REPORT No. : SZ21120213W07

TEST REPORT

APPLICANT	:	Realme Chongqing Mobile Telecommunications Corp., Ltd.
PRODUCT NAME	:	Mobile Phone
MODEL NAME	:	RMX3513
BRAND NAME	:	realme
FCC ID	:	2AUYFRMX3513
STANDARD(S)	:	47 CFR Part 22, Subpart H 47 CFR Part 27, Subpart D&M
RECEIPT DATE	:	2021-11-26
TEST DATE	:	2021-12-03 to 2022-01-07
ISSUE DATE	:	2022-01-26

Edited by: Peng Mi

Peng Mi (Rapporteur)

Approved by: Shen Junsheng

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DIRECTORY

Change History		
Version	Date	Reason for change
1.0	2022-01-26	First edition

1. Technical Information

Note: Provide by applicant.

1.1. Applicant and Manufacturer Information

Applicant:	Realme Chongqing Mobile Telecommunications Corp., Ltd.
Applicant Address:	No.178 Yulong Avenue, Yufengshan, Yubei District, Chongqing, China
Manufacturer:	Realme Chongqing Mobile Telecommunications Corp., Ltd.
Manufacturer Address:	No.178 Yulong Avenue, Yufengshan, Yubei District, Chongqing, China

1.2. Equipment Under Test (EUT) Description

Product Name:	Mobile Phone	
Sample No.:	4#	
Hardware Version:	11	
Software Version:	Android 11	
Modulation Type:	QPSK, 16QAM, 64QAM	
Operation Band:	Band 5 / 7 / 38 / 40 / 41	
Frequency Range:	LTE Band 5	Tx: 824MHz–849MHz
		Rx: 869MHz–894MHz
	LTE Band 7	Tx: 2500MHz–2570MHz
		Rx: 2620MHz–2690MHz
	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: 2535MHz–2655MHz
		Rx: 2535MHz–2655MHz

Channel Bandwidth:	LTE Band 5	1.4MHz, 3MHz, 5MHz, 10MHz
	LTE Band 7	5 MHz, 10MHz, 15MHz, 20MHz
	LTE Band 38	5 MHz, 10MHz, 15MHz, 20MHz
	LTE Band 40	5 MHz, 10MHz
	LTE Band 41	5 MHz, 10MHz, 15MHz, 20MHz
Antenna Type:	PIFA Antenna	
Antenna Gain:	Top Antenna	
	LTE Band 5	0.5dBi
	LTE Band 7	1.1dBi
	LTE Band 38	1.1dBi
	LTE Band 40	1.1dBi
	LTE Band 41	1.1dBi
	Bottom Antenna	
	LTE Band 5	0.5dBi
	LTE Band 7	1.1dBi
	LTE Band 38	1.1dBi
	LTE Band 40	1.1dBi
	LTE Band 41	1.1dBi
Accessory Information:	Battery 1	
	Brand Name:	realme
	Model No.:	BLP877
	Serial No.:	N/A
	Capacity:	Typical: 5000mAh, Rated: 4890mAh
	Rated Voltage:	3.87V
	Charge Limit:	4.45V
	Manufacturer:	Huizhou Desay Battery Co., Ltd
	Battery 2	
	Brand Name:	realme
	Model No.:	BLP877
	Serial No.:	N/A
	Capacity:	Typical: 5000mAh, Rated: 4890mAh
	Rated Voltage:	3.87V
	Charge Limit:	4.45V
	Manufacturer:	Dongguan NVT Technology Co., Ltd.

Accessory Information:	Battery 3	
	Brand Name:	realme
	Model No.:	BLP877
	Serial No.:	N/A
	Capacity:	Typical: 5000mAh, Rated: 4890mAh
	Rated Voltage:	3.87V
	Charge Limit:	4.45V
	Manufacturer:	TWS Technology (Guangzhou) Limited
	AC Adapter 1	
	Brand Name:	realme
	Model No.:	OP92JAUH
	Serial No.:	N/A
	Rated Output:	5V⎓2A; 9V⎓2A
	Rated Input:	100-240V～50/60Hz, 0.5A
	Manufacturer:	Huizhou Golden Lake Industrial Co., Ltd.
	AC Adapter 2	
	Brand Name:	realme
	Model No.:	OP92CAUH
	Serial No.:	N/A
	Rated Output:	5V⎓2A; 9V⎓2A
	Rated Input:	100-240V～50/60Hz, 0.5A
	Manufacturer:	Dongguan YOHOO Electronic Technology Co., Ltd.
	AC Adapter 3	
	Brand Name:	realme
	Model No.:	OP92YAUH
	Serial No.:	N/A
	Rated Output:	5V⎓2A; 9V⎓2A
	Rated Input:	100-240V～50/60Hz, 0.5A
	Manufacturer:	Jiangsu Chenyang Electron Co., Ltd.
	USB Cable	
	Model No.:	DL143
	Earphone	
	Model No.:	MH156
	Length:	1.2m

Note 1: This is a variant report of original report (Report No.: SZ21110383W07, FCC ID: 2AUYFRMX3511), based on the similarity between before, changed model name, remove LTE Band 2/4/12/17/26/66 by hardware, the others are the same as before.

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

Note 3: For a more detailed description, please refer to Specification or User's Manual supplied by the applicant and/or manufacturer.

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

LTE Band 5	Maximum E.R.P./E.I.R.P. (W)			Emission Designator (99%OBW)		
BW(MHz)	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10	0.154	0.135	0.135	9M04G7D	9M01W7D	9M03W7D
5	0.152	0.138	0.133	4M51G7D	4M51W7D	4M50W7D
3	0.152	0.136	0.133	2M72G7D	2M72W7D	2M75W7D
1.4	0.153	0.137	0.131	1M10G7D	1M10W7D	1M10W7D
LTE Band 7	**Maximum E.R.P./E.I.R.P. (W)**			**Emission Designator (99%OBW)**		
BW(MHz)	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
20	0.264	0.213	0.187	18M0G7D	18M0W7D	18M1W7D
15	0.259	0.227	0.197	13M5G7D	13M5W7D	13M5W7D
10	0.254	0.222	0.193	9M02G7D	8M99W7D	9M02W7D
5	0.255	0.207	0.189	4M51G7D	4M52W7D	4M51W7D
LTE Band 38	**Maximum E.R.P./E.I.R.P. (W)**			**Emission Designator (99%OBW)**		
BW(MHz)	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
20	0.261	0.220	0.220	18M0G7D	18M0W7D	18M0W7D
15	0.254	0.220	0.215	13M5G7D	13M5W7D	13M5W7D
10	0.254	0.222	0.218	9M01G7D	9M00W7D	9M02W7D
5	0.254	0.230	0.218	4M52G7D	4M52W7D	4M50W7D
LTE Band 40 Block A	**Maximum E.R.P./E.I.R.P. (W)**			**Emission Designator (99%OBW)**		
BW(MHz)	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10	0.248	0.202	0.207	8M97G7D	8M99W7D	8M99W7D
5	0.245	0.209	0.208	4M51G7D	4M51W7D	4M52W7D
LTE Band 40 Block B	**Maximum E.R.P./E.I.R.P. (W)**			**Emission Designator (99%OBW)**		
BW(MHz)	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10	0.247	0.206	0.207	9M02G7D	8M99W7D	8M98W7D
5	0.244	0.207	0.212	4M51G7D	4M51W7D	4M52W7D
LTE Band 41	**Maximum E.R.P./E.I.R.P. (W)**			**Emission Designator (99%OBW)**		
BW(MHz)	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
20	0.263	0.230	0.219	18M0G7D	18M0W7D	18M0W7D
15	0.259	0.223	0.223	13M5G7D	13M5W7D	13M6W7D
10	0.259	0.228	0.216	9M00G7D	8M99W7D	9M01W7D
5	0.255	0.225	0.224	4M52G7D	4M52W7D	4M51W7D

1.4. Test Standards and Results

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

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

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

Section	Description	Test Date	Test Engineer	Result	Method Determination /Remark
2.1046 22.913(a)(2) 27.50(a)(3) 27.50(h)(2)	Transmitter Conducted Output Power and E.R.P./E.I.R.P.	Dec 19, 2021 Jan 07, 2022	Chen Hao Li Huaijie	PASS$_{Note1}$	No deviation
2.1049	Occupied Bandwidth	Dec 03&10, 2021	Li Huaijie	PASS$_{Note1}$	No deviation
2.1055 22.355 24.235 27.54	Frequency Stability	Dec 13, 2021	Li Huaijie	PASS$_{Note1}$	No deviation
24.232(d), 27.50(d)(5)	Peak to Average Radio	N/A	N/A	N/A	N/A
2.1051 22.917(a) 27.53(a)(4) 27.53(m)(4)	Conducted Spurious Emissions	Dec 09&10&13, 2021	Li Huaijie	PASS$_{Note1}$	No deviation
2.1051 22.917(a) 27.53(a)(4) 27.53(m)(4)	Band Edge	Dec 02&03&08&10, 2021	Li Huaijie	PASS$_{Note1}$	No deviation
2.1051 22.917(a) 27.53(a)(4)	Radiated Spurious Emissions	Dec 18&19&27, 2021	Gao Jianrou	PASS$_{Note1}$	No deviation

27.53(m)(4)					

Note 1: The test results of these test items in this report refer to the test report (Report No.: SZ21110383W07).

Note 2: The tests were performed according to the method of measurements prescribed in KDB971168 D01 v03 and ANSI/TIA-603-E-2016.

Note 3: 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 4: 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 5: 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 27 D&M Requirements

2.1. Transmitter Conducted Output Power and E.R.P./E.I.R.P.

2.1.1. Requirement

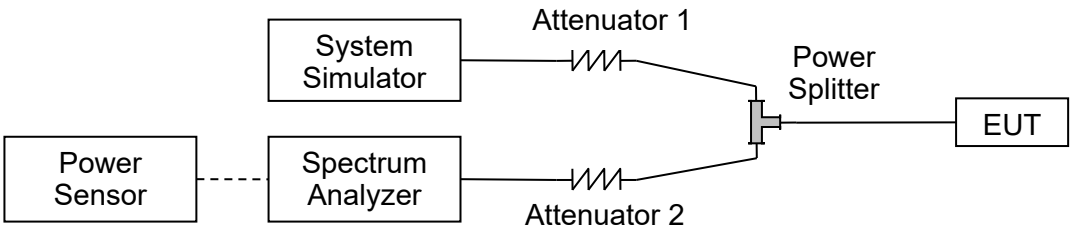
According to FCC section 2.1046(a), for transmitters other than single sideband, independent sideband and controlled carrier radiotelephone, power output shall be measured at the RF output terminals when the transmitter is adjusted in accordance with the tune-up procedure to give the values of current and voltage on the circuit elements specified in FCC section 2.1033(c)(8).

According to FCC section22.913 (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 (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 mill watts 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) = Conducted Output Power (dBm) + Antenna Gain (dBi)
E.R.P. (dBm) = E.I.R.P. (dBm) - 2.15

2.1.4. Result

Conducted Output Power:

LTE Band 5						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20450	20525	20600
Frequency (MHz)				829	836.5	844
10	QPSK	1	0	23.51	23.52	23.44
10	QPSK	1	25	23.37	23.40	23.20
10	QPSK	1	49	23.29	23.41	23.09
10	QPSK	25	0	22.82	22.84	22.65
10	QPSK	25	12	22.58	22.60	22.65
10	QPSK	25	25	22.58	22.69	22.74
10	QPSK	50	0	22.64	22.52	22.66
10	16QAM	1	0	22.68	22.87	22.58
10	16QAM	1	25	22.91	22.94	22.62
10	16QAM	1	49	22.74	22.80	22.87
10	16QAM	25	0	22.83	22.84	22.66
10	16QAM	25	12	22.77	22.85	22.63
10	16QAM	25	25	22.80	22.73	22.76
10	16QAM	50	0	22.81	22.72	22.62
10	64QAM	1	0	22.77	22.87	22.75
10	64QAM	1	25	22.74	22.94	22.74
10	64QAM	1	49	22.63	22.85	22.76
10	64QAM	25	0	22.74	22.85	22.52
10	64QAM	25	12	22.73	22.90	22.61
10	64QAM	25	25	22.85	22.74	22.44
10	64QAM	50	0	22.81	22.77	22.63

LTE Band 5						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20425	20525	20625
Frequency (MHz)				826.5	836.5	846.5
5	QPSK	1	0	23.46	23.42	23.40
5	QPSK	1	12	23.36	23.47	23.31
5	QPSK	1	24	23.36	23.31	23.31
5	QPSK	12	0	22.73	22.78	22.64
5	QPSK	12	7	22.80	22.81	22.73
5	QPSK	12	13	22.85	22.69	22.64
5	QPSK	25	0	22.76	22.72	22.64
5	16QAM	1	0	23.05	22.98	22.74
5	16QAM	1	12	22.75	22.97	22.73
5	16QAM	1	24	22.62	22.97	22.80
5	16QAM	12	0	22.71	22.80	22.79
5	16QAM	12	7	22.78	22.81	22.63
5	16QAM	12	13	22.78	22.69	22.74
5	16QAM	25	0	22.79	22.84	22.79
5	64QAM	1	0	22.86	22.74	22.85
5	64QAM	1	12	22.74	22.68	22.82
5	64QAM	1	24	22.88	22.72	22.66
5	64QAM	12	0	22.60	22.74	22.54
5	64QAM	12	7	22.64	22.80	22.58
5	64QAM	12	13	22.82	22.77	22.34
5	64QAM	25	0	22.70	22.77	22.38

LTE Band 5						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20415	20525	20635
Frequency (MHz)				825.5	836.5	847.5
3	QPSK	1	0	23.45	23.46	23.31
3	QPSK	1	8	23.41	23.42	23.33
3	QPSK	1	14	23.42	23.40	23.14
3	QPSK	8	0	22.66	22.79	22.77
3	QPSK	8	4	22.80	22.86	22.83
3	QPSK	8	7	22.75	22.77	22.64
3	QPSK	15	0	22.73	22.79	22.78
3	16QAM	1	0	22.75	22.86	22.93
3	16QAM	1	8	22.68	22.94	22.78
3	16QAM	1	14	22.73	22.99	22.74
3	16QAM	8	0	22.69	22.78	22.52
3	16QAM	8	4	22.85	22.96	22.53
3	16QAM	8	7	22.77	22.83	22.57
3	16QAM	15	0	22.71	22.73	22.28
3	64QAM	1	0	22.66	22.54	22.75
3	64QAM	1	8	22.54	22.78	22.54
3	64QAM	1	14	22.56	22.74	22.55
3	64QAM	8	0	22.66	22.76	22.74
3	64QAM	8	4	22.88	22.72	22.66
3	64QAM	8	7	22.83	22.75	22.72
3	64QAM	15	0	22.72	22.82	22.62

LTE Band 5						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20407	20525	20643
Frequency (MHz)				824.7	836.5	848.3
1.4	QPSK	1	0	23.46	23.43	23.47
1.4	QPSK	1	3	23.49	23.42	23.49
1.4	QPSK	1	5	23.38	23.32	23.33
1.4	QPSK	3	0	23.39	23.45	23.41
1.4	QPSK	3	1	23.45	23.32	23.42
1.4	QPSK	3	3	23.46	23.38	23.38
1.4	QPSK	6	0	22.71	22.70	22.69
1.4	16QAM	1	0	22.84	22.65	22.82
1.4	16QAM	1	3	22.64	22.88	22.77
1.4	16QAM	1	5	23.03	22.71	22.77
1.4	16QAM	3	0	22.56	22.54	22.68
1.4	16QAM	3	1	22.59	22.86	22.72
1.4	16QAM	3	3	22.67	22.78	22.66
1.4	16QAM	6	0	22.86	22.73	22.77
1.4	64QAM	1	0	22.39	22.56	22.58
1.4	64QAM	1	3	22.70	22.71	22.66
1.4	64QAM	1	5	22.65	22.64	22.52
1.4	64QAM	3	0	22.31	22.58	22.59
1.4	64QAM	3	1	22.59	22.53	22.54
1.4	64QAM	3	3	22.49	22.66	22.70
1.4	64QAM	6	0	22.70	22.82	22.71

LTE Band 7						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20850	21100	21350
Frequency (MHz)				2510	2535	2560
20	QPSK	1	0	23.10	23.11	23.03
20	QPSK	1	49	23.05	23.09	22.98
20	QPSK	1	99	23.00	22.95	23.00
20	QPSK	50	0	22.16	22.23	22.20
20	QPSK	50	24	21.92	21.89	21.79
20	QPSK	50	50	22.02	22.05	22.02
20	QPSK	100	0	21.97	21.99	21.96
20	16QAM	1	0	21.78	21.88	22.06
20	16QAM	1	49	21.93	21.79	22.07
20	16QAM	1	99	21.87	22.18	21.83
20	16QAM	50	0	21.72	21.82	21.75
20	16QAM	50	24	21.77	21.69	21.80
20	16QAM	50	50	21.85	21.90	21.73
20	16QAM	100	0	21.73	21.85	21.83
20	64QAM	1	0	21.61	21.45	21.18
20	64QAM	1	49	21.55	21.52	21.57
20	64QAM	1	99	21.53	21.58	21.49
20	64QAM	50	0	21.47	21.48	21.53
20	64QAM	50	24	21.52	21.53	21.53
20	64QAM	50	50	21.56	21.63	21.48
20	64QAM	100	0	21.49	21.46	21.58

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	22.93	23.02	23.02
15	QPSK	1	37	23.03	23.00	23.04
15	QPSK	1	74	22.97	23.04	23.04
15	QPSK	36	0	21.75	21.84	21.86
15	QPSK	36	20	21.83	21.90	21.85
15	QPSK	36	39	21.86	21.89	21.93
15	QPSK	75	0	21.92	21.85	21.87
15	16QAM	1	0	22.28	22.39	22.46
15	16QAM	1	37	22.10	22.21	22.19
15	16QAM	1	74	22.14	22.14	22.36
15	16QAM	36	0	21.73	21.84	21.86
15	16QAM	36	20	21.80	21.83	21.82
15	16QAM	36	39	21.86	21.84	21.73
15	16QAM	75	0	21.81	21.89	21.81
15	64QAM	1	0	21.71	21.68	21.56
15	64QAM	1	37	21.61	21.76	21.85
15	64QAM	1	74	21.60	21.72	21.78
15	64QAM	36	0	21.45	21.53	21.52
15	64QAM	36	20	21.56	21.55	21.62
15	64QAM	36	39	21.60	21.51	21.53
15	64QAM	75	0	21.45	21.55	21.50

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	22.92	22.79	22.82
10	QPSK	1	25	22.95	22.85	22.87
10	QPSK	1	49	22.88	22.85	22.87
10	QPSK	25	0	21.67	21.67	21.66
10	QPSK	25	12	21.63	21.75	21.80
10	QPSK	25	25	21.56	21.74	21.74
10	QPSK	50	0	21.65	21.77	21.76
10	16QAM	1	0	21.90	22.08	21.93
10	16QAM	1	25	21.89	21.91	21.96
10	16QAM	1	49	22.36	22.26	22.17
10	16QAM	25	0	21.79	21.67	21.75
10	16QAM	25	12	21.61	21.78	21.71
10	16QAM	25	25	21.66	21.69	21.61
10	16QAM	50	0	21.69	21.78	21.63
10	64QAM	1	0	21.71	21.67	21.65
10	64QAM	1	25	21.40	21.65	21.48
10	64QAM	1	49	21.51	21.75	21.56
10	64QAM	25	0	21.37	21.35	21.39
10	64QAM	25	12	21.39	21.50	21.43
10	64QAM	25	25	21.32	21.22	21.21
10	64QAM	50	0	21.26	21.32	21.24

LTE Band 7						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20775	21100	21425
Frequency (MHz)				2502.5	2535	2567.5
5	QPSK	1	0	22.96	22.87	22.77
5	QPSK	1	12	22.83	22.76	22.84
5	QPSK	1	24	22.77	22.83	22.87
5	QPSK	12	0	21.47	21.55	21.47
5	QPSK	12	7	21.54	21.69	21.61
5	QPSK	12	13	21.56	21.72	21.57
5	QPSK	25	0	21.57	21.58	21.53
5	16QAM	1	0	21.75	21.73	21.79
5	16QAM	1	12	21.80	22.02	21.92
5	16QAM	1	24	21.86	22.05	21.87
5	16QAM	12	0	21.77	21.83	21.74
5	16QAM	12	7	21.66	21.68	21.64
5	16QAM	12	13	21.66	21.72	21.85
5	16QAM	25	0	21.63	21.68	21.70
5	64QAM	1	0	21.47	21.52	21.48
5	64QAM	1	12	21.52	21.64	21.52
5	64QAM	1	24	21.56	21.66	21.62
5	64QAM	12	0	21.27	21.24	21.29
5	64QAM	12	7	21.36	21.41	21.20
5	64QAM	12	13	21.31	21.40	21.26
5	64QAM	25	0	21.26	21.25	21.30

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	23.00	23.07	23.04
20	QPSK	1	49	22.99	23.01	23.01
20	QPSK	1	99	22.91	22.97	22.94
20	QPSK	50	0	22.11	22.33	22.19
20	QPSK	50	24	22.04	22.11	22.07
20	QPSK	50	50	22.08	22.13	22.07
20	QPSK	100	0	21.96	22.07	22.10
20	16QAM	1	0	22.08	22.08	22.01
20	16QAM	1	49	22.07	21.67	22.07
20	16QAM	1	99	22.23	22.22	22.33
20	16QAM	50	0	22.08	22.22	21.83
20	16QAM	50	24	22.19	22.01	21.92
20	16QAM	50	50	22.18	21.82	21.86
20	16QAM	100	0	22.19	22.22	21.88
20	64QAM	1	0	22.00	22.28	22.31
20	64QAM	1	49	22.00	22.19	22.29
20	64QAM	1	99	22.02	22.29	22.33
20	64QAM	50	0	22.01	22.00	21.89
20	64QAM	50	24	22.03	21.99	21.98
20	64QAM	50	50	22.01	21.78	22.00
20	64QAM	100	0	22.01	21.97	21.88

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	22.91	22.91	22.92
15	QPSK	1	37	22.92	22.84	22.95
15	QPSK	1	74	22.73	22.95	22.92
15	QPSK	36	0	22.04	22.29	22.33
15	QPSK	36	20	22.24	22.33	22.29
15	QPSK	36	39	22.31	22.29	22.22
15	QPSK	75	0	22.19	22.19	22.20
15	16QAM	1	0	22.27	22.29	22.19
15	16QAM	1	37	22.29	22.33	22.01
15	16QAM	1	74	22.30	22.20	22.00
15	16QAM	36	0	22.07	22.03	21.92
15	16QAM	36	20	22.05	22.19	21.96
15	16QAM	36	39	22.07	22.09	21.94
15	16QAM	75	0	22.03	21.98	21.92
15	64QAM	1	0	22.14	22.03	22.19
15	64QAM	1	37	22.02	22.03	22.01
15	64QAM	1	74	21.97	22.05	22.22
15	64QAM	36	0	21.89	22.04	21.97
15	64QAM	36	20	22.17	22.03	21.91
15	64QAM	36	39	22.01	22.01	22.02
15	64QAM	75	0	22.19	22.01	22.05

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	22.94	22.95	22.95
10	QPSK	1	25	22.94	22.74	22.94
10	QPSK	1	49	22.88	22.90	22.93
10	QPSK	25	0	22.03	21.89	21.89
10	QPSK	25	12	22.26	22.22	21.93
10	QPSK	25	25	22.27	22.29	21.89
10	QPSK	50	0	22.25	22.17	21.89
10	16QAM	1	0	22.11	21.88	22.19
10	16QAM	1	25	21.99	21.89	22.29
10	16QAM	1	49	22.36	21.92	22.01
10	16QAM	25	0	21.89	22.00	21.96
10	16QAM	25	12	22.19	21.89	22.02
10	16QAM	25	25	21.89	22.03	22.08
10	16QAM	50	0	22.01	22.05	21.97
10	64QAM	1	0	22.01	22.04	21.97
10	64QAM	1	25	21.92	22.17	22.07
10	64QAM	1	49	22.28	22.02	22.07
10	64QAM	25	0	21.87	21.87	21.97
10	64QAM	25	12	21.87	22.07	22.08
10	64QAM	25	25	21.83	22.03	21.99
10	64QAM	50	0	21.89	22.05	21.95

