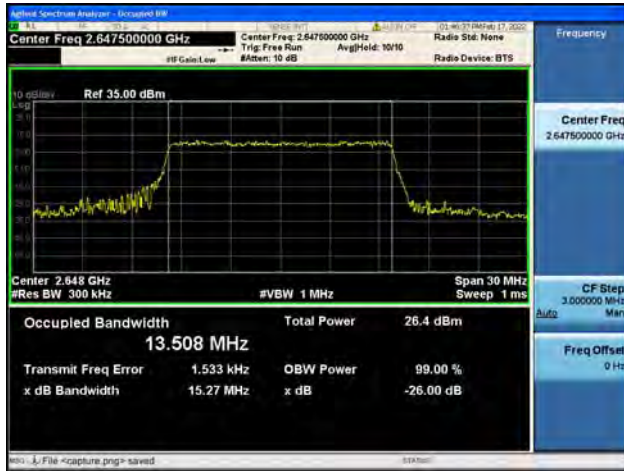
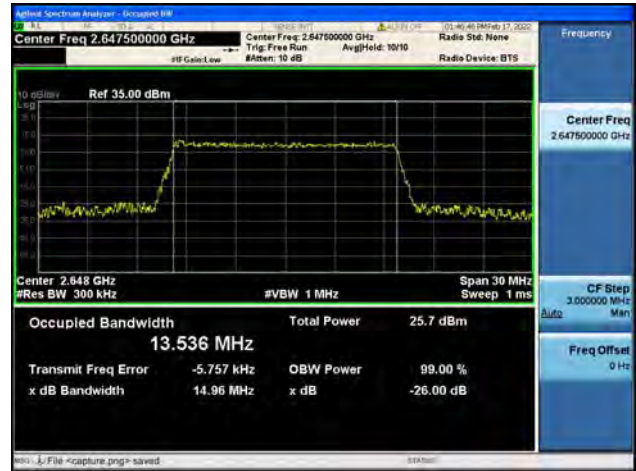




