FCC RADIO TEST REPORT

FCC ID	:	**PKRISGFX31001**
Equipment	:	**Indoor Router**
Brand Name	:	**Inseego**
Model Name	:	**FX3100-1**
Marketing Name	:	**FX3100**
Applicant	:	**Inseego Corp.** **9710 Scranton Road Suite 200, San Diego, CA 92121**
Manufacturer	:	**Inseego Corp.** **9710 Scranton Road Suite 200, San Diego, CA 92121**
Standard	:	**FCC 47 CFR Part 2, and 90(S)**

The product was received on Mar. 03, 2023 and testing was performed from Mar. 03, 2023 to Apr. 06, 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.)
TEL : 886-3-327-3456
FAX : 886-3-328-4978

Table of Contents

History of this test report

Report No.	Version	Description	Issue Date
FG290606F	01	Initial issue of report	Apr. 13, 2023

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.2	§2.1046 §90.635	Conducted Output Power and Effective Radiated Power	Pass	-
-	-	Peak-to-Average Ratio	-	See Note
-	§2.1049 §90.209	Occupied Bandwidth and 26dB Bandwidth	-	See Note
-	§2.1051 §90.691	Emission masks – In-band emissions	-	See Note
-	§2.1051 §90.691	Emission masks – Out of band emissions	-	See Note
-	§2.1055 §90.213	Frequency Stability for Temperature & Voltage	-	See Note
3.3	§2.1053 §90.691	Field Strength of Spurious Radiation	Pass	22.98 dB under the limit at 2448.000 MHz

Note: The RF circuit and output power level are the same in WWAN function across all two FCC ID PKRISGM3000B and PKRISGFX31001, since the change, only verify RF output power and radiated spurious emission test data the worst mode was reported in this report.

Conformity Assessment Condition:
1. 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. 2. Please refer to the section “Uncertainty of Evaluation” for 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: Avis Chuang

Report Producer: Cindy Liu

1 General Description

1.1 Feature of Equipment Under Test

Product Feature	
General Specs 4G-LTE, 5G-FR1, Wi-Fi 2.4GHz 802.11 b/g/n/ax, Wi-Fi 5GHz 802.11 a/n/ac/ax, and GNSS. **Antenna Type** WWAN: Fixed Internal Antenna WLAN: Fixed Internal Antenna GPS / Glonass / BDS / Galileo: Fixed Internal Antenna	
Antenna Gain	5G-FR1 n26: 0.8 dBi

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 Site

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	03CH07-HY
Test Engineer	Sherry Wu	Jesse Wang, Stan Hsieh and Ken Wu
Temperature (℃)	20~24	21~25.6
Relative Humidity (%)	50~58	54.7~66.2

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

FCC Designation No.: TW1190

1.4 Applied Standards

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

- FCC 47 CFR Part 2, 90
- ANSI / TIA-603-E
- ANSI C63.26-2015
- FCC KDB 971168 D01 Power Meas. License Digital Systems v03r01
- FCC KDB 412172 D01 Determining ERP and EIRP v01r01
- FCC KDB 414788 D01 Radiated Test Site v01r01
- Interim Guidance for Equipment Authorization of Devices with Channel Bandwidths Combined Across Two Contiguous Service Rule Allocations OET/Lab/EACB, June 6, 2013

Remark:

1. All the test items were validated and recorded in accordance with the standards without any modification during the testing.
2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.
3. The TAF code is not including all the FCC KDB listed without accreditation.

