



TEST REPORT

APPLICANT : BLU Products, Inc.

PRODUCT NAME : Smart Phone

MODEL NAME : C5L MAX

BRAND NAME : BLU

FCC ID : YHLBLUC5LMAX

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

RECEIPT DATE : 2021-09-15

TEST DATE : 2021-09-19 to 2021-10-22

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Change History		
Version	Date	Reason for change
1.0	2021-10-25	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.:	3#	
Hardware Version:	A507-MB-V3.6	
Software Version:	BLU_C0170WW_V11.0.G.02.00_GENERIC 22-09-2021 13:40	
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:	PIFA Antenna	
Antenna Gain:	LTE Band 2	-0.59dBi
	LTE Band 4	-0.62dBi
	LTE Band 5	-1.81dBi
	LTE Band 7	-0.75dBi
	LTE Band 12	-1.89dBi
	LTE Band 17	-1.90dBi
	LTE Band 66	-0.62dBi
Accessory Information:	Battery	
	Brand Name:	BLU
	Model No.:	C775444200L
	Serial No.:	N/A
	Capacity:	2000mAh
	Rated Voltage:	3.8V
	Charge Limit:	4.35V
	Manufacturer:	Shenzhen Guihang Electronics Co., LTD
	AC Adapter	
	Brand Name:	BLU
	Model No.:	US-FC-0750
	Serial No.:	N/A
	Rated Output:	5.0V \pm 750mA
	Rated Input:	100-240V \sim 50/60Hz, 0.2A
	Manufacturer:	Dongguan Keling Electronic Technology Co., LTD

Note 1: SIM 1 and SIM 2 is a chipset unit and tested as a single chipset. The SIM 1 is chosen for test.

Note 2: 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		0.184	0.148	18M0G7D	18M0W7D
15		0.182	0.147	13M5G7D	13M5W7D
10		0.181	0.145	9M02G7D	8M97W7D
5		0.179	0.144	4M50G7D	4M50W7D
3		0.178	0.143	2M72G7D	2M71W7D
1.4		0.176	0.143	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		0.175	0.141	18M0G7D	18M0W7D
15		0.174	0.140	13M5G7D	13M5W7D
10		0.172	0.139	9M02G7D	8M98W7D
5		0.170	0.137	4M50G7D	4M50W7D
3		0.169	0.136	2M72G7D	2M72W7D
1.4		0.166	0.135	1M10G7D	1M10W7D
LTE Band 5		Maximum E.R.P./E.I.R.P. (W)		Emission Designator (99%OBW)	
BW(MHz)		QPSK	16QAM	QPSK	16QAM
10		0.091	0.074	9M01G7D	8M98W7D
5		0.090	0.076	4M50G7D	4M51W7D
3		0.090	0.074	2M72G7D	2M71W7D
1.4		0.091	0.075	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		0.045	0.038	18M0G7D	18M0W7D
15		0.045	0.038	13M5G7D	13M5W7D
10		0.044	0.037	9M02G7D	8M98W7D
5		0.044	0.037	4M52G7D	4M50W7D
LTE Band 12		Maximum E.R.P./E.I.R.P. (W)		Emission Designator (99%OBW)	
BW(MHz)		QPSK	16QAM	QPSK	16QAM
10		0.087	0.070	9M02G7D	9M01W7D
5		0.086	0.070	4M50G7D	4M50W7D
3		0.086	0.073	2M72G7D	2M71W7D
1.4		0.085	0.072	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	0.071	0.073	9M02G7D	8M97W7D
5	0.085	0.074	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	0.183	0.147	18M1G7D	18M0W7D
15	0.182	0.145	13M5G7D	13M5W7D
10	0.180	0.144	9M01G7D	9M00W7D
5	0.178	0.142	4M52G7D	4M52W7D
3	0.177	0.141	2M72G7D	2M72W7D
1.4	0.175	0.140	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.	Sep 24, 2021 Oct 22, 2021	Tan Xiaowei Yin Xiaogang	PASS	No deviation
2.1049	Occupied Bandwidth	Sep 21&26, 2021	Li Huaijie	PASS	No deviation
2.1055 22.355 24.235 27.54	Frequency Stability	Oct 15, 2021	Li Huaijie	PASS	No deviation
24.232(d), 27.50(d)(5)	Peak to Average Radio	Sep 19&26, 2021	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	Sep 21&27, 2021	Li Huaijie	PASS	No deviation
2.1051 22.917(a)	Band Edge	Sep 19&26, 2021	Li Huaijie	PASS	No deviation



24.238(a) 27.53(g) 27.53(h) 27.53(m)(4)					
2.1051 22.917(a) 24.238(a) 27.53(g) 27.53(h) 27.53(m)(4)	Radiated Spurious Emissions	Oct 09, 2021	Huang Zhiye	PASS	No deviation

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

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

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

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

1.5. Environmental Conditions

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

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



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

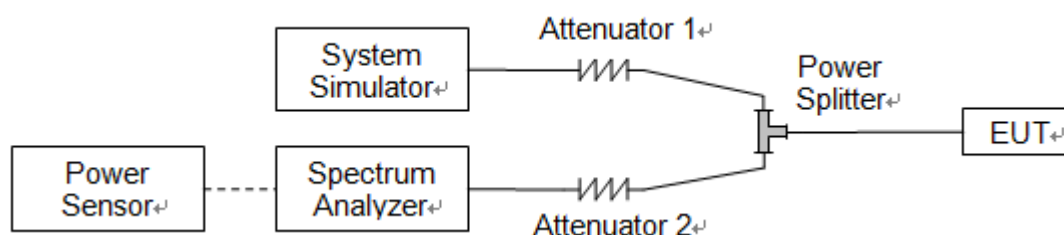
According to FCC section 27.50 (d)(4) for LTE Band 4/66, Fixed, mobile and portable (hand-held) stations in the 1710-1755MHz band are limited to 1wat E.I.R.P.

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.

$E.I.R.P. (dBm) = \text{Conducted Output Power (dBm)} + \text{Antenna Gain (dBi)}$

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

**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	23.20	23.23	23.17
20	QPSK	1	49	23.18	23.12	23.05
20	QPSK	1	99	23.12	23.08	23.06
20	QPSK	50	0	22.28	22.37	22.30
20	QPSK	50	24	22.05	22.10	22.10
20	QPSK	50	50	22.10	22.06	22.12
20	QPSK	100	0	22.03	22.12	22.08
20	16QAM	1	0	22.09	22.11	22.07
20	16QAM	1	49	21.78	22.08	22.04
20	16QAM	1	99	22.03	21.88	22.28
20	16QAM	50	0	21.45	21.42	21.40
20	16QAM	50	24	21.41	21.46	21.47
20	16QAM	50	50	21.49	21.46	21.53
20	16QAM	100	0	21.52	21.53	21.40



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	23.17	23.19	23.12
15	QPSK	1	37	23.14	23.06	22.99
15	QPSK	1	74	23.09	23.05	23.01
15	QPSK	36	0	22.22	22.31	22.26
15	QPSK	36	20	22.02	22.06	22.05
15	QPSK	36	39	22.07	22.03	22.09
15	QPSK	75	0	21.99	22.09	22.04
15	16QAM	1	0	22.06	22.08	22.03
15	16QAM	1	37	21.74	22.04	22.01
15	16QAM	1	74	21.97	21.85	22.25
15	16QAM	36	0	21.40	21.38	21.34
15	16QAM	36	20	21.37	21.43	21.45
15	16QAM	36	39	21.43	21.43	21.48
15	16QAM	75	0	21.46	21.51	21.36



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	23.15	23.17	23.09
10	QPSK	1	25	23.09	23.02	22.94
10	QPSK	1	49	23.03	23.01	22.98
10	QPSK	25	0	22.17	22.28	22.22
10	QPSK	25	12	21.98	22.02	22.02
10	QPSK	25	25	22.04	21.98	22.05
10	QPSK	50	0	21.95	22.07	22.00
10	16QAM	1	0	22.03	22.04	21.98
10	16QAM	1	25	21.70	22.02	21.96
10	16QAM	1	49	21.93	21.82	22.20
10	16QAM	25	0	21.34	21.32	21.32
10	16QAM	25	12	21.33	21.38	21.42
10	16QAM	25	25	21.40	21.39	21.45
10	16QAM	50	0	21.40	21.47	21.31



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	23.12	23.13	23.05
5	QPSK	1	12	23.03	22.99	22.90
5	QPSK	1	24	22.97	22.99	22.92
5	QPSK	12	0	22.11	22.23	22.20
5	QPSK	12	7	21.93	21.98	21.99
5	QPSK	12	13	21.99	21.93	21.99
5	QPSK	25	0	21.89	22.01	21.95
5	16QAM	1	0	21.98	21.99	21.94
5	16QAM	1	12	21.65	21.99	21.91
5	16QAM	1	24	21.90	21.79	22.17
5	16QAM	12	0	21.30	21.29	21.28
5	16QAM	12	7	21.28	21.33	21.36
5	16QAM	12	13	21.36	21.35	21.41
5	16QAM	25	0	21.37	21.45	21.28



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	23.07	23.09	23.00
3	QPSK	1	8	22.98	22.96	22.86
3	QPSK	1	14	22.92	22.96	22.87
3	QPSK	8	0	22.05	22.18	22.15
3	QPSK	8	4	21.89	21.94	21.93
3	QPSK	8	7	21.95	21.87	21.95
3	QPSK	15	0	21.85	21.98	21.90
3	16QAM	1	0	21.93	21.93	21.92
3	16QAM	1	8	21.62	21.97	21.88
3	16QAM	1	14	21.86	21.75	22.15
3	16QAM	8	0	21.26	21.24	21.24
3	16QAM	8	4	21.23	21.28	21.31
3	16QAM	8	7	21.30	21.32	21.38
3	16QAM	15	0	21.32	21.39	21.25



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	23.01	23.04	22.96
1.4	QPSK	1	3	22.94	22.91	22.81
1.4	QPSK	1	5	22.87	22.94	22.82
1.4	QPSK	3	0	22.02	22.15	22.13
1.4	QPSK	3	1	21.83	21.90	21.90
1.4	QPSK	3	3	21.93	21.84	21.89
1.4	QPSK	6	0	21.82	21.92	21.84
1.4	16QAM	1	0	21.87	21.87	21.89
1.4	16QAM	1	3	21.57	21.93	21.85
1.4	16QAM	1	5	21.84	21.70	22.13
1.4	16QAM	3	0	21.20	21.20	21.19
1.4	16QAM	3	1	21.21	21.26	21.26
1.4	16QAM	3	3	21.28	21.28	21.35
1.4	16QAM	6	0	21.29	21.35	21.20



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	22.98	23.06	23.05
20	QPSK	1	49	22.84	22.92	22.91
20	QPSK	1	99	22.76	22.89	23.01
20	QPSK	50	0	21.96	22.09	22.06
20	QPSK	50	24	21.96	22.04	22.04
20	QPSK	50	50	21.90	21.96	21.97
20	QPSK	100	0	21.84	21.99	21.95
20	16QAM	1	0	21.92	22.12	21.99
20	16QAM	1	49	21.80	21.90	21.87
20	16QAM	1	99	21.75	21.81	21.79
20	16QAM	50	0	21.65	21.58	21.72
20	16QAM	50	24	21.46	21.57	21.46
20	16QAM	50	50	21.42	21.43	21.43
20	16QAM	100	0	21.44	21.52	21.53



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	22.94	23.03	23.00
15	QPSK	1	37	22.80	22.89	22.87
15	QPSK	1	74	22.74	22.84	22.97
15	QPSK	36	0	21.94	22.07	22.04
15	QPSK	36	20	21.92	21.98	22.00
15	QPSK	36	39	21.86	21.91	21.92
15	QPSK	75	0	21.79	21.96	21.90
15	16QAM	1	0	21.89	22.08	21.94
15	16QAM	1	37	21.76	21.87	21.81
15	16QAM	1	74	21.71	21.79	21.74
15	16QAM	36	0	21.59	21.52	21.69
15	16QAM	36	20	21.42	21.52	21.41
15	16QAM	36	39	21.37	21.40	21.39
15	16QAM	75	0	21.40	21.47	21.47



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	22.91	22.97	22.95
10	QPSK	1	25	22.74	22.85	22.83
10	QPSK	1	49	22.69	22.82	22.95
10	QPSK	25	0	21.91	22.01	21.99
10	QPSK	25	12	21.88	21.93	21.95
10	QPSK	25	25	21.81	21.88	21.89
10	QPSK	50	0	21.74	21.91	21.86
10	16QAM	1	0	21.84	22.05	21.90
10	16QAM	1	25	21.71	21.83	21.75
10	16QAM	1	49	21.67	21.76	21.71
10	16QAM	25	0	21.54	21.50	21.63
10	16QAM	25	12	21.40	21.47	21.39
10	16QAM	25	25	21.34	21.35	21.35
10	16QAM	50	0	21.37	21.44	21.42



LTE Band 4						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				19975	20175	20375
Frequency (MHz)				1712.5	1732.5	1752.5
5	QPSK	1	0	22.86	22.93	22.90
5	QPSK	1	12	22.70	22.80	22.79
5	QPSK	1	24	22.63	22.78	22.91
5	QPSK	12	0	21.86	21.98	21.96
5	QPSK	12	7	21.83	21.90	21.92
5	QPSK	12	13	21.78	21.85	21.86
5	QPSK	25	0	21.70	21.87	21.82
5	16QAM	1	0	21.81	22.00	21.87
5	16QAM	1	12	21.66	21.80	21.72
5	16QAM	1	24	21.62	21.72	21.67
5	16QAM	12	0	21.52	21.47	21.60
5	16QAM	12	7	21.36	21.43	21.33
5	16QAM	12	13	21.31	21.33	21.31
5	16QAM	25	0	21.32	21.40	21.39



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				19965	20175	20385
Frequency (MHz)				1711.5	1732.5	1753.5
3	QPSK	1	0	22.83	22.89	22.87
3	QPSK	1	8	22.67	22.78	22.74
3	QPSK	1	14	22.58	22.75	22.87
3	QPSK	8	0	21.84	21.94	21.91
3	QPSK	8	4	21.80	21.84	21.89
3	QPSK	8	7	21.73	21.81	21.82
3	QPSK	15	0	21.68	21.83	21.78
3	16QAM	1	0	21.75	21.95	21.85
3	16QAM	1	8	21.62	21.76	21.68
3	16QAM	1	14	21.58	21.70	21.62
3	16QAM	8	0	21.48	21.43	21.55
3	16QAM	8	4	21.30	21.40	21.28
3	16QAM	8	7	21.28	21.31	21.28
3	16QAM	15	0	21.27	21.34	21.34



LTE Band 4						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				19957	20175	20393
Frequency (MHz)				1710.7	1732.5	1754.3
1.4	QPSK	1	0	22.79	22.83	22.81
1.4	QPSK	1	3	22.65	22.75	22.68
1.4	QPSK	1	5	22.54	22.71	22.82
1.4	QPSK	3	0	21.80	21.89	21.87
1.4	QPSK	3	1	21.76	21.78	21.86
1.4	QPSK	3	3	21.70	21.75	21.79
1.4	QPSK	6	0	21.64	21.79	21.75
1.4	16QAM	1	0	21.71	21.91	21.80
1.4	16QAM	1	3	21.59	21.71	21.64
1.4	16QAM	1	5	21.53	21.65	21.59
1.4	16QAM	3	0	21.46	21.40	21.51
1.4	16QAM	3	1	21.24	21.37	21.26
1.4	16QAM	3	3	21.25	21.28	21.23
1.4	16QAM	6	0	21.22	21.29	21.30



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				20450	20525	20600
Frequency (MHz)				829	836.5	844
10	QPSK	1	0	23.56	23.57	23.49
10	QPSK	1	25	23.42	23.45	23.25
10	QPSK	1	49	23.34	23.46	23.14
10	QPSK	25	0	22.51	22.53	22.34
10	QPSK	25	12	22.27	22.29	22.34
10	QPSK	25	25	22.27	22.38	22.43
10	QPSK	50	0	22.33	22.21	22.35
10	16QAM	1	0	22.37	22.56	22.27
10	16QAM	1	25	22.60	22.63	22.31
10	16QAM	1	49	22.43	22.49	22.56
10	16QAM	25	0	22.52	22.53	22.35
10	16QAM	25	12	22.46	22.54	22.32
10	16QAM	25	25	22.49	22.42	22.45
10	16QAM	50	0	22.50	22.41	22.31



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	23.51	23.47	23.45
5	QPSK	1	12	23.41	23.52	23.36
5	QPSK	1	24	23.41	23.36	23.36
5	QPSK	12	0	22.42	22.47	22.33
5	QPSK	12	7	22.49	22.50	22.42
5	QPSK	12	13	22.54	22.38	22.33
5	QPSK	25	0	22.45	22.41	22.33
5	16QAM	1	0	22.74	22.67	22.43
5	16QAM	1	12	22.44	22.66	22.42
5	16QAM	1	24	22.31	22.66	22.49
5	16QAM	12	0	22.40	22.49	22.48
5	16QAM	12	7	22.47	22.50	22.32
5	16QAM	12	13	22.47	22.38	22.43
5	16QAM	25	0	22.48	22.53	22.48



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	23.20	23.51	23.36
3	QPSK	1	8	23.46	23.47	23.38
3	QPSK	1	14	23.47	23.45	23.19
3	QPSK	8	0	22.35	22.48	22.46
3	QPSK	8	4	22.49	22.55	22.52
3	QPSK	8	7	22.44	22.46	22.33
3	QPSK	15	0	22.42	22.48	22.47
3	16QAM	1	0	22.44	22.55	22.62
3	16QAM	1	8	22.37	22.63	22.47
3	16QAM	1	14	22.42	22.68	22.43
3	16QAM	8	0	22.38	22.47	22.21
3	16QAM	8	4	22.54	22.65	22.22
3	16QAM	8	7	22.46	22.52	22.26
3	16QAM	15	0	22.40	22.42	21.97



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	23.41	23.48	23.52
1.4	QPSK	1	3	23.54	23.47	23.54
1.4	QPSK	1	5	23.43	23.37	23.38
1.4	QPSK	3	0	23.44	23.50	23.46
1.4	QPSK	3	1	23.50	23.37	23.47
1.4	QPSK	3	3	23.51	23.43	23.43
1.4	QPSK	6	0	22.40	22.39	22.38
1.4	16QAM	1	0	22.53	22.34	22.51
1.4	16QAM	1	3	22.33	22.57	22.46
1.4	16QAM	1	5	22.72	22.40	22.46
1.4	16QAM	3	0	22.25	22.23	22.37
1.4	16QAM	3	1	22.28	22.55	22.41
1.4	16QAM	3	3	22.36	22.47	22.35
1.4	16QAM	6	0	22.55	22.42	22.46



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	17.27	17.28	17.20
20	QPSK	1	49	17.22	17.26	17.15
20	QPSK	1	99	17.17	17.12	17.17
20	QPSK	50	0	16.70	16.73	16.65
20	QPSK	50	24	16.57	16.54	16.44
20	QPSK	50	50	16.67	16.70	16.67
20	QPSK	100	0	16.62	16.64	16.61
20	16QAM	1	0	16.50	16.53	16.51
20	16QAM	1	49	16.43	16.49	16.49
20	16QAM	1	99	16.37	16.48	16.43
20	16QAM	50	0	16.07	16.17	16.10
20	16QAM	50	24	16.12	16.04	16.15
20	16QAM	50	50	16.05	16.10	15.93
20	16QAM	100	0	15.93	16.05	16.03



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	17.23	17.25	17.15
15	QPSK	1	37	17.18	17.24	17.10
15	QPSK	1	74	17.13	17.07	17.11
15	QPSK	36	0	16.62	16.69	16.64
15	QPSK	36	20	16.53	16.49	16.40
15	QPSK	36	39	16.62	16.65	16.64
15	QPSK	75	0	16.58	16.60	16.58
15	16QAM	1	0	16.47	16.50	16.47
15	16QAM	1	37	16.39	16.45	16.45
15	16QAM	1	74	16.34	16.46	16.39
15	16QAM	36	0	16.02	16.13	16.04
15	16QAM	36	20	16.09	15.98	16.09
15	16QAM	36	39	16.00	16.06	15.87
15	16QAM	75	0	15.88	16.01	15.97



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	17.20	17.23	17.11
10	QPSK	1	25	17.15	17.22	17.08
10	QPSK	1	49	17.07	17.04	17.06
10	QPSK	25	0	16.59	16.64	16.63
10	QPSK	25	12	16.50	16.44	16.36
10	QPSK	25	25	16.58	16.61	16.60
10	QPSK	50	0	16.54	16.55	16.55
10	16QAM	1	0	16.41	16.47	16.43
10	16QAM	1	25	16.34	16.40	16.42
10	16QAM	1	49	16.29	16.43	16.36
10	16QAM	25	0	15.96	16.10	16.00
10	16QAM	25	12	16.07	15.95	16.04
10	16QAM	25	25	15.97	16.04	15.83
10	16QAM	50	0	15.84	15.98	15.94



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	17.15	17.20	17.08
5	QPSK	1	12	17.13	17.18	17.05
5	QPSK	1	24	17.02	16.99	17.04
5	QPSK	12	0	16.55	16.59	16.60
5	QPSK	12	7	16.46	16.40	16.34
5	QPSK	12	13	16.53	16.56	16.56
5	QPSK	25	0	16.50	16.52	16.53
5	16QAM	1	0	16.35	16.44	16.41
5	16QAM	1	12	16.28	16.34	16.38
5	16QAM	1	24	16.24	16.41	16.33
5	16QAM	12	0	15.92	16.07	15.97
5	16QAM	12	7	16.04	15.92	16.00
5	16QAM	12	13	15.92	15.99	15.80
5	16QAM	25	0	15.81	15.94	15.92



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	23.30	23.46	23.35
10	QPSK	1	25	23.16	23.29	23.32
10	QPSK	1	49	23.26	23.27	23.26
10	QPSK	25	0	22.55	22.65	22.56
10	QPSK	25	12	22.52	22.46	22.25
10	QPSK	25	25	22.57	22.63	22.56
10	QPSK	50	0	22.58	22.60	22.51
10	16QAM	1	0	22.51	22.06	22.19
10	16QAM	1	25	22.26	22.21	22.35
10	16QAM	1	49	22.35	22.40	22.29
10	16QAM	25	0	22.24	22.26	22.20
10	16QAM	25	12	22.28	22.32	22.21
10	16QAM	25	25	22.33	22.34	22.28
10	16QAM	50	0	22.23	22.31	22.36



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	23.05	23.38	23.16
5	QPSK	1	12	23.21	23.37	23.21
5	QPSK	1	24	23.17	23.36	23.22
5	QPSK	12	0	22.28	22.35	22.34
5	QPSK	12	7	22.39	22.41	22.38
5	QPSK	12	13	22.34	22.37	22.34
5	QPSK	25	0	22.30	22.42	22.38
5	16QAM	1	0	22.31	22.33	22.35
5	16QAM	1	12	22.48	22.43	22.44
5	16QAM	1	24	22.44	22.42	22.38
5	16QAM	12	0	22.18	22.15	22.18
5	16QAM	12	7	22.32	22.37	22.21
5	16QAM	12	13	22.27	22.24	22.29
5	16QAM	25	0	22.28	22.24	22.26



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	23.13	23.40	23.07
3	QPSK	1	8	23.31	23.30	23.20
3	QPSK	1	14	23.25	23.36	23.31
3	QPSK	8	0	22.36	22.34	22.34
3	QPSK	8	4	22.39	22.42	22.43
3	QPSK	8	7	22.34	22.42	22.36
3	QPSK	15	0	22.33	22.41	22.27
3	16QAM	1	0	22.34	22.70	22.29
3	16QAM	1	8	22.54	22.52	22.47
3	16QAM	1	14	22.37	22.42	22.28
3	16QAM	8	0	22.34	22.23	22.26
3	16QAM	8	4	22.39	22.36	22.47
3	16QAM	8	7	22.23	22.26	22.32
3	16QAM	15	0	22.21	22.14	22.13



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	23.16	23.33	23.13
1.4	QPSK	1	3	23.27	23.26	23.28
1.4	QPSK	1	5	23.16	23.21	23.17
1.4	QPSK	3	0	23.11	23.24	23.22
1.4	QPSK	3	1	23.32	23.32	22.99
1.4	QPSK	3	3	23.27	23.29	23.25
1.4	QPSK	6	0	22.55	22.34	22.28
1.4	16QAM	1	0	22.37	22.31	22.16
1.4	16QAM	1	3	22.18	22.61	22.28
1.4	16QAM	1	5	22.30	22.31	22.30
1.4	16QAM	3	0	22.14	22.17	22.18
1.4	16QAM	3	1	22.30	22.38	22.22
1.4	16QAM	3	3	22.13	22.27	22.27
1.4	16QAM	6	0	22.06	22.26	22.16



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	23.39	23.42	23.39
10	QPSK	1	25	23.27	23.23	23.29
10	QPSK	1	49	23.20	23.23	23.18
10	QPSK	25	0	22.50	22.56	22.48
10	QPSK	25	12	22.35	22.29	22.43
10	QPSK	25	25	22.33	22.33	22.42
10	QPSK	50	0	22.46	22.33	22.34
10	16QAM	1	0	22.19	22.38	22.52
10	16QAM	1	25	22.40	22.69	22.53
10	16QAM	1	49	22.36	22.61	22.66
10	16QAM	25	0	22.30	22.54	22.53
10	16QAM	25	12	22.36	22.51	22.49
10	16QAM	25	25	22.19	22.45	22.50
10	16QAM	50	0	22.23	22.52	22.49



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	23.33	23.29	23.25
5	QPSK	1	12	23.32	23.28	23.27
5	QPSK	1	24	23.24	23.30	23.29
5	QPSK	12	0	22.40	22.26	22.42
5	QPSK	12	7	22.52	22.29	22.37
5	QPSK	12	13	22.35	22.31	22.37
5	QPSK	25	0	22.38	22.23	22.36
5	16QAM	1	0	22.54	22.59	22.31
5	16QAM	1	12	22.71	22.27	22.64
5	16QAM	1	24	22.55	22.60	22.76
5	16QAM	12	0	22.31	22.34	22.55
5	16QAM	12	7	22.31	22.38	22.50
5	16QAM	12	13	22.22	22.47	22.50
5	16QAM	25	0	22.00	22.12	22.16



LTE Band 66						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				132072	132322	132572
Frequency (MHz)				1720	1745	1770
20	QPSK	1	0	23.17	23.24	23.21
20	QPSK	1	49	23.16	23.18	23.18
20	QPSK	1	99	23.08	23.14	23.11
20	QPSK	50	0	22.28	22.38	22.36
20	QPSK	50	24	22.21	22.28	22.24
20	QPSK	50	50	22.25	22.30	22.24
20	QPSK	100	0	22.13	22.24	22.27
20	16QAM	1	0	22.25	22.25	22.18
20	16QAM	1	49	22.24	21.84	22.24
20	16QAM	1	99	22.18	22.17	22.28
20	16QAM	50	0	21.53	21.67	21.53
20	16QAM	50	24	21.39	21.36	21.42
20	16QAM	50	50	21.38	21.32	21.36
20	16QAM	100	0	21.39	21.42	21.23



LTE Band 66						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				132047	132322	132597
Frequency (MHz)				1717.5	1745	1772.5
15	QPSK	1	0	23.12	23.22	23.16
15	QPSK	1	37	23.14	23.13	23.16
15	QPSK	1	74	23.03	23.10	23.08
15	QPSK	36	0	22.25	22.36	22.33
15	QPSK	36	20	22.18	22.23	22.19
15	QPSK	36	39	22.20	22.25	22.20
15	QPSK	75	0	22.08	22.20	22.22
15	16QAM	1	0	22.20	22.19	22.13
15	16QAM	1	37	22.18	21.81	22.21
15	16QAM	1	74	22.14	22.12	22.24
15	16QAM	36	0	21.47	21.63	21.48
15	16QAM	36	20	21.37	21.33	21.39
15	16QAM	36	39	21.33	21.28	21.30
15	16QAM	75	0	21.37	21.39	21.18



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	23.07	23.17	23.13
10	QPSK	1	25	23.09	23.08	23.11
10	QPSK	1	49	23.01	23.05	23.04
10	QPSK	25	0	22.19	22.33	22.29
10	QPSK	25	12	22.15	22.21	22.17
10	QPSK	25	25	22.14	22.19	22.16
10	QPSK	50	0	22.03	22.18	22.19
10	16QAM	1	0	22.16	22.17	22.10
10	16QAM	1	25	22.12	21.75	22.16
10	16QAM	1	49	22.10	22.08	22.19
10	16QAM	25	0	21.44	21.60	21.42
10	16QAM	25	12	21.31	21.29	21.36
10	16QAM	25	25	21.31	21.26	21.26
10	16QAM	50	0	21.31	21.36	21.13



