TEST REPORT

APPLICANT	:	Shenzhen Jaguar Wave Technology LTD
PRODUCT NAME	:	Wireless Gigabit Mobile Hotspot
MODEL NAME	:	JW-MRD-6001
BRAND NAME	:	JAGUAR WAVE/SUGAR lady
FCC ID	:	2ARPAJW-MRD-6001
STANDARD(S)	:	47 CFR Part 22, Subpart H 47 CFR Part 27, Subpart D&M
RECEIPT DATE	:	2019-08-02
TEST DATE	:	2019-08-06 to 2019-09-02
ISSUE DATE	:	2019-09-03

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MORLAB

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Change History		
Version	**Date**	**Reason for change**
1.0	2019-09-03	First edition

1. Technical Information

Note: Provide by applicant.

1.1. Applicant and Manufacturer Information

Applicant:	Shenzhen Jaguar Wave Technology LTD
Applicant Address:	Unit 1002/1003, Block 2A, Tongtai Times Center, No.6259 Baoan Road, Fuhai Street, Baoan District, Shenzhen City, P.R.China
Manufacturer:	Shenzhen Jaguar Wave Technology LTD
ManufacturerAddress:	Unit 1002/1003, Block 2A, Tongtai Times Center, No.6259 Baoan Road, Fuhai Street, Baoan District, Shenzhen City, P.R.China

1.2. Equipment Under Test (EUT) Description

Product Name:	Wireless Gigabit Mobile Hotspot	
Serial No:	(N/A, marked #1 by test site)	
Hardware Version:	P1	
Software Version:	1.0.201810120116	
Modulation Type:	QPSK, 16QAM, 64QAM	
Operation Band:	Band 5 / 7 / 38 / 40 / 41	
Frequency Range:	LTE Band 5	Tx: 824.7MHz -848.3MHz
		Rx: 869.7MHz – 893.3MHz
	LTE Band 7	Tx: 2502.5MHz - 2567.5MHz
		Rx: 2622.5MHz – 2687.5MHz
	LTE Band 38	Tx: 2572.5MHz - 2617.5MHz
		Rx: 2572.5MHz – 2617.5MHz
	LTE Band 40	Tx: 2307.5MHz– 2312.5MHz
		Rx: 2307.5MHz– 2312.5MHz
		Tx: 2352.5MHz– 2357.5MHz
		Rx: 2352.5MHz– 2357.5MHz
	LTE Band 41	Tx:2555MHz-2655MHz
		Rx:2555MHz-2655MHz
Channel Bandwidth	LTE Band 5	1.4MHz, 3 MHz, 5 MHz, 10MHz
	LTE Band 7	5 MHz, 10MHz, 15 MHz, 20 MHz
	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
Emission Designator:	1M09G7D (LTE Band 5, QPSK, BW 1.4MHz) 1M10W7D (LTE Band 5, 16QAM, BW 1.4MHz) 1M10D7W (LTE Band 5, 64QAM, BW 1.4MHz) 2M71G7D (LTE Band 5, QPSK, BW 3MHz) 2M70W7D (LTE Band 5, 16QAM, BW 3MHz) 2M70D7W (LTE Band 5, 64QAM, BW 3MHz) 4M50G7D (LTE Band 5, QPSK, BW 5MHz) 4M50W7D (LTE Band 5, 16QAM, BW 5MHz) 4M50D7W (LTE Band 5, 64QAM, BW 5MHz) 9M01G7D (LTE Band 5, QPSK, BW 10MHz) 8M97W7D (LTE Band 5, 16QAM, BW 10MHz) 8M97D7W (LTE Band 5, 64QAM, BW 10MHz) 4M51G7D (LTE Band 7, QPSK, BW 5MHz) 4M51W7D (LTE Band 7, 16QAM, BW 5MHz) 4M50D7W (LTE Band 7, 64QAM, BW 5MHz) 9M00G7D (LTE Band 7, QPSK, BW 10MHz) 8M97W7D (LTE Band 7, 16QAM, BW 10MHz) 8M98D7W (LTE Band 7, 64QAM, BW 10MHz) 13M50G7D (LTE Band 7, QPSK, BW 15MHz) 13M49W7D (LTE Band 7, 16QAM, BW 15MHz) 13M48D7W (LTE Band 7, 64QAM, BW 15MHz) 17M96G7D (LTE Band 7, QPSK, BW 20MHz) 18M00W7D (LTE Band 7, 16QAM, BW 20MHz) 18M01D7W (LTE Band 7, 64QAM, BW 20MHz) 4M52G7D (LTE Band 38, QPSK, BW 5MHz) 4M51W7D (LTE Band 38, 16QAM, BW 5MHz) 4M51D7W (LTE Band 38, 64QAM, BW 5MHz) 8M99G7D (LTE Band 38, QPSK, BW 10MHz) 8M98W7D (LTE Band 38, 16QAM, BW 10MHz) 8M97D7W (LTE Band 38, 64QAM, BW 10MHz) 13M50G7D (LTE Band 38, QPSK, BW 15MHz) 13M52W7D (LTE Band 38, 16QAM, BW 15MHz) 13M51D7W (LTE Band 38, 64QAM, BW 15MHz) 17M99G7D (LTE Band 38, QPSK, BW 20MHz) 17M96W7D (LTE Band 38, 16QAM, BW 20MHz) 17M99D7W (LTE Band 38, 64QAM, BW 20MHz) 4M50G7D (LTE Band 40, QPSK, BW 5MHz) 4M50W7D (LTE Band 40, 16QAM, BW 5MHz)	

	4M49D7W (LTE Band 40, 64QAM, BW 5MHz) 8M97G7D (LTE Band 40, QPSK, BW 10MHz) 8M95W7D (LTE Band 40, 16QAM, BW 10MHz) 8M96D7W (LTE Band 40, 64QAM, BW 10MHz) 4M50G7D (LTE Band 41, QPSK, BW 5MHz) 4M50W7D (LTE Band 41, 16QAM, BW 5MHz) 4M49D7W (LTE Band 41, 64QAM, BW 5MHz) 8M94G7D (LTE Band 41, QPSK, BW 10MHz) 8M92W7D (LTE Band 41, 16QAM, BW 10MHz) 8M94D7W (LTE Band 41, 64QAM, BW 10MHz) 13M51G7D (LTE Band 41, QPSK, BW 15MHz) 13M49W7D (LTE Band 41, 16QAM, BW 15MHz) 13M49D7W (LTE Band 41, 64QAM, BW 15MHz) 17M92G7D (LTE Band 41, QPSK, BW 20MHz) 17M89W7D (LTE Band 41, 16QAM, BW 20MHz) 17M90D7W (LTE Band 41, 64QAM, BW 20MHz)	
Antenna Type:	PIFA	
Antenna Gain:	LTE Band 5	2.0 dBi
	LTE Band 7	2.0 dBi
	LTE Band 38	2.0 dBi
	LTE Band 40	2.0 dBi
	LTE Band 41	2.0 dBi
Accessory Information:	Battery	
	Brand Name:	N/A
	Model No.:	JW-MRD-6001
	Serial No.:	(N/A, marked #1 by test site)
	Capacity:	4000mAh
	Rated Voltage:	3.85V
	Charge Limit:	4.40V
	AC Adapter Type1	
	Brand Name:	N/A
	Model No.:	TN-090200U1
	Serial No.:	(N/A, marked #1 by test site)
	Rated Input:	100-240V～50/60Hz 0.5A
	Rated Output:	5V⎓3A or 9V⎓2A or 12V⎓1.5A

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

1.3. 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
2.1046, 22.913(a)(2), 27.50(c)(10) 27.50(d)(4), 27.50(h)(2)	Transmitter Conducted Output Power and ERP/EIRP	Aug10, 2019 Aug12, 2019	Gao Mingzhou Peng Xuewei	PASS
2.1049	Occupied Bandwidth	Aug06-26, 2019	Gao Mingzhou	PASS
2.1055, 22.355, 27.54	Frequency Stability	Aug10, 2019	Gao Mingzhou	PASS
27.50(d)(5)	Peak to Average Radio	Aug06-26, 2019	Gao Mingzhou	PASS
2.1051, 22.917(a), 27.53(g)(h)(m)(4)	Conducted Spurious Emissions	Aug06-31, 2019	Gao Mingzhou	PASS
2.1051, 22.917(a), 27.53(g)(h)(m)(4)	Band Edge	Aug06-Setp02, 2019	Gao Mingzhou	PASS
2.1051, 22.917(a), 27.53(g)(h)(m)(4)	Radiated Spurious Emissions	Aug15, 2019	Peng Xuewei	PASS

Note 1: The tests were performed according to the method of measurements prescribed in KDB 971168 D01 V03R01 (Oct 27, 2017)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 26.5dB contains two parts that cable loss 16.5dB and Attenuator 10dB.

1.4. 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 and 27H&L&M Requirements

2.1. Transmitter Conducted Output Power And ERP/EIPR

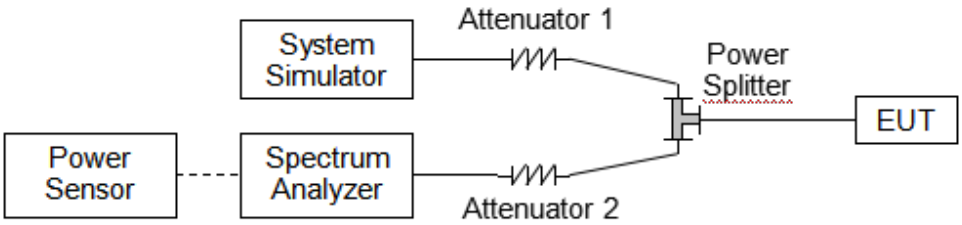
2.1.1. Requirement

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 24.232 (c) for LTE Band 2/25,Mobile and portable stations are limited to 2 watts EIRP and the equipment must employ a means for limiting power to the minimum necessary for successful communications.
According to FCC section 27.50 (d) for LTE Band 4, fixed, mobile and portable (hand-held) stations in the 1710-1755MHz band are limited to 1wat EIRP.
According to FCC section22.913 (a.2) for LTE Band 5/26, the ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 watts.
According to FCC section 27.50 (h) for LTE Band 7/41, 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.

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

2.1.2. Test Descrip



The EUTis 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.

EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)
ERP (dBm) = EIPR (dBm) - 2.15

2.1.4. Result

Transmitter 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	22.07	22.32	22.02
10	QPSK	1	25	21.96	22.19	22.31
10	QPSK	1	49	21.82	21.88	21.88
10	QPSK	25	0	21.02	21.11	21.12
10	QPSK	25	12	20.99	21.17	21.16
10	QPSK	25	25	21.03	21.03	21.03
10	QPSK	50	0	21.01	21.14	21.05
10	16QAM	1	0	21.36	21.54	21.16
10	16QAM	1	25	21.14	21.18	21.19
10	16QAM	1	49	21.20	20.77	20.83
10	16QAM	25	0	20.00	20.01	20.14
10	16QAM	25	12	19.94	20.22	20.21
10	16QAM	25	25	20.01	20.06	20.09
10	16QAM	50	0	19.99	20.06	19.96
10	64QAM	1	0	20.74	20.90	20.98
10	64QAM	1	25	20.96	20.91	20.93
10	64QAM	1	49	20.93	20.93	20.96
10	64QAM	25	0	19.89	19.95	19.91
10	64QAM	25	12	19.91	19.95	19.94
10	64QAM	25	25	19.96	19.96	19.99
10	64QAM	50	0	19.94	19.93	19.96
Channel				20425	20525	20625
Frequency (MHz)				826.5	836.5	846.5
5	QPSK	1	0	21.77	22.09	22.07
5	QPSK	1	12	21.74	22.00	21.95
5	QPSK	1	24	21.72	21.66	21.82
5	QPSK	12	0	20.72	20.84	20.88
5	QPSK	12	7	20.75	20.76	20.78

5	QPSK	12	13	20.76	20.81	20.83
5	QPSK	25	0	20.74	20.75	20.89
5	16QAM	1	0	21.22	20.87	21.39
5	16QAM	1	12	21.34	20.86	21.25
5	16QAM	1	24	21.17	21.30	21.35
5	16QAM	12	0	19.80	19.79	19.90
5	16QAM	12	7	19.73	19.72	19.92
5	16QAM	12	13	19.75	19.78	19.81
5	16QAM	25	0	19.84	19.74	19.96
5	64QAM	1	0	20.95	20.94	20.73
5	64QAM	1	12	20.97	20.89	20.94
5	64QAM	1	24	20.69	20.87	20.68
5	64QAM	12	0	19.75	19.80	19.79
5	64QAM	12	7	19.79	19.73	19.87
5	64QAM	12	13	19.71	19.80	19.71
5	64QAM	25	0	19.83	19.83	19.89

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	21.91	22.04	22.02
3	QPSK	1	8	21.83	22.06	22.08
3	QPSK	1	14	21.77	21.69	21.84
3	QPSK	8	0	20.85	20.79	20.85
3	QPSK	8	4	20.80	20.80	20.92
3	QPSK	8	7	20.87	20.76	20.87
3	QPSK	15	0	20.87	20.78	20.88
3	16QAM	1	0	21.25	20.94	21.30
3	16QAM	1	8	21.32	21.39	21.08
3	16QAM	1	14	21.20	21.04	21.01
3	16QAM	8	0	19.89	19.88	19.99
3	16QAM	8	4	19.97	19.95	19.91
3	16QAM	8	7	19.92	19.75	19.91

3	16QAM	15	0	19.82	19.87	19.80
3	64QAM	1	0	20.88	20.94	20.97
3	64QAM	1	8	20.98	20.93	20.93
3	64QAM	1	14	20.91	20.94	20.96
3	64QAM	8	0	19.78	19.81	19.94
3	64QAM	8	4	19.91	19.82	19.92
3	64QAM	8	7	19.80	19.79	19.93
3	64QAM	15	0	19.81	19.79	19.86
Channel				20407	20525	20643
Frequency (MHz)				824.7	836.5	848.3
1.4	QPSK	1	0	21.85	22.06	22.04
1.4	QPSK	1	3	21.97	22.10	22.06
1.4	QPSK	1	5	21.78	21.73	21.82
1.4	QPSK	3	0	21.85	21.74	21.95
1.4	QPSK	3	1	21.84	21.86	21.99
1.4	QPSK	3	3	21.80	21.85	21.95
1.4	QPSK	6	0	20.80	20.70	20.94
1.4	16QAM	1	0	21.15	21.05	20.94
1.4	16QAM	1	3	21.27	21.23	21.08
1.4	16QAM	1	5	20.83	21.12	20.94
1.4	16QAM	3	0	20.83	20.84	20.87
1.4	16QAM	3	1	20.78	20.95	20.93
1.4	16QAM	3	3	20.89	20.75	21.00
1.4	16QAM	6	0	19.94	19.83	19.98
1.4	64QAM	1	0	20.94	20.86	20.95
1.4	64QAM	1	3	20.97	20.94	20.98
1.4	64QAM	1	5	20.96	20.85	20.98
1.4	64QAM	3	0	21.00	20.85	20.88
1.4	64QAM	3	1	20.97	20.91	20.93
1.4	64QAM	3	3	20.90	20.64	20.77
1.4	64QAM	6	0	19.75	19.81	19.76

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	22.37	22.48	22.38
20	QPSK	1	49	22.31	22.14	22.42
20	QPSK	1	99	22.37	22.36	22.40
20	QPSK	50	0	21.37	21.45	21.09
20	QPSK	50	24	21.35	21.08	21.01
20	QPSK	50	50	21.38	21.19	21.12
20	QPSK	100	0	21.38	21.09	21.00
20	16QAM	1	0	21.34	21.30	21.64
20	16QAM	1	49	21.72	21.61	21.51
20	16QAM	1	99	21.55	21.70	21.62
20	16QAM	50	0	20.35	20.10	20.10
20	16QAM	50	24	20.46	20.09	20.00
20	16QAM	50	50	20.41	20.18	20.02
20	16QAM	100	0	20.44	20.16	20.03
20	64QAM	1	0	21.35	21.43	21.42
20	64QAM	1	49	21.40	21.13	21.02
20	64QAM	1	99	21.47	21.17	21.41
20	64QAM	50	0	20.38	20.07	19.93
20	64QAM	50	24	20.48	20.08	20.10
20	64QAM	50	50	20.41	20.20	20.00
20	64QAM	100	0	20.39	20.15	19.96

