



# TEST REPORT

**APPLICANT** : BLU Products, Inc.

**PRODUCT NAME** : Tablet

**MODEL NAME** : M8L 2022

**BRAND NAME** : BLU

**FCC ID** : YHLBLUM8L271

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

**RECEIPT DATE** : 2021-10-29

**TEST DATE** : 2022-10-26 to 2022-11-01

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Change History		
Version	Date	Reason for change
1.0	2022-11-21	First edition



# 1. Technical Information

**Note:** Provide by applicant.

## 1.1. Applicant and Manufacturer Information

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

## 1.2. Equipment Under Test (EUT) Description

<b>Product Name:</b>	Tablet	
<b>Sample No.:</b>	4#, 1#	
<b>Hardware Version:</b>	S863T-T310-V2.0	
<b>Software Version:</b>	BLU_M0222_ND_V12.0.04.03_GENERIC 18_10_2022	
<b>Modulation Type:</b>	QPSK, 16QAM	
<b>Carrier Aggregation:</b>	Not Support	
<b>Operation Band:</b>	Band 2 / 4 / 5 / 7 / 12 / 17 / 66 / 71	
<b>Frequency Range:</b>	LTE Band 2	Tx: 1850MHz–1910MHz
		Rx: 1930MHz–1990MHz
	LTE Band 4	Tx: 1710MHz–1755MHz
		Rx: 2110MHz–2155MHz
	LTE Band 5	Tx: 824MHz–849MHz
		Rx: 869MHz–894MHz
	LTE Band 7	Tx: 2500MHz–2570MHz
		Rx: 2620MHz–2690MHz
	LTE Band 12	Tx: 699MHz–716MHz
		Rx: 729MHz–746MHz
	LTE Band 17	Tx: 704MHz–716MHz
		Rx: 734MHz–746MHz
	LTE Band 66	Tx: 1710MHz–1780MHz
		Rx: 2110MHz–2200MHz
LTE Band 71	Tx: 663MHz –698MHz	
	Rx: 617MHz –652MHz	



<b>Channel Bandwidth:</b>	LTE Band 2	1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz
	LTE Band 4	1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz
	LTE Band 5	1.4MHz, 3MHz, 5MHz, 10MHz
	LTE Band 7	5 MHz, 10MHz, 15MHz, 20MHz
	LTE Band 12	1.4MHz, 3 MHz, 5 MHz, 10MHz
	LTE Band 17	5 MHz, 10MHz
	LTE Band 66	1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz
	LTE Band 71	5MHz, 10MHz, 15MHz, 20MHz
<b>Antenna Type:</b>	PIFA Antenna	
<b>Antenna Gain:</b>	LTE Band 2	0.5dBi
	LTE Band 4	0.5dBi
	LTE Band 5	0.2dBi
	LTE Band 7	0.7dBi
	LTE Band 12	-0.5dBi
	LTE Band 17	-0.6dBi
	LTE Band 66	0.5dBi
	LTE Band 71	0.7dBi
<b>Accessory Information:</b>	Battery	
	Brand Name:	BLU
	Model No.:	C10310030400P
	Serial No.:	N/A
	Capacity:	4000mAh
	Rated Voltage:	3.7V
	Charge Limit:	4.2V
	Manufacturer:	SHEN ZHEN JIAJINYUAN TECHNOLOGY CO.,LTD.
	AC Adapter	
	Brand Name:	BLU
	Model No.:	US-HY-2000
	Serial No.:	N/A
	Rated Output:	5.0V $\pm$ 2.0mA
	Rated Input:	100-240V $\sim$ 50/60Hz, 0.3A
	Manufacturer:	SHENZHEN ZHONGFUXIN TECHNOLOGY CO.,LTD.



REPORT No. : SZ22100111W05

**Note 1:** This test report is variant from the original report (Report No.: SZ21110256W03, FCC ID: YHLBLUM8L22), based on the similarity between before, changed the FCC ID and enabled LTE B71 by software, no other change.

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

**Note 3:** 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

<b>LTE Band 2</b>		<b>Maximum E.R.P./E.I.R.P. (W)</b>		<b>Emission Designator (99%OBW)</b>	
BW(MHz)		QPSK	16QAM	QPSK	16QAM
20		0.137	0.122	18M0G7D	18M0W7D
15		0.136	0.121	13M5G7D	13M5W7D
10		0.136	0.121	9M01G7D	8M99W7D
5		0.134	0.119	4M50G7D	4M50W7D
3		0.133	0.119	2M71G7D	2M71W7D
1.4		0.132	0.118	1M10G7D	1M10W7D
<b>LTE Band 4</b>		<b>Maximum E.R.P./E.I.R.P. (W)</b>		<b>Emission Designator (99%OBW)</b>	
BW(MHz)		QPSK	16QAM	QPSK	16QAM
20		0.213	0.190	18M0G7D	18M1W7D
15		0.211	0.189	13M5G7D	13M5W7D
10		0.209	0.187	9M04G7D	8M98W7D
5		0.207	0.185	4M50G7D	4M50W7D
3		0.205	0.183	2M72G7D	2M71W7D
1.4		0.204	0.182	1M10G7D	1M10W7D
<b>LTE Band 5</b>		<b>Maximum E.R.P./E.I.R.P. (W)</b>		<b>Emission Designator (99%OBW)</b>	
BW(MHz)		QPSK	16QAM	QPSK	16QAM
10		0.152	0.130	9M03G7D	9M00W7D
5		0.151	0.129	4M50G7D	4M50W7D
3		0.149	0.127	2M72G7D	2M72W7D
1.4		0.148	0.126	1M10G7D	1M10W7D
<b>LTE Band 7</b>		<b>Maximum E.R.P./E.I.R.P. (W)</b>		<b>Emission Designator (99%OBW)</b>	
BW(MHz)		QPSK	16QAM	QPSK	16QAM
20		0.184	0.170	18M0G7D	18M0W7D
15		0.183	0.169	13M5G7D	13M5W7D
10		0.182	0.168	9M02G7D	8M97W7D
5		0.179	0.166	4M51G7D	4M51W7D
<b>LTE Band 12</b>		<b>Maximum E.R.P./E.I.R.P. (W)</b>		<b>Emission Designator (99%OBW)</b>	
BW(MHz)		QPSK	16QAM	QPSK	16QAM
10		0.105	0.093	9M02G7D	8M98W7D
5		0.104	0.092	4M50G7D	4M51W7D
3		0.104	0.092	2M72G7D	2M72W7D
1.4		0.103	0.091	1M10G7D	1M10W7D



<b>LTE Band 17</b>	<b>Maximum E.R.P./E.I.R.P. (W)</b>		<b>Emission Designator (99%OBW)</b>	
BW(MHz)	QPSK	16QAM	QPSK	16QAM
10	0.104	0.092	8M98G7D	8M94W7D
5	0.103	0.091	4M50G7D	4M50W7D
<b>LTE Band 66</b>	<b>Maximum E.R.P./E.I.R.P. (W)</b>		<b>Emission Designator (99%OBW)</b>	
BW(MHz)	QPSK	16QAM	QPSK	16QAM
20	0.209	0.185	18M0G7D	18M0W7D
15	0.197	0.184	13M5G7D	13M5W7D
10	0.205	0.182	9M06G7D	9M01W7D
5	0.204	0.181	4M53G7D	4M53W7D
3	0.201	0.179	2M72G7D	2M72W7D
1.4	0.200	0.177	1M10G7D	1M10W7D
<b>LTE Band 71</b>	<b>Maximum E.R.P./E.I.R.P. (W)</b>		<b>Emission Designator (99%OBW)</b>	
BW(MHz)	QPSK	16QAM	QPSK	16QAM
20	0.143	0.115	18M0G7D	18M0W7D
15	0.141	0.113	13M5G7D	13M5W7D
10	0.137	0.110	9M04G7D	9M00W7D
5	0.134	0.108	4M50G7D	4M51W7D



## 1.4. Test Standards and Results

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

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

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

Section	Description	Test Date	Test Engineer	Result	Method Determination /Remark
2.1046 22.913(a)(2) 24.232(c) 27.50(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.	Nov 08&10, 2021 Nov 01, 2022	Tan Xiaowei Li Huaijie	PASS	No deviation
2.1049	Occupied Bandwidth	Nov 09&11, 2021 Nov 01, 2022	Li Huaijie	PASS	No deviation
2.1055 22.355 24.235 27.54	Frequency Stability	Nov 10, 2021 Nov 01, 2022	Li Huaijie	PASS	No deviation
24.232(d), 27.50(d)(5)	Peak to Average Radio	Nov 09&11, 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	Nov 10&11, 2021 Nov 01, 2022	Li Huaijie	PASS	No deviation
2.1051 22.917(a)	Band Edge	Nov 08&11, 2021 Nov 01, 2022	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	Nov 09, 2021 Oct 26, 2022	Huang Zhiye	PASS	No deviation
<p><b>Note 1:</b> The test results of these test items in this report refer to the test report (Report No.: SZ21110256W05).</p> <p><b>Note 2:</b> The tests were performed according to the method of measurements prescribed in KDB971168 D01 v03 and ANSI/TIA-603-E-2016.</p> <p><b>Note 3:</b> 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.</p> <p><b>Note 4:</b> 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.</p> <p><b>Note 5:</b> When the test result is a critical value, we will use the measurement uncertainty give the judgment result based on the 95% confidence intervals.</p>					

### 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.

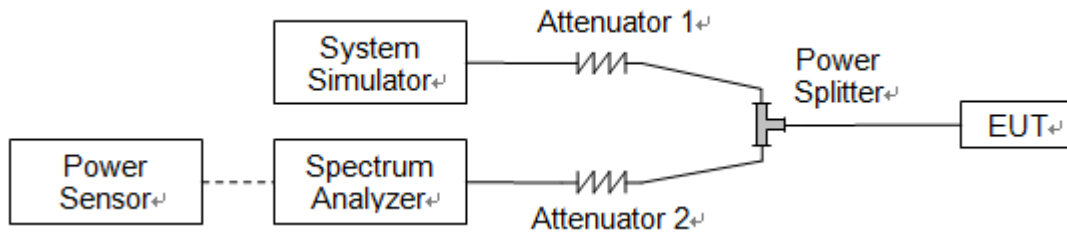
According to FCC section 27.50 (d)(4) for LTE Band 4/66, Fixed, mobile and portable (hand-held) stations in the 1710-1755MHz band are limited to 1wat E.I.R.P.

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 12/17/71, Portable stations (hand-held devices) operating in the 704-716MHz band are limited to 3watts E.R.P.

### 2.1.2. Test Description



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

### 2.1.3. Test Procedure

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

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

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

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

<b>LTE Band 2</b>						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				18700	18900	19100
Frequency (MHz)				1860	1880	1900
20	QPSK	1	0	20.70	20.88	20.86
20	QPSK	1	49	20.41	20.86	20.43
20	QPSK	1	99	20.38	20.53	20.47
20	QPSK	50	0	19.70	19.89	19.69
20	QPSK	50	24	19.74	19.65	19.48
20	QPSK	50	50	19.65	19.73	19.62
20	QPSK	100	0	19.75	19.83	19.47
20	16QAM	1	0	20.37	20.03	20.24
20	16QAM	1	49	20.17	19.93	20.00
20	16QAM	1	99	20.23	19.95	20.07
20	16QAM	50	0	18.52	18.65	18.54
20	16QAM	50	24	18.54	18.55	18.49
20	16QAM	50	50	18.96	18.58	18.46
20	16QAM	100	0	18.91	18.59	18.54



LTE Band 2						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				18675	18900	19125
Frequency (MHz)				1857.5	1880	1902.5
15	QPSK	1	0	20.67	20.85	20.83
15	QPSK	1	37	20.38	20.83	20.40
15	QPSK	1	74	20.35	20.50	20.44
15	QPSK	36	0	19.67	19.86	19.66
15	QPSK	36	20	19.71	19.62	19.45
15	QPSK	36	39	19.62	19.70	19.59
15	QPSK	75	0	19.72	19.80	19.44
15	16QAM	1	0	20.34	20.00	20.21
15	16QAM	1	37	20.14	19.90	19.97
15	16QAM	1	74	20.20	19.92	20.04
15	16QAM	36	0	18.49	18.62	18.51
15	16QAM	36	20	18.51	18.52	18.46
15	16QAM	36	39	18.93	18.55	18.43
15	16QAM	75	0	18.88	18.56	18.51



LTE Band 2						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				18650	18900	19150
Frequency (MHz)				1855	1880	1905
10	QPSK	1	0	20.64	20.82	20.80
10	QPSK	1	25	20.35	20.80	20.37
10	QPSK	1	49	20.32	20.47	20.41
10	QPSK	25	0	19.64	19.83	19.63
10	QPSK	25	12	19.68	19.59	19.42
10	QPSK	25	25	19.59	19.67	19.56
10	QPSK	50	0	19.69	19.77	19.41
10	16QAM	1	0	20.31	19.97	20.18
10	16QAM	1	25	20.11	19.87	19.94
10	16QAM	1	49	20.17	19.89	20.01
10	16QAM	25	0	18.46	18.59	18.48
10	16QAM	25	12	18.48	18.49	18.43
10	16QAM	25	25	18.90	18.52	18.40
10	16QAM	50	0	18.85	18.53	18.48



LTE Band 2						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				18625	18900	19175
Frequency (MHz)				1852.5	1880	1907.5
5	QPSK	1	0	20.59	20.77	20.75
5	QPSK	1	12	20.30	20.75	20.32
5	QPSK	1	24	20.27	20.42	20.36
5	QPSK	12	0	19.59	19.78	19.58
5	QPSK	12	7	19.63	19.54	19.37
5	QPSK	12	13	19.54	19.62	19.51
5	QPSK	25	0	19.64	19.72	19.36
5	16QAM	1	0	20.26	19.92	20.13
5	16QAM	1	12	20.06	19.82	19.89
5	16QAM	1	24	20.12	19.84	19.96
5	16QAM	12	0	18.41	18.54	18.43
5	16QAM	12	7	18.43	18.44	18.38
5	16QAM	12	13	18.85	18.47	18.35
5	16QAM	25	0	18.80	18.48	18.43



LTE Band 2						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				18615	18900	19185
Frequency (MHz)				1851.5	1880	1908.5
3	QPSK	1	0	20.57	20.75	20.73
3	QPSK	1	8	20.28	20.73	20.30
3	QPSK	1	14	20.25	20.40	20.34
3	QPSK	8	0	19.57	19.76	19.56
3	QPSK	8	4	19.61	19.52	19.35
3	QPSK	8	7	19.52	19.60	19.49
3	QPSK	15	0	19.62	19.70	19.34
3	16QAM	1	0	20.24	19.90	20.11
3	16QAM	1	8	20.04	19.80	19.87
3	16QAM	1	14	20.10	19.82	19.94
3	16QAM	8	0	18.39	18.52	18.41
3	16QAM	8	4	18.41	18.42	18.36
3	16QAM	8	7	18.83	18.45	18.33
3	16QAM	15	0	18.78	18.46	18.41





LTE Band 2						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				18607	18900	19193
Frequency (MHz)				1850.7	1880	1909.3
1.4	QPSK	1	0	20.54	20.72	20.70
1.4	QPSK	1	3	20.25	20.70	20.27
1.4	QPSK	1	5	20.22	20.37	20.31
1.4	QPSK	3	0	19.54	19.73	19.53
1.4	QPSK	3	1	19.58	19.49	19.32
1.4	QPSK	3	3	19.49	19.57	19.46
1.4	QPSK	6	0	19.59	19.67	19.31
1.4	16QAM	1	0	20.21	19.87	20.08
1.4	16QAM	1	3	20.01	19.77	19.84
1.4	16QAM	1	5	20.07	19.79	19.91
1.4	16QAM	3	0	18.36	18.49	18.38
1.4	16QAM	3	1	18.38	18.39	18.33
1.4	16QAM	3	3	18.80	18.42	18.30
1.4	16QAM	6	0	18.75	18.43	18.38



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	22.37	22.78	22.73
20	QPSK	1	49	22.55	22.44	22.41
20	QPSK	1	99	22.34	22.42	22.51
20	QPSK	50	0	21.66	21.92	21.48
20	QPSK	50	24	21.46	21.63	21.53
20	QPSK	50	50	21.45	21.72	21.74
20	QPSK	100	0	21.22	21.52	21.46
20	16QAM	1	0	22.29	22.14	22.21
20	16QAM	1	49	22.14	22.13	22.11
20	16QAM	1	99	22.18	22.10	21.99
20	16QAM	50	0	20.66	20.50	20.57
20	16QAM	50	24	20.79	20.53	20.45
20	16QAM	50	50	20.48	20.37	20.52
20	16QAM	100	0	20.97	20.52	20.48



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	22.34	22.75	22.70
15	QPSK	1	37	22.52	22.41	22.38
15	QPSK	1	74	22.31	22.39	22.48
15	QPSK	36	0	21.63	21.89	21.45
15	QPSK	36	20	21.43	21.60	21.50
15	QPSK	36	39	21.42	21.69	21.71
15	QPSK	75	0	21.49	21.19	21.43
15	16QAM	1	0	22.26	22.11	22.18
15	16QAM	1	37	22.11	22.10	22.08
15	16QAM	1	74	22.15	22.07	21.96
15	16QAM	36	0	20.63	20.47	20.54
15	16QAM	36	20	20.76	20.50	20.42
15	16QAM	36	39	20.45	20.34	20.49
15	16QAM	75	0	20.94	20.49	20.45



LTE Band 4						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20000	20175	20350
Frequency (MHz)				1715	1732.5	1750
10	QPSK	1	0	22.29	22.70	22.65
10	QPSK	1	25	22.47	22.36	22.33
10	QPSK	1	49	22.26	22.34	22.43
10	QPSK	25	0	21.58	21.84	21.40
10	QPSK	25	12	21.38	21.55	21.45
10	QPSK	25	25	21.37	21.64	21.66
10	QPSK	50	0	21.44	21.14	21.38
10	16QAM	1	0	22.21	22.06	22.13
10	16QAM	1	25	22.06	22.05	22.03
10	16QAM	1	49	22.10	22.02	21.91
10	16QAM	25	0	20.58	20.42	20.49
10	16QAM	25	12	20.71	20.45	20.37
10	16QAM	25	25	20.40	20.29	20.44
10	16QAM	50	0	20.89	20.44	20.40



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	22.24	22.65	22.60
5	QPSK	1	12	22.42	22.31	22.28
5	QPSK	1	24	22.21	22.29	22.38
5	QPSK	12	0	21.53	21.79	21.35
5	QPSK	12	7	21.33	21.50	21.40
5	QPSK	12	13	21.32	21.59	21.61
5	QPSK	25	0	21.39	21.09	21.33
5	16QAM	1	0	22.16	22.01	22.08
5	16QAM	1	12	22.01	22.00	21.98
5	16QAM	1	24	22.05	21.97	21.86
5	16QAM	12	0	20.53	20.37	20.44
5	16QAM	12	7	20.66	20.40	20.32
5	16QAM	12	13	20.35	20.24	20.39
5	16QAM	25	0	20.84	20.39	20.35



LTE Band 4						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				19965	20175	20385
Frequency (MHz)				1711.5	1732.5	1753.5
3	QPSK	1	0	22.21	22.62	22.57
3	QPSK	1	8	22.39	22.28	22.25
3	QPSK	1	14	22.18	22.26	22.35
3	QPSK	8	0	21.50	21.76	21.32
3	QPSK	8	4	21.30	21.47	21.37
3	QPSK	8	7	21.29	21.56	21.58
3	QPSK	15	0	21.36	21.06	21.30
3	16QAM	1	0	22.13	21.98	22.05
3	16QAM	1	8	21.98	21.97	21.95
3	16QAM	1	14	22.02	21.94	21.83
3	16QAM	8	0	20.50	20.34	20.41
3	16QAM	8	4	20.63	20.37	20.29
3	16QAM	8	7	20.32	20.21	20.36
3	16QAM	15	0	20.81	20.36	20.32



LTE Band 4						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				19957	20175	20393
Frequency (MHz)				1710.7	1732.5	1754.3
1.4	QPSK	1	0	22.18	22.59	22.54
1.4	QPSK	1	3	22.36	22.25	22.22
1.4	QPSK	1	5	22.15	22.23	22.32
1.4	QPSK	3	0	21.47	21.73	21.29
1.4	QPSK	3	1	21.27	21.44	21.34
1.4	QPSK	3	3	21.26	21.53	21.55
1.4	QPSK	6	0	21.33	21.03	21.27
1.4	16QAM	1	0	22.10	21.95	22.02
1.4	16QAM	1	3	21.95	21.94	21.92
1.4	16QAM	1	5	21.99	21.91	21.80
1.4	16QAM	3	0	20.47	20.31	20.38
1.4	16QAM	3	1	20.60	20.34	20.26
1.4	16QAM	3	3	20.29	20.18	20.33
1.4	16QAM	6	0	20.78	20.33	20.29



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	23.38	23.76	23.74
10	QPSK	1	25	23.28	23.49	23.27
10	QPSK	1	49	23.31	23.32	23.31
10	QPSK	25	0	22.45	22.66	22.34
10	QPSK	25	12	22.32	22.26	22.31
10	QPSK	25	25	22.63	22.65	22.16
10	QPSK	50	0	22.29	22.33	22.31
10	16QAM	1	0	22.66	22.85	23.09
10	16QAM	1	25	22.67	22.82	22.69
10	16QAM	1	49	22.73	22.68	22.87
10	16QAM	25	0	21.68	21.22	21.22
10	16QAM	25	12	21.70	21.64	21.32
10	16QAM	25	25	21.63	21.46	21.28
10	16QAM	50	0	21.69	21.61	21.36





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	23.34	23.73	23.71
5	QPSK	1	12	23.25	23.46	23.24
5	QPSK	1	24	23.28	23.29	23.28
5	QPSK	12	0	22.42	22.63	22.31
5	QPSK	12	7	22.29	22.23	22.28
5	QPSK	12	13	22.60	22.62	22.13
5	QPSK	25	0	22.26	22.30	22.28
5	16QAM	1	0	22.63	22.82	23.06
5	16QAM	1	12	22.64	22.79	22.66
5	16QAM	1	24	22.70	22.65	22.84
5	16QAM	12	0	21.65	21.19	21.19
5	16QAM	12	7	21.67	21.61	21.29
5	16QAM	12	13	21.60	21.43	21.25
5	16QAM	25	0	21.66	21.58	21.33



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	23.29	23.67	23.65
3	QPSK	1	8	23.19	23.40	23.18
3	QPSK	1	14	23.22	23.23	23.22
3	QPSK	8	0	22.36	22.57	22.25
3	QPSK	8	4	22.23	22.17	22.22
3	QPSK	8	7	22.54	22.56	22.07
3	QPSK	15	0	22.20	22.24	22.22
3	16QAM	1	0	22.57	22.76	23.00
3	16QAM	1	8	22.58	22.73	22.60
3	16QAM	1	14	22.64	22.59	22.78
3	16QAM	8	0	21.59	21.13	21.13
3	16QAM	8	4	21.61	21.55	21.23
3	16QAM	8	7	21.54	21.37	21.19
3	16QAM	15	0	21.60	21.52	21.27



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	23.26	23.64	23.62
1.4	QPSK	1	3	23.16	23.37	23.15
1.4	QPSK	1	5	23.19	23.20	23.19
1.4	QPSK	3	0	22.33	22.54	22.22
1.4	QPSK	3	1	22.20	22.14	22.19
1.4	QPSK	3	3	22.51	22.53	22.04
1.4	QPSK	6	0	22.17	22.21	22.19
1.4	16QAM	1	0	22.54	22.73	22.97
1.4	16QAM	1	3	22.55	22.70	22.57
1.4	16QAM	1	5	22.61	22.56	22.75
1.4	16QAM	3	0	21.56	21.10	21.10
1.4	16QAM	3	1	21.58	21.52	21.20
1.4	16QAM	3	3	21.51	21.34	21.16
1.4	16QAM	6	0	21.57	21.49	21.24



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	21.80	21.95	21.51
20	QPSK	1	49	21.67	21.64	21.80
20	QPSK	1	99	21.91	21.69	21.77
20	QPSK	50	0	20.78	21.14	20.86
20	QPSK	50	24	20.75	21.07	20.72
20	QPSK	50	50	21.06	20.71	20.73
20	QPSK	100	0	20.72	20.76	20.71
20	16QAM	1	0	21.29	21.17	21.14
20	16QAM	1	49	21.44	21.47	21.19
20	16QAM	1	99	21.61	21.24	21.16
20	16QAM	50	0	19.90	19.85	19.93
20	16QAM	50	24	19.97	19.78	19.96
20	16QAM	50	50	20.05	20.16	19.85
20	16QAM	100	0	19.84	19.77	19.92



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	21.77	21.92	21.48
15	QPSK	1	37	21.64	21.61	21.77
15	QPSK	1	74	21.88	21.66	21.74
15	QPSK	36	0	20.75	21.11	20.83
15	QPSK	36	20	20.72	21.04	20.69
15	QPSK	36	39	21.03	20.68	20.70
15	QPSK	75	0	20.69	20.73	20.68
15	16QAM	1	0	21.26	21.14	21.11
15	16QAM	1	37	21.41	21.44	21.16
15	16QAM	1	74	21.58	21.21	21.13
15	16QAM	36	0	19.87	19.82	19.90
15	16QAM	36	20	19.94	19.75	19.93
15	16QAM	36	39	20.02	20.13	19.82
15	16QAM	75	0	19.81	19.74	19.89



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	21.74	21.89	21.45
10	QPSK	1	25	21.61	21.58	21.74
10	QPSK	1	49	21.85	21.63	21.71
10	QPSK	25	0	20.72	21.08	20.80
10	QPSK	25	12	20.69	21.01	20.66
10	QPSK	25	25	21.00	20.65	20.67
10	QPSK	50	0	20.66	20.70	20.65
10	16QAM	1	0	21.23	21.11	21.08
10	16QAM	1	25	21.38	21.41	21.13
10	16QAM	1	49	21.55	21.18	21.10
10	16QAM	25	0	19.84	19.79	19.87
10	16QAM	25	12	19.91	19.72	19.90
10	16QAM	25	25	19.99	20.10	19.79
10	16QAM	50	0	19.78	19.71	19.86



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	21.69	21.84	21.40
5	QPSK	1	12	21.56	21.53	21.69
5	QPSK	1	24	21.80	21.58	21.66
5	QPSK	12	0	20.67	21.03	20.75
5	QPSK	12	7	20.64	20.96	20.61
5	QPSK	12	13	20.95	20.60	20.62
5	QPSK	25	0	20.61	20.65	20.60
5	16QAM	1	0	21.18	21.06	21.03
5	16QAM	1	12	21.33	21.36	21.08
5	16QAM	1	24	21.50	21.13	21.05
5	16QAM	12	0	19.79	19.74	19.82
5	16QAM	12	7	19.86	19.67	19.85
5	16QAM	12	13	19.94	20.05	19.74
5	16QAM	25	0	19.73	19.66	19.81



LTE Band 12						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				23060	23095	23130
Frequency (MHz)				704	707.5	711
10	QPSK	1	0	22.66	22.86	22.65
10	QPSK	1	25	22.57	22.68	22.61
10	QPSK	1	49	22.51	22.59	22.84
10	QPSK	25	0	21.64	21.96	21.78
10	QPSK	25	12	21.75	21.83	21.49
10	QPSK	25	25	21.80	21.94	21.60
10	QPSK	50	0	21.77	21.81	21.48
10	16QAM	1	0	22.09	21.94	21.96
10	16QAM	1	25	21.88	22.33	21.87
10	16QAM	1	49	22.27	22.20	22.28
10	16QAM	25	0	20.67	20.78	20.76
10	16QAM	25	12	21.13	20.65	21.04
10	16QAM	25	25	20.69	21.04	20.79
10	16QAM	50	0	21.08	20.61	20.98





LTE Band 12						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				23035	23095	23155
Frequency (MHz)				701.5	707.5	713.5
5	QPSK	1	0	22.61	22.81	22.60
5	QPSK	1	12	22.52	22.63	22.56
5	QPSK	1	24	22.46	22.54	22.79
5	QPSK	12	0	21.59	21.91	21.73
5	QPSK	12	7	21.70	21.78	21.44
5	QPSK	12	13	21.75	21.89	21.55
5	QPSK	25	0	21.72	21.76	21.43
5	16QAM	1	0	22.04	21.89	21.91
5	16QAM	1	12	21.83	22.28	21.82
5	16QAM	1	24	22.22	22.15	22.23
5	16QAM	12	0	20.62	20.73	20.71
5	16QAM	12	7	21.08	20.60	20.99
5	16QAM	12	13	20.64	20.99	20.74
5	16QAM	25	0	21.03	20.56	20.93



LTE Band 12						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				23025	23095	23165
Frequency (MHz)				700.5	707.5	714.5
3	QPSK	1	0	22.64	22.84	22.63
3	QPSK	1	8	22.55	22.66	22.59
3	QPSK	1	14	22.49	22.57	22.82
3	QPSK	8	0	21.62	21.94	21.76
3	QPSK	8	4	21.73	21.81	21.47
3	QPSK	8	7	21.78	21.92	21.58
3	QPSK	15	0	21.75	21.79	21.46
3	16QAM	1	0	22.07	21.92	21.94
3	16QAM	1	8	21.86	22.31	21.85
3	16QAM	1	14	22.25	22.18	22.26
3	16QAM	8	0	20.65	20.76	20.74
3	16QAM	8	4	21.11	20.63	21.02
3	16QAM	8	7	20.67	21.02	20.77
3	16QAM	15	0	21.06	20.59	20.96



