

MU887001A TRX Test Module Operation Manual

Seventh Edition

- For safety and warning information, please read this manual before attempting to use the equipment.
- Additional safety and warning information is provided within the MT8870A Universal Wireless Test Set Operation Manual. Please also refer to this document before using the equipment.
- Keep this manual with the equipment.

ANRITSU CORPORATION

MU887001A
TRX Test Module
Operation Manual

31 July 2014 (First Edition)
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CE Conformity Marking

Anritsu affixes the CE conformity marking on the following product(s) in accordance with the Decision 768/2008/EC to indicate that they conform to the EMC, LVD, and RoHS directive of the European Union (EU).

CE marking



1. Product Model

Model: MU887001A TRX Test Module

2. Applied Directive and Standards

When the MU887001A TRX Test Module is installed in the MT8870A, the applied directive and standards of this unit conform to those of the MT8870A main frame.

PS: About main frame

Please contact Anritsu for the latest information on the main frame types that MU887001A can be used with.

If the third digit of the serial number is “6”, the product complies with RoHS.



Serial number example

RCM Conformity Marking

Anritsu affixes the RCM mark on the following product(s) in accordance with the regulation to indicate that they conform to the EMC framework of Australia/New Zealand.

RCM marking



1. Product Model

Model: MU887001A TRX Test Module

2. Applied Directive and Standards

When the MU887001A TRX Test Module is installed in the MT8870A, the applied directive and standards of this unit conform to those of the MT8870A main frame.

PS: About main frame

Please contact Anritsu for the latest information on the main frame types that MU887001A can be used with.

Chapter 1 Replacement and Deletion of Items

The MU887001A is a module with some functions and performances modifications over the MU887000A. This document describes the changes in the functions and performances present in the MU887001A.

For other functions and performances, refer to the *MU887000A TRX Test Module Operation Manual* (M-W3606AE).

Changes in the specifications of the application software and waveform file are also described in this document. For models, input/output settings of test ports, RF output level setting ranges and RF input level setting ranges, similar replacements of the items as for the MU887000A manual are applied, unless otherwise described.

For other items, refer to respective operation manuals.

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1.1 Items To Be Replaced Or Deleted for MU887000A

The following table shows the items in the *MU887000A TRX Test Module Operation Manual* (M-W3606AE) that need to be replaced or deleted.

Items in MU887000A Manual to be Replaced or Deleted (1/9)

| Section | Page | Detail |
|---------|------|--|
| ----- | All | Before: MU887000A |
| | | After: MU887001A |
| 2.1 | 2-2 | Before: Figure 2.1-1 Front Panel Part Names |
| | | After: The figure below shows the appearance of the MU887001A's front panel, and the name of each part. |
| | | <p>Four fastening screws</p> <p>The diagram shows the front panel of the MU887001A TRX Test Module. It includes labels for the Status lamp, Remote lamp, Audio Port (Digital), Test port 3, Test port 1, Handle, Status indication lamp, Audio Port (Analog Input), Input lamp, Audio Port (Analog Output), Output lamp, Test port 4, Input lamp, Test port 2, Output lamp, and Ventilation holes. The panel also features a digital input/output section, an analog input/output section, and four test ports (1, 2, 3, 4) with input and output indicators. A warning label at the bottom states 'Do not remove while power on'.</p> |
| 2.1 | 2-3 | Table 2.1-1 Functions of Front-Panel Parts Test ports 3 and 4 |
| | | <p>Before: Connectors for high-frequency signals. Either of simultaneous signal input and output supported</p> <p>After: Connectors for high-frequency signals. Both simultaneous signal input and output supported.</p> |
| 3.5.4 | 3-20 | Before: Simultaneous signal input and output can be specified for test ports 1 and 2. Signal input or output can be specified for test ports 3 and 4. |
| | | After: Simultaneous signal input and output can be specified for test ports 1, 2, 3 and 4. |

Items in MU887000A manual to be Replaced or Deleted (2/9)

| Section | Page | Detail | | | | | | | | | | | | | |
|--|-------------------------------|--|-------------------------|---|-------------------------------|---|--------------|---|---|--|-------------|--------------|---|--------------|--|
| 5.2.1 | 5-53 | :ROUTe:PORT:CONNect:DIRectiOn Details | | | | | | | | | | | | | |
| | | Before: Test Port1 and Test Port2 can be set for both input and output. Test Port3 and Test Port4 can be set for either input or output. | | | | | | | | | | | | | |
| | | After: Test Port1, Test Port2, Test Port3 and Test Port4 can be set for both input and output. | | | | | | | | | | | | | |
| 5.2.2 | 5-190 | :SOURce:GPRF:GENerator:RFSettings:LEVel Range | | | | | | | | | | | | | |
| | | Before: | | | | | | | | | | | | | |
| | | <table><tr><th>RF frequency f (MHz)</th><th>Port</th><th>Range</th></tr><tr><td rowspan="2">1≤f≤3800</td><td>Port1, Port2</td><td>(−130.0 dBm – CableLoss) to (−10.0 dBm – CableLoss – AWGN_RF_Adjust_Gain)</td></tr><tr><td>Port3, Port4</td><td>(−120.0 dBm – CableLoss) to (0.0 dBm – CableLoss – AWGN_RF_Adjust_Gain)</td></tr><tr><td rowspan="2">3800<f≤6000</td><td>Port1, Port2</td><td>(−130.0 dBm – CableLoss) to (−18.0 dBm – CableLoss – AWGN_RF_Adjust_Gain)</td></tr><tr><td>Port3, Port4</td><td>(−120.0 dBm – CableLoss) to (−8.0 dBm – CableLoss – AWGN_RF_Adjust_Gain)</td></tr></table> | RF frequency f (MHz) | Port | Range | 1≤f≤3800 | Port1, Port2 | (−130.0 dBm – CableLoss) to (−10.0 dBm – CableLoss – AWGN_RF_Adjust_Gain) | Port3, Port4 | (−120.0 dBm – CableLoss) to (0.0 dBm – CableLoss – AWGN_RF_Adjust_Gain) | 3800<f≤6000 | Port1, Port2 | (−130.0 dBm – CableLoss) to (−18.0 dBm – CableLoss – AWGN_RF_Adjust_Gain) | Port3, Port4 | (−120.0 dBm – CableLoss) to (−8.0 dBm – CableLoss – AWGN_RF_Adjust_Gain) |
| | | RF frequency f (MHz) | Port | Range | | | | | | | | | | | |
| | | 1≤f≤3800 | Port1, Port2 | (−130.0 dBm – CableLoss) to (−10.0 dBm – CableLoss – AWGN_RF_Adjust_Gain) | | | | | | | | | | | |
| | | | Port3, Port4 | (−120.0 dBm – CableLoss) to (0.0 dBm – CableLoss – AWGN_RF_Adjust_Gain) | | | | | | | | | | | |
| 3800<f≤6000 | Port1, Port2 | (−130.0 dBm – CableLoss) to (−18.0 dBm – CableLoss – AWGN_RF_Adjust_Gain) | | | | | | | | | | | | | |
| | Port3, Port4 | (−120.0 dBm – CableLoss) to (−8.0 dBm – CableLoss – AWGN_RF_Adjust_Gain) | | | | | | | | | | | | | |
| After: | | | | | | | | | | | | | | | |
| <table><tr><th>RF frequency f (MHz)</th><th>Port</th><th>Range</th></tr><tr><td>1≤f≤3800</td><td>Port1, Port2, Port3, Port4</td><td>(−130.0 dBm – CableLoss) to (−10.0 dBm – CableLoss – AWGN_RF_Adjust_Gain)</td></tr><tr><td>3800<f≤6000</td><td>Port1, Port2, Port3, Port4</td><td>(−130.0 dBm – CableLoss) to (−18.0 dBm – CableLoss – AWGN_RF_Adjust_Gain)</td></tr></table> | RF frequency f (MHz) | Port | Range | 1≤f≤3800 | Port1, Port2, Port3, Port4 | (−130.0 dBm – CableLoss) to (−10.0 dBm – CableLoss – AWGN_RF_Adjust_Gain) | 3800<f≤6000 | Port1, Port2, Port3, Port4 | (−130.0 dBm – CableLoss) to (−18.0 dBm – CableLoss – AWGN_RF_Adjust_Gain) | | | | | | |
| RF frequency f (MHz) | Port | Range | | | | | | | | | | | | | |
| 1≤f≤3800 | Port1, Port2, Port3, Port4 | (−130.0 dBm – CableLoss) to (−10.0 dBm – CableLoss – AWGN_RF_Adjust_Gain) | | | | | | | | | | | | | |
| 3800<f≤6000 | Port1, Port2, Port3, Port4 | (−130.0 dBm – CableLoss) to (−18.0 dBm – CableLoss – AWGN_RF_Adjust_Gain) | | | | | | | | | | | | | |
| 6.2.2 | 6-106 | PORT Details | | | | | | | | | | | | | |
| | | Before: Test Port1 and Test Port2 can be set for both input and output. Test Port3 and Test Port4 can be set for either input or output. | | | | | | | | | | | | | |
| | | After: Test Port1, Test Port2, Test Port3 and Test Port4 can be set for both input and output. | | | | | | | | | | | | | |

Items in MU887000A Manual to be Replaced or Deleted (3/9)

| Section | Page | Detail | | | |
|---|---------------------|--|--|-------------------|-------------------|
| 7.3.1 | 7-5 | VSWR (1) Test target specification Port3, Port4 | | | |
| | | Before: | | | |
| | | | Frequency f | Specifications | |
| | | | 10 MHz≤f<30 MHz | <1.8 | |
| | | | 30 MHz≤f≤3800 MHz | <1.5 | |
| | | 3800 MHz<f≤6000 MHz | <1.6 | | |
| After: | | | | | |
| | Frequency f | Specifications | | | |
| | 10 MHz≤f< 400 MHz | <1.5 | | | |
| | 400 MHz≤f≤2700 MHz | <1.2 | | | |
| | 2700 MHz<f≤3800 MHz | <1.3 | | | |
| | 3800 MHz<f≤6000 MHz | <1.5 | | | |
| 7.3.1 | 7-7 | VSWR (4) Procedure Port1 | | | |
| | | Before: | When testing the Port2, read “Port1” in the procedure of Port1 measurement as “Port2”. | | |
| | | After: | When testing the Port2, 3 or 4, read “Port1” in the procedure of Port1 measurement as “Port2, 3 or 4”. | | |
| 7.3.1 | 7-8 | VSWR (4) Procedure Port3 | | | |
| | | Before: | Port3 | | |
| | | After: | (Subject to deletion) | | |
| 7.3.2 | 7-9 | SG Level Accuracy (1) Test target specifications Port3, Port4 | | | |
| | | Before: | | | |
| | | | Frequency f (MHz) | Specifications | Remarks |
| | | | 10≤ f <400 | ±1.3 dB | −110≤Output Level |
| | | | 400≤ f ≤3800 | ±1.0 dB | −110≤Output Level |
| | | 3800< f ≤6000 | ±1.3 dB | −110≤Output Level | |
| | | After: | | | |
| | | | Frequency f (MHz) | Specifications | Remarks |
| | | | 10≤ f <400 | ±1.3 dB* | −120≤Output Level |
| | | | 400≤ f ≤3800 | ±1.0 dB | −120≤Output Level |
| 3800< f ≤6000 | ±1.3 dB | | −100≤Output Level | | |
| *: Signal analyzer input level: +15 dBm | | | | | |

Items in MU887000A Manual to be Replaced or Deleted (4/9)

| Section | Page | Detail |
|---------|------|--|
| 7.3.2 | 7-16 | SG Level Accuracy (4) Procedure Port1 |
| | | Before: When testing the Port2, read "Port1" in the procedure of Port1 measurement as "Port2". |
| | | After: When testing the Port2, 3 or 4, read "Port1" in the procedure of Port1 measurement as "Port2, 3 or 4". |
| 7.3.2 | 7-17 | SG Level Accuracy (4) Procedure Port3 |
| | | Before: Port3 |
| | | After: (Subject to deletion) |
| 7.3.3 | 7-21 | SG Spurious (4) Procedure Port1 |
| | | Before: SG Spurious is measured at Port1 and Port3 only. |
| | | After: SG Spurious is measured at Port1 and Port3 only. When testing the Port3, read "Port1" in the procedure of Port1 measurement as "Port3". |
| 7.3.3 | 7-22 | SG Spurious (4) Procedure Port3 |
| | | Before: Port3 |
| | | After: (Subject to deletion) |
| 7.3.4 | 7-23 | SA Level Accuracy (1) Test target specifications |
| | | Before: Port1, Port2 |
| | | After: Port1, Port2, Port3, Port4 |
| 7.3.4 | 7-27 | SA Level Accuracy (4) Procedure |
| | | Before: SA Level Accuracy is measured at Port1 and Port2 only. |
| | | After: SA Level Accuracy is measured at Port1, 2, 3 and 4. |
| 7.3.4 | 7-29 | SA Level Accuracy (4) Procedure |
| | | Before: When testing the Port2, read "Port1" in the procedure of Port1 measurement as "Port2". |
| | | After: When testing the Port2, 3 or 4, read "Port1" in the procedure of Port1 measurement as "Port2, 3 or 4". |
| 7.3.5 | 7-30 | SA Linearity (1) Test target specifications |
| | | Before: Port1, Port2 |
| | | After: Port1, Port2, Port3, Port4 |
| 7.3.5 | 7-34 | SA Linearity (4) Procedure |
| | | Before: SA Linearity is measured at Port1 and Port2 only. |
| | | After: SA Linearity is measured at Port1, 2, 3 and 4. |

Items in MU887000A Manual to be Replaced or Deleted (5/9)

| Section | Page | Detail | | |
|------------|------|--|---|-----------------|
| 7.3.5 | 7-35 | SA Linearity (4) Procedure | | |
| | | Before: | When testing the Port2, read “Port1” in the procedure of Port1 measurement as “Port2”. | |
| | | After: | When testing the Port2, 3 or 4, read “Port1” in the procedure of Port1 measurement as “Port2, 3 or 4”. | |
| Appendix A | A-1 | Table A-1 VSWR Test ports 3 and 4: | | |
| | | Before: | Frequency (MHz) | Specifications |
| | | | $10 \leq f < 30$ | <1.8 |
| | | | $30 \leq f \leq 3800$ | <1.5 |
| | | | $3800 < f \leq 6000$ | <1.6 |
| | | | After: | Frequency (MHz) |
| | | $10 \leq f < 400$ | | <1.5 |
| | | $400 \leq f \leq 2700$ | | <1.2 |
| | | $2700 < f \leq 3800$ | | <1.3 |
| | | $3800 < f \leq 6000$ | | <1.5 |
| Appendix A | A-1 | Table A-1 Input level max. | | |
| | | Before: | Test ports 1 and 2: +35 dBm Test ports 3 and 4: +25 dBm | |
| | | After: | Test ports 1, 2, 3 and 4: +35 dBm | |
| Appendix A | A-2 | Table A-2 Amplitude Level setting range | | |
| | | Before: | Test ports 1 and 2: –130 to –10 dBm (Frequency ≤ 3800 MHz) –130 to –18 dBm (Frequency > 3800 MHz) Test ports 3 and 4: –120 to 0 dBm (Frequency ≤ 3800 MHz) –120 to –8 dBm (Frequency > 3800 MHz) | |
| | | After: | Test ports 1, 2, 3 and 4: –130 to –10 dBm (Frequency ≤ 3800 MHz) –130 to –18 dBm (Frequency > 3800 MHz) | |

1.1 Items To Be Replaced Or Deleted for MU887000A

Items in MU887000A Manual to be Replaced or Deleted (6/9)

| Section | Page | Detail | | | | | | | | | | | | |
|---|--|---|----------------------------------|----------------------------------|----------------------------------|--------------------------------|------------------------------|--------------------------------|--------------|--------------------------------|--------------------------------|-----------------------------|--------------------------------|--------------------------------|
| Appendix A | A-2 | Table A-2 Amplitude Level accuracy* ¹ | | | | | | | | | | | | |
| | | Before: | | | | | | | | | | | | |
| | | <table><tr><td>Frequency (MHz)</td><td>Test ports 1 and 2*²</td><td>Test ports 3 and 4*³</td></tr><tr><td>10≤ f <400</td><td>±1.3 dB*⁴</td><td>±1.3 dB</td></tr><tr><td>400≤ f ≤3800</td><td>±1.0 dB, ±0.7 dB*⁵</td><td>±1.0 dB, ±0.7 dB*⁵</td></tr><tr><td>3800< f ≤6000*⁶</td><td>±1.3 dB, ±1.0 dB*⁵</td><td>±1.3 dB, ±0.7 dB*⁵</td></tr></table> | Frequency (MHz) | Test ports 1 and 2* ² | Test ports 3 and 4* ³ | 10≤ f <400 | ±1.3 dB* ⁴ | ±1.3 dB | 400≤ f ≤3800 | ±1.0 dB, ±0.7 dB* ⁵ | ±1.0 dB, ±0.7 dB* ⁵ | 3800< f ≤6000* ⁶ | ±1.3 dB, ±1.0 dB* ⁵ | ±1.3 dB, ±0.7 dB* ⁵ |
| | | Frequency (MHz) | Test ports 1 and 2* ² | Test ports 3 and 4* ³ | | | | | | | | | | |
| | | 10≤ f <400 | ±1.3 dB* ⁴ | ±1.3 dB | | | | | | | | | | |
| | | 400≤ f ≤3800 | ±1.0 dB, ±0.7 dB* ⁵ | ±1.0 dB, ±0.7 dB* ⁵ | | | | | | | | | | |
| 3800< f ≤6000* ⁶ | ±1.3 dB, ±1.0 dB* ⁵ | ±1.3 dB, ±0.7 dB* ⁵ | | | | | | | | | | | | |
| After: | | | | | | | | | | | | | | |
| <table><tr><td>Frequency (MHz)</td><td>Test ports 1, 2, 3 and 4*²</td></tr><tr><td>10≤ f <400</td><td>±1.3 dB*⁴</td></tr><tr><td>400≤ f ≤3800</td><td>±1.0 dB, ±0.7 dB*⁵</td></tr><tr><td>3800< f ≤6000*⁶</td><td>±1.3 dB, ±1.0 dB*⁵</td></tr></table> | Frequency (MHz) | Test ports 1, 2, 3 and 4* ² | 10≤ f <400 | ±1.3 dB* ⁴ | 400≤ f ≤3800 | ±1.0 dB, ±0.7 dB* ⁵ | 3800< f ≤6000* ⁶ | ±1.3 dB, ±1.0 dB* ⁵ | | | | | | |
| Frequency (MHz) | Test ports 1, 2, 3 and 4* ² | | | | | | | | | | | | | |
| 10≤ f <400 | ±1.3 dB* ⁴ | | | | | | | | | | | | | |
| 400≤ f ≤3800 | ±1.0 dB, ±0.7 dB* ⁵ | | | | | | | | | | | | | |
| 3800< f ≤6000* ⁶ | ±1.3 dB, ±1.0 dB* ⁵ | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| Appendix A | A-3 | Table A-3 Amplitude Level setting range * ² | | | | | | | | | | | | |
| | | Before: | | | | | | | | | | | | |
| | | <table><tr><td>Frequency (MHz)</td><td>Test ports 1 and 2</td><td>Test ports 3 and 4</td></tr><tr><td>10≤ f <350</td><td>−65 to +15 dBm</td><td>−65 to +15 dBm</td></tr><tr><td>350≤ f ≤3800</td><td>−65 to +35 dBm</td><td>−65 to +25 dBm</td></tr><tr><td>3800< f ≤6000*¹</td><td>−65 to +35 dBm</td><td>−65 to +25 dBm</td></tr></table> | Frequency (MHz) | Test ports 1 and 2 | Test ports 3 and 4 | 10≤ f <350 | −65 to +15 dBm | −65 to +15 dBm | 350≤ f ≤3800 | −65 to +35 dBm | −65 to +25 dBm | 3800< f ≤6000* ¹ | −65 to +35 dBm | −65 to +25 dBm |
| | | Frequency (MHz) | Test ports 1 and 2 | Test ports 3 and 4 | | | | | | | | | | |
| | | 10≤ f <350 | −65 to +15 dBm | −65 to +15 dBm | | | | | | | | | | |
| | | 350≤ f ≤3800 | −65 to +35 dBm | −65 to +25 dBm | | | | | | | | | | |
| 3800< f ≤6000* ¹ | −65 to +35 dBm | −65 to +25 dBm | | | | | | | | | | | | |
| After: | | | | | | | | | | | | | | |
| <table><tr><td>Frequency (MHz)</td><td>Test ports 1, 2, 3 and 4</td></tr><tr><td>10≤ f <350</td><td>−65 to +15 dBm</td></tr><tr><td>350≤ f ≤3800</td><td>−65 to +35 dBm</td></tr><tr><td>3800< f ≤6000 *¹</td><td>−65 to +35 dBm</td></tr></table> | Frequency (MHz) | Test ports 1, 2, 3 and 4 | 10≤ f <350 | −65 to +15 dBm | 350≤ f ≤3800 | −65 to +35 dBm | 3800< f ≤6000 * ¹ | −65 to +35 dBm | | | | | | |
| Frequency (MHz) | Test ports 1, 2, 3 and 4 | | | | | | | | | | | | | |
| 10≤ f <350 | −65 to +15 dBm | | | | | | | | | | | | | |
| 350≤ f ≤3800 | −65 to +35 dBm | | | | | | | | | | | | | |
| 3800< f ≤6000 * ¹ | −65 to +35 dBm | | | | | | | | | | | | | |

Items in MU887000A Manual to be Replaced or Deleted (7/9)

| Section | Page | Detail | | | | | | | | | | | | | | | | | | | | |
|---|--------------------------|--|-----------------------------------|--------------------|--------------------|---------------|----------------|---------|----------------------|-----------|----------------|---------|---|---|-----------------|---------|---------|-----------|-----------------|---------|---------|-----------|
| Appendix A | A-3 | Table A-3 Amplitude Level accuracy *3 Test ports 3 and 4: | | | | | | | | | | | | | | | | | | | | |
| | | Before: | | | | | | | | | | | | | | | | | | | | |
| | | <table><tr><td>Frequency (MHz) Level (dBm)</td><td>10≤f<400</td><td>400≤f≤3800</td><td>3800<f≤6000*1</td></tr><tr><td>-30 ≤level≤+25</td><td>—</td><td>±0.7 dB</td><td>±0.7 dB*5</td></tr><tr><td>-30 ≤level≤+15</td><td>±0.7 dB</td><td>—</td><td>—</td></tr><tr><td>-55 ≤level <-30</td><td>±0.9 dB</td><td>±0.9 dB</td><td>±0.9 dB*5</td></tr><tr><td>-65 ≤level <-55</td><td>±1.1 dB</td><td>±1.1 dB</td><td>±1.1 dB*5</td></tr></table> | Frequency (MHz) Level (dBm) | 10≤f<400 | 400≤f≤3800 | 3800<f≤6000*1 | -30 ≤level≤+25 | — | ±0.7 dB | ±0.7 dB*5 | -30 ≤level≤+15 | ±0.7 dB | — | — | -55 ≤level <-30 | ±0.9 dB | ±0.9 dB | ±0.9 dB*5 | -65 ≤level <-55 | ±1.1 dB | ±1.1 dB | ±1.1 dB*5 |
| | | Frequency (MHz) Level (dBm) | 10≤f<400 | 400≤f≤3800 | 3800<f≤6000*1 | | | | | | | | | | | | | | | | | |
| | | -30 ≤level≤+25 | — | ±0.7 dB | ±0.7 dB*5 | | | | | | | | | | | | | | | | | |
| | | -30 ≤level≤+15 | ±0.7 dB | — | — | | | | | | | | | | | | | | | | | |
| | | -55 ≤level <-30 | ±0.9 dB | ±0.9 dB | ±0.9 dB*5 | | | | | | | | | | | | | | | | | |
| | | -65 ≤level <-55 | ±1.1 dB | ±1.1 dB | ±1.1 dB*5 | | | | | | | | | | | | | | | | | |
| | | After: | | | | | | | | | | | | | | | | | | | | |
| | | <table><tr><td>Frequency (MHz) Level (dBm)</td><td>10≤f<400</td><td>400≤f≤3800</td><td>3800<f≤6000*1</td></tr><tr><td>-30 ≤level≤+35</td><td>—</td><td>±0.3 dB*4 ±0.5 dB</td><td>±0.7 dB*5</td></tr><tr><td>-30 ≤level≤+15</td><td>±0.7 dB</td><td>—</td><td>—</td></tr><tr><td>-55 ≤level <-30</td><td>±0.9 dB</td><td>±0.7 dB</td><td>±0.9 dB*5</td></tr><tr><td>-65 ≤level <-55</td><td>±1.1 dB</td><td>±0.9 dB</td><td>±1.1 dB*5</td></tr></table> | Frequency (MHz) Level (dBm) | 10≤f<400 | 400≤f≤3800 | 3800<f≤6000*1 | -30 ≤level≤+35 | — | ±0.3 dB*4 ±0.5 dB | ±0.7 dB*5 | -30 ≤level≤+15 | ±0.7 dB | — | — | -55 ≤level <-30 | ±0.9 dB | ±0.7 dB | ±0.9 dB*5 | -65 ≤level <-55 | ±1.1 dB | ±0.9 dB | ±1.1 dB*5 |
| Frequency (MHz) Level (dBm) | 10≤f<400 | 400≤f≤3800 | 3800<f≤6000*1 | | | | | | | | | | | | | | | | | | | |
| -30 ≤level≤+35 | — | ±0.3 dB*4 ±0.5 dB | ±0.7 dB*5 | | | | | | | | | | | | | | | | | | | |
| -30 ≤level≤+15 | ±0.7 dB | — | — | | | | | | | | | | | | | | | | | | | |
| -55 ≤level <-30 | ±0.9 dB | ±0.7 dB | ±0.9 dB*5 | | | | | | | | | | | | | | | | | | | |
| -65 ≤level <-55 | ±1.1 dB | ±0.9 dB | ±1.1 dB*5 | | | | | | | | | | | | | | | | | | | |
| Appendix A | A-4 | Table A-3 Amplitude Level linearity *6 | | | | | | | | | | | | | | | | | | | | |
| | | Before: | | | | | | | | | | | | | | | | | | | | |
| | | <table><tr><td>Input level</td><td>Test ports 1 and 2</td><td>Test ports 3 and 4</td></tr><tr><td>≥-55 dBm</td><td>±0.2 dB</td><td>±0.2 dB</td></tr><tr><td>≥-65 dBm</td><td>±0.4 dB</td><td>±0.4 dB</td></tr></table> | Input level | Test ports 1 and 2 | Test ports 3 and 4 | ≥-55 dBm | ±0.2 dB | ±0.2 dB | ≥-65 dBm | ±0.4 dB | ±0.4 dB | | | | | | | | | | | |
| | | Input level | Test ports 1 and 2 | Test ports 3 and 4 | | | | | | | | | | | | | | | | | | |
| | | ≥-55 dBm | ±0.2 dB | ±0.2 dB | | | | | | | | | | | | | | | | | | |
| | | ≥-65 dBm | ±0.4 dB | ±0.4 dB | | | | | | | | | | | | | | | | | | |
| | | After: | | | | | | | | | | | | | | | | | | | | |
| <table><tr><td>Input level</td><td>Test ports 1, 2, 3 and 4</td></tr><tr><td>≥-55 dBm</td><td>±0.2 dB</td></tr><tr><td>≥-65 dBm</td><td>±0.4 dB</td></tr></table> | Input level | Test ports 1, 2, 3 and 4 | ≥-55 dBm | ±0.2 dB | ≥-65 dBm | ±0.4 dB | | | | | | | | | | | | | | | | |
| Input level | Test ports 1, 2, 3 and 4 | | | | | | | | | | | | | | | | | | | | | |
| ≥-55 dBm | ±0.2 dB | | | | | | | | | | | | | | | | | | | | | |
| ≥-65 dBm | ±0.4 dB | | | | | | | | | | | | | | | | | | | | | |
| Appendix C.2 | C-3 | VSWR | | | | | | | | | | | | | | | | | | | | |
| | | Before: Performance test result sheets of VSWR are common to Port1 and Port2, Port3 and Port4. | | | | | | | | | | | | | | | | | | | | |
| | | After: The result sheet for VSWR performance test is common to all the ports (Port1, Port2, Port3 and Port4). | | | | | | | | | | | | | | | | | | | | |

Items in MU887000A Manual to be Replaced or Deleted (8/9)

| Section | Page | Detail | | | | | | | | | | | | | | |
|---|-----------------------|---|-----------------------|--------------|-------|-------------|-------|-------------|-----------------------------|-------------|----------------------------|-------------|-----------------------------|-------------|----------------------------|-------------|
| Appendix C.2 | C-3 | Table C.2-1 Measurement condition and the table number of result sheet | | | | | | | | | | | | | | |
| | | Before: | | | | | | | | | | | | | | |
| | | <table><tr><th>Measurement condition</th><th>Table number</th></tr><tr><td>Port1</td><td>Table C.2-2</td></tr><tr><td>Port2</td><td>Table C.2-2</td></tr><tr><td>Port3 (Output port setting)</td><td>Table C.2-3</td></tr><tr><td>Port3 (Input port setting)</td><td>Table C.2-3</td></tr><tr><td>Port4 (Output port setting)</td><td>Table C.2-3</td></tr><tr><td>Port4 (Input port setting)</td><td>Table C.2-3</td></tr></table> | Measurement condition | Table number | Port1 | Table C.2-2 | Port2 | Table C.2-2 | Port3 (Output port setting) | Table C.2-3 | Port3 (Input port setting) | Table C.2-3 | Port4 (Output port setting) | Table C.2-3 | Port4 (Input port setting) | Table C.2-3 |
| | | Measurement condition | Table number | | | | | | | | | | | | | |
| | | Port1 | Table C.2-2 | | | | | | | | | | | | | |
| | | Port2 | Table C.2-2 | | | | | | | | | | | | | |
| | | Port3 (Output port setting) | Table C.2-3 | | | | | | | | | | | | | |
| | | Port3 (Input port setting) | Table C.2-3 | | | | | | | | | | | | | |
| | | Port4 (Output port setting) | Table C.2-3 | | | | | | | | | | | | | |
| | | Port4 (Input port setting) | Table C.2-3 | | | | | | | | | | | | | |
| After: | | | | | | | | | | | | | | | | |
| <table><tr><th>Measurement condition</th><th>Table number</th></tr><tr><td>Port1</td><td>Table C.2-2</td></tr><tr><td>Port2</td><td>Table C.2-2</td></tr><tr><td>Port3</td><td>Table C.2-2</td></tr><tr><td>Port4</td><td>Table C.2-2</td></tr></table> | Measurement condition | Table number | Port1 | Table C.2-2 | Port2 | Table C.2-2 | Port3 | Table C.2-2 | Port4 | Table C.2-2 | | | | | | |
| Measurement condition | Table number | | | | | | | | | | | | | | | |
| Port1 | Table C.2-2 | | | | | | | | | | | | | | | |
| Port2 | Table C.2-2 | | | | | | | | | | | | | | | |
| Port3 | Table C.2-2 | | | | | | | | | | | | | | | |
| Port4 | Table C.2-2 | | | | | | | | | | | | | | | |
| Appendix C.2 | C-3 | Table C.2-2 | | | | | | | | | | | | | | |
| | | Before: VSWR (Port1, Port2) | | | | | | | | | | | | | | |
| | | After: VSWR (Port1, Port2, Port3, Port4) | | | | | | | | | | | | | | |
| Appendix C.2 | C-3 | Table C.2-2 Test port: | | | | | | | | | | | | | | |
| | | Before: Port 1 2 | | | | | | | | | | | | | | |
| | | After: Port 1 2 3 4 | | | | | | | | | | | | | | |
| Appendix C.2 | C-3 | Table C.2-3 | | | | | | | | | | | | | | |
| | | Before: VSWR (Port3, Port4) | | | | | | | | | | | | | | |
| | | After: (Subject to deletion) | | | | | | | | | | | | | | |
| Appendix C.3 | C-4 | SG Level Accuracy | | | | | | | | | | | | | | |
| | | Before: Performance test result sheets of SG Level Accuracy are common to Port1 and Port2, Port3 and Port4. | | | | | | | | | | | | | | |
| | | After: The result sheet for SG level accuracy test is common to all the ports (Port1, Port2, Port3 and Port4). | | | | | | | | | | | | | | |
| Appendix C.3 | C-4 | Table C.3-1 | | | | | | | | | | | | | | |
| | | Before: Table numbers of result sheets for Port3 and Port4 tests Table C.3-5, Table C.3-6, Table C.3-7 | | | | | | | | | | | | | | |
| | | After: Table numbers of result sheets for Port3 and Port4 tests Table C.3-5 → Table C.3-2, Table C.3-6 → Table C.3-3, Table C.3-7 → Table C.3-4 | | | | | | | | | | | | | | |

Items in MU887000A Manual to be Replaced or Deleted (9/9)

| Section | Page | Detail |
|--------------|--------------|--|
| Appendix C.3 | C-5 | Table C.3-2 SG Level Accuracy Test port: |
| | | Before: <u>Port 1 2</u> |
| | | After: <u>Port 1 2 3 4</u> |
| Appendix C.3 | C-7 | Table C.3-3 SG Level Accuracy Test port: |
| | | Before: <u>Port 1 2</u> |
| | | After: <u>Port 1 2 3 4</u> |
| Appendix C.3 | C-9 | Table C.3-4 SG Level Accuracy Test port: |
| | | Before: <u>Port 1 2</u> |
| | | After: <u>Port 1 2 3 4</u> |
| Appendix C.3 | C-11 to C-16 | Table C.3-5, 6, 7 SG Level Accuracy Test port: |
| | | Before: <u>Port 3 4</u> |
| | | After: <u>(Subject to deletion)</u> |
| Appendix C.4 | C-17 | SG Spurious |
| | | Before: The value to write in column of “Output Level” is 0 for Port1, –10 for Port3. |
| | | After: Fill in 0 in the Output Level column of the result sheet of each Port1 and Port3. |
| Appendix C.5 | C-19 | SA Level Accuracy |
| | | Before: Performance test result sheets of SA Level Accuracy are common to Port1 and Port2. |
| | | After: The result sheet for SA level accuracy test is common to all the ports (Port1, Port2, Port3 and Port4). |
| Appendix C.5 | C-19 | Table C.5-1 |
| | | Before: Port1 |
| | | After: Common to Port1, Port2, Port3 and Port4 |
| Appendix C.5 | C-20 | Table C.5-2 SA Level Accuracy <u>Test port:</u> |
| | | Before: <u>Port 1 2</u> |
| | | After: <u>Port 1 2 3 4</u> |
| Appendix C.6 | C-21 | SA Linearity |
| | | Before: Performance test result sheets of SA Linearity are common to Port1 and Port2. |
| | | After: The result sheet for SA linearity test is common to all the ports (Port1, Port2, Port3 and Port4). |
| Appendix C.6 | C-21 | Table C.6-1 |
| | | Before: Port1 and Port2 |
| | | After: Common to Port1, Port2, Port3 and Port4 |
| Appendix C.6 | C-22 | Table C.6-2, 3 SA Linearity <u>Test port:</u> |
| | | Before: <u>Port 1 2</u> |
| | | After: <u>Port 1 2 3 4</u> |

1.2 Items To Be Replaced for MX880051A

The following table shows the items in the *MX880051A Cellular Application Applet Operation Manual* (M-W3613AE) that need to be replaced.

Items in MX880051A Manual to be Replaced

| Section | Page | Detail |
|---------|------|---|
| ----- | All | Before: MU887000A |
| | | After: MU887001A |
| 3.1.2 | 3-2 | Table 3.1.2-1 Measurement Settings Pane Buttons |
| | | Before: *: Either Port3 or Port4 can be set. |
| | | After: *: All of Port1, Port2, Port3 and Port4 can be set to any or both of them. |

1.3 Items To Be Replaced for MX880054A

The following table shows the items in the *MX880054A Signal Generator Application Applet Operation Manual* (M-W3619AE) that need to be replaced.