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	22.80	22.90	22.74
5	QPSK	1	12	22.74	22.95	22.93
5	QPSK	1	24	22.74	22.73	22.72
5	QPSK	12	0	22.16	22.64	22.23
5	QPSK	12	7	22.30	22.29	22.29
5	QPSK	12	13	22.18	22.20	22.22
5	QPSK	25	0	22.22	22.23	21.89
5	16QAM	1	0	22.40	22.51	22.41
5	16QAM	1	12	22.01	22.19	21.89
5	16QAM	1	24	22.01	22.02	22.01
5	16QAM	12	0	22.02	22.07	22.01
5	16QAM	12	7	22.01	22.03	22.01
5	16QAM	12	13	21.92	22.04	22.01
5	16QAM	25	0	22.19	21.91	22.09
5	64QAM	1	0	21.95	22.28	21.89
5	64QAM	1	12	22.22	22.22	22.29
5	64QAM	1	24	22.22	22.22	22.19
5	64QAM	12	0	21.93	22.05	22.01
5	64QAM	12	7	22.02	22.03	21.94
5	64QAM	12	13	22.01	22.04	21.91
5	64QAM	25	0	22.05	22.07	21.98

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	/	22.84	/
10	QPSK	1	25	/	22.75	/
10	QPSK	1	49	/	22.73	/
10	QPSK	25	0	/	22.14	/
10	QPSK	25	12	/	22.01	/
10	QPSK	25	25	/	22.06	/
10	QPSK	50	0	/	21.84	/
10	16QAM	1	0	/	21.93	/
10	16QAM	1	25	/	21.91	/
10	16QAM	1	49	/	21.95	/
10	16QAM	25	0	/	21.84	/
10	16QAM	25	12	/	21.91	/
10	16QAM	25	25	/	21.88	/
10	16QAM	50	0	/	21.95	/
10	64QAM	1	0	/	22.02	/
10	64QAM	1	25	/	21.81	/
10	64QAM	1	49	/	22.07	/
10	64QAM	25	0	/	21.64	/
10	64QAM	25	12	/	21.84	/
10	64QAM	25	25	/	21.91	/
10	64QAM	50	0	/	21.84	/

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	22.78	22.73	22.64
5	QPSK	1	12	22.69	22.68	22.79
5	QPSK	1	24	22.75	22.77	22.61
5	QPSK	12	0	21.94	21.87	21.99
5	QPSK	12	7	21.99	21.85	21.95
5	QPSK	12	13	21.87	21.83	21.86
5	QPSK	25	0	21.90	21.76	21.97
5	16QAM	1	0	21.94	21.91	21.99
5	16QAM	1	12	22.10	22.01	22.08
5	16QAM	1	24	22.02	21.91	21.90
5	16QAM	12	0	21.86	21.76	21.92
5	16QAM	12	7	21.88	21.82	21.85
5	16QAM	12	13	21.95	21.73	21.92
5	16QAM	25	0	21.92	21.84	21.87
5	64QAM	1	0	22.04	22.07	21.82
5	64QAM	1	12	22.05	21.45	21.41
5	64QAM	1	24	22.08	21.69	21.45
5	64QAM	12	0	21.83	21.89	21.99
5	64QAM	12	7	21.88	21.92	21.95
5	64QAM	12	13	21.92	21.87	21.89
5	64QAM	25	0	21.93	21.89	21.92

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	/	22.83	/
10	QPSK	1	25	/	22.74	/
10	QPSK	1	49	/	22.70	/
10	QPSK	25	0	/	22.04	/
10	QPSK	25	12	/	21.96	/
10	QPSK	25	25	/	21.97	/
10	QPSK	50	0	/	21.94	/
10	16QAM	1	0	/	22.04	/
10	16QAM	1	25	/	21.95	/
10	16QAM	1	49	/	21.87	/
10	16QAM	25	0	/	21.99	/
10	16QAM	25	12	/	22.02	/
10	16QAM	25	25	/	22.01	/
10	16QAM	50	0	/	21.98	/
10	64QAM	1	0	/	22.07	/
10	64QAM	1	25	/	22.00	/
10	64QAM	1	49	/	21.84	/
10	64QAM	25	0	/	21.96	/
10	64QAM	25	12	/	21.95	/
10	64QAM	25	25	/	21.92	/
10	64QAM	50	0	/	21.81	/

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	22.71	22.66	22.75
5	QPSK	1	12	22.66	22.70	22.73
5	QPSK	1	24	22.59	22.78	22.78
5	QPSK	12	0	21.94	21.93	21.99
5	QPSK	12	7	21.96	21.97	21.99
5	QPSK	12	13	21.94	21.97	21.97
5	QPSK	25	0	21.89	21.87	22.03
5	16QAM	1	0	22.00	22.06	22.04
5	16QAM	1	12	21.95	21.93	21.99
5	16QAM	1	24	21.84	21.75	21.82
5	16QAM	12	0	21.92	21.88	22.05
5	16QAM	12	7	21.84	21.97	22.05
5	16QAM	12	13	21.90	21.91	21.87
5	16QAM	25	0	21.97	21.92	22.01
5	64QAM	1	0	22.05	21.70	21.74
5	64QAM	1	12	22.16	21.54	21.66
5	64QAM	1	24	22.17	21.72	21.61
5	64QAM	12	0	21.83	21.86	21.94
5	64QAM	12	7	21.79	21.80	21.87
5	64QAM	12	13	21.84	21.85	21.88
5	64QAM	25	0	21.92	21.86	21.93

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				40140	40640	41140
Frequency (MHz)				2545	2595	2645
20	QPSK	1	0	22.98	23.10	23.04
20	QPSK	1	49	22.94	23.03	23.04
20	QPSK	1	99	22.88	22.99	22.84
20	QPSK	50	0	22.14	22.20	22.13
20	QPSK	50	24	22.14	21.97	21.94
20	QPSK	50	50	22.17	21.98	22.04
20	QPSK	100	0	22.14	22.04	21.94
20	16QAM	1	0	22.18	21.97	21.94
20	16QAM	1	49	22.17	21.97	21.94
20	16QAM	1	99	22.24	22.04	22.04
20	16QAM	50	0	22.15	21.97	21.94
20	16QAM	50	24	22.13	21.94	21.94
20	16QAM	50	50	22.19	22.40	22.04
20	16QAM	100	0	22.13	22.39	21.97
20	64QAM	1	0	22.28	22.19	21.98
20	64QAM	1	49	22.21	22.01	21.98
20	64QAM	1	99	22.11	21.97	21.94
20	64QAM	50	0	22.07	22.00	22.04
20	64QAM	50	24	21.92	22.07	21.97
20	64QAM	50	50	22.02	22.21	22.03
20	64QAM	100	0	22.00	22.24	22.04

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				40115	40640	41165
Frequency (MHz)				2542.5	2595	2647.5
15	QPSK	1	0	22.64	23.00	22.86
15	QPSK	1	37	22.63	23.04	22.97
15	QPSK	1	74	22.63	22.97	22.77
15	QPSK	36	0	21.80	21.99	22.80
15	QPSK	36	20	22.05	21.95	22.87
15	QPSK	36	39	22.21	21.94	22.82
15	QPSK	75	0	21.99	21.97	22.79
15	16QAM	1	0	21.93	22.34	21.79
15	16QAM	1	37	22.14	21.91	21.88
15	16QAM	1	74	22.10	21.48	21.81
15	16QAM	36	0	21.97	21.88	22.26
15	16QAM	36	20	22.02	21.84	22.28
15	16QAM	36	39	22.09	22.38	22.04
15	16QAM	75	0	22.00	21.86	21.64
15	64QAM	1	0	22.10	22.24	22.38
15	64QAM	1	37	22.38	22.38	21.50
15	64QAM	1	74	22.35	22.17	21.23
15	64QAM	36	0	21.79	21.95	21.87
15	64QAM	36	20	21.94	22.39	21.76
15	64QAM	36	39	21.89	22.36	21.68
15	64QAM	75	0	21.87	22.36	21.76

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				40090	40640	41190
Frequency (MHz)				2540	2595	2650
10	QPSK	1	0	22.68	22.97	22.84
10	QPSK	1	25	22.88	22.84	22.79
10	QPSK	1	49	22.65	23.04	22.80
10	QPSK	25	0	21.96	22.27	22.04
10	QPSK	25	12	22.04	22.16	22.04
10	QPSK	25	25	22.08	22.11	22.40
10	QPSK	50	0	22.13	22.19	21.64
10	16QAM	1	0	21.99	22.01	21.84
10	16QAM	1	25	22.17	22.16	21.88
10	16QAM	1	49	22.03	22.08	22.03
10	16QAM	25	0	22.03	22.22	21.69
10	16QAM	25	12	22.16	22.08	21.45
10	16QAM	25	25	22.13	22.20	21.96
10	16QAM	50	0	22.11	22.18	21.72
10	64QAM	1	0	21.73	21.69	22.09
10	64QAM	1	25	21.76	21.86	22.04
10	64QAM	1	49	21.74	21.73	21.85
10	64QAM	25	0	21.81	21.94	22.01
10	64QAM	25	12	21.84	21.83	21.76
10	64QAM	25	25	21.93	21.92	21.99
10	64QAM	50	0	21.89	21.97	22.05

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				40065	40640	41215
Frequency (MHz)				2537.5	2595	2652.5
5	QPSK	1	0	22.65	22.97	22.75
5	QPSK	1	12	22.64	22.84	22.79
5	QPSK	1	24	22.77	22.94	22.80
5	QPSK	12	0	21.98	22.16	21.96
5	QPSK	12	7	22.06	22.01	22.18
5	QPSK	12	13	22.00	22.23	22.24
5	QPSK	25	0	22.03	22.24	22.17
5	16QAM	1	0	22.27	22.25	22.08
5	16QAM	1	12	21.88	22.42	21.98
5	16QAM	1	24	21.74	22.23	22.24
5	16QAM	12	0	21.92	22.09	22.04
5	16QAM	12	7	22.04	22.19	22.17
5	16QAM	12	13	22.10	22.09	21.96
5	16QAM	25	0	22.02	22.17	21.94
5	64QAM	1	0	22.29	22.41	21.99
5	64QAM	1	12	22.29	22.34	21.95
5	64QAM	1	24	22.14	22.27	22.28
5	64QAM	12	0	22.09	21.87	21.95
5	64QAM	12	7	22.10	21.95	22.03
5	64QAM	12	13	22.08	21.74	21.94
5	64QAM	25	0	21.82	21.80	21.76

Effective Radiated Power and Effective Isotropic Radiated Power

LTE Band 5				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20450		20525		20600	
Frequency (MHz)				829		836.5		844	
				dBm	W	dBm	W	dBm	W
10	QPSK	1	0	21.86	0.153	21.87	0.154	21.79	0.151
10	QPSK	1	25	21.72	0.149	21.75	0.150	21.55	0.143
10	QPSK	1	49	21.64	0.146	21.76	0.150	21.44	0.139
10	QPSK	25	0	21.17	0.131	21.19	0.132	21.00	0.126
10	QPSK	25	12	20.93	0.124	20.95	0.124	21.00	0.126
10	QPSK	25	25	20.93	0.124	21.04	0.127	21.09	0.129
10	QPSK	50	0	20.99	0.126	20.87	0.122	21.01	0.126
10	16QAM	1	0	21.03	0.127	21.22	0.132	20.93	0.124
10	16QAM	1	25	21.26	0.134	21.29	0.135	20.97	0.125
10	16QAM	1	49	21.09	0.129	21.15	0.130	21.22	0.132
10	16QAM	25	0	21.18	0.131	21.19	0.132	21.01	0.126
10	16QAM	25	12	21.12	0.129	21.20	0.132	20.98	0.125
10	16QAM	25	25	21.15	0.130	21.08	0.128	21.11	0.129
10	16QAM	50	0	21.16	0.131	21.07	0.128	20.97	0.125
10	64QAM	1	0	21.12	0.129	21.22	0.132	21.10	0.129
10	64QAM	1	25	21.09	0.129	21.29	0.135	21.09	0.129
10	64QAM	1	49	20.98	0.125	21.20	0.132	21.11	0.129
10	64QAM	25	0	21.09	0.129	21.20	0.132	20.87	0.122
10	64QAM	25	12	21.08	0.128	21.25	0.133	20.96	0.125
10	64QAM	25	25	21.20	0.132	21.09	0.129	20.79	0.120
10	64QAM	50	0	21.16	0.131	21.12	0.129	20.98	0.125

LTE Band 5				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20425		20525		20625	
Frequency (MHz)				826.5		836.5		846.5	
				dBm	W	dBm	W	dBm	W
5	QPSK	1	0	21.81	0.152	21.77	0.150	21.75	0.150
5	QPSK	1	12	21.71	0.148	21.82	0.152	21.66	0.147
5	QPSK	1	24	21.71	0.148	21.66	0.147	21.66	0.147
5	QPSK	12	0	21.08	0.128	21.13	0.130	20.99	0.126
5	QPSK	12	7	21.15	0.130	21.16	0.131	21.08	0.128
5	QPSK	12	13	21.20	0.132	21.04	0.127	20.99	0.126
5	QPSK	25	0	21.11	0.129	21.07	0.128	20.99	0.126
5	16QAM	1	0	21.40	0.138	21.33	0.136	21.09	0.129
5	16QAM	1	12	21.10	0.129	21.32	0.136	21.08	0.128
5	16QAM	1	24	20.97	0.125	21.32	0.136	21.15	0.130
5	16QAM	12	0	21.06	0.128	21.15	0.130	21.14	0.130
5	16QAM	12	7	21.13	0.130	21.16	0.131	20.98	0.125
5	16QAM	12	13	21.13	0.130	21.04	0.127	21.09	0.129
5	16QAM	25	0	21.14	0.130	21.19	0.132	21.14	0.130
5	64QAM	1	0	21.21	0.132	21.09	0.129	21.20	0.132
5	64QAM	1	12	21.09	0.129	21.03	0.127	21.17	0.131
5	64QAM	1	24	21.23	0.133	21.07	0.128	21.01	0.126
5	64QAM	12	0	20.95	0.124	21.09	0.129	20.89	0.123
5	64QAM	12	7	20.99	0.126	21.15	0.130	20.93	0.124
5	64QAM	12	13	21.17	0.131	21.12	0.129	20.69	0.117
5	64QAM	25	0	21.05	0.127	21.12	0.129	20.73	0.118

LTE Band 5				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20415		20525		20635	
Frequency (MHz)				825.5		836.5		847.5	
				dBm	W	dBm	W	dBm	W
3	QPSK	1	0	21.80	0.151	21.81	0.152	21.66	0.147
3	QPSK	1	8	21.76	0.150	21.77	0.150	21.68	0.147
3	QPSK	1	14	21.77	0.150	21.75	0.150	21.49	0.141
3	QPSK	8	0	21.01	0.126	21.14	0.130	21.12	0.129
3	QPSK	8	4	21.15	0.130	21.21	0.132	21.18	0.131
3	QPSK	8	7	21.10	0.129	21.12	0.129	20.99	0.126
3	QPSK	15	0	21.08	0.128	21.14	0.130	21.13	0.130
3	16QAM	1	0	21.10	0.129	21.21	0.132	21.28	0.134
3	16QAM	1	8	21.03	0.127	21.29	0.135	21.13	0.130
3	16QAM	1	14	21.08	0.128	21.34	0.136	21.09	0.129
3	16QAM	8	0	21.04	0.127	21.13	0.130	20.87	0.122
3	16QAM	8	4	21.20	0.132	21.31	0.135	20.88	0.122
3	16QAM	8	7	21.12	0.129	21.18	0.131	20.92	0.124
3	16QAM	15	0	21.06	0.128	21.08	0.128	20.63	0.116
3	64QAM	1	0	21.01	0.126	20.89	0.123	21.10	0.129
3	64QAM	1	8	20.89	0.123	21.13	0.130	20.89	0.123
3	64QAM	1	14	20.91	0.123	21.09	0.129	20.90	0.123
3	64QAM	8	0	21.01	0.126	21.11	0.129	21.09	0.129
3	64QAM	8	4	21.23	0.133	21.07	0.128	21.01	0.126
3	64QAM	8	7	21.18	0.131	21.10	0.129	21.07	0.128
3	64QAM	15	0	21.07	0.128	21.17	0.131	20.97	0.125

LTE Band 5				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20407		20525		20643	
Frequency (MHz)				824.7		836.5		848.3	
				dBm	W	dBm	W	dBm	W
1.4	QPSK	1	0	21.81	0.152	21.78	0.151	21.82	0.152
1.4	QPSK	1	3	21.84	0.153	21.77	0.150	21.84	0.153
1.4	QPSK	1	5	21.73	0.149	21.67	0.147	21.68	0.147
1.4	QPSK	3	0	21.74	0.149	21.80	0.151	21.76	0.150
1.4	QPSK	3	1	21.80	0.151	21.67	0.147	21.77	0.150
1.4	QPSK	3	3	21.81	0.152	21.73	0.149	21.73	0.149
1.4	QPSK	6	0	21.06	0.128	21.05	0.127	21.04	0.127
1.4	16QAM	1	0	21.19	0.132	21.00	0.126	21.17	0.131
1.4	16QAM	1	3	20.99	0.126	21.23	0.133	21.12	0.129
1.4	16QAM	1	5	21.38	0.137	21.06	0.128	21.12	0.129
1.4	16QAM	3	0	20.91	0.123	20.89	0.123	21.03	0.127
1.4	16QAM	3	1	20.94	0.124	21.21	0.132	21.07	0.128
1.4	16QAM	3	3	21.02	0.126	21.13	0.130	21.01	0.126
1.4	16QAM	6	0	21.21	0.132	21.08	0.128	21.12	0.129
1.4	64QAM	1	0	20.74	0.119	20.91	0.123	20.93	0.124
1.4	64QAM	1	3	21.05	0.127	21.06	0.128	21.01	0.126
1.4	64QAM	1	5	21.00	0.126	20.99	0.126	20.87	0.122
1.4	64QAM	3	0	20.66	0.116	20.93	0.124	20.94	0.124
1.4	64QAM	3	1	20.94	0.124	20.88	0.122	20.89	0.123
1.4	64QAM	3	3	20.84	0.121	21.01	0.126	21.05	0.127
1.4	64QAM	6	0	21.05	0.127	21.17	0.131	21.06	0.128

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	24.20	0.263	24.21	0.264	24.13	0.259
20	QPSK	1	49	24.15	0.260	24.19	0.262	24.08	0.256
20	QPSK	1	99	24.10	0.257	24.05	0.254	24.10	0.257
20	QPSK	50	0	23.26	0.212	23.33	0.215	23.30	0.214
20	QPSK	50	24	23.02	0.200	22.99	0.199	22.89	0.195
20	QPSK	50	50	23.12	0.205	23.15	0.207	23.12	0.205
20	QPSK	100	0	23.07	0.203	23.09	0.204	23.06	0.202
20	16QAM	1	0	22.88	0.194	22.98	0.199	23.16	0.207
20	16QAM	1	49	23.03	0.201	22.89	0.195	23.17	0.207
20	16QAM	1	99	22.97	0.198	23.28	0.213	22.93	0.196
20	16QAM	50	0	22.82	0.191	22.92	0.196	22.85	0.193
20	16QAM	50	24	22.87	0.194	22.79	0.190	22.90	0.195
20	16QAM	50	50	22.95	0.197	23.00	0.200	22.83	0.192
20	16QAM	100	0	22.83	0.192	22.95	0.197	22.93	0.196
20	64QAM	1	0	22.71	0.187	22.55	0.180	22.28	0.169
20	64QAM	1	49	22.65	0.184	22.62	0.183	22.67	0.185
20	64QAM	1	99	22.63	0.183	22.68	0.185	22.59	0.182
20	64QAM	50	0	22.57	0.181	22.58	0.181	22.63	0.183
20	64QAM	50	24	22.62	0.183	22.63	0.183	22.63	0.183
20	64QAM	50	50	22.66	0.185	22.73	0.187	22.58	0.181
20	64QAM	100	0	22.59	0.182	22.56	0.180	22.68	0.185

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	24.03	0.253	24.12	0.258	24.12	0.258
15	QPSK	1	37	24.13	0.259	24.10	0.257	24.14	0.259
15	QPSK	1	74	24.07	0.255	24.14	0.259	24.14	0.259
15	QPSK	36	0	22.85	0.193	22.94	0.197	22.96	0.198
15	QPSK	36	20	22.93	0.196	23.00	0.200	22.95	0.197
15	QPSK	36	39	22.96	0.198	22.99	0.199	23.03	0.201
15	QPSK	75	0	23.02	0.200	22.95	0.197	22.97	0.198
15	16QAM	1	0	23.38	0.218	23.49	0.223	23.56	0.227
15	16QAM	1	37	23.20	0.209	23.31	0.214	23.29	0.213
15	16QAM	1	74	23.24	0.211	23.24	0.211	23.46	0.222
15	16QAM	36	0	22.83	0.192	22.94	0.197	22.96	0.198
15	16QAM	36	20	22.90	0.195	22.93	0.196	22.92	0.196
15	16QAM	36	39	22.96	0.198	22.94	0.197	22.83	0.192
15	16QAM	75	0	22.91	0.195	22.99	0.199	22.91	0.195
15	64QAM	1	0	22.81	0.191	22.78	0.190	22.66	0.185
15	64QAM	1	37	22.71	0.187	22.86	0.193	22.95	0.197
15	64QAM	1	74	22.70	0.186	22.82	0.191	22.88	0.194
15	64QAM	36	0	22.55	0.180	22.63	0.183	22.62	0.183
15	64QAM	36	20	22.66	0.185	22.65	0.184	22.72	0.187
15	64QAM	36	39	22.70	0.186	22.61	0.182	22.63	0.183
15	64QAM	75	0	22.55	0.180	22.65	0.184	22.60	0.182

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	24.02	0.252	23.89	0.245	23.92	0.247
10	QPSK	1	25	24.05	0.254	23.95	0.248	23.97	0.249
10	QPSK	1	49	23.98	0.250	23.95	0.248	23.97	0.249
10	QPSK	25	0	22.77	0.189	22.77	0.189	22.76	0.189
10	QPSK	25	12	22.73	0.187	22.85	0.193	22.90	0.195
10	QPSK	25	25	22.66	0.185	22.84	0.192	22.84	0.192
10	QPSK	50	0	22.75	0.188	22.87	0.194	22.86	0.193
10	16QAM	1	0	23.00	0.200	23.18	0.208	23.03	0.201
10	16QAM	1	25	22.99	0.199	23.01	0.200	23.06	0.202
10	16QAM	1	49	23.46	0.222	23.36	0.217	23.27	0.212
10	16QAM	25	0	22.89	0.195	22.77	0.189	22.85	0.193
10	16QAM	25	12	22.71	0.187	22.88	0.194	22.81	0.191
10	16QAM	25	25	22.76	0.189	22.79	0.190	22.71	0.187
10	16QAM	50	0	22.79	0.190	22.88	0.194	22.73	0.187
10	64QAM	1	0	22.81	0.191	22.77	0.189	22.75	0.188
10	64QAM	1	25	22.50	0.178	22.75	0.188	22.58	0.181
10	64QAM	1	49	22.61	0.182	22.85	0.193	22.66	0.185
10	64QAM	25	0	22.47	0.177	22.45	0.176	22.49	0.177
10	64QAM	25	12	22.49	0.177	22.60	0.182	22.53	0.179
10	64QAM	25	25	22.42	0.175	22.32	0.171	22.31	0.170
10	64QAM	50	0	22.36	0.172	22.42	0.175	22.34	0.171

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	24.06	0.255	23.97	0.249	23.87	0.244
5	QPSK	1	12	23.93	0.247	23.86	0.243	23.94	0.248
5	QPSK	1	24	23.87	0.244	23.93	0.247	23.97	0.249
5	QPSK	12	0	22.57	0.181	22.65	0.184	22.57	0.181
5	QPSK	12	7	22.64	0.184	22.79	0.190	22.71	0.187
5	QPSK	12	13	22.66	0.185	22.82	0.191	22.67	0.185
5	QPSK	25	0	22.67	0.185	22.68	0.185	22.63	0.183
5	16QAM	1	0	22.85	0.193	22.83	0.192	22.89	0.195
5	16QAM	1	12	22.90	0.195	23.12	0.205	23.02	0.200
5	16QAM	1	24	22.96	0.198	23.15	0.207	22.97	0.198
5	16QAM	12	0	22.87	0.194	22.93	0.196	22.84	0.192
5	16QAM	12	7	22.76	0.189	22.78	0.190	22.74	0.188
5	16QAM	12	13	22.76	0.189	22.82	0.191	22.95	0.197
5	16QAM	25	0	22.73	0.187	22.78	0.190	22.80	0.191
5	64QAM	1	0	22.57	0.181	22.62	0.183	22.58	0.181
5	64QAM	1	12	22.62	0.183	22.74	0.188	22.62	0.183
5	64QAM	1	24	22.66	0.185	22.76	0.189	22.72	0.187
5	64QAM	12	0	22.37	0.173	22.34	0.171	22.39	0.173
5	64QAM	12	7	22.46	0.176	22.51	0.178	22.30	0.170
5	64QAM	12	13	22.41	0.174	22.50	0.178	22.36	0.172
5	64QAM	25	0	22.36	0.172	22.35	0.172	22.40	0.174

