

2.3. Frequency Stability

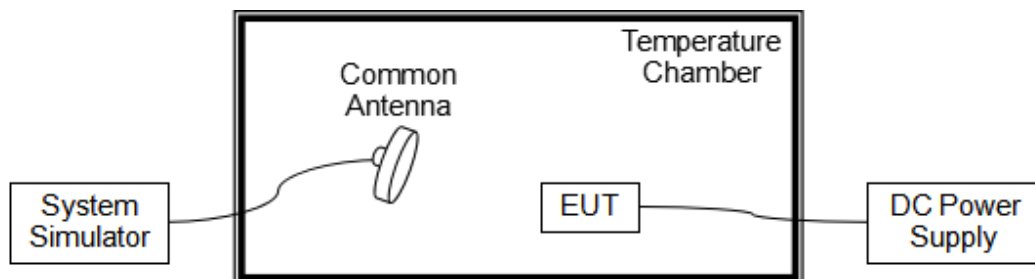
2.3.1. Requirement

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 -20°C to 50°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	3.80	+20 (Ref)	52	0.028	PASS
100		-20	-30	-0.016	
100		-10	62	0.033	
100		0	-54	-0.029	
100		+10	37	0.020	
100		+20	-12	-0.006	
100		+30	-40	-0.021	
100		+40	-53	-0.028	
100		+50	30	0.016	
115	4.35	+20	-12	-0.006	
85	3.23	+20	27	-0.014	

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	3.80	+20 (Ref)	31	0.018	PASS
100		-20	50	0.029	
100		-10	42	0.024	
100		0	-13	-0.008	
100		+10	-32	-0.018	
100		+20	21	0.012	
100		+30	37	0.021	
100		+40	43	0.025	
100		+50	22	0.013	
115	4.35	+20	-16	-0.009	
85	3.23	+20	38	-0.022	



LTE Band 5, QPSK, Channel 20525, Frequency 836.5MHz					
Limit= ± 2.5 ppm					
Voltage (%)	Power (VDC)	Temp ($^{\circ}$ C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
100	3.80	+20 (Ref)	20	0.024	PASS
100		-20	26	0.031	
100		-10	33	0.039	
100		0	-41	-0.049	
100		+10	-35	-0.042	
100		+20	36	0.043	
100		+30	27	0.032	
100		+40	-11	-0.013	
100		+50	33	0.039	
115		4.35	+20	-52	
85	3.23	+20	62	-0.074	

LTE Band 7, QPSK, Channel 21100, Frequency 2535MHz					
Limit= Within Authorized Band					
Voltage (%)	Power (VDC)	Temp ($^{\circ}$ C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
100	3.80	+20 (Ref)	26	0.010	PASS
100		-20	31	0.012	
100		-10	-20	-0.008	
100		0	32	0.013	
100		+10	-17	-0.007	
100		+20	-35	-0.014	
100		+30	48	0.019	
100		+40	36	0.014	
100		+50	25	0.010	
115		4.35	+20	46	
85	3.23	+20	-34	0.013	



LTE Band 12, QPSK, Channel 23095, Frequency 707.5MHz					
Limit= ± 2.5 ppm					
Voltage (%)	Power (VDC)	Temp ($^{\circ}$ C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
100	3.80	+20 (Ref)	20	0.028	PASS
100		-20	32	0.045	
100		-10	-46	-0.065	
100		0	35	0.049	
100		+10	-19	-0.027	
100		+20	57	0.081	
100		+30	-25	-0.035	
100		+40	36	0.051	
100		+50	-17	-0.024	
115		4.35	+20	27	
85	3.23	+20	-23	0.033	

LTE Band 17, QPSK, Channel 23790, Frequency 710MHz					
Limit= ± 2.5 ppm					
Voltage (%)	Power (VDC)	Temp ($^{\circ}$ C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
100	3.80	+20 (Ref)	50	0.070	PASS
100		-20	25	0.035	
100		-10	-31	-0.044	
100		0	42	0.059	
100		+10	-17	-0.024	
100		+20	-32	-0.045	
100		+30	57	0.080	
100		+40	38	0.054	
100		+50	33	0.046	
115		4.35	+20	25	
85	3.23	+20	-63	0.089	



LTE Band 38, QPSK, Channel 38000, Frequency 2595MHz					
Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp (°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
100	3.80	+20 (Ref)	-40	-0.015	PASS
100		-20	26	0.010	
100		-10	-15	-0.006	
100		0	35	0.013	
100		+10	-26	-0.010	
100		+20	-53	-0.020	
100		+30	43	0.017	
100		+40	-22	-0.008	
100		+50	18	0.007	
115		4.35	+20	-38	
85	3.23	+20	14	-0.005	