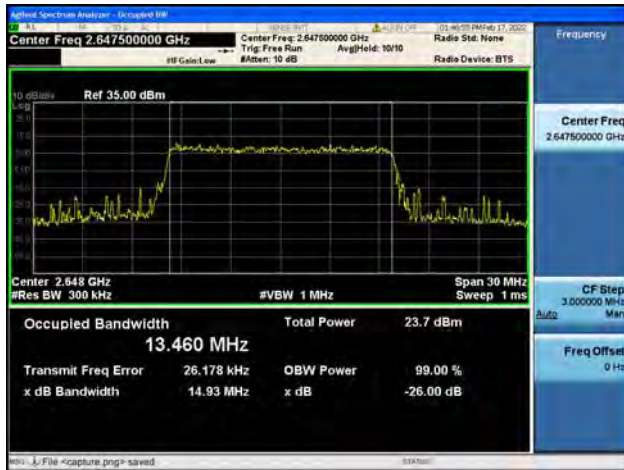
Band41 / 15MHz / High CH / QPSK



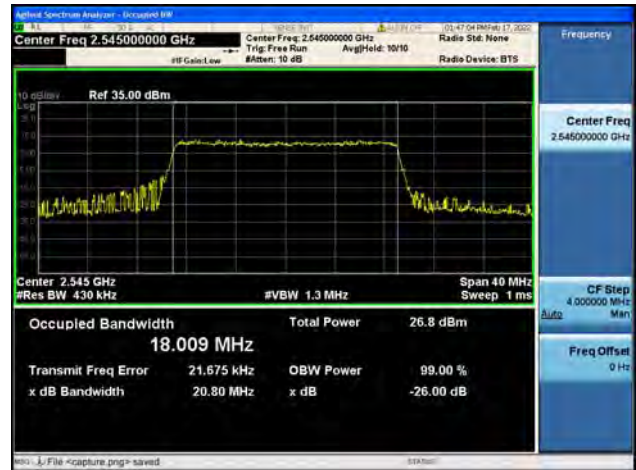
Band41 / 15MHz / High CH / 16QAM



Band41 / 15MHz / High CH / 64QAM



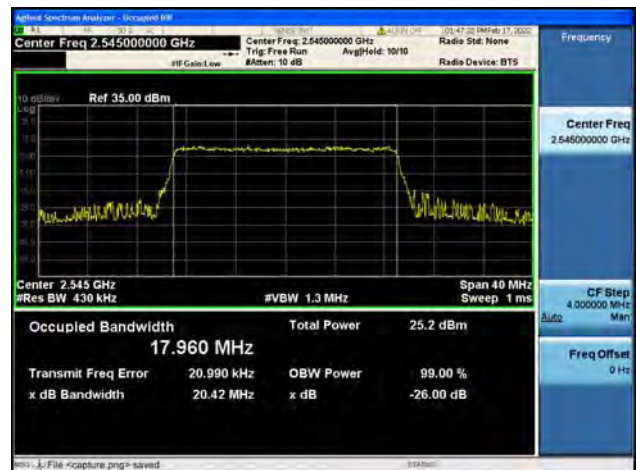
Band41 / 20MHz / Low CH / QPSK



Band41 / 20MHz / Low CH / 16QAM

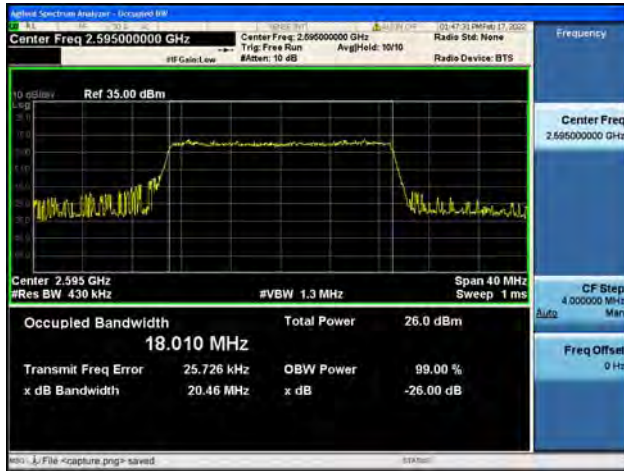


Band41 / 20MHz / Low CH / 64QAM

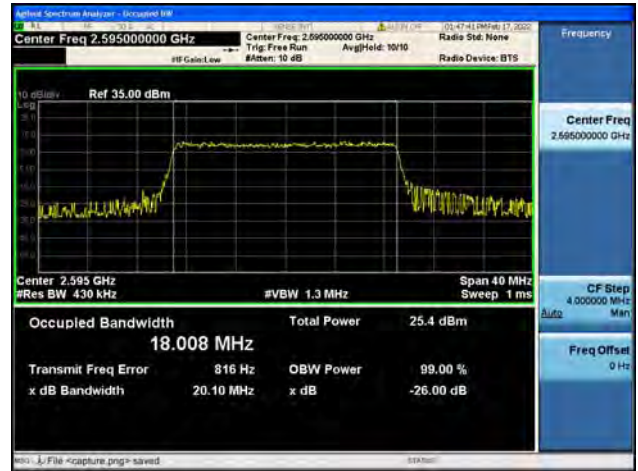




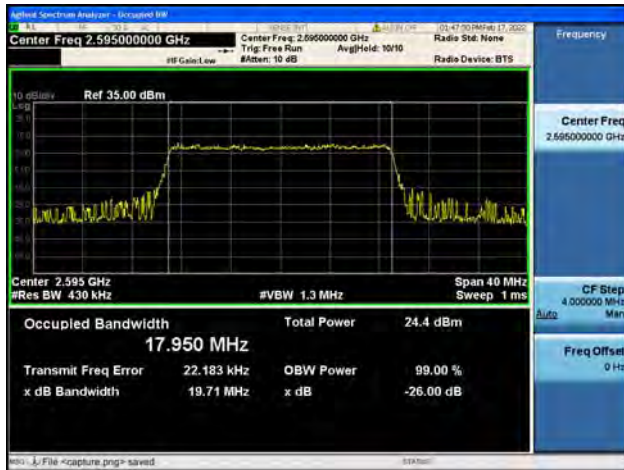
Band41 / 20MHz / Mid CH / QPSK



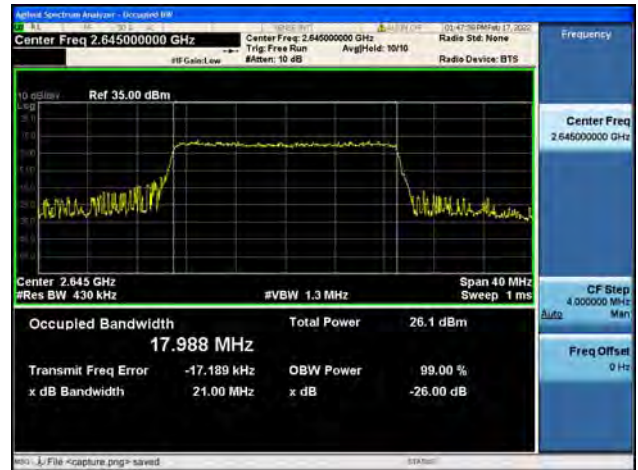
Band41 / 20MHz / Mid CH / 16QAM



Band41 / 20MHz / Mid CH / 64QAM



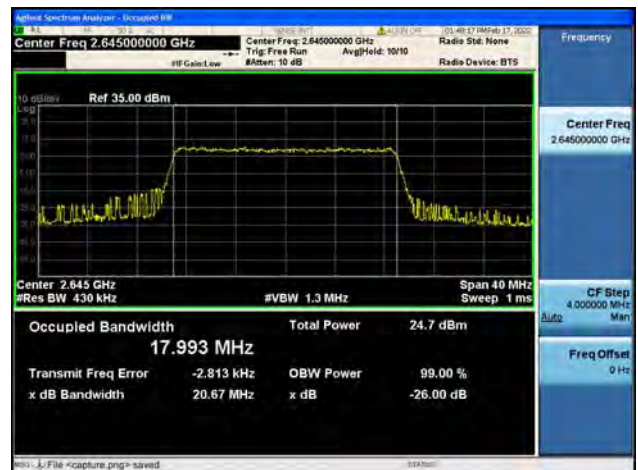
Band41 / 20MHz / High CH / QPSK

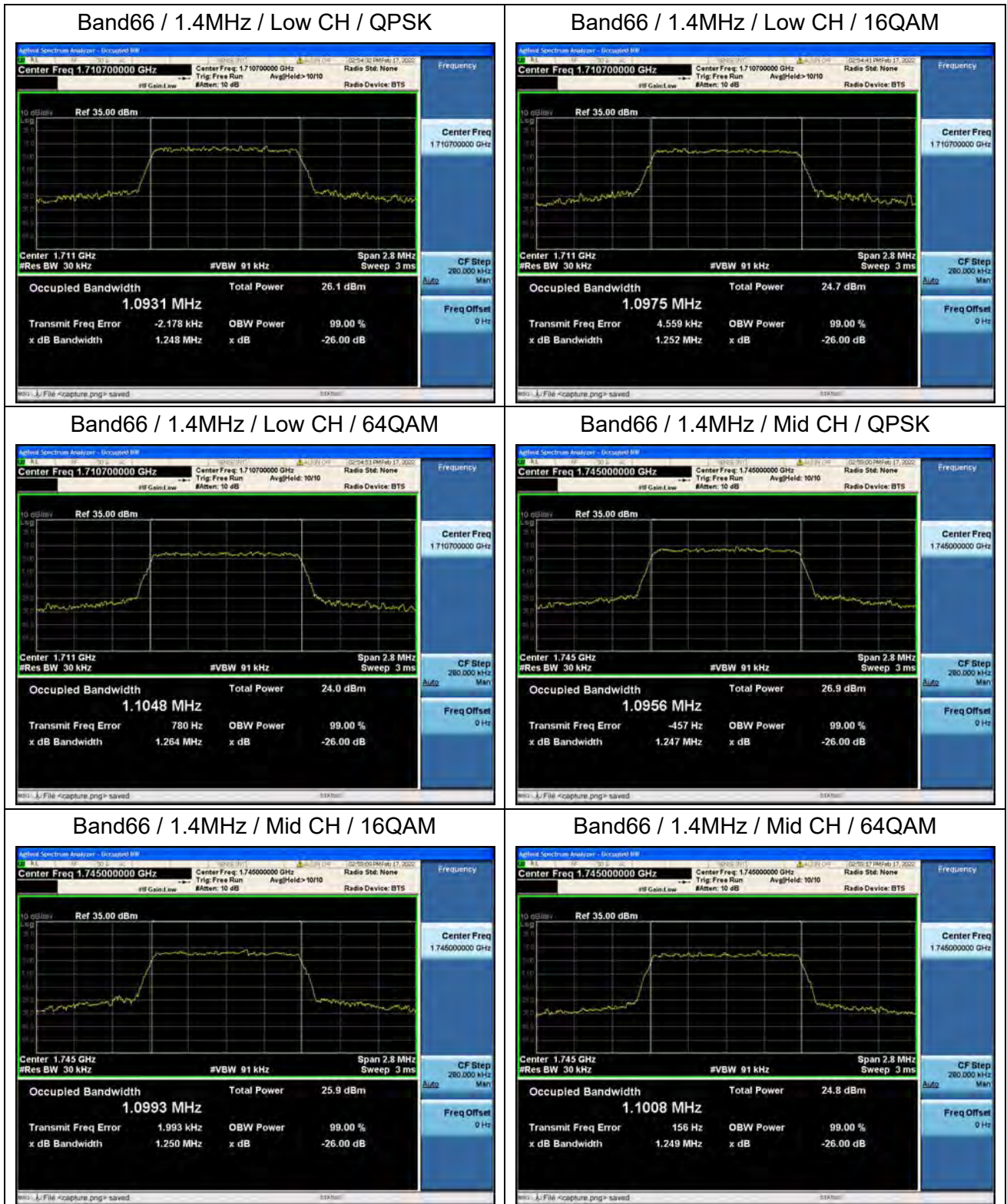


Band41 / 20MHz / High CH / 16QAM



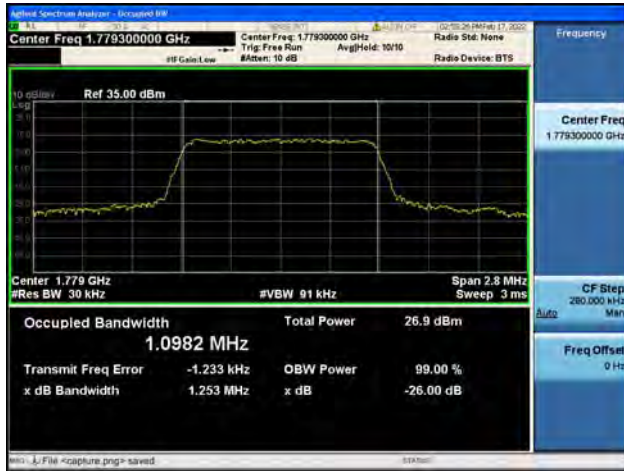
Band41 / 20MHz / High CH / 64QAM



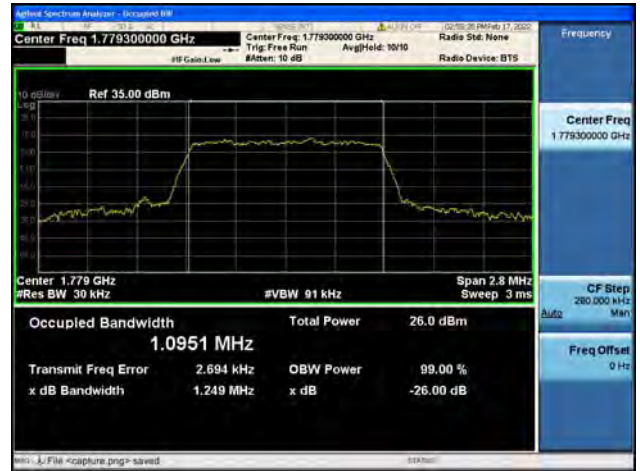




Band66 / 1.4MHz / High CH / QPSK



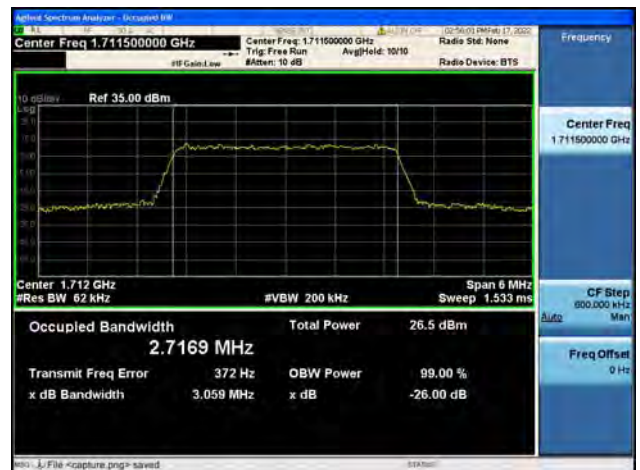
Band66 / 1.4MHz / High CH / 16QAM



Band66 / 1.4MHz / High CH / 64QAM



Band66 / 3MHz / Low CH / QPSK



Band66 / 3MHz / Low CH / 16QAM

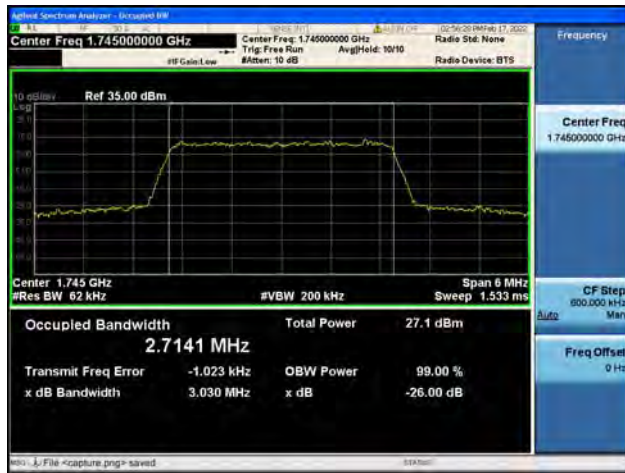


Band66 / 3MHz / Low CH / 64QAM

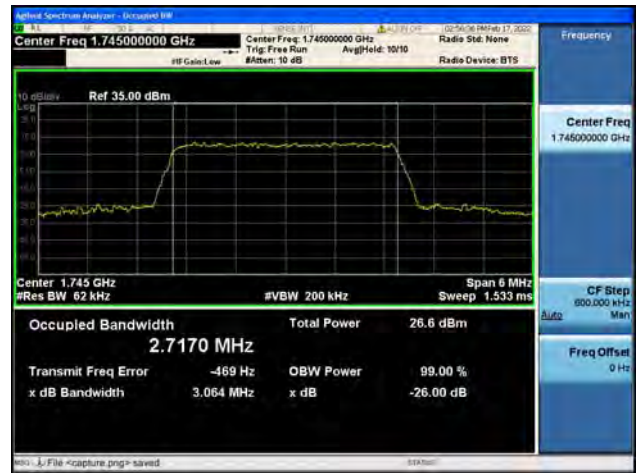




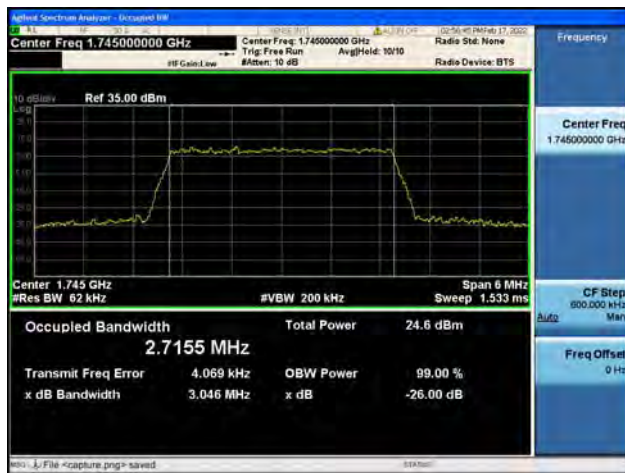
Band66 / 3MHz / Mid CH / QPSK



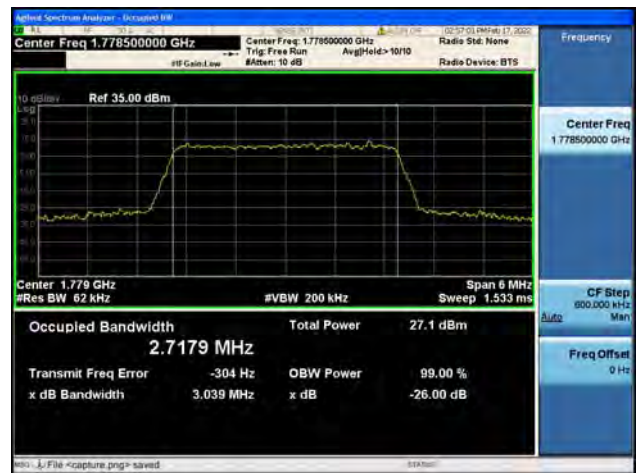
Band66 / 3MHz / Mid CH / 16QAM



Band66 / 3MHz / Mid CH / 64QAM



Band66 / 3MHz / High CH / QPSK

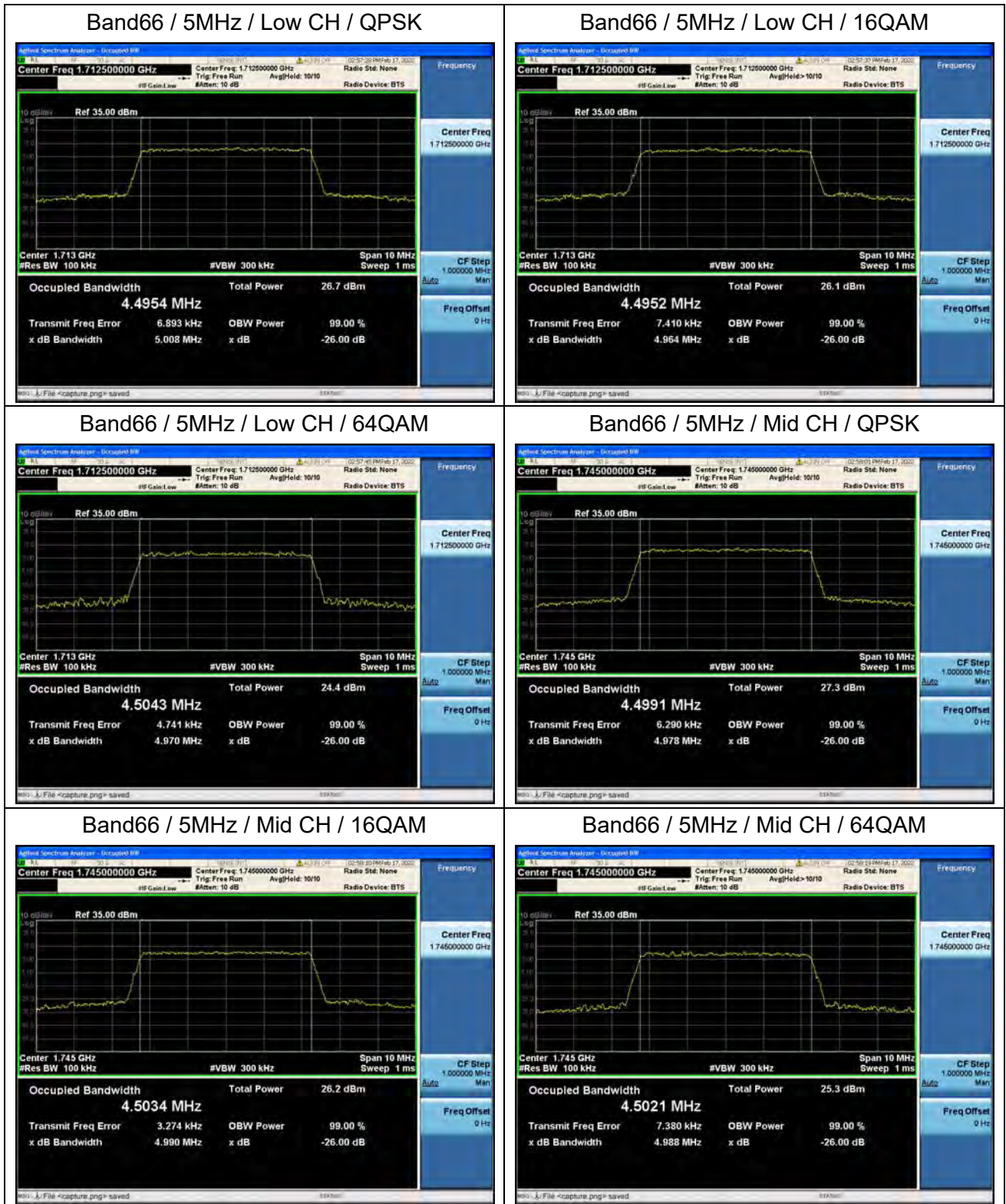


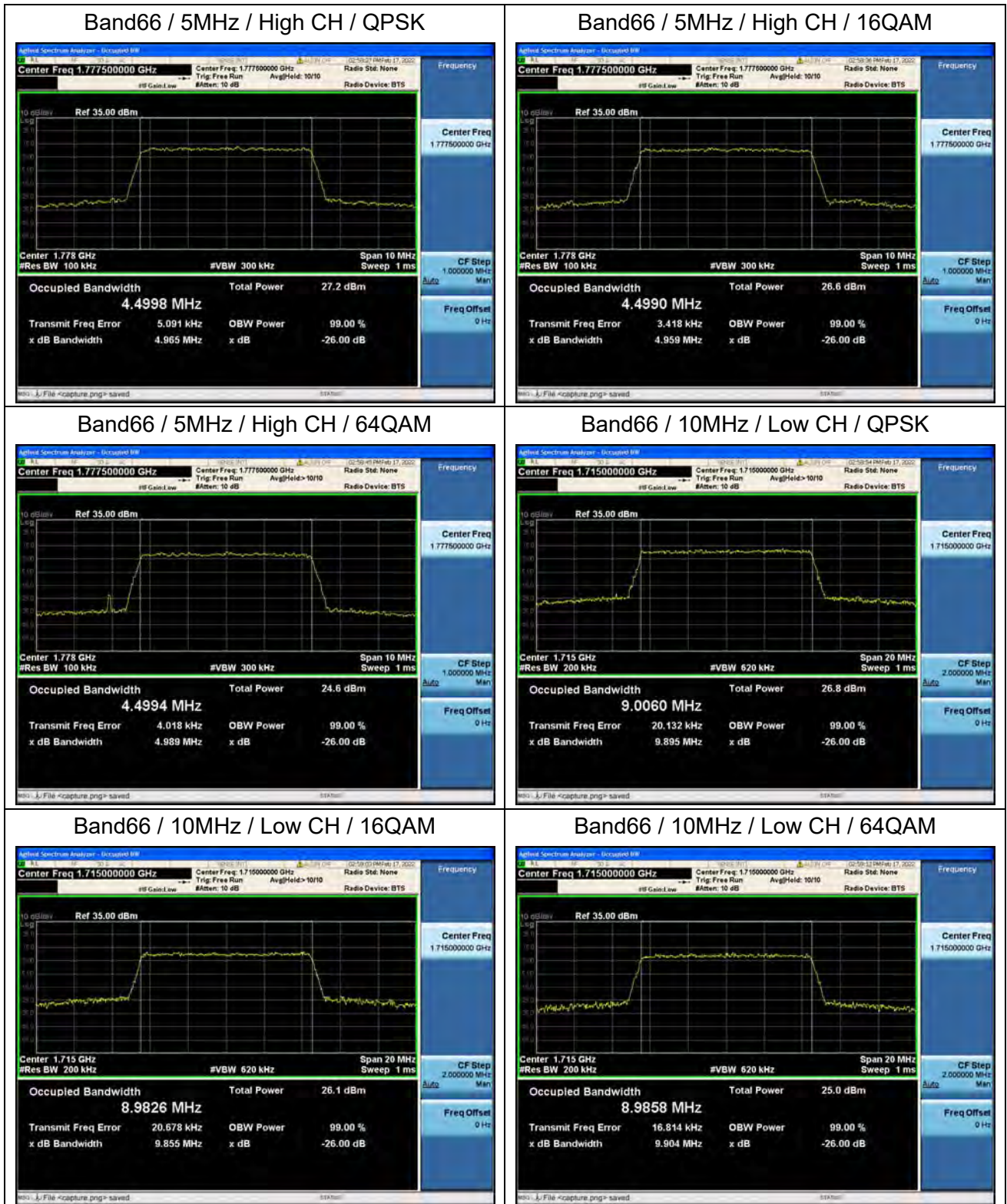
Band66 / 3MHz / High CH / 16QAM



Band66 / 3MHz / High CH / 64QAM

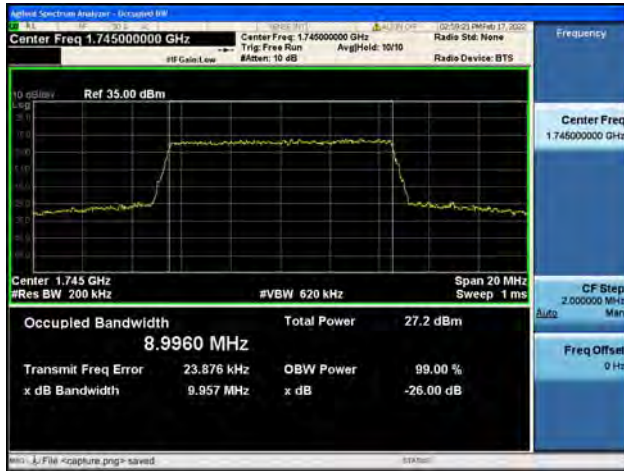




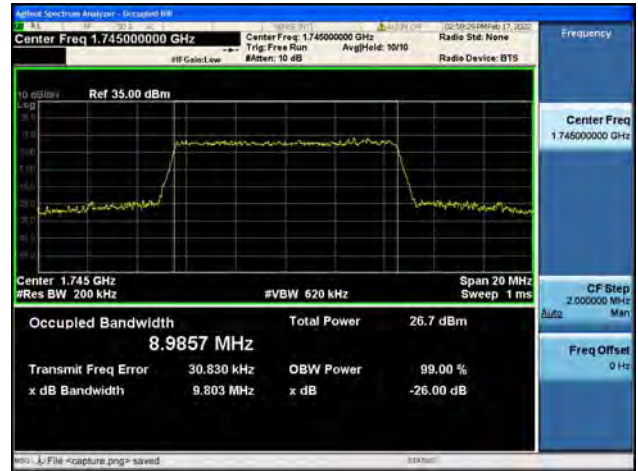




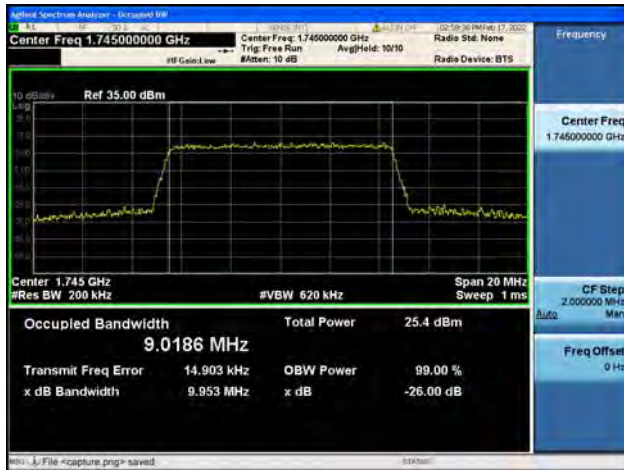
Band66 / 10MHz / Mid CH / QPSK



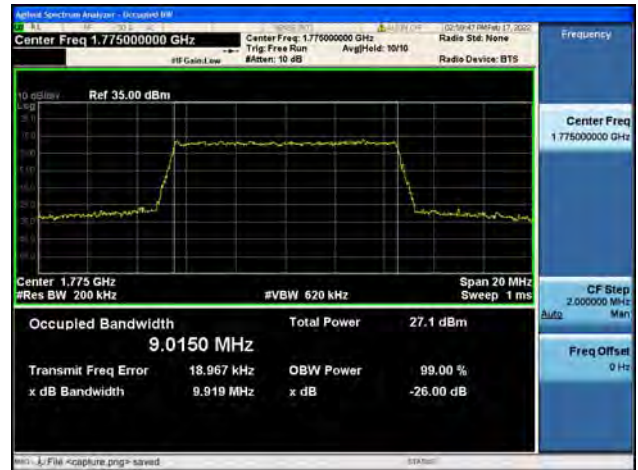
Band66 / 10MHz / Mid CH / 16QAM



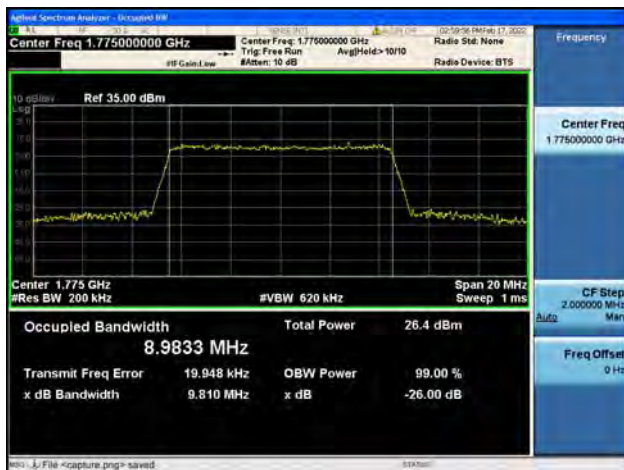
Band66 / 10MHz / Mid CH / 64QAM



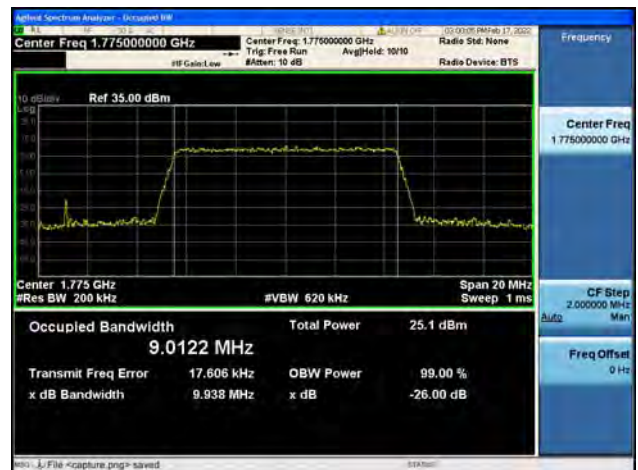
Band66 / 10MHz / High CH / QPSK



Band66 / 10MHz / High CH / 16QAM



Band66 / 10MHz / High CH / 64QAM





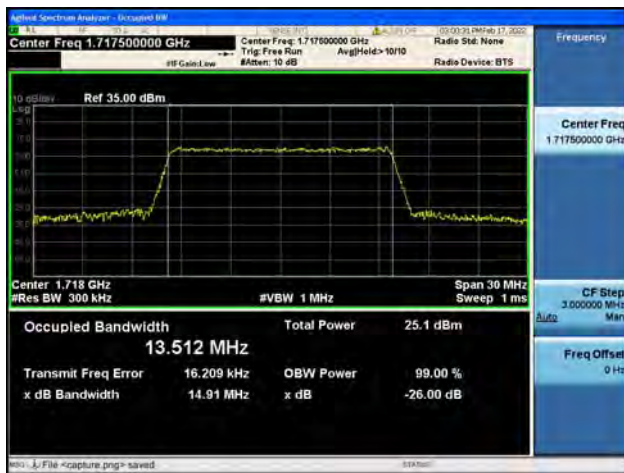
Band66 / 15MHz / Low CH / QPSK



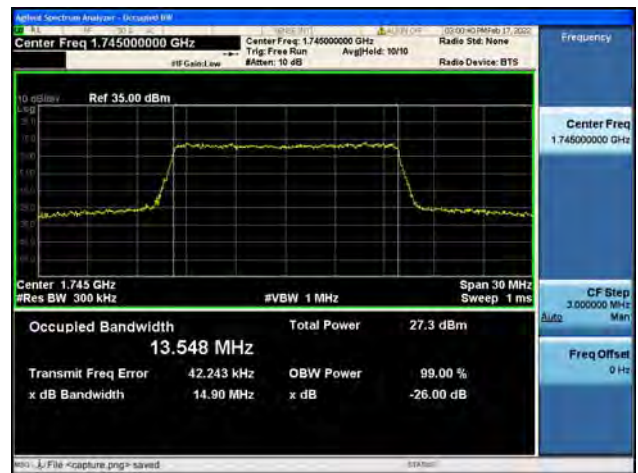
Band66 / 15MHz / Low CH / 16QAM



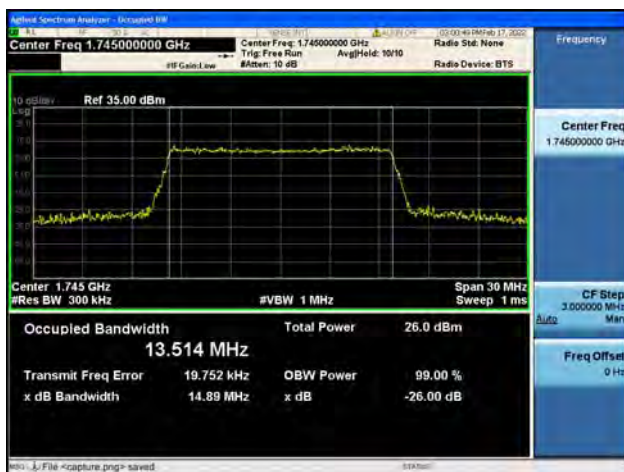
Band66 / 15MHz / Low CH / 64QAM



Band66 / 15MHz / Mid CH / QPSK

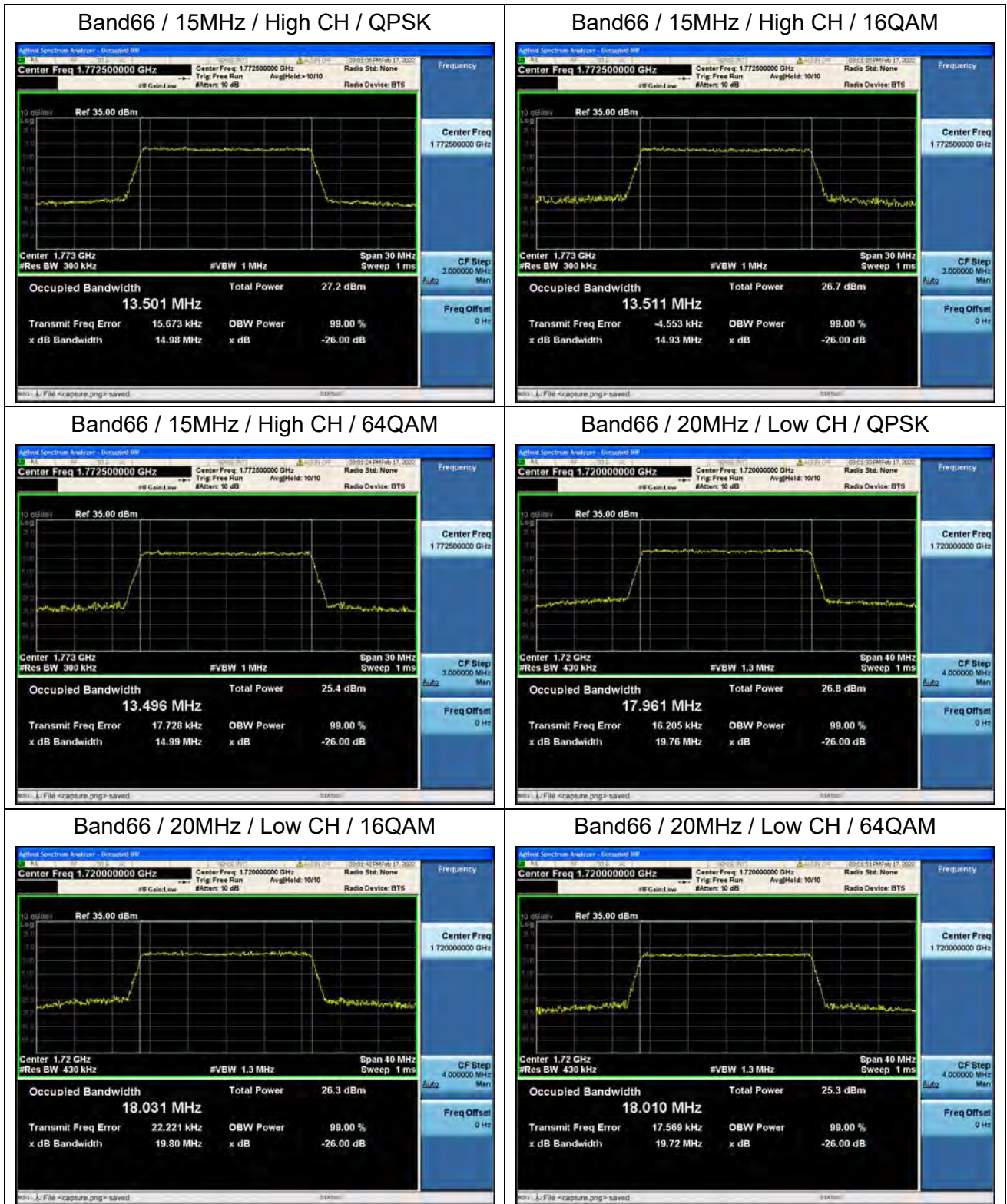


Band66 / 15MHz / Mid CH / 16QAM



Band66 / 15MHz / Mid CH / 64QAM



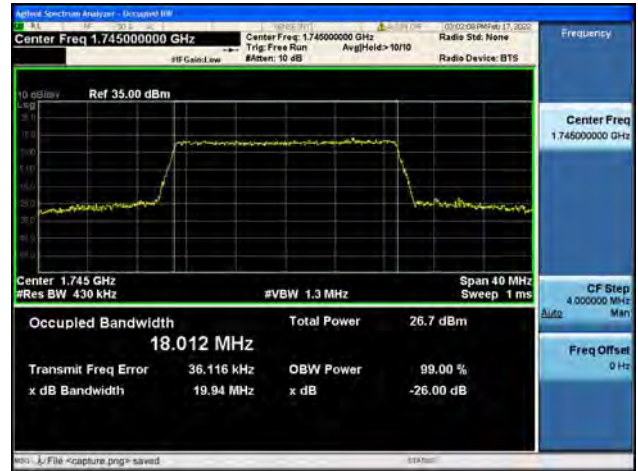




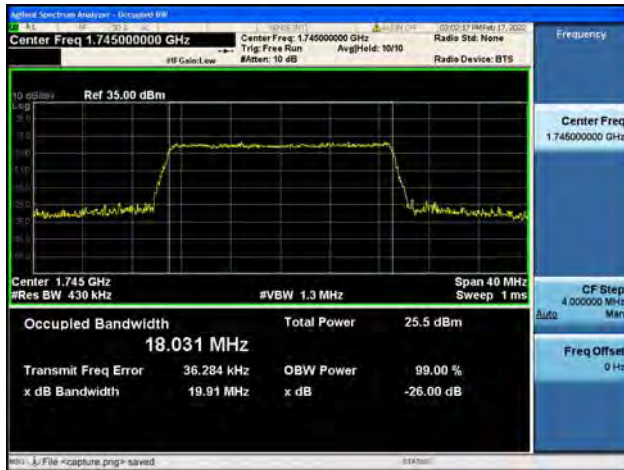
Band66 / 20MHz / Mid CH / QPSK



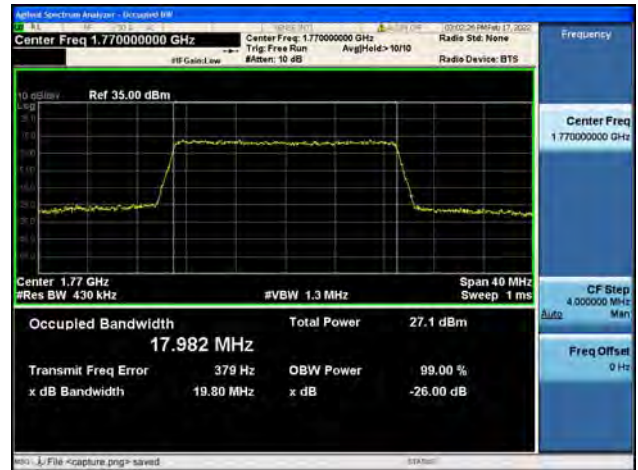
Band66 / 20MHz / Mid CH / 16QAM



Band66 / 20MHz / Mid CH / 64QAM



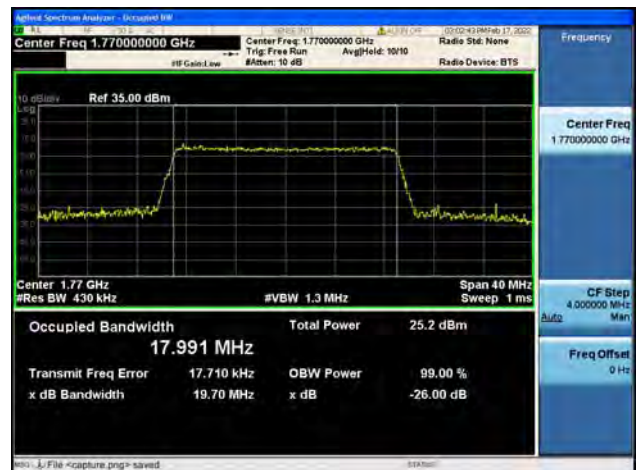
Band66 / 20MHz / High CH / QPSK



Band66 / 20MHz / High CH / 16QAM



Band66 / 20MHz / High CH / 64QAM



2.3. Frequency Stability

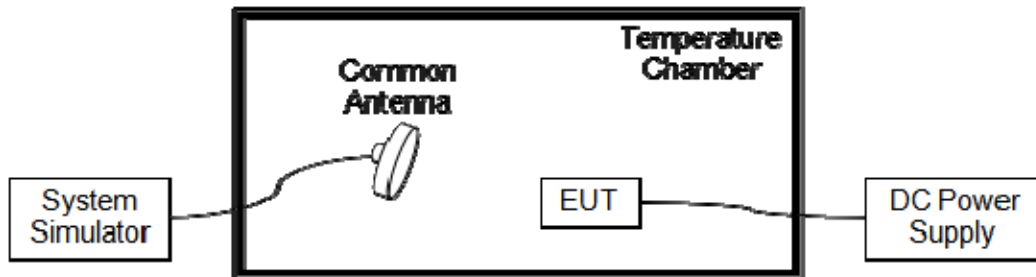
2.3.1. Requirement

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 -10°C to 55°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 3.60V, 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
Normal	3.87	+20(Ref)	39	0.021	PASS
Normal		-10	-24	-0.013	
Normal		0	31	0.016	
Normal		+10	43	0.023	
Normal		+20	32	0.017	
Normal		+30	-38	-0.020	
Normal		+40	18	0.010	
Normal		+50	20	0.011	
Normal		+55	-54	-0.029	
High	4.45	+20	47	0.025	
BATT.ENDPOINT	3.60	+20	57	0.030	

LTE Band 4, QPSK, Channel 20175, Frequency 1732.5MHz					
Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp(°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
Normal	3.87	+20(Ref)	28	0.016	PASS
Normal		-10	49	0.028	
Normal		0	22	0.013	
Normal		+10	20	0.012	
Normal		+20	13	0.008	
Normal		+30	44	0.025	
Normal		+40	53	0.031	
Normal		+50	50	0.029	
Normal		+55	17	0.010	
High	4.45	+20	37	0.021	
BATT.ENDPOINT	3.60	+20	-46	-0.027	



LTE Band 5, QPSK, Channel 20525, Frequency 836.5MHz Limit=±2.5ppm					
Voltage (%)	Power (VDC)	Temp(°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
Normal	3.87	+20(Ref)	36	0.043	PASS
Normal		-10	-53	-0.063	
Normal		0	14	0.017	
Normal		+10	-18	-0.022	
Normal		+20	22	0.026	
Normal		+30	-31	-0.037	
Normal		+40	-20	-0.024	
Normal		+50	39	0.047	
Normal		+55	49	0.059	
High	4.45	+20	-57	-0.068	
BATT.ENDPOINT	3.60	+20	-22	-0.026	