LTE Band7						
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	22.08	21.90	21.93
15	QPSK	1	37	22.45	22.02	22.02
15	QPSK	1	74	22.33	22.15	21.98
15	QPSK	36	0	21.30	20.95	20.79
15	QPSK	36	20	21.34	21.14	20.88
15	QPSK	36	39	21.35	21.10	20.93
15	QPSK	75	0	21.37	21.08	20.85
15	16QAM	1	0	21.38	20.97	21.25
15	16QAM	1	37	21.62	21.05	21.09

15	16QAM	1	74	21.47	21.56	21.38
15	16QAM	36	0	20.34	19.94	19.80
15	16QAM	36	20	20.43	20.14	20.02
15	16QAM	36	39	20.26	20.10	19.77
15	16QAM	75	0	20.34	20.07	19.98
15	64QAM	1	0	21.19	20.69	20.70
15	64QAM	1	37	21.15	21.15	21.23
15	64QAM	1	74	20.54	20.64	20.76
15	64QAM	36	0	20.45	20.11	19.83
15	64QAM	36	20	20.38	20.09	19.82
15	64QAM	36	39	20.33	20.11	19.92
15	64QAM	75	0	20.12	20.15	20.22

LTE Band7						
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	22.29	22.27	22.33
10	QPSK	1	25	22.44	22.14	21.99
10	QPSK	1	49	22.42	22.35	22.21
10	QPSK	25	0	21.55	21.58	21.53
10	QPSK	25	12	21.59	21.53	21.99
10	QPSK	25	25	21.63	21.59	21.51
10	QPSK	50	0	21.62	21.19	21.53
10	16QAM	1	0	21.61	21.52	21.49
10	16QAM	1	25	21.35	21.37	21.28
10	16QAM	1	49	21.89	21.90	21.74
10	16QAM	25	0	20.51	20.14	20.22
10	16QAM	25	12	20.51	20.11	20.03
10	16QAM	25	25	20.58	20.21	20.02
10	16QAM	50	0	20.54	20.21	20.13
10	64QAM	1	0	21.28	21.24	21.36
10	64QAM	1	25	21.35	21.45	21
10	64QAM	1	49	21.49	21.34	21.41
10	64QAM	25	0	20.47	20.08	20.05

10	64QAM	25	12	20.53	20.15	20.15
10	64QAM	25	25	20.57	20.16	20.16
10	64QAM	50	0	20.56	20.17	20.13

LTE Band7						
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	22.29	22.05	22.07
5	QPSK	1	12	22.16	21.95	22.06
5	QPSK	1	24	22.38	22.08	21.99
5	QPSK	12	0	21.46	21.02	21.05
5	QPSK	12	7	21.43	21.14	21.08
5	QPSK	12	13	21.36	21.13	21.06
5	QPSK	25	0	21.34	21.13	21.06
5	16QAM	1	0	21.97	21.31	21.59
5	16QAM	1	12	21.86	21.22	21.52
5	16QAM	1	24	21.93	21.23	21.61
5	16QAM	12	0	20.44	20.06	20.04
5	16QAM	12	7	20.41	20.18	20.10
5	16QAM	12	13	20.37	20.08	20.11
5	16QAM	25	0	20.41	20.12	20.15
5	64QAM	1	0	21.15	21.33	21.27
5	64QAM	1	12	21.25	21.27	21.01
5	64QAM	1	24	21.30	21.24	21.24
5	64QAM	12	0	20.33	20.03	20.04
5	64QAM	12	7	20.52	20.11	20.12
5	64QAM	12	13	20.40	20.00	20.12
5	64QAM	25	0	20.42	20.10	20.16

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	23.39	23.79	23.32
20	QPSK	1	49	23.40	22.92	23.04
20	QPSK	1	99	23.36	22.83	22.73
20	QPSK	50	0	22.51	22.61	22.36
20	QPSK	50	24	22.48	22.12	22.24
20	QPSK	50	50	22.46	22.11	22.10
20	QPSK	100	0	22.56	22.13	22.30
20	16QAM	1	0	22.98	22.86	22.70
20	16QAM	1	49	22.53	22.20	22.34
20	16QAM	1	99	22.53	21.92	22.03
20	16QAM	50	0	21.65	21.28	21.36
20	16QAM	50	24	21.51	21.19	21.24
20	16QAM	50	50	21.31	21.07	21.11
20	16QAM	100	0	21.61	21.21	21.15
20	64QAM	1	0	22.95	22.62	22.77
20	64QAM	1	49	22.48	21.91	22.22
20	64QAM	1	99	22.45	21.97	22.01
20	64QAM	50	0	21.67	21.19	21.23
20	64QAM	50	24	21.44	21.01	21.19
20	64QAM	50	50	21.34	21.12	21.14
20	64QAM	100	0	21.63	21.04	21.35

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	23.68	23.25	23.03
15	QPSK	1	37	23.52	23.01	22.88
15	QPSK	1	74	23.18	22.76	23.03
15	QPSK	36	0	22.50	22.10	21.98
15	QPSK	36	20	22.38	22.10	22.20
15	QPSK	36	39	22.35	21.85	22.09
15	QPSK	75	0	22.25	22.20	22.11

15	16QAM	1	0	22.82	22.57	22.55
15	16QAM	1	37	22.69	22.43	22.37
15	16QAM	1	74	22.47	22.20	22.02
15	16QAM	36	0	21.52	21.05	21.57
15	16QAM	36	20	21.30	21.05	21.19
15	16QAM	36	39	21.27	20.99	21.08
15	16QAM	75	0	21.40	21.17	21.21
15	64QAM	1	0	22.68	22.20	22.45
15	64QAM	1	37	22.35	22.18	22.10
15	64QAM	1	74	21.52	21.15	21.16
15	64QAM	36	0	21.31	21.06	21.19
15	64QAM	36	20	21.28	21.01	21.18
15	64QAM	36	39	21.38	21.16	21.19
15	64QAM	75	0	21.20	21.02	21.12

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	23.53	22.92	22.96
10	QPSK	1	25	23.04	22.75	22.61
10	QPSK	1	49	23.28	23.00	22.75
10	QPSK	25	0	22.56	21.97	22.05
10	QPSK	25	12	22.34	22.11	22.01
10	QPSK	25	25	22.25	21.90	21.89
10	QPSK	50	0	22.43	21.93	21.98
10	16QAM	1	0	22.69	22.30	22.38
10	16QAM	1	25	22.44	22.25	22.09
10	16QAM	1	49	22.49	22.10	21.88
10	16QAM	25	0	21.39	21.17	21.18
10	16QAM	25	12	21.39	20.92	21.05
10	16QAM	25	25	21.22	21.08	20.93
10	16QAM	50	0	21.30	21.03	21.09
10	64QAM	1	0	22.69	22.37	22.18
10	64QAM	1	25	22.41	22.09	22.00

10	64QAM	1	49	21.99	21.94	21.97
10	64QAM	25	0	21.54	21.10	21.12
10	64QAM	25	12	21.32	21.06	21.07
10	64QAM	25	25	21.24	20.83	20.88
10	64QAM	50	0	21.30	21.04	20.96

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				37775	38000	38225
Frequency (MHz)				2572.5	2595	2617.5
5	QPSK	1	0	23.61	22.90	22.94
5	QPSK	1	12	23.17	23.14	22.83
5	QPSK	1	24	23.41	22.92	22.79
5	QPSK	12	0	22.40	22.23	22.12
5	QPSK	12	7	22.53	22.22	21.99
5	QPSK	12	13	22.54	22.09	21.99
5	QPSK	25	0	22.47	22.17	22.00
5	16QAM	1	0	22.76	22.33	22.11
5	16QAM	1	12	22.77	22.43	22.05
5	16QAM	1	24	22.65	22.24	22.22
5	16QAM	12	0	21.59	21.22	21.21
5	16QAM	12	7	21.57	21.20	21.17
5	16QAM	12	13	21.60	21.16	21.09
5	16QAM	25	0	21.55	21.19	21.05
5	64QAM	1	0	22.73	22.10	22.22
5	64QAM	1	12	22.55	22.18	22.14
5	64QAM	1	24	22.53	22.19	22.05
5	64QAM	12	0	21.55	21.16	21.09
5	64QAM	12	7	21.64	20.95	20.96
5	64QAM	12	13	21.53	21.11	20.88
5	64QAM	25	0	21.59	21.00	20.99

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	/	22.91	/
10	QPSK	1	25	/	22.63	/
10	QPSK	1	49	/	22.40	/
10	QPSK	25	0	/	21.70	/
10	QPSK	25	12	/	21.69	/
10	QPSK	25	25	/	21.60	/
10	QPSK	50	0	/	21.81	/
10	16QAM	1	0	/	22.10	/
10	16QAM	1	25	/	21.83	/
10	16QAM	1	49	/	21.59	/
10	16QAM	25	0	/	20.81	/
10	16QAM	25	12	/	20.77	/
10	16QAM	25	25	/	20.57	/
10	16QAM	50	0	/	20.78	/
10	64QAM	1	0	/	21.99	/
10	64QAM	1	25	/	21.83	/
10	64QAM	1	49	/	21.58	/
10	64QAM	25	0	/	20.84	/
10	64QAM	25	12	/	20.78	/
10	64QAM	25	25	/	20.39	/
10	64QAM	50	0	/	20.71	/

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	22.88	22.77	22.78
5	QPSK	1	12	22.85	22.90	22.74
5	QPSK	1	24	22.62	22.69	22.70
5	QPSK	12	0	21.84	21.66	21.70

5	QPSK	12	7	21.85	21.83	21.71
5	QPSK	12	13	21.84	21.64	21.67
5	QPSK	25	0	21.80	21.79	21.68
5	16QAM	1	0	22.19	22.07	21.99
5	16QAM	1	12	21.89	21.92	22.00
5	16QAM	1	24	22.00	21.97	21.85
5	16QAM	12	0	20.87	20.91	20.84
5	16QAM	12	7	20.94	21.02	20.96
5	16QAM	12	13	20.80	20.70	20.60
5	16QAM	25	0	20.90	20.86	20.52
5	64QAM	1	0	21.77	22.05	22.08
5	64QAM	1	12	21.89	21.66	21.50
5	64QAM	1	24	21.46	21.69	21.48
5	64QAM	12	0	20.78	20.86	20.67
5	64QAM	12	7	20.85	20.83	20.80
5	64QAM	12	13	20.83	20.53	20.66
5	64QAM	25	0	20.82	20.60	20.67

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	/	22.90	/
10	QPSK	1	25	/	22.91	/
10	QPSK	1	49	/	22.77	/
10	QPSK	25	0	/	21.90	/
10	QPSK	25	12	/	21.79	/
10	QPSK	25	25	/	21.83	/
10	QPSK	50	0	/	21.80	/
10	16QAM	1	0	/	22.17	/
10	16QAM	1	25	/	22.00	/
10	16QAM	1	49	/	21.91	/
10	16QAM	25	0	/	20.83	/
10	16QAM	25	12	/	20.84	/
10	16QAM	25	25	/	20.79	/

10	16QAM	50	0	/	20.85	/
10	64QAM	1	0	/	22.02	/
10	64QAM	1	25	/	21.76	/
10	64QAM	1	49	/	21.51	/
10	64QAM	25	0	/	20.65	/
10	64QAM	25	12	/	20.77	/
10	64QAM	25	25	/	20.72	/
10	64QAM	50	0	/	20.77	/

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	22.91	22.85	22.78
5	QPSK	1	12	22.83	22.81	22.75
5	QPSK	1	24	22.83	22.63	22.74
5	QPSK	12	0	21.85	21.75	21.87
5	QPSK	12	7	21.75	21.64	21.66
5	QPSK	12	13	21.65	21.75	21.83
5	QPSK	25	0	21.70	21.79	21.86
5	16QAM	1	0	21.95	22.07	21.99
5	16QAM	1	12	22.03	21.96	22.09
5	16QAM	1	24	21.87	21.90	21.92
5	16QAM	12	0	20.87	20.77	20.92
5	16QAM	12	7	20.77	20.87	20.70
5	16QAM	12	13	20.69	20.68	20.87
5	16QAM	25	0	20.82	20.85	20.69
5	64QAM	1	0	21.69	21.92	21.74
5	64QAM	1	12	21.89	21.88	21.62
5	64QAM	1	24	21.82	21.75	21.85
5	64QAM	12	0	20.80	20.71	20.85
5	64QAM	12	7	20.78	20.82	20.86
5	64QAM	12	13	20.50	20.72	20.71
5	64QAM	25	0	20.67	20.77	20.73

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				40340	40740	41140
Frequency (MHz)				2565	2605	2645
20	QPSK	1	0	23.98	23.92	23.27
20	QPSK	1	49	23.49	23.50	22.86
20	QPSK	1	99	23.58	23.48	22.70
20	QPSK	50	0	22.83	22.58	22.28
20	QPSK	50	24	22.77	22.30	21.91
20	QPSK	50	50	22.71	22.49	21.70
20	QPSK	100	0	22.77	22.66	21.83
20	16QAM	1	0	22.95	22.89	22.41
20	16QAM	1	49	22.70	22.66	22.09
20	16QAM	1	99	22.78	22.60	21.95
20	16QAM	50	0	21.73	21.68	21.06
20	16QAM	50	24	21.76	21.39	20.92
20	16QAM	50	50	21.60	21.39	20.87
20	16QAM	100	0	21.75	21.48	21.03
20	64QAM	1	0	22.79	22.73	22.50
20	64QAM	1	49	22.67	22.41	22.08
20	64QAM	1	99	22.72	22.12	21.54
20	64QAM	50	0	21.84	21.70	21.08
20	64QAM	50	24	21.78	21.32	20.77
20	64QAM	50	50	21.52	21.32	20.79
20	64QAM	100	0	21.78	21.72	20.86

LTE Band 41						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				40315	40740	41165
Frequency (MHz)				2562.5	2605	2647.5
15	QPSK	1	0	22.79	23.59	23.01

15	QPSK	1	37	23.45	23.37	22.65
15	QPSK	1	74	23.69	23.27	22.47
15	QPSK	36	0	22.89	22.60	21.90
15	QPSK	36	20	22.74	22.61	21.97
15	QPSK	36	39	22.64	22.49	21.70
15	QPSK	75	0	22.84	22.30	21.94
15	16QAM	1	0	22.91	22.98	22.37
15	16QAM	1	37	22.88	22.84	22.16
15	16QAM	1	74	22.95	22.54	21.94
15	16QAM	36	0	21.86	21.59	20.85
15	16QAM	36	20	21.60	21.46	21.03
15	16QAM	36	39	21.61	21.37	20.65
15	16QAM	75	0	21.64	21.29	20.94
15	64QAM	1	0	22.89	22.87	22.38
15	64QAM	1	37	22.56	22.19	21.94
15	64QAM	1	74	21.87	21.71	21.18
15	64QAM	36	0	21.71	21.59	20.98
15	64QAM	36	20	21.62	21.39	20.87
15	64QAM	36	39	21.84	21.57	20.92
15	64QAM	75	0	21.56	21.36	21.50

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				40290	40740	41190
Frequency (MHz)				2550	2605	2650
10	QPSK	1	0	23.73	23.60	22.72
10	QPSK	1	25	23.68	23.41	22.85
10	QPSK	1	49	23.70	23.33	22.61
10	QPSK	25	0	22.76	22.53	21.97
10	QPSK	25	12	22.76	22.56	21.83
10	QPSK	25	25	22.72	22.29	21.64
10	QPSK	50	0	22.70	22.50	21.72
10	16QAM	1	0	22.95	22.69	22.27
10	16QAM	1	25	22.92	22.54	22.05
10	16QAM	1	49	22.87	22.54	21.92

10	16QAM	25	0	21.77	21.57	20.68
10	16QAM	25	12	21.77	21.58	20.97
10	16QAM	25	25	21.69	21.28	20.84
10	16QAM	50	0	21.68	21.52	20.85
10	64QAM	1	0	22.64	22.55	22.16
10	64QAM	1	25	22.59	22.49	22.06
10	64QAM	1	49	22.74	22.08	21.59
10	64QAM	25	0	21.72	21.29	20.94
10	64QAM	25	12	21.81	21.51	20.90
10	64QAM	25	25	21.72	21.44	20.58
10	64QAM	50	0	21.70	21.34	20.77

