



REPORT No. : SZ20060377W02

TEST REPORT

APPLICANT : LG Electronics USA, Inc.

PRODUCT NAME : Smartphone

MODEL NAME : LM-K310IM

BRAND NAME : LG

FCC ID : ZNFK310IM

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

RECEIPT DATE : 2020-07-03

TEST DATE : 2020-07-03 to 2020-08-12

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DIRECTORY

1. Technical Information	4
1.1. Applicant and Manufacturer Information	4
1.2. Equipment Under Test (EUT) Description	4
1.3. Maximum ERP/EIRP and Emission Designator	6
1.4. Test Standards and Results	7
1.5. Environmental Conditions	9
2. 47 CFR Part 2, Part22H and 27D&M Requirements	10
2.1. Transmitter Conducted Output Power And ERP/EIPR	10
2.2. Occupied Bandwidth	43
2.3. Frequency Stability	74
2.4. Peak to Average Radio	77
2.5. Conducted Spurious Emissions	85
2.6. Band Edge	124
2.7. Radiated Spurious Emissions	141
Annex A Test Uncertainty	157
Annex B Testing Laboratory Information	158



REPORT No. : SZ20060377W02

Change History		
Version	Date	Reason for change
1.0	2020-08-07	First edition
2.0	2020-08-12	Update Band 40 Radiated Spurious Emissions



1. Technical Information

Note: Provide by applicant.

1.1. Applicant and Manufacturer Information

Applicant:	LG Electronics USA, Inc.
Applicant Address:	111 Sylvan Ave North Building Englewood Cliffs, New Jersey, United States 07632
Manufacturer:	Padget Electronics Private Limited
ManufacturerAddress:	B-18, Phase-2, Noida, Uttar Pradesh 201305

1.2. Equipment Under Test (EUT) Description

Product Name:	Smartphone	
Hardware Version:	V1.0	
Software Version:	LG_LM-K310IM_Software	
Modulation Type:	QPSK, 16QAM, 64QAM	
Operation Band:	Band 5 / 38 / 40 / 41	
Frequency Range:	LTE Band 5	Tx: 824MHz - 849MHz
		Rx: 869MHz - 894MHz
	LTE Band 38	Tx: 2570MHz - 2620MHz
		Rx: 2570MHz - 2620MHz
	LTE Band 40	Tx: 2305MHz - 2315MHz
		Rx: 2305MHz - 2315MHz
		Tx: 2350MHz - 2360MHz
		Rx: 2350MHz - 2360MHz
	LTE Band 41	Tx: 2535MHz - 2655MHz
		Rx: 2535MHz - 2655MHz
Channel Bandwidth	LTE Band 5	1.4MHz, 3 MHz, 5 MHz, 10MHz
	LTE Band 38	5 MHz, 10MHz, 15 MHz, 20 MHz
	LTE Band 40	5 MHz, 10MHz
	LTE Band 41	5 MHz, 10MHz, 15 MHz, 20MHz



Antenna Type:	Fixed Internal	
Antenna Gain:	LTE Band 5	0.65 dBi
	LTE Band 38	0.02 dBi
	LTE Band 40	0.37 dBi
	LTE Band 41	0.02 dBi
Accessory Information:	Battery	
	Brand Name:	LG
	Model No.:	LG4000STCL02
	Capacity:	3900mAh
	Rated Voltage:	3.80V
	Charge Limit:	4.40V
	AC Adapter Type1	
	Brand Name:	N/A
	Model No.:	TN-050155U3
	Rated Input:	100-240V~50/60Hz 0.25A
	Rated Output:	5V=1.55A

Note 1: For a more detailed description, please refer to Specification or User's Manual supplied by the applicant and/or manufacturer.



1.3. Maximum ERP/EIRP and Emission Designator

LTE Band5	Maximum ERP/EIRP (W)			Emission Designator (99%OBW)		
BW(MHz)	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10	0.069	0.058	0.055	8M99G7D	8M97W7D	8M89D7W
5	0.068	0.060	0.053	4M50G7D	4M50W7D	4M47D7W
3	0.067	0.057	0.054	2M69G7D	2M70W7D	2M70D7W
1.4	0.066	0.056	0.054	1M10G7D	1M10W7D	1M10D7W
LTE Band38	Maximum ERP/EIRP (W)			Emission Designator (99%OBW)		
BW(MHz)	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
20	0.194	0.158	0.141	18M0G7D	18M0W7D	17M8D7W
15	0.190	0.160	0.141	13M5G7D	13M5W7D	13M4D7W
10	0.192	0.165	0.141	8M98G7D	8M98W7D	8M94D7W
5	0.192	0.159	0.141	4M50G7D	4M50W7D	4M49D7W
LTE Band40 2305MHz 2315MHz	Maximum ERP/EIRP (W)			Emission Designator (99%OBW)		
BW(MHz)	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10	0.253	0.211	0.171	8M93G7D	8M92W7D	8M94D7W
5	0.245	0.209	0.171	4M52G7D	4M52W7D	4M53D7W
LTE Band40 2350MHz 2360MHz	Maximum ERP/EIRP (W)			Emission Designator (99%OBW)		
BW(MHz)	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10	0.252	0.212	0.170	8M95G7D	8M93W7D	8M91D7W
5	0.248	0.211	0.172	4M51G7D	4M52W7D	4M52D7W
LTE Band41	Maximum ERP/EIRP (W)			Emission Designator (99%OBW)		
BW(MHz)	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
20	0.231	0.191	0.153	18M0G7D	18M0W7D	18M0D7W
15	0.194	0.152	0.150	13M5G7D	13M5W7D	13M5D7W
10	0.222	0.191	0.146	9M04G7D	8M97W7D	8M97D7W
5	0.215	0.186	0.149	4M50G7D	4M51W7D	4M49D7W



1.4. Test Standards and Results

The objective of the report is to perform testing according to Part 2, Part 22, Part 24 and 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 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	Transmitter Conducted Output Power and ERP/EIRP	Jul 3	Chen Hao	PASS	No deviation
2.1049	Occupied Bandwidth	Jul 3 to 28, 2020	Zhou xiaolong	PASS	No deviation
2.1055, 22.355, 27.54	Frequency Stability	Jul 3 to 28, 2020	Zhou xiaolong	PASS	No deviation
27.50(d)(5)	Peak to Average Radio	Jul 3 to 28, 2020	Zhou xiaolong	PASS	No deviation
2.1051, 22.917(a), 27.53(g)(h) 27.53(m)(4)(a)(4)	Conducted Spurious Emissions	Jul 3 to 28, 2020	Zhou xiaolong	PASS	No deviation
2.1051, 22.917(a), 27.53	Band Edge	Jul 3 to 28, 2020	Zhou xiaolong	PASS	No deviation
2.1051, 22.917(a), 27.53	Radiated Spurious Emissions	Jul 3 to Aug 12, 2020	Peng Xuewei	PASS	No deviation

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

Note 2: The path loss during the RF test is calibrated to correct the results by the offset setting in the test equipments. The ref offset 23.5dB contains two parts that cable loss 13.5dB and Attenuator 10dB.



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, Part22H and 27D&M Requirements

2.1. Transmitter Conducted Output Power And ERP/EIPR

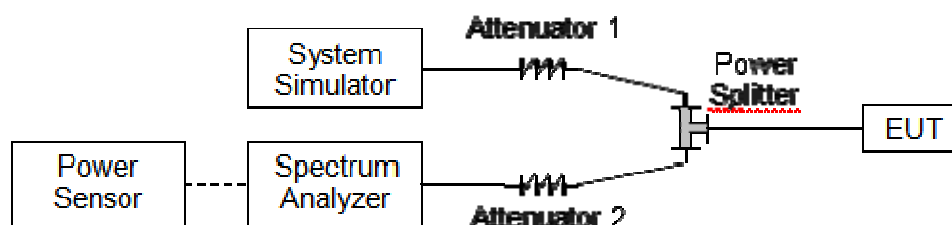
2.1.1. Requirement

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

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

According to FCC section 27.50 (h) for LTE Band 41, Mobile and other user stations. Mobile stations are limited to 2.0 watts EIRP. All user stations are limited to 2.0 watts transmitter output power.

2.1.2. Test Descrip



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 50 Ohm; 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.

$\text{EIRP (dBm)} = \text{Conducted Output Power (dBm)} + \text{Antenna Gain (dBi)}$

$\text{ERP (dBm)} = \text{EIPR (dBm)} - 2.15$

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

LTE Band5						
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	23.23	23.25	23.11
10	QPSK	1	25	23.09	22.89	22.95
10	QPSK	1	49	22.91	22.99	22.83
10	QPSK	25	0	22.09	22.15	22.12
10	QPSK	25	12	22.07	22.00	22.03
10	QPSK	25	25	22.04	22.02	22.08
10	QPSK	50	0	22.03	22.08	22.07
10	16QAM	1	0	22.11	22.51	22.12
10	16QAM	1	25	22.04	22.01	22.20
10	16QAM	1	49	22.01	22.49	22.42
10	16QAM	25	0	21.03	21.24	21.13
10	16QAM	25	12	20.97	20.92	21.04
10	16QAM	25	25	21.08	20.99	21.02
10	16QAM	50	0	21.05	21.06	21.06
10	64QAM	1	0	22.12	22.14	22.11
10	64QAM	1	25	22.21	22.23	22.15
10	64QAM	1	49	22.07	22.14	22.09
10	64QAM	25	0	20.67	20.88	20.90
10	64QAM	25	12	20.77	20.79	20.88
10	64QAM	25	25	20.80	20.74	20.81
10	64QAM	50	0	20.72	20.84	20.85



LTE Band5						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20425	20525	20625
Frequency (MHz)				826.5	836.5	846.5
5	QPSK	1	0	22.88	22.84	22.91
5	QPSK	1	12	23.15	22.93	23.04
5	QPSK	1	24	22.82	22.87	22.85
5	QPSK	12	0	22.03	22.01	22.03
5	QPSK	12	7	22.17	22.11	22.03
5	QPSK	12	13	21.98	21.95	21.94
5	QPSK	25	0	22.00	22.02	22.02
5	16QAM	1	0	22.22	22.34	22.32
5	16QAM	1	12	22.40	22.24	22.61
5	16QAM	1	24	22.27	22.27	22.25
5	16QAM	12	0	20.88	21.05	20.90
5	16QAM	12	7	21.14	20.99	21.06
5	16QAM	12	13	21.05	20.99	20.84
5	16QAM	25	0	21.05	21.03	21.01
5	64QAM	1	0	22.01	22.03	22.00
5	64QAM	1	12	22.10	22.12	22.04
5	64QAM	1	24	21.96	22.03	21.98
5	64QAM	12	0	20.56	20.77	20.79
5	64QAM	12	7	20.66	20.68	20.77
5	64QAM	12	13	20.69	20.63	20.70
5	64QAM	25	0	20.61	20.73	20.74



LTE Band5						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20415	20525	20635
Frequency (MHz)				825.5	836.5	847.5
3	QPSK	1	0	22.89	23.12	22.98
3	QPSK	1	8	23.10	22.87	22.90
3	QPSK	1	14	22.90	22.77	22.92
3	QPSK	8	0	22.00	22.03	22.07
3	QPSK	8	4	22.07	22.02	22.01
3	QPSK	8	7	22.06	21.99	21.95
3	QPSK	15	0	21.96	22.02	22.00
3	16QAM	1	0	21.91	22.41	22.03
3	16QAM	1	8	22.40	22.11	22.09
3	16QAM	1	14	22.41	22.13	22.37
3	16QAM	8	0	21.07	20.99	21.09
3	16QAM	8	4	21.09	20.95	21.22
3	16QAM	8	7	20.94	21.05	20.91
3	16QAM	15	0	20.98	21.02	20.87
3	64QAM	1	0	22.03	22.05	22.02
3	64QAM	1	8	22.12	22.14	22.06
3	64QAM	1	14	21.98	22.05	22.00
3	64QAM	8	0	20.58	20.79	20.81
3	64QAM	8	4	20.68	20.70	20.79
3	64QAM	8	7	20.71	20.65	20.72
3	64QAM	15	0	20.63	20.75	20.76



LTE Band5						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20407	20525	20643
Frequency (MHz)				824.7	836.5	848.3
1.4	QPSK	1	0	22.86	23.06	22.84
1.4	QPSK	1	3	23.03	23.05	23.01
1.4	QPSK	1	5	22.89	22.89	22.76
1.4	QPSK	3	0	23.00	22.93	22.93
1.4	QPSK	3	1	22.93	22.86	23.00
1.4	QPSK	3	3	22.94	22.97	22.87
1.4	QPSK	6	0	22.03	22.01	22.03
1.4	16QAM	1	0	22.32	22.21	21.92
1.4	16QAM	1	3	22.20	22.11	22.22
1.4	16QAM	1	5	22.25	21.86	21.88
1.4	16QAM	3	0	21.97	21.93	21.99
1.4	16QAM	3	1	22.13	22.07	21.98
1.4	16QAM	3	3	22.04	22.10	22.06
1.4	16QAM	6	0	21.27	21.08	20.95
1.4	64QAM	1	0	22.07	22.09	22.06
1.4	64QAM	1	3	22.16	22.18	22.10
1.4	64QAM	1	5	22.02	22.09	22.04
1.4	64QAM	3	0	20.62	20.83	20.85
1.4	64QAM	3	1	20.72	20.74	20.83
1.4	64QAM	3	3	20.75	20.69	20.76
1.4	64QAM	6	0	20.67	20.79	20.80



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	22.84	22.85	22.75
20	QPSK	1	49	22.59	22.75	22.73
20	QPSK	1	99	22.36	22.38	22.49
20	QPSK	50	0	21.73	21.93	21.90
20	QPSK	50	24	21.70	21.81	21.81
20	QPSK	50	50	21.61	21.79	21.86
20	QPSK	100	0	21.70	21.87	21.88
20	16QAM	1	0	21.50	21.68	21.81
20	16QAM	1	49	21.84	21.97	21.75
20	16QAM	1	99	21.61	21.69	21.63
20	16QAM	50	0	20.66	20.85	20.88
20	16QAM	50	24	20.72	20.90	20.85
20	16QAM	50	50	20.64	20.88	20.94
20	16QAM	100	0	20.69	20.90	20.95
20	64QAM	1	0	21.11	21.13	21.17
20	64QAM	1	49	21.42	21.46	21.44
20	64QAM	1	99	21.14	21.12	21.16
20	64QAM	50	0	19.66	19.85	19.93
20	64QAM	50	24	19.74	19.86	19.94
20	64QAM	50	50	19.75	19.81	19.98
20	64QAM	100	0	19.78	19.82	19.96



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	22.50	22.66	22.72
15	QPSK	1	37	22.66	22.75	22.76
15	QPSK	1	74	22.52	22.64	22.75
15	QPSK	36	0	21.73	21.81	22.01
15	QPSK	36	20	21.70	21.88	21.95
15	QPSK	36	39	21.72	21.88	21.93
15	QPSK	75	0	21.70	21.84	21.91
15	16QAM	1	0	21.68	21.82	21.93
15	16QAM	1	37	21.86	22.03	22.02
15	16QAM	1	74	21.78	21.88	21.76
15	16QAM	36	0	20.61	20.85	20.81
15	16QAM	36	20	20.68	20.79	20.82
15	16QAM	36	39	20.72	20.86	20.92
15	16QAM	75	0	20.63	20.84	20.98
15	64QAM	1	0	21.10	21.12	21.16
15	64QAM	1	37	21.41	21.45	21.48
15	64QAM	1	74	21.13	21.11	21.15
15	64QAM	36	0	19.65	19.84	19.92
15	64QAM	36	20	19.73	19.85	19.93
15	64QAM	36	39	19.74	19.80	19.97
15	64QAM	75	0	19.77	19.81	19.95



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				37800	38000	38200
Frequency (MHz)				2575	2595	2615
10	QPSK	1	0	22.49	22.69	22.81
10	QPSK	1	25	22.68	22.81	22.78
10	QPSK	1	49	22.55	22.73	22.76
10	QPSK	25	0	21.78	21.97	22.01
10	QPSK	25	12	21.68	21.96	21.94
10	QPSK	25	25	21.69	21.93	21.99
10	QPSK	50	0	21.82	21.96	22.09
10	16QAM	1	0	21.78	21.97	21.99
10	16QAM	1	25	21.98	22.16	22.10
10	16QAM	1	49	21.86	21.94	21.96
10	16QAM	25	0	20.84	21.00	21.14
10	16QAM	25	12	20.79	21.01	21.01
10	16QAM	25	25	20.85	20.99	21.04
10	16QAM	50	0	20.85	20.97	21.03
10	64QAM	1	0	21.09	21.11	21.15
10	64QAM	1	25	21.40	21.44	21.47
10	64QAM	1	49	21.12	21.10	21.14
10	64QAM	25	0	19.64	19.83	19.91
10	64QAM	25	12	19.72	19.84	19.92
10	64QAM	25	25	19.73	19.79	19.96
10	64QAM	50	0	19.76	19.80	19.94



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	22.37	22.59	22.71
5	QPSK	1	12	22.51	22.69	22.81
5	QPSK	1	24	22.45	22.63	22.70
5	QPSK	12	0	21.59	21.84	21.90
5	QPSK	12	7	21.79	21.92	22.01
5	QPSK	12	13	21.69	21.88	21.97
5	QPSK	25	0	21.61	21.82	21.91
5	16QAM	1	0	21.69	21.86	21.85
5	16QAM	1	12	21.82	21.99	21.96
5	16QAM	1	24	21.76	21.89	21.87
5	16QAM	12	0	20.56	20.93	20.93
5	16QAM	12	7	20.77	20.92	20.97
5	16QAM	12	13	20.83	20.80	21.02
5	16QAM	25	0	20.65	20.95	21.01
5	64QAM	1	0	21.08	21.10	21.14
5	64QAM	1	12	21.39	21.43	21.46
5	64QAM	1	24	21.11	21.09	21.13
5	64QAM	12	0	19.63	19.82	19.90
5	64QAM	12	7	19.71	19.83	19.91
5	64QAM	12	13	19.72	19.78	19.95
5	64QAM	25	0	19.75	19.79	19.93



LTE Band 40 (2305MHz ~ 2315MHz)						
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	/	23.66	/
10	QPSK	1	25	/	23.53	/
10	QPSK	1	49	/	23.41	/
10	QPSK	25	0	/	22.80	/
10	QPSK	25	12	/	22.73	/
10	QPSK	25	25	/	22.78	/
10	QPSK	50	0	/	22.80	/
10	16QAM	1	0	/	22.81	/
10	16QAM	1	25	/	22.87	/
10	16QAM	1	49	/	22.66	/
10	16QAM	25	0	/	21.68	/
10	16QAM	25	12	/	21.67	/
10	16QAM	25	25	/	21.84	/
10	16QAM	50	0	/	21.81	/
10	64QAM	1	0	/	21.89	/
10	64QAM	1	25	/	21.95	/
10	64QAM	1	49	/	21.90	/
10	64QAM	25	0	/	20.71	/
10	64QAM	25	12	/	20.70	/
10	64QAM	25	25	/	20.67	/
10	64QAM	50	0	/	20.62	/



LTE Band 40 (2305MHz ~ 2315MHz)						
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	23.42	23.40	23.47
5	QPSK	1	12	23.52	23.58	23.59
5	QPSK	1	24	23.34	23.36	23.41
5	QPSK	12	0	22.68	22.64	22.67
5	QPSK	12	7	22.68	22.69	22.72
5	QPSK	12	13	22.70	22.73	22.63
5	QPSK	25	0	22.70	22.58	22.65
5	16QAM	1	0	22.65	22.63	22.68
5	16QAM	1	12	22.84	22.80	22.72
5	16QAM	1	24	22.56	22.71	22.54
5	16QAM	12	0	21.66	21.63	21.53
5	16QAM	12	7	21.74	21.66	21.64
5	16QAM	12	13	21.73	21.72	21.68
5	16QAM	25	0	21.75	21.74	21.66
5	64QAM	1	0	21.89	21.79	21.81
5	64QAM	1	12	21.95	21.69	21.72
5	64QAM	1	24	21.90	21.81	21.79
5	64QAM	12	0	20.71	20.69	20.65
5	64QAM	12	7	20.70	20.67	20.59
5	64QAM	12	13	20.67	20.58	20.57
5	64QAM	25	0	20.62	20.60	20.53



LTE Band 40 (2350MHz ~ 2360MHz)						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				/	39200	/
Frequency (MHz)				/	2355	/
10	QPSK	1	0	/	23.64	/
10	QPSK	1	25	/	23.52	/
10	QPSK	1	49	/	23.39	/
10	QPSK	25	0	/	22.74	/
10	QPSK	25	12	/	22.65	/
10	QPSK	25	25	/	22.70	/
10	QPSK	50	0	/	22.68	/
10	16QAM	1	0	/	22.86	/
10	16QAM	1	25	/	22.89	/
10	16QAM	1	49	/	22.66	/
10	16QAM	25	0	/	21.72	/
10	16QAM	25	12	/	21.67	/
10	16QAM	25	25	/	21.80	/
10	16QAM	50	0	/	21.66	/
10	64QAM	1	0	/	21.94	/
10	64QAM	1	25	/	21.80	/
10	64QAM	1	49	/	21.86	/
10	64QAM	25	0	/	20.95	/
10	64QAM	25	12	/	20.96	/
10	64QAM	25	25	/	20.86	/
10	64QAM	50	0	/	20.80	/