LTE Band 7, QPSK, Channel 21100, Frequency 2535MHz Limit= Within Authorized Band					
Voltage (%)	Power (VDC)	Temp(°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
Normal	3.87	+20(Ref)	43	0.017	PASS
Normal		-10	-24	-0.009	
Normal		0	-17	-0.007	
Normal		+10	21	0.008	
Normal		+20	17	0.007	
Normal		+30	39	0.015	
Normal		+40	54	0.021	
Normal		+50	-42	-0.017	
Normal		+55	48	0.019	
High	4.45	+20	-59	-0.023	
BATT.ENDPOINT	3.60	+20	49	0.019	



LTE Band 12, QPSK, Channel 23095, Frequency 707.5MHz					
Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp(°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
Normal	3.87	+20(Ref)	-22	-0.031	PASS
Normal		-10	49	0.069	
Normal		0	25	0.035	
Normal		+10	35	0.049	
Normal		+20	-17	-0.024	
Normal		+30	50	0.071	
Normal		+40	50	0.071	
Normal		+50	-15	-0.021	
Normal		+55	-13	-0.018	
High	4.45	+20	29	0.041	
BATT.ENDPOINT	3.60	+20	-22	-0.031	

LTE Band 13, QPSK, Channel 23230, Frequency 782.0MHz					
Limit=±2.5ppm					
Voltage (%)	Power (VDC)	Temp (°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
Normal	3.87	+20(Ref)	13	0.017	PASS
Normal		-10	-44	-0.056	
Normal		0	13	0.017	
Normal		+10	53	0.068	
Normal		+20	-52	-0.066	
Normal		+30	-23	-0.029	
Normal		+40	-25	-0.032	
Normal		+50	-42	-0.054	
Normal		+55	17	0.022	
High	4.45	+20	-33	-0.042	
BATT.ENDPOINT	3.60	+20	-33	-0.042	



LTE Band 17, QPSK, Channel 23790, Frequency 710MHz					
Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp(°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
Normal	3.87	+20(Ref)	-28	-0.039	PASS
Normal		-10	-38	-0.054	
Normal		0	19	0.027	
Normal		+10	29	0.041	
Normal		+20	-14	-0.020	
Normal		+30	-29	-0.041	
Normal		+40	25	0.035	
Normal		+50	57	0.080	
Normal		+55	25	0.035	
High		4.45	+20	37	
BATT.ENDPOINT	3.60	+20	47	0.066	

LTE Band 26, QPSK, Channel 26915, Frequency 836.5MHz					
Limit=±2.5ppm					
Voltage (%)	Power (VDC)	Temp(°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
Normal	3.87	+20(Ref)	24	0.029	PASS
Normal		-10	46	0.055	
Normal		0	51	0.061	
Normal		+10	25	0.030	
Normal		+20	14	0.017	
Normal		+30	19	0.023	
Normal		+40	39	0.047	
Normal		+50	17	0.020	
Normal		+55	-25	-0.030	
High		4.45	+20	25	
BATT.ENDPOINT	3.60	+20	-20	-0.024	



LTE Band 38, QPSK, Channel 38000, Frequency 2595MHz					
Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp(°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
Normal	3.87	+20(Ref)	21	0.008	PASS
Normal		-10	-59	-0.023	
Normal		0	-58	-0.022	
Normal		+10	14	0.005	
Normal		+20	34	0.013	
Normal		+30	23	0.009	
Normal		+40	18	0.007	
Normal		+50	-21	-0.008	
Normal		+55	32	0.012	
High		4.45	+20	25	
BATT.ENDPOINT	3.60	+20	15	0.006	

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
Normal	3.87	+20(Ref)	49	0.021	PASS
Normal		-10	-19	-0.008	
Normal		0	17	0.007	
Normal		+10	-14	-0.006	
Normal		+20	-29	-0.013	
Normal		+30	-48	-0.021	
Normal		+40	32	0.014	
Normal		+50	-29	-0.013	
Normal		+55	39	0.017	
High		4.45	+20	-15	
BATT.ENDPOINT	3.60	+20	34	0.015	



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
Normal	3.87	+20(Ref)	37	0.016	PASS
Normal		-10	-16	-0.007	
Normal		0	45	0.019	
Normal		+10	-47	-0.020	
Normal		+20	-30	-0.013	
Normal		+30	29	0.012	
Normal		+40	40	0.017	
Normal		+50	50	0.021	
Normal		+55	50	0.021	
High	4.45	+20	43	0.018	
BATT.ENDPOIN T	3.60	+20	-34	-0.014	

LTE Band 41, QPSK, Channel 40620, Frequency 2593.0MHz					
Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp(°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
Normal	3.87	+20(Ref)	15	0.006	PASS
Normal		-10	25	0.010	
Normal		0	27	0.010	
Normal		+10	-14	-0.005	
Normal		+20	36	0.014	
Normal		+30	-30	-0.012	
Normal		+40	47	0.018	
Normal		+50	-52	-0.020	
Normal		+55	-59	-0.023	
High	4.45	+20	-30	-0.012	
BATT.ENDPOINT	3.60	+20	13	0.005	



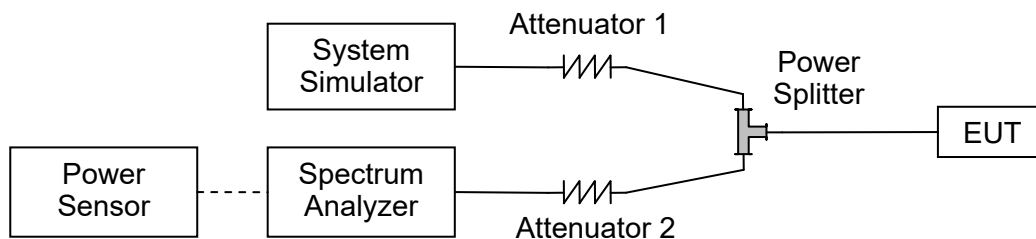
LTE Band 66, QPSK, Channel 132322, Frequency 1745MHz					
Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp (°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
Normal	3.87	+20(Ref)	44	0.025	PASS
Normal		-10	41	0.023	
Normal		0	34	0.019	
Normal		+10	-38	-0.022	
Normal		+20	16	0.009	
Normal		+30	54	0.031	
Normal		+40	43	0.025	
Normal		+50	-56	-0.032	
Normal		+55	16	0.009	
High		4.45	+20	17	
BATT.ENDPOIN T	3.60	+20	-22	-0.013	

