



FCC RADIO TEST REPORT

FCC ID : PKRISGM2000B
Equipment : Wireless Hotspot Modem
Brand Name : Inseego
Model Name : M2000B
M2000E
Marketing Name : M2000
Applicant : Inseego Corporation
9710 Scranton Road Suite 200, San Diego, CA 92121
Manufacturer : Inseego Corporation
9710 Scranton Road Suite 200, San Diego, CA 92121
Standard : FCC 47 CFR Part 2, 96

The product was received on Feb. 02, 2021 and testing was started from Feb. 12, 2021 and completed on Mar. 31, 2021. 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 variant report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.

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	Issued Date
FG041658-02C	01	Initial issue of report	Apr. 21, 2021

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.2	\$2.1046	Conducted Output Power	Reporting only	-
-	§96.41	Peak-to-Average Ratio	Not Required	-
3.3	§96.41	Effective Isotropic Radiated Power	Pass	-
-	\$2.1049 §96.41	Occupied Bandwidth	Not Required	-
-	\$2.1051 §96.41	Conducted Band Edge Measurement	Not Required	-
-	\$2.1051 §96.41	Conducted Spurious Emission	Not Required	-
-	\$2.1055	Frequency Stability for Temperature & Voltage	Not Required	-
4.4	\$2.1051 §96.41	Radiated Spurious Emission	Pass	Under limit 2.90 dB at 25767.000 MHz
Remark: 1. Not required means after assessing, test items are not necessary to carry out. 2. This is a variant report by changing WWAN function by software. All the test cases were performed on original report which can be referred to Sporton Report Number FG041658-01G.				

Declaration of Conformity:

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

Comments and Explanations:

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

Reviewed by: Wii Chang

Report Producer: Dara Chiu



1 General Description

1.1 Product Feature of Equipment Under Test

WCDMA/LTE/5G NR, Wi-Fi 2.4GHz 802.11b/g/n/ax, Wi-Fi 5GHz 802.11a/n/ac/ax and GNSS

Product Specification subjective to this standard	
Antenna Type	WWAN: Fixed Internal Antenna WLAN: <Ant. 1>: Fixed Internal Antenna <Ant. 2>: Fixed Internal Antenna GPS: Fixed Internal Antenna
Antenna Gain	<Ant. 4>: 3.4 dBi

Remark: The above EUT's information was declared by manufacturer. Please refer to Comments and Explanations in report summary.

1.2 Modification of EUT

No modifications are made to the EUT during all test items.

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. TH05-HY
Test Engineer	Benjamin Lin
Temperature	22.2 ~ 24.9°C
Relative Humidity	48.4 ~ 53.1%

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	Jack Cheng, Lance Chiang, and Chuan Chu
Temperature	21.3 ~ 24.5°C
Relative Humidity	54 ~ 65%

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

FCC Designation No. TW1190 and TW0007



1.4 Applied Standards

According to the specifications of 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 test items were verified and recorded according to the standards and without any deviation during the test.
2. The TAF code is not including all the FCC KDB listed without accreditation.

