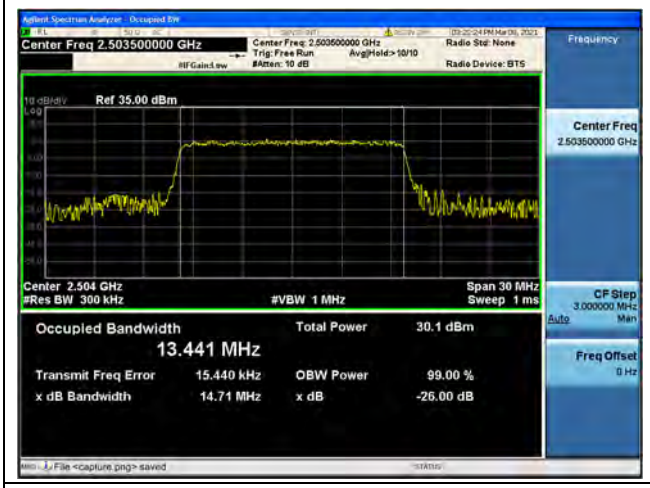
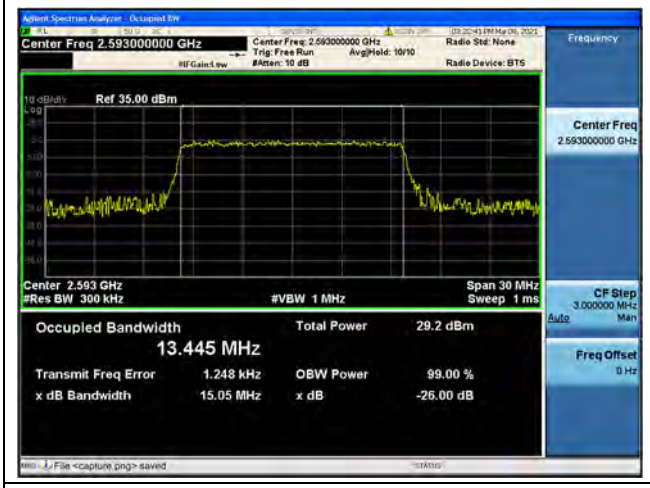
Band41 / 15MHz / Low CH / QPSK



