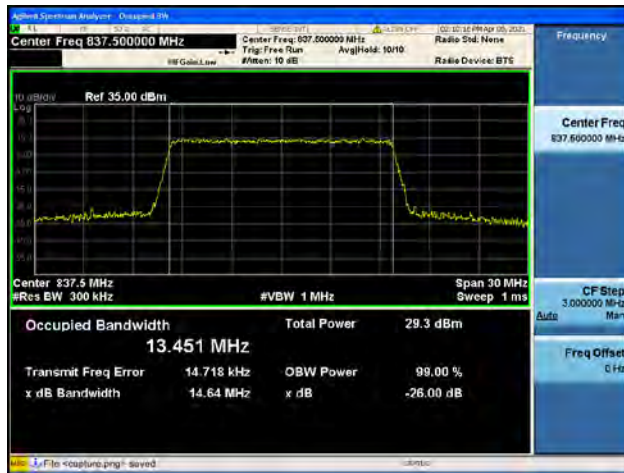
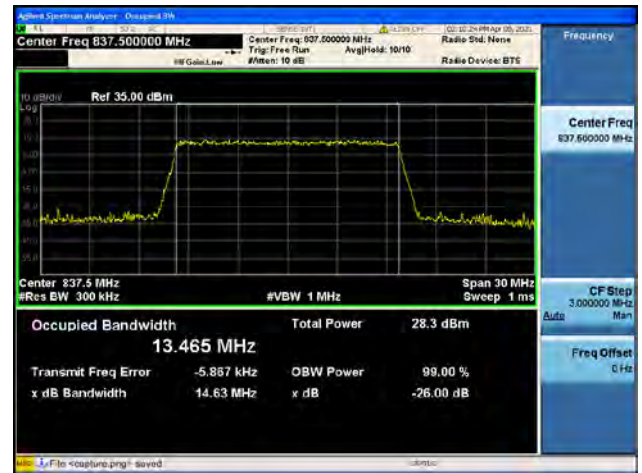




