



FCC RADIO TEST REPORT

FCC ID : VUIMD100
Equipment : Module
Brand Name : PEGATRON
Model Name : MD100-Q62
Applicant : PEGATRON CORPORATION
5F., NO. 76, LIGONG ST., BEITOU
DISTRICT,TAIPEI CITY,Taiwan
Manufacturer : PEGATRON CORPORATION
5F., NO. 76, LIGONG ST., BEITOU
DISTRICT,TAIPEI CITY,Taiwan
Standard : FCC 47 CFR Part 2, 96

The product was received on Mar. 16, 2023 and testing was performed from Apr. 17, 2023 to May 11, 2023. We, Sporton International Inc. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures given in ANSI / TIA-603-E and has been in compliance with the applicable technical standards.

The test results in this partial report apply exclusively to the tested model / sample. Without written approval from Sporton International Inc. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.

Louis Wu

Approved by: Louis Wu

Sporton International Inc. EMC & Wireless Communications Laboratory

No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)



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History of this test report

Report No.	Version	Description	Issue Date
FG2O0623-01I	01	Initial issue of report	May 24, 2023



Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.2	§2.1046 RSS-192 8.6	Conducted Output Power	Reporting only	-
-	§96.41	Peak-to-Average Ratio	-	See Note
3.3	§96.41	Effective Isotropic Radiated Power	Pass	-
-	§2.1049 §96.41	Occupied Bandwidth	-	See Note
-	§2.1051 §96.41	Conducted Band Edge Measurement	-	See Note
-	§2.1051 §96.41	Conducted Spurious Emission	-	See Note
-	§2.1055	Frequency Stability for Temperature & Voltage	-	See Note
4.4	§2.1051 §96.41	Radiated Spurious Emission	Pass	1.32 dB under the limit at 7390.000 MHz

Note:

- The certified module (model: VUIMD100).
- The conducted power has been verified to be consistent with the original modular certification, therefore, the conducted signal test will be re-used.
- To perform a spot check on the radiated spurious emission of the host.

Conformity Assessment Condition:

- The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacturer who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.
- The measurement uncertainty please refer to each test result in the section "Measurement Uncertainty".

Disclaimer:
The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.

Reviewed by: Sheng Kuo
Report Producer: Clio Lo



1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature	
General Specs LTE/5G NR.	
Antenna Type WWAN: PIFA Antenna	
Installed into Host	Equipment Name: 5G Dongle Brand Name: PEGATRON Model Name: MD100-Q62
Antenna Gain	-0.42dBi

Remark: The EUT's information above is declared by manufacturer. Please refer to Disclaimer in report summary.

1.2 Modification of EUT

No modifications made to the EUT during the testing.



1.3 Testing Location

Test Site	Sporton International Inc. EMC & Wireless Communications Laboratory
Test Site Location	No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.) TEL: +886-3-327-3456 FAX: +886-3-328-4978
Test Site No.	Sporton Site No.
	TH03-HY
Test Engineer	Luffy Lin
Temperature (°C)	23.5~24.1
Relative Humidity (%)	48~52

Test Site	Sporton International Inc. Wensan Laboratory
Test Site Location	No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.) TEL: +886-3-327-0868 FAX: +886-3-327-0855
Test Site No.	Sporton Site No.
	03CH12-HY (TAF Code: 3786)
Test Engineer	Tim Lee and Wilson Wu
Temperature (°C)	20~25
Relative Humidity (%)	50~60
Remark	The Radiated Spurious Emission test item subcontracted to Sporton International Inc. Wensan Laboratory.

Note: The test site complies with ANSI C63.4 2014 requirement.

FCC Designation No.: TW1190 and TW3786

1.4 Applied Standards

According to the specifications declared by the manufacturer, the EUT must comply with the requirements of the following standards:

- ♦ ANSI C63.26-2015
- ♦ ANSI / TIA-603-E
- ♦ FCC 47 CFR Part 2, 96
- ♦ FCC KDB 971168 D01 Power Meas. License Digital Systems v03r01
- ♦ FCC KDB 940660 D01 Part 96 CBRS Eqpt v03
- ♦ FCC KDB 412172 D01 Determining ERP and EIRP v01r01
- ♦ FCC KDB 414788 D01 Radiated Test Site v01r01

Remark:

1. All the test items were validated and recorded in accordance with the standards without any modification during the testing.
2. The TAF code is not including all the FCC KDB listed without accreditation.