2 Test Configuration of Equipment Under Test

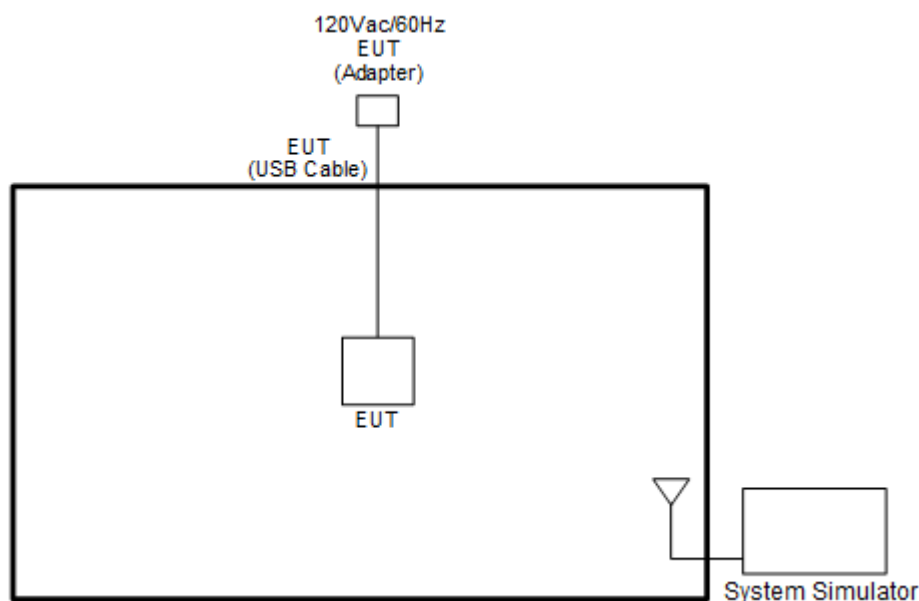
2.1 Test Mode

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, pre-scanned in three orthogonal panels, X, Y, Z. The worst cases (Z plane) were recorded in this report.

Test Items	Band	Bandwidth (MHz)						Modulation			RB #			Test Channel		
		1.4	3	5	10	15	20	QPSK	16QAM	64QAM	1	Half	Full	L	M	H
Max. Output Power	43	-	-	v	v	v	v	v	v	v	v	v	v	v	v	v
E.I.R.P	43	-	-	v	v	v	v	v	v	v	Max. Power					
Radiated Spurious Emission	43	Worst Case												v	v	v
Remark	1. The mark “v “ means that this configuration is chosen for testing 2. The mark “-“ means that this bandwidth is not supported. 3. 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. 4. All the radiated test cases were performed with Battery 2.															

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	8821C	N/A	N/A	Unshielded, 1.8 m

2.4 Frequency List of Low/Middle/High Channels

LTE Band 43 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	43690	44090	44490
	Frequency	3610.0	3650.0	3690.0
15	Channel	43665	44090	44515
	Frequency	3607.5	3650.0	3692.5
10	Channel	43640	44090	44540
	Frequency	3605.0	3650.0	3695.0
5	Channel	43615	44090	44565
	Frequency	3602.5	3650.0	3697.5

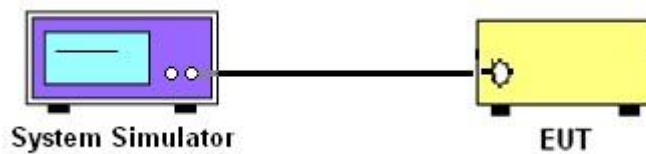
3 Conducted Test Items

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 43

The testing follows ANSI C63.26-2015 Section 5.2.5.5

According to KDB 412172 D01 Power Approach,

$EIRP = PT + GT - LC$, where

PT = transmitter output power in dBm

GT = gain of the transmitting antenna in dBi

LC = 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

3.3.2 Test Procedures

The testing follows procedure in Section 5.2 of ANSI C63.26-2015 and KDB 940660 D01 Part 96 Eqpt v02 Section 3.2(b)(2)

