



REPORT No.: SZ22100099W02

TEST REPORT

APPLICANT : Shanghai BroadMobi Communication
Technology Co., Ltd.

PRODUCT NAME : RX50

MODEL NAME : RX50

BRAND NAME : BroadMobi

FCC ID : 2AON8RX50

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

RECEIPT DATE : 2022-11-21

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Change History		
Version	Date	Reason for change
1.0	2023-01-11	First edition



1. Technical Information

Note: Provide by applicant.

1.1. Applicant and Manufacturer Information

Applicant:	Shanghai BroadMobi Communication Technology Co., Ltd.
Applicant Address:	15F,Building 9,No. 99,Tianzhou Rd.,Xuhui District, Shanghai
Manufacturer:	Shanghai BroadMobi Communication Technology Co., Ltd.
Manufacturer Address:	15F,Building 9,No. 99,Tianzhou Rd.,Xuhui District, Shanghai

1.2. Equipment Under Test (EUT) Description

Product Name:	RX50	
Sample No.:	9#	
Hardware Version:	RX50A_MB_V4.0	
Software Version:	1.01	
Modulation Type:	QPSK, 16QAM, 64QAM	
Carrier Aggregation:	Not Support	
Operation Band:	Band 2 / 4 / 7 / 12 / 66	
Frequency Range:	LTE Band 2	Tx: 1850MHz–1910MHz
		Rx: 1930MHz–1990MHz
	LTE Band 4	Tx: 1710MHz–1755MHz
		Rx: 2110MHz–2155MHz
	LTE Band 7	Tx: 2500MHz–2570MHz
		Rx: 2620MHz–2690MHz
	LTE Band 12	Tx: 699MHz - 716MHz
		Rx: 729MHz – 746MHz
	LTE Band 66	Tx: 1710MHz –1780MHz
		Rx: 2110MHz –2200MHz
Channel Bandwidth:	LTE Band 2	1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz
	LTE Band 4	1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz
	LTE Band 7	5 MHz, 10MHz, 15MHz, 20MHz
	LTE Band 12	1.4MHz, 3 MHz, 5 MHz, 10MHz
	LTE Band 66	1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz



Antenna Type:	Fixed Internal Antenna	
Antenna Gain:	LTE Band 2	4.48dBi
	LTE Band 4	3.46dBi
	LTE Band 7	3.29dBi
	LTE Band 12	1.28dBi
	LTE Band 66	4.23dBi
Accessory Information:	AC Adapter	
	Brand Name:	GuRong Electronics
	Model No.:	GQ24-120200-AU
	Serial No.:	N/A
	Rated Output:	12V $\Rightarrow$ 2A
	Rated Input:	100-240V $\sim$ 50/60Hz, 1A
	Manufacturer:	DONGGUAN GANGQI ELECTRONIC 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	64QAM	QPSK	16QAM	64QAM
20		0.417	0.328	0.326	17M9G7D	18M0W7D	18M0W7D
15		0.415	0.336	0.327	13M5G7D	13M5W7D	13M5W7D
10		0.411	0.333	0.338	9M00G7D	8M96W7D	8M97W7D
5		0.410	0.332	0.338	4M51G7D	4M51W7D	4M51W7D
3		0.410	0.333	0.329	2M70G7D	2M71W7D	2M70W7D
1.4		0.408	0.330	0.325	1M09G7D	1M10W7D	1M10W7D
LTE Band 4		Maximum E.R.P./E.I.R.P. (W)			Emission Designator (99%OBW)		
BW(MHz)		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
20		0.327	0.258	0.260	18M0G7D	18M1W7D	18M0W7D
15		0.321	0.262	0.260	13M5G7D	13M5W7D	13M5W7D
10		0.322	0.261	0.259	8M99G7D	8M96W7D	8M99W7D
5		0.321	0.260	0.257	4M51G7D	4M51W7D	4M51W7D
3		0.321	0.252	0.267	2M70G7D	2M70W7D	2M70W7D
1.4		0.323	0.259	0.262	1M09G7D	1M10W7D	1M10W7D
LTE Band 7		Maximum E.R.P./E.I.R.P. (W)			Emission Designator (99%OBW)		
BW(MHz)		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
20		0.802	0.635	0.637	18M0G7D	18M0W7D	18M0W7D
15		0.789	0.653	0.643	13M5G7D	13M5W7D	13M5W7D
10		0.791	0.638	0.641	9M00G7D	8M96W7D	8M98W7D
5		0.793	0.646	0.641	4M50G7D	4M51W7D	4M51W7D
LTE Band 12		Maximum E.R.P./E.I.R.P. (W)			Emission Designator (99%OBW)		
BW(MHz)		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10		0.194	0.160	0.160	8M98G7D	8M96W7D	8M98W7D
5		0.190	0.159	0.153	4M50G7D	4M51W7D	4M51W7D
3		0.192	0.162	0.160	2M70G7D	2M70W7D	2M71W7D
1.4		0.192	0.159	0.158	1M09G7D	1M10W7D	1M10W7D
LTE Band 66		Maximum E.R.P./E.I.R.P. (W)			Emission Designator (99%OBW)		
BW(MHz)		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
20		0.318	0.256	0.251	18M0G7D	18M1W7D	18M1W7D
15		0.310	0.259	0.255	13M5G7D	13M5W7D	13M5W7D
10		0.313	0.251	0.256	9M00G7D	8M97W7D	8M98W7D
5		0.316	0.259	0.258	4M50G7D	4M50W7D	4M52W7D
3		0.316	0.259	0.255	2M70G7D	2M70W7D	2M70W7D
1.4		0.315	0.267	0.254	1M09G7D	1M10W7D	1M10W7D



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 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.	Jan. 04, 2023	Shen Biaohong Li Huaijie	PASS	No deviation
2.1049	Occupied Bandwidth	Nov. 29, 2022	Li Huaijie	PASS	No deviation
2.1055 24.235 27.54	Frequency Stability	Jan. 04, 2023	Li Huaijie	PASS	No deviation
24.232(d), 27.50(d)(5)	Peak to Average Ratio	Nov. 30, 2022	Li Huaijie	PASS	No deviation
2.1051 24.238(a) 27.53(g) 27.53(h) 27.53(m)(4)	Conducted Spurious Emissions	Nov. 29&30, 2022	Li Huaijie	PASS	No deviation
2.1051 24.238(a) 27.53(g) 27.53(h) 27.53(m)(4)	Band Edge	Nov. 25&29, 2022	Li Huaijie	PASS	No deviation
2.1053 24.238(a)	Radiated Spurious	Dec. 07, 2022	Gao Jianrou	PASS	No deviation



27.53(g) 27.53(h) 27.53(m)(4)	Emissions				
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 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).

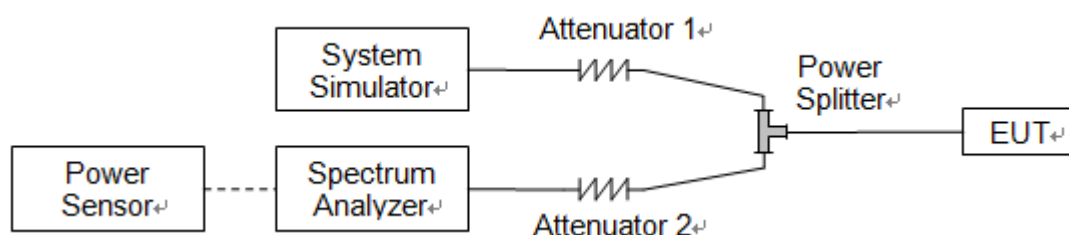
According to FCC section 24.232 (c) for LTE Band 2, Mobile and portable stations are limited to 2 watts E.I.R.P. and the equipment must employ a means for limiting power to the minimum necessary for successful communications.

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 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, 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	24.34	24.42	24.37
20	QPSK	1	49	24.25	24.30	24.33
20	QPSK	1	99	24.28	24.29	24.26
20	QPSK	50	0	23.32	23.41	23.34
20	QPSK	50	24	23.19	23.36	23.22
20	QPSK	50	50	23.23	23.24	23.19
20	QPSK	100	0	23.38	23.33	23.40
20	16QAM	1	0	23.36	23.32	23.38
20	16QAM	1	49	23.27	23.24	23.21
20	16QAM	1	99	23.19	23.26	23.25
20	16QAM	50	0	22.27	22.38	22.41
20	16QAM	50	24	22.30	22.18	22.26
20	16QAM	50	50	22.15	22.23	22.20
20	16QAM	100	0	22.29	22.35	22.37
20	64QAM	1	0	23.20	23.25	23.29
20	64QAM	1	49	23.35	23.30	23.27
20	64QAM	1	99	23.20	23.12	23.16
20	64QAM	50	0	22.33	22.35	22.24
20	64QAM	50	24	22.20	22.19	22.13
20	64QAM	50	50	22.23	22.25	22.20
20	64QAM	100	0	22.34	22.29	22.32



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	24.35	24.40	24.21
15	QPSK	1	37	24.16	24.26	24.11
15	QPSK	1	74	24.29	24.17	24.19
15	QPSK	36	0	23.53	23.43	23.44
15	QPSK	36	20	23.27	23.11	23.16
15	QPSK	36	39	23.29	23.36	23.36
15	QPSK	75	0	23.36	23.27	23.30
15	16QAM	1	0	23.35	23.39	23.29
15	16QAM	1	37	23.12	23.03	23.24
15	16QAM	1	74	23.44	23.48	23.42
15	16QAM	36	0	22.28	22.30	22.36
15	16QAM	36	20	22.10	22.43	22.09
15	16QAM	36	39	22.10	22.36	22.31
15	16QAM	75	0	22.44	22.10	22.26
15	64QAM	1	0	23.35	23.22	23.17
15	64QAM	1	37	23.20	23.09	23.24
15	64QAM	1	74	23.33	23.08	23.36
15	64QAM	36	0	22.16	22.39	22.24
15	64QAM	36	20	22.35	22.03	22.24
15	64QAM	36	39	22.08	22.01	22.12
15	64QAM	75	0	22.36	22.27	22.13



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	24.29	24.36	24.35
10	QPSK	1	25	24.28	24.30	24.10
10	QPSK	1	49	24.31	24.29	24.27
10	QPSK	25	0	23.49	23.40	23.10
10	QPSK	25	12	23.20	23.47	23.04
10	QPSK	25	25	23.07	23.18	23.20
10	QPSK	50	0	23.45	23.30	23.38
10	16QAM	1	0	23.45	23.14	23.43
10	16QAM	1	25	23.40	23.17	23.05
10	16QAM	1	49	23.18	23.12	23.45
10	16QAM	25	0	22.45	22.47	22.36
10	16QAM	25	12	22.33	22.17	22.41
10	16QAM	25	25	22.19	22.21	22.08
10	16QAM	50	0	22.48	22.31	22.28
10	64QAM	1	0	23.42	23.30	23.20
10	64QAM	1	25	23.51	23.17	23.47
10	64QAM	1	49	23.21	23.30	23.13
10	64QAM	25	0	22.23	22.33	22.45
10	64QAM	25	12	22.11	22.18	22.09
10	64QAM	25	25	22.33	22.19	22.23
10	64QAM	50	0	22.09	22.29	22.12



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	24.14	24.35	24.26
5	QPSK	1	12	24.19	24.24	24.28
5	QPSK	1	24	24.24	24.31	24.35
5	QPSK	12	0	23.22	23.33	23.12
5	QPSK	12	7	23.15	23.31	23.06
5	QPSK	12	13	23.02	23.09	23.15
5	QPSK	25	0	23.17	23.39	23.45
5	16QAM	1	0	23.17	23.31	23.41
5	16QAM	1	12	23.43	23.33	23.37
5	16QAM	1	24	23.18	23.13	23.21
5	16QAM	12	0	22.25	22.45	22.36
5	16QAM	12	7	22.24	22.39	22.33
5	16QAM	12	13	22.31	22.18	22.14
5	16QAM	25	0	22.33	22.30	22.48
5	64QAM	1	0	23.29	23.30	23.51
5	64QAM	1	12	23.33	23.28	23.19
5	64QAM	1	24	23.37	23.34	23.38
5	64QAM	12	0	22.27	22.35	22.16
5	64QAM	12	7	22.20	22.16	22.29
5	64QAM	12	13	22.15	22.21	22.27
5	64QAM	25	0	22.17	22.23	22.42



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	24.33	24.35	24.31
3	QPSK	1	8	24.27	24.28	24.26
3	QPSK	1	14	24.34	24.13	24.05
3	QPSK	8	0	23.12	23.33	23.31
3	QPSK	8	4	23.11	23.38	23.12
3	QPSK	8	7	23.14	23.09	23.15
3	QPSK	15	0	23.18	23.57	23.61
3	16QAM	1	0	23.35	23.38	23.14
3	16QAM	1	8	23.04	23.45	23.43
3	16QAM	1	14	23.20	23.16	23.08
3	16QAM	8	0	22.04	22.41	22.29
3	16QAM	8	4	22.39	22.26	22.43
3	16QAM	8	7	22.11	22.25	22.30
3	16QAM	15	0	22.10	22.20	22.24
3	64QAM	1	0	23.28	23.39	23.29
3	64QAM	1	8	23.27	23.23	23.10
3	64QAM	1	14	23.27	23.13	23.09
3	64QAM	8	0	22.21	22.10	22.46
3	64QAM	8	4	22.36	22.26	22.32
3	64QAM	8	7	22.20	22.29	22.19
3	64QAM	15	0	22.25	22.33	22.33



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	24.29	24.33	24.27
1.4	QPSK	1	3	24.06	24.29	24.25
1.4	QPSK	1	5	24.16	24.07	24.16
1.4	QPSK	3	0	23.23	23.36	23.09
1.4	QPSK	3	1	23.00	23.33	23.26
1.4	QPSK	3	3	23.41	23.19	23.06
1.4	QPSK	6	0	23.33	23.11	23.54
1.4	16QAM	1	0	23.36	23.41	23.25
1.4	16QAM	1	3	23.27	23.07	23.31
1.4	16QAM	1	5	23.14	23.37	23.27
1.4	16QAM	3	0	22.04	22.39	22.39
1.4	16QAM	3	1	22.21	22.02	22.08
1.4	16QAM	3	3	22.10	22.39	22.25
1.4	16QAM	6	0	22.30	22.53	22.47
1.4	64QAM	1	0	23.04	23.09	23.34
1.4	64QAM	1	3	23.33	23.13	23.29
1.4	64QAM	1	5	23.22	23.06	23.23
1.4	64QAM	3	0	22.17	22.48	22.24
1.4	64QAM	3	1	22.35	22.14	22.29
1.4	64QAM	3	3	22.09	22.04	22.11
1.4	64QAM	6	0	22.26	22.18	22.42



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	24.35	24.40	24.38
20	QPSK	1	49	24.31	24.20	24.30
20	QPSK	1	99	24.22	24.26	24.21
20	QPSK	50	0	23.43	23.44	23.19
20	QPSK	50	24	23.38	23.31	23.34
20	QPSK	50	50	23.41	23.17	23.31
20	QPSK	100	0	23.18	23.37	23.30
20	16QAM	1	0	23.35	23.38	23.32
20	16QAM	1	49	23.02	23.07	23.09
20	16QAM	1	99	23.10	23.33	23.16
20	16QAM	50	0	22.19	22.32	22.31
20	16QAM	50	24	22.15	22.25	22.19
20	16QAM	50	50	22.19	22.14	22.22
20	16QAM	100	0	22.15	22.32	22.55
20	64QAM	1	0	23.22	23.31	23.41
20	64QAM	1	49	23.36	23.25	23.15
20	64QAM	1	99	23.15	23.35	23.09
20	64QAM	50	0	22.08	22.33	22.01
20	64QAM	50	24	21.95	22.10	22.17
20	64QAM	50	50	22.40	22.17	22.25
20	64QAM	100	0	22.51	22.36	22.34



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	24.26	24.33	24.20
15	QPSK	1	37	24.28	24.25	24.28
15	QPSK	1	74	24.22	24.28	24.16
15	QPSK	36	0	23.28	23.32	23.27
15	QPSK	36	20	23.07	23.23	23.31
15	QPSK	36	39	23.19	23.16	23.12
15	QPSK	75	0	23.46	23.13	23.32
15	16QAM	1	0	23.40	23.39	23.18
15	16QAM	1	37	23.15	23.44	23.24
15	16QAM	1	74	23.23	23.05	23.35
15	16QAM	36	0	22.21	22.39	22.35
15	16QAM	36	20	22.30	22.18	22.36
15	16QAM	36	39	22.10	22.40	22.12
15	16QAM	75	0	22.14	22.22	22.20
15	64QAM	1	0	23.24	23.08	23.33
15	64QAM	1	37	23.23	23.38	23.21
15	64QAM	1	74	23.24	23.19	23.41
15	64QAM	36	0	22.33	22.24	22.23
15	64QAM	36	20	22.30	22.43	22.19
15	64QAM	36	39	22.02	22.32	22.03
15	64QAM	75	0	22.25	22.38	22.10



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	24.23	24.34	24.23
10	QPSK	1	25	24.19	24.33	24.27
10	QPSK	1	49	24.20	24.10	24.21
10	QPSK	25	0	23.36	23.49	23.17
10	QPSK	25	12	23.29	23.15	23.14
10	QPSK	25	25	23.35	23.26	23.29
10	QPSK	50	0	23.37	23.36	23.26
10	16QAM	1	0	23.34	23.34	23.18
10	16QAM	1	25	23.33	23.38	23.10
10	16QAM	1	49	23.27	23.09	23.43
10	16QAM	25	0	22.21	22.20	22.27
10	16QAM	25	12	22.33	22.14	22.25
10	16QAM	25	25	22.12	22.28	22.23
10	16QAM	50	0	22.32	22.11	22.29
10	64QAM	1	0	23.27	23.14	23.27
10	64QAM	1	25	23.19	23.16	23.40
10	64QAM	1	49	23.27	23.25	23.11
10	64QAM	25	0	22.43	22.33	22.19
10	64QAM	25	12	22.39	22.14	22.25
10	64QAM	25	25	22.12	22.28	22.07
10	64QAM	50	0	22.51	22.23	22.44



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	24.18	24.32	24.24
5	QPSK	1	12	24.27	24.21	24.26
5	QPSK	1	24	24.16	24.19	24.09
5	QPSK	12	0	23.08	23.41	23.25
5	QPSK	12	7	23.04	23.16	23.14
5	QPSK	12	13	23.09	23.04	23.16
5	QPSK	25	0	23.14	23.15	23.21
5	16QAM	1	0	23.40	23.41	23.33
5	16QAM	1	12	23.17	23.22	23.32
5	16QAM	1	24	23.14	23.37	23.41
5	16QAM	12	0	22.27	22.40	22.31
5	16QAM	12	7	22.41	22.11	22.32
5	16QAM	12	13	22.16	22.15	22.41
5	16QAM	25	0	22.30	22.42	22.35
5	64QAM	1	0	23.21	23.22	23.09
5	64QAM	1	12	23.17	23.32	23.36
5	64QAM	1	24	23.05	23.13	23.13
5	64QAM	12	0	22.21	22.14	22.08
5	64QAM	12	7	22.26	22.21	22.09
5	64QAM	12	13	22.04	22.04	22.25
5	64QAM	25	0	22.36	22.32	22.35



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	24.29	24.33	24.23
3	QPSK	1	8	24.11	24.23	24.13
3	QPSK	1	14	24.28	24.24	24.29
3	QPSK	8	0	23.25	23.26	23.20
3	QPSK	8	4	23.16	23.30	23.22
3	QPSK	8	7	23.12	23.21	23.04
3	QPSK	15	0	23.48	23.13	23.24
3	16QAM	1	0	23.17	23.16	23.28
3	16QAM	1	8	23.17	23.08	23.13
3	16QAM	1	14	23.18	23.12	23.15
3	16QAM	8	0	22.25	22.43	22.36
3	16QAM	8	4	22.19	22.22	22.07
3	16QAM	8	7	22.16	22.28	22.19
3	16QAM	15	0	22.23	22.10	22.12
3	64QAM	1	0	23.41	23.39	23.29
3	64QAM	1	8	23.25	23.52	23.11
3	64QAM	1	14	23.33	23.19	23.19
3	64QAM	8	0	22.10	22.23	22.18
3	64QAM	8	4	22.29	22.14	22.03
3	64QAM	8	7	22.25	22.13	22.07
3	64QAM	15	0	22.21	22.14	22.21



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	24.31	24.35	24.26
1.4	QPSK	1	3	24.31	24.18	24.30
1.4	QPSK	1	5	24.18	24.26	24.11
1.4	QPSK	3	0	23.21	23.30	23.40
1.4	QPSK	3	1	23.32	23.35	23.15
1.4	QPSK	3	3	23.11	23.28	23.21
1.4	QPSK	6	0	23.46	23.27	23.58
1.4	16QAM	1	0	23.30	23.20	23.21
1.4	16QAM	1	3	23.40	23.30	23.30
1.4	16QAM	1	5	23.12	23.40	23.06
1.4	16QAM	3	0	22.25	22.27	22.33
1.4	16QAM	3	1	22.19	22.07	22.31
1.4	16QAM	3	3	22.35	22.43	22.15
1.4	16QAM	6	0	22.34	22.20	22.52
1.4	64QAM	1	0	23.21	23.24	23.44
1.4	64QAM	1	3	23.17	23.27	23.02
1.4	64QAM	1	5	23.13	23.19	23.20
1.4	64QAM	3	0	22.22	22.25	22.18
1.4	64QAM	3	1	22.10	22.08	22.09
1.4	64QAM	3	3	22.09	22.35	22.04
1.4	64QAM	6	0	22.31	22.17	22.37



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	23.70	23.86	23.80
20	QPSK	1	49	23.57	23.77	23.68
20	QPSK	1	99	23.61	23.66	23.66
20	QPSK	50	0	22.68	22.90	22.82
20	QPSK	50	24	22.74	22.81	22.83
20	QPSK	50	50	22.64	22.76	22.84
20	QPSK	100	0	23.00	22.77	23.06
20	16QAM	1	0	22.62	22.67	22.85
20	16QAM	1	49	22.82	22.55	22.59
20	16QAM	1	99	22.67	22.81	22.58
20	16QAM	50	0	21.86	21.77	21.75
20	16QAM	50	24	21.78	21.82	21.77
20	16QAM	50	50	21.49	21.63	21.61
20	16QAM	100	0	21.79	21.94	22.00
20	64QAM	1	0	22.62	22.75	22.84
20	64QAM	1	49	22.82	22.86	22.83
20	64QAM	1	99	22.63	22.61	22.83
20	64QAM	50	0	21.86	21.68	21.76
20	64QAM	50	24	21.79	21.94	21.55
20	64QAM	50	50	21.94	21.63	21.87
20	64QAM	100	0	21.67	21.80	21.71



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	23.65	23.79	23.77
15	QPSK	1	37	23.65	23.71	23.77
15	QPSK	1	74	23.68	23.57	23.67
15	QPSK	36	0	22.76	22.76	22.92
15	QPSK	36	20	22.70	22.77	22.56
15	QPSK	36	39	22.69	22.92	22.87
15	QPSK	75	0	22.86	22.58	22.72
15	16QAM	1	0	22.93	22.97	22.88
15	16QAM	1	37	22.60	22.82	22.92
15	16QAM	1	74	22.68	22.79	22.90
15	16QAM	36	0	21.79	21.77	21.89
15	16QAM	36	20	21.61	21.45	21.71
15	16QAM	36	39	21.59	21.49	21.83
15	16QAM	75	0	21.89	21.89	21.96
15	64QAM	1	0	22.90	22.88	22.71
15	64QAM	1	37	22.67	22.65	22.64
15	64QAM	1	74	22.89	22.78	22.76
15	64QAM	36	0	21.61	21.67	21.84
15	64QAM	36	20	21.79	21.55	21.71
15	64QAM	36	39	21.59	21.59	21.79
15	64QAM	75	0	21.72	21.71	21.65



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	23.71	23.80	23.75
10	QPSK	1	25	23.74	23.73	23.69
10	QPSK	1	49	23.62	23.78	23.57
10	QPSK	25	0	22.59	22.74	22.65
10	QPSK	25	12	22.68	22.62	22.63
10	QPSK	25	25	22.87	22.60	22.77
10	QPSK	50	0	22.77	22.87	22.80
10	16QAM	1	0	22.77	22.85	22.87
10	16QAM	1	25	22.87	22.68	22.78
10	16QAM	1	49	22.66	22.73	22.52
10	16QAM	25	0	21.87	21.64	21.84
10	16QAM	25	12	21.74	21.58	21.86
10	16QAM	25	25	21.71	21.83	21.58
10	16QAM	50	0	21.76	21.82	21.80
10	64QAM	1	0	22.75	22.64	22.72
10	64QAM	1	25	22.89	22.80	22.85
10	64QAM	1	49	22.82	22.70	22.49
10	64QAM	25	0	21.58	21.88	21.92
10	64QAM	25	12	21.62	21.76	21.60
10	64QAM	25	25	21.56	21.97	21.60
10	64QAM	50	0	21.73	21.66	21.78



