



# TEST REPORT

**APPLICANT** : BLU Products, Inc.

**PRODUCT NAME** : Smart Phone

**MODEL NAME** : S91

**BRAND NAME** : BLU

**FCC ID** : YHLBLUS91

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

**RECEIPT DATE** : 2022-02-15

**TEST DATE** : 2022-02-28 to 2022-03-15

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Shen Junsheng (Supervisor)

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Change History		
Version	Date	Reason for change
1.0	2022-04-18	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>	Smart Phone	
<b>Sample No.:</b>	5#	
<b>Hardware Version:</b>	KE7SB	
<b>Software Version:</b>	BLU_S0690WW_V11.0.01.00_GENERIC 20-01-2022 20:06	
<b>Modulation Type:</b>	QPSK, 16QAM, 64QAM	
<b>Operation Band:</b>	Band 2 / 4 / 5 / 7 / 12 / 13 / 17 / 38	
<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 13	Tx: 777MHz–787MHz
		Rx: 746MHz–756MHz
	LTE Band 17	Tx: 704MHz–716MHz
		Rx: 734MHz–746MHz
<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



<b>Channel Bandwidth:</b>	LTE Band 7	5 MHz, 10MHz, 15MHz, 20MHz
	LTE Band 12	1.4MHz, 3 MHz, 5 MHz, 10MHz
	LTE Band 13	5 MHz, 10MHz
	LTE Band 17	5 MHz, 10MHz
<b>Antenna Type:</b>	Fixed Internal Antenna	
<b>Antenna Gain:</b>	LTE Band 2	-2.10dBi
	LTE Band 4	-2.30dBi
	LTE Band 5	-2.70dBi
	LTE Band 7	-2.10dBi
	LTE Band 12	-3.20dBi
	LTE Band 13	-2.90dBi
	LTE Band 17	-3.10dBi
<b>Accessory Information:</b>	Battery	
	Brand Name:	BLU
	Model No.:	C906450500P
	Serial No.:	N/A
	Capacity:	4900mAh
	Rated Voltage:	3.87V
	Charge Limit:	4.45V
	Manufacturer:	Shenzhen shi jiu li yuan electronic technology Co.,Ltd
	AC Adapter	
	Brand Name:	BLU
	Model No.:	US-WT-2000
	Serial No.:	N/A
	Rated Output:	5V=2A
	Rated Input:	100-240V~50/60Hz, 0.3A
	Manufacturer:	Shenzhen Tianyin Electronics Co.,Ltd

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

**Note 2:** For a more detailed description, please refer to Specification or User's Manual supplied by the applicant and/or manufacturer.



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

<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	64QAM	QPSK	16QAM	64QAM	
20	0.095	0.084	0.082	18M0G7D	18M0W7D	18M0W7D	
15	0.094	0.080	0.082	13M5G7D	13M5W7D	13M5W7D	
10	0.094	0.085	0.078	9M00G7D	8M98W7D	8M98W7D	
5	0.094	0.085	0.083	4M51G7D	4M52W7D	4M51W7D	
3	0.094	0.082	0.083	2M69G7D	2M70W7D	2M70W7D	
1.4	0.094	0.076	0.079	1M09G7D	1M10W7D	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	64QAM	QPSK	16QAM	64QAM	
20	0.081	0.070	0.069	18M0G7D	18M0W7D	18M0W7D	
15	0.080	0.066	0.069	13M5G7D	13M5W7D	13M5W7D	
10	0.079	0.067	0.069	9M01G7D	8M97W7D	9M00W7D	
5	0.079	0.067	0.068	4M50G7D	4M50W7D	4M50W7D	
3	0.086	0.066	0.065	2M69G7D	2M69W7D	2M70W7D	
1.4	0.086	0.063	0.064	1M09G7D	1M10W7D	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	64QAM	QPSK	16QAM	64QAM	
10	0.071	0.059	0.059	9M00G7D	8M96W7D	8M99W7D	
5	0.070	0.061	0.058	4M50G7D	4M50W7D	4M50W7D	
3	0.070	0.060	0.058	2M69G7D	2M69W7D	2M70W7D	
1.4	0.070	0.060	0.058	1M09G7D	1M10W7D	1M09W7D	
<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	64QAM	QPSK	16QAM	64QAM	
20	0.137	0.111	0.103	18M0G7D	18M0W7D	18M0W7D	
15	0.135	0.118	0.112	13M5G7D	13M5W7D	13M5W7D	
10	0.132	0.116	0.109	9M00G7D	8M98W7D	8M99W7D	
5	0.133	0.108	0.107	4M50G7D	4M50W7D	4M50W7D	
<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	64QAM	QPSK	16QAM	64QAM	
10	0.064	0.052	0.052	9M05G7D	9M00W7D	9M02W7D	
5	0.063	0.051	0.052	4M52G7D	4M52W7D	4M51W7D	
3	0.063	0.054	0.050	2M69G7D	2M69W7D	2M70W7D	
1.4	0.062	0.053	0.049	1M10G7D	1M10W7D	1M10W7D	



<b>LTE Band 13</b>	<b>Maximum E.R.P./E.I.R.P. (W)</b>			<b>Emission Designator (99%OBW)</b>		
BW(MHz)	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10	0.071	0.058	0.058	9M02G7D	8M98W7D	9M01W7D
5	0.068	0.060	0.057	4M52G7D	4M52W7D	4M51W7D
<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	64QAM	QPSK	16QAM	64QAM
10	0.064	0.054	0.053	9M02G7D	8M98W7D	9M01W7D
5	0.063	0.059	0.052	4M52G7D	4M52W7D	4M52W7D



## 1.4. Test Standards and Results

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

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

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

Section	Description	Test Date	Test Engineer	Result	Method Determination /Remark
2.1046 22.913(a)(2) 24.232(c) 27.50(c)(10) 27.50(d)(4) 27.50(h)(2)	Transmitter Conducted Output Power and E.R.P./E.I.R.P.	Mar. 15, 2022	Chen Hao Li Huaijie	PASS	No deviation
2.1049	Occupied Bandwidth	Mar. 11, 2022	Li Huaijie	PASS	No deviation
2.1055 22.355 24.235 27.54	Frequency Stability	Mar. 09, 2022	Li Huaijie	PASS	No deviation
24.232(d), 27.50(d)(5)	Peak to Average Radio	Mar. 10, 2022	Li Huaijie	PASS	No deviation
2.1051 22.917(a) 24.238(a) 27.53(g) 27.53(h) 27.53(m)(4)	Conducted Spurious Emissions	Mar. 10, 2022	Li Huaijie	PASS	No deviation
2.1051 22.917(a) 24.238(a) 27.53(g)	Band Edge	Mar. 08&10, 2022	Li Huaijie	PASS	No deviation



27.53(h) 27.53(m)(4)					
2.1053 22.917(a) 24.238(a) 27.53(g) 27.53(h) 27.53(m)(4)	Radiated Spurious Emissions	Mar. 05&07, 2022	Su Zhan	PASS	No deviation

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

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

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

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

## 1.5. Environmental Conditions

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

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





## **2.47 CFR Part 2, Part 22H, Part 24E, Part 27 F&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, Fixed, mobile and portable (hand-held) stations in the 1710-1755MHz band are limited to 1wat E.I.R.P.

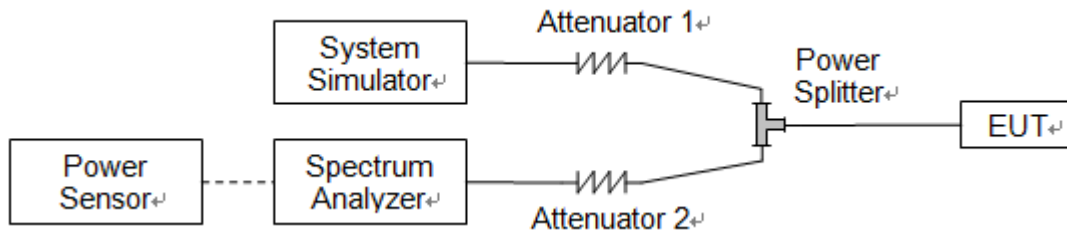
According to FCC section 22.913 (a)(2) for LTE Band 5, the E.R.P. of mobile transmitters and auxiliary test transmitters must not exceed 7 watts.

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

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

According to FCC section 27.50 (b)(10) for LTE Band 13, Portable stations (hand-held devices) transmitting in the 746-757 MHz, 776-788 MHz, and 805-806 MHz bands are limited to 3 watts E.R.P.

### 2.1.2. Test Description



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

### 2.1.3. Test Procedure

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

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

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



2.1.4. Result

Conducted Output Power:

LTE Band 2						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				18700	18900	19100
Frequency (MHz)				1860	1880	1900
20	QPSK	1	0	21.86	21.89	21.83
20	QPSK	1	49	21.84	21.78	21.71
20	QPSK	1	99	21.78	21.74	21.72
20	QPSK	50	0	20.94	21.03	20.96
20	QPSK	50	24	20.95	21.00	21.00
20	QPSK	50	50	21.00	20.96	21.02
20	QPSK	100	0	20.93	21.02	20.98
20	16QAM	1	0	20.99	20.99	21.01
20	16QAM	1	49	20.83	21.13	21.09
20	16QAM	1	99	21.08	20.93	21.33
20	16QAM	50	0	21.01	20.98	20.96
20	16QAM	50	24	20.97	21.02	21.03
20	16QAM	50	50	21.05	21.02	21.09
20	16QAM	100	0	21.08	21.09	20.96
20	64QAM	1	0	21.03	21.22	20.96
20	64QAM	1	49	20.98	21.16	21.07
20	64QAM	1	99	20.93	21.26	21.26
20	64QAM	50	0	21.03	20.95	21.00
20	64QAM	50	24	21.06	21.00	21.05
20	64QAM	50	50	21.05	21.06	21.00
20	64QAM	100	0	20.93	20.90	20.91



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	21.67	21.70	21.61
15	QPSK	1	37	21.46	21.82	21.70
15	QPSK	1	74	21.83	21.75	21.83
15	QPSK	36	0	20.80	20.89	20.88
15	QPSK	36	20	20.79	20.98	20.95
15	QPSK	36	39	20.91	20.92	20.89
15	QPSK	75	0	20.83	20.89	20.85
15	16QAM	1	0	20.92	21.00	20.94
15	16QAM	1	37	21.05	21.08	20.94
15	16QAM	1	74	21.00	21.12	21.12
15	16QAM	36	0	20.79	20.84	20.87
15	16QAM	36	20	20.88	20.81	20.94
15	16QAM	36	39	20.93	21.02	20.99
15	16QAM	75	0	20.80	20.82	20.91
15	64QAM	1	0	21.00	20.76	20.82
15	64QAM	1	37	20.99	20.80	21.22
15	64QAM	1	74	20.88	20.92	21.07
15	64QAM	36	0	20.73	20.90	20.78
15	64QAM	36	20	20.93	20.95	20.85
15	64QAM	36	39	20.81	20.86	20.95
15	64QAM	75	0	20.80	20.87	20.86



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	21.64	21.63	21.73
10	QPSK	1	25	21.75	21.85	21.73
10	QPSK	1	49	21.64	21.72	21.64
10	QPSK	25	0	20.91	20.92	20.88
10	QPSK	25	12	20.87	20.99	20.92
10	QPSK	25	25	20.78	20.91	20.87
10	QPSK	50	0	20.84	20.93	20.91
10	16QAM	1	0	21.32	21.25	21.24
10	16QAM	1	25	21.01	20.97	21.04
10	16QAM	1	49	20.96	21.04	20.83
10	16QAM	25	0	20.86	20.85	20.82
10	16QAM	25	12	21.02	20.82	20.82
10	16QAM	25	25	20.82	21.02	21.12
10	16QAM	50	0	21.39	21.32	21.36
10	64QAM	1	0	20.90	20.95	20.95
10	64QAM	1	25	20.93	20.98	21.02
10	64QAM	1	49	20.60	20.73	20.70
10	64QAM	25	0	20.90	20.94	20.95
10	64QAM	25	12	20.93	20.91	20.92
10	64QAM	25	25	20.86	20.64	20.86
10	64QAM	50	0	20.87	20.87	20.84



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	21.78	21.83	21.77
5	QPSK	1	12	21.77	21.72	21.75
5	QPSK	1	24	21.73	21.81	21.82
5	QPSK	12	0	20.90	20.81	20.88
5	QPSK	12	7	20.91	20.96	20.88
5	QPSK	12	13	20.90	20.89	20.92
5	QPSK	25	0	20.89	20.87	20.89
5	16QAM	1	0	21.02	20.92	21.30
5	16QAM	1	12	21.00	20.93	21.30
5	16QAM	1	24	21.03	20.90	21.29
5	16QAM	12	0	21.12	21.26	21.12
5	16QAM	12	7	21.02	21.02	20.82
5	16QAM	12	13	20.82	21.15	20.92
5	16QAM	25	0	20.92	21.38	21.36
5	64QAM	1	0	21.12	20.84	20.89
5	64QAM	1	12	21.28	20.94	21.05
5	64QAM	1	24	21.29	20.93	20.95
5	64QAM	12	0	20.94	20.87	20.86
5	64QAM	12	7	21.00	20.84	20.84
5	64QAM	12	13	20.97	20.93	20.91
5	64QAM	25	0	21.04	20.84	20.91



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	21.72	21.79	21.71
3	QPSK	1	8	21.82	21.85	21.68
3	QPSK	1	14	21.83	21.70	21.70
3	QPSK	8	0	20.78	20.73	20.75
3	QPSK	8	4	20.84	20.78	20.79
3	QPSK	8	7	20.84	20.78	20.74
3	QPSK	15	0	20.76	20.84	20.77
3	16QAM	1	0	20.92	20.83	20.77
3	16QAM	1	8	20.96	20.90	20.86
3	16QAM	1	14	20.89	20.86	20.74
3	16QAM	8	0	21.13	21.26	21.18
3	16QAM	8	4	21.20	21.17	21.23
3	16QAM	8	7	21.10	21.15	21.18
3	16QAM	15	0	21.13	21.17	21.12
3	64QAM	1	0	20.85	20.78	20.81
3	64QAM	1	8	21.27	21.26	20.86
3	64QAM	1	14	20.88	21.24	20.88
3	64QAM	8	0	20.80	20.82	20.66
3	64QAM	8	4	20.90	20.80	20.80
3	64QAM	8	7	21.00	20.89	20.75
3	64QAM	15	0	20.85	20.85	20.83



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	21.78	21.81	21.76
1.4	QPSK	1	3	21.68	21.66	21.65
1.4	QPSK	1	5	21.65	21.63	21.61
1.4	QPSK	3	0	21.65	21.65	21.61
1.4	QPSK	3	1	21.69	21.66	21.64
1.4	QPSK	3	3	21.71	21.75	21.64
1.4	QPSK	6	0	20.74	20.72	20.71
1.4	16QAM	1	0	20.77	20.77	20.71
1.4	16QAM	1	3	20.73	20.93	20.91
1.4	16QAM	1	5	20.61	20.81	20.49
1.4	16QAM	3	0	20.63	20.68	20.65
1.4	16QAM	3	1	20.81	20.63	20.68
1.4	16QAM	3	3	20.83	20.80	20.54
1.4	16QAM	6	0	20.84	20.77	20.72
1.4	64QAM	1	0	20.72	20.64	20.67
1.4	64QAM	1	3	20.74	20.95	20.83
1.4	64QAM	1	5	20.72	21.07	20.66
1.4	64QAM	3	0	20.75	20.81	20.82
1.4	64QAM	3	1	20.84	20.81	21.02
1.4	64QAM	3	3	20.76	20.90	20.67
1.4	64QAM	6	0	20.81	20.84	20.73





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	21.29	21.37	21.36
20	QPSK	1	49	21.15	21.23	21.22
20	QPSK	1	99	21.07	21.20	21.32
20	QPSK	50	0	20.45	20.49	20.46
20	QPSK	50	24	20.36	20.44	20.44
20	QPSK	50	50	20.25	20.36	20.37
20	QPSK	100	0	20.35	20.39	20.46
20	16QAM	1	0	20.22	20.52	20.39
20	16QAM	1	49	20.37	20.14	20.28
20	16QAM	1	99	20.16	20.38	20.22
20	16QAM	50	0	20.35	20.28	20.42
20	16QAM	50	24	20.61	20.72	20.61
20	16QAM	50	50	20.57	20.58	20.58
20	16QAM	100	0	20.59	20.67	20.68
20	64QAM	1	0	20.33	20.44	20.66
20	64QAM	1	49	20.37	20.30	20.18
20	64QAM	1	99	20.64	20.21	20.68
20	64QAM	50	0	20.34	20.43	20.38
20	64QAM	50	24	20.36	20.47	20.41
20	64QAM	50	50	20.40	20.35	20.37
20	64QAM	100	0	20.43	20.41	20.50



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	21.16	21.20	21.30
15	QPSK	1	37	21.20	21.29	21.21
15	QPSK	1	74	21.07	21.29	21.32
15	QPSK	36	0	20.30	20.37	20.40
15	QPSK	36	20	20.34	20.47	20.43
15	QPSK	36	39	20.39	20.38	20.47
15	QPSK	75	0	20.34	20.36	20.37
15	16QAM	1	0	20.28	20.50	20.22
15	16QAM	1	37	20.36	20.36	20.20
15	16QAM	1	74	20.22	20.52	20.31
15	16QAM	36	0	20.23	20.25	20.44
15	16QAM	36	20	20.18	20.25	20.31
15	16QAM	36	39	20.14	20.23	20.29
15	16QAM	75	0	20.25	20.26	20.35
15	64QAM	1	0	20.20	20.51	20.56
15	64QAM	1	37	20.62	20.38	20.44
15	64QAM	1	74	20.66	20.37	20.41
15	64QAM	36	0	20.31	20.38	20.42
15	64QAM	36	20	20.37	20.39	20.41
15	64QAM	36	39	20.40	20.36	20.38
15	64QAM	75	0	20.33	20.44	20.37



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	21.28	21.27	21.10
10	QPSK	1	25	21.26	21.19	21.20
10	QPSK	1	49	21.14	20.97	21.20
10	QPSK	25	0	20.13	20.35	20.37
10	QPSK	25	12	20.25	20.31	20.35
10	QPSK	25	25	20.14	20.25	20.32
10	QPSK	50	0	20.20	20.30	20.22
10	16QAM	1	0	20.19	20.34	20.10
10	16QAM	1	25	20.46	20.20	20.52
10	16QAM	1	49	20.53	20.43	20.42
10	16QAM	25	0	20.19	20.18	20.17
10	16QAM	25	12	20.11	20.21	20.18
10	16QAM	25	25	20.45	20.36	20.45
10	16QAM	50	0	20.39	20.43	20.55
10	64QAM	1	0	20.25	20.33	20.23
10	64QAM	1	25	20.32	20.61	20.70
10	64QAM	1	49	20.30	20.34	20.29
10	64QAM	25	0	20.14	20.28	20.27
10	64QAM	25	12	20.23	20.34	20.38
10	64QAM	25	25	20.11	20.23	20.25
10	64QAM	50	0	20.17	20.24	20.23



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	21.25	21.20	21.25
5	QPSK	1	12	21.24	21.19	21.16
5	QPSK	1	24	20.99	21.11	21.10
5	QPSK	12	0	20.21	20.21	20.25
5	QPSK	12	7	20.21	20.32	20.29
5	QPSK	12	13	20.16	20.33	20.25
5	QPSK	25	0	20.19	20.23	20.29
5	16QAM	1	0	20.09	20.50	20.18
5	16QAM	1	12	20.20	20.55	20.14
5	16QAM	1	24	20.14	20.49	20.09
5	16QAM	12	0	20.13	20.07	20.10
5	16QAM	12	7	20.16	20.20	20.18
5	16QAM	12	13	20.43	20.50	20.54
5	16QAM	25	0	20.44	20.55	20.48
5	64QAM	1	0	20.21	20.65	20.63
5	64QAM	1	12	20.59	20.35	20.62
5	64QAM	1	24	20.55	20.25	20.32
5	64QAM	12	0	20.22	20.29	20.31
5	64QAM	12	7	20.21	20.30	20.36
5	64QAM	12	13	20.22	20.28	20.27
5	64QAM	25	0	20.17	20.31	20.22



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	21.44	21.45	21.57
3	QPSK	1	8	21.53	21.67	21.61
3	QPSK	1	14	21.33	21.52	21.52
3	QPSK	8	0	20.19	20.25	20.26
3	QPSK	8	4	20.25	20.33	20.35
3	QPSK	8	7	20.21	20.31	20.31
3	QPSK	15	0	20.21	20.27	20.21
3	16QAM	1	0	20.29	20.38	20.42
3	16QAM	1	8	20.51	20.51	20.25
3	16QAM	1	14	20.42	20.20	20.28
3	16QAM	8	0	20.21	20.22	20.31
3	16QAM	8	4	19.97	19.97	19.98
3	16QAM	8	7	20.19	20.27	20.31
3	16QAM	15	0	20.19	20.17	20.24
3	64QAM	1	0	19.86	19.95	19.93
3	64QAM	1	8	20.29	20.27	20.19
3	64QAM	1	14	20.20	20.27	20.10
3	64QAM	8	0	20.18	20.22	20.16
3	64QAM	8	4	20.30	20.28	20.32
3	64QAM	8	7	20.24	20.31	20.43
3	64QAM	15	0	20.20	20.28	20.19



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	21.59	21.64	21.62
1.4	QPSK	1	3	21.53	21.53	21.57
1.4	QPSK	1	5	21.39	21.48	21.50
1.4	QPSK	3	0	21.47	21.44	21.43
1.4	QPSK	3	1	21.43	21.53	21.58
1.4	QPSK	3	3	21.42	21.49	21.48
1.4	QPSK	6	0	20.24	20.26	20.22
1.4	16QAM	1	0	19.84	20.31	19.97
1.4	16QAM	1	3	19.97	20.05	20.09
1.4	16QAM	1	5	20.03	20.19	19.99
1.4	16QAM	3	0	20.06	20.10	20.01
1.4	16QAM	3	1	20.07	20.10	20.12
1.4	16QAM	3	3	20.06	20.18	20.07
1.4	16QAM	6	0	19.97	19.98	19.89
1.4	64QAM	1	0	20.15	20.09	19.83
1.4	64QAM	1	3	20.01	19.99	20.11
1.4	64QAM	1	5	20.26	20.22	20.06
1.4	64QAM	3	0	20.17	20.15	20.34
1.4	64QAM	3	1	20.08	20.23	20.20
1.4	64QAM	3	3	20.14	20.31	20.19
1.4	64QAM	6	0	20.13	20.14	20.21



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	23.35	23.36	23.28
10	QPSK	1	25	23.21	23.24	23.04
10	QPSK	1	49	23.13	23.25	22.93
10	QPSK	25	0	22.66	22.68	22.49
10	QPSK	25	12	22.42	22.44	22.49
10	QPSK	25	25	22.42	22.53	22.58
10	QPSK	50	0	22.48	22.36	22.50
10	16QAM	1	0	22.31	22.50	22.21
10	16QAM	1	25	22.54	22.57	22.25
10	16QAM	1	49	22.37	22.43	22.50
10	16QAM	25	0	22.46	22.47	22.29
10	16QAM	25	12	22.40	22.48	22.26
10	16QAM	25	25	22.43	22.36	22.39
10	16QAM	50	0	22.44	22.35	22.25
10	64QAM	1	0	22.40	22.50	22.38
10	64QAM	1	25	22.37	22.57	22.37
10	64QAM	1	49	22.26	22.48	22.39
10	64QAM	25	0	22.37	22.48	22.15
10	64QAM	25	12	22.36	22.53	22.24
10	64QAM	25	25	22.48	22.37	22.07
10	64QAM	50	0	22.44	22.40	22.26



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	23.30	23.26	23.24
5	QPSK	1	12	23.20	23.31	23.15
5	QPSK	1	24	23.20	23.15	23.15
5	QPSK	12	0	22.57	22.62	22.48
5	QPSK	12	7	22.64	22.65	22.57
5	QPSK	12	13	22.48	22.32	22.27
5	QPSK	25	0	22.39	22.35	22.27
5	16QAM	1	0	22.68	22.61	22.37
5	16QAM	1	12	22.38	22.60	22.36
5	16QAM	1	24	22.25	22.60	22.43
5	16QAM	12	0	22.34	22.43	22.42
5	16QAM	12	7	22.41	22.44	22.26
5	16QAM	12	13	22.41	22.32	22.37
5	16QAM	25	0	22.42	22.47	22.42
5	64QAM	1	0	22.49	22.37	22.48
5	64QAM	1	12	22.37	22.31	22.45
5	64QAM	1	24	22.51	22.35	22.29
5	64QAM	12	0	22.23	22.37	22.17
5	64QAM	12	7	22.27	22.43	22.21
5	64QAM	12	13	22.45	22.40	21.97
5	64QAM	25	0	22.33	22.40	22.01





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	23.30	23.15
3	QPSK	1	8	23.25	23.26	23.17
3	QPSK	1	14	23.26	23.24	22.98
3	QPSK	8	0	22.29	22.42	22.40
3	QPSK	8	4	22.43	22.49	22.46
3	QPSK	8	7	22.38	22.40	22.27
3	QPSK	15	0	22.36	22.42	22.41
3	16QAM	1	0	22.38	22.49	22.56
3	16QAM	1	8	22.31	22.57	22.41
3	16QAM	1	14	22.36	22.62	22.37
3	16QAM	8	0	22.32	22.41	22.15
3	16QAM	8	4	22.48	22.59	22.16
3	16QAM	8	7	22.40	22.46	22.20
3	16QAM	15	0	22.34	22.36	21.91
3	64QAM	1	0	22.29	22.17	22.38
3	64QAM	1	8	22.17	22.41	22.17
3	64QAM	1	14	22.19	22.37	22.18
3	64QAM	8	0	22.29	22.39	22.37
3	64QAM	8	4	22.51	22.35	22.29
3	64QAM	8	7	22.46	22.38	22.35
3	64QAM	15	0	22.35	22.45	22.25



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	23.30	23.27	23.31
1.4	QPSK	1	3	23.33	23.26	23.33
1.4	QPSK	1	5	23.22	23.16	23.17
1.4	QPSK	3	0	23.23	23.29	23.25
1.4	QPSK	3	1	23.29	23.16	23.26
1.4	QPSK	3	3	23.30	23.22	23.22
1.4	QPSK	6	0	22.34	22.33	22.32
1.4	16QAM	1	0	22.47	22.28	22.45
1.4	16QAM	1	3	22.27	22.51	22.40
1.4	16QAM	1	5	22.66	22.34	22.40
1.4	16QAM	3	0	22.19	22.17	22.31
1.4	16QAM	3	1	22.22	22.49	22.35
1.4	16QAM	3	3	22.30	22.41	22.29
1.4	16QAM	6	0	22.49	22.36	22.40
1.4	64QAM	1	0	22.02	22.19	22.21
1.4	64QAM	1	3	22.33	22.34	22.29
1.4	64QAM	1	5	22.28	22.27	22.15
1.4	64QAM	3	0	21.94	22.21	22.22
1.4	64QAM	3	1	22.22	22.16	22.17
1.4	64QAM	3	3	22.12	22.29	22.33
1.4	64QAM	6	0	22.33	22.45	22.34



LTE Band 7						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20850	21100	21350
Frequency (MHz)				2510	2535	2560
20	QPSK	1	0	23.47	23.48	23.40
20	QPSK	1	49	23.42	23.46	23.35
20	QPSK	1	99	23.37	23.32	23.37
20	QPSK	50	0	22.53	22.60	22.57
20	QPSK	50	24	22.29	22.26	22.16
20	QPSK	50	50	22.39	22.42	22.39
20	QPSK	100	0	22.34	22.36	22.33
20	16QAM	1	0	22.15	22.25	22.43
20	16QAM	1	49	22.30	22.16	22.44
20	16QAM	1	99	22.24	22.55	22.20
20	16QAM	50	0	22.09	22.19	22.12
20	16QAM	50	24	22.14	22.06	22.17
20	16QAM	50	50	22.22	22.27	22.10
20	16QAM	100	0	22.10	22.22	22.20
20	64QAM	1	0	22.22	22.06	21.79
20	64QAM	1	49	22.16	22.13	22.18
20	64QAM	1	99	22.14	22.19	22.10
20	64QAM	50	0	22.08	22.09	22.14
20	64QAM	50	24	22.13	22.14	22.14
20	64QAM	50	50	22.17	22.24	22.09
20	64QAM	100	0	22.10	22.07	22.19



LTE Band 7						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20825	21100	21375
Frequency (MHz)				2507.5	2535	2562.5
15	QPSK	1	0	23.30	23.39	23.39
15	QPSK	1	37	23.40	23.37	23.41
15	QPSK	1	74	23.34	23.41	23.41
15	QPSK	36	0	22.12	22.21	22.23
15	QPSK	36	20	22.20	22.27	22.22
15	QPSK	36	39	22.23	22.26	22.30
15	QPSK	75	0	22.29	22.22	22.24
15	16QAM	1	0	22.65	22.76	22.83
15	16QAM	1	37	22.47	22.58	22.56
15	16QAM	1	74	22.51	22.51	22.73
15	16QAM	36	0	22.10	22.21	22.23
15	16QAM	36	20	22.17	22.20	22.19
15	16QAM	36	39	22.23	22.21	22.10
15	16QAM	75	0	22.18	22.26	22.18
15	64QAM	1	0	22.50	22.40	22.50
15	64QAM	1	37	22.35	22.50	22.59
15	64QAM	1	74	22.34	22.46	22.52
15	64QAM	36	0	22.19	22.27	22.26
15	64QAM	36	20	22.30	22.29	22.36
15	64QAM	36	39	22.34	22.25	22.27
15	64QAM	75	0	22.19	22.29	22.24



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				20800	21100	21400
Frequency (MHz)				2505	2535	2565
10	QPSK	1	0	23.29	23.16	23.19
10	QPSK	1	25	23.32	23.22	23.24
10	QPSK	1	49	23.25	23.22	23.24
10	QPSK	25	0	22.04	22.04	22.03
10	QPSK	25	12	22.00	22.12	22.17
10	QPSK	25	25	21.93	22.11	22.11
10	QPSK	50	0	22.02	22.14	22.13
10	16QAM	1	0	22.27	22.45	22.30
10	16QAM	1	25	22.26	22.28	22.33
10	16QAM	1	49	22.73	22.63	22.54
10	16QAM	25	0	22.16	22.04	22.12
10	16QAM	25	12	21.98	22.15	22.08
10	16QAM	25	25	22.03	22.06	21.98
10	16QAM	50	0	22.06	22.15	22.00
10	64QAM	1	0	22.08	22.04	22.02
10	64QAM	1	25	22.14	22.39	22.22
10	64QAM	1	49	22.25	22.49	22.30
10	64QAM	25	0	22.11	22.09	22.13
10	64QAM	25	12	22.13	22.24	22.17
10	64QAM	25	25	22.06	21.96	21.95
10	64QAM	50	0	22.00	22.06	21.98



LTE Band 7						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20775	21100	21425
Frequency (MHz)				2502.5	2535	2567.5
5	QPSK	1	0	23.33	23.24	23.14
5	QPSK	1	12	23.20	23.13	23.21
5	QPSK	1	24	23.14	23.20	23.24
5	QPSK	12	0	22.08	22.16	22.08
5	QPSK	12	7	22.15	22.30	22.22
5	QPSK	12	13	22.17	22.33	22.18
5	QPSK	25	0	22.18	22.19	22.14
5	16QAM	1	0	22.12	22.10	22.16
5	16QAM	1	12	22.17	22.39	22.29
5	16QAM	1	24	22.23	22.42	22.24
5	16QAM	12	0	22.14	22.20	22.11
5	16QAM	12	7	22.03	22.05	22.01
5	16QAM	12	13	22.03	22.09	22.22
5	16QAM	25	0	22.00	22.05	22.07
5	64QAM	1	0	22.21	22.26	22.22
5	64QAM	1	12	22.26	22.38	22.26
5	64QAM	1	24	22.30	22.40	22.36
5	64QAM	12	0	22.01	21.98	22.03
5	64QAM	12	7	22.10	22.15	21.94
5	64QAM	12	13	22.05	22.14	22.00
5	64QAM	25	0	22.00	21.99	22.04



LTE Band 12						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				23060	23095	23130
Frequency (MHz)				704	707.5	711
10	QPSK	1	0	23.27	23.43	23.32
10	QPSK	1	25	23.13	23.26	23.29
10	QPSK	1	49	23.23	23.24	23.23
10	QPSK	25	0	22.52	22.62	22.53
10	QPSK	25	12	22.49	22.43	22.22
10	QPSK	25	25	22.54	22.60	22.53
10	QPSK	50	0	22.55	22.57	22.48
10	16QAM	1	0	22.48	22.03	22.16
10	16QAM	1	25	22.23	22.18	22.32
10	16QAM	1	49	22.32	22.37	22.26
10	16QAM	25	0	22.21	22.23	22.17
10	16QAM	25	12	22.25	22.29	22.18
10	16QAM	25	25	22.30	22.31	22.25
10	16QAM	50	0	22.20	22.28	22.33
10	64QAM	1	0	22.05	22.17	22.51
10	64QAM	1	25	22.49	22.55	22.14
10	64QAM	1	49	22.51	22.19	22.12
10	64QAM	25	0	22.02	21.96	21.93
10	64QAM	25	12	22.07	22.10	22.02
10	64QAM	25	25	22.12	22.09	22.09
10	64QAM	50	0	22.04	21.97	22.08