LTE Band 40, Block A, QPSK, Channel 38750, Frequency 2310MHz					
Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp (°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
100	3.80	+20 (Ref)	11	0.005	PASS
100		-20	-20	-0.009	
100		-10	-23	-0.010	
100		0	13	0.006	
100		+10	55	0.024	
100		+20	-34	-0.015	
100		+30	-16	-0.007	
100		+40	-44	-0.019	
100		+50	30	0.013	
115		4.35	+20	53	
85	3.23	+20	37	-0.016	



LTE Band 40 Block B, QPSK, Channel 39200, Frequency 2355MHz					
Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp (°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
100	3.80	+20 (Ref)	20	0.008	PASS
100		-20	33	0.014	
100		-10	19	0.008	
100		0	23	0.010	
100		+10	12	0.005	
100		+20	-34	-0.014	
100		+30	-5	-0.002	
100		+40	-58	-0.025	
100		+50	37	0.016	
115		4.35	+20	26	
85	3.23	+20	14	-0.006	

LTE Band 41, QPSK, Channel 40620, Frequency 2593MHz					
Limit=±2.5ppm					
Voltage (%)	Power (VDC)	Temp (°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
100	3.80	+20 (Ref)	-31	-0.012	PASS
100		-20	60	0.023	
100		-10	-25	-0.010	
100		0	-12	-0.005	
100		+10	39	0.015	
100		+20	55	0.021	
100		+30	-31	-0.012	
100		+40	-63	-0.024	
100		+50	-22	-0.008	
115		4.35	+20	-17	
85	3.23	+20	-20	0.008	

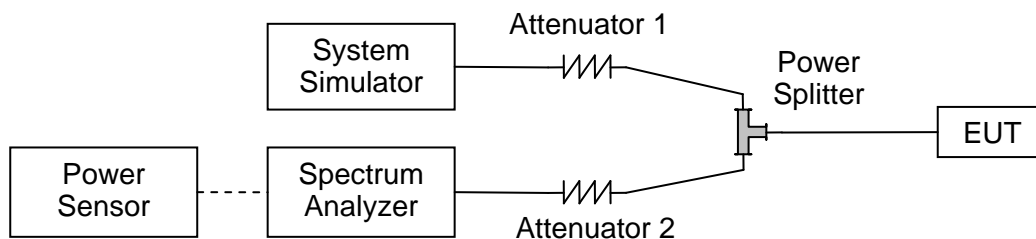
2.4. Peak to Average Ratio

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

Test Set:



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

2.4.3. Test Procedure

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

2.4.4. Test Result

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



LTE Band 2					
BW(MHz)	Channel Level	Modulation	PAR Radio(dB)	Limit(dB)	Verdict
1.4	Low	QPSK	4.26	<=13	PASS
	Low	16QAM	5.81	<=13	PASS
	Low	64QAM	5.78	<=13	PASS
	Mid	QPSK	5.21	<=13	PASS
	Mid	16QAM	5.98	<=13	PASS
	Mid	64QAM	5.97	<=13	PASS
	High	QPSK	4.50	<=13	PASS
	High	16QAM	5.41	<=13	PASS
	High	64QAM	5.39	<=13	PASS
3	Low	QPSK	5.12	<=13	PASS
	Low	16QAM	5.96	<=13	PASS
	Low	64QAM	5.82	<=13	PASS
	Mid	QPSK	5.34	<=13	PASS
	Mid	16QAM	6.17	<=13	PASS
	Mid	64QAM	6.09	<=13	PASS
	High	QPSK	4.79	<=13	PASS
	High	16QAM	5.65	<=13	PASS
	High	64QAM	5.55	<=13	PASS
5	Low	QPSK	5.31	<=13	PASS
	Low	16QAM	6.07	<=13	PASS
	Low	64QAM	5.98	<=13	PASS
	Mid	QPSK	5.46	<=13	PASS
	Mid	16QAM	6.21	<=13	PASS
	Mid	64QAM	6.15	<=13	PASS
	High	QPSK	5.12	<=13	PASS
	High	16QAM	5.84	<=13	PASS
	High	64QAM	5.84	<=13	PASS
10	Low	QPSK	5.27	<=13	PASS
	Low	16QAM	6.04	<=13	PASS
	Low	64QAM	6.03	<=13	PASS
	Mid	QPSK	5.50	<=13	PASS
	Mid	16QAM	6.16	<=13	PASS
	Mid	64QAM	6.22	<=13	PASS
	High	QPSK	5.07	<=13	PASS
	High	16QAM	5.77	<=13	PASS
	High	64QAM	5.83	<=13	PASS