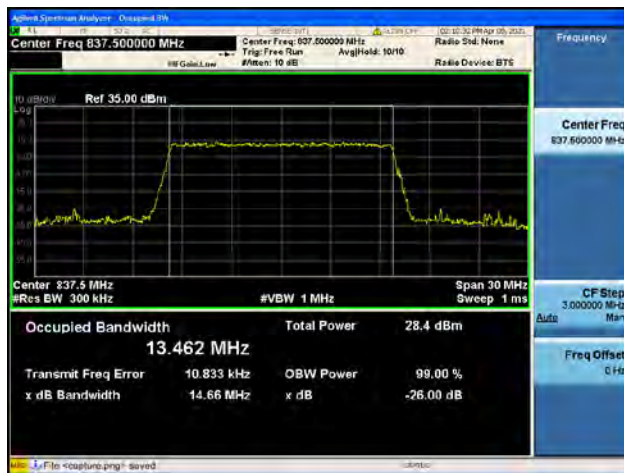
Band19 / 15MHz / Low CH / QPSK



Band19 / 15MHz / Low CH / 16QAM



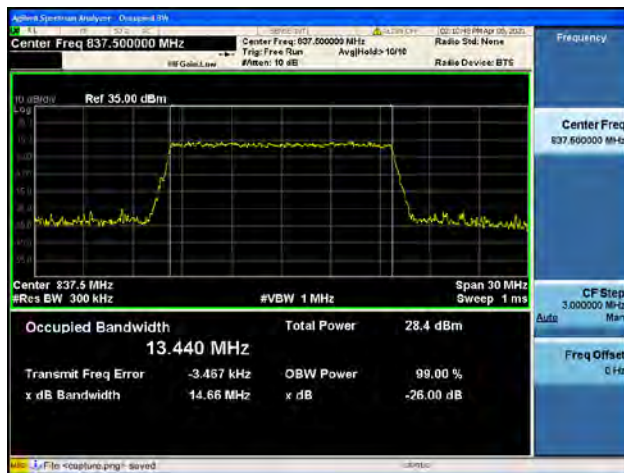
Band19 / 15MHz / Low CH / 64QAM



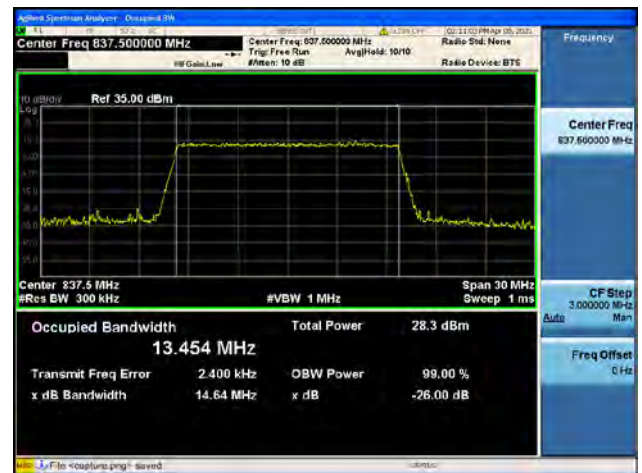
Band19 / 15MHz / Mid CH / QPSK

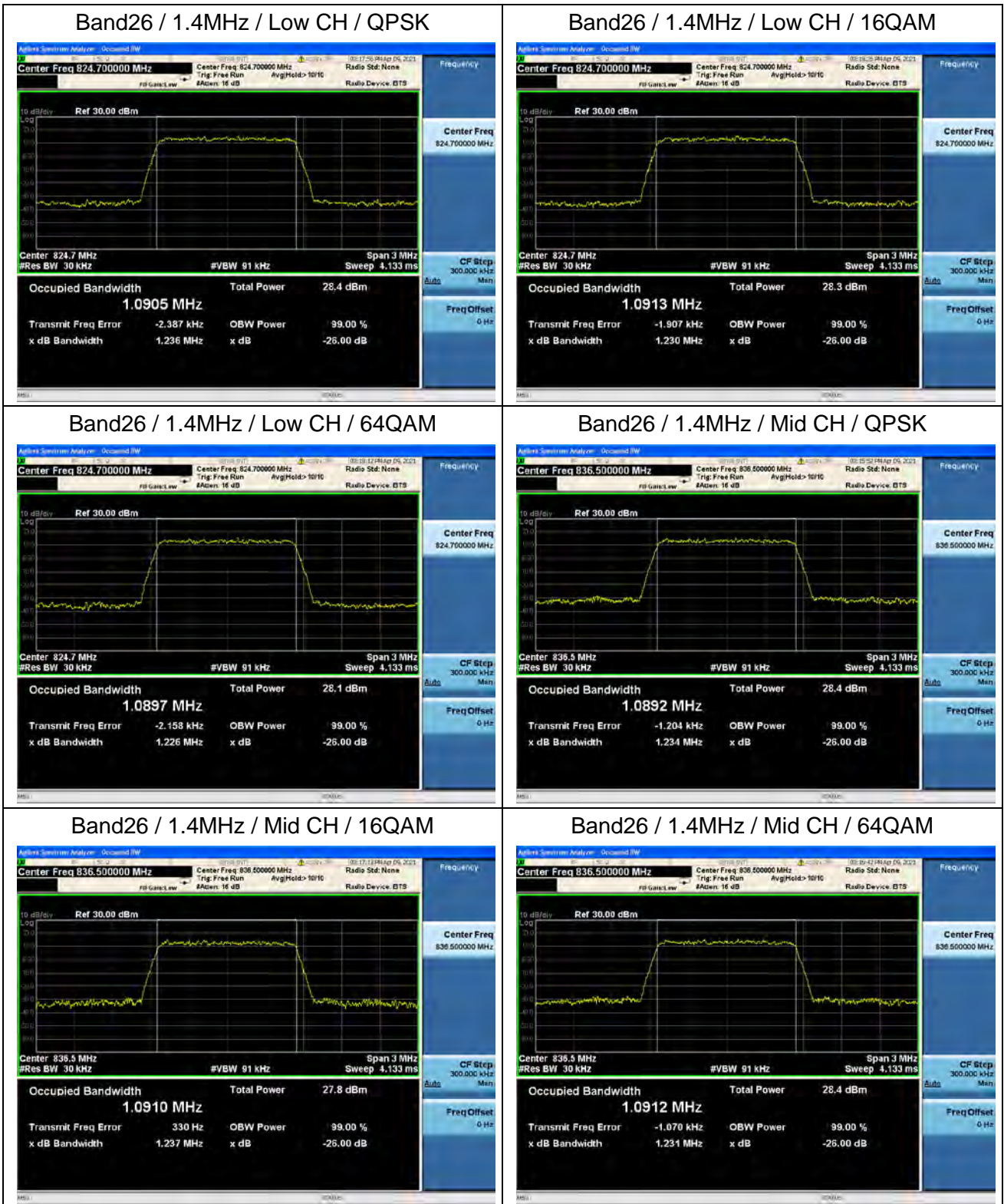


Band19 / 15MHz / Mid CH / 16QAM



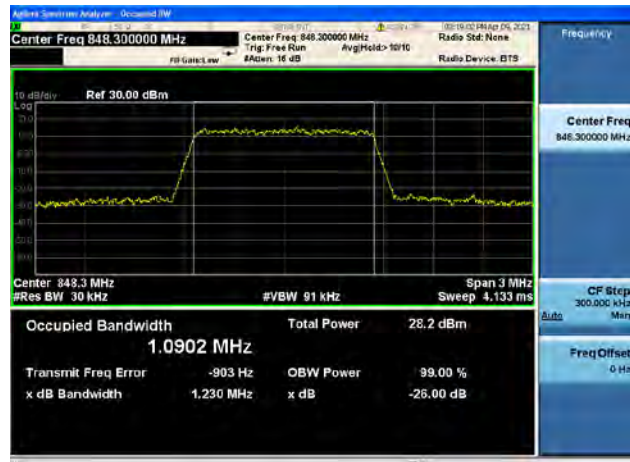
Band19 / 15MHz / Mid CH / 64QAM



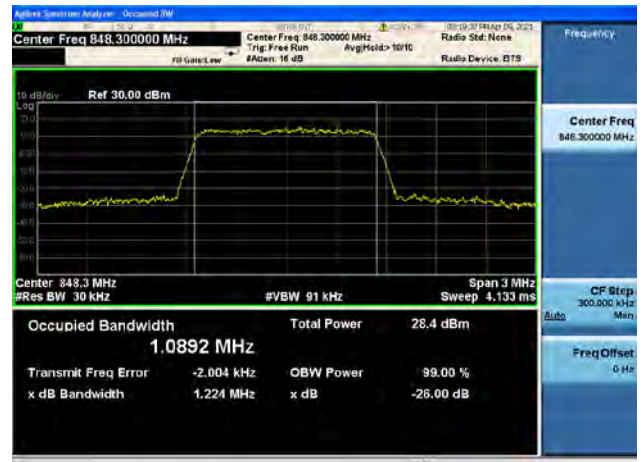




Band26 / 1.4MHz / High CH / QPSK



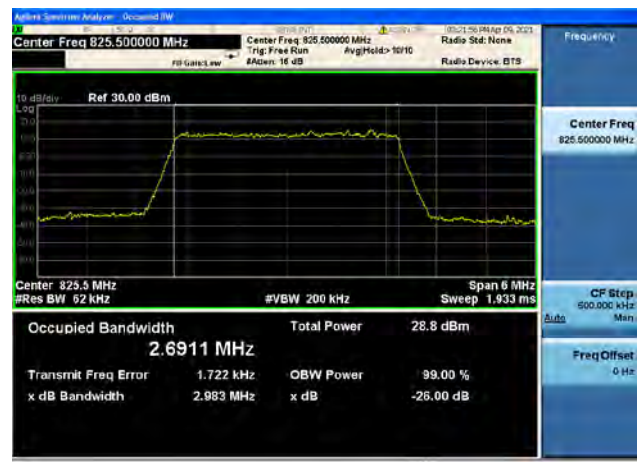
Band26 / 1.4MHz / High CH / 16QAM



Band26 / 1.4MHz / High CH / 64QAM



Band26 / 3MHz / Low CH / QPSK



Band26 / 3MHz / Low CH / 16QAM

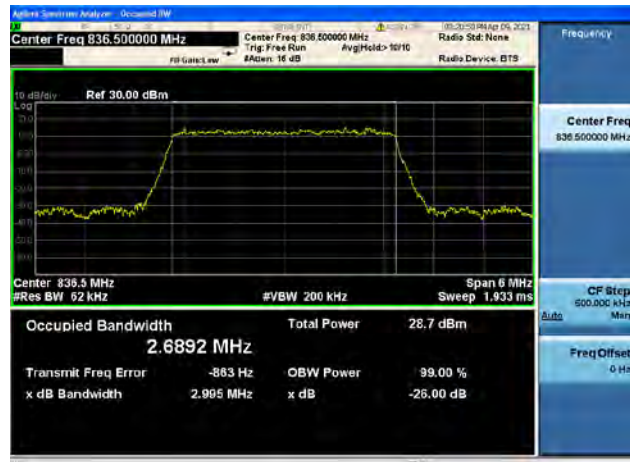


Band26 / 3MHz / Low CH / 64QAM

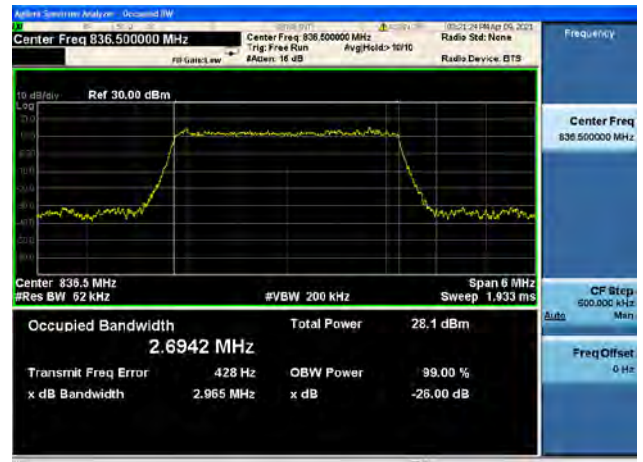




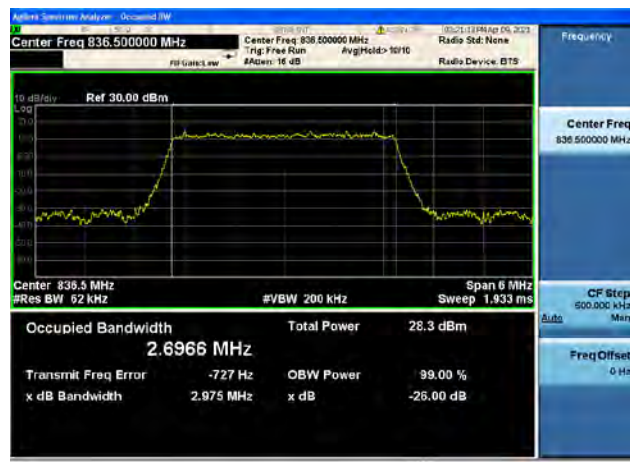
Band26 / 3MHz / Mid CH / QPSK



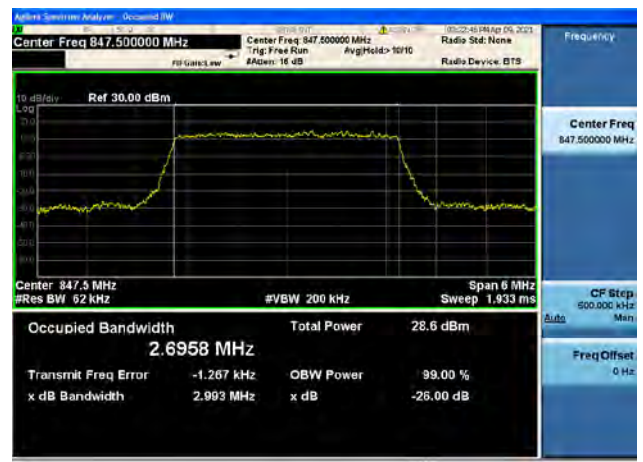
Band26 / 3MHz / Mid CH / 16QAM



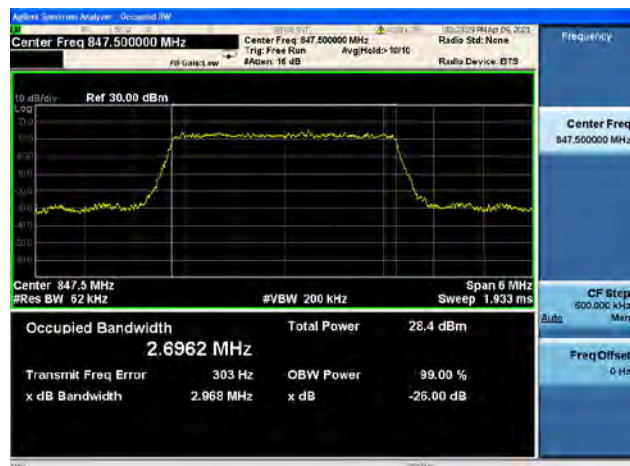
Band26 / 3MHz / Mid CH / 64QAM



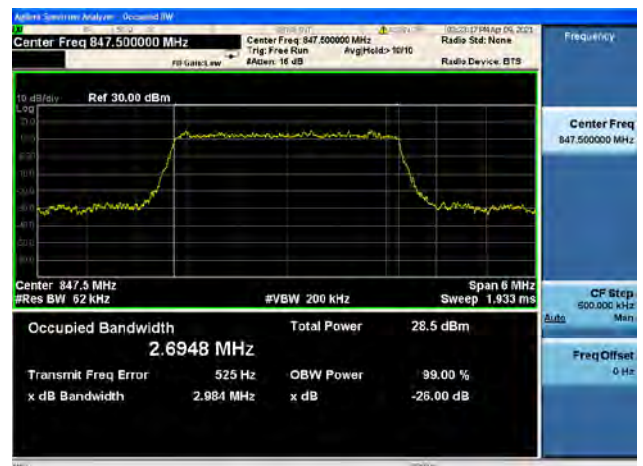
Band26 / 3MHz / High CH / QPSK

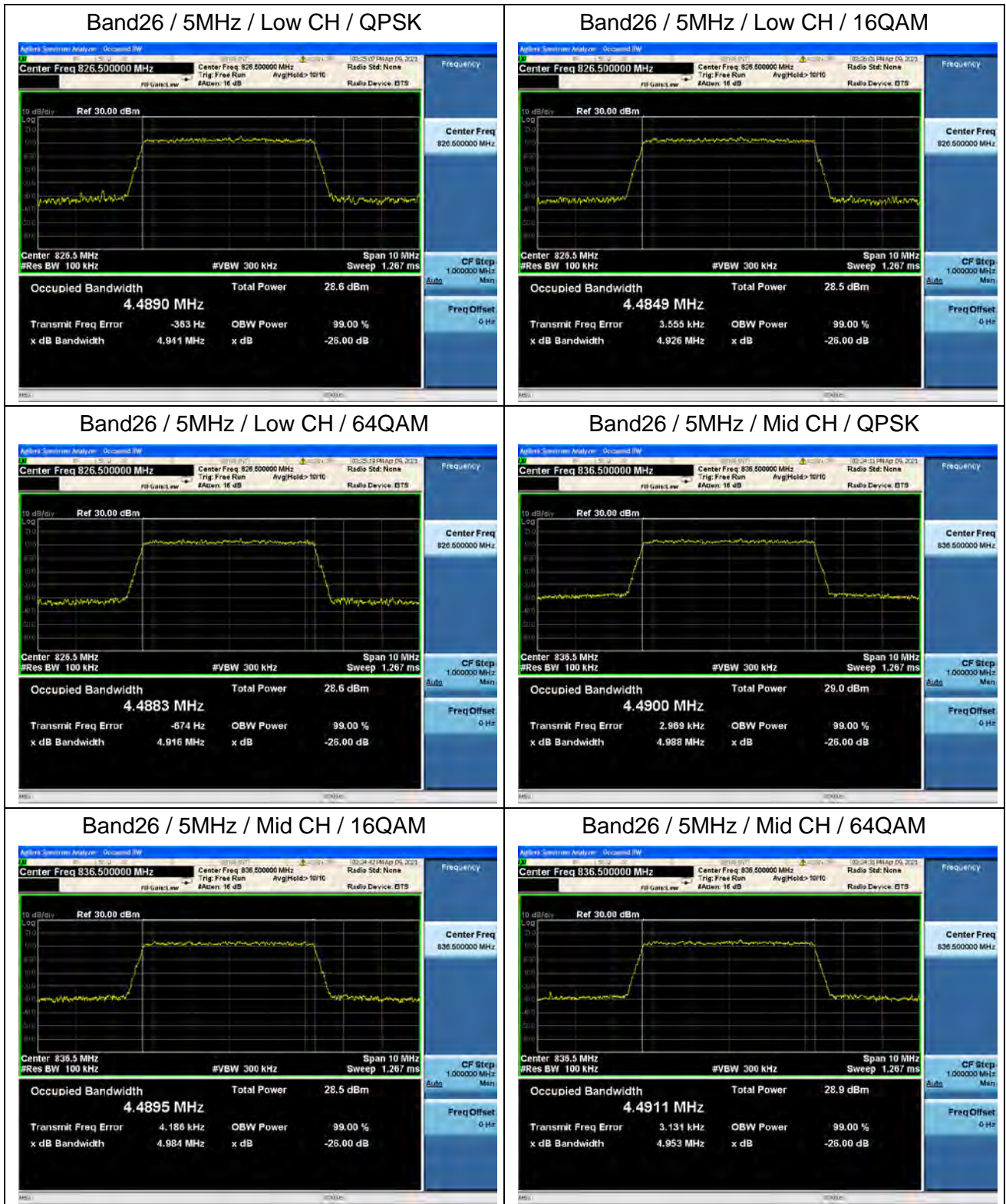


Band26 / 3MHz / High CH / 16QAM



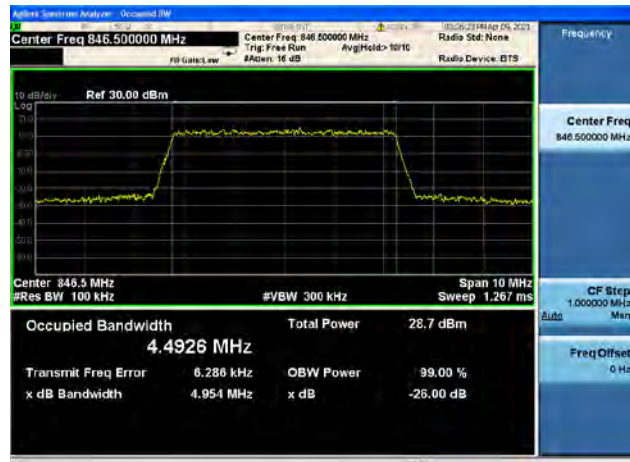
Band26 / 3MHz / High CH / 64QAM



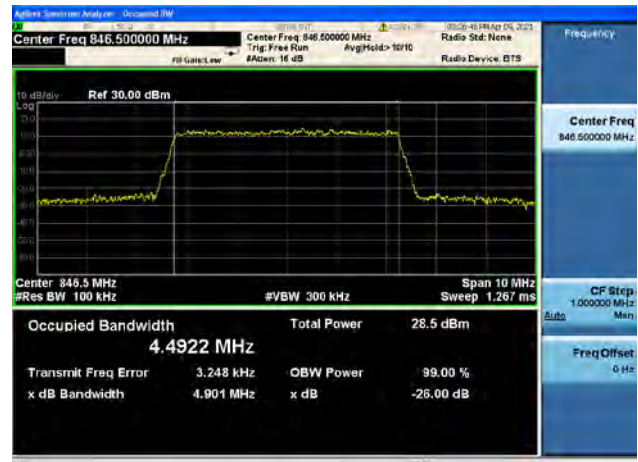




Band26 / 5MHz / High CH / QPSK



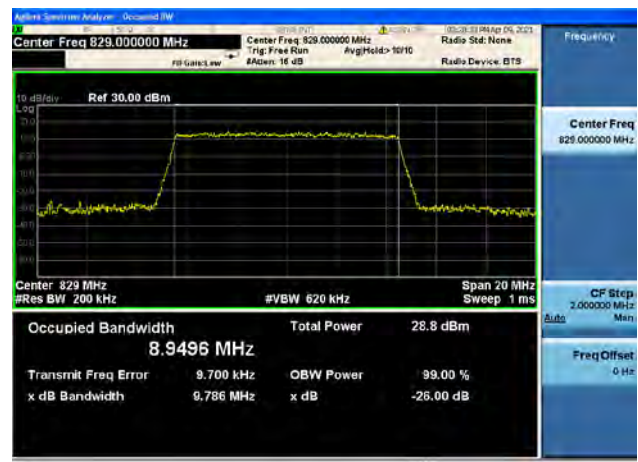
Band26 / 5MHz / High CH / 16QAM



Band26 / 5MHz / High CH / 64QAM



Band26 / 10MHz / Low CH / QPSK

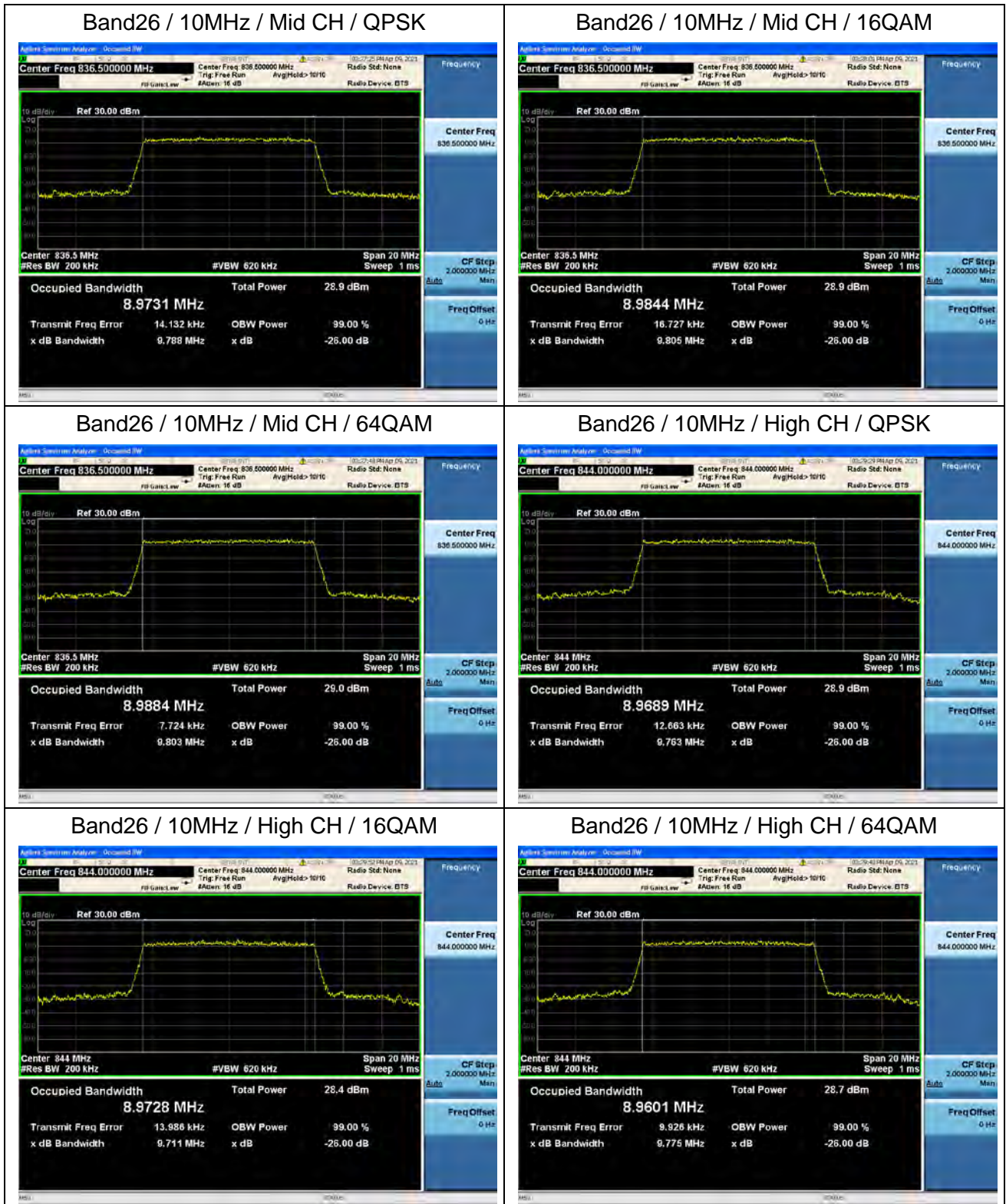


Band26 / 10MHz / Low CH / 16QAM



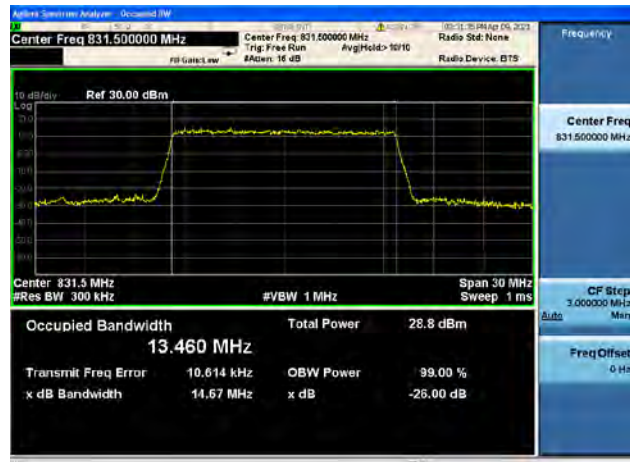
Band26 / 10MHz / Low CH / 64QAM



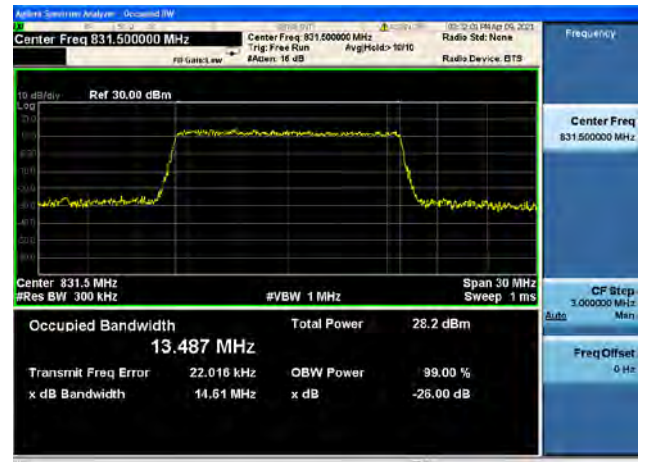




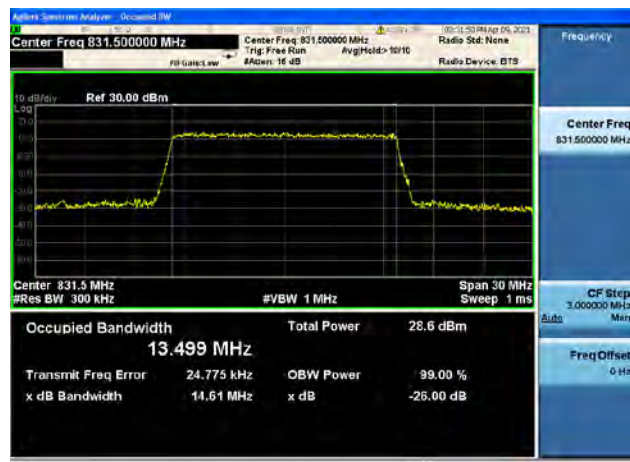
Band26 / 15MHz / Low CH / QPSK



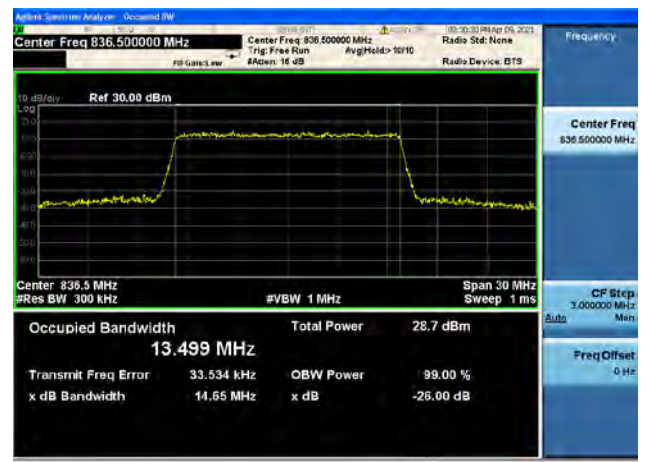
Band26 / 15MHz / Low CH / 16QAM



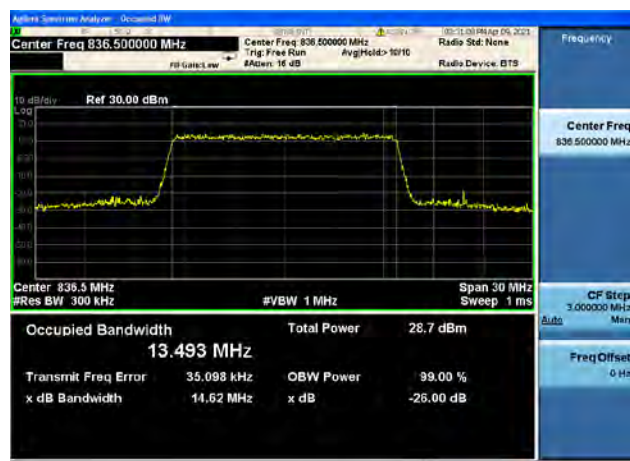
Band26 / 15MHz / Low CH / 64QAM



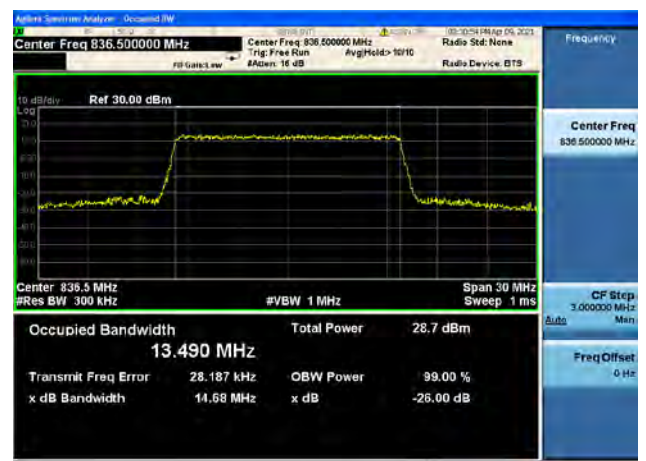
Band26 / 15MHz / Mid CH / QPSK



Band26 / 15MHz / Mid CH / 16QAM

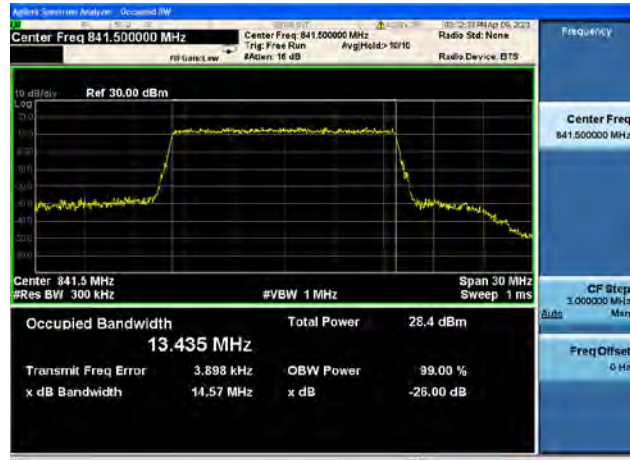


Band26 / 15MHz / Mid CH / 64QAM

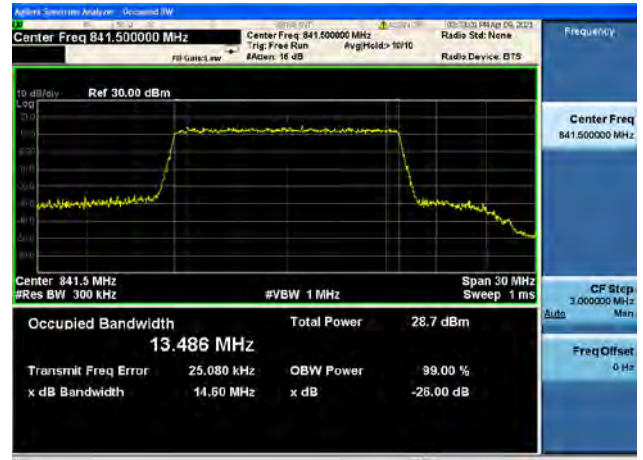




Band26 / 15MHz / High CH / QPSK



Band26 / 15MHz / High CH / 16QAM

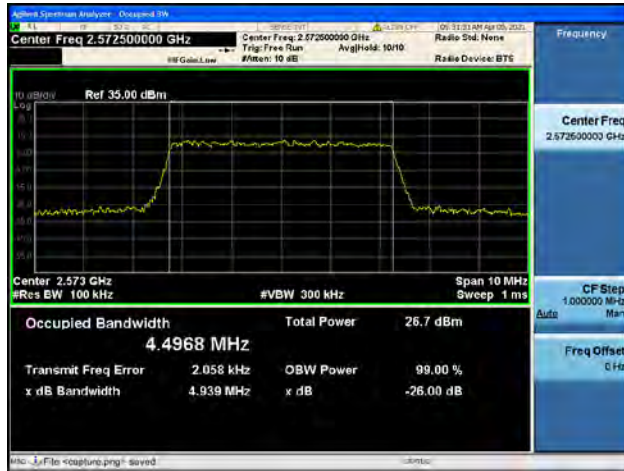


Band26 / 15MHz / High CH / 64QAM

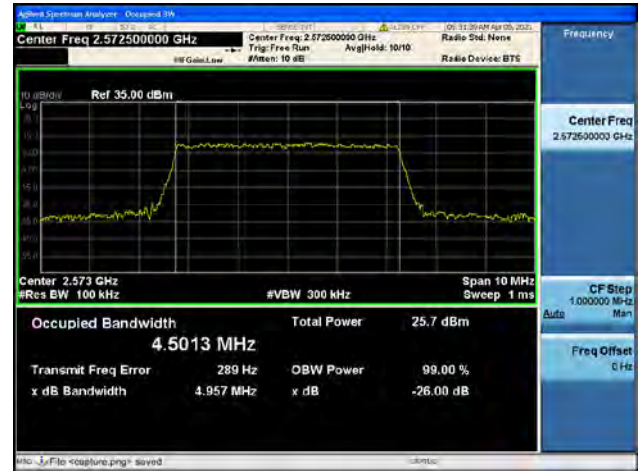




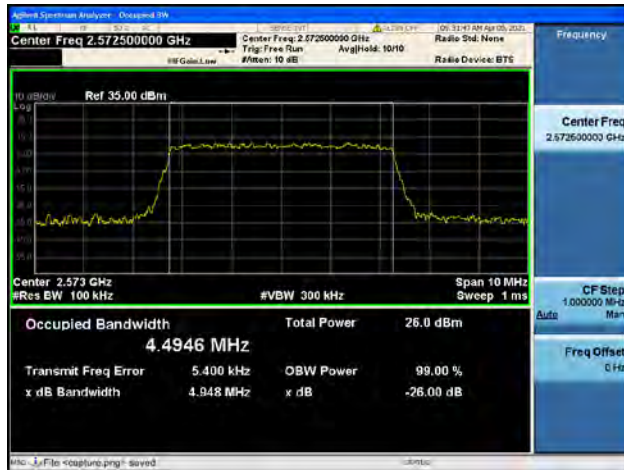
Band38 / 5MHz / Low CH / QPSK



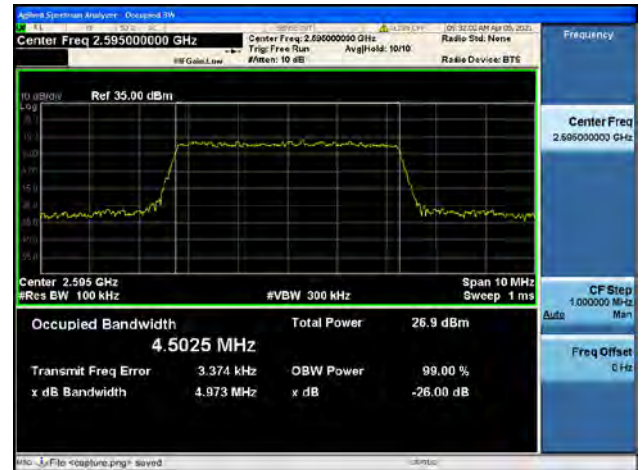
Band38 / 5MHz / Low CH / 16QAM



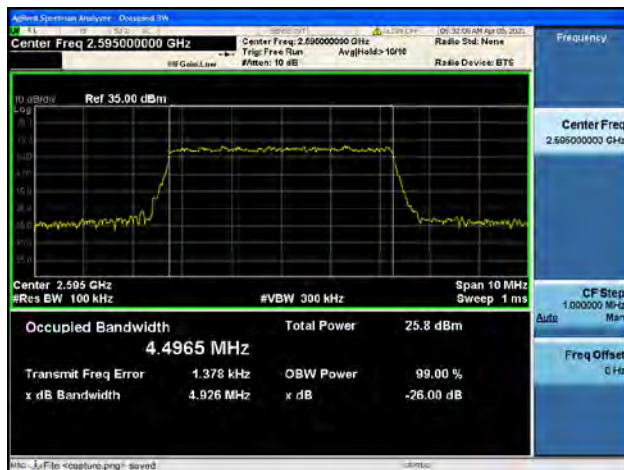
Band38 / 5MHz / Low CH / 64QAM



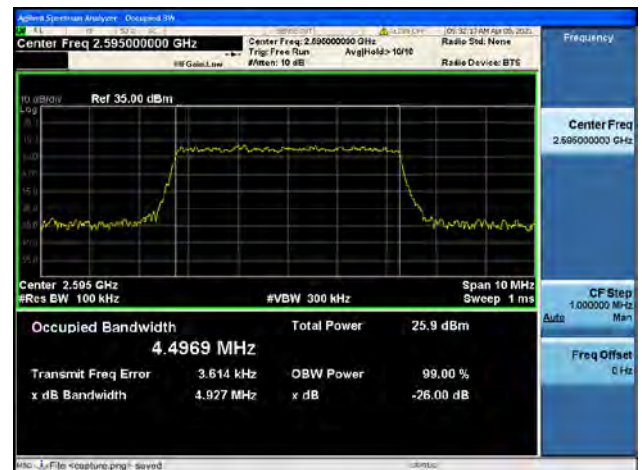
Band38 / 5MHz / Mid CH / QPSK



Band38 / 5MHz / Mid CH / 16QAM

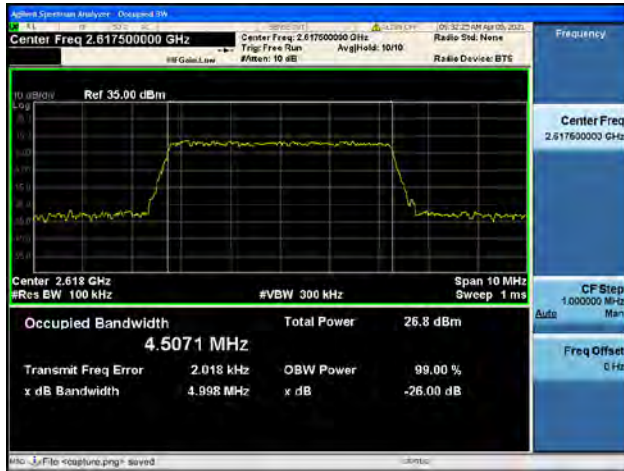


Band38 / 5MHz / Mid CH / 64QAM

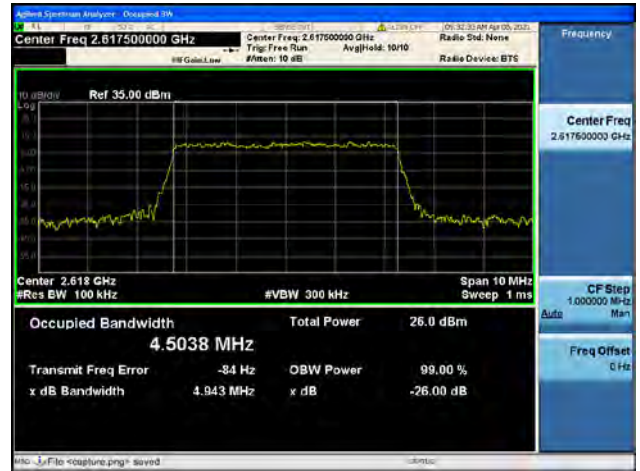




Band38 / 5MHz / High CH / QPSK



Band38 / 5MHz / High CH / 16QAM



Band38 / 5MHz / High CH / 64QAM



Band38 / 10MHz / Low CH / QPSK



Band38 / 10MHz / Low CH / 16QAM

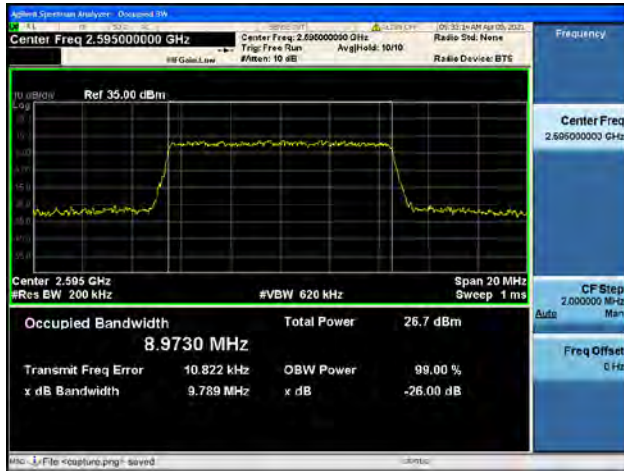


Band38 / 10MHz / Low CH / 64QAM





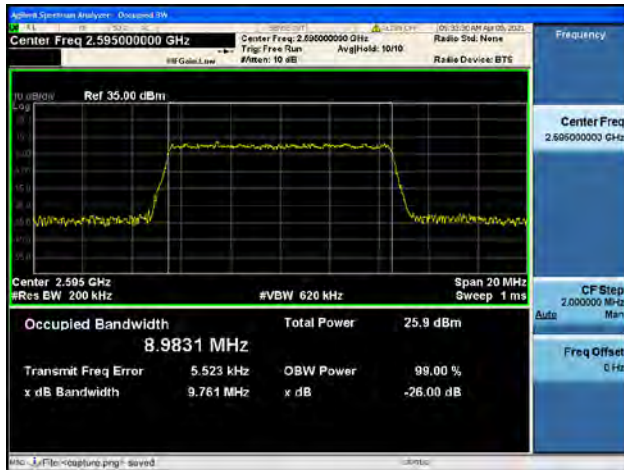
Band38 / 10MHz / Mid CH / QPSK



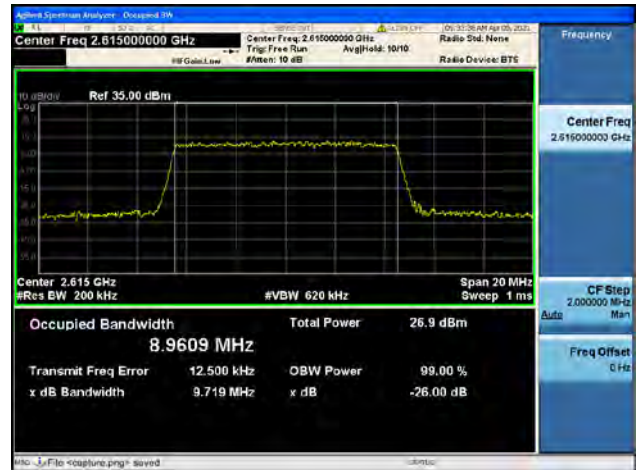
Band38 / 10MHz / Mid CH / 16QAM



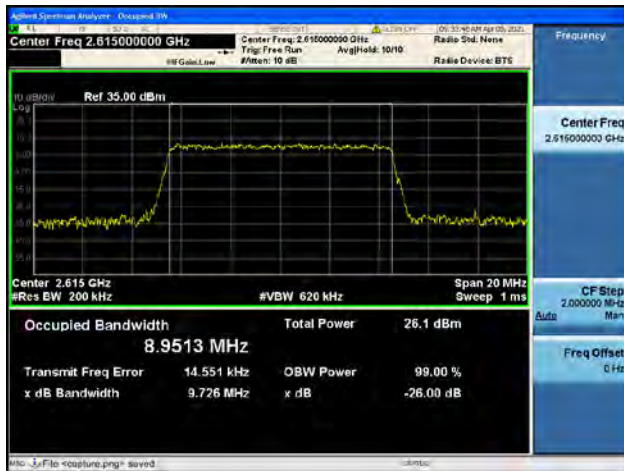
Band38 / 10MHz / Mid CH / 64QAM



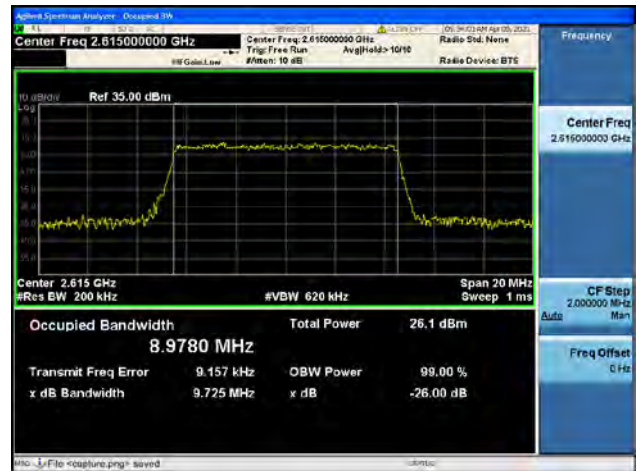
Band38 / 10MHz / High CH / QPSK



Band38 / 10MHz / High CH / 16QAM