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	5.53	<=13	PASS
	Low	16QAM	6.46	<=13	PASS
	Low	64QAM	7.01	<=13	PASS
	Mid	QPSK	5.9	<=13	PASS
	Mid	16QAM	6.64	<=13	PASS
	Mid	64QAM	7.03	<=13	PASS
	High	QPSK	5.6	<=13	PASS
	High	16QAM	6.49	<=13	PASS
	High	64QAM	7.09	<=13	PASS
3	Low	QPSK	5.76	<=13	PASS
	Low	16QAM	6.53	<=13	PASS
	Low	64QAM	6.54	<=13	PASS
	Mid	QPSK	5.96	<=13	PASS
	Mid	16QAM	6.8	<=13	PASS
	Mid	64QAM	6.7	<=13	PASS
	High	QPSK	5.73	<=13	PASS
	High	16QAM	6.46	<=13	PASS
	High	64QAM	6.64	<=13	PASS
5	Low	QPSK	5.75	<=13	PASS
	Low	16QAM	6.37	<=13	PASS
	Low	64QAM	6.61	<=13	PASS
	Mid	QPSK	5.83	<=13	PASS
	Mid	16QAM	6.48	<=13	PASS
	Mid	64QAM	6.81	<=13	PASS
	High	QPSK	5.95	<=13	PASS
	High	16QAM	6.63	<=13	PASS
	High	64QAM	7.00	<=13	PASS
10	Low	QPSK	5.9	<=13	PASS
	Low	16QAM	6.47	<=13	PASS
	Low	64QAM	6.66	<=13	PASS
	Mid	QPSK	5.88	<=13	PASS
	Mid	16QAM	6.53	<=13	PASS
	Mid	64QAM	6.76	<=13	PASS
	High	QPSK	5.78	<=13	PASS
	High	16QAM	6.36	<=13	PASS
	High	64QAM	7.6	<=13	PASS



15	Low	QPSK	5.85	<=13	PASS
	Low	16QAM	6.49	<=13	PASS
	Low	64QAM	6.73	<=13	PASS
	Mid	QPSK	5.95	<=13	PASS
	Mid	16QAM	6.52	<=13	PASS
	Mid	64QAM	6.84	<=13	PASS
	High	QPSK	5.76	<=13	PASS
	High	16QAM	6.37	<=13	PASS
	High	64QAM	6.8	<=13	PASS
20	Low	QPSK	5.81	<=13	PASS
	Low	16QAM	6.51	<=13	PASS
	Low	64QAM	6.8	<=13	PASS
	Mid	QPSK	5.87	<=13	PASS
	Mid	16QAM	6.58	<=13	PASS
	Mid	64QAM	6.74	<=13	PASS
	High	QPSK	5.7	<=13	PASS
	High	16QAM	6.4	<=13	PASS
	High	64QAM	6.76	<=13	PASS



LTE Band 4					
BW(MHz)	Channel Level	Modulation	PAR Radio(dB)	Limit(dB)	Verdict
1.4	Low	QPSK	4.7	<=13	PASS
	Low	16QAM	5.55	<=13	PASS
	Low	64QAM	6.24	<=13	PASS
	Mid	QPSK	5.62	<=13	PASS
	Mid	16QAM	6.42	<=13	PASS
	Mid	64QAM	6.63	<=13	PASS
	High	QPSK	5.19	<=13	PASS
	High	16QAM	6.03	<=13	PASS
	High	64QAM	6.39	<=13	PASS
3	Low	QPSK	4.84	<=13	PASS
	Low	16QAM	5.57	<=13	PASS
	Low	64QAM	5.98	<=13	PASS
	Mid	QPSK	5.62	<=13	PASS
	Mid	16QAM	6.4	<=13	PASS
	Mid	64QAM	6.53	<=13	PASS
	High	QPSK	5.26	<=13	PASS
	High	16QAM	5.99	<=13	PASS
	High	64QAM	6.27	<=13	PASS
5	Low	QPSK	5.32	<=13	PASS
	Low	16QAM	5.78	<=13	PASS
	Low	64QAM	6.24	<=13	PASS
	Mid	QPSK	5.59	<=13	PASS
	Mid	16QAM	6.2	<=13	PASS
	Mid	64QAM	6.57	<=13	PASS
	High	QPSK	5.32	<=13	PASS
	High	16QAM	5.94	<=13	PASS
	High	64QAM	6.31	<=13	PASS
10	Low	QPSK	5.32	<=13	PASS
	Low	16QAM	6.05	<=13	PASS
	Low	64QAM	6.33	<=13	PASS
	Mid	QPSK	5.66	<=13	PASS
	Mid	16QAM	6.3	<=13	PASS
	Mid	64QAM	6.48	<=13	PASS
	High	QPSK	5.57	<=13	PASS
	High	16QAM	6.14	<=13	PASS
	High	64QAM	6.43	<=13	PASS



15	Low	QPSK	5.38	<=13	PASS
	Low	16QAM	6.04	<=13	PASS
	Low	64QAM	6.43	<=13	PASS
	Mid	QPSK	5.64	<=13	PASS
	Mid	16QAM	6.26	<=13	PASS
	Mid	64QAM	6.57	<=13	PASS
	High	QPSK	5.35	<=13	PASS
	High	16QAM	5.99	<=13	PASS
	High	64QAM	6.38	<=13	PASS
20	Low	QPSK	5.47	<=13	PASS
	Low	16QAM	6.15	<=13	PASS
	Low	64QAM	6.49	<=13	PASS
	Mid	QPSK	5.6	<=13	PASS
	Mid	16QAM	6.3	<=13	PASS
	Mid	64QAM	6.54	<=13	PASS
	High	QPSK	5.48	<=13	PASS
	High	16QAM	6.16	<=13	PASS
	High	64QAM	6.44	<=13	PASS



LTE Band 66					
BW(MHz)	Channel Level	Modulation	PAR Radio(dB)	Limit(dB)	Verdict
1.4	Low	QPSK	4.53	<=13	PASS
	Low	16QAM	5.46	<=13	PASS
	Low	64QAM	5.95	<=13	PASS
	Mid	QPSK	5.3	<=13	PASS
	Mid	16QAM	6.05	<=13	PASS
	Mid	64QAM	6.54	<=13	PASS
	High	QPSK	5.33	<=13	PASS
	High	16QAM	6.2	<=13	PASS
	High	64QAM	6.51	<=13	PASS
3	Low	QPSK	4.79	<=13	PASS
	Low	16QAM	5.53	<=13	PASS
	Low	64QAM	6.11	<=13	PASS
	Mid	QPSK	5.26	<=13	PASS
	Mid	16QAM	6.0	<=13	PASS
	Mid	64QAM	6.33	<=13	PASS
	High	QPSK	5.41	<=13	PASS
	High	16QAM	6.18	<=13	PASS
	High	64QAM	6.49	<=13	PASS
5	Low	QPSK	5.12	<=13	PASS
	Low	16QAM	5.7	<=13	PASS
	Low	64QAM	6.1	<=13	PASS
	Mid	QPSK	5.38	<=13	PASS
	Mid	16QAM	6.06	<=13	PASS
	Mid	64QAM	6.47	<=13	PASS
	High	QPSK	5.48	<=13	PASS
	High	16QAM	6.1	<=13	PASS
	High	64QAM	6.43	<=13	PASS
10	Low	QPSK	5.38	<=13	PASS
	Low	16QAM	5.98	<=13	PASS
	Low	64QAM	6.31	<=13	PASS
	Mid	QPSK	5.54	<=13	PASS
	Mid	16QAM	6.12	<=13	PASS
	Mid	64QAM	6.44	<=13	PASS
	High	QPSK	5.65	<=13	PASS
	High	16QAM	6.24	<=13	PASS
	High	64QAM	6.55	<=13	PASS



15	Low	QPSK	5.31	<=13	PASS
	Low	16QAM	5.91	<=13	PASS
	Low	64QAM	6.62	<=13	PASS
	Mid	QPSK	5.35	<=13	PASS
	Mid	16QAM	5.98	<=13	PASS
	Mid	64QAM	6.38	<=13	PASS
	High	QPSK	5.54	<=13	PASS
	High	16QAM	6.16	<=13	PASS
	High	64QAM	6.62	<=13	PASS
20	Low	QPSK	5.41	<=13	PASS
	Low	16QAM	6.12	<=13	PASS
	Low	64QAM	6.39	<=13	PASS
	Mid	QPSK	5.44	<=13	PASS
	Mid	16QAM	6.12	<=13	PASS
	Mid	64QAM	6.41	<=13	PASS
	High	QPSK	5.49	<=13	PASS
	High	16QAM	6.16	<=13	PASS
	High	64QAM	6.42	<=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