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

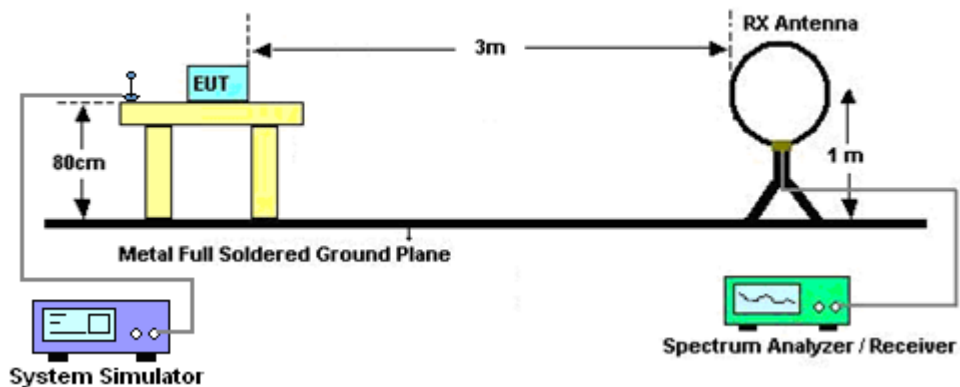
4 Radiated Test Items

4.1 Measuring Instruments

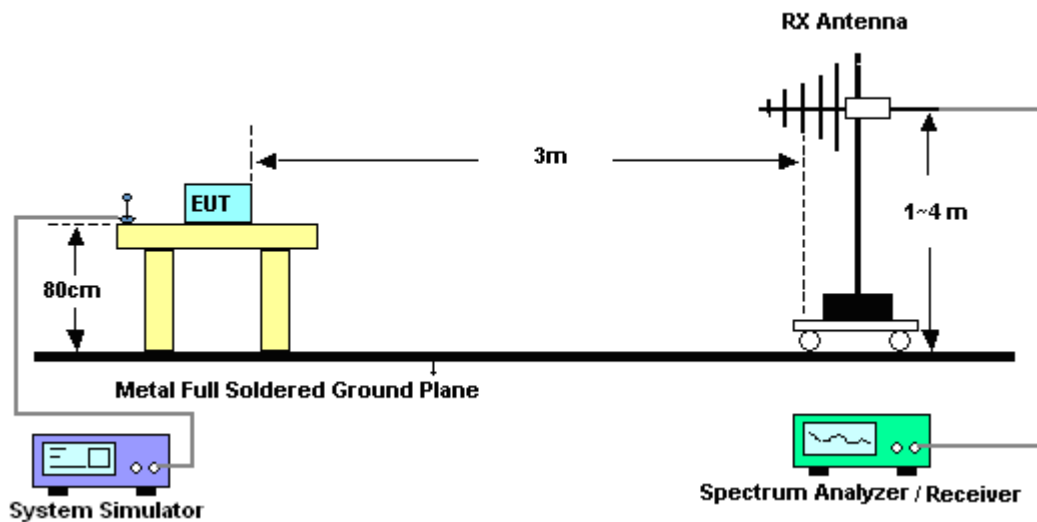
See list of measuring instruments of this test report.