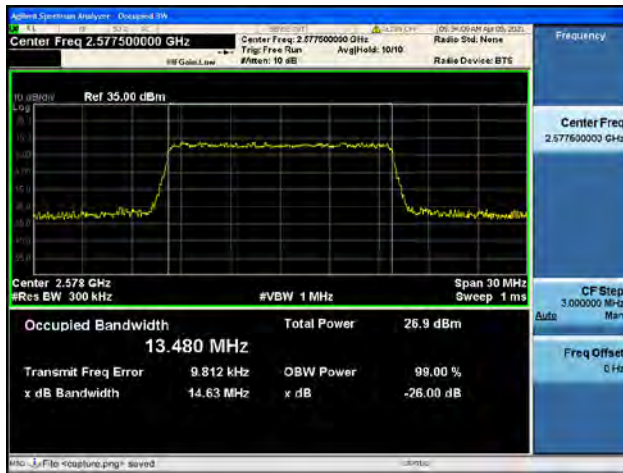


Band38 / 10MHz / High CH / 64QAM

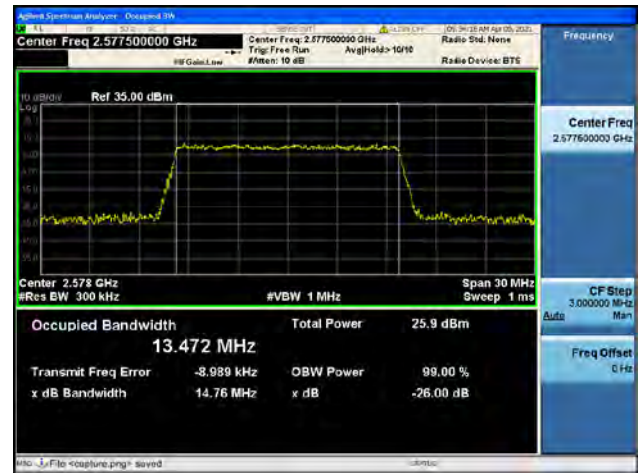




Band38 / 15MHz / Low CH / QPSK



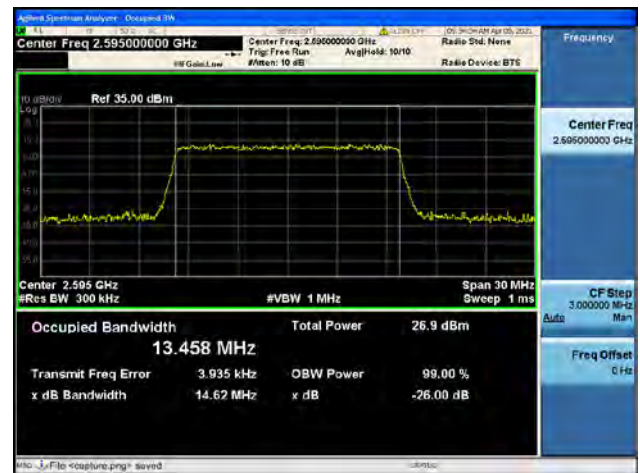
Band38 / 15MHz / Low CH / 16QAM



Band38 / 15MHz / Low CH / 64QAM



Band38 / 15MHz / Mid CH / QPSK



Band38 / 15MHz / Mid CH / 16QAM

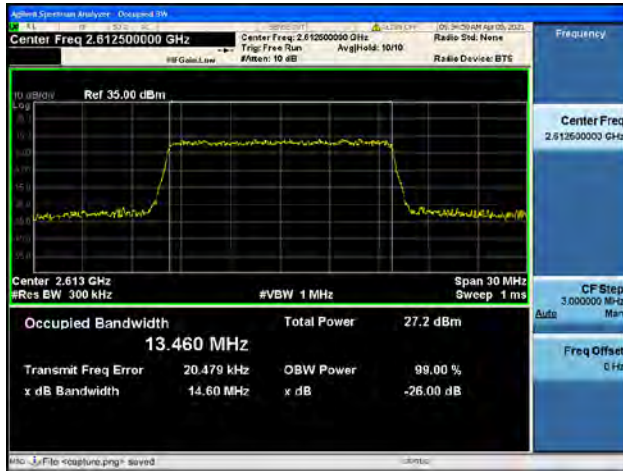


Band38 / 15MHz / Mid CH / 64QAM

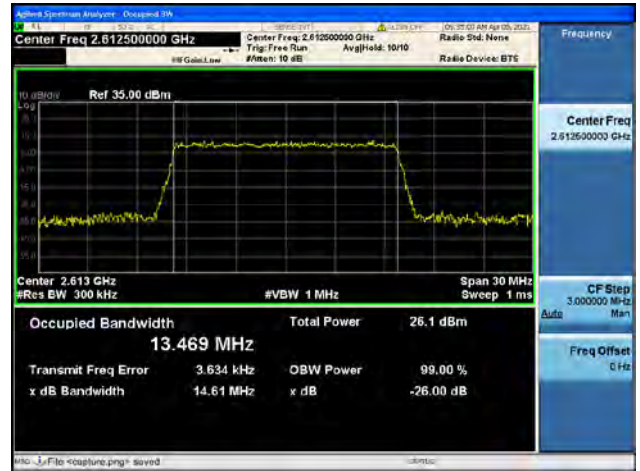




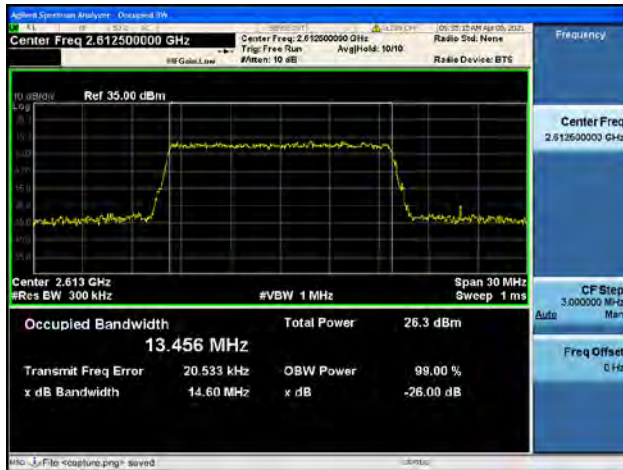
Band38 / 15MHz / High CH / QPSK



Band38 / 15MHz / High CH / 16QAM



Band38 / 15MHz / High CH / 64QAM



Band38 / 20MHz / Low CH / QPSK



Band38 / 20MHz / Low CH / 16QAM

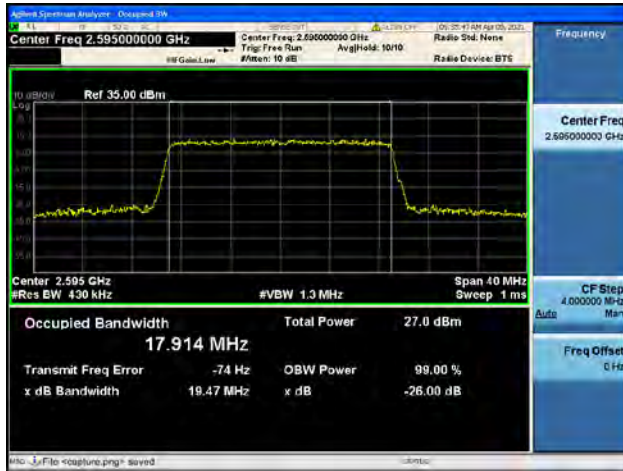


Band38 / 20MHz / Low CH / 64QAM

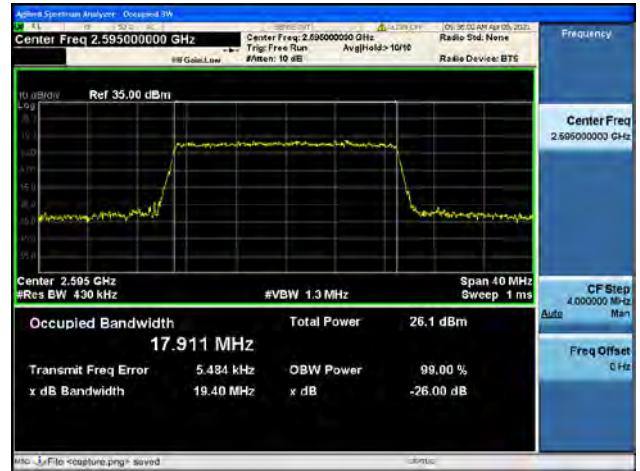




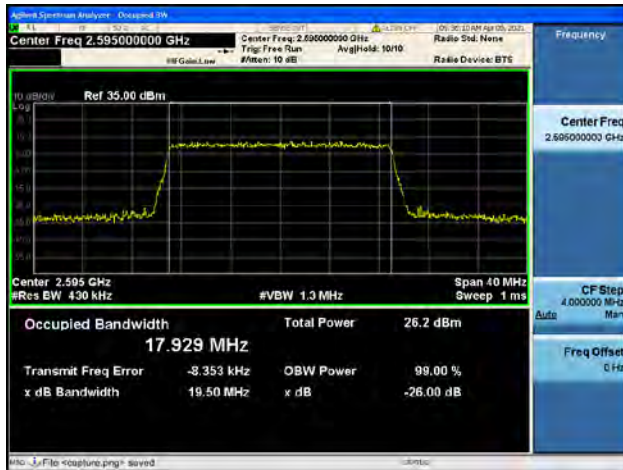
Band38 / 20MHz / Mid CH / QPSK



Band38 / 20MHz / Mid CH / 16QAM



Band38 / 20MHz / Mid CH / 64QAM



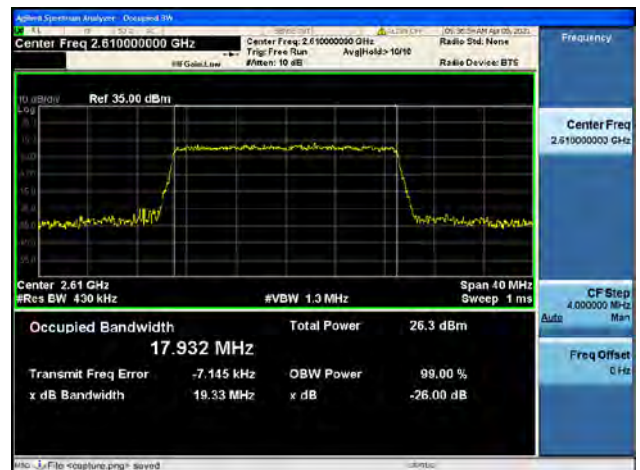
Band38 / 20MHz / High CH / QPSK



Band38 / 20MHz / High CH / 16QAM

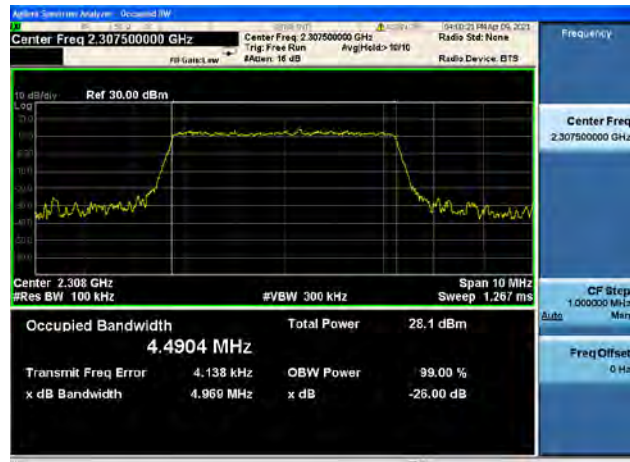


Band38 / 20MHz / High CH / 64QAM

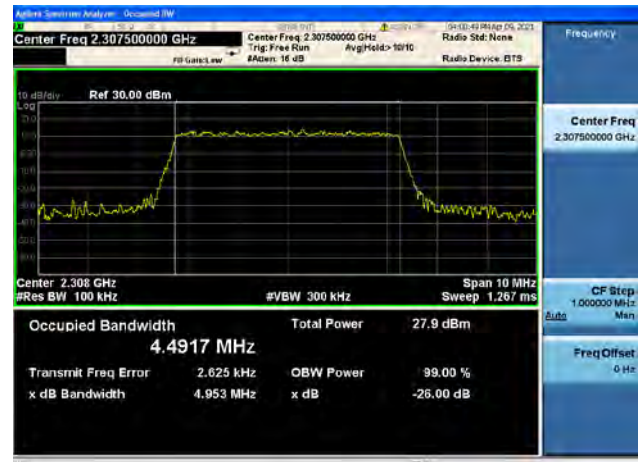




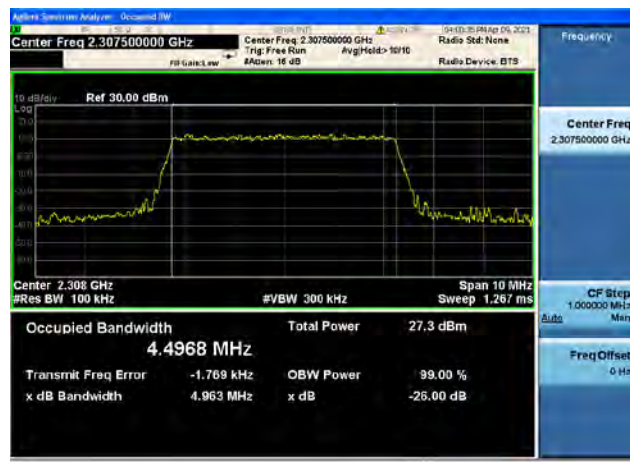
Band40/ Block A / 5MHz / Low CH / QPSK



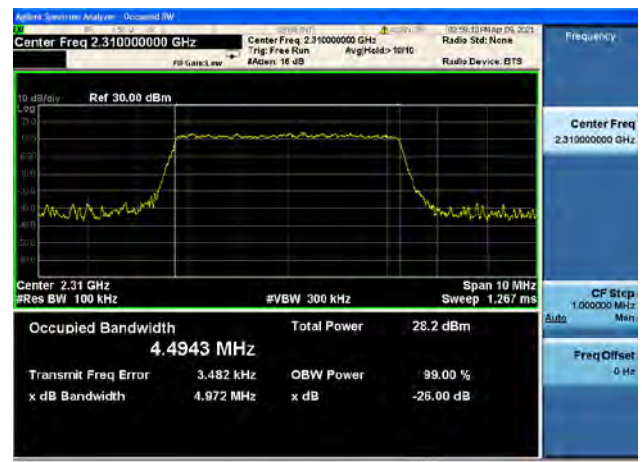
Band40/ Block A / 5MHz / Low CH / 16QAM



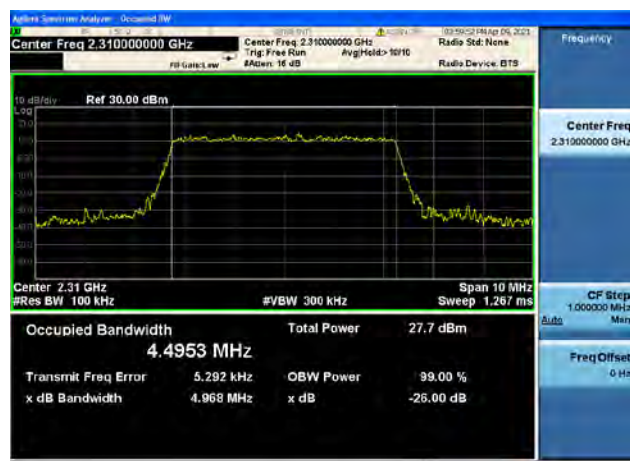
Band40/ Block A / 5MHz / Low CH / 64QAM



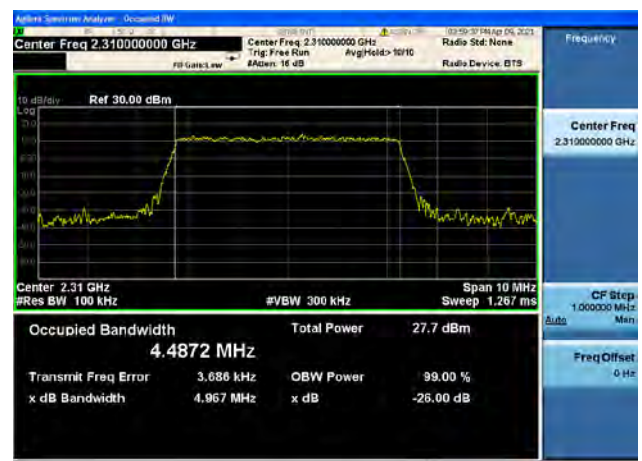
Band40/ Block A / 5MHz / Mid CH / QPSK



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

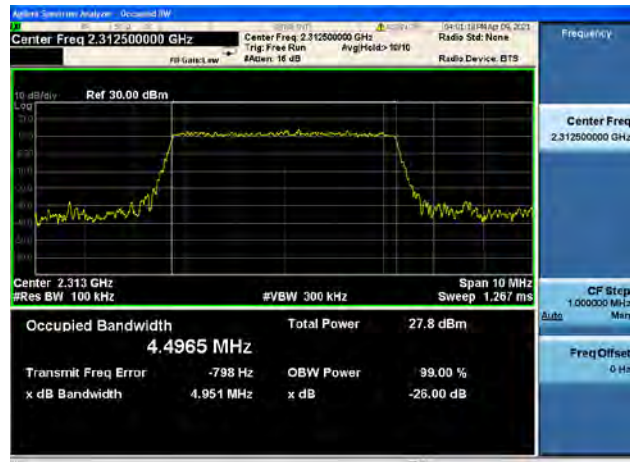


Band40/ Block A / 5MHz / Mid CH / 64QAM

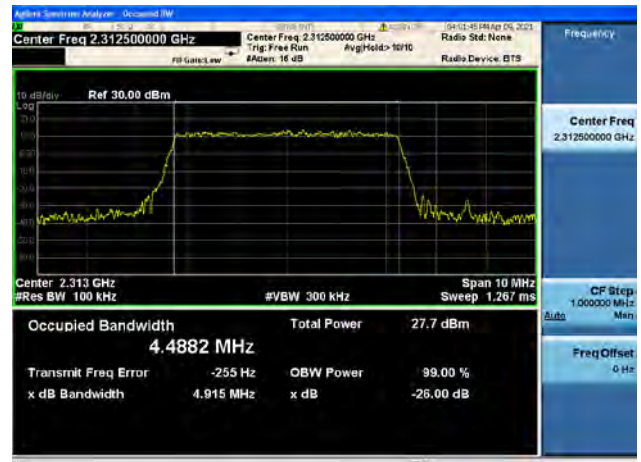




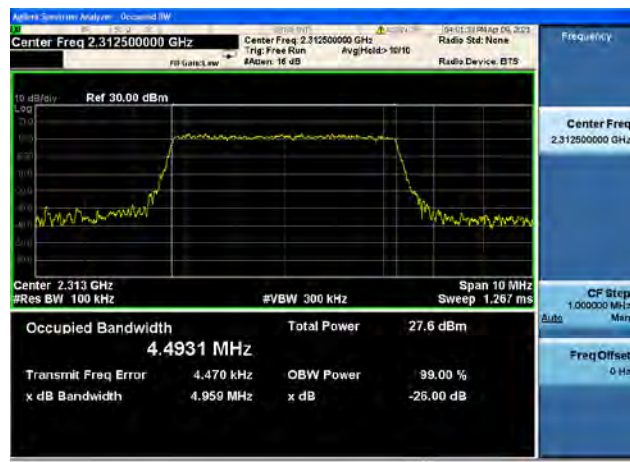
Band40/ Block A / 5MHz / High CH / QPSK



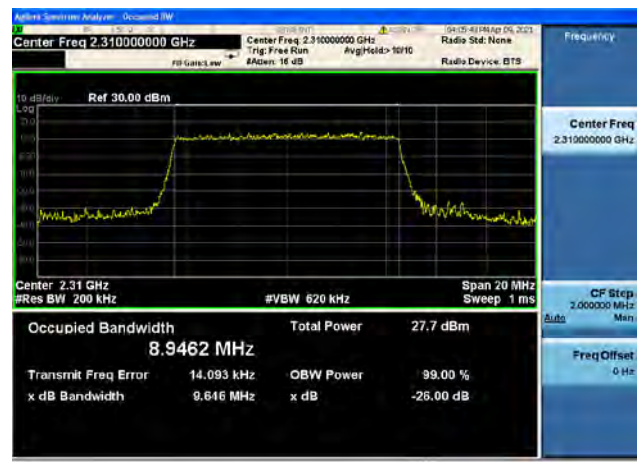
Band40/ Block A / 5MHz / High CH / 16QAM



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



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



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

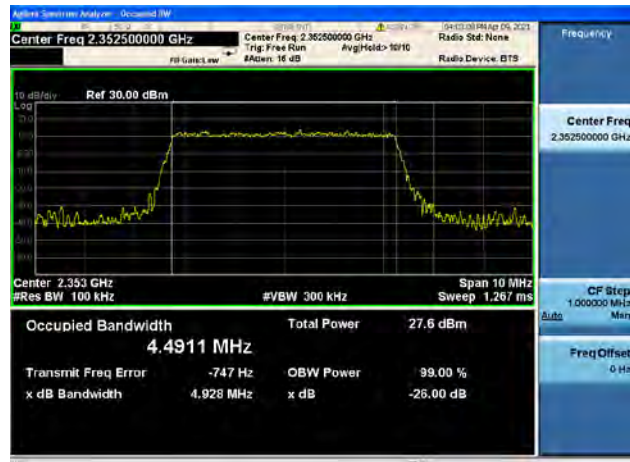


Band40/ Block A / 10MHz / Mid CH / 64QAM

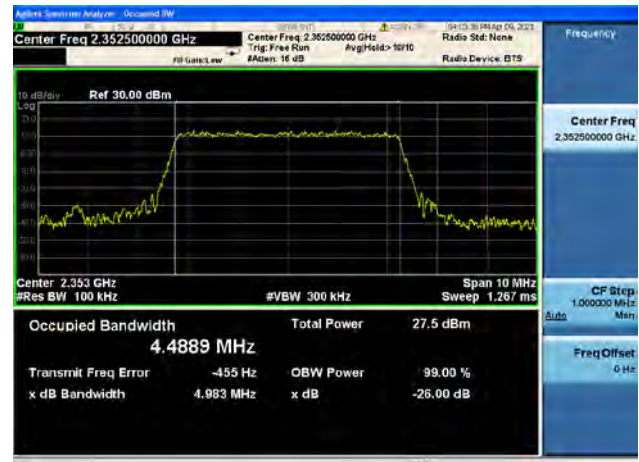




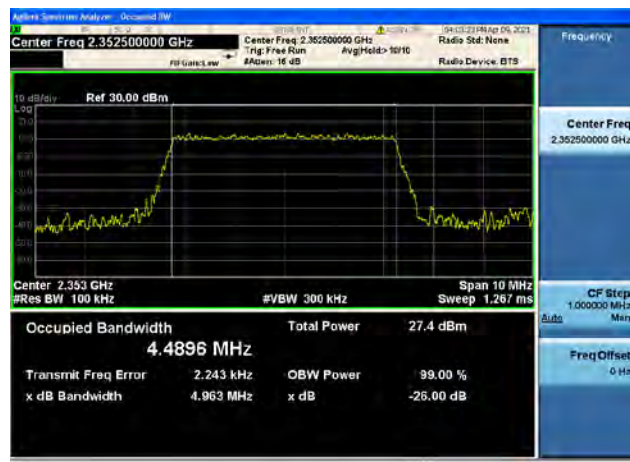
Band40/ Block B / 5MHz / Low CH / QPSK



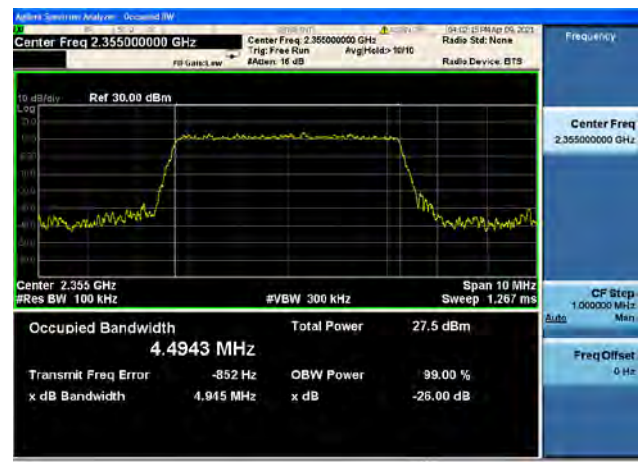
Band40/ Block B / 5MHz / Low CH / 16QAM



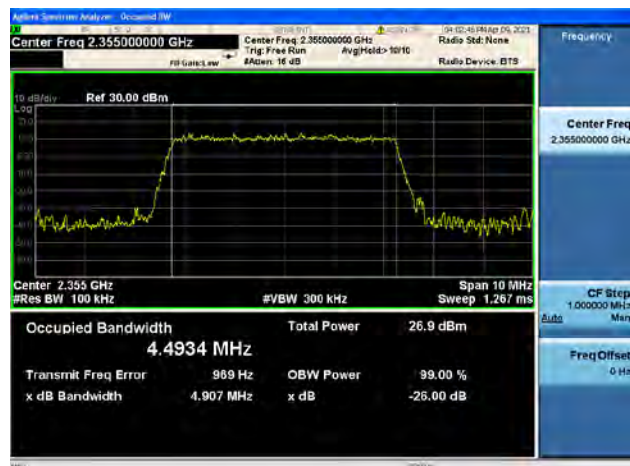
Band40/ Block B / 5MHz / Low CH / 64QAM



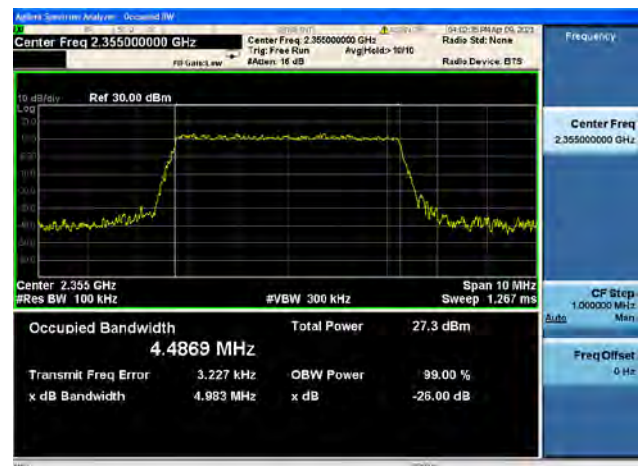
Band40/ Block B / 5MHz / Mid CH / QPSK



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

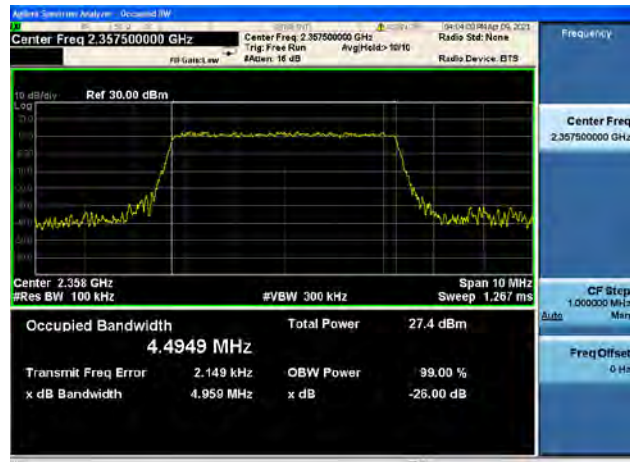


Band40/ Block B / 5MHz / Mid CH / 64QAM

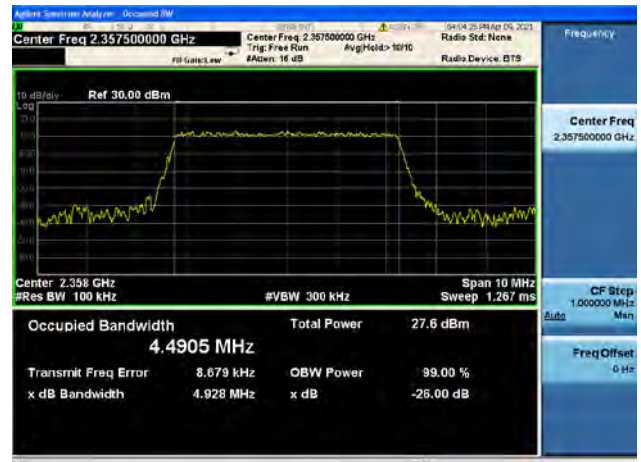




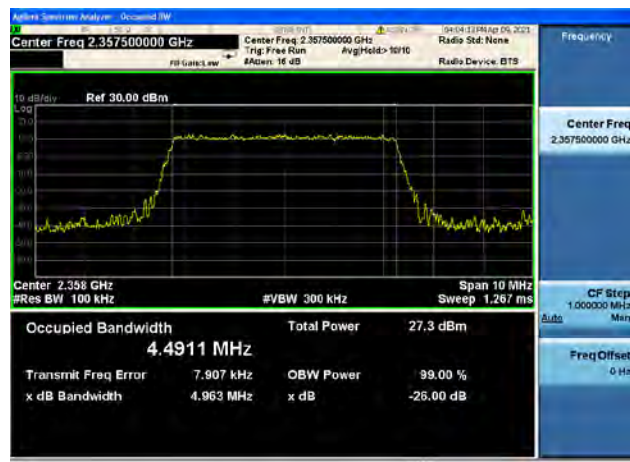
Band40/ Block B / 5MHz / High CH / QPSK



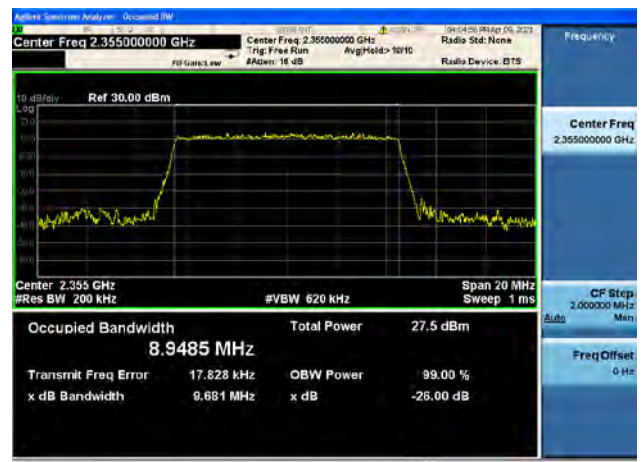
Band40/ Block B / 5MHz / High CH / 16QAM



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



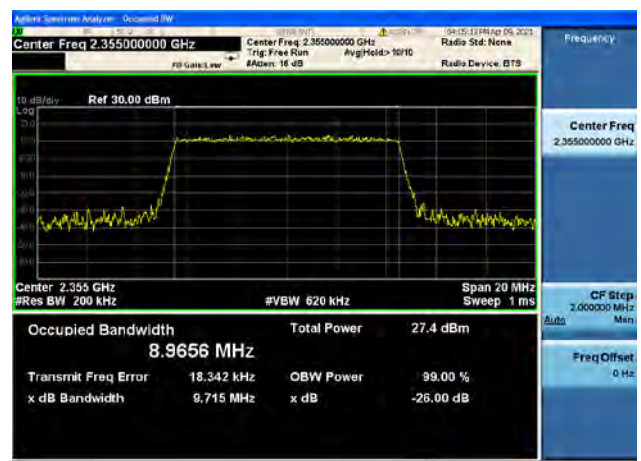
Band40/ Block B / 10MHz / Mid CH / QPSK



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



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



2.3. Frequency Stability

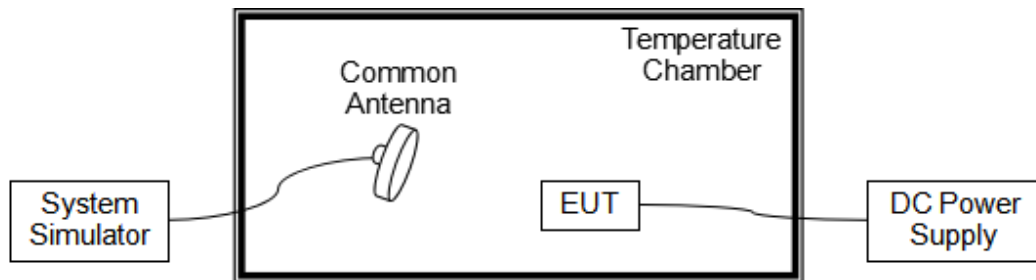
2.3.1. Requirement

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

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

Note: The operating temperature of EUT is from 0°C to 45°C , which are specified by the applicant.

