



# FCC RADIO TEST REPORT

**FCC ID** : PKRISGMD2000  
**Equipment** : Wireless Module  
**Brand Name** : Inseego  
**Model Name** : MD2000  
**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, 22(H), 24(E), 27

The product was received on Dec. 28, 2020 and testing was started from Jan. 05, 2021 and completed on Jan. 29, 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.

*Louis Wu*

Approved by: Louis Wu

**SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory**

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



## Table of Contents

<b>History of this test report.....</b>	<b>3</b>
<b>Summary of Test Result.....</b>	<b>4</b>
<b>1 General Description .....</b>	<b>6</b>
1.1 Product Feature of Equipment Under Test.....	6
1.2 Modification of EUT .....	6
1.3 Testing Location .....	7
1.4 Applicable Standards.....	7
<b>2 Test Configuration of Equipment Under Test .....</b>	<b>8</b>
2.1 Test Mode.....	8
2.2 Connection Diagram of Test System.....	9
2.3 Support Unit used in test configuration and system .....	9
2.4 Frequency List of Low/Middle/High Channels .....	10
<b>3 Conducted Test Items.....</b>	<b>13</b>
3.1 Measuring Instruments .....	13
3.2 Conducted Output Power and ERP/EIRP .....	14
<b>4 Radiated Test Items .....</b>	<b>15</b>
4.1 Measuring Instruments .....	15
4.2 Radiated Spurious Emission Measurement .....	17
<b>5 List of Measuring Equipment.....</b>	<b>18</b>
<b>6 Uncertainty of Evaluation.....</b>	<b>20</b>
<b>Appendix A. Test Results of Conducted and ERP/EIRP Test</b>	
<b>Appendix B. Test Results of Radiated Test</b>	
<b>Appendix C. Test Setup Photographs</b>	



### History of this test report

Report No.	Version	Description	Issued Date
FG090125-02B	01	Initial issue of report	Feb. 09, 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	-
	§22.913 (a)(2)	Effective Radiated Power (n5)	Pass	
	§27.50 (c)(10)	Effective Radiated Power (n12) (n71)		
	§24.232 (c) §27.50 (h)(2)	Equivalent Isotropic Radiated Power (n2) (n25) (n41)		
	§27.50 (d)(4)	Equivalent Isotropic Radiated Power (n66)		
-	§24.232 (d) §27.50 (d)(5)	Peak-to-Average Ratio	Not Required	-
-	§2.1049	Occupied Bandwidth	Not Required	-
-	§2.1051 §22.917 (a) §24.238 (a) §27.53 (g) §27.53 (h)	Conducted Band Edge Measurement (n2) (n5) (n12) (n25) (n66) (n71)	Not Required	-
	§2.1051 §27.53 (m)(4)	Conducted Band Edge Measurement (n41)		
-	§2.1051 §22.917 (a) §24.238 (a) §27.53 (g) §27.53 (h)	Conducted Spurious Emission (n2) (n5) (n12) (n25) (n66) (n71)	Not Required	-
	§2.1051 §27.53 (m)(4)	Conducted Spurious Emission (n41)		
-	§2.1055 §22.355 §24.235 §27.54	Frequency Stability Temperature & Voltage	Not Required	-



Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
4.2	§2.1053 §22.917 (a) §24.238 (a) §27.53 (g) §27.53 (h)	Radiated Spurious Emission (n2) (n5) (n12) (n25) (n66) (n71)	Pass	Under limit 17.86 dB at 10193.000 MHz
	§2.1051 §27.53 (m)(4)	Radiated Spurious Emission (n41)		

**Remark:**

1. Not required means after assessing, test items are not necessary to carry out.
2. This is a variant report by changing SW. All the test cases were performed on original report which can be referred to Sporton Report Number FG090125-01B. Based on the original report, the test cases were verified.

**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: Amy Chen**



# 1 General Description

## 1.1 Product Feature of Equipment Under Test

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

Product Specification subjective to this standard	
<b>Antenna Type</b>	WWAN: <Primary Ant.>: Monopole Antenna <Diversity Ant.>: Monopole Antenna WLAN: <Ant. 0>: Monopole Antenna <Ant. 1>: Monopole Antenna GPS/BDS/Galileo/GLONASS: Monopole Antenna

### <Primary Antenna>

Radio Tech	Band Number	Antenna name	Gain
5G NR	n2	ANT8	6.0
5G NR	n5	ANT1	3.6
5G NR	n12	ANT0	3.2
5G NR	n25	ANT8	6.0
5G NR	n41	ANT8	5.0
5G NR	n66	ANT8	5.8
5G NR	n71	ANT0	3.1

### <Diversity Antenna>

Radio Tech	Band Number	Antenna name	Gain
5G NR	n2	ANT0	6.0
5G NR	n5	ANT0	3.6
5G NR	n66	ANT0	5.8

**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

<b>Test Site</b>	SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory
<b>Test Site Location</b>	No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.) TEL: +886-3-327-3456 FAX: +886-3-328-4978
<b>Test Site No.</b>	<b>Sporton Site No.</b>
	TH05-HY
<b>Test Engineer</b>	Richard Qiu
<b>Temperature</b>	22~25°C
<b>Relative Humidity</b>	54~59%

<b>Test Site</b>	SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory
<b>Test Site Location</b>	No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.) TEL: +886-3-327-0868 FAX: +886-3-327-0855
<b>Test Site No.</b>	<b>Sporton Site No.</b>
	03CH12-HY
<b>Test Engineer</b>	Jack Cheng, Lance Chiang, and Chuan Chu
<b>Temperature</b>	24.3~26.4°C
<b>Relative Humidity</b>	58~66%

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

FCC Designation No.: TW1190 and TW0007

### 1.4 Applicable 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, 22(H), 24(E), 27
- ♦ 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.

**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

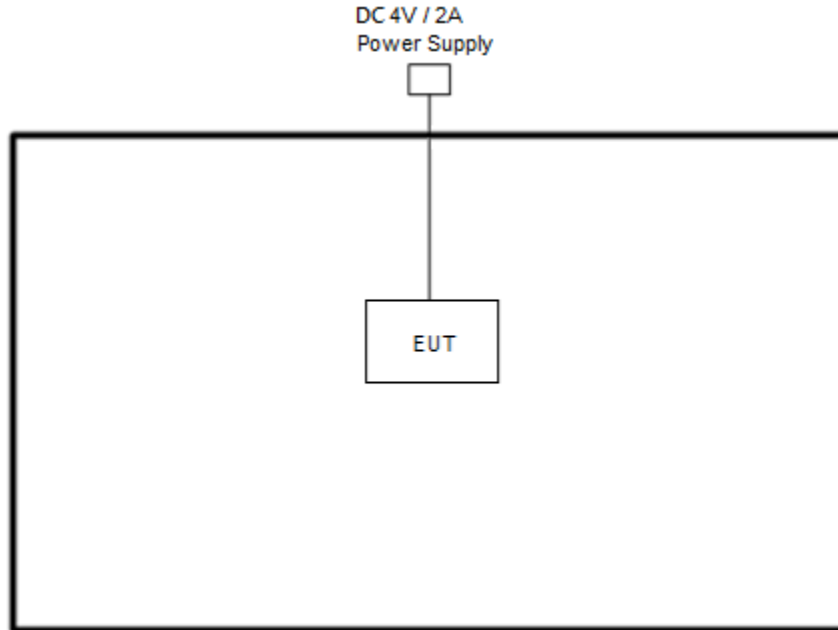
Antenna port conducted and radiated test items listed below are performed according to KDB 971168 D01 Power Meas. License Digital Systems v03r01 with maximum output power.

For radiated measurement, pre-scanned in two config (Ant. Horizontal and Ant. Vertical). The worst cases (Ant. Horizontal: Ant. 0 for 5G NR n2 / n5 / n66 / n71; Ant. 1 for 5G NR n5; Ant. 8 for 5G NR n25 / n41 / n66; Ant. 0+1 for EN-DC 30A\_n5A; Ant. 0+8 for EN-DC 14A\_n2A / EN-DC 30A\_n66A; Ant. Vertical: Ant. 0 for 5G NR n12; Ant. 8 for 5G NR n2; Ant. 0+8 for EN-DC 12A\_n25A / EN-DC 30A\_n2A / EN-DC 14A\_n66A) were recorded in this report.