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				40265	40740	41215
Frequency (MHz)				2557.5	2605	2652.5
5	QPSK	1	0	23.65	23.52	22.91
5	QPSK	1	12	23.66	23.13	22.74
5	QPSK	1	24	23.55	23.38	22.52
5	QPSK	12	0	22.74	22.32	21.55
5	QPSK	12	7	22.68	22.46	21.72
5	QPSK	12	13	22.67	22.39	21.47
5	QPSK	25	0	22.67	22.26	21.78
5	16QAM	1	0	22.85	22.43	21.96
5	16QAM	1	12	22.85	22.68	21.86
5	16QAM	1	24	22.78	22.53	21.91
5	16QAM	12	0	21.75	21.54	20.65
5	16QAM	12	7	21.77	21.56	20.86
5	16QAM	12	13	21.74	21.31	20.65
5	16QAM	25	0	21.76	21.46	20.54
5	64QAM	1	0	22.83	22.63	21.99
5	64QAM	1	12	22.74	22.34	21.83
5	64QAM	1	24	22.65	22.41	21.68
5	64QAM	12	0	21.69	21.46	20.51
5	64QAM	12	7	21.73	21.51	20.82

5	64QAM	12	13	21.59	21.15	20.59
5	64QAM	25	0	21.61	21.22	20.66

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
10	QPSK	1	0	21.92	22.17	21.87
10	QPSK	1	25	21.81	22.04	22.16
10	QPSK	1	49	21.67	21.73	21.73
10	QPSK	25	0	20.87	20.96	20.97
10	QPSK	25	12	20.84	21.02	21.01
10	QPSK	25	25	20.88	20.88	20.88
10	QPSK	50	0	20.86	20.99	20.90
10	16QAM	1	0	21.21	21.39	21.01
10	16QAM	1	25	20.99	21.03	21.04
10	16QAM	1	49	21.05	20.62	20.68
10	16QAM	25	0	19.85	19.86	19.99
10	16QAM	25	12	19.79	20.07	20.06
10	16QAM	25	25	19.86	19.91	19.94
10	16QAM	50	0	19.84	19.91	19.81
10	64QAM	1	0	20.59	20.75	20.83
10	64QAM	1	25	20.81	20.76	20.78
10	64QAM	1	49	20.78	20.78	20.81
10	64QAM	25	0	19.74	19.80	19.76
10	64QAM	25	12	19.76	19.80	19.79
10	64QAM	25	25	19.81	19.81	19.84
10	64QAM	50	0	19.79	19.78	19.81
Channel				20425	20525	20625
Frequency (MHz)				826.5	836.5	846.5
5	QPSK	1	0	21.62	21.94	21.92
5	QPSK	1	12	21.59	21.85	21.80

5	QPSK	1	24	21.57	21.51	21.67
5	QPSK	12	0	20.57	20.69	20.73
5	QPSK	12	7	20.60	20.61	20.63
5	QPSK	12	13	20.61	20.66	20.68
5	QPSK	25	0	20.59	20.60	20.74
5	16QAM	1	0	21.07	20.72	21.24
5	16QAM	1	12	21.19	20.71	21.10
5	16QAM	1	24	21.02	21.15	21.20
5	16QAM	12	0	19.65	19.64	19.75
5	16QAM	12	7	19.58	19.57	19.77
5	16QAM	12	13	19.60	19.63	19.66
5	16QAM	25	0	19.69	19.59	19.81
5	64QAM	1	0	20.80	20.79	20.58
5	64QAM	1	12	20.82	20.74	20.79
5	64QAM	1	24	20.54	20.72	20.53
5	64QAM	12	0	19.60	19.65	19.64
5	64QAM	12	7	19.64	19.58	19.72
5	64QAM	12	13	19.56	19.65	19.56
5	64QAM	25	0	19.68	19.68	19.74

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
3	QPSK	1	0	21.76	21.89	21.87
3	QPSK	1	8	21.68	21.91	21.93
3	QPSK	1	14	21.62	21.54	21.69
3	QPSK	8	0	20.70	20.64	20.70
3	QPSK	8	4	20.65	20.65	20.77
3	QPSK	8	7	20.72	20.61	20.72
3	QPSK	15	0	20.72	20.63	20.73
3	16QAM	1	0	21.10	20.79	21.15
3	16QAM	1	8	21.17	21.24	20.93
3	16QAM	1	14	21.05	20.89	20.86
3	16QAM	8	0	19.74	19.73	19.84
3	16QAM	8	4	19.82	19.80	19.76
3	16QAM	8	7	19.77	19.60	19.76

3	16QAM	15	0	19.67	19.72	19.65
3	64QAM	1	0	20.73	20.79	20.82
3	64QAM	1	8	20.83	20.78	20.78
3	64QAM	1	14	20.76	20.79	20.81
3	64QAM	8	0	19.63	19.66	19.79
3	64QAM	8	4	19.76	19.67	19.77
3	64QAM	8	7	19.65	19.64	19.78
3	64QAM	15	0	19.66	19.64	19.71
Channel				20407	20525	20643
Frequency (MHz)				824.7	836.5	848.3
1.4	QPSK	1	0	21.70	21.91	21.89
1.4	QPSK	1	3	21.82	21.95	21.91
1.4	QPSK	1	5	21.63	21.58	21.67
1.4	QPSK	3	0	21.70	21.59	21.80
1.4	QPSK	3	1	21.69	21.71	21.84
1.4	QPSK	3	3	21.65	21.70	21.80
1.4	QPSK	6	0	20.65	20.55	20.79
1.4	16QAM	1	0	21.00	20.90	20.79
1.4	16QAM	1	3	21.12	21.08	20.93
1.4	16QAM	1	5	20.68	20.97	20.79
1.4	16QAM	3	0	20.68	20.69	20.72
1.4	16QAM	3	1	20.63	20.80	20.78
1.4	16QAM	3	3	20.74	20.60	20.85
1.4	16QAM	6	0	19.79	19.68	19.83
1.4	64QAM	1	0	20.79	20.71	20.80
1.4	64QAM	1	3	20.82	20.79	20.83
1.4	64QAM	1	5	20.81	20.70	20.83
1.4	64QAM	3	0	20.85	20.70	20.73
1.4	64QAM	3	1	20.82	20.76	20.78
1.4	64QAM	3	3	20.75	20.49	20.62
1.4	64QAM	6	0	19.60	19.66	19.61

LTE Band7				**Measured EIRP**		
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
20	QPSK	1	0	26.37	26.48	26.38
20	QPSK	1	49	26.31	26.14	26.42
20	QPSK	1	99	26.37	26.36	26.40
20	QPSK	50	0	25.37	25.45	25.09
20	QPSK	50	24	25.35	25.08	25.01
20	QPSK	50	50	25.38	25.19	25.12
20	QPSK	100	0	25.38	25.09	25.00
20	16QAM	1	0	25.34	25.30	25.64
20	16QAM	1	49	25.72	25.61	25.51
20	16QAM	1	99	25.55	25.70	25.62
20	16QAM	50	0	24.35	24.10	24.10
20	16QAM	50	24	24.46	24.09	24.00
20	16QAM	50	50	24.41	24.18	24.02
20	16QAM	100	0	24.44	24.16	24.03
20	64QAM	1	0	25.35	25.43	25.42
20	64QAM	1	49	25.40	25.13	25.02
20	64QAM	1	99	25.47	25.17	25.41
20	64QAM	50	0	24.38	24.07	23.93
20	64QAM	50	24	24.48	24.08	24.10
20	64QAM	50	50	24.41	24.20	24.00
20	64QAM	100	0	24.39	24.15	23.96

LTE Band7				**Measured EIRP**		
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
15	QPSK	1	0	26.08	25.90	25.93
15	QPSK	1	37	26.45	26.02	26.02
15	QPSK	1	74	26.33	26.15	25.98
15	QPSK	36	0	25.30	24.95	24.79
15	QPSK	36	20	25.34	25.14	24.88
15	QPSK	36	39	25.35	25.10	24.93
15	QPSK	75	0	25.37	25.08	24.85
15	16QAM	1	0	25.38	24.97	25.25

15	16QAM	1	37	25.62	25.05	25.09
15	16QAM	1	74	25.47	25.56	25.38
15	16QAM	36	0	24.34	23.94	23.80
15	16QAM	36	20	24.43	24.14	24.02
15	16QAM	36	39	24.26	24.10	23.77
15	16QAM	75	0	24.34	24.07	23.98
15	64QAM	1	0	25.19	24.69	24.70
15	64QAM	1	37	25.15	25.15	25.23
15	64QAM	1	74	24.54	24.64	24.76
15	64QAM	36	0	24.45	24.11	23.83
15	64QAM	36	20	24.38	24.09	23.82
15	64QAM	36	39	24.33	24.11	23.92
15	64QAM	75	0	24.12	24.15	24.22

LTE Band7				**Measured EIRP**		
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
10	QPSK	1	0	26.29	26.27	26.33
10	QPSK	1	25	26.44	26.14	25.99
10	QPSK	1	49	26.42	26.35	26.21
10	QPSK	25	0	25.55	25.58	25.53
10	QPSK	25	12	25.59	25.53	25.99
10	QPSK	25	25	25.63	25.59	25.51
10	QPSK	50	0	25.62	25.19	25.53
10	16QAM	1	0	25.61	25.52	25.49
10	16QAM	1	25	25.35	25.37	25.28
10	16QAM	1	49	25.89	25.90	25.74
10	16QAM	25	0	24.51	24.14	24.22
10	16QAM	25	12	24.51	24.11	24.03
10	16QAM	25	25	24.58	24.21	24.02
10	16QAM	50	0	24.54	24.21	24.13
10	64QAM	1	0	25.28	25.24	25.36
10	64QAM	1	25	25.35	25.45	25
10	64QAM	1	49	25.49	25.34	25.41

10	64QAM	25	0	24.47	24.08	24.05
10	64QAM	25	12	24.53	24.15	24.15
10	64QAM	25	25	24.57	24.16	24.16
10	64QAM	50	0	24.56	24.17	24.13

LTE Band7				**Measured EIRP**		
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
5	QPSK	1	0	26.29	26.05	26.07
5	QPSK	1	12	26.16	25.95	26.06
5	QPSK	1	24	26.38	26.08	25.99
5	QPSK	12	0	25.46	25.02	25.05
5	QPSK	12	7	25.43	25.14	25.08
5	QPSK	12	13	25.36	25.13	25.06
5	QPSK	25	0	25.34	25.13	25.06
5	16QAM	1	0	25.97	25.31	25.59
5	16QAM	1	12	25.86	25.22	25.52
5	16QAM	1	24	25.93	25.23	25.61
5	16QAM	12	0	24.44	24.06	24.04
5	16QAM	12	7	24.41	24.18	24.10
5	16QAM	12	13	24.37	24.08	24.11
5	16QAM	25	0	24.41	24.12	24.15
5	64QAM	1	0	25.15	25.33	25.27
5	64QAM	1	12	25.25	25.27	25.01
5	64QAM	1	24	25.30	25.24	25.24
5	64QAM	12	0	24.33	24.03	24.04
5	64QAM	12	7	24.52	24.11	24.12
5	64QAM	12	13	24.40	24.00	24.12
5	64QAM	25	0	24.42	24.10	24.16

LTE Band 38				**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
20	QPSK	1	0	25.39	25.79	25.32
20	QPSK	1	49	25.40	24.92	25.04
20	QPSK	1	99	25.36	24.83	24.73
20	QPSK	50	0	24.51	24.61	24.36
20	QPSK	50	24	24.48	24.12	24.24
20	QPSK	50	50	24.46	24.11	24.10
20	QPSK	100	0	24.56	24.13	24.30
20	16QAM	1	0	24.98	24.86	24.70
20	16QAM	1	49	24.53	24.20	24.34
20	16QAM	1	99	24.53	23.92	24.03
20	16QAM	50	0	23.65	23.28	23.36
20	16QAM	50	24	23.51	23.19	23.24
20	16QAM	50	50	23.31	23.07	23.11
20	16QAM	100	0	23.61	23.21	23.15
20	64QAM	1	0	24.95	24.62	24.77
20	64QAM	1	49	24.48	23.91	24.22
20	64QAM	1	99	24.45	23.97	24.01
20	64QAM	50	0	23.67	23.19	23.23
20	64QAM	50	24	23.44	23.01	23.19
20	64QAM	50	50	23.34	23.12	23.14
20	64QAM	100	0	23.63	23.04	23.35

LTE Band 38				**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
15	QPSK	1	0	25.68	25.25	25.03
15	QPSK	1	37	25.52	25.01	24.88
15	QPSK	1	74	25.18	24.76	25.03
15	QPSK	36	0	24.50	24.10	23.98
15	QPSK	36	20	24.38	24.10	24.20
15	QPSK	36	39	24.35	23.85	24.09
15	QPSK	75	0	24.25	24.20	24.11

15	16QAM	1	0	24.82	24.57	24.55
15	16QAM	1	37	24.69	24.43	24.37
15	16QAM	1	74	24.47	24.20	24.02
15	16QAM	36	0	23.52	23.05	23.57
15	16QAM	36	20	23.30	23.05	23.19
15	16QAM	36	39	23.27	22.99	23.08
15	16QAM	75	0	23.40	23.17	23.21
15	64QAM	1	0	24.68	24.20	24.45
15	64QAM	1	37	24.35	24.18	24.10
15	64QAM	1	74	23.52	23.15	23.16
15	64QAM	36	0	23.31	23.06	23.19
15	64QAM	36	20	23.28	23.01	23.18
15	64QAM	36	39	23.38	23.16	23.19
15	64QAM	75	0	23.20	23.02	23.12

LTE Band 38				**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
10	QPSK	1	0	25.53	24.92	24.96
10	QPSK	1	25	25.04	24.75	24.61
10	QPSK	1	49	25.28	25.00	24.75
10	QPSK	25	0	24.56	23.97	24.05
10	QPSK	25	12	24.34	24.11	24.01
10	QPSK	25	25	24.25	23.90	23.89
10	QPSK	50	0	24.43	23.93	23.98
10	16QAM	1	0	24.69	24.30	24.38
10	16QAM	1	25	24.44	24.25	24.09
10	16QAM	1	49	24.49	24.10	23.88
10	16QAM	25	0	23.39	23.17	23.18
10	16QAM	25	12	23.39	22.92	23.05
10	16QAM	25	25	23.22	23.08	22.93
10	16QAM	50	0	23.30	23.03	23.09
10	64QAM	1	0	24.69	24.37	24.18
10	64QAM	1	25	24.41	24.09	24.00

10	64QAM	1	49	23.99	23.94	23.97
10	64QAM	25	0	23.54	23.10	23.12
10	64QAM	25	12	23.32	23.06	23.07
10	64QAM	25	25	23.24	22.83	22.88
10	64QAM	50	0	23.30	23.04	22.96

LTE Band 38				**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
5	QPSK	1	0	25.61	24.90	24.94
5	QPSK	1	12	25.17	25.14	24.83
5	QPSK	1	24	25.41	24.92	24.79
5	QPSK	12	0	24.40	24.23	24.12
5	QPSK	12	7	24.53	24.22	23.99
5	QPSK	12	13	24.54	24.09	23.99
5	QPSK	25	0	24.47	24.17	24.00
5	16QAM	1	0	24.76	24.33	24.11
5	16QAM	1	12	24.77	24.43	24.05
5	16QAM	1	24	24.65	24.24	24.22
5	16QAM	12	0	23.59	23.22	23.21
5	16QAM	12	7	23.57	23.20	23.17
5	16QAM	12	13	23.60	23.16	23.09
5	16QAM	25	0	23.55	23.19	23.05
5	64QAM	1	0	24.73	24.10	24.22
5	64QAM	1	12	24.55	24.18	24.14
5	64QAM	1	24	24.53	24.19	24.05
5	64QAM	12	0	23.55	23.16	23.09
5	64QAM	12	7	23.64	22.95	22.96
5	64QAM	12	13	23.53	23.11	22.88
5	64QAM	25	0	23.59	23.00	22.99