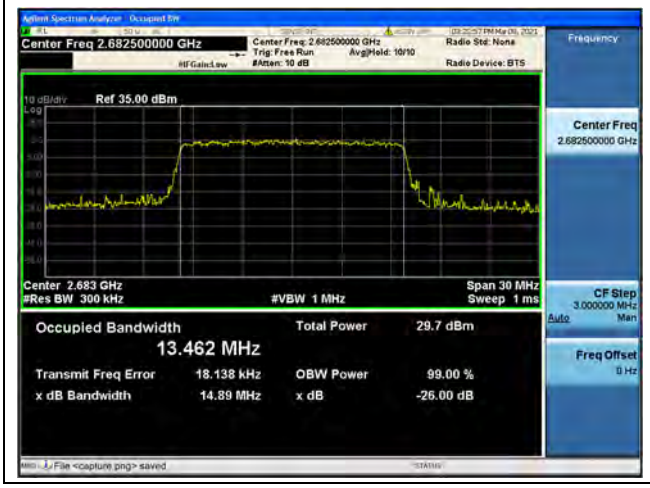
Band41 / 15MHz / Low CH / 16QAM

Band41 / 15MHz / Mid CH / QPSK



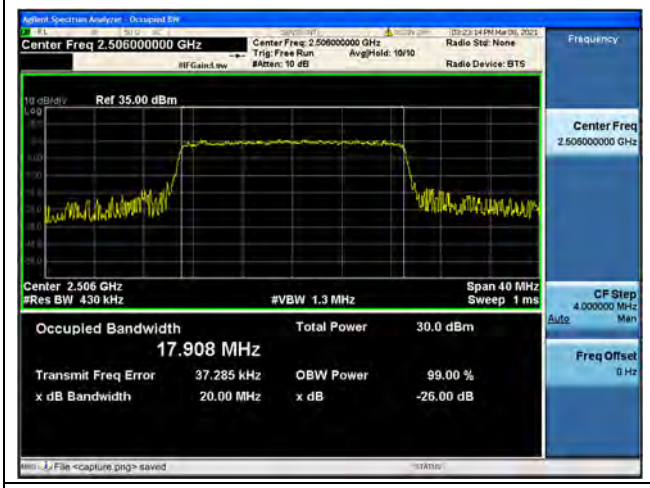
Band41 / 15MHz / Mid CH / 16QAM

Band41 / 15MHz / High CH / QPSK



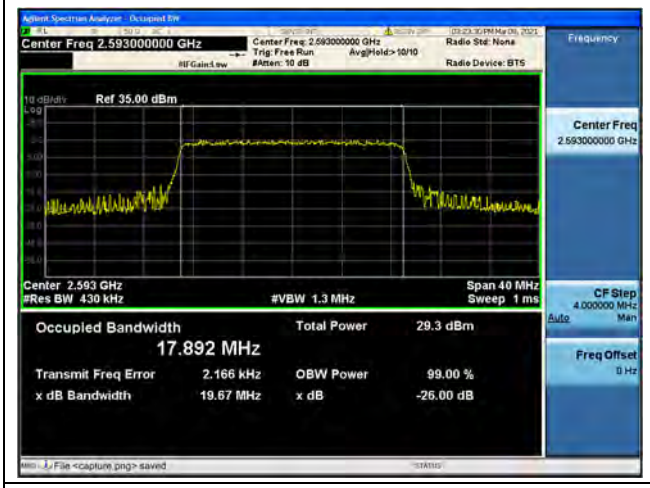
Band41 / 15MHz / High CH / 16QAM

Band41 / 20MHz / Low CH / QPSK

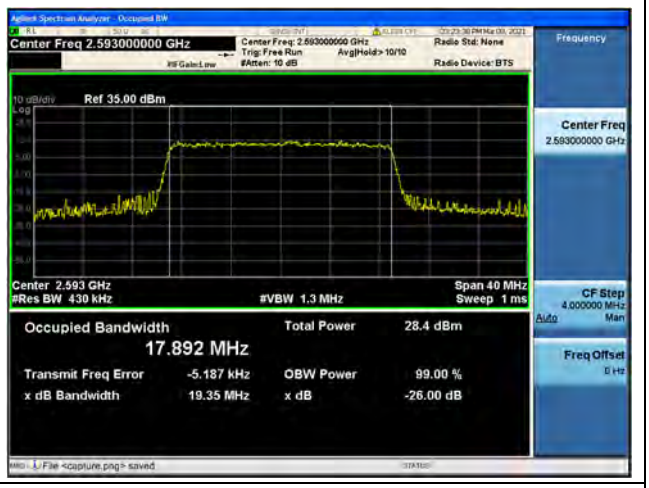


Band41 / 20MHz / Low CH / 16QAM

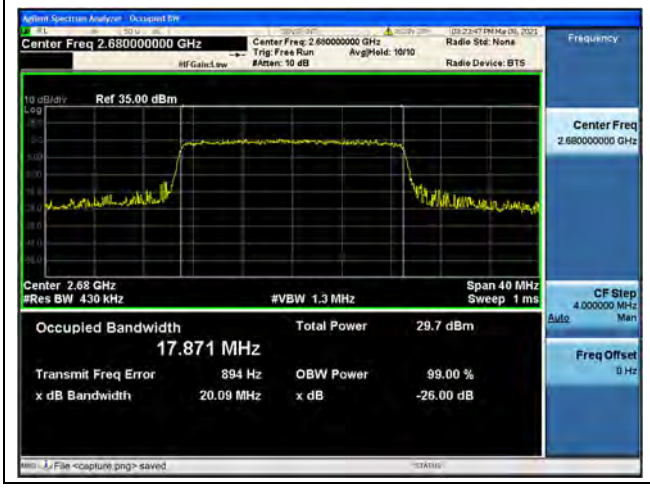
Band41 / 20MHz / Mid CH / QPSK



Band41 / 20MHz / Mid CH / 16QAM



Band41 / 20MHz / High CH / QPSK



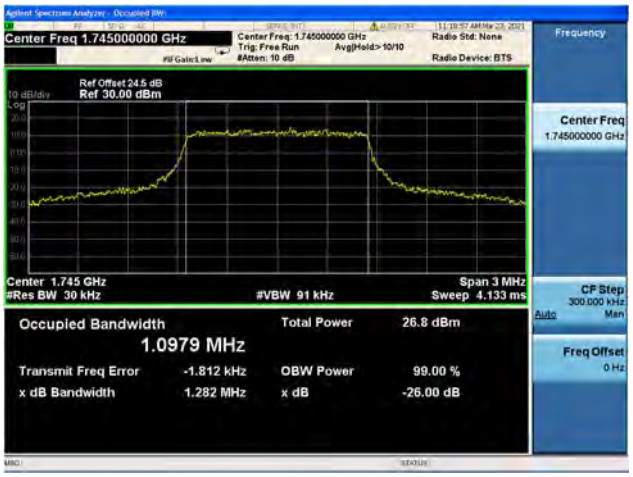
Band41 / 20MHz / High CH / 16QAM

Band66 / 1.4MHz / Low CH / QPSK

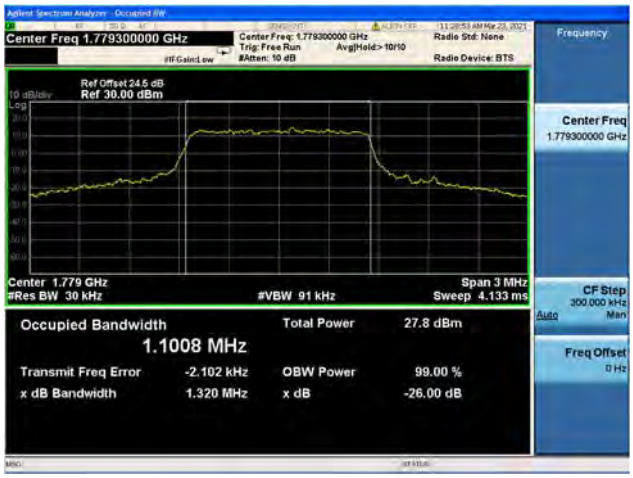
Band66 / 1.4MHz / Low CH / 16QAM

Band66 / 1.4MHz / Mid CH / QPSK

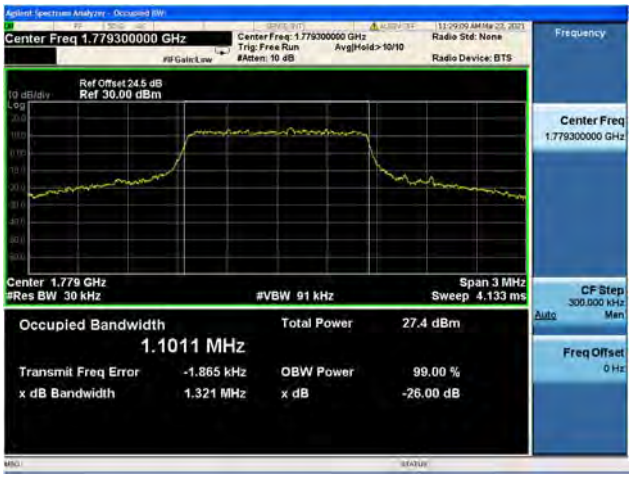
Band66 / 1.4MHz / Mid CH / 16QAM



Band66 / 1.4MHz / High CH / QPSK



Band66 / 1.4MHz / High CH / 16QAM



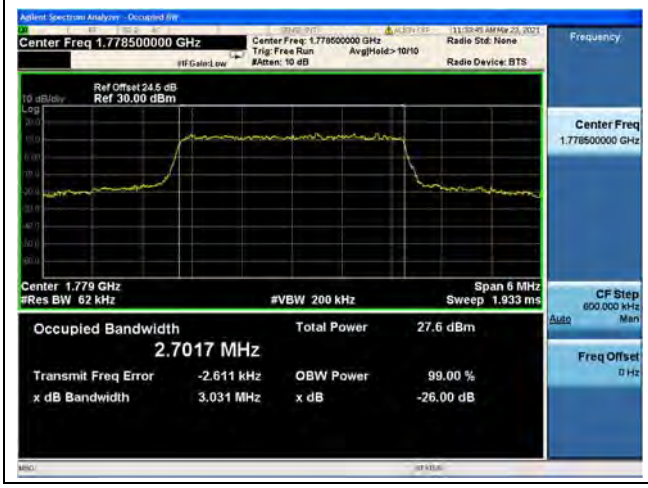
Band66 / 3MHz / Low CH / QPSK

Band66 / 3MHz / Low CH / 16QAM

Band66 / 3MHz / Mid CH / QPSK

Band66 / 3MHz / Mid CH / 16QAM

Band66 / 3MHz / High CH / QPSK



Band66 / 3MHz / High CH / 16QAM

Band66 / 5MHz / Low CH / QPSK

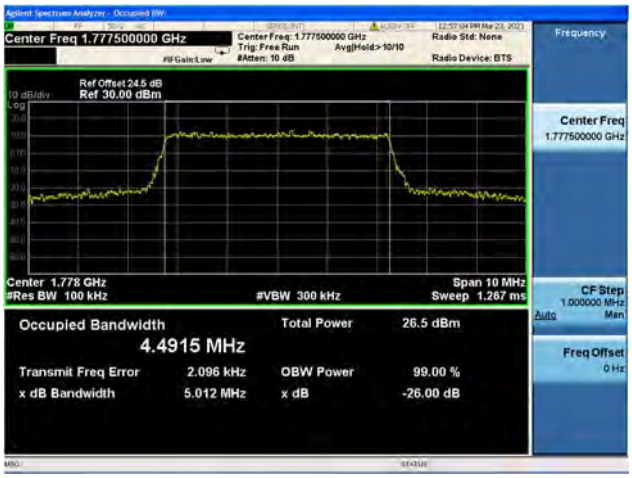
Band66 / 5MHz / Low CH / 16QAM

Band66 / 5MHz / Mid CH / QPSK

Band66 / 5MHz / Mid CH / 16QAM

Band66 / 5MHz / High CH / QPSK

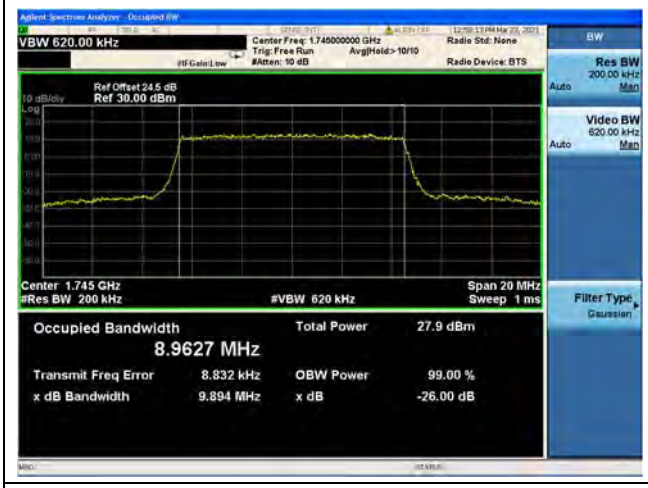
Band66 / 5MHz / High CH / 16QAM



Band66 / 10MHz / Low CH / QPSK

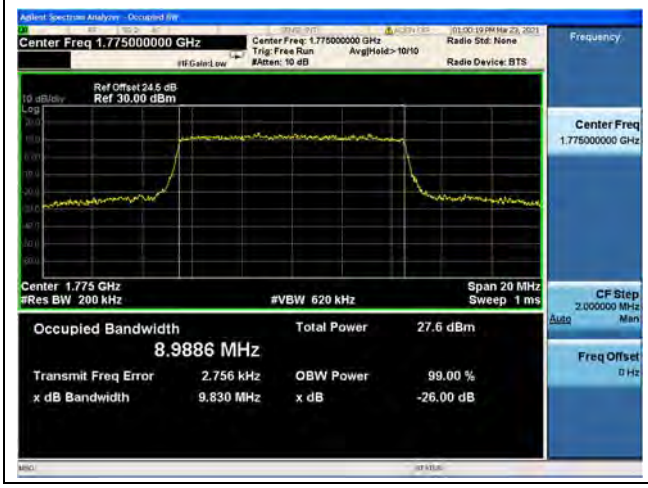
Band66 / 10MHz / Low CH / 16QAM

Band66 / 10MHz / Mid CH / QPSK



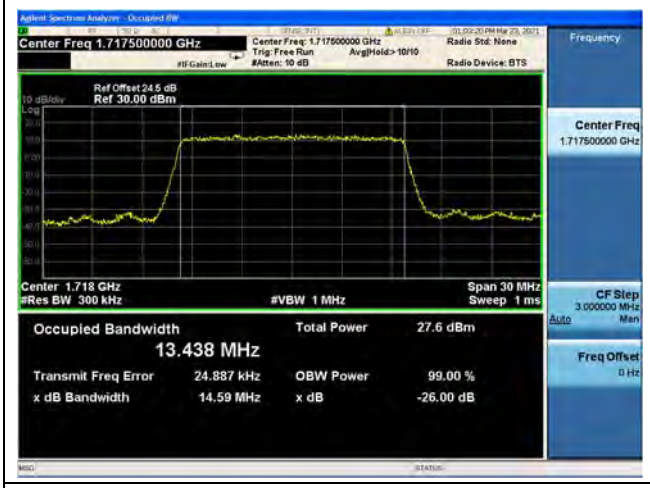
Band66 / 10MHz / Mid CH / 16QAM

Band66 / 10MHz / High CH / QPSK



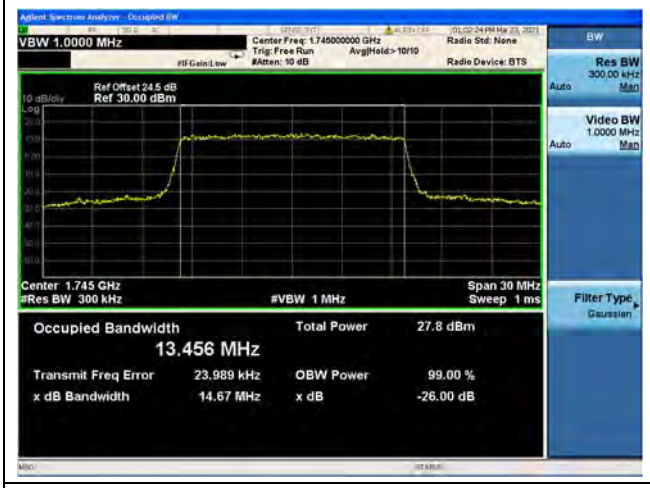
Band66 / 10MHz / High CH / 16QAM

Band66 / 15MHz / Low CH / QPSK



Band66 / 15MHz / Low CH / 16QAM

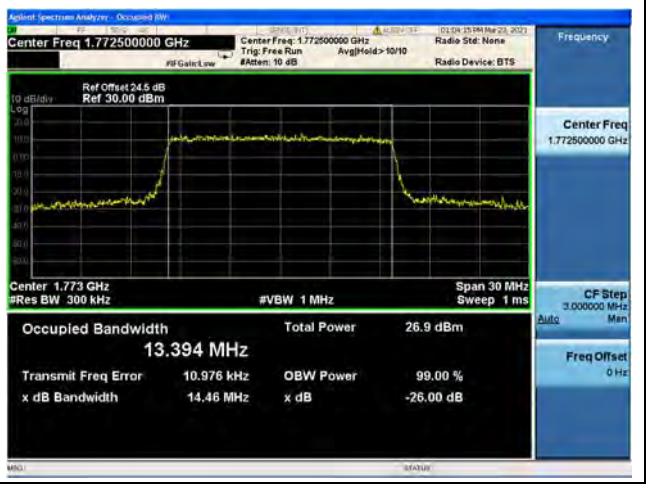
Band66 / 15MHz / Mid CH / QPSK



Band66 / 15MHz / Mid CH / 16QAM

Band66 / 15MHz / High CH / QPSK

Band66 / 15MHz / High CH / 16QAM



Band66 / 20MHz / Low CH / QPSK

Band66 / 20MHz / Low CH / 16QAM

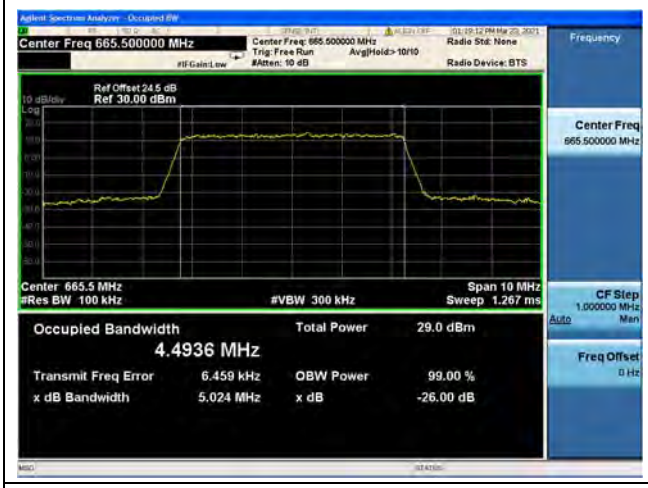
Band66 / 20MHz / Mid CH / QPSK

Band66 / 20MHz / Mid CH / 16QAM

Band66 / 20MHz / High CH / QPSK

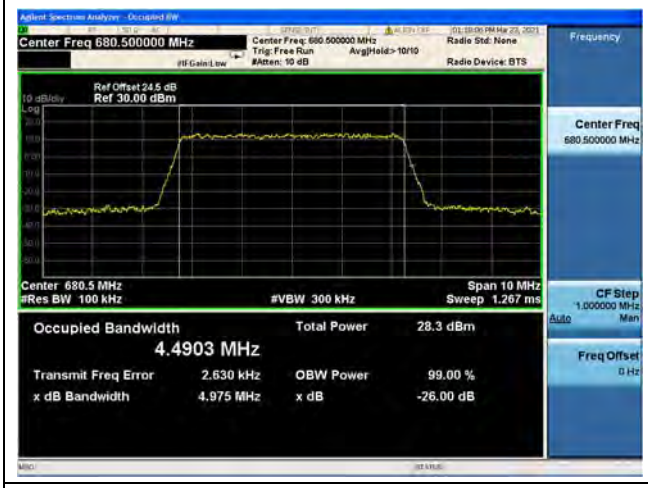
Band66 / 20MHz / High CH / 16QAM

Band71 / 5MHz / Low CH / QPSK



Band71 / 5MHz / Low CH / 16QAM

Band71 / 5MHz / Mid CH / QPSK



Band71 / 5MHz / Mid CH / 16QAM

Band71 / 5MHz / High CH / QPSK

Band71 / 5MHz / High CH / 16QAM

Band71 / 10MHz / Low CH / QPSK

Band71 / 10MHz / Low CH / 16QAM

Band71 / 10MHz / Mid CH / QPSK

Band71 / 10MHz / Mid CH / 16QAM

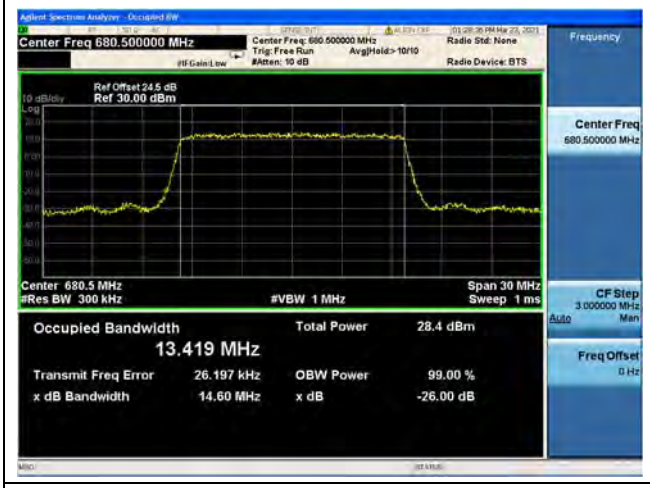
Band71 / 10MHz / High CH / QPSK

Band71 / 10MHz / High CH / 16QAM

Band71 / 15MHz / Low CH / QPSK

Band71 / 15MHz / Low CH / 16QAM

Band71 / 15MHz / Mid CH / QPSK



Band71 / 15MHz / Mid CH / 16QAM

Band71 / 15MHz / High CH / QPSK

Band71 / 15MHz / High CH / 16QAM

Band71 / 20MHz / Low CH / QPSK

Band71 / 20MHz / Low CH / 16QAM

Band71 / 20MHz / Mid CH / QPSK

Band71 / 20MHz / Mid CH / 16QAM

Band71 / 20MHz / High CH / QPSK

Band71 / 20MHz / High CH / 16QAM

2.3. Frequency Stability

2.3.1. Requirement

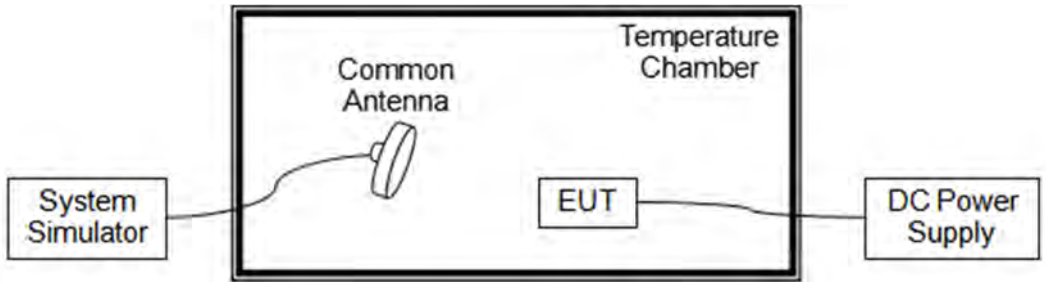
According to FCC section 2.1055, 24.235, 27.54, the frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block. According to FCC section 2.1055, the test conditions are:

(a) The temperature is varied from -30°C to +50°C at intervals of not more than 10°C.

(b) For hand carried battery powered equipment, the primary supply voltage is reduced to the battery operating end point which shall be specified by the manufacture. The supply voltage shall be measured at the input to the cable normally provided with the equipment, or at the power supply terminals if cables are not normally provided.

Note: The operating temperature of EUT is from 0°C to 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 3.80V, 4.35V 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	3.85	+20(Ref)	-34	-0.018	PASS
100		0	-28	-0.015	
100		+10	-29	-0.015	
100		+20	33	0.018	
100		+30	26	0.014	
100		+40	-34	-0.018	
100		+45	-27	-0.014	
115	4.35	+20	-32	-0.017	
85	3.00	+20	29	0.015	

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	3.85	+20(Ref)	-34	-0.020	PASS
100		0	38	0.022	
100		+10	-23	-0.013	
100		+20	40	0.023	
100		+30	31	0.018	
100		+40	-20	-0.012	
100		+45	39	0.023	
115	4.35	+20	-26	-0.015	
85	3.00	+20	-28	-0.016	

LTE Band 5, QPSK, Channel 20525, Frequency 836.5MHz Limit=±2.5ppm					
Voltage (%)	**Power (VDC)**	**Temp(°C)**	**Fre. Dev.(Hz)**	**Deviation (ppm)**	**Result**
100	3.85	+20(Ref)	47	0.056	PASS
100		0	39	0.047	
100		+10	24	0.029	
100		+20	51	0.061	
100		+30	-22	-0.026	
100		+40	-31	-0.037	
100		+45	-19	-0.023	
115	4.35	+20	-26	-0.031	
85	3.00	+20	29	0.035	

LTE Band 7, QPSK, Channel 21100, Frequency 2535.0MHz Limit=±2.5ppm					
Voltage (%)	**Power (VDC)**	**Temp(°C)**	**Fre. Dev.(Hz)**	**Deviation (ppm)**	**Result**
100	3.85	+20(Ref)	-32	-0.014	PASS
100		0	40	0.017	
100		+10	-27	-0.012	
100		+20	-37	-0.016	
100		+30	24	0.010	
100		+40	-32	-0.014	
100		+45	25	0.011	
115	4.35	+20	-20	-0.009	
85	3.00	+20	-23	-0.010	

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	3.85	+20(Ref)	-32	-0.045	PASS
100		0	-22	-0.031	
100		+10	26	0.037	
100		+20	24	0.034	
100		+30	-34	-0.048	
100		+40	32	0.045	
100		+45	27	0.038	
115	4.35	+20	59	0.083	
85	3.00	+20	-25	-0.035	

LTE Band 13, QPSK, Channel 23230, Frequency 782MHz Limit=±2.5ppm					
Voltage (%)	**Power (VDC)**	**Temp(°C)**	**Fre. Dev.(Hz)**	**Deviation (ppm)**	**Result**
100	3.80	+20(Ref)	-34	-0.043	PASS
100		0	-32	-0.041	
100		+10	27	0.035	
100		+20	-34	-0.043	
100		+30	32	0.041	
100		+40	23	0.029	
100		+45	23	0.029	
115	4.35	+20	24	0.031	
85	3.00	+20	34	0.043	

LTE Band 17, QPSK, Channel 23790, Frequency 710MHz Limit =Within Authorized Band					
Voltage (%)	**Power (VDC)**	**Temp(°C)**	**Fre. Dev.(Hz)**	**Deviation (ppm)**	**Result**
100	3.80	+20(Ref)	25	0.035	PASS
100		0	20	0.028	
100		+10	18	0.025	
100		+20	37	0.052	
100		+30	-25	-0.035	
100		+40	-23	-0.032	
100		+45	-29	-0.041	
115	4.35	+20	-20	-0.028	
85	3.00	+20	31	0.044	

LTE Band 25, QPSK, Channel 26365, Frequency 1882.5MHz Limit =Within Authorized Band					
Voltage (%)	**Power (VDC)**	**Temp(°C)**	**Fre. Dev.(Hz)**	**Deviation (ppm)**	**Result**
100	3.80	+20(Ref)	21	0.011	PASS
100		0	-29	-0.015	
100		+10	-36	-0.019	
100		+20	-24	-0.013	
100		+30	-21	-0.011	
100		+40	-26	-0.014	
100		+45	-22	-0.012	
115	4.35	+20	-28	-0.015	
85	3.00	+20	-21	-0.011	

LTE Band 26, QPSK, Channel 26915, Frequency 836.5MHz Limit=±2.5ppm					
Voltage (%)	**Power (VDC)**	**Temp(°C)**	**Fre. Dev.(Hz)**	**Deviation (ppm)**	**Result**
100	3.80	+20(Ref)	49	0.059	PASS
100		0	-24	-0.029	
100		+10	19	0.023	
100		+20	-27	-0.032	
100		+30	-21	-0.025	
100		+40	-33	-0.039	
100		+45	25	0.030	
115	4.35	+20	-28	-0.033	
85	3.00	+20	31	0.037	

LTE Band 26, QPSK, Channel 26915, Frequency 836.5MHz Limit=±2.5ppm					
Voltage (%)	**Power (VDC)**	**Temp(°C)**	**Fre. Dev.(Hz)**	**Deviation (ppm)**	**Result**
100	3.80	+20(Ref)	-33	-0.013	PASS
100		0	-29	-0.011	
100		+10	-23	-0.009	
100		+20	33	0.013	
100		+30	27	0.010	
100		+40	28	0.011	
100		+45	26	0.010	
115	4.35	+20	-34	-0.013	
85	3.00	+20	-28	-0.011	

LTE Band 40, QPSK, Channel 38750, Frequency 2310.0MHz Limit=±2.5ppm					
Voltage (%)	**Power (VDC)**	**Temp(°C)**	**Fre. Dev.(Hz)**	**Deviation (ppm)**	**Result**
100	3.80	+20(Ref)	-26	-0.011	PASS
100		0	-31	-0.013	
100		+10	24	0.010	
100		+20	-34	-0.015	
100		+30	26	0.011	
100		+40	27	0.012	
100		+45	24	0.010	
115	4.35	+20	25	0.011	
85	3.00	+20	-34	-0.015	

LTE Band 40, QPSK, Channel 39200, Frequency 2355.0MHz Limit=±2.5ppm					
Voltage (%)	**Power (VDC)**	**Temp(°C)**	**Fre. Dev.(Hz)**	**Deviation (ppm)**	**Result**
100	3.80	+20(Ref)	-33	-0.014	PASS
100		0	32	0.014	
100		+10	29	0.012	
100		+20	-27	-0.011	
100		+30	-23	-0.010	
100		+40	-34	-0.014	
100		+45	-24	-0.010	
115	4.35	+20	-32	-0.014	
85	3.00	+20	-26	-0.011	

LTE Band 41, QPSK, Channel 40620, Frequency 2593MHz Limit =Within Authorized Band					
Voltage (%)	**Power (VDC)**	**Temp(°C)**	**Fre. Dev.(Hz)**	**Deviation (ppm)**	**Result**
100	3.80	+20(Ref)	-26	-0.010	PASS
100		0	25	0.010	
100		+10	35	0.013	
100		+20	-20	-0.008	
100		+30	-24	-0.009	
100		+40	33	0.013	
100		+45	-21	-0.008	
115	4.35	+20	30	0.012	
85	3.00	+20	-21	-0.008	

LTE Band 66, QPSK, Channel 132322, Frequency 1745MHz Limit =Within Authorized Band					
Voltage (%)	**Power (VDC)**	**Temp(°C)**	**Fre. Dev.(Hz)**	**Deviation (ppm)**	**Result**
100	3.80	+20(Ref)	-26	-0.015	PASS
100		0	41	0.023	
100		+10	-26	-0.015	
100		+20	-20	-0.011	
100		+30	27	0.015	
100		+40	-26	-0.015	
100		+45	-29	-0.017	
115	4.35	+20	34	0.019	
85	3.00	+20	-27	-0.015	

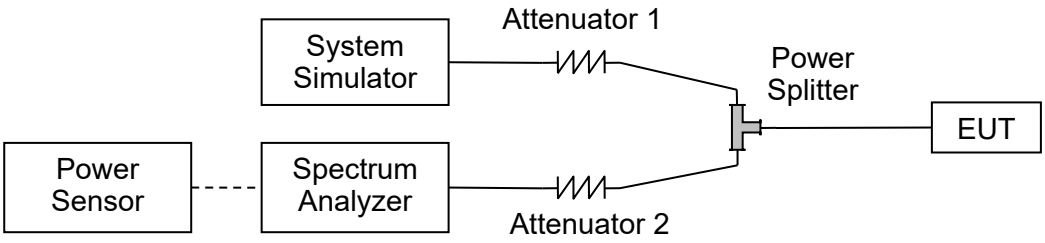
LTE Band 71, QPSK, Channel 133322, Frequency 683MHz Limit=±2.5ppm					
Voltage (%)	**Power (VDC)**	**Temp(°C)**	**Fre. Dev.(Hz)**	**Deviation (ppm)**	**Result**
100	3.80	+20(Ref)	35	0.051	PASS
100		0	-33	-0.048	
100		+10	-26	-0.038	
100		+20	31	0.045	
100		+30	-19	-0.028	
100		+40	-32	-0.047	
100		+45	-27	-0.040	
115	4.35	+20	22	0.032	
85	3.00	+20	-28	-0.041	

2.4. Peak to Average Radio

2.4.1. Requirement

According to FCC section 24.232(d), 27.50(d) and 27.50(j)(4), 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	4.75	<=13	PASS
	Low	16QAM	5.83	<=13	PASS
	Mid	QPSK	5.11	<=13	PASS
	Mid	16QAM	5.97	<=13	PASS
	High	QPSK	4.77	<=13	PASS
	High	16QAM	5.59	<=13	PASS
3	Low	QPSK	5.03	<=13	PASS
	Low	16QAM	5.91	<=13	PASS
	Mid	QPSK	5.17	<=13	PASS
	Mid	16QAM	5.96	<=13	PASS
	High	QPSK	4.83	<=13	PASS
	High	16QAM	5.66	<=13	PASS
5	Low	QPSK	5.06	<=13	PASS
	Low	16QAM	5.83	<=13	PASS
	Mid	QPSK	5.17	<=13	PASS
	Mid	16QAM	5.9	<=13	PASS
	High	QPSK	4.99	<=13	PASS
	High	16QAM	5.75	<=13	PASS
10	Low	QPSK	5.04	<=13	PASS
	Low	16QAM	5.79	<=13	PASS
	Mid	QPSK	5.17	<=13	PASS
	Mid	16QAM	5.93	<=13	PASS
	High	QPSK	5.0	<=13	PASS
	High	16QAM	5.82	<=13	PASS
15	Low	QPSK	4.94	<=13	PASS
	Low	16QAM	5.73	<=13	PASS
	Mid	QPSK	5.05	<=13	PASS
	Mid	16QAM	5.88	<=13	PASS
	High	QPSK	4.91	<=13	PASS
	High	16QAM	5.73	<=13	PASS
20	Low	QPSK	4.89	<=13	PASS
	Low	16QAM	5.79	<=13	PASS
	Mid	QPSK	5.03	<=13	PASS
	Mid	16QAM	5.86	<=13	PASS
	High	QPSK	4.96	<=13	PASS
	High	16QAM	5.84	<=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	5.72	<=13	PASS
	Mid	QPSK	4.94	<=13	PASS
	Mid	16QAM	5.75	<=13	PASS
	High	QPSK	4.32	<=13	PASS
	High	16QAM	5.24	<=13	PASS
3	Low	QPSK	5.05	<=13	PASS
	Low	16QAM	5.86	<=13	PASS
	Mid	QPSK	5.06	<=13	PASS
	Mid	16QAM	5.88	<=13	PASS
	High	QPSK	4.55	<=13	PASS
	High	16QAM	5.39	<=13	PASS
5	Low	QPSK	5.19	<=13	PASS
	Low	16QAM	5.91	<=13	PASS
	Mid	QPSK	5.17	<=13	PASS
	Mid	16QAM	5.84	<=13	PASS
	High	QPSK	4.64	<=13	PASS
	High	16QAM	5.41	<=13	PASS
10	Low	QPSK	5.11	<=13	PASS
	Low	16QAM	5.88	<=13	PASS
	Mid	QPSK	5.05	<=13	PASS
	Mid	16QAM	5.78	<=13	PASS
	High	QPSK	4.68	<=13	PASS
	High	16QAM	5.41	<=13	PASS
15	Low	QPSK	5.02	<=13	PASS
	Low	16QAM	5.82	<=13	PASS
	Mid	QPSK	4.91	<=13	PASS
	Mid	16QAM	5.69	<=13	PASS
	High	QPSK	4.44	<=13	PASS
	High	16QAM	5.24	<=13	PASS
20	Low	QPSK	5.03	<=13	PASS
	Low	16QAM	5.89	<=13	PASS
	Mid	QPSK	4.9	<=13	PASS
	Mid	16QAM	5.74	<=13	PASS
	High	QPSK	4.54	<=13	PASS
	High	16QAM	5.37	<=13	PASS

LTE Band 25					
BW(MHz)	Channel Level	Modulation	PAR Radio(dB)	Limit(dB)	Verdict
1.4	Low	QPSK	5.2	<=13	PASS
	Low	16QAM	5.94	<=13	PASS
	Mid	QPSK	5.19	<=13	PASS
	Mid	16QAM	5.96	<=13	PASS
	High	QPSK	4.41	<=13	PASS
	High	16QAM	5.2	<=13	PASS
3	Low	QPSK	5.16	<=13	PASS
	Low	16QAM	5.95	<=13	PASS
	Mid	QPSK	5.17	<=13	PASS
	Mid	16QAM	5.98	<=13	PASS
	High	QPSK	4.49	<=13	PASS
	High	16QAM	5.36	<=13	PASS
5	Low	QPSK	5.15	<=13	PASS
	Low	16QAM	5.89	<=13	PASS
	Mid	QPSK	5.27	<=13	PASS
	Mid	16QAM	5.94	<=13	PASS
	High	QPSK	4.91	<=13	PASS
	High	16QAM	5.59	<=13	PASS
10	Low	QPSK	5.13	<=13	PASS
	Low	16QAM	5.82	<=13	PASS
	Mid	QPSK	5.14	<=13	PASS
	Mid	16QAM	5.93	<=13	PASS
	High	QPSK	4.95	<=13	PASS
	High	16QAM	5.69	<=13	PASS
15	Low	QPSK	5.04	<=13	PASS
	Low	16QAM	5.79	<=13	PASS
	Mid	QPSK	5.06	<=13	PASS
	Mid	16QAM	5.91	<=13	PASS
	High	QPSK	4.75	<=13	PASS
	High	16QAM	5.63	<=13	PASS
20	Low	QPSK	4.95	<=13	PASS
	Low	16QAM	5.82	<=13	PASS
	Mid	QPSK	5.07	<=13	PASS
	Mid	16QAM	5.89	<=13	PASS
	High	QPSK	4.92	<=13	PASS
	High	16QAM	5.81	<=13	PASS

LTE Band 66					
BW(MHz)	Channel Level	Modulation	PAR Radio(dB)	Limit(dB)	Verdict
1.4	Low	QPSK	4.69	<=13	PASS
	Low	16QAM	5.62	<=13	PASS
	Mid	QPSK	3.98	<=13	PASS
	Mid	16QAM	4.92	<=13	PASS
	High	QPSK	3.43	<=13	PASS
	High	16QAM	4.35	<=13	PASS
3	Low	QPSK	4.90	<=13	PASS
	Low	16QAM	5.69	<=13	PASS
	Mid	QPSK	4.18	<=13	PASS
	Mid	16QAM	5.08	<=13	PASS
	High	QPSK	3.80	<=13	PASS
	High	16QAM	4.71	<=13	PASS
5	Low	QPSK	5.09	<=13	PASS
	Low	16QAM	5.86	<=13	PASS
	Mid	QPSK	4.49	<=13	PASS
	Mid	16QAM	5.20	<=13	PASS
	High	QPSK	4.31	<=13	PASS
	High	16QAM	5.09	<=13	PASS
10	Low	QPSK	5.01	<=13	PASS
	Low	16QAM	5.78	<=13	PASS
	Mid	QPSK	4.48	<=13	PASS
	Mid	16QAM	5.22	<=13	PASS
	High	QPSK	4.53	<=13	PASS
	High	16QAM	4.98	<=13	PASS
15	Low	QPSK	4.90	<=13	PASS
	Low	16QAM	5.73	<=13	PASS
	Mid	QPSK	4.25	<=13	PASS
	Mid	16QAM	5.07	<=13	PASS
	High	QPSK	4.37	<=13	PASS
	High	16QAM	5.23	<=13	PASS
20	Low	QPSK	5.42	<=13	PASS
	Low	16QAM	5.81	<=13	PASS
	Mid	QPSK	4.44	<=13	PASS
	Mid	16QAM	4.53	<=13	PASS
	High	QPSK	4.49	<=13	PASS
	High	16QAM	5.00	<=13	PASS