LTE Band 40 (2350MHz ~ 2360MHz)						
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	23.46	23.49	23.50
5	QPSK	1	12	23.57	23.55	23.54
5	QPSK	1	24	23.41	23.34	23.34
5	QPSK	12	0	22.68	22.72	22.58
5	QPSK	12	7	22.69	22.67	22.69
5	QPSK	12	13	22.73	22.72	22.68
5	QPSK	25	0	22.67	22.70	22.68
5	16QAM	1	0	22.76	22.68	22.66
5	16QAM	1	12	22.88	22.83	22.78
5	16QAM	1	24	22.66	22.63	22.57
5	16QAM	12	0	21.66	21.66	21.62
5	16QAM	12	7	21.81	21.77	21.70
5	16QAM	12	13	21.68	21.65	21.71
5	16QAM	25	0	21.71	21.72	21.72
5	64QAM	1	0	21.91	21.81	21.83
5	64QAM	1	12	21.97	21.71	21.74
5	64QAM	1	24	21.92	21.83	21.81
5	64QAM	12	0	20.73	20.71	20.67
5	64QAM	12	7	20.72	20.69	20.61
5	64QAM	12	13	20.69	20.60	20.59
5	64QAM	25	0	20.64	20.62	20.55



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	23.59	23.57	23.33
20	QPSK	1	49	23.57	23.54	23.37
20	QPSK	1	99	23.30	23.35	23.31
20	QPSK	50	0	22.78	22.63	22.60
20	QPSK	50	24	22.76	22.63	22.52
20	QPSK	50	50	22.73	22.59	22.39
20	QPSK	100	0	22.78	22.65	22.53
20	16QAM	1	0	22.78	22.71	22.69
20	16QAM	1	49	22.61	22.49	22.67
20	16QAM	1	99	22.64	22.51	22.50
20	16QAM	50	0	21.84	21.85	21.74
20	16QAM	50	24	21.81	21.68	21.87
20	16QAM	50	50	21.65	21.67	21.66
20	16QAM	100	0	21.61	21.30	21.55
20	64QAM	1	0	21.46	21.43	21.53
20	64QAM	1	49	21.81	21.81	21.52
20	64QAM	1	99	21.39	21.44	21.56
20	64QAM	50	0	20.25	20.27	20.53
20	64QAM	50	24	20.33	20.26	20.50
20	64QAM	50	50	20.34	20.29	20.60
20	64QAM	100	0	20.31	20.28	20.56



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	22.45	22.48	22.74
15	QPSK	1	37	22.41	22.60	22.85
15	QPSK	1	74	22.39	22.47	22.72
15	QPSK	36	0	22.13	22.19	22.10
15	QPSK	36	20	21.81	21.84	22.08
15	QPSK	36	39	21.75	21.79	21.81
15	QPSK	75	0	21.55	21.68	21.84
15	16QAM	1	0	21.60	21.81	21.78
15	16QAM	1	37	21.57	21.81	21.70
15	16QAM	1	74	21.49	21.72	21.67
15	16QAM	36	0	21.01	21.03	21.06
15	16QAM	36	20	20.81	20.91	21.04
15	16QAM	36	39	20.61	20.64	20.68
15	16QAM	75	0	20.36	20.72	20.31
15	64QAM	1	0	21.42	21.55	21.45
15	64QAM	1	37	21.71	21.54	21.74
15	64QAM	1	74	21.42	21.58	21.45
15	64QAM	36	0	20.14	20.55	20.17
15	64QAM	36	20	20.20	20.52	20.23
15	64QAM	36	39	20.19	20.62	20.22
15	64QAM	75	0	20.31	20.58	20.34



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	23.00	23.13	23.31
10	QPSK	1	25	23.24	23.19	23.44
10	QPSK	1	49	23.05	23.04	23.33
10	QPSK	25	0	22.31	22.29	22.71
10	QPSK	25	12	22.34	22.28	22.60
10	QPSK	25	25	22.36	22.24	22.56
10	QPSK	50	0	22.37	22.25	22.63
10	16QAM	1	0	22.52	22.43	22.73
10	16QAM	1	25	22.57	22.47	22.78
10	16QAM	1	49	22.47	22.38	22.67
10	16QAM	25	0	21.46	21.53	21.67
10	16QAM	25	12	21.31	21.39	21.53
10	16QAM	25	25	21.36	21.30	21.43
10	16QAM	50	0	21.35	21.32	21.33
10	64QAM	1	0	21.31	21.44	21.34
10	64QAM	1	25	21.60	21.43	21.63
10	64QAM	1	49	21.31	21.47	21.34
10	64QAM	25	0	20.03	20.44	20.06
10	64QAM	25	12	20.09	20.41	20.12
10	64QAM	25	25	20.08	20.51	20.11
10	64QAM	50	0	20.20	20.47	20.23



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	23.17	23.20	23.24
5	QPSK	1	12	23.12	23.11	23.31
5	QPSK	1	24	23.01	22.98	23.15
5	QPSK	12	0	22.31	22.26	22.57
5	QPSK	12	7	22.26	22.21	22.45
5	QPSK	12	13	22.33	22.19	22.35
5	QPSK	25	0	22.27	22.15	22.55
5	16QAM	1	0	22.37	22.33	22.68
5	16QAM	1	12	22.49	22.35	22.52
5	16QAM	1	24	22.36	22.32	22.48
5	16QAM	12	0	21.47	21.31	21.67
5	16QAM	12	7	21.41	21.23	21.54
5	16QAM	12	13	21.34	21.25	21.38
5	16QAM	25	0	21.35	21.23	21.66
5	64QAM	1	0	21.35	21.32	21.42
5	64QAM	1	12	21.70	21.70	21.41
5	64QAM	1	24	21.28	21.33	21.45
5	64QAM	12	0	20.14	20.16	20.42
5	64QAM	12	7	20.22	20.15	20.39
5	64QAM	12	13	20.23	20.18	20.49
5	64QAM	25	0	20.20	20.17	20.45

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

LTE Band5				Measured ERP					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20450		20525		20600	
Frequency (MHz)				829		836.5		844	
				dbm	W	dbm	W	dbm	W
10	QPSK	1	0	18.38	0.069	18.40	0.069	18.26	0.067
10	QPSK	1	25	18.24	0.067	18.04	0.064	18.10	0.065
10	QPSK	1	49	18.06	0.064	18.14	0.065	17.98	0.063
10	QPSK	25	0	17.24	0.053	17.30	0.054	17.27	0.053
10	QPSK	25	12	17.22	0.053	17.15	0.052	17.18	0.052
10	QPSK	25	25	17.19	0.052	17.17	0.052	17.23	0.053
10	QPSK	50	0	17.18	0.052	17.23	0.053	17.22	0.053
10	16QAM	1	0	17.26	0.053	17.66	0.058	17.27	0.053
10	16QAM	1	25	17.19	0.052	17.16	0.052	17.35	0.054
10	16QAM	1	49	17.16	0.052	17.64	0.058	17.57	0.057
10	16QAM	25	0	16.18	0.041	16.39	0.044	16.28	0.042
10	16QAM	25	12	16.12	0.041	16.07	0.040	16.19	0.042
10	16QAM	25	25	16.23	0.042	16.14	0.041	16.17	0.041
10	16QAM	50	0	16.20	0.042	16.21	0.042	16.21	0.042
10	64QAM	1	0	17.27	0.053	17.29	0.054	17.26	0.053
10	64QAM	1	25	17.36	0.054	17.38	0.055	17.30	0.054
10	64QAM	1	49	17.22	0.053	17.29	0.054	17.24	0.053
10	64QAM	25	0	15.82	0.038	16.03	0.040	16.05	0.040
10	64QAM	25	12	15.92	0.039	15.94	0.039	16.03	0.040
10	64QAM	25	25	15.95	0.039	15.89	0.039	15.96	0.039
10	64QAM	50	0	15.87	0.039	15.99	0.040	16.00	0.040



LTE Band5				Measured ERP					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20425		20525		20625	
Frequency (MHz)				826.5		836.5		846.5	
				dbm	W	dbm	W	dbm	W
5	QPSK	1	0	18.03	0.064	17.99	0.063	18.06	0.064
5	QPSK	1	12	18.30	0.068	18.08	0.064	18.19	0.066
5	QPSK	1	24	17.97	0.063	18.02	0.063	18.00	0.063
5	QPSK	12	0	17.18	0.052	17.16	0.052	17.18	0.052
5	QPSK	12	7	17.32	0.054	17.26	0.053	17.18	0.052
5	QPSK	12	13	17.13	0.052	17.10	0.051	17.09	0.051
5	QPSK	25	0	17.15	0.052	17.17	0.052	17.17	0.052
5	16QAM	1	0	17.37	0.055	17.49	0.056	17.47	0.056
5	16QAM	1	12	17.55	0.057	17.39	0.055	17.76	0.060
5	16QAM	1	24	17.42	0.055	17.42	0.055	17.40	0.055
5	16QAM	12	0	16.03	0.040	16.20	0.042	16.05	0.040
5	16QAM	12	7	16.29	0.043	16.14	0.041	16.21	0.042
5	16QAM	12	13	16.20	0.042	16.14	0.041	15.99	0.040
5	16QAM	25	0	16.20	0.042	16.18	0.041	16.16	0.041
5	64QAM	1	0	17.16	0.052	17.18	0.052	17.15	0.052
5	64QAM	1	12	17.25	0.053	17.27	0.053	17.19	0.052
5	64QAM	1	24	17.11	0.051	17.18	0.052	17.13	0.052
5	64QAM	12	0	15.71	0.037	15.92	0.039	15.94	0.039
5	64QAM	12	7	15.81	0.038	15.83	0.038	15.92	0.039
5	64QAM	12	13	15.84	0.038	15.78	0.038	15.85	0.038
5	64QAM	25	0	15.76	0.038	15.88	0.039	15.89	0.039



LTE Band5				Measured ERP					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20415		20525		20635	
Frequency (MHz)				825.5		836.5		847.5	
				dbm	W	dbm	W	dbm	W
3	QPSK	1	0	18.04	0.064	18.27	0.067	18.13	0.065
3	QPSK	1	8	18.25	0.067	18.02	0.063	18.05	0.064
3	QPSK	1	14	18.05	0.064	17.92	0.062	18.07	0.064
3	QPSK	8	0	17.15	0.052	17.18	0.052	17.22	0.053
3	QPSK	8	4	17.22	0.053	17.17	0.052	17.16	0.052
3	QPSK	8	7	17.21	0.053	17.14	0.052	17.10	0.051
3	QPSK	15	0	17.11	0.051	17.17	0.052	17.15	0.052
3	16QAM	1	0	17.06	0.051	17.56	0.057	17.18	0.052
3	16QAM	1	8	17.55	0.057	17.26	0.053	17.24	0.053
3	16QAM	1	14	17.56	0.057	17.28	0.053	17.52	0.056
3	16QAM	8	0	16.22	0.042	16.14	0.041	16.24	0.042
3	16QAM	8	4	16.24	0.042	16.10	0.041	16.37	0.043
3	16QAM	8	7	16.09	0.041	16.20	0.042	16.06	0.040
3	16QAM	15	0	16.13	0.041	16.17	0.041	16.02	0.040
3	64QAM	1	0	17.18	0.052	17.20	0.052	17.17	0.052
3	64QAM	1	8	17.27	0.053	17.29	0.054	17.21	0.053
3	64QAM	1	14	17.13	0.052	17.20	0.052	17.15	0.052
3	64QAM	8	0	15.73	0.037	15.94	0.039	15.96	0.039
3	64QAM	8	4	15.83	0.038	15.85	0.038	15.94	0.039
3	64QAM	8	7	15.86	0.039	15.80	0.038	15.87	0.039
3	64QAM	15	0	15.78	0.038	15.90	0.039	15.91	0.039



LTE Band5				Measured ERP					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20407		20525		20643	
Frequency (MHz)				824.7		836.5		848.3	
				dbm	W	dbm	W	dbm	W
1.4	QPSK	1	0	18.01	0.063	18.21	0.066	17.99	0.063
1.4	QPSK	1	3	18.18	0.066	18.20	0.066	18.16	0.065
1.4	QPSK	1	5	18.04	0.064	18.04	0.064	17.91	0.062
1.4	QPSK	3	0	18.15	0.065	18.08	0.064	18.08	0.064
1.4	QPSK	3	1	18.08	0.064	18.01	0.063	18.15	0.065
1.4	QPSK	3	3	18.09	0.064	18.12	0.065	18.02	0.063
1.4	QPSK	6	0	17.18	0.052	17.16	0.052	17.18	0.052
1.4	16QAM	1	0	17.47	0.056	17.36	0.054	17.07	0.051
1.4	16QAM	1	3	17.35	0.054	17.26	0.053	17.37	0.055
1.4	16QAM	1	5	17.40	0.055	17.01	0.050	17.03	0.050
1.4	16QAM	3	0	17.12	0.052	17.08	0.051	17.14	0.052
1.4	16QAM	3	1	17.28	0.053	17.22	0.053	17.13	0.052
1.4	16QAM	3	3	17.19	0.052	17.25	0.053	17.21	0.053
1.4	16QAM	6	0	16.42	0.044	16.23	0.042	16.10	0.041
1.4	64QAM	1	0	17.22	0.053	17.24	0.053	17.21	0.053
1.4	64QAM	1	3	17.31	0.054	17.33	0.054	17.25	0.053
1.4	64QAM	1	5	17.17	0.052	17.24	0.053	17.19	0.052
1.4	64QAM	3	0	15.77	0.038	15.98	0.040	16.00	0.040
1.4	64QAM	3	1	15.87	0.039	15.89	0.039	15.98	0.040
1.4	64QAM	3	3	15.90	0.039	15.84	0.038	15.91	0.039
1.4	64QAM	6	0	15.82	0.038	15.94	0.039	15.95	0.039



LTE Band38				Measured EIRP					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				37850		38000		38150	
Frequency (MHz)				2580		2595		2610	
				dbm	W	dbm	W	dbm	W
20	QPSK	1	0	22.86	0.193	22.87	0.194	22.77	0.189
20	QPSK	1	49	22.61	0.182	22.77	0.189	22.75	0.188
20	QPSK	1	99	22.38	0.173	22.40	0.174	22.51	0.178
20	QPSK	50	0	21.75	0.150	21.95	0.157	21.92	0.156
20	QPSK	50	24	21.72	0.149	21.83	0.152	21.83	0.152
20	QPSK	50	50	21.63	0.146	21.81	0.152	21.88	0.154
20	QPSK	100	0	21.72	0.149	21.89	0.155	21.90	0.155
20	16QAM	1	0	21.52	0.142	21.70	0.148	21.83	0.152
20	16QAM	1	49	21.86	0.153	21.99	0.158	21.77	0.150
20	16QAM	1	99	21.63	0.146	21.71	0.148	21.65	0.146
20	16QAM	50	0	20.68	0.117	20.87	0.122	20.90	0.123
20	16QAM	50	24	20.74	0.119	20.92	0.124	20.87	0.122
20	16QAM	50	50	20.66	0.116	20.90	0.123	20.96	0.125
20	16QAM	100	0	20.71	0.118	20.92	0.124	20.97	0.125
20	64QAM	1	0	21.13	0.130	21.15	0.130	21.19	0.132
20	64QAM	1	49	21.44	0.139	21.48	0.141	21.46	0.140
20	64QAM	1	99	21.16	0.131	21.14	0.130	21.18	0.131
20	64QAM	50	0	19.68	0.093	19.87	0.097	19.95	0.099
20	64QAM	50	24	19.76	0.095	19.88	0.097	19.96	0.099
20	64QAM	50	50	19.77	0.095	19.83	0.096	20.00	0.100
20	64QAM	100	0	19.80	0.095	19.84	0.096	19.98	0.100



LTE Band38				Measured EIRP					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				37825		38000		38175	
Frequency (MHz)				2577.5		2595		2612.5	
				dbm	W	dbm	W	dbm	W
15	QPSK	1	0	22.52	0.179	22.68	0.185	22.74	0.188
15	QPSK	1	37	22.68	0.185	22.77	0.189	22.78	0.190
15	QPSK	1	74	22.54	0.179	22.66	0.185	22.77	0.189
15	QPSK	36	0	21.75	0.150	21.83	0.152	22.03	0.160
15	QPSK	36	20	21.72	0.149	21.90	0.155	21.97	0.157
15	QPSK	36	39	21.74	0.149	21.90	0.155	21.95	0.157
15	QPSK	75	0	21.72	0.149	21.86	0.153	21.93	0.156
15	16QAM	1	0	21.70	0.148	21.84	0.153	21.95	0.157
15	16QAM	1	37	21.88	0.154	22.05	0.160	22.04	0.160
15	16QAM	1	74	21.80	0.151	21.90	0.155	21.78	0.151
15	16QAM	36	0	20.63	0.116	20.87	0.122	20.83	0.121
15	16QAM	36	20	20.70	0.117	20.81	0.121	20.84	0.121
15	16QAM	36	39	20.74	0.119	20.88	0.122	20.94	0.124
15	16QAM	75	0	20.65	0.116	20.86	0.122	21.00	0.126
15	64QAM	1	0	21.12	0.129	21.14	0.130	21.18	0.131
15	64QAM	1	37	21.43	0.139	21.47	0.140	21.50	0.141
15	64QAM	1	74	21.15	0.130	21.13	0.130	21.17	0.131
15	64QAM	36	0	19.67	0.093	19.86	0.097	19.94	0.099
15	64QAM	36	20	19.75	0.094	19.87	0.097	19.95	0.099
15	64QAM	36	39	19.76	0.095	19.82	0.096	19.99	0.100
15	64QAM	75	0	19.79	0.095	19.83	0.096	19.97	0.099



LTE Band38				Measured EIRP					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				37800		38000		38200	
Frequency (MHz)				2575		2595		2615	
				dbm	W	dbm	W	dbm	W
10	QPSK	1	0	22.51	0.178	22.71	0.187	22.83	0.192
10	QPSK	1	25	22.70	0.186	22.83	0.192	22.80	0.191
10	QPSK	1	49	22.57	0.181	22.75	0.188	22.78	0.190
10	QPSK	25	0	21.80	0.151	21.99	0.158	22.03	0.160
10	QPSK	25	12	21.70	0.148	21.98	0.158	21.96	0.157
10	QPSK	25	25	21.71	0.148	21.95	0.157	22.01	0.159
10	QPSK	50	0	21.84	0.153	21.98	0.158	22.11	0.163
10	16QAM	1	0	21.80	0.151	21.99	0.158	22.01	0.159
10	16QAM	1	25	22.00	0.158	22.18	0.165	22.12	0.163
10	16QAM	1	49	21.88	0.154	21.96	0.157	21.98	0.158
10	16QAM	25	0	20.86	0.122	21.02	0.126	21.16	0.131
10	16QAM	25	12	20.81	0.121	21.03	0.127	21.03	0.127
10	16QAM	25	25	20.87	0.122	21.01	0.126	21.06	0.128
10	16QAM	50	0	20.87	0.122	20.99	0.126	21.05	0.127
10	64QAM	1	0	21.11	0.129	21.13	0.130	21.17	0.131
10	64QAM	1	25	21.42	0.139	21.46	0.140	21.49	0.141
10	64QAM	1	49	21.14	0.130	21.12	0.129	21.16	0.131
10	64QAM	25	0	19.66	0.092	19.85	0.097	19.93	0.098
10	64QAM	25	12	19.74	0.094	19.86	0.097	19.94	0.099
10	64QAM	25	25	19.75	0.094	19.81	0.096	19.98	0.100
10	64QAM	50	0	19.78	0.095	19.82	0.096	19.96	0.099



LTE Band38				Measured EIRP					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				37775		38000		38225	
Frequency (MHz)				2572.5		2595		2617.5	
				dbm	W	dbm	W	dbm	W
5	QPSK	1	0	22.39	0.173	22.61	0.182	22.73	0.187
5	QPSK	1	12	22.53	0.179	22.71	0.187	22.83	0.192
5	QPSK	1	24	22.47	0.177	22.65	0.184	22.72	0.187
5	QPSK	12	0	21.61	0.145	21.86	0.153	21.92	0.156
5	QPSK	12	7	21.81	0.152	21.94	0.156	22.03	0.160
5	QPSK	12	13	21.71	0.148	21.90	0.155	21.99	0.158
5	QPSK	25	0	21.63	0.146	21.84	0.153	21.93	0.156
5	16QAM	1	0	21.71	0.148	21.88	0.154	21.87	0.154
5	16QAM	1	12	21.84	0.153	22.01	0.159	21.98	0.158
5	16QAM	1	24	21.78	0.151	21.91	0.155	21.89	0.155
5	16QAM	12	0	20.58	0.114	20.95	0.124	20.95	0.124
5	16QAM	12	7	20.79	0.120	20.94	0.124	20.99	0.126
5	16QAM	12	13	20.85	0.122	20.82	0.121	21.04	0.127
5	16QAM	25	0	20.67	0.117	20.97	0.125	21.03	0.127
5	64QAM	1	0	21.10	0.129	21.12	0.130	21.16	0.131
5	64QAM	1	12	21.41	0.138	21.45	0.140	21.48	0.141
5	64QAM	1	24	21.13	0.130	21.11	0.129	21.15	0.130
5	64QAM	12	0	19.65	0.092	19.84	0.096	19.92	0.098
5	64QAM	12	7	19.73	0.094	19.85	0.097	19.93	0.098
5	64QAM	12	13	19.74	0.094	19.80	0.096	19.97	0.099
5	64QAM	25	0	19.77	0.095	19.81	0.096	19.95	0.099