Test Items	NR Band	Bandwidth (MHz)										Modulation					RB #			Test Channel			
		5	10	15	20	40	50	60	80	90	100	PI/2 BPSK	QPSK	16QAM	64QAM	256QAM	1	Half	Full	L	M	H	
Max. Output Power	n2	v	v	v	v	-	-	-	-	-	-	v	v	v	v	v	v	v	v	v	v	v	
	n5	v	v	v	v	-	-	-	-	-	-	v	v	v	v	v	v	v	v	v	v	v	
	n12	v	v	v		-	-	-	-	-	-	v	v	v	v	v	v	v	v	v	v	v	
	n25	v	v	v	v	-	-	-	-	-	-	v	v	v	v	v	v	v	v	v	v	v	
	n41	-	-	-	v	v	v	v	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	
E.R.P / E.I.R.P	n2	v	v	v	v	-	-	-	-	-	-	v	v	v	v	v	Max Power						
	n5	v	v	v	v	-	-	-	-	-	-	v	v	v	v	v							
	n12	v	v	v	v	-	-	-	-	-	-	v	v	v	v	v							
	n25	v	v	v	v	-	-	-	-	-	-	v	v	v	v	v							
	n41	-	-	-	v	v	v	v	v	v	v	v	v	v	v	v							
	n66	v	v	v	v	-	-	-	-	-	-	v	v	v	v	v							
	n71	v	v	v	v	-	-	-	-	-	-	v	v	v	v	v							
Radiated Spurious Emission	n2				v	-	-	-	-	-	-	v					v			v	v		
	n5				v	-	-	-	-	-	-	v					v			v	v	v	
	n12			v		-	-	-	-	-	-	v					v			v			
	n25				v	-	-	-	-	-	-	v					v						
	n41	-	-	-							v	v					v				v		
	n66				v	-	-	-	-	-	-	v					v					v	
	n71				v	-	-	-	-	-	-	v					v					v	
Remark	<ol style="list-style-type: none"> <li>The mark "v" means that this configuration is chosen for testing</li> <li>The mark "-" means that this bandwidth is not supported.</li> <li>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.</li> <li>Test combination is EN-DC 30A_n5A / EN-DC 14A_n2A / EN-DC 30A_n66A / EN-DC 12A_n25A / EN-DC 30A_n2A / EN-DC 14A_n66A.</li> </ol>																						



## 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.	Power Supply	GW Instek	GPE-2323	N/A	N/A	Unshielded, 1.8 m
2.	System Simulator	R&S	CMU200	N/A	N/A	Unshielded, 1.8 m
3.	System Simulator	Anritsu	MT8821C	N/A	N/A	Unshielded, 1.8 m



### 2.4 Frequency List of Low/Middle/High Channels

5G NR Band n2 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	18700	18900	19100
	Frequency	1860	1880	1900
15	Channel	18675	18900	19125
	Frequency	1857.5	1880	1902.5
10	Channel	18650	18900	19150
	Frequency	1855	1880	1905
5	Channel	18625	18900	19175
	Frequency	1852.5	1880	1907.5

5G NR Band n5 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	166800	167300	167800
	Frequency	834	836.5	839
15	Channel	166300	167300	168300
	Frequency	831.5	836.5	841.5
10	Channel	165800	167300	168800
	Frequency	829	836.5	844
5	Channel	165300	167300	169300
	Frequency	826.5	836.5	846.5

5G NR Band 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	23060	23095	23130
	Frequency	704	707.5	711
5	Channel	23035	23095	23155
	Frequency	701.5	707.5	713.5



5G NR Band n25 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	26140	26340	26590
	Frequency	1860	1880	1905
15	Channel	26115	26340	26615
	Frequency	1857.5	1880	1907.5
10	Channel	26090	26340	26640
	Frequency	1855	1880	1910
5	Channel	26065	26340	26665
	Frequency	1852.5	1880	1912.5

5G NR Band 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 Band n66 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	132072	132322	132572
	Frequency	1720	1745	1770
15	Channel	132047	132322	132597
	Frequency	1717.5	1745	1772.5
10	Channel	132022	132322	132622
	Frequency	1715	1745	1775
5	Channel	131997	132322	132647
	Frequency	1712.5	1745	1777.5

5G NR Band 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

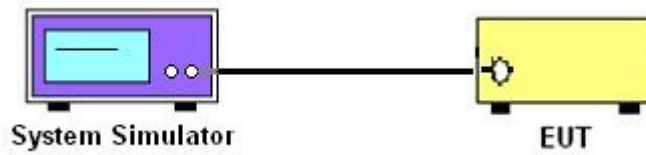
### 3 Conducted Test Items

#### 3.1 Measuring Instruments

See list of measuring instruments of this test report.

##### 3.1.1 Test Setup

##### 3.1.2 Conducted Output Power and ERP/EIRP



##### 3.1.3 Test Result of Conducted Test

Please refer to Appendix A.



## 3.2 Conducted Output Power and ERP/EIRP

### 3.2.1 Description of the Conducted Output Power Measurement and ERP/EIRP 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.

The ERP of mobile transmitters must not exceed 7 Watts for 5G NR n5

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

The EIRP of mobile transmitters must not exceed 2 Watts for 5G NR n2 and n25 and 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

### 3.2.2 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.

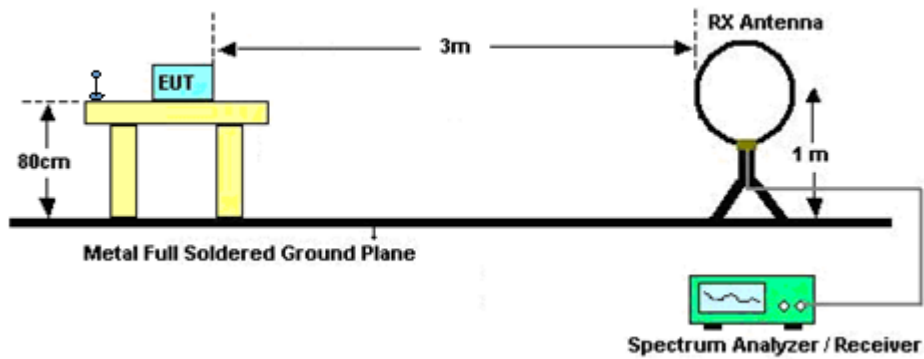
## 4 Radiated Test Items

### 4.1 Measuring Instruments

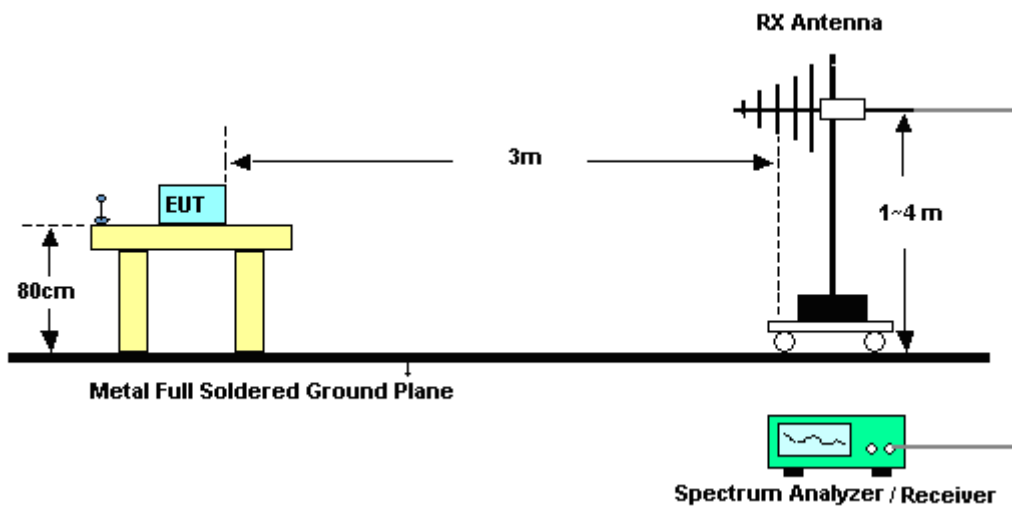
See list of measuring instruments of this test report.