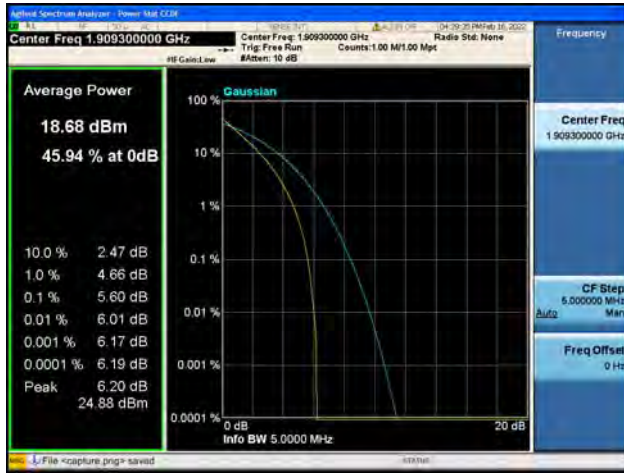


Band2 / 1.4MHz / Mid CH / 64QAM





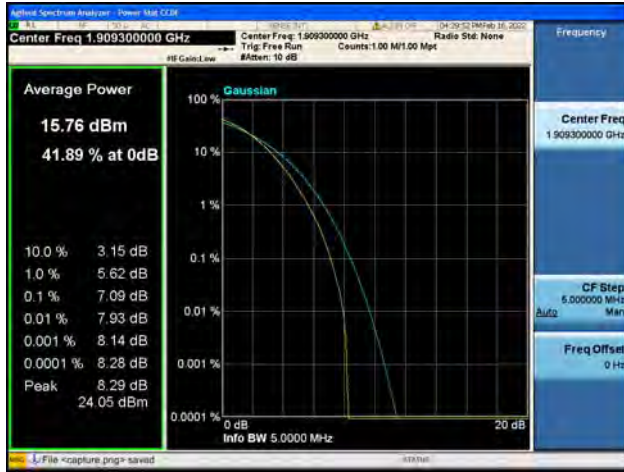
Band2 / 1.4MHz / High CH / QPSK



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



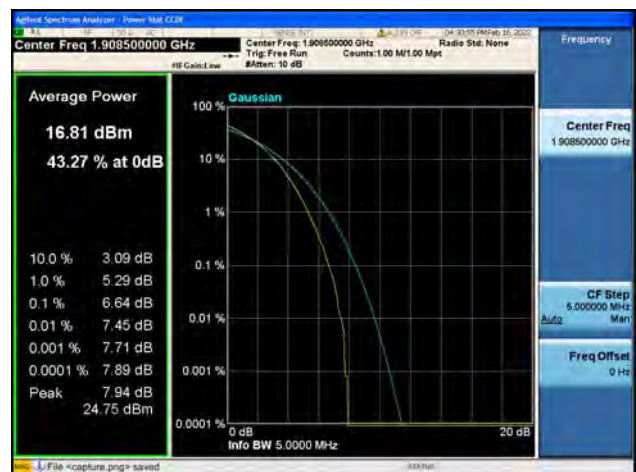
Band2 / 3MHz / High CH / QPSK



Band2 / 3MHz / High CH / 16QAM

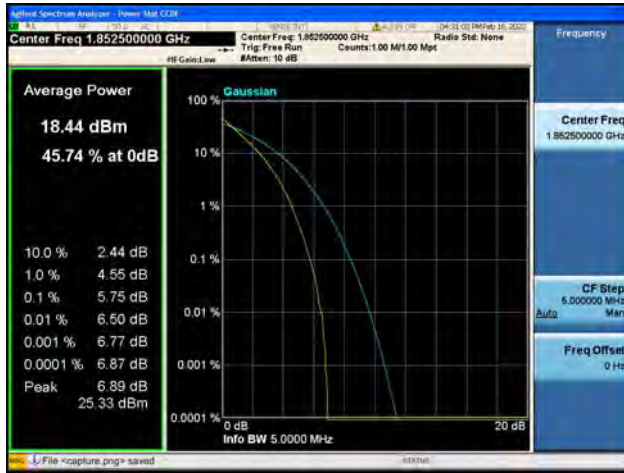


Band2 / 3MHz / High CH / 64QAM

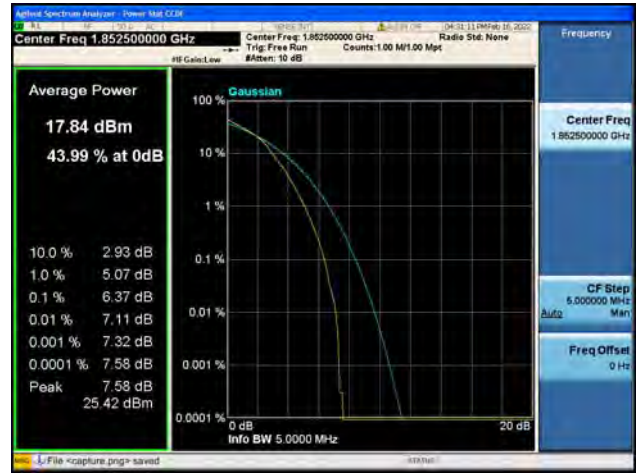




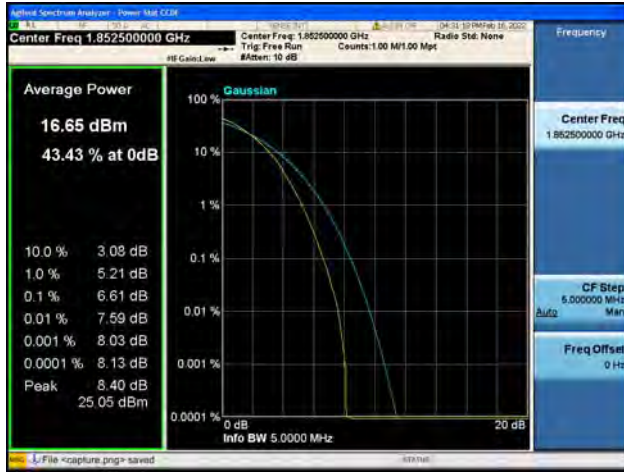
Band2 / 5MHz / Low CH / QPSK



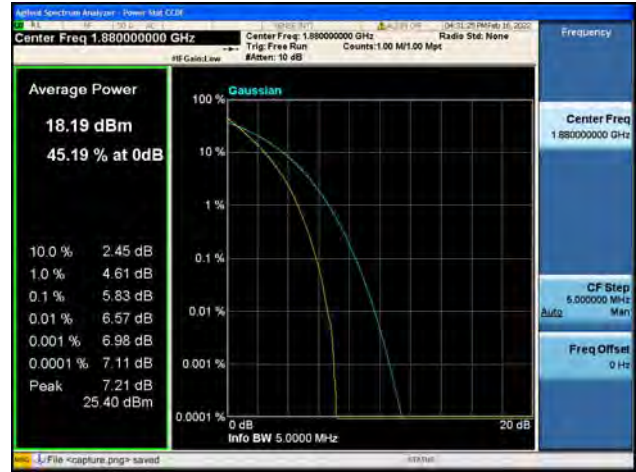
Band2 / 5MHz / Low CH / 16QAM



Band2 / 5MHz / Low CH / 64QAM



Band2 / 5MHz / Mid CH / QPSK



Band2 / 5MHz / Mid CH / 16QAM

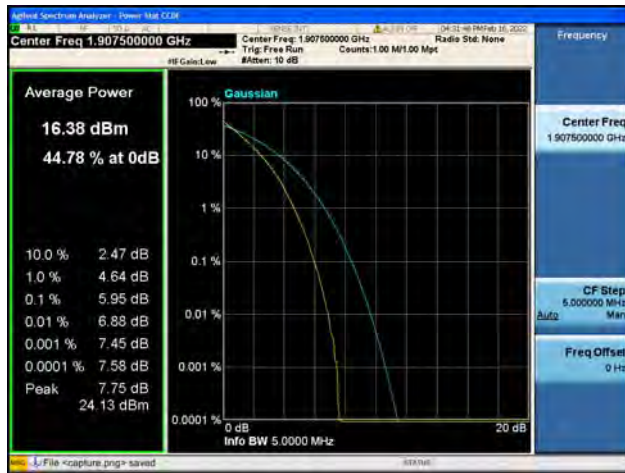


Band2 / 5MHz / Mid CH / 64QAM





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

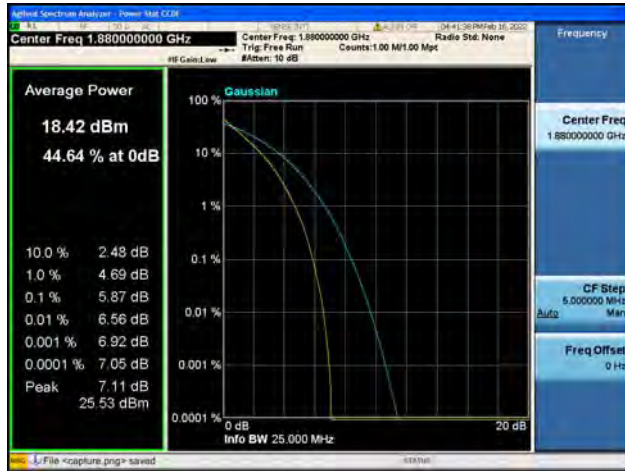


Band2 / 20MHz / Low CH / 64QAM





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





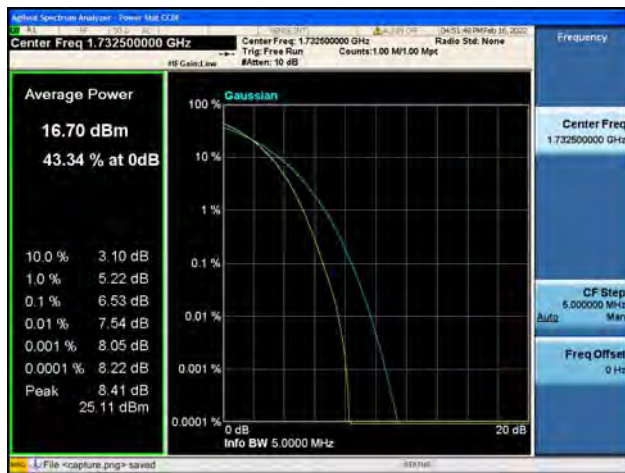
Band4 / 3MHz / Mid CH / QPSK



Band4 / 3MHz / Mid CH / 16QAM



Band4 / 3MHz / Mid CH / 64QAM



Band4 / 3MHz / High CH / QPSK



Band4 / 3MHz / High CH / 16QAM

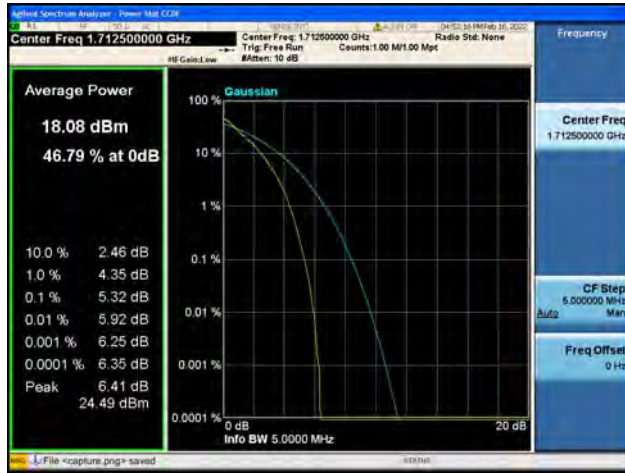


Band4 / 3MHz / High CH / 64QAM

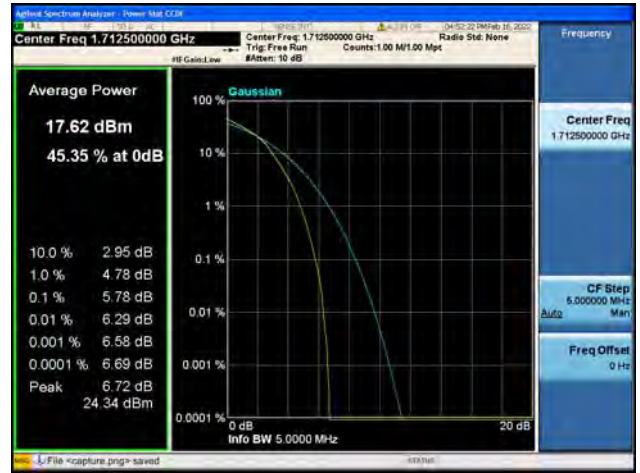




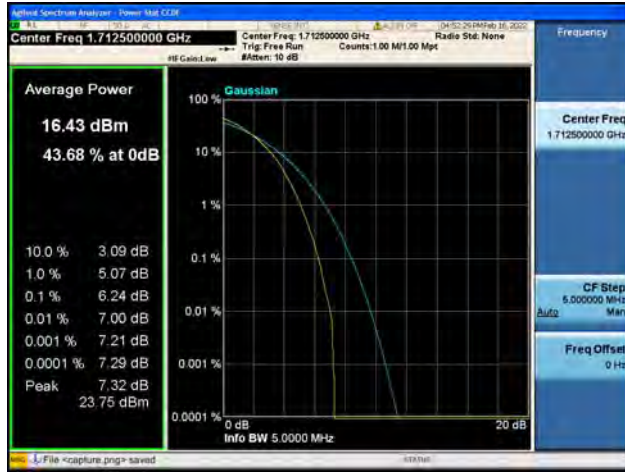
Band4 / 5MHz / Low CH / QPSK



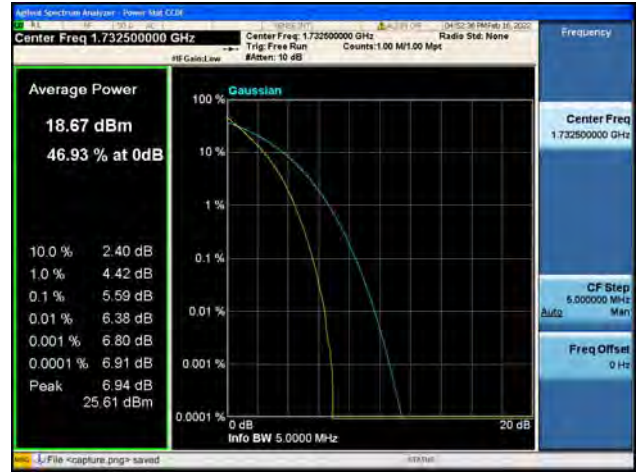
Band4 / 5MHz / Low CH / 16QAM



Band4 / 5MHz / Low CH / 64QAM



Band4 / 5MHz / Mid CH / QPSK



Band4 / 5MHz / Mid CH / 16QAM

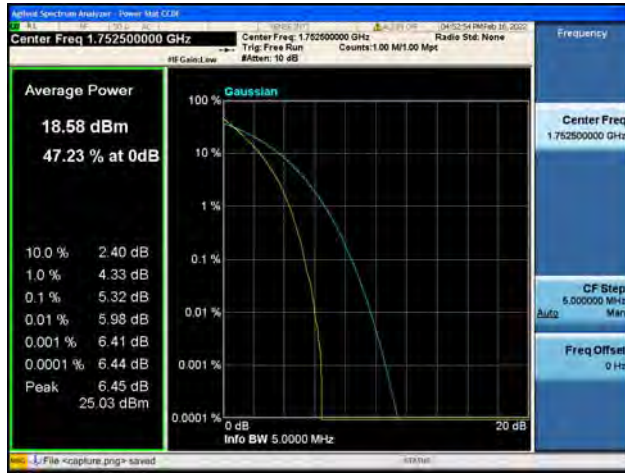


Band4 / 5MHz / Mid CH / 64QAM

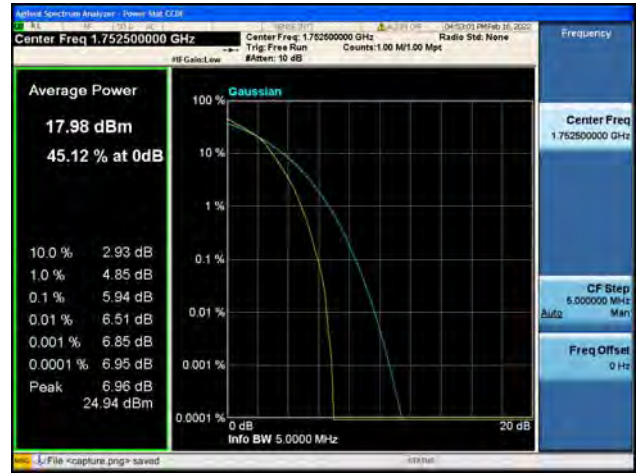




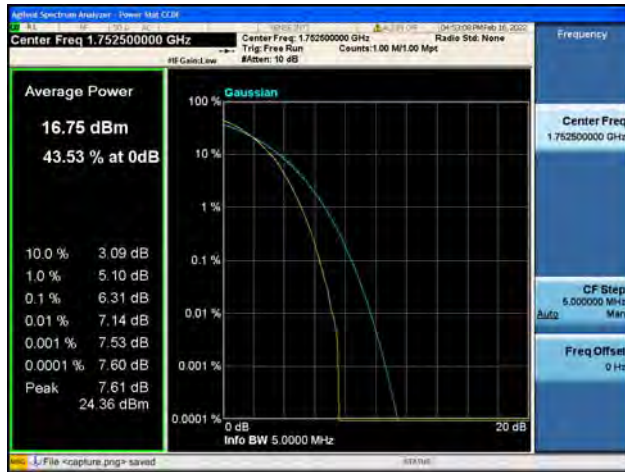
Band4 / 5MHz / High CH / QPSK



Band4 / 5MHz / High CH / 16QAM



Band4 / 5MHz / High CH / 64QAM



Band4 / 10MHz / Low CH / QPSK



Band4 / 10MHz / Low CH / 16QAM

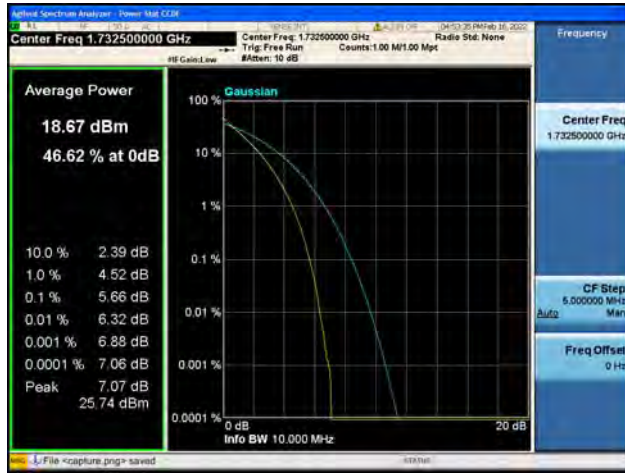


Band4 / 10MHz / Low CH / 64QAM





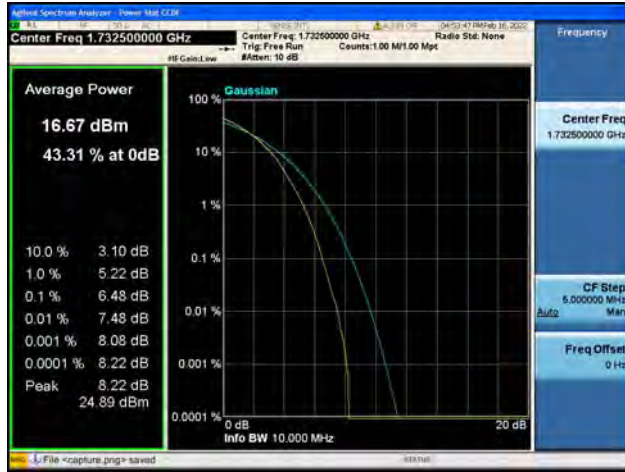
Band4 / 10MHz / Mid CH / QPSK



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

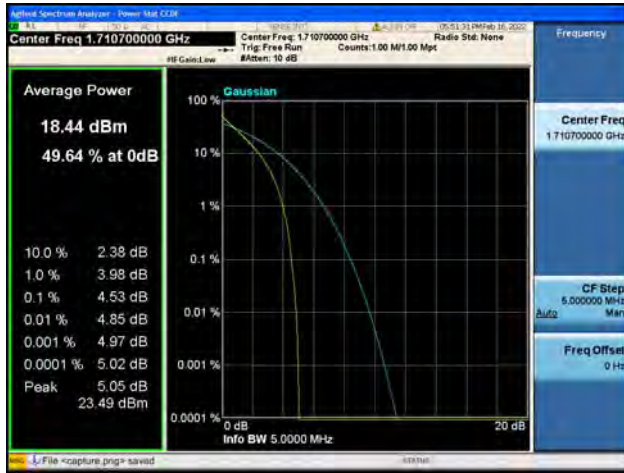


Band4 / 20MHz / High CH / 64QAM

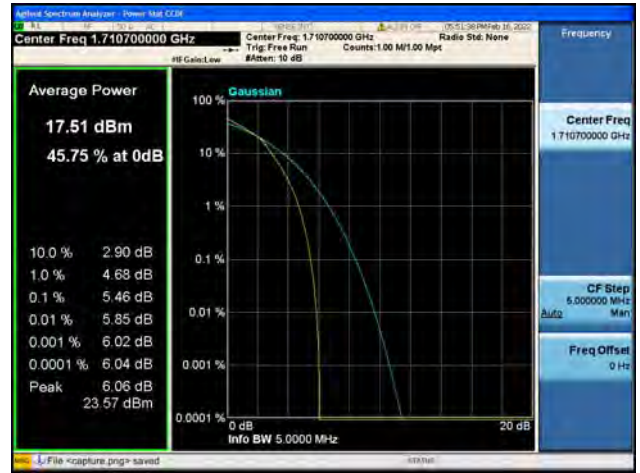




Band66 / 1.4MHz / Low CH / QPSK



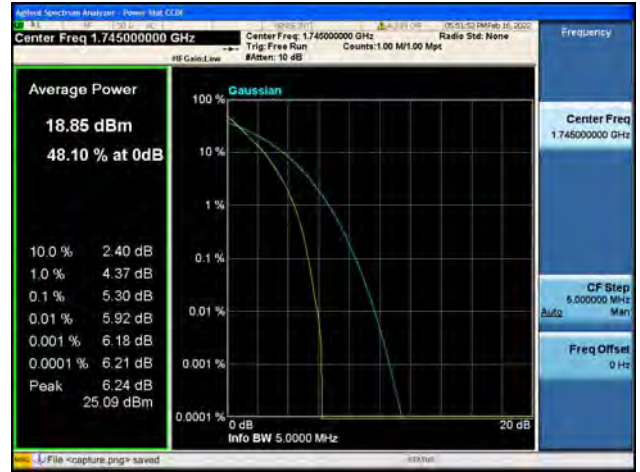
Band66 / 1.4MHz / Low CH / 16QAM



Band66 / 1.4MHz / Low CH / 64QAM



Band66 / 1.4MHz / Mid CH / QPSK



Band66 / 1.4MHz / Mid CH / 16QAM

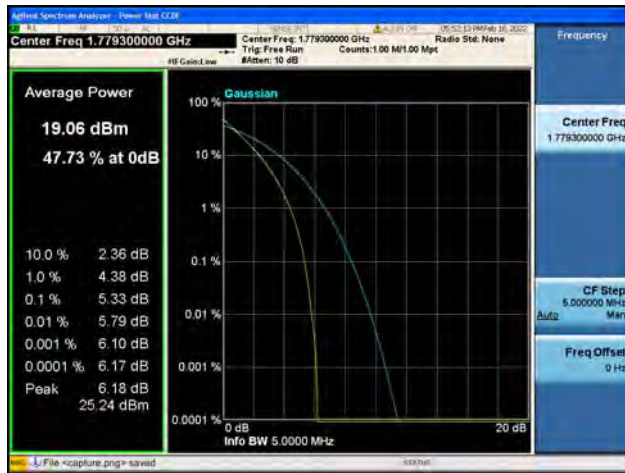


Band66 / 1.4MHz / Mid CH / 64QAM





Band66 / 1.4MHz / High CH / QPSK



Band66 / 1.4MHz / High CH / 16QAM