LTE Band 40 (2305MHz ~ 2315MHz)				Measured EIRP			
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.	Middle Ch. / Freq.		High Ch. / Freq.
Channel				/	38750		/
Frequency (MHz)				/	2310		/
				/	dbm	W	/
10	QPSK	1	0	/	24.03	0.253	/
10	QPSK	1	25	/	23.90	0.245	/
10	QPSK	1	49	/	23.78	0.239	/
10	QPSK	25	0	/	23.17	0.207	/
10	QPSK	25	12	/	23.10	0.204	/
10	QPSK	25	25	/	23.15	0.207	/
10	QPSK	50	0	/	23.17	0.207	/
10	16QAM	1	0	/	23.18	0.208	/
10	16QAM	1	25	/	23.24	0.211	/
10	16QAM	1	49	/	23.03	0.201	/
10	16QAM	25	0	/	22.05	0.160	/
10	16QAM	25	12	/	22.04	0.160	/
10	16QAM	25	25	/	22.21	0.166	/
10	16QAM	50	0	/	22.18	0.165	/
10	64QAM	1	0	/	22.26	0.168	/
10	64QAM	1	25	/	22.32	0.171	/
10	64QAM	1	49	/	22.27	0.169	/
10	64QAM	25	0	/	21.08	0.128	/
10	64QAM	25	12	/	21.07	0.128	/
10	64QAM	25	25	/	21.04	0.127	/
10	64QAM	50	0	/	20.99	0.126	/



LTE Band 40 (2305MHz ~ 2315MHz)				Measured EIRP					
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	23.79	0.239	23.42	0.220	23.49	0.223
5	QPSK	1	12	23.89	0.245	23.60	0.229	23.61	0.230
5	QPSK	1	24	23.71	0.235	23.38	0.218	23.43	0.220
5	QPSK	12	0	23.05	0.202	22.66	0.185	22.69	0.186
5	QPSK	12	7	23.05	0.202	22.71	0.187	22.74	0.188
5	QPSK	12	13	23.07	0.203	22.75	0.188	22.65	0.184
5	QPSK	25	0	23.07	0.203	22.60	0.182	22.67	0.185
5	16QAM	1	0	23.02	0.200	22.65	0.184	22.70	0.186
5	16QAM	1	12	23.21	0.209	22.82	0.191	22.74	0.188
5	16QAM	1	24	22.93	0.196	22.73	0.187	22.56	0.180
5	16QAM	12	0	22.03	0.160	21.65	0.146	21.55	0.143
5	16QAM	12	7	22.11	0.163	21.68	0.147	21.66	0.147
5	16QAM	12	13	22.10	0.162	21.74	0.149	21.70	0.148
5	16QAM	25	0	22.12	0.163	21.76	0.150	21.68	0.147
5	64QAM	1	0	22.26	0.168	21.81	0.152	21.83	0.152
5	64QAM	1	12	22.32	0.171	21.71	0.148	21.74	0.149
5	64QAM	1	24	22.27	0.169	21.83	0.152	21.81	0.152
5	64QAM	12	0	21.08	0.128	20.71	0.118	20.67	0.117
5	64QAM	12	7	21.07	0.128	20.69	0.117	20.61	0.115
5	64QAM	12	13	21.04	0.127	20.60	0.115	20.59	0.115
5	64QAM	25	0	20.99	0.126	20.62	0.115	20.55	0.114



LTE Band 40 (2350MHz ~ 2360MHz)				Measured EIRP			
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.	Middle Ch. / Freq.		High Ch. / Freq.
Channel				/	39200		/
Frequency (MHz)				/	2355		/
				/	dbm	W	/
10	QPSK	1	0	/	24.01	0.252	/
10	QPSK	1	25	/	23.89	0.245	/
10	QPSK	1	49	/	23.76	0.238	/
10	QPSK	25	0	/	23.11	0.205	/
10	QPSK	25	12	/	23.02	0.200	/
10	QPSK	25	25	/	23.07	0.203	/
10	QPSK	50	0	/	23.05	0.202	/
10	16QAM	1	0	/	23.23	0.210	/
10	16QAM	1	25	/	23.26	0.212	/
10	16QAM	1	49	/	23.03	0.201	/
10	16QAM	25	0	/	22.09	0.162	/
10	16QAM	25	12	/	22.04	0.160	/
10	16QAM	25	25	/	22.17	0.165	/
10	16QAM	50	0	/	22.03	0.160	/
10	64QAM	1	0	/	22.31	0.170	/
10	64QAM	1	25	/	22.17	0.165	/
10	64QAM	1	49	/	22.23	0.167	/
10	64QAM	25	0	/	21.32	0.136	/
10	64QAM	25	12	/	21.33	0.136	/
10	64QAM	25	25	/	21.23	0.133	/
10	64QAM	50	0	/	21.17	0.131	/



LTE Band 40 (2350MHz ~ 2360MHz)				Measured EIRP					
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	23.83	0.242	23.51	0.224	23.52	0.225
5	QPSK	1	12	23.94	0.248	23.57	0.228	23.56	0.227
5	QPSK	1	24	23.78	0.239	23.36	0.217	23.36	0.217
5	QPSK	12	0	23.05	0.202	22.74	0.188	22.60	0.182
5	QPSK	12	7	23.06	0.202	22.69	0.186	22.71	0.187
5	QPSK	12	13	23.10	0.204	22.74	0.188	22.70	0.186
5	QPSK	25	0	23.04	0.201	22.72	0.187	22.70	0.186
5	16QAM	1	0	23.13	0.206	22.70	0.186	22.68	0.185
5	16QAM	1	12	23.25	0.211	22.85	0.193	22.80	0.191
5	16QAM	1	24	23.03	0.201	22.65	0.184	22.59	0.182
5	16QAM	12	0	22.03	0.160	21.68	0.147	21.64	0.146
5	16QAM	12	7	22.18	0.165	21.79	0.151	21.72	0.149
5	16QAM	12	13	22.05	0.160	21.67	0.147	21.73	0.149
5	16QAM	25	0	22.08	0.161	21.74	0.149	21.74	0.149
5	64QAM	1	0	22.28	0.169	21.83	0.153	21.85	0.153
5	64QAM	1	12	22.34	0.172	21.73	0.149	21.76	0.150
5	64QAM	1	24	22.29	0.170	21.85	0.153	21.83	0.153
5	64QAM	12	0	21.10	0.129	20.73	0.118	20.69	0.117
5	64QAM	12	7	21.09	0.129	20.71	0.118	20.63	0.116
5	64QAM	12	13	21.06	0.128	20.62	0.115	20.61	0.115
5	64QAM	25	0	21.01	0.126	20.64	0.116	20.57	0.114



LTE Band 41				Measured EIRP					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				40140		40640		41140	
Frequency (MHz)				2565		2595		2645	
				dbm	W	dbm	W	dbm	W
20	QPSK	1	0	23.63	0.231	23.61	0.230	23.35	0.216
20	QPSK	1	49	23.61	0.230	23.58	0.228	23.39	0.218
20	QPSK	1	99	23.34	0.216	23.39	0.218	23.33	0.215
20	QPSK	50	0	22.82	0.191	22.67	0.185	22.62	0.183
20	QPSK	50	24	22.80	0.191	22.67	0.185	22.54	0.179
20	QPSK	50	50	22.77	0.189	22.63	0.183	22.41	0.174
20	QPSK	100	0	22.82	0.191	22.69	0.186	22.55	0.180
20	16QAM	1	0	22.82	0.191	22.75	0.188	22.71	0.187
20	16QAM	1	49	22.65	0.184	22.53	0.179	22.69	0.186
20	16QAM	1	99	22.68	0.185	22.55	0.180	22.52	0.179
20	16QAM	50	0	21.88	0.154	21.89	0.155	21.76	0.150
20	16QAM	50	24	21.85	0.153	21.72	0.149	21.89	0.155
20	16QAM	50	50	21.69	0.148	21.71	0.148	21.68	0.147
20	16QAM	100	0	21.65	0.146	21.34	0.136	21.57	0.144
20	64QAM	1	0	21.50	0.141	21.47	0.140	21.55	0.143
20	64QAM	1	49	21.85	0.153	21.85	0.153	21.54	0.143
20	64QAM	1	99	21.43	0.139	21.48	0.141	21.58	0.144
20	64QAM	50	0	20.29	0.107	20.31	0.107	20.55	0.114
20	64QAM	50	24	20.37	0.109	20.30	0.107	20.52	0.113
20	64QAM	50	50	20.38	0.109	20.33	0.108	20.62	0.115
20	64QAM	100	0	20.35	0.108	20.32	0.108	20.58	0.114



LTE Band 41				Measured EIRP					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				40315		40640		41165	
Frequency (MHz)				2562.5		2595		2647.5	
				dbm	W	dbm	W	dbm	W
15	QPSK	1	0	22.47	0.177	22.50	0.178	22.76	0.189
15	QPSK	1	37	22.43	0.175	22.62	0.183	22.87	0.194
15	QPSK	1	74	22.41	0.174	22.49	0.177	22.74	0.188
15	QPSK	36	0	22.15	0.164	22.21	0.166	22.12	0.163
15	QPSK	36	20	21.83	0.152	21.86	0.153	22.10	0.162
15	QPSK	36	39	21.77	0.150	21.81	0.152	21.83	0.152
15	QPSK	75	0	21.57	0.144	21.70	0.148	21.86	0.153
15	16QAM	1	0	21.62	0.145	21.83	0.152	21.80	0.151
15	16QAM	1	37	21.59	0.144	21.83	0.152	21.72	0.149
15	16QAM	1	74	21.51	0.142	21.74	0.149	21.69	0.148
15	16QAM	36	0	21.03	0.127	21.05	0.127	21.08	0.128
15	16QAM	36	20	20.83	0.121	20.93	0.124	21.06	0.128
15	16QAM	36	39	20.63	0.116	20.66	0.116	20.70	0.117
15	16QAM	75	0	20.38	0.109	20.74	0.119	20.33	0.108
15	64QAM	1	0	21.44	0.139	21.57	0.144	21.47	0.140
15	64QAM	1	37	21.73	0.149	21.56	0.143	21.76	0.150
15	64QAM	1	74	21.44	0.139	21.60	0.145	21.47	0.140
15	64QAM	36	0	20.16	0.104	20.57	0.114	20.19	0.104
15	64QAM	36	20	20.22	0.105	20.54	0.113	20.25	0.106
15	64QAM	36	39	20.21	0.105	20.64	0.116	20.24	0.106
15	64QAM	75	0	20.33	0.108	20.60	0.115	20.36	0.109



LTE Band 41				Measured EIRP					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				40290		40640		41190	
Frequency (MHz)				2550		2595		2650	
				dbm	W	dbm	W	dbm	W
10	QPSK	1	0	23.02	0.200	23.15	0.207	23.33	0.215
10	QPSK	1	25	23.26	0.212	23.21	0.209	23.46	0.222
10	QPSK	1	49	23.07	0.203	23.06	0.202	23.35	0.216
10	QPSK	25	0	22.33	0.171	22.31	0.170	22.73	0.187
10	QPSK	25	12	22.36	0.172	22.30	0.170	22.62	0.183
10	QPSK	25	25	22.38	0.173	22.26	0.168	22.58	0.181
10	QPSK	50	0	22.39	0.173	22.27	0.169	22.65	0.184
10	16QAM	1	0	22.54	0.179	22.45	0.176	22.75	0.188
10	16QAM	1	25	22.59	0.182	22.49	0.177	22.80	0.191
10	16QAM	1	49	22.49	0.177	22.40	0.174	22.69	0.186
10	16QAM	25	0	21.48	0.141	21.55	0.143	21.69	0.148
10	16QAM	25	12	21.33	0.136	21.41	0.138	21.55	0.143
10	16QAM	25	25	21.38	0.137	21.32	0.136	21.45	0.140
10	16QAM	50	0	21.37	0.137	21.34	0.136	21.35	0.136
10	64QAM	1	0	21.33	0.136	21.46	0.140	21.36	0.137
10	64QAM	1	25	21.62	0.145	21.45	0.140	21.65	0.146
10	64QAM	1	49	21.33	0.136	21.49	0.141	21.36	0.137
10	64QAM	25	0	20.05	0.101	20.46	0.111	20.08	0.102
10	64QAM	25	12	20.11	0.103	20.43	0.110	20.14	0.103
10	64QAM	25	25	20.10	0.102	20.53	0.113	20.13	0.103
10	64QAM	50	0	20.22	0.105	20.49	0.112	20.25	0.106



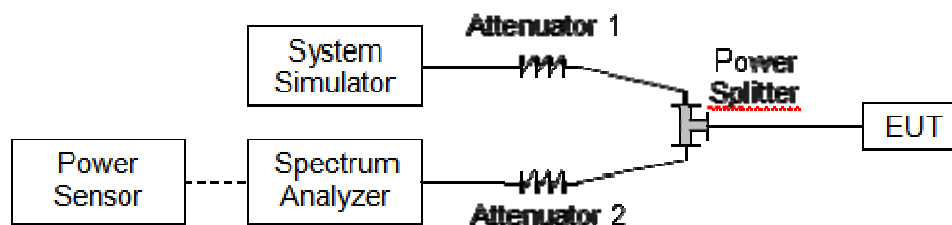
LTE Band 41				Measured EIRP					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				40265		40640		41215	
Frequency (MHz)				2557.5		2595		2652.5	
				dbm	W	dbm	W	dbm	W
5	QPSK	1	0	23.19	0.208	23.22	0.210	23.26	0.212
5	QPSK	1	12	23.14	0.206	23.13	0.206	23.33	0.215
5	QPSK	1	24	23.03	0.201	23.00	0.200	23.17	0.207
5	QPSK	12	0	22.33	0.171	22.28	0.169	22.59	0.182
5	QPSK	12	7	22.28	0.169	22.23	0.167	22.47	0.177
5	QPSK	12	13	22.35	0.172	22.21	0.166	22.37	0.173
5	QPSK	25	0	22.29	0.169	22.17	0.165	22.57	0.181
5	16QAM	1	0	22.39	0.173	22.35	0.172	22.70	0.186
5	16QAM	1	12	22.51	0.178	22.37	0.173	22.54	0.179
5	16QAM	1	24	22.38	0.173	22.34	0.171	22.50	0.178
5	16QAM	12	0	21.49	0.141	21.33	0.136	21.69	0.148
5	16QAM	12	7	21.43	0.139	21.25	0.133	21.56	0.143
5	16QAM	12	13	21.36	0.137	21.27	0.134	21.40	0.138
5	16QAM	25	0	21.37	0.137	21.25	0.133	21.68	0.147
5	64QAM	1	0	21.37	0.137	21.34	0.136	21.44	0.139
5	64QAM	1	12	21.72	0.149	21.72	0.149	21.43	0.139
5	64QAM	1	24	21.30	0.135	21.35	0.136	21.47	0.140
5	64QAM	12	0	20.16	0.104	20.18	0.104	20.44	0.111
5	64QAM	12	7	20.24	0.106	20.17	0.104	20.41	0.110
5	64QAM	12	13	20.25	0.106	20.20	0.105	20.51	0.112
5	64QAM	25	0	20.22	0.105	20.19	0.104	20.47	0.111

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 50 Ohm; 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)	ChannelLevel	Modulation	99% BW(MHz)	26dB BW(MHz)
1.4	Low	QPSK	1.10	1.28
	Low	16QAM	1.10	1.28
	Low	64QAM	1.10	1.30
	Mid	QPSK	1.10	1.27
	Mid	16QAM	1.10	1.31
	Mid	64QAM	1.08	1.22
	High	QPSK	1.09	1.30
	High	16QAM	1.10	1.29
	High	64QAM	1.10	1.28
3	Low	QPSK	2.69	2.92
	Low	16QAM	2.69	2.93
	Low	64QAM	2.70	2.93
	Mid	QPSK	2.60	2.82
	Mid	16QAM	2.70	2.92
	Mid	64QAM	2.70	2.92
	High	QPSK	2.69	3.02
	High	16QAM	2.69	2.94
	High	64QAM	2.70	2.92
5	Low	QPSK	4.49	4.90
	Low	16QAM	4.50	4.91
	Low	64QAM	4.41	4.75
	Mid	QPSK	4.50	4.94
	Mid	16QAM	4.50	4.91
	Mid	64QAM	4.46	4.80
	High	QPSK	4.50	5.14
	High	16QAM	4.50	4.90
	High	64QAM	4.47	4.82
10	Low	QPSK	8.99	9.74
	Low	16QAM	8.97	9.71
	Low	64QAM	8.83	9.49
	Mid	QPSK	8.99	9.74
	Mid	16QAM	8.97	9.70
	Mid	64QAM	8.77	9.38
	High	QPSK	8.99	9.76
	High	16QAM	8.96	9.74
	High	64QAM	8.89	9.47



LTE Band 38				
BW(MHz)	ChannelLevel	Modulation	99% BW(MHz)	26dB BW(MHz)
5	Low	QPSK	4.49	4.99
	Low	16QAM	4.50	4.93
	Low	64QAM	4.49	4.86
	Mid	QPSK	4.49	5.03
	Mid	16QAM	4.50	4.90
	Mid	64QAM	4.46	4.85
	High	QPSK	4.50	4.96
	High	16QAM	4.49	4.89
	High	64QAM	4.47	4.84
10	Low	QPSK	8.96	9.72
	Low	16QAM	8.98	9.69
	Low	64QAM	8.91	9.52
	Mid	QPSK	8.98	9.68
	Mid	16QAM	8.96	9.79
	Mid	64QAM	8.91	9.52
	High	QPSK	8.97	9.75
	High	16QAM	8.96	9.77
	High	64QAM	8.94	9.57
15	Low	QPSK	13.45	14.50
	Low	16QAM	13.45	14.64
	Low	64QAM	13.35	14.18
	Mid	QPSK	13.48	14.50
	Mid	16QAM	13.47	14.57
	Mid	64QAM	13.28	14.06
	High	QPSK	13.45	14.52
	High	16QAM	13.47	14.71
	High	64QAM	13.34	14.01
20	Low	QPSK	17.95	19.29
	Low	16QAM	17.93	19.32
	Low	64QAM	17.82	18.73
	Mid	QPSK	17.98	19.30
	Mid	16QAM	17.92	19.32
	Mid	64QAM	17.83	18.80
	High	QPSK	17.92	19.41
	High	16QAM	17.95	19.28
	High	64QAM	17.82	18.78



LTE Band 40 (2305MHz ~ 2315MHz)				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
5	Low	QPSK	4.52	5.34
	Low	16QAM	4.52	5.31
	Low	64QAM	4.52	5.32
	Mid	QPSK	4.51	5.28
	Mid	16QAM	4.52	5.34
	Mid	64QAM	4.53	5.35
	High	QPSK	4.52	5.67
	High	16QAM	4.52	5.39
	High	64QAM	4.53	5.39
10	Mid	QPSK	8.93	9.71
	Mid	16QAM	8.92	9.72
	Mid	64QAM	8.94	9.65

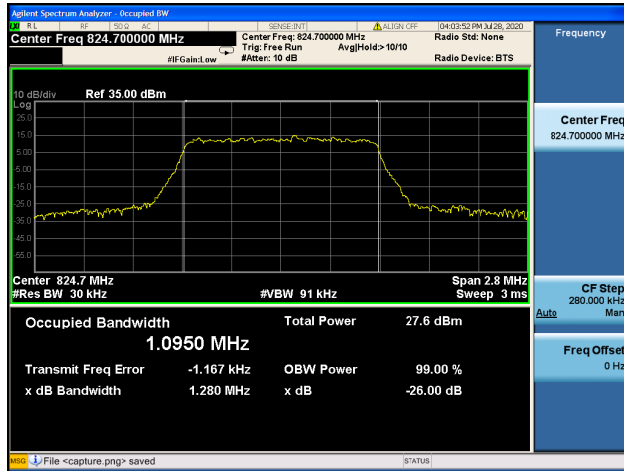
LTE Band 40(2350MHz ~ 2360MHz)				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
5	Low	QPSK	4.51	5.22
	Low	16QAM	4.50	5.46
	Low	64QAM	4.52	5.33
	Mid	QPSK	4.50	5.29
	Mid	16QAM	4.52	5.32
	Mid	64QAM	4.51	5.34
	High	QPSK	4.51	5.15
	High	16QAM	4.51	5.25
	High	64QAM	4.50	5.16
10	Mid	QPSK	8.95	9.75
	Mid	16QAM	8.93	9.59
	Mid	64QAM	8.91	10.15