#### 4.1.1 Test Setup

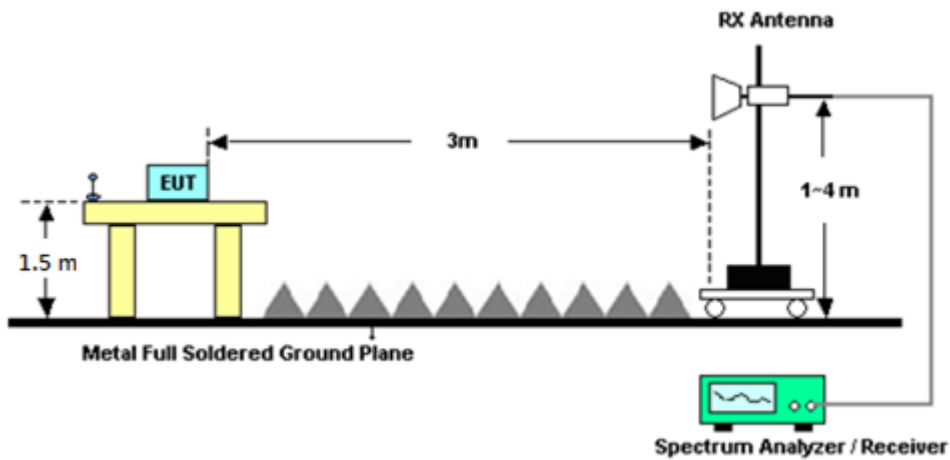
For radiated test below 30MHz



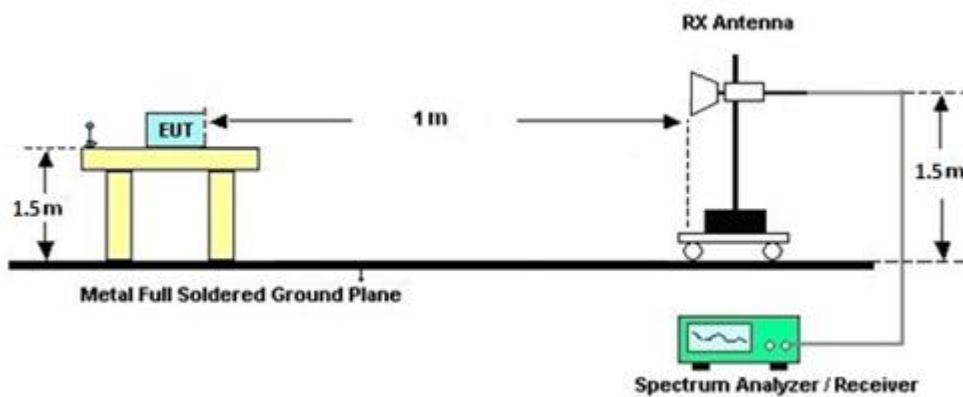
For radiated test from 30MHz to 1GHz



For radiated test from 1GHz to 18GHz



For radiated test above 18GHz



#### 4.1.2 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.





## 4.2 Radiated Spurious Emission Measurement

### 4.2.1 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  $43 + 10 \log (P)$  dB.

For 5G NR 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.

### 4.2.2 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 for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
2. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest spurious emission.
4. The height of the receiving antenna is varied between one meter and four meters to search the maximum spurious emission for both horizontal and vertical polarizations.
5. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
6. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
7. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
8. Taking the record of output power at antenna port.
9. Repeat step 7 to step 8 for another polarization.
10. 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)

For 5G NR n41

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

EIRP (dBm) = S.G. Power – Tx Cable Loss + Tx Antenna Gain

ERP (dBm) = EIRP - 2.15



## 5 List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100488	9 kHz~30 MHz	Jul. 14, 2020	Jan. 06, 2021~ Jan. 29, 2021	Jul. 13, 2021	Radiation (03CH12-HY)
Bilog Antenna	TESEQ	CBL 6111D & 00800N1D01N -06	40103 & 07	30MHz~1GHz	Apr. 29, 2020	Jan. 06, 2021~ Jan. 29, 2021	Apr. 28, 2021	Radiation (03CH12-HY)
Horn Antenna	SCHWARZBE CK	BBHA 9120 D	9120D-1328	1GHz~18GHz	Nov. 23, 2020	Jan. 06, 2021~ Jan. 29, 2021	Nov. 22, 2021	Radiation (03CH12-HY)
Horn Antenna	SCHWARZBE CK	BBHA 9120D	9120D-1241	1GHz ~ 18GHz	Jul. 15, 2020	Jan. 06, 2021~ Jan. 29, 2021	Jul. 14, 2021	Radiation (03CH12-HY)
SHF-EHF Horn Antenna	SCHWARZBE CK	BBHA 9170	BBHA917058 4	18GHz~40GHz	Dec. 11, 2020	Jan. 06, 2021~ Jan. 29, 2021	Dec. 10, 2021	Radiation (03CH12-HY)
SHF-EHF Horn Antenna	SCHWARZBE CK	BBHA 9170	BBHA917057 6	18GHz ~ 40GHz	May 22, 2020	Jan. 06, 2021~ Jan. 29, 2021	May 21, 2021	Radiation (03CH12-HY)
Preamplifier	COM-POWER	PA-103	161075	10MHz~1GHz	Mar. 25, 2020	Jan. 06, 2021~ Jan. 29, 2021	Mar. 24, 2021	Radiation (03CH12-HY)
Preamplifier	Keysight	83017A	MY57280120	1GHz~26.5GHz	Jul. 20, 2020	Jan. 06, 2021~ Jan. 29, 2021	Jul. 19, 2021	Radiation (03CH12-HY)
Preamplifier	E-INSTRUME NT TECH LTD.	ERA-100M-18 G-56-01-A70	EC1900249	1GHz~18GHz	Dec. 05, 2020	Jan. 06, 2021~ Jan. 29, 2021	Dec. 04, 2021	Radiation (03CH12-HY)
Preamplifier	EMEC	EM18G40G	060715	18GHz~40GHz	Dec. 11, 2020	Jan. 06, 2021~ Jan. 29, 2021	Dec. 10, 2021	Radiation (03CH12-HY)
Spectrum Analyzer	Agilent	N9010A	MY54200485	10Hz~44GHz	Feb. 10, 2020	Jan. 06, 2021~ Jan. 29, 2021	Feb. 09, 2021	Radiation (03CH12-HY)
Signal Generator	Anritsu	MG3694C	163401	0.1Hz~40GHz	Feb. 15, 2020	Jan. 06, 2021~ Jan. 29, 2021	Feb. 14, 2021	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY9837/4PE	9kHz~30MHz	Mar. 12, 2020	Jan. 06, 2021~ Jan. 29, 2021	Mar. 11, 2021	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 126E	0058/126E	30MHz~18GHz	Dec. 11, 2020	Jan. 06, 2021~ Jan. 29, 2021	Dec. 10, 2021	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	505134/2	30MHz~40GHz	Feb. 25, 2020	Jan. 06, 2021~ Jan. 29, 2021	Feb. 24, 2021	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	800740/2	30MHz~40GHz	Feb. 25, 2020	Jan. 06, 2021~ Jan. 29, 2021	Feb. 24, 2021	Radiation (03CH12-HY)
Hygrometer	TECPEL	DTM-303B	TP140349	N/A	Oct. 02, 2020	Jan. 06, 2021~ Jan. 29, 2021	Oct. 01, 2020	Radiation (03CH12-HY)
Controller	EMEC	EM1000	N/A	Control Turn table & Ant Mast	N/A	Jan. 06, 2021~ Jan. 29, 2021	N/A	Radiation (03CH12-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1m~4m	N/A	Jan. 06, 2021~ Jan. 29, 2021	N/A	Radiation (03CH12-HY)
Turn Table	EMEC	TT2000	N/A	0~360 Degree	N/A	Jan. 06, 2021~ Jan. 29, 2021	N/A	Radiation (03CH12-HY)
Software	Audix	E3 6.2009-8-24	RK-000989	N/A	N/A	Jan. 06, 2021~ Jan. 29, 2021	N/A	Radiation (03CH12-HY)



Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Base Station (Measure)	Anritsu	MT8821C	6262025280	GSM / GPRS /WCDMA / LTE FDD/TDD with 44) /LTE-3CC DLCA,2CC ULCA	Oct. 05, 2020	Jan. 05, 2021~ Jan. 08, 2021	Oct. 04, 2021	Conducted (TH05-HY)
Spectrum Analyzer	Rohde & Schwarz	FSV40	101908	10Hz~40GHz	May 13, 2020	Jan. 05, 2021~ Jan. 08, 2021	May 12, 2021	Conducted (TH05-HY)
Coupler	Warison	20dB 25W SMA Directional Coupler	#A	1-18GHz	Jan. 13, 2020	Jan. 05, 2021~ Jan. 08, 2021	Jan. 12, 2021	Conducted (TH05-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
---	------

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

Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ )	3.21
---	------

### Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ )	3.80
---	------



## Appendix A. Test Results of Conducted Test

### Conducted Output Power(Average power) and ERP/EIRP

#### <Main Antenna>

NR n2 Maximum Average Power [dBm] (GT - LC = 6 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP(W)
5	1	1	PI/2 BPSK	23.38	23.48	23.58	29.58	0.9078
5	1	23		23.18	23.38	23.48		
5	12	6		23.18	23.38	23.48		
5	1	0		23.18	23.28	23.48		
5	1	24		23.18	23.38	23.48		
5	25	0		23.18	23.38	23.48		
5	1	1	QPSK	23.28	23.38	23.48		
5	1	23		23.18	23.28	23.38		
5	12	6		23.18	23.28	23.38		
5	1	0		22.68	22.78	22.88		
5	1	24		22.78	22.88	22.88		
5	25	0		22.78	22.88	23.08		
5	1	1	16-QAM	22.98	23.08	23.18	29.18	0.8279
5	1	1	64-QAM	21.18	21.18	21.38		
5	1	1	256-QAM	19.18	19.28	19.38		
Limit	EIRP < 2W			Result			Pass	