Band66 / 1.4MHz / High CH / 64QAM



Band66 / 3MHz / Low CH / QPSK



Band66 / 3MHz / Low CH / 16QAM

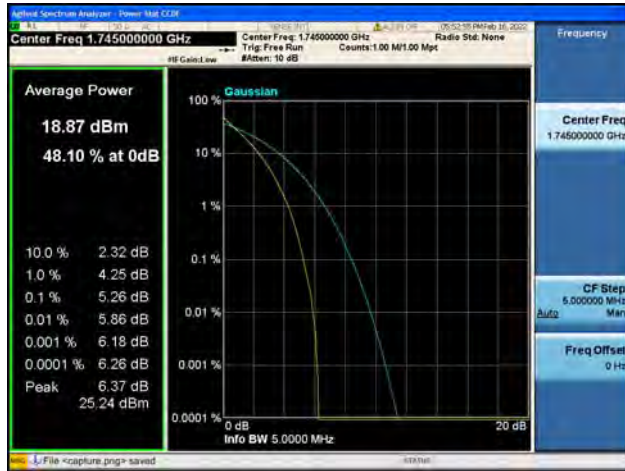


Band66 / 3MHz / Low CH / 64QAM





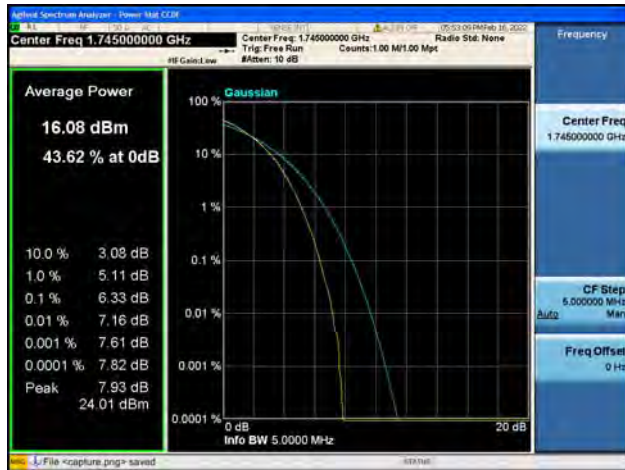
Band66 / 3MHz / Mid CH / QPSK



Band66 / 3MHz / Mid CH / 16QAM



Band66 / 3MHz / Mid CH / 64QAM



Band66 / 3MHz / High CH / QPSK



Band66 / 3MHz / High CH / 16QAM



Band66 / 3MHz / High CH / 64QAM





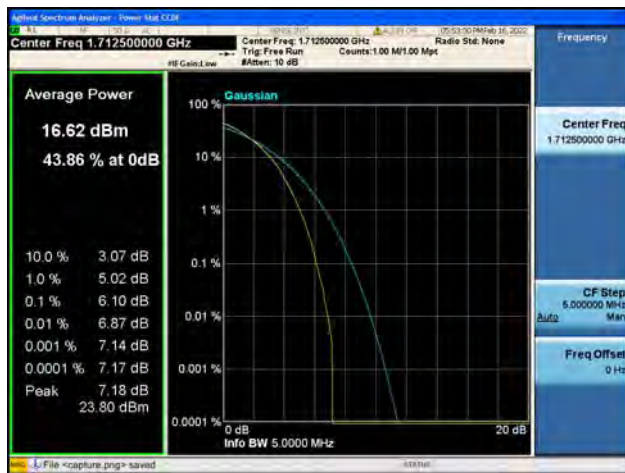
Band66 / 5MHz / Low CH / QPSK



Band66 / 5MHz / Low CH / 16QAM



Band66 / 5MHz / Low CH / 64QAM



Band66 / 5MHz / Mid CH / QPSK



Band66 / 5MHz / Mid CH / 16QAM



Band66 / 5MHz / Mid CH / 64QAM

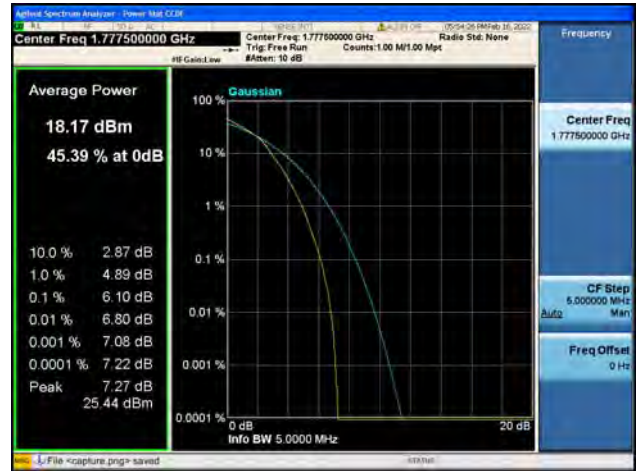




Band66 / 5MHz / High CH / QPSK



Band66 / 5MHz / High CH / 16QAM



Band66 / 5MHz / High CH / 64QAM



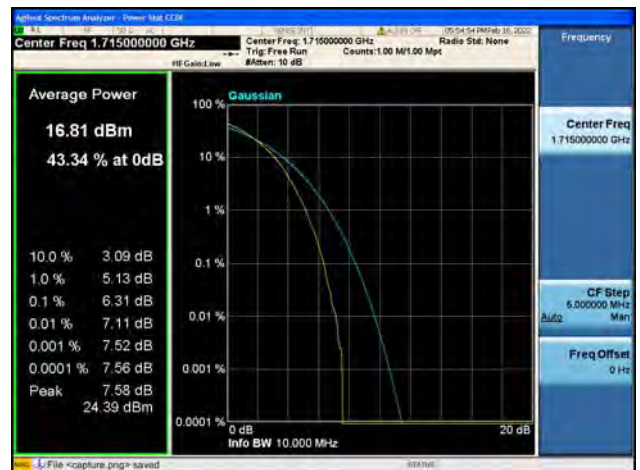
Band66 / 10MHz / Low CH / QPSK



Band66 / 10MHz / Low CH / 16QAM



Band66 / 10MHz / Low CH / 64QAM





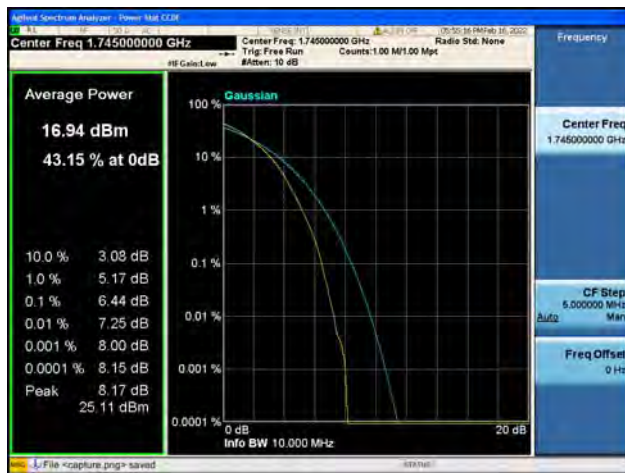
Band66 / 10MHz / Mid CH / QPSK



Band66 / 10MHz / Mid CH / 16QAM



Band66 / 10MHz / Mid CH / 64QAM



Band66 / 10MHz / High CH / QPSK



Band66 / 10MHz / High CH / 16QAM

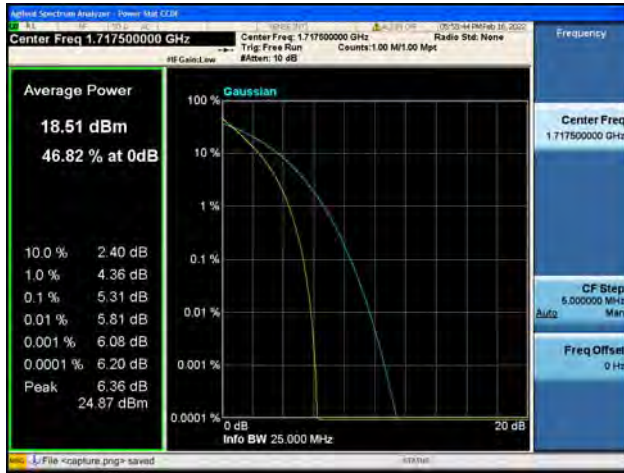


Band66 / 10MHz / High CH / 64QAM





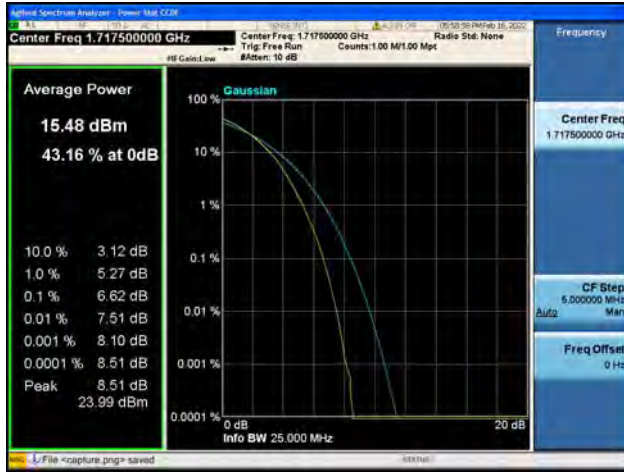
Band66 / 15MHz / Low CH / QPSK



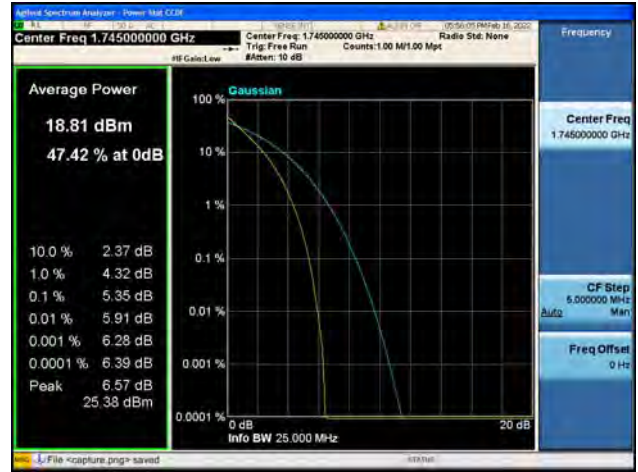
Band66 / 15MHz / Low CH / 16QAM



Band66 / 15MHz / Low CH / 64QAM



Band66 / 15MHz / Mid CH / QPSK



Band66 / 15MHz / Mid CH / 16QAM

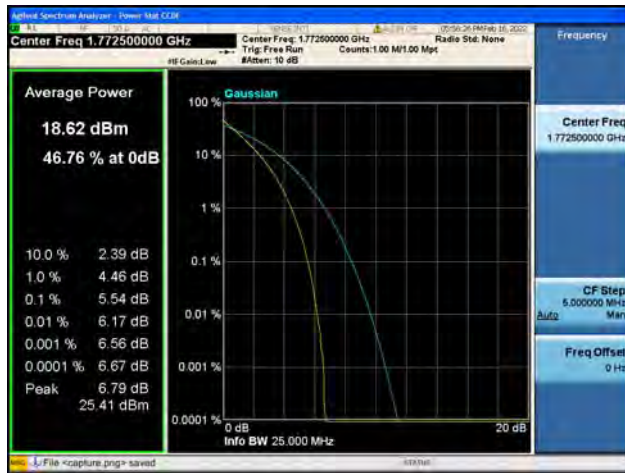


Band66 / 15MHz / Mid CH / 64QAM





Band66 / 15MHz / High CH / QPSK



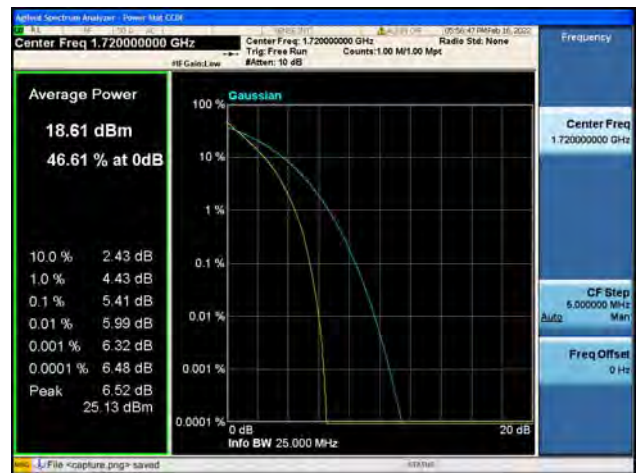
Band66 / 15MHz / High CH / 16QAM



Band66 / 15MHz / High CH / 64QAM



Band66 / 20MHz / Low CH / QPSK



Band66 / 20MHz / Low CH / 16QAM



Band66 / 20MHz / Low CH / 64QAM





Band66 / 20MHz / Mid CH / QPSK



Band66 / 20MHz / Mid CH / 16QAM



Band66 / 20MHz / Mid CH / 64QAM



Band66 / 20MHz / High CH / QPSK



Band66 / 20MHz / High CH / 16QAM



Band66 / 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.

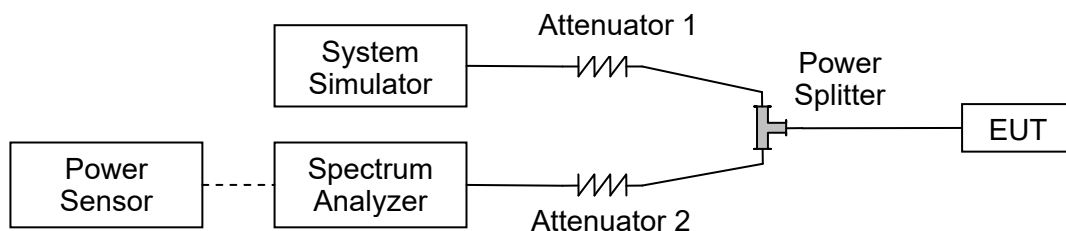
Additional requirement for LTE Band 7, 38, 41:

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



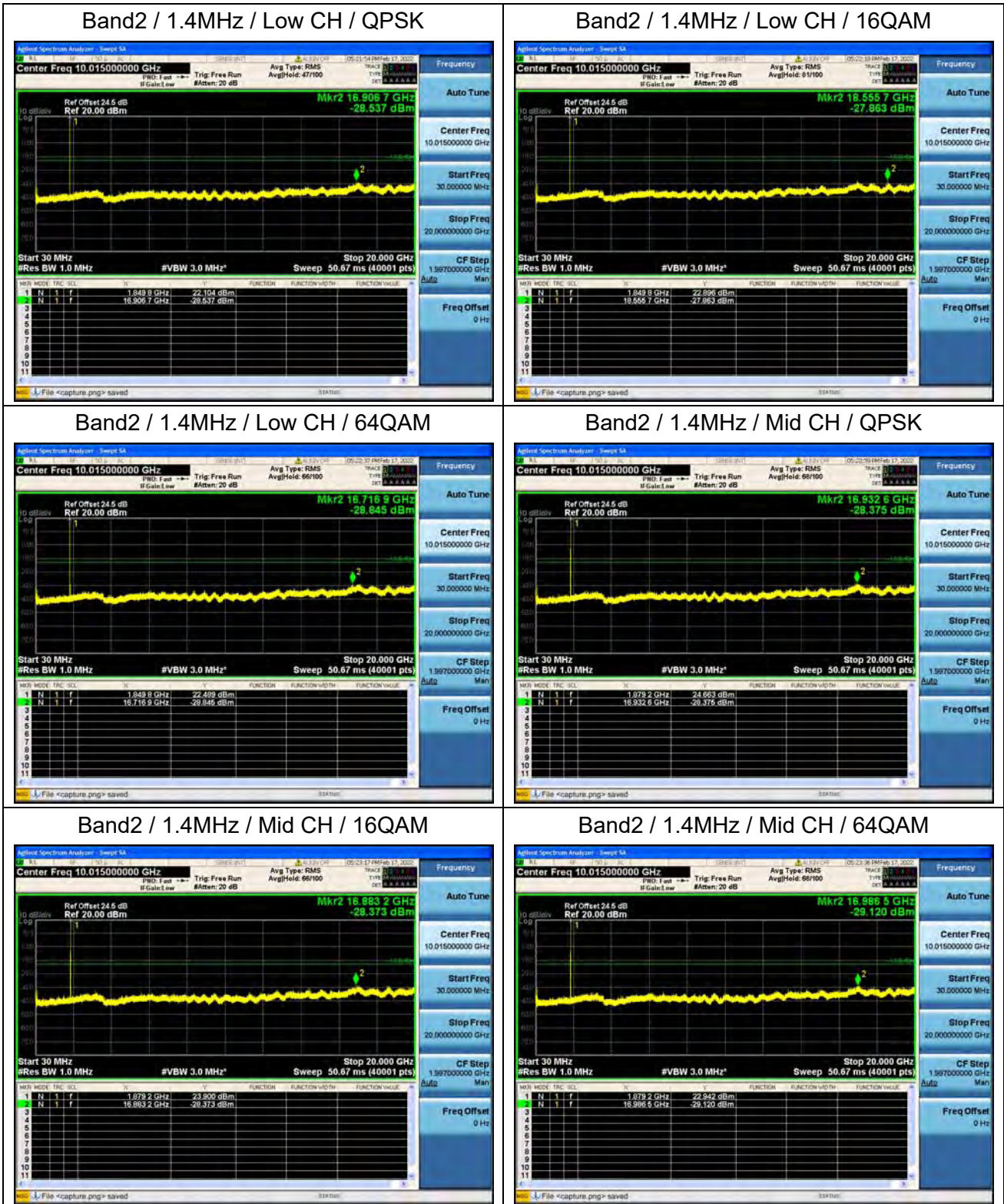
The EUT is coupled to the Spectrum Analyzer (SA) and the System Simulator (SS) with Attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading. The EUT is commanded by the SS to operate at the maximum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