LTE Band 40 Block A	**Measured EIRP**

BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.	Middle Ch. / Freq.	High Ch. / Freq.
Channel				/	38750	/
Frequency (MHz)				/	2310	/
10	QPSK	1	0	/	24.91	/
10	QPSK	1	25	/	24.63	/
10	QPSK	1	49	/	24.40	/
10	QPSK	25	0	/	23.70	/
10	QPSK	25	12	/	23.69	/
10	QPSK	25	25	/	23.60	/
10	QPSK	50	0	/	23.81	/
10	16QAM	1	0	/	24.10	/
10	16QAM	1	25	/	23.83	/
10	16QAM	1	49	/	23.59	/
10	16QAM	25	0	/	22.81	/
10	16QAM	25	12	/	22.77	/
10	16QAM	25	25	/	22.57	/
10	16QAM	50	0	/	22.78	/
10	64QAM	1	0	/	23.99	/
10	64QAM	1	25	/	23.83	/
10	64QAM	1	49	/	23.58	/
10	64QAM	25	0	/	22.84	/
10	64QAM	25	12	/	22.78	/
10	64QAM	25	25	/	22.39	/
10	64QAM	50	0	/	22.71	/

LTE Band 40 Block A				**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
5	QPSK	1	0	24.88	24.77	24.78
5	QPSK	1	12	24.85	24.90	24.74
5	QPSK	1	24	24.62	24.69	24.70
5	QPSK	12	0	23.84	23.66	23.70
5	QPSK	12	7	23.85	23.83	23.71

5	QPSK	12	13	23.84	23.64	23.67
5	QPSK	25	0	23.80	23.79	23.68
5	16QAM	1	0	24.19	24.07	23.99
5	16QAM	1	12	23.89	23.92	24.00
5	16QAM	1	24	24.00	23.97	23.85
5	16QAM	12	0	22.87	22.91	22.84
5	16QAM	12	7	22.94	23.02	22.96
5	16QAM	12	13	22.80	22.70	22.60
5	16QAM	25	0	22.90	22.86	22.52
5	64QAM	1	0	23.77	24.05	24.08
5	64QAM	1	12	23.89	23.66	23.50
5	64QAM	1	24	23.46	23.69	23.48
5	64QAM	12	0	22.78	22.86	22.67
5	64QAM	12	7	22.85	22.83	22.80
5	64QAM	12	13	22.83	22.53	22.66
5	64QAM	25	0	22.82	22.60	22.67

LTE Band 40 Block B				**Measured EIRP**		
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.	Middle Ch. / Freq.	High Ch. / Freq.
Channel				/	39200	/
Frequency (MHz)				/	2355	/
10	QPSK	1	0	/	24.90	/
10	QPSK	1	25	/	24.91	/
10	QPSK	1	49	/	24.77	/
10	QPSK	25	0	/	23.90	/
10	QPSK	25	12	/	23.79	/
10	QPSK	25	25	/	23.83	/
10	QPSK	50	0	/	23.80	/
10	16QAM	1	0	/	24.17	/
10	16QAM	1	25	/	24.00	/
10	16QAM	1	49	/	23.91	/
10	16QAM	25	0	/	22.83	/
10	16QAM	25	12	/	22.84	/
10	16QAM	25	25	/	22.79	/
10	16QAM	50	0	/	22.85	/
10	64QAM	1	0	/	24.02	/

10	64QAM	1	25	/	23.76	/
10	64QAM	1	49	/	23.51	/
10	64QAM	25	0	/	22.65	/
10	64QAM	25	12	/	22.77	/
10	64QAM	25	25	/	22.72	/
10	64QAM	50	0	/	22.77	/

LTE Band 40 Block B				**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
5	QPSK	1	0	24.91	24.85	24.78
5	QPSK	1	12	24.83	24.81	24.75
5	QPSK	1	24	24.83	24.63	24.74
5	QPSK	12	0	23.85	23.75	23.87
5	QPSK	12	7	23.75	23.64	23.66
5	QPSK	12	13	23.65	23.75	23.83
5	QPSK	25	0	23.70	23.79	23.86
5	16QAM	1	0	23.95	24.07	23.99
5	16QAM	1	12	24.03	23.96	24.09
5	16QAM	1	24	23.87	23.90	23.92
5	16QAM	12	0	22.87	22.77	22.92
5	16QAM	12	7	22.77	22.87	22.70
5	16QAM	12	13	22.69	22.68	22.87
5	16QAM	25	0	22.82	22.85	22.69
5	64QAM	1	0	23.69	23.92	23.74
5	64QAM	1	12	23.89	23.88	23.62
5	64QAM	1	24	23.82	23.75	23.85
5	64QAM	12	0	22.80	22.71	22.85
5	64QAM	12	7	22.78	22.82	22.86
5	64QAM	12	13	22.50	22.72	22.71
5	64QAM	25	0	22.67	22.77	22.73

LTE Band 41	**Measured EIRP**

BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.	Middle Ch. / Freq.	High Ch. / Freq.
Channel				39750	40620	41490
Frequency (MHz)				2506.0	2593.0	2680.0
20	QPSK	1	0	25.98	25.92	25.27
20	QPSK	1	49	25.49	25.50	24.86
20	QPSK	1	99	25.58	25.48	24.70
20	QPSK	50	0	24.83	24.58	24.28
20	QPSK	50	24	24.77	24.30	23.91
20	QPSK	50	50	24.71	24.49	23.70
20	QPSK	100	0	24.77	24.66	23.83
20	16QAM	1	0	24.95	24.89	24.41
20	16QAM	1	49	24.70	24.66	24.09
20	16QAM	1	99	24.78	24.60	23.95
20	16QAM	50	0	23.73	23.68	23.06
20	16QAM	50	24	23.76	23.39	22.92
20	16QAM	50	50	23.60	23.39	22.87
20	16QAM	100	0	23.75	23.48	23.03
20	64QAM	1	0	24.79	24.73	24.50
20	64QAM	1	49	24.67	24.41	24.08
20	64QAM	1	99	24.72	24.12	23.54
20	64QAM	50	0	23.84	23.70	23.08
20	64QAM	50	24	23.78	23.32	22.77
20	64QAM	50	50	23.52	23.32	22.79
20	64QAM	100	0	23.78	23.72	22.86

LTE Band 41				**Measured EIRP**		
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.	Middle Ch. / Freq.	High Ch. / Freq.
Channel				39725	40620	41515
Frequency (MHz)				2503.5	2593.0	2682.5
15	QPSK	1	0	24.79	25.59	25.01
15	QPSK	1	37	25.45	25.37	24.65
15	QPSK	1	74	25.69	25.27	24.47
15	QPSK	36	0	24.89	24.60	23.90
15	QPSK	36	20	24.74	24.61	23.97

15	QPSK	36	39	24.64	24.49	23.70
15	QPSK	75	0	24.84	24.30	23.94
15	16QAM	1	0	24.91	24.98	24.37
15	16QAM	1	37	24.88	24.84	24.16
15	16QAM	1	74	24.95	24.54	23.94
15	16QAM	36	0	23.86	23.59	22.85
15	16QAM	36	20	23.60	23.46	23.03
15	16QAM	36	39	23.61	23.37	22.65
15	16QAM	75	0	23.64	23.29	22.94
15	64QAM	1	0	24.89	24.87	24.38
15	64QAM	1	37	24.56	24.19	23.94
15	64QAM	1	74	23.87	23.71	23.18
15	64QAM	36	0	23.71	23.59	22.98
15	64QAM	36	20	23.62	23.39	22.87
15	64QAM	36	39	23.84	23.57	22.92
15	64QAM	75	0	23.56	23.36	23.50

LTE Band 41				**Measured EIRP**		
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.	Middle Ch. / Freq.	High Ch. / Freq.
Channel				39700	40620	41540
Frequency (MHz)				2501.0	2593.0	2685.0
10	QPSK	1	0	25.73	25.60	24.72
10	QPSK	1	25	25.68	25.41	24.85
10	QPSK	1	49	25.70	25.33	24.61
10	QPSK	25	0	24.76	24.53	23.97
10	QPSK	25	12	24.76	24.56	23.83
10	QPSK	25	25	24.72	24.29	23.64
10	QPSK	50	0	24.70	24.50	23.72
10	16QAM	1	0	24.95	24.69	24.27
10	16QAM	1	25	24.92	24.54	24.05
10	16QAM	1	49	24.87	24.54	23.92
10	16QAM	25	0	23.77	23.57	22.68
10	16QAM	25	12	23.77	23.58	22.97
10	16QAM	25	25	23.69	23.28	22.84
10	16QAM	50	0	23.68	23.52	22.85

10	64QAM	1	0	24.64	24.55	24.16
10	64QAM	1	25	24.59	24.49	24.06
10	64QAM	1	49	24.74	24.08	23.59
10	64QAM	25	0	23.72	23.29	22.94
10	64QAM	25	12	23.81	23.51	22.90
10	64QAM	25	25	23.72	23.44	22.58
10	64QAM	50	0	23.70	23.34	22.77

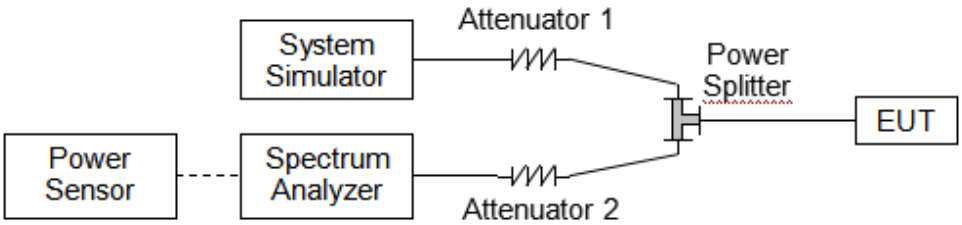
LTE Band 41				**Measured EIRP**		
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.	Middle Ch. / Freq.	High Ch. / Freq.
Channel				39675	40620	41565
Frequency (MHz)				2498.5	2593.0	2687.5
5	QPSK	1	0	25.65	25.52	24.91
5	QPSK	1	12	25.66	25.13	24.74
5	QPSK	1	24	25.55	25.38	24.52
5	QPSK	12	0	24.74	24.32	23.55
5	QPSK	12	7	24.68	24.46	23.72
5	QPSK	12	13	24.67	24.39	23.47
5	QPSK	25	0	24.67	24.26	23.78
5	16QAM	1	0	24.85	24.43	23.96
5	16QAM	1	12	24.85	24.68	23.86
5	16QAM	1	24	24.78	24.53	23.91
5	16QAM	12	0	23.75	23.54	22.65
5	16QAM	12	7	23.77	23.56	22.86
5	16QAM	12	13	23.74	23.31	22.65
5	16QAM	25	0	23.76	23.46	22.54
5	64QAM	1	0	24.83	24.63	23.99
5	64QAM	1	12	24.74	24.34	23.83
5	64QAM	1	24	24.65	24.41	23.68
5	64QAM	12	0	23.69	23.46	22.51
5	64QAM	12	7	23.73	23.51	22.82
5	64QAM	12	13	23.59	23.15	22.59
5	64QAM	25	0	23.61	23.22	22.66

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 EUTis 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: 1.4MHz							
Channel	Frequency (MHz)	QPSK		16QAM		64QAM	
		99% Bandwidth (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	26dB Bandwidth (MHz)
20407	824.7	1.09	1.24	1.09	1.24	1.1	1.24
20525	836.5	1.09	1.24	1.09	1.24	1.09	1.24
20643	848.3	1.09	1.24	1.1	1.23	1.1	1.23

LTE Band 5,BW: 3MHz

Channel	Frequency (MHz)	QPSK		16QAM		64QAM	
		99% Bandwidth (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	26dB Bandwidth (MHz)
20415	825.5	2.7	2.98	2.7	2.97	2.7	2.98
20525	836.5	2.71	3.01	2.7	3.01	2.7	3.01
20635	847.5	2.7	2.99	2.7	3.01	2.7	3.01

LTE Band 5,BW: 5MHz

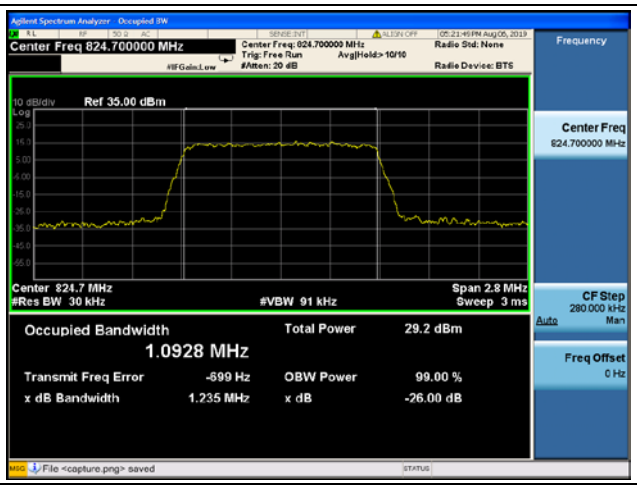
Channel	Frequency (MHz)	QPSK		16QAM		64QAM	
		99% Bandwidth (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	26dB Bandwidth (MHz)
20425	826.5	4.5	4.97	4.5	4.99	4.5	4.99
20525	836.5	4.5	4.99	4.5	4.97	4.5	4.97
20625	846.5	4.5	4.95	4.5	4.97	4.5	4.97

LTE Band 5,BW: 10MHz

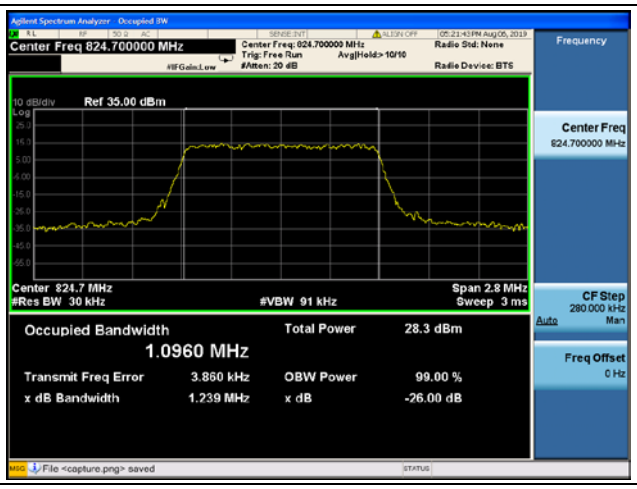
Channel	Frequency (MHz)	QPSK		16QAM		64QAM	
		99% Bandwidth (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	26dB Bandwidth (MHz)
20450	829.0	9.01	9.81	8.96	9.78	8.96	9.78
20525	836.5	9.0	9.75	8.96	9.79	8.96	9.79
20600	844.0	9.0	9.82	8.97	9.75	8.97	9.75