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	23.05	23.13	23.08
5	QPSK	1	12	23.06	23.04	23.06
5	QPSK	1	24	22.96	22.99	23.01
5	QPSK	12	0	22.15	22.28	22.23
5	QPSK	12	7	22.11	22.16	22.13
5	QPSK	12	13	22.10	22.15	22.14
5	QPSK	25	0	21.99	22.14	22.15
5	16QAM	1	0	22.13	22.14	22.08
5	16QAM	1	12	22.06	21.72	22.11
5	16QAM	1	24	22.05	22.05	22.14
5	16QAM	12	0	21.41	21.56	21.39
5	16QAM	12	7	21.29	21.25	21.30
5	16QAM	12	13	21.29	21.21	21.24
5	16QAM	25	0	21.27	21.30	21.10



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	23.03	23.11	23.05
3	QPSK	1	8	23.00	23.01	23.04
3	QPSK	1	14	22.91	22.93	22.98
3	QPSK	8	0	22.11	22.25	22.18
3	QPSK	8	4	22.06	22.13	22.08
3	QPSK	8	7	22.04	22.11	22.12
3	QPSK	15	0	21.95	22.11	22.12
3	16QAM	1	0	22.09	22.09	22.02
3	16QAM	1	8	22.02	21.69	22.08
3	16QAM	1	14	22.00	22.02	22.10
3	16QAM	8	0	21.38	21.53	21.33
3	16QAM	8	4	21.24	21.22	21.24
3	16QAM	8	7	21.25	21.19	21.20
3	16QAM	15	0	21.22	21.24	21.06



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	23.00	23.06	23.00
1.4	QPSK	1	3	22.97	22.99	23.01
1.4	QPSK	1	5	22.88	22.88	22.96
1.4	QPSK	3	0	22.07	22.20	22.15
1.4	QPSK	3	1	22.02	22.09	22.05
1.4	QPSK	3	3	22.01	22.07	22.06
1.4	QPSK	6	0	21.92	22.08	22.08
1.4	16QAM	1	0	22.06	22.04	22.00
1.4	16QAM	1	3	21.97	21.64	22.02
1.4	16QAM	1	5	21.97	21.97	22.07
1.4	16QAM	3	0	21.33	21.49	21.30
1.4	16QAM	3	1	21.20	21.16	21.21
1.4	16QAM	3	3	21.22	21.14	21.14
1.4	16QAM	6	0	21.19	21.18	21.00



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	22.61	0.182	22.64	0.184	22.58	0.181
20	QPSK	1	49	22.59	0.182	22.53	0.179	22.46	0.176
20	QPSK	1	99	22.53	0.179	22.49	0.177	22.47	0.177
20	QPSK	50	0	21.69	0.148	21.78	0.151	21.71	0.148
20	QPSK	50	24	21.46	0.140	21.51	0.142	21.51	0.142
20	QPSK	50	50	21.51	0.142	21.47	0.140	21.53	0.142
20	QPSK	100	0	21.44	0.139	21.53	0.142	21.49	0.141
20	16QAM	1	0	21.50	0.141	21.52	0.142	21.48	0.141
20	16QAM	1	49	21.19	0.132	21.49	0.141	21.45	0.140
20	16QAM	1	99	21.44	0.139	21.29	0.135	21.69	0.148
20	16QAM	50	0	20.86	0.122	20.83	0.121	20.81	0.121
20	16QAM	50	24	20.82	0.121	20.87	0.122	20.88	0.122
20	16QAM	50	50	20.90	0.123	20.87	0.122	20.94	0.124
20	16QAM	100	0	20.93	0.124	20.94	0.124	20.81	0.121



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	22.58	0.181	22.60	0.182	22.53	0.179
15	QPSK	1	37	22.55	0.180	22.47	0.177	22.40	0.174
15	QPSK	1	74	22.50	0.178	22.46	0.176	22.42	0.175
15	QPSK	36	0	21.63	0.146	21.72	0.149	21.67	0.147
15	QPSK	36	20	21.43	0.139	21.47	0.140	21.46	0.140
15	QPSK	36	39	21.48	0.141	21.44	0.139	21.50	0.141
15	QPSK	75	0	21.40	0.138	21.50	0.141	21.45	0.140
15	16QAM	1	0	21.47	0.140	21.49	0.141	21.44	0.139
15	16QAM	1	37	21.15	0.130	21.45	0.140	21.42	0.139
15	16QAM	1	74	21.38	0.137	21.26	0.134	21.66	0.147
15	16QAM	36	0	20.81	0.121	20.79	0.120	20.75	0.119
15	16QAM	36	20	20.78	0.120	20.84	0.121	20.86	0.122
15	16QAM	36	39	20.84	0.121	20.84	0.121	20.89	0.123
15	16QAM	75	0	20.87	0.122	20.92	0.124	20.77	0.119



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	22.56	0.180	22.58	0.181	22.50	0.178
10	QPSK	1	25	22.50	0.178	22.43	0.175	22.35	0.172
10	QPSK	1	49	22.44	0.175	22.42	0.175	22.39	0.173
10	QPSK	25	0	21.58	0.144	21.69	0.148	21.63	0.146
10	QPSK	25	12	21.39	0.138	21.43	0.139	21.43	0.139
10	QPSK	25	25	21.45	0.140	21.39	0.138	21.46	0.140
10	QPSK	50	0	21.36	0.137	21.48	0.141	21.41	0.138
10	16QAM	1	0	21.44	0.139	21.45	0.140	21.39	0.138
10	16QAM	1	25	21.11	0.129	21.43	0.139	21.37	0.137
10	16QAM	1	49	21.34	0.136	21.23	0.133	21.61	0.145
10	16QAM	25	0	20.75	0.119	20.73	0.118	20.73	0.118
10	16QAM	25	12	20.74	0.119	20.79	0.120	20.83	0.121
10	16QAM	25	25	20.81	0.121	20.80	0.120	20.86	0.122
10	16QAM	50	0	20.81	0.121	20.88	0.122	20.72	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				18625		18900		19175	
Frequency (MHz)				1852.5		1880		1907.5	
				dBm	W	dBm	W	dBm	W
5	QPSK	1	0	22.53	0.179	22.54	0.179	22.46	0.176
5	QPSK	1	12	22.44	0.175	22.40	0.174	22.31	0.170
5	QPSK	1	24	22.38	0.173	22.40	0.174	22.33	0.171
5	QPSK	12	0	21.52	0.142	21.64	0.146	21.61	0.145
5	QPSK	12	7	21.34	0.136	21.39	0.138	21.40	0.138
5	QPSK	12	13	21.40	0.138	21.34	0.136	21.40	0.138
5	QPSK	25	0	21.30	0.135	21.42	0.139	21.36	0.137
5	16QAM	1	0	21.39	0.138	21.40	0.138	21.35	0.136
5	16QAM	1	12	21.06	0.128	21.40	0.138	21.32	0.136
5	16QAM	1	24	21.31	0.135	21.20	0.132	21.58	0.144
5	16QAM	12	0	20.71	0.118	20.70	0.117	20.69	0.117
5	16QAM	12	7	20.69	0.117	20.74	0.119	20.77	0.119
5	16QAM	12	13	20.77	0.119	20.76	0.119	20.82	0.121
5	16QAM	25	0	20.78	0.120	20.86	0.122	20.69	0.117



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	22.48	0.177	22.50	0.178	22.41	0.174
3	QPSK	1	8	22.39	0.173	22.37	0.173	22.27	0.169
3	QPSK	1	14	22.33	0.171	22.37	0.173	22.28	0.169
3	QPSK	8	0	21.46	0.140	21.59	0.144	21.56	0.143
3	QPSK	8	4	21.30	0.135	21.35	0.136	21.34	0.136
3	QPSK	8	7	21.36	0.137	21.28	0.134	21.36	0.137
3	QPSK	15	0	21.26	0.134	21.39	0.138	21.31	0.135
3	16QAM	1	0	21.34	0.136	21.34	0.136	21.33	0.136
3	16QAM	1	8	21.03	0.127	21.38	0.137	21.29	0.135
3	16QAM	1	14	21.27	0.134	21.16	0.131	21.56	0.143
3	16QAM	8	0	20.67	0.117	20.65	0.116	20.65	0.116
3	16QAM	8	4	20.64	0.116	20.69	0.117	20.72	0.118
3	16QAM	8	7	20.71	0.118	20.73	0.118	20.79	0.120
3	16QAM	15	0	20.73	0.118	20.80	0.120	20.66	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				18607		18900		19193	
Frequency (MHz)				1850.7		1880		1909.3	
				dBm	W	dBm	W	dBm	W
1.4	QPSK	1	0	22.42	0.175	22.45	0.176	22.37	0.173
1.4	QPSK	1	3	22.35	0.172	22.32	0.171	22.22	0.167
1.4	QPSK	1	5	22.28	0.169	22.35	0.172	22.23	0.167
1.4	QPSK	3	0	21.43	0.139	21.56	0.143	21.54	0.143
1.4	QPSK	3	1	21.24	0.133	21.31	0.135	21.31	0.135
1.4	QPSK	3	3	21.34	0.136	21.25	0.133	21.30	0.135
1.4	QPSK	6	0	21.23	0.133	21.33	0.136	21.25	0.133
1.4	16QAM	1	0	21.28	0.134	21.28	0.134	21.30	0.135
1.4	16QAM	1	3	20.98	0.125	21.34	0.136	21.26	0.134
1.4	16QAM	1	5	21.25	0.133	21.11	0.129	21.54	0.143
1.4	16QAM	3	0	20.61	0.115	20.61	0.115	20.60	0.115
1.4	16QAM	3	1	20.62	0.115	20.67	0.117	20.67	0.117
1.4	16QAM	3	3	20.69	0.117	20.69	0.117	20.76	0.119
1.4	16QAM	6	0	20.70	0.117	20.76	0.119	20.61	0.115



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	22.36	0.172	22.44	0.175	22.43	0.175
20	QPSK	1	49	22.22	0.167	22.30	0.170	22.29	0.169
20	QPSK	1	99	22.14	0.164	22.27	0.169	22.39	0.173
20	QPSK	50	0	21.34	0.136	21.47	0.140	21.44	0.139
20	QPSK	50	24	21.34	0.136	21.42	0.139	21.42	0.139
20	QPSK	50	50	21.28	0.134	21.34	0.136	21.35	0.136
20	QPSK	100	0	21.22	0.132	21.37	0.137	21.33	0.136
20	16QAM	1	0	21.30	0.135	21.50	0.141	21.37	0.137
20	16QAM	1	49	21.18	0.131	21.28	0.134	21.25	0.133
20	16QAM	1	99	21.13	0.130	21.19	0.132	21.17	0.131
20	16QAM	50	0	21.03	0.127	20.96	0.125	21.10	0.129
20	16QAM	50	24	20.84	0.121	20.95	0.124	20.84	0.121
20	16QAM	50	50	20.80	0.120	20.81	0.121	20.81	0.121
20	16QAM	100	0	20.82	0.121	20.90	0.123	20.91	0.123



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	22.32	0.171	22.41	0.174	22.38	0.173
15	QPSK	1	37	22.18	0.165	22.27	0.169	22.25	0.168
15	QPSK	1	74	22.12	0.163	22.22	0.167	22.35	0.172
15	QPSK	36	0	21.32	0.136	21.45	0.140	21.42	0.139
15	QPSK	36	20	21.30	0.135	21.36	0.137	21.38	0.137
15	QPSK	36	39	21.24	0.133	21.29	0.135	21.30	0.135
15	QPSK	75	0	21.17	0.131	21.34	0.136	21.28	0.134
15	16QAM	1	0	21.27	0.134	21.46	0.140	21.32	0.136
15	16QAM	1	37	21.14	0.130	21.25	0.133	21.19	0.132
15	16QAM	1	74	21.09	0.129	21.17	0.131	21.12	0.129
15	16QAM	36	0	20.97	0.125	20.90	0.123	21.07	0.128
15	16QAM	36	20	20.80	0.120	20.90	0.123	20.79	0.120
15	16QAM	36	39	20.75	0.119	20.78	0.120	20.77	0.119
15	16QAM	75	0	20.78	0.120	20.85	0.122	20.85	0.122



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	22.29	0.169	22.35	0.172	22.33	0.171
10	QPSK	1	25	22.12	0.163	22.23	0.167	22.21	0.166
10	QPSK	1	49	22.07	0.161	22.20	0.166	22.33	0.171
10	QPSK	25	0	21.29	0.135	21.39	0.138	21.37	0.137
10	QPSK	25	12	21.26	0.134	21.31	0.135	21.33	0.136
10	QPSK	25	25	21.19	0.132	21.26	0.134	21.27	0.134
10	QPSK	50	0	21.12	0.129	21.29	0.135	21.24	0.133
10	16QAM	1	0	21.22	0.132	21.43	0.139	21.28	0.134
10	16QAM	1	25	21.09	0.129	21.21	0.132	21.13	0.130
10	16QAM	1	49	21.05	0.127	21.14	0.130	21.09	0.129
10	16QAM	25	0	20.92	0.124	20.88	0.122	21.01	0.126
10	16QAM	25	12	20.78	0.120	20.85	0.122	20.77	0.119
10	16QAM	25	25	20.72	0.118	20.73	0.118	20.73	0.118
10	16QAM	50	0	20.75	0.119	20.82	0.121	20.80	0.120



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	22.24	0.167	22.31	0.170	22.28	0.169
5	QPSK	1	12	22.08	0.161	22.18	0.165	22.17	0.165
5	QPSK	1	24	22.01	0.159	22.16	0.164	22.29	0.169
5	QPSK	12	0	21.24	0.133	21.36	0.137	21.34	0.136
5	QPSK	12	7	21.21	0.132	21.28	0.134	21.30	0.135
5	QPSK	12	13	21.16	0.131	21.23	0.133	21.24	0.133
5	QPSK	25	0	21.08	0.128	21.25	0.133	21.20	0.132
5	16QAM	1	0	21.19	0.132	21.38	0.137	21.25	0.133
5	16QAM	1	12	21.04	0.127	21.18	0.131	21.10	0.129
5	16QAM	1	24	21.00	0.126	21.10	0.129	21.05	0.127
5	16QAM	12	0	20.90	0.123	20.85	0.122	20.98	0.125
5	16QAM	12	7	20.74	0.119	20.81	0.121	20.71	0.118
5	16QAM	12	13	20.69	0.117	20.71	0.118	20.69	0.117
5	16QAM	25	0	20.70	0.117	20.78	0.120	20.77	0.119



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	22.21	0.166	22.27	0.169	22.25	0.168
3	QPSK	1	8	22.05	0.160	22.16	0.164	22.12	0.163
3	QPSK	1	14	21.96	0.157	22.13	0.163	22.25	0.168
3	QPSK	8	0	21.22	0.132	21.32	0.136	21.29	0.135
3	QPSK	8	4	21.18	0.131	21.22	0.132	21.27	0.134
3	QPSK	8	7	21.11	0.129	21.19	0.132	21.20	0.132
3	QPSK	15	0	21.06	0.128	21.21	0.132	21.16	0.131
3	16QAM	1	0	21.13	0.130	21.33	0.136	21.23	0.133
3	16QAM	1	8	21.00	0.126	21.14	0.130	21.06	0.128
3	16QAM	1	14	20.96	0.125	21.08	0.128	21.00	0.126
3	16QAM	8	0	20.86	0.122	20.81	0.121	20.93	0.124
3	16QAM	8	4	20.68	0.117	20.78	0.120	20.66	0.116
3	16QAM	8	7	20.66	0.116	20.69	0.117	20.66	0.116
3	16QAM	15	0	20.65	0.116	20.72	0.118	20.72	0.118



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	22.17	0.165	22.21	0.166	22.19	0.166
1.4	QPSK	1	3	22.03	0.160	22.13	0.163	22.06	0.161
1.4	QPSK	1	5	21.92	0.156	22.09	0.162	22.20	0.166
1.4	QPSK	3	0	21.18	0.131	21.27	0.134	21.25	0.133
1.4	QPSK	3	1	21.14	0.130	21.16	0.131	21.24	0.133
1.4	QPSK	3	3	21.08	0.128	21.13	0.130	21.17	0.131
1.4	QPSK	6	0	21.02	0.126	21.17	0.131	21.13	0.130
1.4	16QAM	1	0	21.09	0.129	21.29	0.135	21.18	0.131
1.4	16QAM	1	3	20.97	0.125	21.09	0.129	21.02	0.126
1.4	16QAM	1	5	20.91	0.123	21.03	0.127	20.97	0.125
1.4	16QAM	3	0	20.84	0.121	20.78	0.120	20.89	0.123
1.4	16QAM	3	1	20.62	0.115	20.75	0.119	20.64	0.116
1.4	16QAM	3	3	20.63	0.116	20.66	0.116	20.61	0.115
1.4	16QAM	6	0	20.60	0.115	20.67	0.117	20.68	0.117



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	19.60	0.091	19.61	0.091	19.53	0.090
10	QPSK	1	25	19.46	0.088	19.49	0.089	19.29	0.085
10	QPSK	1	49	19.38	0.087	19.50	0.089	19.18	0.083
10	QPSK	25	0	18.55	0.072	18.57	0.072	18.38	0.069
10	QPSK	25	12	18.31	0.068	18.33	0.068	18.38	0.069
10	QPSK	25	25	18.31	0.068	18.42	0.070	18.47	0.070
10	QPSK	50	0	18.37	0.069	18.25	0.067	18.39	0.069
10	16QAM	1	0	18.41	0.069	18.60	0.072	18.31	0.068
10	16QAM	1	25	18.64	0.073	18.67	0.074	18.35	0.068
10	16QAM	1	49	18.47	0.070	18.53	0.071	18.60	0.072
10	16QAM	25	0	18.56	0.072	18.57	0.072	18.39	0.069
10	16QAM	25	12	18.50	0.071	18.58	0.072	18.36	0.069
10	16QAM	25	25	18.53	0.071	18.46	0.070	18.49	0.071
10	16QAM	50	0	18.54	0.071	18.45	0.070	18.35	0.068



LTE Band 5				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20425		20525		20625	
Frequency (MHz)				826.5		836.5		846.5	
				dBm	W	dBm	W	dBm	W
5	QPSK	1	0	19.55	0.090	19.51	0.089	19.49	0.089
5	QPSK	1	12	19.45	0.088	19.56	0.090	19.40	0.087
5	QPSK	1	24	19.45	0.088	19.40	0.087	19.40	0.087
5	QPSK	12	0	18.46	0.070	18.51	0.071	18.37	0.069
5	QPSK	12	7	18.53	0.071	18.54	0.071	18.46	0.070
5	QPSK	12	13	18.58	0.072	18.42	0.070	18.37	0.069
5	QPSK	25	0	18.49	0.071	18.45	0.070	18.37	0.069
5	16QAM	1	0	18.78	0.076	18.71	0.074	18.47	0.070
5	16QAM	1	12	18.48	0.070	18.70	0.074	18.46	0.070
5	16QAM	1	24	18.35	0.068	18.70	0.074	18.53	0.071
5	16QAM	12	0	18.44	0.070	18.53	0.071	18.52	0.071
5	16QAM	12	7	18.51	0.071	18.54	0.071	18.36	0.069
5	16QAM	12	13	18.51	0.071	18.42	0.070	18.47	0.070
5	16QAM	25	0	18.52	0.071	18.57	0.072	18.52	0.071



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	19.24	0.084	19.55	0.090	19.40	0.087
3	QPSK	1	8	19.50	0.089	19.51	0.089	19.42	0.087
3	QPSK	1	14	19.51	0.089	19.49	0.089	19.23	0.084
3	QPSK	8	0	18.39	0.069	18.52	0.071	18.50	0.071
3	QPSK	8	4	18.53	0.071	18.59	0.072	18.56	0.072
3	QPSK	8	7	18.48	0.070	18.50	0.071	18.37	0.069
3	QPSK	15	0	18.46	0.070	18.52	0.071	18.51	0.071
3	16QAM	1	0	18.48	0.070	18.59	0.072	18.66	0.073
3	16QAM	1	8	18.41	0.069	18.67	0.074	18.51	0.071
3	16QAM	1	14	18.46	0.070	18.72	0.074	18.47	0.070
3	16QAM	8	0	18.42	0.070	18.51	0.071	18.25	0.067
3	16QAM	8	4	18.58	0.072	18.69	0.074	18.26	0.067
3	16QAM	8	7	18.50	0.071	18.56	0.072	18.30	0.068
3	16QAM	15	0	18.44	0.070	18.46	0.070	18.01	0.063



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	19.45	0.088	19.52	0.090	19.56	0.090
1.4	QPSK	1	3	19.58	0.091	19.51	0.089	19.58	0.091
1.4	QPSK	1	5	19.47	0.089	19.41	0.087	19.42	0.087
1.4	QPSK	3	0	19.48	0.089	19.54	0.090	19.50	0.089
1.4	QPSK	3	1	19.54	0.090	19.41	0.087	19.51	0.089
1.4	QPSK	3	3	19.55	0.090	19.47	0.089	19.47	0.089
1.4	QPSK	6	0	18.44	0.070	18.43	0.070	18.42	0.070
1.4	16QAM	1	0	18.57	0.072	18.38	0.069	18.55	0.072
1.4	16QAM	1	3	18.37	0.069	18.61	0.073	18.50	0.071
1.4	16QAM	1	5	18.76	0.075	18.44	0.070	18.50	0.071
1.4	16QAM	3	0	18.29	0.067	18.27	0.067	18.41	0.069
1.4	16QAM	3	1	18.32	0.068	18.59	0.072	18.45	0.070
1.4	16QAM	3	3	18.40	0.069	18.51	0.071	18.39	0.069
1.4	16QAM	6	0	18.59	0.072	18.46	0.070	18.50	0.071



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	16.52	0.045	16.53	0.045	16.45	0.044
20	QPSK	1	49	16.47	0.044	16.51	0.045	16.40	0.044
20	QPSK	1	99	16.42	0.044	16.37	0.043	16.42	0.044
20	QPSK	50	0	15.95	0.039	15.98	0.040	15.90	0.039
20	QPSK	50	24	15.82	0.038	15.79	0.038	15.69	0.037
20	QPSK	50	50	15.92	0.039	15.95	0.039	15.92	0.039
20	QPSK	100	0	15.87	0.039	15.89	0.039	15.86	0.039
20	16QAM	1	0	15.75	0.038	15.78	0.038	15.76	0.038
20	16QAM	1	49	15.68	0.037	15.74	0.037	15.74	0.037
20	16QAM	1	99	15.62	0.036	15.73	0.037	15.68	0.037
20	16QAM	50	0	15.32	0.034	15.42	0.035	15.35	0.034
20	16QAM	50	24	15.37	0.034	15.29	0.034	15.40	0.035
20	16QAM	50	50	15.30	0.034	15.35	0.034	15.18	0.033
20	16QAM	100	0	15.18	0.033	15.30	0.034	15.28	0.034



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	16.48	0.044	16.50	0.045	16.40	0.044
15	QPSK	1	37	16.43	0.044	16.49	0.045	16.35	0.043
15	QPSK	1	74	16.38	0.043	16.32	0.043	16.36	0.043
15	QPSK	36	0	15.87	0.039	15.94	0.039	15.89	0.039
15	QPSK	36	20	15.78	0.038	15.74	0.037	15.65	0.037
15	QPSK	36	39	15.87	0.039	15.90	0.039	15.89	0.039
15	QPSK	75	0	15.83	0.038	15.85	0.038	15.83	0.038
15	16QAM	1	0	15.72	0.037	15.75	0.038	15.72	0.037
15	16QAM	1	37	15.64	0.037	15.70	0.037	15.70	0.037
15	16QAM	1	74	15.59	0.036	15.71	0.037	15.64	0.037
15	16QAM	36	0	15.27	0.034	15.38	0.035	15.29	0.034
15	16QAM	36	20	15.34	0.034	15.23	0.033	15.34	0.034
15	16QAM	36	39	15.25	0.033	15.31	0.034	15.12	0.033
15	16QAM	75	0	15.13	0.033	15.26	0.034	15.22	0.033



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	16.45	0.044	16.48	0.044	16.36	0.043
10	QPSK	1	25	16.40	0.044	16.47	0.044	16.33	0.043
10	QPSK	1	49	16.32	0.043	16.29	0.043	16.31	0.043
10	QPSK	25	0	15.84	0.038	15.89	0.039	15.88	0.039
10	QPSK	25	12	15.75	0.038	15.69	0.037	15.61	0.036
10	QPSK	25	25	15.83	0.038	15.86	0.039	15.85	0.038
10	QPSK	50	0	15.79	0.038	15.80	0.038	15.80	0.038
10	16QAM	1	0	15.66	0.037	15.72	0.037	15.68	0.037
10	16QAM	1	25	15.59	0.036	15.65	0.037	15.67	0.037
10	16QAM	1	49	15.54	0.036	15.68	0.037	15.61	0.036
10	16QAM	25	0	15.21	0.033	15.35	0.034	15.25	0.033
10	16QAM	25	12	15.32	0.034	15.20	0.033	15.29	0.034
10	16QAM	25	25	15.22	0.033	15.29	0.034	15.08	0.032
10	16QAM	50	0	15.09	0.032	15.23	0.033	15.19	0.033



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	16.40	0.044	16.45	0.044	16.33	0.043
5	QPSK	1	12	16.38	0.043	16.43	0.044	16.30	0.043
5	QPSK	1	24	16.27	0.042	16.24	0.042	16.29	0.043
5	QPSK	12	0	15.80	0.038	15.84	0.038	15.85	0.038
5	QPSK	12	7	15.71	0.037	15.65	0.037	15.59	0.036
5	QPSK	12	13	15.78	0.038	15.81	0.038	15.81	0.038
5	QPSK	25	0	15.75	0.038	15.77	0.038	15.78	0.038
5	16QAM	1	0	15.60	0.036	15.69	0.037	15.66	0.037
5	16QAM	1	12	15.53	0.036	15.59	0.036	15.63	0.037
5	16QAM	1	24	15.49	0.035	15.66	0.037	15.58	0.036
5	16QAM	12	0	15.17	0.033	15.32	0.034	15.22	0.033
5	16QAM	12	7	15.29	0.034	15.17	0.033	15.25	0.033
5	16QAM	12	13	15.17	0.033	15.24	0.033	15.05	0.032
5	16QAM	25	0	15.06	0.032	15.19	0.033	15.17	0.033



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	19.26	0.084	19.42	0.087	19.31	0.085
10	QPSK	1	25	19.12	0.082	19.25	0.084	19.28	0.085
10	QPSK	1	49	19.22	0.084	19.23	0.084	19.22	0.084
10	QPSK	25	0	18.51	0.071	18.61	0.073	18.52	0.071
10	QPSK	25	12	18.48	0.070	18.42	0.070	18.21	0.066
10	QPSK	25	25	18.53	0.071	18.59	0.072	18.52	0.071
10	QPSK	50	0	18.54	0.071	18.56	0.072	18.47	0.070
10	16QAM	1	0	18.47	0.070	18.02	0.063	18.15	0.065
10	16QAM	1	25	18.22	0.066	18.17	0.066	18.31	0.068
10	16QAM	1	49	18.31	0.068	18.36	0.069	18.25	0.067
10	16QAM	25	0	18.20	0.066	18.22	0.066	18.16	0.065
10	16QAM	25	12	18.24	0.067	18.28	0.067	18.17	0.066
10	16QAM	25	25	18.29	0.067	18.30	0.068	18.24	0.067
10	16QAM	50	0	18.19	0.066	18.27	0.067	18.32	0.068



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	19.01	0.080	19.34	0.086	19.12	0.082
5	QPSK	1	12	19.17	0.083	19.33	0.086	19.17	0.083
5	QPSK	1	24	19.13	0.082	19.32	0.086	19.18	0.083
5	QPSK	12	0	18.24	0.067	18.31	0.068	18.30	0.068
5	QPSK	12	7	18.35	0.068	18.37	0.069	18.34	0.068
5	QPSK	12	13	18.30	0.068	18.33	0.068	18.30	0.068
5	QPSK	25	0	18.26	0.067	18.38	0.069	18.34	0.068
5	16QAM	1	0	18.27	0.067	18.29	0.067	18.31	0.068
5	16QAM	1	12	18.44	0.070	18.39	0.069	18.40	0.069
5	16QAM	1	24	18.40	0.069	18.38	0.069	18.34	0.068
5	16QAM	12	0	18.14	0.065	18.11	0.065	18.14	0.065
5	16QAM	12	7	18.28	0.067	18.33	0.068	18.17	0.066
5	16QAM	12	13	18.23	0.067	18.20	0.066	18.25	0.067
5	16QAM	25	0	18.24	0.067	18.20	0.066	18.22	0.066



