ELECTROMAGNETIC EMISSIONS COMPLIANCE REPORT

INTENTIONAL RADIATOR CERTIFICATION TO FCC PART 22 SUBPART H, PART 24 SUBPART E and PART 27 SUBPART B, C & SUBPART L and PART 90S REQUIREMENT

OF

Applicant:	HP Inc. 3390 East Harmony Road Fort Collins, Colorado 80528 United States
Product Name:	Notebook Computer
Brand Name:	HP
Model No.:	HSN-I20C
Model Difference:	N/A
FCC ID:	B94HNI20CPD
Report Number:	E2/2018/70058
FCC Rule Part:	2 , 22H & 24E & 27B, C & L & 90S
Issue Date:	Aug. 10, 2018
Date of Test:	Jul. 13, 2018
Date of EUT Received:	Jul. 09, 2018

We hereby certify that:

The above equipment was tested by SGS Taiwan Ltd. Electronics & Communication Laboratory The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.26-2015 and the energy emitted by the sample EUT tested as described in this report is in compliance with conducted and radiated emission limits.

The test results of this report relate only to the tested sample identified in this report.

Tested By: Aken Huang

Aken Huang / Enigneer

Approved By: Jim Chang

Jim Chang / Manager

Testing Laboratory
0513

Revision History

Report Number	Revision	Description	Effected Page	Issue Date	Revised By
E2/2018/70058	Rev.00	Initial creation of document	All	Aug. 10, 2018	Elle Chang

Contents

1. GENERAL PRODUCT INFORMATION

1.1. Product Description

General:

Product Name:	Notebook Computer	
Brand Name:	HP	
Model No.:	HSN-I20C	
Model Difference:	N/A	
Hardware Version:	N/A	
Software Version:	N/A	
Power Supply:	7.7Vdc from Rechargeable Li-polymer Battery or 5 / 9 / 10 / 12 / 15 / 20Vdc from AC/DC Adapter	
	Battery:	Model No.: HSTNN-DB8M, Supplier: N/A.
	Adapter:	1. Model No.: TPN-CA06, Supplier: CHICONY POWER TECHNOLOGY (CHONG-QING) CO, LTD. 2. Model No.: TPN-AA03, Supplier: Acbel Electronic (Wuhan) Co., Ltd.
IMEI:	359324080457857	

1.2. WCDMA / LTE: Cellular Phone Standards Frequency Range

Operating Frequency (MHz)			
WCDMA / HSPA+ Band II	1852.4	-	1907.6
WCDMA//HSPA+ Band IV	1712.4	-	1752.6
WCDMA / HSPA+ Band V	826.4	-	846.6

LTE Band	BW (MHz)	Operation Frequency (MHz)			LTE Band	BW (MHz)	Operation Frequency (MHz)		
2	1.4	1850.7	-	1909.3	7	1.4	1850.7	-	1914.3
	3	1851.5	-	1908.5		3	1851.5	-	1913.5
	5	1852.5	-	1907.5		5	1852.5	-	1912.5
	10	1855.0	-	1905.0		10	1855.0	-	1910.0
	15	1857.5	-	1902.5		15	1857.5	-	1907.5
	20	1860.0	-	1900.0		20	1860.0	-	1905.0
4	1.4	1710.7	-	1754.3	26	1.4	824.7	-	848.3
	3	1711.5	-	1753.5		3	825.5	-	847.5
	5	1712.5	-	1752.5		5	826.5	-	846.5
	10	1715.0	-	1780.0		10	829.0	-	844.0
	15	1717.5	-	1747.5		15	831.5	-	841.5
	20	1720.0	-	1745.0	26 Part90	1.4	814.7	-	823.3
5	1.4	824.7	-	848.3		3	815.5	-	822.5
	3	825.5	-	847.5		5	816.5	-	821.5
	5	826.5	-	846.5		10	819.0		
	10	829.0	-	844.0	30	5	2307.5	-	2312.5
12	1.4	699.7	-	715.3		10	2310.0		
	3	700.5	-	714.5	38	5	2572.5	-	2617.5
	5	701.5	-	713.5		10	2575.0	-	2615.0
	10	704.0	-	711.0		15	2577.5	-	2612.5
13	5	779.5	-	784.5		20	2580.0	-	2610.0
	10	782							
17	5	706.5	-	713.5					
	10	709.0	-	711.0					

LTE Band	BW (MHz)	Operation Frequency (MHz)			LTE Band	BW (MHz)	Operation Frequency (MHz)		
41	5	2498.5	-	2687.5	66	1.4	1710.7	-	1779.3
	10	2501.0	-	2685.0		3	1711.5	-	1778.5
	15	2503.5	-	2682.5		5	1712.5	-	1777.5
	20	2506.0	-	2680.0		10	1715.0	-	1775.0
						15	1717.5	-	1772.5
						20	1720.0	-	1770.0

Antenna Designation

Vendor	Type	Main / Aux	Antenna Part No.	Modulation	Frequency (MHz)	Peak Antenna Gain (dBi)
INPAQ Corporation	Couple	Main	6036B0215701(WA-P-LTE12-02-008)	WCDMA / HSPA Band II	1852.4 ~ 1907.6	-5.17
				WCDMA / HSPA Band IV	1712.4 ~ 1752.6	-4.69
				WCDMA / HSPA Band V	826.4 ~ 846.6	-3.61
				LTE Band 2	1850 ~ 1910	-5.17
				LTE Band 4	1710 ~ 1755	-4.69
				LTE Band 5	824 ~ 849	-3.61
				LTE Band 7	2503 ~ 2560	-4.62
				LTE Band 12	699 ~ 716	-5.57
				LTE Band 13	777 ~ 787	-5.71
				LTE Band 17	704 ~ 716	-5.57
				LTE Band 26	824 ~ 849	-3.61
				LTE Band 26	814 ~ 824	-3.61
				LTE Band 30	2305 ~ 2315	-4.11
				LTE Band 38	2573 ~ 2610	-4.57
				LTE Band 41	2496 ~ 2690	-4.57
				LTE Band 66	1710 ~ 1780	-4.69
	Couple	Aux	6036B0215801(WA-P-LTE8-02-024)	WCDMA / HSPA Band II	1852.4 ~ 1907.6	-8.26
				WCDMA / HSPA Band IV	1712.4 ~ 1752.6	N/A
				WCDMA / HSPA Band V	826.4 ~ 846.6	N/A
				LTE Band 2	1850 ~ 1910	-8.26
				LTE Band 4	1710 ~ 1755	N/A
				LTE Band 5	824 ~ 849	N/A
				LTE Band 7	2503 ~ 2560	N/A
				LTE Band 12	699 ~ 716	N/A
				LTE Band 13	777 ~ 787	-5.51
				LTE Band 17	704 ~ 716	N/A
				LTE Band 26	824 ~ 849	N/A
				LTE Band 26 (Part 90S)	814 ~ 824	-5.66
				LTE Band 30	2305 ~ 2315	-6.3
				LTE Band 38	2573 ~ 2610	-5.39
				LTE Band 41	2496 ~ 2690	-5
				LTE Band 66	1710 ~ 1780	N/A

1.3. Type of Emission & Max ERP/EIRP Power Measurement Result:

	ERP / EIRP (dBm)		(W)	Type of Emission
WCDMA Band II	17.83	EIRP	0.061	4M07F9W
HSDPA Band II	17.56	EIRP	0.057	4M07F9W
HSUPA Band II	17.25	EIRP	0.053	4M08F9W
WCDMA Band IV	18.04	EIRP	0.064	4M07F9W
HSDPA Band IV	17.87	EIRP	0.061	4M06F9W
HSUPA Band IV	17.62	EIRP	0.058	4M05F9W
WCDMA Band V	19.14	ERP	0.082	4M07F9W
HSDPA Band V	18.96	ERP	0.079	4M07F9W
HSUPA Band V	19.03	ERP	0.080	4M07F9W

LTE Band	BW (MHz)	Modulation	ERP / EIRP (dBm)		(W)	Type of Emission
2	1.4	QPSK	17.36	EIRP	0.055	1M12G7D
	1.4	16QAM	16.51	EIRP	0.045	1M13D7W
	3	QPSK	17.32	EIRP	0.054	2M75G7D
	3	16QAM	16.62	EIRP	0.046	2M74D7W
	5	QPSK	17.37	EIRP	0.055	4M54G7D
	5	16QAM	16.50	EIRP	0.045	4M53D7W
	10	QPSK	17.41	EIRP	0.055	9M10G7D
	10	16QAM	16.81	EIRP	0.048	9M07D7W
	15	QPSK	17.32	EIRP	0.054	13M5G7D
	15	16QAM	16.83	EIRP	0.048	13M6D7W
	20	QPSK	17.39	EIRP	0.055	18M1G7D
	20	16QAM	16.91	EIRP	0.049	18M1D7W

LTE Band	BW (MHz)	Modulation	ERP / EIRP (dBm)		(W)	Type of Emission
4	1.4	QPSK	17.63	EIRP	0.058	1M11G7D
	1.4	16QAM	17.04	EIRP	0.051	1M12D7W
	3	QPSK	17.58	EIRP	0.057	2M73G7D
	3	16QAM	16.87	EIRP	0.049	2M73D7W
	5	QPSK	17.66	EIRP	0.058	4M52G7D
	5	16QAM	16.67	EIRP	0.047	4M53D7W
	10	QPSK	17.72	EIRP	0.059	9M07G7D
	10	16QAM	16.88	EIRP	0.049	9M08D7W
	15	QPSK	17.69	EIRP	0.059	13M6G7D
	15	16QAM	16.73	EIRP	0.047	13M6D7W
	20	QPSK	17.75	EIRP	0.060	18M0G7D
	20	16QAM	16.98	EIRP	0.050	18M0D7W

LTE Band	BW (MHz)	Modulation	ERP / EIRP (dBm)		(W)	Type of Emission
5	1.4	QPSK	17.93	ERP	0.062	1M11G7D
	1.4	16QAM	17.87	ERP	0.061	1M12D7W
	3	QPSK	17.91	ERP	0.062	2M72G7D
	3	16QAM	17.81	ERP	0.060	2M74D7W
	5	QPSK	17.81	ERP	0.060	4M53G7D
	5	16QAM	17.79	ERP	0.060	4M52D7W
	10	QPSK	17.89	ERP	0.062	9M11G7D
	10	16QAM	17.06	ERP	0.051	9M10D7W
13	5	QPSK	16.52	ERP	0.045	4M51G7D
	5	16QAM	15.84	ERP	0.038	4M53D7W
	10	QPSK	15.82	ERP	0.038	9M06G7D
	10	16QAM	15.08	ERP	0.032	9M04D7W
7	5	QPSK	17.36	EIRP	0.055	4M54G7D
	5	16QAM	16.58	EIRP	0.046	4M52D7W
	10	QPSK	17.43	EIRP	0.055	9M10G7D
	10	16QAM	16.75	EIRP	0.047	9M07D7W
	15	QPSK	17.41	ERP	0.055	13M6G7D
	15	16QAM	16.84	ERP	0.048	13M6D7W
	20	QPSK	17.6	ERP	0.058	18M0G7D
	20	16QAM	16.86	ERP	0.049	18M1D7W

LTE Band	BW (MHz)	Modulation	ERP / EIRP (dBm)		(W)	Type of Emission
12	1.4	QPSK	16.3	ERP	0.043	1M12G7D
	1.4	16QAM	15.68	ERP	0.037	1M12D7W
	3	QPSK	16.35	ERP	0.043	2M74G7D
	3	16QAM	15.71	ERP	0.037	2M75D7W
	5	QPSK	16.51	ERP	0.045	4M54G7D
	5	16QAM	15.69	ERP	0.037	4M54D7W
	10	QPSK	16.4	ERP	0.044	9M21G7D
	10	16QAM	15.93	ERP	0.039	9M20D7W
17	5	QPSK	16.29	ERP	0.043	4M56G7D
	5	16QAM	15.55	ERP	0.036	4M55D7W
	10	QPSK	16.37	ERP	0.043	9M11G7D
	10	16QAM	15.69	ERP	0.037	9M13D7W
26	1.4	QPSK	18.31	ERP	0.068	1M12G7D
	1.4	16QAM	17.48	ERP	0.056	1M12D7W
	3	QPSK	18.07	ERP	0.064	2M71G7D
	3	16QAM	17.33	ERP	0.054	2M72D7W
	5	QPSK	18.48	ERP	0.071	4M52G7D
	5	16QAM	17.44	ERP	0.056	4M53D7W
	10	QPSK	18.43	ERP	0.070	9M12G7D
	10	16QAM	17.82	ERP	0.061	9M11D7W
	15	QPSK	18.38	ERP	0.069	13M6G7D
	15	16QAM	17.57	ERP	0.057	13M6D7W

LTE Band	BW (MHz)	Modulation	ERP / EIRP (dBm)		(W)	Type of Emission
26 Part90	1.4	QPSK	18.65	ERP	0.073	1M12G7D
	1.4	16QAM	18.14	ERP	0.065	1M11D7W
	3	QPSK	18.56	ERP	0.072	2M72G7D
	3	16QAM	17.95	ERP	0.062	2M73D7W
	5	QPSK	18.71	ERP	0.074	4M55G7D
	5	16QAM	17.89	ERP	0.062	4M53D7W
	10	QPSK	18.47	ERP	0.070	9M16G7D
	10	16QAM	18.11	ERP	0.065	9M12D7W

LTE Band	BW (MHz)	Modulation	ERP / EIRP (dBm)		(W)	Type of Emission
38	5	QPSK	17.63	EIRP	0.058	4M54G7D
	5	16QAM	16.86	EIRP	0.049	4M52D7W
	10	QPSK	17.7	EIRP	0.059	9M06G7D
	10	16QAM	16.88	EIRP	0.049	9M06D7W
	15	QPSK	17.59	EIRP	0.057	13M6G7D
	15	16QAM	16.7	EIRP	0.047	13M5D7W
	20	QPSK	17.7	EIRP	0.059	18M0G7D
	20	16QAM	16.92	EIRP	0.049	18M0D7W

LTE Band	BW (MHz)	Modulation	ERP / EIRP (dBm)		(W)	Type of Emission
41	5	QPSK	17.28	EIRP	0.053	4M54G7D
	5	16QAM	16.68	EIRP	0.047	4M52D7W
	10	QPSK	17.57	EIRP	0.057	9M09G7D
	10	16QAM	16.03	EIRP	0.040	9M07D7W
	15	QPSK	17.51	EIRP	0.056	13M6G7D
	15	16QAM	16.6	EIRP	0.046	13M5D7W
	20	QPSK	17.51	EIRP	0.056	18M0G7D
	20	16QAM	16.63	EIRP	0.046	18M0D7W

LTE Band	BW (MHz)	Modulation	ERP / EIRP (dBm)		(W)	Type of Emission
66	1.4	QPSK	17.98	EIRP	0.063	1M12G7D
	1.4	16QAM	17.48	EIRP	0.056	1M12D7W
	3	QPSK	17.85	EIRP	0.061	2M73G7D
	3	16QAM	17.38	EIRP	0.055	2M73D7W
	5	QPSK	18.02	EIRP	0.061	4M54G7D
	5	16QAM	17.29	EIRP	0.054	4M52D7W
	10	QPSK	18.07	EIRP	0.064	9M07G7D
	10	16QAM	17.54	EIRP	0.057	9M05D7W
	15	QPSK	18.09	EIRP	0.064	13M5G7D
	15	16QAM	17.31	EIRP	0.054	13M5D7W
	20	QPSK	18.08	EIRP	0.064	18M0G7D
	20	16QAM	17.38	EIRP	0.055	18M0D7W

LTE Band	BW (MHz)	Modulation	ERP / EIRP (dBm)	(W)	Type of Emis-sion	
30	5	QPSK	17.87	EIRP	0.061	4M54G7D
	5	16QAM	16.97	EIRP	0.050	4M52D7W
	10	QPSK	18.05	EIRP	0.064	9M04G7D
	10	16QAM	17.37	EIRP	0.055	9M03D7W

1.4. Test Methodology of Applied Standards

CC 47 CFR Part 2, 22, 24, 27, Part 90S.

ANSI C63.26-2015

KDB971168 D01 Power Meas license Digital System v03

KDB941225 D01 SAR test for 3G devices v03r01 (SAR Measurement Procedures for 3G Devices, WCDMA / HSPA) was used for EUT and Base station setting.

TS 151 010-1 is used to set, and measure the output power.

Note: All test items have been performed and record as per the above standards.

1.5. Test Facility

SGS Taiwan Ltd. Electronics & Communication Laboratory No.2, Keji 1st Rd., Guishan District, Taoyuan City, Taiwan 333 code 0513)

FCC Registration Numbers are: 735305 / TW0002

1.6. Special Accessories

No special accessories were used during testing.

1.7. Equipment Modifications

There were no modifications incorporated into the EUT.

2. SYSTEM TEST CONFIGURATION

2.1. EUT Configuration

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner which intends to maximize its emission characteristics in a continuous normal application.

2.2. EUT Exercise

The EUT (Transmitter) was operated in the continuous transmission mode employed with the simulator of the Base Station that fixates at test default channels to fix the Tx frequency which was for the purpose of the measurements.

2.3. Test Procedure

2.3.1 Conducted Measurement at Antenna Port

According to measurement procured ANSI C63.26-2015, the EUT is placed on a turn table which is 0.8 m above ground plane. A low loss of RF cable was used to connect the antenna port of EUT to measurement equipment.

2.3.2 Radiated Emissions (ERP/EIRP)

According to measurement procured ANSI C63.26-2015, The EUT is a placed on as turn table, for emission measurements below 1 GHz is 0.8 m above ground plane, for emission measurements above 1 GHz, the table height shall be 1.5 m. The turn table shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3m away from the receiving antenna which varied from 1m to 4m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both Horizontal and Vertical. In order to find out the max. emission, the relative positions of this hand-held transmitter (EUT) was rotated through three orthogonal axes and measurement procedures for electric field radiated emissions above 1 GHz the EUT measurement is to be made “while keeping the antenna in the ‘cone of radiation’ from that area and pointed at the area both in azimuth and elevation, with polarization oriented for maximum response.” is still within the 3dB illumination BW of the measurement antenna according to the requirements in Section 8 and 13.

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 and attenuation factor between EUT conducted port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly EUT RF output level.

Note:

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.

Following shows an offset computation in physical test.

	RF cable loss (dB)	Attenuation factor(dB)	offset(dB)
Low Band (Below 1GHz)	0.2	10	10.2
High Band (Above 1 GHz)	0.5	10	10.5

2.5. Final Amplifier Voltage and Current Information:

Test Mode	DC voltage (V)	DC current (mA)
WCDMA B2	7.7	0.734
WCDMA B4		0.717
WCDMA B5		0.692
LTE Band 2		0.872
LTE Band 4		0.875
LTE Band 5		0.709
LTE Band 7		0.695
LTE Band 12		0.695
LTE Band 13		0.730
LTE Band 17		0.688
LTE Band 26		0.710
LTE Band 26 (Part 90S)		0.701
LTE Band 30		0.850
LTE Band 38		0.863
LTE Band 41		0.847
LTE Band 66		0.876

2.6. Configuration of Tested System

Fig. 2-1 Configuration of Tested System (Fixed Channel-Conducted)

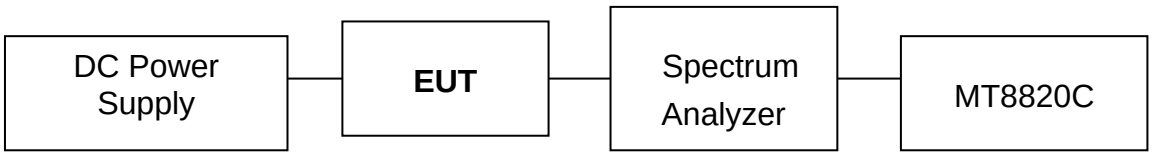
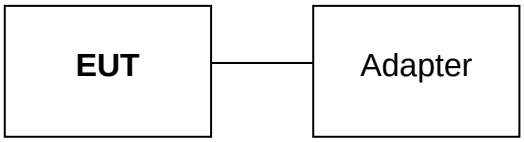


Fig. 2-2 Configuration of Tested System (Fixed Channel-Radiated)



Remote Side

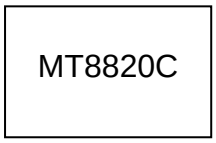


Table 2-1 Equipment Used in

Item	Equipment	Mfr/Brand	Model/ Type No.	Series No.	Data Cable	Power Cord
1.	Universal Radio Communication Tester	Anritsu	MT8820C	6200307563	shielded	Un-shielded

3. SUMMARY OF TEST RESULTS

FCC Rules	Description Of Test	Result
§2.1046(a)	RF Power Output	Compliant
§2.1046(a) §22.913(a)(5) §24.232(c) §27.50(a)(3) §27.50(c)(10) §27.50(d)(4) §90.635	ERP/ EIRP measurement	Compliant
§2.1049(h)	99% & 26dB Occuupied Bandwidth	Compliant
§2.1051 §22.917(a) §24.238(a) §27.53(g) §27.50(c)(5) §27.53(h) §27.53(m)(4)(6) §90.691	Out of Band Emissions at Antenna Terminals and Band Edge / Emission mask requirements	Compliant
§2.1053 §22.917(a) §24.238(a) §27.53(c)(2),(4) §27.50(c)(5) §27.53(f) §27.53(g) §27.53(h) §27.53(m)(4) §90.691(a)(1)(2)	Field Strength of Spurious Radiation	Compliant
§24.232(d) §27.53(d) (5) §27.50(i) (B)	Peak to Average Ratio	Compliant
§2.1055(a)(1) §22.355 §24.235 §27.54 §90.213	Frequency Stability	Compliant

4. DESCRIPTION OF TEST MODES

4.1. The Worst Test Modes and Channel Details

1. The EUT has been tested under operating condition.
2. Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates, X(E1)Y(E2)Z(H) axis and antenna ports. The worst case was found as listed below. Following channel(s) was (were) selected for the final test as listed below:

BAND	ERP/EIRP	RADIATED EMISSION
WCDMA/HSPA Band II	E2-plan	E2-plan
WCDMA/HSPA Band V	E2-plan	E2-plan
LTE Band 2	E2-plan	E2-plan
LTE Band 4	E2-plan	E2-plan
LTE Band 5	E2-plan	E2-plan
LTE Band 12	E2-plan	E2-plan
LTE Band 13	E2-plan	E2-plan
LTE Band 17	E2-plan	E2-plan
LTE Band 25	E2-plan	E2-plan
LTE Band 26	E2-plan	E2-plan
LTE Band 26 (Part 90S)	E2-plan	E2-plan
LTE Band 30	E2-plan	E2-plan
LTE Bnad 38	E2-plan	E2-plan
LTE Band 41	E2-plan	E2-plan
LTE Band 66	E2-plan	E2-plan

WCDMA/HSPA MODE

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	MODE
ERP	4132 to 4233	4132, 4183, 4233	WCDMA/HSPA Band V
EIRP	9262 to 9538	9262, 9400, 9538	WCDMA/HSPA Band II
FREQUENCY STABILITY	4132 to 4233 9262 to 9538	4183 9400	WCDMA Band II WCDMA Band V
OCCUPIED BANDWIDTH	4132 to 4233 9262 to 9538	4132, 4183, 4233 9262, 9400, 9538	WCDMA/HSPA Band II WCDMA/HSPA Band V
PEAK TO AVERAGE RATIO	4132 to 4233 9262 to 9538	4132, 4183, 4233 9262, 9400, 9538	WCDMA/HSPA Band II WCDMA/HSPA Band V
BAND EDGE	4132 to 4233 9262 to 9538	4132, 4233 9262, 9538	WCDMA Band II WCDMA Band V
CONDCUDETED EMISSION	4132 to 4233 9262 to 9538	4132, 4183, 4233 9262, 9400, 9538	WCDMA Band II WCDMA Band V
RADIATED EMISSION	4132 to 4233 9262 to 9538	4132, 4183, 4233 9262, 9400, 9538	WCDMA Band II WCDMA Band V

LTE Band 2 MODE

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
EIRP	18607 to 19193	18607, 18900, 19193	1.4MHz	QPSK, 16QAM	1 RB/ 0,5 RB Offest
	18615 to 19185	18615, 18900, 19185	3MHz	QPSK, 16QAM	1 RB/ 0,14 RB Offest
	18625 to 19175	18625, 18900, 19175	5MHz	QPSK, 16QAM	1 RB/ 0,24 RB Offest
	18650 to 19150	18650, 18900, 19150	10MHz	QPSK, 16QAM	1 RB/ 0,49 RB Offest
	18675 to 19125	18675, 18900, 19125	15MHz	QPSK, 16QAM	1 RB/ 0,74 RB Offest
	18700 to 19100	18700, 18900, 19100	20MHz	QPSK, 16QAM	1 RB/ 0,99 RB Offest
FREQUENCY STA-BILITY	18650 to 19150	18900	10MHz	QPSK,	Full RB
OCCUPIED BAND-WIDTH	18607 to 19193	18607, 18900, 19193	1.4MHz	QPSK, 16QAM	Full RB
	18615 to 19185	18615, 18900, 19185	3MHz	QPSK, 16QAM	Full RB
	18625 to 19175	18625, 18900, 19175	5MHz	QPSK, 16QAM	Full RB
	18650 to 19150	18650, 18900, 19150	10MHz	QPSK, 16QAM	Full RB
	18675 to 19125	18675, 18900, 19125	15MHz	QPSK, 16QAM	Full RB
	18700 to 19100	18700, 18900, 19100	20MHz	QPSK, 16QAM	Full RB
PEAK TO AVERAGE RATIO	18607 to 19193	18607, 18900, 19193	1.4MHz	16QAM	Full RB
	18615 to 19185	18615, 18900, 19185	3MHz	16QAM	Full RB
	18625 to 19175	18625, 18900, 19175	5MHz	16QAM	Full RB
	18650 to 19150	18650, 18900, 19150	10MHz	16QAM	Full RB
	18675 to 19125	18675, 18900, 19125	15MHz	16QAM	Full RB
	18700 to 19100	18700, 18900, 19100	20MHz	16QAM	Full RB
BAND EDGE	18607 to 19193	18607, 19193	1.4MHz	QPSK,	1 RB/ 0,5 RB Offes Full RB
	18615 to 19185	18615, 19185	3MHz	QPSK,	1 RB/ 0,14 RB Offest Full RB
	18625 to 19175	18625, 19175	5MHz	QPSK,	1 RB/ 0,24 RB Offest Full RB
	18650 to 19150	18650, 19150	10MHz	QPSK,	1 RB/ 0,49 RB Offest Full RB
	18675 to 19125	18675, 19125	15MHz	QPSK,	1 RB/ 0,74 RB Offest Full RB
	18700 to 19100	18700, 19100	20MHz	QPSK,	1 RB/ 0,99 RB Offest Full RB
CONDCUDETED EMISSION	18607 to 19193	18607, 18900, 19193	1.4MHz	QPSK,	1 RB, 0 RB Offest
	18615 to 19185	18615, 18900, 19185	3MHz	QPSK,	1 RB, 0 RB Offest
	18625 to 19175	18625, 18900, 19175	5MHz	QPSK,	1 RB, 0 RB Offest
	18650 to 19150	18650, 18900, 19150	10MHz	QPSK,	1 RB, 0 RB Offest
	18675 to 19125	18675, 18900, 19125	15MHz	QPSK,	1 RB, 0 RB Offest
	18700 to 19100	18700, 18900, 19100	20MHz	QPSK,	1 RB, 0 RB Offest
RADIATED EMIS-SION	18625 to 19175	18625, 18900, 19175	3MHz	QPSK	1 RB, 14 RB Offest

LTE Band 4 MODE

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
EIRP	19957 to 19393	19957, 20175, 19393	1.4MHz	QPSK, 16QAM	1 RB/ 0,5 RB Offest
	19965 to 22385	19965, 20175, 22385	3MHz	QPSK, 16QAM	1 RB/ 0,14 RB Offest
	19975 to 20375	19975, 20175, 20375	5MHz	QPSK, 16QAM	1 RB/ 0,24 RB Offest
	20000 to 20350	20000, 20175, 20350	10MHz	QPSK, 16QAM	1 RB/ 0,49 RB Offest
	20025 to 20325	20025, 20175, 20325	15MHz	QPSK, 16QAM	1 RB/ 0,74 RB Offest
	20050 to 20300	20050, 20175, 20300	20MHz	QPSK, 16QAM	1 RB/ 0,99 RB Offest
FREQUENCY STA-BILITY	20000 to 20350	20175	10MHz	QPSK,	Full RB
OCCUPIED BAND-WIDTH	19957 to 19393	19957, 20175, 19393	1.4MHz	QPSK, 16QAM	Full RB
	19965 to 22385	19965, 20175, 22385	3MHz	QPSK, 16QAM,	Full RB
	19975 to 20375	19975, 20175, 20375	5MHz	QPSK, 16QAM,	Full RB
	20000 to 20350	20000, 20175, 20350	10MHz	QPSK, 16QAM,	Full RB
	20025 to 20325	20025, 20175, 20325	15MHz	QPSK, 16QAM,	Full RB
	20050 to 20300	20050, 20175, 20300	20MHz	QPSK, 16QAM,	Full RB
PEAK TO AVERAGE RATIO	19957 to 19393	19957, 20175, 19393	1.4MHz	16QAM	Full RB
	19965 to 22385	19965, 20175, 22385	3MHz	16QAM	Full RB
	19975 to 20375	19975, 20175, 20375	5MHz	16QAM	Full RB
	20000 to 20350	20000, 20175, 20350	10MHz	16QAM	Full RB
	20025 to 20325	20025, 20175, 20325	15MHz	16QAM	Full RB
	20050 to 20300	20050, 20175, 20300	20MHz	16QAM	Full RB
BAND EDGE	19957 to 19393	19957, 19393	1.4MHz	QPSK,	1 RB/ 0,5 RB Offes Full RB
	19965 to 22385	19965, 22385	3MHz	QPSK,	1 RB/ 0,14 RB Offest Full RB
	19975 to 20375	19975, 20375	5MHz	QPSK,	1 RB/ 0,24 RB Offest Full RB
	20000 to 20350	20000, 20350	10MHz	QPSK,	1 RB/ 0,49 RB Offest Full RB
	20025 to 20325	20025, 20325	15MHz	QPSK,	1 RB/ 0,74 RB Offest Full RB
	20050 to 20300	20050, 20300	20MHz	QPSK,	1 RB/ 0,99 RB Offest Full RB
CONDCUDETED EMISSION	19957 to 19393	19957, 20175, 19393	1.4MHz	QPSK,	1 RB, 0 RB Offest
	19965 to 22385	19965, 20175, 22385	3MHz	QPSK,	1 RB, 0 RB Offest
	19975 to 20375	19975, 20175, 20375	5MHz	QPSK,	1 RB, 0 RB Offest
	20000 to 20350	20000, 20175, 20350	10MHz	QPSK,	1 RB, 0 RB Offest
	20025 to 20325	20025, 20175, 20325	15MHz	QPSK,	1 RB, 0 RB Offest
	20050 to 20300	20050, 20175, 20300	20MHz	QPSK,	1 RB, 0 RB Offest
RADIATED EMIS-SION	20000 to 20350	20000, 20175, 20350	10MHz	QPSK,	1 RB, 49 RB Offest

