



TEST REPORT

APPLICANT : BLU Products, Inc.

PRODUCT NAME : Smart Phone

MODEL NAME : G72

BRAND NAME : BLU

FCC ID : YHLBLUG72

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

RECEIPT DATE : 2022-08-01

TEST DATE : 2022-08-04 to 2022-08-29

ISSUE DATE : 2022-09-05

Edited by: Zeng Xiaoying
Zeng Xiaoying (Rapporteur)

Approved by: Shen Junsheng
Shen Junsheng (Supervisor)

NOTE: This document is issued by Shenzhen Morlab Communications Technology Co., Ltd., the test report shall not be reproduced except in full without prior written permission of the company. The test results apply only to the particular sample(s) tested and to the specific tests carried out which is available on request for validation and information confirmed at our website.





DIRECTORY

- 1. Technical Information 3**
- 1.1. Applicant and Manufacturer Information 3**
- 1.2. Equipment Under Test (EUT) Description 3**
- 1.3. Maximum E.R.P./E.I.R.P. and Emission Designator 5**
- 1.4. Test Standards and Results 7**
- 1.5. Environmental Conditions 8**
- 2. 47 CFR Part 2, Part 22H, Part 24E, Part 27 H&L&M Requirements 9**
- 2.1. Transmitter Conducted Output Power and E.R.P./E.I.R.P. 9**
- 2.2. Occupied Bandwidth 75**
- 2.3. Frequency Stability 115**
- 2.4. Peak to Average Ratio 120**
- 2.5. Conducted Spurious Emissions 142**
- 2.6. Band Edge 179**
- 2.7. Radiated Spurious Emissions 213**
- Annex A Test Uncertainty 237**
- Annex B Testing Laboratory Information 238**

Change History		
Version	Date	Reason for change
1.0	2022-09-05	First edition



1. Technical Information

Note: Provide by applicant.

1.1. Applicant and Manufacturer Information

Applicant:	BLU Products, Inc.
Applicant Address:	10814 NW 33rd St # 100 Doral, FL 33172,USA
Manufacturer:	BLU Products, Inc.
Manufacturer Address:	10814 NW 33rd St # 100 Doral, FL 33172,USA

1.2. Equipment Under Test (EUT) Description

Product Name:	Smart Phone	
Sample No.:	2#	
Hardware Version:	S680_V1	
Software Version:	BLU_G0750WW_V12.0.01.00_GENERIC	
Modulation Type:	QPSK, 16QAM	
Carrier Aggregation:	Not Support	
Operation Band:	Band 2 / 4 / 5 / 7 / 12 / 17 / 66	
Frequency Range:	LTE Band 2	Tx: 1850MHz–1910MHz
		Rx: 1930MHz–1990MHz
	LTE Band 4	Tx: 1710MHz–1755MHz
		Rx: 2110MHz–2155MHz
	LTE Band 5	Tx: 824MHz–849MHz
		Rx: 869MHz–894MHz
	LTE Band 7	Tx: 2500MHz–2570MHz
		Rx: 2620MHz–2690MHz
	LTE Band 12	Tx: 699MHz - 716MHz
		Rx: 729MHz – 746MHz
	LTE Band 17	Tx: 704MHz - 716MHz
		Rx: 734MHz – 746MHz
	LTE Band 66	Tx: 1710MHz –1780MHz
		Rx: 2110MHz –2200MHz



Channel Bandwidth:	LTE Band 2	1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz
	LTE Band 4	1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz
	LTE Band 5	1.4MHz, 3MHz, 5MHz, 10MHz
	LTE Band 7	5 MHz, 10MHz, 15MHz, 20MHz
	LTE Band 12	1.4MHz, 3 MHz, 5 MHz, 10MHz
	LTE Band 17	5 MHz, 10MHz
	LTE Band 66	1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz
Antenna Type:	LDS Antenna	
Antenna Gain:	LTE Band 2	1.08dBi
	LTE Band 4	1.03dBi
	LTE Band 5	-0.95dBi
	LTE Band 7	1.19dBi
	LTE Band 12	-0.93dBi
	LTE Band 17	-0.93dBi
	LTE Band 66	1.01dBi
Accessory Information:	Battery	
	Brand Name:	BLU
	Model No.:	C976548500P
	Serial No.:	N/A
	Capacity:	4900mAh
	Rated Voltage:	3.85V
	Charge Limit:	4.4V
	Manufacturer:	Guangdong Fenghua New Energy Co., Ltd
	AC Adapter	
	Brand Name:	BLU
	Model No.:	US-CR-2000
	Serial No.:	N/A
	Rated Output:	5.0V \pm 2000mA
	Rated Input:	100-240V \sim 50/60Hz, 0.3A
	Manufacturer:	Shenzhen Bajunda 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	QPSK	16QAM
20		0.148	0.124	18M0G7D	18M1W7D
15		0.146	0.119	13M5G7D	13M5W7D
10		0.145	0.121	9M02G7D	8M98W7D
5		0.144	0.118	4M50G7D	4M51W7D
3		0.145	0.115	2M72G7D	2M72W7D
1.4		0.143	0.117	1M10G7D	1M10W7D
LTE Band 4		Maximum E.R.P./E.I.R.P. (W)		Emission Designator (99%OBW)	
BW(MHz)		QPSK	16QAM	QPSK	16QAM
20		0.131	0.113	18M0G7D	18M0W7D
15		0.129	0.108	13M5G7D	13M5W7D
10		0.128	0.108	9M02G7D	8M98W7D
5		0.127	0.108	4M50G7D	4M50W7D
3		0.130	0.111	2M72G7D	2M72W7D
1.4		0.129	0.111	1M10G7D	1M11W7D
LTE Band 5		Maximum E.R.P./E.I.R.P. (W)		Emission Designator (99%OBW)	
BW(MHz)		QPSK	16QAM	QPSK	16QAM
10		0.104	0.086	9M01G7D	8M98W7D
5		0.102	0.088	4M52G7D	4M51W7D
3		0.102	0.087	2M72G7D	2M72W7D
1.4		0.103	0.088	1M10G7D	1M10W7D
LTE Band 7		Maximum E.R.P./E.I.R.P. (W)		Emission Designator (99%OBW)	
BW(MHz)		QPSK	16QAM	QPSK	16QAM
20		0.070	0.060	18M0G7D	18M1W7D
15		0.069	0.060	13M5G7D	13M5W7D
10		0.067	0.059	9M05G7D	8M98W7D
5		0.067	0.058	4M51G7D	4M51W7D
LTE Band 12		Maximum E.R.P./E.I.R.P. (W)		Emission Designator (99%OBW)	
BW(MHz)		QPSK	16QAM	QPSK	16QAM
10		0.110	0.089	9M03G7D	9M00W7D
5		0.108	0.088	4M50G7D	4M51W7D
3		0.109	0.093	2M72G7D	2M71W7D
1.4		0.107	0.091	1M10G7D	1M10W7D



LTE Band 17	Maximum E.R.P./E.I.R.P. (W)		Emission Designator (99%OBW)	
BW(MHz)	QPSK	16QAM	QPSK	16QAM
10	0.108	0.092	8M99G7D	8M97W7D
5	0.106	0.100	4M50G7D	4M50W7D
LTE Band 66	Maximum E.R.P./E.I.R.P. (W)		Emission Designator (99%OBW)	
BW(MHz)	QPSK	16QAM	QPSK	16QAM
20	0.140	0.115	18M0G7D	18M0W7D
15	0.139	0.116	13M5G7D	13M5W7D
10	0.140	0.119	9M03G7D	8M98W7D
5	0.138	0.119	4M50G7D	4M50W7D
3	0.137	0.114	2M72G7D	2M71W7D
1.4	0.138	0.116	1M10G7D	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 22.913(a)(2) 24.232(c) 27.50(b)(10) 27.50(c)(10) 27.50(d)(4) 27.50(h)(2)	Transmitter Conducted Output Power and E.R.P./E.I.R.P.	Aug. 29, 2022	Chen Hao Li Huaijie	PASS	No deviation
2.1049	Occupied Bandwidth	Aug. 10, 2022	Li Huaijie	PASS	No deviation
2.1055 22.355 24.235 27.54	Frequency Stability	Aug. 12, 2022	Li Huaijie	PASS	No deviation
24.232(d), 27.50(d)(5)	Peak to Average Radio	Aug. 09, 2022	Li Huaijie	PASS	No deviation
2.1051 22.917(a) 24.238(a) 27.53(c)(2) 27.53(g) 27.53(h) 27.53(m)(4)	Conducted Spurious Emissions	Aug. 08&10, 2022	Li Huaijie	PASS	No deviation
2.1051 22.917(a)	Band Edge	Aug. 04&08, 2022	Li Huaijie	PASS	No deviation



24.238(a) 27.53(g) 27.53(h) 27.53(m)(4)					
2.1053 22.917(a) 24.238(a) 27.53(g) 27.53(h) 27.53(m)(4)	Radiated Spurious Emissions	Aug. 07, 2022	Lin Jiayong	PASS	No deviation

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

Note 2: The path loss during the RF test is calibrated to correct the results by the offset setting in the test equipments. The ref offset 28.0dB contains two parts that cable loss 18.0dB 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.

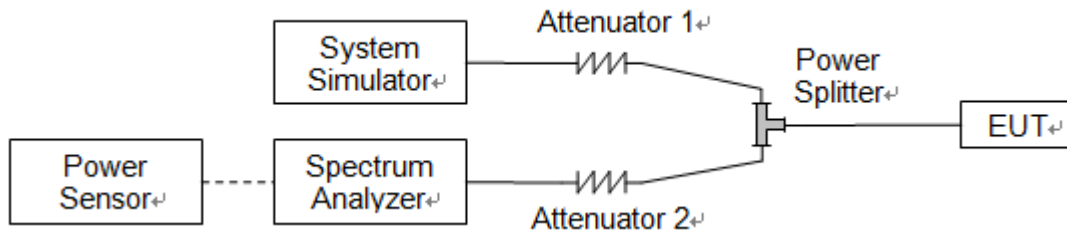
According to FCC section 27.50 (d)(4) for LTE Band 4/66, Fixed, mobile and portable (hand-held) stations in the 1710-1755MHz band are limited to 1wat E.I.R.P.

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

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

According to FCC section 27.50 (c)(10) for LTE Band 12/17, 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	20.60	20.63	20.57
20	QPSK	1	49	20.58	20.52	20.45
20	QPSK	1	99	20.52	20.48	20.46
20	QPSK	50	0	19.48	19.57	19.50
20	QPSK	50	24	19.49	19.54	19.54
20	QPSK	50	50	19.54	19.50	19.56
20	QPSK	100	0	19.47	19.56	19.52
20	16QAM	1	0	19.53	19.53	19.55
20	16QAM	1	49	19.37	19.67	19.63
20	16QAM	1	99	19.62	19.47	19.87
20	16QAM	50	0	19.55	19.52	19.50
20	16QAM	50	24	19.51	19.56	19.57
20	16QAM	50	50	19.59	19.56	19.63
20	16QAM	100	0	19.62	19.63	19.50



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	20.41	20.44	20.35
15	QPSK	1	37	20.20	20.56	20.44
15	QPSK	1	74	20.57	20.49	20.57
15	QPSK	36	0	19.34	19.43	19.42
15	QPSK	36	20	19.33	19.52	19.49
15	QPSK	36	39	19.45	19.46	19.43
15	QPSK	75	0	19.37	19.43	19.39
15	16QAM	1	0	19.46	19.54	19.48
15	16QAM	1	37	19.59	19.62	19.48
15	16QAM	1	74	19.54	19.66	19.66
15	16QAM	36	0	19.33	19.38	19.41
15	16QAM	36	20	19.42	19.35	19.48
15	16QAM	36	39	19.47	19.56	19.53
15	16QAM	75	0	19.34	19.36	19.45



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	20.45	20.44	20.54
10	QPSK	1	25	20.49	20.52	20.47
10	QPSK	1	49	20.45	20.46	20.45
10	QPSK	25	0	19.32	19.33	19.29
10	QPSK	25	12	19.28	19.40	19.33
10	QPSK	25	25	19.19	19.32	19.28
10	QPSK	50	0	19.25	19.34	19.32
10	16QAM	1	0	19.73	19.66	19.65
10	16QAM	1	25	19.42	19.38	19.45
10	16QAM	1	49	19.37	19.45	19.24
10	16QAM	25	0	19.27	19.26	19.23
10	16QAM	25	12	19.43	19.23	19.23
10	16QAM	25	25	19.23	19.43	19.53
10	16QAM	50	0	19.60	19.53	19.57



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	20.45	20.50	20.44
5	QPSK	1	12	20.44	20.39	20.42
5	QPSK	1	24	20.40	20.48	20.49
5	QPSK	12	0	19.37	19.28	19.35
5	QPSK	12	7	19.38	19.43	19.35
5	QPSK	12	13	19.37	19.36	19.39
5	QPSK	25	0	19.36	19.34	19.36
5	16QAM	1	0	19.29	19.19	19.57
5	16QAM	1	12	19.27	19.20	19.57
5	16QAM	1	24	19.30	19.17	19.56
5	16QAM	12	0	19.39	19.53	19.39
5	16QAM	12	7	19.29	19.29	19.09
5	16QAM	12	13	19.09	19.42	19.19
5	16QAM	25	0	19.19	19.65	19.63



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	20.39	20.46	20.38
3	QPSK	1	8	20.49	20.52	20.35
3	QPSK	1	14	20.50	20.37	20.37
3	QPSK	8	0	19.45	19.40	19.42
3	QPSK	8	4	19.51	19.45	19.46
3	QPSK	8	7	19.51	19.45	19.41
3	QPSK	15	0	19.43	19.51	19.44
3	16QAM	1	0	19.39	19.30	19.24
3	16QAM	1	8	19.43	19.37	19.33
3	16QAM	1	14	19.36	19.33	19.21
3	16QAM	8	0	19.39	19.52	19.44
3	16QAM	8	4	19.46	19.43	19.49
3	16QAM	8	7	19.36	19.41	19.44
3	16QAM	15	0	19.39	19.43	19.38



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	20.45	20.48	20.43
1.4	QPSK	1	3	20.35	20.33	20.32
1.4	QPSK	1	5	20.32	20.30	20.28
1.4	QPSK	3	0	20.32	20.32	20.28
1.4	QPSK	3	1	20.36	20.33	20.31
1.4	QPSK	3	3	20.38	20.42	20.31
1.4	QPSK	6	0	19.41	19.39	19.38
1.4	16QAM	1	0	19.44	19.44	19.38
1.4	16QAM	1	3	19.40	19.60	19.58
1.4	16QAM	1	5	19.28	19.48	19.16
1.4	16QAM	3	0	19.30	19.35	19.32
1.4	16QAM	3	1	19.48	19.30	19.35
1.4	16QAM	3	3	19.50	19.47	19.21
1.4	16QAM	6	0	19.51	19.44	19.39



LTE Band 4						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20050	20175	20300
Frequency (MHz)				1720	1732.5	1745
20	QPSK	1	0	20.06	20.14	20.13
20	QPSK	1	49	19.92	20.00	19.99
20	QPSK	1	99	19.84	19.97	20.09
20	QPSK	50	0	19.22	19.26	19.23
20	QPSK	50	24	19.13	19.21	19.21
20	QPSK	50	50	19.02	19.13	19.14
20	QPSK	100	0	19.12	19.16	19.23
20	16QAM	1	0	18.99	19.29	19.16
20	16QAM	1	49	19.14	18.91	19.05
20	16QAM	1	99	18.93	19.15	18.99
20	16QAM	50	0	19.12	19.05	19.19
20	16QAM	50	24	19.38	19.49	19.38
20	16QAM	50	50	19.34	19.35	19.35
20	16QAM	100	0	19.36	19.44	19.45



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	19.93	19.97	20.07
15	QPSK	1	37	19.97	20.06	19.98
15	QPSK	1	74	19.84	20.06	20.09
15	QPSK	36	0	19.07	19.14	19.17
15	QPSK	36	20	19.11	19.24	19.20
15	QPSK	36	39	19.16	19.15	19.24
15	QPSK	75	0	19.11	19.13	19.14
15	16QAM	1	0	19.05	19.27	18.99
15	16QAM	1	37	19.13	19.13	18.97
15	16QAM	1	74	18.99	19.29	19.08
15	16QAM	36	0	19.00	19.02	19.21
15	16QAM	36	20	18.95	19.02	19.08
15	16QAM	36	39	18.91	19.00	19.06
15	16QAM	75	0	19.02	19.03	19.12



LTE Band 4						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20000	20175	20350
Frequency (MHz)				1715	1732.5	1750
10	QPSK	1	0	20.05	20.04	19.87
10	QPSK	1	25	20.03	19.96	19.97
10	QPSK	1	49	19.91	19.74	19.97
10	QPSK	25	0	18.90	19.12	19.14
10	QPSK	25	12	19.02	19.08	19.12
10	QPSK	25	25	18.91	19.02	19.09
10	QPSK	50	0	18.97	19.07	18.99
10	16QAM	1	0	18.96	19.11	18.87
10	16QAM	1	25	19.23	18.97	19.29
10	16QAM	1	49	19.30	19.20	19.19
10	16QAM	25	0	18.96	18.95	18.94
10	16QAM	25	12	18.88	18.98	18.95
10	16QAM	25	25	19.22	19.13	19.22
10	16QAM	50	0	19.16	19.20	19.32



LTE Band 4						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				19975	20175	20375
Frequency (MHz)				1712.5	1732.5	1752.5
5	QPSK	1	0	20.02	19.97	20.02
5	QPSK	1	12	20.01	19.96	19.93
5	QPSK	1	24	19.76	19.88	19.87
5	QPSK	12	0	18.98	18.98	19.02
5	QPSK	12	7	18.98	19.09	19.06
5	QPSK	12	13	18.93	19.10	19.02
5	QPSK	25	0	18.96	19.00	19.06
5	16QAM	1	0	18.86	19.27	18.95
5	16QAM	1	12	18.97	19.32	18.91
5	16QAM	1	24	18.91	19.26	18.86
5	16QAM	12	0	18.90	18.84	18.87
5	16QAM	12	7	18.93	18.97	18.95
5	16QAM	12	13	19.20	19.27	19.31
5	16QAM	25	0	19.21	19.32	19.25



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	19.87	19.88	20.00
3	QPSK	1	8	19.96	20.10	20.04
3	QPSK	1	14	19.76	19.95	19.95
3	QPSK	8	0	18.96	19.02	19.03
3	QPSK	8	4	19.02	19.10	19.12
3	QPSK	8	7	18.98	19.08	19.08
3	QPSK	15	0	18.98	19.04	18.98
3	16QAM	1	0	19.06	19.15	19.19
3	16QAM	1	8	19.28	19.28	19.02
3	16QAM	1	14	19.19	18.97	19.05
3	16QAM	8	0	18.98	18.99	19.08
3	16QAM	8	4	19.08	19.08	19.09
3	16QAM	8	7	19.30	19.38	19.42
3	16QAM	15	0	19.30	19.28	19.35



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				19957	20175	20393
Frequency (MHz)				1710.7	1732.5	1754.3
1.4	QPSK	1	0	20.02	20.07	20.05
1.4	QPSK	1	3	19.96	19.96	20.00
1.4	QPSK	1	5	19.82	19.91	19.93
1.4	QPSK	3	0	19.90	19.87	19.86
1.4	QPSK	3	1	19.86	19.96	20.01
1.4	QPSK	3	3	19.85	19.92	19.91
1.4	QPSK	6	0	19.01	19.03	18.99
1.4	16QAM	1	0	18.95	19.42	19.08
1.4	16QAM	1	3	19.08	19.16	19.20
1.4	16QAM	1	5	19.14	19.30	19.10
1.4	16QAM	3	0	19.17	19.21	19.12
1.4	16QAM	3	1	19.18	19.21	19.23
1.4	16QAM	3	3	19.17	19.29	19.18
1.4	16QAM	6	0	19.08	19.09	19.00



LTE Band 5						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20450	20525	20600
Frequency (MHz)				829	836.5	844
10	QPSK	1	0	23.24	23.25	23.17
10	QPSK	1	25	23.10	23.13	22.93
10	QPSK	1	49	23.02	23.14	22.82
10	QPSK	25	0	22.33	22.35	22.16
10	QPSK	25	12	22.09	22.11	22.16
10	QPSK	25	25	22.09	22.20	22.25
10	QPSK	50	0	22.15	22.03	22.17
10	16QAM	1	0	22.19	22.38	22.09
10	16QAM	1	25	22.42	22.45	22.13
10	16QAM	1	49	22.25	22.31	22.38
10	16QAM	25	0	22.34	22.35	22.17
10	16QAM	25	12	22.28	22.36	22.14
10	16QAM	25	25	22.31	22.24	22.27
10	16QAM	50	0	22.32	22.23	22.13



LTE Band 5						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20425	20525	20625
Frequency (MHz)				826.5	836.5	846.5
5	QPSK	1	0	23.19	23.15	23.13
5	QPSK	1	12	23.09	23.20	23.04
5	QPSK	1	24	23.09	23.04	23.04
5	QPSK	12	0	22.24	22.29	22.15
5	QPSK	12	7	22.31	22.32	22.24
5	QPSK	12	13	22.36	22.20	22.15
5	QPSK	25	0	22.27	22.23	22.15
5	16QAM	1	0	22.56	22.49	22.25
5	16QAM	1	12	22.26	22.48	22.24
5	16QAM	1	24	22.13	22.48	22.31
5	16QAM	12	0	22.22	22.31	22.30
5	16QAM	12	7	22.29	22.32	22.14
5	16QAM	12	13	22.29	22.20	22.25
5	16QAM	25	0	22.30	22.35	22.30



LTE Band 5						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20415	20525	20635
Frequency (MHz)				825.5	836.5	847.5
3	QPSK	1	0	23.18	23.19	23.04
3	QPSK	1	8	23.14	23.15	23.06
3	QPSK	1	14	23.15	23.13	22.87
3	QPSK	8	0	22.17	22.30	22.28
3	QPSK	8	4	22.31	22.37	22.34
3	QPSK	8	7	22.26	22.28	22.15
3	QPSK	15	0	22.24	22.30	22.29
3	16QAM	1	0	22.26	22.37	22.44
3	16QAM	1	8	22.19	22.45	22.29
3	16QAM	1	14	22.24	22.50	22.25
3	16QAM	8	0	22.20	22.29	22.03
3	16QAM	8	4	22.36	22.47	22.04
3	16QAM	8	7	22.28	22.34	22.08
3	16QAM	15	0	22.22	22.24	21.79



LTE Band 5						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20407	20525	20643
Frequency (MHz)				824.7	836.5	848.3
1.4	QPSK	1	0	23.19	23.16	23.20
1.4	QPSK	1	3	23.22	23.15	23.22
1.4	QPSK	1	5	23.11	23.05	23.06
1.4	QPSK	3	0	23.12	23.18	23.14
1.4	QPSK	3	1	23.18	23.05	23.15
1.4	QPSK	3	3	23.19	23.11	23.11
1.4	QPSK	6	0	22.22	22.21	22.20
1.4	16QAM	1	0	22.35	22.16	22.33
1.4	16QAM	1	3	22.15	22.39	22.28
1.4	16QAM	1	5	22.54	22.22	22.28
1.4	16QAM	3	0	22.07	22.05	22.19
1.4	16QAM	3	1	22.10	22.37	22.23
1.4	16QAM	3	3	22.18	22.29	22.17
1.4	16QAM	6	0	22.37	22.24	22.28



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	17.23	17.24	17.16
20	QPSK	1	49	17.18	17.22	17.11
20	QPSK	1	99	17.13	17.08	17.13
20	QPSK	50	0	16.54	16.61	16.58
20	QPSK	50	24	16.30	16.27	16.17
20	QPSK	50	50	16.40	16.43	16.40
20	QPSK	100	0	16.35	16.37	16.34
20	16QAM	1	0	16.16	16.26	16.44
20	16QAM	1	49	16.31	16.17	16.45
20	16QAM	1	99	16.25	16.56	16.21
20	16QAM	50	0	16.10	16.20	16.13
20	16QAM	50	24	16.15	16.07	16.18
20	16QAM	50	50	16.23	16.28	16.11
20	16QAM	100	0	16.11	16.23	16.21



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	17.06	17.15	17.15
15	QPSK	1	37	17.16	17.13	17.17
15	QPSK	1	74	17.10	17.17	17.17
15	QPSK	36	0	16.13	16.22	16.24
15	QPSK	36	20	16.21	16.28	16.23
15	QPSK	36	39	16.24	16.27	16.31
15	QPSK	75	0	16.05	15.98	16.00
15	16QAM	1	0	16.41	16.52	16.59
15	16QAM	1	37	16.23	16.34	16.32
15	16QAM	1	74	16.27	16.27	16.49
15	16QAM	36	0	16.11	16.22	16.24
15	16QAM	36	20	16.18	16.21	16.20
15	16QAM	36	39	16.24	16.22	16.11
15	16QAM	75	0	16.19	16.27	16.19



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	17.05	16.92	16.95
10	QPSK	1	25	17.08	16.98	17.00
10	QPSK	1	49	17.01	16.98	17.00
10	QPSK	25	0	16.05	16.05	16.04
10	QPSK	25	12	16.01	16.13	16.18
10	QPSK	25	25	15.94	16.12	16.12
10	QPSK	50	0	16.03	16.15	16.14
10	16QAM	1	0	16.03	16.21	16.06
10	16QAM	1	25	16.02	16.04	16.09
10	16QAM	1	49	16.49	16.39	16.30
10	16QAM	25	0	16.17	16.05	16.13
10	16QAM	25	12	15.99	16.16	16.09
10	16QAM	25	25	16.04	16.07	15.99
10	16QAM	50	0	16.07	16.16	16.01



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	17.09	17.00	16.90
5	QPSK	1	12	16.96	16.89	16.97
5	QPSK	1	24	16.90	16.96	17.00
5	QPSK	12	0	16.10	16.18	16.10
5	QPSK	12	7	16.17	16.32	16.24
5	QPSK	12	13	16.19	16.35	16.20
5	QPSK	25	0	16.20	16.21	16.16
5	16QAM	1	0	16.13	16.11	16.17
5	16QAM	1	12	16.18	16.40	16.30
5	16QAM	1	24	16.24	16.43	16.25
5	16QAM	12	0	16.40	16.46	16.37
5	16QAM	12	7	16.29	16.31	16.27
5	16QAM	12	13	16.29	16.35	16.48
5	16QAM	25	0	16.26	16.31	16.33



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	23.35	23.51	23.40
10	QPSK	1	25	23.21	23.34	23.37
10	QPSK	1	49	23.31	23.32	23.31
10	QPSK	25	0	22.46	22.56	22.47
10	QPSK	25	12	22.43	22.37	22.16
10	QPSK	25	25	22.48	22.54	22.47
10	QPSK	50	0	22.49	22.51	22.42
10	16QAM	1	0	22.56	22.11	22.24
10	16QAM	1	25	22.31	22.26	22.40
10	16QAM	1	49	22.40	22.45	22.34
10	16QAM	25	0	22.29	22.31	22.25
10	16QAM	25	12	22.33	22.37	22.26
10	16QAM	25	25	22.38	22.39	22.33
10	16QAM	50	0	22.28	22.36	22.41



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	23.10	23.43	23.21
5	QPSK	1	12	23.26	23.42	23.26
5	QPSK	1	24	23.22	23.41	23.27
5	QPSK	12	0	22.33	22.40	22.39
5	QPSK	12	7	22.44	22.46	22.43
5	QPSK	12	13	22.39	22.42	22.39
5	QPSK	25	0	22.35	22.47	22.43
5	16QAM	1	0	22.36	22.38	22.40
5	16QAM	1	12	22.53	22.48	22.49
5	16QAM	1	24	22.49	22.47	22.43
5	16QAM	12	0	22.23	22.20	22.23
5	16QAM	12	7	22.37	22.42	22.26
5	16QAM	12	13	22.32	22.29	22.34
5	16QAM	25	0	22.33	22.29	22.31



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	23.18	23.45	23.12
3	QPSK	1	8	23.36	23.35	23.25
3	QPSK	1	14	23.30	23.41	23.36
3	QPSK	8	0	22.41	22.39	22.39
3	QPSK	8	4	22.44	22.47	22.48
3	QPSK	8	7	22.39	22.47	22.41
3	QPSK	15	0	22.38	22.46	22.32
3	16QAM	1	0	22.39	22.75	22.34
3	16QAM	1	8	22.59	22.57	22.52
3	16QAM	1	14	22.42	22.47	22.33
3	16QAM	8	0	22.39	22.28	22.31
3	16QAM	8	4	22.44	22.41	22.52
3	16QAM	8	7	22.28	22.31	22.37
3	16QAM	15	0	22.26	22.19	22.18



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	23.21	23.38	23.18
1.4	QPSK	1	3	23.32	23.31	23.33
1.4	QPSK	1	5	23.21	23.26	23.22
1.4	QPSK	3	0	23.16	23.29	23.27
1.4	QPSK	3	1	23.37	23.37	23.04
1.4	QPSK	3	3	23.32	23.34	23.30
1.4	QPSK	6	0	22.38	22.35	22.33
1.4	16QAM	1	0	22.42	22.36	22.21
1.4	16QAM	1	3	22.23	22.66	22.33
1.4	16QAM	1	5	22.35	22.36	22.35
1.4	16QAM	3	0	22.19	22.22	22.23
1.4	16QAM	3	1	22.35	22.43	22.27
1.4	16QAM	3	3	22.18	22.32	22.32
1.4	16QAM	6	0	22.11	22.31	22.21



LTE Band 17						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				23780	23790	23800
Frequency (MHz)				709	710	711
10	QPSK	1	0	23.40	23.43	23.40
10	QPSK	1	25	23.28	23.24	23.30
10	QPSK	1	49	23.21	23.24	23.19
10	QPSK	25	0	22.51	22.57	22.49
10	QPSK	25	12	22.36	22.30	22.44
10	QPSK	25	25	22.34	22.34	22.43
10	QPSK	50	0	22.47	22.34	22.35
10	16QAM	1	0	22.20	22.39	22.53
10	16QAM	1	25	22.41	22.70	22.54
10	16QAM	1	49	22.37	22.62	22.67
10	16QAM	25	0	22.31	22.55	22.54
10	16QAM	25	12	22.37	22.52	22.50
10	16QAM	25	25	22.20	22.46	22.51
10	16QAM	50	0	22.24	22.53	22.50



LTE Band 17						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				23755	23790	23825
Frequency (MHz)				706.5	710	713.5
5	QPSK	1	0	23.34	23.30	23.26
5	QPSK	1	12	23.33	23.29	23.28
5	QPSK	1	24	23.25	23.31	23.30
5	QPSK	12	0	22.41	22.59	22.75
5	QPSK	12	7	22.53	22.62	22.70
5	QPSK	12	13	22.36	22.64	22.70
5	QPSK	25	0	22.39	22.56	22.69
5	16QAM	1	0	22.87	22.92	22.64
5	16QAM	1	12	23.04	22.60	22.97
5	16QAM	1	24	22.88	22.93	23.09
5	16QAM	12	0	22.32	22.35	22.56
5	16QAM	12	7	22.32	22.39	22.51
5	16QAM	12	13	22.23	22.48	22.51
5	16QAM	25	0	22.33	22.45	22.49



LTE Band 66						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				132072	132322	132572
Frequency (MHz)				1720	1745	1770
20	QPSK	1	0	20.39	20.45	20.43
20	QPSK	1	49	20.24	20.23	20.19
20	QPSK	1	99	20.17	20.16	20.19
20	QPSK	50	0	19.62	19.69	19.65
20	QPSK	50	24	19.43	19.45	19.58
20	QPSK	50	50	19.47	19.55	19.43
20	QPSK	100	0	19.45	19.45	19.37
20	16QAM	1	0	19.50	19.26	19.54
20	16QAM	1	49	19.55	19.29	19.35
20	16QAM	1	99	19.41	19.59	19.38
20	16QAM	50	0	19.53	19.50	19.47
20	16QAM	50	24	19.42	19.42	19.43
20	16QAM	50	50	19.39	19.31	19.27
20	16QAM	100	0	19.35	19.38	19.44