2.3.2. Test Description



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

2.3.3. Test Procedure

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



2.3.4. Test Result

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

LTE Band 2, QPSK, Channel 18900, Frequency 1880.0MHz					
Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp(°C)	Fre. Dev.(Hz)	Deviation (ppm)	Result
100	3.87	+20(Ref)	-27	-0.014	PASS
100		0	-61	-0.032	
100		+10	63	0.034	
100		+20	-74	-0.039	
100		+30	57	0.030	
100		+40	68	0.036	
100		+45	70	0.037	
115	4.45	+20	-48	-0.026	
85	3.00	+20	81	0.043	

LTE Band 4, QPSK, Channel 20175, Frequency 1732.5MHz					
Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp(°C)	Fre. Dev.(Hz)	Deviation (ppm)	Result
100	3.87	+20(Ref)	26	0.015	PASS
100		0	-97	-0.056	
100		+10	79	0.046	
100		+20	-22	-0.013	
100		+30	32	0.018	
100		+40	32	0.018	
100		+45	95	0.055	
115	4.45	+20	36	0.021	
85	3.00	+20	40	0.023	



LTE Band 5, QPSK, Channel 20525, Frequency 836.5MHz					
Limit= ± 2.5 ppm					
Voltage (%)	Power (VDC)	Temp($^{\circ}$ C)	Fre. Dev.(Hz)	Deviation (ppm)	Result
100	3.87	+20(Ref)	-52	-0.062	PASS
100		0	-74	-0.088	
100		+10	-20	-0.024	
100		+20	-93	-0.111	
100		+30	37	0.044	
100		+40	96	0.115	
100		+45	-42	-0.050	
115	4.45	+20	66	0.079	
85	3.00	+20	48	0.057	

LTE Band 7, QPSK, Channel 21100, Frequency 2535MHz					
Limit= Within Authorized Band					
Voltage (%)	Power (VDC)	Temp($^{\circ}$ C)	Fre. Dev.(Hz)	Deviation (ppm)	Result
100	3.87	+20(Ref)	89	0.035	PASS
100		0	82	0.032	
100		+10	87	0.034	
100		+20	97	0.038	
100		+30	101	0.040	
100		+40	68	0.027	
100		+45	47	0.019	
115	4.45	+20	-73	-0.029	
85	3.00	+20	27	0.011	



LTE Band 12, QPSK, Channel 23095, Frequency 707.5MHz					
Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp(°C)	Fre. Dev.(Hz)	Deviation (ppm)	Result
100	3.87	+20(Ref)	-64	-0.090	PASS
100		0	113	0.160	
100		+10	-36	-0.051	
100		+20	60	0.085	
100		+30	-65	-0.092	
100		+40	52	0.073	
100		+45	43	0.061	
115	4.45	+20	-32	-0.045	
85	3.00	+20	99	0.140	

LTE Band 17, QPSK, Channel 23790, Frequency 710MHz					
Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp(°C)	Fre. Dev.(Hz)	Deviation (ppm)	Result
100	3.87	+20(Ref)	29	0.041	PASS
100		0	-96	-0.135	
100		+10	-50	-0.070	
100		+20	-67	-0.094	
100		+30	109	0.154	
100		+40	86	0.121	
100		+45	83	0.117	
115	4.45	+20	27	0.038	
85	3.00	+20	83	0.117	



LTE Band 18, QPSK, Channel 23970, Frequency 827MHz					
Limit=±2.5ppm					
Voltage (%)	Power (VDC)	Temp (°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
100	3.87	+20(Ref)	-22	-0.027	PASS
100		0	93	0.112	
100		+10	115	0.139	
100		+20	-69	-0.083	
100		+30	-44	-0.053	
100		+40	-43	-0.052	
100		+45	47	0.057	
115	4.45	+20	94	0.114	
85	3.00	+20	40	0.048	

LTE Band 19, QPSK, Channel 24075, Frequency 837.5MHz					
Limit=±2.5ppm					
Voltage (%)	Power (VDC)	Temp (°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
100	3.87	+20(Ref)	29	0.035	PASS
100		0	97	0.116	
100		+10	77	0.092	
100		+20	-78	-0.093	
100		+30	-56	-0.067	
100		+40	-37	-0.044	
100		+45	-44	-0.053	
115	4.45	+20	-69	-0.082	
85	3.00	+20	90	0.107	



LTE Band 26, QPSK, Channel 26915, Frequency 836.5MHz Limit=±2.5ppm					
Voltage (%)	Power (VDC)	Temp(°C)	Fre. Dev.(Hz)	Deviation (ppm)	Result
100	3.87	+20(Ref)	91	0.109	PASS
100		0	25	0.030	
100		+10	36	0.043	
100		+20	117	0.140	
100		+30	-26	-0.031	
100		+40	-92	-0.110	
100		+45	-42	-0.050	
115	4.45	+20	76	0.091	
85	3.00	+20	32	0.038	

LTE Band 38, QPSK, Channel 38000, Frequency 2595MHz Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp(°C)	Fre. Dev.(Hz)	Deviation (ppm)	Result
100	3.87	+20(Ref)	20	0.008	PASS
100		0	-30	-0.012	
100		+10	86	0.033	
100		+20	45	0.017	
100		+30	-72	-0.028	
100		+40	87	0.034	
100		+45	-54	-0.021	
115	4.45	+20	75	0.029	
85	3.00	+20	104	0.040	



LTE Band 40, Block A, QPSK, Channel 38750, Frequency 2310MHz					
Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp (°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
100	3.87	+20(Ref)	83	0.036	PASS
100		0	-83	-0.036	
100		+10	-34	-0.015	
100		+20	59	0.026	
100		+30	-73	-0.032	
100		+40	-32	-0.014	
100		+45	28	0.012	
115	4.45	+20	-21	-0.009	
85	3.00	+20	31	0.013	

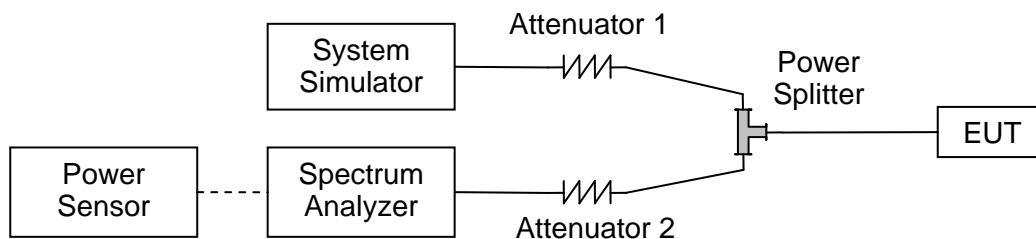
LTE Band 40 Block B, QPSK, Channel 39200, Frequency 2355MHz					
Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp (°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
100	3.87	+20(Ref)	-66	-0.028	PASS
100		0	30	0.013	
100		+10	-94	-0.040	
100		+20	93	0.039	
100		+30	-55	-0.023	
100		+40	46	0.020	
100		+45	52	0.022	
115	4.45	+20	61	0.026	
85	3.00	+20	72	0.031	

2.4. Peak to Average Ratio

2.4.1. Requirement

According to FCC section 24.232(d) and 27.50(d), the peak to average ratio (PAR) of the transmission may not exceed 13dB.

2.4.2. Test Description



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

2.4.3. Test Procedure

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

2.4.4. Test Result

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



LTE Band 2					
BW(MHz)	Channel Level	Modulation	PAR Radio(dB)	Limit(dB)	Verdict
1.4	Low	QPSK	5.17	<=13	PASS
	Low	16QAM	6.00	<=13	PASS
	Low	64QAM	5.98	<=13	PASS
	Mid	QPSK	5.43	<=13	PASS
	Mid	16QAM	6.13	<=13	PASS
	Mid	64QAM	5.98	<=13	PASS
	High	QPSK	5.52	<=13	PASS
	High	16QAM	6.14	<=13	PASS
	High	64QAM	6.07	<=13	PASS
3	Low	QPSK	5.13	<=13	PASS
	Low	16QAM	5.93	<=13	PASS
	Low	64QAM	5.90	<=13	PASS
	Mid	QPSK	5.29	<=13	PASS
	Mid	16QAM	6.08	<=13	PASS
	Mid	64QAM	5.98	<=13	PASS
	High	QPSK	5.34	<=13	PASS
	High	16QAM	6.12	<=13	PASS
	High	64QAM	6.07	<=13	PASS
5	Low	QPSK	5.07	<=13	PASS
	Low	16QAM	5.89	<=13	PASS
	Low	64QAM	5.87	<=13	PASS
	Mid	QPSK	5.28	<=13	PASS
	Mid	16QAM	5.96	<=13	PASS
	Mid	64QAM	6.04	<=13	PASS
	High	QPSK	5.31	<=13	PASS
	High	16QAM	6.05	<=13	PASS
	High	64QAM	6.01	<=13	PASS
10	Low	QPSK	5.01	<=13	PASS
	Low	16QAM	5.86	<=13	PASS
	Low	64QAM	5.87	<=13	PASS
	Mid	QPSK	5.26	<=13	PASS
	Mid	16QAM	6.00	<=13	PASS
	Mid	64QAM	6.01	<=13	PASS
	High	QPSK	5.23	<=13	PASS
	High	16QAM	6.06	<=13	PASS
	High	64QAM	6.06	<=13	PASS



15	Low	QPSK	4.95	≤ 13	PASS
	Low	16QAM	5.82	≤ 13	PASS
	Low	64QAM	5.82	≤ 13	PASS
	Mid	QPSK	5.34	≤ 13	PASS
	Mid	16QAM	6.06	≤ 13	PASS
	Mid	64QAM	5.99	≤ 13	PASS
	High	QPSK	5.29	≤ 13	PASS
	High	16QAM	6.10	≤ 13	PASS
	High	64QAM	6.08	≤ 13	PASS
20	Low	QPSK	5.04	≤ 13	PASS
	Low	16QAM	5.89	≤ 13	PASS
	Low	64QAM	5.91	≤ 13	PASS
	Mid	QPSK	5.22	≤ 13	PASS
	Mid	16QAM	6.05	≤ 13	PASS
	Mid	64QAM	6.05	≤ 13	PASS
	High	QPSK	5.29	≤ 13	PASS
	High	16QAM	6.04	≤ 13	PASS
	High	64QAM	6.02	≤ 13	PASS



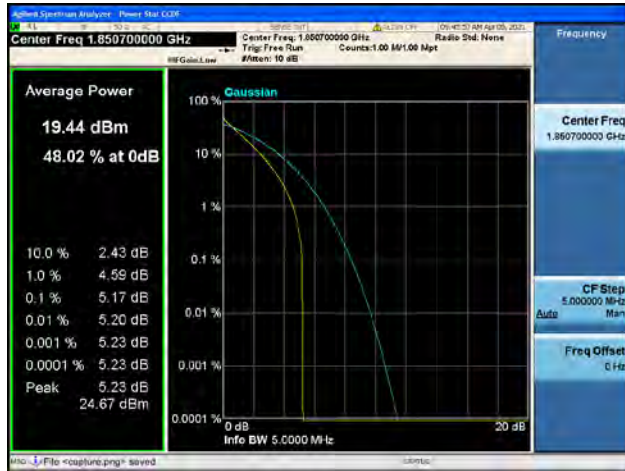
LTE Band 4					
BW(MHz)	Channel Level	Modulation	PAR Radio(dB)	Limit(dB)	Verdict
1.4	Low	QPSK	4.96	<=13	PASS
	Low	16QAM	5.89	<=13	PASS
	Low	64QAM	5.87	<=13	PASS
	Mid	QPSK	5.46	<=13	PASS
	Mid	16QAM	6.01	<=13	PASS
	Mid	64QAM	5.94	<=13	PASS
	High	QPSK	5.18	<=13	PASS
	High	16QAM	5.78	<=13	PASS
	High	64QAM	5.73	<=13	PASS
3	Low	QPSK	5.04	<=13	PASS
	Low	16QAM	5.91	<=13	PASS
	Low	64QAM	5.83	<=13	PASS
	Mid	QPSK	5.22	<=13	PASS
	Mid	16QAM	6.00	<=13	PASS
	Mid	64QAM	5.91	<=13	PASS
	High	QPSK	5.04	<=13	PASS
	High	16QAM	5.75	<=13	PASS
	High	64QAM	5.73	<=13	PASS
5	Low	QPSK	5.16	<=13	PASS
	Low	16QAM	5.82	<=13	PASS
	Low	64QAM	5.80	<=13	PASS
	Mid	QPSK	5.25	<=13	PASS
	Mid	16QAM	5.90	<=13	PASS
	Mid	64QAM	5.91	<=13	PASS
	High	QPSK	5.11	<=13	PASS
	High	16QAM	5.74	<=13	PASS
	High	64QAM	5.75	<=13	PASS
10	Low	QPSK	5.12	<=13	PASS
	Low	16QAM	5.82	<=13	PASS
	Low	64QAM	5.86	<=13	PASS
	Mid	QPSK	5.28	<=13	PASS
	Mid	16QAM	5.96	<=13	PASS
	Mid	64QAM	5.96	<=13	PASS
	High	QPSK	5.07	<=13	PASS
	High	16QAM	5.76	<=13	PASS
	High	64QAM	5.78	<=13	PASS



15	Low	QPSK	5.04	≤ 13	PASS
	Low	16QAM	5.84	≤ 13	PASS
	Low	64QAM	5.94	≤ 13	PASS
	Mid	QPSK	5.24	≤ 13	PASS
	Mid	16QAM	5.89	≤ 13	PASS
	Mid	64QAM	5.91	≤ 13	PASS
	High	QPSK	5.11	≤ 13	PASS
	High	16QAM	5.76	≤ 13	PASS
	High	64QAM	5.75	≤ 13	PASS
20	Low	QPSK	5.09	≤ 13	PASS
	Low	16QAM	5.89	≤ 13	PASS
	Low	64QAM	5.87	≤ 13	PASS
	Mid	QPSK	5.14	≤ 13	PASS
	Mid	16QAM	5.93	≤ 13	PASS
	Mid	64QAM	5.90	≤ 13	PASS
	High	QPSK	5.11	≤ 13	PASS
	High	16QAM	5.81	≤ 13	PASS
	High	64QAM	5.81	≤ 13	PASS