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	24.10	0.257	24.17	0.261	24.14	0.259
20	QPSK	1	49	24.09	0.256	24.11	0.258	24.11	0.258
20	QPSK	1	99	24.01	0.252	24.07	0.255	24.04	0.254
20	QPSK	50	0	23.21	0.209	23.43	0.220	23.29	0.213
20	QPSK	50	24	23.14	0.206	23.21	0.209	23.17	0.207
20	QPSK	50	50	23.18	0.208	23.23	0.210	23.17	0.207
20	QPSK	100	0	23.06	0.202	23.17	0.207	23.20	0.209
20	16QAM	1	0	23.18	0.208	23.18	0.208	23.11	0.205
20	16QAM	1	49	23.17	0.207	22.77	0.189	23.17	0.207
20	16QAM	1	99	23.33	0.215	23.32	0.215	23.43	0.220
20	16QAM	50	0	23.18	0.208	23.32	0.215	22.93	0.196
20	16QAM	50	24	23.29	0.213	23.11	0.205	23.02	0.200
20	16QAM	50	50	23.28	0.213	22.92	0.196	22.96	0.198
20	16QAM	100	0	23.29	0.213	23.32	0.215	22.98	0.199
20	64QAM	1	0	23.10	0.204	23.38	0.218	23.41	0.219
20	64QAM	1	49	23.10	0.204	23.29	0.213	23.39	0.218
20	64QAM	1	99	23.12	0.205	23.39	0.218	23.43	0.220
20	64QAM	50	0	23.11	0.205	23.10	0.204	22.99	0.199
20	64QAM	50	24	23.13	0.206	23.09	0.204	23.08	0.203
20	64QAM	50	50	23.11	0.205	22.88	0.194	23.10	0.204
20	64QAM	100	0	23.11	0.205	23.07	0.203	22.98	0.199

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	24.01	0.252	24.01	0.252	24.02	0.252
15	QPSK	1	37	24.02	0.252	23.94	0.248	24.05	0.254
15	QPSK	1	74	23.83	0.242	24.05	0.254	24.02	0.252
15	QPSK	36	0	23.14	0.206	23.39	0.218	23.43	0.220
15	QPSK	36	20	23.34	0.216	23.43	0.220	23.39	0.218
15	QPSK	36	39	23.41	0.219	23.39	0.218	23.32	0.215
15	QPSK	75	0	23.29	0.213	23.29	0.213	23.30	0.214
15	16QAM	1	0	23.37	0.217	23.39	0.218	23.29	0.213
15	16QAM	1	37	23.39	0.218	23.43	0.220	23.11	0.205
15	16QAM	1	74	23.40	0.219	23.30	0.214	23.10	0.204
15	16QAM	36	0	23.17	0.207	23.13	0.206	23.02	0.200
15	16QAM	36	20	23.15	0.207	23.29	0.213	23.06	0.202
15	16QAM	36	39	23.17	0.207	23.19	0.208	23.04	0.201
15	16QAM	75	0	23.13	0.206	23.08	0.203	23.02	0.200
15	64QAM	1	0	23.24	0.211	23.13	0.206	23.29	0.213
15	64QAM	1	37	23.12	0.205	23.13	0.206	23.11	0.205
15	64QAM	1	74	23.07	0.203	23.15	0.207	23.32	0.215
15	64QAM	36	0	22.99	0.199	23.14	0.206	23.07	0.203
15	64QAM	36	20	23.27	0.212	23.13	0.206	23.01	0.200
15	64QAM	36	39	23.11	0.205	23.11	0.205	23.12	0.205
15	64QAM	75	0	23.29	0.213	23.11	0.205	23.15	0.207

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	24.04	0.254	24.05	0.254	24.05	0.254
10	QPSK	1	25	24.04	0.254	23.84	0.242	24.04	0.254
10	QPSK	1	49	23.98	0.250	24.00	0.251	24.03	0.253
10	QPSK	25	0	23.13	0.206	22.99	0.199	22.99	0.199
10	QPSK	25	12	23.36	0.217	23.32	0.215	23.03	0.201
10	QPSK	25	25	23.37	0.217	23.39	0.218	22.99	0.199
10	QPSK	50	0	23.35	0.216	23.27	0.212	22.99	0.199
10	16QAM	1	0	23.21	0.209	22.98	0.199	23.29	0.213
10	16QAM	1	25	23.09	0.204	22.99	0.199	23.39	0.218
10	16QAM	1	49	23.46	0.222	23.02	0.200	23.11	0.205
10	16QAM	25	0	22.99	0.199	23.10	0.204	23.06	0.202
10	16QAM	25	12	23.29	0.213	22.99	0.199	23.12	0.205
10	16QAM	25	25	22.99	0.199	23.13	0.206	23.18	0.208
10	16QAM	50	0	23.11	0.205	23.15	0.207	23.07	0.203
10	64QAM	1	0	23.11	0.205	23.14	0.206	23.07	0.203
10	64QAM	1	25	23.02	0.200	23.27	0.212	23.17	0.207
10	64QAM	1	49	23.38	0.218	23.12	0.205	23.17	0.207
10	64QAM	25	0	22.97	0.198	22.97	0.198	23.07	0.203
10	64QAM	25	12	22.97	0.198	23.17	0.207	23.18	0.208
10	64QAM	25	25	22.93	0.196	23.13	0.206	23.09	0.204
10	64QAM	50	0	22.99	0.199	23.15	0.207	23.05	0.202

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	23.90	0.245	24.00	0.251	23.84	0.242
5	QPSK	1	12	23.84	0.242	24.05	0.254	24.03	0.253
5	QPSK	1	24	23.84	0.242	23.83	0.242	23.82	0.241
5	QPSK	12	0	23.26	0.212	23.74	0.237	23.33	0.215
5	QPSK	12	7	23.40	0.219	23.39	0.218	23.39	0.218
5	QPSK	12	13	23.28	0.213	23.30	0.214	23.32	0.215
5	QPSK	25	0	23.32	0.215	23.33	0.215	22.99	0.199
5	16QAM	1	0	23.50	0.224	23.61	0.230	23.51	0.224
5	16QAM	1	12	23.11	0.205	23.29	0.213	22.99	0.199
5	16QAM	1	24	23.11	0.205	23.12	0.205	23.11	0.205
5	16QAM	12	0	23.12	0.205	23.17	0.207	23.11	0.205
5	16QAM	12	7	23.11	0.205	23.13	0.206	23.11	0.205
5	16QAM	12	13	23.02	0.200	23.14	0.206	23.11	0.205
5	16QAM	25	0	23.29	0.213	23.01	0.200	23.19	0.208
5	64QAM	1	0	23.05	0.202	23.38	0.218	22.99	0.199
5	64QAM	1	12	23.32	0.215	23.32	0.215	23.39	0.218
5	64QAM	1	24	23.32	0.215	23.32	0.215	23.29	0.213
5	64QAM	12	0	23.03	0.201	23.15	0.207	23.11	0.205
5	64QAM	12	7	23.12	0.205	23.13	0.206	23.04	0.201
5	64QAM	12	13	23.11	0.205	23.14	0.206	23.01	0.200
5	64QAM	25	0	23.15	0.207	23.17	0.207	23.08	0.203

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	/	/	23.94	0.248	/	/
10	QPSK	1	25	/	/	23.85	0.243	/	/
10	QPSK	1	49	/	/	23.83	0.242	/	/
10	QPSK	25	0	/	/	23.24	0.211	/	/
10	QPSK	25	12	/	/	23.11	0.205	/	/
10	QPSK	25	25	/	/	23.16	0.207	/	/
10	QPSK	50	0	/	/	22.94	0.197	/	/
10	16QAM	1	0	/	/	23.03	0.201	/	/
10	16QAM	1	25	/	/	23.01	0.200	/	/
10	16QAM	1	49	/	/	23.05	0.202	/	/
10	16QAM	25	0	/	/	22.94	0.197	/	/
10	16QAM	25	12	/	/	23.01	0.200	/	/
10	16QAM	25	25	/	/	22.98	0.199	/	/
10	16QAM	50	0	/	/	23.05	0.202	/	/
10	64QAM	1	0	/	/	23.12	0.205	/	/
10	64QAM	1	25	/	/	22.91	0.195	/	/
10	64QAM	1	49	/	/	23.17	0.207	/	/
10	64QAM	25	0	/	/	22.74	0.188	/	/
10	64QAM	25	12	/	/	22.94	0.197	/	/
10	64QAM	25	25	/	/	23.01	0.200	/	/
10	64QAM	50	0	/	/	22.94	0.197	/	/

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	23.88	0.244	23.83	0.242	23.74	0.237
5	QPSK	1	12	23.79	0.239	23.78	0.239	23.89	0.245
5	QPSK	1	24	23.85	0.243	23.87	0.244	23.71	0.235
5	QPSK	12	0	23.04	0.201	22.97	0.198	23.09	0.204
5	QPSK	12	7	23.09	0.204	22.95	0.197	23.05	0.202
5	QPSK	12	13	22.97	0.198	22.93	0.196	22.96	0.198
5	QPSK	25	0	23.00	0.200	22.86	0.193	23.07	0.203
5	16QAM	1	0	23.04	0.201	23.01	0.200	23.09	0.204
5	16QAM	1	12	23.20	0.209	23.11	0.205	23.18	0.208
5	16QAM	1	24	23.12	0.205	23.01	0.200	23.00	0.200
5	16QAM	12	0	22.96	0.198	22.86	0.193	23.02	0.200
5	16QAM	12	7	22.98	0.199	22.92	0.196	22.95	0.197
5	16QAM	12	13	23.05	0.202	22.83	0.192	23.02	0.200
5	16QAM	25	0	23.02	0.200	22.94	0.197	22.97	0.198
5	64QAM	1	0	23.14	0.206	23.17	0.207	22.92	0.196
5	64QAM	1	12	23.15	0.207	22.55	0.180	22.51	0.178
5	64QAM	1	24	23.18	0.208	22.79	0.190	22.55	0.180
5	64QAM	12	0	22.93	0.196	22.99	0.199	23.09	0.204
5	64QAM	12	7	22.98	0.199	23.02	0.200	23.05	0.202
5	64QAM	12	13	23.02	0.200	22.97	0.198	22.99	0.199
5	64QAM	25	0	23.03	0.201	22.99	0.199	23.02	0.200

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	/	/	23.93	0.247	/	/
10	QPSK	1	25	/	/	23.84	0.242	/	/
10	QPSK	1	49	/	/	23.80	0.240	/	/
10	QPSK	25	0	/	/	23.14	0.206	/	/
10	QPSK	25	12	/	/	23.06	0.202	/	/
10	QPSK	25	25	/	/	23.07	0.203	/	/
10	QPSK	50	0	/	/	23.04	0.201	/	/
10	16QAM	1	0	/	/	23.14	0.206	/	/
10	16QAM	1	25	/	/	23.05	0.202	/	/
10	16QAM	1	49	/	/	22.97	0.198	/	/
10	16QAM	25	0	/	/	23.09	0.204	/	/
10	16QAM	25	12	/	/	23.12	0.205	/	/
10	16QAM	25	25	/	/	23.11	0.205	/	/
10	16QAM	50	0	/	/	23.08	0.203	/	/
10	64QAM	1	0	/	/	23.17	0.207	/	/
10	64QAM	1	25	/	/	23.10	0.204	/	/
10	64QAM	1	49	/	/	22.94	0.197	/	/
10	64QAM	25	0	/	/	23.06	0.202	/	/
10	64QAM	25	12	/	/	23.05	0.202	/	/
10	64QAM	25	25	/	/	23.02	0.200	/	/
10	64QAM	50	0	/	/	22.91	0.195	/	/

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	23.81	0.240	23.76	0.238	23.85	0.243
5	QPSK	1	12	23.76	0.238	23.80	0.240	23.83	0.242
5	QPSK	1	24	23.69	0.234	23.88	0.244	23.88	0.244
5	QPSK	12	0	23.04	0.201	23.03	0.201	23.09	0.204
5	QPSK	12	7	23.06	0.202	23.07	0.203	23.09	0.204
5	QPSK	12	13	23.04	0.201	23.07	0.203	23.07	0.203
5	QPSK	25	0	22.99	0.199	22.97	0.198	23.13	0.206
5	16QAM	1	0	23.10	0.204	23.16	0.207	23.14	0.206
5	16QAM	1	12	23.05	0.202	23.03	0.201	23.09	0.204
5	16QAM	1	24	22.94	0.197	22.85	0.193	22.92	0.196
5	16QAM	12	0	23.02	0.200	22.98	0.199	23.15	0.207
5	16QAM	12	7	22.94	0.197	23.07	0.203	23.15	0.207
5	16QAM	12	13	23.00	0.200	23.01	0.200	22.97	0.198
5	16QAM	25	0	23.07	0.203	23.02	0.200	23.11	0.205
5	64QAM	1	0	23.15	0.207	22.80	0.191	22.84	0.192
5	64QAM	1	12	23.26	0.212	22.64	0.184	22.76	0.189
5	64QAM	1	24	23.27	0.212	22.82	0.191	22.71	0.187
5	64QAM	12	0	22.93	0.196	22.96	0.198	23.04	0.201
5	64QAM	12	7	22.89	0.195	22.90	0.195	22.97	0.198
5	64QAM	12	13	22.94	0.197	22.95	0.197	22.98	0.199
5	64QAM	25	0	23.02	0.200	22.96	0.198	23.03	0.201

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				40090		40640		41190	
Frequency (MHz)				2540		2595		2650	
				dBm	W	dBm	W	dBm	W
20	QPSK	1	0	24.08	0.256	24.20	0.263	24.14	0.259
20	QPSK	1	49	24.04	0.254	24.13	0.259	24.14	0.259
20	QPSK	1	99	23.98	0.250	24.09	0.256	23.94	0.248
20	QPSK	50	0	23.24	0.211	23.30	0.214	23.23	0.210
20	QPSK	50	24	23.24	0.211	23.07	0.203	23.04	0.201
20	QPSK	50	50	23.27	0.212	23.08	0.203	23.14	0.206
20	QPSK	100	0	23.24	0.211	23.14	0.206	23.04	0.201
20	16QAM	1	0	23.28	0.213	23.07	0.203	23.04	0.201
20	16QAM	1	49	23.27	0.212	23.07	0.203	23.04	0.201
20	16QAM	1	99	23.34	0.216	23.14	0.206	23.14	0.206
20	16QAM	50	0	23.25	0.211	23.07	0.203	23.04	0.201
20	16QAM	50	24	23.23	0.210	23.04	0.201	23.04	0.201
20	16QAM	50	50	23.29	0.213	23.50	0.224	23.14	0.206
20	16QAM	100	0	23.23	0.210	23.49	0.223	23.07	0.203
20	64QAM	1	0	23.38	0.218	23.29	0.213	23.08	0.203
20	64QAM	1	49	23.31	0.214	23.11	0.205	23.08	0.203
20	64QAM	1	99	23.21	0.209	23.07	0.203	23.04	0.201
20	64QAM	50	0	23.17	0.207	23.10	0.204	23.14	0.206
20	64QAM	50	24	23.02	0.200	23.17	0.207	23.07	0.203
20	64QAM	50	50	23.12	0.205	23.31	0.214	23.13	0.206
20	64QAM	100	0	23.10	0.204	23.34	0.216	23.14	0.206

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				40065		40640		41215	
Frequency (MHz)				2537.5		2595		2652.5	
				dBm	W	dBm	W	dBm	W
15	QPSK	1	0	23.74	0.237	24.10	0.257	23.96	0.249
15	QPSK	1	37	23.73	0.236	24.14	0.259	24.07	0.255
15	QPSK	1	74	23.73	0.236	24.07	0.255	23.87	0.244
15	QPSK	36	0	22.90	0.195	23.09	0.204	23.90	0.245
15	QPSK	36	20	23.15	0.207	23.05	0.202	23.97	0.249
15	QPSK	36	39	23.31	0.214	23.04	0.201	23.92	0.247
15	QPSK	75	0	23.09	0.204	23.07	0.203	23.89	0.245
15	16QAM	1	0	23.03	0.201	23.44	0.221	22.89	0.195
15	16QAM	1	37	23.24	0.211	23.01	0.200	22.98	0.199
15	16QAM	1	74	23.20	0.209	22.58	0.181	22.91	0.195
15	16QAM	36	0	23.07	0.203	22.98	0.199	23.36	0.217
15	16QAM	36	20	23.12	0.205	22.94	0.197	23.38	0.218
15	16QAM	36	39	23.19	0.208	23.48	0.223	23.14	0.206
15	16QAM	75	0	23.10	0.204	22.96	0.198	22.74	0.188
15	64QAM	1	0	23.20	0.209	23.34	0.216	23.48	0.223
15	64QAM	1	37	23.48	0.223	23.48	0.223	22.60	0.182
15	64QAM	1	74	23.45	0.221	23.27	0.212	22.33	0.171
15	64QAM	36	0	22.89	0.195	23.05	0.202	22.97	0.198
15	64QAM	36	20	23.04	0.201	23.49	0.223	22.86	0.193
15	64QAM	36	39	22.99	0.199	23.46	0.222	22.78	0.190
15	64QAM	75	0	22.97	0.198	23.46	0.222	22.86	0.193

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				40090		40640		41190	
Frequency (MHz)				2540		2595		2650	
				dBm	W	dBm	W	dBm	W
10	QPSK	1	0	23.78	0.239	24.07	0.255	23.94	0.248
10	QPSK	1	25	23.98	0.250	23.94	0.248	23.89	0.245
10	QPSK	1	49	23.75	0.237	24.14	0.259	23.90	0.245
10	QPSK	25	0	23.06	0.202	23.37	0.217	23.14	0.206
10	QPSK	25	12	23.14	0.206	23.26	0.212	23.14	0.206
10	QPSK	25	25	23.18	0.208	23.21	0.209	23.50	0.224
10	QPSK	50	0	23.23	0.210	23.29	0.213	22.74	0.188
10	16QAM	1	0	23.09	0.204	23.11	0.205	22.94	0.197
10	16QAM	1	25	23.27	0.212	23.26	0.212	22.98	0.199
10	16QAM	1	49	23.13	0.206	23.18	0.208	23.13	0.206
10	16QAM	25	0	23.13	0.206	23.32	0.215	22.79	0.190
10	16QAM	25	12	23.26	0.212	23.18	0.208	22.55	0.180
10	16QAM	25	25	23.23	0.210	23.30	0.214	23.06	0.202
10	16QAM	50	0	23.21	0.209	23.28	0.213	22.82	0.191
10	64QAM	1	0	22.83	0.192	22.79	0.190	23.19	0.208
10	64QAM	1	25	22.86	0.193	22.96	0.198	23.14	0.206
10	64QAM	1	49	22.84	0.192	22.83	0.192	22.95	0.197
10	64QAM	25	0	22.91	0.195	23.04	0.201	23.11	0.205
10	64QAM	25	12	22.94	0.197	22.93	0.196	22.86	0.193
10	64QAM	25	25	23.03	0.201	23.02	0.200	23.09	0.204
10	64QAM	50	0	22.99	0.199	23.07	0.203	23.15	0.207

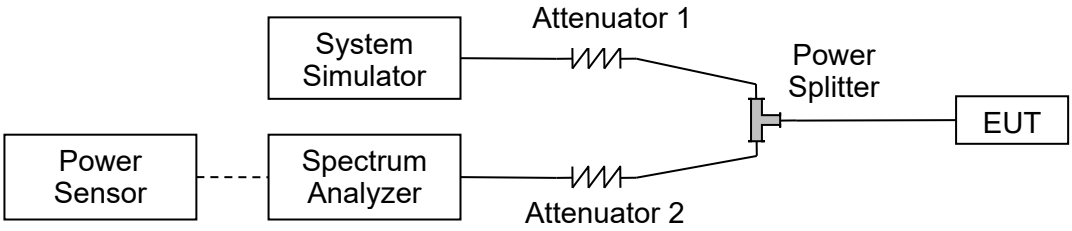
LTE Band 41				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				40065		40640		41215	
Frequency (MHz)				2537.5		2595		2652.5	
				dBm	W	dBm	W	dBm	W
5	QPSK	1	0	23.75	0.237	24.07	0.255	23.85	0.243
5	QPSK	1	12	23.74	0.237	23.94	0.248	23.89	0.245
5	QPSK	1	24	23.87	0.244	24.04	0.254	23.90	0.245
5	QPSK	12	0	23.08	0.203	23.26	0.212	23.06	0.202
5	QPSK	12	7	23.16	0.207	23.11	0.205	23.28	0.213
5	QPSK	12	13	23.10	0.204	23.33	0.215	23.34	0.216
5	QPSK	25	0	23.13	0.206	23.34	0.216	23.27	0.212
5	16QAM	1	0	23.37	0.217	23.35	0.216	23.18	0.208
5	16QAM	1	12	22.98	0.199	23.52	0.225	23.08	0.203
5	16QAM	1	24	22.84	0.192	23.33	0.215	23.34	0.216
5	16QAM	12	0	23.02	0.200	23.19	0.208	23.14	0.206
5	16QAM	12	7	23.14	0.206	23.29	0.213	23.27	0.212
5	16QAM	12	13	23.20	0.209	23.19	0.208	23.06	0.202
5	16QAM	25	0	23.12	0.205	23.27	0.212	23.04	0.201
5	64QAM	1	0	23.39	0.218	23.51	0.224	23.09	0.204
5	64QAM	1	12	23.39	0.218	23.44	0.221	23.05	0.202
5	64QAM	1	24	23.24	0.211	23.37	0.217	23.38	0.218
5	64QAM	12	0	23.19	0.208	22.97	0.198	23.05	0.202
5	64QAM	12	7	23.20	0.209	23.05	0.202	23.13	0.206
5	64QAM	12	13	23.18	0.208	22.84	0.192	23.04	0.201
5	64QAM	25	0	22.92	0.196	22.90	0.195	22.86	0.193

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 5				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
1.4	Low	QPSK	1.08	1.25
	Low	16QAM	1.1	1.26
	Low	64QAM	1.1	1.26
	Mid	QPSK	1.1	1.24
	Mid	16QAM	1.1	1.25
	Mid	64QAM	1.1	1.25
	High	QPSK	1.1	1.24
	High	16QAM	1.09	1.23
	High	64QAM	1.1	1.26
3	Low	QPSK	2.72	3.06
	Low	16QAM	2.71	3.06
	Low	64QAM	2.75	2.9
	Mid	QPSK	2.72	3.07
	Mid	16QAM	2.71	3.06
	Mid	64QAM	2.71	3.03
	High	QPSK	2.71	3.04
	High	16QAM	2.72	3.01
	High	64QAM	2.71	3.05
5	Low	QPSK	4.51	5.0
	Low	16QAM	4.51	4.99
	Low	64QAM	4.5	4.97
	Mid	QPSK	4.5	4.95
	Mid	16QAM	4.5	4.99
	Mid	64QAM	4.49	4.97
	High	QPSK	4.5	4.94
	High	16QAM	4.49	4.9
	High	64QAM	4.5	4.97
10	Low	QPSK	9.04	9.98
	Low	16QAM	9.01	9.84
	Low	64QAM	9.03	9.89
	Mid	QPSK	9.0	9.87
	Mid	16QAM	8.97	9.81
	Mid	64QAM	9.0	9.86
	High	QPSK	8.99	9.89
	High	16QAM	8.98	9.87
	High	64QAM	8.56	8.79

LTE Band 7				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
5	Low	QPSK	4.5	5.0
	Low	16QAM	4.51	5.01
	Low	64QAM	4.51	4.98
	Mid	QPSK	4.51	5.0
	Mid	16QAM	4.52	5.01
	Mid	64QAM	4.51	4.99
	High	QPSK	4.49	4.96
	High	16QAM	4.51	4.98
	High	64QAM	4.5	4.94
10	Low	QPSK	9.0	9.81
	Low	16QAM	8.98	9.83
	Low	64QAM	9.0	9.93
	Mid	QPSK	9.02	9.88
	Mid	16QAM	8.98	9.86
	Mid	64QAM	9.02	9.95
	High	QPSK	9.01	9.97
	High	16QAM	8.99	9.87
	High	64QAM	9.01	9.87
15	Low	QPSK	13.51	14.83
	Low	16QAM	13.52	14.94
	Low	64QAM	13.48	14.77
	Mid	QPSK	13.5	15.0
	Mid	16QAM	13.52	14.96
	Mid	64QAM	13.49	14.92
	High	QPSK	13.5	14.89
	High	16QAM	13.5	14.8
	High	64QAM	13.49	14.92
20	Low	QPSK	17.97	19.77
	Low	16QAM	18.0	19.62
	Low	64QAM	17.98	19.81
	Mid	QPSK	17.96	19.81
	Mid	16QAM	18.06	19.73
	Mid	64QAM	17.99	19.77
	High	QPSK	17.98	19.69
	High	16QAM	17.99	19.7
	High	64QAM	18.0	19.77

