



TEST REPORT

APPLICANT : Shenzhen Chainway Information
Technology Co., Ltd.

PRODUCT NAME : Mobile Data Terminal

MODEL NAME : C66

BRAND NAME : CHAINWAY

FCC ID : 2AC6AC66P

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

RECEIPT DATE : 2021-04-13

TEST DATE : 2021-05-02 to 2021-10-08

ISSUE DATE : 2021-10-14

Edited by: Peng Mi
Peng Mi (Rapporteur)

Approved by: Shen Junsheng
Shen Junsheng (Supervisor)

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





DIRECTORY

- 1. Technical Information 3**
- 1.1. Applicant and Manufacturer Information 3**
- 1.2. Equipment Under Test (EUT) Description 3**
- 1.3. Maximum E.R.P./E.I.R.P. and Emission Designator 6**
- 1.4. Test Standards and Results 8**
- 1.5. Environmental Conditions 9**
- 2. 47 CFR Part 2, Part 22H, Part 24E, Part 27D&F& H&L&M Requirements 10**
- 2.1. Transmitter Conducted Output Power and E.R.P./E.I.R.P. 10**
- 2.2. Occupied Bandwidth 92**
- 2.3. Frequency Stability 143**
- 2.4. Peak to Average Ratio 150**
- 2.5. Conducted Spurious Emissions 165**
- 2.6. Band Edge 236**
- 2.7. Radiated Spurious Emissions 279**
- Annex A Test Uncertainty 316**
- Annex B Testing Laboratory Information 317**

Change History		
Version	Date	Reason for change
1.0	2021-10-14	First edition



1. Technical Information

Note: Provide by applicant.

1.1. Applicant and Manufacturer Information

Applicant:	Shenzhen Chainway Information Technology Co., Ltd.
Applicant Address:	9F Building 2, Daqian Industrial Park, District 67, XingDong Community, Xin'an Street, Bao'an District, Shenzhen, Guangdong, China
Manufacturer:	Shenzhen Chainway Information Technology Co., Ltd.
Manufacturer Address:	9F Building 2, Daqian Industrial Park, District 67, XingDong Community, Xin'an Street, Bao'an District, Shenzhen, Guangdong, China

1.2. Equipment Under Test (EUT) Description

Product Name:	Mobile Data Terminal	
Sample No.:	5#	
Hardware Version:	QDC505-GL_V1.2	
Software Version:	C66_Common_V1.00	
Modulation Type:	QPSK, 16QAM	
Carrier Aggregation:	Not Support	
Operation Band:	Band 2 / 4 / 5 / 7 / 12 / 13 / 17 / 38 / 40 / 41	
Frequency Range:	LTE Band 2	Tx: 1850MHz–1910MHz
		Rx: 1930MHz–1990MHz
	LTE Band 4	Tx: 1710MHz–1755MHz
		Rx: 2110MHz–2155MHz
	LTE Band 5	Tx: 824MHz–849MHz
		Rx: 869MHz–894MHz
	LTE Band 7	Tx: 2500MHz–2570MHz
		Rx: 2620MHz–2690MHz
	LTE Band 12	Tx: 699MHz - 716MHz
		Rx: 729MHz – 746MHz
	LTE Band 13	Tx: 777MHz–787MHz
		Rx: 746MHz–756MHz



Frequency Range:	LTE Band 17	Tx: 704MHz - 716MHz
		Rx: 734MHz – 746MHz
	LTE Band 38	Tx: 2570MHz–2620MHz
		Rx: 2570MHz–2620MHz
	LTE Band 40 Block A	Tx: 2305MHz–2315MHz
		Rx: 2305MHz–2315MHz
LTE Band 40 Block B	Tx: 2350MHz–2360MHz	
	Rx: 2350MHz–2360MHz	
LTE Band 41	Tx: 2496MHz–2690MHz	
	Rx: 2496MHz–2690MHz	
Channel Bandwidth:	LTE Band 2	1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz
	LTE Band 4	1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz
	LTE Band 5	1.4MHz, 3MHz, 5MHz, 10MHz
	LTE Band 7	5 MHz, 10MHz, 15MHz, 20MHz
	LTE Band 12	1.4MHz, 3 MHz, 5 MHz, 10MHz
	LTE Band 13	5 MHz, 10MHz
	LTE Band 17	5 MHz, 10MHz
	LTE Band 38	5 MHz, 10MHz, 15MHz, 20MHz
	LTE Band 40	5MHz, 10MHz
	LTE Band 41	5 MHz, 10MHz, 15MHz, 20MHz
Antenna Type:	Fixed Internal Antenna	
Antenna Gain:	LTE Band 2	0.8dBi
	LTE Band 4	0.3dBi
	LTE Band 5	0.3dBi
	LTE Band 7	1.0dBi
	LTE Band 12	0.1dBi
	LTE Band 13	0.2dBi
	LTE Band 17	0.1dBi
	LTE Band 38	1.0dBi
	LTE Band 40	0.8dBi
	LTE Band 41	1.0dBi



Accessory Information:	Battery	
	Brand Name:	CHAINWAY
	Model No.:	J295
	Serial No.:	N/A
	Capacity:	4300mAh
	Rated Voltage:	3.8V
	Charge Limit:	4.35V
	Manufacturer:	Hixon(Shenzhen) Technology Limited
	AC Adapter	
	Brand Name:	FULLPOWER
	Model No.:	DBS15Q
	Serial No.:	N/A
	Rated Output:	5V=3A, 9V=2A, 12V=1.5A
	Rated Input:	100-240V~50/60Hz, 0.5A
	Manufacturer:	SHENZHEN SHI YING YUAN ELECTRONICS CO LTD
	USB Cable	
	Model No.:	1.8.17.067
Manufacturer:	SHENZHEN HUANJIAN ELECTRONIC CO., LTD.	

Note 1: The EUT only use 9V=2A rated output.

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



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

LTE Band 2		Maximum E.R.P./E.I.R.P. (W)		Emission Designator (99%OBW)	
BW(MHz)		QPSK	16QAM	QPSK	16QAM
20		0.200	0.146	17M9G7D	17M9W7D
15		0.195	0.143	13M5G7D	13M4W7D
10		0.189	0.138	9M00G7D	8M96W7D
5		0.185	0.136	4M50G7D	4M51W7D
3		0.180	0.132	2M70G7D	2M71W7D
1.4		0.177	0.130	1M10G7D	1M10W7D
LTE Band 4		Maximum E.R.P./E.I.R.P. (W)		Emission Designator (99%OBW)	
BW(MHz)		QPSK	16QAM	QPSK	16QAM
20		0.181	0.134	17M9G7D	17M9W7D
15		0.176	0.130	13M4G7D	13M4W7D
10		0.172	0.127	9M00G7D	8M96W7D
5		0.168	0.124	4M50G7D	4M50W7D
3		0.163	0.121	2M70G7D	2M70W7D
1.4		0.159	0.117	1M10G7D	1M10W7D
LTE Band 5		Maximum E.R.P./E.I.R.P. (W)		Emission Designator (99%OBW)	
BW(MHz)		QPSK	16QAM	QPSK	16QAM
10		0.118	0.090	9M00G7D	8M96W7D
5		0.115	0.087	4M50G7D	4M50W7D
3		0.112	0.085	2M69G7D	2M70W7D
1.4		0.109	0.083	1M10G7D	1M10W7D
LTE Band 7		Maximum E.R.P./E.I.R.P. (W)		Emission Designator (99%OBW)	
BW(MHz)		QPSK	16QAM	QPSK	16QAM
20		0.191	0.146	17M9G7D	18M0W7D
15		0.185	0.142	13M5G7D	13M4W7D
10		0.181	0.139	9M00G7D	8M95W7D
5		0.176	0.135	4M51G7D	4M50W7D
LTE Band 12		Maximum E.R.P./E.I.R.P. (W)		Emission Designator (99%OBW)	
BW(MHz)		QPSK	16QAM	QPSK	16QAM
10		0.111	0.088	8M99G7D	8M94W7D
5		0.108	0.086	4M50G7D	4M50W7D
3		0.105	0.084	2M70G7D	2M70W7D
1.4		0.103	0.082	1M10G7D	1M10W7D



LTE Band 13	Maximum E.R.P./E.I.R.P. (W)		Emission Designator (99%OBW)	
BW(MHz)	QPSK	16QAM	QPSK	16QAM
10	0.117	0.096	8M99G7D	8M95W7D
5	0.113	0.090	4M50G7D	4M50W7D
LTE Band 17	Maximum E.R.P./E.I.R.P. (W)		Emission Designator (99%OBW)	
BW(MHz)	QPSK	16QAM	QPSK	16QAM
10	0.112	0.087	8M99G7D	8M95W7D
5	0.110	0.085	4M50G7D	4M50W7D
LTE Band 38	Maximum E.R.P./E.I.R.P. (W)		Emission Designator (99%OBW)	
BW(MHz)	QPSK	16QAM	QPSK	16QAM
20	0.195	0.161	17M9G7D	17M9W7D
15	0.189	0.157	13M5G7D	13M6W7D
10	0.185	0.153	8M97G7D	8M96W7D
5	0.181	0.150	4M51G7D	4M50W7D
LTE Band 40 Block A	Maximum E.R.P./E.I.R.P. (W)		Emission Designator (99%OBW)	
BW(MHz)	QPSK	16QAM	QPSK	16QAM
10	0.238	0.188	8M98G7D	8M97W7D
5	0.234	0.194	4M50G7D	4M50W7D
LTE Band 40 Block B	Maximum E.R.P./E.I.R.P. (W)		Emission Designator (99%OBW)	
BW(MHz)	QPSK	16QAM	QPSK	16QAM
10	0.243	0.189	8M96G7D	8M95W7D
5	0.236	0.200	4M49G7D	4M50W7D
LTE Band 41	Maximum E.R.P./E.I.R.P. (W)		Emission Designator (99%OBW)	
BW(MHz)	QPSK	16QAM	QPSK	16QAM
20	0.220	0.166	17M9G7D	17M9W7D
15	0.216	0.163	13M5G7D	13M5W7D
10	0.210	0.159	8M98G7D	8M96W7D
5	0.205	0.155	4M50G7D	4M50W7D



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(a)(3) 27.50(b)(10) 27.50(c)(10) 27.50(d)(4) 27.50(h)(2)	Transmitter Conducted Output Power and E.R.P./E.I.R.P.	Sep 29&30, 2021 Oct 08, 2021	Tan Xiaowei Gao Jianrou	PASS	No deviation
2.1049	Occupied Bandwidth	May 20&25, 2021	Lin Keye	PASS	No deviation
2.1055 22.355 24.235 27.54	Frequency Stability	May 31, 2021	Lin Keye	PASS	No deviation
24.232(d), 27.50(d)(5)	Peak to Average Radio	May 20&25, 2021	Lin Keye	PASS	No deviation
2.1051 22.917(a) 24.238(a) 27.53(a)(4) 27.53(c)(2) 27.53(g) 27.53(h) 27.53(m)(4)	Conducted Spurious Emissions	May 21&26&27, 2021	Lin Keye	PASS	No deviation



2.1051 22.917(a) 24.238(a) 27.53(a)(4) 27.53(c)(2) 27.53(g) 27.53(h) 27.53(m)(4)	Band Edge	May 20&24, 2021	Lin Keye	PASS	No deviation
2.1051 22.917(a) 24.238(a) 27.53(a)(4) 27.53(c)(2) 27.53(g) 27.53(h) 27.53(m)(4)	Radiated Spurious Emissions	May 14&24, 2021	Gao Jianrou	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 27D&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.

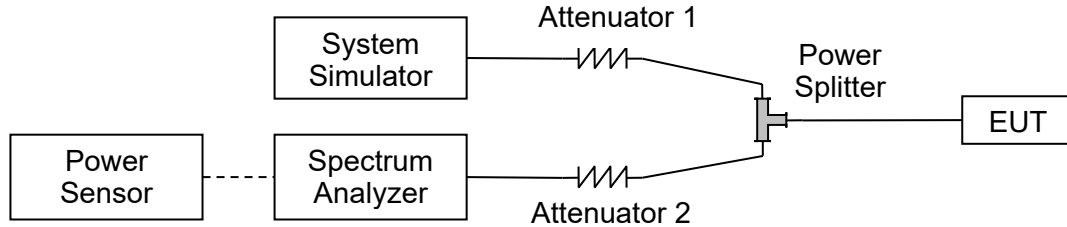
According to FCC section 27.50 (h)(2) for LTE Band 7/38/41, Mobile and other user stations. Mobile stations are limited to 2 watts E.I.R.P. All user stations are limited to 2 watts transmitter output power.

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.

According to FCC section 27.50 (a)(3) for LTE Band 40, For mobile and portable stations transmitting in the 2305-2315 MHz band or the 2350-2360 MHz band, the average E.I.R.P. must not exceed 50 milliwatts within any 1 megahertz of authorized bandwidth.

2.1.2. Test Description



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

2.1.3. Test Procedure

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

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

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

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

LTE Band 2						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				18700	18900	19100
Frequency (MHz)				1860	1880	1900
20	QPSK	1	0	22.12	22.21	22.18
20	QPSK	1	49	21.97	22.04	22.02
20	QPSK	1	99	21.83	21.90	21.88
20	QPSK	50	0	21.00	21.10	21.02
20	QPSK	50	24	21.00	21.07	21.05
20	QPSK	50	50	20.87	20.92	20.90
20	QPSK	100	0	20.90	20.93	20.85
20	16QAM	1	0	20.83	20.85	20.80
20	16QAM	1	49	20.68	20.78	20.73
20	16QAM	1	99	20.52	20.58	20.55
20	16QAM	50	0	19.88	19.87	19.90
20	16QAM	50	24	19.82	19.83	19.80
20	16QAM	50	50	19.93	19.90	19.89
20	16QAM	100	0	19.90	19.94	19.87



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	22.01	22.10	22.07
15	QPSK	1	37	21.86	21.93	21.91
15	QPSK	1	74	21.72	21.79	21.77
15	QPSK	36	0	20.89	20.99	20.91
15	QPSK	36	20	20.89	20.96	20.94
15	QPSK	36	39	20.76	20.81	20.79
15	QPSK	75	0	20.79	20.82	20.74
15	16QAM	1	0	20.72	20.74	20.69
15	16QAM	1	37	20.57	20.67	20.62
15	16QAM	1	74	20.41	20.47	20.44
15	16QAM	36	0	19.77	19.76	19.79
15	16QAM	36	20	19.71	19.72	19.69
15	16QAM	36	39	19.82	19.79	19.78
15	16QAM	75	0	19.79	19.83	19.76



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	21.88	21.97	21.94
10	QPSK	1	25	21.73	21.80	21.78
10	QPSK	1	49	21.59	21.66	21.64
10	QPSK	25	0	20.76	20.86	20.78
10	QPSK	25	12	20.76	20.83	20.81
10	QPSK	25	25	20.63	20.68	20.66
10	QPSK	50	0	20.66	20.69	20.61
10	16QAM	1	0	20.59	20.61	20.56
10	16QAM	1	25	20.44	20.54	20.49
10	16QAM	1	49	20.28	20.34	20.31
10	16QAM	25	0	19.64	19.63	19.66
10	16QAM	25	12	19.58	19.59	19.56
10	16QAM	25	25	19.69	19.66	19.65
10	16QAM	50	0	19.66	19.70	19.63



LTE Band 2						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				18625	18900	19175
Frequency (MHz)				1852.5	1880	1907.5
5	QPSK	1	0	21.79	21.88	21.85
5	QPSK	1	12	21.64	21.71	21.69
5	QPSK	1	24	21.50	21.57	21.55
5	QPSK	12	0	20.67	20.77	20.69
5	QPSK	12	7	20.67	20.74	20.72
5	QPSK	12	13	20.54	20.59	20.57
5	QPSK	25	0	20.57	20.60	20.52
5	16QAM	1	0	20.50	20.52	20.47
5	16QAM	1	12	20.35	20.45	20.40
5	16QAM	1	24	20.19	20.25	20.22
5	16QAM	12	0	19.55	19.54	19.57
5	16QAM	12	7	19.49	19.50	19.47
5	16QAM	12	13	19.60	19.57	19.56
5	16QAM	25	0	19.57	19.61	19.54



LTE Band 2						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				18615	18900	19185
Frequency (MHz)				1851.5	1880	1908.5
3	QPSK	1	0	21.67	21.76	21.73
3	QPSK	1	8	21.52	21.59	21.57
3	QPSK	1	14	21.38	21.45	21.43
3	QPSK	8	0	20.55	20.65	20.57
3	QPSK	8	4	20.55	20.62	20.60
3	QPSK	8	7	20.42	20.47	20.45
3	QPSK	15	0	20.45	20.48	20.40
3	16QAM	1	0	20.38	20.40	20.35
3	16QAM	1	8	20.23	20.33	20.28
3	16QAM	1	14	20.07	20.13	20.10
3	16QAM	8	0	19.43	19.42	19.45
3	16QAM	8	4	19.37	19.38	19.35
3	16QAM	8	7	19.48	19.45	19.44
3	16QAM	15	0	19.45	19.49	19.42



LTE Band 2						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				18607	18900	19193
Frequency (MHz)				1850.7	1880	1909.3
1.4	QPSK	1	0	21.60	21.69	21.66
1.4	QPSK	1	3	21.45	21.52	21.50
1.4	QPSK	1	5	21.31	21.38	21.36
1.4	QPSK	3	0	20.48	20.58	20.50
1.4	QPSK	3	1	20.48	20.55	20.53
1.4	QPSK	3	3	20.35	20.40	20.38
1.4	QPSK	6	0	20.38	20.41	20.33
1.4	16QAM	1	0	20.31	20.33	20.28
1.4	16QAM	1	3	20.16	20.26	20.21
1.4	16QAM	1	5	20.00	20.06	20.03
1.4	16QAM	3	0	19.36	19.35	19.38
1.4	16QAM	3	1	19.30	19.31	19.28
1.4	16QAM	3	3	19.41	19.38	19.37
1.4	16QAM	6	0	19.38	19.42	19.35



LTE Band 4						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20050	20175	20300
Frequency (MHz)				1720	1732.5	1745
20	QPSK	1	0	22.17	22.27	22.24
20	QPSK	1	49	22.13	22.18	22.13
20	QPSK	1	99	22.10	22.10	22.06
20	QPSK	50	0	21.11	21.22	21.17
20	QPSK	50	24	21.10	21.16	21.08
20	QPSK	50	50	21.01	21.05	21.02
20	QPSK	100	0	21.04	21.06	21.09
20	16QAM	1	0	20.85	20.93	20.96
20	16QAM	1	49	20.80	20.86	20.84
20	16QAM	1	99	20.78	20.77	20.83
20	16QAM	50	0	20.15	20.11	20.16
20	16QAM	50	24	20.03	20.20	20.10
20	16QAM	50	50	20.10	20.07	20.15
20	16QAM	100	0	20.03	20.00	20.11



LTE Band 4						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20025	20175	20325
Frequency (MHz)				1717.5	1732.5	1747.5
15	QPSK	1	0	22.05	22.15	22.12
15	QPSK	1	37	22.01	22.06	22.01
15	QPSK	1	74	21.98	21.98	21.94
15	QPSK	36	0	20.99	21.10	21.05
15	QPSK	36	20	20.98	21.04	20.96
15	QPSK	36	39	20.89	20.93	20.90
15	QPSK	75	0	20.92	20.94	20.97
15	16QAM	1	0	20.73	20.81	20.84
15	16QAM	1	37	20.68	20.74	20.72
15	16QAM	1	74	20.66	20.65	20.71
15	16QAM	36	0	20.03	19.99	20.04
15	16QAM	36	20	19.91	20.08	19.98
15	16QAM	36	39	19.98	19.95	20.03
15	16QAM	75	0	19.91	19.88	19.99



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	21.96	22.06	22.03
10	QPSK	1	25	21.92	21.97	21.92
10	QPSK	1	49	21.89	21.89	21.85
10	QPSK	25	0	20.90	21.01	20.96
10	QPSK	25	12	20.89	20.95	20.87
10	QPSK	25	25	20.80	20.84	20.81
10	QPSK	50	0	20.83	20.85	20.88
10	16QAM	1	0	20.64	20.72	20.75
10	16QAM	1	25	20.59	20.65	20.63
10	16QAM	1	49	20.57	20.56	20.62
10	16QAM	25	0	19.94	19.90	19.95
10	16QAM	25	12	19.82	19.99	19.89
10	16QAM	25	25	19.89	19.86	19.94
10	16QAM	50	0	19.82	19.79	19.90



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	21.85	21.95	21.92
5	QPSK	1	12	21.81	21.86	21.81
5	QPSK	1	24	21.78	21.78	21.74
5	QPSK	12	0	20.79	20.90	20.85
5	QPSK	12	7	20.78	20.84	20.76
5	QPSK	12	13	20.69	20.73	20.70
5	QPSK	25	0	20.72	20.74	20.77
5	16QAM	1	0	20.53	20.61	20.64
5	16QAM	1	12	20.48	20.54	20.52
5	16QAM	1	24	20.46	20.45	20.51
5	16QAM	12	0	19.83	19.79	19.84
5	16QAM	12	7	19.71	19.88	19.78
5	16QAM	12	13	19.78	19.75	19.83
5	16QAM	25	0	19.71	19.68	19.79



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	21.73	21.83	21.80
3	QPSK	1	8	21.69	21.74	21.69
3	QPSK	1	14	21.66	21.66	21.62
3	QPSK	8	0	20.67	20.78	20.73
3	QPSK	8	4	20.66	20.72	20.64
3	QPSK	8	7	20.57	20.61	20.58
3	QPSK	15	0	20.60	20.62	20.65
3	16QAM	1	0	20.41	20.49	20.52
3	16QAM	1	8	20.36	20.42	20.40
3	16QAM	1	14	20.34	20.33	20.39
3	16QAM	8	0	19.71	19.67	19.72
3	16QAM	8	4	19.59	19.76	19.66
3	16QAM	8	7	19.66	19.63	19.71
3	16QAM	15	0	19.59	19.56	19.67



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	21.62	21.72	21.69
1.4	QPSK	1	3	21.58	21.63	21.58
1.4	QPSK	1	5	21.55	21.55	21.51
1.4	QPSK	3	0	20.56	20.67	20.62
1.4	QPSK	3	1	20.55	20.61	20.53
1.4	QPSK	3	3	20.46	20.50	20.47
1.4	QPSK	6	0	20.49	20.51	20.54
1.4	16QAM	1	0	20.30	20.38	20.41
1.4	16QAM	1	3	20.25	20.31	20.29
1.4	16QAM	1	5	20.23	20.22	20.28
1.4	16QAM	3	0	19.60	19.56	19.61
1.4	16QAM	3	1	19.48	19.65	19.55
1.4	16QAM	3	3	19.55	19.52	19.60
1.4	16QAM	6	0	19.48	19.45	19.56



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	22.57	22.43	22.51
10	QPSK	1	25	22.38	22.30	22.35
10	QPSK	1	49	22.40	22.41	22.32
10	QPSK	25	0	21.56	21.55	21.50
10	QPSK	25	12	21.40	21.42	21.45
10	QPSK	25	25	21.43	21.38	21.46
10	QPSK	50	0	21.38	21.35	21.30
10	16QAM	1	0	21.37	21.25	21.23
10	16QAM	1	25	21.30	21.30	21.28
10	16QAM	1	49	21.17	21.09	21.10
10	16QAM	25	0	20.41	20.34	20.46
10	16QAM	25	12	20.48	20.41	20.37
10	16QAM	25	25	20.30	20.32	20.33
10	16QAM	50	0	20.24	20.25	20.28



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	22.45	22.31	22.39
5	QPSK	1	12	22.26	22.18	22.23
5	QPSK	1	24	22.28	22.29	22.20
5	QPSK	12	0	21.34	21.43	21.38
5	QPSK	12	7	21.44	21.30	21.33
5	QPSK	12	13	21.31	21.26	21.34
5	QPSK	25	0	21.26	21.23	21.18
5	16QAM	1	0	21.25	21.13	21.11
5	16QAM	1	12	21.18	21.18	21.16
5	16QAM	1	24	21.05	20.97	20.98
5	16QAM	12	0	20.29	20.22	20.34
5	16QAM	12	7	20.36	20.29	20.25
5	16QAM	12	13	20.18	20.20	20.21
5	16QAM	25	0	20.12	20.13	20.16



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	22.36	22.22	22.30
3	QPSK	1	8	22.17	22.09	22.14
3	QPSK	1	14	22.19	22.20	22.11
3	QPSK	8	0	21.25	21.34	21.29
3	QPSK	8	4	21.35	21.21	21.24
3	QPSK	8	7	21.22	21.17	21.25
3	QPSK	15	0	21.17	21.14	21.09
3	16QAM	1	0	21.16	21.04	21.02
3	16QAM	1	8	21.09	21.09	21.07
3	16QAM	1	14	20.96	20.88	20.89
3	16QAM	8	0	20.20	20.13	20.25
3	16QAM	8	4	20.27	20.20	20.16
3	16QAM	8	7	20.09	20.11	20.12
3	16QAM	15	0	20.03	20.04	20.07



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	22.24	22.10	22.18
1.4	QPSK	1	3	22.05	21.97	22.02
1.4	QPSK	1	5	22.07	22.08	21.99
1.4	QPSK	3	0	21.13	21.22	21.17
1.4	QPSK	3	1	21.23	21.09	21.12
1.4	QPSK	3	3	21.10	21.05	21.13
1.4	QPSK	6	0	21.05	21.02	20.97
1.4	16QAM	1	0	21.04	20.92	20.90
1.4	16QAM	1	3	20.97	20.97	20.95
1.4	16QAM	1	5	20.84	20.76	20.77
1.4	16QAM	3	0	20.08	20.01	20.13
1.4	16QAM	3	1	20.15	20.08	20.04
1.4	16QAM	3	3	19.97	19.99	20.00
1.4	16QAM	6	0	19.91	19.92	19.95



LTE Band 7						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20850	21100	21350
Frequency (MHz)				2510	2535	2560
20	QPSK	1	0	21.76	21.80	21.70
20	QPSK	1	49	21.68	21.72	21.66
20	QPSK	1	99	21.60	21.68	21.63
20	QPSK	50	0	20.59	20.63	20.60
20	QPSK	50	24	20.56	20.53	20.57
20	QPSK	50	50	20.48	20.55	20.43
20	QPSK	100	0	20.40	20.44	20.41
20	16QAM	1	0	20.61	20.65	20.55
20	16QAM	1	49	20.50	20.54	20.52
20	16QAM	1	99	20.40	20.45	20.41
20	16QAM	50	0	19.63	19.68	19.60
20	16QAM	50	24	19.55	19.65	19.58
20	16QAM	50	50	19.50	19.60	19.50
20	16QAM	100	0	19.42	19.51	19.48



LTE Band 7						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20825	21100	21375
Frequency (MHz)				2507.5	2535	2562.5
15	QPSK	1	0	21.64	21.68	21.58
15	QPSK	1	37	21.56	21.60	21.54
15	QPSK	1	74	21.48	21.56	21.51
15	QPSK	36	0	20.50	20.55	20.51
15	QPSK	36	20	20.49	20.48	20.45
15	QPSK	36	39	20.36	20.43	20.31
15	QPSK	75	0	20.28	20.32	20.29
15	16QAM	1	0	20.49	20.53	20.43
15	16QAM	1	37	20.38	20.42	20.40
15	16QAM	1	74	20.28	20.33	20.29
15	16QAM	36	0	19.51	19.56	19.48
15	16QAM	36	20	19.43	19.53	19.46
15	16QAM	36	39	19.38	19.48	19.38
15	16QAM	75	0	19.30	19.39	19.36



LTE Band 7						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20800	21100	21400
Frequency (MHz)				2505	2535	2565
10	QPSK	1	0	21.53	21.57	21.47
10	QPSK	1	25	21.45	21.49	21.43
10	QPSK	1	49	21.37	21.45	21.40
10	QPSK	25	0	20.39	20.44	20.40
10	QPSK	25	12	20.38	20.37	20.34
10	QPSK	25	25	20.25	20.32	20.20
10	QPSK	50	0	20.17	20.21	20.18
10	16QAM	1	0	20.38	20.42	20.32
10	16QAM	1	25	20.27	20.31	20.29
10	16QAM	1	49	20.17	20.22	20.18
10	16QAM	25	0	19.40	19.45	19.37
10	16QAM	25	12	19.32	19.42	19.35
10	16QAM	25	25	19.27	19.37	19.27
10	16QAM	50	0	19.19	19.28	19.25



LTE Band 7						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20775	21100	21425
Frequency (MHz)				2502.5	2535	2567.5
5	QPSK	1	0	21.41	21.45	21.35
5	QPSK	1	12	21.33	21.37	21.31
5	QPSK	1	24	21.25	21.33	21.28
5	QPSK	12	0	20.27	20.32	20.28
5	QPSK	12	7	20.26	20.25	20.22
5	QPSK	12	13	20.13	20.20	20.08
5	QPSK	25	0	20.05	20.09	20.06
5	16QAM	1	0	20.26	20.30	20.20
5	16QAM	1	12	20.15	20.19	20.17
5	16QAM	1	24	20.05	20.10	20.06
5	16QAM	12	0	19.28	19.33	19.25
5	16QAM	12	7	19.20	19.30	19.23
5	16QAM	12	13	19.15	19.25	19.15
5	16QAM	25	0	19.07	19.16	19.13



LTE Band 12						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				23060	23095	23130
Frequency (MHz)				704	707.5	711
10	QPSK	1	0	22.44	22.51	22.46
10	QPSK	1	25	22.38	22.40	22.41
10	QPSK	1	49	22.26	22.23	22.30
10	QPSK	25	0	21.46	21.49	21.40
10	QPSK	25	12	21.43	21.47	21.45
10	QPSK	25	25	21.40	21.42	21.34
10	QPSK	50	0	21.34	21.36	21.30
10	16QAM	1	0	21.45	21.48	21.44
10	16QAM	1	25	21.39	21.35	21.30
10	16QAM	1	49	21.30	21.25	21.26
10	16QAM	25	0	20.46	20.53	20.43
10	16QAM	25	12	20.50	20.42	20.39
10	16QAM	25	25	20.35	20.33	20.28
10	16QAM	50	0	20.30	20.27	20.21



LTE Band 12						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				23035	23095	23155
Frequency (MHz)				701.5	707.5	713.5
5	QPSK	1	0	22.32	22.39	22.34
5	QPSK	1	12	22.26	22.28	22.29
5	QPSK	1	24	22.14	22.11	22.18
5	QPSK	12	0	21.34	21.37	21.28
5	QPSK	12	7	21.31	21.35	21.33
5	QPSK	12	13	21.28	21.30	21.22
5	QPSK	25	0	21.22	21.24	21.18
5	16QAM	1	0	21.33	21.40	21.32
5	16QAM	1	12	21.27	21.23	21.18
5	16QAM	1	24	21.18	21.13	21.14
5	16QAM	12	0	20.34	20.41	20.31
5	16QAM	12	7	20.38	20.30	20.27
5	16QAM	12	13	20.23	20.21	20.16
5	16QAM	25	0	20.18	20.15	20.09