Band2 / 1.4MHz / Low CH / QPSK



Band2 / 1.4MHz / Low CH / 16QAM



Band2 / 1.4MHz / Low CH / 64QAM



Band2 / 1.4MHz / Mid CH / QPSK



Band2 / 1.4MHz / Mid CH / 16QAM



Band2 / 1.4MHz / Mid CH / 64QAM





Band2 / 1.4MHz / High CH / QPSK



Band2 / 1.4MHz / High CH / 16QAM



Band2 / 1.4MHz / High CH / 64QAM



Band2 / 3MHz / Low CH / QPSK



Band2 / 3MHz / Low CH / 16QAM



Band2 / 3MHz / Low CH / 64QAM





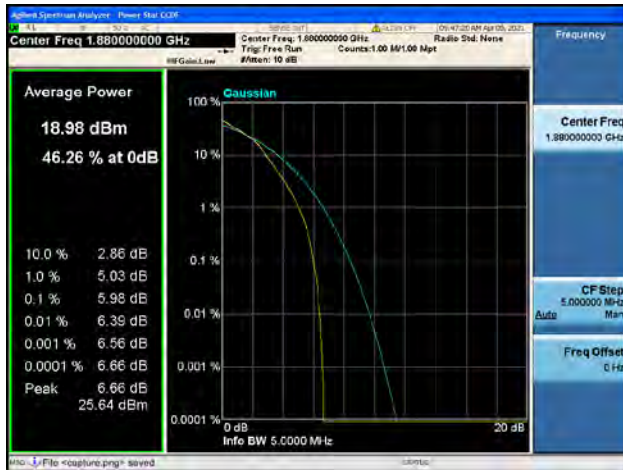
Band2 / 3MHz / Mid CH / QPSK



Band2 / 3MHz / Mid CH / 16QAM



Band2 / 3MHz / Mid CH / 64QAM



Band2 / 3MHz / High CH / QPSK



Band2 / 3MHz / High CH / 16QAM



Band2 / 3MHz / High CH / 64QAM





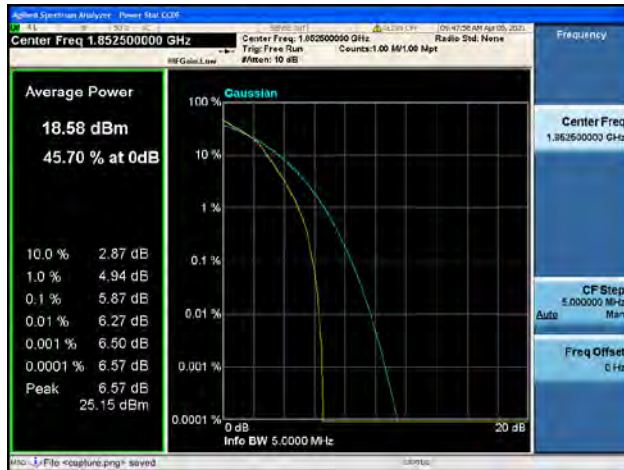
Band2 / 5MHz / Low CH / QPSK



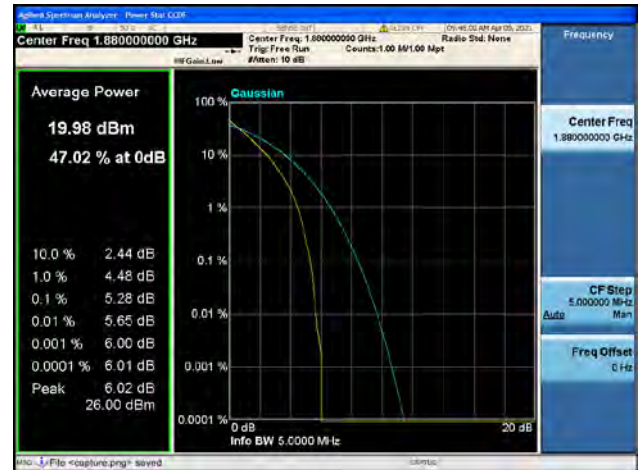
Band2 / 5MHz / Low CH / 16QAM



Band2 / 5MHz / Low CH / 64QAM



Band2 / 5MHz / Mid CH / QPSK



Band2 / 5MHz / Mid CH / 16QAM



Band2 / 5MHz / Mid CH / 64QAM

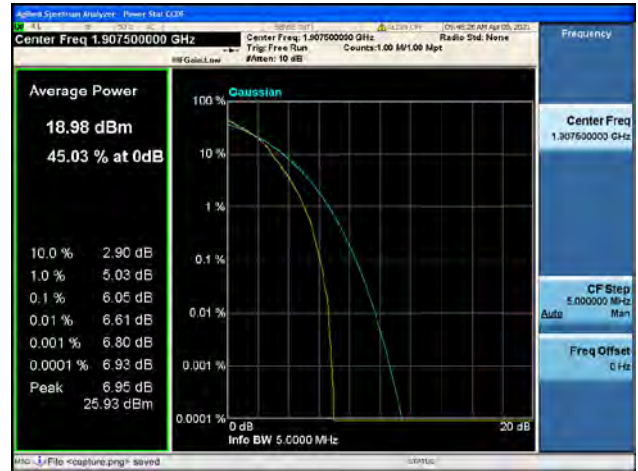




Band2 / 5MHz / High CH / QPSK



Band2 / 5MHz / High CH / 16QAM



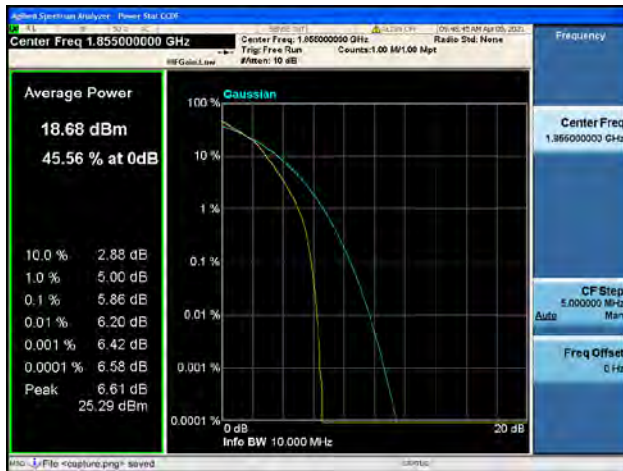
Band2 / 5MHz / High CH / 64QAM



Band2 / 10MHz / Low CH / QPSK



Band2 / 10MHz / Low CH / 16QAM



Band2 / 10MHz / Low CH / 64QAM





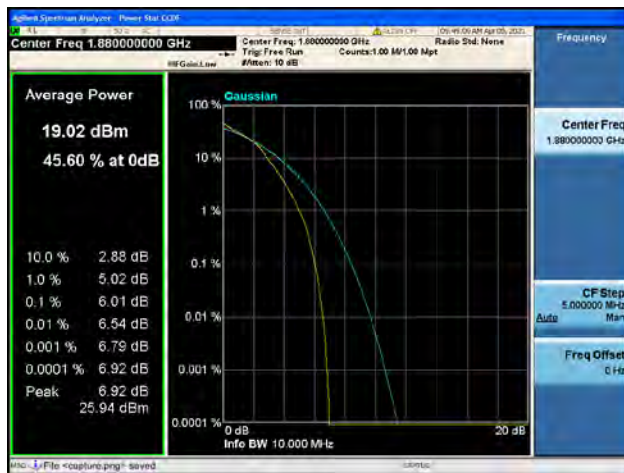
Band2 / 10MHz / Mid CH / QPSK



Band2 / 10MHz / Mid CH / 16QAM



Band2 / 10MHz / Mid CH / 64QAM



Band2 / 10MHz / High CH / QPSK



Band2 / 10MHz / High CH / 16QAM

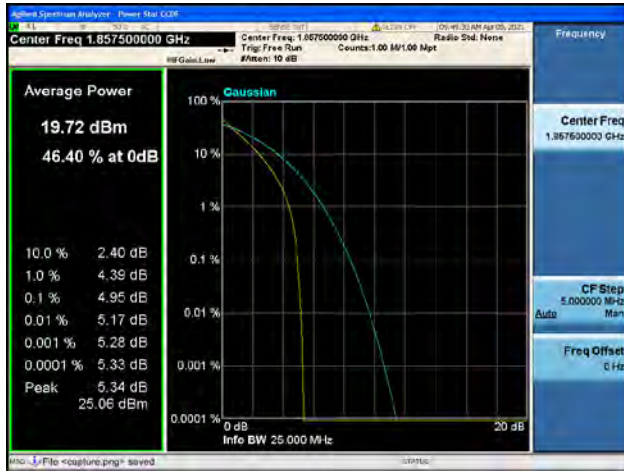


Band2 / 10MHz / High CH / 64QAM





Band2 / 15MHz / Low CH / QPSK



Band2 / 15MHz / Low CH / 16QAM



Band2 / 15MHz / Low CH / 64QAM



Band2 / 15MHz / Mid CH / QPSK



Band2 / 15MHz / Mid CH / 16QAM

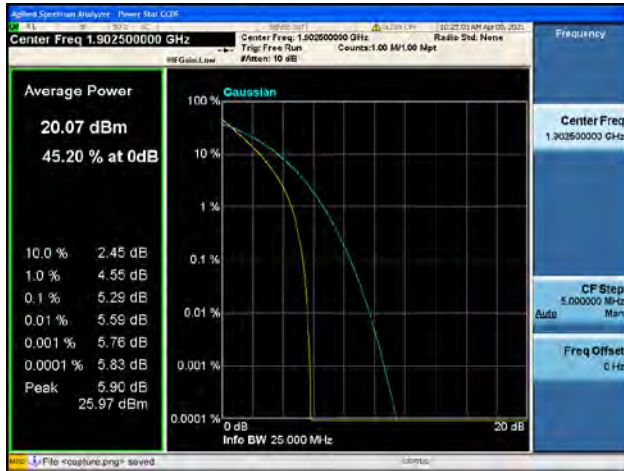


Band2 / 15MHz / Mid CH / 64QAM





Band2 / 15MHz / High CH / QPSK



Band2 / 15MHz / High CH / 16QAM



Band2 / 15MHz / High CH / 64QAM



Band2 / 20MHz / Low CH / QPSK



Band2 / 20MHz / Low CH / 16QAM



Band2 / 20MHz / Low CH / 64QAM





Band2 / 20MHz / Mid CH / QPSK



Band2 / 20MHz / Mid CH / 16QAM



Band2 / 20MHz / Mid CH / 64QAM



Band2 / 20MHz / High CH / QPSK



Band2 / 20MHz / High CH / 16QAM



Band2 / 20MHz / High CH / 64QAM





Band4 / 1.4MHz / Low CH / QPSK



Band4 / 1.4MHz / Low CH / 16QAM



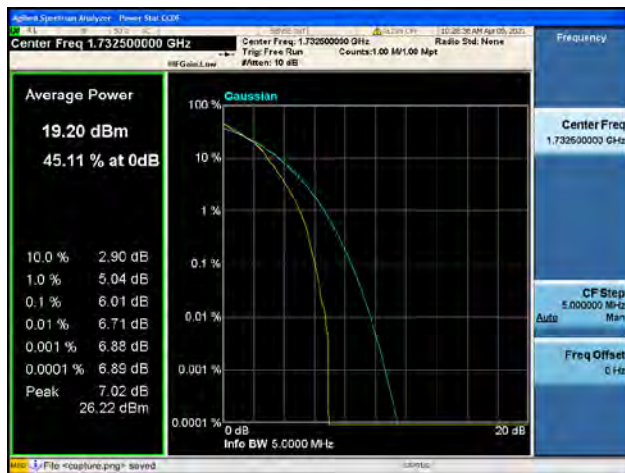
Band4 / 1.4MHz / Low CH / 64QAM



Band4 / 1.4MHz / Mid CH / QPSK



Band4 / 1.4MHz / Mid CH / 16QAM

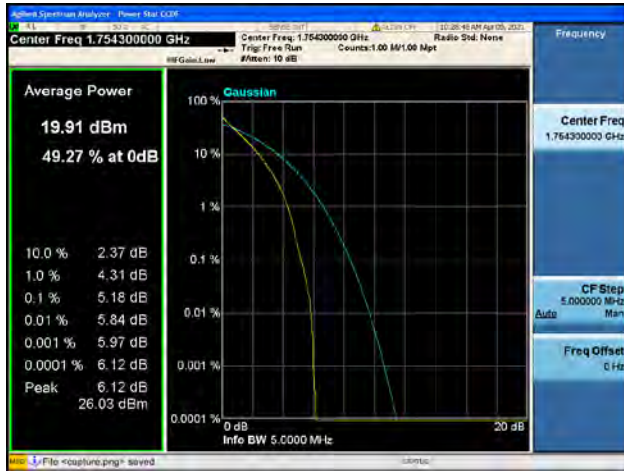


Band4 / 1.4MHz / Mid CH / 64QAM

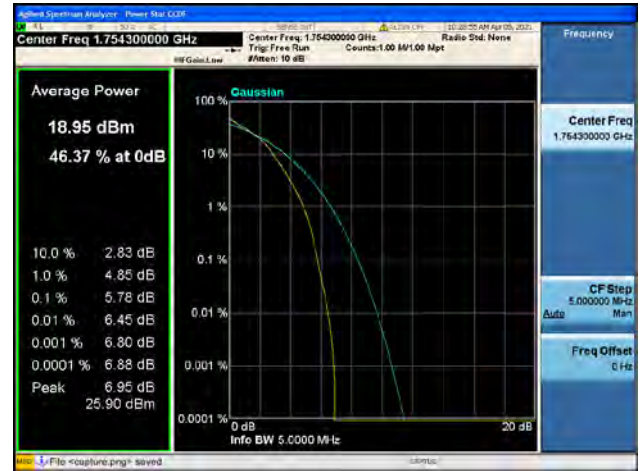




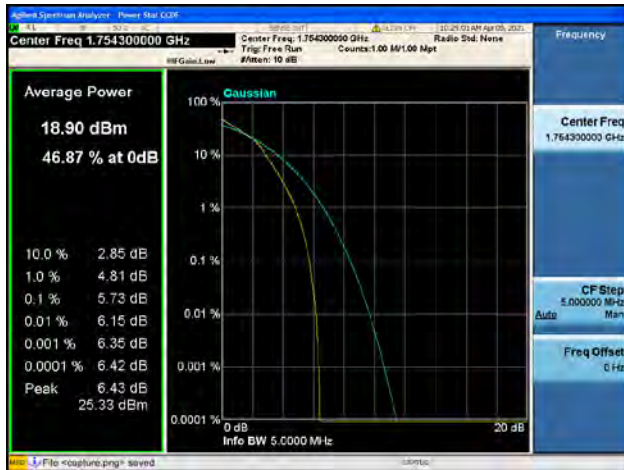
Band4 / 1.4MHz / High CH / QPSK



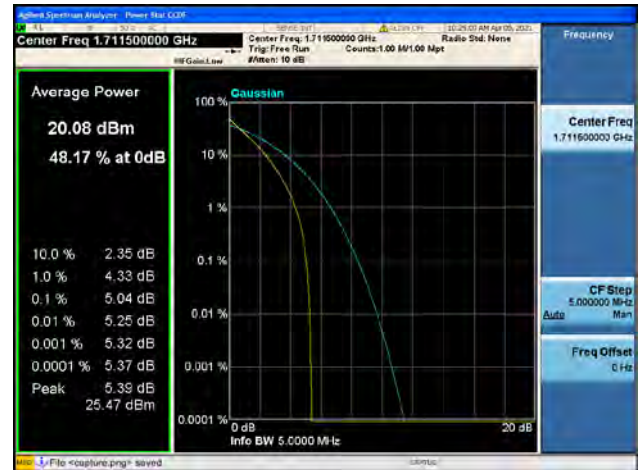
Band4 / 1.4MHz / High CH / 16QAM



Band4 / 1.4MHz / High CH / 64QAM



Band4 / 3MHz / Low CH / QPSK



Band4 / 3MHz / Low CH / 16QAM



Band4 / 3MHz / Low CH / 64QAM





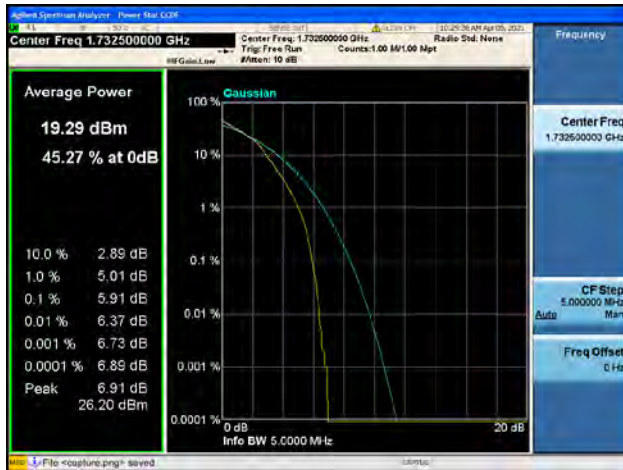
Band4 / 3MHz / Mid CH / QPSK



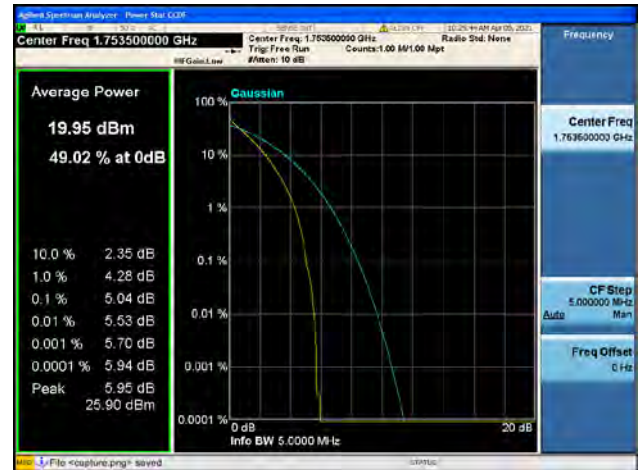
Band4 / 3MHz / Mid CH / 16QAM



Band4 / 3MHz / Mid CH / 64QAM



Band4 / 3MHz / High CH / QPSK



Band4 / 3MHz / High CH / 16QAM

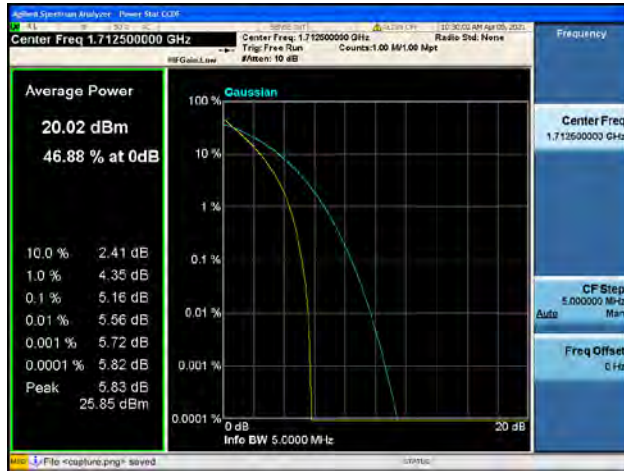


Band4 / 3MHz / High CH / 64QAM





Band4 / 5MHz / Low CH / QPSK



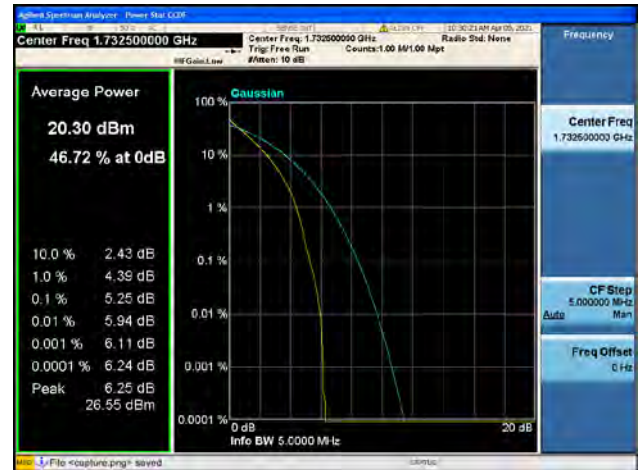
Band4 / 5MHz / Low CH / 16QAM



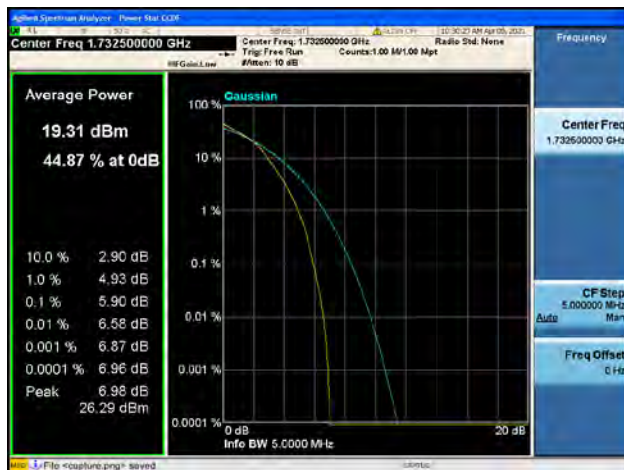
Band4 / 5MHz / Low CH / 64QAM



Band4 / 5MHz / Mid CH / QPSK



Band4 / 5MHz / Mid CH / 16QAM

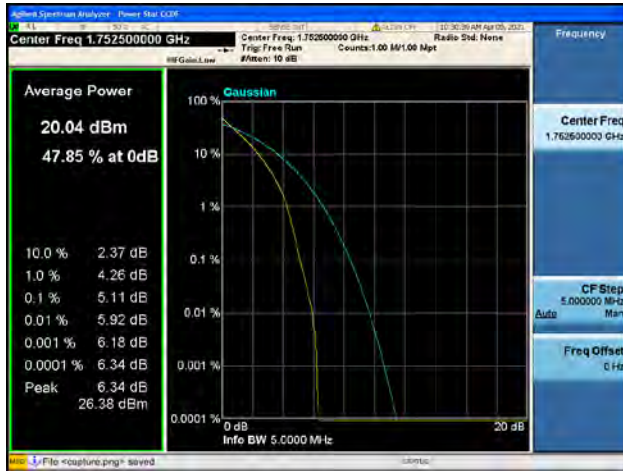


Band4 / 5MHz / Mid CH / 64QAM

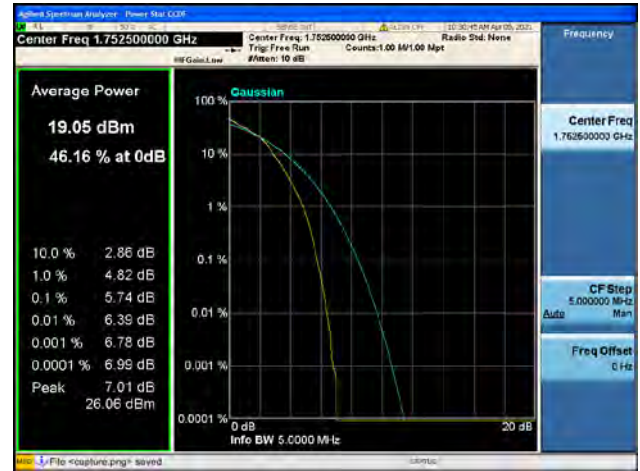




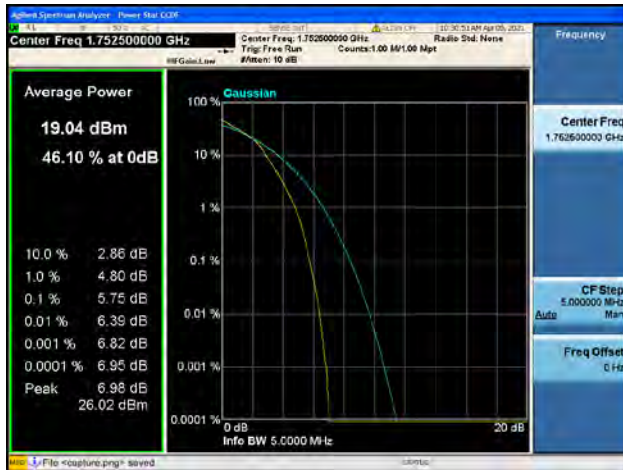
Band4 / 5MHz / High CH / QPSK



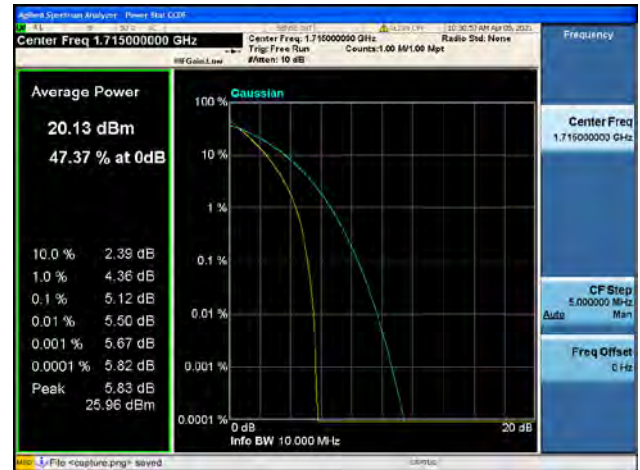
Band4 / 5MHz / High CH / 16QAM



Band4 / 5MHz / High CH / 64QAM



Band4 / 10MHz / Low CH / QPSK



Band4 / 10MHz / Low CH / 16QAM



Band4 / 10MHz / Low CH / 64QAM





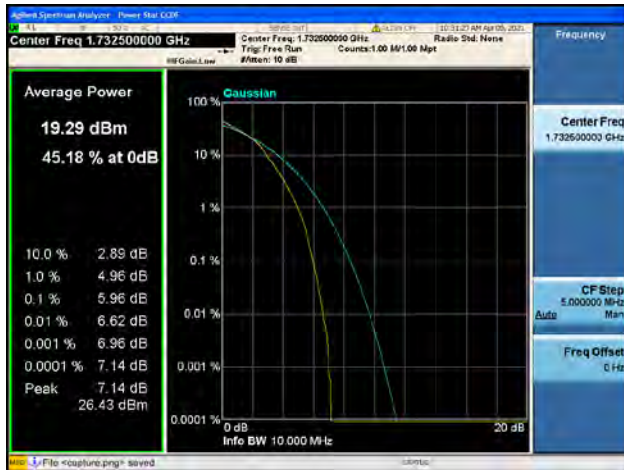
Band4 / 10MHz / Mid CH / QPSK



Band4 / 10MHz / Mid CH / 16QAM



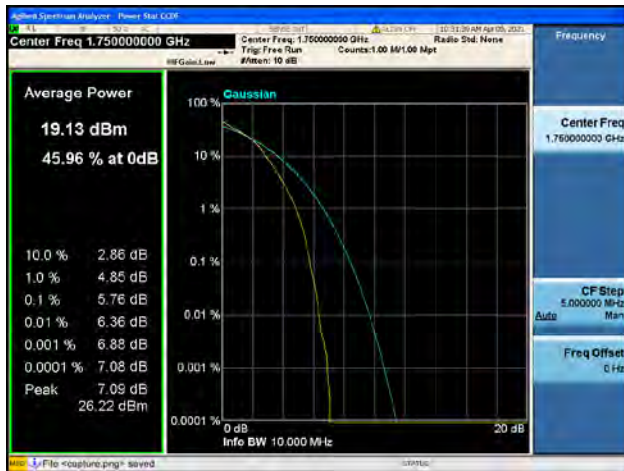
Band4 / 10MHz / Mid CH / 64QAM



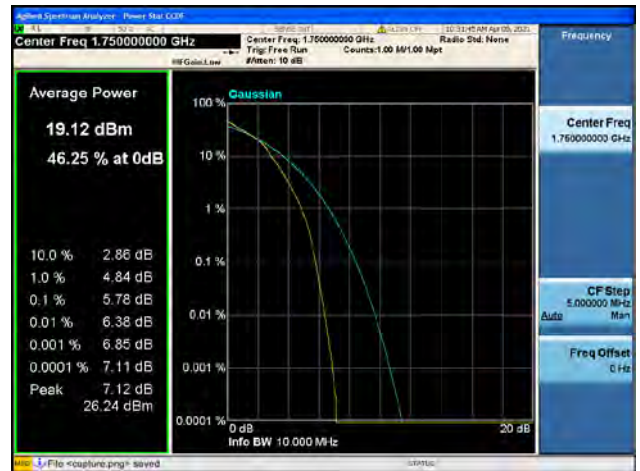
Band4 / 10MHz / High CH / QPSK



Band4 / 10MHz / High CH / 16QAM



Band4 / 10MHz / High CH / 64QAM





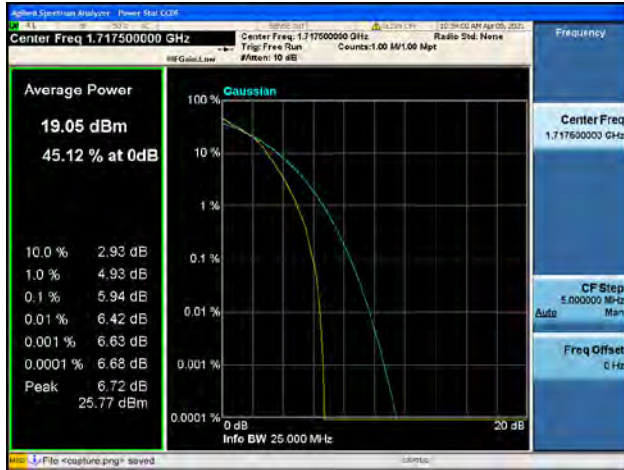
Band4 / 15MHz / Low CH / QPSK



Band4 / 15MHz / Low CH / 16QAM



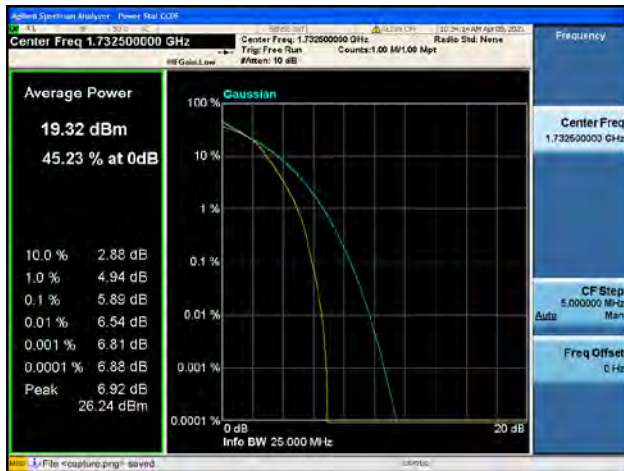
Band4 / 15MHz / Low CH / 64QAM



Band4 / 15MHz / Mid CH / QPSK



Band4 / 15MHz / Mid CH / 16QAM

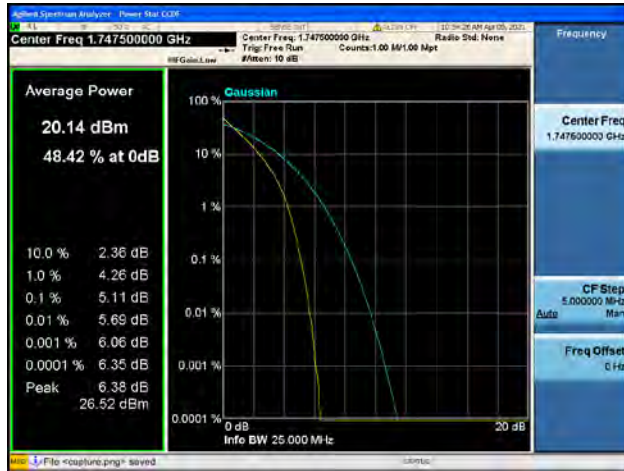


Band4 / 15MHz / Mid CH / 64QAM

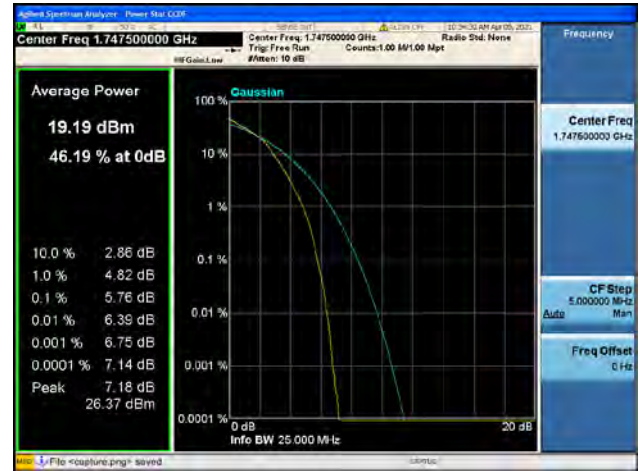




Band4 / 15MHz / High CH / QPSK



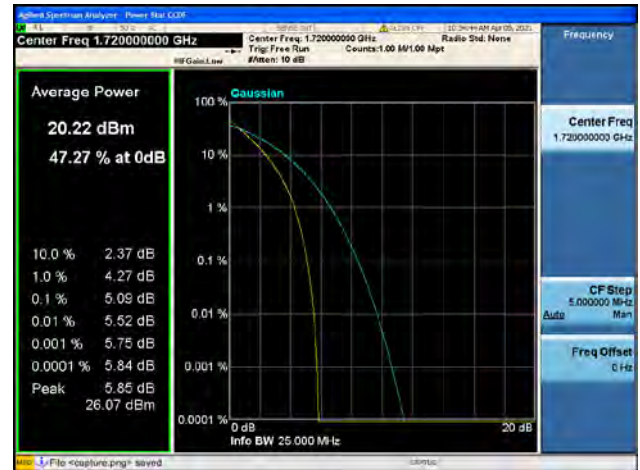
Band4 / 15MHz / High CH / 16QAM



Band4 / 15MHz / High CH / 64QAM



Band4 / 20MHz / Low CH / QPSK



Band4 / 20MHz / Low CH / 16QAM



Band4 / 20MHz / Low CH / 64QAM





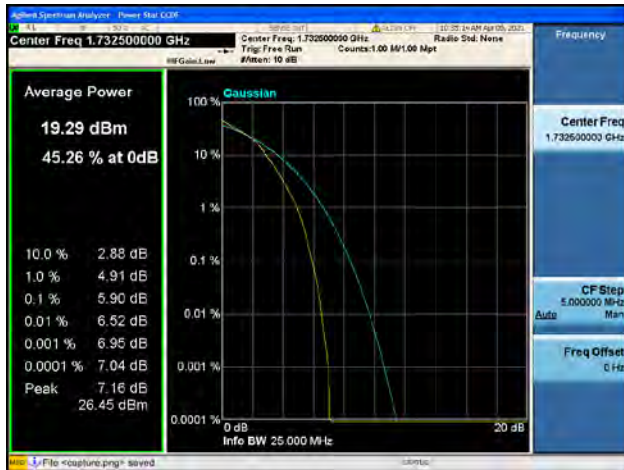
Band4 / 20MHz / Mid CH / QPSK



Band4 / 20MHz / Mid CH / 16QAM



Band4 / 20MHz / Mid CH / 64QAM



Band4 / 20MHz / High CH / QPSK



Band4 / 20MHz / High CH / 16QAM



Band4 / 20MHz / High CH / 64QAM





2.5. Conducted Spurious Emissions

2.5.1. Requirement

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

Additional requirement for LTE Band 7, 38:

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $55 + 10 \log(P)$ dB. This calculated to be -25dBm.