Items in MX880054A Manual to be Replaced

| Section | Page | Detail |
|---------|------|---|
| ----- | All | Before: MU887000A |
| | | After: MU887001A |
| 3.1.2 | 3-2 | Table 3.1.2-1 Measurement Settings Pane Buttons |
| | | Before: *: Either Port3 or Port4 can be set. |
| | | After: *: All of Port1, Port2, Port3 and Port4 can be set to any or both of them. |

1.4 Items To Be Replaced for MX880055A

The following table shows the items in the *MX880055A Small Cell Application Applet Operation Manual* (M-W3706AE) that need to be replaced.

Items in MX880055A Manual to be Replaced

| Section | Page | Detail |
|---------|------|---|
| ----- | All | Before: MU887000A |
| | | After: MU887001A |
| 3.1.2 | 3-2 | Table 3.1.2-1 Measurement Settings Pane Buttons |
| | | Before: *: Either Port3 or Port4 can be set. |
| | | After: *: All of Port1, Port2, Port3 and Port4 can be set to any or both of them. |

1.5 Items To Be Replaced for MX880056A

The following table shows the items in the *MX880056A IEEE 802.15.4 Application Applet Operation Manual* (M-W3746AE) that need to be replaced.

Items in MX880056A Manual to be Replaced

| Section | Page | Detail |
|---------|------|---|
| ----- | All | Before: MU887000A |
| | | After: MU887001A |
| 3.1.2 | 3-3 | Table 3.1.2-1 Measurement Settings Pane Buttons |
| | | Before: *: Either Port3 or Port4 can be set. |
| | | After: *: All of Port1, Port2, Port3 and Port4 can be set to any or both of them. |

1.6 Items To Be Replaced for MX880057A

The following table shows the items in the *MX880057A Z-Wave Application Applet Operation Manual* (M-W3791AE) that need to be replaced.

Items in MX880057A Manual to be Replaced

| Section | Page | Detail |
|---------|------|---|
| ----- | All | Before: MU887000A |
| | | After: MU887001A |
| 3.1.2 | 3-3 | Table 3.1.2-1 Measurement Settings Pane Buttons |
| | | Before: *: Either Port3 or Port4 can be set. |
| | | After: *: All of Port1, Port2, Port3 and Port4 can be set to any or both of them. |

1.7 Items To Be Replaced Or Deleted for MX887010A

The following table shows the items in the *MX887010A Cellular Standards Sequence Measurement Operation Manual* (M-W3607AE) that need to be replaced or deleted.

Items in MX887010A Manual to be Replaced or Deleted (1/5)

| Section | Page | Detail | | | | | |
|---------|--|--|---|-----------|-------|------|--|
| ----- | All | Before: | MU887000A | | | | |
| | | After: | MU887001A | | | | |
| 2.4.1 | 2-30 | Setting measurement conditions Output level | | | | | |
| | | Before: | The setting range is different for Test port1/2 and Test port3/4 of the MU887000A (Test port1/2: −130 to −10 dBm, Test port3/4: −120 to 0 dBm). | | | | |
| | | After: | The setting range for Port1, Port2, Port3 and Port4 of MU887001A is from −130 to −10 dBm. | | | | |
| 3.2.1 | 3-6 | Sequence table setting items Input level: | | | | | |
| | | Before: | −65.0 to +35.0 dBm (Test report 1, 2) −65.0 to +25.0 dBm (Test Port 3, 4) | | | | |
| | | After: | −65.0 to +35.0 dBm (Test report 1, 2, 3, 4) | | | | |
| | | Sequence table setting items Output level: | | | | | |
| | | Before: | −130.0 to −10.0 dBm (Test report 1, 2) −120.0 to 0.0 dBm (Test Port 3, 4) | | | | |
| | | After: | −130.0 to −10.0 dBm (Test report 1, 2, 3, 4) | | | | |
| | | Sequence table setting items Output port | | | | | |
| | | Before: | When selecting Port 3 or 4, make sure the port number is not the same as the input port. | | | | |
| | | After: | (Subject to deletion) | | | | |
| 3.2.3 | 3-11 | Table 3.2.3-2 Error Cause | | | | | |
| | | Before: | <table><tr><th>Parameter</th><th>Cause</th></tr><tr><td>Port</td><td>Port 3 is set for both input port and output port. Or Port 4 is set for both input port and output port.</td></tr></table> | Parameter | Cause | Port | Port 3 is set for both input port and output port. Or Port 4 is set for both input port and output port. |
| | | Parameter | Cause | | | | |
| Port | Port 3 is set for both input port and output port. Or Port 4 is set for both input port and output port. | | | | | | |
| After: | (Subject to deletion) | | | | | | |
| 4.2.1 | 4-38 | :ROUTe:PORT:CONNect:DIRection Details | | | | | |
| | | Before: | Both Test Port1 and Test Port2 can be set to input and output simultaneously. Test Port3 and Test Port4 can be set to either input or output at one time. | | | | |
| | | After: | Test Port1, Test Port2, Test Port3 and Test Port4 can be set to both of Input and Output. | | | | |

Items in MX887010A Manual to be Replaced or Deleted (2/5)

| Section | Page | Detail |
|---------|-------|---|
| 4.2.2 | 4-49 | :CONFigure:CELLular:COMMon:MULTipower:TXRef Parameter <ref(i)> Range |
| | | Before: –65.0 to +35.0 dBm (Port1/Port2) –65.0 to +25.0 dBm (Port3/Port4) |
| | | After: –65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| 4.2.2 | 4-87 | :CONFigure:CELLular:COMMon:TRXFrequency:RXLevel Parameter <p(n)> Range |
| | | Before: –130.0 to –10.0 dBm (Port1/Port2) –120.0 to 0.0 dBm (Port3/Port4) |
| | | After: –130.0 to –10.0 dBm (Port1/Port2/Port3/Port4) |
| 4.2.2 | 4-89 | :CONFigure:CELLular:COMMon:TRXFrequency:RXLevel2 Parameter <p(n)> Range |
| | | Before: –130.0 to –10.0 dBm (Port1/Port2) –120.0 to 0.0 dBm (Port3/Port4) |
| | | After: –130.0 to –10.0 dBm (Port1/Port2/Port3/Port4) |
| 4.2.2 | 4-94 | :CONFigure:CELLular:COMMon:TRXFrequency:TXRef Parameter <ref(i)> Range |
| | | Before: –65.0 to +35.0 dBm (Port1/Port2) –65.0 to +25.0 dBm (Port3/Port4) |
| | | After: –65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| 4.2.2 | 4-97 | :CONFigure:CELLular:GENerator:RFSettings:LEVel Parameter <level> Range |
| | | Before: –130.0 to –10.0 dBm (Port1/Port2) –120.0 to 0.0 dBm (Port3/Port4) |
| | | After: –130.0 to –10.0 dBm (Port1/Port2/Port3/Port4) |
| 4.2.2 | 4-99 | :CONFigure:CELLular:MEASurement:RFSettings:LEVel Parameter <level> Range |
| | | Before: –65.0 to +35.0 dBm (Port1/Port2) –65.0 to +25.0 dBm (Port3/Port4) |
| | | After: –65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| 4.2.3 | 4-124 | :CONFigure:CELLular:GENerator:RFSettings:LEVel Parameter <level> Range |
| | | Before: –130.0 to –10.0 dBm (Port1/Port2) –120.0 to 0.0 dBm (Port3/Port4) |
| | | After: –130.0 to –10.0 dBm (Port1/Port2/Port3/Port4) |

Items in MX887010A Manual to be Replaced or Deleted (3/5)

| Section | Page | Detail |
|---------|-------|---|
| 4.2.3 | 4-126 | :CONFigure:CELLular:MEASurement:RFSettings:LEVel Parameter <level> Range |
| | | Before: –65.0 to +35.0 dBm (Port1/Port2) –65.0 to +25.0 dBm (Port3/Port4) |
| | | After: –65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| 4.2.3 | 4-132 | :CONFigure:CELLular:SEQuence:RFSettings:TRX Parameter <ref> Range |
| | | Before: –65.0 to +35 dBm (Port1/Port2) –65.0 to +25 dBm (Port3/Port4) |
| | | After: –65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| | | Parameter <level> Range |
| | | Before: –130.0 to –10.0 dBm (Port1/Port2) –120.0 to 0.0 dBm (Port3/Port4) |
| | | After: –130.0 to –10.0 dBm (Port1/Port2/Port3/Port4) |
| 4.2.3 | 4-134 | :CONFigure:CELLular:SEQuence:RFSettings:TX Parameter <ref> Range |
| | | Before: –65.0 to +35 dBm (Port1/Port2) –65.0 to +25 dBm (Port3/Port4) |
| | | After: –65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| 4.2.3 | 4-135 | :CONFigure:CELLular:SEQuence:RXPort Details |
| | | Before: PORT3 cannot be set when PORT3 is selected for RF signal input port. PORT4 cannot be set when PORT4 is selected for RF signal input port. |
| | | After: (Subject to deletion) |
| 4.2.3 | 4-140 | :CONFigure:CELLular:SEQuence:TXPower:OLPattern0 Parameter <level(0)> to <level(99)> Range |
| | | Before: –130.0 to –10.0 dBm (Port1/Port2) –120.0 to 0.0 dBm (Port3/Port4) |
| | | After: –130.0 to –10.0 dBm (Port1/Port2/Port3/Port4) |
| 4.2.3 | 4-142 | :CONFigure:CELLular:SEQuence:TXPower:OLPattern1 Parameter <level(50)> to <level(99)> Range |
| | | Before: –130.0 to –10.0 dBm (Port1/Port2) –120.0 to 0.0 dBm (Port3/Port4) |
| | | After: –130.0 to –10.0 dBm (Port1/Port2/Port3/Port4) |

Items in MX887010A Manual to be Replaced or Deleted (4/5)

| Section | Page | Detail |
|---------|------|--|
| 5.2.1 | 5-30 | PORT Details |
| | | Before: Both Test Port1 and Test Port2 can be set to input and output simultaneously. Test Port3 and Test Port4 can be set to either input or output at one time. |
| | | After: Test Port1, Test Port2, Test Port3 and Test Port4 can be set to both of Input and Output. |
| 5.2.2 | 5-36 | ILVL Parameter level Range |
| | | Before: -65.0 to +35.0 dBm (Port1/Port2) -65.0 to +25.0 dBm (Port3/Port4) |
| | | After: -65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| 5.2.2 | 5-53 | MPMEAS_TXREF Parameter ref(i) Range |
| | | Before: -65.0 to +35.0 dBm (Port1/Port2) -65.0 to +25.0 dBm (Port3/Port4) |
| | | After: -65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| 5.2.2 | 5-59 | OLVL Parameter level Range |
| | | Before: -130.0 to -10.0 dBm (Port1/Port2) -120.0 to 0.0 dBm (Port3/Port4) |
| | | After: -130.0 to -10.0 dBm (Port1/Port2/Port3/Port4) |
| 5.2.2 | 5-61 | REGMRXPWR Parameter p(n) Range |
| | | Before: -130.0 to -10.0 dBm (Port1/Port2) -120.0 to 0.0 dBm (Port3/Port4) |
| | | After: -130.0 to -10.0 dBm (Port1/Port2/Port3/Port4) |
| 5.2.2 | 5-62 | REGMRXPWR2 Parameter p(n) Range |
| | | Before: -130.0 to -10.0 dBm (Port1/Port2) -120.0 to 0.0 dBm (Port3/Port4) |
| | | After: -130.0 to -10.0 dBm (Port1/Port2/Port3/Port4) |
| 5.2.2 | 5-64 | REGMTXREF Parameter ref(i) Range |
| | | Before: -65.0 to +35.0 dBm (Port1/Port2) -65.0 to +25.0 dBm (Port3/Port4) |
| | | After: -65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |

Items in MX887010A Manual to be Replaced or Deleted (5/5)

| Section | Page | Detail |
|---------|-------|--|
| 5.2.3 | 5-115 | ILVL Parameter level Range |
| | | Before: –65.0 to +35.0 dBm (Port1/Port2) –65.0 to +25.0 dBm (Port3/Port4) |
| | | After: –65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| 5.2.3 | 5-117 | OLVL Parameter level Range |
| | | Before: –130.0 to –10.0 dBm (Port1/Port2) –120.0 to 0.0 dBm (Port3/Port4) |
| | | After: –130.0 to –10.0 dBm (Port1/Port2/Port3/Port4) |
| 5.2.3 | 5-130 | SEQSGPORT Details |
| | | Before: PORT3 cannot be set when PORT3 is selected for RF signal input port. PORT4 cannot be set when PORT4 is selected for RF signal input port. |
| | | After: (Subject to deletion) |
| 5.2.3 | 5-134 | SEQTRX Parameter ref Range |
| | | Before: –65.0 to +35 dBm (Port1/Port2) –65.0 to +25 dBm (Port3/Port4) |
| | | After: –65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| | | Parameter level Range |
| | | Before: –130.0 to –10.0 dBm (Port1/Port2) –120.0 to 0.0 dBm (Port3/Port4) |
| | | After: –130.0 to –10.0 dBm (Port1/Port2/Port3/Port4) |
| 5.2.3 | 5-136 | SEQTX Parameter ref Range |
| | | Before: –65.0 to +35 dBm (Port1/Port2) –65.0 to +25 dBm (Port3/Port4) |
| | | After: –65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| 5.2.3 | 5-142 | TXPWR_OPAT0 Parameter level0 to level99 Range |
| | | Before: –130.0 to –10.0 dBm (Port1/Port2) –120.0 to 0.0 dBm (Port3/Port4) |
| | | After: –130.0 to –10.0 dBm (Port1/Port2/Port3/Port4) |
| 5.2.3 | 5-144 | TXPWR_OPAT1 Parameter <level50> to <level99> Range |
| | | Before: –130.0 to –10.0 dBm (Port1/Port2) –120.0 to 0.0 dBm (Port3/Port4) |
| | | After: –130.0 to –10.0 dBm (Port1/Port2/Port3/Port4) |

1.8 Items To Be Replaced Or Deleted for MX887011A

The following table shows the items in the *MX887011A W-CDMA/HSPA Uplink TX Measurement Operation Manual* (M-W3608AE) that need to be replaced or deleted.

Items in MX887011A Manual to be Replaced or Deleted (1/8)

| Section | Page | Detail | | | | |
|------------------------------|------|---|---|------------|------|---|
| ----- | All | Before: MU887000A | | | | |
| | | After: MU887001A | | | | |
| 3.2.1 | 3-6 | Sequence table setting items Input level: | | | | |
| | | Before: -65.0 to +35.0 dBm (Test Port 1, 2) -65.0 to +25.0 dBm (Test Port 3, 4) | | | | |
| | | After: -65.0 to +35.0 dBm (Test Port 1, 2, 3, 4) | | | | |
| | | Sequence table setting items Output level: | | | | |
| | | Before: -130.0 to -10.0 dBm (Test Port 1, 2) -120.0 to 0.0 dBm (Test Port 3, 4) | | | | |
| | | After: -130.0 to -10.0 dBm (Test Port 1, 2, 3, 4) | | | | |
| | | Sequence table setting items Output port | | | | |
| | | Before: When selecting Port 3 or 4, make sure the port number is not the same as the input port. | | | | |
| | | After: (Subject to deletion) | | | | |
| 3.2.3 | 3-10 | Table 3.2.3-1 Error Cause | | | | |
| | | Before: <table><tr><th>Parameters</th><th>Parameters</th></tr><tr><td>Port</td><td>Port 3 is set for both input port and output port. Or Port 4 is set for both input port and output port.</td></tr></table> | Parameters | Parameters | Port | Port 3 is set for both input port and output port. Or Port 4 is set for both input port and output port. |
| | | Parameters | Parameters | | | |
| | | Port | Port 3 is set for both input port and output port. Or Port 4 is set for both input port and output port. | | | |
| After: (Subject to deletion) | | | | | | |
| | | | | | | |
| 4.2.1 | 4-37 | :ROUTe:PORT:CONNeCT:DIREction Details | | | | |
| | | Before: Both Test Port1 and Test Port2 can be set to input and output simultaneously. Test Port3 and Test Port4 can be set to either input or output at one time. | | | | |
| | | After: Test Port1, Test Port2, Test Port3 and Test Port4 can be set to both of Input and Output. | | | | |

Items in MX887011A Manual to be Replaced or Deleted (2/8)

| Section | Page | Detail |
|---------|-------|--|
| 4.2.2 | 4-42 | :CONFigure:CELLular:GENerator:RFSettings:LEVel Parameter <level> Range |
| | | Before: –130.0 to –10.0 dBm (Port1/Port2) –120.0 to 0.0 dBm (Port3/Port4) |
| | | After: –130.0 to –10.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is –135.0 to –15.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is –135.0 to –15.0 dBm. |
| 4.2.2 | 4-45 | :CONFigure:CELLular:MEASurement:RFSettings:LEVel Parameter <level> Range |
| | | Before: –65.0 to +35.0 dBm (Port 1/Port 2) –65.0 to +25.0 dBm (Port 3/Port 4) |
| | | After: –65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is –60.0 to +40.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is –60.0 to +40.0 dBm. |
| 4.2.3 | 4-132 | :CONFigure:CELLular:GENerator:RFSettings:LEVel Parameter <level> Range |
| | | Before: –130.0 to –10.0 dBm (Port1/Port2) –120.0 to 0.0 dBm (Port3/Port4) |
| | | After: –130.0 to –10.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is –135.0 to –15.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is –135.0 to –15.0 dBm. |
| 4.2.3 | 4-134 | :CONFigure:CELLular:MEASurement:RFSettings:LEVel Parameter <level> Range |
| | | Before: –65.0 to +35.0 dBm (Port 1/Port 2) –65.0 to +25.0 dBm (Port 3/Port 4) |
| | | After: –65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is –60.0 to +40.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is –60.0 to +40.0 dBm. |

Items in MX887011A Manual to be Replaced or Deleted (3/8)

| Section | Page | Detail |
|---------|-------|---|
| 4.2.3 | 4-139 | :CONFigure:CELLular:SEQuence:RFSettings:TRX Parameters <ref> Range |
| | | Before: –65.0 to +35 dBm (Port1/Port2) –65.0 to +25 dBm (Port3/Port4) |
| | | After: –65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| | | Parameters <level> Range |
| | | Before: –130.0 to –10.0 dBm (Port 1/Port 2) –120.0 to 0.0 dBm (Port 3/Port 4) |
| | | After: –130.0 to –10.0 dBm (Port1/Port2/Port3/Port4) |
| 4.2.3 | 4-141 | :CONFigure:CELLular:SEQuence:RFSettings:TX Parameters <ref> Range |
| | | Before: –65.0 to +35 dBm (Port1/Port2) –65.0 to +25 dBm (Port3/Port4) |
| | | After: –65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is –60.0 to +40.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is –60.0 to +40.0 dBm. |
| 4.2.3 | 4-143 | :CONFigure:CELLular:SEQuence:RXPort Details |
| | | Before: PORT3 cannot be set when PORT3 is selected for RF signal input port. PORT4 cannot be set when PORT4 is selected for RF signal input port. |
| | | After: (Subject to deletion) |
| 5.2.1 | 5-28 | PORT Details |
| | | Before: Both Test Port1 and Test Port2 can be set to input and output simultaneously. Test Port3 and Test Port4 can be set to either input or output at one time. |
| | | After: Test Port1, Test Port2, Test Port3 and Test Port4 can be set to both of Input and Output. |

Items in MX887011A Manual to be Replaced or Deleted (4/8)

| Section | Page | Detail |
|---------|-------|---|
| 5.2.2 | 5-84 | ILVL Parameter level Range |
| | | Before: –65.0 to +35.0 dBm (Port 1/Port 2) –65.0 to +25.0 dBm (Port 3/Port 4) |
| | | After: –65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is –60.0 to +40.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is –60.0 to +40.0 dBm. |
| 5.2.2 | 5-94 | OLVL Parameter level Range |
| | | Before: –130.0 to –10.0 dBm (Port 1/Port 2) –120.0 to 0.0 dBm (Port 3/Port 4) |
| | | After: –130.0 to –10.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is –135.0 to –15.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is –135.0 to –15.0 dBm. |
| 5.2.3 | 5-127 | ILVL Parameter level Range |
| | | Before: –65.0 to +35.0 dBm (Port 1/Port 2) –65.0 to +25.0 dBm (Port 3/Port 4) |
| | | After: –65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is –60.0 to +40.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is –60.0 to +40.0 dBm. |
| 5.2.3 | 5-128 | OLVL Parameter level Range |
| | | Before: –130.0 to –10.0 dBm (Port 1/Port 2) –120.0 to 0.0 dBm (Port 3/Port 4) |
| | | After: –130.0 to –10.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is –135.0 to –15.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is –135.0 to –15.0 dBm. |

Items in MX887011A Manual to be Replaced or Deleted (5/8)

| Section | Page | Detail |
|---------|-------|--|
| 5.2.3 | 5-141 | SEQSGPORT Details |
| | | Before: PORT3 cannot be set when PORT3 is selected for RF signal input port. PORT4 cannot be set when PORT4 is selected for RF signal input port. |
| | | After: (Subject to deletion) |
| 5.2.3 | 5-145 | SEQTRX Parameter ref Range |
| | | Before: -65.0 to +35 dBm (Port1/Port2) -65.0 to +25 dBm (Port3/Port4) |
| | | After: -65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| | | Parameter level Range |
| | | Before: -130.0 to -10.0 dBm (Port 1/Port 2) -120.0 to 0.0 dBm (Port 3/Port 4) |
| | | After: -130.0 to -10.0 dBm (Port1/Port2/Port3/Port4) |
| 5.2.3 | 5-147 | SEQTX Parameter ref Range |
| | | Before: -65.0 to +35 dBm (Port1/Port2) -65.0 to +25 dBm (Port3/Port4) |
| | | After: -65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is -60.0 to +40.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is -60.0 to +40.0 dBm. |
| 6.3.4 | 6-9 | Output EVM (4) Procedure 4 Test Port3 |
| | | Before: Output Level: -0.9 dBm Input Level: +25 dBm |
| | | After: Output Level: -10.9 dBm Input Level: +35 dBm |

Items in MX887011A Manual to be Replaced or Deleted (6/8)

| Section | Page | Detail | | | | |
|--|--------------------------------|--|--|--------------------|--------------------|------------|
| 6.3.5 | 6-11 | Tx Power measurement accuracy (CW) (1) Test specifications | | | | |
| | | Before: | Test Port3/4 | | | |
| | | | Measurement Accuracy | Input Level | Temperature | |
| | | | ±0.7 dB | −25 dBm≤, ≤+25 dBm | 10 to 40°C | |
| | | | ±0.9 dB | −55 dBm≤, <−25 dBm | 10 to 40°C | |
| | | | | ±1.1 dB | −65 dBm≤, <−55 dBm | 10 to 40°C |
| | | After: | Test Port3/4 | | | |
| | | | Measurement Accuracy | Input Level | Temperature | |
| | | | ±0.5 dB | −25 dBm≤, ≤+35 dBm | 10 to 40°C | |
| | | | ±0.7 dB | −55 dBm≤, <−25 dBm | 10 to 40°C | |
| ±0.9 dB | −65 dBm≤, <−55 dBm | | 10 to 40°C | | | |
| 6.3.7 | 6-15 | Frequency/Modulation measurement (1) Test specifications | | | | |
| | | Before: | Test Port3/4 | | | |
| | | | Input level: −30 dBm ≤, ≤+25 dBm | | | |
| | | After: | Test Port3/4 | | | |
| Input level: −30 dBm ≤, ≤+35 dBm | | | | | | |
| 6.3.8 | 6-17 | Adjacent Channel Leakage Power Ratio (1) Test specifications | | | | |
| | | Before: | Test Port3/4 | | | |
| | | | Input level range: −10 dBm ≤, ≤+25 dBm | | | |
| | | After: | Test Port3/4 | | | |
| Input level range: −10 dBm ≤, ≤+35 dBm | | | | | | |
| 6.3.10 | 6-24 | Output EVM Output EVM | | | | |
| | | Before: | EVM (%) Test Port3 | | | |
| | | | MU887000A Output Level: −0.9 dBm | | | |
| | | After: | EVM (%) Test Port3 | | | |
| MU887001A Output Level: −10.9 dBm | | | | | | |
| 6.3.10 | 6-27 | Tx Power Measurement Accuracy (CW) (continued) | | | | |
| | | Tx Power Measurement Accuracy Port3/4 | | | | |
| | | Before: | MU887000A Input Level: −10 dBm | | | |
| | | | Measurement Accuracy (dB) | | | |
| | | | Lo Limit: −0.7 Hi Limit: +0.7 | | | |
| | Measurement uncertainty: ±0.17 | | | | | |
| After: | MU887001A Input Level: −10 dBm | | | | | |
| | Measurement Accuracy (dB) | | | | | |
| | Lo Limit: −0.5 Hi Limit: +0.5 | | | | | |
| | Measurement uncertainty: ±0.15 | | | | | |

Items in MX887011A Manual to be Replaced or Deleted (7/8)

| Section | Page | Detail | | | | | | | | |
|--|---------------------------|--|---------------------------|---------------------------|----------------|---------------------------|----------------|---------|----------------|---------|
| 6.3.10 | 6-27 | Tx Power Measurement Accuracy (CW) (continued) Tx Power Measurement Accuracy Port3/4 | | | | | | | | |
| | | Before: MU887000A Input Level: −55 dBm Measurement Accuracy (dB) Lo Limit: −0.9 Hi Limit: +0.9 Measurement uncertainty: ±0.14 | | | | | | | | |
| | | After: MU887001A Input Level: −55 dBm Measurement Accuracy (dB) Lo Limit: −0.7 Hi Limit: +0.7 Measurement uncertainty: ±0.13 | | | | | | | | |
| 6.3.10 | 6-28 | Tx Power Measurement Accuracy (CW) (continued) Tx Power Measurement Accuracy Port3/4 | | | | | | | | |
| | | Before: MU887000A Input Level: −65 dBm Measurement Accuracy (dB) Lo Limit: −1.1 Hi Limit: +1.1 Measurement uncertainty:± 0.14 | | | | | | | | |
| | | After: MU887001A Input Level: −65 dBm Measurement Accuracy (dB) Lo Limit: −0.9 Hi Limit: +0.9 Measurement uncertainty:± 0.13 | | | | | | | | |
| Appendix A | A-1 | Tx Power Measurement Input Level Range | | | | | | | | |
| | | Before: Port1, Port2:−65.0 to +35.0 dBm Port3, Port4:−65.0 to +25.0 dBm | | | | | | | | |
| | | After: Port1 to 4:−65.0 to +35.0 dBm | | | | | | | | |
| Appendix A | A-1 | Tx Power Measurement Measurement Accuracy | | | | | | | | |
| | | Before: Port1, Port2:After calibration, 10 to 40°C | | | | | | | | |
| | | <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>−25 to +35 dBm</td><td>±0.3 dB (Typ.) ±0.5 dB</td></tr><tr><td>−55 to −25 dBm</td><td>±0.7 dB</td></tr><tr><td>−65 to −55 dBm</td><td>±0.9 dB</td></tr></table> | Input Level | Measurement Accuracy | −25 to +35 dBm | ±0.3 dB (Typ.) ±0.5 dB | −55 to −25 dBm | ±0.7 dB | −65 to −55 dBm | ±0.9 dB |
| | | Input Level | Measurement Accuracy | | | | | | | |
| | | −25 to +35 dBm | ±0.3 dB (Typ.) ±0.5 dB | | | | | | | |
| | | −55 to −25 dBm | ±0.7 dB | | | | | | | |
| | | −65 to −55 dBm | ±0.9 dB | | | | | | | |
| | | Port3, Port4:After calibration, 10 to 40°C | | | | | | | | |
| | | <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>−25 to +25 dBm</td><td>±0.7 dB</td></tr><tr><td>−55 to −25 dBm</td><td>±0.9 dB</td></tr><tr><td>−65 to −55 dBm</td><td>±1.1 dB</td></tr></table> | Input Level | Measurement Accuracy | −25 to +25 dBm | ±0.7 dB | −55 to −25 dBm | ±0.9 dB | −65 to −55 dBm | ±1.1 dB |
| | | Input Level | Measurement Accuracy | | | | | | | |
| | | −25 to +25 dBm | ±0.7 dB | | | | | | | |
| | | −55 to −25 dBm | ±0.9 dB | | | | | | | |
| | | −65 to −55 dBm | ±1.1 dB | | | | | | | |
| After: Port1 to 4:After calibration, 10 to 40°C | | | | | | | | | | |
| <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>−25 to +35 dBm</td><td>±0.3 dB (Typ.) ±0.5 dB</td></tr><tr><td>−55 to −25 dBm</td><td>±0.7 dB</td></tr><tr><td>−65 to −55 dBm</td><td>±0.9 dB</td></tr></table> | Input Level | Measurement Accuracy | −25 to +35 dBm | ±0.3 dB (Typ.) ±0.5 dB | −55 to −25 dBm | ±0.7 dB | −65 to −55 dBm | ±0.9 dB | | |
| Input Level | Measurement Accuracy | | | | | | | | | |
| −25 to +35 dBm | ±0.3 dB (Typ.) ±0.5 dB | | | | | | | | | |
| −55 to −25 dBm | ±0.7 dB | | | | | | | | | |
| −65 to −55 dBm | ±0.9 dB | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
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| | | | | | | | | | | |

Items in MX887011A Manual to be Replaced or Deleted (8/8)

| Section | Page | Detail |
|------------|------|--|
| Appendix A | A-2 | Modulation Analysis Input Level Range |
| | | Before: Port1, Port2: -30.0 to +35.0 dBm Port3, Port4: -30.0 to +25.0 dBm |
| | | After: Port1 to 4: -30.0 to +35.0 dBm |
| Appendix A | A-2 | Occupied Bandwidth Input Level Range |
| | | Before: Port1, Port2: -10.0 to +35.0 dBm Port3, Port4: -10.0 to +25.0 dBm |
| | | After: Port1 to 4: -10.0 to +35.0 dBm |
| Appendix A | A-2 | Adjacent Channel Leakage Power Ratio Input Level Range |
| | | Before: Port1, Port2: -10.0 to +35.0 dBm Port3, Port4: -10.0 to +25.0 dBm |
| | | After: Port1 to 4: -10.0 to +35.0 dBm |

1.9 Items To Be Replaced Or Deleted for MX887012A

The following table shows the items in the *MX887012A GSM/EDGE Uplink TX Measurement Operation Manual* (M-W3609AE) that need to be replaced or deleted.

Items in MX887012A Manual to be Replaced or Deleted (1/8)

| Section | Page | Detail | | | | |
|------------------------------|------|---|---|-------|------|---|
| ----- | All | Before: MU887000A | | | | |
| | | After: MU887001A | | | | |
| 3.2.1 | 3-6 | Sequence table setting items Input level: | | | | |
| | | Before: -65.0 to +35.0 dBm (Test Port 1, 2) -65.0 to +25.0 dBm (Test Port 3, 4) | | | | |
| | | After: -65.0 to +35.0 dBm (Test Port 1, 2, 3, 4) | | | | |
| | | Sequence table setting items Output level: | | | | |
| | | Before: -130.0 to -10.0 dBm (Test Port 1, 2) -120.0 to 0.0 dBm (Test Port 3, 4) | | | | |
| | | After: -130.0 to -10.0 dBm (Test Port 1, 2, 3, 4) | | | | |
| | | Sequence table setting items Output port | | | | |
| | | Before: When selecting Port 3 or 4, make sure the port number is not the same as the input port. | | | | |
| | | After: (Subject to deletion) | | | | |
| 3.2.3 | 3-9 | Table 3.2.3-1 Error Cause | | | | |
| | | Before: <table><tr><th>Parameter</th><th>Cause</th></tr><tr><td>Port</td><td>Port 3 is set for both input port and output port. Or Port 4 is set for both input port and output port.</td></tr></table> | Parameter | Cause | Port | Port 3 is set for both input port and output port. Or Port 4 is set for both input port and output port. |
| | | Parameter | Cause | | | |
| | | Port | Port 3 is set for both input port and output port. Or Port 4 is set for both input port and output port. | | | |
| After: (Subject to deletion) | | | | | | |
| | | | | | | |
| 4.2.1 | 4-47 | :ROUTe:PORT:CONNect:DIRrection Details | | | | |
| | | Before: Both Test Port1 and Test Port2 can be set to input and output simultaneously. Test Port3 and Test Port4 can be set to either input or output at one time. | | | | |
| | | After: Test Port1, Test Port2, Test Port3 and Test Port4 can be set to both of Input and Output. | | | | |

Items in MX887012A Manual to be Replaced or Deleted (2/8)

| Section | Page | Detail |
|---------|------------------------------|---|
| 4.2.2 | 4-52 | :CONFigure:CELLular:GENerator:RFSettings:LEVel Parameter <level> Range |
| | | Before: -130.0 to -10.0 dBm (Port 1/Port 2) -120.0 to 0.0 dBm (Port 3/Port 4) |
| | | After: -130.0 to -10.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is -135.0 to -15.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is -135.0 to -15.0 dBm. |
| 4.2.2 | 4-80 4-81 4-82 4-83 | :CONFigure:CELLular:GSM:HSADjustment:RXSWeep:LEVel1 :CONFigure:CELLular:GSM:HSADjustment:RXSWeep:LEVel2 :CONFigure:CELLular:GSM:HSADjustment:RXSWeep:LEVel3 :CONFigure:CELLular:GSM:HSADjustment:RXSWeep:LEVel4 Parameter <level> Range |
| | | Before: -130.0 to -10.0 dBm (Port1/Port2) -120.0 to 0.0 dBm (Port3/Port4) |
| | | After: -130.0 to -10.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the setting range is -135.0 to -15.0 dBm (Port1/Port2). |
| | | After: When the cable loss is 5 dB, the setting range is -135.0 to -15.0 dBm (Port1/Port2/Port3/Port4). |
| 4.2.2 | 4-84 | :CONFigure:CELLular:GSM:HSADjustment:RXSWeep:LLISt Parameter <level(i)> Range |
| | | Before: OFF, -130.0 to -10.0 dBm, (Port1/Port2) OFF, -120.0 to 0.0 dBm, (Port3/Port4) |
| | | After: OFF, -130.0 to -10.0 dBm (Port1/Port2/Port3/Port4) |
| 4.2.2 | 4-118 | :CONFigure:CELLular:MEASurement:RFSettings:LEVel Parameter <level> Range |
| | | Before: -30.0 to +35.0 dBm (Port 1/Port 2) -30.0 to +25.0 dBm (Port 3/Port 4) |
| | | After: -30.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is -25.0 to +40.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is -25.0 to +40.0 dBm. |

Items in MX887012A Manual to be Replaced or Deleted (3/8)

| Section | Page | Detail |
|---------|-------|--|
| 4.2.3 | 4-180 | :CONFigure:CELLular:GENerator:RFSettings:LEVel Parameter <level> Range |
| | | Before: –130.0 to –10.0 dBm (Port 1/Port 2) –120.0 to 0.0 dBm (Port 3/Port 4) |
| | | After: –130.0 to –10.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is –135.0 to –15.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is –135.0 to –15.0 dBm. |
| 4.2.3 | 4-182 | :CONFigure:CELLular:MEASurement:RFSettings:LEVel Parameter <level> Range |
| | | Before: –30.0 to +35.0 dBm (Port 1/Port 2) –30.0 to +25.0 dBm (Port 3/Port 4) |
| | | After: –30.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is –25.0 to +40.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is –25.0 to +40.0 dBm. |
| 4.2.3 | 4-201 | :CONFigure:CELLular:SEQuence:RFSettings:TRX Parameter <ref> Range |
| | | Before: –65.0 to +35 dBm (Port1/Port2) –65.0 to +25 dBm (Port3/Port4) |
| | | After: –65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| | | Parameter <level> Range |
| | | Before: –130.0 to –10.0 dBm (Port 1/Port 2) –120.0 to 0.0 dBm (Port 3/Port 4) |
| | | After: –130.0 to –10.0 dBm (Port1/Port2/Port3/Port4) |
| 4.2.3 | 4-203 | :CONFigure:CELLular:SEQuence:RFSettings:TX Parameter <ref> Range |
| | | Before: –65.0 to +35 dBm (Port1/Port2) –65.0 to +25 dBm (Port3/Port4) |
| | | After: –65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is –60.0 to +40.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is –60.0 to +40.0 dBm. |

