



TEST REPORT

APPLICANT : BLU Products, Inc.

PRODUCT NAME : Smart Phone

MODEL NAME : G53

BRAND NAME : BLU

FCC ID : YHLBLUG53

STANDARD(S) : 47 CFR Part 2
47 CFR Part 22, Subpart H
47 CFR Part 24, Subpart E
47 CFR Part 27, Subpart H&L&M&N

RECEIPT DATE : 2023-04-18

TEST DATE : 2023-04-26 to 2023-05-25

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DIRECTORY

- 1. Technical Information 3**
- 1.1. Applicant and Manufacturer Information 3**
- 1.2. Equipment Under Test (EUT) Description 3**
- 1.3. Maximum E.R.P./E.I.R.P. and Emission Designator 5**
- 1.4. Test Standards and Results 7**
- 1.5. Environmental Conditions 8**
- 2. 47 CFR Part 2, Part 22H, Part 24E, Part 27 H&L&M Requirements 9**
- 2.1. Transmitter Conducted Output Power and E.R.P./E.I.R.P. 9**
- 2.2. Occupied Bandwidth83**
- 2.3. Frequency Stability 128**
- 2.4. Peak to Average Ratio 133**
- 2.5. Conducted Spurious Emissions 155**
- 2.6. Band Edge 176**
- 2.7. Radiated Spurious Emissions 214**
- Annex A Test Uncertainty 241**
- Annex B Testing Laboratory Information 242**

Change History		
Version	Date	Reason for change
1.0	2023-06-13	First edition



1. Technical Information

Note: Provide by applicant.

1.1. Applicant and Manufacturer Information

Applicant:	BLU Products, Inc.
Applicant Address:	8600 NW 36th Street, Suite #200 Doral, FL 33166, USA
Manufacturer:	BLU Products, Inc.
Manufacturer Address:	8600 NW 36th Street, Suite #200 Doral, FL 33166, USA

1.2. Equipment Under Test (EUT) Description

Product Name:	Smart Phone	
Sample No.:	5#	
Hardware Version:	FS310-MB-V5.0	
Software Version:	BLU_G0850_V13.0.02.00_GENERIC_03-04-2023_10:05	
Modulation Type:	QPSK, 16QAM, 64QAM(DL)	
Carrier Aggregation:	Not Support	
Operation Band:	Band 2 / 4 / 5 / 7 / 12 / 17 / 66 / 71	
Frequency Range:	LTE Band 2	Tx: 1850MHz–1910MHz
		Rx: 1930MHz–1990MHz
	LTE Band 4	Tx: 1710MHz–1755MHz
		Rx: 2110MHz–2155MHz
	LTE Band 5	Tx: 824MHz–849MHz
		Rx: 869MHz–894MHz
	LTE Band 7	Tx: 2500MHz–2570MHz
		Rx: 2620MHz–2690MHz
	LTE Band 12	Tx: 699MHz - 716MHz
		Rx: 729MHz – 746MHz
	LTE Band 17	Tx: 704MHz - 716MHz
		Rx: 734MHz – 746MHz
	LTE Band 66	Tx: 1710MHz –1780MHz
		Rx: 2110MHz –2200MHz
LTE Band 71	Tx: 663MHz –698MHz	
	Rx: 617MHz –652MHz	



Channel Bandwidth:	LTE Band 2	1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz
	LTE Band 4	1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz
	LTE Band 5	1.4MHz, 3MHz, 5MHz, 10MHz
	LTE Band 7	5 MHz, 10MHz, 15MHz, 20MHz
	LTE Band 12	1.4MHz, 3 MHz, 5 MHz, 10MHz
	LTE Band 17	5 MHz, 10MHz
	LTE Band 66	1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz
	LTE Band 71	5MHz, 10MHz, 15MHz, 20MHz
Antenna Type:	PIFA Antenna	
Antenna Gain:	LTE Band 2	1.30dBi
	LTE Band 4	-0.60dBi
	LTE Band 5	-2.30dBi
	LTE Band 7	-1.50dBi
	LTE Band 12	-2.70dBi
	LTE Band 17	-2.70dBi
	LTE Band 66	-0.60dBi
	LTE Band 71	-2.30dBi
Accessory Information:	Battery	
	Brand Name:	BLU
	Model No.:	C966548500P
	Serial No.:	N/A
	Capacity:	5000mAh
	Rated Voltage:	3.85V
	Charge Limit:	4.4V
	Manufacturer:	Shenzhen Jiuliyuan Electronic Technology Co., Ltd.
	AC Adapter	
	Brand Name:	BLU
	Model No.:	US-WW-2001
	Serial No.:	N/A
	Rated Output:	5V \Rightarrow 2000mA
	Rated Input:	100-240V \sim 50/60Hz, 0.4A
	Manufacturer:	SHENZHEN NANBANG ELECTRONICS CO., LTD

Note 1: For a more detailed description, please refer to Specification or User's Manual supplied by the applicant and/or manufacturer.



1.3. Maximum E.R.P./E.I.R.P. and Emission Designator

LTE Band 2		Maximum E.R.P./E.I.R.P. (W)		Emission Designator (99%OBW)	
BW(MHz)	QPSK	16QAM	QPSK	16QAM	
20	0.129	0.102	18M0G7D	18M0W7D	
15	0.128	0.104	13M5G7D	13M5W7D	
10	0.128	0.103	9M00G7D	8M98W7D	
5	0.127	0.104	4M50G7D	4M50W7D	
3	0.128	0.102	2M72G7D	2M72W7D	
1.4	0.128	0.103	1M10G7D	1M10W7D	
LTE Band 4		Maximum E.R.P./E.I.R.P. (W)		Emission Designator (99%OBW)	
BW(MHz)	QPSK	16QAM	QPSK	16QAM	
20	0.105	0.086	18M0G7D	18M0W7D	
15	0.104	0.085	13M5G7D	13M5W7D	
10	0.104	0.085	9M01G7D	8M98W7D	
5	0.104	0.085	4M50G7D	4M51W7D	
3	0.104	0.084	2M72G7D	2M71W7D	
1.4	0.103	0.085	1M10G7D	1M10W7D	
LTE Band 5		Maximum E.R.P./E.I.R.P. (W)		Emission Designator (99%OBW)	
BW(MHz)	QPSK	16QAM	QPSK	16QAM	
10	0.066	0.053	9M00G7D	8M98W7D	
5	0.065	0.053	4M50G7D	4M50W7D	
3	0.065	0.054	2M72G7D	2M72W7D	
1.4	0.065	0.055	1M10G7D	1M10W7D	
LTE Band 7		Maximum E.R.P./E.I.R.P. (W)		Emission Designator (99%OBW)	
BW(MHz)	QPSK	16QAM	QPSK	16QAM	
20	0.082	0.068	18M0G7D	18M0W7D	
15	0.081	0.068	13M5G7D	13M5W7D	
10	0.081	0.066	9M02G7D	8M99W7D	
5	0.081	0.066	4M50G7D	4M51W7D	
LTE Band 12		Maximum E.R.P./E.I.R.P. (W)		Emission Designator (99%OBW)	
BW(MHz)	QPSK	16QAM	QPSK	16QAM	
10	0.063	0.050	9M04G7D	8M98W7D	
5	0.062	0.050	4M50G7D	4M51W7D	
3	0.062	0.050	2M72G7D	2M72W7D	
1.4	0.062	0.050	1M10G7D	1M10W7D	



LTE Band 17	Maximum E.R.P./E.I.R.P. (W)		Emission Designator (99%OBW)	
BW(MHz)	QPSK	16QAM	QPSK	16QAM
10	0.062	0.050	9M02G7D	8M98W7D
5	0.062	0.050	4M50G7D	4M50W7D
LTE Band 66	Maximum E.R.P./E.I.R.P. (W)		Emission Designator (99%OBW)	
BW(MHz)	QPSK	16QAM	QPSK	16QAM
20	0.106	0.083	18M0G7D	18M0W7D
15	0.105	0.086	13M5G7D	13M5W7D
10	0.104	0.086	9M01G7D	8M98W7D
5	0.104	0.083	4M50G7D	4M50W7D
3	0.104	0.084	2M72G7D	2M72W7D
1.4	0.104	0.085	1M10G7D	1M10W7D
LTE Band 71	Maximum E.R.P./E.I.R.P. (W)		Emission Designator (99%OBW)	
BW(MHz)	QPSK	16QAM	QPSK	16QAM
20	0.069	0.056	18M0G7D	18M1W7D
15	0.069	0.056	13M5G7D	13M5W7D
10	0.069	0.055	9M03G7D	8M99W7D
5	0.069	0.055	4M50G7D	4M51W7D



1.4. Test Standards and Results

The objective of the report is to perform testing according to Part 2, Part 22, Part 24, Part 27 for the EUT FCC ID Certification:

No.	Identity	Document Title
1	47 CFR Part 2	Frequency Allocations and Radio Treaty Matters; General Rules and Regulations
2	47 CFR Part 22	Public Mobile Services
3	47 CFR Part 24	Personal Communications Services
4	47 CFR Part 27	Miscellaneous Wireless Communications Services

Test detailed items/section required by FCC rules and results are as below:

Section	Description	Test Date	Test Engineer	Result	Method Determination /Remark
2.1046 22.913(a)(2) 24.232(c) 27.50(c)(10) 27.50(d)(4) 27.50(h)(2)	Transmitter Conducted Output Power and E.R.P./E.I.R.P.	Apr. 27, 2023	Chen Hao Li Huaijie	PASS	No deviation
2.1049	Occupied Bandwidth	Apr. 26, 2023	Li Huaijie	PASS	No deviation
2.1055 22.355 24.235 27.54	Frequency Stability	Apr. 27, 2023	Li Huaijie	PASS	No deviation
24.232(d), 27.50(d)(5)	Peak to Average Radio	Apr. 27, 2023	Li Huaijie	PASS	No deviation
2.1051 22.917(a) 24.238(a) 27.53(g) 27.53(h) 27.53(m)(4)	Conducted Spurious Emissions	Apr. 26, 2023	Li Huaijie	PASS	No deviation
2.1051 22.917(a) 24.238(a) 27.53(g)	Band Edge	Apr. 26, 2023	Li Huaijie	PASS	No deviation



27.53(h) 27.53(m)(4)					
2.1053 22.917(a) 24.238(a) 27.53(g) 27.53(h) 27.53(m)(4)	Radiated Spurious Emissions	May 25, 2023	Gao Jianrou	PASS	No deviation

Note 1: The tests were performed according to the method of measurements prescribed in KDB971168 D01 v03 and ANSI/TIA-603-E-2016.

Note 2: The path loss during the RF test is calibrated to correct the results by the offset setting in the test equipments. The ref offset 24.5dB contains two parts that cable loss 14.5dB and Attenuator 10dB.

Note 3: Additions to, deviation, or exclusions from the method shall be judged in the "method determination" column of add, deviate or exclude from the specific method shall be explained in the "Remark" of the above table.

Note 4: When the test result is a critical value, we will use the measurement uncertainty give the judgment result based on the 95% confidence intervals.

1.5. Environmental Conditions

During the measurement, the environmental conditions were within the listed ranges:

Temperature (°C):	15-35
Relative Humidity (%):	30-60
Atmospheric Pressure (kPa):	86-106



2.47 CFR Part 2, Part 22H, Part 24E, Part 27 H&L&M&N Requirements

2.1. Transmitter Conducted Output Power and E.R.P./E.I.R.P.

2.1.1. Requirement

According to FCC section 2.1046(a), for transmitters other than single sideband, independent sideband and controlled carrier radiotelephone, power output shall be measured at the RF output terminals when the transmitter is adjusted in accordance with the tune-up procedure to give the values of current and voltage on the circuit elements specified in FCC section 2.1033(c)(8).

According to FCC section 24.232 (c) for LTE Band 2, Mobile and portable stations are limited to 2 watts E.I.R.P. and the equipment must employ a means for limiting power to the minimum necessary for successful communications.

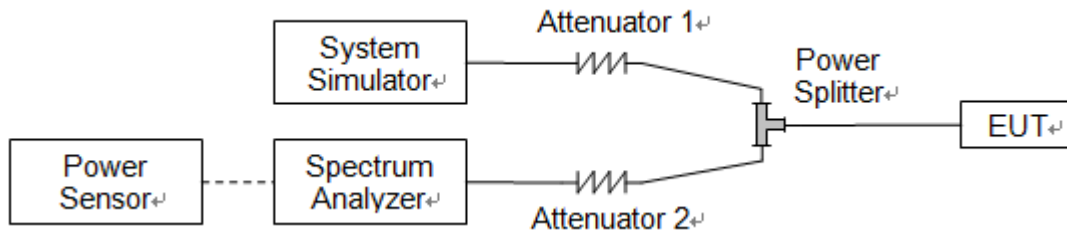
According to FCC section 27.50 (d)(4) for LTE Band 4/66, Fixed, mobile and portable (hand-held) stations in the 1710-1755MHz band are limited to 1wat E.I.R.P.

According to FCC section 22.913 (a)(2) for LTE Band 5, the E.R.P. of mobile transmitters and auxiliary test transmitters must not exceed 7 watts.

According to FCC section 27.50 (h)(2) for LTE Band 7, Mobile and other user stations. Mobile stations are limited to 2 watts E.I.R.P. All user stations are limited to 2 watts transmitter output power.

According to FCC section 27.50 (c)(10) for LTE Band 12/17/71, Portable stations (hand-held devices) operating in the 704-716MHz band are limited to 3watts E.R.P.

2.1.2. Test Description



The EUT is coupled to the Spectrum Analyzer (SA) and the System Simulator (SS) with Attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading. The EUT is commanded by the SS to operate at the maximum output power. A call is established between the EUT and the SS.

2.1.3. Test Procedure

KDB 971168 D01v03 Section 5.2 and ANSI/TIA-603-E-2016.

E.I.R.P. (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

E.R.P. (dBm) = E.I.R.P. (dBm) - 2.15

**2.1.4. Result****Conducted Output Power:**

LTE Band 2						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				18700	18900	19100
Frequency (MHz)				1860	1880	1900
20	QPSK	1	0	19.73	19.79	19.75
20	QPSK	1	49	19.64	19.58	19.46
20	QPSK	1	99	19.63	19.44	19.58
20	QPSK	50	0	18.75	18.84	18.68
20	QPSK	50	24	18.68	18.65	18.74
20	QPSK	50	50	18.61	18.58	18.53
20	QPSK	100	0	18.56	18.61	18.48
20	16QAM	1	0	18.62	18.79	18.61
20	16QAM	1	49	18.55	18.44	18.77
20	16QAM	1	99	18.51	18.65	18.61
20	16QAM	50	0	17.76	17.87	17.86
20	16QAM	50	24	17.64	17.45	17.89
20	16QAM	50	50	17.66	17.75	17.70
20	16QAM	100	0	17.65	17.58	17.66



LTE Band 2						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				18675	18900	19125
Frequency (MHz)				1857.5	1880	1902.5
15	QPSK	1	0	19.66	19.76	19.65
15	QPSK	1	37	19.63	19.65	19.48
15	QPSK	1	74	19.43	19.59	19.56
15	QPSK	36	0	18.76	18.79	18.84
15	QPSK	36	20	18.80	18.57	18.64
15	QPSK	36	39	18.66	18.59	18.43
15	QPSK	75	0	18.55	18.52	18.53
15	16QAM	1	0	18.73	18.70	18.72
15	16QAM	1	37	18.62	18.59	18.87
15	16QAM	1	74	18.57	18.79	18.78
15	16QAM	36	0	17.91	17.80	17.75
15	16QAM	36	20	17.55	17.68	17.90
15	16QAM	36	39	17.74	17.73	17.56
15	16QAM	75	0	17.50	17.56	17.71



LTE Band 2						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				18650	18900	19150
Frequency (MHz)				1855	1880	1905
10	QPSK	1	0	19.59	19.77	19.60
10	QPSK	1	25	19.51	19.66	19.38
10	QPSK	1	49	19.62	19.67	19.72
10	QPSK	25	0	18.48	18.68	18.81
10	QPSK	25	12	18.75	18.72	18.70
10	QPSK	25	25	18.66	18.56	18.71
10	QPSK	50	0	18.63	18.50	18.61
10	16QAM	1	0	18.66	18.82	18.48
10	16QAM	1	25	18.52	18.45	18.77
10	16QAM	1	49	18.53	18.54	18.58
10	16QAM	25	0	17.83	17.84	17.73
10	16QAM	25	12	17.51	17.70	17.62
10	16QAM	25	25	17.83	17.61	17.67
10	16QAM	50	0	17.79	17.49	17.67



LTE Band 2						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				18625	18900	19175
Frequency (MHz)				1852.5	1880	1907.5
5	QPSK	1	0	19.62	19.75	19.66
5	QPSK	1	12	19.48	19.68	19.59
5	QPSK	1	24	19.56	19.50	19.69
5	QPSK	12	0	18.55	18.73	18.81
5	QPSK	12	7	18.82	18.81	18.55
5	QPSK	12	13	18.81	18.68	18.44
5	QPSK	25	0	18.54	18.74	18.76
5	16QAM	1	0	18.88	18.73	18.72
5	16QAM	1	12	18.62	18.72	18.73
5	16QAM	1	24	18.51	18.56	18.79
5	16QAM	12	0	17.76	17.75	17.75
5	16QAM	12	7	17.61	17.72	17.86
5	16QAM	12	13	17.74	17.67	17.68
5	16QAM	25	0	17.47	17.51	17.71



LTE Band 2						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				18615	18900	19185
Frequency (MHz)				1851.5	1880	1908.5
3	QPSK	1	0	19.59	19.76	19.69
3	QPSK	1	8	19.55	19.73	19.61
3	QPSK	1	14	19.70	19.66	19.66
3	QPSK	8	0	18.68	18.60	18.75
3	QPSK	8	4	18.84	18.73	18.83
3	QPSK	8	7	18.54	18.57	18.54
3	QPSK	15	0	18.62	18.61	18.67
3	16QAM	1	0	18.64	18.73	18.58
3	16QAM	1	8	18.65	18.53	18.60
3	16QAM	1	14	18.78	18.59	18.69
3	16QAM	8	0	17.62	17.87	17.84
3	16QAM	8	4	17.72	17.60	17.61
3	16QAM	8	7	17.62	17.62	17.66
3	16QAM	15	0	17.59	17.60	17.72



LTE Band 2						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				18607	18900	19193
Frequency (MHz)				1850.7	1880	1909.3
1.4	QPSK	1	0	19.52	19.75	19.57
1.4	QPSK	1	3	19.61	19.77	19.65
1.4	QPSK	1	5	19.59	19.69	19.46
1.4	QPSK	3	0	18.53	18.79	18.59
1.4	QPSK	3	1	18.58	18.52	18.66
1.4	QPSK	3	3	18.66	18.64	18.72
1.4	QPSK	6	0	18.63	18.78	18.67
1.4	16QAM	1	0	18.73	18.83	18.80
1.4	16QAM	1	3	18.61	18.63	18.59
1.4	16QAM	1	5	18.50	18.83	18.57
1.4	16QAM	3	0	17.75	17.64	17.87
1.4	16QAM	3	1	17.65	17.58	17.66
1.4	16QAM	3	3	17.86	17.72	17.57
1.4	16QAM	6	0	17.62	17.64	17.56



LTE Band 4						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20050	20175	20300
Frequency (MHz)				1720	1732.5	1745
20	QPSK	1	0	20.77	20.80	20.76
20	QPSK	1	49	20.70	20.75	20.68
20	QPSK	1	99	20.64	20.59	20.69
20	QPSK	50	0	19.76	19.73	19.95
20	QPSK	50	24	19.92	19.83	19.97
20	QPSK	50	50	19.67	19.75	19.64
20	QPSK	100	0	19.77	19.60	19.73
20	16QAM	1	0	19.92	19.77	19.86
20	16QAM	1	49	19.62	19.73	19.87
20	16QAM	1	99	19.67	19.63	19.90
20	16QAM	50	0	18.86	18.86	18.73
20	16QAM	50	24	18.69	18.64	18.76
20	16QAM	50	50	18.79	18.55	18.78
20	16QAM	100	0	18.88	18.63	18.79



LTE Band 4						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20025	20175	20325
Frequency (MHz)				1717.5	1732.5	1747.5
15	QPSK	1	0	20.62	20.78	20.73
15	QPSK	1	37	20.63	20.70	20.73
15	QPSK	1	74	20.78	20.61	20.74
15	QPSK	36	0	19.85	19.80	19.82
15	QPSK	36	20	19.95	19.76	19.83
15	QPSK	36	39	19.66	19.83	19.74
15	QPSK	75	0	19.58	19.61	19.60
15	16QAM	1	0	19.78	19.84	19.87
15	16QAM	1	37	19.81	19.84	19.73
15	16QAM	1	74	19.81	19.71	19.59
15	16QAM	36	0	18.96	18.93	19.05
15	16QAM	36	20	18.82	18.77	18.71
15	16QAM	36	39	18.70	18.71	18.67
15	16QAM	75	0	18.86	18.63	18.93



LTE Band 4						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20000	20175	20350
Frequency (MHz)				1715	1732.5	1750
10	QPSK	1	0	20.76	20.77	20.69
10	QPSK	1	25	20.74	20.69	20.69
10	QPSK	1	49	20.68	20.71	20.55
10	QPSK	25	0	19.79	19.96	19.92
10	QPSK	25	12	19.87	19.80	19.84
10	QPSK	25	25	19.67	19.65	19.86
10	QPSK	50	0	19.61	19.75	19.60
10	16QAM	1	0	19.79	19.80	19.77
10	16QAM	1	25	19.84	19.55	19.71
10	16QAM	1	49	19.88	19.81	19.63
10	16QAM	25	0	18.72	18.65	18.85
10	16QAM	25	12	18.71	18.69	18.82
10	16QAM	25	25	18.84	18.63	18.82
10	16QAM	50	0	18.75	18.67	18.95



LTE Band 4						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				19975	20175	20375
Frequency (MHz)				1712.5	1732.5	1752.5
5	QPSK	1	0	20.73	20.76	20.63
5	QPSK	1	12	20.55	20.58	20.53
5	QPSK	1	24	20.67	20.59	20.67
5	QPSK	12	0	19.83	19.88	19.79
5	QPSK	12	7	19.72	19.76	19.88
5	QPSK	12	13	19.71	19.54	19.76
5	QPSK	25	0	19.56	19.91	19.85
5	16QAM	1	0	19.79	19.86	19.71
5	16QAM	1	12	19.63	19.72	19.75
5	16QAM	1	24	19.75	19.61	19.91
5	16QAM	12	0	18.81	18.86	18.82
5	16QAM	12	7	18.80	18.69	18.92
5	16QAM	12	13	18.75	18.60	18.66
5	16QAM	25	0	18.68	18.76	18.91



