FCC RF Test Report

APPLICANT	:	OnePlus Technology (Shenzhen) Co., Ltd.
EQUIPMENT	:	Smart Phone
BRAND NAME	:	ONEPLUS
MODEL NAME	:	DE2118,DE2117
FCC ID	:	2ABZ2-EF000
STANDARD	:	47 CFR Part 2, 22, 24, 27
CLASSIFICATION	:	PCS Licensed Transmitter Held to Ear (PCE)

The product was received on Jan. 05, 2021 and completely tested on Mar. 04, 2021. We, Sporton International (ShenZhen) 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.

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

Reviewed by: Derreck Chen / Supervisor

Approved by: Eric Shih / Manager

ACCREDITED
Cert #5145.01

Sporton International (ShenZhen) Inc.

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People's Republic of China

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APPENDIX A. TEST RESULTS OF CONDUCTED TEST

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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG110513-01D	Rev. 01	Initial issue of report	Mar. 18, 2021

SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.4	§2.1046	Conducted Output Power	Reporting Only	PASS	-
	§22.913(a)(5)	Effective Radiated Power (5G NR n5)	ERP < 7 Watt		
	§24.232(c)	Equivalent Isotropic Radiated Power (5G NR n2, n25)	EIRP < 2Watt		
	§27.50(d)(4)	Equivalent Isotropic Radiated Power (5G NR n66)	EIRP < 1Watt		
3.5	§24.232(d)	Peak-to-Average Ratio	<13 dB	PASS	-
3.6	§2.1049	Occupied Bandwidth	Reporting Only	PASS	-
3.7	§2.1051 §22.917(a) §24.238(a) §27.53(h)	Conducted Band Edge Measurement (5G NR n5) (5G NR n2, n25) (5G NR n66)	< 43+10log10(P[Watts])	PASS	-
3.8	§2.1051 §22.917(a) §24.238(a) §27.53(h)	Conducted Spurious Emission (5G NR n5) (5G NR n2, n25) (5G NR n66)	< 43+10log10(P[Watts])	PASS	-
3.9	§2.1055 §22.355	Frequency Stability Temperature & Voltage	< 2.5 ppm for Part 22	PASS	-
	§24.235 §27.54		Within Authorized Band		
4.4	§2.1053 §22.917(a) §24.238(a) §27.53(h)	Radiated Spurious Emission (5G NR n5) (5G NR n2, n25) (5G NR n66)	< 43+10log$_{10}$(P[Watts])	PASS	Under limit 30.39 dB at 12328.260 MHz

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.

1 General Description

1.1 Applicant

OnePlus Technology (Shenzhen) Co., Ltd.
18C02, 18C03, 18C04 and 18C05, Shum Yip Terra Building, Binhe Avenue North, Futian District, Shenzhen

1.2 Manufacturer

OnePlus Technology (Shenzhen) Co., Ltd.
18C02, 18C03, 18C04 and 18C05, Shum Yip Terra Building, Binhe Avenue North, Futian District, Shenzhen

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Smart Phone
Brand Name	ONEPLUS
Model Name	DE2118,DE2117
FCC ID	2ABZ2-EF000
EUT supports Radios application	GSM/WCDMA/LTE/5G NR WLAN 2.4GHz 802.11b/g/n/ac HT20/HT40/VHT20/VHT40 WLAN 5GHz 802.11a/n HT20/HT40 WLAN 5GHz 802.11ac VHT20/VHT40/VHT80 Bluetooth BR / EDR / LE / ANT+ GNSS/NFC
IMEI Code	Conducted : 990017690032400 Radiation : 990017690038134 for NSA n2,n5,n25,n66 990016750028241 for SA n25, n66
HW Version	10
SW Version	11.0.1.1.DE18CB
EUT Stage	Identical Prototype

1.4 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx Frequency	5G NR n2: 1850 MHz ~ 1910 MHz 5G NR n5: 824 MHz ~ 849 MHz 5G NR n25: 1850 MHz ~ 1915 MHz 5G NR n66: 1710 MHz ~ 1780 MHz
Rx Frequency	5G NR n2: 1930 MHz ~ 1990 MHz 5G NR n5: 869 MHz ~ 894 MHz 5G NR n25: 1930 MHz ~ 1995 MHz

	5G NR n66: 2110 MHz~ 2200 MHz
Bandwidth	5MHz / 10MHz / 15MHz / 20MHz
SCS	15KHz
Maximum Output Power to Antenna	**Top Antenna(Ant.1):** SA: n25 : 24.21 dBm N66 : 23.89 dBm NSA: EN_DC 5A_n2A : 23.45 dBm; EN_DC 12A_n2A : 23.37 dBm; EN_DC 13A_n2A : 22.94 dBm; EN_DC 2A_n5A : 24.53 dBm; EN_DC 66A_n5A : 24.47 dBm; EN_DC 12A_n25A : 24.05 dBm; EN_DC 5A_n66A : 23.45 dBm; EN_DC 12A_n66A : 23.43 dBm; EN_DC 13A_n6A : 23.44 dBm; **Bottom Antenna(Ant.0):** SA: n25 : 24.52 dBm N66 : 24.38 dBm NSA: EN_DC 5A_n2A : 24.35 dBm; EN_DC 12A_n2A : 24.34 dBm; EN_DC 13A_n2A : 24.34 dBm; EN_DC 2A_n5A : 23.80 dBm; EN_DC 66A_n5A : 23.64 dBm; EN_DC 12A_n25A : 24.33 dBm; EN_DC 5A_n66A : 24.50 dBm; EN_DC 12A_n66A : 24.39 dBm; EN_DC 13A_n6A : 24.42 dBm;
Antenna Gain	Top Antenna: 5G NR n2: -2.5 dBi 5G NR n5: -5.0 dBi 5G NR n25: -2.5 dBi 5G NR n66: -2.5 dBi Boottom Antenna: 5G NR n2: -2.0 dBi 5G NR n5: -4.5 dBi 5G NR n25: -2.0 dBi 5G NR n66: -2.0 dBi
Type of Modulation	CP-OFDM: QPSK / 16QAM / 64QAM / 256QAM DFT-s-OFDM: PI/2 BPSK / QPSK / 16QAM / 64QAM / 256QAM

Remark:

1. The maximum ERP/EIRP is calculated from max output power and max antenna gain, only the maximum ERP/EIRP is shown in the report.
2. 5G NR supports SA and NSA mode (refer to the Operation Description). For NSA mode, according to engineering evaluation, only the worst EN-DC combination mode show in the report.

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 n2 (EN DC_5A-n2A)		PI/2 BPSK / QPSK		16QAM / 64QAM / 256QAM	
BW (MHz)	Frequency Range (MHz)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)
5	1852.5 ~ 1907.5	4M49G7D	0.1715	4M51W7D	0.1336
10	1855.0 ~ 1905.0	9M27G7D	0.1715	9M29W7D	0.1348
15	1857.5 ~ 1902.5	14M2G7D	0.1715	14M2W7D	0.1339
20	1860.0 ~ 1900.0	18M9G7D	0.1719	19M0W7D	0.1326
Frequency Tolerance (ppm)		0.0035			

5G NR n5 (EN DC_2A-n5A)		PI/2 BPSK / QPSK		16QAM / 64QAM / 256QAM	
BW (MHz)	Frequency Range (MHz)	Emission Designator (99%OBW)	Maximum ERP(W)	Emission Designator (99%OBW)	Maximum ERP(W)
5	826.5 ~ 846.5	4M47G7D	0.0546	4M49W7D	0.0427
10	829.0 ~ 844.0	9M29G7D	0.0544	9M29W7D	0.0431
15	831.5 ~ 841.5	14M1G7D	0.0541	14M2W7D	0.0434
20	834.0 ~ 839.0	18M9G7D	0.0547	18M9W7D	0.0422
Frequency Tolerance (ppm)		0.0042			

5G NR n25 (EN DC_12A-n25A)		PI/2 BPSK / QPSK		16QAM / 64QAM / 256QAM	
BW (MHz)	Frequency Range (MHz)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)
5	1852.5 ~ 1912.5	4M50G7D	0.1703	4M51W7D	0.1351
10	1855.0 ~ 1910.0	9M29G7D	0.1707	9M31W7D	0.1320
15	1857.5 ~ 1907.5	14M2G7D	0.1707	14M2W7D	0.1345
20	1860.0 ~ 1905.0	19M0G7D	0.1711	19M0W7D	0.1342
Frequency Tolerance (ppm)		0.0034			

5G NR n66 (EN DC_5A-n66A)		PI/2 BPSK / QPSK		16QAM / 64QAM / 256QAM	
BW (MHz)	Frequency Range (MHz)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)
5	1712.5 ~ 1777.5	4M49G7D	0.1755	4M51W7D	0.1288
10	1715.0 ~ 1775.0	9M27G7D	0.1747	9M29W7D	0.1285
15	1717.5 ~ 1772.5	14M2G7D	0.1763	14M2W7D	0.1279
20	1720.0 ~ 1770.0	19M0G7D	0.1779	19M0W7D	0.1300
Frequency Tolerance (ppm)		0.0035			

5G NR n25		PI/2 BPSK / QPSK		16QAM / 64QAM / 256QAM	
BW (MHz)	Frequency Range (MHz)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)
5	1852.5 ~ 1912.5	4M50G7D	0.1722	4M53W7D	0.1334
10	1855.0 ~ 1910.0	9M29G7D	0.1726	9M29W7D	0.1343
15	1857.5 ~ 1907.5	14M1G7D	0.1730	14M2W7D	0.1327
20	1860.0 ~ 1905.0	18M9G7D	0.1786	19M0W7D	0.1324
Frequency Tolerance (ppm)		0.0035			

5G NR n66		PI/2 BPSK / QPSK		16QAM / 64QAM / 256QAM	
BW (MHz)	Frequency Range (MHz)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)
5	1712.5 ~ 1777.5	4M48G7D	0.1726	4M51W7D	0.1256
10	1715.0 ~ 1775.0	9M29G7D	0.1726	9M31W7D	0.1256
15	1717.5 ~ 1772.5	14M2G7D	0.1706	14M2W7D	0.1256
20	1720.0 ~ 1770.0	19M0G7D	0.1730	19M0W7D	0.1233
Frequency Tolerance (ppm)		0.0029			

1.7 Testing Location

Sporton International (Shenzhen) Inc. is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.01.

Test Firm	Sporton International (Shenzhen) Inc.		
Test Site Location	1/F, 2/F, Bldg 5, Shiling Industrial Zone, Xinwei Village, Xili, Nanshan, Shenzhen, 518055 People's Republic of China TEL: +86-755-86379589 FAX: +86-755-86379595		
Test Site No.	**Sporton Site No.**	**FCC Designation No.**	**FCC Test Firm Registration No.**
	TH01-SZ	CN1256	421272

Test Firm	Sporton International (Shenzhen) Inc.		
Test Site Location	101, 1st Floor, Block B, Building 1, No. 2, Tengfeng 4th Road, Fenghuang Community, Fuyong Street, Baoan District, Shenzhen City Guangdong Province China 518103 TEL: +86-755-33202398		
Test Site No.	**Sporton Site No.**	**FCC Designation No.**	**FCC Test Firm Registration No.**
	03CH03-SZ	CN1256	421272

1.8 Test Software

Item	Site	Manufacturer	Name	Version
1.	03CH03-SZ	AUDIX	E3	6.2009-8-24

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, 22, 24, 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:

All test items were verified and recorded according to the standards and without any deviation during the test.

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

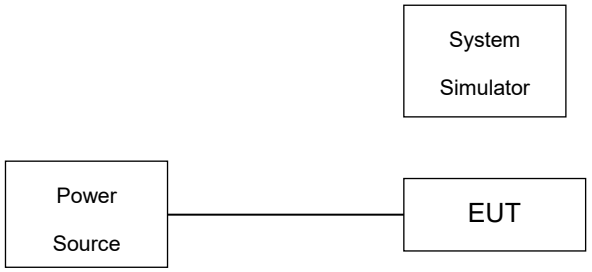
Test Items	5G NR	Bandwidth (MHz)						Modulation					RB #			Test Channel		
		5	10	15	20	60	100	PI/2 BPSK	QPSK	16QAM	64QAM	256QAM	1	Half	Full	L	M	H
Max. Output Power	n2	v	v	v	v	-	-	v	v	v	v	v	v		v	v	v	v
	n5	v	v	v	v	-	-	v	v	v	v	v	v		v	v	v	v
	n25	v	v	v	v	-	-	v	v	v	v	v	v		v	v	v	v
	n66	v	v	v	v	-	-	v	v	v	v	v	v		v	v	v	v
Peak-to-Average Ratio	n2				v	-	-	v	v				v		v	v	v	v
	n5				v	-	-	v	v				v		v	v	v	v
	n25				v	-	-	v	v				v		v	v	v	v
	n66				v	-	-	v	v				v		v	v	v	v
26dB Bandwidth	n2	v	v	v	v	-	-		v	v					v		v	
	n5	v	v	v	v	-	-		v	v					v		v	
	n25	v	v	v	v	-	-		v	v					v		v	
	n66	v	v	v	v	-	-		v	v					v		v	
99% Bandwidth	n2	v	v	v	v	-	-		v	v	v	v			v		v	
	n5	v	v	v	v	-	-		v	v	v	v			v		v	
	n25	v	v	v	v	-	-		v	v	v	v			v		v	
	n66	v	v	v	v	-	-		v	v	v	v			v		v	

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
Conducted Band Edge	n2	v	v		v	-	-	v	v				v		v	v		v
	n5	v	v		v	-	-	v	v				v		v	v		v
	n25	v	v		v	-	-	v	v				v		v	v		v
	n66	v	v		v	-	-	v	v				v		v	v		v
Conducted Spurious Emission	n2	v	v		v	-	-	v	v				v			v	v	v
	n5	v	v		v	-	-	v	v				v			v	v	v
	n25	v	v		v	-	-	v	v				v			v	v	v
	n66	v	v		v	-	-	v	v				v			v	v	v
Frequency Stability	n2				v	-	-	v							v		v	
	n5				v	-	-	v							v		v	
	n25				v	-	-	v							v		v	
	n66				v	-	-	v							v		v	
E.R.P / E.I.R.P	n2	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
	n25	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
Radiated Spurious Emission	n2	Worst Case														v	v	v
	n5	Worst Case														v	v	v
	n25	Worst Case														v	v	v
	n66	Worst Case														v	v	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.
4. The maximum ERP/EIRP is calculated from max output power and max antenna gain, only the maximum ERP/EIRP is shown in the report.
5. 5G NR supports SA and NSA mode (refer to the Operation Description). For NSA mode, according to engineering evaluation, only the worst EN-DC combination mode show in the report.
6. Based on engineering evaluation, only the worst modulation test results are shown in the report.

2.2 Connection Diagram of Test System



This example is connection diagram of EUT test configurations.

. For detail, please refer to test mode configuration and setup photographs for each test item.

2.3 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model No.	FCC ID	Data Cable	Power Cord
1.	DC Power Supply	GW	GPS-3030D	N/A	N/A	Unshielded, 1.8 m
2.	Base Station	Anritsu	MT8821C	N/A	N/A	Unshielded,1.8m
3.	Base Station	Anritsu	MT8000A	N/A	N/A	Unshielded,1.8m

2.4 Measurement Results Explanation Example

For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss between EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

The spectrum analyzer offset is derived from RF cable loss.

Offset = RF cable loss.

Following shows an offset computation example with cable loss 4.1 dB.

Example :

Offset(dB) = RF cable loss(dB).

= 4.1 (dB)

2.5 Frequency List of Low/Middle/High Channels

5G NR n2 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	372000	376000	380000
	Frequency	1860	1880	1900
15	Channel	371500	376000	380500
	Frequency	1857.5	1880	1902.5
10	Channel	371000	376000	381000
	Frequency	1855	1880	1905
5	Channel	370500	376000	381500
	Frequency	1852.5	1880	1907.5

5G NR 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 n25 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	372000	376500	381000
	Frequency	1860	1882.5	1905
15	Channel	371500	376500	381500
	Frequency	1857.5	1882.5	1907.5
10	Channel	371000	376500	382000
	Frequency	1855	1882.5	1910
5	Channel	370500	376500	382500
	Frequency	1852.5	1882.5	1912.5

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

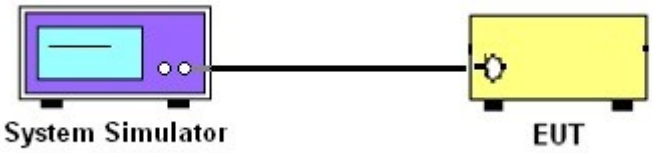
3 Conducted Test Items

3.1 Measuring Instruments

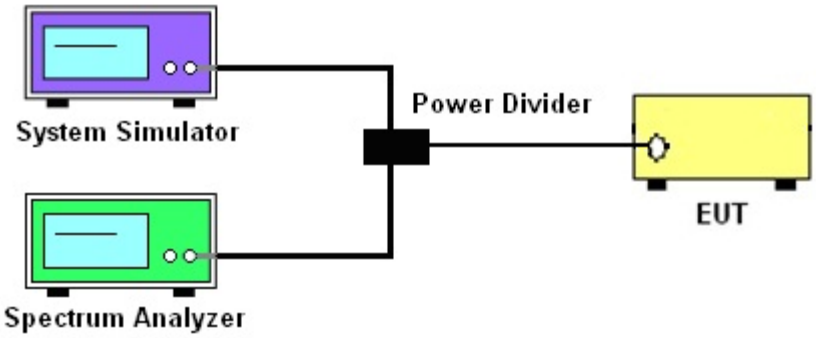
See list of measuring instruments of this test report.

3.2 Test Setup

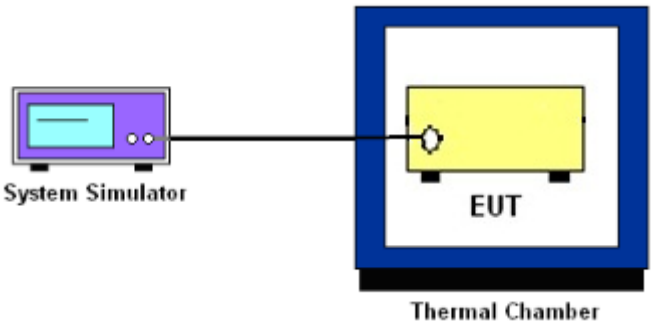
3.2.1 Conducted Output Power



3.2.2 Peak-to-Average Ratio, Occupied Bandwidth ,Conducted Band-Edge and Conducted Spurious Emission



3.2.3 Frequency Stability



3.3 Test Result of Conducted Test

Please refer to Appendix A.

3.4 Conducted Output Power and ERP/EIRP

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

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

3.4.2 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.

3.5 Peak-to-Average Ratio

3.5.1 Description of the PAR Measurement

Power Complementary Cumulative Distribution Function (CCDF) curves provide a means for characterizing the power peaks of a digitally modulated signal on a statistical basis. A CCDF curve depicts the probability of the peak signal amplitude exceeding the average power level. Most contemporary measurement instrumentation include the capability to produce CCDF curves for an input signal provided that the instrument's resolution bandwidth can be set wide enough to accommodate the entire input signal bandwidth. In measuring transmissions in this band using an average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

3.5.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.2.3.4 (CCDF).
2. The EUT was connected to spectrum and system simulator via a power divider.
3. Set the CCDF (Complementary Cumulative Distribution Function) option in spectrum analyzer.
4. The highest RF powers were measured and recorded the maximum PAPR level associated with a probability of 0.1 %.
5. Record the deviation as Peak to Average Ratio.

3.6 Occupied Bandwidth

3.6.1 Description of Occupied Bandwidth Measurement

The occupied bandwidth is the width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5% of the total mean transmitted power.

The 26 dB emission bandwidth is defined as the frequency range between two points, one above and one below the carrier frequency, at which the spectral density of the emission is attenuated 26 dB below the maximum in-band spectral density of the modulated signal. Spectral density (power per unit bandwidth) is to be measured with a detector of resolution bandwidth equal to approximately 1.0% of the emission bandwidth.

3.6.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.4
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The span range for the spectrum analyzer shall be between two and five times the anticipated OBW.
4. The nominal resolution bandwidth (RBW) shall be in the range of 1 to 5 % of the anticipated OBW, and the VBW shall be at least 3 times the RBW.
5. Set the detection mode to peak, and the trace mode to max hold.
6. Determine the reference value: Set the EUT to transmit a modulated signal. Allow the trace to stabilize. Set the spectrum analyzer marker to the highest level of the displayed trace. (this is the reference value)
7. Determine the “-26 dB down amplitude” as equal to (Reference Value – X).
8. Place two markers, one at the lowest and the other at the highest frequency of the envelope of the spectral display such that each marker is at or slightly below the “–X dB down amplitude” determined in step 6. If a marker is below this “-X dB down amplitude” value it shall be placed as close as possible to this value. The OBW is the positive frequency difference between the two markers.
9. Use the 99 % power bandwidth function of the spectrum analyzer and report the measured bandwidth.

3.7 Conducted Band Edge

3.7.1 Description of Conducted Band Edge Measurement

22.917(a)

For operations in the 824 – 849 MHz band, the FCC limit is 43 + $10\log_{10}$(P[Watts]) dB below the transmitter power P(Watts) in a 100kHz bandwidth. However, in the 1MHz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

24.238 (a)

For operations in the 1850-1910 and 1930-1990 MHz band, the FCC limit is 43 + $10\log_{10}$(P[Watts]) dB below the transmitter power P(Watts) in a 1MHz bandwidth. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

27.53 (h)

For operations in the 1710 – 1755 MHz band, the FCC limit is 43 + $10\log_{10}$(P[Watts]) dB below the transmitter power P(Watts) in a 1 MHz bandwidth. However, in the 1MHz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

3.7.2 Test Procedures

1. The testing follows ANSI C63.26 section 5.7
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The band edges of low and high channels for the highest RF powers were measured.
4. Set RBW >= 1% EBW in the 1MHz band immediately outside and adjacent to the band edge.
5. Beyond the 1 MHz band from the band edge, RBW=1MHz was used.
6. Set spectrum analyzer with RMS detector.
7. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
8. Checked that all the results comply with the emission limit line.

   Example:

   The limit line is derived from 43 + 10log(P)dB below the transmitter power P(Watts)

   = P(W)- [43 + 10log(P)] (dB)

   = [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB) = -13dBm.

3.8 Conducted Spurious Emission

3.8.1 Description of Conducted Spurious Emission Measurement

The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least 43 + 10 log (P) dB.

It is measured by means of a calibrated spectrum analyzer and scanned from 30 MHz up to a frequency including its 10th harmonic.

3.8.2 Test Procedures

1. The testing follows ANSI C63.26 section 5.7
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
4. The middle channel for the highest RF power within the transmitting frequency was measured.
5. The conducted spurious emission for the whole frequency range was taken.
6. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz.
7. Set spectrum analyzer with RMS detector.
8. Taking the record of maximum spurious emission.
9. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
10. The limit line is derived from 43 + 10log(P)dB below the transmitter power P(Watts)
    = P(W)- [43 + 10log(P)] (dB)
    = [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB)
    = -13dBm.

3.9 Frequency Stability

3.9.1 Description of Frequency Stability Measurement

The frequency stability shall be measured by variation of ambient temperature and variation of primary supply voltage to ensure that the fundamental emission stays within the authorized frequency block. The frequency stability of the transmitter shall be maintained within ±0.00025% (±2.5ppm) of the center frequency.

3.9.2 Test Procedures for Temperature Variation

1. The testing follows ANSI C63.26 section 5.6.4
2. The EUT was set up in the thermal chamber and connected with the system simulator.
3. With power OFF, the temperature was decreased to -30°C and the EUT was stabilized before testing. Power was applied and the maximum change in frequency was recorded within one minute.
4. With power OFF, the temperature was raised in 10°C step up to 50°C. The EUT was stabilized at each step for at least half an hour. Power was applied and the maximum frequency change was recorded within one minute.

3.9.3 Test Procedures for Voltage Variation

1. The testing follows ANSI C63.26 section 5.6.5
2. The EUT was placed in a temperature chamber at 20±5°C and connected with the system simulator.
3. The power supply voltage to the EUT was varied from 85% to 115% of the nominal value for other than hand carried battery equipment.
4. For hand carried, battery powered equipment, reduce the primary ac or dc supply voltage to the battery operating end point, which shall be specified by the manufacturer.
5. The variation in frequency was measured for the worst case.

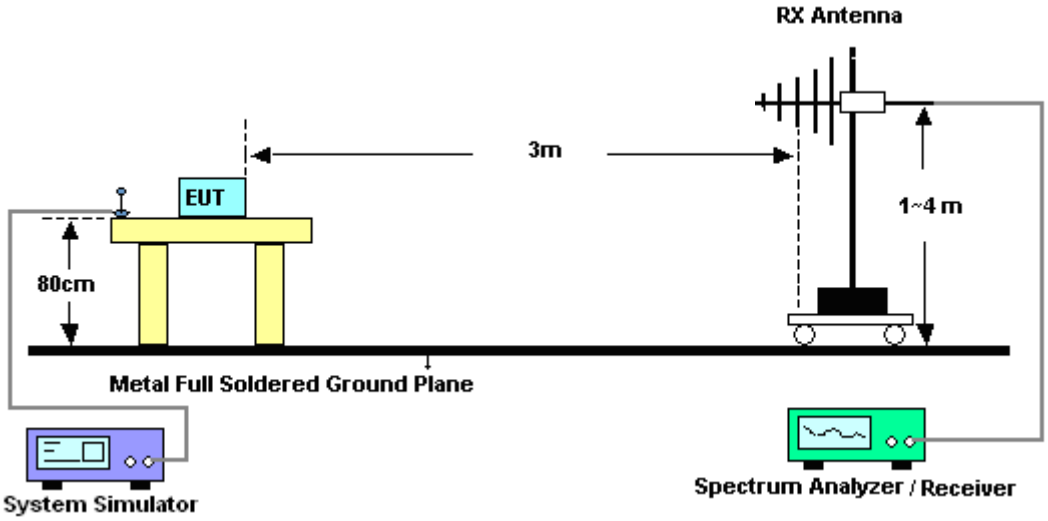
4 Radiated Test Items

4.1 Measuring Instruments

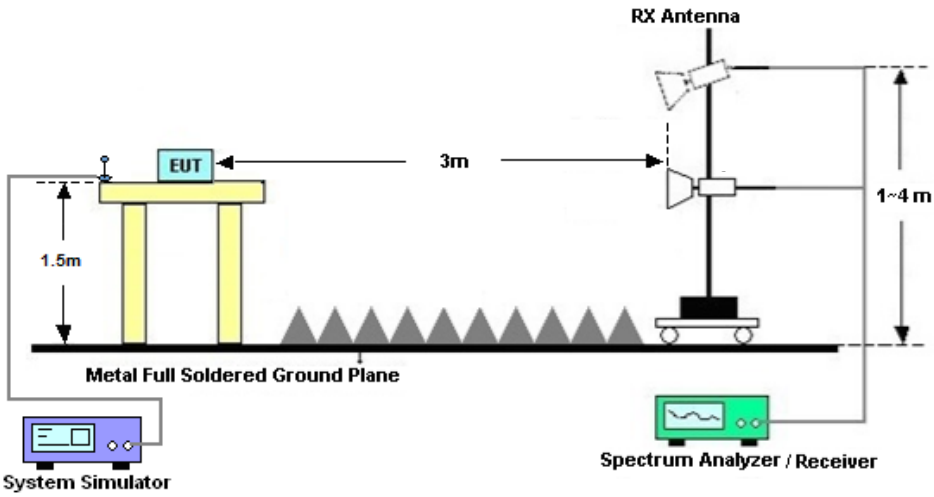
See list of measuring instruments of this test report.

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.

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 + 10log(P)dB below the transmitter power P(Watts)
    = P(W)- [43 + 10log(P)] (dB)
    = [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB)
    = -13dBm.

