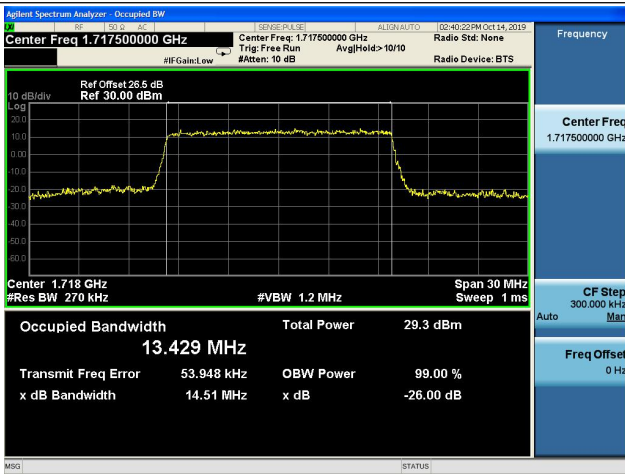
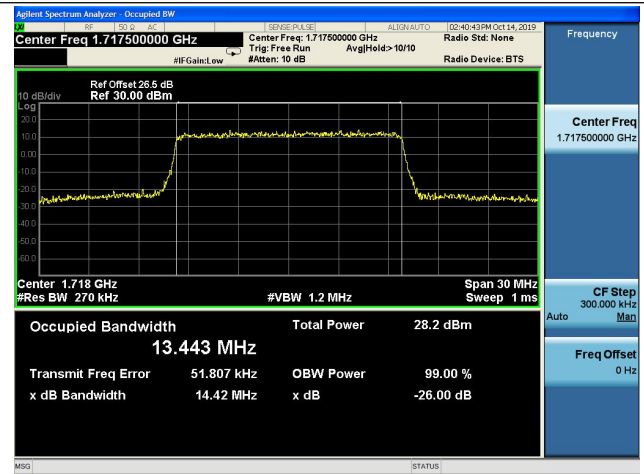