LTE Band 4						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				19965	20175	20385
Frequency (MHz)				1711.5	1732.5	1753.5
3	QPSK	1	0	20.74	20.75	20.61
3	QPSK	1	8	20.54	20.66	20.47
3	QPSK	1	14	20.69	20.68	20.60
3	QPSK	8	0	19.71	19.79	19.73
3	QPSK	8	4	19.78	19.60	19.71
3	QPSK	8	7	19.64	19.50	19.51
3	QPSK	15	0	19.71	19.73	19.55
3	16QAM	1	0	19.70	19.86	19.72
3	16QAM	1	8	19.72	19.84	19.71
3	16QAM	1	14	19.81	19.86	19.77
3	16QAM	8	0	19.04	18.96	18.77
3	16QAM	8	4	18.88	18.73	18.96
3	16QAM	8	7	18.89	18.72	18.81
3	16QAM	15	0	18.54	18.80	18.82



LTE Band 4						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				19957	20175	20393
Frequency (MHz)				1710.7	1732.5	1754.3
1.4	QPSK	1	0	20.71	20.74	20.68
1.4	QPSK	1	3	20.57	20.62	20.60
1.4	QPSK	1	5	20.57	20.63	20.61
1.4	QPSK	3	0	19.68	19.82	19.86
1.4	QPSK	3	1	19.73	19.63	19.64
1.4	QPSK	3	3	19.79	19.53	19.66
1.4	QPSK	6	0	19.46	19.85	19.73
1.4	16QAM	1	0	19.77	19.76	19.64
1.4	16QAM	1	3	19.71	19.76	19.74
1.4	16QAM	1	5	19.90	19.86	19.59
1.4	16QAM	3	0	18.74	18.67	18.81
1.4	16QAM	3	1	18.82	18.86	18.74
1.4	16QAM	3	3	18.70	18.56	18.80
1.4	16QAM	6	0	18.77	18.68	18.92



LTE Band 5						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20450	20525	20600
Frequency (MHz)				829	836.5	844
10	QPSK	1	0	22.55	22.65	22.56
10	QPSK	1	25	22.46	22.45	22.51
10	QPSK	1	49	22.55	22.42	22.54
10	QPSK	25	0	21.58	21.66	21.57
10	QPSK	25	12	21.50	21.48	21.56
10	QPSK	25	25	21.53	21.42	21.42
10	QPSK	50	0	21.28	21.51	21.38
10	16QAM	1	0	21.57	21.64	21.57
10	16QAM	1	25	21.55	21.66	21.48
10	16QAM	1	49	21.40	21.54	21.56
10	16QAM	25	0	20.71	20.55	20.64
10	16QAM	25	12	20.49	20.44	20.51
10	16QAM	25	25	20.73	20.40	20.47
10	16QAM	50	0	20.50	20.56	20.44



LTE Band 5						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20425	20525	20625
Frequency (MHz)				826.5	836.5	846.5
5	QPSK	1	0	22.58	22.58	22.50
5	QPSK	1	12	22.40	22.56	22.45
5	QPSK	1	24	22.58	22.28	22.32
5	QPSK	12	0	21.38	21.65	21.69
5	QPSK	12	7	21.72	21.72	21.48
5	QPSK	12	13	21.48	21.48	21.65
5	QPSK	25	0	21.46	21.47	21.56
5	16QAM	1	0	21.73	21.65	21.55
5	16QAM	1	12	21.56	21.41	21.70
5	16QAM	1	24	21.39	21.52	21.69
5	16QAM	12	0	20.59	20.52	20.63
5	16QAM	12	7	20.56	20.34	20.54
5	16QAM	12	13	20.52	20.57	20.64
5	16QAM	25	0	20.61	20.49	20.55



LTE Band 5						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20415	20525	20635
Frequency (MHz)				825.5	836.5	847.5
3	QPSK	1	0	22.57	22.60	22.44
3	QPSK	1	8	22.42	22.50	22.54
3	QPSK	1	14	22.45	22.56	22.38
3	QPSK	8	0	21.44	21.55	21.62
3	QPSK	8	4	21.70	21.66	21.62
3	QPSK	8	7	21.70	21.53	21.51
3	QPSK	15	0	21.35	21.57	21.59
3	16QAM	1	0	21.72	21.73	21.62
3	16QAM	1	8	21.74	21.50	21.75
3	16QAM	1	14	21.69	21.64	21.60
3	16QAM	8	0	20.71	20.73	20.79
3	16QAM	8	4	20.60	20.37	20.69
3	16QAM	8	7	20.68	20.36	20.63
3	16QAM	15	0	20.64	20.52	20.76



LTE Band 5						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20407	20525	20643
Frequency (MHz)				824.7	836.5	848.3
1.4	QPSK	1	0	22.56	22.59	22.57
1.4	QPSK	1	3	22.37	22.53	22.52
1.4	QPSK	1	5	22.51	22.54	22.45
1.4	QPSK	3	0	21.52	21.57	21.56
1.4	QPSK	3	1	21.64	21.70	21.50
1.4	QPSK	3	3	21.53	21.56	21.53
1.4	QPSK	6	0	21.39	21.62	21.38
1.4	16QAM	1	0	21.67	21.53	21.46
1.4	16QAM	1	3	21.65	21.61	21.83
1.4	16QAM	1	5	21.48	21.54	21.45
1.4	16QAM	3	0	20.79	20.50	20.59
1.4	16QAM	3	1	20.50	20.44	20.70
1.4	16QAM	3	3	20.61	20.38	20.66
1.4	16QAM	6	0	20.40	20.48	20.57



LTE Band 7						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20850	21100	21350
Frequency (MHz)				2510	2535	2560
20	QPSK	1	0	20.55	20.62	20.60
20	QPSK	1	49	20.59	20.36	20.52
20	QPSK	1	99	20.44	20.57	20.35
20	QPSK	50	0	19.71	19.78	19.75
20	QPSK	50	24	19.74	19.47	19.76
20	QPSK	50	50	19.69	19.37	19.39
20	QPSK	100	0	19.59	19.64	19.66
20	16QAM	1	0	19.63	19.81	19.51
20	16QAM	1	49	19.54	19.41	19.78
20	16QAM	1	99	19.69	19.68	19.59
20	16QAM	50	0	18.80	18.44	18.70
20	16QAM	50	24	18.65	18.60	18.74
20	16QAM	50	50	18.80	18.60	18.64
20	16QAM	100	0	18.48	18.56	18.76



LTE Band 7						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20825	21100	21375
Frequency (MHz)				2507.5	2535	2562.5
15	QPSK	1	0	20.46	20.59	20.45
15	QPSK	1	37	20.40	20.54	20.50
15	QPSK	1	74	20.38	20.25	20.39
15	QPSK	36	0	19.47	19.62	19.53
15	QPSK	36	20	19.54	19.59	19.70
15	QPSK	36	39	19.54	19.42	19.56
15	QPSK	75	0	19.57	19.54	19.48
15	16QAM	1	0	19.77	19.55	19.56
15	16QAM	1	37	19.60	19.68	19.82
15	16QAM	1	74	19.59	19.63	19.60
15	16QAM	36	0	18.69	18.64	18.88
15	16QAM	36	20	18.46	18.60	18.60
15	16QAM	36	39	18.48	18.47	18.63
15	16QAM	75	0	18.62	18.70	18.57



LTE Band 7						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20800	21100	21400
Frequency (MHz)				2505	2535	2565
10	QPSK	1	0	20.47	20.58	20.54
10	QPSK	1	25	20.54	20.41	20.51
10	QPSK	1	49	20.51	20.41	20.37
10	QPSK	25	0	19.64	19.48	19.50
10	QPSK	25	12	19.50	19.37	19.53
10	QPSK	25	25	19.75	19.63	19.43
10	QPSK	50	0	19.25	19.57	19.62
10	16QAM	1	0	19.57	19.68	19.66
10	16QAM	1	25	19.72	19.59	19.72
10	16QAM	1	49	19.62	19.43	19.40
10	16QAM	25	0	18.60	18.79	18.80
10	16QAM	25	12	18.56	18.43	18.73
10	16QAM	25	25	18.78	18.57	18.61
10	16QAM	50	0	18.52	18.53	18.61



LTE Band 7						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20775	21100	21425
Frequency (MHz)				2502.5	2535	2567.5
5	QPSK	1	0	20.52	20.60	20.45
5	QPSK	1	12	20.46	20.59	20.54
5	QPSK	1	24	20.58	20.39	20.56
5	QPSK	12	0	19.58	19.73	19.71
5	QPSK	12	7	19.45	19.57	19.71
5	QPSK	12	13	19.55	19.35	19.53
5	QPSK	25	0	19.54	19.66	19.56
5	16QAM	1	0	19.55	19.59	19.68
5	16QAM	1	12	19.50	19.57	19.57
5	16QAM	1	24	19.71	19.53	19.59
5	16QAM	12	0	18.57	18.76	18.79
5	16QAM	12	7	18.41	18.59	18.59
5	16QAM	12	13	18.75	18.53	18.61
5	16QAM	25	0	18.63	18.43	18.46



LTE Band 12						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				23060	23095	23130
Frequency (MHz)				704	707.5	711
10	QPSK	1	0	22.69	22.83	22.68
10	QPSK	1	25	22.64	22.70	22.61
10	QPSK	1	49	22.61	22.60	22.59
10	QPSK	25	0	21.65	21.88	21.77
10	QPSK	25	12	21.77	21.53	21.57
10	QPSK	25	25	21.69	21.69	21.59
10	QPSK	50	0	21.43	21.55	21.57
10	16QAM	1	0	21.69	21.87	21.53
10	16QAM	1	25	21.69	21.69	21.86
10	16QAM	1	49	21.79	21.66	21.83
10	16QAM	25	0	20.85	20.78	20.68
10	16QAM	25	12	20.78	20.47	20.84
10	16QAM	25	25	20.58	20.63	20.64
10	16QAM	50	0	20.56	20.81	20.73



LTE Band 12						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				23035	23095	23155
Frequency (MHz)				701.5	707.5	713.5
5	QPSK	1	0	22.55	22.80	22.66
5	QPSK	1	12	22.66	22.62	22.42
5	QPSK	1	24	22.49	22.55	22.51
5	QPSK	12	0	21.64	21.88	21.68
5	QPSK	12	7	21.79	21.55	21.81
5	QPSK	12	13	21.57	21.68	21.71
5	QPSK	25	0	21.65	21.56	21.52
5	16QAM	1	0	21.75	21.84	21.52
5	16QAM	1	12	21.57	21.60	21.77
5	16QAM	1	24	21.78	21.60	21.69
5	16QAM	12	0	20.74	20.82	20.91
5	16QAM	12	7	20.57	20.56	20.75
5	16QAM	12	13	20.86	20.57	20.84
5	16QAM	25	0	20.53	20.63	20.56



LTE Band 12						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				23025	23095	23165
Frequency (MHz)				700.5	707.5	714.5
3	QPSK	1	0	22.69	22.77	22.68
3	QPSK	1	8	22.63	22.54	22.54
3	QPSK	1	14	22.55	22.50	22.57
3	QPSK	8	0	21.59	21.76	21.89
3	QPSK	8	4	21.70	21.65	21.59
3	QPSK	8	7	21.89	21.45	21.62
3	QPSK	15	0	21.62	21.74	21.60
3	16QAM	1	0	21.80	21.85	21.64
3	16QAM	1	8	21.70	21.46	21.66
3	16QAM	1	14	21.71	21.80	21.67
3	16QAM	8	0	20.76	20.61	20.94
3	16QAM	8	4	20.80	20.78	20.89
3	16QAM	8	7	20.69	20.56	20.61
3	16QAM	15	0	20.66	20.67	20.90



LTE Band 12						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				23017	23095	23173
Frequency (MHz)				699.7	707.5	715.3
1.4	QPSK	1	0	22.65	22.79	22.62
1.4	QPSK	1	3	22.62	22.57	22.59
1.4	QPSK	1	5	22.60	22.60	22.53
1.4	QPSK	3	0	21.51	21.72	21.80
1.4	QPSK	3	1	21.84	21.69	21.58
1.4	QPSK	3	3	21.81	21.63	21.57
1.4	QPSK	6	0	21.53	21.57	21.47
1.4	16QAM	1	0	21.71	21.66	21.65
1.4	16QAM	1	3	21.82	21.81	21.70
1.4	16QAM	1	5	21.51	21.62	21.60
1.4	16QAM	3	0	20.67	20.67	20.73
1.4	16QAM	3	1	20.59	20.53	20.80
1.4	16QAM	3	3	20.58	20.63	20.69
1.4	16QAM	6	0	20.46	20.54	20.69



LTE Band 17						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				23780	23790	23800
Frequency (MHz)				709	710	711
10	QPSK	1	0	22.73	22.78	22.75
10	QPSK	1	25	22.69	22.59	22.57
10	QPSK	1	49	22.60	22.63	22.49
10	QPSK	25	0	21.58	21.76	21.83
10	QPSK	25	12	21.86	21.56	21.61
10	QPSK	25	25	21.91	21.66	21.61
10	QPSK	50	0	21.49	21.53	21.58
10	16QAM	1	0	21.85	21.67	21.76
10	16QAM	1	25	21.61	21.76	21.64
10	16QAM	1	49	21.65	21.53	21.79
10	16QAM	25	0	20.86	20.64	20.85
10	16QAM	25	12	20.71	20.53	20.87
10	16QAM	25	25	20.79	20.73	20.69
10	16QAM	50	0	20.62	20.75	20.90



LTE Band 17						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				23755	23790	23825
Frequency (MHz)				706.5	710	713.5
5	QPSK	1	0	22.69	22.74	22.53
5	QPSK	1	12	22.58	22.57	22.63
5	QPSK	1	24	22.63	22.63	22.69
5	QPSK	12	0	21.70	21.76	21.81
5	QPSK	12	7	21.60	21.74	21.86
5	QPSK	12	13	21.56	21.68	21.76
5	QPSK	25	0	21.43	21.60	21.59
5	16QAM	1	0	21.67	21.82	21.59
5	16QAM	1	12	21.74	21.48	21.63
5	16QAM	1	24	21.55	21.62	21.77
5	16QAM	12	0	20.73	20.72	20.72
5	16QAM	12	7	20.71	20.57	20.74
5	16QAM	12	13	20.85	20.77	20.77
5	16QAM	25	0	20.76	20.76	20.69



LTE Band 66						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				132072	132322	132572
Frequency (MHz)				1720	1745	1770
20	QPSK	1	0	20.77	20.85	20.79
20	QPSK	1	49	20.64	20.58	20.49
20	QPSK	1	99	20.53	20.57	20.54
20	QPSK	50	0	19.79	19.81	19.74
20	QPSK	50	24	19.66	19.65	19.79
20	QPSK	50	50	19.63	19.43	19.62
20	QPSK	100	0	19.59	19.83	19.53
20	16QAM	1	0	19.75	19.80	19.52
20	16QAM	1	49	19.58	19.46	19.71
20	16QAM	1	99	19.48	19.66	19.70
20	16QAM	50	0	18.87	18.87	18.78
20	16QAM	50	24	18.56	18.56	18.73
20	16QAM	50	50	18.80	18.75	18.52
20	16QAM	100	0	18.58	18.54	18.87



LTE Band 66						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				132047	132322	132597
Frequency (MHz)				1717.5	1745	1772.5
15	QPSK	1	0	20.72	20.80	20.73
15	QPSK	1	37	20.46	20.52	20.69
15	QPSK	1	74	20.52	20.55	20.48
15	QPSK	36	0	19.74	19.69	19.90
15	QPSK	36	20	19.71	19.52	19.80
15	QPSK	36	39	19.75	19.64	19.49
15	QPSK	75	0	19.71	19.61	19.53
15	16QAM	1	0	19.93	19.80	19.50
15	16QAM	1	37	19.72	19.49	19.87
15	16QAM	1	74	19.52	19.56	19.52
15	16QAM	36	0	18.95	18.79	18.89
15	16QAM	36	20	18.73	18.78	18.65
15	16QAM	36	39	18.90	18.45	18.57
15	16QAM	75	0	18.54	18.69	18.65



LTE Band 66						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				132022	132322	132622
Frequency (MHz)				1715	1745	1775
10	QPSK	1	0	20.57	20.79	20.67
10	QPSK	1	25	20.60	20.58	20.56
10	QPSK	1	49	20.66	20.72	20.47
10	QPSK	25	0	19.76	19.86	19.86
10	QPSK	25	12	19.87	19.69	19.74
10	QPSK	25	25	19.58	19.70	19.65
10	QPSK	50	0	19.40	19.64	19.50
10	16QAM	1	0	19.70	19.94	19.57
10	16QAM	1	25	19.59	19.50	19.73
10	16QAM	1	49	19.50	19.54	19.84
10	16QAM	25	0	18.84	18.82	18.88
10	16QAM	25	12	18.66	18.72	18.95
10	16QAM	25	25	18.62	18.53	18.49
10	16QAM	50	0	18.50	18.66	18.84



LTE Band 66						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				131997	132322	132647
Frequency (MHz)				1712.5	1745	1777.5
5	QPSK	1	0	20.67	20.77	20.67
5	QPSK	1	12	20.66	20.74	20.58
5	QPSK	1	24	20.66	20.52	20.52
5	QPSK	12	0	19.50	19.81	19.76
5	QPSK	12	7	19.58	19.72	19.90
5	QPSK	12	13	19.56	19.64	19.70
5	QPSK	25	0	19.50	19.56	19.62
5	16QAM	1	0	19.78	19.71	19.63
5	16QAM	1	12	19.71	19.54	19.81
5	16QAM	1	24	19.75	19.61	19.52
5	16QAM	12	0	18.64	18.80	18.69
5	16QAM	12	7	18.48	18.45	18.59
5	16QAM	12	13	18.71	18.64	18.53
5	16QAM	25	0	18.57	18.58	18.85



LTE Band 66						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				131987	132322	132657
Frequency (MHz)				1711.5	1745	1778.5
3	QPSK	1	0	20.73	20.76	20.65
3	QPSK	1	8	20.57	20.75	20.63
3	QPSK	1	14	20.65	20.68	20.45
3	QPSK	8	0	19.59	19.74	19.83
3	QPSK	8	4	19.73	19.63	19.63
3	QPSK	8	7	19.70	19.68	19.72
3	QPSK	15	0	19.65	19.68	19.64
3	16QAM	1	0	19.63	19.75	19.66
3	16QAM	1	8	19.62	19.71	19.84
3	16QAM	1	14	19.57	19.81	19.66
3	16QAM	8	0	18.89	18.91	18.70
3	16QAM	8	4	18.68	18.53	18.94
3	16QAM	8	7	18.72	18.69	18.76
3	16QAM	15	0	18.65	18.62	18.82



LTE Band 66						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				131979	132322	132665
Frequency (MHz)				1710.7	1745	1779.3
1.4	QPSK	1	0	20.54	20.78	20.54
1.4	QPSK	1	3	20.49	20.66	20.44
1.4	QPSK	1	5	20.55	20.55	20.55
1.4	QPSK	3	0	19.80	19.64	19.69
1.4	QPSK	3	1	19.81	19.52	19.68
1.4	QPSK	3	3	19.59	19.54	19.55
1.4	QPSK	6	0	19.59	19.79	19.64
1.4	16QAM	1	0	19.72	19.91	19.65
1.4	16QAM	1	3	19.77	19.71	19.88
1.4	16QAM	1	5	19.63	19.83	19.51
1.4	16QAM	3	0	18.86	18.66	18.87
1.4	16QAM	3	1	18.66	18.63	18.64
1.4	16QAM	3	3	18.59	18.79	18.81
1.4	16QAM	6	0	18.67	18.74	18.90



LTE Band 71						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				133222	133322	133372
Frequency (MHz)				673	683	688
20	QPSK	1	0	22.82	22.86	22.74
20	QPSK	1	49	22.68	22.63	22.47
20	QPSK	1	99	22.54	22.66	22.75
20	QPSK	50	0	21.66	21.85	21.76
20	QPSK	50	24	21.83	21.73	21.59
20	QPSK	50	50	21.61	21.55	21.78
20	QPSK	100	0	21.59	21.71	21.65
20	16QAM	1	0	21.86	21.89	21.77
20	16QAM	1	49	21.62	21.58	21.93
20	16QAM	1	99	21.54	21.79	21.71
20	16QAM	50	0	20.82	20.56	20.87
20	16QAM	50	24	20.59	20.47	20.94
20	16QAM	50	50	20.89	20.62	20.69
20	16QAM	100	0	20.59	20.81	20.82



LTE Band 71						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				133197	133297	133397
Frequency (MHz)				670.5	680.5	690.5
15	QPSK	1	0	22.70	22.82	22.67
15	QPSK	1	37	22.68	22.57	22.43
15	QPSK	1	74	22.57	22.58	22.62
15	QPSK	36	0	21.53	21.65	21.75
15	QPSK	36	20	21.86	21.51	21.78
15	QPSK	36	39	21.80	21.47	21.76
15	QPSK	75	0	21.46	21.76	21.77
15	16QAM	1	0	21.66	21.87	21.67
15	16QAM	1	37	21.56	21.71	21.95
15	16QAM	1	74	21.51	21.86	21.56
15	16QAM	36	0	20.87	20.88	20.89
15	16QAM	36	20	20.48	20.47	20.68
15	16QAM	36	39	20.57	20.62	20.55
15	16QAM	75	0	20.71	20.63	20.85



LTE Band 71						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				133172	133272	133422
Frequency (MHz)				668	678	693
10	QPSK	1	0	22.66	22.83	22.57
10	QPSK	1	25	22.51	22.65	22.62
10	QPSK	1	49	22.63	22.53	22.50
10	QPSK	25	0	21.58	21.70	21.91
10	QPSK	25	12	21.79	21.67	21.75
10	QPSK	25	25	21.61	21.75	21.44
10	QPSK	50	0	21.50	21.77	21.77
10	16QAM	1	0	21.70	21.82	21.77
10	16QAM	1	25	21.74	21.46	21.82
10	16QAM	1	49	21.74	21.61	21.80
10	16QAM	25	0	20.81	20.56	20.73
10	16QAM	25	12	20.55	20.64	20.64
10	16QAM	25	25	20.72	20.50	20.55
10	16QAM	50	0	20.57	20.50	20.71