LTE Band 66						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				132047	132322	132597
Frequency (MHz)				1717.5	1745	1772.5
15	QPSK	1	0	20.37	20.41	20.39
15	QPSK	1	37	20.41	20.37	20.35
15	QPSK	1	74	20.35	20.31	20.29
15	QPSK	36	0	19.56	19.53	19.57
15	QPSK	36	20	19.56	19.48	19.58
15	QPSK	36	39	19.42	19.47	19.44
15	QPSK	75	0	19.37	19.41	19.34
15	16QAM	1	0	19.36	19.23	19.53
15	16QAM	1	37	19.23	19.53	19.46
15	16QAM	1	74	19.33	19.23	19.23
15	16QAM	36	0	19.54	19.54	19.45
15	16QAM	36	20	19.57	19.56	19.62
15	16QAM	36	39	19.49	19.64	19.58
15	16QAM	75	0	19.59	19.57	19.53



LTE Band 66						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				132022	132322	132622
Frequency (MHz)				1715	1745	1775
10	QPSK	1	0	20.40	20.40	20.41
10	QPSK	1	25	20.30	20.28	20.36
10	QPSK	1	49	20.44	20.32	20.22
10	QPSK	25	0	19.59	19.52	19.59
10	QPSK	25	12	19.56	19.75	19.53
10	QPSK	25	25	19.52	19.48	19.40
10	QPSK	50	0	19.60	19.45	19.64
10	16QAM	1	0	19.52	19.52	19.72
10	16QAM	1	25	19.52	19.61	19.73
10	16QAM	1	49	19.35	19.55	19.43
10	16QAM	25	0	19.36	19.53	19.41
10	16QAM	25	12	19.35	19.55	19.46
10	16QAM	25	25	19.26	19.31	19.31
10	16QAM	50	0	19.42	19.46	19.47



LTE Band 66						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				131997	132322	132647
Frequency (MHz)				1712.5	1745	1777.5
5	QPSK	1	0	20.29	20.32	20.37
5	QPSK	1	12	20.32	20.32	20.31
5	QPSK	1	24	20.40	20.30	20.36
5	QPSK	12	0	19.42	19.44	19.40
5	QPSK	12	7	19.44	19.52	19.45
5	QPSK	12	13	19.30	19.36	19.37
5	QPSK	25	0	19.40	19.41	19.40
5	16QAM	1	0	19.75	19.44	19.45
5	16QAM	1	12	19.38	19.67	19.62
5	16QAM	1	24	19.50	19.39	19.74
5	16QAM	12	0	19.39	19.50	19.46
5	16QAM	12	7	19.56	19.48	19.60
5	16QAM	12	13	19.47	19.41	19.48
5	16QAM	25	0	19.48	19.50	19.42



LTE Band 66						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				131987	132322	132657
Frequency (MHz)				1711.5	1745	1778.5
3	QPSK	1	0	20.36	20.27	20.26
3	QPSK	1	8	20.23	20.24	20.32
3	QPSK	1	14	20.14	19.95	20.25
3	QPSK	8	0	19.54	19.51	19.55
3	QPSK	8	4	19.49	19.41	19.51
3	QPSK	8	7	19.35	19.40	19.37
3	QPSK	15	0	19.44	19.48	19.41
3	16QAM	1	0	19.13	19.54	19.30
3	16QAM	1	8	19.46	19.40	19.39
3	16QAM	1	14	19.50	19.39	19.09
3	16QAM	8	0	19.31	19.31	19.22
3	16QAM	8	4	19.34	19.33	19.39
3	16QAM	8	7	19.26	19.41	19.35
3	16QAM	15	0	19.36	19.34	19.30



LTE Band 66						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				131979	132322	132665
Frequency (MHz)				1710.7	1745	1779.3
1.4	QPSK	1	0	20.30	20.21	20.22
1.4	QPSK	1	3	20.36	20.38	20.38
1.4	QPSK	1	5	20.28	20.16	20.32
1.4	QPSK	3	0	20.27	20.20	20.27
1.4	QPSK	3	1	20.24	20.30	20.21
1.4	QPSK	3	3	20.25	20.21	20.13
1.4	QPSK	6	0	19.57	19.42	19.61
1.4	16QAM	1	0	19.44	19.44	19.64
1.4	16QAM	1	3	19.44	19.53	19.65
1.4	16QAM	1	5	19.27	19.47	19.35
1.4	16QAM	3	0	19.22	19.19	19.45
1.4	16QAM	3	1	19.31	19.21	19.33
1.4	16QAM	3	3	19.32	19.33	19.27
1.4	16QAM	6	0	19.21	19.12	19.13



Effective Radiated Power and Effective Isotropic Radiated Power

LTE Band 2				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				18700		18900		19100	
Frequency (MHz)				1860		1880		1900	
				dBm	W	dBm	W	dBm	W
20	QPSK	1	0	21.68	0.147	21.71	0.148	21.65	0.146
20	QPSK	1	49	21.66	0.147	21.60	0.145	21.53	0.142
20	QPSK	1	99	21.60	0.145	21.56	0.143	21.54	0.143
20	QPSK	50	0	20.56	0.114	20.65	0.116	20.58	0.114
20	QPSK	50	24	20.57	0.114	20.62	0.115	20.62	0.115
20	QPSK	50	50	20.62	0.115	20.58	0.114	20.64	0.116
20	QPSK	100	0	20.55	0.114	20.64	0.116	20.60	0.115
20	16QAM	1	0	20.61	0.115	20.61	0.115	20.63	0.116
20	16QAM	1	49	20.45	0.111	20.75	0.119	20.71	0.118
20	16QAM	1	99	20.70	0.117	20.55	0.114	20.95	0.124
20	16QAM	50	0	20.63	0.116	20.60	0.115	20.58	0.114
20	16QAM	50	24	20.59	0.115	20.64	0.116	20.65	0.116
20	16QAM	50	50	20.67	0.117	20.64	0.116	20.71	0.118
20	16QAM	100	0	20.70	0.117	20.71	0.118	20.58	0.114



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	21.49	0.141	21.52	0.142	21.43	0.139
15	QPSK	1	37	21.28	0.134	21.64	0.146	21.52	0.142
15	QPSK	1	74	21.65	0.146	21.57	0.144	21.65	0.146
15	QPSK	36	0	20.42	0.110	20.51	0.112	20.50	0.112
15	QPSK	36	20	20.41	0.110	20.60	0.115	20.57	0.114
15	QPSK	36	39	20.53	0.113	20.54	0.113	20.51	0.112
15	QPSK	75	0	20.45	0.111	20.51	0.112	20.47	0.111
15	16QAM	1	0	20.54	0.113	20.62	0.115	20.56	0.114
15	16QAM	1	37	20.67	0.117	20.70	0.117	20.56	0.114
15	16QAM	1	74	20.62	0.115	20.74	0.119	20.74	0.119
15	16QAM	36	0	20.41	0.110	20.46	0.111	20.49	0.112
15	16QAM	36	20	20.50	0.112	20.43	0.110	20.56	0.114
15	16QAM	36	39	20.55	0.114	20.64	0.116	20.61	0.115
15	16QAM	75	0	20.42	0.110	20.44	0.111	20.53	0.113



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	21.53	0.142	21.52	0.142	21.62	0.145
10	QPSK	1	25	21.57	0.144	21.60	0.145	21.55	0.143
10	QPSK	1	49	21.53	0.142	21.54	0.143	21.53	0.142
10	QPSK	25	0	20.40	0.110	20.41	0.110	20.37	0.109
10	QPSK	25	12	20.36	0.109	20.48	0.112	20.41	0.110
10	QPSK	25	25	20.27	0.106	20.40	0.110	20.36	0.109
10	QPSK	50	0	20.33	0.108	20.42	0.110	20.40	0.110
10	16QAM	1	0	20.81	0.121	20.74	0.119	20.73	0.118
10	16QAM	1	25	20.50	0.112	20.46	0.111	20.53	0.113
10	16QAM	1	49	20.45	0.111	20.53	0.113	20.32	0.108
10	16QAM	25	0	20.35	0.108	20.34	0.108	20.31	0.107
10	16QAM	25	12	20.51	0.112	20.31	0.107	20.31	0.107
10	16QAM	25	25	20.31	0.107	20.51	0.112	20.61	0.115
10	16QAM	50	0	20.68	0.117	20.61	0.115	20.65	0.116



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	21.53	0.142	21.58	0.144	21.52	0.142
5	QPSK	1	12	21.52	0.142	21.47	0.140	21.50	0.141
5	QPSK	1	24	21.48	0.141	21.56	0.143	21.57	0.144
5	QPSK	12	0	20.45	0.111	20.36	0.109	20.43	0.110
5	QPSK	12	7	20.46	0.111	20.51	0.112	20.43	0.110
5	QPSK	12	13	20.45	0.111	20.44	0.111	20.47	0.111
5	QPSK	25	0	20.44	0.111	20.42	0.110	20.44	0.111
5	16QAM	1	0	20.37	0.109	20.27	0.106	20.65	0.116
5	16QAM	1	12	20.35	0.108	20.28	0.107	20.65	0.116
5	16QAM	1	24	20.38	0.109	20.25	0.106	20.64	0.116
5	16QAM	12	0	20.47	0.111	20.61	0.115	20.47	0.111
5	16QAM	12	7	20.37	0.109	20.37	0.109	20.17	0.104
5	16QAM	12	13	20.17	0.104	20.50	0.112	20.27	0.106
5	16QAM	25	0	20.27	0.106	20.73	0.118	20.71	0.118



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	21.47	0.140	21.54	0.143	21.46	0.140
3	QPSK	1	8	21.57	0.144	21.60	0.145	21.43	0.139
3	QPSK	1	14	21.58	0.144	21.45	0.140	21.45	0.140
3	QPSK	8	0	20.53	0.113	20.48	0.112	20.50	0.112
3	QPSK	8	4	20.59	0.115	20.53	0.113	20.54	0.113
3	QPSK	8	7	20.59	0.115	20.53	0.113	20.49	0.112
3	QPSK	15	0	20.51	0.112	20.59	0.115	20.52	0.113
3	16QAM	1	0	20.47	0.111	20.38	0.109	20.32	0.108
3	16QAM	1	8	20.51	0.112	20.45	0.111	20.41	0.110
3	16QAM	1	14	20.44	0.111	20.41	0.110	20.29	0.107
3	16QAM	8	0	20.47	0.111	20.60	0.115	20.52	0.113
3	16QAM	8	4	20.54	0.113	20.51	0.112	20.57	0.114
3	16QAM	8	7	20.44	0.111	20.49	0.112	20.52	0.113
3	16QAM	15	0	20.47	0.111	20.51	0.112	20.46	0.111



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	21.53	0.142	21.56	0.143	21.51	0.142
1.4	QPSK	1	3	21.43	0.139	21.41	0.138	21.40	0.138
1.4	QPSK	1	5	21.40	0.138	21.38	0.137	21.36	0.137
1.4	QPSK	3	0	21.40	0.138	21.40	0.138	21.36	0.137
1.4	QPSK	3	1	21.44	0.139	21.41	0.138	21.39	0.138
1.4	QPSK	3	3	21.46	0.140	21.50	0.141	21.39	0.138
1.4	QPSK	6	0	20.49	0.112	20.47	0.111	20.46	0.111
1.4	16QAM	1	0	20.52	0.113	20.52	0.113	20.46	0.111
1.4	16QAM	1	3	20.48	0.112	20.68	0.117	20.66	0.116
1.4	16QAM	1	5	20.36	0.109	20.56	0.114	20.24	0.106
1.4	16QAM	3	0	20.38	0.109	20.43	0.110	20.40	0.110
1.4	16QAM	3	1	20.56	0.114	20.38	0.109	20.43	0.110
1.4	16QAM	3	3	20.58	0.114	20.55	0.114	20.29	0.107
1.4	16QAM	6	0	20.59	0.115	20.52	0.113	20.47	0.111



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	21.09	0.129	21.17	0.131	21.16	0.131
20	QPSK	1	49	20.95	0.124	21.03	0.127	21.02	0.126
20	QPSK	1	99	20.87	0.122	21.00	0.126	21.12	0.129
20	QPSK	50	0	20.25	0.106	20.29	0.107	20.26	0.106
20	QPSK	50	24	20.16	0.104	20.24	0.106	20.24	0.106
20	QPSK	50	50	20.05	0.101	20.16	0.104	20.17	0.104
20	QPSK	100	0	20.15	0.104	20.19	0.104	20.26	0.106
20	16QAM	1	0	20.02	0.100	20.32	0.108	20.19	0.104
20	16QAM	1	49	20.17	0.104	19.94	0.099	20.08	0.102
20	16QAM	1	99	19.96	0.099	20.18	0.104	20.02	0.100
20	16QAM	50	0	20.15	0.104	20.08	0.102	20.22	0.105
20	16QAM	50	24	20.41	0.110	20.52	0.113	20.41	0.110
20	16QAM	50	50	20.37	0.109	20.38	0.109	20.38	0.109
20	16QAM	100	0	20.39	0.109	20.47	0.111	20.48	0.112



LTE Band 4				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20025		20175		20325	
Frequency (MHz)				1717.5		1732.5		1747.5	
				dBm	W	dBm	W	dBm	W
15	QPSK	1	0	20.96	0.125	21.00	0.126	21.10	0.129
15	QPSK	1	37	21.00	0.126	21.09	0.129	21.01	0.126
15	QPSK	1	74	20.87	0.122	21.09	0.129	21.12	0.129
15	QPSK	36	0	20.10	0.102	20.17	0.104	20.20	0.105
15	QPSK	36	20	20.14	0.103	20.27	0.106	20.23	0.105
15	QPSK	36	39	20.19	0.104	20.18	0.104	20.27	0.106
15	QPSK	75	0	20.14	0.103	20.16	0.104	20.17	0.104
15	16QAM	1	0	20.08	0.102	20.30	0.107	20.02	0.100
15	16QAM	1	37	20.16	0.104	20.16	0.104	20.00	0.100
15	16QAM	1	74	20.02	0.100	20.32	0.108	20.11	0.103
15	16QAM	36	0	20.03	0.101	20.05	0.101	20.24	0.106
15	16QAM	36	20	19.98	0.100	20.05	0.101	20.11	0.103
15	16QAM	36	39	19.94	0.099	20.03	0.101	20.09	0.102
15	16QAM	75	0	20.05	0.101	20.06	0.101	20.15	0.104



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	21.08	0.128	21.07	0.128	20.90	0.123
10	QPSK	1	25	21.06	0.128	20.99	0.126	21.00	0.126
10	QPSK	1	49	20.94	0.124	20.77	0.119	21.00	0.126
10	QPSK	25	0	19.93	0.098	20.15	0.104	20.17	0.104
10	QPSK	25	12	20.05	0.101	20.11	0.103	20.15	0.104
10	QPSK	25	25	19.94	0.099	20.05	0.101	20.12	0.103
10	QPSK	50	0	20.00	0.100	20.10	0.102	20.02	0.100
10	16QAM	1	0	19.99	0.100	20.14	0.103	19.90	0.098
10	16QAM	1	25	20.26	0.106	20.00	0.100	20.32	0.108
10	16QAM	1	49	20.33	0.108	20.23	0.105	20.22	0.105
10	16QAM	25	0	19.99	0.100	19.98	0.100	19.97	0.099
10	16QAM	25	12	19.91	0.098	20.01	0.100	19.98	0.100
10	16QAM	25	25	20.25	0.106	20.16	0.104	20.25	0.106
10	16QAM	50	0	20.19	0.104	20.23	0.105	20.35	0.108



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	21.05	0.127	21.00	0.126	21.05	0.127
5	QPSK	1	12	21.04	0.127	20.99	0.126	20.96	0.125
5	QPSK	1	24	20.79	0.120	20.91	0.123	20.90	0.123
5	QPSK	12	0	20.01	0.100	20.01	0.100	20.05	0.101
5	QPSK	12	7	20.01	0.100	20.12	0.103	20.09	0.102
5	QPSK	12	13	19.96	0.099	20.13	0.103	20.05	0.101
5	QPSK	25	0	19.99	0.100	20.03	0.101	20.09	0.102
5	16QAM	1	0	19.89	0.097	20.30	0.107	19.98	0.100
5	16QAM	1	12	20.00	0.100	20.35	0.108	19.94	0.099
5	16QAM	1	24	19.94	0.099	20.29	0.107	19.89	0.097
5	16QAM	12	0	19.93	0.098	19.87	0.097	19.90	0.098
5	16QAM	12	7	19.96	0.099	20.00	0.100	19.98	0.100
5	16QAM	12	13	20.23	0.105	20.30	0.107	20.34	0.108
5	16QAM	25	0	20.24	0.106	20.35	0.108	20.28	0.107



LTE Band 4				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				19965		20175		20385	
Frequency (MHz)				1711.5		1732.5		1753.5	
				dBm	W	dBm	W	dBm	W
3	QPSK	1	0	20.90	0.123	20.91	0.123	21.03	0.127
3	QPSK	1	8	20.99	0.126	21.13	0.130	21.07	0.128
3	QPSK	1	14	20.79	0.120	20.98	0.125	20.98	0.125
3	QPSK	8	0	19.99	0.100	20.05	0.101	20.06	0.101
3	QPSK	8	4	20.05	0.101	20.13	0.103	20.15	0.104
3	QPSK	8	7	20.01	0.100	20.11	0.103	20.11	0.103
3	QPSK	15	0	20.01	0.100	20.07	0.102	20.01	0.100
3	16QAM	1	0	20.09	0.102	20.18	0.104	20.22	0.105
3	16QAM	1	8	20.31	0.107	20.31	0.107	20.05	0.101
3	16QAM	1	14	20.22	0.105	20.00	0.100	20.08	0.102
3	16QAM	8	0	20.01	0.100	20.02	0.100	20.11	0.103
3	16QAM	8	4	20.11	0.103	20.11	0.103	20.12	0.103
3	16QAM	8	7	20.33	0.108	20.41	0.110	20.45	0.111
3	16QAM	15	0	20.33	0.108	20.31	0.107	20.38	0.109



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	21.05	0.127	21.10	0.129	21.08	0.128
1.4	QPSK	1	3	20.99	0.126	20.99	0.126	21.03	0.127
1.4	QPSK	1	5	20.85	0.122	20.94	0.124	20.96	0.125
1.4	QPSK	3	0	20.93	0.124	20.90	0.123	20.89	0.123
1.4	QPSK	3	1	20.89	0.123	20.99	0.126	21.04	0.127
1.4	QPSK	3	3	20.88	0.122	20.95	0.124	20.94	0.124
1.4	QPSK	6	0	20.04	0.101	20.06	0.101	20.02	0.100
1.4	16QAM	1	0	19.98	0.100	20.45	0.111	20.11	0.103
1.4	16QAM	1	3	20.11	0.103	20.19	0.104	20.23	0.105
1.4	16QAM	1	5	20.17	0.104	20.33	0.108	20.13	0.103
1.4	16QAM	3	0	20.20	0.105	20.24	0.106	20.15	0.104
1.4	16QAM	3	1	20.21	0.105	20.24	0.106	20.26	0.106
1.4	16QAM	3	3	20.20	0.105	20.32	0.108	20.21	0.105
1.4	16QAM	6	0	20.11	0.103	20.12	0.103	20.03	0.101



LTE Band 5				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20450		20525		20600	
Frequency (MHz)				829		836.5		844	
				dBm	W	dBm	W	dBm	W
10	QPSK	1	0	20.14	0.103	20.15	0.104	20.07	0.102
10	QPSK	1	25	20.00	0.100	20.03	0.101	19.83	0.096
10	QPSK	1	49	19.92	0.098	20.04	0.101	19.72	0.094
10	QPSK	25	0	19.23	0.084	19.25	0.084	19.06	0.081
10	QPSK	25	12	18.99	0.079	19.01	0.080	19.06	0.081
10	QPSK	25	25	18.99	0.079	19.10	0.081	19.15	0.082
10	QPSK	50	0	19.05	0.080	18.93	0.078	19.07	0.081
10	16QAM	1	0	19.09	0.081	19.28	0.085	18.99	0.079
10	16QAM	1	25	19.32	0.086	19.35	0.086	19.03	0.080
10	16QAM	1	49	19.15	0.082	19.21	0.083	19.28	0.085
10	16QAM	25	0	19.24	0.084	19.25	0.084	19.07	0.081
10	16QAM	25	12	19.18	0.083	19.26	0.084	19.04	0.080
10	16QAM	25	25	19.21	0.083	19.14	0.082	19.17	0.083
10	16QAM	50	0	19.22	0.084	19.13	0.082	19.03	0.080



LTE Band 5				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20425		20525		20625	
Frequency (MHz)				826.5		836.5		846.5	
				dBm	W	dBm	W	dBm	W
5	QPSK	1	0	20.09	0.102	20.05	0.101	20.03	0.101
5	QPSK	1	12	19.99	0.100	20.10	0.102	19.94	0.099
5	QPSK	1	24	19.99	0.100	19.94	0.099	19.94	0.099
5	QPSK	12	0	19.14	0.082	19.19	0.083	19.05	0.080
5	QPSK	12	7	19.21	0.083	19.22	0.084	19.14	0.082
5	QPSK	12	13	19.26	0.084	19.10	0.081	19.05	0.080
5	QPSK	25	0	19.17	0.083	19.13	0.082	19.05	0.080
5	16QAM	1	0	19.46	0.088	19.39	0.087	19.15	0.082
5	16QAM	1	12	19.16	0.082	19.38	0.087	19.14	0.082
5	16QAM	1	24	19.03	0.080	19.38	0.087	19.21	0.083
5	16QAM	12	0	19.12	0.082	19.21	0.083	19.20	0.083
5	16QAM	12	7	19.19	0.083	19.22	0.084	19.04	0.080
5	16QAM	12	13	19.19	0.083	19.10	0.081	19.15	0.082
5	16QAM	25	0	19.20	0.083	19.25	0.084	19.20	0.083



LTE Band 5				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20415		20525		20635	
Frequency (MHz)				825.5		836.5		847.5	
				dBm	W	dBm	W	dBm	W
3	QPSK	1	0	20.08	0.102	20.09	0.102	19.94	0.099
3	QPSK	1	8	20.04	0.101	20.05	0.101	19.96	0.099
3	QPSK	1	14	20.05	0.101	20.03	0.101	19.77	0.095
3	QPSK	8	0	19.07	0.081	19.20	0.083	19.18	0.083
3	QPSK	8	4	19.21	0.083	19.27	0.085	19.24	0.084
3	QPSK	8	7	19.16	0.082	19.18	0.083	19.05	0.080
3	QPSK	15	0	19.14	0.082	19.20	0.083	19.19	0.083
3	16QAM	1	0	19.16	0.082	19.27	0.085	19.34	0.086
3	16QAM	1	8	19.09	0.081	19.35	0.086	19.19	0.083
3	16QAM	1	14	19.14	0.082	19.40	0.087	19.15	0.082
3	16QAM	8	0	19.10	0.081	19.19	0.083	18.93	0.078
3	16QAM	8	4	19.26	0.084	19.37	0.086	18.94	0.078
3	16QAM	8	7	19.18	0.083	19.24	0.084	18.98	0.079
3	16QAM	15	0	19.12	0.082	19.14	0.082	18.69	0.074



LTE Band 5				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20407		20525		20643	
Frequency (MHz)				824.7		836.5		848.3	
				dBm	W	dBm	W	dBm	W
1.4	QPSK	1	0	20.09	0.102	20.06	0.101	20.10	0.102
1.4	QPSK	1	3	20.12	0.103	20.05	0.101	20.12	0.103
1.4	QPSK	1	5	20.01	0.100	19.95	0.099	19.96	0.099
1.4	QPSK	3	0	20.02	0.100	20.08	0.102	20.04	0.101
1.4	QPSK	3	1	20.08	0.102	19.95	0.099	20.05	0.101
1.4	QPSK	3	3	20.09	0.102	20.01	0.100	20.01	0.100
1.4	QPSK	6	0	19.12	0.082	19.11	0.081	19.10	0.081
1.4	16QAM	1	0	19.25	0.084	19.06	0.081	19.23	0.084
1.4	16QAM	1	3	19.05	0.080	19.29	0.085	19.18	0.083
1.4	16QAM	1	5	19.44	0.088	19.12	0.082	19.18	0.083
1.4	16QAM	3	0	18.97	0.079	18.95	0.079	19.09	0.081
1.4	16QAM	3	1	19.00	0.079	19.27	0.085	19.13	0.082
1.4	16QAM	3	3	19.08	0.081	19.19	0.083	19.07	0.081
1.4	16QAM	6	0	19.27	0.085	19.14	0.082	19.18	0.083



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	18.42	0.070	18.43	0.070	18.35	0.068
20	QPSK	1	49	18.37	0.069	18.41	0.069	18.30	0.068
20	QPSK	1	99	18.32	0.068	18.27	0.067	18.32	0.068
20	QPSK	50	0	17.73	0.059	17.80	0.060	17.77	0.060
20	QPSK	50	24	17.49	0.056	17.46	0.056	17.36	0.054
20	QPSK	50	50	17.59	0.057	17.62	0.058	17.59	0.057
20	QPSK	100	0	17.54	0.057	17.56	0.057	17.53	0.057
20	16QAM	1	0	17.35	0.054	17.45	0.056	17.63	0.058
20	16QAM	1	49	17.50	0.056	17.36	0.054	17.64	0.058
20	16QAM	1	99	17.44	0.055	17.75	0.060	17.40	0.055
20	16QAM	50	0	17.29	0.054	17.39	0.055	17.32	0.054
20	16QAM	50	24	17.34	0.054	17.26	0.053	17.37	0.055
20	16QAM	50	50	17.42	0.055	17.47	0.056	17.30	0.054
20	16QAM	100	0	17.30	0.054	17.42	0.055	17.40	0.055



LTE Band 7				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20825		21100		21375	
Frequency (MHz)				2507.5		2535		2562.5	
				dBm	W	dBm	W	dBm	W
15	QPSK	1	0	18.25	0.067	18.34	0.068	18.34	0.068
15	QPSK	1	37	18.35	0.068	18.32	0.068	18.36	0.069
15	QPSK	1	74	18.29	0.067	18.36	0.069	18.36	0.069
15	QPSK	36	0	17.32	0.054	17.41	0.055	17.43	0.055
15	QPSK	36	20	17.40	0.055	17.47	0.056	17.42	0.055
15	QPSK	36	39	17.43	0.055	17.46	0.056	17.50	0.056
15	QPSK	75	0	17.24	0.053	17.17	0.052	17.19	0.052
15	16QAM	1	0	17.60	0.058	17.71	0.059	17.78	0.060
15	16QAM	1	37	17.42	0.055	17.53	0.057	17.51	0.056
15	16QAM	1	74	17.46	0.056	17.46	0.056	17.68	0.059
15	16QAM	36	0	17.30	0.054	17.41	0.055	17.43	0.055
15	16QAM	36	20	17.37	0.055	17.40	0.055	17.39	0.055
15	16QAM	36	39	17.43	0.055	17.41	0.055	17.30	0.054
15	16QAM	75	0	17.38	0.055	17.46	0.056	17.38	0.055



LTE Band 7				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20800		21100		21400	
Frequency (MHz)				2505		2535		2565	
				dBm	W	dBm	W	dBm	W
10	QPSK	1	0	18.24	0.067	18.11	0.065	18.14	0.065
10	QPSK	1	25	18.27	0.067	18.17	0.066	18.19	0.066
10	QPSK	1	49	18.20	0.066	18.17	0.066	18.19	0.066
10	QPSK	25	0	17.24	0.053	17.24	0.053	17.23	0.053
10	QPSK	25	12	17.20	0.052	17.32	0.054	17.37	0.055
10	QPSK	25	25	17.13	0.052	17.31	0.054	17.31	0.054
10	QPSK	50	0	17.22	0.053	17.34	0.054	17.33	0.054
10	16QAM	1	0	17.22	0.053	17.40	0.055	17.25	0.053
10	16QAM	1	25	17.21	0.053	17.23	0.053	17.28	0.053
10	16QAM	1	49	17.68	0.059	17.58	0.057	17.49	0.056
10	16QAM	25	0	17.36	0.054	17.24	0.053	17.32	0.054
10	16QAM	25	12	17.18	0.052	17.35	0.054	17.28	0.053
10	16QAM	25	25	17.23	0.053	17.26	0.053	17.18	0.052
10	16QAM	50	0	17.26	0.053	17.35	0.054	17.20	0.052



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	18.28	0.067	18.19	0.066	18.09	0.064
5	QPSK	1	12	18.15	0.065	18.08	0.064	18.16	0.065
5	QPSK	1	24	18.09	0.064	18.15	0.065	18.19	0.066
5	QPSK	12	0	17.29	0.054	17.37	0.055	17.29	0.054
5	QPSK	12	7	17.36	0.054	17.51	0.056	17.43	0.055
5	QPSK	12	13	17.38	0.055	17.54	0.057	17.39	0.055
5	QPSK	25	0	17.39	0.055	17.40	0.055	17.35	0.054
5	16QAM	1	0	17.32	0.054	17.30	0.054	17.36	0.054
5	16QAM	1	12	17.37	0.055	17.59	0.057	17.49	0.056
5	16QAM	1	24	17.43	0.055	17.62	0.058	17.44	0.055
5	16QAM	12	0	17.59	0.057	17.65	0.058	17.56	0.057
5	16QAM	12	7	17.48	0.056	17.50	0.056	17.46	0.056
5	16QAM	12	13	17.48	0.056	17.54	0.057	17.67	0.058
5	16QAM	25	0	17.45	0.056	17.50	0.056	17.52	0.056



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	20.27	0.106	20.43	0.110	20.32	0.108
10	QPSK	1	25	20.13	0.103	20.26	0.106	20.29	0.107
10	QPSK	1	49	20.23	0.105	20.24	0.106	20.23	0.105
10	QPSK	25	0	19.38	0.087	19.48	0.089	19.39	0.087
10	QPSK	25	12	19.35	0.086	19.29	0.085	19.08	0.081
10	QPSK	25	25	19.40	0.087	19.46	0.088	19.39	0.087
10	QPSK	50	0	19.41	0.087	19.43	0.088	19.34	0.086
10	16QAM	1	0	19.48	0.089	19.03	0.080	19.16	0.082
10	16QAM	1	25	19.23	0.084	19.18	0.083	19.32	0.086
10	16QAM	1	49	19.32	0.086	19.37	0.086	19.26	0.084
10	16QAM	25	0	19.21	0.083	19.23	0.084	19.17	0.083
10	16QAM	25	12	19.25	0.084	19.29	0.085	19.18	0.083
10	16QAM	25	25	19.30	0.085	19.31	0.085	19.25	0.084
10	16QAM	50	0	19.20	0.083	19.28	0.085	19.33	0.086



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	20.02	0.100	20.35	0.108	20.13	0.103
5	QPSK	1	12	20.18	0.104	20.34	0.108	20.18	0.104
5	QPSK	1	24	20.14	0.103	20.33	0.108	20.19	0.104
5	QPSK	12	0	19.25	0.084	19.32	0.086	19.31	0.085
5	QPSK	12	7	19.36	0.086	19.38	0.087	19.35	0.086
5	QPSK	12	13	19.31	0.085	19.34	0.086	19.31	0.085
5	QPSK	25	0	19.27	0.085	19.39	0.087	19.35	0.086
5	16QAM	1	0	19.28	0.085	19.30	0.085	19.32	0.086
5	16QAM	1	12	19.45	0.088	19.40	0.087	19.41	0.087
5	16QAM	1	24	19.41	0.087	19.39	0.087	19.35	0.086
5	16QAM	12	0	19.15	0.082	19.12	0.082	19.15	0.082
5	16QAM	12	7	19.29	0.085	19.34	0.086	19.18	0.083
5	16QAM	12	13	19.24	0.084	19.21	0.083	19.26	0.084
5	16QAM	25	0	19.25	0.084	19.21	0.083	19.23	0.084



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	20.10	0.102	20.37	0.109	20.04	0.101
3	QPSK	1	8	20.28	0.107	20.27	0.106	20.17	0.104
3	QPSK	1	14	20.22	0.105	20.33	0.108	20.28	0.107
3	QPSK	8	0	19.33	0.086	19.31	0.085	19.31	0.085
3	QPSK	8	4	19.36	0.086	19.39	0.087	19.40	0.087
3	QPSK	8	7	19.31	0.085	19.39	0.087	19.33	0.086
3	QPSK	15	0	19.30	0.085	19.38	0.087	19.24	0.084
3	16QAM	1	0	19.31	0.085	19.67	0.093	19.26	0.084
3	16QAM	1	8	19.51	0.089	19.49	0.089	19.44	0.088
3	16QAM	1	14	19.34	0.086	19.39	0.087	19.25	0.084
3	16QAM	8	0	19.31	0.085	19.20	0.083	19.23	0.084
3	16QAM	8	4	19.36	0.086	19.33	0.086	19.44	0.088
3	16QAM	8	7	19.20	0.083	19.23	0.084	19.29	0.085
3	16QAM	15	0	19.18	0.083	19.11	0.081	19.10	0.081