Band2 / 1.4MHz / Low CH / QPSK

Band2 / 1.4MHz / Low CH / 16QAM

Band2 / 1.4MHz / Mid CH / QPSK

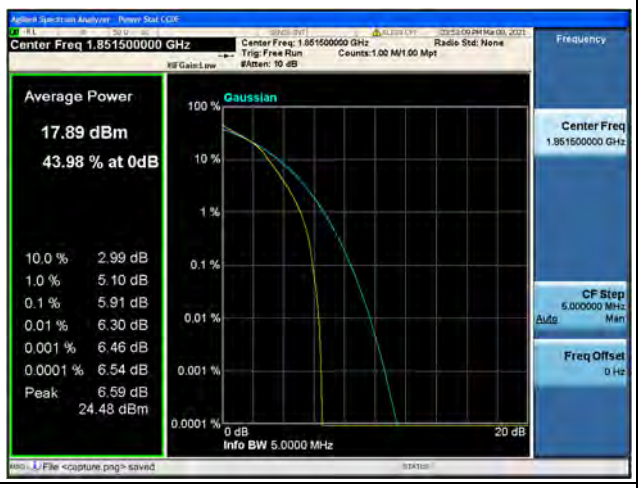
Band2 / 1.4MHz / Mid CH / 16QAM

Band2 / 1.4MHz / High CH / QPSK

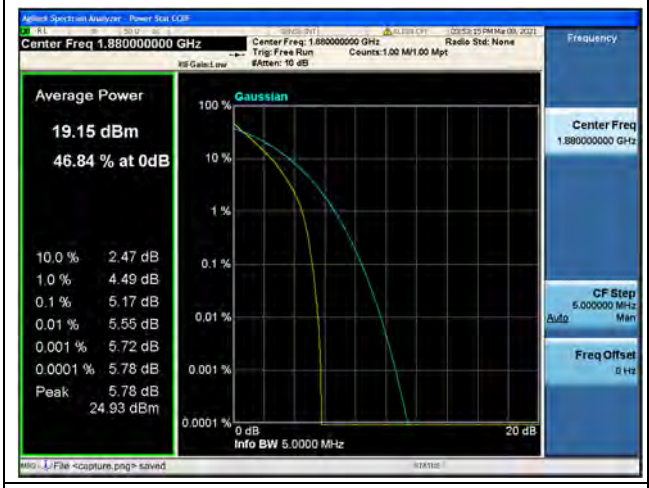
Band2 / 1.4MHz / High CH / 16QAM

Band2 / 3MHz / Low CH / QPSK

Band2 / 3MHz / Low CH / 16QAM



Band2 / 3MHz / Mid CH / QPSK



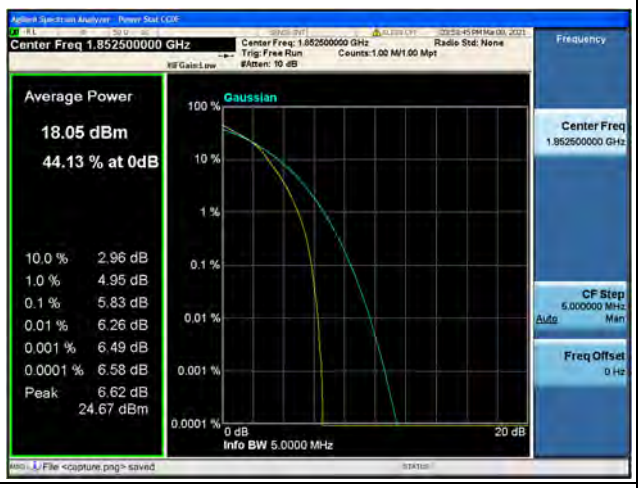
Band2 / 3MHz / Mid CH / 16QAM

Band2 / 3MHz / High CH / QPSK

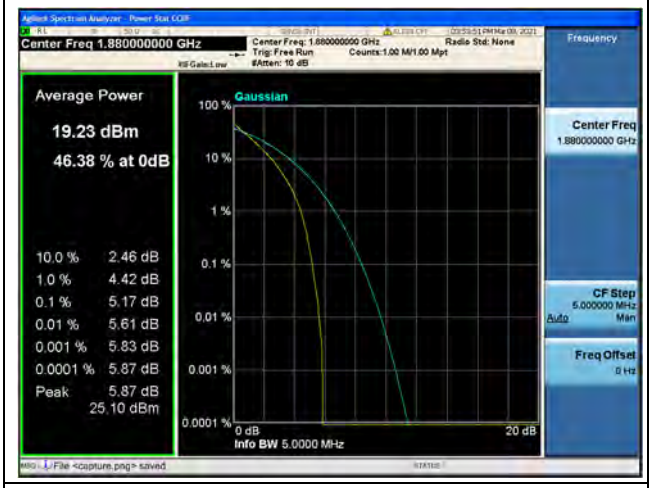
Band2 / 3MHz / High CH / 16QAM

Band2 / 5MHz / Low CH / QPSK

Band2 / 5MHz / Low CH / 16QAM



Band2 / 5MHz / Mid CH / QPSK



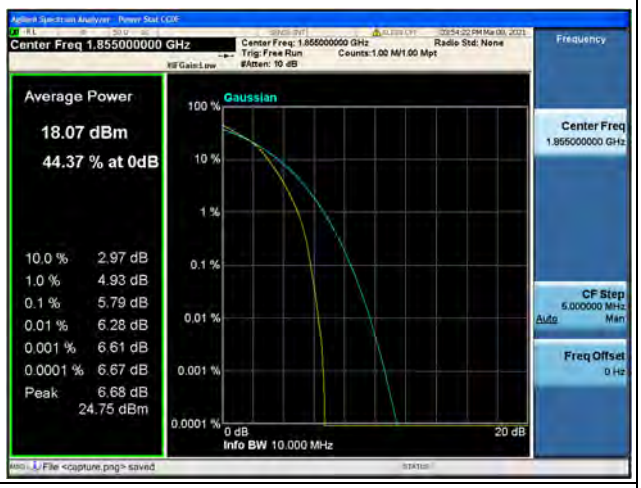
Band2 / 5MHz / Mid CH / 16QAM

Band2 / 5MHz / High CH / QPSK

Band2 / 5MHz / High CH / 16QAM

Band2 / 10MHz / Low CH / QPSK

Band2 / 10MHz / Low CH / 16QAM



Band2 / 10MHz / Mid CH / QPSK

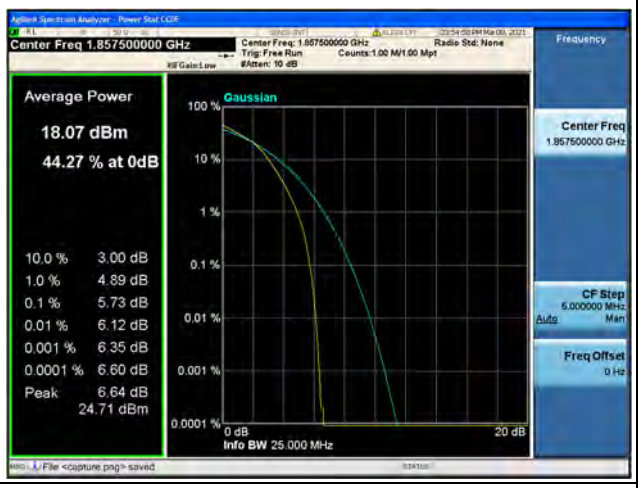
Band2 / 10MHz / Mid CH / 16QAM

Band2 / 10MHz / High CH / QPSK

Band2 / 10MHz / High CH / 16QAM

Band2 / 15MHz / Low CH / QPSK

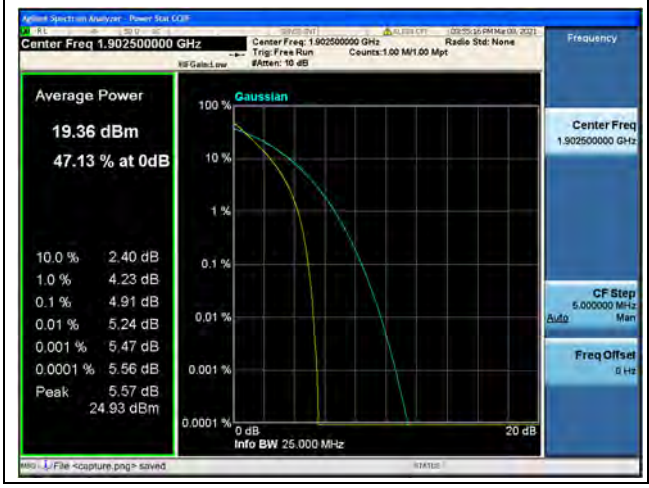
Band2 / 15MHz / Low CH / 16QAM



Band2 / 15MHz / Mid CH / QPSK

Band2 / 15MHz / Mid CH / 16QAM

Band2 / 15MHz / High CH / QPSK



Band2 / 15MHz / High CH / 16QAM

Band2 / 20MHz / Low CH / QPSK

Band2 / 20MHz / Low CH / 16QAM

Band2 / 20MHz / Mid CH / QPSK

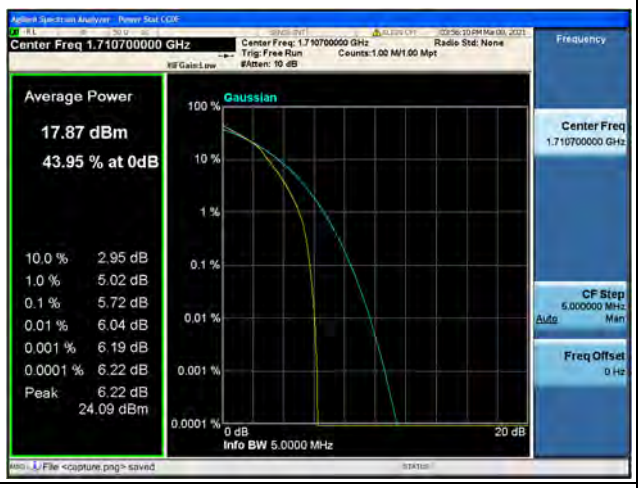
Band2 / 20MHz / Mid CH / 16QAM

Band2 / 20MHz / High CH / QPSK

Band2 / 20MHz / High CH / 16QAM

Band4 / 1.4MHz / Low CH / QPSK

Band4 / 1.4MHz / Low CH / 16QAM



Band4 / 1.4MHz / Mid CH / QPSK

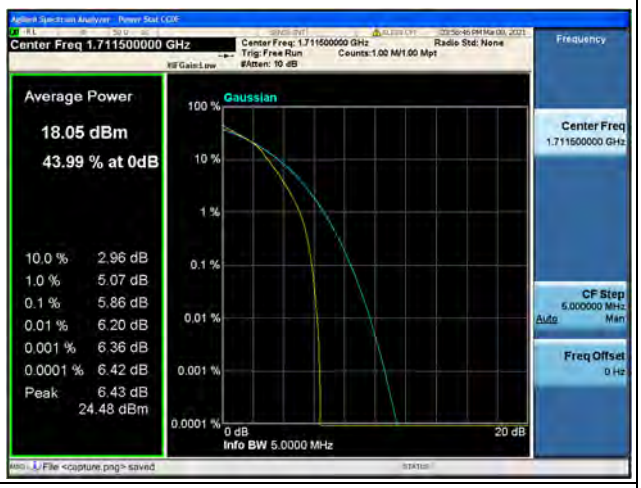
Band4 / 1.4MHz / Mid CH / 16QAM

Band4 / 1.4MHz / High CH / QPSK

Band4 / 1.4MHz / High CH / 16QAM

Band4 / 3MHz / Low CH / QPSK

Band4 / 3MHz / Low CH / 16QAM



Band4 / 3MHz / Mid CH / QPSK

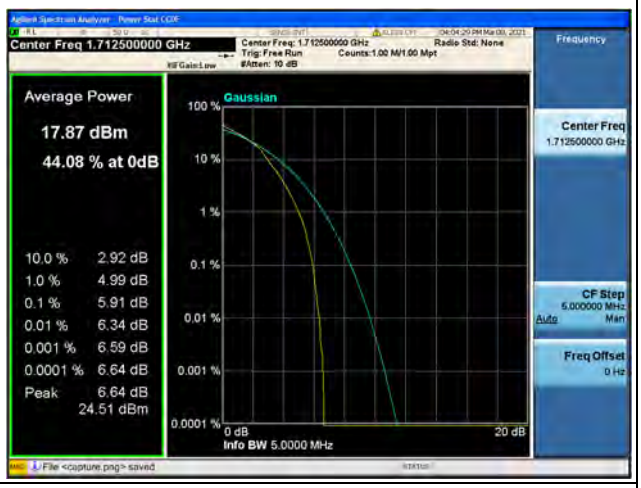
Band4 / 3MHz / Mid CH / 16QAM

Band4 / 3MHz / High CH / QPSK

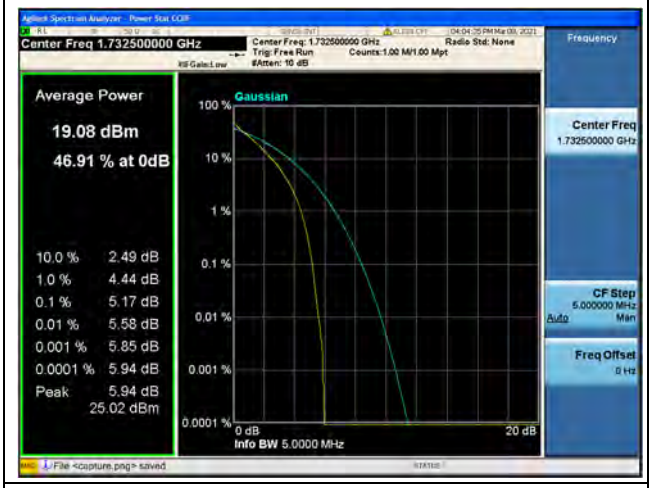
Band4 / 3MHz / High CH / 16QAM

Band4 / 5MHz / Low CH / QPSK

Band4 / 5MHz / Low CH / 16QAM



Band4 / 5MHz / Mid CH / QPSK



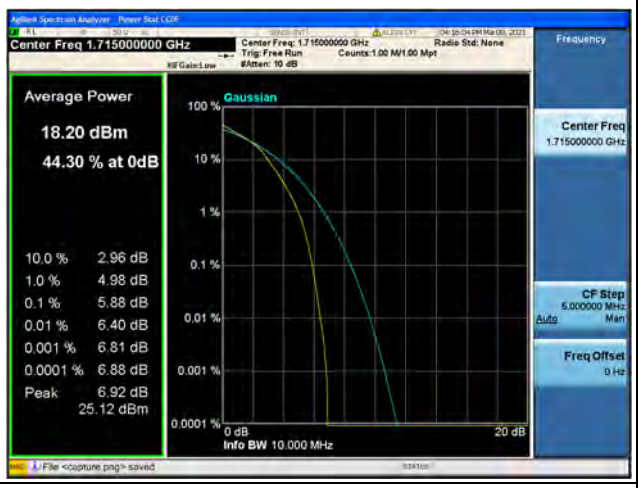
Band4 / 5MHz / Mid CH / 16QAM