LTE Band 71						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				133147	133247	133447
Frequency (MHz)				665.5	675.5	695.5
5	QPSK	1	0	22.72	22.84	22.55
5	QPSK	1	12	22.47	22.72	22.56
5	QPSK	1	24	22.46	22.72	22.51
5	QPSK	12	0	21.63	21.66	21.84
5	QPSK	12	7	21.59	21.65	21.76
5	QPSK	12	13	21.85	21.58	21.56
5	QPSK	25	0	21.43	21.57	21.61
5	16QAM	1	0	21.65	21.68	21.74
5	16QAM	1	12	21.78	21.77	21.84
5	16QAM	1	24	21.73	21.77	21.77
5	16QAM	12	0	20.77	20.71	20.70
5	16QAM	12	7	20.76	20.68	20.93
5	16QAM	12	13	20.84	20.67	20.52
5	16QAM	25	0	20.58	20.79	20.62



Effective Radiated Power and Effective Isotropic Radiated Power

LTE Band 2				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				18700		18900		19100	
Frequency (MHz)				1860		1880		1900	
				dBm	W	dBm	W	dBm	W
20	QPSK	1	0	21.03	0.127	21.09	0.129	21.05	0.127
20	QPSK	1	49	20.94	0.124	20.88	0.122	20.76	0.119
20	QPSK	1	99	20.93	0.124	20.74	0.119	20.88	0.122
20	QPSK	50	0	20.05	0.101	20.14	0.103	19.98	0.100
20	QPSK	50	24	19.98	0.100	19.95	0.099	20.04	0.101
20	QPSK	50	50	19.91	0.098	19.88	0.097	19.83	0.096
20	QPSK	100	0	19.86	0.097	19.91	0.098	19.78	0.095
20	16QAM	1	0	19.92	0.098	20.09	0.102	19.91	0.098
20	16QAM	1	49	19.85	0.097	19.74	0.094	20.07	0.102
20	16QAM	1	99	19.81	0.096	19.95	0.099	19.91	0.098
20	16QAM	50	0	19.06	0.081	19.17	0.083	19.16	0.082
20	16QAM	50	24	18.94	0.078	18.75	0.075	19.19	0.083
20	16QAM	50	50	18.96	0.079	19.05	0.080	19.00	0.079
20	16QAM	100	0	18.95	0.079	18.88	0.077	18.96	0.079



LTE Band 2				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				18675		18900		19125	
Frequency (MHz)				1857.5		1880		1902.5	
				dBm	W	dBm	W	dBm	W
15	QPSK	1	0	20.96	0.125	21.06	0.128	20.95	0.124
15	QPSK	1	37	20.93	0.124	20.95	0.124	20.78	0.120
15	QPSK	1	74	20.73	0.118	20.89	0.123	20.86	0.122
15	QPSK	36	0	20.06	0.101	20.09	0.102	20.14	0.103
15	QPSK	36	20	20.10	0.102	19.87	0.097	19.94	0.099
15	QPSK	36	39	19.96	0.099	19.89	0.097	19.73	0.094
15	QPSK	75	0	19.85	0.097	19.82	0.096	19.83	0.096
15	16QAM	1	0	20.03	0.101	20.00	0.100	20.02	0.100
15	16QAM	1	37	19.92	0.098	19.89	0.097	20.17	0.104
15	16QAM	1	74	19.87	0.097	20.09	0.102	20.08	0.102
15	16QAM	36	0	19.21	0.083	19.10	0.081	19.05	0.080
15	16QAM	36	20	18.85	0.077	18.98	0.079	19.20	0.083
15	16QAM	36	39	19.04	0.080	19.03	0.080	18.86	0.077
15	16QAM	75	0	18.80	0.076	18.86	0.077	19.01	0.080



LTE Band 2				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				18650		18900		19150	
Frequency (MHz)				1855		1880		1905	
				dBm	W	dBm	W	dBm	W
10	QPSK	1	0	20.89	0.123	21.07	0.128	20.90	0.123
10	QPSK	1	25	20.81	0.121	20.96	0.125	20.68	0.117
10	QPSK	1	49	20.92	0.124	20.97	0.125	21.02	0.126
10	QPSK	25	0	19.78	0.095	19.98	0.100	20.11	0.103
10	QPSK	25	12	20.05	0.101	20.02	0.100	20.00	0.100
10	QPSK	25	25	19.96	0.099	19.86	0.097	20.01	0.100
10	QPSK	50	0	19.93	0.098	19.80	0.095	19.91	0.098
10	16QAM	1	0	19.96	0.099	20.12	0.103	19.78	0.095
10	16QAM	1	25	19.82	0.096	19.75	0.094	20.07	0.102
10	16QAM	1	49	19.83	0.096	19.84	0.096	19.88	0.097
10	16QAM	25	0	19.13	0.082	19.14	0.082	19.03	0.080
10	16QAM	25	12	18.81	0.076	19.00	0.079	18.92	0.078
10	16QAM	25	25	19.13	0.082	18.91	0.078	18.97	0.079
10	16QAM	50	0	19.09	0.081	18.79	0.076	18.97	0.079



LTE Band 2				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				18625		18900		19175	
Frequency (MHz)				1852.5		1880		1907.5	
				dBm	W	dBm	W	dBm	W
5	QPSK	1	0	20.92	0.124	21.05	0.127	20.96	0.125
5	QPSK	1	12	20.78	0.120	20.98	0.125	20.89	0.123
5	QPSK	1	24	20.86	0.122	20.80	0.120	20.99	0.126
5	QPSK	12	0	19.85	0.097	20.03	0.101	20.11	0.103
5	QPSK	12	7	20.12	0.103	20.11	0.103	19.85	0.097
5	QPSK	12	13	20.11	0.103	19.98	0.100	19.74	0.094
5	QPSK	25	0	19.84	0.096	20.04	0.101	20.06	0.101
5	16QAM	1	0	20.18	0.104	20.03	0.101	20.02	0.100
5	16QAM	1	12	19.92	0.098	20.02	0.100	20.03	0.101
5	16QAM	1	24	19.81	0.096	19.86	0.097	20.09	0.102
5	16QAM	12	0	19.06	0.081	19.05	0.080	19.05	0.080
5	16QAM	12	7	18.91	0.078	19.02	0.080	19.16	0.082
5	16QAM	12	13	19.04	0.080	18.97	0.079	18.98	0.079
5	16QAM	25	0	18.77	0.075	18.81	0.076	19.01	0.080



LTE Band 2				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				18615		18900		19185	
Frequency (MHz)				1851.5		1880		1908.5	
				dBm	W	dBm	W	dBm	W
3	QPSK	1	0	20.89	0.123	21.06	0.128	20.99	0.126
3	QPSK	1	8	20.85	0.122	21.03	0.127	20.91	0.123
3	QPSK	1	14	21.00	0.126	20.96	0.125	20.96	0.125
3	QPSK	8	0	19.98	0.100	19.90	0.098	20.05	0.101
3	QPSK	8	4	20.14	0.103	20.03	0.101	20.13	0.103
3	QPSK	8	7	19.84	0.096	19.87	0.097	19.84	0.096
3	QPSK	15	0	19.92	0.098	19.91	0.098	19.97	0.099
3	16QAM	1	0	19.94	0.099	20.03	0.101	19.88	0.097
3	16QAM	1	8	19.95	0.099	19.83	0.096	19.90	0.098
3	16QAM	1	14	20.08	0.102	19.89	0.097	19.99	0.100
3	16QAM	8	0	18.92	0.078	19.17	0.083	19.14	0.082
3	16QAM	8	4	19.02	0.080	18.90	0.078	18.91	0.078
3	16QAM	8	7	18.92	0.078	18.92	0.078	18.96	0.079
3	16QAM	15	0	18.89	0.077	18.90	0.078	19.02	0.080



LTE Band 2				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				18607		18900		19193	
Frequency (MHz)				1850.7		1880		1909.3	
				dBm	W	dBm	W	dBm	W
1.4	QPSK	1	0	20.82	0.121	21.05	0.127	20.87	0.122
1.4	QPSK	1	3	20.91	0.123	21.07	0.128	20.95	0.124
1.4	QPSK	1	5	20.89	0.123	20.99	0.126	20.76	0.119
1.4	QPSK	3	0	19.83	0.096	20.09	0.102	19.89	0.097
1.4	QPSK	3	1	19.88	0.097	19.82	0.096	19.96	0.099
1.4	QPSK	3	3	19.96	0.099	19.94	0.099	20.02	0.100
1.4	QPSK	6	0	19.93	0.098	20.08	0.102	19.97	0.099
1.4	16QAM	1	0	20.03	0.101	20.13	0.103	20.10	0.102
1.4	16QAM	1	3	19.91	0.098	19.93	0.098	19.89	0.097
1.4	16QAM	1	5	19.80	0.095	20.13	0.103	19.87	0.097
1.4	16QAM	3	0	19.05	0.080	18.94	0.078	19.17	0.083
1.4	16QAM	3	1	18.95	0.079	18.88	0.077	18.96	0.079
1.4	16QAM	3	3	19.16	0.082	19.02	0.080	18.87	0.077
1.4	16QAM	6	0	18.92	0.078	18.94	0.078	18.86	0.077



LTE Band 4				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20050		20175		20300	
Frequency (MHz)				1720		1732.5		1745	
				dBm	W	dBm	W	dBm	W
20	QPSK	1	0	20.17	0.104	20.20	0.105	20.16	0.104
20	QPSK	1	49	20.10	0.102	20.15	0.104	20.08	0.102
20	QPSK	1	99	20.04	0.101	19.99	0.100	20.09	0.102
20	QPSK	50	0	19.16	0.082	19.13	0.082	19.35	0.086
20	QPSK	50	24	19.32	0.086	19.23	0.084	19.37	0.086
20	QPSK	50	50	19.07	0.081	19.15	0.082	19.04	0.080
20	QPSK	100	0	19.17	0.083	19.00	0.079	19.13	0.082
20	16QAM	1	0	19.32	0.086	19.17	0.083	19.26	0.084
20	16QAM	1	49	19.02	0.080	19.13	0.082	19.27	0.085
20	16QAM	1	99	19.07	0.081	19.03	0.080	19.30	0.085
20	16QAM	50	0	18.26	0.067	18.26	0.067	18.13	0.065
20	16QAM	50	24	18.09	0.064	18.04	0.064	18.16	0.065
20	16QAM	50	50	18.19	0.066	17.95	0.062	18.18	0.066
20	16QAM	100	0	18.28	0.067	18.03	0.064	18.19	0.066



LTE Band 4				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20025		20175		20325	
Frequency (MHz)				1717.5		1732.5		1747.5	
				dBm	W	dBm	W	dBm	W
15	QPSK	1	0	20.02	0.100	20.18	0.104	20.13	0.103
15	QPSK	1	37	20.03	0.101	20.10	0.102	20.13	0.103
15	QPSK	1	74	20.18	0.104	20.01	0.100	20.14	0.103
15	QPSK	36	0	19.25	0.084	19.20	0.083	19.22	0.084
15	QPSK	36	20	19.35	0.086	19.16	0.082	19.23	0.084
15	QPSK	36	39	19.06	0.081	19.23	0.084	19.14	0.082
15	QPSK	75	0	18.98	0.079	19.01	0.080	19.00	0.079
15	16QAM	1	0	19.18	0.083	19.24	0.084	19.27	0.085
15	16QAM	1	37	19.21	0.083	19.24	0.084	19.13	0.082
15	16QAM	1	74	19.21	0.083	19.11	0.081	18.99	0.079
15	16QAM	36	0	18.36	0.069	18.33	0.068	18.45	0.070
15	16QAM	36	20	18.22	0.066	18.17	0.066	18.11	0.065
15	16QAM	36	39	18.10	0.065	18.11	0.065	18.07	0.064
15	16QAM	75	0	18.26	0.067	18.03	0.064	18.33	0.068



LTE Band 4				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20000		20175		20350	
Frequency (MHz)				1715		1732.5		1750	
				dBm	W	dBm	W	dBm	W
10	QPSK	1	0	20.16	0.104	20.17	0.104	20.09	0.102
10	QPSK	1	25	20.14	0.103	20.09	0.102	20.09	0.102
10	QPSK	1	49	20.08	0.102	20.11	0.103	19.95	0.099
10	QPSK	25	0	19.19	0.083	19.36	0.086	19.32	0.086
10	QPSK	25	12	19.27	0.085	19.20	0.083	19.24	0.084
10	QPSK	25	25	19.07	0.081	19.05	0.080	19.26	0.084
10	QPSK	50	0	19.01	0.080	19.15	0.082	19.00	0.079
10	16QAM	1	0	19.19	0.083	19.20	0.083	19.17	0.083
10	16QAM	1	25	19.24	0.084	18.95	0.079	19.11	0.081
10	16QAM	1	49	19.28	0.085	19.21	0.083	19.03	0.080
10	16QAM	25	0	18.12	0.065	18.05	0.064	18.25	0.067
10	16QAM	25	12	18.11	0.065	18.09	0.064	18.22	0.066
10	16QAM	25	25	18.24	0.067	18.03	0.064	18.22	0.066
10	16QAM	50	0	18.15	0.065	18.07	0.064	18.35	0.068



LTE Band 4				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				19975		20175		20375	
Frequency (MHz)				1712.5		1732.5		1752.5	
				dBm	W	dBm	W	dBm	W
5	QPSK	1	0	20.13	0.103	20.16	0.104	20.03	0.101
5	QPSK	1	12	19.95	0.099	19.98	0.100	19.93	0.098
5	QPSK	1	24	20.07	0.102	19.99	0.100	20.07	0.102
5	QPSK	12	0	19.23	0.084	19.28	0.085	19.19	0.083
5	QPSK	12	7	19.12	0.082	19.16	0.082	19.28	0.085
5	QPSK	12	13	19.11	0.081	18.94	0.078	19.16	0.082
5	QPSK	25	0	18.96	0.079	19.31	0.085	19.25	0.084
5	16QAM	1	0	19.19	0.083	19.26	0.084	19.11	0.081
5	16QAM	1	12	19.03	0.080	19.12	0.082	19.15	0.082
5	16QAM	1	24	19.15	0.082	19.01	0.080	19.31	0.085
5	16QAM	12	0	18.21	0.066	18.26	0.067	18.22	0.066
5	16QAM	12	7	18.20	0.066	18.09	0.064	18.32	0.068
5	16QAM	12	13	18.15	0.065	18.00	0.063	18.06	0.064
5	16QAM	25	0	18.08	0.064	18.16	0.065	18.31	0.068



LTE Band 4				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				19965		20175		20385	
Frequency (MHz)				1711.5		1732.5		1753.5	
				dBm	W	dBm	W	dBm	W
3	QPSK	1	0	20.14	0.103	20.15	0.104	20.01	0.100
3	QPSK	1	8	19.94	0.099	20.06	0.101	19.87	0.097
3	QPSK	1	14	20.09	0.102	20.08	0.102	20.00	0.100
3	QPSK	8	0	19.11	0.081	19.19	0.083	19.13	0.082
3	QPSK	8	4	19.18	0.083	19.00	0.079	19.11	0.081
3	QPSK	8	7	19.04	0.080	18.90	0.078	18.91	0.078
3	QPSK	15	0	19.11	0.081	19.13	0.082	18.95	0.079
3	16QAM	1	0	19.10	0.081	19.26	0.084	19.12	0.082
3	16QAM	1	8	19.12	0.082	19.24	0.084	19.11	0.081
3	16QAM	1	14	19.21	0.083	19.26	0.084	19.17	0.083
3	16QAM	8	0	18.44	0.070	18.36	0.069	18.17	0.066
3	16QAM	8	4	18.28	0.067	18.13	0.065	18.36	0.069
3	16QAM	8	7	18.29	0.067	18.12	0.065	18.21	0.066
3	16QAM	15	0	17.94	0.062	18.20	0.066	18.22	0.066



LTE Band 4				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				19957		20175		20393	
Frequency (MHz)				1710.7		1732.5		1754.3	
				dBm	W	dBm	W	dBm	W
1.4	QPSK	1	0	20.11	0.103	20.14	0.103	20.08	0.102
1.4	QPSK	1	3	19.97	0.099	20.02	0.100	20.00	0.100
1.4	QPSK	1	5	19.97	0.099	20.03	0.101	20.01	0.100
1.4	QPSK	3	0	19.08	0.081	19.22	0.084	19.26	0.084
1.4	QPSK	3	1	19.13	0.082	19.03	0.080	19.04	0.080
1.4	QPSK	3	3	19.19	0.083	18.93	0.078	19.06	0.081
1.4	QPSK	6	0	18.86	0.077	19.25	0.084	19.13	0.082
1.4	16QAM	1	0	19.17	0.083	19.16	0.082	19.04	0.080
1.4	16QAM	1	3	19.11	0.081	19.16	0.082	19.14	0.082
1.4	16QAM	1	5	19.30	0.085	19.26	0.084	18.99	0.079
1.4	16QAM	3	0	18.14	0.065	18.07	0.064	18.21	0.066
1.4	16QAM	3	1	18.22	0.066	18.26	0.067	18.14	0.065
1.4	16QAM	3	3	18.10	0.065	17.96	0.063	18.20	0.066
1.4	16QAM	6	0	18.17	0.066	18.08	0.064	18.32	0.068



LTE Band 5				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20450		20525		20600	
Frequency (MHz)				829		836.5		844	
				dBm	W	dBm	W	dBm	W
10	QPSK	1	0	18.10	0.065	18.20	0.066	18.11	0.065
10	QPSK	1	25	18.01	0.063	18.00	0.063	18.06	0.064
10	QPSK	1	49	18.10	0.065	17.97	0.063	18.09	0.064
10	QPSK	25	0	17.13	0.052	17.21	0.053	17.12	0.052
10	QPSK	25	12	17.05	0.051	17.03	0.050	17.11	0.051
10	QPSK	25	25	17.08	0.051	16.97	0.050	16.97	0.050
10	QPSK	50	0	16.83	0.048	17.06	0.051	16.93	0.049
10	16QAM	1	0	17.12	0.052	17.19	0.052	17.12	0.052
10	16QAM	1	25	17.10	0.051	17.21	0.053	17.03	0.050
10	16QAM	1	49	16.95	0.050	17.09	0.051	17.11	0.051
10	16QAM	25	0	16.26	0.042	16.10	0.041	16.19	0.042
10	16QAM	25	12	16.04	0.040	15.99	0.040	16.06	0.040
10	16QAM	25	25	16.28	0.042	15.95	0.039	16.02	0.040
10	16QAM	50	0	16.05	0.040	16.11	0.041	15.99	0.040



LTE Band 5				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20425		20525		20625	
Frequency (MHz)				826.5		836.5		846.5	
				dBm	W	dBm	W	dBm	W
5	QPSK	1	0	18.13	0.065	18.13	0.065	18.05	0.064
5	QPSK	1	12	17.95	0.062	18.11	0.065	18.00	0.063
5	QPSK	1	24	18.13	0.065	17.83	0.061	17.87	0.061
5	QPSK	12	0	16.93	0.049	17.20	0.052	17.24	0.053
5	QPSK	12	7	17.27	0.053	17.27	0.053	17.03	0.050
5	QPSK	12	13	17.03	0.050	17.03	0.050	17.20	0.052
5	QPSK	25	0	17.01	0.050	17.02	0.050	17.11	0.051
5	16QAM	1	0	17.28	0.053	17.20	0.052	17.10	0.051
5	16QAM	1	12	17.11	0.051	16.96	0.050	17.25	0.053
5	16QAM	1	24	16.94	0.049	17.07	0.051	17.24	0.053
5	16QAM	12	0	16.14	0.041	16.07	0.040	16.18	0.041
5	16QAM	12	7	16.11	0.041	15.89	0.039	16.09	0.041
5	16QAM	12	13	16.07	0.040	16.12	0.041	16.19	0.042
5	16QAM	25	0	16.16	0.041	16.04	0.040	16.10	0.041



LTE Band 5				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20415		20525		20635	
Frequency (MHz)				825.5		836.5		847.5	
				dBm	W	dBm	W	dBm	W
3	QPSK	1	0	18.12	0.065	18.15	0.065	17.99	0.063
3	QPSK	1	8	17.97	0.063	18.05	0.064	18.09	0.064
3	QPSK	1	14	18.00	0.063	18.11	0.065	17.93	0.062
3	QPSK	8	0	16.99	0.050	17.10	0.051	17.17	0.052
3	QPSK	8	4	17.25	0.053	17.21	0.053	17.17	0.052
3	QPSK	8	7	17.25	0.053	17.08	0.051	17.06	0.051
3	QPSK	15	0	16.90	0.049	17.12	0.052	17.14	0.052
3	16QAM	1	0	17.27	0.053	17.28	0.053	17.17	0.052
3	16QAM	1	8	17.29	0.054	17.05	0.051	17.30	0.054
3	16QAM	1	14	17.24	0.053	17.19	0.052	17.15	0.052
3	16QAM	8	0	16.26	0.042	16.28	0.042	16.34	0.043
3	16QAM	8	4	16.15	0.041	15.92	0.039	16.24	0.042
3	16QAM	8	7	16.23	0.042	15.91	0.039	16.18	0.041
3	16QAM	15	0	16.19	0.042	16.07	0.040	16.31	0.043



LTE Band 5				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20407		20525		20643	
Frequency (MHz)				824.7		836.5		848.3	
				dBm	W	dBm	W	dBm	W
1.4	QPSK	1	0	18.11	0.065	18.14	0.065	18.12	0.065
1.4	QPSK	1	3	17.92	0.062	18.08	0.064	18.07	0.064
1.4	QPSK	1	5	18.06	0.064	18.09	0.064	18.00	0.063
1.4	QPSK	3	0	17.07	0.051	17.12	0.052	17.11	0.051
1.4	QPSK	3	1	17.19	0.052	17.25	0.053	17.05	0.051
1.4	QPSK	3	3	17.08	0.051	17.11	0.051	17.08	0.051
1.4	QPSK	6	0	16.94	0.049	17.17	0.052	16.93	0.049
1.4	16QAM	1	0	17.22	0.053	17.08	0.051	17.01	0.050
1.4	16QAM	1	3	17.20	0.052	17.16	0.052	17.38	0.055
1.4	16QAM	1	5	17.03	0.050	17.09	0.051	17.00	0.050
1.4	16QAM	3	0	16.34	0.043	16.05	0.040	16.14	0.041
1.4	16QAM	3	1	16.05	0.040	15.99	0.040	16.25	0.042
1.4	16QAM	3	3	16.16	0.041	15.93	0.039	16.21	0.042
1.4	16QAM	6	0	15.95	0.039	16.03	0.040	16.12	0.041