2 Test Configuration of Equipment Under Test

2.1 Test Mode

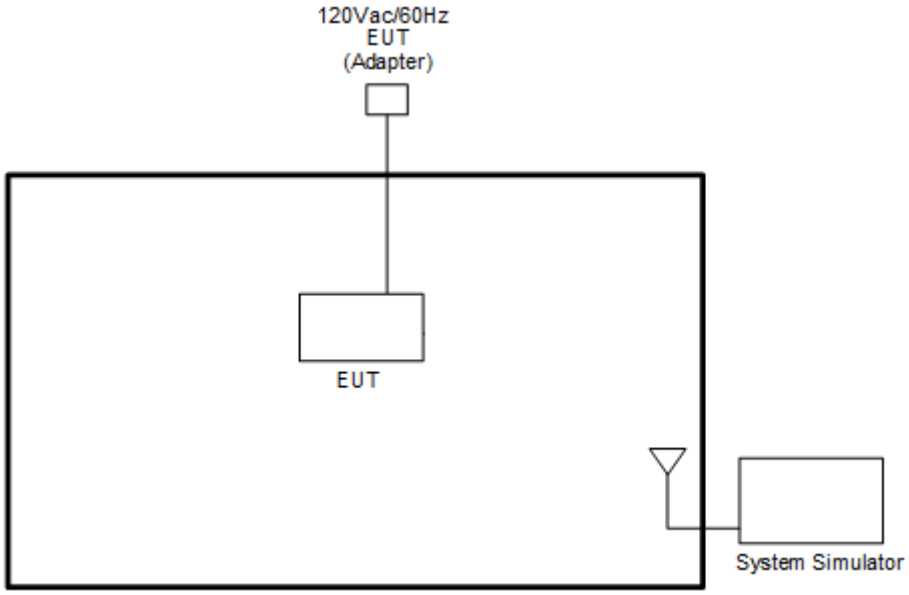
During all testing, EUT is in link mode with base station emulator at maximum power level.

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.

Frequency range investigated for radiated emission is 30 MHz to 9000 MHz.

Conducted Test Cases	Band	Bandwidth (MHz)				Modulation					RB #			Test Channel		
		5	10	15	20	PI/2 BPSK	QPSK	16QAM	64QAM	256QAM	1	Half	Full	L	M	H
Max. Output Power	n26	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V
E.R.P.	n26	V	V	V	V	V	V	V	V	V	Max. Power					
Radiated Spurious Emission	n26	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. 5G-FR1 n26 transmit frequency for part22 rule is 824MHz-849MHz, for part90 rule is 814MHz-824MHz. ERP over 15MHz bandwidth complies the ERP limit line of part22 rule, therefore ERP of the partial frequency spectrum which falls within part 22 also complies. 4. For radiated measurement, pre-scanned in two modes, DFT-s OFDM and CP OFDM. The worst cases (DFT-s OFDM) were recorded in this report.															

2.2 Connection Diagram of Test System



2.3 Support Unit used in test configuration and system

Item	Equipment	Brand Name	Model No.	FCC ID	Data Cable	Power Cord
1.	System Simulator	Anritsu	MT8000A	N/A	N/A	Unshielded, 1.8 m

2.4 Frequency List of Low/Middle/High Channels

5G-FR1 NR n26 Channel and Frequency List				
BW [MHz]	**Channel/Frequency(MHz)**	**Lowest**	**Middle**	**Highest**
10	Channel	-	163800	-
	Frequency	-	819	-
5	Channel	163300	163800	164300
	Frequency	816.5	819	821.5

5G-FR1 NR n26 Channel and Frequency List				
BW [MHz]	**Channel/Frequency(MHz)**	**-**	**cross-rule channels**	**-**
20	Channel	-	164800	-
	Frequency	-	824	-
15	Channel	-	164800	-
	Frequency	-	824	-
10	Channel	-	164800	-
	Frequency	-	824	-
5	Channel	-	164800	-
	Frequency	-	824	-

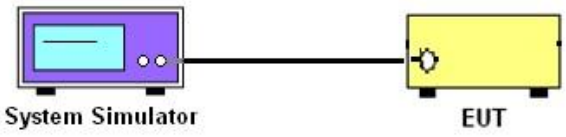
3 Conducted Test Items

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 Measurement and ERP Measurement

3.2.1 Description of the Conducted Output Power Measurement and ERP Measurement

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

The output power of mobile transmitters must not exceed 100 Watts for 5G-FR1 n26.