5 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV40	101078	10Hz~40GHz	Apr. 17, 2020	Jan, 18, 2021~ Mar. 04, 2021	Apr. 16, 2021	Conducted (TH01-SZ)
Thermal Chamber	Ten Billion Hongzhangroup	LP-150U	H2014081803	-40~+150°C	Jul. 22, 2020	Jan, 18, 2021~ Mar. 04, 2021	Jul. 21, 2021	Conducted (TH01-SZ)
EMI Test Receiver&SA	KEYSIGHT	N9038A	MY54450083	20Hz~8.4GHz	Apr. 17, 2020	Feb. 17, 2021	Apr. 16, 2021	Radiation (03CH03-SZ)
EXA Spectrum Anaiyzer	KEYSIGHT	N9010A	MY55150246	10Hz~44GHz;	Apr. 17, 2020	Feb. 17, 2021	Apr. 16, 2021	Radiation (03CH03-SZ)
Bilog Antenna	TeseQ	CBL6112D	35408	30MHz-2GHz	Jun. 22, 2020	Feb. 17, 2021	Jun. 21, 2021	Radiation (03CH03-SZ)
Double Ridge Horn Antenna	SCHWARZBECK	BBHA9120D	9120D-1355	1GHz~18GHz	Apr. 30, 2020	Feb. 17, 2021	Apr. 29, 2021	Radiation (03CH03-SZ)
Amplifier	Burgeon	BPA-530	102210	0.01Hz ~3000MHz	Oct. 17, 2019	Feb. 17, 2021	Oct. 16, 2021	Radiation (03CH03-SZ)
HF Amplifier	MITEQ	TTA1840-35 -HG	1871923	18GHz~40GHz	Jul. 21, 2020	Feb. 17, 2021	Jul. 20, 2021	Radiation (03CH03-SZ)
SHF-EHF Horn	com-power	AH-840	101071	18Ghz-40GHz	Apr. 23, 2020	Feb. 17, 2021	Apr. 22, 2021	Radiation (03CH03-SZ)
Amplifier	Agilent Technologies	83017A	MY39501302	500MHz~26.5GHz	Dec. 25, 2020	Feb. 17, 2021	Dec. 24, 2021	Radiation (03CH03-SZ)
AC Power Source	Chroma	61601	616010001985	N/A	NCR	Feb. 17, 2021	NCR	Radiation (03CH03-SZ)
Turn Table	EM	EM1000	N/A	0~360 degree	NCR	Feb. 17, 2021	NCR	Radiation (03CH03-SZ)
Antenna Mast	EM	EM1000	N/A	1 m~4 m	NCR	Feb. 17, 2021	NCR	Radiation (03CH03-SZ)

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))	**3.0dB**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**3.6dB**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**3.8dB**

Appendix A. Test Results of Conducted Test

Conducted Output Power(Average power and EIRP)

NSA Mode

EN-DC_n2+5A

EN-DC n2 (ANT0)+5A (ANT1)Combination 20MHz+10MHz(LTE)(GT - LC = -2dB)									
Channel	Mode	NR		LTE		Conducted		EIRP	
		RB		RB					
		Size	Offset	Size	Offset	Power(dBm)	Power(Watts)	EIRP(dBm)	EIRP(W)
Lowest	PI/2 BPSK DFT-s-OFDM	1	1	1	0	24.24	0.2656	22.24	0.1676
		1	104	1	49	24.30	0.2693	22.30	0.1699
		50	25	50	0	24.25	0.2663	22.25	0.168
	QPSK DFT-s-OFDM	1	1	1	0	24.22	0.2644	22.22	0.1668
		1	104	1	49	24.32	0.2706	22.32	0.1707
		50	25	50	0	24.27	0.2675	22.27	0.1688
	16QAM DFT-s-OFDM	1	1	1	0	23.20	0.2088	21.20	0.1317
		1	104	1	49	23.23	0.2102	21.23	0.1326
		50	25	50	0	22.84	0.1922	20.84	0.1213
	64QAM DFT-s-OFDM	1	1	1	0	21.18	0.1311	19.18	0.0827
		1	104	1	49	21.14	0.1299	19.14	0.082
		50	25	50	0	21.45	0.1395	19.45	0.088
	256QAM DFT-s-OFDM	1	1	1	0	18.98	0.0791	16.98	0.0499
		1	104	1	49	18.96	0.0786	16.96	0.0496
		50	25	50	0	19.30	0.0851	17.30	0.0537
Middle	PI/2 BPSK DFT-s-OFDM	1	1	1	0	24.22	0.2644	22.22	0.1668
		1	104	1	49	24.35	0.2724	22.35	0.1719
		50	25	50	0	24.28	0.2681	22.28	0.1692
	QPSK DFT-s-OFDM	1	1	1	0	24.29	0.2687	22.29	0.1695
		1	104	1	49	24.31	0.2699	22.31	0.1703
		50	25	50	0	24.27	0.2675	22.27	0.1688
	16QAM DFT-s-OFDM	1	1	1	0	23.09	0.2036	21.09	0.1284
		1	104	1	49	23.04	0.2013	21.04	0.127
		50	25	50	0	22.79	0.1901	20.79	0.1199
	64QAM DFT-s-OFDM	1	1	1	0	21.08	0.1282	19.08	0.0809
		1	104	1	49	21.05	0.1273	19.05	0.0803
		50	25	50	0	21.34	0.136	19.34	0.0858
	256QAM DFT-s-OFDM	1	1	1	0	18.89	0.0774	16.89	0.0488
		1	104	1	49	18.89	0.0774	16.89	0.0488
		50	25	50	0	19.35	0.0861	17.35	0.0543
	QPSK CP-OFDM	1	1	1	0	22.55	0.1799	20.55	0.1135
		1	104	1	49	22.61	0.1824	20.61	0.1151
		53	26	50	0	22.39	0.1734	20.39	0.1094
Highest	PI/2 BPSK DFT-s-OFDM	1	1	1	0	24.24	0.2656	22.24	0.1676
		1	104	1	49	24.23	0.265	22.23	0.1672
		50	25	50	0	24.28	0.2681	22.28	0.1691
	QPSK DFT-s-OFDM	1	1	1	0	24.32	0.2705	22.32	0.1707
		1	104	1	49	24.28	0.268	22.28	0.1691
		50	25	50	0	24.31	0.2695	22.31	0.17
	16QAM DFT-s-OFDM	1	1	1	0	23.23	0.2102	21.23	0.1326
		1	104	1	49	23.18	0.2078	21.18	0.1311
		50	25	50	0	22.93	0.1963	20.93	0.1238
	64QAM DFT-s-OFDM	1	1	1	0	21.16	0.1305	19.16	0.0824
		1	104	1	49	21.21	0.1321	19.21	0.0833
		50	25	50	0	21.39	0.1376	19.39	0.0868
	256QAM DFT-s-OFDM	1	1	1	0	18.89	0.0774	16.89	0.0488
		1	104	1	49	18.99	0.0792	16.99	0.0499
		50	25	50	0	19.33	0.0857	17.33	0.0541

EN-DC n2 (ANT0)+5A (ANT1) Combination 15MHz+10MHz(LTE)(GT - LC = -2dB)									
Channel	Mode	NR		LTE		Conducted		EIRP	
		RB		RB					
		Size	Offset	Size	Offset	Power(dBm)	Power(Watts)	EIRP(dBm)	EIRP(W)
Lowest	PI/2 BPSK DFT-s-OFDM	1	1	1	0	24.31	0.2699	22.31	0.1703
		1	77	1	49	24.33	0.2711	22.33	0.1711
		36	18	50	0	24.30	0.2693	22.30	0.1699
	QPSK DFT-s-OFDM	1	1	1	0	24.31	0.2699	22.31	0.1703
		1	77	1	49	24.34	0.2718	22.34	0.1715
		36	18	50	0	24.22	0.2644	22.22	0.1668
	16QAM DFT-s-OFDM	1	1	1	0	23.22	0.2098	21.22	0.1323
		1	77	1	49	23.23	0.2102	21.23	0.1326
		36	18	50	0	22.88	0.194	20.88	0.1224
	64QAM DFT-s-OFDM	1	1	1	0	21.20	0.1317	19.20	0.0831
		1	77	1	49	21.21	0.1321	19.21	0.0833
		36	18	50	0	21.34	0.136	19.34	0.0858
	256QAM DFT-s-OFDM	1	1	1	0	19.05	0.0804	17.05	0.0508
		1	77	1	49	18.97	0.0788	16.97	0.0497
		36	18	50	0	19.35	0.0861	17.35	0.0543
Middle	PI/2 BPSK DFT-s-OFDM	1	1	1	0	24.29	0.2687	22.29	0.1696
		1	77	1	49	24.34	0.2718	22.34	0.1715
		36	18	50	0	24.33	0.2712	22.33	0.1711
	QPSK DFT-s-OFDM	1	1	1	0	24.32	0.2705	22.32	0.1707
		1	77	1	49	24.30	0.2693	22.30	0.1699
		36	18	50	0	24.34	0.2718	22.34	0.1715
	16QAM DFT-s-OFDM	1	1	1	0	23.13	0.2055	21.13	0.1296
		1	77	1	49	23.08	0.2031	21.08	0.1282
		36	18	50	0	22.84	0.1922	20.84	0.1213
	64QAM DFT-s-OFDM	1	1	1	0	21.14	0.13	19.14	0.082
		1	77	1	49	21.00	0.1259	19.00	0.0794
		36	18	50	0	21.43	0.1388	19.43	0.0876
	256QAM DFT-s-OFDM	1	1	1	0	18.97	0.079	16.97	0.0498
		1	77	1	49	18.90	0.0776	16.90	0.0489
		36	18	50	0	19.26	0.0844	17.26	0.0533
	QPSK CP-OFDM	1	1	1	0	22.73	0.1874	20.73	0.1183
		1	77	1	49	22.52	0.1787	20.52	0.1127
		39	19	50	0	22.40	0.1738	20.40	0.1097
Highest	PI/2 BPSK DFT-s-OFDM	1	1	1	0	24.30	0.2694	22.30	0.17
		1	77	1	49	24.18	0.262	22.18	0.1653
		36	18	50	0	24.27	0.2675	22.27	0.1688
	QPSK DFT-s-OFDM	1	1	1	0	24.32	0.2706	22.32	0.1707
		1	77	1	49	24.25	0.2663	22.25	0.168
		36	18	50	0	24.29	0.2687	22.29	0.1696
	16QAM DFT-s-OFDM	1	1	1	0	23.27	0.2122	21.27	0.1339
		1	77	1	49	23.24	0.2107	21.24	0.133
		36	18	50	0	22.83	0.1918	20.83	0.121
	64QAM DFT-s-OFDM	1	1	1	0	21.16	0.1305	19.16	0.0824
		1	77	1	49	21.10	0.1287	19.10	0.0812
		36	18	50	0	21.36	0.1366	19.36	0.0862
	256QAM DFT-s-OFDM	1	1	1	0	18.96	0.0786	16.96	0.0496
		1	77	1	49	18.92	0.0779	16.92	0.0492
		36	18	50	0	19.30	0.0851	17.30	0.0537

EN-DC n2 (ANT0)+5A (ANT1) Combination 10MHz+10MHz(LTE)(GT - LC = -2dB)									
Channel	Mode	NR		LTE		Conducted		EIRP	
		RB		RB					
		Size	Offset	Size	Offset	Power(dBm)	Power(Watts)	EIRP(dBm)	EIRP(W)
Lowest	PI/2 BPSK DFT-s-OFDM	1	1	1	0	23.74	0.2368	21.74	0.1494
		1	50	1	49	23.66	0.2325	21.66	0.1467
		25	12	50	0	23.59	0.2288	21.59	0.1444
	QPSK DFT-s-OFDM	1	1	1	0	23.67	0.233	21.67	0.147
		1	50	1	49	23.65	0.232	21.65	0.1464
		25	12	50	0	23.55	0.2264	21.55	0.1428
	16QAM DFT-s-OFDM	1	1	1	0	23.21	0.2093	21.21	0.132
		1	50	1	49	23.28	0.2126	21.28	0.1342
		25	12	50	0	23.03	0.2008	21.03	0.1267
	64QAM DFT-s-OFDM	1	1	1	0	21.15	0.1302	19.15	0.0822
		1	50	1	49	21.17	0.1309	19.17	0.0826
		25	12	50	0	21.31	0.1351	19.31	0.0852
	256QAM DFT-s-OFDM	1	1	1	0	19.02	0.0799	17.02	0.0504
		1	50	1	49	18.91	0.0777	16.91	0.049
		25	12	50	0	19.34	0.0859	17.34	0.0542
Middle	PI/2 BPSK DFT-s-OFDM	1	1	1	0	24.32	0.2705	22.32	0.1707
		1	50	1	49	23.87	0.244	21.87	0.1539
		25	12	50	0	24.04	0.2537	22.04	0.1601
	QPSK DFT-s-OFDM	1	1	1	0	24.31	0.2699	22.31	0.1703
		1	50	1	49	23.82	0.2412	21.82	0.1522
		25	12	50	0	23.99	0.2508	21.99	0.1582
	16QAM DFT-s-OFDM	1	1	1	0	23.14	0.2059	21.14	0.1299
		1	50	1	49	23.10	0.204	21.10	0.1287
		25	12	50	0	22.85	0.1927	20.85	0.1216
	64QAM DFT-s-OFDM	1	1	1	0	21.07	0.1279	19.07	0.0807
		1	50	1	49	20.99	0.1256	18.99	0.0792
		25	12	50	0	21.37	0.137	19.37	0.0864
	256QAM DFT-s-OFDM	1	1	1	0	18.95	0.0786	16.95	0.0496
		1	50	1	49	18.93	0.0781	16.93	0.0493
		25	12	50	0	19.35	0.0861	17.35	0.0544
	QPSK CP-OFDM	1	1	1	0	22.50	0.1779	20.50	0.1122
		1	50	1	49	22.50	0.1778	20.50	0.1122
		26	13	50	0	22.37	0.1726	20.37	0.1089
Highest	PI/2 BPSK DFT-s-OFDM	1	1	1	0	24.31	0.2699	22.31	0.1703
		1	50	1	49	24.32	0.2706	22.32	0.1707
		25	12	50	0	24.34	0.2718	22.34	0.1715
	QPSK DFT-s-OFDM	1	1	1	0	24.32	0.2706	22.32	0.1707
		1	50	1	49	24.21	0.2638	22.21	0.1664
		25	12	50	0	24.34	0.2718	22.34	0.1715
	16QAM DFT-s-OFDM	1	1	1	0	23.30	0.2136	21.30	0.1348
		1	50	1	49	23.11	0.2045	21.11	0.129
		25	12	50	0	22.89	0.1945	20.89	0.1227
	64QAM DFT-s-OFDM	1	1	1	0	21.16	0.1305	19.16	0.0824
		1	50	1	49	21.16	0.1306	19.16	0.0824
		25	12	50	0	21.41	0.1382	19.41	0.0872
	256QAM DFT-s-OFDM	1	1	1	0	18.93	0.0781	16.93	0.0493
		1	50	1	49	19.04	0.0801	17.04	0.0505
		25	12	50	0	19.34	0.0859	17.34	0.0542

EN-DC n2 (ANT0)+5A (ANT1) Combination 5MHz+10MHz(LTE)(GT - LC = -2dB)									
Channel	Mode	NR		LTE		Conducted		EIRP	
		RB		RB					
		Size	Offset	Size	Offset	Power(dBm)	Power(Watts)	EIRP(dBm)	EIRP(W)
Lowest	PI/2 BPSK DFT-s-OFDM	1	1	1	0	23.63	0.2309	21.63	0.1457
		1	23	1	49	23.57	0.2273	21.57	0.1434
		12	6	50	0	23.52	0.2252	21.52	0.1421
	QPSK DFT-s-OFDM	1	1	1	0	23.53	0.2252	21.53	0.1421
		1	23	1	49	23.54	0.2262	21.54	0.1427
		12	6	50	0	23.57	0.2277	21.57	0.1437
	16QAM DFT-s-OFDM	1	1	1	0	23.26	0.2117	21.26	0.1336
		1	23	1	49	23.24	0.2107	21.24	0.1329
		12	6	50	0	22.89	0.1945	20.89	0.1227
	64QAM DFT-s-OFDM	1	1	1	0	21.17	0.1308	19.17	0.0826
		1	23	1	49	21.26	0.1336	19.26	0.0843
		12	6	50	0	21.37	0.137	19.37	0.0864
	256QAM DFT-s-OFDM	1	1	1	0	18.90	0.0776	16.90	0.0489
		1	23	1	49	18.91	0.0777	16.91	0.049
		12	6	50	0	19.36	0.0863	17.36	0.0545
Middle	PI/2 BPSK DFT-s-OFDM	1	1	1	0	24.15	0.2602	22.15	0.1642
		1	23	1	49	23.80	0.2401	21.80	0.1515
		12	6	50	0	23.79	0.2396	21.79	0.1511
	QPSK DFT-s-OFDM	1	1	1	0	24.07	0.2555	22.07	0.1612
		1	23	1	49	23.79	0.2396	21.79	0.1511
		12	6	50	0	23.78	0.239	21.78	0.1508
	16QAM DFT-s-OFDM	1	1	1	0	23.22	0.2097	21.22	0.1323
		1	23	1	49	23.10	0.2041	21.10	0.1288
		12	6	50	0	22.82	0.1914	20.82	0.1208
	64QAM DFT-s-OFDM	1	1	1	0	20.98	0.1253	18.98	0.079
		1	23	1	49	21.10	0.1288	19.10	0.0812
		12	6	50	0	21.39	0.1376	19.39	0.0868
	256QAM DFT-s-OFDM	1	1	1	0	19.00	0.0794	17.00	0.0501
		1	23	1	49	18.88	0.0772	16.88	0.0487
		12	6	50	0	19.32	0.0855	17.32	0.054
	QPSK CP-OFDM	1	1	1	0	22.59	0.1815	20.59	0.1145
		1	23	1	49	22.60	0.1819	20.60	0.1148
		13	6	50	0	22.44	0.1754	20.44	0.1107
Highest	PI/2 BPSK DFT-s-OFDM	1	1	1	0	24.31	0.2699	22.31	0.1703
		1	23	1	49	24.32	0.2706	22.32	0.1707
		12	6	50	0	24.28	0.2681	22.28	0.1692
	QPSK DFT-s-OFDM	1	1	1	0	24.33	0.2712	22.33	0.1711
		1	23	1	49	24.34	0.2718	22.34	0.1715
		12	6	50	0	24.32	0.2706	22.32	0.1707
	16QAM DFT-s-OFDM	1	1	1	0	23.21	0.2093	21.21	0.132
		1	23	1	49	23.18	0.2078	21.18	0.1311
		12	6	50	0	22.92	0.1958	20.92	0.1236
	64QAM DFT-s-OFDM	1	1	1	0	21.15	0.1303	19.15	0.0822
		1	23	1	49	21.21	0.132	19.21	0.0833
		12	6	50	0	21.38	0.1373	19.38	0.0866
	256QAM DFT-s-OFDM	1	1	1	0	19.04	0.0801	17.04	0.0505
		1	23	1	49	18.95	0.0785	16.95	0.0495
		12	6	50	0	19.38	0.0867	17.38	0.0547

EN-DC_n5+2A

EN-DC n5 (ANT1)+2A (ANT0)Combination 20MHz+20MHz(LTE)(GT - LC = -5dB)									
Channel	Mode	NR		LTE		Conducted		EIRP	
		RB		RB					
		Size	Offset	Size	Offset	Power(dBm)	Power(Watts)	EIRP(dBm)	EIRP(W)
Lowest	PI/2 BPSK DFT-s-OFDM	1	1	1	0	24.44	0.2782	17.29	0.0536
		1	104	1	99	24.25	0.2664	17.10	0.0513
		50	25	100	0	24.39	0.275	17.24	0.053
	QPSK DFT-s-OFDM	1	1	1	0	24.47	0.2802	17.32	0.054
		1	104	1	99	24.22	0.2645	17.07	0.051
		50	25	100	0	24.36	0.2732	17.21	0.0527
	16QAM DFT-s-OFDM	1	1	1	0	23.40	0.2187	16.25	0.0422
		1	104	1	99	23.24	0.2109	16.09	0.0406
		50	25	100	0	23.08	0.2033	15.93	0.0392
	64QAM DFT-s-OFDM	1	1	1	0	21.25	0.1334	14.10	0.0257
		1	104	1	99	21.29	0.1346	14.14	0.0259
		50	25	100	0	21.48	0.1406	14.33	0.0271
	256QAM DFT-s-OFDM	1	1	1	0	19.12	0.0817	11.97	0.0157
		1	104	1	99	19.04	0.0802	11.89	0.0155
		50	25	100	0	19.50	0.0891	12.35	0.0172
Middle	PI/2 BPSK DFT-s-OFDM	1	1	1	0	24.46	0.2795	17.31	0.0539
		1	104	1	99	24.17	0.2615	17.02	0.0504
		50	25	100	0	24.44	0.2782	17.29	0.0536
	QPSK DFT-s-OFDM	1	1	1	0	24.53	0.284	17.38	0.0547
		1	104	1	99	24.17	0.2615	17.02	0.0504
		50	25	100	0	24.42	0.277	17.27	0.0534
	16QAM DFT-s-OFDM	1	1	1	0	23.24	0.2109	16.09	0.0406
		1	104	1	99	23.15	0.2066	16.00	0.0398
		50	25	100	0	22.94	0.1969	15.79	0.0379
	64QAM DFT-s-OFDM	1	1	1	0	21.11	0.1292	13.96	0.0249
		1	104	1	99	21.17	0.131	14.02	0.0252
		50	25	100	0	21.52	0.1419	14.37	0.0274
	256QAM DFT-s-OFDM	1	1	1	0	19.08	0.081	11.93	0.0156
		1	104	1	99	18.98	0.0791	11.83	0.0153
		50	25	100	0	19.39	0.0869	12.24	0.0167
	QPSK CP-OFDM	1	1	1	0	22.80	0.1906	15.65	0.0367
		1	104	1	99	22.83	0.192	15.68	0.037
		53	26	100	0	22.64	0.1838	15.49	0.0354
Highest	PI/2 BPSK DFT-s-OFDM	1	1	1	0	24.29	0.2688	17.14	0.0518
		1	104	1	99	24.20	0.2633	17.05	0.0507
		50	25	100	0	24.36	0.2731	17.21	0.0526
	QPSK DFT-s-OFDM	1	1	1	0	24.30	0.2694	17.15	0.0519
		1	104	1	99	23.93	0.2469	16.78	0.0476
		50	25	100	0	24.30	0.2694	17.15	0.0519
	16QAM DFT-s-OFDM	1	1	1	0	23.31	0.2143	16.16	0.0413
		1	104	1	99	23.26	0.2118	16.11	0.0408
		50	25	100	0	22.99	0.1991	15.84	0.0384
	64QAM DFT-s-OFDM	1	1	1	0	21.28	0.1343	14.13	0.0259
		1	104	1	99	21.32	0.1356	14.17	0.0261
		50	25	100	0	21.48	0.1406	14.33	0.0271
	256QAM DFT-s-OFDM	1	1	1	0	19.03	0.08	11.88	0.0154
		1	104	1	99	19.06	0.0806	11.91	0.0155
		50	25	100	0	19.48	0.0887	12.33	0.0171

EN-DC n5 (ANT1)+2A (ANT0)Combination 15MHz+20MHz(LTE)(GT - LC = -5dB)									
Channel	Mode	NR		LTE		Conducted		EIRP	
		RB		RB					
		Size	Offset	Size	Offset	Power(dBm)	Power(Watts)	EIRP(dBm)	EIRP(W)
Lowest	PI/2 BPSK DFT-s-OFDM	1	1	1	0	24.37	0.2738	17.22	0.0528
		1	77	1	99	24.24	0.2657	17.09	0.0512
		36	18	100	0	24.45	0.2789	17.30	0.0538
	QPSK DFT-s-OFDM	1	1	1	0	24.40	0.2757	17.25	0.0531
		1	77	1	99	24.30	0.2694	17.15	0.0519
		36	18	100	0	24.35	0.2725	17.20	0.0525
	16QAM DFT-s-OFDM	1	1	1	0	23.37	0.2172	16.22	0.0419
		1	77	1	99	23.29	0.2133	16.14	0.0411
		36	18	100	0	23.18	0.208	16.03	0.0401
	64QAM DFT-s-OFDM	1	1	1	0	21.34	0.1362	14.19	0.0263
		1	77	1	99	21.32	0.1356	14.17	0.0261
		36	18	100	0	21.32	0.1355	14.17	0.0261
	256QAM DFT-s-OFDM	1	1	1	0	19.35	0.0861	12.20	0.0166
		1	77	1	99	19.42	0.0875	12.27	0.0169
		36	18	100	0	19.38	0.0867	12.23	0.0167
Middle	PI/2 BPSK DFT-s-OFDM	1	1	1	0	24.37	0.2738	17.22	0.0528
		1	77	1	99	24.32	0.2707	17.17	0.0522
		36	18	100	0	24.38	0.2744	17.23	0.0529
	QPSK DFT-s-OFDM	1	1	1	0	24.47	0.2801	17.32	0.054
		1	77	1	99	24.22	0.2645	17.07	0.051
		36	18	100	0	24.48	0.2808	17.33	0.0541
	16QAM DFT-s-OFDM	1	1	1	0	23.33	0.2153	16.18	0.0415
		1	77	1	99	23.32	0.2148	16.17	0.0414
		36	18	100	0	23.00	0.1996	15.85	0.0385
	64QAM DFT-s-OFDM	1	1	1	0	21.21	0.1322	14.06	0.0255
		1	77	1	99	21.26	0.1337	14.11	0.0258
		36	18	100	0	21.62	0.1452	14.47	0.028
	256QAM DFT-s-OFDM	1	1	1	0	19.41	0.0873	12.26	0.0168
		1	77	1	99	19.36	0.0863	12.21	0.0166
		36	18	100	0	19.41	0.0873	12.26	0.0168
	QPSK CP-OFDM	1	1	1	0	22.85	0.1928	15.70	0.0372
		1	77	1	99	22.87	0.1938	15.72	0.0373
		39	19	100	0	22.58	0.1813	15.43	0.0349
Highest	PI/2 BPSK DFT-s-OFDM	1	1	1	0	24.35	0.2725	17.20	0.0525
		1	77	1	99	24.17	0.2609	17.02	0.0503
		36	18	100	0	24.26	0.267	17.11	0.0515
	QPSK DFT-s-OFDM	1	1	1	0	24.35	0.2725	17.20	0.0525
		1	77	1	99	24.00	0.2509	16.85	0.0484
		36	18	100	0	24.35	0.2725	17.20	0.0525
	16QAM DFT-s-OFDM	1	1	1	0	23.53	0.2254	16.38	0.0434
		1	77	1	99	23.31	0.2143	16.16	0.0413
		36	18	100	0	23.13	0.2056	15.98	0.0396
	64QAM DFT-s-OFDM	1	1	1	0	21.34	0.1362	14.19	0.0262
		1	77	1	99	21.34	0.1362	14.19	0.0263
		36	18	100	0	21.65	0.1462	14.50	0.0282
	256QAM DFT-s-OFDM	1	1	1	0	19.30	0.0851	12.15	0.0164
		1	77	1	99	19.43	0.0877	12.28	0.0169
		36	18	100	0	19.39	0.0869	12.24	0.0167

EN-DC n5 (ANT1)+2A (ANT0)Combination 10MHz+20MHz(LTE)(GT - LC = -5dB)									
Channel	Mode	NR		LTE		Conducted		EIRP	
		RB		RB					
		Size	Offset	Size	Offset	Power(dBm)	Power(Watts)	EIRP(dBm)	EIRP(W)
Lowest	PI/2 BPSK DFT-s-OFDM	1	1	1	0	24.46	0.2795	17.31	0.0539
		1	50	1	99	24.34	0.2719	17.19	0.0524
		25	12	100	0	24.40	0.2757	17.25	0.0531
	QPSK DFT-s-OFDM	1	1	1	0	24.35	0.2725	17.20	0.0525
		1	50	1	99	24.26	0.2669	17.11	0.0515
		25	12	100	0	24.47	0.2801	17.32	0.054
	16QAM DFT-s-OFDM	1	1	1	0	23.47	0.2223	16.32	0.0428
		1	50	1	99	23.45	0.2213	16.30	0.0426
		25	12	100	0	23.04	0.2014	15.89	0.0388
	64QAM DFT-s-OFDM	1	1	1	0	21.29	0.1346	14.14	0.026
		1	50	1	99	21.42	0.1387	14.27	0.0267
		25	12	100	0	21.48	0.1406	14.33	0.0271
	256QAM DFT-s-OFDM	1	1	1	0	19.29	0.0849	12.14	0.0164
		1	50	1	99	19.26	0.0844	12.11	0.0163
		25	12	100	0	19.30	0.0851	12.15	0.0164
Middle	PI/2 BPSK DFT-s-OFDM	1	1	1	0	24.42	0.2769	17.27	0.0534
		1	50	1	99	24.25	0.2663	17.10	0.0513
		25	12	100	0	24.50	0.2821	17.35	0.0544
	QPSK DFT-s-OFDM	1	1	1	0	24.27	0.2676	17.12	0.0516
		1	50	1	99	24.22	0.2645	17.07	0.051
		25	12	100	0	24.46	0.2795	17.31	0.0539
	16QAM DFT-s-OFDM	1	1	1	0	23.37	0.2172	16.22	0.0419
		1	50	1	99	23.31	0.2143	16.16	0.0413
		25	12	100	0	23.01	0.2001	15.86	0.0386
	64QAM DFT-s-OFDM	1	1	1	0	21.27	0.134	14.12	0.0258
		1	50	1	99	21.25	0.1334	14.10	0.0257
		25	12	100	0	21.67	0.1469	14.52	0.0283
	256QAM DFT-s-OFDM	1	1	1	0	19.34	0.0859	12.19	0.0166
		1	50	1	99	19.40	0.0871	12.25	0.0168
		25	12	100	0	19.49	0.0889	12.34	0.0171
	QPSK CP-OFDM	1	1	1	0	22.87	0.1937	15.72	0.0373
		1	50	1	99	22.85	0.1928	15.70	0.0372
		26	13	100	0	22.59	0.1817	15.44	0.035
Highest	PI/2 BPSK DFT-s-OFDM	1	1	1	0	24.26	0.267	17.11	0.0515
		1	50	1	99	24.15	0.2603	17.00	0.0502
		25	12	100	0	24.28	0.2682	17.13	0.0517
	QPSK DFT-s-OFDM	1	1	1	0	24.26	0.2669	17.11	0.0515
		1	50	1	99	23.93	0.2469	16.78	0.0476
		25	12	100	0	24.25	0.2663	17.10	0.0513
	16QAM DFT-s-OFDM	1	1	1	0	23.50	0.2238	16.35	0.0431
		1	50	1	99	23.41	0.2192	16.26	0.0423
		25	12	100	0	23.16	0.207	16.01	0.0399
	64QAM DFT-s-OFDM	1	1	1	0	21.36	0.1368	14.21	0.0264
		1	50	1	99	21.36	0.1368	14.21	0.0264
		25	12	100	0	21.59	0.1442	14.44	0.0278
	256QAM DFT-s-OFDM	1	1	1	0	19.33	0.0857	12.18	0.0165
		1	50	1	99	19.37	0.0865	12.22	0.0167
		25	12	100	0	19.30	0.0851	12.15	0.0164