LTE Band 7				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20850		21100		21350	
Frequency (MHz)				2510		2535		2560	
				dBm	W	dBm	W	dBm	W
20	QPSK	1	0	19.05	0.080	19.12	0.082	19.10	0.081
20	QPSK	1	49	19.09	0.081	18.86	0.077	19.02	0.080
20	QPSK	1	99	18.94	0.078	19.07	0.081	18.85	0.077
20	QPSK	50	0	18.21	0.066	18.28	0.067	18.25	0.067
20	QPSK	50	24	18.24	0.067	17.97	0.063	18.26	0.067
20	QPSK	50	50	18.19	0.066	17.87	0.061	17.89	0.062
20	QPSK	100	0	18.09	0.064	18.14	0.065	18.16	0.065
20	16QAM	1	0	18.13	0.065	18.31	0.068	18.01	0.063
20	16QAM	1	49	18.04	0.064	17.91	0.062	18.28	0.067
20	16QAM	1	99	18.19	0.066	18.18	0.066	18.09	0.064
20	16QAM	50	0	17.30	0.054	16.94	0.049	17.20	0.052
20	16QAM	50	24	17.15	0.052	17.10	0.051	17.24	0.053
20	16QAM	50	50	17.30	0.054	17.10	0.051	17.14	0.052
20	16QAM	100	0	16.98	0.050	17.06	0.051	17.26	0.053



LTE Band 7				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20825		21100		21375	
Frequency (MHz)				2507.5		2535		2562.5	
				dBm	W	dBm	W	dBm	W
15	QPSK	1	0	18.96	0.079	19.09	0.081	18.95	0.079
15	QPSK	1	37	18.90	0.078	19.04	0.080	19.00	0.079
15	QPSK	1	74	18.88	0.077	18.75	0.075	18.89	0.077
15	QPSK	36	0	17.97	0.063	18.12	0.065	18.03	0.064
15	QPSK	36	20	18.04	0.064	18.09	0.064	18.20	0.066
15	QPSK	36	39	18.04	0.064	17.92	0.062	18.06	0.064
15	QPSK	75	0	18.07	0.064	18.04	0.064	17.98	0.063
15	16QAM	1	0	18.27	0.067	18.05	0.064	18.06	0.064
15	16QAM	1	37	18.10	0.065	18.18	0.066	18.32	0.068
15	16QAM	1	74	18.09	0.064	18.13	0.065	18.10	0.065
15	16QAM	36	0	17.19	0.052	17.14	0.052	17.38	0.055
15	16QAM	36	20	16.96	0.050	17.10	0.051	17.10	0.051
15	16QAM	36	39	16.98	0.050	16.97	0.050	17.13	0.052
15	16QAM	75	0	17.12	0.052	17.20	0.052	17.07	0.051



LTE Band 7				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20800		21100		21400	
Frequency (MHz)				2505		2535		2565	
				dBm	W	dBm	W	dBm	W
10	QPSK	1	0	18.97	0.079	19.08	0.081	19.04	0.080
10	QPSK	1	25	19.04	0.080	18.91	0.078	19.01	0.080
10	QPSK	1	49	19.01	0.080	18.91	0.078	18.87	0.077
10	QPSK	25	0	18.14	0.065	17.98	0.063	18.00	0.063
10	QPSK	25	12	18.00	0.063	17.87	0.061	18.03	0.064
10	QPSK	25	25	18.25	0.067	18.13	0.065	17.93	0.062
10	QPSK	50	0	17.75	0.060	18.07	0.064	18.12	0.065
10	16QAM	1	0	18.07	0.064	18.18	0.066	18.16	0.065
10	16QAM	1	25	18.22	0.066	18.09	0.064	18.22	0.066
10	16QAM	1	49	18.12	0.065	17.93	0.062	17.90	0.062
10	16QAM	25	0	17.10	0.051	17.29	0.054	17.30	0.054
10	16QAM	25	12	17.06	0.051	16.93	0.049	17.23	0.053
10	16QAM	25	25	17.28	0.053	17.07	0.051	17.11	0.051
10	16QAM	50	0	17.02	0.050	17.03	0.050	17.11	0.051



LTE Band 7				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20775		21100		21425	
Frequency (MHz)				2502.5		2535		2567.5	
				dBm	W	dBm	W	dBm	W
5	QPSK	1	0	19.02	0.080	19.10	0.081	18.95	0.079
5	QPSK	1	12	18.96	0.079	19.09	0.081	19.04	0.080
5	QPSK	1	24	19.08	0.081	18.89	0.077	19.06	0.081
5	QPSK	12	0	18.08	0.064	18.23	0.067	18.21	0.066
5	QPSK	12	7	17.95	0.062	18.07	0.064	18.21	0.066
5	QPSK	12	13	18.05	0.064	17.85	0.061	18.03	0.064
5	QPSK	25	0	18.04	0.064	18.16	0.065	18.06	0.064
5	16QAM	1	0	18.05	0.064	18.09	0.064	18.18	0.066
5	16QAM	1	12	18.00	0.063	18.07	0.064	18.07	0.064
5	16QAM	1	24	18.21	0.066	18.03	0.064	18.09	0.064
5	16QAM	12	0	17.07	0.051	17.26	0.053	17.29	0.054
5	16QAM	12	7	16.91	0.049	17.09	0.051	17.09	0.051
5	16QAM	12	13	17.25	0.053	17.03	0.050	17.11	0.051
5	16QAM	25	0	17.13	0.052	16.93	0.049	16.96	0.050



LTE Band 12				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				23060		23095		23130	
Frequency (MHz)				704		707.5		711	
				dBm	W	dBm	W	dBm	W
10	QPSK	1	0	17.84	0.061	17.98	0.063	17.83	0.061
10	QPSK	1	25	17.79	0.060	17.85	0.061	17.76	0.060
10	QPSK	1	49	17.76	0.060	17.75	0.060	17.74	0.059
10	QPSK	25	0	16.80	0.048	17.03	0.050	16.92	0.049
10	QPSK	25	12	16.92	0.049	16.68	0.047	16.72	0.047
10	QPSK	25	25	16.84	0.048	16.84	0.048	16.74	0.047
10	QPSK	50	0	16.58	0.045	16.70	0.047	16.72	0.047
10	16QAM	1	0	16.84	0.048	17.02	0.050	16.68	0.047
10	16QAM	1	25	16.84	0.048	16.84	0.048	17.01	0.050
10	16QAM	1	49	16.94	0.049	16.81	0.048	16.98	0.050
10	16QAM	25	0	16.00	0.040	15.93	0.039	15.83	0.038
10	16QAM	25	12	15.93	0.039	15.62	0.036	15.99	0.040
10	16QAM	25	25	15.73	0.037	15.78	0.038	15.79	0.038
10	16QAM	50	0	15.71	0.037	15.96	0.039	15.88	0.039



LTE Band 12				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				23035		23095		23155	
Frequency (MHz)				701.5		707.5		713.5	
				dBm	W	dBm	W	dBm	W
5	QPSK	1	0	17.70	0.059	17.95	0.062	17.81	0.060
5	QPSK	1	12	17.81	0.060	17.77	0.060	17.57	0.057
5	QPSK	1	24	17.64	0.058	17.70	0.059	17.66	0.058
5	QPSK	12	0	16.79	0.048	17.03	0.050	16.83	0.048
5	QPSK	12	7	16.94	0.049	16.70	0.047	16.96	0.050
5	QPSK	12	13	16.72	0.047	16.83	0.048	16.86	0.049
5	QPSK	25	0	16.80	0.048	16.71	0.047	16.67	0.046
5	16QAM	1	0	16.90	0.049	16.99	0.050	16.67	0.046
5	16QAM	1	12	16.72	0.047	16.75	0.047	16.92	0.049
5	16QAM	1	24	16.93	0.049	16.75	0.047	16.84	0.048
5	16QAM	12	0	15.89	0.039	15.97	0.040	16.06	0.040
5	16QAM	12	7	15.72	0.037	15.71	0.037	15.90	0.039
5	16QAM	12	13	16.01	0.040	15.72	0.037	15.99	0.040
5	16QAM	25	0	15.68	0.037	15.78	0.038	15.71	0.037



LTE Band 12				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				23025		23095		23165	
Frequency (MHz)				700.5		707.5		714.5	
				dBm	W	dBm	W	dBm	W
3	QPSK	1	0	17.84	0.061	17.92	0.062	17.83	0.061
3	QPSK	1	8	17.78	0.060	17.69	0.059	17.69	0.059
3	QPSK	1	14	17.70	0.059	17.65	0.058	17.72	0.059
3	QPSK	8	0	16.74	0.047	16.91	0.049	17.04	0.051
3	QPSK	8	4	16.85	0.048	16.80	0.048	16.74	0.047
3	QPSK	8	7	17.04	0.051	16.60	0.046	16.77	0.048
3	QPSK	15	0	16.77	0.048	16.89	0.049	16.75	0.047
3	16QAM	1	0	16.95	0.050	17.00	0.050	16.79	0.048
3	16QAM	1	8	16.85	0.048	16.61	0.046	16.81	0.048
3	16QAM	1	14	16.86	0.049	16.95	0.050	16.82	0.048
3	16QAM	8	0	15.91	0.039	15.76	0.038	16.09	0.041
3	16QAM	8	4	15.95	0.039	15.93	0.039	16.04	0.040
3	16QAM	8	7	15.84	0.038	15.71	0.037	15.76	0.038
3	16QAM	15	0	15.81	0.038	15.82	0.038	16.05	0.040



LTE Band 12				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				23017		23095		23173	
Frequency (MHz)				699.7		707.5		715.3	
				dBm	W	dBm	W	dBm	W
1.4	QPSK	1	0	17.80	0.060	17.94	0.062	17.77	0.060
1.4	QPSK	1	3	17.77	0.060	17.72	0.059	17.74	0.059
1.4	QPSK	1	5	17.75	0.060	17.75	0.060	17.68	0.059
1.4	QPSK	3	0	16.66	0.046	16.87	0.049	16.95	0.050
1.4	QPSK	3	1	16.99	0.050	16.84	0.048	16.73	0.047
1.4	QPSK	3	3	16.96	0.050	16.78	0.048	16.72	0.047
1.4	QPSK	6	0	16.68	0.047	16.72	0.047	16.62	0.046
1.4	16QAM	1	0	16.86	0.049	16.81	0.048	16.80	0.048
1.4	16QAM	1	3	16.97	0.050	16.96	0.050	16.85	0.048
1.4	16QAM	1	5	16.66	0.046	16.77	0.048	16.75	0.047
1.4	16QAM	3	0	15.82	0.038	15.82	0.038	15.88	0.039
1.4	16QAM	3	1	15.74	0.037	15.68	0.037	15.95	0.039
1.4	16QAM	3	3	15.73	0.037	15.78	0.038	15.84	0.038
1.4	16QAM	6	0	15.61	0.036	15.69	0.037	15.84	0.038



LTE Band 17				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				23780		23790		23800	
Frequency (MHz)				709		710		711	
				dBm	W	dBm	W	dBm	W
10	QPSK	1	0	17.88	0.061	17.93	0.062	17.90	0.062
10	QPSK	1	25	17.84	0.061	17.74	0.059	17.72	0.059
10	QPSK	1	49	17.75	0.060	17.78	0.060	17.64	0.058
10	QPSK	25	0	16.73	0.047	16.91	0.049	16.98	0.050
10	QPSK	25	12	17.01	0.050	16.71	0.047	16.76	0.047
10	QPSK	25	25	17.06	0.051	16.81	0.048	16.76	0.047
10	QPSK	50	0	16.64	0.046	16.68	0.047	16.73	0.047
10	16QAM	1	0	17.00	0.050	16.82	0.048	16.91	0.049
10	16QAM	1	25	16.76	0.047	16.91	0.049	16.79	0.048
10	16QAM	1	49	16.80	0.048	16.68	0.047	16.94	0.049
10	16QAM	25	0	16.01	0.040	15.79	0.038	16.00	0.040
10	16QAM	25	12	15.86	0.039	15.68	0.037	16.02	0.040
10	16QAM	25	25	15.94	0.039	15.88	0.039	15.84	0.038
10	16QAM	50	0	15.77	0.038	15.90	0.039	16.05	0.040



LTE Band 17				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				23755		23790		23825	
Frequency (MHz)				706.5		710		713.5	
				dBm	W	dBm	W	dBm	W
5	QPSK	1	0	17.84	0.061	17.89	0.062	17.68	0.059
5	QPSK	1	12	17.73	0.059	17.72	0.059	17.78	0.060
5	QPSK	1	24	17.78	0.060	17.78	0.060	17.84	0.061
5	QPSK	12	0	16.85	0.048	16.91	0.049	16.96	0.050
5	QPSK	12	7	16.75	0.047	16.89	0.049	17.01	0.050
5	QPSK	12	13	16.71	0.047	16.83	0.048	16.91	0.049
5	QPSK	25	0	16.58	0.045	16.75	0.047	16.74	0.047
5	16QAM	1	0	16.82	0.048	16.97	0.050	16.74	0.047
5	16QAM	1	12	16.89	0.049	16.63	0.046	16.78	0.048
5	16QAM	1	24	16.70	0.047	16.77	0.048	16.92	0.049
5	16QAM	12	0	15.88	0.039	15.87	0.039	15.87	0.039
5	16QAM	12	7	15.86	0.039	15.72	0.037	15.89	0.039
5	16QAM	12	13	16.00	0.040	15.92	0.039	15.92	0.039
5	16QAM	25	0	15.91	0.039	15.91	0.039	15.84	0.038



LTE Band 66				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				132072		132322		132572	
Frequency (MHz)				1720		1745		1770	
				dBm	W	dBm	W	dBm	W
20	QPSK	1	0	20.17	0.104	20.25	0.106	20.19	0.104
20	QPSK	1	49	20.04	0.101	19.98	0.100	19.89	0.097
20	QPSK	1	99	19.93	0.098	19.97	0.099	19.94	0.099
20	QPSK	50	0	19.19	0.083	19.21	0.083	19.14	0.082
20	QPSK	50	24	19.06	0.081	19.05	0.080	19.19	0.083
20	QPSK	50	50	19.03	0.080	18.83	0.076	19.02	0.080
20	QPSK	100	0	18.99	0.079	19.23	0.084	18.93	0.078
20	16QAM	1	0	19.15	0.082	19.20	0.083	18.92	0.078
20	16QAM	1	49	18.98	0.079	18.86	0.077	19.11	0.081
20	16QAM	1	99	18.88	0.077	19.06	0.081	19.10	0.081
20	16QAM	50	0	18.27	0.067	18.27	0.067	18.18	0.066
20	16QAM	50	24	17.96	0.063	17.96	0.063	18.13	0.065
20	16QAM	50	50	18.20	0.066	18.15	0.065	17.92	0.062
20	16QAM	100	0	17.98	0.063	17.94	0.062	18.27	0.067



LTE Band 66				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				132047		132322		132597	
Frequency (MHz)				1717.5		1745		1772.5	
				dBm	W	dBm	W	dBm	W
15	QPSK	1	0	20.12	0.103	20.20	0.105	20.13	0.103
15	QPSK	1	37	19.86	0.097	19.92	0.098	20.09	0.102
15	QPSK	1	74	19.92	0.098	19.95	0.099	19.88	0.097
15	QPSK	36	0	19.14	0.082	19.09	0.081	19.30	0.085
15	QPSK	36	20	19.11	0.081	18.92	0.078	19.20	0.083
15	QPSK	36	39	19.15	0.082	19.04	0.080	18.89	0.077
15	QPSK	75	0	19.11	0.081	19.01	0.080	18.93	0.078
15	16QAM	1	0	19.33	0.086	19.20	0.083	18.90	0.078
15	16QAM	1	37	19.12	0.082	18.89	0.077	19.27	0.085
15	16QAM	1	74	18.92	0.078	18.96	0.079	18.92	0.078
15	16QAM	36	0	18.35	0.068	18.19	0.066	18.29	0.067
15	16QAM	36	20	18.13	0.065	18.18	0.066	18.05	0.064
15	16QAM	36	39	18.30	0.068	17.85	0.061	17.97	0.063
15	16QAM	75	0	17.94	0.062	18.09	0.064	18.05	0.064



LTE Band 66				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				132022		132322		132622	
Frequency (MHz)				1715		1745		1775	
				dBm	W	dBm	W	dBm	W
10	QPSK	1	0	19.97	0.099	20.19	0.104	20.07	0.102
10	QPSK	1	25	20.00	0.100	19.98	0.100	19.96	0.099
10	QPSK	1	49	20.06	0.101	20.12	0.103	19.87	0.097
10	QPSK	25	0	19.16	0.082	19.26	0.084	19.26	0.084
10	QPSK	25	12	19.27	0.085	19.09	0.081	19.14	0.082
10	QPSK	25	25	18.98	0.079	19.10	0.081	19.05	0.080
10	QPSK	50	0	18.80	0.076	19.04	0.080	18.90	0.078
10	16QAM	1	0	19.10	0.081	19.34	0.086	18.97	0.079
10	16QAM	1	25	18.99	0.079	18.90	0.078	19.13	0.082
10	16QAM	1	49	18.90	0.078	18.94	0.078	19.24	0.084
10	16QAM	25	0	18.24	0.067	18.22	0.066	18.28	0.067
10	16QAM	25	12	18.06	0.064	18.12	0.065	18.35	0.068
10	16QAM	25	25	18.02	0.063	17.93	0.062	17.89	0.062
10	16QAM	50	0	17.90	0.062	18.06	0.064	18.24	0.067



LTE Band 66				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				131997		132322		132647	
Frequency (MHz)				1712.5		1745		1777.5	
				dBm	W	dBm	W	dBm	W
5	QPSK	1	0	20.07	0.102	20.17	0.104	20.07	0.102
5	QPSK	1	12	20.06	0.101	20.14	0.103	19.98	0.100
5	QPSK	1	24	20.06	0.101	19.92	0.098	19.92	0.098
5	QPSK	12	0	18.90	0.078	19.21	0.083	19.16	0.082
5	QPSK	12	7	18.98	0.079	19.12	0.082	19.30	0.085
5	QPSK	12	13	18.96	0.079	19.04	0.080	19.10	0.081
5	QPSK	25	0	18.90	0.078	18.96	0.079	19.02	0.080
5	16QAM	1	0	19.18	0.083	19.11	0.081	19.03	0.080
5	16QAM	1	12	19.11	0.081	18.94	0.078	19.21	0.083
5	16QAM	1	24	19.15	0.082	19.01	0.080	18.92	0.078
5	16QAM	12	0	18.04	0.064	18.20	0.066	18.09	0.064
5	16QAM	12	7	17.88	0.061	17.85	0.061	17.99	0.063
5	16QAM	12	13	18.11	0.065	18.04	0.064	17.93	0.062
5	16QAM	25	0	17.97	0.063	17.98	0.063	18.25	0.067



LTE Band 66				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				131987		132322		132657	
Frequency (MHz)				1711.5		1745		1778.5	
				dBm	W	dBm	W	dBm	W
3	QPSK	1	0	20.13	0.103	20.16	0.104	20.05	0.101
3	QPSK	1	8	19.97	0.099	20.15	0.104	20.03	0.101
3	QPSK	1	14	20.05	0.101	20.08	0.102	19.85	0.097
3	QPSK	8	0	18.99	0.079	19.14	0.082	19.23	0.084
3	QPSK	8	4	19.13	0.082	19.03	0.080	19.03	0.080
3	QPSK	8	7	19.10	0.081	19.08	0.081	19.12	0.082
3	QPSK	15	0	19.05	0.080	19.08	0.081	19.04	0.080
3	16QAM	1	0	19.03	0.080	19.15	0.082	19.06	0.081
3	16QAM	1	8	19.02	0.080	19.11	0.081	19.24	0.084
3	16QAM	1	14	18.97	0.079	19.21	0.083	19.06	0.081
3	16QAM	8	0	18.29	0.067	18.31	0.068	18.10	0.065
3	16QAM	8	4	18.08	0.064	17.93	0.062	18.34	0.068
3	16QAM	8	7	18.12	0.065	18.09	0.064	18.16	0.065
3	16QAM	15	0	18.05	0.064	18.02	0.063	18.22	0.066



LTE Band 66				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				131979		132322		132665	
Frequency (MHz)				1710.7		1745		1779.3	
				dBm	W	dBm	W	dBm	W
1.4	QPSK	1	0	19.94	0.099	20.18	0.104	19.94	0.099
1.4	QPSK	1	3	19.89	0.097	20.06	0.101	19.84	0.096
1.4	QPSK	1	5	19.95	0.099	19.95	0.099	19.95	0.099
1.4	QPSK	3	0	19.20	0.083	19.04	0.080	19.09	0.081
1.4	QPSK	3	1	19.21	0.083	18.92	0.078	19.08	0.081
1.4	QPSK	3	3	18.99	0.079	18.94	0.078	18.95	0.079
1.4	QPSK	6	0	18.99	0.079	19.19	0.083	19.04	0.080
1.4	16QAM	1	0	19.12	0.082	19.31	0.085	19.05	0.080
1.4	16QAM	1	3	19.17	0.083	19.11	0.081	19.28	0.085
1.4	16QAM	1	5	19.03	0.080	19.23	0.084	18.91	0.078
1.4	16QAM	3	0	18.26	0.067	18.06	0.064	18.27	0.067
1.4	16QAM	3	1	18.06	0.064	18.03	0.064	18.04	0.064
1.4	16QAM	3	3	17.99	0.063	18.19	0.066	18.21	0.066
1.4	16QAM	6	0	18.07	0.064	18.14	0.065	18.30	0.068