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

3.2.2 Test Procedures

1. The transmitter output port was connected to the system simulator.
2. Set EUT at maximum power through 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 Field Strength of Spurious Radiation Measurement

3.3.1 Description of Field Strength of Spurious Radiated Measurement

The radiated spurious emission was measured by substitution method according to ANSI / TIA-603-E. The power of any emission FCC Part 90.691 on any frequency removed from the assigned frequency by more than 250 percent of the authorized bandwidth at least 43 + 10 log (P) dB. The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

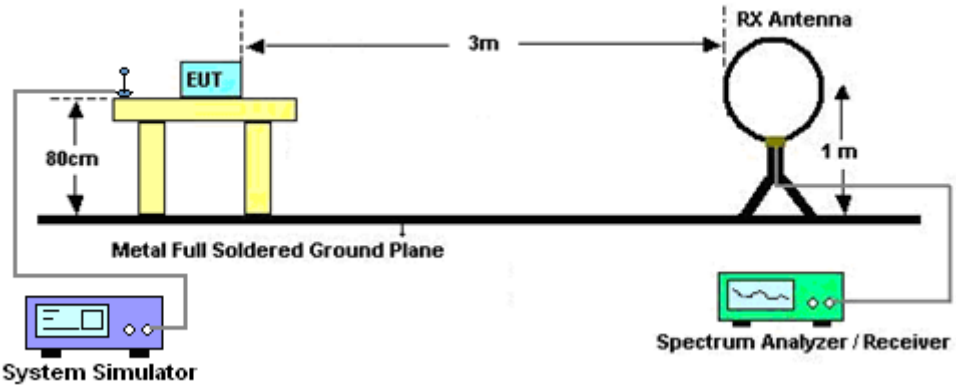
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least $43+10\log_{10}(P[\text{Watts}])$ dB. The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

3.3.2 Test Procedures

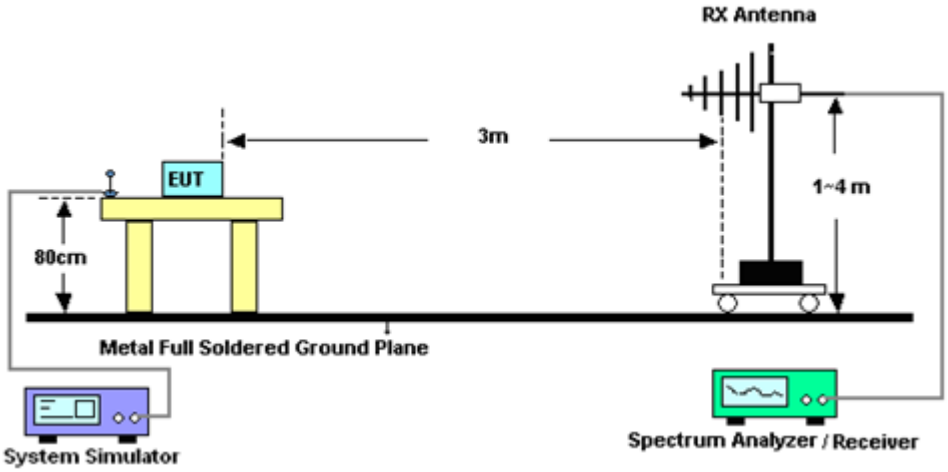
1. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
1. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.
2. The table was rotated 360 degrees to determine the position of the highest spurious emission.
3. 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.
4. For testing below 1GHz, make the measurement with the spectrum analyzer's RBW = 100 kHz, VBW = 3MHz, Sweep = 500ms, Taking the record of maximum spurious emission.
5. For testing above 1GHz, make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, Sweep = 500ms, Taking the record of maximum spurious emission.
6. Measure the burst average result by setting trace = max hold or trace = average with duty cycle factor when margin is not enough.
7. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
8. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
9. Taking the record of output power at antenna port.
10. Repeat step 7 to step 8 for another polarization.
11. EIRP (dBm) = S.G. Power – Tx Cable Loss + Tx Antenna Gain
12. ERP (dBm) = EIRP - 2.15
13. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
14. The limit line is derived from 43 + 10log(P) dB below the transmitter power P(Watts)