Items in MX887012A Manual to be Replaced or Deleted (4/8)

| Section | Page | Detail |
|---------|-------|--|
| 4.2.3 | 4-204 | :CONFigure:CELLular:SEQuence:RXPort Details |
| | | Before: PORT3 cannot be set when PORT3 is selected for RF signal input port. PORT4 cannot be set when PORT4 is selected for RF signal input port. |
| | | After: (Subject to deletion) |
| 5.2.1 | 5-32 | PORT Details |
| | | Before: Both Test Port1 and Test Port2 can be set to input and output simultaneously. Test Port3 and Test Port4 can be set to either input or output at one time. |
| | | After: Test Port1, Test Port2, Test Port3 and Test Port4 can be set to both of Input and Output. |
| 5.2.2 | 5-58 | ILVL Parameter level Range |
| | | Before: –30.0 to +35.0 dBm (Port 1/Port 2) –30.0 to +25.0 dBm (Port 3/Port 4) |
| | | After: –30.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is –25.0 to +40.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is –25.0 to +40.0 dBm. |
| 5.2.2 | 5-77 | OLVL Parameter level Range |
| | | Before: –130.0 to –10.0 dBm (Port 1/Port 2) –120.0 to 0.0 dBm (Port 3/Port 4) |
| | | After: –130.0 to –10.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is –135.0 to –15.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is –135.0 to –15.0 dBm. |

Items in MX887012A Manual to be Replaced or Deleted (5/8)

| Section | Page | Detail |
|---------|----------------------------------|--|
| 5.2.2 | 5-130 5-131 5-132 5-133 | REGMRXPCFG1 REGMRXPCFG2 REGMRXPCFG3 REGMRXPCFG4 Parameter level(0) Range |
| | | Before: –130.0 to –10.0 dBm (Port1/Port2) –120.0 to 0.0 dBm (Port3/Port4) |
| | | After: –130.0 to –10.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the setting range is –135.0 to –15.0 dBm (Port1/Port2). |
| | | After: When the cable loss is 5 dB, the setting range is –135.0 to –15.0 dBm (Port1/Port2/Port3/Port4). |
| 5.2.2 | 5-134 | REGMRXPWR Parameter level(i) Range |
| | | Before: OFF, –130.0 to –10.0 dBm, (Port1/Port2) –120.0 to 0.0 dBm, (Port3/Port4) |
| | | After: OFF, –130.0 to –10.0 dBm (Port1/Port2/Port3/Port4) |
| 5.2.3 | 5-220 | ILVL Parameter level Range |
| | | Before: –30.0 to +35.0 dBm (Port 1/Port 2) –30.0 to +25.0 dBm (Port 3/Port 4) |
| | | After: –30.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is –25.0 to +40.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is –25.0 to +40.0 dBm. |
| 5.2.3 | 5-221 | OLVL Parameter level Range |
| | | Before: –130.0 to –10.0 dBm (Port 1/Port 2) –120.0 to 0.0 dBm (Port 3/Port 4) |
| | | After: –130.0 to –10.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is –135.0 to –15.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is –135.0 to –15.0 dBm. |
| 5.2.3 | 5-234 | SEQSGPORT Details |
| | | Before: PORT3 cannot be set when PORT3 is selected for RF signal input port. PORT4 cannot be set when PORT4 is selected for RF signal input port. |
| | | After: (Subject to deletion) |

Items in MX887012A Manual to be Replaced or Deleted (6/8)

| Section | Page | Detail | | | |
|---------|--------------------|---|----------------------|--------------------|-------------|
| 5.2.3 | 5-238 | SEQTRX Parameter ref Range | | | |
| | | Before: –65.0 to +35 dBm (Port1/Port2) –65.0 to +25 dBm (Port3/Port4) | | | |
| | | After: –65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) | | | |
| | | Parameter level Range | | | |
| | | Before: –130.0 to –10.0 dBm (Port 1/Port 2) –120.0 to 0.0 dBm (Port 3/Port 4) | | | |
| | | After: –130.0 to –10.0 dBm (Port1/Port2/Port3/Port4) | | | |
| 5.2.3 | 5-240 | SEQTX Parameter ref Range | | | |
| | | Before: –65.0 to +35 dBm (Port1/Port2) –65.0 to +25 dBm (Port3/Port4) | | | |
| | | After: –65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) | | | |
| | | Details | | | |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is –60.0 to +40.0 dBm. | | | |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is –60.0 to +40.0 dBm. | | | |
| 6.3.4 | 6-9 | Output EVM (4) Procedure 4 Test Port3 | | | |
| | | Before: Output Level: –0.9 dBm Input Level: +25 dBm | | | |
| | | After: Output Level: –10.9 dBm Input Level: +35 dBm | | | |
| 6.3.5 | 6-11 | Tx power measurement accuracy (CW) (1) Test specifications | | | |
| | | Before: | Test Port3/4 | | |
| | | | Measurement Accuracy | Input Level | Temperature |
| | | | ±0.7 dB | –30 dBm≤, ≤+25 dBm | 10 to 40°C |
| | | After: | Test Port3/4 | | |
| | | | Measurement Accuracy | Input Level | Temperature |
| ±0.5 dB | –30 dBm≤, ≤+35 dBm | | 10 to 40°C | | |
| 6.3.8 | 6-17 | Frequency/Modulation measurement (GMSK) (1) Test specifications | | | |
| | | Before: Test Port3/4 input level: –30 dBm≤, ≤+25 dBm | | | |
| | | After: Test Port3/4 input level: –30 dBm≤, ≤+35 dBm | | | |
| 6.3.9 | 6-19 | Frequency/Modulation measurement (8PSK) (1) Test specifications | | | |
| | | Before: Test Port3/4 Input level: –30 dBm≤, ≤+25 dBm | | | |
| | | After: Test Port3/4 Input level: –30 dBm≤, ≤+35 dBm | | | |

Items in MX887012A Manual to be Replaced or Deleted (7/8)

| Section | Page | Detail |
|---------|------|--|
| 6.3.10 | 6-21 | Output spectrum measurement (1) Test specifications |
| | | Before: Test Port3/4 input level: $-10\text{ dBm} \leq, \leq +25\text{ dBm}$ |
| | | After: Test Port3/4 input level: $-10\text{ dBm} \leq, \leq +35\text{ dBm}$ |
| 6.3.12 | 6-27 | Output Phase Error/EVM Output Phase Error (Average) |
| | | Before: Phase Error (degree) :Test Port3 MU887000A Output Level: -0.9 dBm |
| | | After: Phase Error (degree) :Test Port3 MU887001A Output Level: -10.9 dBm |
| | | Output EVM Output EVM |
| | | Before: EVM (%rms) :Test Port3 MU887000A Output Level: -0.9 dBm |
| | | After: EVM (%rms) :Test Port3 MU887001A Output Level: -10.9 dBm |
| 6.3.12 | 6-29 | Tx Power Measurement Accuracy (CW) (continued) Tx Power Measurement Accuracy Port 3/4 |
| | | Before: MU887000A Input Level: -10 dBm Measurement Accuracy (dB) Lo limit: -0.7 Hi limit: $+0.7$ Measurement uncertainty: ± 0.27 |
| | | After: MU887001A Input Level: -10 dBm Measurement Accuracy (dB) Lo limit: -0.5 Hi limit: $+0.5$ Measurement uncertainty: ± 0.15 |
| | | Tx Power Measurement Accuracy (CW) (continued) Tx Power Measurement Accuracy Port 3/4 |
| | | Before: MU887000A Input Level: -30 dBm Measurement Accuracy (dB) Lo limit: -0.7 Hi limit: $+0.7$ Measurement uncertainty: ± 0.27 |
| | | After: MU887001A Input Level: -30 dBm Measurement Accuracy (dB) Lo limit: -0.5 Hi limit: $+0.5$ Measurement uncertainty: ± 0.15 |

Items in MX887012A Manual to be Replaced or Deleted (8/8)

| Section | Page | Detail | | |
|----------------|---------------------------|--|--|---------------------------|
| Appendix A | A-1 | RF Power | Input Level Range | |
| | | Before: | Port1, Port2:−30.0 to +35.0 dBm Port3, Port4: −30.0 to +25.0 dBm | |
| | | After: | Port1 to 4: −30.0 to +35.0 dBm | |
| Appendix A | A-1 | RF Power | Measurement Accuracy | |
| | | Before: | Port1, Port2:After calibration, 10 to 40°C | |
| | | | Input Level | Measurement Accuracy |
| | | | −30 to +35 dBm | ±0.3 dB (Typ.) ±0.5 dB |
| | | Port3, Port4:After calibration, 10 to 40°C | | |
| | | | Input Level | Measurement Accuracy |
| | | | −30 to +25 dBm | ±0.7 dB |
| | | After: | Port1 to 4:After calibration, 10 to 40°C | |
| | | | Input Level | Measurement Accuracy |
| −25 to +35 dBm | ±0.3 dB (Typ.) ±0.5 dB | | | |
| Appendix A | A-2 | Modulation Analysis | Input Level Range | |
| | | Before: | Port1, Port2: −30.0 to +35.0 dBm Port3, Port4: −30.0 to +25.0 dBm | |
| | | After: | Port1 to 4: −30.0 to +35.0 dBm | |
| Appendix A | A-2 | Output RF Spectrum Measurement | Input Level Range | |
| | | Before: | Port1, Port2: −10.0 to +35.0 dBm Port3, Port4: −10.0 to +25.0 dBm | |
| | | After: | Port1 to 4: −10.0 to +35.0 dBm | |

1.10 Items To Be Replaced Or Deleted for MX887013/14A

The following table shows the items in the *MX887013/14A LTE FDD/TDD Uplink TX Measurement Operation Manual* (M-W3610AE) that need to be replaced or deleted.

Items in MX887013A/14A Manual to be Replaced or Deleted (1/20)

| Section | Page | Detail | | | | |
|------------------------------|------|---|---|-------|------|---|
| ----- | All | Before: MU887000A | | | | |
| | | After: MU887001A | | | | |
| 3.2.1 | 3-6 | Sequence table setting items Input level: | | | | |
| | | Before: -65.0 to +35.0 dBm (Test Port 1, 2) -65.0 to +25.0 dBm (Test Port 3, 4) | | | | |
| | | After: -65.0 to +35.0 dBm (Test Port 1, 2, 3, 4) | | | | |
| | | Sequence table setting items Output level: | | | | |
| | | Before: -130.0 to -10.0 dBm (Test Port 1, 2) -120.0 to 0.0 dBm (Test Port 3, 4) | | | | |
| | | After: -130.0 to -10.0 dBm (Test Port 1, 2, 3, 4) | | | | |
| | | Sequence table setting items Output port | | | | |
| | | Before: When selecting Port 3 or 4, make sure the port number is not the same as the input port. | | | | |
| | | After: (Subject to deletion) | | | | |
| 3.2.3 | 3-13 | Table 3.2.3-1 Error Cause | | | | |
| | | Before: <table><tr><th>Parameter</th><th>Cause</th></tr><tr><td>Port</td><td>Port 3 is set for both input port and output port. Or Port 4 is set for both input port and output port.</td></tr></table> | Parameter | Cause | Port | Port 3 is set for both input port and output port. Or Port 4 is set for both input port and output port. |
| | | Parameter | Cause | | | |
| | | Port | Port 3 is set for both input port and output port. Or Port 4 is set for both input port and output port. | | | |
| After: (Subject to deletion) | | | | | | |
| | | | | | | |
| 4.2.1 | 4-42 | :ROUTE:PORT:CONNect:DIRection Details | | | | |
| | | Before: Both Test Port1 and Test Port2 can be set to input and output simultaneously. Test Port3 and Test Port4 can be set to either input or output at one time. | | | | |
| | | After: Test Port1, Test Port2, Test Port3 and Test Port4 can be set to both of Input and Output. | | | | |

Items in MX887013A/14A Manual to be Replaced or Deleted (2/20)

| Section | Page | Detail |
|---------|-------|--|
| 4.2.2 | 4-50 | :CONFigure:CELLular:GENerator:RFSettings:LEVel Parameter <level> Range |
| | | Before: -130.0 to -10.0 dBm (Port1/Port2) -120.0 to 0.0 dBm (Port3/Port4) |
| | | After: -130.0 to -10.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is -135.0 to -15.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is -135.0 to -15.0 dBm. |
| 4.2.2 | 4-111 | :CONFigure:CELLular:MEASurement:RFSettings:LEVel Parameter <level> Range |
| | | Before: -65.0 to +35.0 dBm (Port 1/Port 2) -65.0 to +25.0 dBm (Port 3/Port 4) |
| | | After: -65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is -60.0 to +40.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is -60.0 to +40.0 dBm. |
| 4.2.2 | 4-112 | :CONFigure:CELLular:MEASurement:RFSettings:LEVel:SCC1 Parameter <level> Range |
| | | Before: -65.0 to +35.0 dBm (Port 1/Port 2) -65.0 to +25.0 dBm (Port 3/Port 4) |
| | | After: -65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is -60.0 to +40.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is -60.0 to +40.0 dBm. |
| 4.2.3 | 4-174 | :CONFigure:CELLular:GENerator:RFSettings:LEVel Parameter <level> Range |
| | | Before: -130.0 to -10.00 dBm (Port1/Port2) -120.0 to 0.0 dBm (Port3/Port4) |
| | | After: -130.0 to -10.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is -135.0 to -15.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is -135.0 to -15.0 dBm. |

Items in MX887013A/14A Manual to be Replaced or Deleted (3/20)

| Section | Page | Detail |
|---------|-------|--|
| 4.2.3 | 4-176 | :CONFigure:CELLular:MEASurement:RFSettings:LEVel Parameter <level> Range |
| | | Before: –65.0 to +35.0 dBm (Port 1/Port 2) –65.0 to +25.0 dBm (Port 3/Port 4) |
| | | After: –65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is –60.0 to +40.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is –60.0 to +40.0 dBm. |
| 4.2.3 | 4-226 | :CONFigure:CELLular:SEQuence:RFSettings:TRX Parameter <ref> Range |
| | | Before: –65.0 to +35 dBm (Port1/Port2) –65.0 to +25 dBm (Port3/Port4) |
| | | After: –65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| | | Parameter <level> Range |
| | | Before: –130.0 to –10.00 dBm (Port1/Port2) –120.0 to 0.0 dBm (Port3/Port4) |
| | | After: –130.0 to –10.0 dBm (Port1/Port2/Port3/Port4) |
| 4.2.3 | 4-228 | :CONFigure:CELLular:SEQuence:RFSettings:TX Parameter <ref> Range |
| | | Before: –65.0 to +35 dBm (Port1/Port2) –65.0 to +25 dBm (Port3/Port4) |
| | | After: –65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is –60.0 to +40.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is –60.0 to +40.0 dBm. |
| 4.2.3 | 4-229 | :CONFigure:CELLular:SEQuence:RFSettings:TX:SCC1 Parameter <ref> Range |
| | | Before: –65.0 to +35 dBm (Port1/Port2) –65.0 to +25 dBm (Port3/Port4) |
| | | After: –65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is –60.0 to +40.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is –60.0 to +40.0 dBm. |

Items in MX887013A/14A Manual to be Replaced or Deleted (4/20)

| Section | Page | Detail |
|---------|-------|--|
| 4.2.3 | 4-231 | :CONFigure:CELLular:SEQuence:RXPort Details |
| | | Before: PORT3 cannot be set when PORT3 is selected for RF signal input port. PORT4 cannot be set when PORT4 is selected for RF signal input port. |
| | | After: (Subject to deletion) |
| 5.2.1 | 5-29 | PORT Details |
| | | Before: Both Test Port1 and Test Port2 can be set to input and output simultaneously. Test Port3 and Test Port4 can be set to either input or output at one time. |
| | | After: Test Port1, Test Port2, Test Port3 and Test Port4 can be set to both of Input and Output. |
| 5.2.2 | 5-74 | ILVL Parameter level Range |
| | | Before: –65.0 to +35.0 dBm (Port 1/Port 2) –65.0 to +25.0 dBm (Port 3/Port 4) |
| | | After: –65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is –60.0 to +40.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is –60.0 to +40.0 dBm. |
| 5.2.2 | 5-75 | ILVL_SCC1 Parameter level Range |
| | | Before: –65.0 to +35.0 dBm (Port 1/Port 2) –65.0 to +25.0 dBm (Port 3/Port 4) |
| | | After: –65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is –60.0 to +40.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is –60.0 to +40.0 dBm. |

Items in MX887013A/14A Manual to be Replaced or Deleted (5/20)

| Section | Page | Detail |
|---------|-------|---|
| 5.2.2 | 5-99 | OLVL Parameter level Range |
| | | Before: –130.0 to –10.0 dBm (Port 1/Port 2) –120.0 to 0.0 dBm (Port 3/Port 4) |
| | | After: –130.0 to –10.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is –135.0 to –15.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is –135.0 to –15.0 dBm. |
| 5.2.3 | 5-167 | ILVL Parameter level Range |
| | | Before: –65.0 to +35.0 dBm (Port 1/Port 2) –65.0 to +25.0 dBm (Port 3/Port 4) |
| | | After: –65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is –60.0 to +40.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is –60.0 to +40.0 dBm. |
| 5.2.3 | 5-258 | OLVL Parameter level Range |
| | | Before: –130.0 to –10.0 dBm (Port 1/Port 2) –120.0 to 0.0 dBm (Port 3/Port 4) |
| | | After: –130.0 to –10.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is –135.0 to –15.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is –135.0 to –15.0 dBm. |
| 5.2.3 | 5-271 | SEQSGPORT Details |
| | | Before: PORT3 cannot be set when PORT3 is selected for RF signal input port. PORT4 cannot be set when PORT4 is selected for RF signal input port. |
| | | After: (Subject to deletion) |

Items in MX887013A/14A Manual to be Replaced or Deleted (6/20)

| Section | Page | Detail |
|---------|-------|---|
| 5.2.3 | 5-275 | SEQTRX Parameter ref Range |
| | | Before: –65.0 to +35 dBm (Port1/Port2) –65.0 to +25 dBm (Port3/Port4) |
| | | After: –65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| | | Parameter level Range |
| | | Before: –130.0 to –10.0 dBm (Port 1/Port 2) –120.0 to 0.0 dBm (Port 3/Port 4) |
| | | After: –130.0 to –10.0 dBm (Port1/Port2/Port3/Port4) |
| 5.2.3 | 5-277 | SEQTX Parameter ref Range |
| | | Before: –65.0 to +35 dBm (Port1/Port2) –65.0 to +25 dBm (Port3/Port4) |
| | | After: –65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is –60.0 to +40.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is –60.0 to +40.0 dBm. |
| 5.2.3 | 5-278 | SEQTX_SCC1 Parameter ref Range |
| | | Before: –65.0 to +35 dBm (Port1/Port2) –65.0 to +25 dBm (Port3/Port4) |
| | | After: –65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is –60.0 to +40.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is –60.0 to +40.0 dBm. |
| 6.4.1 | 6-15 | Measuring output EVM (4) Test Procedure 4. Test Port3 |
| | | Before: Output Level: –2.9 dBm Input Level: +25 dBm |
| | | After: Output Level: –12.9 dBm Input Level: +35 dBm |

Items in MX887013A/14A Manual to be Replaced or Deleted (7/20)

| Section | Page | Detail | | | | | | | | | | | | |
|---------|--------------------|--|----------------------|-------------|-------------|---------|--------------------|------------|---------|--------------------|------------|---------|--------------------|------------|
| 6.4.2 | 6-16 | Tx power measurement accuracy (CW) (1) Test specifications | | | | | | | | | | | | |
| | | Before: Test Port3/4 (600 MHz≤Frequency≤2700 MHz, 3400 MHz≤Frequency≤3800 MHz) <table><tr><th>Measurement Accuracy</th><th>Input Level</th><th>Temperature</th></tr><tr><td>±0.7 dB</td><td>−20 dBm≤, ≤+25 dBm</td><td>10 to 40°C</td></tr><tr><td>±0.9 dB</td><td>−50 dBm≤, <−20 dBm</td><td>10 to 40°C</td></tr><tr><td>±1.1 dB</td><td>−60 dBm≤, <−50 dBm</td><td>10 to 40°C</td></tr></table> | Measurement Accuracy | Input Level | Temperature | ±0.7 dB | −20 dBm≤, ≤+25 dBm | 10 to 40°C | ±0.9 dB | −50 dBm≤, <−20 dBm | 10 to 40°C | ±1.1 dB | −60 dBm≤, <−50 dBm | 10 to 40°C |
| | | Measurement Accuracy | Input Level | Temperature | | | | | | | | | | |
| | | ±0.7 dB | −20 dBm≤, ≤+25 dBm | 10 to 40°C | | | | | | | | | | |
| | | ±0.9 dB | −50 dBm≤, <−20 dBm | 10 to 40°C | | | | | | | | | | |
| | | ±1.1 dB | −60 dBm≤, <−50 dBm | 10 to 40°C | | | | | | | | | | |
| | | After: Test Port3/4 (600 MHz≤Frequency≤2700 MHz, 3400 MHz≤Frequency≤3800 MHz) <table><tr><th>Measurement Accuracy</th><th>Input Level</th><th>Temperature</th></tr><tr><td>±0.5 dB</td><td>−20 dBm≤, ≤+35 dBm</td><td>10 to 40°C</td></tr><tr><td>±0.7 dB</td><td>−50 dBm≤, <−20 dBm</td><td>10 to 40°C</td></tr><tr><td>±0.9 dB</td><td>−60 dBm≤, <−50 dBm</td><td>10 to 40°C</td></tr></table> | Measurement Accuracy | Input Level | Temperature | ±0.5 dB | −20 dBm≤, ≤+35 dBm | 10 to 40°C | ±0.7 dB | −50 dBm≤, <−20 dBm | 10 to 40°C | ±0.9 dB | −60 dBm≤, <−50 dBm | 10 to 40°C |
| | | Measurement Accuracy | Input Level | Temperature | | | | | | | | | | |
| | | ±0.5 dB | −20 dBm≤, ≤+35 dBm | 10 to 40°C | | | | | | | | | | |
| | | ±0.7 dB | −50 dBm≤, <−20 dBm | 10 to 40°C | | | | | | | | | | |
| | | ±0.9 dB | −60 dBm≤, <−50 dBm | 10 to 40°C | | | | | | | | | | |
| | | Before: Test Port3/4 (3800 MHz < Frequency ≤ 4200 MHz) <table><tr><th>Measurement Accuracy</th><th>Input Level</th><th>Temperature</th></tr><tr><td>±0.7 dB</td><td>−20 dBm≤, ≤+25 dBm</td><td>20 to 30°C</td></tr><tr><td>±0.9 dB</td><td>−50 dBm≤, <−20 dBm</td><td>20 to 30°C</td></tr><tr><td>±1.1 dB</td><td>−60 dBm≤, <−50 dBm</td><td>20 to 30°C</td></tr></table> | Measurement Accuracy | Input Level | Temperature | ±0.7 dB | −20 dBm≤, ≤+25 dBm | 20 to 30°C | ±0.9 dB | −50 dBm≤, <−20 dBm | 20 to 30°C | ±1.1 dB | −60 dBm≤, <−50 dBm | 20 to 30°C |
| | | Measurement Accuracy | Input Level | Temperature | | | | | | | | | | |
| | | ±0.7 dB | −20 dBm≤, ≤+25 dBm | 20 to 30°C | | | | | | | | | | |
| | | ±0.9 dB | −50 dBm≤, <−20 dBm | 20 to 30°C | | | | | | | | | | |
| | | ±1.1 dB | −60 dBm≤, <−50 dBm | 20 to 30°C | | | | | | | | | | |
| | | After: Test Port3/4 (3800 MHz < Frequency ≤ 4200 MHz) <table><tr><th>Measurement Accuracy</th><th>Input Level</th><th>Temperature</th></tr><tr><td>±0.7 dB</td><td>−20 dBm≤, ≤+35 dBm</td><td>20 to 30°C</td></tr><tr><td>±0.9 dB</td><td>−50 dBm≤, <−20 dBm</td><td>20 to 30°C</td></tr><tr><td>±1.1 dB</td><td>−60 dBm≤, <−50 dBm</td><td>20 to 30°C</td></tr></table> | Measurement Accuracy | Input Level | Temperature | ±0.7 dB | −20 dBm≤, ≤+35 dBm | 20 to 30°C | ±0.9 dB | −50 dBm≤, <−20 dBm | 20 to 30°C | ±1.1 dB | −60 dBm≤, <−50 dBm | 20 to 30°C |
| | | Measurement Accuracy | Input Level | Temperature | | | | | | | | | | |
| | | ±0.7 dB | −20 dBm≤, ≤+35 dBm | 20 to 30°C | | | | | | | | | | |
| | | ±0.9 dB | −50 dBm≤, <−20 dBm | 20 to 30°C | | | | | | | | | | |
| ±1.1 dB | −60 dBm≤, <−50 dBm | 20 to 30°C | | | | | | | | | | | | |

Items in MX887013A/14A Manual to be Replaced or Deleted (8/20)

| Section | Page | Detail |
|---------|------|--|
| 6.4.4 | 6-20 | Frequency/modulation measurement (1) Test specifications |
| | | Before: Test Port3/4 Input level: $-40\text{ dBm} \leq, \leq +25\text{ dBm}$ |
| | | After: Test Port3/4 Input level: $-40\text{ dBm} \leq, \leq +35\text{ dBm}$ |
| 6.4.6 | 6-24 | Adjacent Channel Leakage Power Ratio (1) Test specifications |
| | | Before: Test Port3/4 Input level range: $-10\text{ dBm} \leq, \leq +25\text{ dBm}$ |
| | | After: Test Port3/4 Input level range: $-10\text{ dBm} \leq, \leq +35\text{ dBm}$ |
| 6.4.7 | 6-32 | Output EVM Output EVM |
| | | Before: EVM (%rms) Test Port3 MU887000A Output Level: -2.9 dBm |
| | | After: EVM (%rms) Test Port3 MU887001A Output Level: -12.9 dBm |
| 6.4.7 | 6-35 | Tx Power Measurement Accuracy (CW) (Cont'd) Tx Power Measurement Accuracy Port3/4 |
| | | Before: MU887000A Input Level: -10 dBm Measurement Accuracy (dB) Lo limit: -0.7 Hi Limit: $+0.7$ Measurement uncertainty: ± 0.17 |
| | | After: MU887001A Input Level: -10 dBm Measurement Accuracy (dB) Lo limit: -0.5 Hi Limit: $+0.5$ Measurement uncertainty: ± 0.15 |
| 6.4.7 | 6-35 | Tx Power Measurement Accuracy (CW) (Cont'd) Tx Power Measurement Accuracy Port3/4 |
| | | Before: MU887000A Input Level: -50 dBm Measurement Accuracy (dB) Lo limit: -0.9 Hi Limit: $+0.9$ Measurement uncertainty: ± 0.14 |
| | | After: MU887001A Input Level: -50 dBm Measurement Accuracy (dB) Lo limit: -0.7 Hi Limit: $+0.7$ Measurement uncertainty: ± 0.14 |
| 6.4.7 | 6-36 | Tx Power Measurement Accuracy (CW) (Cont'd) Tx Power Measurement Accuracy Port3/4 |
| | | Before: MU887000A Input Level: -60 dBm Measurement Accuracy (dB) Lo limit: -1.1 Hi Limit: $+1.1$ Measurement uncertainty: ± 0.14 |
| | | After: MU887001A Input Level: -60 dBm Measurement Accuracy (dB) Lo limit: -0.9 Hi Limit: $+0.9$ Measurement uncertainty: ± 0.14 |

1.10 Items To Be Replaced Or Deleted for MX887013/14A

Items in MX887013A/14A Manual to be Replaced or Deleted (9/20)

| Section | Page | Detail | | | | | | | | | | | | |
|--|----------------------|--|----------------------|-------------|--------------------|------------|--------------------|--------------------|------------|--------------------|--------------------|------------|--------------------|------------|
| 6.6.1 | 6-58 | Tx power measurement accuracy (CW) (1) Test specifications | | | | | | | | | | | | |
| | | Before: Test Port3/4 (Excluding Intraband Contiguous CA SCC, PCC+SCC measurement) (698 MHz≤Frequency≤2700 MHz, 3400 MHz≤Frequency≤3800 MHz) | | | | | | | | | | | | |
| | | <table><tr><th>Measurement Accuracy</th><th>Input Level</th><th>Temperature</th></tr><tr><td>±0.7 dB</td><td>−20 dBm≤, ≤+25 dBm</td><td>10 to 40°C</td></tr><tr><td>±0.9 dB</td><td>−50 dBm≤, <−20 dBm</td><td>10 to 40°C</td></tr><tr><td>±1.1 dB</td><td>−60 dBm≤, <−50 dBm</td><td>10 to 40°C</td></tr></table> | Measurement Accuracy | Input Level | Temperature | ±0.7 dB | −20 dBm≤, ≤+25 dBm | 10 to 40°C | ±0.9 dB | −50 dBm≤, <−20 dBm | 10 to 40°C | ±1.1 dB | −60 dBm≤, <−50 dBm | 10 to 40°C |
| | | Measurement Accuracy | Input Level | Temperature | | | | | | | | | | |
| | | ±0.7 dB | −20 dBm≤, ≤+25 dBm | 10 to 40°C | | | | | | | | | | |
| | | ±0.9 dB | −50 dBm≤, <−20 dBm | 10 to 40°C | | | | | | | | | | |
| | | ±1.1 dB | −60 dBm≤, <−50 dBm | 10 to 40°C | | | | | | | | | | |
| | | After: Test Port3/4 (Excluding Intraband Contiguous CA SCC, PCC+SCC measurement) (698 MHz≤Frequency≤2700 MHz, 3400 MHz≤Frequency≤3800 MHz) | | | | | | | | | | | | |
| | | <table><tr><th>Measurement Accuracy</th><th>Input Level</th><th>Temperature</th></tr><tr><td>±0.5 dB</td><td>−20 dBm≤, ≤+35 dBm</td><td>10 to 40°C</td></tr><tr><td>±0.7 dB</td><td>−50 dBm≤, <−20 dBm</td><td>10 to 40°C</td></tr><tr><td>±0.9 dB</td><td>−60 dBm≤, <−50 dBm</td><td>10 to 40°C</td></tr></table> | Measurement Accuracy | Input Level | Temperature | ±0.5 dB | −20 dBm≤, ≤+35 dBm | 10 to 40°C | ±0.7 dB | −50 dBm≤, <−20 dBm | 10 to 40°C | ±0.9 dB | −60 dBm≤, <−50 dBm | 10 to 40°C |
| | | Measurement Accuracy | Input Level | Temperature | | | | | | | | | | |
| | | ±0.5 dB | −20 dBm≤, ≤+35 dBm | 10 to 40°C | | | | | | | | | | |
| | | ±0.7 dB | −50 dBm≤, <−20 dBm | 10 to 40°C | | | | | | | | | | |
| | | ±0.9 dB | −60 dBm≤, <−50 dBm | 10 to 40°C | | | | | | | | | | |
| | | Before: Test Port3/4 (Excluding Intraband Contiguous CA SCC, PCC+SCC measurement) (3800 MHz < Frequency ≤ 4200 MHz) | | | | | | | | | | | | |
| | | <table><tr><th>Measurement Accuracy</th><th>Input Level</th><th>Temperature</th></tr><tr><td>±0.7 dB</td><td>−20 dBm≤, ≤+25 dBm</td><td>20 to 30°C</td></tr><tr><td>±0.9 dB</td><td>−50 dBm≤, <−20 dBm</td><td>20 to 30°C</td></tr><tr><td>±1.1 dB</td><td>−60 dBm≤, <−50 dBm</td><td>20 to 30°C</td></tr></table> | Measurement Accuracy | Input Level | Temperature | ±0.7 dB | −20 dBm≤, ≤+25 dBm | 20 to 30°C | ±0.9 dB | −50 dBm≤, <−20 dBm | 20 to 30°C | ±1.1 dB | −60 dBm≤, <−50 dBm | 20 to 30°C |
| | | Measurement Accuracy | Input Level | Temperature | | | | | | | | | | |
| ±0.7 dB | −20 dBm≤, ≤+25 dBm | 20 to 30°C | | | | | | | | | | | | |
| ±0.9 dB | −50 dBm≤, <−20 dBm | 20 to 30°C | | | | | | | | | | | | |
| ±1.1 dB | −60 dBm≤, <−50 dBm | 20 to 30°C | | | | | | | | | | | | |
| After: Test Port3/4 (Excluding Intraband Contiguous CA SCC, PCC+SCC measurement) (3800 MHz < Frequency ≤ 4200 MHz) | | | | | | | | | | | | | | |
| <table><tr><th>Measurement Accuracy</th><th>Input Level</th><th>Temperature</th></tr><tr><td>±0.7 dB</td><td>−20 dBm≤, ≤+35 dBm</td><td>20 to 30°C</td></tr><tr><td>±0.9 dB</td><td>−50 dBm≤, <−20 dBm</td><td>20 to 30°C</td></tr><tr><td>±1.1 dB</td><td>−60 dBm≤, <−50 dBm</td><td>20 to 30°C</td></tr></table> | Measurement Accuracy | Input Level | Temperature | ±0.7 dB | −20 dBm≤, ≤+35 dBm | 20 to 30°C | ±0.9 dB | −50 dBm≤, <−20 dBm | 20 to 30°C | ±1.1 dB | −60 dBm≤, <−50 dBm | 20 to 30°C | | |
| Measurement Accuracy | Input Level | Temperature | | | | | | | | | | | | |
| ±0.7 dB | −20 dBm≤, ≤+35 dBm | 20 to 30°C | | | | | | | | | | | | |
| ±0.9 dB | −50 dBm≤, <−20 dBm | 20 to 30°C | | | | | | | | | | | | |
| ±1.1 dB | −60 dBm≤, <−50 dBm | 20 to 30°C | | | | | | | | | | | | |

Items in MX887013A/14A Manual to be Replaced or Deleted (10/20)

| Section | Page | Detail | | | |
|----------------------|--------------------|--|--|---|-------------|
| 6.6.1 | 6-58 | Tx power measurement accuracy (CW) (1) Test specifications | | | |
| | | Before: | Test Port3/4 (Intraband Contiguous CA SCC, PCC+SCC measurement) (698 MHz≤Frequency≤2700 MHz) | | |
| | | | Measurement Accuracy | Input Level | Temperature |
| | | | ±0.7 dB | −20 dBm≤, ≤+25 dBm | 10 to 40°C |
| | | | ±0.9 dB | −50 dBm≤, <−20 dBm | 10 to 40°C |
| | | | ±1.1 dB | −60 dBm≤, <−50 dBm | 10 to 40°C |
| | | After: | Test Port3/4 (Intraband Contiguous CA SCC, PCC+SCC measurement) (698 MHz≤Frequency≤2700 MHz) | | |
| | | | Measurement Accuracy | Input Level | Temperature |
| | | | ±0.7 dB | −50 dBm≤, <+35 dBm | 10 to 40°C |
| | | | ±0.9 dB | −60 dBm≤, <−50 dBm | 10 to 40°C |
| | | | Before: | Test Port3/4 (Intraband Contiguous CA SCC, PCC+SCC measurement) (3400 MHz < Frequency ≤ 3800 MHz) | |
| | | Measurement Accuracy | | Input Level | Temperature |
| | | ±1.0 dB | | −50 dBm≤, ≤+25 dBm | 10 to 40°C |
| | | ±1.3 dB | | −60 dBm≤, <−50 dBm | 10 to 40°C |
| | | After: | | Test Port3/4 (Intraband Contiguous CA SCC, PCC+SCC measurement) (3400 MHz < Frequency ≤3800 MHz) | |
| Measurement Accuracy | Input Level | | Temperature | | |
| ±1.0 dB | −50 dBm≤, <+35 dBm | | 10 to 40°C | | |
| ±1.3 dB | −60 dBm≤, <−50 dBm | | 10 to 40°C | | |