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	19.09	0.081	19.36	0.086	19.03	0.080
3	QPSK	1	8	19.27	0.085	19.26	0.084	19.16	0.082
3	QPSK	1	14	19.21	0.083	19.32	0.086	19.27	0.085
3	QPSK	8	0	18.32	0.068	18.30	0.068	18.30	0.068
3	QPSK	8	4	18.35	0.068	18.38	0.069	18.39	0.069
3	QPSK	8	7	18.30	0.068	18.38	0.069	18.32	0.068
3	QPSK	15	0	18.29	0.067	18.37	0.069	18.23	0.067
3	16QAM	1	0	18.30	0.068	18.66	0.073	18.25	0.067
3	16QAM	1	8	18.50	0.071	18.48	0.070	18.43	0.070
3	16QAM	1	14	18.33	0.068	18.38	0.069	18.24	0.067
3	16QAM	8	0	18.30	0.068	18.19	0.066	18.22	0.066
3	16QAM	8	4	18.35	0.068	18.32	0.068	18.43	0.070
3	16QAM	8	7	18.19	0.066	18.22	0.066	18.28	0.067
3	16QAM	15	0	18.17	0.066	18.10	0.065	18.09	0.064



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	19.12	0.082	19.29	0.085	19.09	0.081
1.4	QPSK	1	3	19.23	0.084	19.22	0.084	19.24	0.084
1.4	QPSK	1	5	19.12	0.082	19.17	0.083	19.13	0.082
1.4	QPSK	3	0	19.07	0.081	19.20	0.083	19.18	0.083
1.4	QPSK	3	1	19.28	0.085	19.28	0.085	18.95	0.079
1.4	QPSK	3	3	19.23	0.084	19.25	0.084	19.21	0.083
1.4	QPSK	6	0	18.51	0.071	18.30	0.068	18.24	0.067
1.4	16QAM	1	0	18.33	0.068	18.27	0.067	18.12	0.065
1.4	16QAM	1	3	18.14	0.065	18.57	0.072	18.24	0.067
1.4	16QAM	1	5	18.26	0.067	18.27	0.067	18.26	0.067
1.4	16QAM	3	0	18.10	0.065	18.13	0.065	18.14	0.065
1.4	16QAM	3	1	18.26	0.067	18.34	0.068	18.18	0.066
1.4	16QAM	3	3	18.09	0.064	18.23	0.067	18.23	0.067
1.4	16QAM	6	0	18.02	0.063	18.22	0.066	18.12	0.065



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	19.34	0.086	19.37	0.086	19.34	0.086
10	QPSK	1	25	19.22	0.084	19.18	0.083	19.24	0.084
10	QPSK	1	49	19.15	0.082	19.18	0.083	19.13	0.082
10	QPSK	25	0	18.45	0.070	18.51	0.071	18.43	0.070
10	QPSK	25	12	18.30	0.068	18.24	0.067	18.38	0.069
10	QPSK	25	25	18.28	0.067	18.28	0.067	18.37	0.069
10	QPSK	50	0	18.41	0.069	18.28	0.067	18.29	0.067
10	16QAM	1	0	18.14	0.065	18.33	0.068	18.47	0.070
10	16QAM	1	25	18.35	0.068	18.64	0.073	18.48	0.070
10	16QAM	1	49	18.31	0.068	18.56	0.072	18.61	0.073
10	16QAM	25	0	18.25	0.067	18.49	0.071	18.48	0.070
10	16QAM	25	12	18.31	0.068	18.46	0.070	18.44	0.070
10	16QAM	25	25	18.14	0.065	18.40	0.069	18.45	0.070
10	16QAM	50	0	18.18	0.066	18.47	0.070	18.44	0.070



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	19.28	0.085	19.24	0.084	19.20	0.083
5	QPSK	1	12	19.27	0.085	19.23	0.084	19.22	0.084
5	QPSK	1	24	19.19	0.083	19.25	0.084	19.24	0.084
5	QPSK	12	0	18.35	0.068	18.21	0.066	18.37	0.069
5	QPSK	12	7	18.47	0.070	18.24	0.067	18.32	0.068
5	QPSK	12	13	18.30	0.068	18.26	0.067	18.32	0.068
5	QPSK	25	0	18.33	0.068	18.18	0.066	18.31	0.068
5	16QAM	1	0	18.49	0.071	18.54	0.071	18.26	0.067
5	16QAM	1	12	18.66	0.073	18.22	0.066	18.59	0.072
5	16QAM	1	24	18.50	0.071	18.55	0.072	18.71	0.074
5	16QAM	12	0	18.26	0.067	18.29	0.067	18.50	0.071
5	16QAM	12	7	18.26	0.067	18.33	0.068	18.45	0.070
5	16QAM	12	13	18.17	0.066	18.42	0.070	18.45	0.070
5	16QAM	25	0	17.95	0.062	18.07	0.064	18.11	0.065



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	22.55	0.180	22.62	0.183	22.59	0.182
20	QPSK	1	49	22.54	0.179	22.56	0.180	22.56	0.180
20	QPSK	1	99	22.46	0.176	22.52	0.179	22.49	0.177
20	QPSK	50	0	21.66	0.147	21.76	0.150	21.74	0.149
20	QPSK	50	24	21.59	0.144	21.66	0.147	21.62	0.145
20	QPSK	50	50	21.63	0.146	21.68	0.147	21.62	0.145
20	QPSK	100	0	21.51	0.142	21.62	0.145	21.65	0.146
20	16QAM	1	0	21.63	0.146	21.63	0.146	21.56	0.143
20	16QAM	1	49	21.62	0.145	21.22	0.132	21.62	0.145
20	16QAM	1	99	21.56	0.143	21.55	0.143	21.66	0.147
20	16QAM	50	0	20.91	0.123	21.05	0.127	20.91	0.123
20	16QAM	50	24	20.77	0.119	20.74	0.119	20.80	0.120
20	16QAM	50	50	20.76	0.119	20.70	0.117	20.74	0.119
20	16QAM	100	0	20.77	0.119	20.80	0.120	20.61	0.115



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	22.50	0.178	22.60	0.182	22.54	0.179
15	QPSK	1	37	22.52	0.179	22.51	0.178	22.54	0.179
15	QPSK	1	74	22.41	0.174	22.48	0.177	22.46	0.176
15	QPSK	36	0	21.63	0.146	21.74	0.149	21.71	0.148
15	QPSK	36	20	21.56	0.143	21.61	0.145	21.57	0.144
15	QPSK	36	39	21.58	0.144	21.63	0.146	21.58	0.144
15	QPSK	75	0	21.46	0.140	21.58	0.144	21.60	0.145
15	16QAM	1	0	21.58	0.144	21.57	0.144	21.51	0.142
15	16QAM	1	37	21.56	0.143	21.19	0.132	21.59	0.144
15	16QAM	1	74	21.52	0.142	21.50	0.141	21.62	0.145
15	16QAM	36	0	20.85	0.122	21.01	0.126	20.86	0.122
15	16QAM	36	20	20.75	0.119	20.71	0.118	20.77	0.119
15	16QAM	36	39	20.71	0.118	20.66	0.116	20.68	0.117
15	16QAM	75	0	20.75	0.119	20.77	0.119	20.56	0.114



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	22.45	0.176	22.55	0.180	22.51	0.178
10	QPSK	1	25	22.47	0.177	22.46	0.176	22.49	0.177
10	QPSK	1	49	22.39	0.173	22.43	0.175	22.42	0.175
10	QPSK	25	0	21.57	0.144	21.71	0.148	21.67	0.147
10	QPSK	25	12	21.53	0.142	21.59	0.144	21.55	0.143
10	QPSK	25	25	21.52	0.142	21.57	0.144	21.54	0.143
10	QPSK	50	0	21.41	0.138	21.56	0.143	21.57	0.144
10	16QAM	1	0	21.54	0.143	21.55	0.143	21.48	0.141
10	16QAM	1	25	21.50	0.141	21.13	0.130	21.54	0.143
10	16QAM	1	49	21.48	0.141	21.46	0.140	21.57	0.144
10	16QAM	25	0	20.82	0.121	20.98	0.125	20.80	0.120
10	16QAM	25	12	20.69	0.117	20.67	0.117	20.74	0.119
10	16QAM	25	25	20.69	0.117	20.64	0.116	20.64	0.116
10	16QAM	50	0	20.69	0.117	20.74	0.119	20.51	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	22.43	0.175	22.51	0.178	22.46	0.176
5	QPSK	1	12	22.44	0.175	22.42	0.175	22.44	0.175
5	QPSK	1	24	22.34	0.171	22.37	0.173	22.39	0.173
5	QPSK	12	0	21.53	0.142	21.66	0.147	21.61	0.145
5	QPSK	12	7	21.49	0.141	21.54	0.143	21.51	0.142
5	QPSK	12	13	21.48	0.141	21.53	0.142	21.52	0.142
5	QPSK	25	0	21.37	0.137	21.52	0.142	21.53	0.142
5	16QAM	1	0	21.51	0.142	21.52	0.142	21.46	0.140
5	16QAM	1	12	21.44	0.139	21.10	0.129	21.49	0.141
5	16QAM	1	24	21.43	0.139	21.43	0.139	21.52	0.142
5	16QAM	12	0	20.79	0.120	20.94	0.124	20.77	0.119
5	16QAM	12	7	20.67	0.117	20.63	0.116	20.68	0.117
5	16QAM	12	13	20.67	0.117	20.59	0.115	20.62	0.115
5	16QAM	25	0	20.65	0.116	20.68	0.117	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				131987		132322		132657	
Frequency (MHz)				1711.5		1745		1778.5	
				dBm	W	dBm	W	dBm	W
3	QPSK	1	0	22.41	0.174	22.49	0.177	22.43	0.175
3	QPSK	1	8	22.38	0.173	22.39	0.173	22.42	0.175
3	QPSK	1	14	22.29	0.169	22.31	0.170	22.36	0.172
3	QPSK	8	0	21.49	0.141	21.63	0.146	21.56	0.143
3	QPSK	8	4	21.44	0.139	21.51	0.142	21.46	0.140
3	QPSK	8	7	21.42	0.139	21.49	0.141	21.50	0.141
3	QPSK	15	0	21.33	0.136	21.49	0.141	21.50	0.141
3	16QAM	1	0	21.47	0.140	21.47	0.140	21.40	0.138
3	16QAM	1	8	21.40	0.138	21.07	0.128	21.46	0.140
3	16QAM	1	14	21.38	0.137	21.40	0.138	21.48	0.141
3	16QAM	8	0	20.76	0.119	20.91	0.123	20.71	0.118
3	16QAM	8	4	20.62	0.115	20.60	0.115	20.62	0.115
3	16QAM	8	7	20.63	0.116	20.57	0.114	20.58	0.114
3	16QAM	15	0	20.60	0.115	20.62	0.115	20.44	0.111



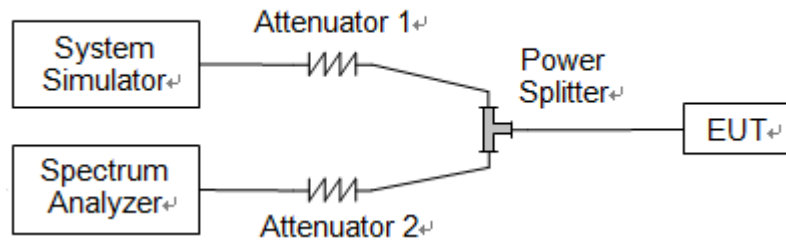
LTE Band 66				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				131979		132322		132665	
Frequency (MHz)				1710.7		1745		1779.3	
				dBm	W	dBm	W	dBm	W
1.4	QPSK	1	0	22.38	0.173	22.44	0.175	22.38	0.173
1.4	QPSK	1	3	22.35	0.172	22.37	0.173	22.39	0.173
1.4	QPSK	1	5	22.26	0.168	22.26	0.168	22.34	0.171
1.4	QPSK	3	0	21.45	0.140	21.58	0.144	21.53	0.142
1.4	QPSK	3	1	21.40	0.138	21.47	0.140	21.43	0.139
1.4	QPSK	3	3	21.39	0.138	21.45	0.140	21.44	0.139
1.4	QPSK	6	0	21.30	0.135	21.46	0.140	21.46	0.140
1.4	16QAM	1	0	21.44	0.139	21.42	0.139	21.38	0.137
1.4	16QAM	1	3	21.35	0.136	21.02	0.126	21.40	0.138
1.4	16QAM	1	5	21.35	0.136	21.35	0.136	21.45	0.140
1.4	16QAM	3	0	20.71	0.118	20.87	0.122	20.68	0.117
1.4	16QAM	3	1	20.58	0.114	20.54	0.113	20.59	0.115
1.4	16QAM	3	3	20.60	0.115	20.52	0.113	20.52	0.113
1.4	16QAM	6	0	20.57	0.114	20.56	0.114	20.38	0.109

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	1.24
	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	2.72	3.05
	Low	16QAM	2.71	3.06
	Mid	QPSK	2.72	3.04
	Mid	16QAM	2.71	3.05
	High	QPSK	2.71	3.05
	High	16QAM	2.71	3.05
5	Low	QPSK	4.50	4.99
	Low	16QAM	4.50	4.94
	Mid	QPSK	4.50	4.96
	Mid	16QAM	4.50	4.96
	High	QPSK	4.50	4.98
	High	16QAM	4.50	4.99
10	Low	QPSK	9.02	9.86
	Low	16QAM	8.97	9.82
	Mid	QPSK	9.02	9.9
	Mid	16QAM	8.96	9.82
	High	QPSK	9.02	9.86
	High	16QAM	8.97	9.87
15	Low	QPSK	13.46	14.93
	Low	16QAM	13.49	15.10
	Mid	QPSK	13.48	14.99
	Mid	16QAM	13.49	14.75
	High	QPSK	13.52	14.95
	High	16QAM	13.51	15.02
20	Low	QPSK	17.99	19.68
	Low	16QAM	18.02	19.67
	Mid	QPSK	17.99	19.69
	Mid	16QAM	18.00	19.71
	High	QPSK	18.04	19.92
	High	16QAM	18.04	19.97



LTE Band 4				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
1.4	Low	QPSK	1.10	1.25
	Low	16QAM	1.10	1.25
	Mid	QPSK	1.09	1.24
	Mid	16QAM	1.10	1.26
	High	QPSK	1.09	1.24
	High	16QAM	1.10	1.26
3	Low	QPSK	2.71	3.03
	Low	16QAM	2.71	3.06
	Mid	QPSK	2.71	3.05
	Mid	16QAM	2.71	3.06
	High	QPSK	2.72	3.05
	High	16QAM	2.72	3.05
5	Low	QPSK	4.50	4.95
	Low	16QAM	4.50	4.99
	Mid	QPSK	4.50	4.97
	Mid	16QAM	4.50	4.99
	High	QPSK	4.50	4.97
	High	16QAM	4.50	5.00
10	Low	QPSK	9.02	9.88
	Low	16QAM	8.98	9.84
	Mid	QPSK	9.02	9.86
	Mid	16QAM	8.97	9.76
	High	QPSK	9.00	9.94
	High	16QAM	8.98	9.82
15	Low	QPSK	13.51	14.93
	Low	16QAM	13.49	14.96
	Mid	QPSK	13.48	14.97
	Mid	16QAM	13.49	14.96
	High	QPSK	13.49	14.84
	High	16QAM	13.47	14.95
20	Low	QPSK	18.02	19.8
	Low	16QAM	18.02	19.77
	Mid	QPSK	17.96	19.70
	Mid	16QAM	17.99	19.63
	High	QPSK	17.95	19.73
	High	16QAM	17.99	19.82



LTE Band 5				
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	1.24
	Mid	16QAM	1.10	1.25
	High	QPSK	1.10	1.24
	High	16QAM	1.10	1.25
3	Low	QPSK	2.71	3.05
	Low	16QAM	2.71	3.06
	Mid	QPSK	2.72	3.05
	Mid	16QAM	2.71	3.06
	High	QPSK	2.71	3.04
	High	16QAM	2.71	3.05
5	Low	QPSK	4.50	4.98
	Low	16QAM	4.49	4.97
	Mid	QPSK	4.50	4.98
	Mid	16QAM	4.51	4.98
	High	QPSK	4.50	4.98
	High	16QAM	4.49	4.96
10	Low	QPSK	8.98	9.85
	Low	16QAM	8.96	9.82
	Mid	QPSK	9.01	9.93
	Mid	16QAM	8.98	9.83
	High	QPSK	9.00	9.91
	High	16QAM	8.97	9.83



LTE Band 7				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
5	Low	QPSK	4.52	4.97
	Low	16QAM	4.50	4.95
	Mid	QPSK	4.50	4.98
	Mid	16QAM	4.50	4.95
	High	QPSK	4.50	4.97
	High	16QAM	4.50	4.97
10	Low	QPSK	9.01	9.84
	Low	16QAM	8.98	9.79
	Mid	QPSK	9.02	9.93
	Mid	16QAM	8.96	9.86
	High	QPSK	9.01	9.99
	High	16QAM	8.96	9.86
15	Low	QPSK	13.45	14.83
	Low	16QAM	13.49	14.81
	Mid	QPSK	13.49	14.92
	Mid	16QAM	13.49	15.01
	High	QPSK	13.52	14.97
	High	16QAM	13.50	14.98
20	Low	QPSK	17.97	19.78
	Low	16QAM	17.99	19.73
	Mid	QPSK	18.01	19.78
	Mid	16QAM	18.04	19.71
	High	QPSK	18.00	19.78
	High	16QAM	18.04	19.80



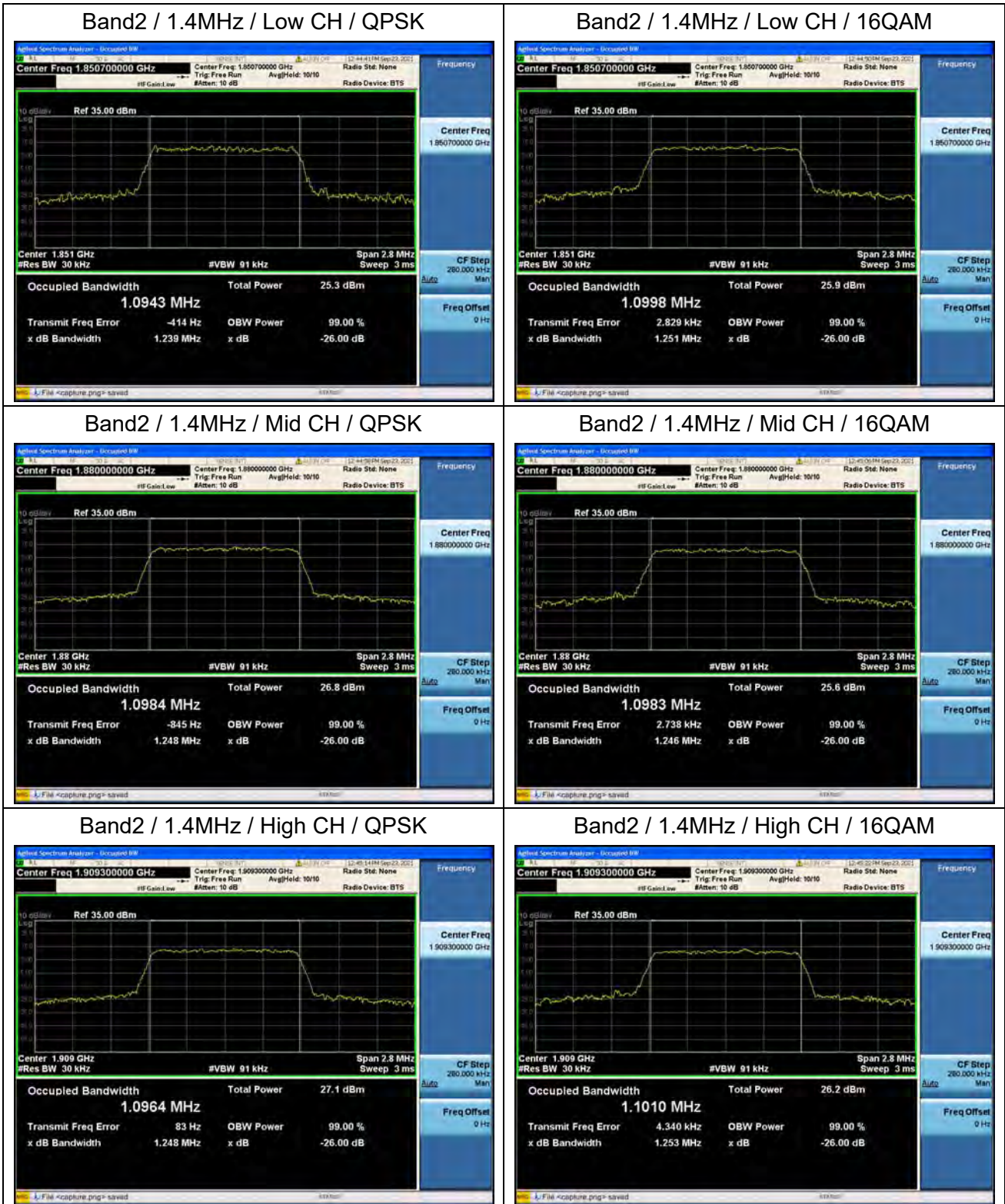
LTE Band 12				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
1.4	Low	QPSK	1.09	1.24
	Low	16QAM	1.10	1.25
	Mid	QPSK	1.10	1.24
	Mid	16QAM	1.10	1.25
	High	QPSK	1.10	1.25
	High	16QAM	1.10	1.25
3	Low	QPSK	2.71	3.05
	Low	16QAM	2.71	3.04
	Mid	QPSK	2.72	3.05
	Mid	16QAM	2.71	3.04
	High	QPSK	2.72	3.04
	High	16QAM	2.71	3.02
5	Low	QPSK	4.50	4.96
	Low	16QAM	4.50	4.99
	Mid	QPSK	4.50	4.97
	Mid	16QAM	4.50	4.97
	High	QPSK	4.50	4.98
	High	16QAM	4.50	4.97
10	Low	QPSK	9.01	9.83
	Low	16QAM	8.98	9.88
	Mid	QPSK	9.02	9.93
	Mid	16QAM	8.98	9.82
	High	QPSK	9.00	9.88
	High	16QAM	9.01	9.89



LTE Band 17				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
5	Low	QPSK	4.50	4.96
	Low	16QAM	4.50	5.00
	Mid	QPSK	4.50	4.98
	Mid	16QAM	4.50	5.00
	High	QPSK	4.50	4.99
	High	16QAM	4.50	4.97
10	Low	QPSK	9.00	9.87
	Low	16QAM	8.97	9.83
	Mid	QPSK	9.02	9.88
	Mid	16QAM	8.95	9.82
	High	QPSK	9.01	9.90
	High	16QAM	8.96	9.77



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	1.23
	Mid	QPSK	1.10	1.25
	Mid	16QAM	1.09	1.24
	High	QPSK	1.10	1.24
	High	16QAM	1.10	1.25
3	Low	QPSK	2.71	3.05
	Low	16QAM	2.72	3.05
	Mid	QPSK	2.71	3.04
	Mid	16QAM	2.72	3.01
	High	QPSK	2.72	3.05
	High	16QAM	2.72	3.05
5	Low	QPSK	4.50	4.93
	Low	16QAM	4.52	4.94
	Mid	QPSK	4.52	5.00
	Mid	16QAM	4.50	4.98
	High	QPSK	4.50	4.94
	High	16QAM	4.51	4.93
10	Low	QPSK	9.01	9.81
	Low	16QAM	8.99	9.80
	Mid	QPSK	8.98	9.77
	Mid	16QAM	9.00	9.86
	High	QPSK	8.98	9.82
	High	16QAM	8.98	9.84
15	Low	QPSK	13.49	14.68
	Low	16QAM	13.49	14.67
	Mid	QPSK	13.48	14.83
	Mid	16QAM	13.46	14.58
	High	QPSK	13.46	14.84
	High	16QAM	13.46	14.75
20	Low	QPSK	18.01	19.77
	Low	16QAM	17.99	19.66
	Mid	QPSK	17.98	19.63
	Mid	16QAM	17.97	19.68
	High	QPSK	18.05	19.86
	High	16QAM	18.03	19.89

