



FCC RF Test Report

APPLICANT : Inseego Corp.
EQUIPMENT : wireless device
BRAND NAME : Inseego
MODEL NAME : FG2000-3, FG2000e-3
FCC ID : PKRISGFG20003
STANDARD : 47 CFR Part 2, 27
CLASSIFICATION : PCS Licensed Transmitter (PCB)
TEST DATE(S) : Oct. 02, 2020 ~ Oct. 31, 2021

We, Sporton International (Kunshan) Inc., would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.26-2015 and shown compliance with the applicable technical standards.

This product installed a RF module (Brand Name: Inseego, Model Name: MD2000, FCC ID: PKRISGMD2000) during the test, only EIRP and RSE test items are tested in this report, all the other test results are quoted on module RF report.

The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International (Kunshan) Inc., the test report shall not be reproduced except in full.

Reviewed by: Jason Jia / Supervisor

Approved by: Alex Wang / Manager



Sporton International (Kunshan) Inc.

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SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.1	§2.1046	Conducted Output Power	Reporting Only	PASS	-
	§27.50(b)(10) §27.50(c)(10)	Effective Radiated Power (5G NR n12) (5G NR n71)	ERP < 3 Watt		
	§27.50(h)(2)	Equivalent Isotropic Radiated Power (5G NR n41)	Output power < 2Watt		
	§27.50(d)(4)	Equivalent Isotropic Radiated Power (5G NR n66)	EIRP < 1Watt		
-	N/A	Peak-to-Average Ratio	<13 dB	PASS	1
-	§2.1049	Occupied Bandwidth	Reporting Only	PASS	1
-	§2.1051 §27.53(g)	Conducted Band Edge Measurement (5G NR n12) (5G NR n66) (5G NR n71)	< 43+10log ₁₀ (P[Watts])	PASS	1
	§27.53(m)(4)	Conducted Band Edge Measurement (5G NR n41)	§27.53(m)(4)		
-	§2.1051 §27.53(g)	Conducted Spurious Emission (5G NR n12) (5G NR n66) (5G NR n71)	< 43+10log ₁₀ (P[Watts])	PASS	1
	§2.1051 §27.53(m)(4)	Conducted Spurious Emission (5G NR n41)	< 55+10log ₁₀ (P[Watts])		
-	§2.1055 §27.54	Frequency Stability Temperature & Voltage	Within Authorized Band	PASS	1
4.4	§2.1053 §27.53(g)	Radiated Spurious Emission (5G NR n12) (5G NR n66) (5G NR n71)	< 43+10log ₁₀ (P[Watts])	PASS	Under limit 30.41 dB at 5088.00 MHz
	§2.1053 §27.53(m)(4)	Radiated Spurious Emission (5G NR n41)	< 55+10log ₁₀ (P[Watts])		

Remark 1:

All conducted test items were leveraged from module RF report which can refer to Report No. "FG090125C" for 5G NR n12/n66, "FG090125-01B" for 5G NR n41/n71 and "FG090125-02B" for 5G NR EN-DC_14A-n66A, EN-DC_30A-n66A.



1 General Description

1.1 Applicant

Inseego Corp.
9710 Scranton Road, Suite 200 San Diego, CA 92121

1.2 Manufacturer

MeiG Smart Technology Co., Ltd
Floor 2, Office Building No.5, Lingxia Road, Fenghuang Community, Fuyong Street, Bao 'an District, Shenzhen

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	wireless device
Brand Name	Inseego
Model Name	FG2000-3, FG2000e-3
FCC ID	PKRISGFG20003
EUT supports Radios application	WCDMA/LTE/5G NR/GNSS WLAN 2.4GHz 802.11b/g/n HT20/HT40 WLAN 2.4GHz 802.11ax HE20/HE40 WLAN 5GHz 802.11a/n HT20/HT40 WLAN 5GHz 802.11ac VHT20/VHT40/VHT80 WLAN 5GHz 802.11ax HE20/HE40/HE80 Bluetooth LE
IMEI Code	Radiation : 990016260002868/990016260002744
HW Version	FG20003_SRT860H_V2.1
SW Version	2.52
EUT Stage	Identical Prototype

Remark:

1. Only 5G NR bands are tested in this report, all the other RF bands are tested in the other reports separately.
2. 5G NR bands support NSA mode only.
3. 5G NR supports CP-OFDM and DFT-s-OFDM modulation, DFT-s-OFDM power is higher than CP-OFDM, thus only DFT-s-OFDM modulation is reported.
4. The maximum ERP/EIRP is calculated from max output power, only the maximum ERP/EIRP is shown on the report.
5. This is a variant report for FG2000-3, FG2000e-3. For change note, please refer the FG2000-3, FG2000e-3_Class II Permissive Change letter exhibit separately. Based on the similarity between current and previous project, only the RSE of EN-DC_14A-n66A, EN-DC_30A-n66A were tested, all the other test results are leveraged from original report which can be referred to Sporton Report Number FG082811I.



1.4 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx Frequency	5G NR n12: 701.5 MHz ~ 713.5 MHz 5G NR n41: 2506 MHz ~ 2680 MHz 5G NR n66: 1712.5 MHz ~ 1777.5 MHz 5G NR n71: 665.5 MHz ~ 695.5MHz
Rx Frequency	5G NR n12: 730.5 MHz ~ 743.5 MHz 5G NR n41: 2506 MHz ~ 2680 MHz 5G NR n66: 2112.5 MHz~ 2197.5 MHz 5G NR n71: 619.5 MHz ~ 649.5MHz
Bandwidth	n12: 5MHz / 10MHz / 15MHz n66, n71: 5MHz / 10MHz / 15MHz / 20MHz n41 : 20MHz / 40MHz / 50MHz / 60MHz / 80MHz / 90MHz / 100MHz
SCS	n12, n66, n71: 15KHz n41 : 30KHz
Antenna Gain	5G NR n12: 2.11 dBi 5G NR n41: 2.60 dBi 5G NR n66: 2.80 dBi 5G NR n71: 1.70 dBi
Type of Modulation	CP-OFDM: QPSK / 16QAM / 64QAM / 256QAM DFT-s-OFDM: PI/2 BPSK / QPSK / 16QAM / 64QAM / 256QAM

1.5 Modification of EUT

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



1.6 Maximum ERP/EIRP Power, Frequency Tolerance, and Emission Designator

5G NR n12		PI/2 BPSK	QPSK	16QAM	64QAM	256QAM
BW (MHz)	Frequency Range (MHz)	Maximum ERP(W)	Maximum ERP(W)	Maximum ERP(W)	Maximum ERP(W)	Maximum ERP(W)
5	701.5 ~ 713.5	0.2366	0.2478	0.2366	0.1795	0.1107
10	704.0 ~ 711.0	0.2366	0.2313	0.2313	0.1754	0.1033
15	706.5 ~ 708.5	0.2313	0.2366	0.2260	0.1754	0.1082