15	Low	QPSK	5.11	<=13	PASS
	Low	16QAM	5.82	<=13	PASS
	Low	64QAM	5.83	<=13	PASS
	Mid	QPSK	5.40	<=13	PASS
	Mid	16QAM	6.08	<=13	PASS
	Mid	64QAM	6.09	<=13	PASS
	High	QPSK	4.74	<=13	PASS
	High	16QAM	5.57	<=13	PASS
	High	64QAM	5.57	<=13	PASS
20	Low	QPSK	5.20	<=13	PASS
	Low	16QAM	5.94	<=13	PASS
	Low	64QAM	5.95	<=13	PASS
	Mid	QPSK	5.31	<=13	PASS
	Mid	16QAM	6.14	<=13	PASS
	Mid	64QAM	6.15	<=13	PASS
	High	QPSK	5.01	<=13	PASS
	High	16QAM	5.80	<=13	PASS
	High	64QAM	5.78	<=13	PASS



LTE Band 4					
BW(MHz)	Channel Level	Modulation	PAR Radio(dB)	Limit(dB)	Verdict
1.4	Low	QPSK	4.93	<=13	PASS
	Low	16QAM	5.79	<=13	PASS
	Low	64QAM	5.69	<=13	PASS
	Mid	QPSK	5.19	<=13	PASS
	Mid	16QAM	6.00	<=13	PASS
	Mid	64QAM	5.85	<=13	PASS
	High	QPSK	5.13	<=13	PASS
	High	16QAM	5.98	<=13	PASS
	High	64QAM	5.92	<=13	PASS
3	Low	QPSK	5.13	<=13	PASS
	Low	16QAM	5.93	<=13	PASS
	Low	64QAM	5.72	<=13	PASS
	Mid	QPSK	5.21	<=13	PASS
	Mid	16QAM	6.05	<=13	PASS
	Mid	64QAM	5.95	<=13	PASS
	High	QPSK	5.33	<=13	PASS
	High	16QAM	6.14	<=13	PASS
	High	64QAM	6.02	<=13	PASS
5	Low	QPSK	5.31	<=13	PASS
	Low	16QAM	6.02	<=13	PASS
	Low	64QAM	5.93	<=13	PASS
	Mid	QPSK	5.48	<=13	PASS
	Mid	16QAM	6.02	<=13	PASS
	Mid	64QAM	5.97	<=13	PASS
	High	QPSK	5.51	<=13	PASS
	High	16QAM	6.11	<=13	PASS
	High	64QAM	6.08	<=13	PASS
10	Low	QPSK	5.42	<=13	PASS
	Low	16QAM	6.06	<=13	PASS
	Low	64QAM	5.98	<=13	PASS
	Mid	QPSK	5.52	<=13	PASS
	Mid	16QAM	6.12	<=13	PASS
	Mid	64QAM	6.16	<=13	PASS
	High	QPSK	5.48	<=13	PASS
	High	16QAM	6.13	<=13	PASS
	High	64QAM	6.11	<=13	PASS



15	Low	QPSK	5.27	<=13	PASS
	Low	16QAM	5.97	<=13	PASS
	Low	64QAM	5.92	<=13	PASS
	Mid	QPSK	5.36	<=13	PASS
	Mid	16QAM	5.96	<=13	PASS
	Mid	64QAM	5.96	<=13	PASS
	High	QPSK	5.32	<=13	PASS
	High	16QAM	6.06	<=13	PASS
	High	64QAM	5.98	<=13	PASS
20	Low	QPSK	5.28	<=13	PASS
	Low	16QAM	6.04	<=13	PASS
	Low	64QAM	6.03	<=13	PASS
	Mid	QPSK	5.32	<=13	PASS
	Mid	16QAM	6.10	<=13	PASS
	Mid	64QAM	6.12	<=13	PASS
	High	QPSK	5.36	<=13	PASS
	High	16QAM	6.15	<=13	PASS
	High	64QAM	6.07	<=13	PASS



LTE Band 7					
BW(MHz)	Channel Level	Modulation	PAR Radio(dB)	Limit(dB)	Verdict
5	Low	QPSK	4.35	<=13	PASS
	Low	16QAM	5.40	<=13	PASS
	Low	64QAM	5.29	<=13	PASS
	Mid	QPSK	4.22	<=13	PASS
	Mid	16QAM	3.54	<=13	PASS
	Mid	64QAM	3.21	<=13	PASS
	High	QPSK	4.82	<=13	PASS
	High	16QAM	5.57	<=13	PASS
	High	64QAM	5.60	<=13	PASS
10	Low	QPSK	5.15	<=13	PASS
	Low	16QAM	5.91	<=13	PASS
	Low	64QAM	5.91	<=13	PASS
	Mid	QPSK	4.83	<=13	PASS
	Mid	16QAM	5.64	<=13	PASS
	Mid	64QAM	5.52	<=13	PASS
	High	QPSK	5.15	<=13	PASS
	High	16QAM	5.81	<=13	PASS
	High	64QAM	5.88	<=13	PASS
15	Low	QPSK	5.14	<=13	PASS
	Low	16QAM	6.00	<=13	PASS
	Low	64QAM	6.01	<=13	PASS
	Mid	QPSK	5.00	<=13	PASS
	Mid	16QAM	5.77	<=13	PASS
	Mid	64QAM	5.77	<=13	PASS
	High	QPSK	4.87	<=13	PASS
	High	16QAM	5.73	<=13	PASS
	High	64QAM	5.58	<=13	PASS
20	Low	QPSK	5.07	<=13	PASS
	Low	16QAM	4.58	<=13	PASS
	Low	64QAM	4.37	<=13	PASS
	Mid	QPSK	4.53	<=13	PASS
	Mid	16QAM	3.69	<=13	PASS
	Mid	64QAM	5.78	<=13	PASS
	High	QPSK	4.88	<=13	PASS
	High	16QAM	4.52	<=13	PASS
	High	64QAM	3.57	<=13	PASS



