3.6 Conducted Spurious Emission Measurement

3.6.1 Description of Conducted Spurious Emission Measurement

The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least 43 + 10 log (P) dB.

For Band 7

The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least 55 + 10 log (P) dB.

It is measured by means of a calibrated spectrum analyzer and scanned from 30MHz up to a frequency including its 10th harmonic.

3.6.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.6.3 Test Procedures

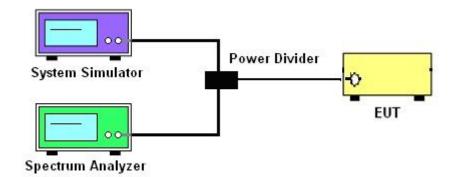
- 1. The EUT was connected to spectrum analyzer and system simulator via a power divider.
- The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator.
 The path loss was compensated to the results for each measurement.
- 3. The middle channel for the highest RF power within the transmitting frequency was measured.
- 4. The conducted spurious emission for the whole frequency range was taken.
- 5. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
- 6. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
- 7. The limit line is derived from 43 + 10log(P)dB below the transmitter power P(Watts)
 - = P(W) [43 + 10log(P)] (dB)
 - = [30 + 10log(P)] (dBm) [43 + 10log(P)] (dB)
 - = -13dBm.
- 8. For Band 7

The limit line is derived from $55 + 10\log(P)dB$ below the transmitter power P(Watts)

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3.6.4 Test Setup



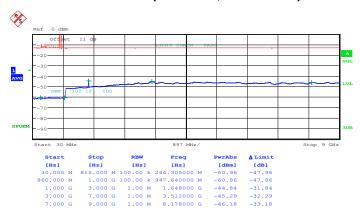
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3.6.5 Test Result (Plots) of Conducted Spurious Emission

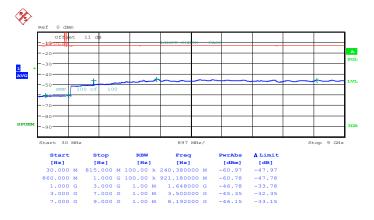
Band :	LTE Band 5	Channel:	CH20407 (Low)
Band Width:	1.4MHz		

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 11:07:52

16QAM (RB Size 1, RB Offset 0)



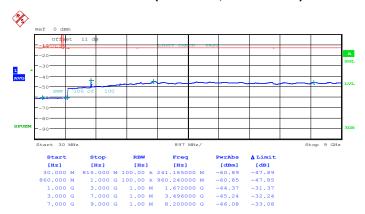
Date: 27.JUL.2014 11:08:50

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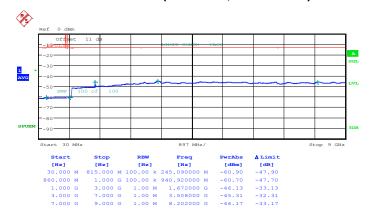
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QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 11:10:50

16QAM (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 11:11:48

SPORTON INTERNATIONAL INC.

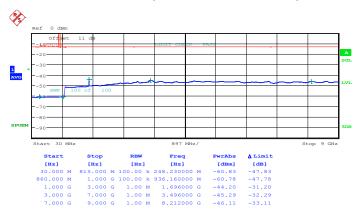
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 Band :
 LTE Band 5
 Channel :
 CH20643 (High)

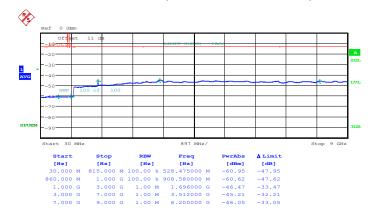
 Band Width :
 1.4MHz

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 11:16:50

16QAM (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 11:17:48

SPORTON INTERNATIONAL INC.

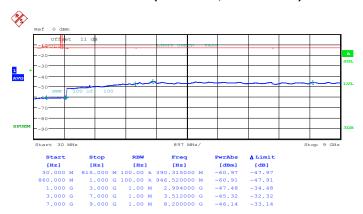
TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: ZL5S50 Page Number : 298 of 441
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 Band :
 LTE Band 5
 Channel :
 CH20415 (Low)

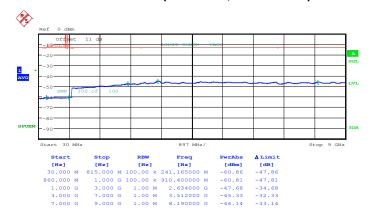
 Band Width :
 3MHz

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 11:24:19

16QAM (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 11:26:55

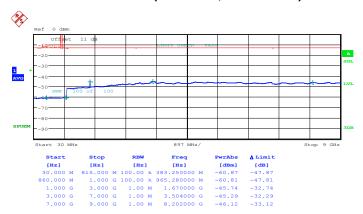
SPORTON INTERNATIONAL INC.

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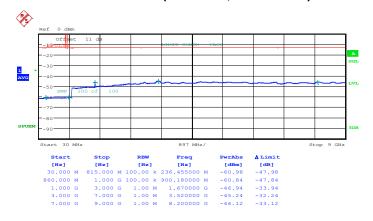
Band :LTE Band 5Channel :CH20525 (Middle)Band Width :3MHz

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 11:29:09

16QAM (RB Size 1, RB Offset 0)



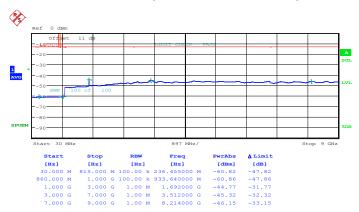
Date: 27.JUL.2014 11:30:07

SPORTON INTERNATIONAL INC.

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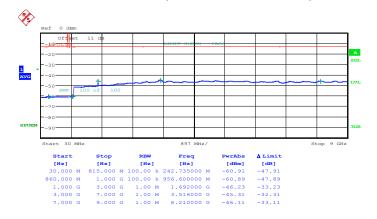
Report Template No.: BU5-FGLTE Version 1.1

Band :	LTE Band 5	Channel:	CH20635 (High)
Band Width:	3MHz		



Date: 27.JUL.2014 11:35:08

16QAM (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 11:36:07

SPORTON INTERNATIONAL INC.

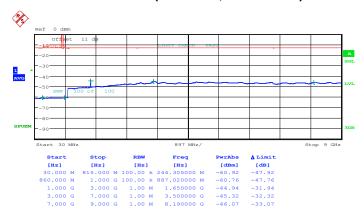
TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: ZL5S50 Page Number : 301 of 441
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 Band :
 LTE Band 5
 Channel :
 CH20425 (Low)

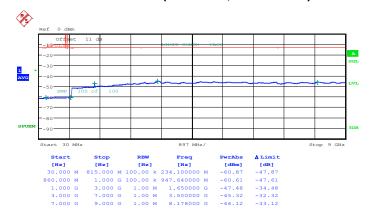
 Band Width :
 5MHz

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 11:42:27

16QAM (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 11:43:25

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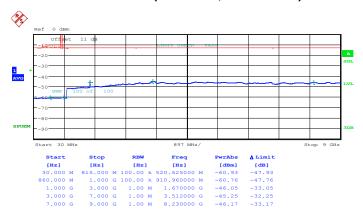
Report No.: FG463004B

Band Width:

5MHz

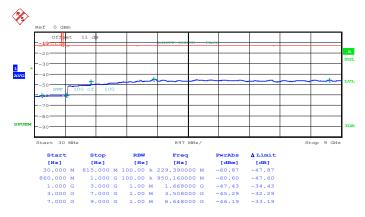
Band: LTE Band 5 Channel: CH20525 (Middle)

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 11:45:25

16QAM (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 11:46:23

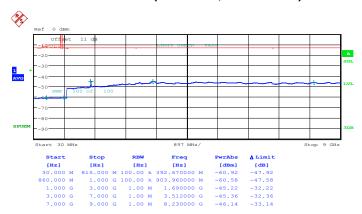
SPORTON INTERNATIONAL INC.

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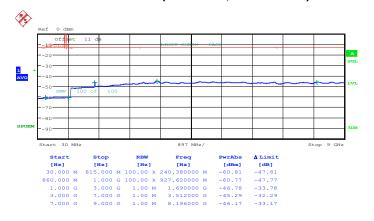
Band: LTE Band 5 Channel: CH20625 (High)
Band Width: 5MHz

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 11:51:25

16QAM (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 11:52:23

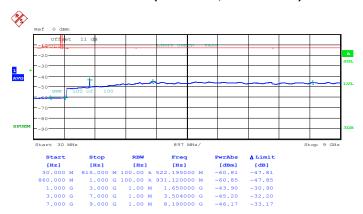
SPORTON INTERNATIONAL INC.

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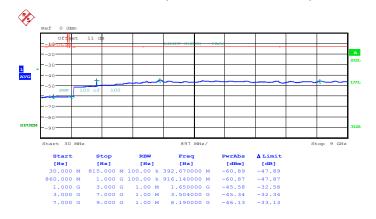
Band :LTE Band 5Channel :CH20450 (Low)Band Width :10MHz

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 11:57:25

16QAM (RB Size 1, RB Offset 0)



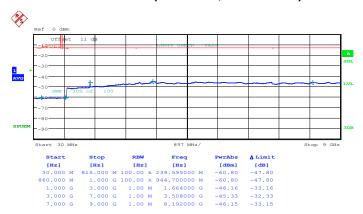
Date: 27.JUL.2014 11:58:23

SPORTON INTERNATIONAL INC.

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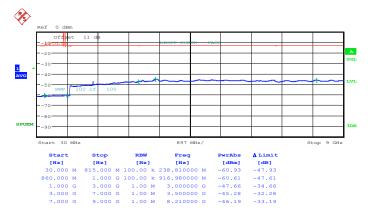
Report Template No.: BU5-FGLTE Version 1.1

Band :	LTE Band 5	Channel:	CH20525 (Middle)
Band Width:	10MHz		



Date: 27.JUL.2014 12:00:23

16QAM (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 12:01:21

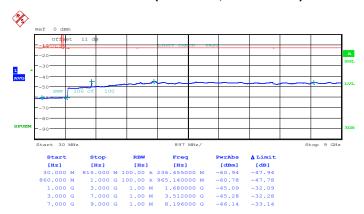
SPORTON INTERNATIONAL INC.

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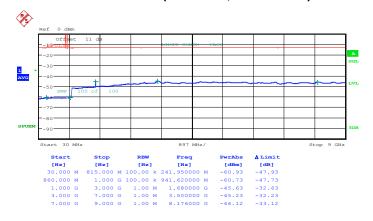
Band :LTE Band 5Channel :CH20600 (High)Band Width :10MHz

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 12:06:23

16QAM (RB Size 1, RB Offset 0)



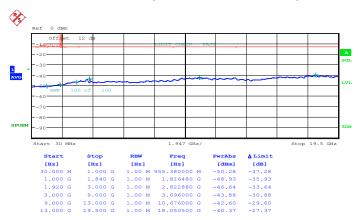
Date: 27.JUL.2014 12:07:21

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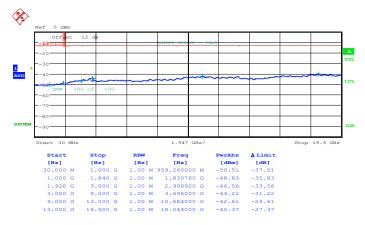
Report No.: FG463004B

Band :	LTE Band 2	Channel:	CH18607 (Low)
Band Width:	1.4MHz		



Date: 27.JUL.2014 07:37:01

16QAM (RB Size 1, RB Offset 0)



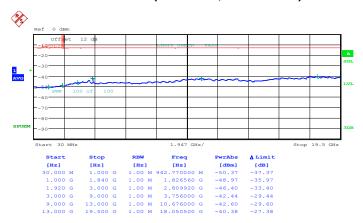
Date: 27.JUL.2014 07:37:59

SPORTON INTERNATIONAL INC.

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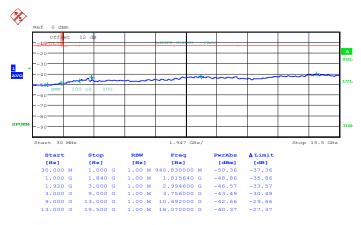
Report No.: FG463004B

Band :	LTE Band 2	Channel:	CH18900 (Middle)
Band Width:	1.4MHz		



Date: 27.JUL.2014 07:39:58

16QAM (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 07:40:57

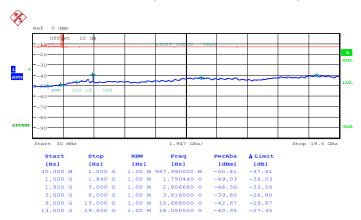
SPORTON INTERNATIONAL INC.

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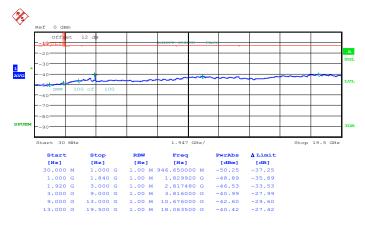
Band :LTE Band 2Channel :CH19193 (High)Band Width :1.4MHz

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 07:45:57

16QAM (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 07:46:56

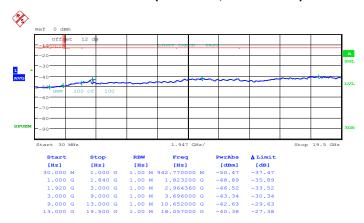
SPORTON INTERNATIONAL INC.

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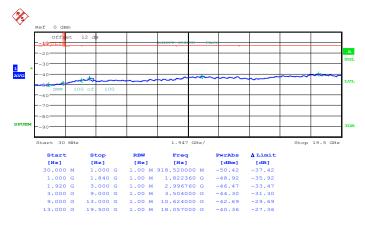
Band :LTE Band 2Channel :CH18615 (Low)Band Width :3MHz

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 07:57:51

16QAM (RB Size 1, RB Offset 0)



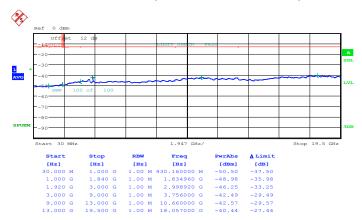
Date: 27.JUL.2014 07:58:50

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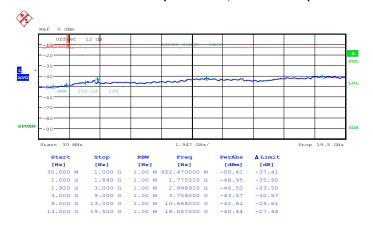
Report No.: FG463004B

Band :	LTE Band 2	Channel:	CH18900 (Middle)
Band Width:	3MHz		



Date: 27.JUL.2014 08:00:49

16QAM (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 08:01:48

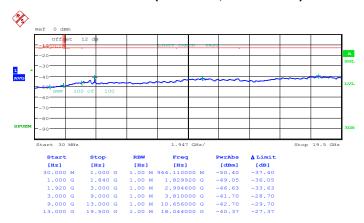
SPORTON INTERNATIONAL INC.

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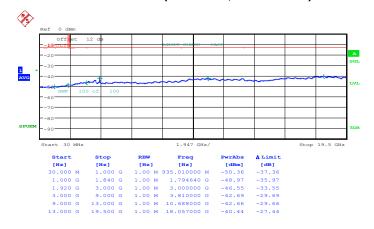
Band :LTE Band 2Channel :CH19185 (High)Band Width :3MHz

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 08:06:48

16QAM (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 08:07:46

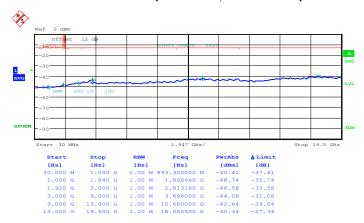
SPORTON INTERNATIONAL INC.

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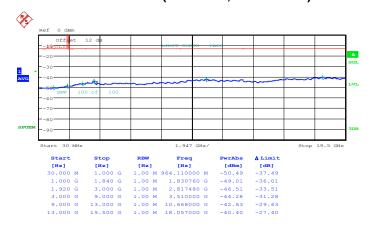
Band :LTE Band 2Channel :CH18625 (Low)Band Width :5MHz

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 08:12:47

16QAM (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 08:13:45

SPORTON INTERNATIONAL INC.

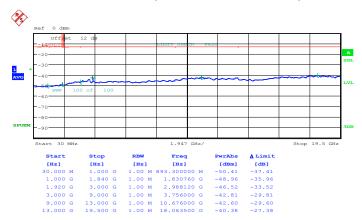
TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: ZL5S50 Page Number : 314 of 441
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Band: LTE Band 2 Channel: CH18900 (Middle)

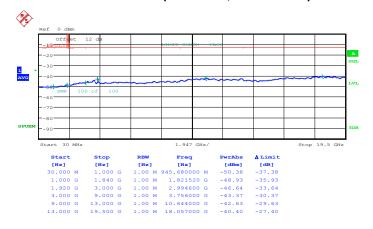
Band Width: 5MHz

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 08:15:44

16QAM (RB Size 1, RB Offset 0)



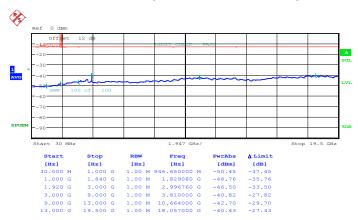
Date: 27.JUL.2014 08:16:43

SPORTON INTERNATIONAL INC.

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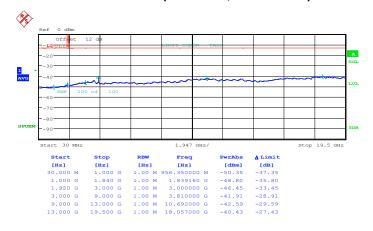
Report No.: FG463004B

Band :	LTE Band 2	Channel:	CH19175 (High)
Band Width :	5MHz		



Date: 27.JUL.2014 08:21:43

16QAM (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 08:22:42

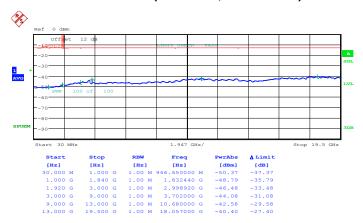
SPORTON INTERNATIONAL INC.

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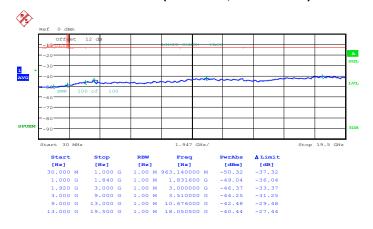
Band :LTE Band 2Channel :CH18650 (Low)Band Width :10MHz

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 08:27:42

16QAM (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 08:28:41

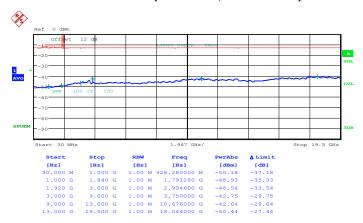
SPORTON INTERNATIONAL INC.

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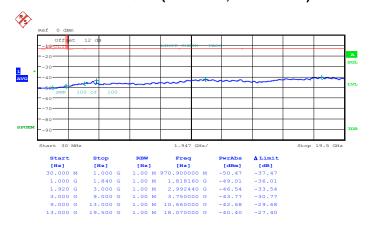
Band: LTE Band 2 Channel: CH18900 (Middle)
Band Width: 10MHz

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 08:30:40

16QAM (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 08:31:39

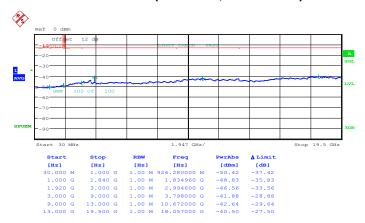
SPORTON INTERNATIONAL INC.

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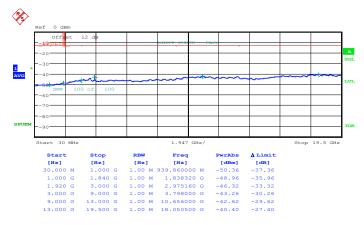
Band :LTE Band 2Channel :CH19150 (High)Band Width :10MHz

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 08:36:40

16QAM (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 08:37:38

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Band: LTE Band 2 Channel: CH18675 (Low)
Band Width: 15MHz

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 08:42:39

16QAM (RB Size 1, RB Offset 0)



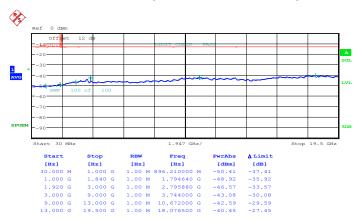
Date: 27.JUL.2014 08:43:38

SPORTON INTERNATIONAL INC.

TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: ZL5S50 Page Number : 320 of 441
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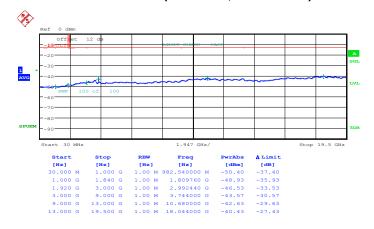
Report Template No.: BU5-FGLTE Version 1.1

Band :	LTE Band 2	Channel:	CH18900 (Middle)
Band Width:	15MHz		



Date: 27.JUL.2014 08:45:37

16QAM (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 08:46:35

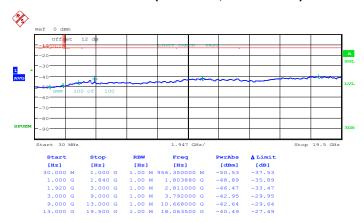
SPORTON INTERNATIONAL INC.

TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: ZL5S50 Page Number : 321 of 441
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Report No.: FG463004B

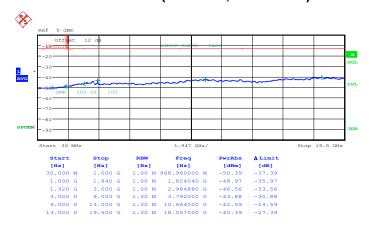
Band :LTE Band 2Channel :CH19125 (High)Band Width :15MHz

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 08:51:36

16QAM (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 08:52:35

SPORTON INTERNATIONAL INC.

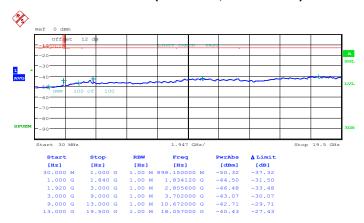
TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: ZL5S50 Page Number : 322 of 441
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Report No.: FG463004B

 Band :
 LTE Band 2
 Channel :
 CH18700 (Low)

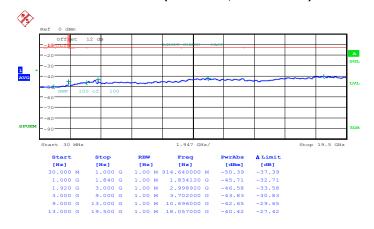
 Band Width :
 20MHz

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 08:57:37

16QAM (RB Size 1, RB Offset 0)



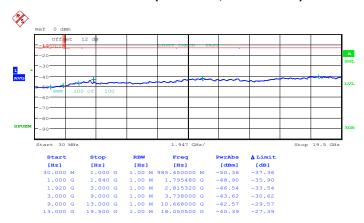
Date: 27.JUL.2014 08:58:36

SPORTON INTERNATIONAL INC.

TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: ZL5S50 Page Number : 323 of 441
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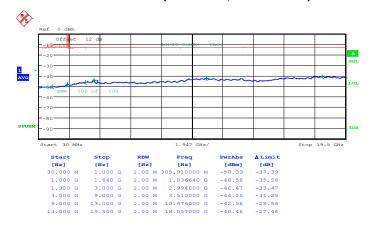
Report No.: FG463004B

Band :	LTE Band 2	Channel:	CH18900 (Middle)
Band Width:	20MHz		



Date: 27.JUL.2014 09:00:35

16QAM (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 09:01:33

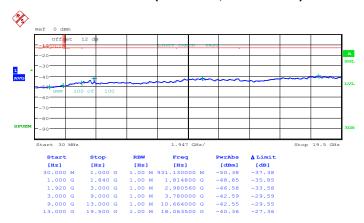
SPORTON INTERNATIONAL INC.

TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: ZL5S50 Page Number : 324 of 441
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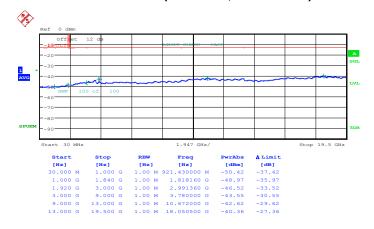
Band: LTE Band 2 Channel: CH19100 (High)
Band Width: 20MHz

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 09:06:37

16QAM (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 09:07:35

SPORTON INTERNATIONAL INC.

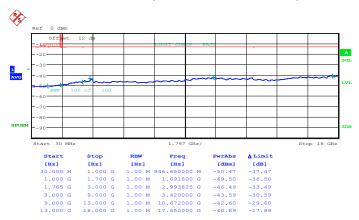
TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: ZL5S50 Page Number : 325 of 441
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Band: LTE Band 4 Channel: CH19957 (Low)

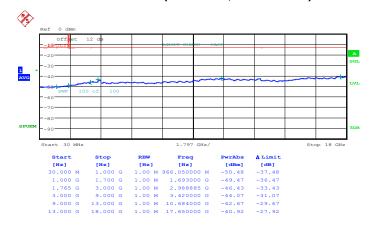
Band Width: 1.4MHz

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 09:14:44

16QAM (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 09:15:43

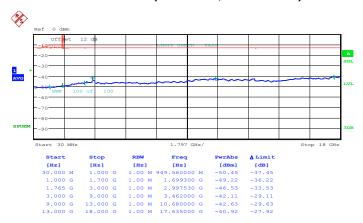
SPORTON INTERNATIONAL INC.

TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: ZL5S50 Page Number : 326 of 441
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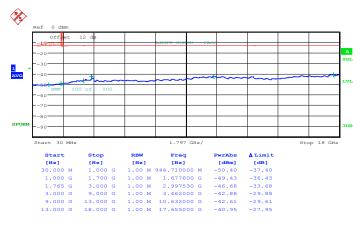
Band: LTE Band 4 Channel: CH20175 (Middle)
Band Width: 1.4MHz

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 09:17:42

16QAM (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 09:18:40

SPORTON INTERNATIONAL INC.

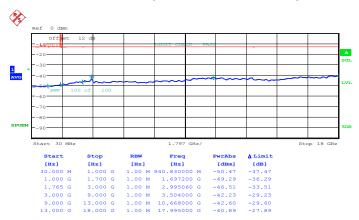
TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: ZL5S50 Page Number : 327 of 441
Report Issued Date : Aug. 19, 2014
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Report Template No.: BU5-FGLTE Version 1.1

Band: LTE Band 4 Channel: CH20393 (High)

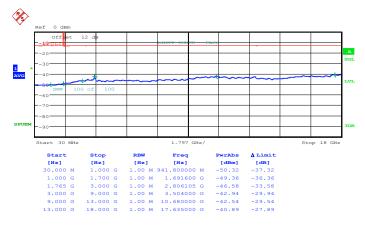
Band Width: 1.4MHz

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 09:23:41

16QAM (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 09:24:40

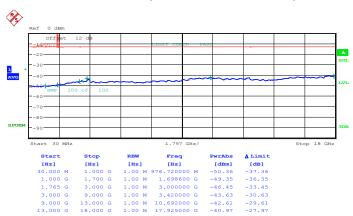
SPORTON INTERNATIONAL INC.

TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: ZL5S50 Page Number : 328 of 441
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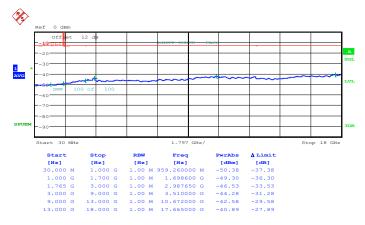
Band: LTE Band 4 Channel: CH19965 (Low)
Band Width: 3MHz

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 09:33:30

16QAM (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 09:34:28

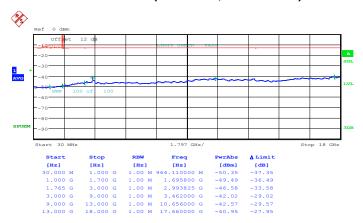
SPORTON INTERNATIONAL INC.

TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: ZL5S50 Page Number : 329 of 441
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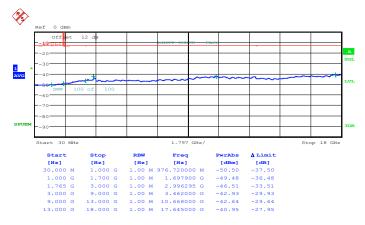
Band :LTE Band 4Channel :CH20175 (Middle)Band Width :3MHz

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 09:36:27

16QAM (RB Size 1, RB Offset 0)



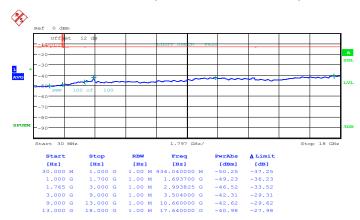
Date: 27.JUL.2014 09:37:26

SPORTON INTERNATIONAL INC.

TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: ZL5S50 Page Number : 330 of 441
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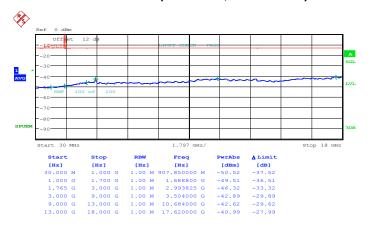
Report No.: FG463004B

Band :	LTE Band 4	Channel:	CH20385 (High)
Band Width:	3MHz		



Date: 27.JUL.2014 09:42:27

16QAM (RB Size 1, RB Offset 0)



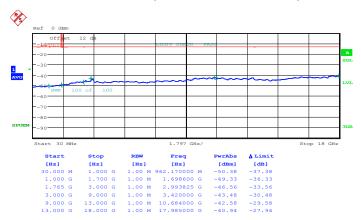
Date: 27.JUL.2014 09:43:26

SPORTON INTERNATIONAL INC.

TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: ZL5S50 Page Number : 331 of 441
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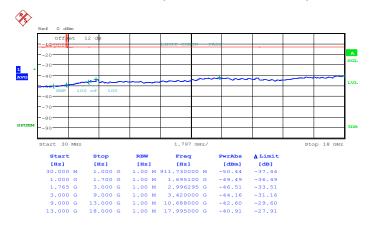
Report No.: FG463004B

Band :	LTE Band 4	Channel:	CH19975 (Low)
Band Width :	5MHz		



Date: 27.JUL.2014 09:48:27

16QAM (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 09:49:26

SPORTON INTERNATIONAL INC.

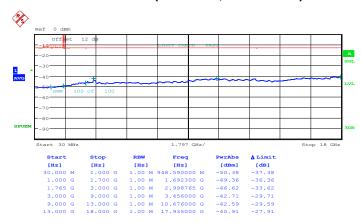
TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: ZL5S50 Page Number : 332 of 441
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Report No.: FG463004B

Band: LTE Band 4 Channel: CH20175 (Middle)

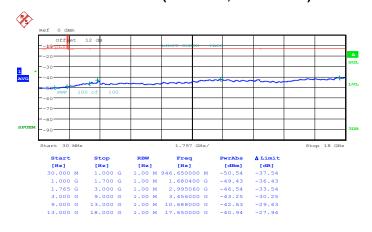
Band Width: 5MHz

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 09:51:25

16QAM (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 09:52:23

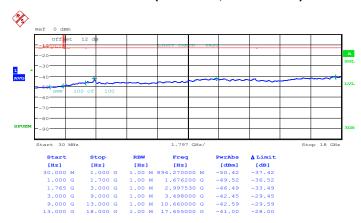
SPORTON INTERNATIONAL INC.

TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: ZL5S50 Page Number : 333 of 441
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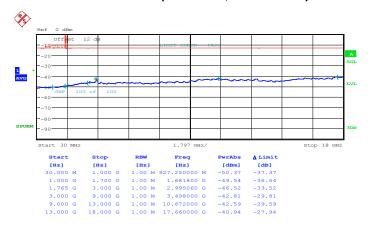
Band: LTE Band 4 Channel: CH20375 (High)
Band Width: 5MHz

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 09:57:24

16QAM (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 09:58:23

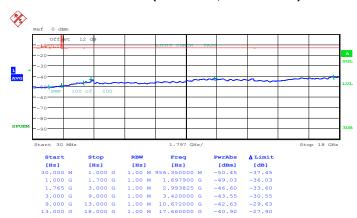
SPORTON INTERNATIONAL INC.

TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: ZL5S50 Page Number : 334 of 441
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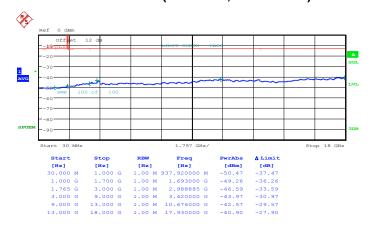
Band: LTE Band 4 Channel: CH20000 (Low)
Band Width: 10MHz

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 10:11:56

16QAM (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 10:12:55

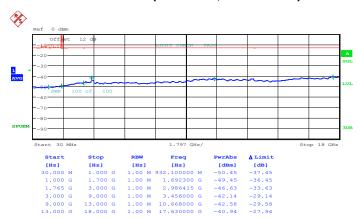
SPORTON INTERNATIONAL INC.

TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: ZL5S50 Page Number : 335 of 441
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Report Template No.: BU5-FGLTE Version 1.1

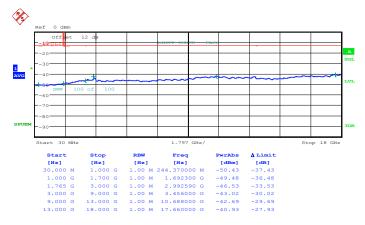
Band :LTE Band 4Channel :CH20175 (Middle)Band Width :10MHz

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 10:14:55

16QAM (RB Size 1, RB Offset 0)



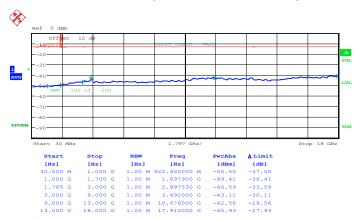
Date: 27.JUL.2014 10:15:53

SPORTON INTERNATIONAL INC.

TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: ZL5S50 Page Number : 336 of 441
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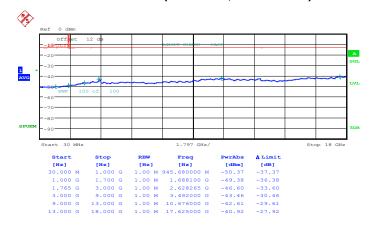
Report Template No.: BU5-FGLTE Version 1.1

Band :	LTE Band 4	Channel:	CH20350 (High)
Band Width:	10MHz		



Date: 27.JUL.2014 10:20:55

16QAM (RB Size 1, RB Offset 0)



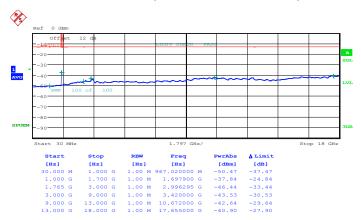
Date: 27.JUL.2014 10:21:54

SPORTON INTERNATIONAL INC.

TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: ZL5S50 Page Number : 337 of 441
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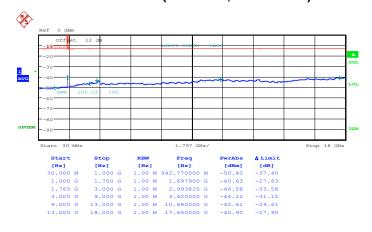
Report Template No.: BU5-FGLTE Version 1.1

Band :	LTE Band 4	Channel:	CH20025 (Low)
Band Width:	15MHz		



Date: 27.JUL.2014 10:26:56

16QAM (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 10:27:54

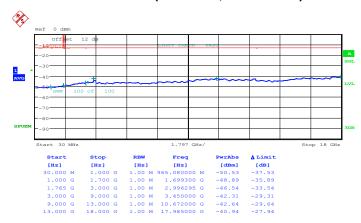
SPORTON INTERNATIONAL INC.

TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: ZL5S50 Page Number : 338 of 441
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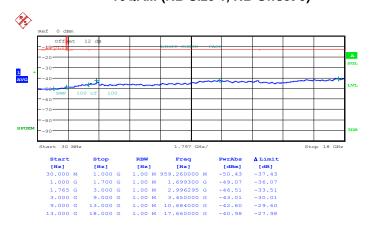
Band: LTE Band 4 Channel: CH20175 (Middle)
Band Width: 15MHz

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 10:29:53

16QAM (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 10:30:52

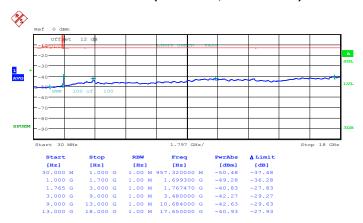
SPORTON INTERNATIONAL INC.

TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: ZL5S50 Page Number : 339 of 441
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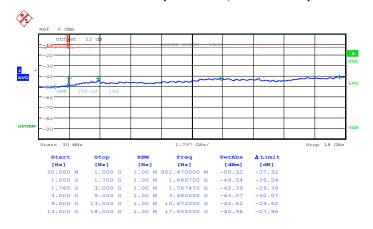
Band :LTE Band 4Channel :CH20325 (High)Band Width :15MHz

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 10:35:54

16QAM (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 10:36:52

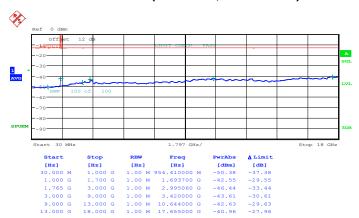
SPORTON INTERNATIONAL INC.

TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: ZL5S50 Page Number : 340 of 441
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Report No.: FG463004B

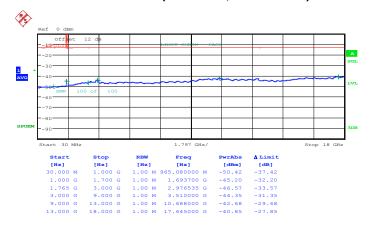
Band :LTE Band 4Channel :CH20050 (Low)Band Width :20MHz

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 10:42:01

16QAM (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 10:43:00

SPORTON INTERNATIONAL INC.

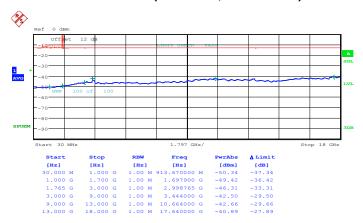
TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: ZL5S50 Page Number : 341 of 441
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Report Template No.: BU5-FGLTE Version 1.1

Band: LTE Band 4 Channel: CH20175 (Middle)

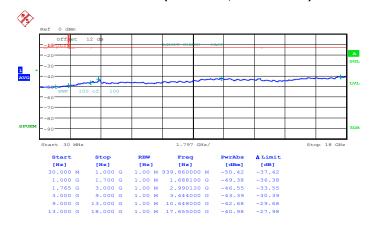
Band Width: 20MHz

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 10:44:59

16QAM (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 10:45:58

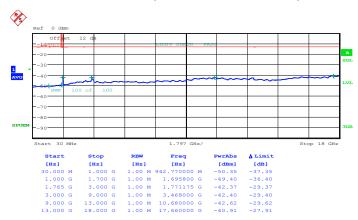
SPORTON INTERNATIONAL INC.

TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: ZL5S50 Page Number : 342 of 441
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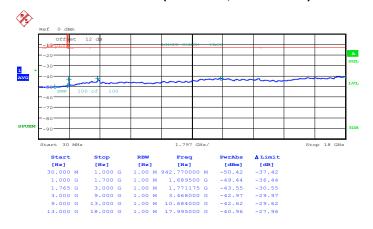
Band: LTE Band 4 Channel: CH20300 (High)
Band Width: 20MHz

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 10:50:59

16QAM (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 10:51:57

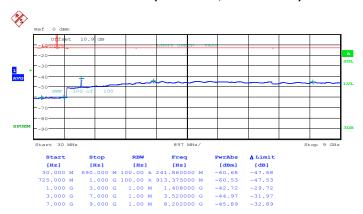
SPORTON INTERNATIONAL INC.

TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: ZL5S50 Page Number : 343 of 441
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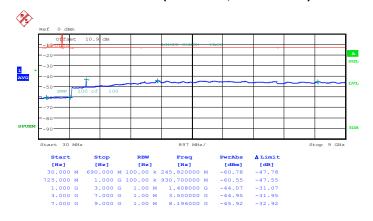
Band :LTE Band 17Channel :CH23755 (Low)Band Width :5MHz

QPSK (RB Size 1, RB Offset 0)



Date: 28.JUL.2014 19:46:45

16QAM (RB Size 1, RB Offset 0)



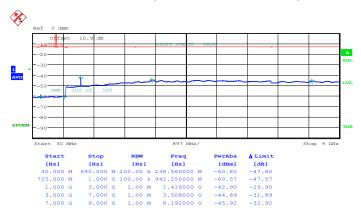
Date: 28.JUL.2014 19:47:44

SPORTON INTERNATIONAL INC.

TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: ZL5S50 Page Number : 344 of 441
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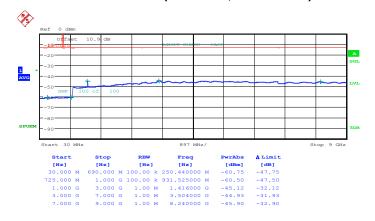
Report No.: FG463004B

Band :	LTE Band 17	Channel:	CH23790 (Middle)
Band Width:	5MHz		



Date: 28.JUL.2014 19:49:42

16QAM (RB Size 1, RB Offset 0)



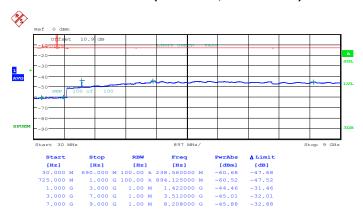
Date: 28.JUL.2014 19:50:41

SPORTON INTERNATIONAL INC.

TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: ZL5S50 Page Number : 345 of 441
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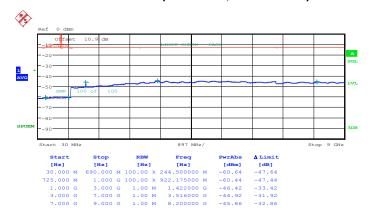
Report No.: FG463004B

Band :	LTE Band 17	Channel:	CH23825 (High)
Band Width:	5MHz		



Date: 28.JUL.2014 19:55:40

16QAM (RB Size 1, RB Offset 0)



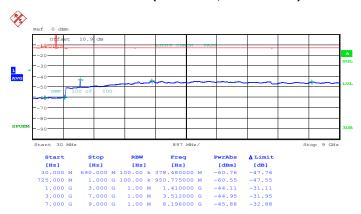
Date: 28.JUL.2014 19:56:38

SPORTON INTERNATIONAL INC.

TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: ZL5S50 Page Number : 346 of 441
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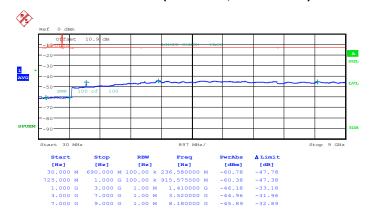
Report Template No.: BU5-FGLTE Version 1.1

Band :	LTE Band 17	Channel:	CH23780 (Low)
Band Width:	10MHz		



Date: 28.JUL.2014 20:01:40

16QAM (RB Size 1, RB Offset 0)



Date: 28.JUL.2014 20:02:38

SPORTON INTERNATIONAL INC.

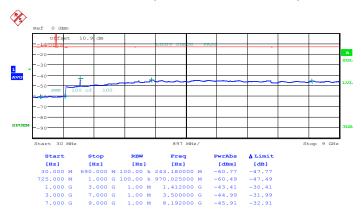
TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: ZL5S50 Page Number : 347 of 441
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 Band :
 LTE Band 17
 Channel :
 CH23790 (Middle)

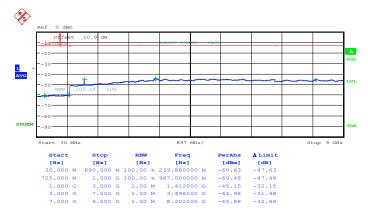
 Band Width :
 10MHz

QPSK (RB Size 1, RB Offset 0)



Date: 28.JUL.2014 20:04:37

16QAM (RB Size 1, RB Offset 0)



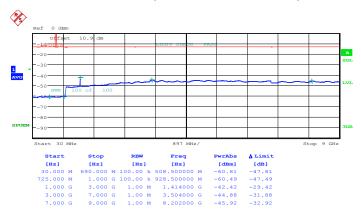
Date: 28.JUL.2014 20:05:35

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TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: ZL5S50 Page Number : 348 of 441
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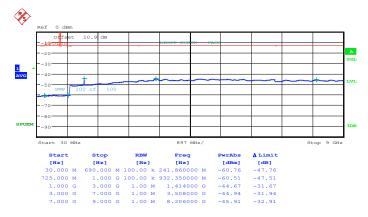
Report No.: FG463004B

Band :	LTE Band 17	Channel:	CH23800 (High)
Band Width:	10MHz		



Date: 28.JUL.2014 20:10:33

16QAM (RB Size 1, RB Offset 0)



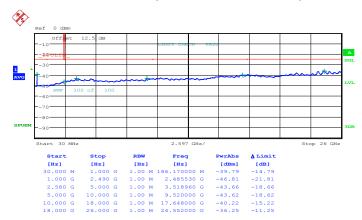
Date: 28.JUL.2014 20:11:31

SPORTON INTERNATIONAL INC.

TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: ZL5S50 Page Number : 349 of 441
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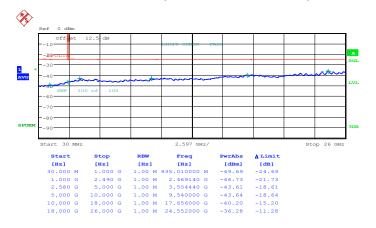
Report Template No.: BU5-FGLTE Version 1.1

Band :	LTE Band 7	Channel:	CH20775 (Low)
Band Width:	5MHz		



Date: 31.JUL.2014 09:23:35

16QAM (RB Size 1, RB Offset 0)



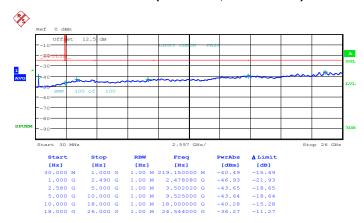
Date: 31.JUL.2014 09:24:36

SPORTON INTERNATIONAL INC.

TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: ZL5S50 Page Number : 350 of 441
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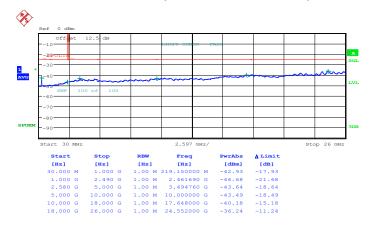
Report Template No.: BU5-FGLTE Version 1.1

Band :	LTE Band 7	Channel:	CH21100 (Middle)
Band Width:	5MHz		



Date: 31.JUL.2014 09:32:24

16QAM (RB Size 1, RB Offset 0)



Date: 31.JUL.2014 09:33:26

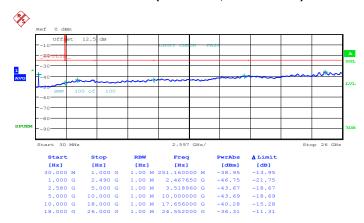
SPORTON INTERNATIONAL INC.

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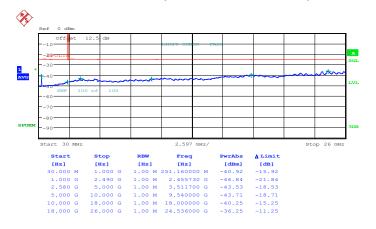
Band :LTE Band 7Channel :CH21425 (High)Band Width :5MHz

QPSK (RB Size 1, RB Offset 0)



Date: 31.JUL.2014 09:38:28

16QAM (RB Size 1, RB Offset 0)



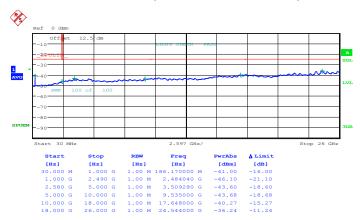
Date: 31.JUL.2014 09:39:29

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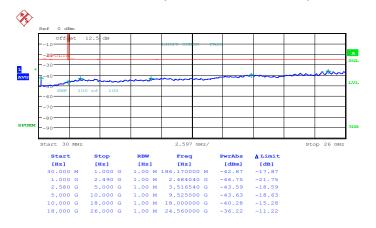
Report No.: FG463004B

Band :	LTE Band 7	Channel:	CH20800 (Low)
Band Width:	10MHz		



Date: 31.JUL.2014 09:44:35

16QAM (RB Size 1, RB Offset 0)



Date: 31.JUL.2014 09:45:36

SPORTON INTERNATIONAL INC.

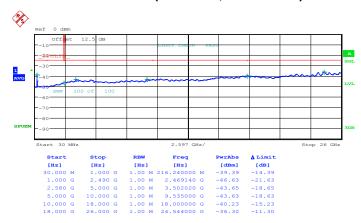
TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: ZL5S50 Page Number : 353 of 441
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Report No.: FG463004B

Band: LTE Band 7 Channel: CH21100 (Middle)

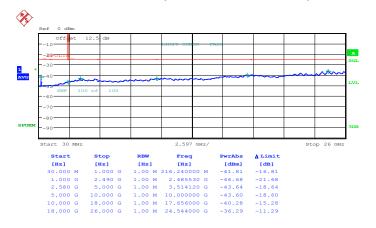
Band Width: 10MHz

QPSK (RB Size 1, RB Offset 0)



Date: 31.JUL.2014 09:47:38

16QAM (RB Size 1, RB Offset 0)



Date: 31.JUL.2014 09:48:40

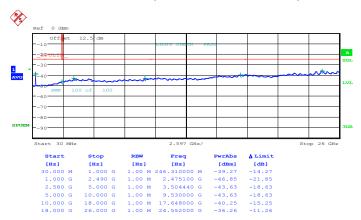
SPORTON INTERNATIONAL INC.

TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: ZL5S50 Page Number : 354 of 441
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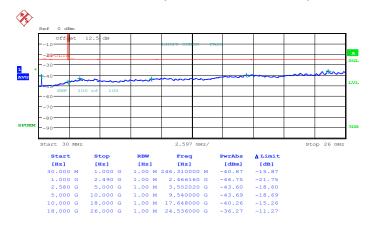
Band: LTE Band 7 Channel: CH21400 (High)
Band Width: 10MHz

QPSK (RB Size 1, RB Offset 0)



Date: 31.JUL.2014 09:53:41

16QAM (RB Size 1, RB Offset 0)



Date: 31.JUL.2014 09:54:42

SPORTON INTERNATIONAL INC.

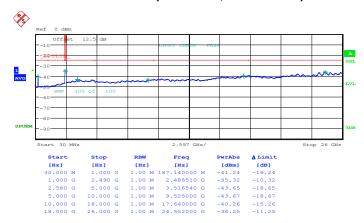
TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: ZL5S50 Page Number : 355 of 441
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 Band :
 LTE Band 7
 Channel :
 CH20825 (Low)

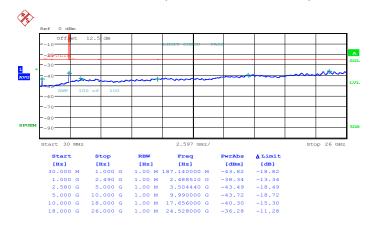
 Band Width :
 15MHz

QPSK (RB Size 1, RB Offset 0)



Date: 31.JUL.2014 09:59:47

16QAM (RB Size 1, RB Offset 0)



Date: 31.JUL.2014 10:00:49

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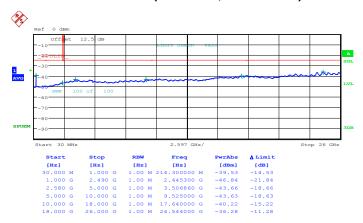
TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: ZL5S50 Page Number : 356 of 441
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LTE Bond 7 Channel . CH24100 (Middle)

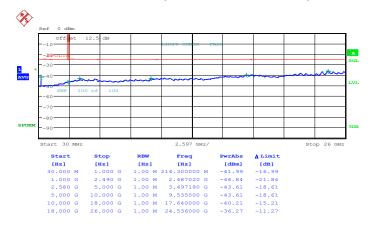
Band:	LTE Band 7	Channel:	CH21100 (Middle)
Band Width:	15MHz		

QPSK (RB Size 1, RB Offset 0)



Date: 31.JUL.2014 10:02:52

16QAM (RB Size 1, RB Offset 0)



Date: 31.JUL.2014 10:03:53

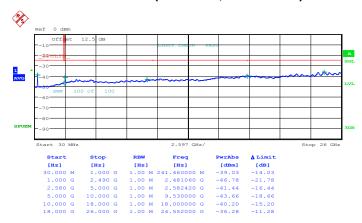
SPORTON INTERNATIONAL INC.

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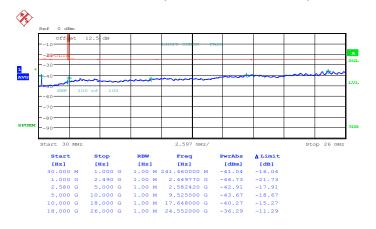
Band :LTE Band 7Channel :CH21375 (High)Band Width :15MHz

QPSK (RB Size 1, RB Offset 0)



Date: 31.JUL.2014 10:08:55

16QAM (RB Size 1, RB Offset 0)



Date: 31.JUL.2014 10:09:57

SPORTON INTERNATIONAL INC.

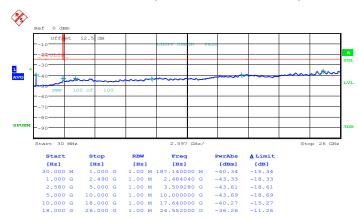
TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: ZL5S50 Page Number : 358 of 441
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 Band :
 LTE Band 7
 Channel :
 CH20850 (Low)

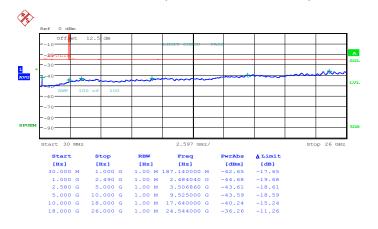
 Band Width :
 20MHz

QPSK (RB Size 1, RB Offset 0)



Date: 31.JUL.2014 10:15:02

16QAM (RB Size 1, RB Offset 0)



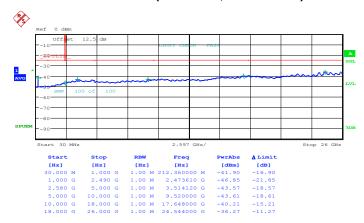
Date: 31.JUL.2014 10:16:03

SPORTON INTERNATIONAL INC.