5G NR n41		PI/2 BPSK	QPSK	16QAM	64QAM	256QAM
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Maximum EIRP(W)	Maximum EIRP(W)	Maximum EIRP(W)	Maximum EIRP(W)
20	2506.02 ~ 2679.99	0.4237	0.4237	0.4237	0.4336	0.3141
40	2516.01 ~ 2670.00	0.4540	0.4540	0.4540	0.3776	0.2865
50	2521.02 ~ 2664.99	0.4540	0.4540	0.4140	0.3000	0.2329
60	2526.00 ~ 2659.98	0.4540	0.4336	0.4336	0.4237	0.3070
80	2536.02 ~ 2649.99	0.4540	0.4540	0.4437	0.3444	0.2383
90	2541.00 ~ 2644.98	0.4540	0.4540	0.4437	0.3776	0.2613
100	2546.01 ~ 2640.00	0.4540	0.4540	0.4437	0.4140	0.2865

5G NR n66		PI/2 BPSK	QPSK	16QAM	64QAM	256QAM
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Maximum EIRP(W)	Maximum EIRP(W)	Maximum EIRP(W)	Maximum EIRP(W)
5	1712.5 ~ 1777.5	0.4396	0.4396	0.4198	0.4103	0.2361
10	1715.0 ~ 1775.0	0.4396	0.4396	0.4296	0.4009	0.2472
15	1717.5 ~ 1772.5	0.4296	0.4396	0.4296	0.4103	0.2530
20	1720.0 ~ 1770.0	0.4396	0.4396	0.4396	0.4103	0.2530

5G NR n71		PI/2 BPSK	QPSK	16QAM	64QAM	256QAM
BW (MHz)	Frequency Range (MHz)	Maximum ERP(W)	Maximum ERP(W)	Maximum ERP(W)	Maximum ERP(W)	Maximum ERP(W)
5	665.5 ~ 695.5	0.2148	0.2129	0.2129	0.1771	0.0996
10	668.0 ~ 693.0	0.2129	0.2129	0.1987	0.1578	0.0951
15	670.5 ~ 690.5	0.2129	0.2129	0.2033	0.1652	0.0908
20	673.0 ~ 688.0	0.2153	0.2129	0.1941	0.1652	0.0951



1.7 Testing Location

Sporton International (Kunshan) Inc. is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.02.

Test Firm	Sporton International (Kunshan) Inc.		
Test Site Location	No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300 People's Republic of China TEL : +86-512-57900158 FAX : +86-512-57900958		
Test Site No.	Sporton Site No.	FCC Designation No.	FCC Test Firm Registration No.
	03CH04-KS TH01-KS	CN1257	314309

1.8 Test Software

Item	Site	Manufacture	Name	Version
1.	03CH04-KS	AUDIX	E3	6.2009-8-24a

1.9 Applicable Standards

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

- ♦ 47 CFR Part 2, 27
- ♦ ANSI C63.26-2015
- ♦ FCC KDB 971168 D01 Power Meas License Digital Systems v03r01
- ♦ FCC KDB 412172 D01 Determining ERP and EIRP v01r01

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.




2 Test Configuration of Equipment Under Test

2.1 Test Mode

Antenna port conducted and radiated test items 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 were recorded in this report.

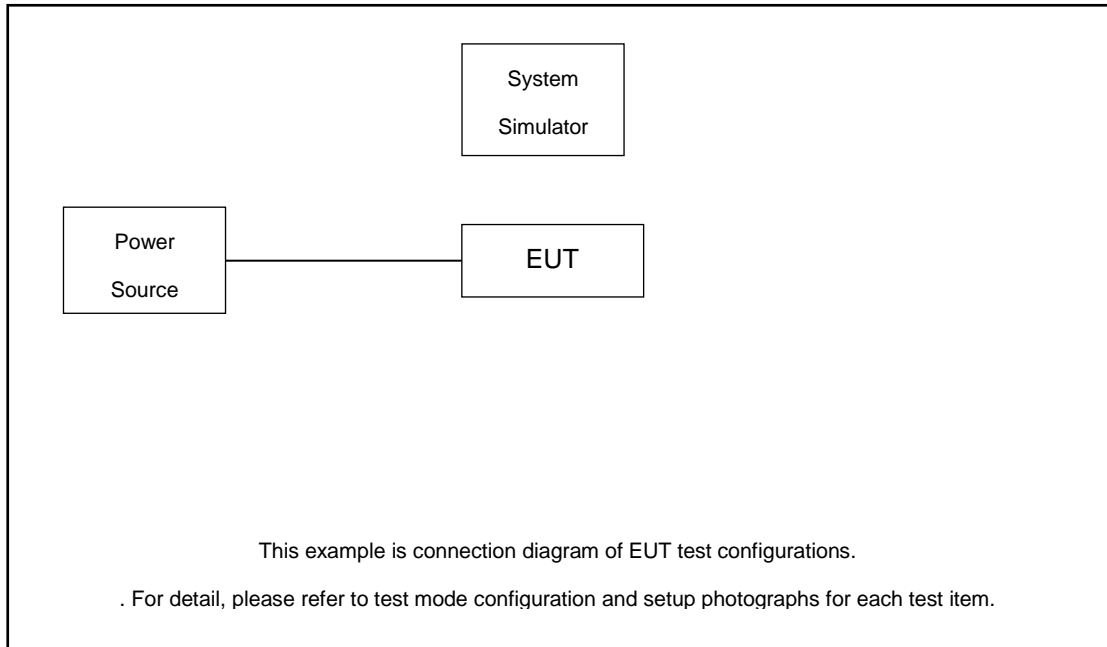
The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported.

Orthogonal Planes of EUT	X Plane	Y Plane	Z Plane
			

Test Items	Band	Bandwidth (MHz)						Modulation				RB #			Test Channel			
		5	10	15	20	60	100	PI/2 BPSK	QPSK	16QAM	64QAM	256QAM	1	Half	Full	L	M	H
E.R.P / E.I.R.P	n12	v	v	v	-	-	-	v	v	v	v	v	v	v	v	v	v	v
	n66	v	v	v	v	-	-	v	v	v	v	v	v	v	v	v	v	v
	n71	v	v	v	v	-	-	v	v	v	v	v	v	v	v	v	v	v
Radiated Spurious Emission	n12	Worst Case															v	
	n66	Worst Case															v	
	n71	Worst Case															v	
Note	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.																	

Test Items	Band	Bandwidth (MHz)							Modulation				RB #			Test Channel			
		20	40	50	60	80	90	100	PI/2 BPSK	QPSK	16QAM	64QAM	256QAM	1	Half	Full	L	M	H
E.R.P / E.I.R.P	n41	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
Radiated Spurious Emission	n41	Worst Case															v		
Note	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.																		