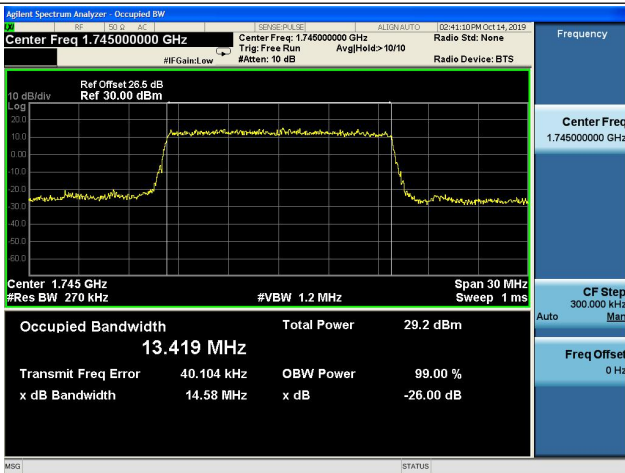
Band 66/ 15MHz/ Low CH/QPSK



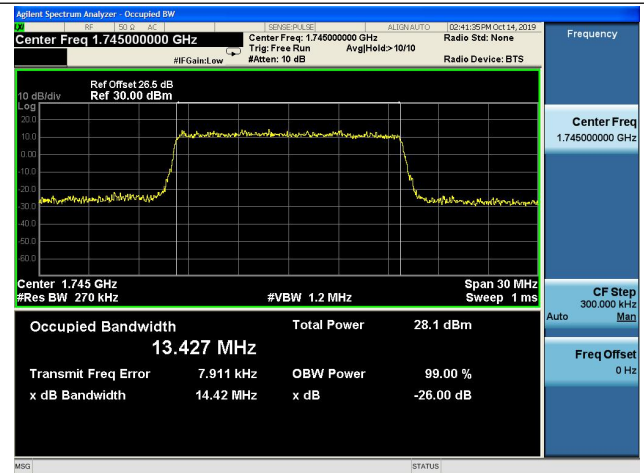
Band 66/ 15MHz/ Low CH/16QAM



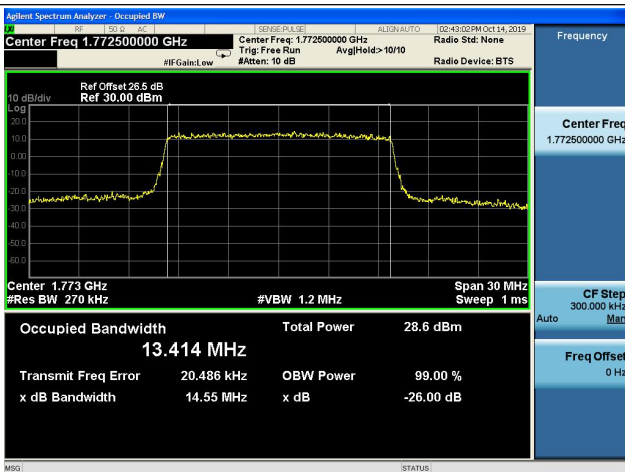
Band 66/ 15MHz/Mid CH/QPSK



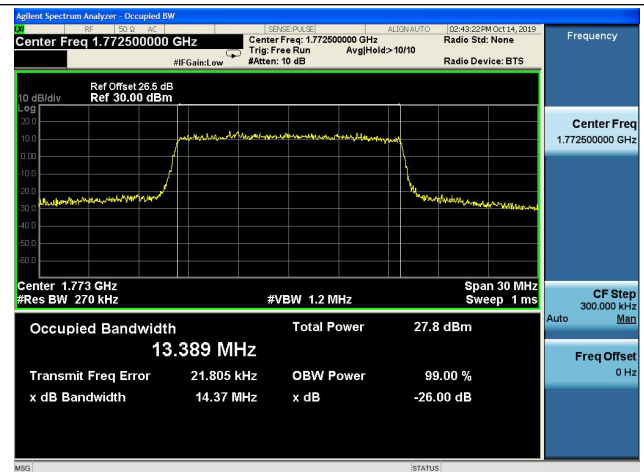
Band 66/ 15MHz/Mid CH/16QAM

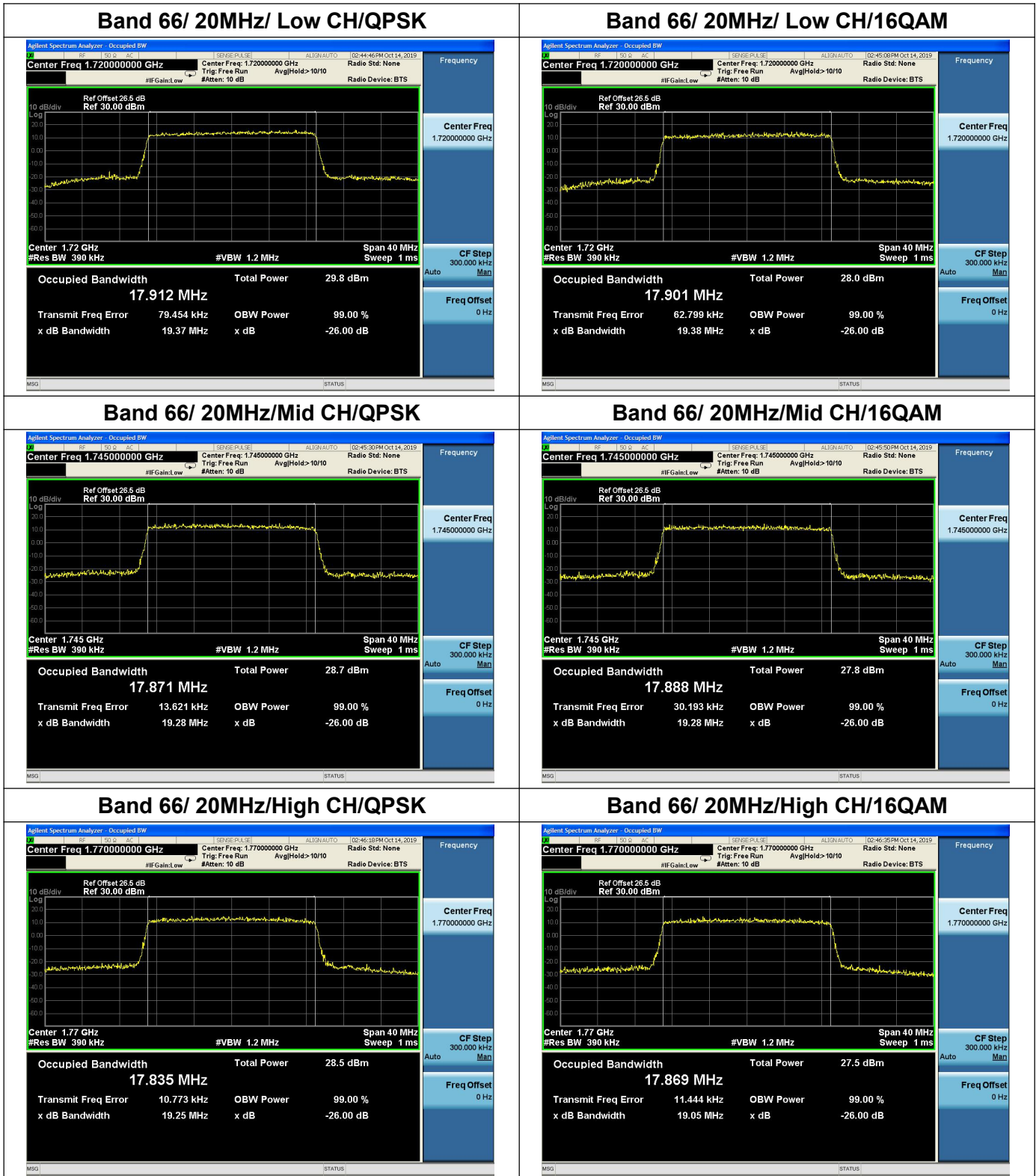


Band 66/ 15MHz/High CH/QPSK



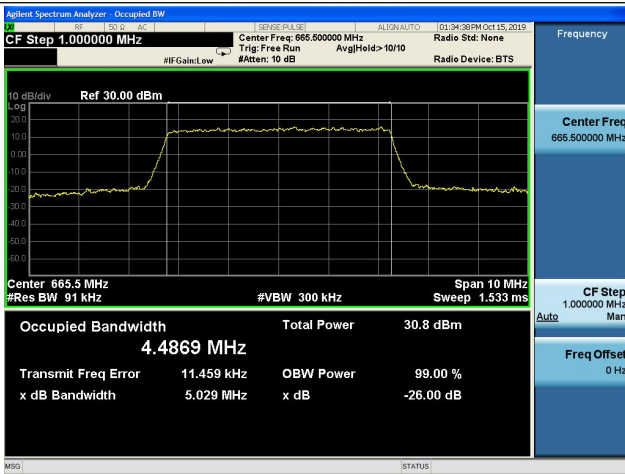
Band 66/ 15MHz/High CH/16QAM



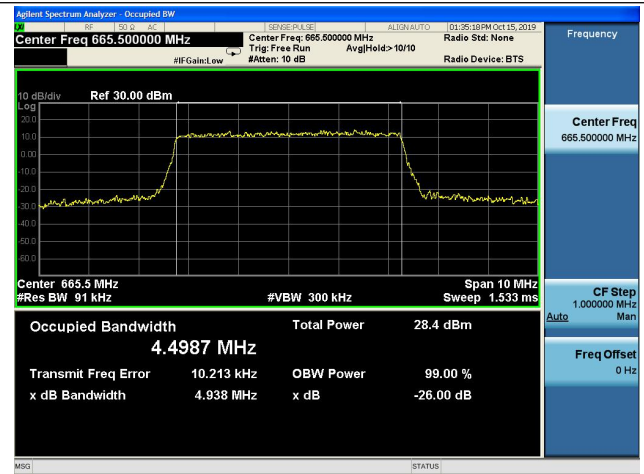




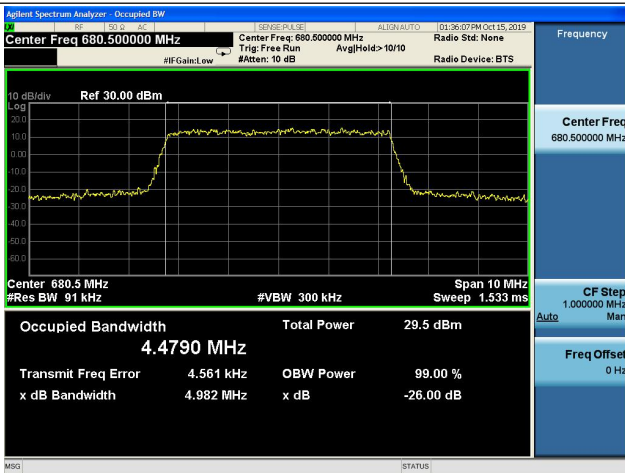
Band 71/ 5MHz/ Low CH/QPSK