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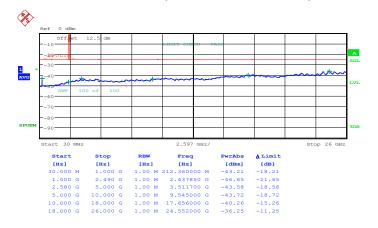
Report Template No.: BU5-FGLTE Version 1.1

Band :	LTE Band 7	Channel:	CH21100 (Middle)
Band Width:	20MHz		



Date: 31.JUL.2014 10:18:05

16QAM (RB Size 1, RB Offset 0)



Date: 31.JUL.2014 10:19:06

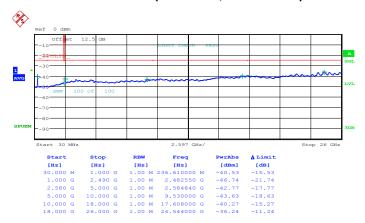
SPORTON INTERNATIONAL INC.

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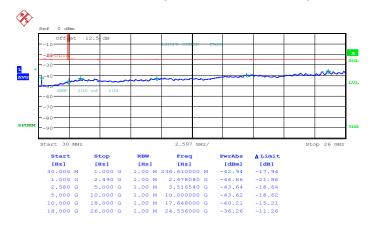
Band: LTE Band 7 Channel: CH21350 (High)
Band Width: 20MHz

QPSK (RB Size 1, RB Offset 0)



Date: 31.JUL.2014 10:24:06

16QAM (RB Size 1, RB Offset 0)



Date: 31.JUL.2014 10:25:08

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3.7 Radiated Spurious Emission Measurement

3.7.1 Description of Radiated Spurious Emission

The radiated spurious emission was measured by substitution method according to ANSI / TIA / EIA-603-C-2004. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least 43 + 10 log (P) dB.

For Band 7

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least 55 + 10 log (P) dB.

For LTE Band 17

For operations in the 746-758 MHz, 775-788 MHz, and 805-806 MHz bands, emissions in the band 1559-1610 MHz shall be limited to -70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth.

The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

3.7.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.7.3 Test Procedures

- 1. The EUT was placed on a rotatable wooden table with 0.8 meter above ground.
- 2. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.
- 3. The table was rotated 360 degrees to determine the position of the highest spurious emission.
- 4. The height of the receiving antenna is varied between one meter and four meters to search the maximum spurious emission for both horizontal and vertical polarizations.
- 5. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
- 6. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
- 7. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
- 8. Taking the record of output power at antenna port.
- 9. Repeat step 7 to step 8 for another polarization.

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10. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

The limit line is derived from 43 + 10log(P)dB below the transmitter power P(Watts)

- = P(W)- [43 + 10log(P)] (dB)
- = [30 + 10log(P)] (dBm) [43 + 10log(P)] (dB)
- = -13dBm.

For Band 7

The limit line is derived from 55 + 10log(P)dB below the transmitter power P(Watts)

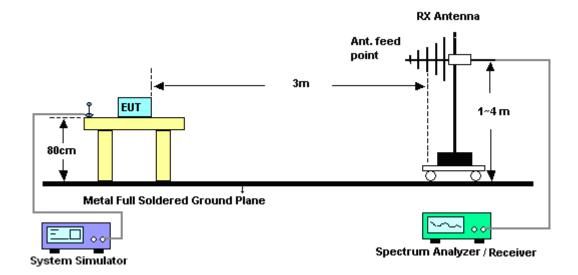
- 11. EIRP (dBm) = S.G. Power Tx Cable Loss + Tx Antenna Gain
- 12. ERP (dBm) = EIRP 2.15

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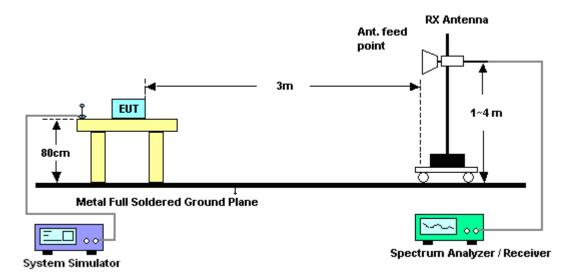
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3.7.4 Test Setup

For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



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3.7.5 Test Result of Field Strength of Spurious Radiated

<Low Channel>

Band :	L	LTE Band 5			Temperature :			23~25°C			
Test Mode	: '	1MHz QPSK RB Size 1 Offset 0				Relative Humidity :			44~48%		
Test Engin	eer :	Eric Shih & Stan Hsieh & Ken Wu				Polarization :			Horizontal		
Remark: Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.											
Frequency	ERP	Limit	Over	SPA	S.G	. TX Cable TX Ant		enna Polarization Re		Result	
			Limit	Reading	Pow	er	loss	Gai	n		
(MHz)	(dBm) (dBm)	(dB)	(dBm)	(dBn	n)	(dB)	(dB	i)	(H/V)	
1648	-39.4	1 -13	-26.41	-46.01	-41.1	5	1.61	5.50)	Н	Pass
2472	-34.56	6 -13	-21.56	-45.51	-36.5	6	2.09	6.2	1	Н	Pass
3296	-38.03	3 -13	-25.03	-49.9	-40.8	39	3.08	8.09	9	Н	Pass
4120	-41.84	4 -13	-28.84	-55.95	-46.3	36	2.59	9.20	3	Н	Pass

Band :		LTE Band 5				Temperature :			23~25°C		
Test Mode	:	1MHz QPSK RB Size 1 Offset 0				Relative Humidity :			44~48%		
Test Engine	eer :	Eric Shih & Stan Hsieh & Ken Wu				Polarization :			Vertical		
Remark :	Semark: Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.									limit line.	
Frequency	ERP	Limit	Over	SPA	S.G	. TX	Cable	TX Ante	nna Po	olarization	Result
			Limit	Reading	Powe	er lo	oss	Gair	ı		
(MHz)	(dBm	n) (dBm)	(dB)	(dBm)	(dBn	n) (d	dB)	(dBi)	(H/V)	
1648	-44.0	9 -13	-31.09	-52.94	-45.8	3 1	.61	5.50)	V	Pass
2472	-40.4	6 -13	-27.46	-51.87	-42.4	6 2	.09	6.24	ļ	V	Pass
3296	-40.5	6 -13	-27.56	-54	-43.4	2 3	.08	8.09)	V	Pass
4120	-46.5	1 -13	-33.51	-61.43	-51.0	3 2	.59	9.26	6	V	Pass

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Band :		LTE Band	5			Tem	perature :		23~25°C		
Test Mode	:	1MHz QPS	K RB Si	ze 1 Offset	0	Rela	tive Humic	dity:	44~4	18%	
Test Engin	eer :	Eric Shih 8	Stan H	sieh & Ken	Wu	Pola	rization :		Hori	zontal	
Remark :	;	Spurious e	missions	within 30-	10th ha	rmor	nic were fou	ınd more	e tha	n 20dB below	limit line.
Frequency	ERP	<u> </u>				i .	TX Cable	TX Ante	enna	Polarization	Result
			Limit	Reading	Pow	er	loss	Gai	n		
(MHz)	(dBm) (dBm)	(dB)	(dBm)	(dBn	n)	(dB)	(dB	i)	(H/V)	
1672	-46.0	0 -13	-33.00	-52.77	-47.7	72	1.62	5.49	9	Н	Pass
2504	-36.8	7 -13 -23.87 -48			-38.8	34	2.1	6.22	2	Н	Pass
3344	-42.8	7 -13 -29.87 -54.83				7 6	3.03	8.07	7	Н	Pass
4176	-46.7	2 -13	-33.72	-60.82	-51.2	26	2.52	9.2	1	Н	Pass

Band :		LTE Band	5			Temperature :		23~25°C		
Test Mode	:	1MHz QPS	K RB Si	ze 1 Offset	0	Relative Humi	dity :	44~48%		
Test Engine	eer :	Eric Shih &	Stan H	sieh & Ken	Wu	Polarization :		Vertical		
Remark :		Spurious e	missions	within 30-	10th ha	rmonic were for	und more	e than 20dB belov	w limit line.	
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Ante	enna Polarization	Result	
			Limit	Reading	Powe	r loss	Gaiı	1		
(MHz)	(dBm) (dBm)	(dB)	(dBm)	(dBm) (dB)	(dBi) (H/V)		
1672	-51.6°	1 -13	-38.61	-60.56	-53.33	3 1.62	5.49) V	Pass	
2504	-41.5	7 -13	-28.57	-53.11	-43.5	4 2.1	6.22	2 V	Pass	
3344	-45.5	4 -13	-32.54	-58.91	-48.43	3.03	8.07	7 V	Pass	
4176	-48.72	2 -13	-35.72	-63.66	-53.20	6 2.52	9.21	V	Pass	

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Band :		LTE Band 5	TE Band 5				perature :		23~25°C		
Test Mode	:	1MHz QPS	K RB Si	ze 1 Offset	0	Rela	ative Humic	lity :	44~4	18%	
Test Engin	eer:	Eric Shih &	Stan Hs	sieh & Ken	Wu	Pola	arization :		Horiz	zontal	
Remark :		Spurious e	missions	within 30-1	10th ha	rmo	nic were fou	ınd more	thai	n 20dB below	limit line.
Frequency	ERP	•					TX Cable	TX Ante	enna	Polarization	Result
			Limit	Reading	Pow	er	loss	Gai	n		
(MHz)	(dBm) (dBm)	(dB)	(dBm)	(dBn	n)	(dB)	(dB	i)	(H/V)	
1696	-44.5	1 -13	-31.51	-51.37	-46.2	25	1.58	5.4	7	Н	Pass
2544	-40.0	6 -13	-27.06	-51.21	-42.1	9	2.03	6.3	l	Н	Pass
3392	-35.8	2 -13	-22.82	-47.82	-39.5	59	2.31	8.23	3	Н	Pass
4240	-44.8	6 -13	-31.86	-58.94	-49.2	21	2.75	9.2	5	Н	Pass

Band :		LTE Band	5			Temperature :		23~25°C		
Test Mode	:	1MHz QPS	K RB S	ize 1 Offset	: 0	Relative Humi	dity :	44~48%		
Test Engine	eer :	Eric Shih & Stan Hsieh & Ken Wu				Polarization :		Vertical		
Remark :		Spurious e	missions	s within 30-	10th ha	monic were fo	und more	e than 20dB below	/ limit line.	
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Ante	nna Polarization	Result	
			Limit	Reading	Powe	r loss	Gaiı	ı		
(MHz)	(dBm) (dBm)	(dB)	(dBm)	(dBm) (dB)	(dBi) (H/V)		
1696	-48.5	4 -13	-35.54	-57.64	-50.28	3 1.58	5.47	' V	Pass	
2544	-41.1	3 -13	-28.13	-52.87	-43.20	2.03	6.31	V	Pass	
3392	-39.6	8 -13	-26.68	-53.1	-43.4	5 2.31	8.23	8 V	Pass	
4240	-49 4	9 -13	-36 49	-64 35	-53.84	4 2.75	9 25	. V	Pass	

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Band :	L	TE Band	5			Temperature :		23~25°C		
Test Mode	: 3	MHz QPS	K RB Si	ze 1 Offset	0 I	Relative Humi	dity :	44~48%		
Test Engin	neer : E	ric Shih 8	Stan H	sieh & Ken	Wu I	Polarization :		Horizontal		
Remark:	5	Spurious e	missions	within 30-	10th har	monic were for	und more	e than 20dB below	v limit line.	
Frequency	ERP	P Limit Over SPA				TX Cable	TX Ante	enna Polarization	Result	
			Limit	Reading	Powe	r loss	Gai	n		
(MHz)	(dBm) (dBm)	(dB)	(dBm)	(dBm) (dB)	(dB	i) (H/V)		
1648	-39.64	-13	-26.64	-46.25	-41.38	3 1.6	5.49	Э Н	Pass	
2472	-35.09	-13	-22.09	-46.14	-37.12	2 2.08	6.26	6 Н	Pass	
3296	-39.03	-13	-26.03	-50.91	-41.9	3.09	8.1	I H	Pass	
4120	-41 48	-13	-28 48	-55.6	-46 03				Pass	

Band :	L	TE Band	5			Temperature :		23~25°C		
Test Mode	: 3	BMHz QPS	K RB Si	ize 1 Offset	0	Relative Hum	dity:	44~4	8%	
Test Engine	eer: E	Fric Shih &	Stan H	sieh & Ken	Wu	Polarization :		Vertic	cal	
Remark :	9	Spurious e	missions	s within 30-	10th hai	rmonic were fo	und more	e than	20dB below	limit line.
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Ante	enna	Polarization	Result
			Limit	Reading	Powe	r loss	Gai	n		
(MHz)	(dBm) (dBm)	(dB)	(dBm)	(dBm) (dB)	(dBi	i)	(H/V)	
1648	-44.29	-13	-31.29	-53.12	-46.03	3 1.6	5.49)	V	Pass
2472	-40.36	-13	-27.36	-51.8	-42.39	9 2.08	6.26	6	V	Pass
3296	-41.02	-13	-28.02	-54.43	-43.89	9 3.09	8.11		V	Pass
4120	-46.30	-13	-33.30	-61.25	-50.8	5 2.61	9.3		V	Pass

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Band :		LTE Band	5			Tem	perature :		23~25°C		
Test Mode	:	3MHz QPS	K RB Si	ze 1 Offset	0	Rela	tive Humid	dity:	44~4	18%	
Test Engin	eer :	Eric Shih &	Stan H	sieh & Ken	Wu	Pola	rization :		Hori	zontal	
Remark :		Spurious e	missions	within 30-	10th ha	rmor	nic were fou	and more	e tha	n 20dB below	limit line.
Frequency	ERP	<u> </u>				i .	TX Cable	TX Ante	enna	Polarization	Result
			Limit	Reading	Pow	er	loss	Gai	n		
(MHz)	(dBm) (dBm)	(dB)	(dBm)	(dBn	n)	(dB)	(dB	i)	(H/V)	
1672	-47.2	9 -13	-34.29	-54.08	-49.0)1	1.62	5.49	9	Н	Pass
2504	-38.9	2 -13	-13 -25.92 -50.04 -4			39	2.1	6.22	2	Н	Pass
3344	-42.9	6 -13 -29.96 -54.85 -			-45.8	35	3.03	8.07	7	Н	Pass
4176	-45.2	5 -13	-32.25	-59.32	-49.7	79	2.52	9.2	1	Н	Pass

Band :		LTE Band	5			Temperature :		23~25°C			
Test Mode	:	3MHz QPS	K RB S	ize 1 Offset	0 I	Relative Humi	dity :	44~48%	~48%		
Test Engine	eer:	Eric Shih &	Stan H	sieh & Ken	Wu I	Polarization :		Vertical			
Remark :		Spurious e	missions	s within 30-	10th har	monic were for	und more	e than 20dB below	v limit line.		
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Ante	enna Polarization	Result		
			Limit	Reading	Powe	r loss	Gaiı	า			
(MHz)	(dBm) (dBm)	(dB)	(dBm)	(dBm) (dB)	(dBi) (H/V)			
1672	-51.6	1 -13	-38.61	-60.59	-53.33	3 1.62	5.49) V	Pass		
2504	-43.2	8 -13	-30.28	-54.78	-45.25	5 2.1	6.22	2 V	Pass		
3344	-45.5	3 -13	-32.53	-58.99	-48.42	3.03	8.07	7 V	Pass		
4176	-47.3	4 -13	-34.34	-62.32	-51.88	3 2.52	9.21	V	Pass		

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Report Template No.: BU5-FGLTE Version 1.1

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Band :		LTE Band (5			Ten	nperature :		23~2	25°C	
Test Mode	:	3MHz QPS	K RB Si	ze 1 Offset	0	Rela	ative Humic	lity :	44~4	18%	
Test Engin	eer :	Eric Shih &	Stan Hs	sieh & Ken	Wu	Pola	arization :		Horiz	zontal	
Remark :		Spurious e	missions	within 30-1	10th ha	armo	nic were fou	ınd more	e thai	n 20dB below	limit line.
Frequency	ERP	Limit	Over	SPA	S.G	i.	TX Cable	TX Ante	enna	Polarization	Result
			Limit	Reading	Pow	er	loss	Gai	n		
(MHz)	(dBm) (dBm)	(dB)	(dBm)	(dBr	n)	(dB)	(dB	i)	(H/V)	
1688	-43.7	1 -13	-30.71	-50.46	-45.4	1 5	1.56	5.4	5	Н	Pass
2536	-38.7	4 -13	-25.74	-49.83	-40.8	35	2.02	6.28	3	Н	Pass
3384	-33.7	1 -13	-20.71	-45.69	-37.4	1 6	2.29	8.19	9	Н	Pass
4232	-44.7	5 -13	-31.75	-58.84	-49.0	08	2.73	9.2	1	Н	Pass

Band :	L	TE Band	5			Temperature :		23~25°C		
Test Mode	: 3	3MHz QPS	K RB Si	ze 1 Offset	0 I	Relative Humi	dity :	44~48%		
Test Engine	eer:	Eric Shih 8	Stan H	sieh & Ken	Wu I	Polarization :		Vertical		
Remark :	9	Spurious e	missions	within 30-	10th har	monic were for	und more	e than 20dB below	v limit line.	
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Ante	nna Polarization	Result	
			Limit	Reading	Powe	r loss	Gaiı	ı		
(MHz)	(dBm) (dBm)	(dB)	(dBm)	(dBm) (dB)	(dBi) (H/V)		
1688	-45.89	9 -13	-32.89	-54.89	-47.63	3 1.56	5.45	5 V	Pass	
2536	-40.58	3 -13	-27.58	-52.21	-42.69	2.02	6.28	8 V	Pass	
3384	-40.27	7 -13	-27.27	-53.71	-44.02	2.29	8.19) V	Pass	
4232	-47.76	6 -13	-34.76	-62.8	-52.09	2.73	9.21	V	Pass	

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Band :		LTE Band	5			Tem	perature :		23~25°C		
Test Mode	:	5MHz QPS	K RB Si	ze 1 Offset	0	Rela	ative Humic	dity:	44~4	18%	
Test Engin	eer:	Eric Shih &	Stan H	sieh & Ken	Wu	Pola	arization :		Horiz	zontal	
Remark :		Spurious e	missions	within 30-1	10th ha	rmo	nic were fou	ınd more	thai	n 20dB below	limit line.
Frequency	ERP	<u> </u>				i .	TX Cable	TX Ante	enna	Polarization	Result
			Limit	Reading	Pow	er	loss	Gai	n		
(MHz)	(dBm) (dBm)	(dB)	(dBm)	(dBn	n)	(dB)	(dB	i)	(H/V)	
1648	-38.2	3 -13	-25.23	-44.78	-39.9	98	1.61	5.5	1	Н	Pass
2472	-35.2	5 -13	-22.25 -46.19 -37		-37.2	26	2.1	6.20	6	Н	Pass
3296	-39.1	4 -13 -26.14 -51 -			-41.9	99	3.12	8.12	2	Н	Pass
4120	-40.9	0 -13	-27.90	-55.05	-45.4	1 5	2.63	9.33	3	Н	Pass

Band :	L	TE Band	5			Temperature :		23~25°C		
Test Mode	: 5	MHz QPS	K RB Si	ze 1 Offset	0 1	Relative Humi	dity :	44~48%		
Test Engine	eer:	Eric Shih &	Stan H	sieh & Ken	Wu I	Polarization :		Vertical		
Remark :	9	Spurious e	missions	within 30-	10th hai	monic were fo	und more	than 20dB below	/ limit line.	
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Ante	nna Polarization	Result	
			Limit	Reading	Powe	r loss	Gair	1		
(MHz)	(dBm) (dBm)	(dB)	(dBm)	(dBm) (dB)	(dBi) (H/V)		
1648	-43.13	3 -13	-30.13	-51.95	-44.88	3 1.61	5.51	V	Pass	
2472	-40.55	5 -13	-27.55	-52.1	-42.56	5 2.1	6.26	V	Pass	
3296	-40.46	3 -13	-27.46	-53.91	-43.3°	3.12	8.12	. V	Pass	
4120	-45.30	-13	-32.30	-60.21	-49.8	5 2.63	9.33	V	Pass	

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Band :		LTE Band 5				Tem	perature :		23~25°C		
Test Mode	:	5MHz QPS	K RB Si	ze 1 Offset	0	Rela	tive Humic	lity :	44~4	18%	
Test Engin	eer:	Eric Shih &	Stan Hs	sieh & Ken	Wu	Pola	rization :		Horiz	zontal	
Remark :		Spurious e	missions	within 30-1	10th ha	rmor	nic were fou	ınd more	thai	n 20dB below	limit line.
Frequency	ERP						TX Cable	TX Ante	enna	Polarization	Result
			Limit	Reading	Powe	er	loss	Gai	n		
(MHz)	(dBm) (dBm)	(dB)	(dBm)	(dBn	n)	(dB)	(dB	i)	(H/V)	
1672	-47.9	9 -13	-34.99	-54.76	-49.7	'1	1.62	5.49	9	Н	Pass
2504	-37.4	8 -13	-24.48	-48.59	-39.4	5	2.1	6.22	2	Н	Pass
3336	-38.4	4 -13	-25.44	-50.33	-41.3	3	3.03	8.07	7	Н	Pass
4168	-46.3	5 -13	-33.35	-60.35	-50.8	89	2.52	9.2	l	Н	Pass

Band :	L	TE Band 9	5			Temperature :		23~25°C	
Test Mode	: 5	MHz QPS	K RB S	ize 1 Offset	0	Relative Hum	idity :	44~48%	
Test Engine	eer: E	Eric Shih & Stan Hsieh & Ken W				Polarization :		Vertical	
Remark :	9	Spurious e	missions	s within 30-	10th ha	rmonic were fo	und more	e than 20dB belo	w limit line.
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Ante	enna Polarization	Result
			Limit	Reading	Powe	er loss	Gai	า	
(MHz)	(dBm) (dBm)	(dB)	(dBm)	(dBm) (dB)	(dBi) (H/V)	
1664	-51.97	' -13	-38.97	-60.89	-53.6	9 1.62	5.49) V	Pass
2504	-41.59	-13	-28.59	-53.14	-43.5	6 2.1	6.22	2 V	Pass
3336	-43.88	-13	-30.88	-57.28	-46.7	7 3.03	8.07	7 V	Pass
4168	-50.44	-13	-37.44	-65.28	-54.9	8 2.52	9.2	V	Pass

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4224

-42.52

-29.52

-56.49

Band :		LTE Band :	5			Tempera	ture :		23~25°C		
Test Mode	:	5MHz QPS	K RB Si	ze 1 Offset	0	Relative	Humi	dity :	44~4	8%	
Test Engin	eer:	Eric Shih & Stan Hsieh & Ken Wu				Polarizat	ion :		Horiz	zontal	
Remark:		Spurious emissions within 30-10				rmonic w	ere fo	und more	e thar	n 20dB below	limit line.
Frequency	ERP	Limit	Over	SPA	S.G	. тх с	Cable	TX Ante	enna	Polarization	Result
			Limit	Reading	Powe	er lo	SS	Gai	n		
(MHz)	(dBm) (dBm)	(dB)	(dBm)	(dBn	n) (d	IB)	(dB	i)	(H/V)	
1688	-41.8	1 -13	-28.81	-48.5	-43.5	6 1.	54	5.4	1	Н	Pass
2536	-37.4	6 -13	-24.46	-48.59	-39.5	7 2.	01	6.2	7	Н	Pass
3376	-34.0	9 -13	-21.09	-46.09	-37.9	4 2.	18	8.18	3	Н	Pass

-46.88

2.68

9.19

Band :		LTE Band	5			Temperature :		23~25°C		
Test Mode	:	5MHz QPS	K RB S	ize 1 Offset	0	Relative Humi	dity :	44~48%		
Test Engine	eer :	Eric Shih & Stan Hsieh & Ken W				Polarization :		Vertical		
Remark:	;	Spurious e	missions	s within 30-	10th ha	rmonic were fo	und more	e than 20dB below	limit line.	
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Ante	nna Polarization	Result	
			Limit	Reading	Powe	er loss	Gair	1		
(MHz)	(dBm) (dBm)	(dB)	(dBm)	(dBm) (dB)	(dBi) (H/V)		
1688	-44.9	5 -13	-31.95	-53.98	-46.7	1.54	5.44	V	Pass	
2536	-40.32	2 -13	-27.32	-51.95	-42.4	3 2.01	6.27	' V	Pass	
3376	-37.47	7 -13	-24.47	-50.9	-41.3	2 2.18	8.18	8 V	Pass	
4224	-45.73	3 -13	-32.73	-60.67	-50.0	9 2.68	9.19) V	Pass	

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Pass

Band :		LTE Band	5			Tem	perature :		23~25°C		
Test Mode	:	10MHz QP	SK RB S	Size 1 Offse	et O	Rela	ative Humic	dity:	44~4	18%	
Test Engin	eer:						arization :		Hori	zontal	
Remark :		Spurious e	missions	within 30-	10th ha	ırmoı	nic were fou	ınd more	e tha	n 20dB below	limit line.
Frequency	ERP	Limit	Over	SPA	S.G		TX Cable	TX Ante	enna	Polarization	Result
			Limit	Reading	Pow	er	loss	Gai	n		
(MHz)	(dBm) (dBm)	(dB)	(dBm)	(dBn	n)	(dB)	(dB	i)	(H/V)	
1648	-38.6	0 -13	-25.60	-45.2	-40.	4	1.63	5.58	3	Н	Pass
2472	-35.9	4 -13	-22.94	-47.02	-37.8	39	2.21	6.3	l	Н	Pass
3296	-39.1	1 -13	-26.11	-50.89	-41.9	99	3.1	8.13	3	Н	Pass
4120	-41.5	7 -13	-28.57	-55.68	-46.1	2	2.65	9.3	5	Н	Pass

Band :	L	TE Band	5		7	Temperature :		23~25°C		
Test Mode	: 1	10MHz QP	SK RB	Size 1 Offse	et 0	Relative Humi	dity :	44~48%		
Test Engine	eer: E	Eric Shih 8	Stan H	sieh & Ken	Wu F	Polarization :		Vertical		
Remark :	9	Spurious e	missions	s within 30-	10th har	monic were fo	und more	e than 20dB below	w limit line.	
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Ante	enna Polarization	Result	
			Limit	Reading	Powe	r loss	Gaiı	ı		
(MHz)	(dBm) (dBm)	(dB)	(dBm)	(dBm) (dB)	(dBi) (H/V)		
1648	-44.61	-13	-31.61	-53.45	-46.41	1.63	5.58	3 V	Pass	
2472	-40.60	-13	-27.60	-52.06	-42.55	5 2.21	6.31	V	Pass	
3296	-39.10	-13	-26.10	-53.57	-41.98	3.1	8.13	3 V	Pass	
4120	-46.61	-13	-33.61	-61.5	-51.16	2.65	9.35	5 V	Pass	