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	20.13	0.103	20.30	0.107	20.10	0.102
1.4	QPSK	1	3	20.24	0.106	20.23	0.105	20.25	0.106
1.4	QPSK	1	5	20.13	0.103	20.18	0.104	20.14	0.103
1.4	QPSK	3	0	20.08	0.102	20.21	0.105	20.19	0.104
1.4	QPSK	3	1	20.29	0.107	20.29	0.107	19.96	0.099
1.4	QPSK	3	3	20.24	0.106	20.26	0.106	20.22	0.105
1.4	QPSK	6	0	19.30	0.085	19.27	0.085	19.25	0.084
1.4	16QAM	1	0	19.34	0.086	19.28	0.085	19.13	0.082
1.4	16QAM	1	3	19.15	0.082	19.58	0.091	19.25	0.084
1.4	16QAM	1	5	19.27	0.085	19.28	0.085	19.27	0.085
1.4	16QAM	3	0	19.11	0.081	19.14	0.082	19.15	0.082
1.4	16QAM	3	1	19.27	0.085	19.35	0.086	19.19	0.083
1.4	16QAM	3	3	19.10	0.081	19.24	0.084	19.24	0.084
1.4	16QAM	6	0	19.03	0.080	19.23	0.084	19.13	0.082



LTE Band 17				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				23780		23790		23800	
Frequency (MHz)				709		710		711	
				dBm	W	dBm	W	dBm	W
10	QPSK	1	0	20.32	0.108	20.35	0.108	20.32	0.108
10	QPSK	1	25	20.20	0.105	20.16	0.104	20.22	0.105
10	QPSK	1	49	20.13	0.103	20.16	0.104	20.11	0.103
10	QPSK	25	0	19.43	0.088	19.49	0.089	19.41	0.087
10	QPSK	25	12	19.28	0.085	19.22	0.084	19.36	0.086
10	QPSK	25	25	19.26	0.084	19.26	0.084	19.35	0.086
10	QPSK	50	0	19.39	0.087	19.26	0.084	19.27	0.085
10	16QAM	1	0	19.12	0.082	19.31	0.085	19.45	0.088
10	16QAM	1	25	19.33	0.086	19.62	0.092	19.46	0.088
10	16QAM	1	49	19.29	0.085	19.54	0.090	19.59	0.091
10	16QAM	25	0	19.23	0.084	19.47	0.089	19.46	0.088
10	16QAM	25	12	19.29	0.085	19.44	0.088	19.42	0.087
10	16QAM	25	25	19.12	0.082	19.38	0.087	19.43	0.088
10	16QAM	50	0	19.16	0.082	19.45	0.088	19.42	0.087



LTE Band 17				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				23755		23790		23825	
Frequency (MHz)				706.5		710		713.5	
				dBm	W	dBm	W	dBm	W
5	QPSK	1	0	20.26	0.106	20.22	0.105	20.18	0.104
5	QPSK	1	12	20.25	0.106	20.21	0.105	20.20	0.105
5	QPSK	1	24	20.17	0.104	20.23	0.105	20.22	0.105
5	QPSK	12	0	19.33	0.086	19.51	0.089	19.67	0.093
5	QPSK	12	7	19.45	0.088	19.54	0.090	19.62	0.092
5	QPSK	12	13	19.28	0.085	19.56	0.090	19.62	0.092
5	QPSK	25	0	19.31	0.085	19.48	0.089	19.61	0.091
5	16QAM	1	0	19.79	0.095	19.84	0.096	19.56	0.090
5	16QAM	1	12	19.96	0.099	19.52	0.090	19.89	0.097
5	16QAM	1	24	19.80	0.095	19.85	0.097	20.01	0.100
5	16QAM	12	0	19.24	0.084	19.27	0.085	19.48	0.089
5	16QAM	12	7	19.24	0.084	19.31	0.085	19.43	0.088
5	16QAM	12	13	19.15	0.082	19.40	0.087	19.43	0.088
5	16QAM	25	0	19.25	0.084	19.37	0.086	19.41	0.087



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	21.40	0.138	21.46	0.140	21.44	0.139
20	QPSK	1	49	21.25	0.133	21.24	0.133	21.20	0.132
20	QPSK	1	99	21.18	0.131	21.17	0.131	21.20	0.132
20	QPSK	50	0	20.63	0.116	20.70	0.117	20.66	0.116
20	QPSK	50	24	20.44	0.111	20.46	0.111	20.59	0.115
20	QPSK	50	50	20.48	0.112	20.56	0.114	20.44	0.111
20	QPSK	100	0	20.46	0.111	20.46	0.111	20.38	0.109
20	16QAM	1	0	20.51	0.112	20.27	0.106	20.55	0.114
20	16QAM	1	49	20.56	0.114	20.30	0.107	20.36	0.109
20	16QAM	1	99	20.42	0.110	20.60	0.115	20.39	0.109
20	16QAM	50	0	20.54	0.113	20.51	0.112	20.48	0.112
20	16QAM	50	24	20.43	0.110	20.43	0.110	20.44	0.111
20	16QAM	50	50	20.40	0.110	20.32	0.108	20.28	0.107
20	16QAM	100	0	20.36	0.109	20.39	0.109	20.45	0.111



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	21.38	0.137	21.42	0.139	21.40	0.138
15	QPSK	1	37	21.42	0.139	21.38	0.137	21.36	0.137
15	QPSK	1	74	21.36	0.137	21.32	0.136	21.30	0.135
15	QPSK	36	0	20.57	0.114	20.54	0.113	20.58	0.114
15	QPSK	36	20	20.57	0.114	20.49	0.112	20.59	0.115
15	QPSK	36	39	20.43	0.110	20.48	0.112	20.45	0.111
15	QPSK	75	0	20.38	0.109	20.42	0.110	20.35	0.108
15	16QAM	1	0	20.37	0.109	20.24	0.106	20.54	0.113
15	16QAM	1	37	20.24	0.106	20.54	0.113	20.47	0.111
15	16QAM	1	74	20.34	0.108	20.24	0.106	20.24	0.106
15	16QAM	36	0	20.55	0.114	20.55	0.114	20.46	0.111
15	16QAM	36	20	20.58	0.114	20.57	0.114	20.63	0.116
15	16QAM	36	39	20.50	0.112	20.65	0.116	20.59	0.115
15	16QAM	75	0	20.60	0.115	20.58	0.114	20.54	0.113



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	21.41	0.138	21.41	0.138	21.42	0.139
10	QPSK	1	25	21.31	0.135	21.29	0.135	21.37	0.137
10	QPSK	1	49	21.45	0.140	21.33	0.136	21.23	0.133
10	QPSK	25	0	20.60	0.115	20.53	0.113	20.60	0.115
10	QPSK	25	12	20.57	0.114	20.76	0.119	20.54	0.113
10	QPSK	25	25	20.53	0.113	20.49	0.112	20.41	0.110
10	QPSK	50	0	20.61	0.115	20.46	0.111	20.65	0.116
10	16QAM	1	0	20.53	0.113	20.53	0.113	20.73	0.118
10	16QAM	1	25	20.53	0.113	20.62	0.115	20.74	0.119
10	16QAM	1	49	20.36	0.109	20.56	0.114	20.44	0.111
10	16QAM	25	0	20.37	0.109	20.54	0.113	20.42	0.110
10	16QAM	25	12	20.36	0.109	20.56	0.114	20.47	0.111
10	16QAM	25	25	20.27	0.106	20.32	0.108	20.32	0.108
10	16QAM	50	0	20.43	0.110	20.47	0.111	20.48	0.112



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	21.30	0.135	21.33	0.136	21.38	0.137
5	QPSK	1	12	21.33	0.136	21.33	0.136	21.32	0.136
5	QPSK	1	24	21.41	0.138	21.31	0.135	21.37	0.137
5	QPSK	12	0	20.43	0.110	20.45	0.111	20.41	0.110
5	QPSK	12	7	20.45	0.111	20.53	0.113	20.46	0.111
5	QPSK	12	13	20.31	0.107	20.37	0.109	20.38	0.109
5	QPSK	25	0	20.41	0.110	20.42	0.110	20.41	0.110
5	16QAM	1	0	20.76	0.119	20.45	0.111	20.46	0.111
5	16QAM	1	12	20.39	0.109	20.68	0.117	20.63	0.116
5	16QAM	1	24	20.51	0.112	20.40	0.110	20.75	0.119
5	16QAM	12	0	20.40	0.110	20.51	0.112	20.47	0.111
5	16QAM	12	7	20.57	0.114	20.49	0.112	20.61	0.115
5	16QAM	12	13	20.48	0.112	20.42	0.110	20.49	0.112
5	16QAM	25	0	20.49	0.112	20.51	0.112	20.43	0.110



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	21.37	0.137	21.28	0.134	21.27	0.134
3	QPSK	1	8	21.24	0.133	21.25	0.133	21.33	0.136
3	QPSK	1	14	21.15	0.130	20.96	0.125	21.26	0.134
3	QPSK	8	0	20.55	0.114	20.52	0.113	20.56	0.114
3	QPSK	8	4	20.50	0.112	20.42	0.110	20.52	0.113
3	QPSK	8	7	20.36	0.109	20.41	0.110	20.38	0.109
3	QPSK	15	0	20.45	0.111	20.49	0.112	20.42	0.110
3	16QAM	1	0	20.14	0.103	20.55	0.114	20.31	0.107
3	16QAM	1	8	20.47	0.111	20.41	0.110	20.40	0.110
3	16QAM	1	14	20.51	0.112	20.40	0.110	20.10	0.102
3	16QAM	8	0	20.32	0.108	20.32	0.108	20.23	0.105
3	16QAM	8	4	20.35	0.108	20.34	0.108	20.40	0.110
3	16QAM	8	7	20.27	0.106	20.42	0.110	20.36	0.109
3	16QAM	15	0	20.37	0.109	20.35	0.108	20.31	0.107



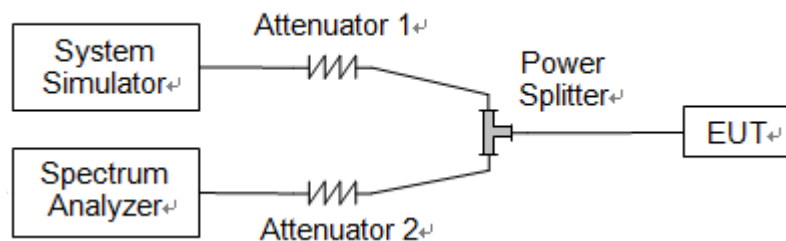
LTE Band 66				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				131979		132322		132665	
Frequency (MHz)				1710.7		1745		1779.3	
				dBm	W	dBm	W	dBm	W
1.4	QPSK	1	0	21.31	0.135	21.22	0.132	21.23	0.133
1.4	QPSK	1	3	21.37	0.137	21.39	0.138	21.39	0.138
1.4	QPSK	1	5	21.29	0.135	21.17	0.131	21.33	0.136
1.4	QPSK	3	0	21.28	0.134	21.21	0.132	21.28	0.134
1.4	QPSK	3	1	21.25	0.133	21.31	0.135	21.22	0.132
1.4	QPSK	3	3	21.26	0.134	21.22	0.132	21.14	0.130
1.4	QPSK	6	0	20.58	0.114	20.43	0.110	20.62	0.115
1.4	16QAM	1	0	20.45	0.111	20.45	0.111	20.65	0.116
1.4	16QAM	1	3	20.45	0.111	20.54	0.113	20.66	0.116
1.4	16QAM	1	5	20.28	0.107	20.48	0.112	20.36	0.109
1.4	16QAM	3	0	20.23	0.105	20.20	0.105	20.46	0.111
1.4	16QAM	3	1	20.32	0.108	20.22	0.105	20.34	0.108
1.4	16QAM	3	3	20.33	0.108	20.34	0.108	20.28	0.107
1.4	16QAM	6	0	20.22	0.105	20.13	0.103	20.14	0.103

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	1.10	1.26
	Mid	QPSK	1.10	1.25
	Mid	16QAM	1.10	1.24
	High	QPSK	1.10	1.25
	High	16QAM	1.10	1.26
3	Low	QPSK	2.72	3.06
	Low	16QAM	2.72	3.03
	Mid	QPSK	2.71	3.06
	Mid	16QAM	2.71	3.03
	High	QPSK	2.71	3.04
	High	16QAM	2.71	3.03
5	Low	QPSK	4.50	4.98
	Low	16QAM	4.51	4.94
	Mid	QPSK	4.50	4.98
	Mid	16QAM	4.50	4.95
	High	QPSK	4.49	4.99
	High	16QAM	4.50	4.94
10	Low	QPSK	9.02	9.88
	Low	16QAM	8.98	9.88
	Mid	QPSK	9.02	9.87
	Mid	16QAM	8.96	9.80
	High	QPSK	8.98	9.84
	High	16QAM	8.95	9.81
15	Low	QPSK	13.53	14.95
	Low	16QAM	13.53	15.00
	Mid	QPSK	13.46	14.86
	Mid	16QAM	13.46	14.93
	High	QPSK	13.47	14.88
	High	16QAM	13.49	14.88
20	Low	QPSK	18.04	19.74
	Low	16QAM	18.06	19.89
	Mid	QPSK	17.95	19.70
	Mid	16QAM	17.93	19.51
	High	QPSK	17.97	19.67
	High	16QAM	17.99	19.77



LTE Band 4				
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
	Mid	QPSK	1.10	1.25
	Mid	16QAM	1.11	1.24
	High	QPSK	1.10	1.25
	High	16QAM	1.10	1.25
3	Low	QPSK	2.72	3.05
	Low	16QAM	2.72	3.05
	Mid	QPSK	2.71	3.03
	Mid	16QAM	2.71	3.05
	High	QPSK	2.72	3.05
	High	16QAM	2.71	3.05
5	Low	QPSK	4.50	4.97
	Low	16QAM	4.50	4.97
	Mid	QPSK	4.50	4.94
	Mid	16QAM	4.49	4.97
	High	QPSK	4.49	4.96
	High	16QAM	4.50	4.97
10	Low	QPSK	9.00	9.83
	Low	16QAM	8.97	9.82
	Mid	QPSK	8.98	9.95
	Mid	16QAM	8.98	9.84
	High	QPSK	9.02	9.88
	High	16QAM	8.98	9.87
15	Low	QPSK	13.48	14.85
	Low	16QAM	13.49	14.95
	Mid	QPSK	13.46	14.88
	Mid	16QAM	13.50	14.97
	High	QPSK	13.50	14.94
	High	16QAM	13.49	14.90
20	Low	QPSK	17.99	19.63
	Low	16QAM	18.01	19.93
	Mid	QPSK	17.97	19.74
	Mid	16QAM	17.99	19.35
	High	QPSK	18.02	19.89
	High	16QAM	18.04	19.81



LTE Band 5				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
1.4	Low	QPSK	1.09	1.25
	Low	16QAM	1.10	1.25
	Mid	QPSK	1.10	1.25
	Mid	16QAM	1.10	1.25
	High	QPSK	1.10	1.25
	High	16QAM	1.10	1.25
3	Low	QPSK	2.71	3.06
	Low	16QAM	2.71	3.05
	Mid	QPSK	2.72	3.05
	Mid	16QAM	2.72	3.07
	High	QPSK	2.72	3.07
	High	16QAM	2.71	3.03
5	Low	QPSK	4.49	4.98
	Low	16QAM	4.50	4.97
	Mid	QPSK	4.52	5.02
	Mid	16QAM	4.51	5.00
	High	QPSK	4.51	4.99
	High	16QAM	4.49	4.97
10	Low	QPSK	9.01	9.92
	Low	16QAM	8.98	9.85
	Mid	QPSK	9.04	9.93
	Mid	16QAM	8.97	9.54
	High	QPSK	8.98	9.87
	High	16QAM	8.98	9.86



LTE Band 7				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
5	Low	QPSK	4.49	4.98
	Low	16QAM	4.50	4.98
	Mid	QPSK	4.50	4.95
	Mid	16QAM	4.50	4.97
	High	QPSK	4.51	4.98
	High	16QAM	4.51	4.99
10	Low	QPSK	9.02	9.78
	Low	16QAM	8.97	9.86
	Mid	QPSK	9.04	9.91
	Mid	16QAM	8.97	9.78
	High	QPSK	9.05	9.93
	High	16QAM	8.98	9.83
15	Low	QPSK	13.50	15.00
	Low	16QAM	13.51	15.10
	Mid	QPSK	13.52	14.99
	Mid	16QAM	13.48	14.95
	High	QPSK	13.49	15.00
	High	16QAM	13.52	15.06
20	Low	QPSK	18.02	19.88
	Low	16QAM	18.05	19.73
	Mid	QPSK	18.00	19.83
	Mid	16QAM	18.00	19.70
	High	QPSK	18.00	19.75
	High	16QAM	18.06	19.87



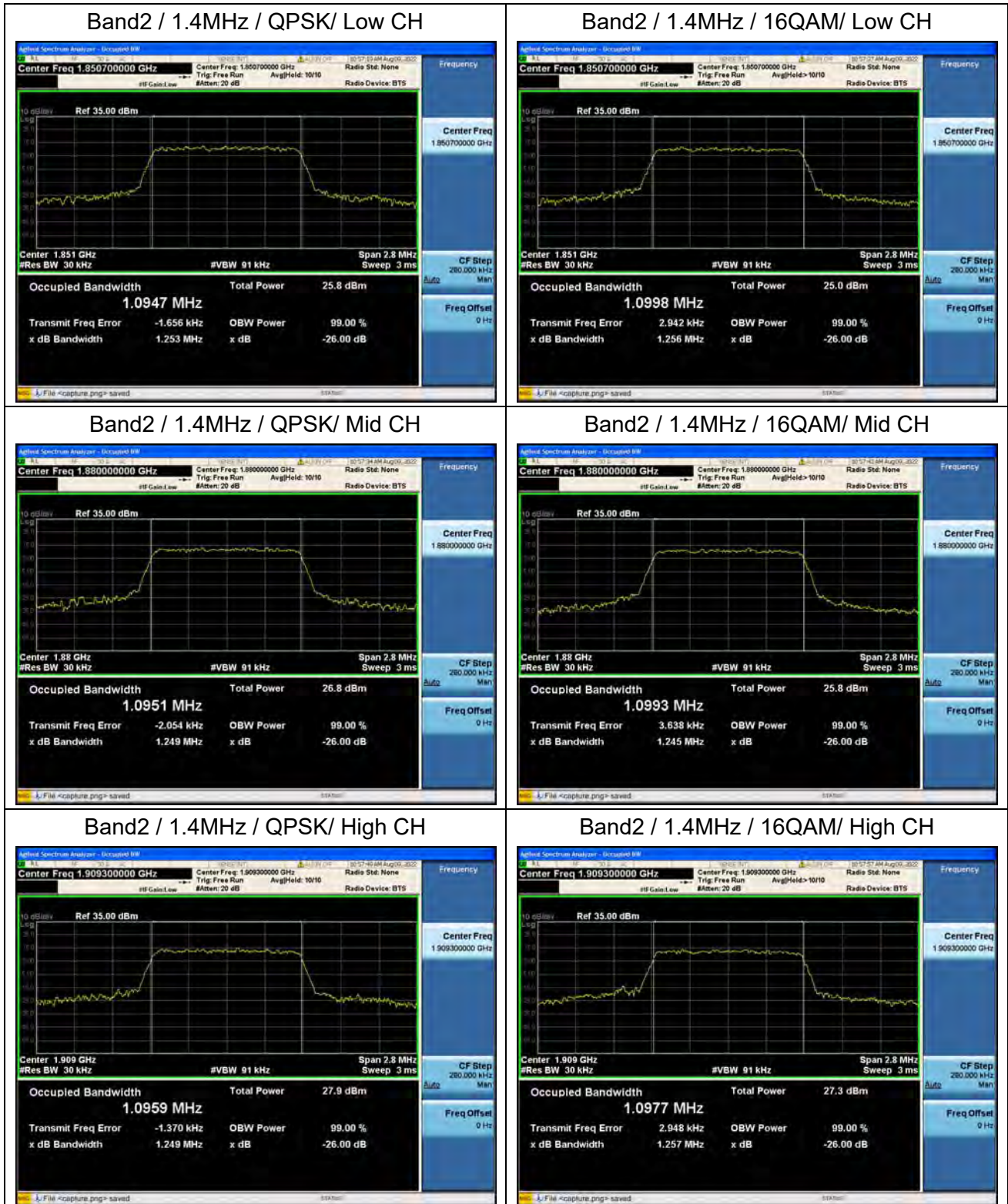
LTE Band 12				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
1.4	Low	QPSK	1.09	1.25
	Low	16QAM	1.10	1.25
	Mid	QPSK	1.10	1.24
	Mid	16QAM	1.10	1.25
	High	QPSK	1.10	1.25
	High	16QAM	1.10	1.25
3	Low	QPSK	2.71	3.04
	Low	16QAM	2.71	3.04
	Mid	QPSK	2.72	2.97
	Mid	16QAM	2.71	3.05
	High	QPSK	2.71	3.04
	High	16QAM	2.71	3.04
5	Low	QPSK	4.50	4.92
	Low	16QAM	4.49	4.96
	Mid	QPSK	4.50	5.00
	Mid	16QAM	4.51	4.99
	High	QPSK	4.50	4.97
	High	16QAM	4.50	4.99
10	Low	QPSK	9.03	9.84
	Low	16QAM	8.98	9.88
	Mid	QPSK	9.03	9.93
	Mid	16QAM	9.00	9.84
	High	QPSK	8.98	9.80
	High	16QAM	8.97	9.81



LTE Band 17				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
5	Low	QPSK	4.50	4.99
	Low	16QAM	4.50	4.99
	Mid	QPSK	4.48	4.96
	Mid	16QAM	4.50	4.95
	High	QPSK	4.49	4.96
	High	16QAM	4.50	4.98
10	Low	QPSK	8.99	9.80
	Low	16QAM	8.97	9.78
	Mid	QPSK	8.99	9.87
	Mid	16QAM	8.94	9.87
	High	QPSK	8.98	9.92
	High	16QAM	8.94	9.76

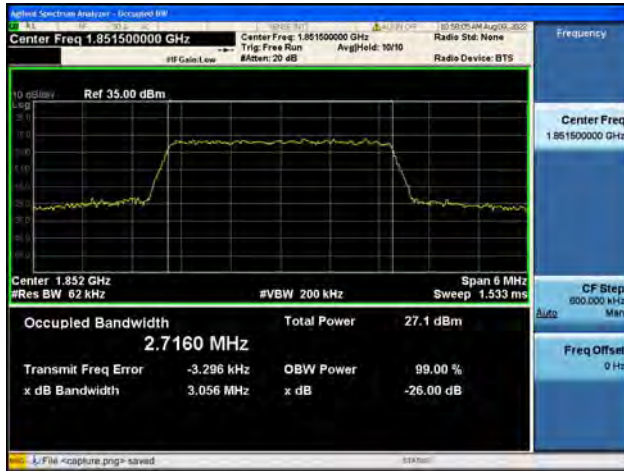


LTE Band 66				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
1.4	Low	QPSK	1.10	1.25
	Low	16QAM	1.09	1.25
	Mid	QPSK	1.10	1.25
	Mid	16QAM	1.10	1.25
	High	QPSK	1.10	1.25
	High	16QAM	1.10	1.25
3	Low	QPSK	2.71	3.04
	Low	16QAM	2.71	3.05
	Mid	QPSK	2.72	3.06
	Mid	16QAM	2.71	3.04
	High	QPSK	2.72	3.04
	High	16QAM	2.71	3.05
5	Low	QPSK	4.50	4.96
	Low	16QAM	4.50	4.97
	Mid	QPSK	4.50	4.97
	Mid	16QAM	4.50	4.99
	High	QPSK	4.50	4.97
	High	16QAM	4.47	4.81
10	Low	QPSK	9.00	9.87
	Low	16QAM	8.98	9.84
	Mid	QPSK	9.00	9.92
	Mid	16QAM	8.98	9.79
	High	QPSK	9.03	9.86
	High	16QAM	8.97	9.81
15	Low	QPSK	13.43	14.33
	Low	16QAM	13.50	14.96
	Mid	QPSK	13.49	14.85
	Mid	16QAM	13.48	14.93
	High	QPSK	13.47	14.81
	High	16QAM	13.49	14.94
20	Low	QPSK	17.94	19.67
	Low	16QAM	17.98	19.79
	Mid	QPSK	18.00	19.68
	Mid	16QAM	18.03	19.75
	High	QPSK	18.00	19.74
	High	16QAM	18.00	19.71