LTE Band 71				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				133222		133322		133372	
Frequency (MHz)				673		683		688	
				dBm	W	dBm	W	dBm	W
20	QPSK	1	0	18.37	0.069	18.41	0.069	18.29	0.067
20	QPSK	1	49	18.23	0.067	18.18	0.066	18.02	0.063
20	QPSK	1	99	18.09	0.064	18.21	0.066	18.30	0.068
20	QPSK	50	0	17.21	0.053	17.40	0.055	17.31	0.054
20	QPSK	50	24	17.38	0.055	17.28	0.053	17.14	0.052
20	QPSK	50	50	17.16	0.052	17.10	0.051	17.33	0.054
20	QPSK	100	0	17.14	0.052	17.26	0.053	17.20	0.052
20	16QAM	1	0	17.41	0.055	17.44	0.055	17.32	0.054
20	16QAM	1	49	17.17	0.052	17.13	0.052	17.48	0.056
20	16QAM	1	99	17.09	0.051	17.34	0.054	17.26	0.053
20	16QAM	50	0	16.37	0.043	16.11	0.041	16.42	0.044
20	16QAM	50	24	16.14	0.041	16.02	0.040	16.49	0.045
20	16QAM	50	50	16.44	0.044	16.17	0.041	16.24	0.042
20	16QAM	100	0	16.14	0.041	16.36	0.043	16.37	0.043



LTE Band 71				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				133197		133297		133397	
Frequency (MHz)				670.5		680.5		690.5	
				dBm	W	dBm	W	dBm	W
15	QPSK	1	0	18.25	0.067	18.37	0.069	18.22	0.066
15	QPSK	1	37	18.23	0.067	18.12	0.065	17.98	0.063
15	QPSK	1	74	18.12	0.065	18.13	0.065	18.17	0.066
15	QPSK	36	0	17.08	0.051	17.20	0.052	17.30	0.054
15	QPSK	36	20	17.41	0.055	17.06	0.051	17.33	0.054
15	QPSK	36	39	17.35	0.054	17.02	0.050	17.31	0.054
15	QPSK	75	0	17.01	0.050	17.31	0.054	17.32	0.054
15	16QAM	1	0	17.21	0.053	17.42	0.055	17.22	0.053
15	16QAM	1	37	17.11	0.051	17.26	0.053	17.50	0.056
15	16QAM	1	74	17.06	0.051	17.41	0.055	17.11	0.051
15	16QAM	36	0	16.42	0.044	16.43	0.044	16.44	0.044
15	16QAM	36	20	16.03	0.040	16.02	0.040	16.23	0.042
15	16QAM	36	39	16.12	0.041	16.17	0.041	16.10	0.041
15	16QAM	75	0	16.26	0.042	16.18	0.041	16.40	0.044



LTE Band 71				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				133172		133297		133422	
Frequency (MHz)				668		680.5		693	
				dBm		dBm		dBm	
				W		W		W	
10	QPSK	1	0	18.21	0.066	18.38	0.069	18.12	0.065
10	QPSK	1	25	18.06	0.064	18.20	0.066	18.17	0.066
10	QPSK	1	49	18.18	0.066	18.08	0.064	18.05	0.064
10	QPSK	25	0	17.13	0.052	17.25	0.053	17.46	0.056
10	QPSK	25	12	17.34	0.054	17.22	0.053	17.30	0.054
10	QPSK	25	25	17.16	0.052	17.30	0.054	16.99	0.050
10	QPSK	50	0	17.05	0.051	17.32	0.054	17.32	0.054
10	16QAM	1	0	17.25	0.053	17.37	0.055	17.32	0.054
10	16QAM	1	25	17.29	0.054	17.01	0.050	17.37	0.055
10	16QAM	1	49	17.29	0.054	17.16	0.052	17.35	0.054
10	16QAM	25	0	16.36	0.043	16.11	0.041	16.28	0.042
10	16QAM	25	12	16.10	0.041	16.19	0.042	16.19	0.042
10	16QAM	25	25	16.27	0.042	16.05	0.040	16.10	0.041
10	16QAM	50	0	16.12	0.041	16.05	0.040	16.26	0.042



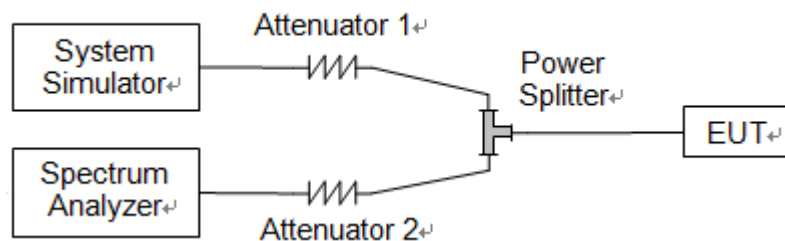
LTE Band 71				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				133147		133297		133447	
Frequency (MHz)				665.5		680.5		695.5	
				dBm	W	dBm	W	dBm	W
5	QPSK	1	0	18.27	0.067	18.39	0.069	18.10	0.065
5	QPSK	1	12	18.02	0.063	18.27	0.067	18.11	0.065
5	QPSK	1	24	18.01	0.063	18.27	0.067	18.06	0.064
5	QPSK	12	0	17.18	0.052	17.21	0.053	17.39	0.055
5	QPSK	12	7	17.14	0.052	17.20	0.052	17.31	0.054
5	QPSK	12	13	17.40	0.055	17.13	0.052	17.11	0.051
5	QPSK	25	0	16.98	0.050	17.12	0.052	17.16	0.052
5	16QAM	1	0	17.20	0.052	17.23	0.053	17.29	0.054
5	16QAM	1	12	17.33	0.054	17.32	0.054	17.39	0.055
5	16QAM	1	24	17.28	0.053	17.32	0.054	17.32	0.054
5	16QAM	12	0	16.32	0.043	16.26	0.042	16.25	0.042
5	16QAM	12	7	16.31	0.043	16.23	0.042	16.48	0.044
5	16QAM	12	13	16.39	0.044	16.22	0.042	16.07	0.040
5	16QAM	25	0	16.13	0.041	16.34	0.043	16.17	0.041

2.2. Occupied Bandwidth

2.2.1. Requirement

According to FCC section 2.1049, 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 radiated by a given emission. Occupied bandwidth is also known as the 99% emission bandwidth.

2.2.2. Test Description



The EUT is coupled to the Spectrum Analyzer (SA) and the System Simulator (SS) with Attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading. The EUT is commanded by the SS to operate at the maximum output power. A call is established between the EUT and the SS.

2.2.3. Test Procedure

KDB 971168 D01v03 Section 4.1 and ANSI/TIA-603-E-2016.

2.2.4. Test Result



LTE Band 2				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
1.4	Low	QPSK	1.10	1.24
	Low	16QAM	1.10	1.25
	Mid	QPSK	1.10	1.25
	Mid	16QAM	1.10	1.26
	High	QPSK	1.10	1.25
	High	16QAM	1.10	1.25
3	Low	QPSK	2.71	3.03
	Low	16QAM	2.72	3.06
	Mid	QPSK	2.72	3.05
	Mid	16QAM	2.71	3.06
	High	QPSK	2.71	3.07
	High	16QAM	2.71	3.07
5	Low	QPSK	4.50	4.96
	Low	16QAM	4.50	4.99
	Mid	QPSK	4.50	4.99
	Mid	16QAM	4.50	4.99
	High	QPSK	4.50	4.99
	High	16QAM	4.50	4.96
10	Low	QPSK	9.00	9.87
	Low	16QAM	8.98	9.84
	Mid	QPSK	9.00	9.81
	Mid	16QAM	8.97	9.86
	High	QPSK	8.99	9.83
	High	16QAM	8.97	9.84
15	Low	QPSK	13.49	14.89
	Low	16QAM	13.50	14.97
	Mid	QPSK	13.45	14.92
	Mid	16QAM	13.50	14.99
	High	QPSK	13.48	14.86
	High	16QAM	13.49	14.94
20	Low	QPSK	17.98	19.78
	Low	16QAM	18.01	19.73
	Mid	QPSK	18.01	19.65
	Mid	16QAM	18.02	19.74
	High	QPSK	17.99	19.80
	High	16QAM	17.98	19.62



LTE Band 4				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
1.4	Low	QPSK	1.10	1.24
	Low	16QAM	1.10	1.25
	Mid	QPSK	1.10	1.24
	Mid	16QAM	1.10	1.25
	High	QPSK	1.10	1.24
	High	16QAM	1.10	1.25
3	Low	QPSK	2.72	3.05
	Low	16QAM	2.71	3.06
	Mid	QPSK	2.71	3.04
	Mid	16QAM	2.70	3.04
	High	QPSK	2.71	3.04
	High	16QAM	2.71	3.04
5	Low	QPSK	4.50	4.95
	Low	16QAM	4.50	5.01
	Mid	QPSK	4.49	4.98
	Mid	16QAM	4.50	4.97
	High	QPSK	4.49	4.97
	High	16QAM	4.51	5.00
10	Low	QPSK	9.00	9.84
	Low	16QAM	8.97	9.81
	Mid	QPSK	9.01	9.89
	Mid	16QAM	8.97	9.84
	High	QPSK	9.01	9.85
	High	16QAM	8.98	9.76
15	Low	QPSK	13.47	14.85
	Low	16QAM	13.47	14.95
	Mid	QPSK	13.49	14.91
	Mid	16QAM	13.48	14.89
	High	QPSK	13.50	14.89
	High	16QAM	13.50	15.00
20	Low	QPSK	17.97	19.65
	Low	16QAM	17.98	19.76
	Mid	QPSK	17.96	19.78
	Mid	16QAM	18.00	19.87
	High	QPSK	18.00	20.41
	High	16QAM	18.02	19.77



LTE Band 5				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
1.4	Low	QPSK	1.10	1.25
	Low	16QAM	1.10	1.25
	Mid	QPSK	1.09	1.25
	Mid	16QAM	1.10	1.25
	High	QPSK	1.10	1.25
	High	16QAM	1.10	1.26
3	Low	QPSK	2.71	3.03
	Low	16QAM	2.72	3.05
	Mid	QPSK	2.72	3.04
	Mid	16QAM	2.71	3.04
	High	QPSK	2.72	3.06
	High	16QAM	2.72	3.06
5	Low	QPSK	4.49	4.97
	Low	16QAM	4.50	4.96
	Mid	QPSK	4.50	4.97
	Mid	16QAM	4.50	4.97
	High	QPSK	4.50	4.96
	High	16QAM	4.50	4.95
10	Low	QPSK	8.99	9.92
	Low	16QAM	8.95	9.79
	Mid	QPSK	8.98	9.89
	Mid	16QAM	8.98	9.85
	High	QPSK	9.00	9.86
	High	16QAM	8.98	9.81



LTE Band 7				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
5	Low	QPSK	4.49	4.98
	Low	16QAM	4.51	4.99
	Mid	QPSK	4.50	4.97
	Mid	16QAM	4.51	4.97
	High	QPSK	4.50	4.96
	High	16QAM	4.50	4.99
10	Low	QPSK	9.02	9.91
	Low	16QAM	8.99	9.83
	Mid	QPSK	9.01	9.94
	Mid	16QAM	8.98	9.83
	High	QPSK	9.01	9.93
	High	16QAM	8.97	9.85
15	Low	QPSK	13.48	14.89
	Low	16QAM	13.50	14.93
	Mid	QPSK	13.52	14.89
	Mid	16QAM	13.48	14.88
	High	QPSK	13.49	14.83
	High	16QAM	13.48	14.91
20	Low	QPSK	18.00	19.80
	Low	16QAM	18.03	19.70
	Mid	QPSK	17.96	19.84
	Mid	16QAM	18.04	19.82
	High	QPSK	17.94	19.73
	High	16QAM	17.97	19.71



LTE Band 12				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
1.4	Low	QPSK	1.10	1.25
	Low	16QAM	1.10	1.23
	Mid	QPSK	1.10	1.24
	Mid	16QAM	1.10	1.25
	High	QPSK	1.10	1.25
	High	16QAM	1.10	1.25
3	Low	QPSK	2.72	3.05
	Low	16QAM	2.72	3.05
	Mid	QPSK	2.71	3.03
	Mid	16QAM	2.71	3.03
	High	QPSK	2.71	3.04
	High	16QAM	2.72	3.05
5	Low	QPSK	4.50	4.98
	Low	16QAM	4.50	4.98
	Mid	QPSK	4.49	4.97
	Mid	16QAM	4.50	5.00
	High	QPSK	4.50	4.97
	High	16QAM	4.51	4.99
10	Low	QPSK	9.04	9.81
	Low	16QAM	8.98	9.76
	Mid	QPSK	9.01	9.90
	Mid	16QAM	8.97	9.85
	High	QPSK	9.02	9.81
	High	16QAM	8.98	9.83



LTE Band 17				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
5	Low	QPSK	4.49	4.96
	Low	16QAM	4.50	4.98
	Mid	QPSK	4.50	4.98
	Mid	16QAM	4.49	4.97
	High	QPSK	4.50	4.95
	High	16QAM	4.50	5.00
10	Low	QPSK	9.00	9.80
	Low	16QAM	8.98	9.81
	Mid	QPSK	9.02	9.91
	Mid	16QAM	8.97	9.80
	High	QPSK	9.01	9.87
	High	16QAM	8.98	9.83



LTE Band 66				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
1.4	Low	QPSK	1.09	1.24
	Low	16QAM	1.10	1.25
	Mid	QPSK	1.09	1.24
	Mid	16QAM	1.10	1.25
	High	QPSK	1.10	1.25
	High	16QAM	1.10	1.25
3	Low	QPSK	2.71	3.05
	Low	16QAM	2.72	3.04
	Mid	QPSK	2.72	3.04
	Mid	16QAM	2.72	3.06
	High	QPSK	2.71	3.05
	High	16QAM	2.71	3.03
5	Low	QPSK	4.50	4.96
	Low	16QAM	4.50	4.99
	Mid	QPSK	4.50	4.96
	Mid	16QAM	4.50	4.96
	High	QPSK	4.50	4.95
	High	16QAM	4.50	4.98
10	Low	QPSK	8.99	9.81
	Low	16QAM	8.97	9.85
	Mid	QPSK	9.01	9.81
	Mid	16QAM	8.97	9.85
	High	QPSK	9.00	9.88
	High	16QAM	8.98	9.90
15	Low	QPSK	13.48	14.82
	Low	16QAM	13.48	14.87
	Mid	QPSK	13.50	15.02
	Mid	16QAM	13.50	14.94
	High	QPSK	13.49	14.89
	High	16QAM	13.49	14.98
20	Low	QPSK	17.97	19.82
	Low	16QAM	17.98	19.80
	Mid	QPSK	18.00	19.75
	Mid	16QAM	18.02	19.79
	High	QPSK	17.96	19.62
	High	16QAM	17.97	19.74



LTE Band 71				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
5	Low	QPSK	4.48	4.95
	Low	16QAM	4.49	4.97
	Mid	QPSK	4.49	4.96
	Mid	16QAM	4.51	4.98
	High	QPSK	4.50	4.95
	High	16QAM	4.50	4.98
10	Low	QPSK	8.99	9.79
	Low	16QAM	8.93	9.81
	Mid	QPSK	9.00	9.80
	Mid	16QAM	8.96	9.80
	High	QPSK	9.03	9.82
	High	16QAM	8.99	9.84
15	Low	QPSK	13.47	14.78
	Low	16QAM	13.47	14.83
	Mid	QPSK	13.47	14.79
	Mid	16QAM	13.45	14.75
	High	QPSK	13.50	14.86
	High	16QAM	13.49	15.02
20	Low	QPSK	18.03	19.78
	Low	16QAM	18.05	19.68
	Mid	QPSK	17.91	19.74
	Mid	16QAM	17.96	19.64
	High	QPSK	17.94	19.74
	High	16QAM	17.98	19.72