3.3.3 Test Setup

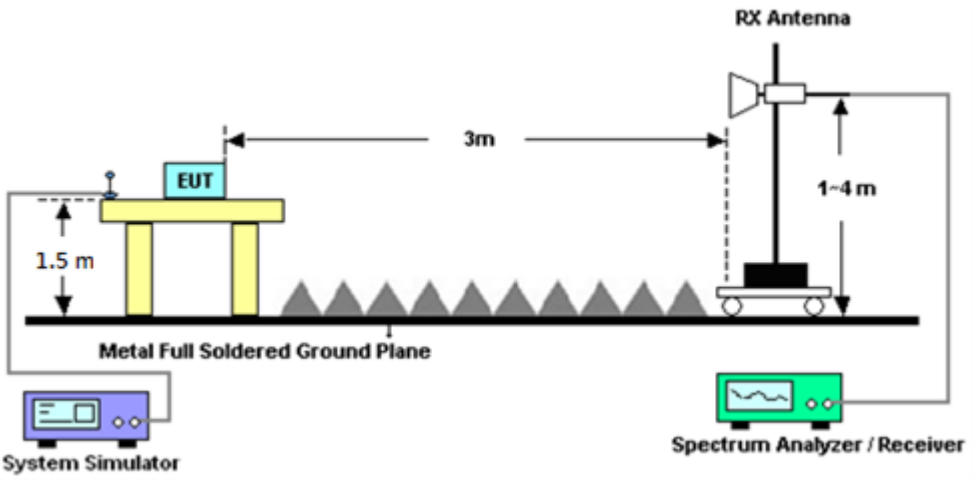
For radiated test below 30MHz



For radiated test from 30MHz to 1GHz



For radiated test above 1GHz



3.3.4 Test Result of Field Strength of Spurious Radiated

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 List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Bilog Antenna	TESEQ	CBL 6111D & 00800N1D01 N-06	35419 & 03	30MHz~1GHz	Apr. 24, 2022	Mar. 24, 2023~ Apr. 01, 2023	Apr. 23, 2023	Radiation (03CH07-HY)
Double Ridge Horn Antenna	ESCO	3117	00075962	1GHz ~ 18GHz	Dec. 01, 2022	Mar. 24, 2023~ Apr. 01, 2023	Nov. 30, 2023	Radiation (03CH07-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100488	9 kHz~30 MHz	Sep. 20, 2022	Mar. 24, 2023~ Apr. 01, 2023	Sep. 19, 2023	Radiation (03CH07-HY)
Preamplifier	MITEQ	AMF-7D-0010 1800-30-10P	1590075	1GHz~18GHz	Apr. 21, 2022	Mar. 24, 2023~ Apr. 01, 2023	Apr. 20, 2023	Radiation (03CH07-HY)
Preamplifier	COM-POWER	PA-103A	161241	10MHz~1GHz	Oct. 03, 2022	Mar. 24, 2023~ Apr. 01, 2023	Oct. 02, 2023	Radiation (03CH07-HY)
Preamplifier	Agilent	8449B	3008A02362	1GHz~26.5GHz	Mar. 24, 2023	Mar. 24, 2023~ Apr. 01, 2023	Mar. 23, 2024	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY15682/4	30MHz to 18GHz	Feb. 22, 2023	Mar. 24, 2023~ Apr. 01, 2023	Feb. 21, 2024	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY24971/4	9kHz to 18GHz	Feb. 22, 2023	Mar. 24, 2023~ Apr. 01, 2023	Feb. 21, 2024	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY28655/4	9kHz to 18GHz	Feb. 22, 2023	Mar. 24, 2023~ Apr. 01, 2023	Feb. 21, 2024	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 126	532078/126E	30MHz~18GHz	Sep. 16, 2022	Mar. 24, 2023~ Apr. 01, 2023	Sep. 15, 2023	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	MY2858/2	18GHz~40GHz	Feb. 22, 2023	Mar. 24, 2023~ Apr. 01, 2023	Feb. 21, 2024	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	801606/2	9KHz ~ 40GHz	Apr. 14, 2022	Mar. 24, 2023~ Apr. 01, 2023	Apr. 13, 2023	Radiation (03CH07-HY)