LTE Band 38					
BW(MHz)	Channel Level	Modulation	PAR Radio(dB)	Limit(dB)	Verdict
5	Low	QPSK	6.85	<=13	PASS
	Low	16QAM	8.36	<=13	PASS
	Low	64QAM	9.29	<=13	PASS
	Mid	QPSK	6.24	<=13	PASS
	Mid	16QAM	8.00	<=13	PASS
	Mid	64QAM	9.41	<=13	PASS
	High	QPSK	10.99	<=13	PASS
	High	16QAM	9.41	<=13	PASS
	High	64QAM	9.63	<=13	PASS
10	Low	QPSK	7.94	<=13	PASS
	Low	16QAM	10.23	<=13	PASS
	Low	64QAM	8.62	<=13	PASS
	Mid	QPSK	7.33	<=13	PASS
	Mid	16QAM	8.56	<=13	PASS
	Mid	64QAM	10.69	<=13	PASS
	High	QPSK	7.95	<=13	PASS
	High	16QAM	9.49	<=13	PASS
	High	64QAM	10.86	<=13	PASS
15	Low	QPSK	8.99	<=13	PASS
	Low	16QAM	8.36	<=13	PASS
	Low	64QAM	8.48	<=13	PASS
	Mid	QPSK	8.60	<=13	PASS
	Mid	16QAM	7.79	<=13	PASS
	Mid	64QAM	7.61	<=13	PASS
	High	QPSK	7.75	<=13	PASS
	High	16QAM	7.81	<=13	PASS
	High	64QAM	10.07	<=13	PASS
20	Low	QPSK	9.04	<=13	PASS
	Low	16QAM	9.14	<=13	PASS
	Low	64QAM	10.03	<=13	PASS
	Mid	QPSK	9.11	<=13	PASS
	Mid	16QAM	9.46	<=13	PASS
	Mid	64QAM	9.50	<=13	PASS
	High	QPSK	9.52	<=13	PASS
	High	16QAM	10.61	<=13	PASS
	High	64QAM	7.98	<=13	PASS



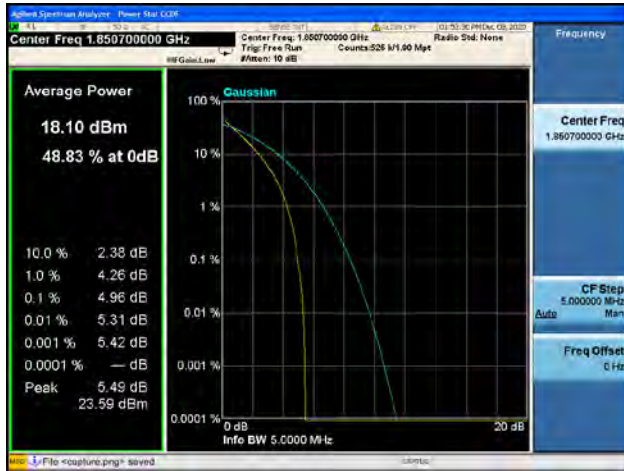
LTE Band 40, Block A					
BW(MHz)	Channel Level	Modulation	PAR Radio(dB)	Limit(dB)	Verdict
5	Low	QPSK	9.00	<=13	PASS
	Low	16QAM	9.68	<=13	PASS
	Low	64QAM	9.47	<=13	PASS
	Mid	QPSK	9.13	<=13	PASS
	Mid	16QAM	10.21	<=13	PASS
	Mid	64QAM	10.78	<=13	PASS
	High	QPSK	9.60	<=13	PASS
	High	16QAM	9.74	<=13	PASS
	High	64QAM	9.41	<=13	PASS
10	Mid	QPSK	8.73	<=13	PASS
	Mid	16QAM	10.38	<=13	PASS
	Mid	64QAM	10.16	<=13	PASS