4.2 Test Setup

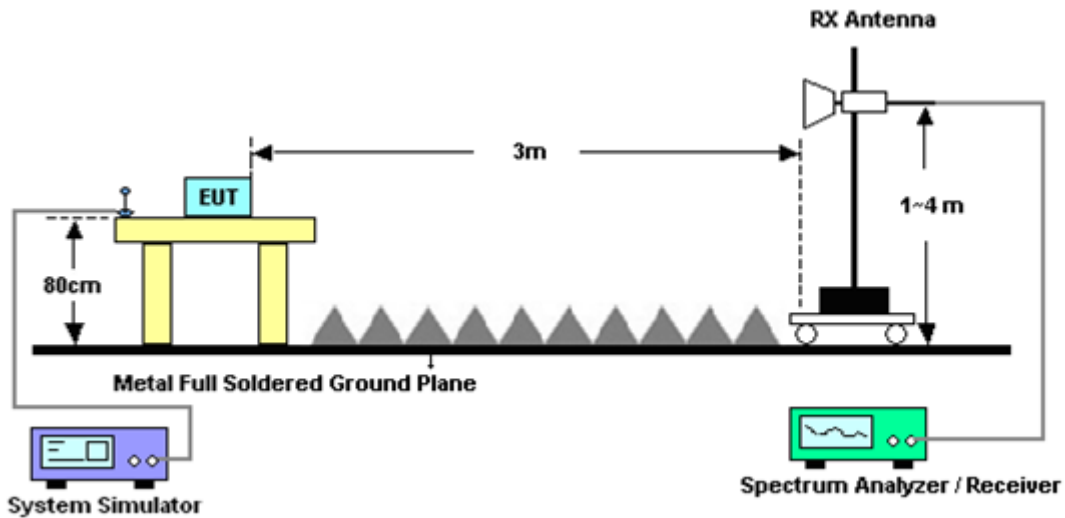
For radiated emissions below 30MHz



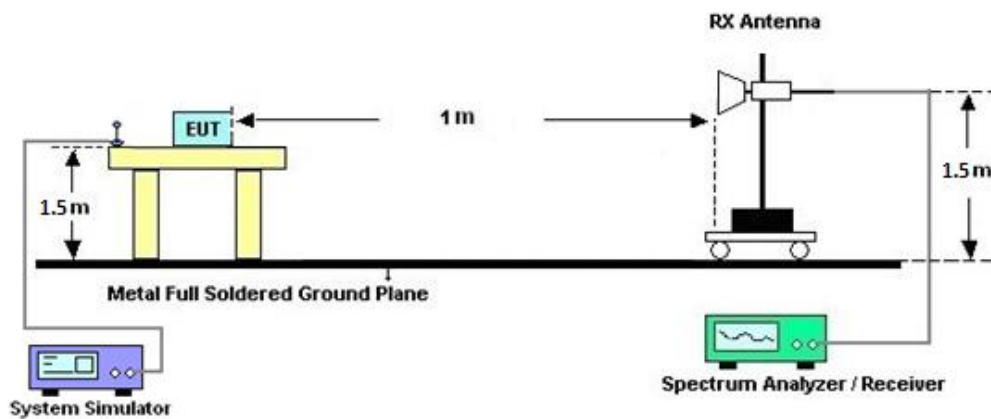
For radiated emissions from 30MHz to 1GHz



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 a comparison data 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
Base Station (Measure)	Anritsu	MT8821C	6262025341	GSM / GPRS / WCDMA / LTE FDD/TDD with 44) / LTE-3CC DLCA,2CC ULCA	Oct. 06, 2020	Feb. 14, 2021 ~ Mar. 31, 2021	Oct. 05, 2021	Conducted (TH05-HY)
Spectrum Analyzer	Rohde & Schwarz	FSV40	101908	10Hz~40GHz	May 13, 2020	Feb. 14, 2021 ~ Mar. 31, 2021	May 12, 2021	Conducted (TH05-HY)
Thermal Chamber	ESPEC	SU-241	92003713	-40℃~90℃	May 15, 2020	Feb. 14, 2021 ~ Mar. 31, 2021	May 14, 2021	Conducted (TH05-HY)
Programmable Power Supply	GW Instek	GPP-2323	GES906037	0V~64V : 0A~6A	Dec. 15, 2020	Feb. 14, 2021 ~ Mar. 31, 2021	Dec. 14, 2021	Conducted (TH05-HY)
Coupler	Warison	20dB 25W SMA Directional Coupler	#A	1-18GHz	Jan. 12, 2021	Feb. 14, 2021 ~ Mar. 31, 2021	Jan. 11, 2022	Conducted (TH05-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100315	9 kHz~30 MHz	Jan. 04, 2021	Feb. 12, 2021 ~ Mar. 27, 2021	Jan. 03, 2022	Radiation (03CH12-HY)
Bilog Antenna	TESEQ	CBL 6111D & 00800N1D01N -06	40103 & 07	30MHz~1GHz	Apr. 29, 2020	Feb. 12, 2021 ~ Mar. 27, 2021	Apr. 28, 2021	Radiation (03CH12-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1328	1GHz~18GHz	Nov. 23, 2020	Feb. 12, 2021 ~ Mar. 27, 2021	Nov. 22, 2021	Radiation (03CH12-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1212	1GHz~18GHz	May 20, 2020	Feb. 12, 2021 ~ Mar. 27, 2021	May 19, 2021	Radiation (03CH12-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	00993	18GHz~40GHz	Dec. 19, 2020	Feb. 12, 2021 ~ Mar. 27, 2021	Dec. 18, 2021	Radiation (03CH12-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170576	18GHz~40GHz	May 22, 2020	Feb. 12, 2021 ~ Mar. 27, 2021	May 21, 2021	Radiation (03CH12-HY)
Preamplifier	COM-POWER	PA-103	161075	10MHz~1GHz	Mar. 25, 2020	Feb. 12, 2021 ~ Mar. 23, 2021	Mar. 24, 2021	Radiation (03CH12-HY)
Preamplifier	COM-POWER	PA-103	161075	10MHz~1GHz	Mar. 24, 2021	Mar. 24, 2021 ~ Mar. 27, 2021	Mar. 23, 2022	Radiation (03CH12-HY)
Preamplifier	Keysight	83017A	MY57280120	1GHz~26.5GHz	Jul. 20, 2020	Feb. 12, 2021 ~ Mar. 27, 2021	Jul. 19, 2021	Radiation (03CH12-HY)
Preamplifier	E-INSTRUMENT TECH LTD.	ERA-100M-18 G-56-01-A70	EC1900249	1GHz-18GHz	Dec. 05, 2020	Feb. 12, 2021 ~ Mar. 27, 2021	Dec. 04, 2021	Radiation (03CH12-HY)
Preamplifier	EMEC	EM18G40G	060715	18GHz~40GHz	Dec. 11, 2020	Feb. 12, 2021 ~ Mar. 27, 2021	Dec. 10, 2021	Radiation (03CH12-HY)
Spectrum Analyzer	Agilent	N9010A	MY53470118	10Hz~44GHz	Jan. 15, 2021	Feb. 12, 2021 ~ Mar. 27, 2021	Jan. 14, 2022	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY9837/4PE	9kHz~30MHz	Mar. 12, 2020	Feb. 12, 2021 ~ Mar. 10, 2021	Mar. 11, 2021	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY9837/4PE	9kHz~30MHz	Mar. 11, 2021	Mar. 11, 2021 ~ Mar. 27, 2021	Mar. 10, 2022	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 126E	0058/126E	30MHz~18GHz	Dec. 11, 2020	Feb. 12, 2021 ~ Mar. 27, 2021	Dec. 10, 2021	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	505134/2	30MHz~40GHz	Feb. 25, 2020	Feb. 12, 2021 ~ Feb. 22, 2021	Feb. 24, 2021	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	505134/2	30MHz~40GHz	Feb. 22, 2021	Feb. 23, 2021 ~ Mar. 27, 2021	Feb. 21, 2022	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	800740/2	30MHz~40GHz	Feb. 25, 2020	Feb. 12, 2021 ~ Feb. 22, 2021	Feb. 24, 2021	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	800740/2	30MHz~40GHz	Feb. 22, 2021	Feb. 23, 2021 ~ Mar. 27, 2021	Feb. 21, 2022	Radiation (03CH12-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1m~4m	N/A	Feb. 12, 2021 ~ Mar. 27, 2021	N/A	Radiation (03CH12-HY)
Turn Table	EMEC	TT2000	N/A	0~360 Degree	N/A	Feb. 12, 2021 ~ Mar. 27, 2021	N/A	Radiation (03CH12-HY)



Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Software	Audix	E3 6.2009-8-24	RK-000989	N/A	N/A	Feb. 12, 2021 ~ Mar. 27, 2021	N/A	Radiation (03CH12-HY)
Filter	Wainwright	WLKS1200-12 SS	SN2	1.2GHz Low Pass Filter	Mar. 21, 2020	Feb.12, 2021 ~ Mar. 16, 2021	Mar. 20, 2021	Radiation (03CH12-HY)
Filter	Wainwright	WLKS1200-12 SS	SN2	1.2GHz Low Pass Filter	Mar. 17, 2021	Mar. 17, 2021 ~ Mar. 27, 2021	Mar. 16, 2022	Radiation (03CH12-HY)
Filter	Wainwright	WHKX12-2700 -3000-18000-6 0ST	SN2	3GHz High Pass Filter	Jul. 14, 2020	Feb. 12, 2021 ~ Mar. 27, 2021	Jul. 13, 2021	Radiation (03CH12-HY)
Filter	Wainwright	WHKX8-5872. 5-6750-18000- 40ST	SN2	6.75GHz High Pass Filter	Mar. 18, 2020	Feb.12, 2021 ~ Mar. 16, 2021	Mar. 17, 2021	Radiation (03CH12-HY)
Filter	Wainwright	WHKX8-5872. 5-6750-18000- 40ST	SN2	6.75GHz High Pass Filter	Mar. 17, 2021	Mar. 17, 2021 ~ Mar. 27, 2021	Mar. 16, 2022	Radiation (03CH12-HY)

6 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	3.07
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Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	3.21
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Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	3.80
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Appendix A. Test Results of Conducted Test

Conducted Output Power(Average power & EIRP)