LTE Band 5 99%&26dB Bandwidth

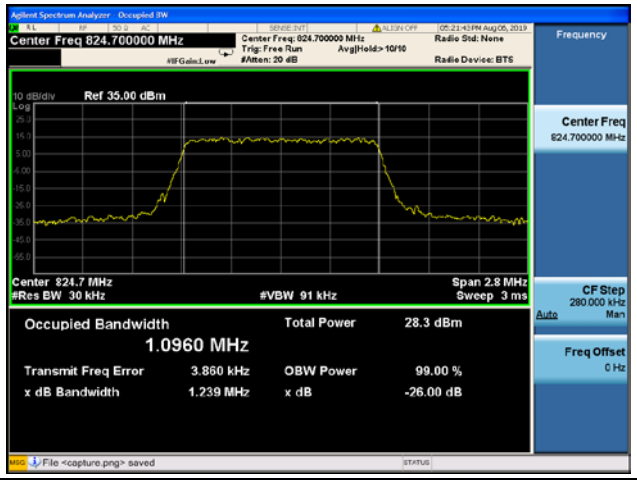
1.4MHz/QPSK/Low CH



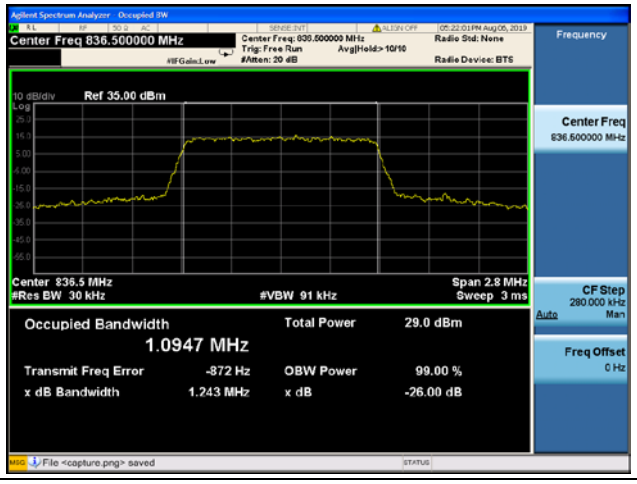
1.4MHz/16QAM/Low CH



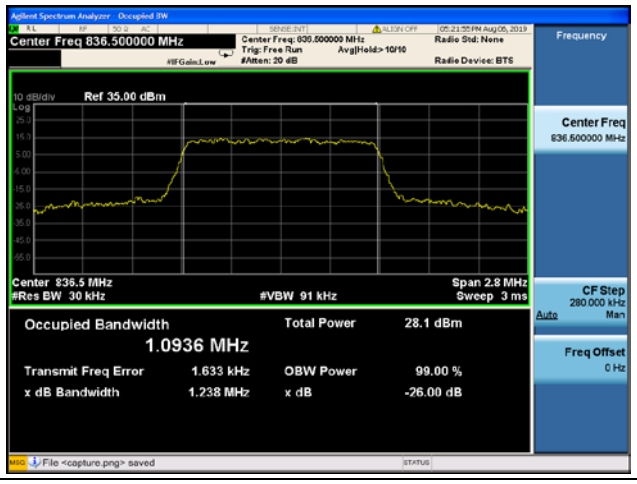
1.4MHz/64QAM/Low CH



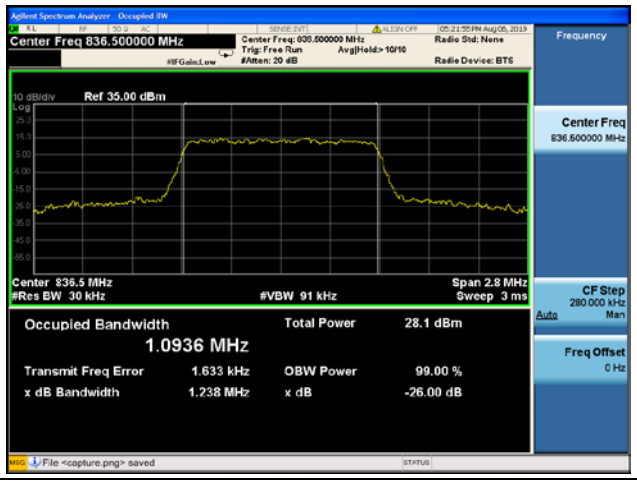
1.4MHz/QPSK/ Mid CH

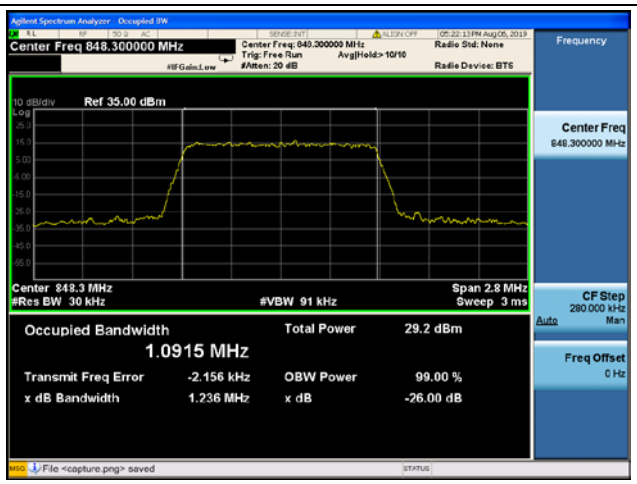
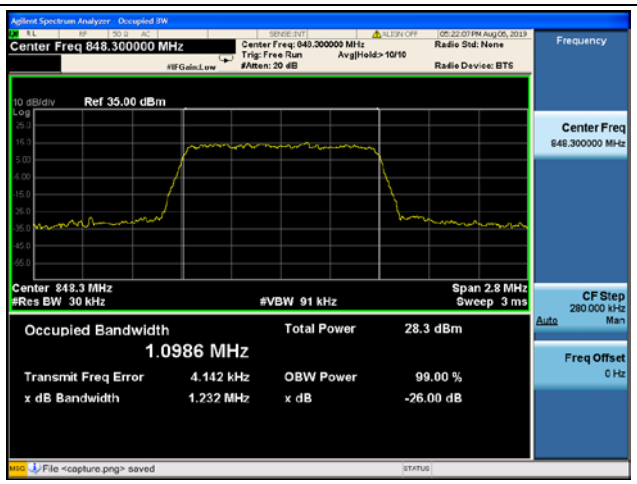
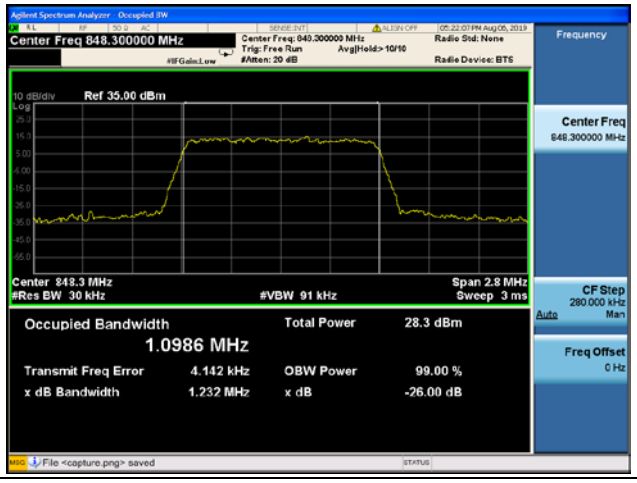
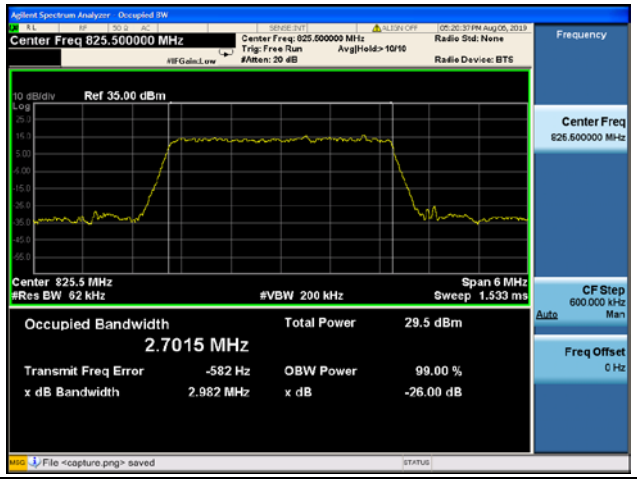
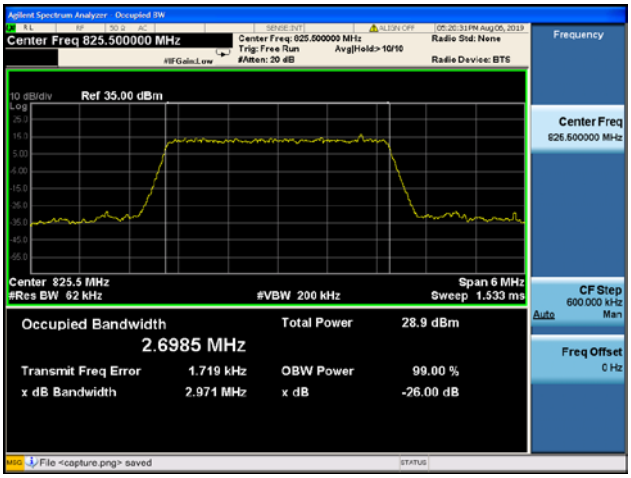
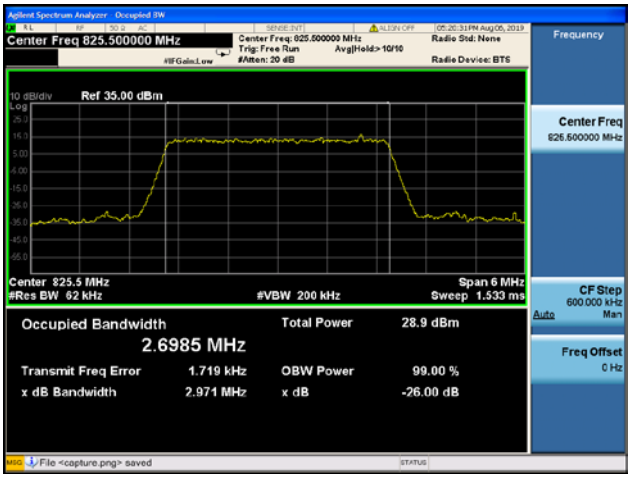