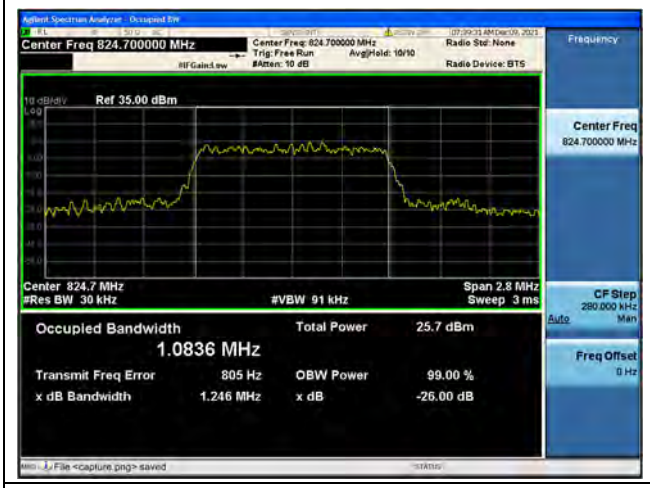
LTE Band 38				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
5	Low	QPSK	4.51	5.01
	Low	16QAM	4.52	5.06
	Low	64QAM	4.5	5.05
	Mid	QPSK	4.52	5.03
	Mid	16QAM	4.52	5.23
	Mid	64QAM	4.5	4.96
	High	QPSK	4.51	5.06
	High	16QAM	4.5	4.96
	High	64QAM	4.5	4.96
10	Low	QPSK	8.99	9.88
	Low	16QAM	9.0	9.76
	Low	64QAM	9.0	10.33
	Mid	QPSK	8.98	10.04
	Mid	16QAM	8.98	10.11
	Mid	64QAM	8.98	10.47
	High	QPSK	9.01	9.9
	High	16QAM	9.0	9.81
	High	64QAM	9.02	10.4
15	Low	QPSK	13.47	14.68
	Low	16QAM	13.51	14.92
	Low	64QAM	13.47	15.85
	Mid	QPSK	13.52	14.92
	Mid	16QAM	13.52	14.98
	Mid	64QAM	13.5	14.96
	High	QPSK	13.5	15.12
	High	16QAM	13.53	14.3
	High	64QAM	13.5	15.35
20	Low	QPSK	17.99	20.78
	Low	16QAM	17.98	19.86
	Low	64QAM	17.99	19.79
	Mid	QPSK	17.98	20.18
	Mid	16QAM	17.97	20.02
	Mid	64QAM	18.0	19.59
	High	QPSK	18.01	20.13
	High	16QAM	17.96	19.69
	High	64QAM	17.97	19.93

LTE Band 40, Block A				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
5	Low	QPSK	4.49	5.12
	Low	16QAM	4.51	5.09
	Low	64QAM	4.50	5.14
	Mid	QPSK	4.50	5.17
	Mid	16QAM	4.50	4.99
	Mid	64QAM	4.52	5.02
	High	QPSK	4.51	5.02
	High	16QAM	4.50	5.07
	High	64QAM	4.50	4.96
10	Mid	QPSK	8.97	10.01
	Mid	16QAM	8.99	10.12
	Mid	64QAM	8.99	9.95

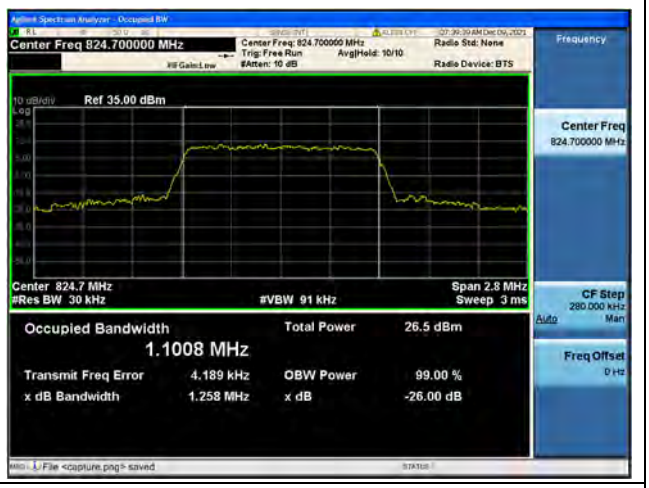
LTE Band 40, Block B				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
5	Low	QPSK	4.49	5.11
	Low	16QAM	4.49	4.93
	Low	64QAM	4.50	4.97
	Mid	QPSK	4.51	4.98
	Mid	16QAM	4.51	5.02
	Mid	64QAM	4.52	5.22
	High	QPSK	4.51	5.15
	High	16QAM	4.50	4.97
	High	64QAM	4.50	5.02
10	Mid	QPSK	9.02	10.14
	Mid	16QAM	8.99	9.94
	Mid	64QAM	8.98	10.21

LTE Band 41				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
5	Low	QPSK	4.52	5.08
	Low	16QAM	4.51	5.00
	Low	64QAM	4.51	5.11
	Mid	QPSK	4.52	5.15
	Mid	16QAM	4.52	5.27
	Mid	64QAM	4.51	5.21
	High	QPSK	4.52	5.08
	High	16QAM	4.51	5.10
	High	64QAM	4.51	4.98
10	Low	QPSK	8.99	9.91
	Low	16QAM	8.99	10.24
	Low	64QAM	9.01	10.19
	Mid	QPSK	8.99	9.90
	Mid	16QAM	8.96	9.88
	Mid	64QAM	8.97	9.85
	High	QPSK	9.00	10.00
	High	16QAM	8.98	9.95
	High	64QAM	9.01	9.92
15	Low	QPSK	13.50	14.94
	Low	16QAM	13.48	14.81
	Low	64QAM	13.50	14.91
	Mid	QPSK	13.51	15.16
	Mid	16QAM	13.53	14.87
	Mid	64QAM	13.49	14.83
	High	QPSK	13.51	14.88
	High	16QAM	13.48	14.91
	High	64QAM	13.55	15.16
20	Low	QPSK	17.93	19.97
	Low	16QAM	17.97	19.68
	Low	64QAM	18.02	19.84
	Mid	QPSK	18.00	19.76
	Mid	16QAM	17.92	20.67
	Mid	64QAM	17.98	20.97
	High	QPSK	18.00	20.89
	High	16QAM	18.00	20.70
	High	64QAM	17.98	20.05