Band4 / 5MHz / High CH / QPSK

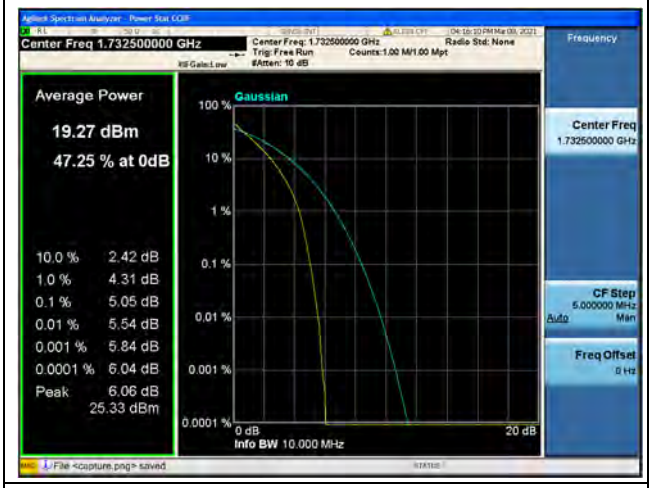
Band4 / 5MHz / High CH / 16QAM

Band4 / 10MHz / Low CH / QPSK

Band4 / 10MHz / Low CH / 16QAM



Band4 / 10MHz / Mid CH / QPSK



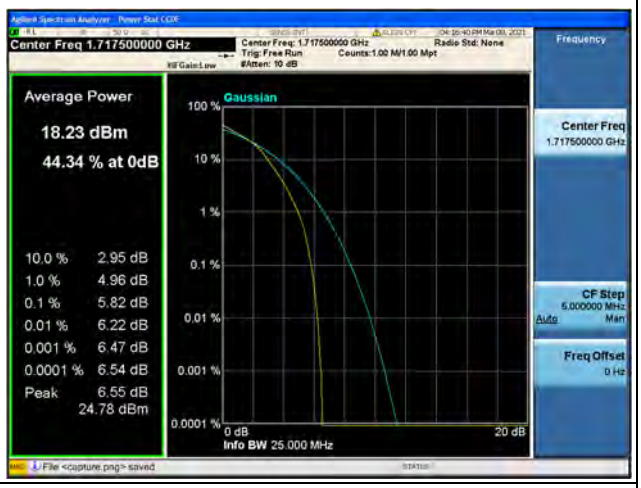
Band4 / 10MHz / Mid CH / 16QAM

Band4 / 10MHz / High CH / QPSK

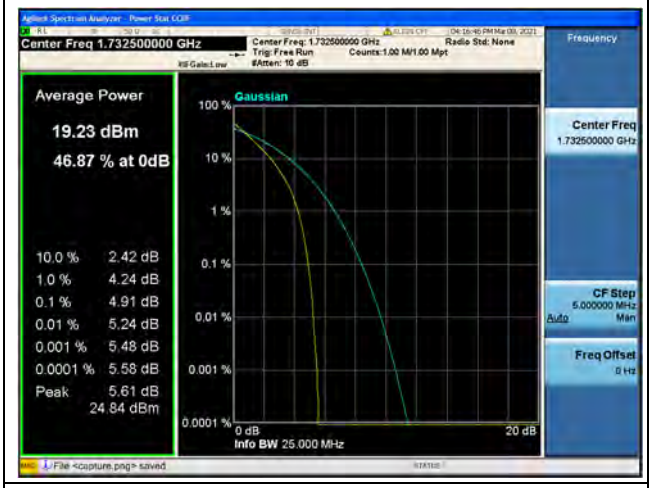
Band4 / 10MHz / High CH / 16QAM

Band4 / 15MHz / Low CH / QPSK

Band4 / 15MHz / Low CH / 16QAM

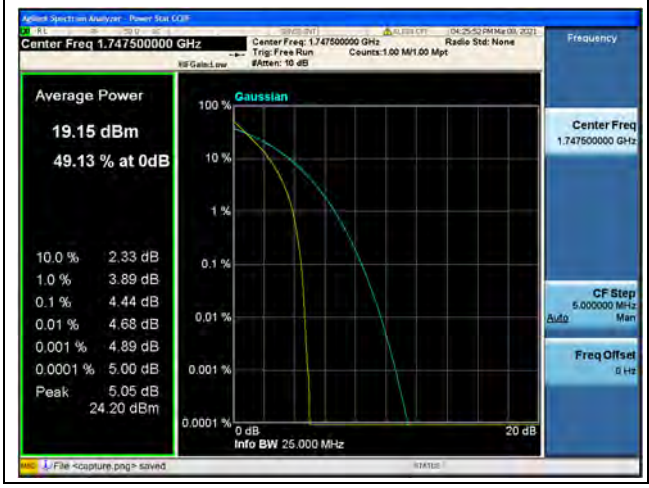


Band4 / 15MHz / Mid CH / QPSK



Band4 / 15MHz / Mid CH / 16QAM

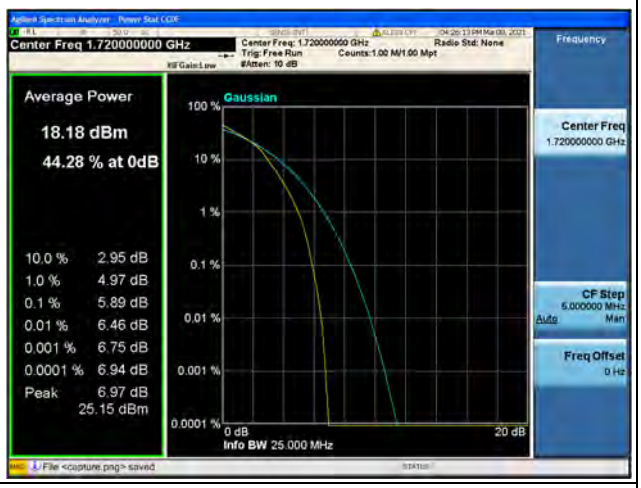
Band4 / 15MHz / High CH / QPSK



Band4 / 15MHz / High CH / 16QAM

Band4 / 20MHz / Low CH / QPSK

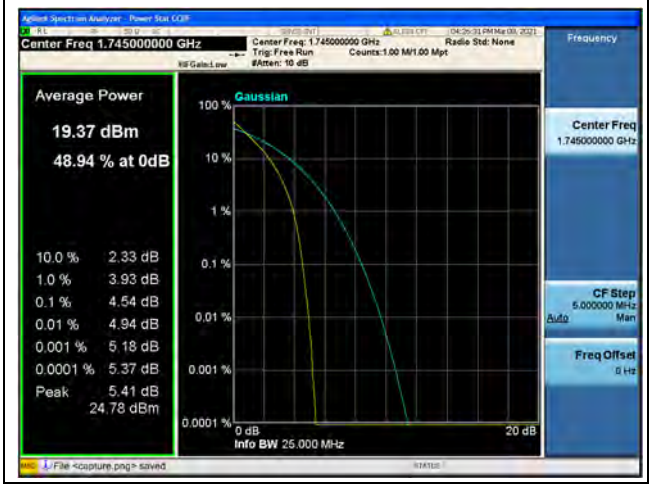
Band4 / 20MHz / Low CH / 16QAM



Band4 / 20MHz / Mid CH / QPSK

Band4 / 20MHz / Mid CH / 16QAM

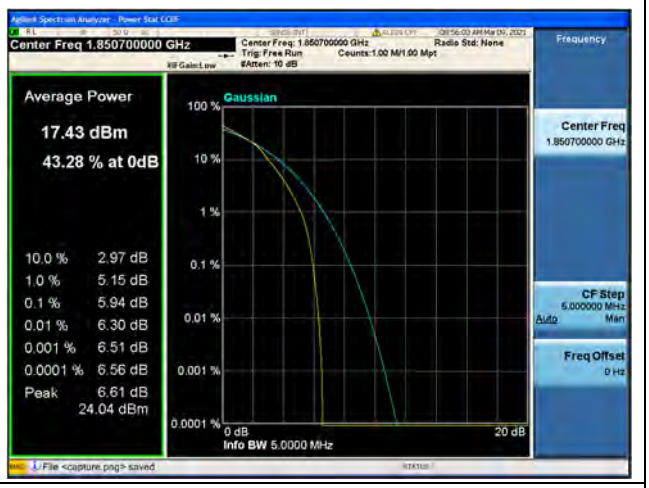
Band4 / 20MHz / High CH / QPSK



Band4 / 20MHz / High CH / 16QAM

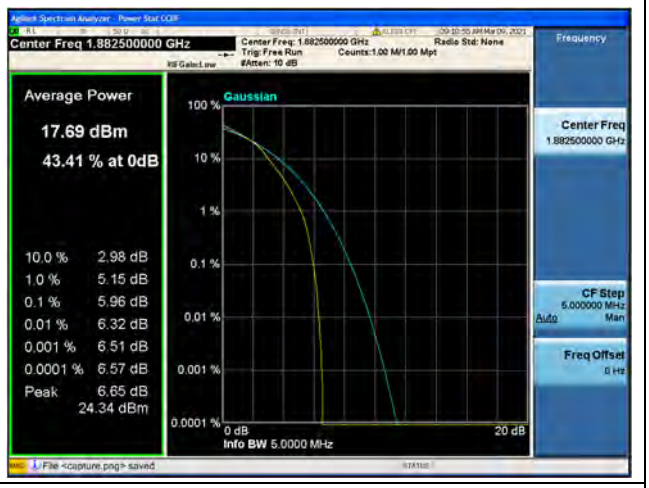
Band25 / 1.4MHz / Low CH / QPSK

Band25 / 1.4MHz / Low CH / 16QAM



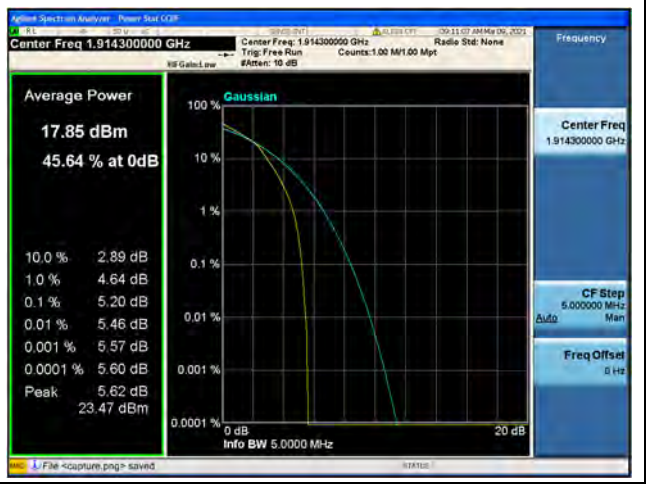
Band25 / 1.4MHz / Mid CH / QPSK

Band25 / 1.4MHz / Mid CH / 16QAM



Band25 / 1.4MHz / High CH / QPSK

Band25 / 1.4MHz / High CH / 16QAM

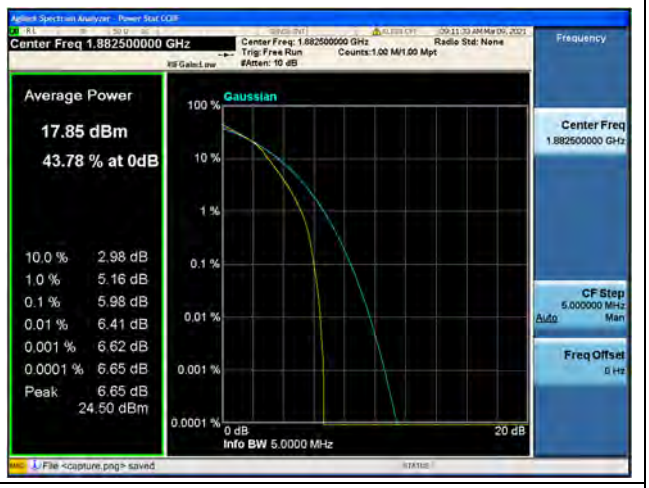


Band25 / 3MHz / Low CH / QPSK

Band25 / 3MHz / Low CH / 16QAM

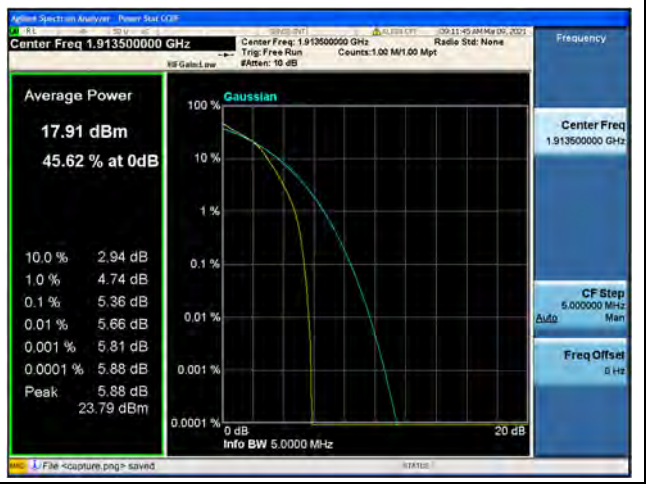
Band25 / 3MHz / Mid CH / QPSK

Band25 / 3MHz / Mid CH / 16QAM



Band25 / 3MHz / High CH / QPSK

Band25 / 3MHz / High CH / 16QAM

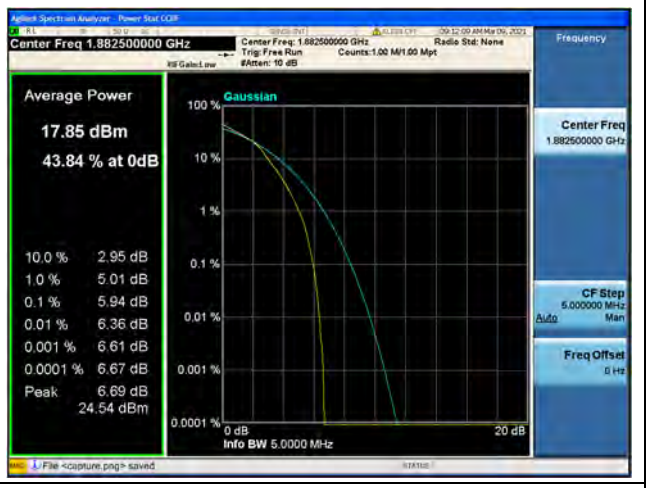


Band25 / 5MHz / Low CH / QPSK

Band25 / 5MHz / Low CH / 16QAM

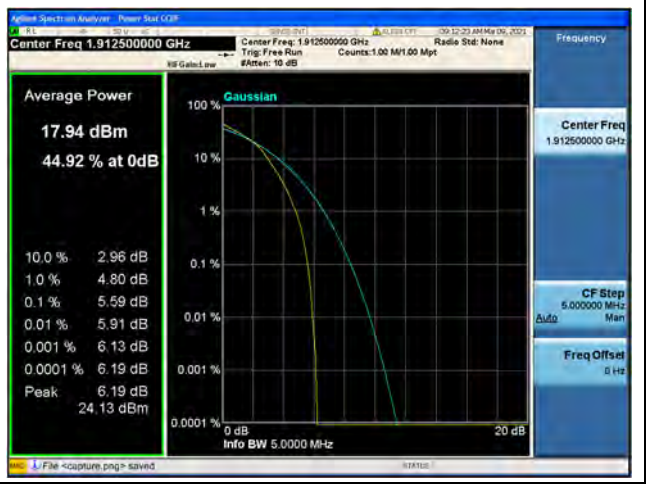
Band25 / 5MHz / Mid CH / QPSK

Band25 / 5MHz / Mid CH / 16QAM



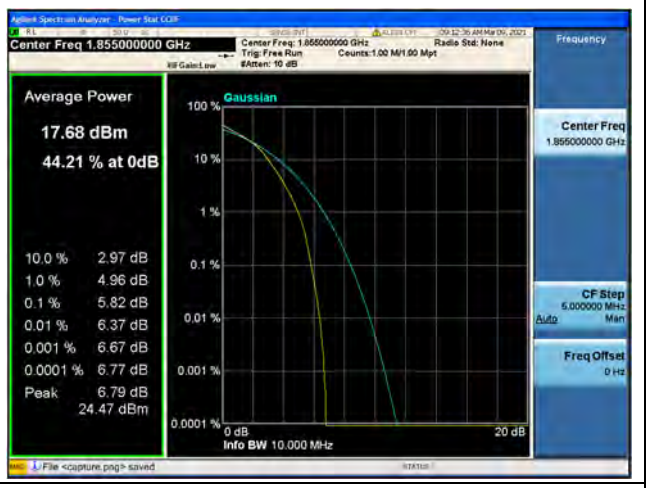
Band25 / 5MHz / High CH / QPSK

Band25 / 5MHz / High CH / 16QAM



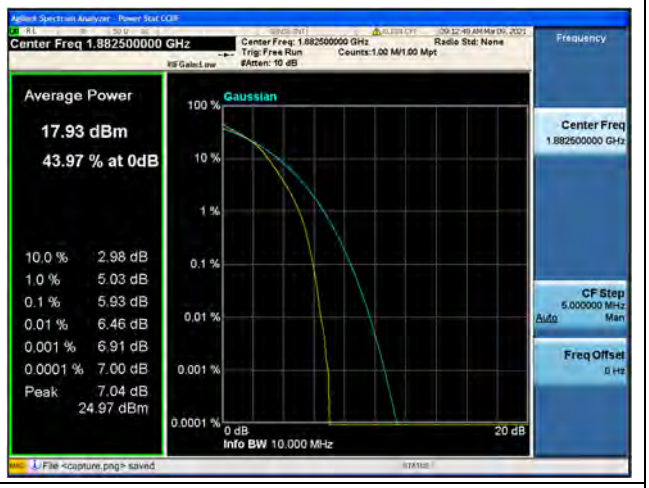
Band25 / 10MHz / Low CH / QPSK

Band25 / 10MHz / Low CH / 16QAM



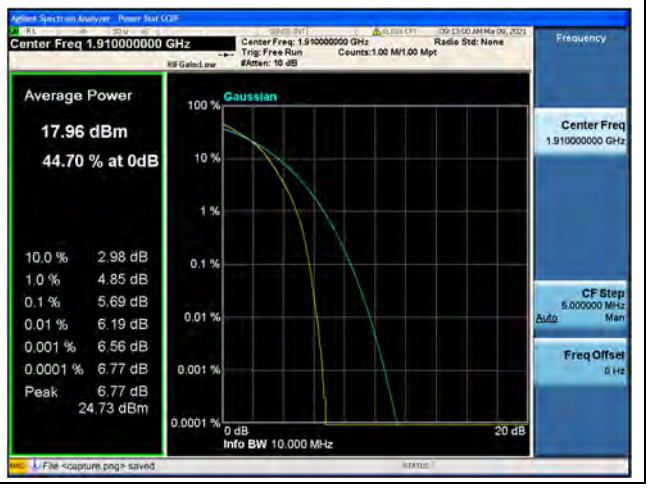
Band25 / 10MHz / Mid CH / QPSK

Band25 / 10MHz / Mid CH / 16QAM



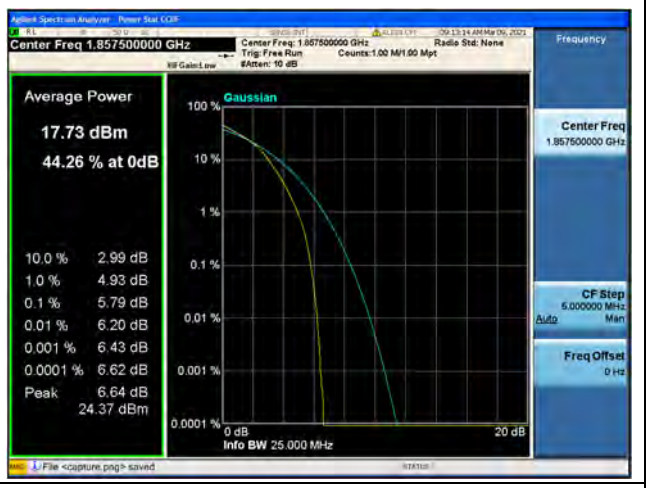
Band25 / 10MHz / High CH / QPSK

Band25 / 10MHz / High CH / 16QAM