2 Test Configuration of Equipment Under Test

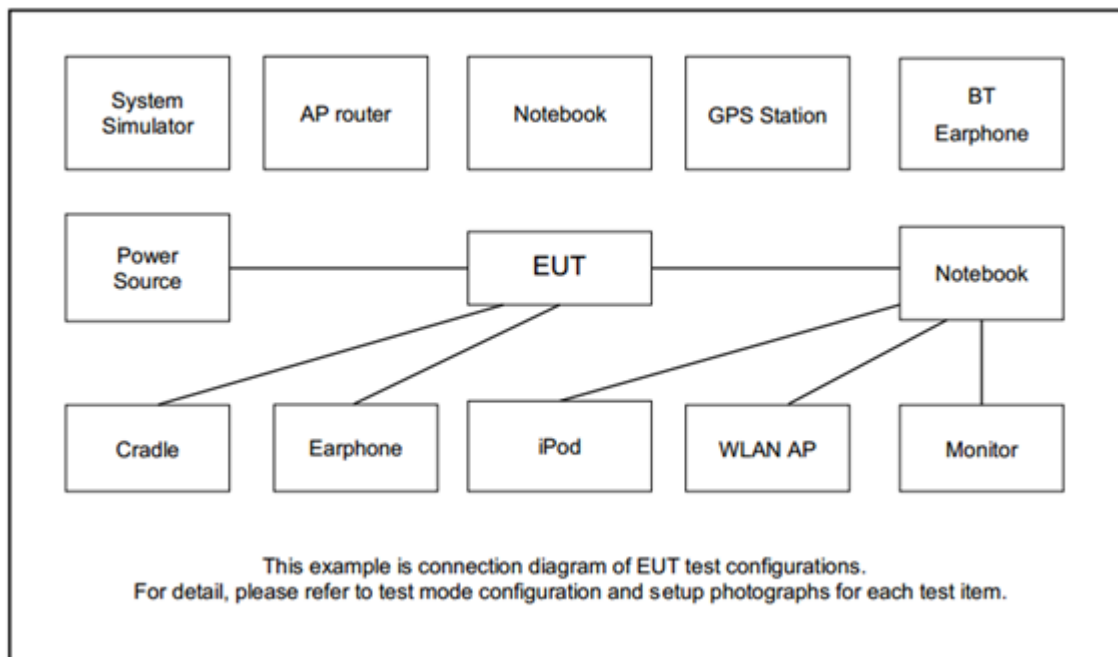
2.1 Test Mode

Antenna port conducted and radiated test items listed below are performed according to KDB 971168 D01 Power Meas. License Digital Systems v03r01 with maximum output power.

For radiated measurement, the measured emission level of the EUT was maximized by rotating the EUT on a turntable, adjusting the orientation of the EUT and EUT antenna in three orthogonal axis (X: flat, Y: portrait, Z: landscape), and adjusting the measurement antenna orientation, following C63.26 exploratory test procedures and only the worst case emissions were reported in this report.

Test Items	Band	Bandwidth (MHz)						Modulation				RB #			Test Channel			
		1.4	3	5	10	15	20	QPSK	16QAM	64QAM	256QAM	1	Half	Full	L	M	H	
Max. Output Power	48	-	-	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
E.R.P / E.I.R.P	48	-	-	v	v	v	v	v	v	v	v	Max. Power						
Radiated Spurious Emission	48	-	-	v				v				v			v	v	v	
Remark	<ol style="list-style-type: none"> The mark "v" means that this configuration is chosen for testing The mark "- " means that this bandwidth is not supported. The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported. 																	