LTE Band 12						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				23025	23095	23165
Frequency (MHz)				700.5	707.5	714.5
3	QPSK	1	0	22.21	22.28	22.23
3	QPSK	1	8	22.15	22.17	22.18
3	QPSK	1	14	22.03	22.00	22.07
3	QPSK	8	0	21.23	21.26	21.17
3	QPSK	8	4	21.20	21.24	21.22
3	QPSK	8	7	21.17	21.19	21.11
3	QPSK	15	0	21.11	21.13	21.07
3	16QAM	1	0	21.22	21.29	21.21
3	16QAM	1	8	21.16	21.12	21.07
3	16QAM	1	14	21.07	21.02	21.03
3	16QAM	8	0	20.23	20.30	20.20
3	16QAM	8	4	20.27	20.19	20.16
3	16QAM	8	7	20.12	20.10	20.05
3	16QAM	15	0	20.07	20.04	19.98



LTE Band 12						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				23017	23095	23173
Frequency (MHz)				699.7	707.5	715.3
1.4	QPSK	1	0	22.12	22.19	22.14
1.4	QPSK	1	3	22.06	22.08	22.09
1.4	QPSK	1	5	21.94	21.91	21.98
1.4	QPSK	3	0	21.14	21.17	21.08
1.4	QPSK	3	1	21.11	21.15	21.13
1.4	QPSK	3	3	21.08	21.10	21.02
1.4	QPSK	6	0	21.02	21.04	20.98
1.4	16QAM	1	0	21.13	21.20	21.12
1.4	16QAM	1	3	21.07	21.03	20.98
1.4	16QAM	1	5	20.98	20.93	20.94
1.4	16QAM	3	0	20.14	20.21	20.11
1.4	16QAM	3	1	20.18	20.10	20.07
1.4	16QAM	3	3	20.03	20.01	19.96
1.4	16QAM	6	0	19.98	19.95	19.89



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	/	22.65	/
10	QPSK	1	25	/	22.56	/
10	QPSK	1	49	/	22.32	/
10	QPSK	25	0	/	21.49	/
10	QPSK	25	12	/	21.51	/
10	QPSK	25	25	/	21.40	/
10	QPSK	50	0	/	21.52	/
10	16QAM	1	0	/	21.78	/
10	16QAM	1	25	/	21.67	/
10	16QAM	1	49	/	21.54	/
10	16QAM	25	0	/	20.40	/
10	16QAM	25	12	/	20.60	/
10	16QAM	25	25	/	20.55	/
10	16QAM	50	0	/	20.59	/



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	22.40	22.47	22.42
5	QPSK	1	12	22.34	22.36	22.37
5	QPSK	1	24	22.22	22.19	22.26
5	QPSK	12	0	21.42	21.45	21.36
5	QPSK	12	7	21.39	21.43	21.41
5	QPSK	12	13	21.36	21.38	21.30
5	QPSK	25	0	21.30	21.32	21.26
5	16QAM	1	0	21.41	21.48	21.40
5	16QAM	1	12	21.35	21.31	21.26
5	16QAM	1	24	21.26	21.21	21.22
5	16QAM	12	0	20.42	20.49	20.39
5	16QAM	12	7	20.46	20.38	20.35
5	16QAM	12	13	20.31	20.29	20.24
5	16QAM	25	0	20.26	20.23	20.17



LTE Band 17						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				23780	23790	23800
Frequency (MHz)				709	710	711
10	QPSK	1	0	22.47	22.56	22.46
10	QPSK	1	25	22.41	22.50	22.42
10	QPSK	1	49	22.32	22.42	22.35
10	QPSK	25	0	21.51	21.55	21.46
10	QPSK	25	12	21.44	21.50	21.39
10	QPSK	25	25	21.41	21.46	21.40
10	QPSK	50	0	21.39	21.40	21.34
10	16QAM	1	0	21.35	21.44	21.39
10	16QAM	1	25	21.30	21.38	21.35
10	16QAM	1	49	21.20	21.30	21.26
10	16QAM	25	0	20.72	20.60	20.70
10	16QAM	25	12	20.66	20.64	20.61
10	16QAM	25	25	20.52	20.60	20.53
10	16QAM	50	0	20.55	20.62	20.48



LTE Band 17						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				23755	23790	23825
Frequency (MHz)				706.5	710	713.5
5	QPSK	1	0	22.36	22.45	22.35
5	QPSK	1	12	22.30	22.39	22.31
5	QPSK	1	24	22.21	22.31	22.24
5	QPSK	12	0	21.40	21.44	21.35
5	QPSK	12	7	21.33	21.39	21.28
5	QPSK	12	13	21.30	21.35	21.29
5	QPSK	25	0	21.28	21.29	21.23
5	16QAM	1	0	21.24	21.33	21.28
5	16QAM	1	12	21.19	21.27	21.24
5	16QAM	1	24	21.09	21.19	21.15
5	16QAM	12	0	20.61	20.49	20.59
5	16QAM	12	7	20.55	20.53	20.50
5	16QAM	12	13	20.41	20.49	20.42
5	16QAM	25	0	20.44	20.51	20.37



LTE Band 38						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				37850	38000	38150
Frequency (MHz)				2580	2595	2610
20	QPSK	1	0	21.89	21.80	21.87
20	QPSK	1	49	21.69	21.72	21.76
20	QPSK	1	99	21.70	20.63	21.66
20	QPSK	50	0	20.92	20.80	20.88
20	QPSK	50	24	20.81	20.76	20.72
20	QPSK	50	50	20.80	20.66	20.63
20	QPSK	100	0	20.77	20.62	20.56
20	16QAM	1	0	21.08	20.96	21.00
20	16QAM	1	49	20.90	20.78	20.89
20	16QAM	1	99	20.99	20.81	20.83
20	16QAM	50	0	19.79	19.70	19.68
20	16QAM	50	24	19.72	19.63	19.71
20	16QAM	50	50	19.61	19.56	19.58
20	16QAM	100	0	19.65	19.60	19.55



LTE Band 38						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				37825	38000	38175
Frequency (MHz)				2577.5	2595	2612.5
15	QPSK	1	0	21.77	21.68	21.75
15	QPSK	1	37	21.57	21.60	21.64
15	QPSK	1	74	21.58	20.51	21.54
15	QPSK	36	0	20.80	20.68	20.76
15	QPSK	36	20	20.69	20.64	20.60
15	QPSK	36	39	20.68	20.54	20.51
15	QPSK	75	0	20.65	20.50	20.44
15	16QAM	1	0	20.96	20.84	20.88
15	16QAM	1	37	20.78	20.66	20.77
15	16QAM	1	74	20.87	20.69	20.71
15	16QAM	36	0	19.67	19.58	19.56
15	16QAM	36	20	19.60	19.51	19.59
15	16QAM	36	39	19.49	19.44	19.46
15	16QAM	75	0	19.53	19.48	19.43



LTE Band 38						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				37800	38000	38200
Frequency (MHz)				2575	2595	2615
10	QPSK	1	0	21.66	21.57	21.64
10	QPSK	1	25	21.46	21.49	21.53
10	QPSK	1	49	21.47	20.40	21.43
10	QPSK	25	0	20.69	20.57	20.65
10	QPSK	25	12	20.58	20.53	20.49
10	QPSK	25	25	20.57	20.43	20.40
10	QPSK	50	0	20.54	20.39	20.33
10	16QAM	1	0	20.85	20.73	20.77
10	16QAM	1	25	20.67	20.55	20.66
10	16QAM	1	49	20.76	20.58	20.60
10	16QAM	25	0	19.56	19.47	19.45
10	16QAM	25	12	19.49	19.40	19.48
10	16QAM	25	25	19.38	19.33	19.35
10	16QAM	50	0	19.42	19.37	19.32



LTE Band 38						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				37775	38000	38225
Frequency (MHz)				2572.5	2595	2617.5
5	QPSK	1	0	21.57	21.48	21.55
5	QPSK	1	12	21.37	21.40	21.44
5	QPSK	1	24	21.38	20.31	21.34
5	QPSK	12	0	20.60	20.48	20.56
5	QPSK	12	7	20.49	20.44	20.40
5	QPSK	12	13	20.48	20.34	20.31
5	QPSK	25	0	20.45	20.30	20.24
5	16QAM	1	0	20.76	20.64	20.68
5	16QAM	1	12	20.58	20.46	20.57
5	16QAM	1	24	20.67	20.49	20.51
5	16QAM	12	0	19.47	19.38	19.36
5	16QAM	12	7	19.40	19.31	19.39
5	16QAM	12	13	19.29	19.24	19.26
5	16QAM	25	0	19.33	19.28	19.23



LTE Band 40, Block A						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				/	38750	/
Frequency (MHz)				/	2310	/
10	QPSK	1	0	/	22.96	/
10	QPSK	1	25	/	22.86	/
10	QPSK	1	49	/	22.65	/
10	QPSK	25	0	/	21.98	/
10	QPSK	25	12	/	21.84	/
10	QPSK	25	25	/	21.68	/
10	QPSK	50	0	/	22.15	/
10	16QAM	1	0	/	21.95	/
10	16QAM	1	25	/	21.75	/
10	16QAM	1	49	/	21.63	/
10	16QAM	25	0	/	20.94	/
10	16QAM	25	12	/	20.90	/
10	16QAM	25	25	/	20.76	/
10	16QAM	50	0	/	20.62	/



LTE Band 40, Block A						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				38725	38750	38775
Frequency (MHz)				2307.5	2310	2312.5
5	QPSK	1	0	22.82	22.90	22.75
5	QPSK	1	12	22.77	22.78	22.70
5	QPSK	1	24	22.60	22.63	22.62
5	QPSK	12	0	21.92	21.80	21.88
5	QPSK	12	7	21.81	21.76	21.72
5	QPSK	12	13	21.80	21.66	21.63
5	QPSK	25	0	21.77	21.62	21.56
5	16QAM	1	0	22.08	21.96	22.00
5	16QAM	1	12	21.90	21.78	21.89
5	16QAM	1	24	21.99	21.81	21.83
5	16QAM	12	0	20.79	20.70	20.68
5	16QAM	12	7	20.72	20.63	20.71
5	16QAM	12	13	20.61	20.56	20.58
5	16QAM	25	0	20.65	20.60	20.55



LTE Band 40, Block B						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				/	39200	/
Frequency (MHz)				/	2355	/
10	QPSK	1	0	/	23.06	/
10	QPSK	1	25	/	22.95	/
10	QPSK	1	49	/	22.75	/
10	QPSK	25	0	/	22.10	/
10	QPSK	25	12	/	22.07	/
10	QPSK	25	25	/	22.18	/
10	QPSK	50	0	/	21.98	/
10	16QAM	1	0	/	21.97	/
10	16QAM	1	25	/	21.90	/
10	16QAM	1	49	/	21.86	/
10	16QAM	25	0	/	21.27	/
10	16QAM	25	12	/	21.23	/
10	16QAM	25	25	/	21.00	/
10	16QAM	50	0	/	20.85	/



LTE Band 40, Block B						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				39175	39200	39225
Frequency (MHz)				2352.5	2355	2357.5
5	QPSK	1	0	22.91	22.92	22.87
5	QPSK	1	12	22.89	22.90	22.82
5	QPSK	1	24	22.72	22.75	22.74
5	QPSK	12	0	22.04	21.92	22.00
5	QPSK	12	7	21.93	21.88	21.84
5	QPSK	12	13	21.92	21.78	21.75
5	QPSK	25	0	21.89	21.74	21.68
5	16QAM	1	0	22.20	22.08	22.12
5	16QAM	1	12	22.02	21.90	22.01
5	16QAM	1	24	22.11	21.93	21.95
5	16QAM	12	0	20.91	20.82	20.80
5	16QAM	12	7	20.84	20.75	20.83
5	16QAM	12	13	20.73	20.68	20.70
5	16QAM	25	0	20.77	20.72	20.67



LTE Band 41						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				39750	40620	41490
Frequency (MHz)				2506	2593	2680
20	QPSK	1	0	22.34	22.43	22.37
20	QPSK	1	49	22.30	22.35	22.23
20	QPSK	1	99	22.25	22.29	22.26
20	QPSK	50	0	21.38	21.41	21.48
20	QPSK	50	24	21.36	21.35	21.46
20	QPSK	50	50	21.30	21.39	21.39
20	QPSK	100	0	21.34	21.40	21.28
20	16QAM	1	0	21.12	21.21	21.15
20	16QAM	1	49	21.08	21.13	21.01
20	16QAM	1	99	21.03	21.07	21.04
20	16QAM	50	0	20.16	20.19	20.26
20	16QAM	50	24	20.14	20.13	20.24
20	16QAM	50	50	20.08	20.17	20.17
20	16QAM	100	0	20.12	20.18	20.06



LTE Band 41						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				39725	40620	41515
Frequency (MHz)				2503.5	2593	2682.5
15	QPSK	1	0	22.25	22.34	22.28
15	QPSK	1	37	22.21	22.26	22.14
15	QPSK	1	74	22.16	22.20	22.17
15	QPSK	36	0	21.29	21.32	21.39
15	QPSK	36	20	21.27	21.26	21.37
15	QPSK	36	39	21.21	21.30	21.30
15	QPSK	75	0	21.25	21.31	21.19
15	16QAM	1	0	21.04	21.13	21.07
15	16QAM	1	37	21.00	21.05	20.93
15	16QAM	1	74	20.95	20.99	20.96
15	16QAM	36	0	20.08	20.11	20.18
15	16QAM	36	20	20.06	20.05	20.16
15	16QAM	36	39	20.00	20.09	20.09
15	16QAM	75	0	20.04	20.10	19.98



LTE Band 41						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				39700	40620	41540
Frequency (MHz)				2501	2593	2685
10	QPSK	1	0	22.13	22.22	22.16
10	QPSK	1	25	22.09	22.14	22.02
10	QPSK	1	49	22.04	22.08	22.05
10	QPSK	25	0	21.17	21.20	21.27
10	QPSK	25	12	21.15	21.14	21.25
10	QPSK	25	25	21.09	21.18	21.18
10	QPSK	50	0	21.13	21.19	21.07
10	16QAM	1	0	20.92	21.01	20.95
10	16QAM	1	25	20.88	20.93	20.81
10	16QAM	1	49	20.83	20.87	20.84
10	16QAM	25	0	19.96	19.99	20.06
10	16QAM	25	12	19.94	19.93	20.04
10	16QAM	25	25	19.88	19.97	19.97
10	16QAM	50	0	19.92	19.98	19.86



LTE Band 41						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				39675	40620	41565
Frequency (MHz)				2498.5	2593	2687.5
5	QPSK	1	0	22.02	22.11	22.05
5	QPSK	1	12	21.98	22.03	21.91
5	QPSK	1	24	21.93	21.97	21.94
5	QPSK	12	0	21.06	21.09	21.16
5	QPSK	12	7	21.04	21.03	21.14
5	QPSK	12	13	20.98	21.07	21.07
5	QPSK	25	0	21.02	21.08	20.96
5	16QAM	1	0	20.81	20.90	20.84
5	16QAM	1	12	20.77	20.82	20.70
5	16QAM	1	24	20.72	20.76	20.73
5	16QAM	12	0	19.85	19.88	19.95
5	16QAM	12	7	19.83	19.82	19.93
5	16QAM	12	13	19.77	19.86	19.86
5	16QAM	25	0	19.81	19.87	19.75



Effective Radiated Power and Effective Isotropic Radiated Power

LTE Band 2				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				18700		18900		19100	
Frequency (MHz)				1860		1880		1900	
				dBm	W	dBm	W	dBm	W
20	QPSK	1	0	22.92	0.196	23.01	0.200	22.98	0.199
20	QPSK	1	49	22.77	0.189	22.84	0.192	22.82	0.191
20	QPSK	1	99	22.63	0.183	22.70	0.186	22.68	0.185
20	QPSK	50	0	21.80	0.151	21.90	0.155	21.82	0.152
20	QPSK	50	24	21.80	0.151	21.87	0.154	21.85	0.153
20	QPSK	50	50	21.67	0.147	21.72	0.149	21.70	0.148
20	QPSK	100	0	21.70	0.148	21.73	0.149	21.65	0.146
20	16QAM	1	0	21.63	0.146	21.65	0.146	21.60	0.145
20	16QAM	1	49	21.48	0.141	21.58	0.144	21.53	0.142
20	16QAM	1	99	21.32	0.136	21.38	0.137	21.35	0.136
20	16QAM	50	0	20.68	0.117	20.67	0.117	20.70	0.117
20	16QAM	50	24	20.62	0.115	20.63	0.116	20.60	0.115
20	16QAM	50	50	20.73	0.118	20.70	0.117	20.69	0.117
20	16QAM	100	0	20.70	0.117	20.74	0.119	20.67	0.117



LTE Band 2				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				18675		18900		19125	
Frequency (MHz)				1857.5		1880		1902.5	
				dBm	W	dBm	W	dBm	W
15	QPSK	1	0	22.81	0.191	22.90	0.195	22.87	0.194
15	QPSK	1	37	22.66	0.185	22.73	0.187	22.71	0.187
15	QPSK	1	74	22.52	0.179	22.59	0.182	22.57	0.181
15	QPSK	36	0	21.69	0.148	21.79	0.151	21.71	0.148
15	QPSK	36	20	21.69	0.148	21.76	0.150	21.74	0.149
15	QPSK	36	39	21.56	0.143	21.61	0.145	21.59	0.144
15	QPSK	75	0	21.59	0.144	21.62	0.145	21.54	0.143
15	16QAM	1	0	21.52	0.142	21.54	0.143	21.49	0.141
15	16QAM	1	37	21.37	0.137	21.47	0.140	21.42	0.139
15	16QAM	1	74	21.21	0.132	21.27	0.134	21.24	0.133
15	16QAM	36	0	20.57	0.114	20.56	0.114	20.59	0.115
15	16QAM	36	20	20.51	0.112	20.52	0.113	20.49	0.112
15	16QAM	36	39	20.62	0.115	20.59	0.115	20.58	0.114
15	16QAM	75	0	20.59	0.115	20.63	0.116	20.56	0.114



LTE Band 2				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				18650		18900		19150	
Frequency (MHz)				1855		1880		1905	
				dBm	W	dBm	W	dBm	W
10	QPSK	1	0	22.68	0.185	22.77	0.189	22.74	0.188
10	QPSK	1	25	22.53	0.179	22.60	0.182	22.58	0.181
10	QPSK	1	49	22.39	0.173	22.46	0.176	22.44	0.175
10	QPSK	25	0	21.56	0.143	21.66	0.147	21.58	0.144
10	QPSK	25	12	21.56	0.143	21.63	0.146	21.61	0.145
10	QPSK	25	25	21.43	0.139	21.48	0.141	21.46	0.140
10	QPSK	50	0	21.46	0.140	21.49	0.141	21.41	0.138
10	16QAM	1	0	21.39	0.138	21.41	0.138	21.36	0.137
10	16QAM	1	25	21.24	0.133	21.34	0.136	21.29	0.135
10	16QAM	1	49	21.08	0.128	21.14	0.130	21.11	0.129
10	16QAM	25	0	20.44	0.111	20.43	0.110	20.46	0.111
10	16QAM	25	12	20.38	0.109	20.39	0.109	20.36	0.109
10	16QAM	25	25	20.49	0.112	20.46	0.111	20.45	0.111
10	16QAM	50	0	20.46	0.111	20.50	0.112	20.43	0.110



LTE Band 2				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				18625		18900		19175	
Frequency (MHz)				1852.5		1880		1907.5	
				dBm	W	dBm	W	dBm	W
5	QPSK	1	0	22.59	0.182	22.68	0.185	22.65	0.184
5	QPSK	1	12	22.44	0.175	22.51	0.178	22.49	0.177
5	QPSK	1	24	22.30	0.170	22.37	0.173	22.35	0.172
5	QPSK	12	0	21.47	0.140	21.57	0.144	21.49	0.141
5	QPSK	12	7	21.47	0.140	21.54	0.143	21.52	0.142
5	QPSK	12	13	21.34	0.136	21.39	0.138	21.37	0.137
5	QPSK	25	0	21.37	0.137	21.40	0.138	21.32	0.136
5	16QAM	1	0	21.30	0.135	21.32	0.136	21.27	0.134
5	16QAM	1	12	21.15	0.130	21.25	0.133	21.20	0.132
5	16QAM	1	24	20.99	0.126	21.05	0.127	21.02	0.126
5	16QAM	12	0	20.35	0.108	20.34	0.108	20.37	0.109
5	16QAM	12	7	20.29	0.107	20.30	0.107	20.27	0.106
5	16QAM	12	13	20.40	0.110	20.37	0.109	20.36	0.109
5	16QAM	25	0	20.37	0.109	20.41	0.110	20.34	0.108



LTE Band 2				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				18615		18900		19185	
Frequency (MHz)				1851.5		1880		1908.5	
				dBm	W	dBm	W	dBm	W
3	QPSK	1	0	22.47	0.177	22.56	0.180	22.53	0.179
3	QPSK	1	8	22.32	0.171	22.39	0.173	22.37	0.173
3	QPSK	1	14	22.18	0.165	22.25	0.168	22.23	0.167
3	QPSK	8	0	21.35	0.136	21.45	0.140	21.37	0.137
3	QPSK	8	4	21.35	0.136	21.42	0.139	21.40	0.138
3	QPSK	8	7	21.22	0.132	21.27	0.134	21.25	0.133
3	QPSK	15	0	21.25	0.133	21.28	0.134	21.20	0.132
3	16QAM	1	0	21.18	0.131	21.20	0.132	21.15	0.130
3	16QAM	1	8	21.03	0.127	21.13	0.130	21.08	0.128
3	16QAM	1	14	20.87	0.122	20.93	0.124	20.90	0.123
3	16QAM	8	0	20.23	0.105	20.22	0.105	20.25	0.106
3	16QAM	8	4	20.17	0.104	20.18	0.104	20.15	0.104
3	16QAM	8	7	20.28	0.107	20.25	0.106	20.24	0.106
3	16QAM	15	0	20.25	0.106	20.29	0.107	20.22	0.105



LTE Band 2				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				18607		18900		19193	
Frequency (MHz)				1850.7		1880		1909.3	
				dBm	W	dBm	W	dBm	W
1.4	QPSK	1	0	22.40	0.174	22.49	0.177	22.46	0.176
1.4	QPSK	1	3	22.25	0.168	22.32	0.171	22.30	0.170
1.4	QPSK	1	5	22.11	0.163	22.18	0.165	22.16	0.164
1.4	QPSK	3	0	21.28	0.134	21.38	0.137	21.30	0.135
1.4	QPSK	3	1	21.28	0.134	21.35	0.136	21.33	0.136
1.4	QPSK	3	3	21.15	0.130	21.20	0.132	21.18	0.131
1.4	QPSK	6	0	21.18	0.131	21.21	0.132	21.13	0.130
1.4	16QAM	1	0	21.11	0.129	21.13	0.130	21.08	0.128
1.4	16QAM	1	3	20.96	0.125	21.06	0.128	21.01	0.126
1.4	16QAM	1	5	20.80	0.120	20.86	0.122	20.83	0.121
1.4	16QAM	3	0	20.16	0.104	20.15	0.104	20.18	0.104
1.4	16QAM	3	1	20.10	0.102	20.11	0.103	20.08	0.102
1.4	16QAM	3	3	20.21	0.105	20.18	0.104	20.17	0.104
1.4	16QAM	6	0	20.18	0.104	20.22	0.105	20.15	0.104



LTE Band 4				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20050		20175		20300	
Frequency (MHz)				1720		1732.5		1745	
				dBm	W	dBm	W	dBm	W
20	QPSK	1	0	22.47	0.177	22.57	0.181	22.54	0.179
20	QPSK	1	49	22.43	0.175	22.48	0.177	22.43	0.175
20	QPSK	1	99	22.40	0.174	22.40	0.174	22.36	0.172
20	QPSK	50	0	21.41	0.138	21.52	0.142	21.47	0.140
20	QPSK	50	24	21.40	0.138	21.46	0.140	21.38	0.137
20	QPSK	50	50	21.31	0.135	21.35	0.136	21.32	0.136
20	QPSK	100	0	21.34	0.136	21.36	0.137	21.39	0.138
20	16QAM	1	0	21.15	0.130	21.23	0.133	21.26	0.134
20	16QAM	1	49	21.10	0.129	21.16	0.131	21.14	0.130
20	16QAM	1	99	21.08	0.128	21.07	0.128	21.13	0.130
20	16QAM	50	0	20.45	0.111	20.41	0.110	20.46	0.111
20	16QAM	50	24	20.33	0.108	20.50	0.112	20.40	0.110
20	16QAM	50	50	20.40	0.110	20.37	0.109	20.45	0.111
20	16QAM	100	0	20.33	0.108	20.30	0.107	20.41	0.110



LTE Band 4				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20025		20175		20325	
Frequency (MHz)				1717.5		1732.5		1747.5	
				dBm	W	dBm	W	dBm	W
15	QPSK	1	0	22.35	0.172	22.45	0.176	22.42	0.175
15	QPSK	1	37	22.31	0.170	22.36	0.172	22.31	0.170
15	QPSK	1	74	22.28	0.169	22.28	0.169	22.24	0.167
15	QPSK	36	0	21.29	0.135	21.40	0.138	21.35	0.136
15	QPSK	36	20	21.28	0.134	21.34	0.136	21.26	0.134
15	QPSK	36	39	21.19	0.132	21.23	0.133	21.20	0.132
15	QPSK	75	0	21.22	0.132	21.24	0.133	21.27	0.134
15	16QAM	1	0	21.03	0.127	21.11	0.129	21.14	0.130
15	16QAM	1	37	20.98	0.125	21.04	0.127	21.02	0.126
15	16QAM	1	74	20.96	0.125	20.95	0.124	21.01	0.126
15	16QAM	36	0	20.33	0.108	20.29	0.107	20.34	0.108
15	16QAM	36	20	20.21	0.105	20.38	0.109	20.28	0.107
15	16QAM	36	39	20.28	0.107	20.25	0.106	20.33	0.108
15	16QAM	75	0	20.21	0.105	20.18	0.104	20.29	0.107



LTE Band 4				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20000		20175		20350	
Frequency (MHz)				1715		1732.5		1750	
				dBm	W	dBm	W	dBm	W
10	QPSK	1	0	22.26	0.168	22.36	0.172	22.33	0.171
10	QPSK	1	25	22.22	0.167	22.27	0.169	22.22	0.167
10	QPSK	1	49	22.19	0.166	22.19	0.166	22.15	0.164
10	QPSK	25	0	21.20	0.132	21.31	0.135	21.26	0.134
10	QPSK	25	12	21.19	0.132	21.25	0.133	21.17	0.131
10	QPSK	25	25	21.10	0.129	21.14	0.130	21.11	0.129
10	QPSK	50	0	21.13	0.130	21.15	0.130	21.18	0.131
10	16QAM	1	0	20.94	0.124	21.02	0.126	21.05	0.127
10	16QAM	1	25	20.89	0.123	20.95	0.124	20.93	0.124
10	16QAM	1	49	20.87	0.122	20.86	0.122	20.92	0.124
10	16QAM	25	0	20.24	0.106	20.20	0.105	20.25	0.106
10	16QAM	25	12	20.12	0.103	20.29	0.107	20.19	0.104
10	16QAM	25	25	20.19	0.104	20.16	0.104	20.24	0.106
10	16QAM	50	0	20.12	0.103	20.09	0.102	20.20	0.105



LTE Band 4				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				19975		20175		20375	
Frequency (MHz)				1712.5		1732.5		1752.5	
				dBm	W	dBm	W	dBm	W
5	QPSK	1	0	22.15	0.164	22.25	0.168	22.22	0.167
5	QPSK	1	12	22.11	0.163	22.16	0.164	22.11	0.163
5	QPSK	1	24	22.08	0.161	22.08	0.161	22.04	0.160
5	QPSK	12	0	21.09	0.129	21.20	0.132	21.15	0.130
5	QPSK	12	7	21.08	0.128	21.14	0.130	21.06	0.128
5	QPSK	12	13	20.99	0.126	21.03	0.127	21.00	0.126
5	QPSK	25	0	21.02	0.126	21.04	0.127	21.07	0.128
5	16QAM	1	0	20.83	0.121	20.91	0.123	20.94	0.124
5	16QAM	1	12	20.78	0.120	20.84	0.121	20.82	0.121
5	16QAM	1	24	20.76	0.119	20.75	0.119	20.81	0.121
5	16QAM	12	0	20.13	0.103	20.09	0.102	20.14	0.103
5	16QAM	12	7	20.01	0.100	20.18	0.104	20.08	0.102
5	16QAM	12	13	20.08	0.102	20.05	0.101	20.13	0.103
5	16QAM	25	0	20.01	0.100	19.98	0.100	20.09	0.102



LTE Band 4				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				19965		20175		20385	
Frequency (MHz)				1711.5		1732.5		1753.5	
				dBm	W	dBm	W	dBm	W
3	QPSK	1	0	22.03	0.160	22.13	0.163	22.10	0.162
3	QPSK	1	8	21.99	0.158	22.04	0.160	21.99	0.158
3	QPSK	1	14	21.96	0.157	21.96	0.157	21.92	0.156
3	QPSK	8	0	20.97	0.125	21.08	0.128	21.03	0.127
3	QPSK	8	4	20.96	0.125	21.02	0.126	20.94	0.124
3	QPSK	8	7	20.87	0.122	20.91	0.123	20.88	0.122
3	QPSK	15	0	20.90	0.123	20.92	0.124	20.95	0.124
3	16QAM	1	0	20.71	0.118	20.79	0.120	20.82	0.121
3	16QAM	1	8	20.66	0.116	20.72	0.118	20.70	0.117
3	16QAM	1	14	20.64	0.116	20.63	0.116	20.69	0.117
3	16QAM	8	0	20.01	0.100	19.97	0.099	20.02	0.100
3	16QAM	8	4	19.89	0.097	20.06	0.101	19.96	0.099
3	16QAM	8	7	19.96	0.099	19.93	0.098	20.01	0.100
3	16QAM	15	0	19.89	0.097	19.86	0.097	19.97	0.099