1.10 Items To Be Replaced Or Deleted for MX887013/14A

Items in MX887013A/14A Manual to be Replaced or Deleted (11/20)

| Section | Page | Detail | | | | | | | | | |
|---|----------------------|--|----------------------|-------------|--------------------|------------|--------------------|--------------------|------------|--------------------|------------|
| 6.6.1 | 6-58 | Tx power measurement accuracy (CW) (1) Test specifications Before: Test Port3/4 (Intraband Contiguous CA SCC, PCC+SCC measurement) (3800 MHz < Frequency ≤ 4200 MHz) | | | | | | | | | |
| | | <table><tr><th>Measurement Accuracy</th><th>Input Level</th><th>Temperature</th></tr><tr><td>±1.0 dB</td><td>−50 dBm≤, ≤+25 dBm</td><td>20 to 30°C</td></tr><tr><td>±1.3 dB</td><td>−60 dBm≤, <−50 dBm</td><td>20 to 30°C</td></tr></table> | Measurement Accuracy | Input Level | Temperature | ±1.0 dB | −50 dBm≤, ≤+25 dBm | 20 to 30°C | ±1.3 dB | −60 dBm≤, <−50 dBm | 20 to 30°C |
| | | Measurement Accuracy | Input Level | Temperature | | | | | | | |
| | | ±1.0 dB | −50 dBm≤, ≤+25 dBm | 20 to 30°C | | | | | | | |
| | | ±1.3 dB | −60 dBm≤, <−50 dBm | 20 to 30°C | | | | | | | |
| | | After: Test Port3/4 (Intraband Contiguous CA SCC, PCC+SCC measurement) (3800 MHz < Frequency ≤4200 MHz) | | | | | | | | | |
| <table><tr><th>Measurement Accuracy</th><th>Input Level</th><th>Temperature</th></tr><tr><td>±1.0 dB</td><td>−50 dBm≤, <+35 dBm</td><td>20 to 30°C</td></tr><tr><td>±1.3 dB</td><td>−60 dBm≤, <−50 dBm</td><td>20 to 30°C</td></tr></table> | Measurement Accuracy | Input Level | Temperature | ±1.0 dB | −50 dBm≤, <+35 dBm | 20 to 30°C | ±1.3 dB | −60 dBm≤, <−50 dBm | 20 to 30°C | | |
| Measurement Accuracy | Input Level | Temperature | | | | | | | | | |
| ±1.0 dB | −50 dBm≤, <+35 dBm | 20 to 30°C | | | | | | | | | |
| ±1.3 dB | −60 dBm≤, <−50 dBm | 20 to 30°C | | | | | | | | | |
| | | | | | | | | | | | |
| 6.6.3 | 6-64 | Frequency/modulation measurement (1) Test specifications Before: Test Port3/4 Input level: −40 dBm≤, ≤+25 dBm After: Test Port3/4 Input level: −40 dBm≤, ≤+35 dBm | | | | | | | | | |
| 6.6.5 | 6-69 | Adjacent Channel Leakage Power Ratio (1) Test specifications Before: Test Port3/4 Input level range: −10 dBm≤, ≤+25 dBm After: Test Port3/4 Input level range: −10 dBm≤, ≤+35 dBm | | | | | | | | | |

Items in MX887013A/14A Manual to be Replaced or Deleted (12/20)

| Section | Page | Detail |
|---------|------|---|
| 6.6.6 | 6-79 | <p>Tx power measurement accuracy (CW) (Cont'd) Port3/4</p> <p>Before: MU887000A Input Level: -10 dBm Measurement Accuracy (dB) PCC (MHz): 717.8, 2719.8, 3400.0, 3780.2 Lo limit: -0.7 Hi Limit: +0.7 Measurement uncertainty: ± 0.17 PCC (MHz): 4180.2 Lo limit: -0.7 Hi Limit: +0.7 Measurement uncertainty: ± 0.28</p> <p>After: MU887001A Input Level: -10 dBm Measurement Accuracy (dB) PCC (MHz): 717.8, 2719.8, 3400.0, 3780.2 Lo limit: -0.5 Hi Limit: +0.5 Measurement uncertainty: ± 0.15 PCC (MHz): 4180.2 Lo limit: -0.7 Hi Limit: +0.7 Measurement uncertainty: ± 0.33</p> |
| | | <p>Before: MU887000A Input Level: -10 dBm Measurement Accuracy (dB) SCC:PCC-19.8 (MHz): 698.0, 2700.0 Lo limit: -0.7 Hi Limit: +0.7 Measurement uncertainty: ± 0.17 SCC:PCC-19.8 (MHz): 3380.2, 3760.4 Lo limit: -1.0 Hi Limit: +1.0 Measurement uncertainty: ± 0.14 SCC:PCC-19.8 (MHz): 4160.4 Lo limit: -1.0 Hi Limit: +1.0 Measurement uncertainty: ± 0.20</p> <p>After: MU887000A Input Level: -10 dBm Measurement Accuracy (dB) SCC:PCC-19.8 (MHz): 698.0, 2700.0 Lo limit: -0.7 Hi Limit: +0.7 Measurement uncertainty: ± 0.15 SCC:PCC-19.8 (MHz): 3380.2, 3760.4 Lo limit: -1.0 Hi Limit: +1.0 Measurement uncertainty: ± 0.14 SCC:PCC-19.8 (MHz): 4160.4 Lo limit: -1.0 Hi Limit: +1.0 Measurement uncertainty: ± 0.33</p> |
| | | <p>Tx power measurement accuracy (CW) (Cont'd) Port3/4</p> <p>Before: MU887000A Input Level: -10 dBm Measurement Accuracy (dB) SCC:PCC+19.8 (MHz): 737.6, 2739.6 Lo limit: -0.7 Hi Limit: +0.7 Measurement uncertainty: ± 0.17 SCC:PCC+19.8 (MHz): 3419.8, 3800.0 Lo limit: -1.0 Hi Limit: +1.0 Measurement uncertainty: ± 0.14 SCC:PCC+19.8 (MHz): 4200.0 Lo limit: -1.0 Hi Limit: +1.0 Measurement uncertainty: ± 0.20</p> <p>After: MU887000A Input Level: -10 dBm Measurement Accuracy (dB) SCC:PCC+19.8 (MHz): 737.6, 2739.6 Lo limit: -0.7 Hi Limit: +0.7 Measurement uncertainty: ± 0.15 SCC:PCC+19.8 (MHz): 3419.8, 3800.0 Lo limit: -1.0 Hi Limit: +1.0 Measurement uncertainty: ± 0.14 SCC:PCC+19.8 (MHz): 4200.0 Lo limit: -1.0 Hi Limit: +1.0 Measurement uncertainty: ± 0.33</p> |

1.10 Items To Be Replaced Or Deleted for MX887013/14A

Items in MX887013A/14A Manual to be Replaced or Deleted (13/20)

| Section | Page | Detail |
|---------|------|--|
| 6.6.6 | 6-80 | <p>Tx power measurement accuracy (CW) (Cont'd) Port3/4</p> <p>Before: MU887000A Input Level: -50 dBm Measurement Accuracy (dB) PCC (MHz): 717.8, 2719.8, 3400.0, 3780.2 Lo limit: -0.9 Hi Limit: +0.9 Measurement uncertainty: ± 0.14 PCC (MHz): 4180.2 Lo limit: -0.9 Hi Limit: +0.9 Measurement uncertainty: ± 0.20</p> <p>After: MU887000A Input Level: -50 dBm Measurement Accuracy (dB) PCC (MHz): 717.8, 2719.8, 3400.0, 3780.2 Lo limit: -0.7 Hi Limit: +0.7 Measurement uncertainty: ± 0.14 PCC (MHz): 4180.2 Lo limit: -0.9 Hi Limit: +0.9 Measurement uncertainty: ± 0.33</p> |
| | | <p>Before: MU887000A Input Level: -50 dBm Measurement Accuracy (dB) SCC:PCC-19.8 (MHz): 698.0, 2700.0 Lo limit: -0.9 Hi Limit: +0.9 Measurement uncertainty: ± 0.24 SCC:PCC-19.8 (MHz): 3380.2, 3760.4 Lo limit: -1.0 Hi Limit: +1.0 Measurement uncertainty: ± 0.24 SCC:PCC-19.8 (MHz): 4160.4 Lo limit: -1.0 Hi Limit: +1.0 Measurement uncertainty: ± 0.20</p> <p>After: MU887000A Input Level: -50 dBm Measurement Accuracy (dB) SCC:PCC-19.8 (MHz): 698.0, 2700.0 Lo limit: -0.7 Hi Limit: +0.7 Measurement uncertainty: ± 0.14 SCC:PCC-19.8 (MHz): 3380.2, 3760.4 Lo limit: -1.0 Hi Limit: +1.0 Measurement uncertainty: ± 0.14 SCC:PCC-19.8 (MHz): 4160.4 Lo limit: -1.0 Hi Limit: +1.0 Measurement uncertainty: ± 0.33</p> |
| | | <p>Before: MU887000A Input Level: -50 dBm Measurement Accuracy (dB) SCC:PCC+19.8 (MHz): 737.6, 2739.6 Lo limit: -0.9 Hi Limit: +0.9 Measurement uncertainty: ± 0.24 SCC:PCC+19.8 (MHz): 3419.8, 3800.0 Lo limit: -1.0 Hi Limit: +1.0 Measurement uncertainty: ± 0.24 SCC:PCC+19.8 (MHz): 4200.0 Lo limit: -1.0 Hi Limit: +1.0 Measurement uncertainty: ± 0.20</p> <p>After: MU887000A Input Level: -50 dBm Measurement Accuracy (dB) SCC:PCC+19.8 (MHz): 737.6, 2739.6 Lo limit: -0.7 Hi Limit: +0.7 Measurement uncertainty: ± 0.14 SCC:PCC+19.8 (MHz): 3419.8, 3800.0 Lo limit: -1.0 Hi Limit: +1.0 Measurement uncertainty: ± 0.14 SCC:PCC+19.8 (MHz): 4200.0 Lo limit: -1.0 Hi Limit: +1.0 Measurement uncertainty: ± 0.33</p> |

Items in MX887013A/14A Manual to be Replaced or Deleted (14/20)

| Section | Page | Detail |
|---------|------|--|
| 6.6.6 | 6-81 | <p>Tx power measurement accuracy (CW) (Cont'd) Port3/4</p> <p>Before: MU887000A Input Level: -60 dBm Measurement Accuracy (dB) PCC(MHz): 717.8, 2719.8, 3400.0, 3780.2 Lo limit: -1.1 Hi Limit: +1.1 Measurement uncertainty: ± 0.14 PCC (MHz): 4180.2 Lo limit: -1.1 Hi Limit: +1.1 Measurement uncertainty: ± 0.20</p> <p>After: MU887000A Input Level: -60 dBm Measurement Accuracy (dB) PCC (MHz): 717.8, 2719.8, 3400.0, 3780.2 Lo limit: -0.9 Hi Limit: +0.9 Measurement uncertainty: ± 0.33 PCC (MHz): 4180.2 Lo limit: -1.1 Hi Limit: +1.1 Measurement uncertainty: ± 0.33</p> |
| | | <p>Before: MU887000A Input Level: -60 dBm Measurement Accuracy (dB) SCC:PCC-19.8 (MHz): 698.0, 2700.0 Lo limit: -1.1 Hi Limit: +1.1 Measurement uncertainty: ± 0.14 SCC:PCC-19.8 (MHz): 3380.2, 3760.4 Lo limit: -1.3 Hi Limit: +1.3 Measurement uncertainty: ± 0.14 SCC:PCC-19.8 (MHz): 4160.4 Lo limit: -1.3 Hi Limit: +1.3 Measurement uncertainty: ± 0.20</p> <p>After: MU887000A Input Level: -60 dBm Measurement Accuracy (dB) SCC:PCC-19.8 (MHz): 698.0, 2700.0 Lo limit: -0.9 Hi Limit: +0.9 Measurement uncertainty: ± 0.34 SCC:PCC-19.8 (MHz): 3380.2, 3760.4 Lo limit: -1.3 Hi Limit: +1.3 Measurement uncertainty: ± 0.14 SCC:PCC-19.8 (MHz): 4160.4 Lo limit: -1.3 Hi Limit: +1.3 Measurement uncertainty: ± 0.33</p> |
| | | <p>Before: MU887000A Input Level: -60 dBm Measurement Accuracy (dB) SCC:PCC+19.8 (MHz): 737.6, 2739.6 Lo limit: -1.1 Hi Limit: +1.1 Measurement uncertainty: ± 0.14 SCC:PCC+19.8 (MHz): 3419.8, 3800.0 Lo limit: -1.3 Hi Limit: +1.3 Measurement uncertainty: ± 0.14 SCC:PCC+19.8 (MHz): 4200.0 Lo limit: -1.3 Hi Limit: +1.3 Measurement uncertainty: ± 0.20</p> <p>After: MU887000A Input Level: -60 dBm Measurement Accuracy (dB) SCC:PCC+19.8 (MHz): 737.6, 2739.6 Lo limit: -0.9 Hi Limit: +0.9 Measurement uncertainty: ± 0.34 SCC:PCC+19.8 (MHz): 3419.8, 3800.0 Lo limit: -1.3 Hi Limit: +1.3 Measurement uncertainty: ± 0.14 SCC:PCC+19.8 (MHz): 4200.0 Lo limit: -1.3 Hi Limit: +1.3 Measurement uncertainty: ± 0.33</p> |

Items in MX887013A/14A Manual to be Replaced or Deleted (15/20)

| Section | Page | Detail | | | | | | | | |
|---|----------------------|---|----------------------|----------------------|----------------|----------------|----------------|---------|----------------|---------|
| Appendix A.1 | A-3 | RF Power Input Level Range | | | | | | | | |
| | | Before: Port1, Port2: −65.0 to +35.0 dBm Port3, Port4: −65.0 to +25.0 dBm | | | | | | | | |
| | | After: Port1 to 4: −40.0 to +35.0 dBm | | | | | | | | |
| Appendix A.1 | A-3 | RF Power Measurement Accuracy (1/2) | | | | | | | | |
| | | Before: Port1, Port2: Frequency: $600\text{ MHz} \leq f \leq 2700\text{ MHz}$, $3400\text{ MHz} \leq f \leq 3800\text{ MHz}$ (After calibration, 20 to 30°C) | | | | | | | | |
| | | <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>−20 to +35 dBm</td><td>±0.3 dB (typ.)</td></tr></table> | Input Level | Measurement Accuracy | −20 to +35 dBm | ±0.3 dB (typ.) | | | | |
| | | Input Level | Measurement Accuracy | | | | | | | |
| | | −20 to +35 dBm | ±0.3 dB (typ.) | | | | | | | |
| | | Frequency: $600\text{ MHz} \leq f \leq 2700\text{ MHz}$, $3400\text{ MHz} \leq f \leq 3800\text{ MHz}$ (After calibration, 10 to 40°C) | | | | | | | | |
| | | <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>−20 to +35 dBm</td><td>±0.5 dB</td></tr><tr><td>−50 to −20 dBm</td><td>±0.7 dB</td></tr><tr><td>−60 to −50 dBm</td><td>±0.9 dB</td></tr></table> | Input Level | Measurement Accuracy | −20 to +35 dBm | ±0.5 dB | −50 to −20 dBm | ±0.7 dB | −60 to −50 dBm | ±0.9 dB |
| | | Input Level | Measurement Accuracy | | | | | | | |
| | | −20 to +35 dBm | ±0.5 dB | | | | | | | |
| | | −50 to −20 dBm | ±0.7 dB | | | | | | | |
| | | −60 to −50 dBm | ±0.9 dB | | | | | | | |
| | | Frequency: $3800\text{ MHz} < f \leq 4200\text{ MHz}$ (After calibration, 20 to 30°C) | | | | | | | | |
| | | <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>−20 to +35 dBm</td><td>±0.7 dB</td></tr><tr><td>−50 to −20 dBm</td><td>±0.9 dB</td></tr><tr><td>−60 to −50 dBm</td><td>±1.1 dB</td></tr></table> | Input Level | Measurement Accuracy | −20 to +35 dBm | ±0.7 dB | −50 to −20 dBm | ±0.9 dB | −60 to −50 dBm | ±1.1 dB |
| | | Input Level | Measurement Accuracy | | | | | | | |
| | | −20 to +35 dBm | ±0.7 dB | | | | | | | |
| −50 to −20 dBm | ±0.9 dB | | | | | | | | | |
| −60 to −50 dBm | ±1.1 dB | | | | | | | | | |
| Port3, Port4: Frequency: $600\text{ MHz} \leq f \leq 2700\text{ MHz}$, $3400\text{ MHz} \leq f \leq 3800\text{ MHz}$ (After calibration, 10 to 40°C) | | | | | | | | | | |
| <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>−20 to +25 dBm</td><td>±0.7 dB</td></tr><tr><td>−50 to −20 dBm</td><td>±0.9 dB</td></tr><tr><td>−60 to −50 dBm</td><td>±1.1 dB</td></tr></table> | Input Level | Measurement Accuracy | −20 to +25 dBm | ±0.7 dB | −50 to −20 dBm | ±0.9 dB | −60 to −50 dBm | ±1.1 dB | | |
| Input Level | Measurement Accuracy | | | | | | | | | |
| −20 to +25 dBm | ±0.7 dB | | | | | | | | | |
| −50 to −20 dBm | ±0.9 dB | | | | | | | | | |
| −60 to −50 dBm | ±1.1 dB | | | | | | | | | |
| Frequency: $3800\text{ MHz} < f \leq 4200\text{ MHz}$ (After calibration, 20 to 30°C) | | | | | | | | | | |
| <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>−20 to +25 dBm</td><td>±0.7 dB</td></tr><tr><td>−50 to −20 dBm</td><td>±0.9 dB</td></tr><tr><td>−60 to −50 dBm</td><td>±1.1 dB</td></tr></table> | Input Level | Measurement Accuracy | −20 to +25 dBm | ±0.7 dB | −50 to −20 dBm | ±0.9 dB | −60 to −50 dBm | ±1.1 dB | | |
| Input Level | Measurement Accuracy | | | | | | | | | |
| −20 to +25 dBm | ±0.7 dB | | | | | | | | | |
| −50 to −20 dBm | ±0.9 dB | | | | | | | | | |
| −60 to −50 dBm | ±1.1 dB | | | | | | | | | |

Items in MX887013A/14A Manual to be Replaced or Deleted (16/20)

| Section | Page | Detail | | | | | | | | |
|---|----------------------|---|----------------------|----------------------|----------------|----------------|----------------|---------|----------------|---------|
| Appendix A.1 | A-3 | RF Power Measurement Accuracy (2/2) After: Port1 to 4: Frequency: $600\text{ MHz} \leq f \leq 2700\text{ MHz}$, $3400\text{ MHz} \leq f \leq 3800\text{ MHz}$ (After calibration, 20 to 30°C) | | | | | | | | |
| | | <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>-20 to +35 dBm</td><td>±0.3 dB (typ.)</td></tr></table> | Input Level | Measurement Accuracy | -20 to +35 dBm | ±0.3 dB (typ.) | | | | |
| | | Input Level | Measurement Accuracy | | | | | | | |
| | | -20 to +35 dBm | ±0.3 dB (typ.) | | | | | | | |
| | | Frequency: $600\text{ MHz} \leq f \leq 2700\text{ MHz}$, $3400\text{ MHz} \leq f \leq 3800\text{ MHz}$ (After calibration, 10 to 40°C) | | | | | | | | |
| | | <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>-20 to +35 dBm</td><td>±0.5 dB</td></tr><tr><td>-50 to -20 dBm</td><td>±0.7 dB</td></tr><tr><td>-60 to -50 dBm</td><td>±0.9 dB</td></tr></table> | Input Level | Measurement Accuracy | -20 to +35 dBm | ±0.5 dB | -50 to -20 dBm | ±0.7 dB | -60 to -50 dBm | ±0.9 dB |
| | | Input Level | Measurement Accuracy | | | | | | | |
| | | -20 to +35 dBm | ±0.5 dB | | | | | | | |
| | | -50 to -20 dBm | ±0.7 dB | | | | | | | |
| | | -60 to -50 dBm | ±0.9 dB | | | | | | | |
| Frequency: $3800\text{ MHz} < f \leq 4200\text{ MHz}$ (After calibration, 20 to 30°C) | | | | | | | | | | |
| <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>-20 to +35 dBm</td><td>±0.7 dB</td></tr><tr><td>-50 to -20 dBm</td><td>±0.9 dB</td></tr><tr><td>-60 to -50 dBm</td><td>±1.1 dB</td></tr></table> | Input Level | Measurement Accuracy | -20 to +35 dBm | ±0.7 dB | -50 to -20 dBm | ±0.9 dB | -60 to -50 dBm | ±1.1 dB | | |
| Input Level | Measurement Accuracy | | | | | | | | | |
| -20 to +35 dBm | ±0.7 dB | | | | | | | | | |
| -50 to -20 dBm | ±0.9 dB | | | | | | | | | |
| -60 to -50 dBm | ±1.1 dB | | | | | | | | | |
| Appendix A.1 | A-4 | Modulation Analysis Input Level Range | | | | | | | | |
| | | Before: Port1, Port2: -40.0 to +35.0 dBm Port3, Port4: -40.0 to +25.0 dBm | | | | | | | | |
| | | After: Port1 to 4: -40.0 to +35.0 dBm | | | | | | | | |
| Appendix A.1 | A-4 | Occupied Bandwidth Input Level Range | | | | | | | | |
| | | Before Port1, Port2: -10.0 to +35.0 dBm Port3, Port4: -10.0 to +25.0 dBm | | | | | | | | |
| | | After Port1 to 4: -10.0 to +35.0 dBm | | | | | | | | |
| Appendix A.1 | A-4 | Adjacent Channel Leakage Power Ratio Input Level Range | | | | | | | | |
| | | Before Port1, Port2: -10.0 to +35.0 dBm Port3, Port4: -10.0 to +25.0 dBm | | | | | | | | |
| | | After Port1 to 4: -10.0 to +35.0 dBm | | | | | | | | |
| Appendix A.1 | A-4 | Spectrum Emission Mask (SEM) Input Level Range | | | | | | | | |
| | | Before: Port1, Port2: -10.0 to +35.0 dBm Port3, Port4: -10.0 to +25.0 dBm | | | | | | | | |
| | | After: Port1 to 4: -10.0 to +35.0 dBm | | | | | | | | |

Items in MX887013A/14A Manual to be Replaced or Deleted (17/20)

| Section | Page | Detail | | | | | | | | |
|---|----------------------|---|----------------------|----------------------|----------------|----------------|----------------|---------|----------------|---------|
| Appendix A.2 | A-6 | RF Power Input Level Range | | | | | | | | |
| | | Before: Port1, Port2: -65.0 to +35.0 dBm Port3, Port4: -65.0 to +25.0 dBm | | | | | | | | |
| | | After: Port1 to 4: -40.0 to +35.0 dBm | | | | | | | | |
| Appendix A.2 | A-6 | RF Power Measurement Accuracy (1/4) | | | | | | | | |
| | | Before: (1/3) Port1, Port2: (Excluding when measuring Intraband Contiguous CA SCC and PCC + SCC) Frequency: $698\text{ MHz} \leq f \leq 2700\text{ MHz}$, $3400\text{ MHz} \leq f \leq 3800\text{ MHz}$ (After calibration, 20 to 30°C) | | | | | | | | |
| | | <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>-20 to +35 dBm</td><td>±0.3 dB (typ.)</td></tr></table> | Input Level | Measurement Accuracy | -20 to +35 dBm | ±0.3 dB (typ.) | | | | |
| | | Input Level | Measurement Accuracy | | | | | | | |
| | | -20 to +35 dBm | ±0.3 dB (typ.) | | | | | | | |
| | | Frequency: $698\text{ MHz} \leq f \leq 2700\text{ MHz}$, $3400\text{ MHz} \leq f \leq 3800\text{ MHz}$ (After calibration, 10 to 40°C) | | | | | | | | |
| | | <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>-20 to +35 dBm</td><td>±0.5 dB</td></tr><tr><td>-50 to -20 dBm</td><td>±0.7 dB</td></tr><tr><td>-60 to -50 dBm</td><td>±0.9 dB</td></tr></table> | Input Level | Measurement Accuracy | -20 to +35 dBm | ±0.5 dB | -50 to -20 dBm | ±0.7 dB | -60 to -50 dBm | ±0.9 dB |
| | | Input Level | Measurement Accuracy | | | | | | | |
| | | -20 to +35 dBm | ±0.5 dB | | | | | | | |
| | | -50 to -20 dBm | ±0.7 dB | | | | | | | |
| | | -60 to -50 dBm | ±0.9 dB | | | | | | | |
| | | Frequency: $3800\text{ MHz} < f \leq 4200\text{ MHz}$ (After calibration, 20 to 30°C) | | | | | | | | |
| | | <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>-20 to +35 dBm</td><td>±0.7 dB</td></tr><tr><td>-50 to -20 dBm</td><td>±0.9 dB</td></tr><tr><td>-60 to -50 dBm</td><td>±1.1 dB</td></tr></table> | Input Level | Measurement Accuracy | -20 to +35 dBm | ±0.7 dB | -50 to -20 dBm | ±0.9 dB | -60 to -50 dBm | ±1.1 dB |
| | | Input Level | Measurement Accuracy | | | | | | | |
| | | -20 to +35 dBm | ±0.7 dB | | | | | | | |
| -50 to -20 dBm | ±0.9 dB | | | | | | | | | |
| -60 to -50 dBm | ±1.1 dB | | | | | | | | | |
| Port1, Port2: (When measuring Intraband Contiguous CA SCC and PCC + SCC) Frequency: $698\text{ MHz} \leq f \leq 2700\text{ MHz}$ (After calibration, 20 to 30°C) | | | | | | | | | | |
| <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>-20 to +35 dBm</td><td>±0.5 dB (typ.)</td></tr></table> | Input Level | Measurement Accuracy | -20 to +35 dBm | ±0.5 dB (typ.) | | | | | | |
| Input Level | Measurement Accuracy | | | | | | | | | |
| -20 to +35 dBm | ±0.5 dB (typ.) | | | | | | | | | |
| Frequency: $698\text{ MHz} \leq f \leq 2700\text{ MHz}$ (After calibration, 10 to 40°C) | | | | | | | | | | |
| <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>-50 to +35 dBm</td><td>±0.7 dB</td></tr><tr><td>-60 to -50 dBm</td><td>±0.9 dB</td></tr></table> | Input Level | Measurement Accuracy | -50 to +35 dBm | ±0.7 dB | -60 to -50 dBm | ±0.9 dB | | | | |
| Input Level | Measurement Accuracy | | | | | | | | | |
| -50 to +35 dBm | ±0.7 dB | | | | | | | | | |
| -60 to -50 dBm | ±0.9 dB | | | | | | | | | |

Items in MX887013A/14A Manual to be Replaced or Deleted (18/20)

| Section | Page | Detail | | | | | | |
|---|----------------------|---|----------------------|----------------------|----------------|---------|----------------|---------|
| Appendix A.2 | A-6 | RF Power Measurement Accuracy (2/4) | | | | | | |
| | | Before: Port1, Port2: (2/3) (When measuring Intraband Contiguous CA SCC and PCC + SCC) | | | | | | |
| | | Frequency: $3400\text{ MHz} \leq f \leq 3800\text{ MHz}$ (After calibration, 10 to 40°C) | | | | | | |
| | | <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>-50 to +35 dBm</td><td>±1.0 dB</td></tr><tr><td>-60 to -50 dBm</td><td>±1.3 dB</td></tr></table> | Input Level | Measurement Accuracy | -50 to +35 dBm | ±1.0 dB | -60 to -50 dBm | ±1.3 dB |
| | | Input Level | Measurement Accuracy | | | | | |
| | | -50 to +35 dBm | ±1.0 dB | | | | | |
| | | -60 to -50 dBm | ±1.3 dB | | | | | |
| | | Frequency: $3800\text{ MHz} < f \leq 4200\text{ MHz}$ (After calibration, 20 to 30°C) | | | | | | |
| | | <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>-50 to +35 dBm</td><td>±1.0 dB</td></tr><tr><td>-60 to -50 dBm</td><td>±1.3 dB</td></tr></table> | Input Level | Measurement Accuracy | -50 to +35 dBm | ±1.0 dB | -60 to -50 dBm | ±1.3 dB |
| | | Input Level | Measurement Accuracy | | | | | |
| | | -50 to +35 dBm | ±1.0 dB | | | | | |
| | | -60 to -50 dBm | ±1.3 dB | | | | | |
| | | Port3, Port4: (Excluding when measuring Intraband Contiguous CA SCC and PCC + SCC) | | | | | | |
| | | Frequency: $698\text{ MHz} \leq f \leq 2700\text{ MHz}$, $3400\text{ MHz} \leq f \leq 3800\text{ MHz}$ (After calibration, 10 to 40°C) | | | | | | |
| | | <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>-20 to +25 dBm</td><td>±0.7 dB</td></tr><tr><td>-50 to -20 dBm</td><td>±0.9 dB</td></tr><tr><td>-60 to -50 dBm</td><td>±1.1 dB</td></tr></table> | Input Level | Measurement Accuracy | -20 to +25 dBm | ±0.7 dB | -50 to -20 dBm | ±0.9 dB |
| Input Level | Measurement Accuracy | | | | | | | |
| -20 to +25 dBm | ±0.7 dB | | | | | | | |
| -50 to -20 dBm | ±0.9 dB | | | | | | | |
| -60 to -50 dBm | ±1.1 dB | | | | | | | |
| Frequency: $3800\text{ MHz} < f \leq 4200\text{ MHz}$ (After calibration, 20 to 30°C) | | | | | | | | |
| <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>-20 to +25 dBm</td><td>±0.7 dB</td></tr><tr><td>-50 to -20 dBm</td><td>±0.9 dB</td></tr><tr><td>-60 to -50 dBm</td><td>±1.1 dB</td></tr></table> | Input Level | Measurement Accuracy | -20 to +25 dBm | ±0.7 dB | -50 to -20 dBm | ±0.9 dB | -60 to -50 dBm | ±1.1 dB |
| Input Level | Measurement Accuracy | | | | | | | |
| -20 to +25 dBm | ±0.7 dB | | | | | | | |
| -50 to -20 dBm | ±0.9 dB | | | | | | | |
| -60 to -50 dBm | ±1.1 dB | | | | | | | |
| Port3, Port4: (When measuring Intraband Contiguous CA SCC and PCC + SCC) | | | | | | | | |
| Frequency: $698\text{ MHz} \leq f \leq 2700\text{ MHz}$ (After calibration, 10 to 40°C) | | | | | | | | |
| <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>-20 to +25 dBm</td><td>±0.7 dB</td></tr><tr><td>-50 to -20 dBm</td><td>±0.9 dB</td></tr><tr><td>-60 to -50 dBm</td><td>±1.1 dB</td></tr></table> | Input Level | Measurement Accuracy | -20 to +25 dBm | ±0.7 dB | -50 to -20 dBm | ±0.9 dB | -60 to -50 dBm | ±1.1 dB |
| Input Level | Measurement Accuracy | | | | | | | |
| -20 to +25 dBm | ±0.7 dB | | | | | | | |
| -50 to -20 dBm | ±0.9 dB | | | | | | | |
| -60 to -50 dBm | ±1.1 dB | | | | | | | |
| Frequency: $3400\text{ MHz} \leq f \leq 3800\text{ MHz}$ (After calibration, 10 to 40°C) | | | | | | | | |
| <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>-50 to +25 dBm</td><td>±1.0 dB</td></tr><tr><td>-60 to -50 dBm</td><td>±1.3 dB</td></tr></table> | Input Level | Measurement Accuracy | -50 to +25 dBm | ±1.0 dB | -60 to -50 dBm | ±1.3 dB | | |
| Input Level | Measurement Accuracy | | | | | | | |
| -50 to +25 dBm | ±1.0 dB | | | | | | | |
| -60 to -50 dBm | ±1.3 dB | | | | | | | |

1.10 Items To Be Replaced Or Deleted for MX887013/14A

Items in MX887013A/14A Manual to be Replaced or Deleted (19/20)

| Section | Page | Detail | | | | | | | | |
|---|----------------------|---|----------------------|----------------------|----------------|----------------|----------------|---------|----------------|---------|
| Appendix A.2 | A-6 | RF Power Measurement Accuracy (3/4) Before: (3/3) Frequency: 3800 MHz < f ≤ 4200 MHz (After calibration, 20 to 30°C) | | | | | | | | |
| | | <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>−50 to +25 dBm</td><td>±1.0 dB</td></tr><tr><td>−60 to −50 dBm</td><td>±1.3 dB</td></tr></table> | Input Level | Measurement Accuracy | −50 to +25 dBm | ±1.0 dB | −60 to −50 dBm | ±1.3 dB | | |
| | | Input Level | Measurement Accuracy | | | | | | | |
| | | −50 to +25 dBm | ±1.0 dB | | | | | | | |
| | | −60 to −50 dBm | ±1.3 dB | | | | | | | |
| | | After: (1/2) Port1 to 4: (Excluding when measuring Intraband Contiguous CA SCC and PCC + SCC) Frequency: 698 MHz ≤ f ≤ 2700 MHz, 3400 MHz ≤ f ≤ 3800 MHz (After calibration, 20 to 30°C) | | | | | | | | |
| | | <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>−20 to +35 dBm</td><td>±0.3 dB (typ.)</td></tr></table> | Input Level | Measurement Accuracy | −20 to +35 dBm | ±0.3 dB (typ.) | | | | |
| | | Input Level | Measurement Accuracy | | | | | | | |
| | | −20 to +35 dBm | ±0.3 dB (typ.) | | | | | | | |
| | | Frequency: 698 MHz ≤ f ≤ 2700 MHz, 3400 MHz ≤ f ≤ 3800 MHz (After calibration, 10 to 40°C) | | | | | | | | |
| | | <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>−20 to +35 dBm</td><td>±0.5 dB</td></tr><tr><td>−50 to −20 dBm</td><td>±0.7 dB</td></tr><tr><td>−60 to −50 dBm</td><td>±0.9 dB</td></tr></table> | Input Level | Measurement Accuracy | −20 to +35 dBm | ±0.5 dB | −50 to −20 dBm | ±0.7 dB | −60 to −50 dBm | ±0.9 dB |
| | | Input Level | Measurement Accuracy | | | | | | | |
| | | −20 to +35 dBm | ±0.5 dB | | | | | | | |
| | | −50 to −20 dBm | ±0.7 dB | | | | | | | |
| | | −60 to −50 dBm | ±0.9 dB | | | | | | | |
| | | Frequency: 3800 MHz < f ≤ 4200 MHz (After calibration, 20 to 30°C) | | | | | | | | |
| <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>−20 to +35 dBm</td><td>±0.7 dB</td></tr><tr><td>−50 to −20 dBm</td><td>±0.9 dB</td></tr><tr><td>−60 to −50 dBm</td><td>±1.1 dB</td></tr></table> | Input Level | Measurement Accuracy | −20 to +35 dBm | ±0.7 dB | −50 to −20 dBm | ±0.9 dB | −60 to −50 dBm | ±1.1 dB | | |
| Input Level | Measurement Accuracy | | | | | | | | | |
| −20 to +35 dBm | ±0.7 dB | | | | | | | | | |
| −50 to −20 dBm | ±0.9 dB | | | | | | | | | |
| −60 to −50 dBm | ±1.1 dB | | | | | | | | | |
| Port1 to 4: (When measuring Intraband Contiguous CA SCC and PCC + SCC) Frequency: 698 MHz ≤ f ≤ 2700 MHz (After calibration, 20 to 30°C) | | | | | | | | | | |
| <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>−20 to +35 dBm</td><td>±0.5 dB (typ.)</td></tr></table> | Input Level | Measurement Accuracy | −20 to +35 dBm | ±0.5 dB (typ.) | | | | | | |
| Input Level | Measurement Accuracy | | | | | | | | | |
| −20 to +35 dBm | ±0.5 dB (typ.) | | | | | | | | | |
| Frequency: 698 MHz ≤ f ≤ 2700 MHz (After calibration, 10 to 40°C) | | | | | | | | | | |
| <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>−50 to +35 dBm</td><td>±0.7 dB</td></tr><tr><td>−60 to −50 dBm</td><td>±0.9 dB</td></tr></table> | Input Level | Measurement Accuracy | −50 to +35 dBm | ±0.7 dB | −60 to −50 dBm | ±0.9 dB | | | | |
| Input Level | Measurement Accuracy | | | | | | | | | |
| −50 to +35 dBm | ±0.7 dB | | | | | | | | | |
| −60 to −50 dBm | ±0.9 dB | | | | | | | | | |

Items in MX887013A/14A Manual to be Replaced or Deleted (20/20)

| Section | Page | Detail | | | | | | |
|----------------|----------------------|---|----------------------|----------------------|----------------|---------|----------------|---------|
| Appendix A.2 | A-6 | RF Power Measurement Accuracy (4/4) After: (2/2) Frequency: $3400\text{ MHz} \leq f \leq 3800\text{ MHz}$ (After calibration, 10 to 40°C) | | | | | | |
| | | <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>-50 to +35 dBm</td><td>±1.0 dB</td></tr><tr><td>-60 to -50 dBm</td><td>±1.3 dB</td></tr></table> | Input Level | Measurement Accuracy | -50 to +35 dBm | ±1.0 dB | -60 to -50 dBm | ±1.3 dB |
| | | Input Level | Measurement Accuracy | | | | | |
| | | -50 to +35 dBm | ±1.0 dB | | | | | |
| | | -60 to -50 dBm | ±1.3 dB | | | | | |
| | | Frequency: $3800\text{ MHz} < f \leq 4200\text{ MHz}$ (After calibration, 20 to 30°C) | | | | | | |
| | | <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>-50 to +35 dBm</td><td>±1.0 dB</td></tr><tr><td>-60 to -50 dBm</td><td>±1.3 dB</td></tr></table> | Input Level | Measurement Accuracy | -50 to +35 dBm | ±1.0 dB | -60 to -50 dBm | ±1.3 dB |
| Input Level | Measurement Accuracy | | | | | | | |
| -50 to +35 dBm | ±1.0 dB | | | | | | | |
| -60 to -50 dBm | ±1.3 dB | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| Appendix A.2 | A-8 | Modulation Analysis Input Level Range | | | | | | |
| | | Before: Port1, Port2: -40.0 to +35.0 dBm Port3, Port4: -40.0 to +25.0 dBm | | | | | | |
| | | After: Port1 to 4: -40.0 to +35.0 dBm | | | | | | |
| Appendix A.2 | A-8 | Occupied Bandwidth Input Level Range | | | | | | |
| | | Before Port1, Port2: -10.0 to +35.0 dBm Port3, Port4: -10.0 to +25.0 dBm | | | | | | |
| | | After Port1 to 4: -10.0 to +35.0 dBm | | | | | | |
| Appendix A.2 | A-8 | Adjacent Channel Leakage Power Ratio Input Level Range | | | | | | |
| | | Before Port1, Port2: -10.0 to +35.0 dBm Port3, Port4: -10.0 to +25.0 dBm | | | | | | |
| | | After Port1 to 4: -10.0 to +35.0 dBm | | | | | | |
| Appendix A.2 | A-8 | Spectrum Emission Mask (SEM) Input Level Range | | | | | | |
| | | Before: Port1, Port2: -10.0 to +35.0 dBm Port3, Port4: -10.0 to +25.0 dBm | | | | | | |
| | | After: Port1 to 4: -10.0 to +35.0 dBm | | | | | | |

1.11 Items To Be Replaced Or Deleted for MX887015A

The following table shows the items in the *MX887015A CDMA2000 Reverse Link TX Measurement Operation Manual* (M-W3611AE) that need to be replaced or deleted.