LTE Band 12						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				23017	23095	23173
Frequency (MHz)				699.7	707.5	715.3
1.4	QPSK	1	0	22.56	22.76	22.55
1.4	QPSK	1	3	22.47	22.58	22.51
1.4	QPSK	1	5	22.41	22.49	22.74
1.4	QPSK	3	0	21.54	21.86	21.68
1.4	QPSK	3	1	21.65	21.73	21.39
1.4	QPSK	3	3	21.70	21.84	21.50
1.4	QPSK	6	0	21.67	21.71	21.38
1.4	16QAM	1	0	21.99	21.84	21.86
1.4	16QAM	1	3	21.78	22.23	21.77
1.4	16QAM	1	5	22.17	22.10	22.18
1.4	16QAM	3	0	20.57	20.68	20.66
1.4	16QAM	3	1	21.03	20.55	20.94
1.4	16QAM	3	3	20.59	20.94	20.69
1.4	16QAM	6	0	20.98	20.51	20.88



LTE Band 17						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				23780	23790	23800
Frequency (MHz)				709	710	711
10	QPSK	1	0	22.42	22.91	22.69
10	QPSK	1	25	22.56	22.54	22.73
10	QPSK	1	49	22.74	22.72	22.89
10	QPSK	25	0	21.62	21.90	21.82
10	QPSK	25	12	21.54	21.45	21.85
10	QPSK	25	25	21.48	21.58	21.86
10	QPSK	50	0	21.73	21.78	21.62
10	16QAM	1	0	22.22	22.15	22.10
10	16QAM	1	25	22.06	22.07	22.37
10	16QAM	1	49	22.37	22.18	22.41
10	16QAM	25	0	20.61	20.66	20.67
10	16QAM	25	12	20.63	21.10	21.09
10	16QAM	25	25	20.68	20.93	20.86
10	16QAM	50	0	20.60	21.03	21.04



LTE Band 17						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				23755	23790	23825
Frequency (MHz)				706.5	710	713.5
5	QPSK	1	0	22.37	22.86	22.64
5	QPSK	1	12	22.51	22.49	22.68
5	QPSK	1	24	22.69	22.67	22.84
5	QPSK	12	0	21.57	21.85	21.77
5	QPSK	12	7	21.49	21.40	21.80
5	QPSK	12	13	21.43	21.53	21.81
5	QPSK	25	0	21.68	21.73	21.57
5	16QAM	1	0	22.17	22.10	22.05
5	16QAM	1	12	22.01	22.02	22.32
5	16QAM	1	24	22.32	22.13	22.36
5	16QAM	12	0	20.56	20.61	20.62
5	16QAM	12	7	20.58	21.05	21.04
5	16QAM	12	13	20.63	20.88	20.81
5	16QAM	25	0	20.55	20.98	20.99



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	22.57	22.80	22.71
20	QPSK	1	49	22.45	22.38	22.38
20	QPSK	1	99	22.47	22.34	22.35
20	QPSK	50	0	21.68	21.73	21.46
20	QPSK	50	24	21.52	21.39	21.50
20	QPSK	50	50	21.65	21.24	21.57
20	QPSK	100	0	21.29	21.71	21.56
20	16QAM	1	0	22.28	22.18	22.14
20	16QAM	1	49	22.25	22.07	22.02
20	16QAM	1	99	22.15	21.85	21.96
20	16QAM	50	0	20.72	20.64	20.34
20	16QAM	50	24	20.84	20.58	20.41
20	16QAM	50	50	20.43	20.47	20.76
20	16QAM	100	0	20.57	20.63	20.14



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	22.54	22.77	22.68
15	QPSK	1	37	22.42	22.35	22.35
15	QPSK	1	74	22.44	22.31	22.32
15	QPSK	36	0	21.65	21.70	21.43
15	QPSK	36	20	21.49	21.36	21.47
15	QPSK	36	39	21.62	21.21	21.54
15	QPSK	75	0	21.26	21.68	21.53
15	16QAM	1	0	22.25	22.15	22.11
15	16QAM	1	37	22.22	22.04	21.99
15	16QAM	1	74	22.12	21.82	21.93
15	16QAM	36	0	20.69	20.61	20.31
15	16QAM	36	20	20.81	20.55	20.38
15	16QAM	36	39	20.40	20.44	20.73
15	16QAM	75	0	20.54	20.60	20.11



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	22.49	22.72	22.63
10	QPSK	1	25	22.37	22.30	22.30
10	QPSK	1	49	22.39	22.26	22.27
10	QPSK	25	0	21.60	21.65	21.38
10	QPSK	25	12	21.44	21.31	21.42
10	QPSK	25	25	21.57	21.16	21.49
10	QPSK	50	0	21.21	21.63	21.48
10	16QAM	1	0	22.20	22.10	22.06
10	16QAM	1	25	22.17	21.99	21.94
10	16QAM	1	49	22.07	21.77	21.88
10	16QAM	25	0	20.64	20.56	20.26
10	16QAM	25	12	20.76	20.50	20.33
10	16QAM	25	25	20.35	20.39	20.68
10	16QAM	50	0	20.49	20.55	20.06





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				131997	132322	132647
Frequency (MHz)				1712.5	1745	1777.5
5	QPSK	1	0	22.46	22.69	22.60
5	QPSK	1	12	22.34	22.27	22.27
5	QPSK	1	24	22.36	22.23	22.24
5	QPSK	12	0	21.57	21.62	21.35
5	QPSK	12	7	21.41	21.28	21.39
5	QPSK	12	13	21.54	21.13	21.46
5	QPSK	25	0	21.18	21.60	21.45
5	16QAM	1	0	22.17	22.07	22.03
5	16QAM	1	12	22.14	21.96	21.91
5	16QAM	1	24	22.04	21.74	21.85
5	16QAM	12	0	20.61	20.53	20.23
5	16QAM	12	7	20.73	20.47	20.30
5	16QAM	12	13	20.32	20.36	20.65
5	16QAM	25	0	20.46	20.52	20.03



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	22.41	22.64	22.55
3	QPSK	1	8	22.29	22.22	22.22
3	QPSK	1	14	22.31	22.18	22.19
3	QPSK	8	0	21.52	21.57	21.30
3	QPSK	8	4	21.36	21.23	21.34
3	QPSK	8	7	21.49	21.08	21.41
3	QPSK	15	0	21.13	21.55	21.40
3	16QAM	1	0	22.12	22.02	21.98
3	16QAM	1	8	22.09	21.91	21.86
3	16QAM	1	14	21.99	21.69	21.80
3	16QAM	8	0	20.56	20.48	20.18
3	16QAM	8	4	20.68	20.42	20.25
3	16QAM	8	7	20.27	20.31	20.60
3	16QAM	15	0	20.41	20.47	19.98



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	22.38	22.61	22.52
1.4	QPSK	1	3	22.26	22.19	22.19
1.4	QPSK	1	5	22.28	22.15	22.16
1.4	QPSK	3	0	21.49	21.54	21.27
1.4	QPSK	3	1	21.33	21.20	21.31
1.4	QPSK	3	3	21.46	21.05	21.38
1.4	QPSK	6	0	21.10	21.52	21.37
1.4	16QAM	1	0	22.09	21.99	21.95
1.4	16QAM	1	3	22.06	21.88	21.83
1.4	16QAM	1	5	21.96	21.66	21.77
1.4	16QAM	3	0	20.53	20.45	20.15
1.4	16QAM	3	1	20.65	20.39	20.22
1.4	16QAM	3	3	20.24	20.28	20.57
1.4	16QAM	6	0	20.38	20.44	19.95



LTE Band 71						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				133222	133322	133372
Frequency (MHz)				673	683	688
20	QPSK	1	0	22.93	23.01	22.96
20	QPSK	1	49	22.90	22.93	22.88
20	QPSK	1	99	22.83	22.87	22.91
20	QPSK	50	0	21.93	21.95	21.91
20	QPSK	50	24	21.86	21.83	21.86
20	QPSK	50	50	21.80	21.90	21.76
20	QPSK	100	0	21.77	21.81	21.69
20	16QAM	1	0	22.05	22.07	22.03
20	16QAM	1	49	21.98	21.95	21.98
20	16QAM	1	99	21.92	22.02	21.88
20	16QAM	50	0	20.83	20.87	20.75
20	16QAM	50	24	20.92	20.89	20.92
20	16QAM	50	50	20.86	20.96	20.82
20	16QAM	100	0	20.83	20.87	20.75



LTE Band 71						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				133197	133297	133397
Frequency (MHz)				670.8	680.5	690.5
15	QPSK	1	0	22.85	22.93	22.88
15	QPSK	1	37	22.82	22.85	22.80
15	QPSK	1	74	22.75	22.79	22.83
15	QPSK	36	0	21.85	21.87	21.83
15	QPSK	36	20	21.78	21.75	21.78
15	QPSK	36	39	21.72	21.82	21.68
15	QPSK	75	0	21.69	21.73	21.61
15	16QAM	1	0	21.97	21.99	21.95
15	16QAM	1	37	21.90	21.87	21.90
15	16QAM	1	74	21.84	21.94	21.80
15	16QAM	36	0	20.75	20.79	20.67
15	16QAM	36	20	20.84	20.81	20.84
15	16QAM	36	39	20.78	20.88	20.74
15	16QAM	75	0	20.75	20.79	20.67



LTE Band 71						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				133172	133272	133422
Frequency (MHz)				668	678	693
10	QPSK	1	0	22.74	22.82	22.77
10	QPSK	1	25	22.71	22.74	22.69
10	QPSK	1	49	22.64	22.68	22.72
10	QPSK	25	0	21.74	21.76	21.72
10	QPSK	25	12	21.67	21.64	21.67
10	QPSK	25	25	21.61	21.71	21.57
10	QPSK	50	0	21.58	21.62	21.50
10	16QAM	1	0	21.86	21.88	21.84
10	16QAM	1	25	21.79	21.76	21.79
10	16QAM	1	49	21.73	21.83	21.69
10	16QAM	25	0	20.64	20.68	20.56
10	16QAM	25	12	20.73	20.70	20.73
10	16QAM	25	25	20.67	20.77	20.63
10	16QAM	50	0	20.64	20.68	20.56



LTE Band 71						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				133147	133247	133447
Frequency (MHz)				665.5	675.5	695.5
5	QPSK	1	0	22.65	22.73	22.68
5	QPSK	1	12	22.62	22.65	22.60
5	QPSK	1	24	22.55	22.59	22.63
5	QPSK	12	0	21.65	21.67	21.63
5	QPSK	12	7	21.58	21.55	21.58
5	QPSK	12	13	21.52	21.62	21.48
5	QPSK	25	0	21.49	21.53	21.41
5	16QAM	1	0	21.77	21.79	21.75
5	16QAM	1	12	21.70	21.67	21.70
5	16QAM	1	24	21.64	21.74	21.60
5	16QAM	12	0	20.55	20.59	20.47
5	16QAM	12	7	20.64	20.61	20.64
5	16QAM	12	13	20.58	20.68	20.54
5	16QAM	25	0	20.55	20.59	20.47



**Effective Radiated Power and Effective Isotropic Radiated Power**

LTE Band 2				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				18700		18900		19100	
Frequency (MHz)				1860		1880		1900	
				dBm	W	dBm	W	dBm	W
20	QPSK	1	0	21.20	0.132	21.38	0.137	21.36	0.137
20	QPSK	1	49	20.91	0.123	21.36	0.137	20.93	0.124
20	QPSK	1	99	20.88	0.122	21.03	0.127	20.97	0.125
20	QPSK	50	0	20.20	0.105	20.39	0.109	20.19	0.104
20	QPSK	50	24	20.24	0.106	20.15	0.104	19.98	0.100
20	QPSK	50	50	20.15	0.104	20.23	0.105	20.12	0.103
20	QPSK	100	0	20.25	0.106	20.33	0.108	19.97	0.099
20	16QAM	1	0	20.87	0.122	20.53	0.113	20.74	0.119
20	16QAM	1	49	20.67	0.117	20.43	0.110	20.50	0.112
20	16QAM	1	99	20.73	0.118	20.45	0.111	20.57	0.114
20	16QAM	50	0	19.02	0.080	19.15	0.082	19.04	0.080
20	16QAM	50	24	19.04	0.080	19.05	0.080	18.99	0.079
20	16QAM	50	50	19.46	0.088	19.08	0.081	18.96	0.079
20	16QAM	100	0	19.41	0.087	19.09	0.081	19.04	0.080





LTE Band 2				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				18675		18900		19125	
Frequency (MHz)				1857.5		1880		1902.5	
				dBm	W	dBm	W	dBm	W
15	QPSK	1	0	21.17	0.131	21.35	0.136	21.33	0.136
15	QPSK	1	37	20.88	0.122	21.33	0.136	20.90	0.123
15	QPSK	1	74	20.85	0.122	21.00	0.126	20.94	0.124
15	QPSK	36	0	20.17	0.104	20.36	0.109	20.16	0.104
15	QPSK	36	20	20.21	0.105	20.12	0.103	19.95	0.099
15	QPSK	36	39	20.12	0.103	20.20	0.105	20.09	0.102
15	QPSK	75	0	20.22	0.105	20.30	0.107	19.94	0.099
15	16QAM	1	0	20.84	0.121	20.50	0.112	20.71	0.118
15	16QAM	1	37	20.64	0.116	20.40	0.110	20.47	0.111
15	16QAM	1	74	20.70	0.117	20.42	0.110	20.54	0.113
15	16QAM	36	0	18.99	0.079	19.12	0.082	19.01	0.080
15	16QAM	36	20	19.01	0.080	19.02	0.080	18.96	0.079
15	16QAM	36	39	19.43	0.088	19.05	0.080	18.93	0.078
15	16QAM	75	0	19.38	0.087	19.06	0.081	19.01	0.080



LTE Band 2				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				18650		18900		19150	
Frequency (MHz)				1855		1880		1905	
				dBm	W	dBm	W	dBm	W
10	QPSK	1	0	21.14	0.130	21.32	0.136	21.30	0.135
10	QPSK	1	25	20.85	0.122	21.30	0.135	20.87	0.122
10	QPSK	1	49	20.82	0.121	20.97	0.125	20.91	0.123
10	QPSK	25	0	20.14	0.103	20.33	0.108	20.13	0.103
10	QPSK	25	12	20.18	0.104	20.09	0.102	19.92	0.098
10	QPSK	25	25	20.09	0.102	20.17	0.104	20.06	0.101
10	QPSK	50	0	20.19	0.104	20.27	0.106	19.91	0.098
10	16QAM	1	0	20.81	0.121	20.47	0.111	20.68	0.117
10	16QAM	1	25	20.61	0.115	20.37	0.109	20.44	0.111
10	16QAM	1	49	20.67	0.117	20.39	0.109	20.51	0.112
10	16QAM	25	0	18.96	0.079	19.09	0.081	18.98	0.079
10	16QAM	25	12	18.98	0.079	18.99	0.079	18.93	0.078
10	16QAM	25	25	19.40	0.087	19.02	0.080	18.90	0.078
10	16QAM	50	0	19.35	0.086	19.03	0.080	18.98	0.079



LTE Band 2				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				18625		18900		19175	
Frequency (MHz)				1852.5		1880		1907.5	
				dBm	W	dBm	W	dBm	W
5	QPSK	1	0	21.09	0.129	21.27	0.134	21.25	0.133
5	QPSK	1	12	20.80	0.120	21.25	0.133	20.82	0.121
5	QPSK	1	24	20.77	0.119	20.92	0.124	20.86	0.122
5	QPSK	12	0	20.09	0.102	20.28	0.107	20.08	0.102
5	QPSK	12	7	20.13	0.103	20.04	0.101	19.87	0.097
5	QPSK	12	13	20.04	0.101	20.12	0.103	20.01	0.100
5	QPSK	25	0	20.14	0.103	20.22	0.105	19.86	0.097
5	16QAM	1	0	20.76	0.119	20.42	0.110	20.63	0.116
5	16QAM	1	12	20.56	0.114	20.32	0.108	20.39	0.109
5	16QAM	1	24	20.62	0.115	20.34	0.108	20.46	0.111
5	16QAM	12	0	18.91	0.078	19.04	0.080	18.93	0.078
5	16QAM	12	7	18.93	0.078	18.94	0.078	18.88	0.077
5	16QAM	12	13	19.35	0.086	18.97	0.079	18.85	0.077
5	16QAM	25	0	19.30	0.085	18.98	0.079	18.93	0.078



LTE Band 2				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				18615		18900		19185	
Frequency (MHz)				1851.5		1880		1908.5	
				dBm	W	dBm	W	dBm	W
3	QPSK	1	0	21.07	0.128	21.25	0.133	21.23	0.133
3	QPSK	1	8	20.78	0.120	21.23	0.133	20.80	0.120
3	QPSK	1	14	20.75	0.119	20.90	0.123	20.84	0.121
3	QPSK	8	0	20.07	0.102	20.26	0.106	20.06	0.101
3	QPSK	8	4	20.11	0.103	20.02	0.100	19.85	0.097
3	QPSK	8	7	20.02	0.100	20.10	0.102	19.99	0.100
3	QPSK	15	0	20.12	0.103	20.20	0.105	19.84	0.096
3	16QAM	1	0	20.74	0.119	20.40	0.110	20.61	0.115
3	16QAM	1	8	20.54	0.113	20.30	0.107	20.37	0.109
3	16QAM	1	14	20.60	0.115	20.32	0.108	20.44	0.111
3	16QAM	8	0	18.89	0.077	19.02	0.080	18.91	0.078
3	16QAM	8	4	18.91	0.078	18.92	0.078	18.86	0.077
3	16QAM	8	7	19.33	0.086	18.95	0.079	18.83	0.076
3	16QAM	15	0	19.28	0.085	18.96	0.079	18.91	0.078



LTE Band 2				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				18607		18900		19193	
Frequency (MHz)				1850.7		1880		1909.3	
				dBm	W	dBm	W	dBm	W
1.4	QPSK	1	0	21.04	0.127	21.22	0.132	21.20	0.132
1.4	QPSK	1	3	20.75	0.119	21.20	0.132	20.77	0.119
1.4	QPSK	1	5	20.72	0.118	20.87	0.122	20.81	0.121
1.4	QPSK	3	0	20.04	0.101	20.23	0.105	20.03	0.101
1.4	QPSK	3	1	20.08	0.102	19.99	0.100	19.82	0.096
1.4	QPSK	3	3	19.99	0.100	20.07	0.102	19.96	0.099
1.4	QPSK	6	0	20.09	0.102	20.17	0.104	19.81	0.096
1.4	16QAM	1	0	20.71	0.118	20.37	0.109	20.58	0.114
1.4	16QAM	1	3	20.51	0.112	20.27	0.106	20.34	0.108
1.4	16QAM	1	5	20.57	0.114	20.29	0.107	20.41	0.110
1.4	16QAM	3	0	18.86	0.077	18.99	0.079	18.88	0.077
1.4	16QAM	3	1	18.88	0.077	18.89	0.077	18.83	0.076
1.4	16QAM	3	3	19.30	0.085	18.92	0.078	18.80	0.076
1.4	16QAM	6	0	19.25	0.084	18.93	0.078	18.88	0.077



LTE Band 4				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20050		20175		20300	
Frequency (MHz)				1720		1732.5		1745	
				dBm	W	dBm	W	dBm	W
20	QPSK	1	0	22.87	0.194	23.28	0.213	23.23	0.210
20	QPSK	1	49	23.05	0.202	22.94	0.197	22.91	0.195
20	QPSK	1	99	22.84	0.192	22.92	0.196	23.01	0.200
20	QPSK	50	0	22.16	0.164	22.42	0.175	21.98	0.158
20	QPSK	50	24	21.96	0.157	22.13	0.163	22.03	0.160
20	QPSK	50	50	21.95	0.157	22.22	0.167	22.24	0.167
20	QPSK	100	0	21.72	0.149	22.02	0.159	21.96	0.157
20	16QAM	1	0	22.79	0.190	22.64	0.184	22.71	0.187
20	16QAM	1	49	22.64	0.184	22.63	0.183	22.61	0.182
20	16QAM	1	99	22.68	0.185	22.60	0.182	22.49	0.177
20	16QAM	50	0	21.16	0.131	21.00	0.126	21.07	0.128
20	16QAM	50	24	21.29	0.135	21.03	0.127	20.95	0.124
20	16QAM	50	50	20.98	0.125	20.87	0.122	21.02	0.126
20	16QAM	100	0	21.47	0.140	21.02	0.126	20.98	0.125



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	22.84	0.192	23.25	0.211	23.20	0.209
15	QPSK	1	37	23.02	0.200	22.91	0.195	22.88	0.194
15	QPSK	1	74	22.81	0.191	22.89	0.195	22.98	0.199
15	QPSK	36	0	22.13	0.163	22.39	0.173	21.95	0.157
15	QPSK	36	20	21.93	0.156	22.10	0.162	22.00	0.158
15	QPSK	36	39	21.92	0.156	22.19	0.166	22.21	0.166
15	QPSK	75	0	21.99	0.158	21.69	0.148	21.93	0.156
15	16QAM	1	0	22.76	0.189	22.61	0.182	22.68	0.185
15	16QAM	1	37	22.61	0.182	22.60	0.182	22.58	0.181
15	16QAM	1	74	22.65	0.184	22.57	0.181	22.46	0.176
15	16QAM	36	0	21.13	0.130	20.97	0.125	21.04	0.127
15	16QAM	36	20	21.26	0.134	21.00	0.126	20.92	0.124
15	16QAM	36	39	20.95	0.124	20.84	0.121	20.99	0.126
15	16QAM	75	0	21.44	0.139	20.99	0.126	20.95	0.124



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	22.79	0.190	23.20	0.209	23.15	0.207
10	QPSK	1	25	22.97	0.198	22.86	0.193	22.83	0.192
10	QPSK	1	49	22.76	0.189	22.84	0.192	22.93	0.196
10	QPSK	25	0	22.08	0.161	22.34	0.171	21.90	0.155
10	QPSK	25	12	21.88	0.154	22.05	0.160	21.95	0.157
10	QPSK	25	25	21.87	0.154	22.14	0.164	22.16	0.164
10	QPSK	50	0	21.94	0.156	21.64	0.146	21.88	0.154
10	16QAM	1	0	22.71	0.187	22.56	0.180	22.63	0.183
10	16QAM	1	25	22.56	0.180	22.55	0.180	22.53	0.179
10	16QAM	1	49	22.60	0.182	22.52	0.179	22.41	0.174
10	16QAM	25	0	21.08	0.128	20.92	0.124	20.99	0.126
10	16QAM	25	12	21.21	0.132	20.95	0.124	20.87	0.122
10	16QAM	25	25	20.90	0.123	20.79	0.120	20.94	0.124
10	16QAM	50	0	21.39	0.138	20.94	0.124	20.90	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				19975		20175		20375	
Frequency (MHz)				1712.5		1732.5		1752.5	
				dBm	W	dBm	W	dBm	W
5	QPSK	1	0	22.74	0.188	23.15	0.207	23.10	0.204
5	QPSK	1	12	22.92	0.196	22.81	0.191	22.78	0.190
5	QPSK	1	24	22.71	0.187	22.79	0.190	22.88	0.194
5	QPSK	12	0	22.03	0.160	22.29	0.169	21.85	0.153
5	QPSK	12	7	21.83	0.152	22.00	0.158	21.90	0.155
5	QPSK	12	13	21.82	0.152	22.09	0.162	22.11	0.163
5	QPSK	25	0	21.89	0.155	21.59	0.144	21.83	0.152
5	16QAM	1	0	22.66	0.185	22.51	0.178	22.58	0.181
5	16QAM	1	12	22.51	0.178	22.50	0.178	22.48	0.177
5	16QAM	1	24	22.55	0.180	22.47	0.177	22.36	0.172
5	16QAM	12	0	21.03	0.127	20.87	0.122	20.94	0.124
5	16QAM	12	7	21.16	0.131	20.90	0.123	20.82	0.121
5	16QAM	12	13	20.85	0.122	20.74	0.119	20.89	0.123
5	16QAM	25	0	21.34	0.136	20.89	0.123	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				19965		20175		20385	
Frequency (MHz)				1711.5		1732.5		1753.5	
				dBm	W	dBm	W	dBm	W
3	QPSK	1	0	22.71	0.187	23.12	0.205	23.07	0.203
3	QPSK	1	8	22.89	0.195	22.78	0.190	22.75	0.188
3	QPSK	1	14	22.68	0.185	22.76	0.189	22.85	0.193
3	QPSK	8	0	22.00	0.158	22.26	0.168	21.82	0.152
3	QPSK	8	4	21.80	0.151	21.97	0.157	21.87	0.154
3	QPSK	8	7	21.79	0.151	22.06	0.161	22.08	0.161
3	QPSK	15	0	21.86	0.153	21.56	0.143	21.80	0.151
3	16QAM	1	0	22.63	0.183	22.48	0.177	22.55	0.180
3	16QAM	1	8	22.48	0.177	22.47	0.177	22.45	0.176
3	16QAM	1	14	22.52	0.179	22.44	0.175	22.33	0.171
3	16QAM	8	0	21.00	0.126	20.84	0.121	20.91	0.123
3	16QAM	8	4	21.13	0.130	20.87	0.122	20.79	0.120
3	16QAM	8	7	20.82	0.121	20.71	0.118	20.86	0.122
3	16QAM	15	0	21.31	0.135	20.86	0.122	20.82	0.121



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	22.68	0.185	23.09	0.204	23.04	0.201
1.4	QPSK	1	3	22.86	0.193	22.75	0.188	22.72	0.187
1.4	QPSK	1	5	22.65	0.184	22.73	0.187	22.82	0.191
1.4	QPSK	3	0	21.97	0.157	22.23	0.167	21.79	0.151
1.4	QPSK	3	1	21.77	0.150	21.94	0.156	21.84	0.153
1.4	QPSK	3	3	21.76	0.150	22.03	0.160	22.05	0.160
1.4	QPSK	6	0	21.83	0.152	21.53	0.142	21.77	0.150
1.4	16QAM	1	0	22.60	0.182	22.45	0.176	22.52	0.179
1.4	16QAM	1	3	22.45	0.176	22.44	0.175	22.42	0.175
1.4	16QAM	1	5	22.49	0.177	22.41	0.174	22.30	0.170
1.4	16QAM	3	0	20.97	0.125	20.81	0.121	20.88	0.122
1.4	16QAM	3	1	21.10	0.129	20.84	0.121	20.76	0.119
1.4	16QAM	3	3	20.79	0.120	20.68	0.117	20.83	0.121
1.4	16QAM	6	0	21.28	0.134	20.83	0.121	20.79	0.120



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	21.43	0.139	21.81	0.152	21.79	0.151
10	QPSK	1	25	21.33	0.136	21.54	0.143	21.32	0.136
10	QPSK	1	49	21.36	0.137	21.37	0.137	21.36	0.137
10	QPSK	25	0	20.50	0.112	20.71	0.118	20.39	0.109
10	QPSK	25	12	20.37	0.109	20.31	0.107	20.36	0.109
10	QPSK	25	25	20.68	0.117	20.70	0.117	20.21	0.105
10	QPSK	50	0	20.34	0.108	20.38	0.109	20.36	0.109
10	16QAM	1	0	20.71	0.118	20.90	0.123	21.14	0.130
10	16QAM	1	25	20.72	0.118	20.87	0.122	20.74	0.119
10	16QAM	1	49	20.78	0.120	20.73	0.118	20.92	0.124
10	16QAM	25	0	19.73	0.094	19.27	0.085	19.27	0.085
10	16QAM	25	12	19.75	0.094	19.69	0.093	19.37	0.086
10	16QAM	25	25	19.68	0.093	19.51	0.089	19.33	0.086
10	16QAM	50	0	19.74	0.094	19.66	0.092	19.41	0.087



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	21.39	0.138	21.78	0.151	21.76	0.150
5	QPSK	1	12	21.30	0.135	21.51	0.142	21.29	0.135
5	QPSK	1	24	21.33	0.136	21.34	0.136	21.33	0.136
5	QPSK	12	0	20.47	0.111	20.68	0.117	20.36	0.109
5	QPSK	12	7	20.34	0.108	20.28	0.107	20.33	0.108
5	QPSK	12	13	20.65	0.116	20.67	0.117	20.18	0.104
5	QPSK	25	0	20.31	0.107	20.35	0.108	20.33	0.108
5	16QAM	1	0	20.68	0.117	20.87	0.122	21.11	0.129
5	16QAM	1	12	20.69	0.117	20.84	0.121	20.71	0.118
5	16QAM	1	24	20.75	0.119	20.70	0.117	20.89	0.123
5	16QAM	12	0	19.70	0.093	19.24	0.084	19.24	0.084
5	16QAM	12	7	19.72	0.094	19.66	0.092	19.34	0.086
5	16QAM	12	13	19.65	0.092	19.48	0.089	19.30	0.085
5	16QAM	25	0	19.71	0.094	19.63	0.092	19.38	0.087



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	21.34	0.136	21.72	0.149	21.70	0.148
3	QPSK	1	8	21.24	0.133	21.45	0.140	21.23	0.133
3	QPSK	1	14	21.27	0.134	21.28	0.134	21.27	0.134
3	QPSK	8	0	20.41	0.110	20.62	0.115	20.30	0.107
3	QPSK	8	4	20.28	0.107	20.22	0.105	20.27	0.106
3	QPSK	8	7	20.59	0.115	20.61	0.115	20.12	0.103
3	QPSK	15	0	20.25	0.106	20.29	0.107	20.27	0.106
3	16QAM	1	0	20.62	0.115	20.81	0.121	21.05	0.127
3	16QAM	1	8	20.63	0.116	20.78	0.120	20.65	0.116
3	16QAM	1	14	20.69	0.117	20.64	0.116	20.83	0.121
3	16QAM	8	0	19.64	0.092	19.18	0.083	19.18	0.083
3	16QAM	8	4	19.66	0.092	19.60	0.091	19.28	0.085
3	16QAM	8	7	19.59	0.091	19.42	0.087	19.24	0.084
3	16QAM	15	0	19.65	0.092	19.57	0.091	19.32	0.086