Band2 / 1.4MHz / QPSK/ Low CH



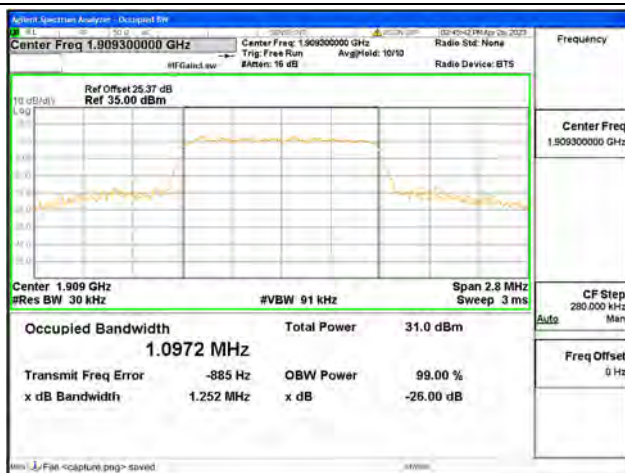
Band2 / 1.4MHz / 16QAM/ Low CH



Band2 / 1.4MHz / QPSK/ Mid CH



Band2 / 1.4MHz / 16QAM/ Mid CH



Band2 / 1.4MHz / QPSK/ High CH



Band2 / 1.4MHz / 16QAM/ High CH



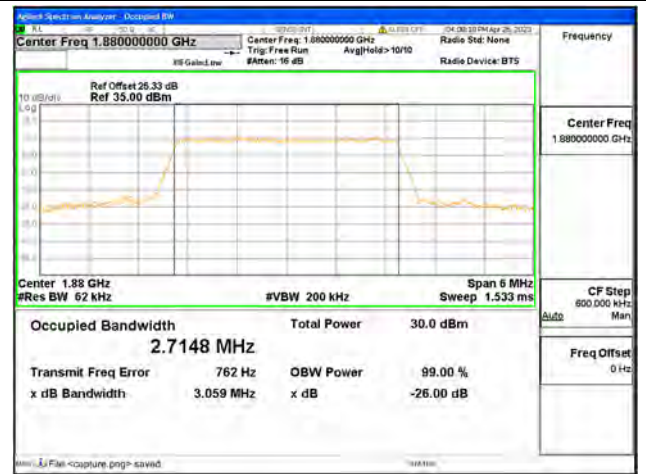
Band2 / 3MHz / QPSK/ Low CH



Band2 / 3MHz / 16QAM/ Low CH



Band2 / 3MHz / QPSK/ Mid CH



Band2 / 3MHz / 16QAM/ Mid CH



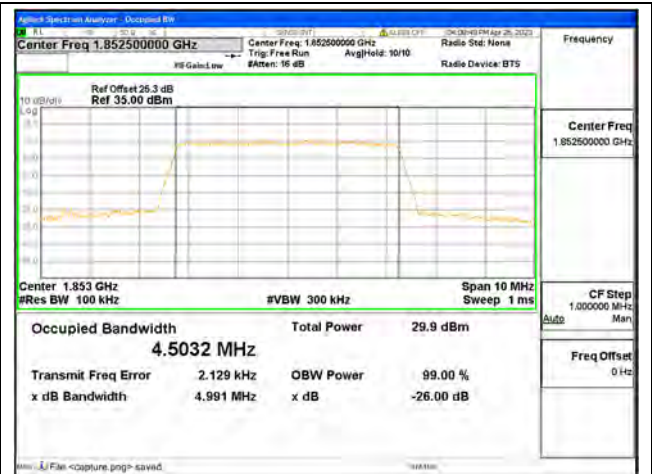
Band2 / 3MHz / QPSK/ High CH



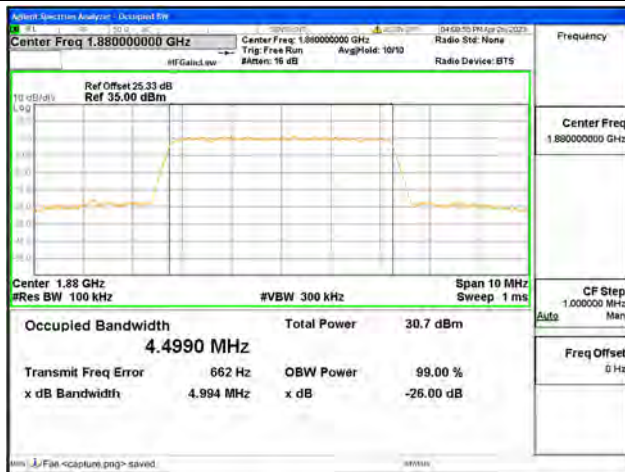
Band2 / 3MHz / 16QAM/ High CH



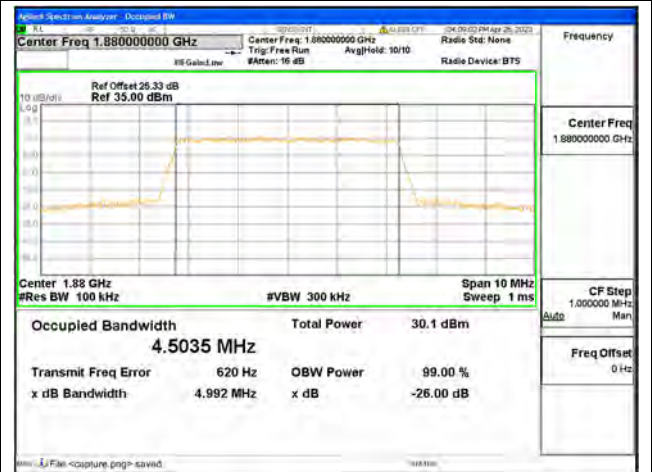
Band2 / 5MHz / QPSK/ Low CH



Band2 / 5MHz / 16QAM/ Low CH



Band2 / 5MHz / QPSK/ Mid CH



Band2 / 5MHz / 16QAM/ Mid CH



Band2 / 5MHz / QPSK/ High CH



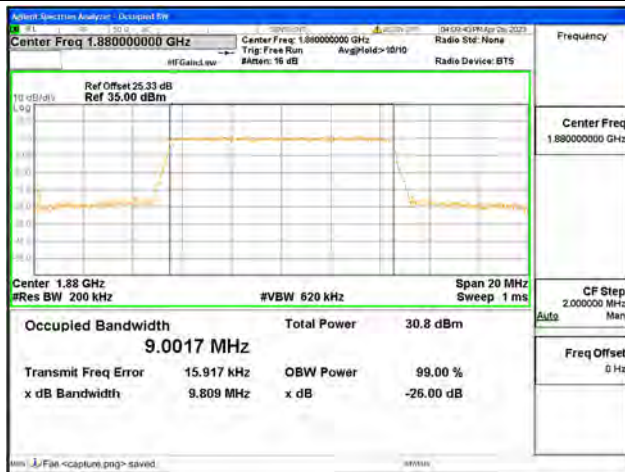
Band2 / 5MHz / 16QAM/ High CH



Band2 / 10MHz / QPSK/ Low CH



Band2 / 10MHz / 16QAM/ Low CH



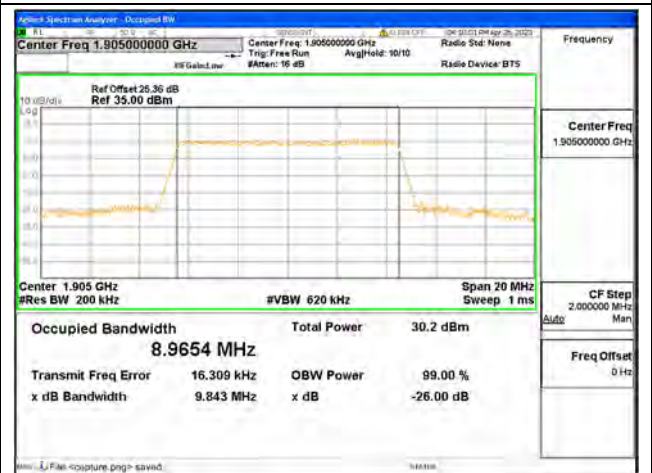
Band2 / 10MHz / QPSK/ Mid CH



Band2 / 10MHz / 16QAM/ Mid CH



Band2 / 10MHz / QPSK/ High CH



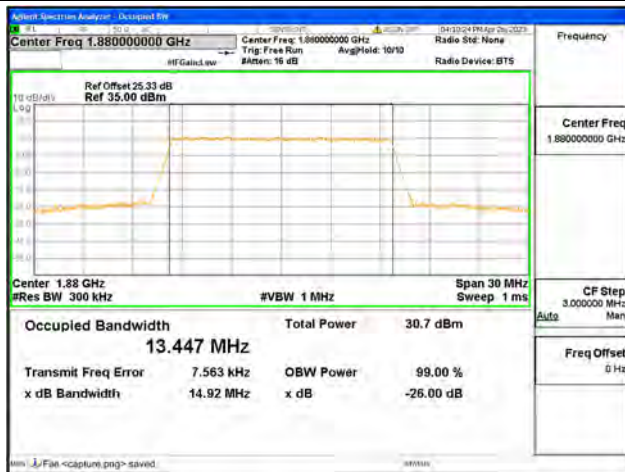
Band2 / 10MHz / 16QAM/ High CH



Band2 / 15MHz / QPSK/ Low CH



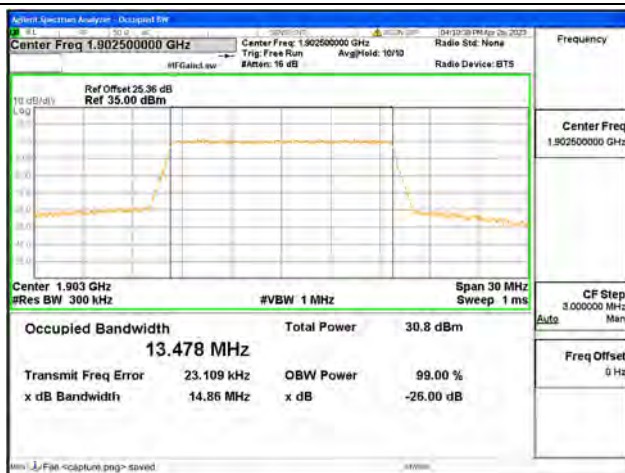
Band2 / 15MHz / 16QAM/ Low CH



Band2 / 15MHz / QPSK/ Mid CH



Band2 / 15MHz / 16QAM/ Mid CH



Band2 / 15MHz / QPSK/ High CH



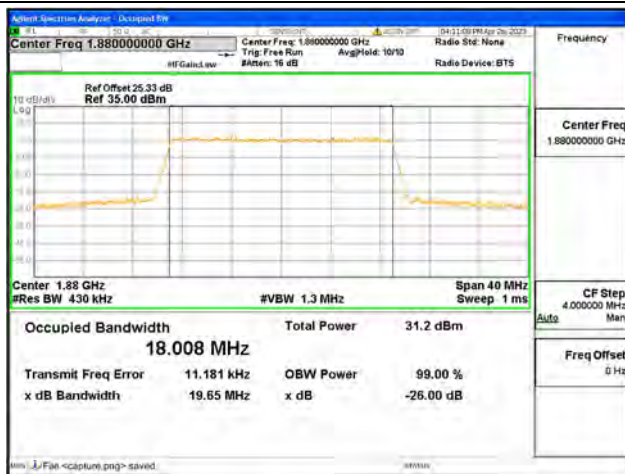
Band2 / 15MHz / 16QAM/ High CH



Band2 / 20MHz / QPSK/ Low CH



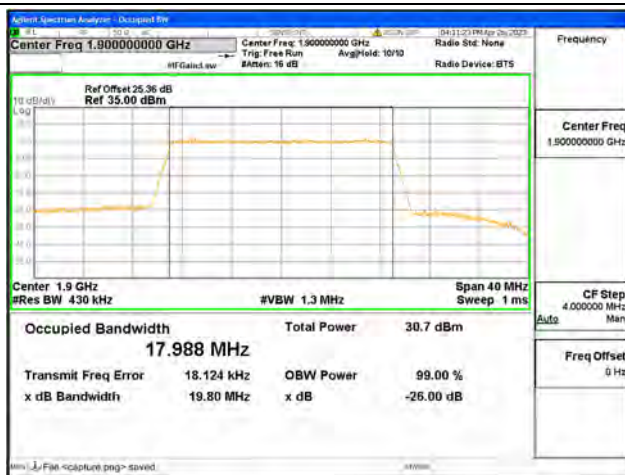
Band2 / 20MHz / 16QAM/ Low CH



Band2 / 20MHz / QPSK/ Mid CH



Band2 / 20MHz / 16QAM/ Mid CH



Band2 / 20MHz / QPSK/ High CH



Band2 / 20MHz / 16QAM/ High CH



Band4 / 1.4MHz / QPSK/ Low CH



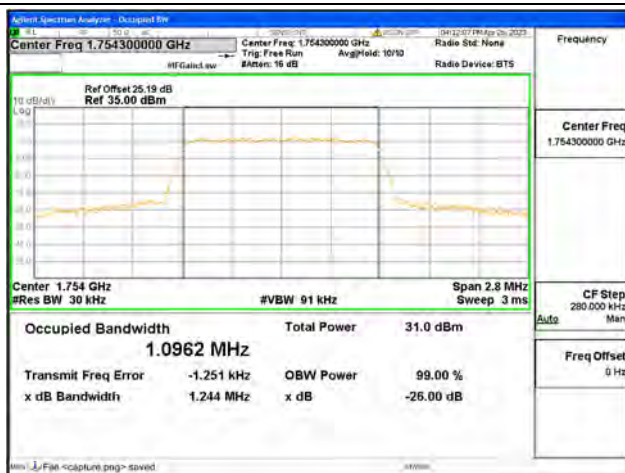
Band4 / 1.4MHz / 16QAM/ Low CH



Band4 / 1.4MHz / QPSK/ Mid CH



Band4 / 1.4MHz / 16QAM/ Mid CH



Band4 / 1.4MHz / QPSK/ High CH



Band4 / 1.4MHz / 16QAM/ High CH



Band4 / 3MHz / QPSK/ Low CH



Band4 / 3MHz / 16QAM/ Low CH



Band4 / 3MHz / QPSK/ Mid CH



Band4 / 3MHz / 16QAM/ Mid CH



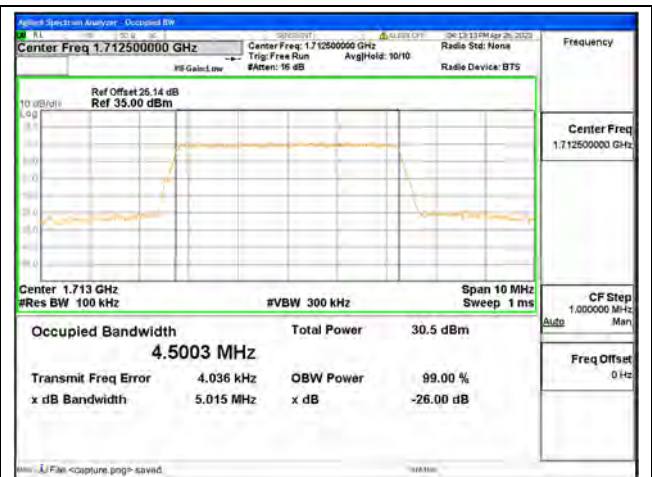
Band4 / 3MHz / QPSK/ High CH



Band4 / 3MHz / 16QAM/ High CH



Band4 / 5MHz / QPSK/ Low CH



Band4 / 5MHz / 16QAM/ Low CH



Band4 / 5MHz / QPSK/ Mid CH



Band4 / 5MHz / 16QAM/ Mid CH



Band4 / 5MHz / QPSK/ High CH



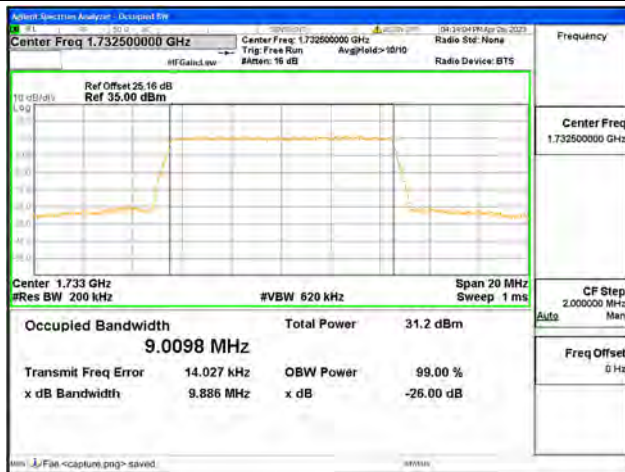
Band4 / 5MHz / 16QAM/ High CH



Band4 / 10MHz / QPSK/ Low CH



Band4 / 10MHz / 16QAM/ Low CH



Band4 / 10MHz / QPSK/ Mid CH



Band4 / 10MHz / 16QAM/ Mid CH



Band4 / 10MHz / QPSK/ High CH



Band4 / 10MHz / 16QAM/ High CH



Band4 / 15MHz / QPSK/ Low CH



Band4 / 15MHz / 16QAM/ Low CH



Band4 / 15MHz / QPSK/ Mid CH



Band4 / 15MHz / 16QAM/ Mid CH



Band4 / 15MHz / QPSK/ High CH



Band4 / 15MHz / 16QAM/ High CH



Band4 / 20MHz / QPSK/ Low CH



Band4 / 20MHz / 16QAM/ Low CH



Band4 / 20MHz / QPSK/ Mid CH



Band4 / 20MHz / 16QAM/ Mid CH



Band4 / 20MHz / QPSK/ High CH



Band4 / 20MHz / 16QAM/ High CH



Band5 / 1.4MHz / QPSK/ Low CH



Band5 / 1.4MHz / 16QAM/ Low CH



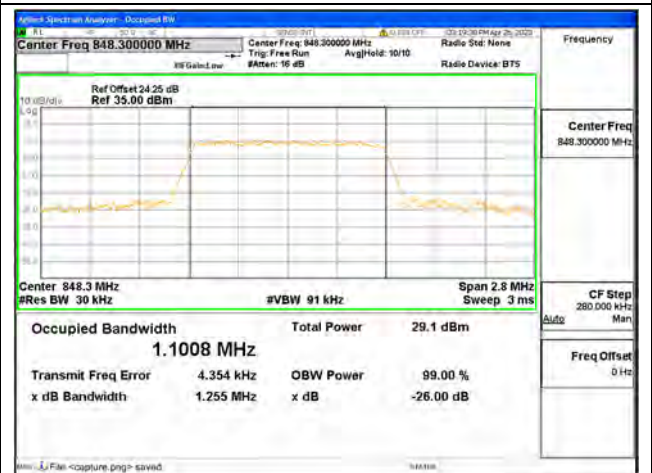
Band5 / 1.4MHz / QPSK/ Mid CH



Band5 / 1.4MHz / 16QAM/ Mid CH



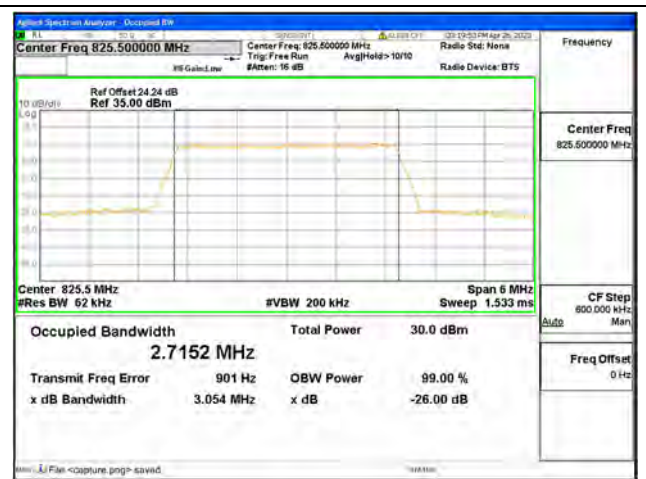
Band5 / 1.4MHz / QPSK/ High CH



Band5 / 1.4MHz / 16QAM/ High CH



Band5 / 3MHz / QPSK/ Low CH



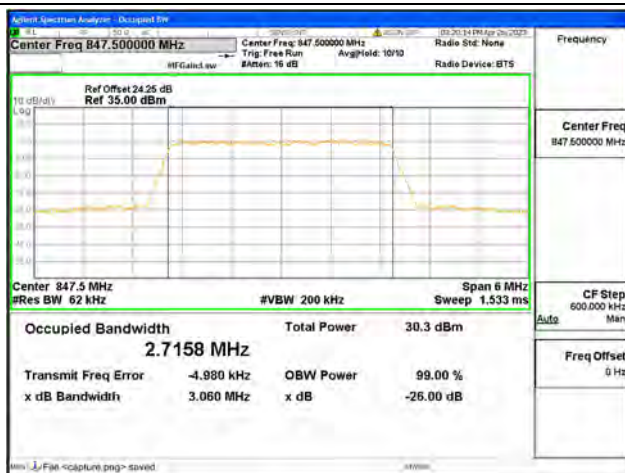
Band5 / 3MHz / 16QAM/ Low CH



Band5 / 3MHz / QPSK/ Mid CH



Band5 / 3MHz / 16QAM/ Mid CH



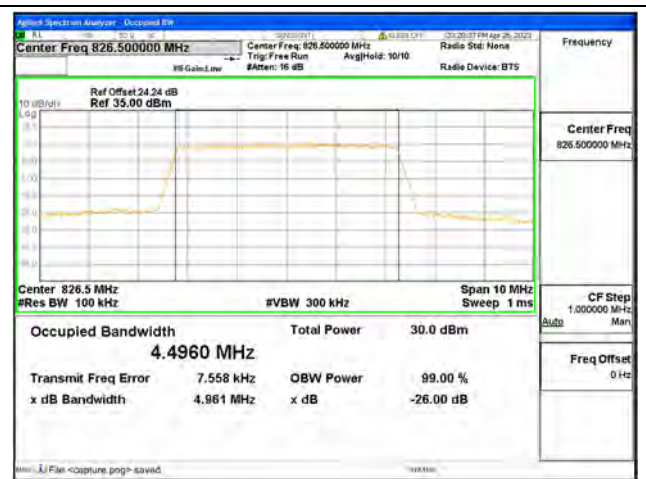
Band5 / 3MHz / QPSK/ High CH



Band5 / 3MHz / 16QAM/ High CH



Band5 / 5MHz / QPSK/ Low CH



Band5 / 5MHz / 16QAM/ Low CH



Band5 / 5MHz / QPSK/ Mid CH



Band5 / 5MHz / 16QAM/ Mid CH



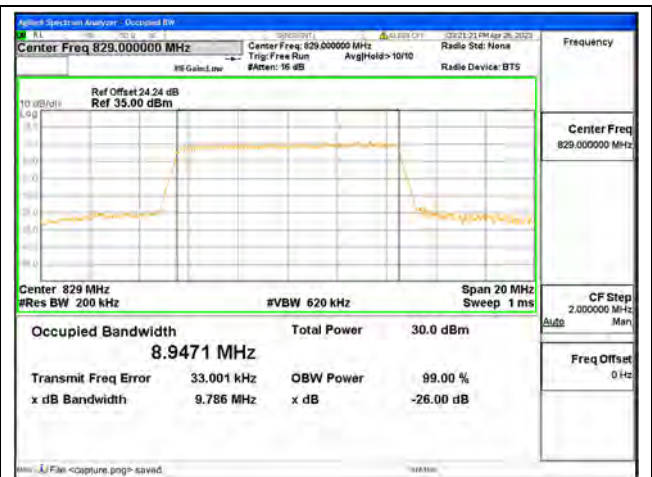
Band5 / 5MHz / QPSK/ High CH



Band5 / 5MHz / 16QAM/ High CH



Band5 / 10MHz / QPSK/ Low CH



Band5 / 10MHz / 16QAM/ Low CH



Band5 / 10MHz / QPSK/ Mid CH



Band5 / 10MHz / 16QAM/ Mid CH



Band5 / 10MHz / QPSK/ High CH



Band5 / 10MHz / 16QAM/ High CH



Band7 / 5MHz / QPSK/ Low CH



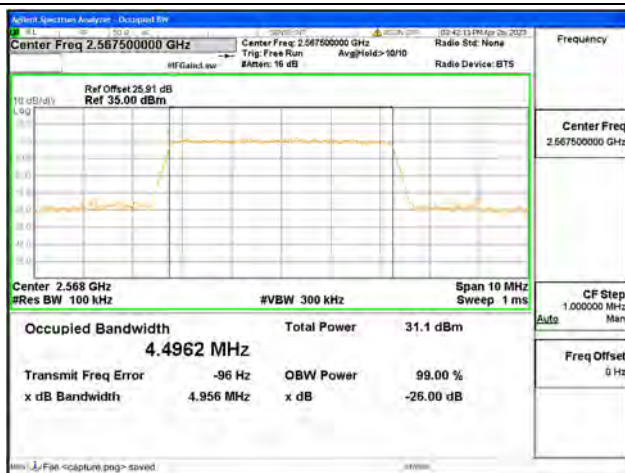
Band7 / 5MHz / 16QAM/ Low CH



Band7 / 5MHz / QPSK/ Mid CH



Band7 / 5MHz / 16QAM/ Mid CH



Band7 / 5MHz / QPSK/ High CH



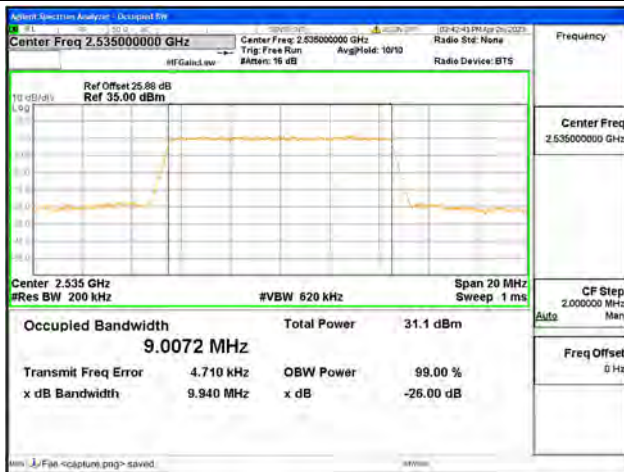
Band7 / 5MHz / 16QAM/ High CH



Band7 / 10MHz / QPSK/ Low CH



Band7 / 10MHz / 16QAM/ Low CH



Band7 / 10MHz / QPSK/ Mid CH



Band7 / 10MHz / 16QAM/ Mid CH



Band7 / 10MHz / QPSK/ High CH



Band7 / 10MHz / 16QAM/ High CH



Band7 / 15MHz / QPSK/ Low CH



Band7 / 15MHz / 16QAM/ Low CH



Band7 / 15MHz / QPSK/ Mid CH



Band7 / 15MHz / 16QAM/ Mid CH



Band7 / 15MHz / QPSK/ High CH



Band7 / 15MHz / 16QAM/ High CH



Band7 / 20MHz / QPSK/ Low CH



Band7 / 20MHz / 16QAM/ Low CH



Band7 / 20MHz / QPSK/ Mid CH



Band7 / 20MHz / 16QAM/ Mid CH



Band7 / 20MHz / QPSK/ High CH



Band7 / 20MHz / 16QAM/ High CH



Band12 / 1.4MHz / QPSK/ Low CH



Band12 / 1.4MHz / 16QAM/ Low CH



Band12 / 1.4MHz / QPSK/ Mid CH



Band12 / 1.4MHz / 16QAM/ Mid CH



Band12 / 1.4MHz / QPSK/ High CH



Band12 / 1.4MHz / 16QAM/ High CH



Band12 / 3MHz / QPSK/ Low CH



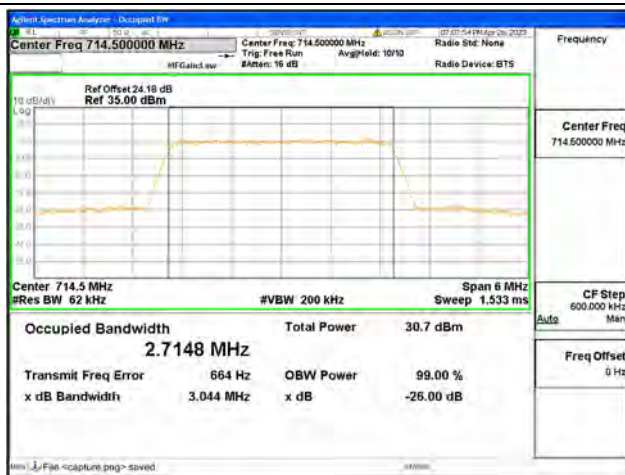
Band12 / 3MHz / 16QAM/ Low CH



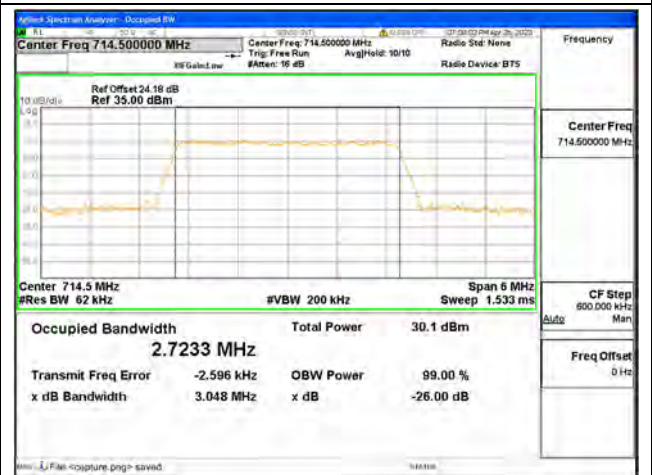
Band12 / 3MHz / QPSK/ Mid CH



Band12 / 3MHz / 16QAM/ Mid CH



Band12 / 3MHz / QPSK/ High CH



Band12 / 3MHz / 16QAM/ High CH



Band12 / 5MHz / QPSK/ Low CH



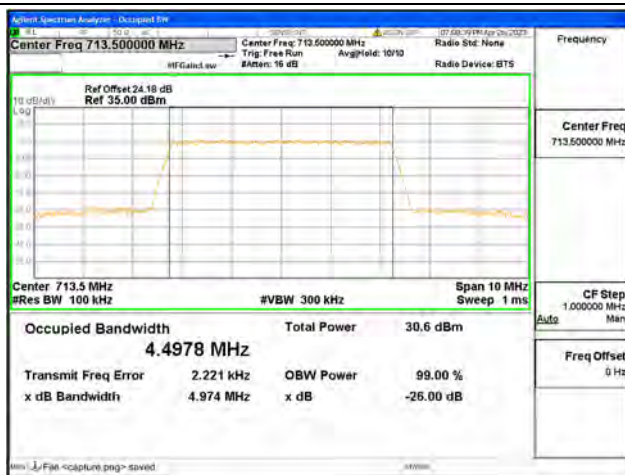
Band12 / 5MHz / 16QAM/ Low CH



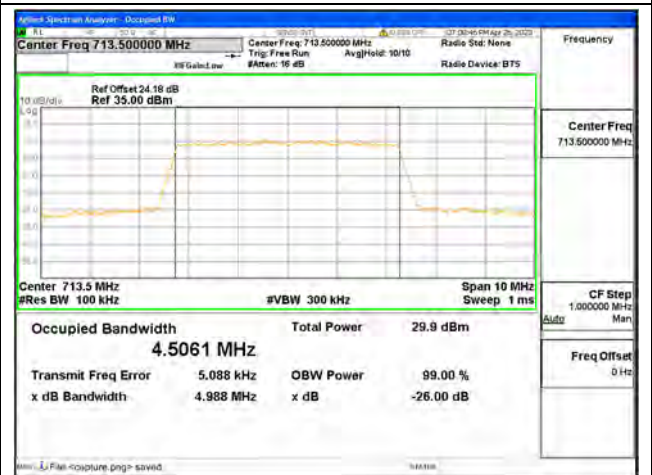
Band12 / 5MHz / QPSK/ Mid CH



Band12 / 5MHz / 16QAM/ Mid CH



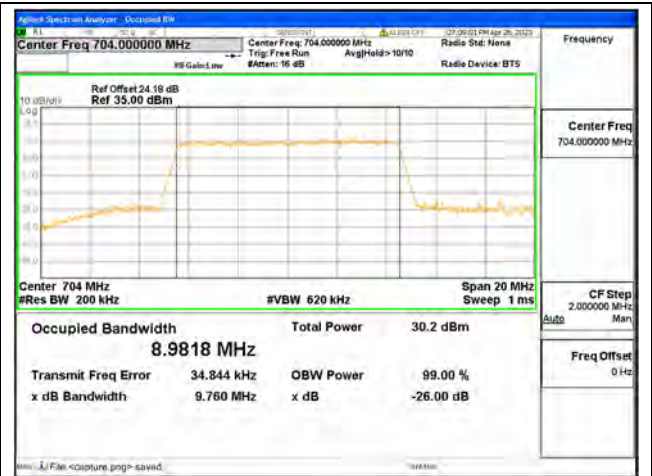
Band12 / 5MHz / QPSK/ High CH



Band12 / 5MHz / 16QAM/ High CH



Band12 / 10MHz / QPSK/ Low CH



Band12 / 10MHz / 16QAM/ Low CH



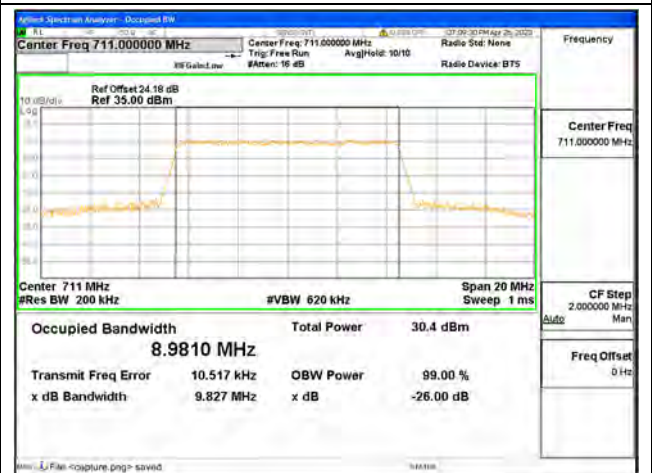
Band12 / 10MHz / QPSK/ Mid CH



Band12 / 10MHz / 16QAM/ Mid CH



Band12 / 10MHz / QPSK/ High CH



Band12 / 10MHz / 16QAM/ High CH



Band17 / 5MHz / QPSK/ Low CH



Band17 / 5MHz / 16QAM/ Low CH



Band17 / 5MHz / QPSK/ Mid CH



Band17 / 5MHz / 16QAM/ Mid CH



Band17 / 5MHz / QPSK/ High CH



Band17 / 5MHz / 16QAM/ High CH



Band17 / 10MHz / QPSK/ Low CH



Band17 / 10MHz / 16QAM/ Low CH



Band17 / 10MHz / QPSK/ Mid CH



Band17 / 10MHz / 16QAM/ Mid CH



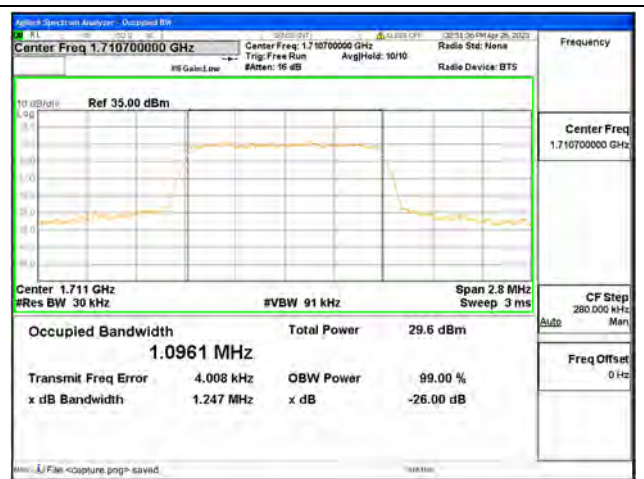
Band17 / 10MHz / QPSK/ High CH



Band17 / 10MHz / 16QAM/ High CH



Band66 / 1.4MHz / QPSK/ Low CH



Band66 / 1.4MHz / 16QAM/ Low CH



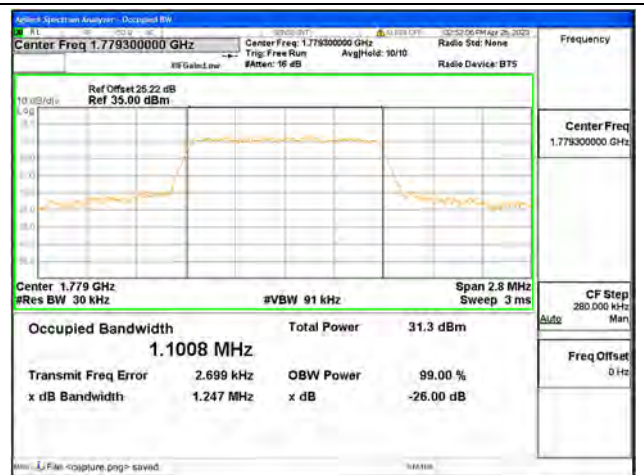
Band66 / 1.4MHz / QPSK/ Mid CH



Band66 / 1.4MHz / 16QAM/ Mid CH



Band66 / 1.4MHz / QPSK/ High CH



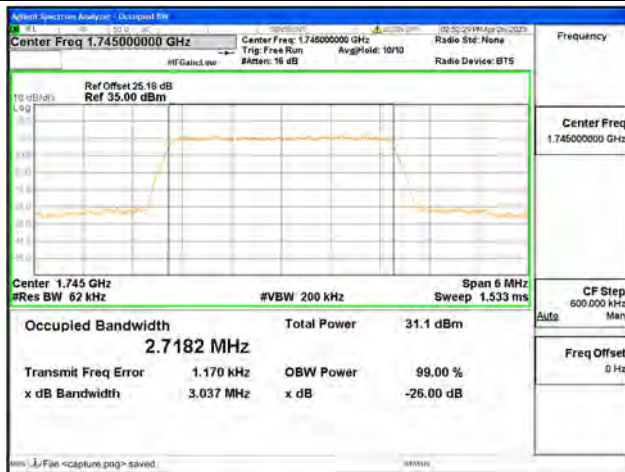
Band66 / 1.4MHz / 16QAM/ High CH



Band66 / 3MHz / QPSK/ Low CH



Band66 / 3MHz / 16QAM/ Low CH



Band66 / 3MHz / QPSK/ Mid CH



Band66 / 3MHz / 16QAM/ Mid CH