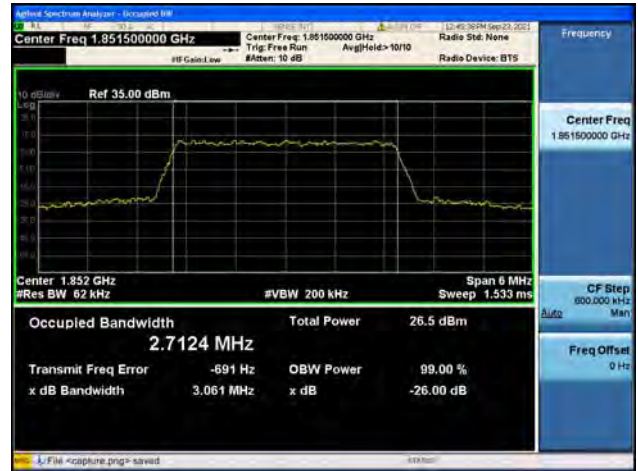




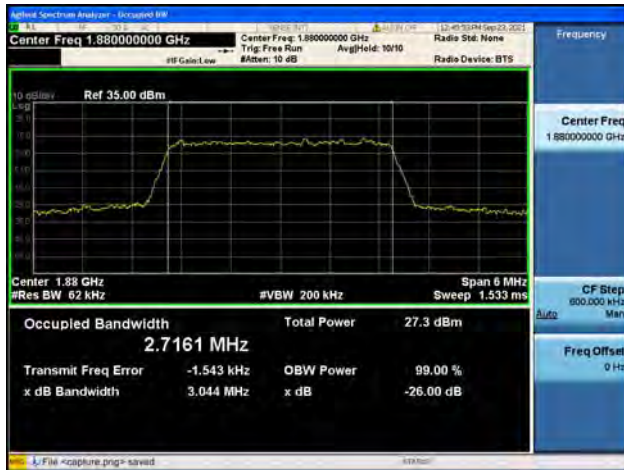
Band2 / 3MHz / Low CH / QPSK



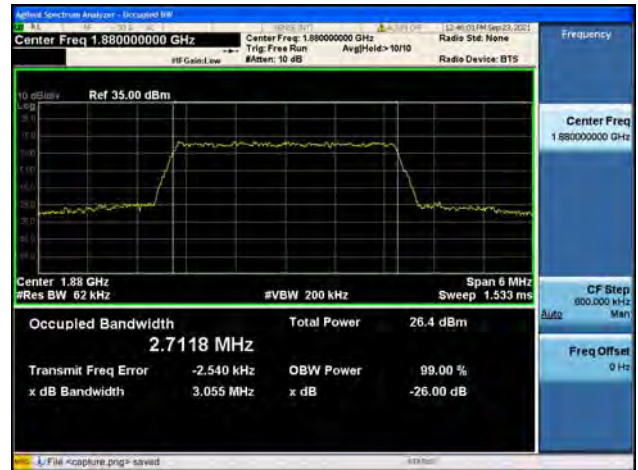
Band2 / 3MHz / Low CH / 16QAM



Band2 / 3MHz / Mid CH / QPSK



Band2 / 3MHz / Mid CH / 16QAM



Band2 / 3MHz / High CH / QPSK

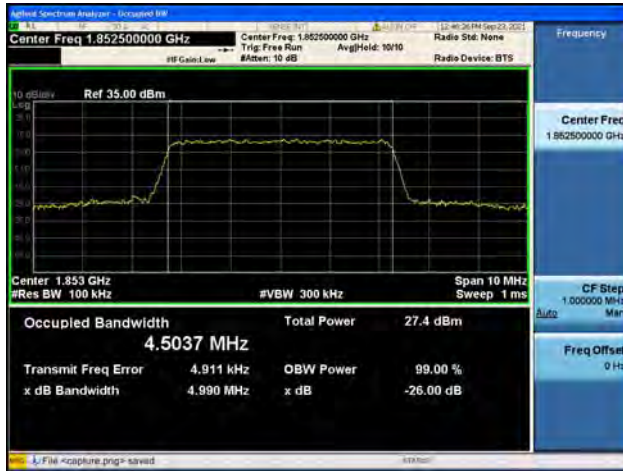


Band2 / 3MHz / High CH / 16QAM





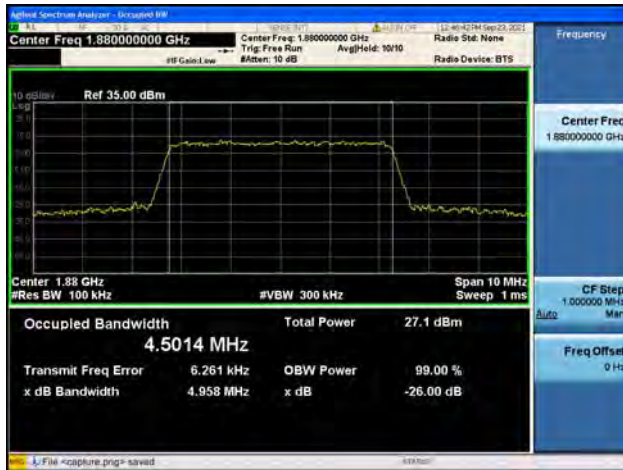
Band2 / 5MHz / Low CH / QPSK



Band2 / 5MHz / Low CH / 16QAM



Band2 / 5MHz / Mid CH / QPSK



Band2 / 5MHz / Mid CH / 16QAM



Band2 / 5MHz / High CH / QPSK

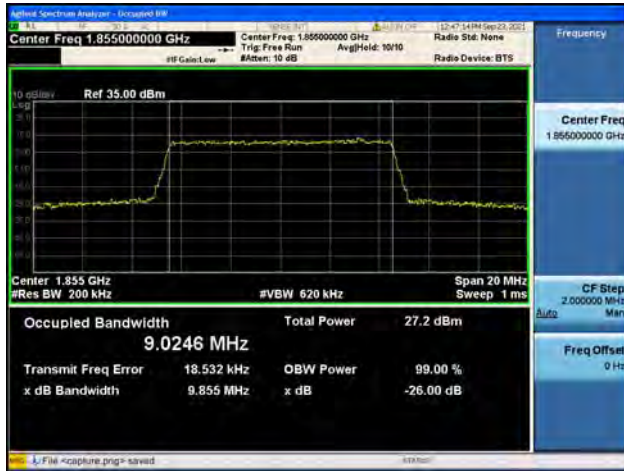


Band2 / 5MHz / High CH / 16QAM

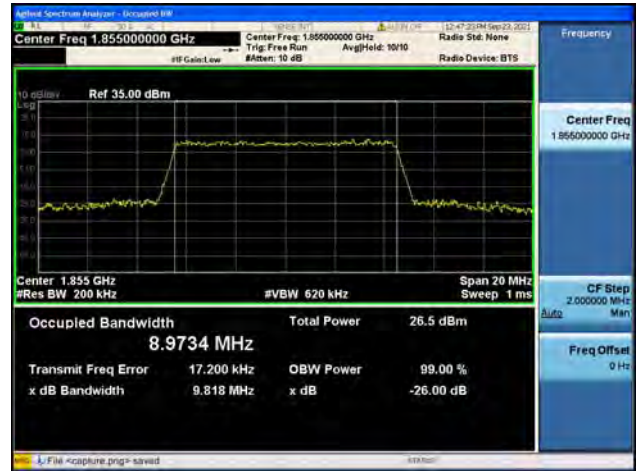




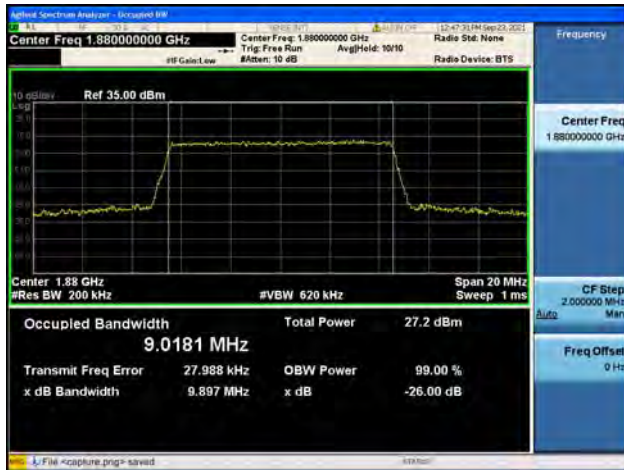
Band2 / 10MHz / Low CH / QPSK



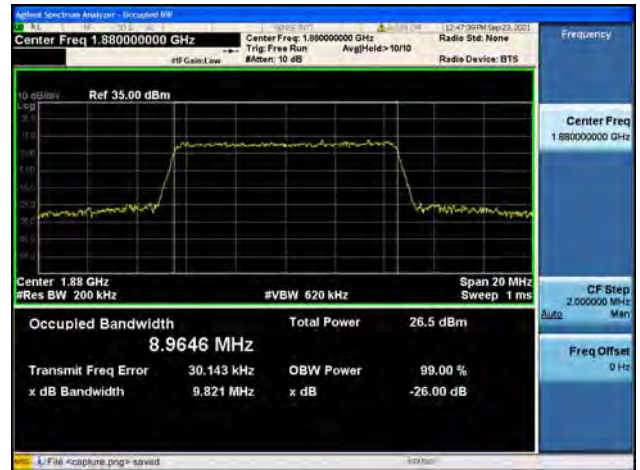
Band2 / 10MHz / Low CH / 16QAM



Band2 / 10MHz / Mid CH / QPSK



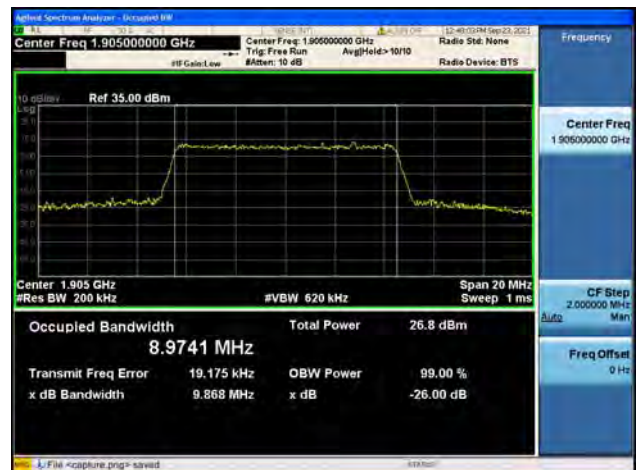
Band2 / 10MHz / Mid CH / 16QAM



Band2 / 10MHz / High CH / QPSK



Band2 / 10MHz / High CH / 16QAM





Band2 / 15MHz / Low CH / QPSK



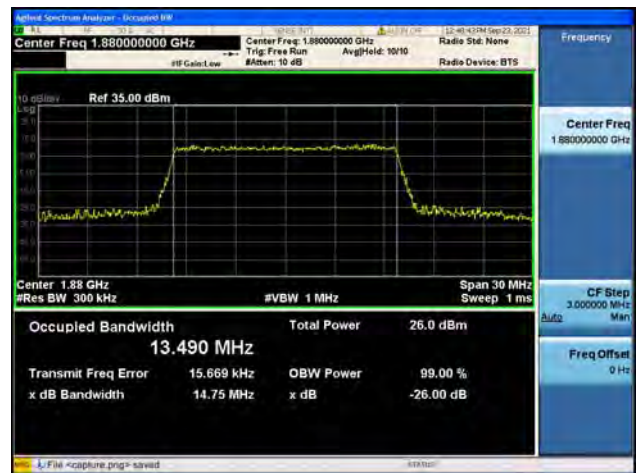
Band2 / 15MHz / Low CH / 16QAM



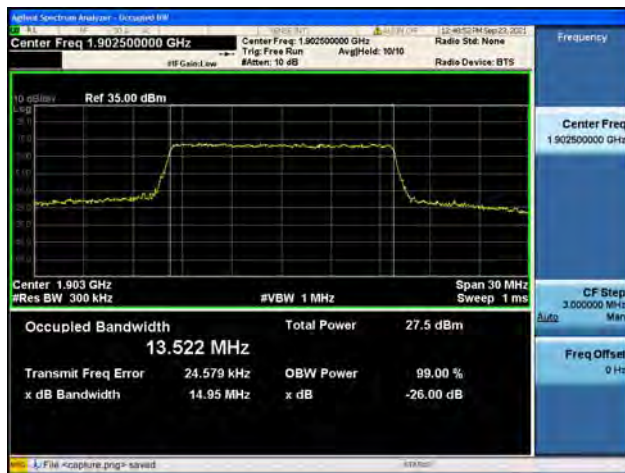
Band2 / 15MHz / Mid CH / QPSK



Band2 / 15MHz / Mid CH / 16QAM



Band2 / 15MHz / High CH / QPSK



Band2 / 15MHz / High CH / 16QAM

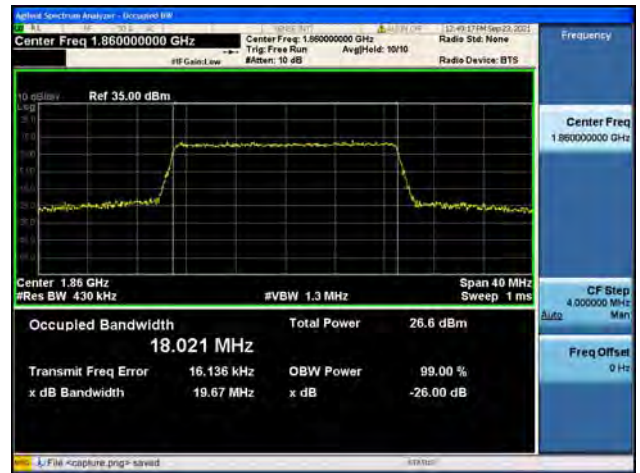




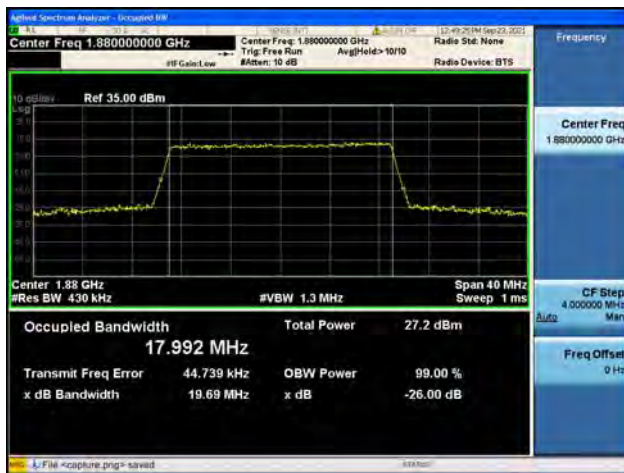
Band2 / 20MHz / Low CH / QPSK



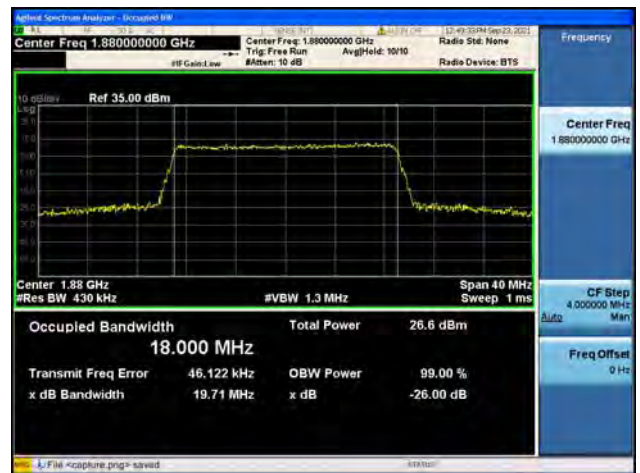
Band2 / 20MHz / Low CH / 16QAM



Band2 / 20MHz / Mid CH / QPSK



Band2 / 20MHz / Mid CH / 16QAM



Band2 / 20MHz / High CH / QPSK



Band2 / 20MHz / High CH / 16QAM





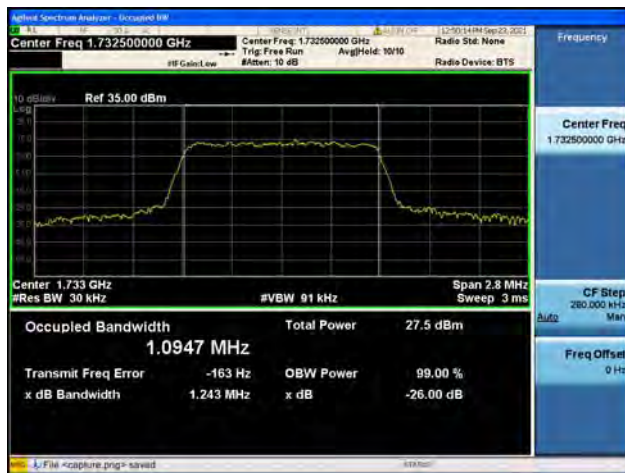
Band4 / 1.4MHz / Low CH / QPSK



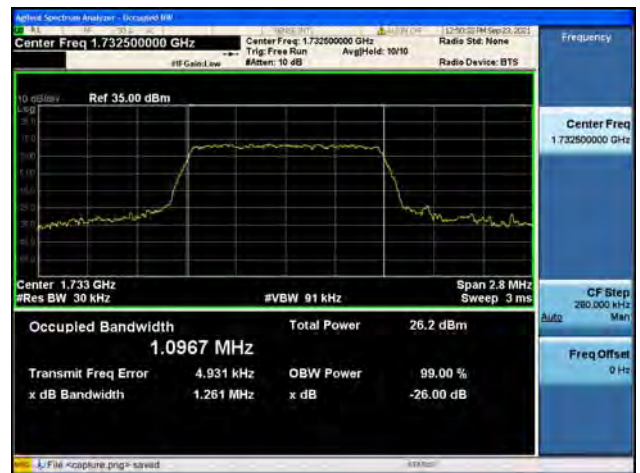
Band4 / 1.4MHz / Low CH / 16QAM



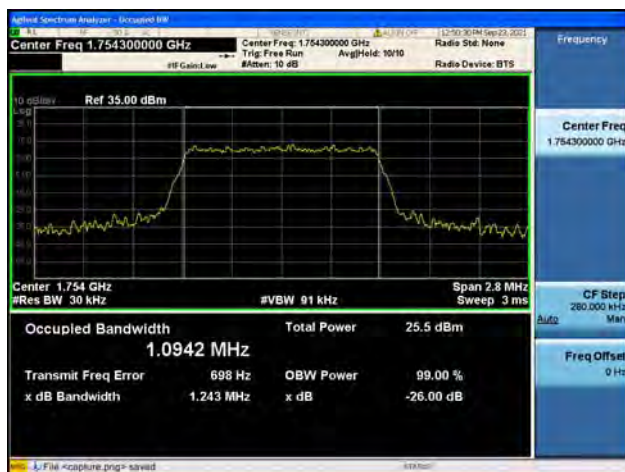
Band4 / 1.4MHz / Mid CH / QPSK



Band4 / 1.4MHz / Mid CH / 16QAM



Band4 / 1.4MHz / High CH / QPSK

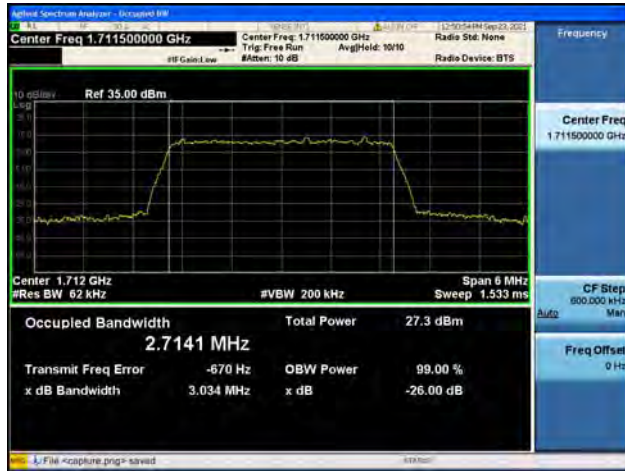


Band4 / 1.4MHz / High CH / 16QAM

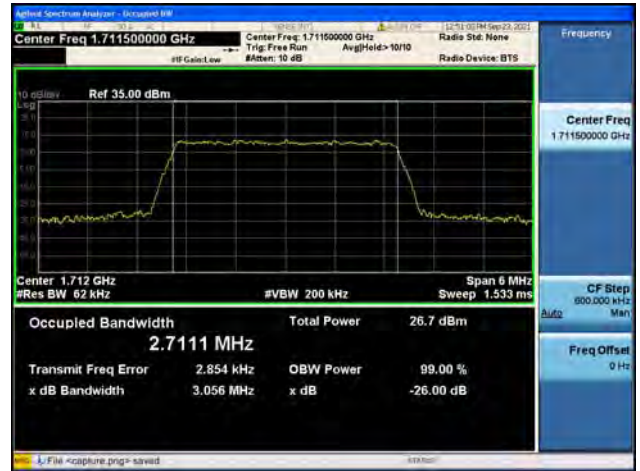




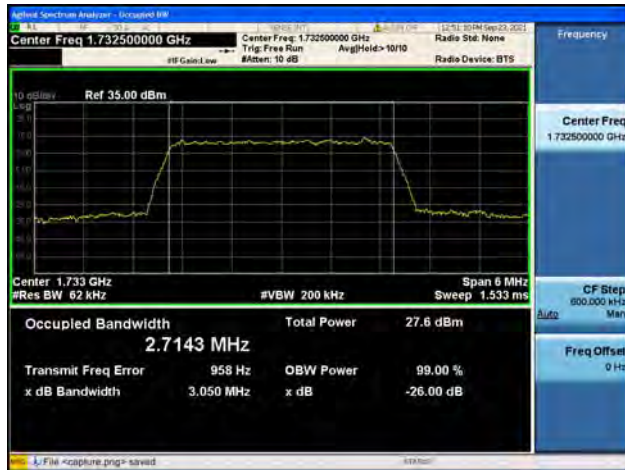
Band4 / 3MHz / Low CH / QPSK



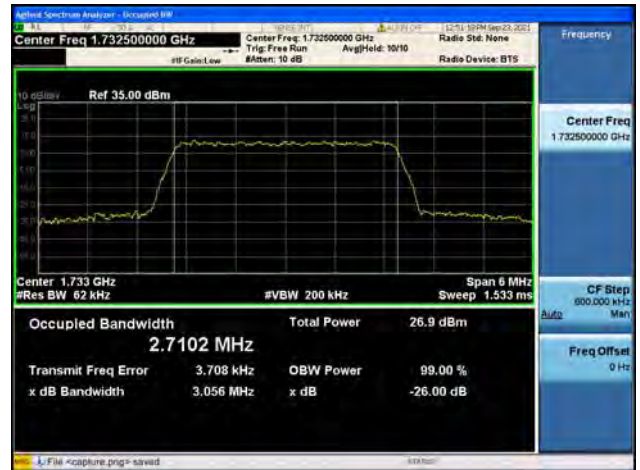
Band4 / 3MHz / Low CH / 16QAM



Band4 / 3MHz / Mid CH / QPSK



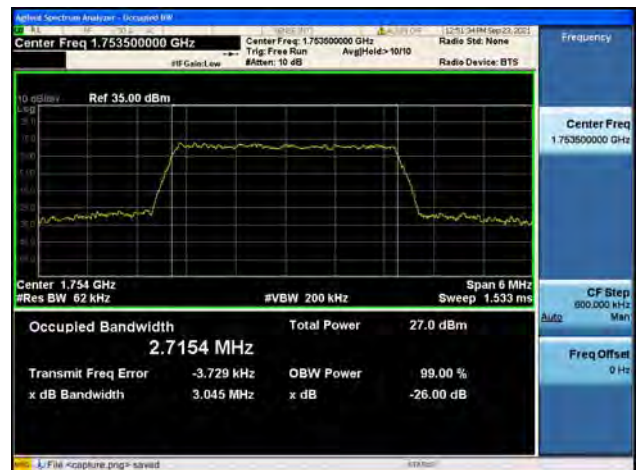
Band4 / 3MHz / Mid CH / 16QAM



Band4 / 3MHz / High CH / QPSK

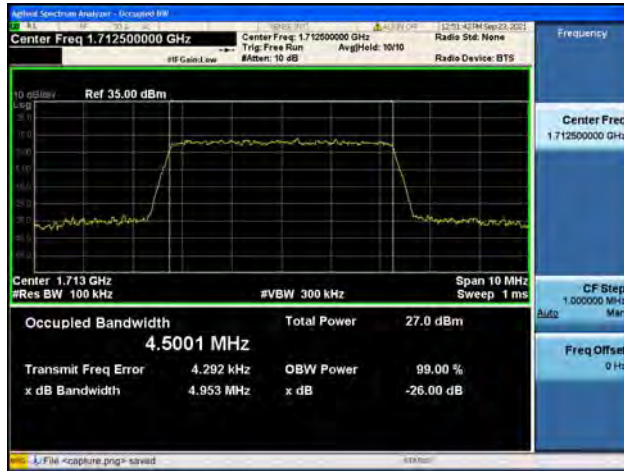


Band4 / 3MHz / High CH / 16QAM

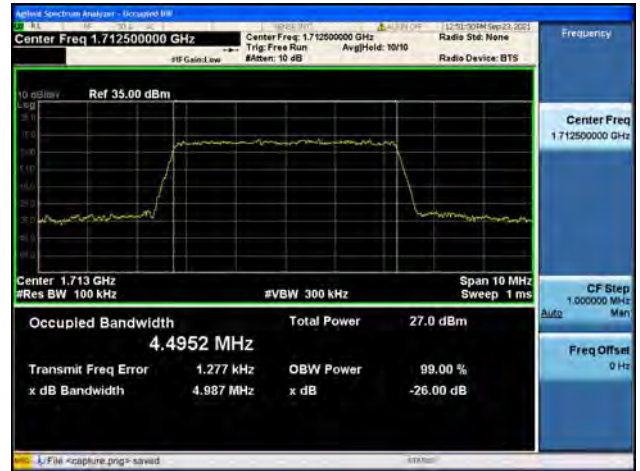




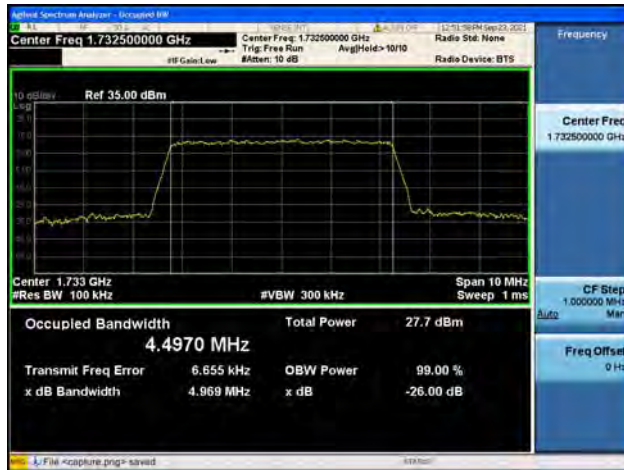
Band4 / 5MHz / Low CH / QPSK



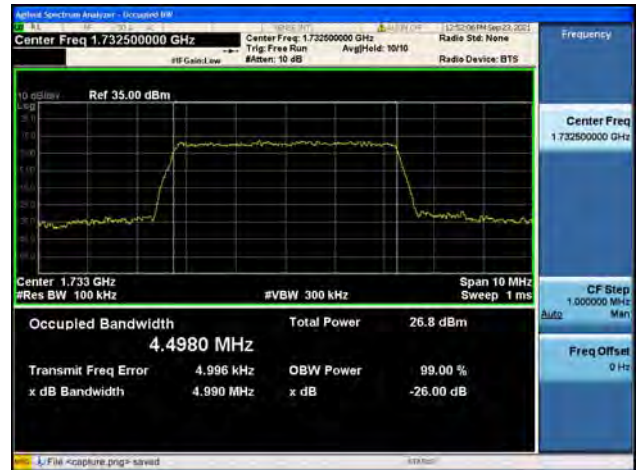
Band4 / 5MHz / Low CH / 16QAM



Band4 / 5MHz / Mid CH / QPSK



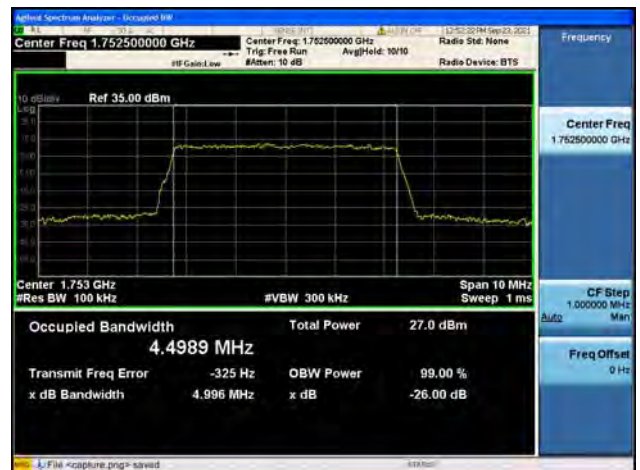
Band4 / 5MHz / Mid CH / 16QAM



Band4 / 5MHz / High CH / QPSK

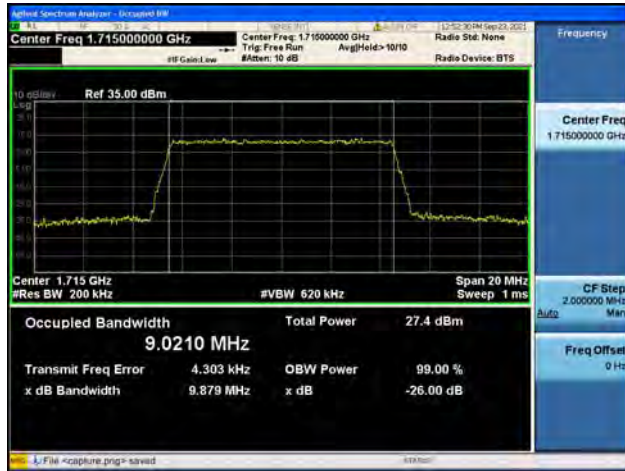


Band4 / 5MHz / High CH / 16QAM

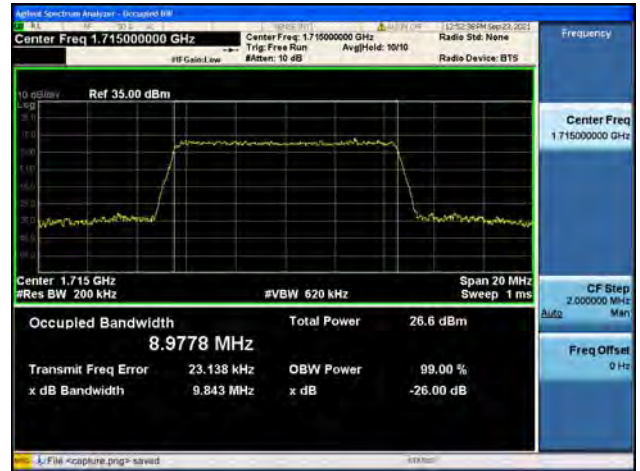




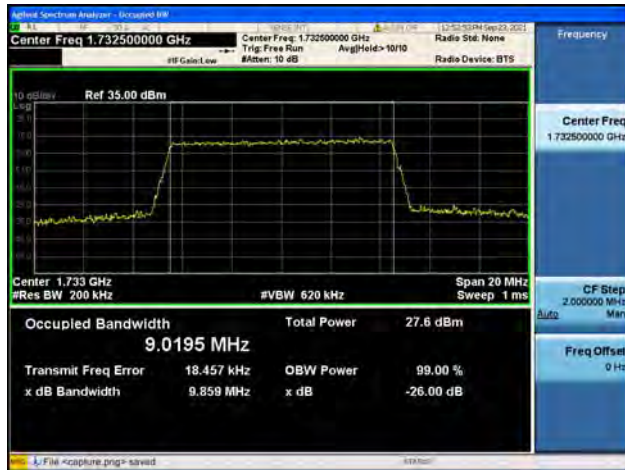
Band4 / 10MHz / Low CH / QPSK



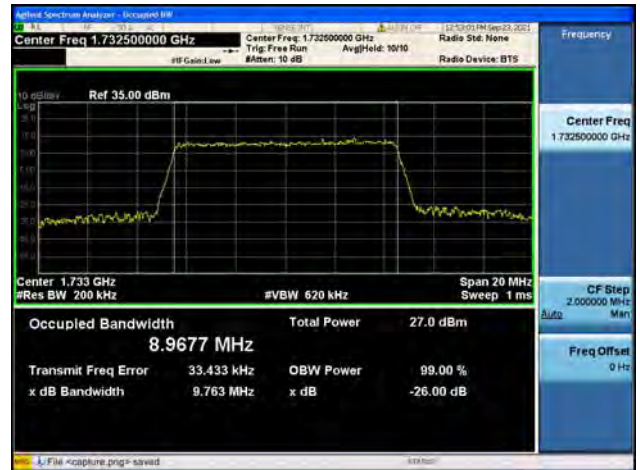
Band4 / 10MHz / Low CH / 16QAM



Band4 / 10MHz / Mid CH / QPSK



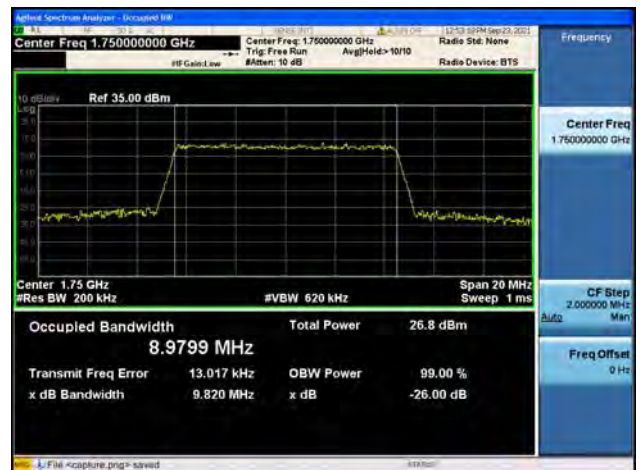
Band4 / 10MHz / Mid CH / 16QAM



Band4 / 10MHz / High CH / QPSK

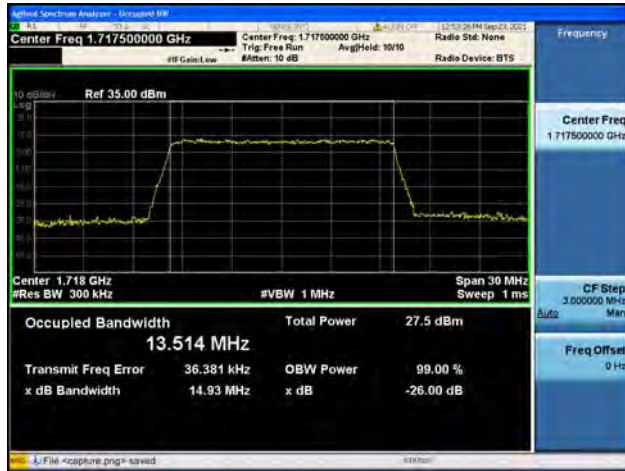


Band4 / 10MHz / High CH / 16QAM

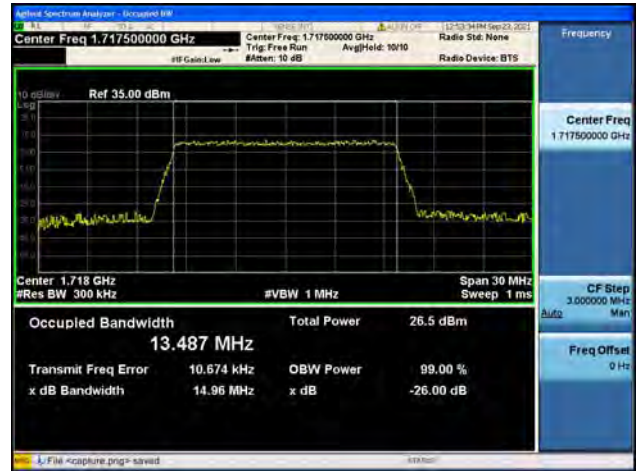




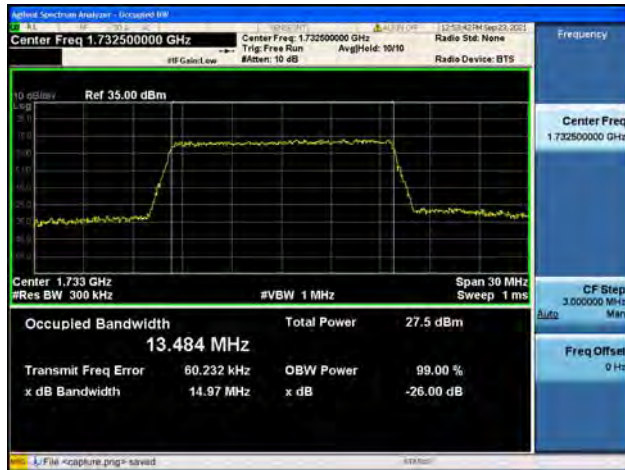
Band4 / 15MHz / Low CH / QPSK



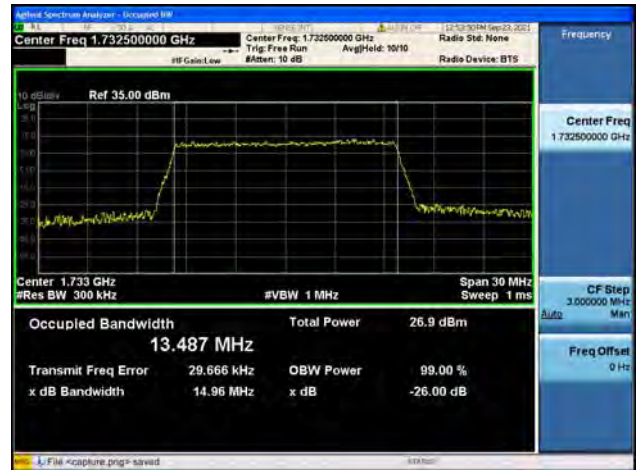
Band4 / 15MHz / Low CH / 16QAM



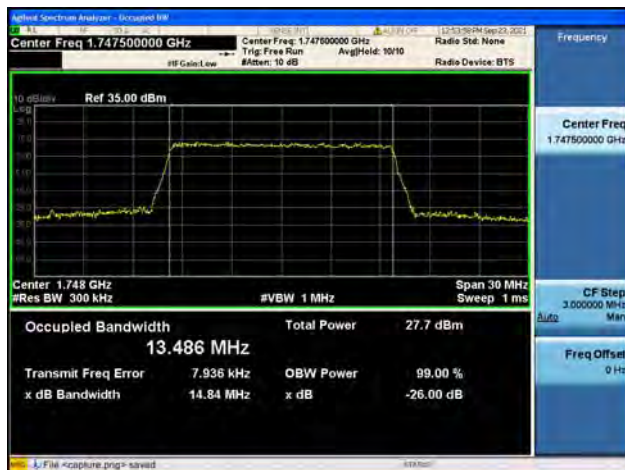