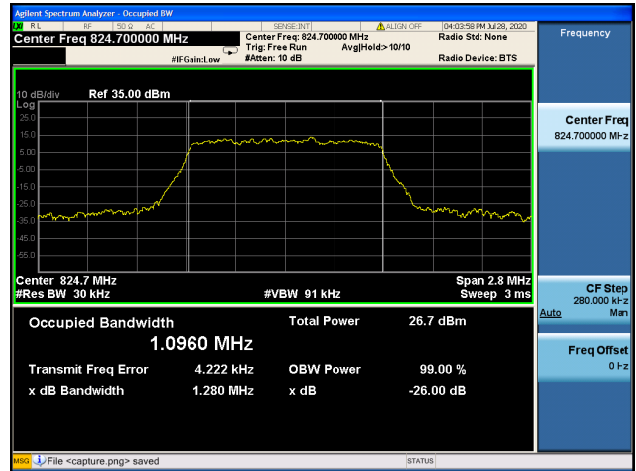
LTE Band 41				
BW(MHz)	ChannelLevel	Modulation	99% BW(MHz)	26dB BW(MHz)
5	Low	QPSK	4.50	4.80
	Low	16QAM	4.48	4.79
	Low	64QAM	4.49	4.83
	Mid	QPSK	4.48	5.00
	Mid	16QAM	4.50	4.80
	Mid	64QAM	4.49	4.93
	High	QPSK	4.50	4.79
	High	16QAM	4.51	4.79
	High	64QAM	4.49	4.87
10	Low	QPSK	8.95	10.11
	Low	16QAM	8.95	10.05
	Low	64QAM	8.97	9.59
	Mid	QPSK	9.04	9.47
	Mid	16QAM	8.97	9.57
	Mid	64QAM	8.94	9.60
	High	QPSK	8.97	9.77
	High	16QAM	8.97	9.61
	High	64QAM	8.96	9.73
15	Low	QPSK	13.44	14.36
	Low	16QAM	13.45	14.50
	Low	64QAM	13.43	14.41
	Mid	QPSK	13.41	14.49
	Mid	16QAM	13.50	14.36
	Mid	64QAM	13.46	14.44
	High	QPSK	13.46	14.43
	High	16QAM	13.42	14.44
	High	64QAM	13.45	14.40
20	Low	QPSK	17.94	19.06
	Low	16QAM	17.93	19.05
	Low	64QAM	17.94	19.23
	Mid	QPSK	17.96	19.87
	Mid	16QAM	17.94	19.09
	Mid	64QAM	17.92	19.03
	High	QPSK	17.94	19.04
	High	16QAM	17.93	19.26
	High	64QAM	17.96	18.95



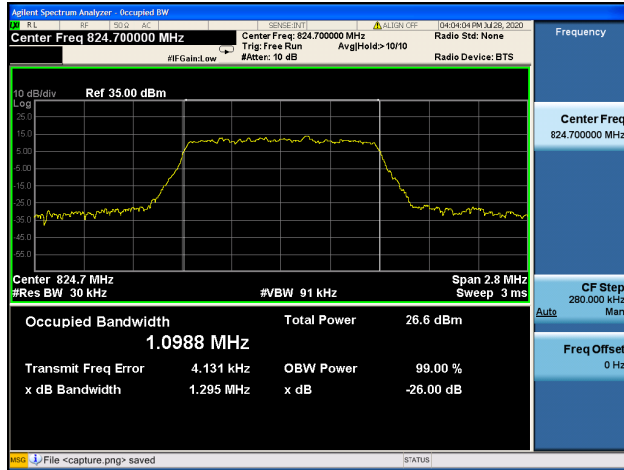
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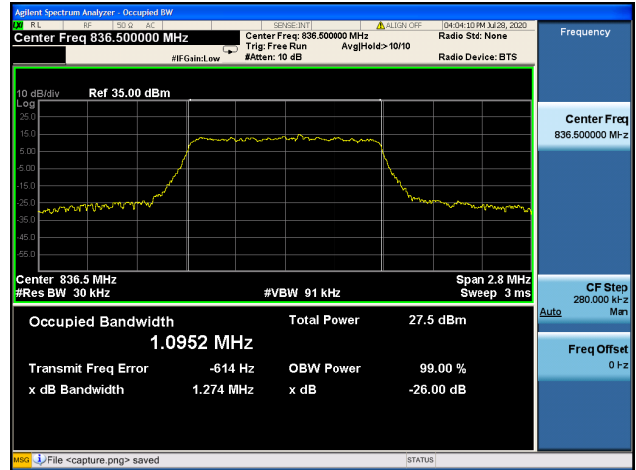
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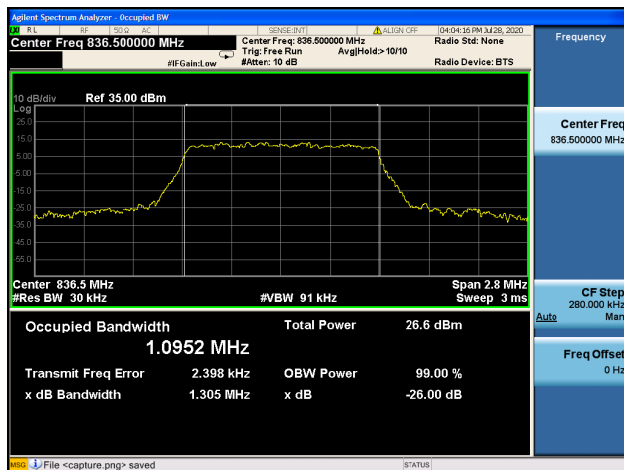
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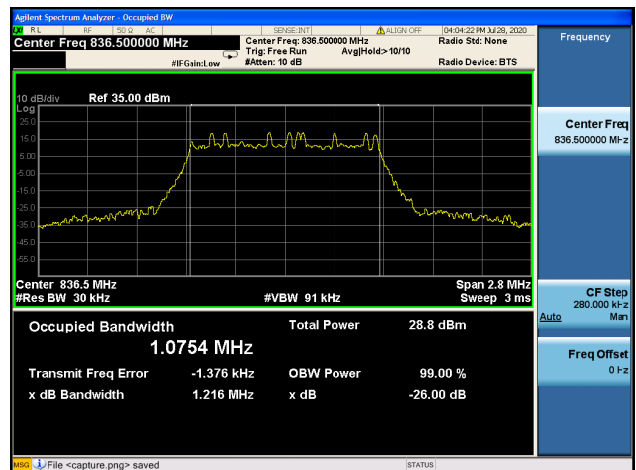
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Band5 / 1.4MHz / Mid CH / 16QAM

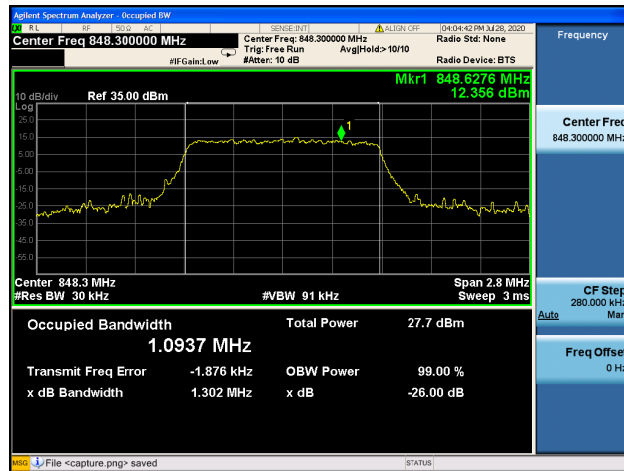


Band5 / 1.4MHz / Mid CH / 64QAM

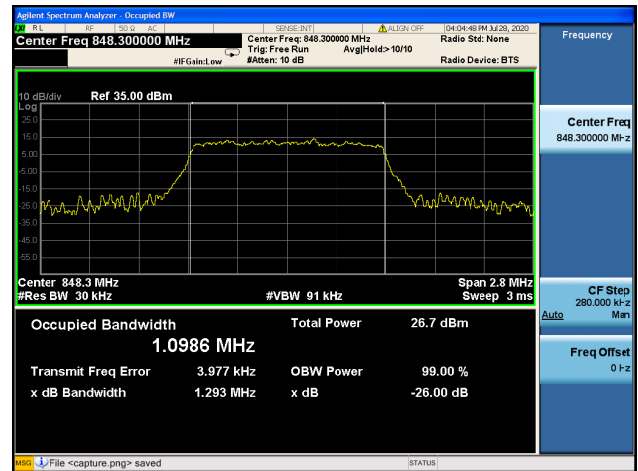




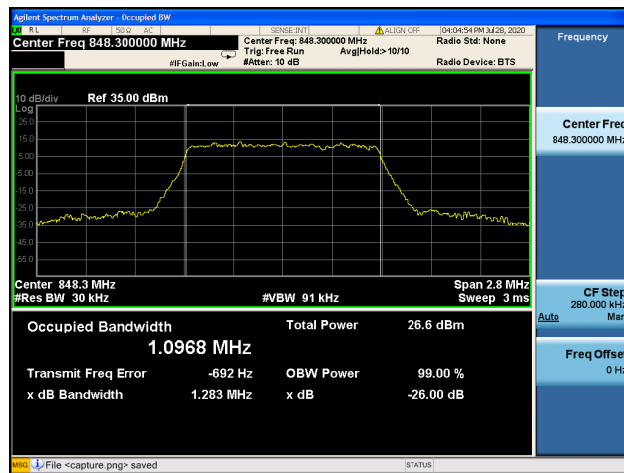
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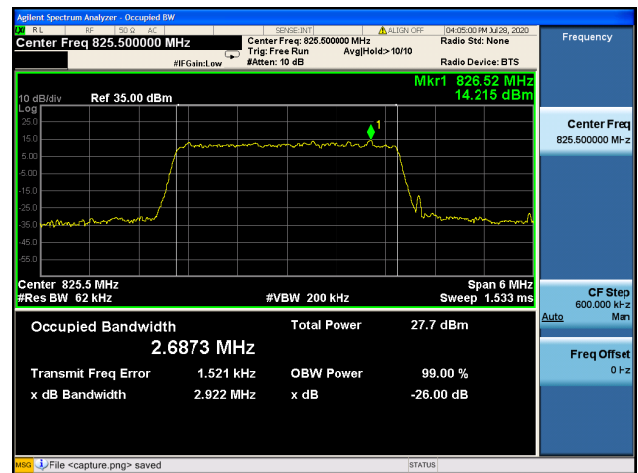
Band5 / 1.4MHz / High CH / 16QAM



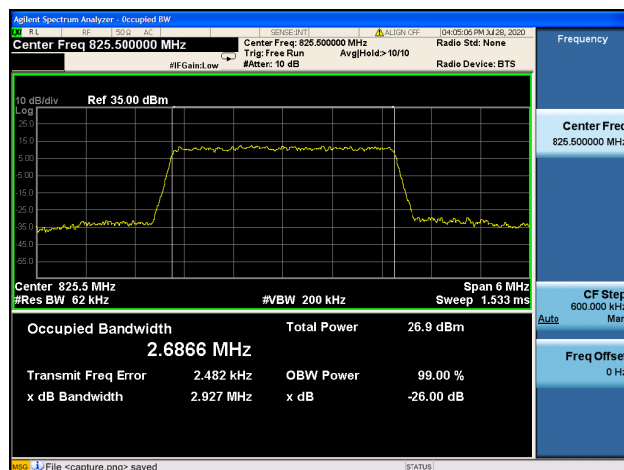
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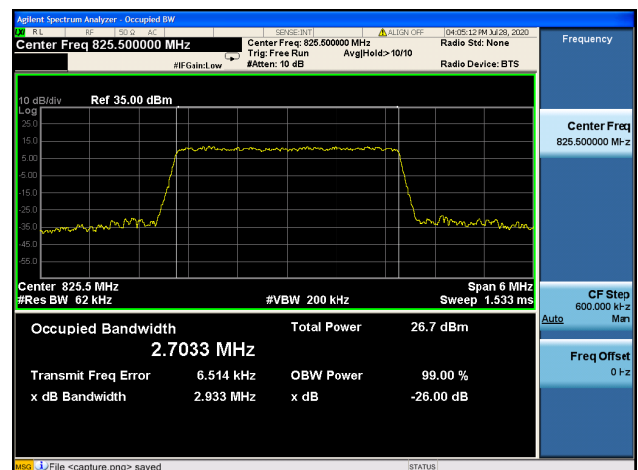
Band5 / 3MHz / Low CH / QPSK



Band5 / 3MHz / Low CH / 16QAM

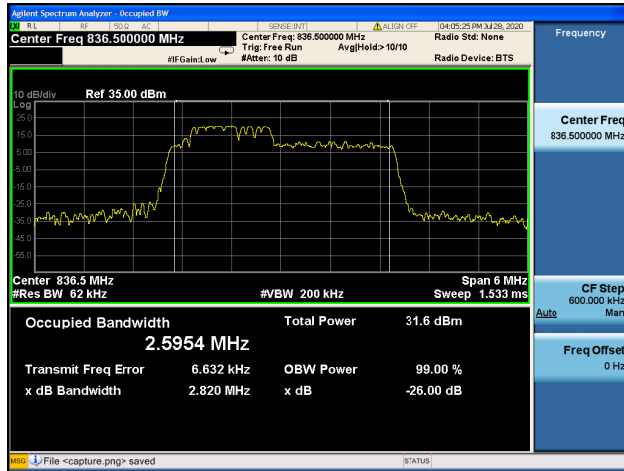


Band5 / 3MHz / Low CH / 64QAM

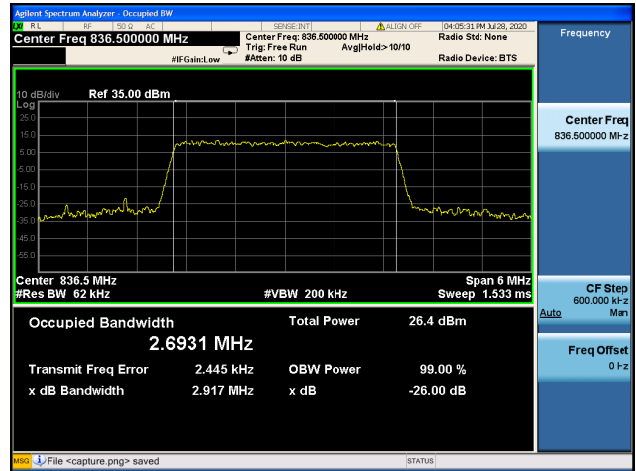




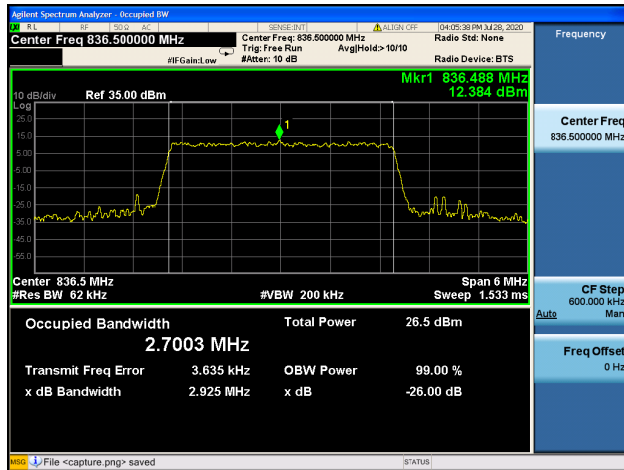
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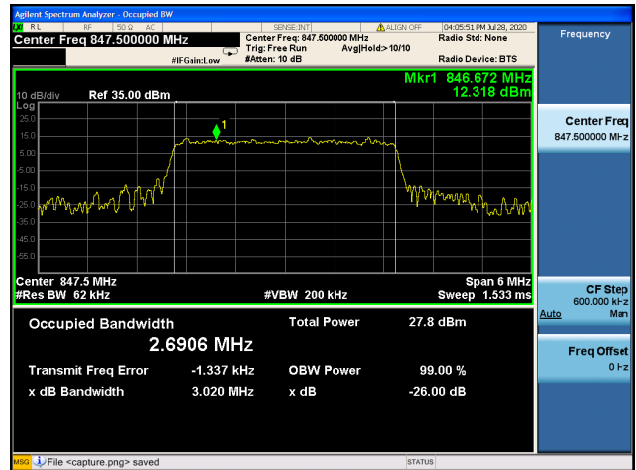
Band5 / 3MHz / Mid CH / 16QAM



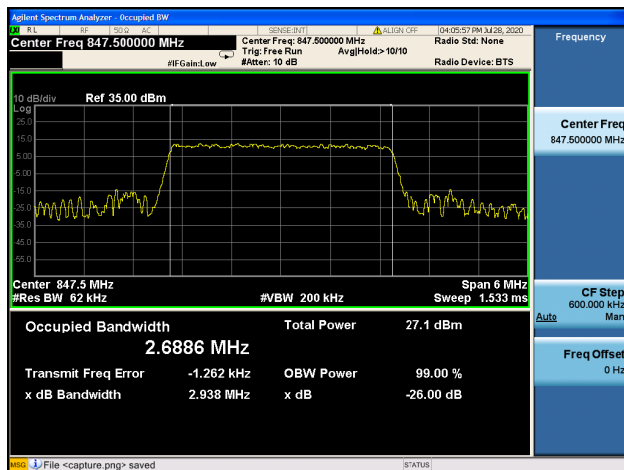
Band5 / 3MHz / Mid CH / 64QAM



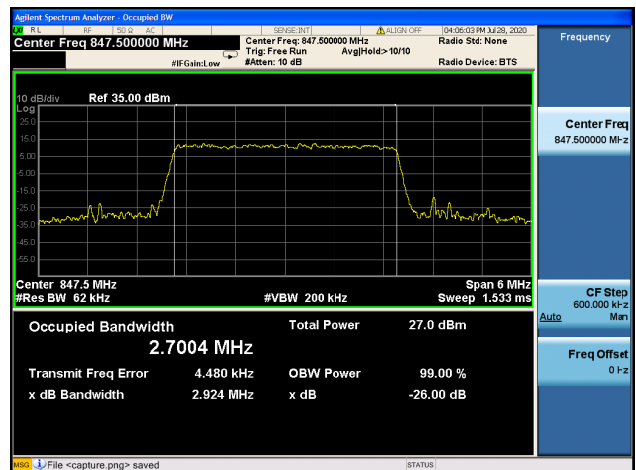
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Band5 / 3MHz / High CH / 16QAM

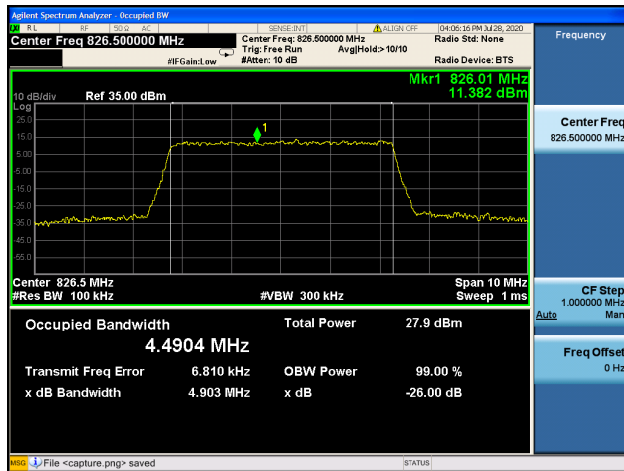


Band5 / 3MHz / High CH / 64QAM

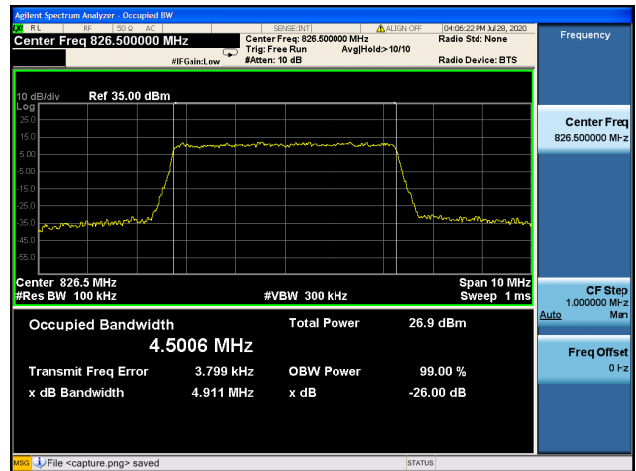




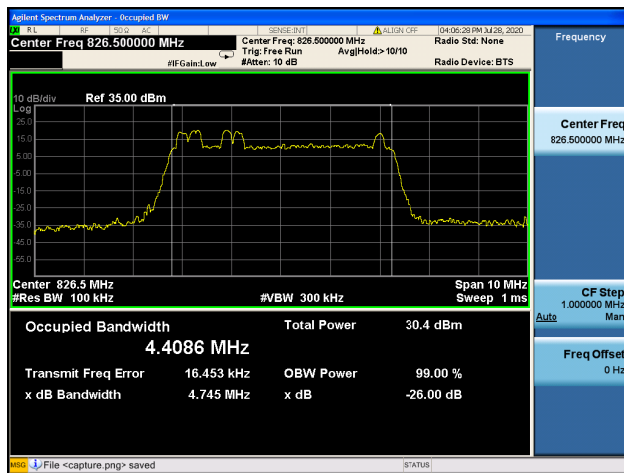
Band5 / 5MHz / Low CH / QPSK



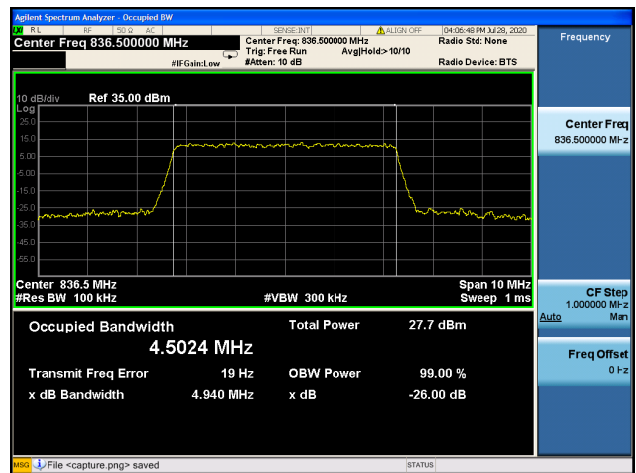
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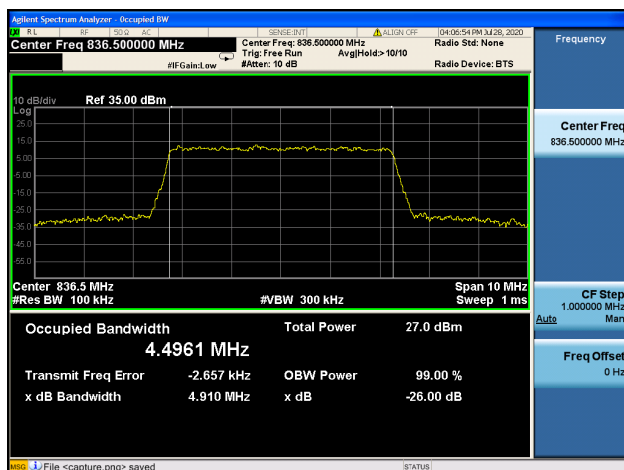
Band5 / 5MHz / Low CH / 64QAM