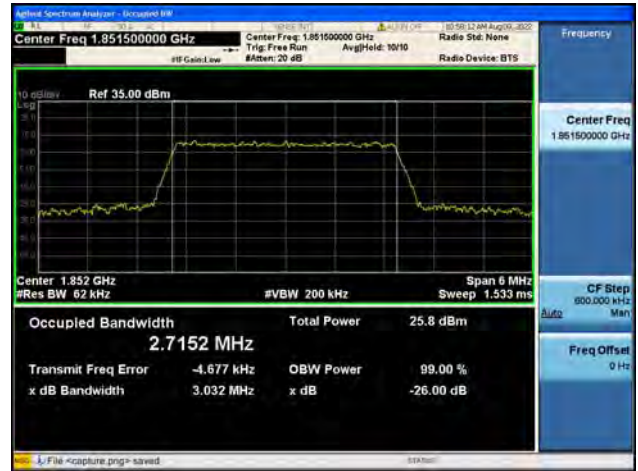




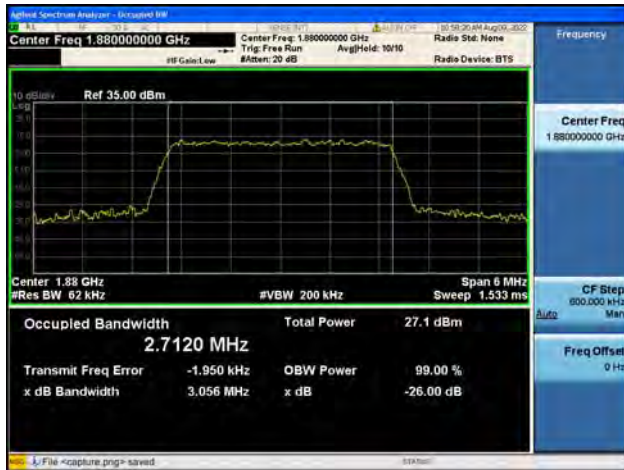
Band2 / 3MHz / QPSK/ Low CH



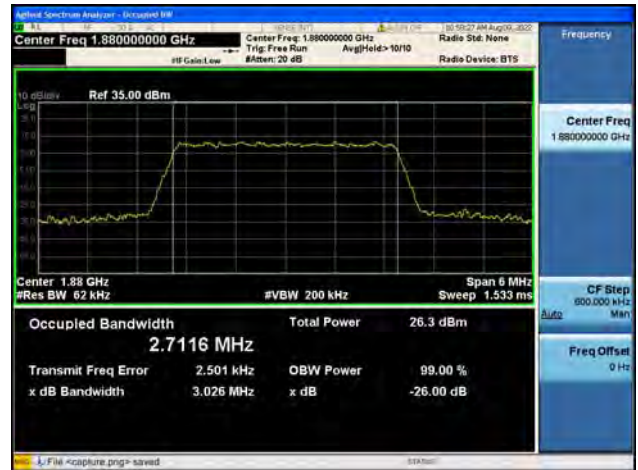
Band2 / 3MHz / 16QAM/ Low CH



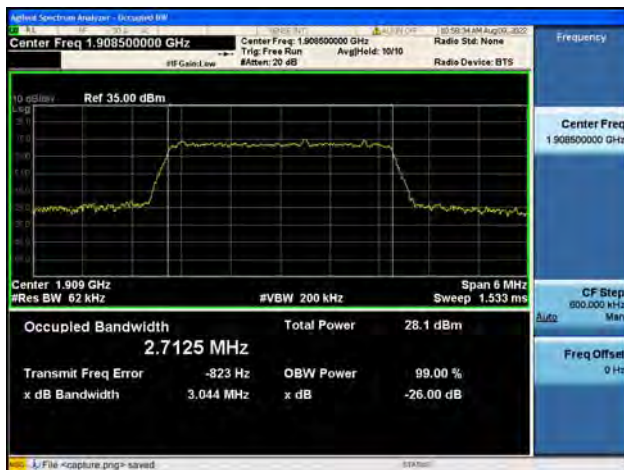
Band2 / 3MHz / QPSK/ Mid CH



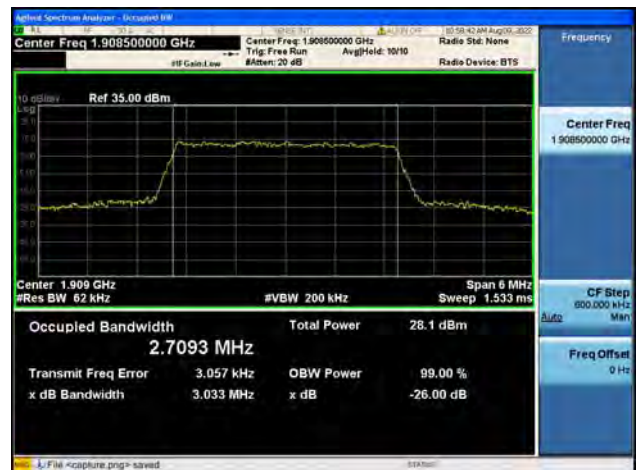
Band2 / 3MHz / 16QAM/ Mid CH



Band2 / 3MHz / QPSK/ High CH

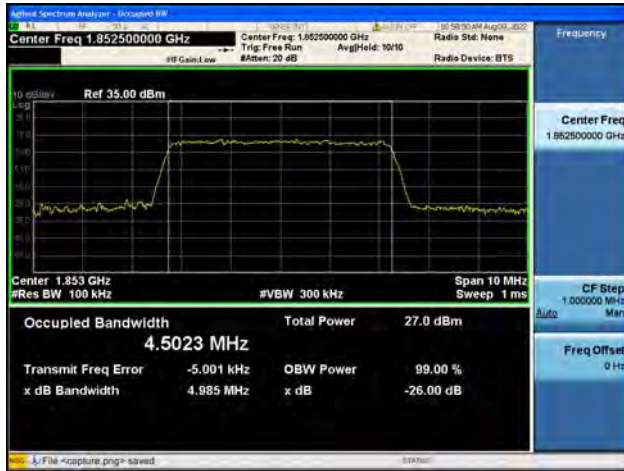


Band2 / 3MHz / 16QAM/ High CH

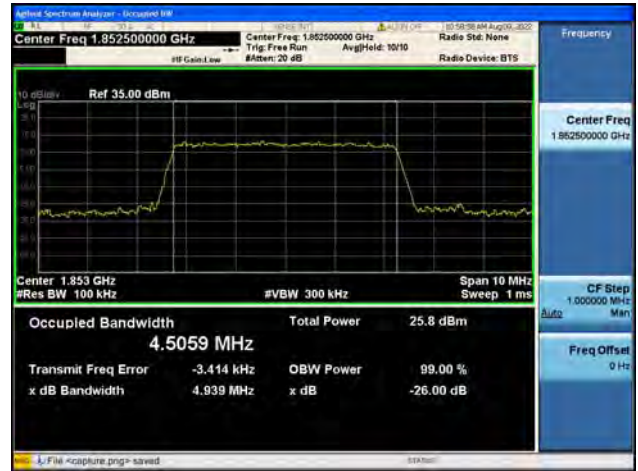




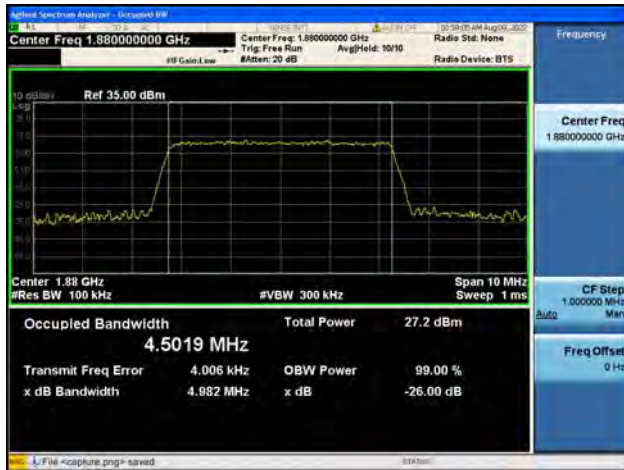
Band2 / 5MHz / QPSK/ Low CH



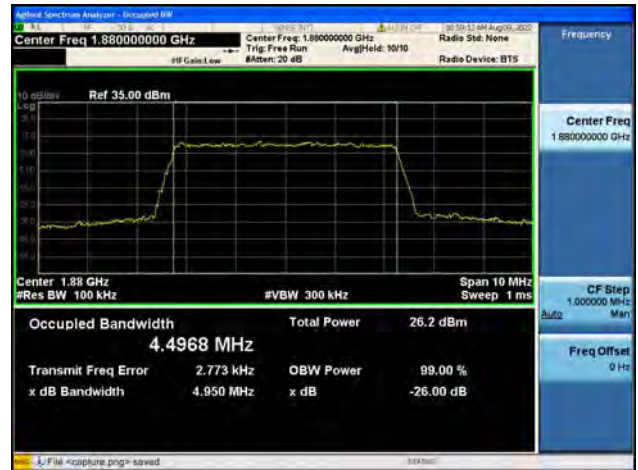
Band2 / 5MHz / 16QAM/ Low CH



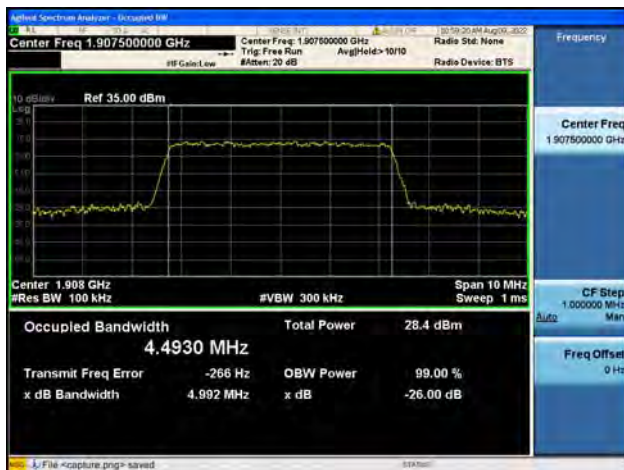
Band2 / 5MHz / QPSK/ Mid CH



Band2 / 5MHz / 16QAM/ Mid CH



Band2 / 5MHz / QPSK/ High CH



Band2 / 5MHz / 16QAM/ High CH

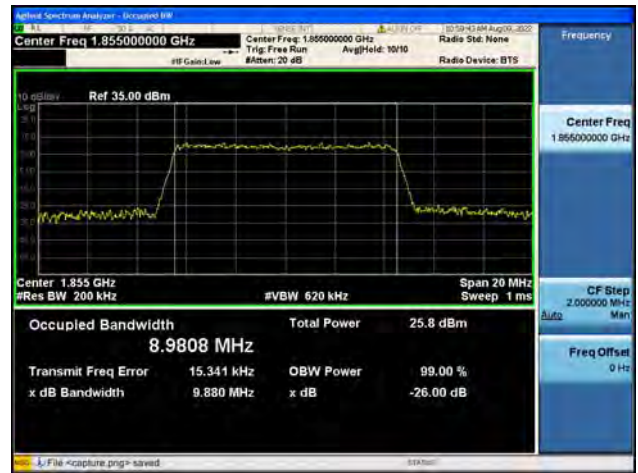




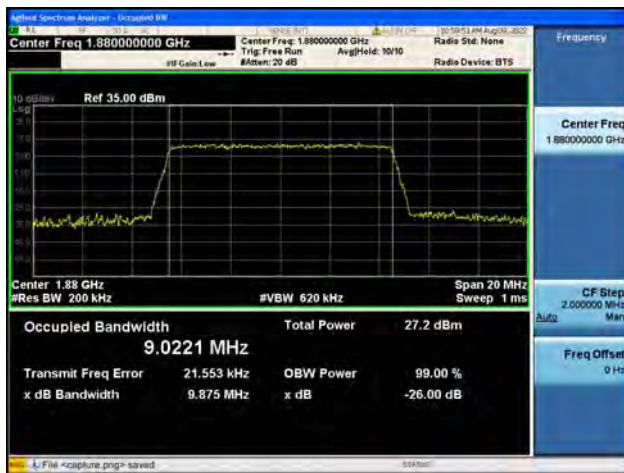
Band2 / 10MHz / QPSK/ Low CH



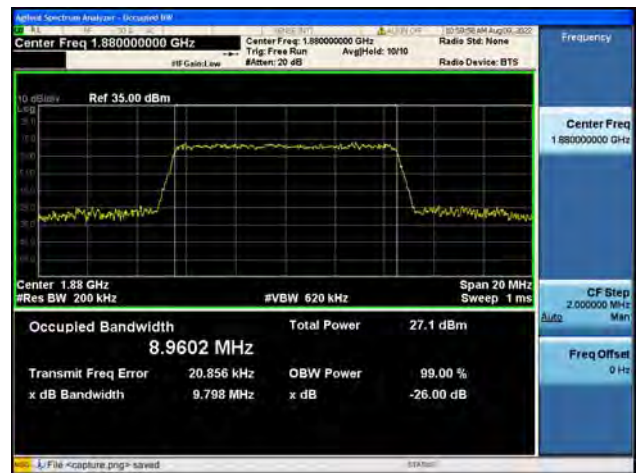
Band2 / 10MHz / 16QAM/ Low CH



Band2 / 10MHz / QPSK/ Mid CH



Band2 / 10MHz / 16QAM/ Mid CH



Band2 / 10MHz / QPSK/ High CH

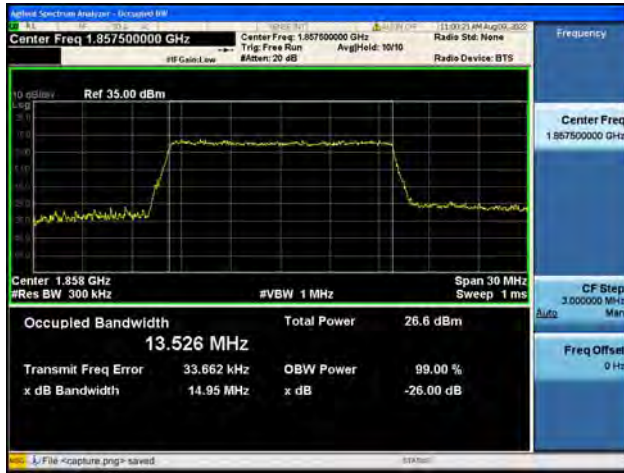


Band2 / 10MHz / 16QAM/ High CH

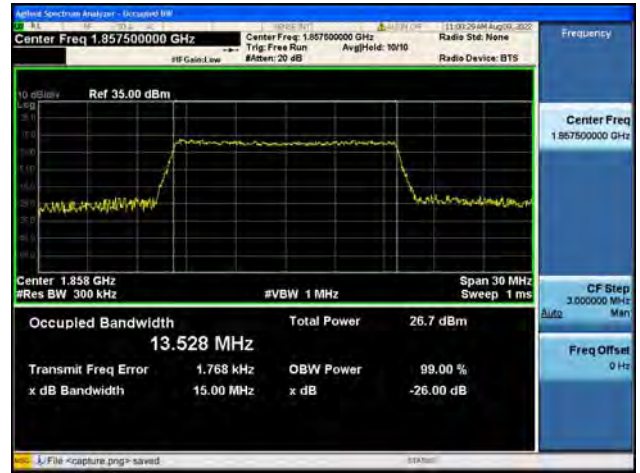




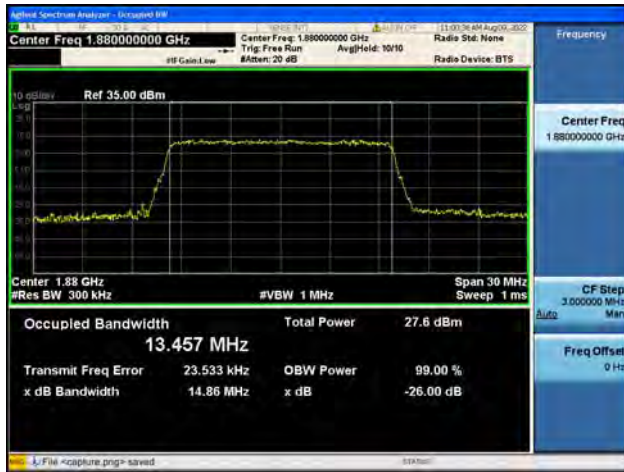
Band2 / 15MHz / QPSK/ Low CH



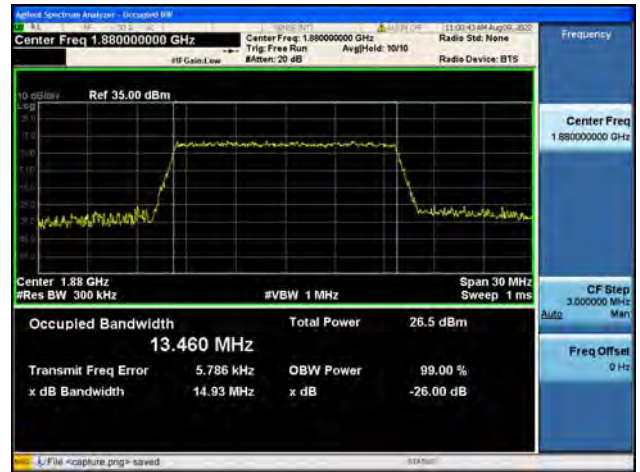
Band2 / 15MHz / 16QAM/ Low CH



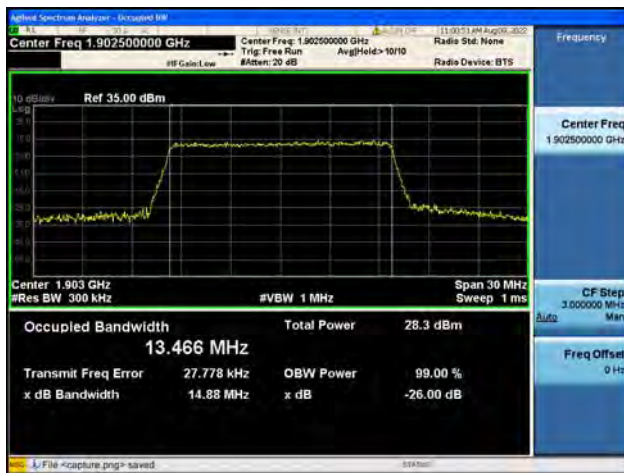
Band2 / 15MHz / QPSK/ Mid CH



Band2 / 15MHz / 16QAM/ Mid CH



Band2 / 15MHz / QPSK/ High CH

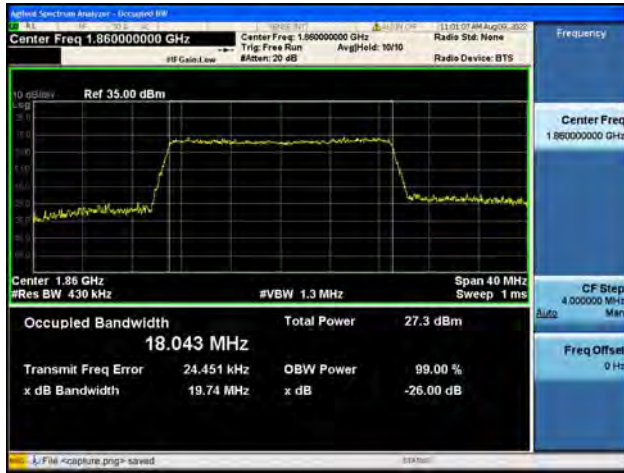


Band2 / 15MHz / 16QAM/ High CH





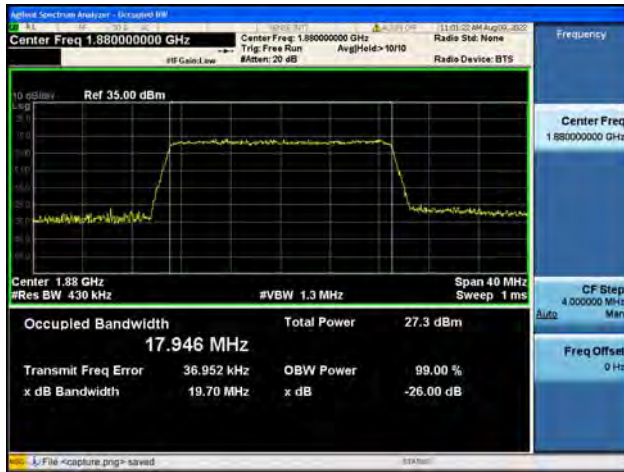
Band2 / 20MHz / QPSK/ Low CH



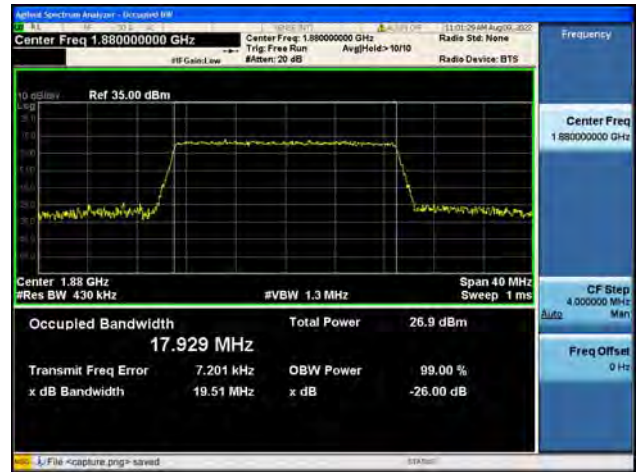
Band2 / 20MHz / 16QAM/ Low CH



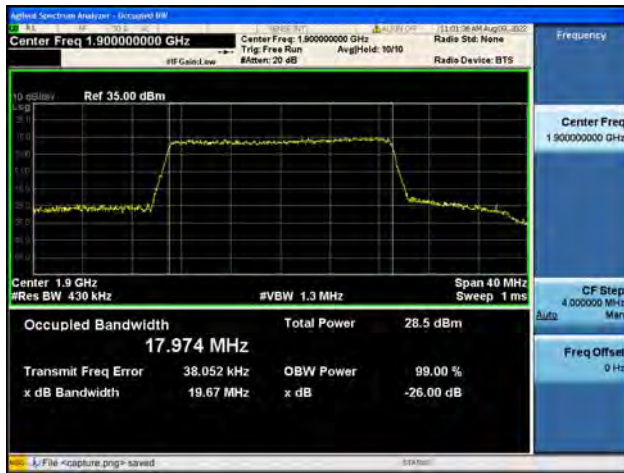
Band2 / 20MHz / QPSK/ Mid CH



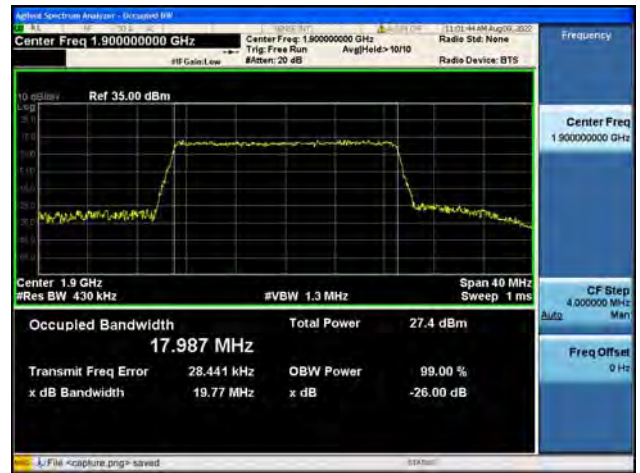
Band2 / 20MHz / 16QAM/ Mid CH



Band2 / 20MHz / QPSK/ High CH

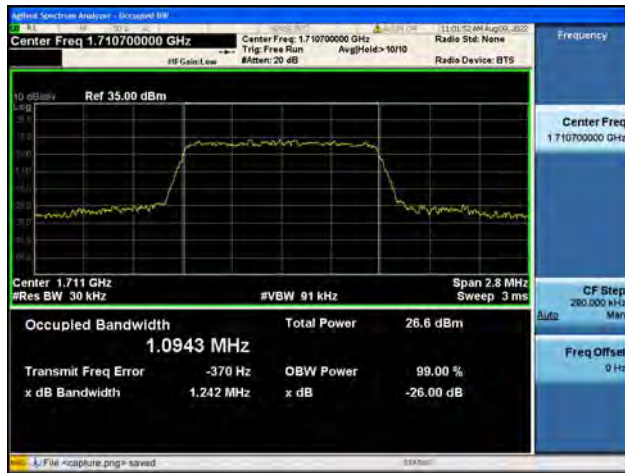


Band2 / 20MHz / 16QAM/ High CH

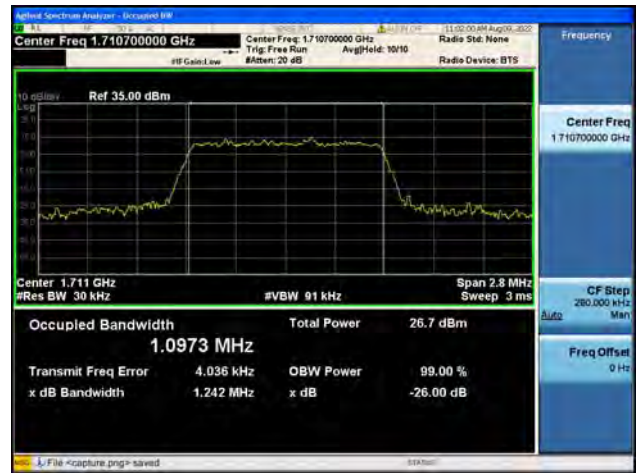




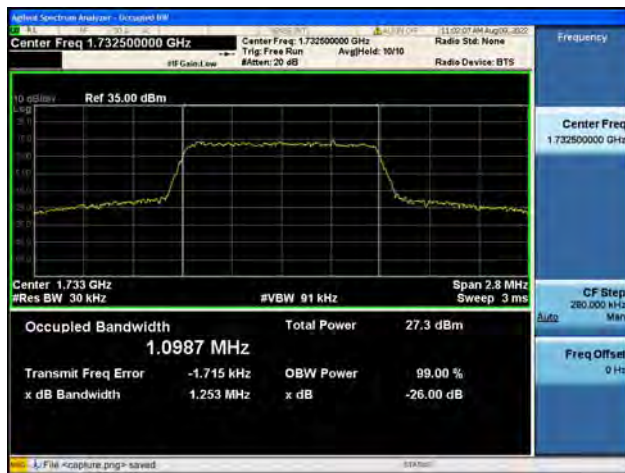
Band4 / 1.4MHz / QPSK/ Low CH



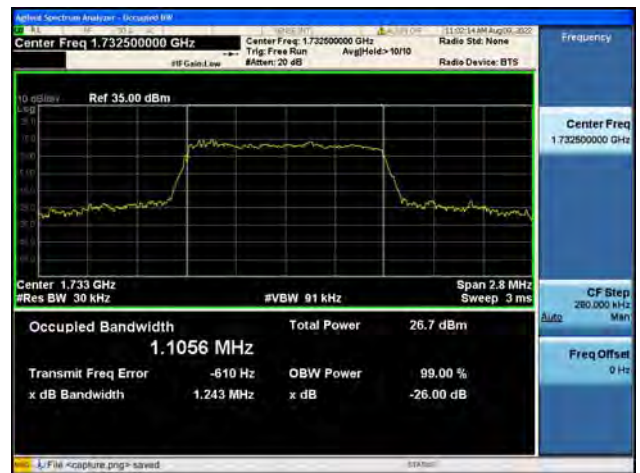
Band4 / 1.4MHz / 16QAM/ Low CH



Band4 / 1.4MHz / QPSK/ Mid CH



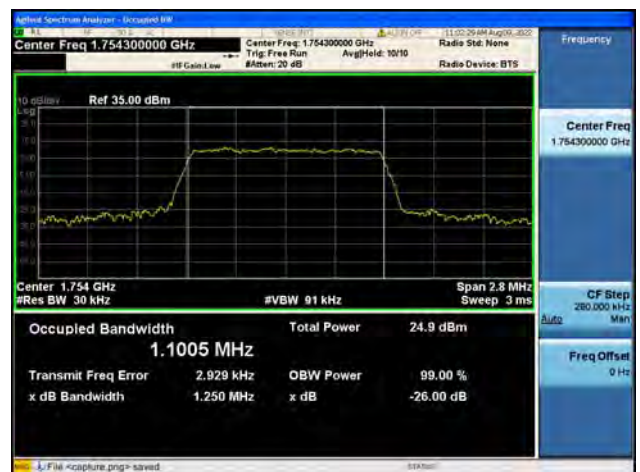
Band4 / 1.4MHz / 16QAM/ Mid CH



Band4 / 1.4MHz / QPSK/ High CH

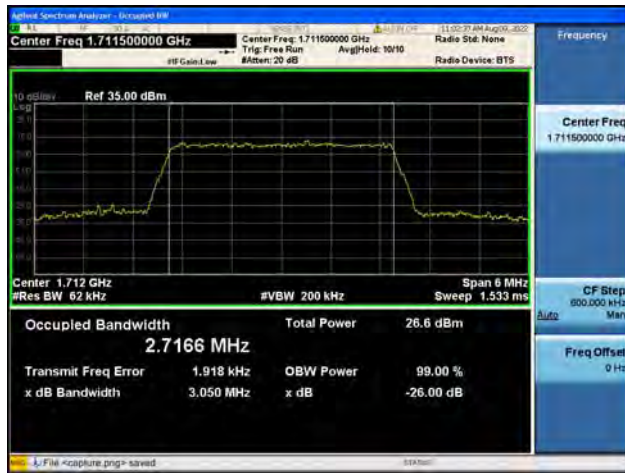


Band4 / 1.4MHz / 16QAM/ High CH

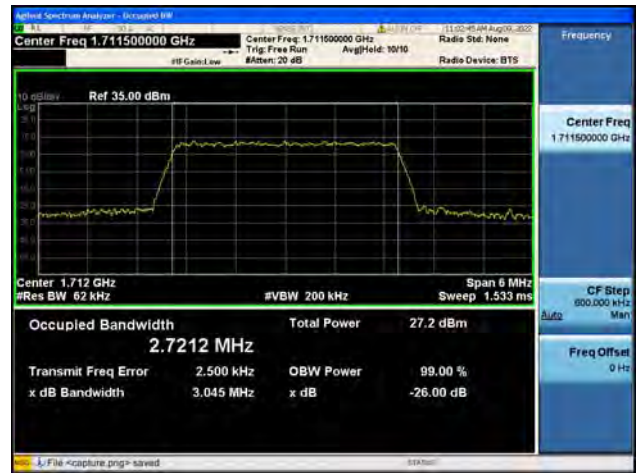




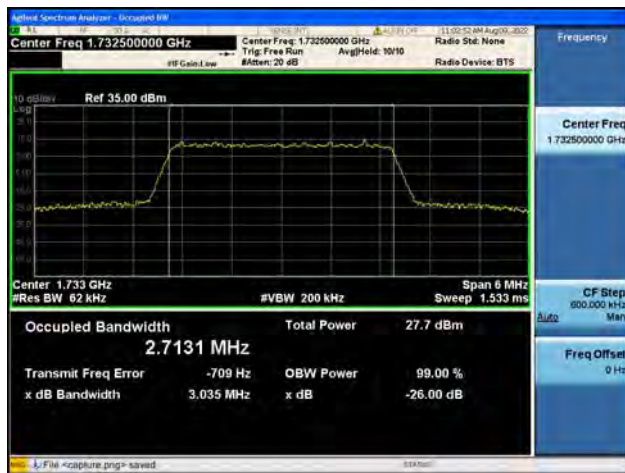
Band4 / 3MHz / QPSK/ Low CH



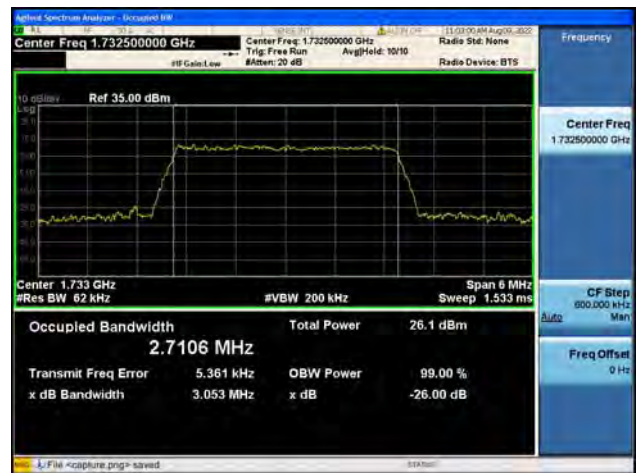
Band4 / 3MHz / 16QAM/ Low CH



Band4 / 3MHz / QPSK/ Mid CH



Band4 / 3MHz / 16QAM/ Mid CH



Band4 / 3MHz / QPSK/ High CH

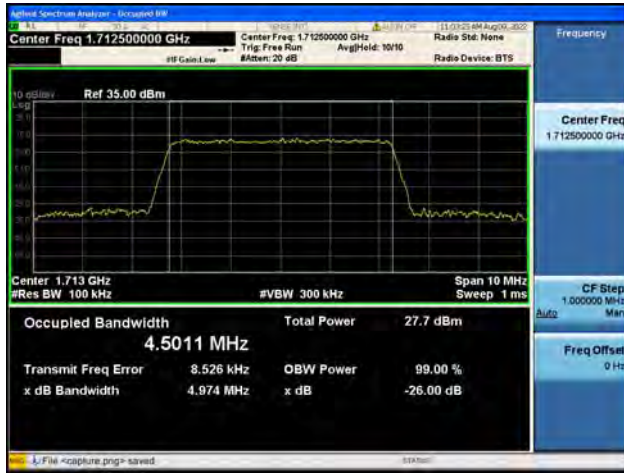


Band4 / 3MHz / 16QAM/ High CH





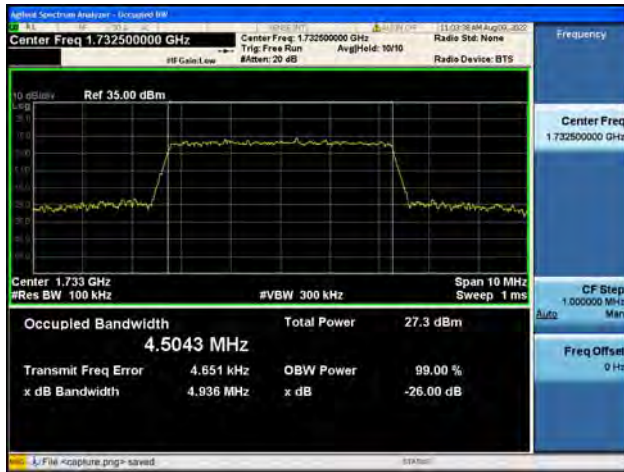
Band4 / 5MHz / QPSK/ Low CH



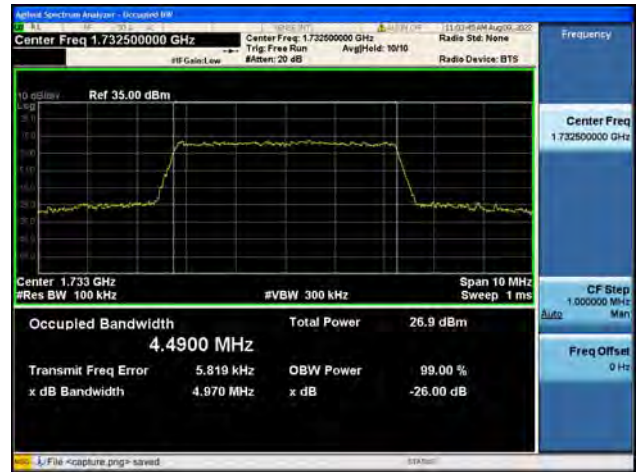
Band4 / 5MHz / 16QAM/ Low CH



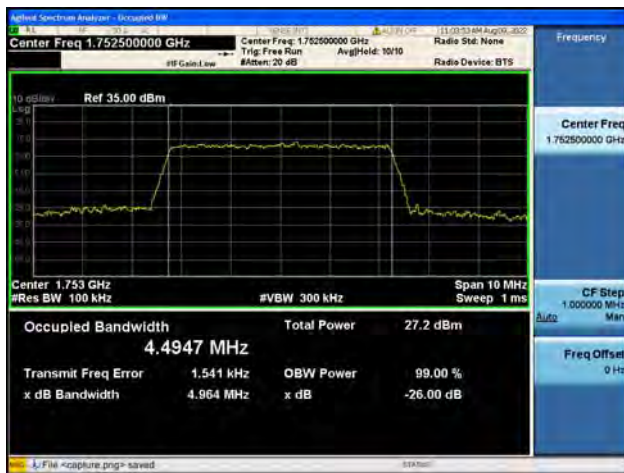
Band4 / 5MHz / QPSK/ Mid CH



Band4 / 5MHz / 16QAM/ Mid CH



Band4 / 5MHz / QPSK/ High CH

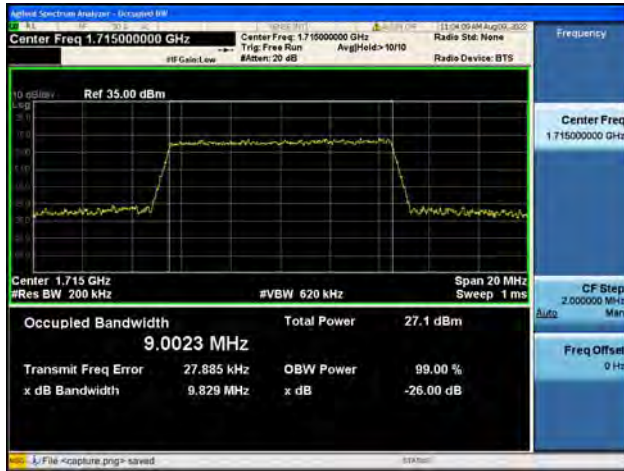


Band4 / 5MHz / 16QAM/ High CH

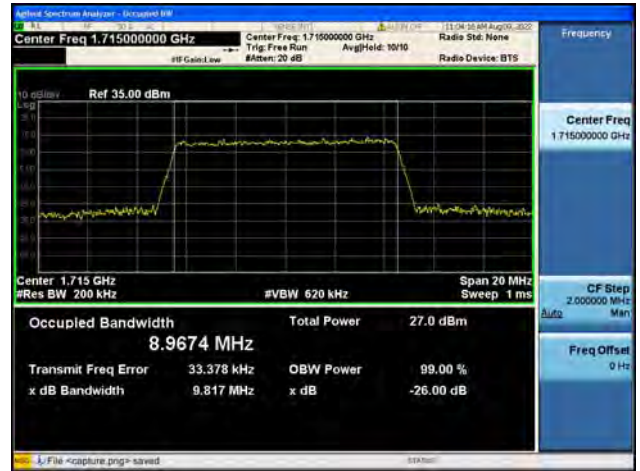




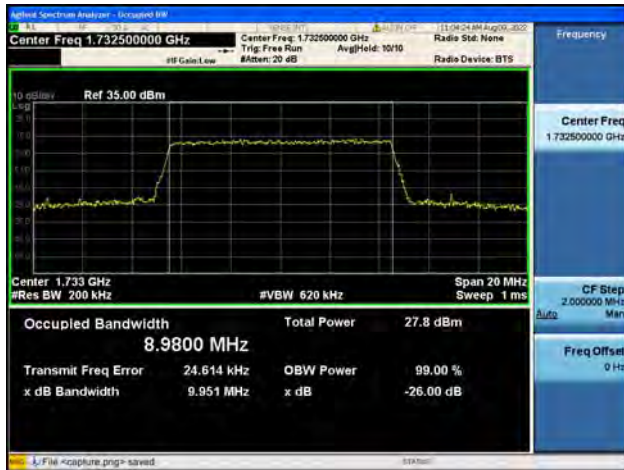
Band4 / 10MHz / QPSK/ Low CH



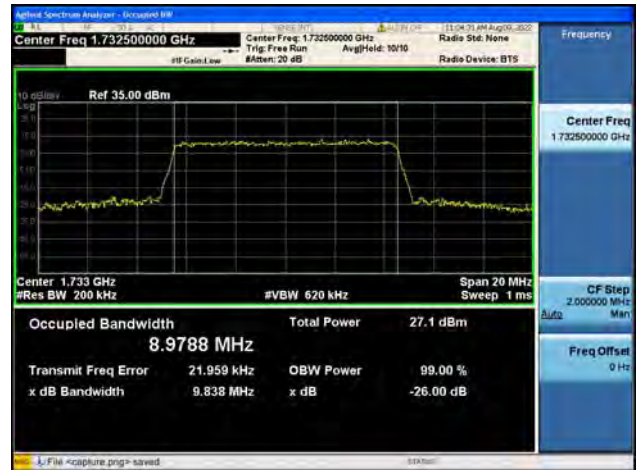
Band4 / 10MHz / 16QAM/ Low CH



Band4 / 10MHz / QPSK/ Mid CH



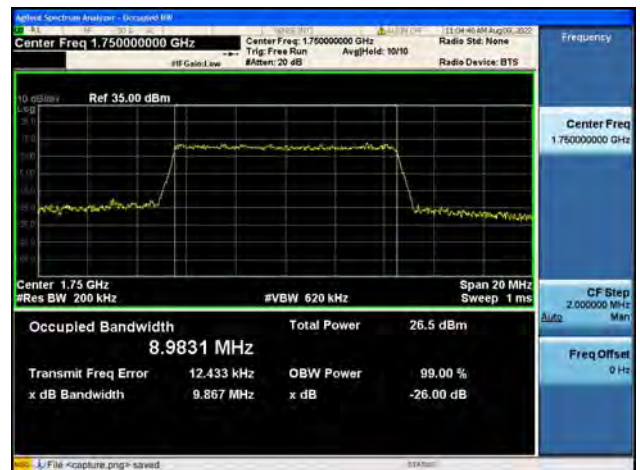
Band4 / 10MHz / 16QAM/ Mid CH



Band4 / 10MHz / QPSK/ High CH

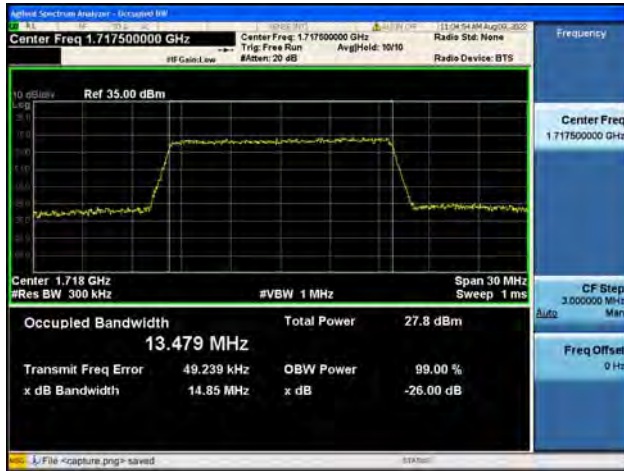


Band4 / 10MHz / 16QAM/ High CH

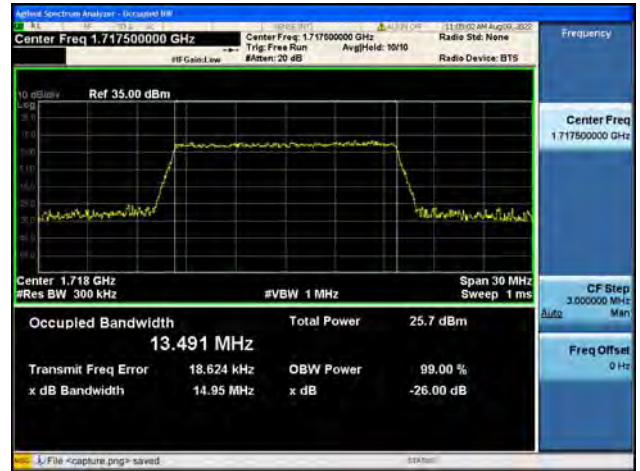




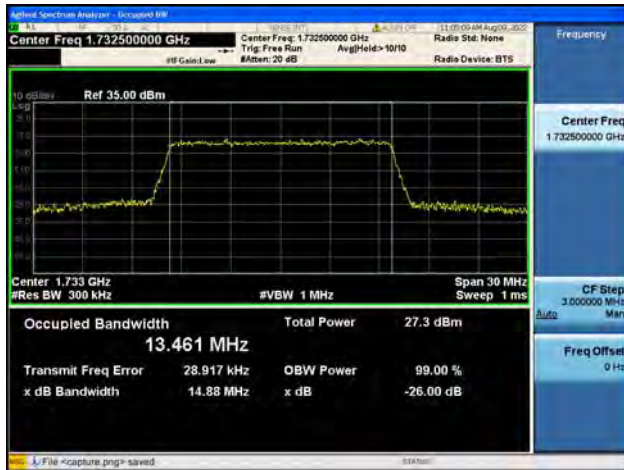
Band4 / 15MHz / QPSK/ Low CH



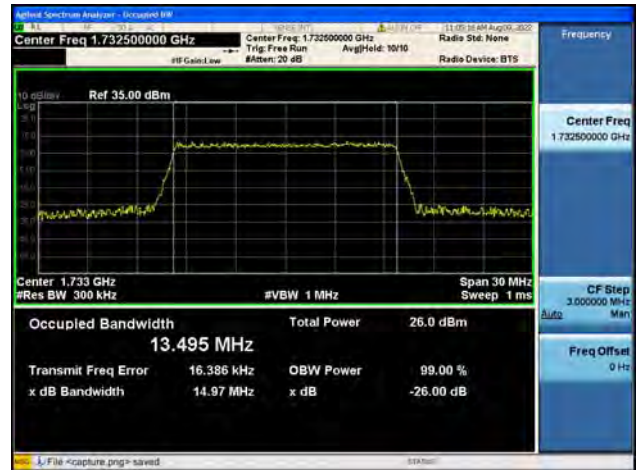
Band4 / 15MHz / 16QAM/ Low CH



Band4 / 15MHz / QPSK/ Mid CH



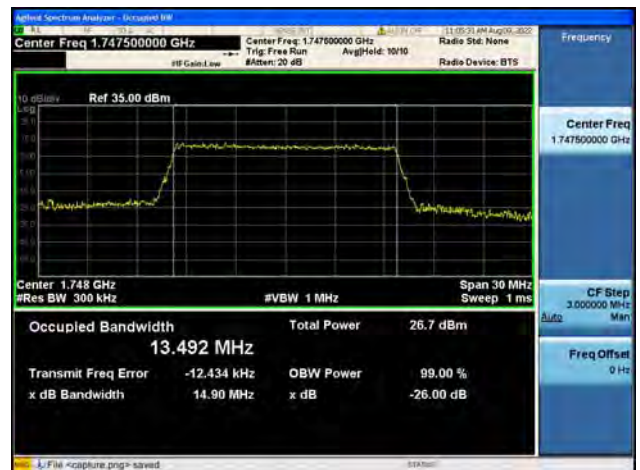
Band4 / 15MHz / 16QAM/ Mid CH



Band4 / 15MHz / QPSK/ High CH

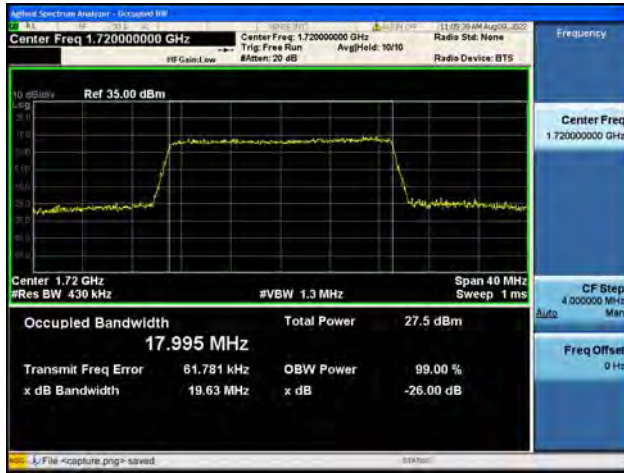


Band4 / 15MHz / 16QAM/ High CH





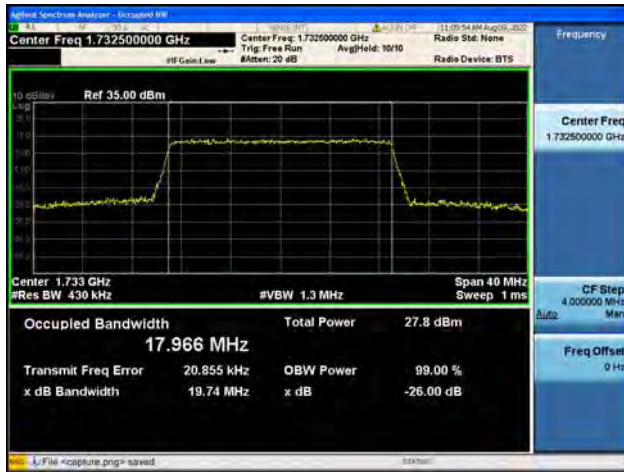
Band4 / 20MHz / QPSK/ Low CH



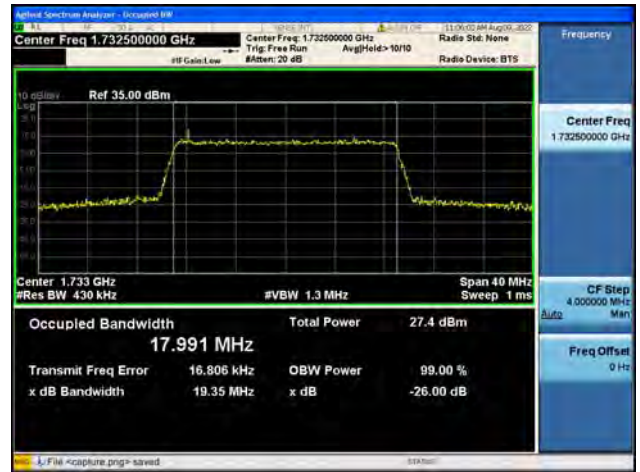
Band4 / 20MHz / 16QAM/ Low CH



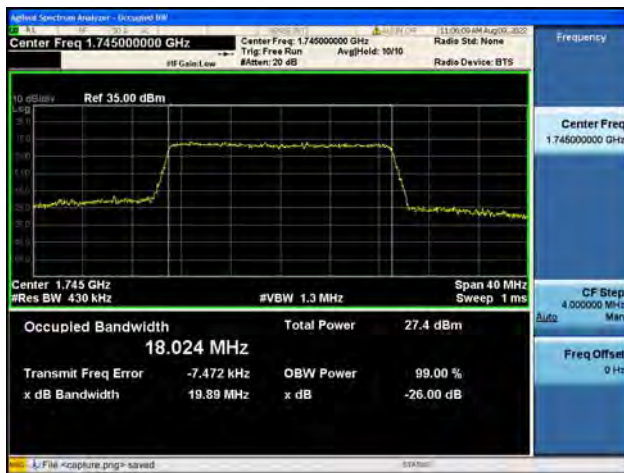
Band4 / 20MHz / QPSK/ Mid CH



Band4 / 20MHz / 16QAM/ Mid CH



Band4 / 20MHz / QPSK/ High CH

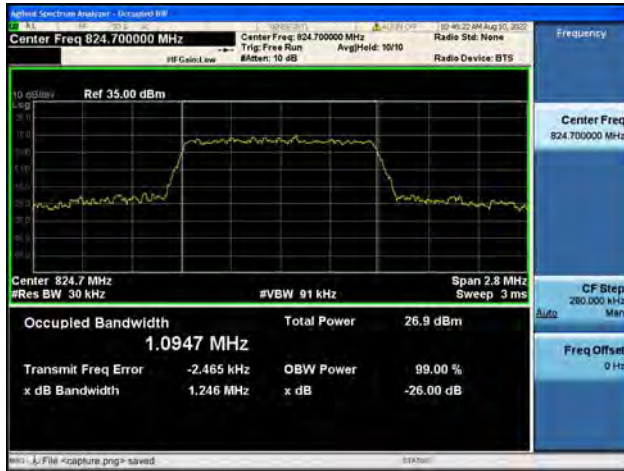


Band4 / 20MHz / 16QAM/ High CH