LTE Band 12						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				23035	23095	23155
Frequency (MHz)				701.5	707.5	713.5
5	QPSK	1	0	23.02	23.35	23.13
5	QPSK	1	12	23.18	23.34	23.18
5	QPSK	1	24	23.14	23.33	23.19
5	QPSK	12	0	22.25	22.32	22.31
5	QPSK	12	7	22.36	22.38	22.35
5	QPSK	12	13	22.31	22.34	22.31
5	QPSK	25	0	22.27	22.39	22.35
5	16QAM	1	0	22.28	22.30	22.32
5	16QAM	1	12	22.45	22.40	22.41
5	16QAM	1	24	22.41	22.39	22.35
5	16QAM	12	0	22.15	22.12	22.15
5	16QAM	12	7	22.29	22.34	22.18
5	16QAM	12	13	22.24	22.21	22.26
5	16QAM	25	0	22.25	22.21	22.23
5	64QAM	1	0	22.03	22.04	22.09
5	64QAM	1	12	22.48	22.18	22.11
5	64QAM	1	24	22.46	22.15	22.20
5	64QAM	12	0	22.00	22.02	21.97
5	64QAM	12	7	22.10	21.98	22.04
5	64QAM	12	13	21.97	22.07	22.12
5	64QAM	25	0	22.12	22.08	22.05





LTE Band 12						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				23025	23095	23165
Frequency (MHz)				700.5	707.5	714.5
3	QPSK	1	0	23.10	23.37	23.04
3	QPSK	1	8	23.28	23.27	23.17
3	QPSK	1	14	23.22	23.33	23.28
3	QPSK	8	0	22.33	22.31	22.31
3	QPSK	8	4	22.36	22.39	22.40
3	QPSK	8	7	22.31	22.39	22.33
3	QPSK	15	0	22.30	22.38	22.24
3	16QAM	1	0	22.31	22.67	22.26
3	16QAM	1	8	22.51	22.49	22.44
3	16QAM	1	14	22.34	22.39	22.25
3	16QAM	8	0	22.31	22.20	22.23
3	16QAM	8	4	22.36	22.33	22.44
3	16QAM	8	7	22.20	22.23	22.29
3	16QAM	15	0	22.18	22.11	22.10
3	64QAM	1	0	22.04	22.38	22.37
3	64QAM	1	8	22.33	22.23	22.24
3	64QAM	1	14	22.26	22.11	22.22
3	64QAM	8	0	21.93	22.01	21.92
3	64QAM	8	4	22.02	22.06	22.05
3	64QAM	8	7	22.01	21.93	22.08
3	64QAM	15	0	22.00	22.02	21.94



LTE Band 12						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				23017	23095	23173
Frequency (MHz)				699.7	707.5	715.3
1.4	QPSK	1	0	23.13	23.30	23.10
1.4	QPSK	1	3	23.24	23.23	23.25
1.4	QPSK	1	5	23.13	23.18	23.14
1.4	QPSK	3	0	23.08	23.21	23.19
1.4	QPSK	3	1	23.29	23.29	22.96
1.4	QPSK	3	3	23.24	23.26	23.22
1.4	QPSK	6	0	22.30	22.27	22.25
1.4	16QAM	1	0	22.34	22.28	22.13
1.4	16QAM	1	3	22.15	22.58	22.25
1.4	16QAM	1	5	22.27	22.28	22.27
1.4	16QAM	3	0	22.11	22.14	22.15
1.4	16QAM	3	1	22.27	22.35	22.19
1.4	16QAM	3	3	22.10	22.24	22.24
1.4	16QAM	6	0	22.03	22.23	22.13
1.4	64QAM	1	0	21.88	22.03	21.87
1.4	64QAM	1	3	22.00	21.93	21.98
1.4	64QAM	1	5	22.16	22.19	22.15
1.4	64QAM	3	0	22.06	22.07	21.90
1.4	64QAM	3	1	22.04	22.28	22.13
1.4	64QAM	3	3	22.06	21.90	22.06
1.4	64QAM	6	0	22.02	22.03	21.90



LTE Band 13						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				/	23230	/
Frequency (MHz)				/	782	/
10	QPSK	1	0	/	23.54	/
10	QPSK	1	25	/	23.32	/
10	QPSK	1	49	/	23.25	/
10	QPSK	25	0	/	22.62	/
10	QPSK	25	12	/	22.38	/
10	QPSK	25	25	/	22.48	/
10	QPSK	50	0	/	22.38	/
10	16QAM	1	0	/	22.19	/
10	16QAM	1	25	/	22.22	/
10	16QAM	1	49	/	22.66	/
10	16QAM	25	0	/	22.57	/
10	16QAM	25	12	/	22.49	/
10	16QAM	25	25	/	22.38	/
10	16QAM	50	0	/	22.45	/
10	64QAM	1	0	/	22.35	/
10	64QAM	1	25	/	22.68	/
10	64QAM	1	49	/	22.70	/
10	64QAM	25	0	/	22.44	/
10	64QAM	25	12	/	22.42	/
10	64QAM	25	25	/	22.38	/
10	64QAM	50	0	/	22.49	/



LTE Band 13						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				23205	23230	23255
Frequency (MHz)				779.5	782	784.5
5	QPSK	1	0	23.32	23.32	23.33
5	QPSK	1	12	23.22	23.20	23.28
5	QPSK	1	24	23.36	23.24	23.14
5	QPSK	12	0	22.63	22.56	22.63
5	QPSK	12	7	22.60	22.79	22.57
5	QPSK	12	13	22.61	22.57	22.49
5	QPSK	25	0	22.69	22.54	22.73
5	16QAM	1	0	22.61	22.61	22.81
5	16QAM	1	12	22.61	22.70	22.82
5	16QAM	1	24	22.44	22.64	22.52
5	16QAM	12	0	22.45	22.62	22.50
5	16QAM	12	7	22.44	22.64	22.55
5	16QAM	12	13	22.35	22.40	22.40
5	16QAM	25	0	22.51	22.55	22.56
5	64QAM	1	0	22.51	22.51	22.18
5	64QAM	1	12	22.18	22.31	22.21
5	64QAM	1	24	22.18	22.18	22.18
5	64QAM	12	0	22.51	22.49	22.51
5	64QAM	12	7	22.50	22.54	22.58
5	64QAM	12	13	22.50	22.43	22.45
5	64QAM	25	0	22.40	22.50	22.51



LTE Band 17						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				23780	23790	23800
Frequency (MHz)				709	710	711
10	QPSK	1	0	23.27	23.30	23.27
10	QPSK	1	25	23.15	23.11	23.17
10	QPSK	1	49	23.08	23.11	23.06
10	QPSK	25	0	22.38	22.44	22.36
10	QPSK	25	12	22.23	22.17	22.31
10	QPSK	25	25	22.21	22.21	22.30
10	QPSK	50	0	22.34	22.21	22.22
10	16QAM	1	0	22.07	22.26	22.40
10	16QAM	1	25	22.28	22.57	22.41
10	16QAM	1	49	22.24	22.49	22.54
10	16QAM	25	0	22.18	22.42	22.41
10	16QAM	25	12	22.24	22.39	22.37
10	16QAM	25	25	22.07	22.33	22.38
10	16QAM	50	0	22.11	22.40	22.37
10	64QAM	1	0	22.08	22.41	22.09
10	64QAM	1	25	22.31	22.21	22.11
10	64QAM	1	49	22.05	22.08	22.08
10	64QAM	25	0	22.23	22.40	22.38
10	64QAM	25	12	22.15	22.23	22.40
10	64QAM	25	25	22.09	22.30	22.46
10	64QAM	50	0	22.16	22.39	22.40



LTE Band 17						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				23755	23790	23825
Frequency (MHz)				706.5	710	713.5
5	QPSK	1	0	23.21	23.17	23.13
5	QPSK	1	12	23.20	23.16	23.15
5	QPSK	1	24	23.12	23.18	23.17
5	QPSK	12	0	22.28	22.46	22.62
5	QPSK	12	7	22.40	22.49	22.57
5	QPSK	12	13	22.23	22.51	22.57
5	QPSK	25	0	22.26	22.43	22.56
5	16QAM	1	0	22.74	22.79	22.51
5	16QAM	1	12	22.91	22.47	22.84
5	16QAM	1	24	22.75	22.80	22.96
5	16QAM	12	0	22.19	22.22	22.43
5	16QAM	12	7	22.19	22.26	22.38
5	16QAM	12	13	22.10	22.35	22.38
5	16QAM	25	0	22.20	22.32	22.36
5	64QAM	1	0	22.00	22.01	22.01
5	64QAM	1	12	22.04	22.01	22.09
5	64QAM	1	24	22.09	22.09	22.01
5	64QAM	12	0	22.15	22.20	22.44
5	64QAM	12	7	22.28	22.36	22.30
5	64QAM	12	13	22.13	22.31	22.33
5	64QAM	25	0	22.10	22.29	22.45



**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	19.76	0.095	19.79	0.095	19.73	0.094
20	QPSK	1	49	19.74	0.094	19.68	0.093	19.61	0.091
20	QPSK	1	99	19.68	0.093	19.64	0.092	19.62	0.092
20	QPSK	50	0	18.84	0.077	18.93	0.078	18.86	0.077
20	QPSK	50	24	18.85	0.077	18.90	0.078	18.90	0.078
20	QPSK	50	50	18.90	0.078	18.86	0.077	18.92	0.078
20	QPSK	100	0	18.83	0.076	18.92	0.078	18.88	0.077
20	16QAM	1	0	18.89	0.077	18.89	0.077	18.91	0.078
20	16QAM	1	49	18.73	0.075	19.03	0.080	18.99	0.079
20	16QAM	1	99	18.98	0.079	18.83	0.076	19.23	0.084
20	16QAM	50	0	18.91	0.078	18.88	0.077	18.86	0.077
20	16QAM	50	24	18.87	0.077	18.92	0.078	18.93	0.078
20	16QAM	50	50	18.95	0.079	18.92	0.078	18.99	0.079
20	16QAM	100	0	18.98	0.079	18.99	0.079	18.86	0.077
20	64QAM	1	0	18.93	0.078	19.12	0.082	18.86	0.077
20	64QAM	1	49	18.88	0.077	19.06	0.081	18.97	0.079
20	64QAM	1	99	18.83	0.076	19.16	0.082	19.16	0.082
20	64QAM	50	0	18.93	0.078	18.85	0.077	18.90	0.078
20	64QAM	50	24	18.96	0.079	18.90	0.078	18.95	0.079
20	64QAM	50	50	18.95	0.079	18.96	0.079	18.90	0.078
20	64QAM	100	0	18.83	0.076	18.80	0.076	18.81	0.076



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	19.57	0.091	19.60	0.091	19.51	0.089
15	QPSK	1	37	19.36	0.086	19.72	0.094	19.60	0.091
15	QPSK	1	74	19.73	0.094	19.65	0.092	19.73	0.094
15	QPSK	36	0	18.70	0.074	18.79	0.076	18.78	0.076
15	QPSK	36	20	18.69	0.074	18.88	0.077	18.85	0.077
15	QPSK	36	39	18.81	0.076	18.82	0.076	18.79	0.076
15	QPSK	75	0	18.73	0.075	18.79	0.076	18.75	0.075
15	16QAM	1	0	18.82	0.076	18.90	0.078	18.84	0.077
15	16QAM	1	37	18.95	0.079	18.98	0.079	18.84	0.077
15	16QAM	1	74	18.90	0.078	19.02	0.080	19.02	0.080
15	16QAM	36	0	18.69	0.074	18.74	0.075	18.77	0.075
15	16QAM	36	20	18.78	0.076	18.71	0.074	18.84	0.077
15	16QAM	36	39	18.83	0.076	18.92	0.078	18.89	0.077
15	16QAM	75	0	18.70	0.074	18.72	0.074	18.81	0.076
15	64QAM	1	0	18.90	0.078	18.66	0.073	18.72	0.074
15	64QAM	1	37	18.89	0.077	18.70	0.074	19.12	0.082
15	64QAM	1	74	18.78	0.076	18.82	0.076	18.97	0.079
15	64QAM	36	0	18.63	0.073	18.80	0.076	18.68	0.074
15	64QAM	36	20	18.83	0.076	18.85	0.077	18.75	0.075
15	64QAM	36	39	18.71	0.074	18.76	0.075	18.85	0.077
15	64QAM	75	0	18.70	0.074	18.77	0.075	18.76	0.075





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	19.54	0.090	19.53	0.090	19.63	0.092
10	QPSK	1	25	19.65	0.092	19.75	0.094	19.63	0.092
10	QPSK	1	49	19.54	0.090	19.62	0.092	19.54	0.090
10	QPSK	25	0	18.81	0.076	18.82	0.076	18.78	0.076
10	QPSK	25	12	18.77	0.075	18.89	0.077	18.82	0.076
10	QPSK	25	25	18.68	0.074	18.81	0.076	18.77	0.075
10	QPSK	50	0	18.74	0.075	18.83	0.076	18.81	0.076
10	16QAM	1	0	19.22	0.084	19.15	0.082	19.14	0.082
10	16QAM	1	25	18.91	0.078	18.87	0.077	18.94	0.078
10	16QAM	1	49	18.86	0.077	18.94	0.078	18.73	0.075
10	16QAM	25	0	18.76	0.075	18.75	0.075	18.72	0.074
10	16QAM	25	12	18.92	0.078	18.72	0.074	18.72	0.074
10	16QAM	25	25	18.72	0.074	18.92	0.078	19.02	0.080
10	16QAM	50	0	19.29	0.085	19.22	0.084	19.26	0.084
10	64QAM	1	0	18.80	0.076	18.85	0.077	18.85	0.077
10	64QAM	1	25	18.83	0.076	18.88	0.077	18.92	0.078
10	64QAM	1	49	18.50	0.071	18.63	0.073	18.60	0.072
10	64QAM	25	0	18.80	0.076	18.84	0.077	18.85	0.077
10	64QAM	25	12	18.83	0.076	18.81	0.076	18.82	0.076
10	64QAM	25	25	18.76	0.075	18.54	0.071	18.76	0.075
10	64QAM	50	0	18.77	0.075	18.77	0.075	18.74	0.075



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	19.68	0.093	19.73	0.094	19.67	0.093
5	QPSK	1	12	19.67	0.093	19.62	0.092	19.65	0.092
5	QPSK	1	24	19.63	0.092	19.71	0.094	19.72	0.094
5	QPSK	12	0	18.80	0.076	18.71	0.074	18.78	0.076
5	QPSK	12	7	18.81	0.076	18.86	0.077	18.78	0.076
5	QPSK	12	13	18.80	0.076	18.79	0.076	18.82	0.076
5	QPSK	25	0	18.79	0.076	18.77	0.075	18.79	0.076
5	16QAM	1	0	18.92	0.078	18.82	0.076	19.20	0.083
5	16QAM	1	12	18.90	0.078	18.83	0.076	19.20	0.083
5	16QAM	1	24	18.93	0.078	18.80	0.076	19.19	0.083
5	16QAM	12	0	19.02	0.080	19.16	0.082	19.02	0.080
5	16QAM	12	7	18.92	0.078	18.92	0.078	18.72	0.074
5	16QAM	12	13	18.72	0.074	19.05	0.080	18.82	0.076
5	16QAM	25	0	18.82	0.076	19.28	0.085	19.26	0.084
5	64QAM	1	0	19.02	0.080	18.74	0.075	18.79	0.076
5	64QAM	1	12	19.18	0.083	18.84	0.077	18.95	0.079
5	64QAM	1	24	19.19	0.083	18.83	0.076	18.85	0.077
5	64QAM	12	0	18.84	0.077	18.77	0.075	18.76	0.075
5	64QAM	12	7	18.90	0.078	18.74	0.075	18.74	0.075
5	64QAM	12	13	18.87	0.077	18.83	0.076	18.81	0.076
5	64QAM	25	0	18.94	0.078	18.74	0.075	18.81	0.076



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	19.62	0.092	19.69	0.093	19.61	0.091
3	QPSK	1	8	19.72	0.094	19.75	0.094	19.58	0.091
3	QPSK	1	14	19.73	0.094	19.60	0.091	19.60	0.091
3	QPSK	8	0	18.68	0.074	18.63	0.073	18.65	0.073
3	QPSK	8	4	18.74	0.075	18.68	0.074	18.69	0.074
3	QPSK	8	7	18.74	0.075	18.68	0.074	18.64	0.073
3	QPSK	15	0	18.66	0.073	18.74	0.075	18.67	0.074
3	16QAM	1	0	18.82	0.076	18.73	0.075	18.67	0.074
3	16QAM	1	8	18.86	0.077	18.80	0.076	18.76	0.075
3	16QAM	1	14	18.79	0.076	18.76	0.075	18.64	0.073
3	16QAM	8	0	19.03	0.080	19.16	0.082	19.08	0.081
3	16QAM	8	4	19.10	0.081	19.07	0.081	19.13	0.082
3	16QAM	8	7	19.00	0.079	19.05	0.080	19.08	0.081
3	16QAM	15	0	19.03	0.080	19.07	0.081	19.02	0.080
3	64QAM	1	0	18.75	0.075	18.68	0.074	18.71	0.074
3	64QAM	1	8	19.17	0.083	19.16	0.082	18.76	0.075
3	64QAM	1	14	18.78	0.076	19.14	0.082	18.78	0.076
3	64QAM	8	0	18.70	0.074	18.72	0.074	18.56	0.072
3	64QAM	8	4	18.80	0.076	18.70	0.074	18.70	0.074
3	64QAM	8	7	18.90	0.078	18.79	0.076	18.65	0.073
3	64QAM	15	0	18.75	0.075	18.75	0.075	18.73	0.075



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	19.68	0.093	19.71	0.094	19.66	0.092
1.4	QPSK	1	3	19.58	0.091	19.56	0.090	19.55	0.090
1.4	QPSK	1	5	19.55	0.090	19.53	0.090	19.51	0.089
1.4	QPSK	3	0	19.55	0.090	19.55	0.090	19.51	0.089
1.4	QPSK	3	1	19.59	0.091	19.56	0.090	19.54	0.090
1.4	QPSK	3	3	19.61	0.091	19.65	0.092	19.54	0.090
1.4	QPSK	6	0	18.64	0.073	18.62	0.073	18.61	0.073
1.4	16QAM	1	0	18.67	0.074	18.67	0.074	18.61	0.073
1.4	16QAM	1	3	18.63	0.073	18.83	0.076	18.81	0.076
1.4	16QAM	1	5	18.51	0.071	18.71	0.074	18.39	0.069
1.4	16QAM	3	0	18.53	0.071	18.58	0.072	18.55	0.072
1.4	16QAM	3	1	18.71	0.074	18.53	0.071	18.58	0.072
1.4	16QAM	3	3	18.73	0.075	18.70	0.074	18.44	0.070
1.4	16QAM	6	0	18.74	0.075	18.67	0.074	18.62	0.073
1.4	64QAM	1	0	18.62	0.073	18.54	0.071	18.57	0.072
1.4	64QAM	1	3	18.64	0.073	18.85	0.077	18.73	0.075
1.4	64QAM	1	5	18.62	0.073	18.97	0.079	18.56	0.072
1.4	64QAM	3	0	18.65	0.073	18.71	0.074	18.72	0.074
1.4	64QAM	3	1	18.74	0.075	18.71	0.074	18.92	0.078
1.4	64QAM	3	3	18.66	0.073	18.80	0.076	18.57	0.072
1.4	64QAM	6	0	18.71	0.074	18.74	0.075	18.63	0.073



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	18.99	0.079	19.07	0.081	19.06	0.081
20	QPSK	1	49	18.85	0.077	18.93	0.078	18.92	0.078
20	QPSK	1	99	18.77	0.075	18.90	0.078	19.02	0.080
20	QPSK	50	0	18.15	0.065	18.19	0.066	18.16	0.065
20	QPSK	50	24	18.06	0.064	18.14	0.065	18.14	0.065
20	QPSK	50	50	17.95	0.062	18.06	0.064	18.07	0.064
20	QPSK	100	0	18.05	0.064	18.09	0.064	18.16	0.065
20	16QAM	1	0	17.92	0.062	18.22	0.066	18.09	0.064
20	16QAM	1	49	18.07	0.064	17.84	0.061	17.98	0.063
20	16QAM	1	99	17.86	0.061	18.08	0.064	17.92	0.062
20	16QAM	50	0	18.05	0.064	17.98	0.063	18.12	0.065
20	16QAM	50	24	18.31	0.068	18.42	0.070	18.31	0.068
20	16QAM	50	50	18.27	0.067	18.28	0.067	18.28	0.067
20	16QAM	100	0	18.29	0.067	18.37	0.069	18.38	0.069
20	64QAM	1	0	18.03	0.064	18.14	0.065	18.36	0.069
20	64QAM	1	49	18.07	0.064	18.00	0.063	17.88	0.061
20	64QAM	1	99	18.34	0.068	17.91	0.062	18.38	0.069
20	64QAM	50	0	18.04	0.064	18.13	0.065	18.08	0.064
20	64QAM	50	24	18.06	0.064	18.17	0.066	18.11	0.065
20	64QAM	50	50	18.10	0.065	18.05	0.064	18.07	0.064
20	64QAM	100	0	18.13	0.065	18.11	0.065	18.20	0.066



LTE Band 4				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20025		20175		20325	
Frequency (MHz)				1717.5		1732.5		1747.5	
				dBm	W	dBm	W	dBm	W
15	QPSK	1	0	18.86	0.077	18.90	0.078	19.00	0.079
15	QPSK	1	37	18.90	0.078	18.99	0.079	18.91	0.078
15	QPSK	1	74	18.77	0.075	18.99	0.079	19.02	0.080
15	QPSK	36	0	18.00	0.063	18.07	0.064	18.10	0.065
15	QPSK	36	20	18.04	0.064	18.17	0.066	18.13	0.065
15	QPSK	36	39	18.09	0.064	18.08	0.064	18.17	0.066
15	QPSK	75	0	18.04	0.064	18.06	0.064	18.07	0.064
15	16QAM	1	0	17.98	0.063	18.20	0.066	17.92	0.062
15	16QAM	1	37	18.06	0.064	18.06	0.064	17.90	0.062
15	16QAM	1	74	17.92	0.062	18.22	0.066	18.01	0.063
15	16QAM	36	0	17.93	0.062	17.95	0.062	18.14	0.065
15	16QAM	36	20	17.88	0.061	17.95	0.062	18.01	0.063
15	16QAM	36	39	17.84	0.061	17.93	0.062	17.99	0.063
15	16QAM	75	0	17.95	0.062	17.96	0.063	18.05	0.064
15	64QAM	1	0	17.90	0.062	18.21	0.066	18.26	0.067
15	64QAM	1	37	18.32	0.068	18.08	0.064	18.14	0.065
15	64QAM	1	74	18.36	0.069	18.07	0.064	18.11	0.065
15	64QAM	36	0	18.01	0.063	18.08	0.064	18.12	0.065
15	64QAM	36	20	18.07	0.064	18.09	0.064	18.11	0.065
15	64QAM	36	39	18.10	0.065	18.06	0.064	18.08	0.064
15	64QAM	75	0	18.03	0.064	18.14	0.065	18.07	0.064



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	18.98	0.079	18.97	0.079	18.80	0.076
10	QPSK	1	25	18.96	0.079	18.89	0.077	18.90	0.078
10	QPSK	1	49	18.84	0.077	18.67	0.074	18.90	0.078
10	QPSK	25	0	17.83	0.061	18.05	0.064	18.07	0.064
10	QPSK	25	12	17.95	0.062	18.01	0.063	18.05	0.064
10	QPSK	25	25	17.84	0.061	17.95	0.062	18.02	0.063
10	QPSK	50	0	17.90	0.062	18.00	0.063	17.92	0.062
10	16QAM	1	0	17.89	0.062	18.04	0.064	17.80	0.060
10	16QAM	1	25	18.16	0.065	17.90	0.062	18.22	0.066
10	16QAM	1	49	18.23	0.067	18.13	0.065	18.12	0.065
10	16QAM	25	0	17.89	0.062	17.88	0.061	17.87	0.061
10	16QAM	25	12	17.81	0.060	17.91	0.062	17.88	0.061
10	16QAM	25	25	18.15	0.065	18.06	0.064	18.15	0.065
10	16QAM	50	0	18.09	0.064	18.13	0.065	18.25	0.067
10	64QAM	1	0	17.95	0.062	18.03	0.064	17.93	0.062
10	64QAM	1	25	18.02	0.063	18.31	0.068	18.40	0.069
10	64QAM	1	49	18.00	0.063	18.04	0.064	17.99	0.063
10	64QAM	25	0	17.84	0.061	17.98	0.063	17.97	0.063
10	64QAM	25	12	17.93	0.062	18.04	0.064	18.08	0.064
10	64QAM	25	25	17.81	0.060	17.93	0.062	17.95	0.062
10	64QAM	50	0	17.87	0.061	17.94	0.062	17.93	0.062



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	18.95	0.079	18.90	0.078	18.95	0.079
5	QPSK	1	12	18.94	0.078	18.89	0.077	18.86	0.077
5	QPSK	1	24	18.69	0.074	18.81	0.076	18.80	0.076
5	QPSK	12	0	17.91	0.062	17.91	0.062	17.95	0.062
5	QPSK	12	7	17.91	0.062	18.02	0.063	17.99	0.063
5	QPSK	12	13	17.86	0.061	18.03	0.064	17.95	0.062
5	QPSK	25	0	17.89	0.062	17.93	0.062	17.99	0.063
5	16QAM	1	0	17.79	0.060	18.20	0.066	17.88	0.061
5	16QAM	1	12	17.90	0.062	18.25	0.067	17.84	0.061
5	16QAM	1	24	17.84	0.061	18.19	0.066	17.79	0.060
5	16QAM	12	0	17.83	0.061	17.77	0.060	17.80	0.060
5	16QAM	12	7	17.86	0.061	17.90	0.062	17.88	0.061
5	16QAM	12	13	18.13	0.065	18.20	0.066	18.24	0.067
5	16QAM	25	0	18.14	0.065	18.25	0.067	18.18	0.066
5	64QAM	1	0	17.91	0.062	18.35	0.068	18.33	0.068
5	64QAM	1	12	18.29	0.067	18.05	0.064	18.32	0.068
5	64QAM	1	24	18.25	0.067	17.95	0.062	18.02	0.063
5	64QAM	12	0	17.92	0.062	17.99	0.063	18.01	0.063
5	64QAM	12	7	17.91	0.062	18.00	0.063	18.06	0.064
5	64QAM	12	13	17.92	0.062	17.98	0.063	17.97	0.063
5	64QAM	25	0	17.87	0.061	18.01	0.063	17.92	0.062





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	19.14	0.082	19.15	0.082	19.27	0.085
3	QPSK	1	8	19.23	0.084	19.37	0.086	19.31	0.085
3	QPSK	1	14	19.03	0.080	19.22	0.084	19.22	0.084
3	QPSK	8	0	17.89	0.062	17.95	0.062	17.96	0.063
3	QPSK	8	4	17.95	0.062	18.03	0.064	18.05	0.064
3	QPSK	8	7	17.91	0.062	18.01	0.063	18.01	0.063
3	QPSK	15	0	17.91	0.062	17.97	0.063	17.91	0.062
3	16QAM	1	0	17.99	0.063	18.08	0.064	18.12	0.065
3	16QAM	1	8	18.21	0.066	18.21	0.066	17.95	0.062
3	16QAM	1	14	18.12	0.065	17.90	0.062	17.98	0.063
3	16QAM	8	0	17.91	0.062	17.92	0.062	18.01	0.063
3	16QAM	8	4	17.67	0.058	17.67	0.058	17.68	0.059
3	16QAM	8	7	17.89	0.062	17.97	0.063	18.01	0.063
3	16QAM	15	0	17.89	0.062	17.87	0.061	17.94	0.062
3	64QAM	1	0	17.56	0.057	17.65	0.058	17.63	0.058
3	64QAM	1	8	17.99	0.063	17.97	0.063	17.89	0.062
3	64QAM	1	14	17.90	0.062	17.97	0.063	17.80	0.060
3	64QAM	8	0	17.88	0.061	17.92	0.062	17.86	0.061
3	64QAM	8	4	18.00	0.063	17.98	0.063	18.02	0.063
3	64QAM	8	7	17.94	0.062	18.01	0.063	18.13	0.065
3	64QAM	15	0	17.90	0.062	17.98	0.063	17.89	0.062



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	19.29	0.085	19.34	0.086	19.32	0.086
1.4	QPSK	1	3	19.23	0.084	19.23	0.084	19.27	0.085
1.4	QPSK	1	5	19.09	0.081	19.18	0.083	19.20	0.083
1.4	QPSK	3	0	19.17	0.083	19.14	0.082	19.13	0.082
1.4	QPSK	3	1	19.13	0.082	19.23	0.084	19.28	0.085
1.4	QPSK	3	3	19.12	0.082	19.19	0.083	19.18	0.083
1.4	QPSK	6	0	17.94	0.062	17.96	0.063	17.92	0.062
1.4	16QAM	1	0	17.54	0.057	18.01	0.063	17.67	0.058
1.4	16QAM	1	3	17.67	0.058	17.75	0.060	17.79	0.060
1.4	16QAM	1	5	17.73	0.059	17.89	0.062	17.69	0.059
1.4	16QAM	3	0	17.76	0.060	17.80	0.060	17.71	0.059
1.4	16QAM	3	1	17.77	0.060	17.80	0.060	17.82	0.061
1.4	16QAM	3	3	17.76	0.060	17.88	0.061	17.77	0.060
1.4	16QAM	6	0	17.67	0.058	17.68	0.059	17.59	0.057
1.4	64QAM	1	0	17.85	0.061	17.79	0.060	17.53	0.057
1.4	64QAM	1	3	17.71	0.059	17.69	0.059	17.81	0.060
1.4	64QAM	1	5	17.96	0.063	17.92	0.062	17.76	0.060
1.4	64QAM	3	0	17.87	0.061	17.85	0.061	18.04	0.064
1.4	64QAM	3	1	17.78	0.060	17.93	0.062	17.90	0.062
1.4	64QAM	3	3	17.84	0.061	18.01	0.063	17.89	0.062
1.4	64QAM	6	0	17.83	0.061	17.84	0.061	17.91	0.062



LTE Band 5				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20450		20525		20600	
Frequency (MHz)				829		836.5		844	
				dBm	W	dBm	W	dBm	W
10	QPSK	1	0	18.50	0.071	18.51	0.071	18.43	0.070
10	QPSK	1	25	18.36	0.069	18.39	0.069	18.19	0.066
10	QPSK	1	49	18.28	0.067	18.40	0.069	18.08	0.064
10	QPSK	25	0	17.81	0.060	17.83	0.061	17.64	0.058
10	QPSK	25	12	17.57	0.057	17.59	0.057	17.64	0.058
10	QPSK	25	25	17.57	0.057	17.68	0.059	17.73	0.059
10	QPSK	50	0	17.63	0.058	17.51	0.056	17.65	0.058
10	16QAM	1	0	17.46	0.056	17.65	0.058	17.36	0.054
10	16QAM	1	25	17.69	0.059	17.72	0.059	17.40	0.055
10	16QAM	1	49	17.52	0.056	17.58	0.057	17.65	0.058
10	16QAM	25	0	17.61	0.058	17.62	0.058	17.44	0.055
10	16QAM	25	12	17.55	0.057	17.63	0.058	17.41	0.055
10	16QAM	25	25	17.58	0.057	17.51	0.056	17.54	0.057
10	16QAM	50	0	17.59	0.057	17.50	0.056	17.40	0.055
10	64QAM	1	0	17.55	0.057	17.65	0.058	17.53	0.057
10	64QAM	1	25	17.52	0.056	17.72	0.059	17.52	0.056
10	64QAM	1	49	17.41	0.055	17.63	0.058	17.54	0.057
10	64QAM	25	0	17.52	0.056	17.63	0.058	17.30	0.054
10	64QAM	25	12	17.51	0.056	17.68	0.059	17.39	0.055
10	64QAM	25	25	17.63	0.058	17.52	0.056	17.22	0.053
10	64QAM	50	0	17.59	0.057	17.55	0.057	17.41	0.055



LTE Band 5				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20425		20525		20625	
Frequency (MHz)				826.5		836.5		846.5	
				dBm	W	dBm	W	dBm	W
5	QPSK	1	0	18.45	0.070	18.41	0.069	18.39	0.069
5	QPSK	1	12	18.35	0.068	18.46	0.070	18.30	0.068
5	QPSK	1	24	18.35	0.068	18.30	0.068	18.30	0.068
5	QPSK	12	0	17.72	0.059	17.77	0.060	17.63	0.058
5	QPSK	12	7	17.79	0.060	17.80	0.060	17.72	0.059
5	QPSK	12	13	17.63	0.058	17.47	0.056	17.42	0.055
5	QPSK	25	0	17.54	0.057	17.50	0.056	17.42	0.055
5	16QAM	1	0	17.83	0.061	17.76	0.060	17.52	0.056
5	16QAM	1	12	17.53	0.057	17.75	0.060	17.51	0.056
5	16QAM	1	24	17.40	0.055	17.75	0.060	17.58	0.057
5	16QAM	12	0	17.49	0.056	17.58	0.057	17.57	0.057
5	16QAM	12	7	17.56	0.057	17.59	0.057	17.41	0.055
5	16QAM	12	13	17.56	0.057	17.47	0.056	17.52	0.056
5	16QAM	25	0	17.57	0.057	17.62	0.058	17.57	0.057
5	64QAM	1	0	17.64	0.058	17.52	0.056	17.63	0.058
5	64QAM	1	12	17.52	0.056	17.46	0.056	17.60	0.058
5	64QAM	1	24	17.66	0.058	17.50	0.056	17.44	0.055
5	64QAM	12	0	17.38	0.055	17.52	0.056	17.32	0.054
5	64QAM	12	7	17.42	0.055	17.58	0.057	17.36	0.054
5	64QAM	12	13	17.60	0.058	17.55	0.057	17.12	0.052
5	64QAM	25	0	17.48	0.056	17.55	0.057	17.16	0.052