Items in MX887015A Manual to be Replaced or Deleted (1/8)

| Section | Page | Detail | | | | |
|------------------------------|------|---|---|-------|------|---|
| ----- | All | Before: MU887000A | | | | |
| | | After: MU887001A | | | | |
| 3.2.1 | 3-6 | Sequence table setting items Input Level: | | | | |
| | | Before: -65.0 to +35.0 dBm (Test Port 1, 2) -65.0 to +25.0 dBm (Test Port 3, 4) | | | | |
| | | After: -65.0 to +35.0 dBm (Test Port 1, 2, 3, 4) | | | | |
| | | Sequence table setting items Output Level: | | | | |
| | | Before: -130.0 to-10.0 dBm (Test Port 1, 2) -120.0 to 0.0 dBm (Test Port 3, 4) | | | | |
| | | After: -130.0 to -10.0 dBm (Test Port 1, 2, 3, 4) | | | | |
| | | Sequence table setting items Output port | | | | |
| | | Before: When selecting Port 3 or 4, make sure the port number is not the same as the input port. | | | | |
| | | After: (Subject to deletion) | | | | |
| 3.2.3 | 3-10 | Table 3.2.3-1 Error Cause | | | | |
| | | Before: <table><tr><th>Parameter</th><th>Cause</th></tr><tr><td>Port</td><td>Port 3 is set for both input port and output port. Or Port 4 is set for both input port and output port.</td></tr></table> | Parameter | Cause | Port | Port 3 is set for both input port and output port. Or Port 4 is set for both input port and output port. |
| | | Parameter | Cause | | | |
| | | Port | Port 3 is set for both input port and output port. Or Port 4 is set for both input port and output port. | | | |
| After: (Subject to deletion) | | | | | | |
| | | | | | | |
| 4.2.1 | 4-31 | :ROUTe:PORT:CONNect:DIRection Details | | | | |
| | | Before: Both Test Port1 and Test Port2 can be set to input and output simultaneously. Test Port3 and Test Port4 can be set to either input or output at one time. | | | | |
| | | After: Test Port1, Test Port2, Test Port3 and Test Port4 can be set to both of Input and Output. | | | | |

Items in MX887015A Manual to be Replaced or Deleted (2/8)

| Section | Page | Detail |
|---------|------|---|
| 4.2.2 | 4-50 | :CONFigure:CELLular:GENerator:RFSettings:LEVel Parameter <level> Range |
| | | Before: –130.0 to –10.0 dBm (Port 1/Port 2) –120.0 to 0.0 dBm (Port 3/Port 4) |
| | | After: –130.0 to –10.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is –135.0 to –15.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is –135.0 to –15.0 dBm. |
| 4.2.2 | 4-55 | :CONFigure:CELLular:MEASurement:RFSettings:LEVel Parameter <level> Range |
| | | Before: –65.0 to +35.0 dBm (Port 1/Port 2) –65.0 to +25.0 dBm (Port 3/Port 4) |
| | | After: –65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is –60.0 to +40.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is –60.0 to +40.0 dBm. |
| 4.2.3 | 4-90 | :CONFigure:CELLular:GENerator:RFSettings:LEVel Parameter <level> Range |
| | | Before: –130.0 to –10.0 dBm (Port 1/Port 2) –120.0 to 0.0 dBm (Port 3/Port 4) |
| | | After: –130.0 to –10.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is –135.0 to –15.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is –135.0 to –15.0 dBm. |
| 4.2.3 | 4-92 | :CONFigure:CELLular:MEASurement:RFSettings:LEVel Parameter <level> Range |
| | | Before: –65.0 to +35.0 dBm (Port 1/Port 2) –65.0 to +25.0 dBm (Port 3/Port 4) |
| | | After: –65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is –60.0 to +40.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is –60.0 to +40.0 dBm. |

Items in MX887015A Manual to be Replaced or Deleted (3/8)

| Section | Page | Detail |
|---------|-------|---|
| 4.2.3 | 4-106 | :CONFigure:CELLular:SEquence:RFSettings:TRX Parameter <ref> Range |
| | | Before: –65.0 to +35 dBm (Port1/Port2) –65.0 to +25 dBm (Port3/Port4) |
| | | After: –65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| | | Parameter <level> Range |
| | | Before: –130.0 to –10.0 dBm (Port 1/Port 2) –120.0 to 0.0 dBm (Port 3/Port 4) |
| | | After: –130.0 to –10.0 dBm (Port1/Port2/Port3/Port4) |
| 4.2.3 | 4-108 | :CONFigure:CELLular:SEquence:RFSettings:TX Parameter <ref> Range |
| | | Before: –65.0 to +35 dBm (Port1/Port2) –65.0 to +25 dBm (Port3/Port4) |
| | | After: –65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is –60.0 to +40.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is –60.0 to +40.0 dBm. |
| 4.2.3 | 4-109 | :CONFigure:CELLular:SEquence:RXPort Details |
| | | Before: PORT3 cannot be set when PORT3 is selected for RF signal input port. PORT4 cannot be set when PORT4 is selected for RF signal input port. |
| | | After: (Subject to deletion) |
| 5.2.1 | 5-23 | PORT Details |
| | | Before: Both Test Port1 and Test Port2 can be set to input and output simultaneously. Test Port3 and Test Port4 can be set to either input or output at one time. |
| | | After: Test Port1, Test Port2, Test Port3 and Test Port4 can be set to both of Input and Output. |

Items in MX887015A Manual to be Replaced or Deleted (4/8)

| Section | Page | Detail |
|---------|-------|---|
| 5.2.2 | 5-53 | ILVL Parameter level Range |
| | | Before: –65.0 to +35.0 dBm (Port 1/Port 2) –65.0 to +25.0 dBm (Port 3/Port 4) |
| | | After: –65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is –60.0 to +40.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is –60.0 to +40.0 dBm. |
| 5.2.2 | 5-62 | OLVL Parameter level Range |
| | | Before: –130.0 to –10.0 dBm (Port 1/Port 2) –120.0 to 0.0 dBm (Port 3/Port 4) |
| | | After: –130.0 to –10.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is –135.0 to –15.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is –135.0 to –15.0 dBm. |
| 5.2.3 | 5-121 | ILVL Parameter level Range |
| | | Before: –65.0 to +35.0 dBm (Port 1/Port 2) –65.0 to +25.0 dBm (Port 3/Port 4) |
| | | After: –65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is –60.0 to +40.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is –60.0 to +40.0 dBm. |
| 5.2.3 | 5-122 | OLVL Parameter level Range |
| | | Before: –130.0 to –10.0 dBm (Port 1/Port 2) –120.0 to 0.0 dBm (Port 3/Port 4) |
| | | After: –130.0 to –10.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is –135.0 to –15.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is –135.0 to –15.0 dBm. |

Items in MX887015A Manual to be Replaced or Deleted (5/8)

| Section | Page | Detail |
|---------|-------|--|
| 5.2.3 | 5-135 | SEQSGPORT Details |
| | | Before: PORT3 cannot be set when PORT3 is selected for RF signal input port. PORT4 cannot be set when PORT4 is selected for RF signal input port. |
| | | After: (Subject to deletion) |
| 5.2.3 | 5-139 | SEQTRX Parameter ref Range |
| | | Before: –65.0 to +35 dBm (Port1/Port2) –65.0 to +25 dBm (Port3/Port4) |
| | | After: –65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| | 5-140 | Parameter level Range |
| | | Before: –130.0 to –10.0 dBm (Port 1/Port 2) –120.0 to 0.0 dBm (Port 3/Port 4) |
| | | After: –130.0 to –10.0 dBm (Port1/Port2/Port3/Port4) |
| 5.2.3 | 5-141 | SEQTX Parameter ref Range |
| | | Before: –65.0 to +35 dBm (Port1/Port2) –65.0 to +25 dBm (Port3/Port4) |
| | | After: –65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is –60.0 to +40.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is –60.0 to +40.0 dBm. |
| 6.3.4 | 6-10 | Output Rho (4) Procedure 4 Test Port3 |
| | | Before: Output Level: –0.9 dBm Input Level: +25 dBm |
| | | After: Output Level: –10.9 dBm Input Level: +35 dBm |

Items in MX887015A Manual to be Replaced or Deleted (6/8)

| Section | Page | Detail | | | | |
|----------------------------------|--|--|---|--|--------------------|------------|
| 6.3.5 | 6-11 | Tx power measurement accuracy (CW) (1) Test specifications | | | | |
| | | Before: | Test Port3/4 | | | |
| | | | Measurement Accuracy | Input Level | Temperature | |
| | | | ±0.7 dB | −25 dBm≤, ≤+25 dBm | 10 to 40°C | |
| | | | ±0.9 dB | −55 dBm≤, <−25 dBm | 10 to 40°C | |
| | | | | ±1.1 dB | −65 dBm≤, <−55 dBm | 10 to 40°C |
| | | After: | Test Port3/4 | | | |
| | | | Measurement Accuracy | Input Level | Temperature | |
| | | | ±0.5 dB | −25 dBm≤, ≤+35 dBm | 10 to 40°C | |
| | | | ±0.7 dB | −55 dBm≤, <−25 dBm | 10 to 40°C | |
| ±0.9 dB | −65 dBm≤, <−55 dBm | | 10 to 40°C | | | |
| 6.3.7 | 6-15 | Frequency/modulation measurement (1) Test specifications | | | | |
| | | Before: | Test Port3/4 | | | |
| | | | Input level: −30 dBm≤, ≤+25 dBm | | | |
| | | After: | Test Port3/4 | | | |
| Input level: −30 dBm≤, ≤+35 dBm | | | | | | |
| 6.3.9 | 6-22 | Output Rho | | Output Rho | | |
| | | Before: | Rho: Test Port3 | | | |
| | | | MU887000A Output Level:−0.9 dBm | | | |
| | | After: | Rho: Test Port3 | | | |
| MU887001A Output Level:−10.9 dBm | | | | | | |
| 6.3.9 | 6-25 | Tx Power Measurement Accuracy (CW) (continued) | | | | |
| | | Tx Power Measurement Accuracy Port3/4 | | | | |
| | | Before: | MU887000A Input Level:−10 dBm Measurement Accuracy (dB) | | | |
| | | | Lo Limit: −0.7 Hi Limit: +0.7 Measurement uncertainty: ±0.17 | | | |
| 6.3.9 | 6-25 | After: | MU887001A Input Level:−10 dBm Measurement Accuracy (dB) | | | |
| | | | Lo Limit: −0.5 Hi Limit: +0.5 Measurement uncertainty:±0.15 | | | |
| | | 6.3.9 | 6-25 | Tx Power Measurement Accuracy (CW) (continued) | | |
| | | | | Tx Power Measurement Accuracy Port3/4 | | |
| Before: | MU887000A Input Level:−55 dBm Measurement Accuracy (dB) | | | | | |
| | Lo Limit: −0.9 Hi Limit: +0.9 Measurement uncertainty:±0.14 | | | | | |
| 6.3.9 | 6-25 | After: | MU887001A Input Level:−55 dBm Measurement Accuracy (dB) | | | |
| | | | Lo Limit: −0.7 Hi Limit: +0.7 Measurement uncertainty:±0.14 | | | |

Items in MX887015A Manual to be Replaced or Deleted (7/8)

| Section | Page | Detail | | | | | | | | |
|--|---------------------------|--|---------------------------|---------------------------|----------------|---------------------------|----------------|---------|----------------|---------|
| 6.3.9 | 6-26 | Tx Power Measurement Accuracy (CW) (continued) Tx Power Measurement Accuracy Port3/4 | | | | | | | | |
| | | Before: MU887000A Input Level:–65 dBm Measurement Accuracy (dB) Lo Limit: –1.1 Hi Limit: +1.1 Measurement uncertainty:±0.14 | | | | | | | | |
| | | After: MU887001A Input Level:–65 dBm Measurement Accuracy (dB) Lo Limit: –0.9 Hi Limit: +0.9 Measurement uncertainty:±0.13 | | | | | | | | |
| Appendix A | A-1 | RF Power Input Level Range | | | | | | | | |
| | | Before: Port1, Port2:–65.0 to +35.0 dBm Port3, Port4:–65.0 to +25.0 dBm | | | | | | | | |
| | | After: Port1 to 4:–65.0 to +35.0 dBm | | | | | | | | |
| Appendix A | A-1 | RF Power Measurement Accuracy | | | | | | | | |
| | | Before: Port1, Port2:After calibration, 10 to 40°C | | | | | | | | |
| | | <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>–25 to +35 dBm</td><td>±0.3 dB (Typ.) ±0.5 dB</td></tr><tr><td>–55 to –25 dBm</td><td>±0.7 dB</td></tr><tr><td>–65 to –55 dBm</td><td>±0.9 dB</td></tr></table> | Input Level | Measurement Accuracy | –25 to +35 dBm | ±0.3 dB (Typ.) ±0.5 dB | –55 to –25 dBm | ±0.7 dB | –65 to –55 dBm | ±0.9 dB |
| | | Input Level | Measurement Accuracy | | | | | | | |
| | | –25 to +35 dBm | ±0.3 dB (Typ.) ±0.5 dB | | | | | | | |
| | | –55 to –25 dBm | ±0.7 dB | | | | | | | |
| | | –65 to –55 dBm | ±0.9 dB | | | | | | | |
| | | Port3, Port4:After calibration, 10 to 40°C | | | | | | | | |
| | | <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>–25 to +25 dBm</td><td>±0.7 dB</td></tr><tr><td>–55 to –25 dBm</td><td>±0.9 dB</td></tr><tr><td>–65 to –55 dBm</td><td>±1.1 dB</td></tr></table> | Input Level | Measurement Accuracy | –25 to +25 dBm | ±0.7 dB | –55 to –25 dBm | ±0.9 dB | –65 to –55 dBm | ±1.1 dB |
| | | Input Level | Measurement Accuracy | | | | | | | |
| –25 to +25 dBm | ±0.7 dB | | | | | | | | | |
| –55 to –25 dBm | ±0.9 dB | | | | | | | | | |
| –65 to –55 dBm | ±1.1 dB | | | | | | | | | |
| After: Port1 to 4:After calibration, 10 to 40°C | | | | | | | | | | |
| <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>–25 to +35 dBm</td><td>±0.3 dB (Typ.) ±0.5 dB</td></tr><tr><td>–55 to –25 dBm</td><td>±0.7 dB</td></tr><tr><td>–65 to –55 dBm</td><td>±0.9 dB</td></tr></table> | Input Level | Measurement Accuracy | –25 to +35 dBm | ±0.3 dB (Typ.) ±0.5 dB | –55 to –25 dBm | ±0.7 dB | –65 to –55 dBm | ±0.9 dB | | |
| Input Level | Measurement Accuracy | | | | | | | | | |
| –25 to +35 dBm | ±0.3 dB (Typ.) ±0.5 dB | | | | | | | | | |
| –55 to –25 dBm | ±0.7 dB | | | | | | | | | |
| –65 to –55 dBm | ±0.9 dB | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| Appendix A | A-2 | Modulation Analysis Input Level Range | | | | | | | | |
| | | Before: Port1, Port2:–30.0 to +35.0 dBm Port3, Port4:–30.0 to +25.0 dBm | | | | | | | | |
| | | After: Port1 to 4:–30.0 to +35.0 dBm | | | | | | | | |
| Appendix A | A-2 | Code Domain Power Input Level Range | | | | | | | | |
| | | Before: Port1, Port2:–30.0 to +35.0 dBm Port3, Port4:–30.0 to +25.0 dBm | | | | | | | | |
| | | After: Port1 to 4: –30.0 to +35.0 dBm | | | | | | | | |

Items in MX887015A Manual to be Replaced or Deleted (8/8)

| Section | Page | Detail |
|----------------|-------------|---|
| Appendix A | A-2 | Occupied Bandwidth Input Level Range |
| | | Before: Port1, Port2: –10.0 to +35.0 dBm Port3, Port4: –10.0 to +25.0 dBm |
| | | After: Port1 to 4: –10.0 to +35.0 dBm |

1.12 Items To Be Replaced Or Deleted for MX887016A

The following table shows the items in the *MX887016A 1xEV-DO Reverse Link TX Measurement Operation Manual* (M-W3612AE) that need to be replaced or deleted.

Items in MX887016A Manual to be Replaced or Deleted (1/8)

| Section | Page | Detail | | | | |
|------------------------------|------|---|---|-------|------|---|
| ----- | All | Before: MU887000A | | | | |
| | | After: MU887001A | | | | |
| 3.2.1 | 3-6 | Sequence table setting items Input level: | | | | |
| | | Before: -65.0 to +35.0 dBm (Test Port 1, 2) -65.0 to +25.0 dBm (Test Port 3, 4) | | | | |
| | | After: -65.0 to +35.0 dBm (Test Port 1, 2, 3, 4) | | | | |
| | | Sequence table setting items Output level: | | | | |
| | | Before: -130.0 to -10.0 dBm (Test Port 1, 2) -120.0 to 0.0 dBm (Test Port 3, 4) | | | | |
| | | After: -130.0 to -10.0 dBm (Test Port 1, 2, 3, 4) | | | | |
| | | Sequence table setting items Output port | | | | |
| | | Before: When selecting Port 3 or 4, make sure the port number is not the same as the input port. | | | | |
| | | After: (Subject to deletion) | | | | |
| 3.2.3 | 3-10 | Table 3.2.3-1 Error Cause | | | | |
| | | Before: <table><tr><th>Parameter</th><th>Cause</th></tr><tr><td>Port</td><td>Port 3 is set for both input port and output port. Or Port 4 is set for both input port and output port.</td></tr></table> | Parameter | Cause | Port | Port 3 is set for both input port and output port. Or Port 4 is set for both input port and output port. |
| | | Parameter | Cause | | | |
| | | Port | Port 3 is set for both input port and output port. Or Port 4 is set for both input port and output port. | | | |
| After: (Subject to deletion) | | | | | | |
| | | | | | | |
| 4.2.1 | 4-31 | :ROUTe:PORT:CONNection:DIRection Details | | | | |
| | | Before: Both Test Port1 and Test Port2 can be set to input and output simultaneously. Test Port3 and Test Port4 can be set to either input or output at one time. | | | | |
| | | After: Test Port1, Test Port2, Test Port3 and Test Port4 can be set to both of Input and Output. | | | | |

Items in MX887016A Manual to be Replaced or Deleted (2/8)

| Section | Page | Detail |
|---------|------|--|
| 4.2.2 | 4-51 | :CONFigure:CELLular:GENerator:RFSettings:LEVel Parameter <level> Range |
| | | Before: –130.0 to –10.0 dBm (Port 1/Port 2) –120.0 to 0.0 dBm (Port 3/Port 4) |
| | | After: –130.0 to –10.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is –135.0 to –15.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is –135.0 to –15.0 dBm. |
| 4.2.2 | 4-56 | :CONFigure:CELLular:MEASurement:RFSettings:LEVel Parameter <level> Range |
| | | Before: –65.0 to +35.0 dBm (Port 1/Port 2) –65.0 to +25.0 dBm (Port 3/Port 4) |
| | | After: –65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is –60.0 to +40.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is –60.0 to +40.0 dBm. |
| 4.2.3 | 4-91 | :CONFigure:CELLular:GENerator:RFSettings:LEVel Parameter <level> Range |
| | | Before: –130.0 to –10.0 dBm (Port1/Port2) –120.0 to 0.0 dBm (Port3/Port4) |
| | | After: –130.0 to –10.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is –135.0 to –15.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is –135.0 to –15.0 dBm. |
| 4.2.3 | 4-93 | :CONFigure:CELLular:MEASurement:RFSettings:LEVel Parameter <level> Range |
| | | Before: –65.0 to +35.0 dBm (Port 1/Port 2) –65.0 to +25.0 dBm (Port 3/Port 4) |
| | | After: –65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is –60.0 to +40.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is –60.0 to +40.0 dBm. |

Items in MX887016A Manual to be Replaced or Deleted (3/8)

| Section | Page | Detail |
|---------|-------|---|
| 4.2.3 | 4-108 | :CONFigure:CELLular:SEQuence:RFSettings:TRX Parameter <ref> Range |
| | | Before: –65.0 to +35 dBm (Port1/Port2) –65.0 to +25 dBm (Port3/Port4) |
| | | After: –65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| | | Parameter <level> Range |
| | | Before: –130.0 to –10.0 dBm (Port 1/Port 2) –120.0 to 0.0 dBm (Port 3/Port 4) |
| | | After: –130.0 to –10.0 dBm (Port1/Port2/Port3/Port4) |
| 4.2.3 | 4-110 | :CONFigure:CELLular:SEQuence:RFSettings:TX Parameter <ref> Range |
| | | Before: –65.0 to +35 dBm (Port1/Port2) –65.0 to +25 dBm (Port3/Port4) |
| | | After: –65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is –60.0 to +40.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is –60.0 to +40.0 dBm. |
| 4.2.3 | 4-111 | :CONFigure:CELLular:SEQuence:RXPort Details |
| | | Before: PORT3 cannot be set when PORT3 is selected for RF signal input port. PORT4 cannot be set when PORT4 is selected for RF signal input port. |
| | | After: (Subject to deletion) |
| 5.2.1 | 5-22 | PORT Details |
| | | Before: Both Test Port1 and Test Port2 can be set to input and output simultaneously. Test Port3 and Test Port4 can be set to either input or output at one time. |
| | | After: Test Port1, Test Port2, Test Port3 and Test Port4 can be set to both of Input and Output. |

Items in MX887016A Manual to be Replaced or Deleted (4/8)

| Section | Page | Detail |
|---------|-------|---|
| 5.2.2 | 5-52 | ILVL Parameter level Range |
| | | Before: –65.0 to +35.0 dBm (Port 1/Port 2) –65.0 to +25.0 dBm (Port 3/Port 4) |
| | | After: –65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is –60.0 to +40.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is –60.0 to +40.0 dBm. |
| 5.2.2 | 5-61 | OLVL Parameter level Range |
| | | Before: –130.0 to –10.0 dBm (Port 1/Port 2) –120.0 to 0.0 dBm (Port 3/Port 4) |
| | | After: –130.0 to –10.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is –135.0 to –15.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is –135.0 to –15.0 dBm. |
| 5.2.3 | 5-125 | ILVL Parameter level Range |
| | | Before: –65.0 to +35.0 dBm (Port 1/Port 2) –65.0 to +25.0 dBm (Port 3/Port 4) |
| | | After: –65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is –60.0 to +40.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is –60.0 to +40.0 dBm. |
| 5.2.3 | 5-126 | OLVL Parameter level Range |
| | | Before: –130.0 to –10.0 dBm (Port 1/Port 2) –120.0 to 0.0 dBm (Port 3/Port 4) |
| | | After: –130.0 to –10.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is –135.0 to –15.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is –135.0 to –15.0 dBm. |

Items in MX887016A Manual to be Replaced or Deleted (5/8)

| Section | Page | Detail |
|---------|-------|--|
| 5.2.3 | 5-140 | SEQSGPORT Details |
| | | Before: PORT3 cannot be set when PORT3 is selected for RF signal input port. PORT4 cannot be set when PORT4 is selected for RF signal input port. |
| | | After: (Subject to deletion) |
| 5.2.3 | 5-144 | SEQTRX Parameter ref Range |
| | | Before: –65.0 to +35 dBm (Port1/Port2) –65.0 to +25 dBm (Port3/Port4) |
| | | After: –65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| | 5-145 | Parameter level Range |
| | | Before: –130.0 to –10.0 dBm (Port 1/Port 2) –120.0 to 0.0 dBm (Port 3/Port 4) |
| | | After: –130.0 to –10.0 dBm (Port1/Port2/Port3/Port4) |
| 5.2.3 | 5-146 | SEQTX Parameter ref Range |
| | | Before: –65.0 to +35 dBm (Port1/Port2) –65.0 to +25 dBm (Port3/Port4) |
| | | After: –65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is –60.0 to +40.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is –60.0 to +40.0 dBm. |
| 6.3.4 | 6-10 | Output Rho (4) Procedure 4 Test Port3 |
| | | Before: Output Level: –0.9 dBm Input Level: +25 dBm |
| | | After: Output Level: –10.9 dBm Input Level: +35 dBm |

Items in MX887016A Manual to be Replaced or Deleted (6/8)

| Section | Page | Detail | | | | |
|---------------------------------------|--------------------------------|--|--|--------------------|--------------------|------------|
| 6.3.5 | 6-11 | Tx power measurement accuracy (CW) (1) Test specifications | | | | |
| | | Before: | Test Port3/4 | | | |
| | | | Measurement Accuracy | Input Level | Temperature | |
| | | | ±0.7 dB | −25 dBm≤, ≤+25 dBm | 10 to 40°C | |
| | | | ±0.9 dB | −55 dBm≤, <−25 dBm | 10 to 40°C | |
| | | | | ±1.1 dB | −65 dBm≤, <−55 dBm | 10 to 40°C |
| | | After: | Test Port3/4 | | | |
| | | | Measurement Accuracy | Input Level | Temperature | |
| | | | ±0.5 dB | −25 dBm≤, ≤+35 dBm | 10 to 40°C | |
| | | | ±0.7 dB | −55 dBm≤, <−25 dBm | 10 to 40°C | |
| ±0.9 dB | −65 dBm≤, <−55 dBm | | 10 to 40°C | | | |
| 6.3.7 | 6-15 | Frequency/Modulation measurement (1) Test specifications | | | | |
| | | Before: | Test Port3/4 | | | |
| | | | Input level: −30 dBm ≤, ≤+25 dBm | | | |
| | | After: | Test Port3/4 | | | |
| Input level: −30 dBm≤, ≤+35 dBm | | | | | | |
| 6.3.9 | 6-22 | Output Rho Output Rho | | | | |
| | | Before: | Rho: Test Port3 | | | |
| | | | MU887000A Output Level: −0.9 dBm | | | |
| | | After: | Rho: Test Port3 | | | |
| MU887001A Output Level: −10.9 dBm | | | | | | |
| 6.3.9 | 6-25 | Tx Power Measurement Accuracy (CW) (continued) | | | | |
| | | Tx Power Measurement Accuracy Port3/4 | | | | |
| | | Before: | MU887000A Input Level: −10 dBm | | | |
| | | | Measurement Accuracy (dB) | | | |
| | | | Lo Limit: −0.7 Hi Limit: +0.7 | | | |
| | Measurement uncertainty: ±0.17 | | | | | |
| After: | MU887001A Input Level:−10 dBm | | | | | |
| | Measurement Accuracy (dB) | | | | | |
| | Lo Limit: −0.5 Hi Limit: +0.5 | | | | | |
| | Measurement uncertainty:±0.15 | | | | | |
| | 6.3.9 | 6-25 | Tx Power Measurement Accuracy (CW) (continued) | | | |
| Tx Power Measurement Accuracy Port3/4 | | | | | | |
| Before: | | | MU887000A Input Level:−55 dBm | | | |
| | | | Measurement Accuracy (dB) | | | |
| | | | Lo Limit: −0.9 Hi Limit: +0.9 | | | |
| | Measurement uncertainty:±0.14 | | | | | |
| After: | MU887001A Input Level:−55 dBm | | | | | |
| | Measurement Accuracy (dB) | | | | | |
| | Lo Limit: −0.7 Hi Limit: +0.7 | | | | | |
| | Measurement uncertainty:±0.14 | | | | | |

Items in MX887016A Manual to be Replaced or Deleted (7/8)

| Section | Page | Detail | | | | | | | | |
|--|---------------------------|--|---------------------------|---------------------------|----------------|---------------------------|----------------|---------|----------------|---------|
| 6.3.9 | 6-26 | Tx Power Measurement Accuracy (CW) (continued) Tx Power Measurement Accuracy Port3/4 | | | | | | | | |
| | | Before: MU887000A Input Level:−65 dBm Measurement Accuracy (dB) Lo Limit: −1.1 Hi Limit: +1.1 Measurement uncertainty:±0.14 | | | | | | | | |
| | | After: MU887001A Input Level:−65 dBm Measurement Accuracy (dB) Lo Limit: −0.9 Hi Limit: +0.9 Measurement uncertainty:±0.13 | | | | | | | | |
| Appendix A | A-1 | RF Power Input Level Range | | | | | | | | |
| | | Before: Port1, Port2: −65.0 to +35.0 dBm Port3, Port4: −65.0 to +25.0 dBm | | | | | | | | |
| | | After: Port1 to 4: −65.0 to +35.0 dBm | | | | | | | | |
| Appendix A | A-1 | RF Power Measurement Accuracy | | | | | | | | |
| | | Before: Port1, Port2: After calibration, 10 to 40°C | | | | | | | | |
| | | <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>−25 to +35 dBm</td><td>±0.3 dB (Typ.) ±0.5 dB</td></tr><tr><td>−55 to −25 dBm</td><td>±0.7 dB</td></tr><tr><td>−65 to −55 dBm</td><td>±0.9 dB</td></tr></table> | Input Level | Measurement Accuracy | −25 to +35 dBm | ±0.3 dB (Typ.) ±0.5 dB | −55 to −25 dBm | ±0.7 dB | −65 to −55 dBm | ±0.9 dB |
| | | Input Level | Measurement Accuracy | | | | | | | |
| | | −25 to +35 dBm | ±0.3 dB (Typ.) ±0.5 dB | | | | | | | |
| | | −55 to −25 dBm | ±0.7 dB | | | | | | | |
| | | −65 to −55 dBm | ±0.9 dB | | | | | | | |
| | | Port3, Port4: After calibration, 10 to 40°C | | | | | | | | |
| | | <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>−25 to +25 dBm</td><td>±0.7 dB</td></tr><tr><td>−55 to −25 dBm</td><td>±0.9 dB</td></tr><tr><td>−65 to −55 dBm</td><td>±1.1 dB</td></tr></table> | Input Level | Measurement Accuracy | −25 to +25 dBm | ±0.7 dB | −55 to −25 dBm | ±0.9 dB | −65 to −55 dBm | ±1.1 dB |
| | | Input Level | Measurement Accuracy | | | | | | | |
| −25 to +25 dBm | ±0.7 dB | | | | | | | | | |
| −55 to −25 dBm | ±0.9 dB | | | | | | | | | |
| −65 to −55 dBm | ±1.1 dB | | | | | | | | | |
| After: Port1 to 4: After calibration, 10 to 40°C | | | | | | | | | | |
| <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>−25 to +35 dBm</td><td>±0.3 dB (Typ.) ±0.5 dB</td></tr><tr><td>−55 to −25 dBm</td><td>±0.7 dB</td></tr><tr><td>−65 to −55 dBm</td><td>±0.9 dB</td></tr></table> | Input Level | Measurement Accuracy | −25 to +35 dBm | ±0.3 dB (Typ.) ±0.5 dB | −55 to −25 dBm | ±0.7 dB | −65 to −55 dBm | ±0.9 dB | | |
| Input Level | Measurement Accuracy | | | | | | | | | |
| −25 to +35 dBm | ±0.3 dB (Typ.) ±0.5 dB | | | | | | | | | |
| −55 to −25 dBm | ±0.7 dB | | | | | | | | | |
| −65 to −55 dBm | ±0.9 dB | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| Appendix A | A-2 | Modulation Analysis Input Level Range | | | | | | | | |
| | | Before: Port1, Port2: −30.0 to +35.0 dBm Port3, Port4: −30.0 to +25.0 dBm | | | | | | | | |
| | | After: Port1 to 4: −30.0 to +35.0 dBm | | | | | | | | |

Items in MX887016A Manual to be Replaced or Deleted (8/8)

| Section | Page | Detail |
|------------|------|--|
| Appendix A | A-2 | Code Domain Power Input Level Range |
| | | Before: Port1, Port2: -30.0 to +35.0 dBm Port3, Port4: -30.0 to +25.0 dBm |
| | | After Port1 to 4: -30.0 to +35.0 dBm |
| Appendix A | A-2 | Occupied Bandwidth Input Level Range |
| | | Before: Port1, Port2: -10.0 to +35.0 dBm Port3, Port4: -10.0 to +25.0 dBm |
| | | After: Port1 to 4: -10.0 to +35.0 dBm |

1.13 Items To Be Replaced Or Deleted for MX887017A

The following table shows the items in the *MX887017A TD-SCDMA Uplink TX Measurement Operation Manual* (M-W3652AE) that need to be replaced or deleted.