LTE Band 4				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				19957		20175		20393	
Frequency (MHz)				1710.7		1732.5		1754.3	
				dBm	W	dBm	W	dBm	W
1.4	QPSK	1	0	21.92	0.156	22.02	0.159	21.99	0.158
1.4	QPSK	1	3	21.88	0.154	21.93	0.156	21.88	0.154
1.4	QPSK	1	5	21.85	0.153	21.85	0.153	21.81	0.152
1.4	QPSK	3	0	20.86	0.122	20.97	0.125	20.92	0.124
1.4	QPSK	3	1	20.85	0.122	20.91	0.123	20.83	0.121
1.4	QPSK	3	3	20.76	0.119	20.80	0.120	20.77	0.119
1.4	QPSK	6	0	20.79	0.120	20.81	0.121	20.84	0.121
1.4	16QAM	1	0	20.60	0.115	20.68	0.117	20.71	0.118
1.4	16QAM	1	3	20.55	0.114	20.61	0.115	20.59	0.115
1.4	16QAM	1	5	20.53	0.113	20.52	0.113	20.58	0.114
1.4	16QAM	3	0	19.90	0.098	19.86	0.097	19.91	0.098
1.4	16QAM	3	1	19.78	0.095	19.95	0.099	19.85	0.097
1.4	16QAM	3	3	19.85	0.097	19.82	0.096	19.90	0.098
1.4	16QAM	6	0	19.78	0.095	19.75	0.094	19.86	0.097



LTE Band 5				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20450		20525		20600	
Frequency (MHz)				829		836.5		844	
				dBm	W	dBm	W	dBm	W
10	QPSK	1	0	20.72	0.118	20.58	0.114	20.66	0.116
10	QPSK	1	25	20.53	0.113	20.45	0.111	20.50	0.112
10	QPSK	1	49	20.55	0.114	20.56	0.114	20.47	0.111
10	QPSK	25	0	19.71	0.094	19.70	0.093	19.65	0.092
10	QPSK	25	12	19.55	0.090	19.57	0.091	19.60	0.091
10	QPSK	25	25	19.58	0.091	19.53	0.090	19.61	0.091
10	QPSK	50	0	19.53	0.090	19.50	0.089	19.45	0.088
10	16QAM	1	0	19.52	0.090	19.40	0.087	19.38	0.087
10	16QAM	1	25	19.45	0.088	19.45	0.088	19.43	0.088
10	16QAM	1	49	19.32	0.086	19.24	0.084	19.25	0.084
10	16QAM	25	0	18.56	0.072	18.49	0.071	18.61	0.073
10	16QAM	25	12	18.63	0.073	18.56	0.072	18.52	0.071
10	16QAM	25	25	18.45	0.070	18.47	0.070	18.48	0.070
10	16QAM	50	0	18.39	0.069	18.40	0.069	18.43	0.070



LTE Band 5				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20425		20525		20625	
Frequency (MHz)				826.5		836.5		846.5	
				dBm	W	dBm	W	dBm	W
5	QPSK	1	0	20.60	0.115	20.46	0.111	20.54	0.113
5	QPSK	1	12	20.41	0.110	20.33	0.108	20.38	0.109
5	QPSK	1	24	20.43	0.110	20.44	0.111	20.35	0.108
5	QPSK	12	0	19.49	0.089	19.58	0.091	19.53	0.090
5	QPSK	12	7	19.59	0.091	19.45	0.088	19.48	0.089
5	QPSK	12	13	19.46	0.088	19.41	0.087	19.49	0.089
5	QPSK	25	0	19.41	0.087	19.38	0.087	19.33	0.086
5	16QAM	1	0	19.40	0.087	19.28	0.085	19.26	0.084
5	16QAM	1	12	19.33	0.086	19.33	0.086	19.31	0.085
5	16QAM	1	24	19.20	0.083	19.12	0.082	19.13	0.082
5	16QAM	12	0	18.44	0.070	18.37	0.069	18.49	0.071
5	16QAM	12	7	18.51	0.071	18.44	0.070	18.40	0.069
5	16QAM	12	13	18.33	0.068	18.35	0.068	18.36	0.069
5	16QAM	25	0	18.27	0.067	18.28	0.067	18.31	0.068



LTE Band 5				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20415		20525		20635	
Frequency (MHz)				825.5		836.5		847.5	
				dBm	W	dBm	W	dBm	W
3	QPSK	1	0	20.51	0.112	20.37	0.109	20.45	0.111
3	QPSK	1	8	20.32	0.108	20.24	0.106	20.29	0.107
3	QPSK	1	14	20.34	0.108	20.35	0.108	20.26	0.106
3	QPSK	8	0	19.40	0.087	19.49	0.089	19.44	0.088
3	QPSK	8	4	19.50	0.089	19.36	0.086	19.39	0.087
3	QPSK	8	7	19.37	0.086	19.32	0.086	19.40	0.087
3	QPSK	15	0	19.32	0.086	19.29	0.085	19.24	0.084
3	16QAM	1	0	19.31	0.085	19.19	0.083	19.17	0.083
3	16QAM	1	8	19.24	0.084	19.24	0.084	19.22	0.084
3	16QAM	1	14	19.11	0.081	19.03	0.080	19.04	0.080
3	16QAM	8	0	18.35	0.068	18.28	0.067	18.40	0.069
3	16QAM	8	4	18.42	0.070	18.35	0.068	18.31	0.068
3	16QAM	8	7	18.24	0.067	18.26	0.067	18.27	0.067
3	16QAM	15	0	18.18	0.066	18.19	0.066	18.22	0.066



LTE Band 5				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20407		20525		20643	
Frequency (MHz)				824.7		836.5		848.3	
				dBm	W	dBm	W	dBm	W
1.4	QPSK	1	0	20.39	0.109	20.25	0.106	20.33	0.108
1.4	QPSK	1	3	20.20	0.105	20.12	0.103	20.17	0.104
1.4	QPSK	1	5	20.22	0.105	20.23	0.105	20.14	0.103
1.4	QPSK	3	0	19.28	0.085	19.37	0.086	19.32	0.086
1.4	QPSK	3	1	19.38	0.087	19.24	0.084	19.27	0.085
1.4	QPSK	3	3	19.25	0.084	19.20	0.083	19.28	0.085
1.4	QPSK	6	0	19.20	0.083	19.17	0.083	19.12	0.082
1.4	16QAM	1	0	19.19	0.083	19.07	0.081	19.05	0.080
1.4	16QAM	1	3	19.12	0.082	19.12	0.082	19.10	0.081
1.4	16QAM	1	5	18.99	0.079	18.91	0.078	18.92	0.078
1.4	16QAM	3	0	18.23	0.067	18.16	0.065	18.28	0.067
1.4	16QAM	3	1	18.30	0.068	18.23	0.067	18.19	0.066
1.4	16QAM	3	3	18.12	0.065	18.14	0.065	18.15	0.065
1.4	16QAM	6	0	18.06	0.064	18.07	0.064	18.10	0.065



LTE Band 7				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20850		21100		21350	
Frequency (MHz)				2510		2535		2560	
				dBm	W	dBm	W	dBm	W
20	QPSK	1	0	22.76	0.189	22.80	0.191	22.70	0.186
20	QPSK	1	49	22.68	0.185	22.72	0.187	22.66	0.185
20	QPSK	1	99	22.60	0.182	22.68	0.185	22.63	0.183
20	QPSK	50	0	21.59	0.144	21.63	0.146	21.60	0.145
20	QPSK	50	24	21.56	0.143	21.53	0.142	21.57	0.144
20	QPSK	50	50	21.48	0.141	21.55	0.143	21.43	0.139
20	QPSK	100	0	21.40	0.138	21.44	0.139	21.41	0.138
20	16QAM	1	0	21.61	0.145	21.65	0.146	21.55	0.143
20	16QAM	1	49	21.50	0.141	21.54	0.143	21.52	0.142
20	16QAM	1	99	21.40	0.138	21.45	0.140	21.41	0.138
20	16QAM	50	0	20.63	0.116	20.68	0.117	20.60	0.115
20	16QAM	50	24	20.55	0.114	20.65	0.116	20.58	0.114
20	16QAM	50	50	20.50	0.112	20.60	0.115	20.50	0.112
20	16QAM	100	0	20.42	0.110	20.51	0.112	20.48	0.112



LTE Band 7				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20825		21100		21375	
Frequency (MHz)				2507.5		2535		2562.5	
				dBm	W	dBm	W	dBm	W
15	QPSK	1	0	22.64	0.184	22.68	0.185	22.58	0.181
15	QPSK	1	37	22.56	0.180	22.60	0.182	22.54	0.179
15	QPSK	1	74	22.48	0.177	22.56	0.180	22.51	0.178
15	QPSK	36	0	21.50	0.141	21.55	0.143	21.51	0.142
15	QPSK	36	20	21.49	0.141	21.48	0.141	21.45	0.140
15	QPSK	36	39	21.36	0.137	21.43	0.139	21.31	0.135
15	QPSK	75	0	21.28	0.134	21.32	0.136	21.29	0.135
15	16QAM	1	0	21.49	0.141	21.53	0.142	21.43	0.139
15	16QAM	1	37	21.38	0.137	21.42	0.139	21.40	0.138
15	16QAM	1	74	21.28	0.134	21.33	0.136	21.29	0.135
15	16QAM	36	0	20.51	0.112	20.56	0.114	20.48	0.112
15	16QAM	36	20	20.43	0.110	20.53	0.113	20.46	0.111
15	16QAM	36	39	20.38	0.109	20.48	0.112	20.38	0.109
15	16QAM	75	0	20.30	0.107	20.39	0.109	20.36	0.109



LTE Band 7				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20800		21100		21400	
Frequency (MHz)				2505		2535		2565	
				dBm	W	dBm	W	dBm	W
10	QPSK	1	0	22.53	0.179	22.57	0.181	22.47	0.177
10	QPSK	1	25	22.45	0.176	22.49	0.177	22.43	0.175
10	QPSK	1	49	22.37	0.173	22.45	0.176	22.40	0.174
10	QPSK	25	0	21.39	0.138	21.44	0.139	21.40	0.138
10	QPSK	25	12	21.38	0.137	21.37	0.137	21.34	0.136
10	QPSK	25	25	21.25	0.133	21.32	0.136	21.20	0.132
10	QPSK	50	0	21.17	0.131	21.21	0.132	21.18	0.131
10	16QAM	1	0	21.38	0.137	21.42	0.139	21.32	0.136
10	16QAM	1	25	21.27	0.134	21.31	0.135	21.29	0.135
10	16QAM	1	49	21.17	0.131	21.22	0.132	21.18	0.131
10	16QAM	25	0	20.40	0.110	20.45	0.111	20.37	0.109
10	16QAM	25	12	20.32	0.108	20.42	0.110	20.35	0.108
10	16QAM	25	25	20.27	0.106	20.37	0.109	20.27	0.106
10	16QAM	50	0	20.19	0.104	20.28	0.107	20.25	0.106



LTE Band 7				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20775		21100		21425	
Frequency (MHz)				2502.5		2535		2567.5	
				dBm	W	dBm	W	dBm	W
5	QPSK	1	0	22.41	0.174	22.45	0.176	22.35	0.172
5	QPSK	1	12	22.33	0.171	22.37	0.173	22.31	0.170
5	QPSK	1	24	22.25	0.168	22.33	0.171	22.28	0.169
5	QPSK	12	0	21.27	0.134	21.32	0.136	21.28	0.134
5	QPSK	12	7	21.26	0.134	21.25	0.133	21.22	0.132
5	QPSK	12	13	21.13	0.130	21.20	0.132	21.08	0.128
5	QPSK	25	0	21.05	0.127	21.09	0.129	21.06	0.128
5	16QAM	1	0	21.26	0.134	21.30	0.135	21.20	0.132
5	16QAM	1	12	21.15	0.130	21.19	0.132	21.17	0.131
5	16QAM	1	24	21.05	0.127	21.10	0.129	21.06	0.128
5	16QAM	12	0	20.28	0.107	20.33	0.108	20.25	0.106
5	16QAM	12	7	20.20	0.105	20.30	0.107	20.23	0.105
5	16QAM	12	13	20.15	0.104	20.25	0.106	20.15	0.104
5	16QAM	25	0	20.07	0.102	20.16	0.104	20.13	0.103



LTE Band 12				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				23060		23095		23130	
Frequency (MHz)				704		707.5		711	
				dBm	W	dBm	W	dBm	W
10	QPSK	1	0	20.39	0.109	20.46	0.111	20.41	0.110
10	QPSK	1	25	20.33	0.108	20.35	0.108	20.36	0.109
10	QPSK	1	49	20.21	0.105	20.18	0.104	20.25	0.106
10	QPSK	25	0	19.41	0.087	19.44	0.088	19.35	0.086
10	QPSK	25	12	19.38	0.087	19.42	0.087	19.40	0.087
10	QPSK	25	25	19.35	0.086	19.37	0.086	19.29	0.085
10	QPSK	50	0	19.29	0.085	19.31	0.085	19.25	0.084
10	16QAM	1	0	19.40	0.087	19.43	0.088	19.39	0.087
10	16QAM	1	25	19.34	0.086	19.30	0.085	19.25	0.084
10	16QAM	1	49	19.25	0.084	19.20	0.083	19.21	0.083
10	16QAM	25	0	18.41	0.069	18.48	0.070	18.38	0.069
10	16QAM	25	12	18.45	0.070	18.37	0.069	18.34	0.068
10	16QAM	25	25	18.30	0.068	18.28	0.067	18.23	0.067
10	16QAM	50	0	18.25	0.067	18.22	0.066	18.16	0.065



LTE Band 12				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				23035		23095		23155	
Frequency (MHz)				701.5		707.5		713.5	
				dBm	W	dBm	W	dBm	W
5	QPSK	1	0	20.27	0.106	20.34	0.108	20.29	0.107
5	QPSK	1	12	20.21	0.105	20.23	0.105	20.24	0.106
5	QPSK	1	24	20.09	0.102	20.06	0.101	20.13	0.103
5	QPSK	12	0	19.29	0.085	19.32	0.086	19.23	0.084
5	QPSK	12	7	19.26	0.084	19.30	0.085	19.28	0.085
5	QPSK	12	13	19.23	0.084	19.25	0.084	19.17	0.083
5	QPSK	25	0	19.17	0.083	19.19	0.083	19.13	0.082
5	16QAM	1	0	19.28	0.085	19.35	0.086	19.27	0.085
5	16QAM	1	12	19.22	0.084	19.18	0.083	19.13	0.082
5	16QAM	1	24	19.13	0.082	19.08	0.081	19.09	0.081
5	16QAM	12	0	18.29	0.067	18.36	0.069	18.26	0.067
5	16QAM	12	7	18.33	0.068	18.25	0.067	18.22	0.066
5	16QAM	12	13	18.18	0.066	18.16	0.065	18.11	0.065
5	16QAM	25	0	18.13	0.065	18.10	0.065	18.04	0.064



LTE Band 12				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				23025		23095		23165	
Frequency (MHz)				700.5		707.5		714.5	
				dBm	W	dBm	W	dBm	W
3	QPSK	1	0	20.16	0.104	20.23	0.105	20.18	0.104
3	QPSK	1	8	20.10	0.102	20.12	0.103	20.13	0.103
3	QPSK	1	14	19.98	0.100	19.95	0.099	20.02	0.100
3	QPSK	8	0	19.18	0.083	19.21	0.083	19.12	0.082
3	QPSK	8	4	19.15	0.082	19.19	0.083	19.17	0.083
3	QPSK	8	7	19.12	0.082	19.14	0.082	19.06	0.081
3	QPSK	15	0	19.06	0.081	19.08	0.081	19.02	0.080
3	16QAM	1	0	19.17	0.083	19.24	0.084	19.16	0.082
3	16QAM	1	8	19.11	0.081	19.07	0.081	19.02	0.080
3	16QAM	1	14	19.02	0.080	18.97	0.079	18.98	0.079
3	16QAM	8	0	18.18	0.066	18.25	0.067	18.15	0.065
3	16QAM	8	4	18.22	0.066	18.14	0.065	18.11	0.065
3	16QAM	8	7	18.07	0.064	18.05	0.064	18.00	0.063
3	16QAM	15	0	18.02	0.063	17.99	0.063	17.93	0.062



LTE Band 12				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				23017		23095		23173	
Frequency (MHz)				699.7		707.5		715.3	
				dBm	W	dBm	W	dBm	W
1.4	QPSK	1	0	20.07	0.102	20.14	0.103	20.09	0.102
1.4	QPSK	1	3	20.01	0.100	20.03	0.101	20.04	0.101
1.4	QPSK	1	5	19.89	0.097	19.86	0.097	19.93	0.098
1.4	QPSK	3	0	19.09	0.081	19.12	0.082	19.03	0.080
1.4	QPSK	3	1	19.06	0.081	19.10	0.081	19.08	0.081
1.4	QPSK	3	3	19.03	0.080	19.05	0.080	18.97	0.079
1.4	QPSK	6	0	18.97	0.079	18.99	0.079	18.93	0.078
1.4	16QAM	1	0	19.08	0.081	19.15	0.082	19.07	0.081
1.4	16QAM	1	3	19.02	0.080	18.98	0.079	18.93	0.078
1.4	16QAM	1	5	18.93	0.078	18.88	0.077	18.89	0.077
1.4	16QAM	3	0	18.09	0.064	18.16	0.065	18.06	0.064
1.4	16QAM	3	1	18.13	0.065	18.05	0.064	18.02	0.063
1.4	16QAM	3	3	17.98	0.063	17.96	0.063	17.91	0.062
1.4	16QAM	6	0	17.93	0.062	17.90	0.062	17.84	0.061



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	/	/	20.70	0.117	/	/
10	QPSK	1	25	/	/	20.61	0.115	/	/
10	QPSK	1	49	/	/	20.37	0.109	/	/
10	QPSK	25	0	/	/	19.54	0.090	/	/
10	QPSK	25	12	/	/	19.56	0.090	/	/
10	QPSK	25	25	/	/	19.45	0.088	/	/
10	QPSK	50	0	/	/	19.57	0.091	/	/
10	16QAM	1	0	/	/	19.83	0.096	/	/
10	16QAM	1	25	/	/	19.72	0.094	/	/
10	16QAM	1	49	/	/	19.59	0.091	/	/
10	16QAM	25	0	/	/	18.45	0.070	/	/
10	16QAM	25	12	/	/	18.65	0.073	/	/
10	16QAM	25	25	/	/	18.60	0.072	/	/
10	16QAM	50	0	/	/	18.64	0.073	/	/



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	20.45	0.111	20.52	0.113	20.47	0.111
5	QPSK	1	12	20.39	0.109	20.41	0.110	20.42	0.110
5	QPSK	1	24	20.27	0.106	20.24	0.106	20.31	0.107
5	QPSK	12	0	19.47	0.089	19.50	0.089	19.41	0.087
5	QPSK	12	7	19.44	0.088	19.48	0.089	19.46	0.088
5	QPSK	12	13	19.41	0.087	19.43	0.088	19.35	0.086
5	QPSK	25	0	19.35	0.086	19.37	0.086	19.31	0.085
5	16QAM	1	0	19.46	0.088	19.53	0.090	19.45	0.088
5	16QAM	1	12	19.40	0.087	19.36	0.086	19.31	0.085
5	16QAM	1	24	19.31	0.085	19.26	0.084	19.27	0.085
5	16QAM	12	0	18.47	0.070	18.54	0.071	18.44	0.070
5	16QAM	12	7	18.51	0.071	18.43	0.070	18.40	0.069
5	16QAM	12	13	18.36	0.069	18.34	0.068	18.29	0.067
5	16QAM	25	0	18.31	0.068	18.28	0.067	18.22	0.066



LTE Band 17				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				23780		23790		23800	
Frequency (MHz)				709		710		711	
				dBm	W	dBm	W	dBm	W
10	QPSK	1	0	20.42	0.110	20.51	0.112	20.41	0.110
10	QPSK	1	25	20.36	0.109	20.45	0.111	20.37	0.109
10	QPSK	1	49	20.27	0.106	20.37	0.109	20.30	0.107
10	QPSK	25	0	19.46	0.088	19.50	0.089	19.41	0.087
10	QPSK	25	12	19.39	0.087	19.45	0.088	19.34	0.086
10	QPSK	25	25	19.36	0.086	19.41	0.087	19.35	0.086
10	QPSK	50	0	19.34	0.086	19.35	0.086	19.29	0.085
10	16QAM	1	0	19.30	0.085	19.39	0.087	19.34	0.086
10	16QAM	1	25	19.25	0.084	19.33	0.086	19.30	0.085
10	16QAM	1	49	19.15	0.082	19.25	0.084	19.21	0.083
10	16QAM	25	0	18.67	0.074	18.55	0.072	18.65	0.073
10	16QAM	25	12	18.61	0.073	18.59	0.072	18.56	0.072
10	16QAM	25	25	18.47	0.070	18.55	0.072	18.48	0.070
10	16QAM	50	0	18.50	0.071	18.57	0.072	18.43	0.070



LTE Band 17				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				23755		23790		23825	
Frequency (MHz)				706.5		710		713.5	
				dBm	W	dBm	W	dBm	W
5	QPSK	1	0	20.31	0.107	20.40	0.110	20.30	0.107
5	QPSK	1	12	20.25	0.106	20.34	0.108	20.26	0.106
5	QPSK	1	24	20.16	0.104	20.26	0.106	20.19	0.104
5	QPSK	12	0	19.35	0.086	19.39	0.087	19.30	0.085
5	QPSK	12	7	19.28	0.085	19.34	0.086	19.23	0.084
5	QPSK	12	13	19.25	0.084	19.30	0.085	19.24	0.084
5	QPSK	25	0	19.23	0.084	19.24	0.084	19.18	0.083
5	16QAM	1	0	19.19	0.083	19.28	0.085	19.23	0.084
5	16QAM	1	12	19.14	0.082	19.22	0.084	19.19	0.083
5	16QAM	1	24	19.04	0.080	19.14	0.082	19.10	0.081
5	16QAM	12	0	18.56	0.072	18.44	0.070	18.54	0.071
5	16QAM	12	7	18.50	0.071	18.48	0.070	18.45	0.070
5	16QAM	12	13	18.36	0.069	18.44	0.070	18.37	0.069
5	16QAM	25	0	18.39	0.069	18.46	0.070	18.32	0.068



LTE Band 38				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				37850		38000		38150	
Frequency (MHz)				2580		2595		2610	
				dBm	W	dBm	W	dBm	W
20	QPSK	1	0	22.89	0.195	22.80	0.191	22.87	0.194
20	QPSK	1	49	22.69	0.186	22.72	0.187	22.76	0.189
20	QPSK	1	99	22.70	0.186	21.63	0.146	22.66	0.185
20	QPSK	50	0	21.92	0.156	21.80	0.151	21.88	0.154
20	QPSK	50	24	21.81	0.152	21.76	0.150	21.72	0.149
20	QPSK	50	50	21.80	0.151	21.66	0.147	21.63	0.146
20	QPSK	100	0	21.77	0.150	21.62	0.145	21.56	0.143
20	16QAM	1	0	22.08	0.161	21.96	0.157	22.00	0.158
20	16QAM	1	49	21.90	0.155	21.78	0.151	21.89	0.155
20	16QAM	1	99	21.99	0.158	21.81	0.152	21.83	0.152
20	16QAM	50	0	20.79	0.120	20.70	0.117	20.68	0.117
20	16QAM	50	24	20.72	0.118	20.63	0.116	20.71	0.118
20	16QAM	50	50	20.61	0.115	20.56	0.114	20.58	0.114
20	16QAM	100	0	20.65	0.116	20.60	0.115	20.55	0.114



LTE Band 38				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				37825		38000		38175	
Frequency (MHz)				2577.5		2595		2612.5	
				dBm	W	dBm	W	dBm	W
15	QPSK	1	0	22.77	0.189	22.68	0.185	22.75	0.188
15	QPSK	1	37	22.57	0.181	22.60	0.182	22.64	0.184
15	QPSK	1	74	22.58	0.181	21.51	0.142	22.54	0.179
15	QPSK	36	0	21.80	0.151	21.68	0.147	21.76	0.150
15	QPSK	36	20	21.69	0.148	21.64	0.146	21.60	0.145
15	QPSK	36	39	21.68	0.147	21.54	0.143	21.51	0.142
15	QPSK	75	0	21.65	0.146	21.50	0.141	21.44	0.139
15	16QAM	1	0	21.96	0.157	21.84	0.153	21.88	0.154
15	16QAM	1	37	21.78	0.151	21.66	0.147	21.77	0.150
15	16QAM	1	74	21.87	0.154	21.69	0.148	21.71	0.148
15	16QAM	36	0	20.67	0.117	20.58	0.114	20.56	0.114
15	16QAM	36	20	20.60	0.115	20.51	0.112	20.59	0.115
15	16QAM	36	39	20.49	0.112	20.44	0.111	20.46	0.111
15	16QAM	75	0	20.53	0.113	20.48	0.112	20.43	0.110



LTE Band 38				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				37800		38000		38200	
Frequency (MHz)				2575		2595		2615	
				dBm	W	dBm	W	dBm	W
10	QPSK	1	0	22.66	0.185	22.57	0.181	22.64	0.184
10	QPSK	1	25	22.46	0.176	22.49	0.177	22.53	0.179
10	QPSK	1	49	22.47	0.177	21.40	0.138	22.43	0.175
10	QPSK	25	0	21.69	0.148	21.57	0.144	21.65	0.146
10	QPSK	25	12	21.58	0.144	21.53	0.142	21.49	0.141
10	QPSK	25	25	21.57	0.144	21.43	0.139	21.40	0.138
10	QPSK	50	0	21.54	0.143	21.39	0.138	21.33	0.136
10	16QAM	1	0	21.85	0.153	21.73	0.149	21.77	0.150
10	16QAM	1	25	21.67	0.147	21.55	0.143	21.66	0.147
10	16QAM	1	49	21.76	0.150	21.58	0.144	21.60	0.145
10	16QAM	25	0	20.56	0.114	20.47	0.111	20.45	0.111
10	16QAM	25	12	20.49	0.112	20.40	0.110	20.48	0.112
10	16QAM	25	25	20.38	0.109	20.33	0.108	20.35	0.108
10	16QAM	50	0	20.42	0.110	20.37	0.109	20.32	0.108



LTE Band 38				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				37775		38000		38225	
Frequency (MHz)				2572.5		2595		2617.5	
				dBm	W	dBm	W	dBm	W
5	QPSK	1	0	22.57	0.181	22.48	0.177	22.55	0.180
5	QPSK	1	12	22.37	0.173	22.40	0.174	22.44	0.175
5	QPSK	1	24	22.38	0.173	21.31	0.135	22.34	0.171
5	QPSK	12	0	21.60	0.145	21.48	0.141	21.56	0.143
5	QPSK	12	7	21.49	0.141	21.44	0.139	21.40	0.138
5	QPSK	12	13	21.48	0.141	21.34	0.136	21.31	0.135
5	QPSK	25	0	21.45	0.140	21.30	0.135	21.24	0.133
5	16QAM	1	0	21.76	0.150	21.64	0.146	21.68	0.147
5	16QAM	1	12	21.58	0.144	21.46	0.140	21.57	0.144
5	16QAM	1	24	21.67	0.147	21.49	0.141	21.51	0.142
5	16QAM	12	0	20.47	0.111	20.38	0.109	20.36	0.109
5	16QAM	12	7	20.40	0.110	20.31	0.107	20.39	0.109
5	16QAM	12	13	20.29	0.107	20.24	0.106	20.26	0.106
5	16QAM	25	0	20.33	0.108	20.28	0.107	20.23	0.105



LTE Band 40, Block A				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				/		38750		/	
Frequency (MHz)				/		2310		/	
				dBm	W	dBm	W	dBm	W
10	QPSK	1	0	/	/	23.76	0.238	/	/
10	QPSK	1	25	/	/	23.66	0.232	/	/
10	QPSK	1	49	/	/	23.45	0.221	/	/
10	QPSK	25	0	/	/	22.78	0.190	/	/
10	QPSK	25	12	/	/	22.64	0.184	/	/
10	QPSK	25	25	/	/	22.48	0.177	/	/
10	QPSK	50	0	/	/	22.95	0.197	/	/
10	16QAM	1	0	/	/	22.75	0.188	/	/
10	16QAM	1	25	/	/	22.55	0.180	/	/
10	16QAM	1	49	/	/	22.43	0.175	/	/
10	16QAM	25	0	/	/	21.74	0.149	/	/
10	16QAM	25	12	/	/	21.70	0.148	/	/
10	16QAM	25	25	/	/	21.56	0.143	/	/
10	16QAM	50	0	/	/	21.42	0.139	/	/



LTE Band 40, Block A				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				38725		38750		38775	
Frequency (MHz)				2307.5		2310		2312.5	
				dBm	W	dBm	W	dBm	W
5	QPSK	1	0	23.62	0.230	23.70	0.234	23.55	0.226
5	QPSK	1	12	23.57	0.228	23.58	0.228	23.50	0.224
5	QPSK	1	24	23.40	0.219	23.43	0.220	23.42	0.220
5	QPSK	12	0	22.72	0.187	22.60	0.182	22.68	0.185
5	QPSK	12	7	22.61	0.182	22.56	0.180	22.52	0.179
5	QPSK	12	13	22.60	0.182	22.46	0.176	22.43	0.175
5	QPSK	25	0	22.57	0.181	22.42	0.175	22.36	0.172
5	16QAM	1	0	22.88	0.194	22.76	0.189	22.80	0.191
5	16QAM	1	12	22.70	0.186	22.58	0.181	22.69	0.186
5	16QAM	1	24	22.79	0.190	22.61	0.182	22.63	0.183
5	16QAM	12	0	21.59	0.144	21.50	0.141	21.48	0.141
5	16QAM	12	7	21.52	0.142	21.43	0.139	21.51	0.142
5	16QAM	12	13	21.41	0.138	21.36	0.137	21.38	0.137
5	16QAM	25	0	21.45	0.140	21.40	0.138	21.35	0.136



LTE Band 40, Block B				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				/		39200		/	
Frequency (MHz)				/		2355		/	
				dBm	W	dBm	W	dBm	W
10	QPSK	1	0	/	/	23.86	0.243	/	/
10	QPSK	1	25	/	/	23.75	0.237	/	/
10	QPSK	1	49	/	/	23.55	0.226	/	/
10	QPSK	25	0	/	/	22.90	0.195	/	/
10	QPSK	25	12	/	/	22.87	0.194	/	/
10	QPSK	25	25	/	/	22.98	0.199	/	/
10	QPSK	50	0	/	/	22.78	0.190	/	/
10	16QAM	1	0	/	/	22.77	0.189	/	/
10	16QAM	1	25	/	/	22.70	0.186	/	/
10	16QAM	1	49	/	/	22.66	0.185	/	/
10	16QAM	25	0	/	/	22.07	0.161	/	/
10	16QAM	25	12	/	/	22.03	0.160	/	/
10	16QAM	25	25	/	/	21.80	0.151	/	/
10	16QAM	50	0	/	/	21.65	0.146	/	/