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	23.70	23.81	23.77
5	QPSK	1	12	23.64	23.69	23.70
5	QPSK	1	24	23.74	23.62	23.59
5	QPSK	12	0	22.58	22.74	22.84
5	QPSK	12	7	22.88	22.73	22.72
5	QPSK	12	13	22.89	22.82	22.58
5	QPSK	25	0	22.59	22.63	22.78
5	16QAM	1	0	22.64	22.75	22.89
5	16QAM	1	12	22.70	22.86	22.63
5	16QAM	1	24	22.73	22.92	22.86
5	16QAM	12	0	21.70	21.82	21.96
5	16QAM	12	7	21.59	21.73	21.52
5	16QAM	12	13	21.51	21.65	21.89
5	16QAM	25	0	21.82	21.88	21.71
5	64QAM	1	0	22.71	22.75	22.57
5	64QAM	1	12	22.67	22.75	22.79
5	64QAM	1	24	22.89	22.60	22.66
5	64QAM	12	0	21.74	21.83	21.68
5	64QAM	12	7	21.65	21.72	21.78
5	64QAM	12	13	21.70	21.55	21.81
5	64QAM	25	0	21.98	21.86	21.77



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	23.69	23.74	23.65
10	QPSK	1	25	23.64	23.62	23.58
10	QPSK	1	49	23.60	23.53	23.53
10	QPSK	25	0	22.67	22.82	22.80
10	QPSK	25	12	22.74	22.75	22.55
10	QPSK	25	25	22.75	22.75	22.89
10	QPSK	50	0	22.70	22.90	22.82
10	16QAM	1	0	22.67	22.73	22.80
10	16QAM	1	25	22.63	22.52	22.82
10	16QAM	1	49	22.90	22.89	22.72
10	16QAM	25	0	21.81	21.92	21.84
10	16QAM	25	12	21.76	21.75	21.93
10	16QAM	25	25	21.58	21.81	21.79
10	16QAM	50	0	21.70	21.89	21.91
10	64QAM	1	0	22.55	22.77	22.74
10	64QAM	1	25	22.66	22.91	22.60
10	64QAM	1	49	22.52	22.85	22.82
10	64QAM	25	0	21.91	21.71	21.56
10	64QAM	25	12	21.82	21.54	21.60
10	64QAM	25	25	21.83	21.89	21.89
10	64QAM	50	0	21.60	21.57	21.82



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	23.64	23.66	23.61
5	QPSK	1	12	23.63	23.59	23.53
5	QPSK	1	24	23.55	23.57	23.59
5	QPSK	12	0	22.60	22.71	22.75
5	QPSK	12	7	22.65	22.94	22.78
5	QPSK	12	13	22.70	22.94	22.64
5	QPSK	25	0	22.81	22.93	22.65
5	16QAM	1	0	22.85	22.73	22.84
5	16QAM	1	12	22.75	22.89	22.56
5	16QAM	1	24	22.73	22.84	22.85
5	16QAM	12	0	21.90	21.77	21.98
5	16QAM	12	7	21.87	21.89	21.78
5	16QAM	12	13	21.58	21.81	21.57
5	16QAM	25	0	22.03	21.71	21.78
5	64QAM	1	0	22.71	22.66	22.57
5	64QAM	1	12	22.60	22.72	22.61
5	64QAM	1	24	22.70	22.62	22.69
5	64QAM	12	0	21.75	21.85	21.66
5	64QAM	12	7	21.58	21.91	21.60
5	64QAM	12	13	21.89	21.64	21.54
5	64QAM	25	0	21.63	21.76	21.81



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	23.59	23.68	23.71
3	QPSK	1	8	23.69	23.62	23.63
3	QPSK	1	14	23.60	23.71	23.64
3	QPSK	8	0	22.78	22.90	22.81
3	QPSK	8	4	22.80	22.71	22.84
3	QPSK	8	7	22.84	22.54	22.62
3	QPSK	15	0	22.72	22.83	22.71
3	16QAM	1	0	22.92	22.84	22.89
3	16QAM	1	8	22.91	22.84	22.68
3	16QAM	1	14	22.59	22.68	22.96
3	16QAM	8	0	21.88	21.74	21.86
3	16QAM	8	4	21.62	21.66	21.95
3	16QAM	8	7	21.52	21.79	21.59
3	16QAM	15	0	21.75	21.78	21.80
3	64QAM	1	0	22.82	22.91	22.82
3	64QAM	1	8	22.67	22.70	22.65
3	64QAM	1	14	22.59	22.51	22.67
3	64QAM	8	0	21.64	21.86	21.62
3	64QAM	8	4	21.68	21.90	21.88
3	64QAM	8	7	21.69	21.81	21.65
3	64QAM	15	0	21.65	21.89	21.67



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	23.67	23.71	23.70
1.4	QPSK	1	3	23.63	23.64	23.64
1.4	QPSK	1	5	23.55	23.63	23.59
1.4	QPSK	3	0	22.60	22.90	22.82
1.4	QPSK	3	1	22.54	22.80	22.76
1.4	QPSK	3	3	22.84	22.79	22.65
1.4	QPSK	6	0	22.90	22.81	23.03
1.4	16QAM	1	0	22.75	22.88	22.79
1.4	16QAM	1	3	22.73	22.85	22.86
1.4	16QAM	1	5	22.83	22.56	22.76
1.4	16QAM	3	0	21.85	21.86	21.79
1.4	16QAM	3	1	21.79	21.51	21.68
1.4	16QAM	3	3	21.58	21.72	21.72
1.4	16QAM	6	0	21.56	21.80	21.71
1.4	64QAM	1	0	22.80	22.85	22.65
1.4	64QAM	1	3	22.77	22.79	22.66
1.4	64QAM	1	5	22.69	22.59	22.66
1.4	64QAM	3	0	21.88	21.91	21.92
1.4	64QAM	3	1	21.90	21.73	21.60
1.4	64QAM	3	3	21.67	21.75	21.92
1.4	64QAM	6	0	21.59	21.70	21.65



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				132072	132322	132572
Frequency (MHz)				1720	1745	1770
20	QPSK	1	0	24.01	24.29	24.20
20	QPSK	1	49	24.17	24.03	24.09
20	QPSK	1	99	24.02	24.17	24.10
20	QPSK	50	0	23.15	23.28	23.17
20	QPSK	50	24	23.13	23.11	23.27
20	QPSK	50	50	23.27	23.29	23.08
20	QPSK	100	0	23.16	23.37	23.26
20	16QAM	1	0	23.16	23.31	23.22
20	16QAM	1	49	23.35	23.25	23.11
20	16QAM	1	99	23.09	23.03	23.05
20	16QAM	50	0	22.35	22.18	22.37
20	16QAM	50	24	22.24	22.15	22.38
20	16QAM	50	50	22.11	22.23	22.05
20	16QAM	100	0	22.06	22.30	22.13
20	64QAM	1	0	23.17	23.22	23.25
20	64QAM	1	49	23.03	23.22	23.15
20	64QAM	1	99	23.13	23.06	23.26
20	64QAM	50	0	22.22	22.34	22.09
20	64QAM	50	24	22.12	22.22	22.13
20	64QAM	50	50	22.18	22.23	22.05
20	64QAM	100	0	22.18	22.11	22.16



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	24.03	24.13	24.18
15	QPSK	1	37	24.08	24.10	24.08
15	QPSK	1	74	24.10	24.15	24.11
15	QPSK	36	0	23.19	23.46	23.32
15	QPSK	36	20	23.12	23.04	23.24
15	QPSK	36	39	23.10	23.12	23.16
15	QPSK	75	0	23.41	23.11	23.36
15	16QAM	1	0	23.10	23.40	23.20
15	16QAM	1	37	23.35	23.30	23.13
15	16QAM	1	74	23.08	23.40	23.14
15	16QAM	36	0	22.15	22.15	22.12
15	16QAM	36	20	22.28	22.03	22.39
15	16QAM	36	39	22.30	22.07	22.24
15	16QAM	75	0	22.11	22.33	22.04
15	64QAM	1	0	23.15	23.30	23.09
15	64QAM	1	37	23.26	23.11	23.19
15	64QAM	1	74	23.33	23.09	23.28
15	64QAM	36	0	22.20	22.32	22.16
15	64QAM	36	20	22.29	22.09	22.12
15	64QAM	36	39	22.07	22.06	22.05
15	64QAM	75	0	22.34	22.21	22.23



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	24.13	24.21	24.19
10	QPSK	1	25	24.10	24.15	24.14
10	QPSK	1	49	24.08	24.16	24.07
10	QPSK	25	0	23.33	23.40	23.38
10	QPSK	25	12	23.06	23.40	23.26
10	QPSK	25	25	23.38	23.12	23.31
10	QPSK	50	0	23.03	23.24	23.17
10	16QAM	1	0	23.22	23.22	23.12
10	16QAM	1	25	23.11	23.20	23.25
10	16QAM	1	49	23.09	23.01	23.12
10	16QAM	25	0	22.34	22.41	22.10
10	16QAM	25	12	22.11	22.13	22.17
10	16QAM	25	25	22.11	22.08	22.29
10	16QAM	50	0	22.23	22.42	22.27
10	64QAM	1	0	23.02	23.15	23.35
10	64QAM	1	25	23.12	23.01	23.00
10	64QAM	1	49	23.32	23.07	23.16
10	64QAM	25	0	22.42	22.12	22.32
10	64QAM	25	12	22.35	22.33	22.11
10	64QAM	25	25	22.09	22.07	22.26
10	64QAM	50	0	22.44	22.27	22.38



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	24.18	24.25	24.23
5	QPSK	1	12	24.03	24.05	24.19
5	QPSK	1	24	24.09	24.05	24.10
5	QPSK	12	0	23.43	23.16	23.31
5	QPSK	12	7	23.14	23.11	23.14
5	QPSK	12	13	23.06	23.12	23.25
5	QPSK	25	0	23.16	23.21	23.20
5	16QAM	1	0	23.14	23.03	23.17
5	16QAM	1	12	23.19	23.37	23.23
5	16QAM	1	24	23.32	23.13	23.39
5	16QAM	12	0	22.35	22.06	22.40
5	16QAM	12	7	22.02	22.27	22.40
5	16QAM	12	13	22.02	22.16	21.90
5	16QAM	25	0	22.25	22.35	22.26
5	64QAM	1	0	23.11	23.19	23.23
5	64QAM	1	12	23.25	23.12	23.38
5	64QAM	1	24	23.08	23.09	23.29
5	64QAM	12	0	22.10	22.16	22.19
5	64QAM	12	7	21.99	22.17	22.27
5	64QAM	12	13	22.31	22.25	22.15
5	64QAM	25	0	22.46	22.19	22.16



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	24.14	24.26	24.23
3	QPSK	1	8	24.11	24.18	24.21
3	QPSK	1	14	24.04	24.11	24.18
3	QPSK	8	0	23.24	23.40	23.13
3	QPSK	8	4	23.13	23.24	23.09
3	QPSK	8	7	23.04	23.02	23.07
3	QPSK	15	0	23.17	23.28	23.25
3	16QAM	1	0	23.08	23.25	23.28
3	16QAM	1	8	23.04	23.18	23.24
3	16QAM	1	14	23.17	23.34	23.39
3	16QAM	8	0	22.04	22.31	22.31
3	16QAM	8	4	22.14	22.16	22.22
3	16QAM	8	7	22.15	22.14	22.10
3	16QAM	15	0	22.14	22.35	22.13
3	64QAM	1	0	23.26	23.24	23.07
3	64QAM	1	8	23.25	23.32	23.13
3	64QAM	1	14	23.09	23.03	23.20
3	64QAM	8	0	22.17	22.24	22.08
3	64QAM	8	4	22.26	22.04	22.05
3	64QAM	8	7	22.23	22.19	22.18
3	64QAM	15	0	22.24	22.25	22.39



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	24.22	24.24	24.12
1.4	QPSK	1	3	24.23	24.14	24.18
1.4	QPSK	1	5	24.21	24.13	24.16
1.4	QPSK	3	0	23.05	23.31	23.14
1.4	QPSK	3	1	23.33	23.24	23.26
1.4	QPSK	3	3	23.04	23.06	23.09
1.4	QPSK	6	0	23.31	23.15	23.25
1.4	16QAM	1	0	23.14	23.42	23.53
1.4	16QAM	1	3	23.39	23.33	23.31
1.4	16QAM	1	5	23.34	23.12	23.09
1.4	16QAM	3	0	22.32	22.30	22.33
1.4	16QAM	3	1	22.20	22.12	22.27
1.4	16QAM	3	3	22.05	22.27	22.34
1.4	16QAM	6	0	22.33	22.39	22.15
1.4	64QAM	1	0	23.30	23.29	23.11
1.4	64QAM	1	3	23.03	23.30	23.28
1.4	64QAM	1	5	23.04	23.10	23.02
1.4	64QAM	3	0	22.21	22.17	22.10
1.4	64QAM	3	1	22.03	22.10	22.10
1.4	64QAM	3	3	22.13	22.15	22.08
1.4	64QAM	6	0	22.06	22.25	22.38

**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	26.12	0.409	26.20	0.417	26.15	0.412
20	QPSK	1	49	26.03	0.401	26.08	0.406	26.11	0.408
20	QPSK	1	99	26.06	0.404	26.07	0.405	26.04	0.402
20	QPSK	50	0	25.10	0.324	25.19	0.330	25.12	0.325
20	QPSK	50	24	24.97	0.314	25.14	0.327	25.00	0.316
20	QPSK	50	50	25.01	0.317	25.02	0.318	24.97	0.314
20	QPSK	100	0	25.16	0.328	25.11	0.324	25.18	0.330
20	16QAM	1	0	25.14	0.327	25.10	0.324	25.16	0.328
20	16QAM	1	49	25.05	0.320	25.02	0.318	24.99	0.316
20	16QAM	1	99	24.97	0.314	25.04	0.319	25.03	0.318
20	16QAM	50	0	24.05	0.254	24.16	0.261	24.19	0.262
20	16QAM	50	24	24.08	0.256	23.96	0.249	24.04	0.254
20	16QAM	50	50	23.93	0.247	24.01	0.252	23.98	0.250
20	16QAM	100	0	24.07	0.255	24.13	0.259	24.15	0.260
20	64QAM	1	0	24.98	0.315	25.03	0.318	25.07	0.321
20	64QAM	1	49	25.13	0.326	25.08	0.322	25.05	0.320
20	64QAM	1	99	24.98	0.315	24.90	0.309	24.94	0.312
20	64QAM	50	0	24.11	0.258	24.13	0.259	24.02	0.252
20	64QAM	50	24	23.98	0.250	23.97	0.249	23.91	0.246
20	64QAM	50	50	24.01	0.252	24.03	0.253	23.98	0.250
20	64QAM	100	0	24.12	0.258	24.07	0.255	24.10	0.257



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	26.13	0.410	26.18	0.415	25.99	0.397
15	QPSK	1	37	25.94	0.393	26.04	0.402	25.89	0.388
15	QPSK	1	74	26.07	0.405	25.95	0.394	25.97	0.395
15	QPSK	36	0	25.31	0.340	25.21	0.332	25.22	0.333
15	QPSK	36	20	25.05	0.320	24.89	0.308	24.94	0.312
15	QPSK	36	39	25.07	0.321	25.14	0.327	25.14	0.327
15	QPSK	75	0	25.14	0.327	25.05	0.320	25.08	0.322
15	16QAM	1	0	25.13	0.326	25.17	0.329	25.07	0.321
15	16QAM	1	37	24.90	0.309	24.81	0.303	25.02	0.318
15	16QAM	1	74	25.22	0.333	25.26	0.336	25.20	0.331
15	16QAM	36	0	24.06	0.255	24.08	0.256	24.14	0.259
15	16QAM	36	20	23.88	0.244	24.21	0.264	23.87	0.244
15	16QAM	36	39	23.88	0.244	24.14	0.259	24.09	0.256
15	16QAM	75	0	24.22	0.264	23.88	0.244	24.04	0.254
15	64QAM	1	0	25.13	0.326	25.00	0.316	24.95	0.313
15	64QAM	1	37	24.98	0.315	24.87	0.307	25.02	0.318
15	64QAM	1	74	25.11	0.324	24.86	0.306	25.14	0.327
15	64QAM	36	0	23.94	0.248	24.17	0.261	24.02	0.252
15	64QAM	36	20	24.13	0.259	23.81	0.240	24.02	0.252
15	64QAM	36	39	23.86	0.243	23.79	0.239	23.90	0.245
15	64QAM	75	0	24.14	0.259	24.05	0.254	23.91	0.246



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	26.07	0.405	26.14	0.411	26.13	0.410
10	QPSK	1	25	26.06	0.404	26.08	0.406	25.88	0.387
10	QPSK	1	49	26.09	0.406	26.07	0.405	26.05	0.403
10	QPSK	25	0	25.27	0.337	25.18	0.330	24.88	0.308
10	QPSK	25	12	24.98	0.315	25.25	0.335	24.82	0.303
10	QPSK	25	25	24.85	0.305	24.96	0.313	24.98	0.315
10	QPSK	50	0	25.23	0.333	25.08	0.322	25.16	0.328
10	16QAM	1	0	25.23	0.333	24.92	0.310	25.21	0.332
10	16QAM	1	25	25.18	0.330	24.95	0.313	24.83	0.304
10	16QAM	1	49	24.96	0.313	24.90	0.309	25.23	0.333
10	16QAM	25	0	24.23	0.265	24.25	0.266	24.14	0.259
10	16QAM	25	12	24.11	0.258	23.95	0.248	24.19	0.262
10	16QAM	25	25	23.97	0.249	23.99	0.251	23.86	0.243
10	16QAM	50	0	24.26	0.267	24.09	0.256	24.06	0.255
10	64QAM	1	0	25.20	0.331	25.08	0.322	24.98	0.315
10	64QAM	1	25	25.29	0.338	24.95	0.313	25.25	0.335
10	64QAM	1	49	24.99	0.316	25.08	0.322	24.91	0.310
10	64QAM	25	0	24.01	0.252	24.11	0.258	24.23	0.265
10	64QAM	25	12	23.89	0.245	23.96	0.249	23.87	0.244
10	64QAM	25	25	24.11	0.258	23.97	0.249	24.01	0.252
10	64QAM	50	0	23.87	0.244	24.07	0.255	23.90	0.245



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	25.92	0.391	26.13	0.410	26.04	0.402
5	QPSK	1	12	25.97	0.395	26.02	0.400	26.06	0.404
5	QPSK	1	24	26.02	0.400	26.09	0.406	26.13	0.410
5	QPSK	12	0	25.00	0.316	25.11	0.324	24.90	0.309
5	QPSK	12	7	24.93	0.311	25.09	0.323	24.84	0.305
5	QPSK	12	13	24.80	0.302	24.87	0.307	24.93	0.311
5	QPSK	25	0	24.95	0.313	25.17	0.329	25.23	0.333
5	16QAM	1	0	24.95	0.313	25.09	0.323	25.19	0.330
5	16QAM	1	12	25.21	0.332	25.11	0.324	25.15	0.327
5	16QAM	1	24	24.96	0.313	24.91	0.310	24.99	0.316
5	16QAM	12	0	24.03	0.253	24.23	0.265	24.14	0.259
5	16QAM	12	7	24.02	0.252	24.17	0.261	24.11	0.258
5	16QAM	12	13	24.09	0.256	23.96	0.249	23.92	0.247
5	16QAM	25	0	24.11	0.258	24.08	0.256	24.26	0.267
5	64QAM	1	0	25.07	0.321	25.08	0.322	25.29	0.338
5	64QAM	1	12	25.11	0.324	25.06	0.321	24.97	0.314
5	64QAM	1	24	25.15	0.327	25.12	0.325	25.16	0.328
5	64QAM	12	0	24.05	0.254	24.13	0.259	23.94	0.248
5	64QAM	12	7	23.98	0.250	23.94	0.248	24.07	0.255
5	64QAM	12	13	23.93	0.247	23.99	0.251	24.05	0.254
5	64QAM	25	0	23.95	0.248	24.01	0.252	24.20	0.263



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	26.11	0.408	26.13	0.410	26.09	0.406
3	QPSK	1	8	26.05	0.403	26.06	0.404	26.04	0.402
3	QPSK	1	14	26.12	0.409	25.91	0.390	25.83	0.383
3	QPSK	8	0	24.90	0.309	25.11	0.324	25.09	0.323
3	QPSK	8	4	24.89	0.308	25.16	0.328	24.90	0.309
3	QPSK	8	7	24.92	0.310	24.87	0.307	24.93	0.311
3	QPSK	15	0	24.96	0.313	25.35	0.343	25.39	0.346
3	16QAM	1	0	25.13	0.326	25.16	0.328	24.92	0.310
3	16QAM	1	8	24.82	0.303	25.23	0.333	25.21	0.332
3	16QAM	1	14	24.98	0.315	24.94	0.312	24.86	0.306
3	16QAM	8	0	23.82	0.241	24.19	0.262	24.07	0.255
3	16QAM	8	4	24.17	0.261	24.04	0.254	24.21	0.264
3	16QAM	8	7	23.89	0.245	24.03	0.253	24.08	0.256
3	16QAM	15	0	23.88	0.244	23.98	0.250	24.02	0.252
3	64QAM	1	0	25.06	0.321	25.17	0.329	25.07	0.321
3	64QAM	1	8	25.05	0.320	25.01	0.317	24.88	0.308
3	64QAM	1	14	25.05	0.320	24.91	0.310	24.87	0.307
3	64QAM	8	0	23.99	0.251	23.88	0.244	24.24	0.265
3	64QAM	8	4	24.14	0.259	24.04	0.254	24.10	0.257
3	64QAM	8	7	23.98	0.250	24.07	0.255	23.97	0.249
3	64QAM	15	0	24.03	0.253	24.11	0.258	24.11	0.258



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	26.07	0.405	26.11	0.408	26.05	0.403
1.4	QPSK	1	3	25.84	0.384	26.07	0.405	26.03	0.401
1.4	QPSK	1	5	25.94	0.393	25.85	0.385	25.94	0.393
1.4	QPSK	3	0	25.01	0.317	25.14	0.327	24.87	0.307
1.4	QPSK	3	1	24.78	0.301	25.11	0.324	25.04	0.319
1.4	QPSK	3	3	25.19	0.330	24.97	0.314	24.84	0.305
1.4	QPSK	6	0	25.11	0.324	24.89	0.308	25.32	0.340
1.4	16QAM	1	0	25.14	0.327	25.19	0.330	25.03	0.318
1.4	16QAM	1	3	25.05	0.320	24.85	0.305	25.09	0.323
1.4	16QAM	1	5	24.92	0.310	25.15	0.327	25.05	0.320
1.4	16QAM	3	0	23.82	0.241	24.17	0.261	24.17	0.261
1.4	16QAM	3	1	23.99	0.251	23.80	0.240	23.86	0.243
1.4	16QAM	3	3	23.88	0.244	24.17	0.261	24.03	0.253
1.4	16QAM	6	0	24.08	0.256	24.31	0.270	24.25	0.266
1.4	64QAM	1	0	24.82	0.303	24.87	0.307	25.12	0.325
1.4	64QAM	1	3	25.11	0.324	24.91	0.310	25.07	0.321
1.4	64QAM	1	5	25.00	0.316	24.84	0.305	25.01	0.317
1.4	64QAM	3	0	23.95	0.248	24.26	0.267	24.02	0.252
1.4	64QAM	3	1	24.13	0.259	23.92	0.247	24.07	0.255
1.4	64QAM	3	3	23.87	0.244	23.82	0.241	23.89	0.245
1.4	64QAM	6	0	24.04	0.254	23.96	0.249	24.20	0.263