2.2 Connection Diagram of Test System





2.3 Support Unit used in test configuration

Item	Equipment	Brand Name	Model No.	FCC ID	Data Cable	Power Cord
1.	System Simulator	Anritsu	MT8821C	N/A	N/A	Unshielded, 1.8 m
2.	Adapter	Samsung	GT-N7000	N/A	N/A	N/A

2.4 Frequency List of Low/Middle/High Channels

LTE Band 48 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	55340	55990	56640
	Frequency	3560.0	3625.0	3690.0
15	Channel	55315	55990	56665
	Frequency	3557.5	3625.0	3692.5
10	Channel	55290	55990	56690
	Frequency	3555.0	3625.0	3695.0
5	Channel	55265	55990	56715
	Frequency	3552.5	3625.0	3697.5

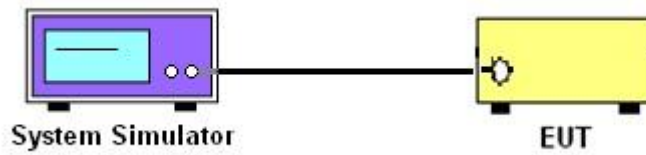
3 Conducted Test Items

3.1 Measuring Instruments

See list of measuring instruments of this test report.

3.1.1 Test Setup

3.1.2 Conducted Output Power



3.1.3 Test Result of Conducted Test

Please refer to Appendix A.



3.2 Conducted Output Power

3.2.1 Description of the Conducted Output Power Measurement

A system simulator was used to establish communication with the EUT. Its parameters were set to force the EUT transmitting at maximum output power. The measured power in the radio frequency on the transmitter output terminals shall be reported.

3.2.2 Test Procedures

1. The transmitter output port was connected to the system simulator.
2. Set EUT at maximum power through the system simulator.
3. Select lowest, middle, and highest channels for each band and different modulation.
4. Measure and record the power level from the system simulator.



3.3 EIRP

3.3.1 Description of the EIRP Measurement

The EIRP of mobile transmitters must not exceed 23 dBm /10 megahertz for LTE Band 48.

The testing follows ANSI C63.26-2015 Section 5.2.5.5

According to KDB 412172 D01 Power Approach,

$EIRP = P_T + G_T - L_C$, where

P_T = transmitter output power in dBm

G_T = gain of the transmitting antenna in dBi

L_C = signal attenuation in the connecting cable between the transmitter and antenna in dB

Device	Maximum EIRP (dBm/10 MHz)	Maximum PSD (dBm/MHz)
End User Device	23	n/a

Remark: Total channel power is complied with EIRP limit 23dBm/10MHz.

3.3.1 Test Procedures

The testing follows procedure in Section 5.2 of ANSI C63.26-2015 and KDB 940660 D01 Part 96 CBRS Eqpt v03 Section 3.2(b)(2)

Determine the EIRP by adding the effective antenna gain to the measured average conducted power level.