NR n2 Maximum Average Power [dBm] (GT - LC = 6 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP(W)
10	1	1	PI/2 BPSK	23.38	23.48	23.58	29.58	0.9078
10	1	50		23.28	23.38	23.48		
10	25	12		23.28	23.38	23.48		
10	1	0		23.28	23.38	23.48		
10	1	51		23.28	23.38	23.48		
10	50	0		23.28	23.38	23.48		
10	1	1	QPSK	22.28	23.38	23.48		
10	1	50		23.18	23.28	23.38		
10	25	12		23.18	23.28	23.38		
10	1	0		22.78	22.78	22.98		
10	1	51		22.78	22.88	22.98		
10	50	0		22.78	22.98	23.08		
10	1	1	16-QAM	22.98	22.98	23.28	29.28	0.8472
10	1	1	64-QAM	21.28	21.28	21.58		
10	1	1	256-QAM	19.28	19.28	19.48		
Limit	EIRP < 2W			Result			Pass	



NR n2 Maximum Average Power [dBm] (GT - LC = 6 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP(W)
15	1	1	PI/2 BPSK	23.48	23.48	23.58	29.58	0.9078
15	1	77		23.38	23.38	23.48		
15	36	18		23.38	23.38	23.48		
15	1	0		23.38	23.38	23.48		
15	1	78		23.38	23.38	23.48		
15	75	0		23.38	23.38	23.48		
15	1	1	QPSK	22.38	23.38	23.38		
15	1	77		22.28	23.28	23.38		
15	36	18		23.28	23.28	23.38		
15	1	0		22.78	22.88	22.98		
15	1	78		22.88	22.88	22.88		
15	75	0		22.88	22.98	22.98		
15	1	1	16-QAM	23.08	23.08	23.18	29.18	0.8279
15	1	1	64-QAM	21.38	21.38	21.48		
15	1	1	256-QAM	19.38	19.28	20.55		
Limit	EIRP < 2W			Result			Pass	

NR n2 Maximum Average Power [dBm] (GT - LC = 6 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP(W)
20	1	1	PI/2 BPSK	23.58	23.58	23.58	29.58	0.9078
20	1	104		23.48	23.48	23.48		
20	50	25		23.48	23.48	23.48		
20	1	0		23.48	23.38	23.38		
20	1	105		23.38	23.48	23.38		
20	100	0		23.38	23.48	23.38		
20	1	1	QPSK	23.48	23.38	23.38		
20	1	104		23.38	23.38	23.38		
20	50	25		23.38	23.38	23.38		
20	1	0		22.88	22.88	22.88		
20	1	105		22.88	22.78	22.88		
20	100	0		22.88	22.98	22.98		
20	1	1	16-QAM	23.08	22.68	22.78	29.08	0.8091
20	1	1	64-QAM	21.38	21.38	21.48		
20	1	1	256-QAM	19.38	19.28	19.28		
Limit	EIRP < 2W			Result			Pass	



NR n5 Maximum Average Power [dBm] (GT - LC = 3.6 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP(W)
5	1	1	PI/2 BPSK	23.54	23.34	22.54	24.99	0.3155
5	1	23		22.94	23.44	22.54		
5	12	6		22.84	23.34	23.04		
5	1	0		22.74	23.44	22.04		
5	1	24		22.34	23.44	22.04		
5	25	0		22.64	23.34	22.44		
5	1	1	QPSK	23.34	23.34	22.44		
5	1	23		22.74	23.24	22.74		
5	12	6		23.34	23.44	23.24		
5	1	0		22.44	22.84	21.44		
5	1	24		21.74	22.84	21.54		
5	25	0		22.64	22.94	22.34		
5	1	1	16-QAM	22.54	22.94	21.54	24.39	0.2748
5	1	1	64-QAM	20.94	21.34	20.04		
5	1	1	256-QAM	19.54	19.44	18.64		
Limit	ERP < 7W			Result			Pass	

NR n5 Maximum Average Power [dBm] (GT - LC = 3.6 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP(W)
10	1	1	PI/2 BPSK	23.44	23.04	22.74	26.89	0.4887
10	1	50		23.14	22.84	23.34		
10	25	12		22.54	23.34	23.24		
10	1	0		22.94	22.54	22.34		
10	1	51		22.64	22.24	23.24		
10	50	0		22.44	22.24	22.94		
10	1	1	QPSK	23.34	22.94	22.74		
10	1	50		22.74	23.14	23.34		
10	25	12		22.84	25.44	23.34		
10	1	0		22.94	22.74	22.84		
10	1	51		22.84	22.84	22.84		
10	50	0		22.54	22.94	22.94		
10	1	1	16-QAM	22.44	22.04	21.84	23.89	0.2449
10	1	1	64-QAM	21.34	21.14	21.24		
10	1	1	256-QAM	19.54	19.34	19.44		
Limit	ERP < 7W			Result			Pass	



NR n5 Maximum Average Power [dBm] (GT - LC = 3.6 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP(W)
15	1	1	PI/2 BPSK	23.44	22.94	23.44	24.89	0.3083
15	1	77		23.34	22.34	22.64		
15	36	18		23.04	23.14	23.24		
15	1	0		23.14	22.44	23.34		
15	1	78		23.34	21.84	22.04		
15	75	0		23.14	23.04	23.24		
15	1	1	QPSK	23.34	22.84	23.34		
15	1	77		23.34	22.54	22.44		
15	36	18		23.04	23.24	23.24		
15	1	0		22.94	22.74	22.84		
15	1	78		22.84	22.04	22.04		
15	75	0		22.64	22.64	22.74		
15	1	1	16-QAM	22.74	21.94	22.94	24.39	0.2748
15	1	1	64-QAM	21.34	21.24	21.24		
15	1	1	256-QAM	19.44	19.44	19.34		
Limit	ERP < 7W			Result			Pass	

NR n5 Maximum Average Power [dBm] (GT - LC = 3.6 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP(W)
20	1	1	PI/2 BPSK	23.44	22.64	22.64	24.99	0.3155
20	1	104		21.94	22.14	22.34		
20	50	25		23.44	23.34	23.23		
20	1	0		22.94	22.24	22.64		
20	1	105		21.44	21.64	21.64		
20	100	0		23.24	23.24	23.24		
20	1	1	QPSK	23.34	22.34	22.54		
20	1	104		21.94	21.94	22.14		
20	50	25		23.54	23.34	23.34		
20	1	0		22.94	22.74	22.84		
20	1	105		21.94	21.94	22.04		
20	100	0		22.64	22.64	22.84		
20	1	1	16-QAM	22.44	21.74	21.64	23.89	0.2449
20	1	1	64-QAM	21.24	21.24	21.14		
20	1	1	256-QAM	19.44	19.44	19.24		
Limit	ERP < 7W			Result			Pass	





NR n12 Maximum Average Power [dBm] (GT - LC = 3.2 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP(W)
5	1	1	PI/2 BPSK	23.92	23.82	23.72	24.97	0.3141
5	1	23		23.72	23.62	23.52		
5	12	6		23.82	23.72	23.62		
5	1	0		23.82	23.82	23.72		
5	1	24		23.72	23.62	23.52		
5	25	0		23.82	23.72	23.62		
5	1	1	QPSK	23.82	23.82	23.72		
5	1	23		23.72	23.72	23.52		
5	12	6		23.82	23.72	23.72		
5	1	0		23.42	23.32	23.12		
5	1	24		23.22	23.02	23.02		
5	25	0		23.42	23.32	23.12		
5	1	1	16-QAM	23.32	23.22	23.12	24.37	0.2735
5	1	1	64-QAM	21.82	21.72	21.62		
5	1	1	256-QAM	19.92	19.82	19.72		
Limit	ERP < 3W			Result			Pass	

NR n12 Maximum Average Power [dBm] (GT - LC = 3.2 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP(W)
10	1	1	PI/2 BPSK	23.92	23.82	23.72	24.97	0.3141
10	1	50		23.72	23.62	23.52		
10	25	12		23.82	23.82	23.72		
10	1	0		23.82	23.82	23.82		
10	1	51		23.72	23.72	23.52		
10	50	0		23.82	23.72	23.72		
10	1	1	QPSK	23.92	23.82	23.72		
10	1	50		23.62	23.62	23.52		
10	25	12		23.82	23.82	23.82		
10	1	0		23.42	23.22	23.12		
10	1	51		23.12	23.12	23.02		
10	50	0		23.42	23.22	23.22		
10	1	1	16-QAM	23.22	23.22	23.12	24.27	0.2673
10	1	1	64-QAM	21.82	21.72	21.62		
10	1	1	256-QAM	19.82	19.85	19.72		
Limit	ERP < 3W			Result			Pass	



NR n12 Maximum Average Power [dBm] (GT - LC = 3.2 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP(W)
15	1	1	PI/2 BPSK	23.92	23.82	23.82	24.97	0.3141
15	1	77		23.02	23.62	23.62		
15	36	18		23.82	23.82	23.82		
15	1	0		23.82	23.82	23.82		
15	1	78		23.72	23.72	23.72		
15	75	0		23.82	23.82	23.82		
15	1	1	QPSK	23.82	23.82	23.82	24.37	0.2735
15	1	77		23.72	23.62	23.62		
15	36	18		23.82	23.82	23.82		
15	1	0		23.42	23.32	23.42		
15	1	78		23.22	23.12	23.12		
15	75	0		23.42	23.32	23.32		
15	1	1	16-QAM	23.32	23.32	23.32	24.37	0.2735
15	1	1	64-QAM	22.02	21.92	21.92		
15	1	1	256-QAM	20.02	20.02	20.02		
Limit	ERP < 3W			Result			Pass	