Controller	EMEC	EM1000	N/A	Control Ant Mast	N/A	Mar. 24, 2023~ Apr. 01, 2023	N/A	Radiation (03CH07-HY)
Controller	MF	MF-7802	N/A	Control Turn table	N/A	Mar. 24, 2023~ Apr. 01, 2023	N/A	Radiation (03CH07-HY)
Antenna Mast	EMEC	AM-BS-4500E	N/A	Boresight mast 1M~4M	N/A	Mar. 24, 2023~ Apr. 01, 2023	N/A	Radiation (03CH07-HY)
Turn Table	ChainTek	Chaintek 3000	N/A	0~360 Degree	N/A	Mar. 24, 2023~ Apr. 01, 2023	N/A	Radiation (03CH07-HY)
Software	Audix	E3	N/A	N/A	N/A	Mar. 24, 2023~ Apr. 01, 2023	N/A	Radiation (03CH07-HY)
USB Data Logger	TECPEL	TR-32	HE17XB2495	N/A	Mar. 14, 2023	Mar. 24, 2023~ Apr. 01, 2023	Mar. 13, 2024	Radiation (03CH07-HY)
Spectrum Analyzer	Keysight	N9010B	MY60241058	10Hz~44GHz	Jul. 07, 2022	Mar. 29, 2023~ Apr. 01, 2023	Jul. 06, 2023	Radiation (03CH07-HY)
Preamplifier	EMEC	EM18G40G	0600789	18GHz~40GHz	Jul. 21, 2022	Mar. 24, 2023~ Apr. 01, 2023	Jul. 20, 2023	Radiation (03CH07-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170251	18GHz~40GHz	Nov. 24, 2022	Mar. 24, 2023~ Apr. 01, 2023	Nov. 23, 2023	Radiation (03CH07-HY)
Double Ridge Horn Antenna	EMCO	3117	00227856	1 - 18 GHz	Sep. 27, 2022	Mar. 24, 2023~ Apr. 01, 2023	Sep. 26, 2023	Radiation (03CH07-HY)
Signal Generator	Rohde & Schwarz	SMF100A	101107	100kHz~40GHz	Jan. 11, 2023	Mar. 24, 2023~ Apr. 01, 2023	Jan. 10, 2024	Radiation (03CH07-HY)
Programmable Power Supply	GW Instek	PSS-2005	EL890001	50Hz~60Hz	Sep. 29, 2022	Mar. 03, 2023~ Apr. 06, 2023	Sep. 28, 2023	Conducted (TH03-HY)
Signal Analyzer	Rohde & Schwarz	FSV3044	101049	10Hz~44GHz	Oct. 07, 2022	Mar. 03, 2023~ Apr. 06, 2023	Oct. 06, 2023	Conducted (TH03-HY)
Temperature Chamber	ESPEC	SH-641	92013720	-40℃ ~90℃	Sep. 07, 2022	Mar. 03, 2023~ Apr. 06, 2023	Sep. 06, 2023	Conducted (TH03-HY)
Base Station (Measure)	Anritsu	MT8821C	6262116730	LTE	Jun. 15, 2022	Mar. 03, 2023~ Apr. 06, 2023	Jun. 14, 2023	Conducted (TH03-HY)
Base Station (Measure)	Anritsu	MT8000A	6262134933	FR1	Jun. 13, 2022	Mar. 03, 2023~ Apr. 06, 2023	Jun. 12, 2023	Conducted (TH03-HY)