LTE Band 40, Block B					
BW(MHz)	Channel Level	Modulation	PAR Radio(dB)	Limit(dB)	Verdict
5	Low	QPSK	8.91	<=13	PASS
	Low	16QAM	9.44	<=13	PASS
	Low	64QAM	9.26	<=13	PASS
	Mid	QPSK	8.90	<=13	PASS
	Mid	16QAM	9.29	<=13	PASS
	Mid	64QAM	9.66	<=13	PASS
	High	QPSK	9.00	<=13	PASS
	High	16QAM	9.35	<=13	PASS
	High	64QAM	9.39	<=13	PASS
10	Mid	QPSK	9.24	<=13	PASS
	Mid	16QAM	9.37	<=13	PASS
	Mid	64QAM	9.34	<=13	PASS

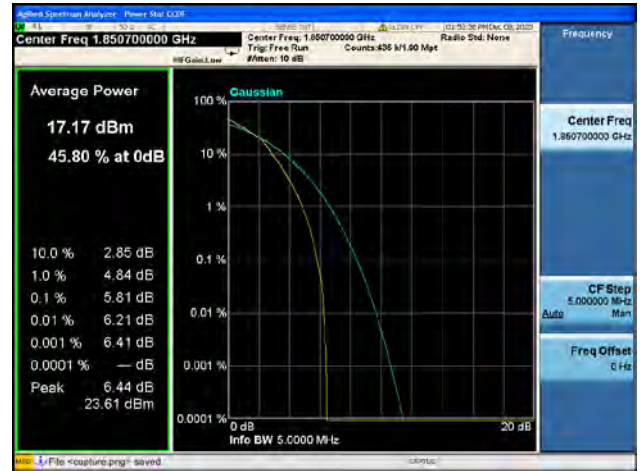


LTE Band 41					
BW(MHz)	Channel Level	Modulation	PAR Radio(dB)	Limit(dB)	Verdict
5	Low	QPSK	8.28	<=13	PASS
	Low	16QAM	8.74	<=13	PASS
	Low	64QAM	8.69	<=13	PASS
	Mid	QPSK	8.34	<=13	PASS
	Mid	16QAM	9.12	<=13	PASS
	Mid	64QAM	9.63	<=13	PASS
	High	QPSK	7.52	<=13	PASS
	High	16QAM	8.43	<=13	PASS
	High	64QAM	8.27	<=13	PASS
10	Low	QPSK	8.26	<=13	PASS
	Low	16QAM	8.97	<=13	PASS
	Low	64QAM	8.82	<=13	PASS
	Mid	QPSK	8.81	<=13	PASS
	Mid	16QAM	9.60	<=13	PASS
	Mid	64QAM	9.71	<=13	PASS
	High	QPSK	8.10	<=13	PASS
	High	16QAM	8.30	<=13	PASS
	High	64QAM	8.83	<=13	PASS
15	Low	QPSK	7.92	<=13	PASS
	Low	16QAM	8.79	<=13	PASS
	Low	64QAM	8.51	<=13	PASS
	Mid	QPSK	8.31	<=13	PASS
	Mid	16QAM	8.83	<=13	PASS
	Mid	64QAM	9.28	<=13	PASS
	High	QPSK	7.46	<=13	PASS
	High	16QAM	8.32	<=13	PASS
	High	64QAM	8.43	<=13	PASS
20	Low	QPSK	8.13	<=13	PASS
	Low	16QAM	8.99	<=13	PASS
	Low	64QAM	9.09	<=13	PASS
	Mid	QPSK	8.65	<=13	PASS
	Mid	16QAM	9.10	<=13	PASS
	Mid	64QAM	9.48	<=13	PASS
	High	QPSK	8.24	<=13	PASS
	High	16QAM	8.84	<=13	PASS
	High	64QAM	9.03	<=13	PASS