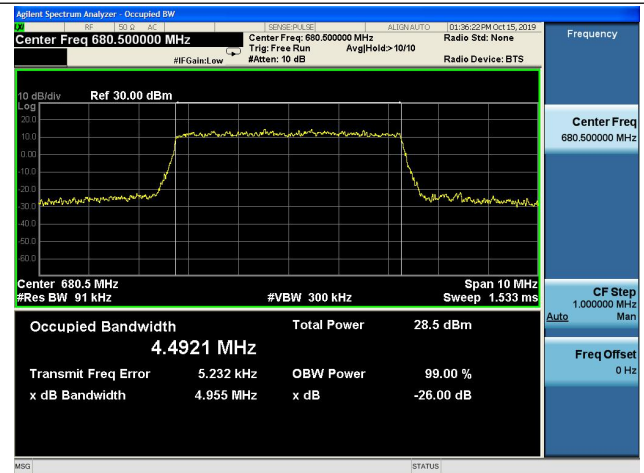
Band 71/ 5MHz/ Low CH/16QAM



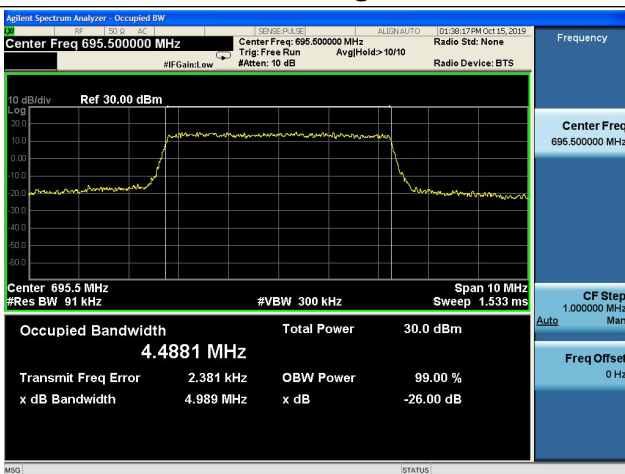
Band 71/ 5MHz/Mid CH/QPSK



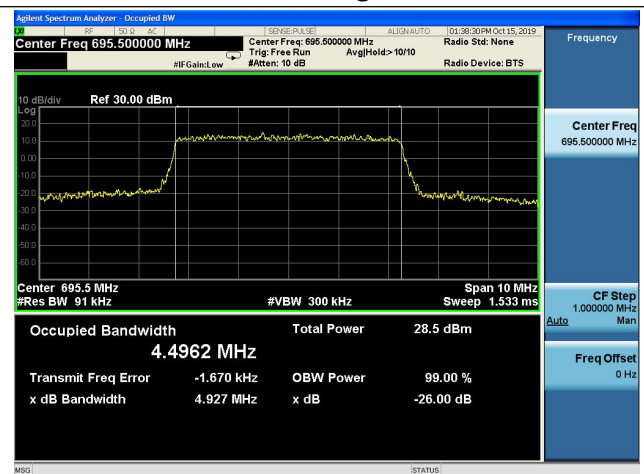
Band 71/ 5MHz/Mid CH/16QAM



Band 71/ 5MHz/High CH/QPSK



Band 71/ 5MHz/High CH/16QAM

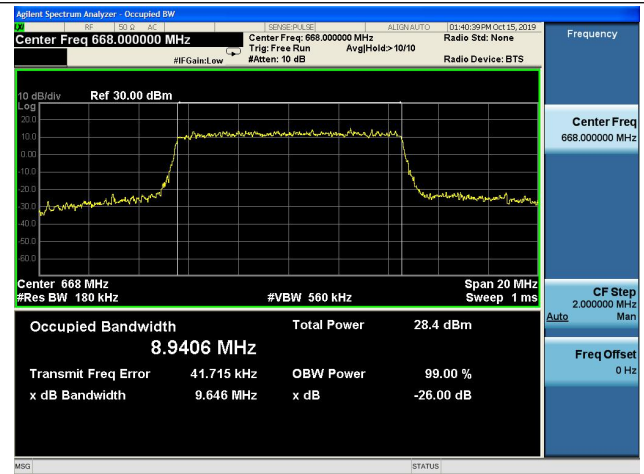




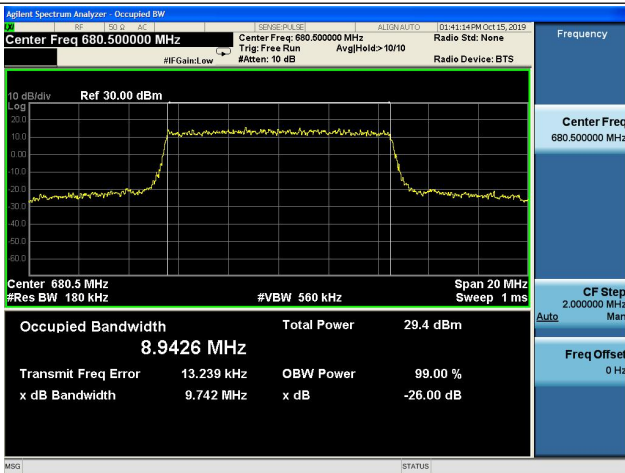
Band 71/ 10MHz/ Low CH/QPSK



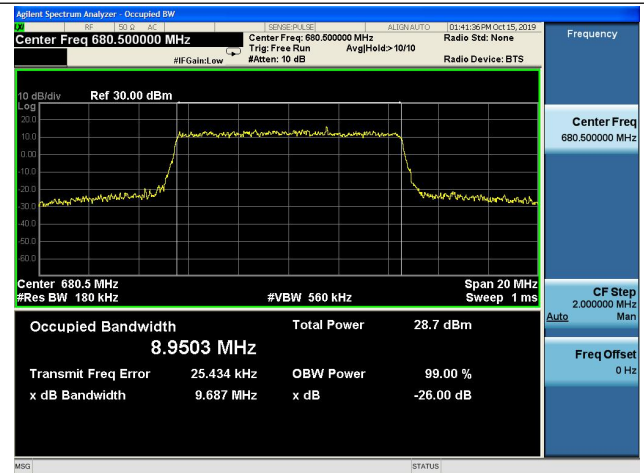
Band 71/ 10MHz/ Low CH/16QAM



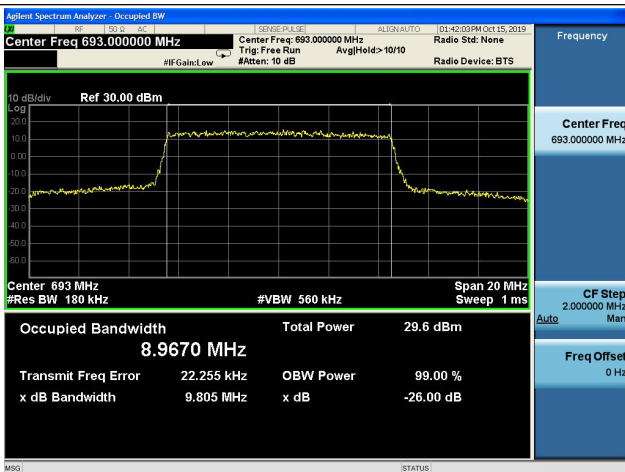
Band 71/ 10MHz/Mid CH/QPSK



Band 71/ 10MHz/Mid CH/16QAM



Band 71/ 10MHz/High CH/QPSK