EN-DC n5 (ANT1)+2A (ANT0)Combination 5MHz+20MHz(LTE)(GT - LC = -5dB)									
Channel	Mode	NR		LTE		Conducted		EIRP	
		RB		RB					
		Size	Offset	Size	Offset	Power(dBm)	Power(Watts)	EIRP(dBm)	EIRP(W)
Lowest	PI/2 BPSK DFT-s-OFDM	1	1	1	0	24.51	0.2827	17.36	0.0545
		1	23	1	99	24.52	0.2834	17.37	0.0546
		12	6	100	0	24.48	0.2808	17.33	0.0541
	QPSK DFT-s-OFDM	1	1	1	0	24.52	0.2834	17.37	0.0546
		1	23	1	99	24.51	0.2827	17.36	0.0545
		12	6	100	0	24.32	0.2707	17.17	0.0522
	16QAM DFT-s-OFDM	1	1	1	0	23.43	0.2203	16.28	0.0425
		1	23	1	99	23.31	0.2143	16.16	0.0413
		12	6	100	0	23.10	0.2042	15.95	0.0394
	64QAM DFT-s-OFDM	1	1	1	0	21.30	0.1349	14.15	0.026
		1	23	1	99	21.32	0.1356	14.17	0.0261
		12	6	100	0	21.39	0.1377	14.24	0.0266
	256QAM DFT-s-OFDM	1	1	1	0	19.42	0.0875	12.27	0.0169
		1	23	1	99	19.36	0.0863	12.21	0.0166
		12	6	100	0	19.43	0.0877	12.28	0.0169
Middle	PI/2 BPSK DFT-s-OFDM	1	1	1	0	24.51	0.2827	17.36	0.0545
		1	23	1	99	24.52	0.2834	17.37	0.0546
		12	6	100	0	24.44	0.2782	17.29	0.0536
	QPSK DFT-s-OFDM	1	1	1	0	24.37	0.2738	17.22	0.0528
		1	23	1	99	24.36	0.2731	17.21	0.0526
		12	6	100	0	24.47	0.2801	17.32	0.054
	16QAM DFT-s-OFDM	1	1	1	0	23.39	0.2183	16.24	0.0421
		1	23	1	99	23.26	0.2119	16.11	0.0408
		12	6	100	0	23.14	0.2061	15.99	0.0397
	64QAM DFT-s-OFDM	1	1	1	0	21.32	0.1356	14.17	0.0261
		1	23	1	99	21.24	0.1331	14.09	0.0257
		12	6	100	0	21.59	0.1442	14.44	0.0278
	256QAM DFT-s-OFDM	1	1	1	0	19.48	0.0887	12.33	0.0171
		1	23	1	99	19.33	0.0857	12.18	0.0165
		12	6	100	0	19.42	0.0875	12.27	0.0169
	QPSK CP-OFDM	1	1	1	0	22.83	0.192	15.68	0.037
		1	23	1	99	22.61	0.1825	15.46	0.0352
		13	6	100	0	22.64	0.1838	15.49	0.0354
Highest	PI/2 BPSK DFT-s-OFDM	1	1	1	0	24.42	0.2769	17.27	0.0534
		1	23	1	99	24.32	0.2707	17.17	0.0522
		12	6	100	0	24.27	0.2676	17.12	0.0516
	QPSK DFT-s-OFDM	1	1	1	0	24.25	0.2663	17.10	0.0513
		1	23	1	99	24.22	0.2645	17.07	0.051
		12	6	100	0	24.24	0.2657	17.09	0.0512
	16QAM DFT-s-OFDM	1	1	1	0	23.46	0.2218	16.31	0.0427
		1	23	1	99	23.38	0.2177	16.23	0.042
		12	6	100	0	23.17	0.2075	16.02	0.04
	64QAM DFT-s-OFDM	1	1	1	0	21.26	0.1337	14.11	0.0258
		1	23	1	99	21.40	0.1381	14.25	0.0266
		12	6	100	0	21.62	0.1452	14.47	0.028
	256QAM DFT-s-OFDM	1	1	1	0	19.37	0.0865	12.22	0.0167
		1	23	1	99	19.29	0.0849	12.14	0.0164
		12	6	100	0	19.27	0.0845	12.12	0.0163

EN-DC_n25+12A

EN-DC n25 (ANT0)+12A (ANT1)Combination 20MHz+10MHz(LTE)(GT - LC = -2dB)									
Channel	Mode	NR		LTE		Conducted		EIRP	
		RB		RB					
		Size	Offset	Size	Offset	Power(dBm)	Power(Watts)	EIRP(dBm)	EIRP(W)
Lowest	PI/2 BPSK DFT-s-OFDM	1	1	1	0	24.18	0.262	22.18	0.1653
		1	104	1	49	24.24	0.2656	22.24	0.1676
		50	25	50	0	24.26	0.2669	22.26	0.1684
	QPSK DFT-s-OFDM	1	1	1	0	24.20	0.2632	22.20	0.1661
		1	104	1	49	24.29	0.2687	22.29	0.1695
		50	25	50	0	24.28	0.2681	22.28	0.1691
	16QAM DFT-s-OFDM	1	1	1	0	23.28	0.2127	21.28	0.1342
		1	104	1	49	23.14	0.2059	21.14	0.1299
		50	25	50	0	22.96	0.1976	20.96	0.1247
	64QAM DFT-s-OFDM	1	1	1	0	21.22	0.1323	19.22	0.0835
		1	104	1	49	21.14	0.13	19.14	0.082
		50	25	50	0	21.34	0.136	19.34	0.0858
	256QAM DFT-s-OFDM	1	1	1	0	18.89	0.0774	16.89	0.0488
		1	104	1	49	18.91	0.0777	16.91	0.0491
		50	25	50	0	19.39	0.0869	17.39	0.0549
Middle	PI/2 BPSK DFT-s-OFDM	1	1	1	0	24.26	0.2669	22.26	0.1684
		1	104	1	49	24.23	0.265	22.23	0.1672
		50	25	50	0	24.33	0.2712	22.33	0.1711
	QPSK DFT-s-OFDM	1	1	1	0	24.21	0.2638	22.21	0.1664
		1	104	1	49	24.24	0.2656	22.24	0.1676
		50	25	50	0	24.29	0.2687	22.29	0.1695
	16QAM DFT-s-OFDM	1	1	1	0	23.20	0.2088	21.20	0.1317
		1	104	1	49	23.11	0.2045	21.11	0.129
		50	25	50	0	22.84	0.1923	20.84	0.1213
	64QAM DFT-s-OFDM	1	1	1	0	21.08	0.1282	19.08	0.0809
		1	104	1	49	21.10	0.1288	19.10	0.0812
		50	25	50	0	21.35	0.1363	19.35	0.086
	256QAM DFT-s-OFDM	1	1	1	0	18.89	0.0774	16.89	0.0488
		1	104	1	49	18.81	0.076	16.81	0.0479
		50	25	50	0	19.32	0.0855	17.32	0.054
	QPSK CP-OFDM	1	1	1	0	22.50	0.1778	20.50	0.1122
		1	104	1	49	22.64	0.1836	20.64	0.1159
		53	26	50	0	22.40	0.1738	20.40	0.1097
Highest	PI/2 BPSK DFT-s-OFDM	1	1	1	0	24.26	0.2668	22.26	0.1684
		1	104	1	49	24.30	0.2693	22.30	0.1699
		50	25	50	0	24.05	0.2542	22.05	0.1604
	QPSK DFT-s-OFDM	1	1	1	0	24.26	0.2668	22.26	0.1684
		1	104	1	49	24.00	0.2514	22.00	0.1586
		50	25	50	0	24.29	0.2687	22.29	0.1695
	16QAM DFT-s-OFDM	1	1	1	0	23.26	0.2117	21.26	0.1336
		1	104	1	49	23.21	0.2093	21.21	0.132
		50	25	50	0	22.97	0.1981	20.97	0.125
	64QAM DFT-s-OFDM	1	1	1	0	21.20	0.1317	19.20	0.0831
		1	104	1	49	21.12	0.1293	19.12	0.0816
		50	25	50	0	21.44	0.1392	19.44	0.0878
	256QAM DFT-s-OFDM	1	1	1	0	18.89	0.0774	16.89	0.0488
		1	104	1	49	19.02	0.0799	17.02	0.0504
		50	25	50	0	19.35	0.0861	17.35	0.0544

EN-DC n25 (ANT0)+12A (ANT1)Combination 15MHz+10MHz(LTE)(GT - LC = -2dB)									
Channel	Mode	NR		LTE		Conducted		EIRP	
		RB		RB					
		Size	Offset	Size	Offset	Power(dBm)	Power(Watts)	EIRP(dBm)	EIRP(W)
Lowest	PI/2 BPSK DFT-s-OFDM	1	1	1	0	24.31	0.2699	22.31	0.1703
		1	77	1	49	24.18	0.262	22.18	0.1653
		36	18	50	0	24.07	0.2555	22.07	0.1612
	QPSK DFT-s-OFDM	1	1	1	0	24.26	0.2668	22.26	0.1684
		1	77	1	49	24.26	0.2668	22.26	0.1684
		36	18	50	0	24.26	0.2668	22.26	0.1684
	16QAM DFT-s-OFDM	1	1	1	0	23.16	0.2069	21.16	0.1305
		1	77	1	49	23.28	0.2127	21.28	0.1342
		36	18	50	0	22.99	0.199	20.99	0.1255
	64QAM DFT-s-OFDM	1	1	1	0	21.01	0.1261	19.01	0.0796
		1	77	1	49	21.08	0.1282	19.08	0.0809
		36	18	50	0	21.38	0.1373	19.38	0.0866
	256QAM DFT-s-OFDM	1	1	1	0	18.95	0.0785	16.95	0.0495
		1	77	1	49	18.93	0.0781	16.93	0.0493
		36	18	50	0	19.35	0.0861	17.35	0.0544
Middle	PI/2 BPSK DFT-s-OFDM	1	1	1	0	24.31	0.2699	22.31	0.1703
		1	77	1	49	24.03	0.2531	22.03	0.1597
		36	18	50	0	24.21	0.2638	22.21	0.1664
	QPSK DFT-s-OFDM	1	1	1	0	24.29	0.2687	22.29	0.1695
		1	77	1	49	24.02	0.2526	22.02	0.1594
		36	18	50	0	24.32	0.2706	22.32	0.1707
	16QAM DFT-s-OFDM	1	1	1	0	23.14	0.206	21.14	0.13
		1	77	1	49	23.08	0.2031	21.08	0.1282
		36	18	50	0	22.95	0.1972	20.95	0.1244
	64QAM DFT-s-OFDM	1	1	1	0	21.08	0.1282	19.08	0.0809
		1	77	1	49	21.06	0.1276	19.06	0.0805
		36	18	50	0	21.45	0.1395	19.45	0.088
	256QAM DFT-s-OFDM	1	1	1	0	18.91	0.0777	16.91	0.0491
		1	77	1	49	18.88	0.0772	16.88	0.0487
		36	18	50	0	19.36	0.0863	17.36	0.0545
	QPSK CP-OFDM	1	1	1	0	22.58	0.1811	20.58	0.1143
		1	77	1	49	22.56	0.1803	20.56	0.1138
		39	19	50	0	22.35	0.1718	20.35	0.1084
Highest	PI/2 BPSK DFT-s-OFDM	1	1	1	0	24.07	0.2555	22.07	0.1612
		1	77	1	49	24.07	0.2555	22.07	0.1612
		36	18	50	0	24.04	0.2537	22.04	0.1601
	QPSK DFT-s-OFDM	1	1	1	0	24.04	0.2537	22.04	0.1601
		1	77	1	49	24.06	0.2549	22.06	0.1608
		36	18	50	0	24.22	0.2644	22.22	0.1668
	16QAM DFT-s-OFDM	1	1	1	0	23.25	0.2112	21.25	0.1333
		1	77	1	49	23.29	0.2132	21.29	0.1345
		36	18	50	0	22.91	0.1954	20.91	0.1233
	64QAM DFT-s-OFDM	1	1	1	0	21.17	0.1308	19.17	0.0826
		1	77	1	49	21.14	0.13	19.14	0.082
		36	18	50	0	21.34	0.136	19.34	0.0858
	256QAM DFT-s-OFDM	1	1	1	0	18.97	0.0788	16.97	0.0497
		1	77	1	49	18.93	0.0781	16.93	0.0493
		36	18	50	0	19.35	0.0862	17.35	0.0544

EN-DC n25 (ANT0)+12A (ANT1)Combination 10MHz+10MHz(LTE)(GT - LC = -2dB)									
Channel	Mode	NR		LTE		Conducted		EIRP	
		RB		RB					
		Size	Offset	Size	Offset	Power(dBm)	Power(Watts)	EIRP(dBm)	EIRP(W)
Lowest	PI/2 BPSK DFT-s-OFDM	1	1	1	0	24.11	0.2578	22.11	0.1627
		1	50	1	49	24.20	0.2632	22.20	0.1661
		25	12	50	0	24.06	0.2549	22.06	0.1608
	QPSK DFT-s-OFDM	1	1	1	0	24.20	0.2632	22.20	0.1661
		1	50	1	49	24.18	0.262	22.18	0.1653
		25	12	50	0	24.32	0.2705	22.32	0.1707
	16QAM DFT-s-OFDM	1	1	1	0	23.19	0.2083	21.19	0.1314
		1	104	1	49	23.15	0.2064	21.15	0.1303
		50	25	50	0	22.84	0.1923	20.84	0.1213
	64QAM DFT-s-OFDM	1	1	1	0	21.13	0.1297	19.13	0.0818
		1	104	1	49	21.14	0.13	19.14	0.082
		50	25	50	0	21.37	0.137	19.37	0.0864
	256QAM DFT-s-OFDM	1	1	1	0	18.88	0.0772	16.88	0.0487
		1	104	1	49	18.99	0.0792	16.99	0.05
		50	25	50	0	19.31	0.0854	17.31	0.0539
Middle	PI/2 BPSK DFT-s-OFDM	1	1	1	0	24.13	0.259	22.13	0.1634
		1	50	1	49	24.31	0.2699	22.31	0.1703
		25	12	50	0	24.20	0.2632	22.20	0.1661
	QPSK DFT-s-OFDM	1	1	1	0	24.30	0.2693	22.30	0.1699
		1	50	1	49	24.19	0.2626	22.19	0.1657
		25	12	50	0	24.22	0.2644	22.22	0.1668
	16QAM DFT-s-OFDM	1	1	1	0	23.14	0.206	21.14	0.13
		1	50	1	49	23.08	0.2031	21.08	0.1282
		25	12	50	0	22.78	0.1896	20.78	0.1197
	64QAM DFT-s-OFDM	1	1	1	0	21.11	0.1291	19.11	0.0814
		1	50	1	49	21.01	0.1261	19.01	0.0796
		25	12	50	0	21.34	0.136	19.34	0.0858
	256QAM DFT-s-OFDM	1	1	1	0	18.98	0.079	16.98	0.0498
		1	50	1	49	18.96	0.0787	16.96	0.0496
		25	12	50	0	19.25	0.0842	17.25	0.0531
	QPSK CP-OFDM	1	1	1	0	22.50	0.1779	20.50	0.1122
		1	50	1	49	22.49	0.1774	20.49	0.112
		26	13	50	0	22.36	0.1722	20.36	0.1087
Highest	PI/2 BPSK DFT-s-OFDM	1	1	1	0	24.31	0.2699	22.31	0.1703
		1	50	1	49	24.32	0.2705	22.32	0.1707
		25	12	50	0	24.02	0.2526	22.02	0.1593
	QPSK DFT-s-OFDM	1	1	1	0	24.31	0.2699	22.31	0.1703
		1	50	1	49	24.10	0.2572	22.10	0.1623
		25	12	50	0	24.22	0.2644	22.22	0.1668
	16QAM DFT-s-OFDM	1	1	1	0	23.21	0.2093	21.21	0.132
		1	104	1	49	23.19	0.2083	21.19	0.1314
		50	25	50	0	22.96	0.1976	20.96	0.1247
	64QAM DFT-s-OFDM	1	1	1	0	21.08	0.1282	19.08	0.0809
		1	104	1	49	21.15	0.1303	19.15	0.0822
		50	25	50	0	21.51	0.1414	19.51	0.0892
	256QAM DFT-s-OFDM	1	1	1	0	19.05	0.0803	17.05	0.0506
		1	104	1	49	19.02	0.0797	17.02	0.0503
		50	25	50	0	19.37	0.0865	17.37	0.0546

EN-DC n25 (ANT0)+12A (ANT1)Combination 5MHz+10MHz(LTE)(GT - LC = -2dB)									
Channel	Mode	NR		LTE		Conducted		EIRP	
		RB		RB					
		Size	Offset	Size	Offset	Power(dBm)	Power(Watts)	EIRP(dBm)	EIRP(W)
Lowest	PI/2 BPSK DFT-s-OFDM	1	1	1	0	24.24	0.2656	22.24	0.1676
		1	23	1	49	24.31	0.2699	22.31	0.1703
		12	6	50	0	24.27	0.2675	22.27	0.1688
	QPSK DFT-s-OFDM	1	1	1	0	24.26	0.2668	22.26	0.1684
		1	23	1	49	24.25	0.2662	22.25	0.168
		12	6	50	0	24.19	0.2626	22.19	0.1657
	16QAM DFT-s-OFDM	1	1	1	0	23.31	0.2141	21.31	0.1351
		1	23	1	49	23.19	0.2083	21.19	0.1314
		12	6	50	0	22.95	0.1972	20.95	0.1244
	64QAM DFT-s-OFDM	1	1	1	0	21.08	0.1282	19.08	0.0809
		1	23	1	49	21.11	0.1291	19.11	0.0814
		12	6	50	0	21.34	0.136	19.34	0.0858
	256QAM DFT-s-OFDM	1	1	1	0	19.00	0.0794	17.00	0.0501
		1	23	1	49	19.04	0.0801	17.04	0.0505
		12	6	50	0	19.39	0.0869	17.39	0.0548
Middle	PI/2 BPSK DFT-s-OFDM	1	1	1	0	24.07	0.2555	22.07	0.1612
		1	23	1	49	24.20	0.2632	22.20	0.1661
		12	6	50	0	24.11	0.2578	22.11	0.1627
	QPSK DFT-s-OFDM	1	1	1	0	24.28	0.2681	22.28	0.1691
		1	23	1	49	24.31	0.2699	22.31	0.1703
		12	6	50	0	24.04	0.2537	22.04	0.1601
	16QAM DFT-s-OFDM	1	1	1	0	23.18	0.2079	21.18	0.1311
		1	23	1	49	23.15	0.2064	21.15	0.1302
		12	6	50	0	22.77	0.1892	20.77	0.1194
	64QAM DFT-s-OFDM	1	1	1	0	20.97	0.125	18.97	0.0789
		1	23	1	49	20.98	0.1253	18.98	0.0791
		12	6	50	0	21.31	0.1351	19.31	0.0853
	256QAM DFT-s-OFDM	1	1	1	0	18.93	0.0781	16.93	0.0493
		1	23	1	49	18.88	0.0772	16.88	0.0487
		12	6	50	0	19.31	0.0854	17.31	0.0539
	QPSK CP-OFDM	1	1	1	0	22.57	0.1807	20.57	0.114
		1	23	1	49	22.68	0.1853	20.68	0.1169
		13	6	50	0	22.37	0.1726	20.37	0.1089
Highest	PI/2 BPSK DFT-s-OFDM	1	1	1	0	24.27	0.2675	22.27	0.1688
		1	23	1	49	24.14	0.2596	22.14	0.1638
		12	6	50	0	24.16	0.2608	22.16	0.1645
	QPSK DFT-s-OFDM	1	1	1	0	24.08	0.2561	22.08	0.1616
		1	23	1	49	24.17	0.2614	22.17	0.1649
		12	6	50	0	24.31	0.2699	22.31	0.1703
	16QAM DFT-s-OFDM	1	1	1	0	23.24	0.2107	21.24	0.133
		1	23	1	49	23.25	0.2112	21.25	0.1333
		12	6	50	0	22.93	0.1963	20.93	0.1238
	64QAM DFT-s-OFDM	1	1	1	0	21.19	0.1315	19.19	0.0829
		1	23	1	49	21.16	0.1306	19.16	0.0824
		12	6	50	0	21.42	0.1386	19.42	0.0874
	256QAM DFT-s-OFDM	1	1	1	0	19.03	0.0799	17.03	0.0504
		1	23	1	49	19.01	0.0795	17.01	0.0502
		12	6	50	0	19.34	0.086	17.34	0.0542

EN-DC_n66+5A

EN-DC n66 (ANT0)+5A (ANT1)Combination 20MHz+10MHz(LTE)(GT - LC = -2dB)									
Channel	Mode	NR		LTE		Conducted		EIRP	
		RB		RB					
		Size	Offset	Size	Offset	Power(dBm)	Power(Watts)	EIRP(dBm)	EIRP(W)
Lowest	PI/2 BPSK DFT-s-OFDM	1	1	1	0	24.22	0.2644	22.22	0.1668
		1	104	1	49	24.32	0.2705	22.32	0.1707
		50	25	50	0	24.32	0.2706	22.32	0.1707
	QPSK DFT-s-OFDM	1	1	1	0	24.17	0.2614	22.17	0.1649
		1	104	1	49	24.37	0.2737	22.37	0.1727
		50	25	50	0	24.24	0.2657	22.24	0.1676
	16QAM DFT-s-OFDM	1	1	1	0	23.14	0.206	21.14	0.13
		1	104	1	49	23.05	0.2018	21.05	0.1273
		50	25	50	0	22.70	0.1863	20.70	0.1175
	64QAM DFT-s-OFDM	1	1	1	0	21.00	0.1259	19.00	0.0794
		1	104	1	49	20.92	0.1236	18.92	0.078
		50	25	50	0	21.26	0.1336	19.26	0.0843
	256QAM DFT-s-OFDM	1	1	1	0	18.80	0.0759	16.80	0.0479
		1	104	1	49	18.80	0.0759	16.80	0.0479
		50	25	50	0	19.23	0.0837	17.23	0.0528
Middle	PI/2 BPSK DFT-s-OFDM	1	1	1	0	23.94	0.2479	21.94	0.1564
		1	104	1	49	24.00	0.2514	22.00	0.1586
		50	25	50	0	24.43	0.2775	22.43	0.1751
	QPSK DFT-s-OFDM	1	1	1	0	23.98	0.2503	21.98	0.1579
		1	104	1	49	24.03	0.2531	22.03	0.1597
		50	25	50	0	24.40	0.2756	22.40	0.1739
	16QAM DFT-s-OFDM	1	1	1	0	22.91	0.1954	20.91	0.1233
		1	104	1	49	22.88	0.1941	20.88	0.1225
		50	25	50	0	22.64	0.1837	20.64	0.1159
	64QAM DFT-s-OFDM	1	1	1	0	20.94	0.1242	18.94	0.0784
		1	104	1	49	20.89	0.1228	18.89	0.0775
		50	25	50	0	21.26	0.1336	19.26	0.0843
	256QAM DFT-s-OFDM	1	1	1	0	18.74	0.0749	16.74	0.0472
		1	104	1	49	18.73	0.0747	16.73	0.0471
		50	25	50	0	19.14	0.082	17.14	0.0517
	QPSK CP-OFDM	1	1	1	0	22.45	0.1759	20.45	0.111
		1	104	1	49	22.28	0.1692	20.28	0.1067
		53	26	50	0	22.28	0.1692	20.28	0.1067
Highest	PI/2 BPSK DFT-s-OFDM	1	1	1	0	23.95	0.2486	21.95	0.1568
		1	104	1	49	23.98	0.2502	21.98	0.1579
		50	25	50	0	24.50	0.282	22.50	0.1779
	QPSK DFT-s-OFDM	1	1	1	0	23.98	0.2502	21.98	0.1579
		1	104	1	49	24.03	0.2531	22.03	0.1597
		50	25	50	0	24.48	0.2807	22.48	0.1771
	16QAM DFT-s-OFDM	1	1	1	0	23.05	0.2018	21.05	0.1273
		1	104	1	49	22.99	0.199	20.99	0.1256
		50	25	50	0	22.67	0.185	20.67	0.1167
	64QAM DFT-s-OFDM	1	1	1	0	20.98	0.1254	18.98	0.0791
		1	104	1	49	20.95	0.1245	18.95	0.0785
		50	25	50	0	21.21	0.1321	19.21	0.0834
	256QAM DFT-s-OFDM	1	1	1	0	18.78	0.0755	16.78	0.0477
		1	104	1	49	18.87	0.0771	16.87	0.0487
		50	25	50	0	19.20	0.0831	17.20	0.0524

EN-DC n66 (ANT0)+5A (ANT1)Combination 15MHz+20MHz(LTE)(GT - LC = -2dB)									
Channel	Mode	NR		LTE		Conducted		EIRP	
		RB		RB					
		Size	Offset	Size	Offset	Power(dBm)	Power(Watts)	EIRP(dBm)	EIRP(W)
Lowest	PI/2 BPSK DFT-s-OFDM	1	1	1	0	23.98	0.2502	21.98	0.1579
		1	77	1	49	24.38	0.2743	22.38	0.1731
		36	18	50	0	23.88	0.2445	21.88	0.1543
	QPSK DFT-s-OFDM	1	1	1	0	23.97	0.2496	21.97	0.1575
		1	77	1	49	24.13	0.259	22.13	0.1634
		36	18	50	0	24.13	0.259	22.13	0.1634
	16QAM DFT-s-OFDM	1	1	1	0	23.07	0.2027	21.07	0.1279
		1	77	1	49	22.95	0.1972	20.95	0.1244
		36	18	50	0	22.66	0.1845	20.66	0.1164
	64QAM DFT-s-OFDM	1	1	1	0	20.97	0.1251	18.97	0.0789
		1	77	1	49	21.01	0.1262	19.01	0.0796
		36	18	50	0	21.18	0.1312	19.18	0.0828
	256QAM DFT-s-OFDM	1	1	1	0	18.74	0.0748	16.74	0.0472
		1	77	1	49	18.79	0.0757	16.79	0.0478
		36	18	50	0	19.14	0.082	17.14	0.0517
Middle	PI/2 BPSK DFT-s-OFDM	1	1	1	0	24.46	0.2794	22.46	0.1763
		1	77	1	49	24.37	0.2737	22.37	0.1727
		36	18	50	0	24.21	0.2638	22.21	0.1665
	QPSK DFT-s-OFDM	1	1	1	0	24.33	0.2712	22.33	0.1711
		1	77	1	49	23.86	0.2434	21.86	0.1536
		36	18	50	0	24.45	0.2787	22.45	0.1759
	16QAM DFT-s-OFDM	1	1	1	0	22.99	0.1991	20.99	0.1256
		1	77	1	49	22.93	0.1963	20.93	0.1239
		36	18	50	0	22.61	0.1825	20.61	0.1151
	64QAM DFT-s-OFDM	1	1	1	0	20.85	0.1217	18.85	0.0768
		1	77	1	49	20.84	0.1214	18.84	0.0766
		36	18	50	0	21.19	0.1315	19.19	0.083
	256QAM DFT-s-OFDM	1	1	1	0	18.70	0.0742	16.70	0.0468
		1	77	1	49	18.72	0.0745	16.72	0.047
		36	18	50	0	19.15	0.0822	17.15	0.0519
	QPSK CP-OFDM	1	1	1	0	22.37	0.1727	20.37	0.109
		1	77	1	49	22.32	0.1707	20.32	0.1077
		39	19	50	0	22.18	0.1653	20.18	0.1043
Highest	PI/2 BPSK DFT-s-OFDM	1	1	1	0	24.25	0.2662	22.25	0.168
		1	77	1	49	23.94	0.248	21.94	0.1564
		36	18	50	0	23.85	0.2429	21.85	0.1533
	QPSK DFT-s-OFDM	1	1	1	0	24.42	0.2769	22.42	0.1747
		1	77	1	49	24.38	0.2743	22.38	0.1731
		36	18	50	0	23.81	0.2407	21.81	0.1518
	16QAM DFT-s-OFDM	1	1	1	0	23.04	0.2013	21.04	0.127
		1	77	1	49	23.00	0.1995	21.00	0.1259
		36	18	50	0	22.82	0.1914	20.82	0.1208
	64QAM DFT-s-OFDM	1	1	1	0	21.06	0.1277	19.06	0.0805
		1	77	1	49	20.91	0.1234	18.91	0.0778
		36	18	50	0	21.11	0.1291	19.11	0.0815
	256QAM DFT-s-OFDM	1	1	1	0	18.78	0.0755	16.78	0.0477
		1	77	1	49	18.73	0.0747	16.73	0.0471
		36	18	50	0	19.16	0.0824	17.16	0.052

EN-DC n66 (ANT0)+5A (ANT1)Combination 10MHz+10MHz(LTE)(GT - LC = -2dB)									
Channel	Mode	NR		LTE		Conducted		EIRP	
		RB		RB					
		Size	Offset	Size	Offset	Power(dBm)	Power(Watts)	EIRP(dBm)	EIRP(W)
Lowest	PI/2 BPSK DFT-s-OFDM	1	1	1	0	24.26	0.2669	22.26	0.1684
		1	50	1	49	24.09	0.2567	22.09	0.1619
		25	12	50	0	24.17	0.2614	22.17	0.1649
	QPSK DFT-s-OFDM	1	1	1	0	23.88	0.2445	21.88	0.1543
		1	50	1	49	24.11	0.2578	22.11	0.1627
		25	12	50	0	23.81	0.2407	21.81	0.1519
	16QAM DFT-s-OFDM	1	1	1	0	23.05	0.2018	21.05	0.1273
		1	50	1	49	22.93	0.1963	20.93	0.1239
		25	12	50	0	22.80	0.1906	20.80	0.1202
	64QAM DFT-s-OFDM	1	1	1	0	20.87	0.1222	18.87	0.0771
		1	50	1	49	20.99	0.1256	18.99	0.0793
		25	12	50	0	21.17	0.1309	19.17	0.0826
	256QAM DFT-s-OFDM	1	1	1	0	18.80	0.0759	16.80	0.0479
		1	50	1	49	18.81	0.0761	16.81	0.048
		25	12	50	0	19.17	0.0826	17.17	0.0521
Middle	PI/2 BPSK DFT-s-OFDM	1	1	1	0	24.27	0.2675	22.27	0.1688
		1	50	1	49	24.00	0.2514	22.00	0.1586
		25	12	50	0	24.28	0.2681	22.28	0.1691
	QPSK DFT-s-OFDM	1	1	1	0	24.12	0.2584	22.12	0.163
		1	50	1	49	24.42	0.2768	22.42	0.1747
		25	12	50	0	24.34	0.2718	22.34	0.1715
	16QAM DFT-s-OFDM	1	1	1	0	23.00	0.1995	21.00	0.1259
		1	50	1	49	22.88	0.1941	20.88	0.1225
		25	12	50	0	22.64	0.1837	20.64	0.1159
	64QAM DFT-s-OFDM	1	1	1	0	20.79	0.12	18.79	0.0757
		1	50	1	49	20.85	0.1217	18.85	0.0768
		25	12	50	0	21.12	0.1294	19.12	0.0817
	256QAM DFT-s-OFDM	1	1	1	0	18.72	0.0745	16.72	0.047
		1	50	1	49	18.74	0.0748	16.74	0.0472
		25	12	50	0	19.16	0.0824	17.16	0.052
	QPSK CP-OFDM	1	1	1	0	22.30	0.1699	20.30	0.1072
		1	50	1	49	22.40	0.1739	20.40	0.1097
		26	13	50	0	22.21	0.1665	20.21	0.105
Highest	PI/2 BPSK DFT-s-OFDM	1	1	1	0	23.87	0.244	21.87	0.1539
		1	50	1	49	24.08	0.2561	22.08	0.1616
		25	12	50	0	23.97	0.2497	21.97	0.1575
	QPSK DFT-s-OFDM	1	1	1	0	24.12	0.2584	22.12	0.163
		1	50	1	49	24.40	0.2756	22.40	0.1739
		25	12	50	0	23.86	0.2435	21.86	0.1536
	16QAM DFT-s-OFDM	1	1	1	0	23.09	0.2037	21.09	0.1285
		1	50	1	49	22.90	0.195	20.90	0.123
		25	12	50	0	22.78	0.1897	20.78	0.1197
	64QAM DFT-s-OFDM	1	1	1	0	20.88	0.1225	18.88	0.0773
		1	50	1	49	20.99	0.1256	18.99	0.0793
		25	12	50	0	21.17	0.1309	19.17	0.0826
	256QAM DFT-s-OFDM	1	1	1	0	18.78	0.0755	16.78	0.0477
		1	50	1	49	18.83	0.0764	16.83	0.0482
		25	12	50	0	19.18	0.0828	17.18	0.0522