Additional requirement for LTE Band 40:

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

2.5.2. Test Description

S
S
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A
+

Attenuator 1

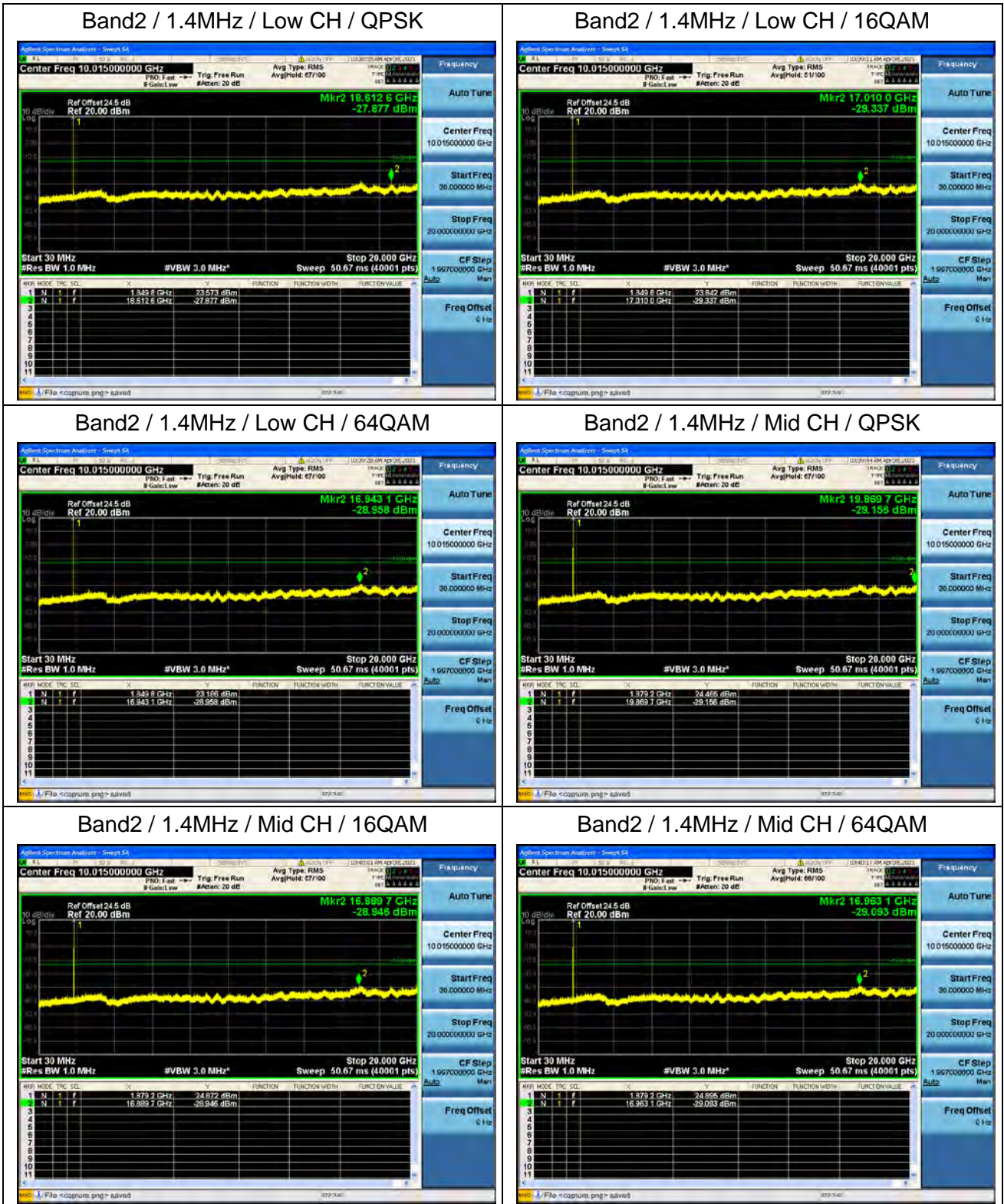
The EUT is coupled to the Spectrum Analyzer (SA) and the System Simulator (SS) with Attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading. The EUT is commanded by the SS to operate at the maximum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