Band4 / 15MHz / Mid CH / QPSK



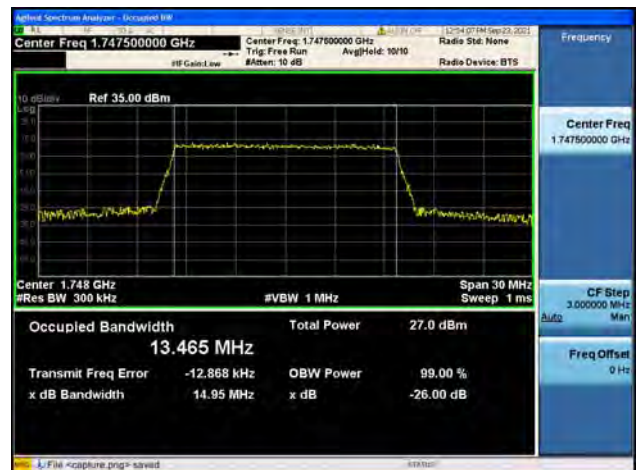
Band4 / 15MHz / Mid CH / 16QAM



Band4 / 15MHz / High CH / QPSK

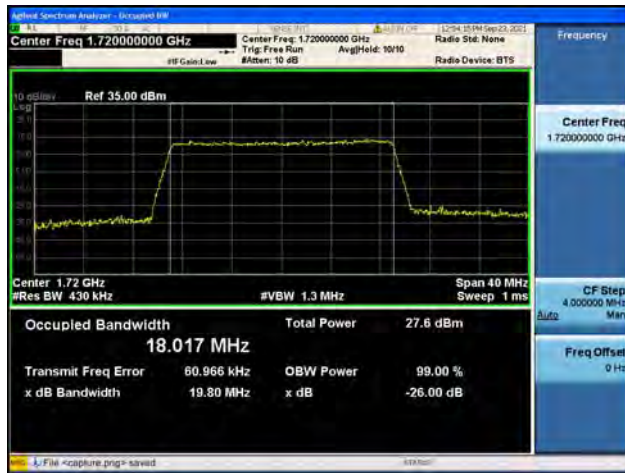


Band4 / 15MHz / High CH / 16QAM





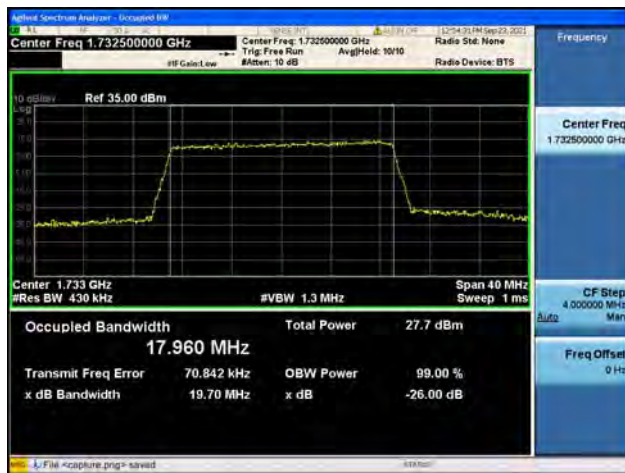
Band4 / 20MHz / Low CH / QPSK



Band4 / 20MHz / Low CH / 16QAM



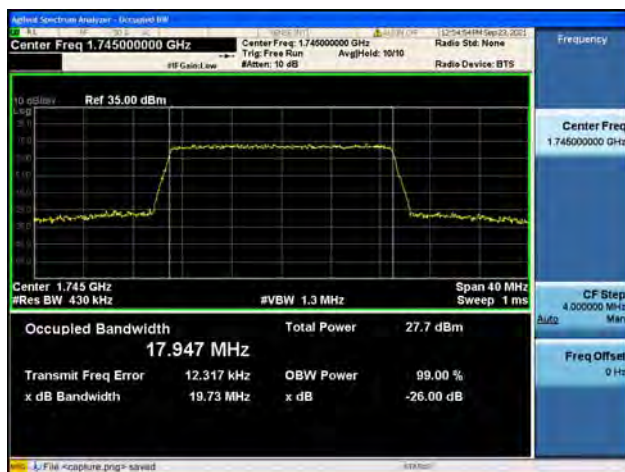
Band4 / 20MHz / Mid CH / QPSK



Band4 / 20MHz / Mid CH / 16QAM



Band4 / 20MHz / High CH / QPSK

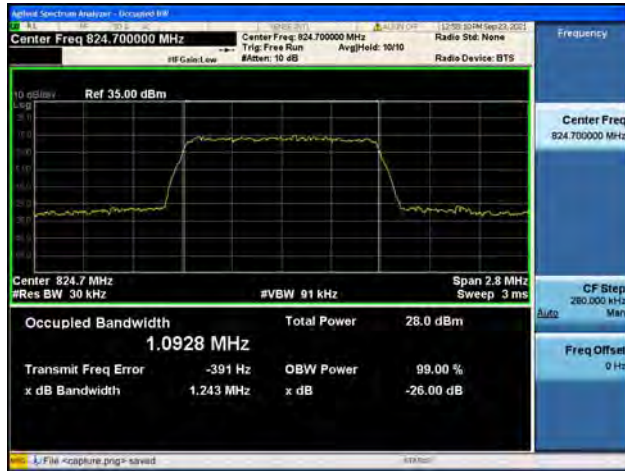


Band4 / 20MHz / High CH / 16QAM





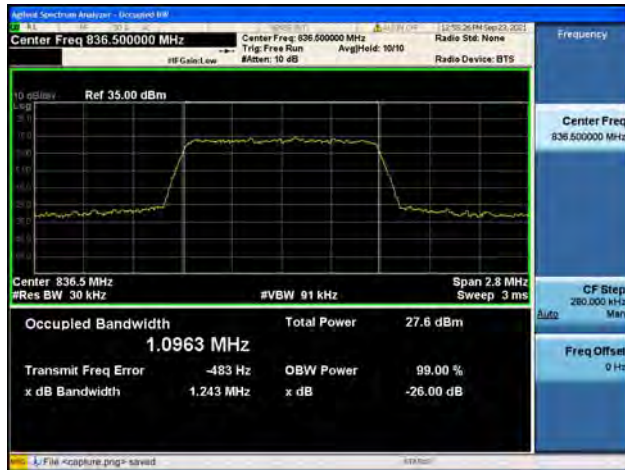
Band5 / 1.4MHz / Low CH / QPSK



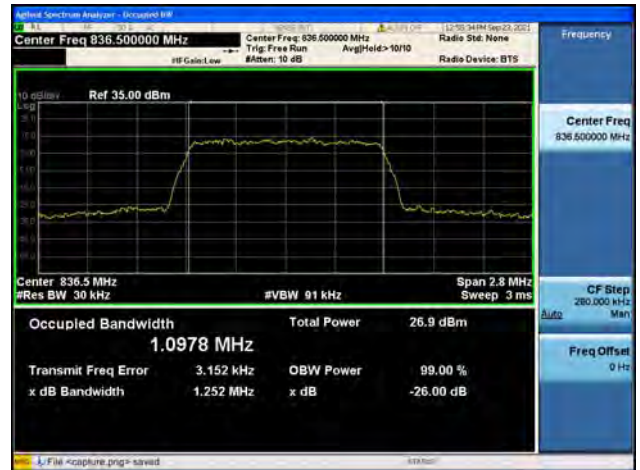
Band5 / 1.4MHz / Low CH / 16QAM



Band5 / 1.4MHz / Mid CH / QPSK



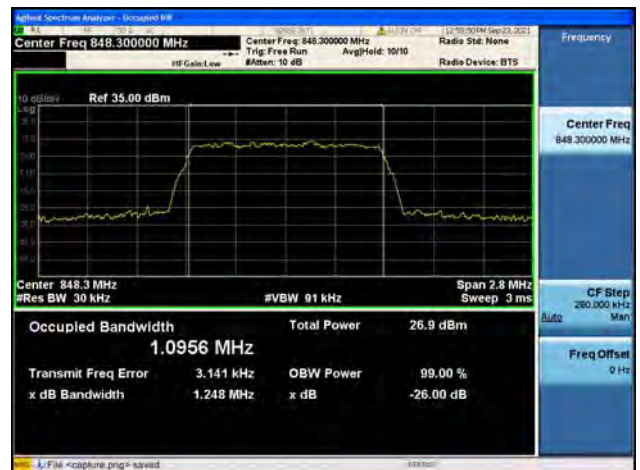
Band5 / 1.4MHz / Mid CH / 16QAM



Band5 / 1.4MHz / High CH / QPSK

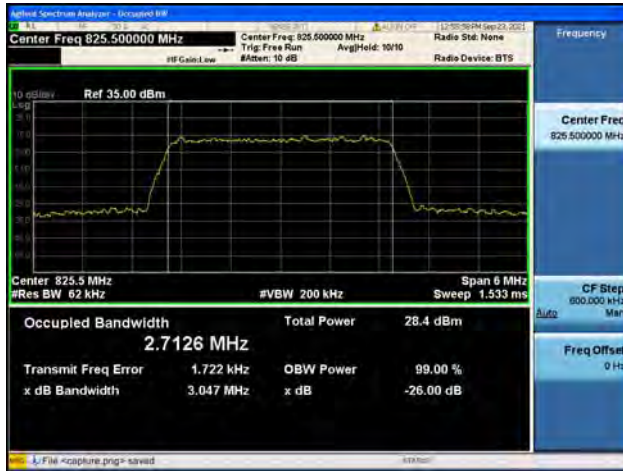


Band5 / 1.4MHz / High CH / 16QAM





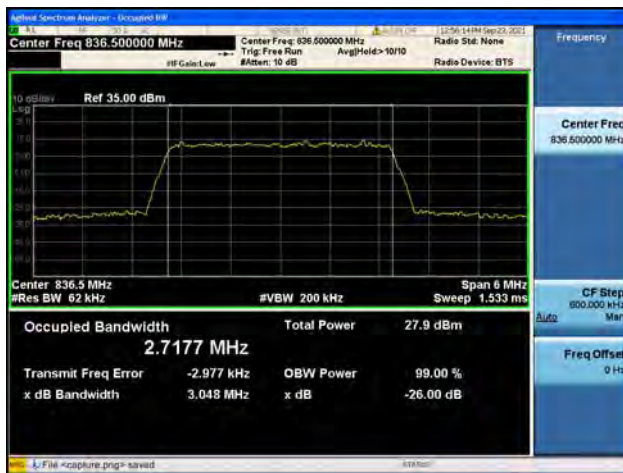
Band5 / 3MHz / Low CH / QPSK



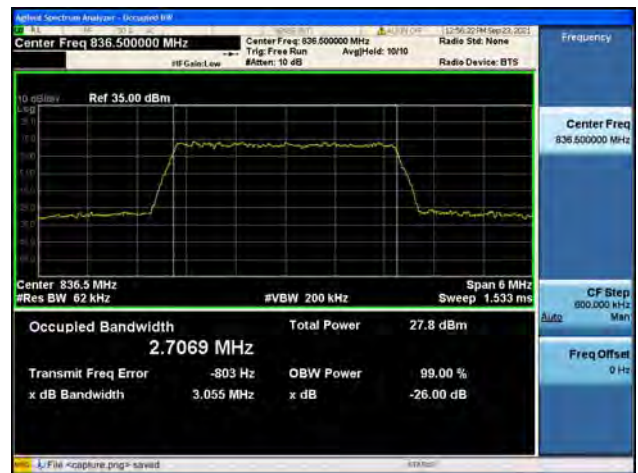
Band5 / 3MHz / Low CH / 16QAM



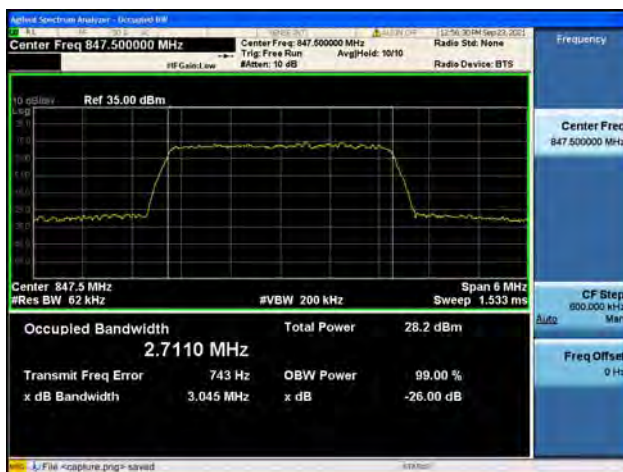
Band5 / 3MHz / Mid CH / QPSK



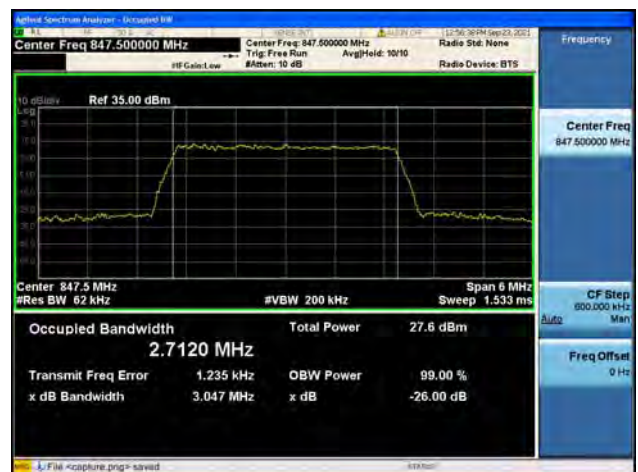
Band5 / 3MHz / Mid CH / 16QAM



Band5 / 3MHz / High CH / QPSK

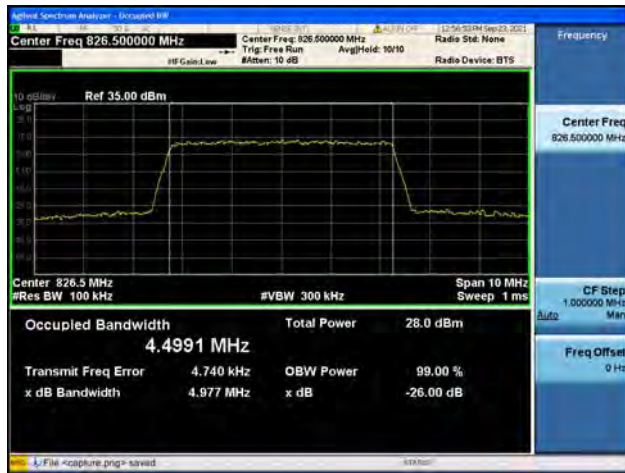


Band5 / 3MHz / High CH / 16QAM

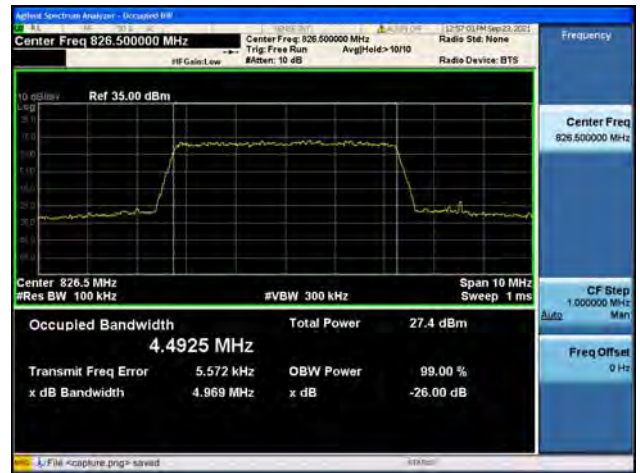




Band5 / 5MHz / Low CH / QPSK



Band5 / 5MHz / Low CH / 16QAM



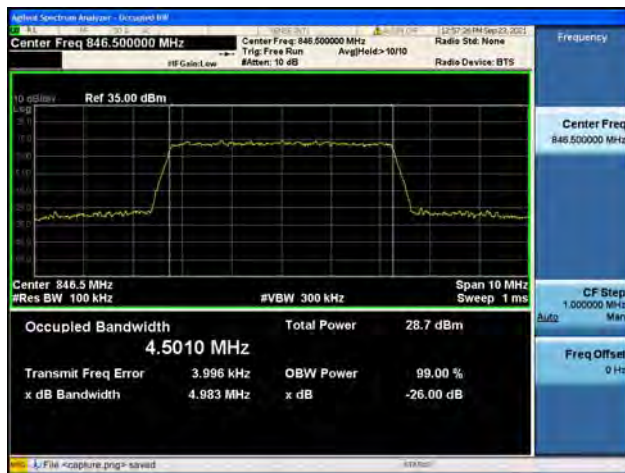
Band5 / 5MHz / Mid CH / QPSK



Band5 / 5MHz / Mid CH / 16QAM



Band5 / 5MHz / High CH / QPSK



Band5 / 5MHz / High CH / 16QAM





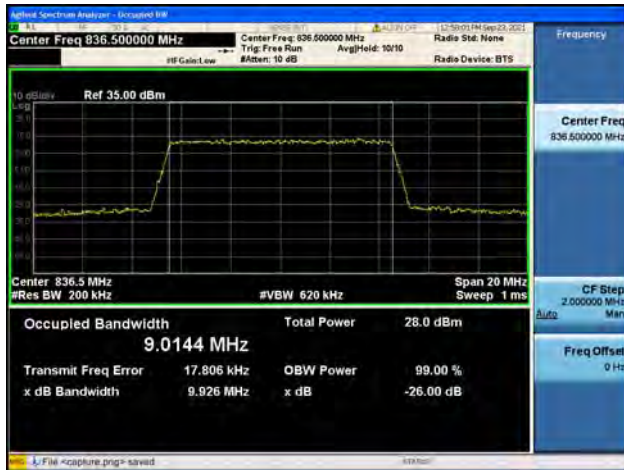
Band5 / 10MHz / Low CH / QPSK



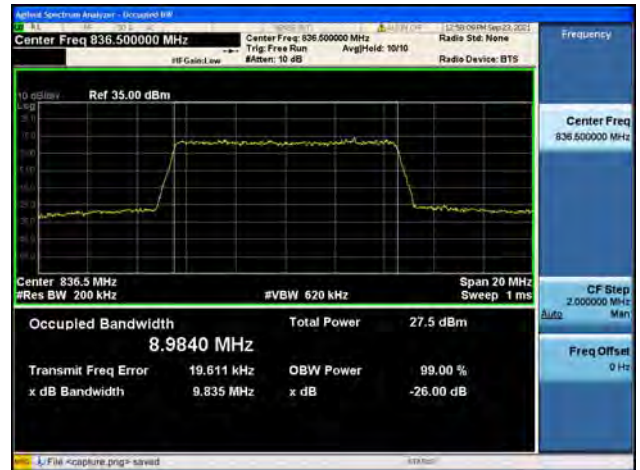
Band5 / 10MHz / Low CH / 16QAM



Band5 / 10MHz / Mid CH / QPSK



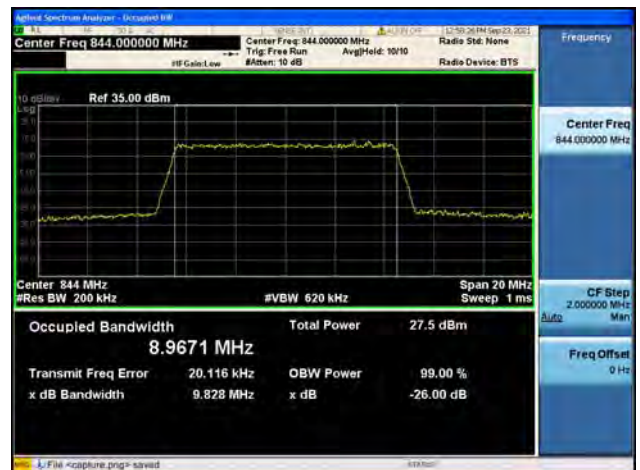
Band5 / 10MHz / Mid CH / 16QAM



Band5 / 10MHz / High CH / QPSK



Band5 / 10MHz / High CH / 16QAM





Band7 / 5MHz / Low CH / QPSK



Band7 / 5MHz / Low CH / 16QAM



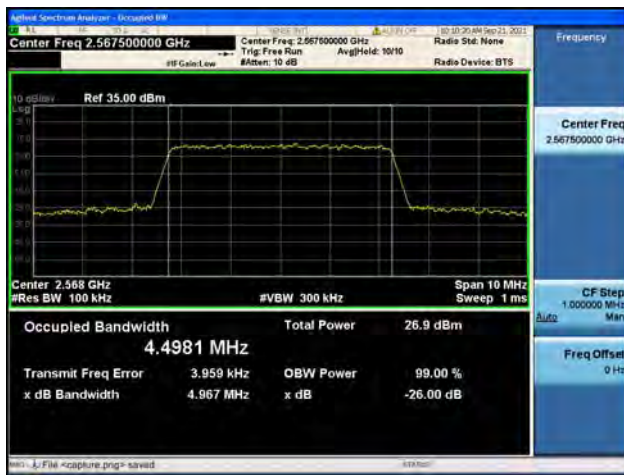
Band7 / 5MHz / Mid CH / QPSK



Band7 / 5MHz / Mid CH / 16QAM



Band7 / 5MHz / High CH / QPSK



Band7 / 5MHz / High CH / 16QAM

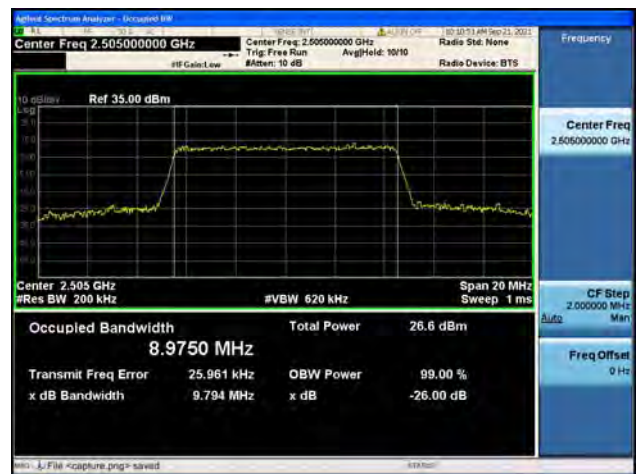




Band7 / 10MHz / Low CH / QPSK



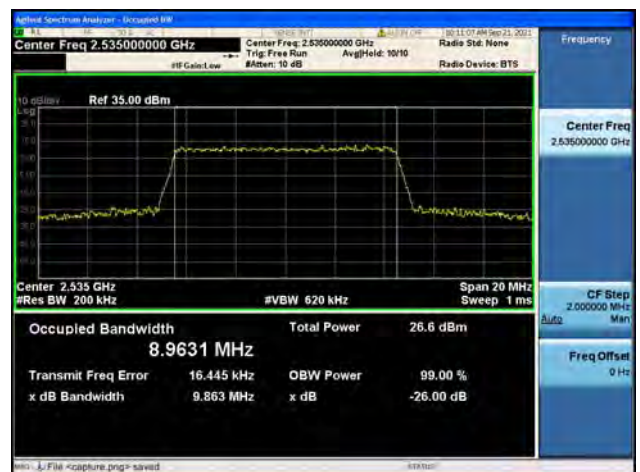
Band7 / 10MHz / Low CH / 16QAM



Band7 / 10MHz / Mid CH / QPSK



Band7 / 10MHz / Mid CH / 16QAM



Band7 / 10MHz / High CH / QPSK

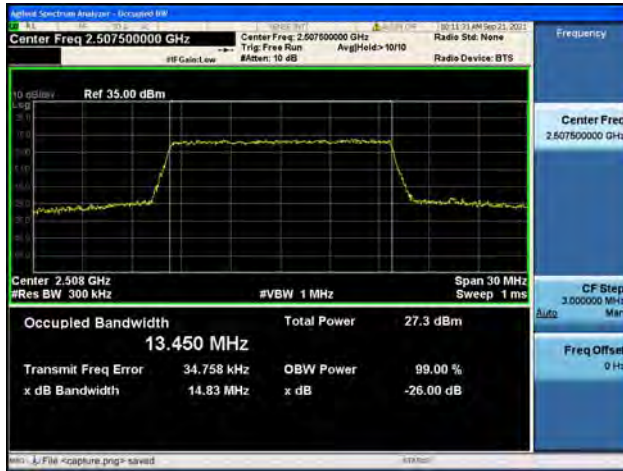


Band7 / 10MHz / High CH / 16QAM





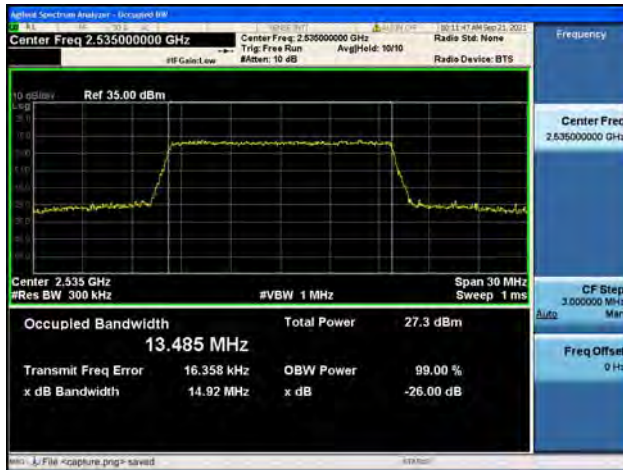
Band7 / 15MHz / Low CH / QPSK



Band7 / 15MHz / Low CH / 16QAM



Band7 / 15MHz / Mid CH / QPSK



Band7 / 15MHz / Mid CH / 16QAM



Band7 / 15MHz / High CH / QPSK

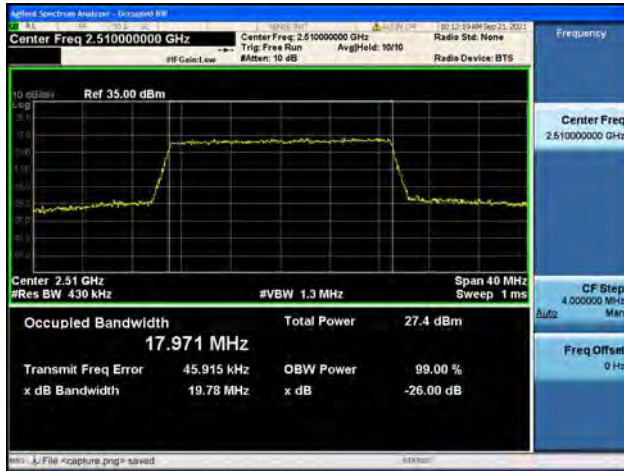


Band7 / 15MHz / High CH / 16QAM





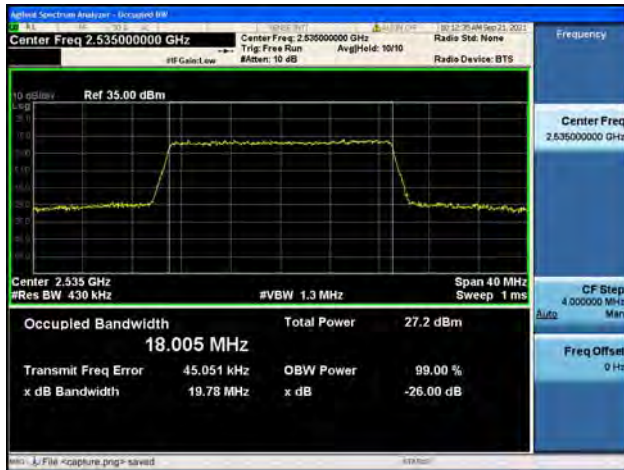
Band7 / 20MHz / Low CH / QPSK



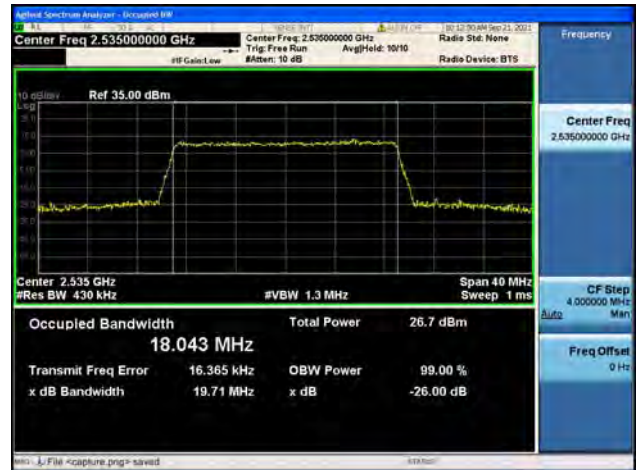
Band7 / 20MHz / Low CH / 16QAM



Band7 / 20MHz / Mid CH / QPSK



Band7 / 20MHz / Mid CH / 16QAM



Band7 / 20MHz / High CH / QPSK

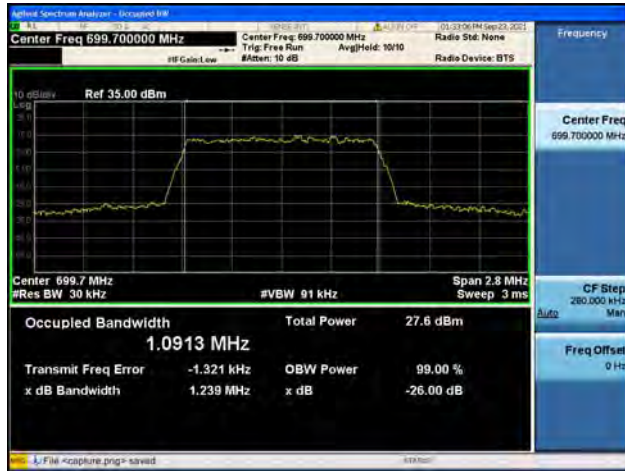


Band7 / 20MHz / High CH / 16QAM

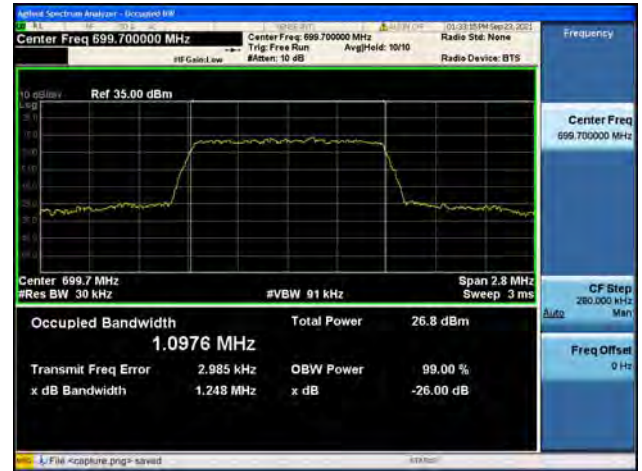




Band12 / 1.4MHz / Low CH / QPSK



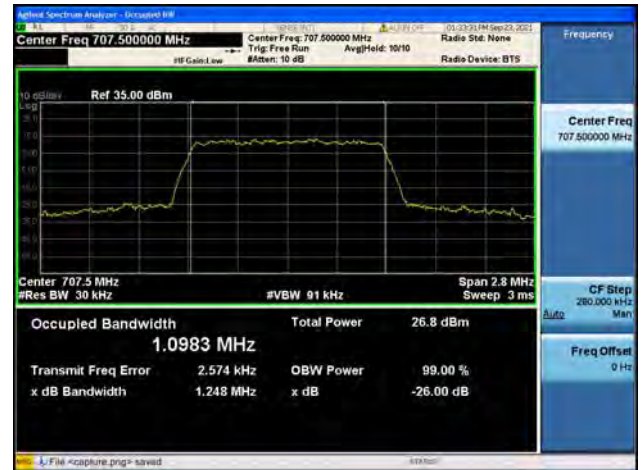
Band12 / 1.4MHz / Low CH / 16QAM



Band12 / 1.4MHz / Mid CH / QPSK



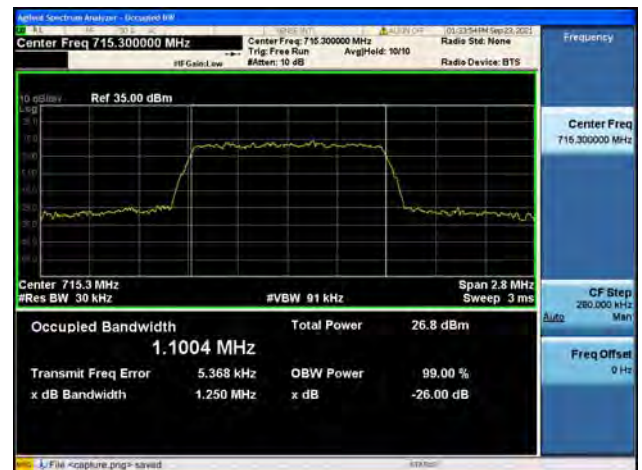
Band12 / 1.4MHz / Mid CH / 16QAM



Band12 / 1.4MHz / High CH / QPSK

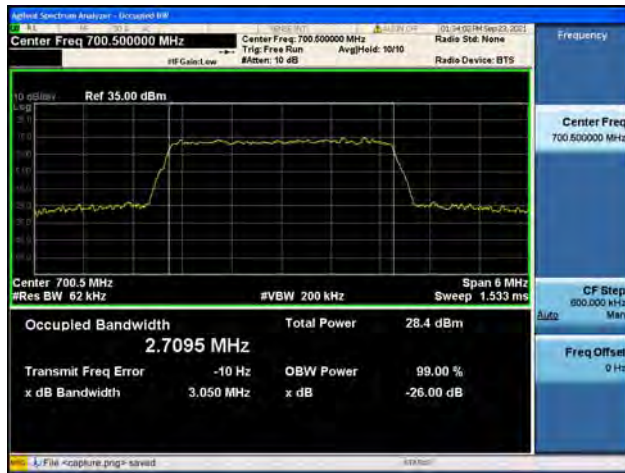