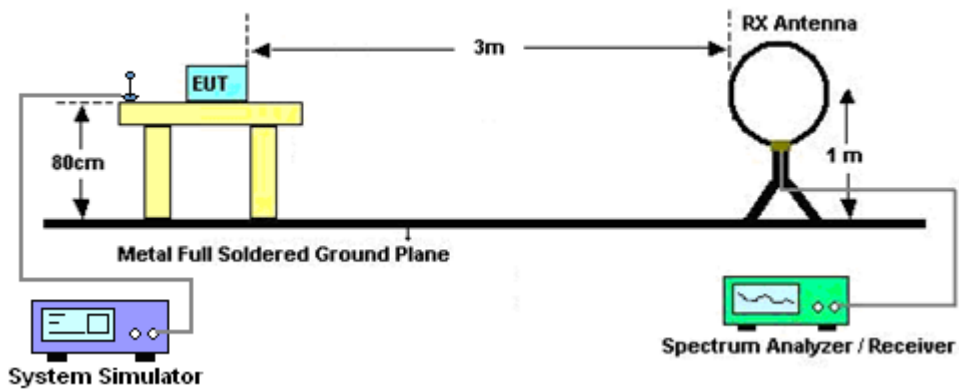
4 Radiated Test Items

4.1 Measuring Instruments

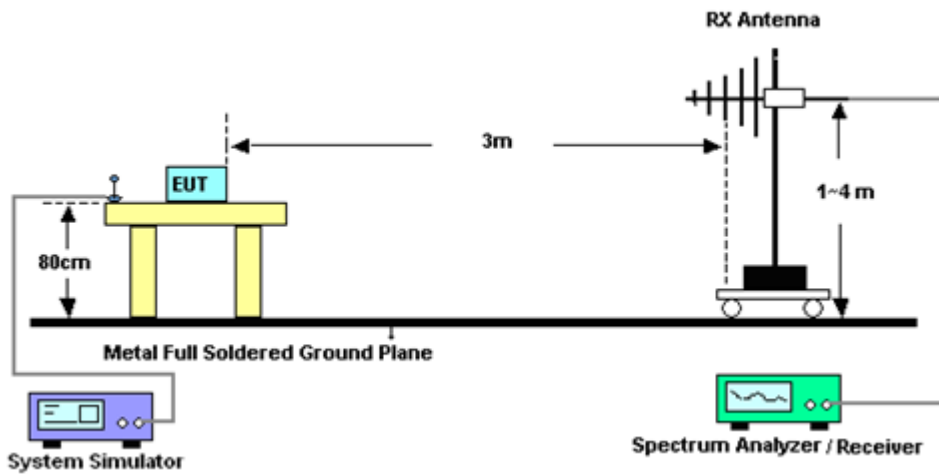
See list of measuring instruments of this test report.

4.2 Test Setup

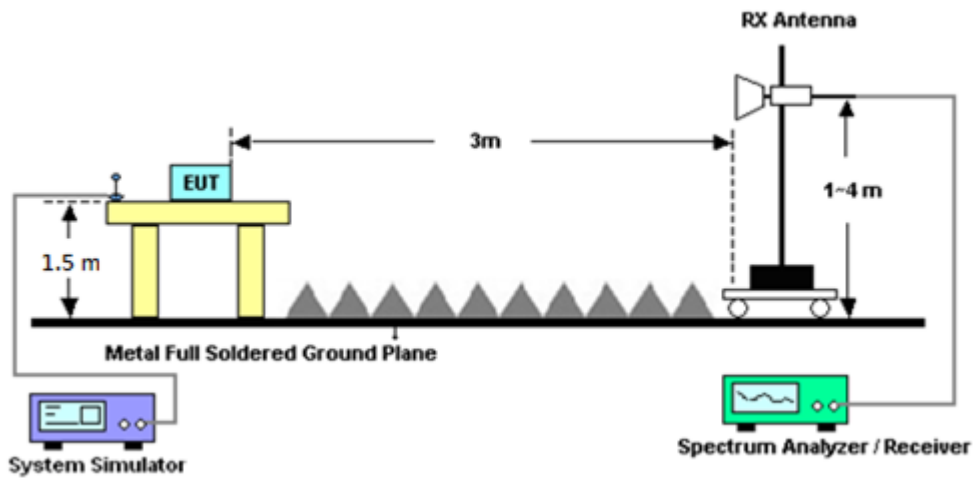
For radiated emissions below 30MHz



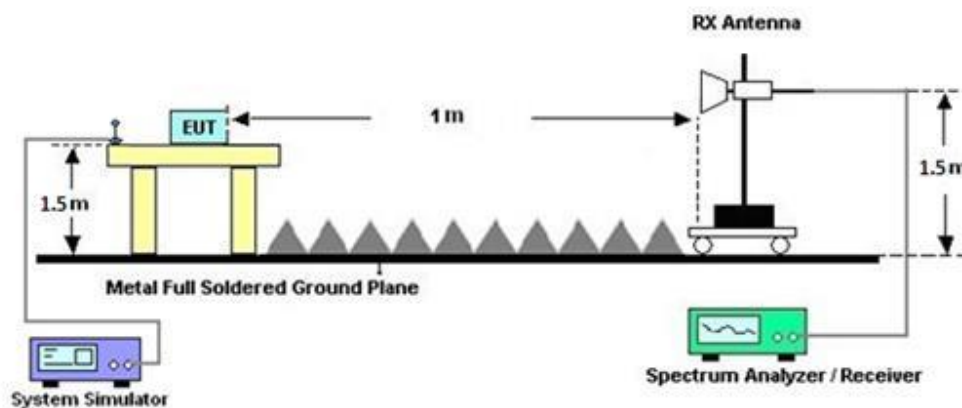
For radiated emissions from 30MHz to 1GHz



For radiated test from 1GHz to 18GHz



For radiated test above 18GHz



4.3 Test Result of Radiated Test

Please refer to Appendix B.