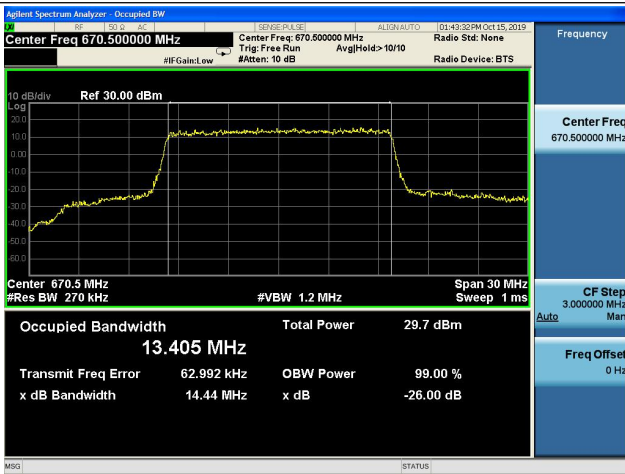


Band 71/ 10MHz/High CH/16QAM

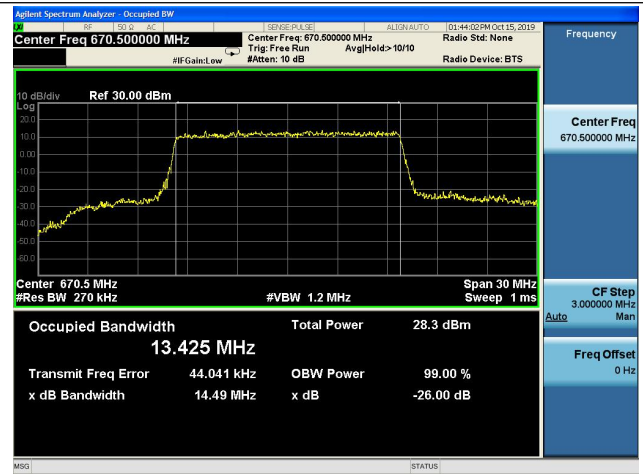




Band 71/ 15MHz/ Low CH/QPSK



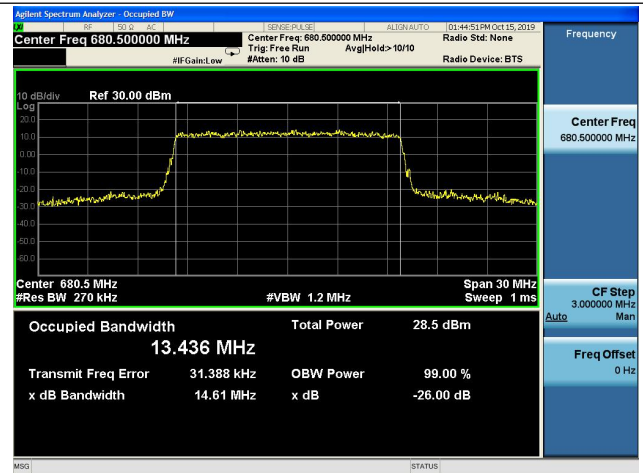
Band 71/ 15MHz/ Low CH/16QAM



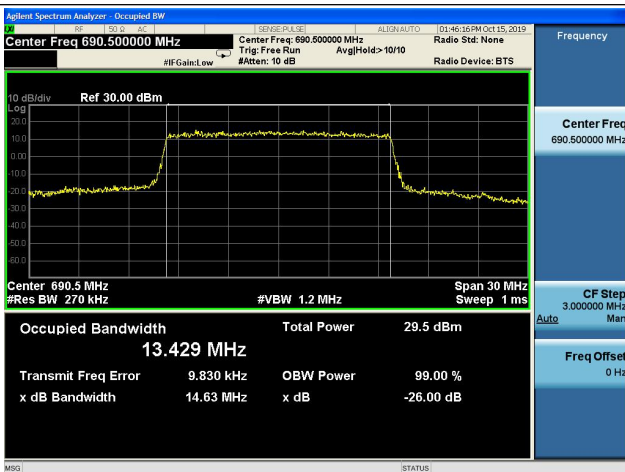
Band 71/ 15MHz/Mid CH/QPSK



Band 71/ 15MHz/Mid CH/16QAM



Band 71/ 15MHz/High CH/QPSK

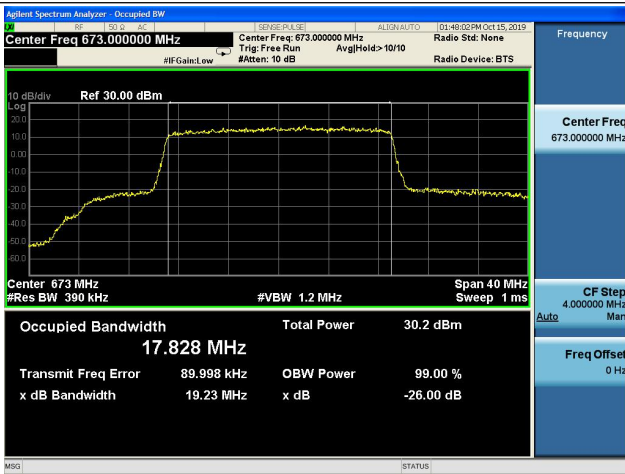


Band 71/ 15MHz/High CH/16QAM

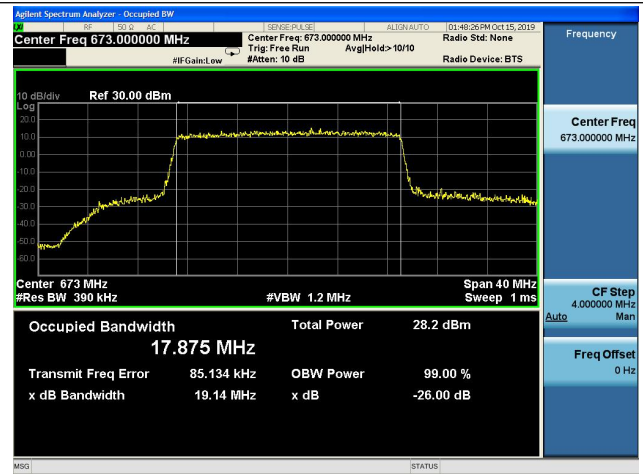




Band 71/ 20MHz/ Low CH/QPSK



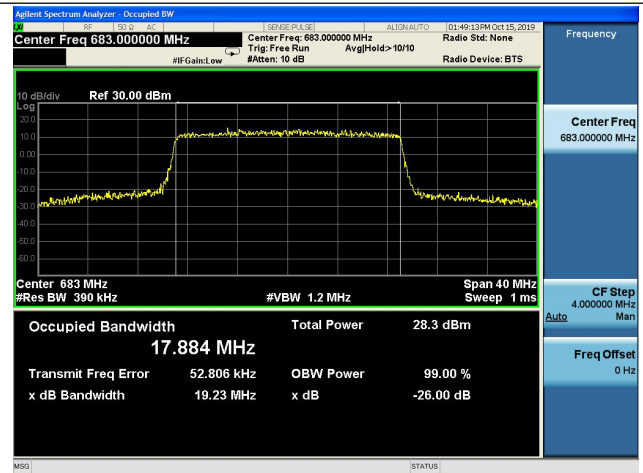