Band12 / 1.4MHz / High CH / 16QAM





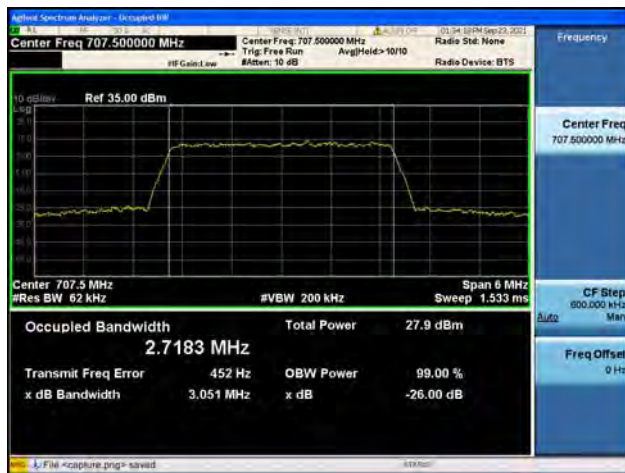
Band12 / 3MHz / Low CH / QPSK



Band12 / 3MHz / Low CH / 16QAM



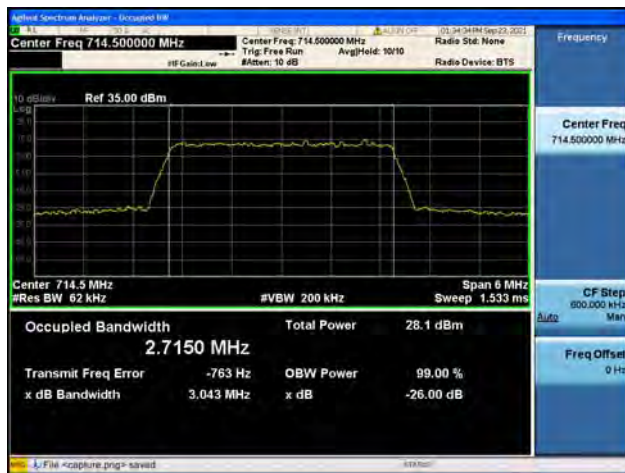
Band12 / 3MHz / Mid CH / QPSK



Band12 / 3MHz / Mid CH / 16QAM



Band12 / 3MHz / High CH / QPSK



Band12 / 3MHz / High CH / 16QAM

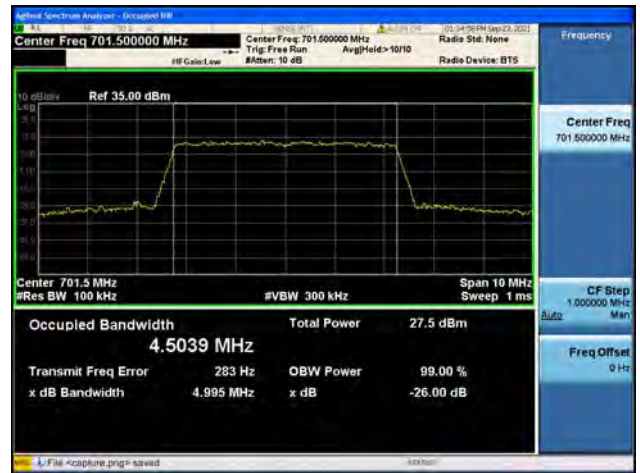




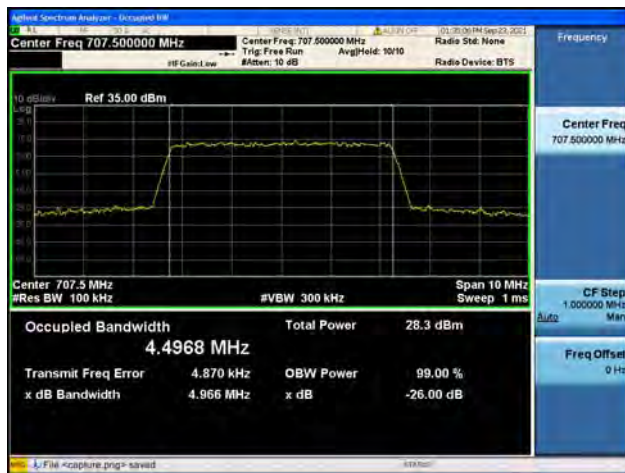
Band12 / 5MHz / Low CH / QPSK



Band12 / 5MHz / Low CH / 16QAM



Band12 / 5MHz / Mid CH / QPSK



Band12 / 5MHz / Mid CH / 16QAM



Band12 / 5MHz / High CH / QPSK

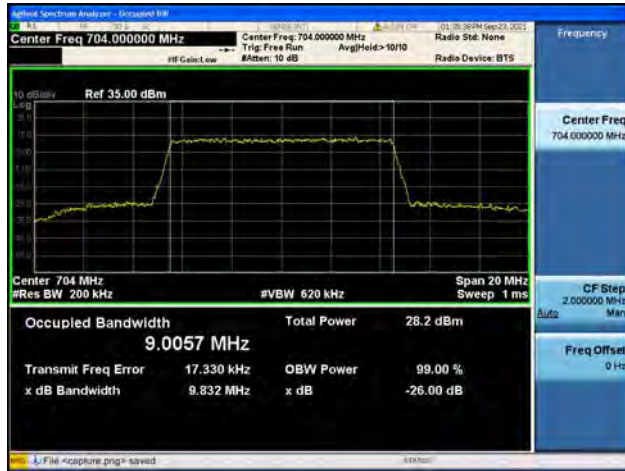


Band12 / 5MHz / High CH / 16QAM





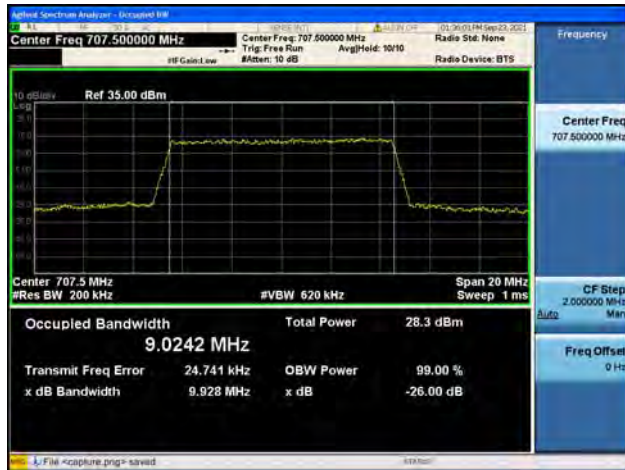
Band12 / 10MHz / Low CH / QPSK



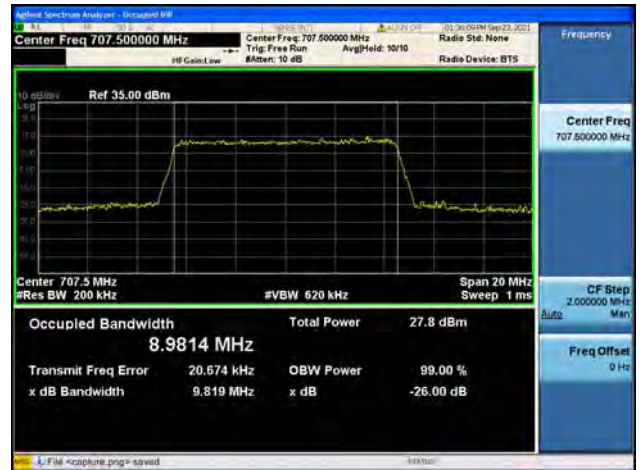
Band12 / 10MHz / Low CH / 16QAM



Band12 / 10MHz / Mid CH / QPSK



Band12 / 10MHz / Mid CH / 16QAM



Band12 / 10MHz / High CH / QPSK

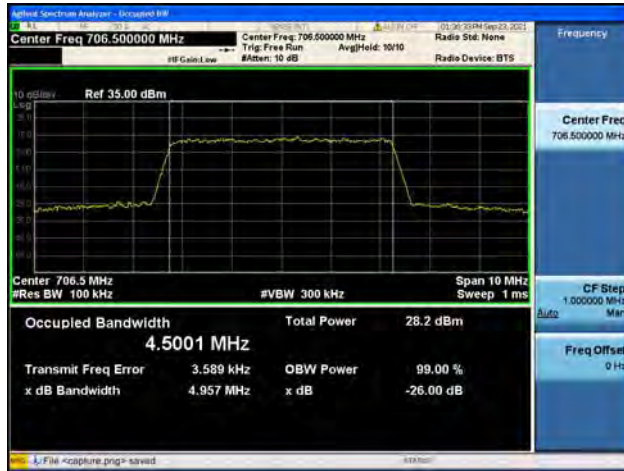


Band12 / 10MHz / High CH / 16QAM

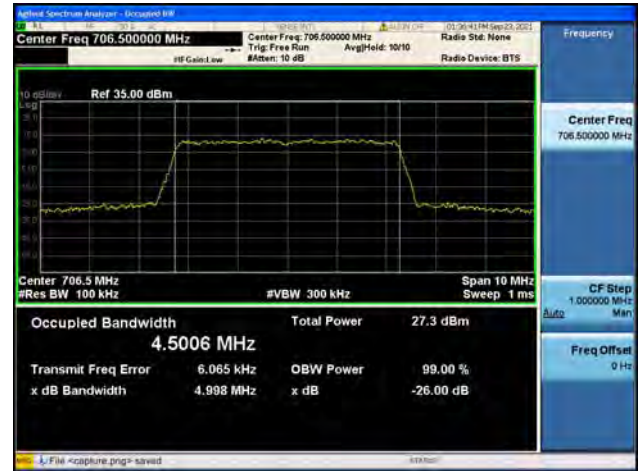




Band17 / 5MHz / Low CH / QPSK



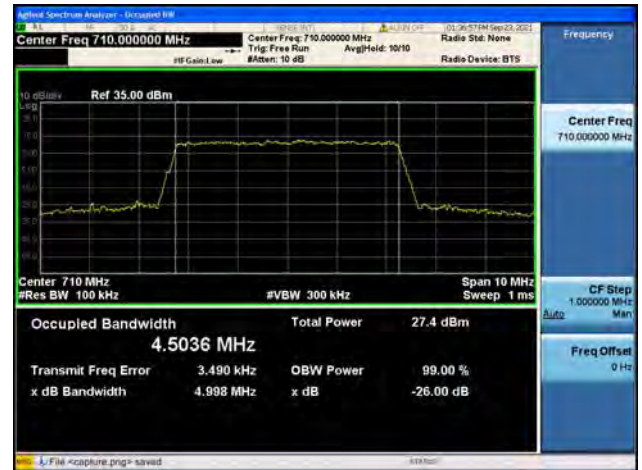
Band17 / 5MHz / Low CH / 16QAM



Band17 / 5MHz / Mid CH / QPSK



Band17 / 5MHz / Mid CH / 16QAM



Band17 / 5MHz / High CH / QPSK



Band17 / 5MHz / High CH / 16QAM

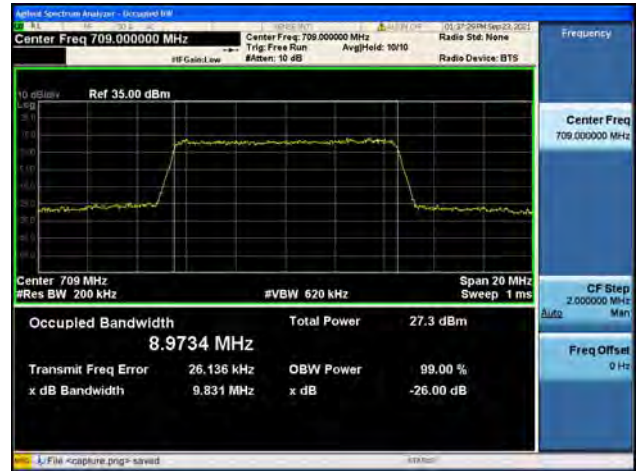




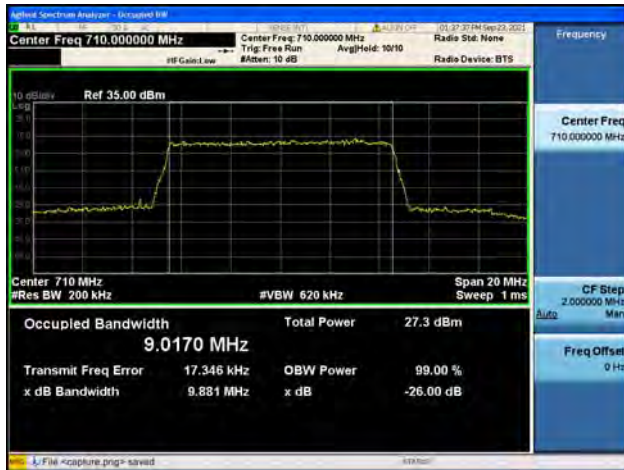
Band17 / 10MHz / Low CH / QPSK



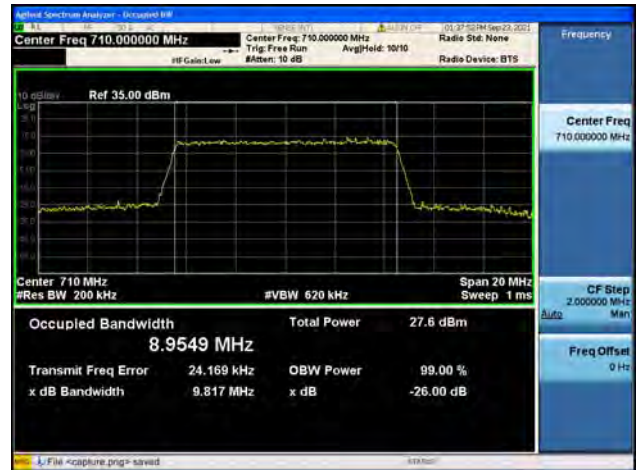
Band17 / 10MHz / Low CH / 16QAM



Band17 / 10MHz / Mid CH / QPSK



Band17 / 10MHz / Mid CH / 16QAM



Band17 / 10MHz / High CH / QPSK

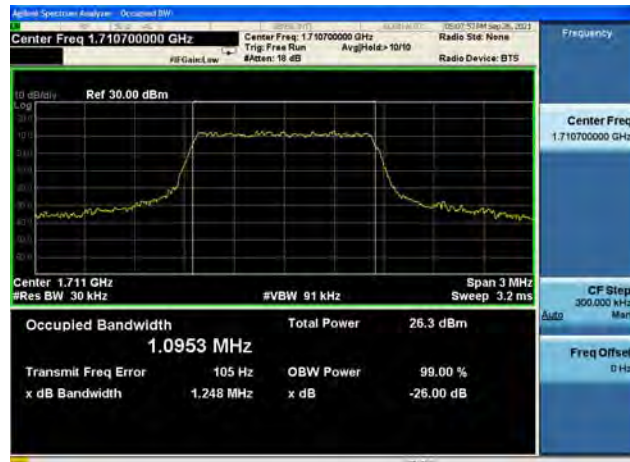


Band17 / 10MHz / High CH / 16QAM





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

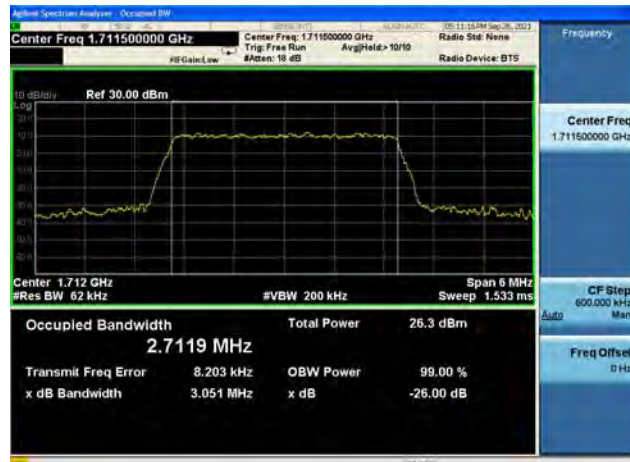


Band66 / 1.4MHz / High CH / 16QAM





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

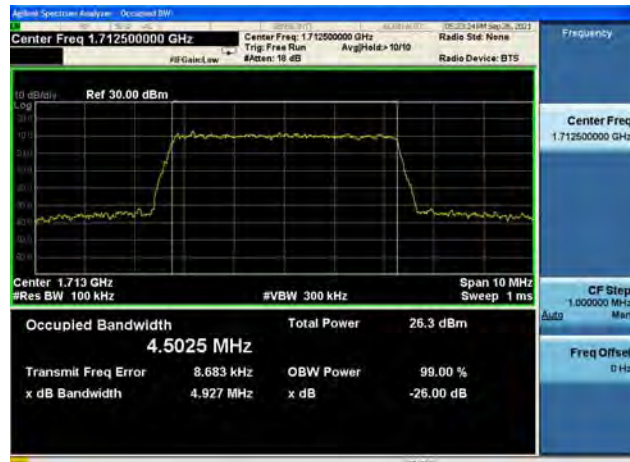


Band66 / 3MHz / High CH / 16QAM

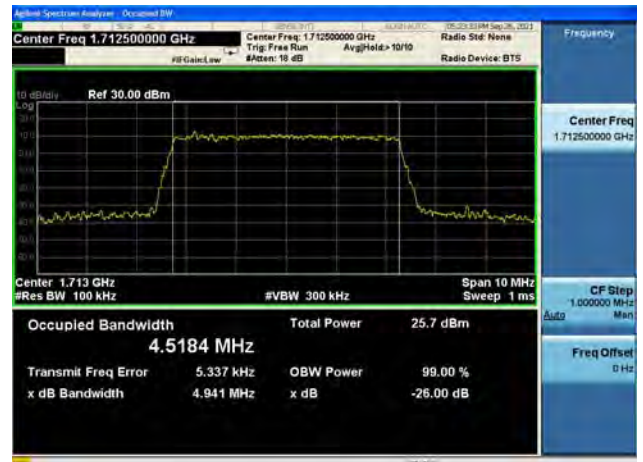




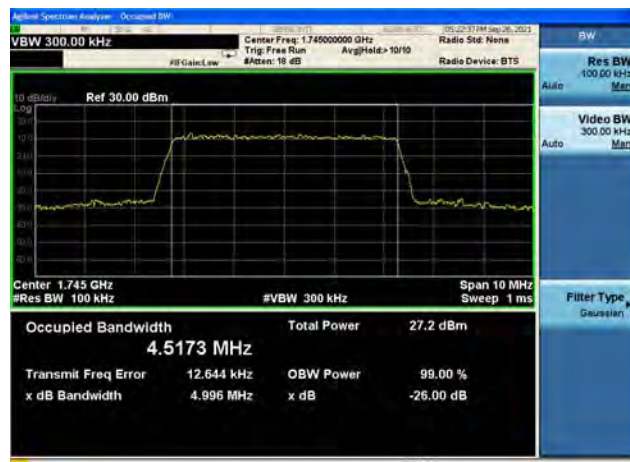
Band66 / 5MHz / Low CH / QPSK



Band66 / 5MHz / Low CH / 16QAM



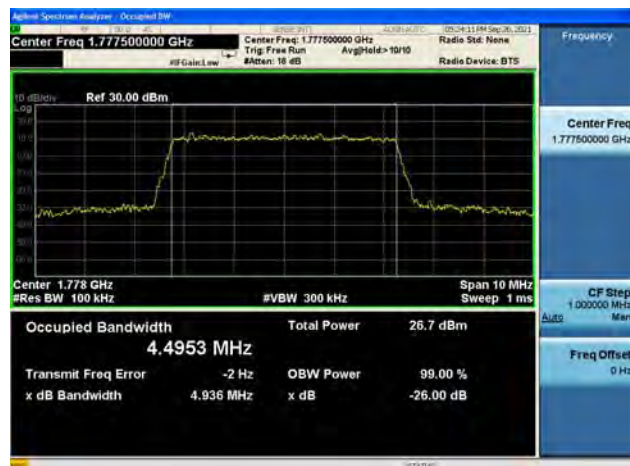
Band66 / 5MHz / Mid CH / QPSK



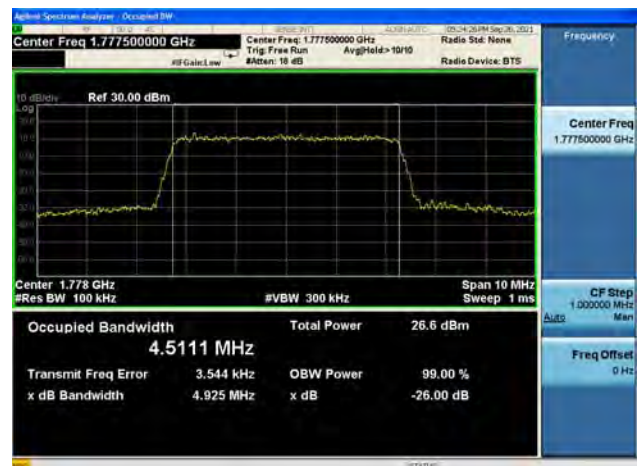
Band66 / 5MHz / Mid CH / 16QAM



Band66 / 5MHz / High CH / QPSK

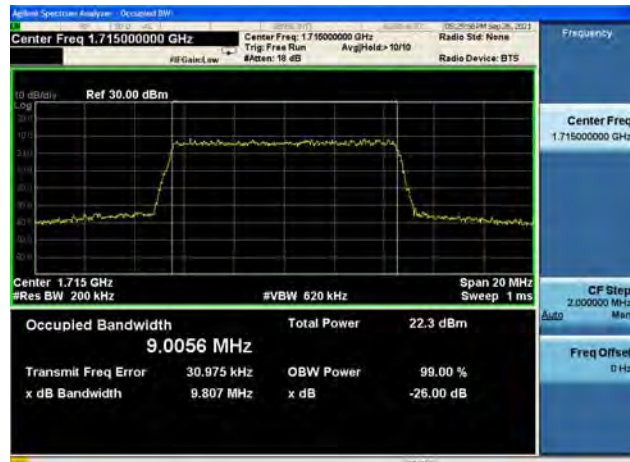


Band66 / 5MHz / High CH / 16QAM

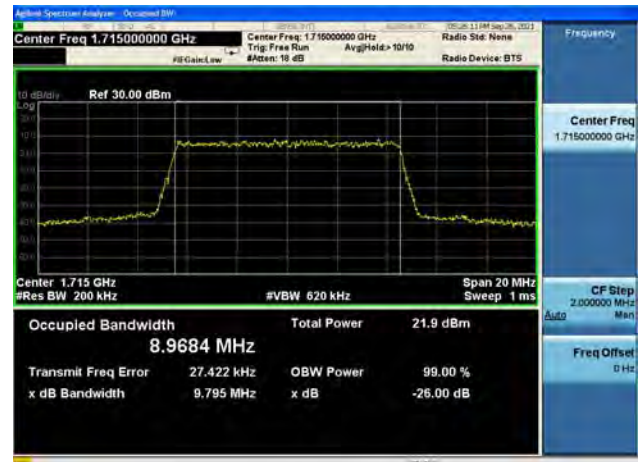




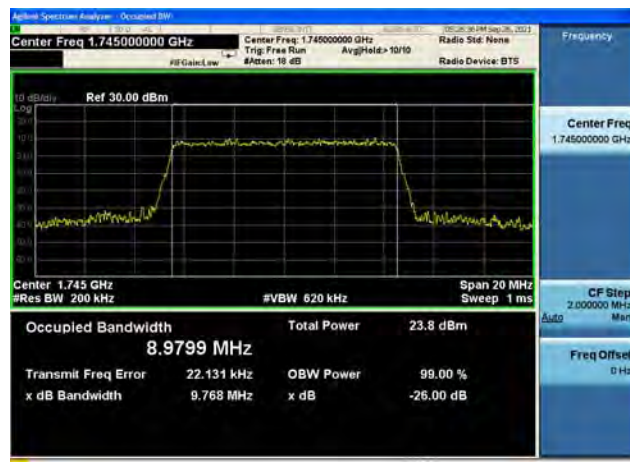
Band66 / 10MHz / Low CH / QPSK



Band66 / 10MHz / Low CH / 16QAM



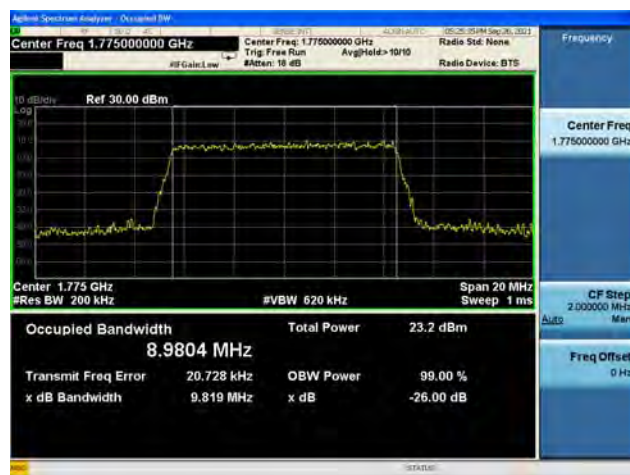
Band66 / 10MHz / Mid CH / QPSK



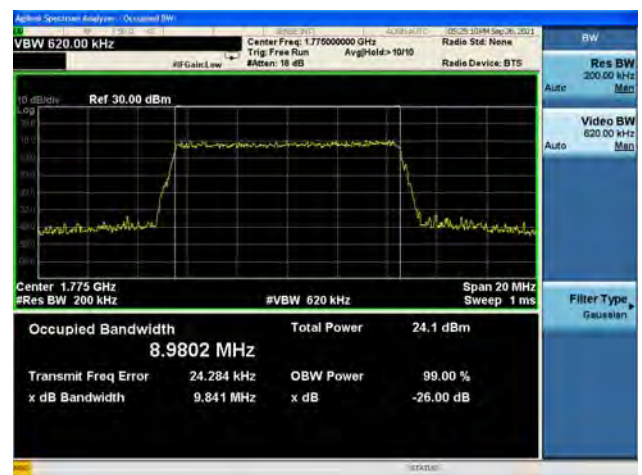
Band66 / 10MHz / Mid CH / 16QAM



Band66 / 10MHz / High CH / QPSK

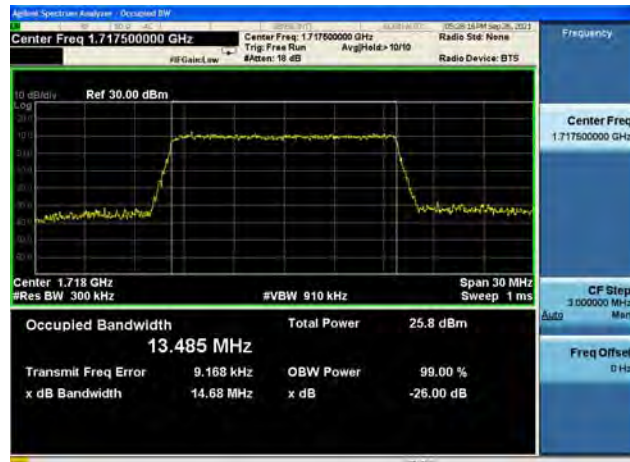


Band66 / 10MHz / High CH / 16QAM

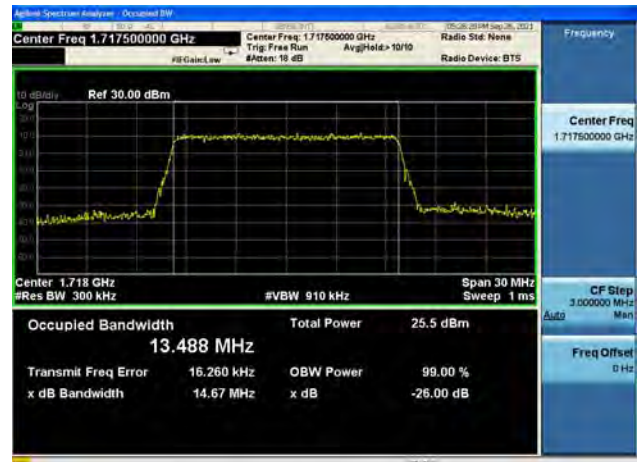




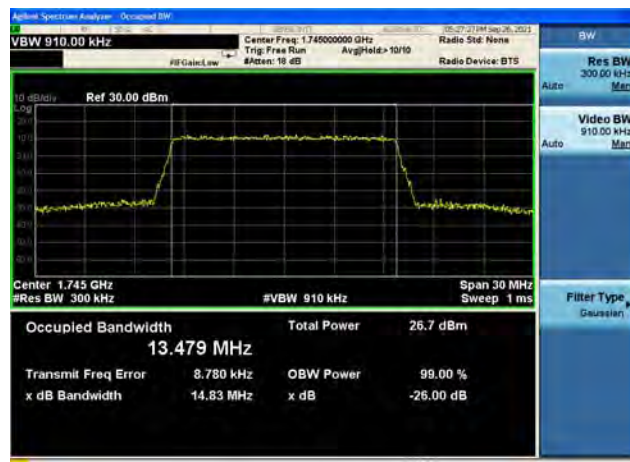
Band66 / 15MHz / Low CH / QPSK



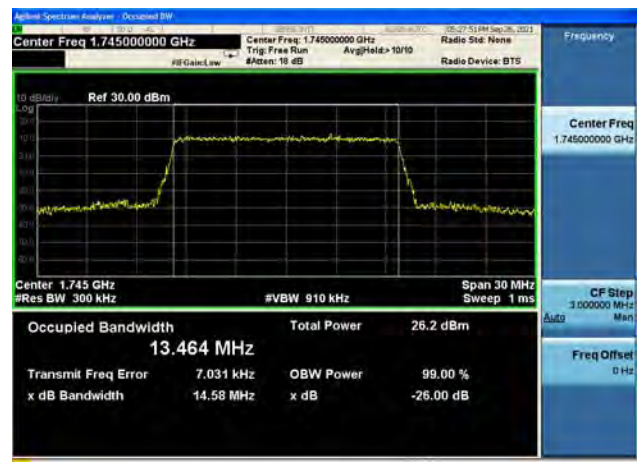
Band66 / 15MHz / Low CH / 16QAM



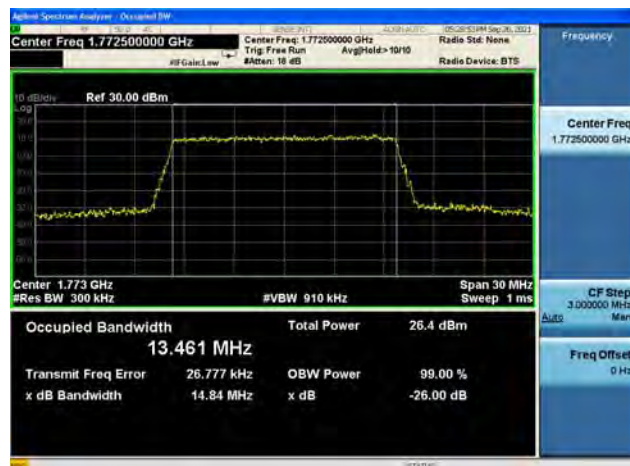
Band66 / 15MHz / Mid CH / QPSK



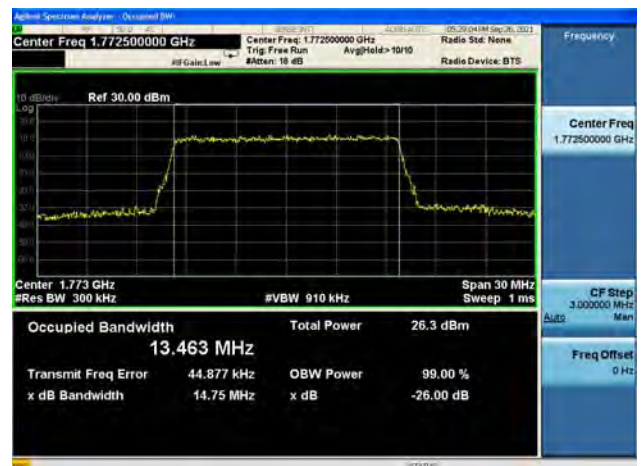
Band66 / 15MHz / Mid CH / 16QAM



Band66 / 15MHz / High CH / QPSK

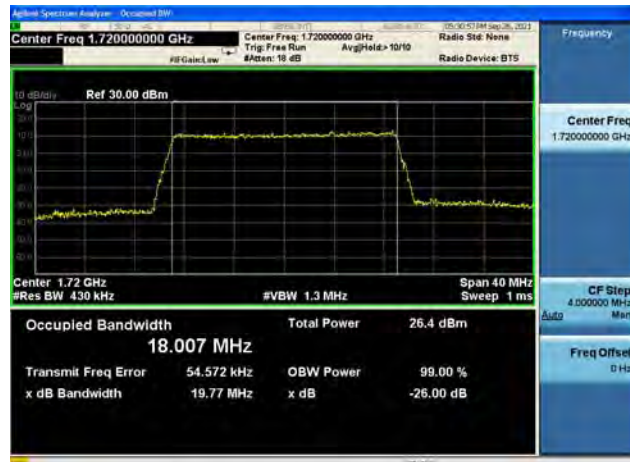


Band66 / 15MHz / High CH / 16QAM





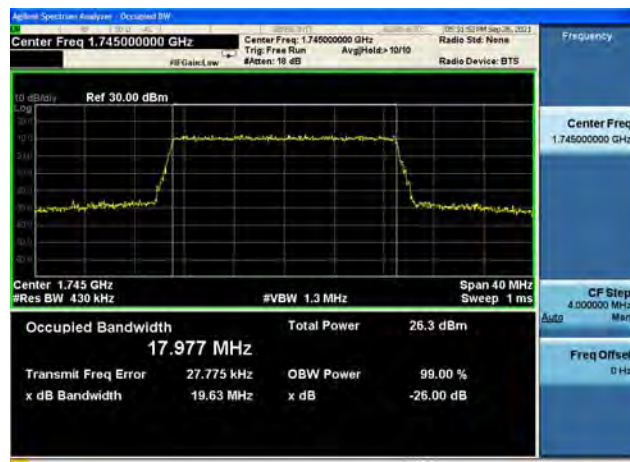
Band66 / 20MHz / Low CH / QPSK



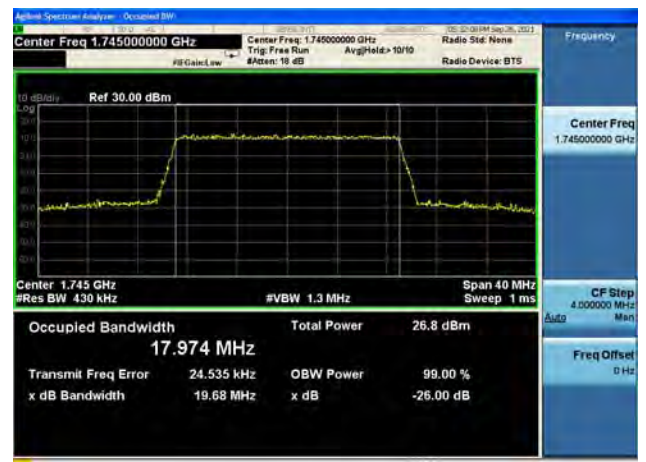
Band66 / 20MHz / Low CH / 16QAM



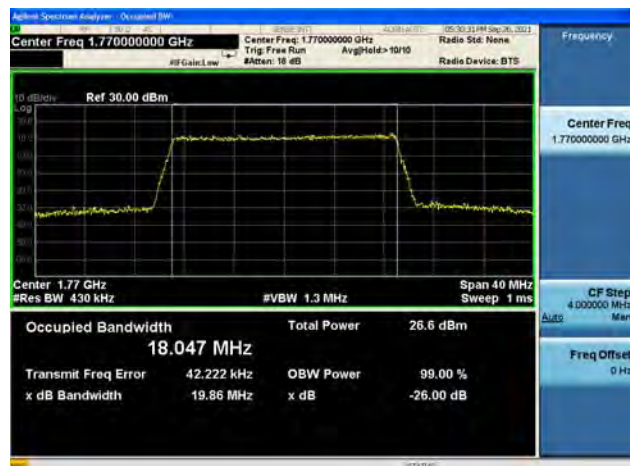
Band66 / 20MHz / Mid CH / QPSK



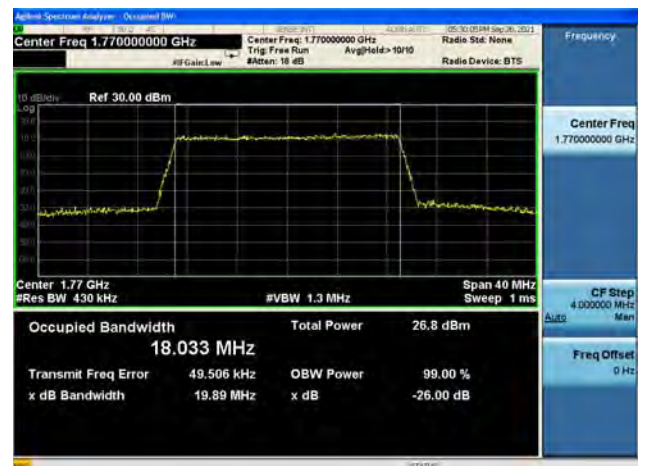