NR n25 Maximum Average Power [dBm] (GT - LC = 6 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP(W)
5	1	1	PI/2 BPSK	23.66	23.66	23.36	29.66	0.9247
5	1	23		23.56	23.56	23.26		
5	12	6		23.56	23.56	23.26		
5	1	0		23.56	23.56	23.26		
5	1	24		23.56	23.56	23.16		
5	25	0		23.56	23.56	23.26		
5	1	1	QPSK	23.56	23.46	23.26		
5	1	23		23.46	23.46	23.16		
5	12	6		23.46	23.46	23.16		
5	1	0		23.06	22.96	22.76		
5	1	24		23.06	22.96	22.66		
5	25	0		23.16	23.06	22.86		
5	1	1	16-QAM	23.06	22.86	22.66	29.06	0.8054
5	1	1	64-QAM	21.66	21.56	21.36		
5	1	1	256-QAM	19.46	19.46	19.16		
Limit	EIRP < 3W			Result			Pass	

NR n25 Maximum Average Power [dBm] (GT - LC = 6 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP(W)
10	1	1	PI/2 BPSK	23.66	23.66	23.36	29.66	0.9247
10	1	50		23.56	23.46	23.26		
10	25	12		23.56	23.56	23.26		
10	1	0		23.56	23.46	23.26		
10	1	51		23.56	23.46	23.26		
10	50	0		23.56	23.56	23.26		
10	1	1	QPSK	23.56	23.56	23.26		
10	1	50		23.46	23.46	23.16		
10	25	12		23.46	23.46	23.16		
10	1	0		23.06	22.96	22.76		
10	1	51		23.06	22.96	22.66		
10	50	0		23.16	23.16	22.86		
10	1	1	16-QAM	23.06	22.96	22.76	29.06	0.8054
10	1	1	64-QAM	21.76	21.66	21.46		
10	1	1	256-QAM	19.56	19.46	19.26		
Limit	EIRP < 2W			Result			Pass	



NR n25 Maximum Average Power [dBm] (GT - LC = 6 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP(W)
15	1	1	PI/2 BPSK	23.76	23.76	23.66	29.76	0.9462
15	1	77		23.66	23.66	23.36		
15	36	18		23.66	23.66	23.56		
15	1	0		23.66	23.56	23.46		
15	1	78		23.66	23.56	23.26		
15	75	0		23.66	23.66	23.46		
15	1	1	QPSK	23.66	23.66	23.56		
15	1	77		23.56	23.56	23.26		
15	36	18		23.56	23.56	23.46		
15	1	0		23.16	23.16	22.96		
15	1	78		23.16	23.06	22.76		
15	75	0		23.26	23.26	22.96		
15	1	1	16-QAM	23.26	23.16	22.86	29.26	0.8433
15	1	1	64-QAM	21.86	21.86	21.66		
15	1	1	256-QAM	19.66	19.66	19.46		
Limit	EIRP < 2W			Result			Pass	

NR n25 Maximum Average Power [dBm] (GT - LC = 6 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP(W)
20	1	1	PI/2 BPSK	23.76	23.76	23.66	29.76	0.9462
20	1	104		23.66	23.66	23.26		
20	50	25		23.66	23.66	23.56		
20	1	0		23.66	23.66	23.56		
20	1	105		23.66	23.66	23.16		
20	100	0		23.66	23.66	23.46		
20	1	1	QPSK	23.56	23.56	23.56		
20	1	104		23.56	23.56	23.16		
20	50	25		23.56	23.56	23.46		
20	1	0		23.16	23.16	23.06		
20	1	105		23.06	22.96	22.66		
20	100	0		23.16	23.16	22.96		
20	1	1	16-QAM	23.26	23.16	22.96	29.26	0.8433
20	1	1	64-QAM	21.86	21.86	21.66		
20	1	1	256-QAM	19.66	19.66	19.56		
Limit	EIRP < 2W			Result			Pass	



NR n41 Maximum Average Power [dBm] (GT - LC = 5 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP(W)
20	1	1	PI/2 BPSK	23.64	23.34	22.64	28.64	0.7311
20	1	49		23.54	23.24	23.24		
20	25	12		23.54	23.54	23.04		
20	1	0		23.54	22.64	22.14		
20	1	50		23.04	23.24	22.74		
20	50	0		20.14	22.94	22.34		
20	1	1	QPSK	23.54	23.24	22.54	28.14	0.6516
20	1	49		23.44	23.14	23.14		
20	25	12		23.44	23.24	22.94		
20	1	0		22.94	23.14	22.54		
20	1	50		23.04	22.64	23.14		
20	50	0		23.04	22.74	22.24		
20	1	1	16-QAM	23.14	22.74	21.94	28.14	0.6516
20	1	1	64-QAM	21.64	21.94	21.24		
20	1	1	256-QAM	19.54	19.94	19.54		
Limit	EIRP < 2W			Result			Pass	



NR n41 Maximum Average Power [dBm] (GT - LC = 5 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP(W)
40	1	1	PI/2 BPSK	23.74	23.74	22.94	28.74	0.7482
40	1	104		23.14	23.34	22.84		
40	50	25		23.54	23.64	22.74		
40	1	0		22.74	23.04	22.44		
40	1	105		22.74	22.44	22.44		
40	100	0		20.14	23.64	22.24		
40	1	1	QPSK	23.44	23.64	22.84		
40	1	104		22.94	23.24	23.04		
40	50	25		23.44	23.54	22.64		
40	1	0		23.24	22.94	22.34		
40	1	105		22.94	22.34	23.14		
40	100	0		23.34	23.04	22.04		
40	1	1	16-QAM	22.94	22.94	22.14	27.94	0.6223
40	1	1	64-QAM	21.94	22.34	21.54		
40	1	1	256-QAM	19.84	20.34	19.84		
Limit	EIRP < 2W			Result			Pass	

NR n41 Maximum Average Power [dBm] (GT - LC = 5 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP(W)
50	1	1	PI/2 BPSK	23.44	23.64	22.94	28.94	0.7834
50	1	131		23.94	23.14	23.84		
50	64	32		23.14	23.34	22.84		
50	1	0		22.54	22.64	22.04		
50	1	132		22.94	22.24	23.14		
50	128	0		22.94	23.24	22.84		
50	1	1	QPSK	23.34	23.64	22.94		
50	1	131		23.84	22.94	23.34		
50	64	32		23.04	23.24	22.64		
50	1	0		22.44	22.54	21.94		
50	1	132		23.34	22.14	22.54		
50	128	0		22.14	23.14	22.24		
50	1	1	16-QAM	23.34	23.54	22.84	28.54	0.7145
50	1	1	64-QAM	22.34	22.44	22.04		
50	1	1	256-QAM	21.44	21.64	21.14		
Limit	EIRP < 2W			Result			Pass	



NR n41 Maximum Average Power [dBm] (GT - LC = 5 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP(W)
60	1	1	PI/2 BPSK	23.44	23.64	22.84	28.94	0.7834
60	1	160		23.94	23.04	23.24		
60	81	40		23.04	23.44	22.94		
60	1	0		22.54	22.74	21.94		
60	1	161		22.84	22.04	22.94		
60	162	0		20.14	23.34	22.94		
60	1	1	QPSK	23.34	23.54	22.74	28.94	0.7834
60	1	160		23.84	22.94	22.84		
60	81	40		23.64	23.34	22.74		
60	1	0		22.44	22.64	21.84		
60	1	161		22.74	21.94	22.44		
60	162	0		22.74	23.24	22.14		
60	1	1	16-QAM	22.04	23.34	22.54	28.34	0.6823
60	1	1	64-QAM	21.64	22.84	22.74		
60	1	1	256-QAM	19.84	21.34	20.94		
Limit	EIRP < 2W			Result			Pass	



NR n41 Maximum Average Power [dBm] (GT - LC = 5 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP(W)
80	1	1	PI/2 BPSK	23.24	23.24	22.84	28.24	0.6668
80	1	215		23.14	22.44	23.24		
80	108	54		21.74	23.04	22.64		
80	1	0		22.14	22.14	22.04		
80	1	216		22.44	21.54	22.74		
80	216	0		20.14	23.04	22.84		
80	1	1	QPSK	23.14	23.14	22.74		
80	1	215		23.04	22.34	23.14		
80	108	54		21.64	22.94	22.64		
80	1	0		22.04	22.04	21.94		
80	1	216		22.34	21.44	22.64		
80	216	0		21.24	22.94	22.74		
80	1	1	16-QAM	22.84	23.04	22.84	28.44	0.6982
80	1	1	64-QAM	22.44	23.44	22.94		
80	1	1	256-QAM	20.54	21.14	20.94		
Limit	EIRP < 2W			Result			Pass	