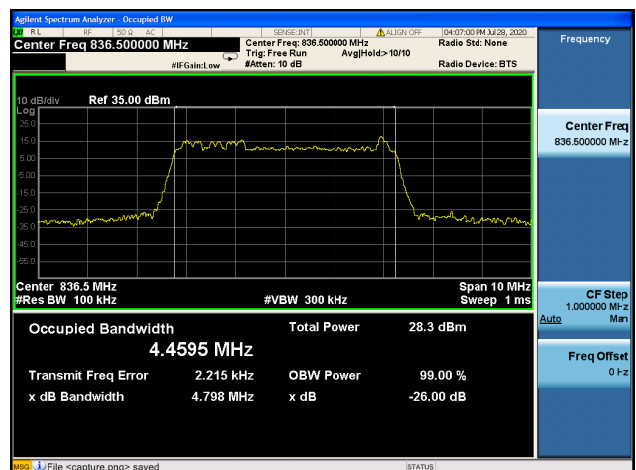
Band5 / 5MHz / Mid CH / QPSK



Band5 / 5MHz / Mid CH / 16QAM

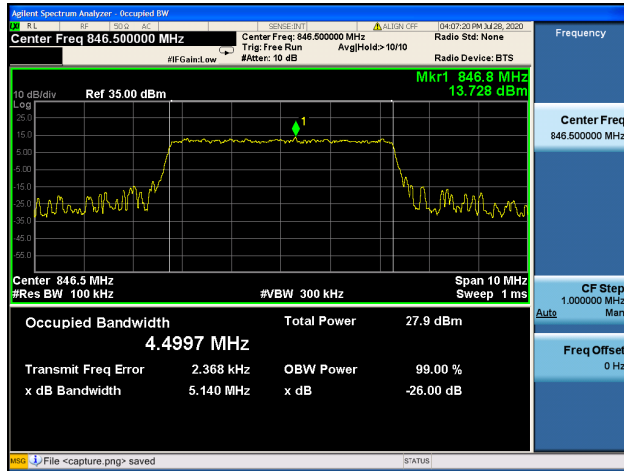


Band5 / 5MHz / Mid CH / 64QAM

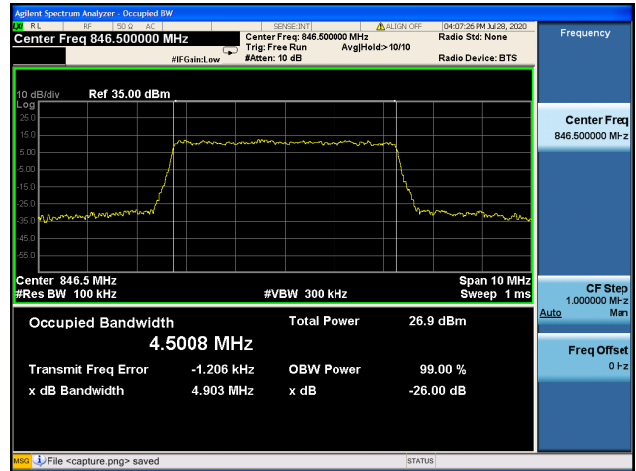




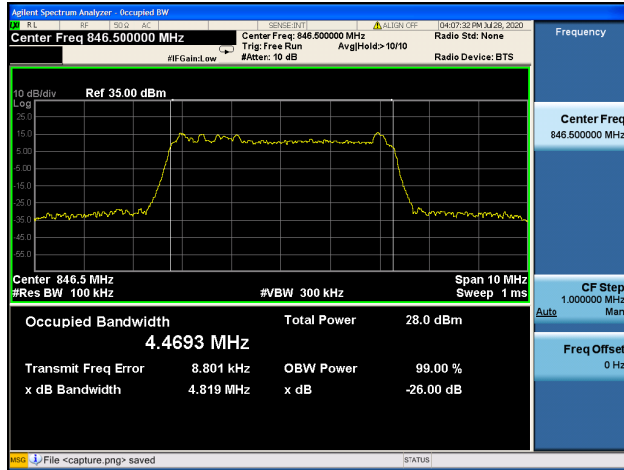
Band5 / 5MHz / High CH / QPSK



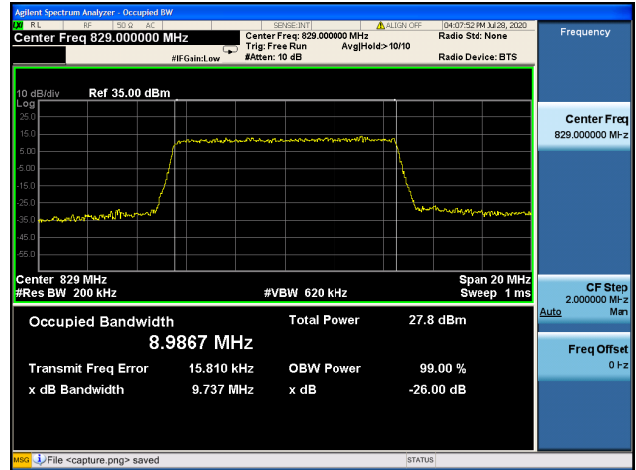
Band5 / 5MHz / High CH / 16QAM



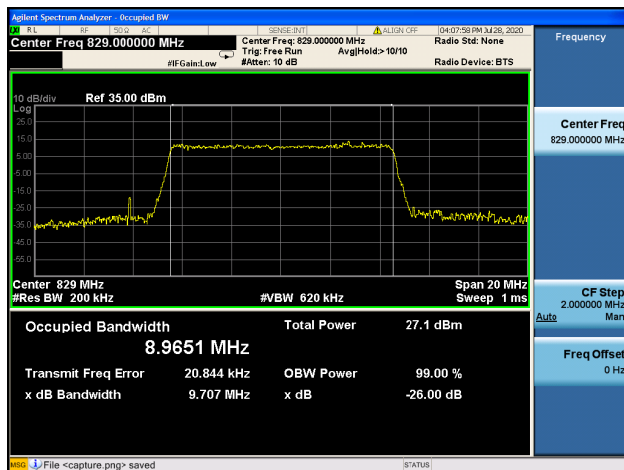
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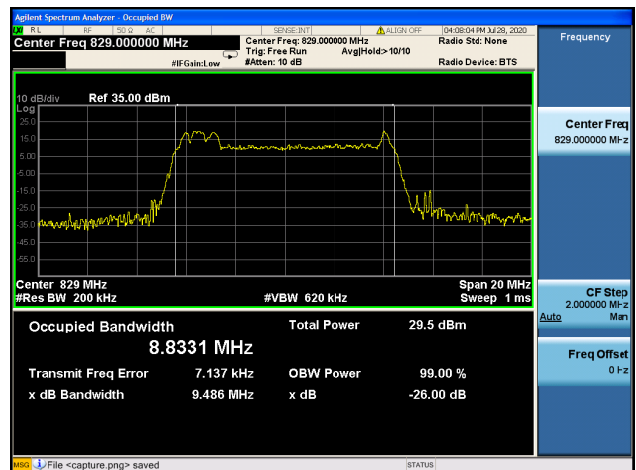
Band5 / 10MHz / Low CH / QPSK



Band5 / 10MHz / Low CH / 16QAM

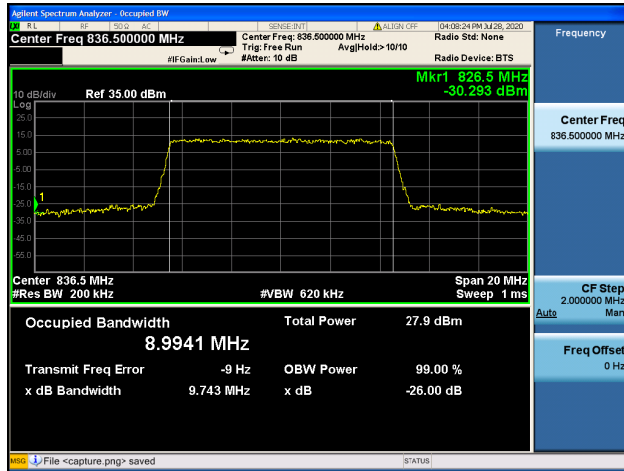


Band5 / 10MHz / Low CH / 64QAM

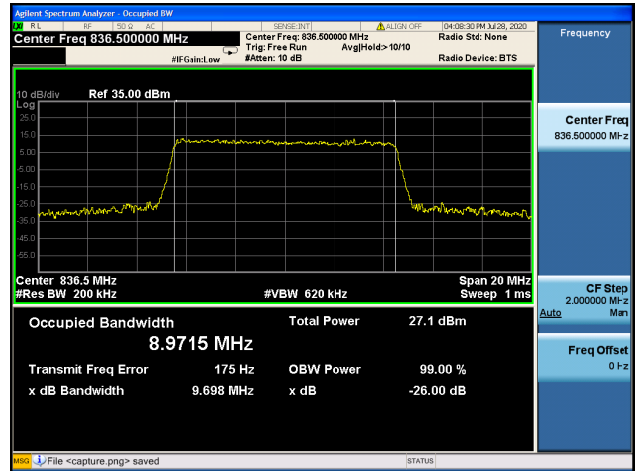




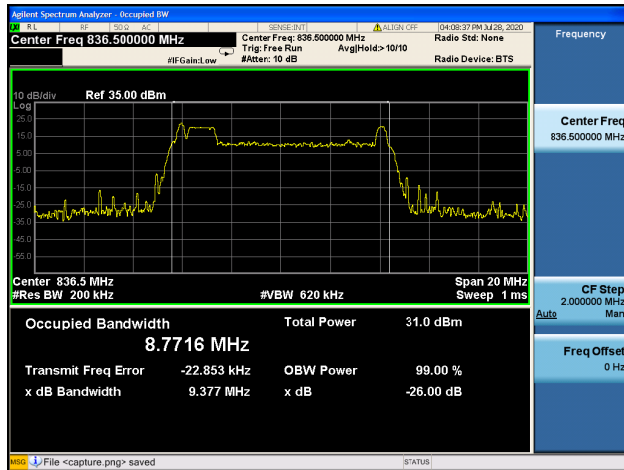
Band5 / 10MHz / Mid CH / QPSK



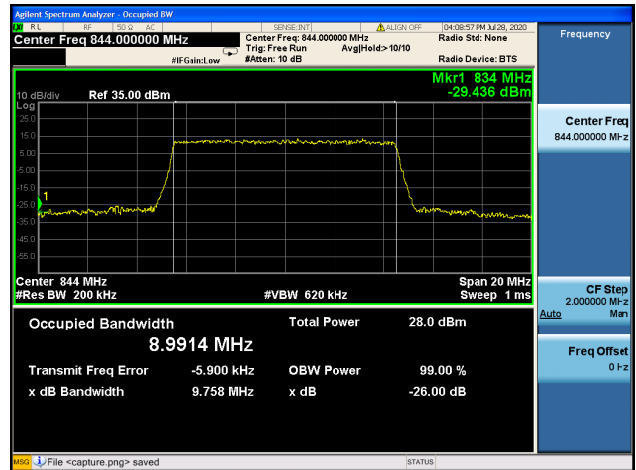
Band5 / 10MHz / Mid CH / 16QAM



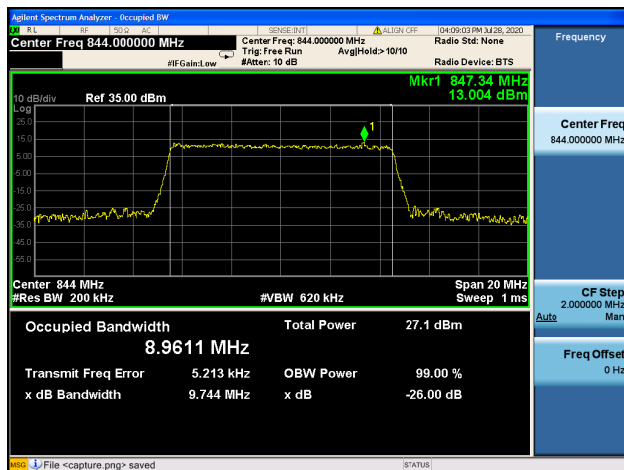
Band5 / 10MHz / Mid CH / 64QAM



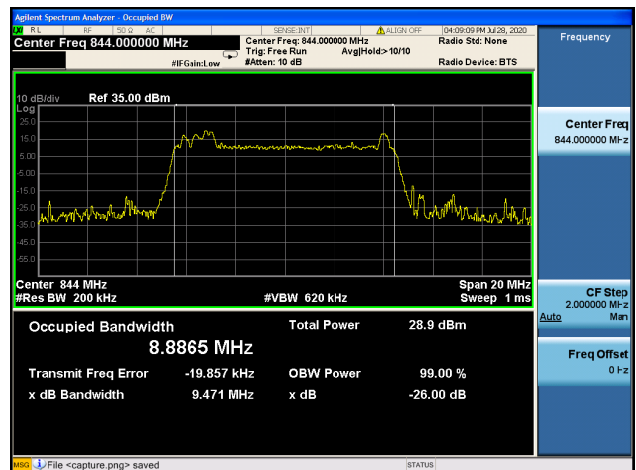
Band5 / 10MHz / High CH / QPSK



Band5 / 10MHz / High CH / 16QAM

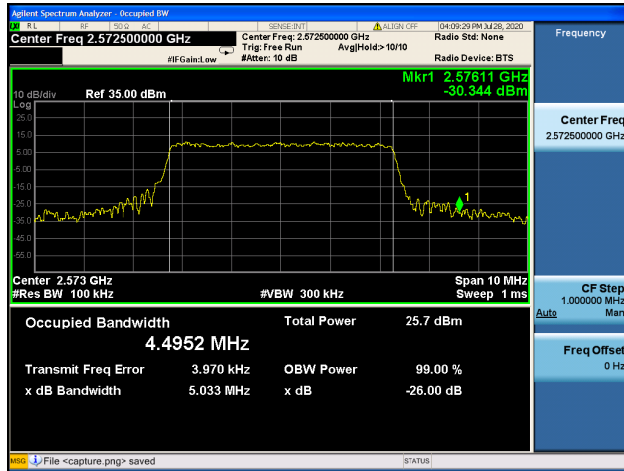


Band5 / 10MHz / High CH / 64QAM

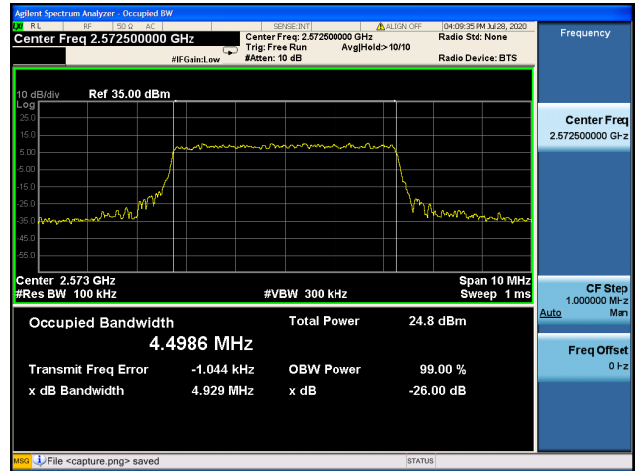




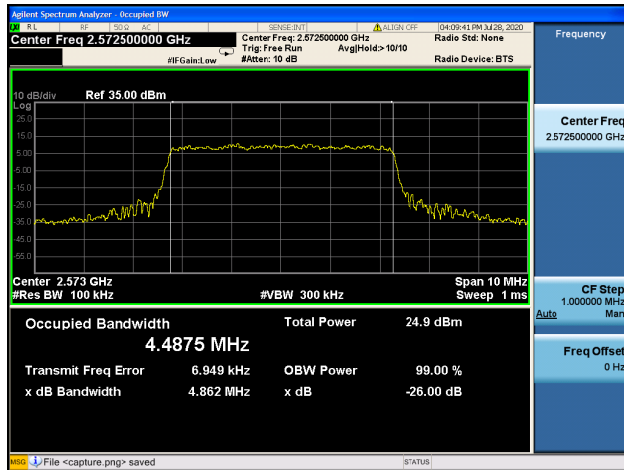
Band38 / 5MHz / Low CH / QPSK



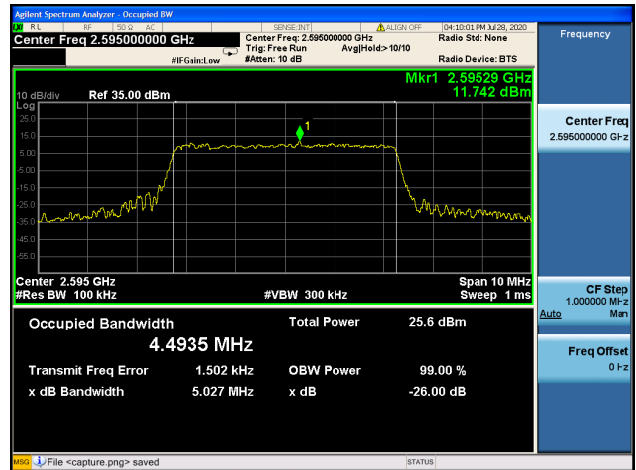
Band38 / 5MHz / Low CH / 16QAM



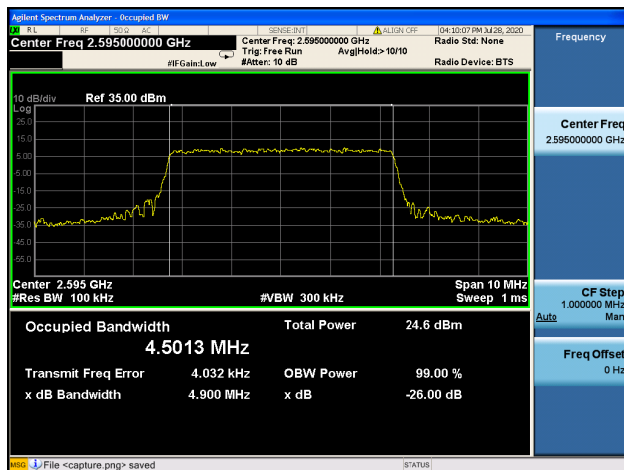
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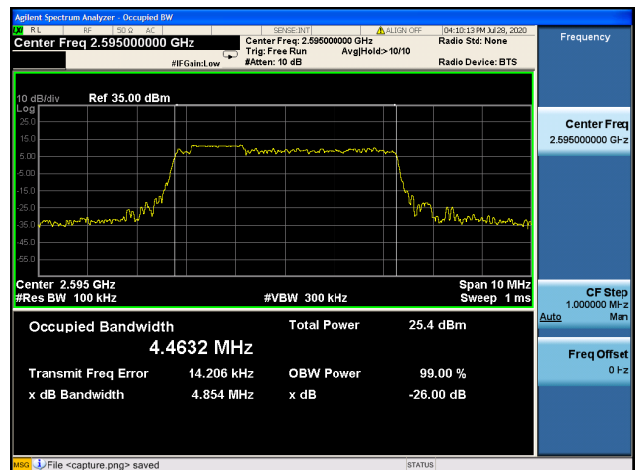
Band38 / 5MHz / Mid CH / QPSK