LTE Band 5 MODE

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
ERP	20470 to 20643	20470, 20525, 20643	1.4MHz	QPSK, 16QAM,	1 RB/ 0,5 RB Offest
	20415 to 20635	20415, 20525, 20635	3MHz	QPSK, 16QAM,	1 RB/ 0,14 RB Offest
	20425 to 20625	20425, 20525, 20625	5MHz	QPSK, 16QAM,	1 RB/ 0,24 RB Offest
	20450 to 20600	20450, 20525, 20600	10MHz	QPSK, 16QAM,	1 RB/ 0,49 RB Offest
FREQUENCY STA-BILITY	20450 to 20600	20525	10MHz	QPSK,	Full RB
OCCUPIED BAND-WIDTH	20470 to 20643	20470, 20525, 20643	1.4MHz	QPSK, 16QAM,	Full RB
	20415 to 20635	20415, 20525, 20635	3MHz	QPSK, 16QAM,	Full RB
	20425 to 20625	20425, 20525, 20625	5MHz	QPSK, 16QAM,	Full RB
	20450 to 20600	20450, 20525, 20600	10MHz	QPSK, 16QAM,	Full RB
PEAK TO AVERAGE RATIO	20470 to 20643	20470, 20525, 20643	1.4MHz	16QAM	Full RB
	20415 to 20635	20415, 20525, 20635	3MHz	16QAM	Full RB
	20425 to 20625	20425, 20525, 20625	5MHz	16QAM	Full RB
	20450 to 20600	20450, 20525, 20600	10MHz	16QAM	Full RB
BAND EDGE	20470 to 20643	20470, 20643	1.4MHz	QPSK,	1 RB/ 0,5 RB Offes Full RB
	20415 to 20635	20415, 20635	3MHz	QPSK,	1 RB/ 0,14 RB Offest Full RB
	20425 to 20625	20425, 20625	5MHz	QPSK,	1 RB/ 0,24 RB Offest Full RB
	20450 to 20600	20450, 20600	10MHz	QPSK,	1 RB/ 0,49 RB Offest Full RB
CONDCUDETED EMISSION	20470 to 20643	20470, 20525, 20643	1.4MHz	QPSK,	1 RB, 0 RB Offest
	20415 to 20635	20415, 20525, 20635	3MHz	QPSK,	1 RB, 0 RB Offest
	20425 to 20625	20425, 20525, 20625	5MHz	QPSK,	1 RB, 0 RB Offest
	20450 to 20600	20450, 20525, 20600	10MHz	QPSK,	1 RB, 0 RB Offest
RADIATED EMIS-SION	20450 to 20600	20450, 20525, 20600	1.4MHz	16QAM	1 RB, 0 RB Offest

LTE Band 7 MODE

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
EIRP	20775 to 21425	20775, 21100, 21425	5MHz	QPSK, 16QAM	1 RB/ 0,24 RB Offest
	20800 to 21400	20800, 21100, 21400	10MHz	QPSK, 16QAM	1 RB/ 0,49 RB Offest
	20850 to 21375	20850, 21100, 21375	15MHz	QPSK, 16QAM	1 RB/ 0,74 RB Offest
	20850 to 21350	20850, 21100, 21350	20MHz	QPSK, 16QAM	1 RB/ 0,99 RB Offest
FREQUENCY STABILITY	20800 to 21400	21100	10MHz	QPSK	Full RB
OCCUPIED BAND-WIDTH	20775 to 21425	20775, 21100, 21425	5MHz	QPSK, 16QAM	Full RB
	20800 to 21400	20800, 21100, 21400	10MHz	QPSK, 16QAM	Full RB
	20850 to 21375	20850, 21100, 21375	15MHz	QPSK, 16QAM	Full RB
	20850 to 21350	20850, 21100, 21350	20MHz	QPSK, 16QAM	Full RB
PEAK TO AVERAGE RATIO	20775 to 21425	20775, 21100, 21425	5MHz	16QAM	Full RB
	20800 to 21400	20800, 21100, 21400	10MHz	16QAM	Full RB
	20850 to 21375	20850, 21100, 21375	15MHz	16QAM	Full RB
	20850 to 21350	20850, 21100, 21350	20MHz	16QAM	Full RB
BAND EDGE	20775 to 21425	20775, 21100, 21425	5MHz	QPSK	1 RB/ 0,24 RB Offest Full RB
	20800 to 21400	20800, 21100, 21400	10MHz	QPSK	1 RB/ 0,49 RB Offest Full RB
	20850 to 21375	20850, 21100, 21375	15MHz	QPSK	1 RB/ 0,74 RB Offest Full RB
	20850 to 21350	20850, 21100, 21350	20MHz	QPSK	1 RB/ 0,99 RB Offest Full RB
CONDCUDETED EMISSION	20775 to 21425	20775, 21100, 21425	5MHz	QPSK	1 RB, 0 RB Offest
	20800 to 21400	20800, 21100, 21400	10MHz	QPSK	1 RB, 0 RB Offest
	20850 to 21375	20850, 21100, 21375	15MHz	QPSK	1 RB, 0 RB Offest
	20850 to 21350	20850, 21100, 21350	20MHz	QPSK	1 RB, 0 RB Offest
RADIATED EMISSION	20800 to 21400	20800, 21100, 21400	10MHz	16QAM	1 RB, 49 RB Offest
EMISSION MASK	20775 to 21425	20775, 21100, 21425	5MHz	QPSK	1 RB/ 0,24 RB Offest 25 RB/ 0 Offset
	20800 to 21400	20800, 21100, 21400	10MHz	QPSK	1 RB/ 0,49 RB Offest 50 RB/ 0 Offset
	20850 to 21375	20850, 21100, 21375	15MHz	QPSK	1 RB/ 0,74 RB Offest 75 RB/ 0 Offset
	20850 to 21350	20850, 21100, 21350	20MHz	QPSK	1 RB/ 0,99 RB Offest 100 RB/ 0 Offset

LTE Band 12 MODE

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
ERP	23017 to 23173	23017, 23095, 23173	1.4MHz	QPSK, 16QAM,	1 RB/ 0,5 RB Offest
	23025 to 23165	23025, 23095, 23165	3MHz	QPSK, 16QAM,	1 RB/ 0,14 RB Offest
	23035 to 23155	23035, 23095, 23155	5MHz	QPSK, 16QAM,	1 RB/ 0,24 RB Offest
	23060 to 23130	23060, 23095, 23130	10MHz	QPSK, 16QAM,	1 RB/ 0,49 RB Offest
FREQUENCY STABILITY	23060 to 23130	23095	10MHz	QPSK,	Full RB
OCCUPIED BANDWIDTH	23017 to 23173	23017, 23095, 23173	1.4MHz	QPSK, 16QAM,	Full RB
	23025 to 23165	23025, 23095, 23165	3MHz	QPSK, 16QAM,	Full RB
	23035 to 23155	23035, 23095, 23155	5MHz	QPSK, 16QAM,	Full RB
	23060 to 23130	23060, 23095, 23130	10MHz	QPSK, 16QAM,	Full RB
PEAK TO AV-ERAGE RATIO	23017 to 23173	23017, 23095, 23173	1.4MHz	16QAM	Full RB
	23025 to 23165	23025, 23095, 23165	3MHz	16QAM	Full RB
	23035 to 23155	23035, 23095, 23155	5MHz	16QAM	Full RB
	23060 to 23130	23060, 23095, 23130	10MHz	16QAM	Full RB
BAND EDGE	23017 to 23173	23017, 23095, 23173	1.4MHz	QPSK,	1 RB/ 0,5 RB Offes Full RB
	23025 to 23165	23025, 23095, 23165	3MHz	QPSK,	1 RB/ 0,14 RB Offest Full RB
	23035 to 23155	23035, 23095, 23155	5MHz	QPSK,	1 RB/ 0,24 RB Offest Full RB
	23060 to 23130	23060, 23095, 23130	10MHz	QPSK,	1 RB/ 0,49 RB Offest Full RB
CONDCU-DETED EMIS-SION	23017 to 23173	23017, 23095, 23173	1.4MHz	QPSK,	1 RB, 0 RB Offest
	23025 to 23165	23025, 23095, 23165	3MHz	QPSK,	1 RB, 0 RB Offest
	23035 to 23155	23035, 23095, 23155	5MHz	QPSK,	1 RB, 0 RB Offest
	23060 to 23130	23060, 23095, 23130	10MHz	QPSK,	1 RB, 0 RB Offest
RADIATED EMISSION	23035 to 23155	23035, 23095, 23155	5MHz	QPSK	1 RB, 24 RB Offest

LTE Band 13 MODE

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
ERP	23205 to 23255	23205, 23230, 23255	5MHz	QPSK, 16QAM,	1 RB/ 0,24 RB Offest
	23230	23230	10MHz	QPSK, 16QAM,	1 RB/ 0,49 RB Offest
FREQUENCY STA-BILITY	23230	23230	10MHz	QPSK,	Full RB
OCCUPIED BAND-WIDTH	23205 to 23255	23205, 23230, 23255	5MHz	QPSK, 16QAM,	Full RB
	23230	23230	10MHz	QPSK, 16QAM,	Full RB
PEAK TO AVERAGE RATIO	23205 to 23255	23205, 23230, 23255	5MHz	16QAM	Full RB
	23230	23230	10MHz	16QAM	Full RB
BAND EDGE	23205 to 23255	23205, 23255	5MHz	QPSK,	1 RB/ 0,24 RB Offest Full RB
	23230	23230	10MHz	QPSK,	1 RB/ 0,49 RB Offest Full RB
CONDCUDETED EMISSION	23205 to 23255	23205, 23230, 23255	5MHz	QPSK,	1 RB, 0 RB Offest
	23230	23230	10MHz	QPSK,	1 RB, 0 RB Offest
RADIATED EMIS-SION	23205 to 23255	23205, 23230, 23255	5MHz	16QAM	1 RB/ 0 RB Offest

LTE Band 17 MODE

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
ERP	23755 to 23825	23755, 23790, 23825	5MHz	QPSK, 16QAM,	1 RB/ 0,24 RB Offest
	23780 to 23800	23780, 23790, 23800	10MHz	QPSK, 16QAM,	1 RB/ 0,49 RB Offest
FREQUENCY STA-BILITY	23780 to 23800	23790	10MHz	QPSK,	Full RB
OCCUPIED BAND-WIDTH	23755 to 23825	23755, 23790, 23825	5MHz	QPSK, 16QAM,	Full RB
	23780 to 23800	23780, 23790, 23800	10MHz	QPSK, 16QAM,	Full RB
PEAK TO AVERAGE RATIO	23755 to 23825	23755, 23790, 23825	5MHz	16QAM	Full RB
	23780 to 23800	23780, 23790, 23800	10MHz	16QAM	Full RB
BAND EDGE	23755 to 23825	23755, 23825	5MHz	QPSK,	1 RB/ 0,24 RB Offest Full RB
	23780 to 23800	23780, 23800	10MHz	QPSK,	1 RB/ 0,49 RB Offest Full RB
CONDCUDETED EMISSION	23755 to 23825	23755, 23790, 23825	5MHz	QPSK,	1 RB, 0 RB Offest
	23780 to 23800	23780, 23790, 23800	10MHz	QPSK,	1 RB, 0 RB Offest
RADIATED EMIS-SION	23755 to 23825	23755, 23790, 23825	5MHz	16QAM	1 RB/ 0 RB Offest

LTE Band 25 MODE

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
EIRP	26047 to 26683	26047, 26365, 26683	1.4MHz	QPSK, 16QAM,	1 RB/ 0,5 RB Offest
	26055 to 26675	26055, 26365, 26675	3MHz	QPSK, 16QAM,	1 RB/ 0,14 RB Offest
	26065 to 26665	26065, 26365, 26665	5MHz	QPSK, 16QAM,	1 RB/ 0,24 RB Offest
	26090 to 26640	26090, 26365, 26640	10MHz	QPSK, 16QAM,	1 RB/ 0,49 RB Offest
	26115 to 26615	26115, 26365, 26615	15MHz	QPSK, 16QAM,	1 RB/ 0,74 RB Offest
	26140 to 26590	26140, 26365, 26590	20MHz	QPSK, 16QAM,	1 RB/ 0,99 RB Offest
FREQUENCY STA-BILITY	18650 to 19150	18900	10MHz	QPSK,	Full RB
OCCUPIED BAND-WIDTH	26047 to 26683	26047, 26365, 26683	1.4MHz	QPSK, 16QAM,	Full RB
	26055 to 26675	26055, 26365, 26675	3MHz	QPSK, 16QAM,	Full RB
	26065 to 26665	26065, 26365, 26665	5MHz	QPSK, 16QAM,	Full RB
	26090 to 26640	26090, 26365, 26640	10MHz	QPSK, 16QAM,	Full RB
	26115 to 26615	26115, 26365, 26615	15MHz	QPSK, 16QAM,	Full RB
	26140 to 26590	26140, 26365, 26590	20MHz	QPSK, 16QAM,	Full RB
PEAK TO AVERAGE RATIO	26047 to 26683	26047, 26365, 26683	1.4MHz	16QAM	Full RB
	26055 to 26675	26055, 26365, 26675	3MHz	16QAM	Full RB
	26065 to 26665	26065, 26365, 26665	5MHz	16QAM	Full RB
	26090 to 26640	26090, 26365, 26640	10MHz	16QAM	Full RB
	26115 to 26615	26115, 26365, 26615	15MHz	16QAM	Full RB
	26140 to 26590	26140, 26365, 26590	20MHz	16QAM	Full RB
BAND EDGE	26047 to 26683	26047, 26683	1.4MHz	QPSK,	1 RB/ 0,5 RB Offes Full RB
	26055 to 26675	26055, 26675	3MHz	QPSK,	1 RB/ 0,14 RB Offest Full RB
	26065 to 26665	26065, 26665	5MHz	QPSK,	1 RB/ 0,24 RB Offest Full RB
	26090 to 26640	26090, 26640	10MHz	QPSK,	1 RB/ 0,49 RB Offest Full RB
	26115 to 26615	26115, 26615	15MHz	QPSK,	1 RB/ 0,74 RB Offest Full RB
	26140 to 26590	26140, 26590	20MHz	QPSK,	1 RB/ 0,99 RB Offest Full RB
CONDCUDETED EMISSION	26047 to 26683	26047, 26365, 26683	1.4MHz	QPSK,	1 RB, 0 RB Offest
	26055 to 26675	26055, 26365, 26675	3MHz	QPSK,	1 RB, 0 RB Offest
	26065 to 26665	26065, 26365, 26665	5MHz	QPSK,	1 RB, 0 RB Offest
	26090 to 26640	26090, 26365, 26640	10MHz	QPSK,	1 RB, 0 RB Offest
	26115 to 26615	26115, 26365, 26615	15MHz	QPSK,	1 RB, 0 RB Offest
	26140 to 26590	26140, 26365, 26590	20MHz	QPSK,	1 RB, 0 RB Offest
RADIATED EMIS-SION	26090 to 26640	26090, 26365, 26640	10MHz	QPSK,	1 RB, 0 RB Offest

LTE Band 26 MODE

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
ERP	26797 to 27033	26797, 26915, 27033	1.4MHz	QPSK, 16QAM,	1 RB/ 0,5 RB Offest
	26805 to 27025	26805, 26915, 27025	3MHz	QPSK, 16QAM,	1 RB/ 0,14 RB Offest
	26815 to 27015	26815, 26915, 27015	5MHz	QPSK, 16QAM,	1 RB/ 0,24 RB Offest
	26840 to 26990	26840, 26915, 26990	10MHz	QPSK, 16QAM,	1 RB/ 0,49 RB Offest
	26865 to 26965	26865, 26915, 26965	15MHz	QPSK, 16QAM,	1 RB/ 0,74 RB Offest
FREQUENCY STABILITY	26865 to 26965	26915	15MHz	QPSK,	Full RB
OCCUPIED BANDWIDTH	26797 to 27033	26797, 26915, 27033	1.4MHz	QPSK, 16QAM,	Full RB
	26805 to 27025	26805, 26915, 27025	3MHz	QPSK, 16QAM,	Full RB
	26815 to 27015	26815, 26915, 27015	5MHz	QPSK, 16QAM,	Full RB
	26840 to 26990	26840, 26915, 26990	10MHz	QPSK, 16QAM,	Full RB
	26865 to 26965	26865, 26915, 26965	15MHz	QPSK, 16QAM,	Full RB
PEAK TO AV-ERAGE RATIO	26797 to 27033	26797, 26915, 27033	1.4MHz	16QAM	Full RB
	26805 to 27025	26805, 26915, 27025	3MHz	16QAM	Full RB
	26815 to 27015	26815, 26915, 27015	5MHz	16QAM	Full RB
	26840 to 26990	26840, 26915, 26990	10MHz	16QAM	Full RB
	26865 to 26965	26865, 26915, 26965	15MHz	16QAM	Full RB
BAND EDGE	26797 to 27033	26797, 26915, 27033	1.4MHz	QPSK,	1 RB/ 0,5 RB Offes Full RB
	26805 to 27025	26805, 26915, 27025	3MHz	QPSK,	1 RB/ 0,14 RB Offest Full RB
	26815 to 27015	26815, 26915, 27015	5MHz	QPSK,	1 RB/ 0,24 RB Offest Full RB
	26840 to 26990	26840, 26915, 26990	10MHz	QPSK,	1 RB/ 0,49 RB Offest Full RB
	26865 to 26965	26865, 26915, 26965	15MHz	QPSK	1 RB/ 0,74 RB Offest
CONDCUDETED EMISSION	26797 to 27033	26797, 26915, 27033	1.4MHz	QPSK,	1 RB, 0 RB Offest
	26805 to 27025	26805, 26915, 27025	3MHz	QPSK,	1 RB, 0 RB Offest
	26815 to 27015	26815, 26915, 27015	5MHz	QPSK,	1 RB, 0 RB Offest
	26840 to 26990	26840, 26915, 26990	10MHz	QPSK,	1 RB, 0 RB Offest
	26865 to 26965	26865, 26915, 26965	15MHz	QPSK	1 RB, 0 RB Offest
RADIATED EMISSION	26805 to 27025	26805, 26915, 27025	1.4MHz	QPSK,	1 RB, 0 RB Offest

LTE Band 26 for 90S MODE

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
ERP	26697 to 26783	26697, 26740, 26783	1.4MHz	QPSK, 16QAM,	1 RB/ 0,5 RB Offest
	26705 to 26775	26705, 26740, 26775	3MHz	QPSK, 16QAM,	1 RB/ 0,14 RB Offest
	26715 to 26765	26715, 26740, 26765	5MHz	QPSK, 16QAM,	1 RB/ 0,24 RB Offest
	26740	26740	10MHz	QPSK, 16QAM,	1 RB/ 0,49 RB Offest
FREQUENCY STABILITY	26697 to 26783	26740	1.4MHz	QPSK,	Full RB
OCCUPIED BANDWIDTH	26697 to 26783	26697, 26740, 26783	1.4MHz	QPSK, 16QAM,	Full RB
	26705 to 26775	26705, 26740, 26775	3MHz	QPSK, 16QAM,	Full RB
	26715 to 26765	26715, 26740, 26765	5MHz	QPSK, 16QAM,	Full RB
	26740	26740	10MHz	QPSK, 16QAM,	Full RB
PEAK TO AV-ERAGE RATIO	26697 to 26783	26697, 26740, 26783	1.4MHz	16QAM	Full RB
	26705 to 26775	26705, 26740, 26775	3MHz	16QAM	Full RB
	26715 to 26765	26715, 26740, 26765	5MHz	16QAM	Full RB
	26740	26740	10MHz	16QAM	Full RB
BAND EDGE	26697 to 26783	26697, 26740, 26783	1.4MHz	QPSK,	1 RB/ 0,5 RB Offes Full RB
	26705 to 26775	26705, 26740, 26775	3MHz	QPSK,	1 RB/ 0,14 RB Offest Full RB
	26715 to 26765	26715, 26740, 26765	5MHz	QPSK,	1 RB/ 0,24 RB Offest Full RB
	26740	26740	10MHz	QPSK,	1 RB/ 0,49 RB Offest Full RB
CONDCUDETED EMISSION	26697 to 26783	26697, 26740, 26783	1.4MHz	QPSK,	1 RB, 0 RB Offest
	26705 to 26775	26705, 26740, 26775	3MHz	QPSK,	1 RB, 0 RB Offest
	26715 to 26765	26715, 26740, 26765	5MHz	QPSK,	1 RB, 0 RB Offest
	26740	26740	10MHz	QPSK,	1 RB, 0 RB Offest
RADIATED EMISSION	26740	26740	10MHz	QPSK,	1 RB, 0 RB Offest

LTE Band 30 MODE

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
ERP	27685 to 27735	27685, 27710, 27735	5MHz	QPSK, 16QAM,	1 RB/ 0,24 RB Offest
	27710	27710	10MHz	QPSK, 16QAM,	1 RB/ 0,49 RB Offest
FREQUENCY STA-BILITY	27710	27710	10MHz	QPSK,	Full RB
OCCUPIED BAND-WIDTH	27685 to 27735	27685, 27710, 27735	5MHz	QPSK, 16QAM,	Full RB
	27710	27710	10MHz	QPSK, 16QAM,	Full RB
PEAK TO AVERAGE RATIO	27685 to 27735	27685, 27710, 27735	5MHz	16QAM	Full RB
	27710	27710	10MHz	16QAM	Full RB
BAND EDGE	27685 to 27735	27685, 27710, 27735	5MHz	QPSK,	1 RB/ 0,24 RB Offest Full RB
	27710	27710	10MHz	QPSK,	1 RB/ 0,49 RB Offest Full RB
CONDCUDETED EMISSION	27685 to 27735	27685, 27710, 27735	5MHz	QPSK,	1 RB, 0 RB Offest
	27710	27710	10MHz	QPSK,	1 RB, 0 RB Offest
RADIATED EMIS-SION	27685 to 27735	27685, 27710, 27735	10MHz	QPSK	1 RB/ 0 RB Offest

LTE Band 38 MODE

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
EIRP	37775 to 38225	37775, 38000, 38225	5MHz	QPSK, 16QAM	1 RB/ 0,24 RB Offest
	37800 to 38200	37800 , 38000, 38200	10MHz	QPSK, 16QAM	1 RB/ 0,49 RB Offest
	37825 to 38175	37825 , 38000, 38175	15MHz	QPSK, 16QAM	1 RB/ 0,74 RB Offest
	37850 to 38150	37850 , 38000, 38150	20MHz	QPSK, 16QAM	1 RB/ 0,99 RB Offest
FREQUENCY STABILITY	37800 to 38200	37800 , 38000, 38200	10MHz	QPSK	Full RB
OCCUPIED BAND-WIDTH	37775 to 38225	37775, 38000, 38225	5MHz	QPSK, 16QAM	Full RB
	37800 to 38200	37800 , 38000, 38200	10MHz	QPSK, 16QAM	Full RB
	37825 to 38175	37825 , 38000, 38175	15MHz	QPSK, 16QAM	Full RB
	37850 to 38150	37850 , 38000, 38150	20MHz	QPSK, 16QAM	Full RB
PEAK TO AVER-AGE RATIO	37775 to 38225	37775, 38000, 38225	5MHz	16QAM	Full RB
	37800 to 38200	37800 , 38000, 38200	10MHz	16QAM	Full RB
	37825 to 38175	37825 , 38000, 38175	15MHz	16QAM	Full RB
	37850 to 38150	37850 , 38000, 38150	20MHz	16QAM	Full RB
BAND EDGE	37775 to 38225	37775, 38000, 38225	5MHz	QPSK	1 RB/ 0,24 RB Offest Full RB
	37800 to 38200	37800 , 38000, 38200	10MHz	QPSK	1 RB/ 0,49 RB Offest Full RB
	37825 to 38175	37825 , 38000, 38175	15MHz	QPSK	1 RB/ 0,74 RB Offest Full RB
	37850 to 38150	37850 , 38000, 38150	20MHz	QPSK	1 RB/ 0,99 RB Offest Full RB
CONDCUDETED EMISSION	37775 to 38225	37775, 38000, 38225	5MHz	QPSK	1 RB, 0 RB Offest
	37800 to 38200	37800 , 38000, 38200	10MHz	QPSK	1 RB, 0 RB Offest
	37825 to 38175	37825 , 38000, 38175	15MHz	QPSK	1 RB, 0 RB Offest
	37850 to 38150	37850 , 38000, 38150	20MHz	QPSK	1 RB, 0 RB Offest
RADIATED EMISSION	37775 to 38225	37775, 38000, 38225	5MHz	QPSK	1 RB, 24 RB Offest
EMISSION MASK	37775 to 38225	37775, 38000, 38225	5MHz	QPSK	1 RB/ 0,24 RB Offest 25 RB/ 0 Offset
	37800 to 38200	37800 , 38000, 38200	10MHz	QPSK	1 RB/ 0,49 RB Offest 50 RB/ 0 Offset
	37825 to 38175	37825 , 38000, 38175	15MHz	QPSK	1 RB/ 0,74 RB Offest 75 RB/ 0 Offset
	37850 to 38150	37850 , 38000, 38150	10MHz	16QAM	1 RB/ 0,99 RB Offest 100 RB/ 0 Offset

LTE Band 41 MODE

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
EIRP	39675 to 41565	39675, 40620, 41565	5MHz	QPSK, 16QAM,	1 RB/ 0,24 RB Offest
	39700 to 41540	39700, 40620, 41540	10MHz	QPSK, 16QAM,	1 RB/ 0,49 RB Offest
	39725 to 41515	39725, 40620, 41515	15MHz	QPSK, 16QAM,	1 RB/ 0,74 RB Offest
	39750 to 41490	39750, 40620, 41490	20MHz	QPSK, 16QAM,	1 RB/ 0,99 RB Offest
FREQUENCY STABILITY	39700 to 41540	39700, 40620, 41540	10MHz	QPSK,	Full RB
OCCUPIED BAND-WIDTH	39675 to 41565	39675, 40620, 41565	5MHz	QPSK, 16QAM,	Full RB
	39700 to 41540	39700, 40620, 41540	10MHz	QPSK, 16QAM,	Full RB
	39725 to 41515	39725, 40620, 41515	15MHz	QPSK, 16QAM,	Full RB
	39750 to 41490	39750, 40620, 41490	20MHz	QPSK, 16QAM,	Full RB
PEAK TO AVERAGE RATIO	39675 to 41565	39675, 40620, 41565	5MHz	16QAM	Full RB
	39700 to 41540	39700, 40620, 41540	10MHz	16QAM	Full RB
	39725 to 41515	39725, 40620, 41515	15MHz	16QAM	Full RB
	39750 to 41490	39750, 40620, 41490	20MHz	16QAM	Full RB
BAND EDGE	39675 to 41565	39675, 41565	5MHz	QPSK,	1 RB/ 0,24 RB Offest Full RB
	39700 to 41540	39700, 41540	10MHz	QPSK,	1 RB/ 0,49 RB Offest Full RB
	39725 to 41515	39725, 41515	15MHz	QPSK,	1 RB/ 0,74 RB Offest Full RB
	39750 to 41490	39750, 41490	20MHz	QPSK,	1 RB/ 0,99 RB Offest Full RB
CONDCUDETED EMIS-SION	39675 to 41565	39675, 40620, 41565	5MHz	QPSK,	1 RB, 0 RB Offest
	39700 to 41540	39700, 40620, 41540	10MHz	QPSK,	1 RB, 0 RB Offest
	39725 to 41515	39725, 40620, 41515	15MHz	QPSK,	1 RB, 0 RB Offest
	39750 to 41490	39750, 40620, 41490	20MHz	QPSK,	1 RB, 0 RB Offest
EMISSION MASK	39675 to 41565	39675, 40620, 41565	5MHz	QPSK,	1 RB/ 0,24 RB Offest 25 RB/ 0 Offset
	39700 to 41540	39700, 40620, 41540	10MHz	QPSK,	1 RB/ 0,49 RB Offest 50 RB/ 0 Offset
	39725 to 41515	39725, 40620, 41515	15MHz	QPSK,	1 RB/ 0,74 RB Offest 75 RB/ 0 Offset
	39750 to 41490	39750, 40620, 41490	20MHz	QPSK,	1 RB/ 0,99 RB Offest 100 RB/ 0 Offset
RADIATED EMISSION	39750 to 41490	39750, 40620, 41490	20MHz	16QAM	1 RB, 99 RB Offest