NR n41 Maximum Average Power [dBm] (GT - LC = 5 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP(W)
90	1	1	PI/2 BPSK	23.24	23.04	23.04	28.54	0.7145
90	1	243		23.14	22.44	23.44		
90	120	60		23.54	22.94	22.54		
90	1	0		22.14	22.04	22.04		
90	1	244		22.14	21.54	22.64		
90	240	0		20.14	22.94	20.94		
90	1	1	QPSK	23.14	22.94	22.94		
90	1	243		23.04	22.34	23.34		
90	120	60		23.44	22.84	22.44		
90	1	0		22.04	21.94	21.94		
90	1	244		22.04	21.44	22.54		
90	240	0		23.34	22.84	22.74		
90	1	1	16-QAM	23.14	22.94	22.94	28.14	0.6516
90	1	1	64-QAM	22.84	22.04	22.04		
90	1	1	256-QAM	21.14	20.24	20.44		
Limit	EIRP < 2W			Result			Pass	





NR n41 Maximum Average Power [dBm] (GT - LC = 5 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP(W)
100	1	1	PI/2 BPSK	23.14	23.04	23.04	28.64	0.7311
100	1	271		22.74	22.44	23.64		
100	135	67		23.54	22.94	22.74		
100	1	0		22.14	22.04	22.24		
100	1	272		21.84	21.54	22.64		
100	270	0		23.34	22.94	22.84		
100	1	1		QPSK	23.04	22.94		
100	1	271	22.64		22.34	23.04		
100	135	67	23.44		22.84	22.64		
100	1	0	22.04		21.94	22.14		
100	1	272	21.74		21.44	22.54		
100	270	0	23.34		22.84	22.84		
100	1	1	16-QAM		22.94	22.94	22.64	27.94
100	1	1	64-QAM	21.74	22.14	21.34		
100	1	1	256-QAM	20.44	20.94	20.04		
Limit	EIRP < 2W			Result			Pass	



NR n66 Maximum Average Power [dBm] (GT - LC = 5.8 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP(W)
5	1	1	PI/2 BPSK	23.34	23.54	23.34	29.34	0.859
5	1	23		23.24	23.44	23.24		
5	12	6		23.24	23.44	23.24		
5	1	0		23.24	23.44	23.14		
5	1	24		23.24	23.44	23.14		
5	25	0		23.24	23.44	23.14		
5	1	1	QPSK	23.24	23.34	23.24		
5	1	23		23.14	23.34	23.14		
5	12	6		23.14	23.34	23.14		
5	1	0		22.84	23.14	22.94		
5	1	24		22.84	23.14	22.74		
5	25	0		23.04	23.34	23.04		
5	1	1	16-QAM	22.84	23.14	22.94	28.94	0.7834
5	1	1	64-QAM	21.54	21.84	21.64		
5	1	1	256-QAM	19.34	19.64	19.44		
Limit	EIRP < 1W			Result			Pass	

NR n66 Maximum Average Power [dBm] (GT - LC = 5.8 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP(W)
10	1	1	PI/2 BPSK	23.34	23.54	23.34	29.34	0.8590
10	1	50		23.24	23.44	23.24		
10	25	12		23.24	23.44	23.24		
10	1	0		23.24	23.34	23.24		
10	1	51		23.24	23.34	23.24		
10	50	0		23.24	23.44	23.24		
10	1	1	QPSK	23.24	23.44	23.14		
10	1	50		23.04	23.34	23.04		
10	25	12		23.14	23.34	23.14		
10	1	0		22.94	23.14	23.04		
10	1	51		22.84	23.24	22.84		
10	50	0		23.04	23.34	23.04		
10	1	1	16-QAM	22.84	23.14	22.94	28.94	0.7834
10	1	1	64-QAM	21.64	21.84	21.74		
10	1	1	256-QAM	19.34	19.74	19.54		
Limit	EIRP < 1W			Result			Pass	



NR n66 Maximum Average Power [dBm] (GT - LC = 5.8 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP(W)
15	1	1	PI/2 BPSK	23.34	23.54	23.34	29.34	0.8590
15	1	77		23.24	23.44	23.24		
15	36	18		23.24	23.44	23.24		
15	1	0		23.14	23.44	23.24		
15	1	78		23.14	23.44	23.24		
15	75	0		23.14	23.44	23.24		
15	1	1	QPSK	23.24	23.44	23.24		
15	1	77		23.14	23.34	23.14		
15	36	18		23.14	23.34	23.14		
15	1	0		22.94	23.24	23.04		
15	1	78		22.94	23.24	23.04		
15	75	0		23.04	23.34	23.14		
15	1	1	16-QAM	22.84	23.24	23.14	29.04	0.8017
15	1	1	64-QAM	21.44	21.94	21.74		
15	1	1	256-QAM	19.44	19.64	19.64		
Limit	EIRP < 1W			Result			Pass	

NR n66 Maximum Average Power [dBm] (GT - LC = 5.8 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP(W)
20	1	1	PI/2 BPSK	23.34	23.54	23.54	29.34	0.8590
20	1	104		23.24	23.44	23.44		
20	50	25		23.14	23.44	23.44		
20	1	0		23.14	23.34	23.44		
20	1	105		23.24	23.44	23.34		
20	100	0		23.14	23.44	23.44		
20	1	1	QPSK	23.24	23.34	23.44		
20	1	104		23.14	23.24	23.34		
20	50	25		23.04	23.34	23.34		
20	1	0		22.94	23.14	23.24		
20	1	105		23.04	23.24	23.04		
20	100	0		22.94	23.24	23.14		
20	1	1	16-QAM	22.94	23.04	23.14	28.94	0.7834
20	1	1	64-QAM	21.74	21.74	21.94		
20	1	1	256-QAM	19.44	19.64	19.74		
Limit	EIRP < 1W			Result			Pass	



NR n71 Maximum Average Power [dBm] (GT - LC = 3.1 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP(W)
5	1	1	PI/2 BPSK	23.70	23.60	23.60	24.65	0.2917
5	1	23		23.60	23.60	23.50		
5	12	6		23.70	23.70	23.60		
5	1	0		23.50	23.40	23.50		
5	1	24		23.50	23.30	23.20		
5	25	0		22.40	23.30	23.30		
5	1	1	QPSK	23.70	23.60	23.60		
5	1	23		23.60	23.60	23.60		
5	12	6		23.70	23.70	23.60		
5	1	0		23.10	23.00	23.50		
5	1	24		23.00	22.50	23.20		
5	25	0		23.20	23.00	23.40		
5	1	1	16-QAM	23.20	23.00	23.00	24.15	0.2600
5	1	1	64-QAM	21.30	21.10	21.10		
5	1	1	256-QAM	19.70	19.40	19.40		
Limit	ERP < 3W			Result			Pass	

NR n71 Maximum Average Power [dBm] (GT - LC = 3.1 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP(W)
10	1	1	PI/2 BPSK	23.70	23.60	23.60	24.65	0.2917
10	1	50		23.10	23.50	23.40		
10	25	12		23.60	23.50	23.50		
10	1	0		23.70	23.20	23.50		
10	1	51		23.40	23.20	23.20		
10	50	0		21.70	23.50	23.40		
10	1	1	QPSK	23.70	23.60	23.60		
10	1	50		23.60	23.50	23.50		
10	25	12		23.70	23.60	23.60		
10	1	0		23.10	22.90	23.00		
10	1	51		22.80	22.90	22.80		
10	50	0		23.10	23.10	23.00		
10	1	1	16-QAM	23.10	22.80	22.90	24.05	0.2541
10	1	1	64-QAM	21.50	21.30	21.40		
10	1	1	256-QAM	19.60	19.40	19.50		
Limit	ERP < 3W			Result			Pass	



NR n71 Maximum Average Power [dBm] (GT - LC = 3.1 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP(W)
15	1	1	PI/2 BPSK	23.70	23.70	23.60	24.65	0.2917
15	1	77		23.70	23.70	23.50		
15	36	18		23.70	23.70	23.60		
15	1	0		23.40	23.40	23.30		
15	1	78		23.40	23.40	23.30		
15	75	0		21.10	22.50	23.50		
15	1	1	QPSK	23.70	23.70	23.60		
15	1	77		23.60	23.60	23.60		
15	36	18		23.60	23.70	23.60		
15	1	0		23.30	23.00	22.90		
15	1	78		22.90	23.00	22.80		
15	75	0		23.20	23.10	23.00		
15	1	1	16-QAM	23.20	22.90	22.90	24.15	0.2600
15	1	1	64-QAM	21.70	21.40	21.30		
15	1	1	256-QAM	19.70	19.50	19.40		
Limit	ERP < 3W			Result			Pass	