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	21.31	0.135	21.69	0.148	21.67	0.147
1.4	QPSK	1	3	21.21	0.132	21.42	0.139	21.20	0.132
1.4	QPSK	1	5	21.24	0.133	21.25	0.133	21.24	0.133
1.4	QPSK	3	0	20.38	0.109	20.59	0.115	20.27	0.106
1.4	QPSK	3	1	20.25	0.106	20.19	0.104	20.24	0.106
1.4	QPSK	3	3	20.56	0.114	20.58	0.114	20.09	0.102
1.4	QPSK	6	0	20.22	0.105	20.26	0.106	20.24	0.106
1.4	16QAM	1	0	20.59	0.115	20.78	0.120	21.02	0.126
1.4	16QAM	1	3	20.60	0.115	20.75	0.119	20.62	0.115
1.4	16QAM	1	5	20.66	0.116	20.61	0.115	20.80	0.120
1.4	16QAM	3	0	19.61	0.091	19.15	0.082	19.15	0.082
1.4	16QAM	3	1	19.63	0.092	19.57	0.091	19.25	0.084
1.4	16QAM	3	3	19.56	0.090	19.39	0.087	19.21	0.083
1.4	16QAM	6	0	19.62	0.092	19.54	0.090	19.29	0.085



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	22.50	0.178	22.65	0.184	22.21	0.166
20	QPSK	1	49	22.37	0.173	22.34	0.171	22.50	0.178
20	QPSK	1	99	22.61	0.182	22.39	0.173	22.47	0.177
20	QPSK	50	0	21.48	0.141	21.84	0.153	21.56	0.143
20	QPSK	50	24	21.45	0.140	21.77	0.150	21.42	0.139
20	QPSK	50	50	21.76	0.150	21.41	0.138	21.43	0.139
20	QPSK	100	0	21.42	0.139	21.46	0.140	21.41	0.138
20	16QAM	1	0	21.99	0.158	21.87	0.154	21.84	0.153
20	16QAM	1	49	22.14	0.164	22.17	0.165	21.89	0.155
20	16QAM	1	99	22.31	0.170	21.94	0.156	21.86	0.153
20	16QAM	50	0	20.60	0.115	20.55	0.114	20.63	0.116
20	16QAM	50	24	20.67	0.117	20.48	0.112	20.66	0.116
20	16QAM	50	50	20.75	0.119	20.86	0.122	20.55	0.114
20	16QAM	100	0	20.54	0.113	20.47	0.111	20.62	0.115





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	22.47	0.177	22.62	0.183	22.18	0.165
15	QPSK	1	37	22.34	0.171	22.31	0.170	22.47	0.177
15	QPSK	1	74	22.58	0.181	22.36	0.172	22.44	0.175
15	QPSK	36	0	21.45	0.140	21.81	0.152	21.53	0.142
15	QPSK	36	20	21.42	0.139	21.74	0.149	21.39	0.138
15	QPSK	36	39	21.73	0.149	21.38	0.137	21.40	0.138
15	QPSK	75	0	21.39	0.138	21.43	0.139	21.38	0.137
15	16QAM	1	0	21.96	0.157	21.84	0.153	21.81	0.152
15	16QAM	1	37	22.11	0.163	22.14	0.164	21.86	0.153
15	16QAM	1	74	22.28	0.169	21.91	0.155	21.83	0.152
15	16QAM	36	0	20.57	0.114	20.52	0.113	20.60	0.115
15	16QAM	36	20	20.64	0.116	20.45	0.111	20.63	0.116
15	16QAM	36	39	20.72	0.118	20.83	0.121	20.52	0.113
15	16QAM	75	0	20.51	0.112	20.44	0.111	20.59	0.115



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	22.44	0.175	22.59	0.182	22.15	0.164
10	QPSK	1	25	22.31	0.170	22.28	0.169	22.44	0.175
10	QPSK	1	49	22.55	0.180	22.33	0.171	22.41	0.174
10	QPSK	25	0	21.42	0.139	21.78	0.151	21.50	0.141
10	QPSK	25	12	21.39	0.138	21.71	0.148	21.36	0.137
10	QPSK	25	25	21.70	0.148	21.35	0.136	21.37	0.137
10	QPSK	50	0	21.36	0.137	21.40	0.138	21.35	0.136
10	16QAM	1	0	21.93	0.156	21.81	0.152	21.78	0.151
10	16QAM	1	25	22.08	0.161	22.11	0.163	21.83	0.152
10	16QAM	1	49	22.25	0.168	21.88	0.154	21.80	0.151
10	16QAM	25	0	20.54	0.113	20.49	0.112	20.57	0.114
10	16QAM	25	12	20.61	0.115	20.42	0.110	20.60	0.115
10	16QAM	25	25	20.69	0.117	20.80	0.120	20.49	0.112
10	16QAM	50	0	20.48	0.112	20.41	0.110	20.56	0.114



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	22.39	0.173	22.54	0.179	22.10	0.162
5	QPSK	1	12	22.26	0.168	22.23	0.167	22.39	0.173
5	QPSK	1	24	22.50	0.178	22.28	0.169	22.36	0.172
5	QPSK	12	0	21.37	0.137	21.73	0.149	21.45	0.140
5	QPSK	12	7	21.34	0.136	21.66	0.147	21.31	0.135
5	QPSK	12	13	21.65	0.146	21.30	0.135	21.32	0.136
5	QPSK	25	0	21.31	0.135	21.35	0.136	21.30	0.135
5	16QAM	1	0	21.88	0.154	21.76	0.150	21.73	0.149
5	16QAM	1	12	22.03	0.160	22.06	0.161	21.78	0.151
5	16QAM	1	24	22.20	0.166	21.83	0.152	21.75	0.150
5	16QAM	12	0	20.49	0.112	20.44	0.111	20.52	0.113
5	16QAM	12	7	20.56	0.114	20.37	0.109	20.55	0.114
5	16QAM	12	13	20.64	0.116	20.75	0.119	20.44	0.111
5	16QAM	25	0	20.43	0.110	20.36	0.109	20.51	0.112



LTE Band 12				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				23060		23095		23130	
Frequency (MHz)				704		707.5		711	
				dBm	W	dBm	W	dBm	W
10	QPSK	1	0	20.01	0.100	20.21	0.105	20.00	0.100
10	QPSK	1	25	19.92	0.098	20.03	0.101	19.96	0.099
10	QPSK	1	49	19.86	0.097	19.94	0.099	20.19	0.104
10	QPSK	25	0	18.99	0.079	19.31	0.085	19.13	0.082
10	QPSK	25	12	19.10	0.081	19.18	0.083	18.84	0.077
10	QPSK	25	25	19.15	0.082	19.29	0.085	18.95	0.079
10	QPSK	50	0	19.12	0.082	19.16	0.082	18.83	0.076
10	16QAM	1	0	19.44	0.088	19.29	0.085	19.31	0.085
10	16QAM	1	25	19.23	0.084	19.68	0.093	19.22	0.084
10	16QAM	1	49	19.62	0.092	19.55	0.090	19.63	0.092
10	16QAM	25	0	18.02	0.063	18.13	0.065	18.11	0.065
10	16QAM	25	12	18.48	0.070	18.00	0.063	18.39	0.069
10	16QAM	25	25	18.04	0.064	18.39	0.069	18.14	0.065
10	16QAM	50	0	18.43	0.070	17.96	0.063	18.33	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	19.96	0.099	20.16	0.104	19.95	0.099
5	QPSK	1	12	19.87	0.097	19.98	0.100	19.91	0.098
5	QPSK	1	24	19.81	0.096	19.89	0.097	20.14	0.103
5	QPSK	12	0	18.94	0.078	19.26	0.084	19.08	0.081
5	QPSK	12	7	19.05	0.080	19.13	0.082	18.79	0.076
5	QPSK	12	13	19.10	0.081	19.24	0.084	18.90	0.078
5	QPSK	25	0	19.07	0.081	19.11	0.081	18.78	0.076
5	16QAM	1	0	19.39	0.087	19.24	0.084	19.26	0.084
5	16QAM	1	12	19.18	0.083	19.63	0.092	19.17	0.083
5	16QAM	1	24	19.57	0.091	19.50	0.089	19.58	0.091
5	16QAM	12	0	17.97	0.063	18.08	0.064	18.06	0.064
5	16QAM	12	7	18.43	0.070	17.95	0.062	18.34	0.068
5	16QAM	12	13	17.99	0.063	18.34	0.068	18.09	0.064
5	16QAM	25	0	18.38	0.069	17.91	0.062	18.28	0.067



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	19.99	0.100	20.19	0.104	19.98	0.100
3	QPSK	1	8	19.90	0.098	20.01	0.100	19.94	0.099
3	QPSK	1	14	19.84	0.096	19.92	0.098	20.17	0.104
3	QPSK	8	0	18.97	0.079	19.29	0.085	19.11	0.081
3	QPSK	8	4	19.08	0.081	19.16	0.082	18.82	0.076
3	QPSK	8	7	19.13	0.082	19.27	0.085	18.93	0.078
3	QPSK	15	0	19.10	0.081	19.14	0.082	18.81	0.076
3	16QAM	1	0	19.42	0.087	19.27	0.085	19.29	0.085
3	16QAM	1	8	19.21	0.083	19.66	0.092	19.20	0.083
3	16QAM	1	14	19.60	0.091	19.53	0.090	19.61	0.091
3	16QAM	8	0	18.00	0.063	18.11	0.065	18.09	0.064
3	16QAM	8	4	18.46	0.070	17.98	0.063	18.37	0.069
3	16QAM	8	7	18.02	0.063	18.37	0.069	18.12	0.065
3	16QAM	15	0	18.41	0.069	17.94	0.062	18.31	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				23017		23095		23173	
Frequency (MHz)				699.7		707.5		715.3	
				dBm	W	dBm	W	dBm	W
1.4	QPSK	1	0	19.91	0.098	20.11	0.103	19.90	0.098
1.4	QPSK	1	3	19.82	0.096	19.93	0.098	19.86	0.097
1.4	QPSK	1	5	19.76	0.095	19.84	0.096	20.09	0.102
1.4	QPSK	3	0	18.89	0.077	19.21	0.083	19.03	0.080
1.4	QPSK	3	1	19.00	0.079	19.08	0.081	18.74	0.075
1.4	QPSK	3	3	19.05	0.080	19.19	0.083	18.85	0.077
1.4	QPSK	6	0	19.02	0.080	19.06	0.081	18.73	0.075
1.4	16QAM	1	0	19.34	0.086	19.19	0.083	19.21	0.083
1.4	16QAM	1	3	19.13	0.082	19.58	0.091	19.12	0.082
1.4	16QAM	1	5	19.52	0.090	19.45	0.088	19.53	0.090
1.4	16QAM	3	0	17.92	0.062	18.03	0.064	18.01	0.063
1.4	16QAM	3	1	18.38	0.069	17.90	0.062	18.29	0.067
1.4	16QAM	3	3	17.94	0.062	18.29	0.067	18.04	0.064
1.4	16QAM	6	0	18.33	0.068	17.86	0.061	18.23	0.067



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	19.67	0.093	20.16	0.104	19.94	0.099
10	QPSK	1	25	19.81	0.096	19.79	0.095	19.98	0.100
10	QPSK	1	49	19.99	0.100	19.97	0.099	20.14	0.103
10	QPSK	25	0	18.87	0.077	19.15	0.082	19.07	0.081
10	QPSK	25	12	18.79	0.076	18.70	0.074	19.10	0.081
10	QPSK	25	25	18.73	0.075	18.83	0.076	19.11	0.081
10	QPSK	50	0	18.98	0.079	19.03	0.080	18.87	0.077
10	16QAM	1	0	19.47	0.089	19.40	0.087	19.35	0.086
10	16QAM	1	25	19.31	0.085	19.32	0.086	19.62	0.092
10	16QAM	1	49	19.62	0.092	19.43	0.088	19.66	0.092
10	16QAM	25	0	17.86	0.061	17.91	0.062	17.92	0.062
10	16QAM	25	12	17.88	0.061	18.35	0.068	18.34	0.068
10	16QAM	25	25	17.93	0.062	18.18	0.066	18.11	0.065
10	16QAM	50	0	17.85	0.061	18.28	0.067	18.29	0.067





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	19.62	0.092	20.11	0.103	19.89	0.097
5	QPSK	1	12	19.76	0.095	19.74	0.094	19.93	0.098
5	QPSK	1	24	19.94	0.099	19.92	0.098	20.09	0.102
5	QPSK	12	0	18.82	0.076	19.10	0.081	19.02	0.080
5	QPSK	12	7	18.74	0.075	18.65	0.073	19.05	0.080
5	QPSK	12	13	18.68	0.074	18.78	0.076	19.06	0.081
5	QPSK	25	0	18.93	0.078	18.98	0.079	18.82	0.076
5	16QAM	1	0	19.42	0.087	19.35	0.086	19.30	0.085
5	16QAM	1	12	19.26	0.084	19.27	0.085	19.57	0.091
5	16QAM	1	24	19.57	0.091	19.38	0.087	19.61	0.091
5	16QAM	12	0	17.81	0.060	17.86	0.061	17.87	0.061
5	16QAM	12	7	17.83	0.061	18.30	0.068	18.29	0.067
5	16QAM	12	13	17.88	0.061	18.13	0.065	18.06	0.064
5	16QAM	25	0	17.80	0.060	18.23	0.067	18.24	0.067



LTE Band 66				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				132072		132322		132572	
Frequency (MHz)				1720		1745		1770	
				dBm	W	dBm	W	dBm	W
20	QPSK	1	0	22.97	0.198	23.20	0.209	23.11	0.205
20	QPSK	1	49	22.85	0.193	22.78	0.190	22.78	0.190
20	QPSK	1	99	22.87	0.194	22.74	0.188	22.75	0.188
20	QPSK	50	0	22.08	0.161	22.13	0.163	21.86	0.153
20	QPSK	50	24	21.92	0.156	21.79	0.151	21.90	0.155
20	QPSK	50	50	22.05	0.160	21.64	0.146	21.97	0.157
20	QPSK	100	0	21.69	0.148	22.11	0.163	21.96	0.157
20	16QAM	1	0	22.68	0.185	22.58	0.181	22.54	0.179
20	16QAM	1	49	22.65	0.184	22.47	0.177	22.42	0.175
20	16QAM	1	99	22.55	0.180	22.25	0.168	22.36	0.172
20	16QAM	50	0	21.12	0.129	21.04	0.127	20.74	0.119
20	16QAM	50	24	21.24	0.133	20.98	0.125	20.81	0.121
20	16QAM	50	50	20.83	0.121	20.87	0.122	21.16	0.131
20	16QAM	100	0	20.97	0.125	21.03	0.127	20.54	0.113



LTE Band 66				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				132047		132322		132597	
Frequency (MHz)				1717.5		1745		1772.5	
				dBm	W	dBm	W	dBm	W
15	QPSK	1	0	22.94	0.197	23.17	0.207	23.08	0.203
15	QPSK	1	37	22.82	0.191	22.75	0.188	22.75	0.188
15	QPSK	1	74	22.84	0.192	22.71	0.187	22.72	0.187
15	QPSK	36	0	22.05	0.160	22.10	0.162	21.83	0.152
15	QPSK	36	20	21.89	0.155	21.76	0.150	21.87	0.154
15	QPSK	36	39	22.02	0.159	21.61	0.145	21.94	0.156
15	QPSK	75	0	21.66	0.147	22.08	0.161	21.93	0.156
15	16QAM	1	0	22.65	0.184	22.55	0.180	22.51	0.178
15	16QAM	1	37	22.62	0.183	22.44	0.175	22.39	0.173
15	16QAM	1	74	22.52	0.179	22.22	0.167	22.33	0.171
15	16QAM	36	0	21.09	0.129	21.01	0.126	20.71	0.118
15	16QAM	36	20	21.21	0.132	20.95	0.124	20.78	0.120
15	16QAM	36	39	20.80	0.120	20.84	0.121	21.13	0.130
15	16QAM	75	0	20.94	0.124	21.00	0.126	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				132022		132322		132622	
Frequency (MHz)				1715		1745		1775	
				dBm	W	dBm	W	dBm	W
10	QPSK	1	0	22.89	0.195	23.12	0.205	23.03	0.201
10	QPSK	1	25	22.77	0.189	22.70	0.186	22.70	0.186
10	QPSK	1	49	22.79	0.190	22.66	0.185	22.67	0.185
10	QPSK	25	0	22.00	0.158	22.05	0.160	21.78	0.151
10	QPSK	25	12	21.84	0.153	21.71	0.148	21.82	0.152
10	QPSK	25	25	21.97	0.157	21.56	0.143	21.89	0.155
10	QPSK	50	0	21.61	0.145	22.03	0.160	21.88	0.154
10	16QAM	1	0	22.60	0.182	22.50	0.178	22.46	0.176
10	16QAM	1	25	22.57	0.181	22.39	0.173	22.34	0.171
10	16QAM	1	49	22.47	0.177	22.17	0.165	22.28	0.169
10	16QAM	25	0	21.04	0.127	20.96	0.125	20.66	0.116
10	16QAM	25	12	21.16	0.131	20.90	0.123	20.73	0.118
10	16QAM	25	25	20.75	0.119	20.79	0.120	21.08	0.128
10	16QAM	50	0	20.89	0.123	20.95	0.124	20.46	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				131997		132322		132647	
Frequency (MHz)				1712.5		1745		1777.5	
				dBm	W	dBm	W	dBm	W
5	QPSK	1	0	22.86	0.193	23.09	0.204	23.00	0.200
5	QPSK	1	12	22.74	0.188	22.67	0.185	22.67	0.185
5	QPSK	1	24	22.76	0.189	22.63	0.183	22.64	0.184
5	QPSK	12	0	21.97	0.157	22.02	0.159	21.75	0.150
5	QPSK	12	7	21.81	0.152	21.68	0.147	21.79	0.151
5	QPSK	12	13	21.94	0.156	21.53	0.142	21.86	0.153
5	QPSK	25	0	21.58	0.144	22.00	0.158	21.85	0.153
5	16QAM	1	0	22.57	0.181	22.47	0.177	22.43	0.175
5	16QAM	1	12	22.54	0.179	22.36	0.172	22.31	0.170
5	16QAM	1	24	22.44	0.175	22.14	0.164	22.25	0.168
5	16QAM	12	0	21.01	0.126	20.93	0.124	20.63	0.116
5	16QAM	12	7	21.13	0.130	20.87	0.122	20.70	0.117
5	16QAM	12	13	20.72	0.118	20.76	0.119	21.05	0.127
5	16QAM	25	0	20.86	0.122	20.92	0.124	20.43	0.110



LTE Band 66				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				131987		132322		132657	
Frequency (MHz)				1711.5		1745		1778.5	
				dBm	W	dBm	W	dBm	W
3	QPSK	1	0	22.81	0.191	23.04	0.201	22.95	0.197
3	QPSK	1	8	22.69	0.186	22.62	0.183	22.62	0.183
3	QPSK	1	14	22.71	0.187	22.58	0.181	22.59	0.182
3	QPSK	8	0	21.92	0.156	21.97	0.157	21.70	0.148
3	QPSK	8	4	21.76	0.150	21.63	0.146	21.74	0.149
3	QPSK	8	7	21.89	0.155	21.48	0.141	21.81	0.152
3	QPSK	15	0	21.53	0.142	21.95	0.157	21.80	0.151
3	16QAM	1	0	22.52	0.179	22.42	0.175	22.38	0.173
3	16QAM	1	8	22.49	0.177	22.31	0.170	22.26	0.168
3	16QAM	1	14	22.39	0.173	22.09	0.162	22.20	0.166
3	16QAM	8	0	20.96	0.125	20.88	0.122	20.58	0.114
3	16QAM	8	4	21.08	0.128	20.82	0.121	20.65	0.116
3	16QAM	8	7	20.67	0.117	20.71	0.118	21.00	0.126
3	16QAM	15	0	20.81	0.121	20.87	0.122	20.38	0.109



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	22.78	0.190	23.01	0.200	22.92	0.196
1.4	QPSK	1	3	22.66	0.185	22.59	0.182	22.59	0.182
1.4	QPSK	1	5	22.68	0.185	22.55	0.180	22.56	0.180
1.4	QPSK	3	0	21.89	0.155	21.94	0.156	21.67	0.147
1.4	QPSK	3	1	21.73	0.149	21.60	0.145	21.71	0.148
1.4	QPSK	3	3	21.86	0.153	21.45	0.140	21.78	0.151
1.4	QPSK	6	0	21.50	0.141	21.92	0.156	21.77	0.150
1.4	16QAM	1	0	22.49	0.177	22.39	0.173	22.35	0.172
1.4	16QAM	1	3	22.46	0.176	22.28	0.169	22.23	0.167
1.4	16QAM	1	5	22.36	0.172	22.06	0.161	22.17	0.165
1.4	16QAM	3	0	20.93	0.124	20.85	0.122	20.55	0.114
1.4	16QAM	3	1	21.05	0.127	20.79	0.120	20.62	0.115
1.4	16QAM	3	3	20.64	0.116	20.68	0.117	20.97	0.125
1.4	16QAM	6	0	20.78	0.120	20.84	0.121	20.35	0.108



LTE Band 71				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				133222		133322		133372	
Frequency (MHz)				673		683		688	
				dBm	W	dBm	W	dBm	W
20	QPSK	1	0	21.48	0.141	21.56	0.143	21.51	0.142
20	QPSK	1	49	21.45	0.140	21.48	0.141	21.43	0.139
20	QPSK	1	99	21.38	0.137	21.42	0.139	21.46	0.140
20	QPSK	50	0	20.48	0.112	20.50	0.112	20.46	0.111
20	QPSK	50	24	20.41	0.110	20.38	0.109	20.41	0.110
20	QPSK	50	50	20.35	0.108	20.45	0.111	20.31	0.107
20	QPSK	100	0	20.32	0.108	20.36	0.109	20.24	0.106
20	16QAM	1	0	20.60	0.115	20.62	0.115	20.58	0.114
20	16QAM	1	49	20.53	0.113	20.50	0.112	20.53	0.113
20	16QAM	1	99	20.47	0.111	20.57	0.114	20.43	0.110
20	16QAM	50	0	19.38	0.087	19.42	0.087	19.30	0.085
20	16QAM	50	24	19.47	0.089	19.44	0.088	19.47	0.089
20	16QAM	50	50	19.41	0.087	19.51	0.089	19.37	0.086
20	16QAM	100	0	19.38	0.087	19.42	0.087	19.30	0.085





LTE Band 71				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				133197		133297		133397	
Frequency (MHz)				670.8		680.5		690.5	
				dBm	W	dBm	W	dBm	W
15	QPSK	1	0	21.40	0.138	21.48	0.141	21.43	0.139
15	QPSK	1	37	21.37	0.137	21.40	0.138	21.35	0.136
15	QPSK	1	74	21.30	0.135	21.34	0.136	21.38	0.137
15	QPSK	36	0	20.40	0.110	20.42	0.110	20.38	0.109
15	QPSK	36	20	20.33	0.108	20.30	0.107	20.33	0.108
15	QPSK	36	39	20.27	0.106	20.37	0.109	20.23	0.105
15	QPSK	75	0	20.24	0.106	20.28	0.107	20.16	0.104
15	16QAM	1	0	20.52	0.113	20.54	0.113	20.50	0.112
15	16QAM	1	37	20.45	0.111	20.42	0.110	20.45	0.111
15	16QAM	1	74	20.39	0.109	20.49	0.112	20.35	0.108
15	16QAM	36	0	19.30	0.085	19.34	0.086	19.22	0.084
15	16QAM	36	20	19.39	0.087	19.36	0.086	19.39	0.087
15	16QAM	36	39	19.33	0.086	19.43	0.088	19.29	0.085
15	16QAM	75	0	19.30	0.085	19.34	0.086	19.22	0.084



LTE Band 71				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				133172		133272		133422	
Frequency (MHz)				668		678		693	
				dBm	W	dBm	W	dBm	W
10	QPSK	1	0	21.29	0.135	21.37	0.137	21.32	0.136
10	QPSK	1	25	21.26	0.134	21.29	0.135	21.24	0.133
10	QPSK	1	49	21.19	0.132	21.23	0.133	21.27	0.134
10	QPSK	25	0	20.29	0.107	20.31	0.107	20.27	0.106
10	QPSK	25	12	20.22	0.105	20.19	0.104	20.22	0.105
10	QPSK	25	25	20.16	0.104	20.26	0.106	20.12	0.103
10	QPSK	50	0	20.13	0.103	20.17	0.104	20.05	0.101
10	16QAM	1	0	20.41	0.110	20.43	0.110	20.39	0.109
10	16QAM	1	25	20.34	0.108	20.31	0.107	20.34	0.108
10	16QAM	1	49	20.28	0.107	20.38	0.109	20.24	0.106
10	16QAM	25	0	19.19	0.083	19.23	0.084	19.11	0.081
10	16QAM	25	12	19.28	0.085	19.25	0.084	19.28	0.085
10	16QAM	25	25	19.22	0.084	19.32	0.086	19.18	0.083
10	16QAM	50	0	19.19	0.083	19.23	0.084	19.11	0.081



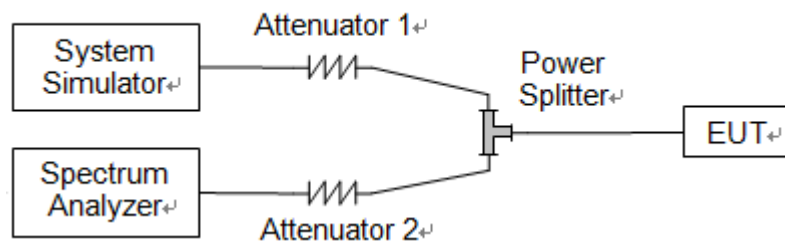
LTE Band 71				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				133147		133247		133447	
Frequency (MHz)				665.5		675.5		695.5	
				dBm	W	dBm	W	dBm	W
5	QPSK	1	0	21.20	0.132	21.28	0.134	21.23	0.133
5	QPSK	1	12	21.17	0.131	21.20	0.132	21.15	0.130
5	QPSK	1	24	21.10	0.129	21.14	0.130	21.18	0.131
5	QPSK	12	0	20.20	0.105	20.22	0.105	20.18	0.104
5	QPSK	12	7	20.13	0.103	20.10	0.102	20.13	0.103
5	QPSK	12	13	20.07	0.102	20.17	0.104	20.03	0.101
5	QPSK	25	0	20.04	0.101	20.08	0.102	19.96	0.099
5	16QAM	1	0	20.32	0.108	20.34	0.108	20.30	0.107
5	16QAM	1	12	20.25	0.106	20.22	0.105	20.25	0.106
5	16QAM	1	24	20.19	0.104	20.29	0.107	20.15	0.104
5	16QAM	12	0	19.10	0.081	19.14	0.082	19.02	0.080
5	16QAM	12	7	19.19	0.083	19.16	0.082	19.19	0.083
5	16QAM	12	13	19.13	0.082	19.23	0.084	19.09	0.081
5	16QAM	25	0	19.10	0.081	19.14	0.082	19.02	0.080

## 2.2. Occupied Bandwidth

### 2.2.1. Requirement

According to FCC section 2.1049, the occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power radiated by a given emission. Occupied bandwidth is also known as the 99% emission bandwidth.