2.2 Connection Diagram of Test System



2.3 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model No.	FCC ID	Data Cable	Power Cord
1.	Power Supply	GW	GPS-3030D	N/A	N/A	Unshielded, 1.8 m
2.	LTE Base Station	Anritsu	MT8820C/8821	N/A	N/A	Unshielded, 1.8 m
3.	NR Base Station	Anritsu	MT8000A	N/A	N/A	Unshielded, 1.8 m



2.4 Frequency List of Low/Middle/High Channels

5G NR n12 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
15	Channel	141300	141500	141700
	Frequency	706.5	707.5	708.5
10	Channel	140800	141500	142200
	Frequency	704	707.5	711
5	Channel	140300	141500	142700
	Frequency	701.5	707.5	713.5

5G NR n41 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
100	Channel	509202	518598	528000
	Frequency	2546.01	2592.99	2640
90	Channel	508200	518598	528996
	Frequency	2541	2592.99	2644.98
80	Channel	507204	518598	529998
	Frequency	2536.02	2592.99	2649.99
60	Channel	505200	518598	531996
	Frequency	2526	2592.99	2659.98
50	Channel	504204	518598	532998
	Frequency	2521.02	2592.99	2664.99
40	Channel	503202	518598	534000
	Frequency	2516.01	2592.99	2670
20	Channel	501204	518598	535998
	Frequency	2506.02	2592.99	2679.99



5G NR n66 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	344000	349000	354000
	Frequency	1720	1745	1770
15	Channel	343500	349000	354500
	Frequency	1717.5	1745	1772.5
10	Channel	343000	349000	355000
	Frequency	1715	1745	1775
5	Channel	342500	349000	355500
	Frequency	1712.5	1745	1777.5

5G NR n71 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	134600	136100	137600
	Frequency	673	680.5	688
15	Channel	134100	136100	138100
	Frequency	670.5	680.5	690.5
10	Channel	133600	136100	138600
	Frequency	668	680.5	693
5	Channel	133100	136100	139100
	Frequency	665.5	680.5	695.5



3 Conducted Test Items

3.1 ERP/EIRP

3.1.1 Description of the ERP/EIRP Measurement

The ERP of mobile transmitters must not exceed 3 Watts for 5G NR n12 and n71.

The Output power of all user stations must not exceed 2 Watts for 5G NR n41.

The EIRP of mobile transmitters must not exceed 1 Watts for 5G NR n66.

According to KDB 412172 D01 Power Approach,

$EIRP = P_T + G_T - L_C$, $ERP = EIRP - 2.15$, 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

3.1.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.2
2. The transmitter output port was connected to the system simulator.
3. Set EUT at maximum power through the system simulator.
4. Select lowest, middle, and highest channels for each band and different modulation.
5. Measure and record the power level from the system simulator.

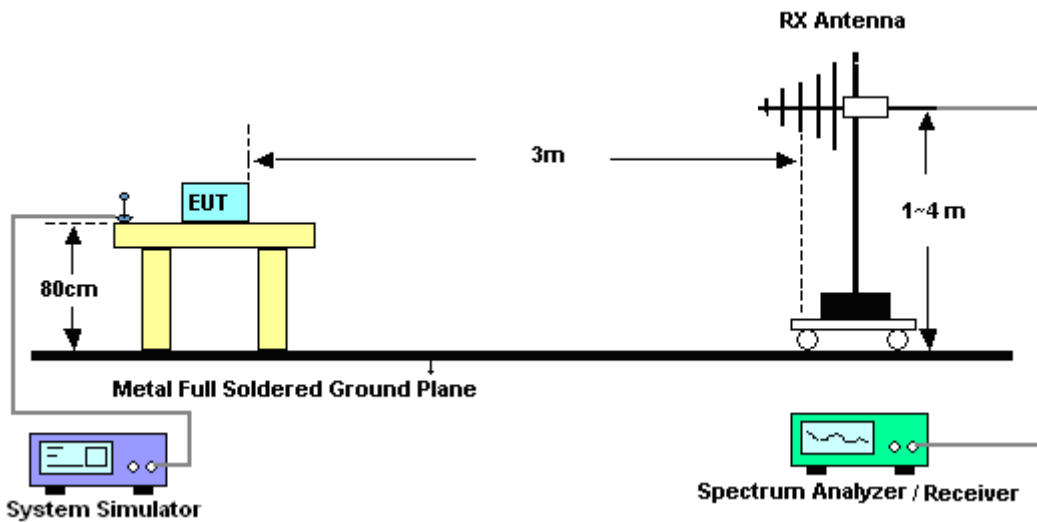
4 Radiated Test Items

4.1 Measuring Instruments

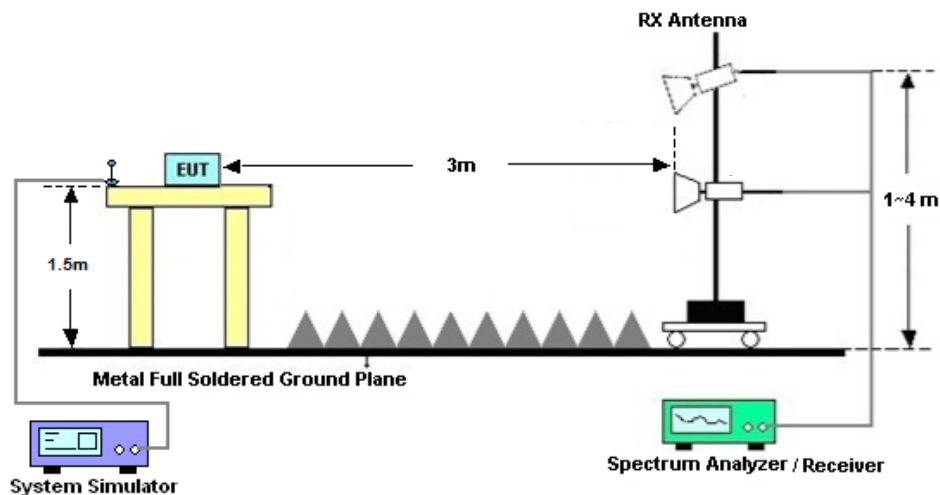
See list of measuring instruments of this test report.

4.2 Test Setup

4.2.1 For radiated test from 30MHz to 1GHz



4.2.2 For radiated test above 1GHz



4.3 Test Result of Radiated Test

Please refer to Appendix B.



4.4 Radiated Spurious Emission

4.4.1 Description of Radiated Spurious Emission

The radiated spurious emission was measured by substitution method according to ANSI C63.26. 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 5G NR n7,n41

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.

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

4.4.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.5
2. 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.
3. The EUT was set 3 meters from the receiving antenna mounted on the antenna tower.
4. The table was rotated 360 degrees to determine the position of the highest spurious emission.
5. The height of the receiving antenna is varied between 1m to 4m to search the maximum spurious emission for both horizontal and vertical polarizations.
6. During the measurement, the system simulator parameters were set to force the EUT transmitting at maximum output power.
7. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
8. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
9. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
10. $EIRP (dBm) = S.G. Power - Tx Cable Loss + Tx Antenna Gain$
11. $ERP (dBm) = EIRP - 2.15$
12. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

The limit line is derived from $43 + 10\log(P)$ dB below the transmitter power P(Watts)
 $= P(W) - [43 + 10\log(P)] (dB)$
 $= [30 + 10\log(P)] (dBm) - [43 + 10\log(P)] (dB)$
 $= -13dBm.$

13. For 5G NR n7, n41:

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



5 List of Measuring Equipment

For original report(FG082811I):