NR n71 Maximum Average Power [dBm] (GT - LC = 3.1 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP(W)
20	1	1	PI/2 BPSK	23.60	23.70	23.40	24.65	0.2917
20	1	104		23.40	23.70	23.10		
20	50	25		23.40	23.70	23.40		
20	1	0		23.60	23.40	23.50		
20	1	105		23.40	23.40	23.10		
20	100	0		23.60	20.40	23.40		
20	1	1	QPSK	23.60	23.70	23.40		
20	1	104		23.40	23.60	23.20		
20	50	25		23.50	23.60	23.50		
20	1	0		23.50	22.80	23.30		
20	1	105		23.00	22.90	22.90		
20	100	0		23.30	23.00	23.10		
20	1	1	16-QAM	23.30	22.80	23.10	24.25	0.2661
20	1	1	64-QAM	21.80	21.30	21.50		
20	1	1	256-QAM	19.90	19.40	19.60		
Limit	ERP < 3W			Result			Pass	



**<Diversity Antenna>**

NR n5 Maximum Average Power [dBm] (GT - LC = 3.6 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP(W)
5	1	1	PI/2 BPSK	23.27	23.07	22.77	24.82	0.3034
5	1	23		23.27	22.87	22.57		
5	12	6		23.37	23.07	22.77		
5	1	0		23.37	23.07	22.47		
5	1	24		23.27	22.87	22.67		
5	25	0		23.37	22.97	22.67		
5	1	1	QPSK	23.27	23.07	22.77		
5	1	23		23.27	22.77	22.57		
5	12	6		23.37	23.07	22.67		
5	1	0		22.87	22.67	21.97		
5	1	24		22.77	22.37	22.07		
5	25	0		22.87	22.57	22.17		
5	1	1	16-QAM	22.87	22.67	21.97	24.32	0.2704
5	1	1	64-QAM	21.57	21.27	20.57		
5	1	1	256-QAM	19.47	19.27	18.97		
Limit	ERP < 7W			Result			Pass	

NR n5 Maximum Average Power [dBm] (GT - LC = 3.6 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP(W)
10	1	1	PI/2 BPSK	23.27	23.17	22.77	24.72	0.2965
10	1	50		23.17	22.87	22.67		
10	25	12		23.17	23.17	22.77		
10	1	0		23.17	23.17	22.77		
10	1	51		23.07	22.87	22.67		
10	50	0		23.27	23.07	22.87		
10	1	1	QPSK	23.17	23.17	22.77		
10	1	50		23.07	22.87	22.57		
10	25	12		23.27	23.17	22.97		
10	1	0		22.67	22.67	22.27		
10	1	51		22.57	22.37	22.17		
10	50	0		22.77	22.67	22.47		
10	1	1	16-QAM	22.87	22.77	22.47	24.32	0.2704
10	1	1	64-QAM	21.47	21.37	20.97		
10	1	1	256-QAM	19.47	19.37	19.07		
Limit	ERP < 7W			Result			Pass	



NR n5 Maximum Average Power [dBm] (GT - LC = 3.6 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP(W)
15	1	1	PI/2 BPSK	23.37	23.27	23.17	24.82	0.3034
15	1	77		23.17	22.87	22.77		
15	36	18		23.27	23.17	22.97		
15	1	0		23.37	23.17	23.17		
15	1	78		23.07	22.77	22.77		
15	75	0		22.87	23.17	22.97		
15	1	1	QPSK	23.37	23.17	23.17		
15	1	77		23.17	22.87	22.77		
15	36	18		23.37	23.17	23.07		
15	1	0		22.87	22.77	22.67		
15	1	78		22.57	22.37	22.27		
15	75	0		23.27	22.77	22.57		
15	1	1	16-QAM	22.97	22.77	22.77	24.42	0.2767
15	1	1	64-QAM	21.47	21.37	21.27		
15	1	1	256-QAM	19.57	19.47	19.37		
Limit	ERP < 7W			Result			Pass	

NR n5 Maximum Average Power [dBm] (GT - LC = 3.6 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP(W)
20	1	1	PI/2 BPSK	23.27	23.17	23.17	24.82	0.3034
20	1	104		22.97	22.67	22.77		
20	50	25		23.27	23.17	23.17		
20	1	0		23.27	23.27	22.67		
20	1	105		22.87	22.27	21.87		
20	100	0		23.27	23.17	23.07		
20	1	1	QPSK	23.37	23.27	23.17		
20	1	104		22.87	22.57	22.77		
20	50	25		23.37	22.77	23.17		
20	1	0		22.77	23.27	22.67		
20	1	105		23.37	22.27	22.27		
20	100	0		22.77	22.77	22.67		
20	1	1	16-QAM	22.87	22.87	22.77	24.32	0.2704
20	1	1	64-QAM	21.47	21.47	21.37		
20	1	1	256-QAM	19.47	19.47	19.37		
Limit	ERP < 7W			Result			Pass	



# Appendix B. Test Results of Radiated Test

<Ant. 0+1>

## EN-DC 30A-n5A

EN-DC 30A-n5A / 20MHz / PI/2 BPSK									
Channel	Frequency ( MHz )	ERP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading (dBm)	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1655	-42.15	-13	-29.15	-70.63	-47.77	0.92	8.69	H
	2483	-37.36	-13	-24.36	-70.95	-44.74	1.15	10.68	H
	3311	-35.90	-13	-22.90	-71.22	-44.47	1.33	12.05	H
									H
									H
									H
									H
	1655	-42.78	-13	-29.78	-70.7	-48.40	0.92	8.69	V
	2483	-37.53	-13	-24.53	-71.3	-44.91	1.15	10.68	V
	3311	-35.14	-13	-22.14	-70.93	-43.71	1.33	12.05	V
									V
									V
									V
									V

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





<Ant. 0>

**SA-n5A**

SA-n5A / 20MHz / PI/2 BPSK									
Channel	Frequency ( MHz )	ERP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading (dBm)	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1655	-62.70	-13	-49.70	-71.17	-68.32	0.92	8.69	H
	2483	-57.67	-13	-44.67	-71.2	-65.05	1.15	10.68	H
	3311	-56.78	-13	-43.78	-72.07	-65.35	1.33	12.05	H
									H
									H
									H
									H
	1655	-63.20	-13	-50.20	-71.11	-68.82	0.92	8.69	V
	2483	-55.11	-13	-42.11	-68.82	-62.49	1.15	10.68	V
	3311	-56.39	-13	-43.39	-72.15	-64.96	1.33	12.05	V
									V
									V
									V
									V

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



<Ant. 1>

**SA-n5A**

SA-n5A / 20MHz / PI/2 BPSK									
Channel	Frequency ( MHz )	ERP ( 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	1650	-63.30	-13	-50.30	-71.76	-68.90	0.92	8.67	H
	2475	-58.83	-13	-45.83	-72.35	-66.20	1.14	10.67	H
	3301	-57.40	-13	-44.40	-72.71	-65.95	1.32	12.02	H
									H
									H
									H
	1650	-63.80	-13	-50.80	-71.72	-69.40	0.92	8.67	V
	2475	-58.85	-13	-45.85	-72.53	-66.22	1.14	10.67	V
	3301	-56.94	-13	-43.94	-72.72	-65.49	1.32	12.02	V
									V
									V
									V
Middle	1656	-62.73	-13	-49.73	-71.21	-68.35	0.92	8.69	H
	2483	-58.51	-13	-45.51	-72.04	-65.89	1.15	10.68	H
	3311	-57.48	-13	-44.48	-72.77	-66.05	1.33	12.05	H
									H
									H
									H
	1656	-63.87	-13	-50.87	-71.78	-69.49	0.92	8.69	V
	2483	-58.25	-13	-45.25	-71.96	-65.63	1.15	10.68	V
	3311	-57.35	-13	-44.35	-73.11	-65.92	1.33	12.05	V
									V
									V
									V



Highest	1660	-63.09	-13	-50.09	-71.57	-68.72	0.92	8.71	H
	2490	-58.60	-13	-45.60	-72.15	-65.99	1.15	10.69	H
	3321	-57.20	-13	-44.20	-72.46	-65.79	1.33	12.07	H
									H
									H
									H
									H
	1660	-63.64	-13	-50.64	-71.54	-69.27	0.92	8.71	V
	2490	-59.13	-13	-46.13	-72.87	-66.52	1.15	10.69	V
	3321	-56.63	-13	-43.63	-72.35	-65.22	1.33	12.07	V
									V
									V
									V
									V

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



<Ant. 0+8>

**EN-DC 12A-n25A**

EN-DC 12A-n25A / 20MHz / PI/2 BPSK									
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	3702	-56.41	-13	-43.41	-74.34	-67.62	1.41	12.62	H
	5553	-51.20	-13	-38.20	-74.36	-62.76	1.74	13.30	H
	7405	-47.04	-13	-34.04	-73.85	-56.35	1.94	11.25	H
									H
									H
									H
									H
	3702	-56.47	-13	-43.47	-74.55	-67.68	1.41	12.62	V
	5553	-51.92	-13	-38.92	-74.61	-63.48	1.74	13.30	V
	7405	-47.11	-13	-34.11	-73.77	-56.42	1.94	11.25	V
									V
									V
									V
									V