LTE Band 66 MODE

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
EIRP	131979 to 132665	131979, 132322, 132665	1.4MHz	QPSK, 16QAM,	1 RB/ 0,5 RB Offest
	131987 to 132657	131987, 132322, 132657	3MHz	QPSK, 16QAM,	1 RB/ 0,14 RB Offest
	131997 to 132647	131997, 132322, 132647	5MHz	QPSK, 16QAM,	1 RB/ 0,24 RB Offest
	132022 to 132622	132022, 132322, 132622	10MHz	QPSK, 16QAM,	1 RB/ 0,49 RB Offest
	132047 to 132597	132047, 132322, 132597	15MHz	QPSK, 16QAM,	1 RB/ 0,74 RB Offest
	132072 to 132572	132072, 132322, 132572	20MHz	QPSK, 16QAM,	1 RB/ 0,99 RB Offest
FREQUENCY STA-BILITY	18650 to 19150	18900	10MHz	QPSK,	Full RB
OCCUPIED BAND-WIDTH	131979 to 132665	131979, 132322, 132665	1.4MHz	QPSK, 16QAM,	Full RB
	131987 to 132657	131987, 132322, 132657	3MHz	QPSK, 16QAM,	Full RB
	131997 to 132647	131997, 132322, 132647	5MHz	QPSK, 16QAM,	Full RB
	132022 to 132622	132022, 132322, 132622	10MHz	QPSK, 16QAM,	Full RB
	132047 to 132597	132047, 132322, 132597	15MHz	QPSK, 16QAM,	Full RB
	132072 to 132572	132072, 132322, 132572	20MHz	QPSK, 16QAM,	Full RB
PEAK TO AVERAGE RATIO	131979 to 132665	131979, 132322, 132665	1.4MHz	16QAM	Full RB
	131987 to 132657	131987, 132322, 132657	3MHz	16QAM	Full RB
	131997 to 132647	131997, 132322, 132647	5MHz	16QAM	Full RB
	132022 to 132622	132022, 132322, 132622	10MHz	16QAM	Full RB
	132047 to 132597	132047, 132322, 132597	15MHz	16QAM	Full RB
	132072 to 132572	132072, 132322, 132572	20MHz	16QAM	Full RB
BAND EDGE	18607 to 19193	18607, 19193	1.4MHz	QPSK,	1 RB/ 0,5 RB Offes Full RB
	18615 to 19185	18615, 19185	3MHz	QPSK,	1 RB/ 0,14 RB Offest Full RB
	18625 to 19175	18625, 19175	5MHz	QPSK,	1 RB/ 0,24 RB Offest Full RB
	18650 to 19150	18650, 19150	10MHz	QPSK,	1 RB/ 0,49 RB Offest Full RB
	18675 to 19125	18675, 19125	15MHz	QPSK,	1 RB/ 0,74 RB Offest Full RB
	18700 to 19100	18700, 19100	20MHz	QPSK,	1 RB/ 0,99 RB Offest Full RB
CONDCUDETED EMISSION	18607 to 19193	18607, 18900, 19193	1.4MHz	QPSK,	1 RB, 0 RB Offest
	18615 to 19185	18615, 18900, 19185	3MHz	QPSK,	1 RB, 0 RB Offest
	18625 to 19175	18625, 18900, 19175	5MHz	QPSK,	1 RB, 0 RB Offest
	18650 to 19150	18650, 18900, 19150	10MHz	QPSK,	1 RB, 0 RB Offest
	18675 to 19125	18675, 18900, 19125	15MHz	QPSK,	1 RB, 0 RB Offest
	18700 to 19100	18700, 18900, 19100	20MHz	QPSK,	1 RB, 0 RB Offest
RADIATED EMISSION	18700 to 19100	18700, 18900, 19100	20MHz	16QAM	1 RB, 99 RB Offest

5. MEASUREMENT UNCERTAINTY

Test Items	Uncertainty
RF Power Output	+/- 1.10 dB
ERP/ EIRP measurement	Vertical Polarization = +/- 4.74dB Horizontal Polarization =+/- 4.62dB
99% Occupied Bandwidth	+/- 5.19 Hz
Out of Band Emissions at Antenna Terminals and Band Edge	+/- 0.70 dB
Peak to Average Ratio	+/- 0.70 dB
Frequency Stability vs. Temperature	+/- 5.19 Hz
Frequency Stability vs. Voltage	+/- 5.19 Hz
Temperature	+/- 0.65 °C
Humidity	+/- 4.6 %
DC / AC Power Source	DC= +/- 0.13%, AC=+/- 0.2%

Radiated Spurious Emission:

Measurement uncertainty (Polarization : **Vertical**)	9kHz – 30MHz: +/- 2.87 dB
	30MHz - 180MHz: +/- 3.37dB
	180MHz -417MHz: +/- 3.19dB
	0.417GHz-1GHz: +/- 3.19dB
	1GHz - 18GHz: +/- 4.04dB
	18GHz - 40GHz: +/- 4.04dB

Measurement uncertainty (Polarization : **Horizontal**)	9kHz – 30MHz: +/- 2.87 dB
	30MHz - 167MHz: +/- 4.22dB
	167MHz -500MHz: +/- 3.44dB
	0.5GHz-1GHz: +/- 3.39dB
	1GHz - 18GHz: +/- 4.08dB
	18GHz - 40GHz: +/- 4.08dB

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

6. MAXMUM OUTPUT POWER

6.1. Standard Applicable

A base station simulator was used to establish communication with the EUT. Its parameters were set to transmit the maximum power on the EUT. The measured power in the radio frequency on the transmitter output terminals.

ERP/EIRP LIMIT

According to FCC §2.1046

FCC 22.913(a) Mobile station is limited to 7W ERP.

FCC 24.232(b) Mobile and portable stations are limited to 2 W EIRP.

FCC 27.50(a)(3) Mobile and portable stations (hand-held devices) are limited to 250 mW/ 5MHz EIRP.

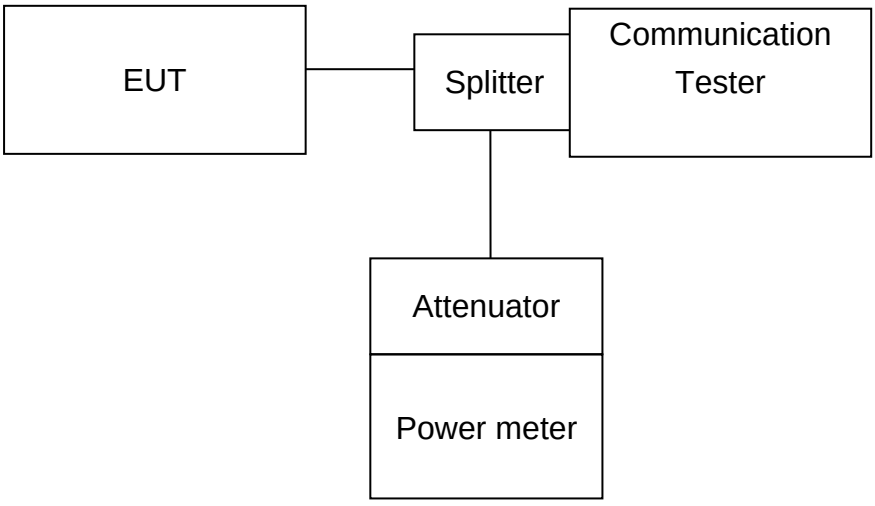
FCC 27.50(c)(10) Portable stations (hand-held devices) are limited to 3 watts ERP.

FCC 27.50(d)(4) Fixed, mobile, and portable (hand-held) stations are limited to 1W EIRP.

FCC 27, 50(h)(2) Mobile and other user stations. Mobile stations are limited to 2 W EIRP

FCC 90.635(b) Mobile station is limited to 100W ERP

6.2. Test Set-up



Note: *Measurement setup for testing on Antenna connector*

6.3. Measurement Procedure

The transmitter output was connected to a calibrated attenuator, the other end of which was connected to a power meter. Transmitter output was read off the power meter in dBm. The power output at the transmitter antenna port was determined by adding the value of the attenuator to the power meter reading. TS 151 010-1 is reference to conduct the test measurement of output power.

The Procedure of KDB941225 (SAR Measurement Procedures for 3G devices, (WCDMA/HSPA) was used for EUT and Base station setting. RMC 12.2kps is used for this testing, and KDB 971168 D01 Power Meas License Digital System as the supplemental test methodology to adjust the proper setting obtaining the measurement results

All LTE bands conducted average power is obtained from the simulator telecommunication test set.

The following tests were conducted according to the test requirements outlined in section 6.2 of the 3GPP.

TEST PROCEDURE:

ANSI C63.26:2015

KDB 971168 Section 5.6

ERP/EIRP = PMeas + GT-LC

where: ERP/EIRP = effective or equivalent radiated power, respectively (expressed in the same units as PMeas, typically dBW or dBm);

PMeas = measured transmitter output power or PSD, in dBm or dBW;

GT = gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP);

LC = signal attenuation in the connecting cable between the transmitter and antenna, in dB.2

For devices utilizing multiple antennas, KDB 662911 provides guidance for determining the effective array transmit antenna gain term to be used in the above equation.

6.4. Measurement Equipment Used

Conducted Emission (measured at antenna port) Test Site					
EQUIPMENT TYPE	**MFR**	**MODEL NUMBER**	**SERIAL NUMBER**	**LAST CAL.**	**CAL DUE.**
Spectrum Analyzer	Agilent	N9010A	MY53400256	10/30/2017	10/29/2018
Radio Communica-tion Analyer	Anritsu	MT8820C	6201107337	06/09/2018	06/08/2019
DC Power Supply	Agilent	E3640A	MY53130054	09/04/2017	09/03/2018
Attenuator	Marvelous	MVE2213-10	RF30	12/26/2017	12/25/2018
Splitter	RF-LAMBAD	RFLT2W1G18G	RF35	12/26/2017	12/25/2018
Spectrum Analyzer	Agilent	N9010A	MY53400256	10/30/2017	10/29/2018
Radio Communica-tion Analyer	Anritsu	MT8820C	6201107337	06/09/2018	06/08/2019
DC Power Supply	Agilent	E3640A	MY53130054	09/04/2017	09/03/2018

6.5. Measurement Result

RF Conducted Output Power

WCDMA MODE:

The following tests were completed according to the test requirements outlined in section 5.2 of the 3GPP TS34.121-1 V8.4.0 specification. The EUT supports power Class 3, which has a nominal maximum output power of 24 dBm (+1.7/-3.7). RMC 12.2kps is used for this testing.

Results:

WCDMA/HSUPA/HSDPA Band II Result:

EUT Mode	Freq. (MHz)	CH	Conducted Avg. Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)
WCDMA	1852.4	9262	22.89	-5.17	17.72	33	-15.28
	1880	9400	23	-5.17	17.83	33	-15.17
	1907.6	9538	22.61	-5.17	17.44	33	-15.56
HSDPA	1852.4	9262	22.61	-5.17	17.44	33	-15.56
	1880	9400	22.73	-5.17	17.56	33	-15.44
	1907.6	9538	22.35	-5.17	17.18	33	-15.82
HSUPA	1852.4	9262	22.39	-5.17	17.22	33	-15.78
	1880	9400	22.42	-5.17	17.25	33	-15.75
	1907.6	9538	22.13	-5.17	16.96	33	-16.04

WCDMA/HSUPA/HSDPA Band IV Result:

EUT Mode	Freq. (MHz)	CH	Conducted Avg. Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)
WCDMA	1712.4	1312	22.38	-4.69	17.69	30	-12.31
	1732.6	1413	22.49	-4.69	17.8	30	-12.2
	1752.6	1513	22.73	-4.69	18.04	30	-11.96
HSDPA	1712.4	1312	22.11	-4.69	17.42	30	-12.58
	1732.6	1413	22.21	-4.69	17.52	30	-12.48
	1752.6	1513	22.56	-4.69	17.87	30	-12.13
HSUPA	1712.4	1312	21.88	-4.69	17.19	30	-12.81
	1732.6	1413	21.91	-4.69	17.22	30	-12.78
	1752.6	1513	22.31	-4.69	17.62	30	-12.38

WCDMA/HSUPA/HSDPA Band V Result:

EUT Mode	Freq. (MHz)	CH	Conducted Avg. Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)
WCDMA	826.4	4132	22.73	-3.61	19.12	38.5	-19.38
	836.6	4183	22.59	-3.61	18.98	38.5	-19.52
	846.6	4233	22.75	-3.61	19.14	38.5	-19.36
HSDPA	826.4	4132	22.51	-3.61	18.9	38.5	-19.6
	836.6	4183	22.57	-3.61	18.96	38.5	-19.54
	846.6	4233	22.56	-3.61	18.95	38.5	-19.55
HSUPA	826.4	4132	22.21	-3.61	18.6	38.5	-19.9
	836.6	4183	22.64	-3.61	19.03	38.5	-19.47
	846.6	4233	22.23	-3.61	18.62	38.5	-19.88

HSDPA Release 6 MODE:

The following 4 Sub-Tests were completed according to the test requirements outlined in section 5.2A of the 3GPP TS34.121-1 V8.4.0 specification. All TX RMS power requirements for Power Class 3 were met according to table 5.2AA.5 and 5.2B.5 All UE channels and power ratio's are set according to table C10.1.4 & C11.1.3 in the 3GPP TS34.121-1 V8.4.0. RMC 12.2kps is used for this testing.

HSDPA SUB-TEST Setting

Table C.10.1.4: β values for transmitter characteristics tests with HS-DPCCH(FOR HSDPA)

Sub-test	β_c	β_d	β_d *(SF)*	β_c/β_d	β_{HS} (*Note1, Note 2*)	CM (dB) *(Note 3)*	MPR (dB) *(Note 3)*	RMC (Kbps)
1	2/15	15/15	64	2/15	4/15	0.0	0.0	12.2
2	12/15 *(Note 4)*	15/15 *(Note 4)*	64	12/15 *(Note 4)*	24/15	1.0	0.0	12.2
3	15/15	8/15	64	15/8	30/15	1.5	0.5	12.2
4	15/15	4/15	64	15/4	30/15	1.5	0.5	12.2

Note: The recommended HSDPA MPRs are implemented as per following sub-tests.

HSPA (HSDPA & HSUPA) Release 6 MODE

The following 5 Sub-Tests were completed according to the test requirements outlined in section 5.2A of the 3GPP TS34.121-1 V8.4.0 specification. All TX RMS power requirements for Power Class 3 were met according to table 5.2AA.5 and 5.2B.5 All UE channels and power ratio's are set according to table C11.1.3 in the 3GPP TS34.121-1 V8.4.0. RMC 12.2kps is used for this testing

HSPA SUB-TEST Setting

Table C.11.1.3: β values for transmitter characteristics tests with HS-DPCCH and E-DCH(FOR HSUPA)

Sub-test	β_c	β_d	β_d (SF)	β_c/β_d	β_{HS}	β_{ec}	β_{ed}	β_{ed} (SF)	β_{ed} (Codes)	CM (dB)	MPR (dB)	AG Index	E-TFCI	RMC (Kbps)
1	11/15 (Note 3)	15/15 (Note 3)	64	11/15 (Note 3)	22/15	209/225	1309/225	4	1	1.0	0.0	20	75	12.2
2	6/15	15/15	64	6/15	12/15	12/15	94/75	4	1	3.0	2.0	12	67	12.2
3	15/15	9/15	64	15/9	30/15	30/15	$\beta_{ed}1$: 47/15 $\beta_{ed}2$: 47/15	4 4	2	2.0	1.0	15	92	12.2
4	2/15	15/15	64	2/15	4/15	2/15	56/75	4	1	3.0	2.0	17	71	12.2
5	15/15 (Note 4)	15/15 (Note 4)	64	15/15 (Note 4)	30/15	24/15	134/15	4	1	1.0	0.0	21	81	12.2

Note: The recommended HSUPA MPRs are implemented as per following sub-tests.

Results:

Mode	Sub test	Avg. Power (dBm) Channel			Power Class 3 Limitation (dBm)	Comments
		9262	9400	9538		
HSDPA II	1	22.85	2.98	22.58	20.3dBm – 25.7dBm	Pass
	2	21.83	21.97	21.57	20.3dBm – 25.7dBm	Pass
	3	21.04	21.45	21.04	19.8dBm – 25.7dBm	Pass
	4	21.07	21.24	20.79	19.8dBm – 25.7dBm	Pass

Mode	Sub test	Avg. Power (dBm) Channel			Power Class 3 Limitation (dBm)	Comments
		1312	1413	1513		
HSDPA IV	1	20.58	22.44	22.82	20.3dBm – 25.7dBm	Pass
	2	21.36	21.42	21.83	20.3dBm – 25.7dBm	Pass
	3	20.86	20.95	21.33	19.8dBm – 25.7dBm	Pass
	4	20.62	20.68	21.14	19.8dBm – 25.7dBm	Pass

Mode	Sub test	Avg. Power (dBm) Channel			Power Class 3 Limitation (dBm)	Comments
		4132	4183	4233		
HSDPA V	1	22.75	22.62	22.86	20.3dBm – 25.7dBm	Pass
	2	21.74	22.11	21.84	20.3dBm – 25.7dBm	Pass
	3	21.23	21.62	21.31	19.8dBm – 25.7dBm	Pass
	4	21.01	21.34	21.05	19.8dBm – 25.7dBm	Pass

Mode	Sub test	Avg. Power (dBm) Channel			Power Class 3 Limitation (dBm)	Comments
		9262	9400	9538		
HSUPA II	1	22.34	22.45	22.01	18.8dBm – 25.7dBm	Pass
	2	22.79	22.93	22.54	16.8dBm – 25.7dBm	Pass
	3	21.28	21.41	20.98	17.8dBm – 25.7dBm	Pass
	4	22.84	22.92	22.54	16.8dBm – 25.7dBm	Pass
	5	21.88	21.96	21.53	18.8dBm – 25.7dBm	Pass

Mode	Sub test	Avg. Power (dBm) Channel			Power Class 3 Limitation (dBm)	Comments
		1312	1413	1513		
HSUPA IV	1	21.83	21.93	22.38	20.3dBm – 25.7dBm	Pass
	2	22.33	22.37	22.84	20.3dBm – 25.7dBm	Pass
	3	20.87	20.91	21.38	19.8dBm – 25.7dBm	Pass
	4	22.34	22.35	22.89	19.8dBm – 25.7dBm	Pass
	5	21.32	21.43	21.83	19.8dBm – 25.7dBm	Pass

Mode	Sub test	Avg. Power (dBm) Channel			Power Class 3 Limitation (dBm)	Comments
		4132	4183	4233		
HSUPA V	1	22.27	22.18	22.37	18.8dBm – 25.7dBm	Pass
	2	22.75	22.64	22.80	16.8dBm – 25.7dBm	Pass
	3	21.22	21.71	21.39	17.8dBm – 25.7dBm	Pass
	4	22.77	22.67	22.89	16.8dBm – 25.7dBm	Pass
	5	21.74	22.11	21.83	18.8dBm – 25.7dBm	Pass

WCDMA/HSDPA/HSUPA band II, IV, V

The EUT output power was controlled by simulator. Set Communication Tester MT8820C function key “UE Power Control” and enter max rated power 24dBm. The EUT is going to be set to max output power to 24dBm. Then record the read (see page 15 for measurement data). The min. power was measures by a function key “minimum power” then record the read. It is -52.3dBm. The power variation can be 0.1dB step by setting.

LTE Result:

Antenna gain (dBi) -5.17

LTE Band 2_Uplink frequency band : 1850 to 1910 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
1.4	18607	1850.7	QPSK	1	0	22.35	17.18	33	-15.82
				1	5	22.30	17.13	33	-15.87
				3	2	22.31	17.14	33	-15.86
				6	0	21.12	15.95	33	-17.05
	18900	1880	QPSK	1	0	22.53	17.36	33	-15.64
				1	5	22.43	17.26	33	-15.74
				3	2	22.38	17.21	33	-15.79
				6	0	21.42	16.25	33	-16.75
	19193	1909.3	QPSK	1	0	21.98	16.81	33	-16.19
				1	5	22.01	16.84	33	-16.16
				3	2	22.07	16.90	33	-16.10
				6	0	21.06	15.89	33	-17.11
	18607	1850.7	16QAM	1	0	21.22	16.05	33	-16.95
				1	5	21.19	16.02	33	-16.98
				3	2	21.12	15.95	33	-17.05
				6	0	20.37	15.20	33	-17.80
	18900	1880	16QAM	1	0	21.63	16.46	33	-16.54
				1	5	21.68	16.51	33	-16.49
				3	2	21.34	16.17	33	-16.83
				6	0	20.36	15.19	33	-17.81
	19193	1909.3	16QAM	1	0	21.21	16.04	33	-16.96
				1	5	21.01	15.84	33	-17.16
				3	2	20.98	15.81	33	-17.19
				6	0	20.14	14.97	33	-18.03

Antenna gain (dBi) -5.17

LTE Band 2_Uplink frequency band : 1850 to 1910 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
3	18615	1851.5	QPSK	1	0	22.40	17.23	33	-15.77
				1	14	22.35	17.18	33	-15.82
				8	4	21.23	16.06	33	-16.94
				15	0	21.08	15.91	33	-17.09
	18900	1880	QPSK	1	0	22.49	17.32	33	-15.68
				1	14	22.46	17.29	33	-15.71
				8	4	21.43	16.26	33	-16.74
				15	0	21.51	16.34	33	-16.66
	19185	1908.5	QPSK	1	0	22.03	16.86	33	-16.14
				1	14	21.98	16.81	33	-16.19
				8	4	21.05	15.88	33	-17.12
				15	0	21.05	15.88	33	-17.12
	18615	1851.5	16QAM	1	0	21.60	16.43	33	-16.57
				1	14	21.53	16.36	33	-16.64
				8	4	20.40	15.23	33	-17.77
				15	0	20.28	15.11	33	-17.89
	18900	1880	16QAM	1	0	21.79	16.62	33	-16.38
				1	14	21.76	16.59	33	-16.41
				8	4	20.49	15.32	33	-17.68
				15	0	20.41	15.24	33	-17.76
	19185	1908.5	16QAM	1	0	21.23	16.06	33	-16.94
				1	14	21.14	15.97	33	-17.03
				8	4	20.13	14.96	33	-18.04
				15	0	20.11	14.94	33	-18.06

Antenna gain (dB -5.17

LTE Band 2_Uplink frequency band : 1850 to 1910 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
5	18625	1852.5	QPSK	1	0	22.28	17.11	33	-15.89
				1	24	22.16	16.99	33	-16.01
				12	6	21.32	16.15	33	-16.85
				25	0	21.39	16.22	33	-16.78
	18900	1880	QPSK	1	0	22.54	17.37	33	-15.63
				1	24	22.51	17.34	33	-15.66
				12	6	21.53	16.36	33	-16.64
				25	0	21.51	16.34	33	-16.66
	19175	1907.5	QPSK	1	0	22.08	16.91	33	-16.09
				1	24	22.07	16.90	33	-16.10
				12	6	21.04	15.87	33	-17.13
				25	0	21.07	15.90	33	-17.10
	18625	1852.5	16QAM	1	0	21.46	16.29	33	-16.71
				1	24	21.31	16.14	33	-16.86
				12	6	20.34	15.17	33	-17.83
				25	0	20.34	15.17	33	-17.83
	18900	1880	16QAM	1	0	21.63	16.46	33	-16.54
				1	24	21.67	16.50	33	-16.50
				12	6	20.37	15.20	33	-17.80
				25	0	20.39	15.22	33	-17.78
	19175	1907.5	16QAM	1	0	21.38	16.21	33	-16.79
				1	24	21.26	16.09	33	-16.91
				12	6	20.04	14.87	33	-18.13
				25	0	20.10	14.93	33	-18.07

Antenna gain (dBi) -5.17

LTE Band 2_Uplink frequency band : 1850 to 1910 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
10	18650	1855	QPSK	1	0	22.54	17.37	33	-15.63
				1	24	21.88	16.71	33	-16.29
				12	6	20.92	15.75	33	-17.25
				25	0	20.90	15.73	33	-17.27
	18900	1880	QPSK	1	0	22.58	17.41	33	-15.59
				1	24	22.54	17.37	33	-15.63
				12	6	21.65	16.48	33	-16.52
				25	0	21.19	16.02	33	-16.98
	19150	1905	QPSK	1	0	21.70	16.53	33	-16.47
				1	24	21.85	16.68	33	-16.32
				12	6	20.78	15.61	33	-17.39
				25	0	20.75	15.58	33	-17.42
	18650	1855	16QAM	1	0	21.62	16.45	33	-16.55
				1	24	20.21	15.04	33	-17.96
				12	6	20.01	14.84	33	-18.16
				25	0	20.39	15.22	33	-17.78
	18900	1880	16QAM	1	0	21.91	16.74	33	-16.26
				1	24	21.98	16.81	33	-16.19
				12	6	20.71	15.54	33	-17.46
				25	0	20.52	15.35	33	-17.65
	19150	1905	16QAM	1	0	21.23	16.06	33	-16.94
				1	24	21.39	16.22	33	-16.78
				12	6	20.12	14.95	33	-18.05
				25	0	20.16	14.99	33	-18.01

Antenna gain (dBi) -5.17

LTE Band 2_Uplink frequency band : 1850 to 1910 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
15	18675	1857.5	QPSK	1	0	22.49	17.32	33	-15.68
				1	74	21.17	16.00	33	-17.00
				36	19	21.37	16.20	33	-16.80
				75	0	21.39	16.22	33	-16.78
	18900	1880	QPSK	1	0	21.09	15.92	33	-17.08
				1	74	22.47	17.30	33	-15.70
				36	19	21.66	16.49	33	-16.51
				75	0	20.98	15.81	33	-17.19
	19125	1902.5	QPSK	1	0	21.88	16.71	33	-16.29
				1	74	22.30	17.13	33	-15.87
				36	19	21.09	15.92	33	-17.08
				75	0	20.61	15.44	33	-17.56
	18675	1857.5	16QAM	1	0	21.53	16.36	33	-16.64
				1	74	21.23	16.06	33	-16.94
				36	19	20.47	15.30	33	-17.70
				75	0	20.35	15.18	33	-17.82
	18900	1880	16QAM	1	0	21.45	16.28	33	-16.72
				1	74	22.00	16.83	33	-16.17
				36	19	20.69	15.52	33	-17.48
				75	0	20.60	15.43	33	-17.57
	19125	1902.5	16QAM	1	0	21.38	16.21	33	-16.79
				1	74	21.48	16.31	33	-16.69
				36	19	20.41	15.24	33	-17.76
				75	0	20.29	15.12	33	-17.88

Antenna gain (dBi) -5.17

LTE Band 2_Uplink frequency band : 1850 to 1910 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
20	18700	1860	QPSK	1	0	22.53	17.36	33	-15.64
				1	99	22.49	17.32	33	-15.68
				50	25	21.37	16.20	33	-16.80
				100	0	21.46	16.29	33	-16.71
	18900	1880	QPSK	1	0	22.21	17.04	33	-15.96
				1	99	22.56	17.39	33	-15.61
				50	25	20.19	15.02	33	-17.98
				100	0	21.74	16.57	33	-16.43
	19100	1900	QPSK	1	0	22.31	17.14	33	-15.86
				1	99	22.18	17.01	33	-15.99
				50	25	21.07	15.90	33	-17.10
				100	0	21.00	15.83	33	-17.17
	18700	1860	16QAM	1	0	21.79	16.62	33	-16.38
				1	99	21.89	16.72	33	-16.28
				50	25	20.38	15.21	33	-17.79
				100	0	20.48	15.31	33	-17.69
	18900	1880	16QAM	1	0	22.01	16.84	33	-16.16
				1	99	22.08	16.91	33	-16.09
				50	25	20.25	15.08	33	-17.92
				100	0	20.74	15.57	33	-17.43
	19100	1900	16QAM	1	0	21.21	16.04	33	-16.96
				1	99	20.69	15.52	33	-17.48
				50	25	20.15	14.98	33	-18.02
				100	0	20.35	15.18	33	-17.82

Antenna gain (dBi) -4.69

LTE Band 4_Uplink frequency band : 1710 to 1755 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
1.4	19957	1710.7	QPSK	1	0	21.82	17.13	30	-12.87
				1	5	21.78	17.09	30	-12.91
				3	2	21.91	17.22	30	-12.78
				6	0	20.89	16.20	30	-13.80
	20175	1732.5	QPSK	1	0	21.83	17.14	30	-12.86
				1	5	21.84	17.15	30	-12.85
				3	2	21.74	17.05	30	-12.95
				6	0	20.86	16.17	30	-13.83
	20393	1754.3	QPSK	1	0	22.32	17.63	30	-12.37
				1	5	22.29	17.60	30	-12.40
				3	2	22.32	17.63	30	-12.37
				6	0	21.34	16.65	30	-13.35
	19957	1710.7	16QAM	1	0	20.90	16.21	30	-13.79
				1	5	21.03	16.34	30	-13.66
				3	2	21.03	16.34	30	-13.66
				6	0	19.87	15.18	30	-14.82
	20175	1732.5	16QAM	1	0	21.02	16.33	30	-13.67
				1	5	21.07	16.38	30	-13.62
				3	2	20.87	16.18	30	-13.82
				6	0	19.98	15.29	30	-14.71
	20393	1754.3	16QAM	1	0	21.68	16.99	30	-13.01
				1	5	21.73	17.04	30	-12.96
				3	2	21.22	16.53	30	-13.47
				6	0	20.45	15.76	30	-14.24

Antenna gain (dBi) -4.69

LTE Band 4_Uplink frequency band : 1710 to 1755 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
3	19965	1711.5	QPSK	1	0	21.82	17.13	30	-12.87
				1	14	21.82	17.13	30	-12.87
				8	4	20.88	16.19	30	-13.81
				15	0	20.87	16.18	30	-13.82
	20175	1732.5	QPSK	1	0	21.72	17.03	30	-12.97
				1	14	21.71	17.02	30	-12.98
				8	4	20.86	16.17	30	-13.83
				15	0	20.81	16.12	30	-13.88
	20385	1753.5	QPSK	1	0	22.27	17.58	30	-12.42
				1	14	22.23	17.54	30	-12.46
				8	4	21.24	16.55	30	-13.45
				15	0	21.27	16.58	30	-13.42
	19965	1711.5	16QAM	1	0	20.90	16.21	30	-13.79
				1	14	21.08	16.39	30	-13.61
				8	4	19.85	15.16	30	-14.84
				15	0	19.83	15.14	30	-14.86
	20175	1732.5	16QAM	1	0	20.78	16.09	30	-13.91
				1	14	20.96	16.27	30	-13.73
				8	4	19.81	15.12	30	-14.88
				15	0	19.85	15.16	30	-14.84
	20385	1753.5	16QAM	1	0	21.47	16.78	30	-13.22
				1	14	21.56	16.87	30	-13.13
				8	4	20.28	15.59	30	-14.41
				15	0	20.19	15.50	30	-14.50