LTE Band 5				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20415		20525		20635	
Frequency (MHz)				825.5		836.5		847.5	
				dBm	W	dBm	W	dBm	W
3	QPSK	1	0	18.44	0.070	18.45	0.070	18.30	0.068
3	QPSK	1	8	18.40	0.069	18.41	0.069	18.32	0.068
3	QPSK	1	14	18.41	0.069	18.39	0.069	18.13	0.065
3	QPSK	8	0	17.44	0.055	17.57	0.057	17.55	0.057
3	QPSK	8	4	17.58	0.057	17.64	0.058	17.61	0.058
3	QPSK	8	7	17.53	0.057	17.55	0.057	17.42	0.055
3	QPSK	15	0	17.51	0.056	17.57	0.057	17.56	0.057
3	16QAM	1	0	17.53	0.057	17.64	0.058	17.71	0.059
3	16QAM	1	8	17.46	0.056	17.72	0.059	17.56	0.057
3	16QAM	1	14	17.51	0.056	17.77	0.060	17.52	0.056
3	16QAM	8	0	17.47	0.056	17.56	0.057	17.30	0.054
3	16QAM	8	4	17.63	0.058	17.74	0.059	17.31	0.054
3	16QAM	8	7	17.55	0.057	17.61	0.058	17.35	0.054
3	16QAM	15	0	17.49	0.056	17.51	0.056	17.06	0.051
3	64QAM	1	0	17.44	0.055	17.32	0.054	17.53	0.057
3	64QAM	1	8	17.32	0.054	17.56	0.057	17.32	0.054
3	64QAM	1	14	17.34	0.054	17.52	0.056	17.33	0.054
3	64QAM	8	0	17.44	0.055	17.54	0.057	17.52	0.056
3	64QAM	8	4	17.66	0.058	17.50	0.056	17.44	0.055
3	64QAM	8	7	17.61	0.058	17.53	0.057	17.50	0.056
3	64QAM	15	0	17.50	0.056	17.60	0.058	17.40	0.055



LTE Band 5				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20407		20525		20643	
Frequency (MHz)				824.7		836.5		848.3	
				dBm	W	dBm	W	dBm	W
1.4	QPSK	1	0	18.45	0.070	18.42	0.070	18.46	0.070
1.4	QPSK	1	3	18.48	0.070	18.41	0.069	18.48	0.070
1.4	QPSK	1	5	18.37	0.069	18.31	0.068	18.32	0.068
1.4	QPSK	3	0	18.38	0.069	18.44	0.070	18.40	0.069
1.4	QPSK	3	1	18.44	0.070	18.31	0.068	18.41	0.069
1.4	QPSK	3	3	18.45	0.070	18.37	0.069	18.37	0.069
1.4	QPSK	6	0	17.49	0.056	17.48	0.056	17.47	0.056
1.4	16QAM	1	0	17.62	0.058	17.43	0.055	17.60	0.058
1.4	16QAM	1	3	17.42	0.055	17.66	0.058	17.55	0.057
1.4	16QAM	1	5	17.81	0.060	17.49	0.056	17.55	0.057
1.4	16QAM	3	0	17.34	0.054	17.32	0.054	17.46	0.056
1.4	16QAM	3	1	17.37	0.055	17.64	0.058	17.50	0.056
1.4	16QAM	3	3	17.45	0.056	17.56	0.057	17.44	0.055
1.4	16QAM	6	0	17.64	0.058	17.51	0.056	17.55	0.057
1.4	64QAM	1	0	17.17	0.052	17.34	0.054	17.36	0.054
1.4	64QAM	1	3	17.48	0.056	17.49	0.056	17.44	0.055
1.4	64QAM	1	5	17.43	0.055	17.42	0.055	17.30	0.054
1.4	64QAM	3	0	17.09	0.051	17.36	0.054	17.37	0.055
1.4	64QAM	3	1	17.37	0.055	17.31	0.054	17.32	0.054
1.4	64QAM	3	3	17.27	0.053	17.44	0.055	17.48	0.056
1.4	64QAM	6	0	17.48	0.056	17.60	0.058	17.49	0.056



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	21.37	0.137	21.38	0.137	21.30	0.135
20	QPSK	1	49	21.32	0.136	21.36	0.137	21.25	0.133
20	QPSK	1	99	21.27	0.134	21.22	0.132	21.27	0.134
20	QPSK	50	0	20.43	0.110	20.50	0.112	20.47	0.111
20	QPSK	50	24	20.19	0.104	20.16	0.104	20.06	0.101
20	QPSK	50	50	20.29	0.107	20.32	0.108	20.29	0.107
20	QPSK	100	0	20.24	0.106	20.26	0.106	20.23	0.105
20	16QAM	1	0	20.05	0.101	20.15	0.104	20.33	0.108
20	16QAM	1	49	20.20	0.105	20.06	0.101	20.34	0.108
20	16QAM	1	99	20.14	0.103	20.45	0.111	20.10	0.102
20	16QAM	50	0	19.99	0.100	20.09	0.102	20.02	0.100
20	16QAM	50	24	20.04	0.101	19.96	0.099	20.07	0.102
20	16QAM	50	50	20.12	0.103	20.17	0.104	20.00	0.100
20	16QAM	100	0	20.00	0.100	20.12	0.103	20.10	0.102
20	64QAM	1	0	20.12	0.103	19.96	0.099	19.69	0.093
20	64QAM	1	49	20.06	0.101	20.03	0.101	20.08	0.102
20	64QAM	1	99	20.04	0.101	20.09	0.102	20.00	0.100
20	64QAM	50	0	19.98	0.100	19.99	0.100	20.04	0.101
20	64QAM	50	24	20.03	0.101	20.04	0.101	20.04	0.101
20	64QAM	50	50	20.07	0.102	20.14	0.103	19.99	0.100
20	64QAM	100	0	20.00	0.100	19.97	0.099	20.09	0.102



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	21.20	0.132	21.29	0.135	21.29	0.135
15	QPSK	1	37	21.30	0.135	21.27	0.134	21.31	0.135
15	QPSK	1	74	21.24	0.133	21.31	0.135	21.31	0.135
15	QPSK	36	0	20.02	0.100	20.11	0.103	20.13	0.103
15	QPSK	36	20	20.10	0.102	20.17	0.104	20.12	0.103
15	QPSK	36	39	20.13	0.103	20.16	0.104	20.20	0.105
15	QPSK	75	0	20.19	0.104	20.12	0.103	20.14	0.103
15	16QAM	1	0	20.55	0.114	20.66	0.116	20.73	0.118
15	16QAM	1	37	20.37	0.109	20.48	0.112	20.46	0.111
15	16QAM	1	74	20.41	0.110	20.41	0.110	20.63	0.116
15	16QAM	36	0	20.00	0.100	20.11	0.103	20.13	0.103
15	16QAM	36	20	20.07	0.102	20.10	0.102	20.09	0.102
15	16QAM	36	39	20.13	0.103	20.11	0.103	20.00	0.100
15	16QAM	75	0	20.08	0.102	20.16	0.104	20.08	0.102
15	64QAM	1	0	20.40	0.110	20.30	0.107	20.40	0.110
15	64QAM	1	37	20.25	0.106	20.40	0.110	20.49	0.112
15	64QAM	1	74	20.24	0.106	20.36	0.109	20.42	0.110
15	64QAM	36	0	20.09	0.102	20.17	0.104	20.16	0.104
15	64QAM	36	20	20.20	0.105	20.19	0.104	20.26	0.106
15	64QAM	36	39	20.24	0.106	20.15	0.104	20.17	0.104
15	64QAM	75	0	20.09	0.102	20.19	0.104	20.14	0.103





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	21.19	0.132	21.06	0.128	21.09	0.129
10	QPSK	1	25	21.22	0.132	21.12	0.129	21.14	0.130
10	QPSK	1	49	21.15	0.130	21.12	0.129	21.14	0.130
10	QPSK	25	0	19.94	0.099	19.94	0.099	19.93	0.098
10	QPSK	25	12	19.90	0.098	20.02	0.100	20.07	0.102
10	QPSK	25	25	19.83	0.096	20.01	0.100	20.01	0.100
10	QPSK	50	0	19.92	0.098	20.04	0.101	20.03	0.101
10	16QAM	1	0	20.17	0.104	20.35	0.108	20.20	0.105
10	16QAM	1	25	20.16	0.104	20.18	0.104	20.23	0.105
10	16QAM	1	49	20.63	0.116	20.53	0.113	20.44	0.111
10	16QAM	25	0	20.06	0.101	19.94	0.099	20.02	0.100
10	16QAM	25	12	19.88	0.097	20.05	0.101	19.98	0.100
10	16QAM	25	25	19.93	0.098	19.96	0.099	19.88	0.097
10	16QAM	50	0	19.96	0.099	20.05	0.101	19.90	0.098
10	64QAM	1	0	19.98	0.100	19.94	0.099	19.92	0.098
10	64QAM	1	25	20.04	0.101	20.29	0.107	20.12	0.103
10	64QAM	1	49	20.15	0.104	20.39	0.109	20.20	0.105
10	64QAM	25	0	20.01	0.100	19.99	0.100	20.03	0.101
10	64QAM	25	12	20.03	0.101	20.14	0.103	20.07	0.102
10	64QAM	25	25	19.96	0.099	19.86	0.097	19.85	0.097
10	64QAM	50	0	19.90	0.098	19.96	0.099	19.88	0.097



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	21.23	0.133	21.14	0.130	21.04	0.127
5	QPSK	1	12	21.10	0.129	21.03	0.127	21.11	0.129
5	QPSK	1	24	21.04	0.127	21.10	0.129	21.14	0.130
5	QPSK	12	0	19.98	0.100	20.06	0.101	19.98	0.100
5	QPSK	12	7	20.05	0.101	20.20	0.105	20.12	0.103
5	QPSK	12	13	20.07	0.102	20.23	0.105	20.08	0.102
5	QPSK	25	0	20.08	0.102	20.09	0.102	20.04	0.101
5	16QAM	1	0	20.02	0.100	20.00	0.100	20.06	0.101
5	16QAM	1	12	20.07	0.102	20.29	0.107	20.19	0.104
5	16QAM	1	24	20.13	0.103	20.32	0.108	20.14	0.103
5	16QAM	12	0	20.04	0.101	20.10	0.102	20.01	0.100
5	16QAM	12	7	19.93	0.098	19.95	0.099	19.91	0.098
5	16QAM	12	13	19.93	0.098	19.99	0.100	20.12	0.103
5	16QAM	25	0	19.90	0.098	19.95	0.099	19.97	0.099
5	64QAM	1	0	20.11	0.103	20.16	0.104	20.12	0.103
5	64QAM	1	12	20.16	0.104	20.28	0.107	20.16	0.104
5	64QAM	1	24	20.20	0.105	20.30	0.107	20.26	0.106
5	64QAM	12	0	19.91	0.098	19.88	0.097	19.93	0.098
5	64QAM	12	7	20.00	0.100	20.05	0.101	19.84	0.096
5	64QAM	12	13	19.95	0.099	20.04	0.101	19.90	0.098
5	64QAM	25	0	19.90	0.098	19.89	0.097	19.94	0.099



LTE Band 12				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				23060		23095		23130	
Frequency (MHz)				704		707.5		711	
				dBm	W	dBm	W	dBm	W
10	QPSK	1	0	17.92	0.062	18.08	0.064	17.97	0.063
10	QPSK	1	25	17.78	0.060	17.91	0.062	17.94	0.062
10	QPSK	1	49	17.88	0.061	17.89	0.062	17.88	0.061
10	QPSK	25	0	17.17	0.052	17.27	0.053	17.18	0.052
10	QPSK	25	12	17.14	0.052	17.08	0.051	16.87	0.049
10	QPSK	25	25	17.19	0.052	17.25	0.053	17.18	0.052
10	QPSK	50	0	17.20	0.052	17.22	0.053	17.13	0.052
10	16QAM	1	0	17.13	0.052	16.68	0.047	16.81	0.048
10	16QAM	1	25	16.88	0.049	16.83	0.048	16.97	0.050
10	16QAM	1	49	16.97	0.050	17.02	0.050	16.91	0.049
10	16QAM	25	0	16.86	0.049	16.88	0.049	16.82	0.048
10	16QAM	25	12	16.90	0.049	16.94	0.049	16.83	0.048
10	16QAM	25	25	16.95	0.050	16.96	0.050	16.90	0.049
10	16QAM	50	0	16.85	0.048	16.93	0.049	16.98	0.050
10	64QAM	1	0	16.70	0.047	16.82	0.048	17.16	0.052
10	64QAM	1	25	17.14	0.052	17.20	0.052	16.79	0.048
10	64QAM	1	49	17.16	0.052	16.84	0.048	16.77	0.048
10	64QAM	25	0	16.67	0.046	16.61	0.046	16.58	0.045
10	64QAM	25	12	16.72	0.047	16.75	0.047	16.67	0.046
10	64QAM	25	25	16.77	0.048	16.74	0.047	16.74	0.047
10	64QAM	50	0	16.69	0.047	16.62	0.046	16.73	0.047



LTE Band 12				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				23035		23095		23155	
Frequency (MHz)				701.5		707.5		713.5	
				dBm	W	dBm	W	dBm	W
5	QPSK	1	0	17.67	0.058	18.00	0.063	17.78	0.060
5	QPSK	1	12	17.83	0.061	17.99	0.063	17.83	0.061
5	QPSK	1	24	17.79	0.060	17.98	0.063	17.84	0.061
5	QPSK	12	0	16.90	0.049	16.97	0.050	16.96	0.050
5	QPSK	12	7	17.01	0.050	17.03	0.050	17.00	0.050
5	QPSK	12	13	16.96	0.050	16.99	0.050	16.96	0.050
5	QPSK	25	0	16.92	0.049	17.04	0.051	17.00	0.050
5	16QAM	1	0	16.93	0.049	16.95	0.050	16.97	0.050
5	16QAM	1	12	17.10	0.051	17.05	0.051	17.06	0.051
5	16QAM	1	24	17.06	0.051	17.04	0.051	17.00	0.050
5	16QAM	12	0	16.80	0.048	16.77	0.048	16.80	0.048
5	16QAM	12	7	16.94	0.049	16.99	0.050	16.83	0.048
5	16QAM	12	13	16.89	0.049	16.86	0.049	16.91	0.049
5	16QAM	25	0	16.90	0.049	16.86	0.049	16.88	0.049
5	64QAM	1	0	16.68	0.047	16.69	0.047	16.74	0.047
5	64QAM	1	12	17.13	0.052	16.83	0.048	16.76	0.047
5	64QAM	1	24	17.11	0.051	16.80	0.048	16.85	0.048
5	64QAM	12	0	16.65	0.046	16.67	0.046	16.62	0.046
5	64QAM	12	7	16.75	0.047	16.63	0.046	16.69	0.047
5	64QAM	12	13	16.62	0.046	16.72	0.047	16.77	0.048
5	64QAM	25	0	16.77	0.048	16.73	0.047	16.70	0.047



LTE Band 12				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				23025		23095		23165	
Frequency (MHz)				700.5		707.5		714.5	
				dBm	W	dBm	W	dBm	W
3	QPSK	1	0	17.75	0.060	18.02	0.063	17.69	0.059
3	QPSK	1	8	17.93	0.062	17.92	0.062	17.82	0.061
3	QPSK	1	14	17.87	0.061	17.98	0.063	17.93	0.062
3	QPSK	8	0	16.98	0.050	16.96	0.050	16.96	0.050
3	QPSK	8	4	17.01	0.050	17.04	0.051	17.05	0.051
3	QPSK	8	7	16.96	0.050	17.04	0.051	16.98	0.050
3	QPSK	15	0	16.95	0.050	17.03	0.050	16.89	0.049
3	16QAM	1	0	16.96	0.050	17.32	0.054	16.91	0.049
3	16QAM	1	8	17.16	0.052	17.14	0.052	17.09	0.051
3	16QAM	1	14	16.99	0.050	17.04	0.051	16.90	0.049
3	16QAM	8	0	16.96	0.050	16.85	0.048	16.88	0.049
3	16QAM	8	4	17.01	0.050	16.98	0.050	17.09	0.051
3	16QAM	8	7	16.85	0.048	16.88	0.049	16.94	0.049
3	16QAM	15	0	16.83	0.048	16.76	0.047	16.75	0.047
3	64QAM	1	0	16.69	0.047	17.03	0.050	17.02	0.050
3	64QAM	1	8	16.98	0.050	16.88	0.049	16.89	0.049
3	64QAM	1	14	16.91	0.049	16.76	0.047	16.87	0.049
3	64QAM	8	0	16.58	0.045	16.66	0.046	16.57	0.045
3	64QAM	8	4	16.67	0.046	16.71	0.047	16.70	0.047
3	64QAM	8	7	16.66	0.046	16.58	0.045	16.73	0.047
3	64QAM	15	0	16.65	0.046	16.67	0.046	16.59	0.046



LTE Band 12				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				23017		23095		23173	
Frequency (MHz)				699.7		707.5		715.3	
				dBm	W	dBm	W	dBm	W
1.4	QPSK	1	0	17.78	0.060	17.95	0.062	17.75	0.060
1.4	QPSK	1	3	17.89	0.062	17.88	0.061	17.90	0.062
1.4	QPSK	1	5	17.78	0.060	17.83	0.061	17.79	0.060
1.4	QPSK	3	0	17.73	0.059	17.86	0.061	17.84	0.061
1.4	QPSK	3	1	17.94	0.062	17.94	0.062	17.61	0.058
1.4	QPSK	3	3	17.89	0.062	17.91	0.062	17.87	0.061
1.4	QPSK	6	0	16.95	0.050	16.92	0.049	16.90	0.049
1.4	16QAM	1	0	16.99	0.050	16.93	0.049	16.78	0.048
1.4	16QAM	1	3	16.80	0.048	17.23	0.053	16.90	0.049
1.4	16QAM	1	5	16.92	0.049	16.93	0.049	16.92	0.049
1.4	16QAM	3	0	16.76	0.047	16.79	0.048	16.80	0.048
1.4	16QAM	3	1	16.92	0.049	17.00	0.050	16.84	0.048
1.4	16QAM	3	3	16.75	0.047	16.89	0.049	16.89	0.049
1.4	16QAM	6	0	16.68	0.047	16.88	0.049	16.78	0.048
1.4	64QAM	1	0	16.53	0.045	16.68	0.047	16.52	0.045
1.4	64QAM	1	3	16.65	0.046	16.58	0.045	16.63	0.046
1.4	64QAM	1	5	16.81	0.048	16.84	0.048	16.80	0.048
1.4	64QAM	3	0	16.71	0.047	16.72	0.047	16.55	0.045
1.4	64QAM	3	1	16.69	0.047	16.93	0.049	16.78	0.048
1.4	64QAM	3	3	16.71	0.047	16.55	0.045	16.71	0.047
1.4	64QAM	6	0	16.67	0.046	16.68	0.047	16.55	0.045



LTE Band 13				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				/		23230		/	
Frequency (MHz)				/		782		/	
				dBm	W	dBm	W	dBm	W
10	QPSK	1	0	/	/	18.49	0.071	/	/
10	QPSK	1	25	/	/	18.27	0.067	/	/
10	QPSK	1	49	/	/	18.20	0.066	/	/
10	QPSK	25	0	/	/	17.57	0.057	/	/
10	QPSK	25	12	/	/	17.33	0.054	/	/
10	QPSK	25	25	/	/	17.43	0.055	/	/
10	QPSK	50	0	/	/	17.33	0.054	/	/
10	16QAM	1	0	/	/	17.14	0.052	/	/
10	16QAM	1	25	/	/	17.17	0.052	/	/
10	16QAM	1	49	/	/	17.61	0.058	/	/
10	16QAM	25	0	/	/	17.52	0.056	/	/
10	16QAM	25	12	/	/	17.44	0.055	/	/
10	16QAM	25	25	/	/	17.33	0.054	/	/
10	16QAM	50	0	/	/	17.40	0.055	/	/
10	64QAM	1	0	/	/	17.30	0.054	/	/
10	64QAM	1	25	/	/	17.63	0.058	/	/
10	64QAM	1	49	/	/	17.65	0.058	/	/
10	64QAM	25	0	/	/	17.39	0.055	/	/
10	64QAM	25	12	/	/	17.37	0.055	/	/
10	64QAM	25	25	/	/	17.33	0.054	/	/
10	64QAM	50	0	/	/	17.44	0.055	/	/



LTE Band 13				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				23205		23230		23255	
Frequency (MHz)				779.5		782		784.5	
				dBm	W	dBm	W	dBm	W
5	QPSK	1	0	18.27	0.067	18.27	0.067	18.28	0.067
5	QPSK	1	12	18.17	0.066	18.15	0.065	18.23	0.067
5	QPSK	1	24	18.31	0.068	18.19	0.066	18.09	0.064
5	QPSK	12	0	17.58	0.057	17.51	0.056	17.58	0.057
5	QPSK	12	7	17.55	0.057	17.74	0.059	17.52	0.056
5	QPSK	12	13	17.56	0.057	17.52	0.056	17.44	0.055
5	QPSK	25	0	17.64	0.058	17.49	0.056	17.68	0.059
5	16QAM	1	0	17.56	0.057	17.56	0.057	17.76	0.060
5	16QAM	1	12	17.56	0.057	17.65	0.058	17.77	0.060
5	16QAM	1	24	17.39	0.055	17.59	0.057	17.47	0.056
5	16QAM	12	0	17.40	0.055	17.57	0.057	17.45	0.056
5	16QAM	12	7	17.39	0.055	17.59	0.057	17.50	0.056
5	16QAM	12	13	17.30	0.054	17.35	0.054	17.35	0.054
5	16QAM	25	0	17.46	0.056	17.50	0.056	17.51	0.056
5	64QAM	1	0	17.46	0.056	17.46	0.056	17.13	0.052
5	64QAM	1	12	17.13	0.052	17.26	0.053	17.16	0.052
5	64QAM	1	24	17.13	0.052	17.13	0.052	17.13	0.052
5	64QAM	12	0	17.46	0.056	17.44	0.055	17.46	0.056
5	64QAM	12	7	17.45	0.056	17.49	0.056	17.53	0.057
5	64QAM	12	13	17.45	0.056	17.38	0.055	17.40	0.055
5	64QAM	25	0	17.35	0.054	17.45	0.056	17.46	0.056





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	18.02	0.063	18.05	0.064	18.02	0.063
10	QPSK	1	25	17.90	0.062	17.86	0.061	17.92	0.062
10	QPSK	1	49	17.83	0.061	17.86	0.061	17.81	0.060
10	QPSK	25	0	17.13	0.052	17.19	0.052	17.11	0.051
10	QPSK	25	12	16.98	0.050	16.92	0.049	17.06	0.051
10	QPSK	25	25	16.96	0.050	16.96	0.050	17.05	0.051
10	QPSK	50	0	17.09	0.051	16.96	0.050	16.97	0.050
10	16QAM	1	0	16.82	0.048	17.01	0.050	17.15	0.052
10	16QAM	1	25	17.03	0.050	17.32	0.054	17.16	0.052
10	16QAM	1	49	16.99	0.050	17.24	0.053	17.29	0.054
10	16QAM	25	0	16.93	0.049	17.17	0.052	17.16	0.052
10	16QAM	25	12	16.99	0.050	17.14	0.052	17.12	0.052
10	16QAM	25	25	16.82	0.048	17.08	0.051	17.13	0.052
10	16QAM	50	0	16.86	0.049	17.15	0.052	17.12	0.052
10	64QAM	1	0	16.83	0.048	17.16	0.052	16.84	0.048
10	64QAM	1	25	17.06	0.051	16.96	0.050	16.86	0.049
10	64QAM	1	49	16.80	0.048	16.83	0.048	16.83	0.048
10	64QAM	25	0	16.98	0.050	17.15	0.052	17.13	0.052
10	64QAM	25	12	16.90	0.049	16.98	0.050	17.15	0.052
10	64QAM	25	25	16.84	0.048	17.05	0.051	17.21	0.053
10	64QAM	50	0	16.91	0.049	17.14	0.052	17.15	0.052



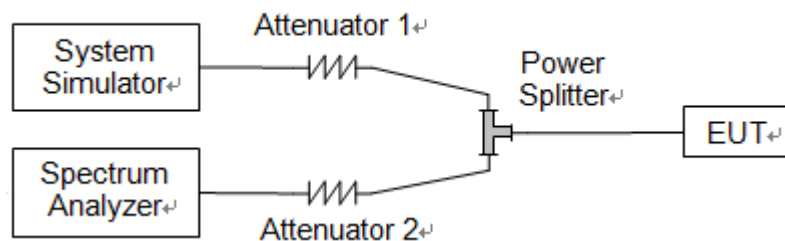
LTE Band 17				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				23755		23790		23825	
Frequency (MHz)				706.5		710		713.5	
				dBm	W	dBm	W	dBm	W
5	QPSK	1	0	17.96	0.063	17.92	0.062	17.88	0.061
5	QPSK	1	12	17.95	0.062	17.91	0.062	17.90	0.062
5	QPSK	1	24	17.87	0.061	17.93	0.062	17.92	0.062
5	QPSK	12	0	17.03	0.050	17.21	0.053	17.37	0.055
5	QPSK	12	7	17.15	0.052	17.24	0.053	17.32	0.054
5	QPSK	12	13	16.98	0.050	17.26	0.053	17.32	0.054
5	QPSK	25	0	17.01	0.050	17.18	0.052	17.31	0.054
5	16QAM	1	0	17.49	0.056	17.54	0.057	17.26	0.053
5	16QAM	1	12	17.66	0.058	17.22	0.053	17.59	0.057
5	16QAM	1	24	17.50	0.056	17.55	0.057	17.71	0.059
5	16QAM	12	0	16.94	0.049	16.97	0.050	17.18	0.052
5	16QAM	12	7	16.94	0.049	17.01	0.050	17.13	0.052
5	16QAM	12	13	16.85	0.048	17.10	0.051	17.13	0.052
5	16QAM	25	0	16.95	0.050	17.07	0.051	17.11	0.051
5	64QAM	1	0	16.75	0.047	16.76	0.047	16.76	0.047
5	64QAM	1	12	16.79	0.048	16.76	0.047	16.84	0.048
5	64QAM	1	24	16.84	0.048	16.84	0.048	16.76	0.047
5	64QAM	12	0	16.90	0.049	16.95	0.050	17.19	0.052
5	64QAM	12	7	17.03	0.050	17.11	0.051	17.05	0.051
5	64QAM	12	13	16.88	0.049	17.06	0.051	17.08	0.051
5	64QAM	25	0	16.85	0.048	17.04	0.051	17.20	0.052

## 2.2. Occupied Bandwidth

### 2.2.1. Requirement

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

### 2.2.2. Test Description



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

### 2.2.3. Test Procedure

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

### 2.2.4. Test Result



LTE Band 2				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
1.4	Low	QPSK	1.09	1.25
	Low	16QAM	1.10	1.29
	Low	64QAM	1.10	1.28
	Mid	QPSK	1.09	1.26
	Mid	16QAM	1.10	1.28
	Mid	64QAM	1.10	1.29
	High	QPSK	1.09	1.27
	High	16QAM	1.10	1.30
	High	64QAM	1.10	1.29
3	Low	QPSK	2.69	2.92
	Low	16QAM	2.69	2.92
	Low	64QAM	2.70	2.93
	Mid	QPSK	2.69	2.91
	Mid	16QAM	2.70	2.93
	Mid	64QAM	2.69	2.91
	High	QPSK	2.69	2.92
	High	16QAM	2.69	2.94
	High	64QAM	2.69	2.92
5	Low	QPSK	4.51	5.60
	Low	16QAM	4.52	5.44
	Low	64QAM	4.51	4.91
	Mid	QPSK	4.49	4.93
	Mid	16QAM	4.50	4.94
	Mid	64QAM	4.50	4.93
	High	QPSK	4.50	4.91
	High	16QAM	4.50	4.92
	High	64QAM	4.50	4.91
10	Low	QPSK	9.00	9.66
	Low	16QAM	8.97	9.70
	Low	64QAM	8.97	9.76
	Mid	QPSK	9.00	9.70
	Mid	16QAM	8.98	9.70
	Mid	64QAM	8.97	9.84
	High	QPSK	8.99	9.72
	High	16QAM	8.98	9.66
	High	64QAM	8.98	9.78



15	Low	QPSK	13.48	14.56
	Low	16QAM	13.47	14.61
	Low	64QAM	13.44	14.55
	Mid	QPSK	13.49	14.59
	Mid	16QAM	13.46	14.60
	Mid	64QAM	13.45	14.56
	High	QPSK	13.45	14.63
	High	16QAM	13.48	14.68
	High	64QAM	13.44	14.54
20	Low	QPSK	17.95	19.23
	Low	16QAM	17.99	19.31
	Low	64QAM	17.96	19.47
	Mid	QPSK	17.96	19.23
	Mid	16QAM	17.98	19.35
	Mid	64QAM	17.97	19.40
	High	QPSK	17.94	19.27
	High	16QAM	17.99	19.43
	High	64QAM	17.93	19.29



LTE Band 4				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
1.4	Low	QPSK	1.09	1.27
	Low	16QAM	1.10	1.29
	Low	64QAM	1.10	1.28
	Mid	QPSK	1.09	1.27
	Mid	16QAM	1.10	1.28
	Mid	64QAM	1.10	1.27
	High	QPSK	1.09	1.28
	High	16QAM	1.10	1.29
	High	64QAM	1.10	1.28
3	Low	QPSK	2.69	2.92
	Low	16QAM	2.69	2.93
	Low	64QAM	2.70	2.91
	Mid	QPSK	2.69	2.92
	Mid	16QAM	2.69	2.93
	Mid	64QAM	2.70	2.91
	High	QPSK	2.69	2.92
	High	16QAM	2.69	2.93
	High	64QAM	2.69	2.92
5	Low	QPSK	4.50	4.92
	Low	16QAM	4.49	4.90
	Low	64QAM	4.50	4.93
	Mid	QPSK	4.49	4.94
	Mid	16QAM	4.50	4.87
	Mid	64QAM	4.50	4.95
	High	QPSK	4.49	4.93
	High	16QAM	4.50	4.92
	High	64QAM	4.50	4.90
10	Low	QPSK	9.01	9.71
	Low	16QAM	8.97	9.72
	Low	64QAM	9.00	10.07
	Mid	QPSK	9.01	9.75
	Mid	16QAM	8.97	9.68
	Mid	64QAM	8.99	9.75
	High	QPSK	9.00	9.88
	High	16QAM	8.97	10.03
	High	64QAM	8.98	9.77



15	Low	QPSK	13.44	14.55
	Low	16QAM	13.46	14.56
	Low	64QAM	13.46	15.59
	Mid	QPSK	13.46	14.57
	Mid	16QAM	13.49	14.51
	Mid	64QAM	13.46	14.58
	High	QPSK	13.49	14.70
	High	16QAM	13.48	14.68
	High	64QAM	13.46	14.55
20	Low	QPSK	17.93	19.31
	Low	16QAM	17.95	19.35
	Low	64QAM	17.92	19.38
	Mid	QPSK	17.97	19.30
	Mid	16QAM	17.96	19.39
	Mid	64QAM	17.95	19.40
	High	QPSK	17.97	19.26
	High	16QAM	17.98	19.39
	High	64QAM	17.99	19.42



LTE Band 5				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
1.4	Low	QPSK	1.09	1.28
	Low	16QAM	1.10	1.31
	Low	64QAM	1.09	1.29
	Mid	QPSK	1.09	1.27
	Mid	16QAM	1.10	1.29
	Mid	64QAM	1.09	1.29
	High	QPSK	1.09	1.27
	High	16QAM	1.10	1.29
	High	64QAM	1.09	1.28
3	Low	QPSK	2.69	2.92
	Low	16QAM	2.69	2.93
	Low	64QAM	2.70	2.92
	Mid	QPSK	2.69	2.92
	Mid	16QAM	2.69	2.93
	Mid	64QAM	2.70	2.93
	High	QPSK	2.69	2.93
	High	16QAM	2.69	2.92
	High	64QAM	2.70	2.92
5	Low	QPSK	4.50	4.91
	Low	16QAM	4.50	4.91
	Low	64QAM	4.49	4.91
	Mid	QPSK	4.50	4.92
	Mid	16QAM	4.50	4.87
	Mid	64QAM	4.50	4.89
	High	QPSK	4.50	4.94
	High	16QAM	4.50	4.90
	High	64QAM	4.50	4.89
10	Low	QPSK	9.00	9.68
	Low	16QAM	8.96	9.62
	Low	64QAM	8.99	9.75
	Mid	QPSK	8.98	9.80
	Mid	16QAM	8.96	9.62
	Mid	64QAM	8.98	9.72
	High	QPSK	8.99	9.74
	High	16QAM	8.96	9.68
	High	64QAM	8.98	9.72