Band66 / 20MHz / Mid CH / 16QAM



Band66 / 20MHz / High CH / QPSK



Band66 / 20MHz / High CH / 16QAM



2.3. Frequency Stability

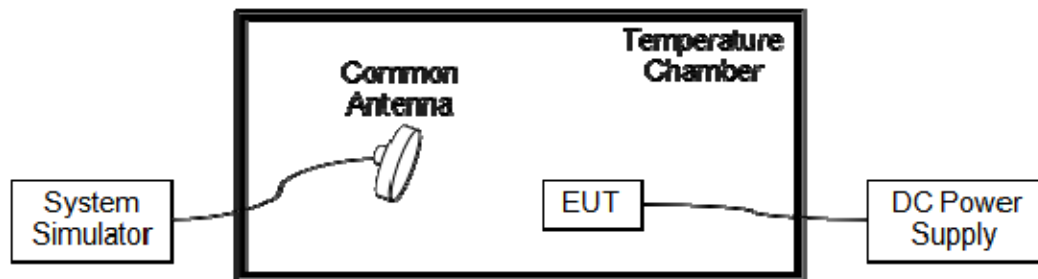
2.3.1. Requirement

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 -20°C to 60°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 3.80V, 4.35V and 3.60V, which are specified by the applicant; the normal temperature here used is 20°C.

LTE Band 2, QPSK, Channel 18900, Frequency 1880.0MHz					
Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp(°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
100	3.80	+20(Ref)	50	0.027	PASS
100		-20	16	0.009	
100		-10	29	0.015	
100		0	-43	-0.023	
100		+10	43	0.023	
100		+20	44	0.023	
100		+30	48	0.026	
100		+40	41	0.022	
100		+50	42	0.022	
100		+60	52	0.028	
115	4.35	+20	50	0.027	
85	3.60	+20	-59	-0.031	

LTE Band 4, QPSK, Channel 20175, Frequency 1732.5MHz					
Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp(°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
100	3.80	+20(Ref)	-15	-0.009	PASS
100		-20	-45	-0.026	
100		-10	-51	-0.029	
100		0	-30	-0.017	
100		+10	19	0.011	
100		+20	-36	-0.021	
100		+30	29	0.017	
100		+40	-41	-0.024	
100		+50	45	0.026	
100		+60	-54	-0.031	
115	4.35	+20	36	0.021	
85	3.60	+20	21	0.012	



LTE Band 5, QPSK, Channel 20525, Frequency 836.5MHz					
Limit=±2.5ppm					
Voltage (%)	Power (VDC)	Temp(°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
100	3.80	+20(Ref)	-51	-0.061	PASS
100		-20	-47	-0.056	
100		-10	52	0.062	
100		0	42	0.050	
100		+10	-18	-0.022	
100		+20	25	0.030	
100		+30	-18	-0.022	
100		+40	-35	-0.042	
100		+50	27	0.032	
100		+60	22	0.026	
115	4.35	+20	50	0.060	
85	3.60	+20	15	0.018	

LTE Band 7, QPSK, Channel 21100, Frequency 2535MHz					
Limit= Within Authorized Band					
Voltage (%)	Power (VDC)	Temp(°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
100	3.80	+20(Ref)	-49	-0.019	PASS
100		-20	45	0.018	
100		-10	-53	-0.021	
100		0	20	0.008	
100		+10	32	0.013	
100		+20	19	0.007	
100		+30	-39	-0.015	
100		+40	-46	-0.018	
100		+50	-19	-0.007	
100		+60	29	0.011	
115	4.35	+20	18	0.007	
85	3.60	+20	20	0.008	



LTE Band 12, QPSK, Channel 23095, Frequency 707.5MHz Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp(°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
100	3.80	+20(Ref)	-39	-0.055	PASS
100		-20	35	0.049	
100		-10	-31	-0.044	
100		0	-56	-0.079	
100		+10	54	0.076	
100		+20	-52	-0.073	
100		+30	41	0.058	
100		+40	-55	-0.078	
100		+50	-32	-0.045	
100		+60	47	0.066	
115	4.35	+20	29	0.041	
85	3.60	+20	49	0.069	

LTE Band 17, QPSK, Channel 23790, Frequency 710MHz Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp(°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
100	3.80	+20(Ref)	-52	-0.073	PASS
100		-20	-18	-0.025	
100		-10	46	0.065	
100		0	24	0.034	
100		+10	23	0.032	
100		+20	50	0.070	
100		+30	57	0.080	
100		+40	-32	-0.045	
100		+50	-14	-0.020	
100		+60	45	0.063	
115	4.35	+20	-21	-0.030	
85	3.60	+20	-52	-0.073	



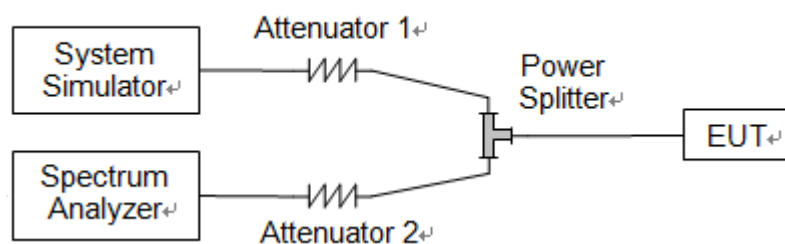
LTE Band 66, QPSK, Channel 132322, Frequency 1745.0MHz					
Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp (°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
100	3.80	+20(Ref)	16	0.009	PASS
100		-20	-58	-0.033	
100		-10	36	0.021	
100		0	-50	-0.029	
100		+10	24	0.014	
100		+20	41	0.023	
100		+30	-48	-0.028	
100		+40	40	0.023	
100		+50	19	0.011	
100		+60	50	0.029	
115		4.35	+20	55	
85	3.60	+20	-48	-0.028	

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%.