5 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**3.25 dB**

Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**3.50 dB**

Appendix A. Test Results of Conducted Test

Conducted Output Power(Average power and ERP)

Part90s 5G FR1 n26 Maximum Average Power [dBm] (GT - LC = 0.8 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP
5	1	1	PI/2 BPSK	24.29	24.21	24.12	22.94	0.1968
5	1	23		24.17	24.22	24.18		
5	12	6		24.21	24.16	24.20		
5	1	0		23.73	23.70	23.71		
5	1	24		23.69	23.68	23.62		
5	25	0		23.68	23.64	23.73		
5	1	1	QPSK	24.27	24.19	24.15		
5	1	23		24.19	24.18	24.13		
5	12	6		24.22	24.10	24.19		
5	1	0		23.28	23.31	23.14		
5	1	24		23.18	23.20	23.15		
5	25	0		23.27	23.29	23.15		
5	1	1	16-QAM	23.33	23.20	23.32	21.98	0.1578
5	1	1	64-QAM	21.93	21.85	21.96		
5	1	1	256-QAM	19.33	19.24	19.23		
Limit	Output Power < 100W			Result			Pass	

Part90s 5G FR1 n26 Maximum Average Power [dBm] (GT - LC = 0.8 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP
10	1	1	PI/2 BPSK	-	24.30	-	22.96	0.1977
10	1	50		-	24.25	-		
10	25	12		-	24.22	-		
10	1	0		-	23.94	-		
10	1	51		-	23.79	-		
10	50	0		-	23.77	-		
10	1	1	QPSK	-	24.31	-		
10	1	50		-	24.18	-		
10	25	12		-	24.25	-		
10	1	0		-	23.36	-		
10	1	51		-	23.29	-		
10	50	0		-	23.25	-		
10	1	1	16-QAM	-	23.39	-	22.04	0.1600
10	1	1	64-QAM	-	21.98	-		
10	1	1	256-QAM	-	19.35	-		
Limit	Output Power < 100W			Result			Pass	

5G FR1 n26 Straddle Channel Maximum Average Power [dBm] (GT - LC = 0.8 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP
5	1	1	PI/2 BPSK	-	24.16	-	22.90	0.1950
5	1	23		-	24.21	-		
5	12	6		-	24.20	-		
5	1	0		-	23.67	-		
5	1	24		-	23.77	-		
5	25	0		-	23.72	-		
5	1	1	QPSK	-	24.18	-		
5	1	23		-	24.25	-		
5	12	6		-	24.20	-		
5	1	0		-	23.25	-		
5	1	24		-	23.27	-		
5	25	0		-	23.20	-		
5	1	1	16-QAM	-	23.28	-	21.93	0.1560
5	1	1	64-QAM	-	21.90	-		
5	1	1	256-QAM	-	19.25	-		
Limit	Reporting only			Result			N/A	

5G FR1 n26 Straddle Channel Maximum Average Power [dBm] (GT - LC = 0.8 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP
10	1	1	PI/2 BPSK	-	24.17	-	22.86	0.1932
10	1	50		-	24.21	-		
10	25	12		-	24.18	-		
10	1	0		-	23.75	-		
10	1	51		-	23.69	-		
10	50	0		-	23.74	-		
10	1	1	QPSK	-	24.20	-		
10	1	50		-	24.19	-		
10	25	12		-	24.18	-		
10	1	0		-	23.28	-		
10	1	51		-	23.33	-		
10	50	0		-	23.25	-		
10	1	1	16-QAM	-	23.17	-	21.82	0.1521
10	1	1	64-QAM	-	21.80	-		
10	1	1	256-QAM	-	19.26	-		
Limit	Reporting only			Result			N/A	

5G FR1 n26 Straddle Channel Maximum Average Power [dBm] (GT - LC = 0.8 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP
15	1	1	PI/2 BPSK	-	24.28	-	22.95	0.1972
15	1	77		-	24.30	-		
15	36	18		-	24.24	-		
15	1	0		-	23.90	-		
15	1	78		-	23.79	-		
15	75	0		-	23.90	-		
15	1	1	QPSK	-	24.23	-		
15	1	77		-	24.24	-		
15	36	18		-	24.23	-		
15	1	0		-	23.49	-		
15	1	78		-	23.40	-		
15	75	0		-	23.39	-		
15	1	1	16-QAM	-	23.39	-	22.04	0.1600
15	1	1	64-QAM	-	22.01	-		
15	1	1	256-QAM	-	19.35	-		
Limit	Reporting only			Result			N/A	

5G FR1 n26 Straddle Channel Maximum Average Power [dBm] (GT - LC = 0.8 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP
20	1	1	PI/2 BPSK	-	24.31	-	22.97	0.1982
20	1	104		-	24.30	-		
20	50	25		-	24.28	-		
20	1	0		-	23.96	-		
20	1	105		-	23.76	-		
20	100	0		-	23.87	-		
20	1	1	QPSK	-	24.32	-		
20	1	104		-	24.18	-		
20	50	25		-	24.31	-		
20	1	0		-	23.55	-		
20	1	105		-	23.34	-		
20	100	0		-	23.40	-		
20	1	1	16-QAM	-	23.28	-	21.93	0.1560
20	1	1	64-QAM	-	21.94	-		
20	1	1	256-QAM	-	19.49	-		
Limit	Reporting only			Result			N/A	