Note:

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not reported.

There is adequate comparison measurement of both open-field test site and alternative test site - semi-Anechoic chamber according to 414788 D01 Radiated Test Site v01r01, and the result came out very similar.



4.4 Radiated Spurious Emission

4.4.1 Description of Radiated Spurious Emission Measurement

The radiated spurious emission was measured by substitution method according to ANSI / TIA-603-E. 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 -40dBm / MHz .
The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

4.4.2 Test Procedures

The testing follows FCC KDB 971168 D01 v03r01 Section 7 and ANSI / TIA-603-E Section 2.2.12.

1. The EUT was placed on a turntable with 0.8 meter height for frequency below 1GHz and 1.5 meter height for frequency above 1GHz respectively above ground.
2. The EUT was set 3 meters from the receiving antenna 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 1m to 4m to search the maximum spurious emission for both horizontal and vertical polarizations.
5. During the measurement, the system simulator parameters were set to force the EUT transmitting at maximum output power.
6. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
7. A horn antenna was substituted in place of the EUT and was driven by a signal generator. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
$$\text{EIRP (dBm)} = \text{S.G. Power} - \text{Tx Cable Loss} + \text{Tx Antenna Gain}$$
$$\text{ERP (dBm)} = \text{EIRP} - 2.15$$
8. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
The limit line is -40dBm/MHz



5 List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Radio Communication Analyzer	Anritsu	MT8821C	6262025353	LTE FDD/TDD LTE-2CC DLCA/ULCA	Oct. 13, 2022	Apr. 17, 2023~ Apr. 28, 2023	Oct. 12, 2023	Conducted (TH03-HY)
Coupler	Warison	20dB 25W SMA Directional Coupler	#B	1-18GHz	Jan. 06, 2023	Apr. 17, 2023~ Apr. 28, 2023	Jan. 05, 2024	Conducted (TH03-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100488	9 kHz~30 MHz	Sep. 20, 2022	Apr. 20, 2023~ May 11, 2023	Sep. 19, 2023	Radiation (03CH12-HY)
Bilog Antenna	TESEQ	CBL 6111D & 00800N1D01 N-06	37059 & 01	30MHz~1GHz	Nov. 10, 2022	Apr. 20, 2023~ May 11, 2023	Nov. 09, 2023	Radiation (03CH12-HY)
Horn Antenna	SCHWARZBE CK	BBHA 9120 D	9120D-021 14	1GHz~18GHz	Aug. 09, 2022	Apr. 20, 2023~ May 11, 2023	Aug. 08, 2023	Radiation (03CH12-HY)
SHF-EHF Horn Antenna	SCHWARZBE CK	BBHA9170	00993	18GHz~40GHz	Nov. 24, 2022	Apr. 20, 2023~ May 11, 2023	Nov. 23, 2023	Radiation (03CH12-HY)
Preamplifier	COM-POWER	PA-103A	161241	10MHz~1GHz	Oct. 03, 2022	Apr. 20, 2023~ May 11, 2023	Oct. 02, 2023	Radiation (03CH12-HY)
Preamplifier	Agilent	8449B	3008A023 75	1GHz~26.5GHz	May 24, 2022	Apr. 20, 2023~ May 11, 2023	May 23, 2023	Radiation (03CH12-HY)
Preamplifier	E-INSTRUME NT TECH LTD.	ERA-100M-18 G-56-01-A70	EC190024 9	1GHz-18GHz	Dec. 21, 2022	Apr. 20, 2023~ May 11, 2023	Dec. 20, 2023	Radiation (03CH12-HY)
Preamplifier	EMEC	EM18G40G	060715	18GHz~40GHz	Dec. 07, 2022	Apr. 20, 2023~ May 11, 2023	Dec. 06, 2023	Radiation (03CH12-HY)
Spectrum Analyzer	Agilent	N9010A	MY534701 18	10Hz~44GHz	Jan. 10, 2023	Apr. 20, 2023~ May 11, 2023	Jan. 09, 2024	Radiation (03CH12-HY)
Filter	Wainwright	WHKX8-5872. 5-6750-18000 -40ST	SN2	6.75GHz High Pass Filter	Mar. 14, 2023	Apr. 20, 2023~ May 11, 2023	Mar. 13, 2024	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	803951/2	9kHz~30MHz	Mar. 07, 2023	Apr. 20, 2023~ May 11, 2023	Mar. 06, 2024	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 126E	0058/126E	30MHz~18GHz	Dec. 20, 2022	Apr. 20, 2023~ May 11, 2023	Dec. 19, 2023	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	505134/2	30MHz~40GHz	Dec. 20, 2022	Apr. 20, 2023~ May 11, 2023	Dec. 19, 2023	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	803953/2	30MHz~40GHz	Dec. 20, 2022	Apr. 20, 2023~ May 11, 2023	Dec. 19, 2023	Radiation (03CH12-HY)
Hygrometer	TECPEL	DTM-303B	TP210090	N/A	Oct. 03, 2022	Apr. 20, 2023~ May 11, 2023	Oct. 02, 2023	Radiation (03CH12-HY)
Controller	EMEC	EM1000	N/A	Control Turn table & Ant Mast	N/A	Apr. 20, 2023~ May 11, 2023	N/A	Radiation (03CH12-HY)
Antenna Mast	EMEC	AM-BS-4500- B	N/A	1m~4m	N/A	Apr. 20, 2023~ May 11, 2023	N/A	Radiation (03CH12-HY)
Turn Table	EMEC	TT2000	N/A	0~360 Degree	N/A	Apr. 20, 2023~ May 11, 2023	N/A	Radiation (03CH12-HY)
Software	Audix	E3 6.2009-8-24	RK-00098 9	N/A	N/A	Apr. 20, 2023~ May 11, 2023	N/A	Radiation (03CH12-HY)