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	25.09	0.323	25.14	0.327	25.12	0.325
20	QPSK	1	49	25.05	0.320	24.94	0.312	25.04	0.319
20	QPSK	1	99	24.96	0.313	25.00	0.316	24.95	0.313
20	QPSK	50	0	24.17	0.261	24.18	0.262	23.93	0.247
20	QPSK	50	24	24.12	0.258	24.05	0.254	24.08	0.256
20	QPSK	50	50	24.15	0.260	23.91	0.246	24.05	0.254
20	QPSK	100	0	23.92	0.247	24.11	0.258	24.04	0.254
20	16QAM	1	0	24.09	0.256	24.12	0.258	24.06	0.255
20	16QAM	1	49	23.76	0.238	23.81	0.240	23.83	0.242
20	16QAM	1	99	23.84	0.242	24.07	0.255	23.90	0.245
20	16QAM	50	0	22.93	0.196	23.06	0.202	23.05	0.202
20	16QAM	50	24	22.89	0.195	22.99	0.199	22.93	0.196
20	16QAM	50	50	22.93	0.196	22.88	0.194	22.96	0.198
20	16QAM	100	0	22.89	0.195	23.06	0.202	23.29	0.213
20	64QAM	1	0	23.96	0.249	24.05	0.254	24.15	0.260
20	64QAM	1	49	24.10	0.257	23.99	0.251	23.89	0.245
20	64QAM	1	99	23.89	0.245	24.09	0.256	23.83	0.242
20	64QAM	50	0	22.82	0.191	23.07	0.203	22.75	0.188
20	64QAM	50	24	22.69	0.186	22.84	0.192	22.91	0.195
20	64QAM	50	50	23.14	0.206	22.91	0.195	22.99	0.199
20	64QAM	100	0	23.25	0.211	23.10	0.204	23.08	0.203



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	25.00	0.316	25.07	0.321	24.94	0.312
15	QPSK	1	37	25.02	0.318	24.99	0.316	25.02	0.318
15	QPSK	1	74	24.96	0.313	25.02	0.318	24.90	0.309
15	QPSK	36	0	24.02	0.252	24.06	0.255	24.01	0.252
15	QPSK	36	20	23.81	0.240	23.97	0.249	24.05	0.254
15	QPSK	36	39	23.93	0.247	23.90	0.245	23.86	0.243
15	QPSK	75	0	24.20	0.263	23.87	0.244	24.06	0.255
15	16QAM	1	0	24.14	0.259	24.13	0.259	23.92	0.247
15	16QAM	1	37	23.89	0.245	24.18	0.262	23.98	0.250
15	16QAM	1	74	23.97	0.249	23.79	0.239	24.09	0.256
15	16QAM	36	0	22.95	0.197	23.13	0.206	23.09	0.204
15	16QAM	36	20	23.04	0.201	22.92	0.196	23.10	0.204
15	16QAM	36	39	22.84	0.192	23.14	0.206	22.86	0.193
15	16QAM	75	0	22.88	0.194	22.96	0.198	22.94	0.197
15	64QAM	1	0	23.98	0.250	23.82	0.241	24.07	0.255
15	64QAM	1	37	23.97	0.249	24.12	0.258	23.95	0.248
15	64QAM	1	74	23.98	0.250	23.93	0.247	24.15	0.260
15	64QAM	36	0	23.07	0.203	22.98	0.199	22.97	0.198
15	64QAM	36	20	23.04	0.201	23.17	0.207	22.93	0.196
15	64QAM	36	39	22.76	0.189	23.06	0.202	22.77	0.189
15	64QAM	75	0	22.99	0.199	23.12	0.205	22.84	0.192



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	24.97	0.314	25.08	0.322	24.97	0.314
10	QPSK	1	25	24.93	0.311	25.07	0.321	25.01	0.317
10	QPSK	1	49	24.94	0.312	24.84	0.305	24.95	0.313
10	QPSK	25	0	24.10	0.257	24.23	0.265	23.91	0.246
10	QPSK	25	12	24.03	0.253	23.89	0.245	23.88	0.244
10	QPSK	25	25	24.09	0.256	24.00	0.251	24.03	0.253
10	QPSK	50	0	24.11	0.258	24.10	0.257	24.00	0.251
10	16QAM	1	0	24.08	0.256	24.08	0.256	23.92	0.247
10	16QAM	1	25	24.07	0.255	24.12	0.258	23.84	0.242
10	16QAM	1	49	24.01	0.252	23.83	0.242	24.17	0.261
10	16QAM	25	0	22.95	0.197	22.94	0.197	23.01	0.200
10	16QAM	25	12	23.07	0.203	22.88	0.194	22.99	0.199
10	16QAM	25	25	22.86	0.193	23.02	0.200	22.97	0.198
10	16QAM	50	0	23.06	0.202	22.85	0.193	23.03	0.201
10	64QAM	1	0	24.01	0.252	23.88	0.244	24.01	0.252
10	64QAM	1	25	23.93	0.247	23.90	0.245	24.14	0.259
10	64QAM	1	49	24.01	0.252	23.99	0.251	23.85	0.243
10	64QAM	25	0	23.17	0.207	23.07	0.203	22.93	0.196
10	64QAM	25	12	23.13	0.206	22.88	0.194	22.99	0.199
10	64QAM	25	25	22.86	0.193	23.02	0.200	22.81	0.191
10	64QAM	50	0	23.25	0.211	22.97	0.198	23.18	0.208



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	24.92	0.310	25.06	0.321	24.98	0.315
5	QPSK	1	12	25.01	0.317	24.95	0.313	25.00	0.316
5	QPSK	1	24	24.90	0.309	24.93	0.311	24.83	0.304
5	QPSK	12	0	23.82	0.241	24.15	0.260	23.99	0.251
5	QPSK	12	7	23.78	0.239	23.90	0.245	23.88	0.244
5	QPSK	12	13	23.83	0.242	23.78	0.239	23.90	0.245
5	QPSK	25	0	23.88	0.244	23.89	0.245	23.95	0.248
5	16QAM	1	0	24.14	0.259	24.15	0.260	24.07	0.255
5	16QAM	1	12	23.91	0.246	23.96	0.249	24.06	0.255
5	16QAM	1	24	23.88	0.244	24.11	0.258	24.15	0.260
5	16QAM	12	0	23.01	0.200	23.14	0.206	23.05	0.202
5	16QAM	12	7	23.15	0.207	22.85	0.193	23.06	0.202
5	16QAM	12	13	22.90	0.195	22.89	0.195	23.15	0.207
5	16QAM	25	0	23.04	0.201	23.16	0.207	23.09	0.204
5	64QAM	1	0	23.95	0.248	23.96	0.249	23.83	0.242
5	64QAM	1	12	23.91	0.246	24.06	0.255	24.10	0.257
5	64QAM	1	24	23.79	0.239	23.87	0.244	23.87	0.244
5	64QAM	12	0	22.95	0.197	22.88	0.194	22.82	0.191
5	64QAM	12	7	23.00	0.200	22.95	0.197	22.83	0.192
5	64QAM	12	13	22.78	0.190	22.78	0.190	22.99	0.199
5	64QAM	25	0	23.10	0.204	23.06	0.202	23.09	0.204



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	25.03	0.318	25.07	0.321	24.97	0.314
3	QPSK	1	8	24.85	0.305	24.97	0.314	24.87	0.307
3	QPSK	1	14	25.02	0.318	24.98	0.315	25.03	0.318
3	QPSK	8	0	23.99	0.251	24.00	0.251	23.94	0.248
3	QPSK	8	4	23.90	0.245	24.04	0.254	23.96	0.249
3	QPSK	8	7	23.86	0.243	23.95	0.248	23.78	0.239
3	QPSK	15	0	24.22	0.264	23.87	0.244	23.98	0.250
3	16QAM	1	0	23.91	0.246	23.90	0.245	24.02	0.252
3	16QAM	1	8	23.91	0.246	23.82	0.241	23.87	0.244
3	16QAM	1	14	23.92	0.247	23.86	0.243	23.89	0.245
3	16QAM	8	0	22.99	0.199	23.17	0.207	23.10	0.204
3	16QAM	8	4	22.93	0.196	22.96	0.198	22.81	0.191
3	16QAM	8	7	22.90	0.195	23.02	0.200	22.93	0.196
3	16QAM	15	0	22.97	0.198	22.84	0.192	22.86	0.193
3	64QAM	1	0	24.15	0.260	24.13	0.259	24.03	0.253
3	64QAM	1	8	23.99	0.251	24.26	0.267	23.85	0.243
3	64QAM	1	14	24.07	0.255	23.93	0.247	23.93	0.247
3	64QAM	8	0	22.84	0.192	22.97	0.198	22.92	0.196
3	64QAM	8	4	23.03	0.201	22.88	0.194	22.77	0.189
3	64QAM	8	7	22.99	0.199	22.87	0.194	22.81	0.191
3	64QAM	15	0	22.95	0.197	22.88	0.194	22.95	0.197



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	25.05	0.320	25.09	0.323	25.00	0.316
1.4	QPSK	1	3	25.05	0.320	24.92	0.310	25.04	0.319
1.4	QPSK	1	5	24.92	0.310	25.00	0.316	24.85	0.305
1.4	QPSK	3	0	23.95	0.248	24.04	0.254	24.14	0.259
1.4	QPSK	3	1	24.06	0.255	24.09	0.256	23.89	0.245
1.4	QPSK	3	3	23.85	0.243	24.02	0.252	23.95	0.248
1.4	QPSK	6	0	24.20	0.263	24.01	0.252	24.32	0.270
1.4	16QAM	1	0	24.04	0.254	23.94	0.248	23.95	0.248
1.4	16QAM	1	3	24.14	0.259	24.04	0.254	24.04	0.254
1.4	16QAM	1	5	23.86	0.243	24.14	0.259	23.80	0.240
1.4	16QAM	3	0	22.99	0.199	23.01	0.200	23.07	0.203
1.4	16QAM	3	1	22.93	0.196	22.81	0.191	23.05	0.202
1.4	16QAM	3	3	23.09	0.204	23.17	0.207	22.89	0.195
1.4	16QAM	6	0	23.08	0.203	22.94	0.197	23.26	0.212
1.4	64QAM	1	0	23.95	0.248	23.98	0.250	24.18	0.262
1.4	64QAM	1	3	23.91	0.246	24.01	0.252	23.76	0.238
1.4	64QAM	1	5	23.87	0.244	23.93	0.247	23.94	0.248
1.4	64QAM	3	0	22.96	0.198	22.99	0.199	22.92	0.196
1.4	64QAM	3	1	22.84	0.192	22.82	0.191	22.83	0.192
1.4	64QAM	3	3	22.83	0.192	23.09	0.204	22.78	0.190
1.4	64QAM	6	0	23.05	0.202	22.91	0.195	23.11	0.205



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	28.88	0.773	29.04	0.802	28.98	0.791
20	QPSK	1	49	28.75	0.750	28.95	0.785	28.86	0.769
20	QPSK	1	99	28.79	0.757	28.84	0.766	28.84	0.766
20	QPSK	50	0	27.86	0.611	28.08	0.643	28.00	0.631
20	QPSK	50	24	27.92	0.619	27.99	0.630	28.01	0.632
20	QPSK	50	50	27.82	0.605	27.94	0.622	28.02	0.634
20	QPSK	100	0	28.18	0.658	27.95	0.624	28.24	0.667
20	16QAM	1	0	27.80	0.603	27.85	0.610	28.03	0.635
20	16QAM	1	49	28.00	0.631	27.73	0.593	27.77	0.598
20	16QAM	1	99	27.85	0.610	27.99	0.630	27.76	0.597
20	16QAM	50	0	27.04	0.506	26.95	0.495	26.93	0.493
20	16QAM	50	24	26.96	0.497	27.00	0.501	26.95	0.495
20	16QAM	50	50	26.67	0.465	26.81	0.480	26.79	0.478
20	16QAM	100	0	26.97	0.498	27.12	0.515	27.18	0.522
20	64QAM	1	0	27.80	0.603	27.93	0.621	28.02	0.634
20	64QAM	1	49	28.00	0.631	28.04	0.637	28.01	0.632
20	64QAM	1	99	27.81	0.604	27.79	0.601	28.01	0.632
20	64QAM	50	0	27.04	0.506	26.86	0.485	26.94	0.494
20	64QAM	50	24	26.97	0.498	27.12	0.515	26.73	0.471
20	64QAM	50	50	27.12	0.515	26.81	0.480	27.05	0.507
20	64QAM	100	0	26.85	0.484	26.98	0.499	26.89	0.489



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	28.83	0.764	28.97	0.789	28.95	0.785
15	QPSK	1	37	28.83	0.764	28.89	0.774	28.95	0.785
15	QPSK	1	74	28.86	0.769	28.75	0.750	28.85	0.767
15	QPSK	36	0	27.94	0.622	27.94	0.622	28.10	0.646
15	QPSK	36	20	27.88	0.614	27.95	0.624	27.74	0.594
15	QPSK	36	39	27.87	0.612	28.10	0.646	28.05	0.638
15	QPSK	75	0	28.04	0.637	27.76	0.597	27.90	0.617
15	16QAM	1	0	28.11	0.647	28.15	0.653	28.06	0.640
15	16QAM	1	37	27.78	0.600	28.00	0.631	28.10	0.646
15	16QAM	1	74	27.86	0.611	27.97	0.627	28.08	0.643
15	16QAM	36	0	26.97	0.498	26.95	0.495	27.07	0.509
15	16QAM	36	20	26.79	0.478	26.63	0.460	26.89	0.489
15	16QAM	36	39	26.77	0.475	26.67	0.465	27.01	0.502
15	16QAM	75	0	27.07	0.509	27.07	0.509	27.14	0.518
15	64QAM	1	0	28.08	0.643	28.06	0.640	27.89	0.615
15	64QAM	1	37	27.85	0.610	27.83	0.607	27.82	0.605
15	64QAM	1	74	28.07	0.641	27.96	0.625	27.94	0.622
15	64QAM	36	0	26.79	0.478	26.85	0.484	27.02	0.504
15	64QAM	36	20	26.97	0.498	26.73	0.471	26.89	0.489
15	64QAM	36	39	26.77	0.475	26.77	0.475	26.97	0.498
15	64QAM	75	0	26.90	0.490	26.89	0.489	26.83	0.482



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	28.89	0.774	28.98	0.791	28.93	0.782
10	QPSK	1	25	28.92	0.780	28.91	0.778	28.87	0.771
10	QPSK	1	49	28.80	0.759	28.96	0.787	28.75	0.750
10	QPSK	25	0	27.77	0.598	27.92	0.619	27.83	0.607
10	QPSK	25	12	27.86	0.611	27.80	0.603	27.81	0.604
10	QPSK	25	25	28.05	0.638	27.78	0.600	27.95	0.624
10	QPSK	50	0	27.95	0.624	28.05	0.638	27.98	0.628
10	16QAM	1	0	27.95	0.624	28.03	0.635	28.05	0.638
10	16QAM	1	25	28.05	0.638	27.86	0.611	27.96	0.625
10	16QAM	1	49	27.84	0.608	27.91	0.618	27.70	0.589
10	16QAM	25	0	27.05	0.507	26.82	0.481	27.02	0.504
10	16QAM	25	12	26.92	0.492	26.76	0.474	27.04	0.506
10	16QAM	25	25	26.89	0.489	27.01	0.502	26.76	0.474
10	16QAM	50	0	26.94	0.494	27.00	0.501	26.98	0.499
10	64QAM	1	0	27.93	0.621	27.82	0.605	27.90	0.617
10	64QAM	1	25	28.07	0.641	27.98	0.628	28.03	0.635
10	64QAM	1	49	28.00	0.631	27.88	0.614	27.67	0.585
10	64QAM	25	0	26.76	0.474	27.06	0.508	27.10	0.513
10	64QAM	25	12	26.80	0.479	26.94	0.494	26.78	0.476
10	64QAM	25	25	26.74	0.472	27.15	0.519	26.78	0.476
10	64QAM	50	0	26.91	0.491	26.84	0.483	26.96	0.497



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	28.88	0.773	28.99	0.793	28.95	0.785
5	QPSK	1	12	28.82	0.762	28.87	0.771	28.88	0.773
5	QPSK	1	24	28.92	0.780	28.80	0.759	28.77	0.753
5	QPSK	12	0	27.76	0.597	27.92	0.619	28.02	0.634
5	QPSK	12	7	28.06	0.640	27.91	0.618	27.90	0.617
5	QPSK	12	13	28.07	0.641	28.00	0.631	27.76	0.597
5	QPSK	25	0	27.77	0.598	27.81	0.604	27.96	0.625
5	16QAM	1	0	27.82	0.605	27.93	0.621	28.07	0.641
5	16QAM	1	12	27.88	0.614	28.04	0.637	27.81	0.604
5	16QAM	1	24	27.91	0.618	28.10	0.646	28.04	0.637
5	16QAM	12	0	26.88	0.488	27.00	0.501	27.14	0.518
5	16QAM	12	7	26.77	0.475	26.91	0.491	26.70	0.468
5	16QAM	12	13	26.69	0.467	26.83	0.482	27.07	0.509
5	16QAM	25	0	27.00	0.501	27.06	0.508	26.89	0.489
5	64QAM	1	0	27.89	0.615	27.93	0.621	27.75	0.596
5	64QAM	1	12	27.85	0.610	27.93	0.621	27.97	0.627
5	64QAM	1	24	28.07	0.641	27.78	0.600	27.84	0.608
5	64QAM	12	0	26.92	0.492	27.01	0.502	26.86	0.485
5	64QAM	12	7	26.83	0.482	26.90	0.490	26.96	0.497
5	64QAM	12	13	26.88	0.488	26.73	0.471	26.99	0.500
5	64QAM	25	0	27.16	0.520	27.04	0.506	26.95	0.495



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	22.82	0.191	22.87	0.194	22.78	0.190
10	QPSK	1	25	22.77	0.189	22.75	0.188	22.71	0.187
10	QPSK	1	49	22.73	0.187	22.66	0.185	22.66	0.185
10	QPSK	25	0	21.80	0.151	21.95	0.157	21.93	0.156
10	QPSK	25	12	21.87	0.154	21.88	0.154	21.68	0.147
10	QPSK	25	25	21.88	0.154	21.88	0.154	22.02	0.159
10	QPSK	50	0	21.83	0.152	22.03	0.160	21.95	0.157
10	16QAM	1	0	21.80	0.151	21.86	0.153	21.93	0.156
10	16QAM	1	25	21.76	0.150	21.65	0.146	21.95	0.157
10	16QAM	1	49	22.03	0.160	22.02	0.159	21.85	0.153
10	16QAM	25	0	20.94	0.124	21.05	0.127	20.97	0.125
10	16QAM	25	12	20.89	0.123	20.88	0.122	21.06	0.128
10	16QAM	25	25	20.71	0.118	20.94	0.124	20.92	0.124
10	16QAM	50	0	20.83	0.121	21.02	0.126	21.04	0.127
10	64QAM	1	0	21.68	0.147	21.90	0.155	21.87	0.154
10	64QAM	1	25	21.79	0.151	22.04	0.160	21.73	0.149
10	64QAM	1	49	21.65	0.146	21.98	0.158	21.95	0.157
10	64QAM	25	0	21.04	0.127	20.84	0.121	20.69	0.117
10	64QAM	25	12	20.95	0.124	20.67	0.117	20.73	0.118
10	64QAM	25	25	20.96	0.125	21.02	0.126	21.02	0.126
10	64QAM	50	0	20.73	0.118	20.70	0.117	20.95	0.124



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	22.77	0.189	22.79	0.190	22.74	0.188
5	QPSK	1	12	22.76	0.189	22.72	0.187	22.66	0.185
5	QPSK	1	24	22.68	0.185	22.70	0.186	22.72	0.187
5	QPSK	12	0	21.73	0.149	21.84	0.153	21.88	0.154
5	QPSK	12	7	21.78	0.151	22.07	0.161	21.91	0.155
5	QPSK	12	13	21.83	0.152	22.07	0.161	21.77	0.150
5	QPSK	25	0	21.94	0.156	22.06	0.161	21.78	0.151
5	16QAM	1	0	21.98	0.158	21.86	0.153	21.97	0.157
5	16QAM	1	12	21.88	0.154	22.02	0.159	21.69	0.148
5	16QAM	1	24	21.86	0.153	21.97	0.157	21.98	0.158
5	16QAM	12	0	21.03	0.127	20.90	0.123	21.11	0.129
5	16QAM	12	7	21.00	0.126	21.02	0.126	20.91	0.123
5	16QAM	12	13	20.71	0.118	20.94	0.124	20.70	0.117
5	16QAM	25	0	21.16	0.131	20.84	0.121	20.91	0.123
5	64QAM	1	0	21.84	0.153	21.79	0.151	21.70	0.148
5	64QAM	1	12	21.73	0.149	21.85	0.153	21.74	0.149
5	64QAM	1	24	21.83	0.152	21.75	0.150	21.82	0.152
5	64QAM	12	0	20.88	0.122	20.98	0.125	20.79	0.120
5	64QAM	12	7	20.71	0.118	21.04	0.127	20.73	0.118
5	64QAM	12	13	21.02	0.126	20.77	0.119	20.67	0.117
5	64QAM	25	0	20.76	0.119	20.89	0.123	20.94	0.124



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	22.72	0.187	22.81	0.191	22.84	0.192
3	QPSK	1	8	22.82	0.191	22.75	0.188	22.76	0.189
3	QPSK	1	14	22.73	0.187	22.84	0.192	22.77	0.189
3	QPSK	8	0	21.91	0.155	22.03	0.160	21.94	0.156
3	QPSK	8	4	21.93	0.156	21.84	0.153	21.97	0.157
3	QPSK	8	7	21.97	0.157	21.67	0.147	21.75	0.150
3	QPSK	15	0	21.85	0.153	21.96	0.157	21.84	0.153
3	16QAM	1	0	22.05	0.160	21.97	0.157	22.02	0.159
3	16QAM	1	8	22.04	0.160	21.97	0.157	21.81	0.152
3	16QAM	1	14	21.72	0.149	21.81	0.152	22.09	0.162
3	16QAM	8	0	21.01	0.126	20.87	0.122	20.99	0.126
3	16QAM	8	4	20.75	0.119	20.79	0.120	21.08	0.128
3	16QAM	8	7	20.65	0.116	20.92	0.124	20.72	0.118
3	16QAM	15	0	20.88	0.122	20.91	0.123	20.93	0.124
3	64QAM	1	0	21.95	0.157	22.04	0.160	21.95	0.157
3	64QAM	1	8	21.80	0.151	21.83	0.152	21.78	0.151
3	64QAM	1	14	21.72	0.149	21.64	0.146	21.80	0.151
3	64QAM	8	0	20.77	0.119	20.99	0.126	20.75	0.119
3	64QAM	8	4	20.81	0.121	21.03	0.127	21.01	0.126
3	64QAM	8	7	20.82	0.121	20.94	0.124	20.78	0.120
3	64QAM	15	0	20.78	0.120	21.02	0.126	20.80	0.120



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	22.80	0.191	22.84	0.192	22.83	0.192
1.4	QPSK	1	3	22.76	0.189	22.77	0.189	22.77	0.189
1.4	QPSK	1	5	22.68	0.185	22.76	0.189	22.72	0.187
1.4	QPSK	3	0	21.73	0.149	22.03	0.160	21.95	0.157
1.4	QPSK	3	1	21.67	0.147	21.93	0.156	21.89	0.155
1.4	QPSK	3	3	21.97	0.157	21.92	0.156	21.78	0.151
1.4	QPSK	6	0	22.03	0.160	21.94	0.156	22.16	0.164
1.4	16QAM	1	0	21.88	0.154	22.01	0.159	21.92	0.156
1.4	16QAM	1	3	21.86	0.153	21.98	0.158	21.99	0.158
1.4	16QAM	1	5	21.96	0.157	21.69	0.148	21.89	0.155
1.4	16QAM	3	0	20.98	0.125	20.99	0.126	20.92	0.124
1.4	16QAM	3	1	20.92	0.124	20.64	0.116	20.81	0.121
1.4	16QAM	3	3	20.71	0.118	20.85	0.122	20.85	0.122
1.4	16QAM	6	0	20.69	0.117	20.93	0.124	20.84	0.121
1.4	64QAM	1	0	21.93	0.156	21.98	0.158	21.78	0.151
1.4	64QAM	1	3	21.90	0.155	21.92	0.156	21.79	0.151
1.4	64QAM	1	5	21.82	0.152	21.72	0.149	21.79	0.151
1.4	64QAM	3	0	21.01	0.126	21.04	0.127	21.05	0.127
1.4	64QAM	3	1	21.03	0.127	20.86	0.122	20.73	0.118
1.4	64QAM	3	3	20.80	0.120	20.88	0.122	21.05	0.127
1.4	64QAM	6	0	20.72	0.118	20.83	0.121	20.78	0.120