2.5.3. Test Procedure

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

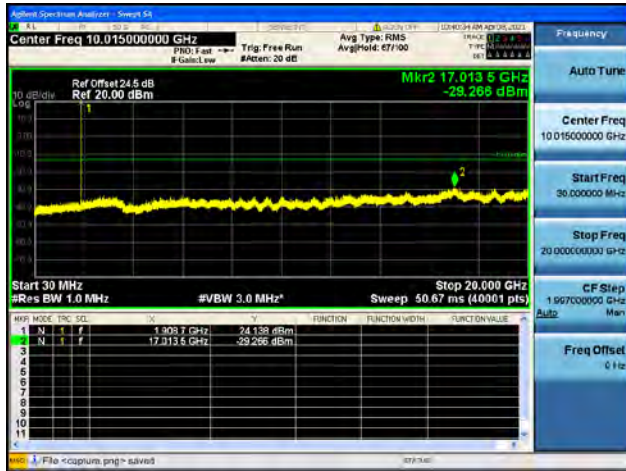


2.5.4. Test Result

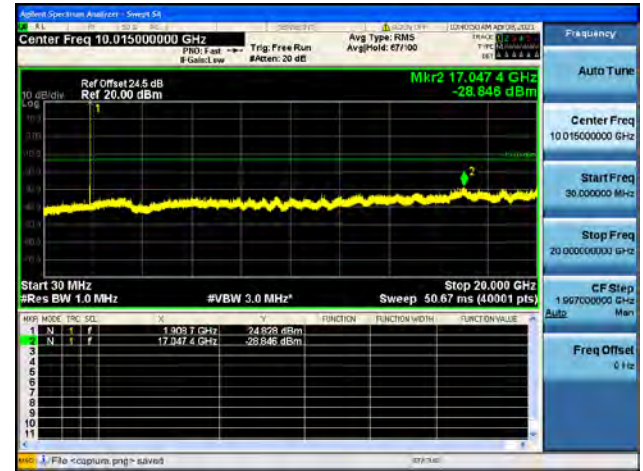




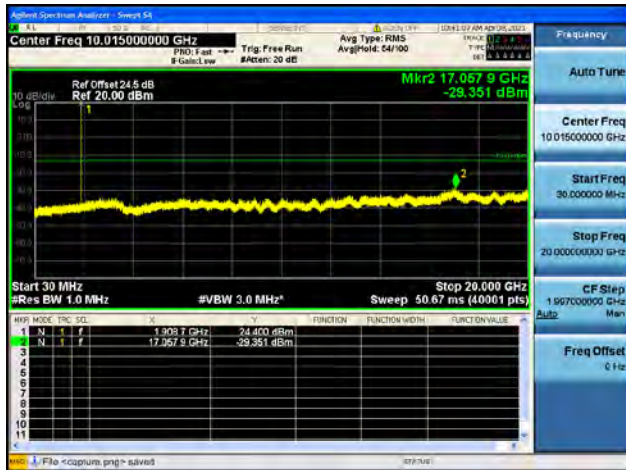
Band2 / 1.4MHz / High CH / QPSK



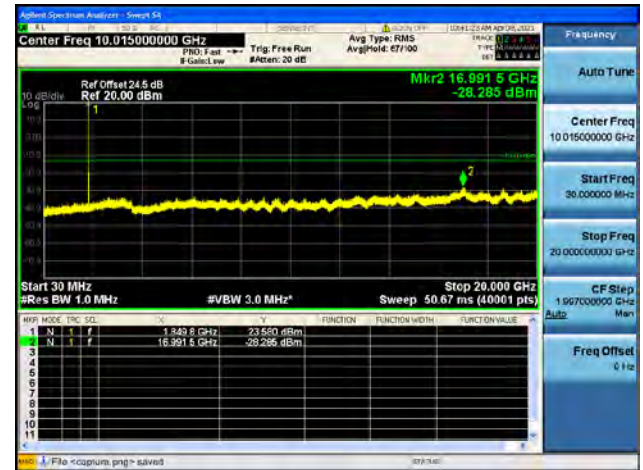
Band2 / 1.4MHz / High CH / 16QAM



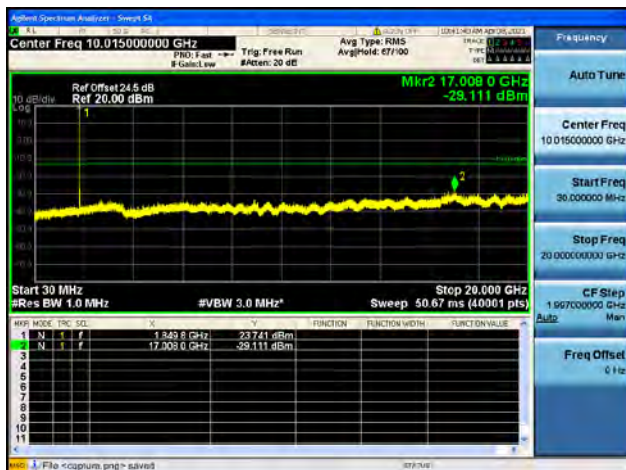
Band2 / 1.4MHz / High CH / 64QAM



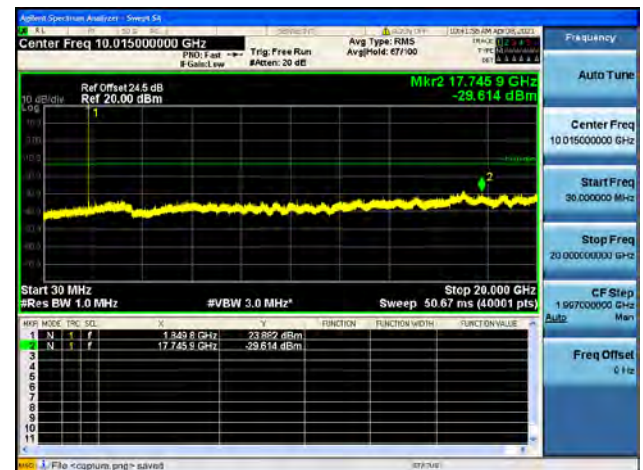
Band2 / 3MHz / Low CH / QPSK



Band2 / 3MHz / Low CH / 16QAM

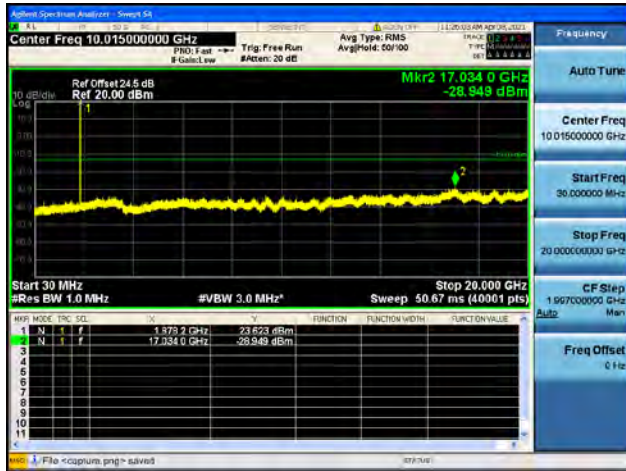


Band2 / 3MHz / Low CH / 64QAM





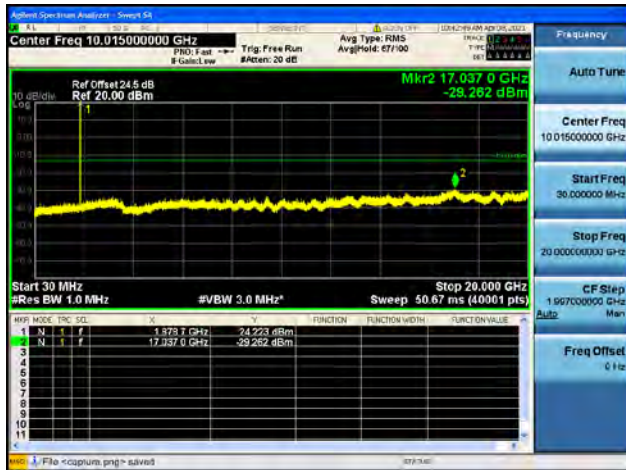
Band2 / 3MHz / Mid CH / QPSK



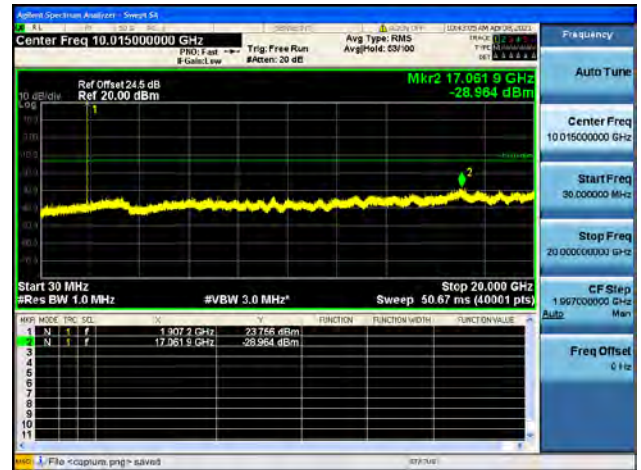
Band2 / 3MHz / Mid CH / 16QAM



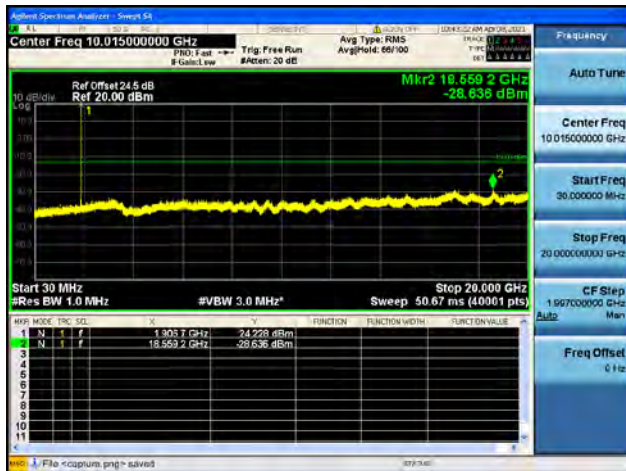
Band2 / 3MHz / Mid CH / 64QAM



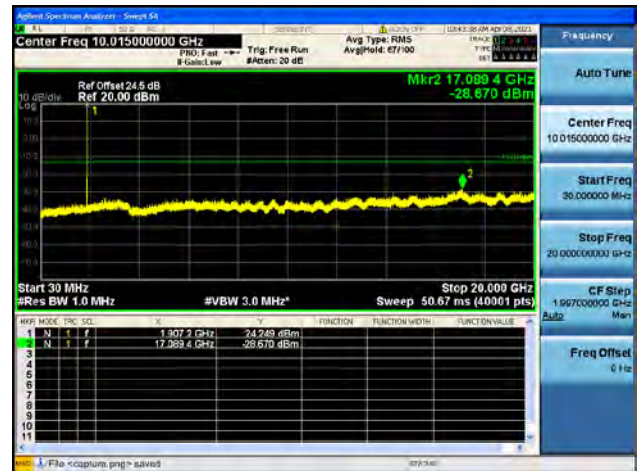
Band2 / 3MHz / High CH / QPSK



Band2 / 3MHz / High CH / 16QAM

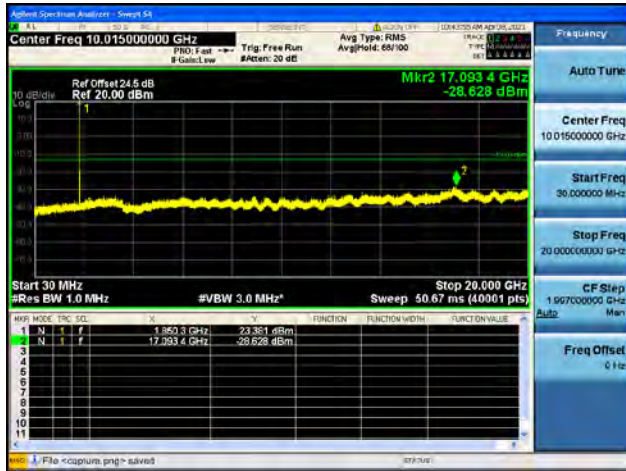


Band2 / 3MHz / High CH / 64QAM





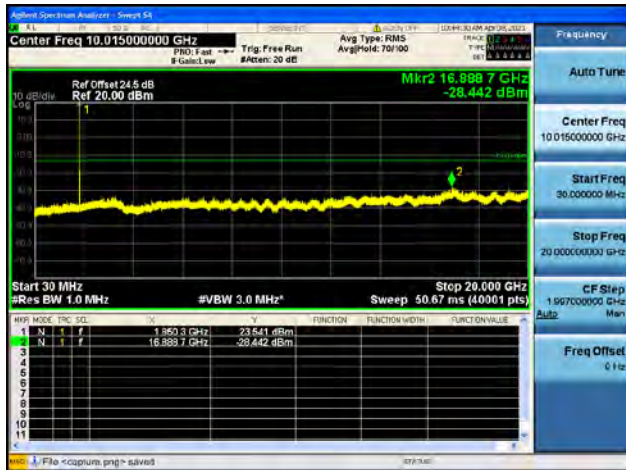
Band2 / 5MHz / Low CH / QPSK



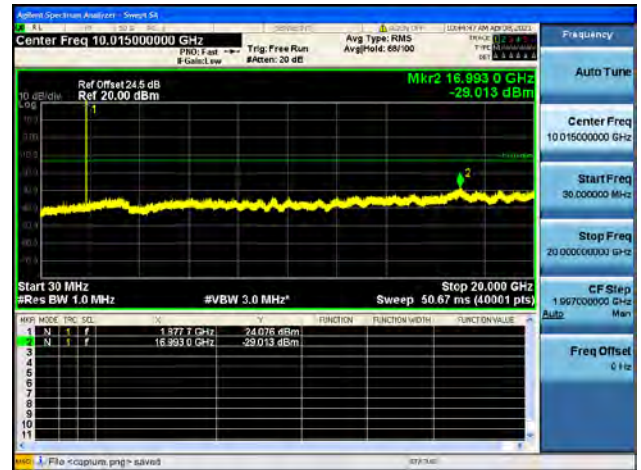
Band2 / 5MHz / Low CH / 16QAM



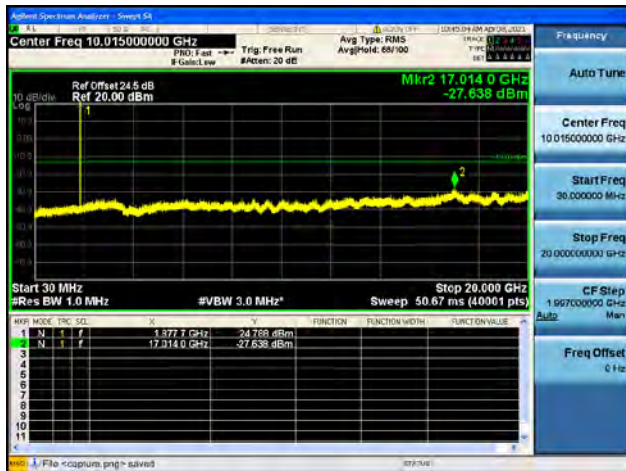
Band2 / 5MHz / Low CH / 64QAM



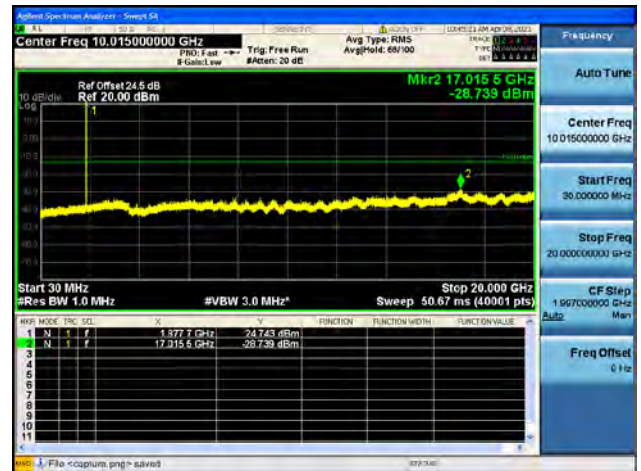
Band2 / 5MHz / Mid CH / QPSK



Band2 / 5MHz / Mid CH / 16QAM

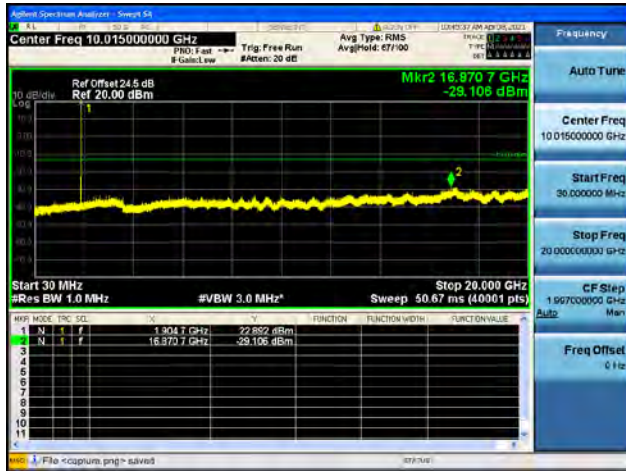


Band2 / 5MHz / Mid CH / 64QAM





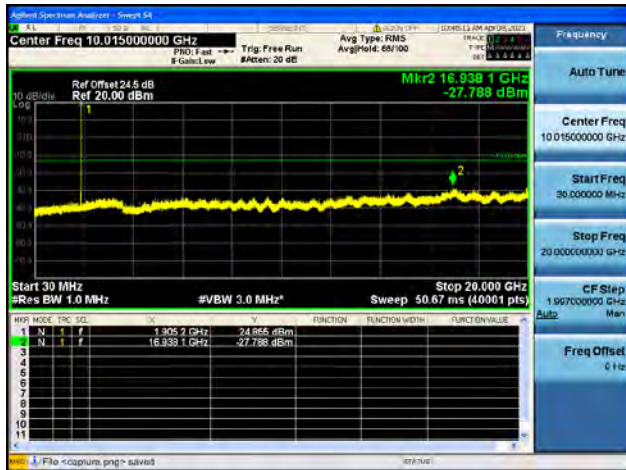
Band2 / 5MHz / High CH / QPSK



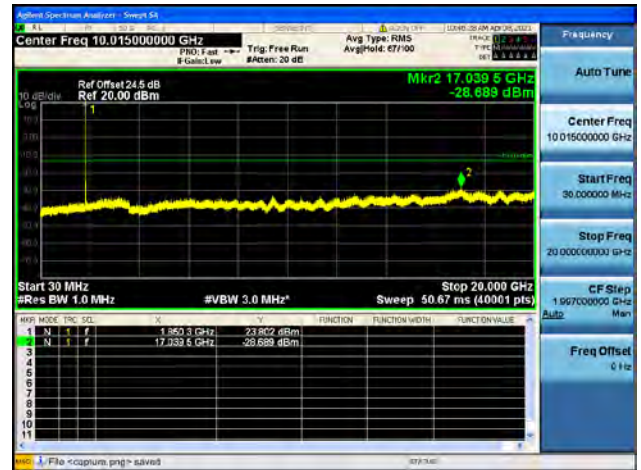
Band2 / 5MHz / High CH / 16QAM



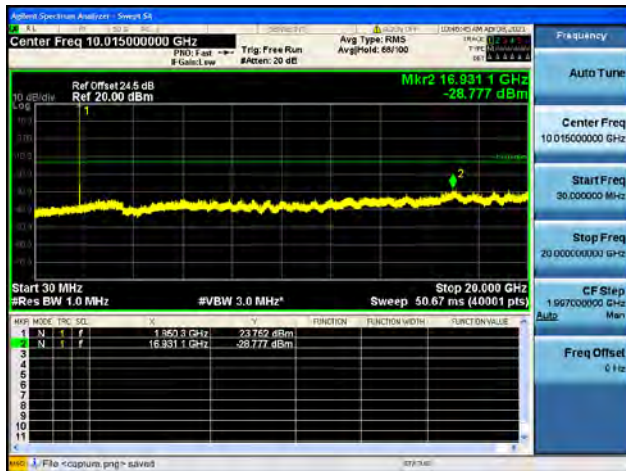
Band2 / 5MHz / High CH / 64QAM



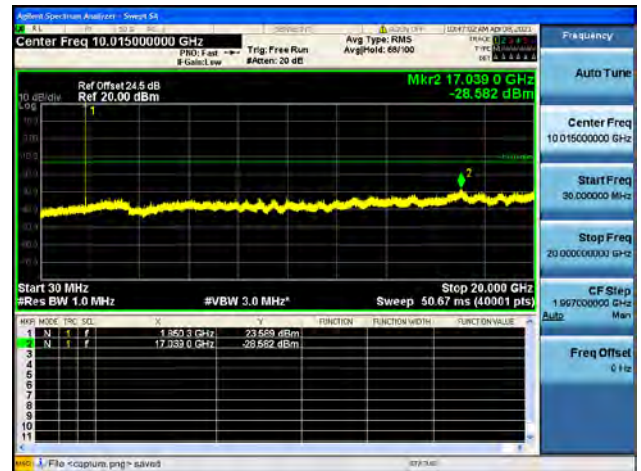
Band2 / 10MHz / Low CH / QPSK



Band2 / 10MHz / Low CH / 16QAM



Band2 / 10MHz / Low CH / 64QAM





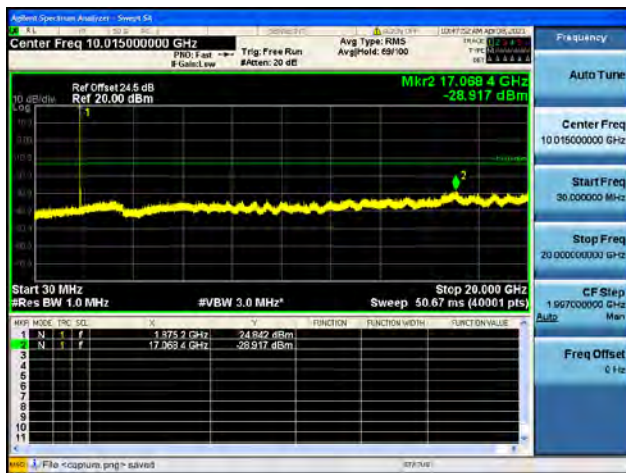
Band2 / 10MHz / Mid CH / QPSK



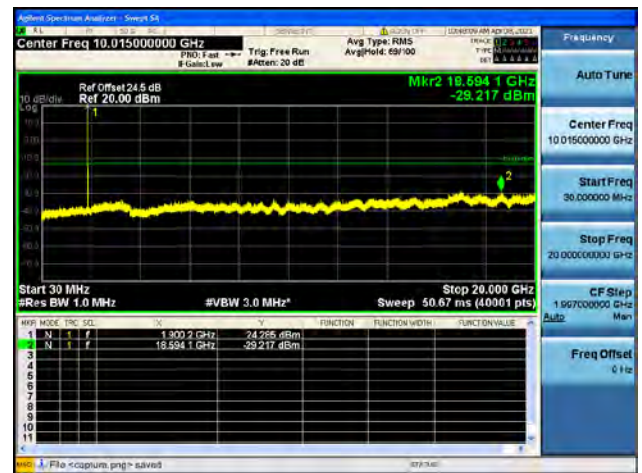
Band2 / 10MHz / Mid CH / 16QAM



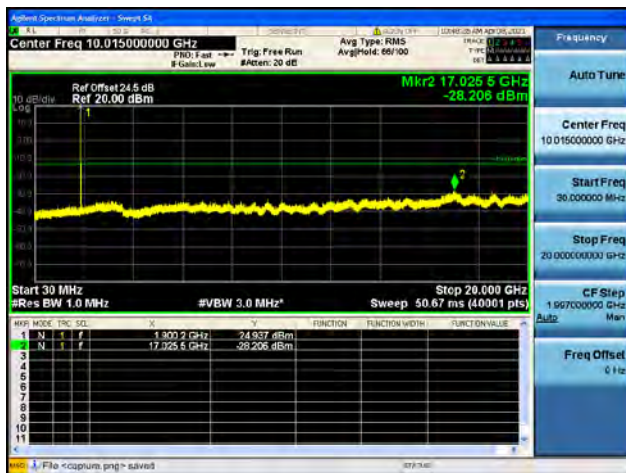
Band2 / 10MHz / Mid CH / 64QAM



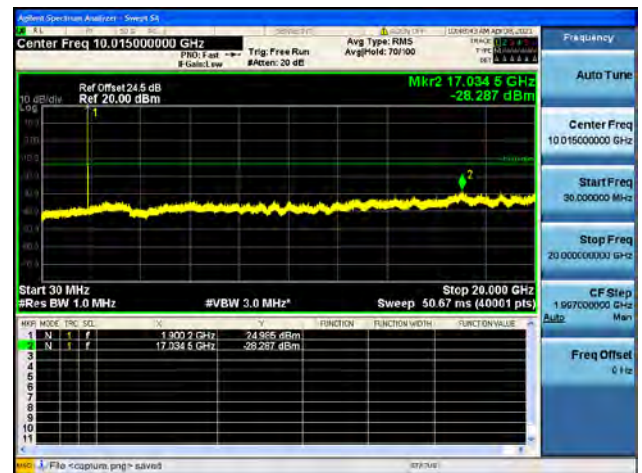
Band2 / 10MHz / High CH / QPSK



Band2 / 10MHz / High CH / 16QAM

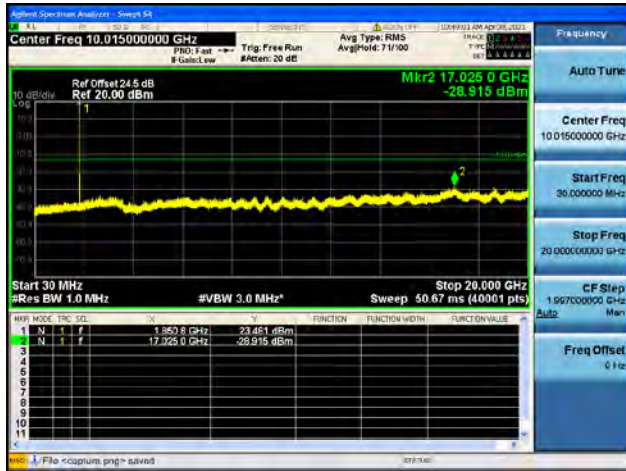


Band2 / 10MHz / High CH / 64QAM





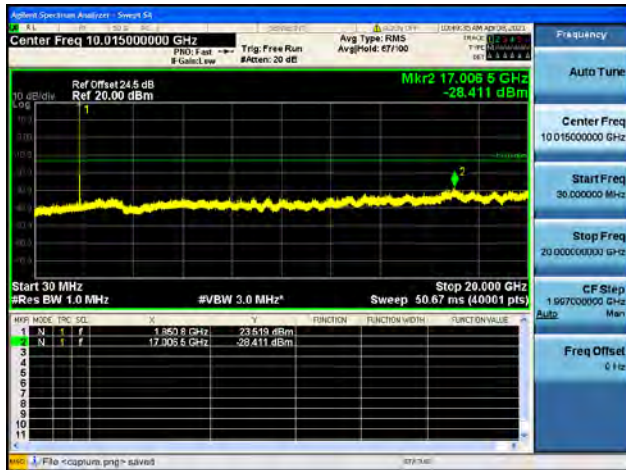
Band2 / 15MHz / Low CH / QPSK



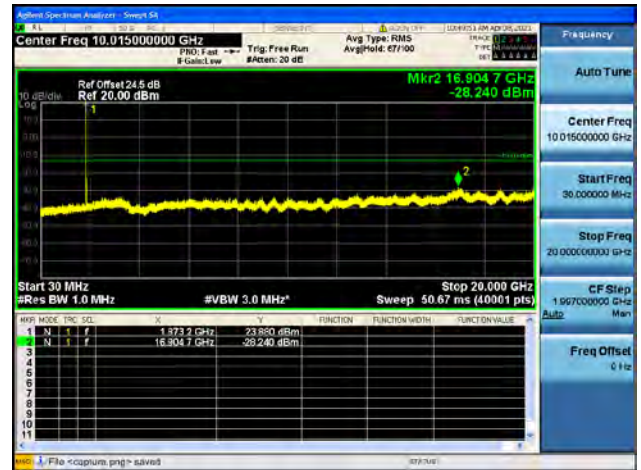
Band2 / 15MHz / Low CH / 16QAM



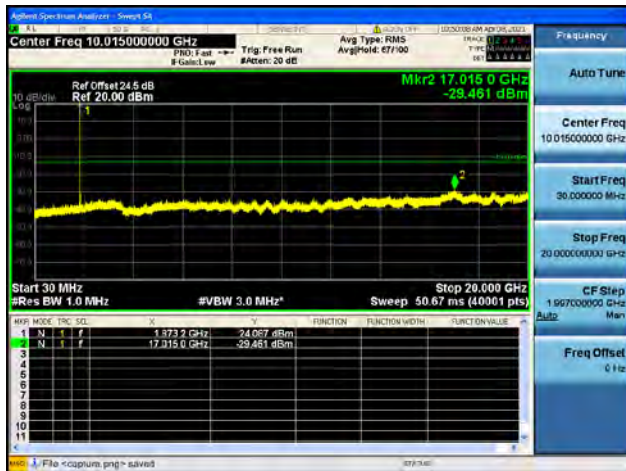
Band2 / 15MHz / Low CH / 64QAM



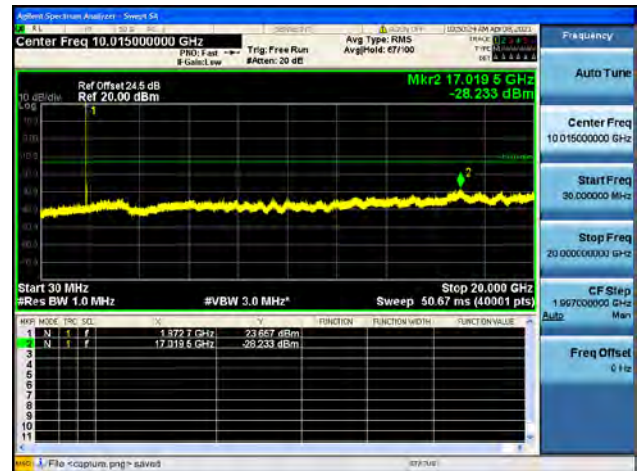
Band2 / 15MHz / Mid CH / QPSK



Band2 / 15MHz / Mid CH / 16QAM

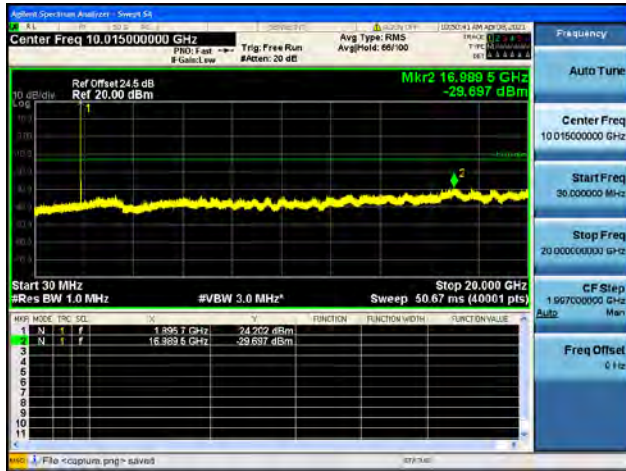


Band2 / 15MHz / Mid CH / 64QAM





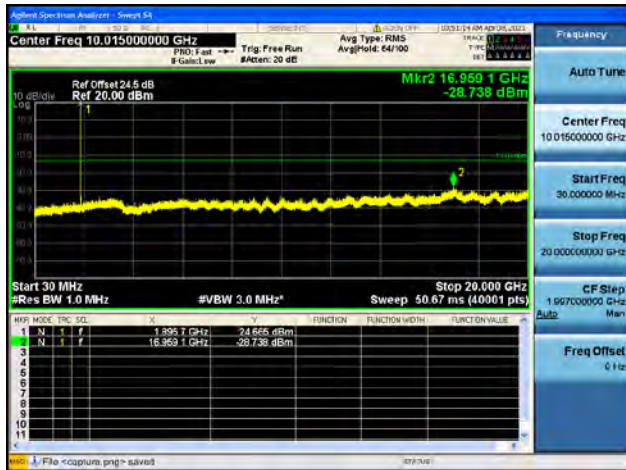
Band2 / 15MHz / High CH / QPSK



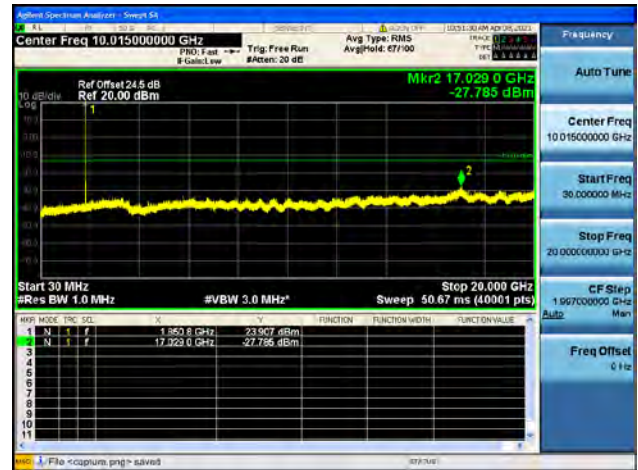
Band2 / 15MHz / High CH / 16QAM



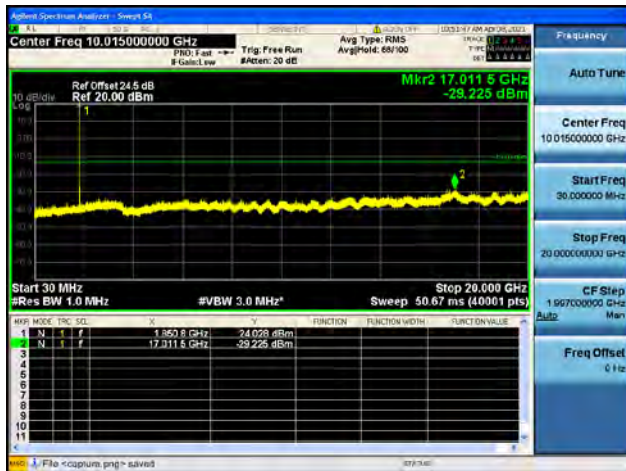
Band2 / 15MHz / High CH / 64QAM



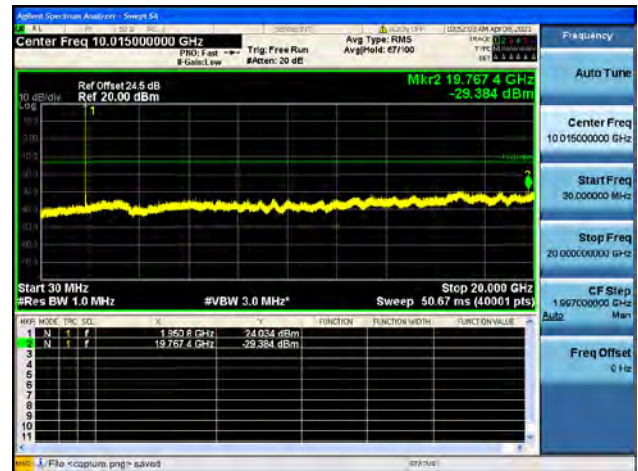
Band2 / 20MHz / Low CH / QPSK



Band2 / 20MHz / Low CH / 16QAM



Band2 / 20MHz / Low CH / 64QAM





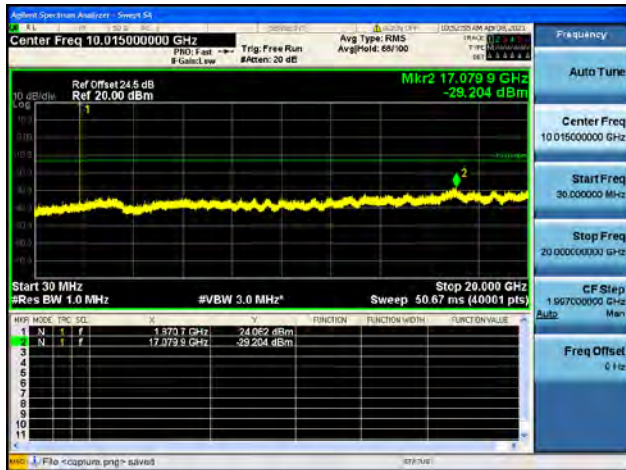
Band2 / 20MHz / Mid CH / QPSK



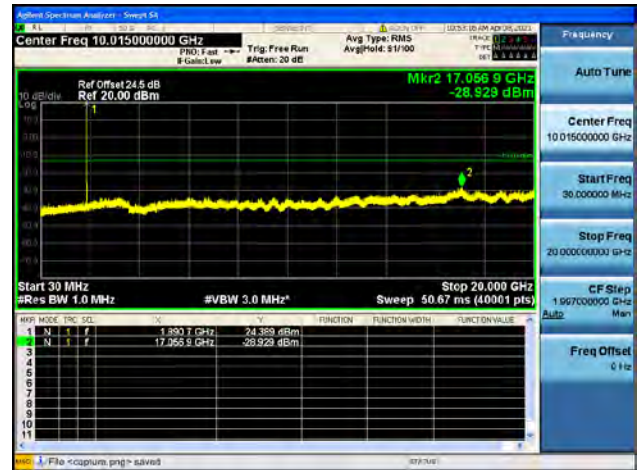
Band2 / 20MHz / Mid CH / 16QAM



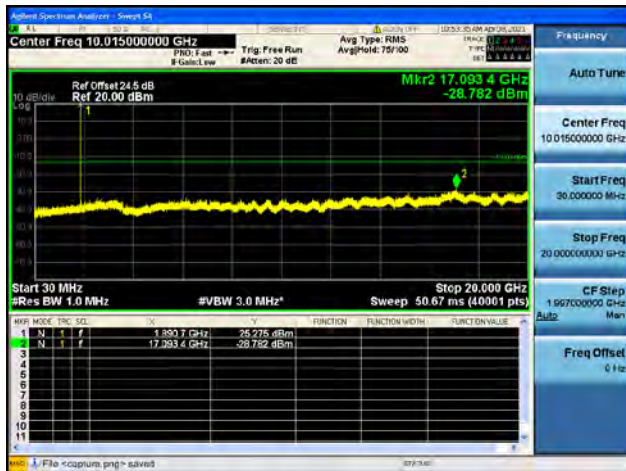
Band2 / 20MHz / Mid CH / 64QAM



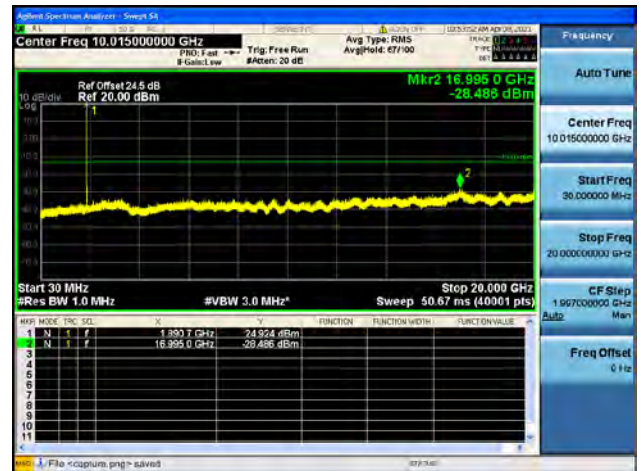