Band5 / 1.4MHz / Low CH / QPSK

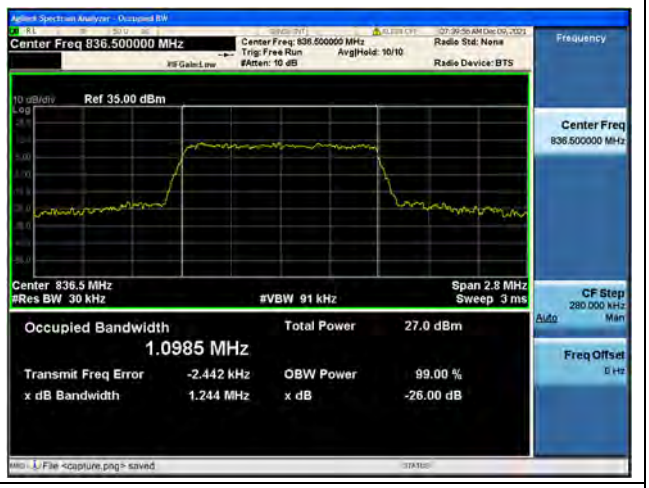


Band5 / 1.4MHz / Low CH / 16QAM



Band5 / 1.4MHz / Low CH / 64QAM

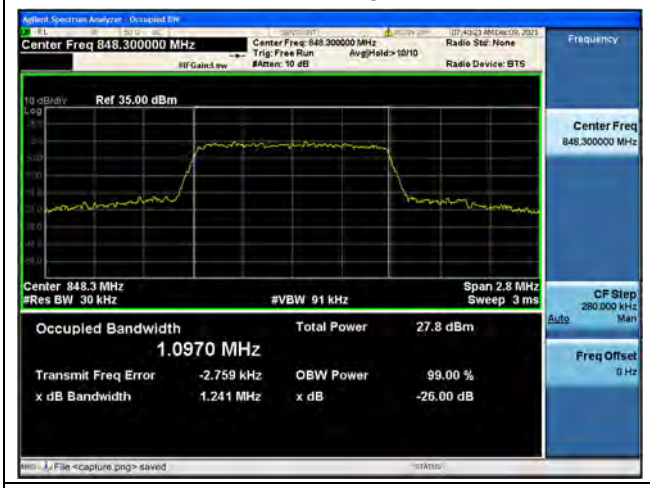
Band5 / 1.4MHz / Mid CH / QPSK



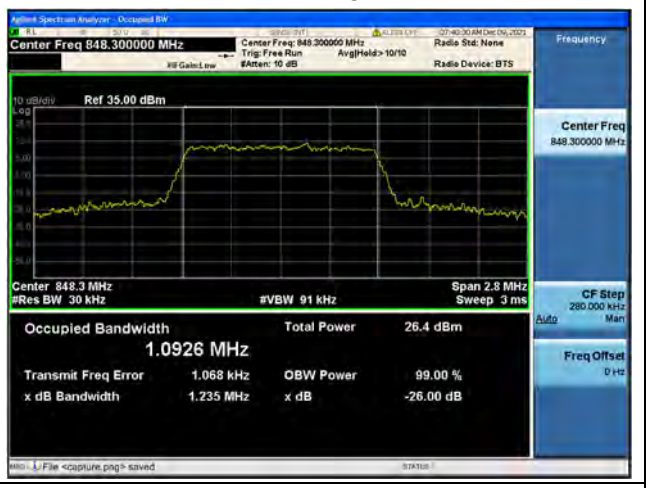
Band5 / 1.4MHz / Mid CH / 16QAM

Band5 / 1.4MHz / Mid CH / 64QAM

Band5 / 1.4MHz / High CH / QPSK



Band5 / 1.4MHz / High CH / 16QAM



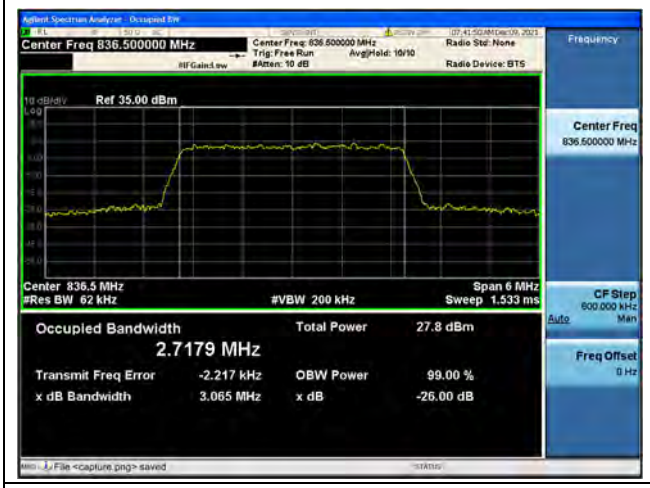
Band5 / 1.4MHz / High CH / 64QAM

Band5 / 3MHz / Low CH / QPSK

Band5 / 3MHz / Low CH / 16QAM

Band5 / 3MHz / Low CH / 64QAM

Band5 / 3MHz / Mid CH / QPSK

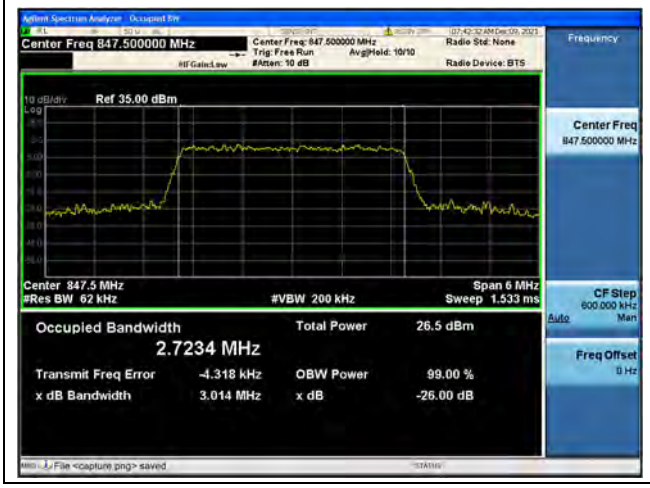


Band5 / 3MHz / Mid CH / 16QAM

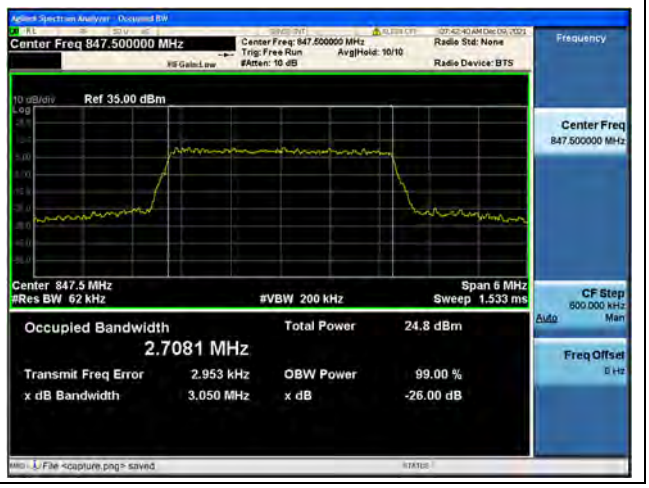
Band5 / 3MHz / Mid CH / 64QAM

Band5 / 3MHz / High CH / QPSK

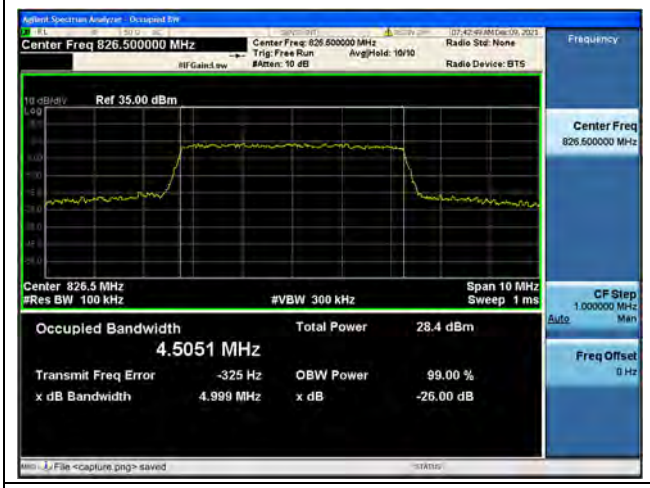
Band5 / 3MHz / High CH / 16QAM



Band5 / 3MHz / High CH / 64QAM



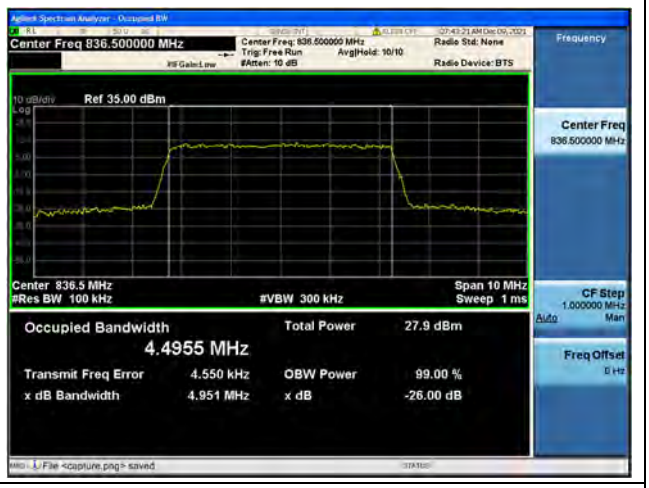
Band5 / 5MHz / Low CH / QPSK



Band5 / 5MHz / Low CH / 16QAM

Band5 / 5MHz / Low CH / 64QAM

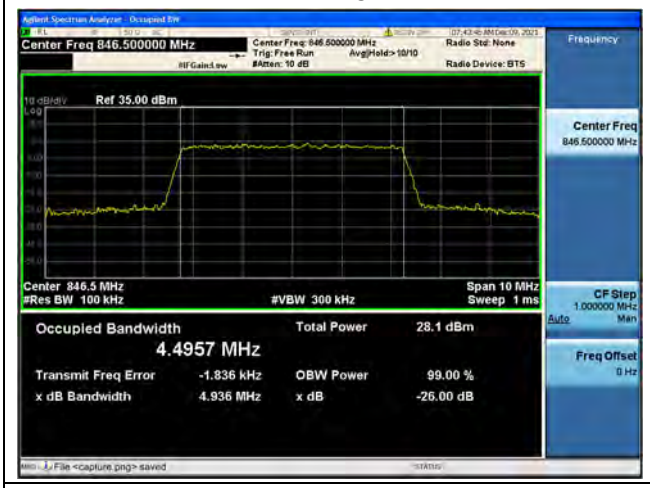
Band5 / 5MHz / Mid CH / QPSK



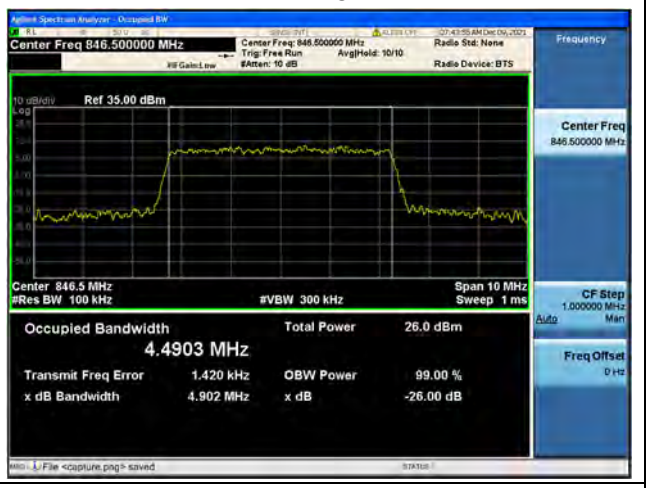
Band5 / 5MHz / Mid CH / 16QAM

Band5 / 5MHz / Mid CH / 64QAM

Band5 / 5MHz / High CH / QPSK

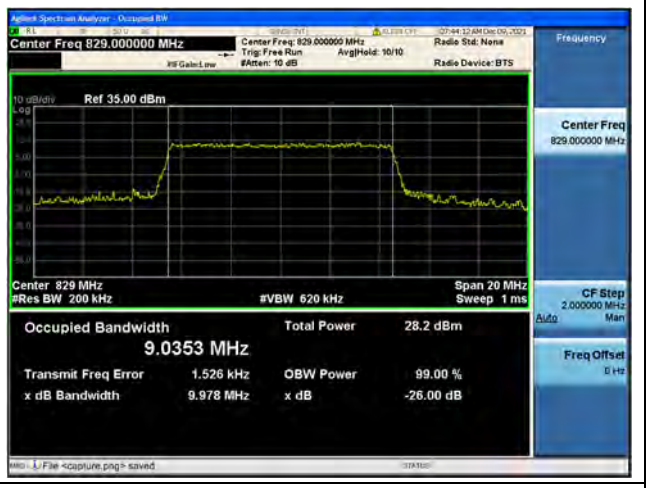


Band5 / 5MHz / High CH / 16QAM

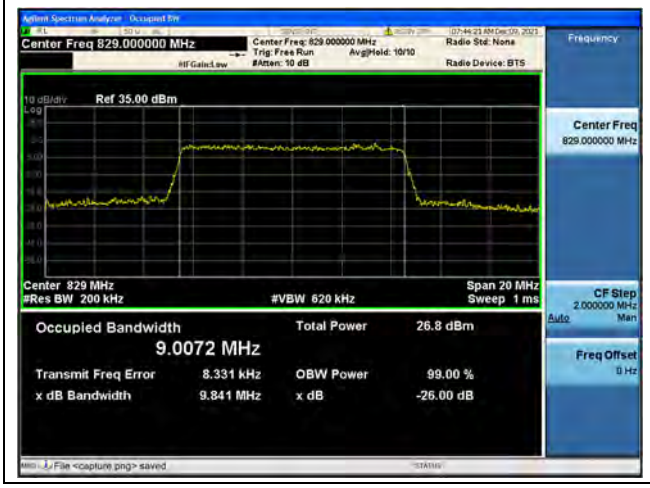


Band5 / 5MHz / High CH / 64QAM

Band5 / 10MHz / Low CH / QPSK



Band5 / 10MHz / Low CH / 16QAM



Band5 / 10MHz / Low CH / 64QAM

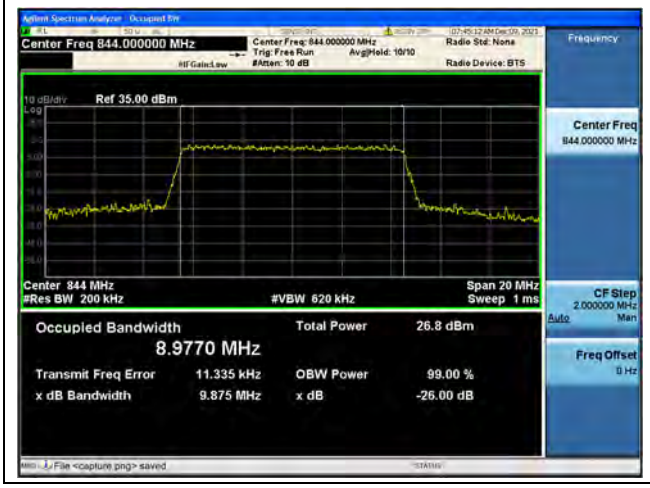
Band5 / 10MHz / Mid CH / QPSK

Band5 / 10MHz / Mid CH / 16QAM

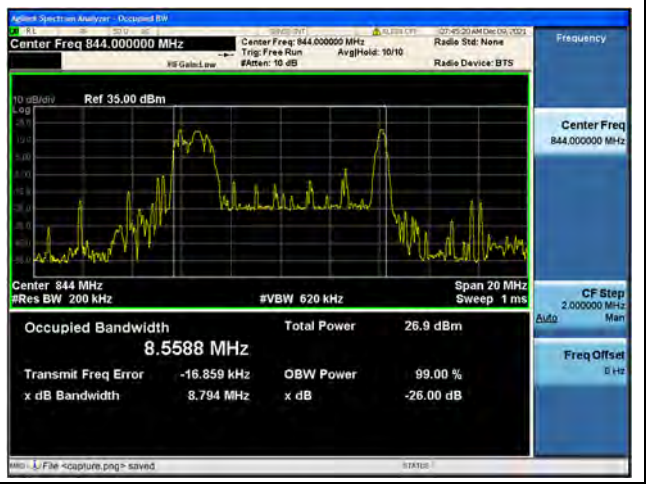
Band5 / 10MHz / Mid CH / 64QAM

Band5 / 10MHz / High CH / QPSK

Band5 / 10MHz / High CH / 16QAM



Band5 / 10MHz / High CH / 64QAM



Band7 / 5MHz / Low CH / QPSK

Band7 / 5MHz / Low CH / 16QAM

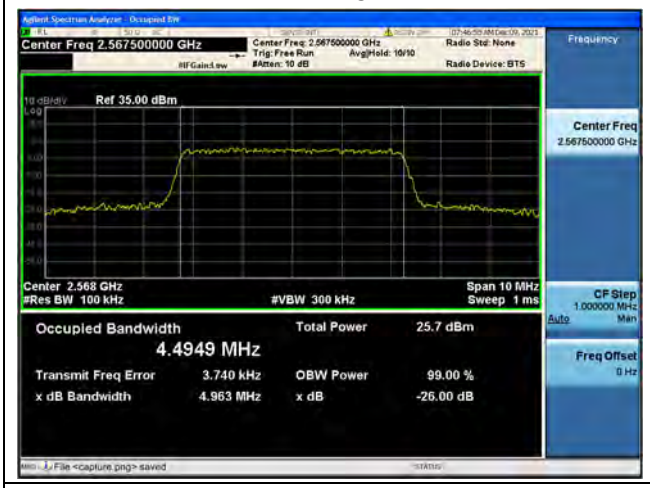
Band7 / 5MHz / Low CH / 64QAM

Band7 / 5MHz / Mid CH / QPSK

Band7 / 5MHz / Mid CH / 16QAM

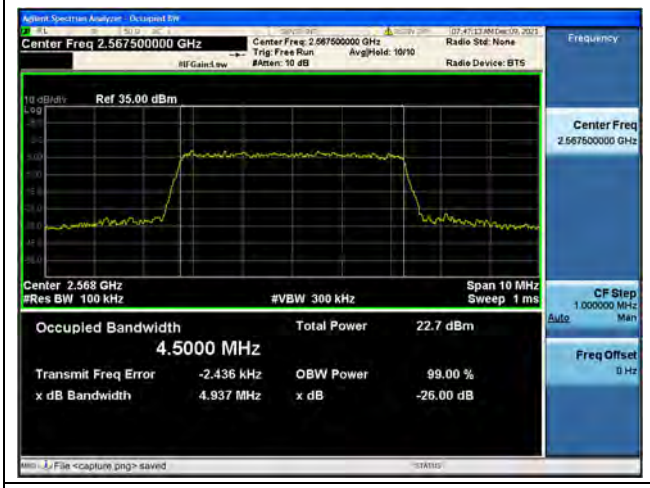
Band7 / 5MHz / Mid CH / 64QAM

Band7 / 5MHz / High CH / QPSK



Band7 / 5MHz / High CH / 16QAM

Band7 / 5MHz / High CH / 64QAM



Band7 / 10MHz / Low CH / QPSK

Band7 / 10MHz / Low CH / 16QAM

Band7 / 10MHz / Low CH / 64QAM

Band7 / 10MHz / Mid CH / QPSK

Band7 / 10MHz / Mid CH / 16QAM

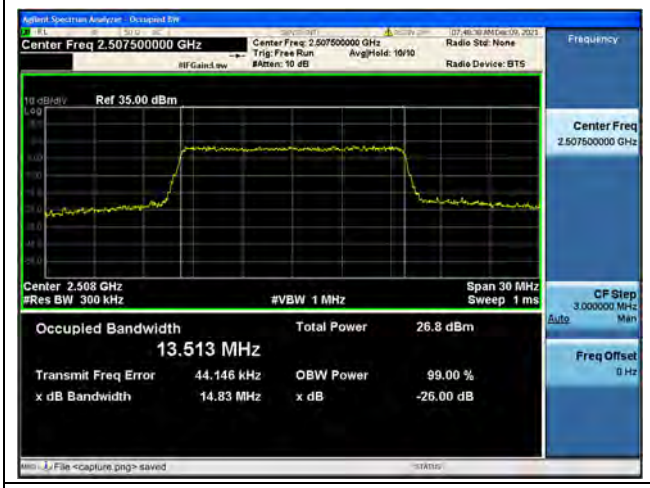
Band7 / 10MHz / Mid CH / 64QAM

Band7 / 10MHz / High CH / QPSK

Band7 / 10MHz / High CH / 16QAM

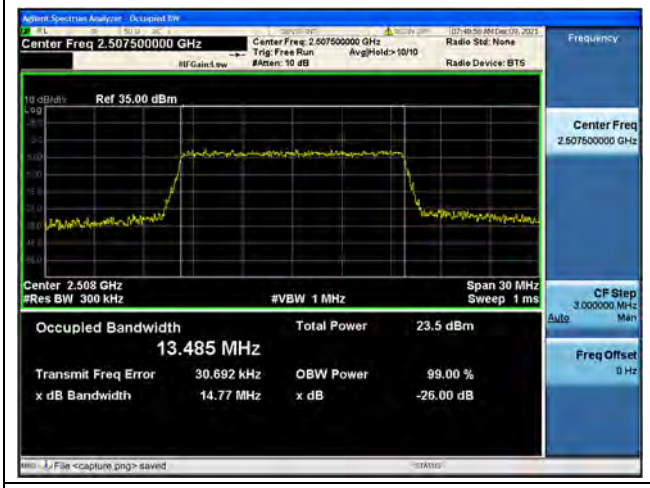
Band7 / 10MHz / High CH / 64QAM

Band7 / 15MHz / Low CH / QPSK



Band7 / 15MHz / Low CH / 16QAM

Band7 / 15MHz / Low CH / 64QAM



Band7 / 15MHz / Mid CH / QPSK

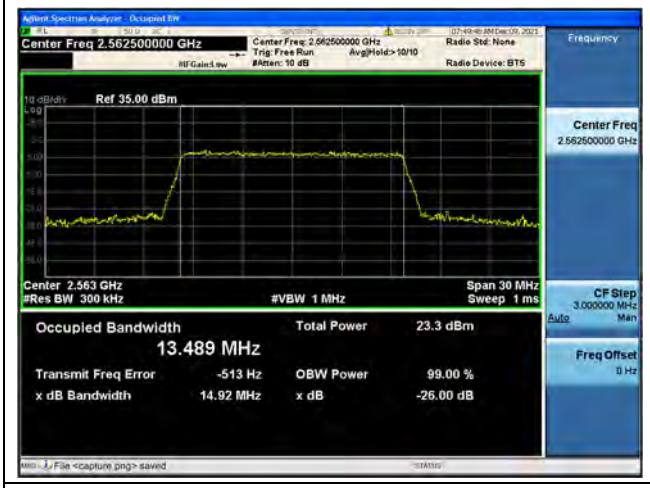
Band7 / 15MHz / Mid CH / 16QAM

Band7 / 15MHz / Mid CH / 64QAM

Band7 / 15MHz / High CH / QPSK

Band7 / 15MHz / High CH / 16QAM

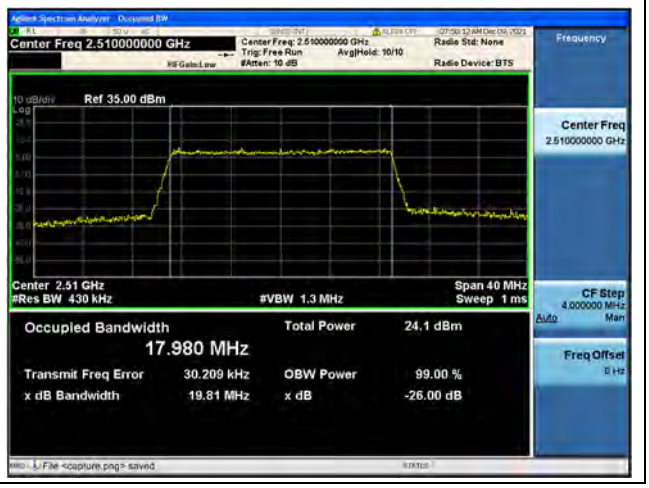
Band7 / 15MHz / High CH / 64QAM



Band7 / 20MHz / Low CH / QPSK

Band7 / 20MHz / Low CH / 16QAM

Band7 / 20MHz / Low CH / 64QAM



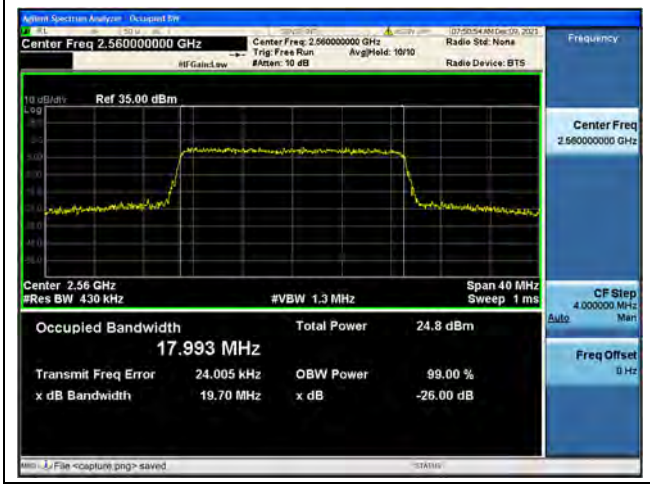
Band7 / 20MHz / Mid CH / QPSK

Band7 / 20MHz / Mid CH / 16QAM

Band7 / 20MHz / Mid CH / 64QAM

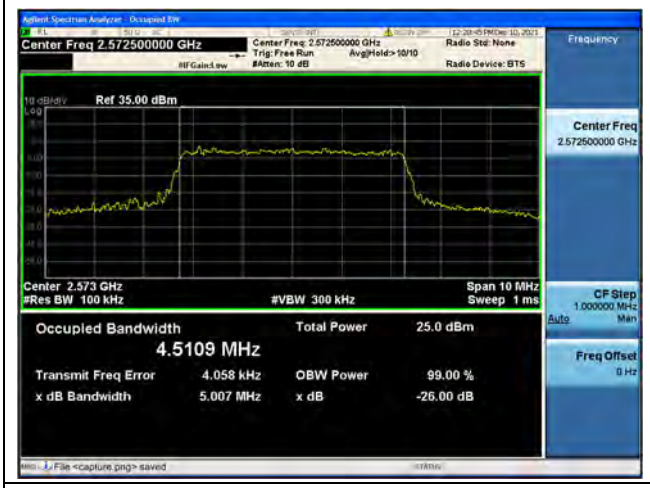
Band7 / 20MHz / High CH / QPSK

Band7 / 20MHz / High CH / 16QAM



Band7 / 20MHz / High CH / 64QAM

Band38 / 5MHz / Low CH / QPSK



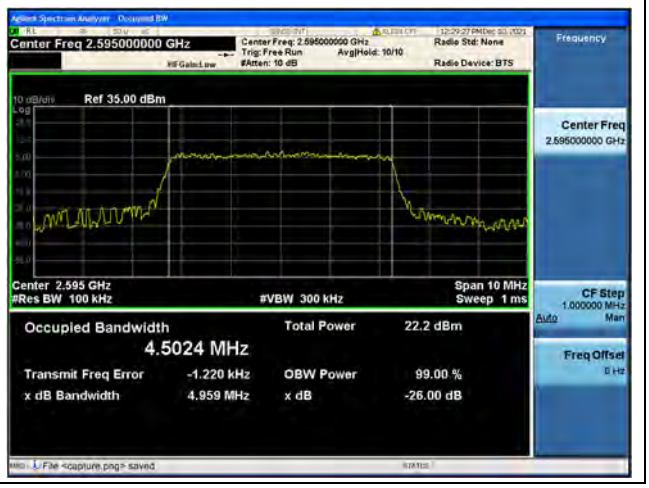
Band38 / 5MHz / Low CH / 16QAM

Band38 / 5MHz / Low CH / 64QAM

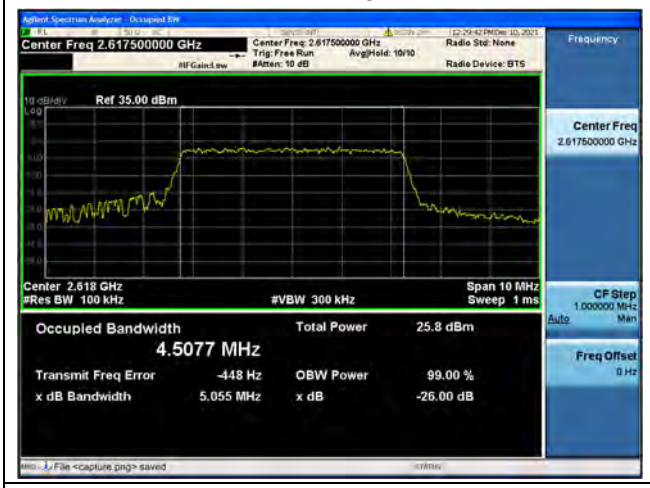
Band38 / 5MHz / Mid CH / QPSK

Band38 / 5MHz / Mid CH / 16QAM

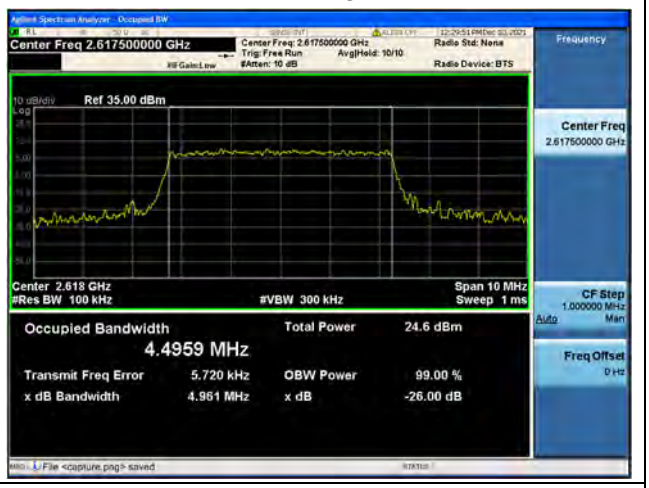
Band38 / 5MHz / Mid CH / 64QAM



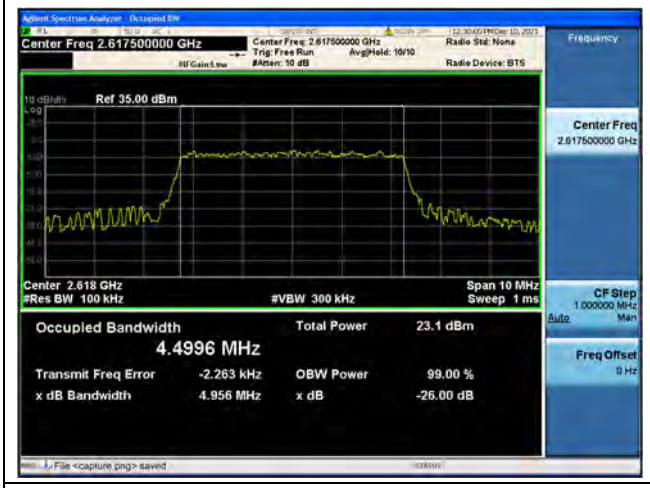
Band38 / 5MHz / High CH / QPSK



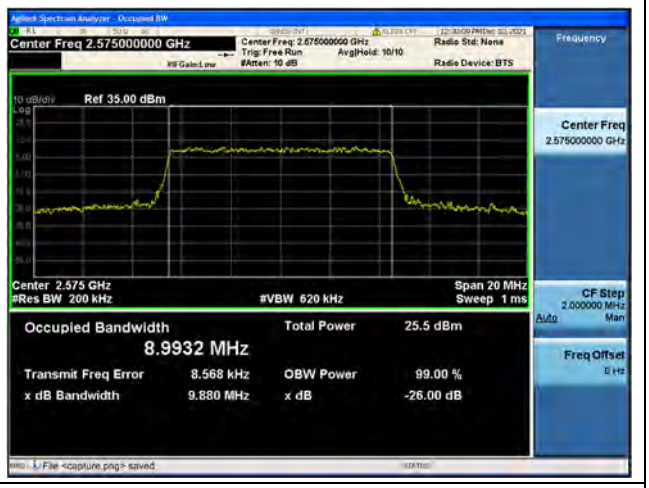
Band38 / 5MHz / High CH / 16QAM



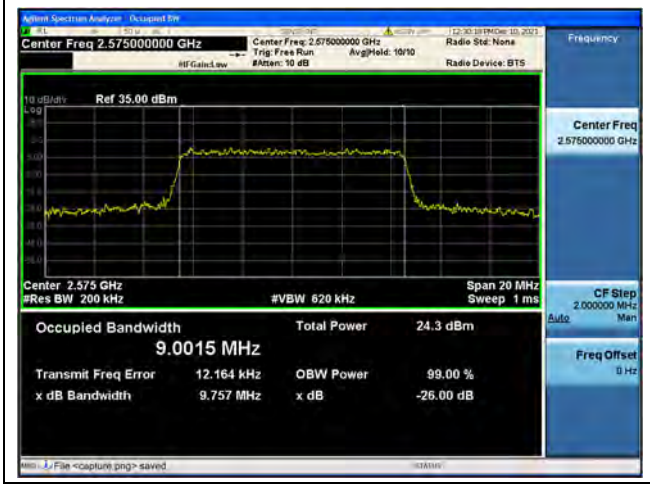
Band38 / 5MHz / High CH / 64QAM



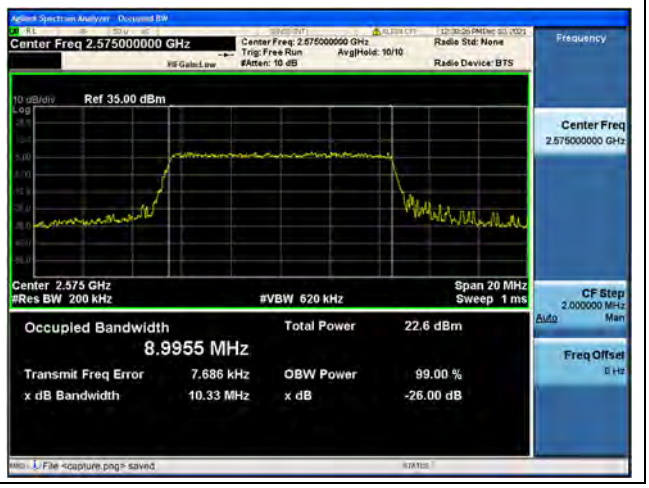
Band38 / 10MHz / Low CH / QPSK



Band38 / 10MHz / Low CH / 16QAM



Band38 / 10MHz / Low CH / 64QAM



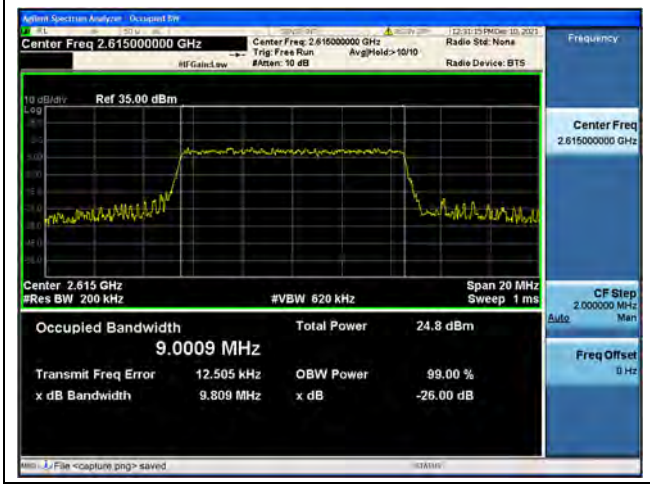
Band38 / 10MHz / Mid CH / QPSK

Band38 / 10MHz / Mid CH / 16QAM

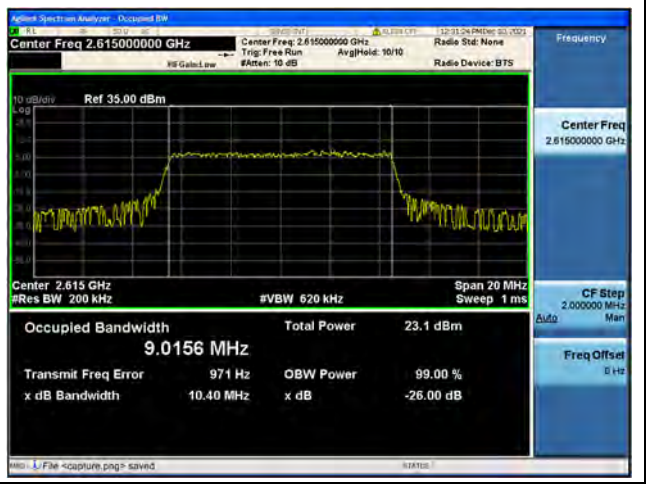
Band38 / 10MHz / Mid CH / 64QAM

Band38 / 10MHz / High CH / QPSK

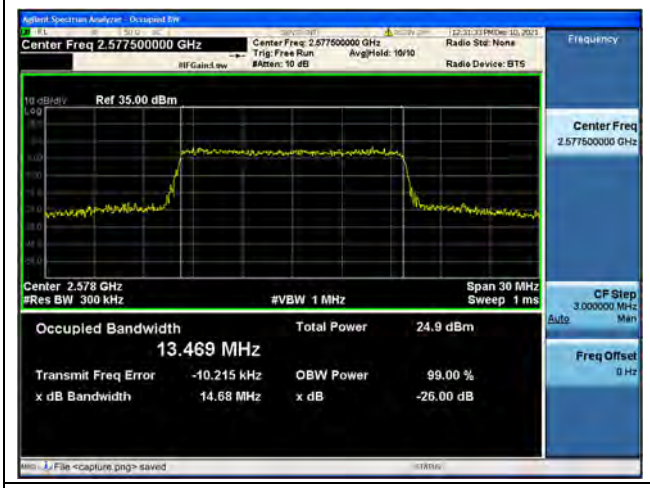
Band38 / 10MHz / High CH / 16QAM



Band38 / 10MHz / High CH / 64QAM



Band38 / 15MHz / Low CH / QPSK

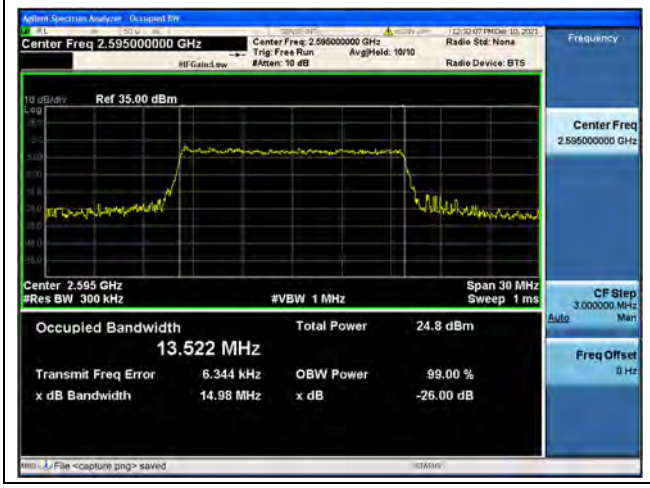


Band38 / 15MHz / Low CH / 16QAM

Band38 / 15MHz / Low CH / 64QAM

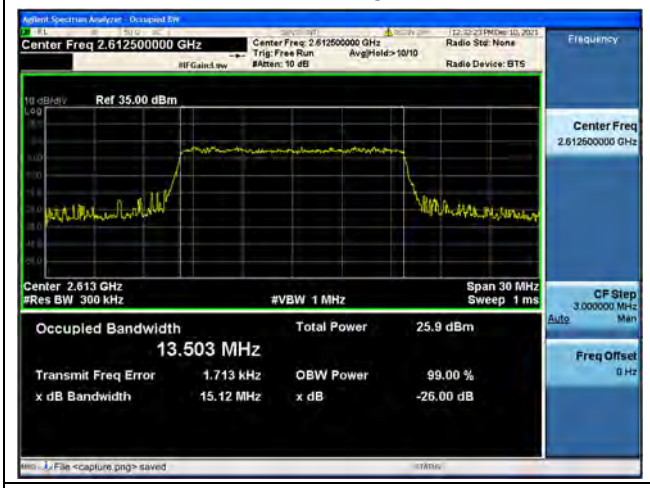
Band38 / 15MHz / Mid CH / QPSK

Band38 / 15MHz / Mid CH / 16QAM

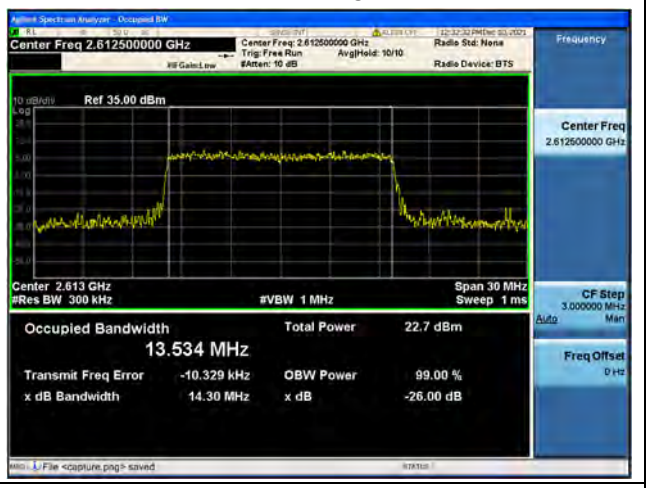


Band38 / 15MHz / Mid CH / 64QAM

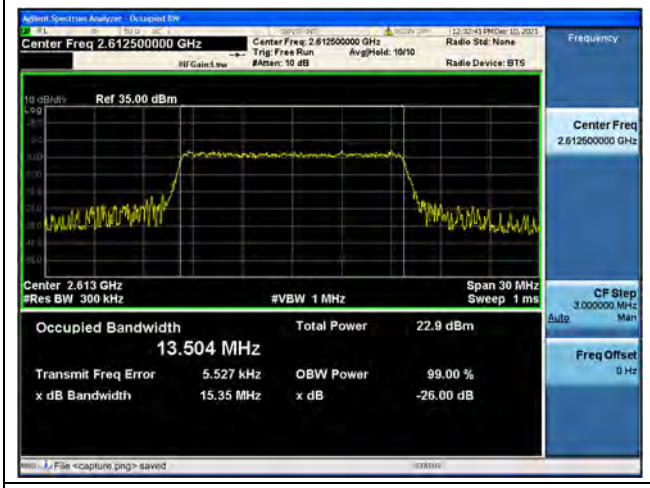
Band38 / 15MHz / High CH / QPSK



Band38 / 15MHz / High CH / 16QAM



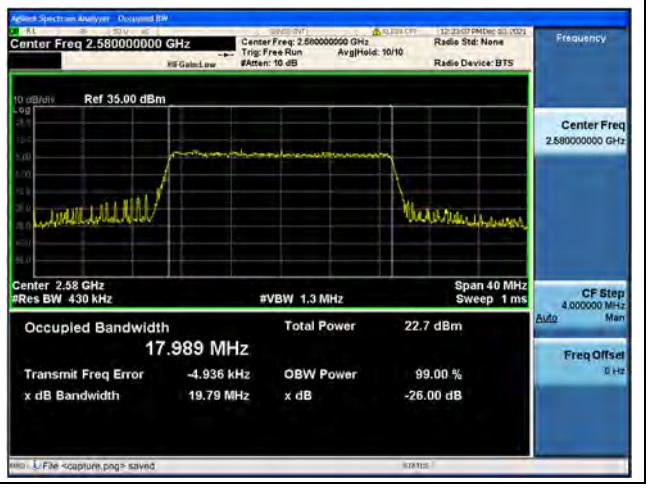
Band38 / 15MHz / High CH / 64QAM



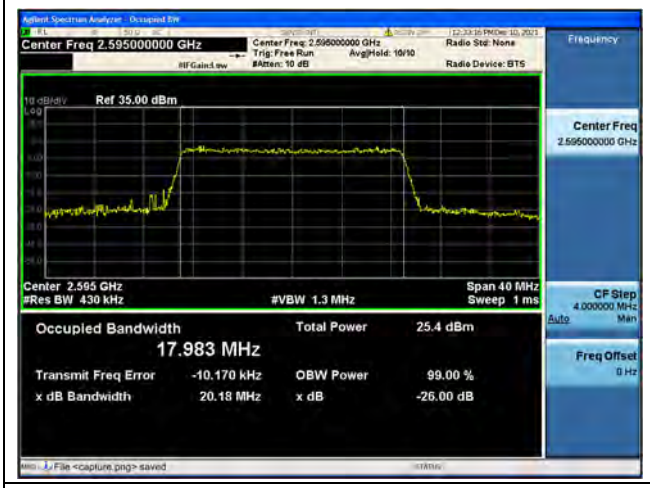
Band38 / 20MHz / Low CH / QPSK

Band38 / 20MHz / Low CH / 16QAM

Band38 / 20MHz / Low CH / 64QAM

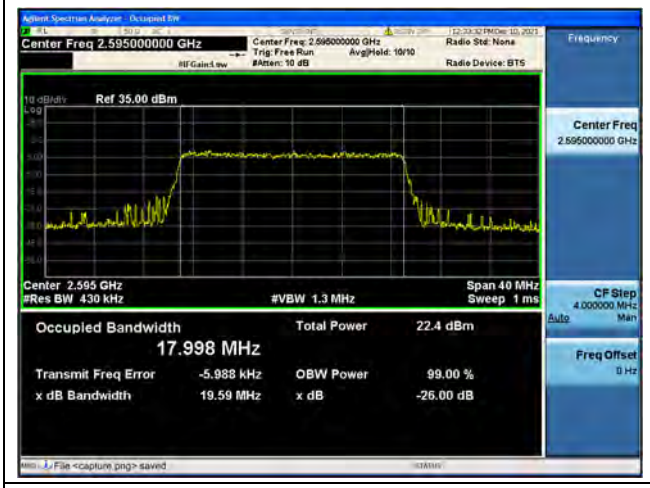


Band38 / 20MHz / Mid CH / QPSK



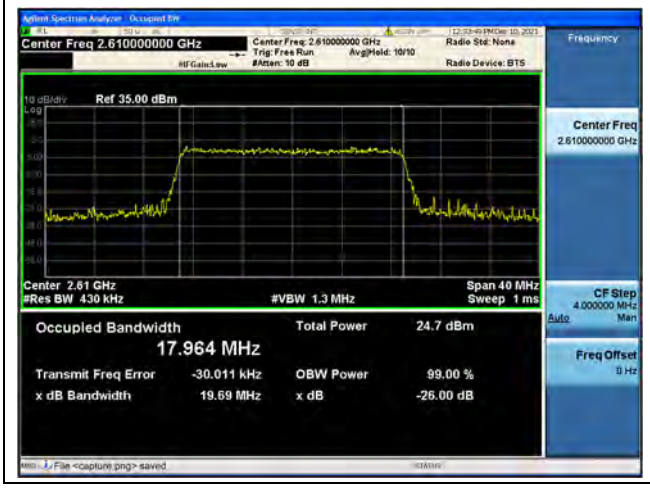
Band38 / 20MHz / Mid CH / 16QAM

Band38 / 20MHz / Mid CH / 64QAM



Band38 / 20MHz / High CH / QPSK

Band38 / 20MHz / High CH / 16QAM



Band38 / 20MHz / High CH / 64QAM

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

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

Band40/ Block A / 5MHz / Low CH / 64QAM

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

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

Band40/ Block A / 5MHz / Mid CH / 64QAM

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

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

Band40/ Block A / 5MHz / High CH / 64QAM

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