Antenna gain (dB -4.69

LTE Band 4_Uplink frequency band : 1710 to 1755 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
5	19975	1712.5	QPSK	1	0	21.81	17.12	30	-12.88
				1	24	22.01	17.32	30	-12.68
				12	6	20.95	16.26	30	-13.74
				25	0	20.98	16.29	30	-13.71
	20175	1732.5	QPSK	1	0	21.94	17.25	30	-12.75
				1	24	21.70	17.01	30	-12.99
				12	6	20.83	16.14	30	-13.86
				25	0	20.88	16.19	30	-13.81
	20375	1752.5	QPSK	1	0	22.35	17.66	30	-12.34
				1	24	22.26	17.57	30	-12.43
				12	6	21.36	16.67	30	-13.33
				25	0	21.33	16.64	30	-13.36
	19975	1712.5	16QAM	1	0	20.91	16.22	30	-13.78
				1	24	21.36	16.67	30	-13.33
				12	6	19.93	15.24	30	-14.76
				25	0	19.94	15.25	30	-14.75
	20175	1732.5	16QAM	1	0	21.19	16.50	30	-13.50
				1	24	21.14	16.45	30	-13.55
				12	6	19.71	15.02	30	-14.98
				25	0	19.93	15.24	30	-14.76
	20375	1752.5	16QAM	1	0	21.31	16.62	30	-13.38
				1	24	21.32	16.63	30	-13.37
				12	6	20.26	15.57	30	-14.43
				25	0	20.26	15.57	30	-14.43

Antenna gain (dBi) -4.69

LTE Band 4_Uplink frequency band : 1710 to 1755 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
10	20000	1715	QPSK	1	0	21.80	17.11	30	-12.89
				1	24	21.58	16.89	30	-13.11
				12	6	20.71	16.02	30	-13.98
				25	0	21.09	16.40	30	-13.60
	20175	1732.5	QPSK	1	0	21.74	17.05	30	-12.95
				1	24	21.95	17.26	30	-12.74
				12	6	20.45	15.76	30	-14.24
				25	0	20.13	15.44	30	-14.56
	20375	1750	QPSK	1	0	22.34	17.65	30	-12.35
				1	24	22.41	17.72	30	-12.28
				12	6	21.47	16.78	30	-13.22
				25	0	21.29	16.60	30	-13.40
	20000	1715	16QAM	1	0	21.22	16.53	30	-13.47
				1	24	21.30	16.61	30	-13.39
				12	6	20.17	15.48	30	-14.52
				25	0	20.10	15.41	30	-14.59
	20175	1732.5	16QAM	1	0	21.06	16.37	30	-13.63
				1	24	21.02	16.33	30	-13.67
				12	6	19.93	15.24	30	-14.76
				25	0	19.97	15.28	30	-14.72
	20375	1750	16QAM	1	0	20.24	15.55	30	-14.45
				1	24	21.57	16.88	30	-13.12
				12	6	20.43	15.74	30	-14.26
				25	0	20.43	15.74	30	-14.26

Antenna gain (dBi) -4.69

LTE Band 4_Uplink frequency band : 1710 to 1755 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
15	20025	1717.5	QPSK	1	0	21.51	16.82	30	-13.18
				1	74	21.93	17.24	30	-12.76
				36	19	19.35	14.66	30	-15.34
				75	0	20.10	15.41	30	-14.59
	20175	1732.5	QPSK	1	0	21.47	16.78	30	-13.22
				1	74	21.77	17.08	30	-12.92
				36	19	20.85	16.16	30	-13.84
				75	0	20.24	15.55	30	-14.45
	20325	1747.5	QPSK	1	0	21.90	17.21	30	-12.79
				1	74	22.38	17.69	30	-12.31
				36	19	21.36	16.67	30	-13.33
				75	0	20.04	15.35	30	-14.65
	20025	1717.5	16QAM	1	0	20.59	15.90	30	-14.10
				1	74	21.09	16.40	30	-13.60
				36	19	20.16	15.47	30	-14.53
				75	0	20.16	15.47	30	-14.53
	20175	1732.5	16QAM	1	0	20.80	16.11	30	-13.89
				1	74	20.71	16.02	30	-13.98
				36	19	19.90	15.21	30	-14.79
				75	0	19.93	15.24	30	-14.76
	20325	1747.5	16QAM	1	0	21.19	16.50	30	-13.50
				1	74	21.42	16.73	30	-13.27
				36	19	20.03	15.34	30	-14.66
				75	0	20.39	15.70	30	-14.30

Antenna gain (dBi) -4.69

LTE Band 4_Uplink frequency band : 1710 to 1755 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
20	20050	1720	QPSK	1	0	22.01	17.32	30	-12.68
				1	99	21.59	16.90	30	-13.10
				50	25	20.46	15.77	30	-14.23
				100	0	20.77	16.08	30	-13.92
	20175	1732.5	QPSK	1	0	21.77	17.08	30	-12.92
				1	99	22.03	17.34	30	-12.66
				50	25	20.90	16.21	30	-13.79
				100	0	20.95	16.26	30	-13.74
	20300	1745	QPSK	1	0	21.90	17.21	30	-12.79
				1	99	22.44	17.75	30	-12.25
				50	25	21.19	16.50	30	-13.50
				100	0	21.46	16.77	30	-13.23
	20050	1720	16QAM	1	0	21.30	16.61	30	-13.39
				1	99	21.19	16.50	30	-13.50
				50	25	20.25	15.56	30	-14.44
				100	0	20.20	15.51	30	-14.49
	20175	1732.5	16QAM	1	0	20.82	16.13	30	-13.87
				1	99	21.06	16.37	30	-13.63
				50	25	19.87	15.18	30	-14.82
				100	0	19.93	15.24	30	-14.76
	20300	1745	16QAM	1	0	21.05	16.36	30	-13.64
				1	99	21.67	16.98	30	-13.02
				50	25	20.24	15.55	30	-14.45
				100	0	20.40	15.71	30	-14.29

Antenna gain (dBi) -3.61

LTE Band 5_Uplink frequency band : 824 to 849 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
1.4	20407	824.7	QPSK	1	0	21.54	17.93	38.45	-20.52
				1	5	21.49	17.88	38.45	-20.57
				3	2	21.53	17.92	38.45	-20.53
				6	0	20.55	16.94	38.45	-21.51
	20525	836.5	QPSK	1	0	21.19	17.58	38.45	-20.87
				1	5	21.18	17.57	38.45	-20.88
				3	2	21.05	17.44	38.45	-21.01
				6	0	20.27	16.66	38.45	-21.79
	20643	848.3	QPSK	1	0	21.42	17.81	38.45	-20.64
				1	5	21.43	17.82	38.45	-20.63
				3	2	21.35	17.74	38.45	-20.71
				6	0	20.43	16.82	38.45	-21.63
	20407	824.7	16QAM	1	0	21.43	17.82	38.45	-20.63
				1	5	21.19	17.58	38.45	-20.87
				3	2	21.43	17.82	38.45	-20.63
				6	0	20.25	16.64	38.45	-21.81
	20525	836.5	16QAM	1	0	21.30	17.69	38.45	-20.76
				1	5	21.32	17.71	38.45	-20.74
				3	2	21.06	17.45	38.45	-21.00
				6	0	20.07	16.46	38.45	-21.99
	20643	848.3	16QAM	1	0	21.44	17.83	38.45	-20.62
				1	5	21.48	17.87	38.45	-20.58
				3	2	21.16	17.55	38.45	-20.90
				6	0	20.07	16.46	38.45	-21.99

Antenna gain (dBi) -3.61

LTE Band 5_Uplink frequency band : 824 to 849 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
3	20415	825.5	QPSK	1	0	21.52	17.91	38.45	-20.54
				1	14	21.36	17.75	38.45	-20.70
				8	4	20.45	16.84	38.45	-21.61
				15	0	20.48	16.87	38.45	-21.58
	20525	836.5	QPSK	1	0	21.22	17.61	38.45	-20.84
				1	14	21.27	17.66	38.45	-20.79
				8	4	20.30	16.69	38.45	-21.76
				15	0	20.08	16.47	38.45	-21.98
	20635	847.5	QPSK	1	0	21.31	17.70	38.45	-20.75
				1	14	21.33	17.72	38.45	-20.73
				8	4	20.42	16.81	38.45	-21.64
				15	0	20.42	16.81	38.45	-21.64
	20415	825.5	16QAM	1	0	21.42	17.81	38.45	-20.64
				1	14	21.32	17.71	38.45	-20.74
				8	4	20.09	16.48	38.45	-21.97
				15	0	19.95	16.34	38.45	-22.11
	20525	836.5	16QAM	1	0	21.31	17.70	38.45	-20.75
				1	14	21.39	17.78	38.45	-20.67
				8	4	19.94	16.33	38.45	-22.12
				15	0	19.94	16.33	38.45	-22.12
	20635	847.5	16QAM	1	0	21.10	17.49	38.45	-20.96
				1	14	21.19	17.58	38.45	-20.87
				8	4	20.13	16.52	38.45	-21.93
				15	0	20.17	16.56	38.45	-21.89

Antenna gain (dBi) -3.61

LTE Band 5_Uplink frequency band : 824 to 849 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
5	20425	826.5	QPSK	1	0	21.42	17.81	38.45	-20.64
				1	24	21.27	17.66	38.45	-20.79
				12	6	20.40	16.79	38.45	-21.66
				25	0	20.42	16.81	38.45	-21.64
	20525	836.5	QPSK	1	0	21.25	17.64	38.45	-20.81
				1	24	21.33	17.72	38.45	-20.73
				12	6	20.28	16.67	38.45	-21.78
				25	0	20.34	16.73	38.45	-21.72
	20625	846.5	QPSK	1	0	21.39	17.78	38.45	-20.67
				1	24	21.40	17.79	38.45	-20.66
				12	6	20.39	16.78	38.45	-21.67
				25	0	20.36	16.75	38.45	-21.70
	20425	826.5	16QAM	1	0	21.38	17.77	38.45	-20.68
				1	24	21.07	17.46	38.45	-20.99
				12	6	19.94	16.33	38.45	-22.12
				25	0	20.01	16.40	38.45	-22.05
	20525	836.5	16QAM	1	0	20.97	17.36	38.45	-21.09
				1	24	21.09	17.48	38.45	-20.97
				12	6	19.89	16.28	38.45	-22.17
				25	0	19.90	16.29	38.45	-22.16
	20625	846.5	16QAM	1	0	21.23	17.62	38.45	-20.83
				1	24	21.40	17.79	38.45	-20.66
				12	6	19.89	16.28	38.45	-22.17
				25	0	19.91	16.30	38.45	-22.15

Antenna gain (dBi) -3.61

LTE Band 5_Uplink frequency band : 824 to 849 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
10	20450	829	QPSK	1	0	21.47	17.86	38.45	-20.59
				1	49	21.30	17.69	38.45	-20.76
				25	12	20.35	16.74	38.45	-21.71
				50	0	20.07	16.46	38.45	-21.99
	20525	836.5	QPSK	1	0	21.23	17.62	38.45	-20.83
				1	49	20.33	16.72	38.45	-21.73
				25	12	20.34	16.73	38.45	-21.72
				50	0	20.35	16.74	38.45	-21.71
	20600	844	QPSK	1	0	21.50	17.89	38.45	-20.56
				1	49	21.46	17.85	38.45	-20.60
				25	12	20.43	16.82	38.45	-21.63
				50	0	20.47	16.86	38.45	-21.59
	20450	829	16QAM	1	0	20.56	16.95	38.45	-21.50
				1	49	20.54	16.93	38.45	-21.52
				25	12	20.37	16.76	38.45	-21.69
				50	0	20.09	16.48	38.45	-21.97
	20525	836.5	16QAM	1	0	20.49	16.88	38.45	-21.57
				1	49	20.67	17.06	38.45	-21.39
				25	12	20.14	16.53	38.45	-21.92
				50	0	20.21	16.60	38.45	-21.85
	20600	844	16QAM	1	0	20.63	17.02	38.45	-21.43
				1	49	20.61	17.00	38.45	-21.45
				25	12	20.58	16.97	38.45	-21.48
				50	0	20.17	16.56	38.45	-21.89

Antenna gain (dBi) -4.62

LTE Band 7_Uplink frequency band : 2500 to 2570 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
5	20775	2502.5	QPSK	1	0	21.88	17.26	33	-15.74
				1	24	21.88	17.26	33	-15.74
				12	6	20.95	16.33	33	-16.67
				25	0	20.98	16.36	33	-16.64
	21100	2535	QPSK	1	0	21.92	17.30	33	-15.70
				1	24	21.98	17.36	33	-15.64
				12	6	21.05	16.43	33	-16.57
				25	0	21.07	16.45	33	-16.55
	21375	2567.5	QPSK	1	0	21.95	17.33	33	-15.67
				1	24	21.98	17.36	33	-15.64
				12	6	21.03	16.41	33	-16.59
				25	0	21.07	16.45	33	-16.55
	20775	2502.5	16QAM	1	0	21.10	16.48	33	-16.52
				1	24	21.20	16.58	33	-16.42
				12	6	20.01	15.39	33	-17.61
				25	0	19.99	15.37	33	-17.63
	21100	2535	16QAM	1	0	20.76	16.14	33	-16.86
				1	24	21.06	16.44	33	-16.56
				12	6	20.02	15.40	33	-17.60
				25	0	20.06	15.44	33	-17.56
	21375	2567.5	16QAM	1	0	20.99	16.37	33	-16.63
				1	24	20.98	16.36	33	-16.64
				12	6	20.11	15.49	33	-17.51
				25	0	20.08	15.46	33	-17.54

Antenna gain (dBi) -4.62

LTE Band 7_Uplink frequency band : 2500 to 2570 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
10	20800	2505	QPSK	1	0	21.88	17.26	33	-15.74
				1	49	22.05	17.43	33	-15.57
				25	12	21.00	16.38	33	-16.62
				50	0	20.96	16.34	33	-16.66
	21100	2535	QPSK	1	0	21.91	17.29	33	-15.71
				1	49	22.03	17.41	33	-15.59
				25	12	21.05	16.43	33	-16.57
				50	0	21.03	16.41	33	-16.59
	21350	2565	QPSK	1	0	21.66	17.04	33	-15.96
				1	49	20.77	16.15	33	-16.85
				25	12	21.05	16.43	33	-16.57
				50	0	20.17	15.55	33	-17.45
	20800	2505	16QAM	1	0	21.11	16.49	33	-16.51
				1	49	21.21	16.59	33	-16.41
				25	12	20.10	15.48	33	-17.52
				50	0	20.24	15.62	33	-17.38
	21100	2535	16QAM	1	0	20.93	16.31	33	-16.69
				1	49	21.29	16.67	33	-16.33
				25	12	20.10	15.48	33	-17.52
				50	0	20.16	15.54	33	-17.46
	21350	2565	16QAM	1	0	21.20	16.58	33	-16.42
				1	49	21.37	16.75	33	-16.25
				25	12	20.11	15.49	33	-17.51
				50	0	20.19	15.57	33	-17.43

Antenna gain (dBi) -4.62

LTE Band 7_Uplink frequency band : 2500 to 2570 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
15	20825	2507.5	QPSK	1	0	21.83	17.21	33	-15.79
				1	74	21.99	17.37	33	-15.63
				36	19	21.07	16.45	33	-16.55
				75	0	20.02	15.40	33	-17.60
	21100	2535	QPSK	1	0	21.93	17.31	33	-15.69
				1	74	20.68	16.06	33	-16.94
				36	19	21.05	16.43	33	-16.57
				75	0	20.46	15.84	33	-17.16
	21375	2562.5	QPSK	1	0	22.01	17.39	33	-15.61
				1	74	22.03	17.41	33	-15.59
				36	19	21.15	16.53	33	-16.47
				75	0	20.12	15.50	33	-17.50
	20825	2507.5	16QAM	1	0	21.03	16.41	33	-16.59
				1	74	21.29	16.67	33	-16.33
				36	19	20.11	15.49	33	-17.51
				75	0	20.03	15.41	33	-17.59
	21100	2535	16QAM	1	0	21.04	16.42	33	-16.58
				1	74	21.46	16.84	33	-16.16
				36	19	20.08	15.46	33	-17.54
				75	0	20.11	15.49	33	-17.51
	21375	2562.5	16QAM	1	0	21.40	16.78	33	-16.22
				1	74	21.43	16.81	33	-16.19
				36	19	20.22	15.60	33	-17.40
				75	0	20.17	15.55	33	-17.45

Antenna gain (dBi) -4.62

LTE Band 7_Uplink frequency band : 2500 to 2570 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
20	20850	2510	QPSK	1	0	21.91	17.29	33	-15.71
				1	99	22.22	17.60	33	-15.40
				50	25	19.81	15.19	33	-17.81
				100	0	21.20	16.58	33	-16.42
	21100	2535	QPSK	1	0	22.04	17.42	33	-15.58
				1	99	22.18	17.56	33	-15.44
				50	25	21.09	16.47	33	-16.53
				100	0	21.22	16.60	33	-16.40
	21350	2560	QPSK	1	0	21.63	17.01	33	-15.99
				1	99	20.72	16.10	33	-16.90
				50	25	21.10	16.48	33	-16.52
				100	0	21.22	16.60	33	-16.40
	20850	2510	16QAM	1	0	20.74	16.12	33	-16.88
				1	99	21.13	16.51	33	-16.49
				50	25	20.11	15.49	33	-17.51
				100	0	20.23	15.61	33	-17.39
	21100	2535	16QAM	1	0	20.00	15.38	33	-17.62
				1	99	21.48	16.86	33	-16.14
				50	25	20.21	15.59	33	-17.41
				100	0	20.21	15.59	33	-17.41
	21350	2560	16QAM	1	0	20.81	16.19	33	-16.81
				1	99	20.90	16.28	33	-16.72
				50	25	20.21	15.59	33	-17.41
				100	0	20.25	15.63	33	-17.37

Antenna gain (dBi) -5.57

LTE Band 12_Uplink frequency band : 699 to 716 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
1.4	23017	699.7	QPSK	1	0	21.87	16.30	34.77	-18.47
				1	5	21.80	16.23	34.77	-18.54
				3	2	21.64	16.07	34.77	-18.70
				6	0	20.68	15.11	34.77	-19.66
	23095	707.5	QPSK	1	0	21.79	16.22	34.77	-18.55
				1	5	21.75	16.18	34.77	-18.59
				3	2	21.79	16.22	34.77	-18.55
				6	0	20.80	15.23	34.77	-19.54
	23173	715.5	QPSK	1	0	21.81	16.24	34.77	-18.53
				1	5	21.73	16.16	34.77	-18.61
				3	2	21.87	16.30	34.77	-18.47
				6	0	20.88	15.31	34.77	-19.46
	23017	699.7	16QAM	1	0	21.24	15.67	34.77	-19.10
				1	5	21.25	15.68	34.77	-19.09
				3	2	20.92	15.35	34.77	-19.42
				6	0	19.89	14.32	34.77	-20.45
	23095	707.5	16QAM	1	0	20.85	15.28	34.77	-19.49
				1	5	20.91	15.34	34.77	-19.43
				3	2	20.80	15.23	34.77	-19.54
				6	0	19.92	14.35	34.77	-20.42
	23173	715.5	16QAM	1	0	20.88	15.31	34.77	-19.46
				1	5	20.47	14.90	34.77	-19.87
				3	2	20.98	15.41	34.77	-19.36
				6	0	20.01	14.44	34.77	-20.33

Antenna gain (dBi) -5.57

LTE Band 12_Uplink frequency band : 699 to 716 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
3	23025	700.5	QPSK	1	0	21.87	16.30	34.77	-18.47
				1	14	21.92	16.35	34.77	-18.42
				8	4	21.01	15.44	34.77	-19.33
				15	0	20.86	15.29	34.77	-19.48
	23095	707.5	QPSK	1	0	21.74	16.17	34.77	-18.60
				1	14	21.78	16.21	34.77	-18.56
				8	4	20.79	15.22	34.77	-19.55
				15	0	20.87	15.30	34.77	-19.47
	23165	714.5	QPSK	1	0	21.81	16.24	34.77	-18.53
				1	14	21.87	16.30	34.77	-18.47
				8	4	20.89	15.32	34.77	-19.45
				15	0	21.06	15.49	34.77	-19.28
	23025	700.5	16QAM	1	0	21.02	15.45	34.77	-19.32
				1	14	21.15	15.58	34.77	-19.19
				8	4	19.83	14.26	34.77	-20.51
				15	0	19.93	14.36	34.77	-20.41
	23095	707.5	16QAM	1	0	20.85	15.28	34.77	-19.49
				1	14	20.96	15.39	34.77	-19.38
				8	4	19.79	14.22	34.77	-20.55
				15	0	20.06	14.49	34.77	-20.28
	23165	714.5	16QAM	1	0	21.28	15.71	34.77	-19.06
				1	14	20.53	14.96	34.77	-19.81
				8	4	20.03	14.46	34.77	-20.31
				15	0	20.00	14.43	34.77	-20.34

Antenna gain (dBi) -5.57

LTE Band 12_Uplink frequency band : 699 to 716 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
5	23035	701.5	QPSK	1	0	21.91	16.34	34.77	-18.43
				1	24	22.03	16.46	34.77	-18.31
				12	6	21.01	15.44	34.77	-19.33
				25	0	20.99	15.42	34.77	-19.35
	23095	707.5	QPSK	1	0	21.79	16.22	34.77	-18.55
				1	24	21.78	16.21	34.77	-18.56
				12	6	20.82	15.25	34.77	-19.52
				25	0	20.82	15.25	34.77	-19.52
	23155	713.5	QPSK	1	0	22.08	16.51	34.77	-18.26
				1	24	21.88	16.31	34.77	-18.46
				12	6	20.87	15.30	34.77	-19.47
				25	0	20.99	15.42	34.77	-19.35
	23035	701.5	16QAM	1	0	21.08	15.51	34.77	-19.26
				1	24	21.26	15.69	34.77	-19.08
				12	6	20.09	14.52	34.77	-20.25
				25	0	19.92	14.35	34.77	-20.42
	23095	707.5	16QAM	1	0	21.23	15.66	34.77	-19.11
				1	24	21.10	15.53	34.77	-19.24
				12	6	19.85	14.28	34.77	-20.49
				25	0	19.83	14.26	34.77	-20.51
	23155	713.5	16QAM	1	0	20.83	15.26	34.77	-19.51
				1	24	20.83	15.26	34.77	-19.51
				12	6	19.82	14.25	34.77	-20.52
				25	0	19.82	14.25	34.77	-20.52

Antenna gain (dBi) -5.57

LTE Band 12_Uplink frequency band : 699 to 716 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
10	23060	704	QPSK	1	0	21.70	16.13	34.77	-18.64
				1	49	21.83	16.26	34.77	-18.51
				25	12	20.96	15.39	34.77	-19.38
				50	0	19.98	14.41	34.77	-20.36
	23095	707.5	QPSK	1	0	21.78	16.21	34.77	-18.56
				1	49	20.90	15.33	34.77	-19.44
				25	12	20.74	15.17	34.77	-19.60
				50	0	19.87	14.30	34.77	-20.47
	23130	711	QPSK	1	0	21.81	16.24	34.77	-18.53
				1	49	21.97	16.40	34.77	-18.37
				25	12	20.94	15.37	34.77	-19.40
				50	0	21.12	15.55	34.77	-19.22
	23060	704	16QAM	1	0	21.20	15.63	34.77	-19.14
				1	49	21.12	15.55	34.77	-19.22
				25	12	20.02	14.45	34.77	-20.32
				50	0	20.12	14.55	34.77	-20.22
	23095	707.5	16QAM	1	0	21.24	15.67	34.77	-19.10
				1	49	21.50	15.93	34.77	-18.84
				25	12	19.93	14.36	34.77	-20.41
				50	0	20.12	14.55	34.77	-20.22
	23130	711	16QAM	1	0	21.17	15.60	34.77	-19.17
				1	49	21.18	15.61	34.77	-19.16
				25	12	20.01	14.44	34.77	-20.33
				50	0	20.24	14.67	34.77	-20.10

Antenna gain (dBi) -5.71

LTE Band 13_Uplink frequency band : 777 to 787 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
5	23205	779.5	QPSK	1	0	22.14	16.43	34.77	-18.34
				1	24	22.14	16.43	34.77	-18.34
				12	6	21.22	15.51	34.77	-19.26
				25	0	21.25	15.54	34.77	-19.23
	23230	782	QPSK	1	0	22.20	16.49	34.77	-18.28
				1	24	22.16	16.45	34.77	-18.32
				12	6	21.09	15.38	34.77	-19.39
				25	0	21.14	15.43	34.77	-19.34
	23255	784.5	QPSK	1	0	22.08	16.37	34.77	-18.40
				1	24	22.23	16.52	34.77	-18.25
				12	6	21.10	15.39	34.77	-19.38
				25	0	21.13	15.42	34.77	-19.35
	23205	779.5	16QAM	1	0	20.88	15.17	34.77	-19.60
				1	24	21.13	15.42	34.77	-19.35
				12	6	20.74	15.03	34.77	-19.74
				25	0	20.70	14.99	34.77	-19.78
	23230	782	16QAM	1	0	21.55	15.84	34.77	-18.93
				1	24	21.55	15.84	34.77	-18.93
				12	6	20.83	15.12	34.77	-19.65
				25	0	20.77	15.06	34.77	-19.71
	23255	784.5	16QAM	1	0	21.25	15.54	34.77	-19.23
				1	24	21.47	15.76	34.77	-19.01
				12	6	20.74	15.03	34.77	-19.74
				25	0	20.79	15.08	34.77	-19.69

Antenna gain (dBi) -5.71

LTE Band 13_Uplink frequency band : 777 to 787 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
10	23230	782	QPSK	1	0	21.51	15.80	34.77	-18.97
				1	49	21.53	15.82	34.77	-18.95
				25	12	20.55	14.84	34.77	-19.93
				50	0	20.63	14.92	34.77	-19.85
	23230	782	16QAM	1	0	20.79	15.08	34.77	-19.69
				1	49	20.75	15.04	34.77	-19.73
				25	12	19.86	14.15	34.77	-20.62
				50	0	19.92	14.21	34.77	-20.56

Antenna gain (dBi) -5.57

LTE Band 17_Uplink frequency band : 704 to 716 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
5	23755	706.5	QPSK	1	0	21.86	16.29	34.77	-18.48
				1	24	21.72	16.15	34.77	-18.62
				12	6	20.71	15.14	34.77	-19.63
				25	0	20.73	15.16	34.77	-19.61
	23790	710	QPSK	1	0	21.60	16.03	34.77	-18.74
				1	24	21.82	16.25	34.77	-18.52
				12	6	20.79	15.22	34.77	-19.55
				25	0	20.75	15.18	34.77	-19.59
	23825	713.5	QPSK	1	0	21.76	16.19	34.77	-18.58
				1	24	21.67	16.10	34.77	-18.67
				12	6	20.75	15.18	34.77	-19.59
				25	0	20.86	15.29	34.77	-19.48
	23755	706.5	16QAM	1	0	21.12	15.55	34.77	-19.22
				1	24	21.03	15.46	34.77	-19.31
				12	6	19.71	14.14	34.77	-20.63
				25	0	19.76	14.19	34.77	-20.58
	23790	710	16QAM	1	0	20.86	15.29	34.77	-19.48
				1	24	20.99	15.42	34.77	-19.35
				12	6	19.82	14.25	34.77	-20.52
				25	0	19.77	14.20	34.77	-20.57
	23825	713.5	16QAM	1	0	20.88	15.31	34.77	-19.46
				1	24	20.76	15.19	34.77	-19.58
				12	6	19.93	14.36	34.77	-20.41
				25	0	19.83	14.26	34.77	-20.51

Antenna gain (dBi) -5.57

LTE Band 17_Uplink frequency band : 704 to 716 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
10	23780	709	QPSK	1	0	21.94	16.37	34.77	-18.40
				1	49	20.82	15.25	34.77	-19.52
				25	12	20.93	15.36	34.77	-19.41
				50	0	19.88	14.31	34.77	-20.46
	23790	710	QPSK	1	0	21.61	16.04	34.77	-18.73
				1	49	21.75	16.18	34.77	-18.59
				25	12	21.00	15.43	34.77	-19.34
				50	0	21.01	15.44	34.77	-19.33
	23800	711	QPSK	1	0	21.63	16.06	34.77	-18.71
				1	49	21.79	16.22	34.77	-18.55
				25	12	20.85	15.28	34.77	-19.49
				50	0	21.03	15.46	34.77	-19.31
	23780	709	16QAM	1	0	19.89	14.32	34.77	-20.45
				1	49	20.85	15.28	34.77	-19.49
				25	12	19.99	14.42	34.77	-20.35
				50	0	20.26	14.69	34.77	-20.08
	23790	710	16QAM	1	0	20.91	15.34	34.77	-19.43
				1	49	21.26	15.69	34.77	-19.08
				25	12	19.96	14.39	34.77	-20.38
				50	0	20.09	14.52	34.77	-20.25
	23800	711	16QAM	1	0	20.92	15.35	34.77	-19.42
				1	49	21.08	15.51	34.77	-19.26
				25	12	19.95	14.38	34.77	-20.39
				50	0	20.03	14.46	34.77	-20.31