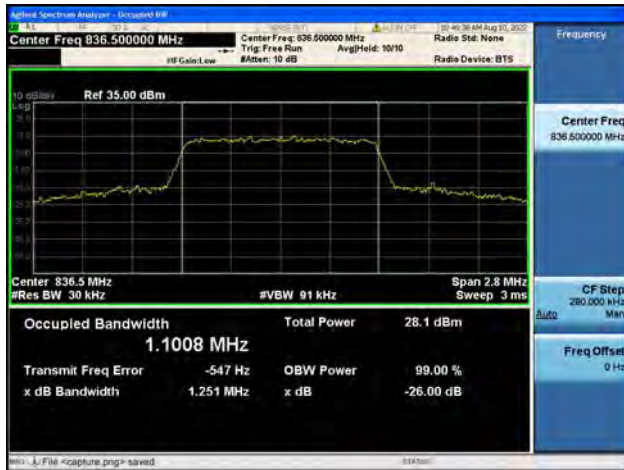
Band5 / 1.4MHz / QPSK/ Low CH



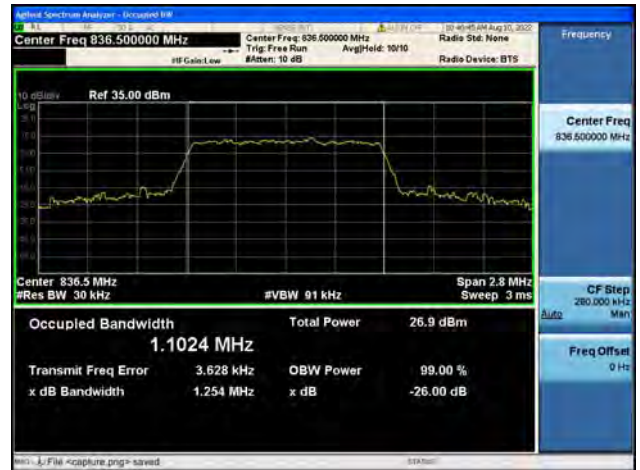
Band5 / 1.4MHz / 16QAM/ Low CH



Band5 / 1.4MHz / QPSK/ Mid CH



Band5 / 1.4MHz / 16QAM/ Mid CH



Band5 / 1.4MHz / QPSK/ High CH

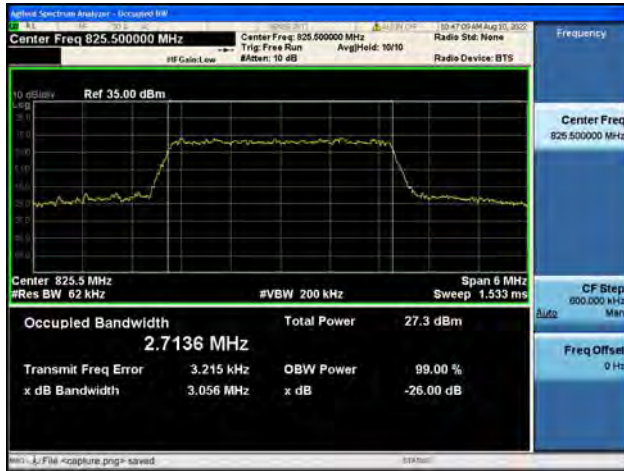


Band5 / 1.4MHz / 16QAM/ High CH





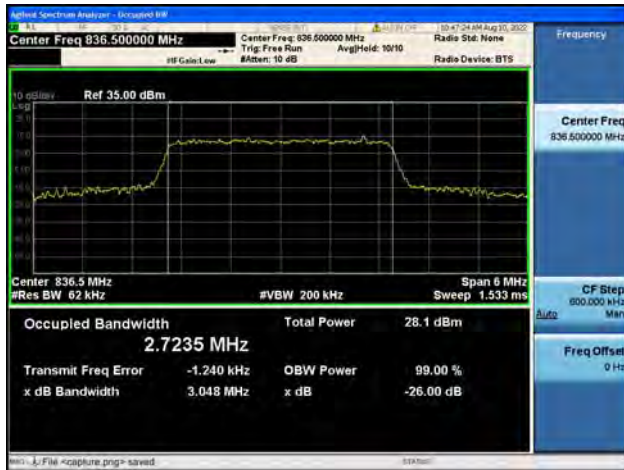
Band5 / 3MHz / QPSK/ Low CH



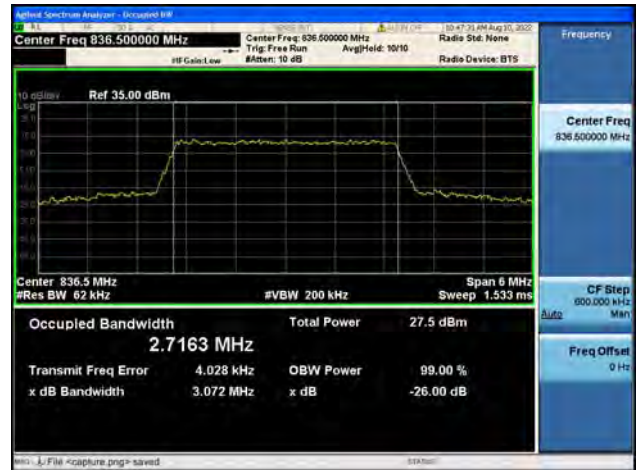
Band5 / 3MHz / 16QAM/ Low CH



Band5 / 3MHz / QPSK/ Mid CH



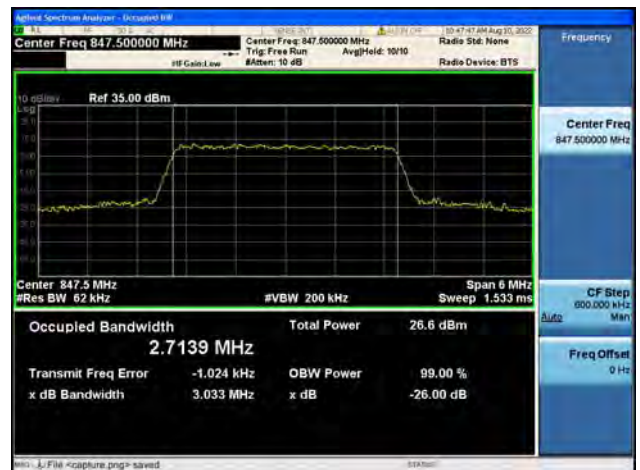
Band5 / 3MHz / 16QAM/ Mid CH



Band5 / 3MHz / QPSK/ High CH

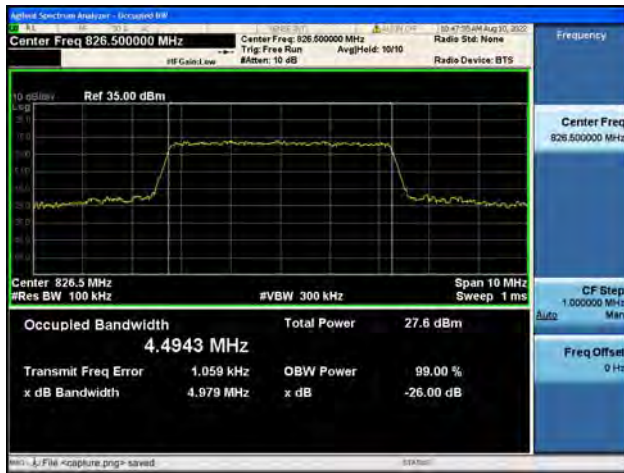


Band5 / 3MHz / 16QAM/ High CH

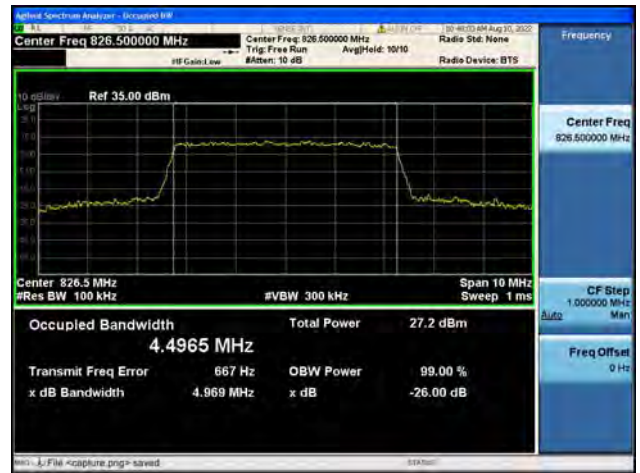




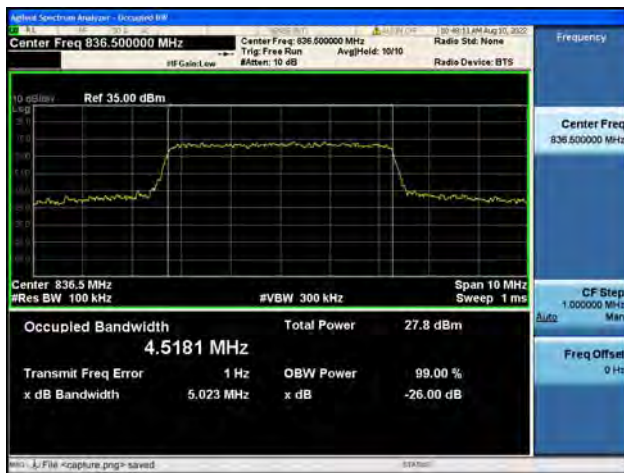
Band5 / 5MHz / QPSK/ Low CH



Band5 / 5MHz / 16QAM/ Low CH



Band5 / 5MHz / QPSK/ Mid CH



Band5 / 5MHz / 16QAM/ Mid CH



Band5 / 5MHz / QPSK/ High CH

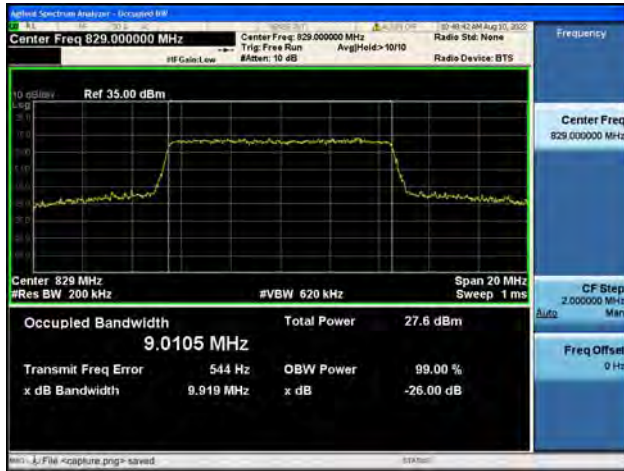


Band5 / 5MHz / 16QAM/ High CH





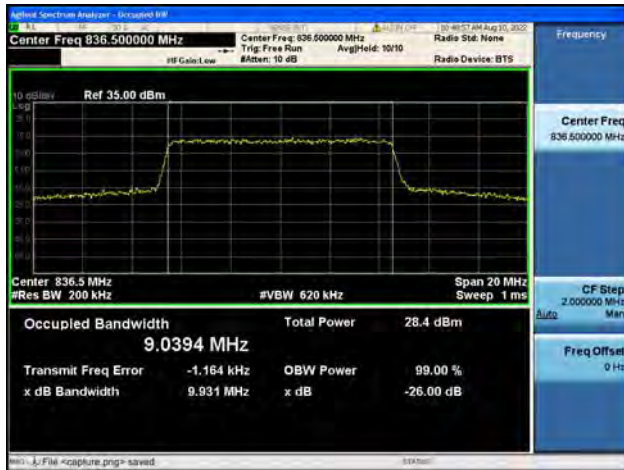
Band5 / 10MHz / QPSK/ Low CH



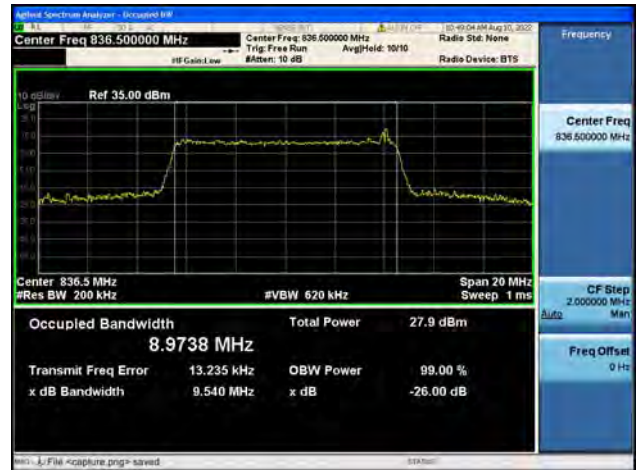
Band5 / 10MHz / 16QAM/ Low CH



Band5 / 10MHz / QPSK/ Mid CH



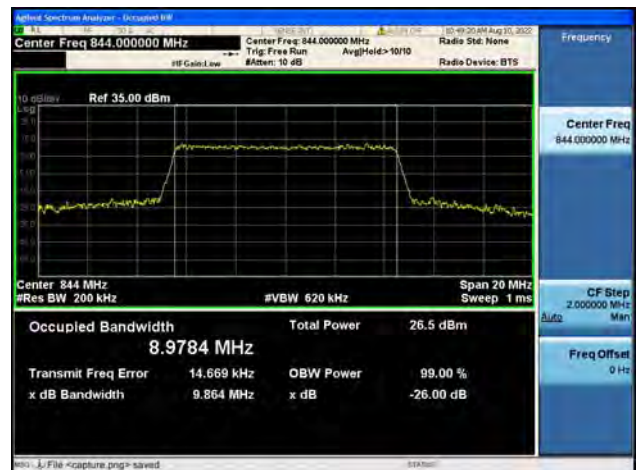
Band5 / 10MHz / 16QAM/ Mid CH



Band5 / 10MHz / QPSK/ High CH

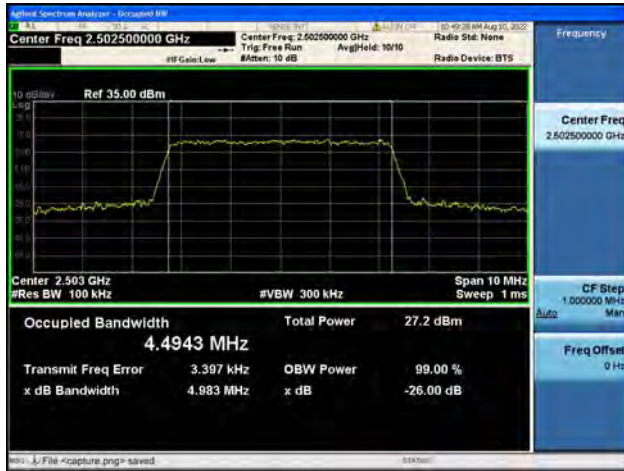


Band5 / 10MHz / 16QAM/ High CH

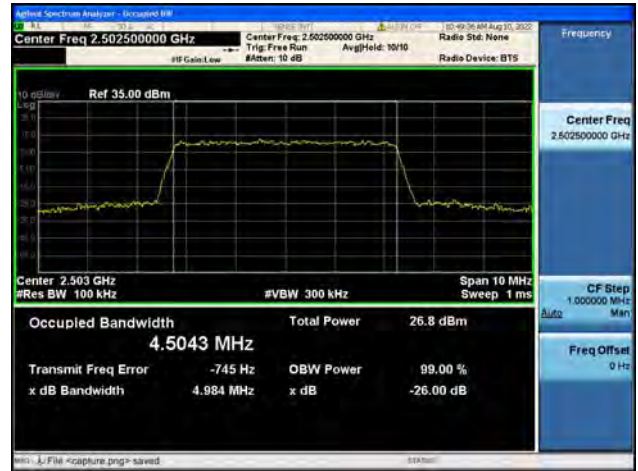




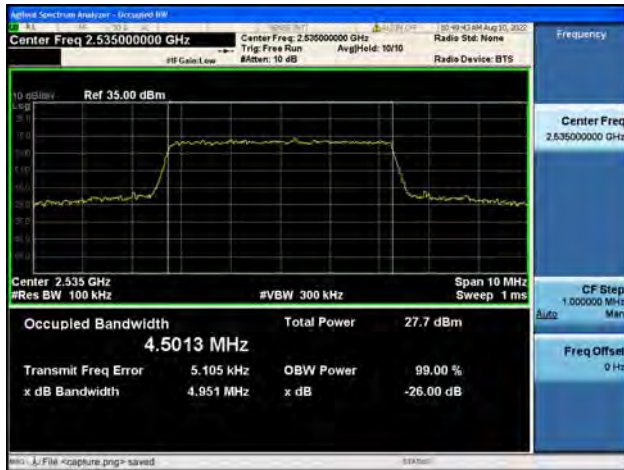
Band7 / 5MHz / QPSK/ Low CH



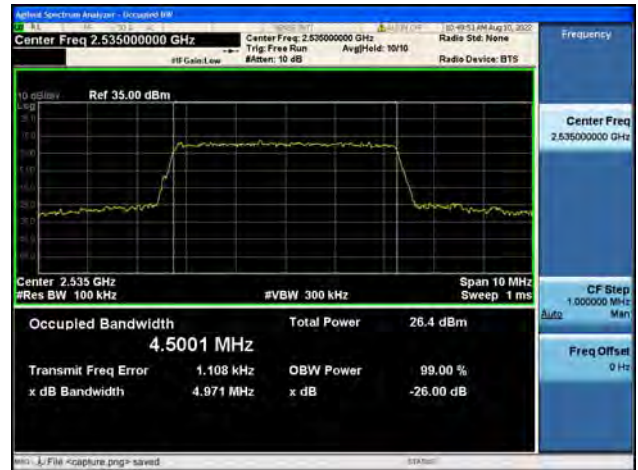
Band7 / 5MHz / 16QAM/ Low CH



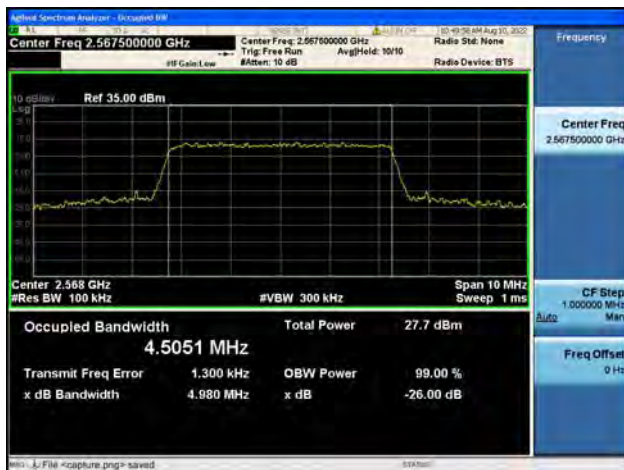
Band7 / 5MHz / QPSK/ Mid CH



Band7 / 5MHz / 16QAM/ Mid CH



Band7 / 5MHz / QPSK/ High CH

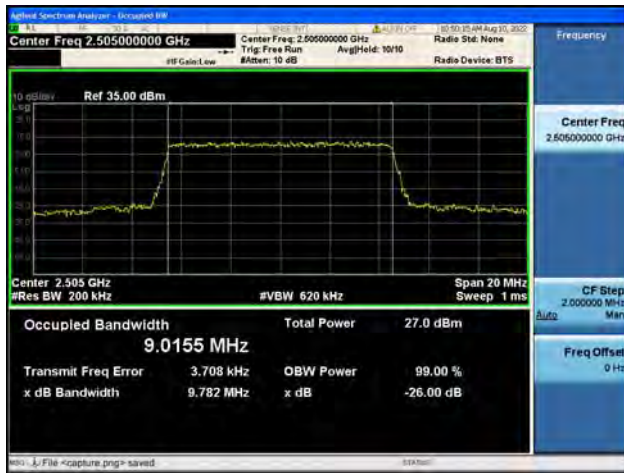


Band7 / 5MHz / 16QAM/ High CH

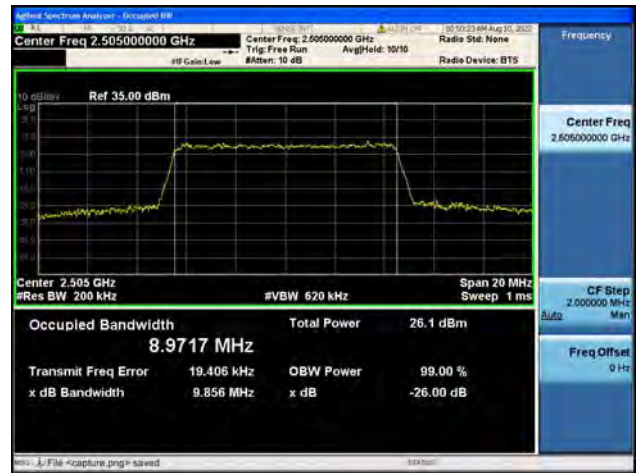




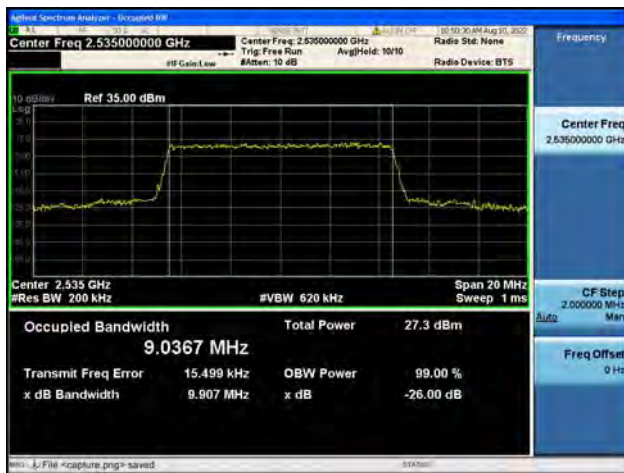
Band7 / 10MHz / QPSK/ Low CH



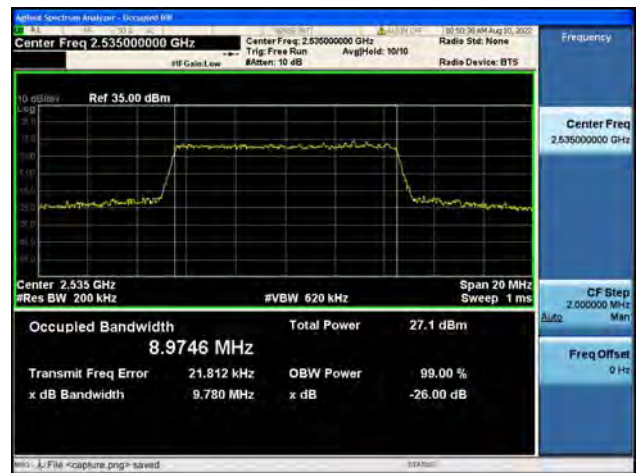
Band7 / 10MHz / 16QAM/ Low CH



Band7 / 10MHz / QPSK/ Mid CH



Band7 / 10MHz / 16QAM/ Mid CH



Band7 / 10MHz / QPSK/ High CH

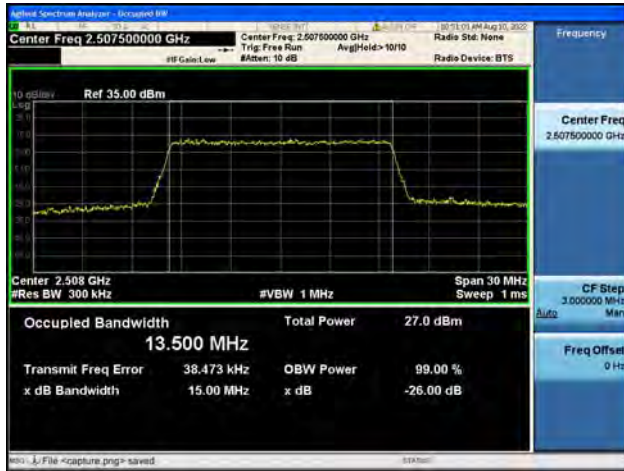


Band7 / 10MHz / 16QAM/ High CH

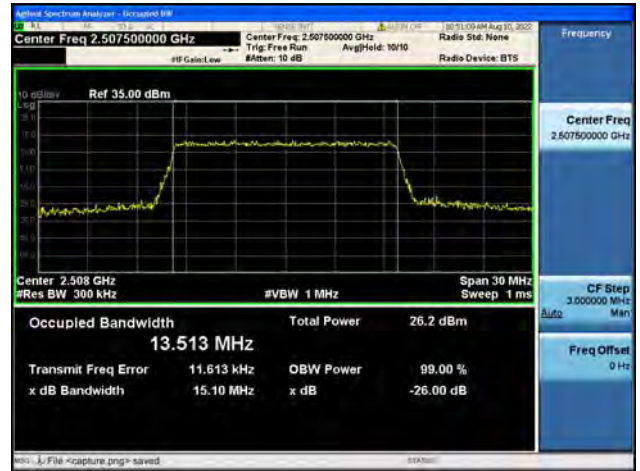




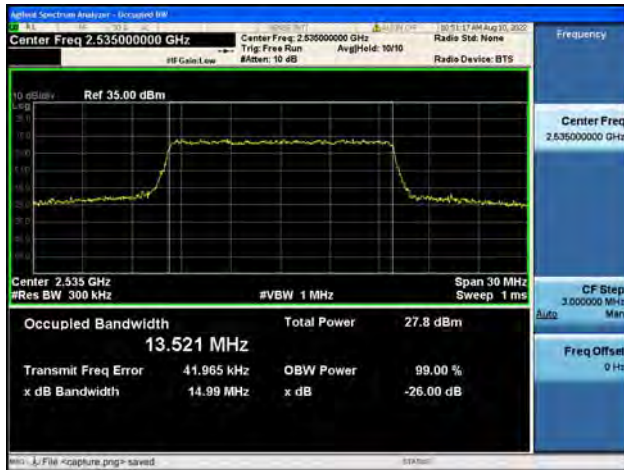
Band7 / 15MHz / QPSK/ Low CH



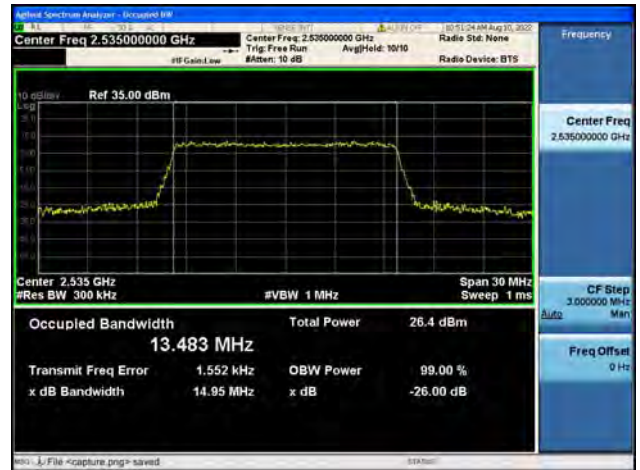
Band7 / 15MHz / 16QAM/ Low CH



Band7 / 15MHz / QPSK/ Mid CH



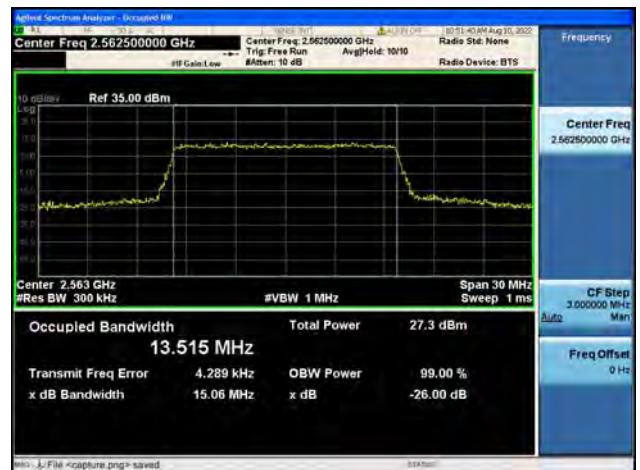
Band7 / 15MHz / 16QAM/ Mid CH



Band7 / 15MHz / QPSK/ High CH

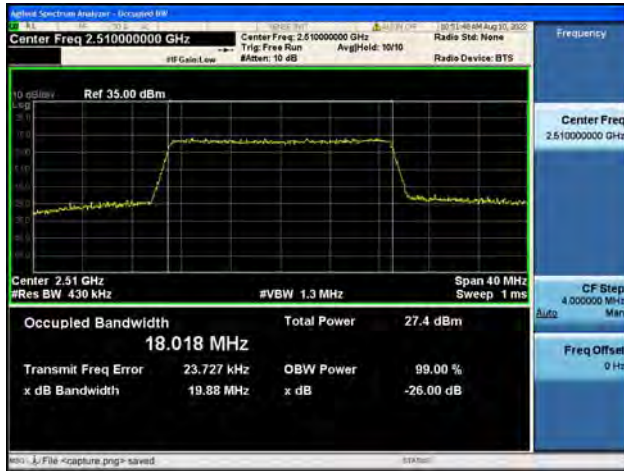


Band7 / 15MHz / 16QAM/ High CH





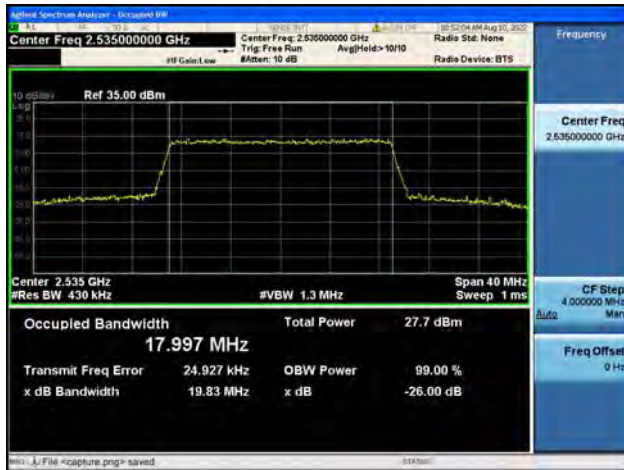
Band7 / 20MHz / QPSK/ Low CH



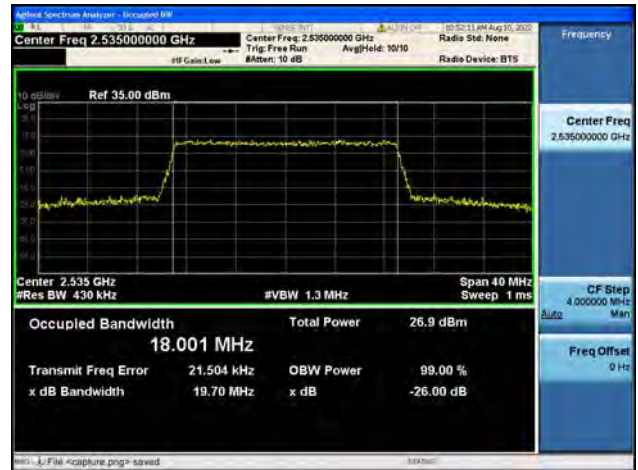
Band7 / 20MHz / 16QAM/ Low CH



Band7 / 20MHz / QPSK/ Mid CH



Band7 / 20MHz / 16QAM/ Mid CH



Band7 / 20MHz / QPSK/ High CH

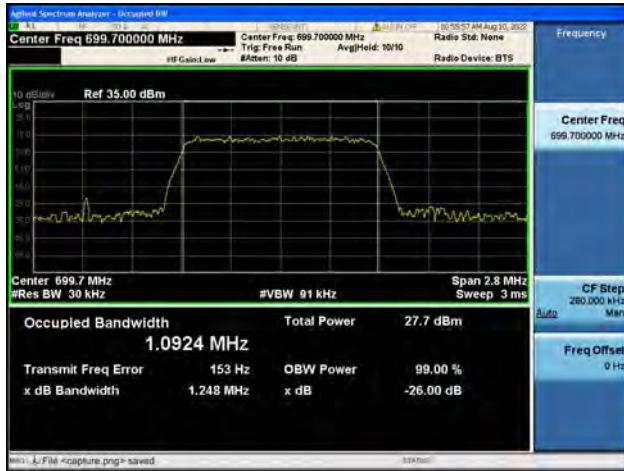


Band7 / 20MHz / 16QAM/ High CH

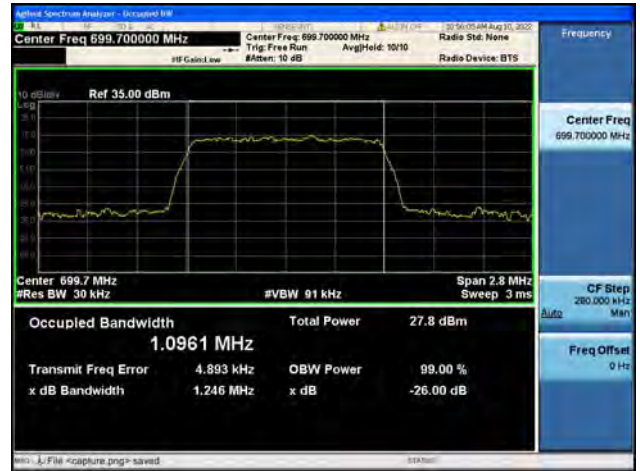




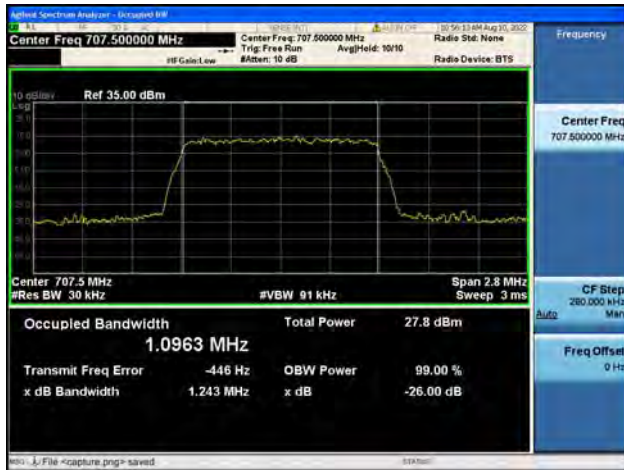
Band12 / 1.4MHz / QPSK/ Low CH



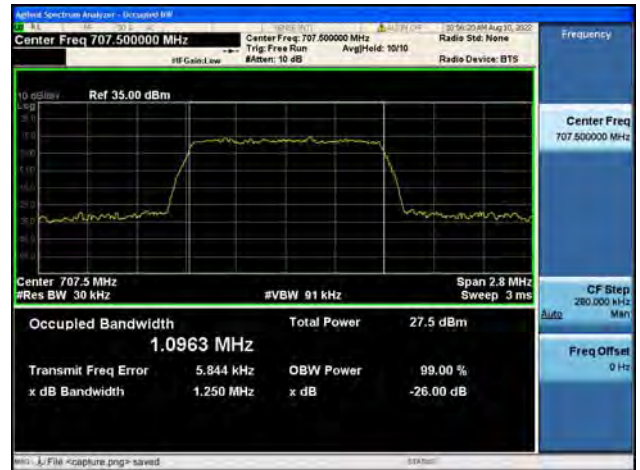
Band12 / 1.4MHz / 16QAM/ Low CH



Band12 / 1.4MHz / QPSK/ Mid CH



Band12 / 1.4MHz / 16QAM/ Mid CH



Band12 / 1.4MHz / QPSK/ High CH

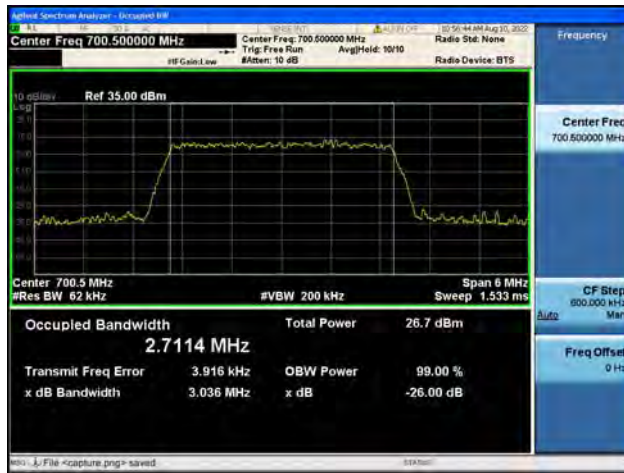


Band12 / 1.4MHz / 16QAM/ High CH

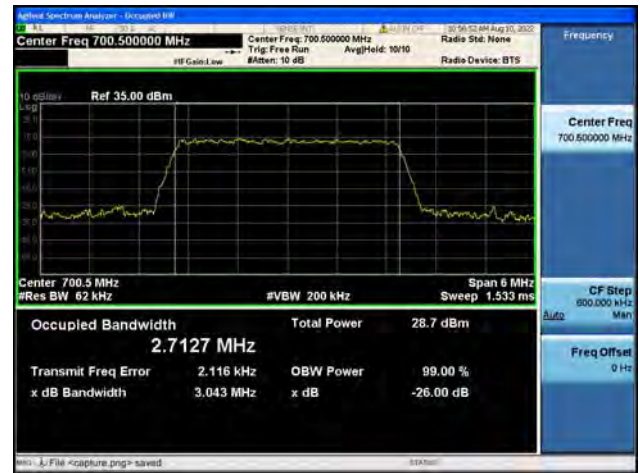




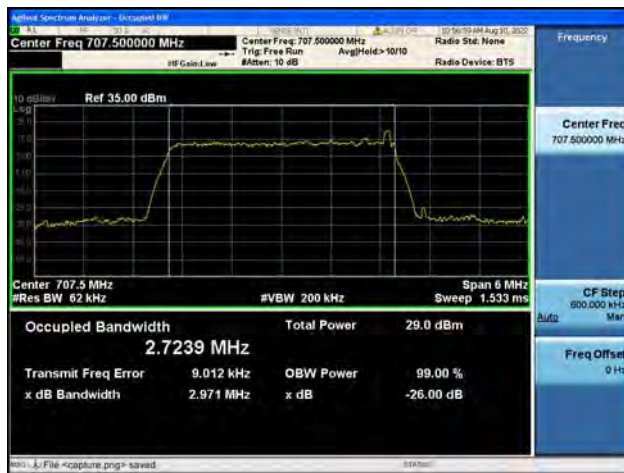
Band12 / 3MHz / QPSK/ Low CH



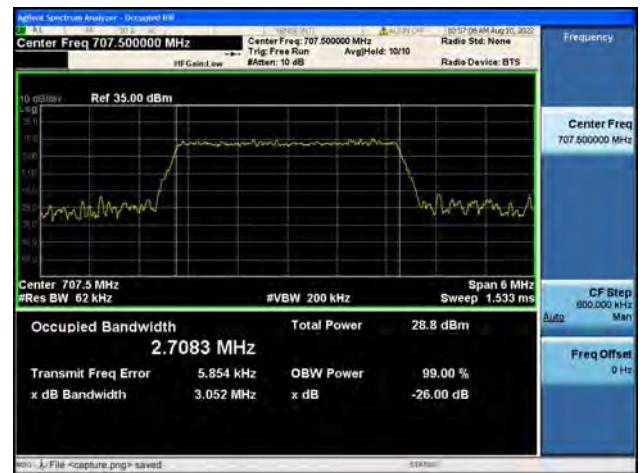
Band12 / 3MHz / 16QAM/ Low CH



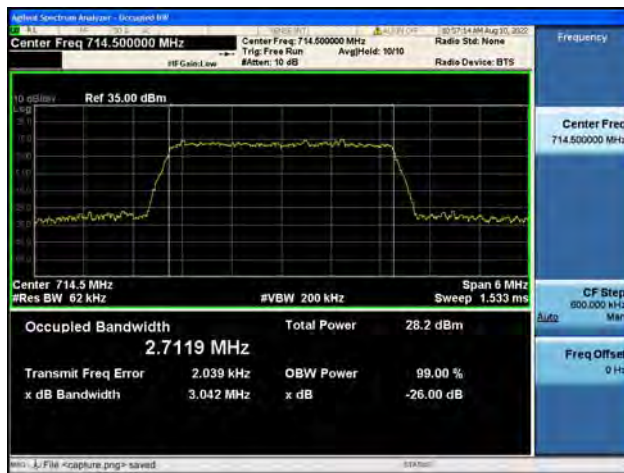
Band12 / 3MHz / QPSK/ Mid CH



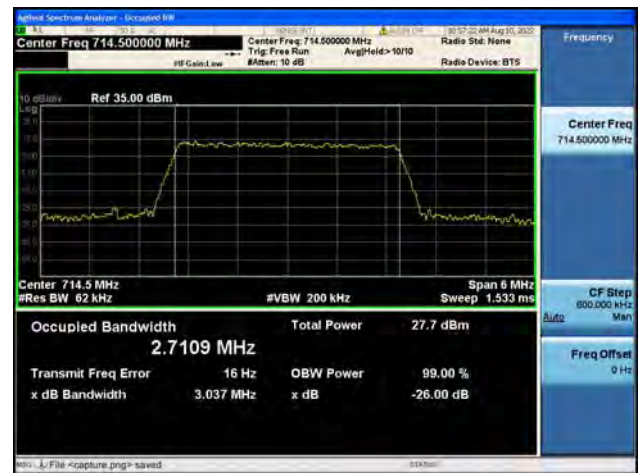
Band12 / 3MHz / 16QAM/ Mid CH



Band12 / 3MHz / QPSK/ High CH

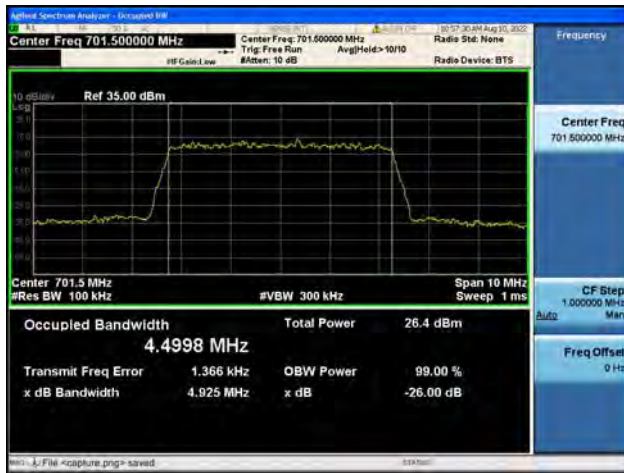


Band12 / 3MHz / 16QAM/ High CH

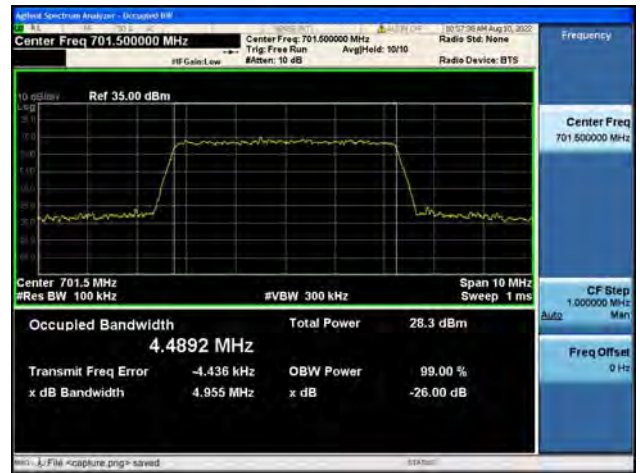




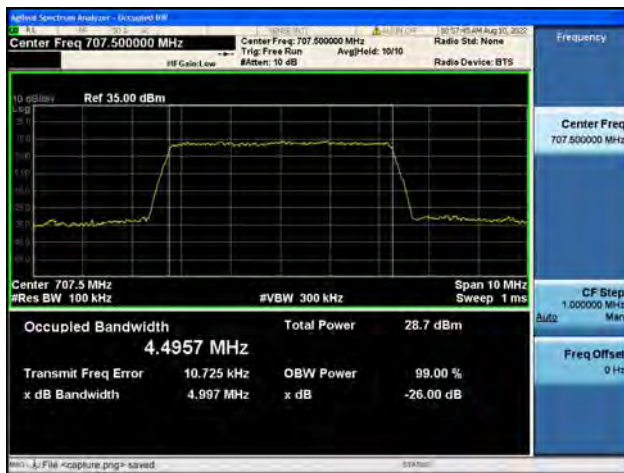
Band12 / 5MHz / QPSK/ Low CH



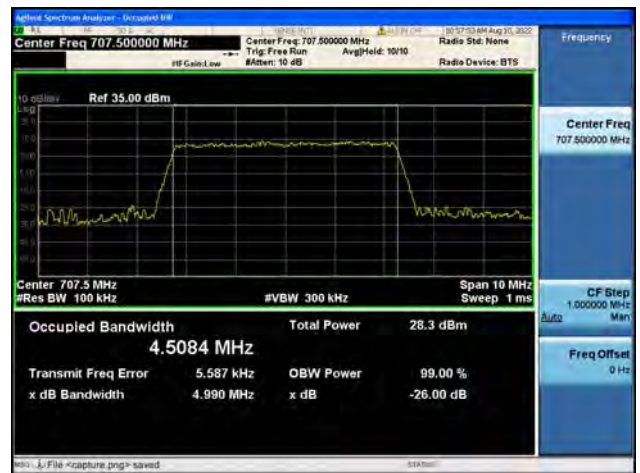
Band12 / 5MHz / 16QAM/ Low CH



Band12 / 5MHz / QPSK/ Mid CH



Band12 / 5MHz / 16QAM/ Mid CH



Band12 / 5MHz / QPSK/ High CH

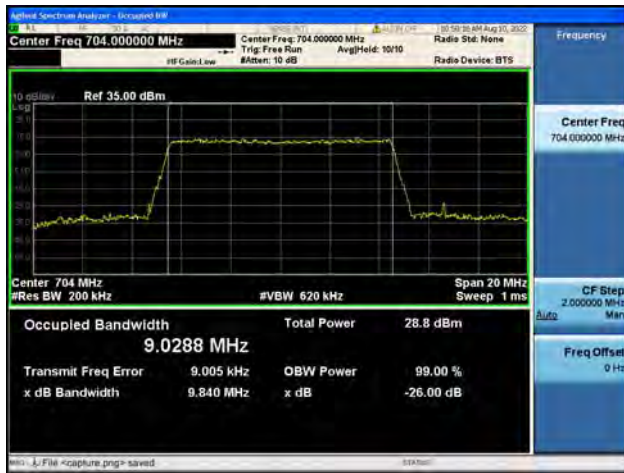


Band12 / 5MHz / 16QAM/ High CH

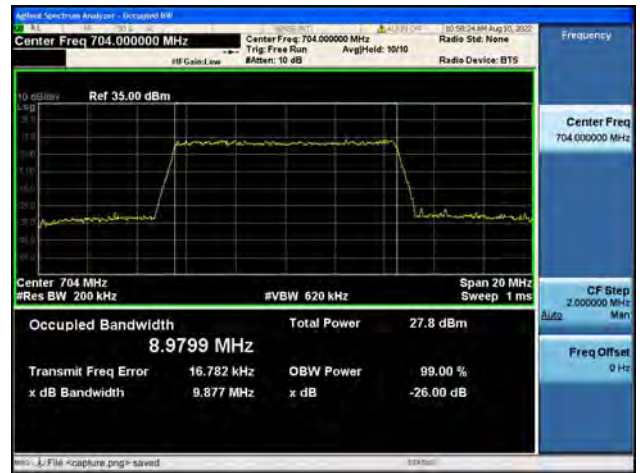




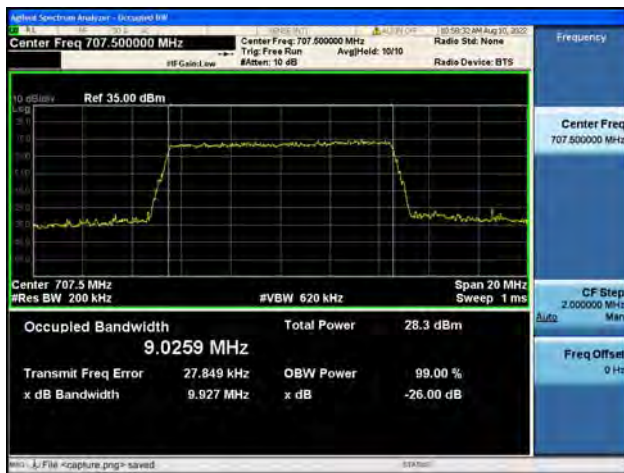
Band12 / 10MHz / QPSK/ Low CH



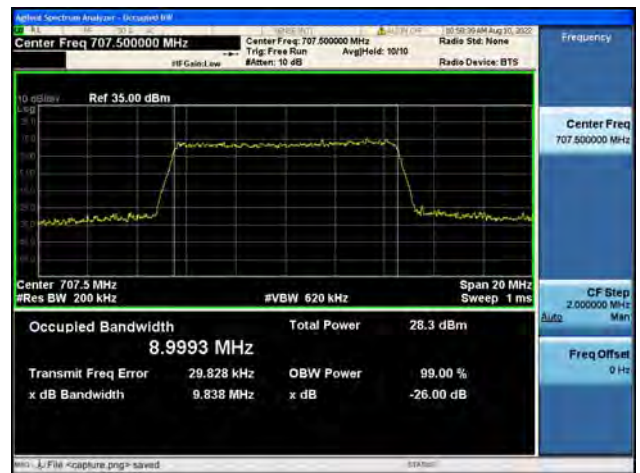
Band12 / 10MHz / 16QAM/ Low CH



Band12 / 10MHz / QPSK/ Mid CH



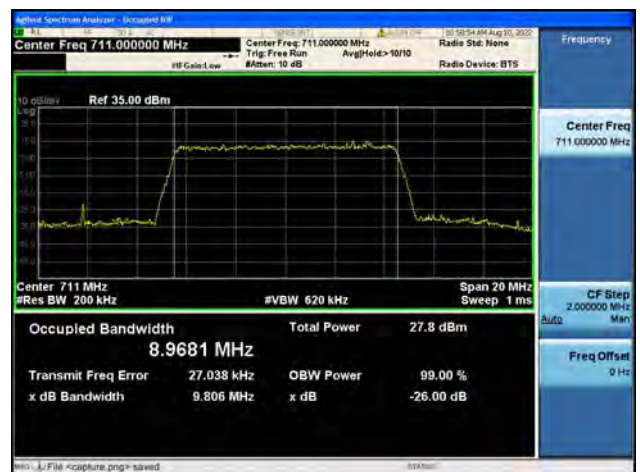