LTE Band 40, Block B				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				39175		39200		39225	
Frequency (MHz)				2352.5		2355		2357.5	
				dBm	W	dBm	W	dBm	W
5	QPSK	1	0	23.71	0.235	23.72	0.236	23.67	0.233
5	QPSK	1	12	23.69	0.234	23.70	0.234	23.62	0.230
5	QPSK	1	24	23.52	0.225	23.55	0.226	23.54	0.226
5	QPSK	12	0	22.84	0.192	22.72	0.187	22.80	0.191
5	QPSK	12	7	22.73	0.187	22.68	0.185	22.64	0.184
5	QPSK	12	13	22.72	0.187	22.58	0.181	22.55	0.180
5	QPSK	25	0	22.69	0.186	22.54	0.179	22.48	0.177
5	16QAM	1	0	23.00	0.200	22.88	0.194	22.92	0.196
5	16QAM	1	12	22.82	0.191	22.70	0.186	22.81	0.191
5	16QAM	1	24	22.91	0.195	22.73	0.187	22.75	0.188
5	16QAM	12	0	21.71	0.148	21.62	0.145	21.60	0.145
5	16QAM	12	7	21.64	0.146	21.55	0.143	21.63	0.146
5	16QAM	12	13	21.53	0.142	21.48	0.141	21.50	0.141
5	16QAM	25	0	21.57	0.144	21.52	0.142	21.47	0.140



LTE Band 41				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				39750		40620		41490	
Frequency (MHz)				2506		2593		2680	
				dBm	W	dBm	W	dBm	W
20	QPSK	1	0	23.34	0.216	23.43	0.220	23.37	0.217
20	QPSK	1	49	23.30	0.214	23.35	0.216	23.23	0.210
20	QPSK	1	99	23.25	0.211	23.29	0.213	23.26	0.212
20	QPSK	50	0	22.38	0.173	22.41	0.174	22.48	0.177
20	QPSK	50	24	22.36	0.172	22.35	0.172	22.46	0.176
20	QPSK	50	50	22.30	0.170	22.39	0.173	22.39	0.173
20	QPSK	100	0	22.34	0.171	22.40	0.174	22.28	0.169
20	16QAM	1	0	22.12	0.163	22.21	0.166	22.15	0.164
20	16QAM	1	49	22.08	0.161	22.13	0.163	22.01	0.159
20	16QAM	1	99	22.03	0.160	22.07	0.161	22.04	0.160
20	16QAM	50	0	21.16	0.131	21.19	0.132	21.26	0.134
20	16QAM	50	24	21.14	0.130	21.13	0.130	21.24	0.133
20	16QAM	50	50	21.08	0.128	21.17	0.131	21.17	0.131
20	16QAM	100	0	21.12	0.129	21.18	0.131	21.06	0.128



LTE Band 41				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				39725		40620		41515	
Frequency (MHz)				2503.5		2593		2682.5	
				dBm	W	dBm	W	dBm	W
15	QPSK	1	0	23.25	0.211	23.34	0.216	23.28	0.213
15	QPSK	1	37	23.21	0.209	23.26	0.212	23.14	0.206
15	QPSK	1	74	23.16	0.207	23.20	0.209	23.17	0.207
15	QPSK	36	0	22.29	0.169	22.32	0.171	22.39	0.173
15	QPSK	36	20	22.27	0.169	22.26	0.168	22.37	0.173
15	QPSK	36	39	22.21	0.166	22.30	0.170	22.30	0.170
15	QPSK	75	0	22.25	0.168	22.31	0.170	22.19	0.166
15	16QAM	1	0	22.04	0.160	22.13	0.163	22.07	0.161
15	16QAM	1	37	22.00	0.158	22.05	0.160	21.93	0.156
15	16QAM	1	74	21.95	0.157	21.99	0.158	21.96	0.157
15	16QAM	36	0	21.08	0.128	21.11	0.129	21.18	0.131
15	16QAM	36	20	21.06	0.128	21.05	0.127	21.16	0.131
15	16QAM	36	39	21.00	0.126	21.09	0.129	21.09	0.129
15	16QAM	75	0	21.04	0.127	21.10	0.129	20.98	0.125



LTE Band 41				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				39700		40620		41540	
Frequency (MHz)				2501		2593		2685	
				dBm	W	dBm	W	dBm	W
10	QPSK	1	0	23.13	0.206	23.22	0.210	23.16	0.207
10	QPSK	1	25	23.09	0.204	23.14	0.206	23.02	0.200
10	QPSK	1	49	23.04	0.201	23.08	0.203	23.05	0.202
10	QPSK	25	0	22.17	0.165	22.20	0.166	22.27	0.169
10	QPSK	25	12	22.15	0.164	22.14	0.164	22.25	0.168
10	QPSK	25	25	22.09	0.162	22.18	0.165	22.18	0.165
10	QPSK	50	0	22.13	0.163	22.19	0.166	22.07	0.161
10	16QAM	1	0	21.92	0.156	22.01	0.159	21.95	0.157
10	16QAM	1	25	21.88	0.154	21.93	0.156	21.81	0.152
10	16QAM	1	49	21.83	0.152	21.87	0.154	21.84	0.153
10	16QAM	25	0	20.96	0.125	20.99	0.126	21.06	0.128
10	16QAM	25	12	20.94	0.124	20.93	0.124	21.04	0.127
10	16QAM	25	25	20.88	0.122	20.97	0.125	20.97	0.125
10	16QAM	50	0	20.92	0.124	20.98	0.125	20.86	0.122



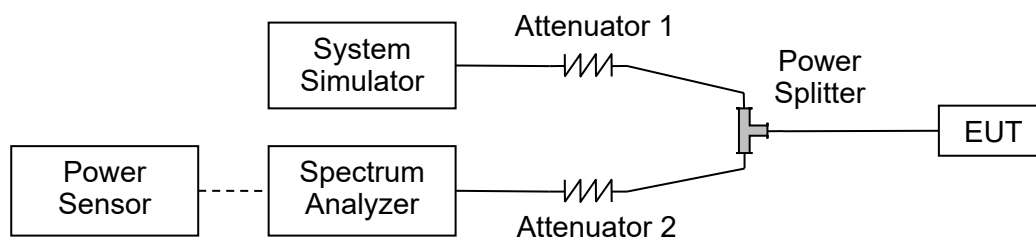
LTE Band 41				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				39675		40620		41565	
Frequency (MHz)				2498.5		2593		2687.5	
				dBm	W	dBm	W	dBm	W
5	QPSK	1	0	23.02	0.200	23.11	0.205	23.05	0.202
5	QPSK	1	12	22.98	0.199	23.03	0.201	22.91	0.195
5	QPSK	1	24	22.93	0.196	22.97	0.198	22.94	0.197
5	QPSK	12	0	22.06	0.161	22.09	0.162	22.16	0.164
5	QPSK	12	7	22.04	0.160	22.03	0.160	22.14	0.164
5	QPSK	12	13	21.98	0.158	22.07	0.161	22.07	0.161
5	QPSK	25	0	22.02	0.159	22.08	0.161	21.96	0.157
5	16QAM	1	0	21.81	0.152	21.90	0.155	21.84	0.153
5	16QAM	1	12	21.77	0.150	21.82	0.152	21.70	0.148
5	16QAM	1	24	21.72	0.149	21.76	0.150	21.73	0.149
5	16QAM	12	0	20.85	0.122	20.88	0.122	20.95	0.124
5	16QAM	12	7	20.83	0.121	20.82	0.121	20.93	0.124
5	16QAM	12	13	20.77	0.119	20.86	0.122	20.86	0.122
5	16QAM	25	0	20.81	0.121	20.87	0.122	20.75	0.119

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	1.26
	Low	16QAM	1.10	1.29
	Mid	QPSK	1.10	1.28
	Mid	16QAM	1.10	1.29
	High	QPSK	1.10	1.29
	High	16QAM	1.10	1.29
3	Low	QPSK	2.70	2.97
	Low	16QAM	2.71	3.0
	Mid	QPSK	2.70	2.98
	Mid	16QAM	2.70	2.99
	High	QPSK	2.70	2.98
	High	16QAM	2.70	3.0
5	Low	QPSK	4.5	5.01
	Low	16QAM	4.5	5.03
	Mid	QPSK	4.5	5.02
	Mid	16QAM	4.51	5.0
	High	QPSK	4.5	5.03
	High	16QAM	4.5	4.95
10	Low	QPSK	9.0	9.85
	Low	16QAM	8.96	9.83
	Mid	QPSK	8.98	9.87
	Mid	16QAM	8.95	9.77
	High	QPSK	8.97	9.78
	High	16QAM	8.95	9.85
15	Low	QPSK	13.45	14.59
	Low	16QAM	13.44	14.62
	Mid	QPSK	13.45	14.62
	Mid	16QAM	13.42	14.65
	High	QPSK	13.41	14.66
	High	16QAM	13.4	14.59
20	Low	QPSK	17.87	19.47
	Low	16QAM	17.91	19.42
	Mid	QPSK	17.89	19.4
	Mid	16QAM	17.9	19.44
	High	QPSK	17.86	19.41
	High	16QAM	17.91	19.46



LTE Band 4				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
1.4	Low	QPSK	1.09	1.28
	Low	16QAM	1.1	1.29
	Mid	QPSK	1.1	1.28
	Mid	16QAM	1.1	1.29
	High	QPSK	1.1	1.28
	High	16QAM	1.1	1.29
3	Low	QPSK	2.7	3.01
	Low	16QAM	2.7	2.99
	Mid	QPSK	2.7	2.97
	Mid	16QAM	2.7	2.99
	High	QPSK	2.7	2.99
	High	16QAM	2.7	2.99
5	Low	QPSK	4.5	5.02
	Low	16QAM	4.5	4.94
	Mid	QPSK	4.5	5.02
	Mid	16QAM	4.5	5.02
	High	QPSK	4.49	4.99
	High	16QAM	4.5	4.97
10	Low	QPSK	9.0	9.85
	Low	16QAM	8.96	9.78
	Mid	QPSK	8.97	9.79
	Mid	16QAM	8.95	9.78
	High	QPSK	8.98	9.81
	High	16QAM	8.94	9.82
15	Low	QPSK	13.39	14.51
	Low	16QAM	13.42	14.59
	Mid	QPSK	13.42	14.61
	Mid	16QAM	13.43	14.58
	High	QPSK	13.42	14.69
	High	16QAM	13.42	14.59
20	Low	QPSK	17.92	19.43
	Low	16QAM	17.94	19.37
	Mid	QPSK	17.88	19.41
	Mid	16QAM	17.92	19.42
	High	QPSK	17.89	19.44
	High	16QAM	17.91	19.47



LTE Band 5				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
1.4	Low	QPSK	1.1	1.29
	Low	16QAM	1.09	1.29
	Mid	QPSK	1.1	1.29
	Mid	16QAM	1.1	1.29
	High	QPSK	1.1	1.29
	High	16QAM	1.1	1.3
3	Low	QPSK	2.69	2.93
	Low	16QAM	2.7	2.99
	Mid	QPSK	2.7	2.97
	Mid	16QAM	2.7	2.98
	High	QPSK	2.7	2.98
	High	16QAM	2.7	2.99
5	Low	QPSK	4.5	4.96
	Low	16QAM	4.5	5.0
	Mid	QPSK	4.5	4.99
	Mid	16QAM	4.5	5.0
	High	QPSK	4.49	4.99
	High	16QAM	4.49	4.94
10	Low	QPSK	8.99	9.83
	Low	16QAM	8.96	9.8
	Mid	QPSK	9.0	9.91
	Mid	16QAM	8.95	9.82
	High	QPSK	8.98	9.9
	High	16QAM	8.96	9.81



LTE Band 7				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
5	Low	QPSK	4.51	5.02
	Low	16QAM	4.5	4.93
	Mid	QPSK	4.49	4.97
	Mid	16QAM	4.49	4.97
	High	QPSK	4.5	5.01
	High	16QAM	4.5	5.0
10	Low	QPSK	8.99	9.89
	Low	16QAM	8.94	9.89
	Mid	QPSK	9.0	9.82
	Mid	16QAM	8.95	9.82
	High	QPSK	9.0	9.9
	High	16QAM	8.95	9.83
15	Low	QPSK	13.41	14.3
	Low	16QAM	13.42	14.7
	Mid	QPSK	13.41	14.63
	Mid	16QAM	13.42	14.65
	High	QPSK	13.46	14.72
	High	16QAM	13.43	14.61
20	Low	QPSK	17.92	19.58
	Low	16QAM	17.93	19.42
	Mid	QPSK	17.88	19.55
	Mid	16QAM	17.87	19.52
	High	QPSK	17.92	19.53
	High	16QAM	17.95	19.51



LTE Band 12				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
1.4	Low	QPSK	1.1	1.28
	Low	16QAM	1.1	1.29
	Mid	QPSK	1.1	1.28
	Mid	16QAM	1.1	1.3
	High	QPSK	1.1	1.29
	High	16QAM	1.1	1.3
3	Low	QPSK	2.7	2.98
	Low	16QAM	2.7	2.99
	Mid	QPSK	2.7	2.97
	Mid	16QAM	2.7	2.99
	High	QPSK	2.7	2.98
	High	16QAM	2.7	2.99
5	Low	QPSK	4.5	4.99
	Low	16QAM	4.49	4.96
	Mid	QPSK	4.49	5.02
	Mid	16QAM	4.5	4.95
	High	QPSK	4.49	5.01
	High	16QAM	4.49	5.03
10	Low	QPSK	8.96	9.83
	Low	16QAM	8.94	9.74
	Mid	QPSK	8.99	9.87
	Mid	16QAM	8.94	9.79
	High	QPSK	8.97	9.84
	High	16QAM	8.94	9.8



LTE Band 13				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
5	Low	QPSK	4.5	4.97
	Low	16QAM	4.49	5.01
	Mid	QPSK	4.49	4.96
	Mid	16QAM	4.5	5.02
	High	QPSK	4.5	5.02
	High	16QAM	4.5	5.0
10	Low	QPSK	8.99	9.8
	Low	16QAM	8.94	9.73
	Mid	QPSK	8.98	9.82
	Mid	16QAM	8.93	9.76
	High	QPSK	8.97	9.87
	High	16QAM	8.95	9.78



LTE Band 17				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
5	Low	QPSK	4.5	5.0
	Low	16QAM	4.49	4.97
	Mid	QPSK	4.5	5.03
	Mid	16QAM	4.49	4.99
	High	QPSK	4.49	5.01
	High	16QAM	4.5	5.01
10	Low	QPSK	8.97	9.81
	Low	16QAM	8.95	9.77
	Mid	QPSK	8.99	9.84
	Mid	16QAM	8.94	9.76
	High	QPSK	8.98	9.87
	High	16QAM	8.95	9.76



LTE Band 38				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
5	Low	QPSK	4.5	4.99
	Low	16QAM	4.5	5.06
	Mid	QPSK	4.51	5.09
	Mid	16QAM	4.5	4.97
	High	QPSK	4.5	5.04
	High	16QAM	4.5	5.02
10	Low	QPSK	8.97	9.88
	Low	16QAM	8.96	9.8
	Mid	QPSK	8.94	9.76
	Mid	16QAM	8.95	10.02
	High	QPSK	8.94	9.44
	High	16QAM	8.94	9.99
15	Low	QPSK	13.49	14.31
	Low	16QAM	13.57	14.11
	Mid	QPSK	13.47	14.62
	Mid	16QAM	13.45	14.72
	High	QPSK	13.42	14.57
	High	16QAM	13.44	14.55
20	Low	QPSK	17.89	19.55
	Low	16QAM	17.92	21.11
	Mid	QPSK	17.88	19.83
	Mid	16QAM	17.91	21.28
	High	QPSK	17.91	19.62
	High	16QAM	17.91	20.86



LTE Band 40, Block A				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
5	Low	QPSK	4.50	5.21
	Low	16QAM	4.50	5.35
	Mid	QPSK	4.49	5.24
	Mid	16QAM	4.49	5.13
	High	QPSK	4.50	5.22
	High	16QAM	4.49	5.05
10	Mid	QPSK	8.98	9.74
	Mid	16QAM	8.97	9.78

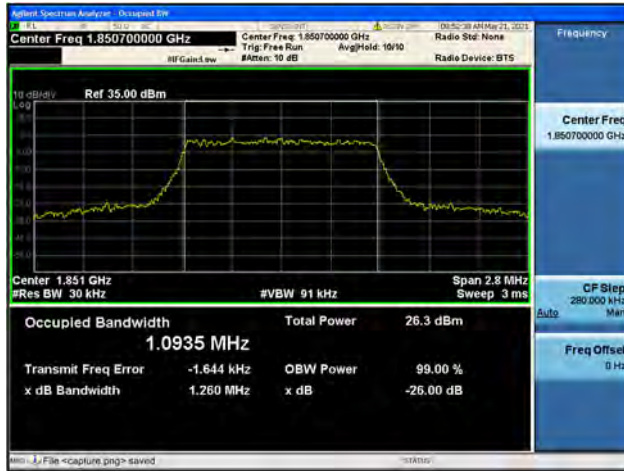
LTE Band 40, Block B				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
5	Low	QPSK	4.49	5.10
	Low	16QAM	4.50	5.12
	Mid	QPSK	4.49	5.14
	Mid	16QAM	4.49	5.07
	High	QPSK	4.49	5.07
	High	16QAM	4.49	5.10
10	Mid	QPSK	8.96	9.77
	Mid	16QAM	8.95	9.83



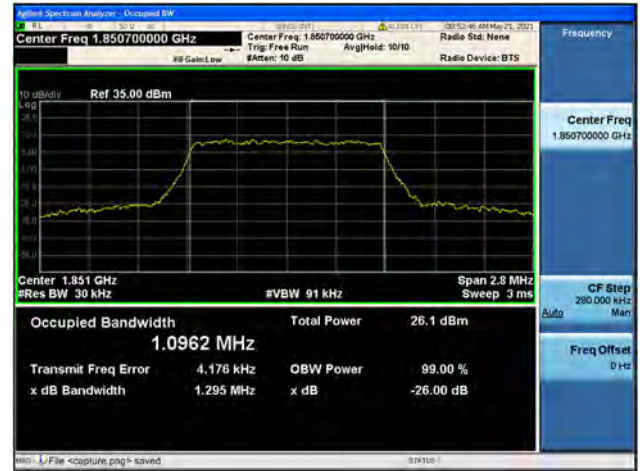
LTE Band 41				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
5	Low	QPSK	4.5	5.06
	Low	16QAM	4.5	5.06
	Mid	QPSK	4.5	4.99
	Mid	16QAM	4.49	5.09
	High	QPSK	4.5	5.06
	High	16QAM	4.5	5.01
10	Low	QPSK	8.98	9.85
	Low	16QAM	8.96	9.98
	Mid	QPSK	8.87	9.36
	Mid	16QAM	8.95	9.99
	High	QPSK	8.97	9.79
	High	16QAM	8.94	9.94
15	Low	QPSK	13.45	14.61
	Low	16QAM	13.4	14.65
	Mid	QPSK	13.36	14.05
	Mid	16QAM	13.43	14.74
	High	QPSK	13.44	14.61
	High	16QAM	13.47	14.85
20	Low	QPSK	17.92	19.83
	Low	16QAM	17.93	20.72
	Mid	QPSK	17.9	19.95
	Mid	16QAM	17.91	21.52
	High	QPSK	17.92	19.51
	High	16QAM	17.92	20.16