Antenna gain (dBi) -3.61

LTE Band 26_Uplink frequency band : 824 to 849 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
1.4	26697	814.7	QPSK	1	0	21.92	18.31	38.45	-20.14
				1	5	21.84	18.23	38.45	-20.22
				3	2	21.87	18.26	38.45	-20.19
				6	0	20.91	17.30	38.45	-21.15
	26865	831.5	QPSK	1	0	21.64	18.03	38.45	-20.42
				1	5	21.61	18.00	38.45	-20.45
				3	2	21.58	17.97	38.45	-20.48
				6	0	20.67	17.06	38.45	-21.39
	27033	848.3	QPSK	1	0	21.75	18.14	38.45	-20.31
				1	5	21.70	18.09	38.45	-20.36
				3	2	21.60	17.99	38.45	-20.46
				6	0	20.72	17.11	38.45	-21.34
	26697	814.7	16QAM	1	0	20.94	17.33	38.45	-21.12
				1	5	20.53	16.92	38.45	-21.53
				3	2	21.09	17.48	38.45	-20.97
				6	0	19.97	16.36	38.45	-22.09
	26865	831.5	16QAM	1	0	20.88	17.27	38.45	-21.18
				1	5	20.93	17.32	38.45	-21.13
				3	2	20.63	17.02	38.45	-21.43
				6	0	19.65	16.04	38.45	-22.41
	27033	848.3	16QAM	1	0	20.98	17.37	38.45	-21.08
				1	5	20.97	17.36	38.45	-21.09
				3	2	20.77	17.16	38.45	-21.29
				6	0	19.80	16.19	38.45	-22.26

Antenna gain (dBi) -3.61

LTE Band 26_Uplink frequency band : 824 to 849 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
3	26705	815.5	QPSK	1	0	21.30	17.69	38.45	-20.76
				1	14	21.66	18.05	38.45	-20.40
				8	4	20.44	16.83	38.45	-21.62
				15	0	20.74	17.13	38.45	-21.32
	26865	831.5	QPSK	1	0	21.65	18.04	38.45	-20.41
				1	14	21.68	18.07	38.45	-20.38
				8	4	20.63	17.02	38.45	-21.43
				15	0	20.62	17.01	38.45	-21.44
	27025	847.5	QPSK	1	0	21.68	18.07	38.45	-20.38
				1	14	21.64	18.03	38.45	-20.42
				8	4	20.66	17.05	38.45	-21.40
				15	0	20.63	17.02	38.45	-21.43
	26705	815.5	16QAM	1	0	20.60	16.99	38.45	-21.46
				1	14	20.94	17.33	38.45	-21.12
				8	4	19.80	16.19	38.45	-22.26
				15	0	19.76	16.15	38.45	-22.30
	26865	831.5	16QAM	1	0	20.79	17.18	38.45	-21.27
				1	14	20.87	17.26	38.45	-21.19
				8	4	19.74	16.13	38.45	-22.32
				15	0	19.72	16.11	38.45	-22.34
	27025	847.5	16QAM	1	0	20.79	17.18	38.45	-21.27
				1	14	20.88	17.27	38.45	-21.18
				8	4	19.59	15.98	38.45	-22.47
				15	0	19.80	16.19	38.45	-22.26

Antenna gain (dBi) -3.61

LTE Band 26_Uplink frequency band : 824 to 849 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
5	26715	816.5	QPSK	1	0	22.09	18.48	38.45	-19.97
				1	24	21.12	17.51	38.45	-20.94
				12	6	20.97	17.36	38.45	-21.09
				25	0	21.01	17.40	38.45	-21.05
	26865	831.5	QPSK	1	0	21.72	18.11	38.45	-20.34
				1	24	21.94	18.33	38.45	-20.12
				12	6	20.88	17.27	38.45	-21.18
				25	0	20.89	17.28	38.45	-21.17
	27015	846.5	QPSK	1	0	21.76	18.15	38.45	-20.30
				1	24	21.72	18.11	38.45	-20.34
				12	6	20.62	17.01	38.45	-21.44
				25	0	20.42	16.81	38.45	-21.64
	26715	816.5	16QAM	1	0	21.02	17.41	38.45	-21.04
				1	24	20.76	17.15	38.45	-21.30
				12	6	20.06	16.45	38.45	-22.00
				25	0	20.07	16.46	38.45	-21.99
	26865	831.5	16QAM	1	0	20.10	16.49	38.45	-21.96
				1	24	20.51	16.90	38.45	-21.55
				12	6	19.63	16.02	38.45	-22.43
				25	0	19.61	16.00	38.45	-22.45
	27015	846.5	16QAM	1	0	20.86	17.25	38.45	-21.20
				1	24	21.05	17.44	38.45	-21.01
				12	6	19.73	16.12	38.45	-22.33
				25	0	19.73	16.12	38.45	-22.33

Antenna gain (dBi) -3.61

LTE Band 26_Uplink frequency band : 824 to 849 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
10	26750	820	QPSK	1	0	22.04	18.43	38.45	-20.02
				1	49	21.87	18.26	38.45	-20.19
				25	12	21.01	17.40	38.45	-21.05
				50	0	19.92	16.31	38.45	-22.14
	26865	831.5	QPSK	1	0	20.93	17.32	38.45	-21.13
				1	49	21.05	17.44	38.45	-21.01
				25	12	19.99	16.38	38.45	-22.07
				50	0	20.93	17.32	38.45	-21.13
	26990	844	QPSK	1	0	21.96	18.35	38.45	-20.10
				1	49	21.93	18.32	38.45	-20.13
				25	12	20.99	17.38	38.45	-21.07
				50	0	19.98	16.37	38.45	-22.08
	26750	820	16QAM	1	0	21.43	17.82	38.45	-20.63
				1	49	21.04	17.43	38.45	-21.02
				25	12	19.80	16.19	38.45	-22.26
				50	0	19.96	16.35	38.45	-22.10
	26865	831.5	16QAM	1	0	19.98	16.37	38.45	-22.08
				1	49	20.18	16.57	38.45	-21.88
				25	12	20.00	16.39	38.45	-22.06
				50	0	20.04	16.43	38.45	-22.02
	26990	844	16QAM	1	0	21.17	17.56	38.45	-20.89
				1	49	20.21	16.60	38.45	-21.85
				25	12	20.00	16.39	38.45	-22.06
				50	0	20.10	16.49	38.45	-21.96

Antenna gain (dBi) -3.61

LTE Band 26_Uplink frequency band : 824 to 849 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
15	26775	822.5	QPSK	1	0	21.99	18.38	38.45	-20.07
				1	74	21.89	18.28	38.45	-20.17
				36	19	19.93	16.32	38.45	-22.13
				75	0	20.68	17.07	38.45	-21.38
	26865	831.5	QPSK	1	0	21.68	18.07	38.45	-20.38
				1	74	21.87	18.26	38.45	-20.19
				36	19	20.85	17.24	38.45	-21.21
				75	0	20.80	17.19	38.45	-21.26
	26965	841.5	QPSK	1	0	21.80	18.19	38.45	-20.26
				1	74	21.96	18.35	38.45	-20.10
				36	19	19.75	16.14	38.45	-22.31
				75	0	21.07	17.46	38.45	-20.99
	26775	822.5	16QAM	1	0	21.18	17.57	38.45	-20.88
				1	74	21.17	17.56	38.45	-20.89
				36	19	19.94	16.33	38.45	-22.12
				75	0	19.70	16.09	38.45	-22.36
	26865	831.5	16QAM	1	0	21.10	17.49	38.45	-20.96
				1	74	20.37	16.76	38.45	-21.69
				36	19	20.00	16.39	38.45	-22.06
				75	0	19.85	16.24	38.45	-22.21
	26965	841.5	16QAM	1	0	20.95	17.34	38.45	-21.11
				1	74	21.14	17.53	38.45	-20.92
				36	19	20.10	16.49	38.45	-21.96
				75	0	20.17	16.56	38.45	-21.89

Antenna gain (dBi) -3.61

Part 90S_LTE Band 26_Uplink frequency band : 814 to 824 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
1.4	26697	814.7	QPSK	1	0	22.03	18.42	50	-31.58
				1	5	22.12	18.51	50	-31.49
				3	2	22.09	18.48	50	-31.52
				6	0	21.11	17.50	50	-32.50
	26740	819	QPSK	1	0	22.26	18.65	50	-31.35
				1	5	22.17	18.56	50	-31.44
				3	2	22.12	18.51	50	-31.49
				6	0	21.19	17.58	50	-32.42
	26783	823.3	QPSK	1	0	22.08	18.47	50	-31.53
				1	5	22.16	18.55	50	-31.45
				3	2	22.26	18.65	50	-31.35
				6	0	21.33	17.72	50	-32.28
	26697	814.7	16QAM	1	0	21.32	17.71	50	-32.29
				1	5	21.42	17.81	50	-32.19
				3	2	21.12	17.51	50	-32.49
				6	0	20.18	16.57	50	-33.43
	26740	819	16QAM	1	0	21.57	17.96	50	-32.04
				1	5	21.46	17.85	50	-32.15
				3	2	21.21	17.60	50	-32.40
				6	0	20.21	16.60	50	-33.40
	26783	823.3	16QAM	1	0	21.75	18.14	50	-31.86
				1	5	21.72	18.11	50	-31.89
				3	2	21.23	17.62	50	-32.38
				6	0	20.29	16.68	50	-33.32

Antenna gain (dBi) -3.61

Part 90S_LTE Band 26_Uplink frequency band : 814 to 824 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
3	26705	815.5	QPSK	1	0	21.96	18.35	50	-31.65
				1	14	22.12	18.51	50	-31.49
				8	4	21.17	17.56	50	-32.44
				15	0	21.09	17.48	50	-32.52
	26740	819	QPSK	1	0	22.12	18.51	50	-31.49
				1	14	22.12	18.51	50	-31.49
				8	4	21.24	17.63	50	-32.37
				15	0	21.21	17.60	50	-32.40
	26775	822.5	QPSK	1	0	22.12	18.51	50	-31.49
				1	14	22.17	18.56	50	-31.44
				8	4	21.25	17.64	50	-32.36
				15	0	21.19	17.58	50	-32.42
	26705	815.5	16QAM	1	0	21.17	17.56	50	-32.44
				1	14	21.03	17.42	50	-32.58
				8	4	20.22	16.61	50	-33.39
				15	0	20.18	16.57	50	-33.43
	26740	819	16QAM	1	0	21.51	17.90	50	-32.10
				1	14	21.56	17.95	50	-32.05
				8	4	20.31	16.70	50	-33.30
				15	0	20.24	16.63	50	-33.37
	26775	822.5	16QAM	1	0	21.38	17.77	50	-32.23
				1	14	21.52	17.91	50	-32.09
				8	4	20.32	16.71	50	-33.29
				15	0	20.30	16.69	50	-33.31

Antenna gain (dBi) -3.61

Part 90S_LTE Band 26_Uplink frequency band : 814 to 824 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
5	26715	816.5	QPSK	1	0	22.02	18.41	50	-31.59
				1	24	22.26	18.65	50	-31.35
				12	6	21.24	17.63	50	-32.37
				25	0	21.01	17.40	50	-32.60
	26740	819	QPSK	1	0	22.23	18.62	50	-31.38
				1	24	22.32	18.71	50	-31.29
				12	6	21.32	17.71	50	-32.29
				25	0	21.27	17.66	50	-32.34
	26765	821.5	QPSK	1	0	22.14	18.53	50	-31.47
				1	24	22.27	18.66	50	-31.34
				12	6	21.15	17.54	50	-32.46
				25	0	21.29	17.68	50	-32.32
	26715	816.5	16QAM	1	0	21.10	17.49	50	-32.51
				1	24	20.61	17.00	50	-33.00
				12	6	20.32	16.71	50	-33.29
				25	0	20.26	16.65	50	-33.35
	26740	819	16QAM	1	0	21.50	17.89	50	-32.11
				1	24	21.41	17.80	50	-32.20
				12	6	20.38	16.77	50	-33.23
				25	0	20.28	16.67	50	-33.33
	26765	821.5	16QAM	1	0	21.13	17.52	50	-32.48
				1	24	21.31	17.70	50	-32.30
				12	6	20.24	16.63	50	-33.37
				25	0	20.30	16.69	50	-33.31

Antenna gain (dBi) -3.61

Part 90S_LTE Band 26_Uplink frequency band : 814 to 824 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
10	26740	819	QPSK	1	0	22.08	18.47	50	-31.53
				1	49	22.30	18.69	50	-31.31
				25	12	21.26	17.65	50	-32.35
				50	0	21.30	17.69	50	-32.31
	26740	819	16QAM	1	0	21.41	17.80	50	-32.20
				1	49	21.72	18.11	50	-31.89
				25	12	20.42	16.81	50	-33.19
				50	0	19.97	16.36	50	-33.64

Antenna gain (dBi) -4.11

LTE Band 30_Uplink frequency band : 2305 to 2315 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
5	27685	2307.5	QPSK	1	0	21.92	17.81	24	-6.19
				1	24	21.82	17.71	24	-6.29
				12	6	20.87	16.76	24	-7.24
				25	0	20.93	16.82	24	-7.18
	27710	2310	QPSK	1	0	21.79	17.68	24	-6.32
				1	24	21.80	17.69	24	-6.31
				12	6	20.91	16.80	24	-7.20
				25	0	20.97	16.86	24	-7.14
	27735	2312.5	QPSK	1	0	21.98	17.87	24	-6.13
				1	24	21.98	17.87	24	-6.13
				12	6	20.72	16.61	24	-7.39
				25	0	20.69	16.58	24	-7.42
	27685	2307.5	16QAM	1	0	20.60	16.49	24	-7.51
				1	24	20.53	16.42	24	-7.58
				12	6	19.87	15.76	24	-8.24
				25	0	19.80	15.69	24	-8.31
	27710	2310	16QAM	1	0	21.08	16.97	24	-7.03
				1	24	21.07	16.96	24	-7.04
				12	6	19.92	15.81	24	-8.19
				25	0	19.94	15.83	24	-8.17
	27735	2312.5	16QAM	1	0	20.92	16.81	24	-7.19
				1	24	20.92	16.81	24	-7.19
				12	6	19.76	15.65	24	-8.35
				25	0	19.82	15.71	24	-8.29

Antenna gain (dBi)	-4.11								
LTE Band 30_Uplink frequency band : 2305 to 2315 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm/10MHz)	EIRP Average (dBm/10MHz)	EIRP Limit (dBm/5MHZ)	Margin (dB)
10	27710	2310	QPSK	1	0	22.16	18.05	24	-5.95
				1	49	22.00	17.89	24	-6.11
				25	12	21.09	16.98	24	-7.02
				50	0	21.22	17.11	24	-6.89
	27710	2310	16QAM	1	0	21.48	17.37	24	-6.63
				1	49	21.34	17.23	24	-6.77
				25	12	20.07	15.96	24	-8.04
				50	0	20.18	16.07	24	-7.93

Antenna gain (dBi)	-4.11								
LTE Band 30_Uplink frequency band : 2305 to 2315 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm/5MHz)	EIRP Average (dBm/5MHz)	EIRP Limit (dBm/5MHZ)	Margin (dB)
10	27710	2310	QPSK	1	0	19.11	15.00	24	-9.00
				1	49	18.98	14.87	24	-9.13
				25	12	18.07	13.96	24	-10.04
				50	0	18.13	14.02	24	-9.98
	27710	2310	16QAM	1	0	18.41	14.30	24	-9.70
				1	49	18.31	14.20	24	-9.80
				25	12	17.04	12.93	24	-11.07
				50	0	17.12	13.01	24	-10.99

Antenna gain (dBi) -4.57

LTE Band 38_Uplink frequency band : 2570 to 2620 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
5	37775	2572.5	QPSK	1	0	22.02	17.45	33	-15.55
				1	24	22.03	17.46	33	-15.54
				12	6	20.95	16.38	33	-16.62
				25	0	20.96	16.39	33	-16.61
	38000	2595	QPSK	1	0	22.17	17.60	33	-15.40
				1	24	22.18	17.61	33	-15.39
				12	6	21.12	16.55	33	-16.45
				25	0	21.13	16.56	33	-16.44
	38225	2617.5	QPSK	1	0	22.20	17.63	33	-15.37
				1	24	22.19	17.62	33	-15.38
				12	6	21.11	16.54	33	-16.46
				25	0	21.12	16.55	33	-16.45
	37775	2572.5	16QAM	1	0	21.32	16.75	33	-16.25
				1	24	21.33	16.76	33	-16.24
				12	6	20.12	15.55	33	-17.45
				25	0	20.04	15.47	33	-17.53
	38000	2595	16QAM	1	0	21.42	16.85	33	-16.15
				1	24	21.43	16.86	33	-16.14
				12	6	20.22	15.65	33	-17.35
				25	0	20.15	15.58	33	-17.42
	38225	2617.5	16QAM	1	0	21.41	16.84	33	-16.16
				1	24	21.40	16.83	33	-16.17
				12	6	20.26	15.69	33	-17.31
				25	0	20.22	15.65	33	-17.35

Antenna gain (dBi) -4.57

LTE Band 38_Uplink frequency band : 2570 to 2620 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
10	37800	2575	QPSK	1	0	22.21	17.64	33	-15.36
				1	49	22.24	17.67	33	-15.33
				25	12	21.05	16.48	33	-16.52
				50	0	21.03	16.46	33	-16.54
	38000	2595	QPSK	1	0	22.25	17.68	33	-15.32
				1	49	22.27	17.70	33	-15.30
				25	12	21.13	16.56	33	-16.44
				50	0	21.11	16.54	33	-16.46
	38200	2615	QPSK	1	0	22.16	17.59	33	-15.41
				1	49	22.23	17.66	33	-15.34
				25	12	21.17	16.60	33	-16.40
				50	0	21.15	16.58	33	-16.42
	37800	2575	16QAM	1	0	21.20	16.63	33	-16.37
				1	49	20.40	15.83	33	-17.17
				25	12	20.12	15.55	33	-17.45
				50	0	20.00	15.43	33	-17.57
	38000	2595	16QAM	1	0	21.38	16.81	33	-16.19
				1	49	21.29	16.72	33	-16.28
				25	12	20.19	15.62	33	-17.38
				50	0	20.09	15.52	33	-17.48
	38200	2615	16QAM	1	0	21.45	16.88	33	-16.12
				1	49	21.30	16.73	33	-16.27
				25	12	20.26	15.69	33	-17.31
				50	0	20.14	15.57	33	-17.43

Antenna gain (dBi) -4.57

LTE Band 38_Uplink frequency band : 2570 to 2620 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
15	37825	2577.5	QPSK	1	0	22.02	17.45	33	-15.55
				1	74	22.15	17.58	33	-15.42
				36	19	21.03	16.46	33	-16.54
				75	0	20.99	16.42	33	-16.58
	38000	2595	QPSK	1	0	21.27	16.70	33	-16.30
				1	74	22.16	17.59	33	-15.41
				36	19	21.09	16.52	33	-16.48
				75	0	21.05	16.48	33	-16.52
	38175	2612.5	QPSK	1	0	21.31	16.74	33	-16.26
				1	74	22.08	17.51	33	-15.49
				36	19	21.15	16.58	33	-16.42
				75	0	21.11	16.54	33	-16.46
	37825	2577.5	16QAM	1	0	20.26	15.69	33	-17.31
				1	74	21.15	16.58	33	-16.42
				36	19	20.16	15.59	33	-17.41
				75	0	20.07	15.50	33	-17.50
	38000	2595	16QAM	1	0	21.25	16.68	33	-16.32
				1	74	20.44	15.87	33	-17.13
				36	19	20.28	15.71	33	-17.29
				75	0	20.14	15.57	33	-17.43
	38175	2612.5	16QAM	1	0	21.27	16.70	33	-16.30
				1	74	20.42	15.85	33	-17.15
				36	19	20.27	15.70	33	-17.30
				75	0	20.14	15.57	33	-17.43

Antenna gain (dBi) -4.57

LTE Band 38_Uplink frequency band : 2570 to 2620 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
20	37850	2580	QPSK	1	0	22.23	17.66	33	-15.34
				1	99	22.20	17.63	33	-15.37
				50	25	21.03	16.46	33	-16.54
				100	0	21.04	16.47	33	-16.53
	38000	2595	QPSK	1	0	22.21	17.64	33	-15.36
				1	99	22.21	17.64	33	-15.36
				50	25	21.06	16.49	33	-16.51
				100	0	21.05	16.48	33	-16.52
	38150	2610	QPSK	1	0	22.27	17.70	33	-15.30
				1	99	22.20	17.63	33	-15.37
				50	25	21.12	16.55	33	-16.45
				100	0	21.11	16.54	33	-16.46
	37850	2580	16QAM	1	0	21.20	16.63	33	-16.37
				1	99	21.31	16.74	33	-16.26
				50	25	19.99	15.42	33	-17.58
				100	0	20.06	15.49	33	-17.51
	38000	2595	16QAM	1	0	21.25	16.68	33	-16.32
				1	99	20.40	15.83	33	-17.17
				50	25	20.06	15.49	33	-17.51
				100	0	20.14	15.57	33	-17.43
	38150	2610	16QAM	1	0	21.49	16.92	33	-16.08
				1	99	21.45	16.88	33	-16.12
				50	25	20.12	15.55	33	-17.45
				100	0	20.19	15.62	33	-17.38

Antenna gain (dBi) -4.57

LTE Band 41_Uplink frequency band : 2496 to 2690 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
5	39675	2498.5	QPSK	1	0	21.77	17.20	33	-15.80
				1	24	21.79	17.22	33	-15.78
				12	6	20.77	16.20	33	-16.80
				25	0	20.81	16.24	33	-16.76
	40620	2593	QPSK	1	0	21.85	17.28	33	-15.72
				1	24	21.78	17.21	33	-15.79
				12	6	20.94	16.37	33	-16.63
				25	0	20.93	16.36	33	-16.64
	41565	2687.5	QPSK	1	0	21.83	17.26	33	-15.74
				1	24	21.36	16.79	33	-16.21
				12	6	20.91	16.34	33	-16.66
				25	0	20.89	16.32	33	-16.68
	39675	2498.5	16QAM	1	0	21.07	16.50	33	-16.50
				1	24	21.08	16.51	33	-16.49
				12	6	19.93	15.36	33	-17.64
				25	0	19.84	15.27	33	-17.73
	40620	2593	16QAM	1	0	21.23	16.66	33	-16.34
				1	24	21.25	16.68	33	-16.32
				12	6	20.04	15.47	33	-17.53
				25	0	19.97	15.40	33	-17.60
	41565	2687.5	16QAM	1	0	21.19	16.62	33	-16.38
				1	24	21.24	16.67	33	-16.33
				12	6	20.01	15.44	33	-17.56
				25	0	19.95	15.38	33	-17.62

Antenna gain (dBi) -4.57

LTE Band 41_Uplink frequency band : 2496 to 2690 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
10	39700	2501	QPSK	1	0	21.04	16.47	33	-16.53
				1	49	21.01	16.44	33	-16.56
				25	12	19.85	15.28	33	-17.72
				50	0	20.84	16.27	33	-16.73
	40620	2593	QPSK	1	0	22.14	17.57	33	-15.43
				1	49	21.40	16.83	33	-16.17
				25	12	20.99	16.42	33	-16.58
				50	0	20.97	16.40	33	-16.60
	41540	2685	QPSK	1	0	22.09	17.52	33	-15.48
				1	49	22.07	17.50	33	-15.50
				25	12	20.95	16.38	33	-16.62
				50	0	20.94	16.37	33	-16.63
	39700	2501	16QAM	1	0	20.12	15.55	33	-17.45
				1	49	20.11	15.54	33	-17.46
				25	12	19.90	15.33	33	-17.67
				50	0	19.85	15.28	33	-17.72
	40620	2593	16QAM	1	0	20.51	15.94	33	-17.06
				1	49	20.52	15.95	33	-17.05
				25	12	20.06	15.49	33	-17.51
				50	0	19.96	15.39	33	-17.61
	41540	2685	16QAM	1	0	20.58	16.01	33	-16.99
				1	49	20.60	16.03	33	-16.97
				25	12	20.04	15.47	33	-17.53
				50	0	19.92	15.35	33	-17.65

Antenna gain (dBi) -4.57

LTE Band 41_Uplink frequency band : 2496 to 2690 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
15	39725	2503.5	QPSK	1	0	20.38	15.81	33	-17.19
				1	74	20.35	15.78	33	-17.22
				36	19	20.83	16.26	33	-16.74
				75	0	20.87	16.30	33	-16.70
	40620	2593	QPSK	1	0	21.29	16.72	33	-16.28
				1	74	22.07	17.50	33	-15.50
				36	19	20.95	16.38	33	-16.62
				75	0	20.90	16.33	33	-16.67
	41515	2682.5	QPSK	1	0	22.08	17.51	33	-15.49
				1	74	20.59	16.02	33	-16.98
				36	19	20.92	16.35	33	-16.65
				75	0	20.87	16.30	33	-16.70
	39725	2503.5	16QAM	1	0	21.06	16.49	33	-16.51
				1	74	20.15	15.58	33	-17.42
				36	19	20.03	15.46	33	-17.54
				75	0	19.85	15.28	33	-17.72
	40620	2593	16QAM	1	0	21.17	16.60	33	-16.40
				1	74	20.43	15.86	33	-17.14
				36	19	20.09	15.52	33	-17.48
				75	0	19.94	15.37	33	-17.63
	41515	2682.5	16QAM	1	0	19.70	15.13	33	-17.87
				1	74	21.12	16.55	33	-16.45
				36	19	20.03	15.46	33	-17.54
				75	0	19.95	15.38	33	-17.62

Antenna gain (dBi) -4.57

LTE Band 41_Uplink frequency band : 2496 to 2690 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
20	39750	2506	QPSK	1	0	21.98	17.41	33	-15.59
				1	99	22.03	17.46	33	-15.54
				50	25	20.89	16.32	33	-16.68
				100	0	20.91	16.34	33	-16.66
	40620	2593	QPSK	1	0	22.08	17.51	33	-15.49
				1	99	22.02	17.45	33	-15.55
				50	25	20.90	16.33	33	-16.67
				100	0	20.94	16.37	33	-16.63
	41490	2680	QPSK	1	0	20.76	16.19	33	-16.81
				1	99	20.57	16.00	33	-17.00
				50	25	20.85	16.28	33	-16.72
				100	0	20.95	16.38	33	-16.62
	39750	2506	16QAM	1	0	21.09	16.52	33	-16.48
				1	99	21.14	16.57	33	-16.43
				50	25	19.81	15.24	33	-17.76
				100	0	19.89	15.32	33	-17.68
	40620	2593	16QAM	1	0	21.20	16.63	33	-16.37
				1	99	20.32	15.75	33	-17.25
				50	25	19.90	15.33	33	-17.67
				100	0	19.95	15.38	33	-17.62
	41490	2680	16QAM	1	0	19.78	15.21	33	-17.79
				1	99	19.65	15.08	33	-17.92
				50	25	19.83	15.26	33	-17.74
				100	0	19.90	15.33	33	-17.67

Antenna gain (dBi) -4.69

LTE Band 66_Uplink frequency band : 1710 to 1780 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
1.4	131979	1710.7	QPSK	1	0	22.07	17.38	30	-12.62
				1	5	22.13	17.44	30	-12.56
				3	2	22.05	17.36	30	-12.64
				6	0	21.04	16.35	30	-13.65
	132322	1745	QPSK	1	0	22.48	17.79	30	-12.21
				1	5	22.53	17.84	30	-12.16
				3	2	22.37	17.68	30	-12.32
				6	0	21.42	16.73	30	-13.27
	132665	1779.3	QPSK	1	0	22.67	17.98	30	-12.02
				1	5	22.64	17.95	30	-12.05
				3	2	22.45	17.76	30	-12.24
				6	0	21.58	16.89	30	-13.11
	131979	1710.7	16QAM	1	0	20.66	15.97	30	-14.03
				1	5	20.69	16.00	30	-14.00
				3	2	20.96	16.27	30	-13.73
				6	0	20.08	15.39	30	-14.61
	132322	1745	16QAM	1	0	21.73	17.04	30	-12.96
				1	5	21.69	17.00	30	-13.00
				3	2	21.29	16.60	30	-13.40
				6	0	20.31	15.62	30	-14.38
	132665	1779.3	16QAM	1	0	22.17	17.48	30	-12.52
				1	5	21.90	17.21	30	-12.79
				3	2	21.45	16.76	30	-13.24
				6	0	20.29	15.60	30	-14.40

Antenna gain (dBi) -4.69

LTE Band 66_Uplink frequency band : 1710 to 1780 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
3	131987	1711.5	QPSK	1	0	21.27	16.58	30	-13.42
				1	14	21.33	16.64	30	-13.36
				8	4	20.89	16.20	30	-13.80
				15	0	21.22	16.53	30	-13.47
	132322	1745	QPSK	1	0	22.00	17.31	30	-12.69
				1	14	21.62	16.93	30	-13.07
				8	4	21.37	16.68	30	-13.32
				15	0	21.39	16.70	30	-13.30
	132657	1778.5	QPSK	1	0	22.39	17.70	30	-12.30
				1	14	22.54	17.85	30	-12.15
				8	4	21.60	16.91	30	-13.09
				15	0	21.61	16.92	30	-13.08
	131987	1711.5	16QAM	1	0	21.41	16.72	30	-13.28
				1	14	21.49	16.80	30	-13.20
				8	4	19.64	14.95	30	-15.05
				15	0	20.00	15.31	30	-14.69
	132322	1745	16QAM	1	0	21.33	16.64	30	-13.36
				1	14	21.87	17.18	30	-12.82
				8	4	20.21	15.52	30	-14.48
				15	0	20.19	15.50	30	-14.50
	132657	1778.5	16QAM	1	0	21.88	17.19	30	-12.81
				1	14	22.07	17.38	30	-12.62
				8	4	20.37	15.68	30	-14.32
				15	0	20.32	15.63	30	-14.37