LTE Band 7				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
5	Low	QPSK	4.49	4.93
	Low	16QAM	4.50	4.92
	Low	64QAM	4.50	4.91
	Mid	QPSK	4.49	4.93
	Mid	16QAM	4.50	4.90
	Mid	64QAM	4.50	4.89
	High	QPSK	4.50	4.93
	High	16QAM	4.50	4.91
	High	64QAM	4.50	4.91
10	Low	QPSK	9.00	9.71
	Low	16QAM	8.96	9.69
	Low	64QAM	8.98	9.74
	Mid	QPSK	8.99	9.79
	Mid	16QAM	8.98	9.66
	Mid	64QAM	8.98	9.73
	High	QPSK	8.99	9.70
	High	16QAM	8.97	9.68
	High	64QAM	8.99	9.70
15	Low	QPSK	13.47	14.58
	Low	16QAM	13.48	14.49
	Low	64QAM	13.45	14.59
	Mid	QPSK	13.45	14.56
	Mid	16QAM	13.47	14.56
	Mid	64QAM	13.47	14.62
	High	QPSK	13.49	14.58
	High	16QAM	13.50	14.58
	High	64QAM	13.47	14.60
20	Low	QPSK	17.91	19.32
	Low	16QAM	17.99	19.27
	Low	64QAM	17.97	19.39
	Mid	QPSK	17.95	19.35
	Mid	16QAM	17.98	19.37
	Mid	64QAM	17.96	19.36
	High	QPSK	17.99	19.31
	High	16QAM	18.02	19.27
	High	64QAM	17.96	19.34



LTE Band 12				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
1.4	Low	QPSK	1.09	1.27
	Low	16QAM	1.10	1.29
	Low	64QAM	1.10	1.31
	Mid	QPSK	1.09	1.26
	Mid	16QAM	1.10	1.31
	Mid	64QAM	1.10	1.29
	High	QPSK	1.10	1.29
	High	16QAM	1.10	1.30
	High	64QAM	1.09	1.29
3	Low	QPSK	2.69	2.92
	Low	16QAM	2.69	2.92
	Low	64QAM	2.70	2.92
	Mid	QPSK	2.69	2.91
	Mid	16QAM	2.69	2.93
	Mid	64QAM	2.70	2.92
	High	QPSK	2.69	2.91
	High	16QAM	2.69	2.94
	High	64QAM	2.70	2.92
5	Low	QPSK	4.52	5.22
	Low	16QAM	4.51	5.13
	Low	64QAM	4.50	5.12
	Mid	QPSK	4.52	5.19
	Mid	16QAM	4.52	5.21
	Mid	64QAM	4.51	5.14
	High	QPSK	4.52	5.18
	High	16QAM	4.52	5.15
	High	64QAM	4.51	5.06
10	Low	QPSK	9.05	10.15
	Low	16QAM	9.00	9.90
	Low	64QAM	9.02	10.13
	Mid	QPSK	9.02	10.05
	Mid	16QAM	8.98	9.91
	Mid	64QAM	9.01	10.07
	High	QPSK	9.01	10.09
	High	16QAM	8.98	9.94
	High	64QAM	9.00	9.99



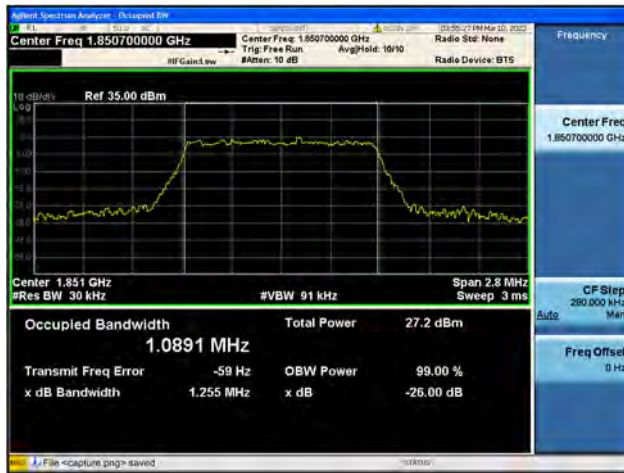
LTE Band 13				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
5	Low	QPSK	4.52	5.19
	Low	16QAM	4.51	5.16
	Low	64QAM	4.51	5.15
	Mid	QPSK	4.52	5.13
	Mid	16QAM	4.52	5.13
	Mid	64QAM	4.50	5.10
	High	QPSK	4.51	5.14
	High	16QAM	4.51	5.12
	High	64QAM	4.49	5.11
10	Low	QPSK	9.02	10.07
	Low	16QAM	8.98	9.94
	Low	64QAM	9.00	10.11
	Mid	QPSK	9.01	9.95
	Mid	16QAM	8.97	9.91
	Mid	64QAM	9.00	10.07
	High	QPSK	9.02	10.08
	High	16QAM	8.98	9.97
	High	64QAM	9.01	10.02



LTE Band 17				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
5	Low	QPSK	4.52	5.15
	Low	16QAM	4.51	5.08
	Low	64QAM	4.51	5.13
	Mid	QPSK	4.52	5.25
	Mid	16QAM	4.52	5.65
	Mid	64QAM	4.52	5.27
	High	QPSK	4.51	5.16
	High	16QAM	4.51	5.19
	High	64QAM	4.50	5.10
10	Low	QPSK	9.01	10.03
	Low	16QAM	8.98	10.05
	Low	64QAM	8.99	10.10
	Mid	QPSK	9.02	10.04
	Mid	16QAM	8.98	9.84
	Mid	64QAM	9.00	10.02
	High	QPSK	9.02	9.97
	High	16QAM	8.97	10.46
	High	64QAM	9.01	10.10