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
NR Base Station	Anritsu	MT8000A	6261867347	5G	Nov. 01, 2020	Nov. 19, 2020	Oct. 31, 2021	Conducted (TH01-KS)
EXA Spectrum Analyzer	Keysight	N9010A	MY55150244	10Hz-44G,MAX 30dB	Apr. 15, 2020	Oct. 02, 2020	Apr. 14, 2021	Radiation (03CH04-KS)
Bilog Antenna	TeseQ	CBL6111D	49922	30MHz-1GHz	Jan. 03, 2020	Oct. 02, 2020	Jan. 02, 2021	Radiation (03CH04-KS)
Horn Antenna	Schwarzbeck	BBHA9120D	1356	1GHz~18GHz	Apr. 20, 2020	Oct. 02, 2020	Apr. 19, 2021	Radiation (03CH04-KS)
SHF-EHF Horn	Com-power	AH-840	101115	18GHz~40GHz	Nov. 10, 2019	Oct. 02, 2020	Nov. 09, 2020	Radiation (03CH04-KS)
Amplifier	SONOMA	310N	187289	9KHz-1GHz	Jan. 03, 2020	Oct. 02, 2020	Jan. 02, 2021	Radiation (03CH04-KS)
Amplifier	MITEQ	EM18G40G GA	060728	18~40GHz	Jan. 08, 2020	Oct. 02, 2020	Jan. 07, 2021	Radiation (03CH04-KS)
high gain Amplifier	MITEQ	AMF-7D-00 101800-30-1 0P	2025788	1Ghz-18Ghz	Jan. 03, 2020	Oct. 02, 2020	Jan. 02, 2021	Radiation (03CH04-KS)
Amplifier	Keysight	83017A	MY57280106	500MHz~26.5GHz	Oct. 11, 2019	Oct. 02, 2020	Oct. 10, 2020	Radiation (03CH04-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	Oct. 02, 2020	NCR	Radiation (03CH04-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Oct. 02, 2020	NCR	Radiation (03CH04-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	Oct. 02, 2020	NCR	Radiation (03CH04-KS)

NCR: No Calibration Required

For present report(FG082811-03I):

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
EXA Spectrum Analyzer	Keysight	N9010A	MY55150244	10Hz-44G,MAX 30dB	Apr. 13, 2021	Oct. 31, 2021	Apr. 12, 2022	Radiation (03CH04-KS)
Loop Antenna	R&S	HFH2-Z2	100321	9kHz~30MHz	Nov. 01, 2020	Oct. 31, 2021	Oct. 31, 2021	Radiation (03CH04-KS)
Bilog Antenna	TeseQ	CBL6111D	49922	30MHz-1GHz	Jun. 07, 2021	Oct. 31, 2021	Jun. 06, 2022	Radiation (03CH04-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	75957	1GHz~18GHz	Nov. 01, 2020	Oct. 31, 2021	Oct. 31, 2021	Radiation (03CH04-KS)
SHF-EHF Horn	Com-power	AH-840	101115	18GHz~40GHz	Jan. 06, 2021	Oct. 31, 2021	Jan. 05, 2022	Radiation (03CH04-KS)
Amplifier	SONOMA	310N	187289	9KHz-1GHz	Jan. 06, 2021	Oct. 31, 2021	Jan. 05, 2022	Radiation (03CH04-KS)
Amplifier	MITEQ	EM18G40G GA	060728	18~40GHz	Jan. 07, 2021	Oct. 31, 2021	Jan. 06, 2022	Radiation (03CH04-KS)
high gain Amplifier	MITEQ	AMF-7D-00 101800-30-1 0P	2025788	1Ghz-18Ghz	Jan. 06, 2021	Oct. 31, 2021	Jan. 05, 2022	Radiation (03CH04-KS)
Amplifier	Keysight	83017A	MY57280106	500MHz~26.5GHz	Oct. 13, 2021	Oct. 31, 2021	Oct. 12, 2022	Radiation (03CH04-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	Oct. 31, 2021	NCR	Radiation (03CH04-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Oct. 31, 2021	NCR	Radiation (03CH04-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	Oct. 31, 2021	NCR	Radiation (03CH04-KS)

NCR: No Calibration Required



6 Uncertainty of Evaluation

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI 63.26-2015. All the measurement uncertainty value were shown with a coverage K=2 to indicate 95% level of confidence. The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.3dB
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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))	2.8dB
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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))	2.8dB
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Appendix A. Test Results of Conducted Test

ERP/EIRP

5G NR n12:

NR n12 / 5MHz (Average) (GT - LC = 2.11 dB)							
Channel	Mode	RB		Conducted		ERP	
		Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	PI/2 BPSK	12	6	23.58	0.2281	23.54	0.2260
Middle		12	6	23.78	0.2388	23.74	0.2366
Highest		12	6	23.68	0.2334	23.64	0.2313
Lowest	QPSK	1	1	23.78	0.2388	23.74	0.2366
Middle		1	1	23.88	0.2444	23.84	0.2422
Highest		1	1	23.98	0.2501	23.94	0.2478
Lowest	16QAM	1	1	23.58	0.2281	23.54	0.2260
Middle		1	1	23.68	0.2334	23.64	0.2313
Highest		1	1	23.78	0.2388	23.74	0.2366
Lowest	64QAM	1	1	22.38	0.1730	22.34	0.1714
Middle		1	1	22.58	0.1812	22.54	0.1795
Highest		1	1	22.58	0.1812	22.54	0.1795
Lowest	256QAM	1	1	20.18	0.1043	20.14	0.1033
Middle		1	1	20.48	0.1117	20.44	0.1107
Highest		1	1	20.48	0.1117	20.44	0.1107
Limit	ERP < 3W			Result		PASS	

NR n12 / 10MHz (Average) (GT - LC = 2.11 dB)							
Channel	Mode	RB		Conducted		ERP	
		Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	PI/2 BPSK	25	12	23.48	0.2229	23.44	0.2209
Middle		25	12	23.58	0.2281	23.54	0.2260
Highest		25	12	23.78	0.2388	23.74	0.2366
Lowest	QPSK	25	12	23.48	0.2229	23.44	0.2209
Middle		25	12	23.68	0.2334	23.64	0.2313
Highest		25	12	23.68	0.2334	23.64	0.2313
Lowest	16QAM	1	1	23.48	0.2229	23.44	0.2209
Middle		1	1	23.58	0.2281	23.54	0.2260
Highest		1	1	23.68	0.2334	23.64	0.2313
Lowest	64QAM	1	1	22.28	0.1691	22.24	0.1675
Middle		1	1	22.28	0.1691	22.24	0.1675
Highest		1	1	22.48	0.1771	22.44	0.1754
Lowest	256QAM	1	1	20.08	0.1019	20.04	0.1010
Middle		1	1	20.18	0.1043	20.14	0.1033
Highest		1	1	20.18	0.1043	20.14	0.1033
Limit	ERP < 3W			Result		PASS	



NR n12 / 15MHz (Average) (GT - LC = 2.11 dB)							
Channel	Mode	RB		Conducted		ERP	
		Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	PI/2 BPSK	1	77	23.68	0.2334	23.64	0.2313
Middle		1	77	23.58	0.2281	23.54	0.2260
Highest		1	77	23.58	0.2281	23.54	0.2260
Lowest	QPSK	1	77	23.68	0.2334	23.64	0.2313
Middle		1	77	23.58	0.2281	23.54	0.2260
Highest		1	77	23.78	0.2388	23.74	0.2366
Lowest	16QAM	1	1	23.48	0.2229	23.44	0.2209
Middle		1	1	23.58	0.2281	23.54	0.2260
Highest		1	1	23.58	0.2281	23.54	0.2260
Lowest	64QAM	1	1	22.28	0.1691	22.24	0.1675
Middle		1	1	22.48	0.1771	22.44	0.1754
Highest		1	1	22.48	0.1771	22.44	0.1754
Lowest	256QAM	1	1	20.08	0.1019	20.04	0.1010
Middle		1	1	20.38	0.1092	20.34	0.1082
Highest		1	1	20.38	0.1092	20.34	0.1082
Limit	ERP < 3W			Result		PASS	

5G NR n66:

NR n66 / 5MHz (Average) (GT - LC = 2.8 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	PI/2 BPSK	12	6	23.63	0.2307	26.43	0.4396
Middle		12	6	23.33	0.2153	26.13	0.4103
Highest		12	6	23.13	0.2056	25.93	0.3918
Lowest	QPSK	1	1	23.63	0.2307	26.43	0.4396
Middle		1	1	23.33	0.2153	26.13	0.4103
Highest		1	1	23.03	0.2010	25.83	0.3829
Lowest	16QAM	1	1	23.43	0.2203	26.23	0.4198
Middle		1	1	23.13	0.2056	25.93	0.3918
Highest		1	1	22.93	0.1964	25.73	0.3742
Lowest	64QAM	1	1	23.33	0.2153	26.13	0.4103
Middle		1	1	23.03	0.2010	25.83	0.3829
Highest		1	1	22.83	0.1919	25.63	0.3656
Lowest	256QAM	1	1	20.93	0.1239	23.73	0.2361
Middle		1	1	20.53	0.1130	23.33	0.2153
Highest		1	1	20.43	0.1105	23.23	0.2104
Limit	EIRP < 1W			Result		PASS	



NR n66 / 10MHz (Average) (GT - LC = 2.8 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	PI/2 BPSK	25	12	23.63	0.2307	26.43	0.4396
Middle		25	12	23.33	0.2153	26.13	0.4103
Highest		25	12	23.03	0.2010	25.83	0.3829
Lowest	QPSK	50	0	23.63	0.2307	26.43	0.4396
Middle		50	0	23.33	0.2153	26.13	0.4103
Highest		50	0	23.03	0.2010	25.83	0.3829
Lowest	16QAM	1	1	23.53	0.2255	26.33	0.4296
Middle		1	1	23.23	0.2104	26.03	0.4009
Highest		1	1	22.93	0.1964	25.73	0.3742
Lowest	64QAM	1	1	23.23	0.2104	26.03	0.4009
Middle		1	1	23.03	0.2010	25.83	0.3829
Highest		1	1	22.73	0.1875	25.53	0.3573
Lowest	256QAM	1	1	21.13	0.1298	23.93	0.2472
Middle		1	1	20.93	0.1239	23.73	0.2361
Highest		1	1	20.53	0.1130	23.33	0.2153
Limit	EIRP < 1W			Result		PASS	

NR n66 / 15MHz (Average) (GT - LC = 2.8 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	PI/2 BPSK	1	1	23.53	0.2255	26.33	0.4296
Middle		1	1	23.23	0.2104	26.03	0.4009
Highest		1	1	22.93	0.1964	25.73	0.3742
Lowest	QPSK	75	0	23.63	0.2307	26.43	0.4396
Middle		75	0	23.33	0.2153	26.13	0.4103
Highest		75	0	23.03	0.2010	25.83	0.3829
Lowest	16QAM	1	1	23.53	0.2255	26.33	0.4296
Middle		1	1	23.23	0.2104	26.03	0.4009
Highest		1	1	23.03	0.2010	25.83	0.3829
Lowest	64QAM	1	1	23.33	0.2153	26.13	0.4103
Middle		1	1	23.03	0.2010	25.83	0.3829
Highest		1	1	22.73	0.1875	25.53	0.3573
Lowest	256QAM	1	1	21.23	0.1328	24.03	0.2530
Middle		1	1	20.83	0.1211	23.63	0.2307
Highest		1	1	20.63	0.1157	23.43	0.2203
Limit	EIRP < 1W			Result		PASS	



NR n66 / 20MHz (Average) (GT - LC = 2.8 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	PI/2 BPSK	1	0	23.63	0.2307	26.43	0.4396
Middle		1	0	23.33	0.2153	26.13	0.4103
Highest		1	0	23.13	0.2056	25.93	0.3918
Lowest	QPSK	1	1	23.63	0.2307	26.43	0.4396
Middle		1	1	23.33	0.2153	26.13	0.4103
Highest		1	1	23.23	0.2104	26.03	0.4009
Lowest	16QAM	1	1	23.63	0.2307	26.43	0.4396
Middle		1	1	23.33	0.2153	26.13	0.4103
Highest		1	1	23.13	0.2056	25.93	0.3918
Lowest	64QAM	1	1	23.33	0.2153	26.13	0.4103
Middle		1	1	23.13	0.2056	25.93	0.3918
Highest		1	1	22.93	0.1964	25.73	0.3742
Lowest	256QAM	1	1	21.23	0.1328	24.03	0.2530
Middle		1	1	21.03	0.1268	23.83	0.2416
Highest		1	1	20.73	0.1184	23.53	0.2255
Limit	EIRP < 1W			Result		PASS	

5G NR n71:

NR n71 / 5MHz (Average) (GT - LC =1.7 dB)							
Channel	Mode	RB		Conducted		ERP	
		Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	PI/2 BPSK	1	1	23.77	0.2383	23.32	0.2148
Middle		1	1	23.53	0.2255	23.08	0.2033
Highest		1	1	23.33	0.2153	22.88	0.1941
Lowest	QPSK	1	1	23.73	0.2361	23.28	0.2129
Middle		1	1	23.73	0.2361	23.28	0.2129
Highest		1	1	23.43	0.2203	22.98	0.1987
Lowest	16QAM	1	1	23.73	0.2361	23.28	0.2129
Middle		1	1	23.63	0.2307	23.18	0.2080
Highest		1	1	23.43	0.2203	22.98	0.1987
Lowest	64QAM	1	1	22.93	0.1964	22.48	0.1771
Middle		1	1	22.43	0.1750	21.98	0.1578
Highest		1	1	22.23	0.1672	21.78	0.1507
Lowest	256QAM	1	1	20.43	0.1105	19.98	0.0996
Middle		1	1	20.03	0.1007	19.58	0.0908
Highest		1	1	19.93	0.0985	19.48	0.0888
Limit	ERP < 3W			Result		PASS	



NR n71 / 10MHz (Average) (GT - LC = 1.7 dB)							
Channel	Mode	RB		Conducted		ERP	
		Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	PI/2 BPSK	1	1	23.73	0.2361	23.28	0.2129
Middle		1	1	23.53	0.2255	23.08	0.2033
Highest		1	1	23.33	0.2153	22.88	0.1941
Lowest	QPSK	1	1	23.73	0.2361	23.28	0.2129
Middle		1	1	23.53	0.2255	23.08	0.2033
Highest		1	1	23.43	0.2203	22.98	0.1987
Lowest	16QAM	1	1	22.63	0.1833	22.18	0.1652
Middle		1	1	23.33	0.2153	22.88	0.1941
Highest		1	1	23.43	0.2203	22.98	0.1987
Lowest	64QAM	1	1	22.43	0.1750	21.98	0.1578
Middle		1	1	22.03	0.1596	21.58	0.1439
Highest		1	1	22.33	0.1711	21.88	0.1542
Lowest	256QAM	1	1	20.23	0.1055	19.78	0.0951
Middle		1	1	19.93	0.0985	19.48	0.0888
Highest		1	1	19.83	0.0962	19.38	0.0867
Limit	ERP < 3W			Result		PASS	