Band66 / 3MHz / QPSK/ High CH



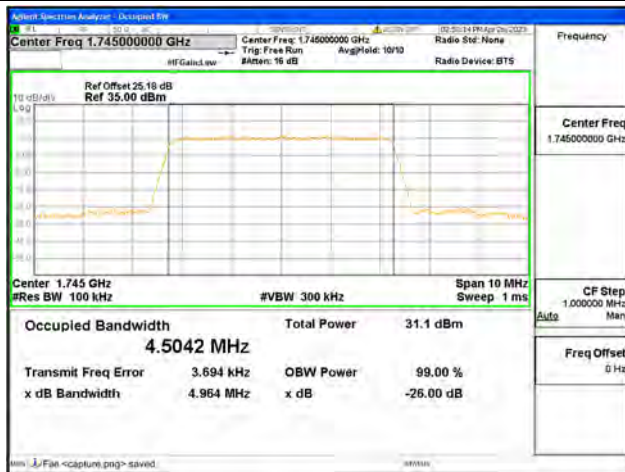
Band66 / 3MHz / 16QAM/ High CH



Band66 / 5MHz / QPSK/ Low CH



Band66 / 5MHz / 16QAM/ Low CH



Band66 / 5MHz / QPSK/ Mid CH



Band66 / 5MHz / 16QAM/ Mid CH



Band66 / 5MHz / QPSK/ High CH



Band66 / 5MHz / 16QAM/ High CH



Band66 / 10MHz / QPSK/ Low CH



Band66 / 10MHz / 16QAM/ Low CH



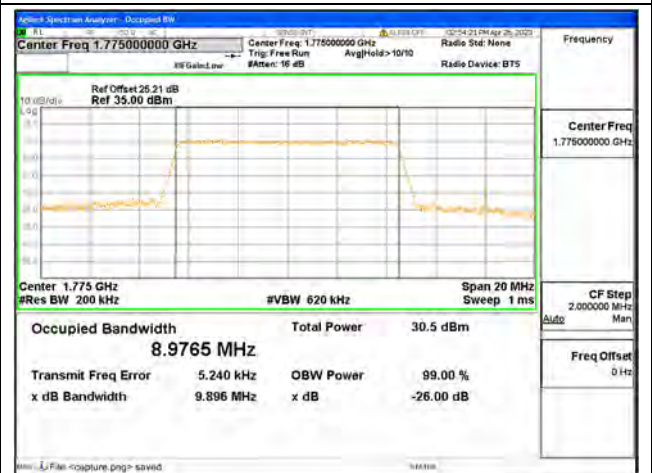
Band66 / 10MHz / QPSK/ Mid CH



Band66 / 10MHz / 16QAM/ Mid CH



Band66 / 10MHz / QPSK/ High CH



Band66 / 10MHz / 16QAM/ High CH



Band66 / 15MHz / QPSK/ Low CH



Band66 / 15MHz / 16QAM/ Low CH



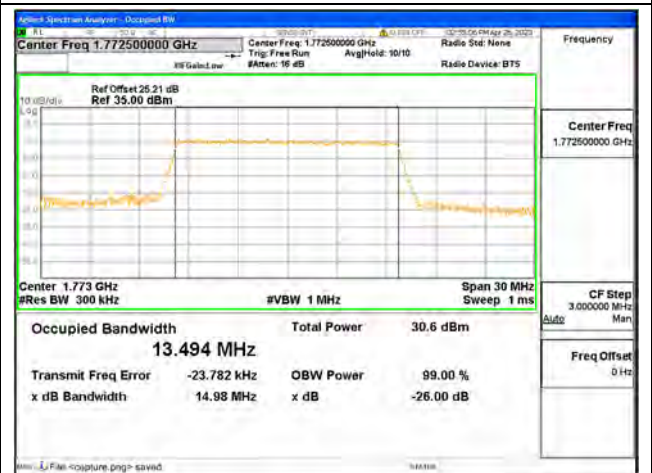
Band66 / 15MHz / QPSK/ Mid CH



Band66 / 15MHz / 16QAM/ Mid CH



Band66 / 15MHz / QPSK/ High CH



Band66 / 15MHz / 16QAM/ High CH



Band66 / 20MHz / QPSK/ Low CH



Band66 / 20MHz / 16QAM/ Low CH



Band66 / 20MHz / QPSK/ Mid CH



Band66 / 20MHz / 16QAM/ Mid CH



Band66 / 20MHz / QPSK/ High CH



Band66 / 20MHz / 16QAM/ High CH



Band71 / 5MHz / QPSK/ Low CH



Band71 / 5MHz / 16QAM/ Low CH



Band71 / 5MHz / QPSK/ Mid CH



Band71 / 5MHz / 16QAM/ Mid CH



Band71 / 5MHz / QPSK/ High CH



Band71 / 5MHz / 16QAM/ High CH



Band71 / 10MHz / QPSK/ Low CH



Band71 / 10MHz / 16QAM/ Low CH



Band71 / 10MHz / QPSK/ Mid CH



Band71 / 10MHz / 16QAM/ Mid CH



Band71 / 10MHz / QPSK/ High CH



Band71 / 10MHz / 16QAM/ High CH



Band71 / 20MHz / QPSK/ Low CH



Band71 / 20MHz / 16QAM/ Low CH



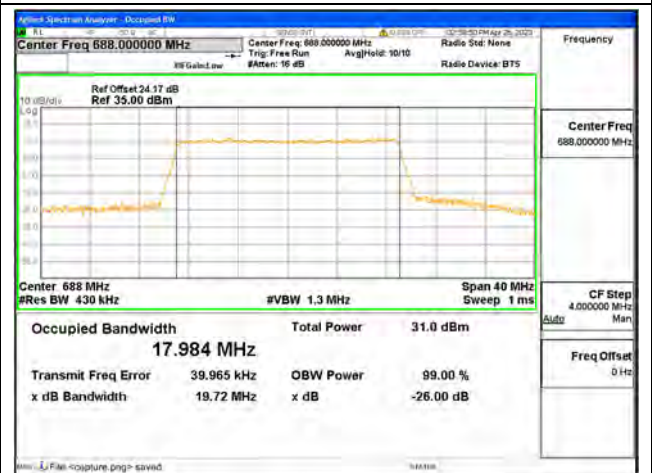
Band71 / 20MHz / QPSK/ Mid CH



Band71 / 20MHz / 16QAM/ Mid CH



Band71 / 20MHz / QPSK/ High CH



Band71 / 20MHz / 16QAM/ High CH

2.3. Frequency Stability

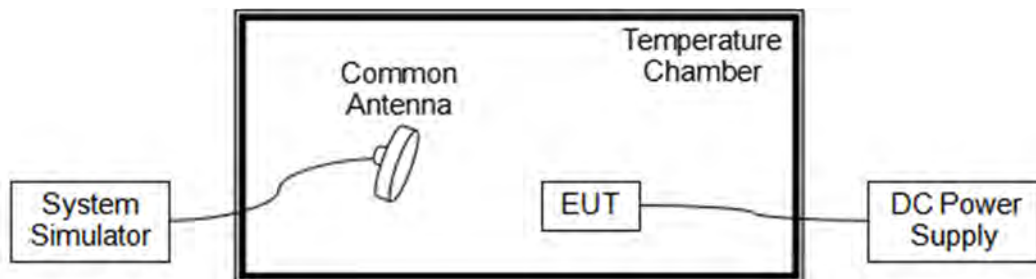
2.3.1. Requirement

According to FCC section 2.1055, 24.235, 27.54, the frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block. According to FCC section 2.1055, the test conditions are:

- (a) The temperature is varied from -30°C to $+50^{\circ}\text{C}$ at intervals of not more than 10°C .
- (b) For hand carried battery powered equipment, the primary supply voltage is reduced to the battery operating end point which shall be specified by the manufacture. The supply voltage shall be measured at the input to the cable normally provided with the equipment, or at the power supply terminals if cables are not normally provided.

Note: The operating temperature of EUT is from -10°C to 55°C , which are specified by the applicant.

2.3.2. Test Description



The EUT which is powered by the DC Power Supply directly, is located in the Temperature Chamber. The EUT is commanded by the System Simulator (SS) to operate at the maximum output power. A call is established between the EUT and the SS via a Common Antenna.

2.3.3. Test Procedure

KDB 971168 D01v03 Section 9.0 and ANSI/TIA-603-E-2016.



2.3.4. Test Result

The nominal, highest and lowest extreme voltages are separately 3.85V, 4.40V and 3.60V, which are specified by the applicant; the normal temperature here used is 20°C.

LTE Band 2, QPSK, Channel 18900, Frequency 1880.0MHz					
Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp(°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
Normal	3.85	+20(Ref)	17	0.009	PASS
Normal		-10	20	0.011	
Normal		0	-13	-0.007	
Normal		+10	-15	-0.008	
Normal		+20	17	0.009	
Normal		+30	-16	-0.009	
Normal		+40	-7	-0.004	
Normal		+50	19	0.010	
Normal		+55	20	0.011	
High		4.40	+20	12	
BATT.ENDPOINT	3.60	+20	16	0.009	

LTE Band 4, QPSK, Channel 20175, Frequency 1732.5MHz					
Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp(°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
Normal	3.85	+20(Ref)	16	0.009	PASS
Normal		-10	13	0.008	
Normal		0	-14	-0.008	
Normal		+10	20	0.012	
Normal		+20	17	0.010	
Normal		+30	2	0.001	
Normal		+40	13	0.008	
Normal		+50	13	0.008	
Normal		+55	14	0.008	
High		4.40	+20	20	
BATT.ENDPOINT	3.60	+20	18	0.010	



LTE Band 5, QPSK, Channel 20525, Frequency 836.5MHz					
Limit=±2.5ppm					
Voltage (%)	Power (VDC)	Temp(°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
Normal	3.85	+20(Ref)	19	0.023	PASS
Normal		-10	-3	-0.004	
Normal		0	15	0.018	
Normal		+10	17	0.020	
Normal		+20	3	0.004	
Normal		+30	13	0.016	
Normal		+40	17	0.020	
Normal		+50	-4	-0.005	
Normal		+55	20	0.024	
High	4.40	+20	-16	-0.019	
BATT.ENDPOINT	3.60	+20	-19	-0.023	

LTE Band 7, QPSK, Channel 21100, Frequency 2535MHz					
Limit= Within Authorized Band					
Voltage (%)	Power (VDC)	Temp(°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
Normal	3.85	+20(Ref)	17	0.007	PASS
Normal		-10	-21	-0.008	
Normal		0	-21	-0.008	
Normal		+10	-4	-0.002	
Normal		+20	16	0.006	
Normal		+30	18	0.007	
Normal		+40	16	0.006	
Normal		+50	18	0.007	
Normal		+55	21	0.008	
High	4.40	+20	13	0.005	
BATT.ENDPOINT	3.60	+20	14	0.006	



LTE Band 12, QPSK, Channel 23095, Frequency 707.5MHz Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp(°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
Normal	3.85	+20(Ref)	17	0.024	PASS
Normal		-10	17	0.024	
Normal		0	17	0.024	
Normal		+10	14	0.020	
Normal		+20	15	0.021	
Normal		+30	16	0.023	
Normal		+40	16	0.023	
Normal		+50	20	0.028	
Normal		+55	11	0.016	
High	4.40	+20	15	0.021	
BATT.ENDPOINT	3.60	+20	8	0.011	

LTE Band 17, QPSK, Channel 23790, Frequency 710MHz Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp(°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
Normal	3.85	+20(Ref)	17	0.024	PASS
Normal		-10	16	0.023	
Normal		0	20	0.028	
Normal		+10	17	0.024	
Normal		+20	18	0.025	
Normal		+30	-14	-0.020	
Normal		+40	-10	-0.014	
Normal		+50	17	0.024	
Normal		+55	14	0.020	
High	4.40	+20	14	0.020	
BATT.ENDPOINT	3.60	+20	12	0.017	



LTE Band 66, QPSK, Channel 132322, Frequency 1745MHz					
Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp (°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
Normal	3.85	+20(Ref)	17	0.010	PASS
Normal		-10	23	0.013	
Normal		0	1	0.001	
Normal		+10	20	0.011	
Normal		+20	14	0.008	
Normal		+30	-13	-0.007	
Normal		+40	11	0.006	
Normal		+50	18	0.010	
Normal		+55	9	0.005	
High	4.40	+20	19	0.011	
BATT.ENDPOINT	3.60	+20	19	0.011	

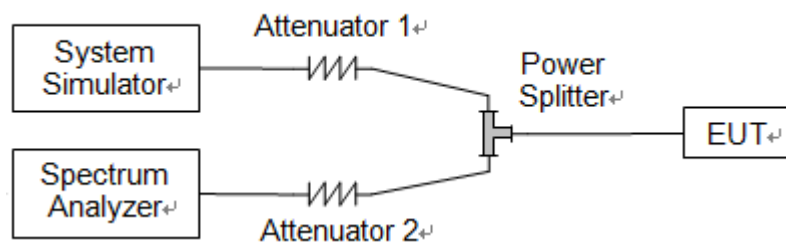
LTE Band 71, QPSK, Channel 133322, Frequency 683.0MHz					
Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp (°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
Normal	3.85	+20(Ref)	19	0.028	PASS
Normal		-10	-18	-0.026	
Normal		0	-3	-0.004	
Normal		+10	13	0.019	
Normal		+20	17	0.025	
Normal		+30	-23	-0.034	
Normal		+40	18	0.026	
Normal		+50	21	0.031	
Normal		+55	23	0.034	
High	4.40	+20	9	0.013	
BATT.ENDPOINT	3.60	+20	13	0.019	

2.4. Peak to Average Ratio

2.4.1. Requirement

According to FCC section 24.232(d) and 27.50(d), the peak to average ratio (PAR) of the transmission may not exceed 13dB.