Band38 / 5MHz / Mid CH / 16QAM

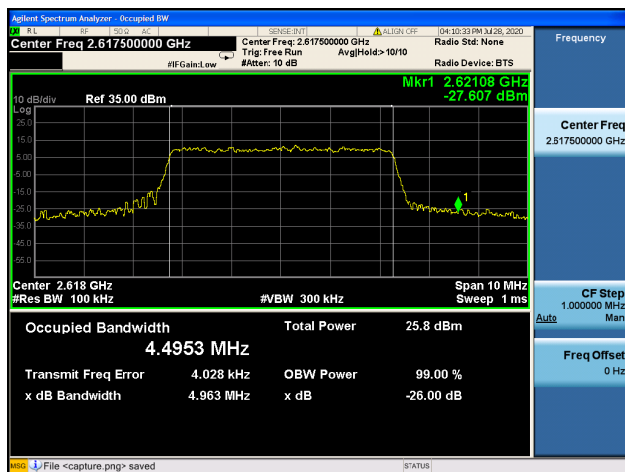


Band38 / 5MHz / Mid CH / 64QAM

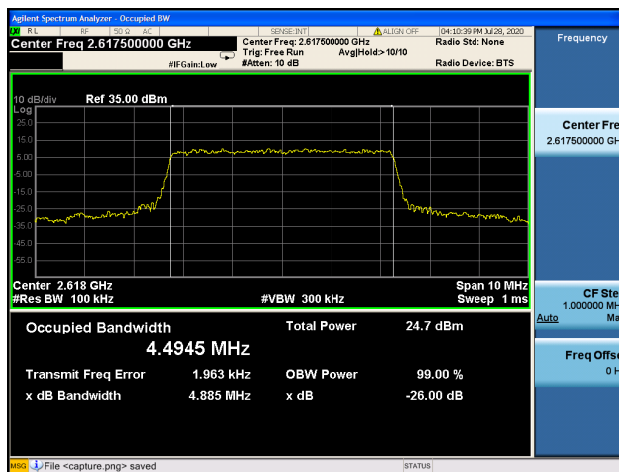




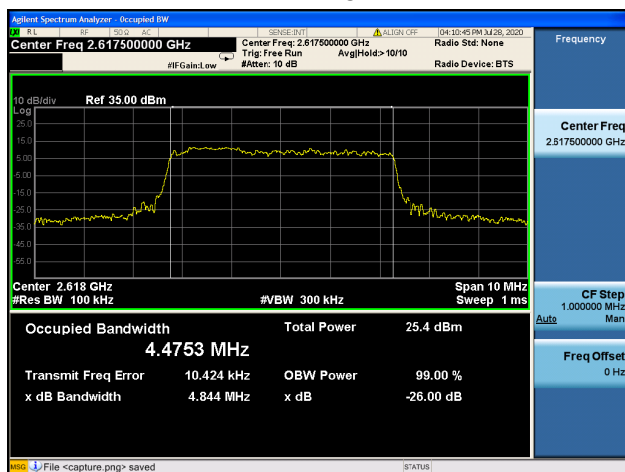
Band38 / 5MHz / High CH / QPSK



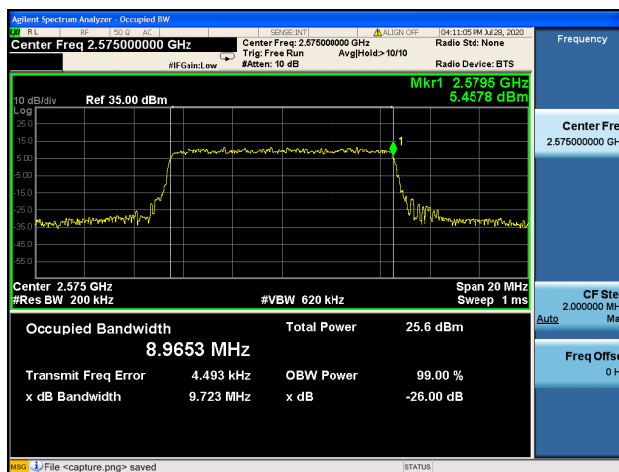
Band38 / 5MHz / High CH / 16QAM



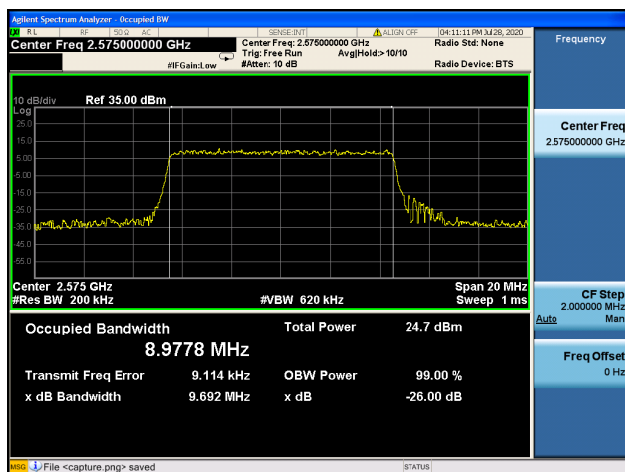
Band38 / 5MHz / High CH / 64QAM



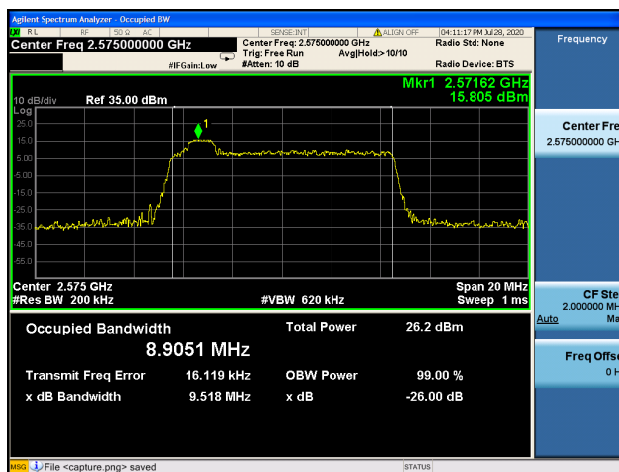
Band38 / 10MHz / Low CH / QPSK



Band38 / 10MHz / Low CH / 16QAM

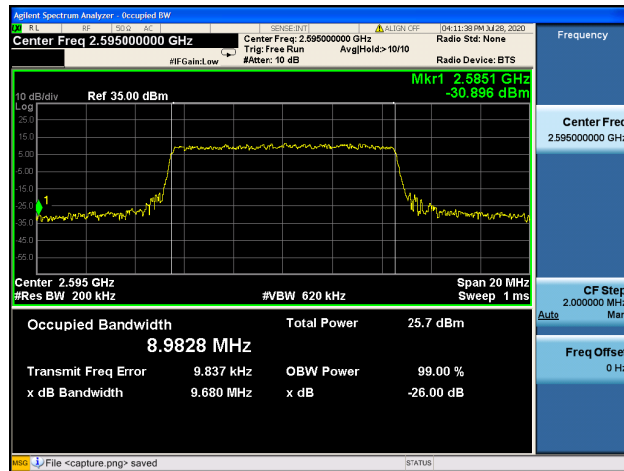


Band38 / 10MHz / Low CH / 64QAM

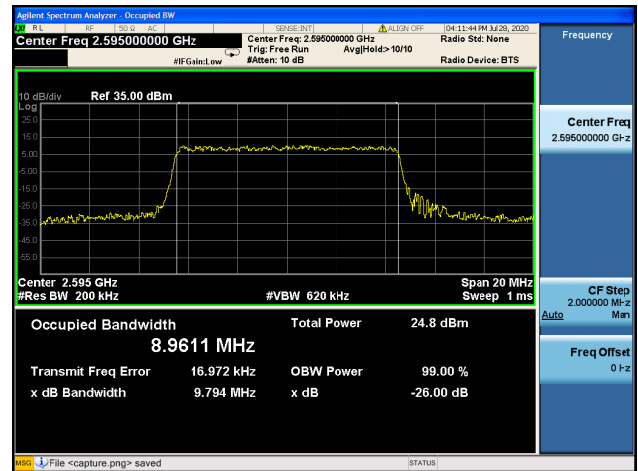




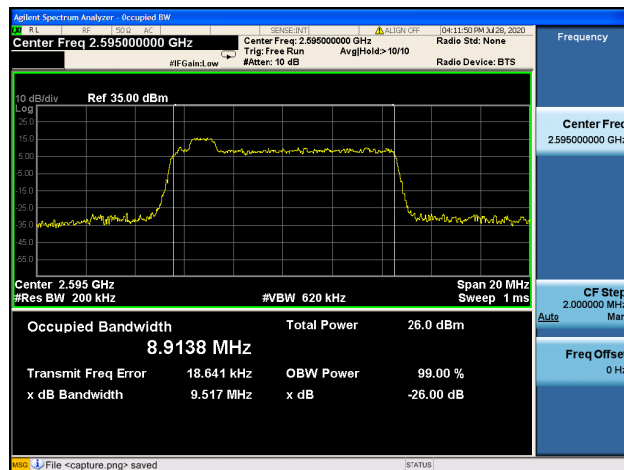
Band38 / 10MHz / Mid CH / QPSK



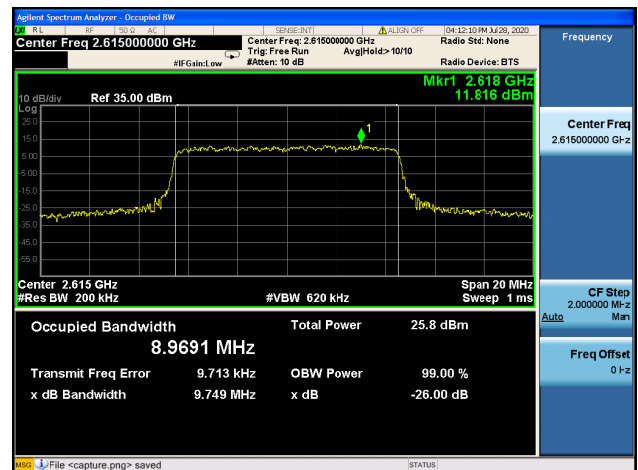
Band38 / 10MHz / Mid CH / 16QAM



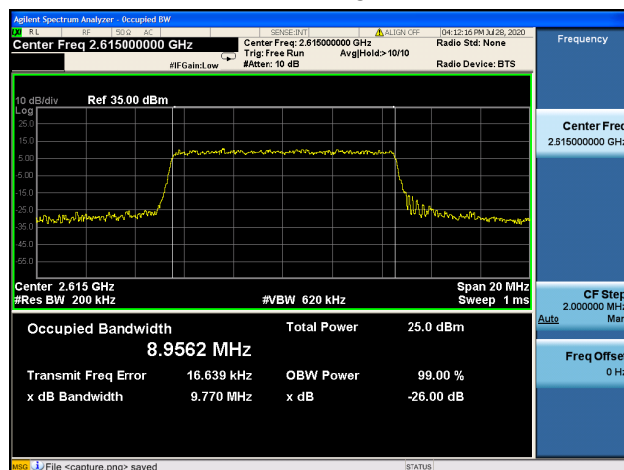
Band38 / 10MHz / Mid CH / 64QAM



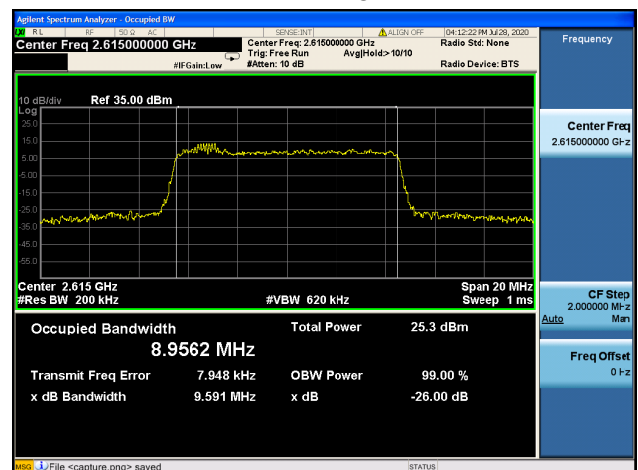
Band38 / 10MHz / High CH / QPSK



Band38 / 10MHz / High CH / 16QAM

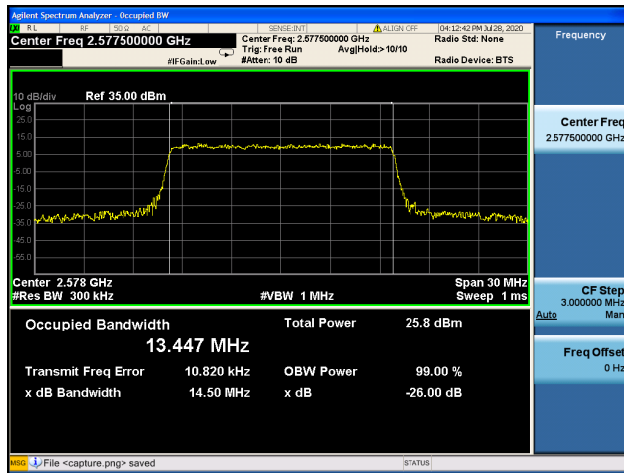


Band38 / 10MHz / High CH / 64QAM

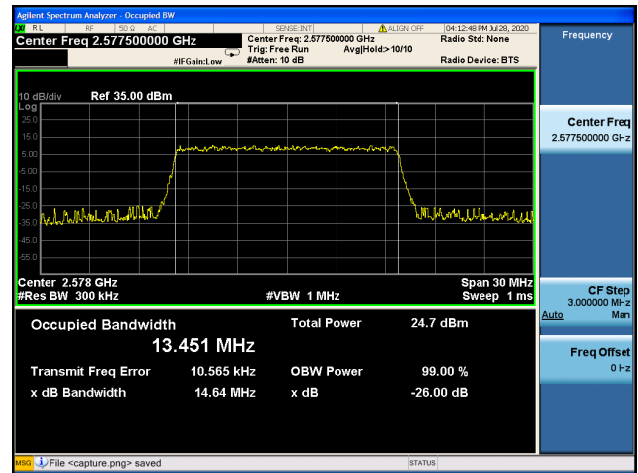




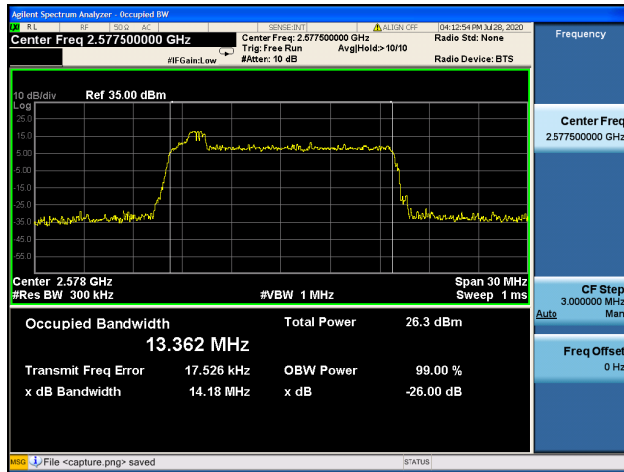
Band38 / 15MHz / Low CH / QPSK



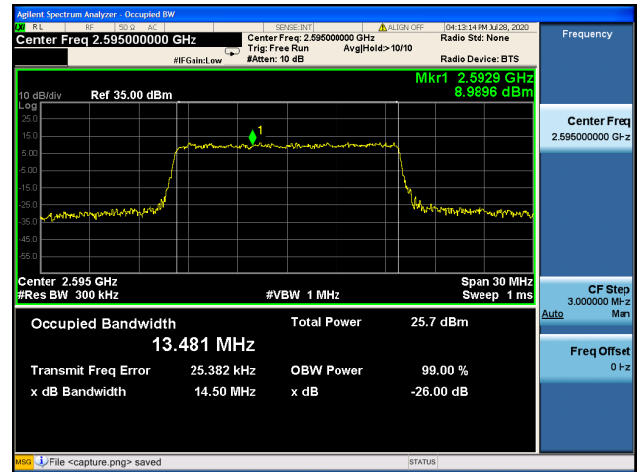
Band38 / 15MHz / Low CH / 16QAM



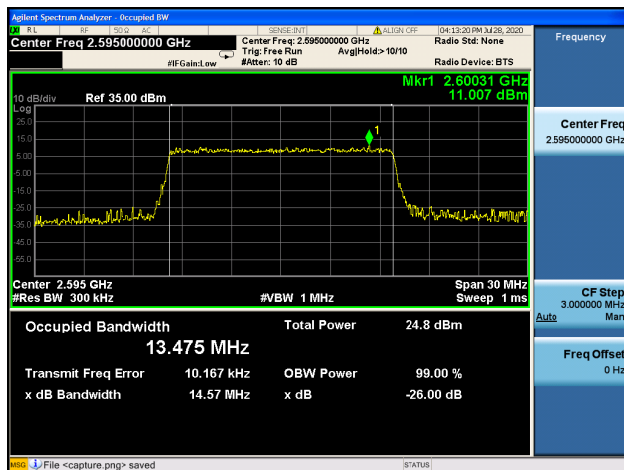
Band38 / 15MHz / Low CH / 64QAM



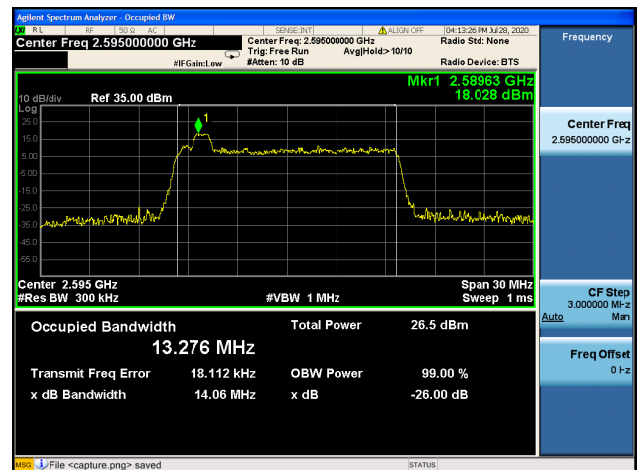
Band38 / 15MHz / Mid CH / QPSK



Band38 / 15MHz / Mid CH / 16QAM

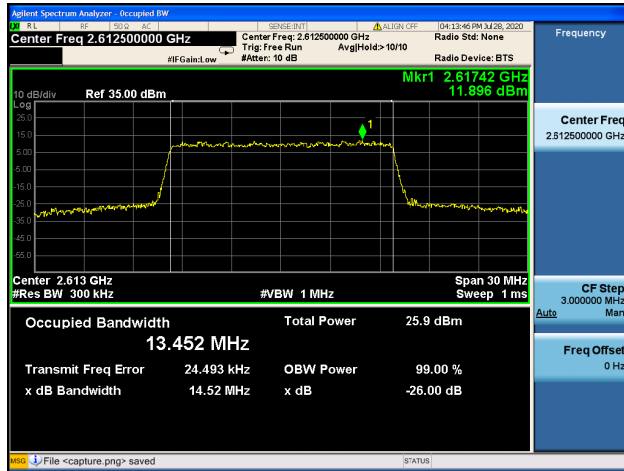


Band38 / 15MHz / Mid CH / 64QAM

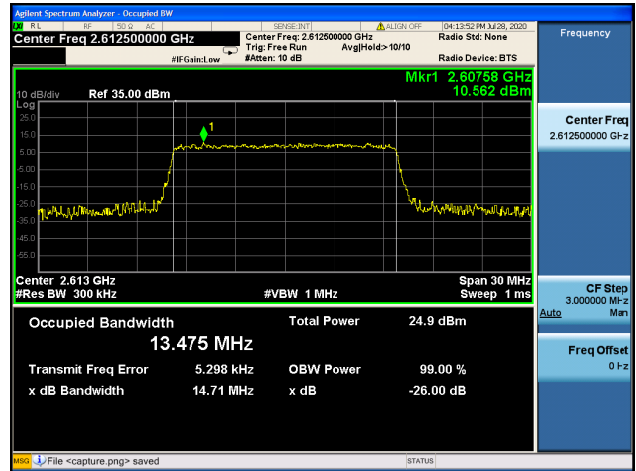




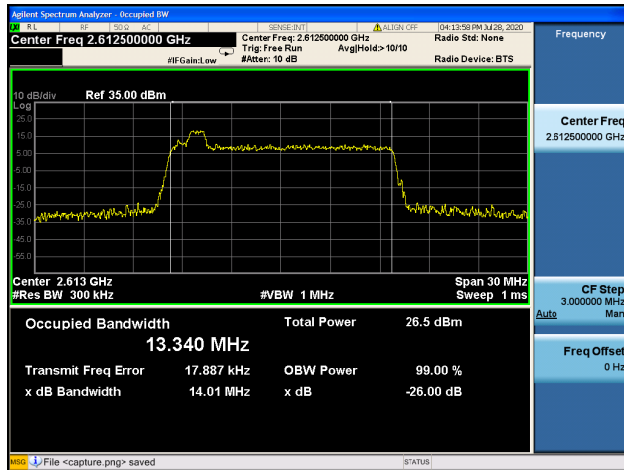
Band38 / 15MHz / High CH / QPSK