### 2.2.2. Test Description



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

### 2.2.3. Test Procedure

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

### 2.2.4. Test Result



LTE Band 2				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
1.4	Low	QPSK	1.09	1.25
	Low	16QAM	1.1	1.24
	Mid	QPSK	1.09	1.24
	Mid	16QAM	1.1	1.25
	High	QPSK	1.1	1.25
	High	16QAM	1.1	1.25
3	Low	QPSK	2.71	3.04
	Low	16QAM	2.71	3.06
	Mid	QPSK	2.71	3.05
	Mid	16QAM	2.71	3.05
	High	QPSK	2.71	3.02
	High	16QAM	2.71	3.04
5	Low	QPSK	4.5	4.97
	Low	16QAM	4.5	4.96
	Mid	QPSK	4.5	4.98
	Mid	16QAM	4.49	4.99
	High	QPSK	4.5	4.98
	High	16QAM	4.5	4.99
10	Low	QPSK	9.0	9.88
	Low	16QAM	8.97	9.88
	Mid	QPSK	9.01	9.86
	Mid	16QAM	8.97	9.86
	High	QPSK	9.01	9.81
	High	16QAM	8.99	9.83
15	Low	QPSK	13.49	14.93
	Low	16QAM	13.5	14.91
	Mid	QPSK	13.47	14.82
	Mid	16QAM	13.46	14.93
	High	QPSK	13.48	14.81
	High	16QAM	13.5	15.05
20	Low	QPSK	17.99	19.82
	Low	16QAM	18.04	19.77
	Mid	QPSK	17.98	19.69
	Mid	16QAM	17.97	19.86
	High	QPSK	17.99	19.77
	High	16QAM	18.02	19.76



LTE Band 4				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
1.4	Low	QPSK	1.1	1.25
	Low	16QAM	1.09	1.25
	Mid	QPSK	1.09	1.25
	Mid	16QAM	1.1	1.25
	High	QPSK	1.1	1.24
	High	16QAM	1.1	1.25
3	Low	QPSK	2.71	3.04
	Low	16QAM	2.71	3.06
	Mid	QPSK	2.72	3.05
	Mid	16QAM	2.71	3.05
	High	QPSK	2.72	3.04
	High	16QAM	2.71	3.05
5	Low	QPSK	4.49	4.97
	Low	16QAM	4.5	4.95
	Mid	QPSK	4.49	4.97
	Mid	16QAM	4.5	4.97
	High	QPSK	4.5	4.98
	High	16QAM	4.49	4.95
10	Low	QPSK	9.02	9.92
	Low	16QAM	8.98	9.81
	Mid	QPSK	8.97	9.86
	Mid	16QAM	8.98	9.82
	High	QPSK	9.04	9.9
	High	16QAM	8.98	9.84
15	Low	QPSK	13.53	14.83
	Low	16QAM	13.49	14.99
	Mid	QPSK	13.47	14.81
	Mid	16QAM	13.47	14.92
	High	QPSK	13.49	14.99
	High	16QAM	13.49	14.9
20	Low	QPSK	17.98	19.76
	Low	16QAM	18.05	19.74
	Mid	QPSK	17.98	19.77
	Mid	16QAM	17.96	19.77
	High	QPSK	17.97	19.77
	High	16QAM	18.0	19.79



LTE Band 5				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
1.4	Low	QPSK	1.1	1.25
	Low	16QAM	1.1	1.25
	Mid	QPSK	1.09	1.24
	Mid	16QAM	1.1	1.25
	High	QPSK	1.1	1.24
	High	16QAM	1.1	1.25
3	Low	QPSK	2.72	3.04
	Low	16QAM	2.72	3.05
	Mid	QPSK	2.72	3.05
	Mid	16QAM	2.71	3.05
	High	QPSK	2.71	3.04
	High	16QAM	2.72	3.05
5	Low	QPSK	4.5	4.97
	Low	16QAM	4.5	4.94
	Mid	QPSK	4.5	4.97
	Mid	16QAM	4.5	4.97
	High	QPSK	4.5	4.97
	High	16QAM	4.5	4.98
10	Low	QPSK	9.02	9.88
	Low	16QAM	9.0	9.87
	Mid	QPSK	9.0	9.87
	Mid	16QAM	8.96	9.78
	High	QPSK	9.03	9.83
	High	16QAM	8.99	9.85



LTE Band 7				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
5	Low	QPSK	4.51	4.97
	Low	16QAM	4.5	4.95
	Mid	QPSK	4.5	4.97
	Mid	16QAM	4.5	4.96
	High	QPSK	4.5	5.0
	High	16QAM	4.51	4.99
10	Low	QPSK	8.99	9.94
	Low	16QAM	8.97	9.84
	Mid	QPSK	9.02	9.83
	Mid	16QAM	8.97	9.82
	High	QPSK	9.0	9.88
	High	16QAM	8.97	9.8
15	Low	QPSK	13.5	14.91
	Low	16QAM	13.49	14.96
	Mid	QPSK	13.51	14.91
	Mid	16QAM	13.5	15.01
	High	QPSK	13.51	14.81
	High	16QAM	13.5	14.92
20	Low	QPSK	17.99	19.71
	Low	16QAM	18.0	19.84
	Mid	QPSK	17.99	19.74
	Mid	16QAM	18.02	19.8
	High	QPSK	17.95	19.76
	High	16QAM	18.0	19.81





LTE Band 12				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
1.4	Low	QPSK	1.09	1.24
	Low	16QAM	1.1	1.25
	Mid	QPSK	1.1	1.25
	Mid	16QAM	1.1	1.26
	High	QPSK	1.1	1.25
	High	16QAM	1.1	1.25
3	Low	QPSK	2.71	3.05
	Low	16QAM	2.72	3.05
	Mid	QPSK	2.72	3.05
	Mid	16QAM	2.72	3.04
	High	QPSK	2.72	3.05
	High	16QAM	2.71	3.06
5	Low	QPSK	4.5	4.97
	Low	16QAM	4.5	5.0
	Mid	QPSK	4.5	4.97
	Mid	16QAM	4.5	5.01
	High	QPSK	4.5	4.97
	High	16QAM	4.51	4.97
10	Low	QPSK	9.02	9.9
	Low	16QAM	8.98	9.89
	Mid	QPSK	9.02	9.85
	Mid	16QAM	8.96	9.83
	High	QPSK	8.97	9.82
	High	16QAM	8.95	9.86



LTE Band 17				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
5	Low	QPSK	4.5	4.95
	Low	16QAM	4.5	5.01
	Mid	QPSK	4.48	4.94
	Mid	16QAM	4.49	4.95
	High	QPSK	4.5	4.96
	High	16QAM	4.51	5.01
10	Low	QPSK	8.97	9.88
	Low	16QAM	8.94	9.78
	Mid	QPSK	8.98	9.87
	Mid	16QAM	8.94	9.85
	High	QPSK	8.97	9.88
	High	16QAM	8.94	9.8



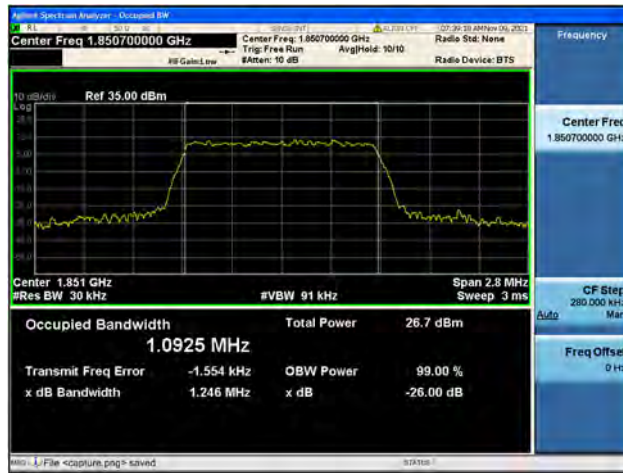
LTE Band 66				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
1.4	Low	QPSK	1.1	1.35
	Low	16QAM	1.11	1.34
	Mid	QPSK	1.11	1.4
	Mid	16QAM	1.11	1.36
	High	QPSK	1.1	1.36
	High	16QAM	1.11	1.36
3	Low	QPSK	2.72	3.08
	Low	16QAM	2.71	3.06
	Mid	QPSK	2.72	3.07
	Mid	16QAM	2.72	3.09
	High	QPSK	2.71	3.06
	High	16QAM	2.71	3.09
5	Low	QPSK	4.52	5.15
	Low	16QAM	4.52	5.13
	Mid	QPSK	4.53	5.15
	Mid	16QAM	4.51	5.07
	High	QPSK	4.52	5.1
	High	16QAM	4.53	5.06
10	Low	QPSK	9.06	10.11
	Low	16QAM	9.0	10.09
	Mid	QPSK	9.0	10.08
	Mid	16QAM	9.01	10.06
	High	QPSK	9.02	9.9
	High	16QAM	9.01	9.95
15	Low	QPSK	13.52	14.95
	Low	16QAM	13.48	14.8
	Mid	QPSK	13.5	14.93
	Mid	16QAM	13.49	14.9
	High	QPSK	13.5	14.99
	High	16QAM	13.5	14.99
20	Low	QPSK	17.96	19.25
	Low	16QAM	17.97	21.99
	Mid	QPSK	17.97	19.95
	Mid	16QAM	18.03	19.93
	High	QPSK	17.99	19.78
	High	16QAM	18.03	19.84



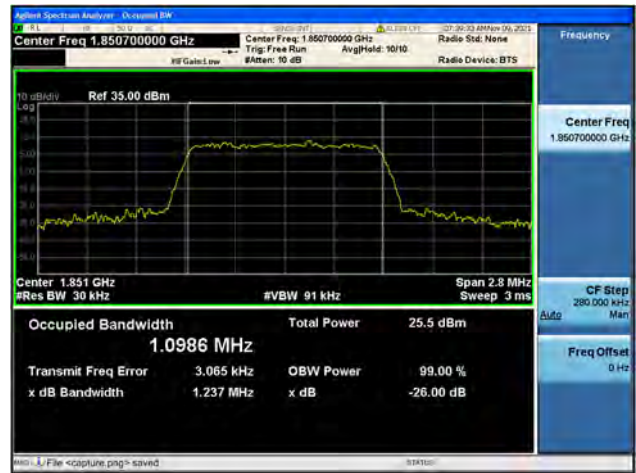
LTE Band 71				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
5	Low	QPSK	4.49	4.96
	Low	16QAM	4.50	4.94
	Mid	QPSK	4.50	4.96
	Mid	16QAM	4.51	4.98
	High	QPSK	4.50	4.96
	High	16QAM	4.50	4.96
10	Low	QPSK	9.00	9.80
	Low	16QAM	8.96	9.76
	Mid	QPSK	9.02	9.87
	Mid	16QAM	9.00	9.82
	High	QPSK	9.04	9.87
	High	16QAM	9.00	9.86
15	Low	QPSK	13.45	14.77
	Low	16QAM	13.46	14.84
	Mid	QPSK	13.52	14.90
	Mid	16QAM	13.50	14.97
	High	QPSK	13.46	14.83
	High	16QAM	13.50	14.84
20	Low	QPSK	17.97	19.60
	Low	16QAM	17.99	19.88
	Mid	QPSK	17.95	19.72
	Mid	16QAM	17.96	19.75
	High	QPSK	17.94	19.83
	High	16QAM	17.96	19.67