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Band :		LTE Band	5			Tem	perature :		23~25°C		
Test Mode	:	10MHz QP	SK RB S	Size 1 Offse	et O	Rela	tive Humic	dity:	44~4	18%	
Test Engin	eer :	Eric Shih &	Stan H	sieh & Ken	Wu	Pola	rization :		Hori	zontal	
Remark :	9	Spurious emissions within 30-10th				rmor	nic were fou	ınd more	e tha	n 20dB below	limit line.
Frequency	ERP	Limit	Over	SPA	S.G	i.	TX Cable	TX Ante	enna	Polarization	Result
			Limit	Reading	Powe	er	loss	Gai	n		
(MHz)	(dBm) (dBm)	(dB)	(dBm)	(dBn	n)	(dB)	(dB	i)	(H/V)	
1664	-45.6°	1 -13	-32.61	-52.28	-47.3	33	1.62	5.49	9	Н	Pass
2496	-36.18	8 -13	-23.18	-47.32	-38.1	15	2.1	6.22	2	Н	Pass
3328	-36.60	0 -13	-23.60	-48.47	-39.4	19	3.03	8.07	7	Н	Pass
4160	-45.54	4 -13	-32.54	-59.65	-50.0	8(2.52	9.2	1	Н	Pass

Band :	I	LTE Band	5			Temperature :		23~25°C	
Test Mode	: '	10MHz QP	SK RB	Size 1 Offse	et 0	Relative Humi	dity :	44~48%	
Test Engine	eer :	Eric Shih 8	Stan H	sieh & Ken	Wu	Polarization :		Vertical	
Remark :	;	Spurious e	missions	within 30-	10th ha	rmonic were fo	und more	e than 20dB below	v limit line.
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Ante	enna Polarization	Result
			Limit	Reading	Powe	r loss	Gaiı	1	
(MHz)	(dBm) (dBm)	(dB)	(dBm)	(dBm) (dB)	(dBi) (H/V)	
1664	-48.84	4 -13	-35.84	-57.76	-50.56	6 1.62	5.49) V	Pass
2496	-39.92	2 -13	-26.92	-51.46	-41.89	9 2.1	6.22	<u> </u>	Pass
3328	-39.80	0 -13	-26.80	-53.29	-42.69	3.03	8.07	'	Pass
4160	-48.70) -13	-35.70	-63.67	-53.24	4 2.52	9.21	V	Pass

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<High Channel>

Band :		LTE Band	5			Tem	perature :		23~25°C		
Test Mode	:	10MHz QP	SK RB S	Size 1 Offse	et O	Rela	tive Humid	dity:	44~4	18%	
Test Engin	eer :	Eric Shih &	Stan H	sieh & Ken	Wu	Pola	rization :		Hori	zontal	
Remark :		Spurious emissions within 30-10th				rmor	nic were fou	and more	e tha	n 20dB below	limit line.
Frequency	ERP	Limit	Over	SPA	S.G		TX Cable	TX Ante	enna	Polarization	Result
			Limit	Reading	Powe	er	loss	Gai	n		
(MHz)	(dBm) (dBm)	(dB)	(dBm)	(dBn	n)	(dB)	(dB	i)	(H/V)	
1680	-41.3	7 -13	-28.37	-48.13	-43.1	2	1.52	5.42	2	Н	Pass
2520	-39.4	5 -13	-26.45	-50.52	-41.5	6	1.99	6.2	5	Н	Pass
3360	-37.6	8 -13	-24.68	-49.66	-41.5	53	2.14	8.14	4	Н	Pass
4200	-44.4	4 -13	-31.44	-58.47	-48.8	32	2.63	9.16	3	Н	Pass

Band :	L	TE Band	5		1	Temperature :		23~25°C	
Test Mode	: '	10MHz QP	SK RB S	Size 1 Offse	et 0	Relative Humi	dity:	44~48%	
Test Engin	eer :	Eric Shih &	Stan H	sieh & Ken	Wu F	Polarization :		Vertical	
Remark :	9	Spurious e	missions	s within 30-	10th har	monic were fo	und more	than 20dB belov	v limit line.
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Ante	nna Polarization	Result
			Limit	Reading	Powe	r loss	Gair	1	
(MHz)	(dBm) (dBm)	(dB)	(dBm)	(dBm) (dB)	(dBi) (H/V)	
1680	-46.36	3 -13	-33.36	-55.37	-48.11	1.52	5.42	? V	Pass
2520	-41.30	-13	-28.30	-52.87	-43.41	1.99	6.25	, V	Pass
3360	-40.78	3 -13	-27.78	-54.21	-44.63	3 2.14	8.14	V	Pass
4200	-47.60	-13	-34.60	-62.53	-51.98	3 2.63	9.16	S V	Pass

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Band :		TE Band 2	2			Temp	erature :		23~25°C		
Test Mode	:	1MHz QPS	K RB Si	ze 1 Offset	0	Relati	ive Humid	dity:	44~4	18%	
Test Engin	eer :	Eric Shih & Stan Hsieh & Ken W				Polari	ization :		Horiz	zontal	
Remark:	;	Spurious emissions within 30-10				rmoni	c were fou	ınd more	e thai	n 20dB below	limit line.
Frequency	EIRP	Limit	Over	SPA	S.G.	. 1	ΓX Cable	TX Ante	enna	Polarization	Result
			Limit	Reading	Powe	er	loss	Gai	n		
(MHz)	(dBm) (dBm)	(dB)	(dBm)	(dBm	າ)	(dB)	(dB	i)	(H/V)	
3700	-26.5	4 -13	-13.54	-41.77	-32.8	3	2.48	8.74	4	Н	Pass
5548	-35.4	1 -13	-22.41	-56.11	-43.1	1	2.96	10.6	5	Н	Pass
7403	-27.4	7 -13	-14.47	-54.81	-36.1	1	3.48	12.1	1	Н	Pass

Band :		LTE Band 2	2			Temperature :		23~25°C		
Test Mode	:	1MHz QPS	K RB Si	ize 1 Offset	0	Relative Humi	dity :	44~48%		
Test Engine	eer :	Eric Shih &	Stan H	sieh & Ken	Wu	Polarization :		Vertical		
Remark :		Spurious e	urious emissions within 30-10th harmonic w				und more	than 20dB belov	v limit line.	
Frequency	EIRI	P Limit	Over	SPA	S.G.	. TX Cable	TX Ante	nna Polarization	Result	
			Limit	Reading	Powe	er loss	Gair	1		
(MHz)	(dBn	n) (dBm)	(dB)	(dBm)	(dBm	n) (dB)	(dBi) (H/V)		
3700	-34.9	94 -13	-21.94	-51.16	-41.2	2 2.48	8.74	V	Pass	
5548	-39.5	51 -13	-26.51	-60.94	-47.2	2 2.96	10.6	5 V	Pass	
7403	-30.4	7 -13	-17.47	-57.56	-39.1	1 3.48	1 V	Pass		

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Band :		LTE Band 2	2		1	Tempera	ature :		23~2	25°C	
Test Mode	:	1MHz QPS	K RB Si	ze 1 Offset	0	Relative	Humi	dity :	44~4	18%	
Test Engin	eer :	Eric Shih & Stan Hsieh & Ken Wu			Wu	Polariza	tion :		Horiz	zontal	
Remark :	;	Spurious e	10th ha	rmonic w	ere fo	und more	e thai	n 20dB below	limit line.		
Frequency	EIRP	Spurious emissions within 30-1 P Limit Over SPA				TX	Cable	TX Anto	enna	Polarization	Result
			Limit	Reading	Powe	er lo	oss	Gai	n		
(MHz)	(dBm) (dBm)	(dB)	(dBm)	(dBm	1) (0	dB)	(dB	i)	(H/V)	
3756	-25.8	0 -13	-12.80	-41.58	-32.1	2	.51	8.8	1	Н	Pass
5639	-32.3	9 -13	-19.39	-53.4	-40.1	2	.99	10.7	0	Н	Pass
7515	-30.3	7 -13	-17.37	-58.31	-38.9	3	.59	12.1	2	Н	Pass

Band :		LTE Band	2			Temperature :		23~2	5°C	
Test Mode		1MHz QPS	K RB Si	ize 1 Offset	0	Relative Humi	dity:	44~4	8%	
Test Engin	eer :	Eric Shih &	Stan H	sieh & Ken	Wu	Polarization :		Verti	cal	
Remark :		Spurious e	ous emissions within 30-10th harmonic were found more than 20dB below limit						limit line.	
Frequency	EIRF	P Limit	Over	SPA	S.G.	. TX Cable	TX Ante	enna	Polarization	Result
			Limit	Reading	Powe	er loss	Gaiı	า		
(MHz)	(dBm	n) (dBm)	(dB)	(dBm)	(dBm	n) (dB)	(dBi)	(H/V)	
3756	-35.6	<i></i>			-41.9	9 2.51	8.81		V	Pass
5639	-37.3	9 -13	-24.39 -58.03			1 2.99	10.70 V		V	Pass
7515	-31.9	7 -13	-18.97	-59.31	-40.5	3.59	12.1	2	V	Pass

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Band :	I	LTE Band 2	2			Temperatu	re:	23~2	25°C	
Test Mode	: '	1MHz QPS	K RB Si	ze 1 Offset	0	Relative H	umidity :	44~4	18%	
Test Engin	eer :	Eric Shih & Stan Hsieh & Ken Wu				Polarizatio	n :	Horiz	zontal	
Remark :	(Spurious emissions within 30-10				rmonic wer	e found mor	e thar	n 20dB below	limit line.
Frequency	EIRP	L'				TX Ca	ble TX Ant	enna	Polarization	Result
			Limit	Reading	Powe	er loss	s Gai	n		
(MHz)	(dBm) (dBm)	(dB)	(dBm)	(dBm) (dB) (dB	i)	(H/V)	
3819	-20.84	4 -13	-7.84	-36.5	-27.1	2.61	8.8	7	Н	Pass
5723	-32.70	0 -13	-19.70	-54.08	-40.5	3.09	10.8	39	Н	Pass
7634	-31.60	0 -13	-18.60	-58.21	-40.1	3.68	3 12.1	8	Н	Pass

Band :		LTE Band	2			Temperature :		23~25°C	
Test Mode	••	1MHz QPS	K RB Si	ize 1 Offset	0	Relative Humi	dity :	44~48%	
Test Engin	eer :	Eric Shih & Stan Hsieh & Ken Wo				Polarization :		Vertical	
Remark :		Spurious e	urious emissions within 30-10th harmonic were found more than 20dl						v limit line.
Frequency	EIRE	P Limit	Over	SPA	S.G.	TX Cable	TX Ante	enna Polarization	Result
			Limit	Reading	Powe	er loss	Gai	า	
(MHz)	(dBn	n) (dBm)	(dB)	(dBm)	(dBm	n) (dB)	(dBi) (H/V)	
3819	-32.8	4 -13	-19.84	-49.49	-39.1	2.61	8.87	7 \	Pass
5723	-36.9	0 -13	-23.90	-57.99	-44.7	3.09	10.8	9 V	Pass
7634	-32.4	-13	-19.40	-59.26	-40.9	3.68	12.1	Pass	

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Band :		_TE Band 2	2		1	Temp	erature :		23~2	25°C	
Test Mode	: :	3MHz QPS	K RB Si	ze 1 Offset	0	Relati	ive Humic	dity:	44~4	18%	
Test Engin	eer:	Eric Shih & Stan Hsieh & Ken Wu				Polari	ization :		Hori	zontal	
Remark :	;	Spurious e	10th ha	rmoni	c were fou	ınd more	e thai	n 20dB below	limit line.		
Frequency	EIRP	<u> </u>				. 1	TX Cable	TX Ante	enna	Polarization	Result
			Limit	Reading	Powe	er	loss	Gai	n		
(MHz)	(dBm) (dBm)	(dB)	(dBm)	(dBm	ı)	(dB)	(dB	i)	(H/V)	
3700	-26.8	4 -13	-13.84	-42.12	-33.1	1	2.47	8.73	3	Н	Pass
5548	-35.3	5 -13	-22.35	-55.76	-43.1	1	2.93	10.6	8	Н	Pass
7403	-26.5	3 -13	-13.58	-54.45	-35.3	3	3.42	12.1	4	Н	Pass

Band :		LTE Band	2		ŀ	Temperature :		23~2	5°C	
Test Mode		3MHz QPS	K RB Si	ize 1 Offset	0	Relative Humi	dity:	44~4	8%	
Test Engin	eer :	Eric Shih &	Shih & Stan Hsieh & Ken Wu			Polarization :		Verti	cal	
Remark :		Spurious e	ous emissions within 30-10th harmonic were found more than 20dB below limit						limit line.	
Frequency	EIRF	P Limit	Over	SPA	S.G.	. TX Cable	TX Ante	enna	Polarization	Result
			Limit	Reading	Powe	er loss	Gaiı	า		
(MHz)	(dBm	n) (dBm)	(dB)	(dBm)	(dBm	n) (dB)	(dBi)	(H/V)	
3700	-34.2	4 -13	-21.24	-50.89	-40.5	5 2.47	8.73	3	V	Pass
5548	-40.7	5 -13	-27.75	-61.34	-48.5	5 2.93	10.68		V	Pass
7403	-30.4	8 -13	-17.48	-57.75	-39.2	2 3.42	12.1	4	V	Pass

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Band :		LTE Band 2	2		1	Tempe	rature :		23~2	25°C	
Test Mode	: ;	3MHz QPS	K RB Si	ze 1 Offset	0	Relativ	e Humi	dity:	44~4	18%	
Test Engin	eer:	Eric Shih & Stan Hsieh & Ken Wu				Polariz	ation :		Horiz	zontal	
Remark :	;	Spurious e	10th ha	rmonic	were fou	und more	thai	n 20dB below	limit line.		
Frequency	EIRP	<u> </u>				. тх	(Cable	TX Ante	enna	Polarization	Result
			Limit	Reading	Powe	er	loss	Gai	า		
(MHz)	(dBm) (dBm)	(dB)	(dBm)	(dBm	ı) ((dB)	(dBi	i)	(H/V)	
3756	-26.4	0 -13	-13.40	-41.9	-32.7	7	2.51	8.8	1	Н	Pass
5639	-33.0	9 -13	-20.09	-54.12	-40.8	3	2.99	10.7	0	Н	Pass
7515	-31.1	7 -13	-18.17	-58.62	-39.7	7	3.59	12.1	2	Н	Pass

Band :		LTE Band	2			Temperature :		23~25°C	
Test Mode	:	3MHz QPS	K RB Si	ze 1 Offset	0	Relative Humi	dity :	44~48%	
Test Engine	eer :	Eric Shih &	ih & Stan Hsieh & Ken Wu Polariz					Vertical	
Remark :		Spurious emissions within 30-10th harmonic were found more				e than 20dB below	v limit line.		
Frequency	EIRI	P Limit	Over	SPA	S.G.	TX Cable	TX Ante	nna Polarization	Result
			Limit	Reading	Powe	er loss	Gaiı	ı	
(MHz)	(dBn	n) (dBm)	(dB)	(dBm)	(dBm	n) (dB)	(dBi) (H/V)	
3756	-35.4	-13	-22.40	-51.87	-41.7	7 2.51	8.81	V	Pass
5632	-38.0	9 -13	-25.09	-59.17	-45.8	3 2.99	10.7	0 V	Pass
7515	-32.2	.7 -13	-19.27	-59.81	-40.8	3.59	12.1	2 V	Pass

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Band :		LTE Band 2	2			Tem	perature :		23~2	25°C	
Test Mode	:	3MHz QPS	K RB Si	ze 1 Offset	0	Rela	tive Humid	dity:	44~4	18%	
Test Engin	eer :	Eric Shih &	Stan H	sieh & Ken	Wu	Pola	rization :		Hori	zontal	
Remark :		Spurious emissions within 30-10t				rmor	nic were fou	and more	e tha	n 20dB below	limit line.
Frequency	EIRF	Limit	Over	SPA	S.G		TX Cable	TX Ante	enna	Polarization	Result
			Limit	Reading	Pow	er	loss	Gai	n		
(MHz)	(dBm	n) (dBm)	(dB)	(dBm)	(dBn	n)	(dB)	(dB	i)	(H/V)	
3812	-21.6	7 -13	-8.67	-37.19	-27.	9	2.64	8.8	7	Н	Pass
5723	-33.0	6 -13	-20.06	-54.46	-40.	8	3.08	10.82		Н	Pass
7627	-30.6	1 -13	-17.61	-57.31	-39.	1	3.64	12.1	3	Н	Pass
9538	-37.1	4 -13	-24.14	-63.94	-46.	3	4.22	13.3	8	Н	Pass

Band :	L	TE Band 2	2			Temperature :		23~25°C	
Test Mode	: 3	BMHz QPS	K RB S	ize 1 Offset	0 F	Relative Humi	dity :	44~48%	
Test Engin	eer :	Eric Shih & Stan Hsieh & Ken W				Polarization :		Vertical	
Remark :	9	Spurious e	missions	s within 30-	10th har	monic were fo	und more	e than 20dB be	elow limit line.
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Ante	enna Polarizat	ion Result
			Limit	Reading	Powe	r loss	Gair	า	
(MHz)	(dBm) (dBm)	(dB)	(dBm)	(dBm) (dB)	(dBi) (H/V)	
3812	-31.27	7 -13	-18.27	-47.94	-37.5	2.64	8.87	7 V	Pass
5723	-37.36	6 -13	-24.36	-58.27	-45.1	3.08	10.8	2 V	Pass
7627	-31.61	I -13	-18.61	-58.15	-40.1	3.64	12.1	3 V	Pass
9538	-39.54	1 -13	-26.54	-66.11	-48.7	4.22	13.3	8 V	Pass

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Band :		LTE Band 2	2			Temp	perature :		23~2	25°C	
Test Mode	:	5MHz QPS	K RB Si	ze 1 Offset	0	Relat	tive Humic	lity :	44~4	18%	
Test Engin	eer :	Eric Shih & Stan Hsieh & Ken Wu			Wu	Pola	rization :		Horiz	zontal	
Remark :	;	Spurious emissions within 30-10				rmon	ic were fou	ınd more	e thai	n 20dB below	limit line.
Frequency	EIRP	L'				•	TX Cable	TX Ante	enna	Polarization	Result
			Limit	Reading	Powe	er	loss	Gai	n		
(MHz)	(dBm) (dBm)	(dB)	(dBm)	(dBm	n)	(dB)	(dB	i)	(H/V)	
3700	-26.8	7 -13	-13.87	-42.24	-33.2	2	2.46	8.79	9	Н	Pass
5548	-34.6	3 -13	-21.63	-55.35	-42.5	5	2.9	10.7	7	Н	Pass
7403	-26.2	8 -13	-13.28	-53.81	-35.1	1	3.42	12.2	4	Н	Pass

Band :		LTE Band	2			Temp	erature :		23~2	25°C	
Test Mode	:	5MHz QPS	K RB S	ize 1 Offset	: 0	Relat	ive Humi	dity:	44~4	18%	
Test Engin	eer :	Eric Shih &	ric Shih & Stan Hsieh & Ken Wι				ization :		Verti	cal	
Remark :		Spurious e	ous emissions within 30-10th harmonic were found more than 20dB below lim						limit line.		
Frequency	EIRF	P Limit	Over	SPA	S.G.		TX Cable	TX Ante	nna	Polarization	Result
			Limit	Reading	Powe	er	loss	Gai	1		
(MHz)	(dBm	n) (dBm)	(dB)	(dBm)	(dBn	n)	(dB)	(dBi)	(H/V)	
3700	-34.1					5	2.46	8.79)	V	Pass
5548	-41.0	3 -13	-28.03	-61.55	-48.9	9	2.9	10.77 V		V	Pass
7403	-30.2	8 -13	-17.28	-57.3	-39.1	1	3.42	12.2	4	V	Pass

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Band :		LTE Band 2	2			Tem	perature :		23~2	25°C	
Test Mode	:	5MHz QPS	K RB Si	ze 1 Offset	0	Rela	tive Humid	dity:	44~4	18%	
Test Engin	eer:	Eric Shih &	Stan H	sieh & Ken	Wu	Pola	rization :		Horiz	zontal	
Remark :	;	Spurious e	missions	within 30-	10th ha	rmon	ic were fou	ınd more	thai	n 20dB below	limit line.
Frequency	EIRP	Limit	Over	SPA	S.G		TX Cable	TX Ante	enna	Polarization	Result
			Limit	Reading	Powe	er	loss	Gai	n		
(MHz)	(dBm) (dBm)	(dB)	(dBm)	(dBm	n)	(dB)	(dBi	i)	(H/V)	
3756	-26.4	40 -13 -13.40 -42.05				7	2.51	8.8	1	Н	Pass
5632	-29.3	9 -13	-16.39	-50.43	-37.1	1	2.99	10.7	0	Н	Pass
7508	-30.3					9	3.59	12.1	2	Н	Pass

Band :		LTE Band	2			Tempera	ture :		23~2	25°C	
Test Mode		5MHz QPS	K RB Si	ze 1 Offset	0	Relative	Humi	dity :	44~4	18%	
Test Engine	eer :	Eric Shih &	n & Stan Hsieh & Ken Wu Polarization :					Verti	cal		
Remark :		Spurious e	ous emissions within 30-10th harmonic were found more than 20dB below lim						limit line.		
Frequency	EIR	P Limit	Over	SPA	S.G.	TX (Cable	TX Ante	nna	Polarization	Result
			Limit	Reading	Powe	er lo	SS	Gair	1		
(MHz)	(dBn	n) (dBm)	(dB)	(dBm)	(dBm	i) (d	IB)	(dBi)	(H/V)	
3756	-35.2	.0 -13	-22.20	-51.78	-41.5	5 2.	51	8.81		V	Pass
5632	-35.7	'9 -13	-22.79	-56.86	-43.5	5 2.	99	10.7	0	V	Pass
7508	-32.3	37 -13	-19.37	-59.92	-40.9	3.	59	12.1	2	V	Pass

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Band :		LTE Band 2	2			Ten	nperature :		23~2	25°C	
Test Mode	:	5MHz QPS	K RB Si	ze 1 Offset	0	Rela	ative Humic	dity:	44~4	18%	
Test Engin	eer :	Eric Shih &	Stan Hs	sieh & Ken	Wu	Pola	arization :		Horiz	zontal	
Remark :		Spurious e	urious emissions within 30-10th harmonic were found mo					ınd more	e thai	n 20dB below	limit line.
Frequency	EIRF	Limit	Over	SPA	S.G					Polarization	Result
			Limit	Reading	Pow	er	loss	Gai	n		
(MHz)	(dBm) (dBm)	(dB)	(dBm)	(dBn	n)	(dB)	(dB	i)	(H/V)	
3812	-23.1	6 -13	-10.16	-38.83	-29.	5	2.59	8.9	3	Н	Pass
5716	-34.2	0 -13	-21.20	-55.48	-42.	2.1 3.08 10.98 H				Н	Pass
7620	-30.1	7 -13	-17.17	-56.88	-38.	7	3.64	12.1	7	Н	Pass
9524	-37.9	0 -13	-24.90	-64.66	-47.	3	4.23	13.6	3	Н	Pass

Band :	I	LTE Band 2	2			Temperature :		23~25°C		
Test Mode	: !	5MHz QPS	K RB S	ize 1 Offset	0 F	Relative Humi	dity :	44~48%		
Test Engin	eer :	Eric Shih &	Stan H	sieh & Ken	Wu F	Polarization :		Vertical		
Remark :	;	Spurious e	ous emissions within 30-10th harmonic were found more than 20dB below limit							
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Ante	nna Polarization	Result	
			Limit	Reading	Powe	r loss	Gair	ı		
(MHz)	(dBm) (dBm)	(dB)	(dBm)	(dBm) (dB)	(dBi) (H/V)		
3812	-32.46	6 -13	-19.46	-48.94	-38.8	2.59	8.93	8 V	Pass	
5716	-38.60) -13	-25.60	-59.38	-46.5	3.08	10.9	8 V	Pass	
7620	-32.57	7 -13	-19.57	-58.97	-41.1	3.64	12.1	7 V	Pass	
9524	-41.10) -13	-28.10	-67.96	-50.5	4.23	13.6	3 V	Pass	

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Test Mode	:	10MHz QF	SK RB S	Size 1 Offse	et 0	Relative Humi	dity :	44~48%	
Test Engin	eer:	Eric Shih 8	Stan H	sieh & Ken	Wu	Polarization :		Horizontal	
Remark:		Spurious e	rious emissions within 30-10th harmonic were found more than 20dB belo						below limit line.
Frequency	EIRF	Limit	Over	SPA	S.G.	. TX Cable	TX Ante	enna Polariz	ation Result
			Limit	Reading	Powe	er loss	Gai	n	
(MHz)	(dBn) (dBm)	(dB)	(dBm)	(dBm	n) (dB)	(dB	i) (H/\	V)
3700	-27.2	6 -13	-14.26	-42.44	-33.6	8 2.47	8.89	9 Н	Pass
5548	-34.9	5 -13	-21.95	-54.96	-42.8	1 2.93	10.7	9 H	Pass
7403	-26.7	6 -13	-13.76	-53.98	-35.5	7 3.45	12.2	6 H	Pass

-									
Band :		LTE Band 2	2			Temperature :		23~25°C	
Test Mode		10MHz QP	SK RB S	Size 1 Offse	et 0	Relative Humic	dity:	44~48%	
Test Engine	eer :	Eric Shih &	ic Shih & Stan Hsieh & Ken Wu Polarization :					Vertical	
Remark :		Spurious e	missions	within 30-	10th ha	armonic were fou	ınd more	than 20dB belo	w limit line.
Frequency	EIR	Limit	Over	SPA	S.G.	. TX Cable	TX Ante	nna Polarization	Result
			Limit	Reading	Powe	er loss	Gair	1	
(MHz)	(dBn	n) (dBm)	(dB)	(dBm)	(dBn	n) (dB)	(dBi) (H/V)	
3700	-34.1	0 -13	-21.10	-50.29	-40.5	52 2.47	8.89) V	Pass
5548	-41.2	7 -13	-28.27	-61.58	-49.1	3 2.93	10.79	9 V	Pass
7403	-30.4	2 -13	-17.42	-57.09	-39.2	23 3.45	12.20	6 V	Pass

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Band :		LTE Band 2	2		1	Temp	perature :		23~2	25°C	
Test Mode	:	10MHz QP	SK RB S	Size 1 Offse	et O	Relat	tive Humid	dity:	44~4	18%	
Test Engin	eer :	Eric Shih &	Wu	Pola	rization :		Horiz	zontal			
Remark :	9	Spurious e	missions	within 30-	10th ha	rmon	ic were fou	ınd more	e thai	n 20dB below	limit line.
Frequency	EIRP	Limit	Over	SPA	S.G.	•	TX Cable	TX Ante	enna	Polarization	Result
			Limit	Reading	Powe	er	loss	Gai	n		
(MHz)	(dBm) (dBm)	(dB)	(dBm)	(dBm	າ)	(dB)	(dB	i)	(H/V)	
3749	-26.20	26 -13 -13.26 -41.58 -32.56 2.51					2.51	8.8	1	Н	Pass
5625	-28.5	4 -13	-15.54	-49.68	-36.2	5	2.99	10.7	0	Н	Pass
7501	-29.22	2 -13	-16.22	-57.27	-37.7	5	3.59	12.1	2	Н	Pass