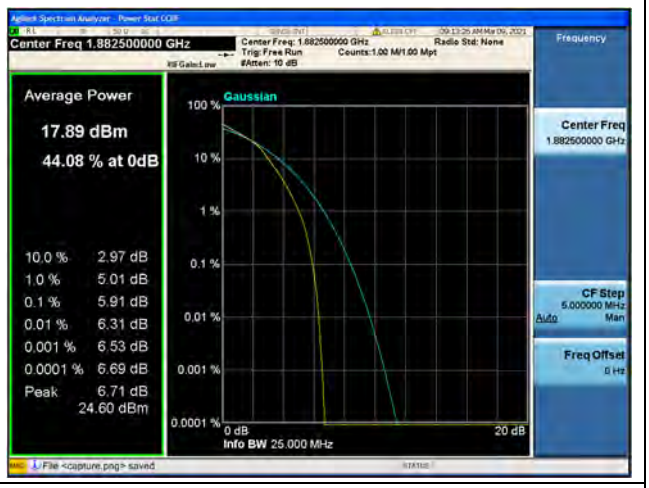
Band25 / 15MHz / Low CH / QPSK

Band25 / 15MHz / Low CH / 16QAM



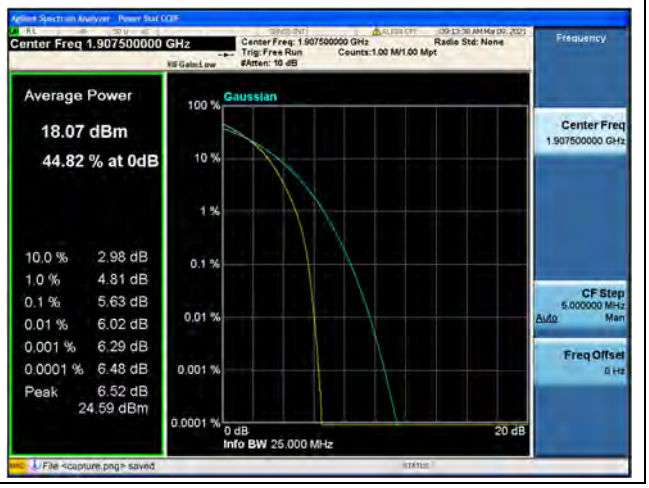
Band25 / 15MHz / Mid CH / QPSK

Band25 / 15MHz / Mid CH / 16QAM



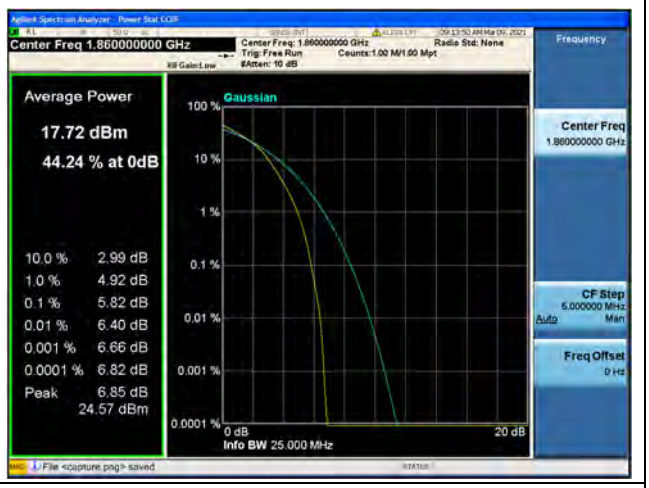
Band25 / 15MHz / High CH / QPSK

Band25 / 15MHz / High CH / 16QAM



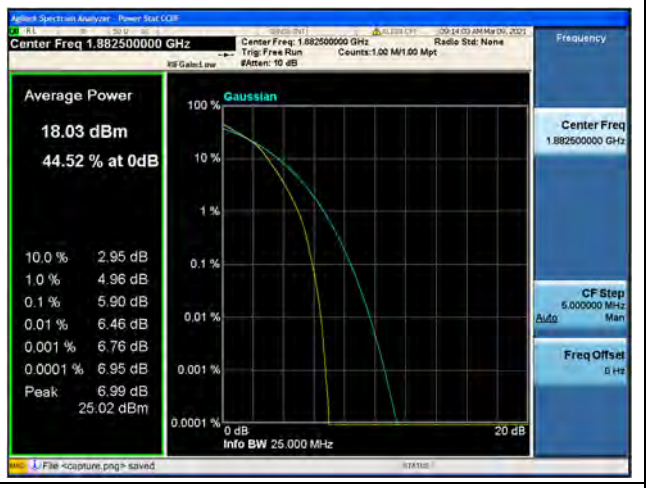
Band25 / 20MHz / Low CH / QPSK

Band25 / 20MHz / Low CH / 16QAM



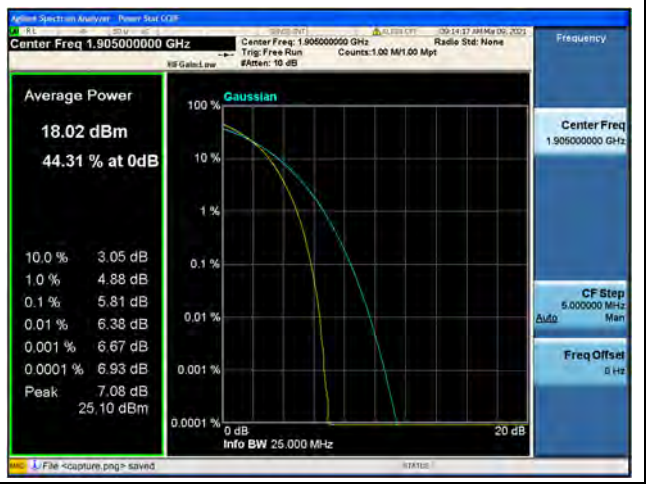
Band25 / 20MHz / Mid CH / QPSK

Band25 / 20MHz / Mid CH / 16QAM

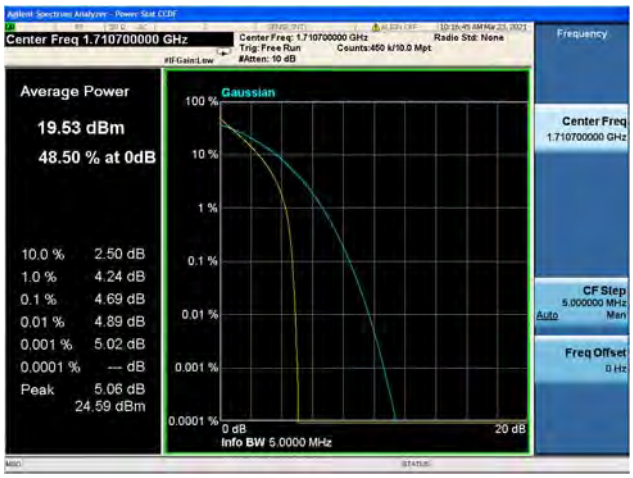


Band25 / 20MHz / High CH / QPSK

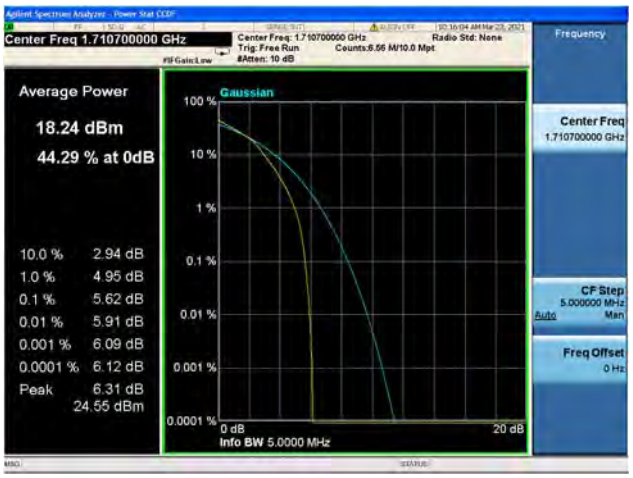
Band25 / 20MHz / High CH / 16QAM



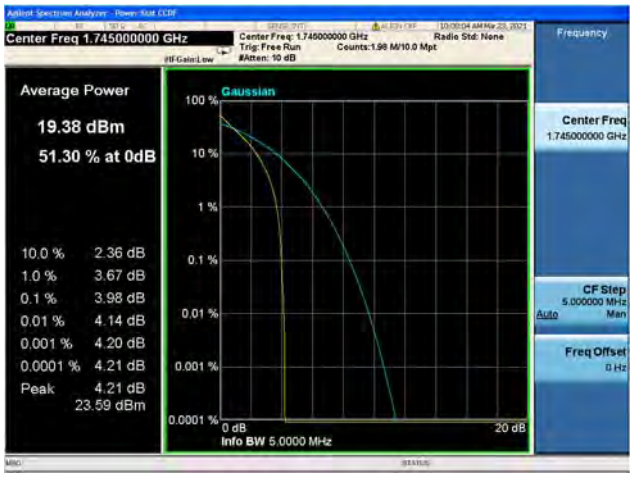
Band66 / 1.4MHz / Low CH / QPSK



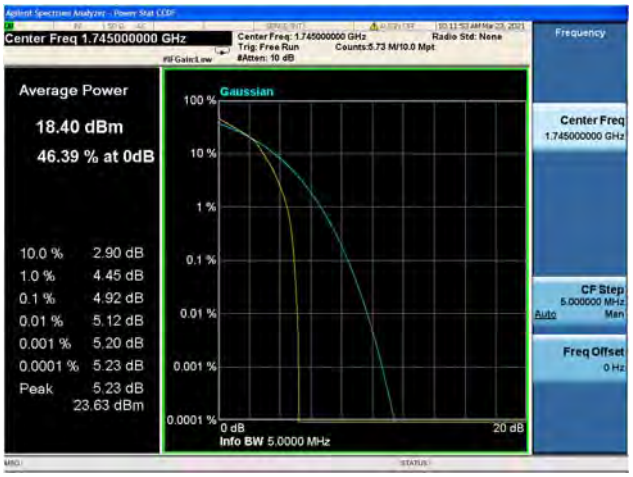
Band66 / 1.4MHz / Low CH / 16QAM



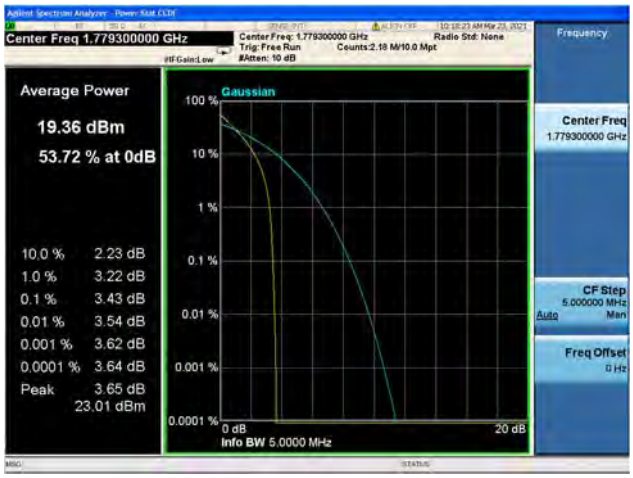
Band66 / 1.4MHz / Mid CH / QPSK



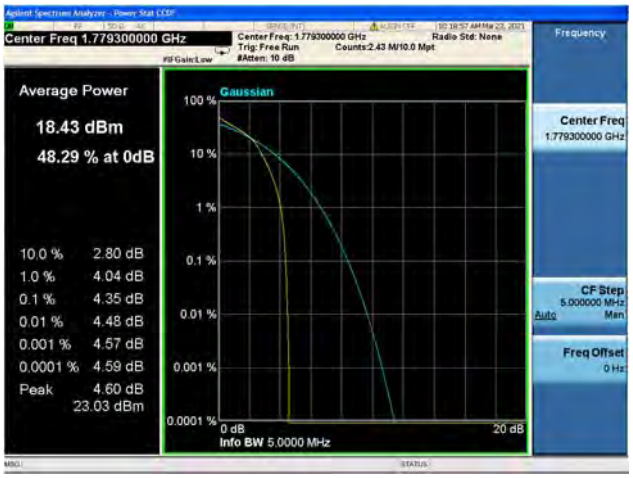
Band66 / 1.4MHz / Mid CH / 16QAM



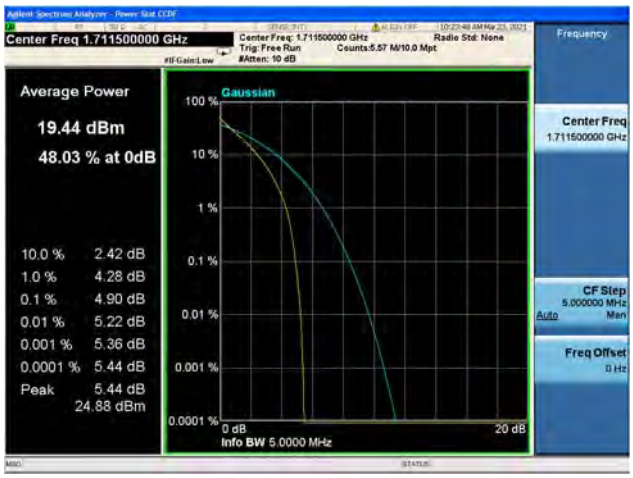
Band66 / 1.4MHz / High CH / QPSK



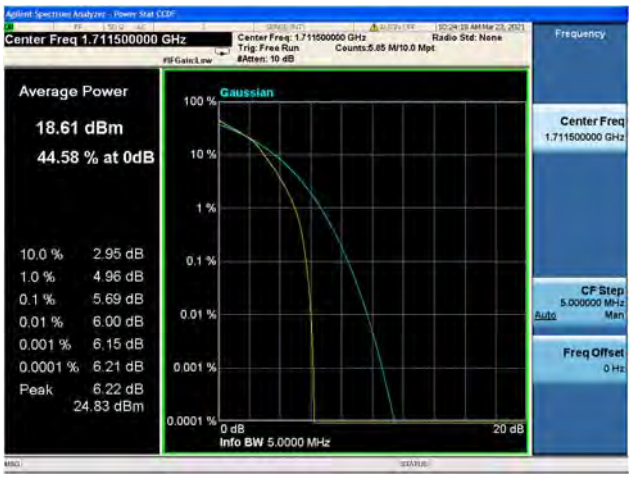
Band66 / 1.4MHz / High CH / 16QAM



Band66 / 3MHz / Low CH / QPSK

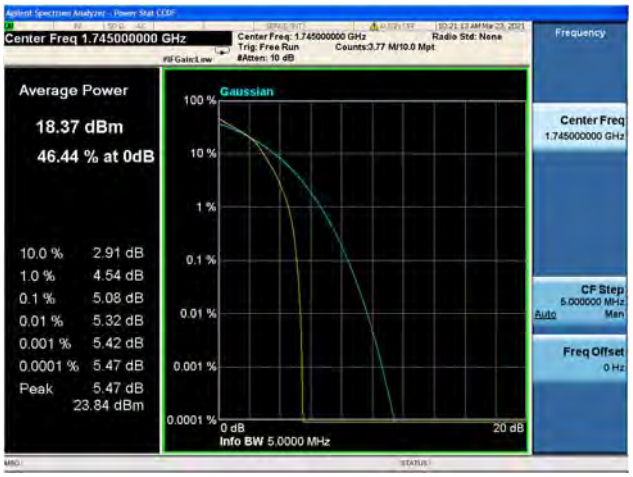


Band66 / 3MHz / Low CH / 16QAM

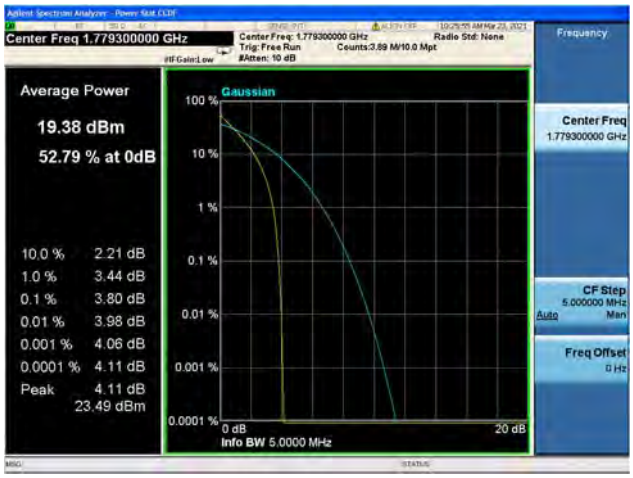


Band66 / 3MHz / Mid CH / QPSK

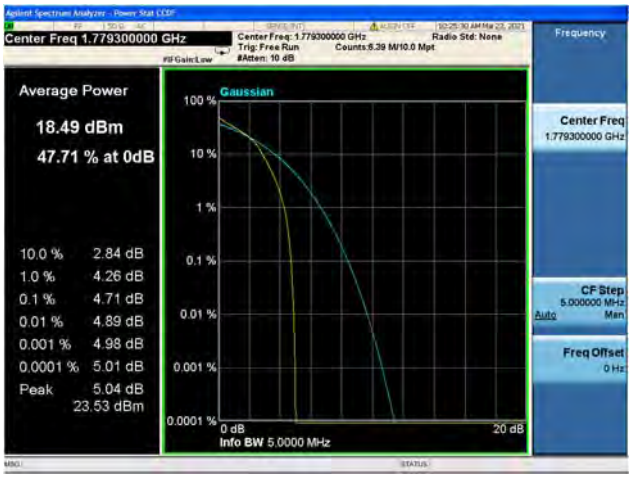
Band66 / 3MHz / Mid CH / 16QAM



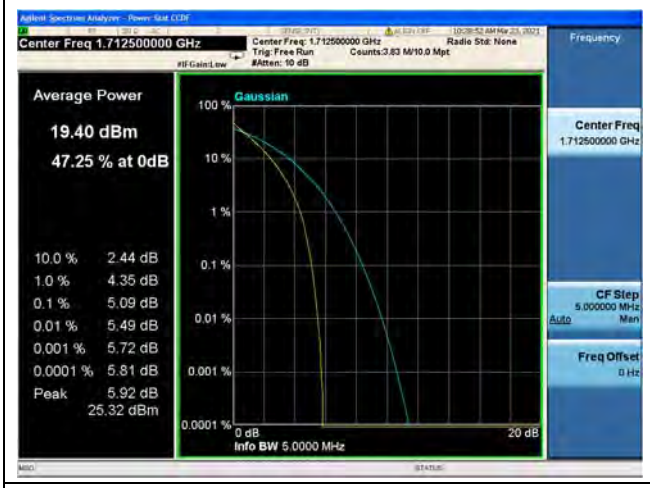
Band66 / 3MHz / High CH / QPSK



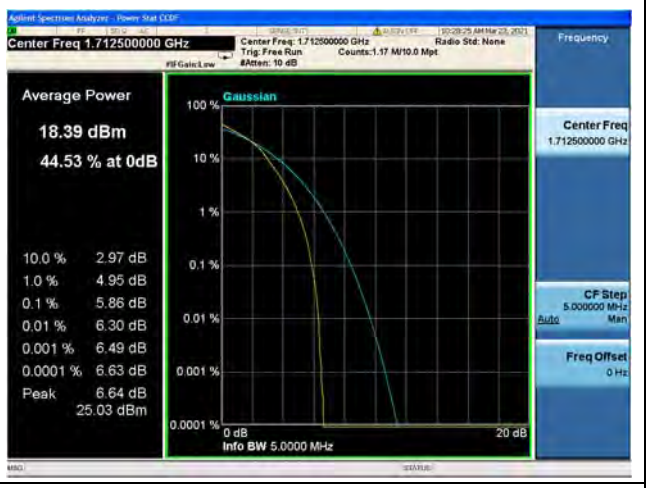
Band66 / 3MHz / High CH / 16QAM



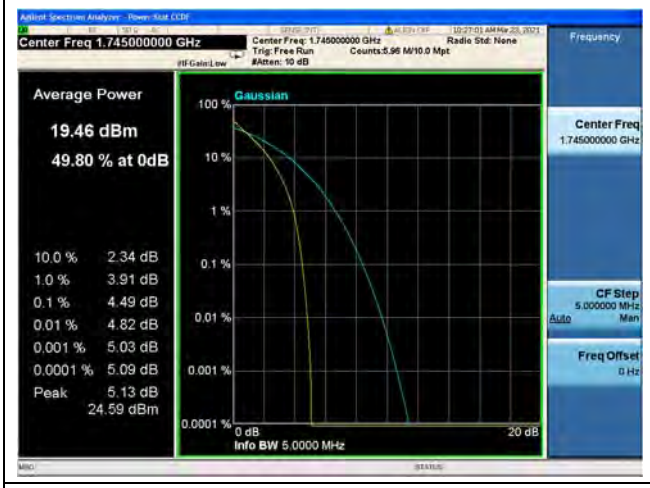
Band66 / 5MHz / Low CH / QPSK



Band66 / 5MHz / Low CH / 16QAM



Band66 / 5MHz / Mid CH / QPSK

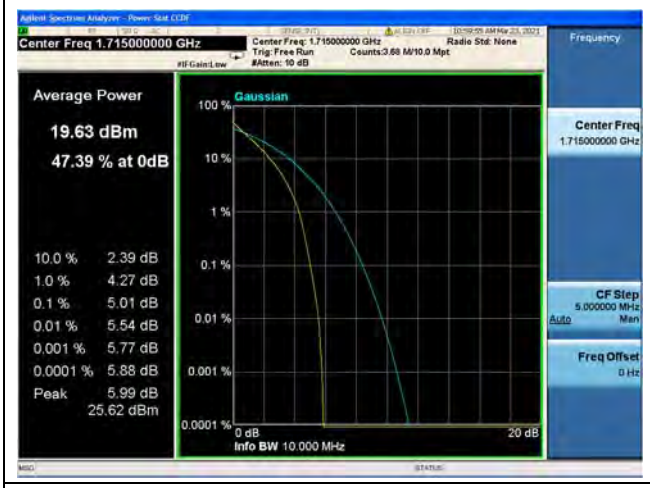


Band66 / 5MHz / Mid CH / 16QAM

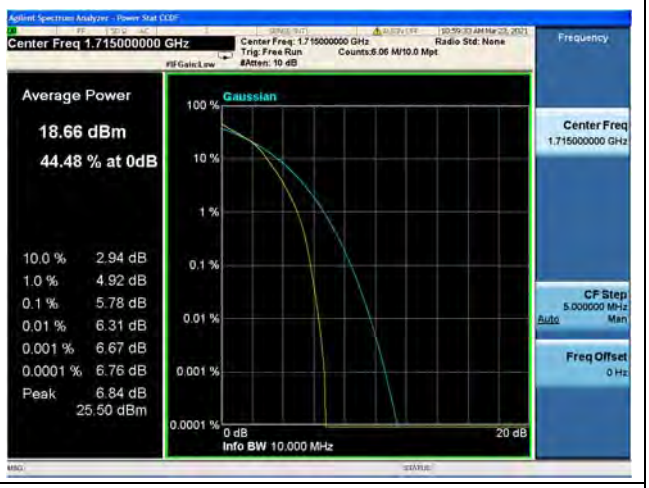
Band66 / 5MHz / High CH / QPSK

Band66 / 5MHz / High CH / 16QAM

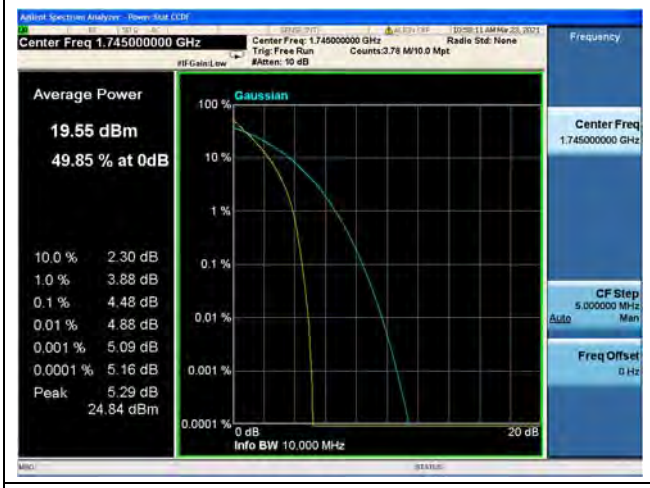
Band66 / 10MHz / Low CH / QPSK



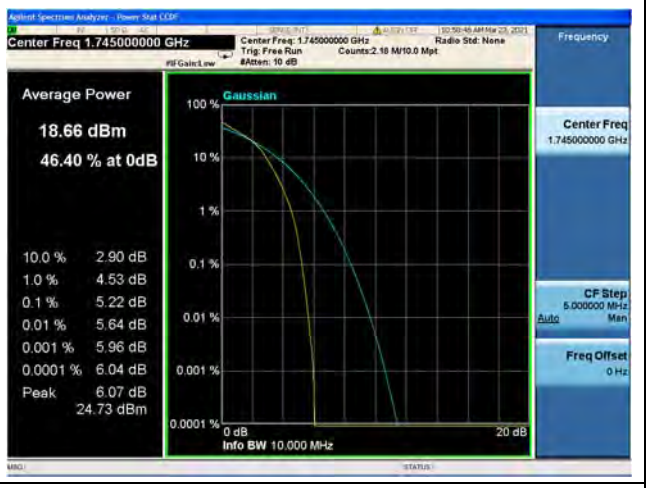
Band66 / 10MHz / Low CH / 16QAM



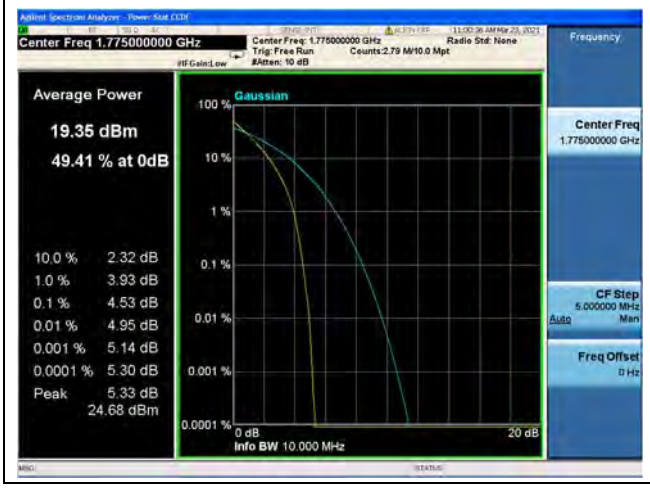
Band66 / 10MHz / Mid CH / QPSK



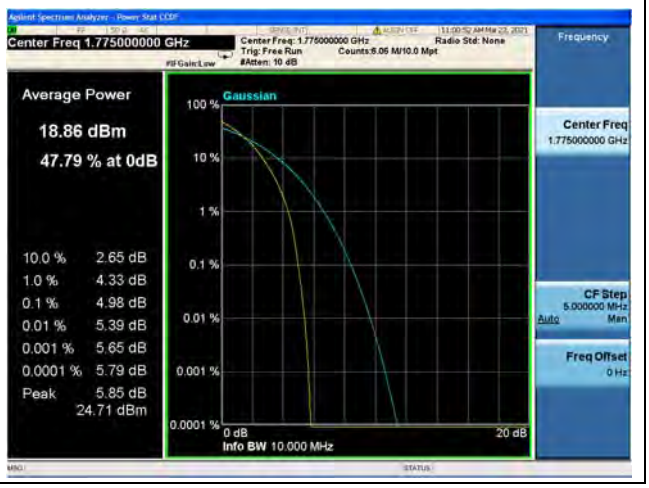