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	24.75	0.299	25.03	0.318	24.94	0.312
20	QPSK	1	49	24.91	0.310	24.77	0.300	24.83	0.304
20	QPSK	1	99	24.76	0.299	24.91	0.310	24.84	0.305
20	QPSK	50	0	23.89	0.245	24.02	0.252	23.91	0.246
20	QPSK	50	24	23.87	0.244	23.85	0.243	24.01	0.252
20	QPSK	50	50	24.01	0.252	24.03	0.253	23.82	0.241
20	QPSK	100	0	23.90	0.245	24.11	0.258	24.00	0.251
20	16QAM	1	0	23.90	0.245	24.05	0.254	23.96	0.249
20	16QAM	1	49	24.09	0.256	23.99	0.251	23.85	0.243
20	16QAM	1	99	23.83	0.242	23.77	0.238	23.79	0.239
20	16QAM	50	0	23.09	0.204	22.92	0.196	23.11	0.205
20	16QAM	50	24	22.98	0.199	22.89	0.195	23.12	0.205
20	16QAM	50	50	22.85	0.193	22.97	0.198	22.79	0.190
20	16QAM	100	0	22.80	0.191	23.04	0.201	22.87	0.194
20	64QAM	1	0	23.91	0.246	23.96	0.249	23.99	0.251
20	64QAM	1	49	23.77	0.238	23.96	0.249	23.89	0.245
20	64QAM	1	99	23.87	0.244	23.80	0.240	24.00	0.251
20	64QAM	50	0	22.96	0.198	23.08	0.203	22.83	0.192
20	64QAM	50	24	22.86	0.193	22.96	0.198	22.87	0.194
20	64QAM	50	50	22.92	0.196	22.97	0.198	22.79	0.190
20	64QAM	100	0	22.92	0.196	22.85	0.193	22.90	0.195



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	24.77	0.300	24.87	0.307	24.92	0.310
15	QPSK	1	37	24.82	0.303	24.84	0.305	24.82	0.303
15	QPSK	1	74	24.84	0.305	24.89	0.308	24.85	0.305
15	QPSK	36	0	23.93	0.247	24.20	0.263	24.06	0.255
15	QPSK	36	20	23.86	0.243	23.78	0.239	23.98	0.250
15	QPSK	36	39	23.84	0.242	23.86	0.243	23.90	0.245
15	QPSK	75	0	24.15	0.260	23.85	0.243	24.10	0.257
15	16QAM	1	0	23.84	0.242	24.14	0.259	23.94	0.248
15	16QAM	1	37	24.09	0.256	24.04	0.254	23.87	0.244
15	16QAM	1	74	23.82	0.241	24.14	0.259	23.88	0.244
15	16QAM	36	0	22.89	0.195	22.89	0.195	22.86	0.193
15	16QAM	36	20	23.02	0.200	22.77	0.189	23.13	0.206
15	16QAM	36	39	23.04	0.201	22.81	0.191	22.98	0.199
15	16QAM	75	0	22.85	0.193	23.07	0.203	22.78	0.190
15	64QAM	1	0	23.89	0.245	24.04	0.254	23.83	0.242
15	64QAM	1	37	24.00	0.251	23.85	0.243	23.93	0.247
15	64QAM	1	74	24.07	0.255	23.83	0.242	24.02	0.252
15	64QAM	36	0	22.94	0.197	23.06	0.202	22.90	0.195
15	64QAM	36	20	23.03	0.201	22.83	0.192	22.86	0.193
15	64QAM	36	39	22.81	0.191	22.80	0.191	22.79	0.190
15	64QAM	75	0	23.08	0.203	22.95	0.197	22.97	0.198



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	24.87	0.307	24.95	0.313	24.93	0.311
10	QPSK	1	25	24.84	0.305	24.89	0.308	24.88	0.308
10	QPSK	1	49	24.82	0.303	24.90	0.309	24.81	0.303
10	QPSK	25	0	24.07	0.255	24.14	0.259	24.12	0.258
10	QPSK	25	12	23.80	0.240	24.14	0.259	24.00	0.251
10	QPSK	25	25	24.12	0.258	23.86	0.243	24.05	0.254
10	QPSK	50	0	23.77	0.238	23.98	0.250	23.91	0.246
10	16QAM	1	0	23.96	0.249	23.96	0.249	23.86	0.243
10	16QAM	1	25	23.85	0.243	23.94	0.248	23.99	0.251
10	16QAM	1	49	23.83	0.242	23.75	0.237	23.86	0.243
10	16QAM	25	0	23.08	0.203	23.15	0.207	22.84	0.192
10	16QAM	25	12	22.85	0.193	22.87	0.194	22.91	0.195
10	16QAM	25	25	22.85	0.193	22.82	0.191	23.03	0.201
10	16QAM	50	0	22.97	0.198	23.16	0.207	23.01	0.200
10	64QAM	1	0	23.76	0.238	23.89	0.245	24.09	0.256
10	64QAM	1	25	23.86	0.243	23.75	0.237	23.74	0.237
10	64QAM	1	49	24.06	0.255	23.81	0.240	23.90	0.245
10	64QAM	25	0	23.16	0.207	22.86	0.193	23.06	0.202
10	64QAM	25	12	23.09	0.204	23.07	0.203	22.85	0.193
10	64QAM	25	25	22.83	0.192	22.81	0.191	23.00	0.200
10	64QAM	50	0	23.18	0.208	23.01	0.200	23.12	0.205



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	24.92	0.310	24.99	0.316	24.97	0.314
5	QPSK	1	12	24.77	0.300	24.79	0.301	24.93	0.311
5	QPSK	1	24	24.83	0.304	24.79	0.301	24.84	0.305
5	QPSK	12	0	24.17	0.261	23.90	0.245	24.05	0.254
5	QPSK	12	7	23.88	0.244	23.85	0.243	23.88	0.244
5	QPSK	12	13	23.80	0.240	23.86	0.243	23.99	0.251
5	QPSK	25	0	23.90	0.245	23.95	0.248	23.94	0.248
5	16QAM	1	0	23.88	0.244	23.77	0.238	23.91	0.246
5	16QAM	1	12	23.93	0.247	24.11	0.258	23.97	0.249
5	16QAM	1	24	24.06	0.255	23.87	0.244	24.13	0.259
5	16QAM	12	0	23.09	0.204	22.80	0.191	23.14	0.206
5	16QAM	12	7	22.76	0.189	23.01	0.200	23.14	0.206
5	16QAM	12	13	22.76	0.189	22.90	0.195	22.64	0.184
5	16QAM	25	0	22.99	0.199	23.09	0.204	23.00	0.200
5	64QAM	1	0	23.85	0.243	23.93	0.247	23.97	0.249
5	64QAM	1	12	23.99	0.251	23.86	0.243	24.12	0.258
5	64QAM	1	24	23.82	0.241	23.83	0.242	24.03	0.253
5	64QAM	12	0	22.84	0.192	22.90	0.195	22.93	0.196
5	64QAM	12	7	22.73	0.187	22.91	0.195	23.01	0.200
5	64QAM	12	13	23.05	0.202	22.99	0.199	22.89	0.195
5	64QAM	25	0	23.20	0.209	22.93	0.196	22.90	0.195



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	24.88	0.308	25.00	0.316	24.97	0.314
3	QPSK	1	8	24.85	0.305	24.92	0.310	24.95	0.313
3	QPSK	1	14	24.78	0.301	24.85	0.305	24.92	0.310
3	QPSK	8	0	23.98	0.250	24.14	0.259	23.87	0.244
3	QPSK	8	4	23.87	0.244	23.98	0.250	23.83	0.242
3	QPSK	8	7	23.78	0.239	23.76	0.238	23.81	0.240
3	QPSK	15	0	23.91	0.246	24.02	0.252	23.99	0.251
3	16QAM	1	0	23.82	0.241	23.99	0.251	24.02	0.252
3	16QAM	1	8	23.78	0.239	23.92	0.247	23.98	0.250
3	16QAM	1	14	23.91	0.246	24.08	0.256	24.13	0.259
3	16QAM	8	0	22.78	0.190	23.05	0.202	23.05	0.202
3	16QAM	8	4	22.88	0.194	22.90	0.195	22.96	0.198
3	16QAM	8	7	22.89	0.195	22.88	0.194	22.84	0.192
3	16QAM	15	0	22.88	0.194	23.09	0.204	22.87	0.194
3	64QAM	1	0	24.00	0.251	23.98	0.250	23.81	0.240
3	64QAM	1	8	23.99	0.251	24.06	0.255	23.87	0.244
3	64QAM	1	14	23.83	0.242	23.77	0.238	23.94	0.248
3	64QAM	8	0	22.91	0.195	22.98	0.199	22.82	0.191
3	64QAM	8	4	23.00	0.200	22.78	0.190	22.79	0.190
3	64QAM	8	7	22.97	0.198	22.93	0.196	22.92	0.196
3	64QAM	15	0	22.98	0.199	22.99	0.199	23.13	0.206



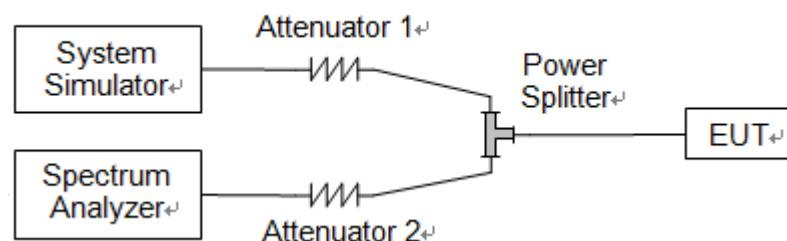
LTE Band 66				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				131979		132322		132665	
Frequency (MHz)				1710.7		1745		1779.3	
				dBm	W	dBm	W	dBm	W
1.4	QPSK	1	0	24.96	0.313	24.98	0.315	24.86	0.306
1.4	QPSK	1	3	24.97	0.314	24.88	0.308	24.92	0.310
1.4	QPSK	1	5	24.95	0.313	24.87	0.307	24.90	0.309
1.4	QPSK	3	0	23.79	0.239	24.05	0.254	23.88	0.244
1.4	QPSK	3	1	24.07	0.255	23.98	0.250	24.00	0.251
1.4	QPSK	3	3	23.78	0.239	23.80	0.240	23.83	0.242
1.4	QPSK	6	0	24.05	0.254	23.89	0.245	23.99	0.251
1.4	16QAM	1	0	23.88	0.244	24.16	0.261	24.27	0.267
1.4	16QAM	1	3	24.13	0.259	24.07	0.255	24.05	0.254
1.4	16QAM	1	5	24.08	0.256	23.86	0.243	23.83	0.242
1.4	16QAM	3	0	23.06	0.202	23.04	0.201	23.07	0.203
1.4	16QAM	3	1	22.94	0.197	22.86	0.193	23.01	0.200
1.4	16QAM	3	3	22.79	0.190	23.01	0.200	23.08	0.203
1.4	16QAM	6	0	23.07	0.203	23.13	0.206	22.89	0.195
1.4	64QAM	1	0	24.04	0.254	24.03	0.253	23.85	0.243
1.4	64QAM	1	3	23.77	0.238	24.04	0.254	24.02	0.252
1.4	64QAM	1	5	23.78	0.239	23.84	0.242	23.76	0.238
1.4	64QAM	3	0	22.95	0.197	22.91	0.195	22.84	0.192
1.4	64QAM	3	1	22.77	0.189	22.84	0.192	22.84	0.192
1.4	64QAM	3	3	22.87	0.194	22.89	0.195	22.82	0.191
1.4	64QAM	6	0	22.80	0.191	22.99	0.199	23.12	0.205

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	1.09	1.25
	Low	16QAM	1.09	1.24
	Low	64QAM	1.10	1.23
	Mid	QPSK	1.09	1.24
	Mid	16QAM	1.10	1.24
	Mid	64QAM	1.10	1.24
	High	QPSK	1.09	1.23
	High	16QAM	1.09	1.24
	High	64QAM	1.10	1.24
3	Low	QPSK	2.70	3.00
	Low	16QAM	2.70	3.01
	Low	64QAM	2.70	2.98
	Mid	QPSK	2.70	3.00
	Mid	16QAM	2.70	3.02
	Mid	64QAM	2.70	2.98
	High	QPSK	2.70	2.98
	High	16QAM	2.71	3.00
	High	64QAM	2.70	2.98
5	Low	QPSK	4.50	4.96
	Low	16QAM	4.51	4.97
	Low	64QAM	4.50	4.98
	Mid	QPSK	4.51	4.95
	Mid	16QAM	4.50	4.97
	Mid	64QAM	4.51	4.99
	High	QPSK	4.50	4.97
	High	16QAM	4.51	4.96
	High	64QAM	4.51	5.00
10	Low	QPSK	9.00	9.84
	Low	16QAM	8.95	9.75
	Low	64QAM	8.96	9.79
	Mid	QPSK	8.97	9.83
	Mid	16QAM	8.95	9.70
	Mid	64QAM	8.96	9.78
	High	QPSK	8.98	9.79
	High	16QAM	8.96	9.79
	High	64QAM	8.97	9.82



15	Low	QPSK	13.47	14.62
	Low	16QAM	13.46	14.65
	Low	64QAM	13.45	14.70
	Mid	QPSK	13.50	14.64
	Mid	16QAM	13.47	14.66
	Mid	64QAM	13.45	14.67
	High	QPSK	13.44	14.64
	High	16QAM	13.46	14.71
	High	64QAM	13.46	14.71
20	Low	QPSK	17.94	19.51
	Low	16QAM	17.92	19.46
	Low	64QAM	17.95	19.46
	Mid	QPSK	17.91	19.46
	Mid	16QAM	17.98	19.48
	Mid	64QAM	17.96	19.61
	High	QPSK	17.93	19.44
	High	16QAM	17.98	19.88
	High	64QAM	17.93	19.58



LTE Band 4				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
1.4	Low	QPSK	1.09	1.23
	Low	16QAM	1.09	1.24
	Low	64QAM	1.10	1.24
	Mid	QPSK	1.09	1.23
	Mid	16QAM	1.10	1.24
	Mid	64QAM	1.09	1.23
	High	QPSK	1.09	1.23
	High	16QAM	1.09	1.23
	High	64QAM	1.10	1.22
3	Low	QPSK	2.70	2.99
	Low	16QAM	2.70	2.99
	Low	64QAM	2.70	2.99
	Mid	QPSK	2.70	2.99
	Mid	16QAM	2.70	3.01
	Mid	64QAM	2.70	2.99
	High	QPSK	2.70	2.97
	High	16QAM	2.70	3.00
	High	64QAM	2.70	2.98
5	Low	QPSK	4.51	4.98
	Low	16QAM	4.50	4.97
	Low	64QAM	4.51	4.96
	Mid	QPSK	4.50	4.95
	Mid	16QAM	4.50	4.93
	Mid	64QAM	4.51	4.96
	High	QPSK	4.50	4.99
	High	16QAM	4.51	4.99
	High	64QAM	4.51	4.96
10	Low	QPSK	8.99	9.83
	Low	16QAM	8.96	9.79
	Low	64QAM	8.98	9.83
	Mid	QPSK	8.98	9.76
	Mid	16QAM	8.94	9.79
	Mid	64QAM	8.97	9.77
	High	QPSK	8.99	9.82
	High	16QAM	8.96	9.72
	High	64QAM	8.99	9.80



15	Low	QPSK	13.53	14.68
	Low	16QAM	13.50	14.67
	Low	64QAM	13.48	14.70
	Mid	QPSK	13.46	14.63
	Mid	16QAM	13.45	14.57
	Mid	64QAM	13.41	14.61
	High	QPSK	13.48	14.64
	High	16QAM	13.48	14.71
	High	64QAM	13.47	14.75
20	Low	QPSK	17.96	19.63
	Low	16QAM	18.00	19.60
	Low	64QAM	18.00	19.63
	Mid	QPSK	17.95	19.49
	Mid	16QAM	17.92	19.38
	Mid	64QAM	17.88	19.33
	High	QPSK	18.01	19.54
	High	16QAM	18.06	19.69
	High	64QAM	18.01	19.46



LTE Band 7				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
5	Low	QPSK	4.49	5.00
	Low	16QAM	4.51	4.99
	Low	64QAM	4.51	4.99
	Mid	QPSK	4.49	4.96
	Mid	16QAM	4.50	4.96
	Mid	64QAM	4.50	4.95
	High	QPSK	4.50	4.99
	High	16QAM	4.51	4.94
	High	64QAM	4.50	4.97
10	Low	QPSK	8.99	9.79
	Low	16QAM	8.95	9.71
	Low	64QAM	8.97	9.78
	Mid	QPSK	8.97	9.81
	Mid	16QAM	8.96	9.75
	Mid	64QAM	8.98	9.79
	High	QPSK	9.00	9.83
	High	16QAM	8.96	9.76
	High	64QAM	8.97	9.82
15	Low	QPSK	13.43	14.58
	Low	16QAM	13.47	14.62
	Low	64QAM	13.45	14.62
	Mid	QPSK	13.49	14.83
	Mid	16QAM	13.48	14.64
	Mid	64QAM	13.45	14.67
	High	QPSK	13.49	14.68
	High	16QAM	13.46	14.72
	High	64QAM	13.46	14.65
20	Low	QPSK	17.90	19.47
	Low	16QAM	17.93	19.52
	Low	64QAM	17.92	19.61
	Mid	QPSK	17.97	19.57
	Mid	16QAM	18.01	19.64
	Mid	64QAM	18.00	19.64
	High	QPSK	17.94	19.47
	High	16QAM	17.95	19.38
	High	64QAM	17.92	19.53



LTE Band 12				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
1.4	Low	QPSK	1.09	1.23
	Low	16QAM	1.10	1.23
	Low	64QAM	1.09	1.23
	Mid	QPSK	1.09	1.23
	Mid	16QAM	1.10	1.24
	Mid	64QAM	1.09	1.24
	High	QPSK	1.09	1.24
	High	16QAM	1.10	1.24
	High	64QAM	1.10	1.21
3	Low	QPSK	2.70	2.99
	Low	16QAM	2.70	3.00
	Low	64QAM	2.70	2.99
	Mid	QPSK	2.70	3.00
	Mid	16QAM	2.70	3.00
	Mid	64QAM	2.70	3.00
	High	QPSK	2.70	3.00
	High	16QAM	2.70	3.00
	High	64QAM	2.71	2.99
5	Low	QPSK	4.50	4.98
	Low	16QAM	4.51	4.95
	Low	64QAM	4.50	5.00
	Mid	QPSK	4.49	4.99
	Mid	16QAM	4.50	4.97
	Mid	64QAM	4.50	4.99
	High	QPSK	4.50	5.00
	High	16QAM	4.50	4.93
	High	64QAM	4.51	4.96
10	Low	QPSK	8.98	9.81
	Low	16QAM	8.96	9.76
	Low	64QAM	8.98	9.75
	Mid	QPSK	8.97	9.76
	Mid	16QAM	8.95	9.76
	Mid	64QAM	8.97	9.79
	High	QPSK	8.96	9.80
	High	16QAM	8.95	9.71
	High	64QAM	8.96	9.77



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	1.24
	Low	64QAM	1.09	1.24
	Mid	QPSK	1.09	1.23
	Mid	16QAM	1.10	1.24
	Mid	64QAM	1.10	1.22
	High	QPSK	1.09	1.23
	High	16QAM	1.10	1.23
	High	64QAM	1.09	1.24
3	Low	QPSK	2.70	3.00
	Low	16QAM	2.70	3.01
	Low	64QAM	2.70	2.97
	Mid	QPSK	2.70	3.01
	Mid	16QAM	2.70	3.01
	Mid	64QAM	2.70	2.98
	High	QPSK	2.70	2.99
	High	16QAM	2.70	3.01
	High	64QAM	2.70	2.98
5	Low	QPSK	4.50	4.96
	Low	16QAM	4.50	4.95
	Low	64QAM	4.52	4.98
	Mid	QPSK	4.50	4.97
	Mid	16QAM	4.50	4.96
	Mid	64QAM	4.52	4.97
	High	QPSK	4.50	4.97
	High	16QAM	4.49	4.97
	High	64QAM	4.51	4.94
10	Low	QPSK	9.00	9.78
	Low	16QAM	8.97	9.73
	Low	64QAM	8.98	9.77
	Mid	QPSK	8.99	9.82
	Mid	16QAM	8.96	9.74
	Mid	64QAM	8.98	9.78
	High	QPSK	9.00	9.81
	High	16QAM	8.97	9.74
	High	64QAM	8.98	9.82



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15	Low	QPSK	13.49	14.65
	Low	16QAM	13.51	14.75
	Low	64QAM	13.48	14.65
	Mid	QPSK	13.53	14.64
	Mid	16QAM	13.51	14.71
	Mid	64QAM	13.49	14.72
	High	QPSK	13.52	14.84
	High	16QAM	13.52	14.84
	High	64QAM	13.52	14.69
20	Low	QPSK	17.97	19.46
	Low	16QAM	18.00	19.50
	Low	64QAM	17.99	19.55
	Mid	QPSK	18.03	19.60
	Mid	16QAM	18.02	19.53
	Mid	64QAM	18.04	20.63
	High	QPSK	18.04	19.66
	High	16QAM	18.06	19.57
	High	64QAM	18.06	19.46



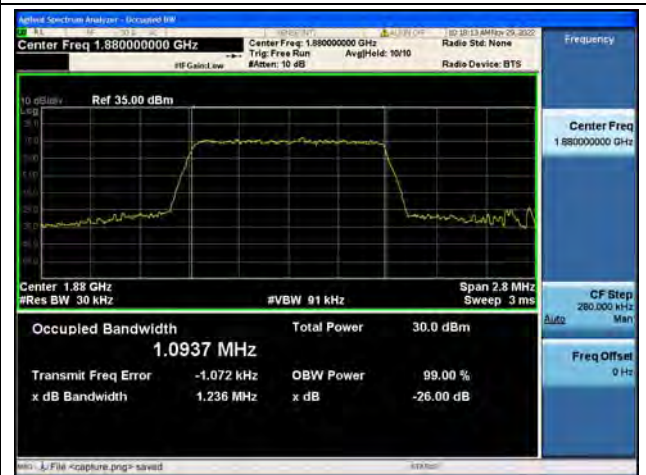
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Band2 / 1.4MHz / 16QAM/ Low CH



Band2 / 1.4MHz / 64QAM/ Low CH



Band2 / 1.4MHz / QPSK/ Mid CH



Band2 / 1.4MHz / 16QAM/ Mid CH



Band2 / 1.4MHz / 64QAM/ Mid CH



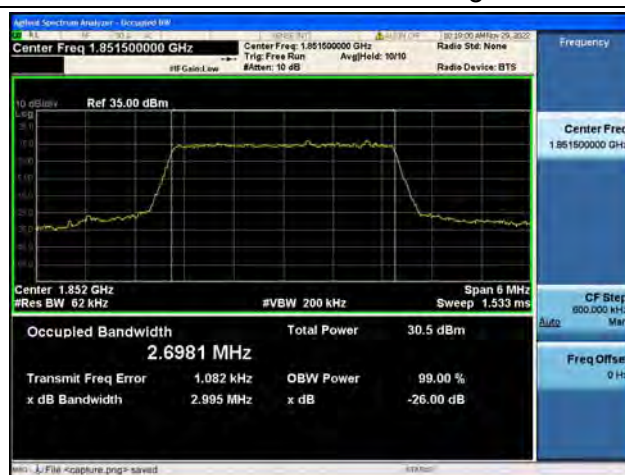
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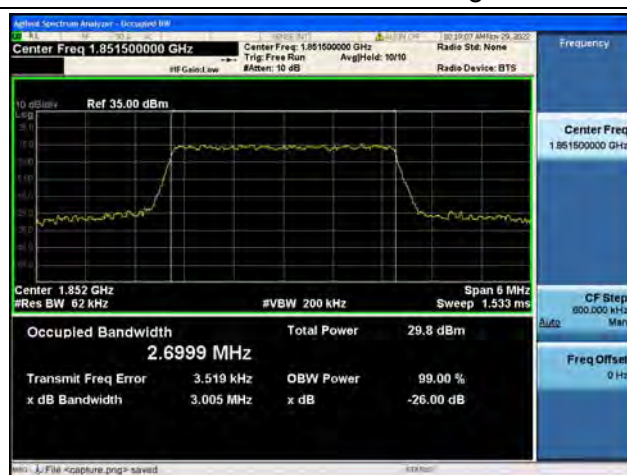
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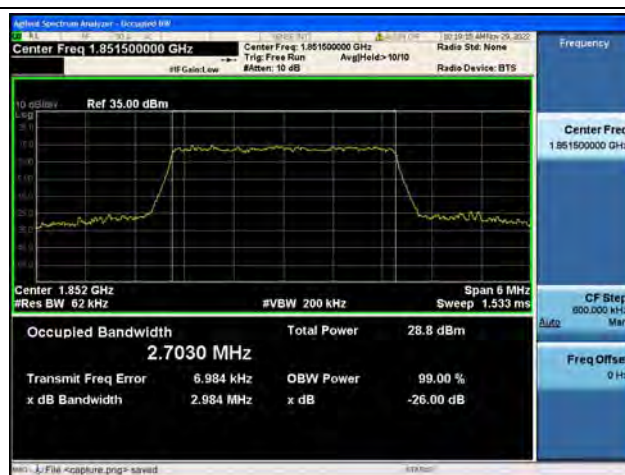
Band2 / 1.4MHz / 64QAM/ High CH