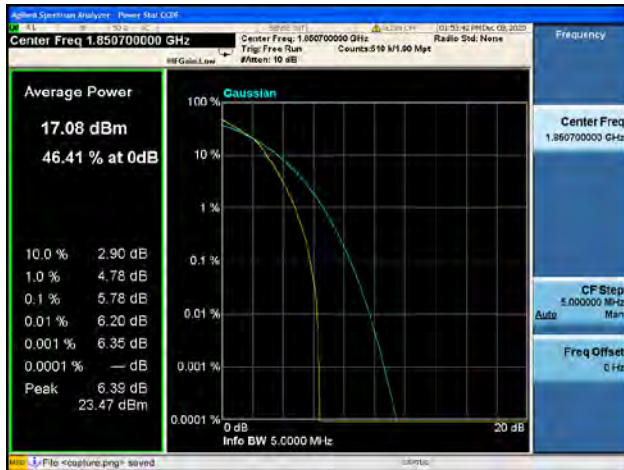
Band2 / 1.4MHz / Low CH / QPSK



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

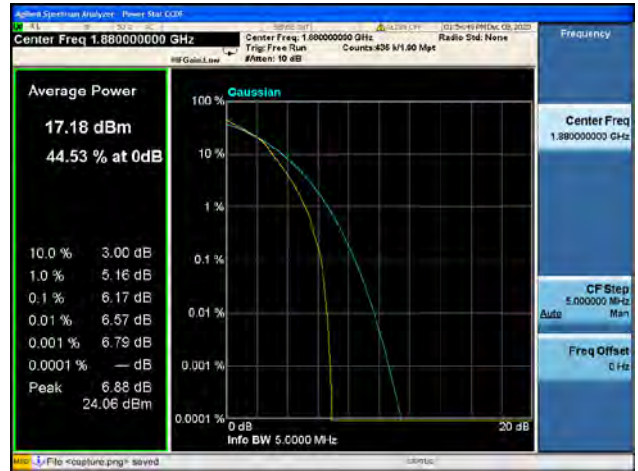




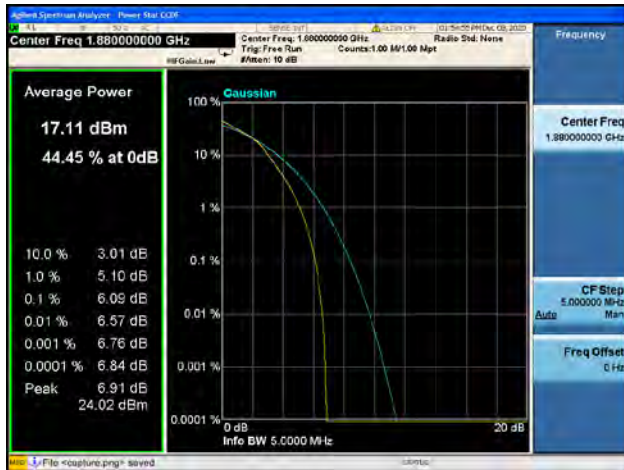
Band2 / 3MHz / Mid CH / QPSK



Band2 / 3MHz / Mid CH / 16QAM



Band2 / 3MHz / Mid CH / 64QAM



Band2 / 3MHz / High CH / QPSK



Band2 / 3MHz / High CH / 16QAM

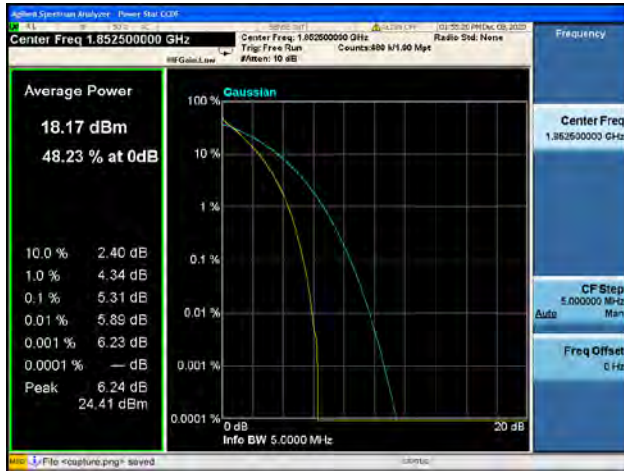


Band2 / 3MHz / High CH / 64QAM

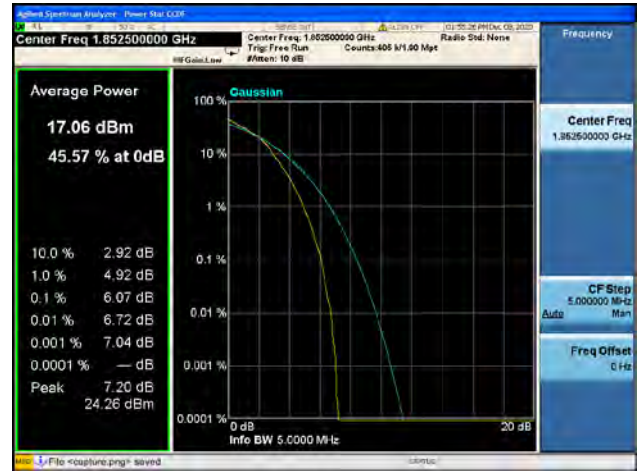




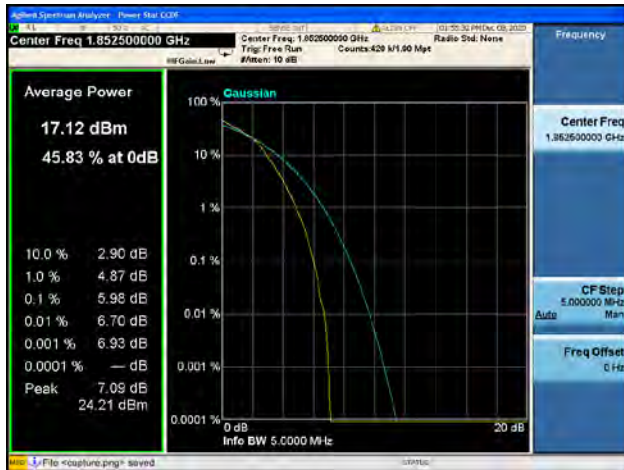
Band2 / 5MHz / Low CH / QPSK



Band2 / 5MHz / Low CH / 16QAM