Band12 / 10MHz / 16QAM/ Mid CH



Band12 / 10MHz / QPSK/ High CH

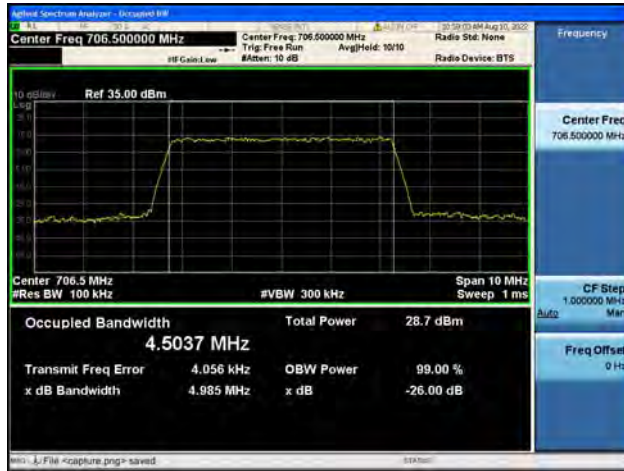


Band12 / 10MHz / 16QAM/ High CH

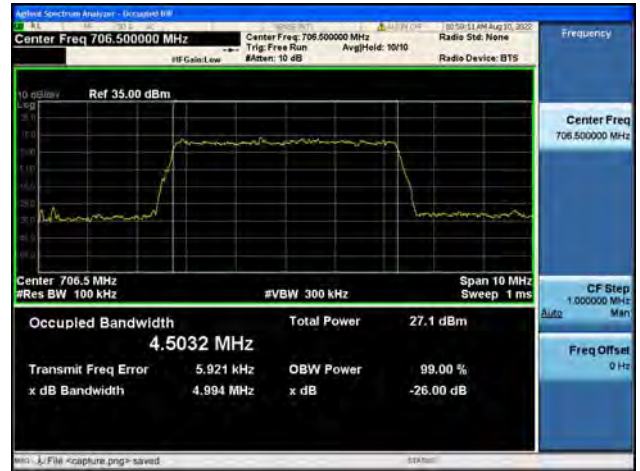




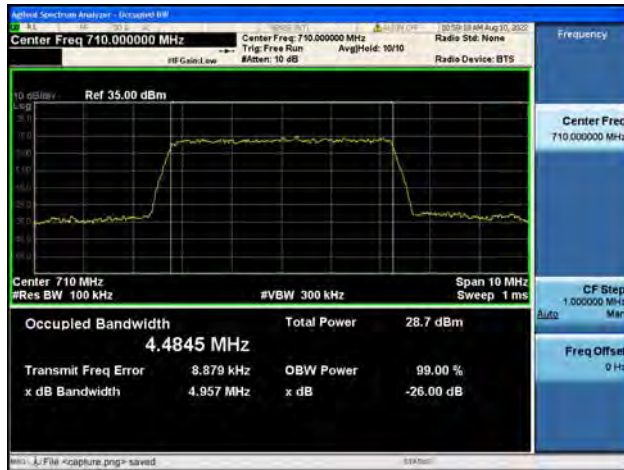
Band17 / 5MHz / QPSK/ Low CH



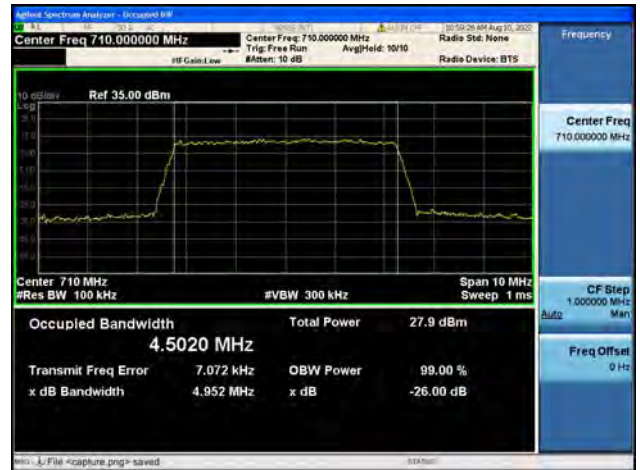
Band17 / 5MHz / 16QAM/ Low CH



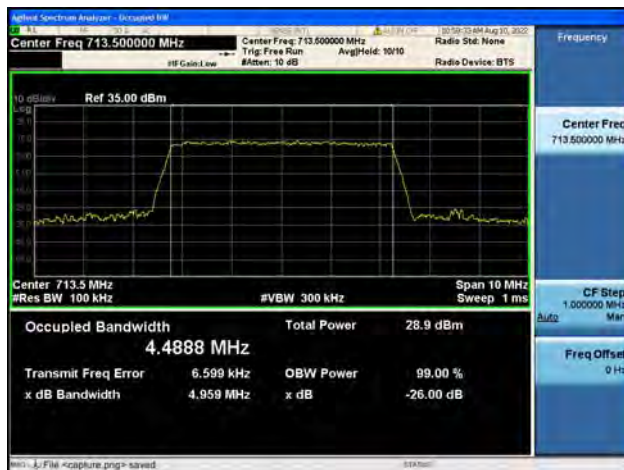
Band17 / 5MHz / QPSK/ Mid CH



Band17 / 5MHz / 16QAM/ Mid CH



Band17 / 5MHz / QPSK/ High CH

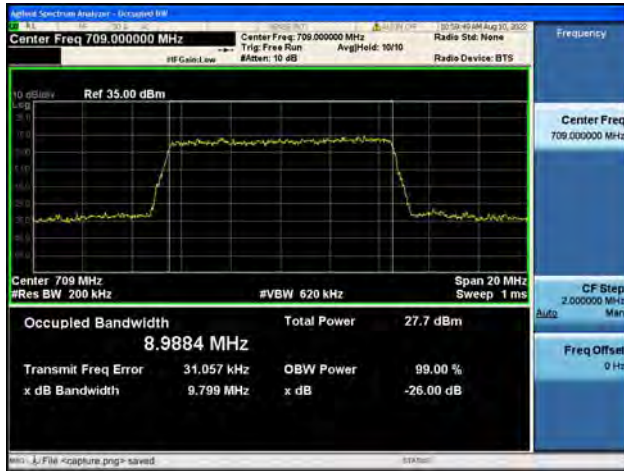


Band17 / 5MHz / 16QAM/ High CH





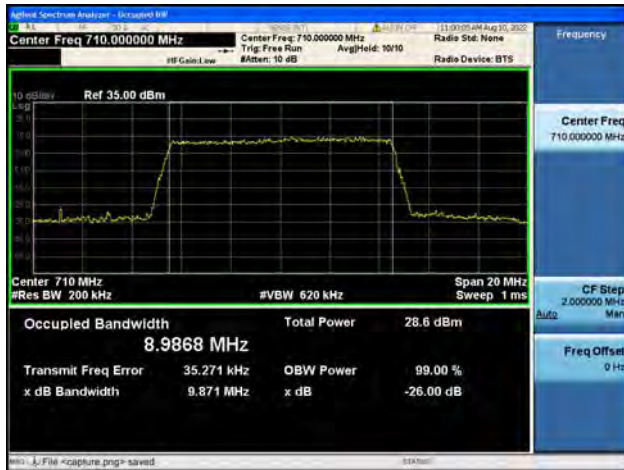
Band17 / 10MHz / QPSK/ Low CH



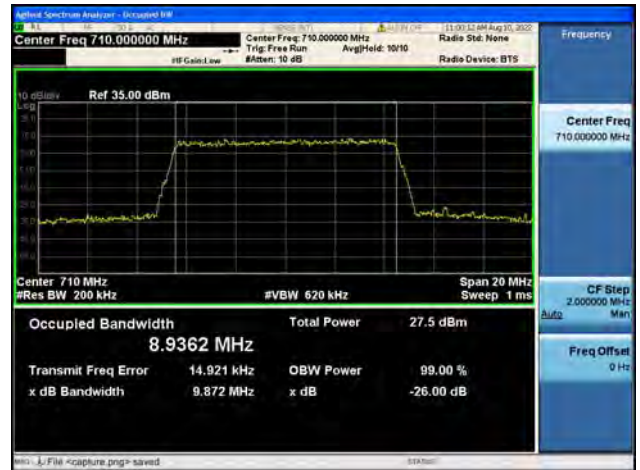
Band17 / 10MHz / 16QAM/ Low CH



Band17 / 10MHz / QPSK/ Mid CH



Band17 / 10MHz / 16QAM/ Mid CH

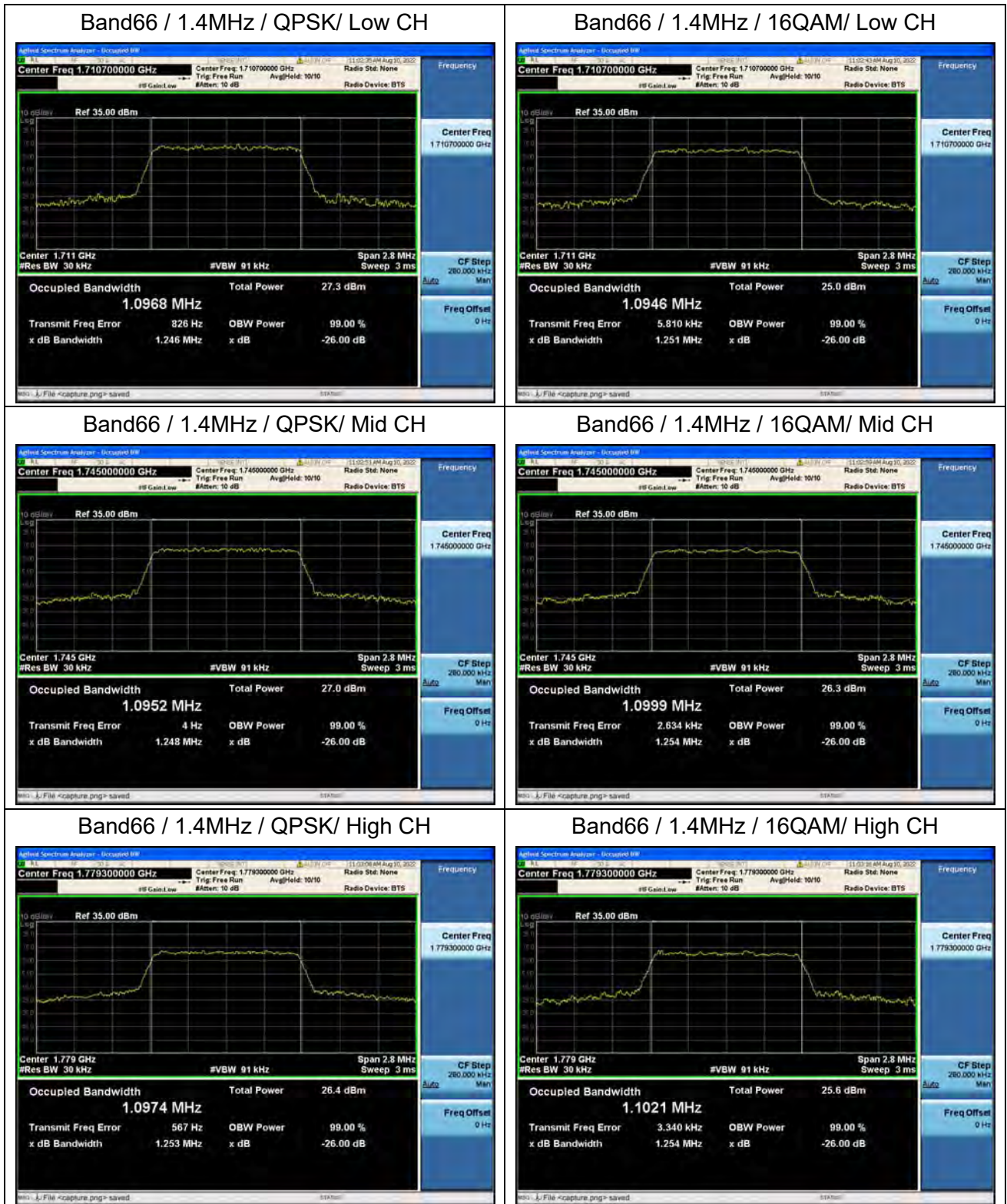


Band17 / 10MHz / QPSK/ High CH



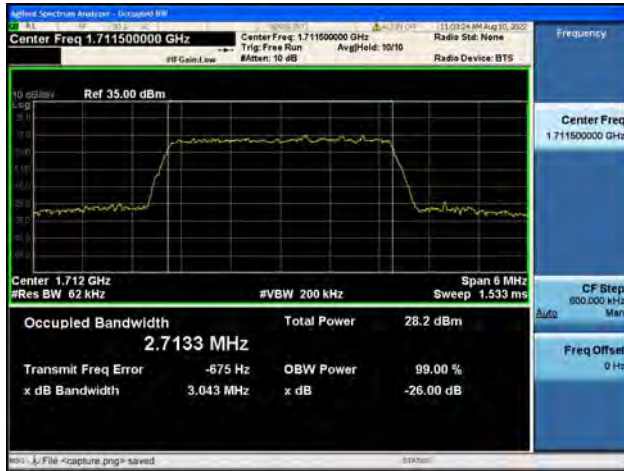
Band17 / 10MHz / 16QAM/ High CH



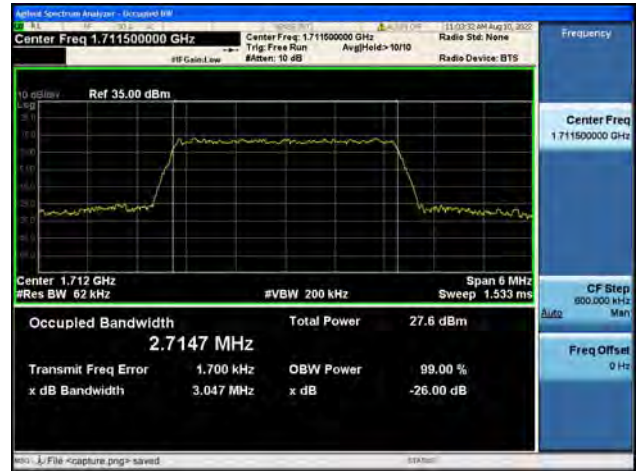




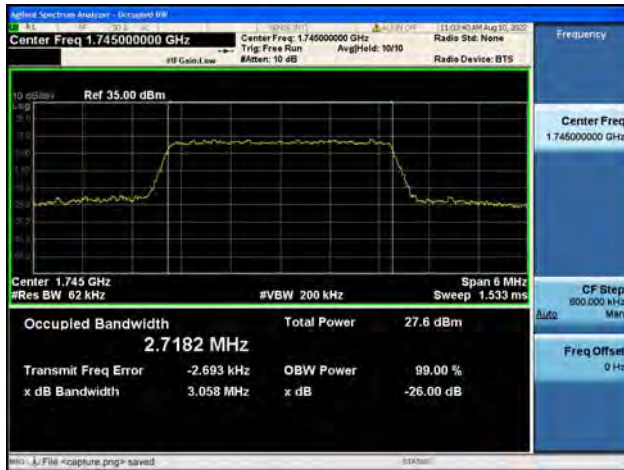
Band66 / 3MHz / QPSK/ Low CH



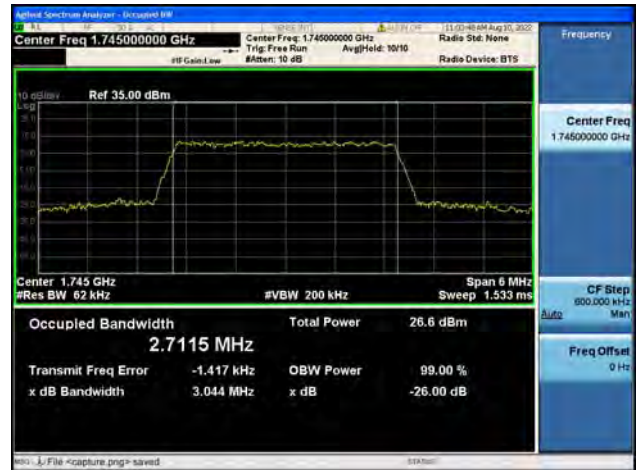
Band66 / 3MHz / 16QAM/ Low CH



Band66 / 3MHz / QPSK/ Mid CH



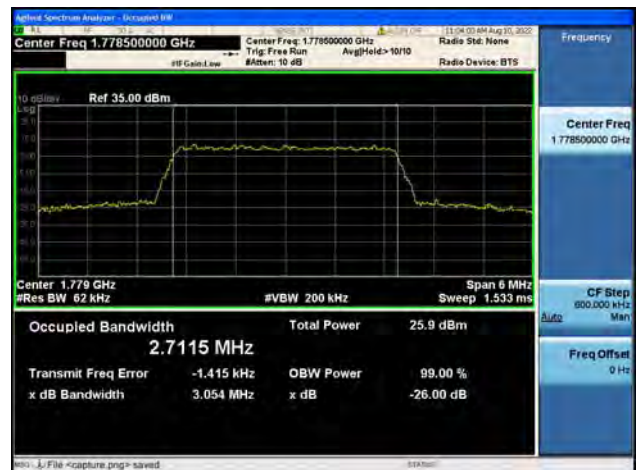
Band66 / 3MHz / 16QAM/ Mid CH



Band66 / 3MHz / QPSK/ High CH

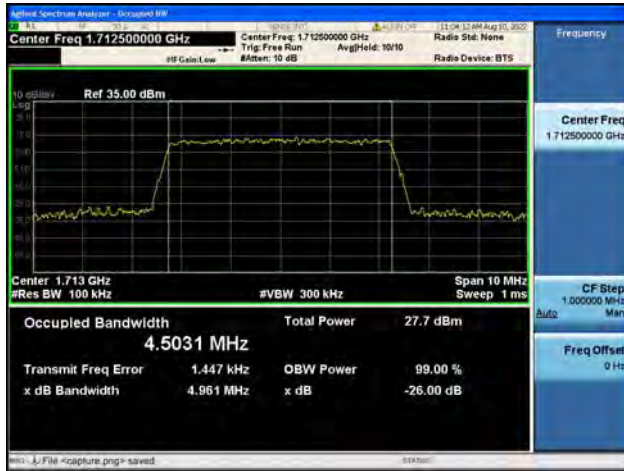


Band66 / 3MHz / 16QAM/ High CH





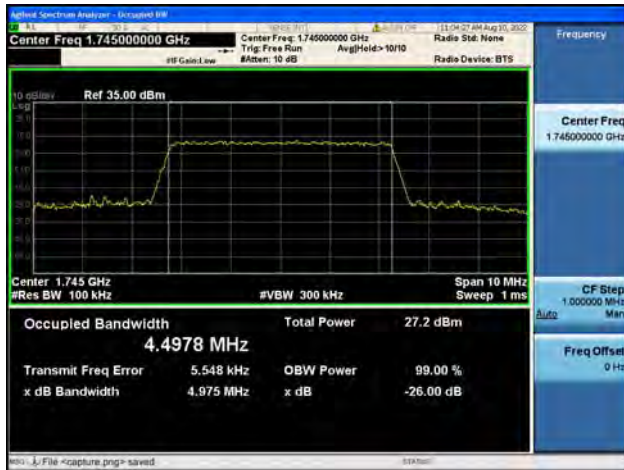
Band66 / 5MHz / QPSK/ Low CH



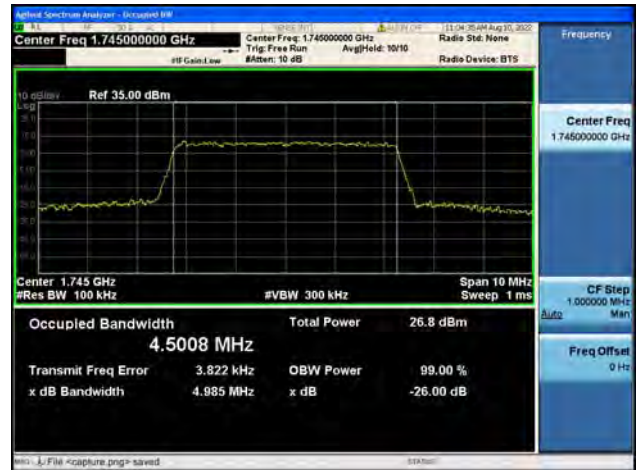
Band66 / 5MHz / 16QAM/ Low CH



Band66 / 5MHz / QPSK/ Mid CH



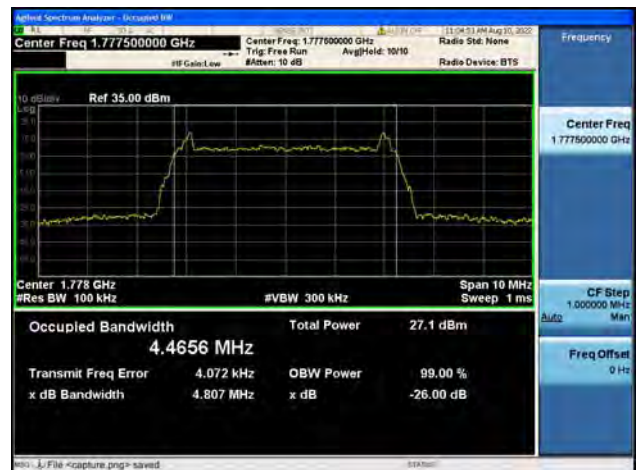
Band66 / 5MHz / 16QAM/ Mid CH



Band66 / 5MHz / QPSK/ High CH

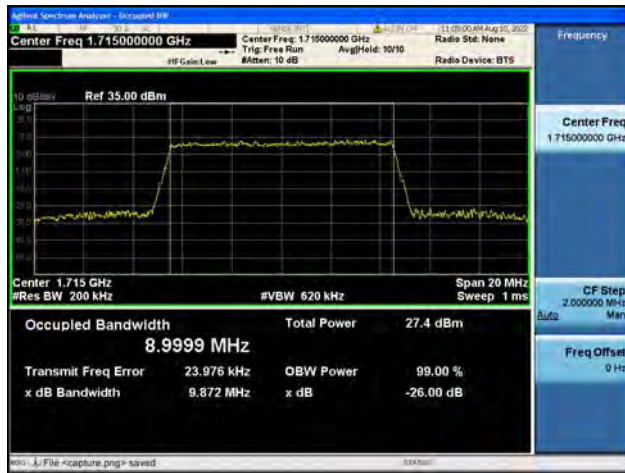


Band66 / 5MHz / 16QAM/ High CH

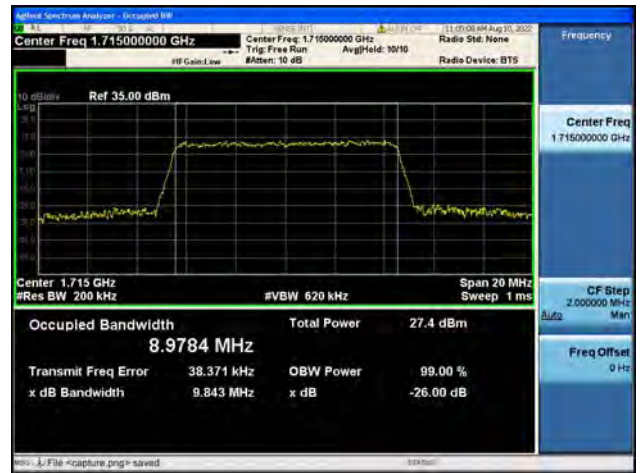




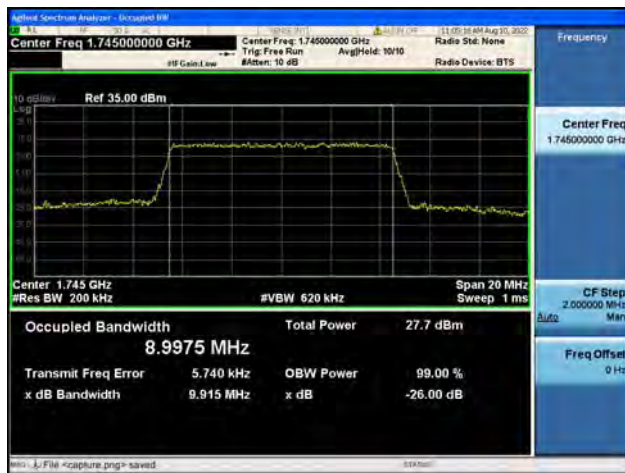
Band66 / 10MHz / QPSK/ Low CH



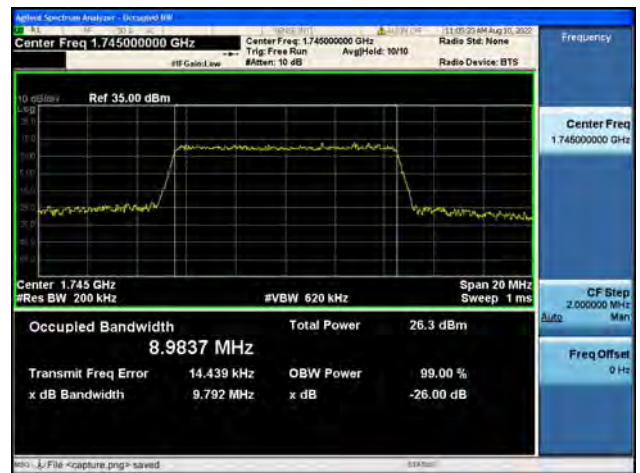
Band66 / 10MHz / 16QAM/ Low CH



Band66 / 10MHz / QPSK/ Mid CH



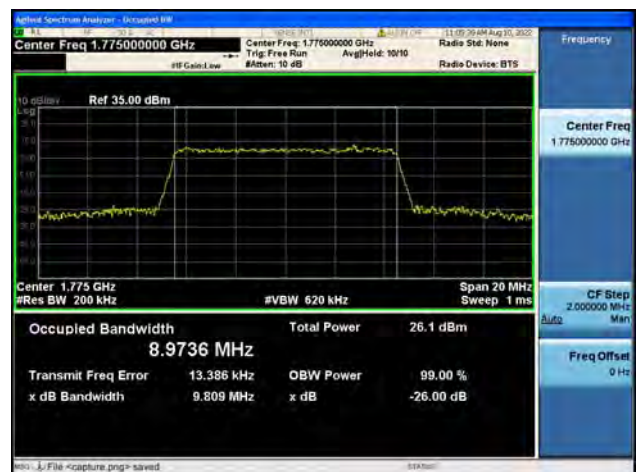
Band66 / 10MHz / 16QAM/ Mid CH



Band66 / 10MHz / QPSK/ High CH

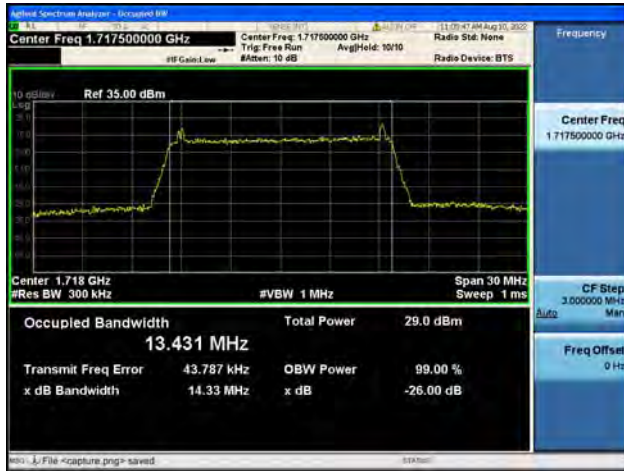


Band66 / 10MHz / 16QAM/ High CH

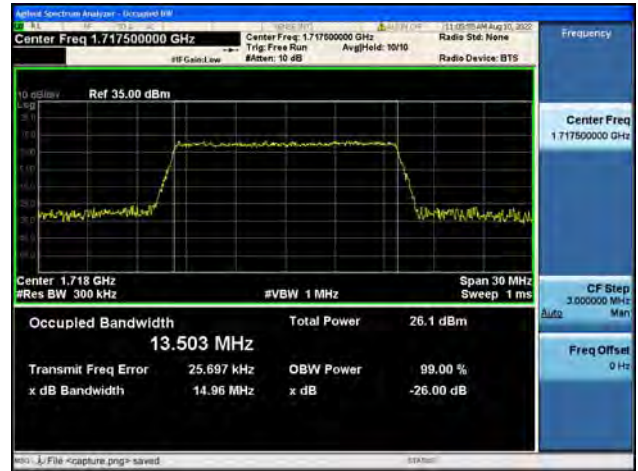




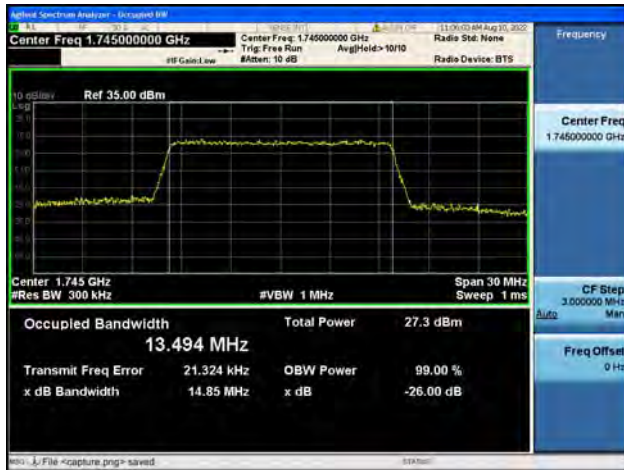
Band66 / 15MHz / QPSK/ Low CH



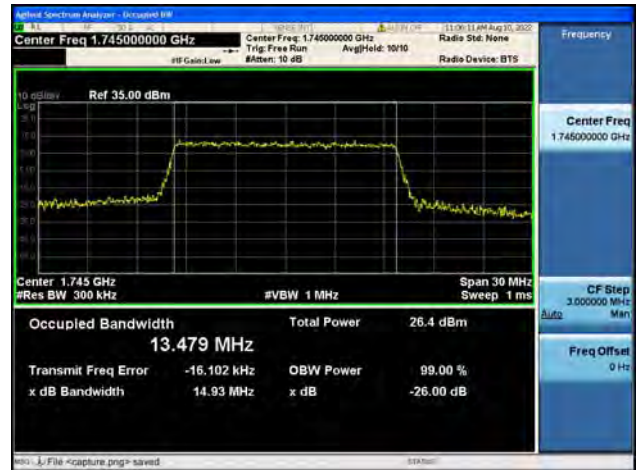
Band66 / 15MHz / 16QAM/ Low CH



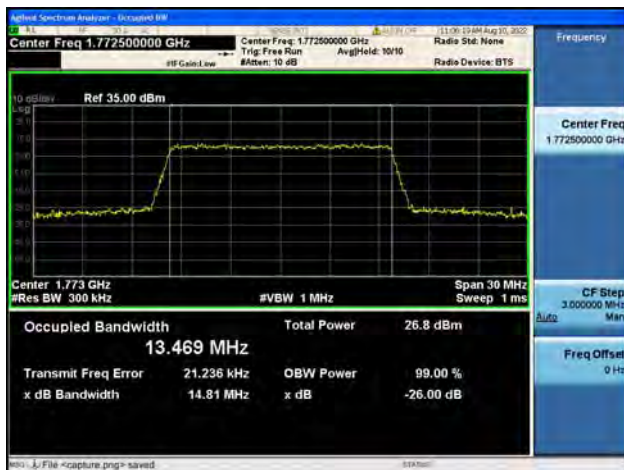
Band66 / 15MHz / QPSK/ Mid CH



Band66 / 15MHz / 16QAM/ Mid CH



Band66 / 15MHz / QPSK/ High CH

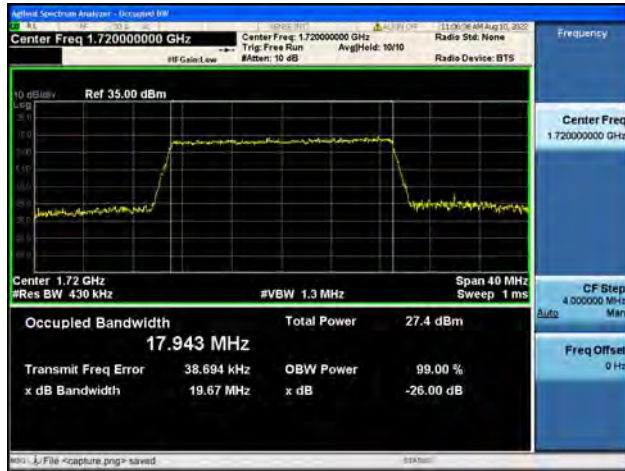


Band66 / 15MHz / 16QAM/ High CH

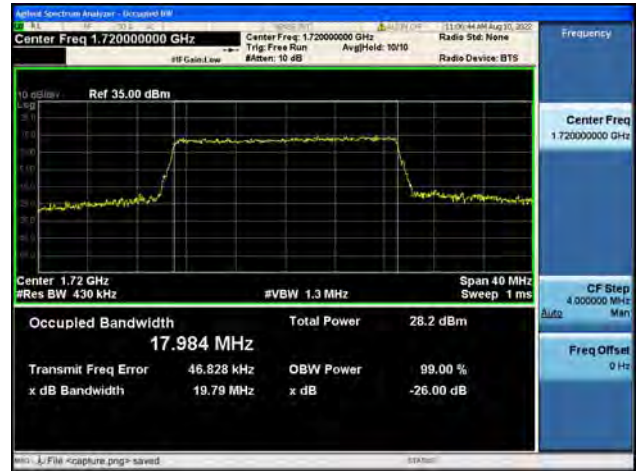




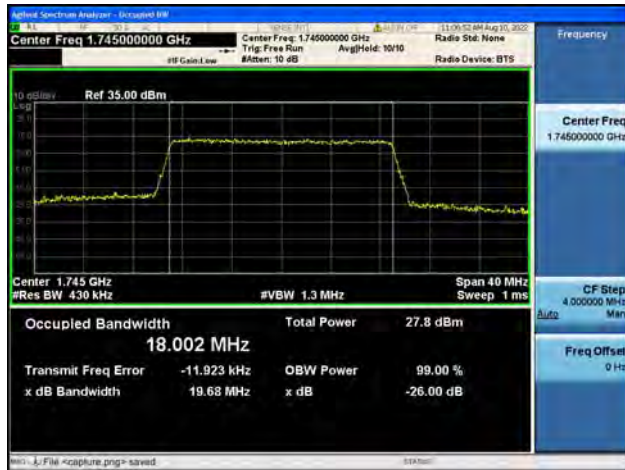
Band66 / 20MHz / QPSK/ Low CH



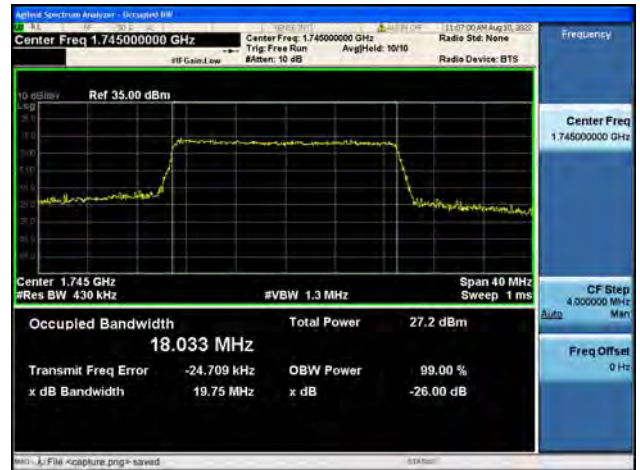
Band66 / 20MHz / 16QAM/ Low CH



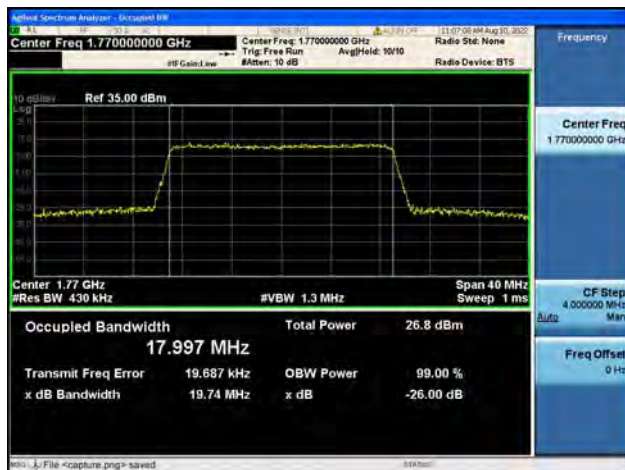
Band66 / 20MHz / QPSK/ Mid CH



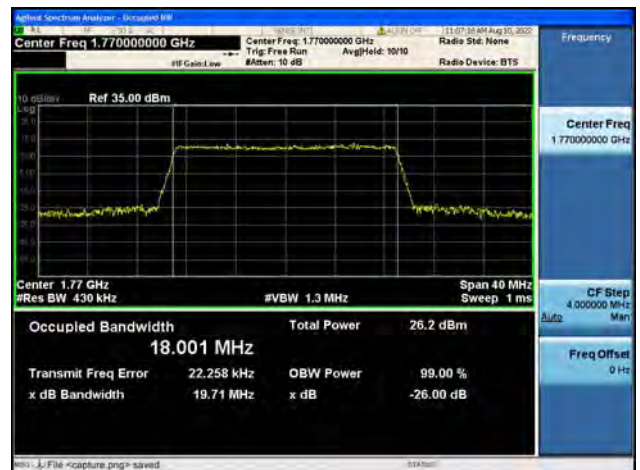
Band66 / 20MHz / 16QAM/ Mid CH



Band66 / 20MHz / QPSK/ High CH



Band66 / 20MHz / 16QAM/ High CH



2.3. Frequency Stability

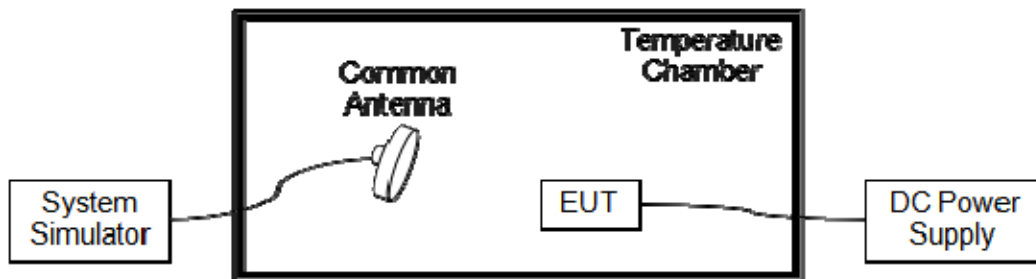
2.3.1. Requirement

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

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

Note: The operating temperature of EUT is from -10°C to 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, highest and lowest extreme voltages are separately 3.00V, 4.40V and 3.85V, which are specified by the applicant; the normal temperature here used is 20°C.

LTE Band 2, QPSK, Channel 18900, Frequency 1880.0MHz					
Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp(°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
Normal	3.85	+20(Ref)	14	0.007	PASS
Normal		-10	34	0.018	
Normal		0	-16	-0.009	
Normal		+10	-53	-0.028	
Normal		+20	-23	-0.012	
Normal		+30	-35	-0.019	
Normal		+40	52	0.028	
Normal		+45	32	0.017	
High	4.40	+20	42	0.022	
BATT.ENDPOINT	3.00	+20	-21	-0.011	

LTE Band 4, QPSK, Channel 20175, Frequency 1732.5MHz					
Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp(°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
Normal	3.85	+20(Ref)	45	0.026	PASS
Normal		-10	42	0.024	
Normal		0	-36	-0.021	
Normal		+10	33	0.019	
Normal		+20	36	0.021	
Normal		+30	39	0.023	
Normal		+40	51	0.029	
Normal		+45	33	0.019	
High	4.40	+20	37	0.021	
BATT.ENDPOINT	3.00	+20	-22	-0.013	



LTE Band 5, QPSK, Channel 20525, Frequency 836.5MHz					