Band2 / 3MHz / QPSK/ Low CH



Band2 / 3MHz / 16QAM/ Low CH



Band2 / 3MHz / 64QAM/ Low CH



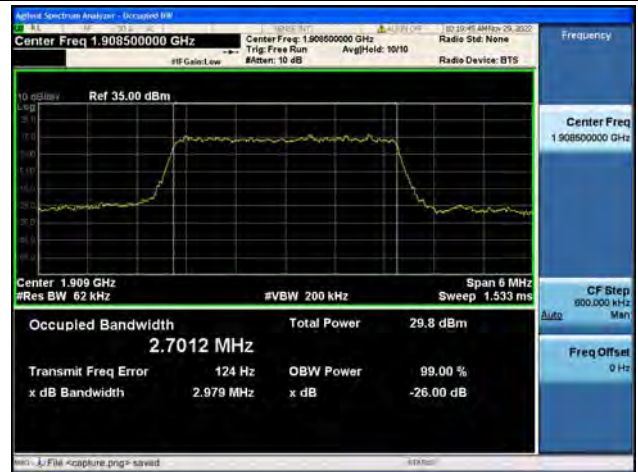
Band2 / 3MHz / QPSK/ Mid CH



Band2 / 3MHz / 16QAM/ Mid CH



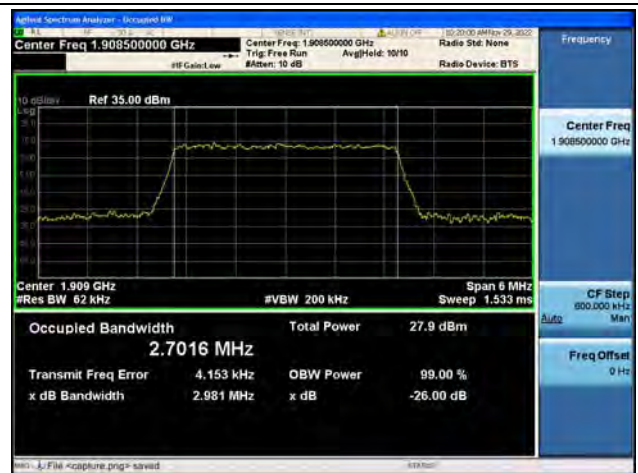
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Band2 / 3MHz / QPSK/ High CH



Band2 / 3MHz / 16QAM/ High CH



Band2 / 3MHz / 64QAM/ High CH



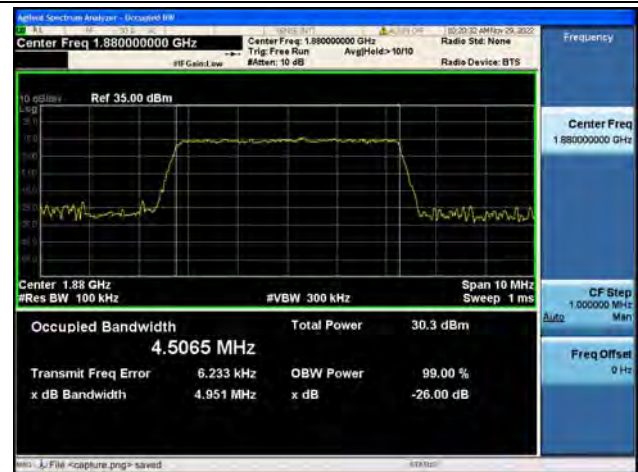
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Band2 / 5MHz / 16QAM/ Low CH



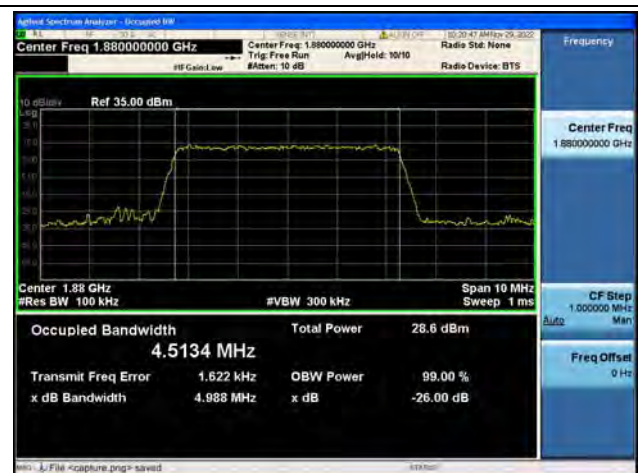
Band2 / 5MHz / 64QAM/ Low CH



Band2 / 5MHz / QPSK/ Mid CH



Band2 / 5MHz / 16QAM/ Mid CH



Band2 / 5MHz / 64QAM/ Mid CH



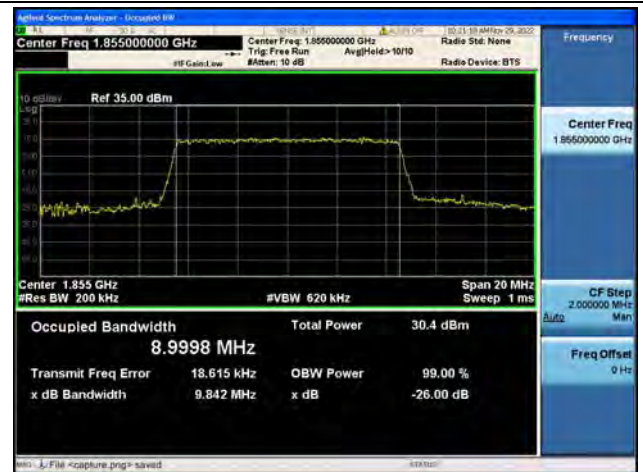
Band2 / 5MHz / QPSK/ High CH



Band2 / 5MHz / 16QAM/ High CH



Band2 / 5MHz / 64QAM/ High CH



Band2 / 10MHz / QPSK/ Low CH



Band2 / 10MHz / 16QAM/ Low CH



Band2 / 10MHz / 64QAM/ Low CH



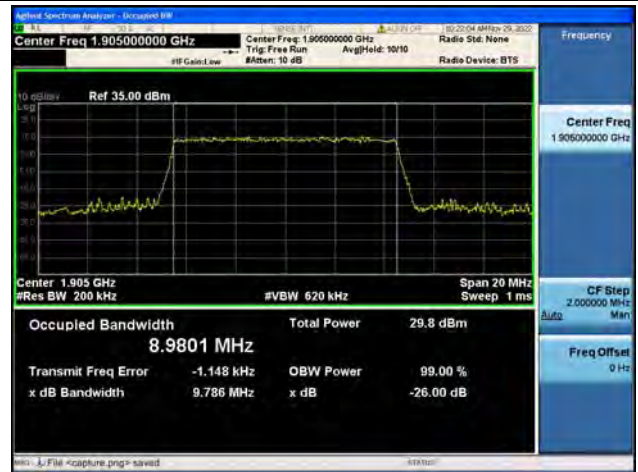
Band2 / 10MHz / QPSK/ Mid CH



Band2 / 10MHz / 16QAM/ Mid CH



Band2 / 10MHz / 64QAM/ Mid CH



Band2 / 10MHz / QPSK/ High CH



Band2 / 10MHz / 16QAM/ High CH



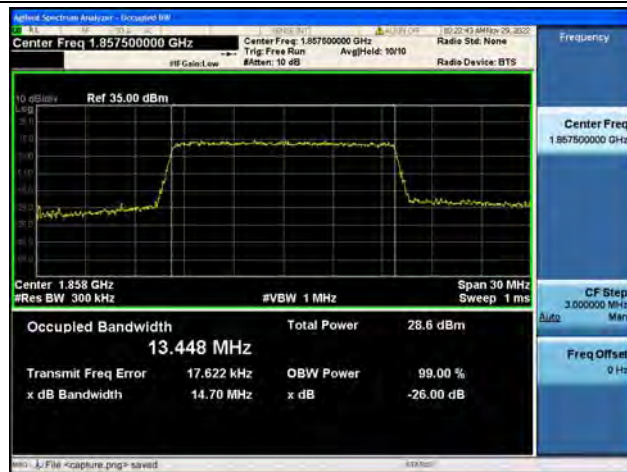
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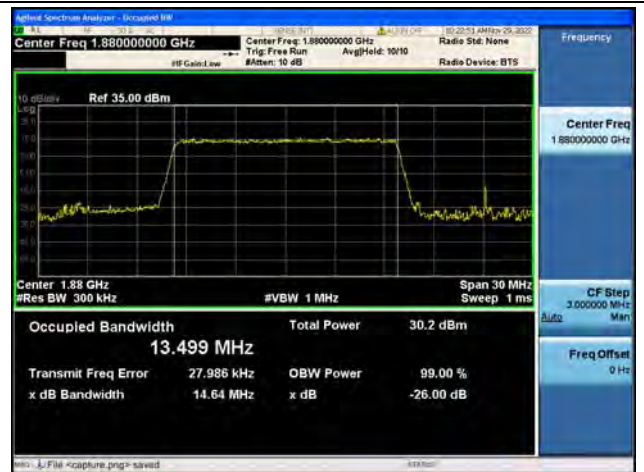
Band2 / 15MHz / QPSK/ Low CH