1.4MHz/16QAM/ Mid CH

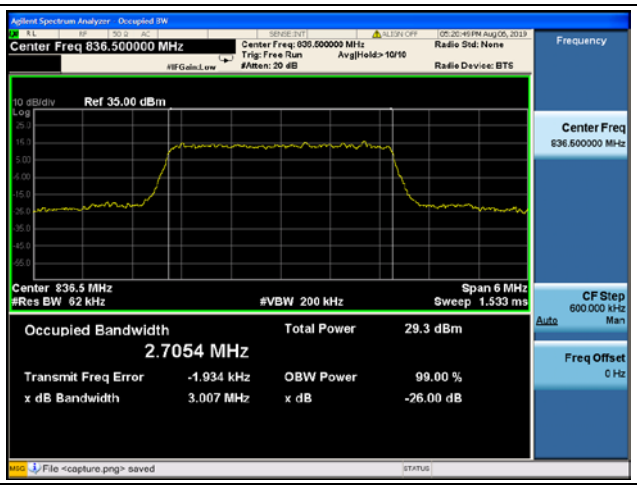


1.4MHz/64QAM/ Mid CH

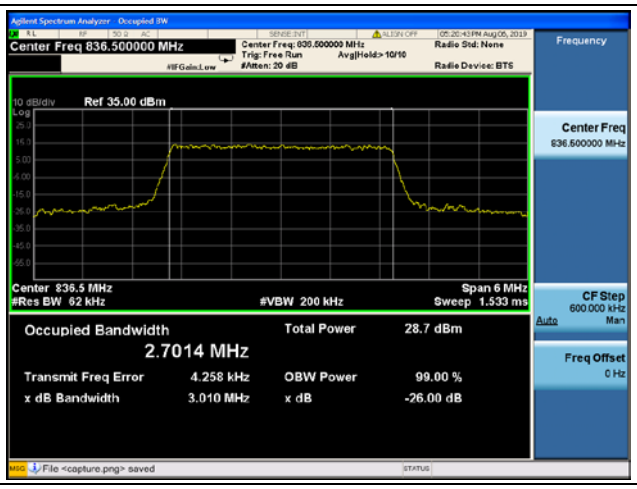


1.4MHz/QPSK/ High CH	1.4MHz/16QAM/ High CH
	
1.4MHz/64QAM/ High CH	**3MHz/ QPSK / Low CH**
	
3MHz/ 16QAM / Low CH	**3MHz/ 64QAM / Low CH**
	

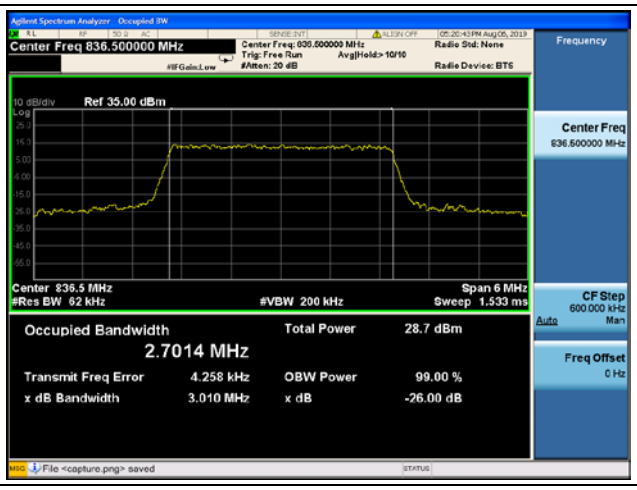
3MHz/ QPSK / Mid CH



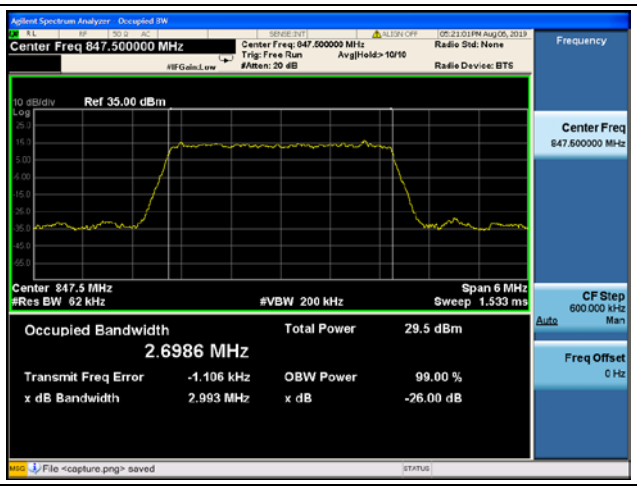
3MHz/ 16QAM / Mid CH



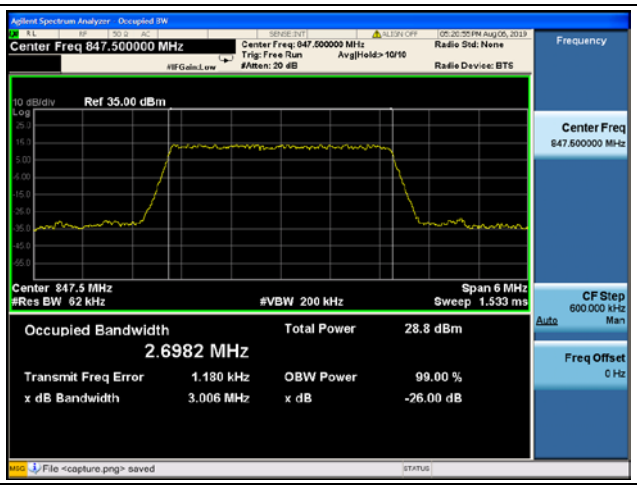
3MHz/ 64QAM / Mid CH



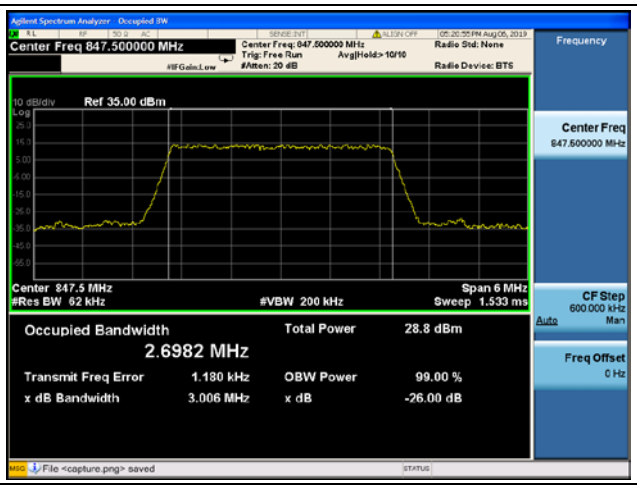
3MHz/ QPSK / High CH



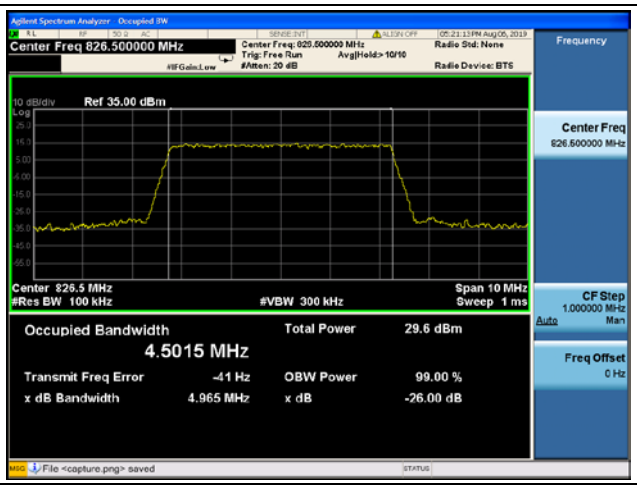
3MHz/ 16QAM / High CH



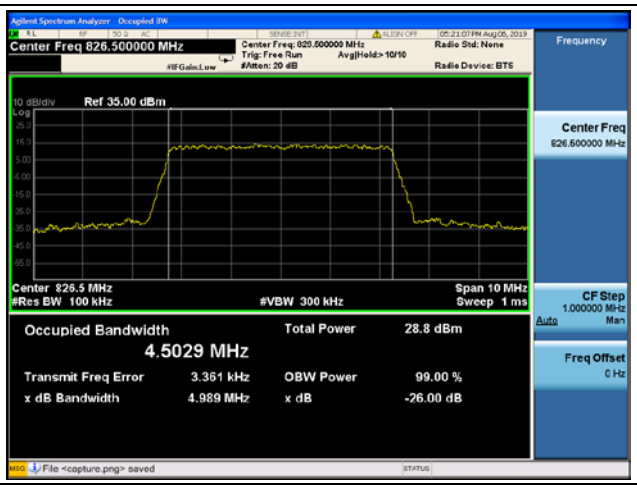
3MHz/ 64QAM / High CH



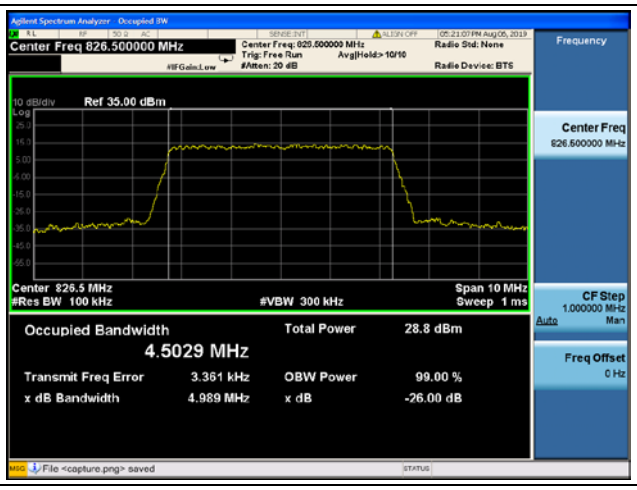
5MHz/ QPSK /Low CH



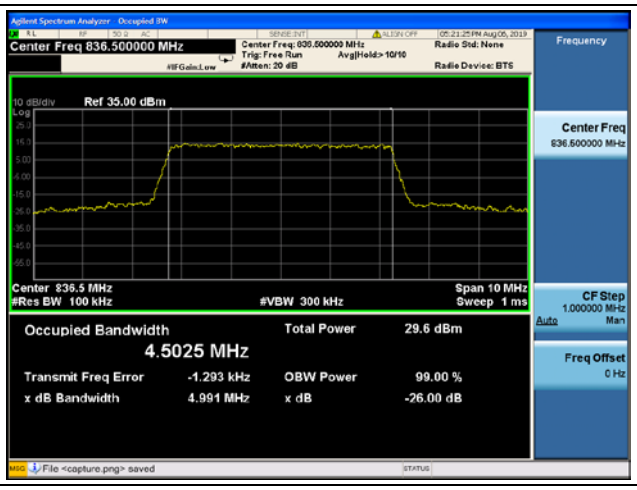
5MHz/ 16QAM /Low CH



5MHz/ 64QAM /Low CH



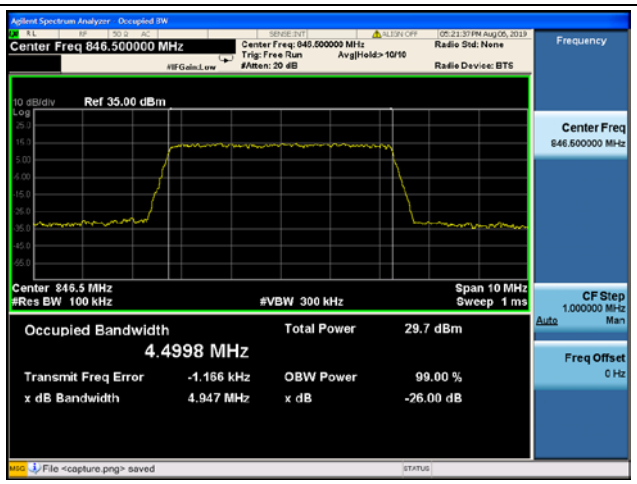
5MHz/ QPSK /Mid CH



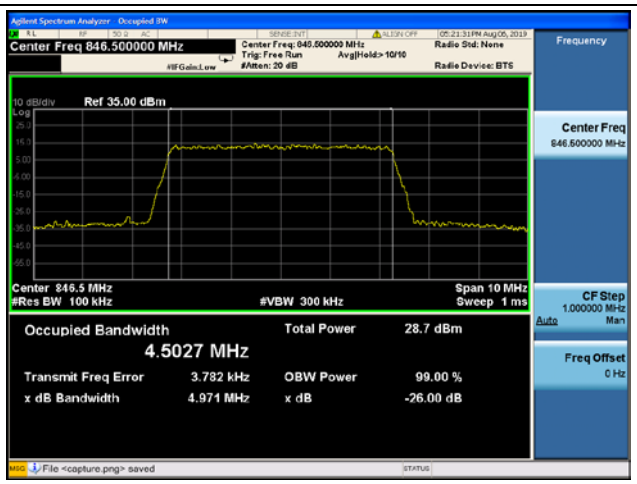
5MHz/ 16QAM /Mid CH

5MHz/ 64QAM /Mid CH

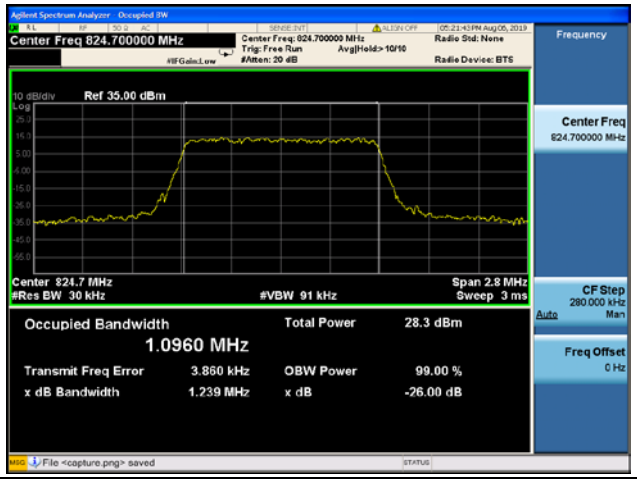
5MHz/ QPSK /High CH



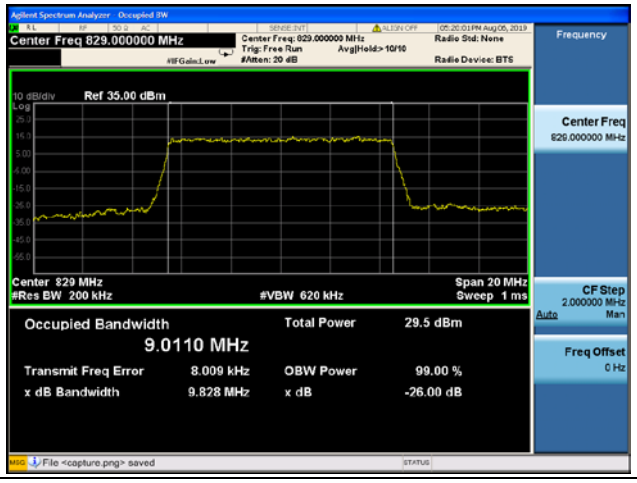
5MHz/ 16QAM /High CH



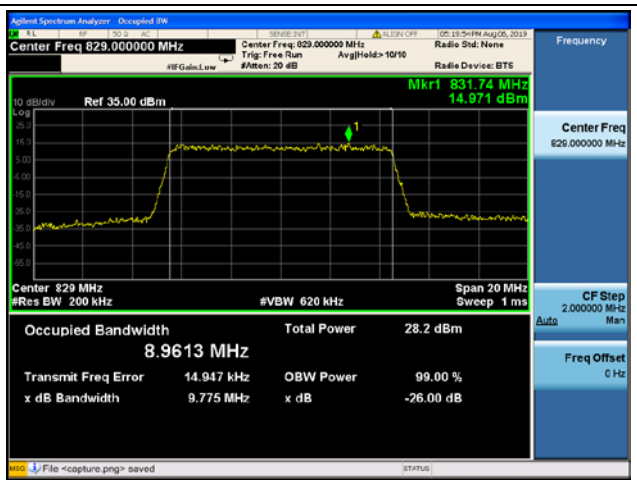
5MHz/ 64QAM /High CH



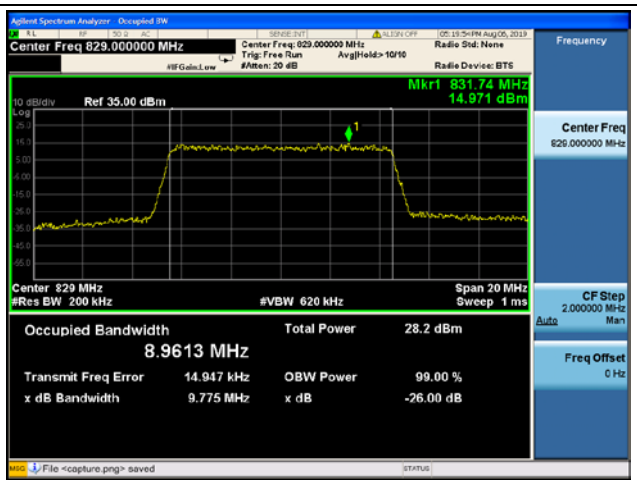
10MHz/ QPSK /Low CH



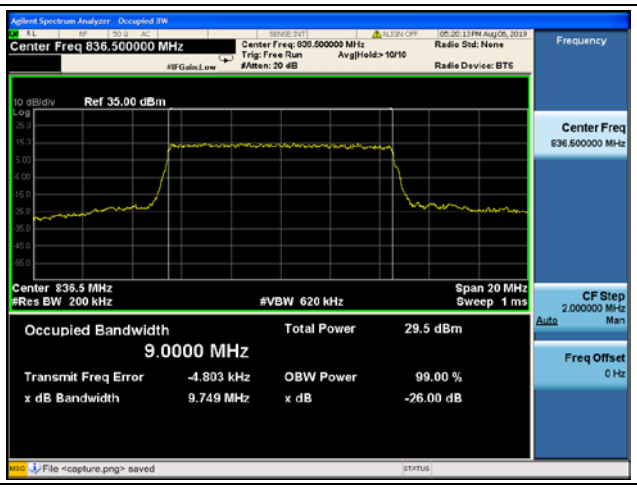
10MHz/ 16QAM /Low CH



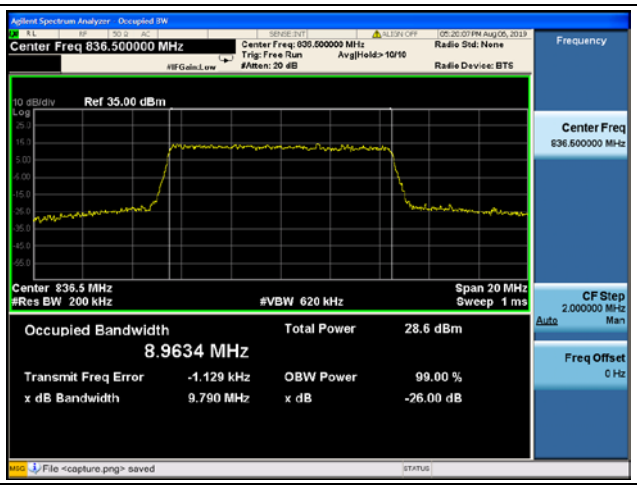
10MHz/ 64QAM /Low CH



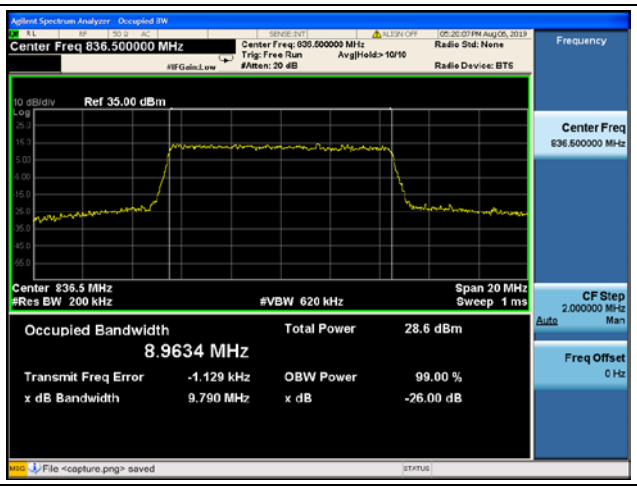
10MHz/ QPSK /Mid CH



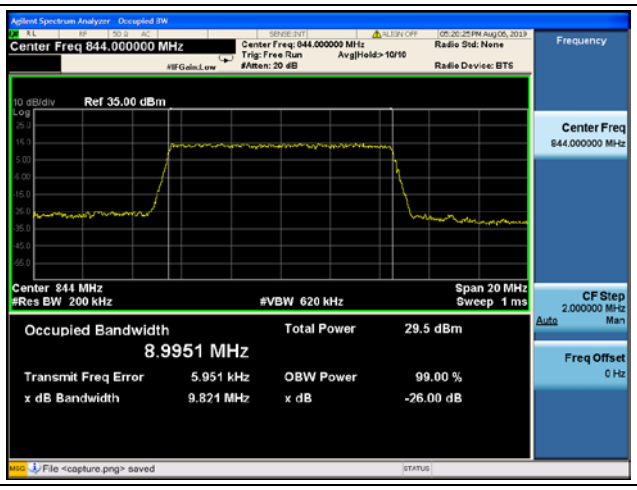
10MHz/ 16QAM /Mid CH



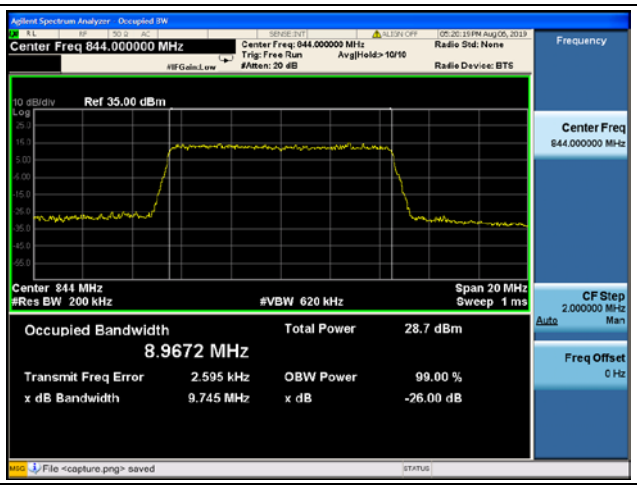
10MHz/ 64QAM /Mid CH



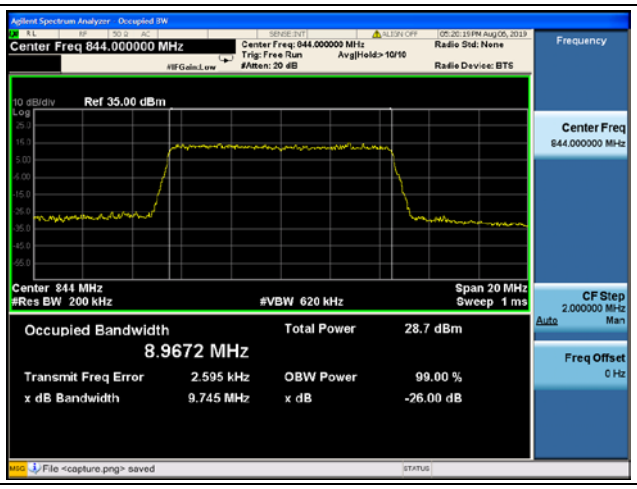
10MHz/ QPSK /High CH



10MHz/ 16QAM /High CH



10MHz/ 64QAM /High CH



LTE Band 7,BW: 5MHz							
Channel	Frequency (MHz)	QPSK		16QAM		64QAM	
		99% Bandwidth (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	26dB Bandwidth (MHz)
20775	2502.5	4.51	4.99	4.5	4.99	4.5	4.97
21100	2535	4.51	4.98	4.51	4.96	4.5	4.97
21425	2567.5	4.5	4.97	4.5	4.96	4.5	4.97