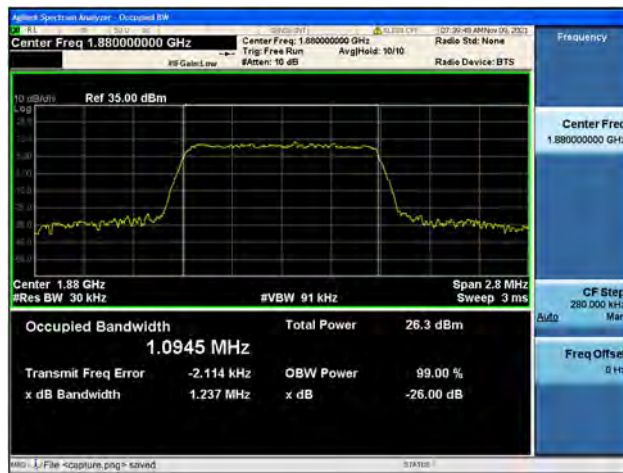
Band2 / 1.4MHz / Low CH / QPSK



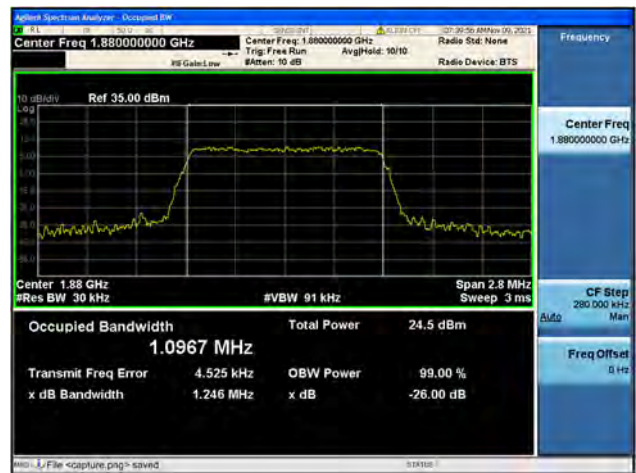
Band2 / 1.4MHz / Low CH / 16QAM



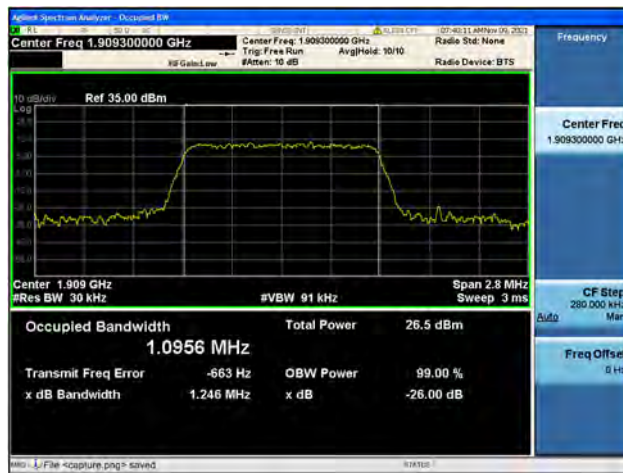
Band2 / 1.4MHz / Mid CH / QPSK



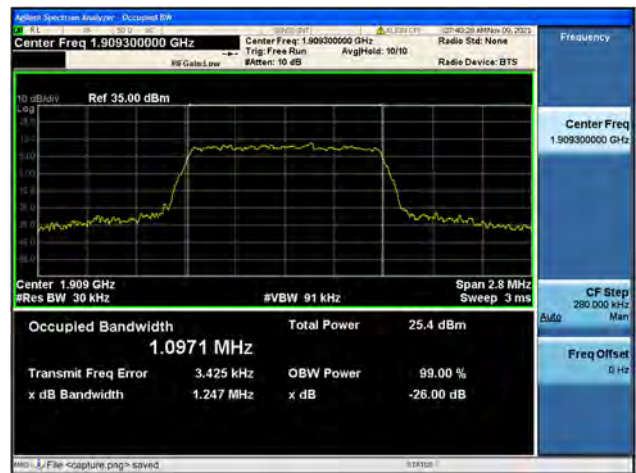
Band2 / 1.4MHz / Mid CH / 16QAM

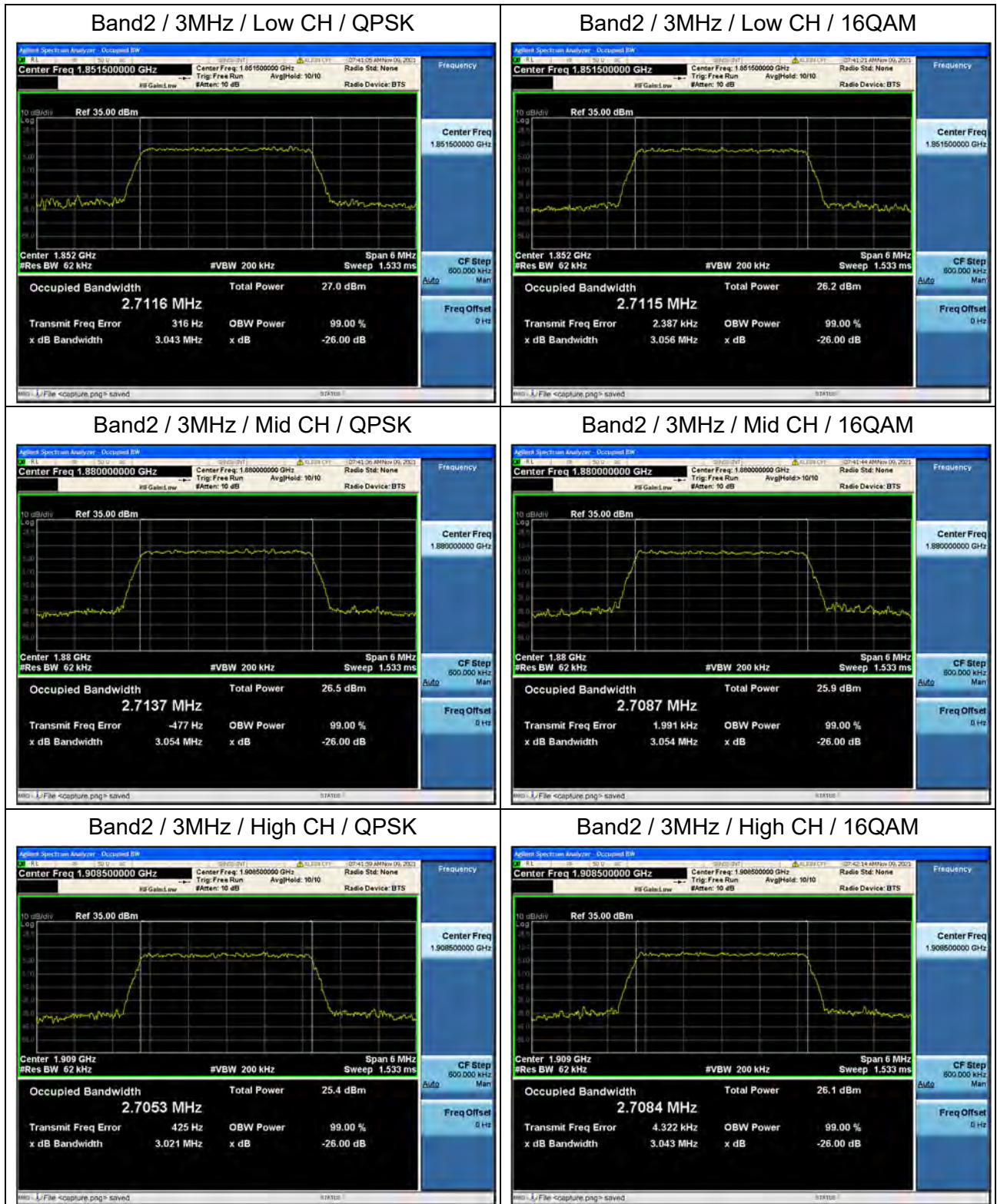


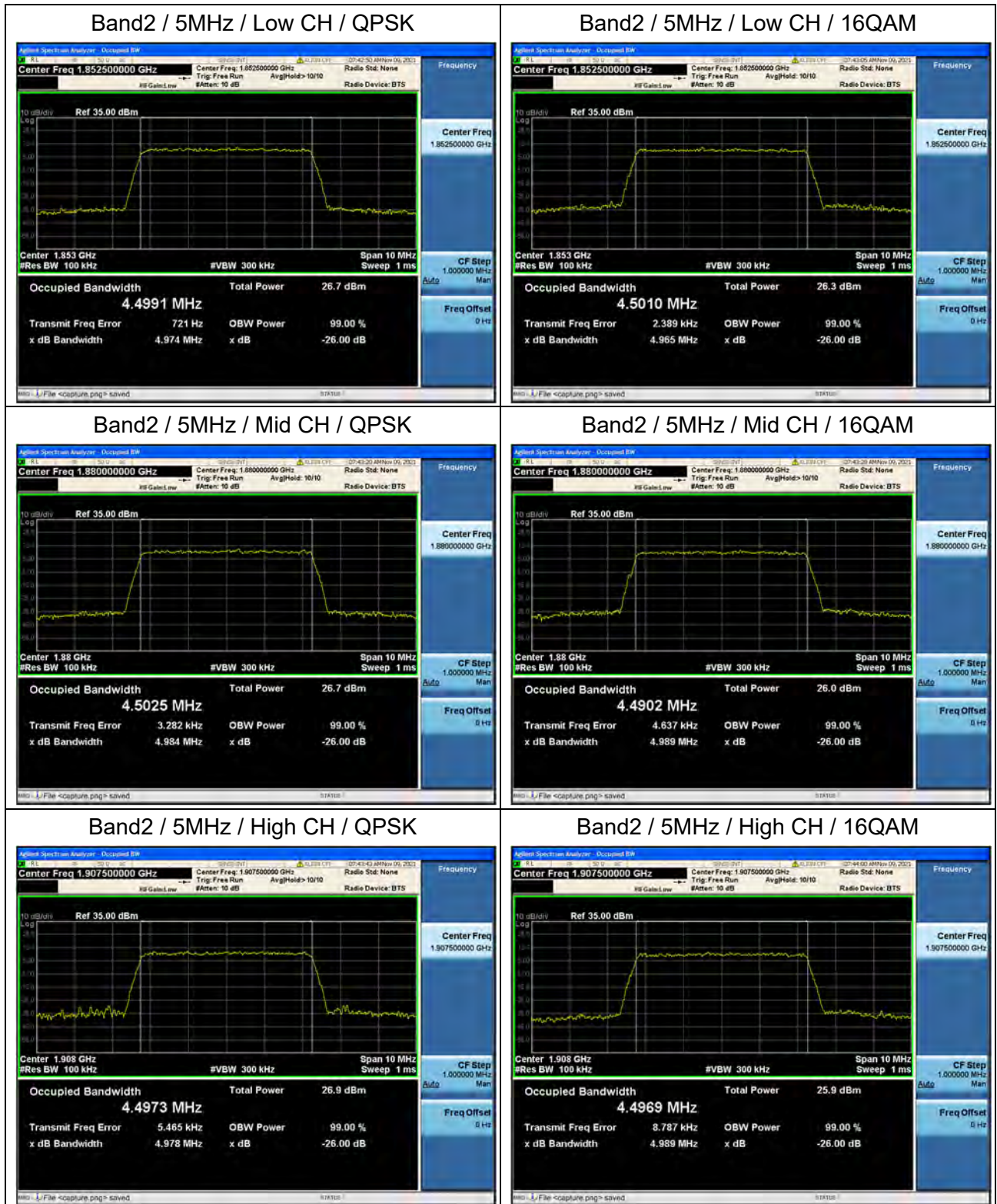
Band2 / 1.4MHz / High CH / QPSK

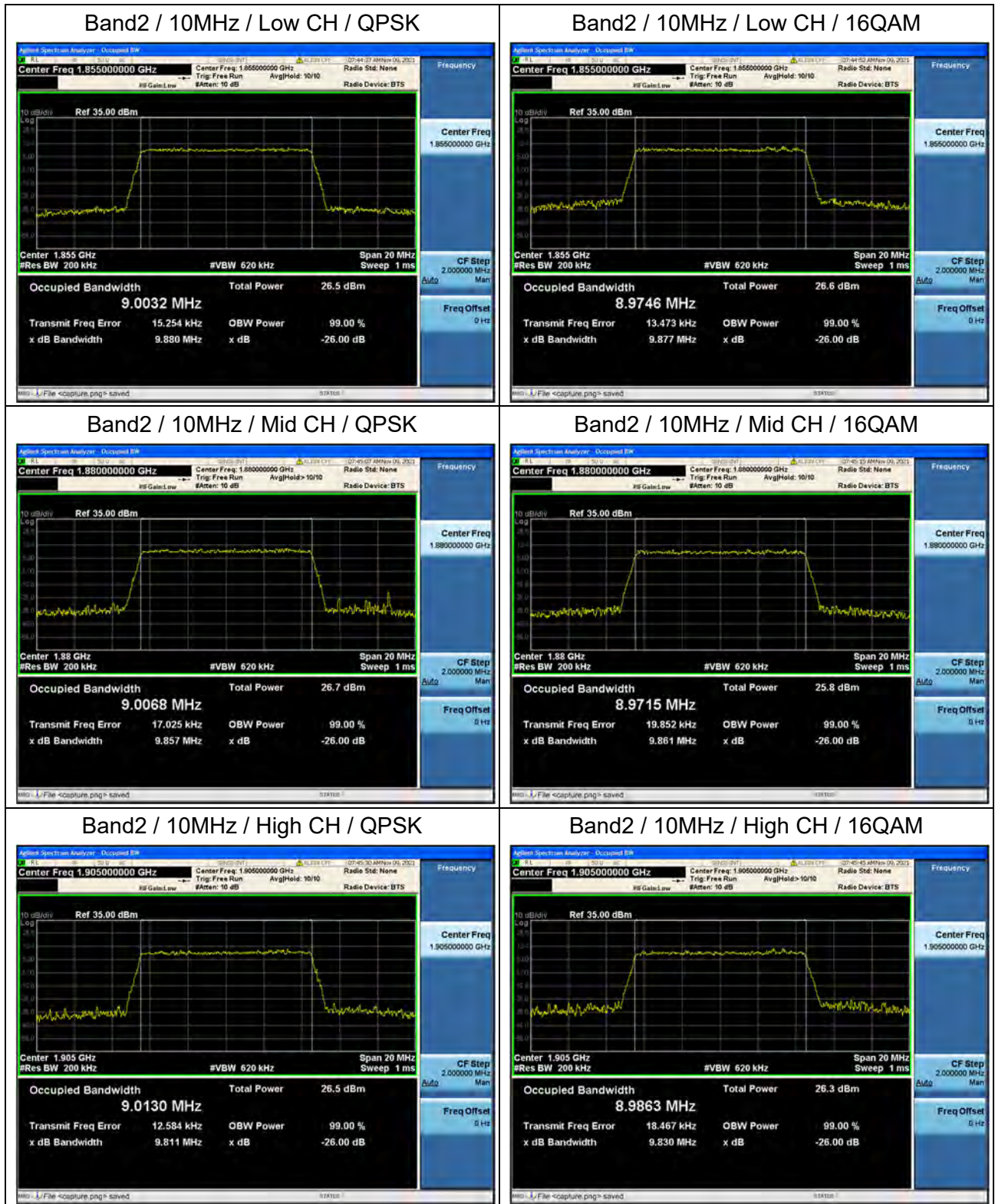


Band2 / 1.4MHz / High CH / 16QAM













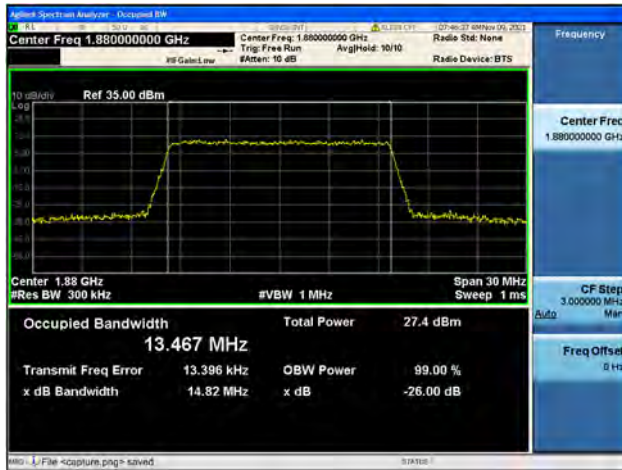
Band2 / 15MHz / Low CH / QPSK



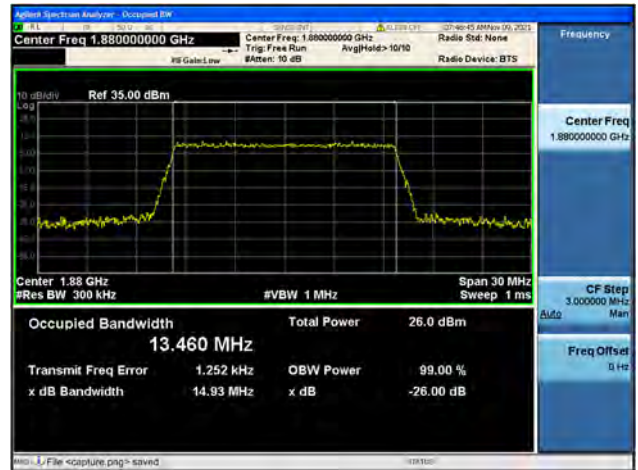
Band2 / 15MHz / Low CH / 16QAM



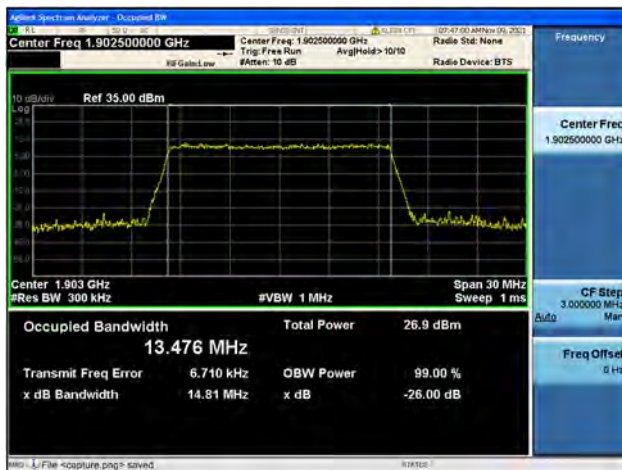
Band2 / 15MHz / Mid CH / QPSK



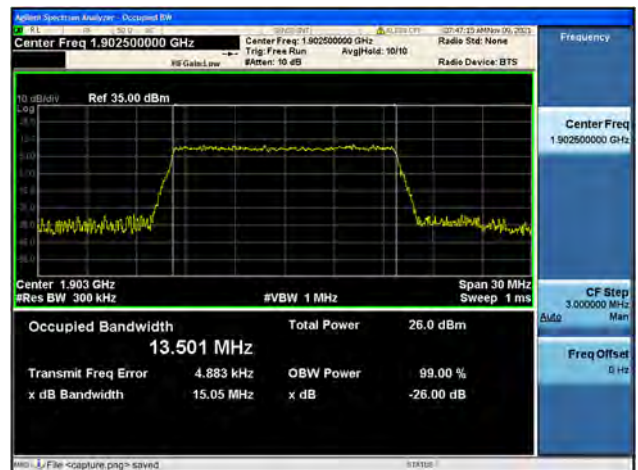
Band2 / 15MHz / Mid CH / 16QAM

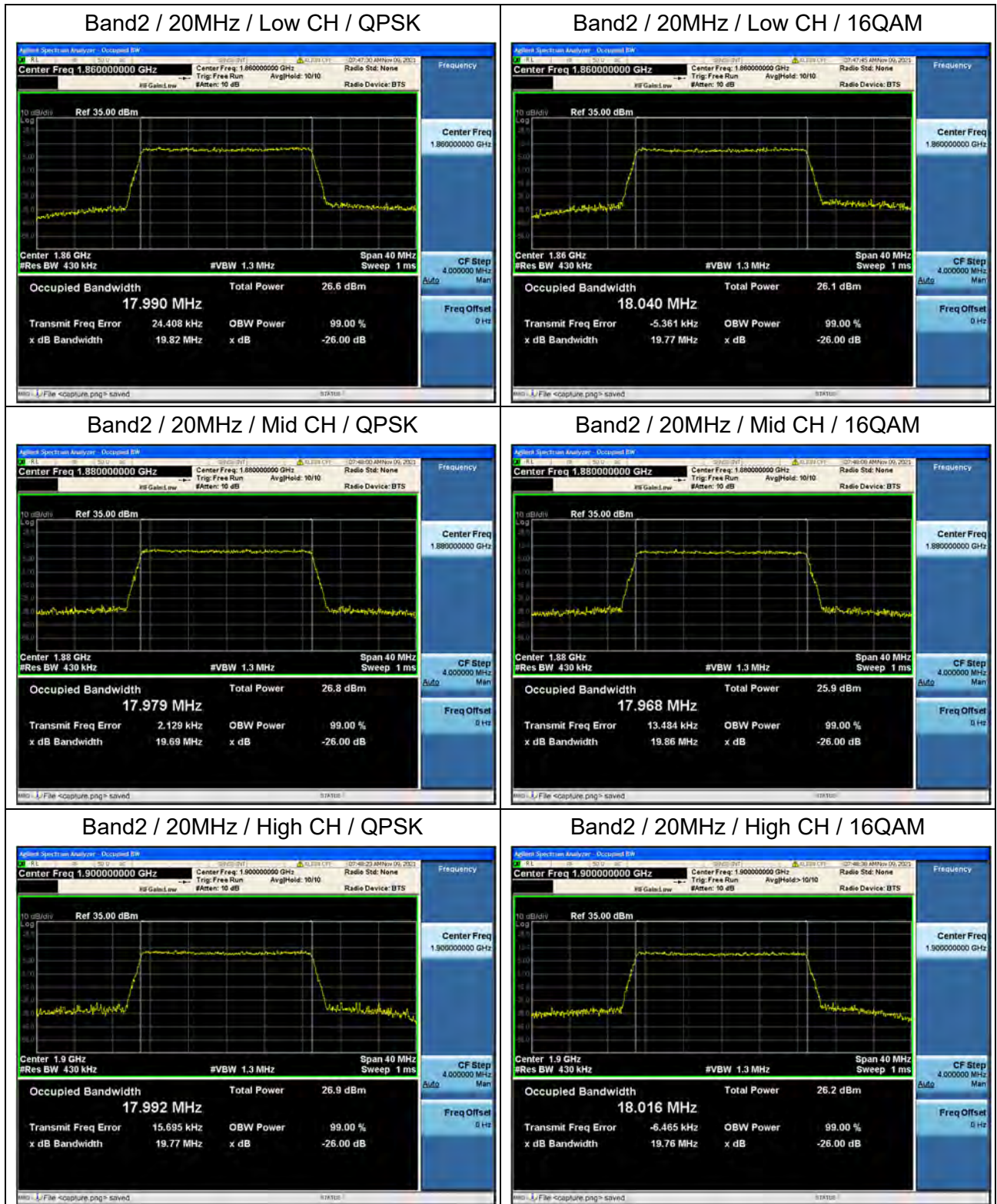


Band2 / 15MHz / High CH / QPSK



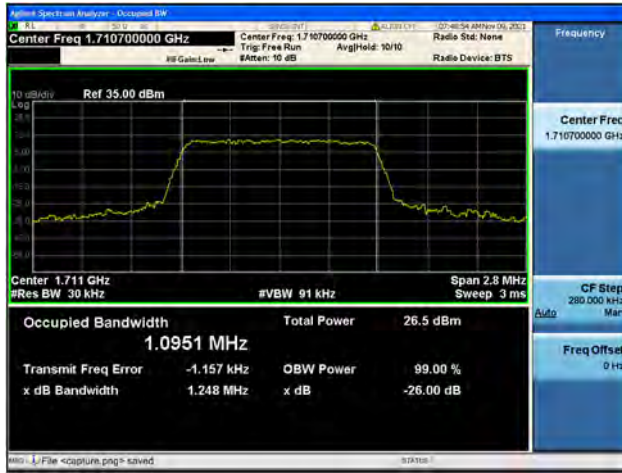
Band2 / 15MHz / High CH / 16QAM



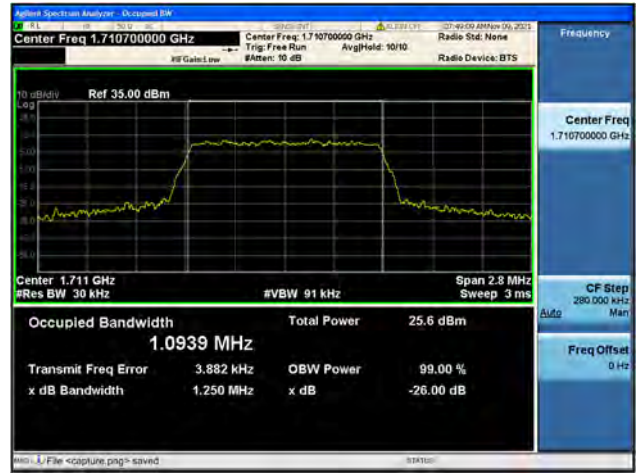




Band4 / 1.4MHz / Low CH / QPSK



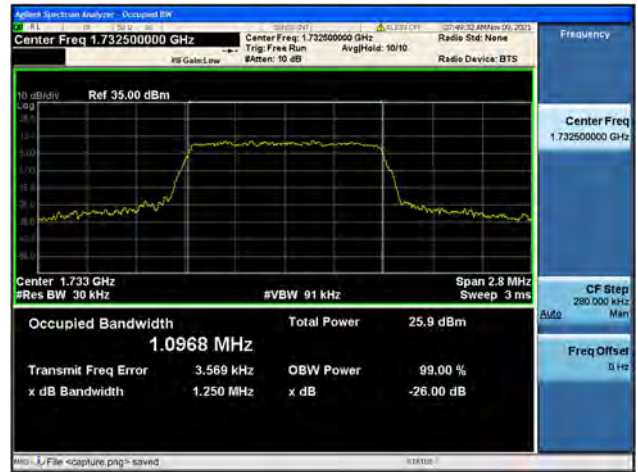
Band4 / 1.4MHz / Low CH / 16QAM



Band4 / 1.4MHz / Mid CH / QPSK



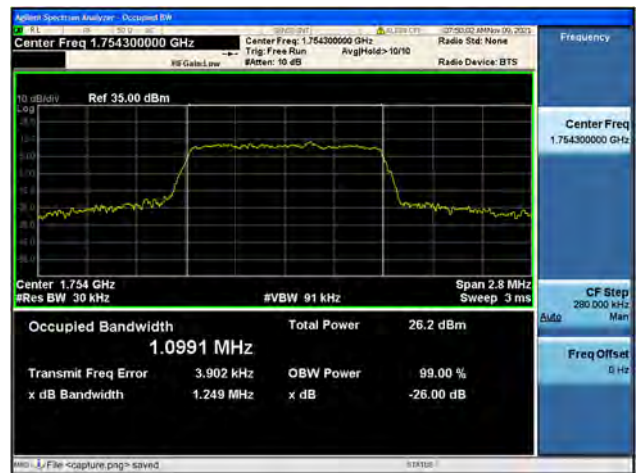
Band4 / 1.4MHz / Mid CH / 16QAM

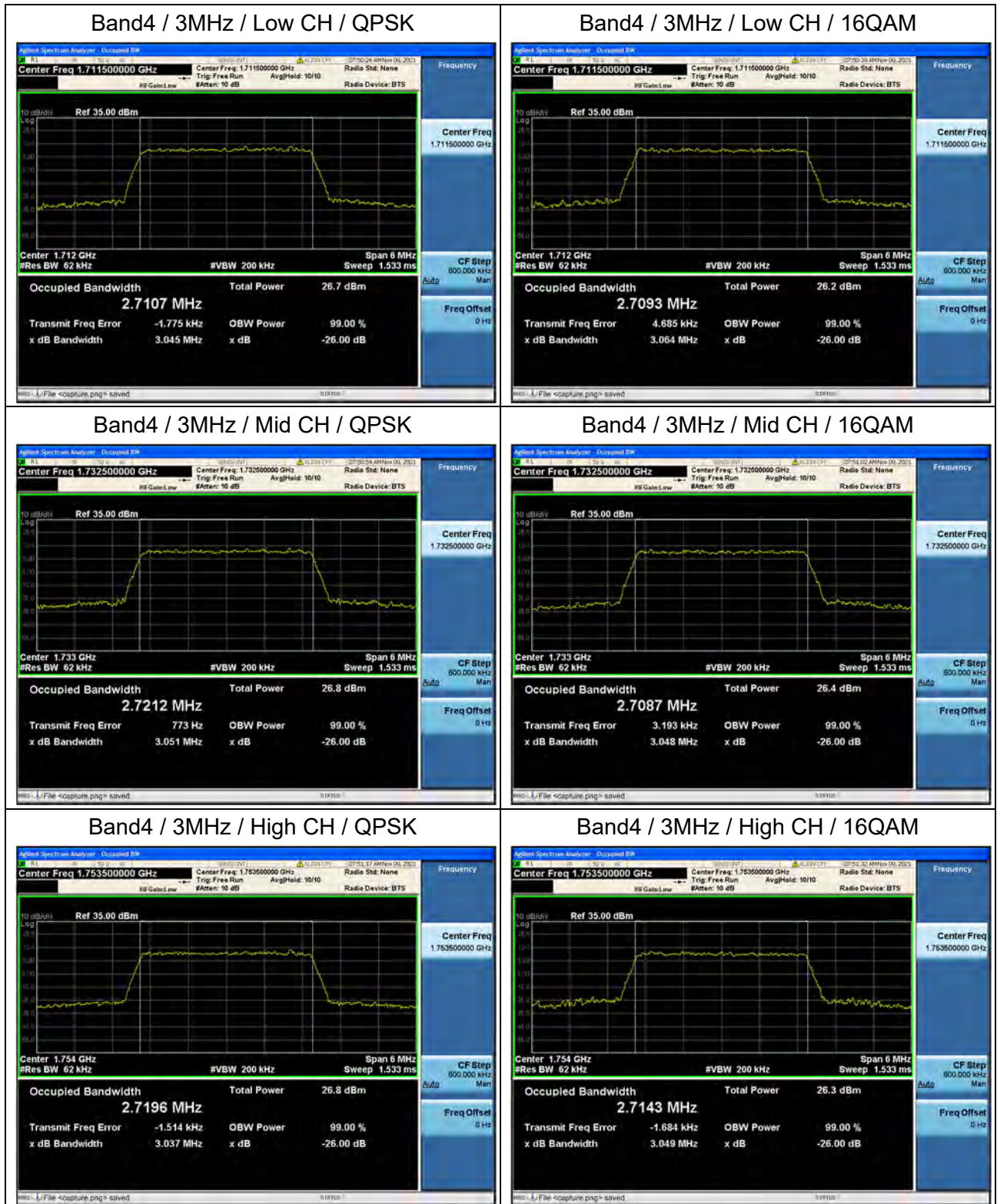


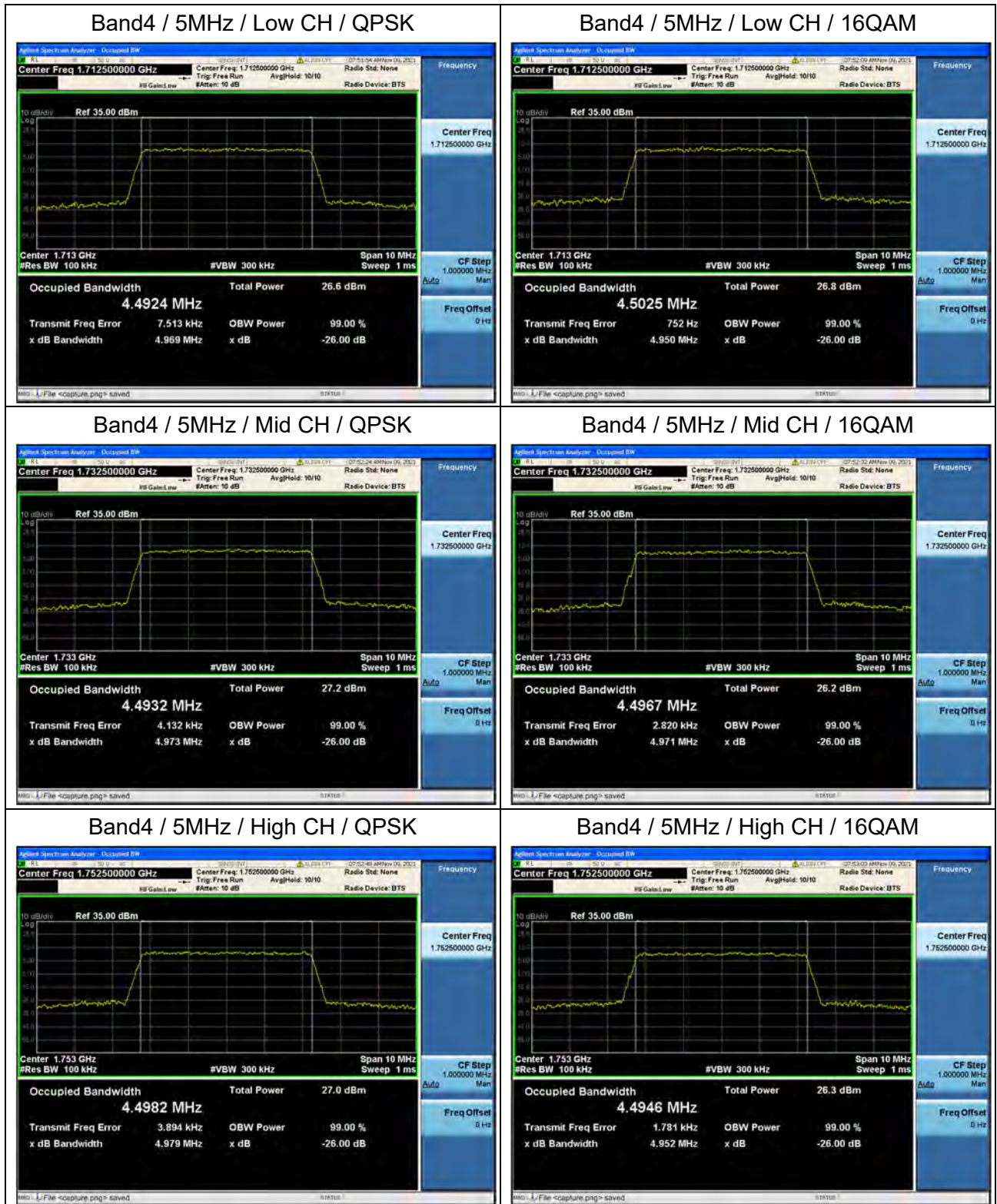
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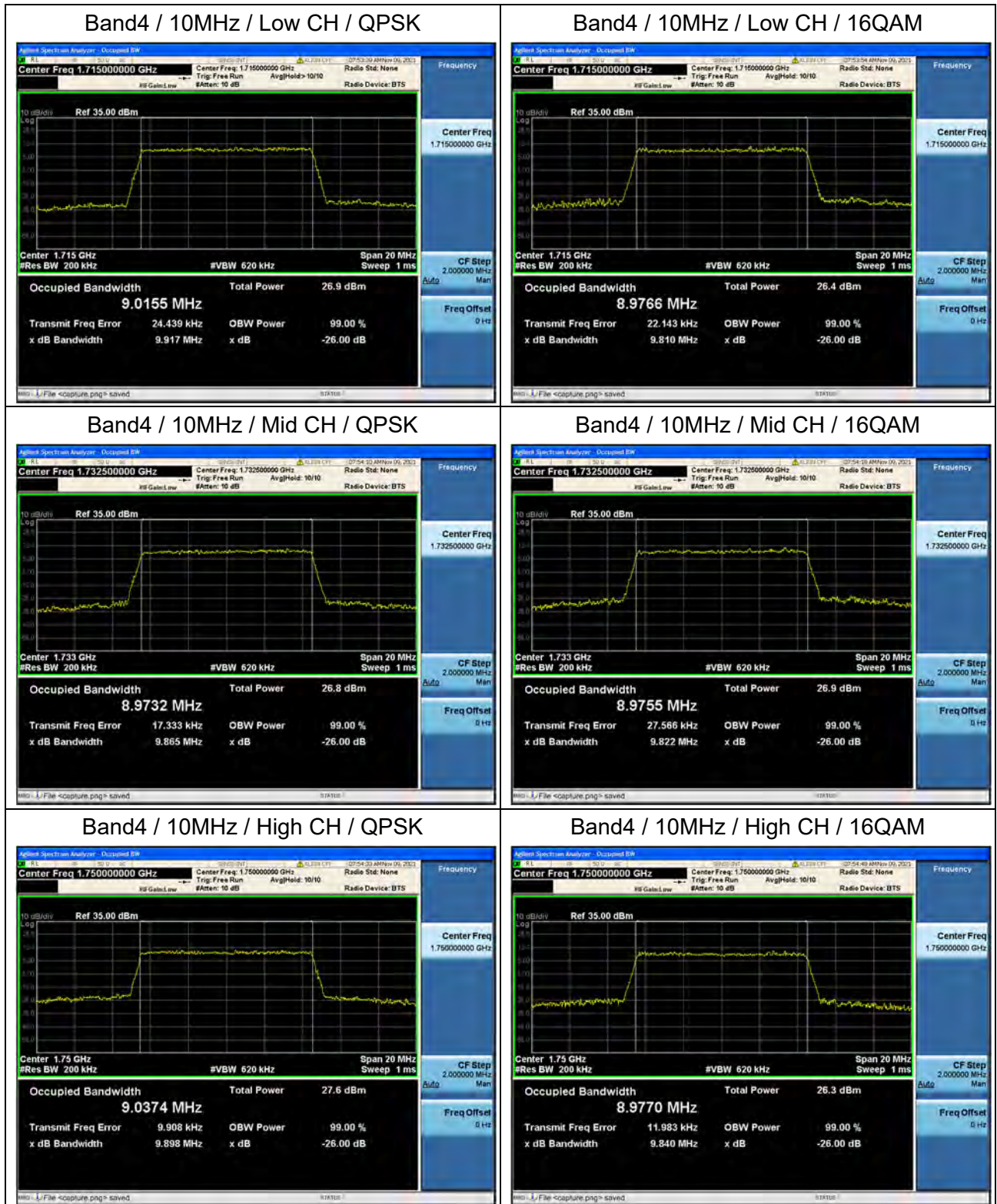