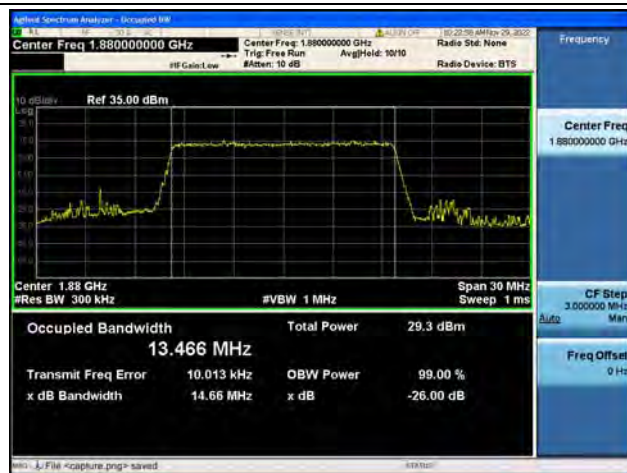
Band2 / 15MHz / 16QAM/ Low CH



Band2 / 15MHz / 64QAM/ Low CH



Band2 / 15MHz / QPSK/ Mid CH



Band2 / 15MHz / 16QAM/ Mid CH



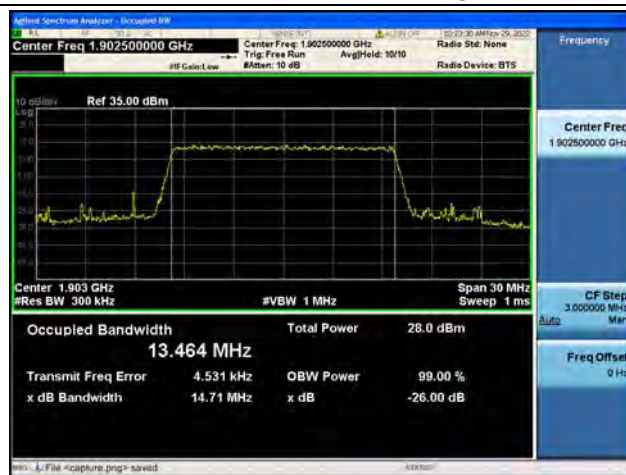
Band2 / 15MHz / 64QAM/ Mid CH



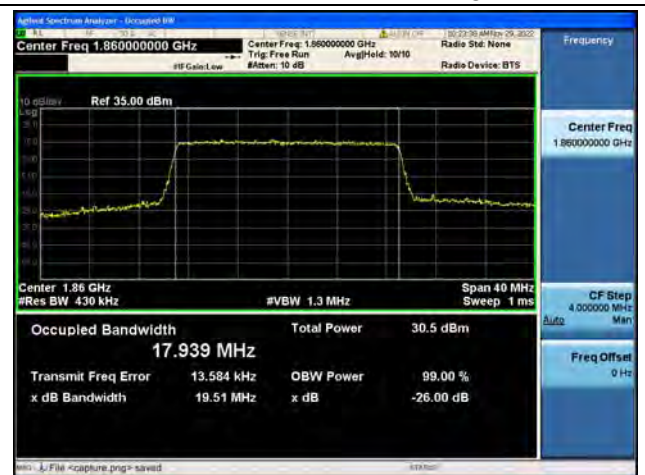
Band2 / 15MHz / QPSK/ High CH



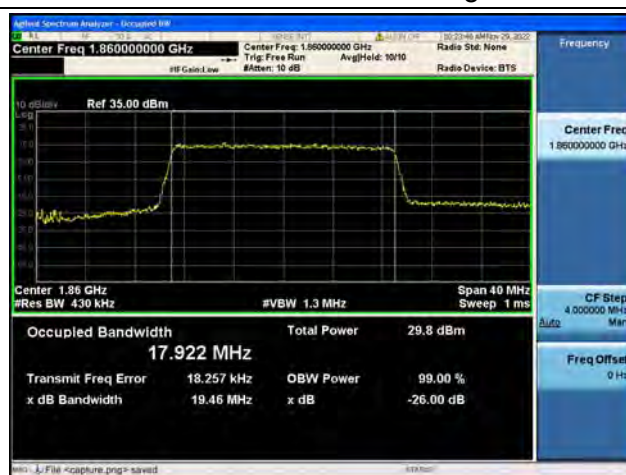
Band2 / 15MHz / 16QAM/ High CH



Band2 / 15MHz / 64QAM/ High CH



Band2 / 20MHz / QPSK/ Low CH



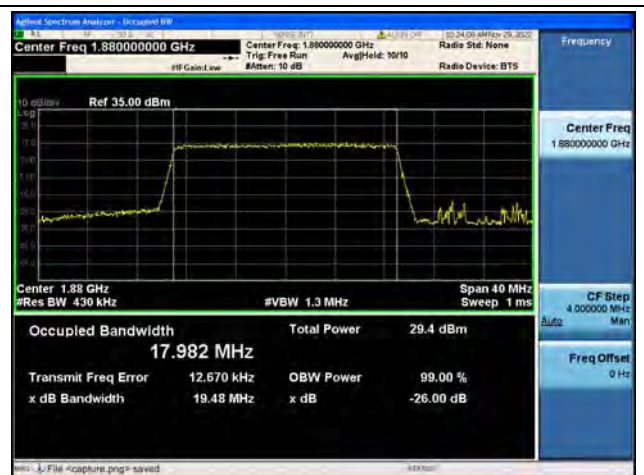
Band2 / 20MHz / 16QAM/ Low CH



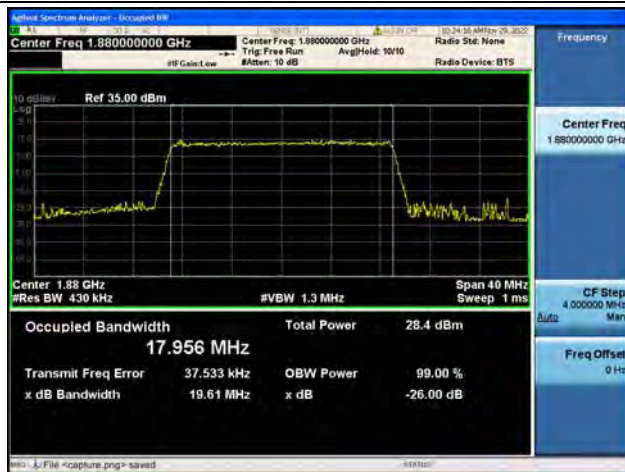
Band2 / 20MHz / 64QAM/ Low CH



Band2 / 20MHz / QPSK/ Mid CH



Band2 / 20MHz / 16QAM/ Mid CH



Band2 / 20MHz / 64QAM/ Mid CH



Band2 / 20MHz / QPSK/ High CH



Band2 / 20MHz / 16QAM/ High CH



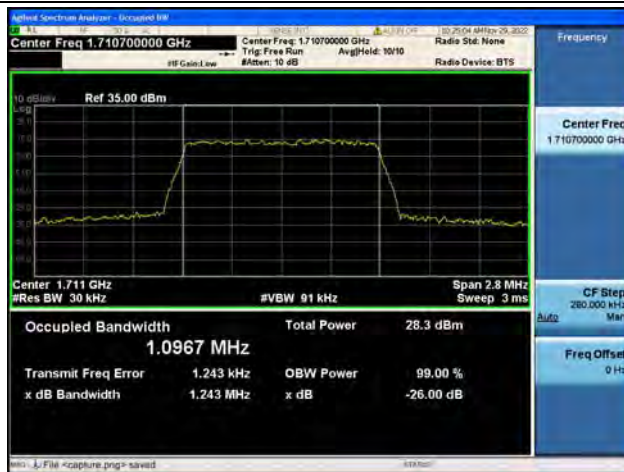
Band2 / 20MHz / 64QAM/ High CH



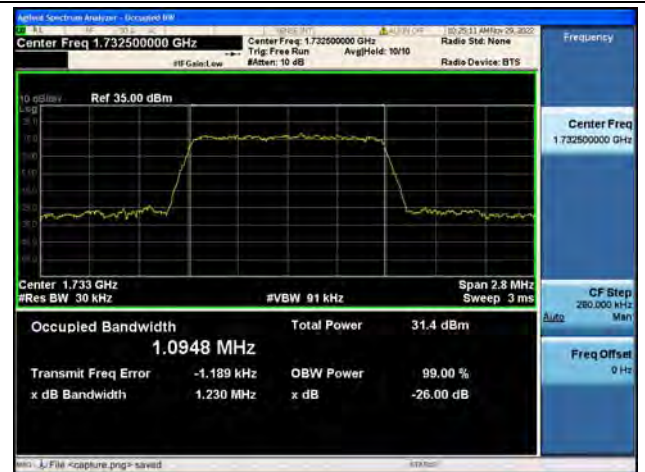
Band4 / 1.4MHz / QPSK/ Low CH



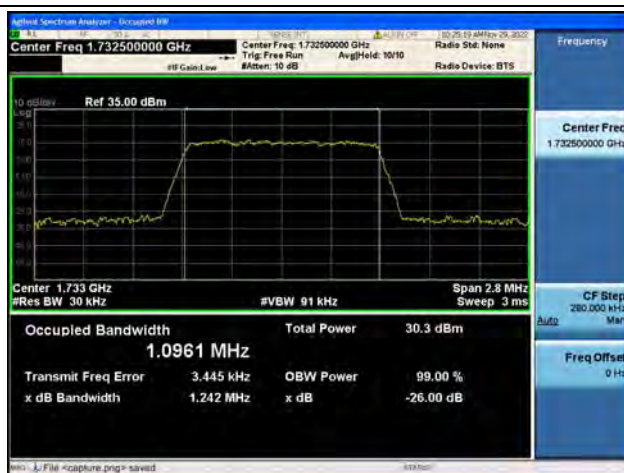
Band4 / 1.4MHz / 16QAM/ Low CH



Band4 / 1.4MHz / 64QAM/ Low CH



Band4 / 1.4MHz / QPSK/ Mid CH



Band4 / 1.4MHz / 16QAM/ Mid CH



Band4 / 1.4MHz / 64QAM/ Mid CH



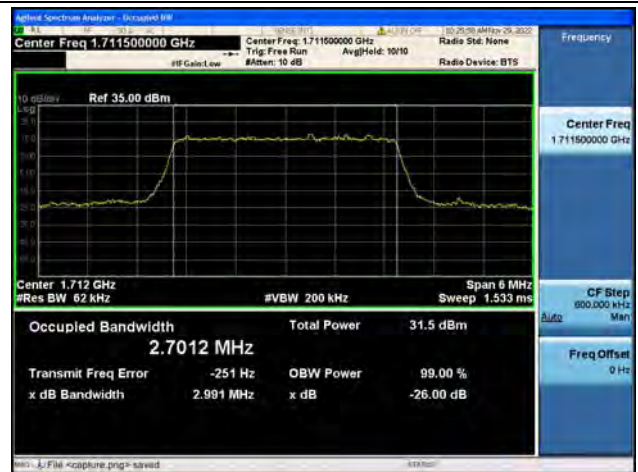
Band4 / 1.4MHz / QPSK/ High CH



Band4 / 1.4MHz / 16QAM/ High CH



Band4 / 1.4MHz / 64QAM/ High CH



Band4 / 3MHz / QPSK/ Low CH



Band4 / 3MHz / 16QAM/ Low CH



Band4 / 3MHz / 64QAM/ Low CH



Band4 / 3MHz / QPSK/ Mid CH



Band4 / 3MHz / 16QAM/ Mid CH



Band4 / 3MHz / 64QAM/ Mid CH



Band4 / 3MHz / QPSK/ High CH



Band4 / 3MHz / 16QAM/ High CH



Band4 / 3MHz / 64QAM/ High CH



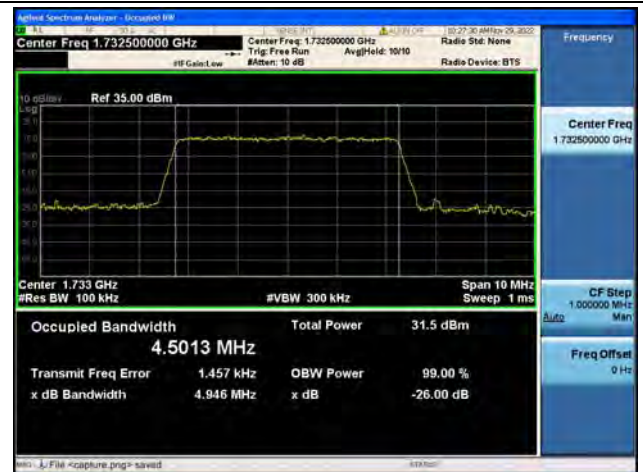
Band4 / 5MHz / QPSK/ Low CH



Band4 / 5MHz / 16QAM/ Low CH



Band4 / 5MHz / 64QAM/ Low CH



Band4 / 5MHz / QPSK/ Mid CH



Band4 / 5MHz / 16QAM/ Mid CH



Band4 / 5MHz / 64QAM/ Mid CH



Band4 / 5MHz / QPSK/ High CH



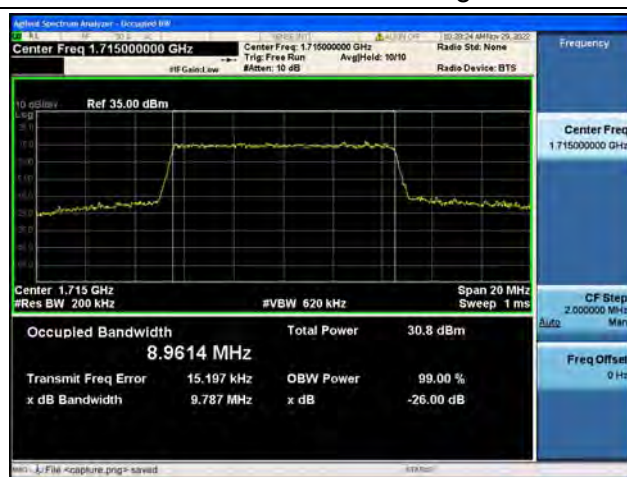
Band4 / 5MHz / 16QAM/ High CH



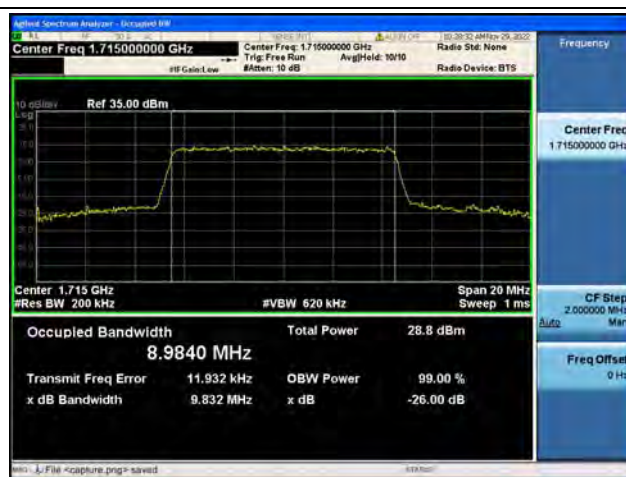
Band4 / 5MHz / 64QAM/ High CH



Band4 / 10MHz / QPSK/ Low CH



Band4 / 10MHz / 16QAM/ Low CH



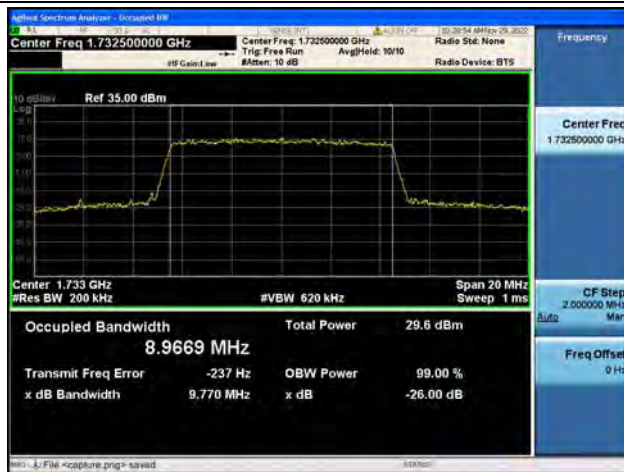
Band4 / 10MHz / 64QAM/ Low CH



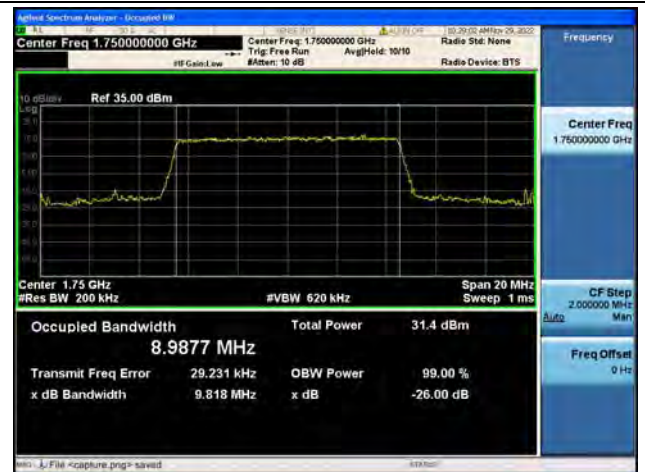
Band4 / 10MHz / QPSK/ Mid CH



Band4 / 10MHz / 16QAM/ Mid CH



Band4 / 10MHz / 64QAM/ Mid CH



Band4 / 10MHz / QPSK/ High CH



Band4 / 10MHz / 16QAM/ High CH



Band4 / 10MHz / 64QAM/ High CH



Band4 / 15MHz / QPSK/ Low CH



Band4 / 15MHz / 16QAM/ Low CH



Band4 / 15MHz / 64QAM/ Low CH



Band4 / 15MHz / QPSK/ Mid CH



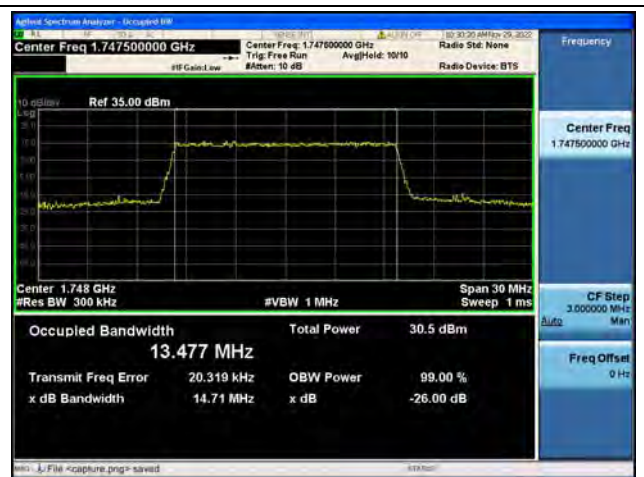
Band4 / 15MHz / 16QAM/ Mid CH



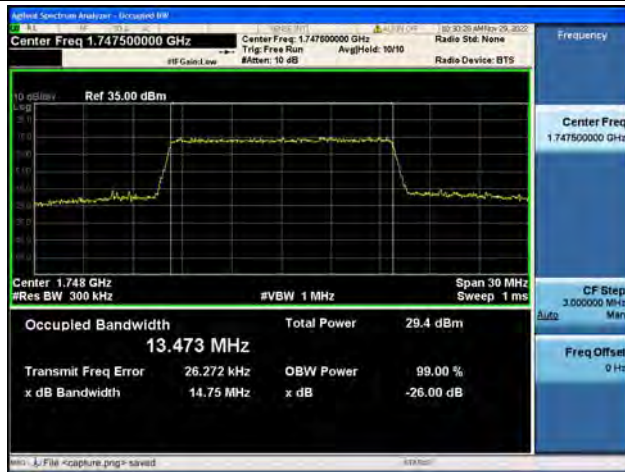
Band4 / 15MHz / 64QAM/ Mid CH



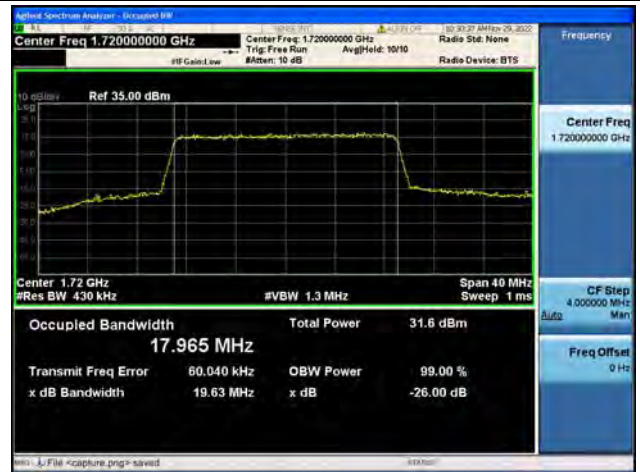
Band4 / 15MHz / QPSK/ High CH



Band4 / 15MHz / 16QAM/ High CH



Band4 / 15MHz / 64QAM/ High CH



Band4 / 20MHz / QPSK/ Low CH



Band4 / 20MHz / 16QAM/ Low CH



Band4 / 20MHz / 64QAM/ Low CH



Band4 / 20MHz / QPSK/ Mid CH



Band4 / 20MHz / 16QAM/ Mid CH



Band4 / 20MHz / 64QAM/ Mid CH



Band4 / 20MHz / QPSK/ High CH



Band4 / 20MHz / 16QAM/ High CH



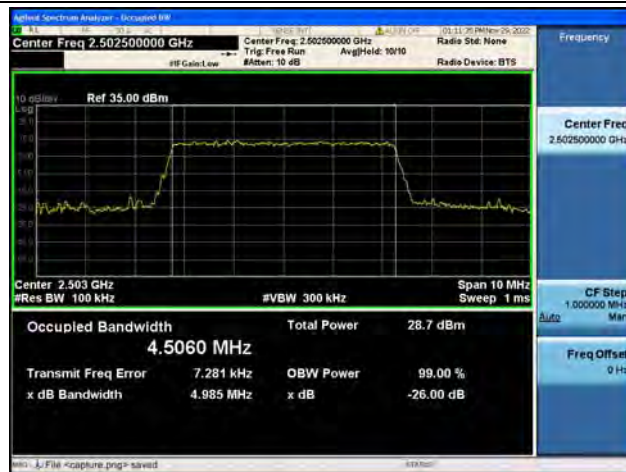
Band4 / 20MHz / 64QAM/ High CH



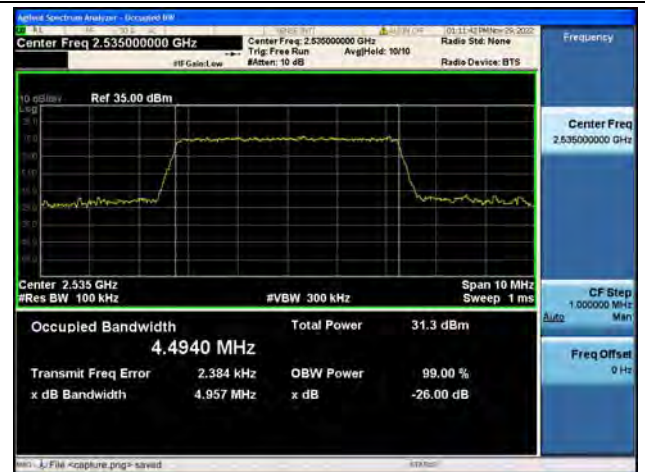
Band7 / 5MHz / QPSK/ Low CH



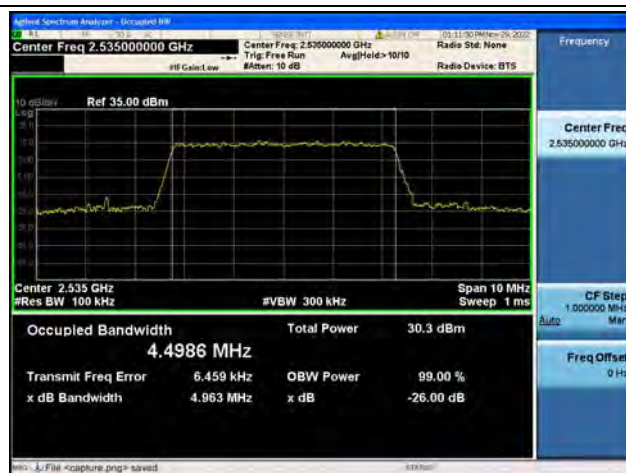
Band7 / 5MHz / 16QAM/ Low CH



Band7 / 5MHz / 64QAM/ Low CH



Band7 / 5MHz / QPSK/ Mid CH



Band7 / 5MHz / 16QAM/ Mid CH



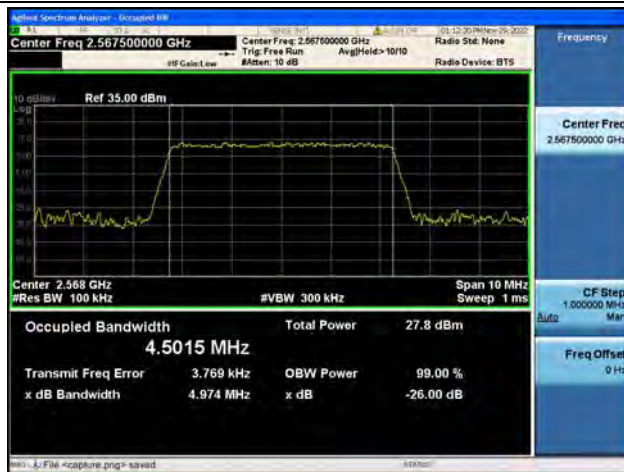
Band7 / 5MHz / 64QAM/ Mid CH



Band7 / 5MHz / QPSK/ High CH



Band7 / 5MHz / 16QAM/ High CH



Band7 / 5MHz / 64QAM/ High CH



Band7 / 10MHz / QPSK/ Low CH



Band7 / 10MHz / 16QAM/ Low CH



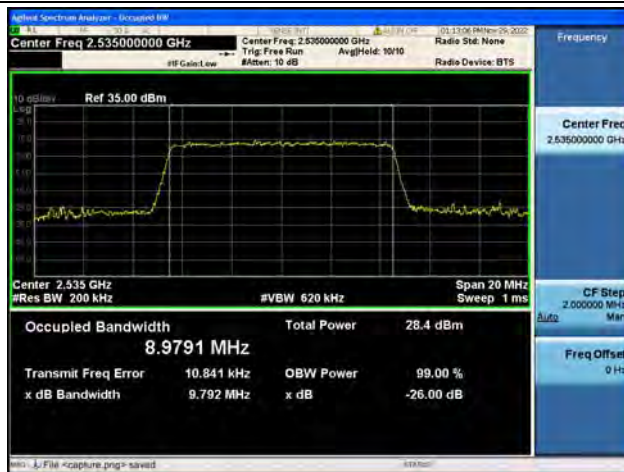
Band7 / 10MHz / 64QAM/ Low CH



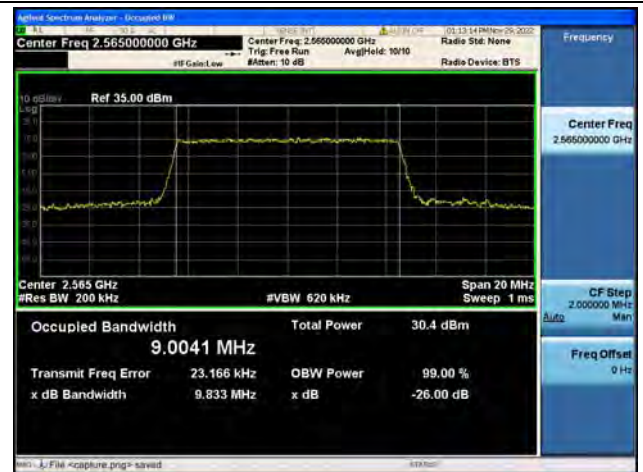
Band7 / 10MHz / QPSK/ Mid CH



Band7 / 10MHz / 16QAM/ Mid CH



Band7 / 10MHz / 64QAM/ Mid CH



Band7 / 10MHz / QPSK/ High CH



Band7 / 10MHz / 16QAM/ High CH



Band7 / 10MHz / 64QAM/ High CH



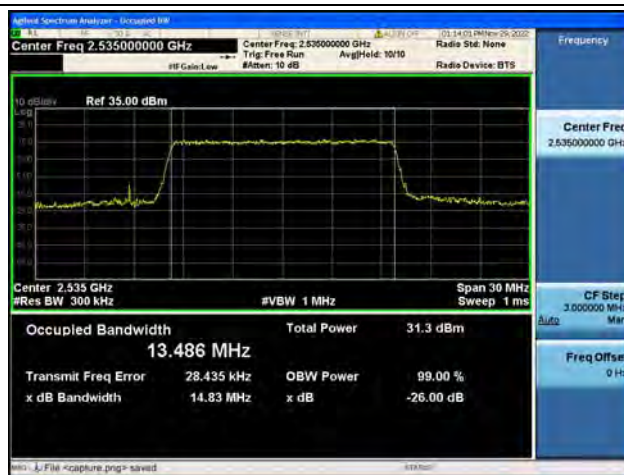
Band7 / 15MHz / QPSK/ Low CH



Band7 / 15MHz / 16QAM/ Low CH



Band7 / 15MHz / 64QAM/ Low CH



Band7 / 15MHz / QPSK/ Mid CH



Band7 / 15MHz / 16QAM/ Mid CH



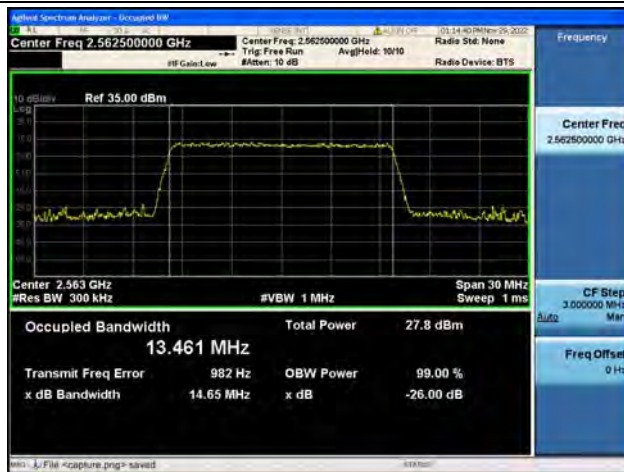
Band7 / 15MHz / 64QAM/ Mid CH



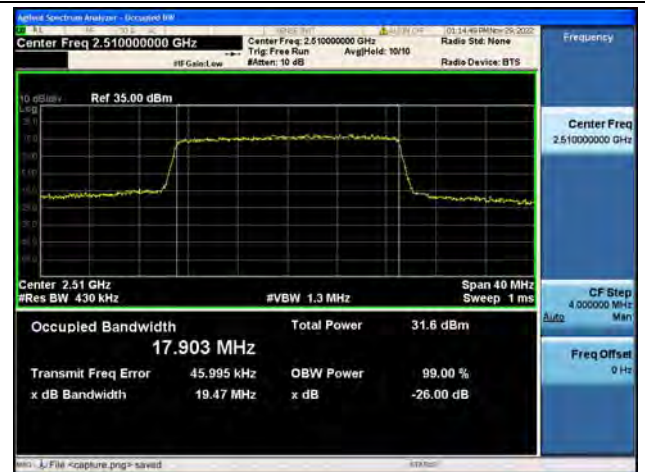
Band7 / 15MHz / QPSK/ High CH



Band7 / 15MHz / 16QAM/ High CH



Band7 / 15MHz / 64QAM/ High CH



Band7 / 20MHz / QPSK/ Low CH



Band7 / 20MHz / 16QAM/ Low CH



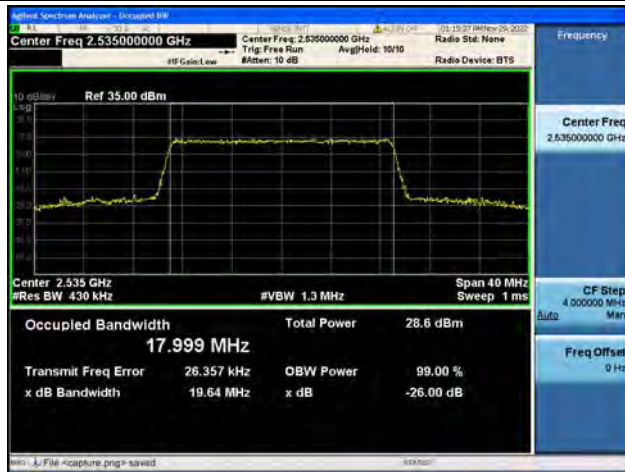
Band7 / 20MHz / 64QAM/ Low CH



Band7 / 20MHz / QPSK/ Mid CH



Band7 / 20MHz / 16QAM/ Mid CH



Band7 / 20MHz / 64QAM/ Mid CH



Band7 / 20MHz / QPSK/ High CH



Band7 / 20MHz / 16QAM/ High CH



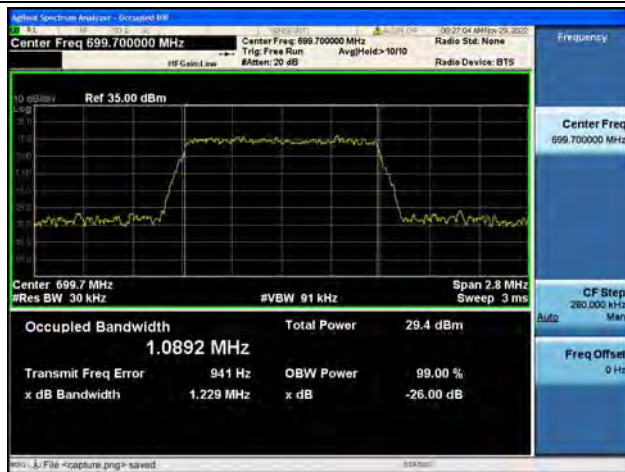
Band7 / 20MHz / 64QAM/ High CH



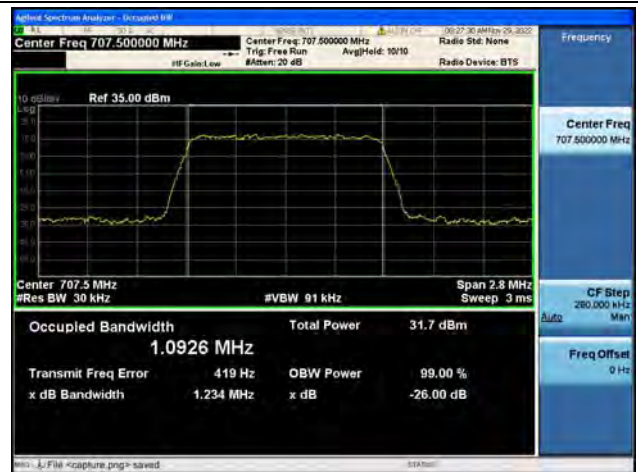
Band12 / 1.4MHz / QPSK/ Low CH



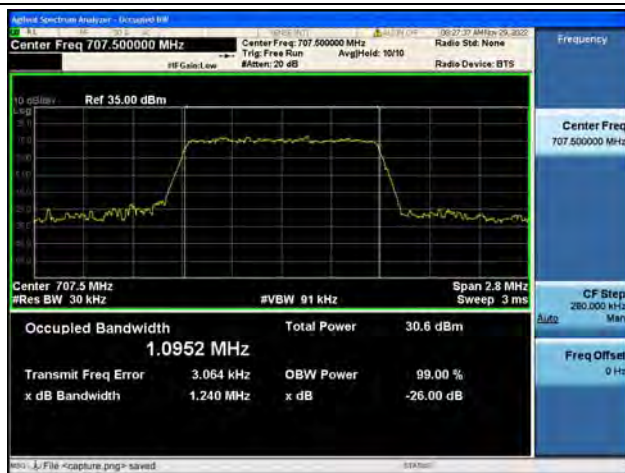
Band12 / 1.4MHz / 16QAM/ Low CH



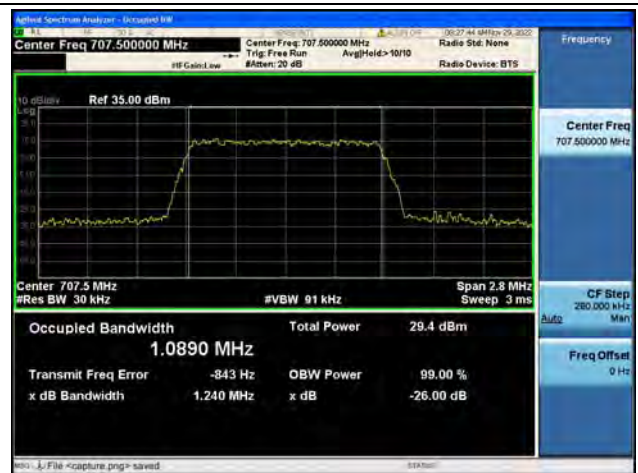
Band12 / 1.4MHz / 64QAM/ Low CH



Band12 / 1.4MHz / QPSK/ Mid CH



Band12 / 1.4MHz / 16QAM/ Mid CH



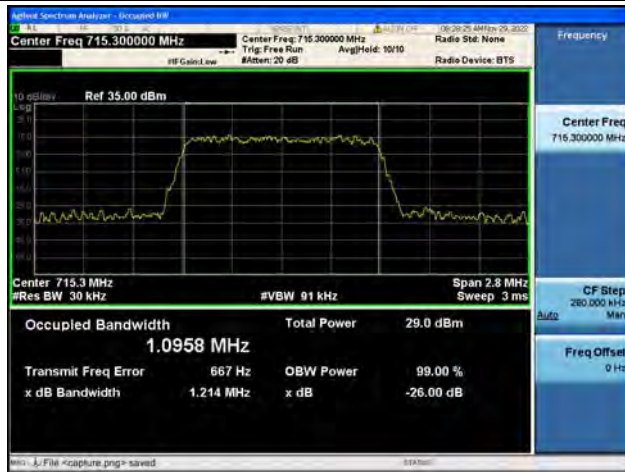
Band12 / 1.4MHz / 64QAM/ Mid CH



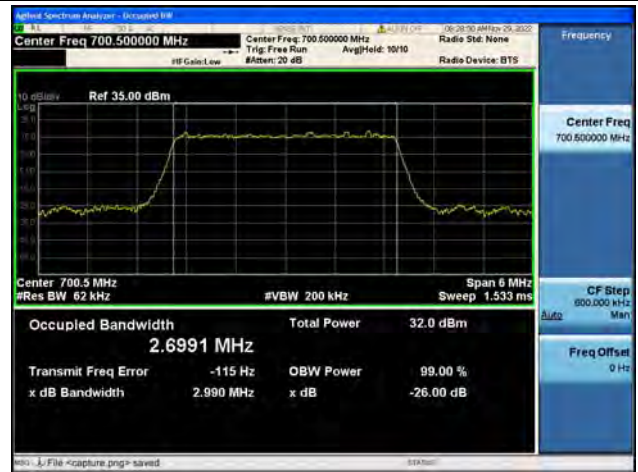
Band12 / 1.4MHz / QPSK/ High CH



Band12 / 1.4MHz / 16QAM/ High CH



Band12 / 1.4MHz / 64QAM/ High CH



Band12 / 3MHz / QPSK/ Low CH



Band12 / 3MHz / 16QAM/ Low CH



Band12 / 3MHz / 64QAM/ Low CH



Band12 / 3MHz / QPSK/ Mid CH



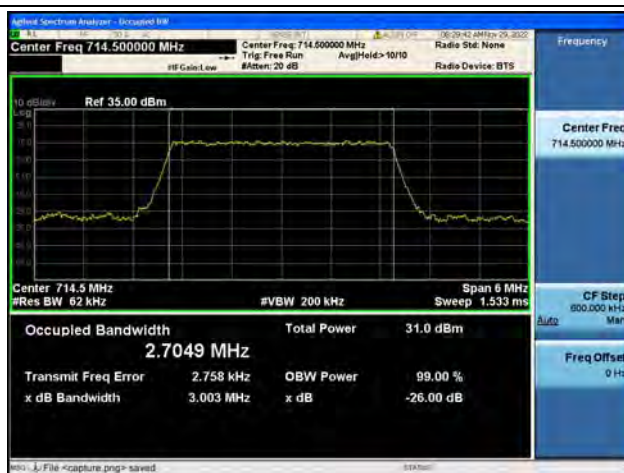
Band12 / 3MHz / 16QAM/ Mid CH



Band12 / 3MHz / 64QAM/ Mid CH



Band12 / 3MHz / QPSK/ High CH



Band12 / 3MHz / 16QAM/ High CH



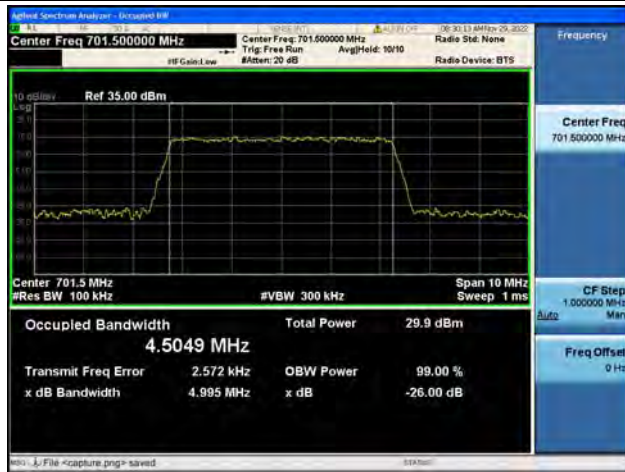
Band12 / 3MHz / 64QAM/ High CH