6 Measurement Uncertainty

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	3.31 dB
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Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	3.25 dB
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Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	3.81 dB
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Appendix A. Test Results of Conducted Test

Conducted Output Power(Average power & EIRP)

LTE Band 48 Maximum Average Power [dBm] (GT - LC = -0.42 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
20	1	0	QPSK	20.02	19.95	19.94	19.60	0.0912
20	1	49		19.85	19.83	19.81		
20	1	99		19.72	19.76	19.64		
20	50	0		18.97	18.99	18.97		
20	50	24		18.92	18.92	18.91		
20	50	50		18.89	18.92	18.84		
20	100	0		18.90	18.89	18.89		
20	1	0	16-QAM	18.97	18.95	18.99	18.57	0.0719
20	1	49		18.92	18.86	18.82		
20	1	99		18.81	18.72	18.64		
20	50	0		17.96	17.97	17.96		
20	50	24		17.95	18.02	17.93		
20	50	50		17.90	17.90	17.87		
20	100	0		17.90	17.94	17.91		
20	1	0	64-QAM	17.89	17.93	17.90	17.51	0.0564
20	1	49		17.78	17.71	17.80		
20	1	99		17.68	17.69	17.53		
20	50	0		16.96	17.03	16.95		
20	50	24		16.93	16.89	16.90		
20	50	50		16.90	16.85	16.84		
20	100	0		16.90	16.93	16.90		
20	1	0	256-QAM	15.71	15.50	15.60	15.35	0.0343
20	1	49		15.61	15.45	15.53		
20	1	99		15.75	15.63	15.57		
20	50	0		15.77	15.66	15.61		
20	50	24		15.70	15.55	15.58		
20	50	50		15.66	15.55	15.57		
20	100	0		15.71	15.57	15.56		
Limit	EIRP < 23dBm/10MHz			Result			Pass	

Total EIRP power is less than partial EIRP limit 23 dBm/10MHz.