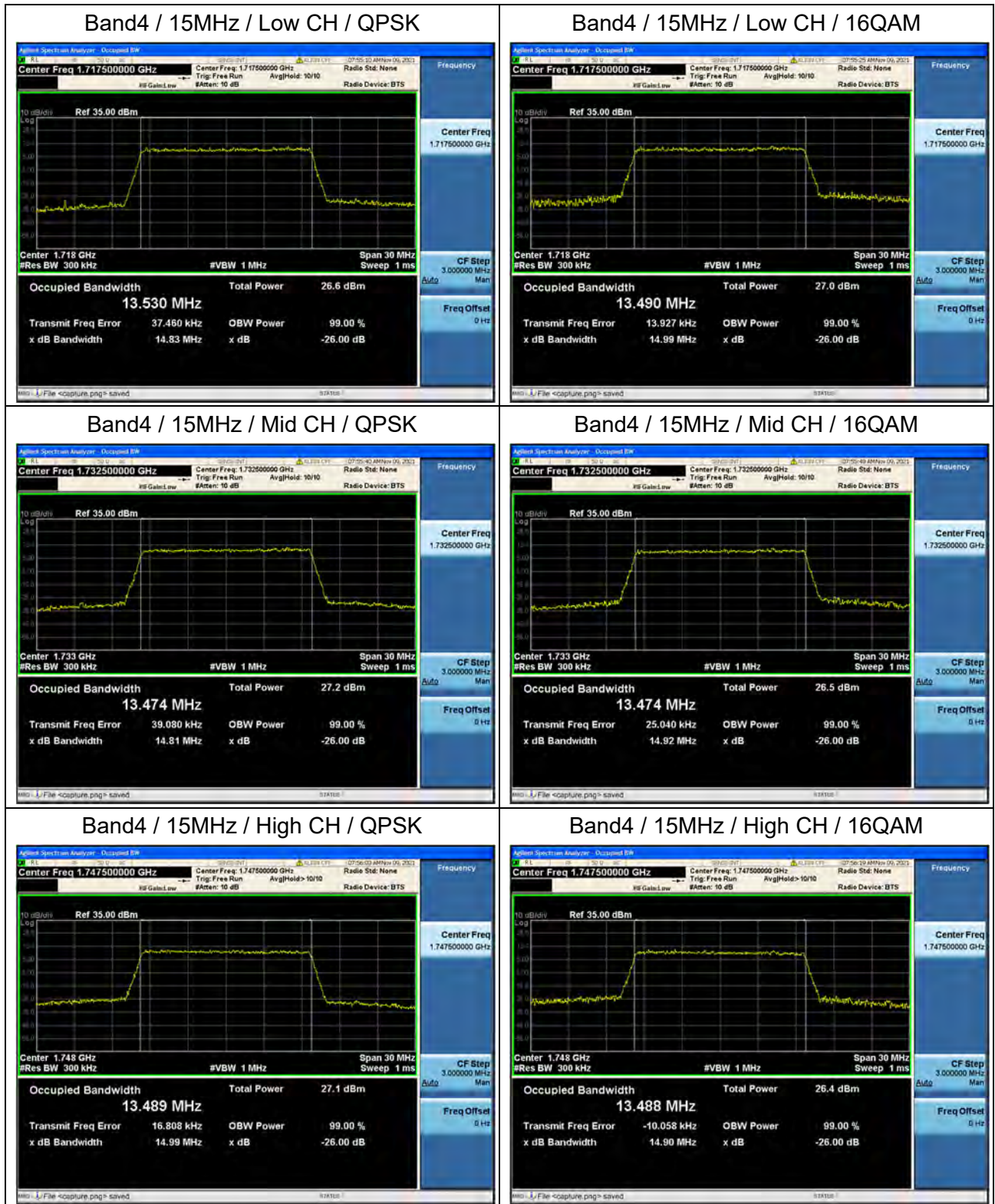
Band4 / 1.4MHz / High CH / 16QAM

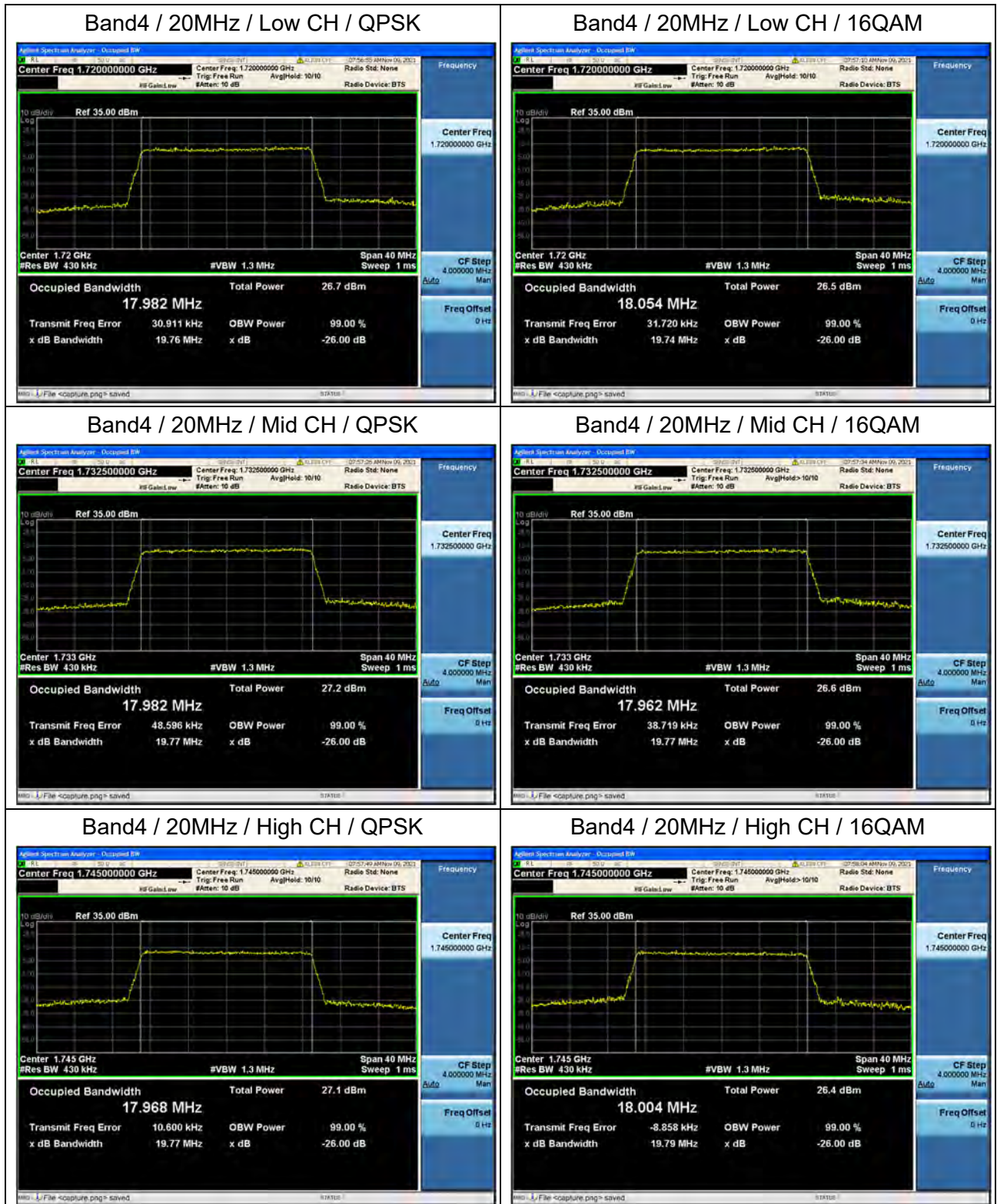








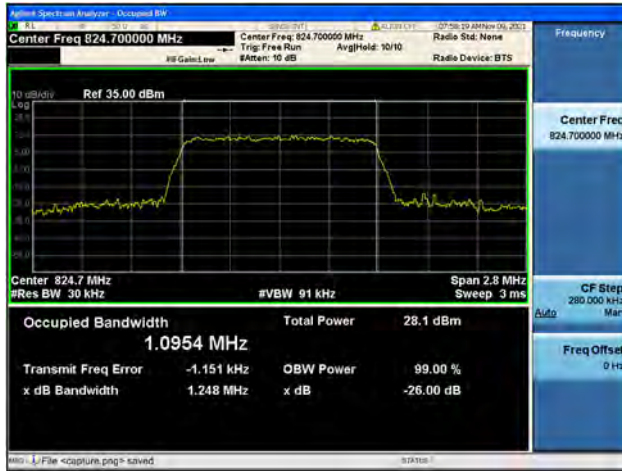








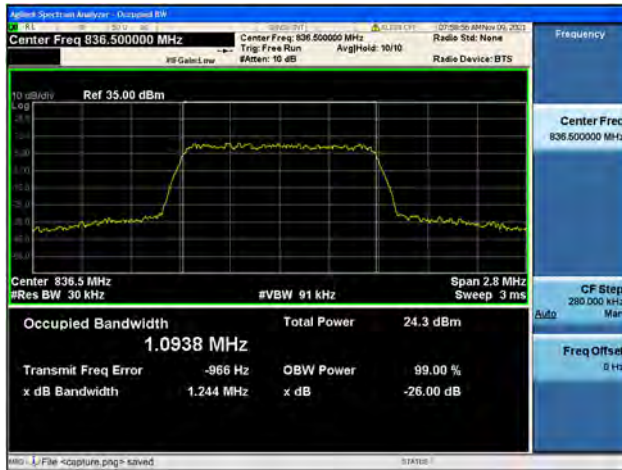
Band5 / 1.4MHz / Low CH / QPSK



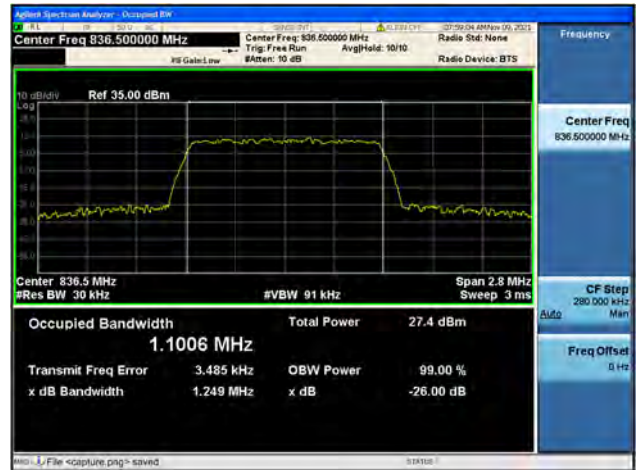
Band5 / 1.4MHz / Low CH / 16QAM



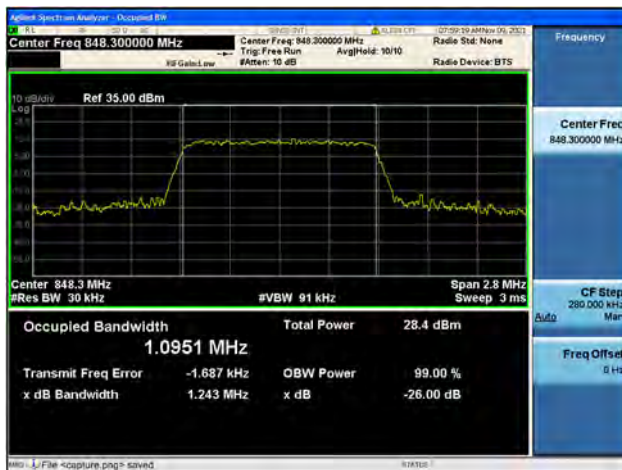
Band5 / 1.4MHz / Mid CH / QPSK



Band5 / 1.4MHz / Mid CH / 16QAM

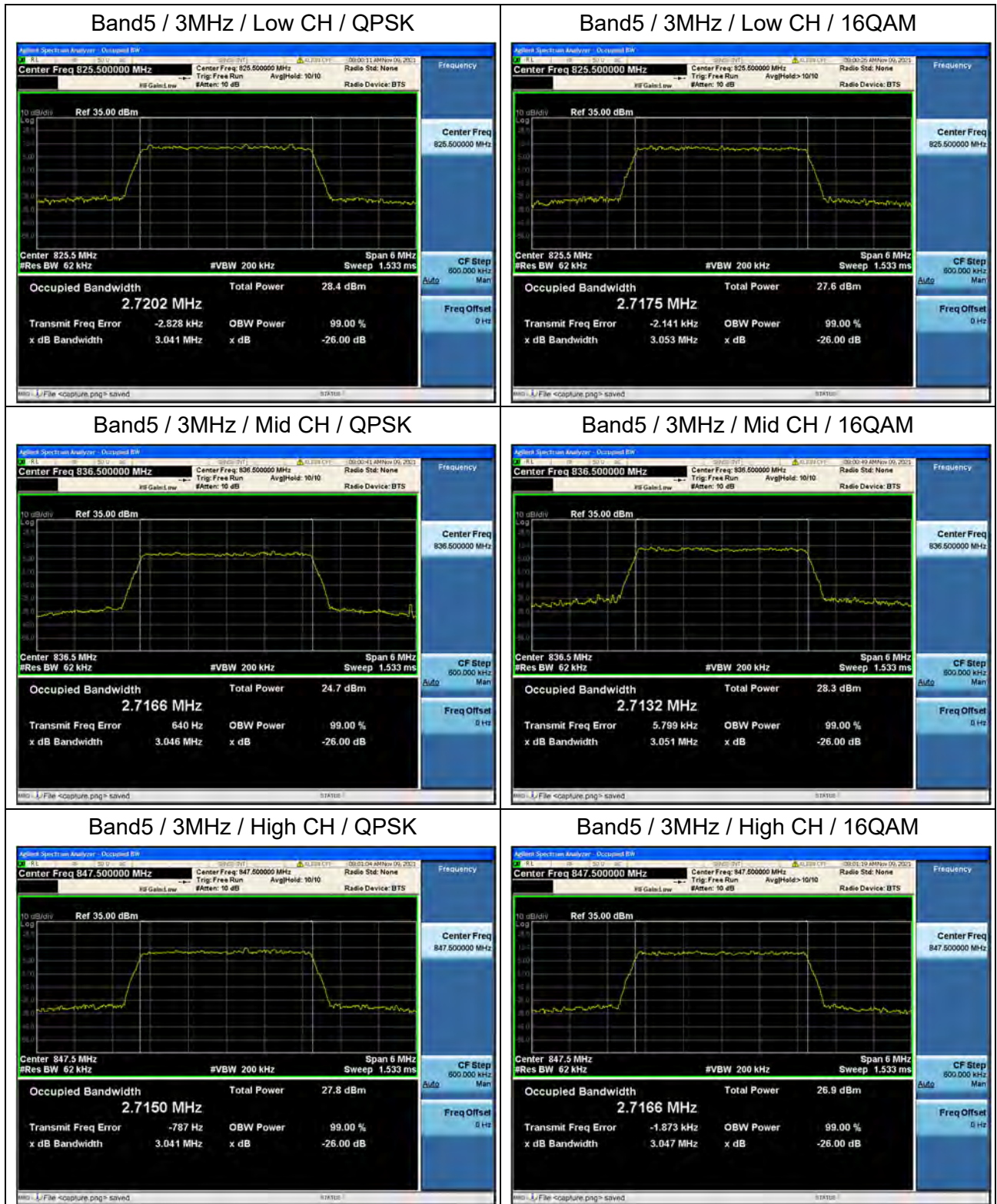


Band5 / 1.4MHz / High CH / QPSK



Band5 / 1.4MHz / High CH / 16QAM



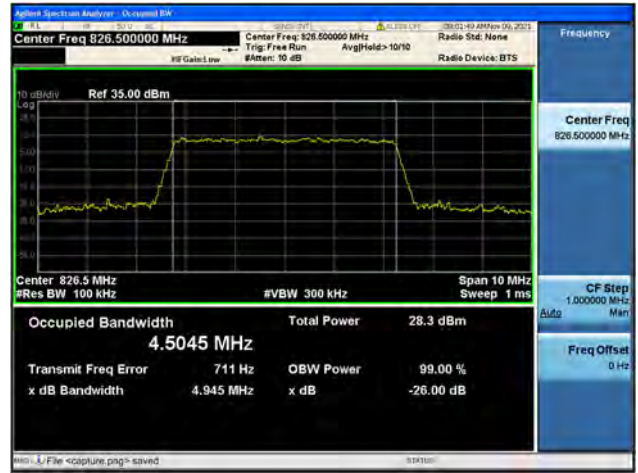




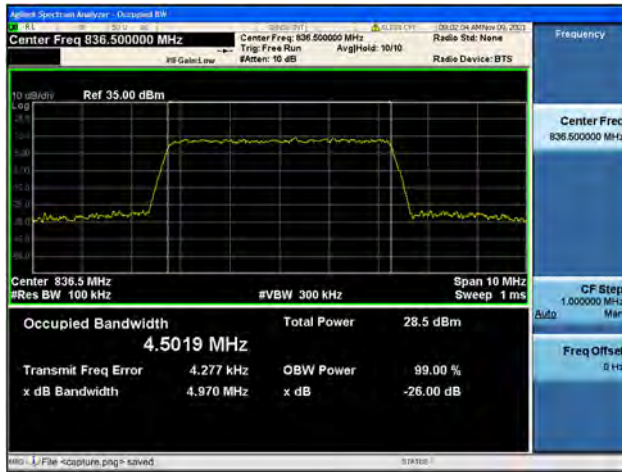
Band5 / 5MHz / Low CH / QPSK



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

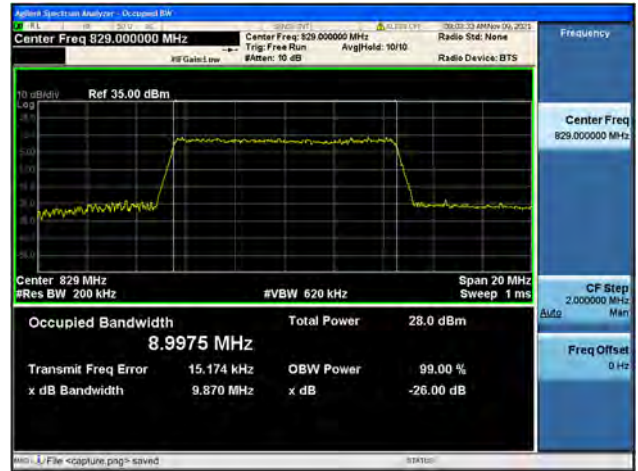




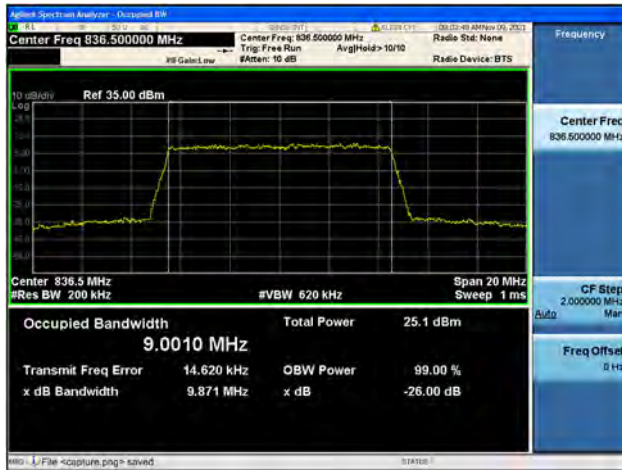
Band5 / 10MHz / Low CH / QPSK



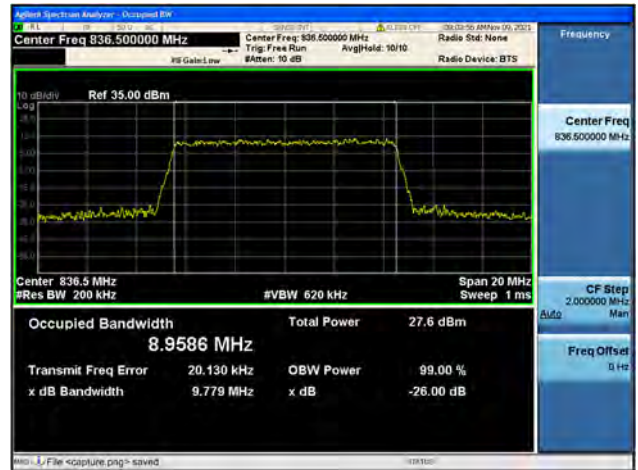
Band5 / 10MHz / Low CH / 16QAM



Band5 / 10MHz / Mid CH / QPSK



Band5 / 10MHz / Mid CH / 16QAM



Band5 / 10MHz / High CH / QPSK



Band5 / 10MHz / High CH / 16QAM

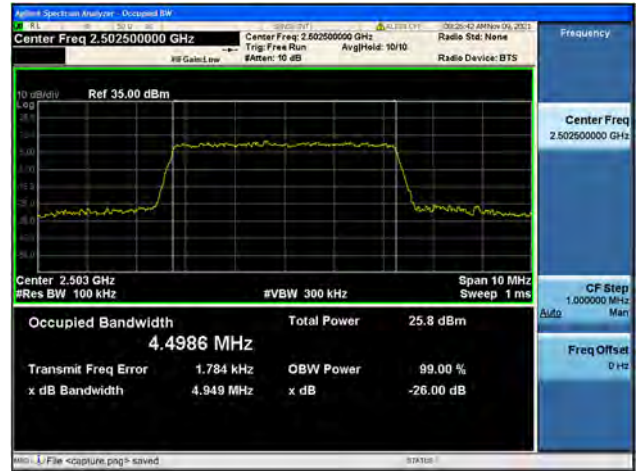




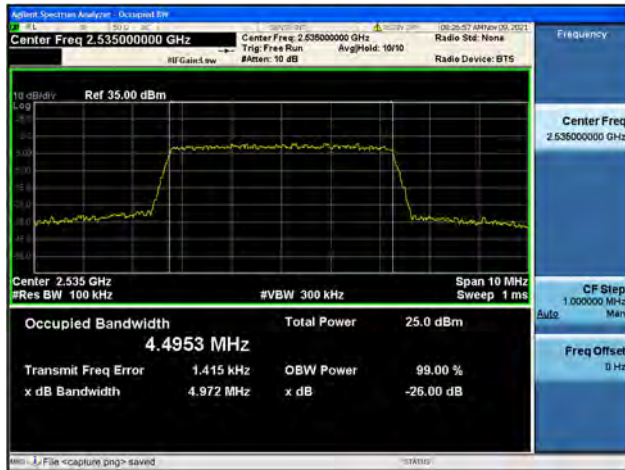
Band7 / 5MHz / Low CH / QPSK



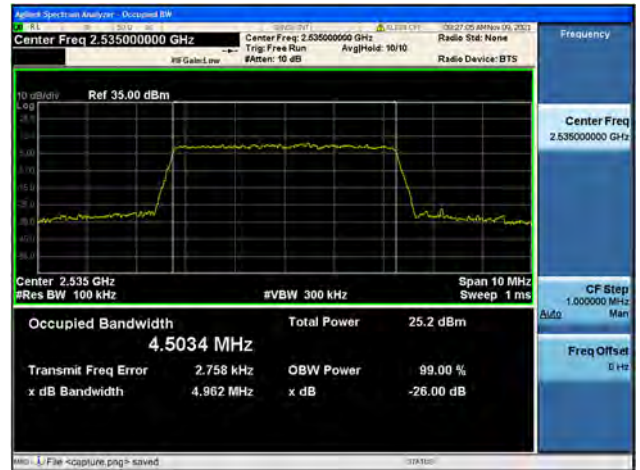
Band7 / 5MHz / Low CH / 16QAM



Band7 / 5MHz / Mid CH / QPSK



Band7 / 5MHz / Mid CH / 16QAM



Band7 / 5MHz / High CH / QPSK



Band7 / 5MHz / High CH / 16QAM





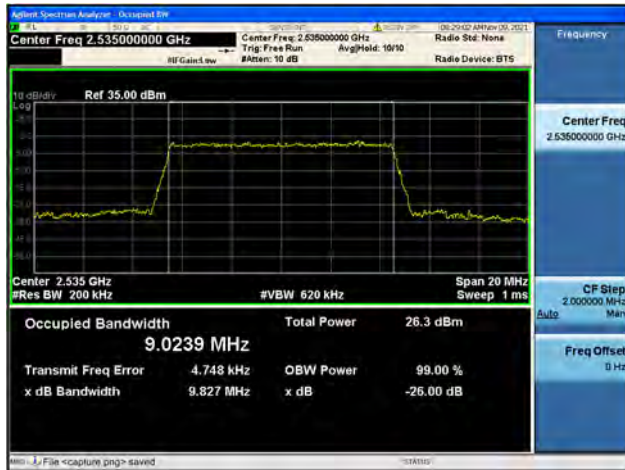
Band7 / 10MHz / Low CH / QPSK



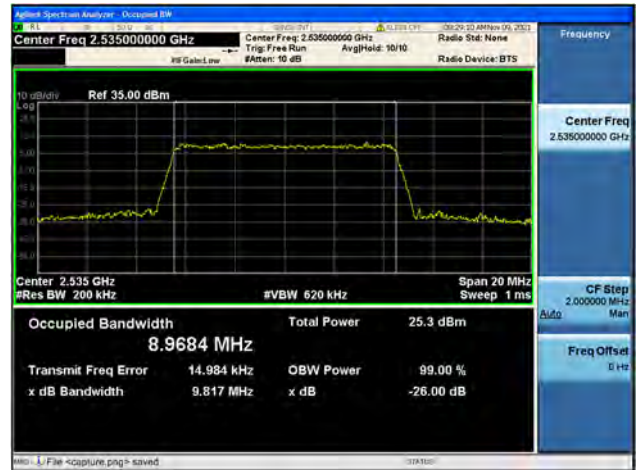
Band7 / 10MHz / Low CH / 16QAM



Band7 / 10MHz / Mid CH / QPSK



Band7 / 10MHz / Mid CH / 16QAM



Band7 / 10MHz / High CH / QPSK



Band7 / 10MHz / High CH / 16QAM

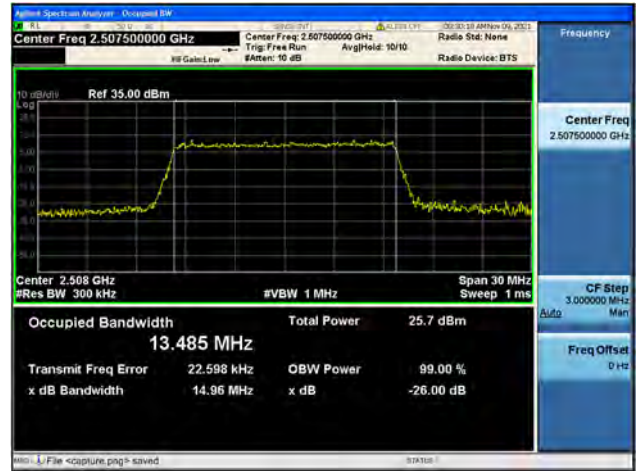




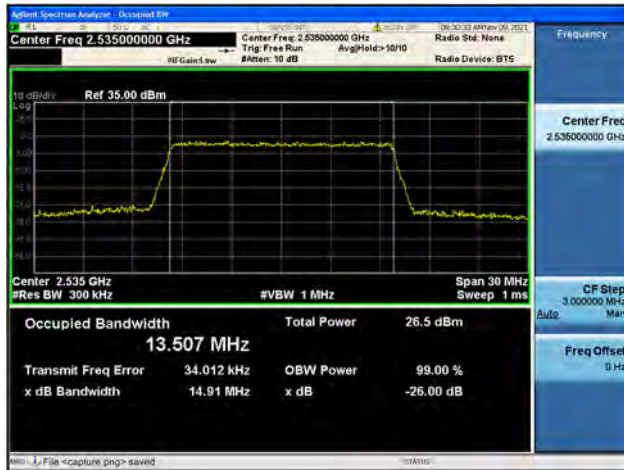
Band7 / 15MHz / Low CH / QPSK



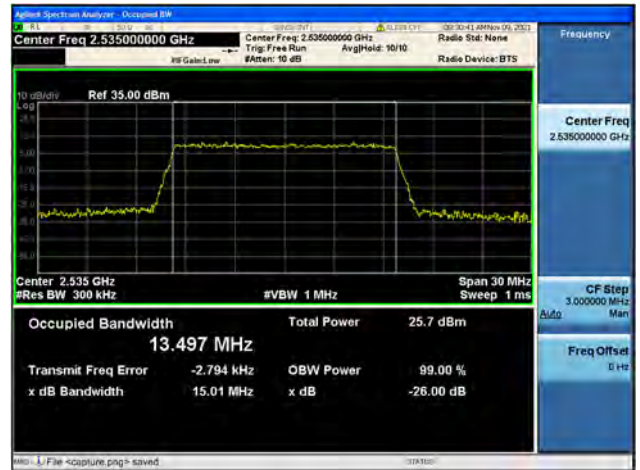
Band7 / 15MHz / Low CH / 16QAM



Band7 / 15MHz / Mid CH / QPSK



Band7 / 15MHz / Mid CH / 16QAM



Band7 / 15MHz / High CH / QPSK

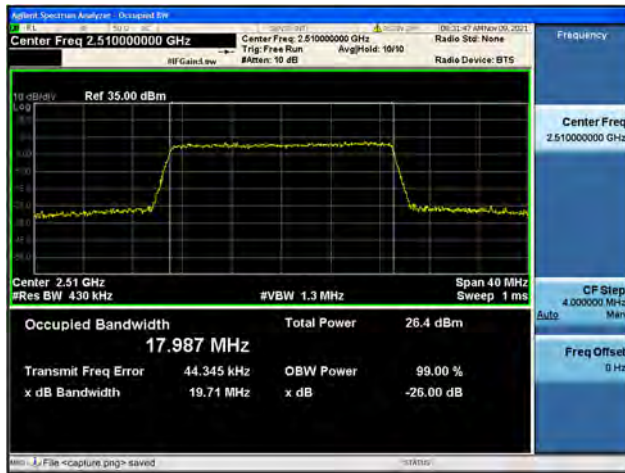


Band7 / 15MHz / High CH / 16QAM





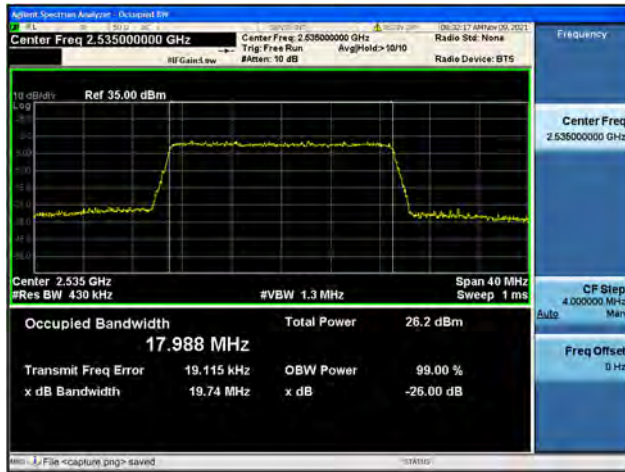
Band7 / 20MHz / Low CH / QPSK



Band7 / 20MHz / Low CH / 16QAM



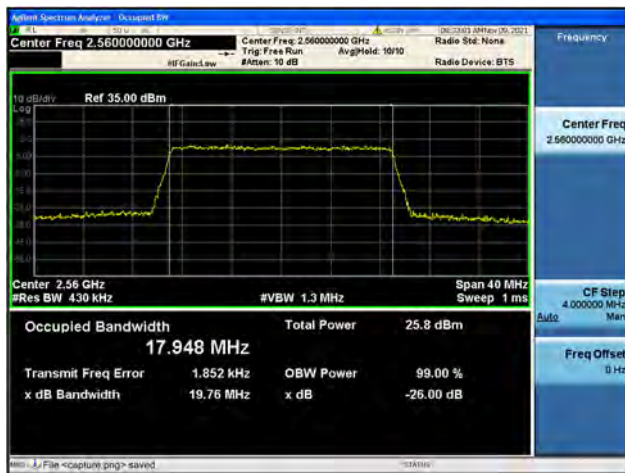
Band7 / 20MHz / Mid CH / QPSK



Band7 / 20MHz / Mid CH / 16QAM



Band7 / 20MHz / High CH / QPSK



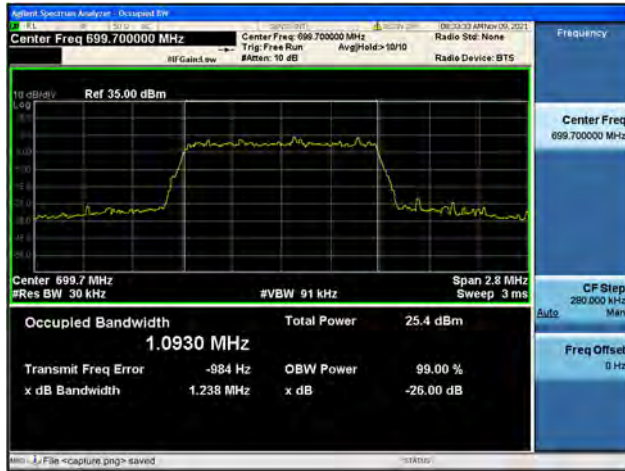
Band7 / 20MHz / High CH / 16QAM







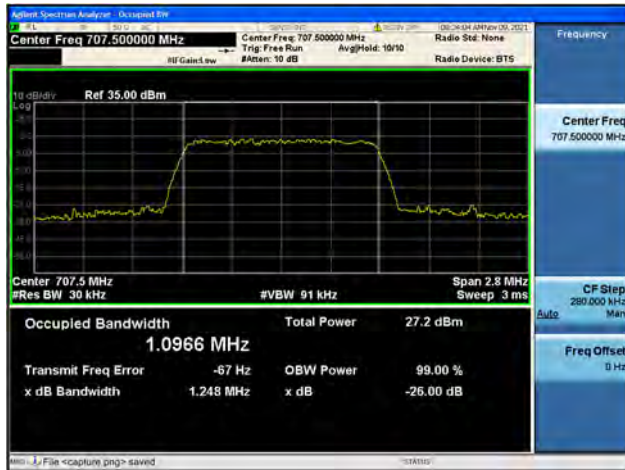
Band12 / 1.4MHz / Low CH / QPSK



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





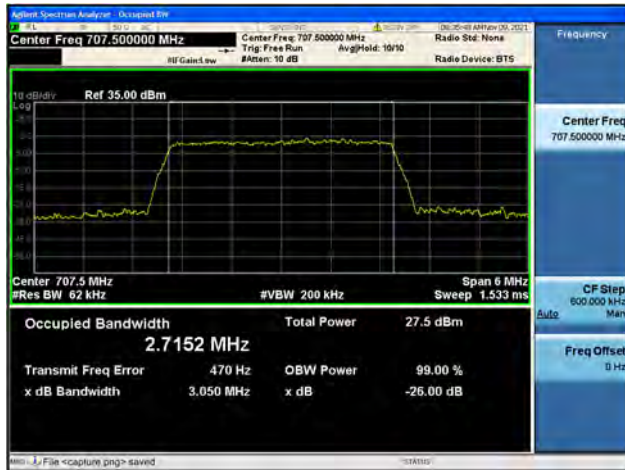
Band12 / 3MHz / Low CH / QPSK



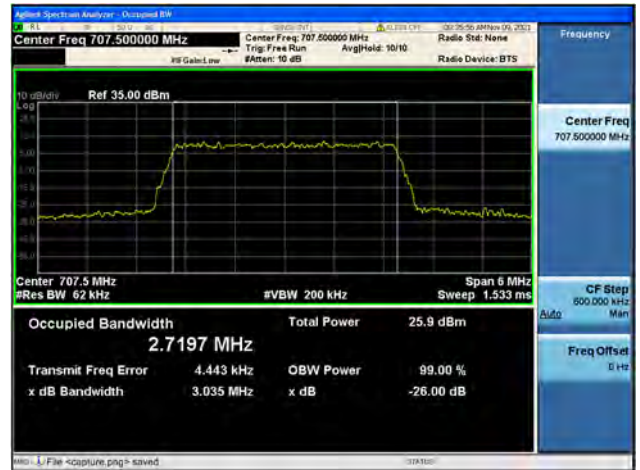
Band12 / 3MHz / Low CH / 16QAM



Band12 / 3MHz / Mid CH / QPSK



Band12 / 3MHz / Mid CH / 16QAM



Band12 / 3MHz / High CH / QPSK



Band12 / 3MHz / High CH / 16QAM





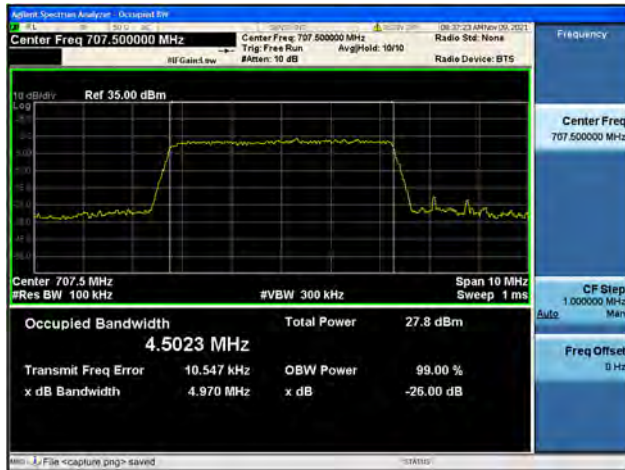
Band12 / 5MHz / Low CH / QPSK



Band12 / 5MHz / Low CH / 16QAM



Band12 / 5MHz / Mid CH / QPSK



Band12 / 5MHz / Mid CH / 16QAM



Band12 / 5MHz / High CH / QPSK

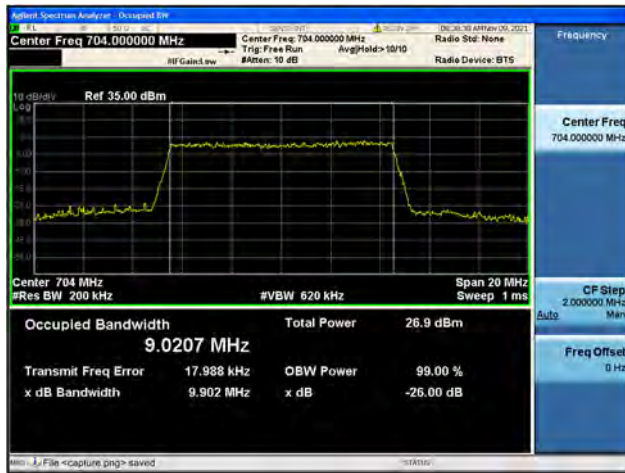


Band12 / 5MHz / High CH / 16QAM

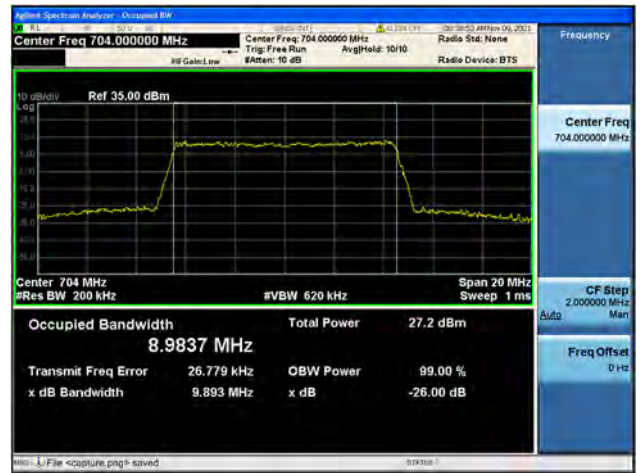




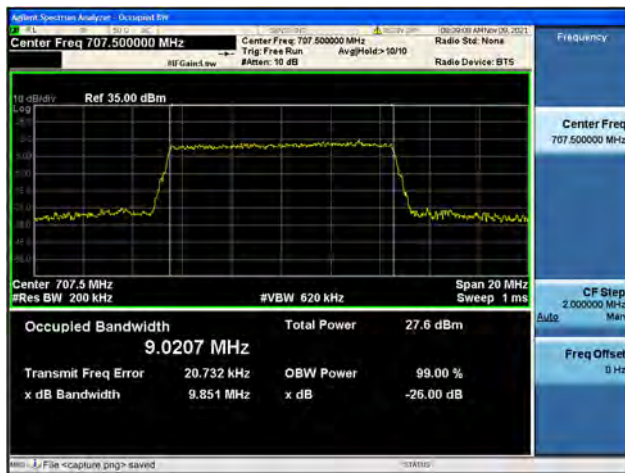
Band12 / 10MHz / Low CH / QPSK



Band12 / 10MHz / Low CH / 16QAM



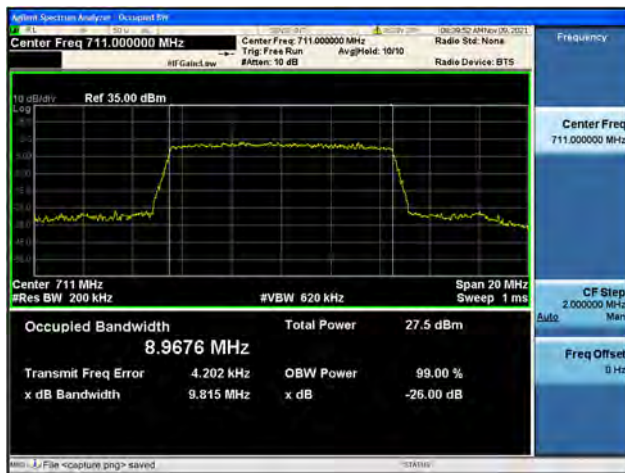
Band12 / 10MHz / Mid CH / QPSK



Band12 / 10MHz / Mid CH / 16QAM



Band12 / 10MHz / High CH / QPSK



Band12 / 10MHz / High CH / 16QAM





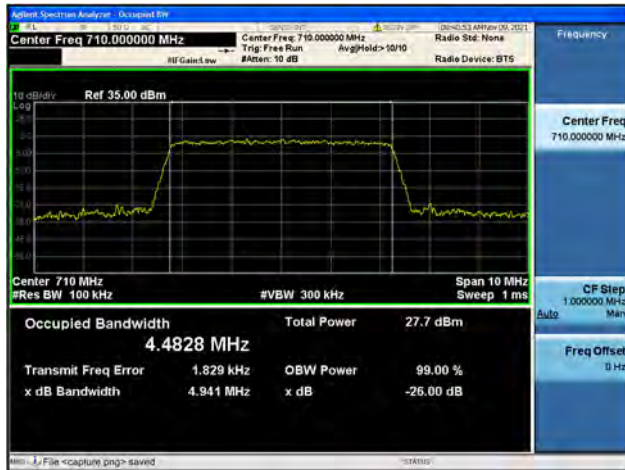
Band17 / 5MHz / Low CH / QPSK



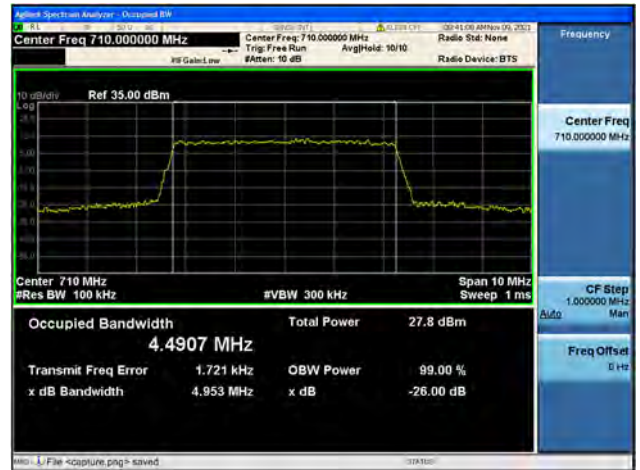
Band17 / 5MHz / Low CH / 16QAM



Band17 / 5MHz / Mid CH / QPSK



Band17 / 5MHz / Mid CH / 16QAM



Band17 / 5MHz / High CH / QPSK