Band 71/ 20MHz/ Low CH/16QAM



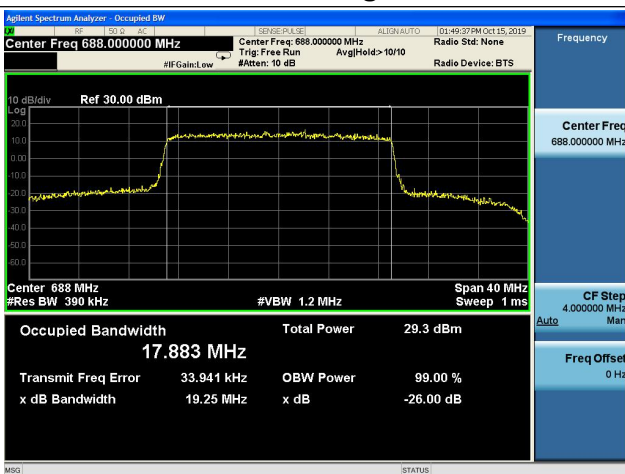
Band 71/ 20MHz/Mid CH/QPSK



Band 71/ 20MHz/Mid CH/16QAM



Band 71/ 20MHz/High CH/QPSK



Band 71/ 20MHz/High CH/16QAM



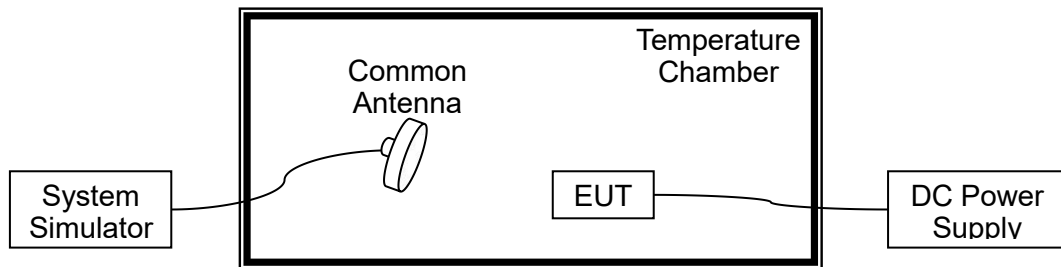
2.3. Frequency Stability

2.3.1. Requirement

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

- (a) The temperature is varied from -10°C to $+45^{\circ}\text{C}$ at intervals of not more than 10°C .
- (b) For hand carried battery powered equipment, the primary supply voltage is reduced to the battery operating end point which shall be specified by the manufacture. The supply voltage shall be measured at the input to the cable normally provided with the equipment, or at the power supply terminals if cables are not normally provided.

2.3.2. Test Description



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

2.3.3. Test procedure

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

2.3.4. Test Result

The nominal, highest and lowest extreme voltages are separately 3.8VDC, 4.35VDC and 3.5VDC, which are specified by the applicant; the normal temperature here used is 20°C .