NR n71 / 15MHz (Average) (GT - LC = 1.7 dB)							
Channel	Mode	RB		Conducted		ERP	
		Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	PI/2 BPSK	1	1	23.73	0.2361	23.28	0.2129
Middle		1	1	23.63	0.2307	23.18	0.2080
Highest		1	1	23.33	0.2153	22.88	0.1941
Lowest	QPSK	1	1	23.73	0.2361	23.28	0.2129
Middle		1	1	23.63	0.2307	23.18	0.2080
Highest		1	1	23.43	0.2203	22.98	0.1987
Lowest	16QAM	1	1	23.53	0.2255	23.08	0.2033
Middle		1	1	23.43	0.2203	22.98	0.1987
Highest		1	1	23.13	0.2056	22.68	0.1854
Lowest	64QAM	1	1	22.63	0.1833	22.18	0.1652
Middle		1	1	22.13	0.1634	21.68	0.1473
Highest		1	1	22.33	0.1711	21.88	0.1542
Lowest	256QAM	1	1	20.03	0.1007	19.58	0.0908
Middle		1	1	20.03	0.1007	19.58	0.0908
Highest		1	1	19.83	0.0962	19.38	0.0867
Limit	ERP < 3W			Result		PASS	



NR n71 / 20MHz (Average) (GT - LC = 1.7 dB)							
Channel	Mode	RB		Conducted		ERP	
		Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	PI/2 BPSK	1	1	23.78	0.2388	23.33	0.2153
Middle		1	1	23.53	0.2255	23.08	0.2033
Highest		1	1	23.43	0.2203	22.98	0.1987
Lowest	QPSK	1	1	23.73	0.2361	23.28	0.2129
Middle		1	1	23.63	0.2307	23.18	0.2080
Highest		1	1	23.43	0.2203	22.98	0.1987
Lowest	16QAM	1	1	22.73	0.1875	22.28	0.1691
Middle		1	1	23.33	0.2153	22.88	0.1941
Highest		1	1	23.23	0.2104	22.78	0.1897
Lowest	64QAM	1	1	22.63	0.1833	22.18	0.1652
Middle		1	1	22.43	0.1750	21.98	0.1578
Highest		1	1	22.33	0.1711	21.88	0.1542
Lowest	256QAM	1	1	20.23	0.1055	19.78	0.0951
Middle		1	1	19.93	0.0985	19.48	0.0888
Highest		1	1	19.83	0.0962	19.38	0.0867
Limit	ERP < 3W			Result		PASS	

5G NR n41:

NR n41 / 20MHz (Average) (GT - LC = 5 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	PI/2 BPSK	1	1	23.47	0.2224	26.07	0.4046
Middle		1	1	23.67	0.2329	26.27	0.4237
Highest		1	1	23.67	0.2329	26.27	0.4237
Lowest	QPSK	1	1	23.67	0.2329	26.27	0.4237
Middle		1	1	23.57	0.2276	26.17	0.4140
Highest		1	1	23.57	0.2276	26.17	0.4140
Lowest	16QAM	1	1	23.67	0.2329	26.27	0.4237
Middle		1	1	23.67	0.2329	26.27	0.4237
Highest		1	1	23.47	0.2224	26.07	0.4046
Lowest	64QAM	1	1	23.77	0.2383	26.37	0.4336
Middle		1	1	22.17	0.1649	24.77	0.3000
Highest		1	1	22.17	0.1649	24.77	0.3000
Lowest	256QAM	1	1	22.37	0.1726	24.97	0.3141
Middle		1	1	20.17	0.1040	22.77	0.1893
Highest		1	1	20.17	0.1040	22.77	0.1893
Limit	EIRP < 2W			Result		PASS	



NR n41 / 40MHz (Average) (GT - LC = 5 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	PI/2 BPSK	1	1	23.97	0.2495	26.57	0.4540
Middle		1	1	23.97	0.2495	26.57	0.4540
Highest		1	1	23.87	0.2438	26.47	0.4437
Lowest	QPSK	1	1	23.97	0.2495	26.57	0.4540
Middle		1	1	23.97	0.2495	26.57	0.4540
Highest		1	1	23.97	0.2495	26.57	0.4540
Lowest	16QAM	1	1	23.77	0.2383	26.37	0.4336
Middle		1	1	23.97	0.2495	26.57	0.4540
Highest		1	1	23.77	0.2383	26.37	0.4336
Lowest	64QAM	1	1	23.17	0.2075	25.77	0.3776
Middle		1	1	22.57	0.1808	25.17	0.3289
Highest		1	1	22.47	0.1767	25.07	0.3214
Lowest	256QAM	1	1	21.97	0.1574	24.57	0.2865
Middle		1	1	20.57	0.1141	23.17	0.2075
Highest		1	1	20.57	0.1141	23.17	0.2075
Limit	EIRP < 2W			Result		PASS	

NR n41 / 50MHz (Average) (GT - LC = 5 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	PI/2 BPSK	1	132	23.97	0.2495	26.57	0.4540
Middle		1	132	23.37	0.2173	25.97	0.3954
Highest		1	132	22.87	0.1937	25.47	0.3524
Lowest	QPSK	1	132	23.97	0.2495	26.57	0.4540
Middle		1	132	23.27	0.2124	25.87	0.3864
Highest		1	132	22.97	0.1982	25.57	0.3606
Lowest	16QAM	1	1	23.17	0.2075	25.77	0.3776
Middle		1	1	23.57	0.2276	26.17	0.4140
Highest		1	1	23.57	0.2276	26.17	0.4140
Lowest	64QAM	1	1	22.17	0.1649	24.77	0.3000
Middle		1	1	22.17	0.1649	24.77	0.3000
Highest		1	1	22.07	0.1611	24.67	0.2931
Lowest	256QAM	1	1	21.07	0.1280	23.67	0.2329
Middle		1	1	20.17	0.1040	22.77	0.1893
Highest		1	1	20.07	0.1017	22.67	0.1850
Limit	EIRP < 2W			Result		PASS	



NR n41 / 60MHz (Average) (GT - LC = 5 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	PI/2 BPSK	1	160	23.97	0.2495	26.57	0.4540
Middle		1	160	23.17	0.2075	25.77	0.3776
Highest		1	160	23.37	0.2173	25.97	0.3954
Lowest	QPSK	1	161	23.77	0.2383	26.37	0.4336
Middle		1	161	23.17	0.2075	25.77	0.3776
Highest		1	161	23.17	0.2075	25.77	0.3776
Lowest	16QAM	1	1	23.57	0.2276	26.17	0.4140
Middle		1	1	23.77	0.2383	26.37	0.4336
Highest		1	1	23.27	0.2124	25.87	0.3864
Lowest	64QAM	1	1	23.67	0.2329	26.27	0.4237
Middle		1	1	22.47	0.1767	25.07	0.3214
Highest		1	1	21.87	0.1539	24.47	0.2799
Lowest	256QAM	1	1	22.27	0.1687	24.87	0.3070
Middle		1	1	20.17	0.1040	22.77	0.1893
Highest		1	1	19.87	0.0971	22.47	0.1767
Limit	EIRP < 2W			Result		PASS	