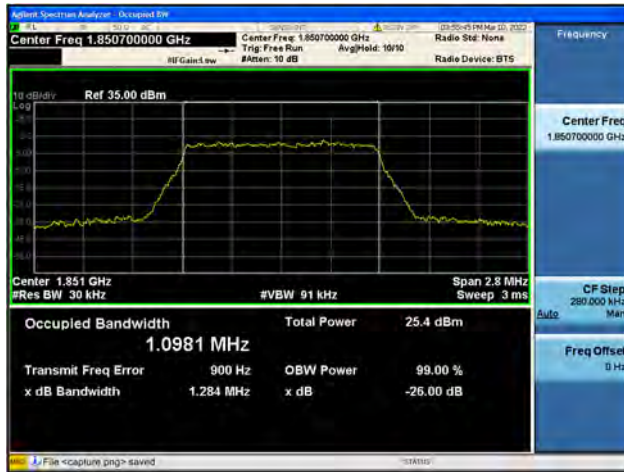
Band2 / 1.4MHz / Low CH / QPSK



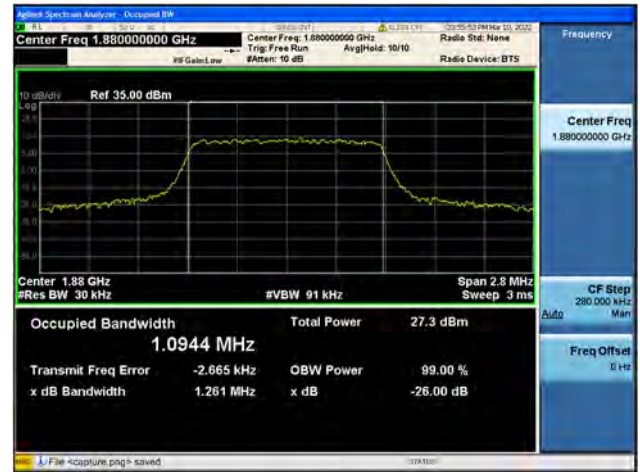
Band2 / 1.4MHz / Low CH / 16QAM



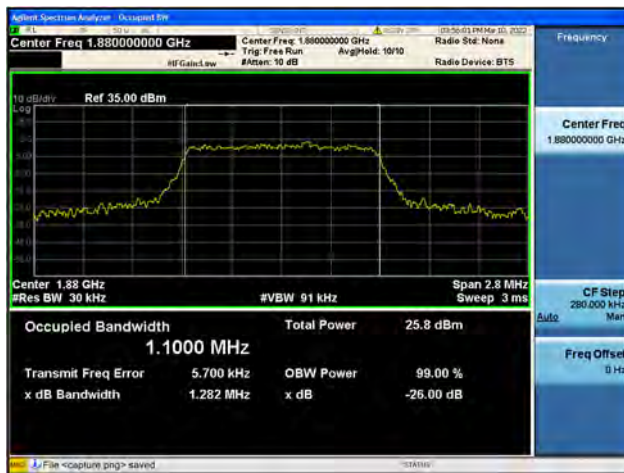
Band2 / 1.4MHz / Low CH / 64QAM



Band2 / 1.4MHz / Mid CH / QPSK



Band2 / 1.4MHz / Mid CH / 16QAM

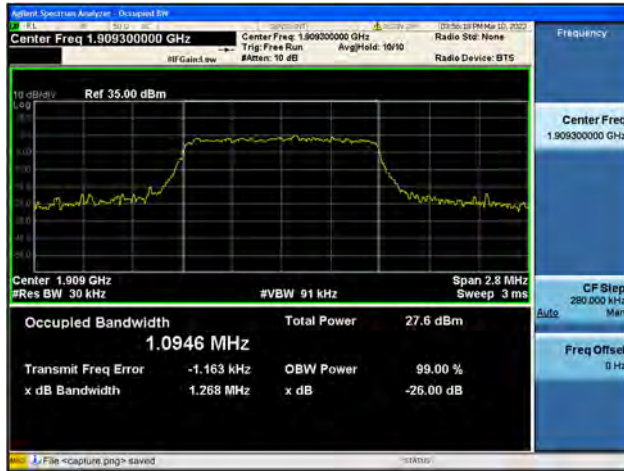


Band2 / 1.4MHz / Mid CH / 64QAM

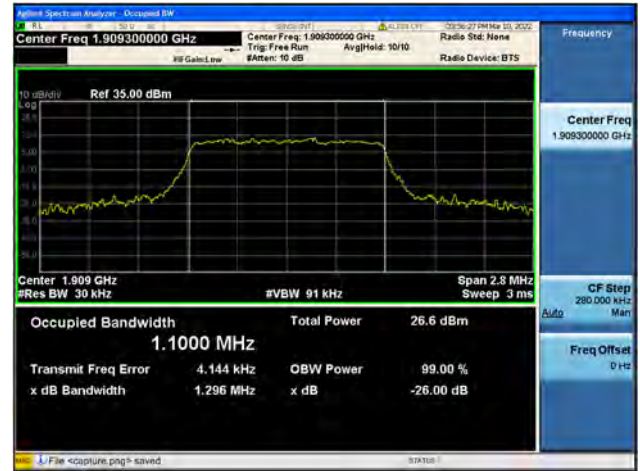




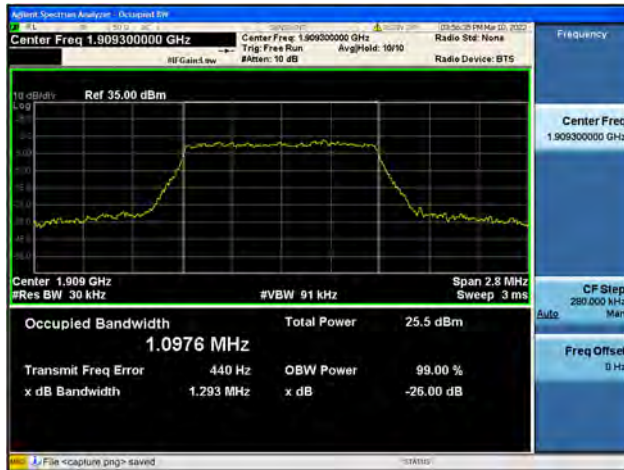
Band2 / 1.4MHz / High CH / QPSK



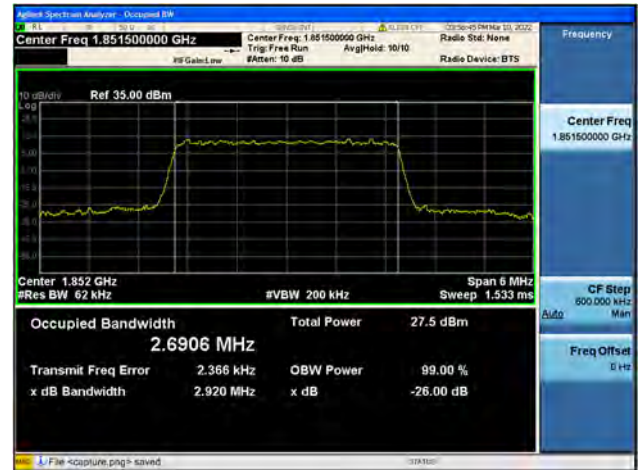
Band2 / 1.4MHz / High CH / 16QAM



Band2 / 1.4MHz / High CH / 64QAM



Band2 / 3MHz / Low CH / QPSK

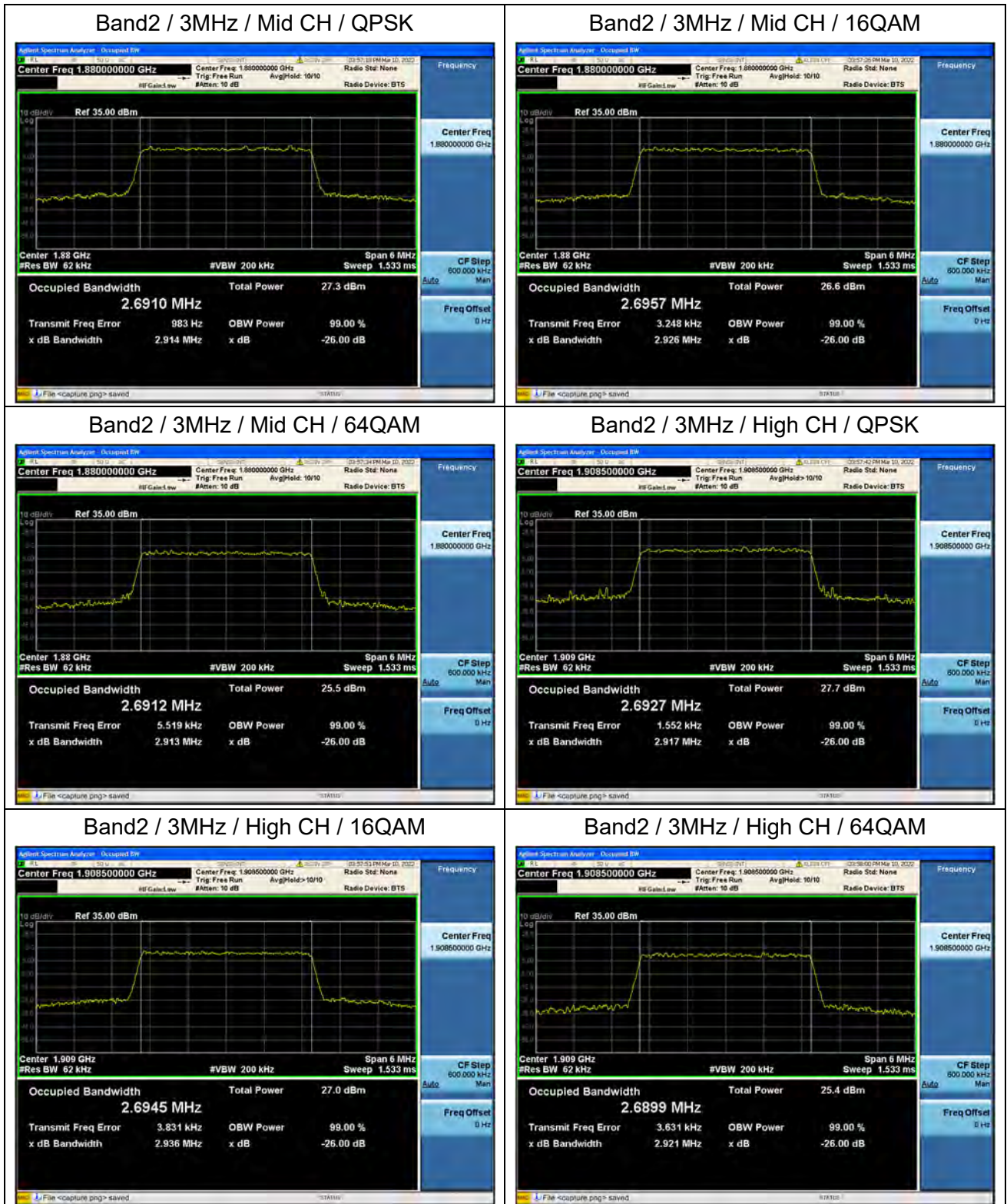


Band2 / 3MHz / Low CH / 16QAM



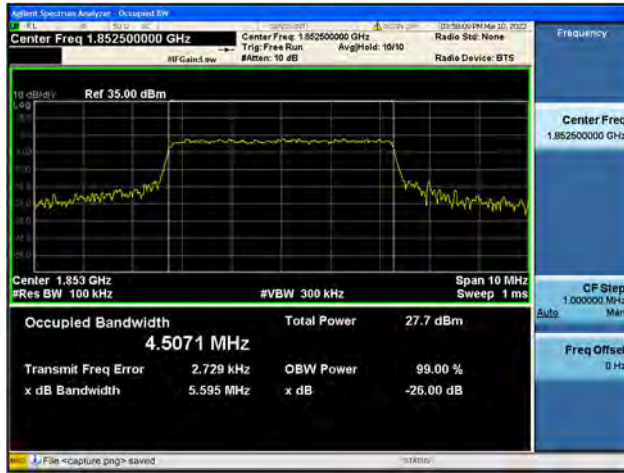
Band2 / 3MHz / Low CH / 64QAM







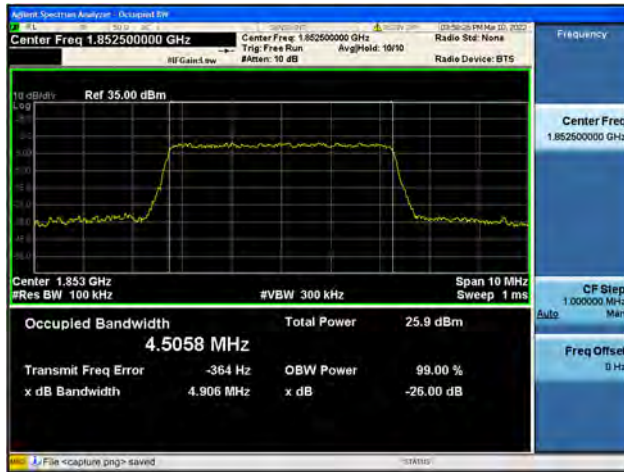
Band2 / 5MHz / Low CH / QPSK



Band2 / 5MHz / Low CH / 16QAM



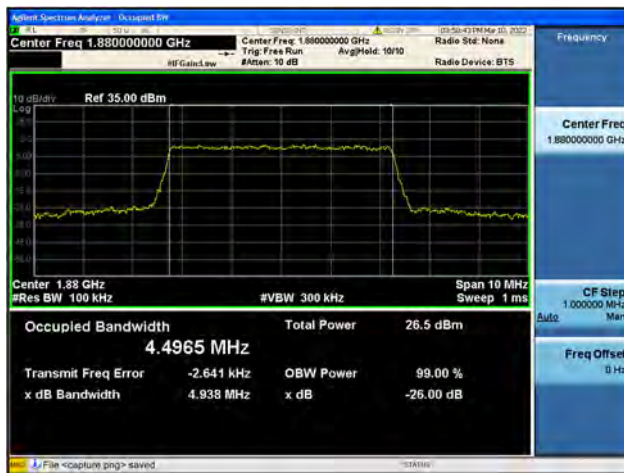
Band2 / 5MHz / Low CH / 64QAM



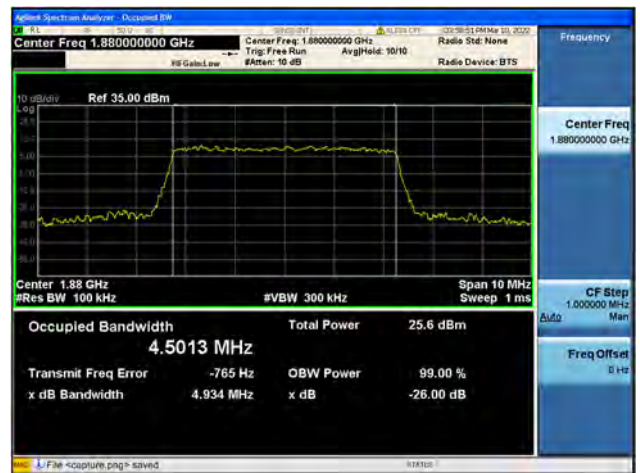
Band2 / 5MHz / Mid CH / QPSK



Band2 / 5MHz / Mid CH / 16QAM



Band2 / 5MHz / Mid CH / 64QAM



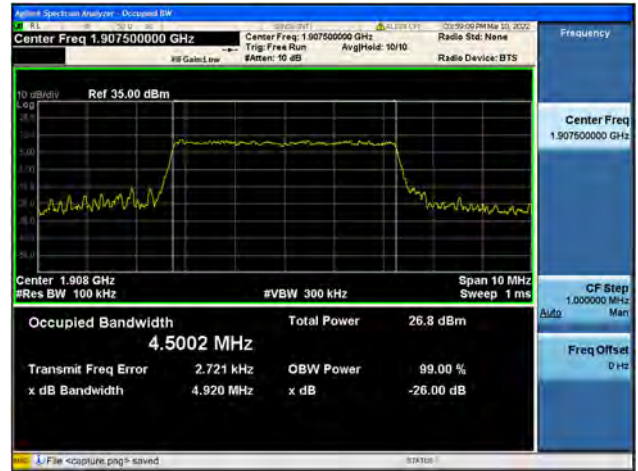




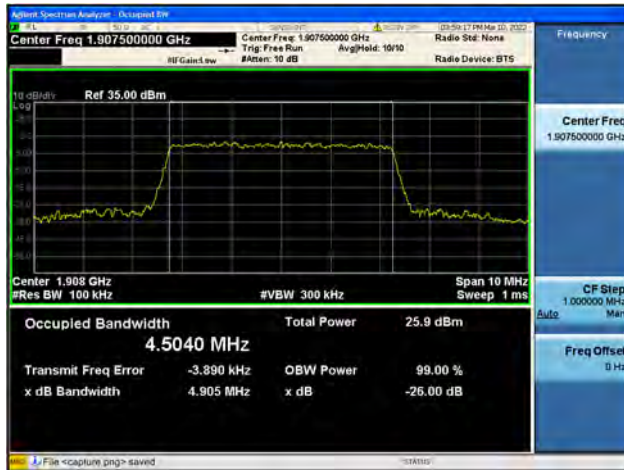
Band2 / 5MHz / High CH / QPSK



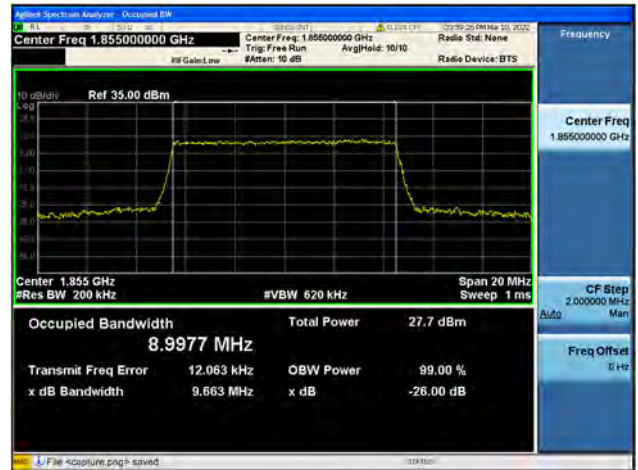
Band2 / 5MHz / High CH / 16QAM



Band2 / 5MHz / High CH / 64QAM



Band2 / 10MHz / Low CH / QPSK



Band2 / 10MHz / Low CH / 16QAM



Band2 / 10MHz / Low CH / 64QAM

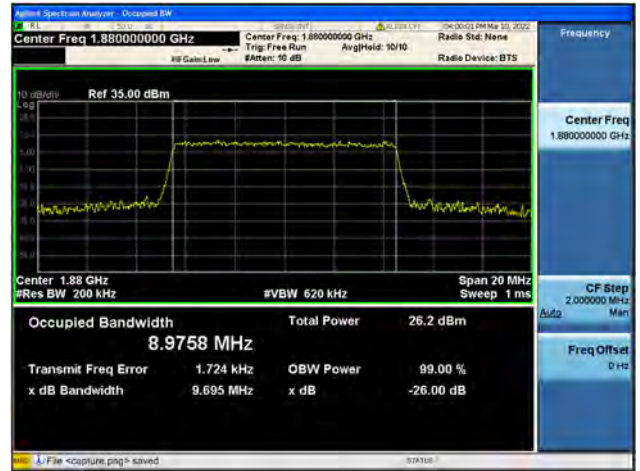




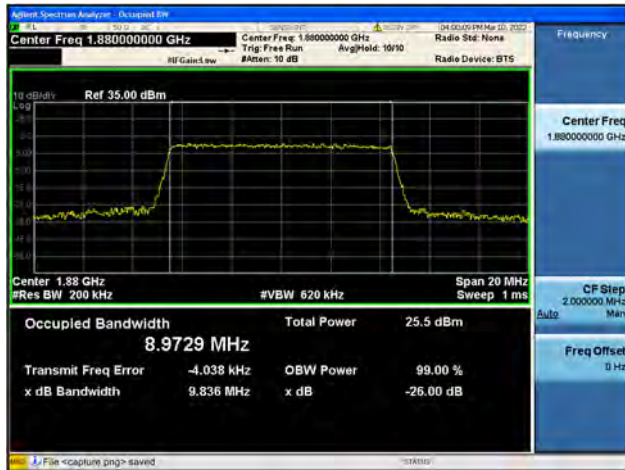
Band2 / 10MHz / Mid CH / QPSK



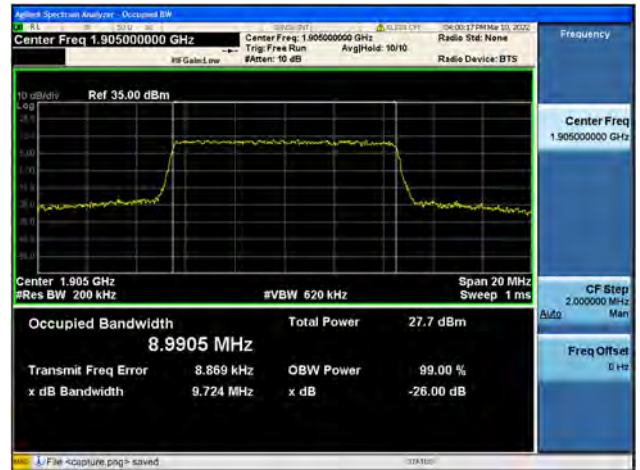
Band2 / 10MHz / Mid CH / 16QAM



Band2 / 10MHz / Mid CH / 64QAM



Band2 / 10MHz / High CH / QPSK



Band2 / 10MHz / High CH / 16QAM

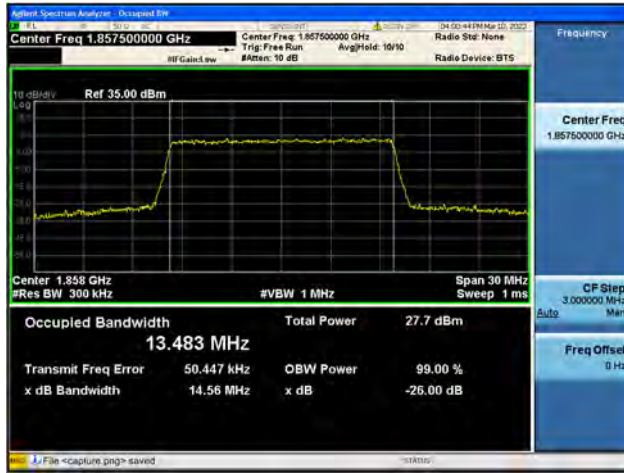


Band2 / 10MHz / High CH / 64QAM

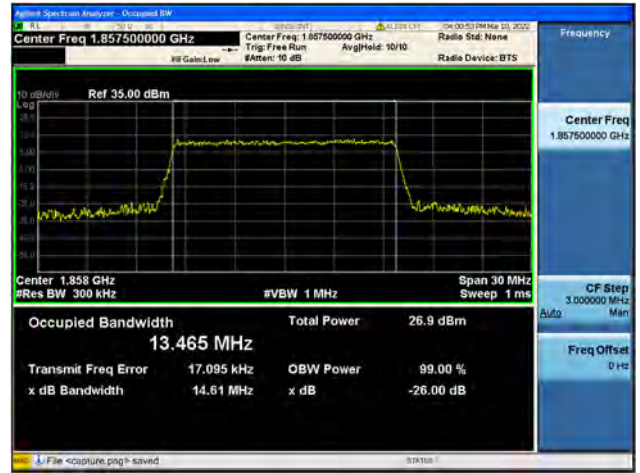




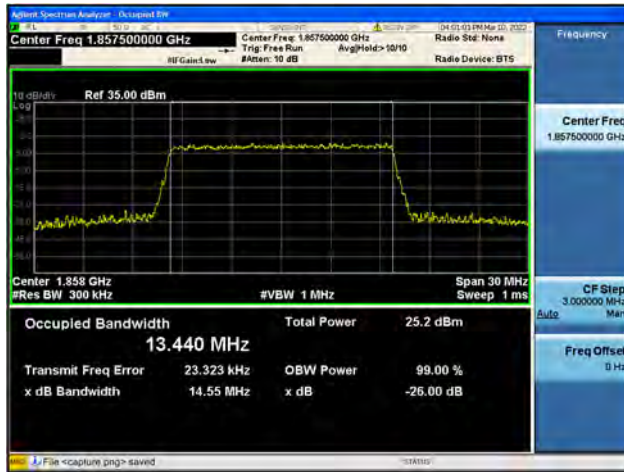
Band2 / 15MHz / Low CH / QPSK



Band2 / 15MHz / Low CH / 16QAM



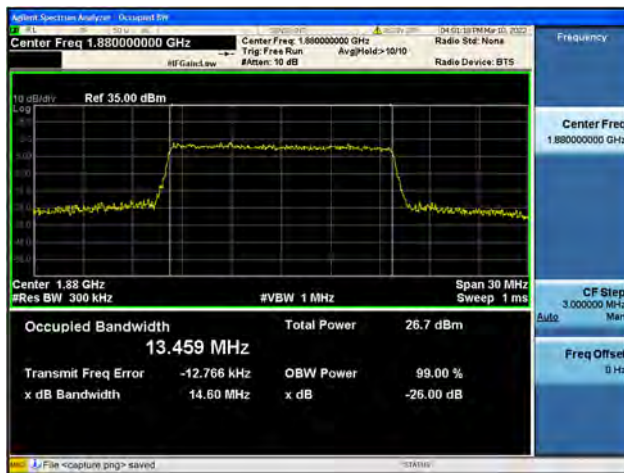
Band2 / 15MHz / Low CH / 64QAM



Band2 / 15MHz / Mid CH / QPSK



Band2 / 15MHz / Mid CH / 16QAM

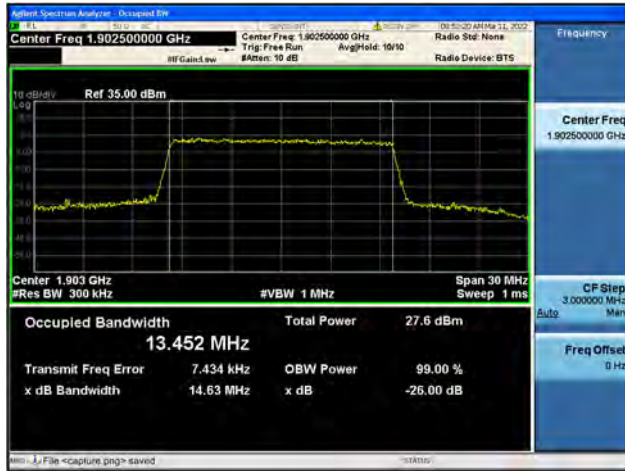


Band2 / 15MHz / Mid CH / 64QAM





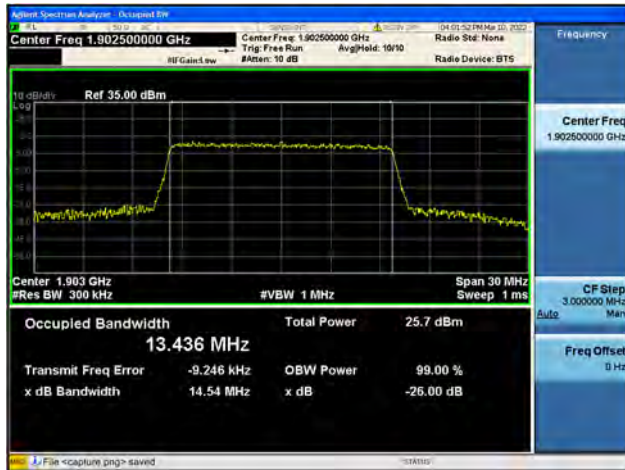
Band2 / 15MHz / High CH / QPSK



Band2 / 15MHz / High CH / 16QAM



Band2 / 15MHz / High CH / 64QAM



Band2 / 20MHz / Low CH / QPSK



Band2 / 20MHz / Low CH / 16QAM



Band2 / 20MHz / Low CH / 64QAM





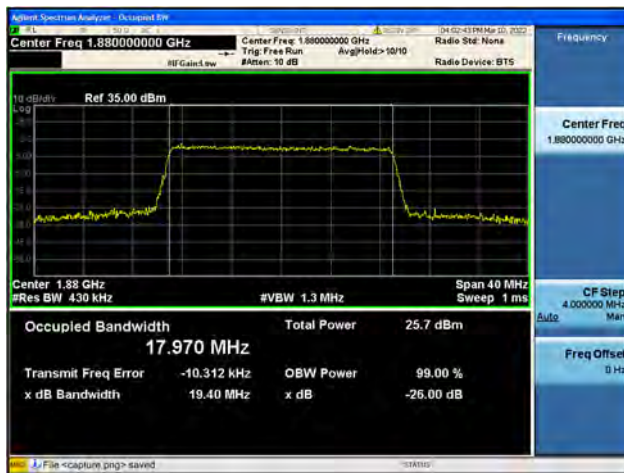
Band2 / 20MHz / Mid CH / QPSK



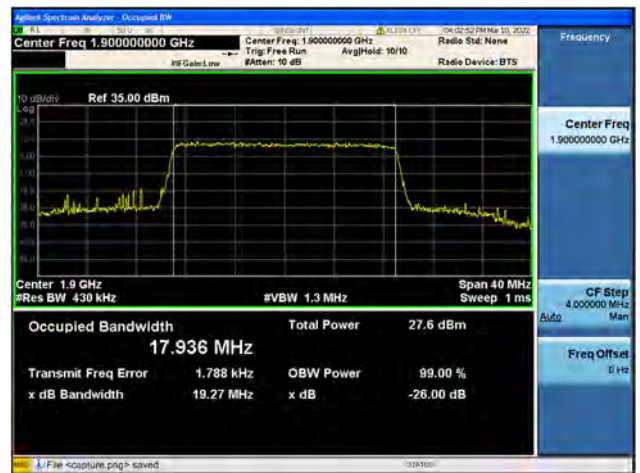
Band2 / 20MHz / Mid CH / 16QAM



Band2 / 20MHz / Mid CH / 64QAM



Band2 / 20MHz / High CH / QPSK

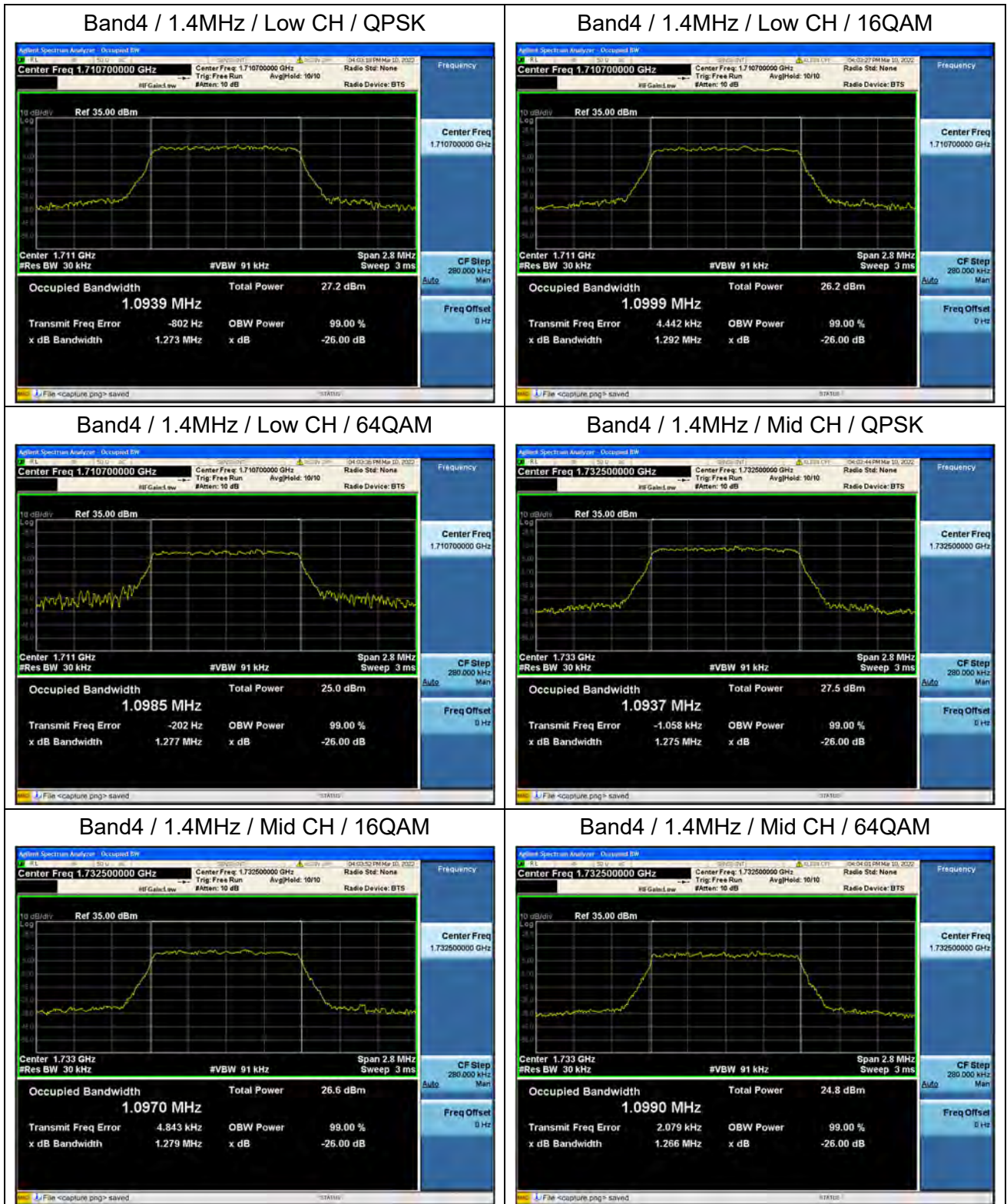


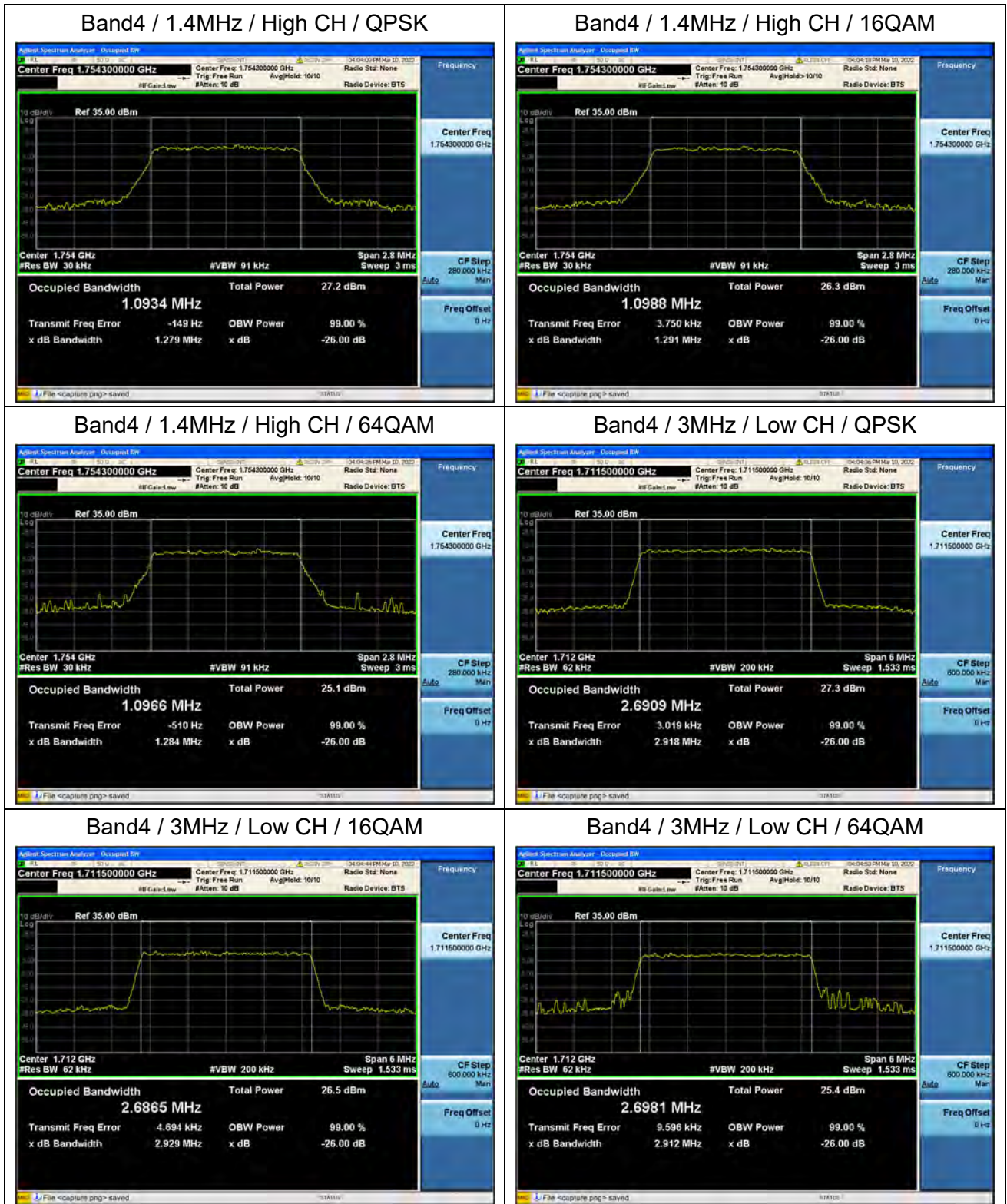
Band2 / 20MHz / High CH / 16QAM

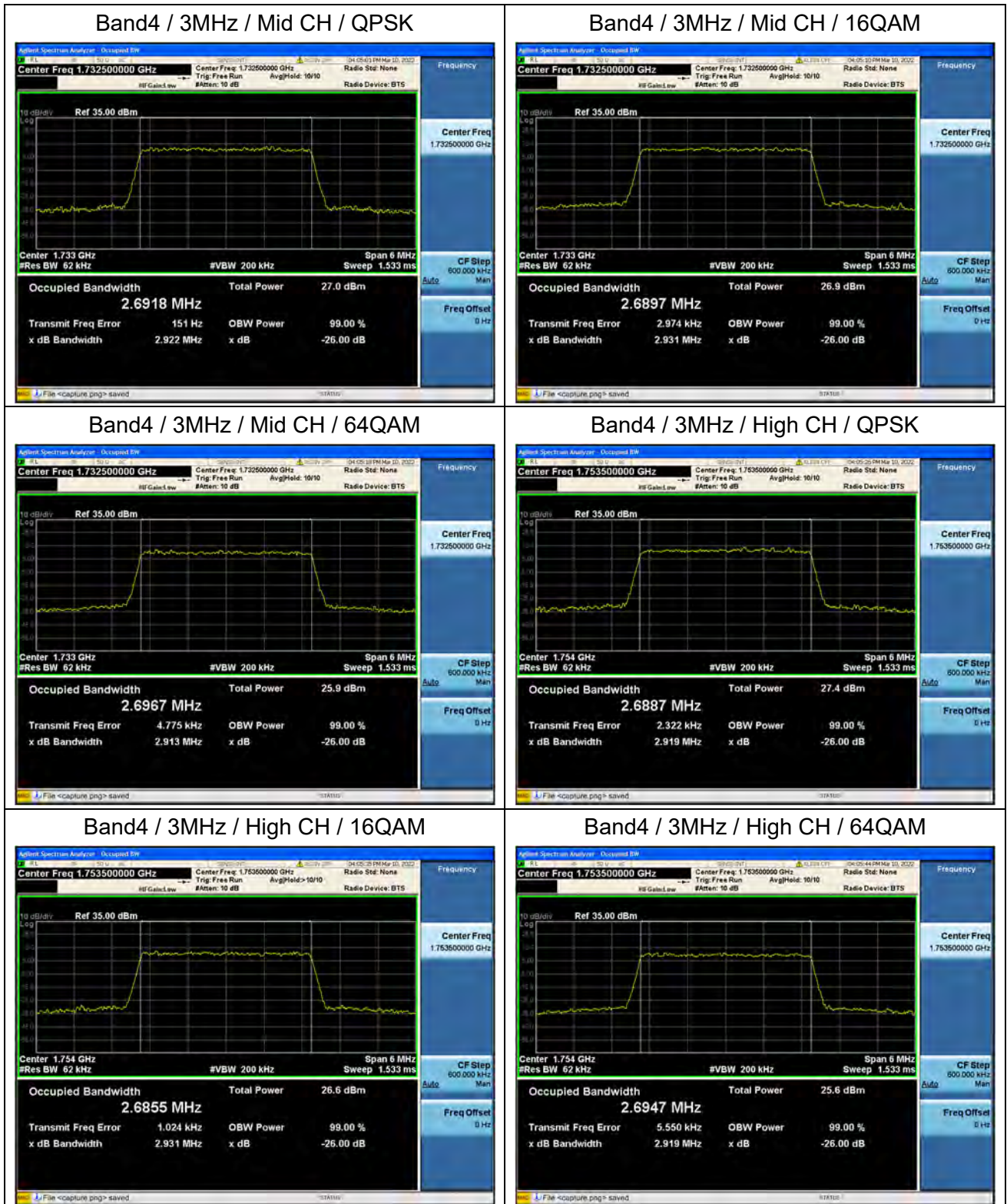


Band2 / 20MHz / High CH / 64QAM





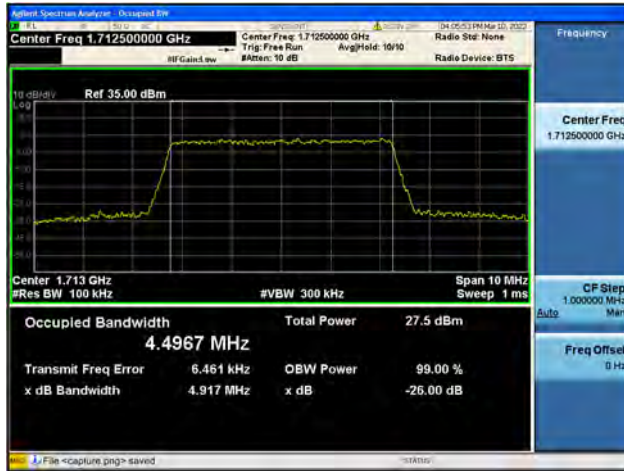








Band4 / 5MHz / Low CH / QPSK



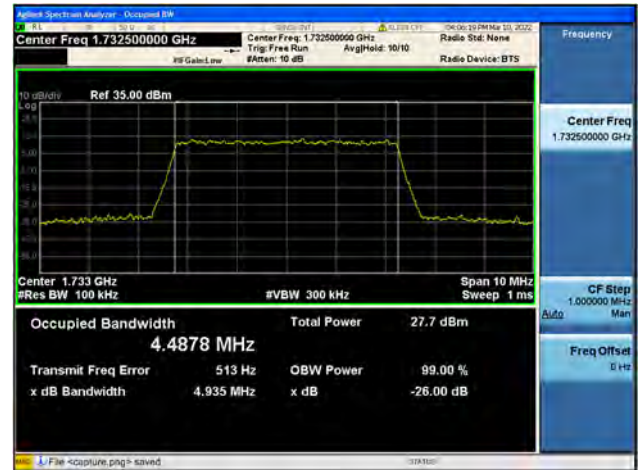
Band4 / 5MHz / Low CH / 16QAM



Band4 / 5MHz / Low CH / 64QAM



Band4 / 5MHz / Mid CH / QPSK



Band4 / 5MHz / Mid CH / 16QAM

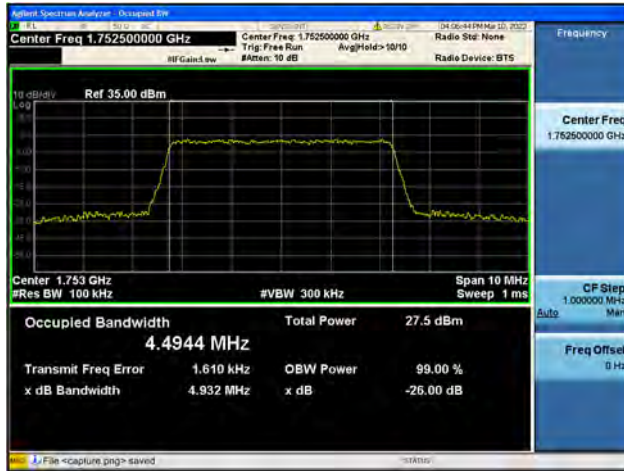


Band4 / 5MHz / Mid CH / 64QAM





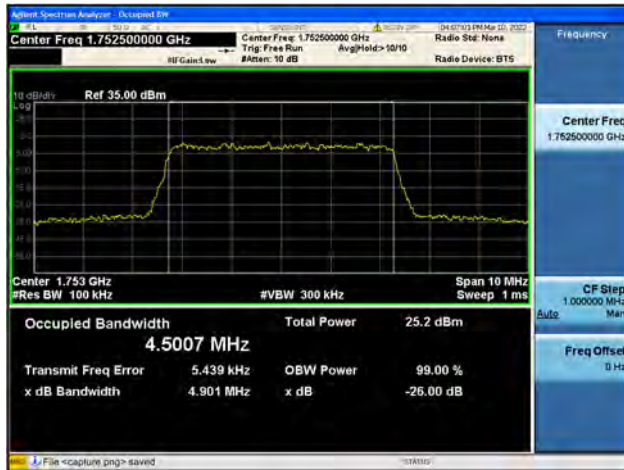
Band4 / 5MHz / High CH / QPSK



Band4 / 5MHz / High CH / 16QAM



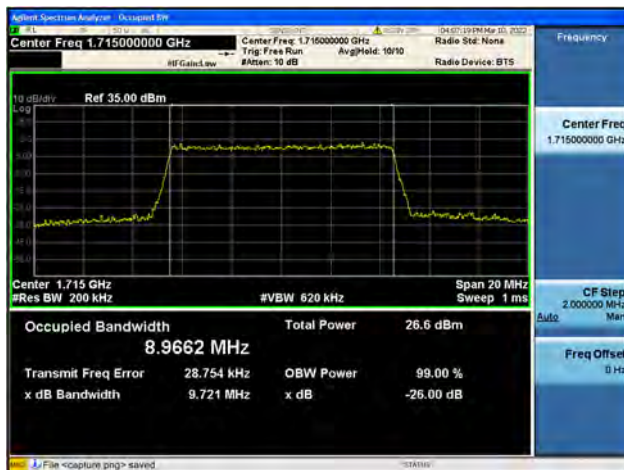
Band4 / 5MHz / High CH / 64QAM



Band4 / 10MHz / Low CH / QPSK



Band4 / 10MHz / Low CH / 16QAM

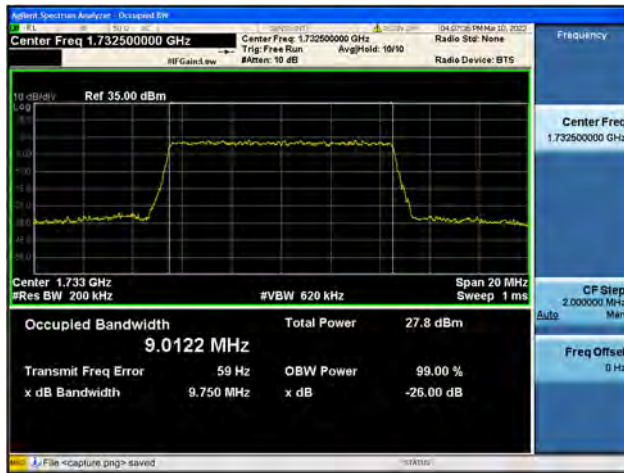


Band4 / 10MHz / Low CH / 64QAM





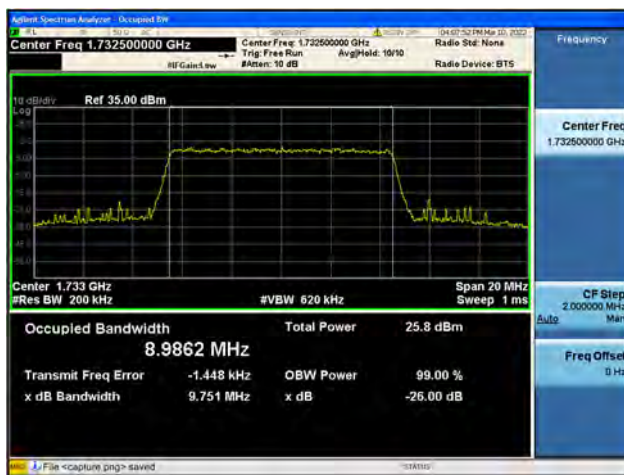
Band4 / 10MHz / Mid CH / QPSK



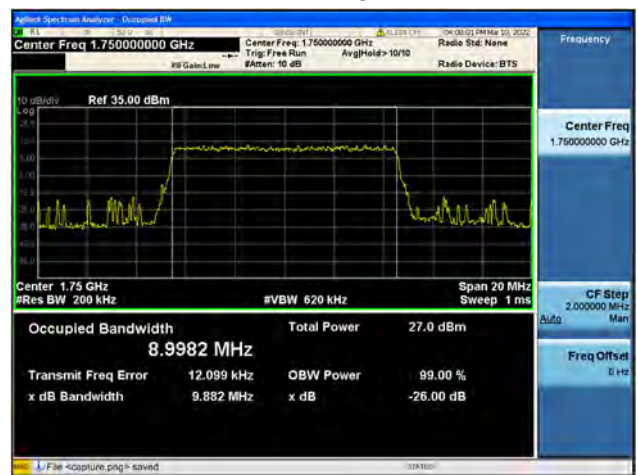
Band4 / 10MHz / Mid CH / 16QAM



Band4 / 10MHz / Mid CH / 64QAM



Band4 / 10MHz / High CH / QPSK



Band4 / 10MHz / High CH / 16QAM

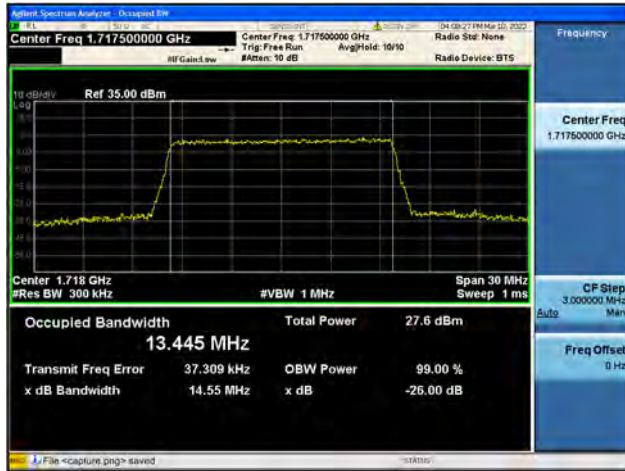


Band4 / 10MHz / High CH / 64QAM





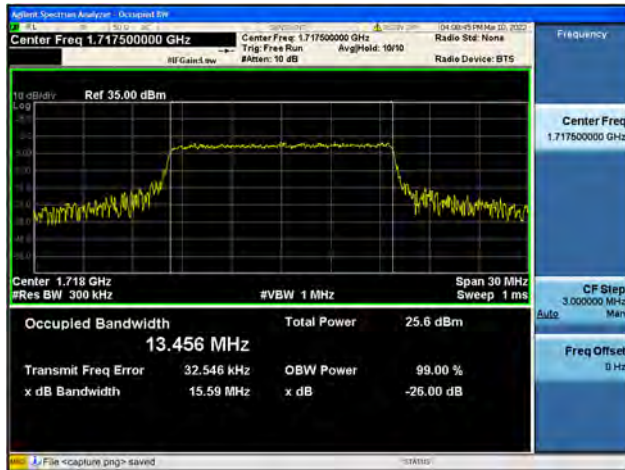
Band4 / 15MHz / Low CH / QPSK



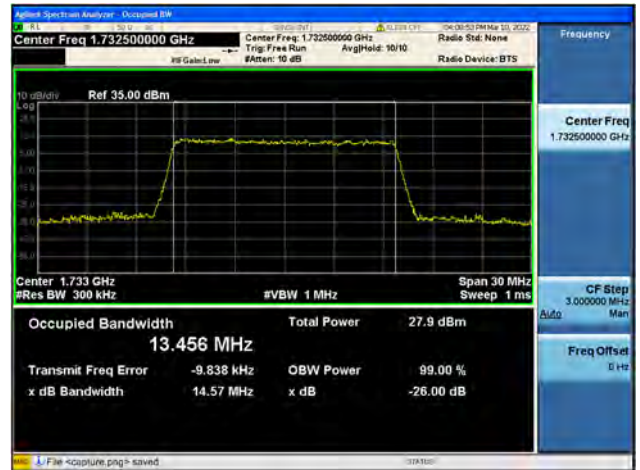
Band4 / 15MHz / Low CH / 16QAM



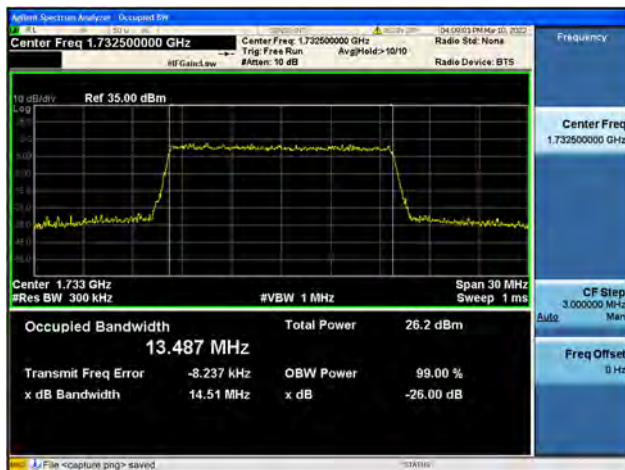
Band4 / 15MHz / Low CH / 64QAM



Band4 / 15MHz / Mid CH / QPSK



Band4 / 15MHz / Mid CH / 16QAM

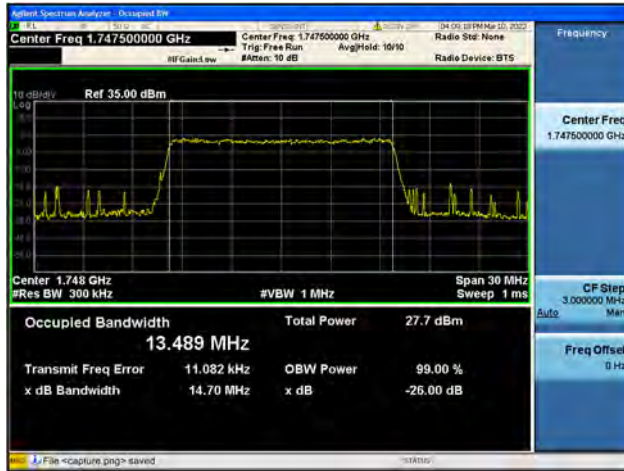


Band4 / 15MHz / Mid CH / 64QAM

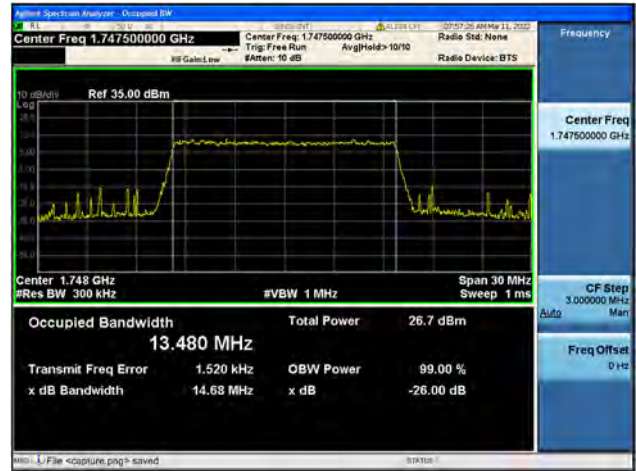




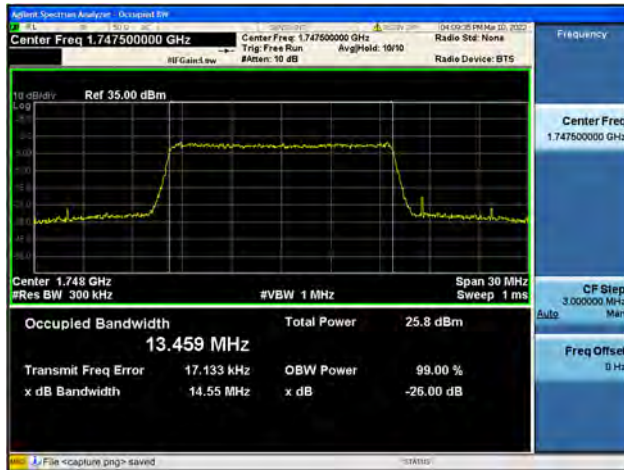
Band4 / 15MHz / High CH / QPSK



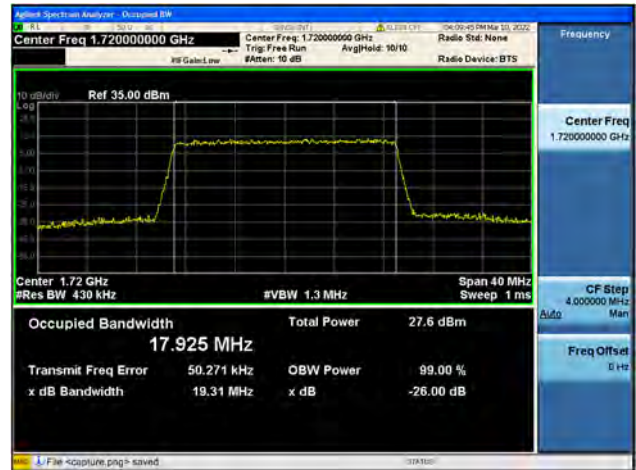
Band4 / 15MHz / High CH / 16QAM



Band4 / 15MHz / High CH / 64QAM



Band4 / 20MHz / Low CH / QPSK



Band4 / 20MHz / Low CH / 16QAM

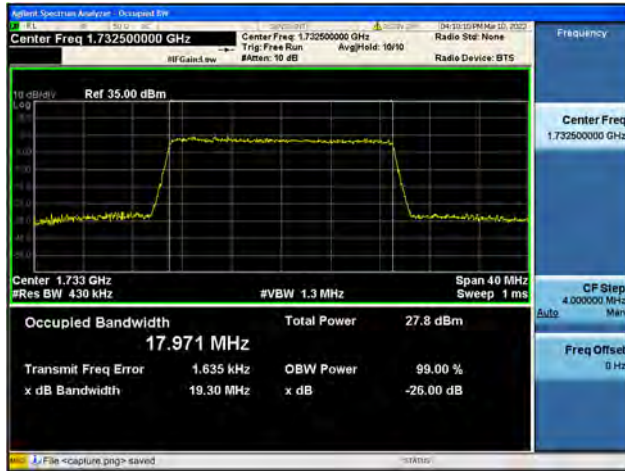


Band4 / 20MHz / Low CH / 64QAM

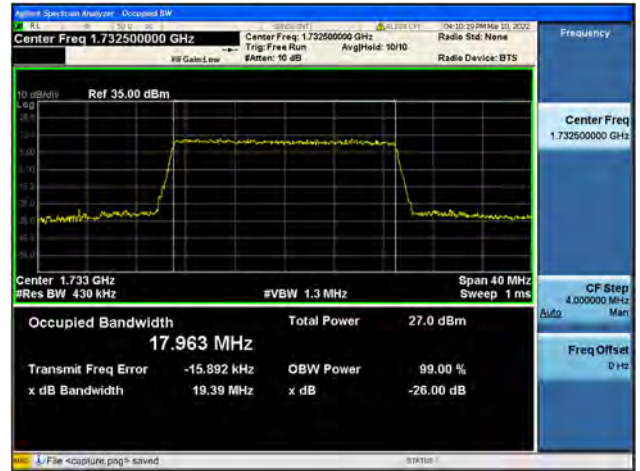




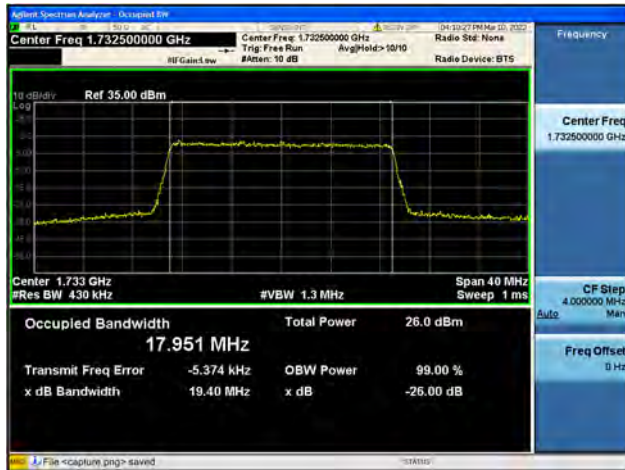
Band4 / 20MHz / Mid CH / QPSK



Band4 / 20MHz / Mid CH / 16QAM



Band4 / 20MHz / Mid CH / 64QAM



Band4 / 20MHz / High CH / QPSK



Band4 / 20MHz / High CH / 16QAM

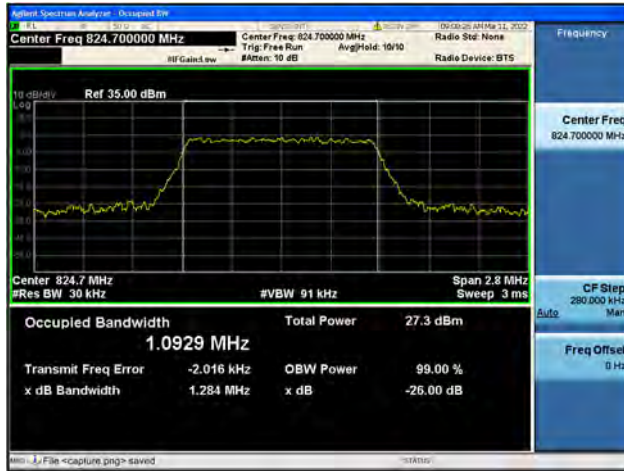


Band4 / 20MHz / High CH / 64QAM





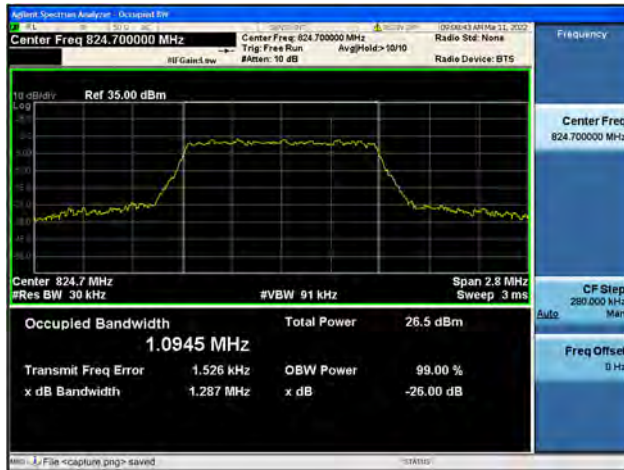
Band5 / 1.4MHz / Low CH / QPSK



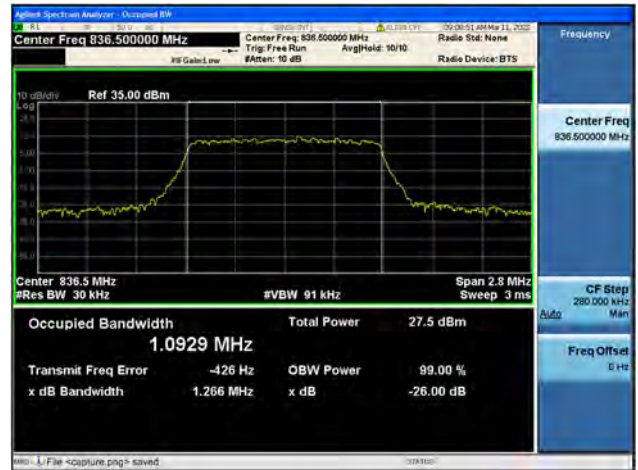
Band5 / 1.4MHz / Low CH / 16QAM