EN-DC n66 (ANT0)+5A (ANT1)Combination 5MHz+10MHz(LTE)(GT - LC = -2dB)									
Channel	Mode	NR		LTE		Conducted		EIRP	
		RB		RB					
		Size	Offset	Size	Offset	Power(dBm)	Power(Watts)	EIRP(dBm)	EIRP(W)
Lowest	PI/2 BPSK DFT-s-OFDM	1	1	1	0	23.93	0.2474	21.93	0.1561
		1	23	1	49	23.81	0.2407	21.81	0.1519
		12	6	50	0	24.14	0.2596	22.14	0.1638
	QPSK DFT-s-OFDM	1	1	1	0	24.03	0.2532	22.03	0.1597
		1	23	1	49	24.27	0.2675	22.27	0.1688
		12	6	50	0	24.21	0.2638	22.21	0.1665
	16QAM DFT-s-OFDM	1	1	1	0	22.97	0.1981	20.97	0.125
		1	23	1	49	23.00	0.1995	21.00	0.1259
		12	6	50	0	22.74	0.188	20.74	0.1186
	64QAM DFT-s-OFDM	1	1	1	0	20.82	0.1208	18.82	0.0762
		1	23	1	49	20.96	0.1248	18.96	0.0787
		12	6	50	0	21.19	0.1315	19.19	0.083
	256QAM DFT-s-OFDM	1	1	1	0	18.79	0.0757	16.79	0.0478
		1	23	1	49	18.80	0.0759	16.80	0.0479
		12	6	50	0	19.14	0.082	17.14	0.0517
Middle	PI/2 BPSK DFT-s-OFDM	1	1	1	0	24.02	0.2526	22.02	0.1594
		1	23	1	49	24.22	0.2644	22.22	0.1668
		12	6	50	0	24.15	0.2602	22.15	0.1642
	QPSK DFT-s-OFDM	1	1	1	0	24.34	0.2718	22.34	0.1715
		1	23	1	49	24.32	0.2706	22.32	0.1707
		12	6	50	0	24.44	0.2781	22.44	0.1755
	16QAM DFT-s-OFDM	1	1	1	0	23.01	0.2	21.01	0.1262
		1	23	1	49	22.83	0.1919	20.83	0.1211
		12	6	50	0	22.64	0.1837	20.64	0.1159
	64QAM DFT-s-OFDM	1	1	1	0	20.86	0.122	18.86	0.0769
		1	23	1	49	20.88	0.1225	18.88	0.0773
		12	6	50	0	21.15	0.1303	19.15	0.0822
	256QAM DFT-s-OFDM	1	1	1	0	18.81	0.0761	16.81	0.048
		1	23	1	49	18.71	0.0743	16.71	0.0469
		12	6	50	0	19.23	0.0837	17.23	0.0528
	QPSK CP-OFDM	1	1	1	0	22.35	0.1719	20.35	0.1085
		1	23	1	49	22.46	0.1763	20.46	0.1112
		13	6	50	0	22.18	0.1653	20.18	0.1043
Highest	PI/2 BPSK DFT-s-OFDM	1	1	1	0	24.25	0.2662	22.25	0.168
		1	23	1	49	24.28	0.2681	22.28	0.1692
		12	6	50	0	24.21	0.2638	22.21	0.1665
	QPSK DFT-s-OFDM	1	1	1	0	23.94	0.248	21.94	0.1565
		1	23	1	49	24.23	0.265	22.23	0.1672
		12	6	50	0	23.88	0.2445	21.88	0.1543
	16QAM DFT-s-OFDM	1	1	1	0	23.10	0.2041	21.10	0.1288
		1	23	1	49	23.00	0.1995	21.00	0.1259
		12	6	50	0	22.62	0.1829	20.62	0.1154
	64QAM DFT-s-OFDM	1	1	1	0	20.86	0.122	18.86	0.0769
		1	23	1	49	20.96	0.1248	18.96	0.0787
		12	6	50	0	21.14	0.13	19.14	0.082
	256QAM DFT-s-OFDM	1	1	1	0	18.73	0.0747	16.73	0.0471
		1	23	1	49	18.73	0.0747	16.73	0.0471
		12	6	50	0	19.26	0.0843	17.26	0.0532

SA Mode

5G NR n25

SA n25 (ANT 0)20MHz (GT - LC = -2 dB)							
Channel	Mode	NR RB		Conducted		EIRP	
		Size	Offset	Power(dBm)	Power(Watts)	EIRP(dBm)	EIRP(W)
Lowest	PI/2 BPSK DFT-s-OFDM	1	1	24.41	0.2761	22.41	0.1742
		1	104	24.38	0.2742	22.38	0.173
		50	25	24.52	0.2831	22.52	0.1786
	QPSK DFT-s-OFDM	1	1	24.43	0.2773	22.43	0.175
		1	104	24.25	0.2661	22.25	0.1679
		50	25	24.47	0.2799	22.47	0.1766
	16QAM DFT-s-OFDM	1	1	23.22	0.2099	21.22	0.1324
		1	104	23.12	0.2051	21.12	0.1294
		50	25	22.95	0.1972	20.95	0.1245
	64QAM DFT-s-OFDM	1	1	21.13	0.1297	19.13	0.0818
		1	104	21.15	0.1303	19.15	0.0822
		50	25	21.41	0.1384	19.41	0.0873
	256QAM DFT-s-OFDM	1	1	18.87	0.0771	16.87	0.0486
		1	104	18.96	0.0787	16.96	0.0497
		50	25	19.32	0.0855	17.32	0.054
Middle	PI/2 BPSK DFT-s-OFDM	1	1	24.29	0.2685	22.29	0.1694
		1	104	24.33	0.271	22.33	0.171
		50	25	24.48	0.2805	22.48	0.177
	QPSK DFT-s-OFDM	1	1	24.28	0.2679	22.28	0.169
		1	104	24.21	0.2636	22.21	0.1663
		50	25	24.46	0.2793	22.46	0.1762
	16QAM DFT-s-OFDM	1	1	23.07	0.2028	21.07	0.1279
		1	104	23.01	0.2	21.01	0.1262
		50	25	22.87	0.1936	20.87	0.1222
	64QAM DFT-s-OFDM	1	1	21.02	0.1265	19.02	0.0798
		1	104	21.04	0.1271	19.04	0.0802
		50	25	21.38	0.1374	19.38	0.0867
	256QAM DFT-s-OFDM	1	1	18.93	0.0782	16.93	0.0493
		1	104	18.84	0.0766	16.84	0.0483
		50	25	19.27	0.0845	17.27	0.0533
	QPSK CP-s-OFDM	1	1	22.44	0.1754	20.44	0.1107
		1	104	22.48	0.177	20.48	0.1117
		53	26	22.38	0.173	20.38	0.1091
Highest	PI/2 BPSK DFT-s-OFDM	1	1	24.35	0.2723	22.35	0.1718
		1	104	24.34	0.2716	22.34	0.1714
		50	25	24.46	0.2793	22.46	0.1762
	QPSK DFT-s-OFDM	1	1	24.41	0.2761	22.41	0.1742
		1	104	24.19	0.2624	22.19	0.1656
		50	25	24.41	0.2761	22.41	0.1742
	16QAM DFT-s-OFDM	1	1	23.18	0.208	21.18	0.1312
		1	104	23.14	0.2061	21.14	0.13
		50	25	22.89	0.1945	20.89	0.1227
	64QAM DFT-s-OFDM	1	1	21.04	0.1271	19.04	0.0802
		1	104	21.19	0.1315	19.19	0.083
		50	25	21.36	0.1368	19.36	0.0863
	256QAM DFT-s-OFDM	1	1	18.95	0.0785	16.95	0.0495
		1	104	18.86	0.0769	16.86	0.0485
		50	25	19.27	0.0845	17.27	0.0533

SA n25 (ANT 0)15MHz (GT - LC = -2dB)							
Channel	Mode	NR RB		Conducted		EIRP	
		Size	Offset	Power(dBm)	Power(Watts)	EIRP(dBm)	EIRP(W)
Lowest	PI/2 BPSK DFT-s-OFDM	1	1	24.29	0.2685	22.29	0.1694
		1	77	24.29	0.2685	22.29	0.1694
		36	18	24.18	0.2618	22.18	0.1652
	QPSK DFT-s-OFDM	1	1	24.38	0.2742	22.38	0.173
		1	77	24.23	0.2649	22.23	0.1671
		36	18	24.22	0.2642	22.22	0.1667
	16QAM DFT-s-OFDM	1	1	23.23	0.2104	21.23	0.1327
		1	77	23.16	0.207	21.16	0.1306
		36	18	22.89	0.1945	20.89	0.1227
	64QAM DFT-s-OFDM	1	1	21.14	0.13	19.14	0.082
		1	77	21.08	0.1282	19.08	0.0809
		36	18	21.38	0.1374	19.38	0.0867
	256QAM DFT-s-OFDM	1	1	18.88	0.0773	16.88	0.0488
		1	77	18.98	0.0791	16.98	0.0499
		36	18	19.26	0.0843	17.26	0.0532
Middle	PI/2 BPSK DFT-s-OFDM	1	1	24.31	0.2698	22.31	0.1702
		1	77	24.25	0.2661	22.25	0.1679
		36	18	24.24	0.2655	22.24	0.1675
	QPSK DFT-s-OFDM	1	1	24.22	0.2642	22.22	0.1667
		1	77	24.27	0.2673	22.27	0.1687
		36	18	24.24	0.2655	22.24	0.1675
	16QAM DFT-s-OFDM	1	1	23.07	0.2028	21.07	0.1279
		1	77	23.08	0.2032	21.08	0.1282
		36	18	22.79	0.1901	20.79	0.1199
	64QAM DFT-s-OFDM	1	1	20.99	0.1256	18.99	0.0793
		1	77	21.09	0.1285	19.09	0.0811
		36	18	21.31	0.1352	19.31	0.0853
	256QAM DFT-s-OFDM	1	1	18.95	0.0785	16.95	0.0495
		1	77	18.87	0.0771	16.87	0.0486
		36	18	19.29	0.0849	17.29	0.0536
	QPSK CP-s-OFDM	1	1	22.58	0.1811	20.58	0.1143
		1	77	22.45	0.1758	20.45	0.1109
		39	19	22.43	0.175	20.43	0.1104
Highest	PI/2 BPSK DFT-s-OFDM	1	1	24.24	0.2655	22.24	0.1675
		1	77	24.23	0.2649	22.23	0.1671
		36	18	24.27	0.2673	22.27	0.1687
	QPSK DFT-s-OFDM	1	1	24.19	0.2624	22.19	0.1656
		1	77	24.19	0.2624	22.19	0.1656
		36	18	24.29	0.2685	22.29	0.1694
	16QAM DFT-s-OFDM	1	1	23.18	0.208	21.18	0.1312
		1	77	23.14	0.2061	21.14	0.13
		36	18	22.93	0.1963	20.93	0.1239
	64QAM DFT-s-OFDM	1	1	21.07	0.1279	19.07	0.0807
		1	77	21.19	0.1315	19.19	0.083
		36	18	21.36	0.1368	19.36	0.0863
	256QAM DFT-s-OFDM	1	1	18.95	0.0785	16.95	0.0495
		1	77	18.92	0.078	16.92	0.0492
		36	18	19.28	0.0847	17.28	0.0535

SA n25 (ANT 0)10MHz (GT - LC = -2 dB)							
Channel	Mode	NR RB		Conducted		EIRP	
		Size	Offset	Power(dBm)	Power(Watts)	EIRP(dBm)	EIRP(W)
Lowest	PI/2 BPSK DFT-s-OFDM	1	1	24.26	0.2667	22.26	0.1683
		1	50	24.23	0.2649	22.23	0.1671
		25	12	24.31	0.2698	22.31	0.1702
	QPSK DFT-s-OFDM	1	1	24.20	0.263	22.20	0.166
		1	50	24.35	0.2723	22.35	0.1718
		25	12	24.31	0.2698	22.31	0.1702
	16QAM DFT-s-OFDM	1	1	23.28	0.2128	21.28	0.1343
		1	50	23.17	0.2075	21.17	0.1309
		25	12	22.93	0.1963	20.93	0.1239
	64QAM DFT-s-OFDM	1	1	21.03	0.1268	19.03	0.08
		1	50	21.07	0.1279	19.07	0.0807
		25	12	21.32	0.1355	19.32	0.0855
	256QAM DFT-s-OFDM	1	1	18.83	0.0764	16.83	0.0482
		1	50	18.97	0.0789	16.97	0.0498
		25	12	19.25	0.0841	17.25	0.0531
Middle	PI/2 BPSK DFT-s-OFDM	1	1	24.33	0.271	22.33	0.171
		1	50	24.32	0.2704	22.32	0.1706
		25	12	24.27	0.2673	22.27	0.1687
	QPSK DFT-s-OFDM	1	1	24.29	0.2685	22.29	0.1694
		1	50	24.29	0.2685	22.29	0.1694
		25	12	24.18	0.2618	22.18	0.1652
	16QAM DFT-s-OFDM	1	1	23.14	0.2061	21.14	0.13
		1	50	23.08	0.2032	21.08	0.1282
		25	12	22.89	0.1945	20.89	0.1227
	64QAM DFT-s-OFDM	1	1	21.05	0.1274	19.05	0.0804
		1	50	20.99	0.1256	18.99	0.0793
		25	12	21.36	0.1368	19.36	0.0863
	256QAM DFT-s-OFDM	1	1	18.84	0.0766	16.84	0.0483
		1	50	18.78	0.0755	16.78	0.0476
		25	12	19.32	0.0855	17.32	0.054
	QPSK CP-s-OFDM	1	1	22.50	0.1778	20.50	0.1122
		1	50	22.56	0.1803	20.56	0.1138
		26	13	22.39	0.1734	20.39	0.1094
Highest	PI/2 BPSK DFT-s-OFDM	1	1	24.23	0.2649	22.23	0.1671
		1	50	24.27	0.2673	22.27	0.1687
		25	12	24.37	0.2735	22.37	0.1726
	QPSK DFT-s-OFDM	1	1	24.27	0.2673	22.27	0.1687
		1	50	24.37	0.2735	22.37	0.1726
		25	12	24.33	0.271	22.33	0.171
	16QAM DFT-s-OFDM	1	1	23.17	0.2075	21.17	0.1309
		1	50	23.13	0.2056	21.13	0.1297
		25	12	22.86	0.1932	20.86	0.1219
	64QAM DFT-s-OFDM	1	1	21.03	0.1268	19.03	0.08
		1	50	21.11	0.1291	19.11	0.0815
		25	12	21.36	0.1368	19.36	0.0863
	256QAM DFT-s-OFDM	1	1	18.93	0.0782	16.93	0.0493
		1	50	18.99	0.0793	16.99	0.05
		25	12	19.25	0.0841	17.25	0.0531

SA n25 (ANT 0)5MHz (GT - LC = -2 dB)							
Channel	Mode	NR RB		Conducted		EIRP	
		Size	Offset	Power(dBm)	Power(Watts)	EIRP(dBm)	EIRP(W)
Lowest	PI/2 BPSK DFT-s-OFDM	1	1	24.36	0.2729	22.36	0.1722
		1	23	24.34	0.2716	22.34	0.1714
		12	6	24.35	0.2723	22.35	0.1718
	QPSK DFT-s-OFDM	1	1	24.33	0.271	22.33	0.171
		1	23	24.26	0.2667	22.26	0.1683
		12	6	24.21	0.2636	22.21	0.1663
	16QAM DFT-s-OFDM	1	1	23.23	0.2104	21.23	0.1327
		1	23	23.13	0.2056	21.13	0.1297
		12	6	22.92	0.1959	20.92	0.1236
	64QAM DFT-s-OFDM	1	1	21.18	0.1312	19.18	0.0828
		1	23	21.07	0.1279	19.07	0.0807
		12	6	21.43	0.139	19.43	0.0877
	256QAM DFT-s-OFDM	1	1	18.86	0.0769	16.86	0.0485
		1	23	18.86	0.0769	16.86	0.0485
		12	6	19.31	0.0853	17.31	0.0538
Middle	PI/2 BPSK DFT-s-OFDM	1	1	24.26	0.2667	22.26	0.1683
		1	23	24.35	0.2723	22.35	0.1718
		12	6	24.27	0.2673	22.27	0.1687
	QPSK DFT-s-OFDM	1	1	24.23	0.2649	22.23	0.1671
		1	23	24.27	0.2673	22.27	0.1687
		12	6	24.23	0.2649	22.23	0.1671
	16QAM DFT-s-OFDM	1	1	23.15	0.2065	21.15	0.1303
		1	23	23.12	0.2051	21.12	0.1294
		12	6	22.78	0.1897	20.78	0.1197
	64QAM DFT-s-OFDM	1	1	20.99	0.1256	18.99	0.0793
		1	23	21.01	0.1262	19.01	0.0796
		12	6	21.33	0.1358	19.33	0.0857
	256QAM DFT-s-OFDM	1	1	18.90	0.0776	16.90	0.049
		1	23	18.77	0.0753	16.77	0.0475
		12	6	19.31	0.0853	17.31	0.0538
	QPSK CP-s-OFDM	1	1	22.54	0.1795	20.54	0.1132
		1	23	22.49	0.1774	20.49	0.1119
		13	6	22.32	0.1706	20.32	0.1076
Highest	PI/2 BPSK DFT-s-OFDM	1	1	24.31	0.2698	22.31	0.1702
		1	23	24.32	0.2704	22.32	0.1706
		12	6	24.31	0.2698	22.31	0.1702
	QPSK DFT-s-OFDM	1	1	24.28	0.2679	22.28	0.169
		1	23	24.26	0.2667	22.26	0.1683
		12	6	24.35	0.2723	22.35	0.1718
	16QAM DFT-s-OFDM	1	1	23.25	0.2113	21.25	0.1334
		1	23	23.19	0.2084	21.19	0.1315
		12	6	22.95	0.1972	20.95	0.1245
	64QAM DFT-s-OFDM	1	1	21.05	0.1274	19.05	0.0804
		1	23	21.15	0.1303	19.15	0.0822
		12	6	21.34	0.1361	19.34	0.0859
	256QAM DFT-s-OFDM	1	1	18.85	0.0767	16.85	0.0484
		1	23	18.92	0.078	16.92	0.0492
		12	6	19.32	0.0855	17.32	0.054

5G NR n66

SA n66 (ANT0)20MHz (GT - LC = -2 dB)							
Channel	Mode	NR RB		Conducted		EIRP	
		Size	Offset	Power(dBm)	Power(Watts)	EIRP(dBm)	EIRP(W)
Lowest	PI/2 BPSK DFT-s-OFDM	1	1	24.38	0.2742	22.38	0.173
		1	104	24.33	0.271	22.33	0.171
		50	25	24.32	0.2704	22.32	0.1706
	QPSK DFT-s-OFDM	1	1	24.33	0.271	22.33	0.171
		1	104	24.31	0.2698	22.31	0.1702
		50	25	24.29	0.2685	22.29	0.1694
	16QAM DFT-s-OFDM	1	1	22.78	0.1897	20.78	0.1197
		1	104	22.71	0.1866	20.71	0.1178
		50	25	22.91	0.1954	20.91	0.1233
	64QAM DFT-s-OFDM	1	1	21.34	0.1361	19.34	0.0859
		1	104	21.39	0.1377	19.39	0.0869
		50	25	21.42	0.1387	19.42	0.0875
	256QAM DFT-s-OFDM	1	1	18.92	0.078	16.92	0.0492
		1	104	18.89	0.0774	16.89	0.0489
		50	25	19.35	0.0861	17.35	0.0543
Middle	PI/2 BPSK DFT-s-OFDM	1	1	24.31	0.2698	22.31	0.1702
		1	104	24.29	0.2685	22.29	0.1694
		50	25	24.24	0.2655	22.24	0.1675
	QPSK DFT-s-OFDM	1	1	24.15	0.26	22.15	0.1641
		1	104	24.22	0.2642	22.22	0.1667
		50	25	24.29	0.2685	22.29	0.1694
	16QAM DFT-s-OFDM	1	1	22.87	0.1936	20.87	0.1222
		1	104	22.87	0.1936	20.87	0.1222
		50	25	22.77	0.1892	20.77	0.1194
	64QAM DFT-s-OFDM	1	1	21.39	0.1377	19.39	0.0869
		1	104	21.29	0.1346	19.29	0.0849
		50	25	21.39	0.1377	19.39	0.0869
	256QAM DFT-s-OFDM	1	1	18.81	0.076	16.81	0.048
		1	104	18.85	0.0767	16.85	0.0484
		50	25	19.32	0.0855	17.32	0.054
	QPSK CP-s-OFDM	1	1	22.43	0.175	20.43	0.1104
		1	104	22.33	0.171	20.33	0.1079
		53	26	22.43	0.175	20.43	0.1104
Highest	PI/2 BPSK DFT-s-OFDM	1	1	24.12	0.2582	22.12	0.1629
		1	104	24.28	0.2679	22.28	0.169
		50	25	24.22	0.2642	22.22	0.1667
	QPSK DFT-s-OFDM	1	1	24.13	0.2588	22.13	0.1633
		1	104	24.18	0.2618	22.18	0.1652
		50	25	24.22	0.2642	22.22	0.1667
	16QAM DFT-s-OFDM	1	1	22.87	0.1936	20.87	0.1222
		1	104	22.82	0.1914	20.82	0.1208
		50	25	22.86	0.1932	20.86	0.1219
	64QAM DFT-s-OFDM	1	1	21.26	0.1337	19.26	0.0843
		1	104	21.39	0.1377	19.39	0.0869
		50	25	21.34	0.1361	19.34	0.0859
	256QAM DFT-s-OFDM	1	1	18.86	0.0769	16.86	0.0485
		1	104	18.97	0.0789	16.97	0.0498
		50	25	19.28	0.0847	17.28	0.0535

SA n66 (ANT0)15MHz (GT - LC = -2 dB)							
Channel	Mode	NR RB		Conducted		EIRP	
		Size	Offset	Power(dBm)	Power(Watts)	EIRP(dBm)	EIRP(W)
Lowest	PI/2 BPSK DFT-s-OFDM	1	1	24.21	0.2636	22.21	0.1663
		1	77	24.26	0.2667	22.26	0.1683
		36	18	24.27	0.2673	22.27	0.1687
	QPSK DFT-s-OFDM	1	1	24.23	0.2649	22.23	0.1671
		1	77	24.28	0.2679	22.28	0.169
		36	18	24.29	0.2685	22.29	0.1694
	16QAM DFT-s-OFDM	1	1	22.83	0.1919	20.83	0.1211
		1	77	22.81	0.191	20.81	0.1205
		36	18	22.93	0.1963	20.93	0.1239
	64QAM DFT-s-OFDM	1	1	21.26	0.1337	19.26	0.0843
		1	77	21.37	0.1371	19.37	0.0865
		36	18	21.31	0.1352	19.31	0.0853
	256QAM DFT-s-OFDM	1	1	18.92	0.078	16.92	0.0492
		1	77	18.94	0.0783	16.94	0.0494
		36	18	19.27	0.0845	17.27	0.0533
Middle	PI/2 BPSK DFT-s-OFDM	1	1	24.27	0.2673	22.27	0.1687
		1	77	24.32	0.2704	22.32	0.1706
		36	18	24.23	0.2649	22.23	0.1671
	QPSK DFT-s-OFDM	1	1	24.22	0.2642	22.22	0.1667
		1	77	24.24	0.2655	22.24	0.1675
		36	18	24.25	0.2661	22.25	0.1679
	16QAM DFT-s-OFDM	1	1	22.89	0.1945	20.89	0.1227
		1	77	22.84	0.1923	20.84	0.1213
		36	18	22.83	0.1919	20.83	0.1211
	64QAM DFT-s-OFDM	1	1	21.39	0.1377	19.39	0.0869
		1	77	21.32	0.1355	19.32	0.0855
		36	18	21.35	0.1365	19.35	0.0861
	256QAM DFT-s-OFDM	1	1	18.87	0.0771	16.87	0.0486
		1	77	18.81	0.076	16.81	0.048
		36	18	19.26	0.0843	17.26	0.0532
	QPSK CP-s-OFDM	1	1	22.39	0.1734	20.39	0.1094
		1	77	22.41	0.1742	20.41	0.1099
		39	19	22.41	0.1742	20.41	0.1099
Highest	PI/2 BPSK DFT-s-OFDM	1	1	24.07	0.2553	22.07	0.1611
		1	77	24.18	0.2618	22.18	0.1652
		36	18	24.14	0.2594	22.14	0.1637
	QPSK DFT-s-OFDM	1	1	23.98	0.25	21.98	0.1578
		1	77	24.17	0.2612	22.17	0.1648
		36	18	24.12	0.2582	22.12	0.1629
	16QAM DFT-s-OFDM	1	1	22.98	0.1986	20.98	0.1253
		1	77	22.84	0.1923	20.84	0.1213
		36	18	22.99	0.1991	20.99	0.1256
	64QAM DFT-s-OFDM	1	1	21.39	0.1377	19.39	0.0869
		1	77	21.37	0.1371	19.37	0.0865
		36	18	21.33	0.1358	19.33	0.0857
	256QAM DFT-s-OFDM	1	1	18.85	0.0767	16.85	0.0484
		1	77	18.89	0.0774	16.89	0.0489
		36	18	19.37	0.0865	17.37	0.0546

SA n66 (ANT0)10MHz (GT - LC = -2 dB)							
Channel	Mode	NR RB		Conducted		EIRP	
		Size	Offset	Power(dBm)	Power(Watts)	EIRP(dBm)	EIRP(W)
Lowest	PI/2 BPSK DFT-s-OFDM	1	1	24.24	0.2655	22.24	0.1675
		1	50	24.31	0.2698	22.31	0.1702
		25	12	24.35	0.2723	22.35	0.1718
	QPSK DFT-s-OFDM	1	1	24.26	0.2667	22.26	0.1683
		1	50	24.37	0.2735	22.37	0.1726
		25	12	24.26	0.2667	22.26	0.1683
	16QAM DFT-s-OFDM	1	1	22.82	0.1914	20.82	0.1208
		1	50	22.80	0.1905	20.80	0.1202
		25	12	22.99	0.1991	20.99	0.1256
	64QAM DFT-s-OFDM	1	1	21.35	0.1365	19.35	0.0861
		1	50	21.33	0.1358	19.33	0.0857
		25	12	21.32	0.1355	19.32	0.0855
	256QAM DFT-s-OFDM	1	1	18.97	0.0789	16.97	0.0498
		1	50	18.99	0.0793	16.99	0.05
		25	12	19.29	0.0849	17.29	0.0536
Middle	PI/2 BPSK DFT-s-OFDM	1	1	24.18	0.2618	22.18	0.1652
		1	50	24.17	0.2612	22.17	0.1648
		25	12	24.22	0.2642	22.22	0.1667
	QPSK DFT-s-OFDM	1	1	24.23	0.2649	22.23	0.1671
		1	50	24.13	0.2588	22.13	0.1633
		25	12	24.27	0.2673	22.27	0.1687
	16QAM DFT-s-OFDM	1	1	22.90	0.195	20.90	0.123
		1	50	22.85	0.1928	20.85	0.1216
		25	12	22.81	0.191	20.81	0.1205
	64QAM DFT-s-OFDM	1	1	21.36	0.1368	19.36	0.0863
		1	50	21.27	0.134	19.27	0.0845
		25	12	21.32	0.1355	19.32	0.0855
	256QAM DFT-s-OFDM	1	1	18.84	0.0766	16.84	0.0483
		1	50	18.79	0.0757	16.79	0.0478
		25	12	19.29	0.0849	17.29	0.0536
	QPSK CP-s-OFDM	1	1	22.34	0.1714	20.34	0.1081
		1	50	22.22	0.1667	20.22	0.1052
		26	13	22.38	0.173	20.38	0.1091
Highest	PI/2 BPSK DFT-s-OFDM	1	1	24.09	0.2564	22.09	0.1618
		1	50	24.13	0.2588	22.13	0.1633
		25	12	24.16	0.2606	22.16	0.1644
	QPSK DFT-s-OFDM	1	1	24.26	0.2667	22.26	0.1683
		1	50	24.23	0.2649	22.23	0.1671
		25	12	24.25	0.2661	22.25	0.1679
	16QAM DFT-s-OFDM	1	1	22.88	0.1941	20.88	0.1225
		1	50	22.86	0.1932	20.86	0.1219
		25	12	22.84	0.1923	20.84	0.1213
	64QAM DFT-s-OFDM	1	1	21.26	0.1337	19.26	0.0843
		1	50	21.34	0.1361	19.34	0.0859
		25	12	21.36	0.1368	19.36	0.0863
	256QAM DFT-s-OFDM	1	1	18.85	0.0767	16.85	0.0484
		1	50	18.93	0.0782	16.93	0.0493
		25	12	19.26	0.0843	17.26	0.0532