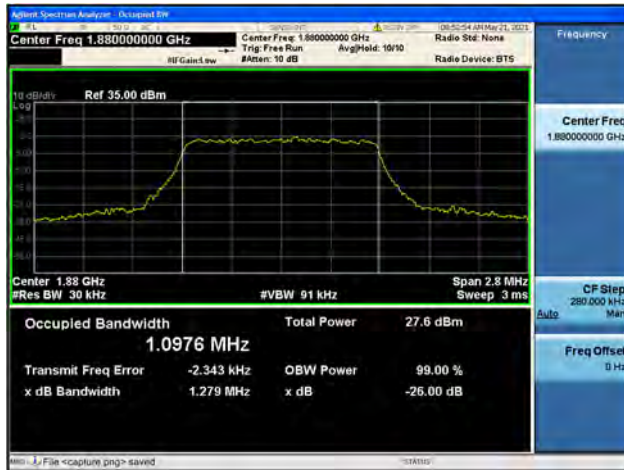
Band2 / 1.4MHz / Low CH / QPSK



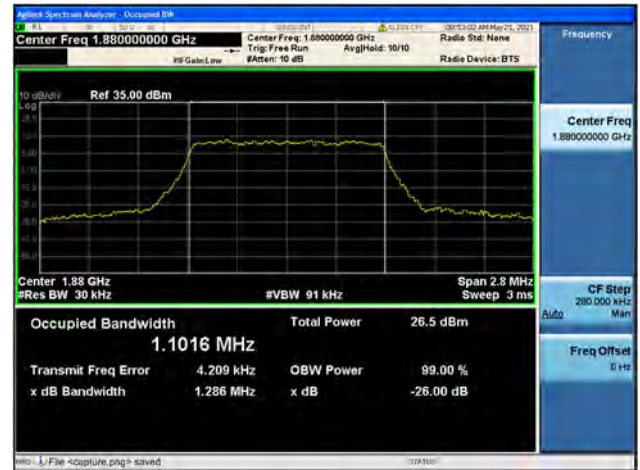
Band2 / 1.4MHz / Low CH / 16QAM



Band2 / 1.4MHz / Mid CH / QPSK



Band2 / 1.4MHz / Mid CH / 16QAM



Band2 / 1.4MHz / High CH / QPSK

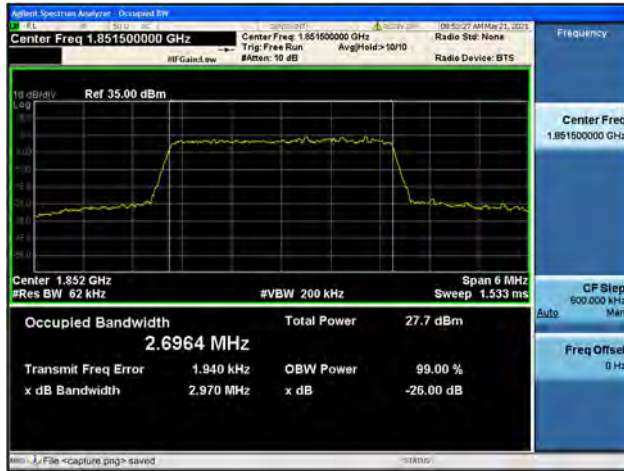


Band2 / 1.4MHz / High CH / 16QAM





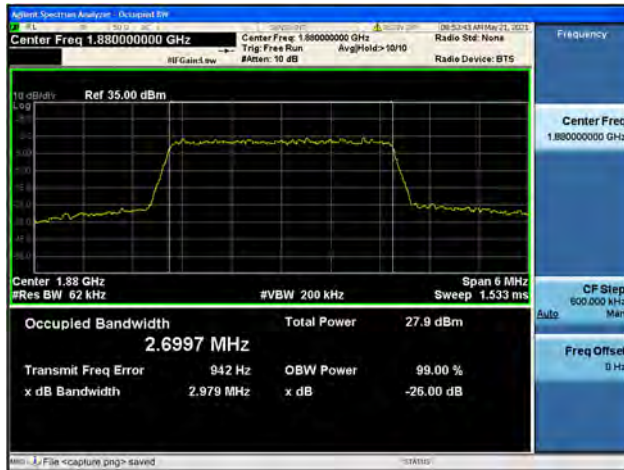
Band2 / 3MHz / Low CH / QPSK



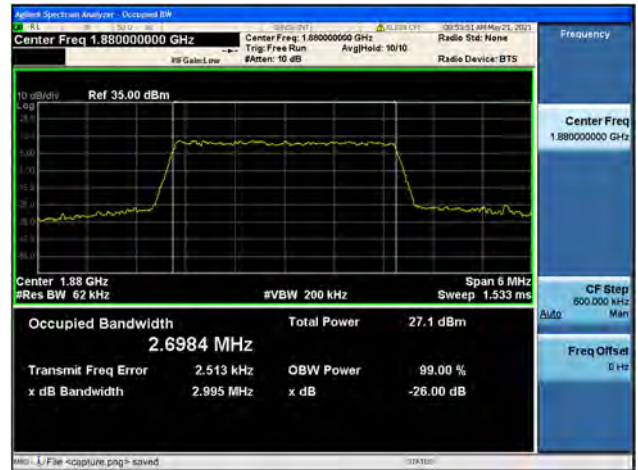
Band2 / 3MHz / Low CH / 16QAM



Band2 / 3MHz / Mid CH / QPSK



Band2 / 3MHz / Mid CH / 16QAM



Band2 / 3MHz / High CH / QPSK



Band2 / 3MHz / High CH / 16QAM





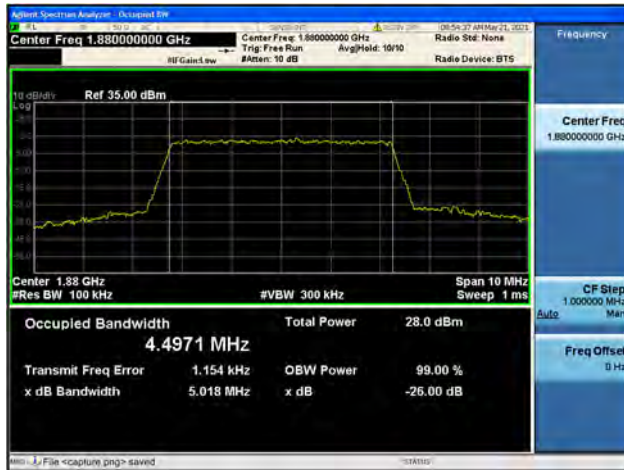
Band2 / 5MHz / Low CH / QPSK



Band2 / 5MHz / Low CH / 16QAM



Band2 / 5MHz / Mid CH / QPSK



Band2 / 5MHz / Mid CH / 16QAM



Band2 / 5MHz / High CH / QPSK



Band2 / 5MHz / High CH / 16QAM

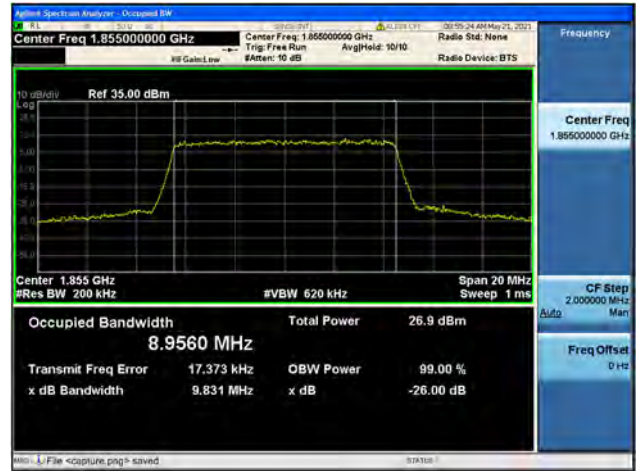




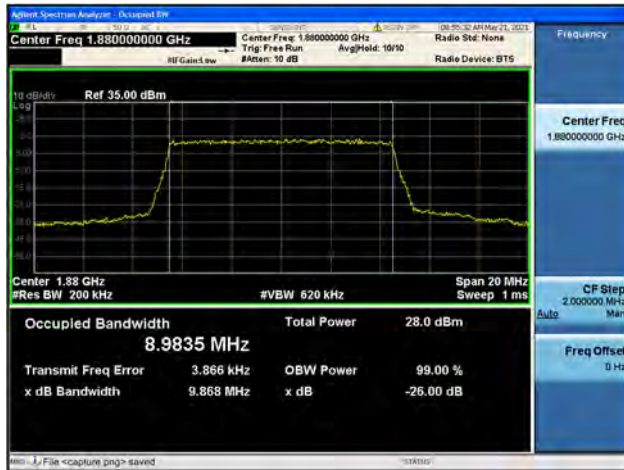
Band2 / 10MHz / Low CH / QPSK



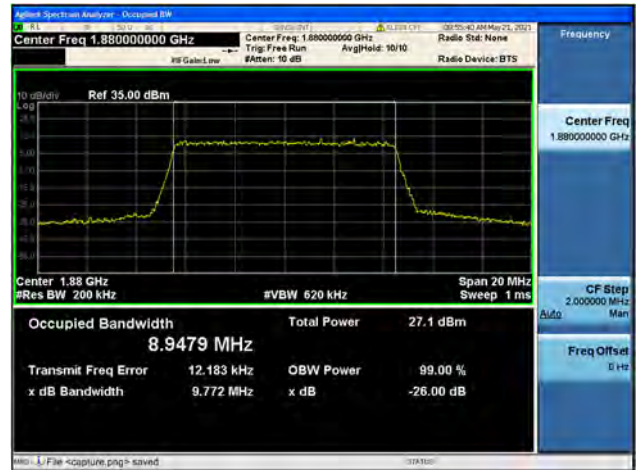
Band2 / 10MHz / Low CH / 16QAM



Band2 / 10MHz / Mid CH / QPSK



Band2 / 10MHz / Mid CH / 16QAM



Band2 / 10MHz / High CH / QPSK

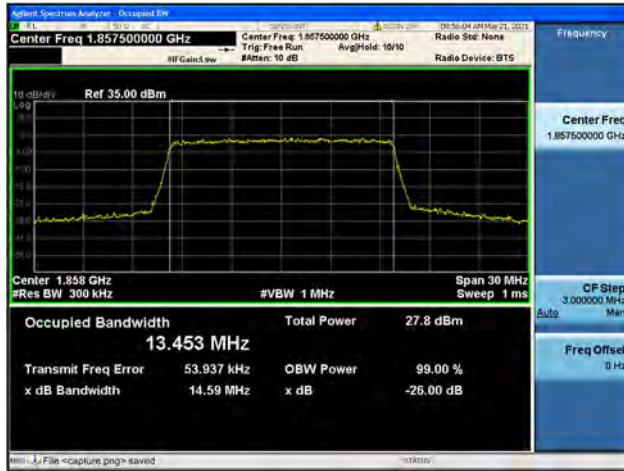


Band2 / 10MHz / High CH / 16QAM





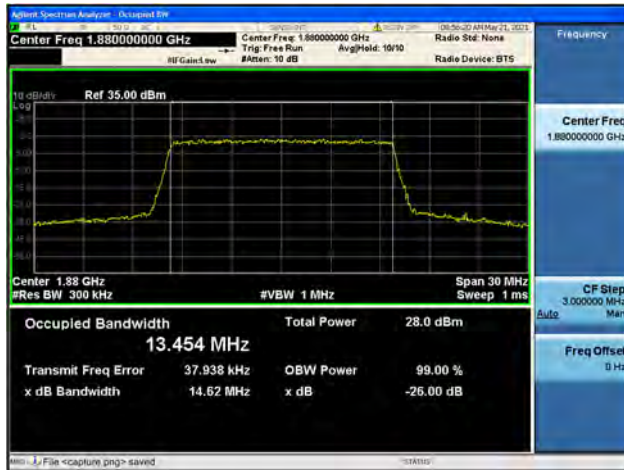
Band2 / 15MHz / Low CH / QPSK



Band2 / 15MHz / Low CH / 16QAM



Band2 / 15MHz / Mid CH / QPSK



Band2 / 15MHz / Mid CH / 16QAM



Band2 / 15MHz / High CH / QPSK

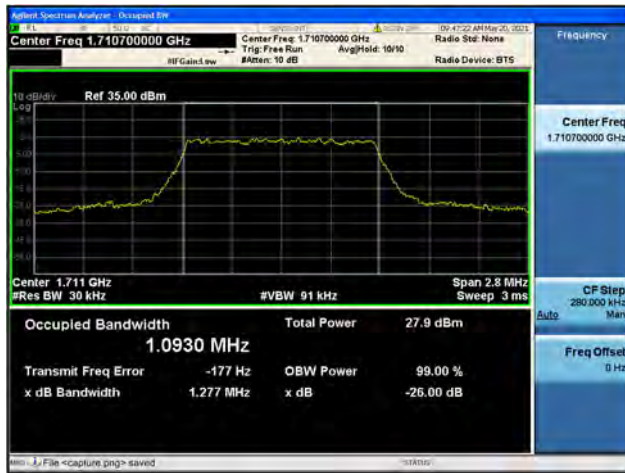


Band2 / 15MHz / High CH / 16QAM

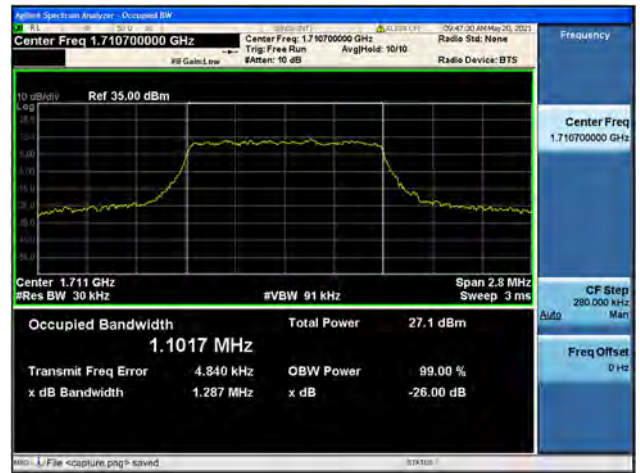




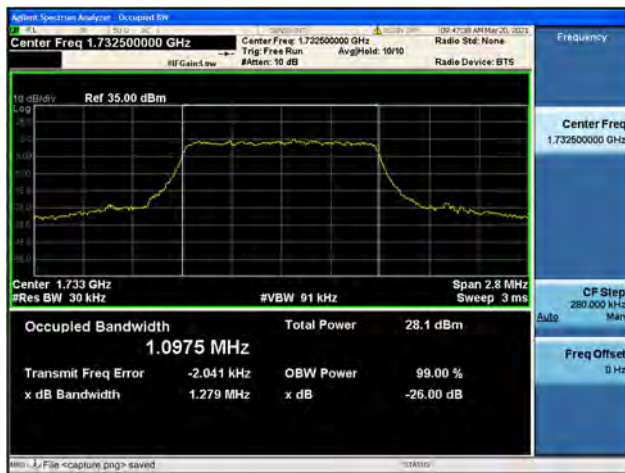
Band4 / 1.4MHz / Low CH / QPSK



Band4 / 1.4MHz / Low CH / 16QAM



Band4 / 1.4MHz / Mid CH / QPSK



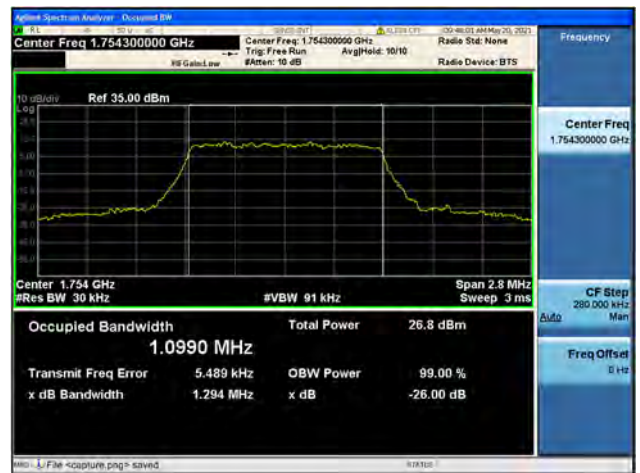
Band4 / 1.4MHz / Mid CH / 16QAM



Band4 / 1.4MHz / High CH / QPSK



Band4 / 1.4MHz / High CH / 16QAM

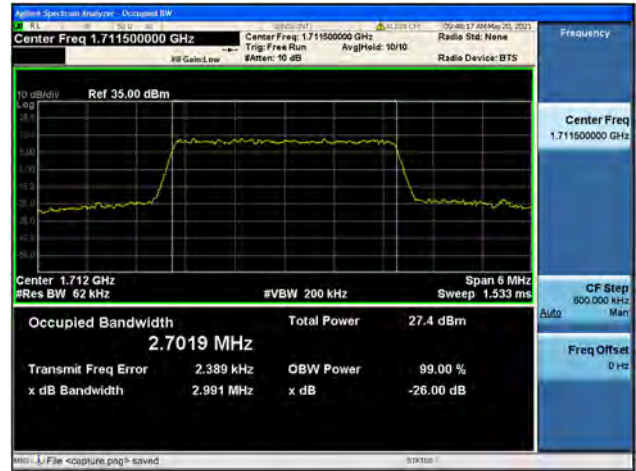




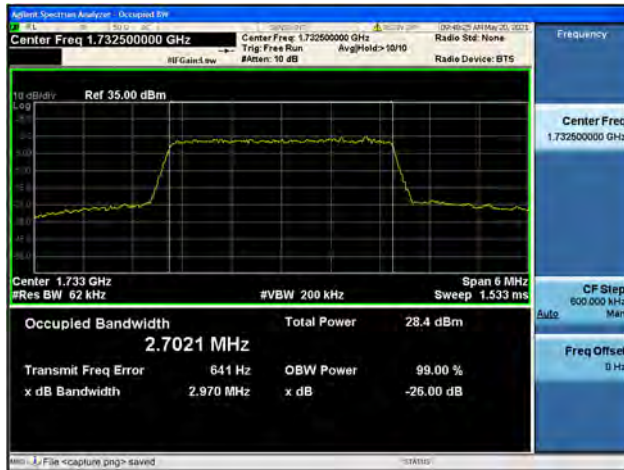
Band4 / 3MHz / Low CH / QPSK



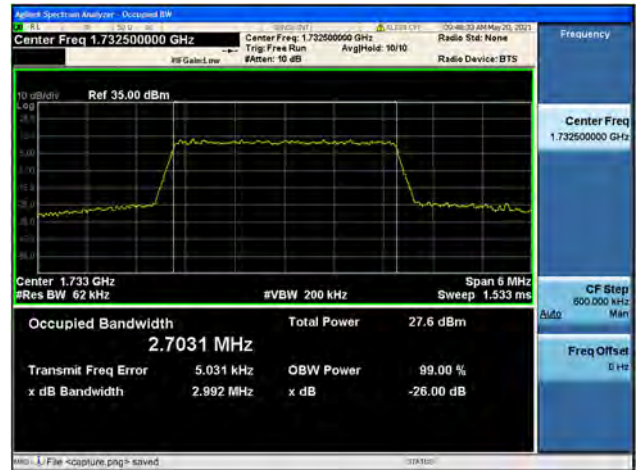
Band4 / 3MHz / Low CH / 16QAM



Band4 / 3MHz / Mid CH / QPSK



Band4 / 3MHz / Mid CH / 16QAM



Band4 / 3MHz / High CH / QPSK

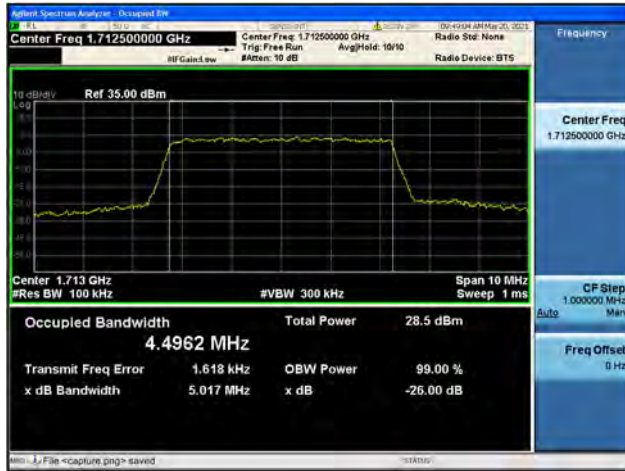


Band4 / 3MHz / High CH / 16QAM





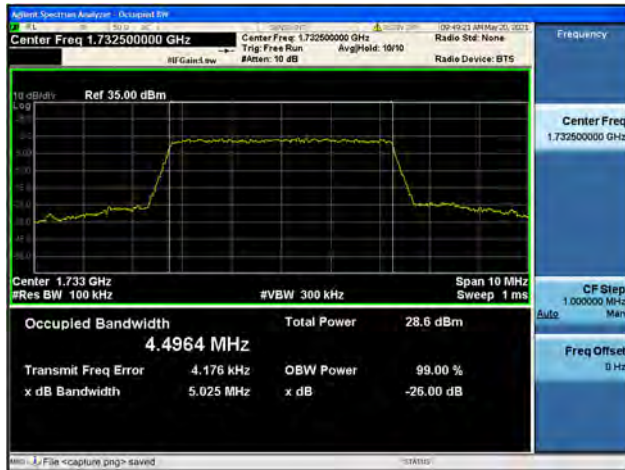
Band4 / 5MHz / Low CH / QPSK



Band4 / 5MHz / Low CH / 16QAM



Band4 / 5MHz / Mid CH / QPSK



Band4 / 5MHz / Mid CH / 16QAM



Band4 / 5MHz / High CH / QPSK



Band4 / 5MHz / High CH / 16QAM

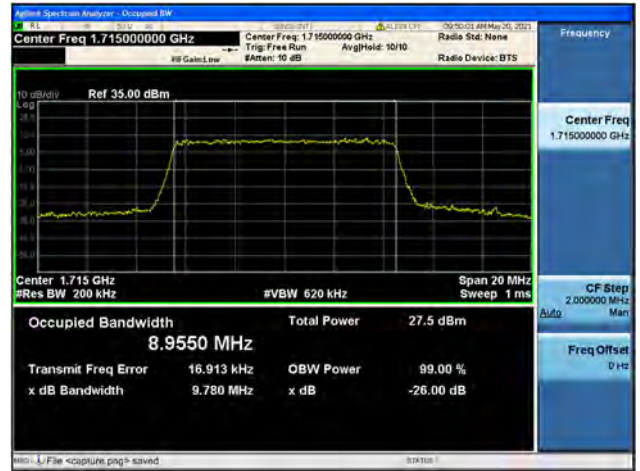




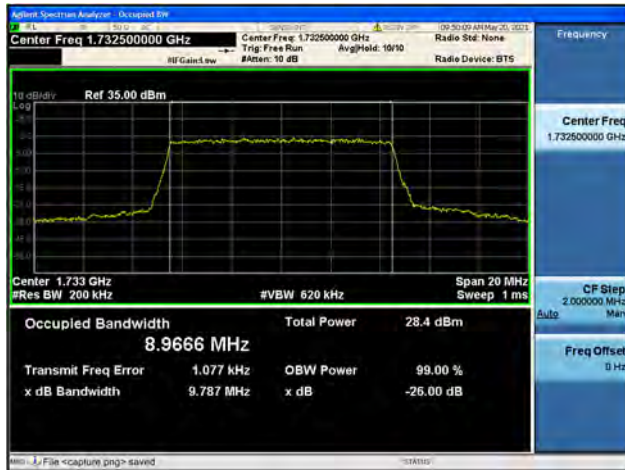
Band4 / 10MHz / Low CH / QPSK



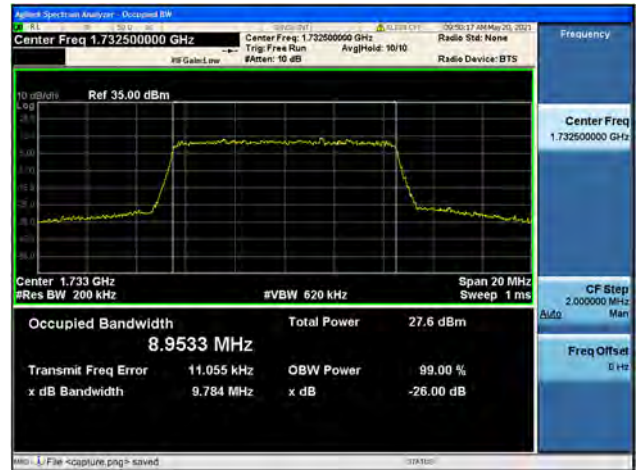
Band4 / 10MHz / Low CH / 16QAM



Band4 / 10MHz / Mid CH / QPSK



Band4 / 10MHz / Mid CH / 16QAM

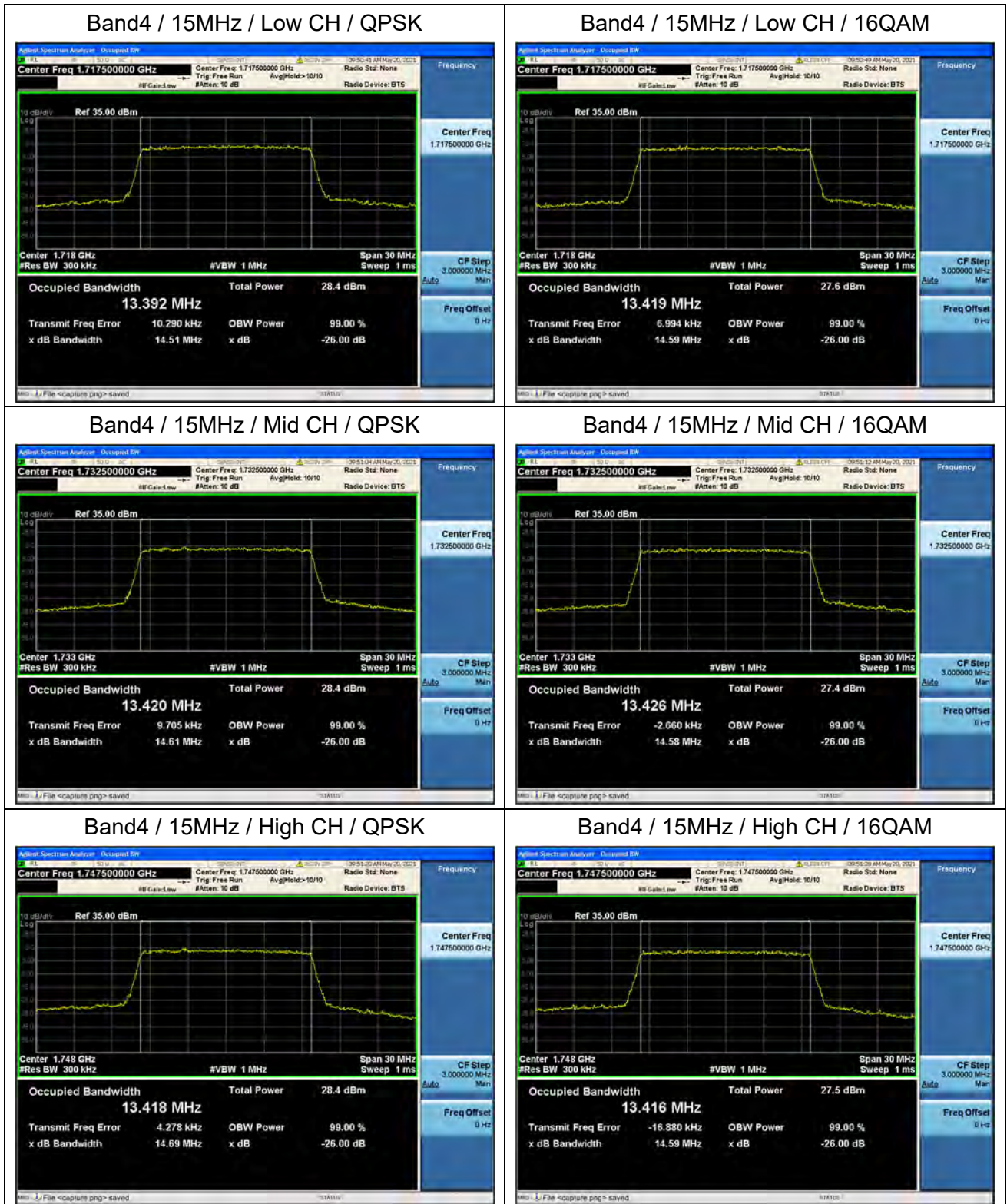


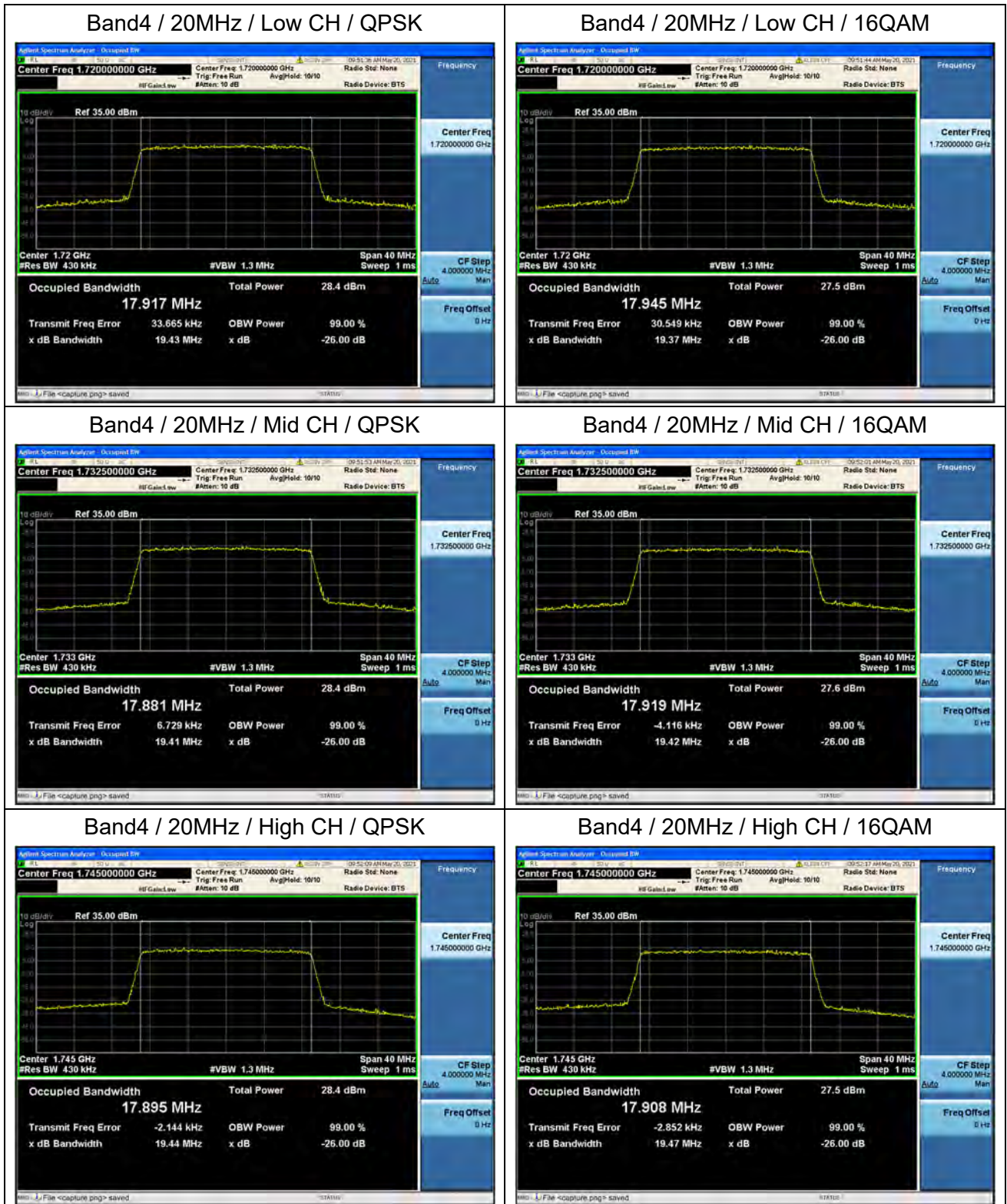
Band4 / 10MHz / High CH / QPSK

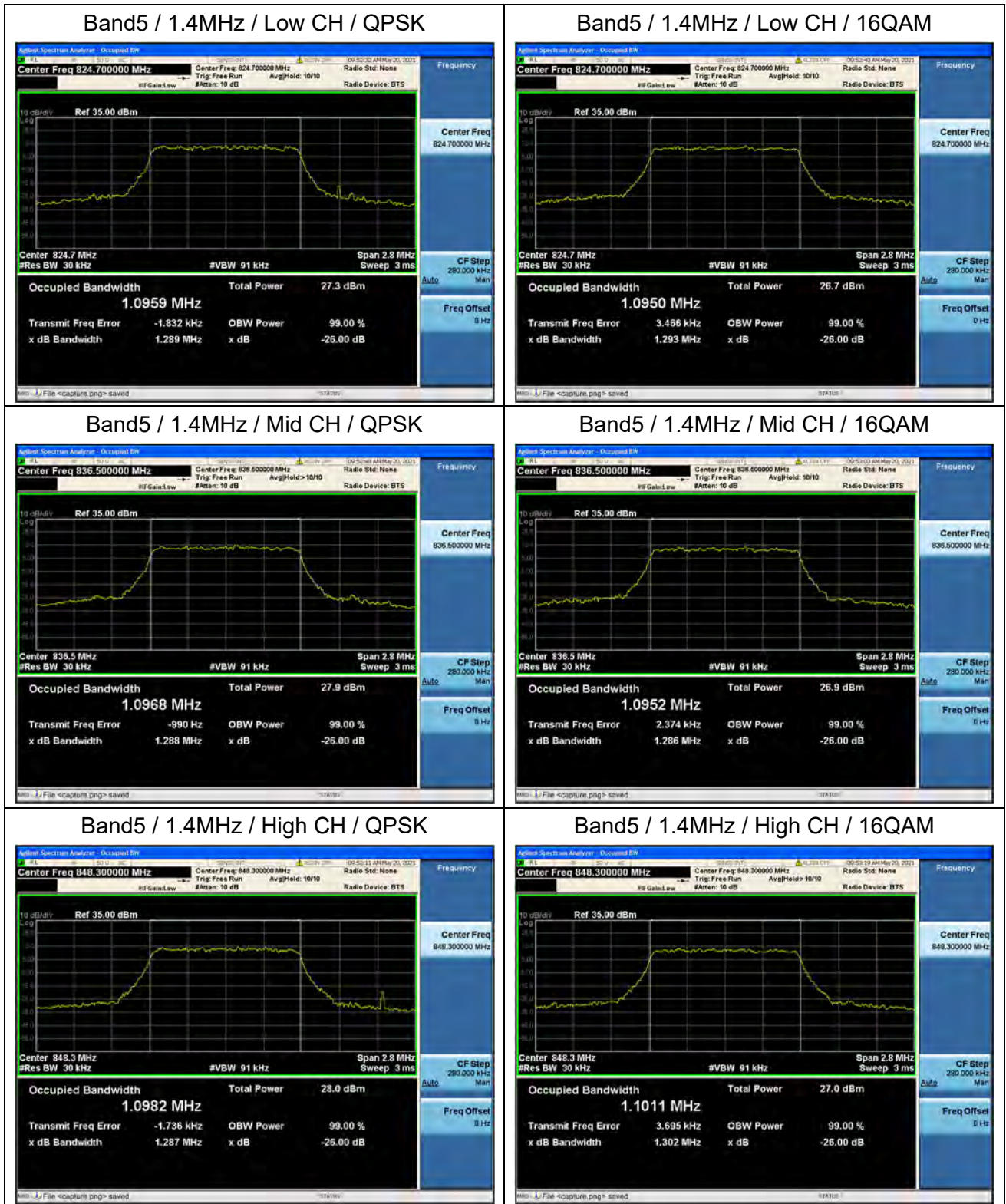


Band4 / 10MHz / High CH / 16QAM











Band5 / 3MHz / Low CH / QPSK



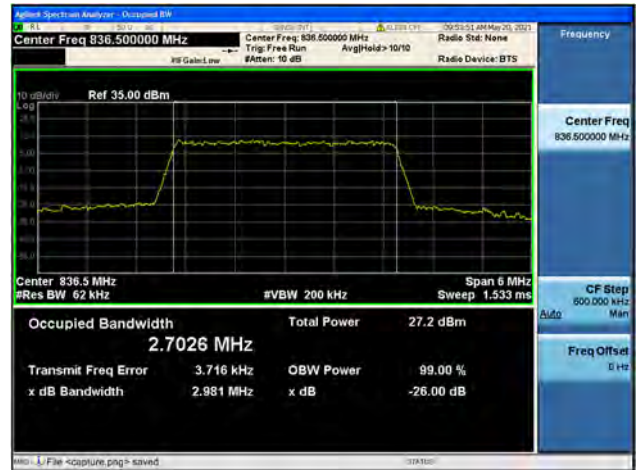
Band5 / 3MHz / Low CH / 16QAM



Band5 / 3MHz / Mid CH / QPSK



Band5 / 3MHz / Mid CH / 16QAM



Band5 / 3MHz / High CH / QPSK



Band5 / 3MHz / High CH / 16QAM





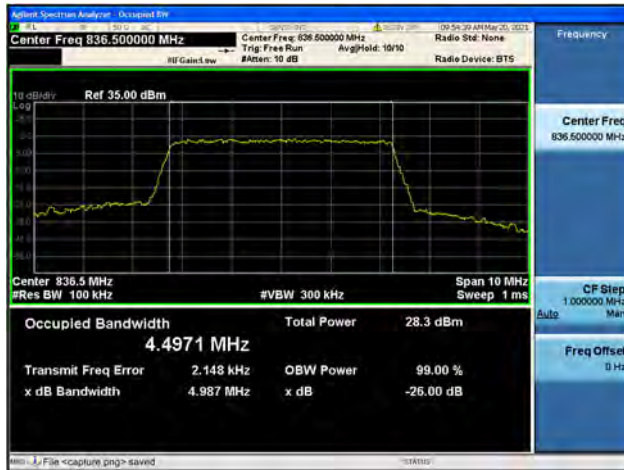
Band5 / 5MHz / Low CH / QPSK



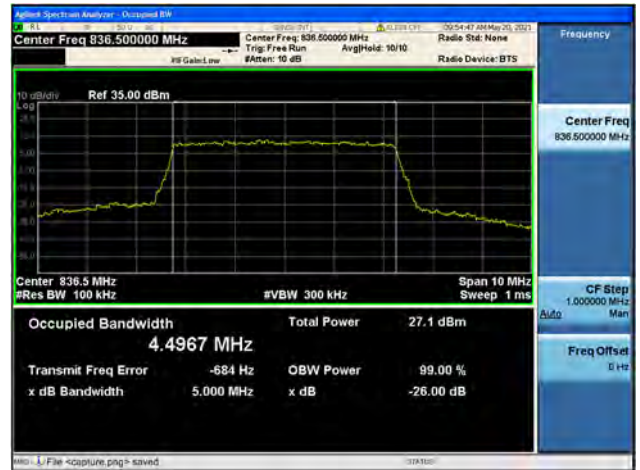
Band5 / 5MHz / Low CH / 16QAM



Band5 / 5MHz / Mid CH / QPSK



Band5 / 5MHz / Mid CH / 16QAM



Band5 / 5MHz / High CH / QPSK



Band5 / 5MHz / High CH / 16QAM





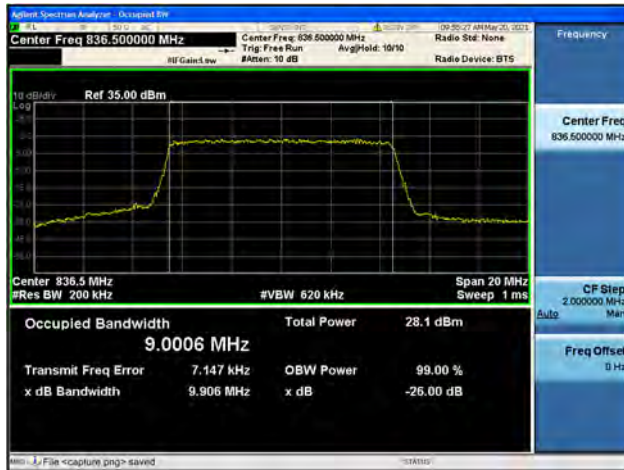
Band5 / 10MHz / Low CH / QPSK



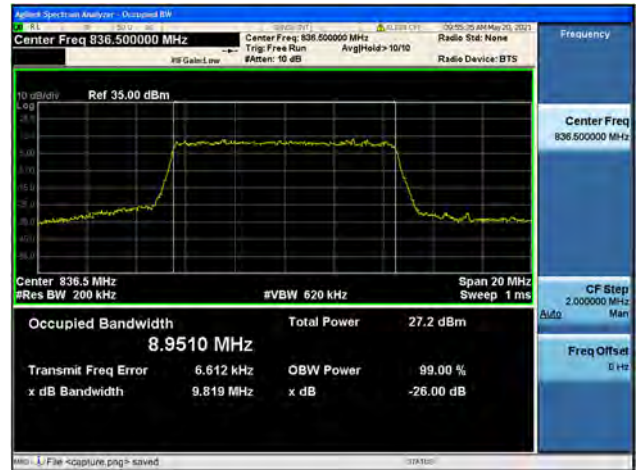
Band5 / 10MHz / Low CH / 16QAM



Band5 / 10MHz / Mid CH / QPSK



Band5 / 10MHz / Mid CH / 16QAM



Band5 / 10MHz / High CH / QPSK

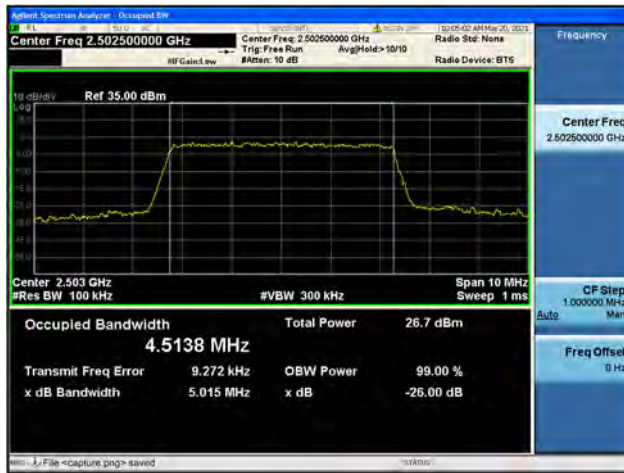


Band5 / 10MHz / High CH / 16QAM





Band7 / 5MHz / Low CH / QPSK



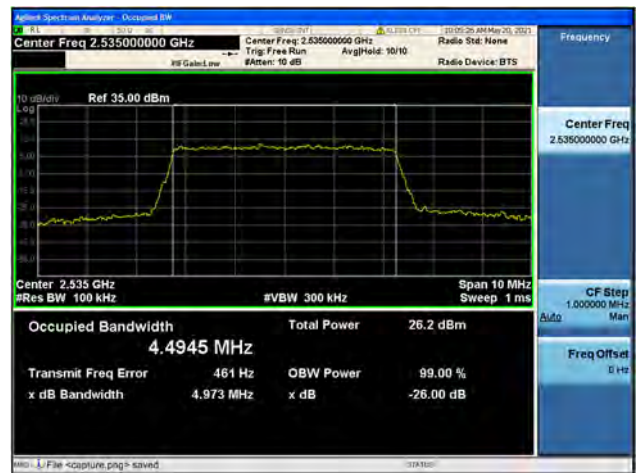
Band7 / 5MHz / Low CH / 16QAM



Band7 / 5MHz / Mid CH / QPSK



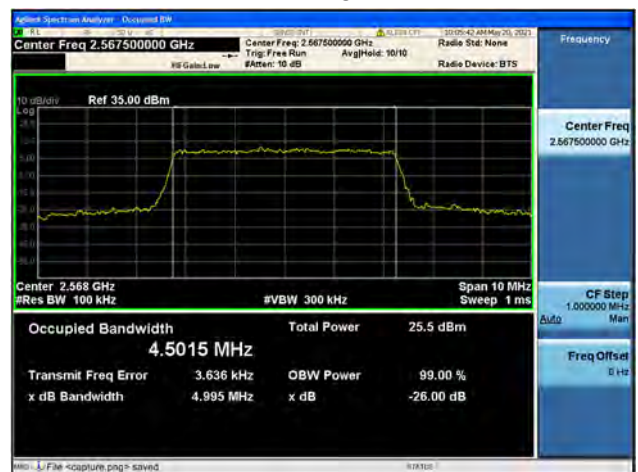
Band7 / 5MHz / Mid CH / 16QAM



Band7 / 5MHz / High CH / QPSK

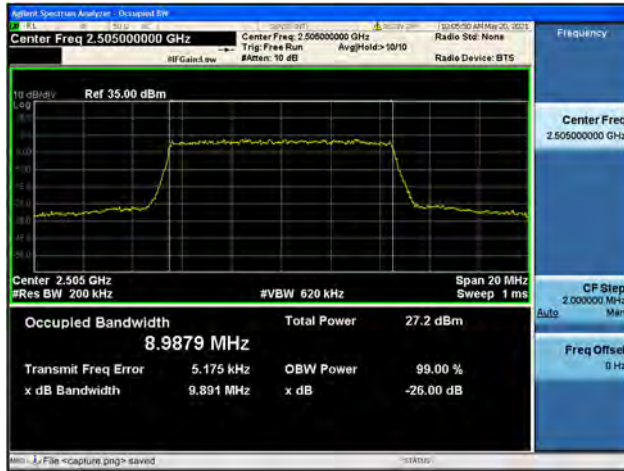


Band7 / 5MHz / High CH / 16QAM





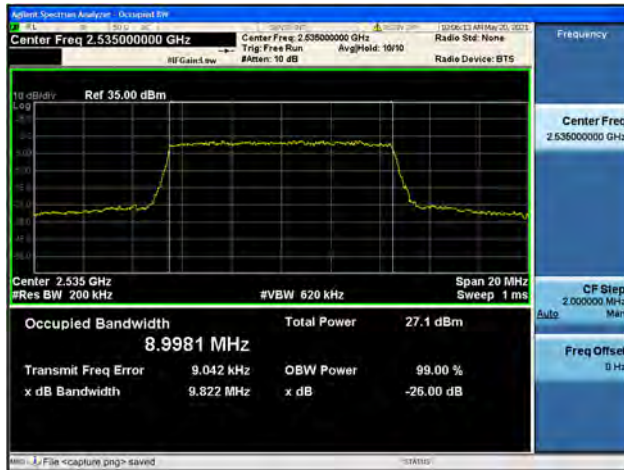
Band7 / 10MHz / Low CH / QPSK



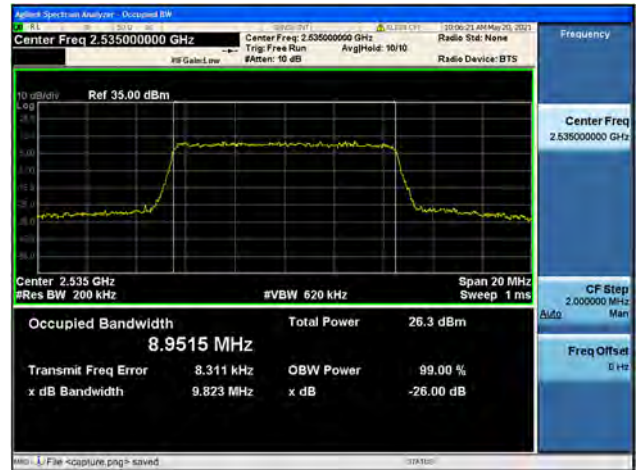
Band7 / 10MHz / Low CH / 16QAM



Band7 / 10MHz / Mid CH / QPSK



Band7 / 10MHz / Mid CH / 16QAM



Band7 / 10MHz / High CH / QPSK

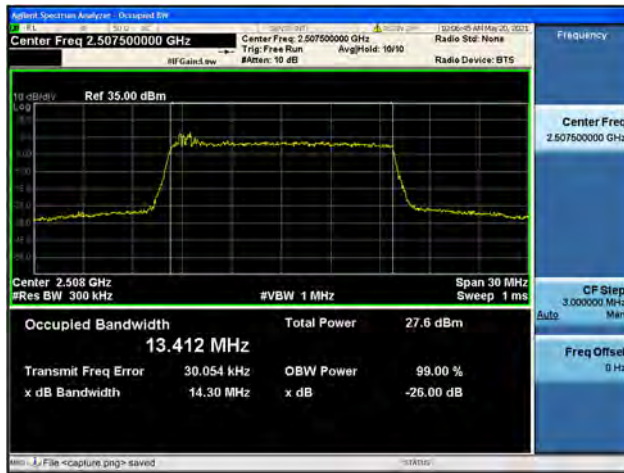


Band7 / 10MHz / High CH / 16QAM





Band7 / 15MHz / Low CH / QPSK



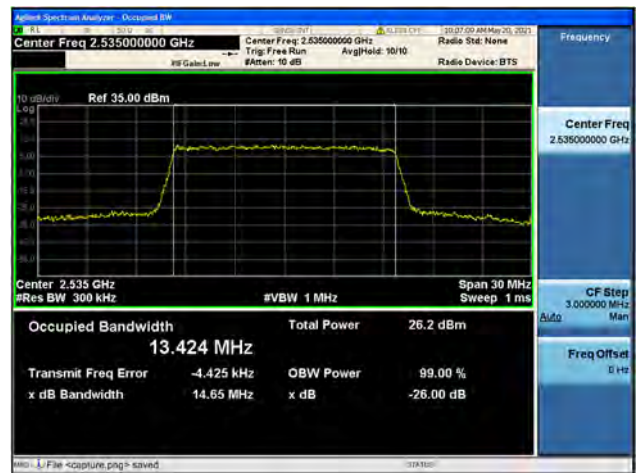
Band7 / 15MHz / Low CH / 16QAM



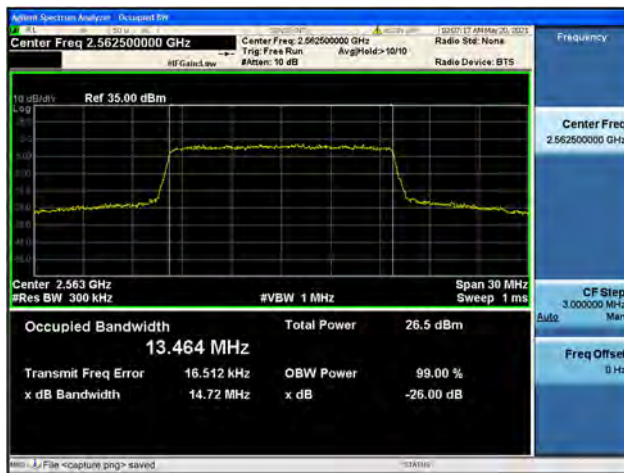
Band7 / 15MHz / Mid CH / QPSK



Band7 / 15MHz / Mid CH / 16QAM



Band7 / 15MHz / High CH / QPSK

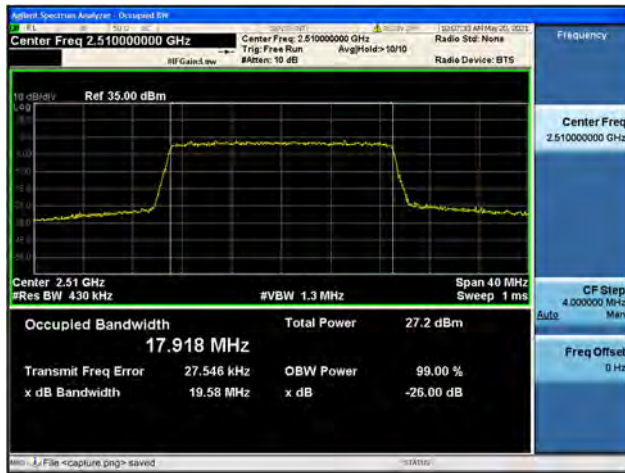


Band7 / 15MHz / High CH / 16QAM

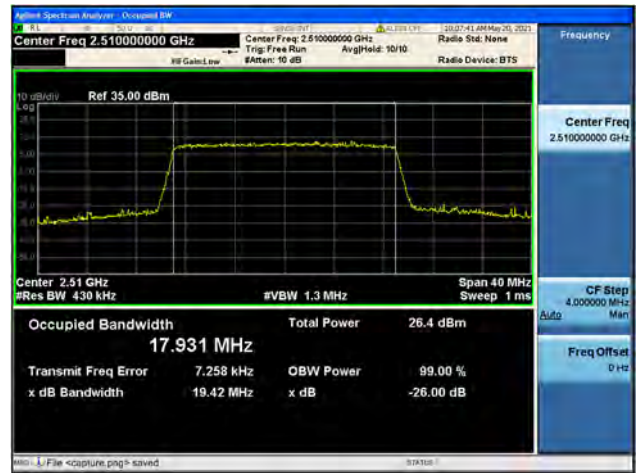




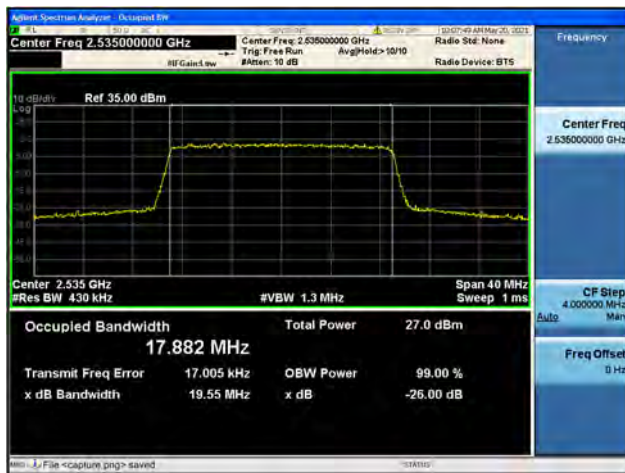
Band7 / 20MHz / Low CH / QPSK