LTE Band 48 Maximum Average Power [dBm] (GT - LC = -0.42 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
15	1	0	QPSK	19.96	19.98	19.86	19.56	0.0904
15	1	37		19.84	19.85	19.80		
15	1	74		19.62	19.70	19.58		
15	36	0		18.92	19.04	18.89		
15	36	20		18.87	18.95	18.87		
15	36	39		18.84	18.88	18.76		
15	75	0		18.85	18.94	18.82		
15	1	0	16-QAM	18.94	18.89	18.91	18.52	0.0711
15	1	37		18.87	18.89	18.82		
15	1	74		18.74	18.74	18.57		
15	36	0		17.87	17.97	17.91		
15	36	20		17.89	18.01	17.87		
15	36	39		17.90	17.85	17.79		
15	75	0		17.86	17.91	17.85		
15	1	0	64-QAM	17.84	17.99	17.83	17.57	0.0571
15	1	37		17.71	17.70	17.74		
15	1	74		17.62	17.68	17.53		
15	36	0		16.96	16.96	16.92		
15	36	20		16.88	16.98	16.84		
15	36	39		16.80	16.90	16.74		
15	75	0		16.83	16.97	16.89		
15	1	0	256-QAM	15.71	15.51	15.58	15.29	0.0338
15	1	37		15.52	15.48	15.51		
15	1	74		15.65	15.66	15.51		
15	36	0		15.71	15.63	15.59		
15	36	20		15.60	15.60	15.49		
15	36	39		15.65	15.59	15.48		
15	75	0		15.62	15.63	15.51		
Limit	EIRP < 23dBm/10MHz			Result			Pass	

Total EIRP power is less than partial EIRP limit 23 dBm/10MHz.



LTE Band 48 Maximum Average Power [dBm] (GT - LC = -0.42 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
10	1	0	QPSK	19.99	19.94	19.89	19.57	0.0906
10	1	25		19.77	19.78	19.80		
10	1	49		19.62	19.68	19.61		
10	25	0		18.87	19.05	18.97		
10	25	12		18.92	18.94	18.87		
10	25	25		18.85	18.88	18.84		
10	50	0		18.81	18.95	18.79		
10	1	0	16-QAM	18.91	18.94	18.92	18.52	0.0711
10	1	25		18.86	18.88	18.81		
10	1	49		18.73	18.72	18.64		
10	25	0		17.86	17.94	17.91		
10	25	12		17.95	17.95	17.83		
10	25	25		17.82	17.88	17.83		
10	50	0		17.87	17.96	17.87		
10	1	0	64-QAM	17.84	17.93	17.85	17.51	0.0564
10	1	25		17.77	17.76	17.73		
10	1	49		17.67	17.61	17.53		
10	25	0		16.86	17.00	16.89		
10	25	12		16.83	16.98	16.85		
10	25	25		16.90	16.89	16.77		
10	50	0		16.89	16.99	16.89		
10	1	0	256-QAM	15.66	15.57	15.50	15.30	0.0339
10	1	25		15.60	15.52	15.53		
10	1	49		15.66	15.57	15.51		
10	25	0		15.72	15.68	15.58		
10	25	12		15.60	15.55	15.50		
10	25	25		15.58	15.57	15.53		
10	50	0		15.67	15.61	15.49		
Limit	EIRP < 23dBm/10MHz			Result			Pass	

Total EIRP power is less than partial EIRP limit 23 dBm/10MHz.



LTE Band 48 Maximum Average Power [dBm] (GT - LC = -0.42 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
5	1	0	QPSK	19.98	19.86	19.84	19.56	0.0904
5	1	12		19.77	19.84	19.77		
5	1	24		19.66	19.72	19.56		
5	12	0		18.89	19.05	18.96		
5	12	7		18.87	18.97	18.81		
5	12	13		18.79	18.86	18.74		
5	25	0		18.82	18.89	18.84		
5	1	0	16-QAM	18.92	18.95	18.98	18.56	0.0718
5	1	12		18.92	18.91	18.78		
5	1	24		18.72	18.69	18.63		
5	12	0		17.92	18.02	17.93		
5	12	7		17.94	17.94	17.86		
5	12	13		17.80	17.86	17.77		
5	25	0		17.89	17.94	17.91		
5	1	0	64-QAM	17.87	17.98	17.83	17.56	0.0570
5	1	12		17.76	17.76	17.78		
5	1	24		17.67	17.69	17.54		
5	12	0		16.95	16.93	16.85		
5	12	7		16.89	16.93	16.83		
5	12	13		16.84	16.89	16.76		
5	25	0		16.83	16.93	16.84		
5	1	0	256-QAM	15.70	15.54	15.51	15.28	0.0337
5	1	12		15.57	15.50	15.48		
5	1	24		15.65	15.65	15.54		
5	12	0		15.69	15.61	15.52		
5	12	7		15.65	15.59	15.54		
5	12	13		15.60	15.59	15.56		
5	25	0		15.69	15.56	15.47		
Limit	EIRP < 23dBm/10MHz			Result			Pass	