Band :		LTE Band	2			Temperature :		23~25	5°C	
Test Mode		10MHz QP	SK RB S	Size 1 Offse	et 0	Relative Humi	dity :	44~48	3%	
Test Engin	eer :	Eric Shih &	Stan H	sieh & Ken	Wu	Polarization :		Vertic	al	
Remark :		Spurious e	us emissions within 30-10th harmonic were found more than 20dB below limit I							limit line.
Frequency	EIR	P Limit	Over	SPA	S.G.	TX Cable	TX Ante	enna F	Polarization	Result
			Limit	Reading	Powe	er loss	Gair	า		
(MHz)	(dBn	n) (dBm)	(dB)	(dBm)	(dBm	n) (dB)	(dBi)	(H/V)	
3749	-34.6	8 -13	13 -21.68 -50.71 -40.98 2.51 8.81 V					Pass		
5625	-35.5	2 -13	-22.52	-56.47	-43.2	3 2.99	10.7	0	V	Pass
7501	-32.1	2 -13	-19.12	-59.45	-40.6	5 3.59	12.1	2	V	Pass

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Band :	L	TE Band 2	2			Temperature	:	23~2	25°C	
Test Mode	: 1	I0MHz QP	SK RB S	Size 1 Offse	et O	Relative Hun	nidity :	44~4	18%	
Test Engin	eer :	Eric Shih &	Stan H	sieh & Ken	Wu	Polarization	:	Horiz	zontal	
Remark :	9	Spurious e	missions	within 30-	10th ha	rmonic were f	found more	e thar	n 20dB below	limit line.
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	e TX Ant	enna	Polarization	Result
			Limit	Reading	Powe	er loss	Gai	n		
(MHz)	(dBm) (dBm)	(dB)	(dBm)	(dBm	n) (dB)	(dB	i)	(H/V)	
3798	-24.60					6 2.52	8.8	8	Н	Pass
5702	-30.97	7 -13 -17.97 -51.59			-38.6	3 3.09	10.7	10.75 H		Pass
7599	-32.94	1 -13	-19.94	-59.1	-41.5	8 3.65	12.2	29	Н	Pass

Band :		LTE Band	2			Temperature :		23~2	25°C	
Test Mode		10MHz QP	SK RB S	Size 1 Offse	et 0	Relative Humi	dity :	44~4	18%	
Test Engine	eer :	Eric Shih &	hih & Stan Hsieh & Ken Wu Polarization :					Verti	cal	
Remark :		Spurious e	us emissions within 30-10th harmonic were found more than 20dB below limit lin							limit line.
Frequency	EIR	P Limit	Over	SPA	S.G.	. TX Cable	TX Ante	nna	Polarization	Result
			Limit	Reading	Powe	er loss	Gai	า		
(MHz)	(dBn	n) (dBm)	(dB)	(dBm)	(dBm	n) (dB)	(dBi)	(H/V)	
3798	-34.8	8 -13	-21.88	-50.57	-41.2	24 2.52	8.88	3	V	Pass
5702	-35.7	'9 -13	-22.79	-56.3	-43.4	5 3.09	10.7	5	V	Pass
7599	-33.4	4 -13	-20.44	-59.88	-42.0	8 3.65	12.2	9	V	Pass

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Band :	I	TE Band 2	2			Tem	perature :		23~2	25°C	
Test Mode	: '	15MHz QP	SK RB S	Size 1 Offse	et O	Rela	ative Humid	dity:	44~4	18%	
Test Engin	eer :	Eric Shih & Stan Hsieh & Ken W				Pola	arization :		Horiz	zontal	
Remark:	Ş	Spurious e	purious emissions within 30-10th harmon					ınd more	e thai	n 20dB below	limit line.
Frequency	EIRP	Limit	Over	SPA	S.G	i.	TX Cable	TX Ante	enna	Polarization	Result
			Limit	Reading	Pow	er	loss	Gai	n		
(MHz)	(dBm) (dBm)	(dB)	(dBm)	(dBn	n)	(dB)	(dB	i)	(H/V)	
3700	-27.89	-13	-14.89	-42.82	-34.2	24	2.49	8.8	4	Н	Pass
5555	-34.83	3 -13	-21.83	-54.44	-42.6	88	3.01	10.8	6	Н	Pass
7403	-26.11	-13	-13.11	-54.19	-35.0	8(3.38	12.3	5	Н	Pass

Band :		LTE Band	2			Temperature :		23~25°C		
Test Mode		15MHz QP	SK RB S	Size 1 Offse	et 0	Relative Humic	dity:	44~48%		
Test Engine	eer :	Eric Shih &	& Stan Hsieh & Ken Wu Polarization :					Vertical		
Remark :		Spurious e	us emissions within 30-10th harmonic were found more than 20dB below limit lin							limit line.
Frequency	EIRF	P Limit	Over	SPA	S.G.	. TX Cable	TX Ante	nna Polariz	ation	Result
			Limit	Reading	Powe	er loss	Gair	1		
(MHz)	(dBm	n) (dBm)	(dB)	(dBm)	(dBm	n) (dB)	(dBi) (H/\	V)	
3700	-30.3	0 -13	-17.30	-46.8	-36.6	5 2.49	8.84	· V		Pass
5555	-38.4	-13	-25.40	-58.76	-46.2	5 3.01	10.8	6 V		Pass
7403	-29.0	2 -13	-16.02	-56.44	-37.9	9 3.38	12.3	5 V		Pass

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Report Template No.: BU5-FGLTE Version 1.1

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Band :		LTE Band 2	2			Temp	perature :		23~2	25°C	
Test Mode	:	15MHz QP	SK RB S	Size 1 Offse	et O	Relat	tive Humid	dity:	44~4	18%	
Test Engin	eer :	Eric Shih & Stan Hsieh & Ken Wu			Wu	Pola	rization :		Horiz	zontal	
Remark :	;	Spurious emissions within 30-10				rmon	ic were fou	ınd more	e thai	n 20dB below	limit line.
Frequency	EIRP	Limit				•	TX Cable	TX Ante	enna	Polarization	Result
			Limit	Reading	Powe	er	loss	Gai	n		
(MHz)	(dBm) (dBm)	(dB)	(dBm)	(dBm	າ)	(dB)	(dB	i)	(H/V)	
3749	-26.2	2 -13	-13.22	-41.91	-32.5	2	2.51	8.8	1	Н	Pass
5618	-30.7	2 -13	-17.72	-51.16	-38.4	-3	2.99	10.7	0	Н	Pass
7494	-29.1				-37.6	9	3.59	12.1	2	Н	Pass

Band :		LTE Band	2		ŀ	Temperature :		23~2	5°C	
Test Mode		15MHz QP	SK RB S	Size 1 Offse	et 0	Relative Humi	dity:	44~4	8%	
Test Engine	eer :	Eric Shih &	Stan H	sieh & Ken	Wu	Polarization :		Verti	cal	
Remark :		Spurious e	ious emissions within 30-10th harmonic were found more than 20dB below				20dB below	limit line.		
Frequency	EIRF	P Limit	Over	SPA	S.G.	TX Cable	TX Ante	enna	Polarization	Result
			Limit	Reading	Powe	er loss	Gaiı	า		
(MHz)	(dBm	n) (dBm)	(dB)	(dBm)	(dBm) (dB)	(dBi)	(H/V)	
3749	-28.4	1 -13	-15.41	-45.14	-34.7	1 2.51	8.81		V	Pass
5618	-35.5	4 -13	-13 -22.54 -55.94 -			5 2.99	10.7	0	V	Pass
7494	-31.1	0 -13	-18.10	-59.18	-39.6	3 3.59	12.1	2	V	Pass

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Band :		LTE Band	2			Temp	erature :		23~2	25°C	
Test Mode	:	15MHz QF	SK RB S	Size 1 Offse	et O	Relati	ve Humi	dity:	44~4	18%	
Test Engin	eer:	Eric Shih & Stan Hsieh & Ken W			Wu	Polari	ization :		Horiz	zontal	
Remark:		Spurious emissions within 30-1			10th ha	rmoni	c were fou	and more	e thai	n 20dB below	limit line.
Frequency	EIRF	Limit	Over	SPA	S.G	. 1	TX Cable	TX Ante	enna	Polarization	Result
			Limit	Reading	Powe	er	loss	Gai	n		
(MHz)	(dBn) (dBm)	(dB)	(dBm)	(dBn	n)	(dB)	(dBi	i)	(H/V)	
3791	-24.7	7 -13	-11.77	-40.1	-31.0	8	2.52	8.83	3	Н	Pass
5688	-28.2	6 -13	-15.26	-49.52	-35.9	9	3.03	10.7	6	Н	Pass
7585	-31.7				-40.2	25	3.61	12.1	6	Н	Pass

Band :		LTE Band	2			Temperature :		23~25°C	
Test Mode	:	15MHz QP	SK RB	Size 1 Offse	et 0	Relative Humic	lity :	44~48%	
Test Engine	eer :	Eric Shih &	Stan H	sieh & Ken	Wu	Polarization :		Vertical	
Remark :		Spurious e	urious emissions within 30-10th harmonic were found more than 20dB below				v limit line.		
Frequency	EIRI	P Limit	Over	SPA	S.G.	. TX Cable	TX Ante	nna Polarization	Result
			Limit	Reading	Powe	er loss	Gair	1	
(MHz)	(dBn	n) (dBm)	(dB)	(dBm)	(dBm	n) (dB)	(dBi) (H/V)	
3791	-28.8	3 -13	-15.83	-45.23	-35.1	4 2.52	8.83	S V	Pass
5688	-32.9	5 -13	-19.95	-53.01	-40.6	3.03	10.7	6 V	Pass
7585	-32.3	34 -13	-19.34	-58.87	-40.8	9 3.61	12.1	6 V	Pass

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Band :		LTE Band :	2			Temperature :	:	23~2	25°C	
Test Mode	:	20MHz QP	SK RB S	Size 1 Offse	et 0	Relative Hum	idity :	44~4	18%	
Test Engin	eer:	Eric Shih & Stan Hsieh & Ken W			Wu	Polarization :		Horiz	zontal	
Remark :		Spurious emissions within 30-10				rmonic were fo	und more	e thar	n 20dB below	limit line.
Frequency	EIRF	·			S.G.	. TX Cable	enna	Polarization	Result	
			Limit	Reading	Powe	er loss	Gai	n		
(MHz)	(dBm) (dBm)	(dB)	(dBm)	(dBm	n) (dB)	(dB	i)	(H/V)	
3700	-27.5	7 -13	-14.57	-42.86	-33.9	5 2.51	8.8	9	Н	Pass
5555	-33.4	3 -13 -20.43 -54.23			-41.2	9 3.03	10.8	9	Н	Pass
7403	-30.8				-40	3.24	12.3	8	Н	Pass

Band :		LTE Band	2			Temperature :		23~25°C	
Test Mode	:	20MHz QP	SK RB S	Size 1 Offse	et 0	Relative Humid	dity:	44~48%	
Test Engine	eer :	Eric Shih &	Shih & Stan Hsieh & Ken Wu			Polarization :		Vertical	
Remark :		Spurious e	ious emissions within 30-10th harmonic were found more than 20dB be				ow limit line.		
Frequency	EIRI	P Limit	Over	SPA	S.G.	. TX Cable	TX Ante	nna Polarizatio	n Result
			Limit	Reading	Powe	er loss	Gair	า	
(MHz)	(dBn	n) (dBm)	(dB)	(dBm)	(dBn	n) (dB)	(dBi) (H/V)	
3700	-31.1	5 -13	-18.15	-47.35	-37.5	3 2.51	8.89) V	Pass
5555	-38.8	37 -13	-25.87	-59.17	-46.7	3.03	10.8	9 V	Pass
7440	-29.7	'4 -13	-16.74	-56.78	-38.8	3.24	12.3	8 V	Pass

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Band :		LTE Band 2	2		1	Tem	perature :		23~2	25°C	
Test Mode	: 2	20MHz QP	SK RB S	Size 1 Offse	et 0	Rela	tive Humid	dity:	44~4	18%	
Test Engin	eer :	Eric Shih & Stan Hsieh & Ken Wu			Wu	Pola	rization :		Horiz	zontal	
Remark :	9	Spurious emissions within 30-10				rmon	ic were fou	ınd more	e thai	n 20dB below	limit line.
Frequency	EIRP	•			S.G.	•	TX Cable	TX Ante	enna	Polarization	Result
			Limit	Reading	Powe	er	loss	Gai	n		
(MHz)	(dBm) (dBm)	(dB)	(dBm)	(dBm	າ)	(dB)	(dB	i)	(H/V)	
3742	-27.98	8 -13	-14.98	-42.49	-34.2	.8	2.51	8.8	1	Н	Pass
5611	-28.28	8 -13	-15.28	-49.55	-35.9	9	2.99	10.7	0	Н	Pass
7487	-30.04				-38.5	7	3.59	12.1	2	Н	Pass

Band :		LTE Band	2			Temperature :		23~2	5°C	
Test Mode		20MHz QP	SK RB S	Size 1 Offse	et 0	Relative Humi	dity :	44~4	8%	
Test Engine	eer :	Eric Shih &	Shih & Stan Hsieh & Ken Wu			Polarization :	cal			
Remark :		Spurious e	ous emissions within 30-10th harmonic were found more than 20dB below				limit line.			
Frequency	EIR	P Limit	Over	SPA	S.G.	. TX Cable	TX Ante	nna	Polarization	Result
			Limit	Reading	Powe	er loss	Gaiı	า		
(MHz)	(dBn	n) (dBm)	(dB)	(dBm)	(dBm	n) (dB)	(dBi)	(H/V)	
3742	-28.3	9 -13	-15.39	-44.98	-34.6	9 2.51	8.81		V	Pass
5611	-34.1	0 -13	-21.10	-55.4	-41.8	1 2.99	10.7	0	V	Pass
7487	-31.1	0 -13	-18.10	-58.93	-39.6	3 3.59	12.1	2	V	Pass

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Band :		LTE Band 2	2			Temp	perature :		23~2	25°C	
Test Mode	: :	20MHz QP	SK RB S	Size 1 Offse	et O	Relat	ive Humic	dity:	44~4	18%	
Test Engin	eer :	Eric Shih & Stan Hsieh & Ken Wu			Wu	Polar	rization :		Horiz	zontal	
Remark :	;	Spurious emissions within 30-10			10th ha	rmon	ic were fou	ınd more	e thai	n 20dB below	limit line.
Frequency	EIRP	·			S.G		TX Cable	TX Ante	enna	Polarization	Result
			Limit	Reading	Powe	er	loss	Gai	n		
(MHz)	(dBm) (dBm)	(dB)	(dBm)	(dBm	າ)	(dB)	(dB	i)	(H/V)	
3784	-25.1	8 -13	-12.18	-40.7	-31.5	6	2.52	8.90)	Н	Pass
5674	-32.0	9 -13	-19.09	-53.01	-39.8	4	3.01	10.7	6	Н	Pass
7564	-29.5				-38.0	9	3.62	12.1	5	Н	Pass

Band :		LTE Band	2		ŀ	Temperature :		23~25°C	
Test Mode	:	20MHz QP	SK RB S	Size 1 Offse	et 0	Relative Humic	dity:	44~48%	
Test Engin	eer :	Eric Shih 8	Shih & Stan Hsieh & Ken Wu			Polarization :		Vertical	
Remark :		Spurious e	ous emissions within 30-10th harmonic were found more than 20dB below lin				ow limit line.		
Frequency	EIRI	P Limit	Over	SPA	S.G.	TX Cable	TX Ante	nna Polarizatio	n Result
			Limit	Reading	Powe	er loss	Gair	1	
(MHz)	(dBn	n) (dBm)	(dB)	(dBm)	(dBm	n) (dB)	(dBi) (H/V)	
3784	-27.6	55 -13	-14.65	-44.09	-34.0	3 2.52	8.90	V	Pass
5674	-36.7	'2 -13	-23.72	-57.42	-44.4	7 3.01	10.7	6 V	Pass
7564	-30.6	64 -13	-17.64	-57.48	-39.1	7 3.62	12.1	5 V	Pass

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11968

-32.17

-13

-19.17

-63.47

Band :		LTE Band 4	1			Tem	perature :		23~2	25°C	
Test Mode :		1MHz QPS	K RB Si	ze 1 Offset	0	Rela	tive Humid	dity:	44~4	48%	
Test Engine	er:	Eric Shih &	Stan Hs	sieh & Ken	Wu	Pola	rization :		Hori	zontal	
Remark:		Spurious e	missions	within 30-	10th ha	rmor	nic were fou	and more	tha	n 20dB below	limit line.
Frequency	EIRF	Limit	Over	SPA	S.G		TX Cable	TX Ante	enna	Polarization	Result
			Limit	Reading	Pow	er	loss	Gaiı	า		
(MHz)	(dBm	n) (dBm)	(dB)	(dBm)	(dBn	n)	(dB)	(dBi)	(H/V)	
3420	-37.2	3 -13	-24.23	-51.43	-41.	1	4.41	8.28	3	Н	Pass
5128	-32.9	3 -13	-19.93	-51.52	-37.	5	5.28	9.85	5	Н	Pass
6843	-28.5	.57 -13 -15.57 -54.29			-33.	8	6.01	11.2	4	Н	Pass
8551	-32.2	7 -13	-19.27	-58.1	-37.	2	8.15	13.0	8	Н	Pass
10264	-33.5	2 -13	-20.52	-62.73	-37.	8	8.54	12.8	2	Н	Pass

-36.5

8.48

12.81

Band :		LTE Band	4			Ten	nperature :		23~	25°C	
Test Mode		1MHz QPS	SK RB Si	ze 1 Offset	0	Rela	ative Humi	dity:	44~	48%	
Test Engir	eer :	Eric Shih 8	k Stan H	sieh & Ken	Wu	Pol	arization :		Vert	ical	
Remark:		Spurious e	missions	s within 30-	10th ha	rmo	nic were fo	und more	tha	n 20dB below	limit line.
Frequency	EIRE	P Limit	Over	SPA	S.G		TX Cable	TX Ante	nna	Polarization	Result
			Limit	Reading	Pow	er	loss	Gair	1		
(MHz)	(dBn	n) (dBm)	(dB)	(dBm)	(dBn	n)	(dB)	(dBi)	(H/V)	
3420	-38.9	3 -13	-25.93	-54.59	-42.	8	4.41	8.28	3	V	Pass
5128	-34.9	3 -13	-21.93	-53.68	-39.	5	5.28	9.85	;	V	Pass
6843	-32.2	7 -13	-19.27	-57.22	-37.	5	6.01	11.2	4	V	Pass
8551	-36.2	7 -13	-23.27	-61.6	-41.	2	8.15	13.0	3	V	Pass
10264	-35.9	2 -13	-22.92	-63.89	-40.	2	8.54	12.8	2	V	Pass
11968	-34.1	7 -13	-21.17	-64.34	-38.	5	8.48	12.8	1	V	Pass

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Pass

-26.16

-34.18

-31.21

-13

-13

-13

<Middle Channel>

6927

8663

10392

Band :	L	TE Band 4	1			Temperature	:	23~25°C		
Test Mode :	11	MHz QPS	K RB Si	ze 1 Offset	0	Relative Hum	idity :	44~4	-8%	
Test Enginee	r: E	ric Shih &	Stan Hs	sieh & Ken \	Wu	Polarization : Horizo			zontal	
Remark :	s	purious e	missions	within 30-1	10th ha	rmonic were fo	und mor	e thar	n 20dB below	limit line.
	quency EIRP Limit Over SPA S					*	-			
Frequency	EIKP	Limit	Over	SPA	S.G	. TX Cable	TX Anto	enna	Polarization	Result
Frequency	EIRP	Limit	Over Limit	SPA Reading	S.G Powe		TX Anto		Polarization	Result
(MHz)	dBm)					er loss		n	Polarization (H/V)	Result
(MHz) () (dBm)	Limit	Reading	Powe	er loss	Gai	n i)		Result Pass

-31.4

-39.1

-35.5

6.1

8.25

8.65

11.34

13.17

12.94

Н

Н

Н

Pass

Pass

Pass

-13.16

-21.18

-18.21

-52.55

-60.03

-60.55

Band :	LTE Band 4	Temperature :	23~25°C
Test Mode :	1MHz QPSK RB Size 1 Offset 0	Relative Humidity :	44~48%
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu	Polarization :	Vertical
Remark :	Spurious emissions within 30-10th ha	armonic were found more	e than 20dB below limit line.

Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3462	-37.27	-13	-24.27	-53.06	-41.1	4.48	8.31	V	Pass
5198	-35.36	-13	-22.36	-54.57	-40	5.332	9.98	V	Pass
6927	-30.26	-13	-17.26	-56.08	-35.5	6.1	11.34	V	Pass
8663	-38.78	-13	-25.78	-64.36	-43.7	8.25	13.17	V	Pass
10392	-33.41	-13	-20.41	-61.76	-37.7	8.65	12.94	V	Pass

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12280

-34.00

-13

-21.00

-66.23

Band :		LTE Band 4	4			Temperature :		23~25°C			
Test Mode		1MHz QPS	K RB Si	ze 1 Offset	0	44~4	48%				
Test Engine	eer :	Eric Shih &	Stan H	sieh & Ken	Wu	Polarization :		Horizontal			
Remark :		Spurious emissions within 30-10th harmonic were found more than 20dB below limit								limit line.	
Frequency	EIRI	P Limit	Over	SPA	S.G	6. TX Cable TX Ante			Polarization	Result	
			Limit	Reading	Powe	er loss	Gai	n			
(MHz)	(dBn	n) (dBm)	(dB)	(dBm)	(dBn	n) (dB)	(dB	i)	(H/V)		
3504	-32.5	3 -13	-19.53	-47.07	-36.	3 4.14	8.4	1	Н	Pass	
5261	-29.0	5 -13	-16.05	-48.57	-34	5.12	10.0	7	Н	Pass	
7018	-26.4	1 -13	-13.41	-53.06	-31.	7 6.13	11.4	2	Н	Pass	
8768	-30.2	.0 -13	-17.20	-56.39	-35.3	3 8.05	13.1	5	Н	Pass	
10520	-32.2	6 -13	-19.26	-62.24	-37.8	3 7.38	12.9	2	Н	Pass	

-37.1

9.8

12.90

Н

Pass

_			_									
Band :		LTE Band	4			Ten	nperature :		23~2	25°C		
Test Mode	:	1MHz QPS	SK RB Si	ze 1 Offset	0	Rela	ative Humi	dity:	44~4	48%		
Test Engir	eer :	Eric Shih 8	Stan H	sieh & Ken	Wu	Pol	arization :		Vertical			
Remark:		Spurious e	missions	within 30-	10th ha	h harmonic were found more than 20dB below limit					limit line.	
Frequency	EIRI	P Limit	Over	SPA	S.G	G. TX Cable TX Ante				Polarization	Result	
			Limit	Reading	Pow	er	loss	Gair	1			
(MHz)	(dBn	n) (dBm)	(dB)	(dBm)	(dBn	n)	(dB)	(dBi)	(H/V)		
3504	-39.3	3 -13	-26.33	-55.18	-43.	6	4.14	8.41		V	Pass	
5261	-30.3	5 -13	-17.35	-50.01	-35.	3	5.12	10.0	7	V	Pass	
7018	-30.5	1 -13	-17.51	-56.36	-35.	8	6.13	11.4	2	V	Pass	
8768	-36.6	0 -13	-23.60	-61.66	-41.	1.7 8.05 13.15 V			V	Pass		
10520	-35.9	6 -13	-22.96	-64.37	-41.	-41.5 7.38 12.92 V				Pass		
12272	-35.5	50 -13 -22.50 -66.29 -38.6 9.8 12.90 V Pa						Pass				

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11968

-33.18

-13

-20.18

-64.49

Band :		LTE Band 4	1			Temper	ature :		23~25°C		
Test Mode :		3MHz QPS	K RB Si	ze 1 Offset	0	Relative	Humi	dity :	44~4	18%	
Test Engine	er:	Eric Shih &	Stan H	sieh & Ken	Wu	Polariza	ation :		Horiz	zontal	
Remark :		Spurious e	rious emissions within 30-10th harmonic were found more than 20dB below lim								limit line.
Frequency	EIRF	Limit	Over	SPA	S.G	. TX	Cable	TX Ante	nna	Polarization	Result
			Limit	Reading	Pow	er I	oss	Gaiı	1		
(MHz)	(dBm	n) (dBm)	(dB)	(dBm)	(dBn	n) (dB)	(dBi)	(H/V)	
3420	-37.2	2 -13	-24.22	-51.92	-41.	1 4	4.43	8.31		Н	Pass
5128	-34.1	3 -13	-21.13	-52.5	-38.	7 5	5.31	9.88	3	Н	Pass
6843	-28.2	7 -13	-15.27	-53.89	-33.	6 6	5.02	11.3	5	Н	Pass
8551	-32.1	2 -13	-19.12	-58.08	-37.	1 8	3.13	13.1	1	Н	Pass
10264	-32.5	0 -13	-19.50	-61.97	-36.	8 8	3.56	12.8	6	Н	Pass

-37.5

8.5

12.82

Band :		LTE Band	4			Ten	nperature :		23~2	25°C			
Test Mode	:	3MHz QPS	K RB Size 1 Offset 0 Relative Humidity:					44~4	48%				
Test Engir	neer :	Eric Shih 8	& Stan H	sieh & Ken	Wu	Pol	arization :		Verti	Vertical			
Remark:		Spurious e	missions	within 30-	10th ha	n harmonic were found more than 20dB below limit li							
Frequency	EIRI	P Limit	Over	SPA	S.G	G. TX Cable TX Ante				Polarization	Result		
			Limit	Reading	Pow	er	loss	Gair	1				
(MHz)	(dBn	n) (dBm)	(dB)	(dBm)	(dBn	n)	(dB)	(dBi)	(H/V)			
3420	-38.8	2 -13	-25.82	-54.52	-42.	7	4.43	8.31		V	Pass		
5128	-34.2	.3 -13	-21.23	-53.1	-38.	8	5.31	9.88	3	V	Pass		
6843	-31.8	7 -13	-18.87	-57.16	-37.	2	6.02	11.3	5	V	Pass		
8551	-37.5	2 -13	-24.52	-63.08	-42.	5	8.13	13.1	1	V	Pass		
10256	-35.2	.0 -13	-22.20	-63.91	-39.	5	8.56	12.8	6	V	Pass		
11968	-34.0	8 -13	4	8.5	12.8	2	V	Pass					

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Pass

-35.46

-25.56

-34.18

-31.51

-13

-13

-13

-13

-22.46

-12.56

-21.18

-18.51

-54.46

-51.97

-60.07

-60.61

<Middle Channel>

5191

6927

8656

10384

Band :	l	LTE Band 4				Temperature :	4	23~25°C		
Test Mode :		3MHz QPSK RB Size 1 Offset 0 Relative Humidity: 44~48					44~48%			
Test Enginee	er:	Eric Shih &	Stan Hs	sieh & Ken	Wu	Polarization :		Horizontal		
Remark :	Ş	Spurious er	missions	within 30-	10th ha	armonic were fou	nd more	than 20dB be	elow limit line.	
Frequency	EIRP	Limit	Over	SPA	S.G.	. TX Cable	TX Ante	nna Polarizati	ion Result	
			Limit	Reading	Powe	er loss	Gain	1		
(MHz) (dBm) (dBm)	(dB)	(dBm)	(dBm	n) (dB)	(dBi)	(H/V)		
3462	-35.07	7 -13	-22.07	-49.69	-38.9	9 4.48	8.31	Н	Pass	

-40.1

-30.8

-39.1

-35.8

5.332

6.1

8.25

8.65

9.98

11.34

13.17

12.94

Н

Н

Н

Н

Pass

Pass

Pass

Pass

Band :	LTE Band 4	Temperature :	23~25°C
Test Mode :	3MHz QPSK RB Size 1 Offset 0	Relative Humidity :	44~48%
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu	Polarization :	Vertical
Remark :	Spurious emissions within 30-10th ha	armonic were found more	e than 20dB below limit line.

Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3462	-36.97	-13	-23.97	-53.19	-40.8	4.48	8.31	V	Pass
5191	-36.36	-13	-23.36	-55.17	-41	5.332	9.98	V	Pass
6927	-30.26	-13	-17.26	-55.85	-35.5	6.1	11.34	V	Pass
8656	-40.18	-13	-27.18	-65.64	-45.1	8.25	13.17	V	Pass
10384	-34.21	-13	-21.21	-62.71	-38.5	8.65	12.94	V	Pass

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12264

-34.10

-13

-21.10

-66.59

Band :		LTE Band 4 Temperature : 23~25°C									
Test Mode	:	3MHz QPS	K RB Si	ze 1 Offset	0	Relative Hum	idity :	44~4	18%		
Test Engine	er:	Eric Shih &	Stan H	sieh & Ken	Wu	Polarization :		Horizontal			
Remark :		Spurious e	urious emissions within 30-10th harmonic were found more than 20dB below limit li							limit line.	
Frequency	EIRF	Limit	Over	SPA	S.G	G. TX Cable TX Anter			Polarization	Result	
			Limit	Reading	Powe	er loss	Gai	n			
(MHz)	(dBm	n) (dBm)	(dB)	(dBm)	(dBn	n) (dB)	(dB	i)	(H/V)		
3504	-32.4	3 -13	-19.43	-49.96	-36.	7 4.14	8.4	1	Н	Pass	
5254	-30.1	5 -13	-17.15	-49.27	-35.	1 5.12	10.0	7	Н	Pass	
7011	-26.9	1 -13	-13.91	-53.54	-32.	2 6.13	11.4	2	Н	Pass	
8761	-31.4	0 -13	-18.40	-57	-36.	5 8.05	13.1	5	Н	Pass	
10512	-30.9	6 -13	-17.96	-61.06	-36.	5 7.38	12.9	2	Н	Pass	

-37.2

9.8

12.90

Band :		LTE Band	4			Ten	nperature :		23~2	25°C			
Test Mode	::	3MHz QPS	SK RB Si	K RB Size 1 Offset 0 Relative H					44~4	48%			
Test Engir	neer :	Eric Shih 8	Stan H	sieh & Ken	Wu	Pol	arization :		Verti	Vertical			
Remark:		Spurious e	missions	within 30-	10th ha	n harmonic were found more than 20dB below limit li					limit line.		
Frequency	EIRF	P Limit	Over	SPA	S.G	G. TX Cable TX Ante				Polarization	Result		
			Limit	Reading	Pow	er	loss	Gair	1				
(MHz)	(dBn	n) (dBm)	(dB)	(dBm)	(dBn	n)	(dB)	(dBi)	(H/V)			
3504	-39.2	3 -13	-26.23	-55.26	-43.	5	4.14	8.41		V	Pass		
5254	-31.9	5 -13	-18.95	-51.57	-36.	9	5.12	10.0	7	V	Pass		
7011	-31.8	1 -13	-18.81	-57.65	-37.	1	6.13	11.4	2	V	Pass		
8761	-34.9	0 -13	-21.90	-60.37	-40		8.05	13.1	5	V	Pass		
10512	-35.2	6 -13	-22.26	-63.64	-40.	8	7.38	12.9	2	V	Pass		
12264	-34.4	0 -13	-21.40	-64.9	-37.	-37.5 9.8 12.90 V					Pass		

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Pass

11968

-33.19

-13

-20.19

-64.58

Band :		LTE Band 4				Temperature :			23~25°C			
Test Mode :		5MHz QPSK RB Size 1 Offset 0					Relative Humidity :			44~48%		
Test Engineer :		Eric Shih & Stan Hsieh & Ken Wu					Polarization :			Horizontal		
Remark: Spurious emissions within 30-10th harmonic were found more than 20dB below lir								limit line.				
Frequency	EIRF	Limit	Over	SPA	S.G		TX Cable	TX Ante	nna	Polarization	Result	
			Limit	Reading	Pow	er	loss	Gaiı	1			
(MHz)	(MHz) (dBn		(dB)	(dBm)	(dBn	n)	(dB)	(dBi)	(H/V)		
3420	-36.3	7 -13	-23.37	-50.9	-40.:	2	4.48	8.31		Н	Pass	
5128	-32.4	6 -13	-19.46	-51.3	-37.	1	5.332	9.98	3	Н	Pass	
6843	-28.8	6 -13	-15.86	-54.62	-34.	1	6.1	11.3	4	Н	Pass	
8551	-30.9	8 -13	-17.98	-57.06	-35.	9	8.25	13.1	7	Н	Pass	
10264	-33.5	1 -13	-20.51	-63.03	-37.	8	8.65	12.9	4	Н	Pass	

-37.5

8.59

12.90

Band :		LTE Band 4					nperature :		23~25°C		
Test Mode :		5MHz QPSK RB Size 1 Offset 0					ative Humi	dity:	44~48%		
Test Engineer :		Eric Shih & Stan Hsieh & Ken Wu				Polarization :			Vertical		
Remark: Spurious emissions within 30-10th harmonic were found more than 20dB below limit line										limit line.	
Frequency	EIRE	P Limit	Over	SPA	S.G.		TX Cable	TX Antenna		Polarization	Result
			Limit	Reading	Power		loss	Gair	1		
(MHz)	(dBn	n) (dBm)	(dB)	(dBm)	(dBn	n)	(dB)	(dBi)	(H/V)	
3420	-38.2	7 -13	-25.27	-54.08	-42.	1	4.48	8.31		V	Pass
5128	-36.0	6 -13	-23.06	-54.69	-40.	7	5.332	9.98	3	V	Pass
6843	-32.2	6 -13	-19.26	-57.27	-37.	5	6.1	11.3	4	V	Pass
8551	-37.5	8 -13	-24.58	-63.05	-42.	5	8.25	13.1	7	V	Pass
10264	-35.9	1 -13	-22.91	-64.19	-40.2	2	8.65	12.9	4	V	Pass
11968	-35.8	9 -13	-22.89	-65.78	-40.2	2	8.59	12.9	0	V	Pass

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Pass

-25.56

-35.58

-32.61

-13

-13

-13

-12.56

-22.58

-19.61

-51.66

-61.41

-62.03

<Middle Channel>

6920

8649

10384

Band :		TE Band 4				Temperature :	23~25°C			
Test Mode :	į.	5MHz QPS	K RB Si	ze 1 Offset	0	Relative Humid	44~48%			
Test Engine	er: Eric Shih & Stan Hsieh & Ken Wu					Polarization :		Horizo	ntal	
Remark :		Spurious e	missions	within 30-1	10th hai	rmonic were fou	and more	than 2	20dB below	limit line.
Frequency EIRP Limit										
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Ante	nna P	olarization	Result
Frequency	EIRP	Limit	Over Limit	SPA Reading	S.G. Powe		TX Ante		olarization	Result
Frequency (MHz)	EIRP					er loss		1	olarization (H/V)	Result
) (dBm)	Limit	Reading	Powe	er loss	Gaiı))		Result Pass

-30.8

-40.5

-36.9

6.1

8.25

8.65

11.34

13.17

12.94

Н

Н

Н

Pass

Pass

Pass

Band :	LTE Band 4	Temperature :	23~25°C
Test Mode :	5MHz QPSK RB Size 1 Offset 0	Relative Humidity :	44~48%
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu	Polarization :	Vertical
Remark :	Spurious emissions within 30-10th ha	armonic were found more	e than 20dB below limit line.

Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3462	-37.47	-13	-24.47	-53.22	-41.3	4.48	8.31	V	Pass
5191	-36.56	-13	-23.56	-55.81	-41.2	5.332	9.98	V	Pass
6920	-29.86	-13	-16.86	-55.08	-35.1	6.1	11.34	V	Pass
8649	-39.28	-13	-26.28	-65.01	-44.2	8.25	13.17	V	Pass
10384	-34.51	-13	-21.51	-62.64	-38.8	8.65	12.94	V	Pass

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-26.22

-29.94

-31.58

-13

-13

-13

-13.22

-16.94

-18.58

-53.29

-56.54

-61.16

<High Channel>

7004

8754

10504

Band :	L	LTE Band 4	4			Temperature :			23~25°C		
Test Mode :	: (5MHz QPS	K RB Si	ze 1 Offset	0	Relative Humidity :			44~48%		
Test Engine	ngineer: Eric Shih & Stan Hsieh & Ken Wu					Polarization :		Horiz	zontal		
Remark :	Ş	Spurious e	missions	within 30-	10th ha	rmonic were fou	and more	e thar	n 20dB below	limit line.	
Frequency EIRP Limit											
Frequency	EIRP	Limit	Over	SPA	S.G.	. TX Cable	TX Ante	enna	Polarization	Result	
Frequency	EIRP	Limit	Over Limit	SPA Reading	S.G. Powe		TX Ante		Polarization	Result	
Frequency (MHz)	EIRP					er loss		1	Polarization (H/V)	Result	
) (dBm)	Limit	Reading	Powe	er loss	Gai	n ()		Result Pass	

-31.5

-35

-37.1

6.15

8.09

7.41

11.43

13.15

12.93

Н

Н

Н

Pass

Pass

Pass

Band :	LTE Band 4	Temperature :	23~25°C						
Test Mode :	5MHz QPSK RB Size 1 Offset 0	Relative Humidity :	44~48%						
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								

Ì	Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
				Limit	Reading	Power	loss	Gain		
	(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
	3497	-39.43	-13	-26.43	-54.77	-43.7	4.16	8.43	V	Pass
	5254	-30.84	-13	-17.84	-50.38	-35.8	5.13	10.09	V	Pass
	7004	-31.22	-13	-18.22	-56.83	-36.5	6.15	11.43	V	Pass
	8754	-35.74	-13	-22.74	-61.13	-40.8	8.09	13.15	V	Pass
	10504	-35.28	-13	-22.28	-63.65	-40.8	7.41	12.93	V	Pass

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11976

-32.01

-13

-19.01

-63.39

Band :		LTE Band 4	1			Temperature :			23~25°C		
Test Mode :		10MHz QP	SK RB S	Size 1 Offse	et O	Relative Humidity :			44~48%		
Test Engine	er:	Eric Shih & Stan Hsieh & Ken Wu Polarization : Horizontal							zontal		
Remark:		Spurious e	missions	within 30-	10th ha	rmor	nic were fou	and more	tha	n 20dB below	limit line.
Frequency	EIRF	P Limit	Over	SPA	S.G	i .	TX Cable	TX Ante	enna	Polarization	Result
			Limit	Reading	Pow	er	loss	Gaiı	า		
(MHz)	(dBm	n) (dBm)	(dB)	(dBm)	(dBn	n)	(dB)	(dBi)	(H/V)	
3420	-38.2	8 -13	-25.28	-52.62	-42.	1	4.51	8.33	3	Н	Pass
5128	-34.4	3 -13	-21.43	-52.91	-39.	1	5.36	10.0	3	Н	Pass
6843	-27.9	7 -13	-14.97	-53.78	-33.	2	6.13	11.3	6	Н	Pass
8551	-29.0	0 -13	-16.00	-55.12	-33.	9	8.29	13.1	9	Н	Pass
10264	10264 -33.55 -13 -20.55 -62.85 -3					8	8.74	12.9	9	Н	Pass

-36.3

8.65

12.94

Н

Pass

Band :		LTE Band	4			Ten	nperature :		23~	25°C	
Test Mode	::	10MHz QF	SK RB S	Size 1 Offse	et 0	Rel	ative Humi	dity:	44~	48%	
Test Engir	eer :	Eric Shih 8	Stan H	sieh & Ken	Wu	Pol	arization :		Vert	ical	
Remark :		Spurious e	Spurious emissions within 30-10th harmonic were fou							n 20dB below	limit line.
Frequency	EIRF	Limit	Over	SPA	S.G		TX Cable	TX Ante	nna	Polarization	Result
			Limit	Reading	Pow	er	loss	Gair	1		
(MHz)	(dBm	n) (dBm)	(dB)	(dBm)	(dBn	n)	(dB)	(dBi)	(H/V)	
3420	-40.1	8 -13	-27.18	-55.93	-44		4.51	8.33	3	V	Pass
5128	-34.0	3 -13	-21.03	-52.31	-38.	7	5.36	10.0	3	V	Pass
6843	-31.3	7 -13	-18.37	-56.46	-36.	6	6.13	11.3	6	V	Pass
8551	-36.3	0 -13	-23.30	-61.76	-41.	2	8.29	13.1	9	V	Pass
10264	-37.3	5 -13	-24.35	-65.33	-41.	6	8.74	12.9	9	V	Pass
11976						6	8.65	12.9	4	V	Pass

SPORTON INTERNATIONAL INC.

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-26.06

-34.18

-32.91

-13

-13

-13

-13.06

-21.18

-19.91

-52.41

-59.79

-62.05

<Middle Channel>

6913

8642

10368

Band :	L	LTE Band 4	1		l	Temperature :			23~25°C		
Test Mode :	,	10MHz QP	SK RB S	Size 1 Offse	et O I	Relative Humidity :			44~48%		
Test Engine	Engineer: Eric Shih & Stan Hsieh & Ken Wu					Polarization : Horizontal					
Remark:	Ş	Spurious e	missions	within 30-	10th har	rmonic were fou	and more	thar	n 20dB below	limit line.	
_		EIRP Limit									
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Ante	enna	Polarization	Result	
Frequency	EIRP	Limit	Over Limit	SPA Reading	S.G. Powe		TX Ante		Polarization	Result	
(MHz)	EIRP					er loss		1	Polarization (H/V)	Result	
. ,) (dBm)	Limit	Reading	Powe	er loss	Gaiı	າ)		Result Pass	

-31.3

-39.1

-37.2

6.1

8.25

8.65

11.34

13.17

12.94

Н

Н

Н

Pass

Pass

Pass

Band :	LTE Band 4	Temperature :	23~25°C
Test Mode :	10MHz QPSK RB Size 1 Offset 0	Relative Humidity :	44~48%
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu	Polarization :	Vertical
Remark :	Spurious emissions within 30-10th ha	armonic were found more	e than 20dB below limit line.

Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3455	-37.27	-13	-24.27	-52.89	-41.1	4.48	8.31	V	Pass
5184	-38.06	-13	-25.06	-57.02	-42.7	5.332	9.98	V	Pass
6913	-29.46	-13	-16.46	-54.94	-34.7	6.1	11.34	V	Pass
8642	-39.58	-13	-26.58	-65.2	-44.5	8.25	13.17	V	Pass
10368	-35.01	-13	-22.01	-63.05	-39.3	8.65	12.94	V	Pass

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Band :	and: LTE Band 4					Temperature :			23~25°C		
Test Mode	Mode: 10MHz QPSK RB Size 1 Offset 0					Relative Humidity: 44~48%					
Test Engine	er:	Eric Shih &	Stan H	sieh & Ken	Wu	Polarization :		Hori	zontal		
Remark :		Spurious e	missions	within 30-	10th ha	rmonic were for	und more	e tha	n 20dB below	limit line.	
Frequency	EIRI	P Limit	Over	SPA	S.G.	TX Cable	TX Ante	enna	Polarization	Result	
			Limit	Reading	Powe	er loss	Gaiı	า			
(MHz)	(dBn	n) (dBm)	(dB)	(dBm)	(dBm) (dB)	(dBi)	(H/V)		
3490	-34.5	1 -13	-21.51	-48.82	-38.7	4.2	8.39)	Н	Pass	
5233	-30.7	2 -13	-17.72	-50.31	-35.6	5.17	10.0	5	Н	Pass	
6983	-26.2	.0 -13	-13.20	-52.58	-31.4	6.2	11.4	0	Н	Pass	
8726	-32.4	9 -13	-19.49	-57.36	-37.5	8.11	13.1	2	Н	Pass	
10472	-32.0	6 -13	-19.06	-61.6	-37.5	7.45	12.8	9	Н	Pass	
12216	-33.2	2 -13	-20.22	-65.57	-36.2	9.88	12.8	6	Н	Pass	

Band :		LTE Band	4			Ten	nperature :		23~25°C		
Test Mode		10MHz QF	SK RB	Size 1 Offse	et O	Rela	ative Humi	dity:	44~4	48%	
Test Engir	eer :	Eric Shih 8	Shih & Stan Hsieh & Ken Wu Polarization : Vertica					ical			
Remark:		Spurious e	missions	within 30-	10th ha	rmo	nic were for	und more	tha	n 20dB below	limit line.
Frequency	EIRI	P Limit	Over	SPA	S.G		TX Cable	TX Ante	nna	Polarization	Result
			Limit	Reading	Pow	er	loss	Gair	1		
(MHz)	(dBn	n) (dBm)	(dB)	(dBm)	(dBn	n)	(dB)	(dBi)	(H/V)	
3490	-38.9	1 -13	-25.91	-54.54	-43.	1	4.2	8.39)	V	Pass
5233	-32.9	2 -13	-19.92	-51.97	-37.	8	5.17	10.0	5	V	Pass
6983	-30.4	0 -13	-17.40	-56.23	-35.	6	6.2	11.4)	V	Pass
8726	-35.1	9 -13	-22.19	-60.91	-40.	2	8.11	13.1	2	V	Pass
10472	-35.6	6 -13	-22.66	-64.01	-41.	1	7.45	12.8	9	V	Pass
12216	-35.1	2 -13	-22.12	-65.4	-38.	1	9.88	12.8	6	V	Pass

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11976

-32.51

-13

-19.51

-63.9

Band :		LTE Band 4	1			Tempe	erature :		23~2	23~25°C		
Test Mode :		15MHz QP	SK RB S	Size 1 Offse	et 0	Relativ	ve Humi	dity:	44~48%			
Test Engine	er:	Eric Shih &	Eric Shih & Stan Hsieh & Ken Wu Polarization :						Horizontal			
Remark :		Spurious e	purious emissions within 30-10th harmonic were found more t						tha	n 20dB below	limit line.	
Frequency	EIRF	Limit	Over	SPA	S.G	. Т	X Cable	TX Ante	nna	Polarization	Result	
			Limit	Reading	Pow	er	loss	Gaiı	1			
(MHz)	(dBm	n) (dBm)	(dB)	(dBm)	(dBn	n)	(dB)	(dBi)	(H/V)		
3420	-38.2	3 -13	-25.23	-52.48	-42		4.59	8.36	6	Н	Pass	
5135	-33.4	6 -13	-20.46	-51.68	-38.	1	5.41	10.0	5	Н	Pass	
6843	-28.4	6 -13	-15.46	-54.28	-33.	7	6.15	11.3	9	Н	Pass	
8551	-30.2	2 -13	-17.22	-56.1	-35.	1	8.36	13.2	4	Н	Pass	
10264	-33.2	2 -13	-20.22	-62.46	-37.	37.5 8.75 13.03 H				Pass		

-36.7

8.77

12.96

_												
Band :		LTE Band	4			Ten	nperature :		23~2	25°C		
Test Mode	:	15MHz QF	SK RB S	Size 1 Offse	et 0	Relative Humidity: 4			44~4	44~48%		
Test Engin	neer :	Eric Shih & Stan Hsieh & Ken Wu Polarization :							Verti	cal		
Remark:		Spurious e	missions	within 30-	10th ha	rmo	nic were fo	und more	thai	n 20dB below	limit line.	
Frequency	EIRI	P Limit	Over	SPA	S.G		TX Cable	TX Ante	nna	Polarization	Result	
			Limit	Reading	Pow	er	loss	Gair	1			
(MHz)	(dBn	n) (dBm)	(dB)	(dBm)	(dBn	n)	(dB)	(dBi)	(H/V)		
3420	-39.0	3 -13	-26.03	-55.12	-42.	8	4.59	8.36	;	V	Pass	
5135	-35.0	6 -13	-22.06	-53.77	-39.	7	5.41	10.0	5	V	Pass	
6843	-31.2	.6 -13	-18.26	-56.82	-36.	5	6.15	11.3	9	V	Pass	
8551	-37.1	2 -13	-24.12	-62.47	-42		8.36	13.2	4	V	Pass	
10264	-36.5	2 -13	-23.52	-64.88	-40.	8	8.75	13.0	3	V	Pass	
11976	-35.5	1 -13	-22.51	-65.33	-39.	7	8.77	12.9	6	V	Pass	

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Pass

-26.76

-32.98

-33.21

-13

-13

-13

-13.76

-19.98

-20.21

-52.91

-59.01

-62.42

<Middle Channel>

6906

8628

10352

Band :	L	TE Band 4				Temperature:		23~25°C		
Test Mode :	,	15MHz QP	SK RB S	Size 1 Offse	et O F	Relative Humi	dity :	44~4	8%	
Test Engine	er:	ric Shih & Stan Hsieh & Ken Wu Polarization:					Horiz	ontal		
Remark :	9	Spurious e	missions	within 30-	10th har	monic were for	und more	e than	20dB below	limit line.
									00	
Frequency	EIRP	<u>.</u>	Over	SPA	S.G.	TX Cable	*		Polarization	Result
Frequency		<u>.</u>				TX Cable	*	enna		
Frequency (MHz)		Limit	Over	SPA	S.G.	TX Cable r loss	TX Ante	enna 1		
	EIRP	Limit	Over Limit	SPA Reading	S.G. Power	TX Cable loss (dB)	TX Ante	enna n	Polarization	

-32

-37.9

-37.5

6.1

8.25

8.65

11.34

13.17

12.94

Н

Н

Н

Pass

Pass

Pass

Band :	LTE Band 4	Temperature :	23~25°C						
Test Mode :	15MHz QPSK RB Size 1 Offset 0	Relative Humidity :	44~48%						
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								

1	Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
				Limit	Reading	Power	loss	Gain		
	(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
	3448	-38.27	-13	-25.27	-54.16	-42.1	4.48	8.31	V	Pass
	5177	-38.26	-13	-25.26	-57.11	-42.9	5.332	9.98	V	Pass
	6906	-28.46	-13	-15.46	-54.04	-33.7	6.1	11.34	V	Pass
	8628	-39.68	-13	-26.68	-65.3	-44.6	8.25	13.17	V	Pass
	10352	-36.21	-13	-23.21	-64.62	-40.5	8.65	12.94	V	Pass

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12184

-33.55

-13

-20.55

-65.6

Band :		LTE Band 4	1			Tem	perature :		23~25°C		
Test Mode :		15MHz QP	SK RB S	Size 1 Offse	et O	Rela	tive Humid	dity:	44~48%		
Test Engine	er:	Eric Shih &	Eric Shih & Stan Hsieh & Ken Wu Polarization :						Horizontal		
Remark:		Spurious e	ourious emissions within 30-10th harmonic were found more t						e tha	n 20dB below	limit line.
Frequency	EIRF	Limit	Over	SPA	S.G	G. TX Cable TX Anter		enna	Polarization	Result	
			Limit	Reading	Pow	er	loss	Gaiı	า		
(MHz)	(dBm	n) (dBm)	(dB)	(dBm)	(dBn	n)	(dB)	(dBi)	(H/V)	
3483	-34.3	6 -13	-21.36	-49.12	-38.	5	4.24	8.38	3	Н	Pass
5219	-30.6	3 -13	-17.63	-49.89	-35.	5	5.18	10.0	5	Н	Pass
6962	-27.3	1 -13	-14.31	-53.65	-32.	5	6.19	11.3	8	Н	Pass
8705	-30.8	1 -13	-17.81	-56.8	-35.	8	8.1	13.0	9	Н	Pass
10448	-31.2	5 -13	-18.25	-60.63	-36.	7	7.43	12.8	8	Н	Pass

-36.5

9.89

12.84

Н

Pass

Band :		LTE Band	1			Ton	anoraturo :		22 (25°C	
Ballu .		LI E Ballu	+			ren	nperature :		23~2	25 C	
Test Mode	:	15MHz QF	SK RB S	Size 1 Offse	et 0	Relative Humidity :			44~4	48%	
Test Engir	neer :	Eric Shih 8	Stan H	sieh & Ken	Wu	Pol	arization :		Verti	ical	
Remark:		Spurious e	missions	within 30-	10th ha	rmo	nic were fo	und more	tha	n 20dB below	limit line.
Frequency	EIRI	P Limit	Over	SPA	S.G		TX Cable	TX Ante	nna	Polarization	Result
			Limit	Reading	Pow	er	loss	Gair	1		
(MHz)	(dBn	n) (dBm)	(dB)	(dBm)	(dBn	n)	(dB)	(dBi)	(H/V)	
3483	-39.3	6 -13	-26.36	-54.68	-43.	5	4.24	8.38	3	V	Pass
5219	-32.2	.3 -13	-19.23	-51.59	-37.	1	5.18	10.0	5	V	Pass
6962	-30.5	1 -13	-17.51	-56.17	-35.	7	6.19	11.3	3	V	Pass
8705	-36.3	-13	-23.31	-62.17	-41.	3	8.1	13.0	9	V	Pass
10448	-35.3	35 -13	-22.35	-64.04	-40.	8	7.43	12.8	8	V	Pass
12184	-34.9	5 -13	-21.95	-65.34	-37.	9	9.89	12.8	4	V	Pass

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Band :		LTE Band 4	4			Temp	erature :		23~25°C		
Test Mode		20MHz QP	SK RB S	Size 1 Offse	et 0	Relat	ive Humid	dity:	44~48%		
Test Engine	eer :	Eric Shih &	Stan H	sieh & Ken	Wu	Polarization :			Hori	zontal	
Remark :		Spurious emissions within 30-10th harmonic were found more						tha	n 20dB below	limit line.	
Frequency	EIRI	P Limit	Over	SPA	S.G		TX Cable	TX Ante	enna	Polarization	Result
			Limit	Reading	Powe	er	loss	Gai	า		
(MHz)	(dBn	n) (dBm)	(dB)	(dBm)	(dBn	ı)	(dB)	(dB)	(H/V)	
3420	-37.9	2 -13	-24.92	-52.41	-41.7	7	4.62	8.40)	Н	Pass
5135	-33.8	37 -13	-20.87	-52.7	-38.5	5	5.45	10.0	8	Н	Pass
6843	-28.2	26 -13	-15.26	-54.72	-33.5	5	6.18	11.4	2	Н	Pass
8558	-30.3	3 -13	-17.33	-56.45	-35.2	2	8.39	13.2	6	Н	Pass
10264	-32.8	6 -13	-19.86	-62.38	-37.2	2	8.77	13.1	1	Н	Pass
11976	-31.9	1 -13	-18.91	-63.32	-36.		8.8	12.9	9	Н	Pass