Limit=±2.5ppm					
Voltage (%)	Power (VDC)	Temp(°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
Normal	3.85	+20(Ref)	37	0.044	PASS
Normal		-10	26	0.031	
Normal		0	-38	-0.045	
Normal		+10	43	0.051	
Normal		+20	41	0.049	
Normal		+30	-44	-0.053	
Normal		+40	-19	-0.023	
Normal		+45	14	0.017	
High	4.40	+20	26	0.031	
BATT.ENDPOINT	3.00	+20	-22	-0.026	

LTE Band 7, QPSK, Channel 21100, Frequency 2535MHz					
Limit= Within Authorized Band					
Voltage (%)	Power (VDC)	Temp(°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
Normal	3.85	+20(Ref)	40	0.016	PASS
Normal		-10	-29	-0.011	
Normal		0	20	0.008	
Normal		+10	37	0.015	
Normal		+20	52	0.021	
Normal		+30	-55	-0.022	
Normal		+40	52	0.021	
Normal		+45	-25	-0.010	
High	4.40	+20	20	0.008	
BATT.ENDPOINT	3.00	+20	14	0.006	



LTE Band 12, QPSK, Channel 23095, Frequency 707.5MHz Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp(°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
Normal	3.85	+20(Ref)	-20	-0.028	PASS
Normal		-10	42	0.059	
Normal		0	-32	-0.045	
Normal		+10	32	0.045	
Normal		+20	-39	-0.055	
Normal		+30	25	0.035	
Normal		+40	16	0.023	
Normal		+45	-45	-0.064	
High	4.40	+20	37	0.052	
BATT.ENDPOINT	3.00	+20	-33	-0.047	

LTE Band 17, QPSK, Channel 23790, Frequency 710MHz Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp(°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
Normal	3.85	+20(Ref)	-33	-0.046	PASS
Normal		-10	55	0.077	
Normal		0	-42	-0.059	
Normal		+10	34	0.048	
Normal		+20	-24	-0.034	
Normal		+30	44	0.062	
Normal		+40	-50	-0.070	
Normal		+45	16	0.023	
High	4.40	+20	44	0.062	
BATT.ENDPOINT	3.00	+20	-31	-0.044	



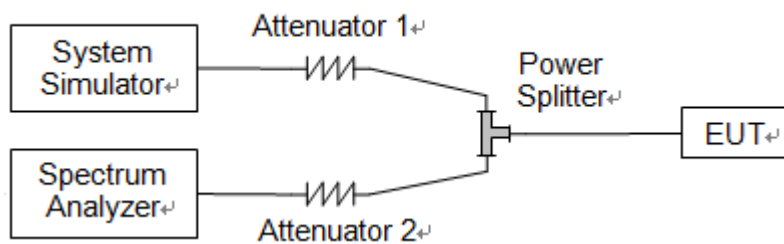
LTE Band 66, QPSK, Channel 132322, Frequency 1745.0MHz					
Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp (°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
Normal	3.85	+20(Ref)	-33	-0.046	PASS
Normal		-10	55	0.077	
Normal		0	-42	-0.059	
Normal		+10	34	0.048	
Normal		+20	-24	-0.034	
Normal		+30	44	0.062	
Normal		+40	-50	-0.070	
Normal		+45	16	0.023	
High	4.40	+20	44	0.062	
BATT.ENDPOINT	3.00	+20	-31	-0.044	

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	4.89	<=13	PASS
	Low	16QAM	5.88	<=13	PASS
	Mid	QPSK	5.82	<=13	PASS
	Mid	16QAM	6.53	<=13	PASS
	High	QPSK	5.01	<=13	PASS
	High	16QAM	5.84	<=13	PASS
3	Low	QPSK	5.34	<=13	PASS
	Low	16QAM	5.92	<=13	PASS
	Mid	QPSK	5.67	<=13	PASS
	Mid	16QAM	6.46	<=13	PASS
	High	QPSK	5.11	<=13	PASS
	High	16QAM	5.92	<=13	PASS
5	Low	QPSK	5.63	<=13	PASS
	Low	16QAM	6.13	<=13	PASS
	Mid	QPSK	5.69	<=13	PASS
	Mid	16QAM	6.30	<=13	PASS
	High	QPSK	5.45	<=13	PASS
	High	16QAM	6.00	<=13	PASS
10	Low	QPSK	5.90	<=13	PASS
	Low	16QAM	6.28	<=13	PASS
	Mid	QPSK	5.77	<=13	PASS
	Mid	16QAM	6.36	<=13	PASS
	High	QPSK	5.62	<=13	PASS
	High	16QAM	6.25	<=13	PASS
15	Low	QPSK	5.86	<=13	PASS
	Low	16QAM	6.32	<=13	PASS
	Mid	QPSK	5.62	<=13	PASS
	Mid	16QAM	6.29	<=13	PASS
	High	QPSK	5.51	<=13	PASS
	High	16QAM	6.15	<=13	PASS
20	Low	QPSK	5.91	<=13	PASS
	Low	16QAM	6.48	<=13	PASS
	Mid	QPSK	5.66	<=13	PASS
	Mid	16QAM	6.38	<=13	PASS
	High	QPSK	5.63	<=13	PASS
	High	16QAM	6.31	<=13	PASS



LTE Band 4					
BW(MHz)	Channel Level	Modulation	PAR Radio(dB)	Limit(dB)	Verdict
1.4	Low	QPSK	5.58	<=13	PASS
	Low	16QAM	6.40	<=13	PASS
	Mid	QPSK	4.93	<=13	PASS
	Mid	16QAM	5.86	<=13	PASS
	High	QPSK	5.76	<=13	PASS
	High	16QAM	6.65	<=13	PASS
3	Low	QPSK	5.84	<=13	PASS
	Low	16QAM	6.57	<=13	PASS
	Mid	QPSK	5.46	<=13	PASS
	Mid	16QAM	6.29	<=13	PASS
	High	QPSK	5.73	<=13	PASS
	High	16QAM	6.46	<=13	PASS
5	Low	QPSK	5.77	<=13	PASS
	Low	16QAM	6.40	<=13	PASS
	Mid	QPSK	5.54	<=13	PASS
	Mid	16QAM	6.22	<=13	PASS
	High	QPSK	5.74	<=13	PASS
	High	16QAM	6.29	<=13	PASS
10	Low	QPSK	5.83	<=13	PASS
	Low	16QAM	6.43	<=13	PASS
	Mid	QPSK	5.64	<=13	PASS
	Mid	16QAM	6.26	<=13	PASS
	High	QPSK	5.66	<=13	PASS
	High	16QAM	6.30	<=13	PASS
15	Low	QPSK	5.75	<=13	PASS
	Low	16QAM	6.43	<=13	PASS
	Mid	QPSK	5.50	<=13	PASS
	Mid	16QAM	6.13	<=13	PASS
	High	QPSK	5.45	<=13	PASS
	High	16QAM	6.16	<=13	PASS
20	Low	QPSK	5.73	<=13	PASS
	Low	16QAM	6.44	<=13	PASS
	Mid	QPSK	5.55	<=13	PASS
	Mid	16QAM	6.28	<=13	PASS
	High	QPSK	5.51	<=13	PASS
	High	16QAM	5.95	<=13	PASS



LTE Band 66					
BW(MHz)	Channel Level	Modulation	PAR Radio(dB)	Limit(dB)	Verdict
1.4	Low	QPSK	5.67	<=13	PASS
	Low	16QAM	6.49	<=13	PASS
	Mid	QPSK	5.25	<=13	PASS