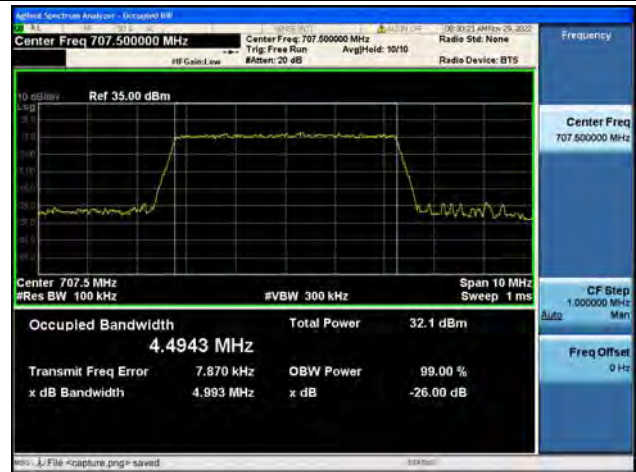
Band12 / 5MHz / QPSK/ Low CH



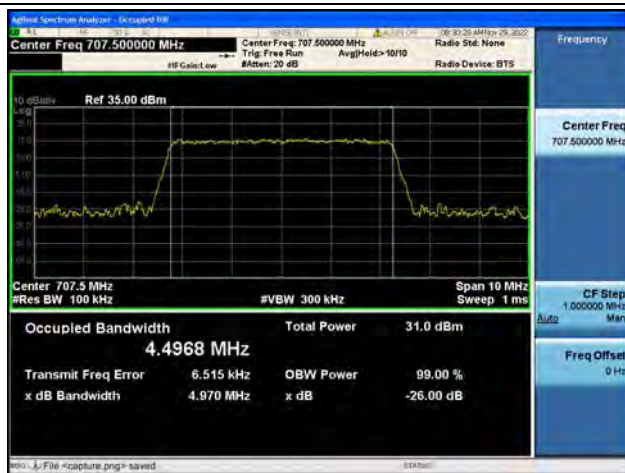
Band12 / 5MHz / 16QAM/ Low CH



Band12 / 5MHz / 64QAM/ Low CH



Band12 / 5MHz / QPSK/ Mid CH



Band12 / 5MHz / 16QAM/ Mid CH



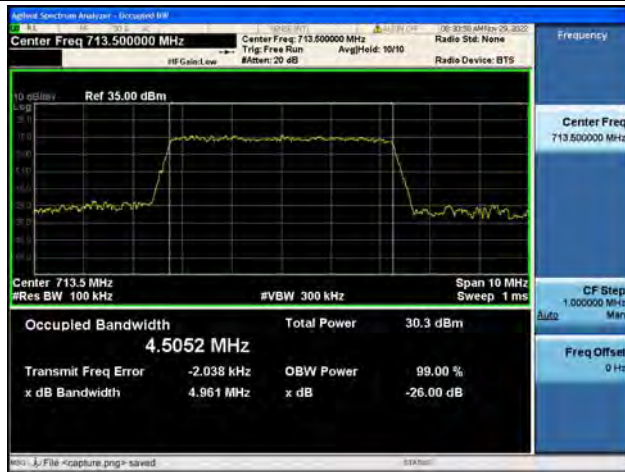
Band12 / 5MHz / 64QAM/ Mid CH



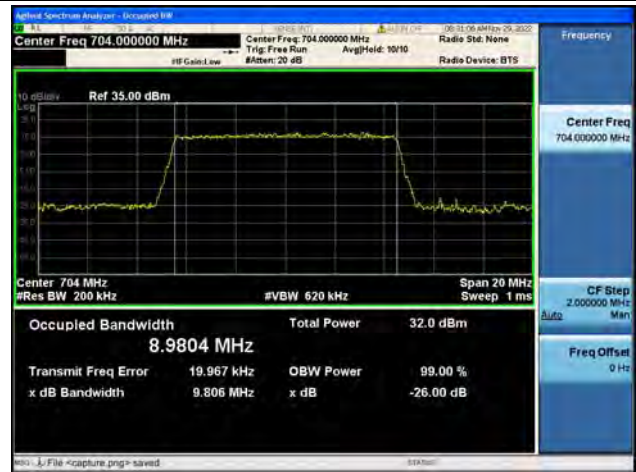
Band12 / 5MHz / QPSK/ High CH



Band12 / 5MHz / 16QAM/ High CH



Band12 / 5MHz / 64QAM/ High CH



Band12 / 10MHz / QPSK/ Low CH



Band12 / 10MHz / 16QAM/ Low CH



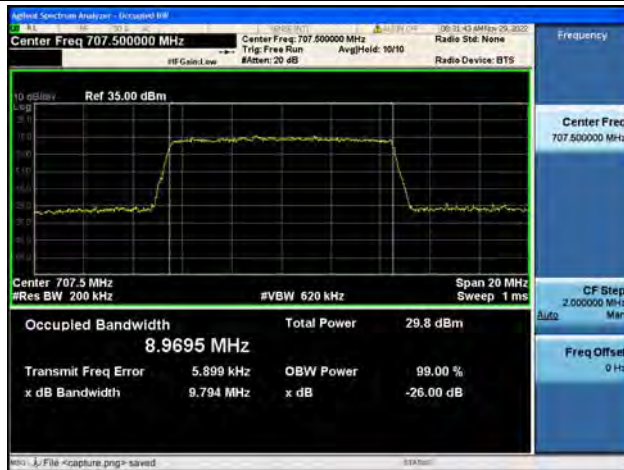
Band12 / 10MHz / 64QAM/ Low CH



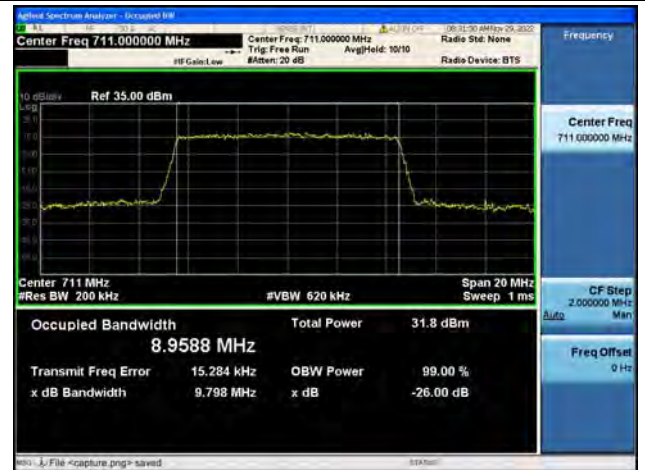
Band12 / 10MHz / QPSK/ Mid CH



Band12 / 10MHz / 16QAM/ Mid CH



Band12 / 10MHz / 64QAM/ Mid CH



Band12 / 10MHz / QPSK/ High CH



Band12 / 10MHz / 16QAM/ High CH



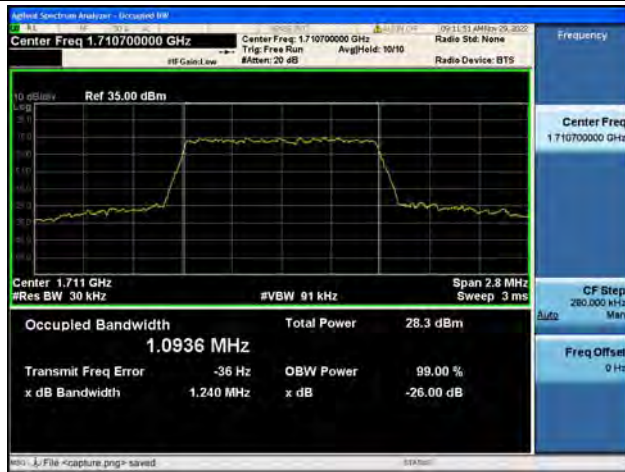
Band12 / 10MHz / 64QAM/ High CH



Band66 / 1.4MHz / QPSK/ Low CH



Band66 / 1.4MHz / 16QAM/ Low CH



Band66 / 1.4MHz / 64QAM/ Low CH



Band66 / 1.4MHz / QPSK/ Mid CH



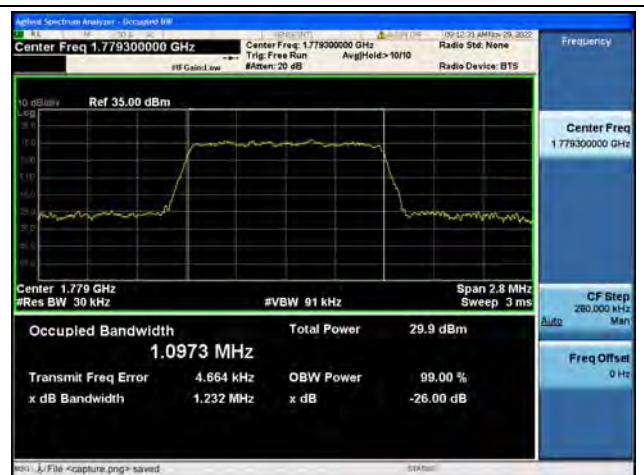
Band66 / 1.4MHz / 16QAM/ Mid CH



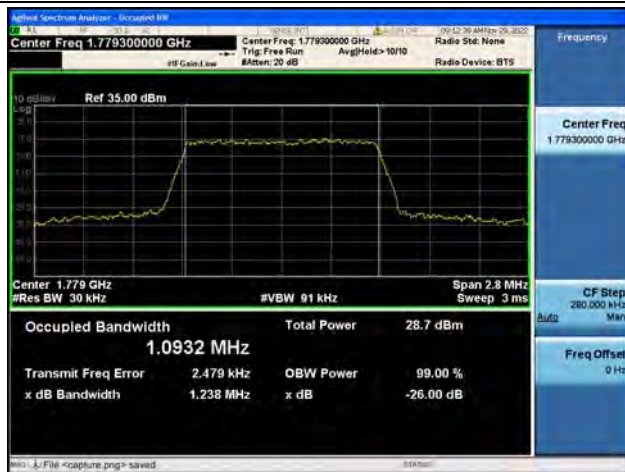
Band66 / 1.4MHz / 64QAM/ Mid CH



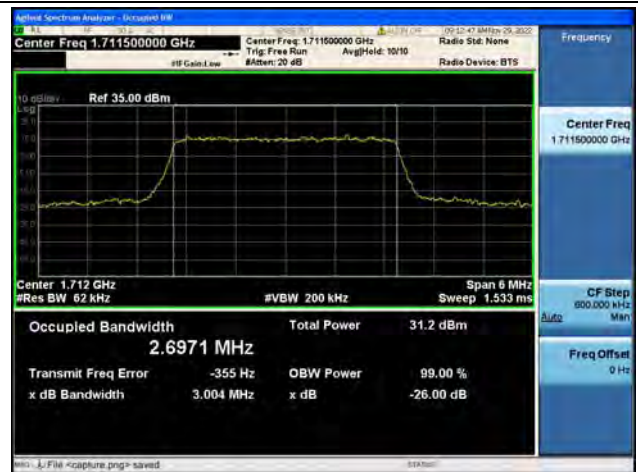
Band66 / 1.4MHz / QPSK/ High CH



Band66 / 1.4MHz / 16QAM/ High CH



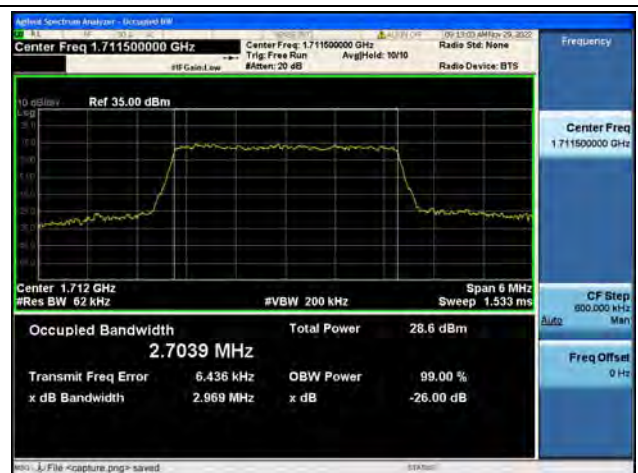
Band66 / 1.4MHz / 64QAM/ High CH



Band66 / 3MHz / QPSK/ Low CH



Band66 / 3MHz / 16QAM/ Low CH



Band66 / 3MHz / 64QAM/ Low CH



Band66 / 3MHz / QPSK/ Mid CH



Band66 / 3MHz / 16QAM/ Mid CH



Band66 / 3MHz / 64QAM/ Mid CH



Band66 / 3MHz / QPSK/ High CH



Band66 / 3MHz / 16QAM/ High CH



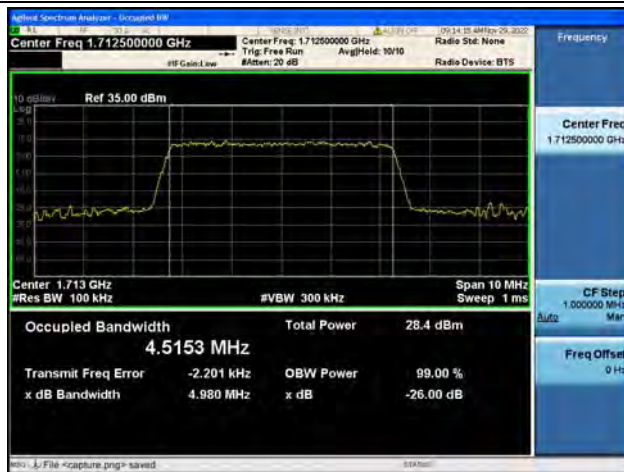
Band66 / 3MHz / 64QAM/ High CH



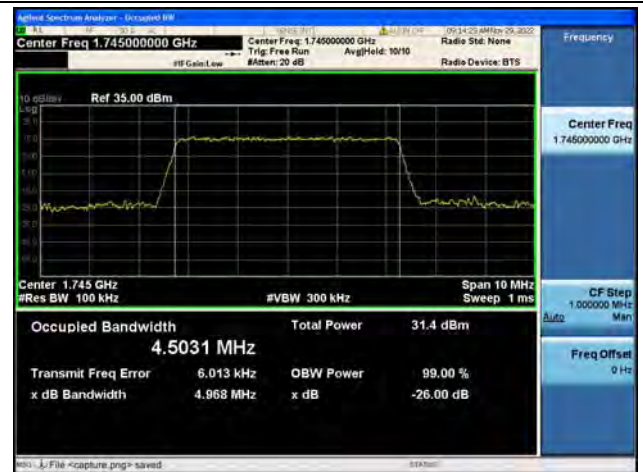
Band66 / 5MHz / QPSK/ Low CH



Band66 / 5MHz / 16QAM/ Low CH



Band66 / 5MHz / 64QAM/ Low CH



Band66 / 5MHz / QPSK/ Mid CH



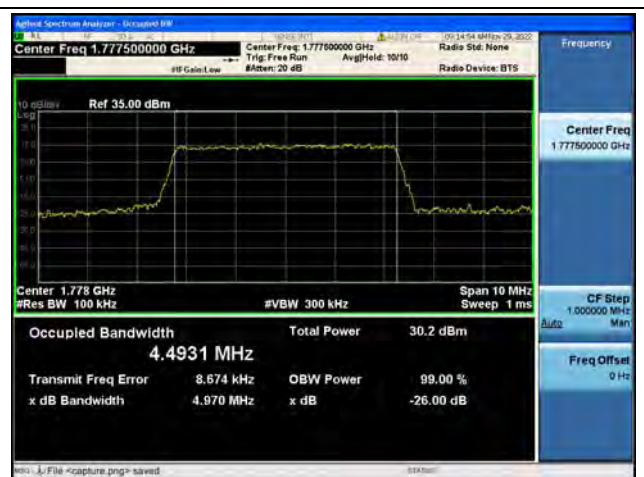
Band66 / 5MHz / 16QAM/ Mid CH



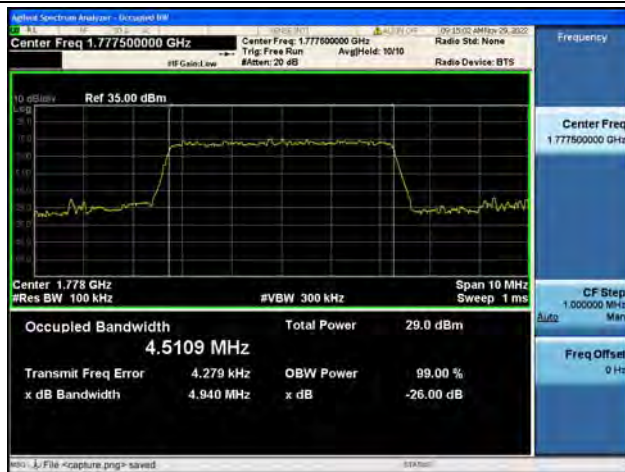
Band66 / 5MHz / 64QAM/ Mid CH



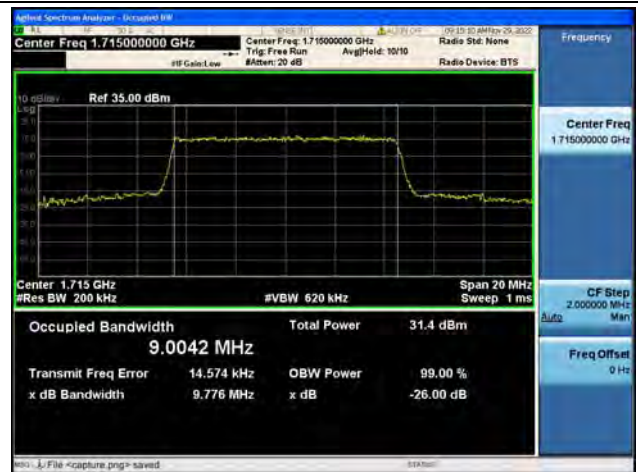
Band66 / 5MHz / QPSK/ High CH



Band66 / 5MHz / 16QAM/ High CH



Band66 / 5MHz / 64QAM/ High CH



Band66 / 10MHz / QPSK/ Low CH



Band66 / 10MHz / 16QAM/ Low CH



Band66 / 10MHz / 64QAM/ Low CH



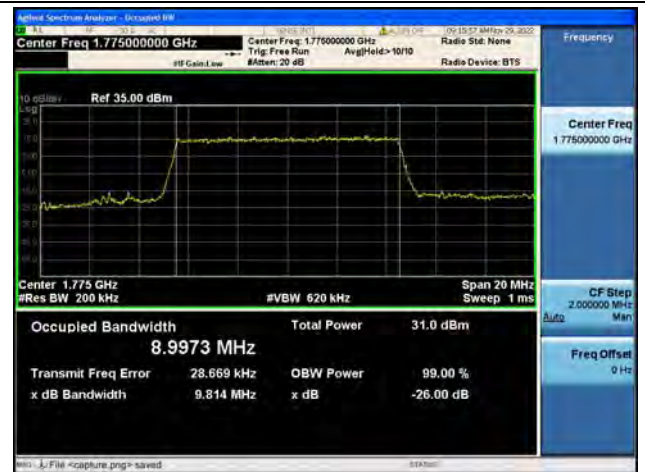
Band66 / 10MHz / QPSK/ Mid CH



Band66 / 10MHz / 16QAM/ Mid CH



Band66 / 10MHz / 64QAM/ Mid CH



Band66 / 10MHz / QPSK/ High CH



Band66 / 10MHz / 16QAM/ High CH



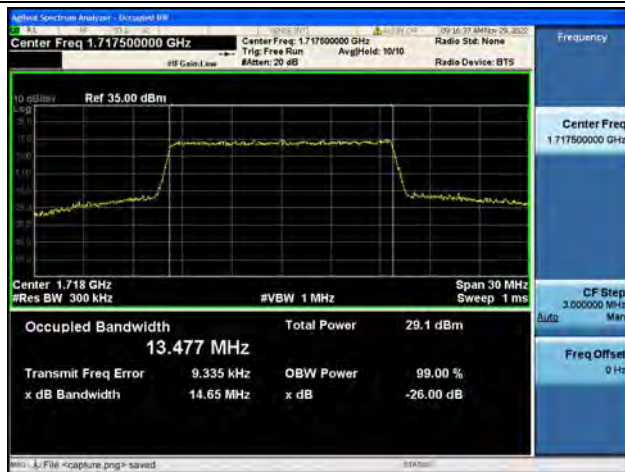
Band66 / 10MHz / 64QAM/ High CH



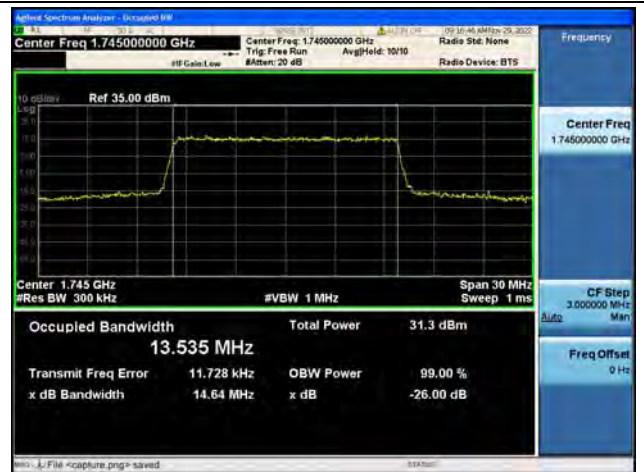
Band66 / 15MHz / QPSK/ Low CH



Band66 / 15MHz / 16QAM/ Low CH



Band66 / 15MHz / 64QAM/ Low CH



Band66 / 15MHz / QPSK/ Mid CH



Band66 / 15MHz / 16QAM/ Mid CH



Band66 / 15MHz / 64QAM/ Mid CH



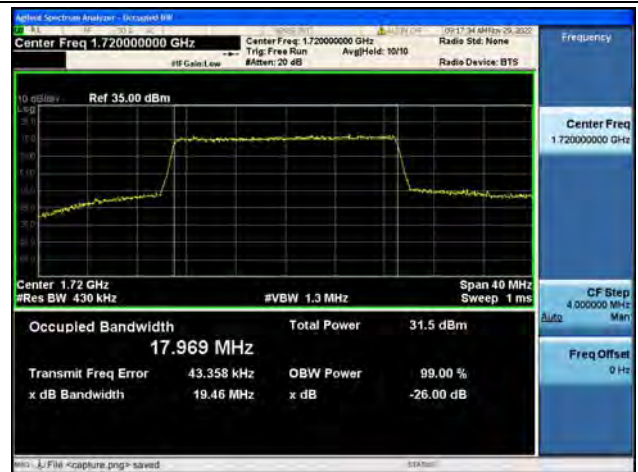
Band66 / 15MHz / QPSK/ High CH



Band66 / 15MHz / 16QAM/ High CH



Band66 / 15MHz / 64QAM/ High CH



Band66 / 20MHz / QPSK/ Low CH



Band66 / 20MHz / 16QAM/ Low CH



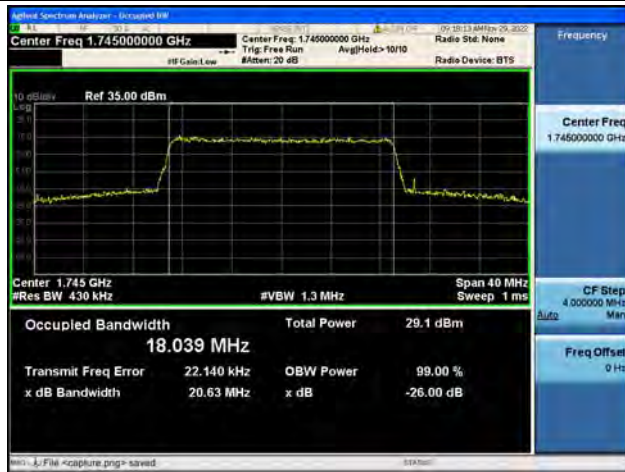
Band66 / 20MHz / 64QAM/ Low CH



Band66 / 20MHz / QPSK/ Mid CH



Band66 / 20MHz / 16QAM/ Mid CH



Band66 / 20MHz / 64QAM/ Mid CH



Band66 / 20MHz / QPSK/ High CH



Band66 / 20MHz / 16QAM/ High CH



Band66 / 20MHz / 64QAM/ High CH

2.3. Frequency Stability

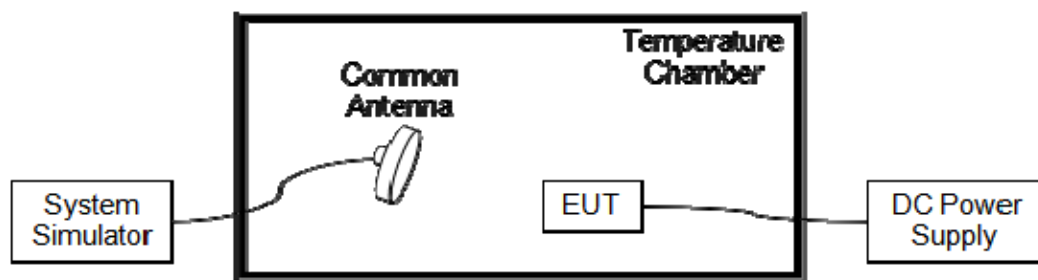
2.3.1. Requirement

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 0°C to 45°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 voltage 12.0V which is 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
100	12.0	+20(Ref)	22	0.012	PASS
100		0	20	0.011	
100		+10	42	0.022	
100		+20	29	0.015	
100		+30	46	0.024	
100		+40	44	0.023	
100		+45	23	0.012	
115	13.8	+20	-14	-0.007	PASS
85	10.2	+20	22	0.012	

LTE Band 4, QPSK, Channel 20175, Frequency 1732.5MHz Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp(°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
100	12.0	+20(Ref)	-23	-0.013	PASS
100		0	16	0.009	
100		+10	16	0.009	
100		+20	35	0.020	
100		+30	-17	-0.010	
100		+40	-13	-0.008	
100		+45	26	0.015	
115	13.8	+20	18	0.010	PASS
85	10.2	+20	23	0.013	



LTE Band 7, QPSK, Channel 21100, Frequency 2535MHz Limit= Within Authorized Band					
Voltage (%)	Power (VDC)	Temp(°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
100	12.0	+20(Ref)	17	0.007	PASS
100		0	48	0.019	
100		+10	-16	-0.006	
100		+20	19	0.007	
100		+30	17	0.007	
100		+40	-23	-0.009	
100		+45	14	0.006	
115	13.8	+20	16	0.006	
85	10.2	+20	34	0.013	

LTE Band 12, QPSK, Channel 23095, Frequency 707.5MHz Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp(°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
100	12.0	+20(Ref)	17	0.024	PASS
100		0	23	0.033	
100		+10	-20	-0.028	
100		+20	23	0.033	
100		+30	37	0.052	
100		+40	32	0.045	
100		+45	24	0.034	
115	13.8	+20	53	0.075	
85	10.2	+20	-15	-0.021	



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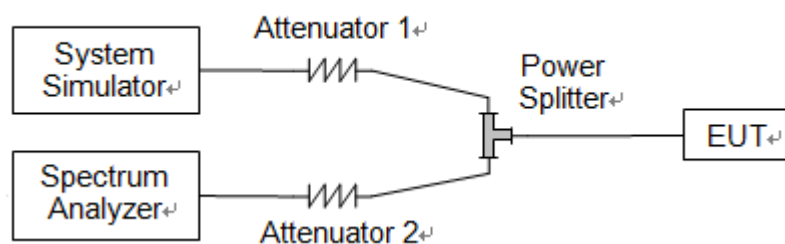
LTE Band 66, QPSK, Channel 132322, Frequency 1745MHz Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp (°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
100	12.0	+20(Ref)	30	0.017	PASS
100		0	-17	-0.010	
100		+10	40	0.023	
100		+20	20	0.011	
100		+30	17	0.010	
100		+40	-18	-0.010	
100		+45	34	0.019	
115	13.8	+20	17	0.010	
85	10.2	+20	17	0.010	

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	5.69	<=13	PASS
	Low	16QAM	6.49	<=13	PASS
	Low	64QAM	6.92	<=13	PASS
	Mid	QPSK	5.86	<=13	PASS
	Mid	16QAM	6.54	<=13	PASS
	Mid	64QAM	6.91	<=13	PASS
	High	QPSK	5.42	<=13	PASS
	High	16QAM	6.44	<=13	PASS
	High	64QAM	6.82	<=13	PASS