2.4.2. Test Description



The EUT is coupled to the Spectrum Analyzer (SA) and the System Simulator (SS) with Attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading. The EUT is commanded by the SS to operate at the maximum output power. A call is established between the EUT and the SS.

2.4.3. Test Procedure

KDB 971168 D01v03 Section 5.7 and ANSI/TIA-603-E-2016.

2.4.4. Test Result

Record the maximum PAPR level associated with a probability of 0.1%.



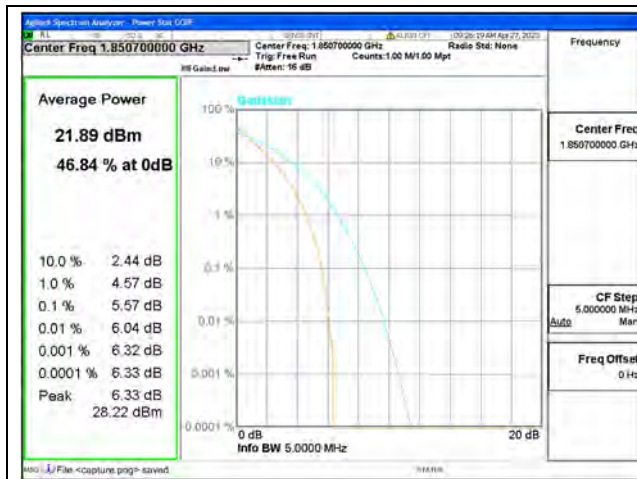
LTE Band 2					
BW(MHz)	Channel Level	Modulation	PAR Radio(dB)	Limit(dB)	Verdict
1.4	Low	QPSK	5.57	<=13	PASS
	Low	16QAM	6.38	<=13	PASS
	Mid	QPSK	4.28	<=13	PASS
	Mid	16QAM	5.01	<=13	PASS
	High	QPSK	5.15	<=13	PASS
	High	16QAM	5.87	<=13	PASS
3	Low	QPSK	5.59	<=13	PASS
	Low	16QAM	6.33	<=13	PASS
	Mid	QPSK	5.20	<=13	PASS
	Mid	16QAM	5.99	<=13	PASS
	High	QPSK	4.24	<=13	PASS
	High	16QAM	5.91	<=13	PASS
5	Low	QPSK	5.61	<=13	PASS
	Low	16QAM	6.26	<=13	PASS
	Mid	QPSK	5.30	<=13	PASS
	Mid	16QAM	5.92	<=13	PASS
	High	QPSK	5.39	<=13	PASS
	High	16QAM	5.93	<=13	PASS
10	Low	QPSK	5.79	<=13	PASS
	Low	16QAM	6.35	<=13	PASS
	Mid	QPSK	5.53	<=13	PASS
	Mid	16QAM	6.12	<=13	PASS
	High	QPSK	5.52	<=13	PASS
	High	16QAM	6.21	<=13	PASS
15	Low	QPSK	5.65	<=13	PASS
	Low	16QAM	6.32	<=13	PASS
	Mid	QPSK	5.30	<=13	PASS
	Mid	16QAM	6.00	<=13	PASS
	High	QPSK	5.53	<=13	PASS
	High	16QAM	6.23	<=13	PASS
20	Low	QPSK	5.67	<=13	PASS
	Low	16QAM	6.39	<=13	PASS
	Mid	QPSK	5.47	<=13	PASS
	Mid	16QAM	6.14	<=13	PASS
	High	QPSK	5.56	<=13	PASS
	High	16QAM	6.27	<=13	PASS



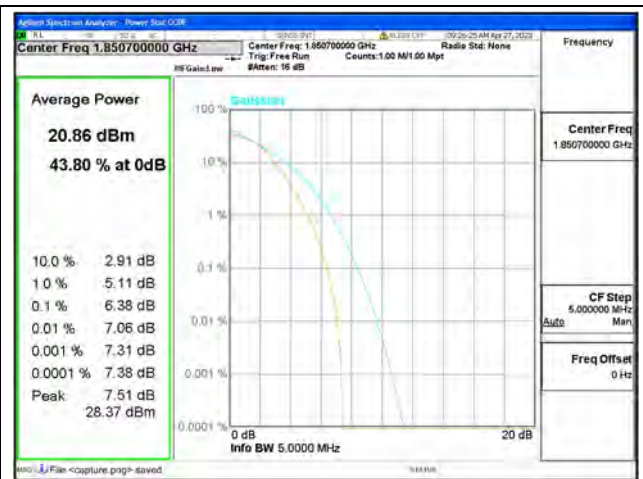
LTE Band 4					
BW(MHz)	Channel Level	Modulation	PAR Radio(dB)	Limit(dB)	Verdict
1.4	Low	QPSK	5.62	<=13	PASS
	Low	16QAM	6.45	<=13	PASS
	Mid	QPSK	5.64	<=13	PASS
	Mid	16QAM	6.45	<=13	PASS
	High	QPSK	5.47	<=13	PASS
	High	16QAM	6.37	<=13	PASS
3	Low	QPSK	5.66	<=13	PASS
	Low	16QAM	6.43	<=13	PASS
	Mid	QPSK	5.69	<=13	PASS
	Mid	16QAM	6.70	<=13	PASS
	High	QPSK	5.41	<=13	PASS
	High	16QAM	6.27	<=13	PASS
5	Low	QPSK	5.65	<=13	PASS
	Low	16QAM	6.28	<=13	PASS
	Mid	QPSK	5.61	<=13	PASS
	Mid	16QAM	6.27	<=13	PASS
	High	QPSK	5.54	<=13	PASS
	High	16QAM	6.22	<=13	PASS
10	Low	QPSK	5.67	<=13	PASS
	Low	16QAM	6.33	<=13	PASS
	Mid	QPSK	5.72	<=13	PASS
	Mid	16QAM	6.34	<=13	PASS
	High	QPSK	5.65	<=13	PASS
	High	16QAM	6.32	<=13	PASS
15	Low	QPSK	5.57	<=13	PASS
	Low	16QAM	6.27	<=13	PASS
	Mid	QPSK	5.63	<=13	PASS
	Mid	16QAM	6.28	<=13	PASS
	High	QPSK	5.56	<=13	PASS
	High	16QAM	6.23	<=13	PASS
20	Low	QPSK	5.62	<=13	PASS
	Low	16QAM	6.32	<=13	PASS
	Mid	QPSK	5.64	<=13	PASS
	Mid	16QAM	6.35	<=13	PASS
	High	QPSK	5.68	<=13	PASS
	High	16QAM	6.36	<=13	PASS



LTE Band 66					
BW(MHz)	Channel Level	Modulation	PAR Radio(dB)	Limit(dB)	Verdict
1.4	Low	QPSK	5.68	<=13	PASS
	Low	16QAM	6.40	<=13	PASS
	Mid	QPSK	5.67	<=13	PASS
	Mid	16QAM	6.51	<=13	PASS
	High	QPSK	5.54	<=13	PASS
	High	16QAM	6.73	<=13	PASS
3	Low	QPSK	5.66	<=13	PASS
	Low	16QAM	6.45	<=13	PASS
	Mid	QPSK	5.63	<=13	PASS
	Mid	16QAM	6.50	<=13	PASS
	High	QPSK	5.50	<=13	PASS
	High	16QAM	6.30	<=13	PASS
5	Low	QPSK	5.60	<=13	PASS
	Low	16QAM	6.32	<=13	PASS
	Mid	QPSK	5.60	<=13	PASS
	Mid	16QAM	6.35	<=13	PASS
	High	QPSK	5.51	<=13	PASS
	High	16QAM	6.20	<=13	PASS
10	Low	QPSK	5.67	<=13	PASS
	Low	16QAM	6.28	<=13	PASS
	Mid	QPSK	5.77	<=13	PASS
	Mid	16QAM	6.35	<=13	PASS
	High	QPSK	5.52	<=13	PASS
	High	16QAM	6.26	<=13	PASS
15	Low	QPSK	5.59	<=13	PASS
	Low	16QAM	6.24	<=13	PASS
	Mid	QPSK	5.61	<=13	PASS
	Mid	16QAM	6.28	<=13	PASS
	High	QPSK	5.29	<=13	PASS
	High	16QAM	5.99	<=13	PASS
20	Low	QPSK	5.62	<=13	PASS
	Low	16QAM	6.33	<=13	PASS
	Mid	QPSK	5.68	<=13	PASS
	Mid	16QAM	6.34	<=13	PASS
	High	QPSK	5.37	<=13	PASS
	High	16QAM	6.08	<=13	PASS



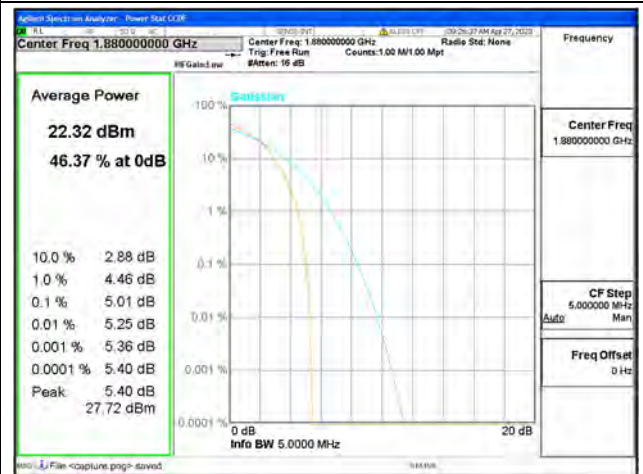
Band2 / 1.4MHz / Low CH / QPSK



Band2 / 1.4MHz / Low CH / 16QAM



Band2 / 1.4MHz / Mid CH / QPSK



Band2 / 1.4MHz / Mid CH / 16QAM



Band2 / 1.4MHz / High CH / QPSK



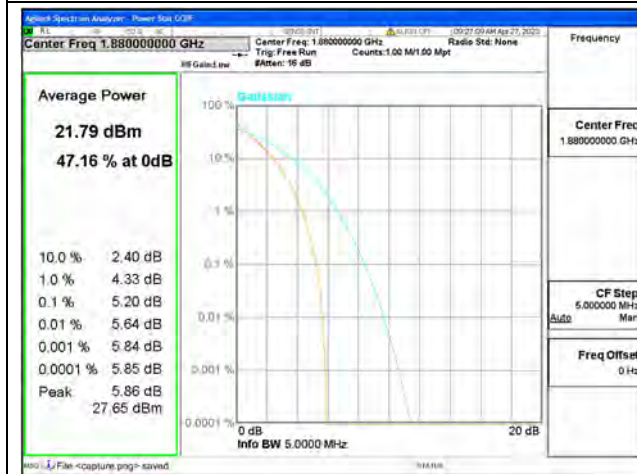
Band2 / 1.4MHz / High CH / 16QAM



Band2 / 3MHz / Low CH / QPSK



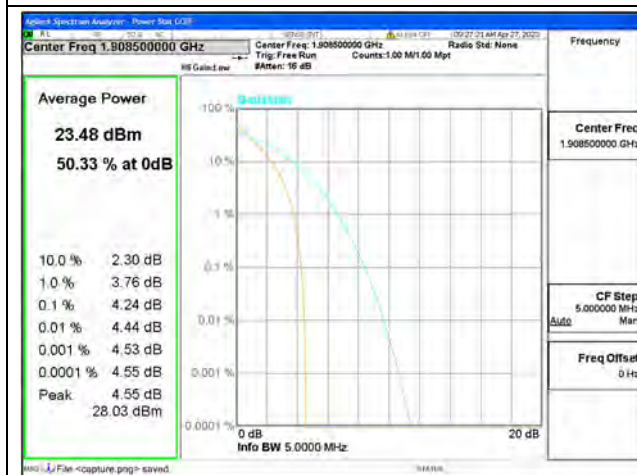
Band2 / 3MHz / Low CH / 16QAM



Band2 / 3MHz / Mid CH / QPSK



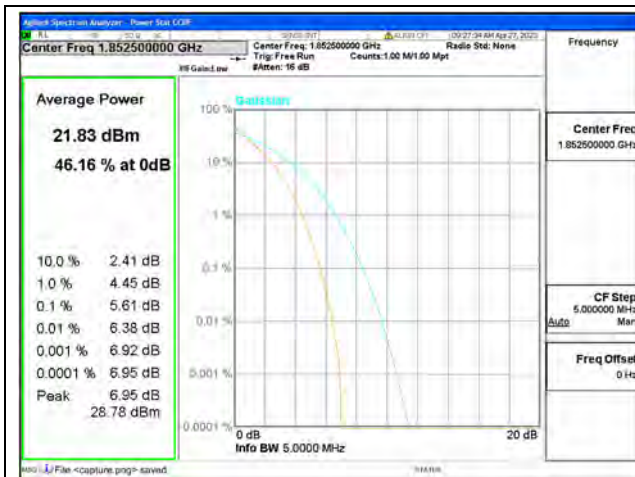
Band2 / 3MHz / Mid CH / 16QAM



Band2 / 3MHz / High CH / QPSK



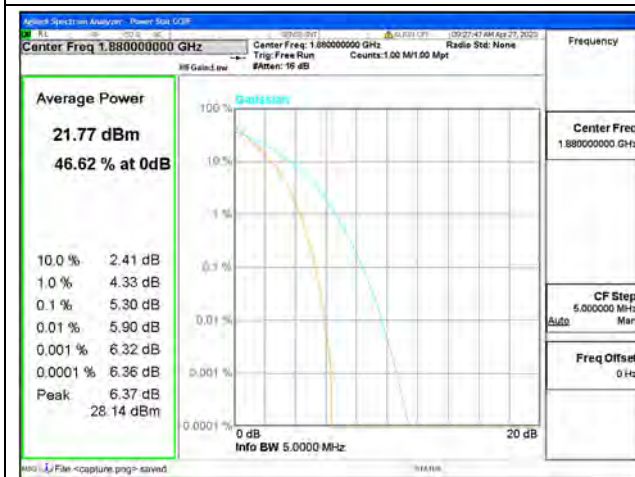
Band2 / 3MHz / High CH / 16QAM



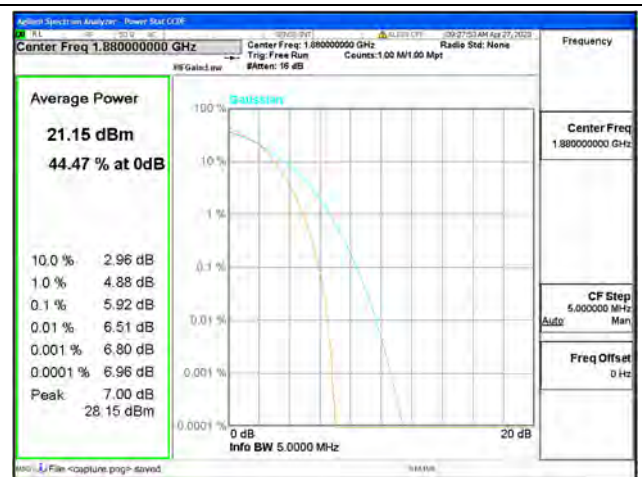
Band2 / 5MHz / Low CH / QPSK



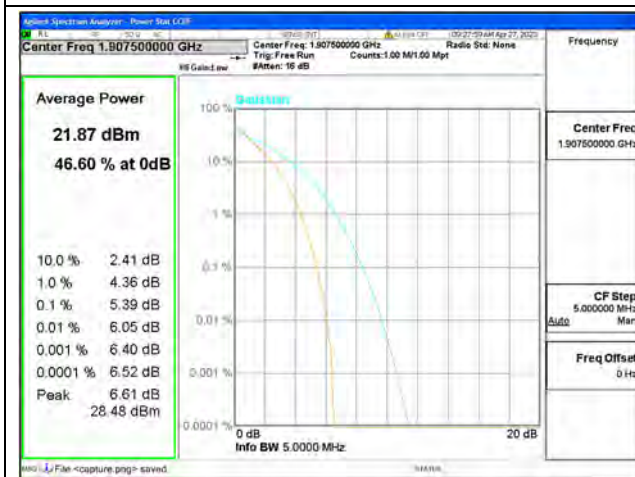
Band2 / 5MHz / Low CH / 16QAM



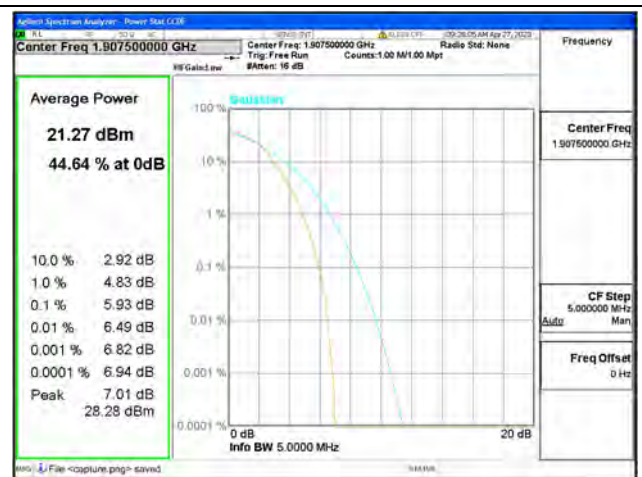
Band2 / 5MHz / Mid CH / QPSK



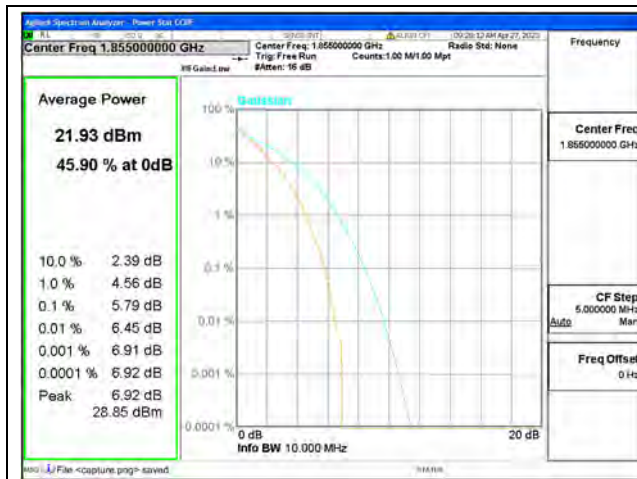
Band2 / 5MHz / Mid CH / 16QAM



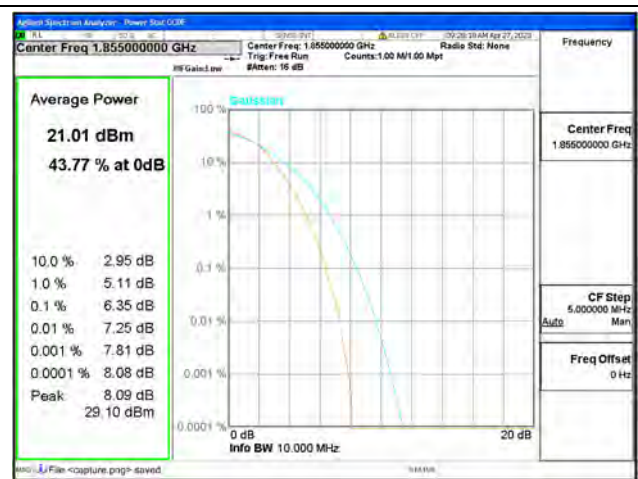
Band2 / 5MHz / High CH / QPSK



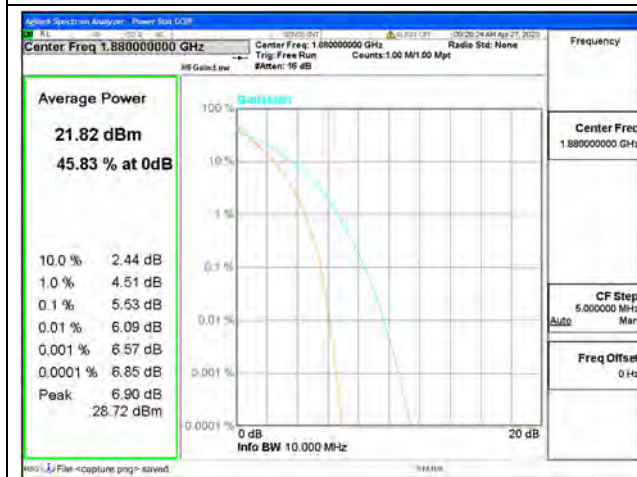
Band2 / 5MHz / High CH / 16QAM



Band2 / 10MHz / Low CH / QPSK



Band2 / 10MHz / Low CH / 16QAM



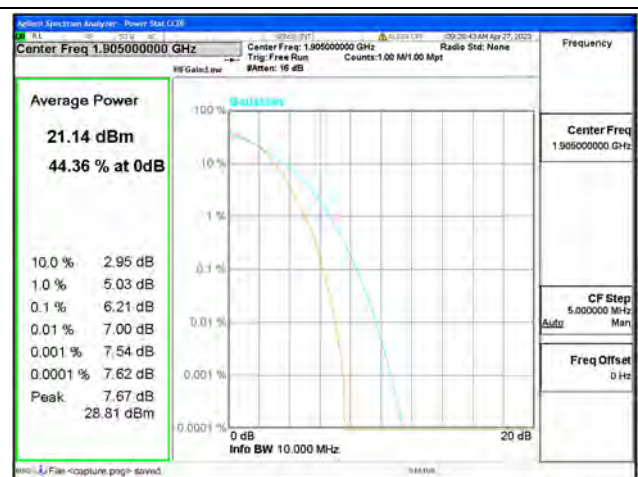
Band2 / 10MHz / Mid CH / QPSK



Band2 / 10MHz / Mid CH / 16QAM



Band2 / 10MHz / High CH / QPSK



Band2 / 10MHz / High CH / 16QAM