Band66 / 10MHz / Mid CH / 16QAM



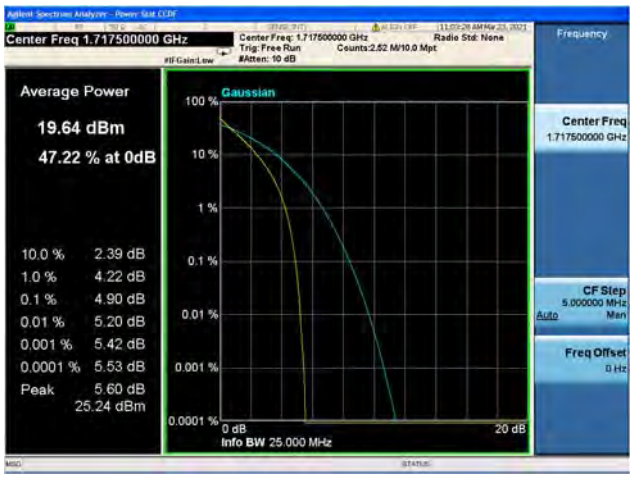
Band66 / 10MHz / High CH / QPSK



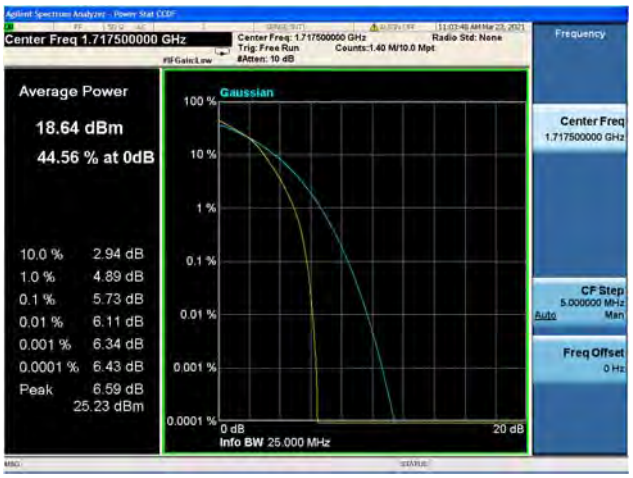
Band66 / 10MHz / High CH / 16QAM



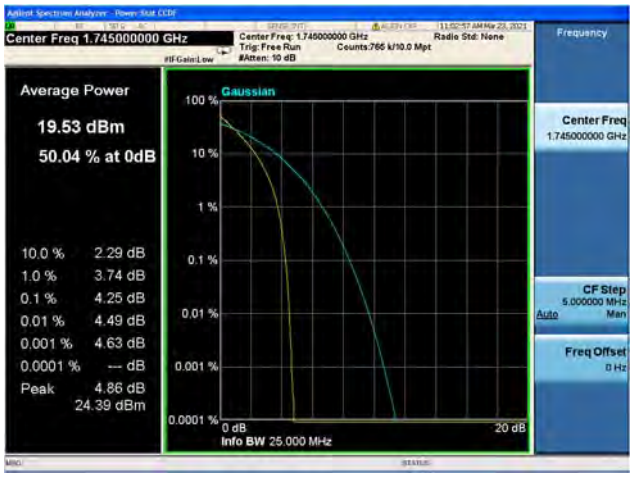
Band66 / 15MHz / Low CH / QPSK



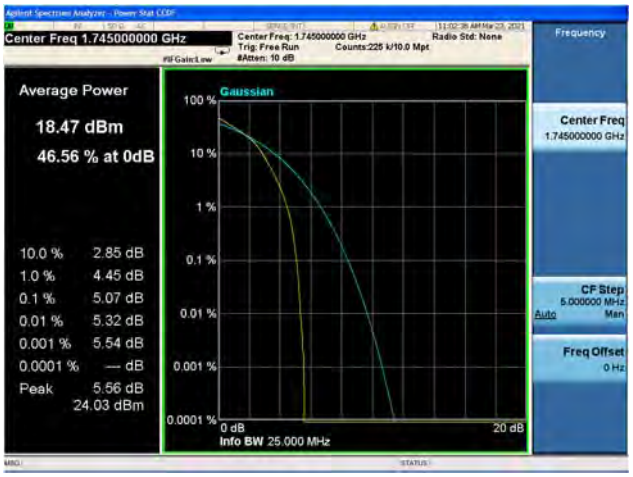
Band66 / 15MHz / Low CH / 16QAM



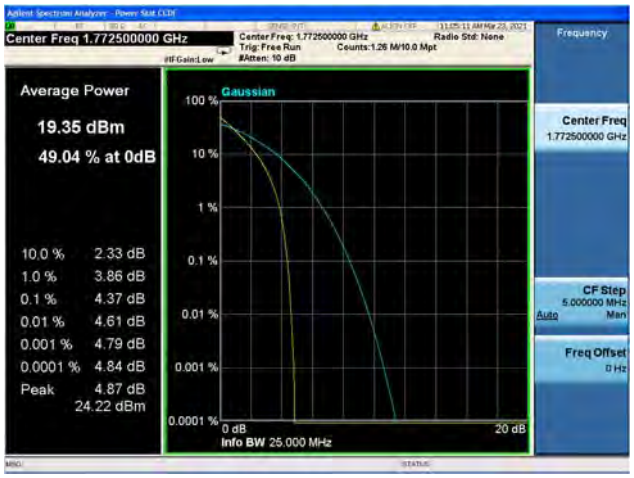
Band66 / 15MHz / Mid CH / QPSK



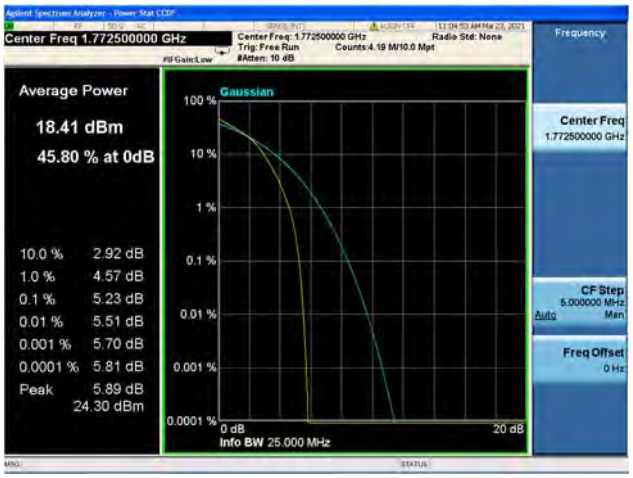
Band66 / 15MHz / Mid CH / 16QAM



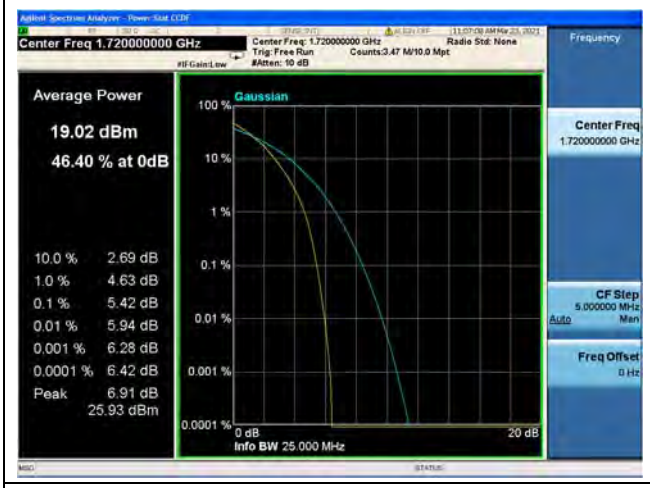
Band66 / 15MHz / High CH / QPSK



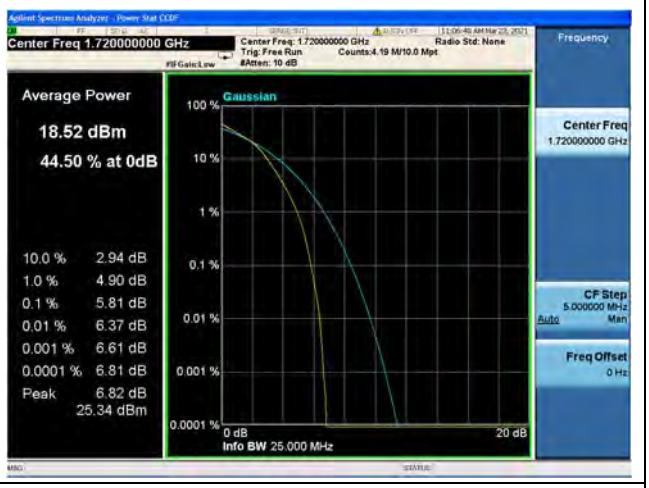
Band66 / 15MHz / High CH / 16QAM



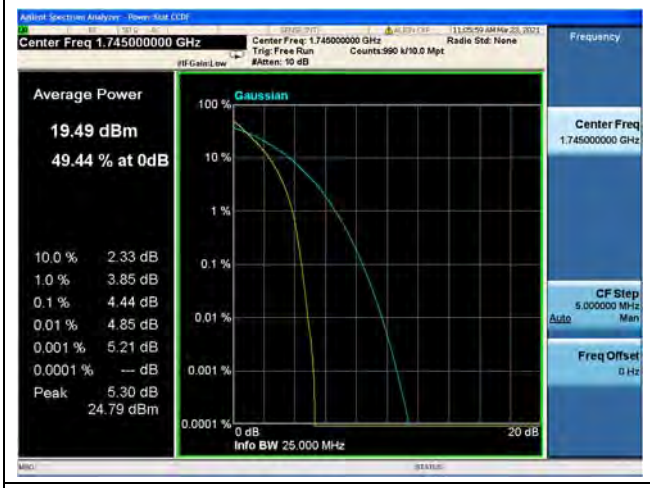
Band66 / 20MHz / Low CH / QPSK



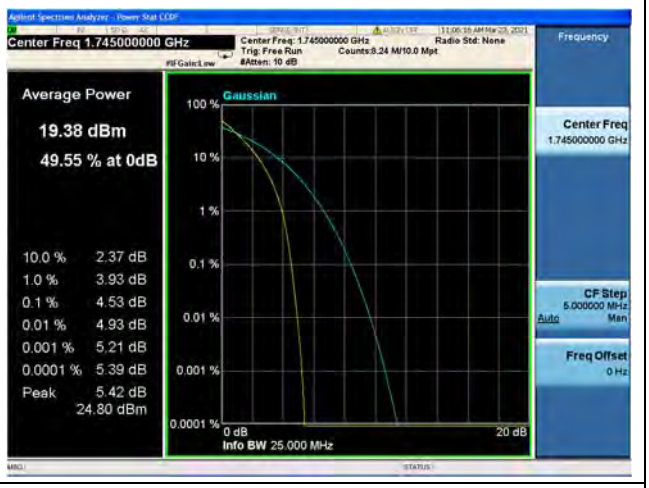
Band66 / 20MHz / Low CH / 16QAM



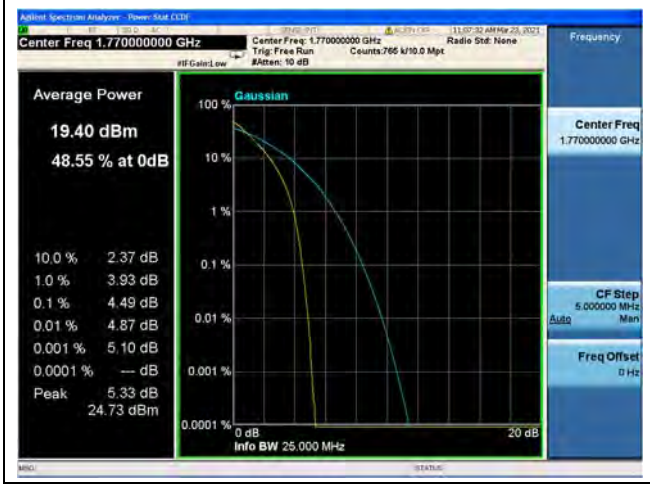
Band66 / 20MHz / Mid CH / QPSK



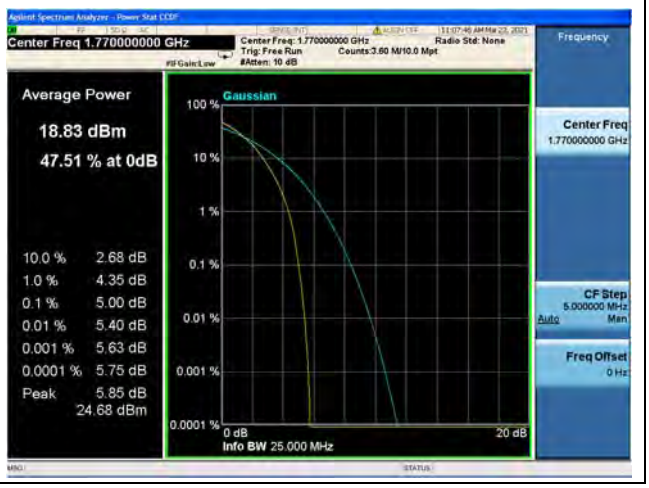
Band66 / 20MHz / Mid CH / 16QAM



Band66 / 20MHz / High CH / QPSK



Band66 / 20MHz / High CH / 16QAM



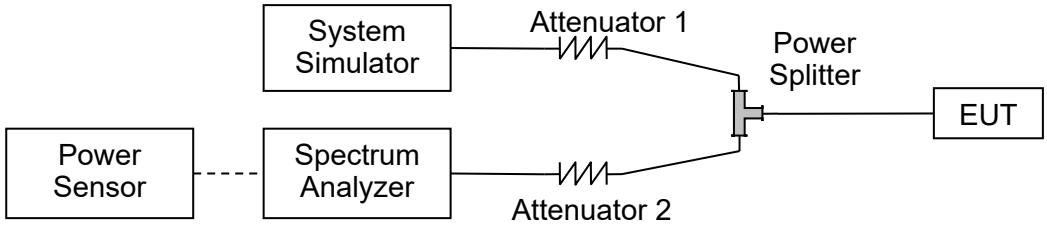
2.5. Conducted Spurious Emissions

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 7,38,41:
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 55 + 10 log(P) dB. This calculated to be -25dBm.
Additional requirement for LTE Band 40:
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least 70 + 10 log (P) dB. This calculated to be -40dBm.

2.5.2. Test Description

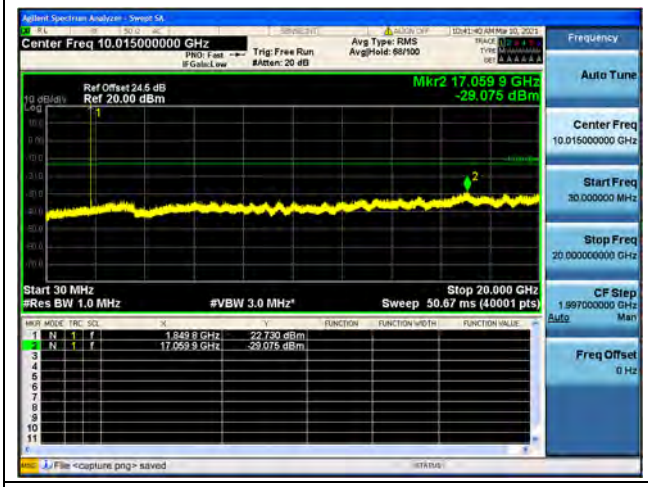
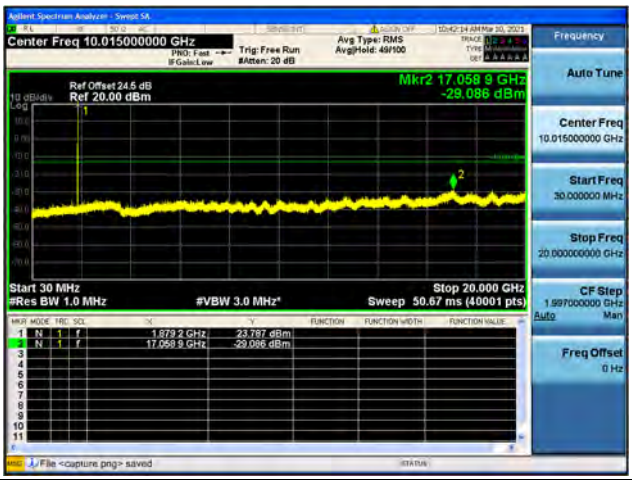
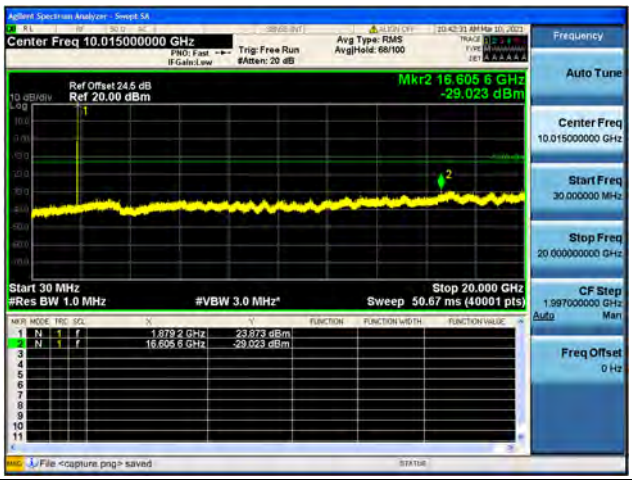
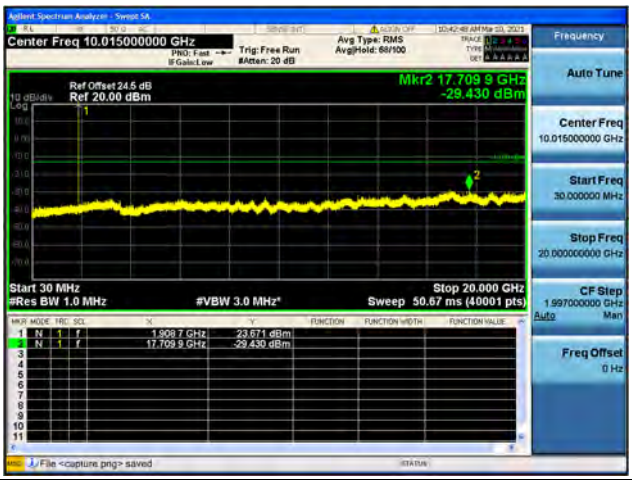
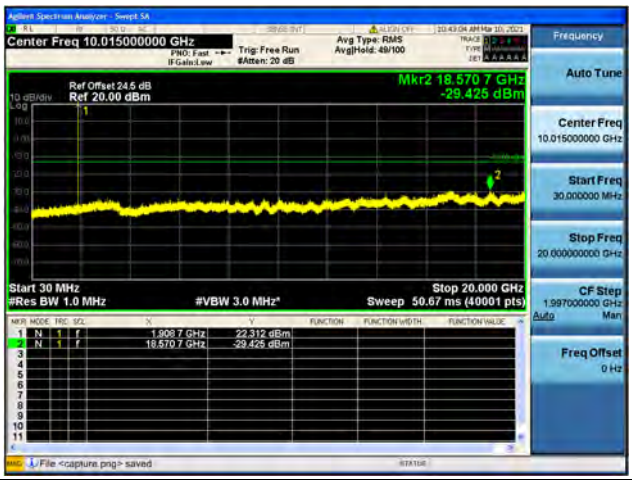


The EUT is coupled to the Spectrum Analyzer (SA) and the System Simulator (SS) with Attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading. The EUT is commanded by the SS to operate at the maximum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

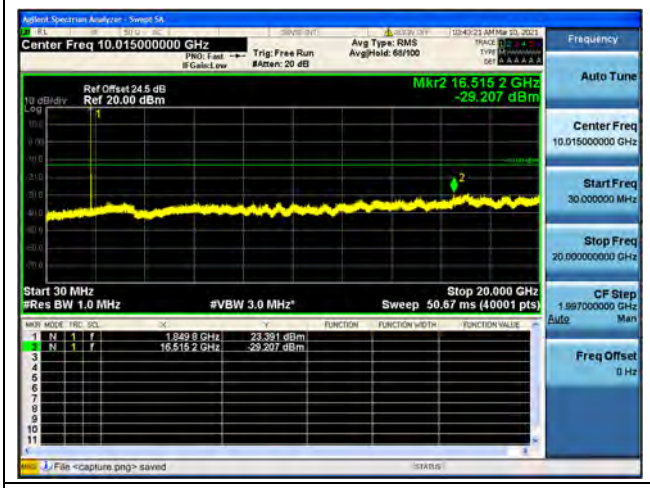
2.5.3. Test Procedure

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

2.5.4. Test Result

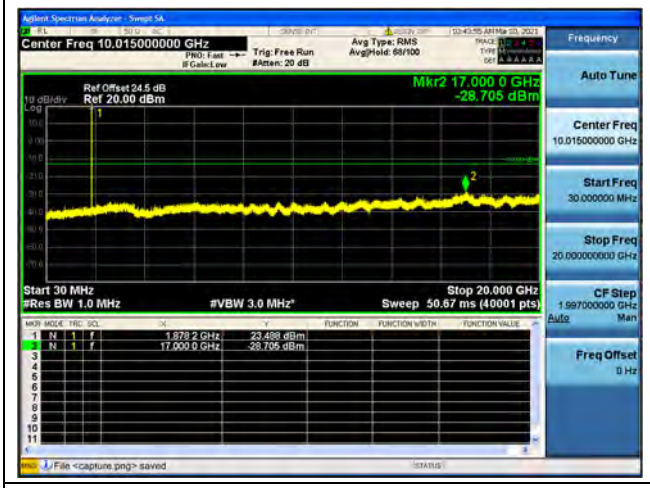
Band2 / 1.4MHz / Low CH / QPSK	Band2 / 1.4MHz / Low CH / 16QAM
	