Items in MX887017A Manual to be Replaced or Deleted (1/7)

| Section | Page | Detail | | | | |
|------------------------------|------|---|---|-------|------|---|
| ----- | All | Before: MU887000A | | | | |
| | | After: MU887001A | | | | |
| 3.2.1 | 3-6 | Sequence table setting items Input level: | | | | |
| | | Before: -65.0 to +35.0 dBm (Test Port 1, 2) -65.0 to +25.0 dBm (Test Port 3, 4) | | | | |
| | | After: -65.0 to +35.0 dBm (Test Port 1, 2, 3, 4) | | | | |
| | | Sequence table setting items Output level: | | | | |
| | | Before: -130.0 to -10.0 dBm (Test Port 1, 2) -120.0 to 0.0 dBm (Test Port 3, 4) | | | | |
| | | After: -130.0 to -10.0 dBm (Test Port 1, 2, 3, 4) | | | | |
| | | Sequence table setting items Output port | | | | |
| | | Before: When selecting Port 3 or 4, make sure the port number is not the same as the input port. | | | | |
| | | After: (Subject to deletion) | | | | |
| 3.2.3 | 3-9 | Table 3.2.3-1 Error Cause | | | | |
| | | Before: <table><tr><th>Parameter</th><th>Cause</th></tr><tr><td>Port</td><td>Port 3 is set for both input port and output port. Or Port 4 is set for both input port and output port.</td></tr></table> | Parameter | Cause | Port | Port 3 is set for both input port and output port. Or Port 4 is set for both input port and output port. |
| | | Parameter | Cause | | | |
| | | Port | Port 3 is set for both input port and output port. Or Port 4 is set for both input port and output port. | | | |
| After: (Subject to deletion) | | | | | | |
| | | | | | | |
| 4.2.1 | 4-35 | :ROUTE:PORT:CONNection:DIRection Details | | | | |
| | | Before: Both Test Port1 and Test Port2 can be set to input and output simultaneously. Test Port3 and Test Port4 can be set to either input or output at one time. | | | | |
| | | After: Test Port1, Test Port2, Test Port3 and Test Port4 can be set to both of Input and Output. | | | | |

Items in MX887017A Manual to be Replaced or Deleted (2/7)

| Section | Page | Detail |
|---------|-------|--|
| 4.2.2 | 4-40 | :CONFigure:CELLular:GENerator:RFSettings:LEVel Parameter <level> Range |
| | | Before: –130.0 to –10.0 dBm (Port1/Port2) –120.0 to 0.0 dBm (Port3/Port4) |
| | | After: –130.0 to –10.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is –135.0 to –15.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is –135.0 to –15.0 dBm. |
| 4.2.2 | 4-43 | :CONFigure:CELLular:MEASurement:RFSettings:LEVel Parameter <level> Range |
| | | Before: –65.0 to +35.0 dBm (Port 1/Port 2) –65.0 to +25.0 dBm (Port 3/Port 4) |
| | | After: –65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is –60.0 to +40.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is –60.0 to +40.0 dBm. |
| 4.2.3 | 4-117 | :CONFigure:CELLular:GENerator:RFSettings:LEVel Parameter <level> Range |
| | | Before: –130.0 to –10.0 dBm (Port1/Port2) –120.0 to 0.0 dBm (Port3/Port4) |
| | | After: –130.0 to –10.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is –135.0 to –15.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is –135.0 to –15.0 dBm. |
| 4.2.3 | 4-119 | :CONFigure:CELLular:MEASurement:RFSettings:LEVel Parameter <level> Range |
| | | Before: –65.0 to +35.0 dBm (Port 1/Port 2) –65.0 to +25.0 dBm (Port 3/Port 4) |
| | | After: –65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is –60.0 to +40.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is –60.0 to +40.0 dBm. |

Items in MX887017A Manual to be Replaced or Deleted (3/7)

| Section | Page | Detail |
|---------|-------|---|
| 4.2.3 | 4-123 | :CONFigure:CELLular:SEQuence:RFSettings:TRX Parameter <ref> Range |
| | | Before: –65.0 to +35.0 dBm (Port1/Port2) –65.0 to +25.0 dBm (Port3/Port4) |
| | | After: –65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| | | Parameter <level> Range |
| | | Before: –130.0 to –10.0 dBm (Port1/Port2) –120.0 to 0.0 dBm (Port3/Port4) |
| | | After: –130.0 to –10.0 dBm (Port1/Port2/Port3/Port4) |
| 4.2.3 | 4-125 | :CONFigure:CELLular:SEQuence:RFSettings:TX Parameter <ref> Range |
| | | Before: –65.0 to +35 dBm (Port1/Port2) –65.0 to +25 dBm (Port3/Port4) |
| | | After: –65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is –60.0 to +40.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is –60.0 to +40.0 dBm. |
| 4.2.3 | 4-126 | :CONFigure:CELLular:SEQuence:RXPort Details |
| | | Before: PORT3 cannot be set when PORT3 is selected for RF signal input port. PORT4 cannot be set when PORT4 is selected for RF signal input port. |
| | | After: (Subject to deletion) |
| 5.2.1 | 5-29 | PORT Details |
| | | Before: Both Test Port1 and Test Port2 can be set to input and output simultaneously. Test Port3 and Test Port4 can be set to either input or output at one time. |
| | | After: Test Port1, Test Port2, Test Port3 and Test Port4 can be set to both of Input and Output. |
| 5.2.2 | 5-69 | ILVL Parameter level Range |
| | | Before: –65.0 to +35.0 dBm (Port 1/Port 2) –65.0 to +25.0 dBm (Port 3/Port 4) |
| | | After: –65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is –60.0 to +40.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is –60.0 to +40.0 dBm. |

Items in MX887017A Manual to be Replaced or Deleted (4/7)

| Section | Page | Detail |
|---------|-------|---|
| 5.2.2 | 5-83 | OLVL Parameter level Range |
| | | Before: –130.0 to –10.0 dBm (Port 1/Port 2) –120.0 to 0.0 dBm (Port 3/Port 4) |
| | | After: –130.0 to –10.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is –135.0 to –15.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is –135.0 to –15.0 dBm. |
| 5.2.3 | 5-114 | ILVL Parameter level Range |
| | | Before: –65.0 to +35.0 dBm (Port 1/Port 2) –65.0 to +25.0 dBm (Port 3/Port 4) |
| | | After: –65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is –60.0 to +40.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is –60.0 to +40.0 dBm. |
| 5.2.3 | 5-115 | OLVL Parameter level Range |
| | | Before: –130.0 to –10.0 dBm (Port 1/Port 2) –120.0 to 0.0 dBm (Port 3/Port 4) |
| | | After: –130.0 to –10.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is –135.0 to –15.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is –135.0 to –15.0 dBm. |
| 5.2.3 | 5-128 | SEQSGPORT Details |
| | | Before: PORT3 cannot be set when PORT3 is selected for RF signal input port. PORT4 cannot be set when PORT4 is selected for RF signal input port. |
| | | After: (Subject to deletion) |

Items in MX887017A Manual to be Replaced or Deleted (5/7)

| Section | Page | Detail | | | | | | | | | | | | |
|---------|--------------------|--|----------------------|-------------|-------------|---------|--------------------|------------|---------|--------------------|------------|---------|--------------------|------------|
| 5.2.3 | 5-132 | SEQTRX Parameter ref Range | | | | | | | | | | | | |
| | | Before: −65.0 to +35 dBm (Port1/Port2) −65.0 to +25 dBm (Port3/Port4) | | | | | | | | | | | | |
| | | After: −65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) | | | | | | | | | | | | |
| | | Parameter level Range | | | | | | | | | | | | |
| | | Before: −130.0 to −10.0 dBm (Port1/Port2) −120.0 to 0.0 dBm (Port3/Port4) | | | | | | | | | | | | |
| | | After: −130.0 to −10.0 dBm (Port1/Port2/Port3/Port4) | | | | | | | | | | | | |
| 5.2.3 | 5-134 | SEQTX Parameter ref Range | | | | | | | | | | | | |
| | | Before: −65.0 to +35 dBm (Port1/Port2) −65.0 to +25 dBm (Port3/Port4) | | | | | | | | | | | | |
| | | After: −65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) | | | | | | | | | | | | |
| | | Details | | | | | | | | | | | | |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is −60.0 to +40.0 dBm. | | | | | | | | | | | | |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is −60.0 to +40.0 dBm. | | | | | | | | | | | | |
| 6.3.4 | 6-10 | Output EVM (4) Procedure4 Test Port3 | | | | | | | | | | | | |
| | | Before: Output Level: −0.9 dBm Input Level: +25 dBm | | | | | | | | | | | | |
| | | After: Output Level: −10.9 dBm Input Level: +35 dBm | | | | | | | | | | | | |
| 6.3.5 | 6-11 | Tx Power measurement accuracy (CW) (1) Test specifications | | | | | | | | | | | | |
| | | Before: Test Port3/4 | | | | | | | | | | | | |
| | | <table><tr><th>Measurement Accuracy</th><th>Input Level</th><th>Temperature</th></tr><tr><td>±0.7 dB</td><td>−25 dBm≤, ≤+25 dBm</td><td>10 to 40°C</td></tr><tr><td>±0.9 dB</td><td>−55 dBm≤, <−25 dBm</td><td>10 to 40°C</td></tr><tr><td>±1.1 dB</td><td>−70 dBm≤, <−55 dBm</td><td>10 to 40°C</td></tr></table> | Measurement Accuracy | Input Level | Temperature | ±0.7 dB | −25 dBm≤, ≤+25 dBm | 10 to 40°C | ±0.9 dB | −55 dBm≤, <−25 dBm | 10 to 40°C | ±1.1 dB | −70 dBm≤, <−55 dBm | 10 to 40°C |
| | | Measurement Accuracy | Input Level | Temperature | | | | | | | | | | |
| | | ±0.7 dB | −25 dBm≤, ≤+25 dBm | 10 to 40°C | | | | | | | | | | |
| | | ±0.9 dB | −55 dBm≤, <−25 dBm | 10 to 40°C | | | | | | | | | | |
| | | ±1.1 dB | −70 dBm≤, <−55 dBm | 10 to 40°C | | | | | | | | | | |
| | | After: Test Port3/4 | | | | | | | | | | | | |
| | | <table><tr><th>Measurement Accuracy</th><th>Input Level</th><th>Temperature</th></tr><tr><td>±0.5 dB</td><td>−25 dBm≤, ≤+35 dBm</td><td>10 to 40°C</td></tr><tr><td>±0.7 dB</td><td>−55 dBm≤, <−25 dBm</td><td>10 to 40°C</td></tr><tr><td>±0.9 dB</td><td>−70 dBm≤, <−55 dBm</td><td>10 to 40°C</td></tr></table> | Measurement Accuracy | Input Level | Temperature | ±0.5 dB | −25 dBm≤, ≤+35 dBm | 10 to 40°C | ±0.7 dB | −55 dBm≤, <−25 dBm | 10 to 40°C | ±0.9 dB | −70 dBm≤, <−55 dBm | 10 to 40°C |
| | | Measurement Accuracy | Input Level | Temperature | | | | | | | | | | |
| | | ±0.5 dB | −25 dBm≤, ≤+35 dBm | 10 to 40°C | | | | | | | | | | |
| ±0.7 dB | −55 dBm≤, <−25 dBm | 10 to 40°C | | | | | | | | | | | | |
| ±0.9 dB | −70 dBm≤, <−55 dBm | 10 to 40°C | | | | | | | | | | | | |
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Items in MX887017A Manual to be Replaced or Deleted (6/7)

| Section | Page | Detail |
|---------|------|--|
| 6.3.7 | 6-15 | Frequency/Modulation measurement (1) Test specifications |
| | | Before: Test Port3/4 Input level: $-30\text{ dBm} \leq, \leq +25\text{ dBm}$ |
| | | After: Test Port3/4 Input level: $-30\text{ dBm} \leq, \leq +35\text{ dBm}$ |
| 6.3.8 | 6-17 | Adjacent Channel Leakage Power Ratio (1) Testing specifications |
| | | Before: Test Port3/4 Input level range: $-10\text{ dBm} \leq, \leq +25\text{ dBm}$ |
| | | After: Test Port3/4 Input level range: $-10\text{ dBm} \leq, \leq +35\text{ dBm}$ |
| 6.3.10 | 6-24 | Output EVM Output EVM |
| | | Before: EVM (%) Test Port3 MU887000A Output Level: -0.9 dBm |
| | | After: EVM (%) Test Port3 MU887001A Output Level: -10.9 dBm |
| 6.3.10 | 6-27 | Tx Power Measurement Accuracy (CW) (continued) Tx Power Measurement Accuracy Port3/4 |
| | | Before: MU887000A Input Level: -10 dBm Measurement Accuracy (dB) Lo Limit: -0.7 Hi Limit: $+0.7$ Measurement Uncertainty: ± 0.17 |
| | | After: MU887001A Input Level: -10 dBm Measurement Accuracy (dB) Lo Limit: -0.5 Hi Limit: $+0.5$ Measurement Uncertainty: ± 0.15 |
| 6.3.10 | 6-27 | Tx Power Measurement Accuracy (CW) (continued) Tx Power Measurement Accuracy Port3/4 |
| | | Before: MU887000A Input Level: -55 dBm Measurement Accuracy (dB) Lo Limit: -0.9 Hi Limit: $+0.9$ Measurement Uncertainty: ± 0.14 |
| | | After: MU887001A Input Level: -55 dBm Measurement Accuracy (dB) Lo Limit: -0.7 Hi Limit: $+0.7$ Measurement Uncertainty: ± 0.13 |
| 6.3.10 | 6-28 | Tx Power Measurement Accuracy (CW) (continued) Tx Power Measurement Accuracy Port3/4 |
| | | Before: MU887000A Input Level: -65 dBm Measurement Accuracy (dB) Lo Limit: -1.1 Hi Limit: $+1.1$ Measurement Uncertainty: ± 0.14 |
| | | After: MU887001A Input Level: -65 dBm Measurement Accuracy (dB) Lo Limit: -0.9 Hi Limit: $+0.9$ Measurement Uncertainty: ± 0.13 |

Items in MX887017A Manual to be Replaced or Deleted (7/7)

| Section | Page | Detail | | | | | | | | |
|--|---------------------------|--|---------------------------|---------------------------|----------------|---------------------------|----------------|---------|----------------|---------|
| Appendix A | A-1 | Tx Power Measurement Input Level Range | | | | | | | | |
| | | Before: Port1, Port2: −65.0 to +35.0 dBm Port3, Port4: −65.0 to +25.0 dBm | | | | | | | | |
| | | After: Port1 to 4: −65.0 to +35.0 dBm | | | | | | | | |
| Appendix A | A-1 | Tx Power Measurement Measurement Accuracy | | | | | | | | |
| | | Before: Port1, Port2: After calibration, 10 to 40°C | | | | | | | | |
| | | <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>−25 to +35 dBm</td><td>±0.3 dB (Typ.) ±0.5 dB</td></tr><tr><td>−55 to −25 dBm</td><td>±0.7 dB</td></tr><tr><td>−70 to −55 dBm</td><td>±0.9 dB</td></tr></table> | Input Level | Measurement Accuracy | −25 to +35 dBm | ±0.3 dB (Typ.) ±0.5 dB | −55 to −25 dBm | ±0.7 dB | −70 to −55 dBm | ±0.9 dB |
| | | Input Level | Measurement Accuracy | | | | | | | |
| | | −25 to +35 dBm | ±0.3 dB (Typ.) ±0.5 dB | | | | | | | |
| | | −55 to −25 dBm | ±0.7 dB | | | | | | | |
| | | −70 to −55 dBm | ±0.9 dB | | | | | | | |
| | | Port3, Port4: After calibration, 10 to 40°C | | | | | | | | |
| | | <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>−25 to +25 dBm</td><td>±0.7 dB</td></tr><tr><td>−55 to −25 dBm</td><td>±0.9 dB</td></tr><tr><td>−70 to −55 dBm</td><td>±1.1 dB</td></tr></table> | Input Level | Measurement Accuracy | −25 to +25 dBm | ±0.7 dB | −55 to −25 dBm | ±0.9 dB | −70 to −55 dBm | ±1.1 dB |
| | | Input Level | Measurement Accuracy | | | | | | | |
| | | −25 to +25 dBm | ±0.7 dB | | | | | | | |
| | | −55 to −25 dBm | ±0.9 dB | | | | | | | |
| | | −70 to −55 dBm | ±1.1 dB | | | | | | | |
| After: Port1 to 4: After calibration, 10 to 40°C | | | | | | | | | | |
| <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>−25 to +35 dBm</td><td>±0.3 dB (Typ.) ±0.5 dB</td></tr><tr><td>−55 to −25 dBm</td><td>±0.7 dB</td></tr><tr><td>−70 to −55 dBm</td><td>±0.9 dB</td></tr></table> | Input Level | Measurement Accuracy | −25 to +35 dBm | ±0.3 dB (Typ.) ±0.5 dB | −55 to −25 dBm | ±0.7 dB | −70 to −55 dBm | ±0.9 dB | | |
| Input Level | Measurement Accuracy | | | | | | | | | |
| −25 to +35 dBm | ±0.3 dB (Typ.) ±0.5 dB | | | | | | | | | |
| −55 to −25 dBm | ±0.7 dB | | | | | | | | | |
| −70 to −55 dBm | ±0.9 dB | | | | | | | | | |
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| Appendix A | A-2 | Modulation Analysis Input Level Range | | | | | | | | |
| | | Before: Port1, Port2: −30.0 to +35.0 dBm Port3, Port4: −30.0 to +25.0 dBm | | | | | | | | |
| | | After: Port1 to 4: −30.0 to +35.0 dBm | | | | | | | | |
| Appendix A | A-2 | Occupied Bandwidth Input Level Range | | | | | | | | |
| | | Before: Port1, Port2: −10.0 to +35.0 dBm Port3, Port4: −10.0 to +25.0 dBm | | | | | | | | |
| | | After: Port1 to 4: −10.0 to +35.0 dBm | | | | | | | | |
| Appendix A | A-2 | Adjacent Channel Leakage Power Ratio Input Level Range | | | | | | | | |
| | | Before: Port1, Port2: −10.0 to +35.0 dBm Port3, Port4: −10.0 to +25.0 dBm | | | | | | | | |
| | | After Port1 to 4: −10.0 to +35.0 dBm | | | | | | | | |

1.14 Items To Be Replaced for MX887021A

The following table shows the items in the *MX887021A W-CDMA/HSPA Downlink TX Measurement Operation Manual (M-W3702AE)* that need to be replaced.

Items in MX887021A Manual to be Replaced (1/4)

| Section | Page | Detail |
|---------|------|---|
| ----- | All | Before: MU887000A |
| | | After: MU887001A |
| 3.2.2 | 3-14 | [[:SENSe]:POWer[:RF]:RANGe:ILEVel Parameter <real> Range |
| | | Before: -65.0 to +35.0 dBm (Port 1/Port 2) -65.0 to +25.0 dBm (Port 3/Port 4) |
| | | After: -65.0 to +35.0 dBm (Port 1/Port 2/Port 3/Port 4) |
| | | Default |
| | | Before: +35.0 dBm (Port 1/Port 2) +25.0 dBm (Port 3/Port 4) |
| | | After: +35.0 dBm (Port 1/Port 2/Port 3/Port 4) |
| 3.2.9 | 3-56 | [[:SOURce]:POWer[:LEVel][:IMMediate][:AMPLitude] Parameter <level> Range |
| | | Before: -130.0 to -10.0 dBm (Port1/Port2) -120.0 to 0.0 dBm (Port3/Port4) |
| | | After: -130.0 to -10.0 dBm (Port1/Port2/Port3/Port4) |
| | | Default |
| | | Before: -130.0 dBm (Port1/Port2) -120.0 dBm (Port3/Port4) |
| | | After: -130.0 dBm (Port1/Port2/Port3/Port4) |
| 3.2.12 | 3-60 | :ROUTe:PORT:CONNeCT:DIReCTION Details |
| | | Before: Both Test Port1 and Test Port2 can be set to input and output simultaneously Test Port3 and Test Port4 can be set to either input or output at one time. |
| | | After: Test Port1, Test Port2, Test Port3 and Test Port4 can be set to both of Input and Output. |

Items in MX887021A Manual to be Replaced (2/4)

| Section | Page | Detail |
|---------|------|---|
| 4.2 | 4-50 | INPUTLVL Parameter <l> Range |
| | | Before: –65.0 to +35.0 dBm (Port 1/Port 2) –65.0 to +25.0 dBm (Port 3/Port 4) |
| | | After: –65.0 to +35.0 dBm (Port 1/Port 2/Port 3/Port 4) |
| | | Default |
| | | Before: +35.0 dBm (Port 1/Port 2) +25.0 dBm (Port 3/Port 4) |
| | | After: +35.0 dBm (Port 1/Port 2/Port 3/Port 4) |
| 4.2 | 4-77 | OLVL Parameter <level> Range |
| | | Before: –130.0 to –10.0 dBm (Port1/Port2) –120.0 to 0.0 dBm (Port3/Port4) |
| | | After: –130.0 to –10.0 dBm (Port1/Port2/Port3/Port4) |
| | | Default |
| | | Before: –130.0 dBm (Port1/Port2) –120.0 dBm (Port3/Port4) |
| | | After: –130.0 dBm (Port1/Port2/Port3/Port4) |
| 4.2 | 4-82 | PORT Details |
| | | Before: Both Test Port1 and Test Port2 can be set to input and output simultaneously Test Port3 and Test Port4 can be set to either input or output at one time. |
| | | After: Test Port1, Test Port2, Test Port3 and Test Port4 can be set to both of Input and Output. |

Items in MX887021A Manual to be Replaced (3/4)

| Section | Page | Detail | | | |
|--|--------------------|---|---|--------------------|-------------|
| 5.3.2 | 5-6 | Tx Power measurement accuracy (MOD) (1) Test specifications | | | |
| | | Before: | Test Port3/4 | | |
| | | | Measurement Accuracy | Input Level | Temperature |
| | | | ±0.7 dB | −15 dBm≤, ≤+25 dBm | 10 to 40°C |
| | | After: | Test Port3/4 | | |
| | | | Measurement Accuracy | Input Level | Temperature |
| ±0.5 dB | −15 dBm≤, ≤+35 dBm | | 10 to 40°C | | |
| 5.3.3 | 5-8 | Frequency/Modulation measurement (1) Test specifications | | | |
| | | Before: | Test Port3/4 | | |
| | | | Input Level:−30 dBm≤, ≤+25 dBm | | |
| | | After: | Test Port3/4 | | |
| Input Level:−30 dBm≤, ≤+35 dBm | | | | | |
| 5.3.4 | 5-10 | Adjacent Channel Leakage Power Ratio (1) Test specifications | | | |
| | | Before: | Test Port3/4 | | |
| | | | Input level range:−10 dBm≤, ≤+25 dBm | | |
| | | After: | Test Port3/4 | | |
| Input level range:−10 dBm≤, ≤+35 dBm | | | | | |
| 5.3.6 | 5-14 | Tx Power Measurement Accuracy (MOD) Tx Power Measurement Accuracy Port3/4 | | | |
| | | Before: | MU887000A Input level:−10 dBm | | |
| | | | Measurement Accuracy (dB) | | |
| | | | Lo Limit: −0.7 Hi Limit: +0.7 Measurement uncertainty: ±0.16 | | |
| | | After: | MU887001A Input Level: −10 dBm | | |
| | | | Measurement Accuracy (dB) | | |
| Lo Limit:−0.5 Hi Limit: +0.5 Measurement uncertainty: ±0.15 | | | | | |

Items in MX887021A Manual to be Replaced (4/4)

| Section | Page | Detail | | | | | |
|----------------|--|--|--|----------------|------------------------|----------------|------------------------|
| Appendix A | A-1 | Tx Power Measurement Input level range | | | | | |
| | | Before: | Port1, Port2: −65.0 to +35.0 dBm Port3, Port4: −65.0 to +25.0 dBm | | | | |
| | | After: | Port1 to 4: −65.0 to +35.0 dBm | | | | |
| Appendix A | A-1 | Tx Power Measurement Accuracy | | | | | |
| | | Before: | Port1, Port2: After calibration, 10 to 40°C | | | | |
| | | | <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>−15 to +35 dBm</td><td>±0.3 dB (Typ.) ±0.5 dB</td></tr></table> | Input Level | Measurement Accuracy | −15 to +35 dBm | ±0.3 dB (Typ.) ±0.5 dB |
| | | Input Level | Measurement Accuracy | | | | |
| | | −15 to +35 dBm | ±0.3 dB (Typ.) ±0.5 dB | | | | |
| | | | Port3, Port4: After calibration, 10 to 40°C | | | | |
| | | | <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>−15 to +25 dBm</td><td>±0.7 dB</td></tr></table> | Input Level | Measurement Accuracy | −15 to +25 dBm | ±0.7 dB |
| Input Level | Measurement Accuracy | | | | | | |
| −15 to +25 dBm | ±0.7 dB | | | | | | |
| After: | Port1 to 4: After calibration, 10 to 40°C | | | | | | |
| | <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>−15 to +35 dBm</td><td>±0.3 dB (Typ.) ±0.5 dB</td></tr></table> | Input Level | Measurement Accuracy | −15 to +35 dBm | ±0.3 dB (Typ.) ±0.5 dB | | |
| Input Level | Measurement Accuracy | | | | | | |
| −15 to +35 dBm | ±0.3 dB (Typ.) ±0.5 dB | | | | | | |
| Appendix A | A-2 | Modulation Analysis Input Level Range | | | | | |
| | | Before: | Port1, Port2: −30.0 to +35.0 dBm Port3, Port4: −30.0 to +25.0 dBm | | | | |
| | | After: | Port1 to 4: −30.0 to +35.0 dBm | | | | |
| Appendix A | A-2 | Adjacent Channel Leakage Power Ratio Input Level Range | | | | | |
| | | Before: | Port1, Port2: −10.0 to +35.0 dBm Port3, Port4: −10.0 to +25.0 dBm | | | | |
| | | After: | Port1 to 4: −10.0 to +35.0 dBm | | | | |

1.15 Items To Be Replaced for MX887023A

The following table shows the items in the *MX887023A LTE FDD Downlink TX Measurement Operation Manual* (M-W3703AE) that need to be replaced.

Items in MX887023A Manual to be Replaced (1/3)

| Section | Page | Detail |
|---------|------|---|
| ----- | All | Before: MU887000A |
| | | After: MU887001A |
| 3.2.2 | 3-18 | [[:SENSE]:BATCH:BAND[0]:POWER[:RF]:RANGE:ILEVEL Parameter <real> Range |
| | | Before: -65.0 to +35.0 dBm (Port 1/Port 2) -65.0 to +25.0 dBm (Port 3/Port 4) |
| | | After: -65.0 to +35.0 dBm (Port 1/Port 2/Port 3/Port 4) |
| | | Default |
| | | Before: +35.0 dBm (Port 1/Port 2) +25.0 dBm (Port 3/Port 4) |
| | | After: +35.0 dBm (Port 1/Port 2/Port 3/Port 4) |
| 3.2.9 | 3-94 | [[:SOURCE]:POWER[:LEVEL][:IMMEDIATE][:AMPLITUDE] Parameter <level> Range |
| | | Before: -130.0 to -10.0 dBm (Port1/Port2) -120.0 to 0.0 dBm (Port3/Port4) |
| | | After: -130.0 to -10.0 dBm (Port1/Port2/Port3/Port4) |
| | | Default |
| | | Before: -130.0 dBm (Port1/Port2) -120.0 dBm (Port3/Port4) |
| | | After: -130.0 dBm (Port1/Port2/Port3/Port4) |
| 3.2.12 | 3-98 | :ROUTE:PORT:CONNECT:DIRrection Details |
| | | Before: Both Test Port1 and Test Port2 can be set to input and output simultaneously Test Port3 and Test Port4 can be set to either input or output at one time. |
| | | After: Test Port1, Test Port2, Test Port3 and Test Port4 can be set to both of Input and Output. |

Items in MX887023A Manual to be Replaced (2/3)

| Section | Page | Detail | | | | | | |
|--|----------------------|--|----------------------|-------------|--------------------|------------|--------------------|------------|
| 4.3.2 | 4-6 | Tx Power Measurement Accuracy (MOD) (1) Test specifications | | | | | | |
| | | Before: Test Port3/4 | | | | | | |
| | | <table><tr><th>Measurement Accuracy</th><th>Input Level</th><th>Temperature</th></tr><tr><td>±0.7 dB</td><td>−15 dBm≤, ≤+25 dBm</td><td>10 to 40°C</td></tr></table> | Measurement Accuracy | Input Level | Temperature | ±0.7 dB | −15 dBm≤, ≤+25 dBm | 10 to 40°C |
| | | Measurement Accuracy | Input Level | Temperature | | | | |
| | | ±0.7 dB | −15 dBm≤, ≤+25 dBm | 10 to 40°C | | | | |
| After: Test Port3/4 | | | | | | | | |
| <table><tr><th>Measurement Accuracy</th><th>Input Level</th><th>Temperature</th></tr><tr><td>±0.5 dB</td><td>−15 dBm≤, ≤+35 dBm</td><td>10 to 40°C</td></tr></table> | Measurement Accuracy | Input Level | Temperature | ±0.5 dB | −15 dBm≤, ≤+35 dBm | 10 to 40°C | | |
| Measurement Accuracy | Input Level | Temperature | | | | | | |
| ±0.5 dB | −15 dBm≤, ≤+35 dBm | 10 to 40°C | | | | | | |
| 4.3.3 | 4-8 | Frequency/Modulation measurement (1) Test specifications | | | | | | |
| | | Before: Test Port3/4 | | | | | | |
| | | Input Level: −15 dBm≤,≤+25 dBm | | | | | | |
| | | After: Test Port3/4 | | | | | | |
| Input Level: −15 dBm≤,≤+35 dBm | | | | | | | | |
| 4.3.4 | 4-10 | Adjacent Channel Leakage Power Ratio (1) Test specification | | | | | | |
| | | Before: Test Port3/4 | | | | | | |
| | | Input Level Range: −10 dBm≤,≤+25 dBm | | | | | | |
| | | After: Test Port3/4 | | | | | | |
| Input Level Range: −10 dBm≤,≤+35 dBm | | | | | | | | |
| 4.3.6 | 4-14 | Tx Power measurement accuracy (MOD) Tx Power measurement accuracy Port3/4 | | | | | | |
| | | Before: MU887000A Input Level: −10 dBm Measurement Accuracy (dB) | | | | | | |
| | | Lo Limit: −0.7 Hi Limit: +0.7 Measurement uncertainty: ±0.16 | | | | | | |
| | | After: MU887001A Input Level: −10 dBm Measurement Accuracy (dB) | | | | | | |
| | | Lo Limit: −0.5 Hi Limit: +0.5 Measurement uncertainty: ±0.15 | | | | | | |

Items in MX887023A Manual to be Replaced (3/3)

| Section | Page | Detail | | | | | |
|----------------|--|--|--|----------------|------------------------|----------------|------------------------|
| Appendix A | A-1 | Tx Power Measurement Input Level Range | | | | | |
| | | Before: | Port1, Port2: −65.0 to +35.0 dBm Port3, Port4: −65.0 to +25.0 dBm | | | | |
| | | After: | Port1 to 4: −65.0 to +35.0 dBm | | | | |
| Appendix A | A-1 | Tx Power measurement accuracy | | | | | |
| | | Before: | Port1, Port2: After calibration, 10 to 40°C | | | | |
| | | | <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>−15 to +35 dBm</td><td>±0.3 dB (Typ.) ±0.5 dB</td></tr></table> | Input Level | Measurement Accuracy | −15 to +35 dBm | ±0.3 dB (Typ.) ±0.5 dB |
| | | Input Level | Measurement Accuracy | | | | |
| | | −15 to +35 dBm | ±0.3 dB (Typ.) ±0.5 dB | | | | |
| | | | Port3, Port4: After calibration, 10 to 40°C | | | | |
| | | | <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>−15 to +25 dBm</td><td>±0.7 dB</td></tr></table> | Input Level | Measurement Accuracy | −15 to +25 dBm | ±0.7 dB |
| Input Level | Measurement Accuracy | | | | | | |
| −15 to +25 dBm | ±0.7 dB | | | | | | |
| After: | Port1 to 4: After calibration, 10 to 40°C | | | | | | |
| | <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>−15 to +35 dBm</td><td>±0.3 dB (Typ.) ±0.5 dB</td></tr></table> | Input Level | Measurement Accuracy | −15 to +35 dBm | ±0.3 dB (Typ.) ±0.5 dB | | |
| Input Level | Measurement Accuracy | | | | | | |
| −15 to +35 dBm | ±0.3 dB (Typ.) ±0.5 dB | | | | | | |
| Appendix A | A-2 | Modulation Analysis Input Level Range | | | | | |
| | | Before: | Port1, Port2: −15.0 to +35.0 dBm Port3, Port4: −15.0 to +25.0 dBm | | | | |
| | | After: | Port1 to 4: −15.0 to +35.0 dBm | | | | |
| Appendix A | A-2 | Adjacent Channel Leakage Power Ratio Input Level Range | | | | | |
| | | Before: | Port1, Port2: −10.0 to +35.0 dBm Port3, Port4: −10.0 to +25.0 dBm | | | | |
| | | After: | Port1 to 4: −10.0 to +35.0 dBm | | | | |

1.16 Items To Be Replaced Or Deleted for MX887030A/31A/32A/33A/40A/50A

The following table shows the items in the
*MX887030A/31A/32A/33A/40A/50A Short Range Wireless Applications
Operation Manual (M-W3617AE)* that need to be replaced.