NR n41 / 80MHz (Average) (GT - LC = 5 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	PI/2 BPSK	108	54	23.97	0.2495	26.57	0.4540
Middle		108	54	23.37	0.2173	25.97	0.3954
Highest		108	54	23.37	0.2173	25.97	0.3954
Lowest	QPSK	1	215	23.97	0.2495	26.57	0.4540
Middle		1	215	23.07	0.2028	25.67	0.3690
Highest		1	215	23.27	0.2124	25.87	0.3864
Lowest	16QAM	1	1	23.67	0.2329	26.27	0.4237
Middle		1	1	23.87	0.2438	26.47	0.4437
Highest		1	1	23.77	0.2383	26.37	0.4336
Lowest	64QAM	1	1	22.77	0.1893	25.37	0.3444
Middle		1	1	22.57	0.1808	25.17	0.3289
Highest		1	1	22.37	0.1726	24.97	0.3141
Lowest	256QAM	1	1	21.17	0.1310	23.77	0.2383
Middle		1	1	20.37	0.1089	22.97	0.1982
Highest		1	1	20.07	0.1017	22.67	0.1850
Limit	EIRP < 2W			Result		PASS	



NR n41 / 90MHz (Average) (GT - LC = 5 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	PI/2 BPSK	120	60	23.97	0.2495	26.57	0.4540
Middle		120	60	23.77	0.2383	26.37	0.4336
Highest		120	60	23.37	0.2173	25.97	0.3954
Lowest	QPSK	120	60	23.97	0.2495	26.57	0.4540
Middle		120	60	23.37	0.2173	25.97	0.3954
Highest		120	60	23.37	0.2173	25.97	0.3954
Lowest	16QAM	1	1	23.87	0.2438	26.47	0.4437
Middle		1	1	23.87	0.2438	26.47	0.4437
Highest		1	1	23.77	0.2383	26.37	0.4336
Lowest	64QAM	1	1	23.17	0.2075	25.77	0.3776
Middle		1	1	22.57	0.1808	25.17	0.3289
Highest		1	1	22.37	0.1726	24.97	0.3141
Lowest	256QAM	1	1	21.57	0.1436	24.17	0.2613
Middle		1	1	20.37	0.1089	22.97	0.1982
Highest		1	1	20.17	0.1040	22.77	0.1893
Limit	EIRP < 2W			Result		PASS	

NR n41 / 100MHz (Average) (GT - LC = 5 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	PI/2 BPSK	135	67	23.97	0.2495	26.57	0.4540
Middle		135	67	23.27	0.2124	25.87	0.3864
Highest		135	67	23.27	0.2124	25.87	0.3864
Lowest	QPSK	135	67	23.97	0.2495	26.57	0.4540
Middle		135	67	23.27	0.2124	25.87	0.3864
Highest		135	67	23.27	0.2124	25.87	0.3864
Lowest	16QAM	1	1	23.67	0.2329	26.27	0.4237
Middle		1	1	23.87	0.2438	26.47	0.4437
Highest		1	1	23.77	0.2383	26.37	0.4336
Lowest	64QAM	1	1	23.57	0.2276	26.17	0.4140
Middle		1	1	22.57	0.1808	25.17	0.3289
Highest		1	1	22.27	0.1687	24.87	0.3070
Lowest	256QAM	1	1	21.97	0.1574	24.57	0.2865
Middle		1	1	20.37	0.1089	22.97	0.1982
Highest		1	1	20.17	0.1040	22.77	0.1893
Limit	EIRP < 2W			Result		PASS	



Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

EN-DC_5A_n66A / LTE 10MHz +NR 20MHz / QPSK DFT-s-OFDM								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	3471	-51.97	-13	-38.97	-62.71	2.604	13.34	H
	5208	-57.40	-13	-44.40	-67.91	3.011	13.52	H
	6948	-53.54	-13	-40.54	-63.74	3.271	13.47	H
	3471	-50.51	-13	-37.51	-61.25	2.604	13.34	V
	5208	-57.80	-13	-44.80	-68.31	3.011	13.52	V
	6948	-53.77	-13	-40.77	-63.97	3.271	13.47	V

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

EN-DC_7A_n66A / LTE 10MHz +NR 20MHz / QPSK DFT-s-OFDM								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	3471	-52.02	-13	-39.02	-62.76	2.604	13.34	H
	5208	-57.92	-13	-44.92	-68.43	3.011	13.52	H
	6948	-53.92	-13	-40.92	-64.12	3.271	13.47	H
	3471	-51.21	-13	-38.21	-61.95	2.604	13.34	V
	5208	-57.83	-13	-44.83	-68.34	3.011	13.52	V
	6948	-53.89	-13	-40.89	-64.09	3.271	13.47	V

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

EN-DC_12A_n66A / LTE 10MHz +NR 20MHz / QPSK DFT-s-OFDM								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	3471	-55.78	-13	-42.78	-66.52	2.604	13.34	H
	5208	-57.88	-13	-44.88	-68.39	3.011	13.52	H
	6948	-53.79	-13	-40.79	-63.99	3.271	13.47	H
	3471	-49.61	-13	-36.61	-60.35	2.604	13.34	V
	5208	-57.30	-13	-44.30	-67.81	3.011	13.52	V
	6948	-53.63	-13	-40.63	-63.83	3.271	13.47	V

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



EN-DC_13A_n66A / LTE 10MHz +NR 20MHz / QPSK DFT-s-OFDM								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	3471	-52.98	-13	-39.98	-63.72	2.604	13.34	H
	5208	-57.81	-13	-44.81	-68.32	3.011	13.52	H
	6948	-54.09	-13	-41.09	-64.29	3.271	13.47	H
	3471	-50.82	-13	-37.82	-61.56	2.604	13.34	V
	5208	-57.21	-13	-44.21	-67.72	3.011	13.52	V
	6948	-53.63	-13	-40.63	-63.83	3.271	13.47	V

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

EN-DC_71A_n66A / LTE 10MHz +NR 20MHz / QPSK DFT-s-OFDM								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	3471	-54.28	-13	-41.28	-65.02	2.604	13.34	H
	5208	-57.73	-13	-44.73	-68.24	3.011	13.52	H
	6948	-54.12	-13	-41.12	-64.32	3.271	13.47	H
	3471	-50.61	-13	-37.61	-61.35	2.604	13.34	V
	5208	-57.93	-13	-44.93	-68.44	3.011	13.52	V
	6948	-53.60	-13	-40.60	-63.80	3.271	13.47	V

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

EN-DC_2A_n66A / LTE 10MHz +NR 20MHz / QPSK DFT-s-OFDM								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	3471	-60.76	-13	-47.76	-71.50	2.604	13.34	H
	5208	-57.77	-13	-44.77	-68.28	3.011	13.52	H
	6948	-54.05	-13	-41.05	-64.25	3.271	13.47	H
	3471	-59.95	-13	-46.95	-70.69	2.604	13.34	V
	5208	-58.14	-13	-45.14	-68.65	3.011	13.52	V
	6948	-54.98	-13	-41.98	-65.18	3.271	13.47	V

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



EN-DC_48A_n66A / LTE 10MHz +NR 20MHz / QPSK DFT-s-OFDM								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	3471	-60.10	-13	-47.10	-70.84	2.604	13.34	H
	5208	-57.70	-13	-44.70	-68.21	3.011	13.52	H
	6948	-53.54	-13	-40.54	-63.74	3.271	13.47	H
	3471	-61.32	-13	-48.32	-72.06	2.604	13.34	V
	5208	-57.66	-13	-44.66	-68.17	3.011	13.52	V
	6948	-53.44	-13	-40.44	-63.64	3.271	13.47	V