Band5 / 1.4MHz / Low CH / 64QAM



Band5 / 1.4MHz / Mid CH / QPSK



Band5 / 1.4MHz / Mid CH / 16QAM



Band5 / 1.4MHz / Mid CH / 64QAM

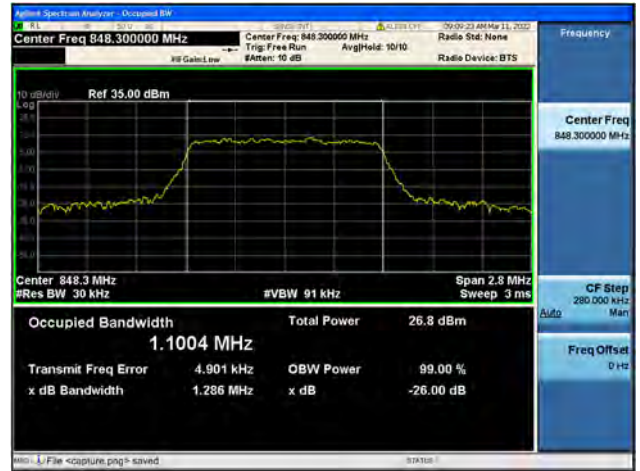




Band5 / 1.4MHz / High CH / QPSK



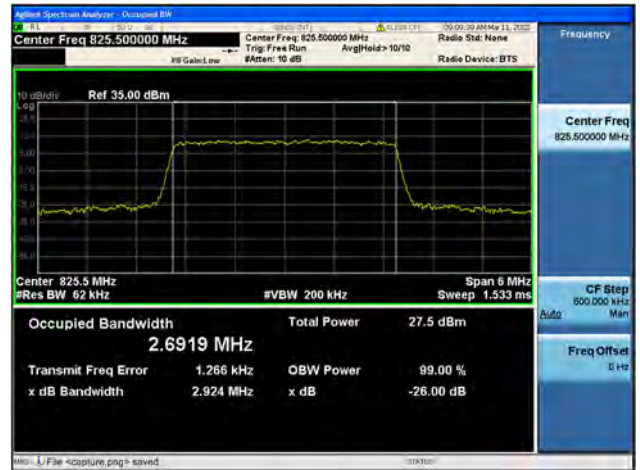
Band5 / 1.4MHz / High CH / 16QAM



Band5 / 1.4MHz / High CH / 64QAM



Band5 / 3MHz / Low CH / QPSK



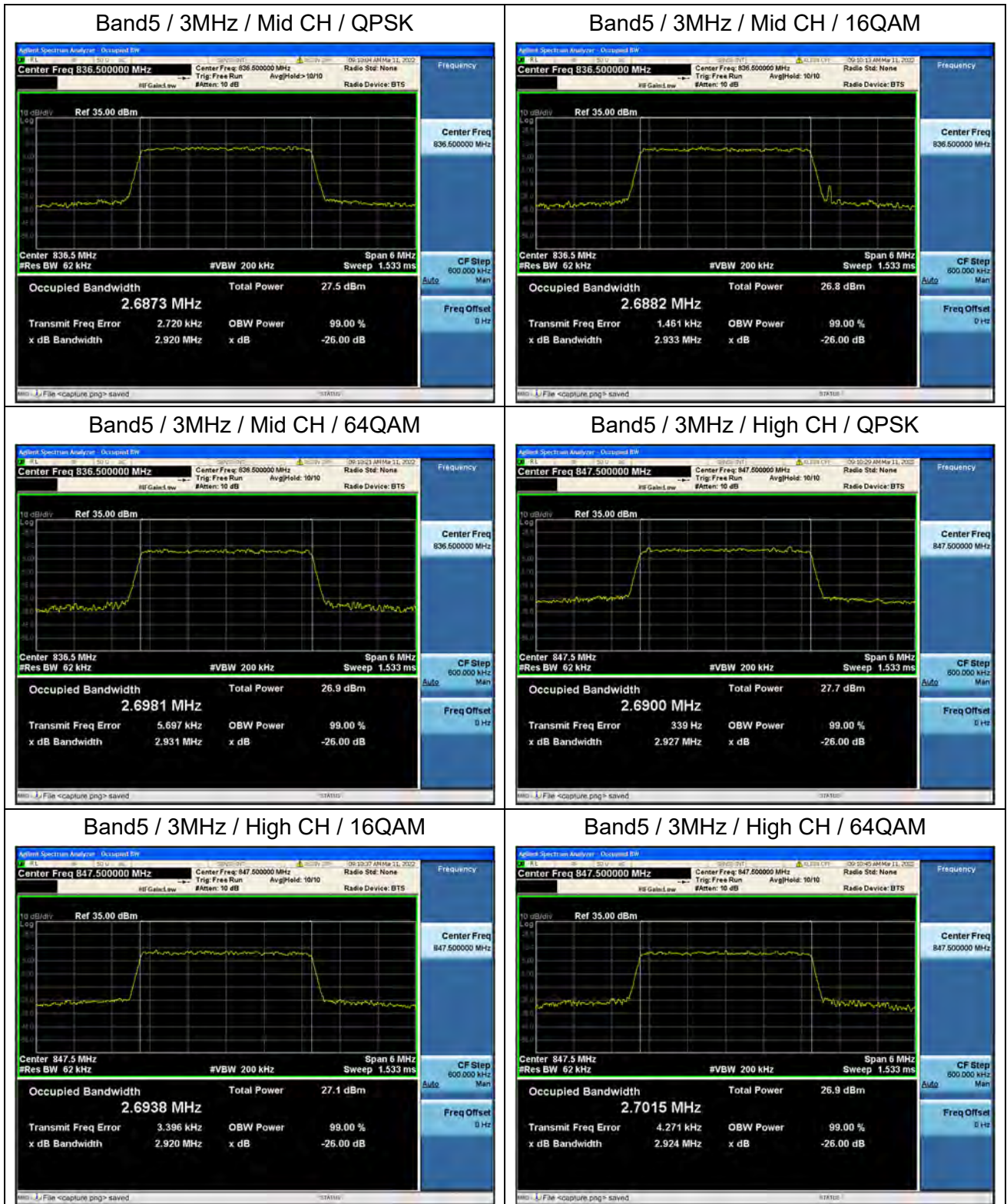
Band5 / 3MHz / Low CH / 16QAM



Band5 / 3MHz / Low CH / 64QAM









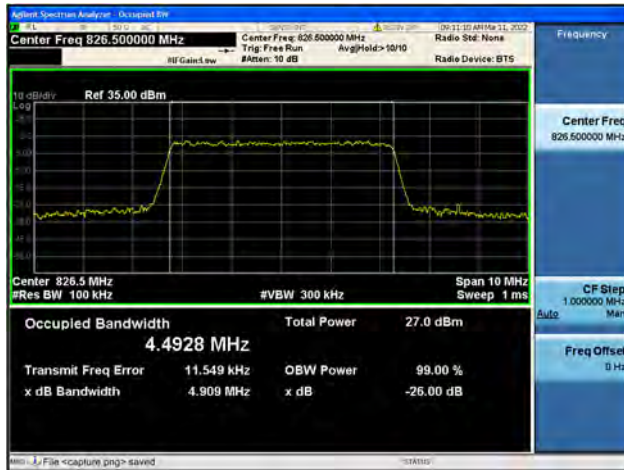
Band5 / 5MHz / Low CH / QPSK



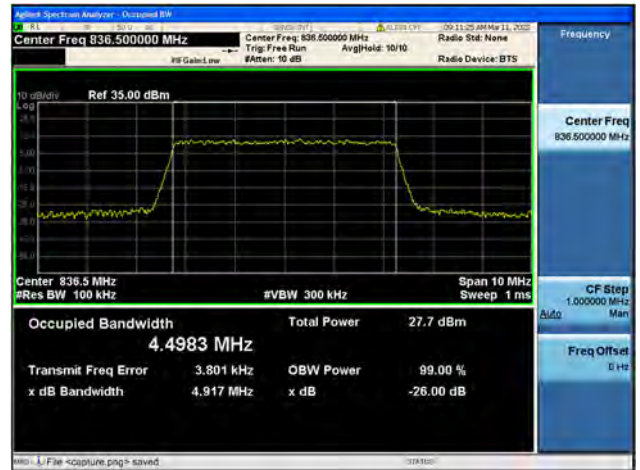
Band5 / 5MHz / Low CH / 16QAM



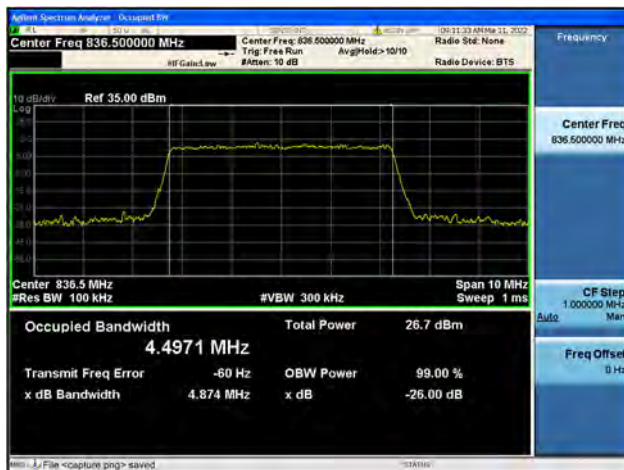
Band5 / 5MHz / Low CH / 64QAM



Band5 / 5MHz / Mid CH / QPSK



Band5 / 5MHz / Mid CH / 16QAM

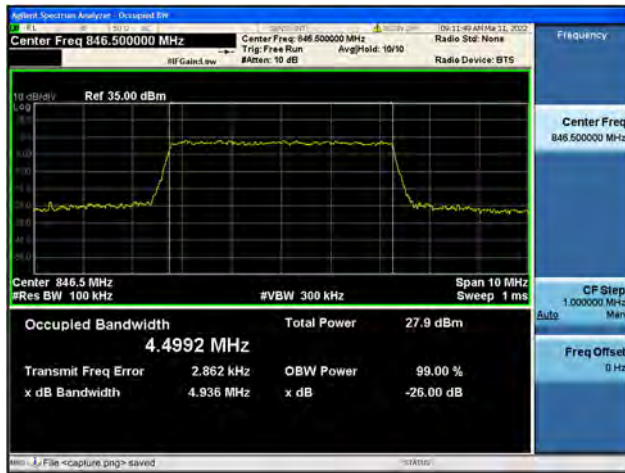


Band5 / 5MHz / Mid CH / 64QAM





Band5 / 5MHz / High CH / QPSK



Band5 / 5MHz / High CH / 16QAM



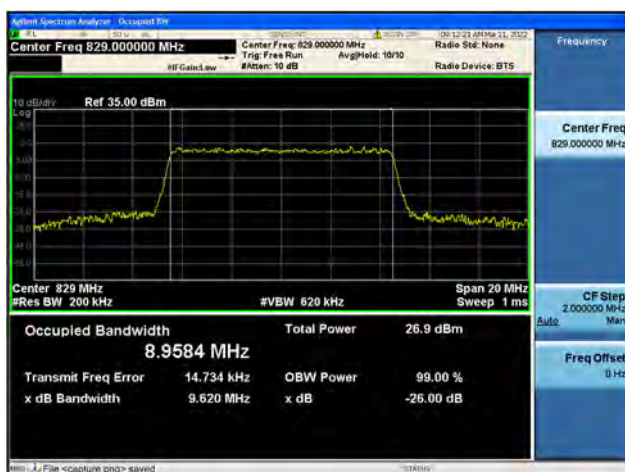
Band5 / 5MHz / High CH / 64QAM



Band5 / 10MHz / Low CH / QPSK



Band5 / 10MHz / Low CH / 16QAM

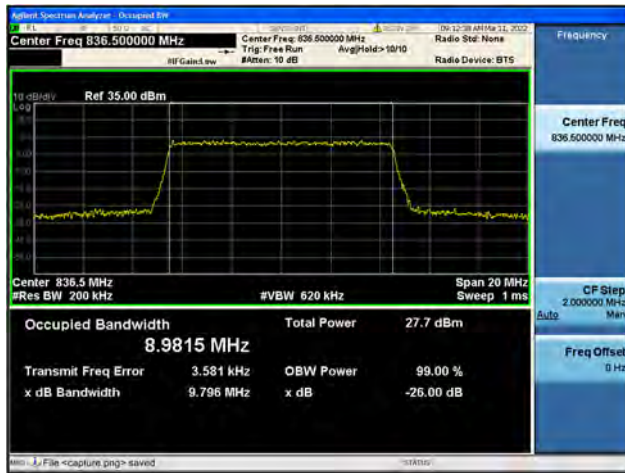


Band5 / 10MHz / Low CH / 64QAM

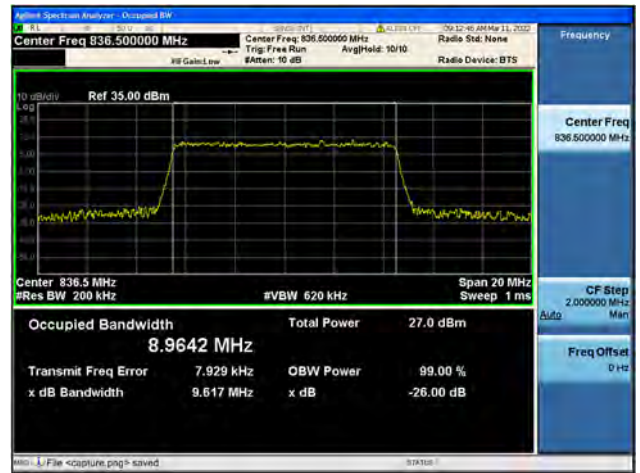




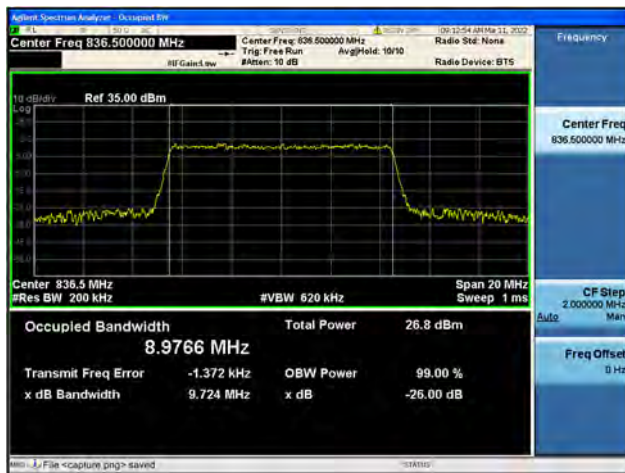
Band5 / 10MHz / Mid CH / QPSK



Band5 / 10MHz / Mid CH / 16QAM



Band5 / 10MHz / Mid CH / 64QAM



Band5 / 10MHz / High CH / QPSK



Band5 / 10MHz / High CH / 16QAM



Band5 / 10MHz / High CH / 64QAM





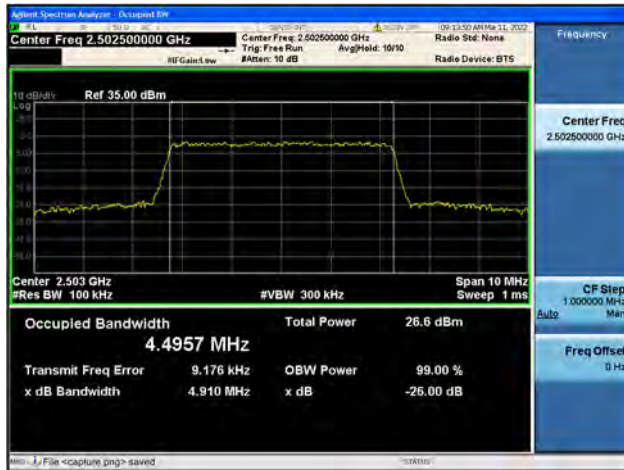
Band7 / 5MHz / Low CH / QPSK



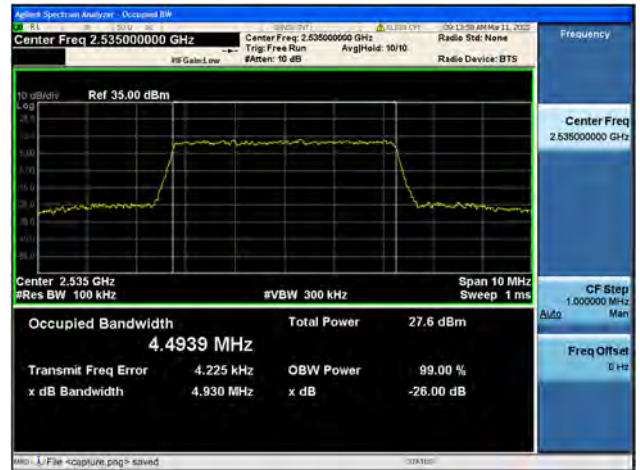
Band7 / 5MHz / Low CH / 16QAM



Band7 / 5MHz / Low CH / 64QAM



Band7 / 5MHz / Mid CH / QPSK



Band7 / 5MHz / Mid CH / 16QAM

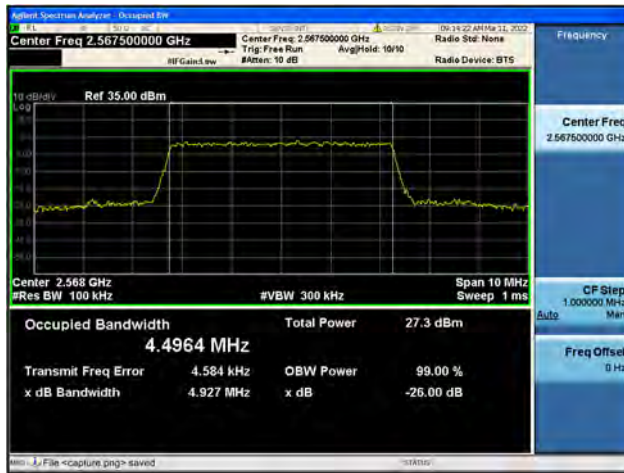


Band7 / 5MHz / Mid CH / 64QAM





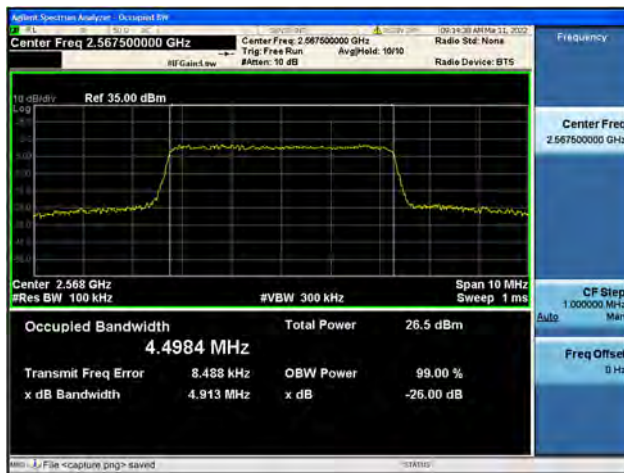
Band7 / 5MHz / High CH / QPSK



Band7 / 5MHz / High CH / 16QAM



Band7 / 5MHz / High CH / 64QAM



Band7 / 10MHz / Low CH / QPSK



Band7 / 10MHz / Low CH / 16QAM

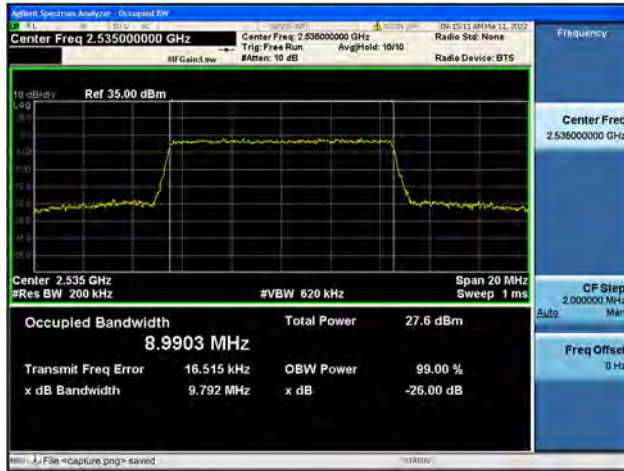


Band7 / 10MHz / Low CH / 64QAM

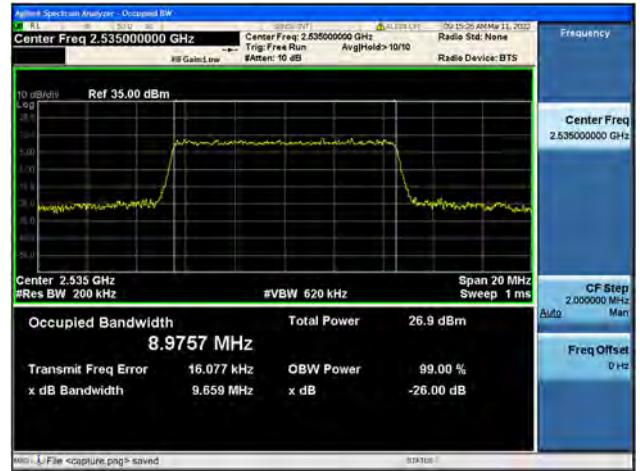




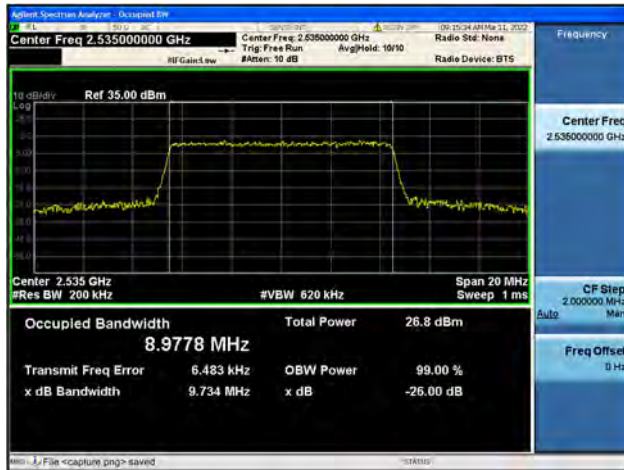
Band7 / 10MHz / Mid CH / QPSK



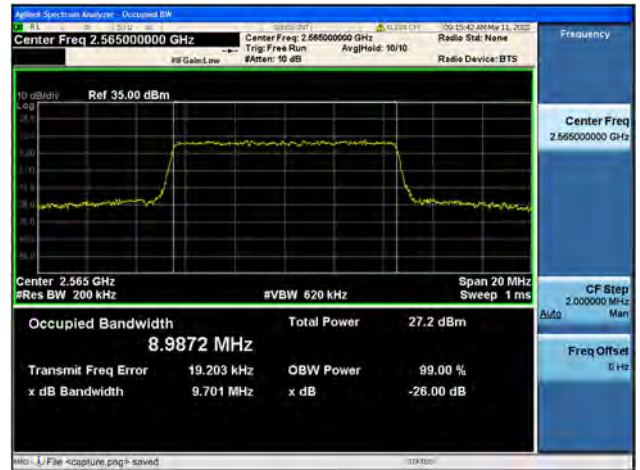
Band7 / 10MHz / Mid CH / 16QAM



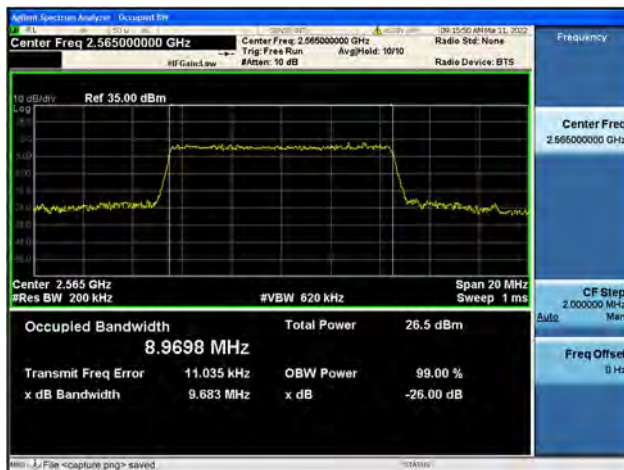
Band7 / 10MHz / Mid CH / 64QAM



Band7 / 10MHz / High CH / QPSK



Band7 / 10MHz / High CH / 16QAM

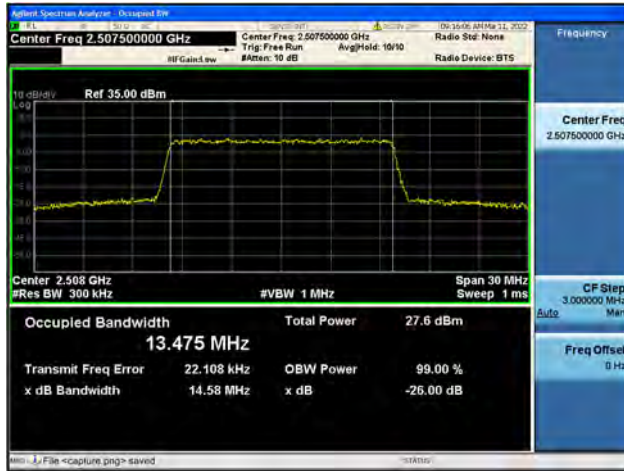


Band7 / 10MHz / High CH / 64QAM





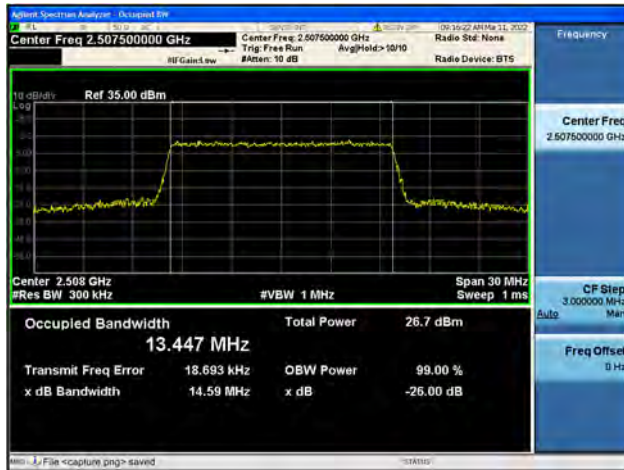
Band7 / 15MHz / Low CH / QPSK



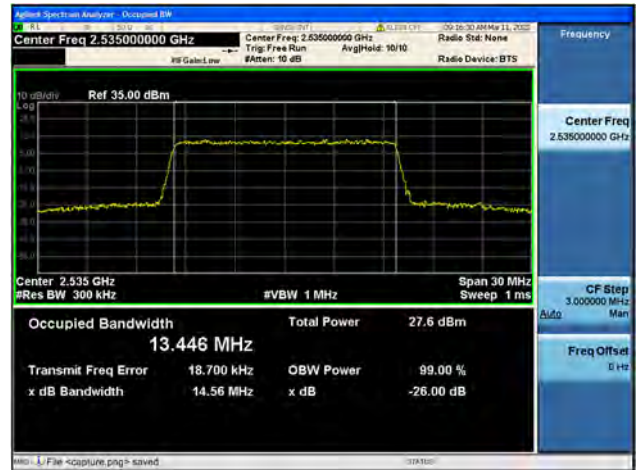
Band7 / 15MHz / Low CH / 16QAM



Band7 / 15MHz / Low CH / 64QAM



Band7 / 15MHz / Mid CH / QPSK



Band7 / 15MHz / Mid CH / 16QAM



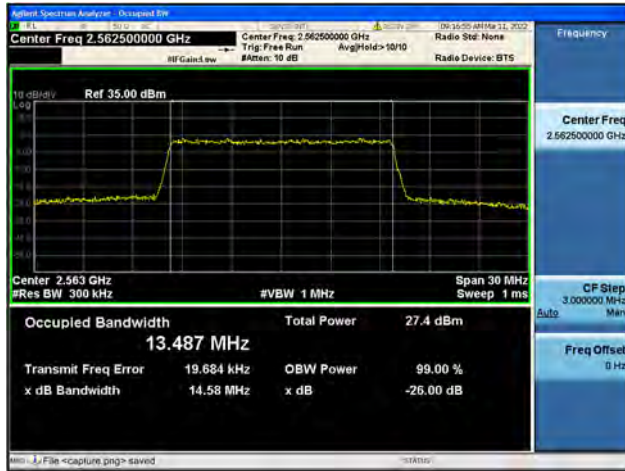
Band7 / 15MHz / Mid CH / 64QAM







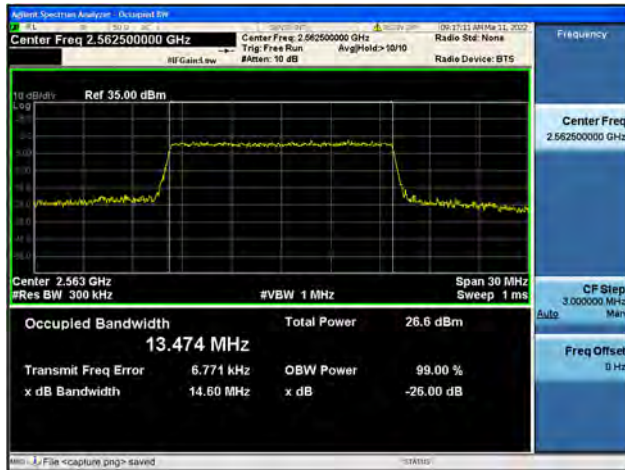
Band7 / 15MHz / High CH / QPSK



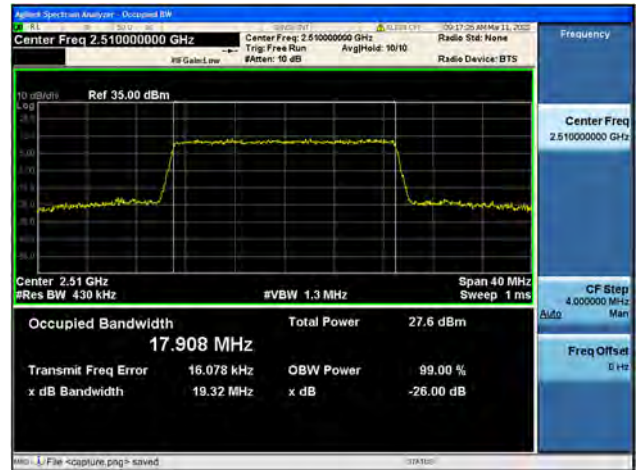
Band7 / 15MHz / High CH / 16QAM



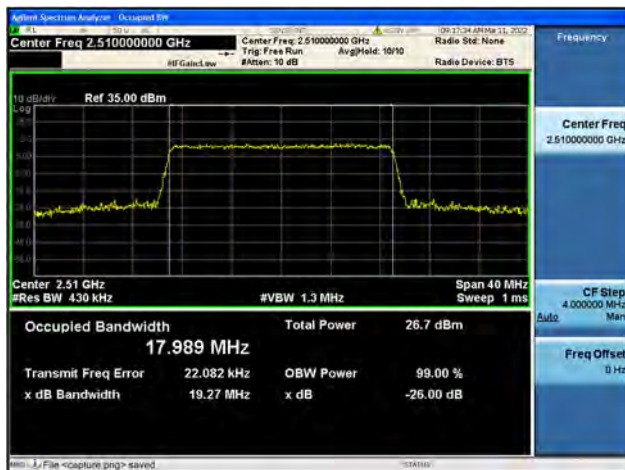
Band7 / 15MHz / High CH / 64QAM



Band7 / 20MHz / Low CH / QPSK



Band7 / 20MHz / Low CH / 16QAM

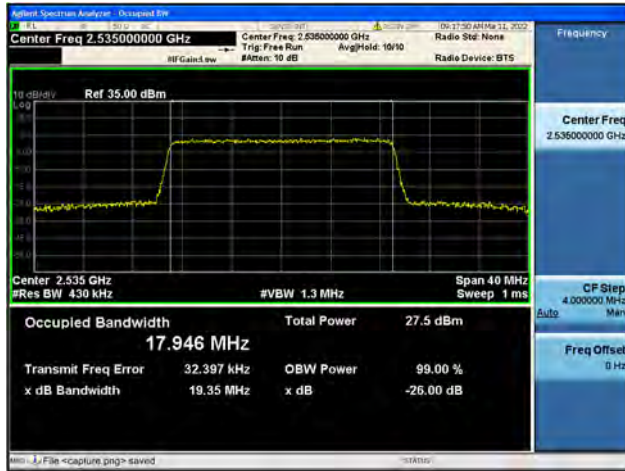


Band7 / 20MHz / Low CH / 64QAM





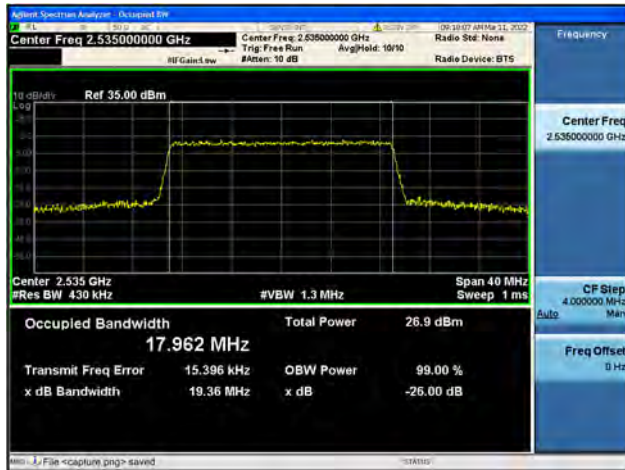
Band7 / 20MHz / Mid CH / QPSK



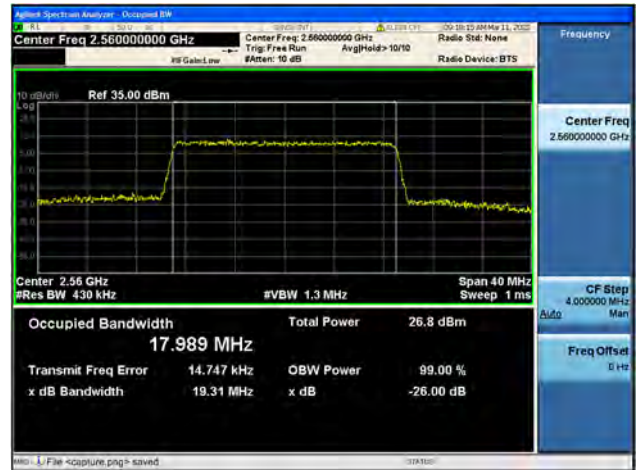
Band7 / 20MHz / Mid CH / 16QAM



Band7 / 20MHz / Mid CH / 64QAM



Band7 / 20MHz / High CH / QPSK



Band7 / 20MHz / High CH / 16QAM



Band7 / 20MHz / High CH / 64QAM

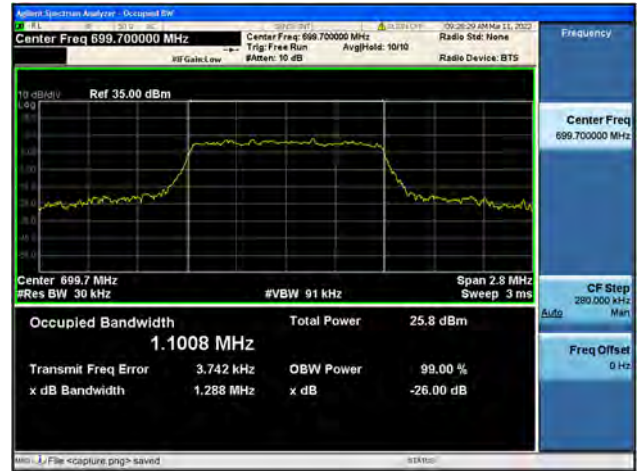




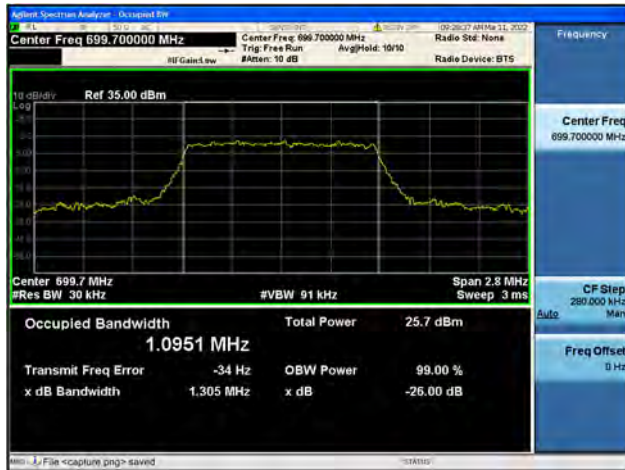
Band12 / 1.4MHz / Low CH / QPSK



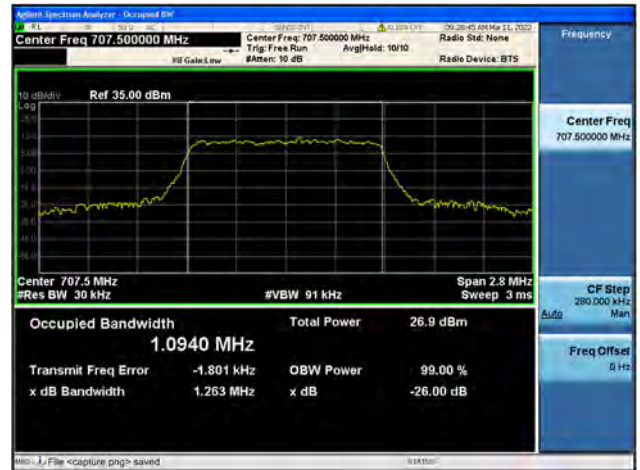
Band12 / 1.4MHz / Low CH / 16QAM



Band12 / 1.4MHz / Low CH / 64QAM



Band12 / 1.4MHz / Mid CH / QPSK

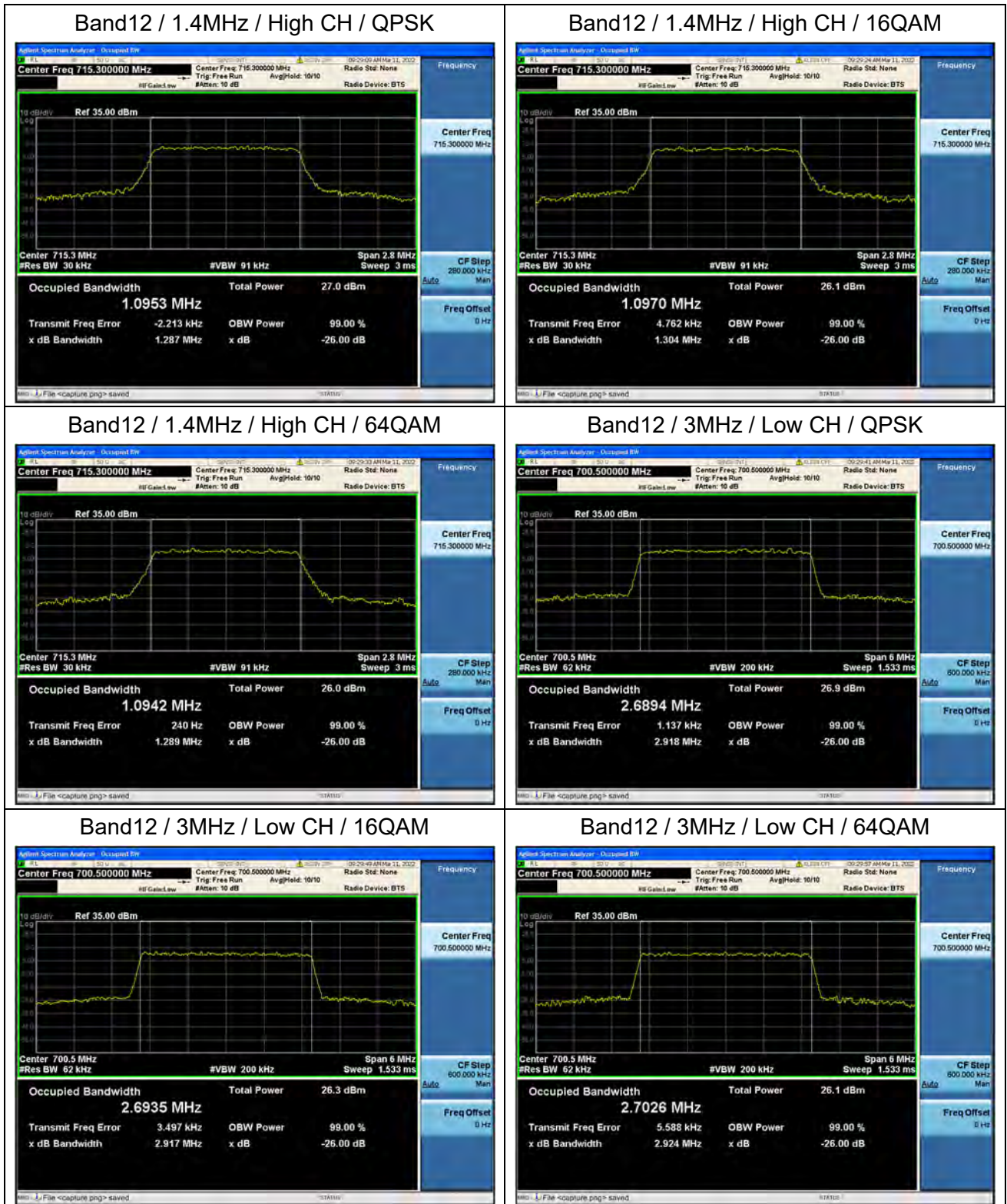


Band12 / 1.4MHz / Mid CH / 16QAM



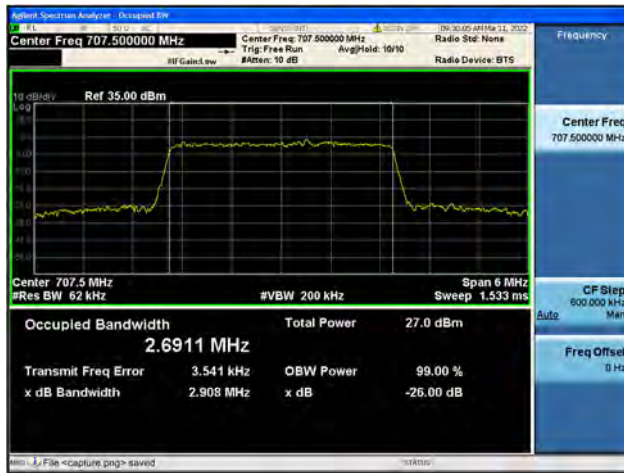
Band12 / 1.4MHz / Mid CH / 64QAM



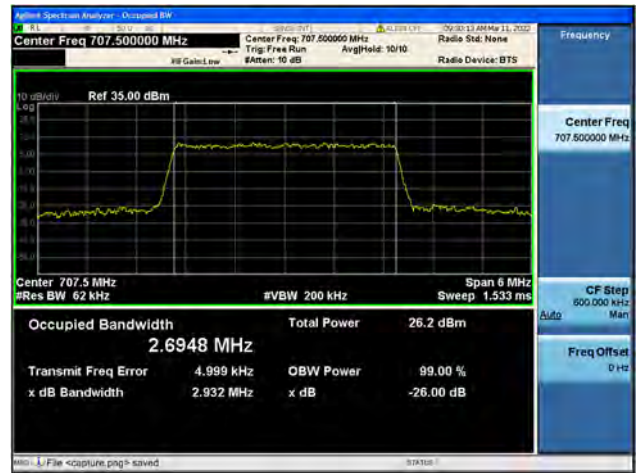




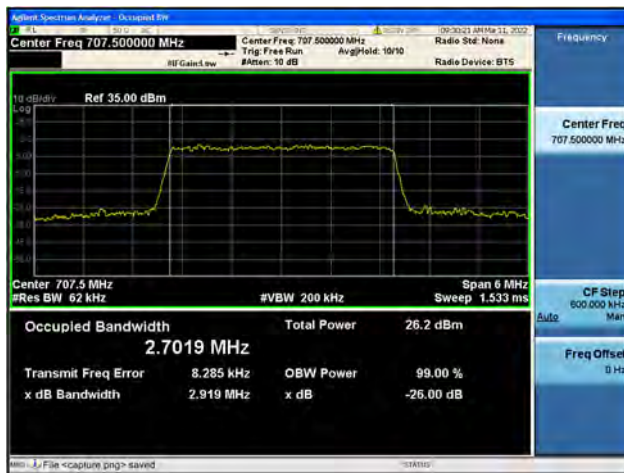
Band12 / 3MHz / Mid CH / QPSK



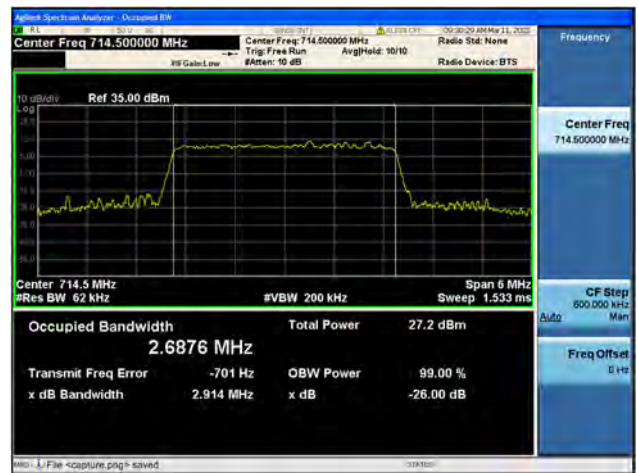
Band12 / 3MHz / Mid CH / 16QAM



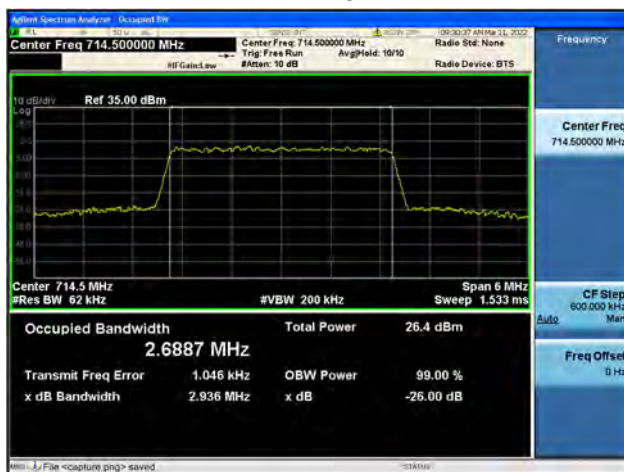
Band12 / 3MHz / Mid CH / 64QAM



Band12 / 3MHz / High CH / QPSK



Band12 / 3MHz / High CH / 16QAM

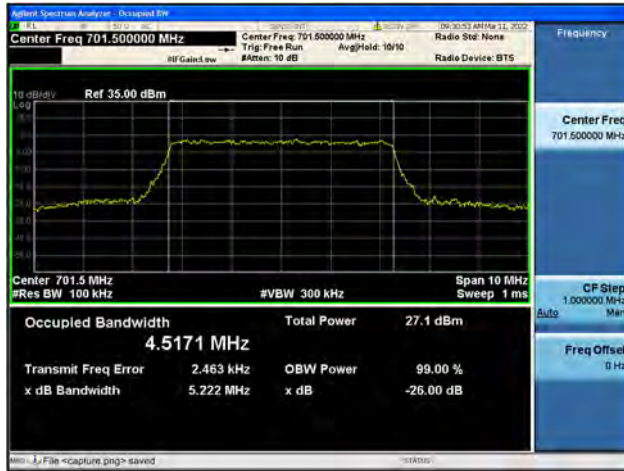


Band12 / 3MHz / High CH / 64QAM

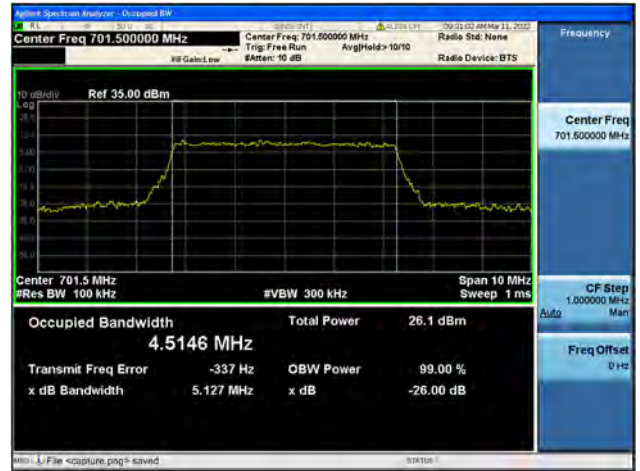




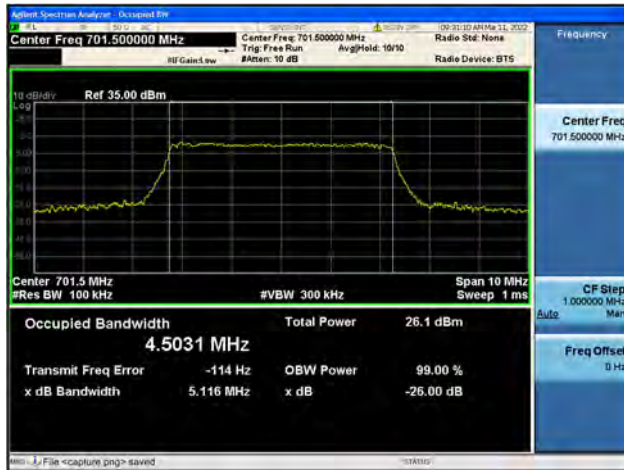
Band12 / 5MHz / Low CH / QPSK



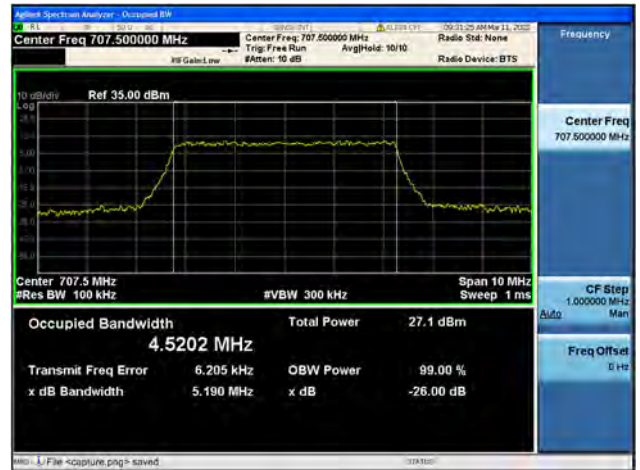
Band12 / 5MHz / Low CH / 16QAM



Band12 / 5MHz / Low CH / 64QAM



Band12 / 5MHz / Mid CH / QPSK



Band12 / 5MHz / Mid CH / 16QAM



Band12 / 5MHz / Mid CH / 64QAM





Band12 / 5MHz / High CH / QPSK



Band12 / 5MHz / High CH / 16QAM



Band12 / 5MHz / High CH / 64QAM



Band12 / 10MHz / Low CH / QPSK



Band12 / 10MHz / Low CH / 16QAM



Band12 / 10MHz / Low CH / 64QAM

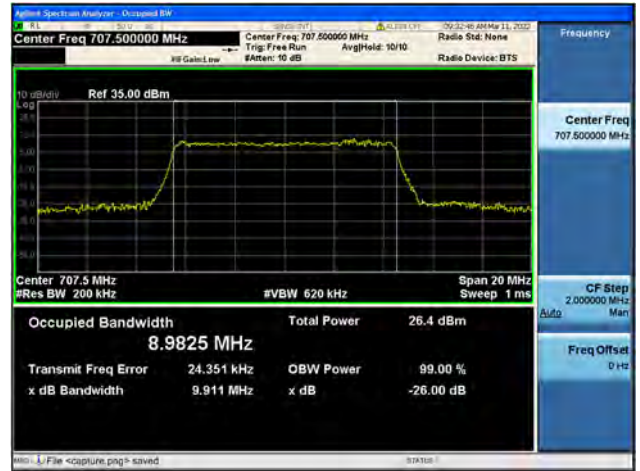




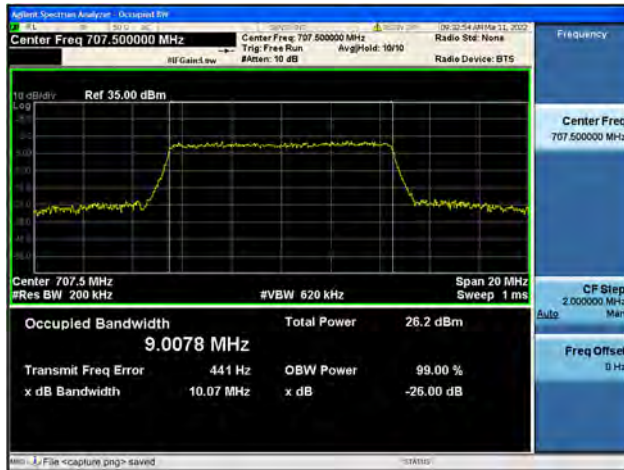
Band12 / 10MHz / Mid CH / QPSK



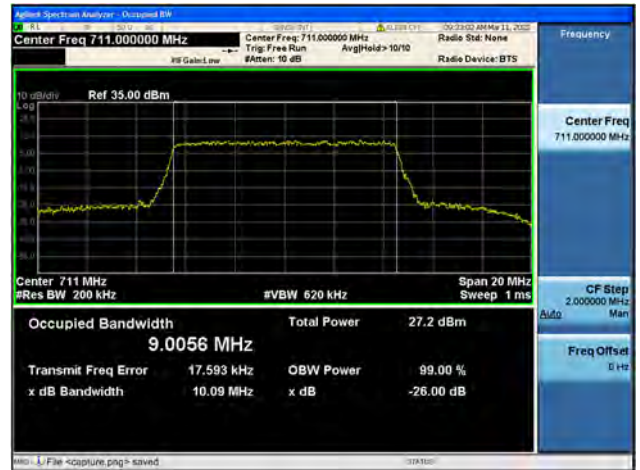
Band12 / 10MHz / Mid CH / 16QAM



Band12 / 10MHz / Mid CH / 64QAM