	Mid	16QAM	6.22	<=13	PASS
	High	QPSK	4.65	<=13	PASS
	High	16QAM	5.43	<=13	PASS
3	Low	QPSK	5.66	<=13	PASS
	Low	16QAM	6.43	<=13	PASS
	Mid	QPSK	5.32	<=13	PASS
	Mid	16QAM	6.12	<=13	PASS
	High	QPSK	4.60	<=13	PASS
	High	16QAM	5.39	<=13	PASS
5	Low	QPSK	5.62	<=13	PASS
	Low	16QAM	6.33	<=13	PASS
	Mid	QPSK	5.45	<=13	PASS
	Mid	16QAM	6.10	<=13	PASS
	High	QPSK	5.01	<=13	PASS
	High	16QAM	5.76	<=13	PASS
10	Low	QPSK	5.67	<=13	PASS
	Low	16QAM	6.27	<=13	PASS
	Mid	QPSK	5.58	<=13	PASS
	Mid	16QAM	6.21	<=13	PASS
	High	QPSK	5.60	<=13	PASS
	High	16QAM	6.03	<=13	PASS
15	Low	QPSK	5.48	<=13	PASS
	Low	16QAM	6.10	<=13	PASS
	Mid	QPSK	5.38	<=13	PASS
	Mid	16QAM	6.08	<=13	PASS
	High	QPSK	5.41	<=13	PASS
	High	16QAM	5.98	<=13	PASS
20	Low	QPSK	5.44	<=13	PASS
	Low	16QAM	6.17	<=13	PASS
	Mid	QPSK	5.48	<=13	PASS
	Mid	16QAM	6.19	<=13	PASS
	High	QPSK	5.46	<=13	PASS
	High	16QAM	6.23	<=13	PASS



Band2 / 1.4MHz / Low CH / QPSK



Band2 / 1.4MHz / Low CH / 16QAM



Band2 / 1.4MHz / Mid CH / QPSK



Band2 / 1.4MHz / Mid CH / 16QAM



Band2 / 1.4MHz / High CH / QPSK

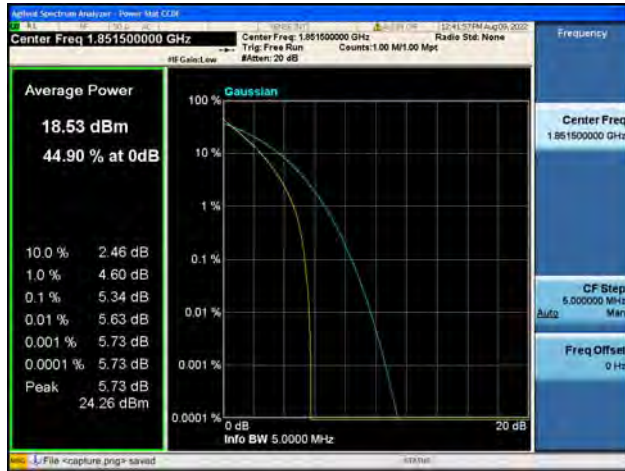


Band2 / 1.4MHz / High CH / 16QAM





Band2 / 3MHz / Low CH / QPSK



Band2 / 3MHz / Low CH / 16QAM



Band2 / 3MHz / Mid CH / QPSK



Band2 / 3MHz / Mid CH / 16QAM



Band2 / 3MHz / High CH / QPSK

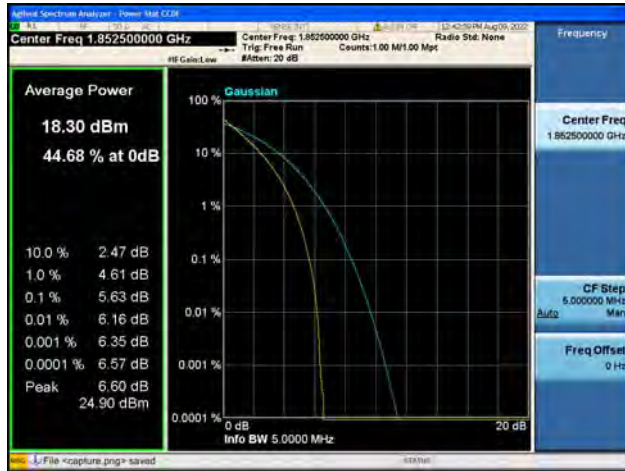


Band2 / 3MHz / High CH / 16QAM

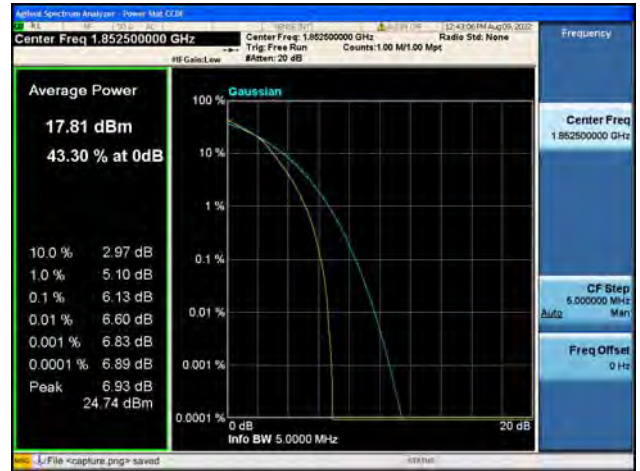




Band2 / 5MHz / Low CH / QPSK



Band2 / 5MHz / Low CH / 16QAM



Band2 / 5MHz / Mid CH / QPSK



Band2 / 5MHz / Mid CH / 16QAM



Band2 / 5MHz / High CH / QPSK



Band2 / 5MHz / High CH / 16QAM





Band2 / 10MHz / Low CH / QPSK



Band2 / 10MHz / Low CH / 16QAM



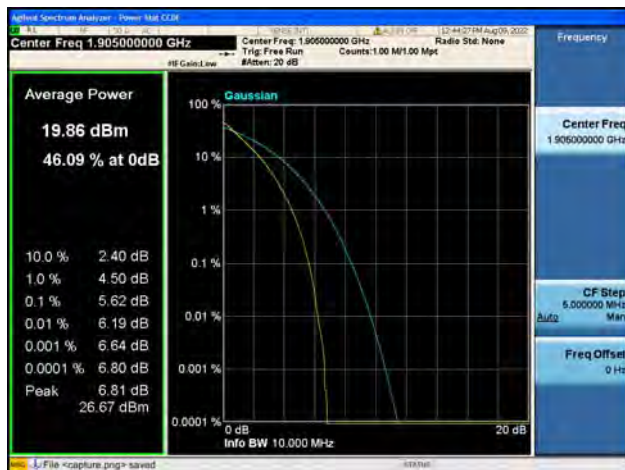
Band2 / 10MHz / Mid CH / QPSK



Band2 / 10MHz / Mid CH / 16QAM



Band2 / 10MHz / High CH / QPSK



Band2 / 10MHz / High CH / 16QAM





Band2 / 15MHz / Low CH / QPSK



Band2 / 15MHz / Low CH / 16QAM



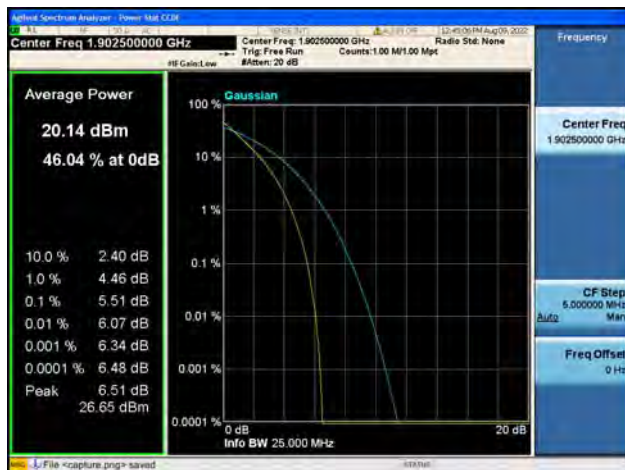
Band2 / 15MHz / Mid CH / QPSK



Band2 / 15MHz / Mid CH / 16QAM



Band2 / 15MHz / High CH / QPSK



Band2 / 15MHz / High CH / 16QAM





Band2 / 20MHz / Low CH / QPSK



Band2 / 20MHz / Low CH / 16QAM



Band2 / 20MHz / Mid CH / QPSK



Band2 / 20MHz / Mid CH / 16QAM



Band2 / 20MHz / High CH / QPSK

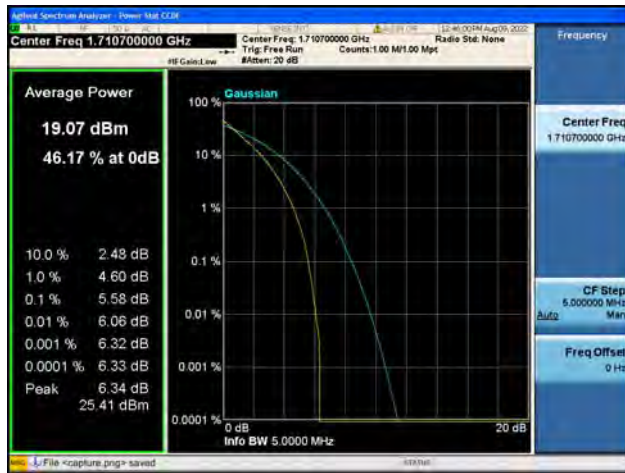


Band2 / 20MHz / High CH / 16QAM





Band4 / 1.4MHz / Low CH / QPSK



Band4 / 1.4MHz / Low CH / 16QAM



Band4 / 1.4MHz / Mid CH / QPSK



Band4 / 1.4MHz / Mid CH / 16QAM



Band4 / 1.4MHz / High CH / QPSK



Band4 / 1.4MHz / High CH / 16QAM





Band4 / 3MHz / Low CH / QPSK



Band4 / 3MHz / Low CH / 16QAM



Band4 / 3MHz / Mid CH / QPSK



Band4 / 3MHz / Mid CH / 16QAM



Band4 / 3MHz / High CH / QPSK



Band4 / 3MHz / High CH / 16QAM

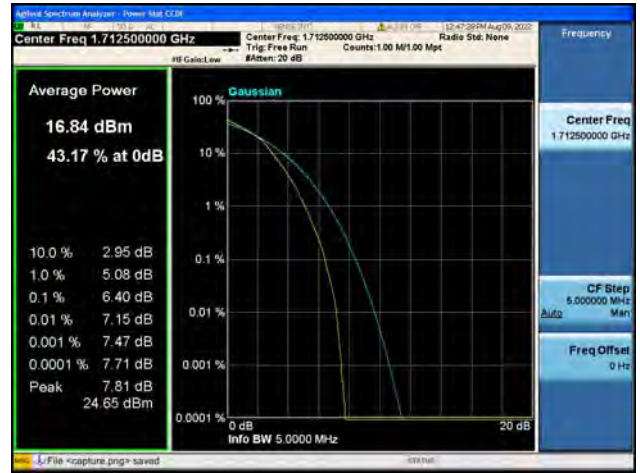




Band4 / 5MHz / Low CH / QPSK



Band4 / 5MHz / Low CH / 16QAM



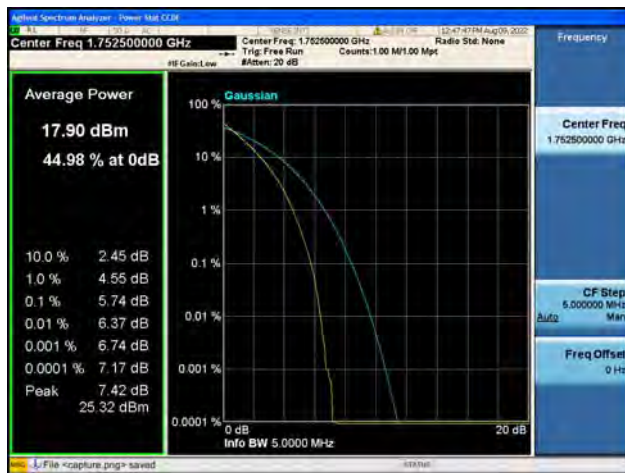
Band4 / 5MHz / Mid CH / QPSK



Band4 / 5MHz / Mid CH / 16QAM



Band4 / 5MHz / High CH / QPSK



Band4 / 5MHz / High CH / 16QAM





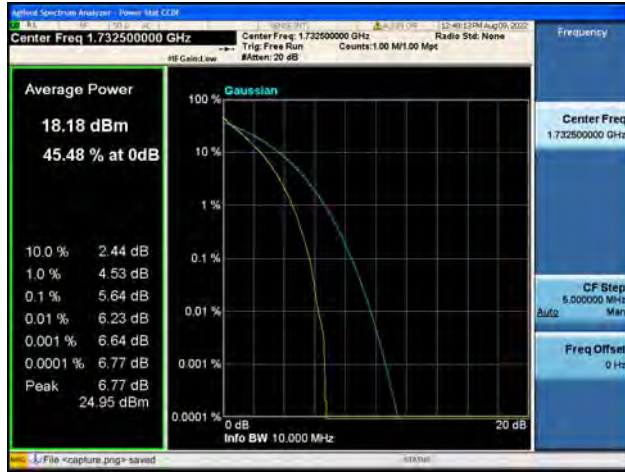
Band4 / 10MHz / Low CH / QPSK



Band4 / 10MHz / Low CH / 16QAM



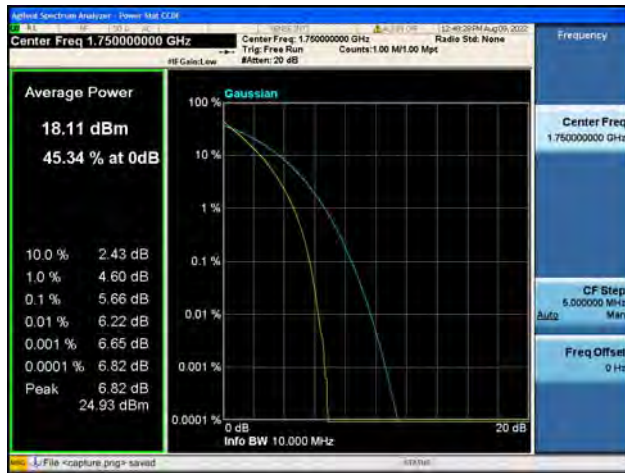
Band4 / 10MHz / Mid CH / QPSK



Band4 / 10MHz / Mid CH / 16QAM



Band4 / 10MHz / High CH / QPSK

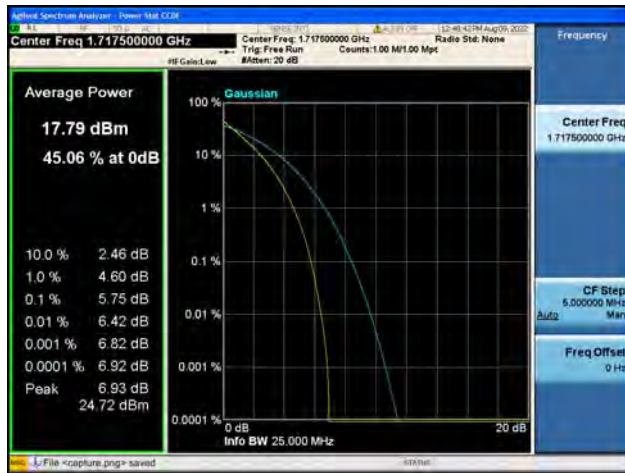


Band4 / 10MHz / High CH / 16QAM





Band4 / 15MHz / Low CH / QPSK



Band4 / 15MHz / Low CH / 16QAM



Band4 / 15MHz / Mid CH / QPSK



Band4 / 15MHz / Mid CH / 16QAM



Band4 / 15MHz / High CH / QPSK

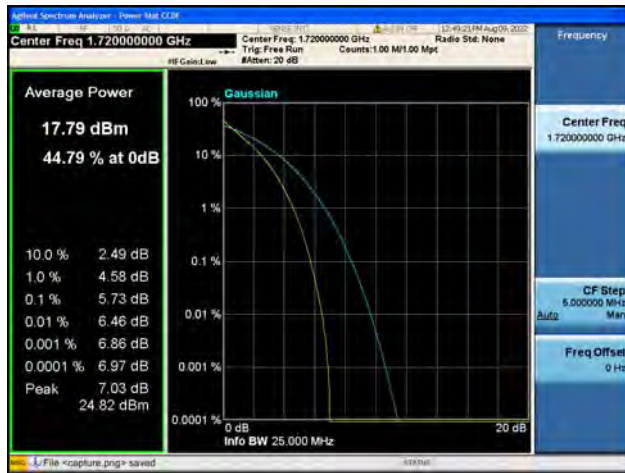


Band4 / 15MHz / High CH / 16QAM





Band4 / 20MHz / Low CH / QPSK



Band4 / 20MHz / Low CH / 16QAM



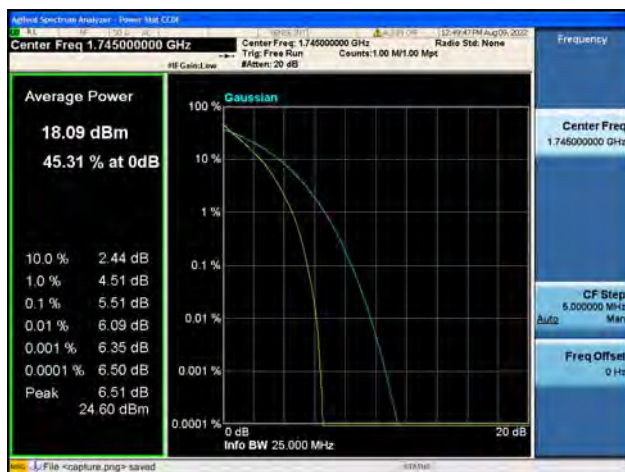
Band4 / 20MHz / Mid CH / QPSK



Band4 / 20MHz / Mid CH / 16QAM



Band4 / 20MHz / High CH / QPSK



Band4 / 20MHz / High CH / 16QAM





Band66 / 1.4MHz / Low CH / QPSK



Band66 / 1.4MHz / Low CH / 16QAM



Band66 / 1.4MHz / Mid CH / QPSK



Band66 / 1.4MHz / Mid CH / 16QAM



Band66 / 1.4MHz / High CH / QPSK



Band66 / 1.4MHz / High CH / 16QAM





Band66 / 3MHz / Low CH / QPSK



Band66 / 3MHz / Low CH / 16QAM



Band66 / 3MHz / Mid CH / QPSK



Band66 / 3MHz / Mid CH / 16QAM



Band66 / 3MHz / High CH / QPSK



Band66 / 3MHz / High CH / 16QAM