Band2 / 1.4MHz / Mid CH / QPSK	**Band2 / 1.4MHz / Mid CH / 16QAM**
	
Band2 / 1.4MHz / High CH / QPSK	**Band2 / 1.4MHz / High CH / 16QAM**
	

Band2 / 3MHz / Low CH / QPSK



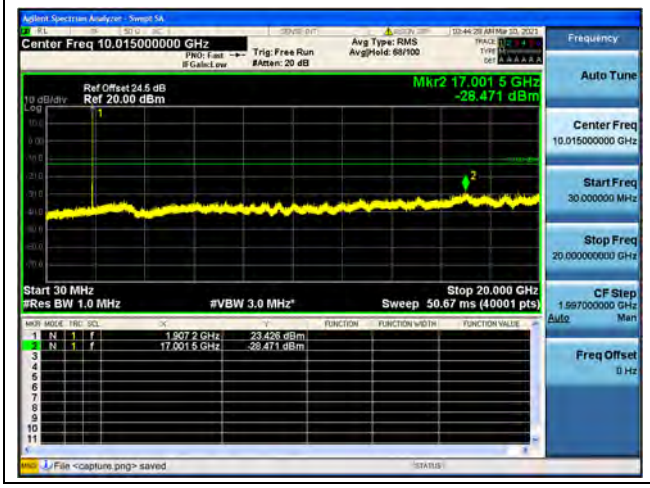
Band2 / 3MHz / Low CH / 16QAM

Band2 / 3MHz / Mid CH / QPSK



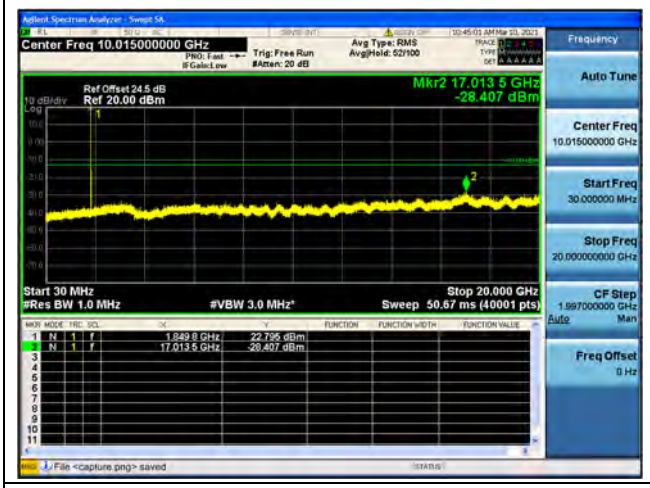
Band2 / 3MHz / Mid CH / 16QAM

Band2 / 3MHz / High CH / QPSK



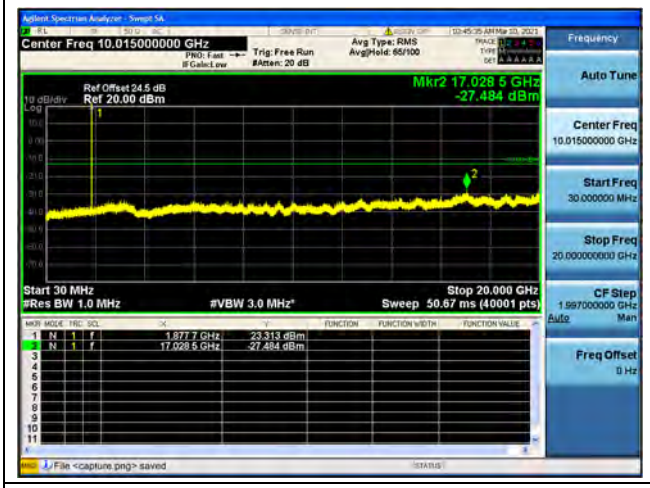
Band2 / 3MHz / High CH / 16QAM

Band2 / 5MHz / Low CH / QPSK



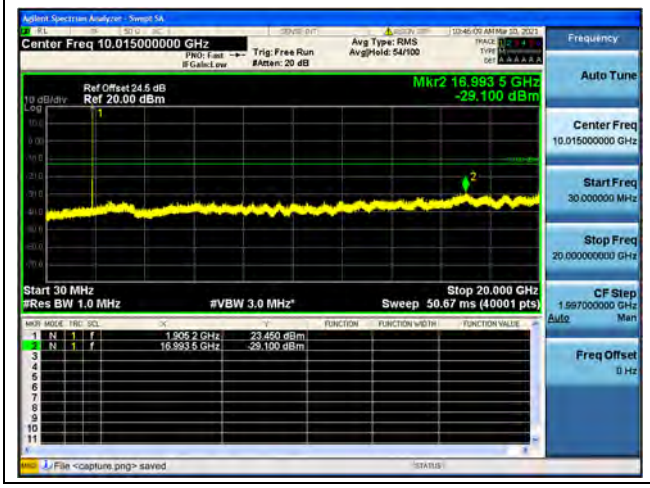
Band2 / 5MHz / Low CH / 16QAM

Band2 / 5MHz / Mid CH / QPSK



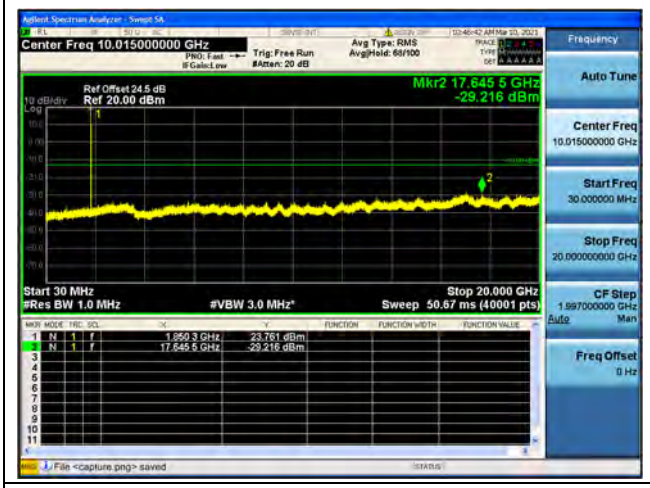
Band2 / 5MHz / Mid CH / 16QAM

Band2 / 5MHz / High CH / QPSK



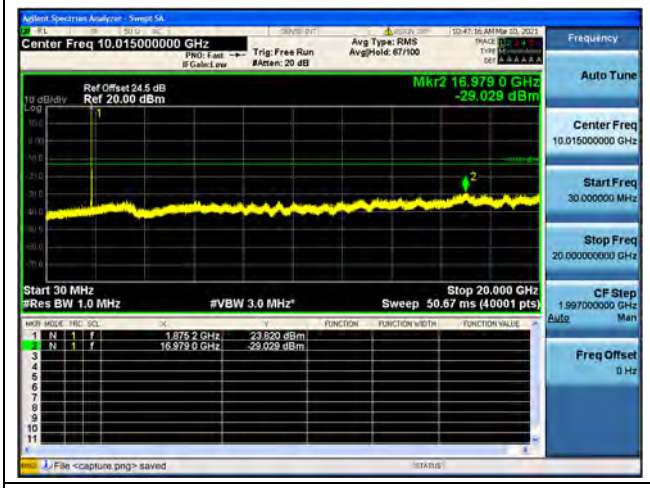
Band2 / 5MHz / High CH / 16QAM

Band2 / 10MHz / Low CH / QPSK



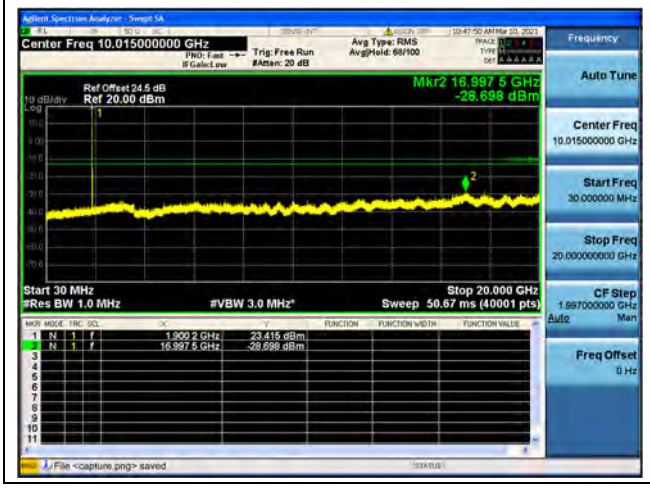
Band2 / 10MHz / Low CH / 16QAM

Band2 / 10MHz / Mid CH / QPSK



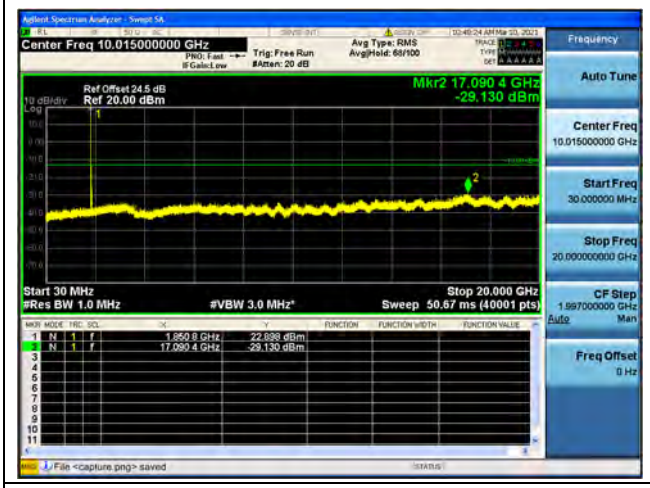
Band2 / 10MHz / Mid CH / 16QAM

Band2 / 10MHz / High CH / QPSK



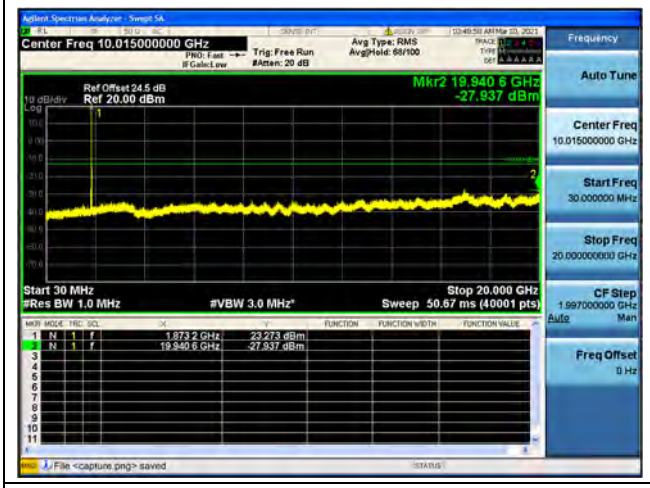
Band2 / 10MHz / High CH / 16QAM

Band2 / 15MHz / Low CH / QPSK



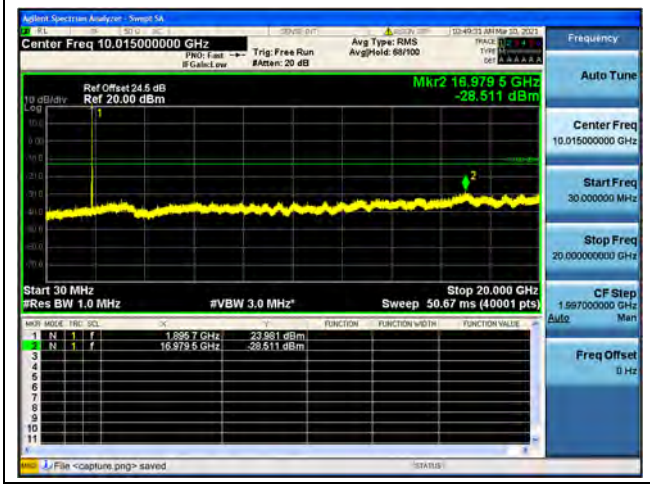
Band2 / 15MHz / Low CH / 16QAM

Band2 / 15MHz / Mid CH / QPSK



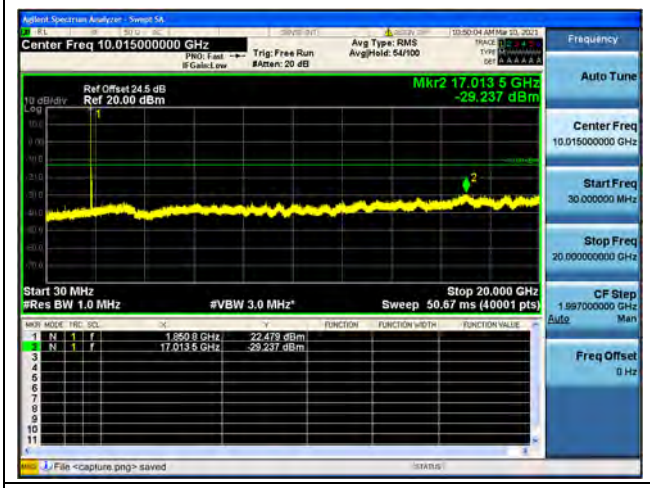
Band2 / 15MHz / Mid CH / 16QAM

Band2 / 15MHz / High CH / QPSK



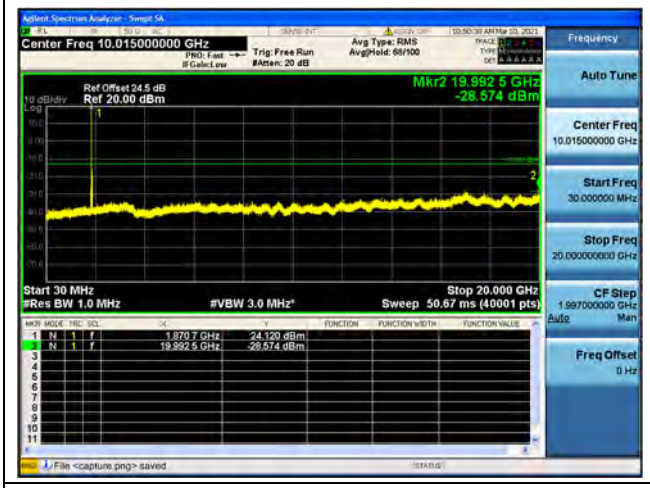
Band2 / 15MHz / High CH / 16QAM

Band2 / 20MHz / Low CH / QPSK



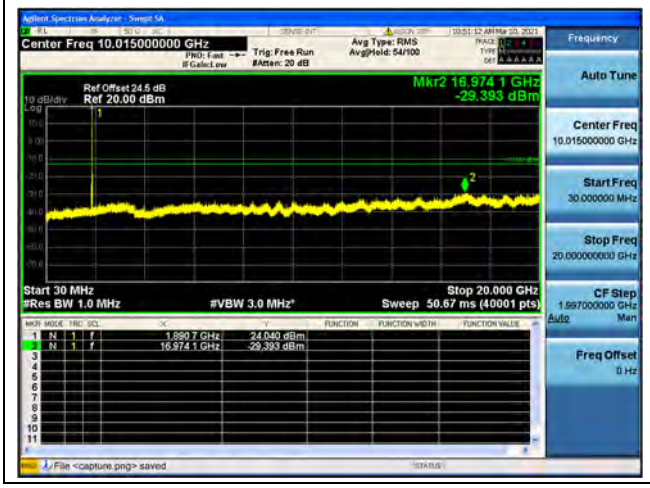
Band2 / 20MHz / Low CH / 16QAM

Band2 / 20MHz / Mid CH / QPSK



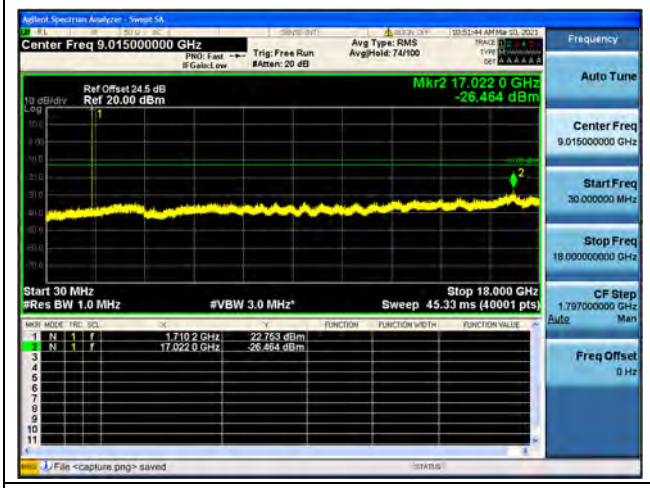
Band2 / 20MHz / Mid CH / 16QAM

Band2 / 20MHz / High CH / QPSK



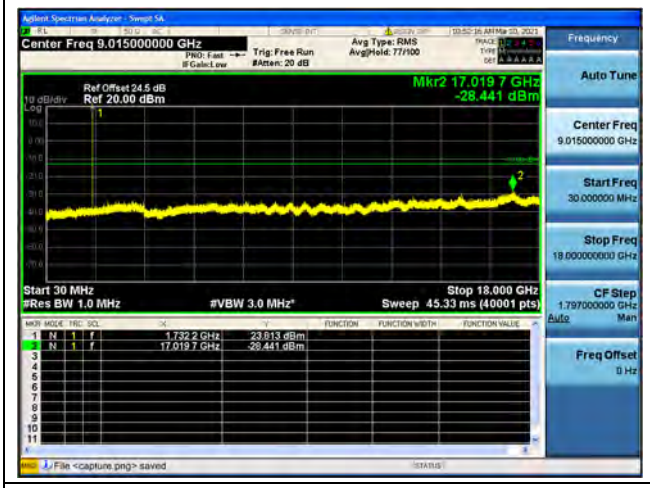
Band2 / 20MHz / High CH / 16QAM

Band4 / 1.4MHz / Low CH / QPSK



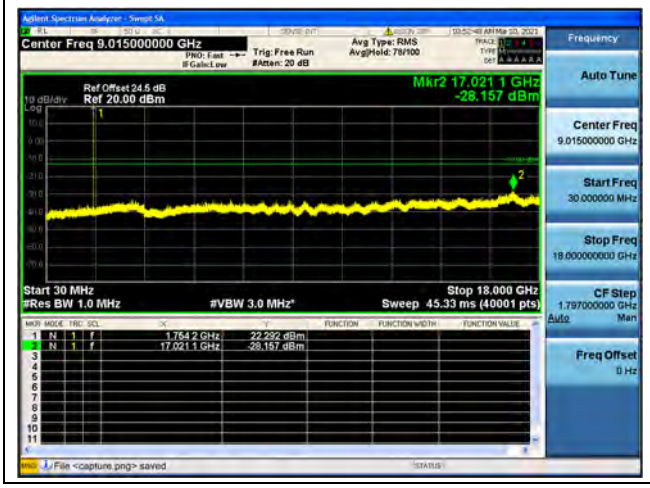
Band4 / 1.4MHz / Low CH / 16QAM

Band4 / 1.4MHz / Mid CH / QPSK



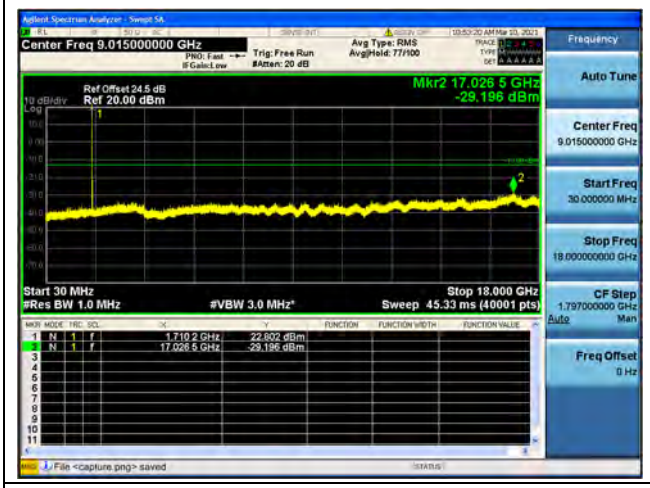
Band4 / 1.4MHz / Mid CH / 16QAM

Band4 / 1.4MHz / High CH / QPSK



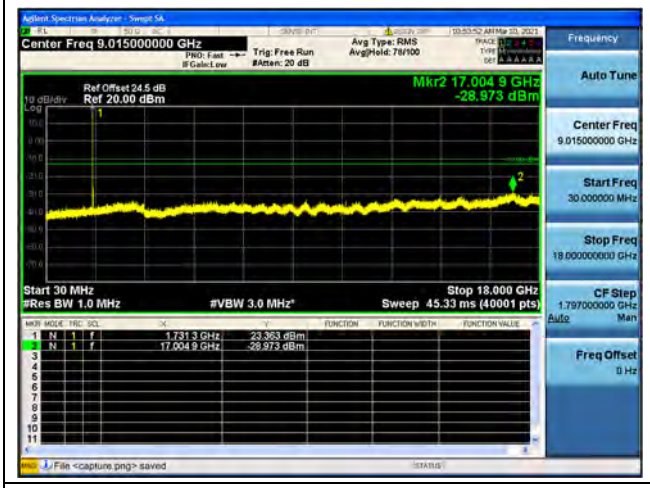
Band4 / 1.4MHz / High CH / 16QAM

Band4 / 3MHz / Low CH / QPSK