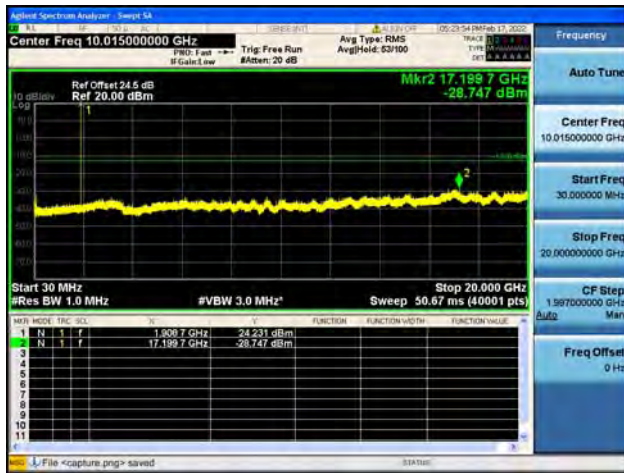


2.5.4. Test Result





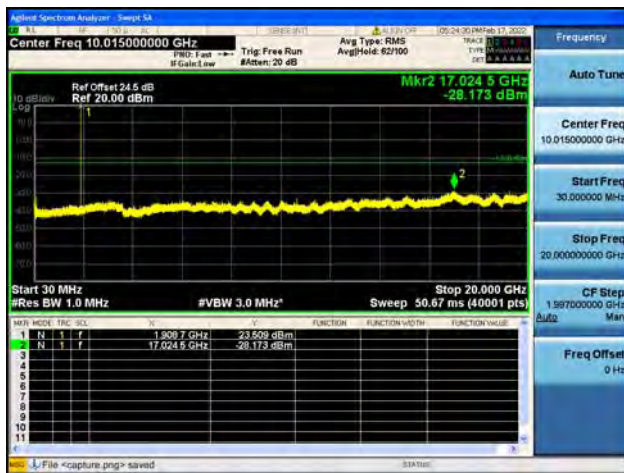
Band2 / 1.4MHz / High CH / QPSK



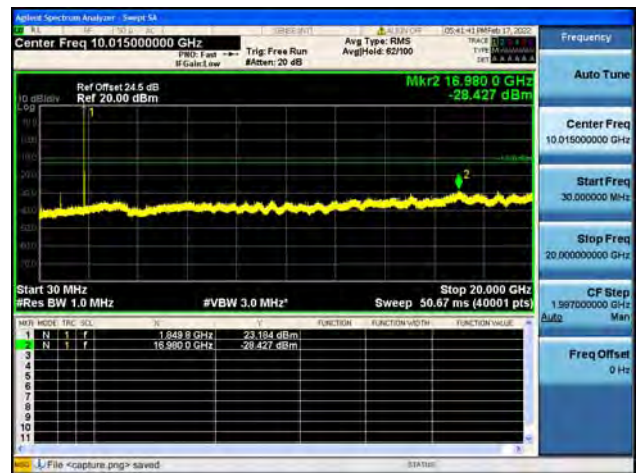
Band2 / 1.4MHz / High CH / 16QAM



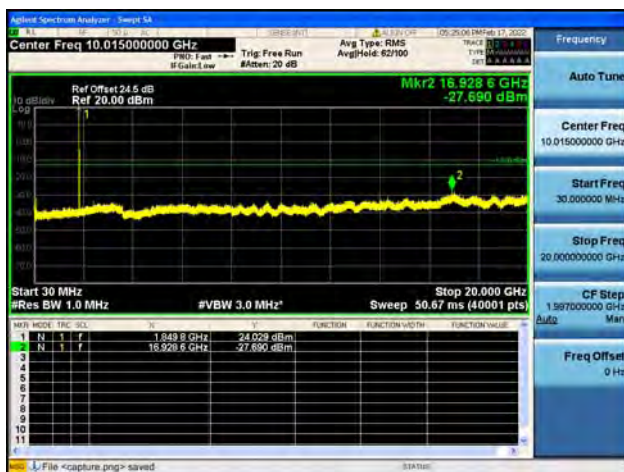
Band2 / 1.4MHz / High CH / 64QAM



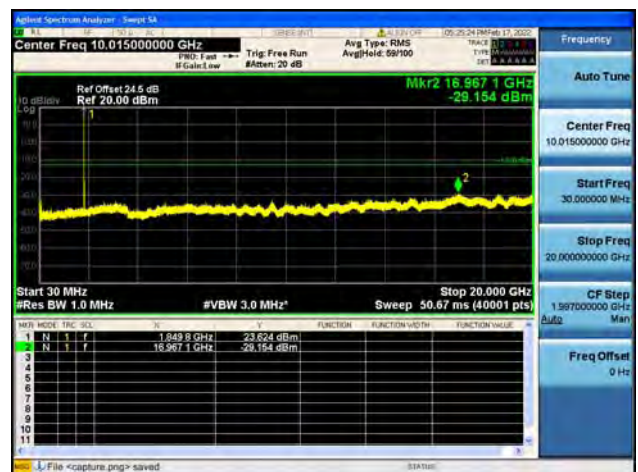
Band2 / 3MHz / Low CH / QPSK



Band2 / 3MHz / Low CH / 16QAM

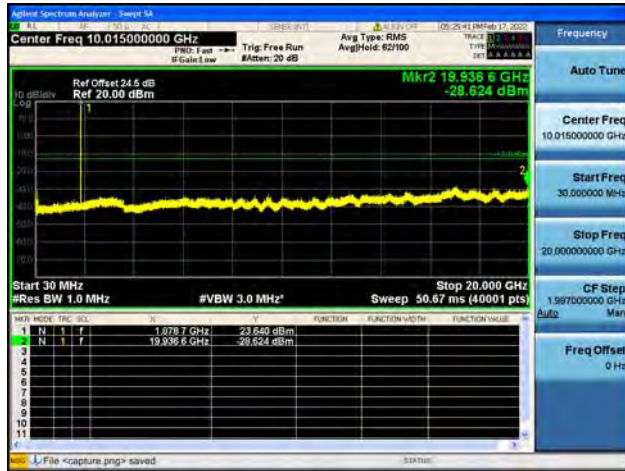


Band2 / 3MHz / Low CH / 64QAM

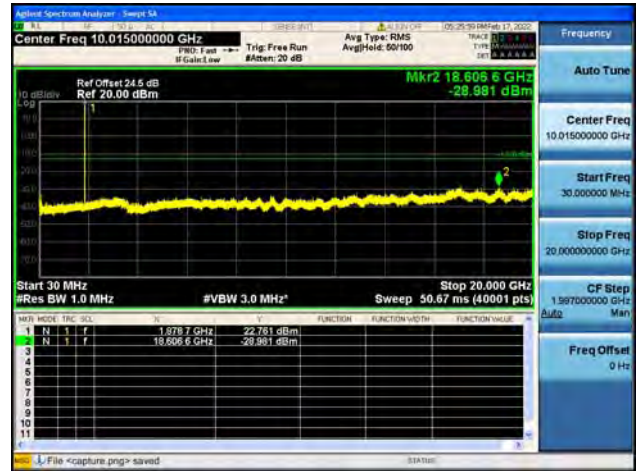




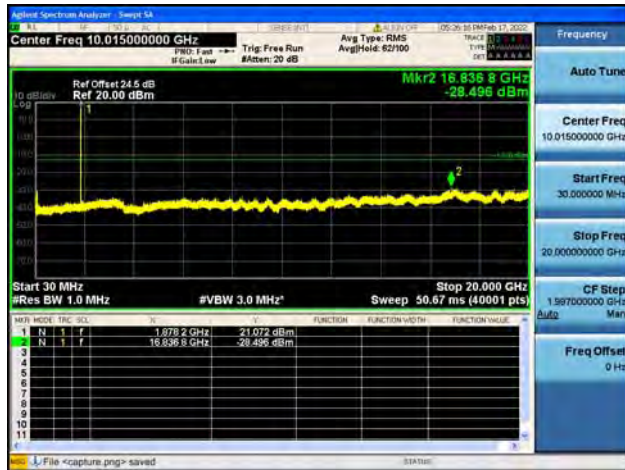
Band2 / 3MHz / Mid CH / QPSK



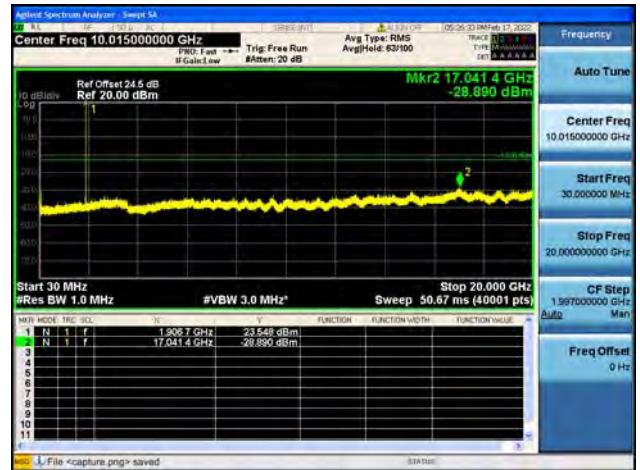
Band2 / 3MHz / Mid CH / 16QAM



Band2 / 3MHz / Mid CH / 64QAM



Band2 / 3MHz / High CH / QPSK



Band2 / 3MHz / High CH / 16QAM

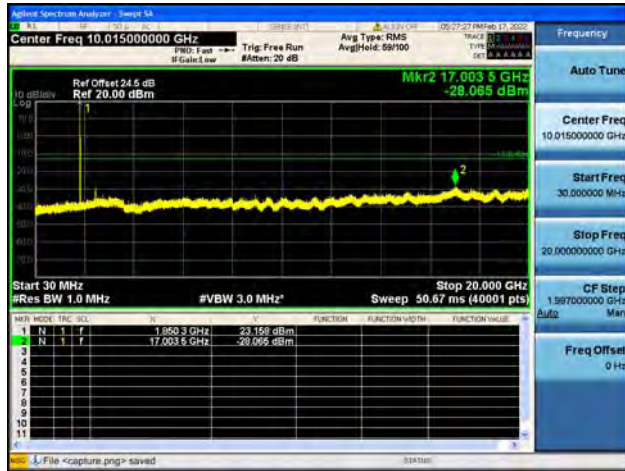


Band2 / 3MHz / High CH / 64QAM





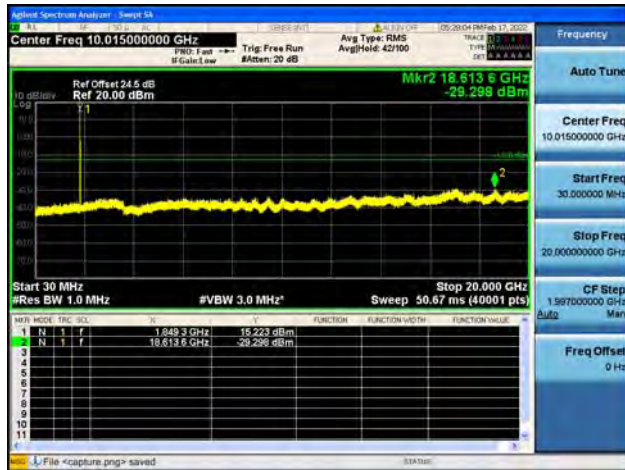
Band2 / 5MHz / Low CH / QPSK



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





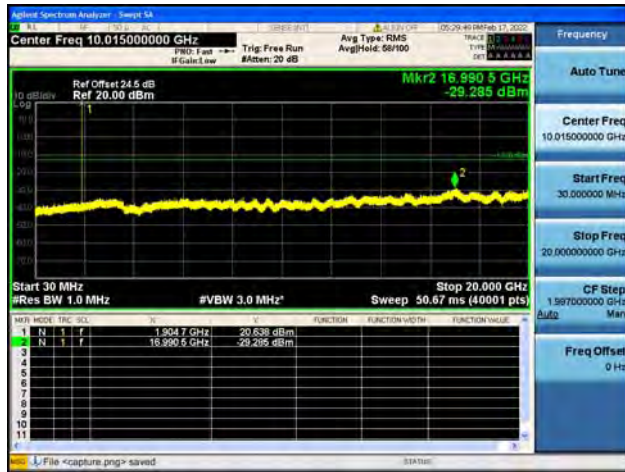
Band2 / 5MHz / High CH / QPSK



Band2 / 5MHz / High CH / 16QAM



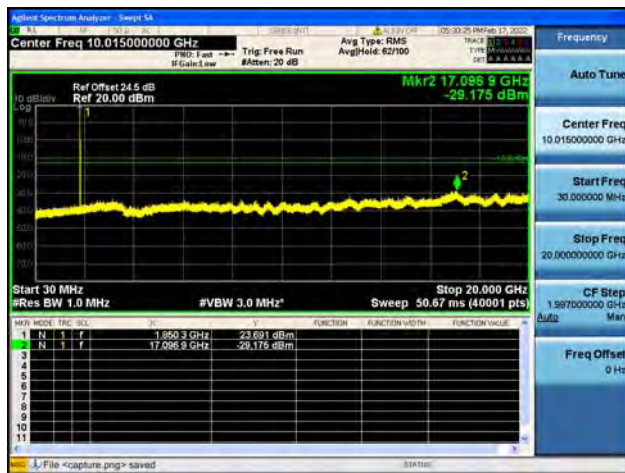
Band2 / 5MHz / High CH / 64QAM



Band2 / 10MHz / Low CH / QPSK



Band2 / 10MHz / Low CH / 16QAM



Band2 / 10MHz / Low CH / 64QAM

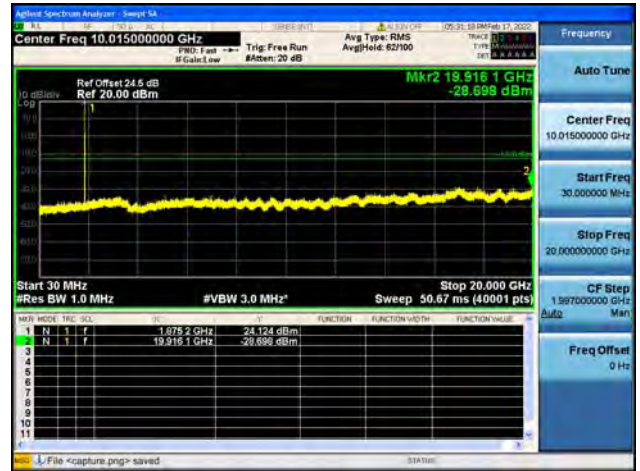




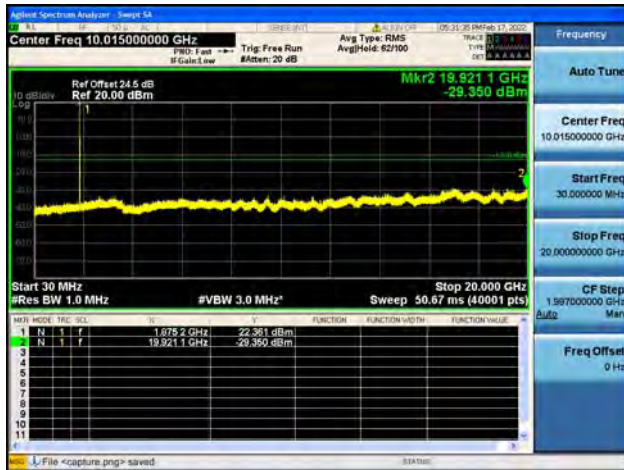
Band2 / 10MHz / Mid CH / QPSK



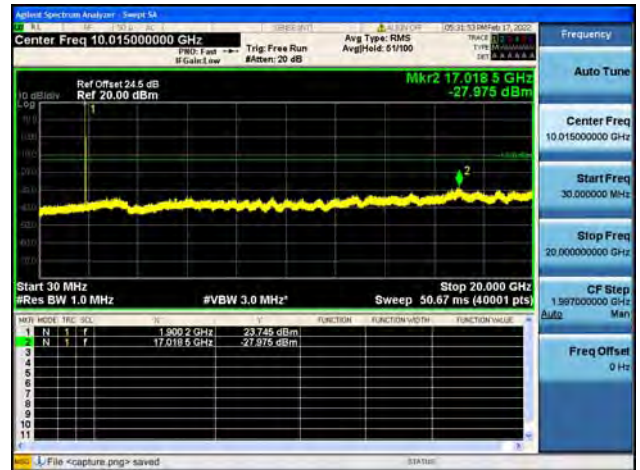
Band2 / 10MHz / Mid CH / 16QAM



Band2 / 10MHz / Mid CH / 64QAM



Band2 / 10MHz / High CH / QPSK



Band2 / 10MHz / High CH / 16QAM

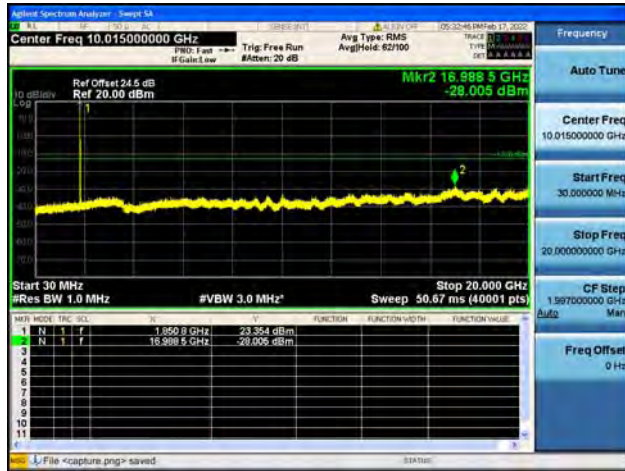


Band2 / 10MHz / High CH / 64QAM

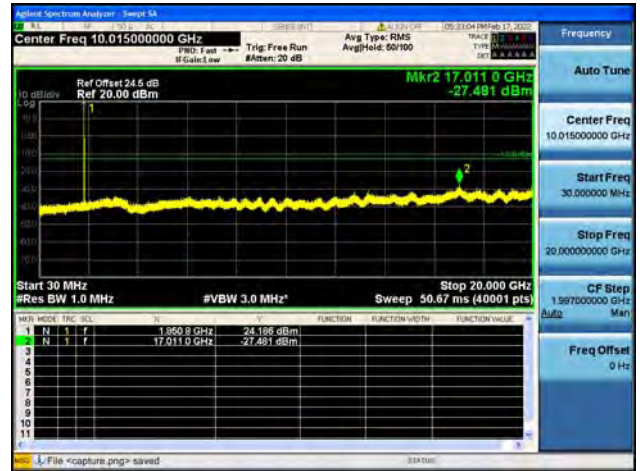




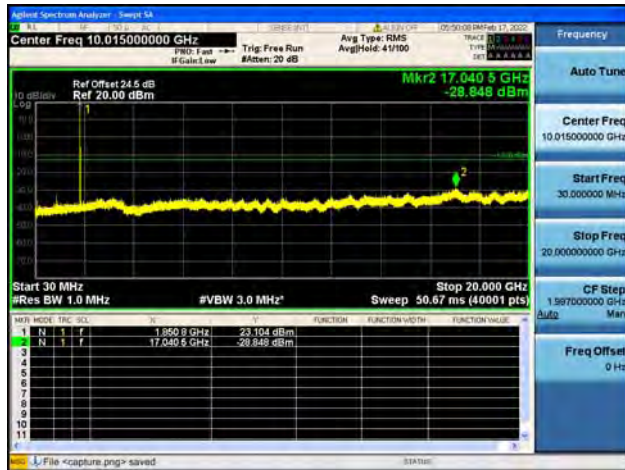
Band2 / 15MHz / Low CH / QPSK



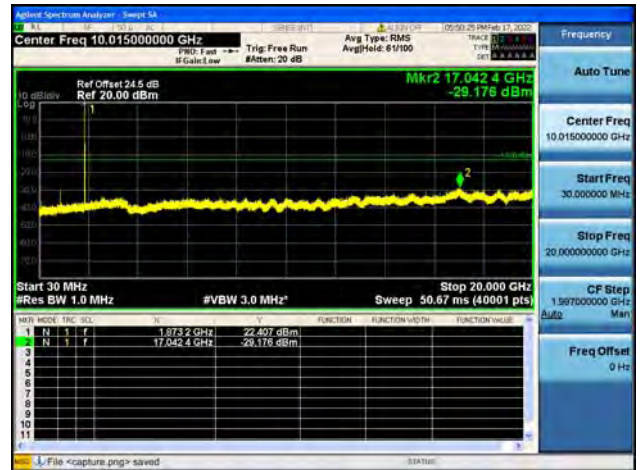
Band2 / 15MHz / Low CH / 16QAM



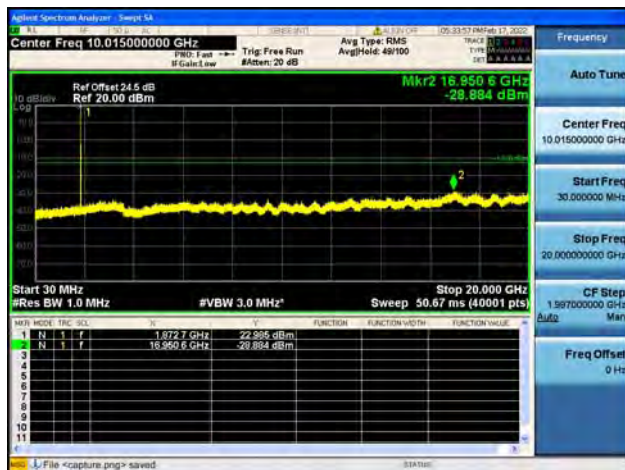
Band2 / 15MHz / Low CH / 64QAM



Band2 / 15MHz / Mid CH / QPSK



Band2 / 15MHz / Mid CH / 16QAM

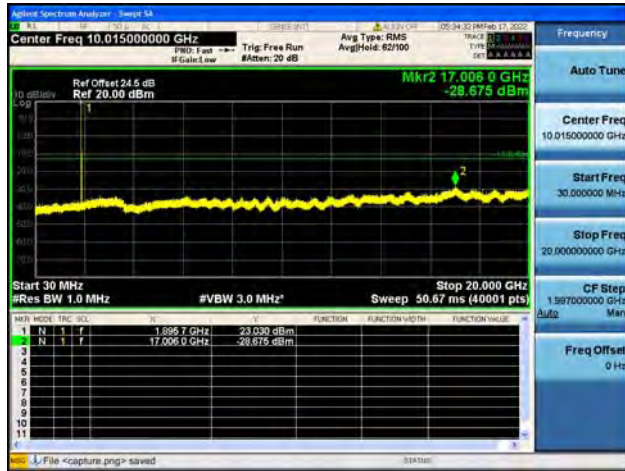