LTE Band 26, QPSK, Channel 26915, Frequency 836.5MHz					
Limit =±2.5ppm					
Voltage(%)	Power(VDC)	Temp(°C)	Fre. Dev.(Hz)	Deviation (ppm)	Result
100	3.85	+20(Ref)	43	0.024	PASS
100		-10	26	0.015	
100		0	-66	-0.037	
100		+10	45	0.025	
100		+20	-27	-0.015	
100		+30	-27	-0.015	
100		+40	25	0.014	
100		+50	56	0.032	
100		+55	17	0.010	
115	4.20	+20	37	0.021	
85	3.60	+20	-25	-0.014	

LTE Band 28, QPSK, Channel 27460, Frequency 728MHz					
Limit =±2.5ppm					
Voltage(%)	Power(VDC)	Temp(°C)	Fre. Dev.(Hz)	Deviation (ppm)	Result
100	3.85	+20(Ref)	42	0.017	PASS
100		-10	26	0.010	
100		0	-42	-0.017	
100		+10	45	0.018	
100		+20	-27	-0.011	
100		+30	-47	-0.019	
100		+40	25	0.010	
100		+50	26	0.010	
100		+55	17	0.007	
115	4.20	+20	36	0.014	
85	3.60	+20	-25	-0.010	

LTE Band 30, QPSK, Channel 27710, Frequency 2310MHz					
Limit =±1ppm					
Voltage(%)	Power(VDC)	Temp(°C)	Fre.	Deviation	Result



)		Dev.(Hz)	(ppm)	
100	3.85	+20(Ref)	42	0.024	PASS
100		-10	51	0.029	
100		0	-53	-0.030	
100		+10	42	0.024	
100		+20	-7	-0.004	
100		+30	-39	-0.022	
100		+40	27	0.015	
100		+50	37	0.021	
100		+55	13	0.007	
115	4.20	+20	36	0.020	
85	3.60	+20	-55	-0.031	

LTE Band 41, QPSK, Channel 40620, Frequency 2593MHz					
Limit =±1ppm					
Voltage(%)	Power(VDC)	Temp(°C)	Fre. Dev.(Hz)	Deviation (ppm)	Result
100	3.85	+20(Ref)	43	0.024	PASS
100		-10	26	0.015	
100		0	-66	-0.037	
100		+10	45	0.025	
100		+20	-27	-0.015	
100		+30	-27	-0.015	
100		+40	25	0.014	
100		+50	56	0.032	
100		+55	17	0.010	
115	4.20	+20	37	0.021	
85	3.60	+20	-25	-0.014	

LTE Band 66, QPSK, Channel 132322, Frequency 1745MHz					
Limit =±1ppm					
Voltage(%)	Power(VDC)	Temp(°C)	Fre. Dev.(Hz)	Deviation (ppm)	Result
100	3.85	+20(Ref)	42	0.017	PASS
100		-10	26	0.010	
100		0	-42	-0.017	



100		+10	45	0.018	
100		+20	-27	-0.011	
100		+30	-47	-0.019	
100		+40	25	0.010	
100		+50	26	0.010	
100		+55	17	0.007	
115	4.20	+20	36	0.014	
85	3.60	+20	-25	-0.010	

LTE Band 71, QPSK, Channel 133322, Frequency 683MHz					
Limit =±1ppm					
Voltage(%)	Power(VDC)	Temp(°C)	Fre. Dev.(Hz)	Deviation (ppm)	Result
100	3.85	+20(Ref)	42	0.024	PASS
100		-10	51	0.029	
100		0	-53	-0.030	
100		+10	42	0.024	
100		+20	-7	-0.004	
100		+30	-39	-0.022	
100		+40	27	0.015	
100		+50	37	0.021	
100		+55	13	0.007	
115		4.20	+20	36	
85	3.60	+20	-55	-0.031	

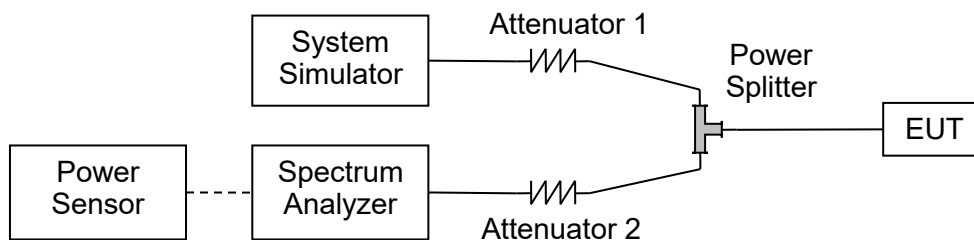
2.4. Peak to Average Ratio

2.4.1. Requirement

According to FCC section 24.232(d), the peak to average ratio (PAR) of the transmission may not exceed 13dB.

2.4.2. Test Description

A. Test Set:



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.

2.4.3. Test procedure

KDB 971168 D01v03 Section 5.7 and ANSI/TIA-603-E-2016.

2.4.4. Test Result

Record the maximum PAPR level associated with a probability of 0.1%.



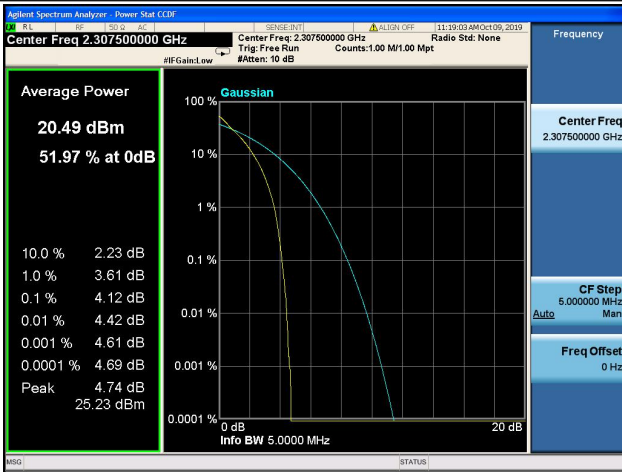
LTE Band 30						
BW (MHz)	Modulation	LCH	MCH	HCH	Limit (dB)	Verdict
5	QPSK	4.12	4.04	4.05	≤ 13	PASS
	16QAM	4.93	4.86	4.85		PASS
10	QPSK	/	4.05	/		PASS
	16QAM	/	4.82	/		PASS