Band2 / 5MHz / Low CH / 64QAM



Band2 / 5MHz / Mid CH / QPSK



Band2 / 5MHz / Mid CH / 16QAM



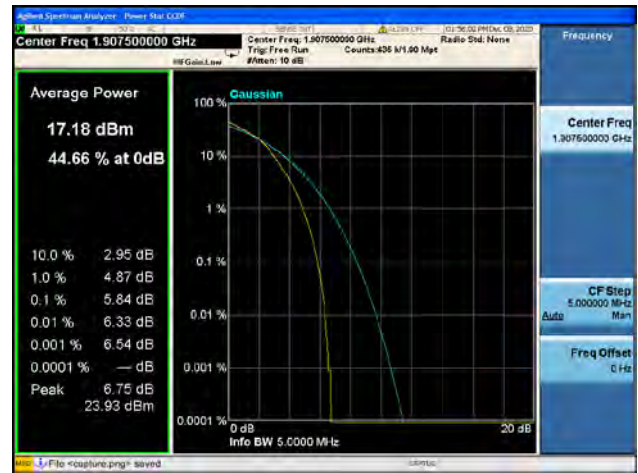
Band2 / 5MHz / Mid CH / 64QAM



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

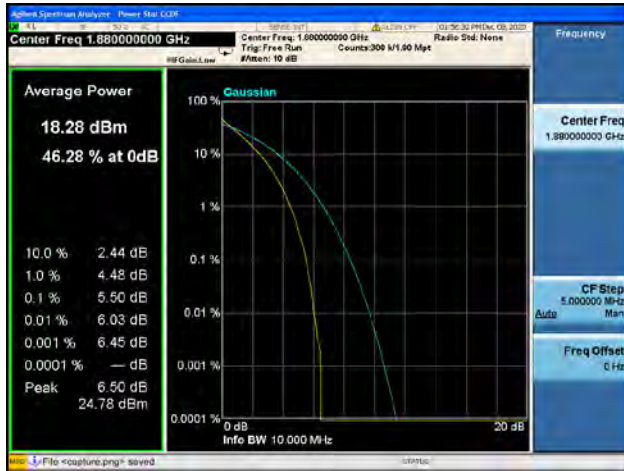


Band2 / 10MHz / Low CH / 64QAM

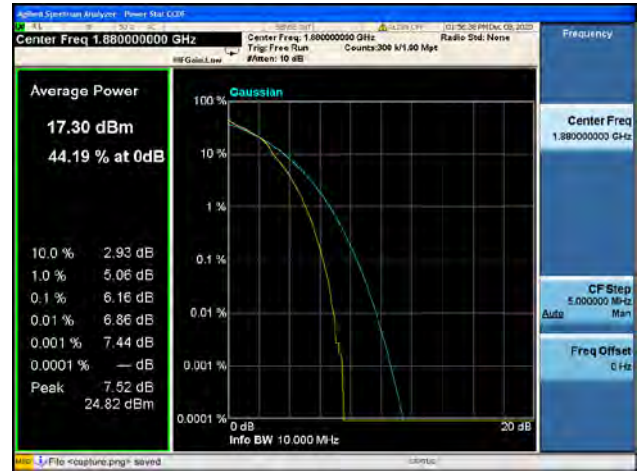




Band2 / 10MHz / Mid CH / QPSK



Band2 / 10MHz / Mid CH / 16QAM



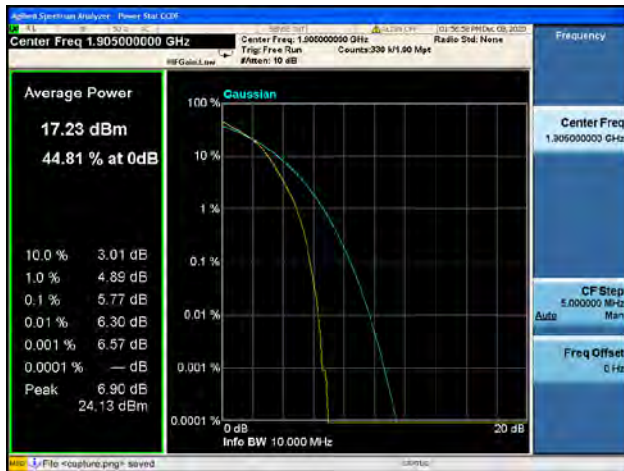
Band2 / 10MHz / Mid CH / 64QAM



Band2 / 10MHz / High CH / QPSK



Band2 / 10MHz / High CH / 16QAM



Band2 / 10MHz / High CH / 64QAM