Items in MX887030A/31A/32A/33A/40A/50A Manual to be Replaced or Deleted (1/7)

| Section | Page | Detail |
|--------------|------|---|
| ----- | All | Before: MU887000A |
| | | After: MU887001A |
| Appendix A.1 | A-1 | MX887030A Use application |
| | | Before: The MX887030A WLAN 802.11b/g/a/n TX Measurement option are designed for measuring the transmitter of IEEE802.11 b, g, a, n (1X1) HT 20/40MHz radios when this application is installed in MU887000A TRX Test module and using either port 3 or 4. IEEE802.11a, 802.11j ,802.11n 1x1 (5GHz) require the 6GHz option (MU887000A-001) |
| | | After: The MX887030A WLAN 802.11b/g/a/n TX Measurement option are designed for measuring the transmitter of IEEE802.11 b, g, a, n (1X1) HT 20/40MHz radios when this application is installed in MU887001A TRX Test module and using either port 1 to 4. IEEE802.11a, 802.11j ,802.11n 1x1 (5GHz) require the 6GHz option (MU887001A-001) |
| | | |
| Appendix A.1 | A-2 | Electrical characteristic |
| | | Before: Specifications are for Port 3 and 4 unless otherwise stated. |
| | | After: Specifications are for Port 1 to 4 unless otherwise stated. |
| Appendix A.1 | A-2 | RF Power Input Setting Range |
| | | Before: -65 to +25 dBm(Port 3/4) |
| | | After: -55 to +35 dBm(Port 1 to 4) |
| Appendix A.1 | A-2 | RF Power Measurement Accuracy |
| | | Before: (at 20 to 30°C) ±0.7 dB (-30 dBm≤ Level ≤+25 dBm) ±1.0 dB (-50 dBm≤ Level < -30 dBm) |
| | | After: (at 20 to 30°C) ±0.7 dB (-20 dBm≤ Level ≤+35 dBm) ±1.0 dB(-40 dBm≤ Level < -20 dBm) |
| | | |
| Appendix A.1 | A-3 | Spectral profile measurements Input signal measurement range with set RBW (100 kHz) |
| | | Before: -27 to +25 dBm |
| | | After: -17 to +35 dBm |

Items in MX887030A/31A/32A/33A/40A/50A Manual to be Replaced or Deleted (2/7)

| Section | Page | Detail |
|--------------|------|---|
| Appendix A.1 | A-3 | Spectral profile measurements Linearity |
| | | Before: Same as MU887000A Level Linearity port 3/4. ±0.2 dB (0 to -40 dB, ≥-55 dBm) |
| | | After: Same as MU887000A Level Linearity port 1 to 4. ±0.2 dB (0 to -40 dB, ≥-55 dBm) |
| Appendix A.1 | A-3 | EVM Measurement Range |
| | | Before: -20 to +25 dBm |
| | | After: -10 to +35 dBm |
| Appendix A.1 | A-3 | Residual EVM DSSS |
| | | Before: Signal Level > -20 dBm, averaged over 20 packets |
| | | After: Signal Level > -10 dBm, averaged over 20 packets |
| Appendix A.1 | A-3 | Residual EVM OFDM |
| | | Before: Signal Level > -20 dBm, averaged over 20 packets |
| | | After: Signal Level > -10 dBm, averaged over 20 packets |
| Appendix A.2 | A-9 | MX887031A Use application |
| | | Before: The MX887031A WLAN 802.11ac TX Measurement option are designed for measuring the transmitter of IEEE802.11ac when this application is installed in MU887000A TRX Test module and using either port 3 or 4. IEEE802.11ac require the 6GHz option(MU887000A-001) |
| | | After: The MX887031A WLAN 802.11ac TX Measurement option are designed for measuring the transmitter of IEEE802.11ac when this application is installed in MU887001A TRX Test module and using either port 1 to 4. IEEE802.11ac require the 6GHz option(MU887001A-001) |
| Appendix A.2 | A-10 | Electrical characteristic |
| | | Before: Specifications are for Port 3 and 4 unless otherwise stated. |
| | | After: Specifications are for Port 1 to 4 unless otherwise stated. |
| Appendix A.2 | A-10 | RF Power Input Setting Range |
| | | Before: -65 to +25 dBm (Port 3/4) |
| | | After: -55 to +35 dBm (Port 1 to 4) |
| Appendix A.2 | A-10 | RF Power Measurement Accuracy |
| | | Before: (at 20 to 30°C) ±0.7 dB (-30 dBm ≤ Level ≤ +25 dBm) ±1.0 dB (-50 dBm ≤ Level < -30 dBm) |
| | | After: (at 20 to 30°C) ±0.7 dB (-20 dBm ≤ Level ≤ +35 dBm) ±1.0 dB (-40 dBm ≤ Level < -20 dBm) |

1.16 Items To Be Replaced Or Deleted for MX887030A/31A/32A/33A/40A/50A

Items in MX887030A/31A/32A/33A/40A/50A Manual to be Replaced or Deleted (3/7)

| Section | Page | Detail |
|--------------|------|---|
| Appendix A.2 | A-11 | Spectral profile measurements Input signal measurement range with set RBW (100 kHz) |
| | | Before: -27 to +25 dBm |
| | | After: -17 to +35 dBm |
| Appendix A.2 | A-11 | EVM Measurement Range |
| | | Before: -20 to +25 dBm |
| | | After: -10 to +35 dBm |
| Appendix A.2 | A-11 | Residual EVM ≤ 80 MHz |
| | | Before: Signal Level > -10 dBm, averaged over 20 packets |
| | | After: Signal Level > 0 dBm, averaged over 20 packets |
| Appendix A.3 | A-14 | MX887032A Use application |
| | | Before The MX887032A WLAN 802.11p TX Measurement option are designed for measuring the transmitter of IEEE802.11p when this application is installed in MU887000A TRX Test module and using either port 3 or 4. |
| | | After The MX887032A WLAN 802.11p TX Measurement option are designed for measuring the transmitter of IEEE802.11p when this application is installed in MU887001A TRX Test module and using either port 1 to 4. |
| Appendix A.3 | A-15 | Electrical characteristic |
| | | Before: Specifications are for Port 3 and 4 unless otherwise stated. |
| | | After: Specifications are for Port 1 to 4 unless otherwise stated. |
| Appendix A.3 | A-15 | RF Power Input Setting Range |
| | | Before: -65 to +25 dBm(Port 3/4) |
| | | After: -55 to +35 dBm(Port 1 to 4) |
| Appendix A.3 | A-15 | RF Power Measurement Accuracy |
| | | Before: (at 20 to 30°C) ± 0.7 dB (-30 dBm \leq Level $\leq +25$ dBm) ± 1.0 dB (-50 dBm \leq Level < -30 dBm) |
| | | After: (at 20 to 30°C) ± 0.7 dB (-20 dBm \leq Level $\leq +35$ dBm) ± 1.0 dB (-40 dBm \leq Level < -20 dBm) |
| Appendix A.3 | A-15 | EVM Measurement Range |
| | | Before: -20 to +25 dBm |
| | | After: -10 to +35 dBm |
| Appendix A.3 | A-15 | Residual EVM OFDM |
| | | Before: Signal Level > -20 dBm, averaged over 20 packets |
| | | After: Signal Level > -10 dBm, averaged over 20 packets |

Items in MX887030A/31A/32A/33A/40A/50A Manual to be Replaced or Deleted (4/7)

| Section | Page | Detail |
|--------------|------|---|
| Appendix A.4 | A-17 | MX887033A Use application |
| | | Before: The MX887033A WLAN 802.11ax TX Measurement option are designed for measuring the transmitter of IEEE802.11ax when this application is installed in MU887000A TRX Test module and using either port 3 or 4. IEEE802.11ax (5GHz) require the 6GHz option (MU887000A-001) |
| | | After: The MX887033A WLAN 802.11ax TX Measurement option are designed for measuring the transmitter of IEEE802.11ax when this application is installed in MU887000A TRX Test module and using either port 1 to 4. IEEE802.11ax (5GHz) require the 6GHz option (MU887001A-001) |
| Appendix A.4 | A-18 | Electrical characteristic |
| | | Before: Specifications are for Port 3 and 4 unless otherwise stated. |
| | | After: Specifications are for Port 1 to 4 unless otherwise stated. |
| Appendix A.4 | A-18 | RF Power Input Setting Range |
| | | Before: -65 to +25 dBm (Port 3/4) |
| | | After: -55 to +35 dBm (Port 1 to 4) |
| Appendix A.4 | A-18 | RF Power Measurement Accuracy |
| | | Before: (at 20 to 30°C) ±0.7 dB (-30 dBm ≤ Level ≤ +25 dBm) ±1.0 dB (-50 dBm ≤ Level < -30 dBm) |
| | | After: (at 20 to 30°C) ±0.7 dB (-20 dBm ≤ Level ≤ +35 dBm) ±1.0 dB (-40 dBm ≤ Level < -20 dBm) |
| Appendix A.4 | A-19 | Spectral profile measurements Input signal measurement range with set RBW (100 kHz) |
| | | Before: -27 to +25 dBm |
| | | After: -17 to +35 dBm |
| Appendix A.4 | A-19 | EVM Measurement Range |
| | | Before: -20 to +25 dBm |
| | | After: -10 to +35 dBm |

1.16 Items To Be Replaced Or Deleted for MX887030A/31A/32A/33A/40A/50A

Items in MX887030A/31A/32A/33A/40A/50A Manual to be Replaced or Deleted (5/7)

| Section | Page | Detail |
|--------------|------|---|
| Appendix A.4 | A-19 | Residual EVM \leq 80 MHz |
| | | Before: (at 20 to 30°C) Signal Level > -10 dBm, averaged over 20 packets, where each packet is no less than 16 data OFDM symbols long. And for each subcarrier (except Pilots), all data OFDM symbols have same data field pattern. Channel Estimation: FULLPACKET |
| | | After: (at 20 to 30°C) Signal Level > 0 dBm, averaged over 20 packets, where each packet is no less than 16 data OFDM symbols long. And for each subcarrier (except Pilots), all data OFDM symbols have same data field pattern. Channel Estimation: FULLPACKET |
| Appendix A.5 | A-22 | MX887040A Use application |
| | | Before: The MX887040A Bluetooth TX Measurement option are designed for measuring the transmitter performance of Bluetooth (2.0,3.0,4.0) radios when this application is installed in MU887000A TRX Test module and using either port 3 or 4. |
| | | After: The MX887040A Bluetooth TX Measurement option are designed for measuring the transmitter performance of Bluetooth (2.0,3.0,4.0) radios when this application is installed in MU887001A TRX Test module and using either port 1 to 4. |
| Appendix A.5 | A-23 | Electrical characteristic |
| | | Before: Specifications are for Port 3 and 4 unless otherwise stated. |
| | | After: Specifications are for Port 1 to 4 unless otherwise stated. |
| Appendix A.5 | A-23 | RF Power Input Setting Range |
| | | Before: -65 to $+25$ dBm (Port 3/4) |
| | | After: -55 to $+35$ dBm (Port 1 to 4) |
| Appendix A.5 | A-23 | RF Power Measurement Accuracy |
| | | Before: (at 20 to 30°C) ± 0.7 dB (-30 dBm \leq Level $\leq +25$ dBm) ± 1.0 dB (-50 dBm \leq Level < -30 dBm) |
| | | After: (at 20 to 30°C) ± 0.7 dB (-20 dBm \leq Level $\leq +35$ dBm) ± 1.0 dB (-40 dBm \leq Level < -20 dBm) |
| Appendix A.5 | A-23 | EDR relative transmit power Power measurement range |
| | | Before: -35 to $+25$ dBm |
| | | After: -25 to $+35$ dBm |

Items in MX887030A/31A/32A/33A/40A/50A Manual to be Replaced or Deleted (6/7)

| Section | Page | Detail |
|--------------|------|---|
| Appendix A.5 | A-24 | DEVM Measurement Range |
| | | Before: -20 to +25 dBm |
| | | After: -10 to +35 dBm |
| Appendix A.5 | A-24 | GFSK Modulation Accuracy |
| | | Before: Signal Level > -20 dBm, averaged over 10 packets |
| | | After: Signal Level > -10 dBm, averaged over 10 packets |
| Appendix A.5 | A-24 | Initial Carrier Frequency tolerance Input signal range |
| | | Before: -35 to +25 dBm |
| | | After: -25 to +35 dBm |
| Appendix A.5 | A-24 | Carrier-Frequency drift Input signal range |
| | | Before: -35 to +25 dBm |
| | | After: -25 to +35 dBm |
| Appendix A.5 | A-24 | EDR Carrier frequency stability Accuracy |
| | | Before: Signal Level > -20 dBm, averaged over 10 packets |
| | | After: Signal Level > -10 dBm, averaged over 10 packets |
| Appendix A.5 | A-25 | BLE Modulation characteristics Input signal range |
| | | Before: -35 to +25 dBm |
| | | After: -25 to +35 dBm |
| Appendix A.5 | A-25 | BLE Modulation characteristics Accuracy |
| | | Before: Signal Level > -20 dBm, averaged over 10 packets |
| | | After: Signal Level > -10 dBm, averaged over 10 packets |
| Appendix A.5 | A-25 | BLE Carrier frequency offset and drift Input signal range |
| | | Before: -35 to +25 dBm |
| | | After: -25 to +35 dBm |
| Appendix A.5 | A-25 | BLE Carrier frequency offset and drift Accuracy |
| | | Before: Signal Level > -20 dBm, averaged over 10 packets |
| | | After: Signal Level > -10 dBm, averaged over 10 packets |
| Appendix A.6 | A-27 | MX887050A Use application |
| | | Before: The MX887050A are designed for measuring the transmitter power and frequency performance of Bluetooth (2.0,3.0,4.0) and IEEE802.11 b, g, a, n(1X1) HT 20/40MHz radios when this application is installed in MU887000A TRX Test module and using either port 3 or 4. |
| | | After: The MX887050A are designed for measuring the transmitter power and frequency performance of Bluetooth (2.0,3.0,4.0) and IEEE802.11 b, g, a, n(1X1) HT 20/40MHz radios when this application is installed in MU887001A TRX Test module and using either port 1 to 4. |

1.16 Items To Be Replaced Or Deleted for MX887030A/31A/32A/33A/40A/50A

Items in MX887030A/31A/32A/33A/40A/50A Manual to be Replaced or Deleted (7/7)

| Section | Page | Detail |
|--------------|------|--|
| Appendix A.6 | A-28 | Electrical characteristic |
| | | Before: Specifications are for Port 3 and 4 unless otherwise stated. |
| | | After: Specifications are for Port 1 to 4 unless otherwise stated. |
| Appendix A.6 | A-28 | RF Power (CW and continuously Modulated) Input Setting Range |
| | | Before: -65 to $+25$ dBm(Port 3/4) |
| | | After: -55 to $+35$ dBm(Port 1 to 4) |
| Appendix A.6 | A-28 | Measurement Accuracy |
| | | Before: After calibration $(400 \text{ MHz} \leq \text{Frequency} \leq 3800 \text{ MHz})$ $10 \leq \text{Temperature} \leq 40^{\circ}\text{C}$ $\pm 0.7 \text{ dB } (-30 \text{ dBm} \leq \text{Level} \leq +25 \text{ dBm})$ $\pm 0.9 \text{ dB } (-55 \text{ dBm} \leq \text{Level} < -30 \text{ dBm})$ $\pm 1.1 \text{ dB } (-65 \text{ dBm} \leq \text{Level} < -55 \text{ dBm})$ $(3800 \text{ MHz} \leq \text{Frequency} \leq 6000 \text{ MHz})$ $20 \leq \text{Temperature} \leq 30^{\circ}\text{C}$ $\pm 0.7 \text{ dB } (-30 \text{ dBm} \leq \text{Level} \leq +25 \text{ dBm})$ $\pm 0.9 \text{ dB } (-55 \text{ dBm} \leq \text{Level} < -30 \text{ dBm})$ $\pm 1.1 \text{ dB } (-65 \text{ dBm} \leq \text{Level} < -55 \text{ dBm})$ |
| | | After: (Subject to deletion) |
| Appendix A.6 | A-28 | Linearity |
| | | Before: CW, RBW = 100 kHz $\pm 0.2 \text{ dB } (0 \text{ to } -40 \text{ dB}, \geq -55 \text{ dBm})$ |
| | | After: (Subject to deletion) |
| Appendix A.6 | A-28 | Frequency (CW and continuously Modulated) Input signal range |
| | | Before: -35 to $+25$ dBm (Port 3/4) |
| | | After: -25 to $+35$ dBm (Port 1 to 4) |

1.17 Items To Be Replaced Or Deleted for MX887060A

The following table shows the items in the *MX887060A IEEE 802.15.4 TX Measurement Operation Manual* (M-W3744AE) that need to be replaced.

Items in MX887060A Manual to be Replaced (1/3)

| Section | Page | Detail | | | |
|-----------------------------------|--------------------|--|---|--------------------|-------------|
| ----- | All | Before: | MU887000A | | |
| | | After: | MU887001A | | |
| 5.3.3 | 5-8 | Output EVM (4) Procedure 4 Test Port3 | | | |
| | | Before: | Output Level: −0.9 dBm Input Level: +25 dBm | | |
| | | After: | Output Level: −10.9 dBm Input Level: +35 dBm | | |
| | | | | | |
| 5.3.4 | 5-9 | Tx Power measurement accuracy (CW) (1) Test specifications | | | |
| | | Before: | Test Port3/4 | | |
| | | | Measurement Accuracy | Input Level | Temperature |
| | | | ±0.7 dB | −25 dBm≤, ≤+25 dBm | 10 to 40°C |
| | | | ±0.9 dB | −55 dBm≤, <−25 dBm | 10 to 40°C |
| | | | ±1.1 dB | −65 dBm≤, <−55 dBm | 10 to 40°C |
| | | After: | Test Port3/4 | | |
| | | | Measurement Accuracy | Input Level | Temperature |
| | | | ±0.5 dB | −25 dBm≤, ≤+35 dBm | 10 to 40°C |
| | | | ±0.7 dB | −55 dBm≤, <−25 dBm | 10 to 40°C |
| ±0.9 dB | −65 dBm≤, <−55 dBm | | 10 to 40°C | | |
| 5.3.5 | 5-11 | Frequency/Modulation measurement (1) Test specifications | | | |
| | | Before: | Test Port3/4 | | |
| | | Input Level:−30 dBm≤,≤+25 dBm | | | |
| | | After: | Test Port3/4 | | |
| Input Level:−30 dBm≤,≤+35 dBm | | | | | |
| 5.3.7 | 5-15 | Output EVM Output EVM | | | |
| | | Before: | EVM (%) Test Port3 | | |
| | | MU887000A Output Level: −0.9 dBm | | | |
| | | After: | EVM (%) Test Port3 | | |
| MU887001A Output Level: −10.9 dBm | | | | | |

Items in MX887060A Manual to be Replaced (2/3)

| Section | Page | Detail |
|---------|------|--|
| 5.3.7 | 5-17 | Tx Power measurement accuracy (CW) (continued) Tx Power measurement accuracy Port3/4 |
| | | Before: MU887000A Input Level: –10 dBm Measurement Accuracy (dB) Lo Limit: –0.7 Hi Limit: +0.7 Measurement uncertainty: ±0.17 |
| | | After: MU887001A Input Level: –10 dBm Measurement Accuracy (dB) Lo Limit: –0.5 Hi Limit: +0.5 Measurement uncertainty: ±0.15 |
| 5.3.7 | 5-17 | Tx Power measurement accuracy (CW) (continued) Tx Power measurement accuracy Port3/4 |
| | | Before: MU887000A Input Level: –55 dBm Measurement Accuracy (dB) Lo Limit: –0.9 Hi Limit: +0.9 Measurement uncertainty: ±0.14 |
| | | After: MU887001A Input Level: –55 dBm Measurement Accuracy (dB) Lo Limit: –0.7 Hi Limit: +0.7 Measurement uncertainty: ±0.13 |
| 5.3.7 | 5-17 | Tx Power measurement accuracy (CW) (continued) Tx Power measurement accuracy Port3/4 |
| | | Before: MU887000A Input Level: –65 dBm Measurement Accuracy (dB) Lo Limit: –1.1 Hi Limit: +1.1 Measurement uncertainty: ±0.14 |
| | | After: MU887001A Input Level: –65 dBm Measurement Accuracy (dB) Lo Limit: –0.9 Hi Limit: +0.9 Measurement uncertainty: ±0.13 |

Items in MX887060A Manual to be Replaced (3/3)

| Section | Page | Detail | | | | | | | | | |
|----------------|--|--|--|----------------|------------------------|----------------|------------------------|----------------|---------|----------------|---------|
| Appendix A | A-1 | Tx Power Measurement Input Level Range | | | | | | | | | |
| | | Before: | Port1, Port2: −65.0 to +35.0 dBm Port3, Port4: −65.0 to +25.0 dBm | | | | | | | | |
| | | After: | Port1 to 4: −65.0 to +35.0 dBm | | | | | | | | |
| Appendix A | A-1 | Tx Power Measurement Input Level accuracy | | | | | | | | | |
| | | Before: | Port1, Port2: After calibration, 10 to 40°C | | | | | | | | |
| | | | <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>−25 to +35 dBm</td><td>±0.3 dB (Typ.) ±0.5 dB</td></tr><tr><td>−55 to −25 dBm</td><td>±0.7 dB</td></tr><tr><td>−65 to −55 dBm</td><td>±0.9 dB</td></tr></table> | Input Level | Measurement Accuracy | −25 to +35 dBm | ±0.3 dB (Typ.) ±0.5 dB | −55 to −25 dBm | ±0.7 dB | −65 to −55 dBm | ±0.9 dB |
| | | Input Level | Measurement Accuracy | | | | | | | | |
| | | −25 to +35 dBm | ±0.3 dB (Typ.) ±0.5 dB | | | | | | | | |
| | | −55 to −25 dBm | ±0.7 dB | | | | | | | | |
| | | −65 to −55 dBm | ±0.9 dB | | | | | | | | |
| | | | Port3, Port4: After calibration, 10 to 40°C | | | | | | | | |
| | | | <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>−25 to +25 dBm</td><td>±0.7 dB</td></tr><tr><td>−55 to −25 dBm</td><td>±0.9 dB</td></tr><tr><td>−65 to −55 dBm</td><td>±1.1 dB</td></tr></table> | Input Level | Measurement Accuracy | −25 to +25 dBm | ±0.7 dB | −55 to −25 dBm | ±0.9 dB | −65 to −55 dBm | ±1.1 dB |
| | | Input Level | Measurement Accuracy | | | | | | | | |
| | | −25 to +25 dBm | ±0.7 dB | | | | | | | | |
| | | −55 to −25 dBm | ±0.9 dB | | | | | | | | |
| −65 to −55 dBm | ±1.1 dB | | | | | | | | | | |
| After: | Port1 to 4: After calibration, 10 to 40°C | | | | | | | | | | |
| | <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>−25 to +35 dBm</td><td>±0.3 dB (Typ.) ±0.5 dB</td></tr><tr><td>−55 to −25 dBm</td><td>±0.7 dB</td></tr><tr><td>−65 to −55 dBm</td><td>±0.9 dB</td></tr></table> | Input Level | Measurement Accuracy | −25 to +35 dBm | ±0.3 dB (Typ.) ±0.5 dB | −55 to −25 dBm | ±0.7 dB | −65 to −55 dBm | ±0.9 dB | | |
| Input Level | Measurement Accuracy | | | | | | | | | | |
| −25 to +35 dBm | ±0.3 dB (Typ.) ±0.5 dB | | | | | | | | | | |
| −55 to −25 dBm | ±0.7 dB | | | | | | | | | | |
| −65 to −55 dBm | ±0.9 dB | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| Appendix A | A-2 | Modulation Analysis Input Level Range | | | | | | | | | |
| | | Before: | Port1, Port2: −30.0 to +35.0 dBm Port3, Port4: −30.0 to +25.0 dBm | | | | | | | | |
| | | After: | Port1 to 4: −30.0 to +35.0 dBm | | | | | | | | |

1.18 Items To Be Replaced for MX887061A

The following table shows the items in the *MX887061A Z-Wave TX Measurement Operation Manual* (M-W3789AE) that need to be replaced.

Items in MX887061A Manual to be Replaced (1/3)

| Section | Page | Detail | | | |
|----------------------------------|-------------------|--|----------------------------------|-------------------|-------------|
| ----- | All | Before: MU887000A | | | |
| | | After: MU887001A | | | |
| 5.3.3 | 5-7 | Tx Power measurement accuracy (CW) (1) Test specifications | | | |
| | | Before: | Test Port3/4 | | |
| | | | Measurement Accuracy | Input Level | Temperature |
| | | | ±0.7 dB | −25 dBm≤,≤+25 dBm | 10 to 40°C |
| | | | ±0.9 dB | −55 dBm≤,<−25 dBm | 10 to 40°C |
| | | ±1.1 dB | −65 dBm≤,<−55 dBm | 10 to 40°C | |
| | | After: | Test Port3/4 | | |
| | | | Measurement Accuracy | Input Level | Temperature |
| | | | ±0.5 dB | −25 dBm≤,≤+35 dBm | 10 to 40°C |
| | | | ±0.7 dB | −55 dBm≤,<−25 dBm | 10 to 40°C |
| ±0.9 dB | −65 dBm≤,<−55 dBm | | 10 to 40°C | | |
| 5.3.4 | 5-9 | Frequency error measurement (1) Test specifications | | | |
| | | Before: | Test Port3/4 | | |
| | | | Input level: −30 dBm ≤, ≤+25 dBm | | |
| | | After: | Test Port3/4 | | |
| Input level: −30 dBm ≤, ≤+35 dBm | | | | | |

Items in MX887061A Manual to be Replaced (2/3)

| Section | Page | Detail |
|---------|------|--|
| 5.3.6 | 5-14 | Tx Power measurement accuracy (CW) (continued) Tx Power Measurement accuracy Port3/4 |
| | | Before: MU887000A Input Level: -10 dBm Measurement Accuracy (dB) Lo Limit: -0.7 Hi Limit: +0.7 Measurement uncertainty: ±0.17 |
| | | After: MU887001A Input Level: -10 dBm Measurement Accuracy (dB) Lo Limit: -0.5 Hi Limit: +0.5 Measurement uncertainty: ±0.15 |
| 5.3.6 | 5-14 | Tx Power measurement accuracy (CW) (continued) Tx Power Measurement accuracy Port3/4 |
| | | Before: MU887000A Input Level: -55 dBm Measurement Accuracy (dB) Lo Limit: -0.9 Hi Limit: +0.9 Measurement uncertainty: ±0.14 |
| | | After: MU887001A Input Level: -55 dBm Measurement Accuracy (dB) Lo Limit: -0.7 Hi Limit: +0.7 Measurement uncertainty: ±0.13 |
| 5.3.6 | 5-14 | Tx Power measurement accuracy (CW) (continued) Tx Power Measurement accuracy Port3/4 |
| | | Before: MU887000A Input Level: -65 dBm Measurement Accuracy (dB) Lo Limit: -1.1 Hi Limit: +1.1 Measurement uncertainty: ±0.14 |
| | | After: MU887001A Input Level: -65 dBm Measurement Accuracy (dB) Lo Limit: -0.9 Hi Limit: +0.9 Measurement uncertainty: ±0.13 |

Items in MX887061A Manual to be Replaced (3/3)

| Section | Page | Detail | | | | | | | | |
|--|------------------------|--|------------------------|------------------------|----------------|------------------------|----------------|---------|----------------|---------|
| Appendix A | A-1 | Tx Power Measurement Input Level Range | | | | | | | | |
| | | Before: Port1, Port2: −65.0 to +35.0 dBm Port3, Port4: −65.0 to +25.0 dBm | | | | | | | | |
| | | After: Port1 to 4: −65.0 to +35.0 dBm | | | | | | | | |
| Appendix A | A-1 | Tx Power Measurement Input Level accuracy | | | | | | | | |
| | | Before: Port1, Port2: After calibration, 10 to 40°C | | | | | | | | |
| | | <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>−25 to +35 dBm</td><td>±0.3 dB (Typ.) ±0.5 dB</td></tr><tr><td>−55 to −25 dBm</td><td>±0.7 dB</td></tr><tr><td>−65 to −55 dBm</td><td>±0.9 dB</td></tr></table> | Input Level | Measurement Accuracy | −25 to +35 dBm | ±0.3 dB (Typ.) ±0.5 dB | −55 to −25 dBm | ±0.7 dB | −65 to −55 dBm | ±0.9 dB |
| | | Input Level | Measurement Accuracy | | | | | | | |
| | | −25 to +35 dBm | ±0.3 dB (Typ.) ±0.5 dB | | | | | | | |
| | | −55 to −25 dBm | ±0.7 dB | | | | | | | |
| | | −65 to −55 dBm | ±0.9 dB | | | | | | | |
| | | Port3, Port4: After calibration, 10 to 40°C | | | | | | | | |
| | | <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>−25 to +25 dBm</td><td>±0.7 dB</td></tr><tr><td>−55 to −25 dBm</td><td>±0.9 dB</td></tr><tr><td>−65 to −55 dBm</td><td>±1.1 dB</td></tr></table> | Input Level | Measurement Accuracy | −25 to +25 dBm | ±0.7 dB | −55 to −25 dBm | ±0.9 dB | −65 to −55 dBm | ±1.1 dB |
| | | Input Level | Measurement Accuracy | | | | | | | |
| −25 to +25 dBm | ±0.7 dB | | | | | | | | | |
| −55 to −25 dBm | ±0.9 dB | | | | | | | | | |
| −65 to −55 dBm | ±1.1 dB | | | | | | | | | |
| After: Port1 to 4: After calibration, 10 to 40°C | | | | | | | | | | |
| <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>−25 to +35 dBm</td><td>±0.3 dB (Typ.) ±0.5 dB</td></tr><tr><td>−55 to −25 dBm</td><td>±0.7 dB</td></tr><tr><td>−65 to −55 dBm</td><td>±0.9 dB</td></tr></table> | Input Level | Measurement Accuracy | −25 to +35 dBm | ±0.3 dB (Typ.) ±0.5 dB | −55 to −25 dBm | ±0.7 dB | −65 to −55 dBm | ±0.9 dB | | |
| Input Level | Measurement Accuracy | | | | | | | | | |
| −25 to +35 dBm | ±0.3 dB (Typ.) ±0.5 dB | | | | | | | | | |
| −55 to −25 dBm | ±0.7 dB | | | | | | | | | |
| −65 to −55 dBm | ±0.9 dB | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| Appendix A | A-2 | Modulation Analysis Input Level Range | | | | | | | | |
| | | Before: Port1, Port2: −30.0 to +35.0 dBm Port3, Port4: −30.0 to +25.0 dBm | | | | | | | | |
| | | After: Port1 to 4: −30.0 to +35.0 dBm | | | | | | | | |

1.19 Items To Be Replaced for MX887065A

The following table shows the items in the *MX887065A Category M FDD Uplink TX Measurement Operation Manual* (M-W3936AE) that need to be replaced.

Items in MX887065A Manual to be Replaced or Deleted (1/6)

| Section | Page | Detail |
|---------|------|---|
| ----- | All | Before: MU887000A |
| | | After: MU887001A |
| 4.2.1 | 4-31 | :ROUTE:PORT:CONNECT:DIRrection Details |
| | | Before: Both Test Port1 and Test Port2 can be set to input and output simultaneously Test Port3 and Test Port4 can be set to either input or output at one time. |
| | | After: Test Port1, Test Port2, Test Port3 and Test Port4 can be set to both of Input and Output. |
| 4.2.2 | 4-62 | :CONFIGure:CELLular:GENerator:RFSettings:LEVel Parameter <level> Range |
| | | Before: -130.0 to -10.0 dBm (Port1/Port2) -120.0 to 0.0 dBm (Port3/Port4) |
| | | After: -130.0 to -10.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is -135.0 to -15.0 dBm. |
| 4.2.2 | 4-68 | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is -135.0 to -15.0 dBm. |
| | | :CONFIGure:CELLular:MEASurement:RFSettings:LEVel Parameter <level> Range |
| | | Before: -65.0 to +35.0 dBm (Port 1/Port 2) -65.0 to +25.0 dBm (Port 3/Port 4) |
| | | After: -65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is -60.0 to +40.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is -60.0 to +40.0 dBm. |

Items in MX887065A Manual to be Replaced or Deleted (2/6)

| Section | Page | Detail |
|---------|------|--|
| 5.2.1 | 5-27 | PORT Details |
| | | Before: Both Test Port1 and Test Port2 can be set to input and output simultaneously. Test Port3 and Test Port4 can be set to either input or output at one time. |
| | | After: Test Port1, Test Port2, Test Port3 and Test Port4 can be set to both of Input and Output. |
| 5.2.2 | 5-59 | ILVL Parameter level Range |
| | | Before: -65.0 to +35.0 dBm (Port 1/Port 2) -65.0 to +25.0 dBm (Port 3/Port 4) |
| | | After: -65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is -60.0 to +40.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is -60.0 to +40.0 dBm. |
| 5.2.2 | 5-77 | OLVL Parameter level Range |
| | | Before: -130.0 to -10.0 dBm (Port 1/Port 2) -120.0 to 0.0 dBm (Port 3/Port 4) |
| | | After: -130.0 to -10.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is -135.0 to -15.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is -135.0 to -15.0 dBm. |

Items in MX887065A Manual to be Replaced or Deleted (3/6)

| Section | Page | Detail | | | | | | | | | | | | |
|--|----------------------|--|----------------------|-------------|----------------------|------------|----------------------|----------------------|------------|----------------------|----------------------|------------|----------------------|------------|
| 6.4.1 | 6-11 | Tx Power measurement accuracy (CW) (1) Test specifications | | | | | | | | | | | | |
| | | Before: Test Port3/4 (600 MHz ≤ Frequency ≤ 2700 MHz, 3400 MHz ≤ Frequency ≤ 3800 MHz) | | | | | | | | | | | | |
| | | <table><tr><th>Measurement Accuracy</th><th>Input Level</th><th>Temperature</th></tr><tr><td>±0.7 dB</td><td>−20 dBm ≤, ≤ +25 dBm</td><td>10 to 40°C</td></tr><tr><td>±0.9 dB</td><td>−50 dBm ≤, < −20 dBm</td><td>10 to 40°C</td></tr><tr><td>±1.1 dB</td><td>−60 dBm ≤, < −50 dBm</td><td>10 to 40°C</td></tr></table> | Measurement Accuracy | Input Level | Temperature | ±0.7 dB | −20 dBm ≤, ≤ +25 dBm | 10 to 40°C | ±0.9 dB | −50 dBm ≤, < −20 dBm | 10 to 40°C | ±1.1 dB | −60 dBm ≤, < −50 dBm | 10 to 40°C |
| | | Measurement Accuracy | Input Level | Temperature | | | | | | | | | | |
| | | ±0.7 dB | −20 dBm ≤, ≤ +25 dBm | 10 to 40°C | | | | | | | | | | |
| | | ±0.9 dB | −50 dBm ≤, < −20 dBm | 10 to 40°C | | | | | | | | | | |
| | | ±1.1 dB | −60 dBm ≤, < −50 dBm | 10 to 40°C | | | | | | | | | | |
| | | After: Test Port3/4 (600 MHz ≤ Frequency ≤ 2700 MHz, 3400 MHz ≤ Frequency ≤ 3800 MHz) | | | | | | | | | | | | |
| | | <table><tr><th>Measurement Accuracy</th><th>Input Level</th><th>Temperature</th></tr><tr><td>±0.5 dB</td><td>−20 dBm ≤, ≤ +35 dBm</td><td>10 to 40°C</td></tr><tr><td>±0.7 dB</td><td>−50 dBm ≤, < −20 dBm</td><td>10 to 40°C</td></tr><tr><td>±0.9 dB</td><td>−60 dBm ≤, < −50 dBm</td><td>10 to 40°C</td></tr></table> | Measurement Accuracy | Input Level | Temperature | ±0.5 dB | −20 dBm ≤, ≤ +35 dBm | 10 to 40°C | ±0.7 dB | −50 dBm ≤, < −20 dBm | 10 to 40°C | ±0.9 dB | −60 dBm ≤, < −50 dBm | 10 to 40°C |
| | | Measurement Accuracy | Input Level | Temperature | | | | | | | | | | |
| | | ±0.5 dB | −20 dBm ≤, ≤ +35 dBm | 10 to 40°C | | | | | | | | | | |
| | | ±0.7 dB | −50 dBm ≤, < −20 dBm | 10 to 40°C | | | | | | | | | | |
| | | ±0.9 dB | −60 dBm ≤, < −50 dBm | 10 to 40°C | | | | | | | | | | |
| | | Before: Test Port3/4 (3800 MHz < Frequency ≤ 4200 MHz) | | | | | | | | | | | | |
| | | <table><tr><th>Measurement Accuracy</th><th>Input Level</th><th>Temperature</th></tr><tr><td>±0.7 dB</td><td>−20 dBm ≤, ≤ +25 dBm</td><td>20 to 30°C</td></tr><tr><td>±0.9 dB</td><td>−50 dBm ≤, < −20 dBm</td><td>20 to 30°C</td></tr><tr><td>±1.1 dB</td><td>−60 dBm ≤, < −50 dBm</td><td>20 to 30°C</td></tr></table> | Measurement Accuracy | Input Level | Temperature | ±0.7 dB | −20 dBm ≤, ≤ +25 dBm | 20 to 30°C | ±0.9 dB | −50 dBm ≤, < −20 dBm | 20 to 30°C | ±1.1 dB | −60 dBm ≤, < −50 dBm | 20 to 30°C |
| | | Measurement Accuracy | Input Level | Temperature | | | | | | | | | | |
| ±0.7 dB | −20 dBm ≤, ≤ +25 dBm | 20 to 30°C | | | | | | | | | | | | |
| ±0.9 dB | −50 dBm ≤, < −20 dBm | 20 to 30°C | | | | | | | | | | | | |
| ±1.1 dB | −60 dBm ≤, < −50 dBm | 20 to 30°C | | | | | | | | | | | | |
| After: Test Port3/4 (3800 MHz < Frequency ≤ 4200 MHz) | | | | | | | | | | | | | | |
| <table><tr><th>Measurement Accuracy</th><th>Input Level</th><th>Temperature</th></tr><tr><td>±0.7 dB</td><td>−20 dBm ≤, ≤ +35 dBm</td><td>20 to 30°C</td></tr><tr><td>±0.9 dB</td><td>−50 dBm ≤, < −20 dBm</td><td>20 to 30°C</td></tr><tr><td>±1.1 dB</td><td>−60 dBm ≤, < −50 dBm</td><td>20 to 30°C</td></tr></table> | Measurement Accuracy | Input Level | Temperature | ±0.7 dB | −20 dBm ≤, ≤ +35 dBm | 20 to 30°C | ±0.9 dB | −50 dBm ≤, < −20 dBm | 20 to 30°C | ±1.1 dB | −60 dBm ≤, < −50 dBm | 20 to 30°C | | |
| Measurement Accuracy | Input Level | Temperature | | | | | | | | | | | | |
| ±0.7 dB | −20 dBm ≤, ≤ +35 dBm | 20 to 30°C | | | | | | | | | | | | |
| ±0.9 dB | −50 dBm ≤, < −20 dBm | 20 to 30°C | | | | | | | | | | | | |
| ±1.1 dB | −60 dBm ≤, < −50 dBm | 20 to 30°C | | | | | | | | | | | | |
| 6.4.2 | 6-13 | Frequency/Modulation measurement (1) Test specifications | | | | | | | | | | | | |
| | | Before: Test Port3/4 Input level: −40 dBm ≤, ≤ +25 dBm | | | | | | | | | | | | |
| | | After: Test Port3/4 Input level: −40 dBm ≤, ≤ +35 dBm | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| 6.4.4 | 6-17 | Adjacent Channel Leakage Power Ratio (1) Testing specifications | | | | | | | | | | | | |
| | | Before: Test Port3/4 Input level range: −10 dBm ≤, ≤ +25 dBm | | | | | | | | | | | | |
| | | After: Test Port3/4 Input level range: −10 dBm ≤, ≤ +35 dBm | | | | | | | | | | | | |