Antenna gain (dBi) -4.69

LTE Band 66_Uplink frequency band : 1710 to 1780 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
5	131997	1712.5	QPSK	1	0	22.22	17.53	30	-12.47
				1	24	22.36	17.67	30	-12.33
				12	6	21.11	16.42	30	-13.58
				25	0	21.34	16.65	30	-13.35
	132322	1745	QPSK	1	0	22.51	17.82	30	-12.18
				1	24	22.57	17.88	30	-12.12
				12	6	21.30	16.61	30	-13.39
				25	0	21.53	16.84	30	-13.16
	132647	1777.5	QPSK	1	0	22.49	17.80	30	-12.20
				1	24	22.71	18.02	30	-11.98
				12	6	21.44	16.75	30	-13.25
				25	0	21.62	16.93	30	-13.07
	131997	1712.5	16QAM	1	0	21.14	16.45	30	-13.55
				1	24	21.24	16.55	30	-13.45
				12	6	19.96	15.27	30	-14.73
				25	0	20.17	15.48	30	-14.52
	132322	1745	16QAM	1	0	21.72	17.03	30	-12.97
				1	24	21.73	17.04	30	-12.96
				12	6	20.17	15.48	30	-14.52
				25	0	20.39	15.70	30	-14.30
	132647	1777.5	16QAM	1	0	21.49	16.80	30	-13.20
				1	24	21.98	17.29	30	-12.71
				12	6	20.32	15.63	30	-14.37
				25	0	20.52	15.83	30	-14.17

Antenna gain (dBi) -4.69

LTE Band 66_Uplink frequency band : 1710 to 1780 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
10	132022	1715	QPSK	1	0	22.16	17.47	30	-12.53
				1	49	22.41	17.72	30	-12.28
				25	12	21.34	16.65	30	-13.35
				50	0	20.31	15.62	30	-14.38
	132322	1745	QPSK	1	0	22.25	17.56	30	-12.44
				1	49	22.76	18.07	30	-11.93
				25	12	21.35	16.66	30	-13.34
				50	0	21.52	16.83	30	-13.17
	132622	1775	QPSK	1	0	22.49	17.80	30	-12.20
				1	49	22.71	18.02	30	-11.98
				25	12	21.49	16.80	30	-13.20
				50	0	21.64	16.95	30	-13.05
	132022	1715	16QAM	1	0	20.48	15.79	30	-14.21
				1	49	21.88	17.19	30	-12.81
				25	12	20.24	15.55	30	-14.45
				50	0	20.40	15.71	30	-14.29
	132322	1745	16QAM	1	0	21.55	16.86	30	-13.14
				1	49	21.83	17.14	30	-12.86
				25	12	20.20	15.51	30	-14.49
				50	0	20.54	15.85	30	-14.15
	132622	1775	16QAM	1	0	21.79	17.10	30	-12.90
				1	49	22.23	17.54	30	-12.46
				25	12	20.28	15.59	30	-14.41
				50	0	20.58	15.89	30	-14.11

Antenna gain (dBi) -4.69

LTE Band 66_Uplink frequency band : 1710 to 1780 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
15	132047	1717.5	QPSK	1	0	22.06	17.37	30	-12.63
				1	74	22.24	17.55	30	-12.45
				36	19	21.48	16.79	30	-13.21
				75	0	21.19	16.50	30	-13.50
	132322	1745	QPSK	1	0	22.37	17.68	30	-12.32
				1	74	22.78	18.09	30	-11.91
				36	19	21.46	16.77	30	-13.23
				75	0	21.28	16.59	30	-13.41
	132597	1772.5	QPSK	1	0	22.49	17.80	30	-12.20
				1	74	22.62	17.93	30	-12.07
				36	19	21.46	16.77	30	-13.23
				75	0	21.67	16.98	30	-13.02
	132047	1717.5	16QAM	1	0	21.45	16.76	30	-13.24
				1	74	21.41	16.72	30	-13.28
				36	19	20.36	15.67	30	-14.33
				75	0	20.54	15.85	30	-14.15
	132322	1745	16QAM	1	0	21.61	16.92	30	-13.08
				1	74	22.00	17.31	30	-12.69
				36	19	20.40	15.71	30	-14.29
				75	0	20.64	15.95	30	-14.05
	132597	1772.5	16QAM	1	0	21.79	17.10	30	-12.90
				1	74	21.87	17.18	30	-12.82
				36	19	20.34	15.65	30	-14.35
				75	0	20.64	15.95	30	-14.05

Antenna gain (dBi) -4.69

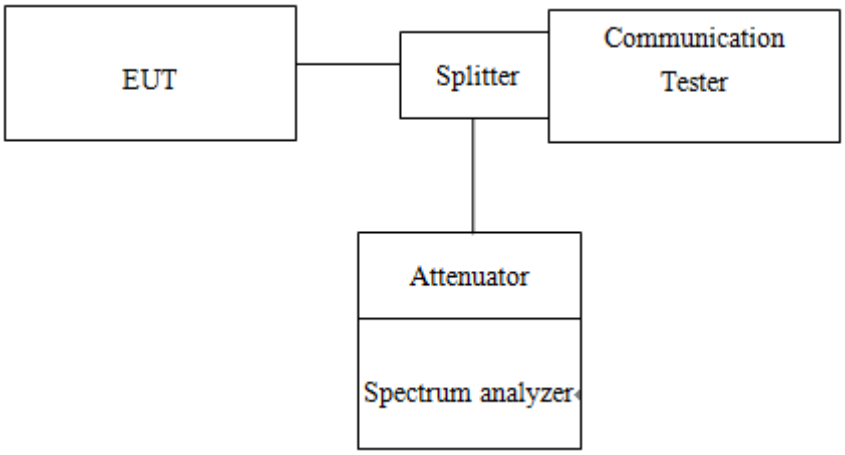
LTE Band 66_Uplink frequency band : 1710 to 1780 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
20	132072	1720	QPSK	1	0	22.21	17.52	30	-12.48
				1	99	22.37	17.68	30	-12.32
				50	25	21.49	16.80	30	-13.20
				100	0	21.52	16.83	30	-13.17
	132322	1745	QPSK	1	0	22.22	17.53	30	-12.47
				1	99	22.73	18.04	30	-11.96
				50	25	21.60	16.91	30	-13.09
				100	0	21.70	17.01	30	-12.99
	132572	1770	QPSK	1	0	22.77	18.08	30	-11.92
				1	99	22.75	18.06	30	-11.94
				50	25	20.37	15.68	30	-14.32
				100	0	21.76	17.07	30	-12.93
	132072	1720	16QAM	1	0	21.58	16.89	30	-13.11
				1	99	21.58	16.89	30	-13.11
				50	25	20.42	15.73	30	-14.27
				100	0	20.61	15.92	30	-14.08
	132322	1745	16QAM	1	0	20.58	15.89	30	-14.11
				1	99	21.72	17.03	30	-12.97
				50	25	20.49	15.80	30	-14.20
				100	0	20.73	16.04	30	-13.96
	132572	1770	16QAM	1	0	22.07	17.38	30	-12.62
				1	99	22.07	17.38	30	-12.62
				50	25	20.23	15.54	30	-14.46
				100	0	20.71	16.02	30	-13.98

7. OCCUPIED BANDWIDTH MEASUREMENT

7.1. Standard Applicable

The occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power.

7.2. Test Set-up



7.3. Measurement Procedure

99% &26dB Bandwidth with detector peak

The EUT's output RF connector was connected with a short cable to the spectrum analyzer, RBW was set to about 1% of emission BW, VBW= 3 times RBW, -26dBc display line was placed on the screen (or 26dB bandwidth), the occupied bandwidth is the delta frequency between the two points where the display line intersects the signal trace. Then set RBW to 99% bandwidth, RBW= 1%, VBW= 3 RBW, with span > 2 * Signal BW, set % Power = 99%.

99% Bandwidth with detector sample

The EUT's output RF connector was connected with a short cable to the spectrum analyzer, RBW was set to about 1% ~ 5% of emission BW, VBW= 3 times RBW, -20dBc display line was placed on the screen (or 20dB bandwidth). Set RBW to 99% bandwidth, RBW= 1% ~ 5%, VBW= 3 RBW, with span > 2 * Signal BW, set % Power = 99%.

7.4. Measurement Equipment Used

Conducted Emission (measured at antenna port) Test Site					
EQUIPMENT TYPE	**MFR**	**MODEL NUMBER**	**SERIAL NUMBER**	**LAST CAL.**	**CAL DUE.**
Spectrum Analyzer	Agilent	N9010A	MY53400256	10/30/2017	10/29/2018
Radio Communication Analyer	Anritsu	MT8820C	6201107337	06/09/2018	06/08/2019
DC Power Supply	Agilent	E3640A	MY53130054	09/04/2017	09/03/2018
Attenuator	Marvelous	MVE2213-10	RF30	12/26/2017	12/25/2018
Splitter	RF-LAMBAD	RFLT2W1G18G	RF35	12/26/2017	12/25/2018
Spectrum Analyzer	Agilent	N9010A	MY53400256	10/30/2017	10/29/2018
Radio Communication Analyer	Anritsu	MT8820C	6201107337	06/09/2018	06/08/2019
DC Power Supply	Agilent	E3640A	MY53130054	09/04/2017	09/03/2018

7.5. Measurement Result

Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		WCDMA II	HSDPA II	HSUPA II	WCDMA II	HSDPA II	HSUPA II
1852.40	9262	4.06200	4.05770	4.06240	4.60000	4.60570	4.60470
1880.00	9400	4.06500	4.05740	4.07810	4.59570	4.59850	4.59090
1907.60	9538	4.05890	4.06650	4.06410	4.60060	4.59220	4.58870

Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		WCDMA IV	HSDPA IV	HSUPA IV	WCDMA IV	HSDPA IV	HSUPA IV
1712.40	1312	4.06640	4.06410	4.04980	4.06640	4.06410	4.04980
1732.60	1413	4.06410	4.05280	4.05470	4.06410	4.05280	4.05470
1752.60	1513	4.05620	4.05660	4.05200	4.05620	4.05660	4.05200

Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		WCDMA V	HSDPA V	HSUPA V	WCDMA V	HSDPA V	HSUPA V
826.40	4132	4.05710	4.04900	4.05350	4.60280	4.59360	4.59110
836.60	4183	4.07490	4.06710	4.06740	4.61720	4.61090	4.60760
846.60	4233	4.03650	4.02830	4.04040	4.62290	4.60130	4.61120

LTE BAND 2 Channel bandwidth: 1.4MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
1850.7	18607	1.1159	1.1295	1.3178	1.3336
1880.0	18900	1.1202	1.1259	1.3348	1.3335
1909.3	19193	1.1138	1.1259	1.3181	1.3386

LTE BAND 2 Channel bandwidth: 3MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
1851.5	18615	2.7282	2.7361	3.0777	3.0673
1880.0	18900	2.7495	2.7291	3.0623	3.0728
1908.5	19185	2.7266	2.7273	3.0714	3.0670

LTE BAND 2 Channel bandwidth: 5MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
1852.5	18625	4.5323	4.5150	5.1200	5.0996
1880.0	18900	4.5365	4.5200	5.0856	5.0730
1907.5	19175	4.5436	4.5251	5.1343	5.0989

LTE BAND 2 Channel bandwidth: 10MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
1855.0	18650	9.0948	9.0671	10.599	10.494
1880.0	18900	9.0912	9.0576	10.584	10.482
1905.0	19150	9.1042	9.0714	10.609	10.541

LTE BAND 2 Channel bandwidth: 15MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
1857.5	18675	13.528	13.544	15.450	15.762
1880.0	18900	13.544	13.553	15.868	15.683
1902.5	19125	13.549	13.565	15.745	15.797

LTE BAND 2 Channel bandwidth: 20MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
1860.0	18700	17.971	18.006	19.950	19.984
1880.0	18900	18.057	18.057	20.171	20.153
1900.0	19100	17.989	18.022	20.177	19.932

LTE BAND 4 Channel bandwidth: 1.4MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
1710.7	19957	1.1076	1.1162	1.3215	1.3249
1732.5	20175	1.1094	1.1124	1.3264	1.3286
1754.3	20393	1.1104	1.1110	1.3270	1.3256

LTE BAND 4 Channel bandwidth: 3MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
1711.5	19965	2.7224	2.7340	3.0551	3.0806
1732.5	20175	2.7185	2.7286	3.0473	3.0602
1753.5	20385	2.7327	2.7287	3.0553	3.0573

LTE BAND 4 Channel bandwidth: 5MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
1712.5	19957	4.5219	4.5264	5.1063	5.0496
1732.5	20175	4.5226	4.5135	5.0742	5.0958
1752.5	20375	4.5127	4.5032	5.0680	5.0759

LTE BAND 4 Channel bandwidth: 10MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
1715.0	20000	9.0674	9.0484	10.486	10.525
1732.5	20175	9.0735	9.0834	10.544	10.564
1750.0	20350	9.0572	9.0504	10.476	10.498

LTE BAND 4 Channel bandwidth: 15MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
1717.5	20025	13.515	13.515	15.594	15.655
1732.5	20175	13.572	13.572	16.074	15.747
1747.5	20325	13.522	13.523	15.637	15.515

LTE BAND 4 Channel bandwidth: 20MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
1720.0	20050	17.973	18.012	20.092	19.869
1732.5	20175	18.039	18.038	19.999	20.130
1745.0	20300	17.958	17.985	19.941	19.905

LTE BAND 5 Channel bandwidth: 1.4MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
824.7	20407	1.1102	1.1221	1.3245	1.3217
836.5	20525	1.1093	1.1200	1.3156	1.3305
848.3	20643	1.1121	1.1158	1.3303	1.3292

LTE BAND 5 Channel bandwidth: 3MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
825.5	20415	2.7152	2.7309	3.0501	3.0433
836.5	20525	2.7217	2.7446	3.0555	3.0651
847.5	20635	2.7220	2.7280	3.0531	3.0710

LTE BAND 5 Channel bandwidth: 5MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
826.5	20425	4.5134	4.5204	5.1041	5.1031
836.5	20525	4.5259	4.5186	5.1019	5.0753
846.5	20625	4.4999	4.4970	5.0763	5.0334

LTE BAND 5 Channel bandwidth: 10MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
829.0	20450	9.0304	9.0175	10.496	10.414
836.5	20525	9.1123	9.0934	10.618	10.556
844.0	20600	9.0381	9.0065	10.464	10.492

LTE BAND 7 Channel bandwidth: 5MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
2502.5	20775	4.5290	4.5177	5.1210	5.0565
2535.0	21100	4.5321	4.5225	5.1109	5.0757
2567.5	21425	4.5378	4.5212	5.0610	5.0811

LTE BAND 7 Channel bandwidth: 10MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
2505.0	20800	9.0748	9.0647	10.485	10.558
2535.0	21100	9.1043	9.0628	10.549	10.548
2565.0	21400	9.0943	9.0691	10.569	10.633

LTE BAND 7 Channel bandwidth: 15MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
2507.5	20825	13.519	13.604	15.595	15.891
2535.0	21100	13.568	13.574	15.869	15.647
2562.5	21375	13.548	13.570	15.687	15.695

LTE BAND 7 Channel bandwidth: 20MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
2510.0	20850	18.040	18.053	20.424	20.293
2535.0	21100	18.034	17.982	20.265	20.171
2560.0	21350	18.018	18.040	20.064	20.215

LTE BAND 12 Channel bandwidth: 1.4MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
699.7	23017	1.1108	1.1058	1.3338	1.3157
707.5	23095	1.1157	1.1153	1.3373	1.3201
715.3	23173	1.1170	1.1118	1.3270	1.3200

LTE BAND 12 Channel bandwidth: 3MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
700.5	23025	2.7199	2.7209	3.0368	3.0635
707.5	23095	2.7421	2.7467	3.0766	3.0884
714.5	23165	2.7270	2.7393	3.0508	3.0482

LTE BAND 12 Channel bandwidth: 5MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
701.5	23035	4.4832	4.4826	5.0018	4.9788
707.5	23095	4.5394	4.5380	5.1758	5.1372
713.5	23155	4.4832	4.4801	5.0109	4.9920

LTE BAND 12 Channel bandwidth: 10MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
704.0	23060	9.0298	9.0111	10.338	10.421
707.5	23095	9.2149	9.1953	10.611	10.658
711.0	23130	9.0063	8.9611	10.391	10.331

LTE BAND 13 Channel bandwidth: 5MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
779.5	23205	4.4849	4.4891	4.9130	4.9530
782.0	23230	4.5157	4.5089	5.0250	4.9860
784.5	23255	4.4895	4.5025	4.9220	4.9480

LTE BAND 13 Channel bandwidth: 10MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
782.0	23230	8.961	8.943	9.806	9.751

LTE BAND 17 Channel bandwidth: 5MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
706.5	23755	4.5623	4.5516	5.4475	5.1492
710.0	23790	4.5279	4.5252	5.0755	5.0372
713.5	23825	4.4924	4.4830	5.0340	5.0010

LTE BAND 17 Channel bandwidth: 10MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
709.0	23780	9.1119	9.1250	10.548	10.593
710.0	23790	9.0544	9.0315	10.414	10.506
711.0	23800	8.9940	8.9900	10.377	10.367

LTE BAND 26 Channel bandwidth: 1.4MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
824.7	26797	1.1097	1.1114	1.3190	1.3290
836.5	26915	1.1129	1.1146	1.3230	1.3270
848.3	27033	1.1108	1.1186	1.3220	1.3340

LTE BAND 26 Channel bandwidth: 3MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
825.5	26805	2.7105	2.7098	3.0340	3.0450
836.5	26915	2.7181	2.7203	3.0370	3.0460
847.5	27025	2.7133	2.7200	3.0340	3.0340

LTE BAND 26 Channel bandwidth: 5MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
826.5	26815	4.5181	4.5314	5.0790	5.0390
836.5	26915	4.5194	4.5234	5.1160	5.0520
846.5	27015	4.5000	4.5092	5.1000	5.0430

LTE BAND 26 Channel bandwidth: 10MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
829.0	26840	9.1222	9.1137	10.600	10.600
836.5	26915	9.0399	9.0527	10.470	10.540
844.0	26990	9.0135	9.0062	10.420	10.380

LTE BAND 26 Channel bandwidth: 15MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
831.5	26865	13.602	13.643	15.570	15.680
836.5	26915	13.432	13.469	15.410	15.320
841.5	26965	13.521	13.609	15.430	15.620

LTE BAND 26 for part 90S Channel bandwidth: 1.4MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
814.7	26697	1.1110	1.1135	1.3210	1.3330
819.0	26740	1.1166	1.1148	1.3300	1.3200
823.3	26783	1.1149	1.1131	1.3300	1.3250

LTE BAND 26 for part 90S Channel bandwidth: 3MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
815.5	26705	2.7117	2.7167	3.0450	3.0620
819.0	26740	2.7219	2.7187	3.0680	3.0510
822.5	26775	2.7172	2.7253	3.0620	3.0540

LTE BAND 26 for part 90S Channel bandwidth: 5MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
816.5	26715	4.5357	4.5234	5.1050	5.0600
819.0	26740	4.5505	4.5229	5.1850	5.0310
821.5	26765	4.5457	4.5273	5.1600	5.0610

LTE BAND 26 for part 90S Channel bandwidth: 10MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
819.0	26740	9.1620	9.1200	10.510	10.510

LTE BAND 30 Channel bandwidth: 5MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
2307.5	27685	4.5396	4.5143	5.0660	5.0840
2310.0	27710	4.5162	4.5170	5.0900	5.0680
2312.5	27735	4.5367	4.5078	5.1020	5.1040

LTE BAND 30 Channel bandwidth: 10MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	16QAM	QPSK
2310.0	27710	9.0392	9.0264	10.5300	10.5000

LTE BAND 38 Channel bandwidth: 5MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
2572.5	37775	4.5092	4.5174	5.1580	5.0860
2595.0	38000	4.5256	4.5059	5.0730	5.0450
2617.5	38225	4.5359	4.5082	5.0430	5.0460

LTE BAND 38 Channel bandwidth: 10MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
2575.0	37800	9.0153	9.0363	10.510	10.470
2595.0	38000	9.0579	9.0592	10.540	10.540
2615.0	38200	9.0291	9.0543	10.470	10.500

LTE BAND 38 Channel bandwidth: 15MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
2577.5	37825	13.569	13.472	16.270	15.260
2595.0	38000	13.524	13.508	15.560	15.220
2612.5	38175	13.525	13.511	15.490	15.410

LTE BAND 38 Channel bandwidth: 20MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
2580.0	37850	18.012	17.983	19.990	19.800
2595.0	38000	18.033	17.967	20.160	20.690
2610.0	38150	17.995	18.003	20.020	19.560

LTE BAND 41 Channel bandwidth: 5MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
2498.5	39675	4.5289	4.5218	5.0280	5.0640
2593.0	40620	4.5387	4.5228	5.0700	5.0550
2687.5	41565	4.5202	4.5226	5.1130	5.0300

LTE BAND 41 Channel bandwidth: 10MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
2501.0	39700	9.0522	9.0601	10.590	10.530
2593.0	40620	9.0446	9.0708	10.480	10.560
2685.0	41540	9.0924	9.0735	10.540	10.490

LTE BAND 41 Channel bandwidth: 15MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
2503.5	39725	13.573	13.496	15.830	15.560
2593.0	40620	13.567	13.503	15.470	15.440
2682.5	41515	13.551	13.512	16.540	15.270

LTE BAND 41 Channel bandwidth: 20MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
2506.0	39750	18.005	18.017	20.400	21.010
2593.0	40620	18.001	18.046	20.600	20.550
2680.0	41490	17.980	18.020	20.260	20.630

LTE BAND 66 Channel bandwidth: 1.4MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
1710.7	131979	1.1162	1.1138	1.3290	1.3270
1745.0	132322	1.1084	1.1150	1.3260	1.3230
1779.3	132665	1.1193	1.1109	1.3320	1.3290

LTE BAND 66 Channel bandwidth: 3MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
1711.5	131987	2.7205	2.7166	3.0510	3.0580
1745.0	132322	2.7272	2.7245	3.0600	3.0500
1778.5	132657	2.7309	2.7296	3.0530	3.0470

LTE BAND 66 Channel bandwidth: 5MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
1712.5	131997	4.5232	4.5160	5.0770	5.0740
1745.0	132322	4.5181	4.5196	5.1230	5.1030
1777.5	132647	4.5414	4.5137	5.1230	5.0550

LTE BAND 66 Channel bandwidth: 10MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
1715.0	132022	9.0579	9.0505	10.6000	10.5200
1745.0	132322	9.0667	9.0347	10.5000	10.5100
1775.0	132622	9.0665	9.0273	10.5100	10.4600

LTE BAND 66 Channel bandwidth: 15MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
1717.5	132047	13.5030	13.4870	15.4700	15.6200
1745.0	132322	13.5050	13.5320	15.6000	15.6500
1772.5	132597	13.4810	13.4560	15.5900	15.6600

LTE BAND 66 Channel bandwidth: 20MHz					
Freq. (MHz)	CH	99% BW (MHz)		26 dB BW (MHz)	
		QPSK	16QAM	QPSK	16QAM
1720.0	132072	17.9560	17.9720	19.9100	19.9200
1745.0	132322	17.9390	17.9770	20.0400	20.0300
1770.0	132572	17.9440	17.9700	19.8400	20.0400

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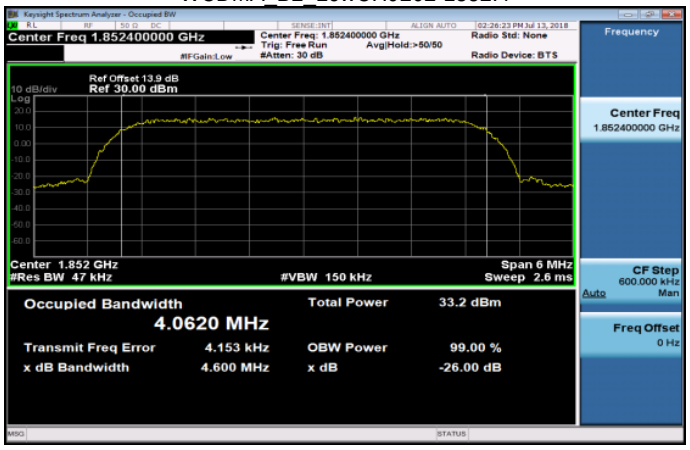

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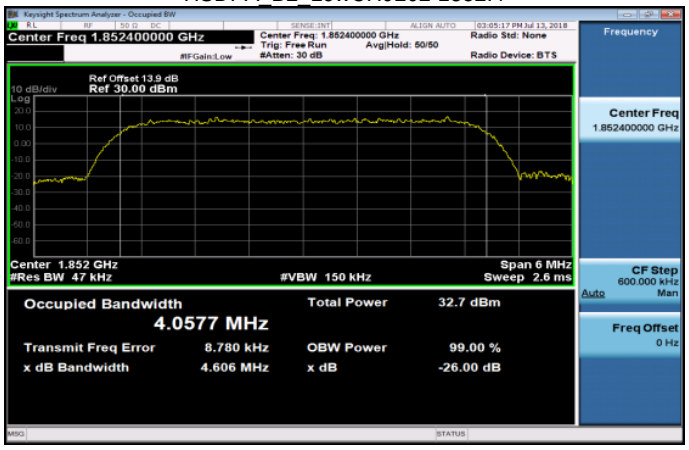

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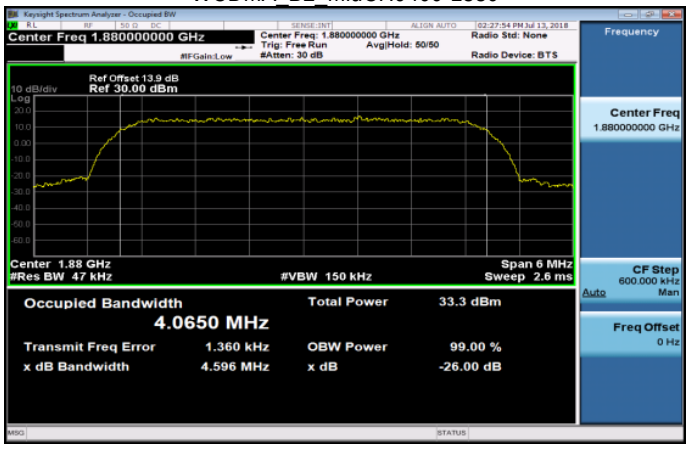

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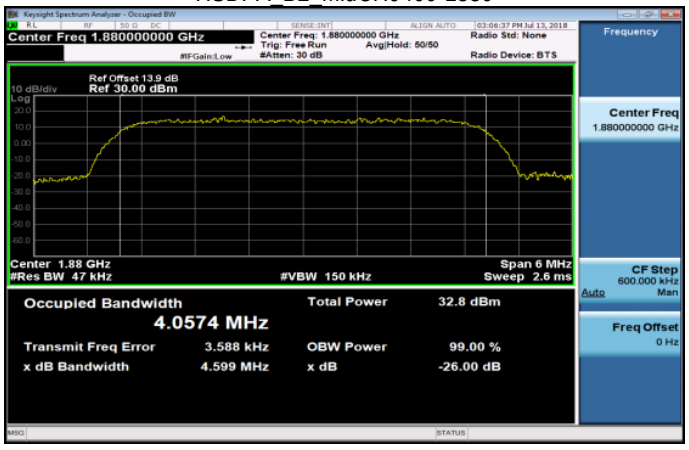

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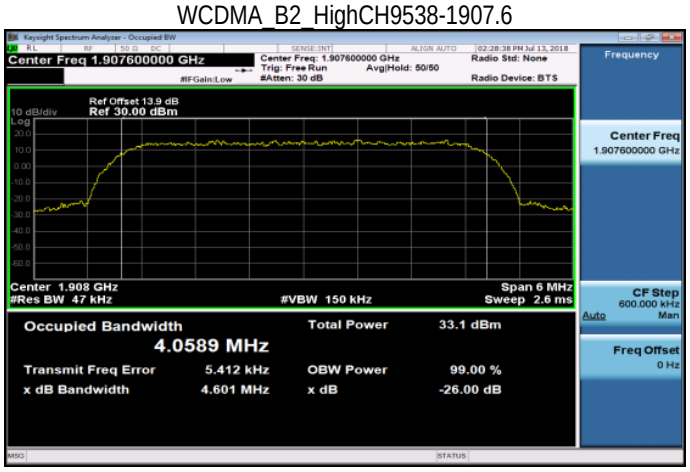

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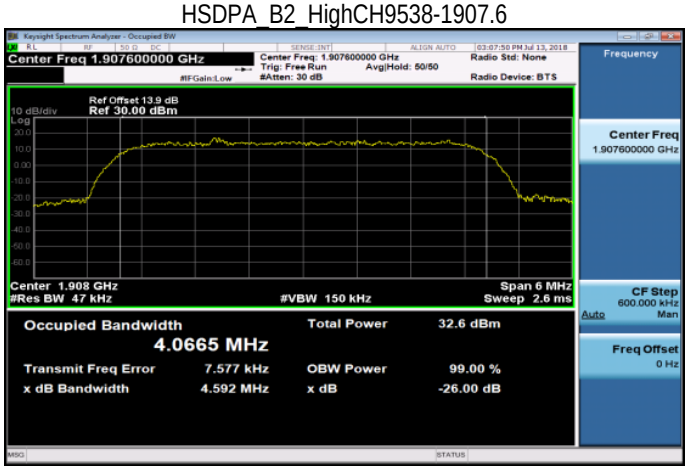

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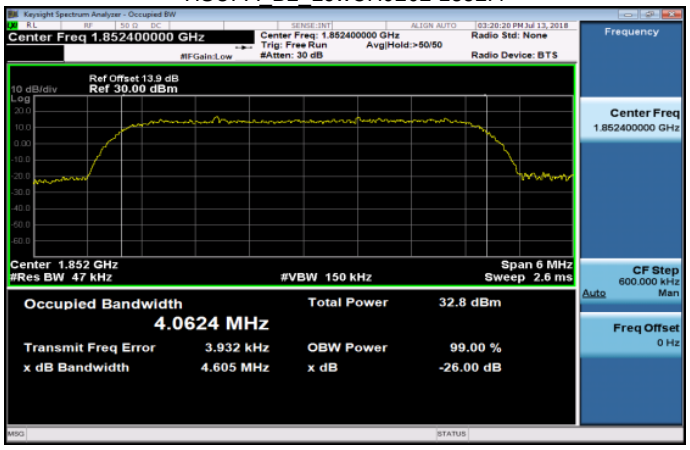