SA n66 (ANT0)5MHz (GT - LC = -2 dB)							
Channel	Mode	NR RB		Conducted		EIRP	
		Size	Offset	Power(dBm)	Power(Watts)	EIRP(dBm)	EIRP(W)
Lowest	PI/2 BPSK DFT-s-OFDM	1	1	24.26	0.2667	22.26	0.1683
		1	23	24.37	0.2735	22.37	0.1726
		12	6	24.29	0.2685	22.29	0.1694
	QPSK DFT-s-OFDM	1	1	24.35	0.2723	22.35	0.1718
		1	23	24.24	0.2655	22.24	0.1675
		12	6	24.25	0.2661	22.25	0.1679
	16QAM DFT-s-OFDM	1	1	22.85	0.1928	20.85	0.1216
		1	23	22.72	0.1871	20.72	0.118
		12	6	22.98	0.1986	20.98	0.1253
	64QAM DFT-s-OFDM	1	1	21.32	0.1355	19.32	0.0855
		1	23	21.29	0.1346	19.29	0.0849
		12	6	21.34	0.1361	19.34	0.0859
	256QAM DFT-s-OFDM	1	1	18.86	0.0769	16.86	0.0485
		1	23	18.96	0.0787	16.96	0.0497
		12	6	19.31	0.0853	17.31	0.0538
Middle	PI/2 BPSK DFT-s-OFDM	1	1	24.22	0.2642	22.22	0.1667
		1	23	24.19	0.2624	22.19	0.1656
		12	6	24.23	0.2649	22.23	0.1671
	QPSK DFT-s-OFDM	1	1	24.19	0.2624	22.19	0.1656
		1	23	24.18	0.2618	22.18	0.1652
		12	6	24.21	0.2636	22.21	0.1663
	16QAM DFT-s-OFDM	1	1	22.99	0.1991	20.99	0.1256
		1	23	22.86	0.1932	20.86	0.1219
		12	6	22.86	0.1932	20.86	0.1219
	64QAM DFT-s-OFDM	1	1	21.35	0.1365	19.35	0.0861
		1	23	21.31	0.1352	19.31	0.0853
		12	6	21.35	0.1365	19.35	0.0861
	256QAM DFT-s-OFDM	1	1	18.95	0.0785	16.95	0.0495
		1	23	18.89	0.0774	16.89	0.0489
		12	6	19.25	0.0841	17.25	0.0531
	QPSK CP-s-OFDM	1	1	22.28	0.169	20.28	0.1067
		1	23	22.23	0.1671	20.23	0.1054
		13	6	22.34	0.1714	20.34	0.1081
Highest	PI/2 BPSK DFT-s-OFDM	1	1	24.07	0.2553	22.07	0.1611
		1	23	24.25	0.2661	22.25	0.1679
		12	6	24.15	0.26	22.15	0.1641
	QPSK DFT-s-OFDM	1	1	24.17	0.2612	22.17	0.1648
		1	23	24.19	0.2624	22.19	0.1656
		12	6	24.26	0.2667	22.26	0.1683
	16QAM DFT-s-OFDM	1	1	22.95	0.1972	20.95	0.1245
		1	23	22.85	0.1928	20.85	0.1216
		12	6	22.86	0.1932	20.86	0.1219
	64QAM DFT-s-OFDM	1	1	21.37	0.1371	19.37	0.0865
		1	23	21.27	0.134	19.27	0.0845
		12	6	21.37	0.1371	19.37	0.0865
	256QAM DFT-s-OFDM	1	1	18.87	0.0771	16.87	0.0486
		1	23	18.89	0.0774	16.89	0.0489
		12	6	19.35	0.0861	17.35	0.0543

5G NR n2

NSA

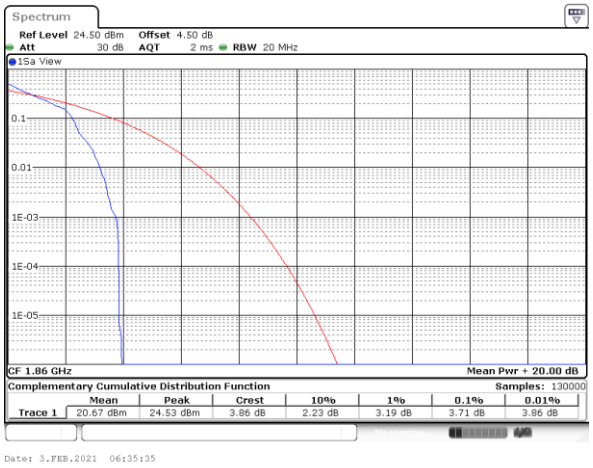
Peak-to-Average Ratio

Mode	FR1 n2+5A / 20MHz / DFT-S OFDM				
Mod.	PI/2 BPSK	PI/2 BPSK	QPSK	QPSK	Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	3.71	3.62	5.71	5.13	PASS
Middle CH	3.88	3.54	5.94	5.16	
Highest CH	3.86	3.57	5.97	5.16	

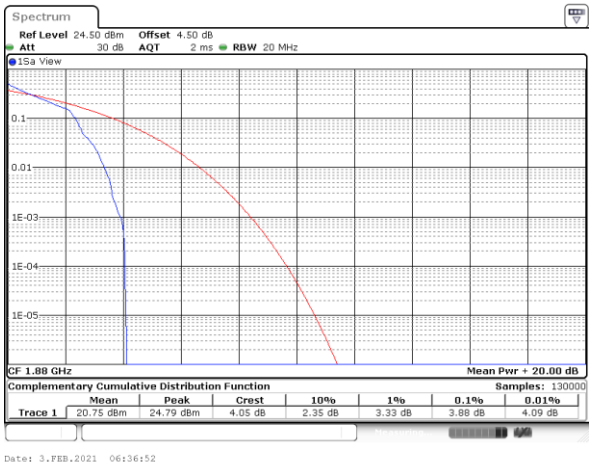
FR1 n2+5A / 20MHz / DFT-S OFDM

PI/2 BPSK

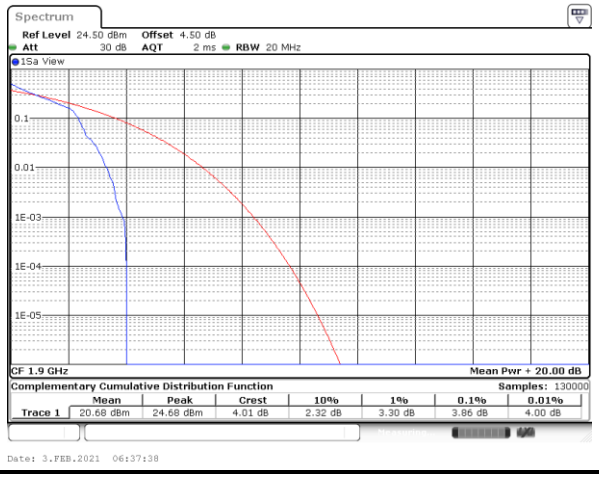
Lowest Channel / 1RB



Middle Channel / 1 RB

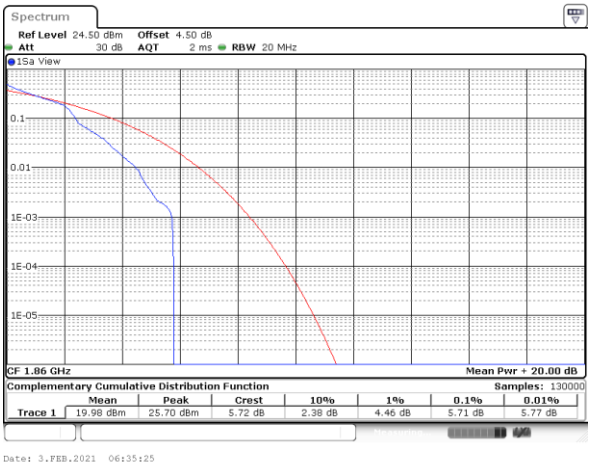


Highest Channel / 1 RB

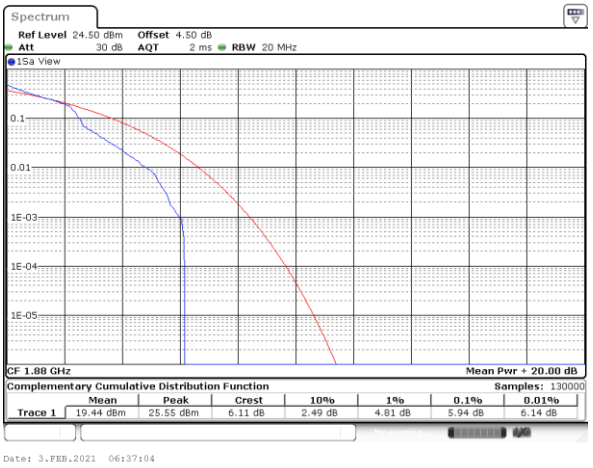


QPSK

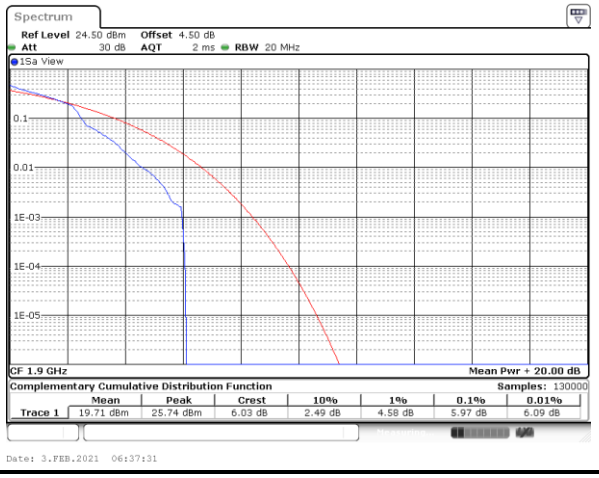
Lowest Channel / 1RB



Middle Channel / 1 RB



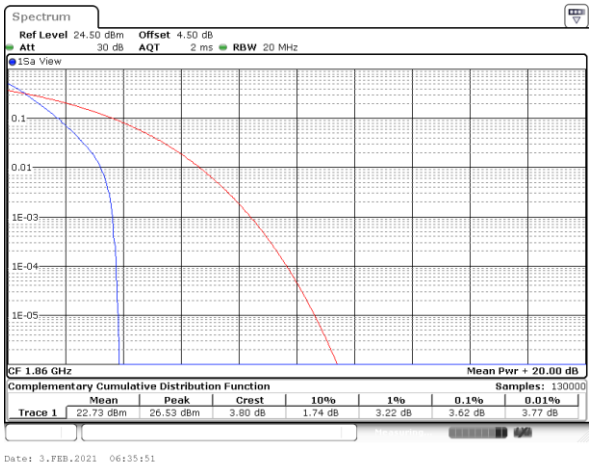
Highest Channel / 1 RB



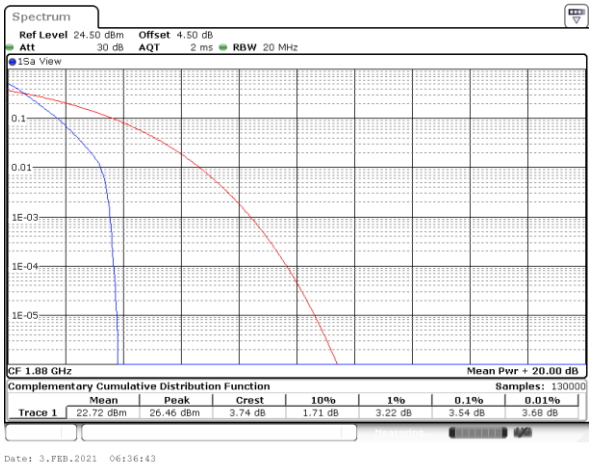
FR1 n2+5A / 20MHz / DFT-S OFDM

PI/2 BPSK

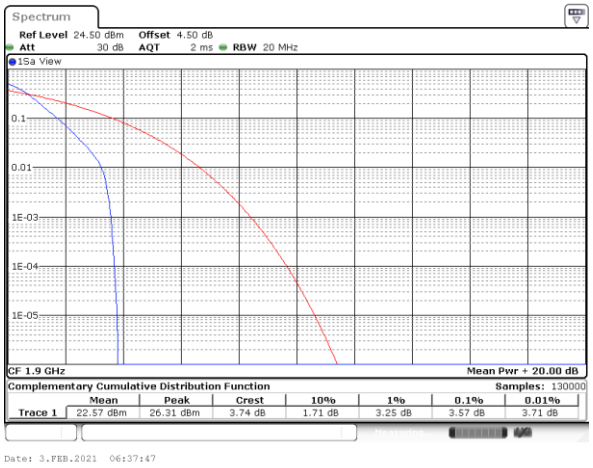
Lowest Channel / Full RB



Middle Channel / Full RB

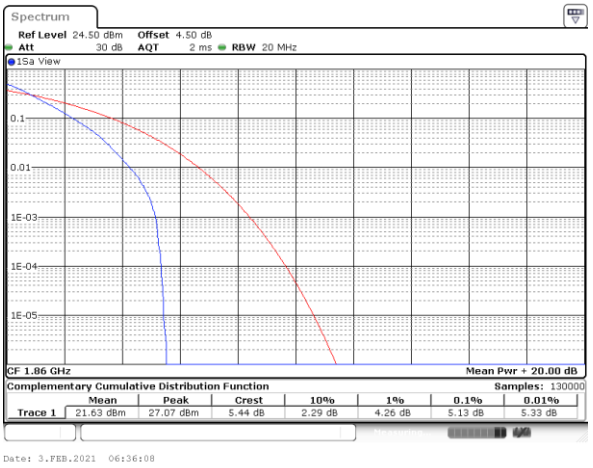


Highest Channel / Full RB

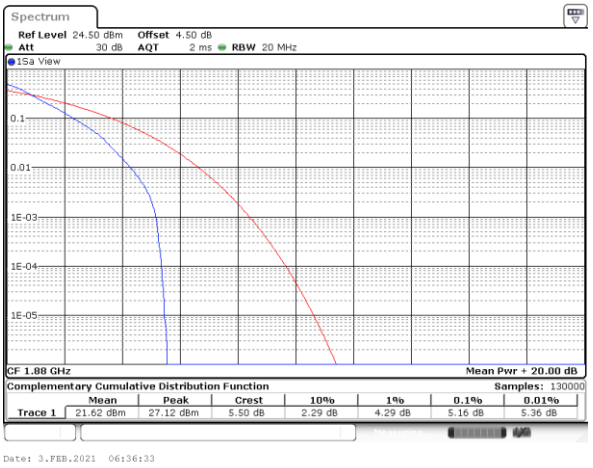


QPSK

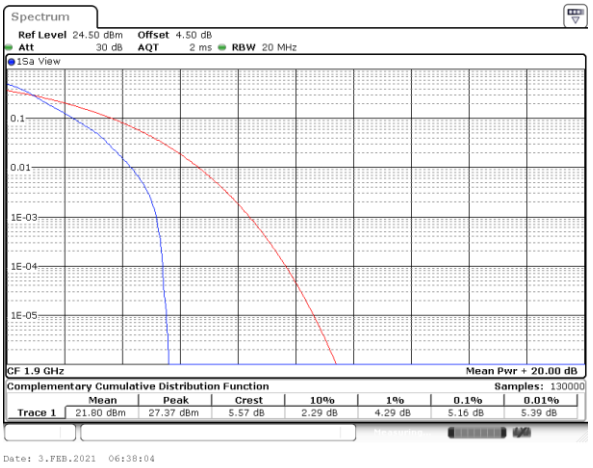
Lowest Channel / Full RB



Middle Channel / Full RB



Highest Channel / Full RB



26dB Bandwidth

Mode	FR1 n2+5A : 26dB BW(MHz) / CP-OFDM			
BW	5MHz	5MHz	5MHz	5MHz
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	4.83	4.84	4.96	4.92

Mode	FR1 n2+5A : 26dB BW(MHz) / CP-OFDM			
BW	10MHz	10MHz	10MHz	10MHz
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	9.89	9.71	9.95	9.89

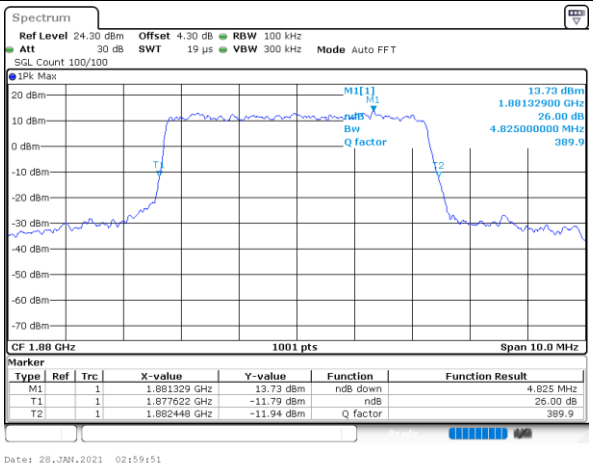
Mode	FR1 n2+5A : 26dB BW(MHz) / CP-OFDM			
BW	15MHz	15MHz	15MHz	15MHz
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	15.02	15.04	14.89	14.98

Mode	FR1 n2+5A : 26dB BW(MHz) / CP-OFDM			
BW	20MHz	20MHz	20MHz	20MHz
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	19.74	19.82	19.78	19.82

FR1 n2+5A / 5MHz / CP-OFDM

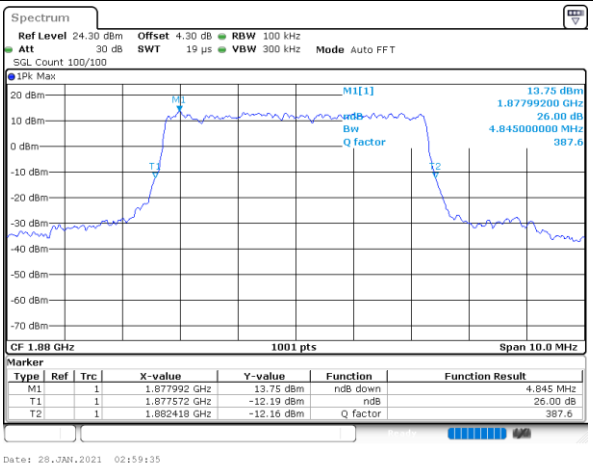
QPSK

Middle Channel



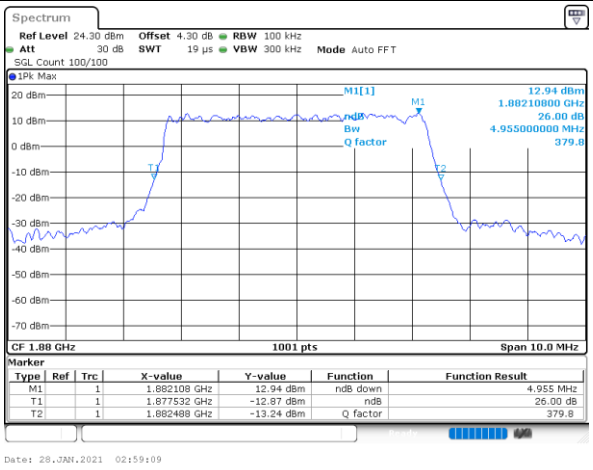
16QAM

Middle Channel



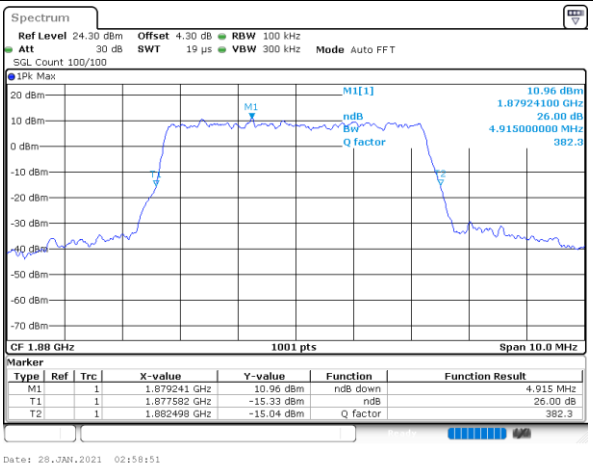
64QAM

Middle Channel



256QAM

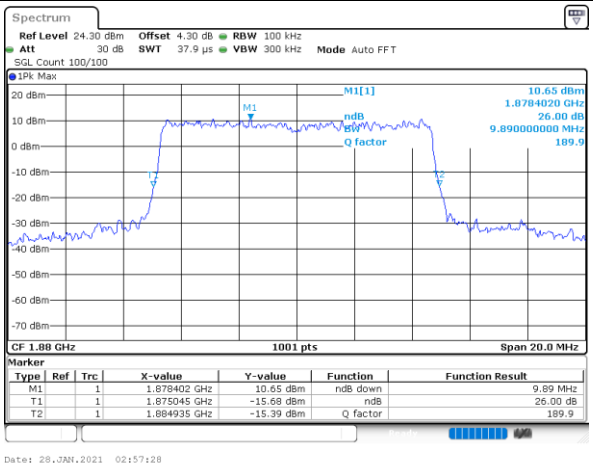
Middle Channel



FR1 n2+5A / 10MHz / CP-OFDM

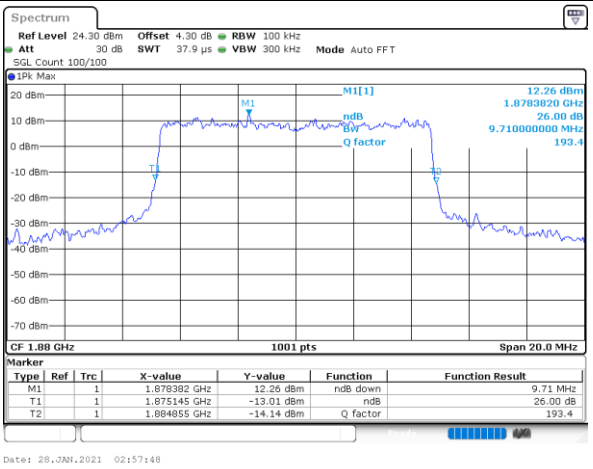
QPSK

Middle Channel



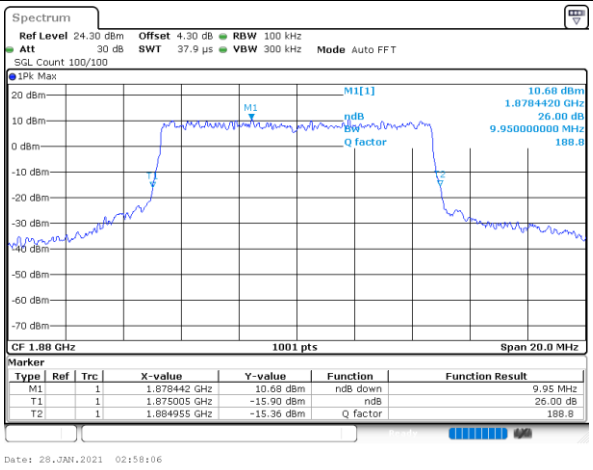
16QAM

Middle Channel



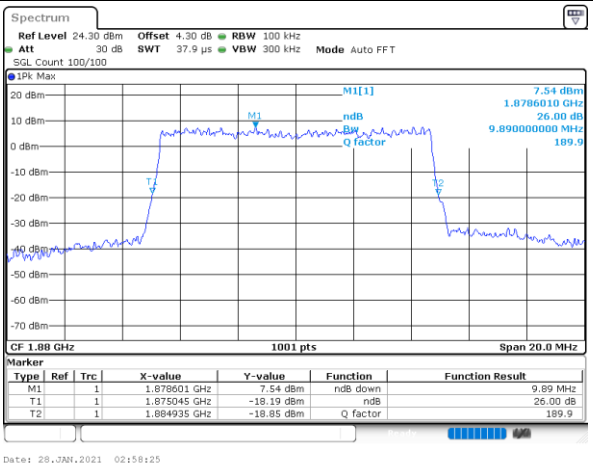
64QAM

Middle Channel



256QAM

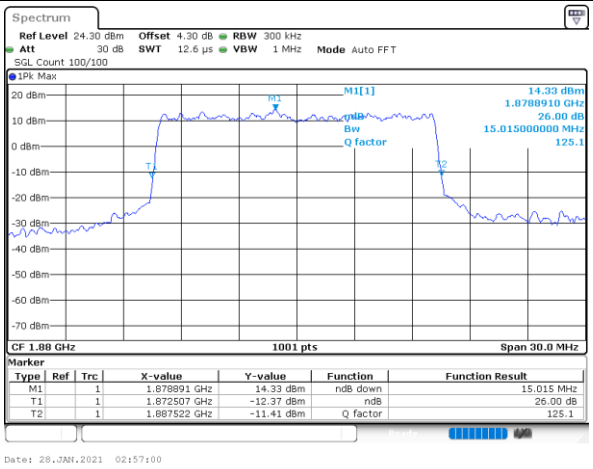
Middle Channel



FR1 n2+5A / 15MHz / CP-OFDM

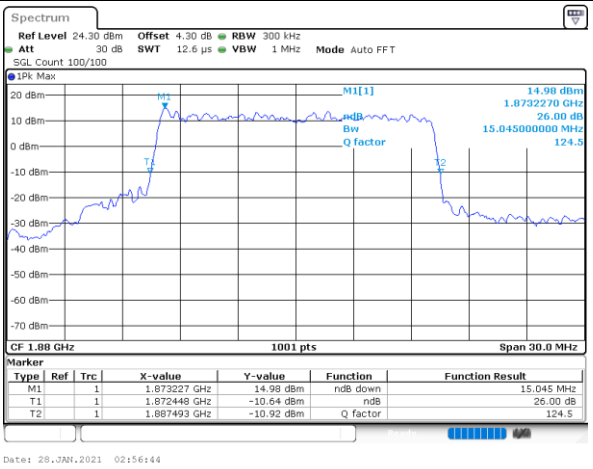
QPSK

Middle Channel



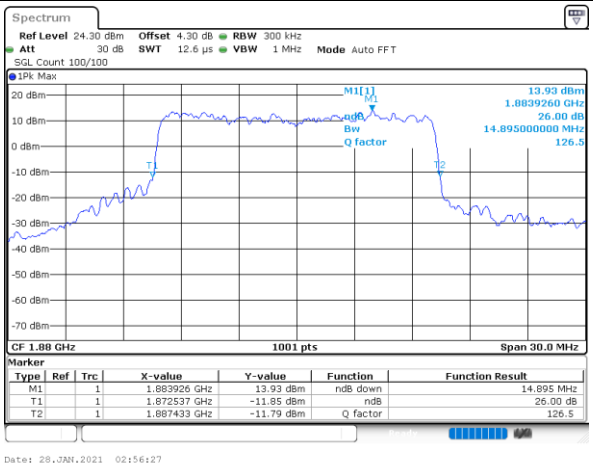
16QAM

Middle Channel



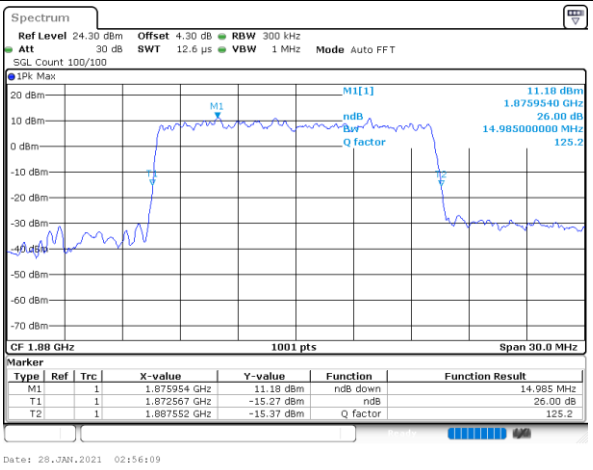
64QAM

Middle Channel



256QAM

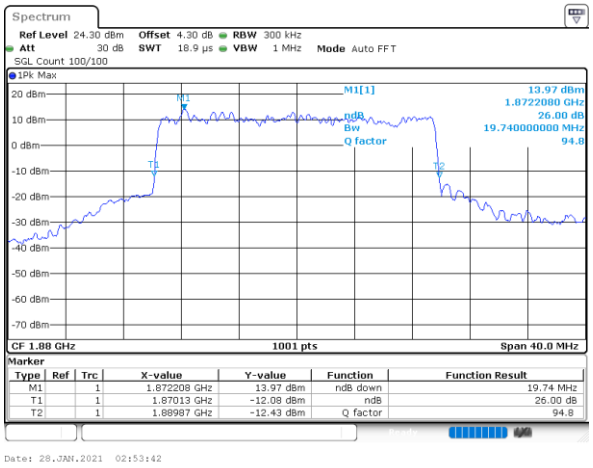
Middle Channel



FR1 n2+5A / 20MHz / CP-OFDM

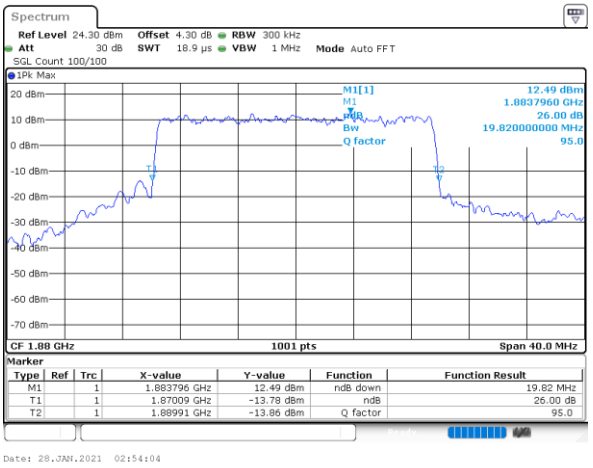
QPSK

Middle Channel



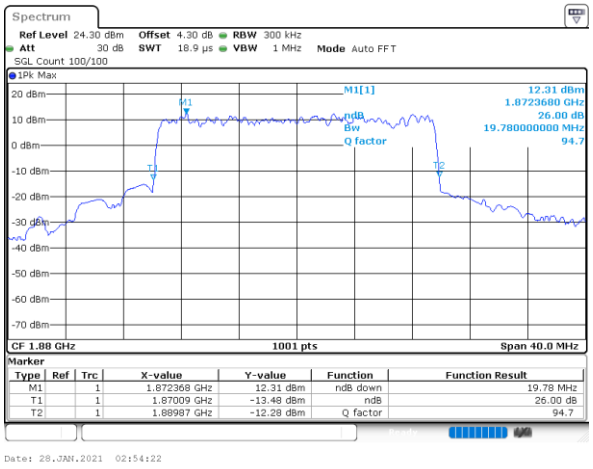
16QAM

Middle Channel



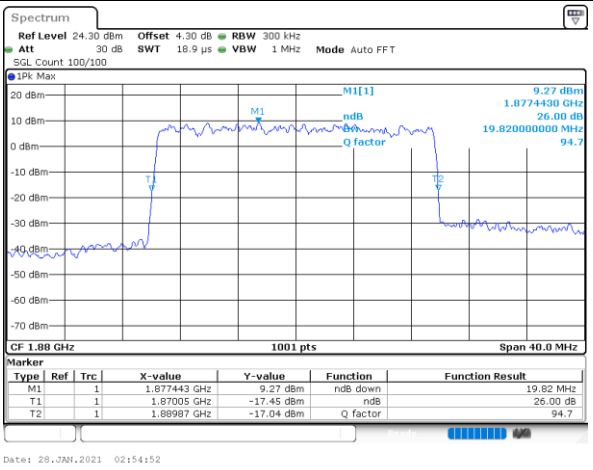
64QAM

Middle Channel



256QAM

Middle Channel



Occupied Bandwidth

Mode	FR1 n2+5A : OBW(MHz) / CP-OFDM			
BW	5MHz	5MHz	5MHz	5MHz
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	4.49	4.50	4.48	4.51

Mode	FR1 n2+5A : OBW(MHz) / CP-OFDM			
BW	10MHz	10MHz	10MHz	10MHz
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	9.27	9.29	9.29	9.29