Items in MX887065A Manual to be Replaced or Deleted (4/6)

| Section | Page | Detail |
|---------|------|---|
| 6.4.5 | 6-27 | Tx Power measurement accuracy (CW) (Cont'd) Tx Power measurement accuracy Port3/4 |
| | | Before: MU887000A Input Level: –10 dBm Measurement Accuracy (dB) Frequency (MHz): 600 to 3800 Lo Limit: –0.7 Hi Limit: +0.7 Measurement uncertainty: ± 0.17 Frequency (MHz): 4000, 4200 Lo Limit: –0.7 Hi Limit: +0.7 Measurement uncertainty: ± 0.28 |
| | | After: MU887001A Input Level: –10 dBm Measurement Accuracy (dB) Frequency (MHz): 600 to 3800 Lo Limit: –0.5 Hi Limit: +0.5 Measurement uncertainty: ± 0.15 Frequency (MHz): 4000, 4200 Lo Limit: –0.7 Hi Limit: +0.7 Measurement uncertainty: ± 0.33 |
| 6.4.5 | 6-27 | Tx Power measurement accuracy (CW) (Cont'd) Tx Power measurement accuracy Port3/4 |
| | | Before: MU887000A Input Level: –50 dBm Measurement Accuracy (dB) Frequency (MHz): 600 to 3800 Lo Limit: –0.9 Hi Limit: +0.9 Measurement uncertainty: ± 0.14 Frequency (MHz): 4000, 4200 Lo Limit: –0.9 Hi Limit: +0.9 Measurement uncertainty: ± 0.20 |
| | | After: MU887001A Input Level: –50 dBm Measurement Accuracy (dB) Frequency (MHz): 600 to 3800 Lo Limit: –0.7 Hi Limit: +0.7 Measurement uncertainty: ± 0.14 Frequency (MHz): 4000, 4200 Lo Limit: –0.9 Hi Limit: +0.9 Measurement uncertainty: ± 0.33 |
| 6.4.5 | 6-28 | Tx Power measurement accuracy (CW) (Cont'd) Tx Power measurement accuracy Port3/4 |
| | | Before: MU887000A Input Level: –60 dBm Measurement Accuracy (dB) Frequency (MHz): 600 to 3800 Lo Limit: –1.1 Hi Limit: +1.1 Measurement uncertainty: ± 0.14 Frequency (MHz): 4000, 4200 Lo Limit: –1.1 Hi Limit: +1.1 Measurement uncertainty: ± 0.20 |
| | | After: MU887001A Input Level: –60 dBm Measurement Accuracy (dB) Frequency (MHz): 600 to 3800 Lo Limit: –0.9 Hi Limit: +0.9 Measurement uncertainty: ± 0.14 Frequency (MHz): 4000, 4200 Lo Limit: –1.1 Hi Limit: +1.1 Measurement uncertainty: ± 0.33 |

Items in MX887065A Manual to be Replaced or Deleted (5/6)

| Section | Page | Detail | | | | | | | | |
|---|----------------------|---|----------------------|----------------------|----------------|----------------|----------------|---------|----------------|---------|
| Appendix A | A-3 | Tx Power Measurement Input Level Range | | | | | | | | |
| | | Before: Port1, Port2: −65.0 to +35.0 dBm Port3, Port4: −65.0 to +25.0 dBm | | | | | | | | |
| | | After: Port1 to 4: −65.0 to +35.0 dBm | | | | | | | | |
| Appendix A | A-3 | Tx Power measurement accuracy | | | | | | | | |
| | | Before: Port1, Port2: 600 MHz ≤ Frequency ≤ 2700 MHz, 3400 MHz ≤ Frequency ≤ 3800 MHz (After calibration, 20 to 30°C) | | | | | | | | |
| | | <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>−20 to +35 dBm</td><td>±0.3 dB (Typ.)</td></tr></table> | Input Level | Measurement Accuracy | −20 to +35 dBm | ±0.3 dB (Typ.) | | | | |
| | | Input Level | Measurement Accuracy | | | | | | | |
| | | −20 to +35 dBm | ±0.3 dB (Typ.) | | | | | | | |
| | | 600 MHz ≤ Frequency ≤ 2700 MHz, 3400 MHz ≤ Frequency ≤ 3800 MHz (After calibration, 10 to 40°C to) | | | | | | | | |
| | | <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>−20 to +35 dBm</td><td>±0.5 dB</td></tr><tr><td>−50 to −20 dBm</td><td>±0.7 dB</td></tr><tr><td>−60 to −50 dBm</td><td>±0.9 dB</td></tr></table> | Input Level | Measurement Accuracy | −20 to +35 dBm | ±0.5 dB | −50 to −20 dBm | ±0.7 dB | −60 to −50 dBm | ±0.9 dB |
| | | Input Level | Measurement Accuracy | | | | | | | |
| | | −20 to +35 dBm | ±0.5 dB | | | | | | | |
| | | −50 to −20 dBm | ±0.7 dB | | | | | | | |
| | | −60 to −50 dBm | ±0.9 dB | | | | | | | |
| | | 3800 MHz < Frequency ≤ 4200 MHz (After calibration, 20 to 30°C) | | | | | | | | |
| <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>−20 to +35 dBm</td><td>±0.7 dB</td></tr><tr><td>−50 to −20 dBm</td><td>±0.9 dB</td></tr><tr><td>−60 to −50 dBm</td><td>±1.1 dB</td></tr></table> | Input Level | Measurement Accuracy | −20 to +35 dBm | ±0.7 dB | −50 to −20 dBm | ±0.9 dB | −60 to −50 dBm | ±1.1 dB | | |
| Input Level | Measurement Accuracy | | | | | | | | | |
| −20 to +35 dBm | ±0.7 dB | | | | | | | | | |
| −50 to −20 dBm | ±0.9 dB | | | | | | | | | |
| −60 to −50 dBm | ±1.1 dB | | | | | | | | | |
| Port3, Port4: 600 MHz ≤ Frequency ≤ 2700 MHz, 3400 MHz ≤ Frequency ≤ 3800 MHz (After calibration, 10 to 40°C) | | | | | | | | | | |
| <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>−20 to +25 dBm</td><td>±0.7 dB</td></tr><tr><td>−50 to −20 dBm</td><td>±0.9 dB</td></tr><tr><td>−60 to −50 dBm</td><td>±1.1 dB</td></tr></table> | Input Level | Measurement Accuracy | −20 to +25 dBm | ±0.7 dB | −50 to −20 dBm | ±0.9 dB | −60 to −50 dBm | ±1.1 dB | | |
| Input Level | Measurement Accuracy | | | | | | | | | |
| −20 to +25 dBm | ±0.7 dB | | | | | | | | | |
| −50 to −20 dBm | ±0.9 dB | | | | | | | | | |
| −60 to −50 dBm | ±1.1 dB | | | | | | | | | |
| 3800 MHz < Frequency ≤ 4200 MHz (After calibration, 20 to 30°C) | | | | | | | | | | |
| <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>−20 to +25 dBm</td><td>±0.7 dB</td></tr><tr><td>−50 to −20 dBm</td><td>±0.9 dB</td></tr><tr><td>−60 to −50 dBm</td><td>±1.1 dB</td></tr></table> | Input Level | Measurement Accuracy | −20 to +25 dBm | ±0.7 dB | −50 to −20 dBm | ±0.9 dB | −60 to −50 dBm | ±1.1 dB | | |
| Input Level | Measurement Accuracy | | | | | | | | | |
| −20 to +25 dBm | ±0.7 dB | | | | | | | | | |
| −50 to −20 dBm | ±0.9 dB | | | | | | | | | |
| −60 to −50 dBm | ±1.1 dB | | | | | | | | | |

Items in MX887065A Manual to be Replaced or Deleted (6/6)

| Section | Page | Detail | | | | | | | | |
|---|----------------------|---|----------------------|----------------------|----------------|----------------|----------------|---------|----------------|---------|
| Appendix A | A-3 | Tx Power Measurement Accuracy (Cont'd) After: Port1 to 4: 600 MHz ≤ Frequency ≤ 2700 MHz, 3400 MHz ≤ Frequency ≤ 3800 MHz (After calibration, 20 to 30°C) | | | | | | | | |
| | | <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>−20 to +35 dBm</td><td>±0.3 dB (Typ.)</td></tr></table> | Input Level | Measurement Accuracy | −20 to +35 dBm | ±0.3 dB (Typ.) | | | | |
| | | Input Level | Measurement Accuracy | | | | | | | |
| | | −20 to +35 dBm | ±0.3 dB (Typ.) | | | | | | | |
| | | 600 MHz ≤ Frequency ≤ 2700 MHz, 3400 MHz ≤ Frequency ≤ 3800 MHz (After calibration, 10 to 40°C) | | | | | | | | |
| | | <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>−20 to +35 dBm</td><td>±0.5 dB</td></tr><tr><td>−50 to −20 dBm</td><td>±0.7 dB</td></tr><tr><td>−60 to −50 dBm</td><td>±0.9 dB</td></tr></table> | Input Level | Measurement Accuracy | −20 to +35 dBm | ±0.5 dB | −50 to −20 dBm | ±0.7 dB | −60 to −50 dBm | ±0.9 dB |
| | | Input Level | Measurement Accuracy | | | | | | | |
| | | −20 to +35 dBm | ±0.5 dB | | | | | | | |
| | | −50 to −20 dBm | ±0.7 dB | | | | | | | |
| | | −60 to −50 dBm | ±0.9 dB | | | | | | | |
| 3800 MHz < Frequency ≤ 4200 MHz (After calibration, 20 to 30°C) | | | | | | | | | | |
| <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>−20 to +35 dBm</td><td>±0.7 dB</td></tr><tr><td>−50 to −20 dBm</td><td>±0.9 dB</td></tr><tr><td>−60 to −50 dBm</td><td>±1.1 dB</td></tr></table> | Input Level | Measurement Accuracy | −20 to +35 dBm | ±0.7 dB | −50 to −20 dBm | ±0.9 dB | −60 to −50 dBm | ±1.1 dB | | |
| Input Level | Measurement Accuracy | | | | | | | | | |
| −20 to +35 dBm | ±0.7 dB | | | | | | | | | |
| −50 to −20 dBm | ±0.9 dB | | | | | | | | | |
| −60 to −50 dBm | ±1.1 dB | | | | | | | | | |
| Appendix A | A-4 | Modulation Analysis Input Level Range | | | | | | | | |
| | | Before: Port1, Port2: −40.0 to +35.0 dBm Port3, Port4: −40.0 to +25.0 dBm | | | | | | | | |
| | | After: Port1 to 4: −40.0 to +35.0 dBm | | | | | | | | |
| Appendix A | A-4 | Occupied Bandwidth Input Level Range | | | | | | | | |
| | | Before: Port1, Port2: −10.0 to +35.0 dBm Port3, Port4: −10.0 to +25.0 dBm | | | | | | | | |
| | | After: Port1 to 4: −10.0 to +35.0 dBm | | | | | | | | |
| Appendix A | A-4 | Adjacent Channel Leakage Power Ratio Input Level Range | | | | | | | | |
| | | Before: Port1, Port2: −10.0 to +35.0 dBm Port3, Port4: −10.0 to +25.0 dBm | | | | | | | | |
| | | After: Port1 to 4: −10.0 to +35.0 dBm | | | | | | | | |
| Appendix A | A-4 | Spectrum Emission Mask (SEM) Input Level Range | | | | | | | | |
| | | Before: Port1, Port2: −10.0 to +35.0 dBm Port3, Port4: −10.0 to +25.0 dBm | | | | | | | | |
| | | After: Port1 to 4: −10.0 to +35.0 dBm | | | | | | | | |

1.20 Items To Be Replaced for MX887067A

The following table shows the items in the *MX887067A NB-IoT Uplink TX Measurement Operation Manual* (M-W3937AE) that need to be replaced.

Items in MX887067A Manual to be Replaced or Deleted (1/6)

| Section | Page | Detail |
|---------|------|---|
| ----- | All | Before: MU887000A |
| | | After: MU887001A |
| 4.2.1 | 4-26 | :ROUTE:PORT:CONNECT:DIRrection Details |
| | | Before: Both Test Port1 and Test Port2 can be set to input and output simultaneously Test Port3 and Test Port4 can be set to either input or output at one time. |
| | | After: Test Port1, Test Port2, Test Port3 and Test Port4 can be set to both of Input and Output. |
| 4.2.2 | 4-31 | :CONFIGure:CELLular:GENerator:RFSettings:LEVel Parameter <level> Range |
| | | Before: -130.0 to -10.0 dBm (Port1/Port2) -120.0 to 0.0 dBm (Port3/Port4) |
| | | After: -130.0 to -10.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is -135.0 to -15.0 dBm. |
| 4.2.2 | 4-34 | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is -135.0 to -15.0 dBm. |
| | | :CONFIGure:CELLular:MEASurement:RFSettings:LEVel Parameter <level> Range |
| | | Before: -65.0 to +35.0 dBm (Port 1/Port 2) -65.0 to +25.0 dBm (Port 3/Port 4) |
| | | After: -65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is -60.0 to +40.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is -60.0 to +40.0 dBm. |

Items in MX887067A Manual to be Replaced or Deleted (2/6)

| Section | Page | Detail |
|---------|------|--|
| 5.2.1 | 5-22 | PORT Details |
| | | Before: Both Test Port1 and Test Port2 can be set to input and output simultaneously. Test Port3 and Test Port4 can be set to either input or output at one time. |
| | | After: Test Port1, Test Port2, Test Port3 and Test Port4 can be set to both of Input and Output. |
| 5.2.2 | 5-49 | ILVL Parameter level Range |
| | | Before: -65.0 to +35.0 dBm (Port 1/Port 2) -65.0 to +25.0 dBm (Port 3/Port 4) |
| | | After: -65.0 to +35.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is -60.0 to +40.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is -60.0 to +40.0 dBm. |
| 5.2.2 | 5-70 | OLVL Parameter level Range |
| | | Before: -130.0 to -10.0 dBm (Port 1/Port 2) -120.0 to 0.0 dBm (Port 3/Port 4) |
| | | After: -130.0 to -10.0 dBm (Port1/Port2/Port3/Port4) |
| | | Details |
| | | Before: When the cable loss is 5 dB, the Port1/Port2 setting range is -135.0 to -15.0 dBm. |
| | | After: When the cable loss is 5 dB, the Port1/Port2/Port3/Port4 setting range is -135.0 to -15.0 dBm. |

Items in MX887067A Manual to be Replaced or Deleted (3/6)

| Section | Page | Detail | | | | | | | | | | | | |
|--|----------------------|--|----------------------|-------------|----------------------|------------|----------------------|----------------------|------------|----------------------|----------------------|------------|----------------------|------------|
| 6.4.1 | 6-11 | Tx Power measurement accuracy (CW) (1) Test specifications | | | | | | | | | | | | |
| | | Before: Test Port3/4 (600 MHz ≤ Frequency ≤ 2700 MHz, 3400 MHz ≤ Frequency ≤ 3800 MHz) | | | | | | | | | | | | |
| | | <table><tr><th>Measurement Accuracy</th><th>Input Level</th><th>Temperature</th></tr><tr><td>±0.7 dB</td><td>−20 dBm ≤, ≤ +25 dBm</td><td>10 to 40°C</td></tr><tr><td>±0.9 dB</td><td>−50 dBm ≤, < −20 dBm</td><td>10 to 40°C</td></tr><tr><td>±1.1 dB</td><td>−60 dBm ≤, < −50 dBm</td><td>10 to 40°C</td></tr></table> | Measurement Accuracy | Input Level | Temperature | ±0.7 dB | −20 dBm ≤, ≤ +25 dBm | 10 to 40°C | ±0.9 dB | −50 dBm ≤, < −20 dBm | 10 to 40°C | ±1.1 dB | −60 dBm ≤, < −50 dBm | 10 to 40°C |
| | | Measurement Accuracy | Input Level | Temperature | | | | | | | | | | |
| | | ±0.7 dB | −20 dBm ≤, ≤ +25 dBm | 10 to 40°C | | | | | | | | | | |
| | | ±0.9 dB | −50 dBm ≤, < −20 dBm | 10 to 40°C | | | | | | | | | | |
| | | ±1.1 dB | −60 dBm ≤, < −50 dBm | 10 to 40°C | | | | | | | | | | |
| | | After: Test Port3/4 (600 MHz ≤ Frequency ≤ 2700 MHz, 3400 MHz ≤ Frequency ≤ 3800 MHz) | | | | | | | | | | | | |
| | | <table><tr><th>Measurement Accuracy</th><th>Input Level</th><th>Temperature</th></tr><tr><td>±0.5 dB</td><td>−20 dBm ≤, ≤ +35 dBm</td><td>10 to 40°C</td></tr><tr><td>±0.7 dB</td><td>−50 dBm ≤, < −20 dBm</td><td>10 to 40°C</td></tr><tr><td>±0.9 dB</td><td>−60 dBm ≤, < −50 dBm</td><td>10 to 40°C</td></tr></table> | Measurement Accuracy | Input Level | Temperature | ±0.5 dB | −20 dBm ≤, ≤ +35 dBm | 10 to 40°C | ±0.7 dB | −50 dBm ≤, < −20 dBm | 10 to 40°C | ±0.9 dB | −60 dBm ≤, < −50 dBm | 10 to 40°C |
| | | Measurement Accuracy | Input Level | Temperature | | | | | | | | | | |
| | | ±0.5 dB | −20 dBm ≤, ≤ +35 dBm | 10 to 40°C | | | | | | | | | | |
| | | ±0.7 dB | −50 dBm ≤, < −20 dBm | 10 to 40°C | | | | | | | | | | |
| | | ±0.9 dB | −60 dBm ≤, < −50 dBm | 10 to 40°C | | | | | | | | | | |
| | | Before: Test Port3/4 (3800 MHz < Frequency ≤ 4200 MHz) | | | | | | | | | | | | |
| | | <table><tr><th>Measurement Accuracy</th><th>Input Level</th><th>Temperature</th></tr><tr><td>±0.7 dB</td><td>−20 dBm ≤, ≤ +25 dBm</td><td>20 to 30°C</td></tr><tr><td>±0.9 dB</td><td>−50 dBm ≤, < −20 dBm</td><td>20 to 30°C</td></tr><tr><td>±1.1 dB</td><td>−60 dBm ≤, < −50 dBm</td><td>20 to 30°C</td></tr></table> | Measurement Accuracy | Input Level | Temperature | ±0.7 dB | −20 dBm ≤, ≤ +25 dBm | 20 to 30°C | ±0.9 dB | −50 dBm ≤, < −20 dBm | 20 to 30°C | ±1.1 dB | −60 dBm ≤, < −50 dBm | 20 to 30°C |
| | | Measurement Accuracy | Input Level | Temperature | | | | | | | | | | |
| | | ±0.7 dB | −20 dBm ≤, ≤ +25 dBm | 20 to 30°C | | | | | | | | | | |
| ±0.9 dB | −50 dBm ≤, < −20 dBm | 20 to 30°C | | | | | | | | | | | | |
| ±1.1 dB | −60 dBm ≤, < −50 dBm | 20 to 30°C | | | | | | | | | | | | |
| After: Test Port3/4 (3800 MHz < Frequency ≤ 4200 MHz) | | | | | | | | | | | | | | |
| <table><tr><th>Measurement Accuracy</th><th>Input Level</th><th>Temperature</th></tr><tr><td>±0.7 dB</td><td>−20 dBm ≤, ≤ +35 dBm</td><td>20 to 30°C</td></tr><tr><td>±0.9 dB</td><td>−50 dBm ≤, < −20 dBm</td><td>20 to 30°C</td></tr><tr><td>±1.1 dB</td><td>−60 dBm ≤, < −50 dBm</td><td>20 to 30°C</td></tr></table> | Measurement Accuracy | Input Level | Temperature | ±0.7 dB | −20 dBm ≤, ≤ +35 dBm | 20 to 30°C | ±0.9 dB | −50 dBm ≤, < −20 dBm | 20 to 30°C | ±1.1 dB | −60 dBm ≤, < −50 dBm | 20 to 30°C | | |
| Measurement Accuracy | Input Level | Temperature | | | | | | | | | | | | |
| ±0.7 dB | −20 dBm ≤, ≤ +35 dBm | 20 to 30°C | | | | | | | | | | | | |
| ±0.9 dB | −50 dBm ≤, < −20 dBm | 20 to 30°C | | | | | | | | | | | | |
| ±1.1 dB | −60 dBm ≤, < −50 dBm | 20 to 30°C | | | | | | | | | | | | |
| 6.4.2 | 6-14 | Frequency/Modulation measurement (1) Test specifications | | | | | | | | | | | | |
| | | Before: Test Port3/4 Input level: −40 dBm ≤, ≤+25 dBm | | | | | | | | | | | | |
| | | After: Test Port3/4 Input level: −40 dBm ≤, ≤+35 dBm | | | | | | | | | | | | |
| 6.4.4 | 6-18 | Adjacent Channel Leakage Power Ratio (1) Testing specifications | | | | | | | | | | | | |
| | | Before: Test Port3/4 Input level range: −10 dBm ≤, ≤+25 dBm | | | | | | | | | | | | |
| | | After: Test Port3/4 Input level range: −10 dBm ≤, ≤+35 dBm | | | | | | | | | | | | |

Items in MX887067A Manual to be Replaced or Deleted (4/6)

| Section | Page | Detail |
|---------|------|---|
| 6.4.5 | 6-28 | Tx Power measurement accuracy (CW) (Cont'd) Tx Power measurement accuracy Port3/4 |
| | | Before: MU887000A Input Level: –10 dBm Measurement Accuracy (dB) Frequency (MHz): 600 to 3800 Lo Limit: –0.7 Hi Limit: +0.7 Measurement uncertainty: ± 0.17 Frequency (MHz): 4000, 4200 Lo Limit: –0.7 Hi Limit: +0.7 Measurement uncertainty: ± 0.28 |
| | | After: MU887001A Input Level: –10 dBm Measurement Accuracy (dB) Frequency (MHz): 600 to 3800 Lo Limit: –0.5 Hi Limit: +0.5 Measurement uncertainty: ± 0.15 Frequency (MHz): 4000, 4200 Lo Limit: –0.7 Hi Limit: +0.7 Measurement uncertainty: ± 0.33 |
| 6.4.5 | 6-28 | Tx Power measurement accuracy (CW) (Cont'd) Tx Power measurement accuracy Port3/4 |
| | | Before: MU887000A Input Level: –50 dBm Measurement Accuracy (dB) Frequency (MHz): 600 to 3800 Lo Limit: –0.9 Hi Limit: +0.9 Measurement uncertainty: ± 0.14 Frequency (MHz): 4000, 4200 Lo Limit: –0.9 Hi Limit: +0.9 Measurement uncertainty: ± 0.20 |
| | | After: MU887001A Input Level: –50 dBm Measurement Accuracy (dB) Frequency (MHz): 600 to 3800 Lo Limit: –0.7 Hi Limit: +0.7 Measurement uncertainty: ± 0.14 Frequency (MHz): 4000, 4200 Lo Limit: –0.9 Hi Limit: +0.9 Measurement uncertainty: ± 0.33 |
| 6.4.5 | 6-29 | Tx Power measurement accuracy (CW) (Cont'd) Tx Power measurement accuracy Port3/4 |
| | | Before: MU887000A Input Level: –60 dBm Measurement Accuracy (dB) Frequency (MHz): 600 to 3800 Lo Limit: –1.1 Hi Limit: +1.1 Measurement uncertainty: ± 0.14 Frequency (MHz): 4000, 4200 Lo Limit: –1.1 Hi Limit: +1.1 Measurement uncertainty: ± 0.20 |
| | | After: MU887001A Input Level: –60 dBm Measurement Accuracy (dB) Frequency (MHz): 600 to 3800 Lo Limit: –0.9 Hi Limit: +0.9 Measurement uncertainty: ± 0.14 Frequency (MHz): 4000, 4200 Lo Limit: –1.1 Hi Limit: +1.1 Measurement uncertainty: ± 0.33 |

Items in MX887067A Manual to be Replaced or Deleted (5/6)

| Section | Page | Detail | | | | | | | | |
|---|----------------------|---|----------------------|----------------------|----------------|----------------|----------------|---------|----------------|---------|
| Appendix A | A-3 | RF Power Input Level Range | | | | | | | | |
| | | Before: Port1, Port2: -65.0 to +35.0 dBm Port3, Port4: -65.0 to +25.0 dBm | | | | | | | | |
| | | After: Port1 to 4: -65.0 to +35.0 dBm | | | | | | | | |
| Appendix A | A-3 | RF Power Measurement accuracy | | | | | | | | |
| | | Before: Port1, Port2: 600 MHz ≤ Frequency ≤ 2700 MHz, 3400 MHz ≤ Frequency ≤ 3800 MHz (After calibration, 20 to 30°C) | | | | | | | | |
| | | <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>-20 to +35 dBm</td><td>±0.3 dB (Typ.)</td></tr></table> | Input Level | Measurement Accuracy | -20 to +35 dBm | ±0.3 dB (Typ.) | | | | |
| | | Input Level | Measurement Accuracy | | | | | | | |
| | | -20 to +35 dBm | ±0.3 dB (Typ.) | | | | | | | |
| | | 600 MHz ≤ Frequency ≤ 2700 MHz, 3400 MHz ≤ Frequency ≤ 3800 MHz (After calibration, 10 to 40°C to) | | | | | | | | |
| | | <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>-20 to +35 dBm</td><td>±0.5 dB</td></tr><tr><td>-50 to -20 dBm</td><td>±0.7 dB</td></tr><tr><td>-60 to -50 dBm</td><td>±0.9 dB</td></tr></table> | Input Level | Measurement Accuracy | -20 to +35 dBm | ±0.5 dB | -50 to -20 dBm | ±0.7 dB | -60 to -50 dBm | ±0.9 dB |
| | | Input Level | Measurement Accuracy | | | | | | | |
| | | -20 to +35 dBm | ±0.5 dB | | | | | | | |
| | | -50 to -20 dBm | ±0.7 dB | | | | | | | |
| | | -60 to -50 dBm | ±0.9 dB | | | | | | | |
| | | 3800 MHz < Frequency ≤ 4200 MHz (After calibration, 20 to 30°C) | | | | | | | | |
| <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>-20 to +35 dBm</td><td>±0.7 dB</td></tr><tr><td>-50 to -20 dBm</td><td>±0.9 dB</td></tr><tr><td>-60 to -50 dBm</td><td>±1.1 dB</td></tr></table> | Input Level | Measurement Accuracy | -20 to +35 dBm | ±0.7 dB | -50 to -20 dBm | ±0.9 dB | -60 to -50 dBm | ±1.1 dB | | |
| Input Level | Measurement Accuracy | | | | | | | | | |
| -20 to +35 dBm | ±0.7 dB | | | | | | | | | |
| -50 to -20 dBm | ±0.9 dB | | | | | | | | | |
| -60 to -50 dBm | ±1.1 dB | | | | | | | | | |
| Port3, Port4: 600 MHz ≤ Frequency ≤ 2700 MHz, 3400 MHz ≤ Frequency ≤ 3800 MHz (After calibration, 10 to 40°C) | | | | | | | | | | |
| <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>-20 to +25 dBm</td><td>±0.7 dB</td></tr><tr><td>-50 to -20 dBm</td><td>±0.9 dB</td></tr><tr><td>-60 to -50 dBm</td><td>±1.1 dB</td></tr></table> | Input Level | Measurement Accuracy | -20 to +25 dBm | ±0.7 dB | -50 to -20 dBm | ±0.9 dB | -60 to -50 dBm | ±1.1 dB | | |
| Input Level | Measurement Accuracy | | | | | | | | | |
| -20 to +25 dBm | ±0.7 dB | | | | | | | | | |
| -50 to -20 dBm | ±0.9 dB | | | | | | | | | |
| -60 to -50 dBm | ±1.1 dB | | | | | | | | | |
| 3800 MHz < Frequency ≤ 4200 MHz (After calibration, 20 to 30°C) | | | | | | | | | | |
| <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>-20 to +25 dBm</td><td>±0.7 dB</td></tr><tr><td>-50 to -20 dBm</td><td>±0.9 dB</td></tr><tr><td>-60 to -50 dBm</td><td>±1.1 dB</td></tr></table> | Input Level | Measurement Accuracy | -20 to +25 dBm | ±0.7 dB | -50 to -20 dBm | ±0.9 dB | -60 to -50 dBm | ±1.1 dB | | |
| Input Level | Measurement Accuracy | | | | | | | | | |
| -20 to +25 dBm | ±0.7 dB | | | | | | | | | |
| -50 to -20 dBm | ±0.9 dB | | | | | | | | | |
| -60 to -50 dBm | ±1.1 dB | | | | | | | | | |

Items in MX887067A Manual to be Replaced or Deleted (6/6)

| Section | Page | Detail | | | | | | | | |
|---|----------------------|---|----------------------|----------------------|----------------|----------------|----------------|---------|----------------|---------|
| Appendix A | A-3 | RF Power Measurement Accuracy (Cont'd) | | | | | | | | |
| | | After: Port1 to 4: | | | | | | | | |
| | | 600 MHz ≤ Frequency ≤ 2700 MHz, 3400 MHz ≤ Frequency ≤ 3800 MHz (After calibration, 20 to 30°C) | | | | | | | | |
| | | <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>−20 to +35 dBm</td><td>±0.3 dB (Typ.)</td></tr></table> | Input Level | Measurement Accuracy | −20 to +35 dBm | ±0.3 dB (Typ.) | | | | |
| | | Input Level | Measurement Accuracy | | | | | | | |
| | | −20 to +35 dBm | ±0.3 dB (Typ.) | | | | | | | |
| | | 600 MHz ≤ Frequency ≤ 2700 MHz, 3400 MHz ≤ Frequency ≤ 3800 MHz (After calibration, 10 to 40°C) | | | | | | | | |
| | | <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>−20 to +35 dBm</td><td>±0.5 dB</td></tr><tr><td>−50 to −20 dBm</td><td>±0.7 dB</td></tr><tr><td>−60 to −50 dBm</td><td>±0.9 dB</td></tr></table> | Input Level | Measurement Accuracy | −20 to +35 dBm | ±0.5 dB | −50 to −20 dBm | ±0.7 dB | −60 to −50 dBm | ±0.9 dB |
| | | Input Level | Measurement Accuracy | | | | | | | |
| | | −20 to +35 dBm | ±0.5 dB | | | | | | | |
| −50 to −20 dBm | ±0.7 dB | | | | | | | | | |
| −60 to −50 dBm | ±0.9 dB | | | | | | | | | |
| 3800 MHz < Frequency ≤ 4200 MHz (After calibration, 20 to 30°C) | | | | | | | | | | |
| <table><tr><th>Input Level</th><th>Measurement Accuracy</th></tr><tr><td>−20 to +35 dBm</td><td>±0.7 dB</td></tr><tr><td>−50 to −20 dBm</td><td>±0.9 dB</td></tr><tr><td>−60 to −50 dBm</td><td>±1.1 dB</td></tr></table> | Input Level | Measurement Accuracy | −20 to +35 dBm | ±0.7 dB | −50 to −20 dBm | ±0.9 dB | −60 to −50 dBm | ±1.1 dB | | |
| Input Level | Measurement Accuracy | | | | | | | | | |
| −20 to +35 dBm | ±0.7 dB | | | | | | | | | |
| −50 to −20 dBm | ±0.9 dB | | | | | | | | | |
| −60 to −50 dBm | ±1.1 dB | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| Appendix A | A-4 | Modulation Analysis Input Level Range | | | | | | | | |
| | | Before: Port1, Port2: −40.0 to +35.0 dBm Port3, Port4: −40.0 to +25.0 dBm | | | | | | | | |
| | | After: Port1 to 4: −40.0 to +35.0 dBm | | | | | | | | |
| Appendix A | A-4 | Occupied Bandwidth Input Level Range | | | | | | | | |
| | | Before: Port1, Port2: −10.0 to +35.0 dBm Port3, Port4: −10.0 to +25.0 dBm | | | | | | | | |
| | | After: Port1 to 4: −10.0 to +35.0 dBm | | | | | | | | |
| Appendix A | A-4 | Adjacent Channel Leakage Power Ratio Input Level Range | | | | | | | | |
| | | Before: Port1, Port2: −10.0 to +35.0 dBm Port3, Port4: −10.0 to +25.0 dBm | | | | | | | | |
| | | After: Port1 to 4: −10.0 to +35.0 dBm | | | | | | | | |
| Appendix A | A-4 | Spectrum Emission Mask (SEM) Input Level Range | | | | | | | | |
| | | Before: Port1, Port2: −10.0 to +35.0 dBm Port3, Port4: −10.0 to +25.0 dBm | | | | | | | | |
| | | After: Port1 to 4: −10.0 to +35.0 dBm | | | | | | | | |

1.21 Items To Be Replaced for MV887011A/12A/13A/14A/15A/16A/17A/65A/67A

The following table shows the items in the *Waveform File for Cellular Application Operation Manual* (M-W3621AE) that need to be replaced.

Items in Waveform File for Cellular Application Manual to be Replaced

| Section | Page | Detail |
|---------|------|---|
| ----- | All | Before: MU887000A |
| | | After: MU887001A |
| 1.3 | 1-5 | Table 1.3-3 Max. output level |
| | | Before: -12 dBm (TestPort 1/2, Frequency \leq 3800 MHz) -20 dBm (TestPort 1/2, 3800 MHz < Frequency) -2 dBm (TestPort 3/4, Frequency \leq 3800 MHz) -10 dBm (TestPort 3/4, 3800 MHz < Frequency) |
| | | After: -12 dBm (TestPort 1 to 4, Frequency \leq 3800 MHz) -20 dBm (TestPort 1 to 4, 3800 MHz < Frequency) |
| | | |
| 1.3 | 1-5 | Table 1.3-4 Max. output level |
| | | Before: -12 dBm (TestPort 1/2, Frequency \leq 3800 MHz) -20 dBm (TestPort 1/2, 3800 MHz < Frequency) -2 dBm (TestPort 3/4, Frequency \leq 3800 MHz) -10 dBm (TestPort 3/4, 3800 MHz < Frequency) |
| | | After: -12 dBm (TestPort 1 to 4, Frequency \leq 3800 MHz) -20 dBm (TestPort 1 to 4, 3800 MHz < Frequency) |
| | | |
| 1.3 | 1-6 | Table 1.3-8 Max. output level |
| | | Before: -12 dBm (TestPort 1/2, Frequency \leq 3800 MHz) -20 dBm (TestPort 1/2, 3800 MHz < Frequency) -2 dBm (TestPort 3/4, Frequency \leq 3800 MHz) -10 dBm (TestPort 3/4, 3800 MHz < Frequency) |
| | | After: -12 dBm (TestPort 1 to 4, Frequency \leq 3800 MHz) -20 dBm (TestPort 1 to 4, 3800 MHz < Frequency) |
| | | |
| 1.3 | 1-6 | Table 1.3-9 Max. output level |
| | | Before: -12 dBm (TestPort 1/2, Frequency \leq 3800 MHz) -20 dBm (TestPort 1/2, 3800 MHz < Frequency) -2 dBm (TestPort 3/4, Frequency \leq 3800 MHz) -10 dBm (TestPort 3/4, 3800 MHz < Frequency) |
| | | After: -12 dBm (TestPort 1 to 4, Frequency \leq 3800 MHz) -20 dBm (TestPort 1 to 4, 3800 MHz < Frequency) |
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