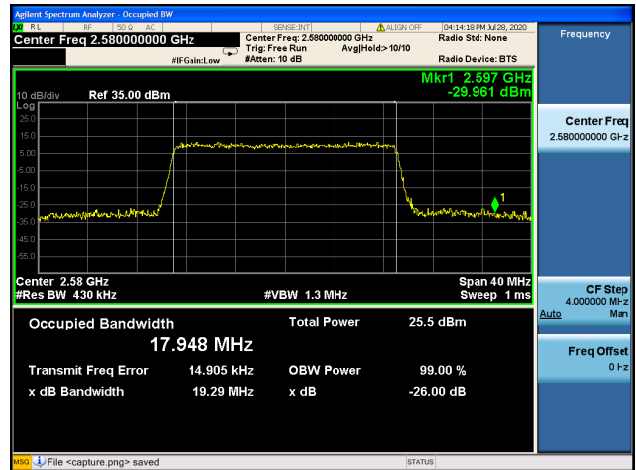
Band38 / 15MHz / High CH / 16QAM



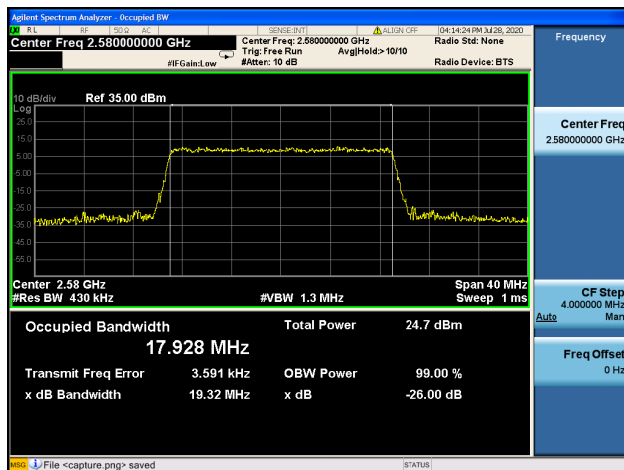
Band38 / 15MHz / High CH / 64QAM



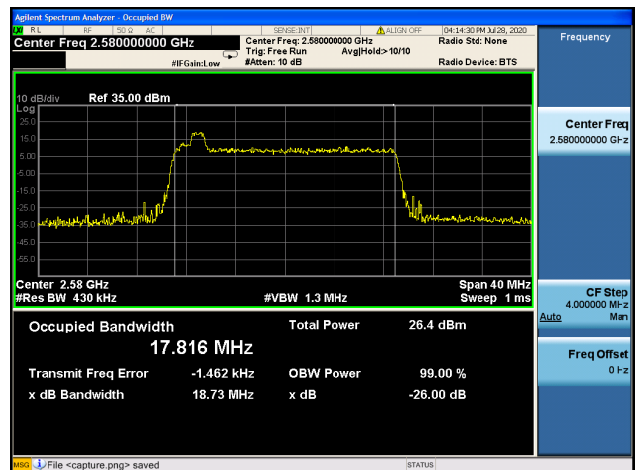
Band38 / 20MHz / Low CH / QPSK



Band38 / 20MHz / Low CH / 16QAM

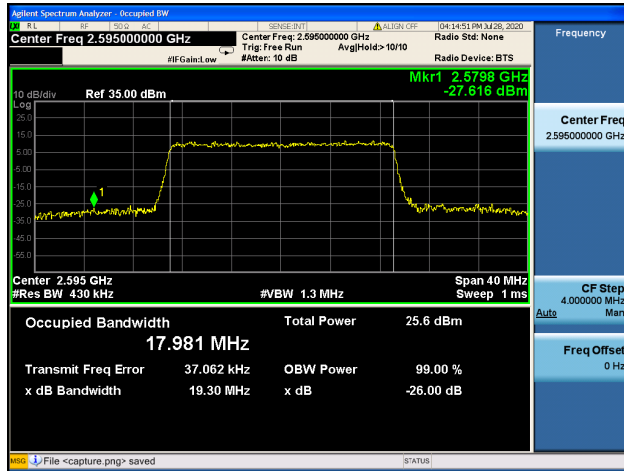


Band38 / 20MHz / Low CH / 64QAM

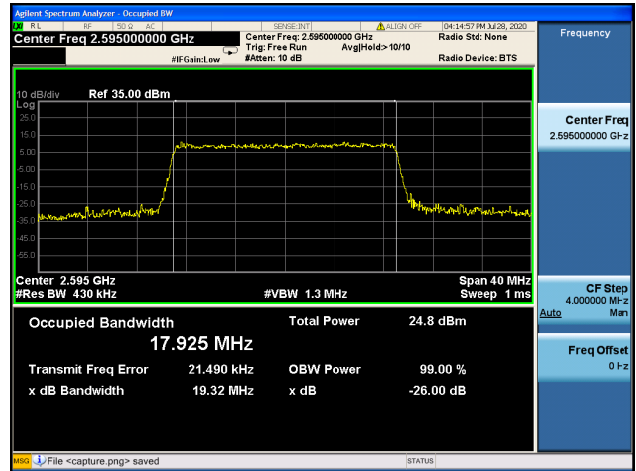




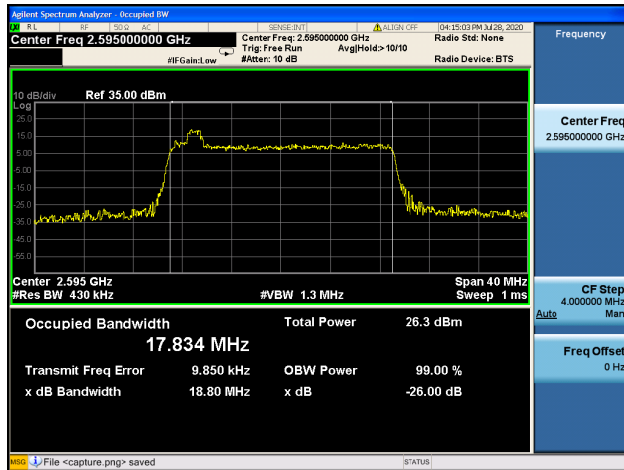
Band38 / 20MHz / Mid CH / QPSK



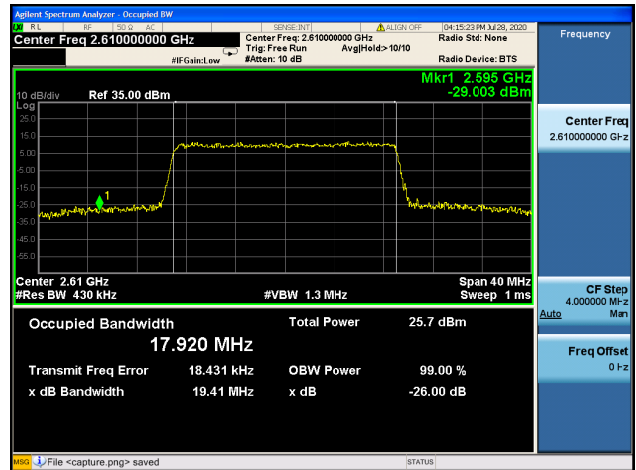
Band38 / 20MHz / Mid CH / 16QAM



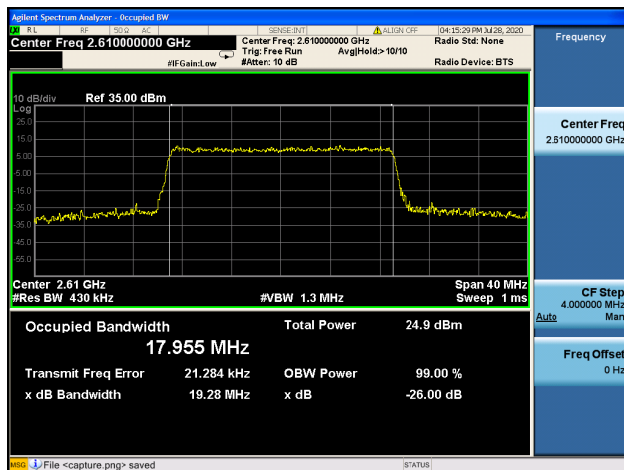
Band38 / 20MHz / Mid CH / 64QAM



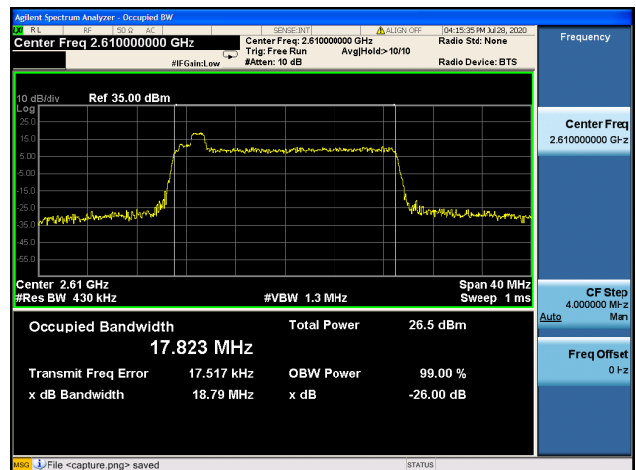
Band38 / 20MHz / High CH / QPSK



Band38 / 20MHz / High CH / 16QAM



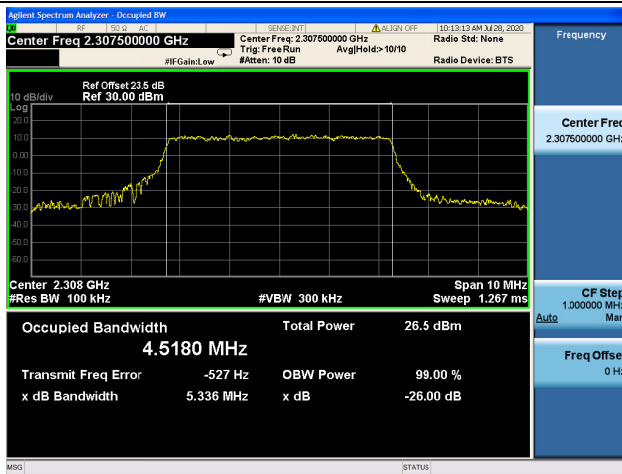
Band38 / 20MHz / High CH / 64QAM



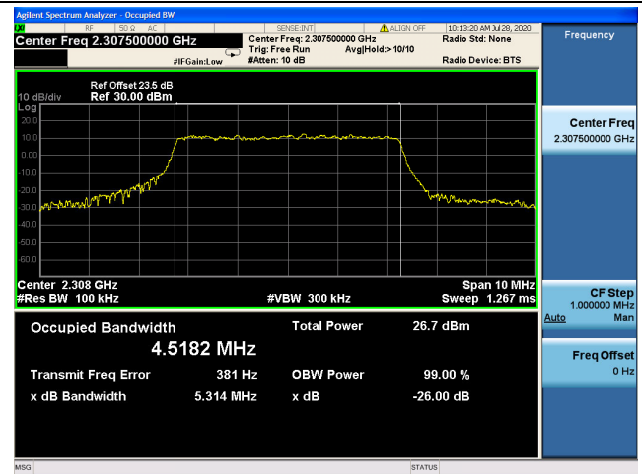


LTE Band 40 (2305 — 2315MHz)

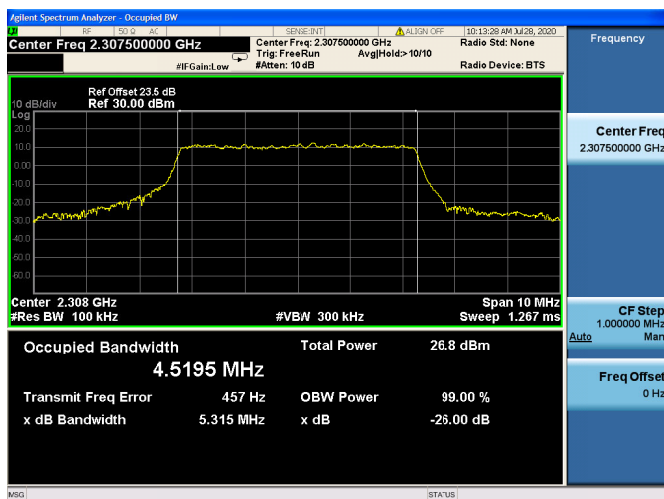
5MHz/QPSK / LCH



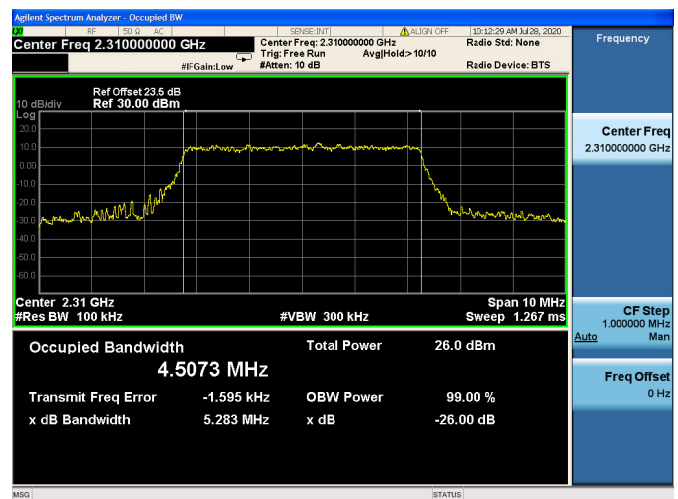
5MHz/16QAM / LCH



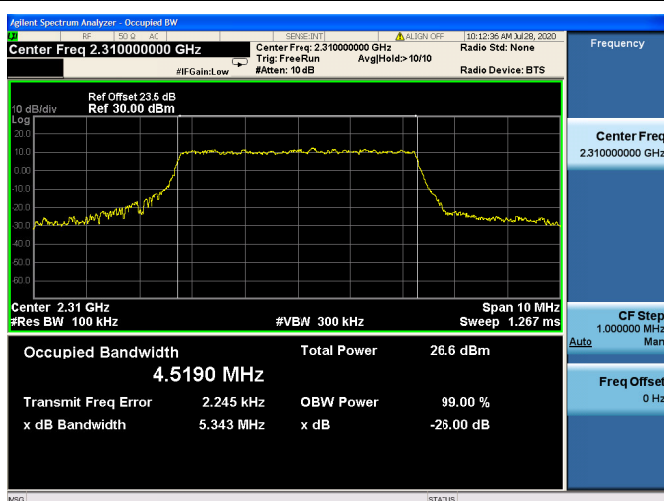
5MHz/ 64QAM / LCH



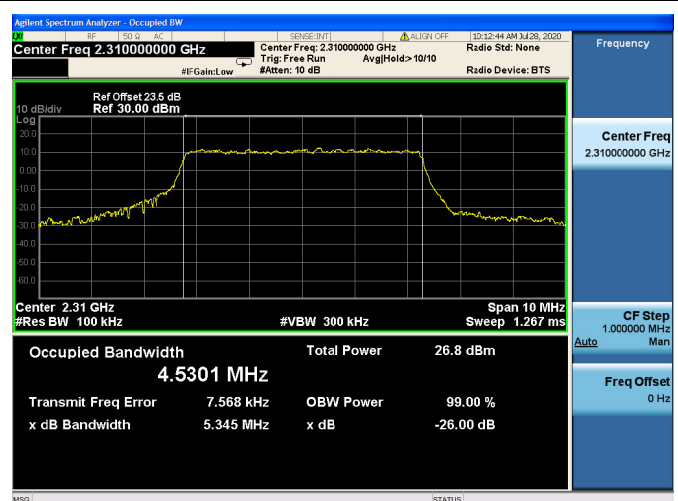
5MHz/QPSK / MCH



5MHz/ 16QAM / MCH

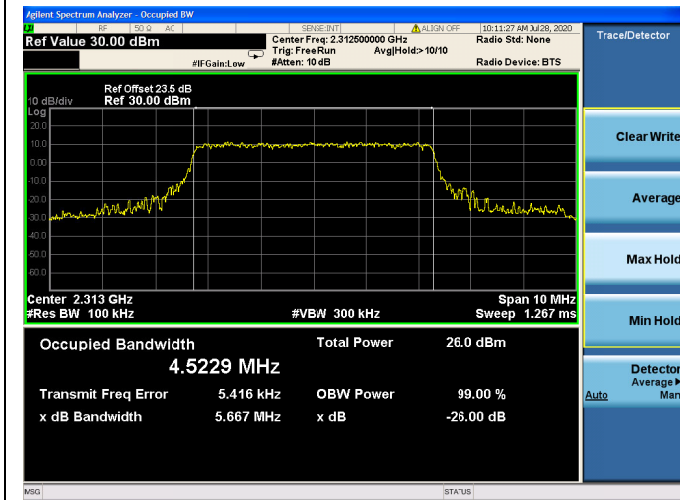


5MHz/ 64QAM / MCH

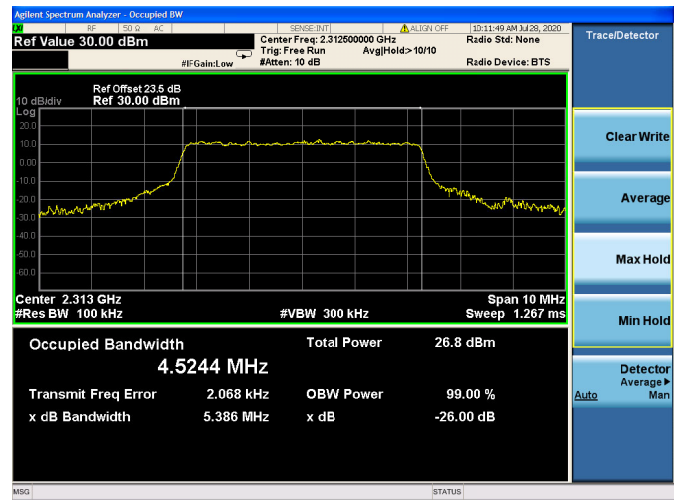




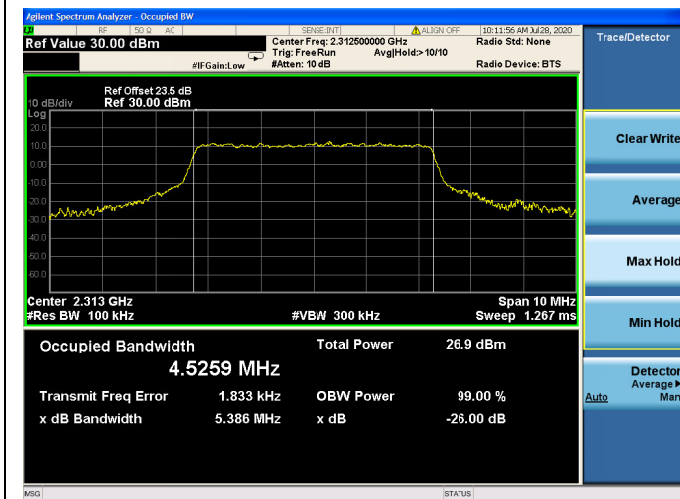
5MHz/ QPSK / HCH



5MHz/ 16QAM / HCH

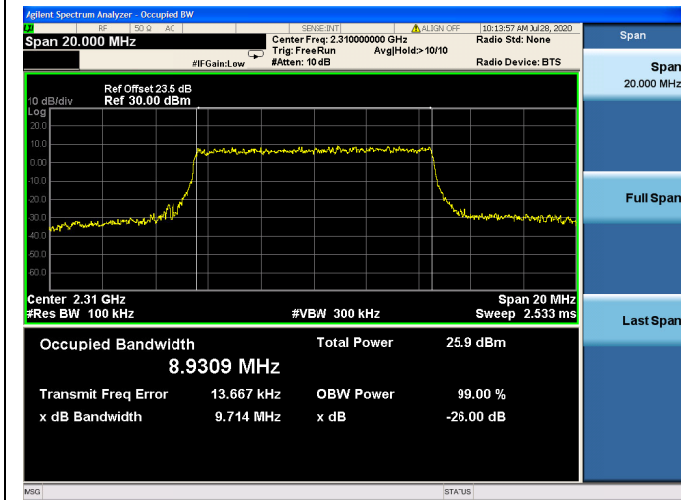


5MHz/ 64QAM / HCH





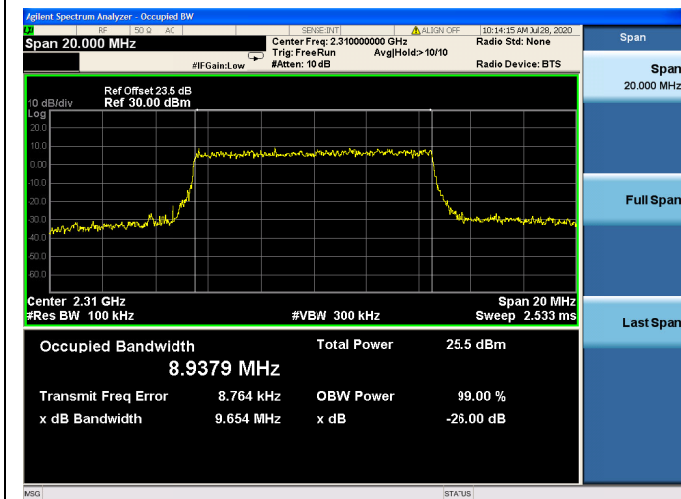
10MHz/QPSK / MCH



10MHz/ 16QAM / MCH



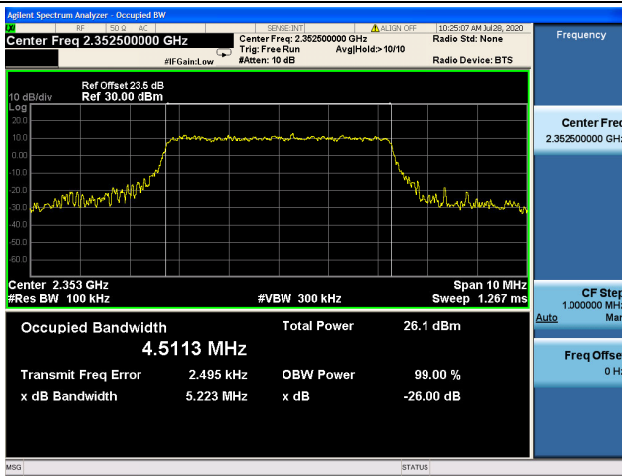
10MHz/ 64QAM / MCH



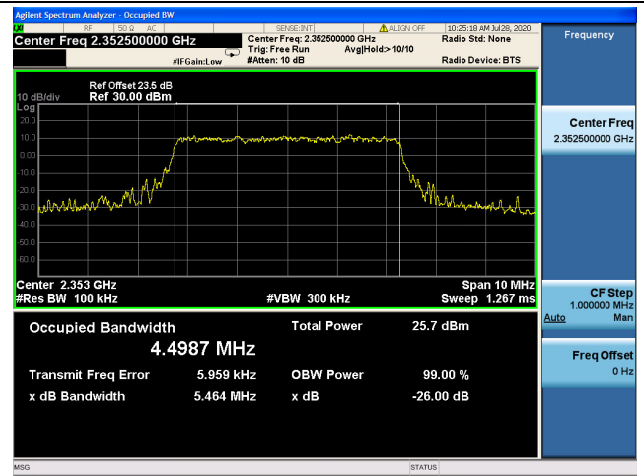


LTE Band 40 (2350 — 2360MHz)