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

EN-DC_14A_n66A / LTE 10MHz +NR 20MHz / QPSK DFT-s-OFDM								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	3471	-59.71	-13	-46.71	-70.45	2.604	13.34	H
	5208	-56.59	-13	-43.59	-67.10	3.011	13.52	H
	6948	-55.95	-13	-42.95	-66.15	3.271	13.47	H
	3471	-60.53	-13	-47.53	-71.27	2.604	13.34	V
	5208	-57.23	-13	-44.23	-67.74	3.011	13.52	V
	6948	-56.45	-13	-43.45	-66.65	3.271	13.47	V

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

EN-DC_30A_n66A / LTE 10MHz +NR 20MHz / QPSK DFT-s-OFDM								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	3471	-59.33	-13	-46.33	-70.07	2.604	13.34	H
	5208	-56.10	-13	-43.10	-66.61	3.011	13.52	H
	6948	-55.97	-13	-42.97	-66.17	3.271	13.47	H
	8676	-50.75	-13	-37.75	-57.72	5.527	12.5	H
	3471	-60.45	-13	-47.45	-71.19	2.604	13.34	V
	5208	-57.25	-13	-44.25	-67.76	3.011	13.52	V
	6948	-56.19	-13	-43.19	-66.39	3.271	13.47	V
	8676	-52.04	-13	-39.04	-59.01	5.527	12.50	V

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



EN-DC_2A_n41A / LTE 10MHz +NR 100MHz / QPSK DFT-s-OFDM								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	5088	-55.82	-25	-30.82	-66.03	3.03	13.24	H
	7644	-60.77	-25	-35.77	-70.22	3.56	13.01	H
	10190	-57.69	-25	-32.69	-67.21	3.92	13.44	H
	5088	-54.09	-25	-29.09	-64.30	3.03	13.24	V
	7644	-60.55	-25	-35.55	-70.00	3.56	13.01	V
	10190	-57.89	-25	-32.89	-67.41	3.92	13.44	V

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

EN-DC_25A_n41A / LTE 10MHz +NR 100MHz / QPSK DFT-s-OFDM								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	5088	-58.48	-25	-33.48	-68.69	3.03	13.24	H
	7644	-60.92	-25	-35.92	-70.37	3.56	13.01	H
	10190	-57.92	-25	-32.92	-67.44	3.92	13.44	H
	5088	-58.10	-25	-33.10	-68.31	3.03	13.24	V
	7644	-60.57	-25	-35.57	-70.02	3.56	13.01	V
	10190	-57.76	-25	-32.76	-67.28	3.92	13.44	V

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

EN-DC_26A_n41A / LTE 10MHz +NR 100MHz / QPSK DFT-s-OFDM								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	5088	-56.49	-25	-31.49	-66.70	3.03	13.24	H
	7644	-60.66	-25	-35.66	-70.11	3.56	13.01	H
	10190	-57.97	-25	-32.97	-67.49	3.92	13.44	H
	5088	-55.41	-25	-30.41	-65.62	3.03	13.24	V
	7644	-60.59	-25	-35.59	-70.04	3.56	13.01	V
	10190	-57.86	-25	-32.86	-67.38	3.92	13.44	V

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



EN-DC_66A_n41A / LTE 10MHz +NR 100MHz / QPSK DFT-s-OFDM								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	5088	-62.10	-25	-37.10	-72.31	3.03	13.24	H
	7644	-61.08	-25	-36.08	-70.53	3.56	13.01	H
	10190	-57.86	-25	-32.86	-67.38	3.92	13.44	H
	5088	-58.49	-25	-33.49	-68.70	3.03	13.24	V
	7644	-60.62	-25	-35.62	-70.07	3.56	13.01	V
	10190	-57.79	-25	-32.79	-67.31	3.92	13.44	V

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

EN-DC_2A_n12A / LTE 10MHz +NR 15MHz / QPSK DFT-s-OFDM								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1402	-63.91	-13	-50.91	-70.88	1.58	10.70	H
	2102	-63.65	-13	-50.65	-71.90	2.102	12.50	H
	2804	-62.67	-13	-49.67	-71.56	2.856	13.90	H
	3504	-61.33	-13	-48.33	-69.79	2.689	13.30	H
	1402	-61.05	-13	-48.05	-68.02	1.58	10.70	V
	2102	-61.30	-13	-48.30	-69.55	2.10	12.50	V
	2804	-62.42	-13	-49.42	-71.31	2.86	13.90	V
	3504	-61.61	-13	-48.61	-70.07	2.69	13.30	V

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

EN-DC_66A_n12A / LTE 10MHz +NR 15MHz / QPSK DFT-s-OFDM								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1402	-66.40	-13	-53.40	-73.37	1.58	10.70	H
	2102	-66.17	-13	-53.17	-74.42	2.102	12.50	H
	2804	-65.33	-13	-52.33	-74.22	2.856	13.90	H
	3504	-64.09	-13	-51.09	-72.55	2.689	13.30	H
	1402	-63.84	-13	-50.84	-70.81	1.58	10.70	V
	2102	-64.56	-13	-51.56	-72.81	2.10	12.50	V
	2804	-65.05	-13	-52.05	-73.94	2.86	13.90	V
	3504	-64.13	-13	-51.13	-72.59	2.69	13.30	V

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



EN-DC_2A_n71A / LTE 10MHz +NR 20MHz / QPSK DFT-s-OFDM								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1344	-69.36	-13	-56.36	-71.11	1.02	4.92	H
	2014	-67.10	-13	-54.10	-69.07	1.27	5.39	H
	2686	-65.81	-13	-52.81	-68.74	1.49	6.57	H
	3360	-64.53	-13	-51.53	-67.93	1.73	7.28	H
	1344	-69.16	-13	-56.16	-70.91	1.02	4.92	V
	2014	-67.33	-13	-54.33	-69.30	1.27	5.39	V
	2686	-65.63	-13	-52.63	-68.56	1.49	6.57	V
	3360	-64.64	-13	-51.64	-68.04	1.73	7.28	V

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

EN-DC_7A_n71A / LTE 10MHz +NR 20MHz / QPSK DFT-s-OFDM								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1344	-68.87	-13	-55.87	-70.62	1.02	4.92	H
	2014	-67.44	-13	-54.44	-69.41	1.27	5.39	H
	2686	-65.46	-13	-52.46	-68.39	1.49	6.57	H
	3360	-64.39	-13	-51.39	-67.79	1.73	7.28	H
	1344	-68.35	-13	-55.35	-70.10	1.02	4.92	V
	2014	-67.09	-13	-54.09	-69.06	1.27	5.39	V
	2686	-65.30	-13	-52.30	-68.23	1.49	6.57	V
	3360	-64.15	-13	-51.15	-67.55	1.73	7.28	V

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

EN-DC_66A_n71A / LTE 10MHz +NR 20MHz / QPSK DFT-s-OFDM								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1342	-69.36	-13	-56.36	-71.11	1.02	4.92	H
	2014	-67.37	-13	-54.37	-69.34	1.27	5.39	H
	2686	-65.38	-13	-52.38	-68.31	1.49	6.57	H
	3360	-64.46	-13	-51.46	-67.86	1.73	7.28	H
	1342	-65.52	-13	-52.52	-67.27	1.02	4.92	V
	2014	-66.93	-13	-53.93	-68.90	1.27	5.39	V
	2686	-65.43	-13	-52.43	-68.36	1.49	6.57	V
	3360	-64.01	-13	-51.01	-67.41	1.73	7.28	V

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