Band12 / 10MHz / High CH / QPSK



Band12 / 10MHz / High CH / 16QAM



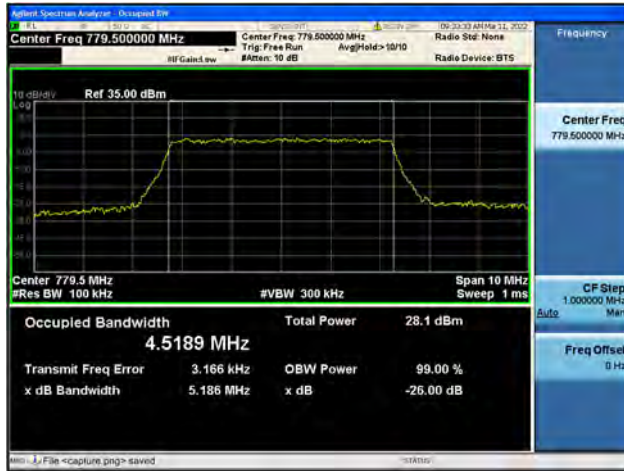
Band12 / 10MHz / High CH / 64QAM



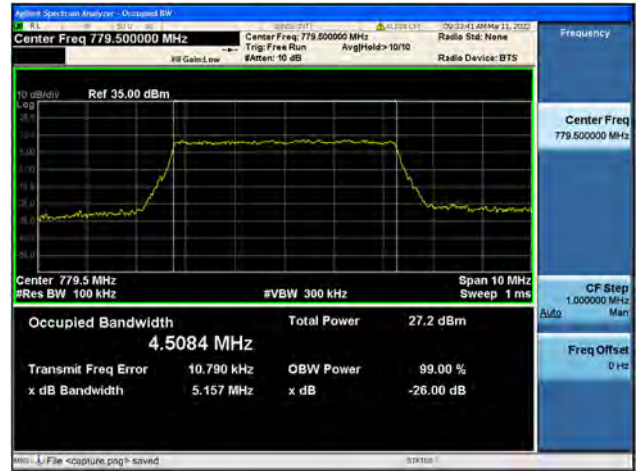




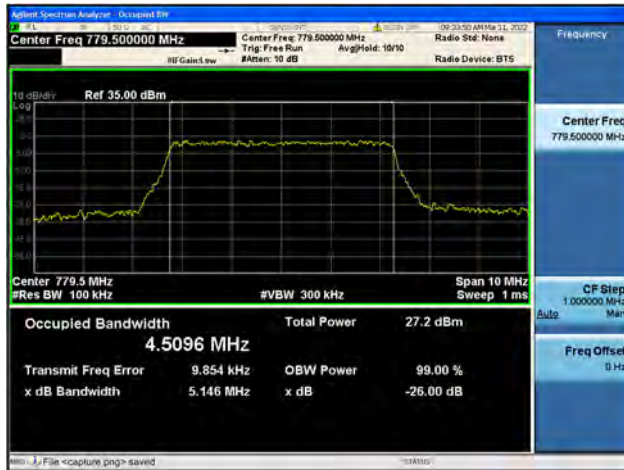
Band13 / 5MHz / Low CH / QPSK



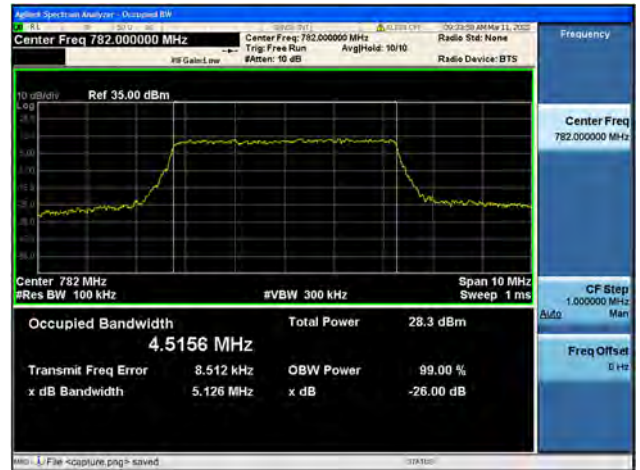
Band13 / 5MHz / Low CH / 16QAM



Band13 / 5MHz / Low CH / 64QAM



Band13 / 5MHz / Mid CH / QPSK



Band13 / 5MHz / Mid CH / 16QAM



Band13 / 5MHz / Mid CH / 64QAM

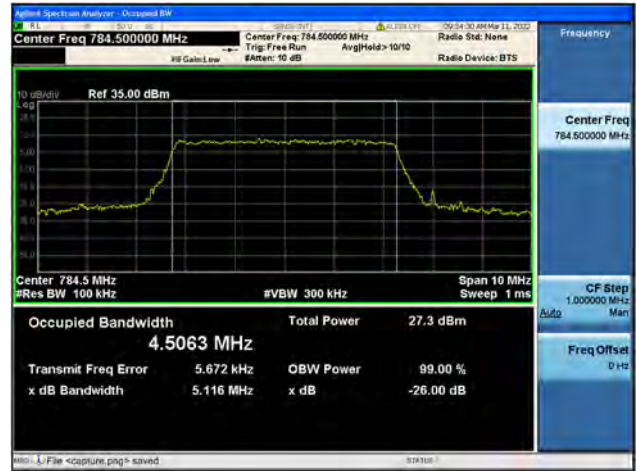




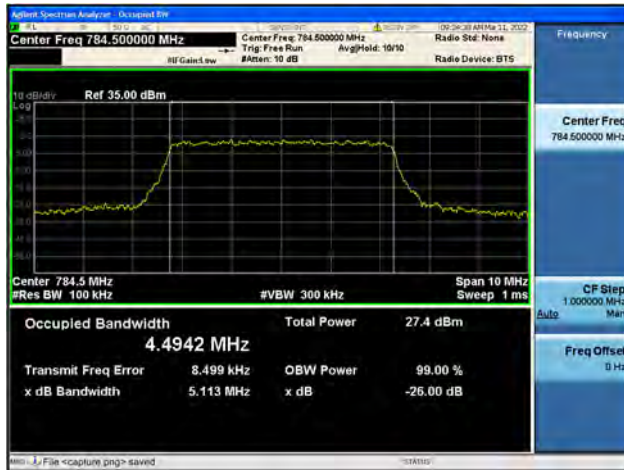
Band13 / 5MHz / High CH / QPSK



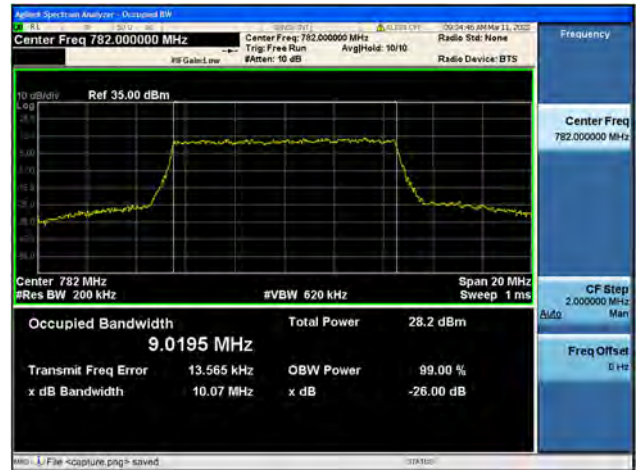
Band13 / 5MHz / High CH / 16QAM



Band13 / 5MHz / High CH / 64QAM



Band13 / 10MHz / Low CH / QPSK



Band13 / 10MHz / Low CH / 16QAM



Band13 / 10MHz / Low CH / 64QAM





Band13 / 10MHz / Mid CH / QPSK



Band13 / 10MHz / Mid CH / 16QAM



Band13 / 10MHz / Mid CH / 64QAM



Band13 / 10MHz / High CH / QPSK



Band13 / 10MHz / High CH / 16QAM



Band13 / 10MHz / High CH / 64QAM

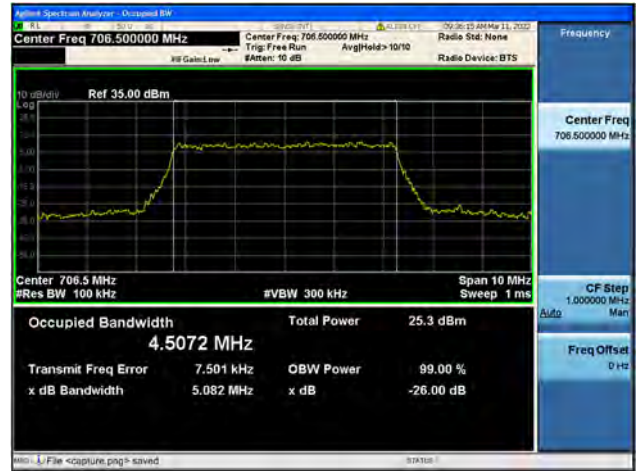




Band17 / 5MHz / Low CH / QPSK



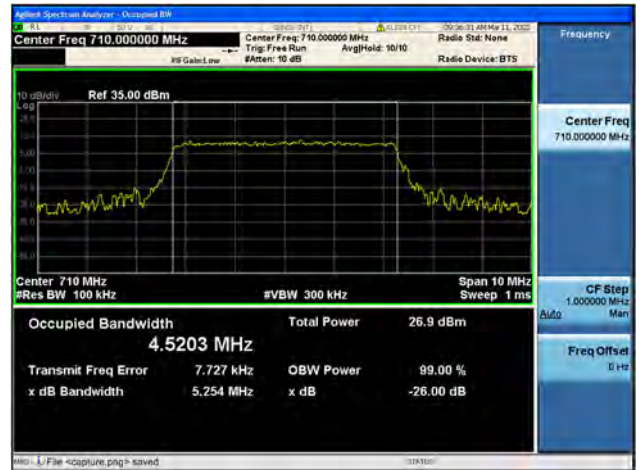
Band17 / 5MHz / Low CH / 16QAM



Band17 / 5MHz / Low CH / 64QAM



Band17 / 5MHz / Mid CH / QPSK



Band17 / 5MHz / Mid CH / 16QAM

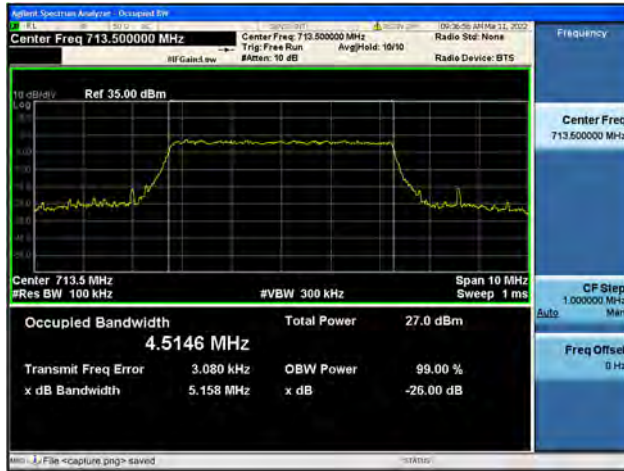


Band17 / 5MHz / Mid CH / 64QAM

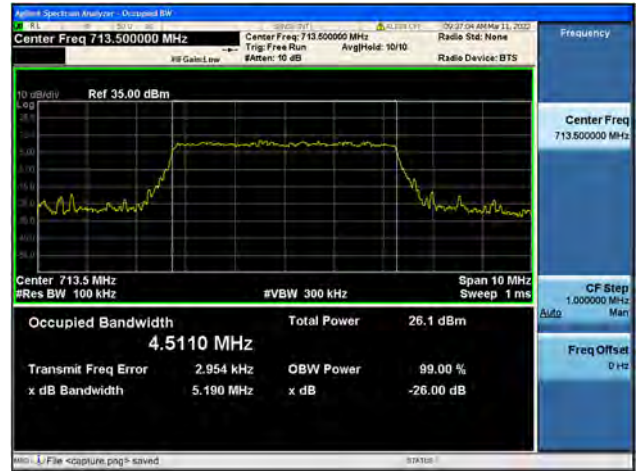




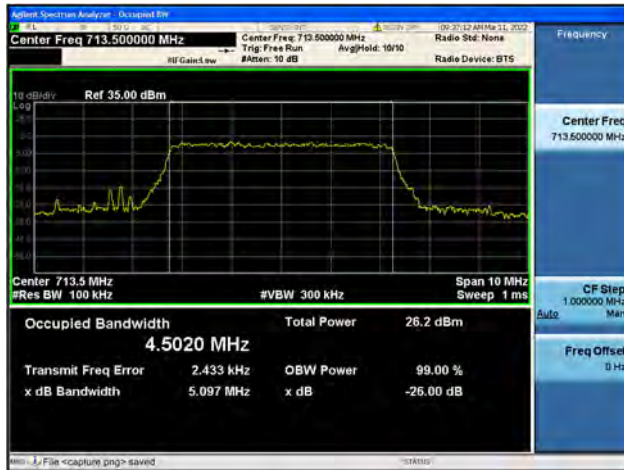
Band17 / 5MHz / High CH / QPSK



Band17 / 5MHz / High CH / 16QAM



Band17 / 5MHz / High CH / 64QAM



Band17 / 10MHz / Low CH / QPSK



Band17 / 10MHz / Low CH / 16QAM

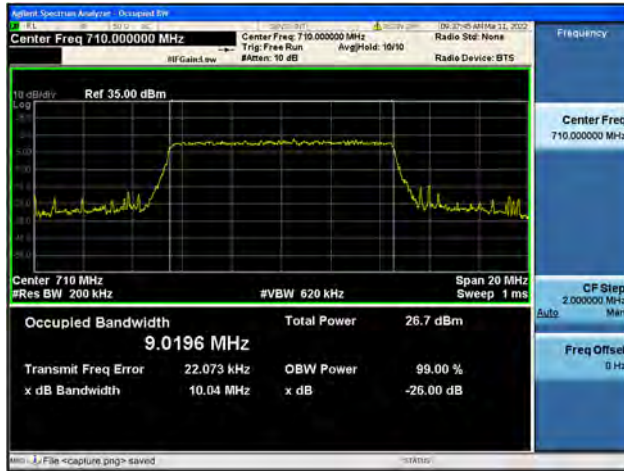


Band17 / 10MHz / Low CH / 64QAM





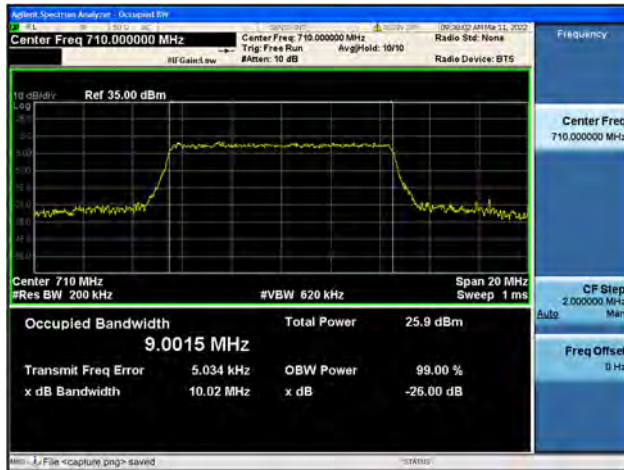
Band17 / 10MHz / Mid CH / QPSK



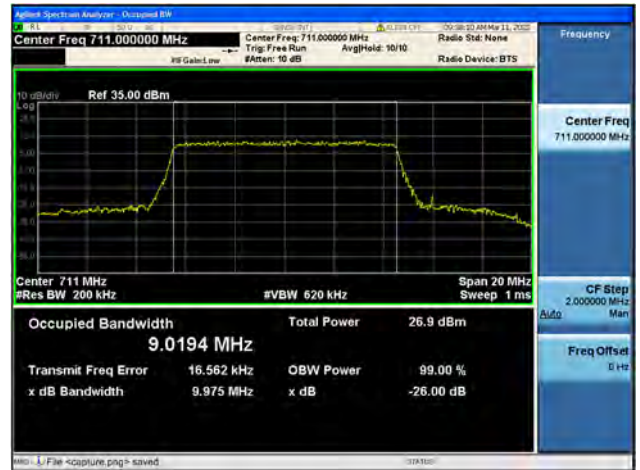
Band17 / 10MHz / Mid CH / 16QAM



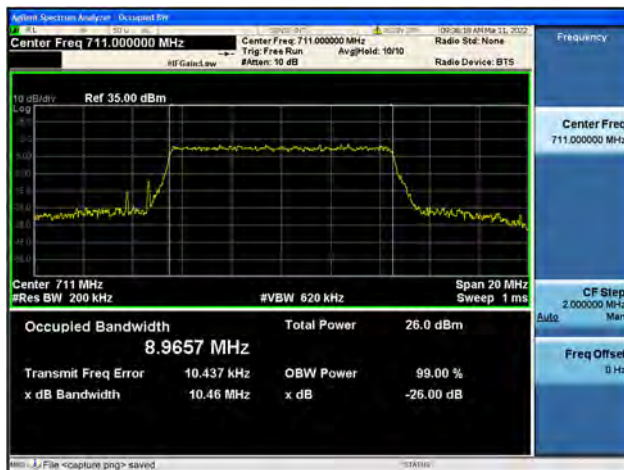
Band17 / 10MHz / Mid CH / 64QAM



Band17 / 10MHz / High CH / QPSK



Band17 / 10MHz / High CH / 16QAM



Band17 / 10MHz / High CH / 64QAM



## 2.3. Frequency Stability

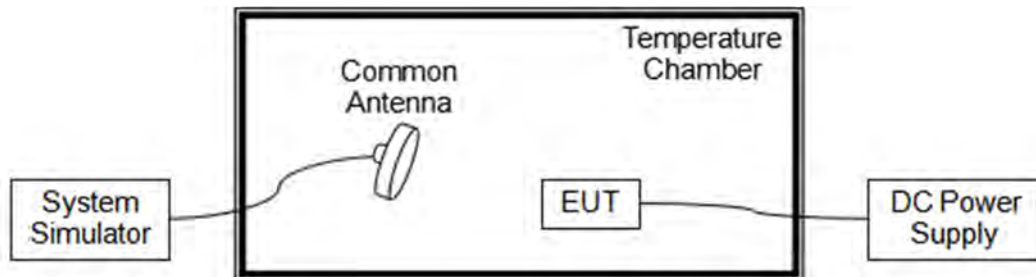
### 2.3.1. Requirement

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 3.87V, 4.50V and 3.45V, 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	3.87	+20(Ref)	-34	-0.018	PASS
Normal		-10	43	0.023	
Normal		0	-46	-0.024	
Normal		+10	-40	-0.021	
Normal		+20	43	0.023	
Normal		+30	43	0.023	
Normal		+40	-22	-0.012	
Normal		+50	26	0.014	
Normal		+55	46	0.024	
High	4.50	+20	-32	-0.017	
BATT.ENDPOINT	3.45	+20	-54	-0.029	

<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	3.87	+20(Ref)	-17	-0.010	PASS
Normal		-10	-55	-0.032	
Normal		0	14	0.008	
Normal		+10	40	0.023	
Normal		+20	28	0.016	
Normal		+30	46	0.027	
Normal		+40	-32	-0.018	
Normal		+50	15	0.009	
Normal		+55	-40	-0.023	
High	4.50	+20	41	0.024	
BATT.ENDPOINT	3.45	+20	35	0.020	





LTE Band 5, QPSK, Channel 20525, Frequency 836.5MHz					
Limit=±2.5ppm					
Voltage (%)	Power (VDC)	Temp(°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
Normal	3.87	+20(Ref)	48	0.057	PASS
Normal		-10	46	0.055	
Normal		0	25	0.030	
Normal		+10	-49	-0.059	
Normal		+20	21	0.025	
Normal		+30	41	0.049	
Normal		+40	52	0.062	
Normal		+50	42	0.050	
Normal		+55	50	0.060	
High	4.50	+20	19	0.023	
BATT.ENDPOINT	3.45	+20	28	0.033	

LTE Band 7, QPSK, Channel 21100, Frequency 2535MHz					
Limit= Within Authorized Band					
Voltage (%)	Power (VDC)	Temp(°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
Normal	3.87	+20(Ref)	-31	-0.012	PASS
Normal		-10	-38	-0.015	
Normal		0	-53	-0.021	
Normal		+10	41	0.016	
Normal		+20	46	0.018	
Normal		+30	51	0.020	
Normal		+40	35	0.014	
Normal		+50	-51	-0.020	
Normal		+55	22	0.009	
High	4.50	+20	-51	-0.020	
BATT.ENDPOINT	3.45	+20	-30	-0.012	



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	3.87	+20(Ref)	27	0.038	PASS
Normal		-10	51	0.072	
Normal		0	25	0.035	
Normal		+10	-53	-0.075	
Normal		+20	42	0.059	
Normal		+30	17	0.024	
Normal		+40	-53	-0.075	
Normal		+50	-21	-0.030	
Normal		+55	-20	-0.028	
High	4.50	+20	34	0.048	
BATT.ENDPOINT	3.45	+20	21	0.030	

LTE Band 13, QPSK, Channel 23230, Frequency 782.0MHz Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp(°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
Normal	3.87	+20(Ref)	31	0.040	PASS
Normal		-10	-31	-0.040	
Normal		0	-59	-0.075	
Normal		+10	22	0.028	
Normal		+20	-27	-0.035	
Normal		+30	-34	-0.043	
Normal		+40	48	0.061	
Normal		+50	41	0.052	
Normal		+55	41	0.052	
High	4.50	+20	51	0.065	
BATT.ENDPOINT	3.45	+20	-32	-0.041	



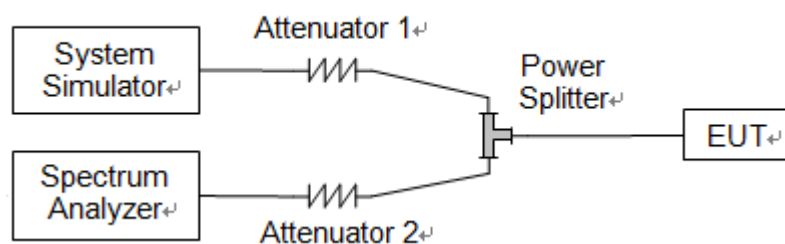
LTE Band 17, QPSK, Channel 23790, Frequency 710MHz					
Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp(°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
Normal	3.87	+20(Ref)	53	0.075	PASS
Normal		-10	32	0.045	
Normal		0	15	0.021	
Normal		+10	-42	-0.059	
Normal		+20	-33	-0.046	
Normal		+30	-30	-0.042	
Normal		+40	-48	-0.068	
Normal		+50	-56	-0.079	
Normal		+55	-43	-0.061	
High		4.50	+20	-21	
BATT.ENDPOINT	3.45	+20	32	0.045	

## 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	5.17	<=13	PASS
	Low	16QAM	6.12	<=13	PASS