Band2 / 15MHz / Mid CH / 64QAM





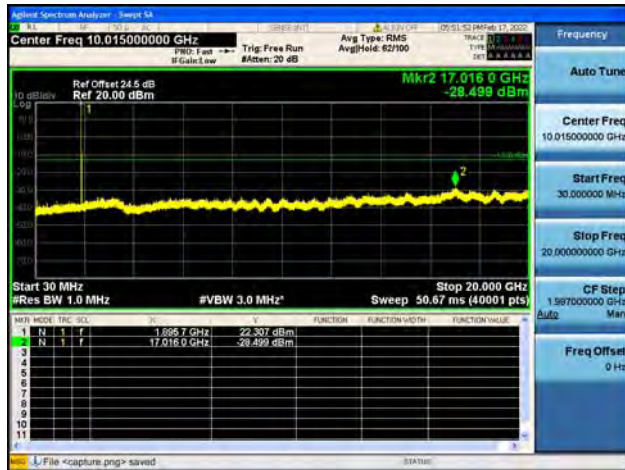
Band2 / 15MHz / High CH / QPSK



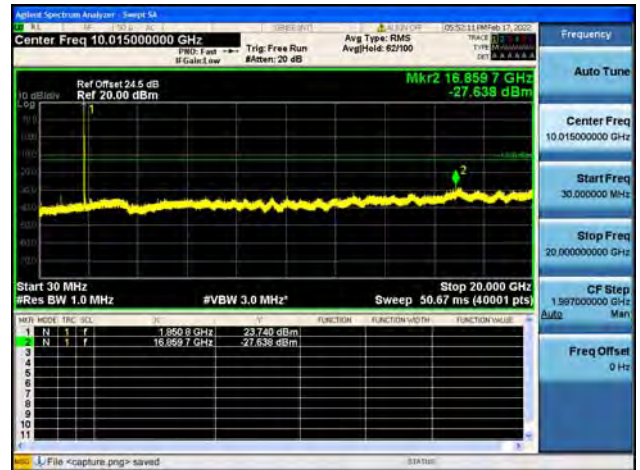
Band2 / 15MHz / High CH / 16QAM



Band2 / 15MHz / High CH / 64QAM



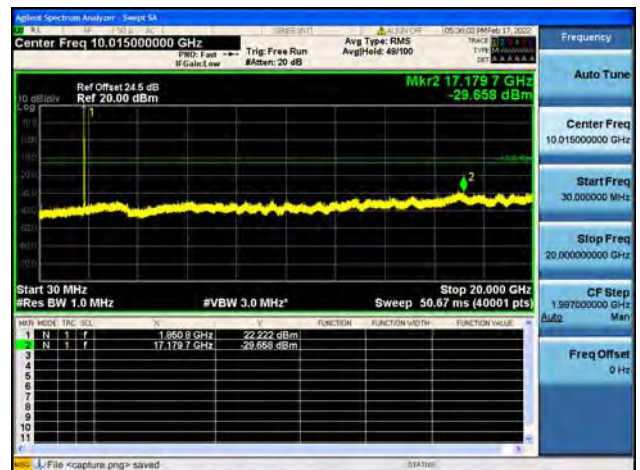
Band2 / 20MHz / Low CH / QPSK



Band2 / 20MHz / Low CH / 16QAM

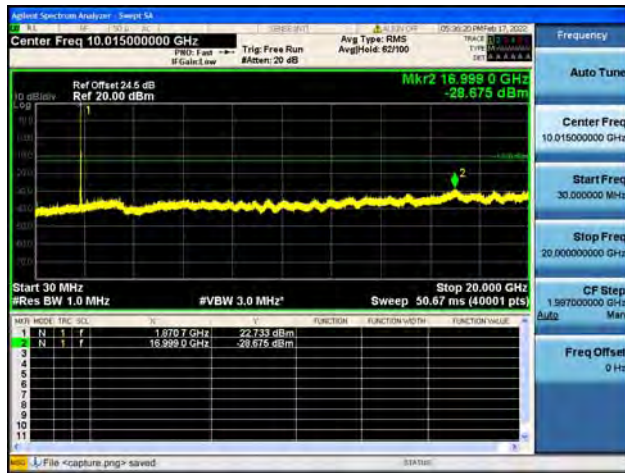


Band2 / 20MHz / Low CH / 64QAM





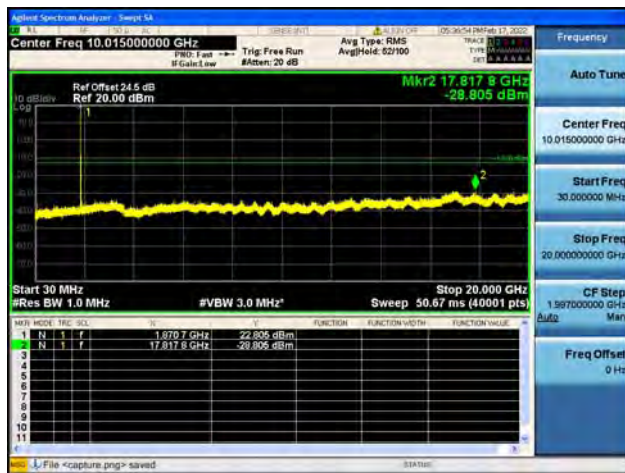
Band2 / 20MHz / Mid CH / QPSK



Band2 / 20MHz / Mid CH / 16QAM



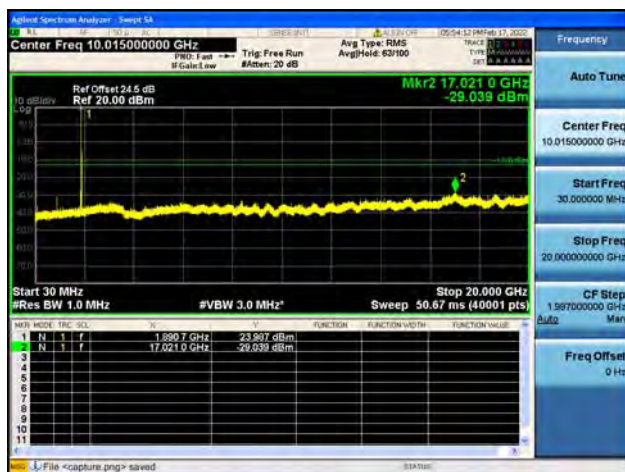
Band2 / 20MHz / Mid CH / 64QAM



Band2 / 20MHz / High CH / QPSK



Band2 / 20MHz / High CH / 16QAM



Band2 / 20MHz / High CH / 64QAM





Band4 / 1.4MHz / Low CH / QPSK



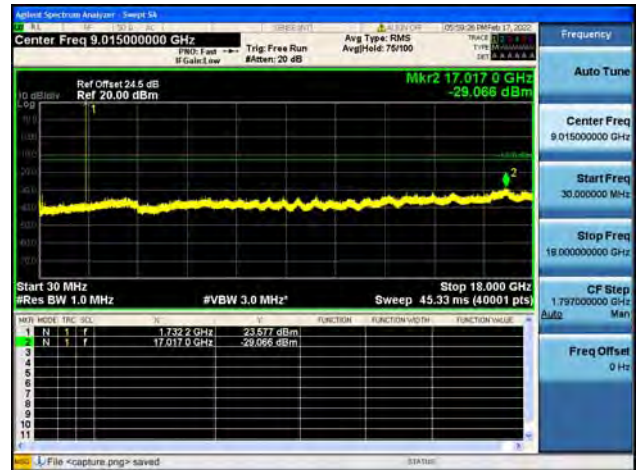
Band4 / 1.4MHz / Low CH / 16QAM



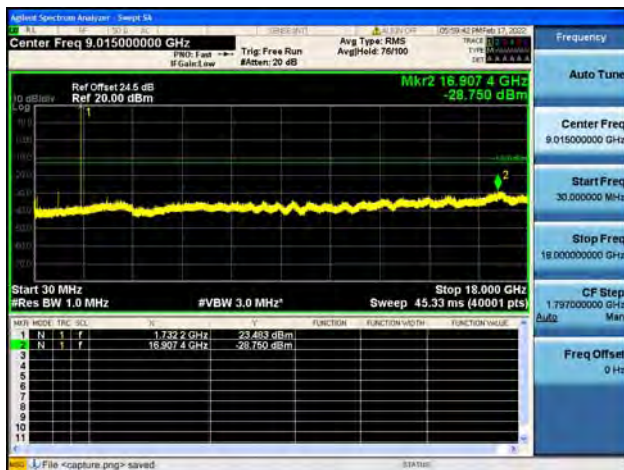
Band4 / 1.4MHz / Low CH / 64QAM



Band4 / 1.4MHz / Mid CH / QPSK



Band4 / 1.4MHz / Mid CH / 16QAM



Band4 / 1.4MHz / Mid CH / 64QAM





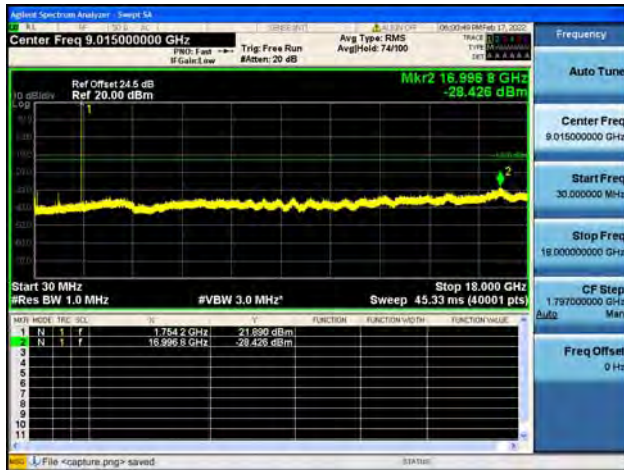
Band4 / 1.4MHz / High CH / QPSK



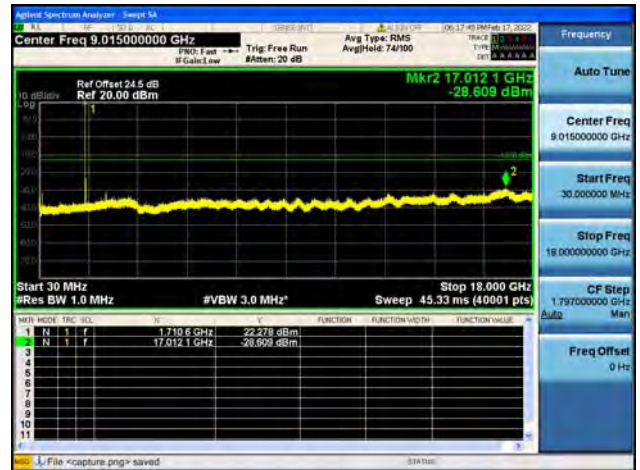
Band4 / 1.4MHz / High CH / 16QAM



Band4 / 1.4MHz / High CH / 64QAM



Band4 / 3MHz / Low CH / QPSK



Band4 / 3MHz / Low CH / 16QAM

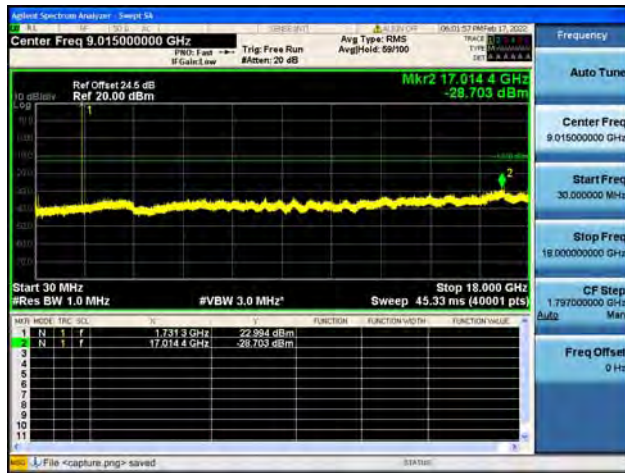


Band4 / 3MHz / Low CH / 64QAM





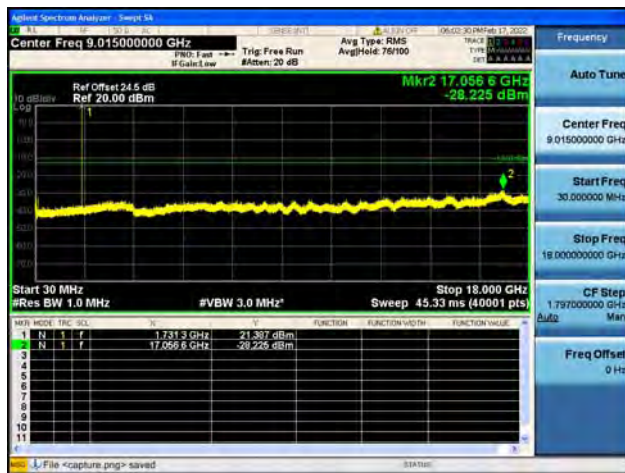
Band4 / 3MHz / Mid CH / QPSK



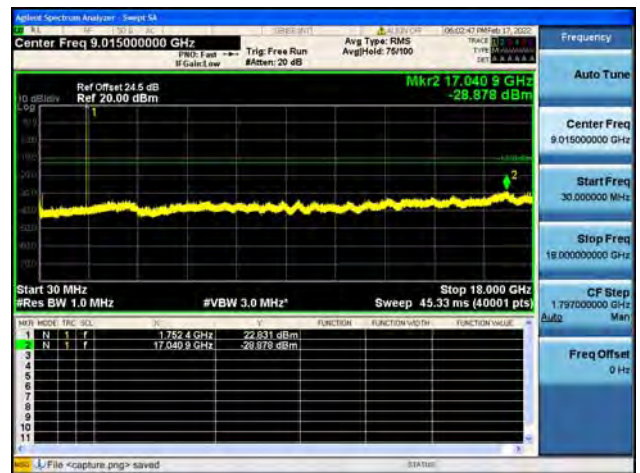
Band4 / 3MHz / Mid CH / 16QAM



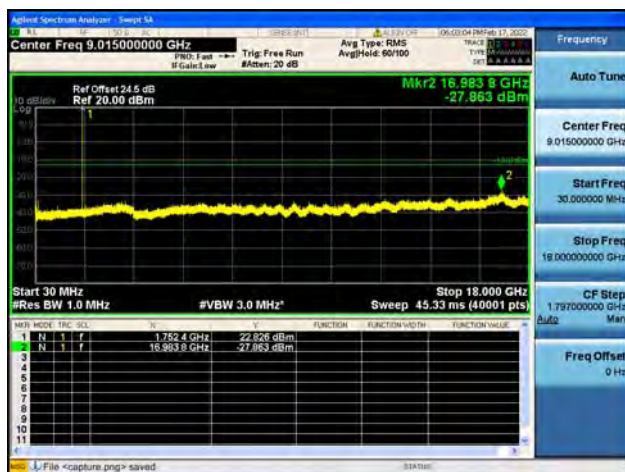
Band4 / 3MHz / Mid CH / 64QAM



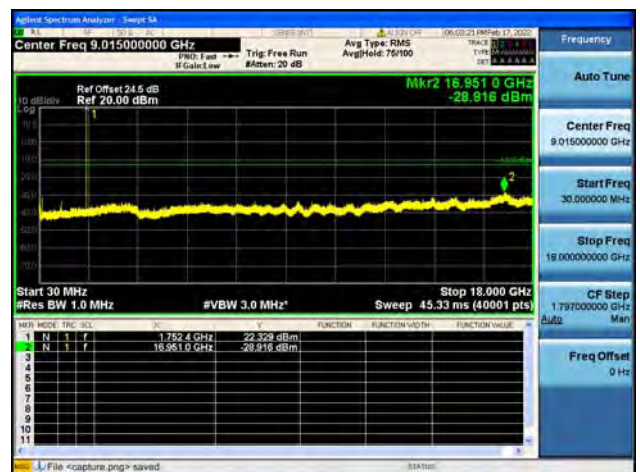
Band4 / 3MHz / High CH / QPSK



Band4 / 3MHz / High CH / 16QAM



Band4 / 3MHz / High CH / 64QAM





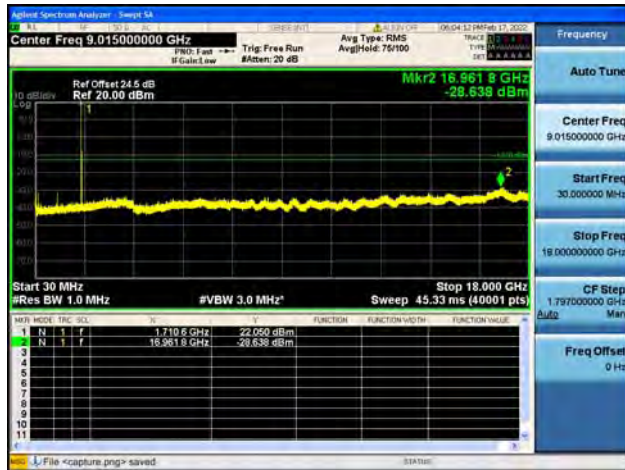
Band4 / 5MHz / Low CH / QPSK



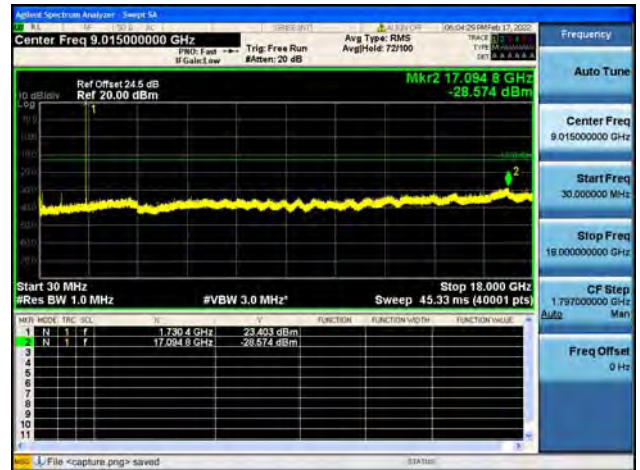
Band4 / 5MHz / Low CH / 16QAM



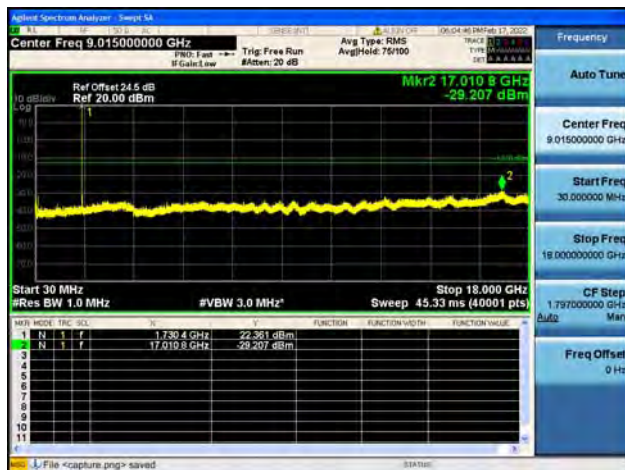
Band4 / 5MHz / Low CH / 64QAM



Band4 / 5MHz / Mid CH / QPSK



Band4 / 5MHz / Mid CH / 16QAM



Band4 / 5MHz / Mid CH / 64QAM