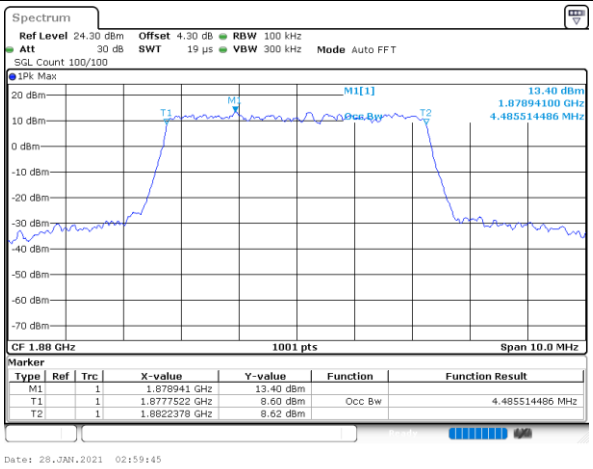
Mode	FR1 n2+5A : OBW(MHz) / CP-OFDM			
BW	15MHz	15MHz	15MHz	15MHz
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	14.15	14.15	14.09	14.15

Mode	FR1 n2+5A : OBW(MHz) / CP-OFDM			
BW	20MHz	20MHz	20MHz	20MHz
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	18.94	18.98	18.94	18.94

FR1 n2+5A / 5MHz / CP-OFDM

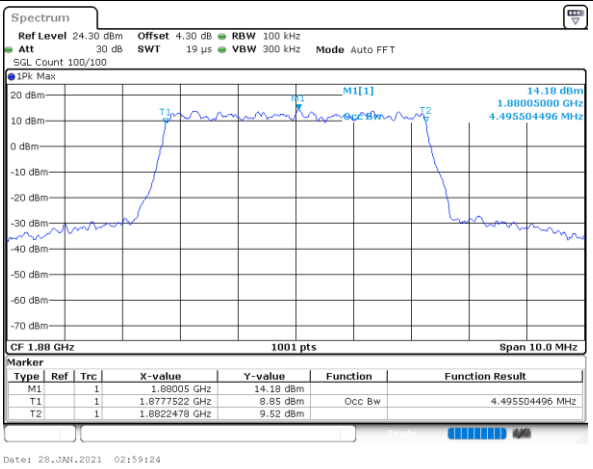
QPSK

Middle Channel



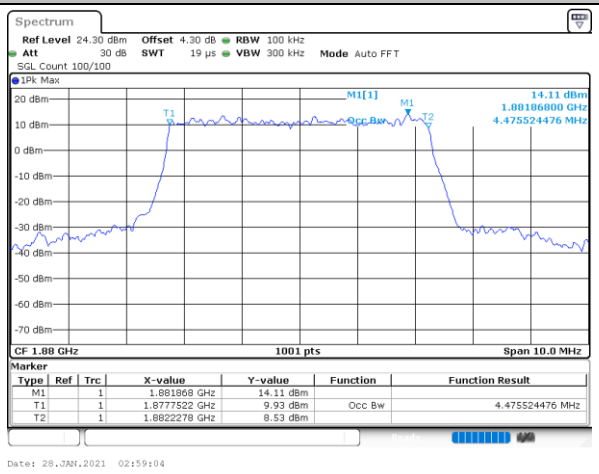
16QAM

Middle Channel



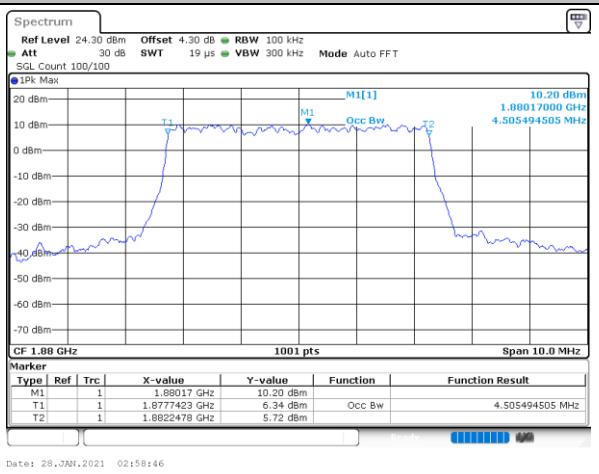
64QAM

Middle Channel



256QAM

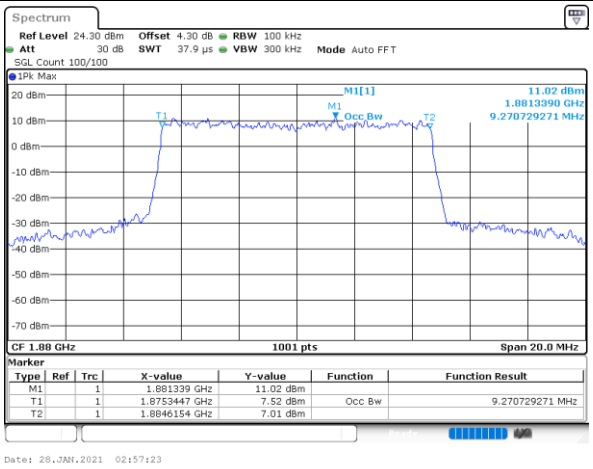
Middle Channel



FR1 n2+5A / 10MHz / CP-OFDM

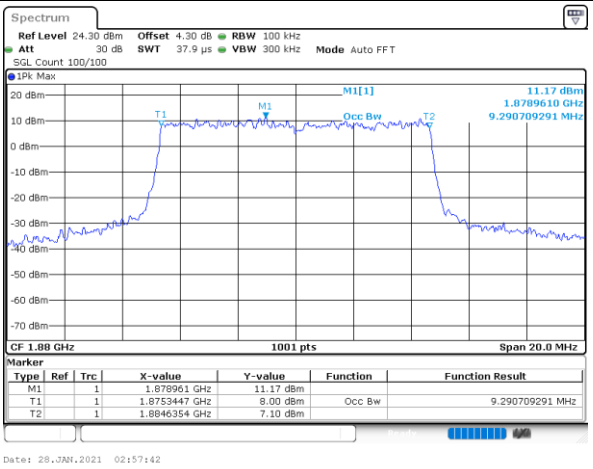
QPSK

Middle Channel



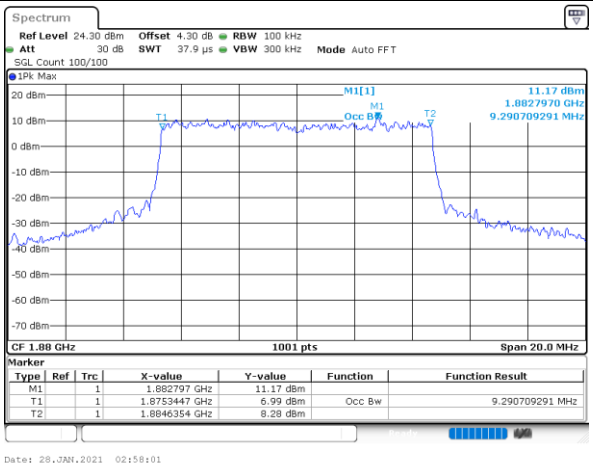
16QAM

Middle Channel



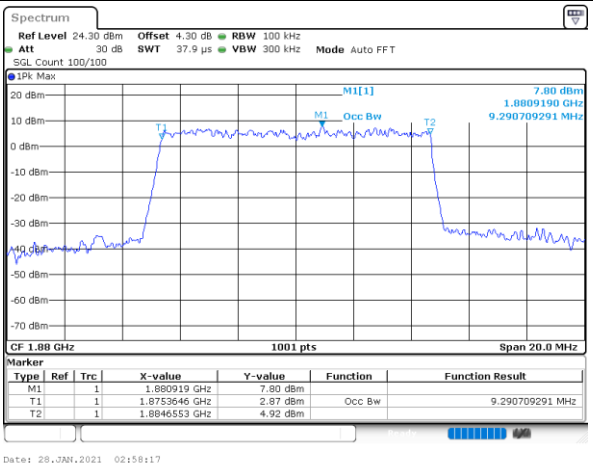
64QAM

Middle Channel



256QAM

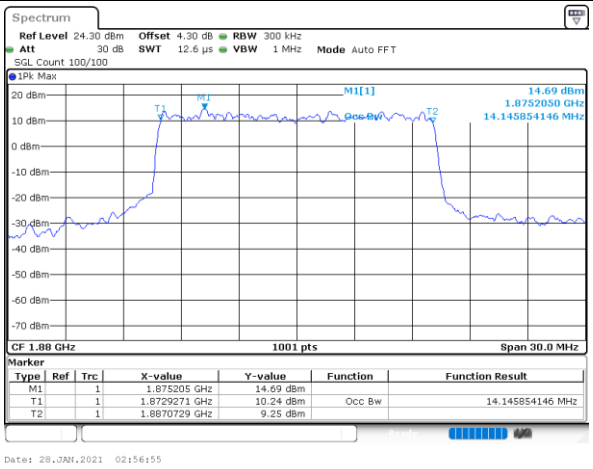
Middle Channel



FR1 n2+5A / 15MHz / CP-OFDM

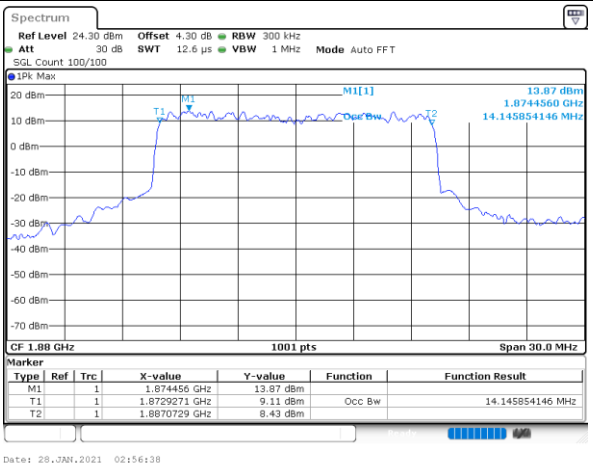
QPSK

Middle Channel



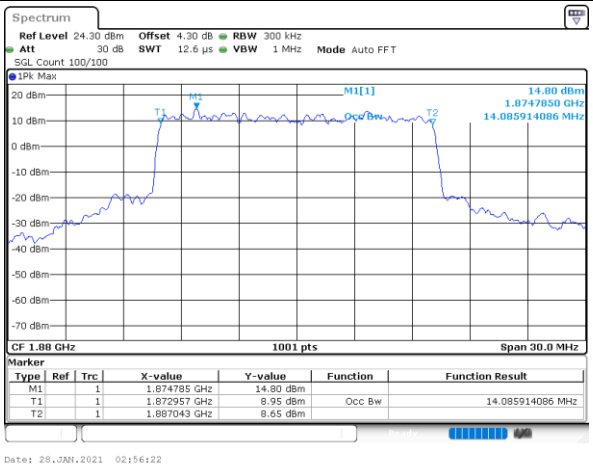
16QAM

Middle Channel



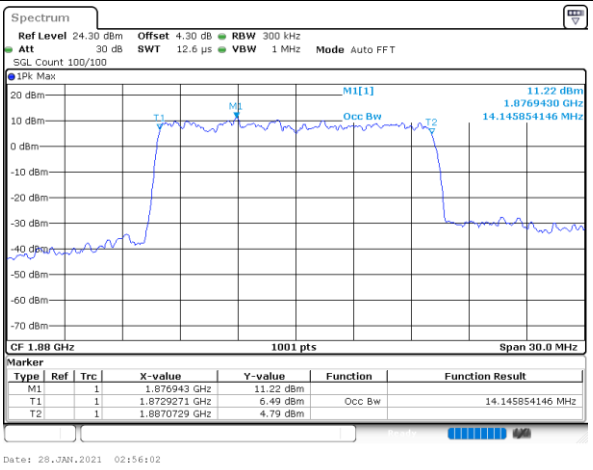
64QAM

Middle Channel



256QAM

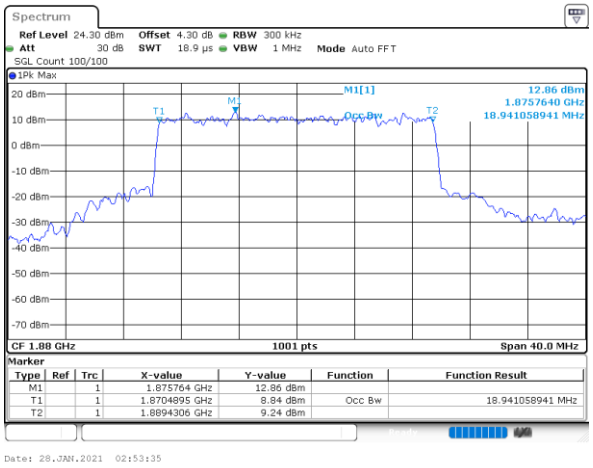
Middle Channel



FR1 n2+5A / 20MHz / CP-OFDM

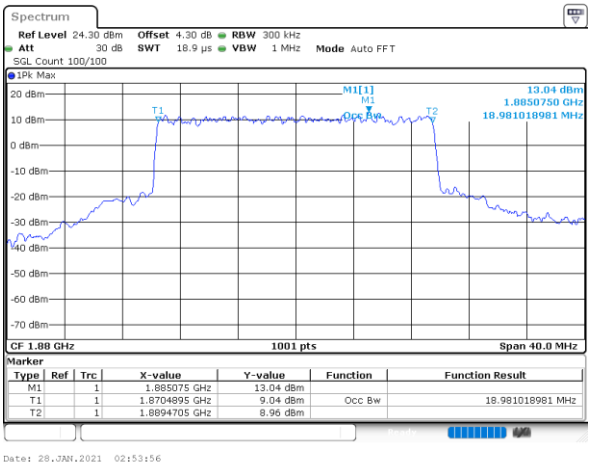
QPSK

Middle Channel



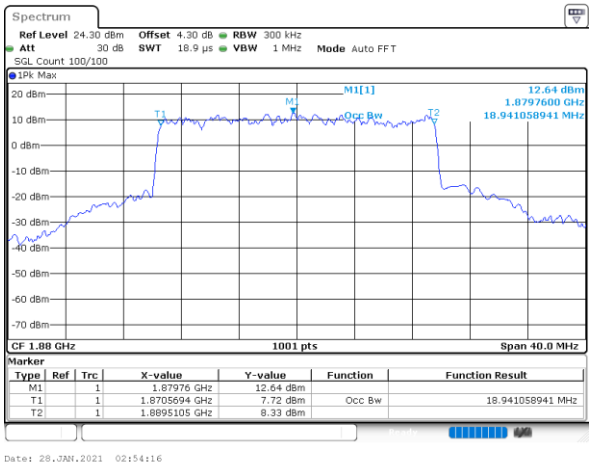
16QAM

Middle Channel



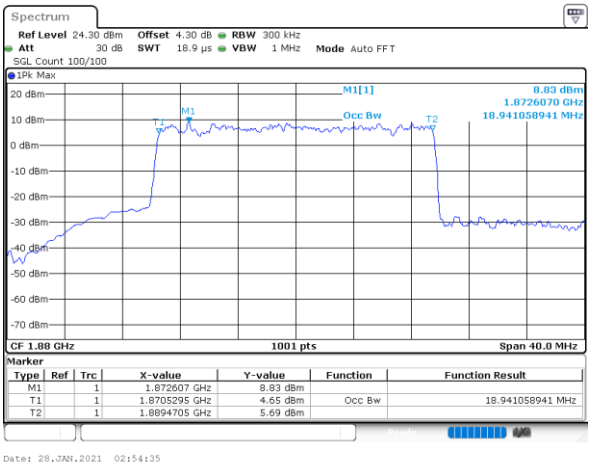
64QAM

Middle Channel



256QAM

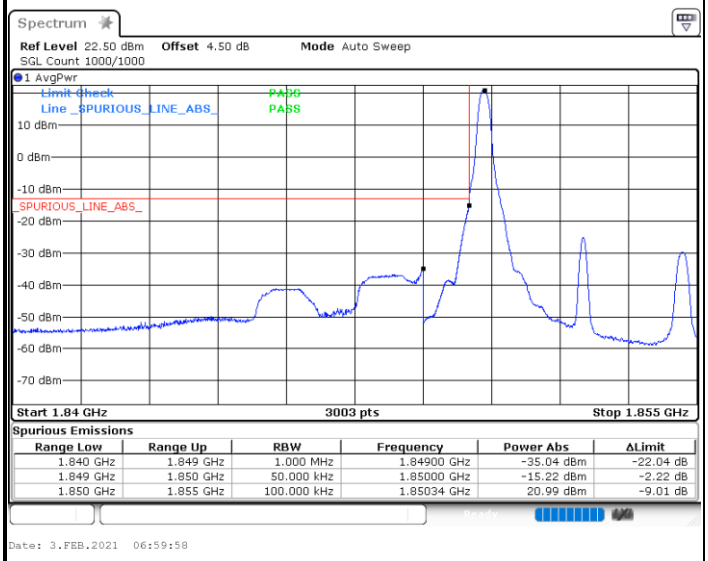
Middle Channel



Conducted Band Edge

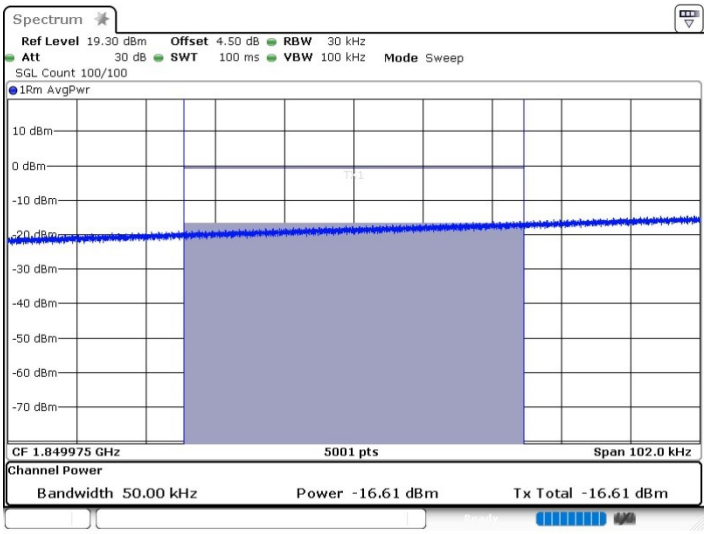
FR1 n2+5A / 5MHz / DFT-S OFDM BPSK

Lowest Band Edge / 1 RB



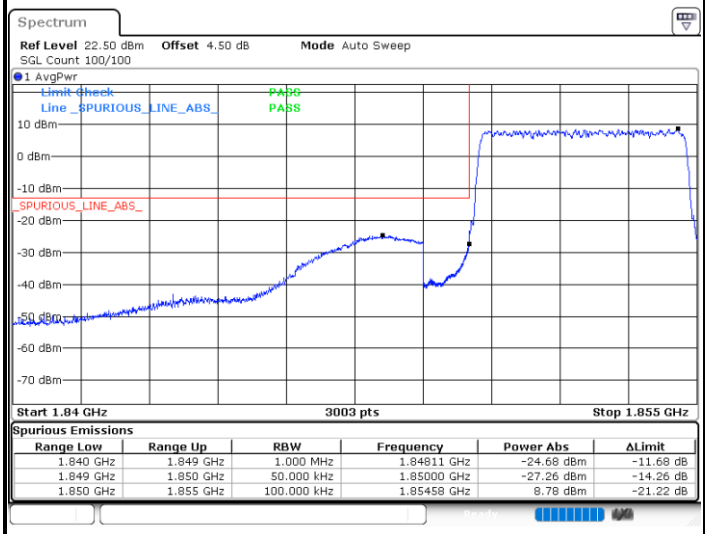
Date: 3.FEB.2021 06:59:58

Channel Power < -13dBm Pass



Date: 3.FEB.2021 07:12:37

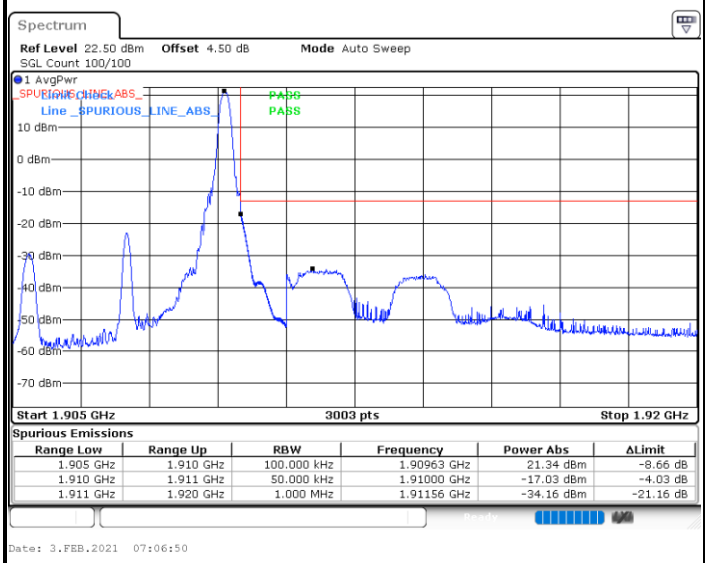
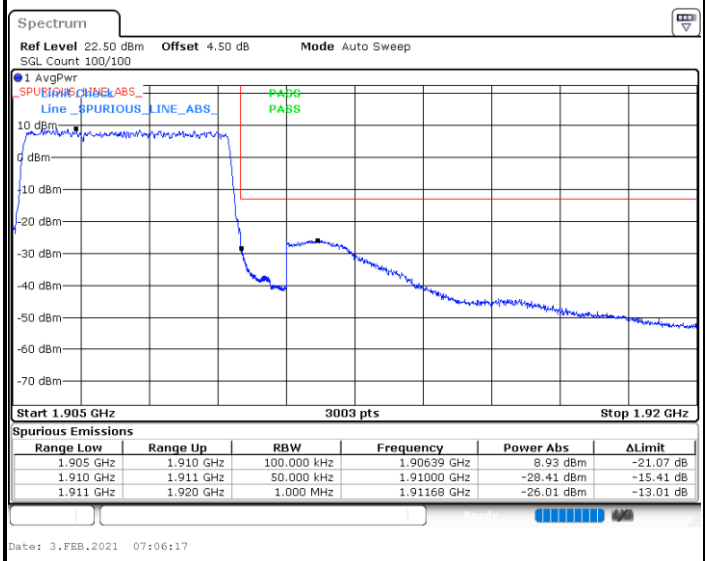
Lowest Band Edge / Full RB

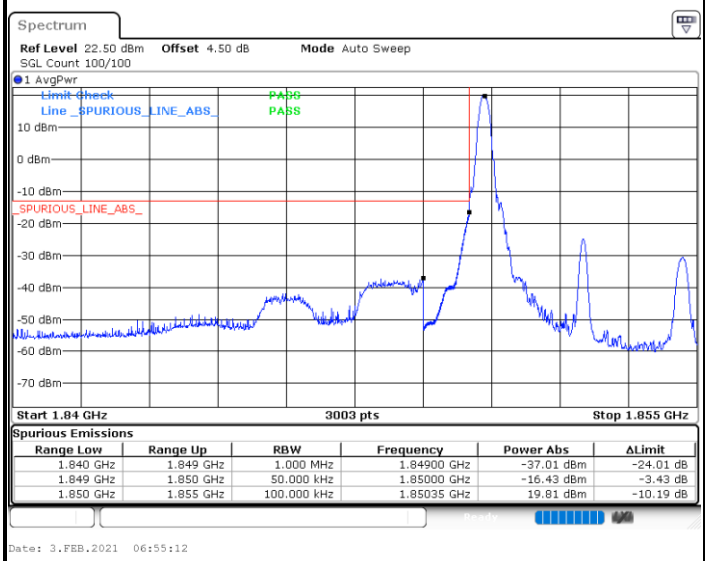
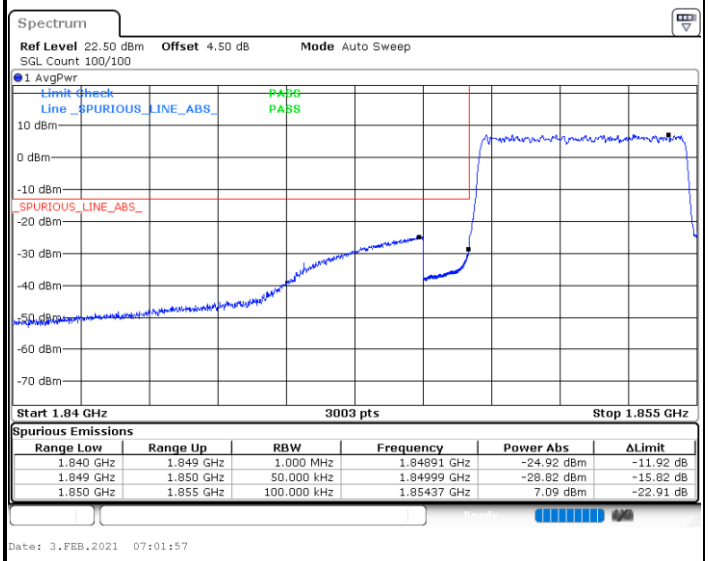


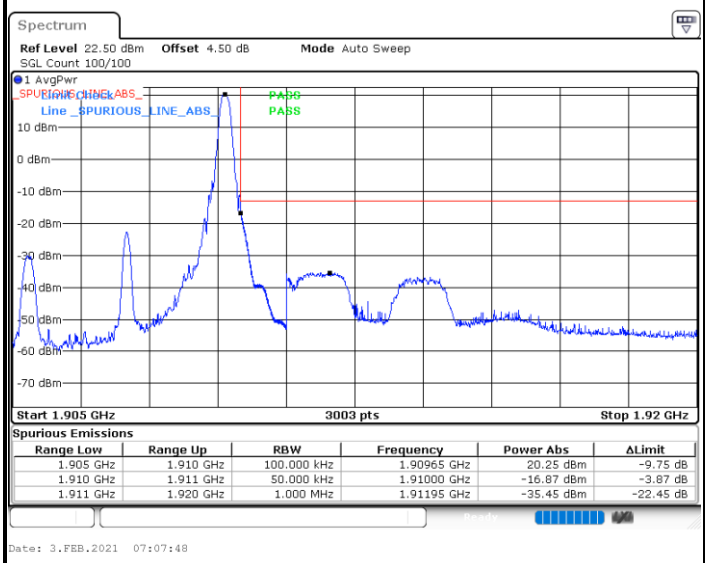
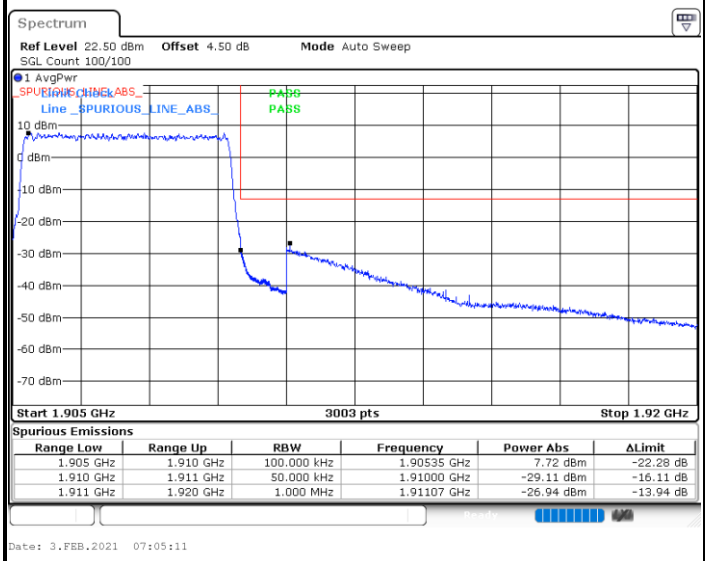
Date: 3.FEB.2021 07:01:40

Channel Power < -13dBm Pass

/

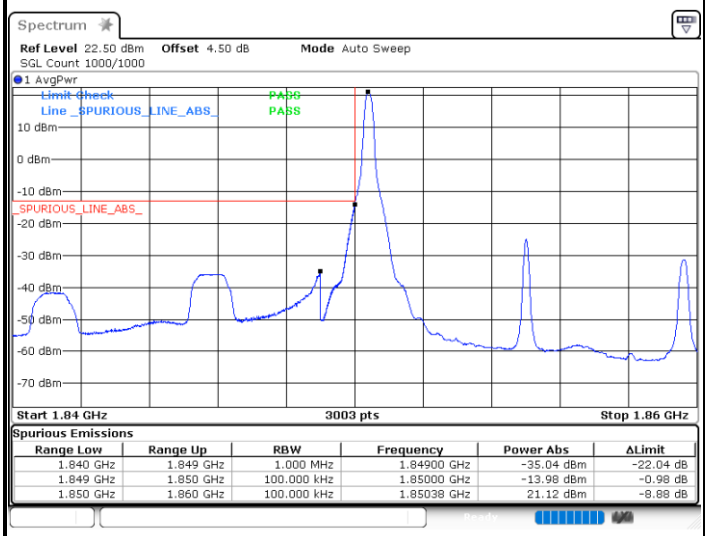
FR1 n2+5A / 5MHz / DFT-S OFDM BPSK	
Highest Band Edge / 1 RB	**Channel Power < -13dBm Pass**
	/
Highest Band Edge / Full RB	**Channel Power < -13dBm Pass**
	/

FR1 n2+5A / 5MHz / DFT-S OFDM QPSK	
Lowest Band Edge / 1 RB	**Channel Power < -13dBm Pass**
 Spurious Emissions Range Low / Range Up / RBW / Frequency / Power Abs / ΔLimit 1.840 GHz / 1.849 GHz / 1.000 MHz / 1.84900 GHz / -37.01 dBm / -24.01 dB 1.849 GHz / 1.850 GHz / 50.000 kHz / 1.85000 GHz / -16.43 dBm / -3.43 dB 1.850 GHz / 1.855 GHz / 100.000 kHz / 1.85035 GHz / 19.81 dBm / -10.19 dB Date: 3.FEB.2021 06:55:12	/
Lowest Band Edge / Full RB	**Channel Power < -13dBm Pass**
 Spurious Emissions Range Low / Range Up / RBW / Frequency / Power Abs / ΔLimit 1.840 GHz / 1.849 GHz / 1.000 MHz / 1.84891 GHz / -24.92 dBm / -11.92 dB 1.849 GHz / 1.850 GHz / 50.000 kHz / 1.84999 GHz / -28.82 dBm / -15.82 dB 1.850 GHz / 1.855 GHz / 100.000 kHz / 1.85437 GHz / 7.09 dBm / -22.91 dB Date: 3.FEB.2021 07:01:57	/

FR1 n2+5A / 5MHz / DFT-S OFDM QPSK	
Highest Band Edge / 1 RB	**Channel Power < -13dBm Pass**
	/
Highest Band Edge / Full RB	**Channel Power < -13dBm Pass**
	/