	Low	64QAM	6.37	<=13	PASS
	Mid	QPSK	4.73	<=13	PASS
	Mid	16QAM	5.54	<=13	PASS
	Mid	64QAM	6.07	<=13	PASS
	High	QPSK	4.88	<=13	PASS
	High	16QAM	5.69	<=13	PASS
	High	64QAM	6.07	<=13	PASS
3	Low	QPSK	5.31	<=13	PASS
	Low	16QAM	6.12	<=13	PASS
	Low	64QAM	6.36	<=13	PASS
	Mid	QPSK	4.90	<=13	PASS
	Mid	16QAM	5.75	<=13	PASS
	Mid	64QAM	6.15	<=13	PASS
	High	QPSK	5.01	<=13	PASS
	High	16QAM	5.85	<=13	PASS
	High	64QAM	6.12	<=13	PASS
5	Low	QPSK	5.61	<=13	PASS
	Low	16QAM	6.25	<=13	PASS
	Low	64QAM	6.48	<=13	PASS
	Mid	QPSK	5.21	<=13	PASS
	Mid	16QAM	5.89	<=13	PASS
	Mid	64QAM	6.28	<=13	PASS
	High	QPSK	5.31	<=13	PASS
	High	16QAM	5.97	<=13	PASS
	High	64QAM	6.33	<=13	PASS
10	Low	QPSK	5.64	<=13	PASS
	Low	16QAM	6.27	<=13	PASS
	Low	64QAM	6.48	<=13	PASS
	Mid	QPSK	5.25	<=13	PASS
	Mid	16QAM	5.91	<=13	PASS
	Mid	64QAM	6.31	<=13	PASS
	High	QPSK	5.34	<=13	PASS
	High	16QAM	5.98	<=13	PASS
	High	64QAM	6.28	<=13	PASS



15	Low	QPSK	5.47	<=13	PASS
	Low	16QAM	6.11	<=13	PASS
	Low	64QAM	6.47	<=13	PASS
	Mid	QPSK	5.08	<=13	PASS
	Mid	16QAM	5.80	<=13	PASS
	Mid	64QAM	6.29	<=13	PASS
	High	QPSK	5.11	<=13	PASS
	High	16QAM	5.93	<=13	PASS
	High	64QAM	6.23	<=13	PASS
20	Low	QPSK	5.42	<=13	PASS
	Low	16QAM	6.19	<=13	PASS
	Low	64QAM	6.45	<=13	PASS
	Mid	QPSK	5.22	<=13	PASS
	Mid	16QAM	6.01	<=13	PASS
	Mid	64QAM	6.31	<=13	PASS
	High	QPSK	5.30	<=13	PASS
	High	16QAM	6.09	<=13	PASS
	High	64QAM	6.32	<=13	PASS



LTE Band 4					
BW(MHz)	Channel Level	Modulation	PAR Radio(dB)	Limit(dB)	Verdict
1.4	Low	QPSK	5.56	<=13	PASS
	Low	16QAM	6.38	<=13	PASS
	Low	64QAM	6.57	<=13	PASS
	Mid	QPSK	5.84	<=13	PASS
	Mid	16QAM	6.53	<=13	PASS
	Mid	64QAM	6.52	<=13	PASS
	High	QPSK	5.66	<=13	PASS
	High	16QAM	6.44	<=13	PASS
	High	64QAM	6.69	<=13	PASS
3	Low	QPSK	5.61	<=13	PASS
	Low	16QAM	6.43	<=13	PASS
	Low	64QAM	6.58	<=13	PASS
	Mid	QPSK	5.77	<=13	PASS
	Mid	16QAM	6.57	<=13	PASS
	Mid	64QAM	6.54	<=13	PASS
	High	QPSK	5.67	<=13	PASS
	High	16QAM	6.55	<=13	PASS
	High	64QAM	6.65	<=13	PASS
5	Low	QPSK	5.70	<=13	PASS
	Low	16QAM	6.35	<=13	PASS
	Low	64QAM	6.63	<=13	PASS
	Mid	QPSK	5.83	<=13	PASS
	Mid	16QAM	6.47	<=13	PASS
	Mid	64QAM	6.75	<=13	PASS
	High	QPSK	5.78	<=13	PASS
	High	16QAM	6.46	<=13	PASS
	High	64QAM	6.64	<=13	PASS
10	Low	QPSK	5.72	<=13	PASS
	Low	16QAM	6.44	<=13	PASS
	Low	64QAM	6.64	<=13	PASS
	Mid	QPSK	5.85	<=13	PASS
	Mid	16QAM	6.50	<=13	PASS
	Mid	64QAM	6.71	<=13	PASS
	High	QPSK	5.86	<=13	PASS
	High	16QAM	6.50	<=13	PASS
	High	64QAM	6.62	<=13	PASS



15	Low	QPSK	5.70	<=13	PASS
	Low	16QAM	6.38	<=13	PASS
	Low	64QAM	6.64	<=13	PASS
	Mid	QPSK	5.80	<=13	PASS
	Mid	16QAM	6.47	<=13	PASS
	Mid	64QAM	6.75	<=13	PASS
	High	QPSK	5.77	<=13	PASS
	High	16QAM	6.46	<=13	PASS
	High	64QAM	6.68	<=13	PASS
20	Low	QPSK	5.68	<=13	PASS
	Low	16QAM	6.44	<=13	PASS
	Low	64QAM	6.64	<=13	PASS
	Mid	QPSK	5.74	<=13	PASS
	Mid	16QAM	6.47	<=13	PASS
	Mid	64QAM	6.71	<=13	PASS
	High	QPSK	5.73	<=13	PASS
	High	16QAM	6.50	<=13	PASS
	High	64QAM	6.66	<=13	PASS





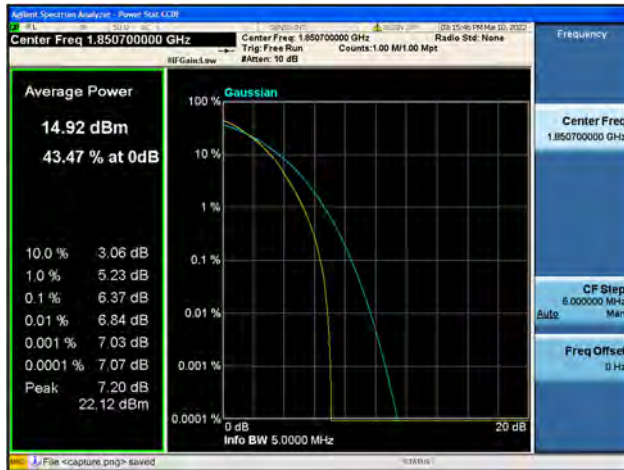
Band2 / 1.4MHz / Low CH / QPSK



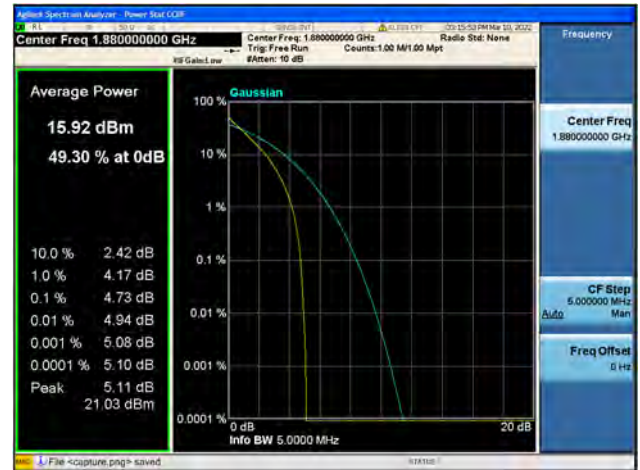
Band2 / 1.4MHz / Low CH / 16QAM



Band2 / 1.4MHz / Low CH / 64QAM



Band2 / 1.4MHz / Mid CH / QPSK



Band2 / 1.4MHz / Mid CH / 16QAM



Band2 / 1.4MHz / Mid CH / 64QAM





Band2 / 1.4MHz / High CH / QPSK



Band2 / 1.4MHz / High CH / 16QAM



Band2 / 1.4MHz / High CH / 64QAM



Band2 / 3MHz / Low CH / QPSK



Band2 / 3MHz / Low CH / 16QAM



Band2 / 3MHz / Low CH / 64QAM





Band2 / 3MHz / Mid CH / QPSK



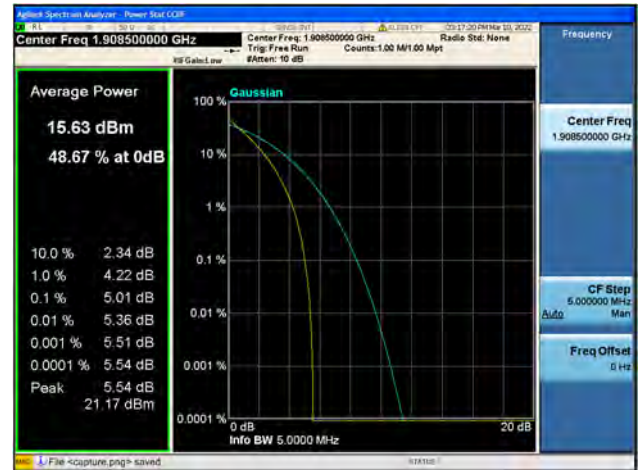
Band2 / 3MHz / Mid CH / 16QAM



Band2 / 3MHz / Mid CH / 64QAM



Band2 / 3MHz / High CH / QPSK



Band2 / 3MHz / High CH / 16QAM

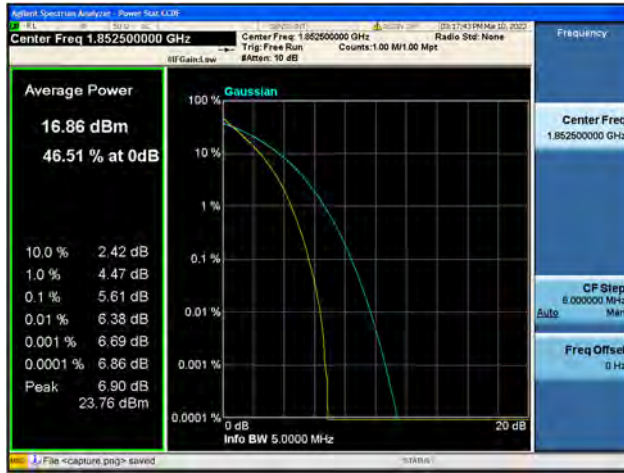


Band2 / 3MHz / High CH / 64QAM

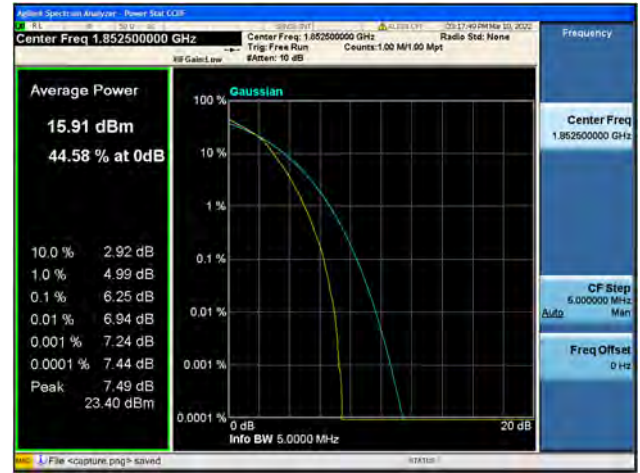




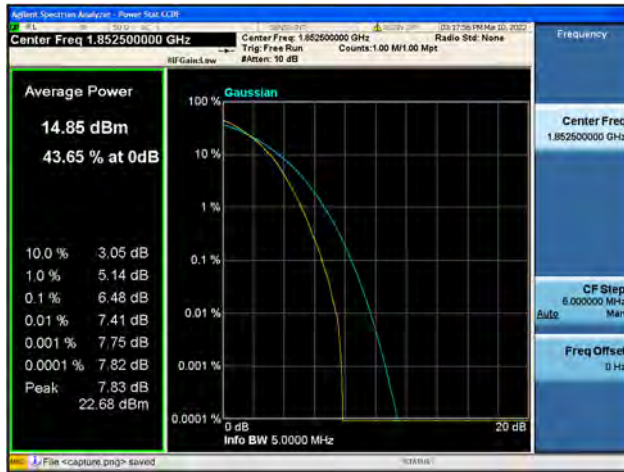
Band2 / 5MHz / Low CH / QPSK



Band2 / 5MHz / Low CH / 16QAM



Band2 / 5MHz / Low CH / 64QAM



Band2 / 5MHz / Mid CH / QPSK



Band2 / 5MHz / Mid CH / 16QAM



Band2 / 5MHz / Mid CH / 64QAM

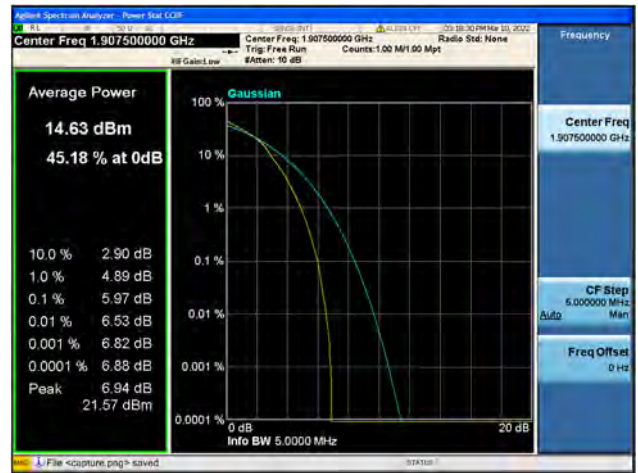




Band2 / 5MHz / High CH / QPSK



Band2 / 5MHz / High CH / 16QAM



Band2 / 5MHz / High CH / 64QAM



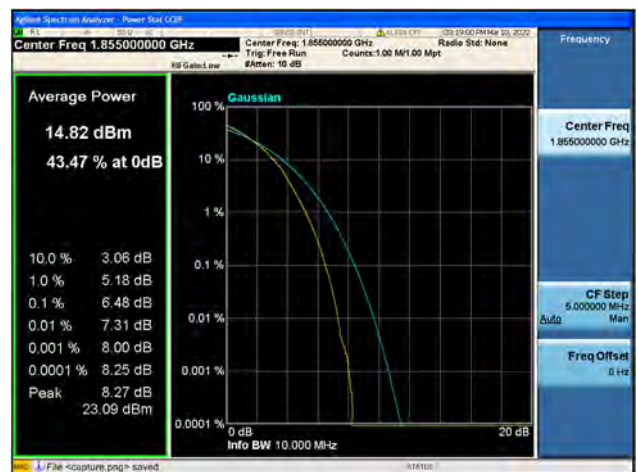
Band2 / 10MHz / Low CH / QPSK



Band2 / 10MHz / Low CH / 16QAM



Band2 / 10MHz / Low CH / 64QAM





Band2 / 10MHz / Mid CH / QPSK



Band2 / 10MHz / Mid CH / 16QAM



Band2 / 10MHz / Mid CH / 64QAM



Band2 / 10MHz / High CH / QPSK



Band2 / 10MHz / High CH / 16QAM



Band2 / 10MHz / High CH / 64QAM





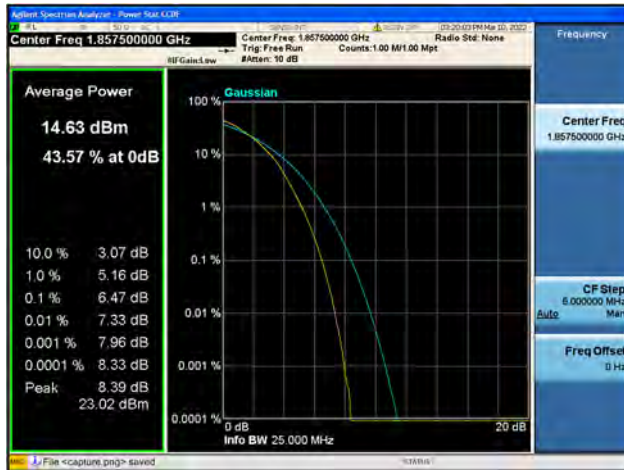
Band2 / 15MHz / Low CH / QPSK



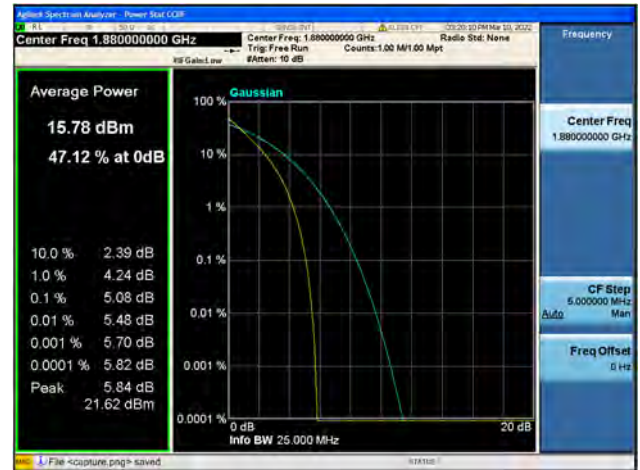
Band2 / 15MHz / Low CH / 16QAM



Band2 / 15MHz / Low CH / 64QAM



Band2 / 15MHz / Mid CH / QPSK



Band2 / 15MHz / Mid CH / 16QAM

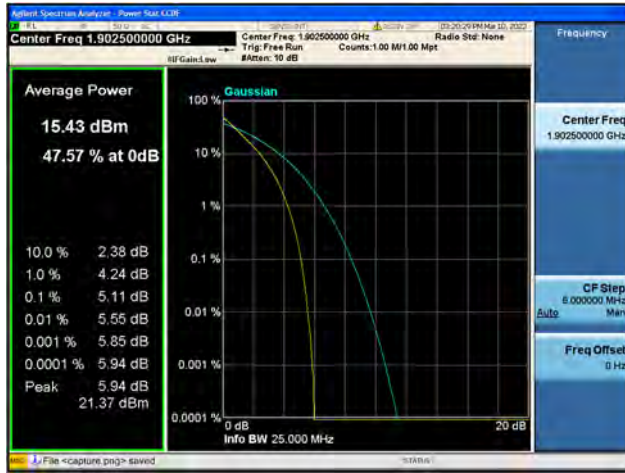


Band2 / 15MHz / Mid CH / 64QAM





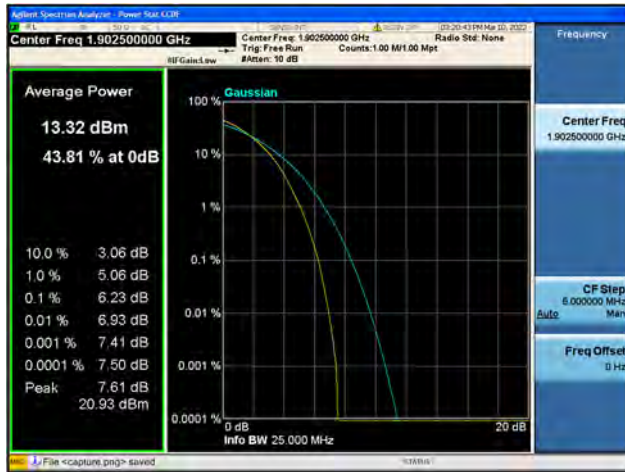
Band2 / 15MHz / High CH / QPSK



Band2 / 15MHz / High CH / 16QAM



Band2 / 15MHz / High CH / 64QAM



Band2 / 20MHz / Low CH / QPSK



Band2 / 20MHz / Low CH / 16QAM



Band2 / 20MHz / Low CH / 64QAM