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



<Ant. 0+8>

**EN-DC 14A-n2A**

EN-DC 14A-n2A / 20MHz / PI/2 BPSK									
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	3702	-56.63	-13	-43.63	-74.56	-67.84	1.41	12.62	H
	5553	-51.25	-13	-38.25	-74.41	-62.81	1.74	13.30	H
	7405	-47.44	-13	-34.44	-74.25	-56.75	1.94	11.25	H
									H
									H
									H
									H
	3702	-56.61	-13	-43.61	-74.69	-67.82	1.41	12.62	V
	5553	-52.11	-13	-39.11	-74.8	-63.67	1.74	13.30	V
	7405	-47.50	-13	-34.50	-74.16	-56.81	1.94	11.25	V
									V
									V
									V
									V

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



<Ant. 0+8>

**EN-DC 30A-n2A**

EN-DC 30A-n2A / 20MHz / PI/2 BPSK									
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	3702	-56.56	-13	-43.56	-74.49	-67.77	1.41	12.62	H
	5553	-51.15	-13	-38.15	-74.31	-62.71	1.74	13.30	H
	7405	-47.25	-13	-34.25	-74.06	-56.56	1.94	11.25	H
									H
									H
									H
									H
	3702	-56.76	-13	-43.76	-74.84	-67.97	1.41	12.62	V
	5553	-52.20	-13	-39.20	-74.89	-63.76	1.74	13.30	V
	7405	-47.44	-13	-34.44	-74.1	-56.75	1.94	11.25	V
									V
									V
									V
									V

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



<Ant. 8>

**SA-n25A**

SA-n25A / 20MHz / PI/2 BPSK									
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	3702	-56.37	-13	-43.37	-74.3	-67.58	1.41	12.62	H
	5553	-51.60	-13	-38.60	-74.76	-63.16	1.74	13.30	H
	7405	-47.30	-13	-34.30	-74.11	-56.61	1.94	11.25	H
									H
									H
									H
									H
	3702	-56.41	-13	-43.41	-74.49	-67.62	1.41	12.62	V
	5553	-52.24	-13	-39.24	-74.93	-63.80	1.74	13.30	V
	7405	-47.55	-13	-34.55	-74.21	-56.86	1.94	11.25	V
									V
									V
									V
									V

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



<Ant. 8>

**SA-n2A**

SA-n2A / 20MHz / PI/2 BPSK									
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	3702	-56.67	-13	-43.67	-74.6	-67.88	1.41	12.62	H
	5553	-51.21	-13	-38.21	-74.37	-62.77	1.74	13.30	H
	7405	-47.22	-13	-34.22	-74.03	-56.53	1.94	11.25	H
									H
									H
									H
									H
	3702	-56.37	-13	-43.37	-74.45	-67.58	1.41	12.62	V
	5553	-52.24	-13	-39.24	-74.93	-63.80	1.74	13.30	V
	7405	-47.47	-13	-34.47	-74.13	-56.78	1.94	11.25	V
									V
									V
									V
									V

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





<Ant. 0>

**SA-n2A**

SA-n2A / 20MHz / PI/2 BPSK									
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)
Middle	3742	-53.78	-13	-40.78	-71.89	-65.00	1.42	12.65	H
	5613	-50.45	-13	-37.45	-73.53	-62.01	1.74	13.30	H
	7485	-46.54	-13	-33.54	-72.97	-55.68	1.98	11.12	H
									H
									H
									H
									H
	3742	-54.47	-13	-41.47	-72.78	-65.69	1.42	12.65	V
	5613	-50.68	-13	-37.68	-73.42	-62.24	1.74	13.30	V
	7485	-46.40	-13	-33.40	-72.78	-55.54	1.98	11.12	V
									V
									V
									V
									V

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



<Ant. 0+8>

**EN-DC 14A-n66A**

EN-DC 14A-n66A / 20MHz / PI/2 BPSK									
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)
Highest	3522	-56.05	-13	-43.05	-72.92	-67.20	1.37	12.51	H
	5283	-52.68	-13	-39.68	-74.91	-63.99	1.68	13.00	H
	7045	-47.54	-13	-34.54	-73.85	-57.62	1.74	11.83	H
									H
									H
									H
									H
	3522	-55.73	-13	-42.73	-72.88	-66.88	1.37	12.51	V
	5283	-52.96	-13	-39.96	-74.92	-64.27	1.68	13.00	V
	7045	-48.26	-13	-35.26	-74.12	-58.34	1.74	11.83	V
									V
									V
									V
									V

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



<Ant. 0+8>

**EN-DC 30A-n66A**

EN-DC 30A-n66A / 20MHz / PI/2 BPSK									
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)
Highest	3522	-55.98	-13	-42.98	-72.85	-67.13	1.37	12.51	H
	5283	-52.48	-13	-39.48	-74.71	-63.79	1.68	13.00	H
	7045	-47.17	-13	-34.17	-73.48	-57.25	1.74	11.83	H
									H
									H
									H
									H
	3522	-55.38	-13	-42.38	-72.53	-66.53	1.37	12.51	V
	5283	-52.79	-13	-39.79	-74.75	-64.10	1.68	13.00	V
	7045	-47.72	-13	-34.72	-73.58	-57.80	1.74	11.83	V
									V
									V
									V
									V

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



<Ant. 8>

**SA-n66A**

SA-n66A / 20MHz / PI/2 BPSK									
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)
Highest	3525	-55.64	-13	-42.64	-72.53	-66.79	1.37	12.52	H
	5283	-52.28	-13	-39.28	-74.5	-63.59	1.68	13.00	H
	7046	-47.22	-13	-34.22	-73.53	-57.30	1.74	11.83	H
									H
									H
									H
									H
	3525	-55.65	-13	-42.65	-72.82	-66.80	1.37	12.52	V
	5283	-52.61	-13	-39.61	-74.57	-63.92	1.68	13.00	V
	7046	-47.78	-13	-34.78	-73.64	-57.86	1.74	11.83	V
									V
									V
									V
									V

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



<Ant. 0>

**SA-n66A**

SA-n66A / 20MHz / PI/2 BPSK									
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)
Highest	3522	-55.83	-13	-42.83	-72.7	-66.98	1.37	12.51	H
	5283	-52.51	-13	-39.51	-74.74	-63.82	1.68	13.00	H
	7045	-47.45	-13	-34.45	-73.76	-57.53	1.74	11.83	H
									H
									H
									H
									H
	3522	-55.16	-13	-42.16	-72.31	-66.31	1.37	12.51	V
	5283	-52.63	-13	-39.63	-74.59	-63.94	1.68	13.00	V
	7045	-47.53	-13	-34.53	-73.39	-57.61	1.74	11.83	V
									V
									V
									V
									V

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



<Ant. 8>

**SA-n41A**

SA-n41A / 100MHz / PI/2 BPSK									
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)
Middle	5096	-53.00	-25	-28.00	-74.98	-64.10	1.63	12.73	H
	7644	-47.86	-25	-22.86	-73.72	-56.98	2.01	11.13	H
	10193	-43.68	-25	-18.68	-73.72	-52.43	2.40	11.15	H
									H
									H
									H
									H
	5096	-53.49	-25	-28.49	-75.16	-64.59	1.63	12.73	V
	7644	-48.27	-25	-23.27	-74.03	-57.39	2.01	11.13	V
	10193	-42.86	-25	-17.86	-73.28	-51.61	2.40	11.15	V
									V
									V
									V
									V

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



<Ant. 0>

**SA-n12A**

SA-n12A / 15MHz / PI/2 BPSK									
Channel	Frequency ( MHz )	ERP ( 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	1400	-60.22	-13.00	-47.22	-69.79	-64.87	0.84	7.64	H
	2100	-59.46	-13.00	-46.46	-72.13	-66.39	1.06	10.14	H
	2800	-57.82	-13.00	-44.82	-72.24	-65.51	1.22	11.06	H
									H
									H
									H
									H
	1400	-60.23	-13.00	-47.23	-68.57	-64.88	0.84	7.64	V
	2100	-60.43	-13.00	-47.43	-72.00	-67.36	1.06	10.14	V
	2800	-57.45	-13.00	-44.45	-71.81	-65.14	1.22	11.06	V
									V
									V
									V
									V

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



<Ant. 0>

**SA-n71A**

SA-n71A / 20MHz / PI/2 BPSK									
Channel	Frequency ( MHz )	ERP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading (dBm)	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Highest	1358	-56.44	-13	-43.44	-63.61	-60.90	0.83	7.45	H
	2037	-62.48	-13	-49.48	-71.86	-69.33	1.05	10.05	H
	2717	-60.60	-13	-47.60	-72.52	-68.21	1.20	10.96	H
									H
									H
									H
									H
	1358	-59.34	-13	-46.34	-65.51	-63.80	0.83	7.45	V
	2037	-63.35	-13	-50.35	-71.71	-70.20	1.05	10.05	V
	2717	-60.52	-13	-47.52	-72.39	-68.13	1.20	10.96	V
									V
									V
									V
									V

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