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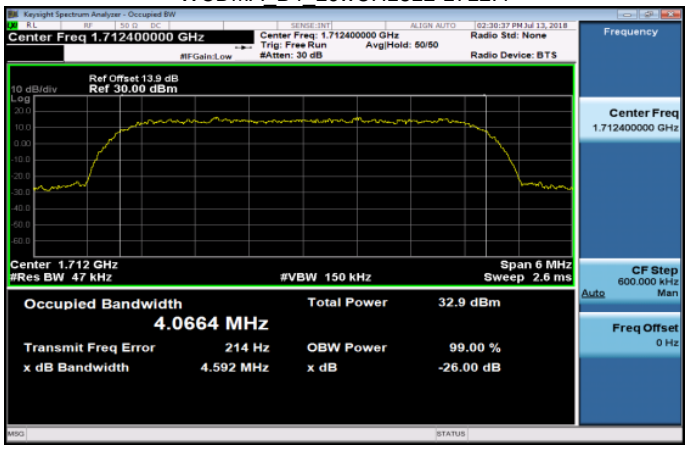

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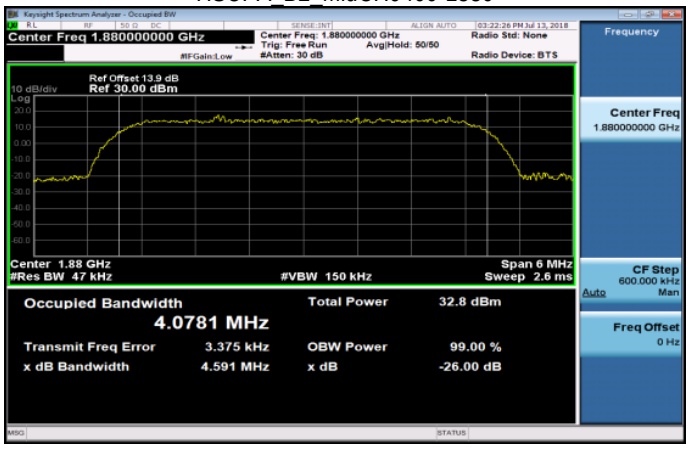

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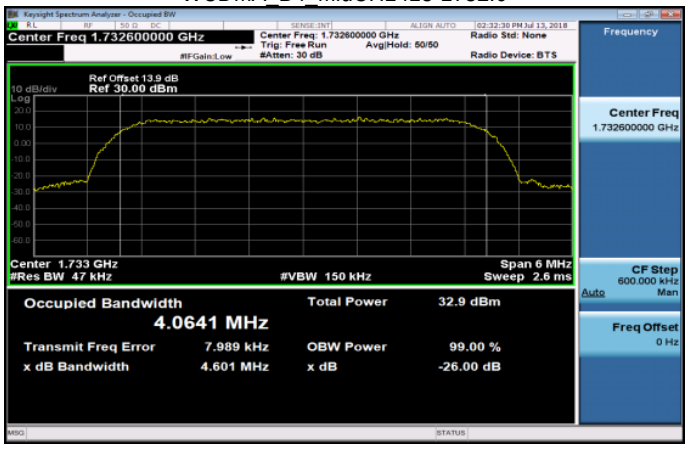

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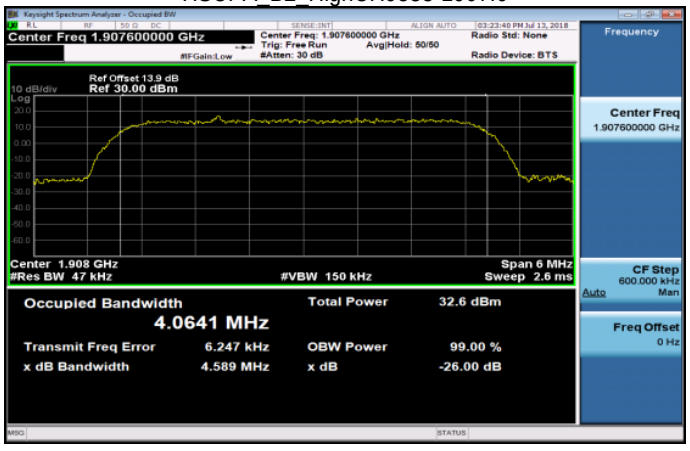

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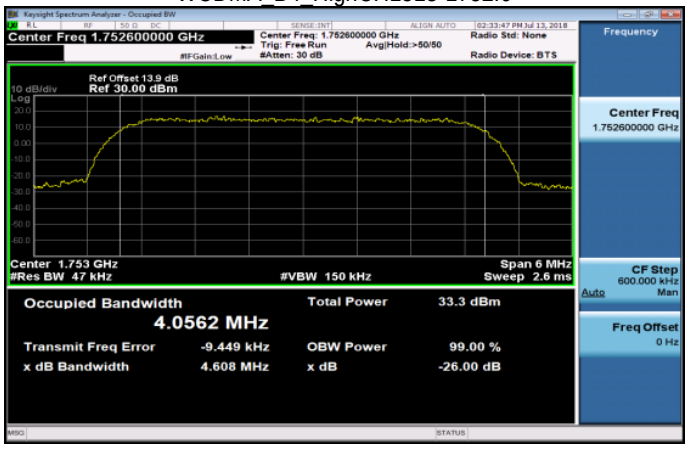

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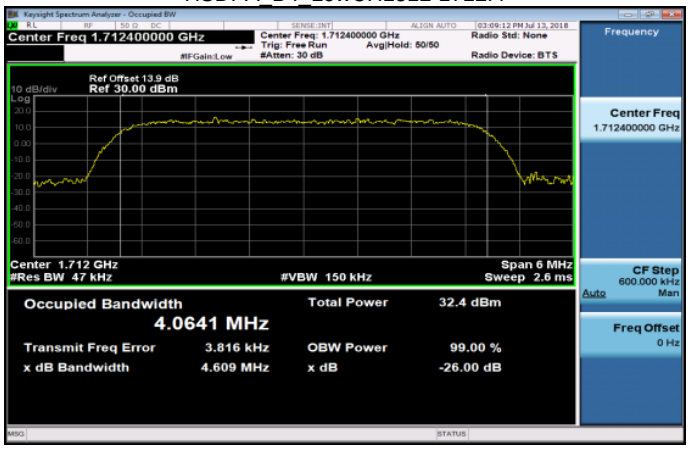

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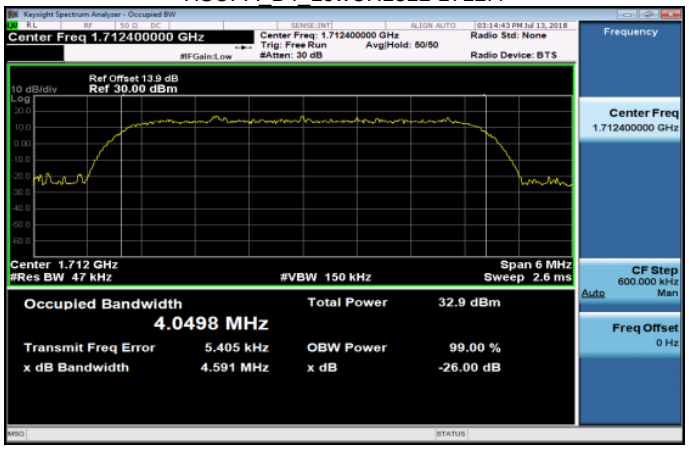

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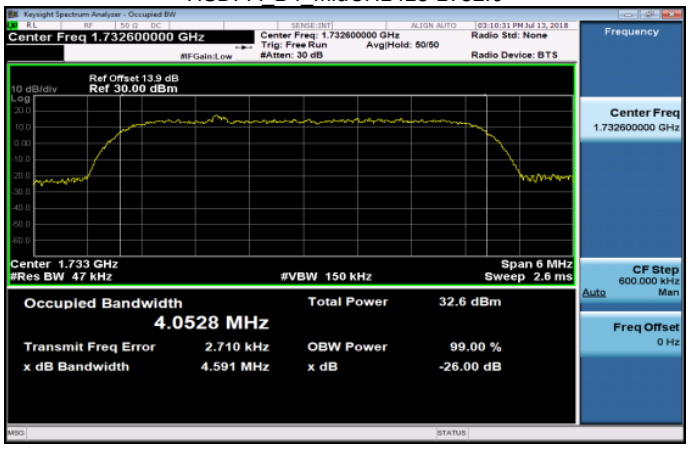

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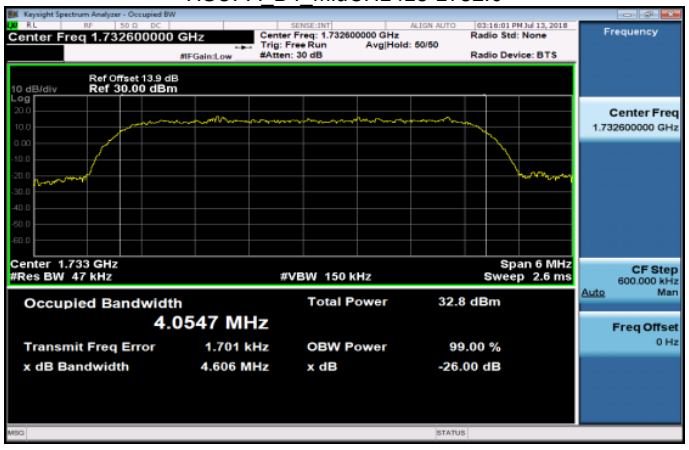

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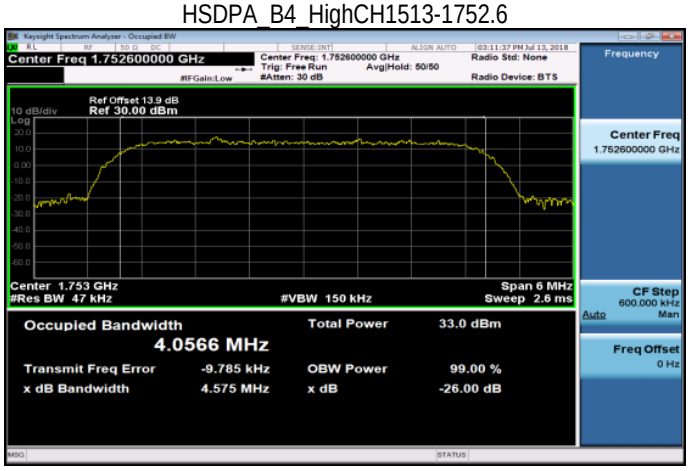

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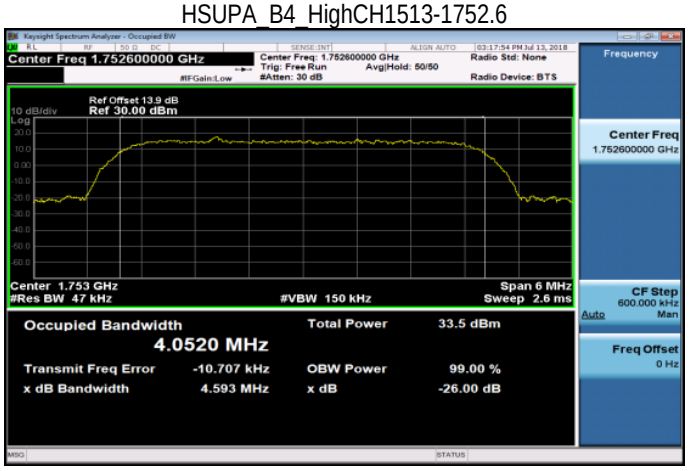

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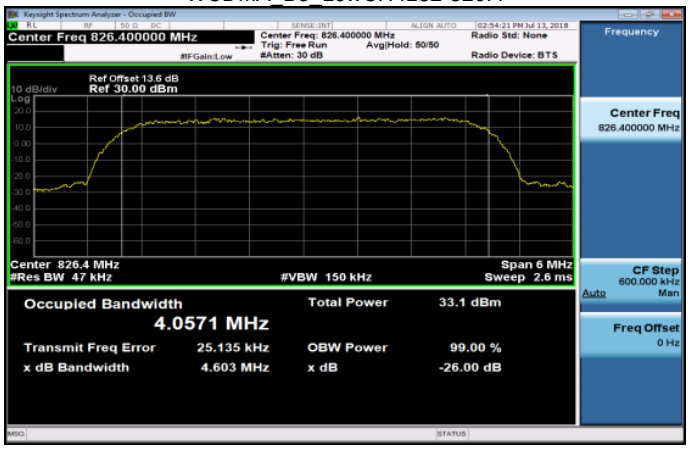

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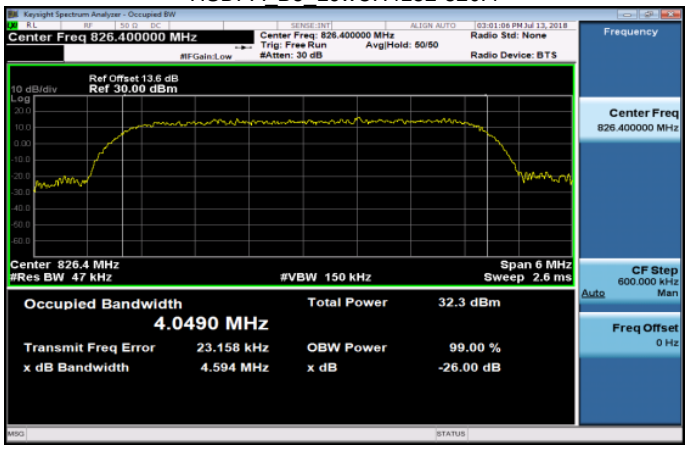

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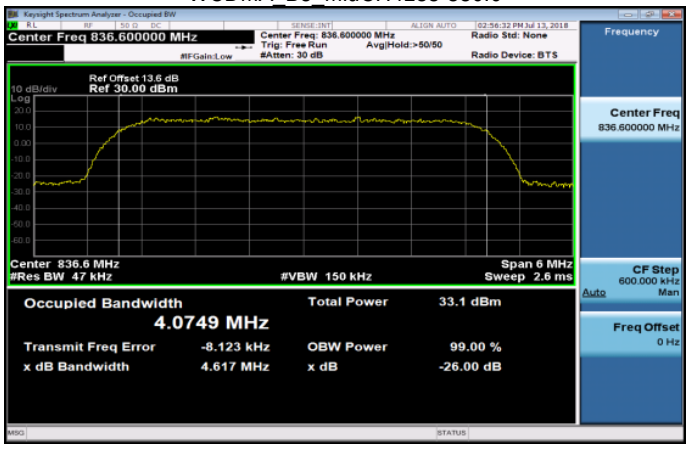

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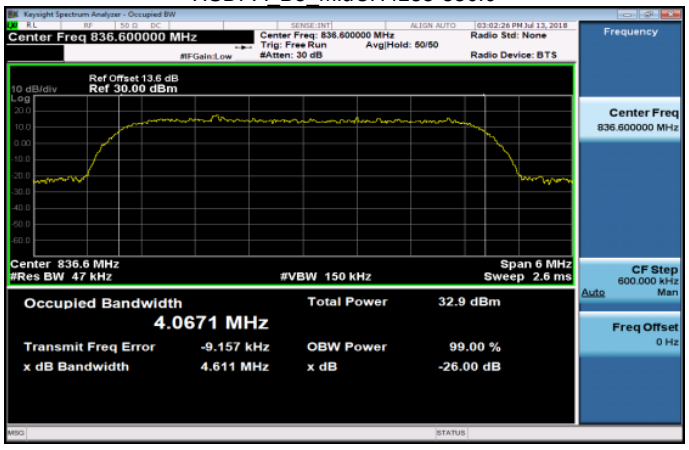

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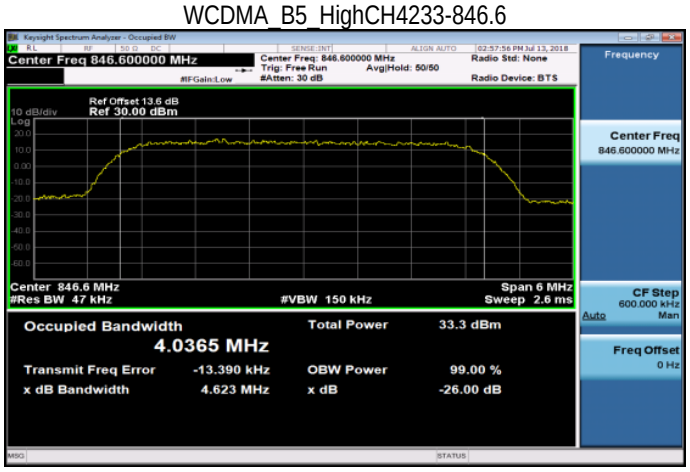

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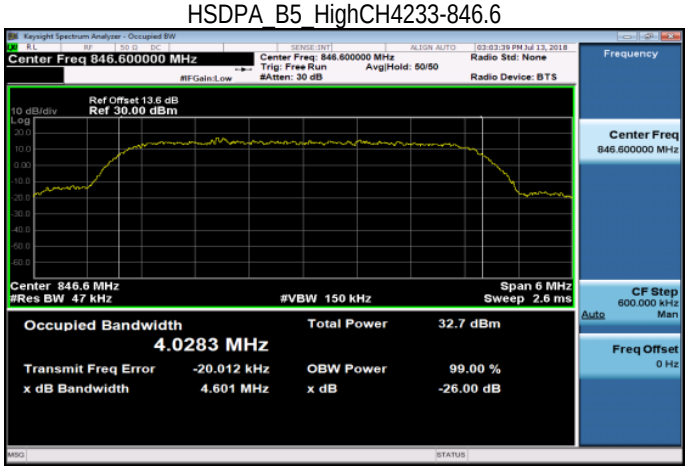
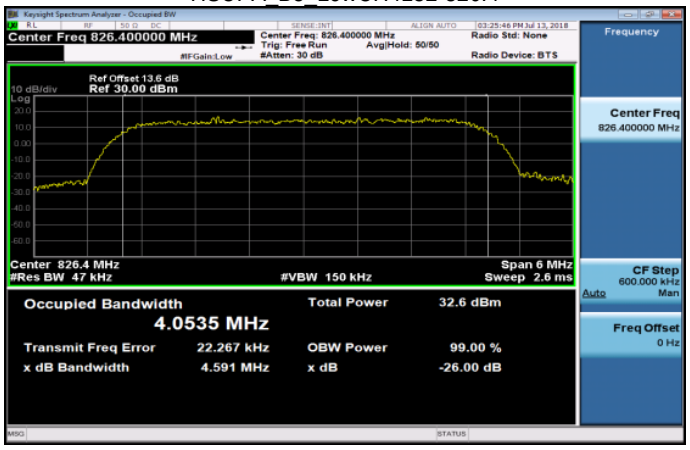


HSUPA_B5_LowCH4132-826.4



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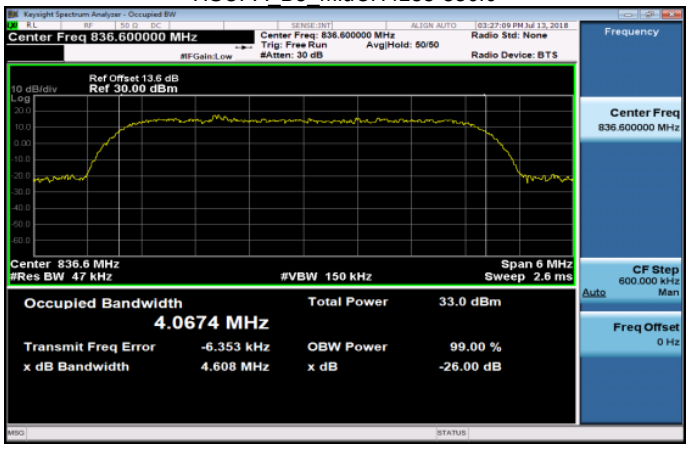

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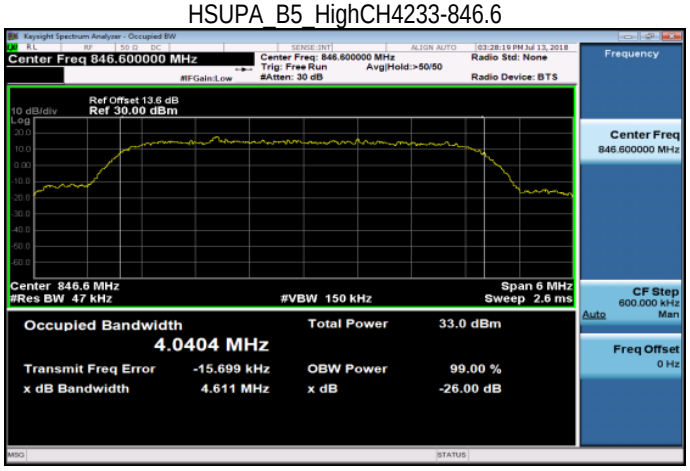
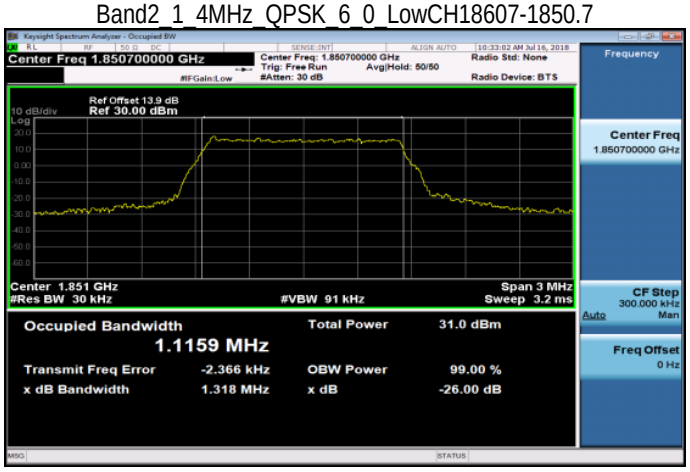
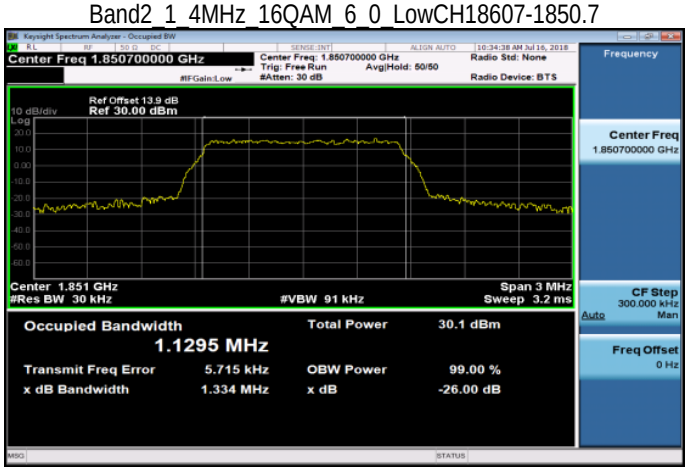


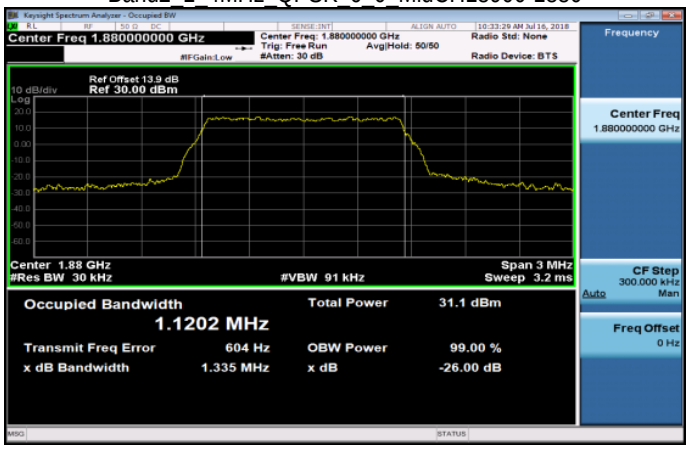
Band2_1_4MHz_QPSK_6_0_LowCH18607-1850.7



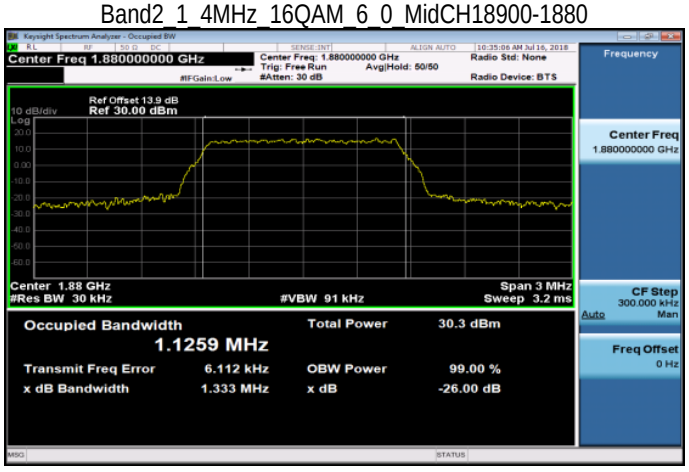
Band2_1_4MHz_16QAM_6_0_LowCH18607-1850.7



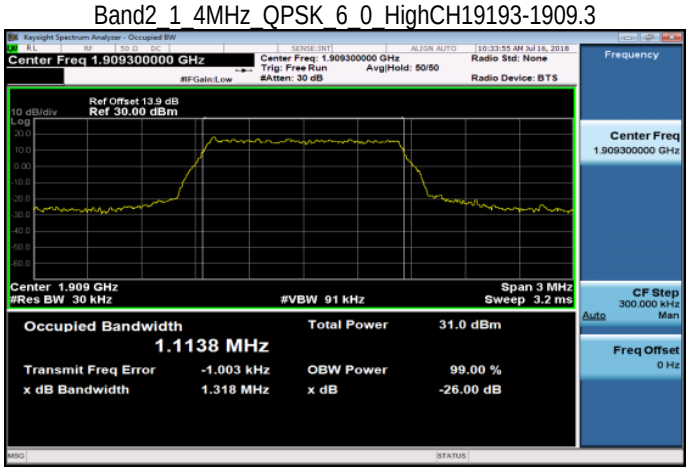
Band2_1_4MHz_QPSK_6_0_MidCH18900-1880



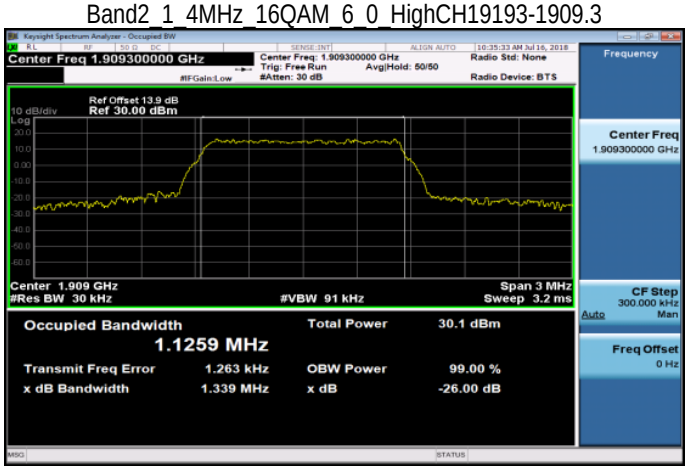
Band2_1_4MHz_16QAM_6_0_MidCH18900-1880



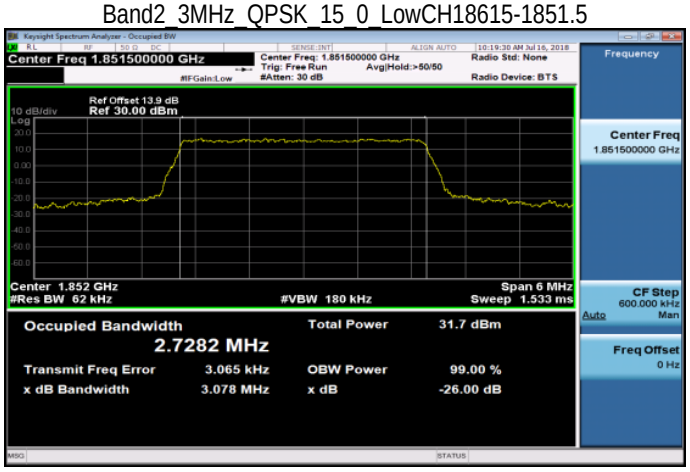
Band2_1_4MHz_QPSK_6_0_HighCH19193-1909.3



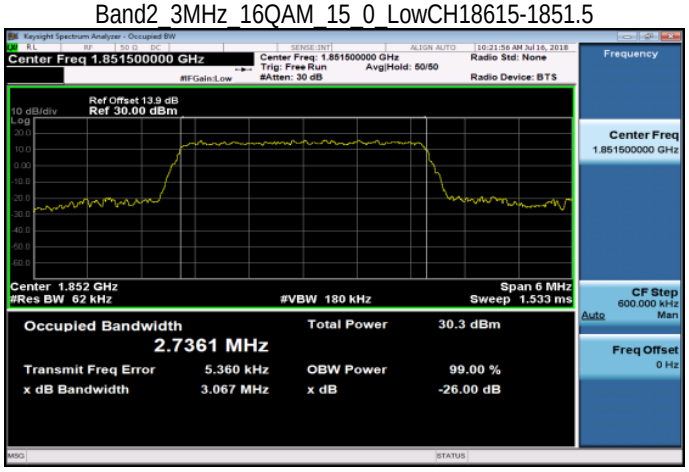
Band2_1_4MHz_16QAM_6_0_HighCH19193-1909.3