LTE Band 43 Maximum Average Power [dBm] (GT - LC = 3.4 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
20	1	0	QPSK	17.85	18.80	19.49	22.89	0.1945
20	1	49		18.02	18.73	19.18		
20	1	99		18.30	18.68	19.33		
20	50	0		17.32	18.06	18.31		
20	50	24		17.36	18.06	18.52		
20	50	50		17.43	17.97	18.64		
20	100	0		17.38	18.05	18.54		
20	1	0	16-QAM	17.29	18.17	18.36	22.31	0.1702
20	1	49		17.42	18.17	18.61		
20	1	99		17.74	18.07	18.91		
20	50	0		16.36	17.09	17.33		
20	50	24		16.41	17.15	17.56		
20	50	50		16.53	17.05	17.67		
20	100	0		16.45	17.09	17.52		
20	1	0	64-QAM	16.12	16.97	17.00	21.09	0.1285
20	1	49		16.24	16.91	17.37		
20	1	99		16.53	16.84	17.69		
20	50	0		15.42	16.11	16.37		
20	50	24		15.49	16.14	16.52		
20	50	50		15.50	16.05	16.67		
20	100	0		15.46	16.14	16.53		
Limit	EIRP < 23dBm/10MHz			Result			Pass	



LTE Band 43 Maximum Average Power [dBm] (GT - LC = 3.4 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
15	1	0	QPSK	18.01	18.93	19.17	22.87	0.1936
15	1	37		18.10	18.92	19.46		
15	1	74		18.28	18.83	19.47		
15	36	0		17.28	18.08	18.40		
15	36	20		17.33	18.10	18.60		
15	36	39		17.38	18.05	18.70		
15	75	0		17.37	18.09	18.59		
15	1	0	16-QAM	17.32	18.25	18.45	22.37	0.1726
15	1	37		17.45	18.15	18.67		
15	1	74		17.57	18.10	18.97		
15	36	0		16.33	17.07	17.44		
15	36	20		16.33	17.08	17.58		
15	36	39		16.39	17.06	17.67		
15	75	0		16.40	17.13	17.64		
15	1	0	64-QAM	16.15	16.99	17.17	21.09	0.1285
15	1	37		16.21	16.99	17.46		
15	1	74		16.40	16.90	17.69		
15	36	0		15.35	16.11	16.48		
15	36	20		15.39	16.14	16.65		
15	36	39		15.44	16.07	16.72		
15	75	0		15.45	16.18	16.66		
Limit	EIRP < 23dBm/10MHz			Result			Pass	



LTE Band 43 Maximum Average Power [dBm] (GT - LC = 3.4 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
10	1	0	QPSK	18.02	18.83	19.20	22.83	0.1919
10	1	25		17.99	18.85	19.35		
10	1	49		18.13	18.78	19.43		
10	25	0		17.23	18.00	18.48		
10	25	12		17.27	18.08	18.61		
10	25	25		17.31	18.01	18.56		
10	50	0		17.29	18.05	18.61		
10	1	0	16-QAM	17.40	18.29	18.67	22.37	0.1726
10	1	25		17.51	18.24	18.78		
10	1	49		17.53	18.13	18.97		
10	25	0		16.22	16.97	17.48		
10	25	12		16.31	17.06	17.63		
10	25	25		16.30	17.02	17.69		
10	50	0		16.33	17.13	17.68		
10	1	0	64-QAM	16.35	17.03	17.42	21.22	0.1324
10	1	25		16.25	17.00	17.65		
10	1	49		16.36	17.04	17.82		
10	25	0		15.38	16.10	16.63		
10	25	12		15.34	16.17	16.74		
10	25	25		15.44	16.13	16.82		
10	50	0		15.35	16.10	16.70		
Limit	EIRP < 23dBm/10MHz			Result			Pass	



LTE Band 43 Maximum Average Power [dBm] (GT - LC = 3.4 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
5	1	0	QPSK	18.05	18.82	19.33	22.88	0.1941
5	1	12		18.00	18.82	19.35		
5	1	24		18.10	18.86	19.48		
5	12	0		17.20	18.06	18.70		
5	12	7		17.25	18.06	18.69		
5	12	13		17.23	18.06	18.74		
5	25	0		17.20	18.00	18.68		
5	1	0	16-QAM	17.37	18.17	18.78	22.37	0.1726
5	1	12		17.39	18.21	18.86		
5	1	24		17.44	18.17	18.97		
5	12	0		16.23	17.09	17.72		
5	12	7		16.25	17.08	17.75		
5	12	13		16.24	17.07	17.79		
5	25	0		16.28	17.08	17.75		
5	1	0	64-QAM	16.17	17.01	17.59	21.15	0.1303
5	1	12		16.13	17.00	17.62		
5	1	24		16.23	17.03	17.75		
5	12	0		15.30	16.16	16.68		
5	12	7		15.34	16.16	16.74		
5	12	13		15.30	16.14	16.74		
5	25	0		15.31	16.10	16.75		
Limit	EIRP < 23dBm/10MHz			Result			Pass	