Band :		LTE Band	4			Tem	perature :		23~25°C		
Test Mode	:	20MHz QP	SK RB	Size 1 Offse	et O	Rela	ative Humi	dity:	44~4	48%	
Test Engir	neer :	Eric Shih 8	Stan H	sieh & Ken	en Wu Polarization : Vertical						
Remark:		Spurious e	missions	within 30-	10th ha	rmo	nic were fo	und more	tha	n 20dB below	limit line.
Frequency	EIRF	P Limit	Over	SPA	S.G		TX Cable	TX Ante	nna	Polarization	Result
			Limit	Reading	Powe	er	loss	Gair	1		
(MHz)	(dBm	n) (dBm)	(dB)	(dBm)	(dBn	n)	(dB)	(dBi)	(H/V)	
3420	-40.2	2 -13	-27.22	-56.05	-44		4.62	8.40)	V	Pass
5135	-33.1	7 -13	-20.17	-51.84	-37.8	8	5.45	10.0	8	V	Pass
6843	-32.3	6 -13	-19.36	-57.87	-37.6	6	6.18	11.4	2	V	Pass
8558	-37.5	3 -13	-24.53	-62.93	-42.4	4	8.39	13.2	6	V	Pass
10264	-37.3	6 -13	-24.36	-65.86	-41.	7	8.77	13.1	1	V	Pass
11976	-35.8	1 -13	-22.81	-65.71	-40		8.8	12.9	9	V	Pass

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-26.56

-33.98

-32.91

-13

-13

-13

-13.56

-20.98

-19.91

-52.85

-59.68

-62.24

<Middle Channel>

6892

8621

10344

Band :		LTE Band	TE Band 4				2	23~25°C		
Test Mode	:	20MHz QP	SK RB S	Size 1 Offse	et O F	Relative Humic	dity:	44~48%		
Test Engine	eer:	Eric Shih &	Shih & Stan Hsieh & Ken Wu Polarization : Horizontal					Horizontal		
Remark :		Spurious e	missions	within 30-	10th har	monic were fou	ınd more	than 20dB below	limit line.	
Frequency	EIRF	P Limit	Over	SPA	S.G.	TX Cable	TX Antei	nna Polarization	Result	
			Limit	Reading	Powe	r loss	Gain			
(MHz)	(dBm	n) (dBm)	(dB)	(dBm)	(dBm) (dB)	(dBi)	(H/V)		
3448	-36.0	7 -13	-23.07	-50.42	-39.9	4.48	8.31	Н	Pass	
5170	-37.5	6 -13	-24.56	-56.41	-42.2	5.332	9.98	Н	Pass	

-31.8

-38.9

-37.2

6.1

8.25

8.65

11.34

13.17

12.94

Н

Н

Н

Pass

Pass

Pass

Band :	LTE Band 4	Temperature :	23~25°C						
Test Mode :	20MHz QPSK RB Size 1 Offset 0	Relative Humidity :	44~48%						
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								

Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3448	-37.57	-13	-24.57	-53.54	-41.4	4.48	8.31	V	Pass
5170	-36.96	-13	-23.96	-55.71	-41.6	5.332	9.98	V	Pass
6892	-29.86	-13	-16.86	-55.3	-35.1	6.1	11.34	V	Pass
8621	-38.78	-13	-25.78	-64.69	-43.7	8.25	13.17	V	Pass
10344	-37.01	-13	-24.01	-65.37	-41.3	8.65	12.94	V	Pass

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-26.97

-36.17

-31.38

-13

-13

-13

-13.97

-23.17

-18.38

-53.31

-61.83

-60.66

<High Channel>

6941

8677

10416

Remark:

Band :	I	LTE Band 4	1			Temperature :		23~2	23~25°C			
Test Mode :	: 2	20MHz QP	SK RB S	Size 1 Offse	et O I	Relative Humic	dity:	44~4	4~48%			
Test Engine	er:	Eric Shih &	Stan Hs	sieh & Ken \	Wu I	Polarization :		Horiz	Horizontal			
Remark:	;	Spurious e	missions	within 30-1	10th har	monic were fou	ınd more	thar	20dB below	limit line.		
_												
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Ante	enna	Polarization	Result		
Frequency	EIRP	Limit	Over Limit	SPA Reading	S.G. Powe		TX Ante		Polarization	Result		
(MHz)	EIRP					r loss		1	Polarization (H/V)	Result		
) (dBm)	Limit	Reading	Powe	r loss	Gair	າ)		Result Pass		

-32.1

-41.1

-36.8

6.23

8.15

7.47

Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.

11.36

13.08

12.89

Н

Н

Н

Pass

Pass

Pass

-			
Band :	LTE Band 4	Temperature :	23~25°C
Test Mode :	20MHz QPSK RB Size 1 Offset 0	Relative Humidity :	44~48%
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu	Polarization :	Vertical

F	requency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
				Limit	Reading	Power	loss	Gain		
	(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
	3469	-38.01	-13	-25.01	-53.76	-42.1	4.28	8.37	V	Pass
	5205	-35.89	-13	-22.89	-54.88	-40.7	5.22	10.03	V	Pass
	6941	-31.07	-13	-18.07	-56.47	-36.2	6.23	11.36	V	Pass
	8677	-39.87	-13	-26.87	-65.41	-44.8	8.15	13.08	V	Pass
	10416	-34.08	-13	-21.08	-63.01	-39.5	7.47	12.89	V	Pass

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Band :		LTE Band	7				Temperature :		23~25°C		
Test Mode	:	5MHz QPS	K RB S	ze 1 Offset	0		Relative Humidity: 44~48%				
Test Engir	neer :	Eric Shih & Stan Hsieh & Ken Wu Polarization : Horizont							ntal		
Remark :		Spurious emissions within 30-10th harmonic were found more than 20dB						below	limit line.		
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cab	le TX Antenna	Polari	zation	Result	
			Limit	Reading	Power	loss	Gain				
(MHz)	(dBm) (dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/	/V)		
4998	-31.7	9 -25	-6.79	-49.64	-35.35	6.78	10.34	H	1	Pass	
7500	-34.5	1 -25	-9.51	-56.1	-37.55	9.22	12.26	H	1	Pass	
10002	-33.8	6 -25	-8.86	-62.61	-38.2	8.51	12.85	F	1	Pass	

Band :		LTE Band	7				Temperature :		23~25°C			
Test Mode	:	5MHz QPS	K RB Si	ize 1 Offset	fset 0 Relative Humidity: 44~48%							
Test Engine	eer :	Eric Shih &	ric Shih & Stan Hsieh & Ken Wu Polarization: Ver						Vertica	I		
Remark :		Spurious emissions within 30-10th harmonic were found more than 20dB by						B below	limit line.			
Frequency	EIRI	Limit	Over	SPA	S.G.	TX Cabl	e TX Antenna	Polari	zation	Result		
			Limit	Reading	Power	loss	Gain					
(MHz)	(dBn	n) (dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/	(V)			
4998	-37.7	4 -25	-12.74	-55.75	-41.3	6.78	10.34	١	/	Pass		
7500	-30.7	1 -25	-5.71	-58.08	-33.75	9.22	12.26	\	/	Pass		
10002	-36.9	1 -25	-11.91	-64.71	-41.25	8.51	12.85	\	/	Pass		

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<Middle Channel>

Band :		LTE Band	7				Temperature :		23~25°C	
Test Mode	:	5MHz QPS	SK RB S	ize 1 Offset	0		Relative Humi	44~48	%	
Test Engir	neer :	Eric Shih 8	& Stan H	sieh & Ken	Wu		Polarization :	ntal		
Remark:		Spurious e	mission	s within 30-	10th harmo	nic were	found more tha	n 20dE	B below	limit line.
Frequency	EIRF	Limit	Over	SPA	S.G.	TX Cabl	e TX Antenna	Polari	zation	Result
			Limit	Reading	Power	loss	Gain			
(MHz)	(dBm) (dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H	/V)	
5064	-34.6	4 -25	-9.64	-52.83	-38.13	6.86	10.35	ŀ	1	Pass
7596	-25.1	4 -25	-0.14	-51.89	-28.03	9.34	12.23	ŀ	-1	Pass
10134	-28.8	4 -25	-3.84	-57.76	-32.94	8.64	12.74	H	4	Pass

Band :		LTE Band	7				Temperature :		23~25	,C
Test Mode		5MHz QPS	Hz QPSK RB Size 1 Offset 0 Relative Humidity: 44~48%							
Test Engin	eer :	Eric Shih &	Shih & Stan Hsieh & Ken Wu Polarization : Vertical							
Remark :		Spurious e	missions	within 30-	10th harmo	onic were	found more tha	n 20dE	below	limit line.
Frequency	EIRE	P Limit	Over	SPA	S.G.	TX Cab	e TX Antenna	Polaria	zation	Result
			Limit	Reading	Power	loss	Gain			
(MHz)	(dBm	n) (dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/	V)	
5064	-39.9	8 -25	-14.98	-58.26	-43.47	6.86	10.35	\	/	Pass
7596	-29.1	6 -25	-4.16	-55.71	-32.05	9.34	12.23	\	/	Pass
10134	-36.9	2 -25					\	/	Pass	

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Report Template No.: BU5-FGLTE Version 1.1

Band :		LTE Band	7				Temperature :		23~25°C	
Test Mode	:	5MHz QP	SK RB S	ize 1 Offset	0		Relative Humidity: 44~48%			
Test Engin	eer :	Eric Shih 8	& Stan H	sieh & Ken	Wu		Polarization : Horizontal			
Remark :		Spurious 6	emission	s within 30-	10th harmo	onic were	found more tha	n 20dB	below	limit line.
Frequency	EIR	P Limit	Over	SPA	S.G.	TX Cab	e TX Antenna	Polari	zation	Result
			Limit	Reading	Power	loss	Gain			
(MHz)	(dBn	n) (dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/	V)	
5130	-33.8	37 -25	-8.87	-52.37	-37.4	6.9	10.43	H	1	Pass
7698	-25.7	7 -25	-0.77	-51.72	-28.7	9.39	12.32	H	1	Pass
10260	-25.0	9 -25	-0.09	-54.16	-29.23	8.71	12.85	H	1	Pass

Band :		LTE Band	7				Temperature :		23~25	,C		
Test Mode	:	5MHz QPS	K RB Si	ze 1 Offset	0		Relative Humi	lumidity: 44~48%				
Test Engin	eer :	Eric Shih &	Stan H	sieh & Ken	Wu		Polarization :		Vertica	ıl		
Remark :		Spurious e	missions	within 30-	10th harmo	onic were	found more tha	n 20dE	B below	limit line.		
Frequency	EIRF	Limit	Over	SPA	S.G.	TX Cab	le TX Antenna	Polaria	zation	Result		
			Limit	Reading	Power	loss	Gain					
(MHz)	(dBm	n) (dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/	V)			
5130	-39.5	4 -25	-14.54	-58.11	-43.07	6.9	10.43	V	/	Pass		
7698	-28.9	1 -25	-3.91	-54.74	-31.84	9.39	12.32	\	/	Pass		
10260	-29.4	1 -25	-4.41	-57.52	-33.55	8.71	12.85 V			Pass		

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Band :		LTE	Band 7	•				Temperature :		°C		
Test Mode	:	10MI	Hz QP	SK RB S	Size 1 Offse	et O		Relative Humidity: 44~48%				
Test Engir	neer :	Eric S	Shih &	Stan Hs	sieh & Ken	Wu		Polarization : Horizontal				
Remark :		Spur	ious er	nissions	within 30-	10th harmo	nic were	found more tha	below	limit line.		
Frequency	EIRI	> [Limit	Over	SPA	S.G.	TX Cab	le TX Antenna	Polari	zation	Result	
				Limit	Reading	Power	loss	Gain				
(MHz)	(dBn	n) (d	dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H	(V)		
4998	-32.0)1	-25	-7.01	-49.85	-35.55	6.81	10.35	ŀ	1	Pass	
7500	-29.7	5	-25	-4.75	-57.33	-32.73	9.26	12.24	H	1	Pass	
10002	-33.1	8	-25	-8.18	-61.92	-37.47	8.54	12.83	H	1	Pass	

Band :		LTE Band	7				Temperature :	re : 23~25°C				
Test Mode		10MHz QP	SK RB S	Size 1 Offse	et 0		Relative Humic	ative Humidity: 44~48%				
Test Engin	eer :	Eric Shih &	Stan H	sieh & Ken	Wu		Polarization :		Vertica	I		
Remark :		Spurious e	missions	within 30-	10th harmo	onic were	found more tha	n 20dE	below	limit line.		
Frequency	EIRF	Limit	Over	SPA	S.G.	TX Cab	le TX Antenna	Polaria	zation	Result		
			Limit	Reading	Power	loss	Gain					
(MHz)	(dBm	n) (dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/	V)			
4998	-38.3	3 -25	-13.33	-56.37	-41.87	6.81	10.35	\	/	Pass		
7500	-31.5	2 -25	-6.52	-58.86	-34.5	9.26	12.24	\	/	Pass		
10002	-37.7	2 -25	-12.72	-65.55	-42.01	8.54	12.83	/	Pass			

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<Middle Channel>

Band :		LTE Ba	and 7					Temperature :		23~25°C		
Test Mode	:	10MHz	QPS	K RB S	Size 1 Offse	et O		Relative Humi	dity:	: 44~48%		
Test Engir	neer :	Eric Sh	nih & S	Stan Hs	sieh & Ken	Wu		Polarization :		Horizontal		
Remark :		Spurio	us em	nissions	within 30-	10th harmo	nic were	found more tha	n 20dE	below	limit line.	
Frequency	EIRF	L ir	nit	Over	SPA	S.G.	TX Cab	le TX Antenna	Polari	zation	Result	
				Limit	Reading	Power	loss	Gain				
(MHz)	(dBn	1) (dE	m)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H	/ V)		
5058	-35.4	4 -2	:5	-10.44	-53.64	-38.93	6.86	10.35	ŀ	1	Pass	
7590	-25.4	6 -2	:5	-0.46	-52.22	-28.35	9.34	12.23	H	1	Pass	
10122	-27.5	3 -2	5	-2.53	-56.44	-31.63	8.64	12.74	H	1	Pass	

Band :		LTE Band	7				Temperature :		23~25	°C
Test Mode		10MHz QP	SK RB	Size 1 Offse	et 0		Relative Humid	dity:	44~48	%
Test Engin	eer :	Eric Shih &	Stan H	sieh & Ken	Wu		Polarization :		Vertica	ıl
Remark :		Spurious e	missions	s within 30-	10th harmo	onic were	found more than 20d		below	limit line.
Frequency	EIRF	Limit	Over	SPA	S.G.	TX Cabl	e TX Antenna	Polari	zation	Result
			Limit	Reading	Power	loss	Gain			
(MHz)	(dBm	n) (dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/	V)	
5058	-40.2	4 -25	-15.24	-58.56	-43.73	6.86	10.35	\	/	Pass
7590	-27.5	3 -25	-2.53	-54.12	-30.42	9.34	12.23	\	/	Pass
10122	-35.0	4 -25	-10.04	-62.98	-39.14	8.64	12.74	\	/	Pass

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Band :		LTE Band	7				Temperature :		23~25°C		
Test Mode	:	10MHz QF	SK RB	Size 1 Offse	et O		Relative Humi	dity:	44~48	%	
Test Engir	neer :	Eric Shih 8	Stan H	sieh & Ken	Wu		Polarization :		Horizontal		
Remark :		Spurious e	missions	s within 30-	10th harmo	nic were	found more tha	n 20dE	B below	limit line.	
Frequency	EIRF	Limit	Over	SPA	S.G.	TX Cabl	e TX Antenna	Polari	zation	Result	
			Limit	Reading	Power	loss	Gain				
(MHz)	(dBm) (dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H	/V)		
5118	-31.9	9 -25	-6.99	-50.42	-35.53	6.88	10.42	ŀ	1	Pass	
7680	-25.4	2 -25	-0.42	-50.85	-28.36	9.37	12.31	ŀ	-1	Pass	
10242	-26.4	0 -25	-1.40	-55.45	-30.59	8.64	12.83	H	4	Pass	

Band :		LTE Band 7	7				Temperature :		23~25	,C
Test Mode		10MHz QP	SK RB S	Size 1 Offse	et 0		Relative Humid	dity:	44~489	%
Test Engine	eer :	Eric Shih &	Stan H	sieh & Ken	Wu		Polarization :		Vertica	I
Remark :		Spurious e	missions	s within 30-	10th harmo	onic were	found more tha	n 20dE	B below	limit line.
Frequency	EIRE	Limit	Over	SPA	S.G.	TX Cabl	e TX Antenna	Polari	zation	Result
			Limit	Reading	Power	loss	Gain			
(MHz)	(dBm	n) (dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/	(V)	
5118	-38.7	5 -25	-13.75	-56.86	-42.29	6.88	10.42	١	/	Pass
7680	-26.1	4 -25	-1.14	-52.29	-29.08	9.37	12.31	\	/	Pass
10242	-34.4	9 -25	-9.49	-62.81	-38.68	8.64	12.83	\	/	Pass

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Band :		LTE Band	7				Temperature :		23~25	,C
Test Mode	. e	15MHz QF	SK RB	Size 1 Offse	et O		Relative Humi	dity:	44~48	%
Test Engi	neer :	Eric Shih & Stan Hsieh & Ken Wu Polarization :					Horizo	ntal		
Remark:		Spurious e	missions	within 30-10th harmonic were found more than 20dB			below	limit line.		
Frequency	EIRI	Limit	Over	SPA	S.G.	TX Cab	le TX Antenna	Polari	zation	Result
			Limit	Reading	Power	loss	Gain			
(MHz)	(dBn	n) (dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/	V)	
5004	-32.1	6 -25	-7.16	-50.1	-35.71	6.82	10.37	F	ł	Pass
7500	-29.7	6 -25	-4.76	-57.29	-32.75	9.27	12.26	F	ł	Pass
10002	-32.7	8 -25	-7.78	-61.52	-37.11	8.55	12.88	F	ł	Pass

Band :		LTE Band	7				Temperature :		23~25	,C
Test Mode	:	15MHz QP	SK RB S	Size 1 Offse	et 0		Relative Humi	dity:	44~48	%
Test Engin	eer :	Eric Shih &	Stan Hs	sieh & Ken	Wu		Polarization :		Vertica	I
Remark :		Spurious e	missions	within 30-	10th harmo	onic were	found more tha	n 20dE	B below	limit line.
Frequency	EIRF	Limit	Over	SPA	S.G.	TX Cab	le TX Antenna	Polari	zation	Result
			Limit	Reading	Power	loss	Gain			
(MHz)	(dBm	n) (dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/	V)	
5004	-38.3	3 -25	-13.33	-56.37	-41.88	6.82	10.37	\	/	Pass
7500	-31.0	1 -25	-6.01	-58.24	-34	9.27	12.26	\	/	Pass
10002	-36.7	1 -25	-11.71	-64.45	-41.04	8.55	12.88	\	/	Pass

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<Middle Channel>

Band :		LTE Band	7				Temperature :		23~25°C		
Test Mode	:	15MHz QI	PSK RB	Size 1 Offse	Relative Humidity:			y : 44~48%			
Test Engir	neer :	Eric Shih	& Stan H	sieh & Ken	Wu		Polarization :		Horizontal		
Remark :		Spurious 6	emissions	s within 30-	10th harmo	nic were	found more tha	n 20dB	below	limit line.	
Frequency	EIR	Limit	Over	SPA	S.G.	TX Cab	le TX Antenna	Polari	zation	Result	
			Limit	Reading	Power	loss	Gain				
(MHz)	(dBn	n) (dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/	V)		
5058	-38.2	7 -25	-13.27	-56.44	-41.76	6.86	10.35	H	1	Pass	
7584	-28.4	4 -25	-3.44	-55.33	-31.33	9.34	12.23	H	ł	Pass	
10110	-26.9	2 -25	-1.92	-55.76	-31.02	8.64	12.74	F	1	Pass	

Band :		LTE Band	7				Temperature :		23~25	°C
Test Mode	:	15MHz QP	SK RB S	Size 1 Offse	et 0		Relative Humi	dity:	44~48	%
Test Engin	eer :	Eric Shih 8	Stan H	sieh & Ken	Wu		Polarization :		Vertica	ı
Remark :		Spurious e	missions	within 30-	10th harmo	onic were	found more tha	n 20dE	B below	limit line.
Frequency	EIRF	Limit	Over	SPA	S.G.	TX Cab	le TX Antenna	Polari	zation	Result
			Limit	Reading	Power	loss	Gain			
(MHz)	(dBm	n) (dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/	V)	
5058	-40.1	9 -25	-15.19	-58.42	-43.68	6.86	10.35	\	/	Pass
7584	-28.3	7 -25	-3.37	-55.08	-31.26	9.34	12.23	\	/	Pass
10110	-34.8	9 -25	-9.89	-62.88	-38.99	8.64	12.74	\	/	Pass

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Band :		LTE Band	7				Temperature :		23~25°C		
Test Mode	:	15MHz QF	SK RB	Size 1 Offse	et O		Relative Humi	dity:	44~48°	%	
Test Engir	neer :	Eric Shih & Stan Hsieh & Ken Wu Polarization :					Horizo	ntal			
Remark :		Spurious e	missions	s within 30-	10th harmo	nic were	found more tha	n 20dB	below	limit line.	
Frequency	EIR	Limit	Over	SPA	S.G.	TX Cab	le TX Antenna	Polari	zation	Result	
			Limit	Reading	Power	loss	Gain				
(MHz)	(dBn) (dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/	V)		
5112	-34.0	8 -25	-9.08	-52.41	-37.62	6.87	10.41	F	1	Pass	
7668	-26.5	4 -25	-1.54	-52.79	-29.49	9.35	12.30	F	ł	Pass	
10224	-28.1	9 -25	-3.19	-57.3	-32.38	8.63	12.82	H	ł	Pass	

Band :		LTE Band	7				Temperature :		23~25	°C
Test Mode		15MHz QP	SK RB S	Size 1 Offse	et 0		Relative Humid	dity:	44~48	%
Test Engin	eer :	Eric Shih &	Stan H	sieh & Ken	Wu		Polarization :		Vertica	ıl
Remark :		Spurious e	missions	within 30-	10th harmo	onic were	found more than 20dl		below	limit line.
Frequency	EIRF	Limit	Over	SPA	S.G.	TX Cabl	e TX Antenna	Polaria	zation	Result
			Limit	Reading	Power	loss	Gain			
(MHz)	(dBm	n) (dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/	V)	
5112	-41.5	7 -25	-16.57	-60.06	-45.11	6.87	10.41	V	/	Pass
7668	-27.1	0 -25	-2.10	-53.19	-30.05	9.35	12.30	V	/	Pass
10224	-33.5	7 -25	-8.57	-61.59	-37.76	8.63	12.82	V	/	Pass

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Band :		LTE Band	7				Temperature :		23~25°C		
Test Mode	e: 2	20MHz QP	SK RB	Size 1 Offse	et O		Relative Humi	dity:	44~48	%	
Test Engir	neer :	Eric Shih &	Stan H	sieh & Ken	Wu		Polarization :	Horizontal			
Remark :		Spurious e	missions	s within 30-	10th harmo	nic were	found more tha	B below	limit line.		
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cabl	e TX Antenna	Polari	zation	Result	
			Limit	Reading	Power	loss	Gain				
(MHz)	(dBm) (dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H.	/V)		
5004	-31.9	0 -25	-6.90	-49.78	-35.45	6.83	10.38	ŀ	1	Pass	
7506	-29.0	9 -25	-4.09	-56.47	-32.06	9.28	12.25	H	-1	Pass	
10002	-34.0	9 -25	-9.09	-62.85	-38.44	8.54	12.89	H	1	Pass	

Band :		LTE Band	7				Temperature :		23~25°C		
Test Mode		20MHz QP	SK RB	Size 1 Offse	et 0		Relative Humi	dity:	44~48	%	
Test Engin	eer :	Eric Shih & Stan Hsieh & Ken Wu Polarization :		Vertica	ıl						
Remark :		Spurious emissions within 30-10th harmonic were found more than 20dB		below	limit line.						
Frequency	EIRE	P Limit	Over	SPA	S.G.	TX Cab	le TX Antenna	Polari	zation	Result	
			Limit	Reading	Power	loss	Gain				
(MHz)	(dBm	n) (dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H	V)		
5004	-37.4	5 -25	-12.45	-55.48	-41	6.83	10.38	\	/	Pass	
7506	-31.4	8 -25	-6.48	-58.72	-34.45	9.28	12.25	\	/	Pass	
10002	-37.6	8 -25	-12.68	-65.41	-42.03	8.54	12.89	\	/	Pass	

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Report No.: FG463004B

<Middle Channel>

Band :		LTE	Band 7	•		Temperature :		23~25	°C		
Test Mode	:	201	ИHz QP	SK RB S	Size 1 Offse	et O		Relative Humic	dity:	44~48	%
Test Engir	neer :	Eric	ric Shih & Stan Hsieh & Ken Wu Polarization : Horizon								ntal
Remark :		Spu	urious emissions within 30-10th harmonic were found more than 20dB below limi								limit line.
Frequency	EIRI	>	Limit	Over	SPA	S.G.	TX Cab	le TX Antenna	Polari	zation	Result
				Limit	Reading	Power	loss	Gain			
(MHz)	(dBn	1)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H	/ V)	
5052	-34.1	0	-25	-9.10	-52.18	-37.59	6.86	10.35	H	1	Pass
7578	-27.1	6	-25	-2.16	-53.97	-30.05	9.34	12.23	H	H	Pass
10104	-28.1	2	-25	-3.12	-56.97	-32.22	8.64 12.74		H	1	Pass

Band :		LTE Band	7				Temperature :		23~25	,C
Test Mode		20MHz QP	SK RB S	Size 1 Offse	et 0		Relative Humi	dity:	44~48	%
Test Engin	eer :	Eric Shih & Stan Hsieh & Ken Wu Polarization : Verti							Vertica	ıl
Remark :	k: Spurious emissions within 30-10th harmonic were found more than 20dB below limit line									limit line.
Frequency	EIRF	Limit	Over	SPA	S.G.	TX Cab	le TX Antenna	Polari	zation	Result
			Limit	Reading	Power	loss	Gain			
(MHz)	(dBm	n) (dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/	V)	
5052	-40.0	3 -25	-15.03	-58.26	-43.52	6.86	10.35	\	/	Pass
7578	-29.1	1 -25	-4.11	-55.7	-32	9.34	12.23	\	/	Pass
10104	-33.6	6 -25	-8.66	-61.45	-37.76	8.64	12.74	\	/	Pass

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Band :		LTE Band	7				Temperature :		23~25°C	
Test Mode	:	20MHz QP	SK RB	Size 1 Offse	et O		Relative Humid	dity:	44~48	%
Test Engir	neer :	Eric Shih & Stan Hsieh & Ken Wu Polarization : Horizon								ntal
Remark: Spurious emissions within 30-10th harmonic were found more than 20dB below limit lin									limit line.	
Frequency	EIRF	Limit	Over	SPA	S.G.	TX Cabl	e TX Antenna	Polari	zation	Result
			Limit	Reading	Power	loss	Gain			
(MHz)	(dBm) (dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/	V)	
5100	-31.2	3 -25	-6.23	-49.58	-35.77	5.84	10.38	H	1	Pass
7656	-25.6	0 -25	-0.60	-52.03	-28.54	9.33	12.27	H	1	Pass
10206	-30.3	3 -25	-5.33	-59.31	-34.53	8.6	12.80	H	1	Pass