FR1 n2+5A / 10MHz / DFT-S OFDM BPSK

Lowest Band Edge / 1 RB

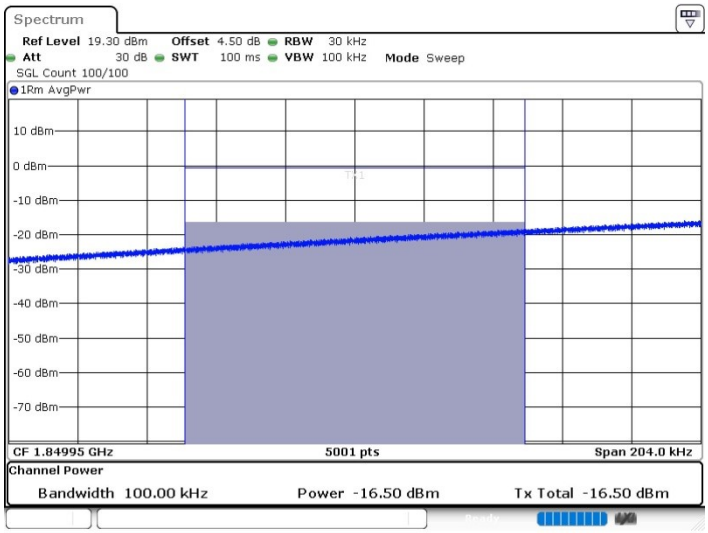


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.840 GHz	1.849 GHz	1.000 MHz	1.84900 GHz	-35.04 dBm	-22.04 dB
1.849 GHz	1.850 GHz	100.000 kHz	1.85000 GHz	-13.98 dBm	-0.98 dB
1.850 GHz	1.860 GHz	100.000 kHz	1.85038 GHz	21.12 dBm	-8.88 dB

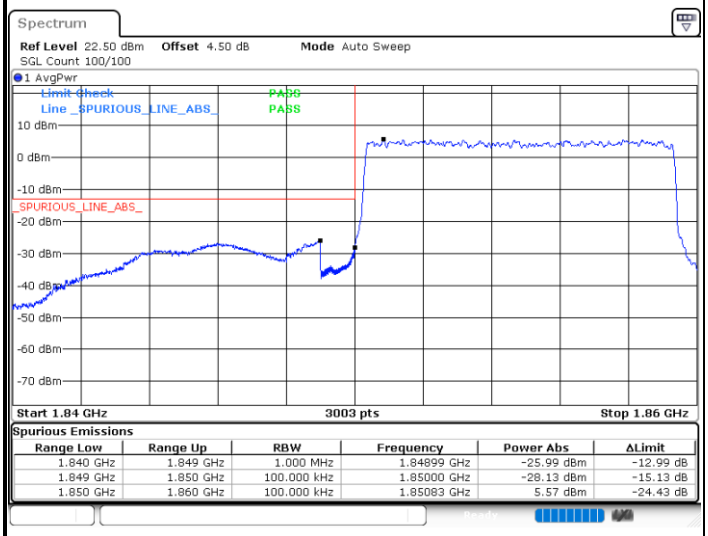
Date: 3.FEB.2021 06:40:44

Channel Power < -13dBm Pass



Date: 3.FEB.2021 07:13:43

Lowest Band Edge / Full RB



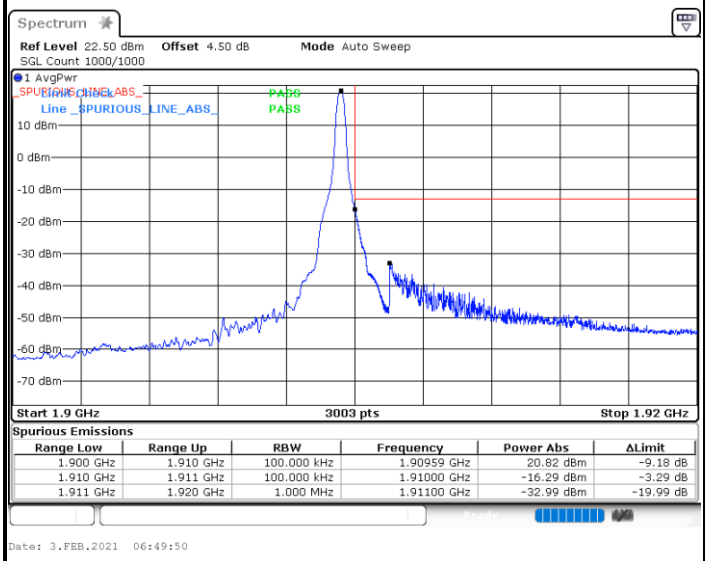
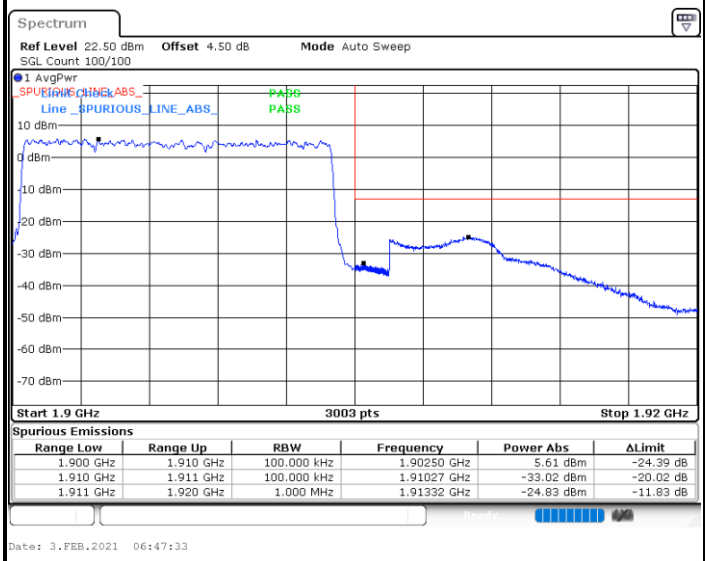
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.840 GHz	1.849 GHz	1.000 MHz	1.84899 GHz	-25.99 dBm	-12.99 dB
1.849 GHz	1.850 GHz	100.000 kHz	1.85000 GHz	-28.13 dBm	-15.13 dB
1.850 GHz	1.860 GHz	100.000 kHz	1.85083 GHz	5.57 dBm	-24.43 dB

Date: 3.FEB.2021 06:46:56

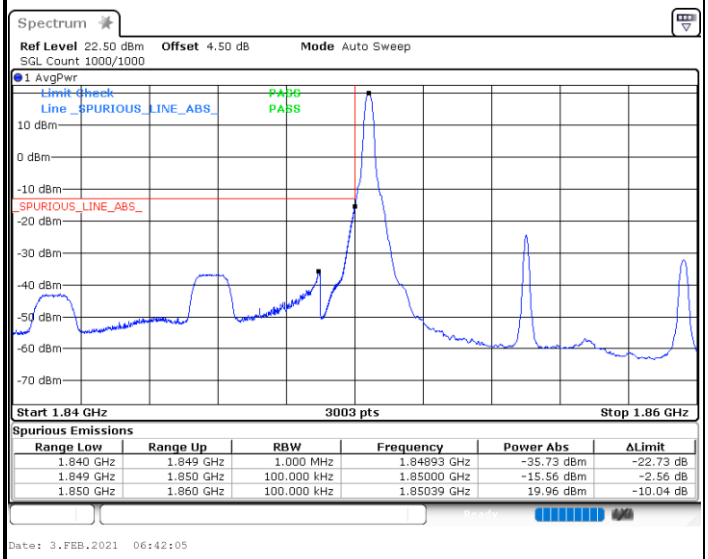
Channel Power < -13dBm Pass

/

FR1 n2+5A / 10MHz / DFT-S OFDM BPSK	
Highest Band Edge / 1 RB	**Channel Power < -13dBm Pass**
	/
Highest Band Edge / Full RB	**Channel Power < -13dBm Pass**
	/

FR1 n2+5A / 10MHz / DFT-S OFDM QPSK

Lowest Band Edge / 1 RB

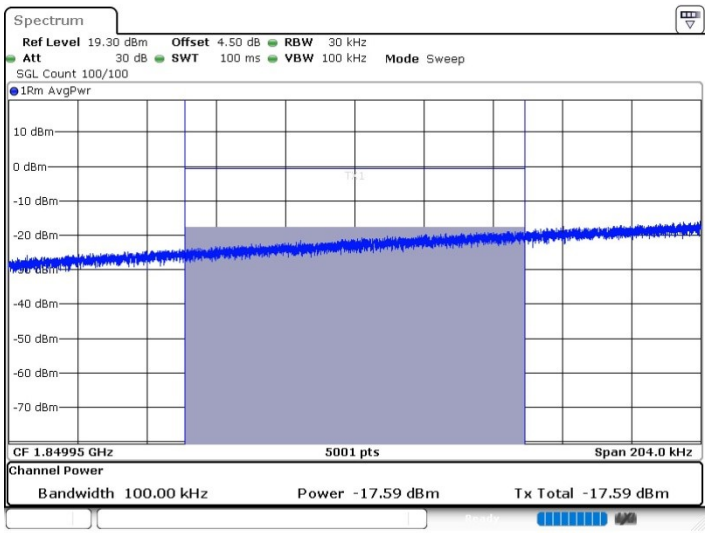


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.840 GHz	1.849 GHz	1.000 MHz	1.84893 GHz	-35.73 dBm	-22.73 dB
1.849 GHz	1.850 GHz	100.000 kHz	1.85000 GHz	-15.56 dBm	-2.56 dB
1.850 GHz	1.860 GHz	100.000 kHz	1.85039 GHz	19.96 dBm	-10.04 dB

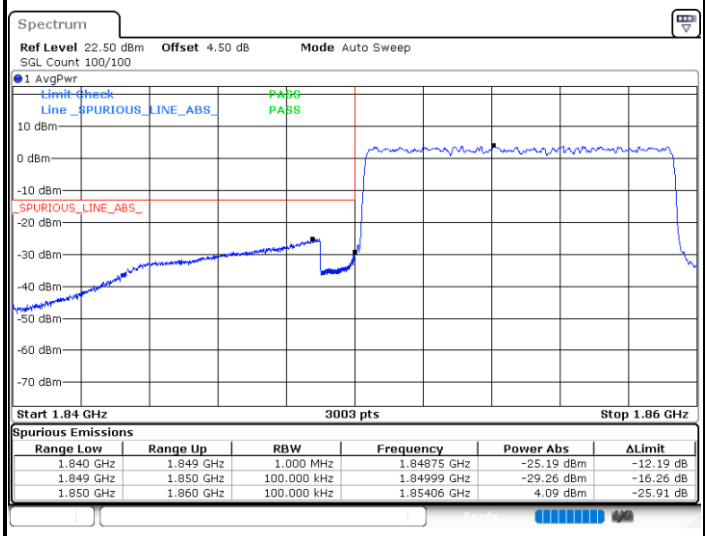
Date: 3.FEB.2021 06:42:05

Channel Power < -13dBm Pass



Date: 3.FEB.2021 07:15:35

Lowest Band Edge / Full RB



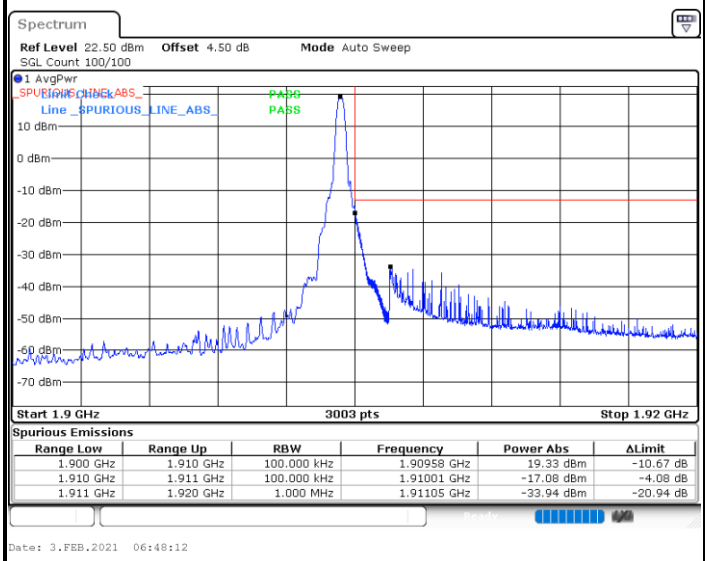
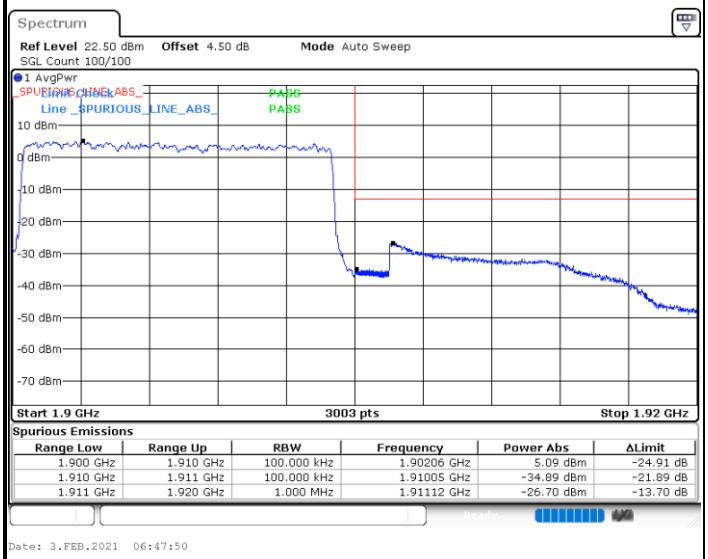
Spurious Emissions

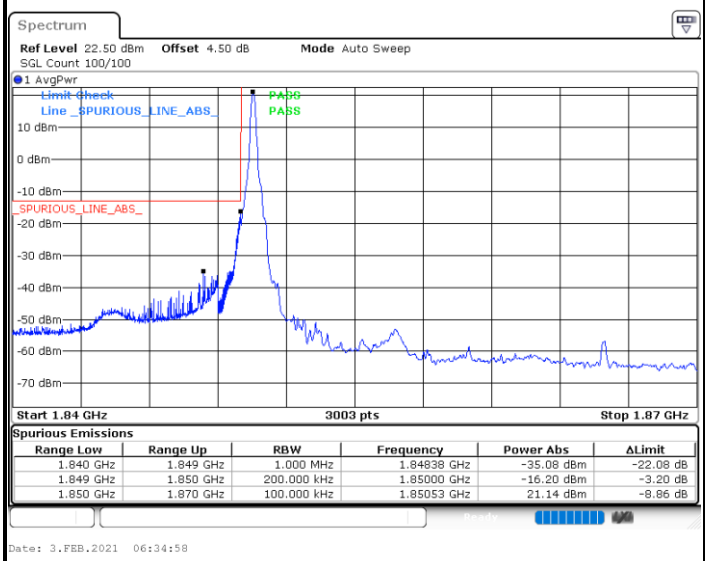
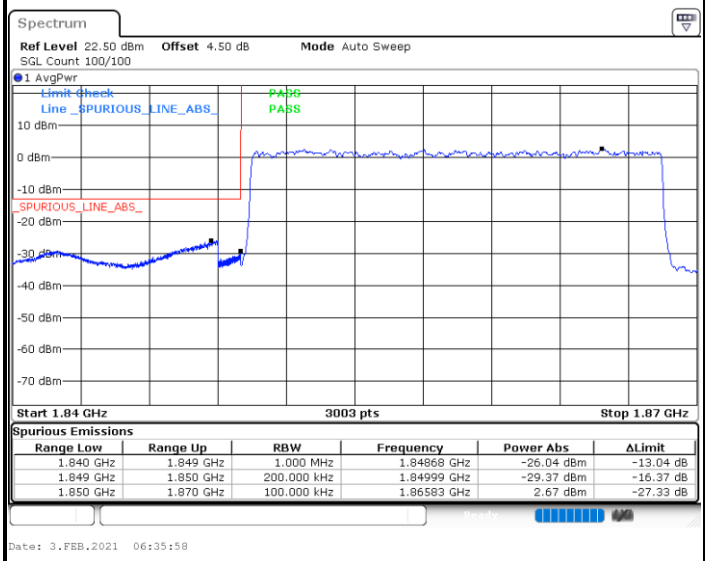
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.840 GHz	1.849 GHz	1.000 MHz	1.84875 GHz	-25.19 dBm	-12.19 dB
1.849 GHz	1.850 GHz	100.000 kHz	1.84999 GHz	-29.26 dBm	-16.26 dB
1.850 GHz	1.860 GHz	100.000 kHz	1.85406 GHz	4.09 dBm	-25.91 dB

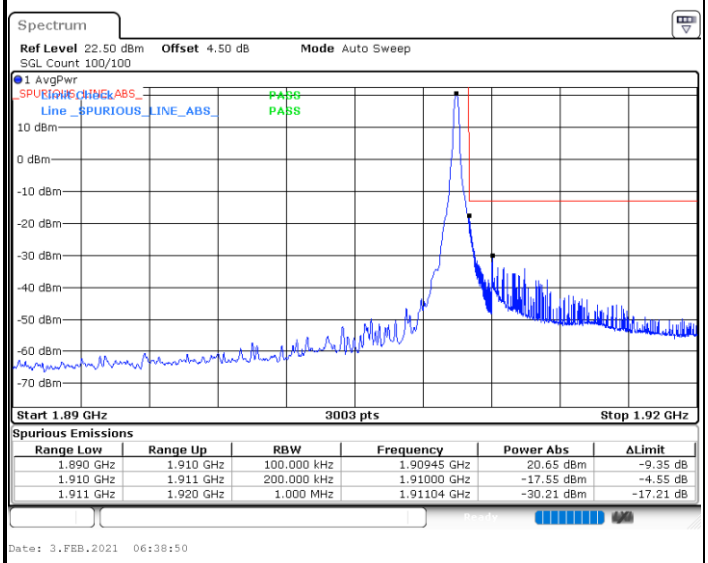
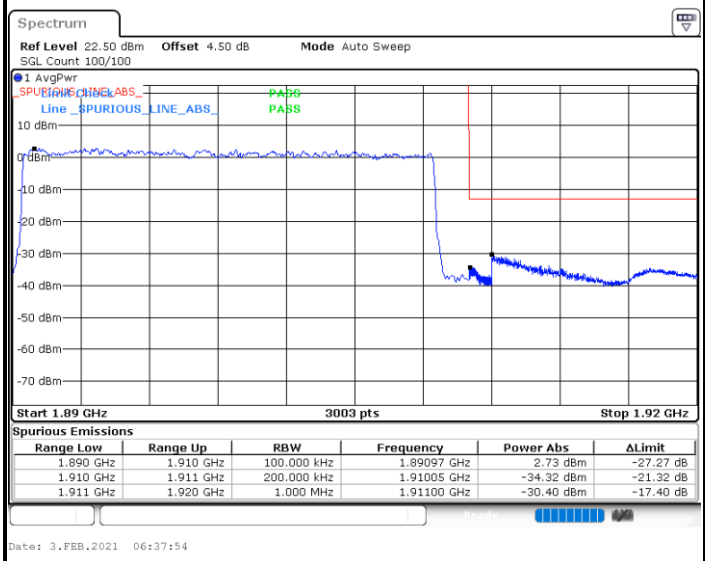
Date: 3.FEB.2021 06:45:47

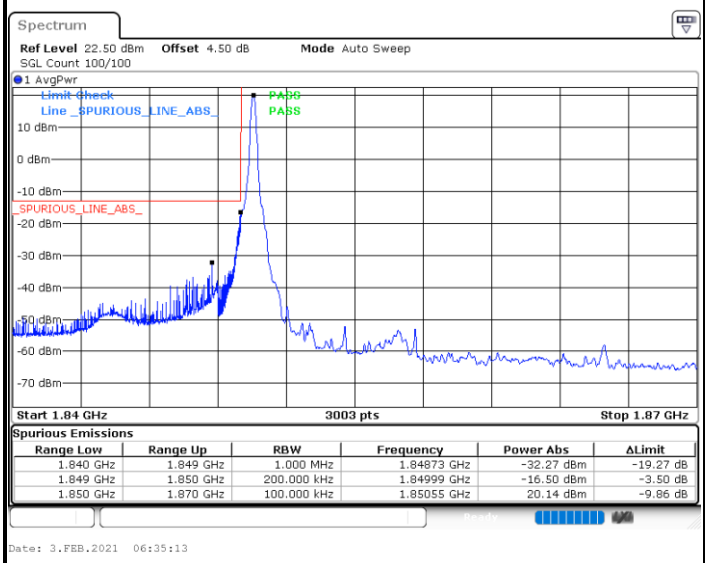
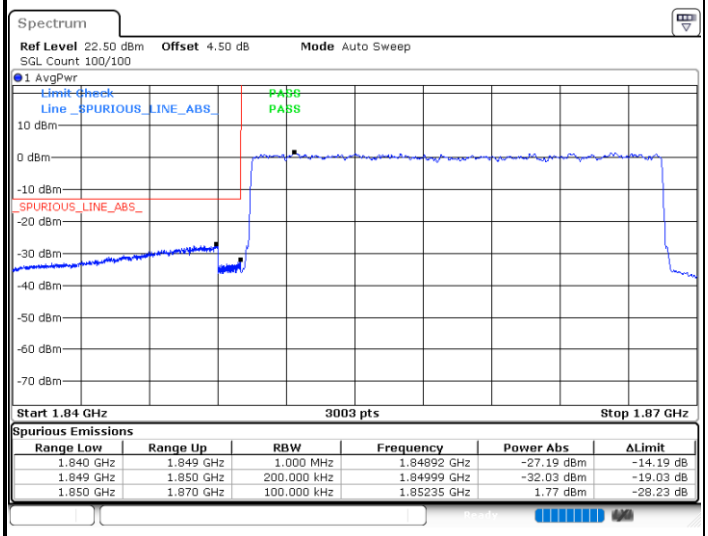
Channel Power < -13dBm Pass

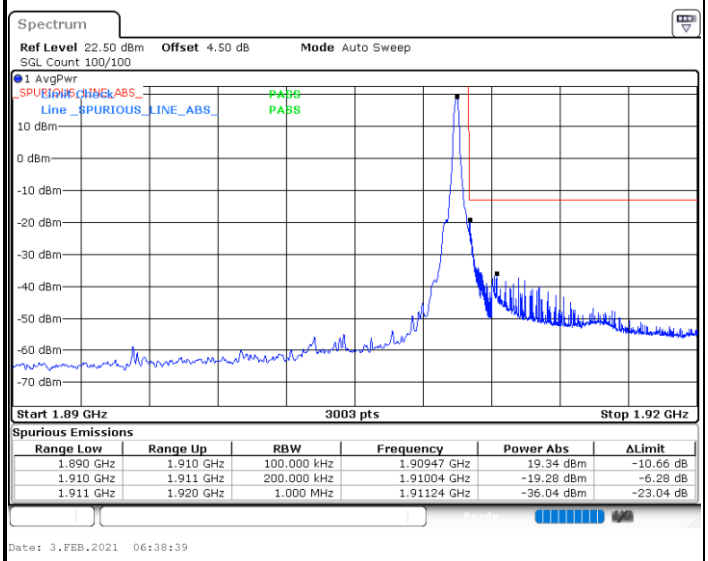
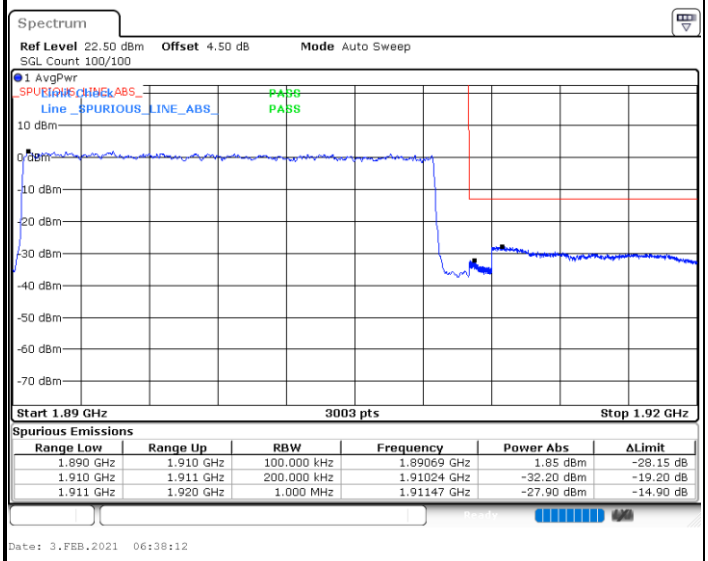
/

FR1 n2+5A / 10MHz / DFT-S OFDM QPSK	
Highest Band Edge / 1 RB	**Channel Power < -13dBm Pass**
	/
Highest Band Edge / Full RB	**Channel Power < -13dBm Pass**
	/

FR1 n2+5A / 20MHz / DFT-S OFDM BPSK	
Lowest Band Edge / 1 RB	**Channel Power < -13dBm Pass**
	/
Lowest Band Edge / Full RB	**Channel Power < -13dBm Pass**
	/

FR1 n2+5A / 20MHz / DFT-S OFDM BPSK	
Highest Band Edge / 1 RB	**Channel Power < -13dBm Pass**
	/
Highest Band Edge / Full RB	**Channel Power < -13dBm Pass**
	/

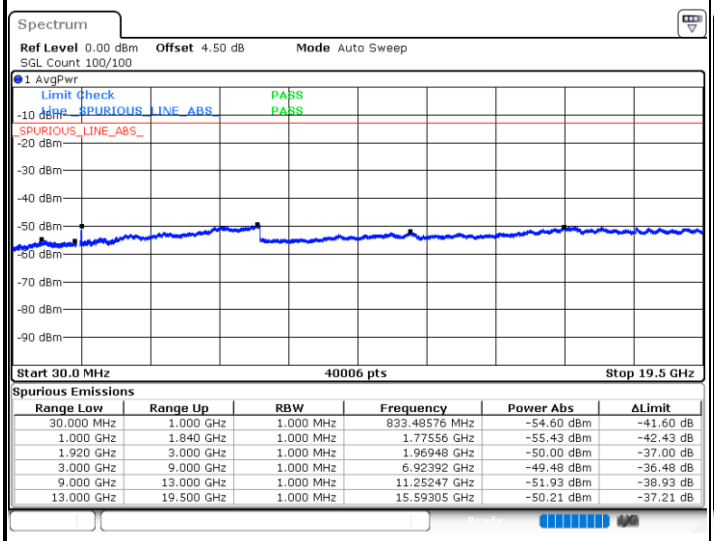
FR1 n2+5A / 20MHz / DFT-S OFDM QPSK	
Lowest Band Edge / 1 RB	**Channel Power < -13dBm Pass**
 Spurious Emissions Range Low / Range Up / RBW / Frequency / Power Abs / ΔLimit 1.840 GHz / 1.849 GHz / 1.000 MHz / 1.84873 GHz / -32.27 dBm / -19.27 dB 1.849 GHz / 1.850 GHz / 200.000 kHz / 1.84999 GHz / -16.50 dBm / -3.50 dB 1.850 GHz / 1.870 GHz / 100.000 kHz / 1.85055 GHz / 20.14 dBm / -9.86 dB Date: 3.FEB.2021 06:35:13	/
Lowest Band Edge / Full RB	**Channel Power < -13dBm Pass**
 Spurious Emissions Range Low / Range Up / RBW / Frequency / Power Abs / ΔLimit 1.840 GHz / 1.849 GHz / 1.000 MHz / 1.84892 GHz / -27.19 dBm / -14.19 dB 1.849 GHz / 1.850 GHz / 200.000 kHz / 1.84999 GHz / -32.03 dBm / -19.03 dB 1.850 GHz / 1.870 GHz / 100.000 kHz / 1.85235 GHz / 1.77 dBm / -28.23 dB Date: 3.FEB.2021 06:36:15	/

FR1 n2+5A / 20MHz / DFT-S OFDM QPSK	
Highest Band Edge / 1 RB	**Channel Power < -13dBm Pass**
 Spurious Emissions Range Low / Range Up / RBW / Frequency / Power Abs / ΔLimit 1.890 GHz / 1.910 GHz / 100.000 kHz / 1.90947 GHz / 19.34 dBm / -10.66 dB 1.910 GHz / 1.911 GHz / 200.000 kHz / 1.91004 GHz / -19.28 dBm / -6.28 dB 1.911 GHz / 1.920 GHz / 1.000 MHz / 1.91124 GHz / -36.04 dBm / -23.04 dB Date: 3.FEB.2021 06:38:39	/
Highest Band Edge / Full RB	**Channel Power < -13dBm Pass**
 Spurious Emissions Range Low / Range Up / RBW / Frequency / Power Abs / ΔLimit 1.890 GHz / 1.910 GHz / 100.000 kHz / 1.89069 GHz / 1.85 dBm / -28.15 dB 1.910 GHz / 1.911 GHz / 200.000 kHz / 1.91024 GHz / -32.20 dBm / -19.20 dB 1.911 GHz / 1.920 GHz / 1.000 MHz / 1.91147 GHz / -27.90 dBm / -14.90 dB Date: 3.FEB.2021 06:38:12	/

Conducted Spurious Emission

FR1 n2+5A / 5MHz / DFT-S OFDM / BPSK

Lowest Channel / 1RB

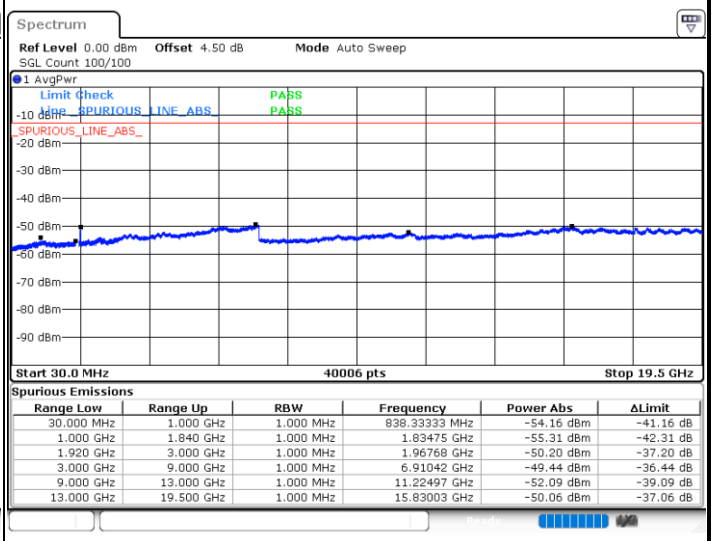


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	833.48576 MHz	-54.60 dBm	-41.60 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.77556 GHz	-55.43 dBm	-42.43 dB
1.920 GHz	3.000 GHz	1.000 MHz	1.96948 GHz	-50.00 dBm	-37.00 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.92392 GHz	-49.48 dBm	-36.48 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.25247 GHz	-51.93 dBm	-38.93 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.59305 GHz	-50.21 dBm	-37.21 dB