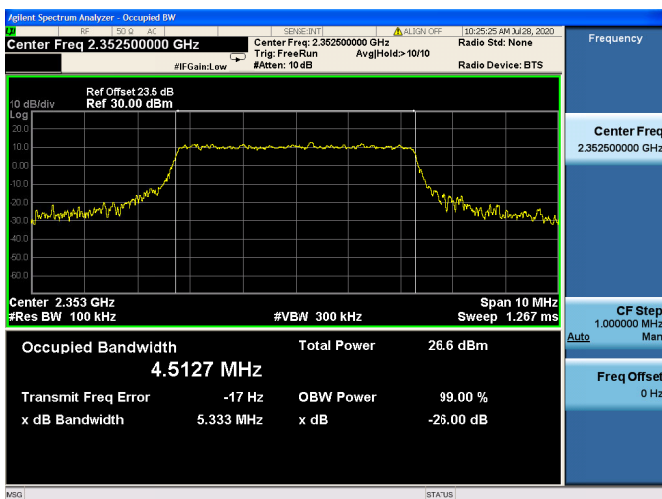
5MHz/QPSK / LCH



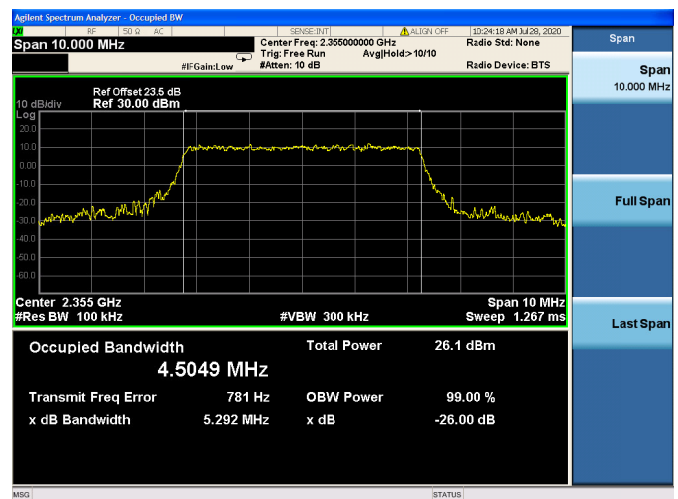
5MHz/16QAM / LCH



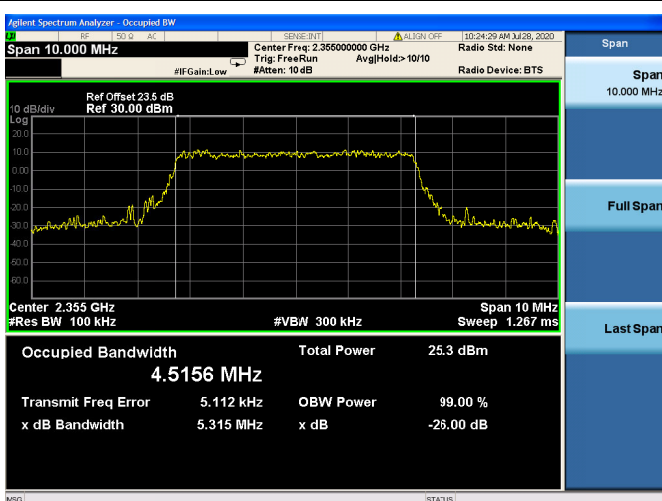
5MHz/ 64QAM / LCH



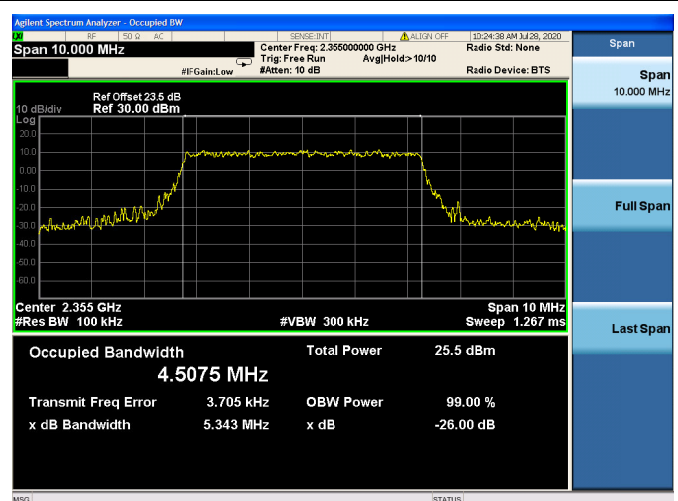
5MHz/QPSK / MCH



5MHz/ 16QAM / MCH

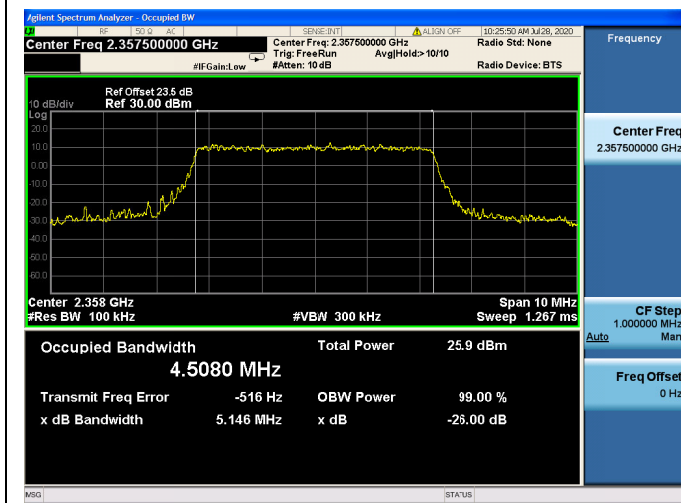


5MHz/ 64QAM / MCH

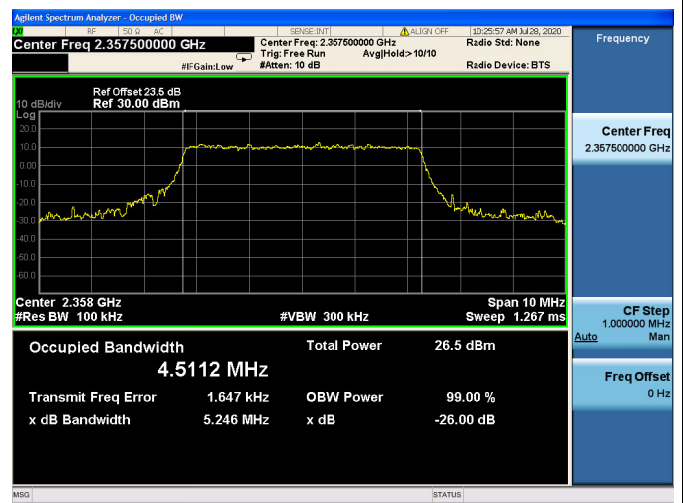




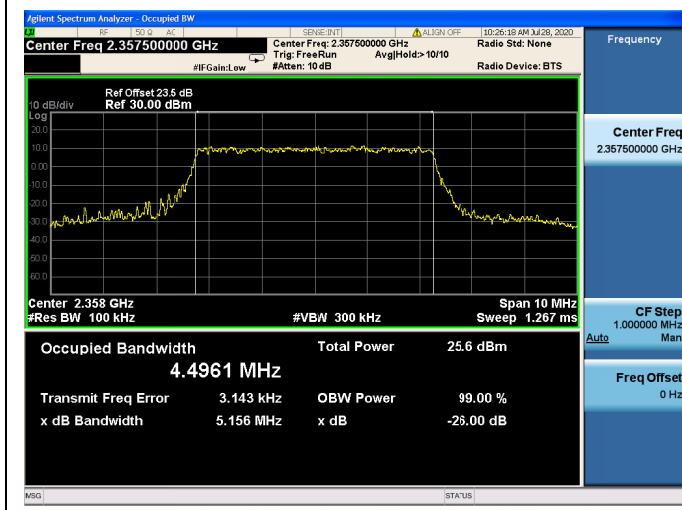
5MHz/ QPSK / HCH



5MHz/ 16QAM / HCH

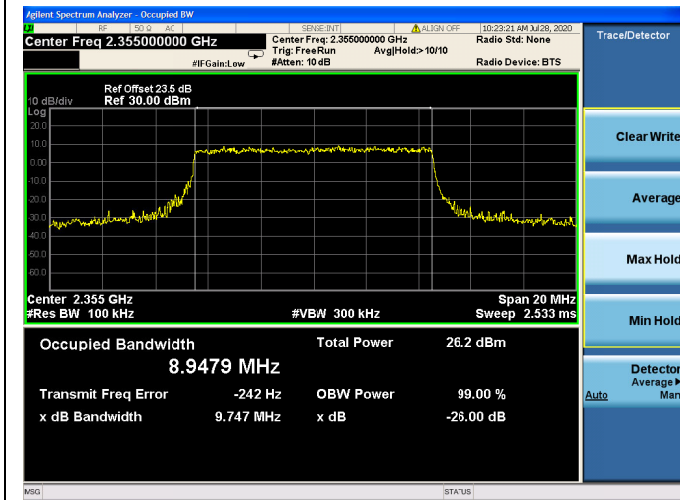


5MHz/ 64QAM / HCH

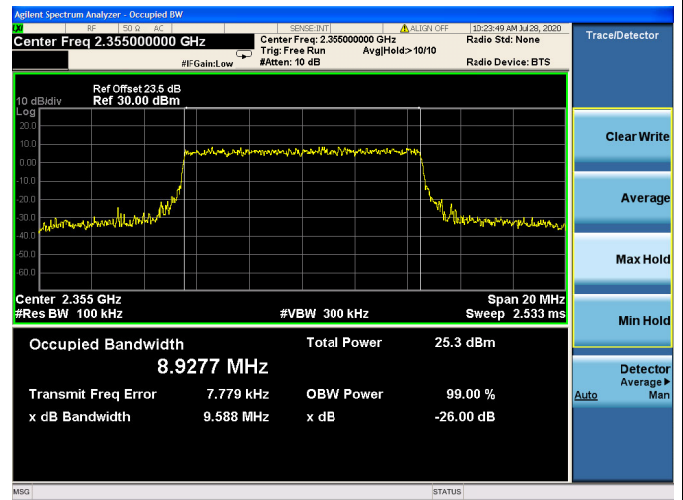




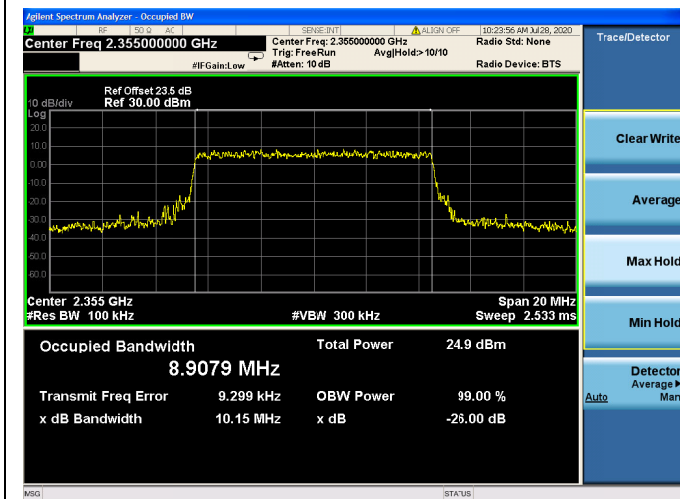
10MHz/QPSK / MCH



10MHz/ 16QAM / MCH



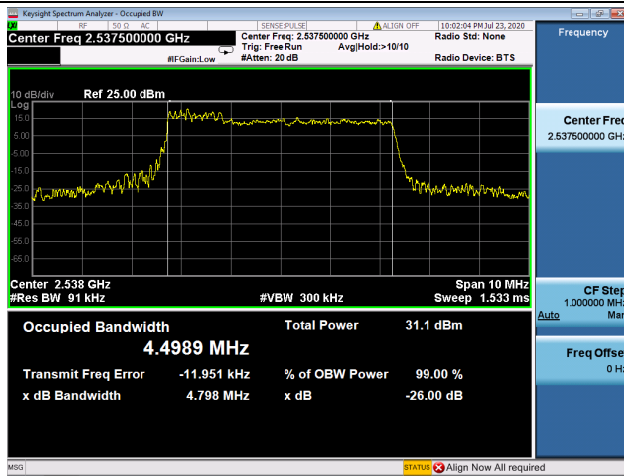
10MHz/ 64QAM / MCH



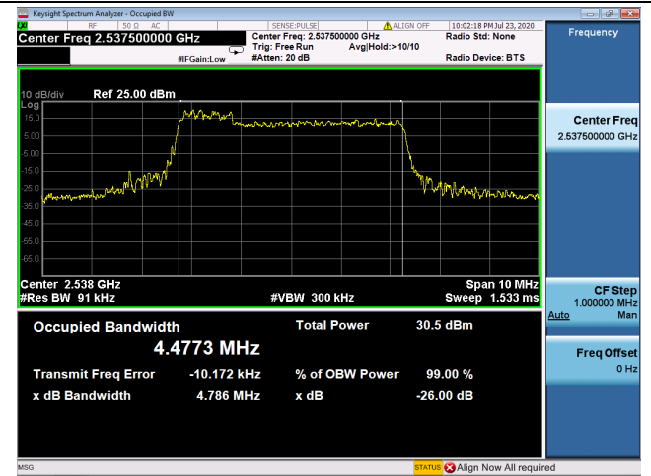


LTE Band 41

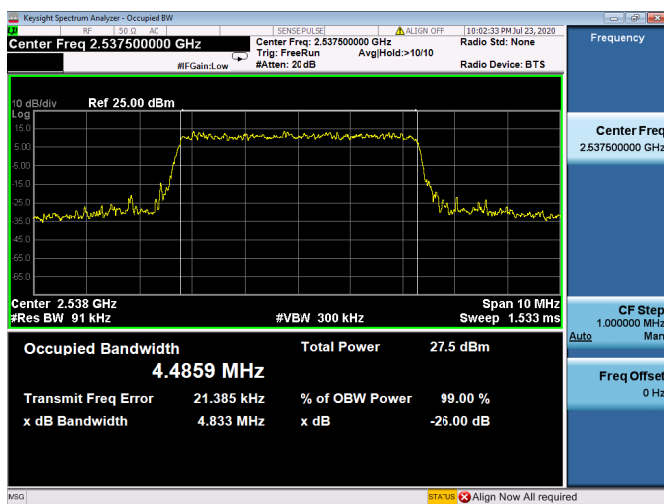
5MHz/QPSK / LCH



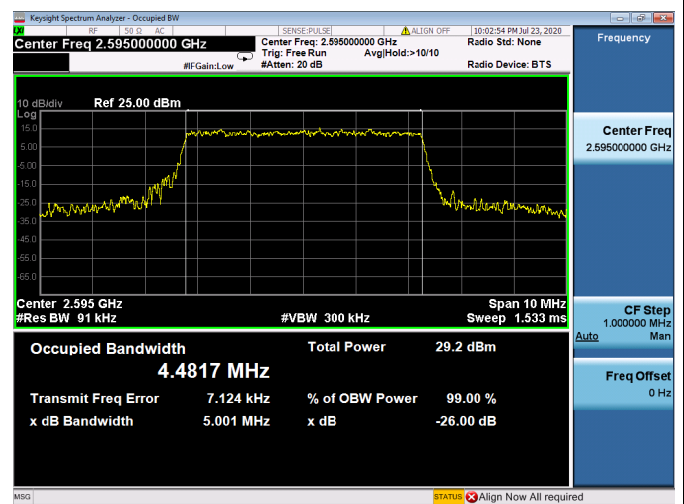
5MHz/16QAM / LCH



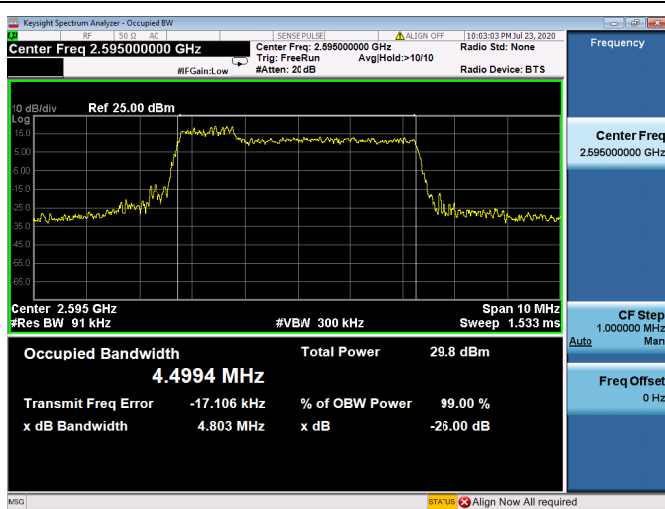
5MHz/ 64QAM / LCH



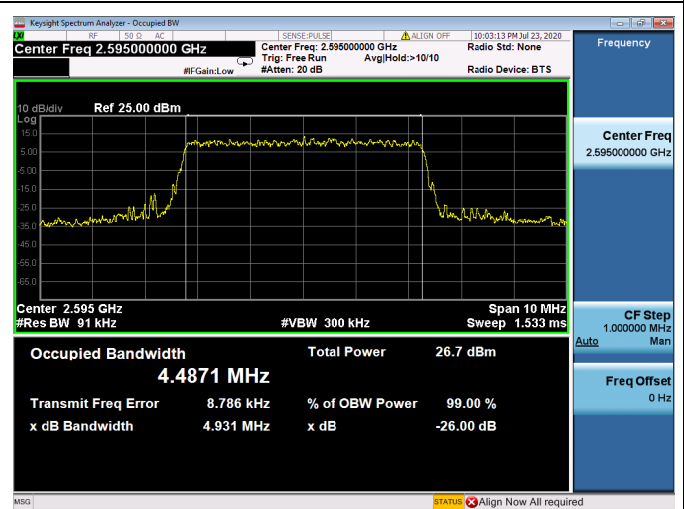
5MHz/QPSK / MCH



5MHz/ 16QAM / MCH

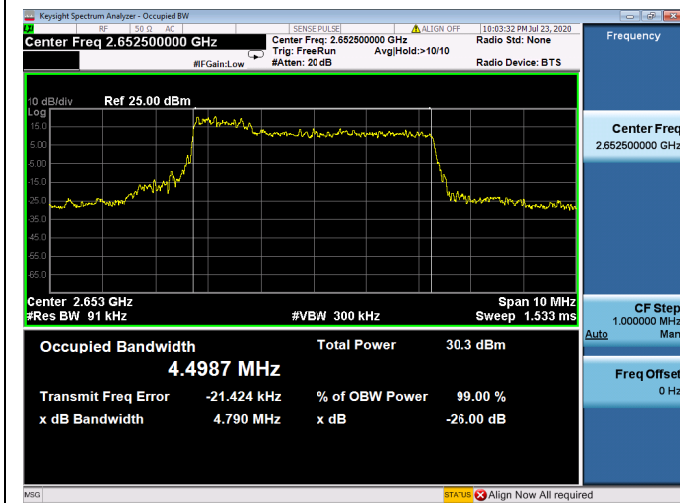


5MHz/ 64QAM / MCH

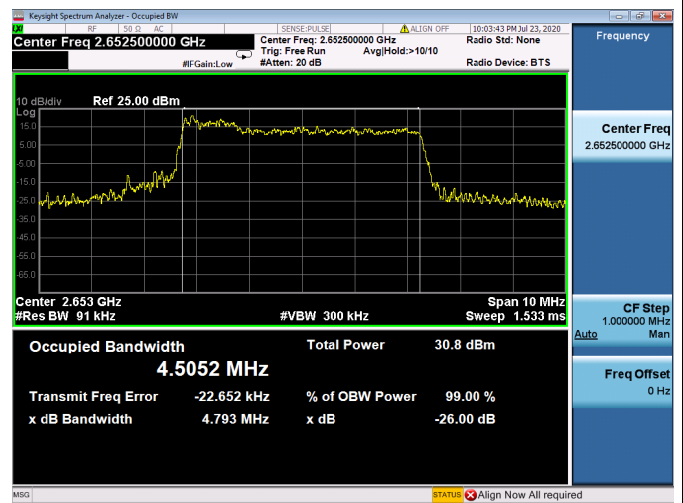




5MHz/ QPSK / HCH



5MHz/ 16QAM / HCH



5MHz/ 64QAM / HCH