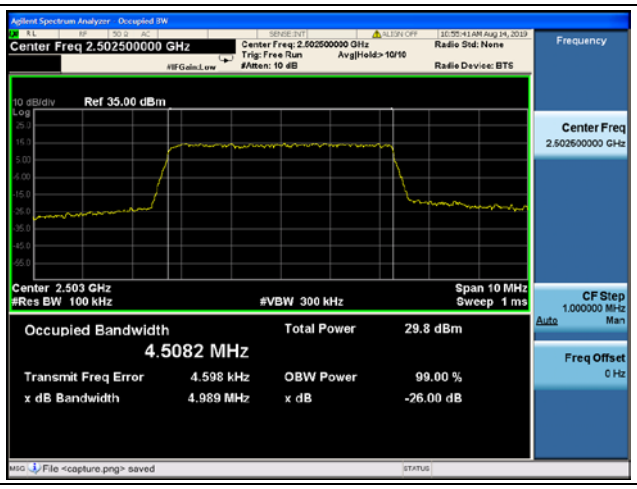
LTE Band 7,BW: 10MHz							
Channel	Frequency (MHz)	QPSK		16QAM		64QAM	
		99% Bandwidth (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	26dB Bandwidth (MHz)
20800	2505	9.00	9.83	8.97	9.8	8.98	9.79
21100	2535	8.99	9.84	8.96	9.72	8.97	9.76
21400	2565	9.0	9.73	8.97	9.79	8.96	9.81

LTE Band 7,BW: 15MHz							
Channel	Frequency (MHz)	QPSK		16QAM		64QAM	
		99% Bandwidth (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	26dB Bandwidth (MHz)
20825	2507.5	13.5	14.74	13.49	14.73	13.48	14.7
21100	2535	13.48	14.67	13.48	14.75	13.47	14.68
21375	2562.5	13.44	14.67	13.47	14.68	13.46	14.76

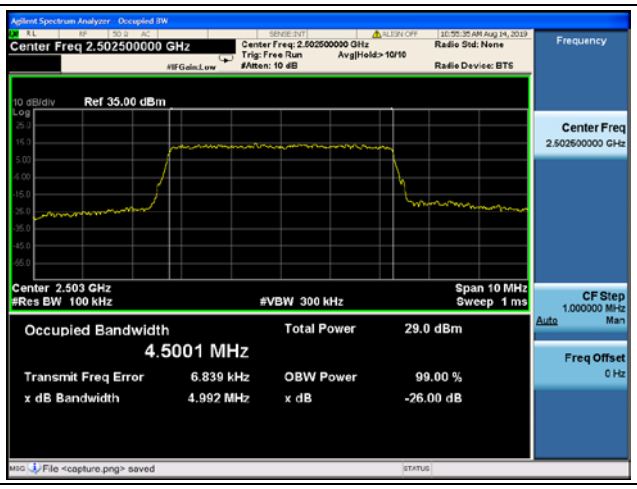
LTE Band 7,BW: 20MHz							
Channel	Frequency (MHz)	QPSK		16QAM		64QAM	
		99% Bandwidth (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	26dB Bandwidth (MHz)
20850	2510	17.96	19.45	18.0	19.56	17.97	19.52
21100	2535	17.96	19.51	17.99	19.43	18.01	19.52
21350	2560	17.92	19.49	17.95	19.49	17.99	19.56