Band7 / 20MHz / Low CH / 16QAM



Band7 / 20MHz / Mid CH / QPSK



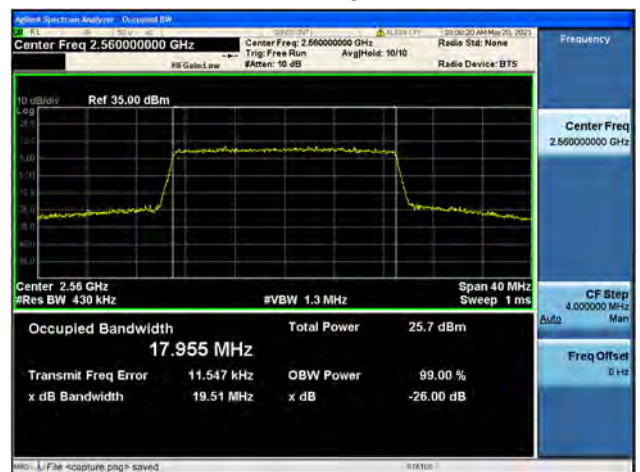
Band7 / 20MHz / Mid CH / 16QAM



Band7 / 20MHz / High CH / QPSK

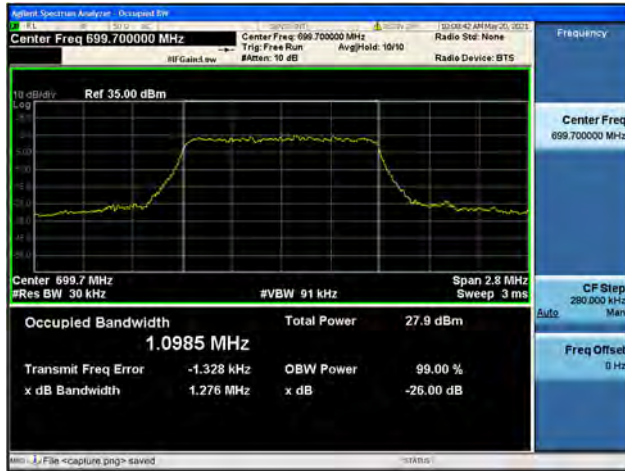


Band7 / 20MHz / High CH / 16QAM





Band12 / 1.4MHz / Low CH / QPSK



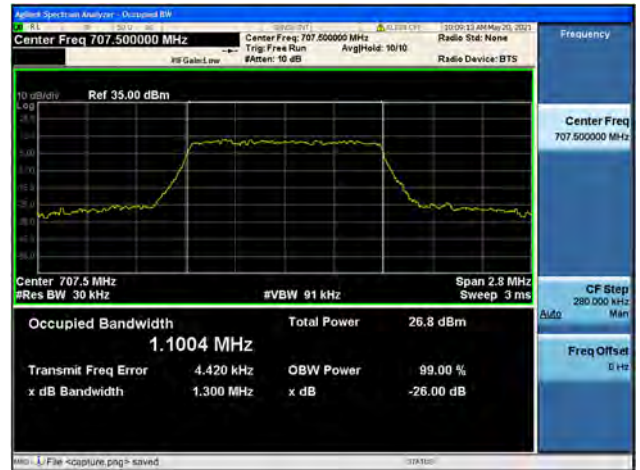
Band12 / 1.4MHz / Low CH / 16QAM



Band12 / 1.4MHz / Mid CH / QPSK



Band12 / 1.4MHz / Mid CH / 16QAM



Band12 / 1.4MHz / High CH / QPSK

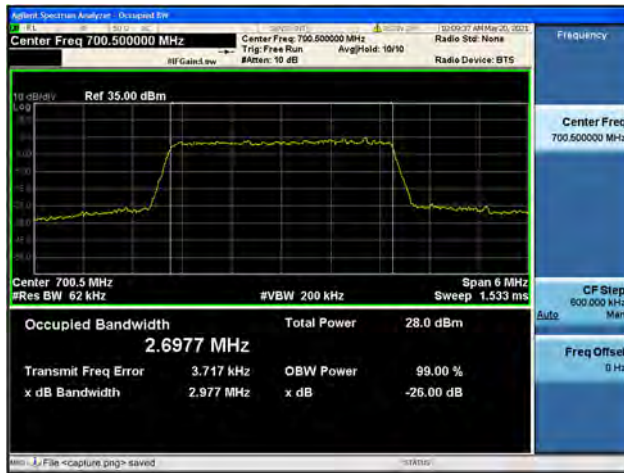


Band12 / 1.4MHz / High CH / 16QAM

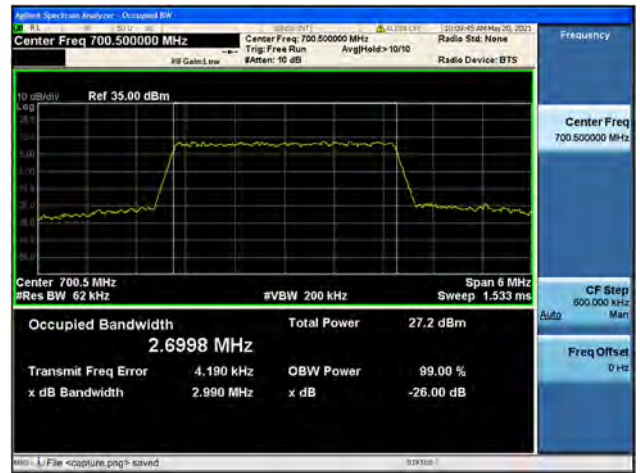




Band12 / 3MHz / Low CH / QPSK



Band12 / 3MHz / Low CH / 16QAM



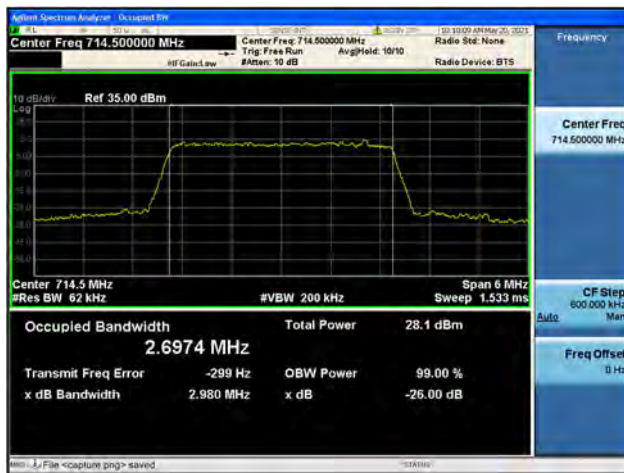
Band12 / 3MHz / Mid CH / QPSK



Band12 / 3MHz / Mid CH / 16QAM



Band12 / 3MHz / High CH / QPSK



Band12 / 3MHz / High CH / 16QAM





Band12 / 5MHz / Low CH / QPSK



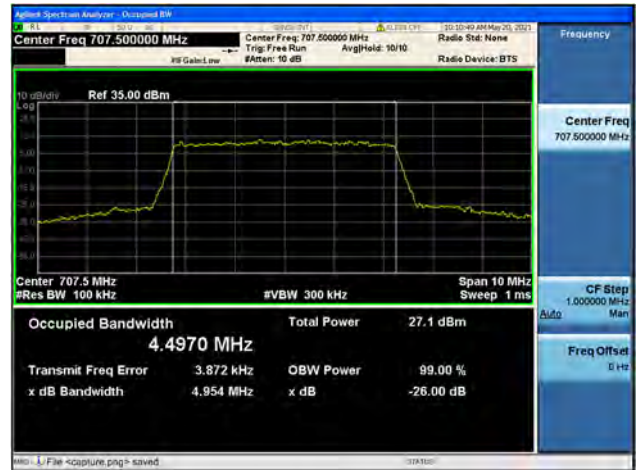
Band12 / 5MHz / Low CH / 16QAM



Band12 / 5MHz / Mid CH / QPSK



Band12 / 5MHz / Mid CH / 16QAM



Band12 / 5MHz / High CH / QPSK



Band12 / 5MHz / High CH / 16QAM





Band12 / 10MHz / Low CH / QPSK



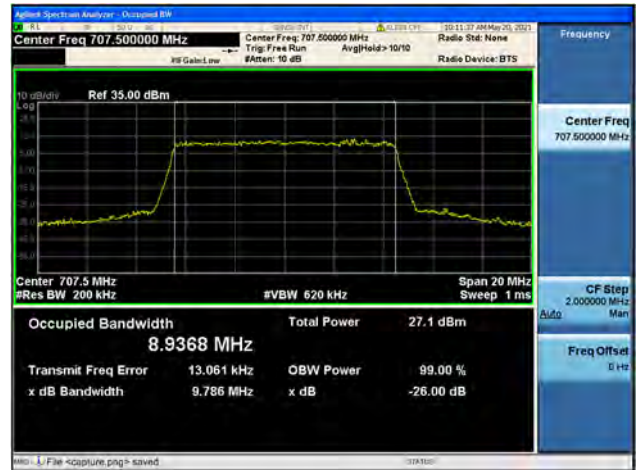
Band12 / 10MHz / Low CH / 16QAM



Band12 / 10MHz / Mid CH / QPSK



Band12 / 10MHz / Mid CH / 16QAM



Band12 / 10MHz / High CH / QPSK

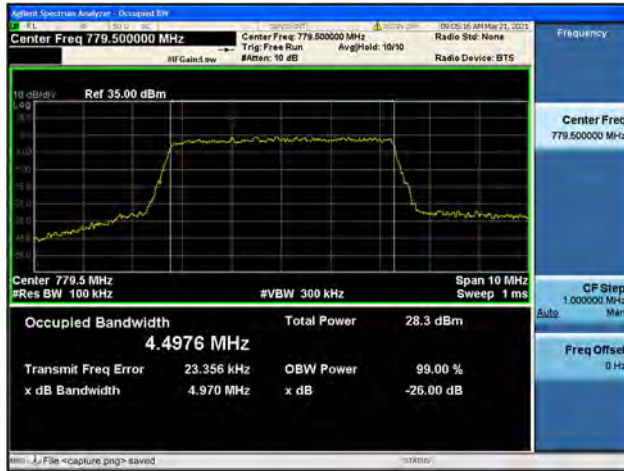


Band12 / 10MHz / High CH / 16QAM





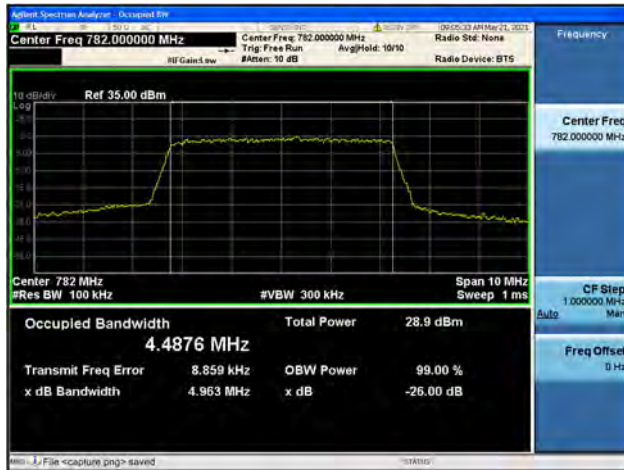
Band13 / 5MHz / Low CH / QPSK



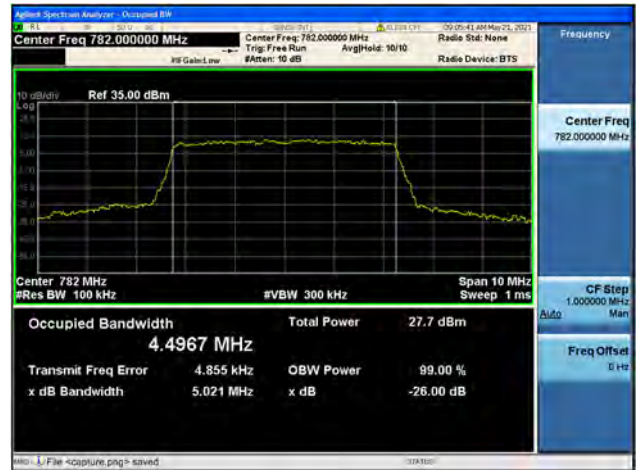
Band13 / 5MHz / Low CH / 16QAM



Band13 / 5MHz / Mid CH / QPSK



Band13 / 5MHz / Mid CH / 16QAM



Band13 / 5MHz / High CH / QPSK



Band13 / 5MHz / High CH / 16QAM

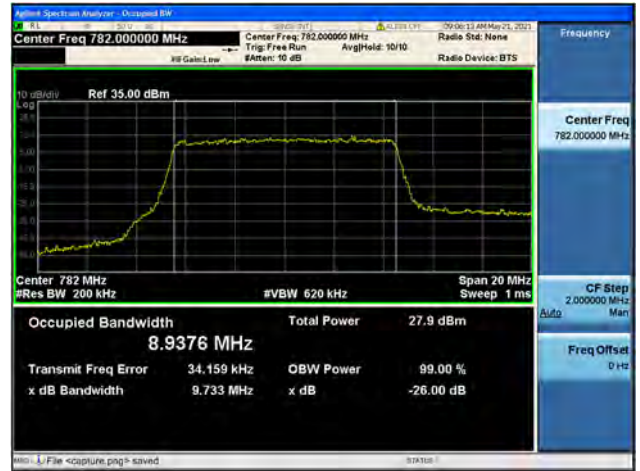




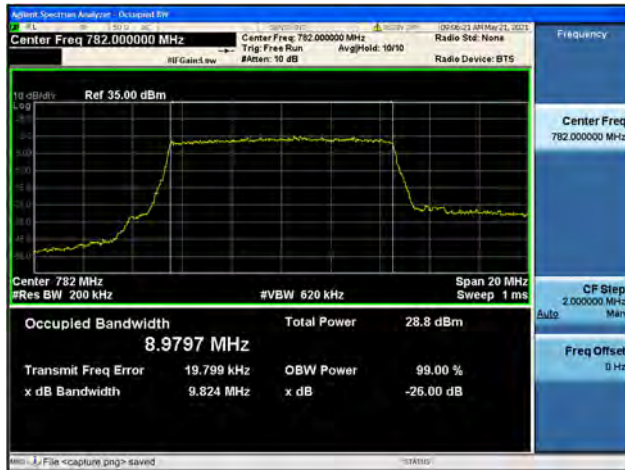
Band13 / 10MHz / Low CH / QPSK



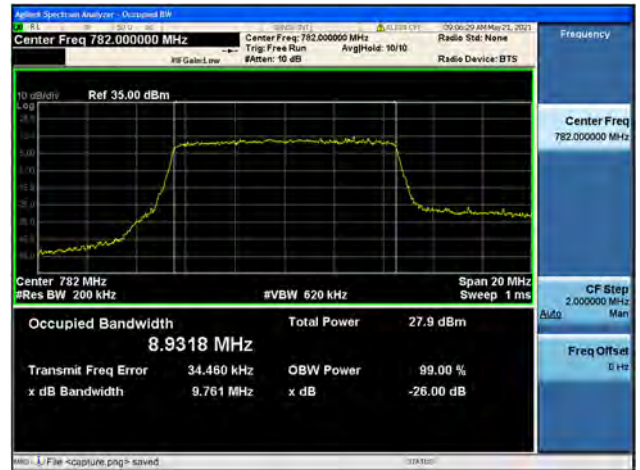
Band13 / 10MHz / Low CH / 16QAM



Band13 / 10MHz / Mid CH / QPSK



Band13 / 10MHz / Mid CH / 16QAM



Band13 / 10MHz / High CH / QPSK



Band13 / 10MHz / High CH / 16QAM





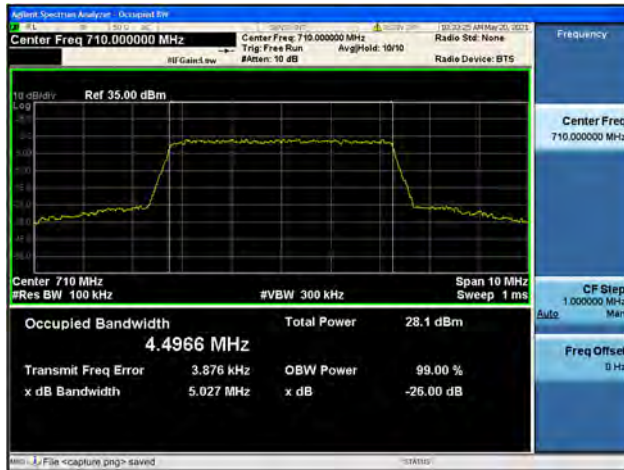
Band17 / 5MHz / Low CH / QPSK



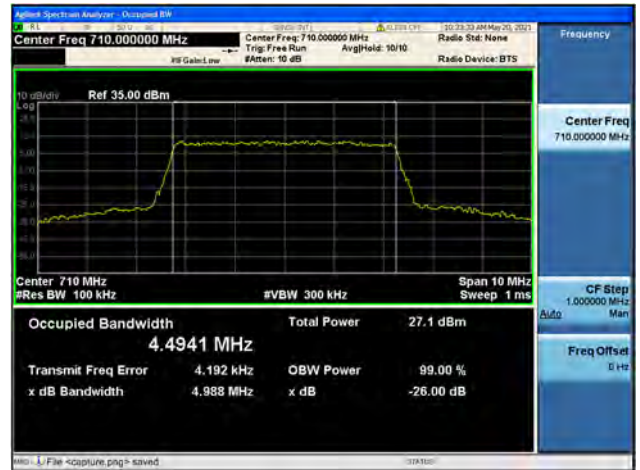
Band17 / 5MHz / Low CH / 16QAM



Band17 / 5MHz / Mid CH / QPSK



Band17 / 5MHz / Mid CH / 16QAM



Band17 / 5MHz / High CH / QPSK

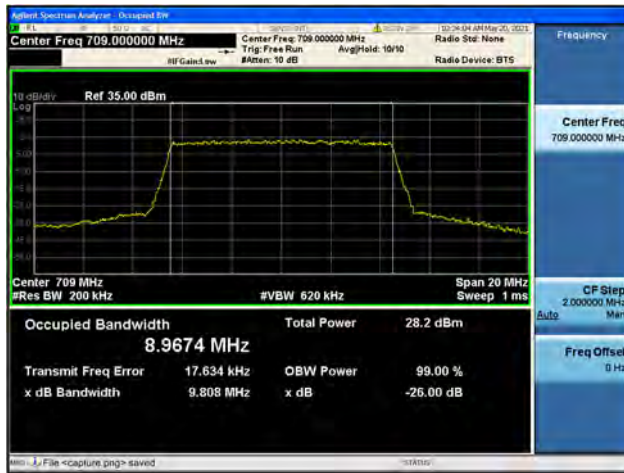


Band17 / 5MHz / High CH / 16QAM





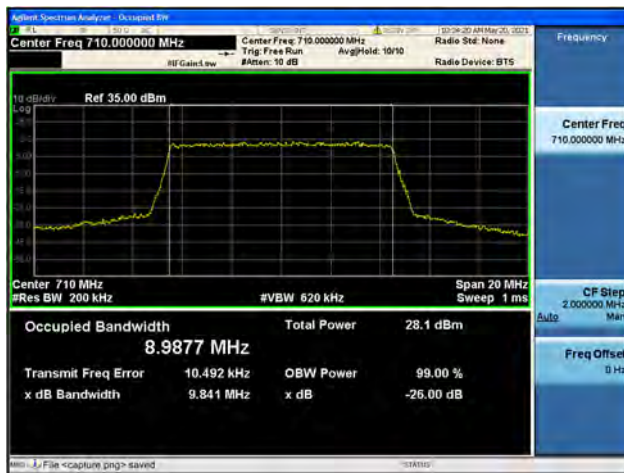
Band17 / 10MHz / Low CH / QPSK



Band17 / 10MHz / Low CH / 16QAM



Band17 / 10MHz / Mid CH / QPSK



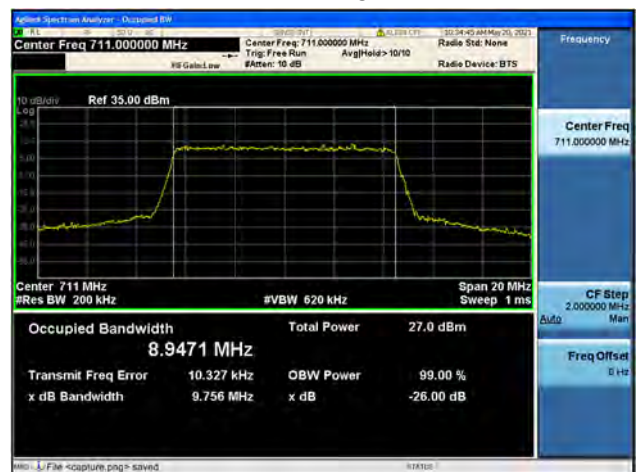
Band17 / 10MHz / Mid CH / 16QAM



Band17 / 10MHz / High CH / QPSK

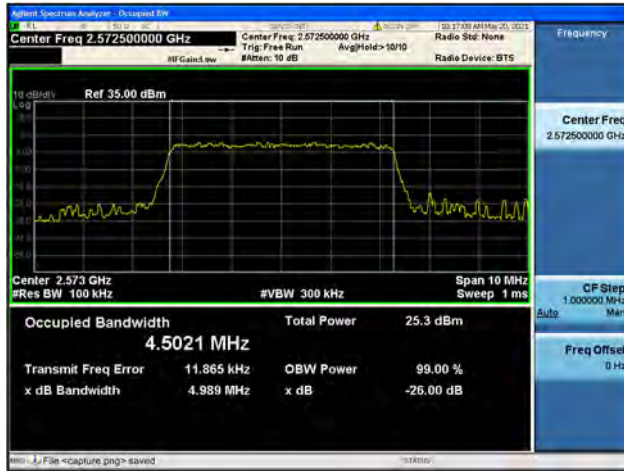


Band17 / 10MHz / High CH / 16QAM

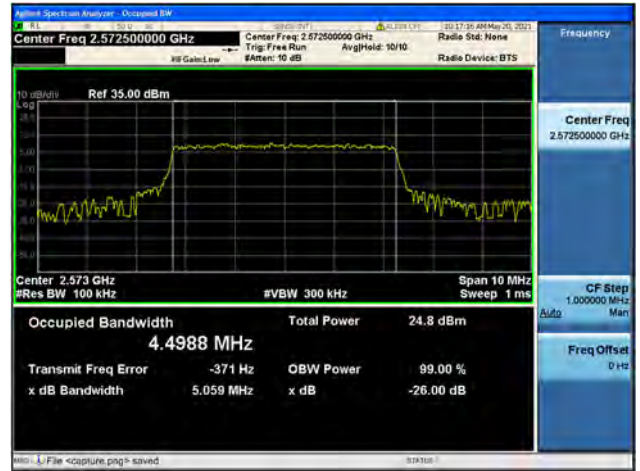




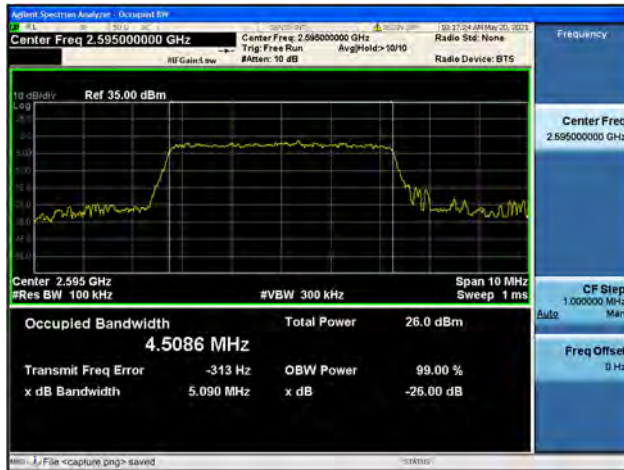
Band38 / 5MHz / Low CH / QPSK



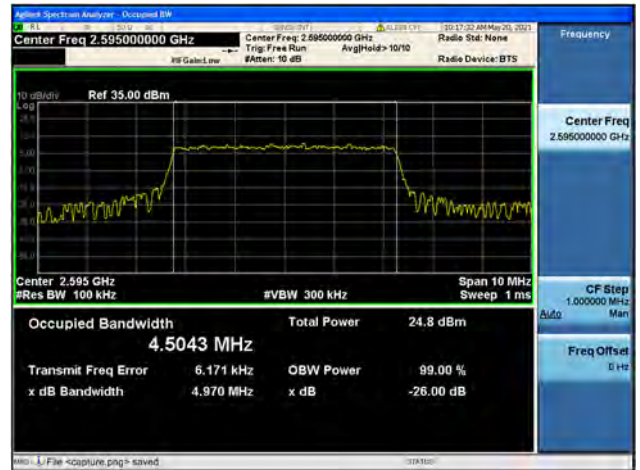
Band38 / 5MHz / Low CH / 16QAM



Band38 / 5MHz / Mid CH / QPSK



Band38 / 5MHz / Mid CH / 16QAM



Band38 / 5MHz / High CH / QPSK

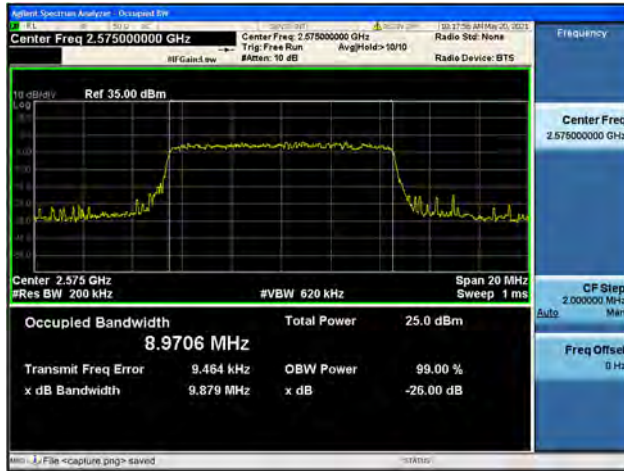


Band38 / 5MHz / High CH / 16QAM





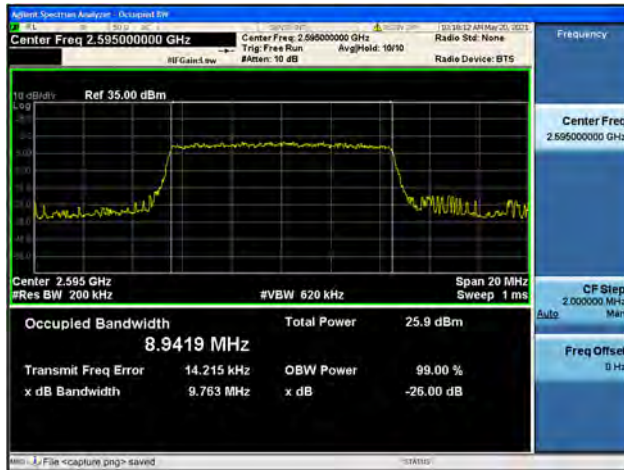
Band38 / 10MHz / Low CH / QPSK



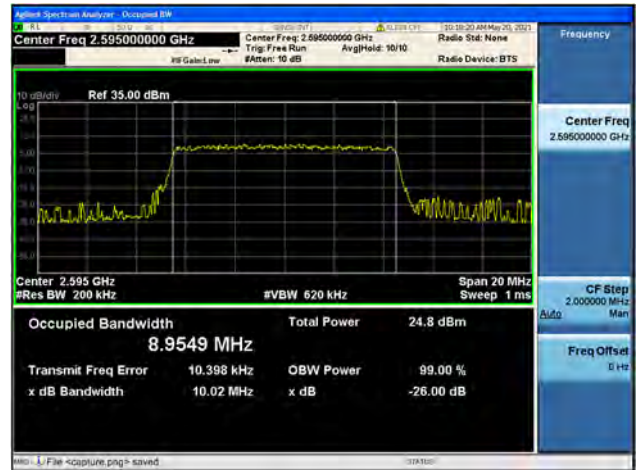
Band38 / 10MHz / Low CH / 16QAM



Band38 / 10MHz / Mid CH / QPSK



Band38 / 10MHz / Mid CH / 16QAM



Band38 / 10MHz / High CH / QPSK

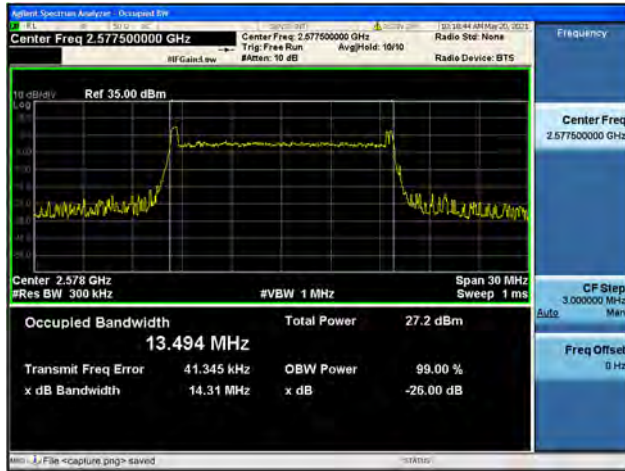


Band38 / 10MHz / High CH / 16QAM

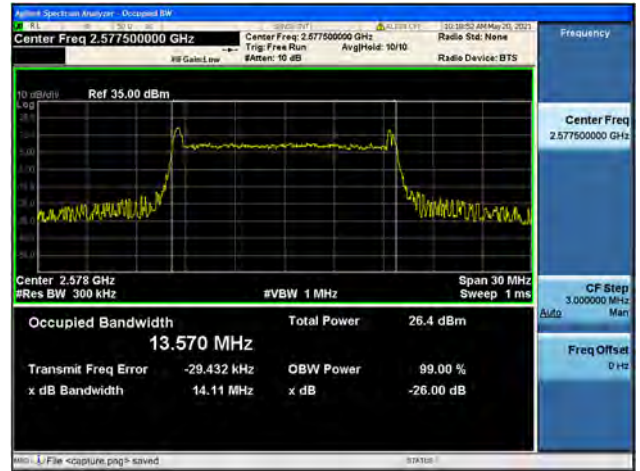




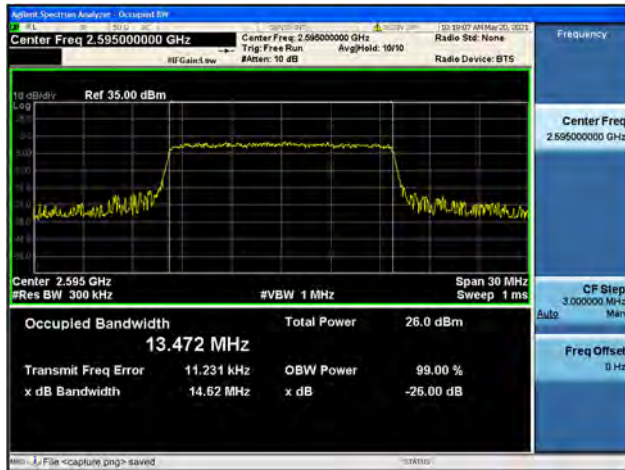
Band38 / 15MHz / Low CH / QPSK



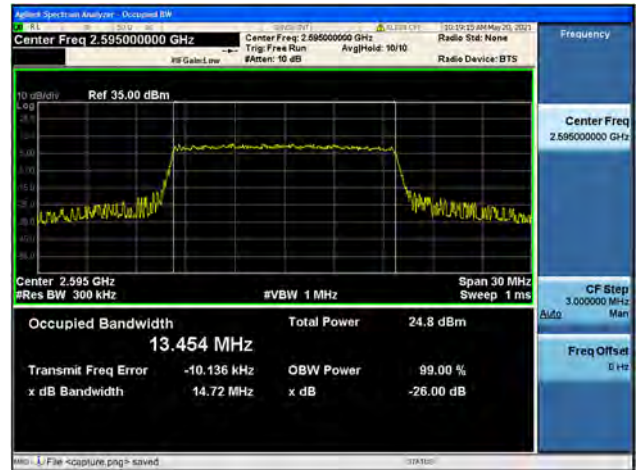
Band38 / 15MHz / Low CH / 16QAM



Band38 / 15MHz / Mid CH / QPSK



Band38 / 15MHz / Mid CH / 16QAM



Band38 / 15MHz / High CH / QPSK

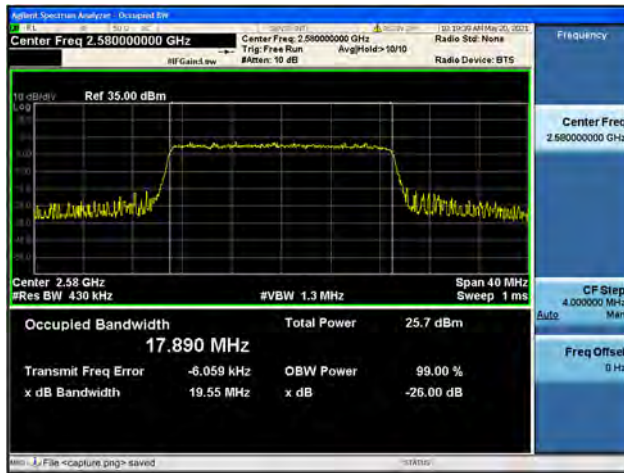


Band38 / 15MHz / High CH / 16QAM

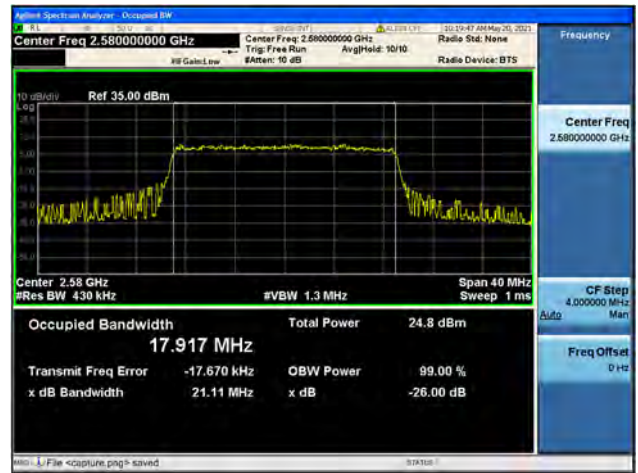




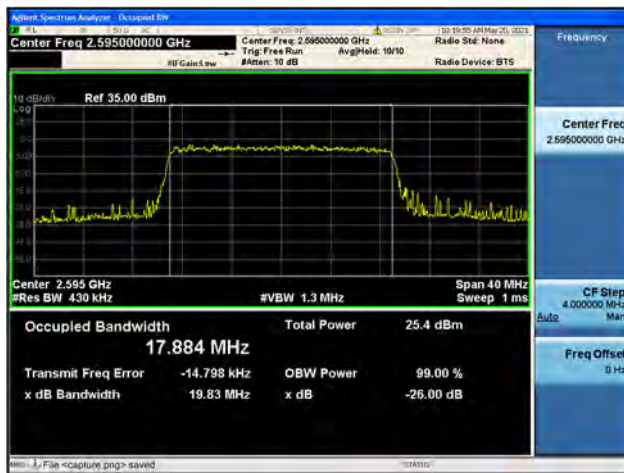
Band38 / 20MHz / Low CH / QPSK



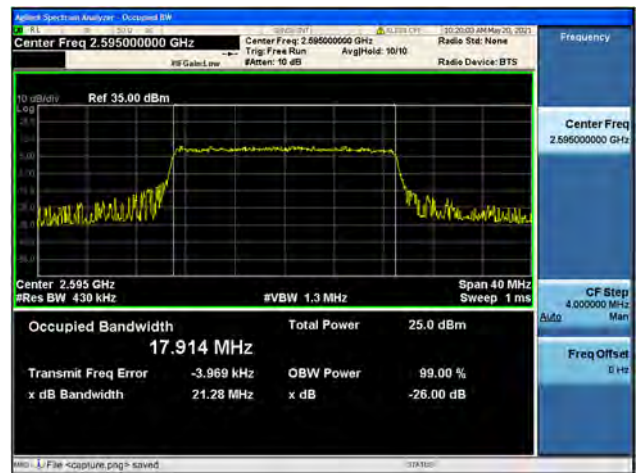
Band38 / 20MHz / Low CH / 16QAM



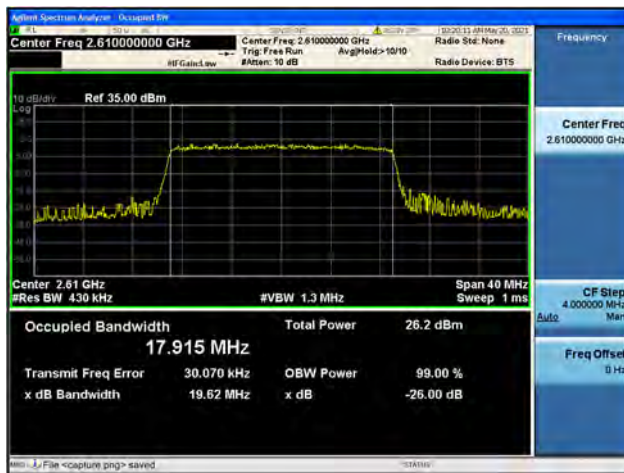
Band38 / 20MHz / Mid CH / QPSK



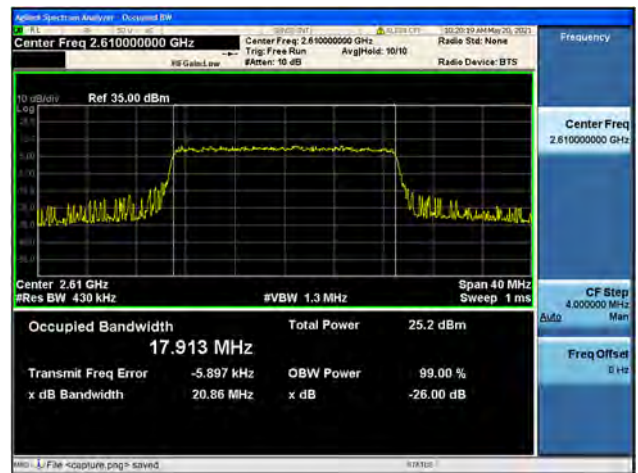
Band38 / 20MHz / Mid CH / 16QAM



Band38 / 20MHz / High CH / QPSK



Band38 / 20MHz / High CH / 16QAM





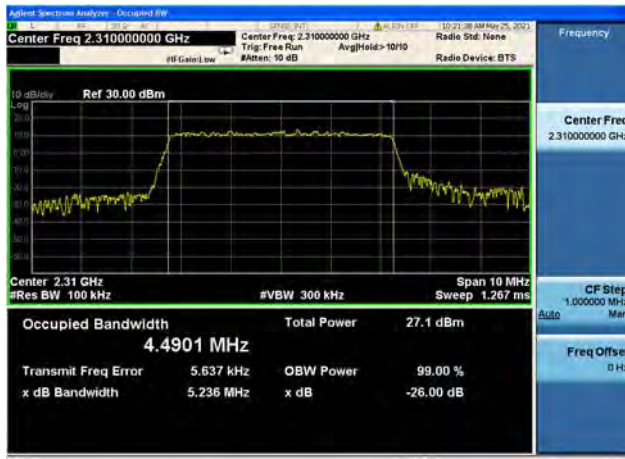
Band40/ Block A / 5MHz / Low CH / QPSK



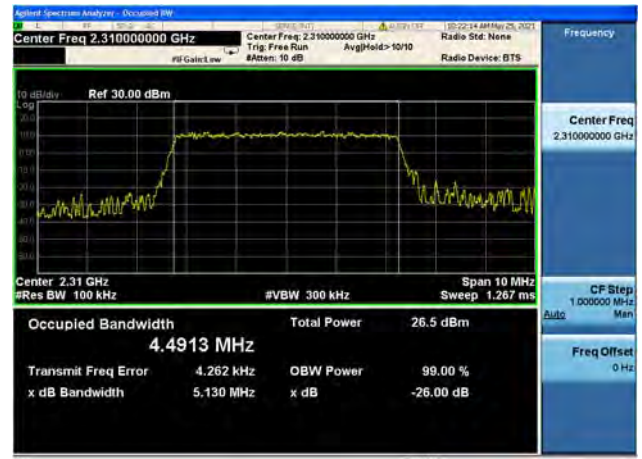
Band40/ Block A / 5MHz / Low CH / 16QAM



Band40/ Block A / 5MHz / Mid CH / QPSK



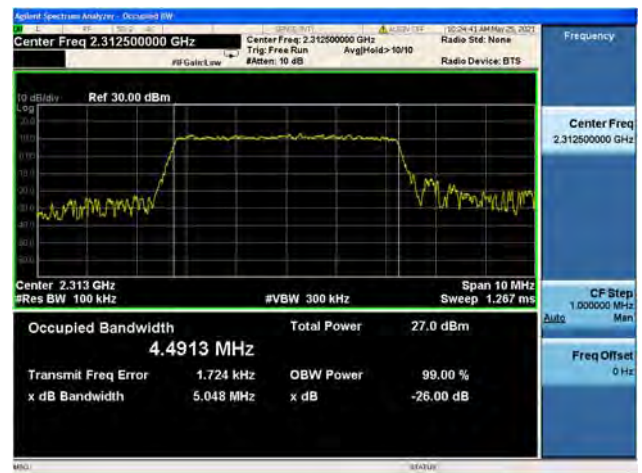
Band40/ Block A / 5MHz / Mid CH / 16QAM



Band40/ Block A / 5MHz / High CH / QPSK

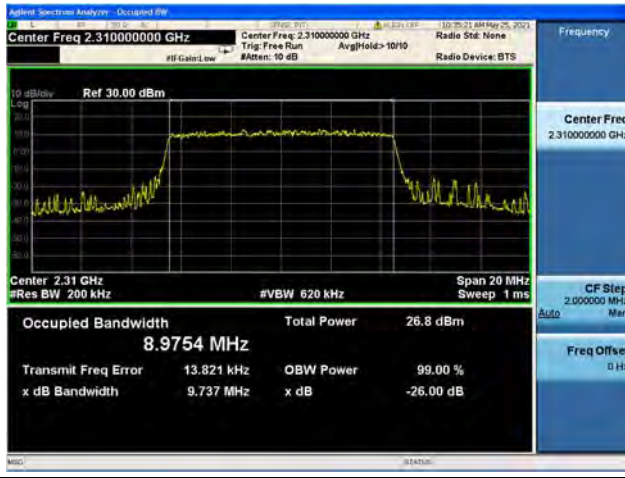


Band40/ Block A / 5MHz / High CH / 16QAM





Band40/ Block A / 10MHz / Mid CH / QPSK

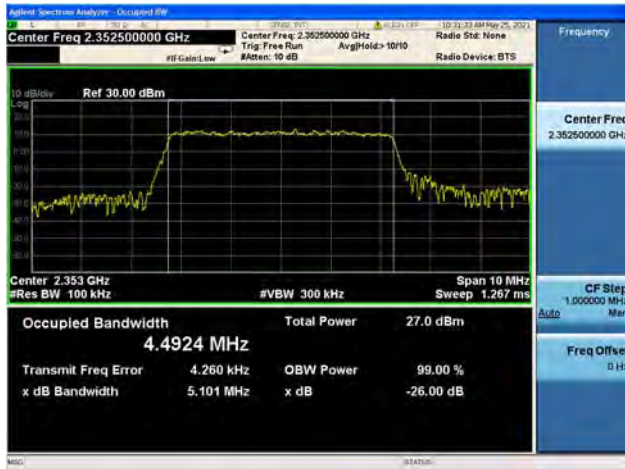


Band40/ Block A / 10MHz / Mid CH / 16QAM

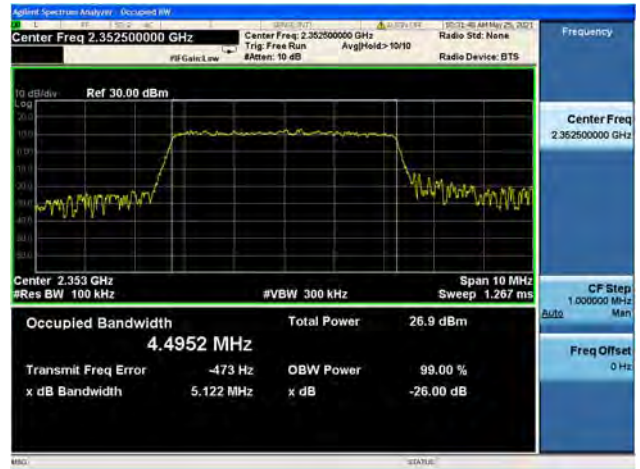




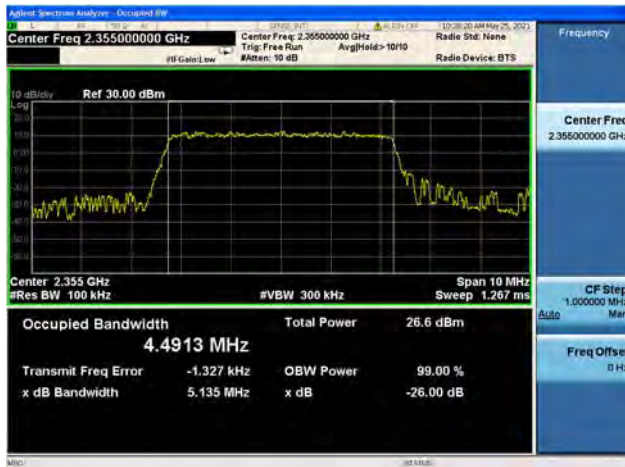
Band40/ Block B / 5MHz / Low CH / QPSK