Appendix B. Test Results of Radiated Test

<Ant. 4>

LTE Band 43

LTE Band 43/ 20MHz / QPSK									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	7202	-46.38	-40	-6.38	-42.59	-56.13	1.83	11.58	H
	10803	-55.98	-40	-15.98	-53.79	-64.33	2.55	10.90	H
	14404	-55.24	-40	-15.24	-57.89	-63.61	2.86	11.23	H
	18005	-53.84	-40	-13.84	-71.71	-70.11	1.73	18.00	H
	21606	-46.10	-40	-6.10	-67.47	-62.88	1.96	18.74	H
	25207	-47.52	-40	-7.52	-72.57	-63.99	2.12	18.59	H
									H
	7202	-49.05	-40	-9.05	-44.98	-58.80	1.83	11.58	V
	10803	-55.51	-40	-15.51	-53.1	-63.86	2.55	10.90	V
	14404	-56.10	-40	-16.10	-58.06	-64.47	2.86	11.23	V
	18005	-55.15	-40	-15.15	-72.08	-71.42	1.73	18.00	V
	21606	-51.05	-40	-11.05	-72.41	-67.83	1.96	18.74	V
	25207	-48.71	-40	-8.71	-74.98	-65.18	2.12	18.59	V
									V



Middle	7282	-49.01	-40	-9.01	-45.1	-58.59	1.87	11.45	H
	10923	-53.91	-40	-13.91	-51.89	-62.20	2.61	10.90	H
	14564	-51.90	-40	-11.90	-54.77	-60.24	2.87	11.20	H
	18205	-49.06	-40	-9.06	-67.13	-65.22	1.80	17.96	H
	21846	-44.85	-40	-4.85	-66.3	-61.64	2.04	18.84	H
	25487	-44.39	-40	-4.39	-69.83	-61.20	2.17	18.98	H
	29128	-47.61	-40	-7.61	-72.7	-64.38	2.31	19.08	H
	7282	-45.74	-40	-5.74	-41.59	-55.32	1.87	11.45	V
	10923	-56.57	-40	-16.57	-54.36	-64.86	2.61	10.90	V
	14564	-55.96	-40	-15.96	-57.72	-64.30	2.87	11.20	V
	18205	-55.98	-40	-15.98	-73.14	-72.14	1.80	17.96	V
	21846	-47.74	-40	-7.74	-69.18	-64.53	2.04	18.84	V
	25487	-48.16	-40	-8.16	-74.94	-64.97	2.17	18.98	V
	29128	-49.82	-40	-9.82	-76.47	-66.59	2.31	19.08	V
Highest	7362	-50.39	-40	-10.39	-46.37	-59.80	1.92	11.32	H
	11043	-57.37	-40	-17.37	-55.61	-65.69	2.63	10.95	H
	14724	-47.65	-40	-7.65	-51.3	-56.45	2.91	11.72	H
	18405	-54.71	-40	-14.71	-72.99	-70.76	1.87	17.92	H
	22086	-46.97	-40	-6.97	-68.88	-63.76	2.08	18.87	H
	25767	-42.90	-40	-2.90	-68.78	-59.92	2.03	19.05	H
									H
	7362	-49.19	-40	-9.19	-44.99	-58.60	1.92	11.32	V
	11043	-57.77	-40	-17.77	-55.85	-66.09	2.63	10.95	V
	14724	-54.20	-40	-14.20	-56.18	-63.00	2.91	11.72	V
	18405	-56.06	-40	-16.06	-73.46	-72.11	1.87	17.92	V
	22086	-48.06	-40	-8.06	-69.97	-64.85	2.08	18.87	V
	25767	-43.61	-40	-3.61	-70.68	-60.63	2.03	19.05	V
									V

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