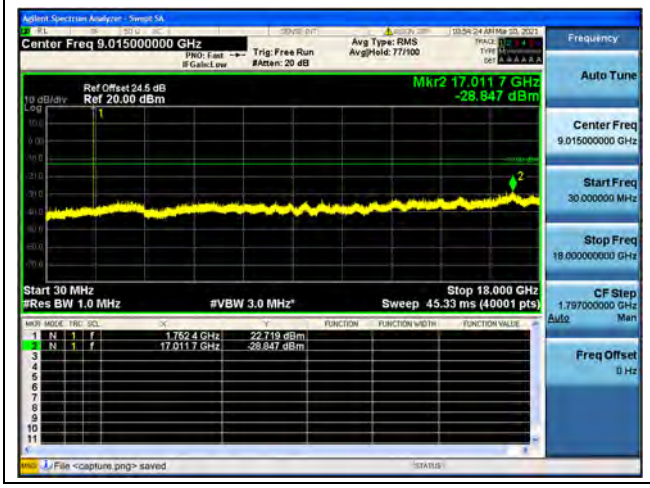
Band4 / 3MHz / Low CH / 16QAM

Band4 / 3MHz / Mid CH / QPSK



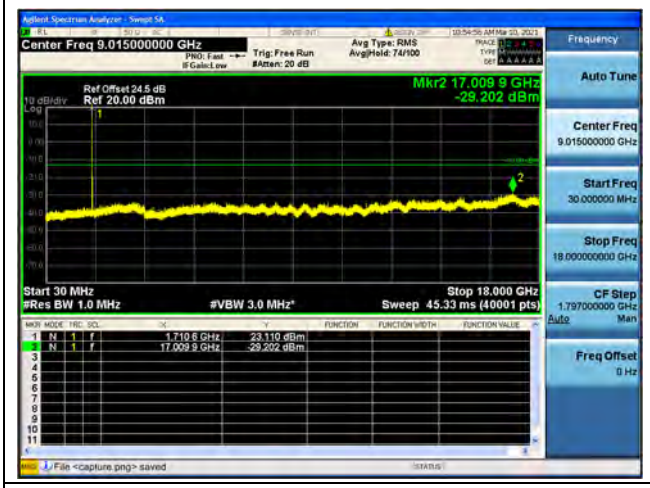
Band4 / 3MHz / Mid CH / 16QAM

Band4 / 3MHz / High CH / QPSK



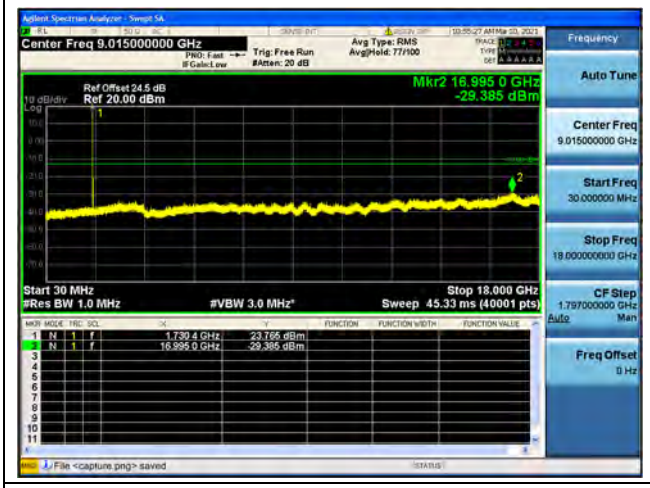
Band4 / 3MHz / High CH / 16QAM

Band4 / 5MHz / Low CH / QPSK



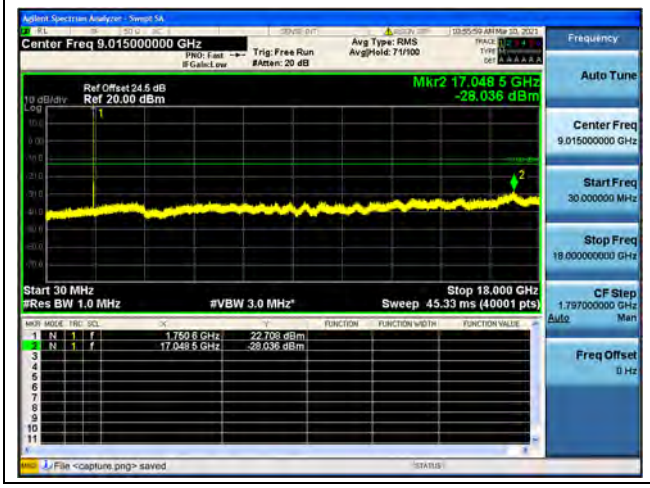
Band4 / 5MHz / Low CH / 16QAM

Band4 / 5MHz / Mid CH / QPSK



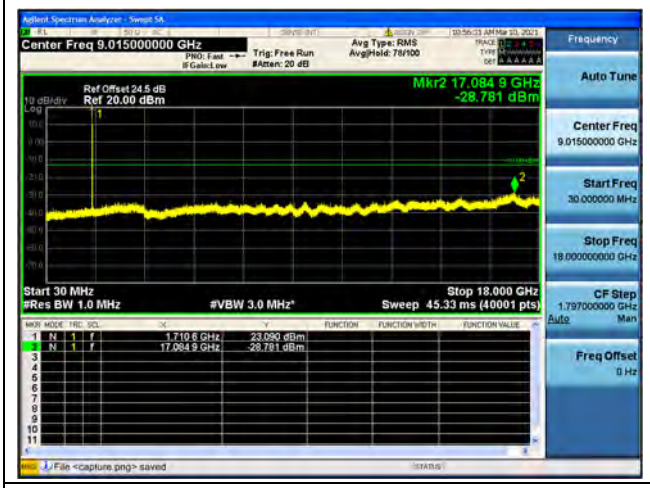
Band4 / 5MHz / Mid CH / 16QAM

Band4 / 5MHz / High CH / QPSK



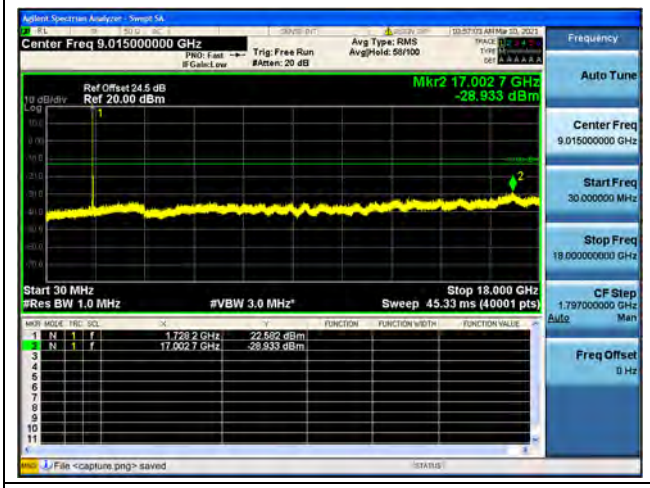
Band4 / 5MHz / High CH / 16QAM

Band4 / 10MHz / Low CH / QPSK



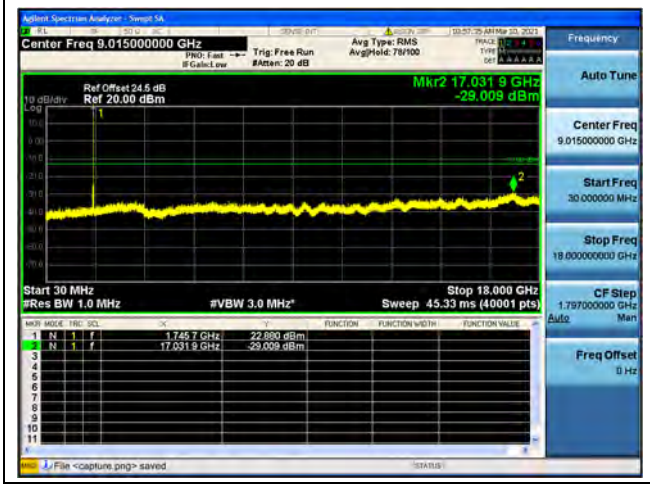
Band4 / 10MHz / Low CH / 16QAM

Band4 / 10MHz / Mid CH / QPSK



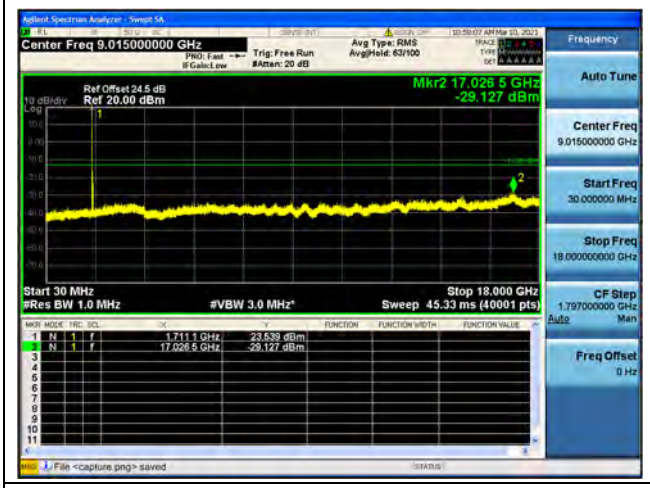
Band4 / 10MHz / Mid CH / 16QAM

Band4 / 10MHz / High CH / QPSK



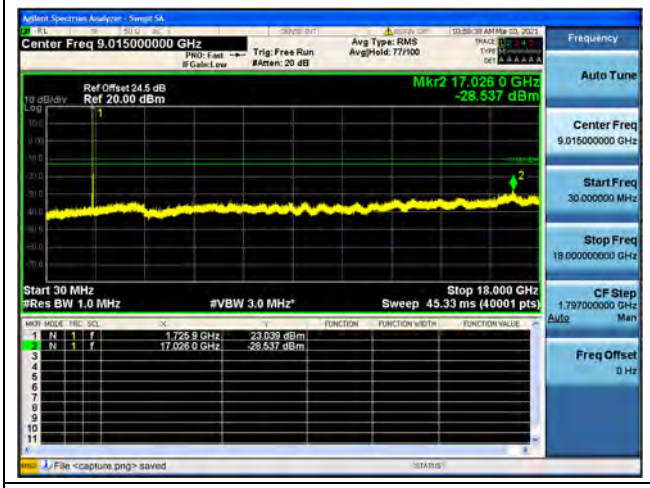
Band4 / 10MHz / High CH / 16QAM

Band4 / 15MHz / Low CH / QPSK



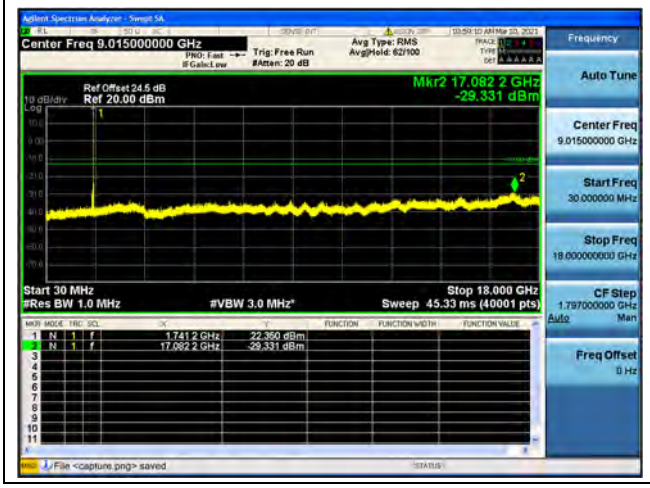
Band4 / 15MHz / Low CH / 16QAM

Band4 / 15MHz / Mid CH / QPSK



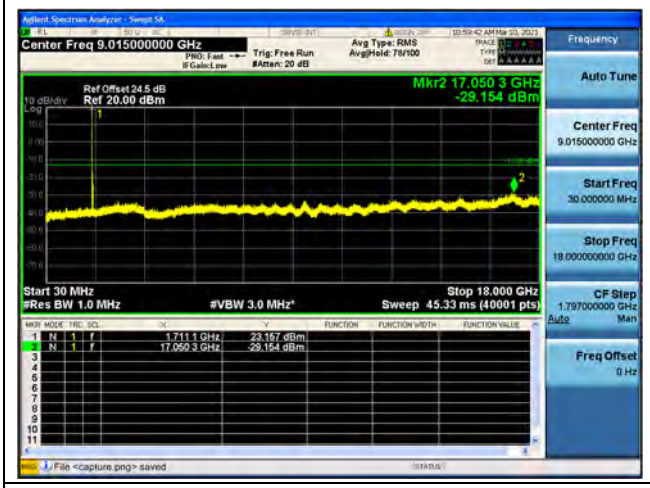
Band4 / 15MHz / Mid CH / 16QAM

Band4 / 15MHz / High CH / QPSK



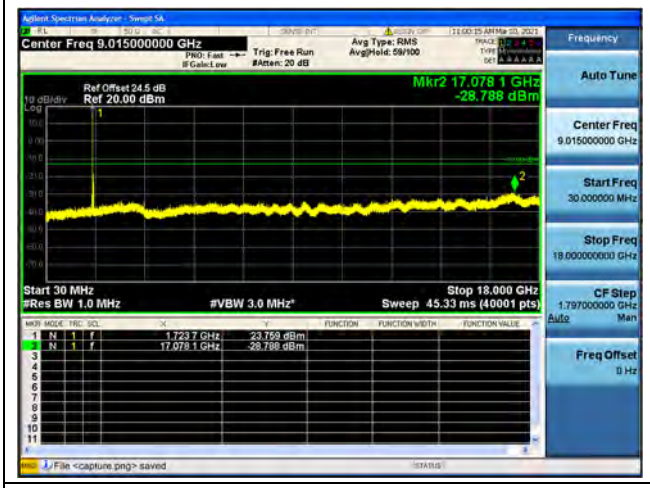
Band4 / 15MHz / High CH / 16QAM

Band4 / 20MHz / Low CH / QPSK



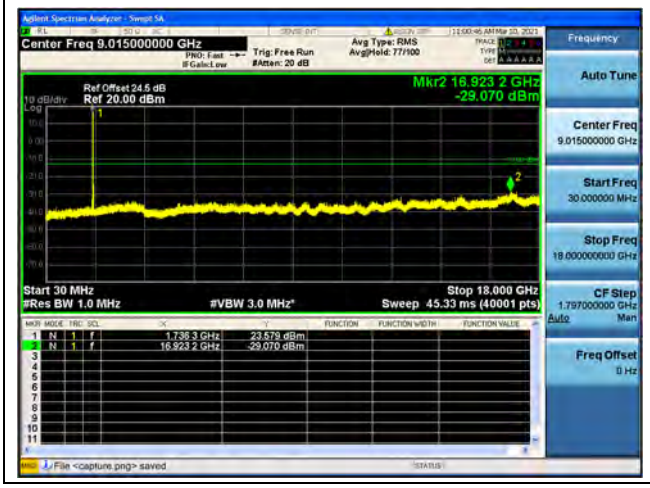
Band4 / 20MHz / Low CH / 16QAM

Band4 / 20MHz / Mid CH / QPSK



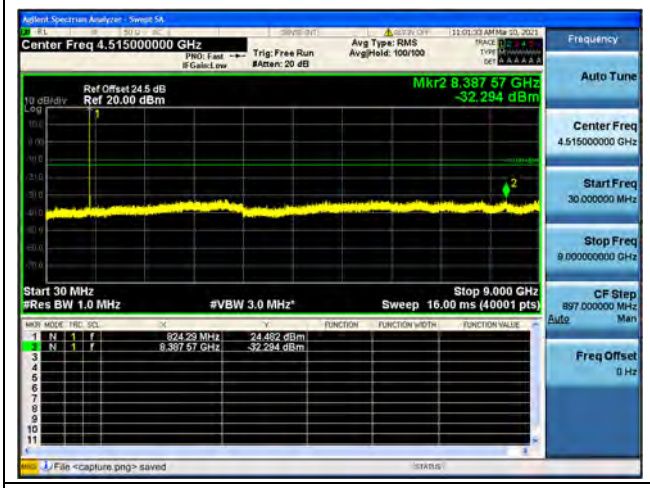
Band4 / 20MHz / Mid CH / 16QAM

Band4 / 20MHz / High CH / QPSK



Band4 / 20MHz / High CH / 16QAM

Band5 / 1.4MHz / Low CH / QPSK

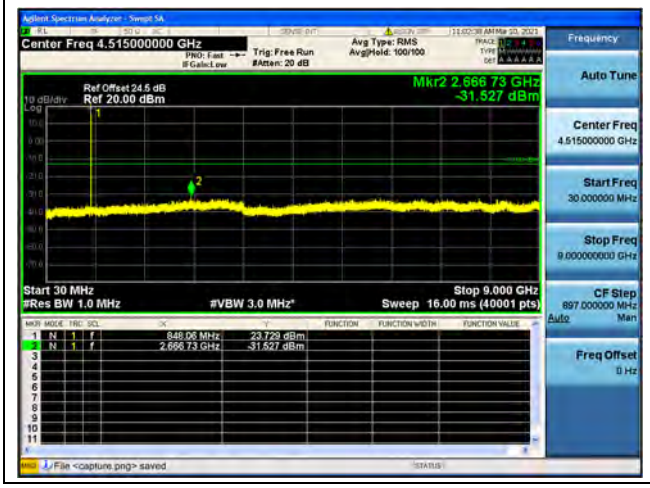


Band5 / 1.4MHz / Low CH / 16QAM

Band5 / 1.4MHz / Mid CH / QPSK

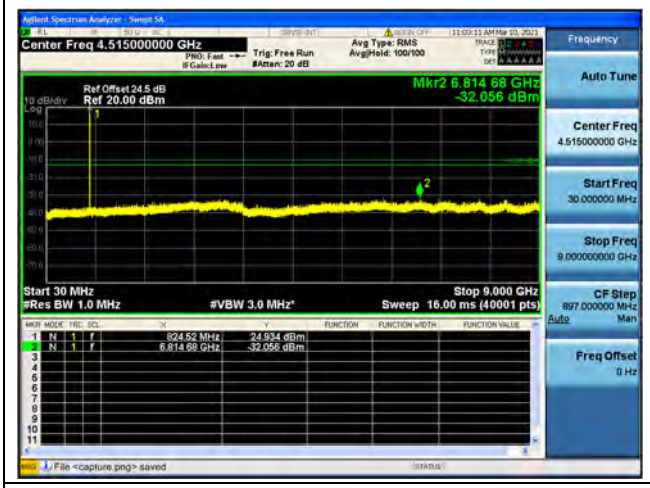
Band5 / 1.4MHz / Mid CH / 16QAM

Band5 / 1.4MHz / High CH / QPSK



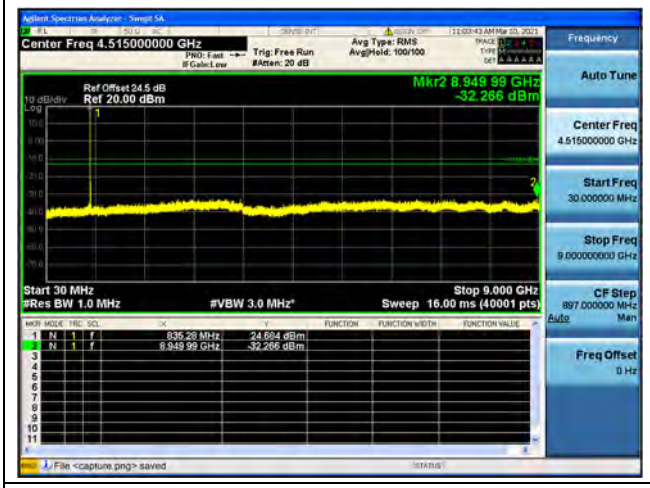
Band5 / 1.4MHz / High CH / 16QAM

Band5 / 3MHz / Low CH / QPSK



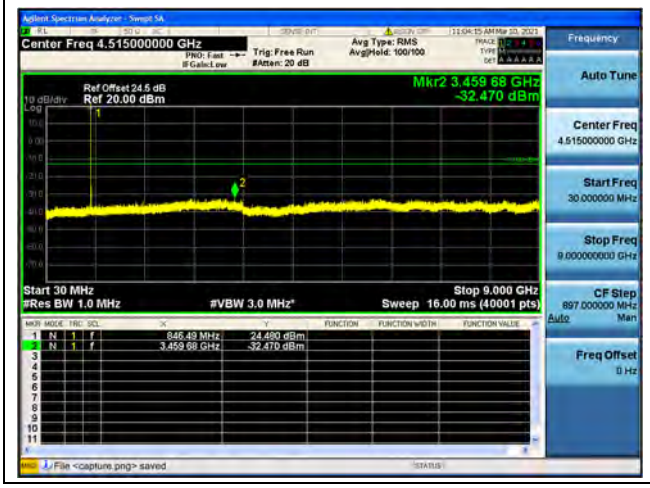
Band5 / 3MHz / Low CH / 16QAM

Band5 / 3MHz / Mid CH / QPSK



Band5 / 3MHz / Mid CH / 16QAM

Band5 / 3MHz / High CH / QPSK



Band5 / 3MHz / High CH / 16QAM