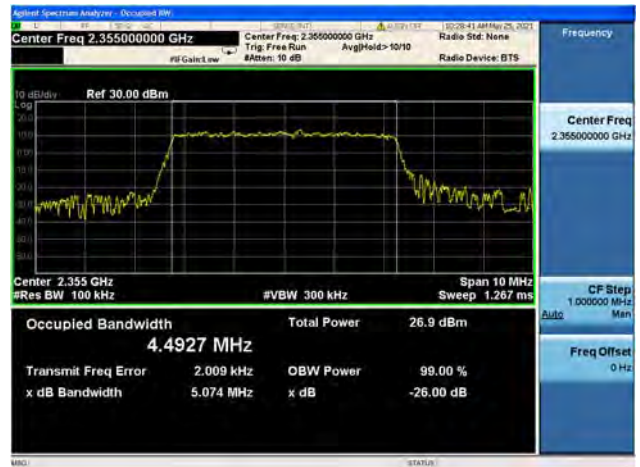
Band40/ Block B / 5MHz / Low CH / 16QAM



Band40/ Block B / 5MHz / Mid CH / QPSK



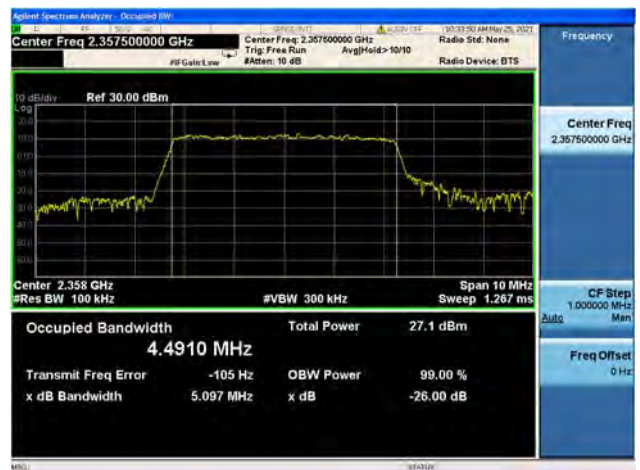
Band40/ Block B / 5MHz / Mid CH / 16QAM



Band40/ Block B / 5MHz / High CH / QPSK



Band40/ Block B / 5MHz / High CH / 16QAM

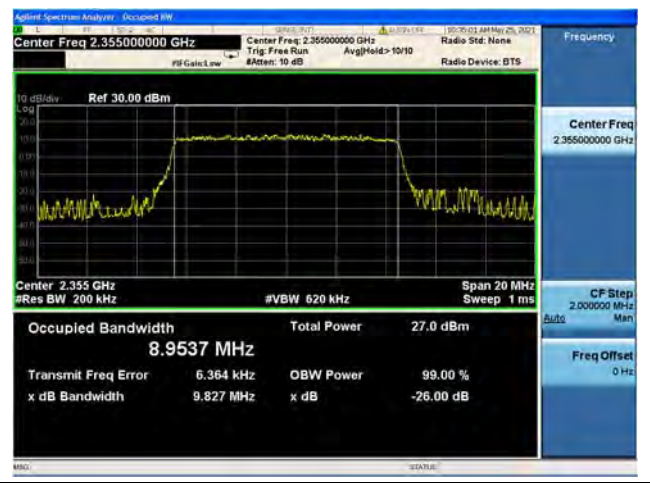




Band40/ Block B / 10MHz / Mid CH / QPSK



Band40/ Block B / 10MHz / Mid CH / 16QAM





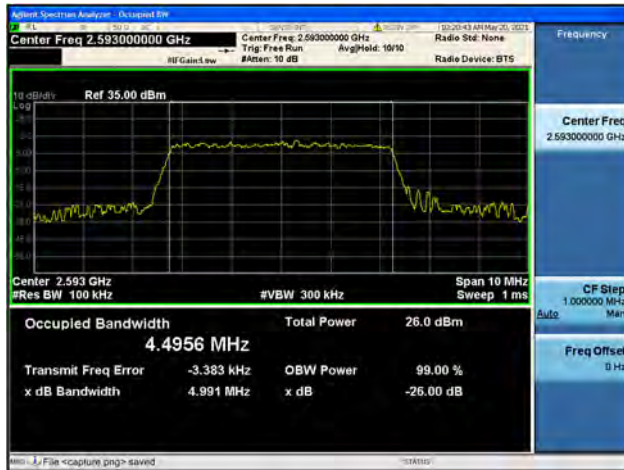
Band41 / 5MHz / Low CH / QPSK



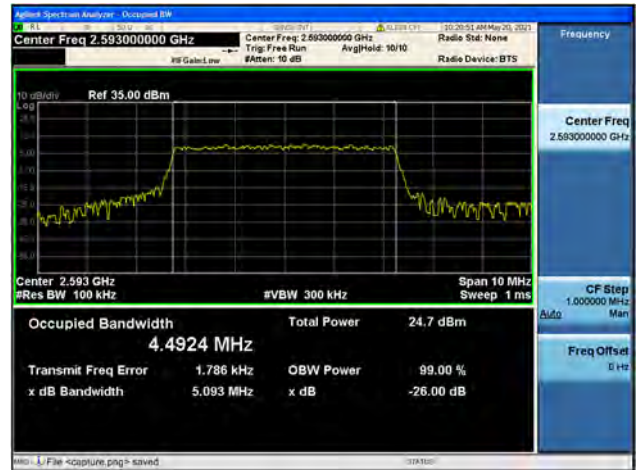
Band41 / 5MHz / Low CH / 16QAM



Band41 / 5MHz / Mid CH / QPSK



Band41 / 5MHz / Mid CH / 16QAM



Band41 / 5MHz / High CH / QPSK

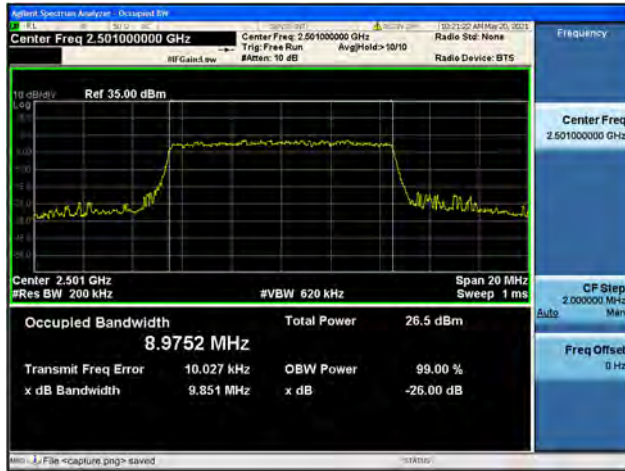


Band41 / 5MHz / High CH / 16QAM

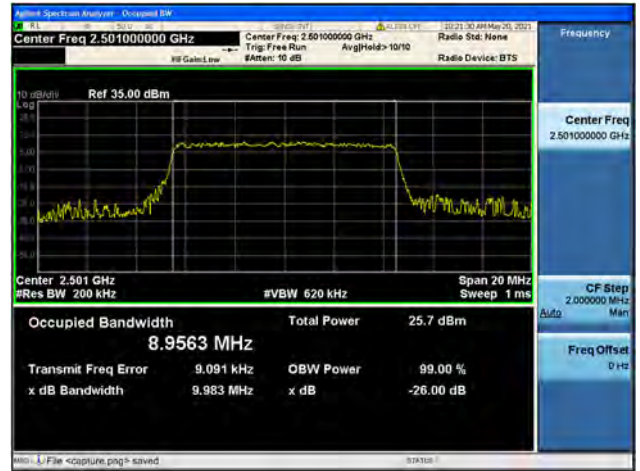




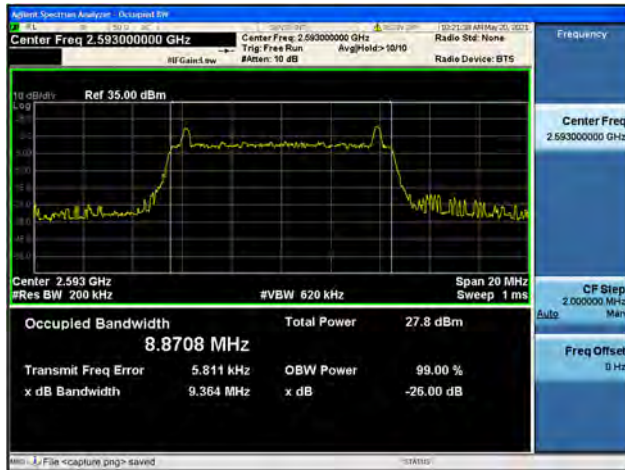
Band41 / 10MHz / Low CH / QPSK



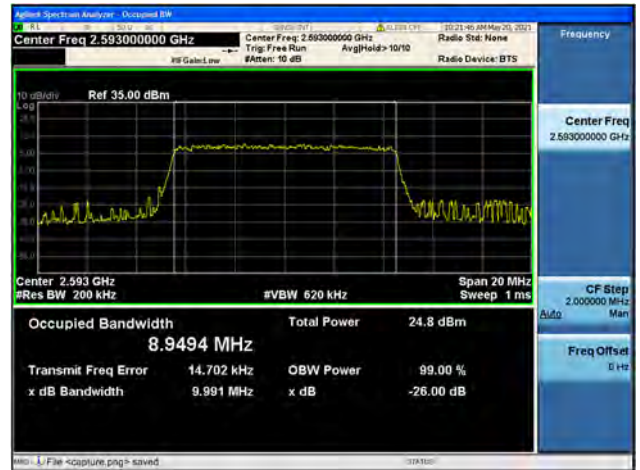
Band41 / 10MHz / Low CH / 16QAM



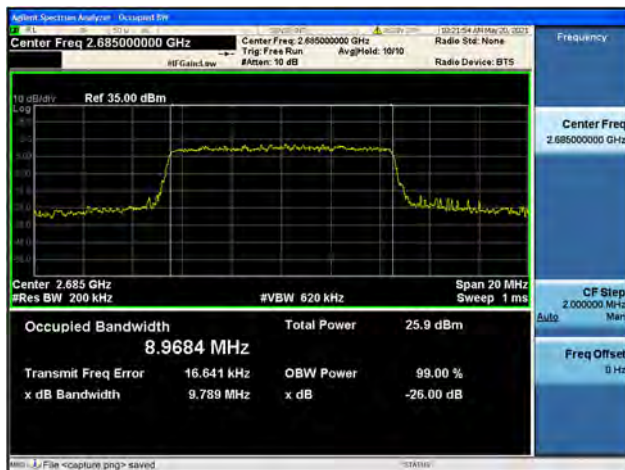
Band41 / 10MHz / Mid CH / QPSK



Band41 / 10MHz / Mid CH / 16QAM



Band41 / 10MHz / High CH / QPSK

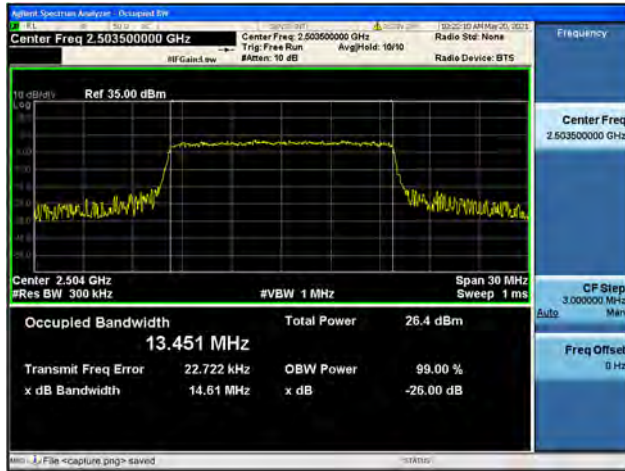


Band41 / 10MHz / High CH / 16QAM

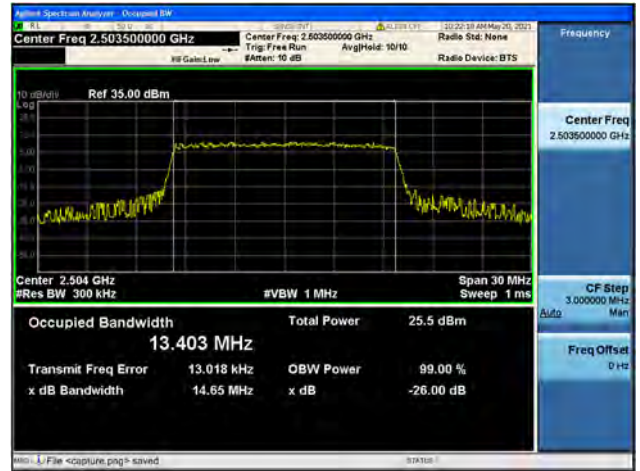




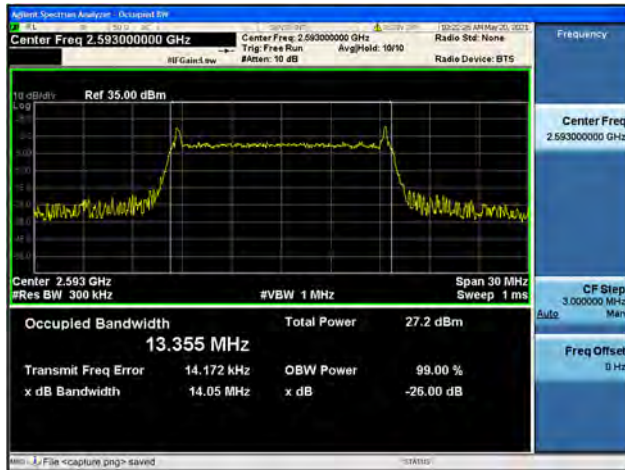
Band41 / 15MHz / Low CH / QPSK



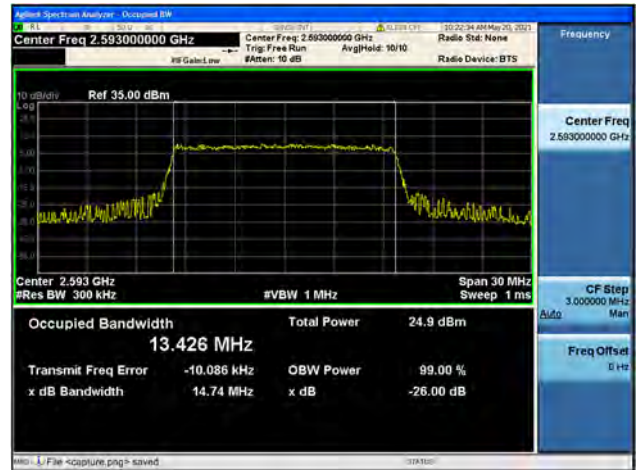
Band41 / 15MHz / Low CH / 16QAM



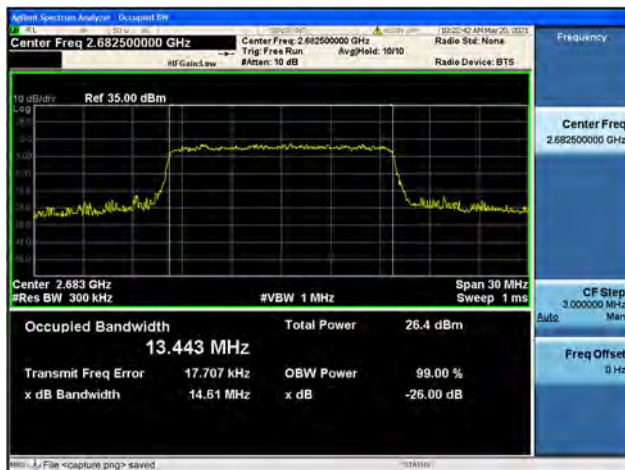
Band41 / 15MHz / Mid CH / QPSK



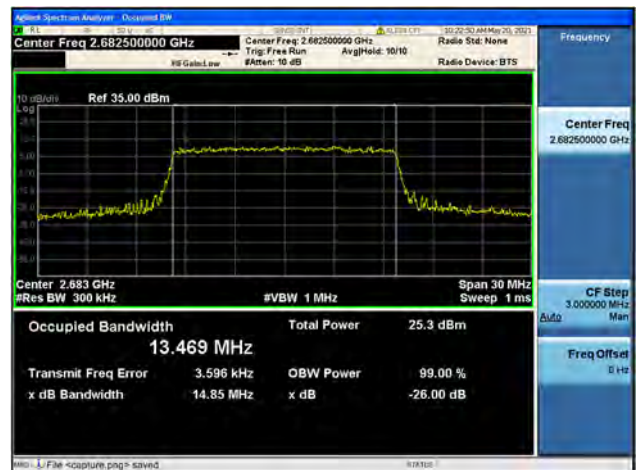
Band41 / 15MHz / Mid CH / 16QAM



Band41 / 15MHz / High CH / QPSK

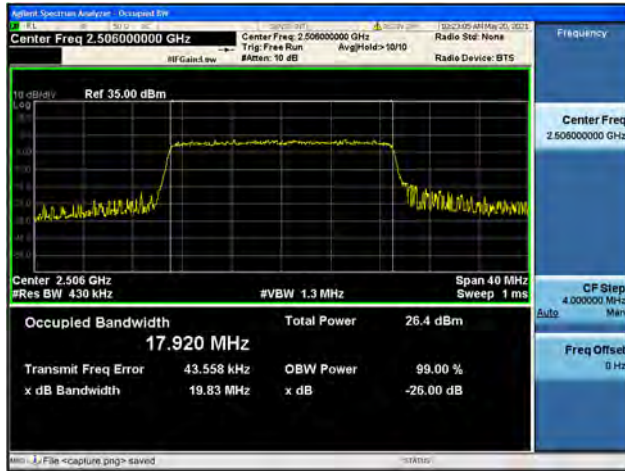


Band41 / 15MHz / High CH / 16QAM





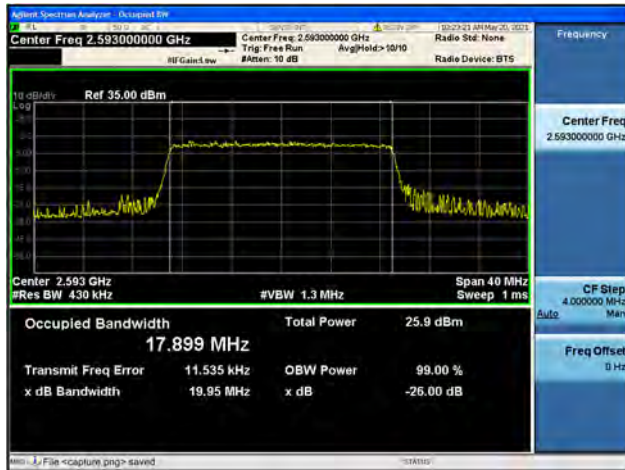
Band41 / 20MHz / Low CH / QPSK



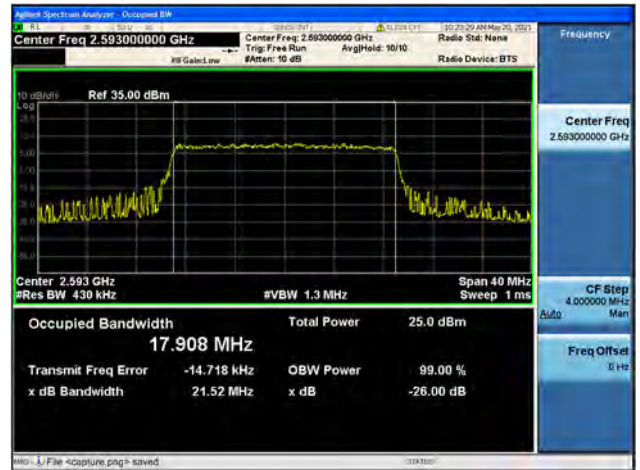
Band41 / 20MHz / Low CH / 16QAM



Band41 / 20MHz / Mid CH / QPSK



Band41 / 20MHz / Mid CH / 16QAM



Band41 / 20MHz / High CH / QPSK



Band41 / 20MHz / High CH / 16QAM



2.3. Frequency Stability

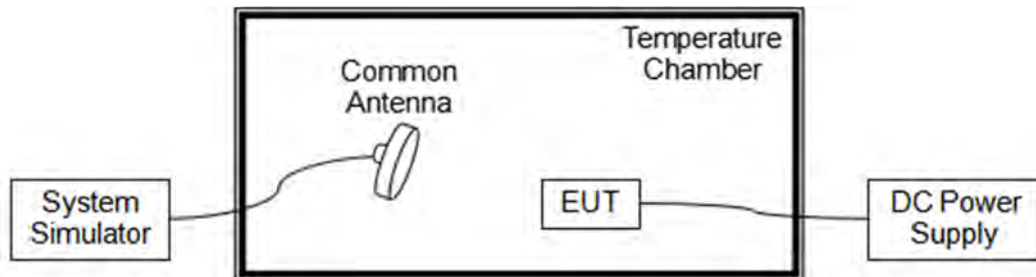
2.3.1. Requirement

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

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

Note: The operating temperature of EUT is from -20°C to 50°C , which are specified by the applicant.

2.3.2. Test Description



The EUT which is powered by the DC Power Supply directly, is located in the Temperature Chamber. The EUT is commanded by the System Simulator (SS) to operate at the maximum output power. A call is established between the EUT and the SS via a Common Antenna.

2.3.3. Test Procedure

KDB 971168 D01v03 Section 9.0 and ANSI/TIA-603-E-2016.



2.3.4. Test Result

The nominal, highest and lowest extreme voltages are separately 3.70V, 4.35V and 3.50V, which are specified by the applicant; the normal temperature here used is 20°C.

LTE Band 2, QPSK, Channel 18900, Frequency 1880.0MHz					
Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp(°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
100	3.70	+20(Ref)	-26	-0.014	PASS
100		-20	57	0.030	
100		-10	27	0.014	
100		0	17	0.009	
100		+10	-23	-0.012	
100		+20	-71	-0.038	
100		+30	36	0.019	
100		+40	29	0.015	
100		+50	70	0.037	
115		4.35	+20	-72	
85	3.50	+20	57	0.030	

LTE Band 4, QPSK, Channel 20175, Frequency 1732.5MHz					
Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp(°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
100	3.70	+20(Ref)	18	0.010	PASS
100		-20	20	0.012	
100		-10	-39	-0.023	
100		0	-38	-0.022	
100		+10	-41	-0.024	
100		+20	28	0.016	
100		+30	33	0.019	
100		+40	-57	-0.033	
100		+50	14	0.008	
115		4.35	+20	47	
85	3.50	+20	34	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
100	3.70	+20(Ref)	61	0.073	PASS
100		-20	-69	-0.082	
100		-10	-32	-0.038	
100		0	-19	-0.023	
100		+10	48	0.057	
100		+20	-26	-0.031	
100		+30	48	0.057	
100		+40	-60	-0.072	
100		+50	52	0.062	
115		4.35	+20	-52	
85	3.50	+20	43	0.051	

LTE Band 7, QPSK, Channel 21100, Frequency 2535MHz Limit= Within Authorized Band					
Voltage (%)	Power (VDC)	Temp(°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
100	3.70	+20(Ref)	38	0.015	PASS
100		-20	79	0.031	
100		-10	-18	-0.007	
100		0	19	0.007	
100		+10	32	0.013	
100		+20	56	0.022	
100		+30	-72	-0.028	
100		+40	52	0.021	
100		+50	45	0.018	
115		4.35	+20	17	
85	3.50	+20	20	0.008	



LTE Band 12, QPSK, Channel 23095, Frequency 707.5MHz					
Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp(°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
100	3.70	+20(Ref)	-78	-0.110	PASS
100		-20	-77	-0.109	
100		-10	-29	-0.041	
100		0	49	0.069	
100		+10	32	0.045	
100		+20	64	0.090	
100		+30	-37	-0.052	
100		+40	28	0.040	
100		+50	76	0.107	
115		4.35	+20	29	
85	3.50	+20	65	0.092	

LTE Band 13, QPSK, Channel 23230, Frequency 782.0MHz					
Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp(°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