Total EIRP power is less than partial EIRP limit 23 dBm/10MHz.



Appendix B. Test Results of Radiated Test

LTE Band 48

LTE Band 48 / 5MHz / QPSK									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	7100	-46.40	-40	-6.40	-43.91	-56.11	1.84	11.55	H
	10651	-50.84	-40	-10.84	-52.31	-59.31	2.23	10.71	H
	14201	-50.72	-40	-10.72	-58.41	-60.35	2.65	12.28	H
	21302	-60.18	-40	-20.18	-73.81	-75.02	3.32	18.16	H
	24852	-59.97	-40	-19.97	-77.45	-74.74	3.71	18.49	H
	28402	-56.78	-40	-16.78	-76.29	-72.25	3.99	19.46	H
	7100	-44.25	-40	-4.25	-42	-53.96	1.84	11.55	V
	10651	-48.08	-40	-8.08	-49.13	-56.55	2.23	10.71	V
	14201	-50.96	-40	-10.96	-58.52	-60.59	2.65	12.28	V
	21302	-62.80	-40	-22.80	-76.15	-77.64	3.32	18.16	V
	24852	-60.27	-40	-20.27	-77.43	-75.04	3.71	18.49	V
	28402	-57.83	-40	-17.83	-76.92	-73.30	3.99	19.46	V
Middle	7245	-44.08	-40	-4.08	-41.92	-53.54	1.86	11.32	H
	10868	-48.45	-40	-8.45	-50.29	-56.82	2.21	10.58	H
	14491	-50.04	-40	-10.04	-57.86	-59.52	2.62	12.11	H
	18114	-58.28	-40	-18.28	-69.12	-72.65	3.23	17.60	H
	21737	-57.84	-40	-17.84	-72.25	-73.04	3.44	18.64	H
	25359	-58.02	-40	-18.02	-75.61	-73.06	3.79	18.83	H
	7245	-41.37	-40	-1.37	-39.53	-50.83	1.86	11.32	V
	10868	-45.65	-40	-5.65	-47.28	-54.02	2.21	10.58	V
	14491	-50.21	-40	-10.21	-58.52	-59.69	2.62	12.11	V
	18114	-60.42	-40	-20.42	-70.96	-74.79	3.23	17.60	V
	21737	-53.06	-40	-13.06	-67.13	-68.26	3.44	18.64	V
	25359	-60.33	-40	-20.33	-77.64	-75.37	3.79	18.83	V



Highest	7390	-41.80	-40	-1.80	-40.11	-51.26	1.94	11.40	H
	11086	-54.41	-40	-14.41	-56.77	-62.78	2.23	10.60	H
	14781	-50.24	-40	-10.24	-58.4	-60.37	2.59	12.72	H
	18476	-63.40	-40	-23.40	-74.66	-77.76	3.24	17.60	H
	22172	-56.86	-40	-16.86	-71.64	-72.21	3.52	18.87	H
	25867	-59.32	-40	-19.32	-77.25	-74.49	3.91	19.07	H
									H
	7390	-41.32	-40	-1.32	-39.74	-50.78	1.94	11.40	V
	11086	-53.63	-40	-13.63	-55.93	-62.00	2.23	10.60	V
	14781	-48.93	-40	-8.93	-58.15	-59.06	2.59	12.72	V
	18476	-60.87	-40	-20.87	-71.9	-75.23	3.24	17.60	V
	22172	-58.90	-40	-18.90	-73.29	-74.25	3.52	18.87	V
	25867	-59.15	-40	-19.15	-76.77	-74.32	3.91	19.07	V
									V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.