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

Band40/ Block A / 10MHz / Mid CH / 64QAM

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

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

Band40/ Block B / 5MHz / Low CH / 64QAM

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

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

Band40/ Block B / 5MHz / Mid CH / 64QAM

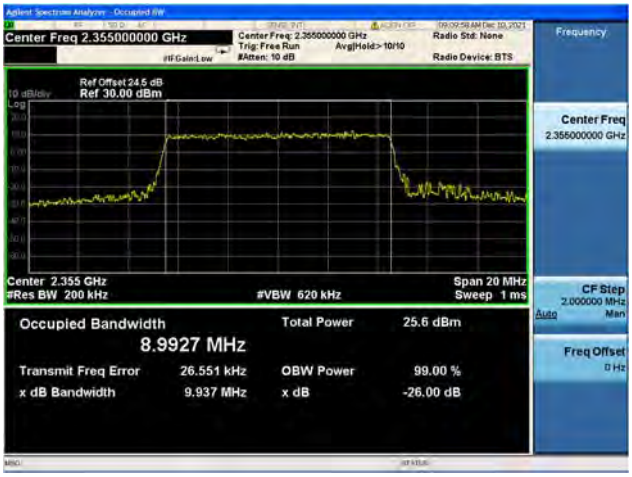
Band40/ Block B / 5MHz / High CH / QPSK

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

Band40/ Block B / 5MHz / High CH / 64QAM

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

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



Band40/ Block B / 10MHz / Mid CH / 64QAM

Band41 / 5MHz / Low CH / QPSK

Band41 / 5MHz / Low CH / 16QAM

Band41 / 5MHz / Low CH / 64QAM

Band41 / 5MHz / Mid CH / QPSK

Band41 / 5MHz / Mid CH / 16QAM

Band41 / 5MHz / Mid CH / 64QAM

Band41 / 5MHz / High CH / QPSK

Band41 / 5MHz / High CH / 16QAM

Band41 / 5MHz / High CH / 64QAM

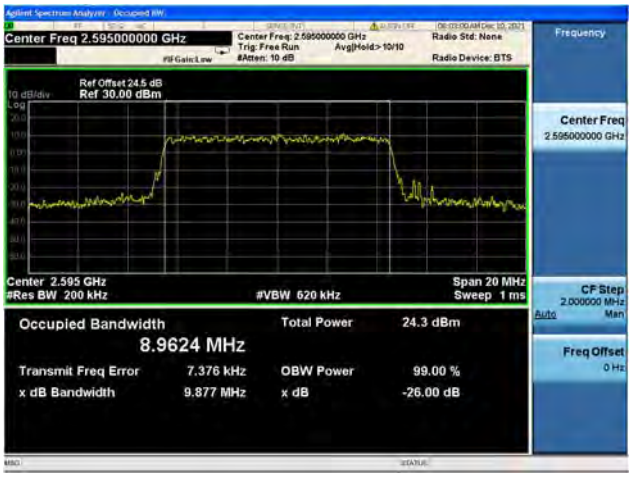
Band41 / 10MHz / Low CH / QPSK

Band41 / 10MHz / Low CH / 16QAM

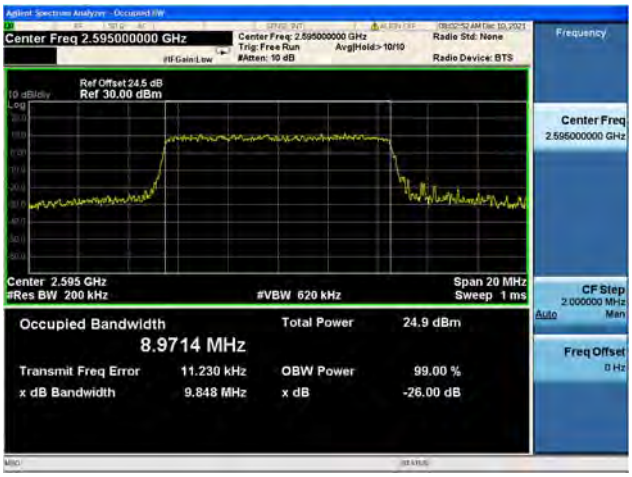
Band41 / 10MHz / Low CH / 64QAM

Band41 / 10MHz / Mid CH / QPSK

Band41 / 10MHz / Mid CH / 16QAM



Band41 / 10MHz / Mid CH / 64QAM



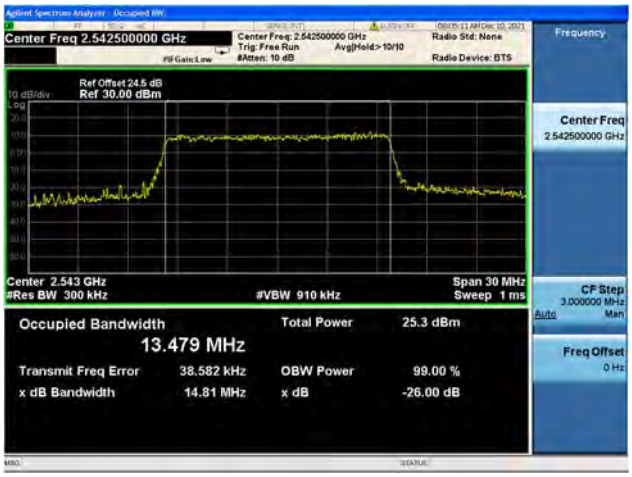
Band41 / 10MHz / High CH / QPSK

Band41 / 10MHz / High CH / 16QAM

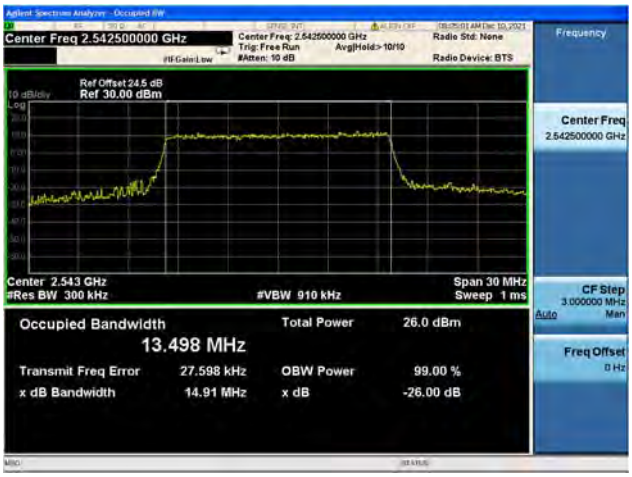
Band41 / 10MHz / High CH / 64QAM

Band41 / 15MHz / Low CH / QPSK

Band41 / 15MHz / Low CH / 16QAM

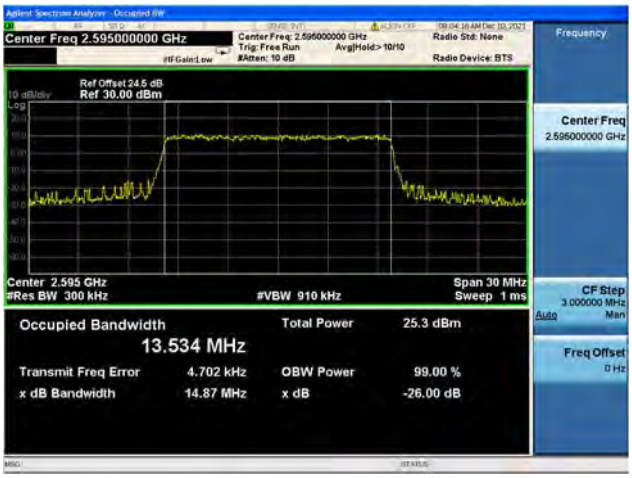


Band41 / 15MHz / Low CH / 64QAM

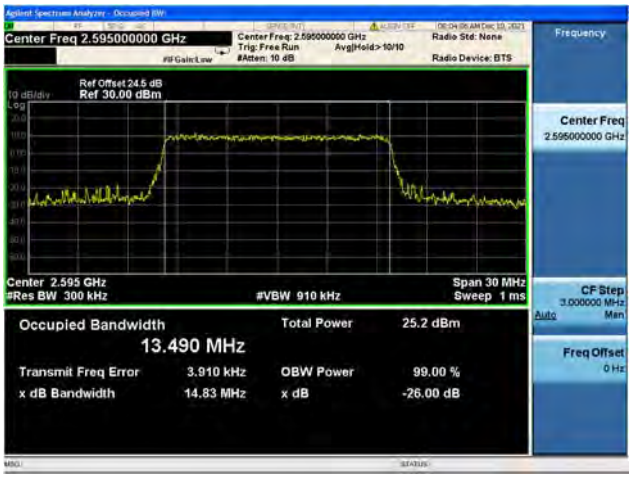


Band41 / 15MHz / Mid CH / QPSK

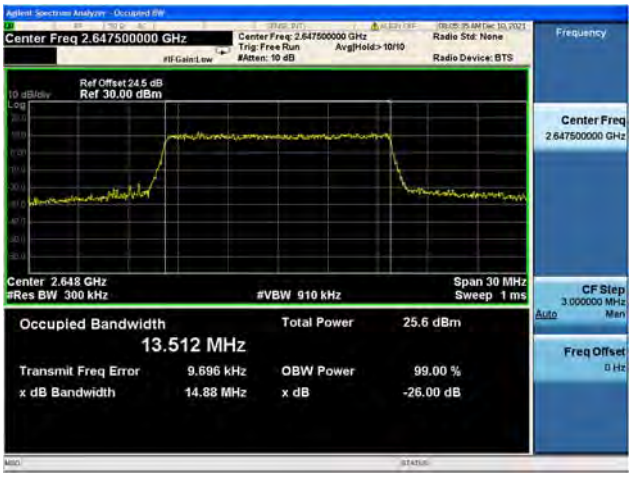
Band41 / 15MHz / Mid CH / 16QAM



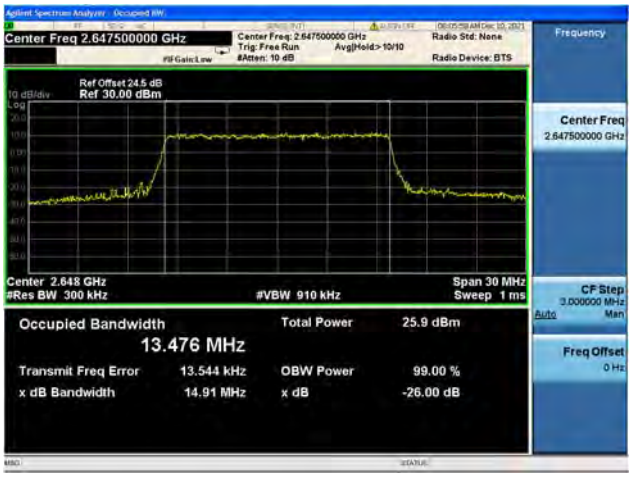
Band41 / 15MHz / Mid CH / 64QAM



Band41 / 15MHz / High CH / QPSK

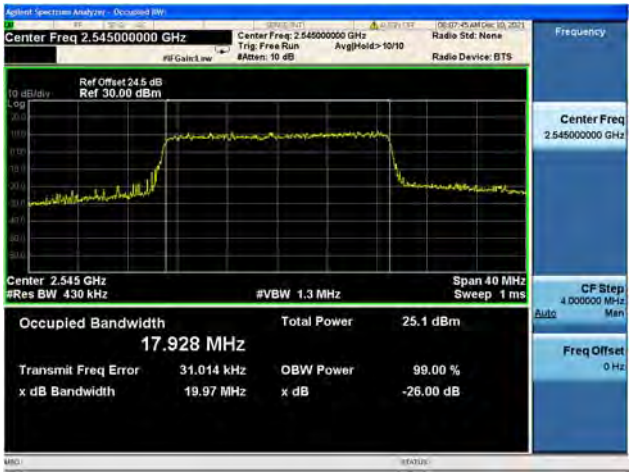


Band41 / 15MHz / High CH / 16QAM



Band41 / 15MHz / High CH / 64QAM

Band41 / 20MHz / Low CH / QPSK

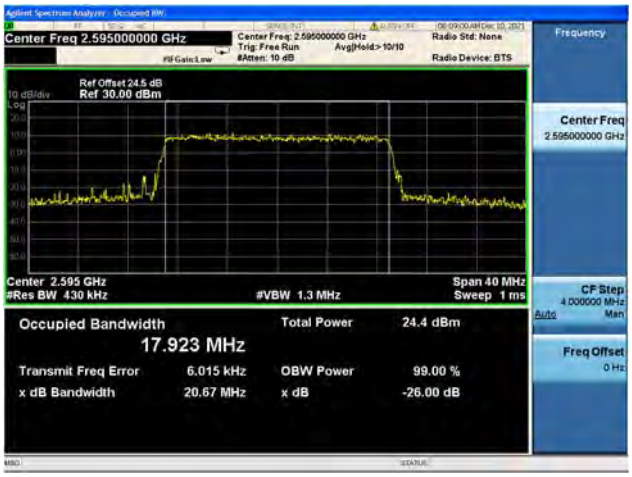


Band41 / 20MHz / Low CH / 16QAM

Band41 / 20MHz / Low CH / 64QAM

Band41 / 20MHz / Mid CH / QPSK

Band41 / 20MHz / Mid CH / 16QAM

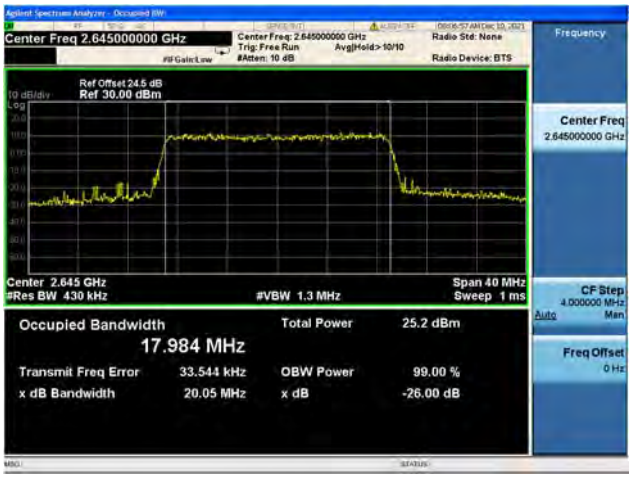


Band41 / 20MHz / Mid CH / 64QAM

Band41 / 20MHz / High CH / QPSK

Band41 / 20MHz / High CH / 16QAM

Band41 / 20MHz / High CH / 64QAM



2.3. Frequency Stability

2.3.1. Requirement

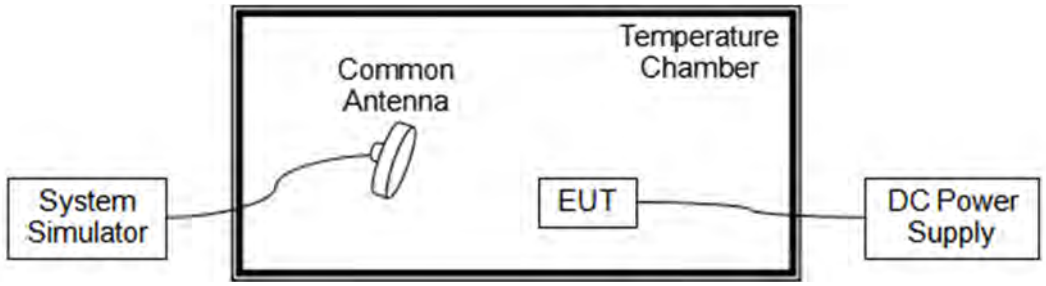
According to FCC section 2.1055, 24.235, 27.54, the frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block. According to FCC section 2.1055, the test conditions are:

(a) The temperature is varied from -30°C to +50°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 0°C to 35°C, which are specified by the applicant.

2.3.2. Test Description



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

2.3.3. Test Procedure

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

2.3.4. Test Result

The nominal, highest and lowest extreme voltages are separately 3.87V, 4.45V and 3.00V, which are specified by the applicant; the normal temperature here used is 20°C.

LTE Band 5, QPSK, Channel 20525, Frequency 836.5MHz Limit=±2.5ppm					
Voltage (%)	**Power (VDC)**	**Temp(°C)**	**Fre. Dev. (Hz)**	**Deviation (ppm)**	**Result**
Normal	3.87	+20(Ref)	-29	-0.035	PASS
Normal		0	21	0.025	
Normal		+10	-33	-0.039	
Normal		+20	-38	-0.045	
Normal		+30	29	0.035	
Normal		+35	43	0.051	
High	4.45	+20	29	0.035	
BATT.ENDPOINT	3.00	+20	-13	-0.016	

LTE Band 7, QPSK, Channel 21100, Frequency 2535MHz Limit= Within Authorized Band					
Voltage (%)	**Power (VDC)**	**Temp(°C)**	**Fre. Dev. (Hz)**	**Deviation (ppm)**	**Result**
Normal	3.87	+20(Ref)	33	0.013	PASS
Normal		0	55	0.022	
Normal		+10	39	0.015	
Normal		+20	53	0.021	
Normal		+30	-55	-0.022	
Normal		+35	32	0.013	
High	4.45	+20	33	0.013	
BATT.ENDPOINT	3.00	+20	36	0.014	

LTE Band 38, QPSK, Channel 38000, Frequency 2595MHz Limit =Within Authorized Band					
Voltage (%)	**Power (VDC)**	**Temp(°C)**	**Fre. Dev. (Hz)**	**Deviation (ppm)**	**Result**
Normal	3.87	+20(Ref)	24	0.009	PASS
Normal		0	48	0.018	
Normal		+10	35	0.013	
Normal		+20	-15	-0.006	
Normal		+30	-56	-0.022	
Normal		+35	57	0.022	
High	4.45	+20	-50	-0.019	
BATT.ENDPOINT	3.00	+20	-24	-0.009	

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**
Normal	3.87	+20(Ref)	32	0.014	PASS
Normal		0	42	0.018	
Normal		+10	45	0.019	
Normal		+20	-51	-0.022	
Normal		+30	-51	-0.022	
Normal		+35	46	0.020	
High	4.45	+20	-15	-0.006	
BATT.ENDPOINT	3.00	+20	-43	-0.019	

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**
Normal	3.87	+20(Ref)	-27	-0.011	PASS
Normal		0	23	0.010	
Normal		+10	-14	-0.006	
Normal		+20	-15	-0.006	
Normal		+30	-47	-0.020	
Normal		+35	-40	-0.017	
High	4.45	+20	41	0.017	
BATT.ENDPOINT	3.00	+20	-28	-0.012	

LTE Band 41, QPSK, Channel 40620, Frequency 2593.0MHz Limit =Within Authorized Band					
Voltage (%)	**Power (VDC)**	**Temp(°C)**	**Fre. Dev. (Hz)**	**Deviation (ppm)**	**Result**
Normal	3.87	+20(Ref)	-44	-0.017	PASS
Normal		0	25	0.010	
Normal		+10	49	0.019	
Normal		+20	-36	-0.014	
Normal		+30	27	0.010	
Normal		+35	30	0.012	
High	4.45	+20	-47	-0.018	
BATT.ENDPOINT	3.00	+20	45	0.017	

2.4. Conducted Spurious Emissions

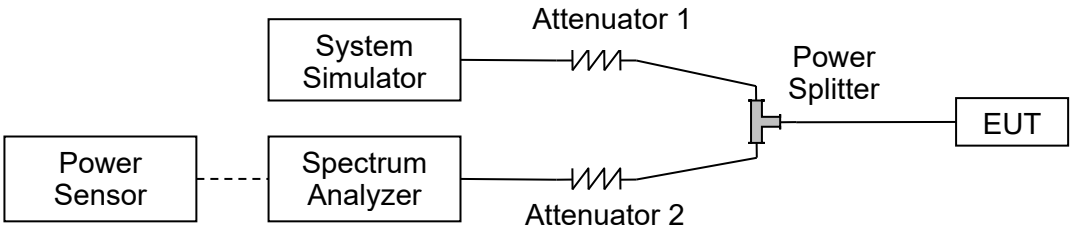
2.4.1. Requirement

According to FCC section 2.1051, the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43+10*log(P)dB. This calculated to be -13dBm.

Additional requirement for LTE Band 7, 38, 41:
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 55 + 10 log(P) dB. This calculated to be -25dBm.

Additional requirement for LTE Band 40:
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least 70 + 10 log (P) dB. This calculated to be -40dBm.