LTE Band 7 99%&26dB Bandwidth

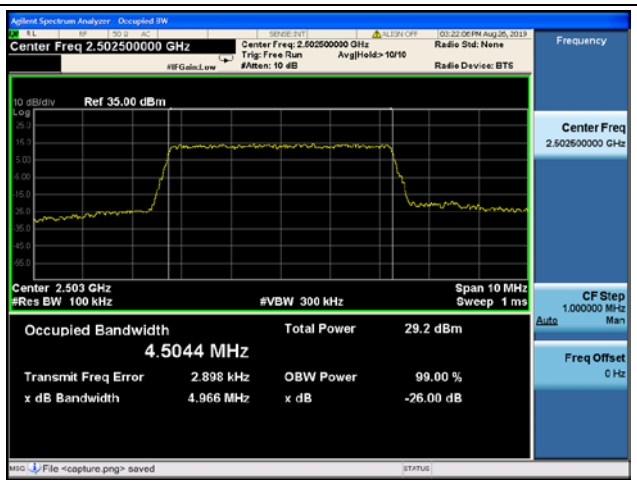
5MHz/QPSK/Low CH



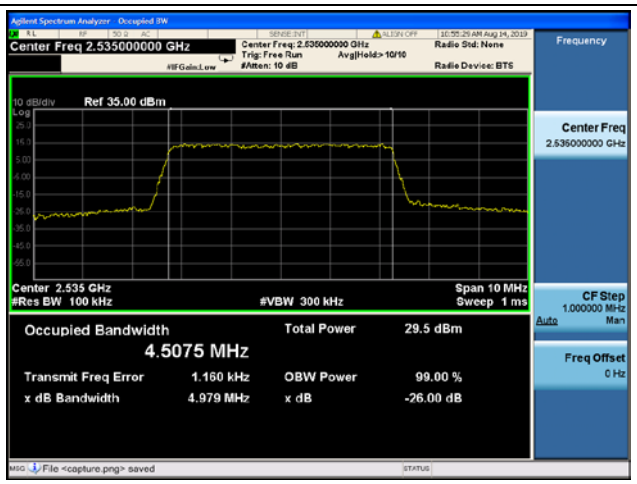
5MHz/16QAM/Low CH



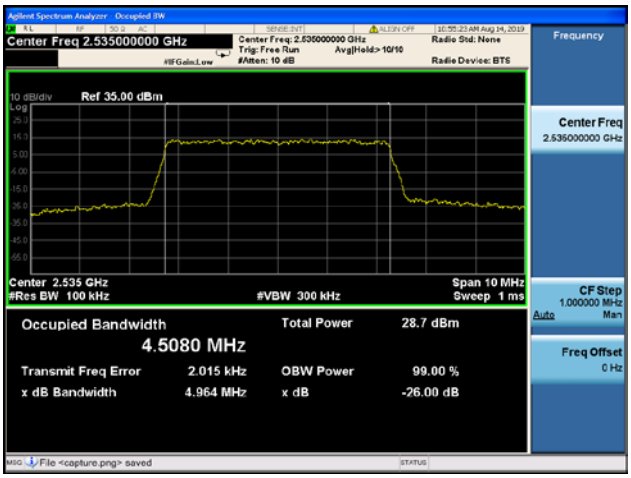
5MHz/64QAM/Low CH



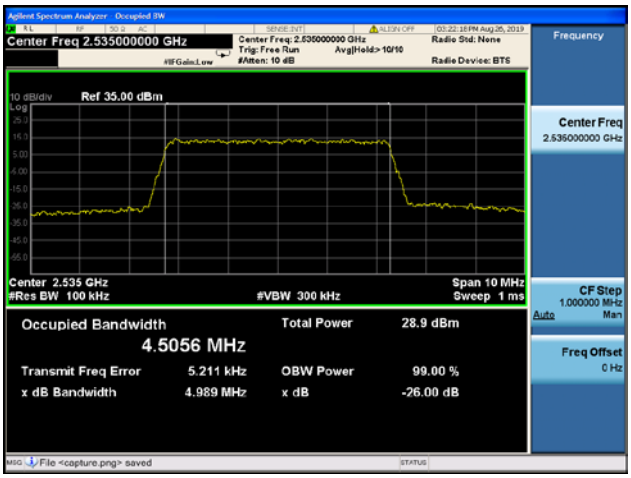
5MHz/QPSK/ Mid CH



5MHz/16QAM/ Mid CH

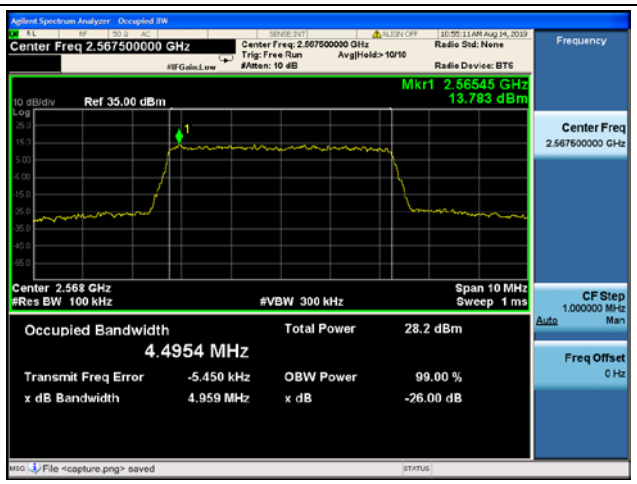


5MHz/64QAM/ Mid CH

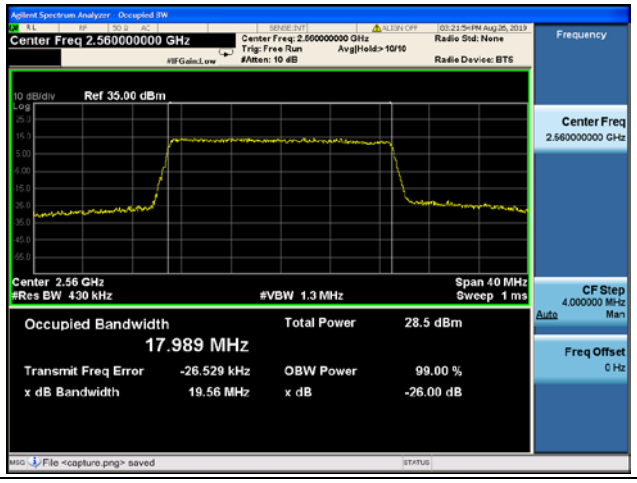


5MHz/QPSK/ High CH

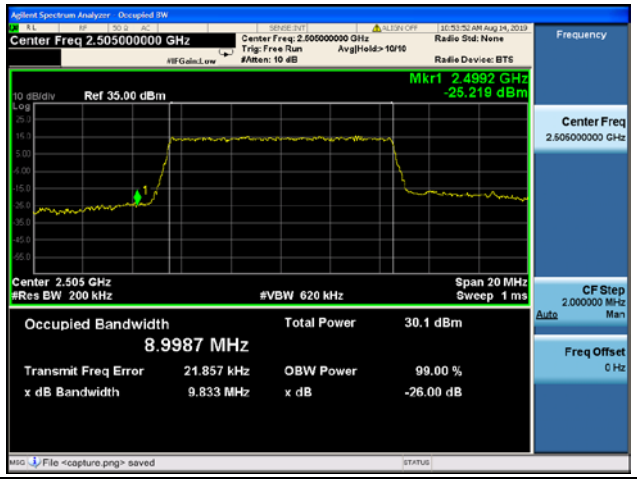
5MHz/16QAM/ High CH



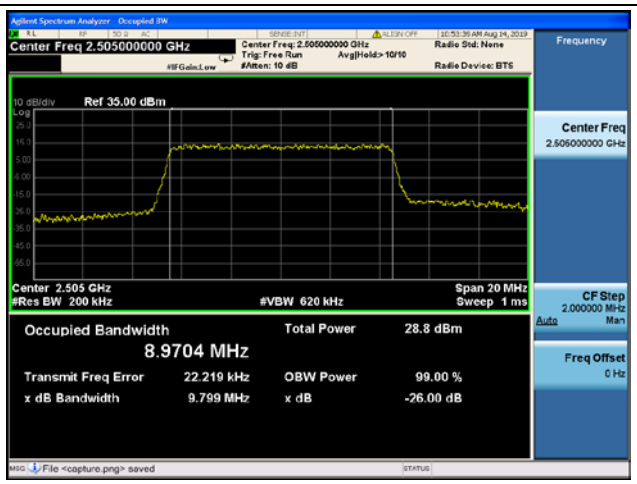
5MHz/64QAM/ High CH



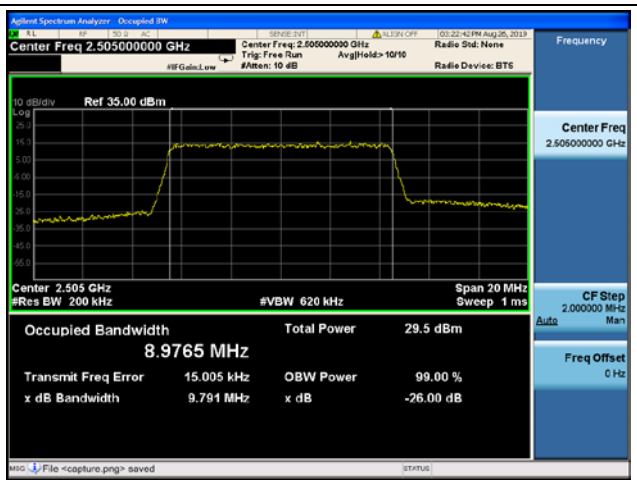
10MHz/ QPSK / Low CH



10MHz/ 16QAM / Low CH

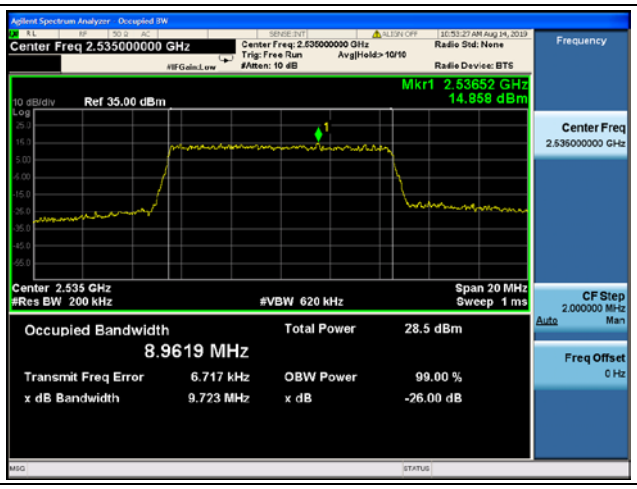


10MHz/ 64QAM / Low CH

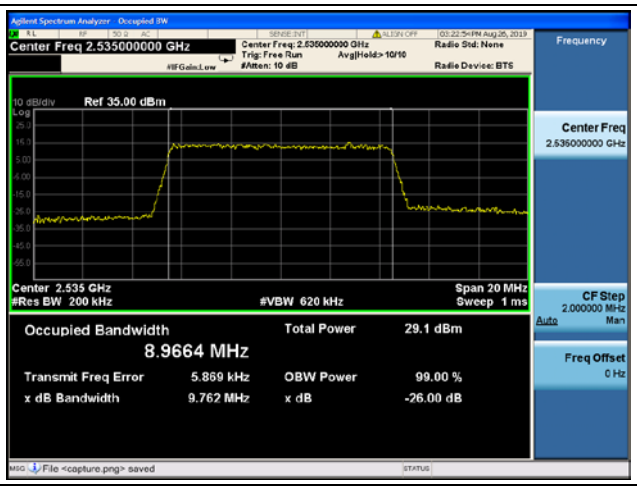


10MHz/ QPSK / Mid CH

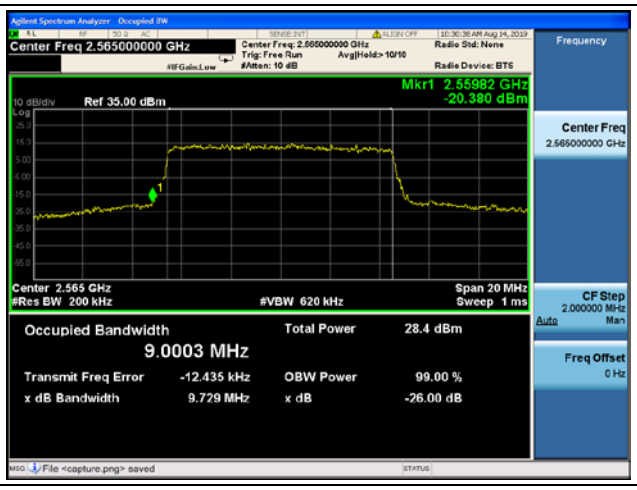
10MHz/ 16QAM / Mid CH



10MHz/ 64QAM / Mid CH

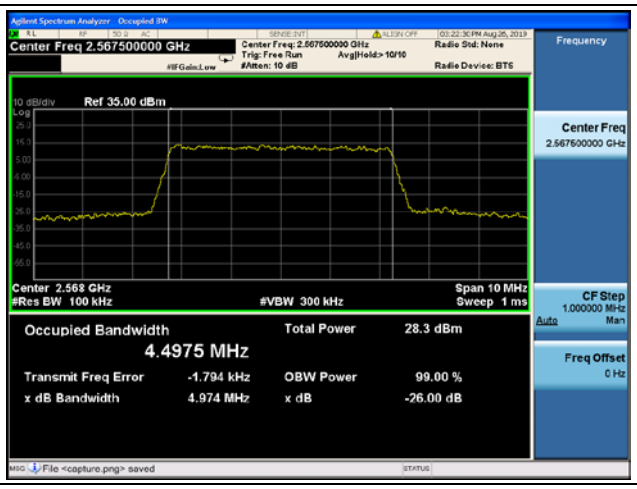


10MHz/ QPSK / High CH

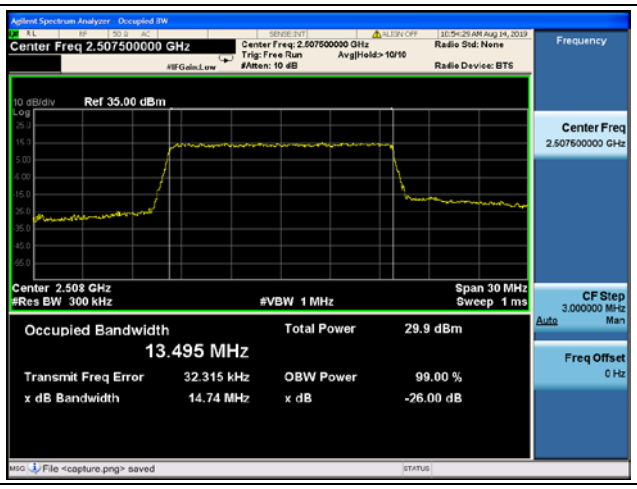


10MHz/ 16QAM / High CH

10MHz/ 64QAM / High CH

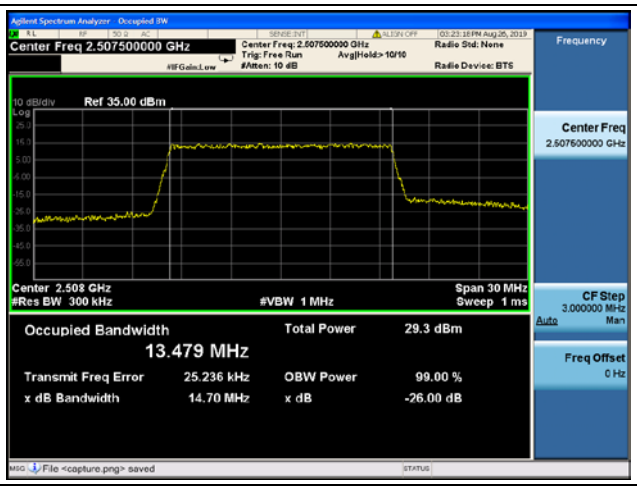


15MHz/ QPSK /Low CH



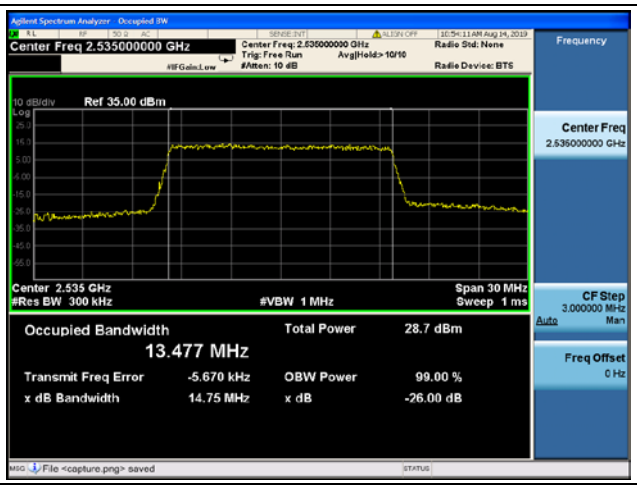
15MHz/ 16QAM /Low CH

15MHz/ 64QAM /Low CH

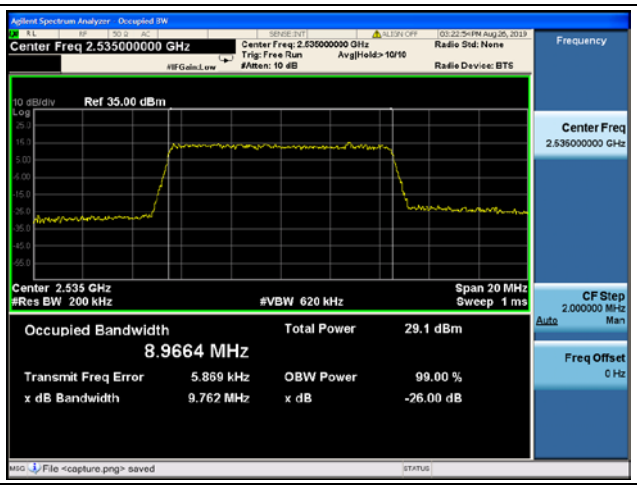


15MHz/ QPSK /Mid CH

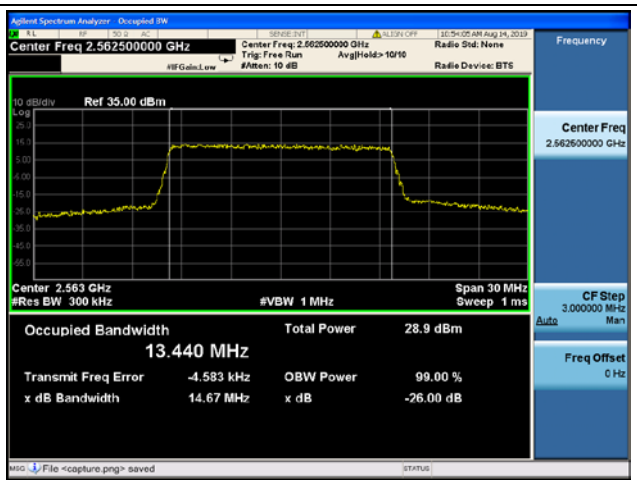
15MHz/ 16QAM /Mid CH



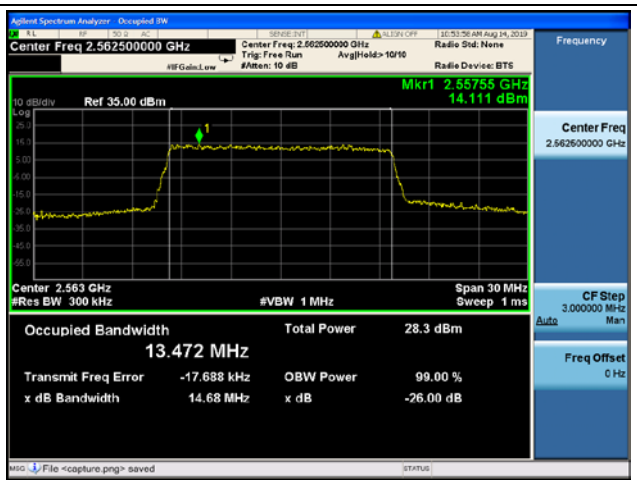
15MHz/ 64QAM /Mid CH



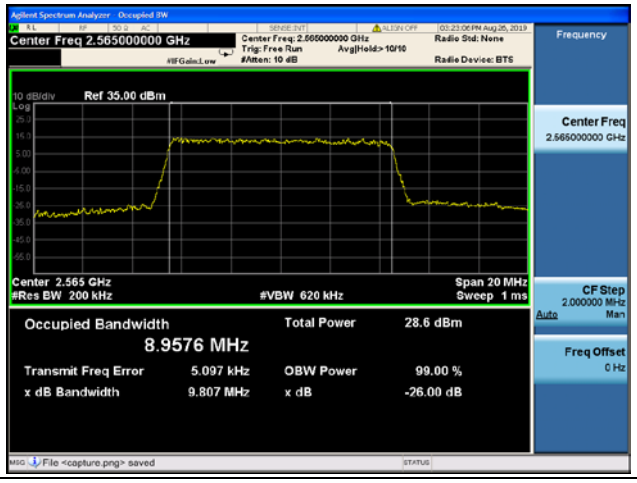
15MHz/ QPSK /High CH



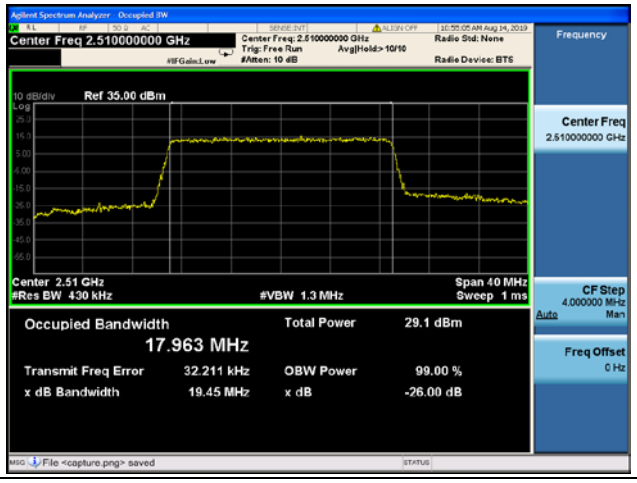
15MHz/ 16QAM /High CH



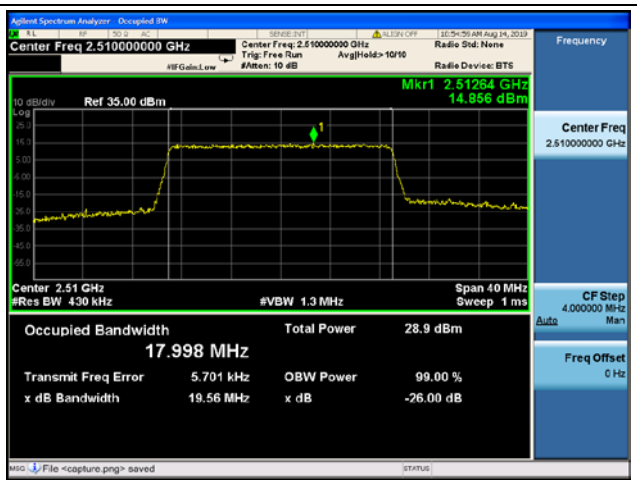
15MHz/ 64QAM /High CH



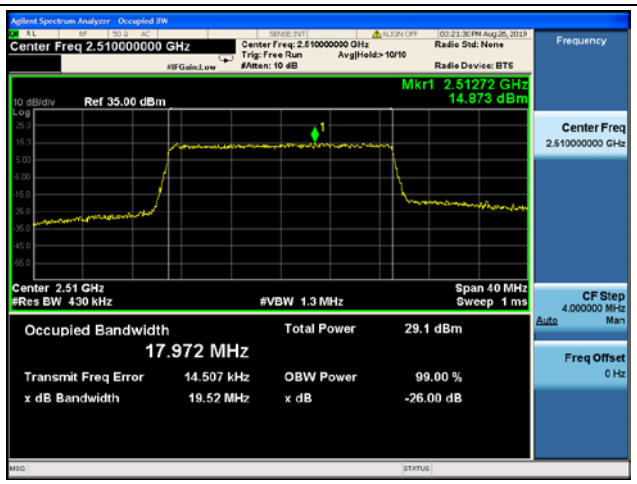
20MHz/ QPSK /Low CH



20MHz/ 16QAM /Low CH

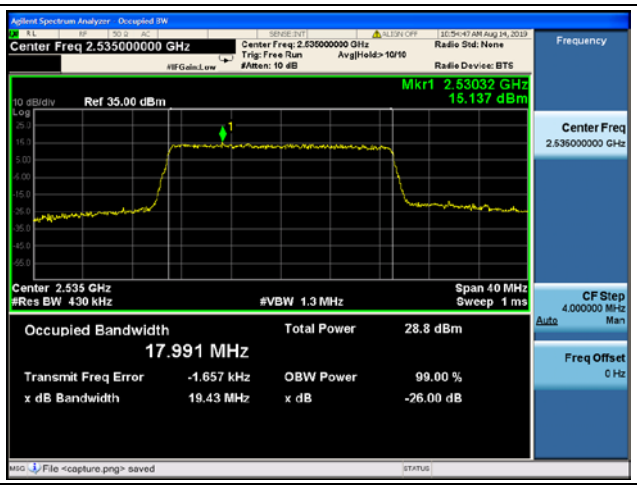


20MHz/ 64QAM /Low CH



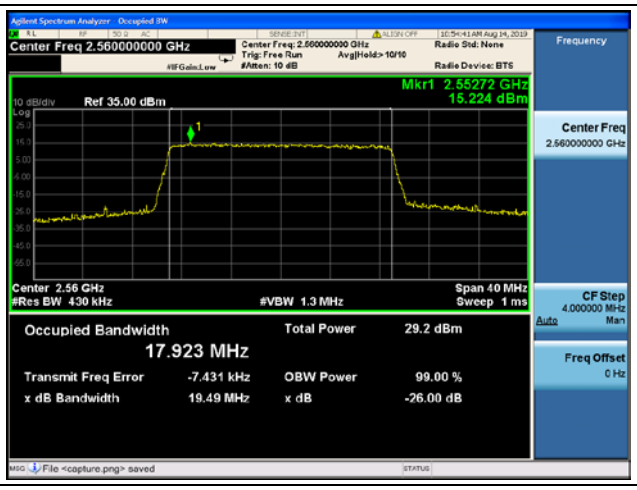
20MHz/ QPSK /Mid CH

20MHz/ 16QAM /Mid CH

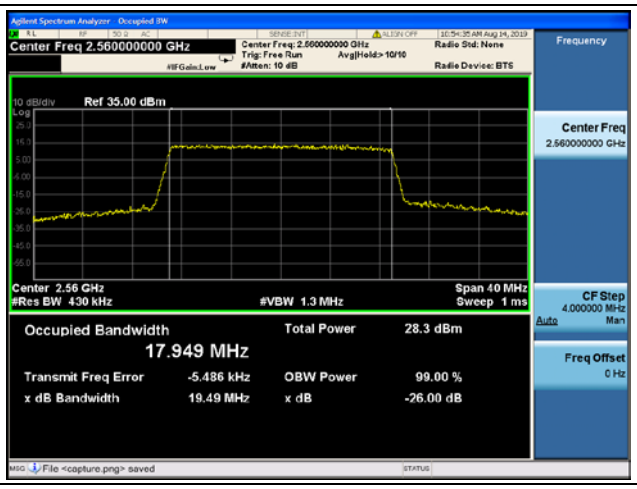


20MHz/ 64QAM /Mid CH

20MHz/ QPSK /High CH



20MHz/ 16QAM /High CH



20MHz/ 64QAM /High CH

LTE Band 38,BW: 5MHz							
Channel	Frequency (MHz)	QPSK		16QAM		64QAM	
		99% Bandwidth (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	26dB Bandwidth (MHz)
37775	2572.5	4.51	5.18	4.5	5.06	4.5	5.14
38000	2595	4.51	5.17	4.5	5.12	4.51	5.12
38225	2617.5	4.52	5.34	4.51	5.14	4.5	4.89

LTE Band 38,BW: 10MHz							
Channel	Frequency (MHz)	QPSK		16QAM		64QAM	
		99% Bandwidth (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	26dB Bandwidth (MHz)
37800	2575	8.97	9.94	8.98	9.97	8.96	10.14
38000	2595	8.99	9.88	8.92	9.53	8.96	9.99
38200	2617.5	8.97	9.78	8.97	9.72	8.97	9.94

LTE Band 38,BW: 15MHz							
Channel	Frequency (MHz)	QPSK		16QAM		64QAM	
		99% Bandwidth (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	26dB Bandwidth (MHz)
37825	2577.5	13.5	14.68	13.49	14.72	13.47	14.78
38000	2595	13.48	14.62	13.52	14.91	13.51	14.64
38175	2612.5	13.49	14.74	13.48	14.72	13.5	14.65

LTE Band 38,BW: 20MHz							
Channel	Frequency (MHz)	QPSK		16QAM		64QAM	
		99% Bandwidth (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	26dB Bandwidth (MHz)
37850	2572.5	17.98	19.91	17.94	19.75	17.99	19.17
38000	2595	17.99	20.58	17.96	19.66	17.95	19.54
38150	2610	17.99	20.1	17.96	19.59	17.98	19.86