3	Low	QPSK	5.43	<=13	PASS
	Low	16QAM	6.41	<=13	PASS
	Low	64QAM	6.76	<=13	PASS
	Mid	QPSK	5.41	<=13	PASS
	Mid	16QAM	6.42	<=13	PASS
	Mid	64QAM	6.74	<=13	PASS
	High	QPSK	5.22	<=13	PASS
	High	16QAM	6.29	<=13	PASS
	High	64QAM	6.70	<=13	PASS
5	Low	QPSK	5.38	<=13	PASS
	Low	16QAM	6.23	<=13	PASS
	Low	64QAM	6.72	<=13	PASS
	Mid	QPSK	5.56	<=13	PASS
	Mid	16QAM	6.29	<=13	PASS
	Mid	64QAM	6.70	<=13	PASS
	High	QPSK	5.28	<=13	PASS
	High	16QAM	6.23	<=13	PASS
	High	64QAM	6.74	<=13	PASS
10	Low	QPSK	5.58	<=13	PASS
	Low	16QAM	6.17	<=13	PASS
	Low	64QAM	6.66	<=13	PASS
	Mid	QPSK	5.62	<=13	PASS
	Mid	16QAM	6.20	<=13	PASS
	Mid	64QAM	6.62	<=13	PASS
	High	QPSK	5.33	<=13	PASS
	High	16QAM	6.12	<=13	PASS
	High	64QAM	6.61	<=13	PASS



15	Low	QPSK	5.40	≤ 13	PASS
	Low	16QAM	6.20	≤ 13	PASS
	Low	64QAM	6.67	≤ 13	PASS
	Mid	QPSK	5.64	≤ 13	PASS
	Mid	16QAM	6.21	≤ 13	PASS
	Mid	64QAM	6.78	≤ 13	PASS
	High	QPSK	5.58	≤ 13	PASS
	High	16QAM	6.23	≤ 13	PASS
	High	64QAM	6.79	≤ 13	PASS
20	Low	QPSK	5.54	≤ 13	PASS
	Low	16QAM	6.19	≤ 13	PASS
	Low	64QAM	6.67	≤ 13	PASS
	Mid	QPSK	5.44	≤ 13	PASS
	Mid	16QAM	6.18	≤ 13	PASS
	Mid	64QAM	6.65	≤ 13	PASS
	High	QPSK	5.28	≤ 13	PASS
	High	16QAM	6.14	≤ 13	PASS
	High	64QAM	6.68	≤ 13	PASS



LTE Band 4					
BW(MHz)	Channel Level	Modulation	PAR Radio(dB)	Limit(dB)	Verdict
1.4	Low	QPSK	4.61	<=13	PASS
	Low	16QAM	5.63	<=13	PASS
	Low	64QAM	6.71	<=13	PASS
	Mid	QPSK	6.60	<=13	PASS
	Mid	16QAM	6.28	<=13	PASS
	Mid	64QAM	6.64	<=13	PASS
	High	QPSK	5.52	<=13	PASS
	High	16QAM	6.10	<=13	PASS
	High	64QAM	6.66	<=13	PASS
3	Low	QPSK	4.61	<=13	PASS
	Low	16QAM	5.61	<=13	PASS
	Low	64QAM	6.56	<=13	PASS
	Mid	QPSK	5.24	<=13	PASS
	Mid	16QAM	6.12	<=13	PASS
	Mid	64QAM	6.51	<=13	PASS
	High	QPSK	5.27	<=13	PASS
	High	16QAM	6.11	<=13	PASS
	High	64QAM	6.57	<=13	PASS
5	Low	QPSK	4.82	<=13	PASS
	Low	16QAM	5.62	<=13	PASS
	Low	64QAM	6.55	<=13	PASS
	Mid	QPSK	5.33	<=13	PASS
	Mid	16QAM	5.98	<=13	PASS
	Mid	64QAM	6.58	<=13	PASS
	High	QPSK	5.28	<=13	PASS
	High	16QAM	5.97	<=13	PASS
	High	64QAM	6.60	<=13	PASS
10	Low	QPSK	4.99	<=13	PASS
	Low	16QAM	5.85	<=13	PASS
	Low	64QAM	6.57	<=13	PASS
	Mid	QPSK	5.29	<=13	PASS
	Mid	16QAM	6.00	<=13	PASS
	Mid	64QAM	6.47	<=13	PASS
	High	QPSK	5.25	<=13	PASS
	High	16QAM	5.98	<=13	PASS
	High	64QAM	6.49	<=13	PASS



15	Low	QPSK	5.22	≤ 13	PASS
	Low	16QAM	6.05	≤ 13	PASS
	Low	64QAM	6.63	≤ 13	PASS
	Mid	QPSK	5.24	≤ 13	PASS
	Mid	16QAM	6.00	≤ 13	PASS
	Mid	64QAM	6.57	≤ 13	PASS
	High	QPSK	5.29	≤ 13	PASS
	High	16QAM	6.06	≤ 13	PASS
	High	64QAM	6.60	≤ 13	PASS
20	Low	QPSK	5.23	≤ 13	PASS
	Low	16QAM	6.07	≤ 13	PASS
	Low	64QAM	6.58	≤ 13	PASS
	Mid	QPSK	5.16	≤ 13	PASS
	Mid	16QAM	5.98	≤ 13	PASS
	Mid	64QAM	6.46	≤ 13	PASS
	High	QPSK	5.28	≤ 13	PASS
	High	16QAM	6.09	≤ 13	PASS
	High	64QAM	6.64	≤ 13	PASS



LTE Band 66					
BW(MHz)	Channel Level	Modulation	PAR Radio(dB)	Limit(dB)	Verdict
1.4	Low	QPSK	4.44	<=13	PASS
	Low	16QAM	5.34	<=13	PASS
	Low	64QAM	6.78	<=13	PASS
	Mid	QPSK	4.84	<=13	PASS
	Mid	16QAM	6.05	<=13	PASS
	Mid	64QAM	6.74	<=13	PASS
	High	QPSK	4.89	<=13	PASS
	High	16QAM	6.29	<=13	PASS
	High	64QAM	6.65	<=13	PASS
3	Low	QPSK	4.59	<=13	PASS
	Low	16QAM	5.53	<=13	PASS
	Low	64QAM	6.64	<=13	PASS
	Mid	QPSK	4.83	<=13	PASS
	Mid	16QAM	5.84	<=13	PASS
	Mid	64QAM	6.58	<=13	PASS
	High	QPSK	4.71	<=13	PASS
	High	16QAM	5.81	<=13	PASS
	High	64QAM	6.52	<=13	PASS
5	Low	QPSK	4.83	<=13	PASS
	Low	16QAM	5.66	<=13	PASS
	Low	64QAM	6.63	<=13	PASS
	Mid	QPSK	4.98	<=13	PASS
	Mid	16QAM	5.83	<=13	PASS
	Mid	64QAM	6.57	<=13	PASS
	High	QPSK	4.94	<=13	PASS
	High	16QAM	5.80	<=13	PASS
	High	64QAM	6.56	<=13	PASS
10	Low	QPSK	4.89	<=13	PASS
	Low	16QAM	5.71	<=13	PASS
	Low	64QAM	6.55	<=13	PASS
	Mid	QPSK	5.02	<=13	PASS
	Mid	16QAM	5.88	<=13	PASS
	Mid	64QAM	6.59	<=13	PASS
	High	QPSK	4.82	<=13	PASS
	High	16QAM	5.72	<=13	PASS
	High	64QAM	6.57	<=13	PASS



15	Low	QPSK	5.00	≤ 13	PASS
	Low	16QAM	5.97	≤ 13	PASS
	Low	64QAM	6.69	≤ 13	PASS
	Mid	QPSK	5.05	≤ 13	PASS
	Mid	16QAM	5.92	≤ 13	PASS
	Mid	64QAM	6.72	≤ 13	PASS
	High	QPSK	5.16	≤ 13	PASS
	High	16QAM	5.86	≤ 13	PASS
	High	64QAM	6.70	≤ 13	PASS
20	Low	QPSK	5.12	≤ 13	PASS
	Low	16QAM	6.05	≤ 13	PASS
	Low	64QAM	6.59	≤ 13	PASS
	Mid	QPSK	5.14	≤ 13	PASS
	Mid	16QAM	6.04	≤ 13	PASS
	Mid	64QAM	6.67	≤ 13	PASS
	High	QPSK	5.22	≤ 13	PASS
	High	16QAM	5.94	≤ 13	PASS
	High	64QAM	6.71	≤ 13	PASS



Band2 / 1.4MHz / Low CH / QPSK



Band2 / 1.4MHz / Low CH / 16QAM



Band2 / 1.4MHz / Low CH / 64QAM



Band2 / 1.4MHz / Mid CH / QPSK



Band2 / 1.4MHz / Mid CH / 16QAM



Band2 / 1.4MHz / Mid CH / 64QAM



Band2 / 1.4MHz / High CH / QPSK



Band2 / 1.4MHz / High CH / 16QAM



Band2 / 1.4MHz / High CH / 64QAM



Band2 / 3MHz / Low CH / QPSK



Band2 / 3MHz / Low CH / 16QAM



Band2 / 3MHz / Low CH / 64QAM



Band2 / 3MHz / Mid CH / QPSK



Band2 / 3MHz / Mid CH / 16QAM



Band2 / 3MHz / Mid CH / 64QAM



Band2 / 3MHz / High CH / QPSK



Band2 / 3MHz / High CH / 16QAM



Band2 / 3MHz / High CH / 64QAM



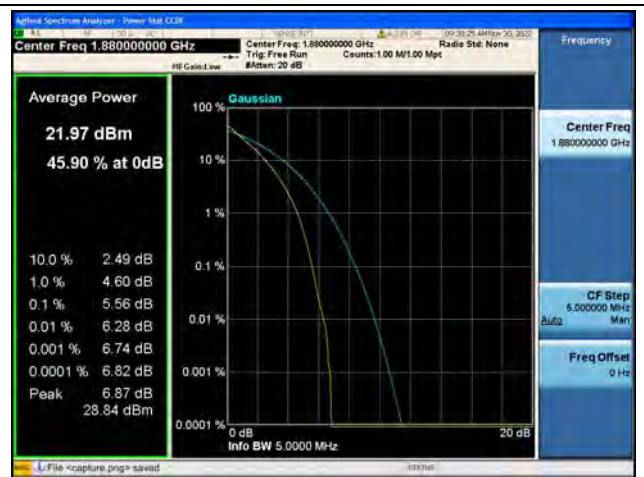
Band2 / 5MHz / Low CH / QPSK



Band2 / 5MHz / Low CH / 16QAM



Band2 / 5MHz / Low CH / 64QAM



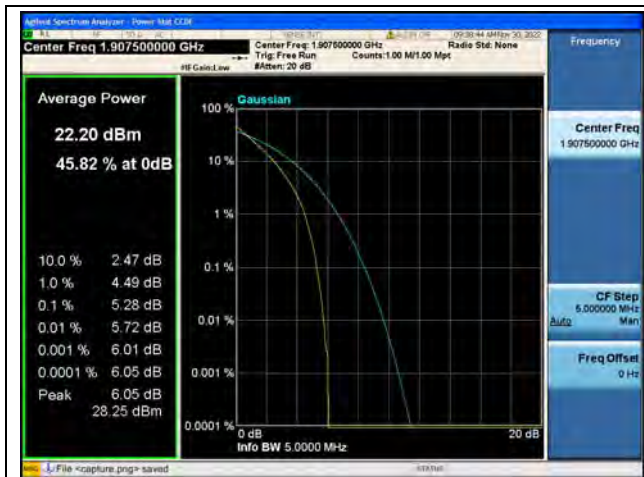
Band2 / 5MHz / Mid CH / QPSK



Band2 / 5MHz / Mid CH / 16QAM



Band2 / 5MHz / Mid CH / 64QAM



Band2 / 5MHz / High CH / QPSK



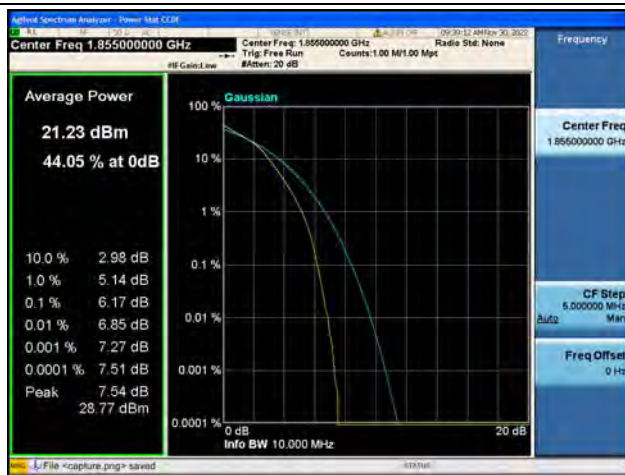
Band2 / 5MHz / High CH / 16QAM



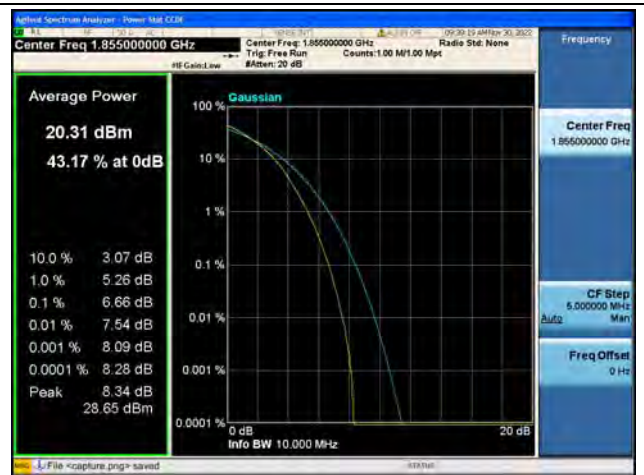
Band2 / 5MHz / High CH / 64QAM



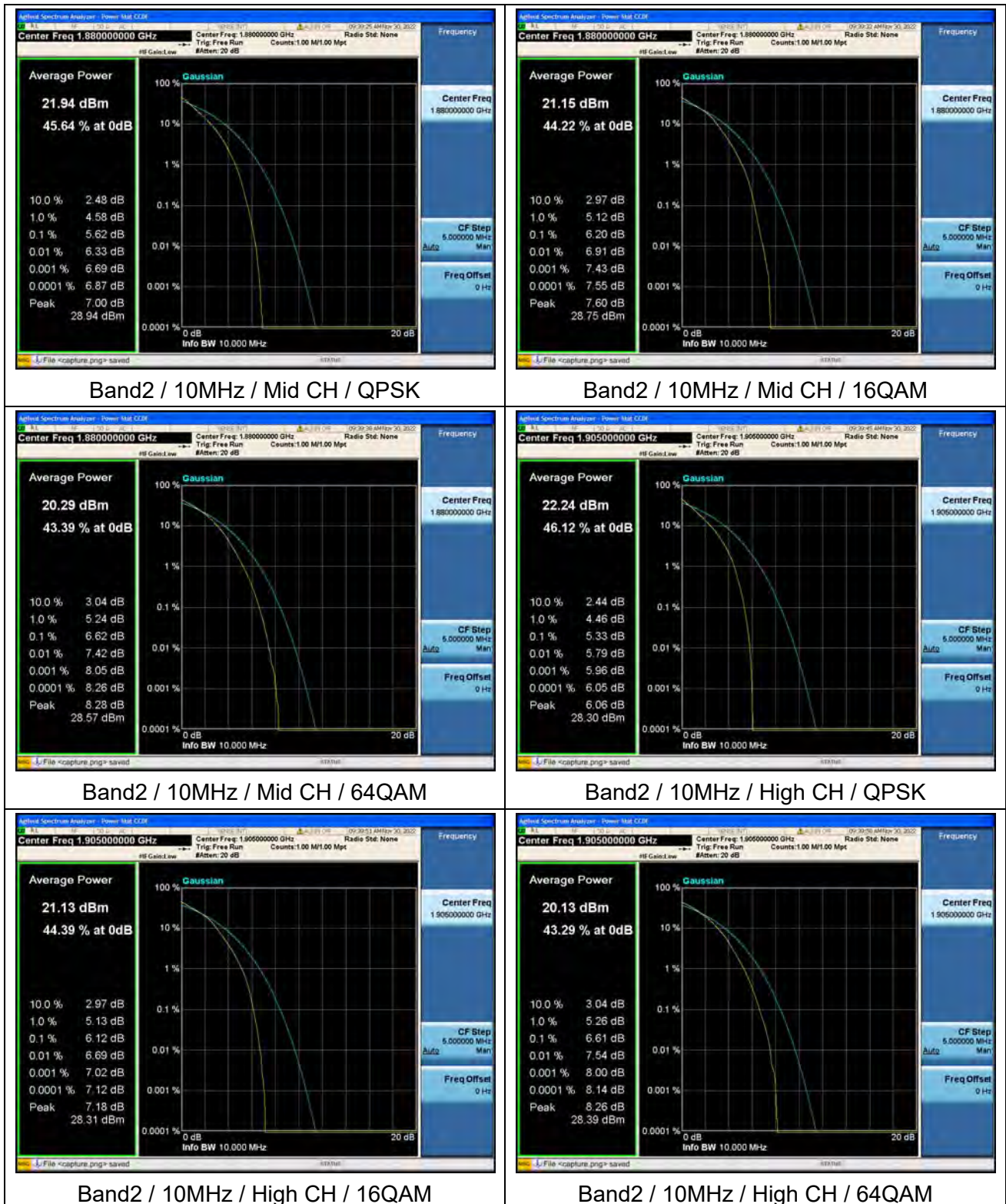
Band2 / 10MHz / Low CH / QPSK



Band2 / 10MHz / Low CH / 16QAM



Band2 / 10MHz / Low CH / 64QAM





Band2 / 15MHz / Low CH / QPSK



Band2 / 15MHz / Low CH / 16QAM



Band2 / 15MHz / Low CH / 64QAM



Band2 / 15MHz / Mid CH / QPSK



Band2 / 15MHz / Mid CH / 16QAM



Band2 / 15MHz / Mid CH / 64QAM