2.4.2. Test Description

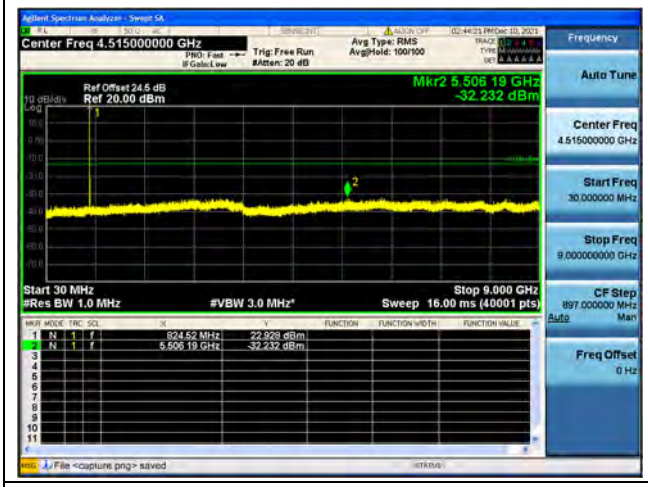
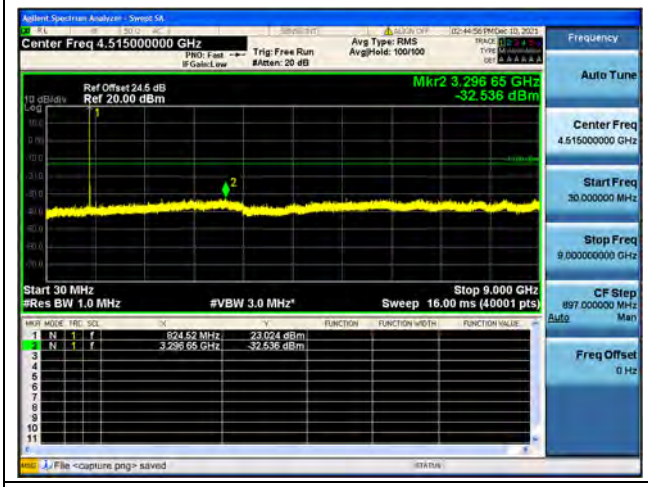
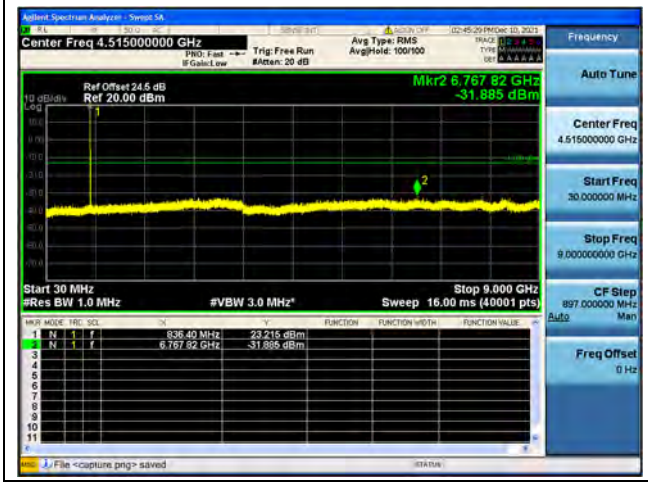


The EUT is coupled to the Spectrum Analyzer (SA) and the System Simulator (SS) with Attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading. The EUT is commanded by the SS to operate at the maximum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

2.4.3. Test Procedure

KDB 971168 D01v03 Section 6.0 and ANSI/TIA-603-E-2016.

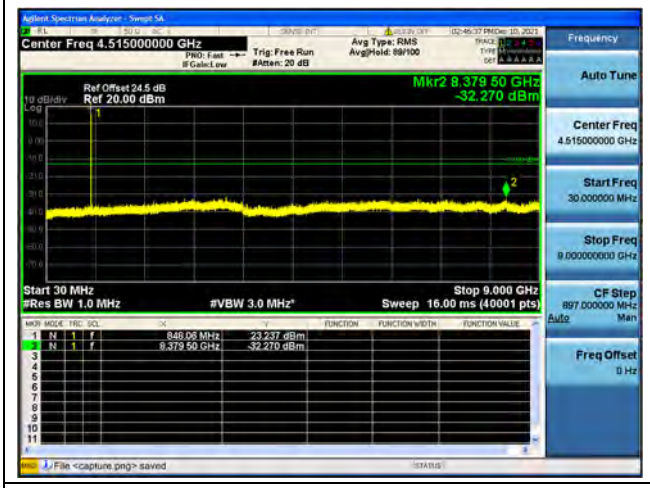
2.4.4. Test Result

Band5 / 1.4MHz / Low CH / QPSK	Band5 / 1.4MHz / Low CH / 16QAM
	
Band5 / 1.4MHz / Low CH / 64QAM	Band5 / 1.4MHz / Mid CH / QPSK
	
Band5 / 1.4MHz / Mid CH / 16QAM	Band5 / 1.4MHz / Mid CH / 64QAM
	

Band5 / 1.4MHz / High CH / QPSK

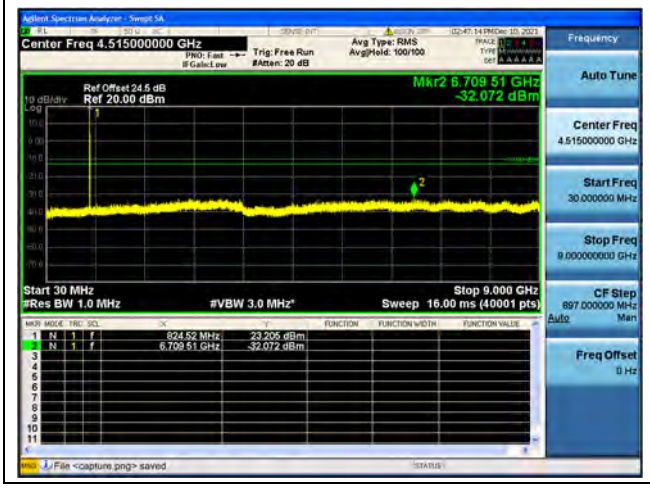
Band5 / 1.4MHz / High CH / 16QAM

Band5 / 1.4MHz / High CH / 64QAM



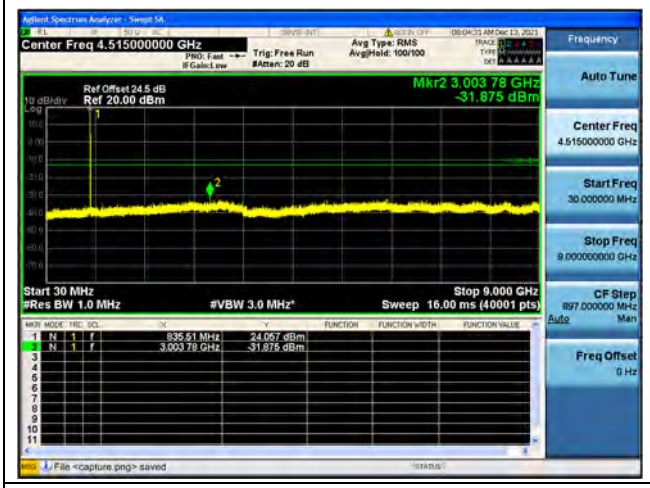
Band5 / 3MHz / Low CH / QPSK

Band5 / 3MHz / Low CH / 16QAM



Band5 / 3MHz / Low CH / 64QAM

Band5 / 3MHz / Mid CH / QPSK



Band5 / 3MHz / Mid CH / 16QAM

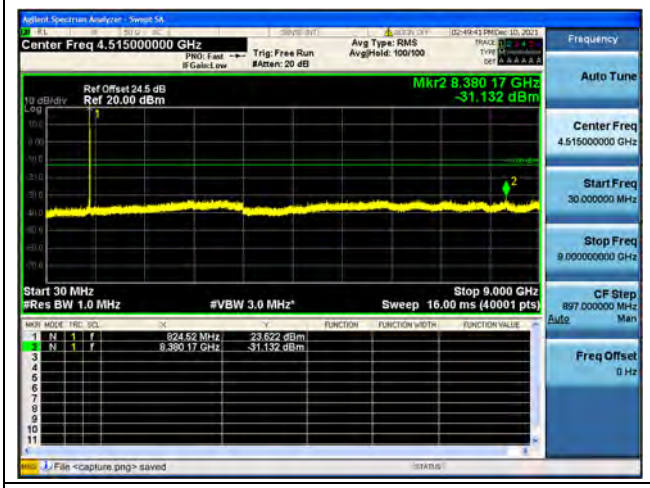
Band5 / 3MHz / Mid CH / 64QAM

Band5 / 3MHz / High CH / QPSK

Band5 / 3MHz / High CH / 16QAM

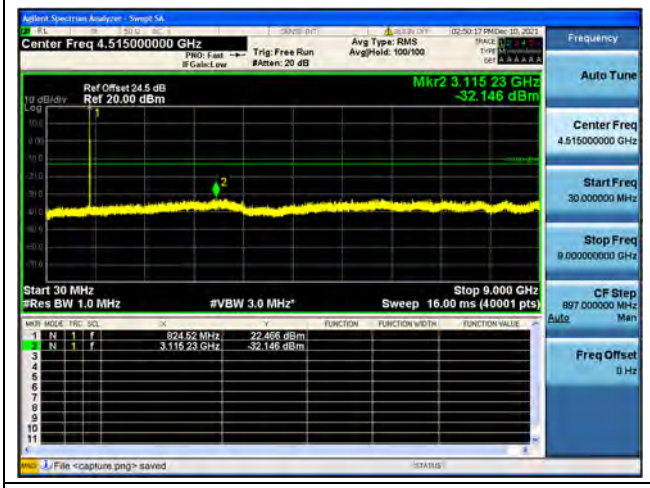
Band5 / 3MHz / High CH / 64QAM

Band5 / 5MHz / Low CH / QPSK



Band5 / 5MHz / Low CH / 16QAM

Band5 / 5MHz / Low CH / 64QAM

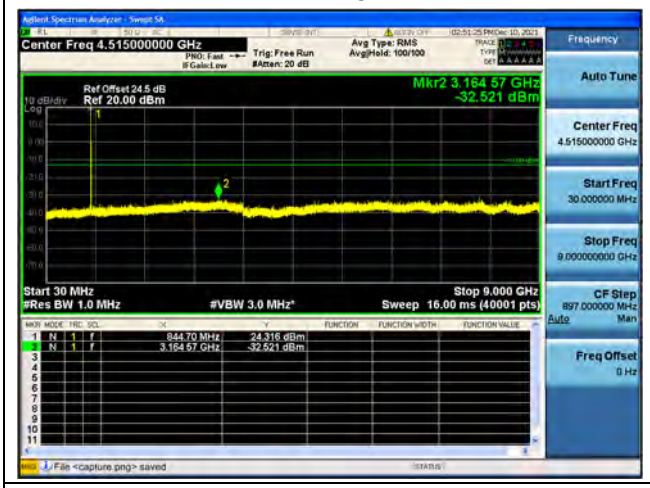


Band5 / 5MHz / Mid CH / QPSK

Band5 / 5MHz / Mid CH / 16QAM

Band5 / 5MHz / Mid CH / 64QAM

Band5 / 5MHz / High CH / QPSK

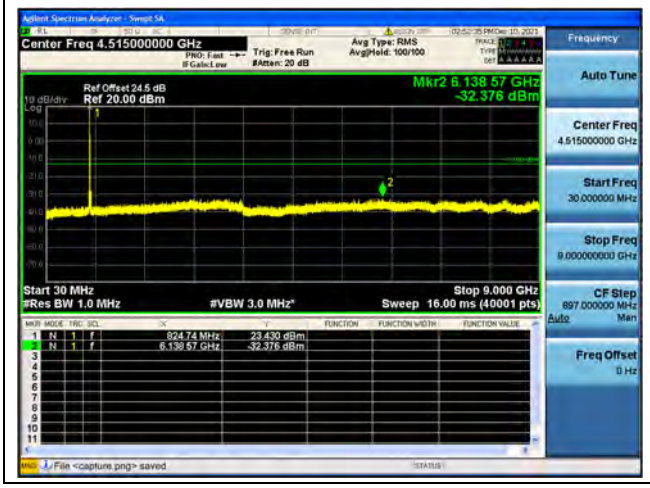


Band5 / 5MHz / High CH / 16QAM

Band5 / 5MHz / High CH / 64QAM

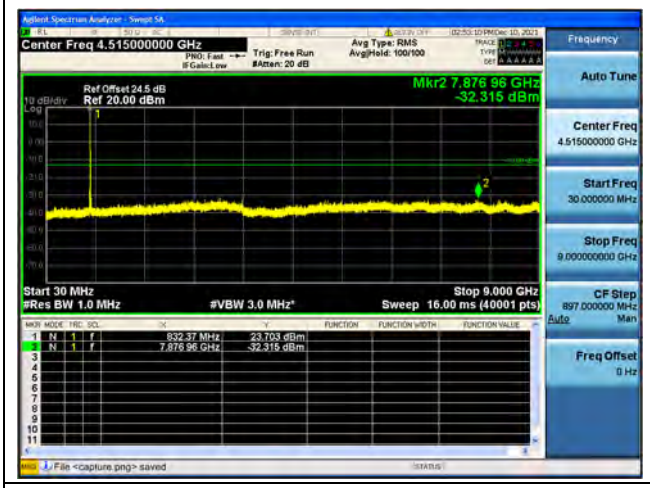
Band5 / 10MHz / Low CH / QPSK

Band5 / 10MHz / Low CH / 16QAM



Band5 / 10MHz / Low CH / 64QAM

Band5 / 10MHz / Mid CH / QPSK

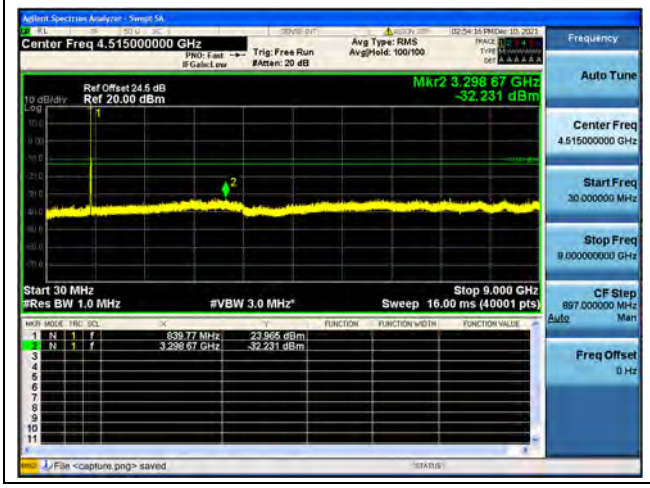


Band5 / 10MHz / Mid CH / 16QAM

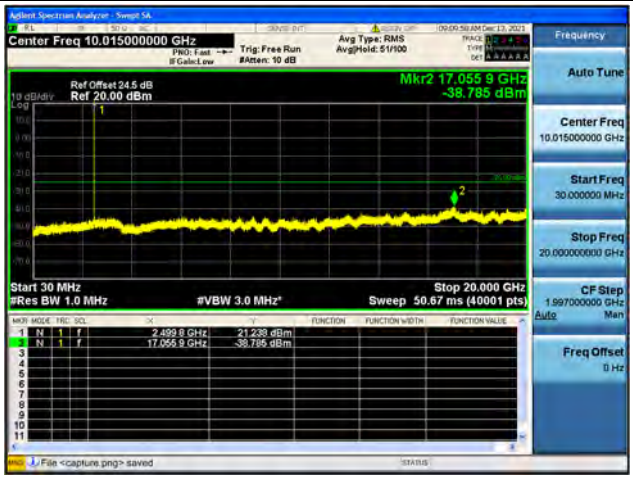
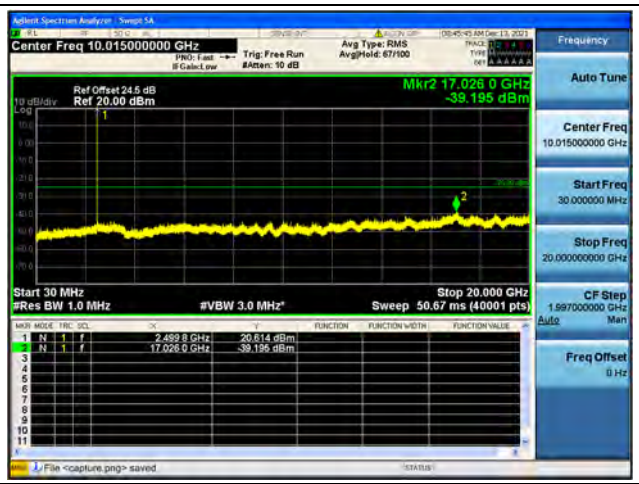
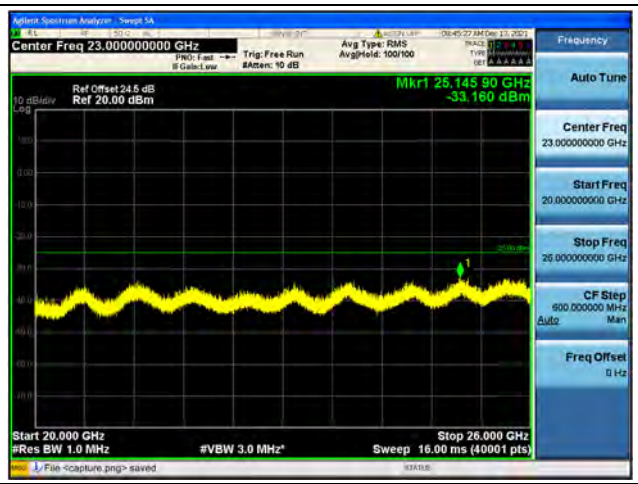
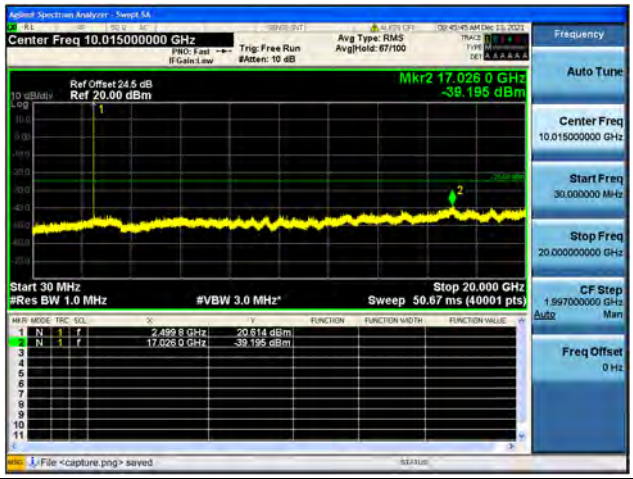
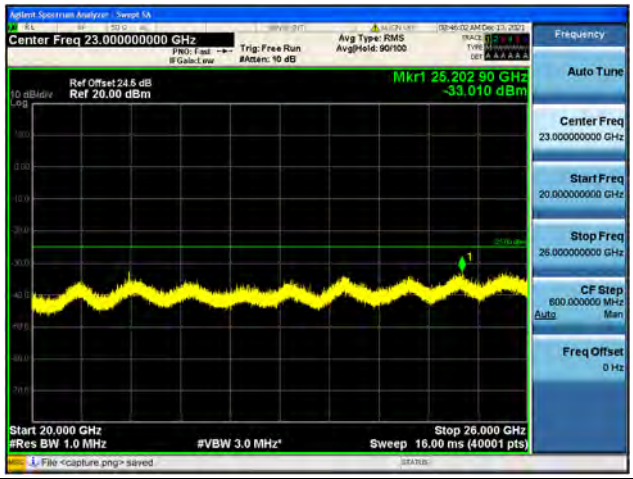
Band5 / 10MHz / Mid CH / 64QAM

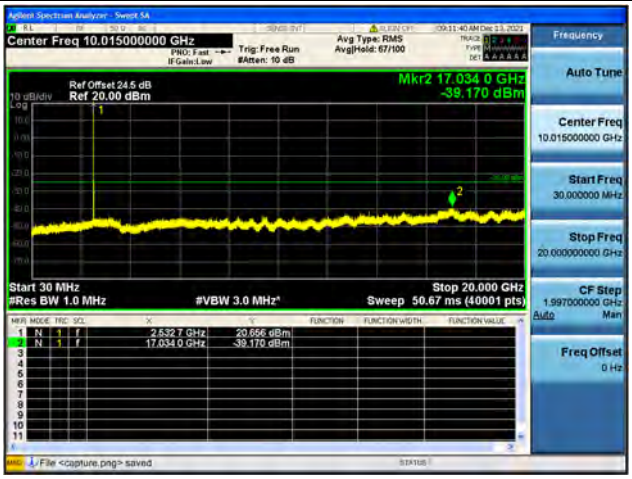
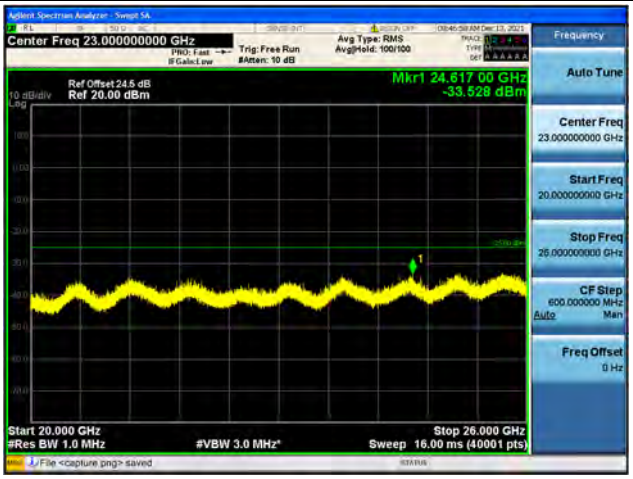
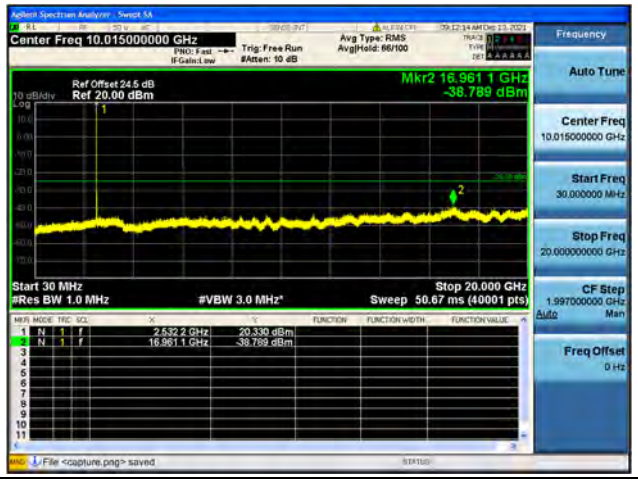
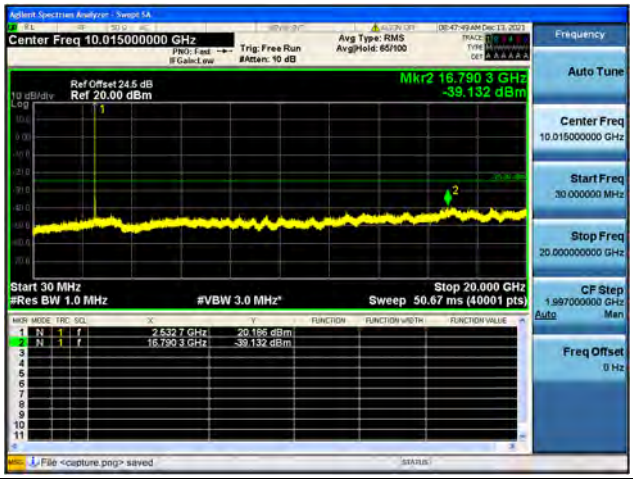
Band5 / 10MHz / High CH / QPSK