Appendix B. Test Results of Radiated Test

5G FR1 n26

5G FR1 n26 / 5MHz / PI/2 BPSK									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1632	-52.69	-13	-39.69	-64.21	-54.5	0.97	4.93	H
	2440	-37.80	-13	-24.80	-54.73	-39.6	1.27	5.22	H
	3256	-57.65	-13	-44.65	-76.94	-60.9	1.53	6.93	H
	4072	-56.14	-13	-43.14	-77.76	-60.8	1.80	8.61	H
	5704	-54.31	-13	-41.31	-80.53	-59.2	2.74	9.78	H
									H
	1632	-43.29	-13	-30.29	-55.04	-45.1	0.97	4.93	V
	2440	-38.60	-13	-25.60	-56.11	-40.4	1.27	5.22	V
	3256	-57.05	-13	-44.05	-76.76	-60.3	1.53	6.93	V
	4072	-46.74	-13	-33.74	-68.59	-51.4	1.80	8.61	V
	5704	-51.91	-13	-38.91	-78.43	-56.8	2.74	9.78	V
									V
Middle	1632	-49.69	-13	-36.69	-61.24	-51.5	0.97	4.93	H
	2448	-35.98	-13	-22.98	-53.19	-37.8	1.27	5.24	H
	3266	-57.61	-13	-44.61	-77.05	-60.9	1.53	6.97	H
	4088	-53.84	-13	-40.84	-75.33	-58.5	1.81	8.62	H
									H
									H
	1638	-50.41	-13	-37.41	-62.4	-52.2	0.97	4.91	V
	2457	-38.26	-13	-25.26	-55.8	-40.1	1.28	5.27	V
	3266	-57.41	-13	-44.41	-77.11	-60.7	1.53	6.97	V
	4088	-51.14	-13	-38.14	-73.02	-55.8	1.81	8.62	V
									V
									V

Highest	1640	-50.12	-13	-37.12	-61.61	-51.9	0.97	4.91	H
	2456	-37.56	-13	-24.56	-54.76	-39.4	1.28	5.27	H
	3276	-57.07	-13	-44.07	-76.74	-60.4	1.53	7.01	H
	4096	-47.45	-13	-34.45	-68.94	-52.1	1.82	8.62	H
									H
									H
	1640	-50.92	-13	-37.92	-62.83	-52.7	0.97	4.91	V
	2456	-38.26	-13	-25.26	-55.84	-40.1	1.28	5.27	V
	3276	-57.17	-13	-44.17	-76.98	-60.5	1.53	7.01	V
	4096	-51.85	-13	-38.85	-73.72	-56.5	1.82	8.62	V
									V
									V

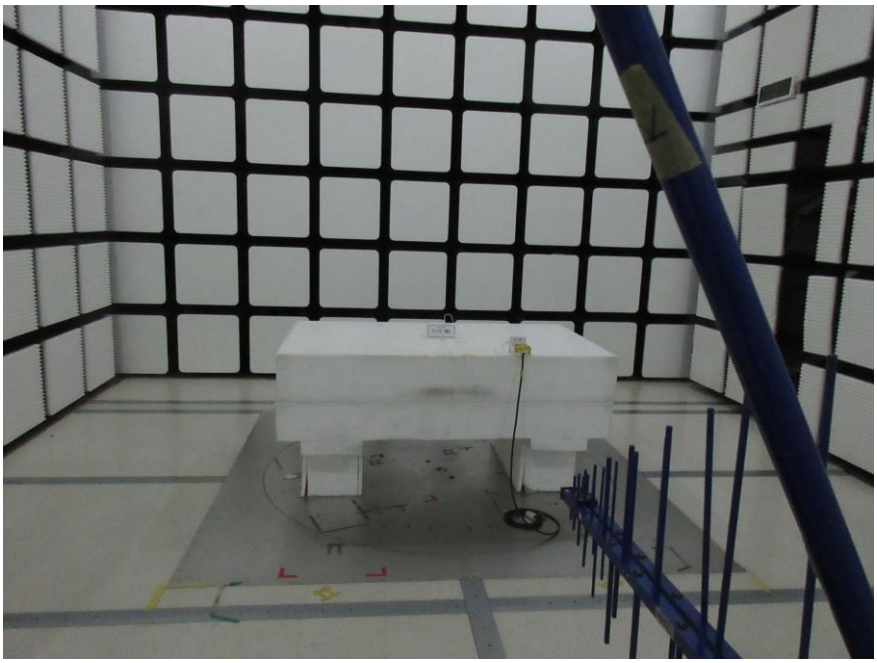
Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

Appendix C. Setup Photographs

<Radiated Emission>

Y Plane

LF



HF

———THE END———