Band2 / 20MHz / High CH / QPSK



Band2 / 20MHz / High CH / 16QAM

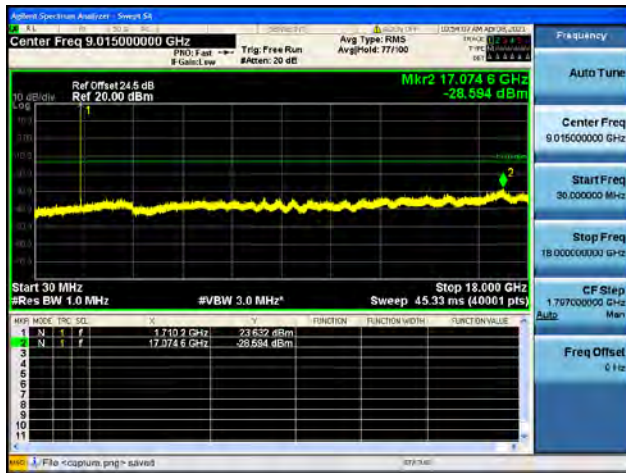


Band2 / 20MHz / High CH / 64QAM

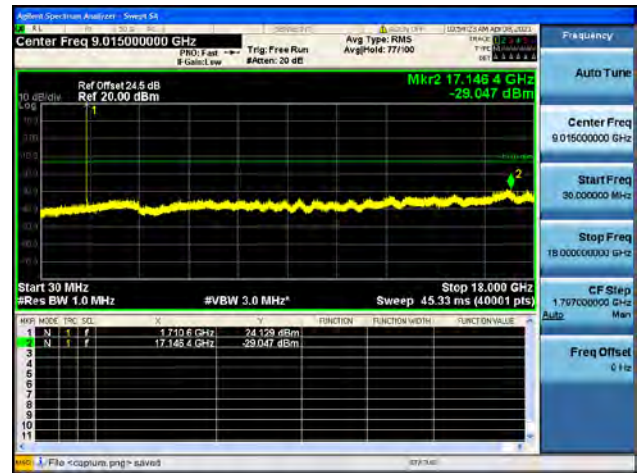




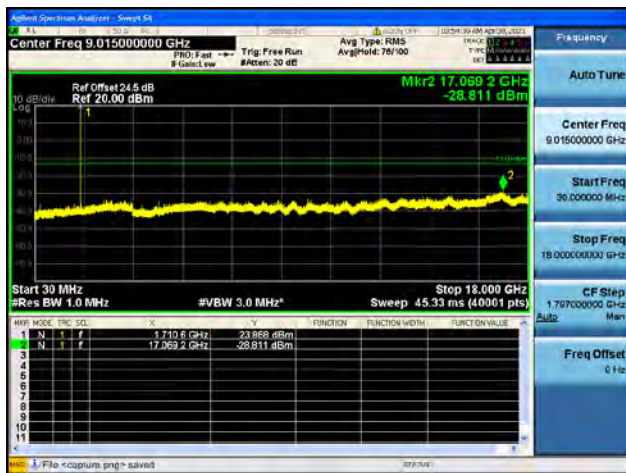
Band4 / 1.4MHz / Low CH / QPSK



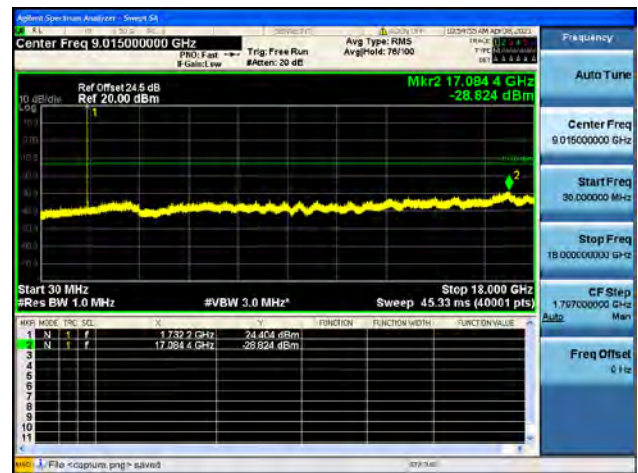
Band4 / 1.4MHz / Low CH / 16QAM



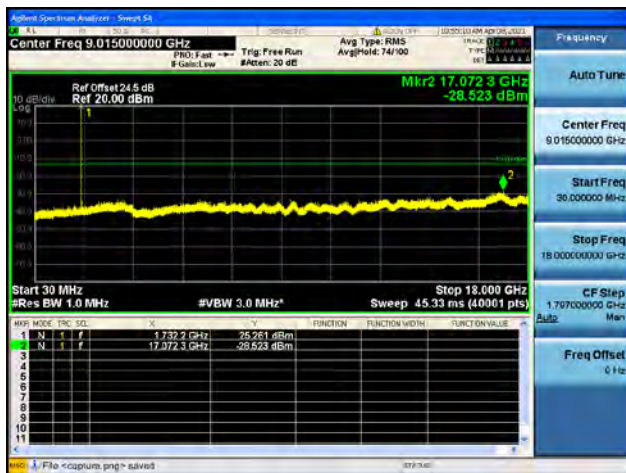
Band4 / 1.4MHz / Low CH / 64QAM



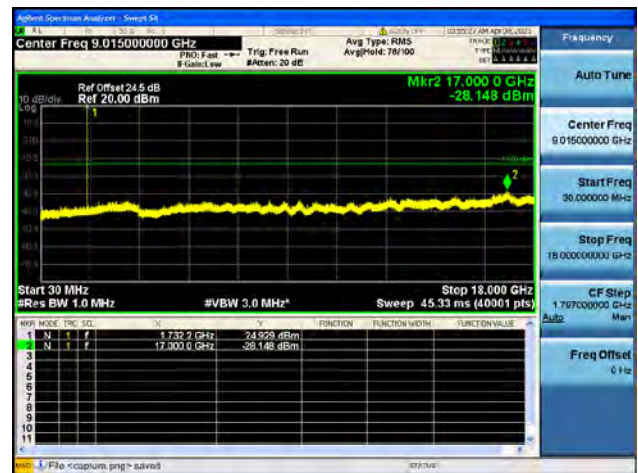
Band4 / 1.4MHz / Mid CH / QPSK



Band4 / 1.4MHz / Mid CH / 16QAM

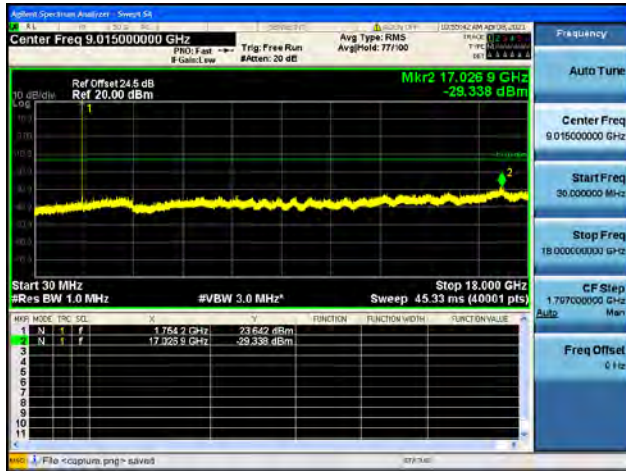


Band4 / 1.4MHz / Mid CH / 64QAM

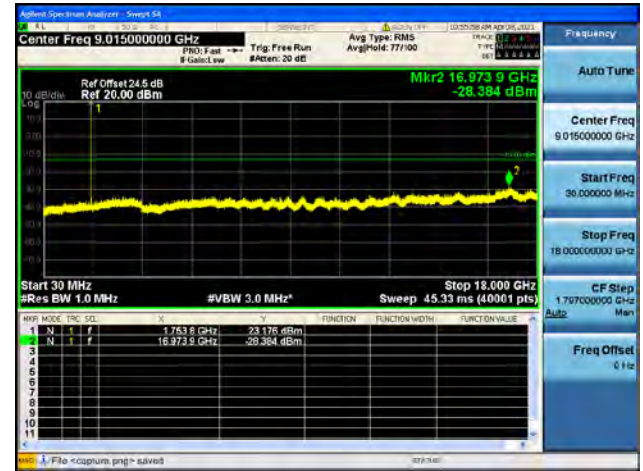




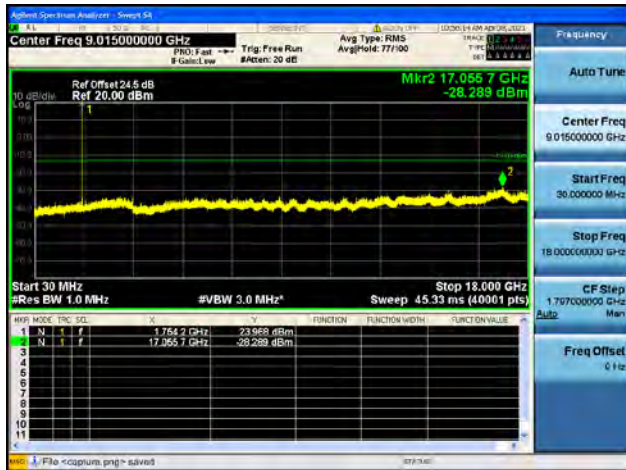
Band4 / 1.4MHz / High CH / QPSK



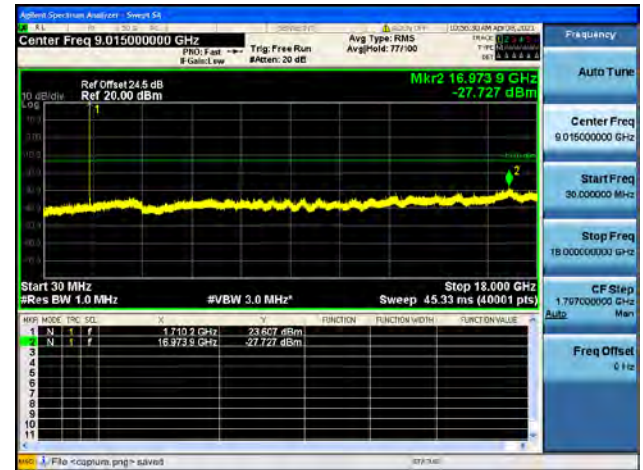
Band4 / 1.4MHz / High CH / 16QAM



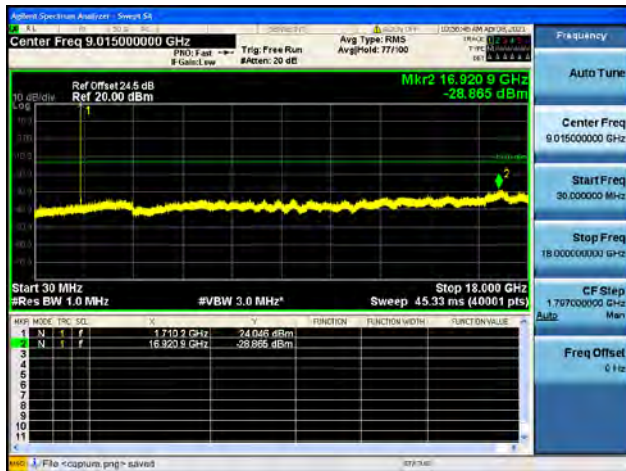
Band4 / 1.4MHz / High CH / 64QAM



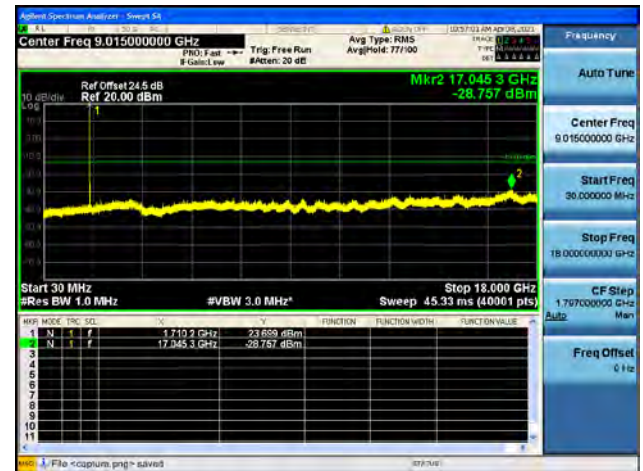
Band4 / 3MHz / Low CH / QPSK



Band4 / 3MHz / Low CH / 16QAM

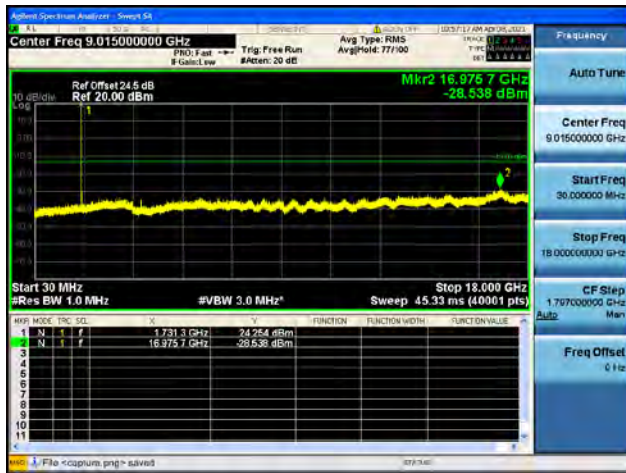


Band4 / 3MHz / Low CH / 64QAM

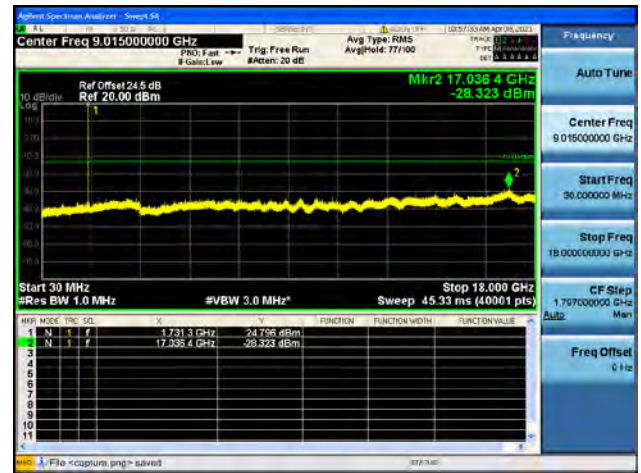




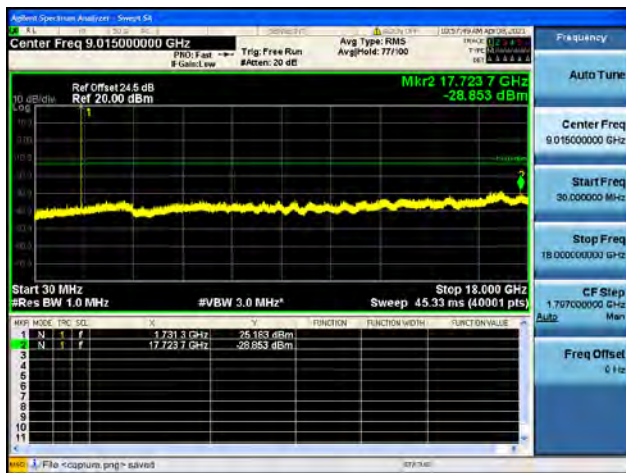
Band4 / 3MHz / Mid CH / QPSK



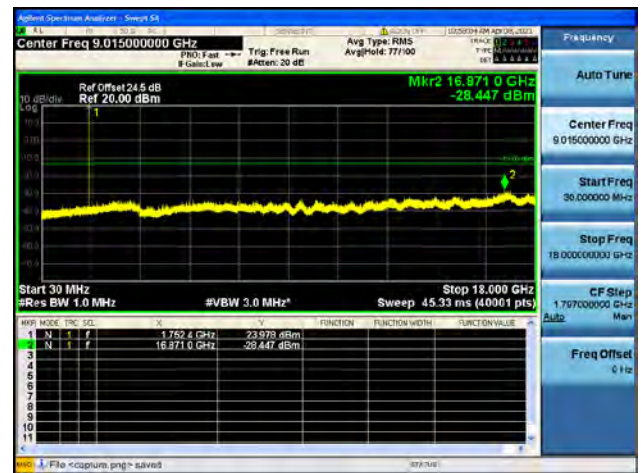
Band4 / 3MHz / Mid CH / 16QAM



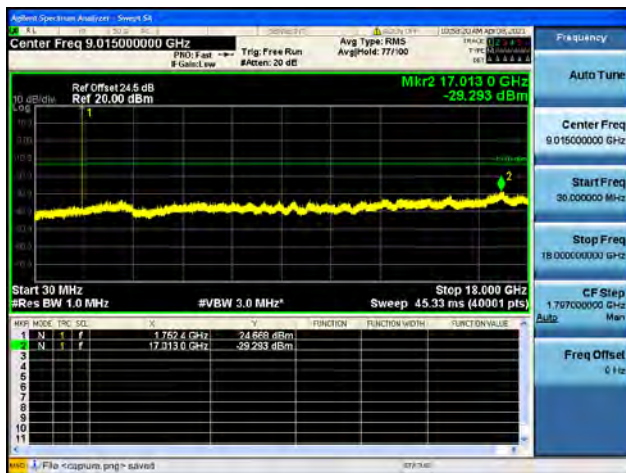
Band4 / 3MHz / Mid CH / 64QAM



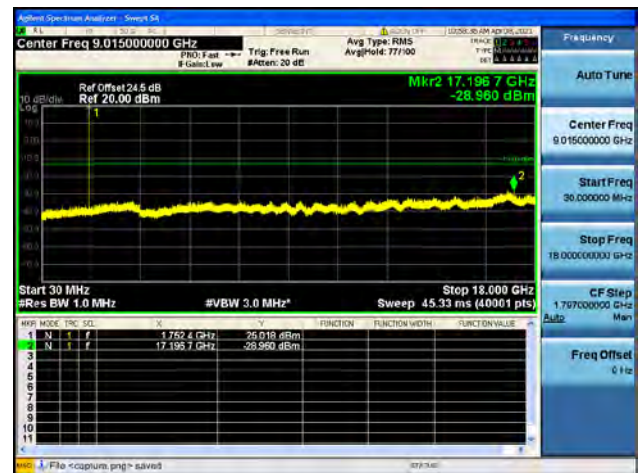
Band4 / 3MHz / High CH / QPSK



Band4 / 3MHz / High CH / 16QAM

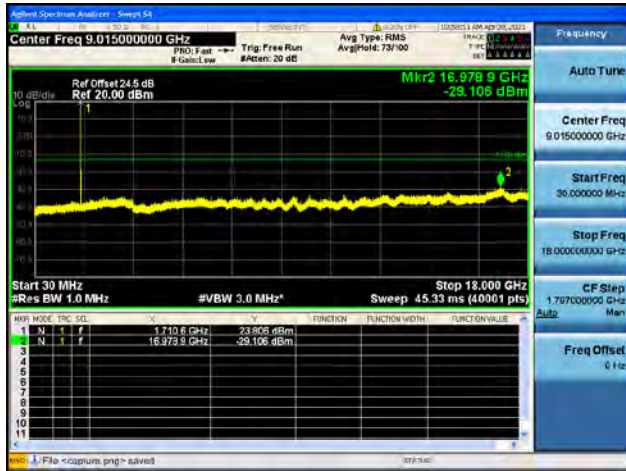


Band4 / 3MHz / High CH / 64QAM

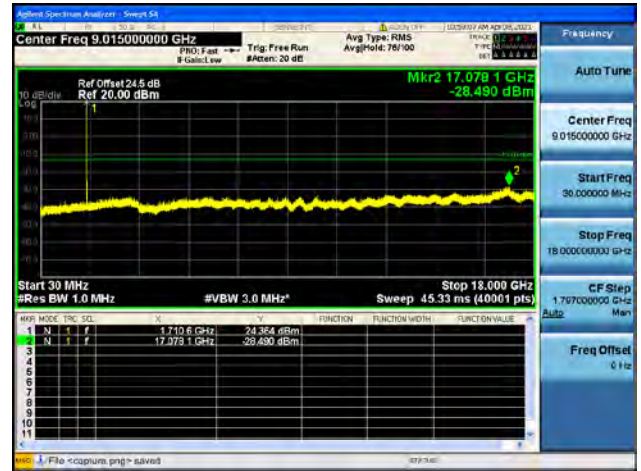




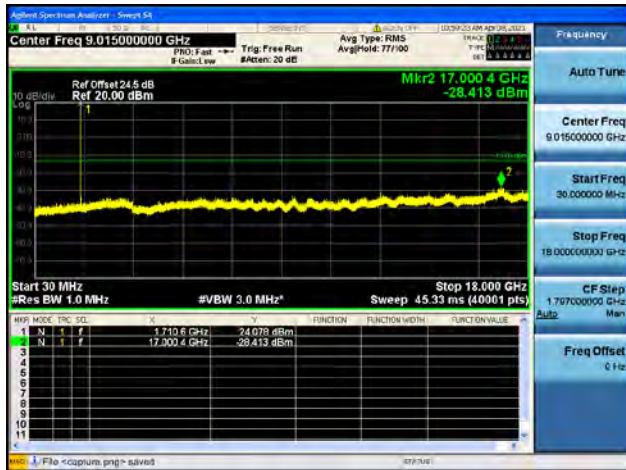
Band4 / 5MHz / Low CH / QPSK



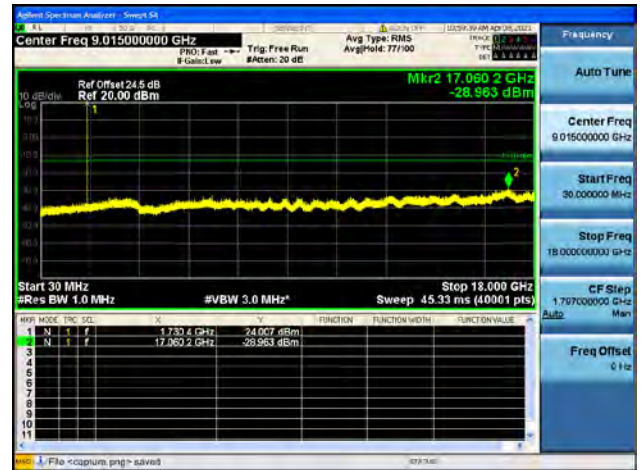
Band4 / 5MHz / Low CH / 16QAM



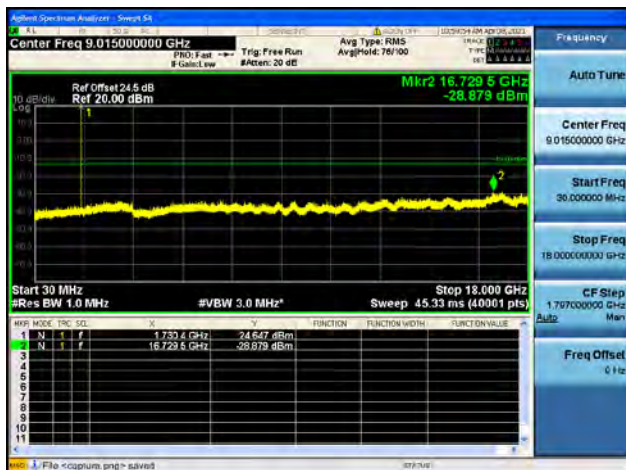
Band4 / 5MHz / Low CH / 64QAM



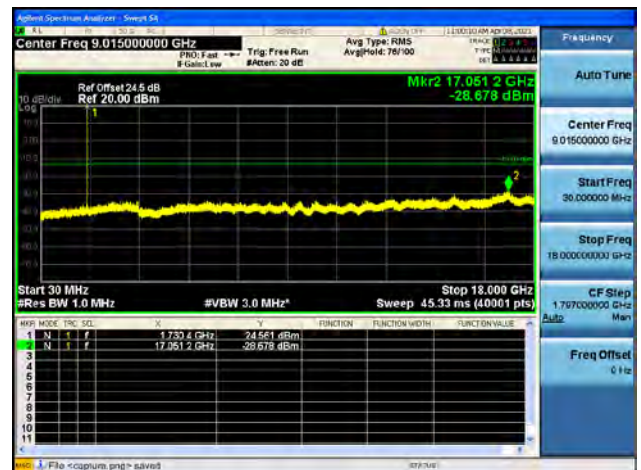
Band4 / 5MHz / Mid CH / QPSK



Band4 / 5MHz / Mid CH / 16QAM

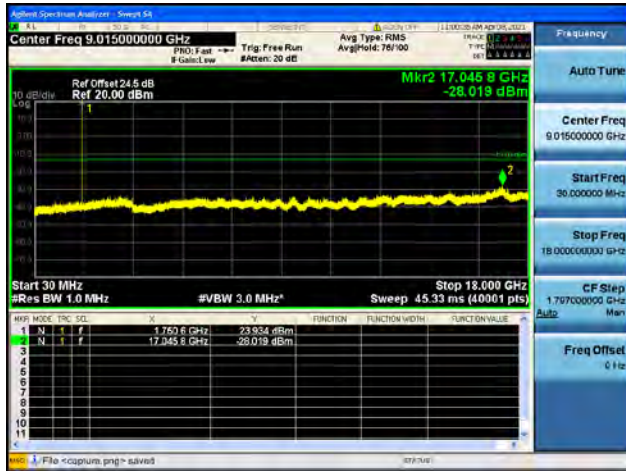


Band4 / 5MHz / Mid CH / 64QAM

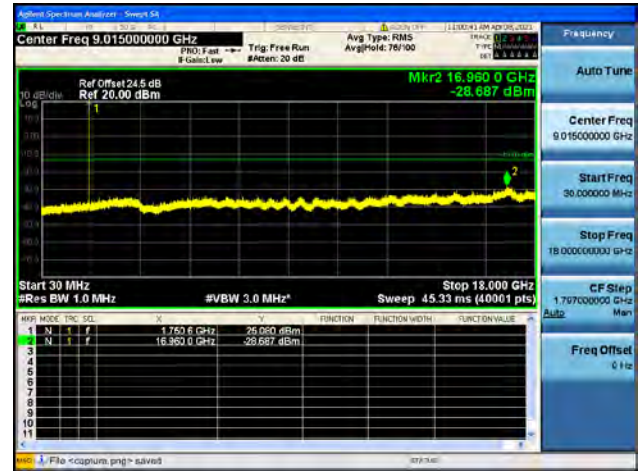




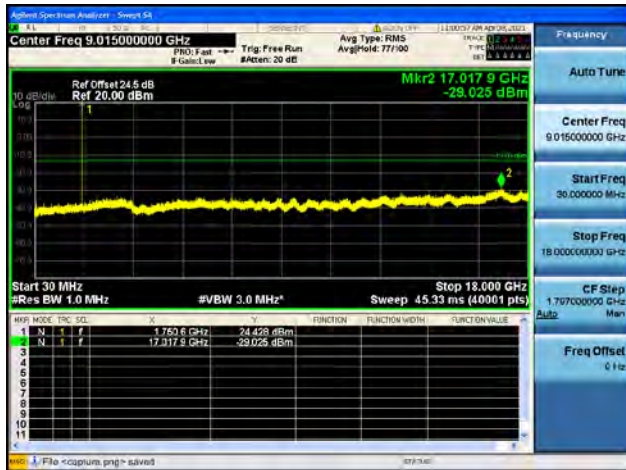
Band4 / 5MHz / High CH / QPSK



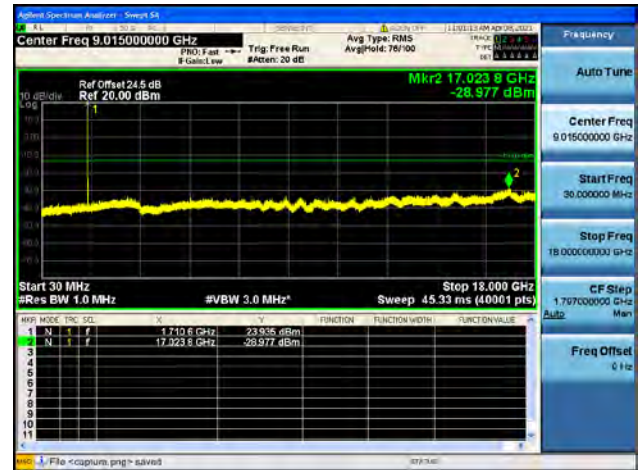
Band4 / 5MHz / High CH / 16QAM



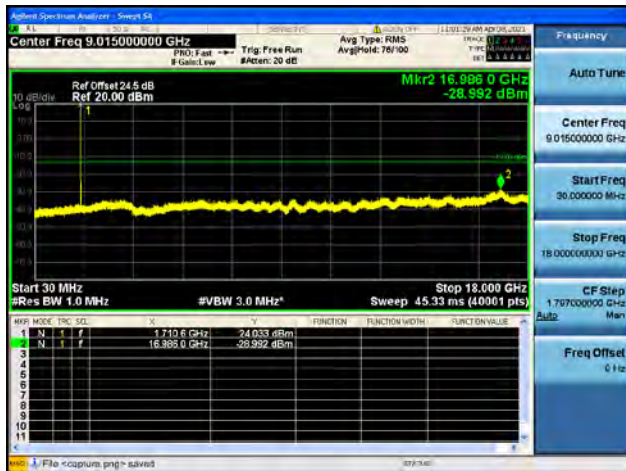
Band4 / 5MHz / High CH / 64QAM



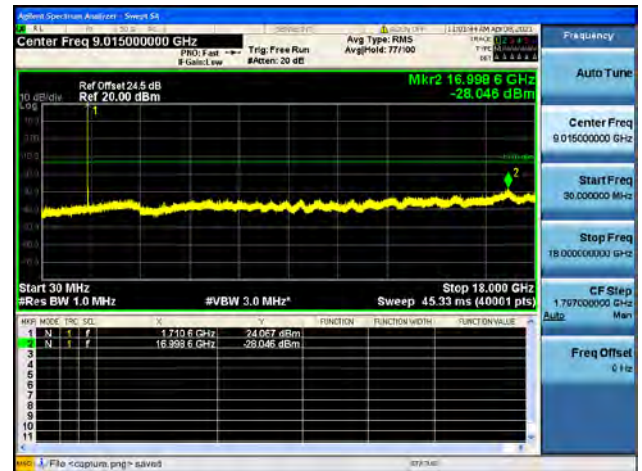
Band4 / 10MHz / Low CH / QPSK



Band4 / 10MHz / Low CH / 16QAM

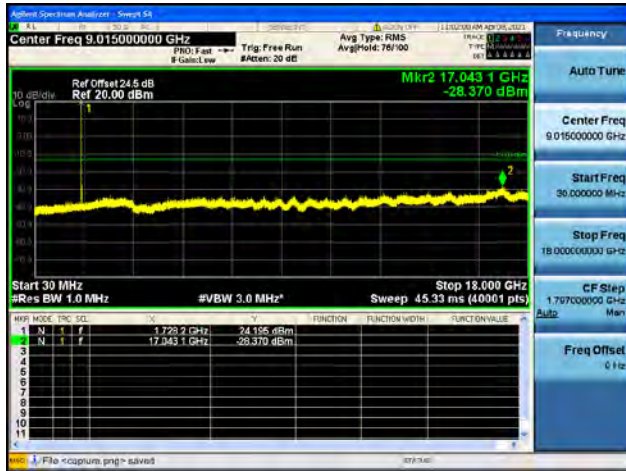


Band4 / 10MHz / Low CH / 64QAM

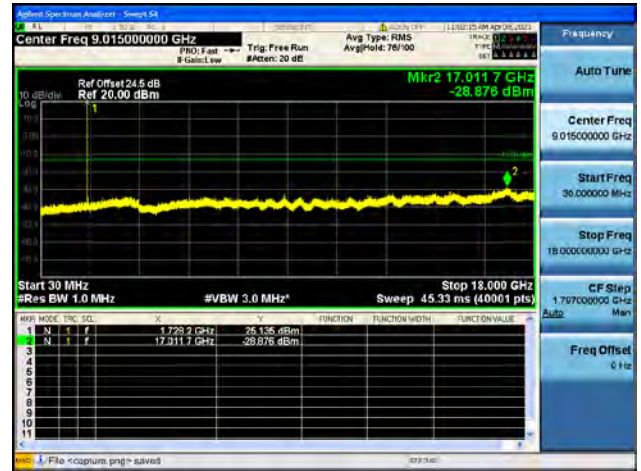




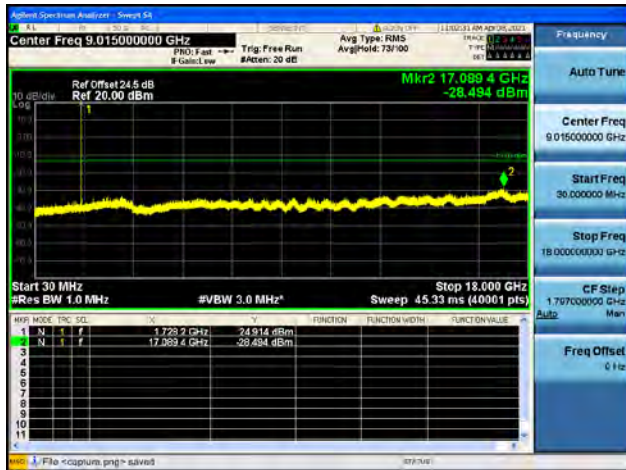
Band4 / 10MHz / Mid CH / QPSK



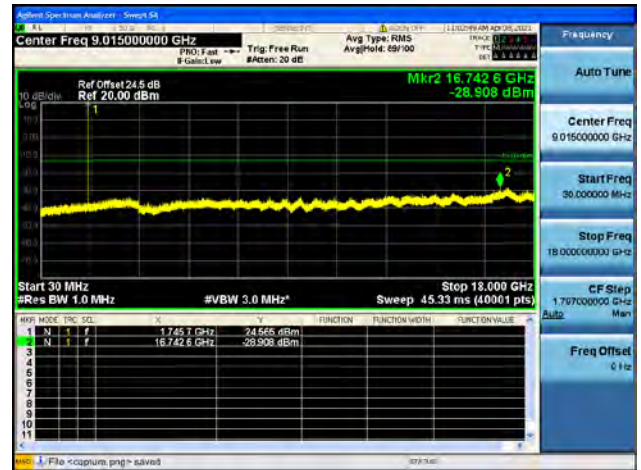
Band4 / 10MHz / Mid CH / 16QAM



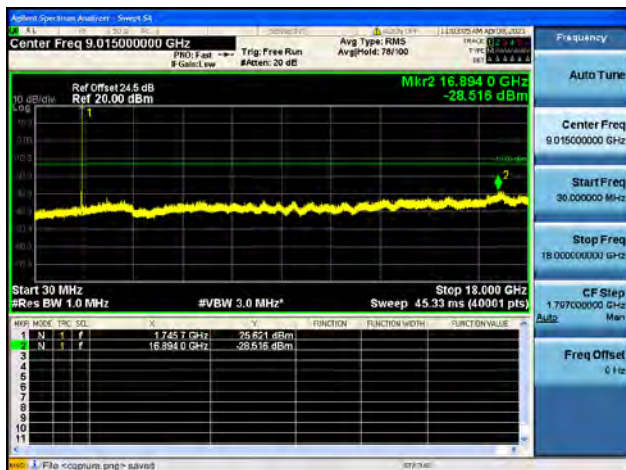
Band4 / 10MHz / Mid CH / 64QAM



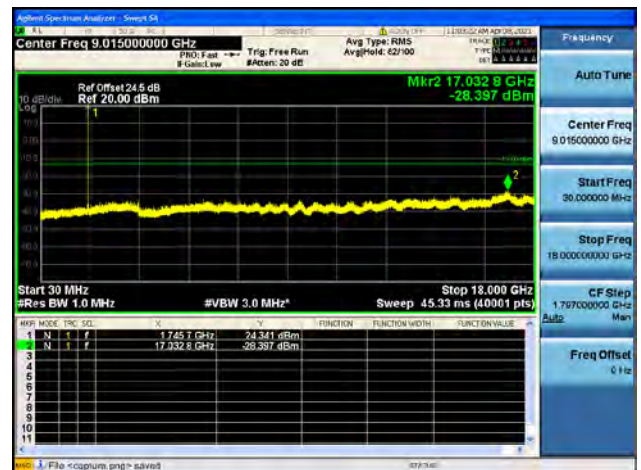
Band4 / 10MHz / High CH / QPSK



Band4 / 10MHz / High CH / 16QAM

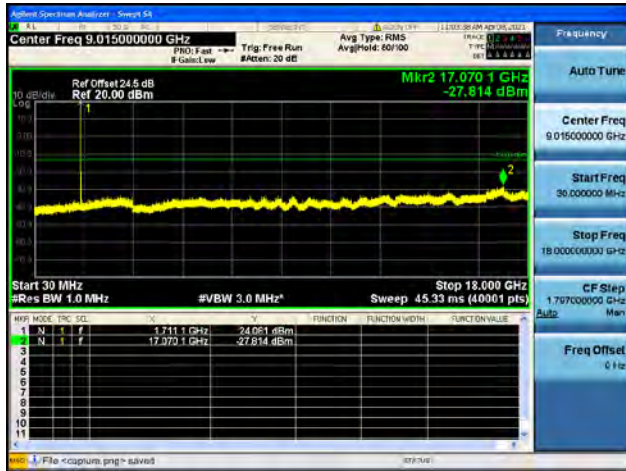


Band4 / 10MHz / High CH / 64QAM

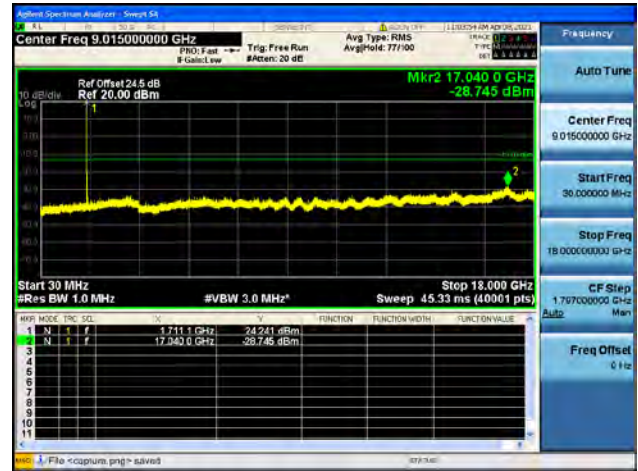




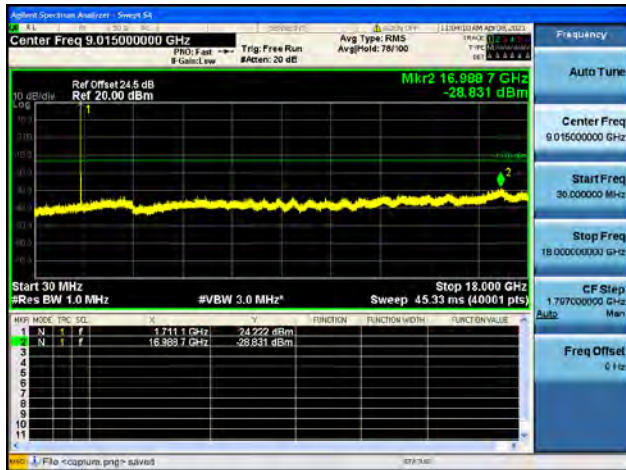
Band4 / 15MHz / Low CH / QPSK



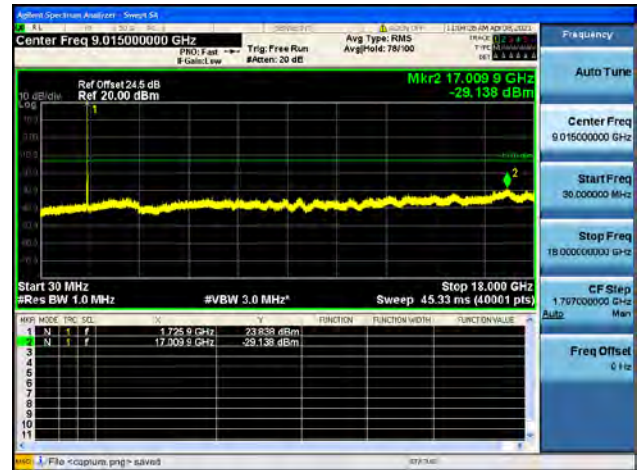
Band4 / 15MHz / Low CH / 16QAM



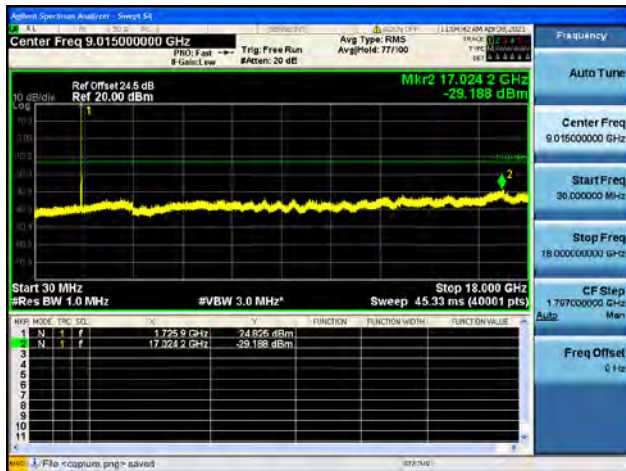
Band4 / 15MHz / Low CH / 64QAM



Band4 / 15MHz / Mid CH / QPSK



Band4 / 15MHz / Mid CH / 16QAM



Band4 / 15MHz / Mid CH / 64QAM