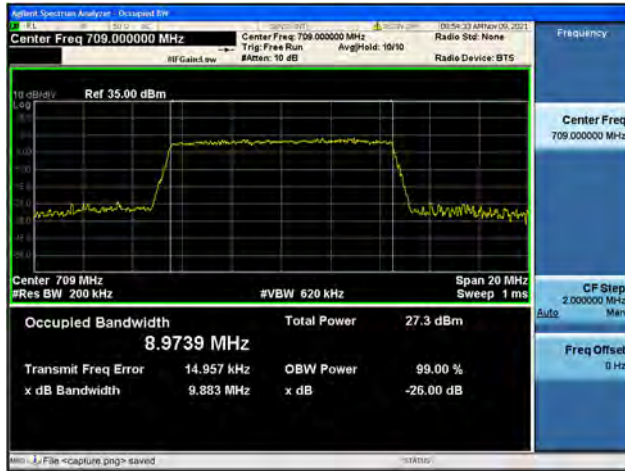


Band17 / 5MHz / High CH / 16QAM

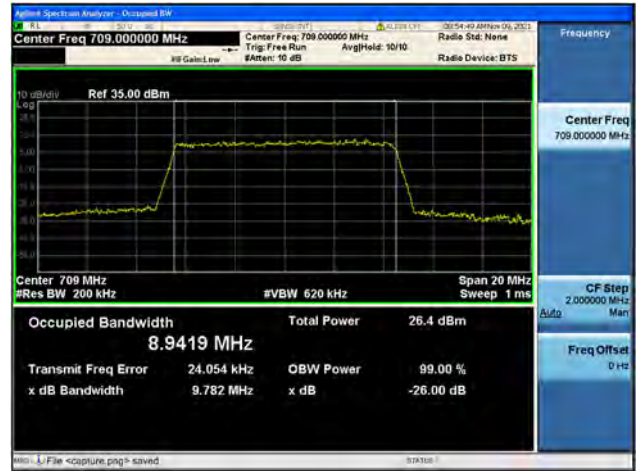




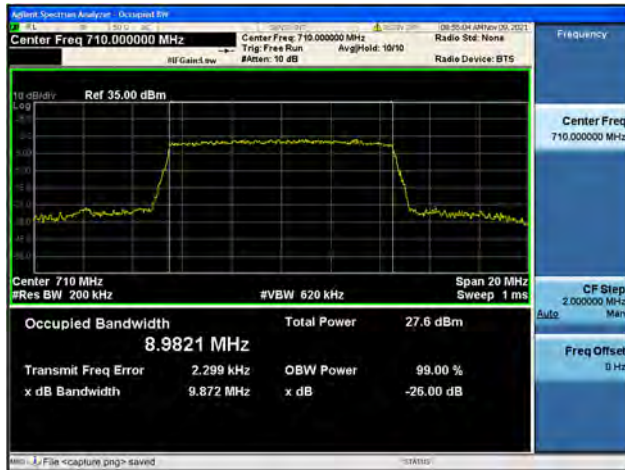
Band17 / 10MHz / Low CH / QPSK



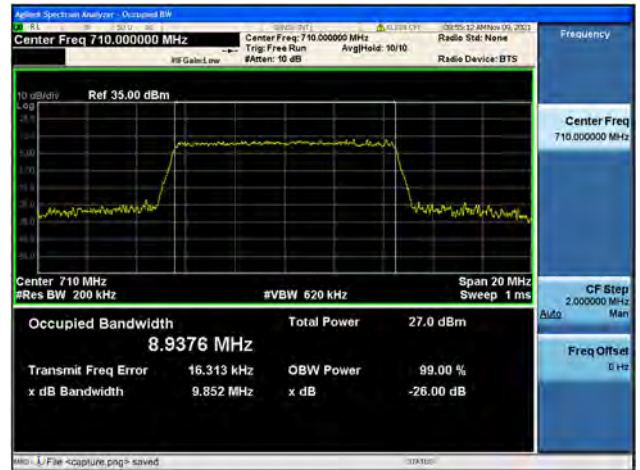
Band17 / 10MHz / Low CH / 16QAM



Band17 / 10MHz / Mid CH / QPSK



Band17 / 10MHz / Mid CH / 16QAM



Band17 / 10MHz / High CH / QPSK

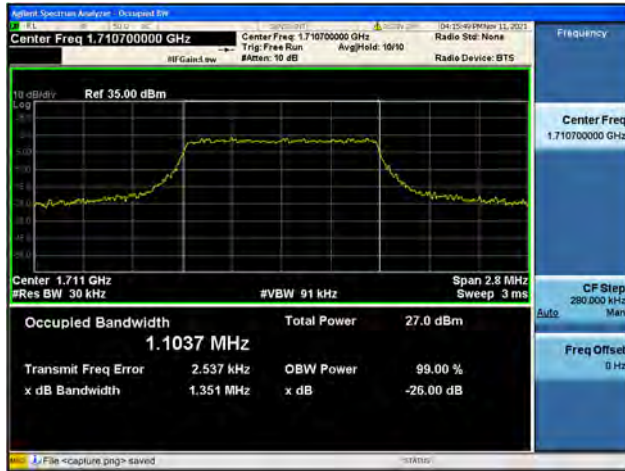


Band17 / 10MHz / High CH / 16QAM

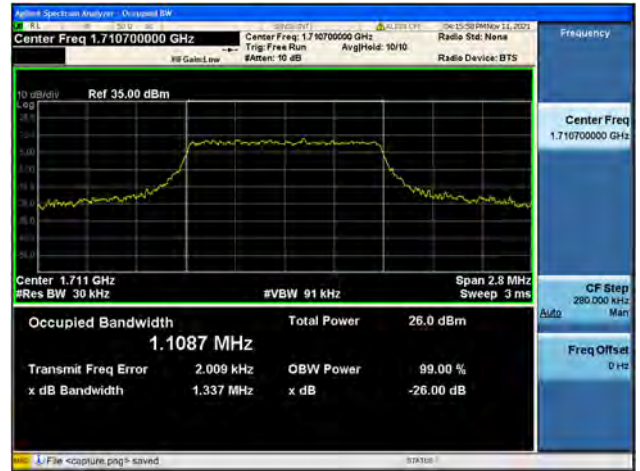




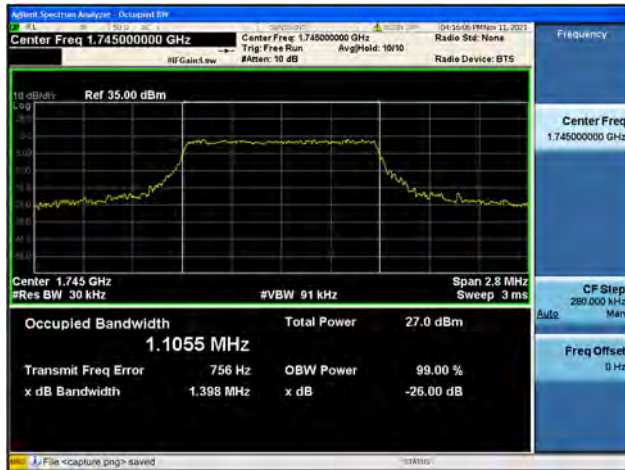
Band66 / 1.4MHz / Low CH / QPSK



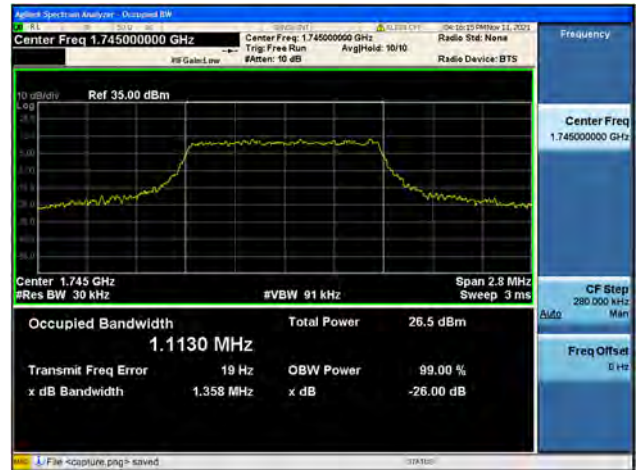
Band66 / 1.4MHz / Low CH / 16QAM



Band66 / 1.4MHz / Mid CH / QPSK



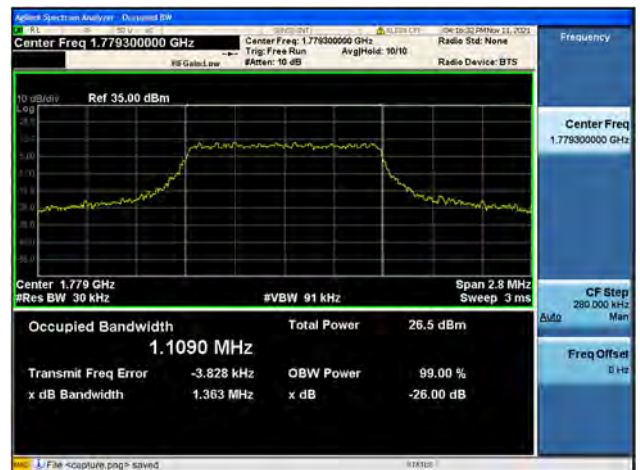
Band66 / 1.4MHz / Mid CH / 16QAM



Band66 / 1.4MHz / High CH / QPSK



Band66 / 1.4MHz / High CH / 16QAM





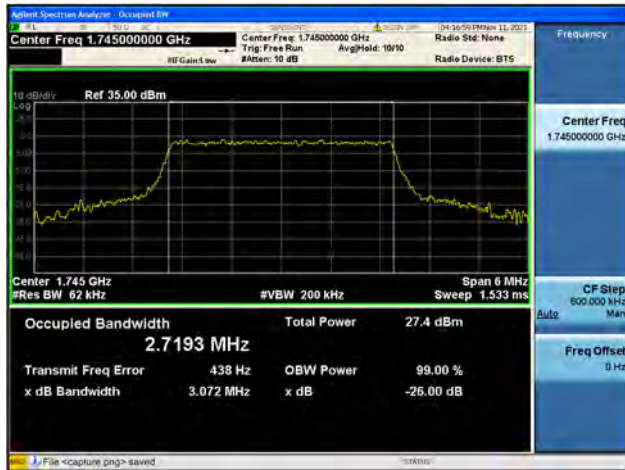
Band66 / 3MHz / Low CH / QPSK



Band66 / 3MHz / Low CH / 16QAM



Band66 / 3MHz / Mid CH / QPSK



Band66 / 3MHz / Mid CH / 16QAM



Band66 / 3MHz / High CH / QPSK



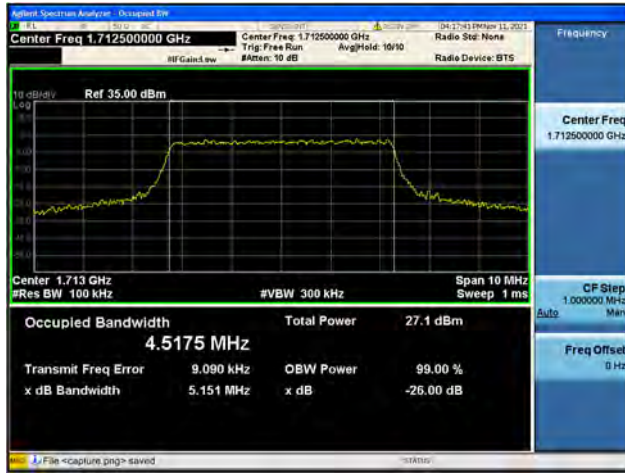
Band66 / 3MHz / High CH / 16QAM







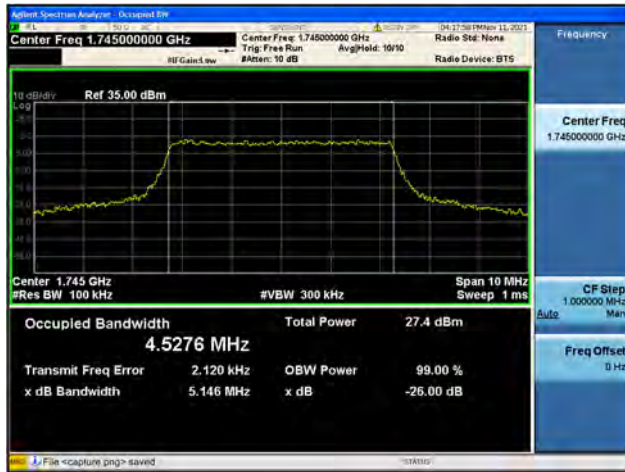
Band66 / 5MHz / Low CH / QPSK



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

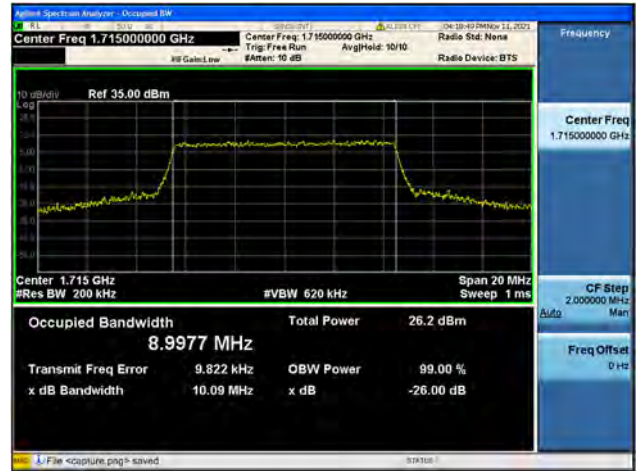




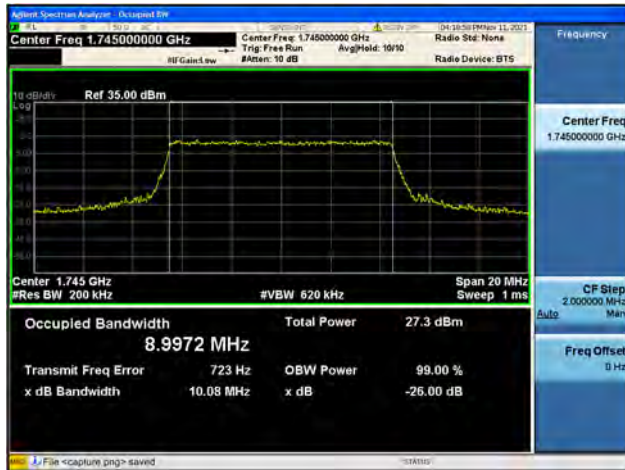
Band66 / 10MHz / Low CH / QPSK



Band66 / 10MHz / Low CH / 16QAM



Band66 / 10MHz / Mid CH / QPSK



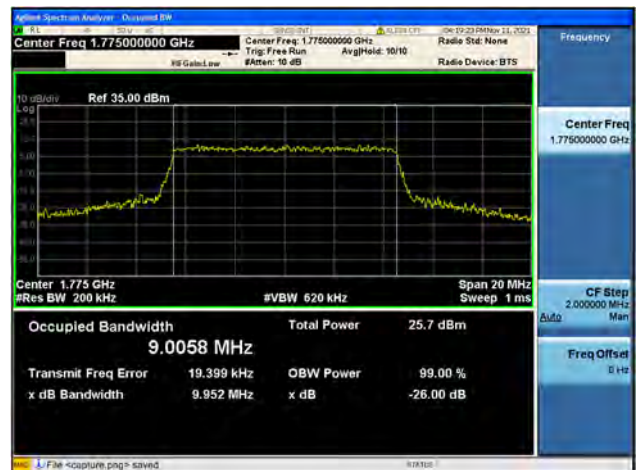
Band66 / 10MHz / Mid CH / 16QAM



Band66 / 10MHz / High CH / QPSK



Band66 / 10MHz / High CH / 16QAM





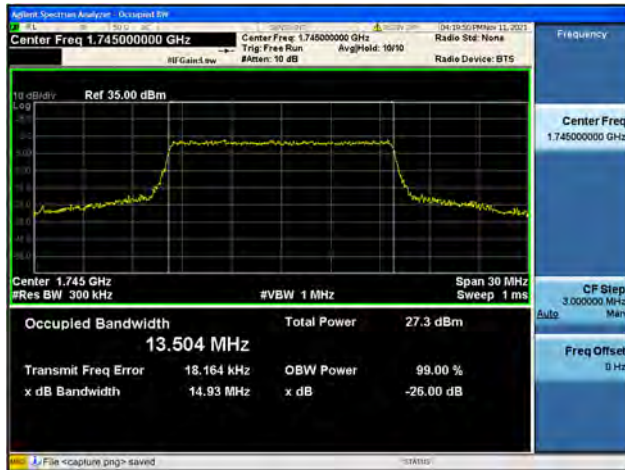
Band66 / 15MHz / Low CH / QPSK



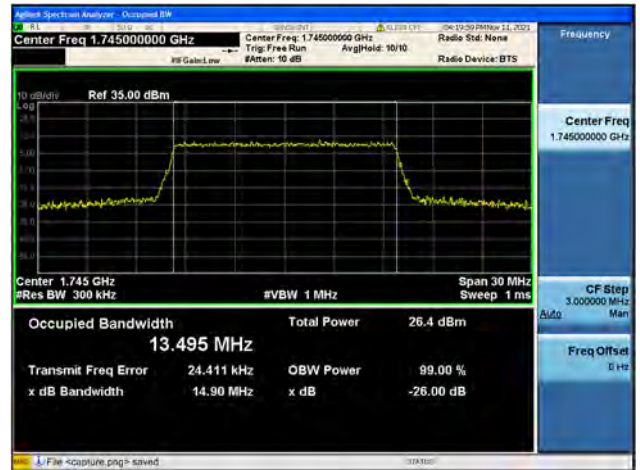
Band66 / 15MHz / Low CH / 16QAM



Band66 / 15MHz / Mid CH / QPSK



Band66 / 15MHz / Mid CH / 16QAM



Band66 / 15MHz / High CH / QPSK

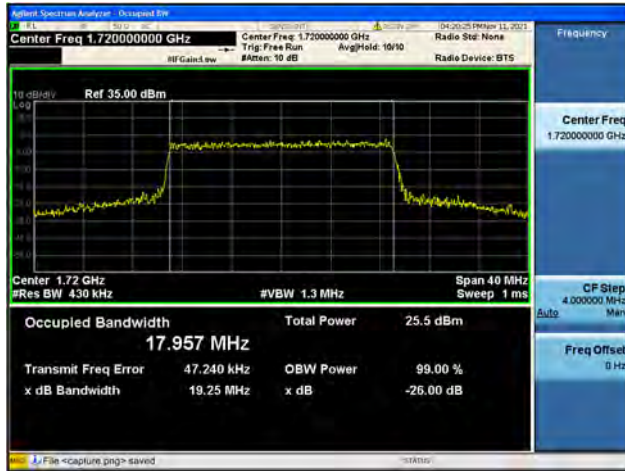


Band66 / 15MHz / High CH / 16QAM

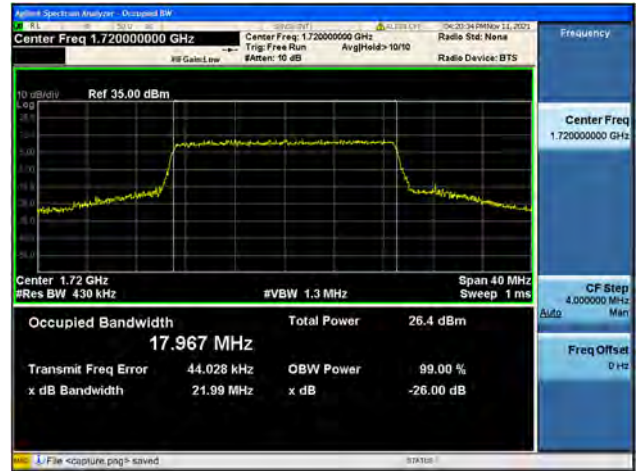




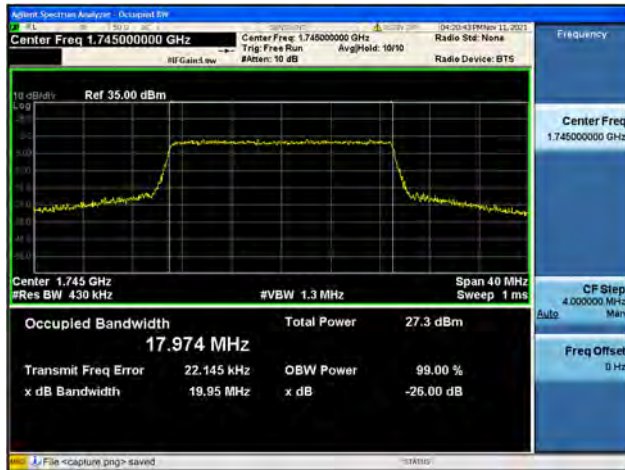
Band66 / 20MHz / Low CH / QPSK



Band66 / 20MHz / Low CH / 16QAM



Band66 / 20MHz / Mid CH / QPSK



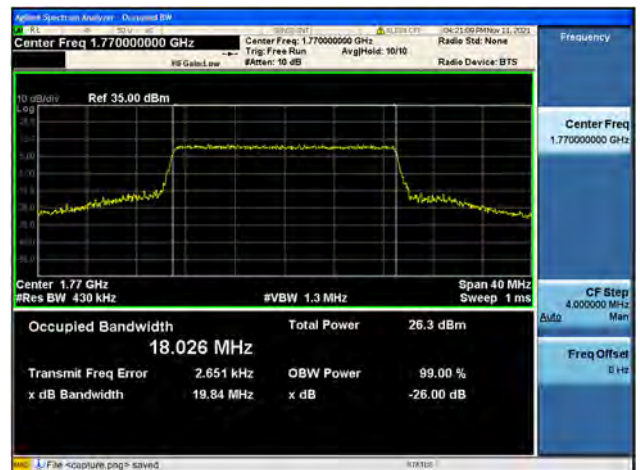
Band66 / 20MHz / Mid CH / 16QAM



Band66 / 20MHz / High CH / QPSK



Band66 / 20MHz / High CH / 16QAM

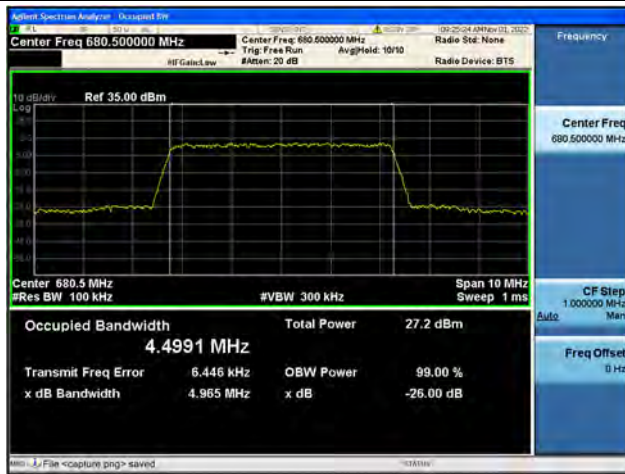




Band71 / 5MHz / QPSK/ Low CH



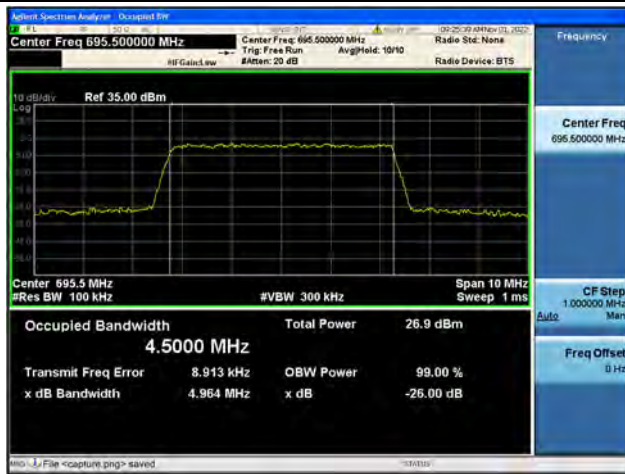
Band71 / 5MHz / 16QAM/ Low CH



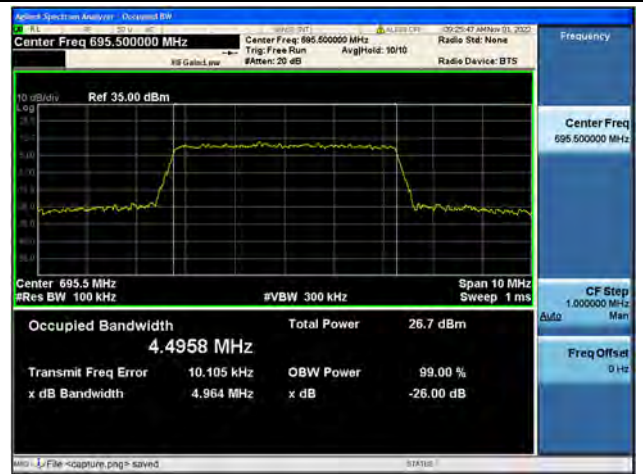
Band71 / 5MHz / QPSK/ Mid CH



Band71 / 5MHz / 16QAM/ Mid CH



Band71 / 5MHz / QPSK/ High CH



Band71 / 5MHz / 16QAM/ High CH



Band71 / 10MHz / QPSK/ Low CH



Band71 / 10MHz / 16QAM/ Low CH



Band71 / 10MHz / QPSK/ Mid CH



Band71 / 10MHz / 16QAM/ Mid CH



Band71 / 10MHz / QPSK/ High CH



Band71 / 10MHz / 16QAM/ High CH



Band71 / 15MHz / QPSK/ Low CH



Band71 / 15MHz / 16QAM/ Low CH



Band71 / 15MHz / QPSK/ Mid CH



Band71 / 15MHz / 16QAM/ Mid CH



Band71 / 15MHz / QPSK/ High CH



Band71 / 15MHz / 16QAM/ High CH



Band71 / 20MHz / QPSK/ Low CH



Band71 / 20MHz / 16QAM/ Low CH



Band71 / 20MHz / QPSK/ Mid CH



Band71 / 20MHz / 16QAM/ Mid CH



Band71 / 20MHz / QPSK/ High CH



Band71 / 20MHz / 16QAM/ High CH



## 2.3. Frequency Stability

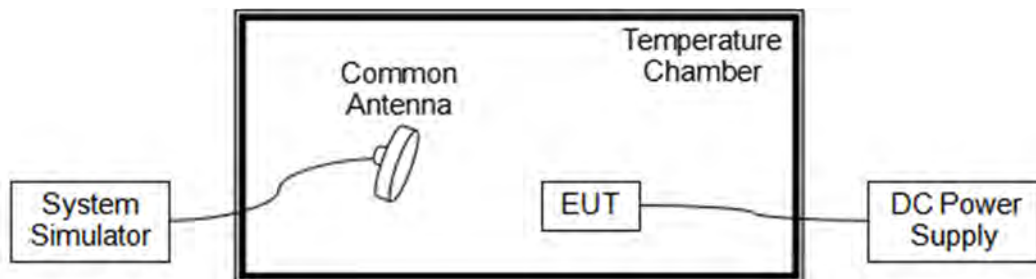
### 2.3.1. Requirement

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

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

**Note:** The operating temperature of EUT is from  $-10^{\circ}\text{C}$  to  $55^{\circ}\text{C}$ , 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 3.70V, 4.20V and 3.00V, which are specified by the applicant; the normal temperature here used is 20°C.