Band5 / 10MHz / High CH / 16QAM

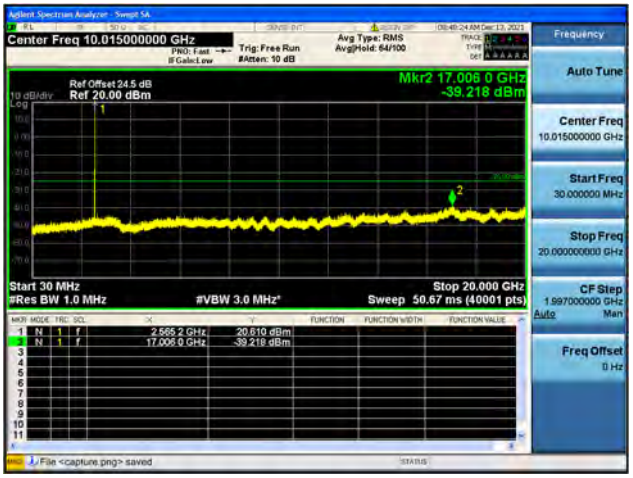


Band5 / 10MHz / High CH / 64QAM

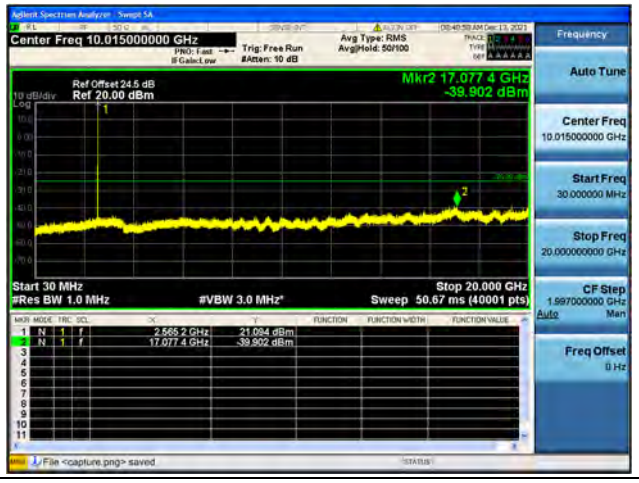
Band 7 / 5MHz / Low CH / QPSK	
	
Band 7 / 5MHz / Low CH / 16QAM	
	
Band 7 / 5MHz / Low CH / 64QAM	
	

Band 7 / 5MHz / Mid CH / QPSK	
	
Band 7 / 5MHz / Mid CH / 16QAM	
	
Band 7 / 5MHz / Mid CH / 64QAM	
	

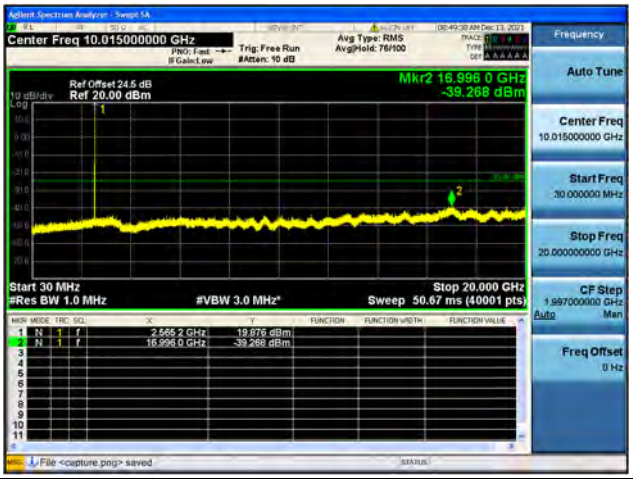
Band 7 / 5MHz / High CH / QPSK

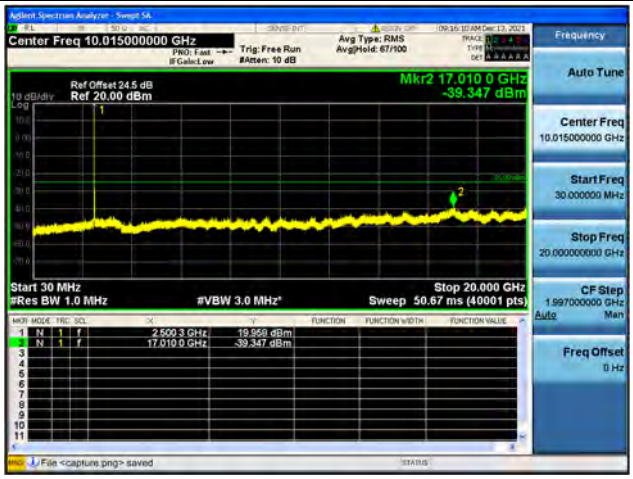
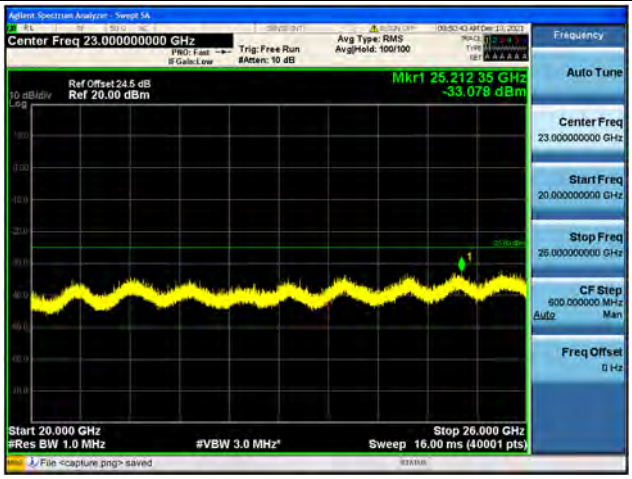
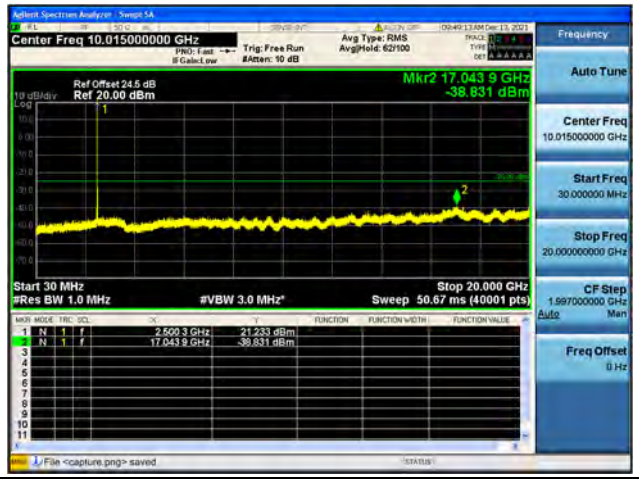
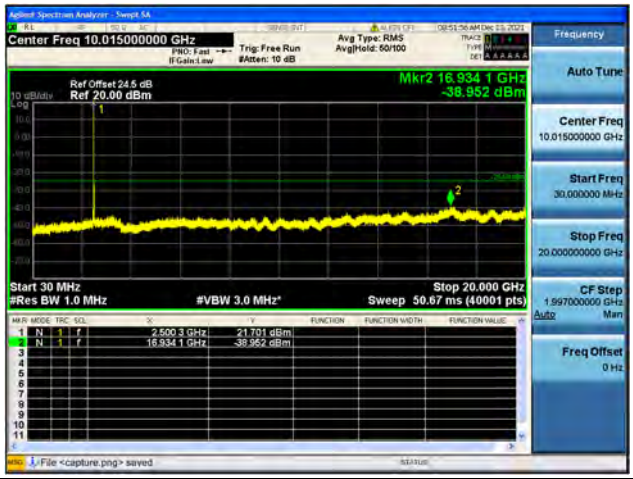


Band 7 / 5MHz / High CH / 16QAM

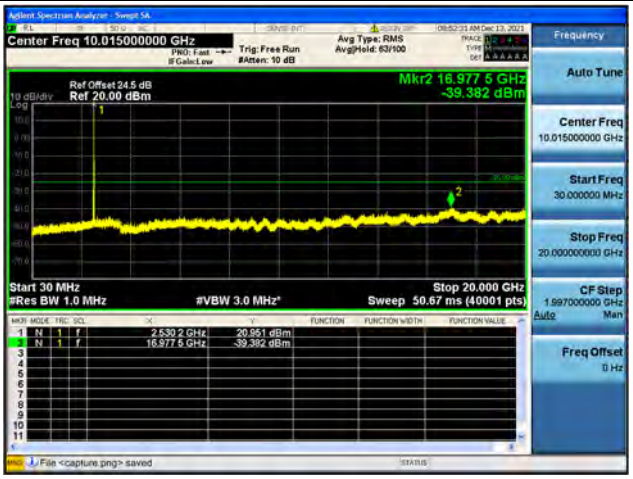


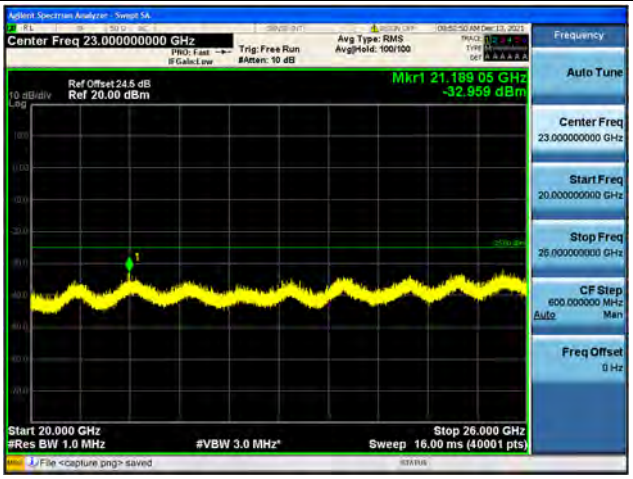
Band 7 / 5MHz / High CH / 64QAM



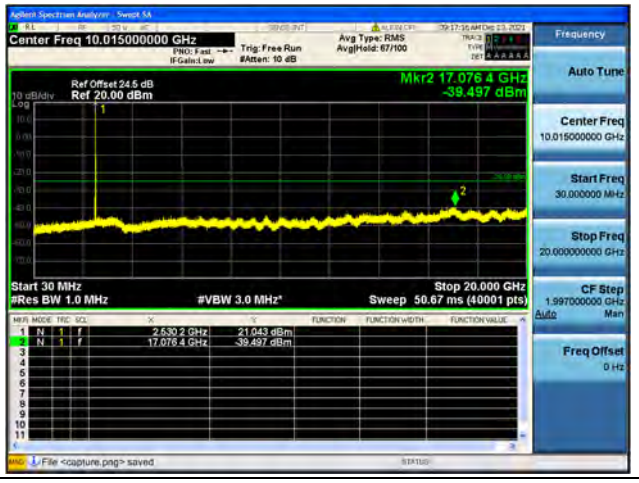
Band 7 / 10MHz / Low CH / QPSK	
	
Band 7 / 10MHz / Low CH / 16QAM	
	
Band 7 / 10MHz / Low CH / 64QAM	
	

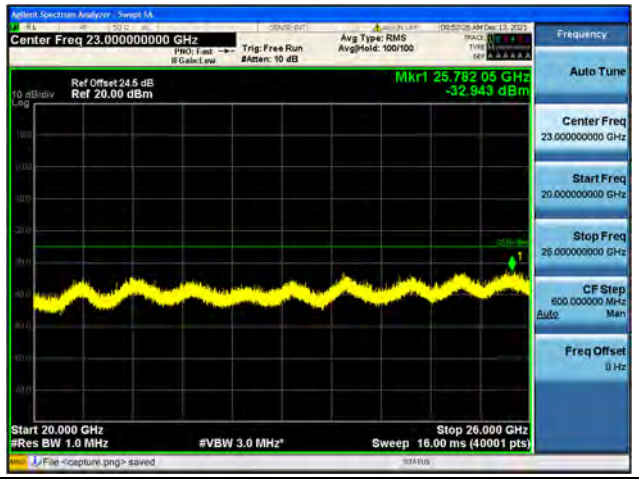
Band 7 / 10MHz / Mid CH / QPSK



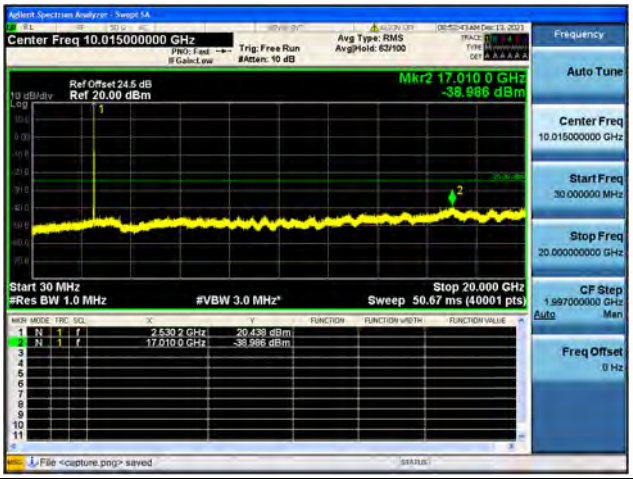


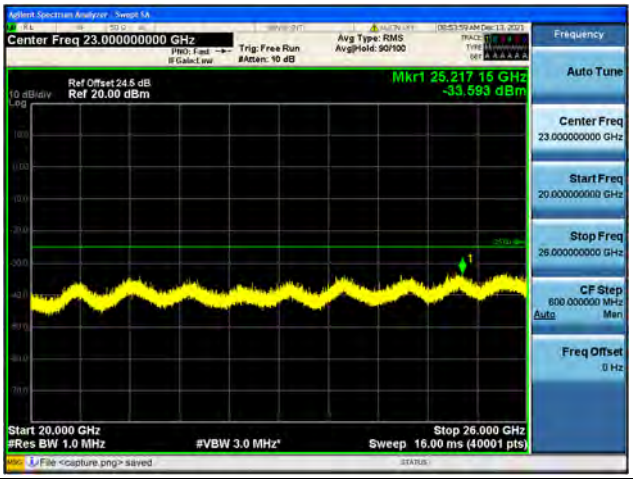
Band 7 / 10MHz / Mid CH / 16QAM



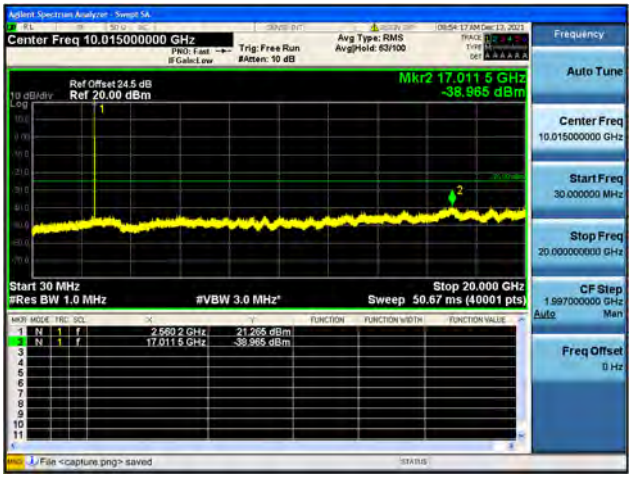


Band 7 / 10MHz / Mid CH / 64QAM

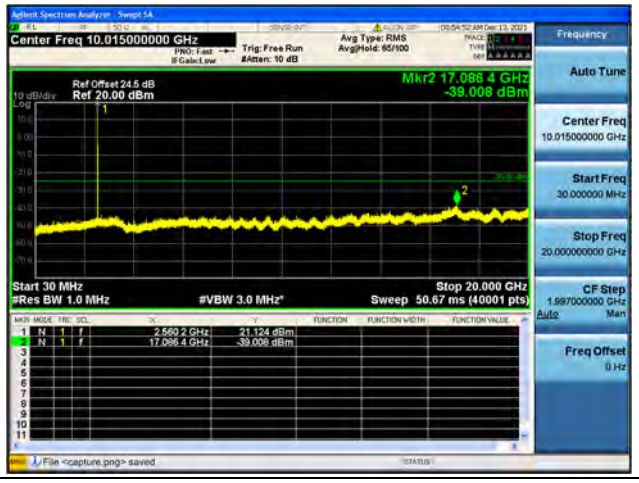




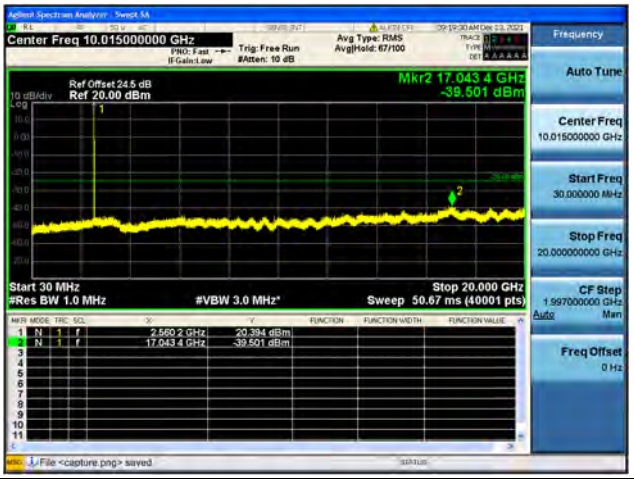
Band 7 / 10MHz / High CH / QPSK

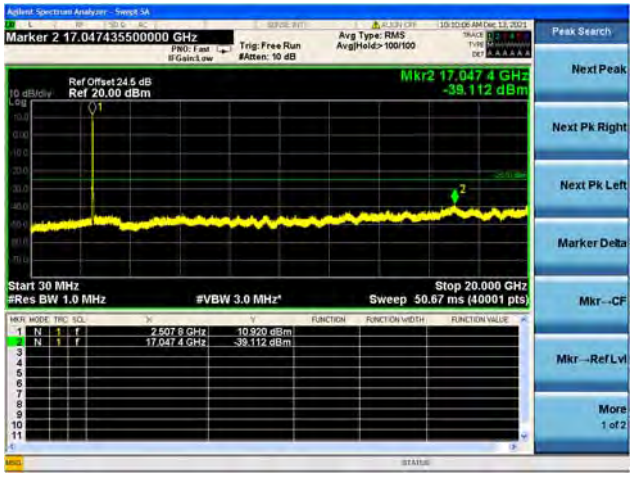
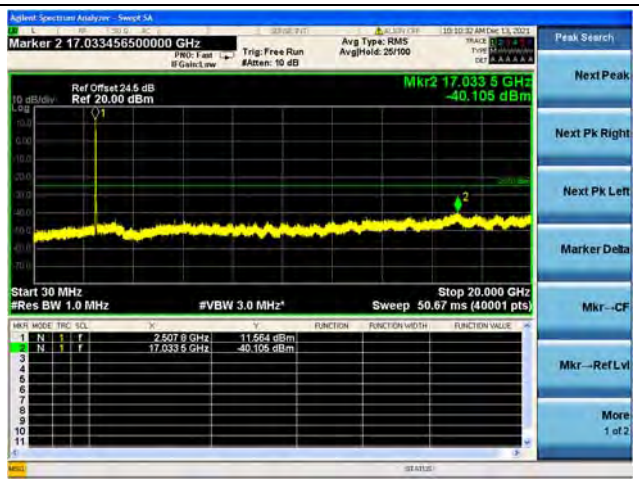
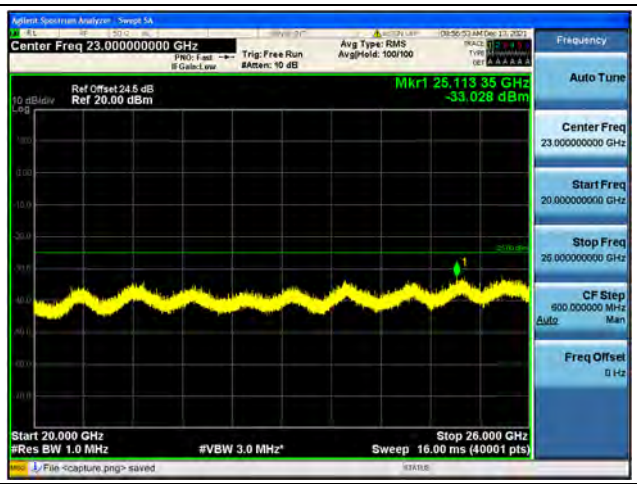
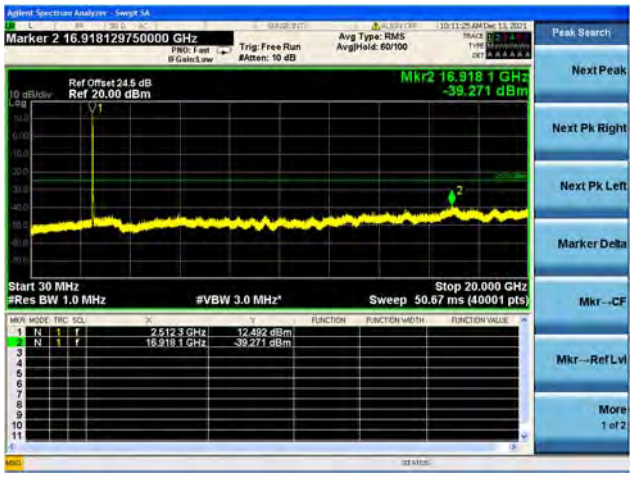
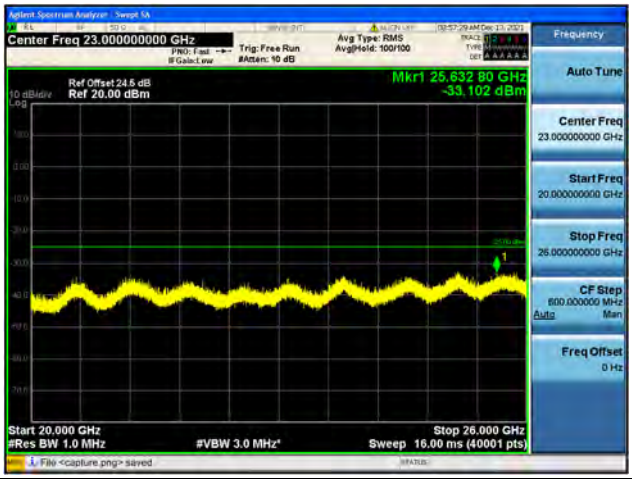


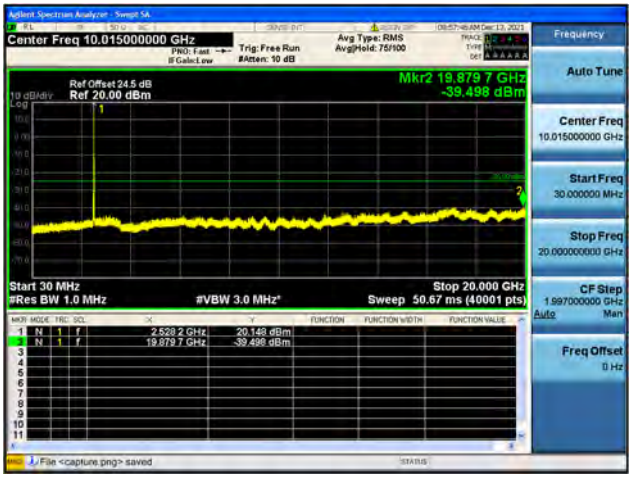
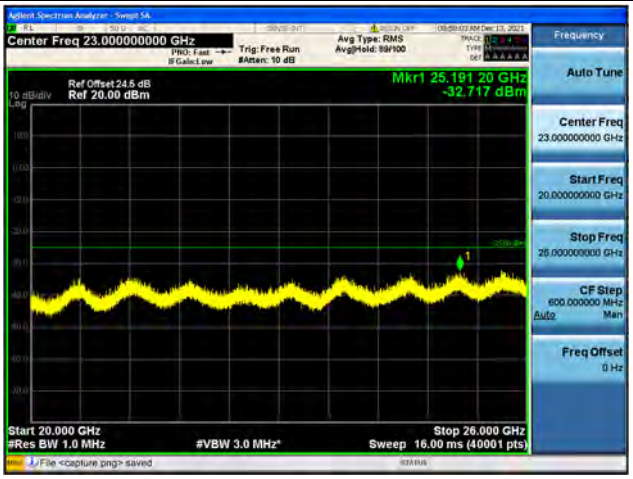
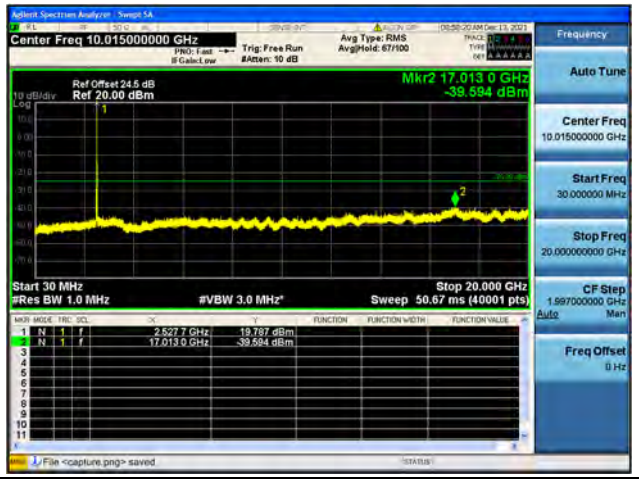
Band 7 / 10MHz / High CH / 16QAM



Band 7 / 10MHz / High CH / 64QAM



Band 7 / 15MHz / Low CH / QPSK	
	
Band 7 / 15MHz / Low CH / 16QAM	
	
Band 7 / 15MHz / Low CH / 64QAM	
	

Band 7 / 15MHz / Mid CH / QPSK	
	
Band 7 / 15MHz / Mid CH / 16QAM	
	
Band 7 / 15MHz / Mid CH / 64QAM