Date: 3.FEB.2021 05:54:36

Middle Channel / 1RB

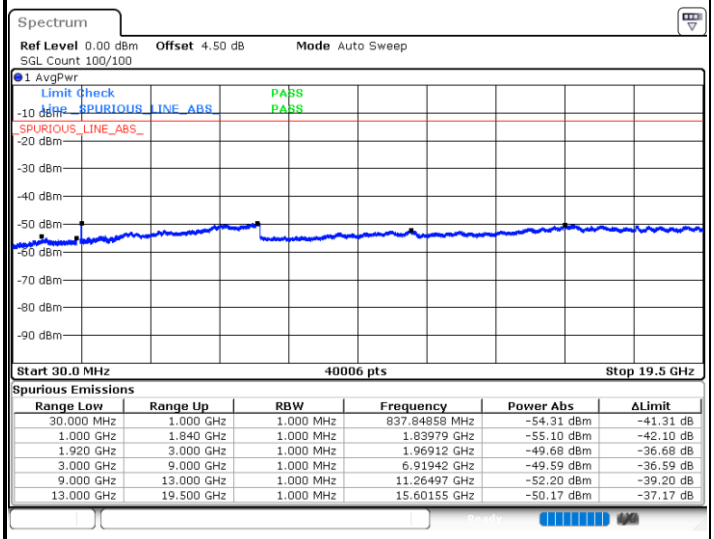


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	838.33333 MHz	-54.16 dBm	-41.16 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.83475 GHz	-55.31 dBm	-42.31 dB
1.920 GHz	3.000 GHz	1.000 MHz	1.96768 GHz	-50.20 dBm	-37.20 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.91042 GHz	-49.44 dBm	-36.44 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.22497 GHz	-52.09 dBm	-39.09 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.83003 GHz	-50.06 dBm	-37.06 dB

Date: 3.FEB.2021 05:59:57

Highest Channel / 1RB



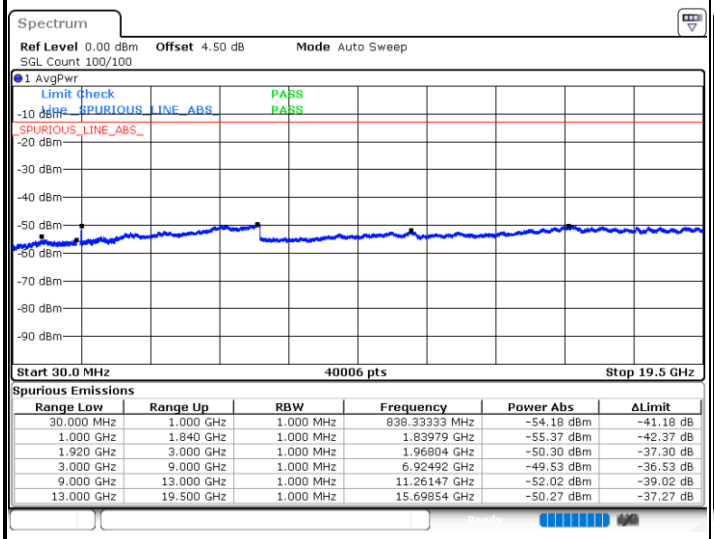
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	837.84858 MHz	-54.31 dBm	-41.31 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.83979 GHz	-55.10 dBm	-42.10 dB
1.920 GHz	3.000 GHz	1.000 MHz	1.96912 GHz	-49.68 dBm	-36.68 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.91942 GHz	-49.59 dBm	-36.59 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.26497 GHz	-52.20 dBm	-39.20 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.60155 GHz	-50.17 dBm	-37.17 dB

Date: 3.FEB.2021 06:00:41

FR1 n2+5A / 5MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB

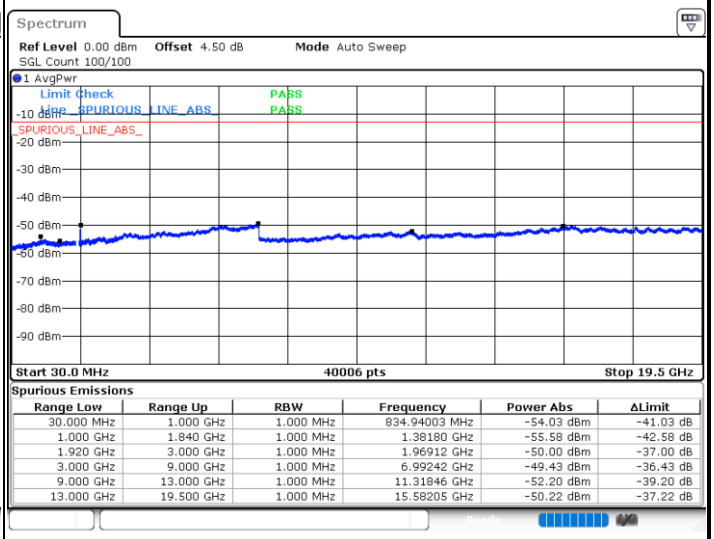


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	838.33333 MHz	-54.18 dBm	-41.18 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.83979 GHz	-55.37 dBm	-42.37 dB
1.920 GHz	3.000 GHz	1.000 MHz	1.96804 GHz	-50.30 dBm	-37.30 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.92492 GHz	-49.53 dBm	-36.53 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.26147 GHz	-52.02 dBm	-39.02 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.69854 GHz	-50.27 dBm	-37.27 dB

Date: 3.FEB.2021 05:56:23

Middle Channel / 1RB

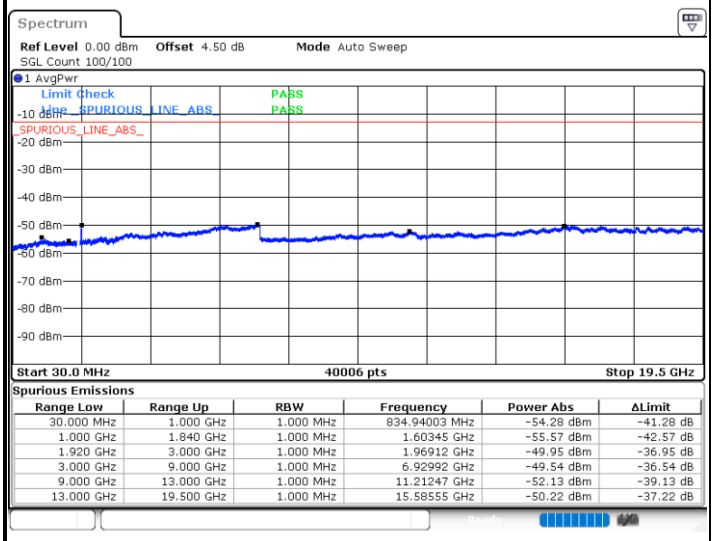


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	834.94003 MHz	-54.03 dBm	-41.03 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.38180 GHz	-55.58 dBm	-42.58 dB
1.920 GHz	3.000 GHz	1.000 MHz	1.96912 GHz	-50.00 dBm	-37.00 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99242 GHz	-49.43 dBm	-36.43 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.31846 GHz	-52.20 dBm	-39.20 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.58205 GHz	-50.22 dBm	-37.22 dB

Date: 3.FEB.2021 05:58:16

Highest Channel / 1RB



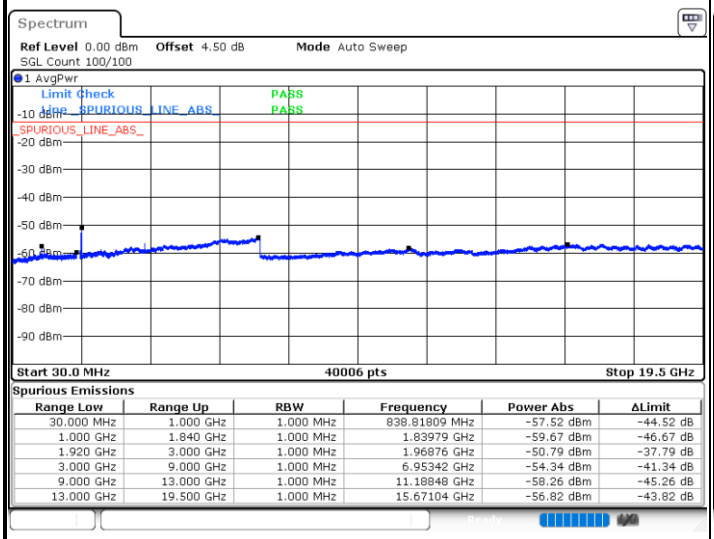
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	834.94003 MHz	-54.28 dBm	-41.28 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.60345 GHz	-55.57 dBm	-42.57 dB
1.920 GHz	3.000 GHz	1.000 MHz	1.96912 GHz	-49.95 dBm	-36.95 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.92992 GHz	-49.54 dBm	-36.54 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.21247 GHz	-52.13 dBm	-39.13 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.58555 GHz	-50.22 dBm	-37.22 dB

Date: 3.FEB.2021 06:02:35

FR1 n2+5A / 10MHz / DFT-S OFDM / BPSK

Lowest Channel / 1RB

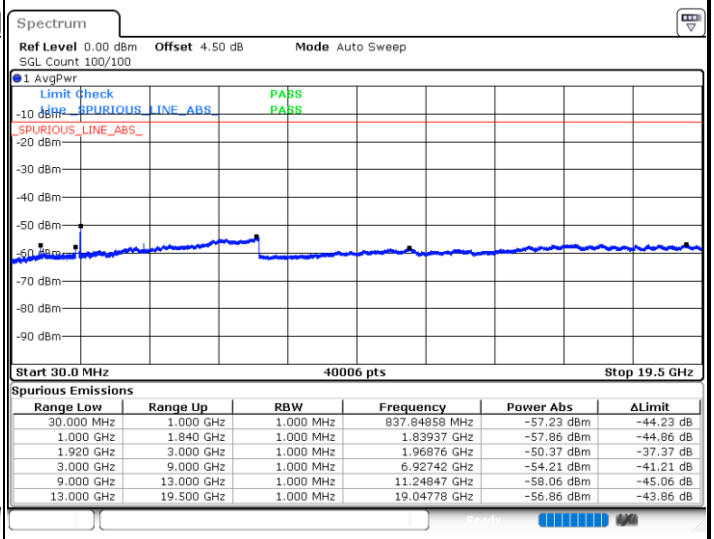


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	838.81809 MHz	-57.52 dBm	-44.52 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.83979 GHz	-59.67 dBm	-46.67 dB
1.920 GHz	3.000 GHz	1.000 MHz	1.96876 GHz	-50.79 dBm	-37.79 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.95342 GHz	-54.34 dBm	-41.34 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.18848 GHz	-58.26 dBm	-45.26 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.67104 GHz	-56.82 dBm	-43.82 dB

Date: 3.FEB.2021 05:47:15

Middle Channel / 1RB

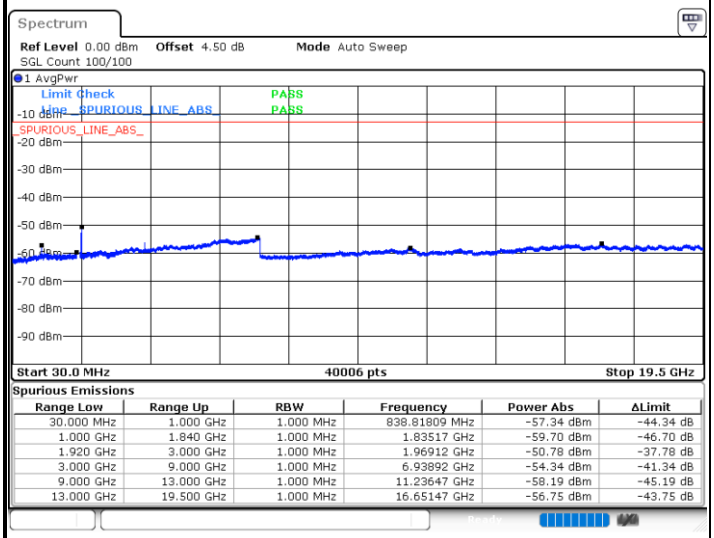


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	837.84858 MHz	-57.23 dBm	-44.23 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.83937 GHz	-57.86 dBm	-44.86 dB
1.920 GHz	3.000 GHz	1.000 MHz	1.96876 GHz	-50.37 dBm	-37.37 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.92742 GHz	-54.21 dBm	-41.21 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.24847 GHz	-58.06 dBm	-45.06 dB
13.000 GHz	19.500 GHz	1.000 MHz	19.04778 GHz	-56.86 dBm	-43.86 dB

Date: 3.FEB.2021 05:49:02

Highest Channel / 1RB



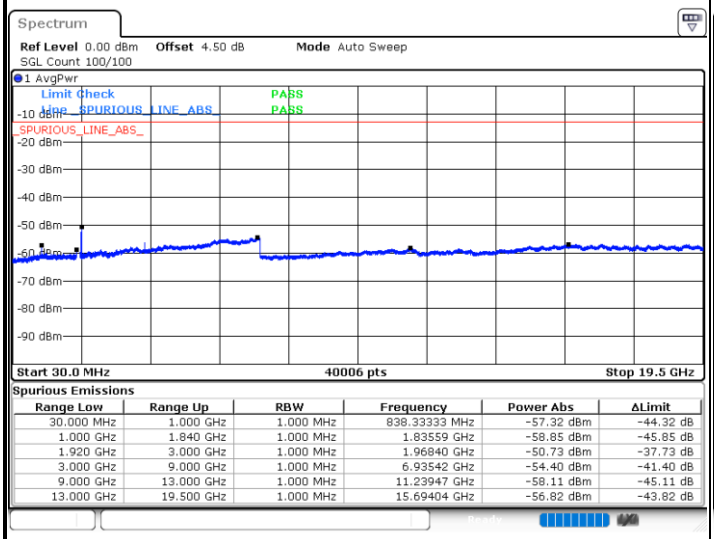
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	838.81809 MHz	-57.34 dBm	-44.34 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.83517 GHz	-59.70 dBm	-46.70 dB
1.920 GHz	3.000 GHz	1.000 MHz	1.96912 GHz	-50.78 dBm	-37.78 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.93892 GHz	-54.34 dBm	-41.34 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.23647 GHz	-58.19 dBm	-45.19 dB
13.000 GHz	19.500 GHz	1.000 MHz	16.65147 GHz	-56.75 dBm	-43.75 dB

Date: 3.FEB.2021 05:53:54

FR1 n2+5A / 10MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB

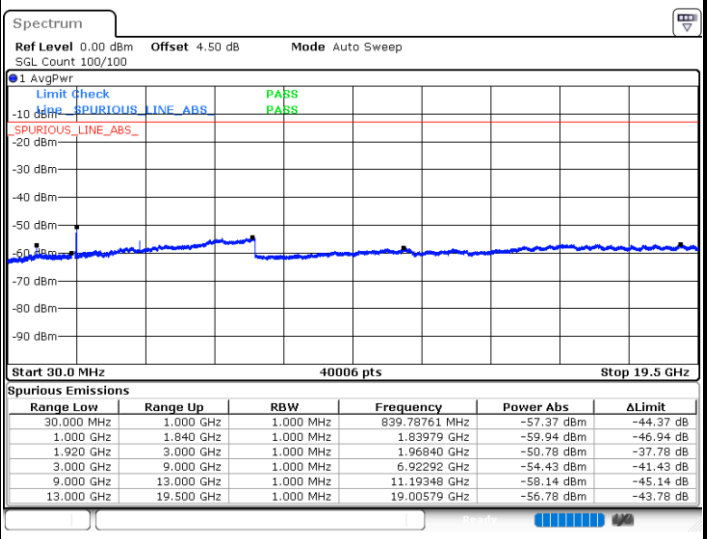


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	838.33333 MHz	-57.32 dBm	-44.32 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.83559 GHz	-58.85 dBm	-45.85 dB
1.920 GHz	3.000 GHz	1.000 MHz	1.96840 GHz	-50.73 dBm	-37.73 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.93542 GHz	-54.40 dBm	-41.40 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.23947 GHz	-58.11 dBm	-45.11 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.69404 GHz	-56.82 dBm	-43.82 dB

Date: 3.FEB.2021 05:45:57

Middle Channel / 1RB

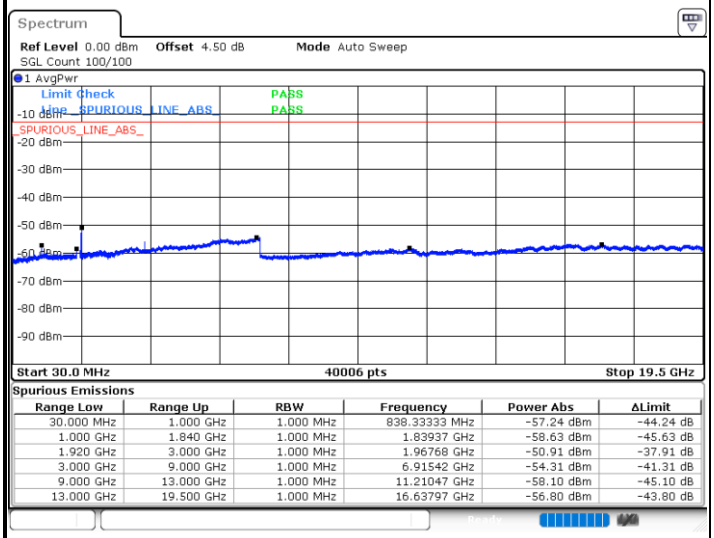


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	839.78761 MHz	-57.37 dBm	-44.37 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.83979 GHz	-59.94 dBm	-46.94 dB
1.920 GHz	3.000 GHz	1.000 MHz	1.96840 GHz	-50.78 dBm	-37.78 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.92292 GHz	-54.43 dBm	-41.43 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.19348 GHz	-58.14 dBm	-45.14 dB
13.000 GHz	19.500 GHz	1.000 MHz	19.00579 GHz	-56.78 dBm	-43.78 dB

Date: 3.FEB.2021 05:51:39

Highest Channel / 1RB



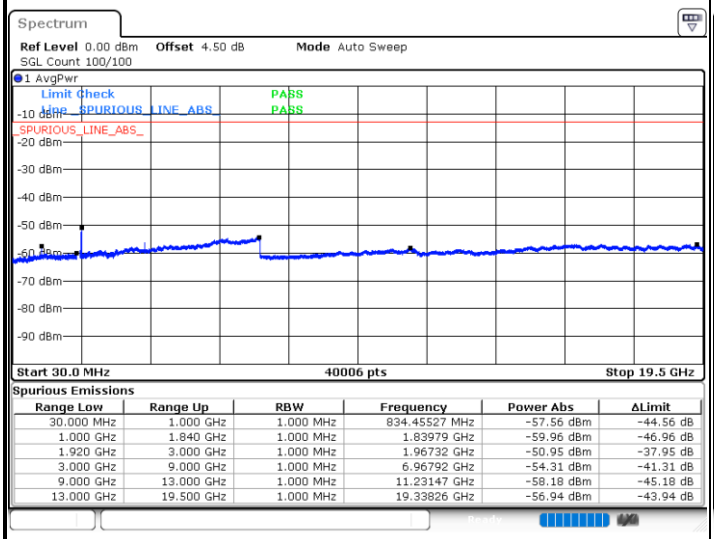
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	838.33333 MHz	-57.24 dBm	-44.24 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.83937 GHz	-58.63 dBm	-45.63 dB
1.920 GHz	3.000 GHz	1.000 MHz	1.96768 GHz	-50.91 dBm	-37.91 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.91542 GHz	-54.31 dBm	-41.31 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.21047 GHz	-58.10 dBm	-45.10 dB
13.000 GHz	19.500 GHz	1.000 MHz	16.63797 GHz	-56.80 dBm	-43.80 dB

Date: 3.FEB.2021 05:52:18

FR1 n2+5A / 20MHz / DFT-S OFDM / BPSK

Lowest Channel / 1RB

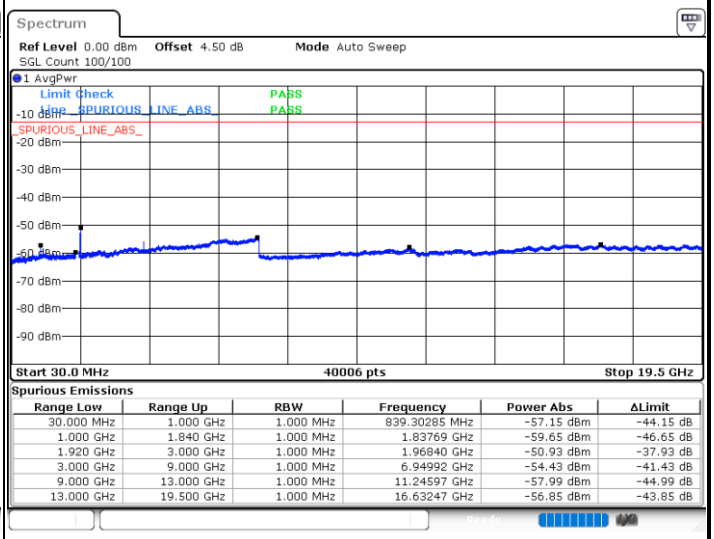


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	834.45527 MHz	-57.56 dBm	-44.56 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.83979 GHz	-59.96 dBm	-46.96 dB
1.920 GHz	3.000 GHz	1.000 MHz	1.96732 GHz	-50.95 dBm	-37.95 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.96792 GHz	-54.31 dBm	-41.31 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.23147 GHz	-58.18 dBm	-45.18 dB
13.000 GHz	19.500 GHz	1.000 MHz	19.33826 GHz	-56.94 dBm	-43.94 dB

Date: 3.FEB.2021 05:33:43

Middle Channel / 1RB

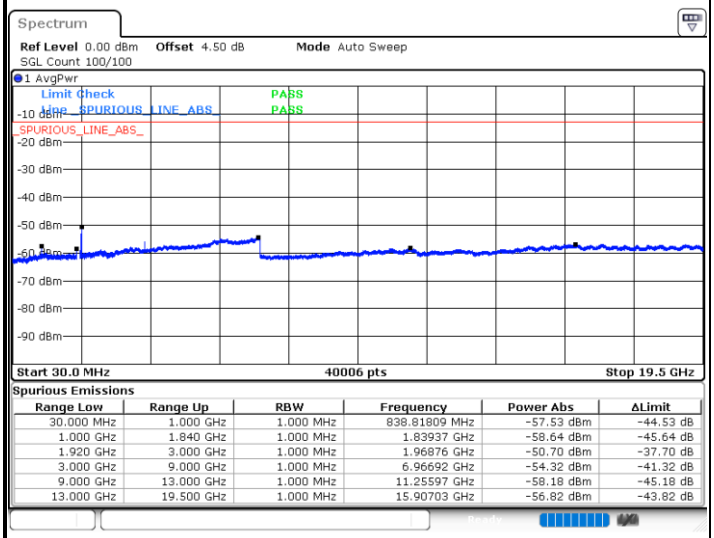


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	839.30285 MHz	-57.15 dBm	-44.15 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.83769 GHz	-59.65 dBm	-46.65 dB
1.920 GHz	3.000 GHz	1.000 MHz	1.96840 GHz	-50.93 dBm	-37.93 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.94992 GHz	-54.43 dBm	-41.43 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.24597 GHz	-57.99 dBm	-44.99 dB
13.000 GHz	19.500 GHz	1.000 MHz	16.63247 GHz	-56.85 dBm	-43.85 dB

Date: 3.FEB.2021 05:26:04

Highest Channel / 1RB



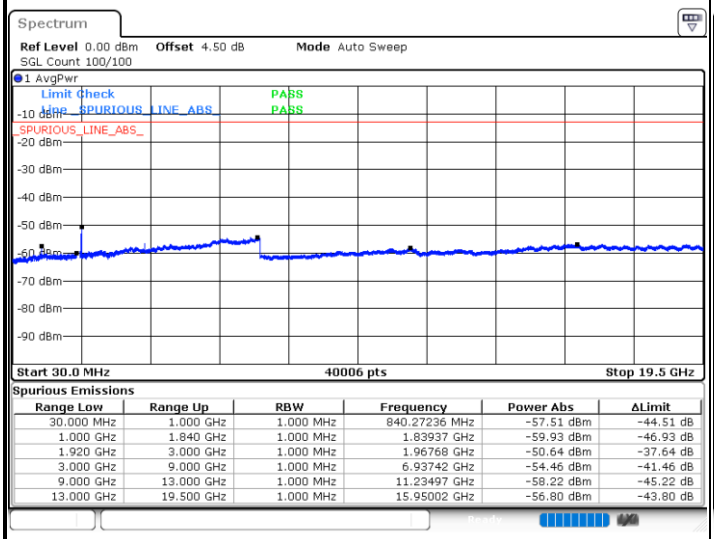
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	838.81809 MHz	-57.53 dBm	-44.53 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.83937 GHz	-58.64 dBm	-45.64 dB
1.920 GHz	3.000 GHz	1.000 MHz	1.96876 GHz	-50.70 dBm	-37.70 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.96692 GHz	-54.32 dBm	-41.32 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.25597 GHz	-58.18 dBm	-45.18 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.90703 GHz	-56.82 dBm	-43.82 dB

Date: 3.FEB.2021 05:37:06

FR1 n2+5A / 20MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB

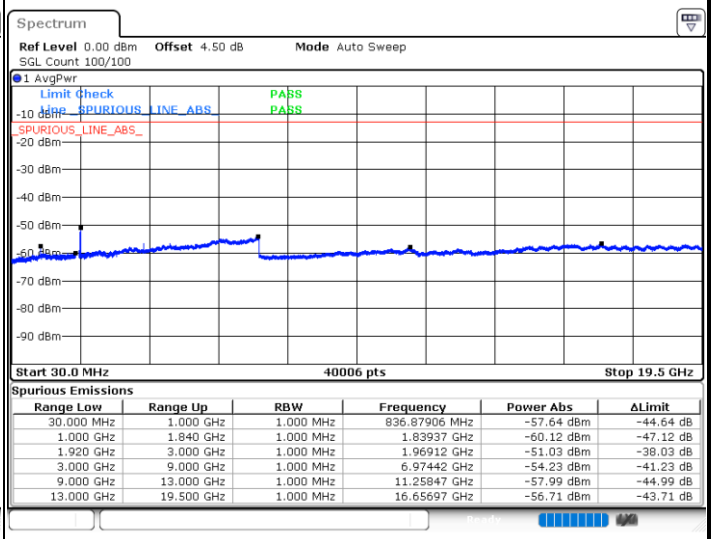


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	840.27236 MHz	-57.51 dBm	-44.51 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.83937 GHz	-59.93 dBm	-46.93 dB
1.920 GHz	3.000 GHz	1.000 MHz	1.96768 GHz	-50.64 dBm	-37.64 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.93742 GHz	-54.46 dBm	-41.46 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.23497 GHz	-58.22 dBm	-45.22 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.95002 GHz	-56.80 dBm	-43.80 dB

Date: 3.FEB.2021 05:28:28

Middle Channel / 1RB

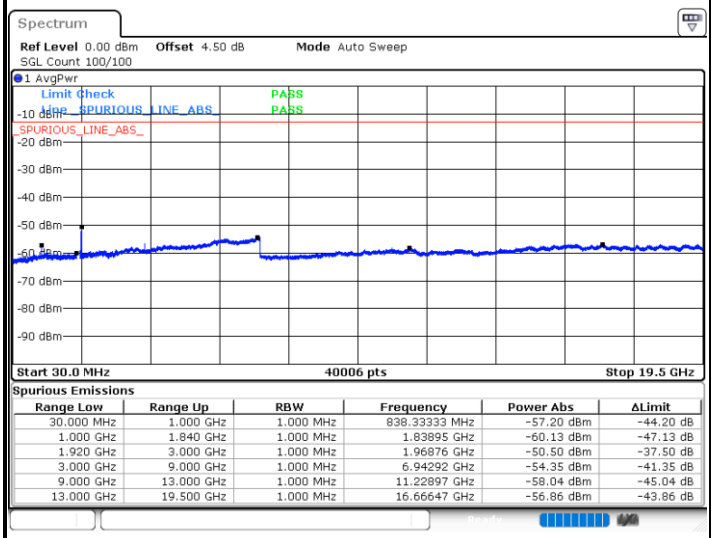


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	836.87906 MHz	-57.64 dBm	-44.64 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.83937 GHz	-60.12 dBm	-47.12 dB
1.920 GHz	3.000 GHz	1.000 MHz	1.96912 GHz	-51.03 dBm	-38.03 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.97442 GHz	-54.23 dBm	-41.23 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.25847 GHz	-57.99 dBm	-44.99 dB
13.000 GHz	19.500 GHz	1.000 MHz	16.65697 GHz	-56.71 dBm	-43.71 dB

Date: 3.FEB.2021 05:36:02

Highest Channel / 1RB



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	838.33333 MHz	-57.20 dBm	-44.20 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.83895 GHz	-60.13 dBm	-47.13 dB
1.920 GHz	3.000 GHz	1.000 MHz	1.96876 GHz	-50.50 dBm	-37.50 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.94292 GHz	-54.35 dBm	-41.35 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.22897 GHz	-58.04 dBm	-45.04 dB
13.000 GHz	19.500 GHz	1.000 MHz	16.66647 GHz	-56.86 dBm	-43.86 dB

Date: 3.FEB.2021 05:41:01

Frequency Stability

Test Conditions		NR n2+5A (BPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz	Within Band
		Deviation (ppm)	Result
50	Normal Voltage	0.0024	PASS
40	Normal Voltage	0.0017	
30	Normal Voltage	0.0015	
20(Ref.)	Normal Voltage	0.0013	
10	Normal Voltage	0.0018	
0	Normal Voltage	0.0012	
-10	Normal Voltage	0.0029	
-20	Normal Voltage	0.0015	
-30	Normal Voltage	0.0023	
20	Maximum Voltage	0.0029	
20	Normal Voltage	0.0035	
20	Battery End Point	0.0021	

Note:

1. Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.45 V. ; Maximum Voltage =4.45 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.

5G NR n5

NSA

Peak-to-Average Ratio

Mode	FR1 n5+2A / 20MHz / DFT-S OFDM				
Mod.	PI/2 BPSK	PI/2 BPSK	QPSK	QPSK	Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	3.65	3.45	5.62	4.84	PASS
Middle CH	3.83	3.51	5.74	5.01	
Highest CH	3.80	3.74	5.80	5.19	