<b>LTE Band 2, QPSK, Channel 18900, Frequency 1880.0MHz</b>					
<b>Limit =Within Authorized Band</b>					
<b>Voltage (%)</b>	<b>Power (VDC)</b>	<b>Temp(°C)</b>	<b>Fre. Dev. (Hz)</b>	<b>Deviation (ppm)</b>	<b>Result</b>
Normal	3.70	+20(Ref)	-39	-0.021	PASS
Normal		-10	47	0.025	
Normal		0	-19	-0.010	
Normal		+10	-45	-0.024	
Normal		+20	-50	-0.027	
Normal		+30	28	0.015	
Normal		+40	-49	-0.026	
Normal		+50	46	0.024	
Normal		+55	-38	-0.020	
High	4.20	+20	-17	-0.009	
BATT.ENDPOINT	3.00	+20	-13	-0.007	

<b>LTE Band 4, QPSK, Channel 20175, Frequency 1732.5MHz</b>					
<b>Limit =Within Authorized Band</b>					
<b>Voltage (%)</b>	<b>Power (VDC)</b>	<b>Temp(°C)</b>	<b>Fre. Dev. (Hz)</b>	<b>Deviation (ppm)</b>	<b>Result</b>
Normal	3.70	+20(Ref)	57	0.033	PASS
Normal		-10	34	0.020	
Normal		0	-39	-0.023	
Normal		+10	21	0.012	
Normal		+20	31	0.018	
Normal		+30	-43	-0.025	
Normal		+40	13	0.008	
Normal		+50	-20	-0.012	
Normal		+55	30	0.017	
High	4.20	+20	51	0.029	
BATT.ENDPOINT	3.00	+20	23	0.013	



LTE Band 5, QPSK, Channel 20525, Frequency 836.5MHz					
Limit=±2.5ppm					
Voltage (%)	Power (VDC)	Temp(°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
Normal	3.70	+20(Ref)	-59	-0.071	PASS
Normal		-10	53	0.063	
Normal		0	45	0.054	
Normal		+10	28	0.033	
Normal		+20	27	0.032	
Normal		+30	-16	-0.019	
Normal		+40	-59	-0.071	
Normal		+50	-18	-0.022	
Normal		+55	23	0.027	
High		4.20	+20	53	
BATT.ENDPOINT	3.00	+20	-26	-0.031	

LTE Band 7, QPSK, Channel 21100, Frequency 2535MHz					
Limit= Within Authorized Band					
Voltage (%)	Power (VDC)	Temp(°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
Normal	3.70	+20(Ref)	44	0.017	PASS
Normal		-10	32	0.013	
Normal		0	-31	-0.012	
Normal		+10	48	0.019	
Normal		+20	16	0.006	
Normal		+30	-39	-0.015	
Normal		+40	24	0.009	
Normal		+50	45	0.018	
Normal		+55	-18	-0.007	
High		4.20	+20	-25	
BATT.ENDPOINT	3.00	+20	-36	-0.014	



LTE Band 12, QPSK, Channel 23095, Frequency 707.5MHz					
Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp(°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
Normal	3.70	+20(Ref)	-27	-0.038	PASS
Normal		-10	21	0.030	
Normal		0	-54	-0.076	
Normal		+10	50	0.071	
Normal		+20	-15	-0.021	
Normal		+30	13	0.018	
Normal		+40	54	0.076	
Normal		+50	-48	-0.068	
Normal		+55	-23	-0.033	
High	4.20	+20	27	0.038	
BATT.ENDPOINT	3.00	+20	45	0.064	

LTE Band 17, QPSK, Channel 23790, Frequency 710MHz					
Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp(°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
Normal	3.70	+20(Ref)	40	0.056	PASS
Normal		-10	-26	-0.037	
Normal		0	51	0.072	
Normal		+10	17	0.024	
Normal		+20	-37	-0.052	
Normal		+30	-38	-0.054	
Normal		+40	-23	-0.032	
Normal		+50	-20	-0.028	
Normal		+55	51	0.072	
High	4.20	+20	-56	-0.079	
BATT.ENDPOINT	3.00	+20	26	0.037	



LTE Band 66, QPSK, Channel 132322, Frequency 1745.0MHz					
Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp (°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
Normal	3.70	+20(Ref)	-17	-0.010	PASS
Normal		-10	-45	-0.026	
Normal		0	49	0.028	
Normal		+10	22	0.013	
Normal		+20	48	0.028	
Normal		+30	-24	-0.014	
Normal		+40	-16	-0.009	
Normal		+50	-31	-0.018	
Normal		+55	40	0.023	
High	4.20	+20	-15	-0.009	
BATT.ENDPOINT	3.00	+20	-58	-0.033	

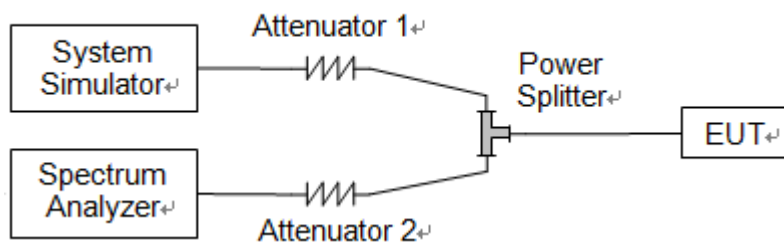
LTE Band 71, 16QAM, Channel 133322, Frequency 683.0MHz					
Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp (°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
Normal	3.70	+20(Ref)	-30	-0.044	PASS
Normal		-10	30	0.044	
Normal		0	-53	-0.078	
Normal		+10	51	0.075	
Normal		+20	-30	-0.044	
Normal		+30	-18	-0.026	
Normal		+40	40	0.059	
Normal		+50	-17	-0.025	
Normal		+55	35	0.051	
High	4.20	+20	47	0.069	
BATT.ENDPOINT	3.00	+20	-29	-0.042	

## 2.4. Peak to Average Ratio

### 2.4.1. Requirement

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

### 2.4.2. Test Description



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

### 2.4.3. Test Procedure

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

### 2.4.4. Test Result

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



LTE Band 2					
BW(MHz)	Channel Level	Modulation	PAR Radio(dB)	Limit(dB)	Verdict
1.4	Low	QPSK	5.6	<=13	PASS
	Low	16QAM	6.39	<=13	PASS
	Mid	QPSK	5.78	<=13	PASS
	Mid	16QAM	6.47	<=13	PASS
	High	QPSK	5.58	<=13	PASS
	High	16QAM	6.34	<=13	PASS
3	Low	QPSK	5.48	<=13	PASS
	Low	16QAM	6.29	<=13	PASS
	Mid	QPSK	5.72	<=13	PASS
	Mid	16QAM	6.45	<=13	PASS
	High	QPSK	5.61	<=13	PASS
	High	16QAM	6.35	<=13	PASS
5	Low	QPSK	5.77	<=13	PASS
	Low	16QAM	6.11	<=13	PASS
	Mid	QPSK	5.66	<=13	PASS
	Mid	16QAM	6.31	<=13	PASS
	High	QPSK	5.67	<=13	PASS
	High	16QAM	6.31	<=13	PASS
10	Low	QPSK	5.75	<=13	PASS
	Low	16QAM	6.47	<=13	PASS
	Mid	QPSK	5.82	<=13	PASS
	Mid	16QAM	6.34	<=13	PASS
	High	QPSK	5.86	<=13	PASS
	High	16QAM	6.41	<=13	PASS
15	Low	QPSK	5.72	<=13	PASS
	Low	16QAM	6.47	<=13	PASS
	Mid	QPSK	5.69	<=13	PASS
	Mid	16QAM	6.26	<=13	PASS
	High	QPSK	5.74	<=13	PASS
	High	16QAM	6.34	<=13	PASS
20	Low	QPSK	5.8	<=13	PASS
	Low	16QAM	6.39	<=13	PASS
	Mid	QPSK	5.69	<=13	PASS
	Mid	16QAM	6.3	<=13	PASS
	High	QPSK	5.86	<=13	PASS
	High	16QAM	6.43	<=13	PASS



LTE Band 4					
BW(MHz)	Channel Level	Modulation	PAR Radio(dB)	Limit(dB)	Verdict
1.4	Low	QPSK	5.6	<=13	PASS
	Low	16QAM	6.43	<=13	PASS
	Mid	QPSK	5.41	<=13	PASS
	Mid	16QAM	6.25	<=13	PASS
	High	QPSK	5.29	<=13	PASS
	High	16QAM	5.93	<=13	PASS
3	Low	QPSK	5.62	<=13	PASS
	Low	16QAM	6.42	<=13	PASS
	Mid	QPSK	5.45	<=13	PASS
	Mid	16QAM	6.18	<=13	PASS
	High	QPSK	5.36	<=13	PASS
	High	16QAM	6.06	<=13	PASS
5	Low	QPSK	5.64	<=13	PASS
	Low	16QAM	6.26	<=13	PASS
	Mid	QPSK	5.59	<=13	PASS
	Mid	16QAM	6.17	<=13	PASS
	High	QPSK	5.41	<=13	PASS
	High	16QAM	6.05	<=13	PASS
10	Low	QPSK	5.87	<=13	PASS
	Low	16QAM	6.43	<=13	PASS
	Mid	QPSK	5.63	<=13	PASS
	Mid	16QAM	6.2	<=13	PASS
	High	QPSK	5.44	<=13	PASS
	High	16QAM	6.08	<=13	PASS
15	Low	QPSK	5.7	<=13	PASS
	Low	16QAM	6.23	<=13	PASS
	Mid	QPSK	5.62	<=13	PASS
	Mid	16QAM	6.21	<=13	PASS
	High	QPSK	5.28	<=13	PASS
	High	16QAM	6.03	<=13	PASS
20	Low	QPSK	5.74	<=13	PASS
	Low	16QAM	6.37	<=13	PASS
	Mid	QPSK	5.52	<=13	PASS
	Mid	16QAM	6.15	<=13	PASS
	High	QPSK	5.38	<=13	PASS
	High	16QAM	6.12	<=13	PASS

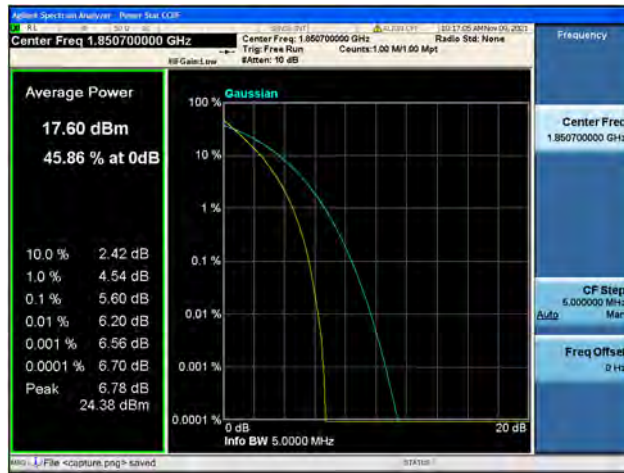




LTE Band 66					
BW(MHz)	Channel Level	Modulation	PAR Radio(dB)	Limit(dB)	Verdict
1.4	Low	QPSK	4.46	<=13	PASS
	Low	16QAM	5.23	<=13	PASS
	Mid	QPSK	4.41	<=13	PASS
	Mid	16QAM	5.28	<=13	PASS
	High	QPSK	4.45	<=13	PASS
	High	16QAM	5.33	<=13	PASS
3	Low	QPSK	4.6	<=13	PASS
	Low	16QAM	5.39	<=13	PASS
	Mid	QPSK	4.6	<=13	PASS
	Mid	16QAM	5.42	<=13	PASS
	High	QPSK	4.56	<=13	PASS
	High	16QAM	5.5	<=13	PASS
5	Low	QPSK	4.91	<=13	PASS
	Low	16QAM	5.71	<=13	PASS
	Mid	QPSK	4.78	<=13	PASS
	Mid	16QAM	5.73	<=13	PASS
	High	QPSK	4.81	<=13	PASS
	High	16QAM	5.76	<=13	PASS
10	Low	QPSK	4.91	<=13	PASS
	Low	16QAM	5.8	<=13	PASS
	Mid	QPSK	4.94	<=13	PASS
	Mid	16QAM	5.81	<=13	PASS
	High	QPSK	5.07	<=13	PASS
	High	16QAM	5.83	<=13	PASS
15	Low	QPSK	4.65	<=13	PASS
	Low	16QAM	5.64	<=13	PASS
	Mid	QPSK	4.67	<=13	PASS
	Mid	16QAM	5.6	<=13	PASS
	High	QPSK	4.85	<=13	PASS
	High	16QAM	5.68	<=13	PASS
20	Low	QPSK	4.73	<=13	PASS
	Low	16QAM	5.75	<=13	PASS
	Mid	QPSK	4.77	<=13	PASS
	Mid	16QAM	5.74	<=13	PASS
	High	QPSK	4.99	<=13	PASS
	High	16QAM	5.86	<=13	PASS



Band2 / 1.4MHz / Low CH / QPSK



Band2 / 1.4MHz / Low CH / 16QAM



Band2 / 1.4MHz / Mid CH / QPSK



Band2 / 1.4MHz / Mid CH / 16QAM

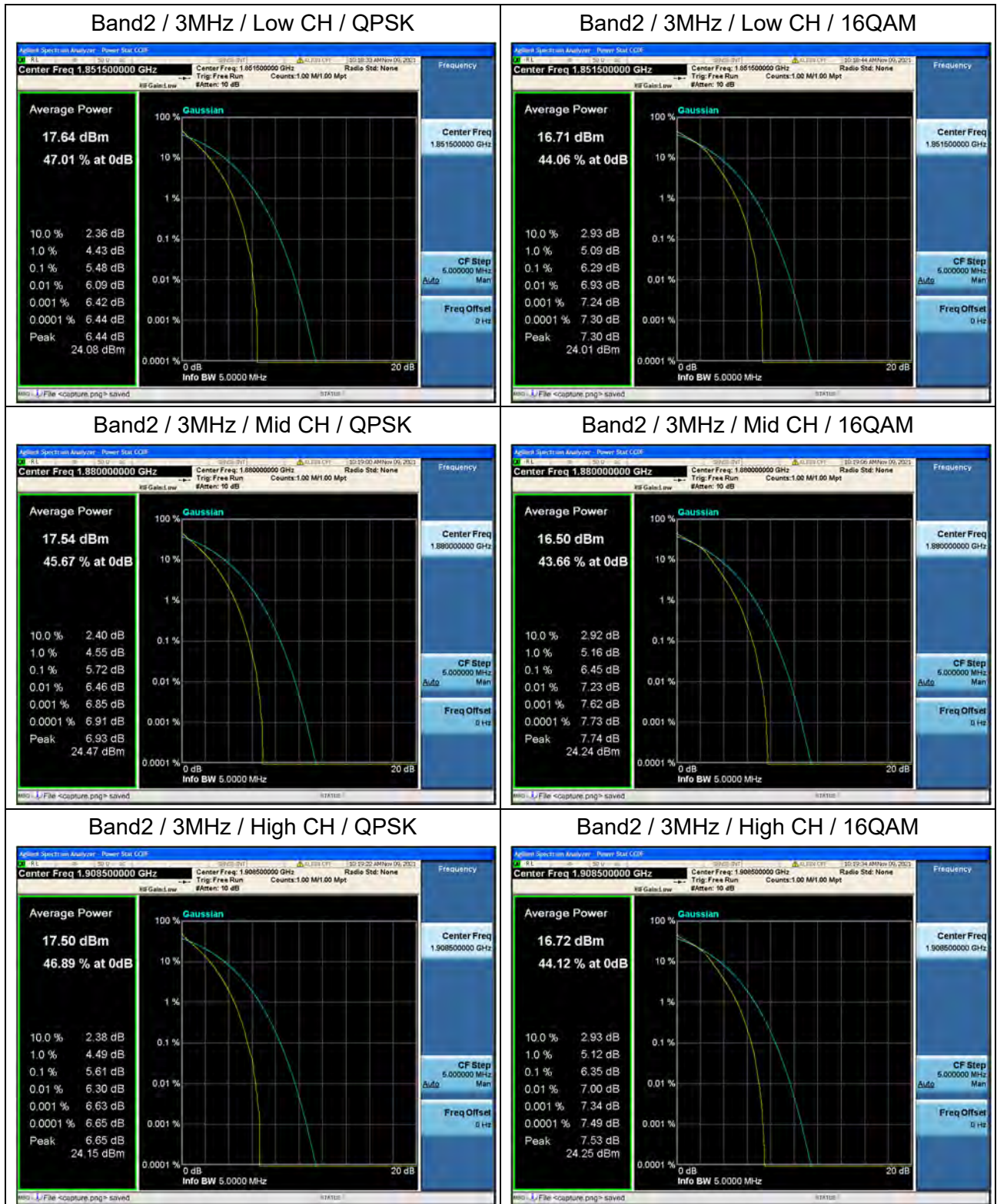


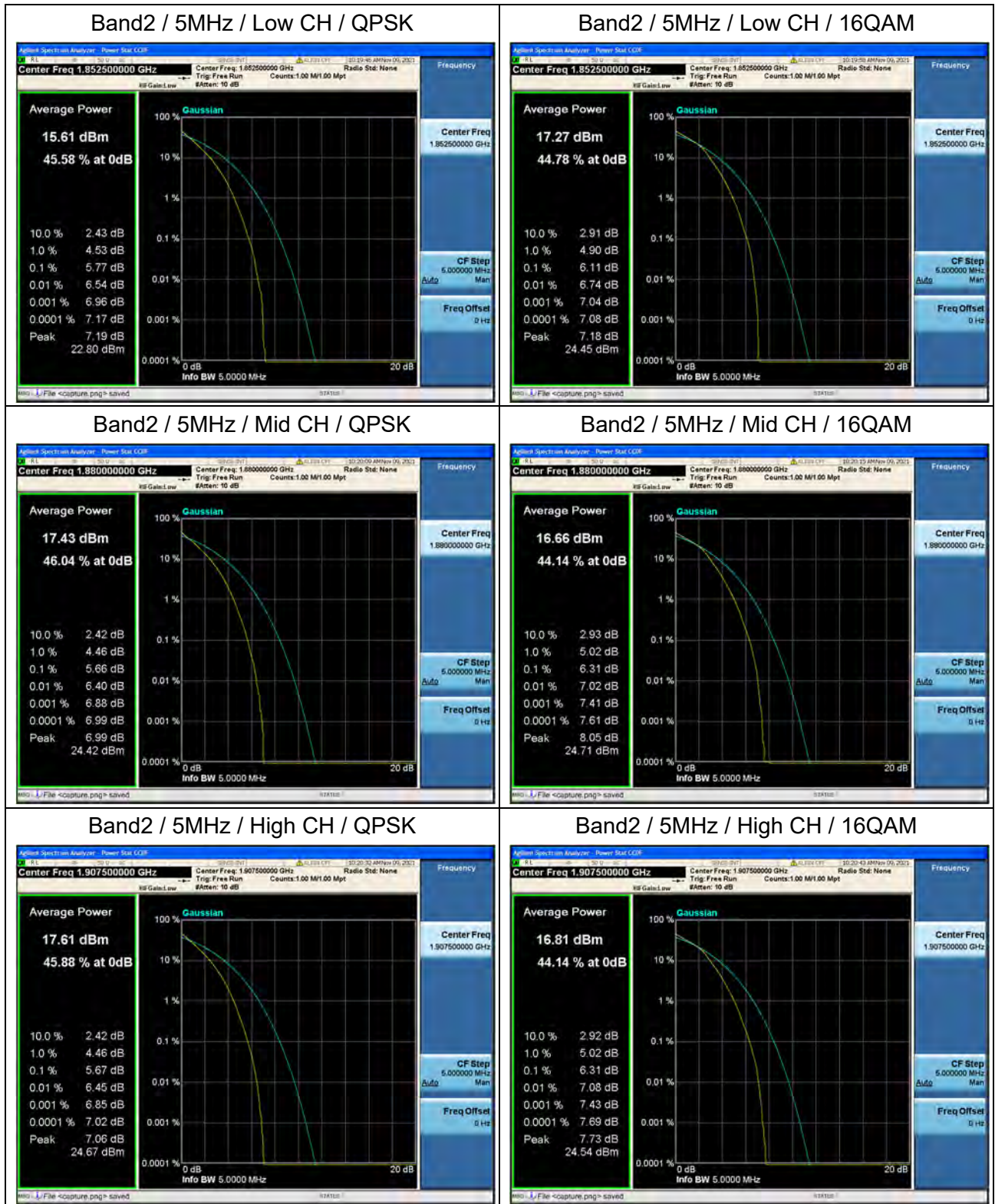
Band2 / 1.4MHz / High CH / QPSK

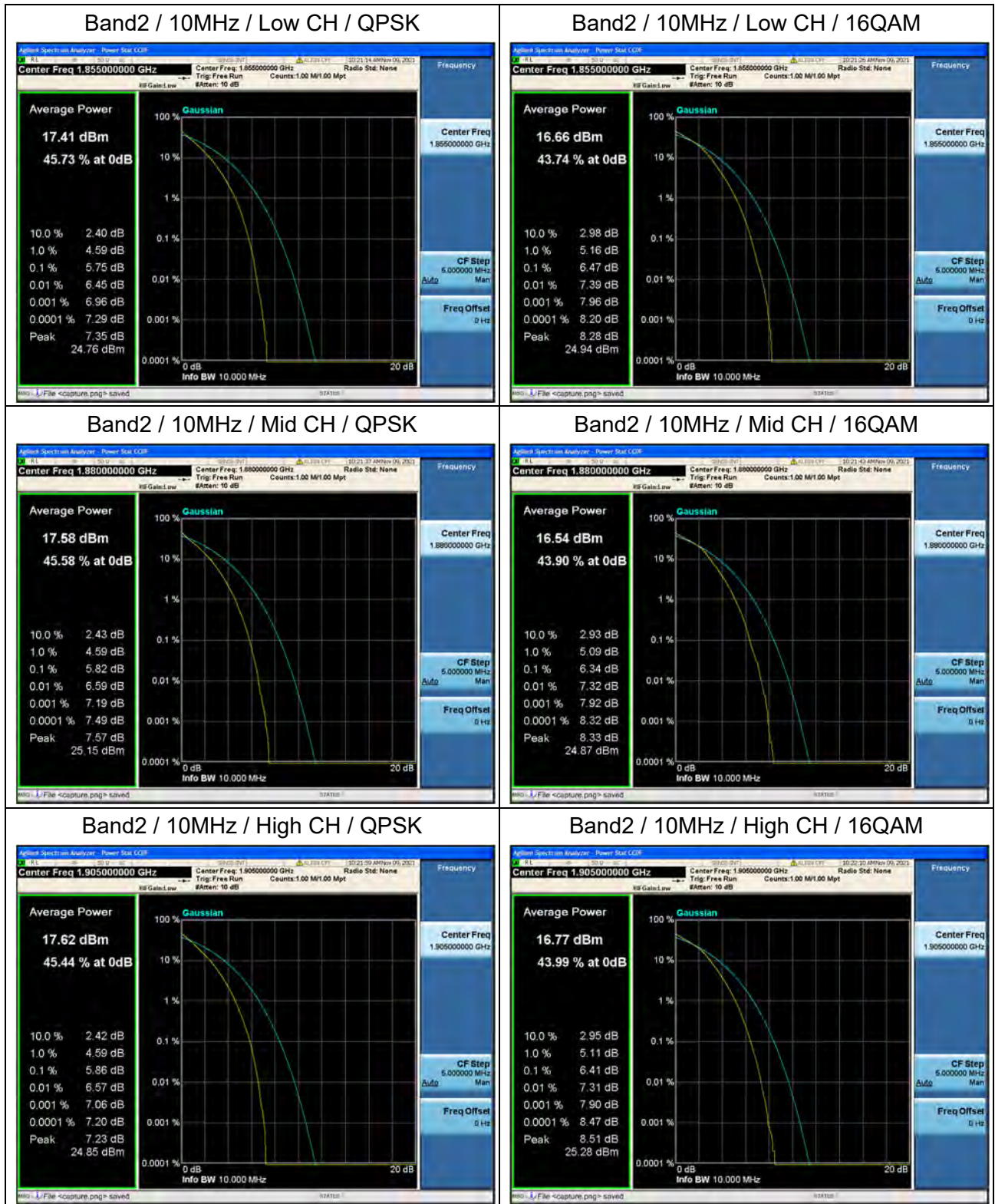


Band2 / 1.4MHz / High CH / 16QAM



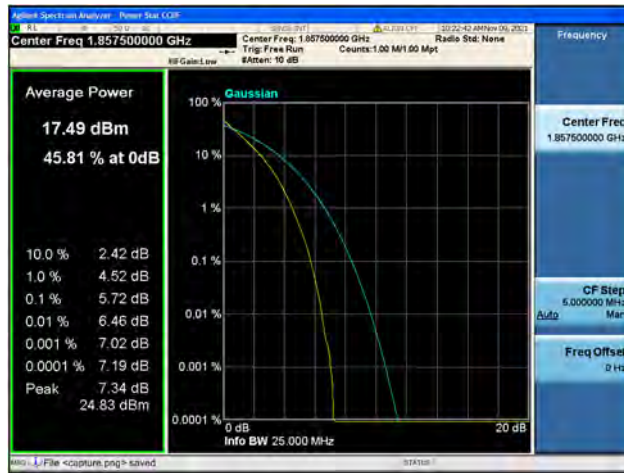








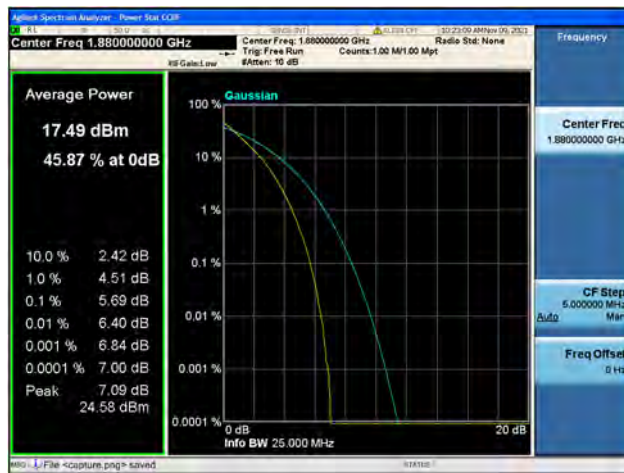
Band2 / 15MHz / Low CH / QPSK



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



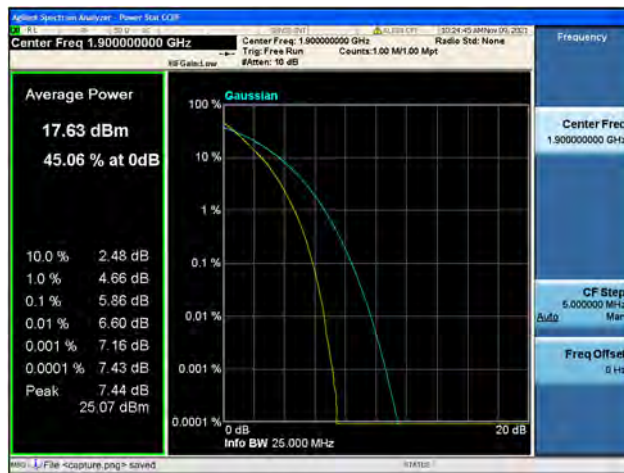
Band2 / 20MHz / Mid CH / QPSK



Band2 / 20MHz / Mid CH / 16QAM



Band2 / 20MHz / High CH / QPSK

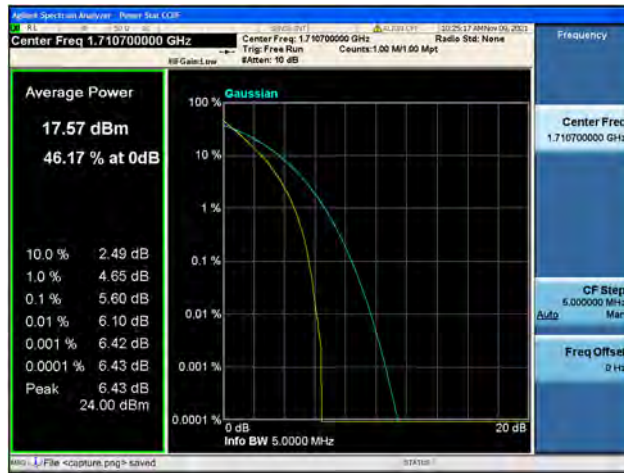


Band2 / 20MHz / High CH / 16QAM

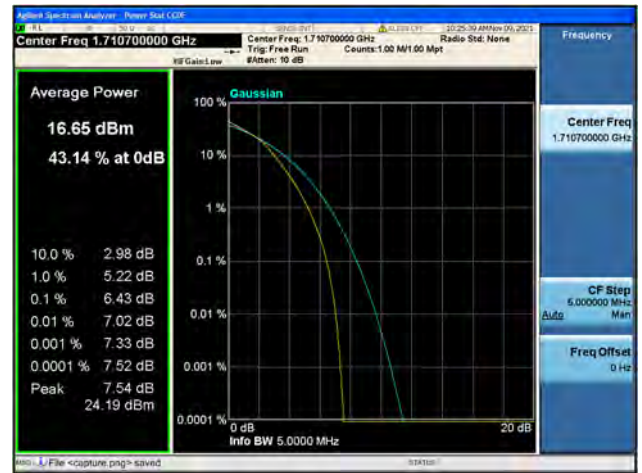




Band4 / 1.4MHz / Low CH / QPSK



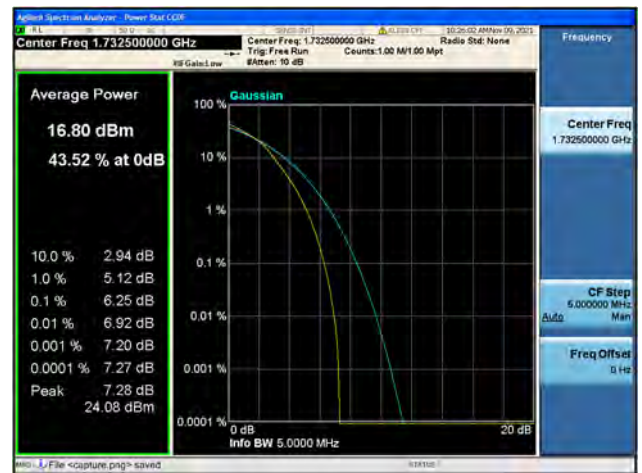
Band4 / 1.4MHz / Low CH / 16QAM



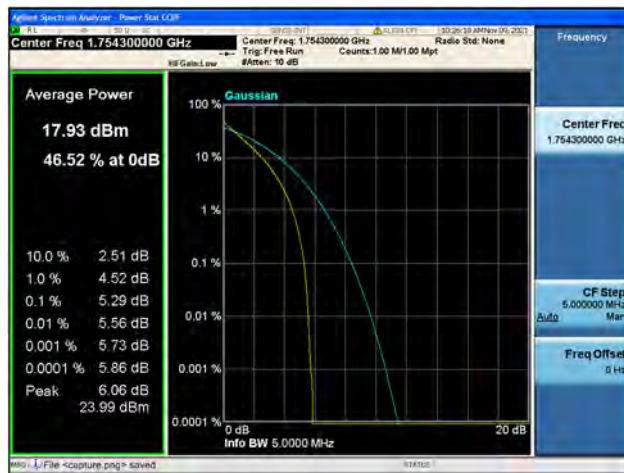
Band4 / 1.4MHz / Mid CH / QPSK



Band4 / 1.4MHz / Mid CH / 16QAM



Band4 / 1.4MHz / High CH / QPSK



Band4 / 1.4MHz / High CH / 16QAM