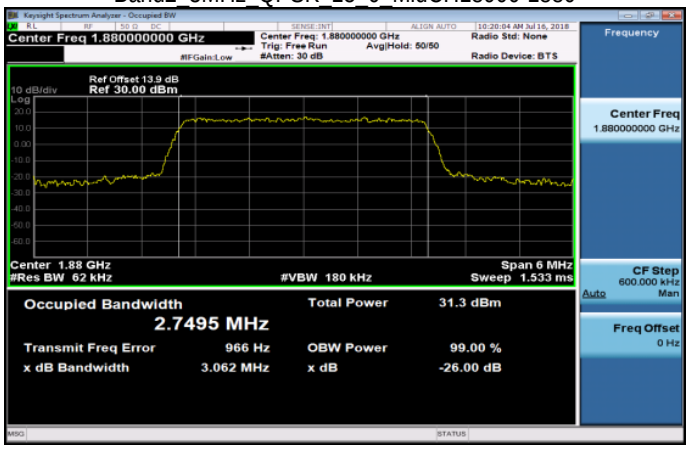
Band2_3MHz_QPSK_15_0_LowCH18615-1851.5



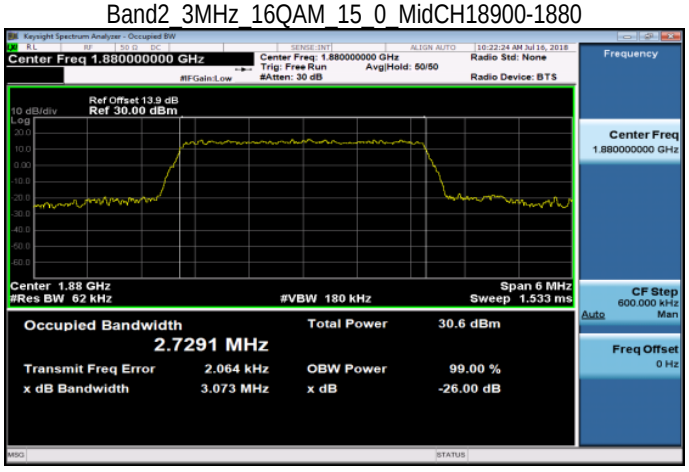
Band2_3MHz_16QAM_15_0_LowCH18615-1851.5



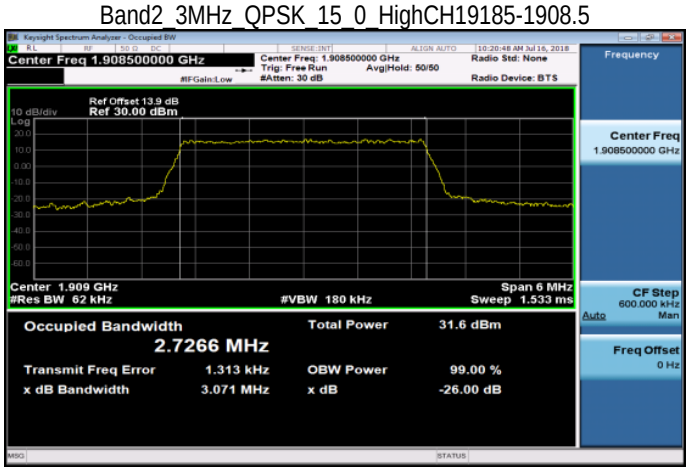
Band2_3MHz_QPSK_15_0_MidCH18900-1880



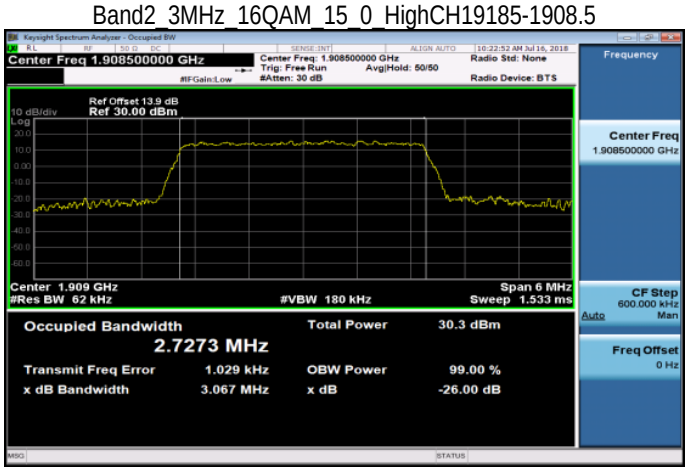
Band2_3MHz_16QAM_15_0_MidCH18900-1880



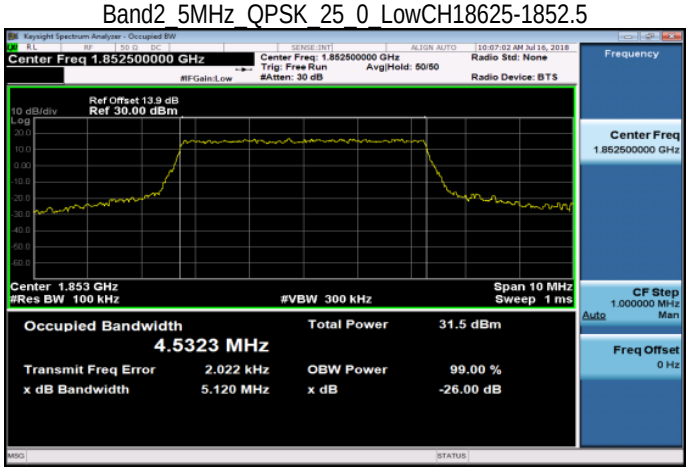
Band2_3MHz_QPSK_15_0_HighCH19185-1908.5



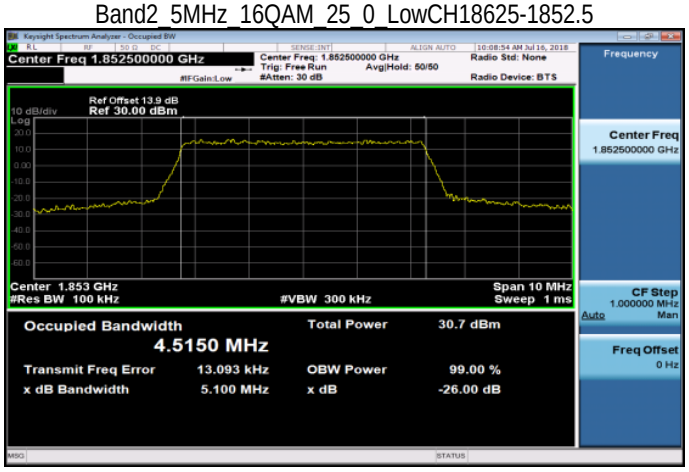
Band2_3MHz_16QAM_15_0_HighCH19185-1908.5



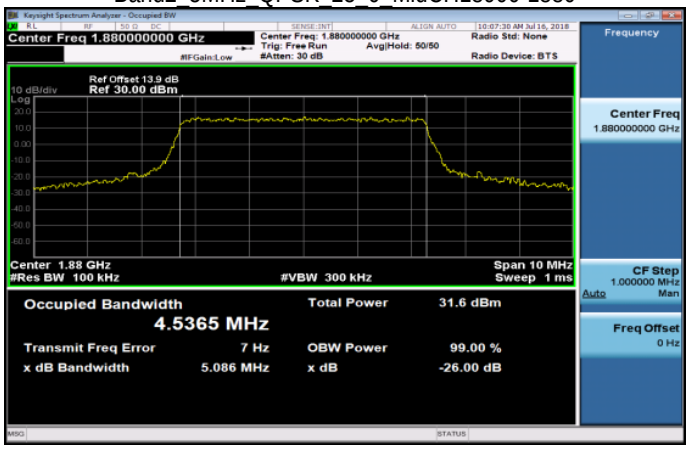
Band2_5MHz_QPSK_25_0_LowCH18625-1852.5



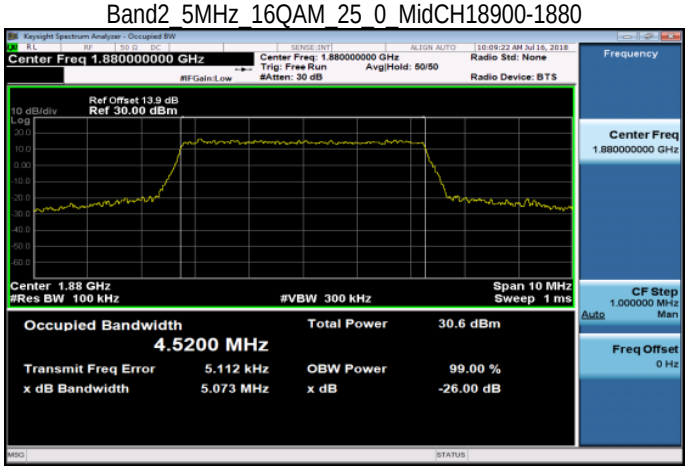
Band2_5MHz_16QAM_25_0_LowCH18625-1852.5



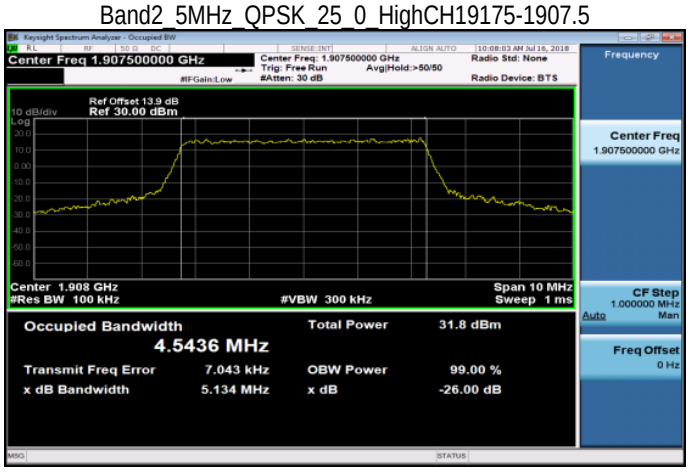
Band2_5MHz_QPSK_25_0_MidCH18900-1880



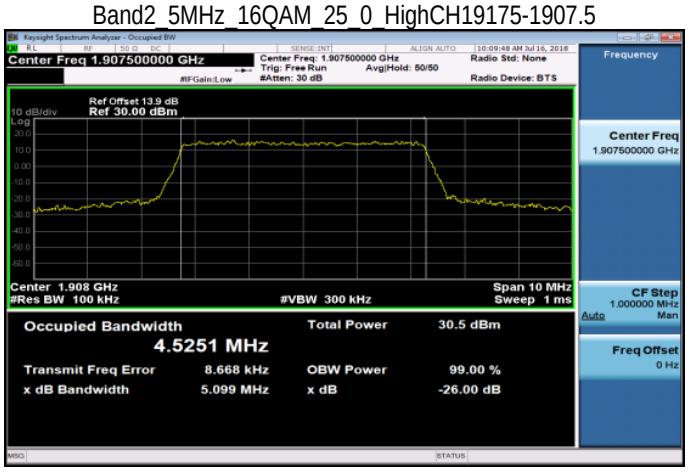
Band2_5MHz_16QAM_25_0_MidCH18900-1880



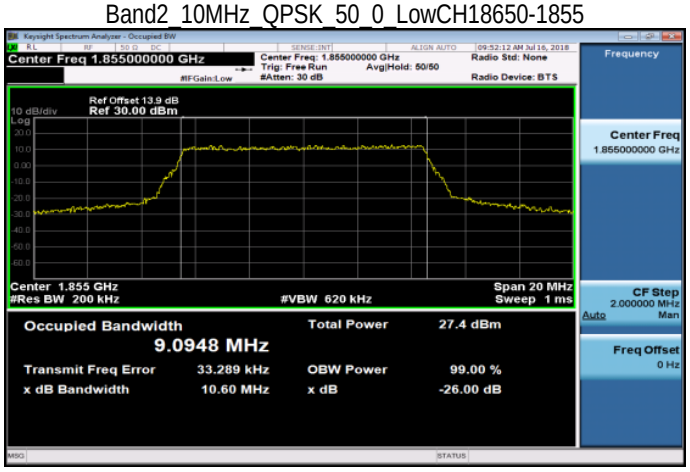
Band2_5MHz_QPSK_25_0_HighCH19175-1907.5



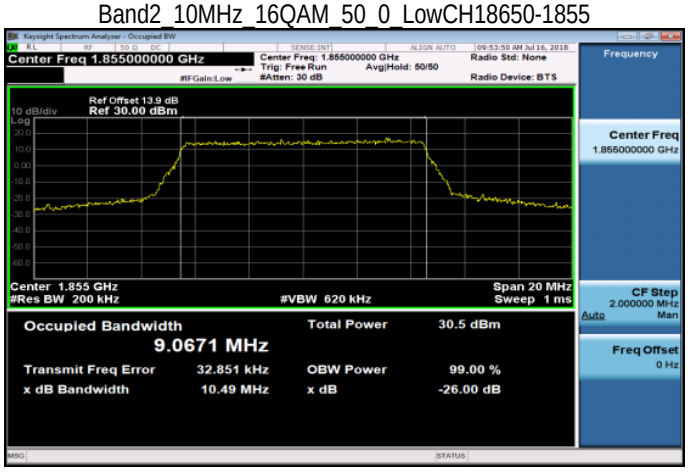
Band2_5MHz_16QAM_25_0_HighCH19175-1907.5



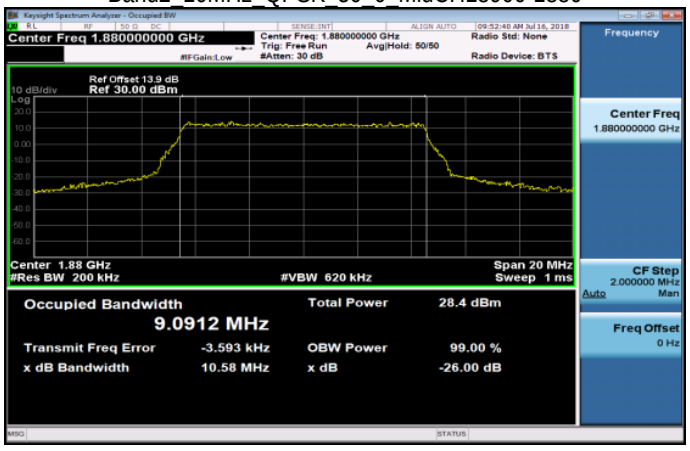
Band2_10MHz_QPSK_50_0_LowCH18650-1855



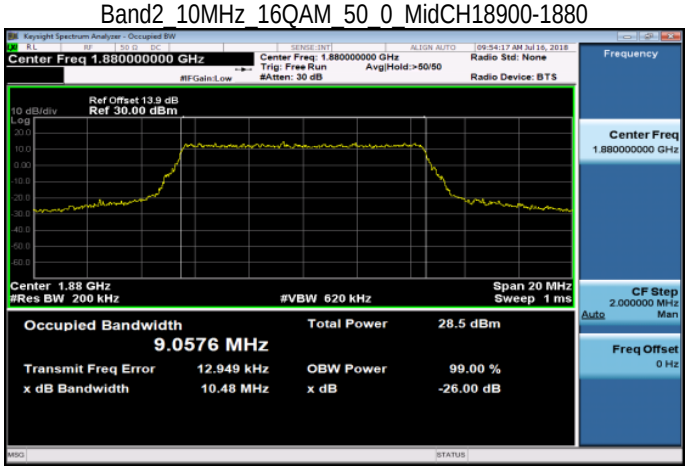
Band2_10MHz_16QAM_50_0_LowCH18650-1855



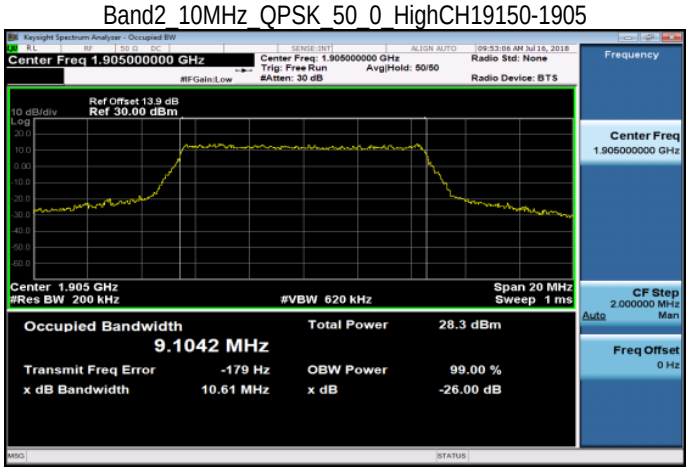
Band2_10MHz_QPSK_50_0_MidCH18900-1880



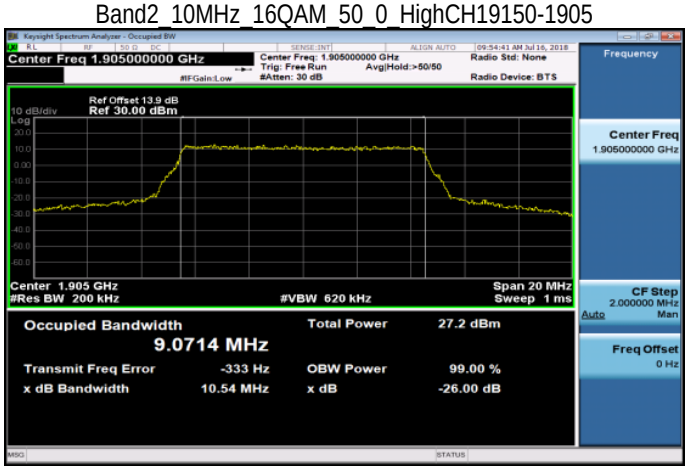
Band2_10MHz_16QAM_50_0_MidCH18900-1880



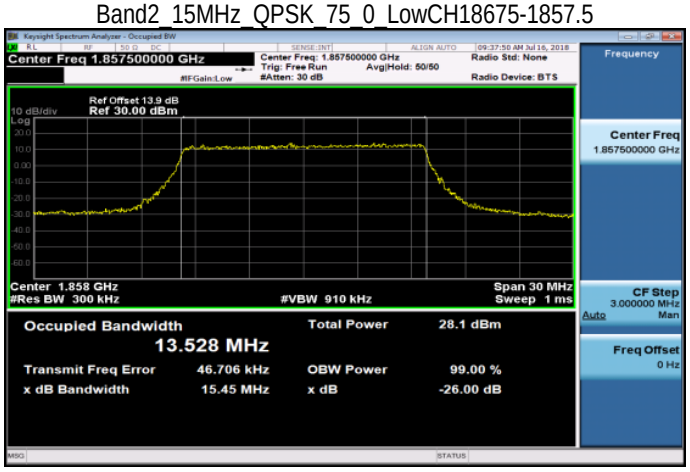
Band2_10MHz_QPSK_50_0_HighCH19150-1905



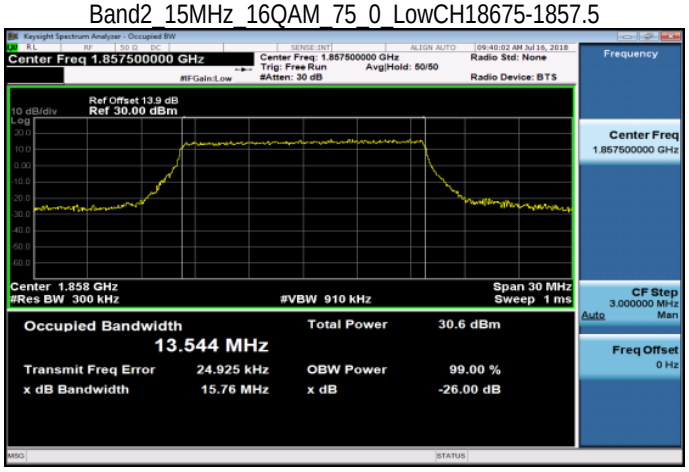
Band2_10MHz_16QAM_50_0_HighCH19150-1905



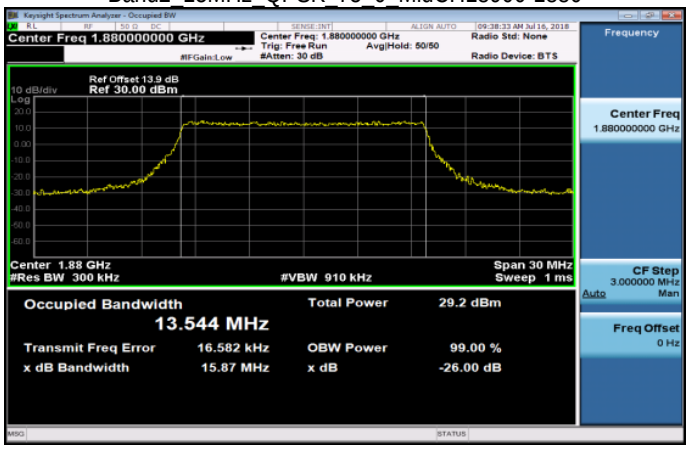
Band2_15MHz_QPSK_75_0_LowCH18675-1857.5



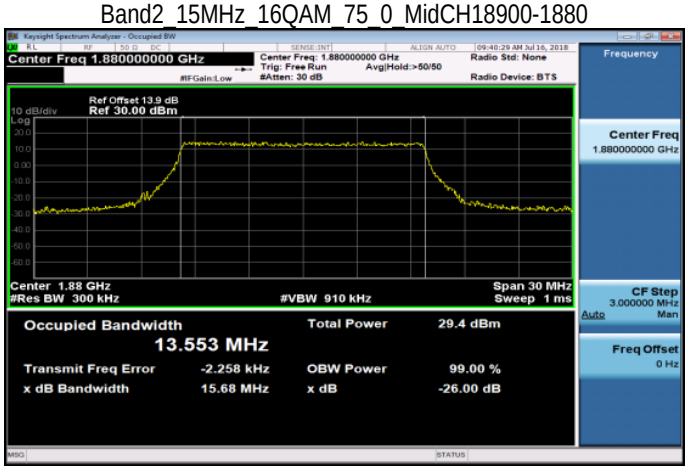
Band2_15MHz_16QAM_75_0_LowCH18675-1857.5



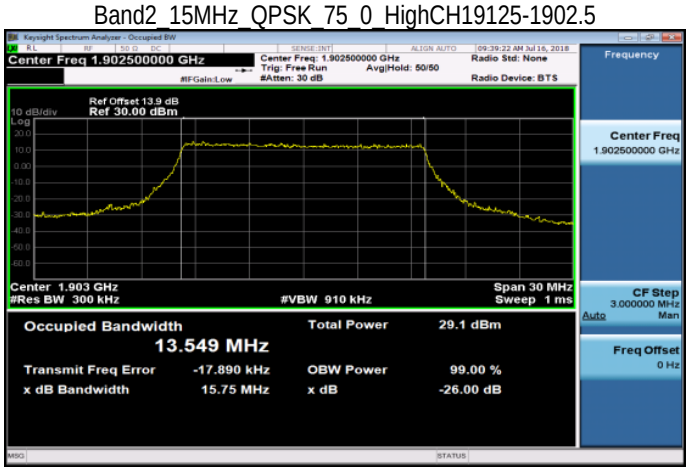
Band2_15MHz_QPSK_75_0_MidCH18900-1880



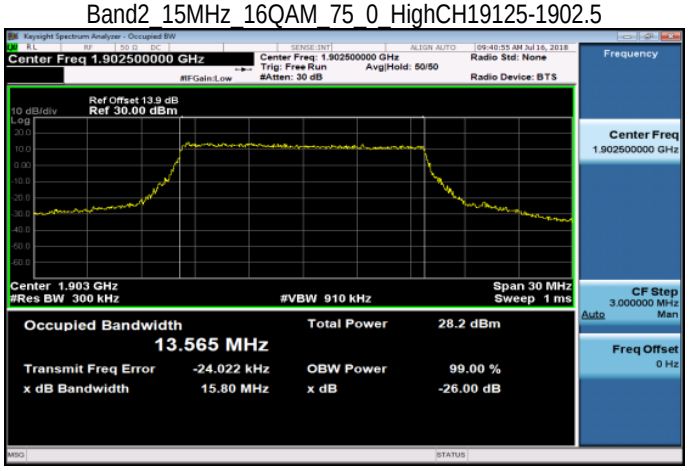
Band2_15MHz_16QAM_75_0_MidCH18900-1880



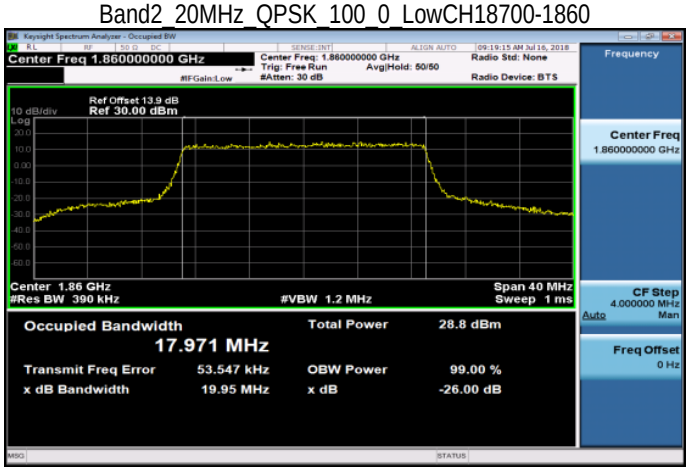
Band2_15MHz_QPSK_75_0_HighCH19125-1902.5



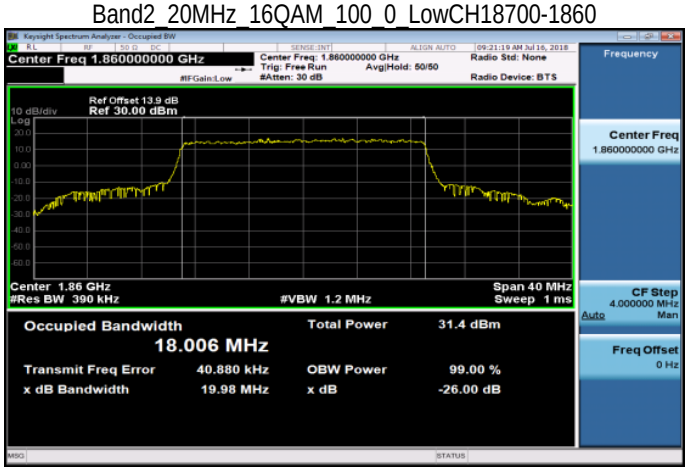
Band2_15MHz_16QAM_75_0_HighCH19125-1902.5



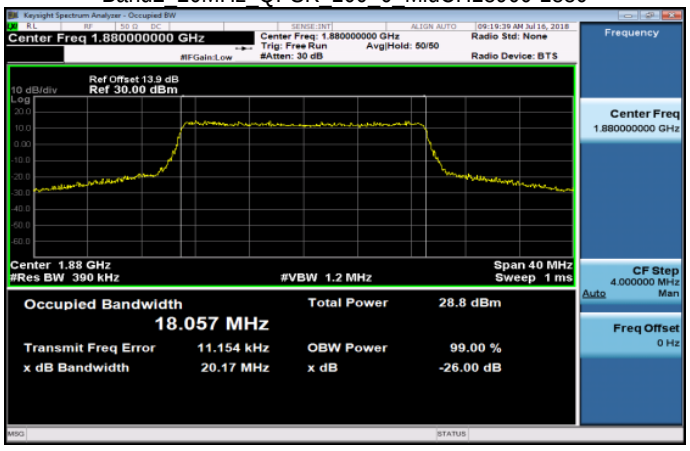
Band2_20MHz_QPSK_100_0_LowCH18700-1860



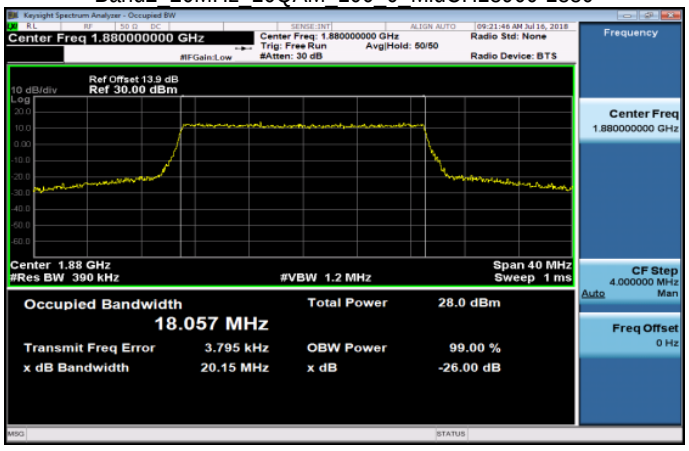
Band2_20MHz_16QAM_100_0_LowCH18700-1860



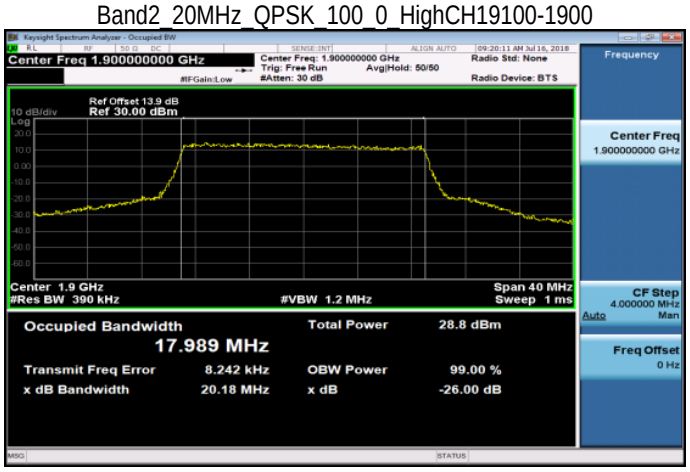
Band2_20MHz_QPSK_100_0_MidCH18900-1880



Band2_20MHz_16QAM_100_0_MidCH18900-1880



Band2_20MHz_QPSK_100_0_HighCH19100-1900



Band2_20MHz_16QAM_100_0_HighCH19100-1900