LTE Band 41						
BW (MHz)	Modulation	LCH	MCH	HCH	Limit (dB)	Verdict
5	QPSK	10.78	9.14	8.55	≤ 13	PASS
	16QAM	9.53	9.83	9.9		PASS
10	QPSK	8.85	9.18	9.4		PASS
	16QAM	10.73	9.48	9.02		PASS
15	QPSK	8.93	8.64	8.01		PASS
	16QAM	10.01	9.45	9.17		PASS
20	QPSK	8.67	8.74	9.44		PASS
	16QAM	9.6	9.28	11.41		PASS

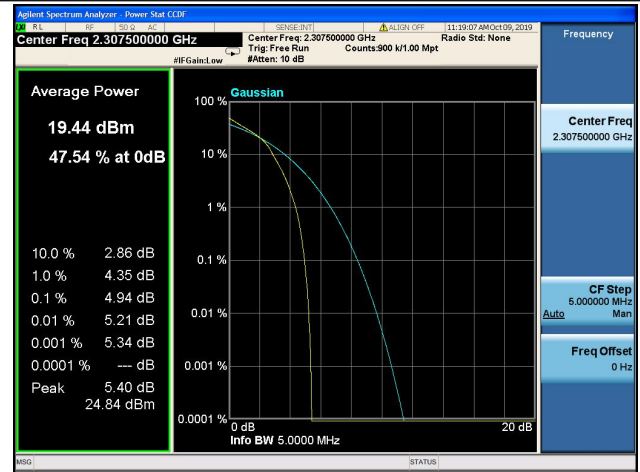
LTE Band 66						
BW (MHz)	Modulation	LCH	MCH	HCH	Limit (dB)	Verdict
1.4	QPSK	3.71	4.62	3.62	≤ 13	PASS
	16QAM	4.31	5.22	4.68		PASS
3	QPSK	4.12	4.75	4.17		PASS
	16QAM	4.70	4.86	5.03		PASS
5	QPSK	4.70	4.86	4.61		PASS
	16QAM	4.85	4.95	4.68		PASS
10	QPSK	6.02	5.96	6.01		PASS
	16QAM	6.38	6.07	6.17		PASS
15	QPSK	6.80	6.77	6.80		PASS
	16QAM	6.86	6.86	6.88		PASS
20	QPSK	7.42	7.44	7.31		PASS
	16QAM	7.50	7.43	7.40		PASS



Band 30/ 5MHz/ Low CH/ QPSK



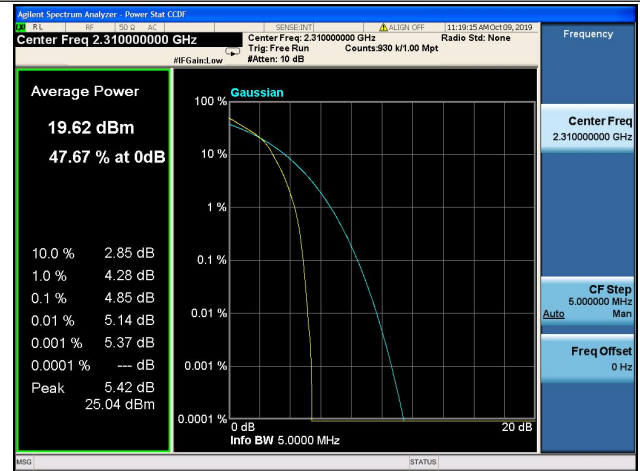
Band 30/ 5MHz/ Low CH/ 16QAM



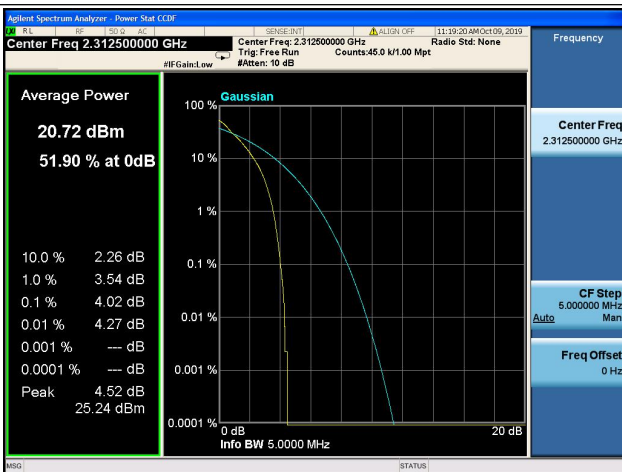
Band 30/ 5MHz/Mid CH/ QPSK



Band 30/ 5MHz/Mid CH/ 16QAM



Band 30/ 5MHz/High CH/ QPSK



Band 30/ 5MHz/High CH/ 16QAM