Band :		LTE Band	7				Temperature :		23~25°C	
Test Mode		20MHz QP	SK RB S	Size 1 Offse	et 0		Relative Humi	dity:	44~48	%
Test Engin	eer :	Eric Shih &	Shih & Stan Hsieh & Ken Wu Polarization : Vert							
Remark :		Spurious e	missions	within 30-	10th harmo	onic were	found more tha	n 20dE	below	limit line.
Frequency	EIRF	P Limit	Over	SPA	S.G.	TX Cabl	e TX Antenna	Polaria	zation	Result
			Limit	Reading	Power	loss	Gain			
(MHz)	(dBm	n) (dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/	V)	
5100	-35.8	2 -25	-10.82	-55.14	-40.36	5.84	10.38	V	1	Pass
7656	-25.8	4 -25	-0.84	-51.82	-28.78	9.33	12.27	V	<i>'</i>	Pass
10206	-35.4	8 -25	-10.48	-63.35	-39.68	8.6	12.80	\	<i>'</i>	Pass

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Report Template No.: BU5-FGLTE Version 1.1

Band :	LTE Band	17			Tem	perature :		23~2	25°C	
Test Mode :	5MHz QPS	K RB Siz	e 1 Offset	0	Rela	ntive Humic	lity :	44~4	18%	
Test Engineer	Eric Shih &	Stan Hsi	eh & Ken \	∕Vu	Pola	rization :		Horiz	zontal	
Remark :	Spurious e	missions	within 30-1	0th ha	ırmoı	nic were fou	ind more	e thar	n 20dB below	limit line.
Frequency ER	P Limit	Over	SPA	S.G	i.	TX Cable	TX Ante	enna	Polarization	Result
(MHz) (dB	m)(dBm)	Limit (dB)	Reading (dBm)	Power (dBr		loss (dB)	Gair (dBi	_	(H/V)	

rrequency	ERF	LIIIII	Over	SPA	S.G.	I A Cable	I A Antenna	Polarization	Resuit
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
1408	-43.50	-13	-30.50	-49.54	-45.44	1.51	5.60	Н	Pass
2112	-46.46	-13	-33.46	-55.46	-48.49	1.82	6.00	Н	Pass
2816	-45.23	-13	-32.23	-56.38	-47.86	2.2	6.98	Н	Pass
3520	-45.36	-13	-32.36	-57.67	-49.03	2.42	8.24	Н	Pass

Band :	LTE Band 17	Temperature :	23~25°C
Test Mode :	5MHz QPSK RB Size 1 Offset 0	Relative Humidity :	44~48%
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu	Polarization :	Vertical
Remark :	Spurious emissions within 30-10th ha	armonic were found more	e than 20dB below limit line.
Eroquoney EDI	D Limit Over SDA S.C.	TV Cable TV Ante	nna Polarization Posult

Frequency	ERP	Limit	Over Limit	SPA Reading	S.G. Power	TX Cable loss	TX Antenna Gain	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
1408	-35.62	-13	-22.62	-43.78	-37.56	1.51	5.60	V	Pass
2112	-40.93	-13	-27.93	-51.77	-42.96	1.82	6.00	V	Pass
2816	-43.99	-13	-30.99	-56.78	-46.62	2.2	6.98	V	Pass
3520	-42.34	-13	-29.34	-55.74	-46.01	2.42	8.24	V	Pass

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Report Template No.: BU5-FGLTE Version 1.1

<Middle Channel>

Band :	LTE Band 1	7			Tem	perature :		23~2	25°C	
Test Mode :	5MHz QPS	K RB Siz	e 1 Offset	0	Rela	ative Humic	dity:	44~4	48%	
Test Engineer :	Eric Shih &	Stan Hsi	eh & Ken \	∕Vu	Pola	arization :		Horiz	zontal	
Remark :	Spurious er	nissions	within 30-1	0th ha	rmo	nic were fou	ınd more	e thai	n 20dB below	limit line.
Frequency ER	P Limit	Over	SPA	S.G	i.	TX Cable	TX Ante	enna	Polarization	Result
(MHz) (dBı	n) (dBm)	Limit (dB)	Reading (dBm)	Power (dBr		loss (dB)	Gaiı (dBi		(H/V)	

Band :	ΙΤΙ	F Band	17		Tem	nerature :	23~2	5°C	
3536	-45.35	-13	-32.35	-57.64	-49	2.46	8.26	Н	Pass
2832	-40.75	-13	-27.75	-51.97	-43.36	2.24	7.00	Н	Pass
2120	-42.23	-13	-29.23	-51.35	-44.25	1.85	6.02	Н	Pass
1416	-46.95	-13	-33.95	-52.99	-48.88	1.53	5.61	Н	Pass

Band :	LTE Band 17	Temperature :	23~25°C
Test Mode :	5MHz QPSK RB Size 1 Offset 0	Relative Humidity :	44~48%
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu	Polarization :	Vertical
Remark :	Spurious emissions within 30-10th ha	armonic were found more	e than 20dB below limit line.

Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
1416	-34.82	-13	-21.82	-43.04	-36.75	1.53	5.61	V	Pass
2120	-39.00	-13	-26.00	-50.12	-41.02	1.85	6.02	V	Pass
2832	-41.78	-13	-28.78	-53.84	-44.39	2.24	7.00	V	Pass
3536	-42.01	-13	-29.01	-55.47	-45.66	2.46	8.26	V	Pass

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2136

2848

3560

-46.70

-43.68

-50.10

-13

-13

-13

-33.70

-30.68

-37.10

-55.77

-54.97

-62.63

Band :	LTE Band	17			Temperature :			23~25°C		
Test Mode :	5MHz QPS	K RB Siz	e 1 Offset	0	Rela	ative Humic	lity :	44~4	18%	
Test Engineer	Eric Shih &	Stan Hsi	eh & Ken \	Wu	Pola	arization :		Horiz	zontal	
Remark :	Spurious e	missions	within 30-1	10th ha	ırmoı	nic were fou	ind more	e thar	n 20dB below	limit line.
Frequency ER	P Limit	Over	SPA	S.G	-	TX Cable			Polarization	Result
(\	Limit	Reading	Pow		loss	Gai	-	4150	
(MHz) (dB	m) (dBm)	(dB)	(dBm)	(dBn	n)	(dB)	(dB	1)	(H/V)	
1424 -51.	60 -13	-38.60	-57.65	-53.5	55	1.54	5.64	1	Н	Pass

-48.76

-46.38

-53.78

1.87

2.26

2.48

6.08

7.11

8.31

Н

Н

Н

Pass

Pass Pass

Band :	LTE Band 17	Temperature :	23~25°C					
Test Mode :	5MHz QPSK RB Size 1 Offset 0	Relative Humidity :	44~48%					
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu	Polarization :	Vertical					
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.							

Frequency	ERP	Limit	Over Limit	SPA Reading	S.G. Power	TX Cable loss	TX Antenna Gain	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
1424	-40.17	-13	-27.17	-48.33	-42.12	1.54	5.64	V	Pass
2136	-41.43	-13	-28.43	-52.47	-43.49	1.87	6.08	V	Pass
2848	-43.35	-13	-30.35	-56.25	-46.05	2.26	7.11	V	Pass
3552	-46.54	-13	-33.54	-60.07	-50.22	2.48	8.31	V	Pass

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2112

2816

3520

-44.59

-43.59

-45.01

-13

-13

-13

-31.59

-30.59

-32.01

-53.61

-54.86

-57.27

Band :		LTE Band 1	17			Temperature :			23~25°C		
Test Mode	:	10MHz QP	SK RB S	Size 1 Offse	t O	Rela	tive Humic	dity:	44~4	8%	
Test Engir	neer :	Eric Shih &	Stan Hs	ieh & Ken	Wu	Pola	rization :		Horiz	zontal	
Remark:		Spurious e	missions	within 30-	10th ha	rmor	nic were fou	ınd more	e thar	n 20dB below	limit line.
Frequency	ERP	Limit	Over	SPA	S.G		TX Cable	TX Ante	enna	Polarization	Result
(MHz)	(dBm	n) (dBm)	Limit (dB)	Reading (dBm)	Powe (dBn		loss (dB)	Gaiı (dBi	_	(H/V)	
1408	-44.5	, , , ,	-31.58	-50.54	-46.5		1.52	5.6	•	H	Pass

-46.63

-46.21

-48.57

1.83

2.24

2.5

6.02

7.01

8.21

Band :	LTE Band 17	Temperature :	23~25°C					
Test Mode :	10MHz QPSK RB Size 1 Offset 0	Relative Humidity :	44~48%					
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu	Polarization :	Vertical					
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.							

Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
1408	-33.54	-13	-20.54	-41.71	-35.49	1.51	5.61	V	Pass
2112	-38.90	-13	-25.90	-49.63	-40.95	1.82	6.02	V	Pass
2816	-42.57	-13	-29.57	-55.34	-45.23	2.2	7.01	V	Pass
3520	-41.23	-13	-28.23	-54.54	-44.87	2.42	8.21	V	Pass

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Н

Н

Н

Pass

Pass Pass

-42.41

-40.78

-42.47

-13

-13

-13

-29.41

-27.78

-29.47

-51.42

-52.08

-54.77

<Middle Channel>

2112

2824

3528

Band :	LTE Band 1	17			Temperature :			23~25°C		
Test Mode :	10MHz QP	SK RB S	ize 1 Offse	t 0	Relat	ive Humic	dity:	44~4	18%	
Test Engineer :	Eric Shih &	Stan Hs	ieh & Ken \	∕Vu	Polar	ization :		Horiz	zontal	
Remark :	Spurious er	missions	within 30-1	0th ha	rmoni	c were fou	ınd more	e thar	n 20dB below	limit line.
Frequency ER	P Limit	Over	SPA	S.G		TX Cable	TX Ante	enna	Polarization	Result
(MHz) (dBr	n) (dBm)	Limit (dB)	Reading (dBm)	Powe (dBn		loss (dB)	Gair (dBi	-	(H/V)	
1408 -45.5	59 -13	-32.59	-51.65	-47.5		1.53	5.6	•	Н	Pass

-44.43

-43.39

-46.12

1.85

2.24

2.46

6.02

7.00

8.26

Н

Н

Н

Pass

Pass Pass

Band :	LTE Ba	and 17			Temperature :		23~2	25°C	
Test Mode :	10MHz	QPSK RB	Size 1 Offse	et 0	Relative Humi	dity:	44~4	18%	
Test Engineer	: Eric Sh	nih & Stan H	Isieh & Ken	Wu	Polarization :		Verti	cal	
Remark :	Spurio	us emissior	ns within 30-	10th ha	rmonic were fo	und more	e thar	n 20dB below	limit line.
Frequency El	RP Lin	nit Over	SPA	S.G	. TX Cable	TX Ante	nna	Polarization	Result
		Limit	Reading	Pow	er loss	Gair	1		
(MHz) (di	Bm) (dB	m) (dB)	(dBm)	(dBn	n) (dB)	(dBi)	(H/V)	

Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
1408	-34.82	-13	-21.82	-42.93	-36.75	1.53	5.61	V	Pass
2112	-38.67	-13	-25.67	-49.44	-40.69	1.85	6.02	V	Pass
2824	-41.13	-13	-28.13	-53.89	-43.74	2.24	7.00	V	Pass
3528	-40.46	-13	-27.46	-53.97	-44.11	2.46	8.26	V	Pass

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Band :	LTE Band 1	7			Temp	perature :		23~2	25°C	
Test Mode :	10MHz QP	SK RB S	ize 1 Offse	t 0	Relat	ive Humic	dity:	44~4	18%	
Test Engineer :	Eric Shih &	Stan Hsi	eh & Ken \	Vu	Polar	rization :		Horiz	zontal	
Remark :	Spurious er	nissions	within 30-1	0th ha	rmon	ic were fou	and more	e thar	n 20dB below	limit line.
Frequency ERI	P Limit	Over	SPA	S.G	i .	TX Cable	TX Ante	enna	Polarization	Result
(MHz) (dBn	n) (dBm)	Limit	Reading (dBm)	Power		loss (dB)	Gair (dB		(H/\/)	

			Limit	Reading	Power	IOSS	Gain		
(MHz)	(dBm) ((dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
1416	-47.55	-13	-34.55	-51.4	-49.5	1.53	5.63	Н	Pass
2120	-43.90	-13	-30.90	-51.02	-45.95	1.88	6.08	Н	Pass
2824	-42.33	-13	-29.33	-51.43	-45.02	2.27	7.11	Н	Pass
3536	-46.29	-13	-33.29	-56.44	-50	2.45	8.31	Н	Pass

Band :	LTE Band 17	Temperature :	23~25°C			
Test Mode :	10MHz QPSK RB Size 1 Offset 0	Relative Humidity :	44~48%			
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu	Polarization :	Vertical			
Remark: Spurious emissions within 30-10th harmonic were found more than 20dB below limit						
Frequency FRE	P Limit Over SPA S.G	TX Cable TX Ante	enna Polarization Result			

Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
1416	-37.21	-13	-24.21	-43.26	-39.16	1.53	5.63	V	Pass
2120	-40.20	-13	-27.20	-49.01	-42.25	1.88	6.08	V	Pass
2824	-42.67	-13	-29.67	-53.38	-45.36	2.27	7.11	V	Pass
3536	-42.43	-13	-29.43	-53.73	-46.14	2.45	8.31	V	Pass

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Band :		LTE Band 7 Temperature :				23~25°C				
Test Mode	:	5MHz QPS	SK RB Si	ze 1 Offset	0 + WPC (Charging	Relative Humi	dity:	44~48	%
Test Engir	neer :	Eric Shih 8	ric Shih & Stan Hsieh & Ken Wu Polarization : Horiz					Horizo	ntal	
Remark :		Spurious e	purious emissions within 30-10th harmonic were found more than 20dB below limit							limit line.
Frequency	EIRF	Limit	Over	SPA	S.G.	TX Cab	le TX Antenna	Polari	zation	Result
			Limit	Reading	Power	loss	Gain			
(MHz)	(dBn) (dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H	(V)	
4998	-38.2	8 -25	-13.28	-53.8	-41.84	6.78	10.34	ŀ	1	Pass
7500	-36.7	3 -25	-11.73	-62.14	-39.77	9.22	12.26	H	1	Pass
10002	-40.9	9 -25	-15.99	-67.51	-45.33	8.51	12.85	H	1	Pass

Band :		LTE Band	7				Temperature :		23~25°C	
Test Mode	:	5MHz QPS	MHz QPSK RB Size 1 Offset 0 + WPC Charging Relative Humidity:					dity:	44~48%	
Test Engine	neer: Eric Shih & Stan Hsieh & Ken Wu Polarization:					Vertica	ıl			
Remark :		Spurious e	missions	within 30-	10th harm	onic were	found more tha	n 20dE	B below	limit line.
Frequency	EIRF	Limit	Over	SPA	S.G.	TX Cab	e TX Antenna	Polari	zation	Result
			Limit	Reading	Power	loss	Gain			
(MHz)	(dBm	n) (dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/	V)	
4998	-35.5	0 -25	-10.50	-51.34	-39.06	6.78	10.34	\	/	Pass
7500	-33.9	6 -25	-8.96	-58.99	-37	9.22	12.26	\	/	Pass
10002	-41.1	5 -25	-16.15	-66.75	-45.49	8.51	12.85	\	/	Pass

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<Middle Channel>

Band :		LTE Band	7				Temperature :		23~25°C	
Test Mode	:	5MHz QPS	SK RB Si	ze 1 Offset	0 + WPC	Charging	Relative Humio	dity:	44~48	%
Test Engir	neer :	Eric Shih 8	Eric Shih & Stan Hsieh & Ken Wu Polarization : Horizo					ntal		
Remark :		Spurious e	purious emissions within 30-10th harmonic were found more than 20dB below limit li							limit line.
Frequency	EIRF	Limit	Over	SPA	S.G.	TX Cab	le TX Antenna	Polari	zation	Result
			Limit	Reading	Power	loss	Gain			
(MHz)	(dBm) (dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H	V)	
5064	-40.7	3 -25	-15.73	-56.74	-44.22	6.86	10.35	F	1	Pass
7596	-32.4	7 -25	-7.47	-57.03	-35.36	9.34	12.23	F	1	Pass
10128	-39.2	9 -25	-14.29	-66.01	-43.39	8.64	12.74	H	1	Pass

Band :		LTE Band	7				Temperature :		23~25°C	
Test Mode	:	5MHz QPS	MHz QPSK RB Size 1 Offset 0 + WPC Charging Relative Humidity:					44~48	%	
Test Engine	gineer: Eric Shih & Stan Hsieh & Ken Wu Polarization:				Vertica	ıl				
Remark :		Spurious e	missions	within 30-	10th harm	onic were	found more tha	n 20dE	B below	limit line.
Frequency	EIRF	Limit	Over	SPA	S.G.	TX Cab	e TX Antenna	Polari	zation	Result
			Limit	Reading	Power	loss	Gain			
(MHz)	(dBm	n) (dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/	V)	
5064	-37.6	2 -25	-12.62	-53.81	-41.11	6.86	10.35	\	/	Pass
7596	-33.4	3 -25	-8.43	-57.82	-36.32	9.34	12.23	\	/	Pass
10128	-39.7	8 -25	-14.78	-65.44	-43.88	8.64	12.74	\	/	Pass

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Band :		LTE Band	7				Temperature :		23~25°C	
Test Mode	:	5MHz QPS	SK RB S	ze 1 Offset	0 + WPC (Charging	Relative Humi	dity:	44~48	%
Test Engir	neer :	Eric Shih 8	Fric Shih & Stan Hsieh & Ken Wu Polarization : Hor					Horizo	ntal	
Remark:		Spurious emissions within 30-10th harmonic were found more than 20dB below limit							limit line.	
Frequency	EIRF	Limit	Over	SPA	S.G.	TX Cab	le TX Antenna	Polari	zation	Result
			Limit	Reading	Power	loss	Gain			
(MHz)	(dBm) (dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H	/ V)	
5130	-39.3	4 -25	-14.34	-55.67	-42.87	6.9	10.43	H	1	Pass
7698	-29.7	0 -25	-4.70	-53.51	-32.63	9.39	12.32	H	1	Pass
10260	-34.7	2 -25	-9.72	-61.45	-38.86	8.71	12.85	H	1	Pass

Band :		LTE Band	7				Temperature :		23~25°C	
Test Mode		5MHz QPS	1Hz QPSK RB Size 1 Offset 0 + WPC Charging Relative Humidity: 44~					44~48	%	
Test Engin	eer :	r: Eric Shih & Stan Hsieh & Ken Wu Polarization:				Vertical				
Remark :		Spurious e	missions	within 30-	10th harmo	onic were	found more tha	n 20dE	B below	limit line.
Frequency	EIRF	Limit	Over	SPA	S.G.	TX Cab	e TX Antenna	Polari	zation	Result
			Limit	Reading	Power	loss	Gain			
(MHz)	(dBm	n) (dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/	(V)	
5130	-38.8	0 -25	-13.80	-55.14	-42.33	6.9	10.43	\	/	Pass
7698	-28.9	2 -25	-3.92	-52.5	-31.85	9.39	12.32	\	/	Pass
10260	-33.8	5 -25	-8.85	-59.88	-37.99	8.71	12.85	\	/	Pass

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3.8 Frequency Stability Measurement

3.8.1 Description of Frequency Stability Measurement

The frequency stability shall be measured by variation of ambient temperature and variation of primary supply voltage to ensure that the fundamental emission stays within the authorized frequency block. The frequency stability of the transmitter shall be maintained within ±0.00025% (±2.5ppm) of the center frequency.

3.8.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.8.3 Test Procedures for Temperature Variation

- 1. The EUT was set up in the thermal chamber and connected with the system simulator.
- With power OFF, the temperature was decreased to -30°C and the EUT was stabilized before testing. Power was applied and the maximum change in frequency was recorded within one minute.
- 3. With power OFF, the temperature was raised in 10°C step up to 50°C. The EUT was stabilized at each step for at least half an hour. Power was applied and the maximum frequency change was recorded within one minute.

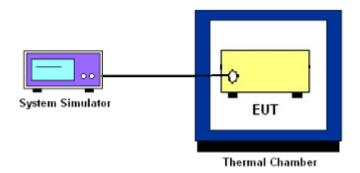
3.8.4 Test Procedures for Voltage Variation

- 1. The EUT was placed in a temperature chamber at 25±5° C and connected with the system simulator.
- 2. The power supply voltage to the EUT was varied from 85% to 115% of the nominal value measured at the input to the EUT.
- 3. The variation in frequency was measured for the worst case.

3.8.5 Test Procedures for Frequency Stability (IC)

- 1. The EUT was connected to spectrum analyzer and system simulator via a power divider.
- 2. The EUT was operated at the lowest and highest channel
- 3. Using RBW= 1% OBW and displaying line = -13dBm.
- 4. The frequency at these points shall be recorded as f_L and f_H respectively.
- 5. Calculate frequency stability within the 704 716 band.

3.8.6 Test Setup



3.8.7 Test Result of Temperature Variation (FCC)

	BW 10MHz	
Temperature (°C)	Deviation (ppm)	Result
50	0.0049	
40	0.0060	
30	0.0085	
20(Ref.)	0.0000	
10	0.0024	PASS
0	0.0037	
-10	0.0018	
-20	0.0038	
-30	0.0013	

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Band :	LTE Band 2 (QPSK)	Limit (ppm):	2.5
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Temperature (°C)	BW 10MHz Deviation	Result
	(ppm)	
50	0.0013	
40	0.0034	
30	0.0032	
20(Ref.)	0.0000	
10	0.0022	PASS
0	0.0018	
-10	0.0016	
-20	0.0009	
-30	0.0008	

Band :	LTE Band 4 (QPSK)	Limit (ppm) :	2.5
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	BW 10MHz	
Temperature (°C)	Deviation (ppm)	Result
50	0.0002	
40	0.0009	
30	0.0058	
20(Ref.)	0.0000	
10	0.0005	PASS
0	0.0016	
-10	0.0023	
-20	0.0041	
-30	0.0003	

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Band :	LTE Band 7 (QPSK)	Limit (ppm) :	2.5
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	BW 10MHz	
Temperature (°C)	Deviation (ppm)	Result
50	0.0031	
40	0.0051	
30	0.0002	
20(Ref.)	0.0000	
10	0.0006	PASS
0	0.0004	
-10	0.0014	
-20	0.0019	
-30	0.0030	

Band :	LTE Band 17 (QPSK)	Limit (ppm):	2.5
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	BW 10MHz	
Temperature (°C)	Deviation (ppm)	Result
50	0.0045	
40	0.0061	
30	0.0058	
20(Ref.)	0.0000	
10	0.0025	PASS
0	0.0045	
-10	0.0063	
-20	0.0038	
-30	0.0046	

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3.8.8 Test Result of Voltage Variation (FCC)

Band	Bandwidth	Voltage (Volt)	Deviation (ppm)	Limit (ppm)	Result
		4.2	0.0050		
LTE Band 5	10M	3.8	0.0047		
		BEP	0.0033		
		4.2	0.0024		
LTE Band 2	10M	3.8	0.0013		
		BEP	0.0020		
	10M	4.2	0.0012		
LTE Band 4		3.8	0.0012	2.5	PASS
		BEP	0.0008		
		4.2	0.0007		
LTE Band 7	10M	3.8	0.0000		
		BEP	0.0022		
		4.2	0.0024		
LTE Band 17	10M	3.8	0.0031		
		BEP	0.0007		

Remark:

- 1. Normal Voltage = 3.8V.
- 2. Battery End Point (BEP) = 3.6 V.

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3.8.9 Test Result of Temperature and Voltage Variation (IC)

Band :	LTE Band 17
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Condition		Frequency Offset (△f) (Hz)	Note
	50 °C	2	
	40 °C	3.1	
	30 °C	2.9	
	20 °C(Ref.)	-1.2	
Temperature	10 ℃	0.6	
	0 ℃	2	 MAX(△f) 3.3= Hz
	-10 °C	3.3	
	-20 °C	1.5	
	-30 °C	2.1	
	4.2	0.5	
Voltage	3.8	1	
	BEP	-0.7	

Remark:

- 1. Normal Voltage = 3.8V.
- 2. Battery End Point (BEP) = 3.6 V.

3.8.10 Test Result of Frequency Stability (IC)

Band :	LTE Band 17	

Frequency Stability	Frequency (MHz)	Limit Line	Result
$f_L - MAX(\triangle f) $	704.144	≥ 704 MHz	DASS
fн + MAX(△f)	715.856	≤ 716 MHz	PASS

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4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
LTE Base Station	Anritsu	MT8820C	6201026480	30MHz~2.7GHz SISO	Jan. 07, 2014	Jul. 27, 2014 ~ Jul. 31, 2014	Jan. 06, 2015	Conducted (TH02-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP40	100055	9kHz~40GHz	Jun. 09, 2014	Jul. 27, 2014 ~ Jul. 31, 2014	Jun. 08, 2015	Conducted (TH02-HY)
Thermal Chamber	Ten Billion	TTH-D3SP	TBN-930701	N/A	Jul. 17, 2014	Jul. 27, 2014 ~ Jul. 31, 2014	Jul. 16, 2015	Conducted (TH02-HY)
Spectrum Analyzer	Rohde & Schwarz	FSV30	101749	10Hz ~ 30GHz	Feb. 10, 2014	Jul. 19, 2014 ~ Jul. 30, 2014	Feb. 09, 2015	Radiation (03CH07-HY
Bilog Antenna	Schaffner	CBL6111C	2726	30MHz ~ 1GHz	Oct. 10, 2013	Jul. 19, 2014 ~ Jul. 30, 2014	Oct. 09, 2014	Radiation (03CH07-HY
Double Ridge Horn Antenna	ESCO	3117	75962	1GHz~18GHz	Aug. 22, 2013	Jul. 19, 2014 ~ Jul. 30, 2014	Aug. 21, 2014	Radiation (03CH07-HY
Preamplifier	COM-POWER	PA-103A	161241	10 MHz ~ 1000MHz	Mar. 17, 2014	Jul. 19, 2014 ~ Jul. 30, 2014	Mar. 16, 2015	Radiation (03CH07-HY
Preamplifier	Agilent	8449B	3008A02362	1 GHz~26.5 GHz	Nov. 29, 2013	Jul. 19, 2014 ~ Jul. 30, 2014	Nov. 28, 2014	Radiation (03CH07-HY
Turn Table	ChainTek	ChainTek 3000	N/A	0 ~ 360 degree	N/A	Jul. 19, 2014 ~ Jul. 30, 2014	N/A	Radiation (03CH07-HY
Antenna Mast	ChainTek	M-400-0	114/8000604/	N/A	N/A	Jul. 19, 2014 ~ Jul. 30, 2014	N/A	Radiation (03CH07-HY
SHF-EHF Horn Antenna	SCHWARZBEC K	BBHA 9170	BBHA917025 1	15GHz- 40GHz	Oct. 03, 2013	Jul. 19, 2014 ~ Jul. 30, 2014	Oct. 02, 2014	Radiation (03CH07-HY

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5 Uncertainty of Evaluation

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of	4.50
Confidence of 95% (U = 2Uc(y))	4.50

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