100	3.70	+20(Ref)	29	0.037	PASS
100		-20	-58	-0.074	
100		-10	74	0.095	
100		0	-36	-0.046	
100		+10	43	0.055	
100		+20	-34	-0.043	
100		+30	-31	-0.040	
100		+40	-18	-0.023	
100		+50	25	0.032	
115		4.35	+20	-77	
85	3.50	+20	43	0.055	



LTE Band 17, QPSK, Channel 23790, Frequency 710MHz					
Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp(°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
100	3.70	+20(Ref)	40	0.056	PASS
100		-20	-48	-0.068	
100		-10	-47	-0.066	
100		0	50	0.070	
100		+10	41	0.058	
100		+20	62	0.087	
100		+30	14	0.020	
100		+40	26	0.037	
100		+50	-38	-0.054	
115		4.35	+20	-45	
85	3.50	+20	75	0.106	

LTE Band 38, QPSK, Channel 38000, Frequency 2595.0MHz					
Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp (°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
100	3.70	+20(Ref)	47	0.018	PASS
100		-20	30	0.012	
100		-10	33	0.013	
100		0	-14	-0.005	
100		+10	32	0.012	
100		+20	38	0.015	
100		+30	-79	-0.030	
100		+40	58	0.022	
100		+50	77	0.030	
115		4.35	+20	-28	
85	3.50	+20	79	0.030	



LTE Band 40, Block A, QPSK, Channel 38750, Frequency 2310MHz					
Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp (°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
100	3.70	+20(Ref)	24	0.010	PASS
100		-20	59	0.026	
100		-10	49	0.021	
100		0	-57	-0.025	
100		+10	59	0.026	
100		+20	44	0.019	
100		+30	-34	-0.015	
100		+40	-50	-0.022	
100		+50	-47	-0.020	
115		4.35	+20	-77	
85	3.50	+20	61	0.026	

LTE Band 40 Block B, QPSK, Channel 39200, Frequency 2355MHz					
Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp (°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
100	3.70	+20(Ref)	41	0.017	PASS
100		-20	73	0.031	
100		-10	17	0.007	
100		0	78	0.033	
100		+10	16	0.007	
100		+20	-39	-0.017	
100		+30	-57	-0.024	
100		+40	-70	-0.030	
100		+50	-31	-0.013	
115		4.35	+20	-62	
85	3.50	+20	37	0.016	



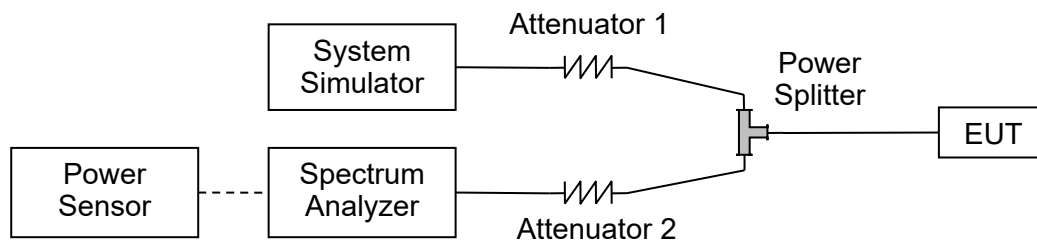
LTE Band 41, QPSK, Channel 40620, Frequency 2593.0MHz					
Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp (°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
100	3.70	+20(Ref)	48	0.019	PASS
100		-20	-22	-0.008	
100		-10	41	0.016	
100		0	77	0.030	
100		+10	42	0.016	
100		+20	-59	-0.023	
100		+30	-20	-0.008	
100		+40	76	0.029	
100		+50	75	0.029	
115		4.35	+20	-46	
85	3.50	+20	59	0.023	

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	5.38	<=13	PASS
	Low	16QAM	6.27	<=13	PASS
	Mid	QPSK	5.42	<=13	PASS
	Mid	16QAM	6.16	<=13	PASS
	High	QPSK	5.41	<=13	PASS
	High	16QAM	6.1	<=13	PASS
3	Low	QPSK	5.57	<=13	PASS
	Low	16QAM	6.42	<=13	PASS
	Mid	QPSK	5.38	<=13	PASS
	Mid	16QAM	6.25	<=13	PASS
	High	QPSK	5.37	<=13	PASS
	High	16QAM	6.21	<=13	PASS
5	Low	QPSK	5.38	<=13	PASS
	Low	16QAM	6.21	<=13	PASS
	Mid	QPSK	5.27	<=13	PASS
	Mid	16QAM	6.1	<=13	PASS
	High	QPSK	5.27	<=13	PASS
	High	16QAM	6.03	<=13	PASS
10	Low	QPSK	5.39	<=13	PASS
	Low	16QAM	6.19	<=13	PASS
	Mid	QPSK	5.33	<=13	PASS
	Mid	16QAM	6.09	<=13	PASS
	High	QPSK	5.21	<=13	PASS
	High	16QAM	6.01	<=13	PASS
15	Low	QPSK	5.26	<=13	PASS
	Low	16QAM	6.11	<=13	PASS
	Mid	QPSK	5.26	<=13	PASS
	Mid	16QAM	6.06	<=13	PASS
	High	QPSK	5.1	<=13	PASS
	High	16QAM	5.94	<=13	PASS
20	Low	QPSK	5.24	<=13	PASS
	Low	16QAM	6.15	<=13	PASS
	Mid	QPSK	5.21	<=13	PASS
	Mid	16QAM	6.09	<=13	PASS
	High	QPSK	5.12	<=13	PASS
	High	16QAM	6.04	<=13	PASS



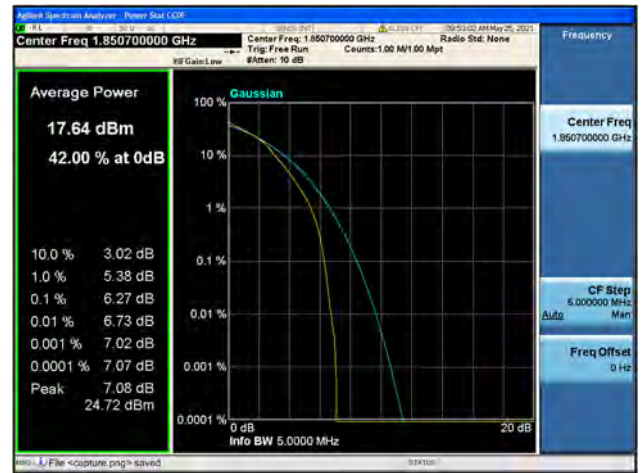
LTE Band 4					
BW(MHz)	Channel Level	Modulation	PAR Radio(dB)	Limit(dB)	Verdict
1.4	Low	QPSK	4.74	<=13	PASS
	Low	16QAM	5.76	<=13	PASS
	Mid	QPSK	5.17	<=13	PASS
	Mid	16QAM	5.94	<=13	PASS
	High	QPSK	5.23	<=13	PASS
	High	16QAM	5.95	<=13	PASS
3	Low	QPSK	4.96	<=13	PASS
	Low	16QAM	5.82	<=13	PASS
	Mid	QPSK	5.25	<=13	PASS
	Mid	16QAM	6.11	<=13	PASS
	High	QPSK	5.24	<=13	PASS
	High	16QAM	6.16	<=13	PASS
5	Low	QPSK	5.02	<=13	PASS
	Low	16QAM	5.86	<=13	PASS
	Mid	QPSK	5.18	<=13	PASS
	Mid	16QAM	6.02	<=13	PASS
	High	QPSK	5.17	<=13	PASS
	High	16QAM	5.99	<=13	PASS
10	Low	QPSK	5.04	<=13	PASS
	Low	16QAM	5.86	<=13	PASS
	Mid	QPSK	5.22	<=13	PASS
	Mid	16QAM	5.99	<=13	PASS
	High	QPSK	5.07	<=13	PASS
	High	16QAM	5.91	<=13	PASS
15	Low	QPSK	4.86	<=13	PASS
	Low	16QAM	5.79	<=13	PASS
	Mid	QPSK	5.11	<=13	PASS
	Mid	16QAM	5.95	<=13	PASS
	High	QPSK	4.9	<=13	PASS
	High	16QAM	5.8	<=13	PASS
20	Low	QPSK	4.97	<=13	PASS
	Low	16QAM	5.87	<=13	PASS
	Mid	QPSK	5.13	<=13	PASS
	Mid	16QAM	6.0	<=13	PASS
	High	QPSK	5.0	<=13	PASS
	High	16QAM	5.89	<=13	PASS



Band2 / 1.4MHz / Low CH / QPSK



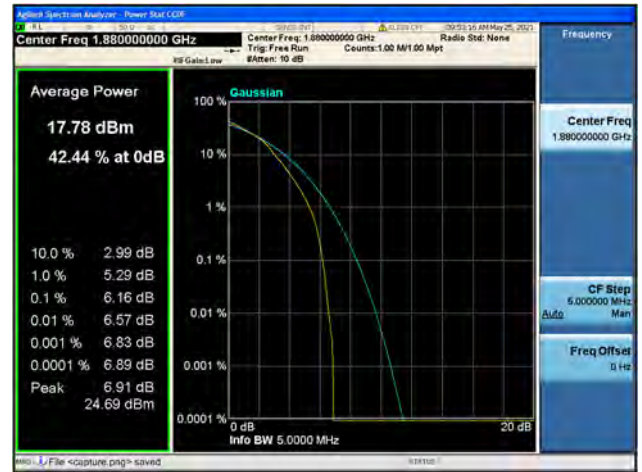
Band2 / 1.4MHz / Low CH / 16QAM



Band2 / 1.4MHz / Mid CH / QPSK



Band2 / 1.4MHz / Mid CH / 16QAM



Band2 / 1.4MHz / High CH / QPSK



Band2 / 1.4MHz / High CH / 16QAM

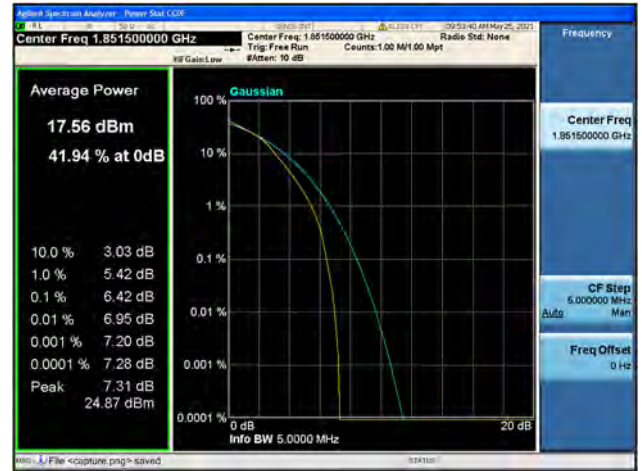




Band2 / 3MHz / Low CH / QPSK



Band2 / 3MHz / Low CH / 16QAM



Band2 / 3MHz / Mid CH / QPSK



Band2 / 3MHz / Mid CH / 16QAM



Band2 / 3MHz / High CH / QPSK



Band2 / 3MHz / High CH / 16QAM