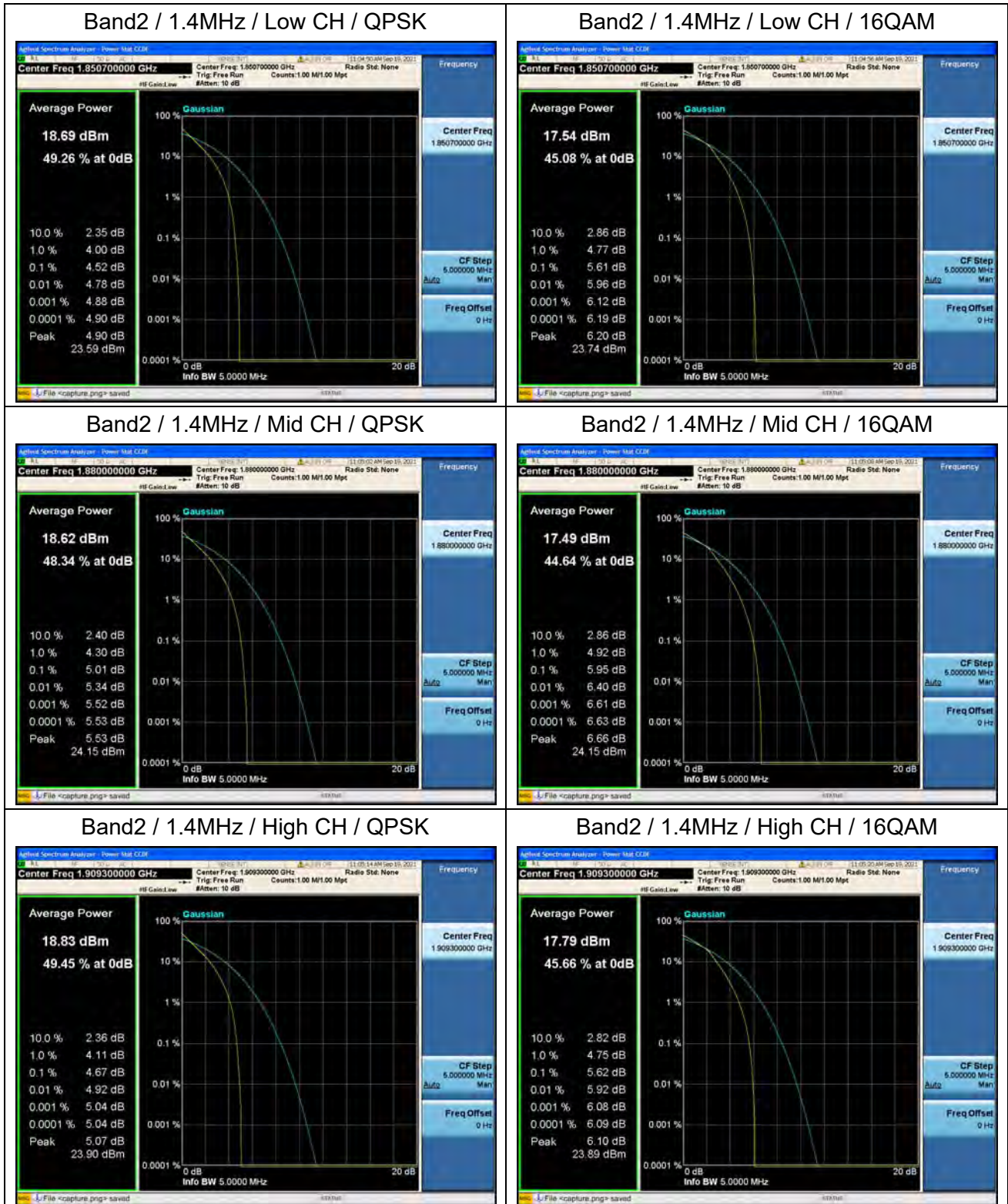
LTE Band 2					
BW(MHz)	Channel Level	Modulation	PAR Radio(dB)	Limit(dB)	Verdict
1.4	Low	QPSK	4.52	<=13	PASS
	Low	16QAM	5.61	<=13	PASS
	Mid	QPSK	5.01	<=13	PASS
	Mid	16QAM	5.95	<=13	PASS
	High	QPSK	4.67	<=13	PASS
	High	16QAM	5.62	<=13	PASS
3	Low	QPSK	4.72	<=13	PASS
	Low	16QAM	5.60	<=13	PASS
	Mid	QPSK	5.05	<=13	PASS
	Mid	16QAM	5.92	<=13	PASS
	High	QPSK	4.81	<=13	PASS
	High	16QAM	5.60	<=13	PASS
5	Low	QPSK	4.99	<=13	PASS
	Low	16QAM	5.63	<=13	PASS
	Mid	QPSK	5.22	<=13	PASS
	Mid	16QAM	5.88	<=13	PASS
	High	QPSK	5.05	<=13	PASS
	High	16QAM	5.70	<=13	PASS
10	Low	QPSK	5.15	<=13	PASS
	Low	16QAM	5.85	<=13	PASS
	Mid	QPSK	5.34	<=13	PASS
	Mid	16QAM	6.00	<=13	PASS
	High	QPSK	5.09	<=13	PASS
	High	16QAM	5.77	<=13	PASS
15	Low	QPSK	4.96	<=13	PASS
	Low	16QAM	5.65	<=13	PASS
	Mid	QPSK	4.96	<=13	PASS
	Mid	16QAM	5.85	<=13	PASS
	High	QPSK	4.69	<=13	PASS
	High	16QAM	5.47	<=13	PASS
20	Low	QPSK	5.08	<=13	PASS
	Low	16QAM	5.84	<=13	PASS
	Mid	QPSK	5.20	<=13	PASS
	Mid	16QAM	5.96	<=13	PASS
	High	QPSK	4.97	<=13	PASS
	High	16QAM	5.64	<=13	PASS



LTE Band 4					
BW(MHz)	Channel Level	Modulation	PAR Radio(dB)	Limit(dB)	Verdict
1.4	Low	QPSK	5.62	<=13	PASS
	Low	16QAM	6.39	<=13	PASS
	Mid	QPSK	5.53	<=13	PASS
	Mid	16QAM	6.48	<=13	PASS
	High	QPSK	5.47	<=13	PASS
	High	16QAM	6.16	<=13	PASS
3	Low	QPSK	5.61	<=13	PASS
	Low	16QAM	6.37	<=13	PASS
	Mid	QPSK	5.62	<=13	PASS
	Mid	16QAM	6.40	<=13	PASS
	High	QPSK	5.42	<=13	PASS
	High	16QAM	6.12	<=13	PASS
5	Low	QPSK	5.65	<=13	PASS
	Low	16QAM	6.28	<=13	PASS
	Mid	QPSK	5.66	<=13	PASS
	Mid	16QAM	6.27	<=13	PASS
	High	QPSK	5.60	<=13	PASS
	High	16QAM	5.96	<=13	PASS
10	Low	QPSK	5.79	<=13	PASS
	Low	16QAM	6.41	<=13	PASS
	Mid	QPSK	5.67	<=13	PASS
	Mid	16QAM	6.31	<=13	PASS
	High	QPSK	5.47	<=13	PASS
	High	16QAM	6.16	<=13	PASS
15	Low	QPSK	5.76	<=13	PASS
	Low	16QAM	6.39	<=13	PASS
	Mid	QPSK	5.53	<=13	PASS
	Mid	16QAM	6.24	<=13	PASS
	High	QPSK	5.27	<=13	PASS
	High	16QAM	6.00	<=13	PASS
20	Low	QPSK	5.71	<=13	PASS
	Low	16QAM	6.47	<=13	PASS
	Mid	QPSK	5.56	<=13	PASS
	Mid	16QAM	6.31	<=13	PASS
	High	QPSK	5.34	<=13	PASS
	High	16QAM	6.13	<=13	PASS



LTE Band 66					
BW(MHz)	Channel Level	Modulation	PAR Radio(dB)	Limit(dB)	Verdict
1.4	Low	QPSK	5.51	<=13	PASS
	Low	16QAM	6.39	<=13	PASS
	Mid	QPSK	4.89	<=13	PASS
	Mid	16QAM	5.73	<=13	PASS
	High	QPSK	5.35	<=13	PASS
	High	16QAM	6.10	<=13	PASS
3	Low	QPSK	5.64	<=13	PASS
	Low	16QAM	6.31	<=13	PASS
	Mid	QPSK	5.09	<=13	PASS
	Mid	16QAM	5.82	<=13	PASS
	High	QPSK	5.35	<=13	PASS
	High	16QAM	6.13	<=13	PASS
5	Low	QPSK	5.60	<=13	PASS
	Low	16QAM	6.33	<=13	PASS
	Mid	QPSK	5.27	<=13	PASS
	Mid	16QAM	5.95	<=13	PASS
	High	QPSK	5.48	<=13	PASS
	High	16QAM	6.09	<=13	PASS
10	Low	QPSK	6.30	<=13	PASS
	Low	16QAM	6.32	<=13	PASS
	Mid	QPSK	6.68	<=13	PASS
	Mid	16QAM	5.98	<=13	PASS
	High	QPSK	6.55	<=13	PASS
	High	16QAM	6.20	<=13	PASS
15	Low	QPSK	5.68	<=13	PASS
	Low	16QAM	6.35	<=13	PASS
	Mid	QPSK	6.75	<=13	PASS
	Mid	16QAM	5.76	<=13	PASS
	High	QPSK	5.47	<=13	PASS
	High	16QAM	6.16	<=13	PASS
20	Low	QPSK	5.71	<=13	PASS
	Low	16QAM	6.44	<=13	PASS
	Mid	QPSK	6.16	<=13	PASS
	Mid	16QAM	5.99	<=13	PASS
	High	QPSK	5.56	<=13	PASS
	High	16QAM	6.25	<=13	PASS





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

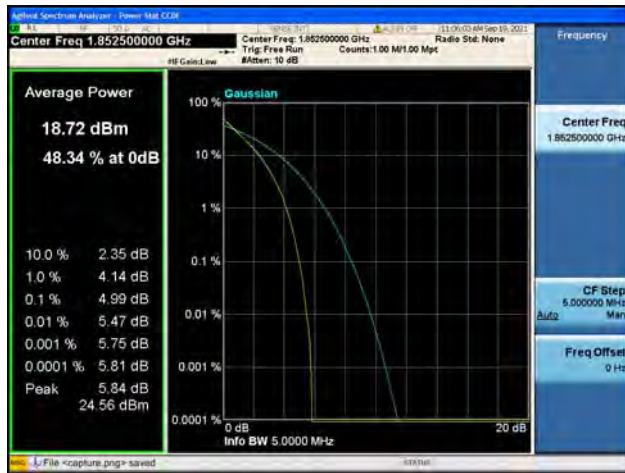


Band2 / 3MHz / High CH / 16QAM





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



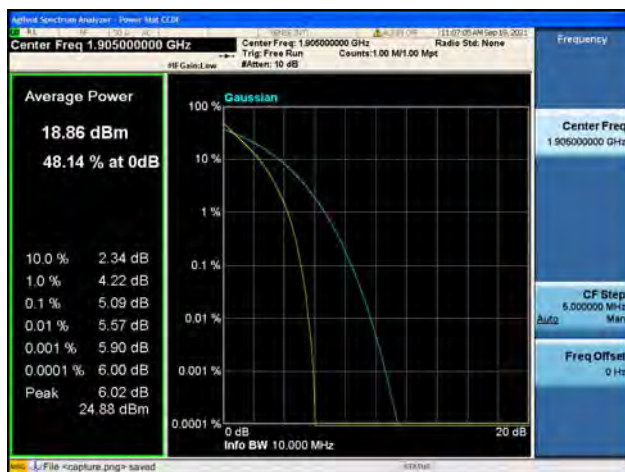
Band2 / 10MHz / Mid CH / QPSK



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

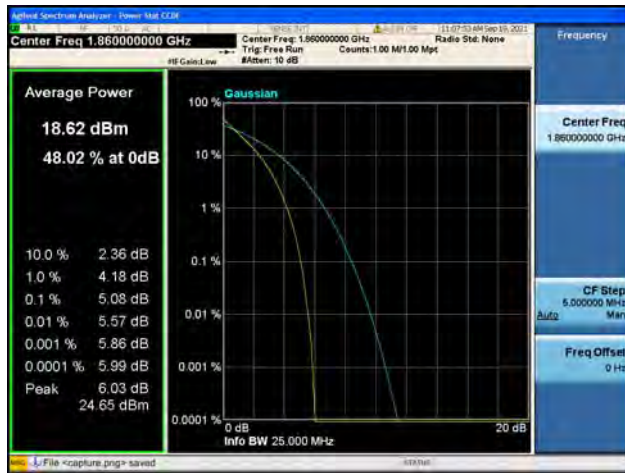


Band2 / 15MHz / High CH / 16QAM





Band2 / 20MHz / Low CH / QPSK



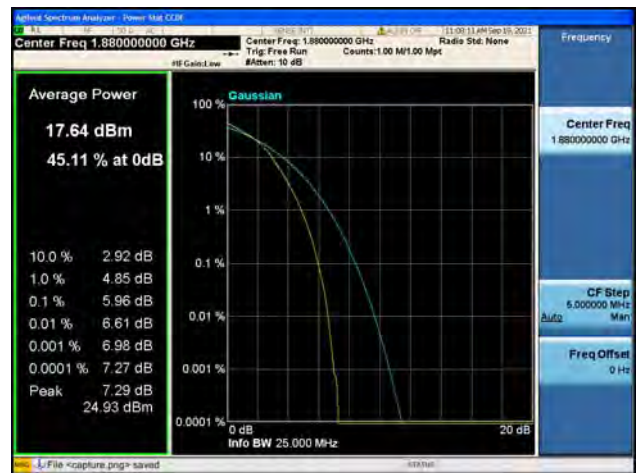
Band2 / 20MHz / Low CH / 16QAM



Band2 / 20MHz / Mid CH / QPSK



Band2 / 20MHz / Mid CH / 16QAM



Band2 / 20MHz / High CH / QPSK

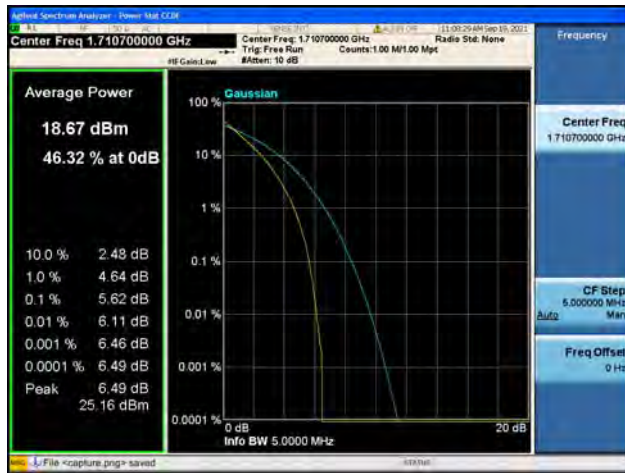


Band2 / 20MHz / High CH / 16QAM





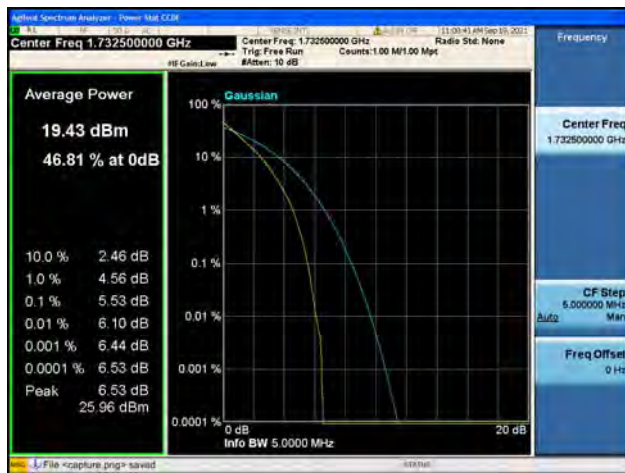
Band4 / 1.4MHz / Low CH / QPSK



Band4 / 1.4MHz / Low CH / 16QAM



Band4 / 1.4MHz / Mid CH / QPSK



Band4 / 1.4MHz / Mid CH / 16QAM



Band4 / 1.4MHz / High CH / QPSK

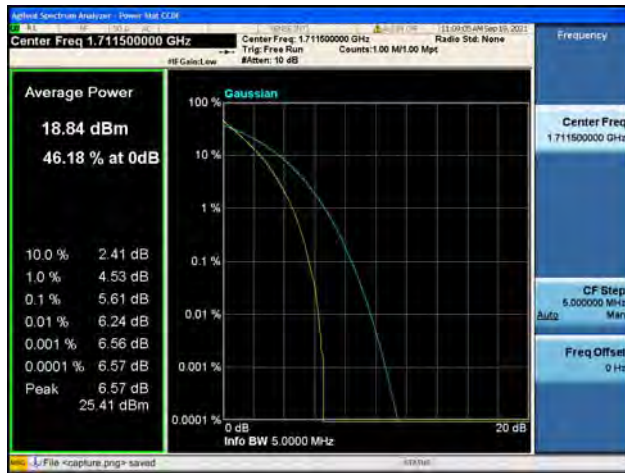


Band4 / 1.4MHz / High CH / 16QAM





Band4 / 3MHz / Low CH / QPSK



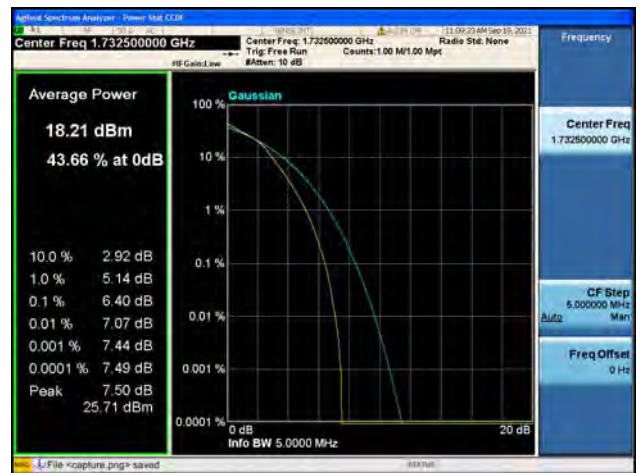
Band4 / 3MHz / Low CH / 16QAM



Band4 / 3MHz / Mid CH / QPSK



Band4 / 3MHz / Mid CH / 16QAM



Band4 / 3MHz / High CH / QPSK

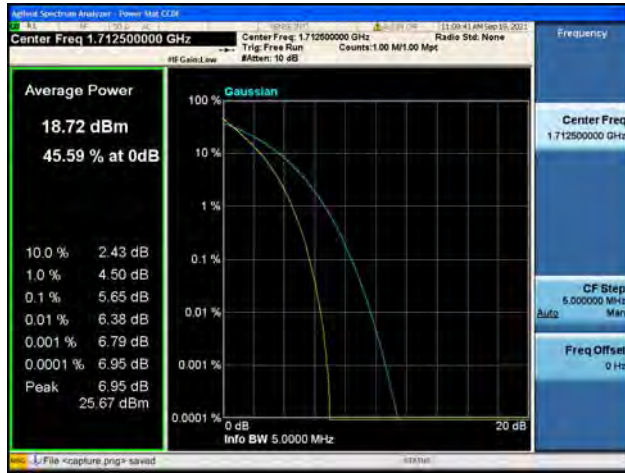


Band4 / 3MHz / High CH / 16QAM





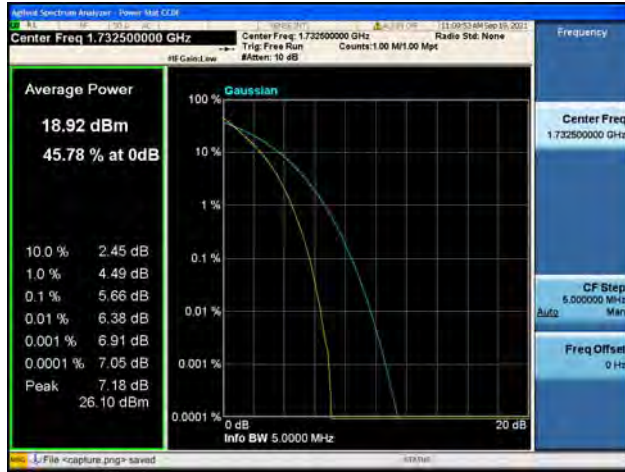
Band4 / 5MHz / Low CH / QPSK



Band4 / 5MHz / Low CH / 16QAM



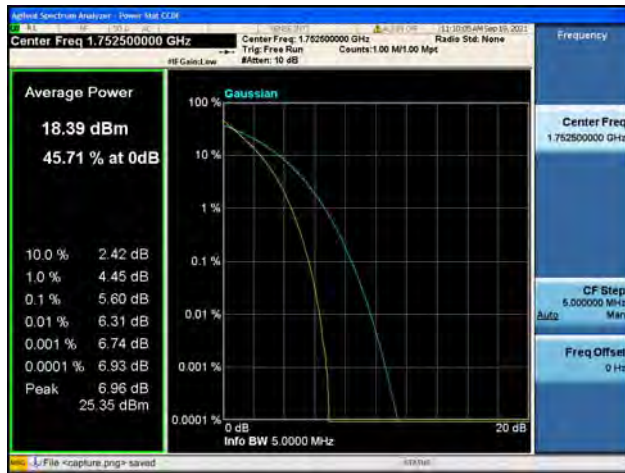
Band4 / 5MHz / Mid CH / QPSK



Band4 / 5MHz / Mid CH / 16QAM



Band4 / 5MHz / High CH / QPSK

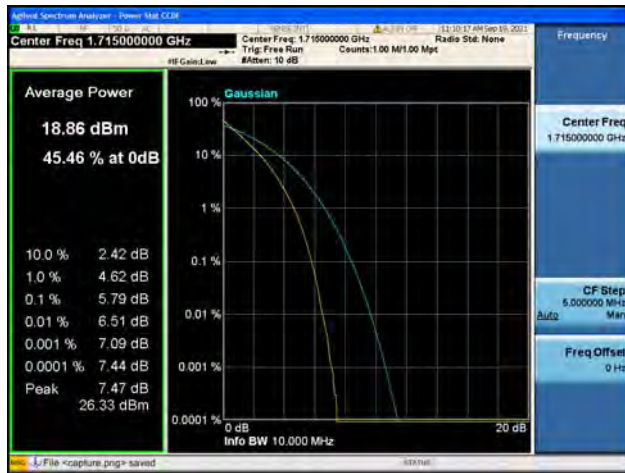


Band4 / 5MHz / High CH / 16QAM





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





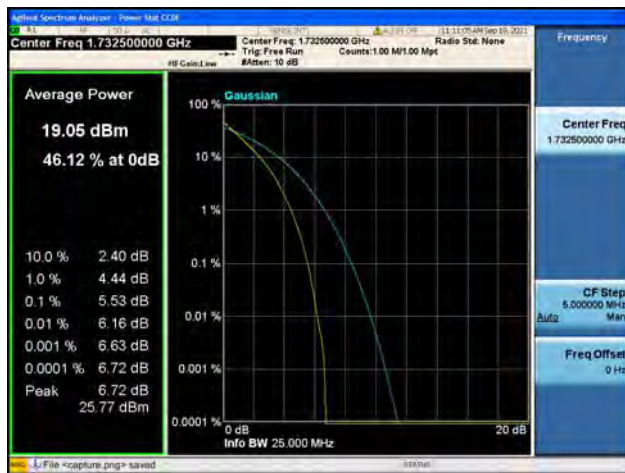
Band4 / 15MHz / Low CH / QPSK



Band4 / 15MHz / Low CH / 16QAM



Band4 / 15MHz / Mid CH / QPSK



Band4 / 15MHz / Mid CH / 16QAM



Band4 / 15MHz / High CH / QPSK

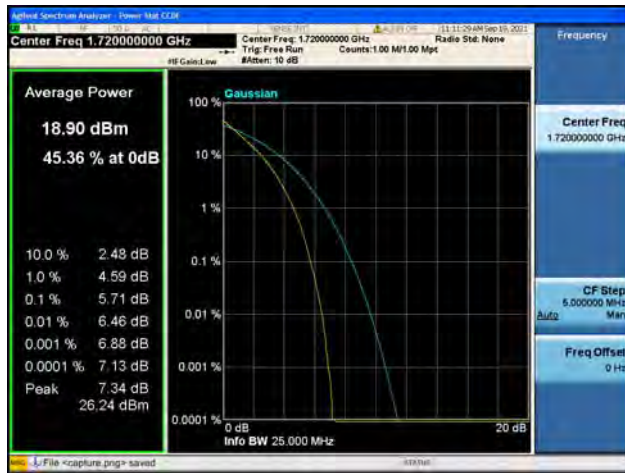


Band4 / 15MHz / High CH / 16QAM

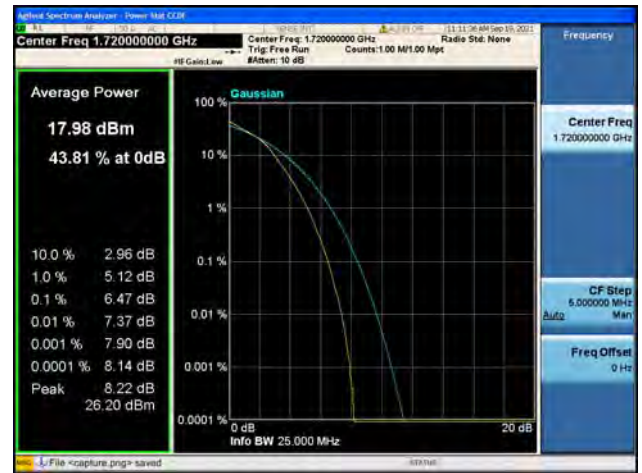




Band4 / 20MHz / Low CH / QPSK



Band4 / 20MHz / Low CH / 16QAM



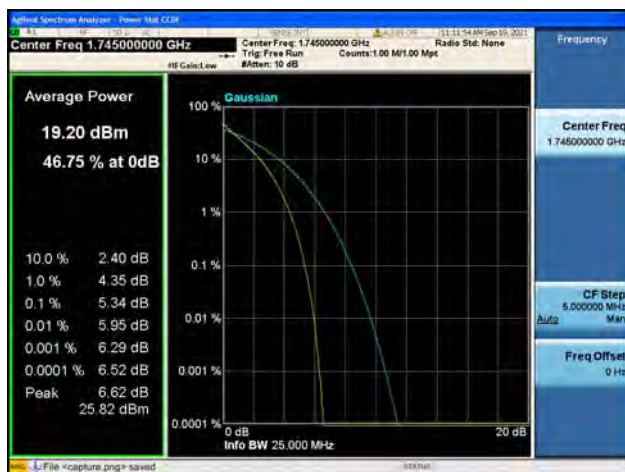
Band4 / 20MHz / Mid CH / QPSK



Band4 / 20MHz / Mid CH / 16QAM



Band4 / 20MHz / High CH / QPSK



Band4 / 20MHz / High CH / 16QAM





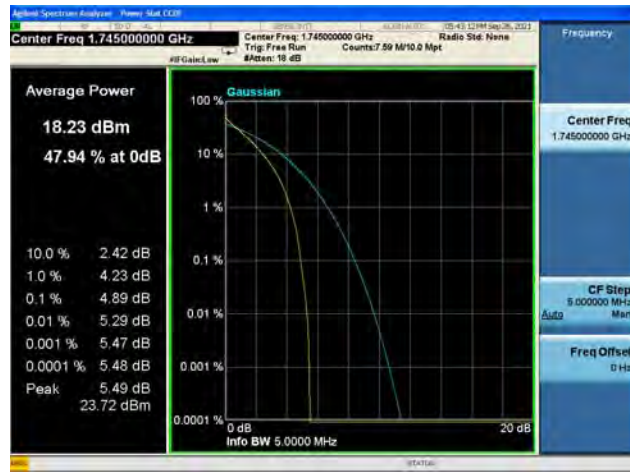
Band66 / 1.4MHz / Low CH / QPSK



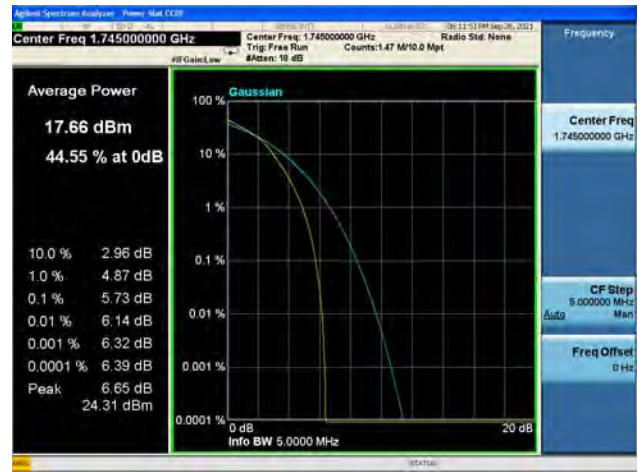
Band66 / 1.4MHz / Low CH / 16QAM



Band66 / 1.4MHz / Mid CH / QPSK



Band66 / 1.4MHz / Mid CH / 16QAM



Band66 / 1.4MHz / High CH / QPSK



Band66 / 1.4MHz / High CH / 16QAM





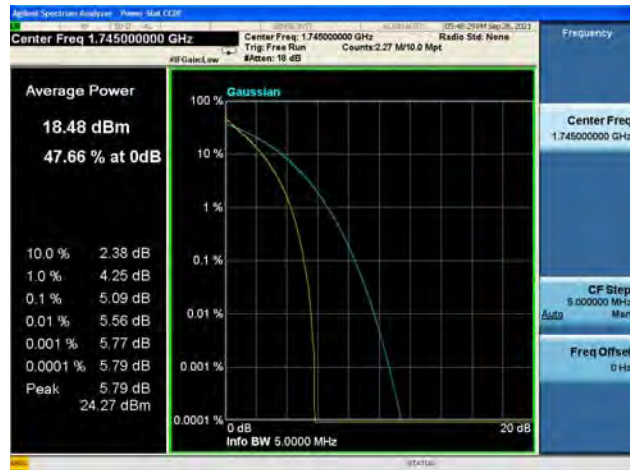
Band66 / 3MHz / Low CH / QPSK



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

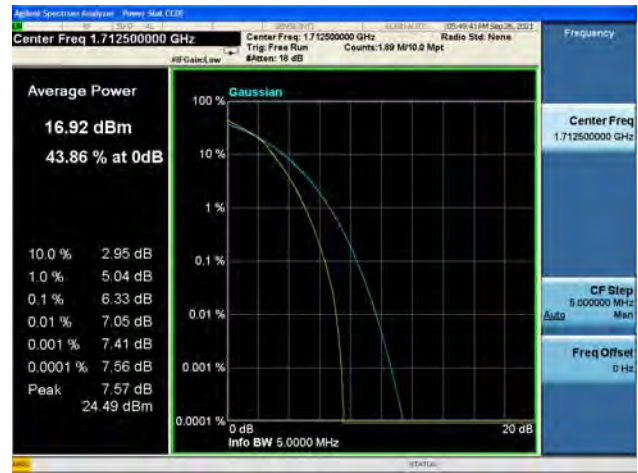




Band66 / 5MHz / Low CH / QPSK



Band66 / 5MHz / Low CH / 16QAM



Band66 / 5MHz / Mid CH / QPSK



Band66 / 5MHz / Mid CH / 16QAM



Band66 / 5MHz / High CH / QPSK



Band66 / 5MHz / High CH / 16QAM