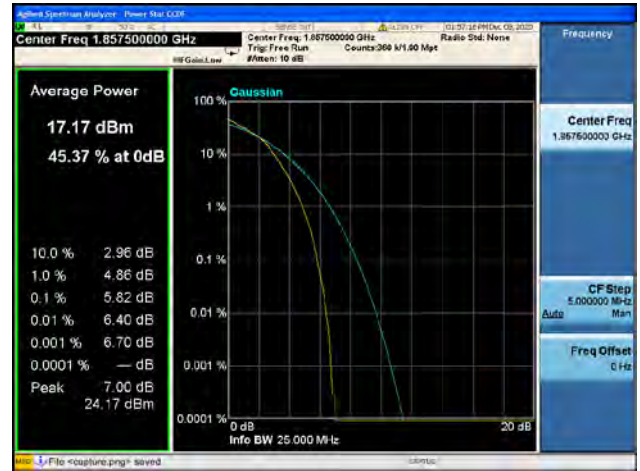




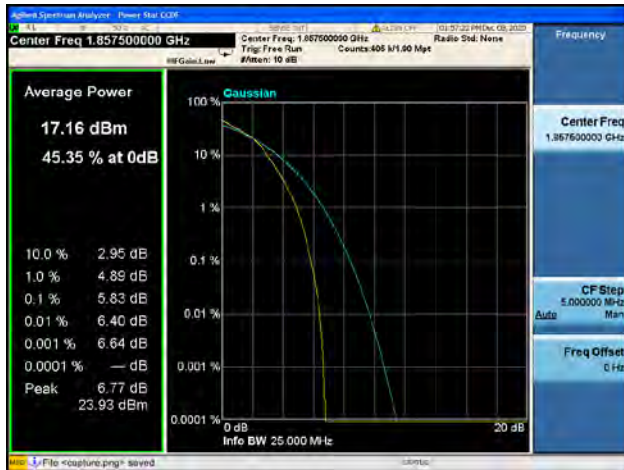
Band2 / 15MHz / Low CH / QPSK



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

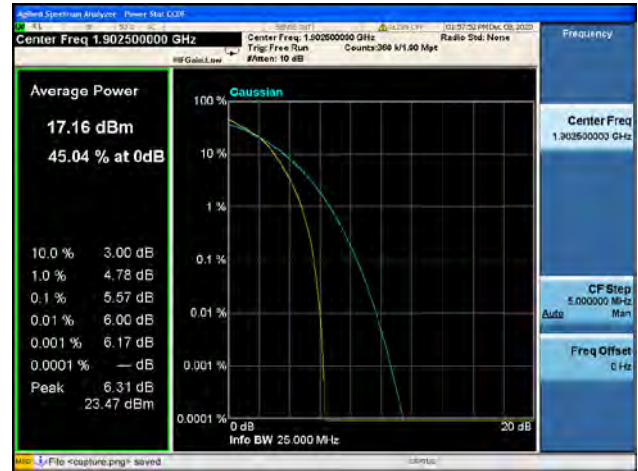




Band2 / 15MHz / High CH / QPSK



Band2 / 15MHz / High CH / 16QAM



Band2 / 15MHz / High CH / 64QAM



Band2 / 20MHz / Low CH / QPSK



Band2 / 20MHz / Low CH / 16QAM



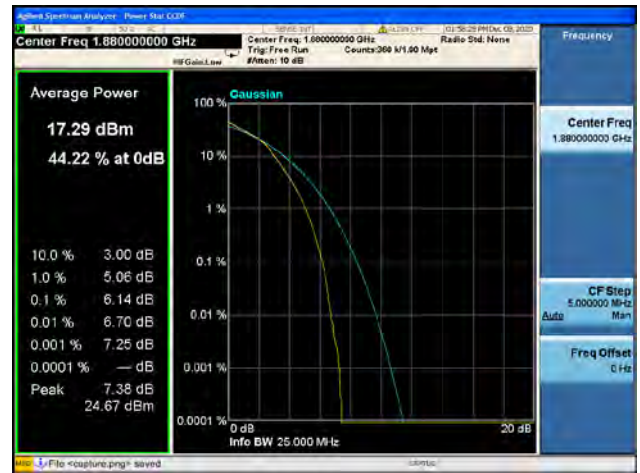
Band2 / 20MHz / Low CH / 64QAM



Band2 / 20MHz / Mid CH / QPSK



Band2 / 20MHz / Mid CH / 16QAM



Band2 / 20MHz / Mid CH / 64QAM



Band2 / 20MHz / High CH / QPSK



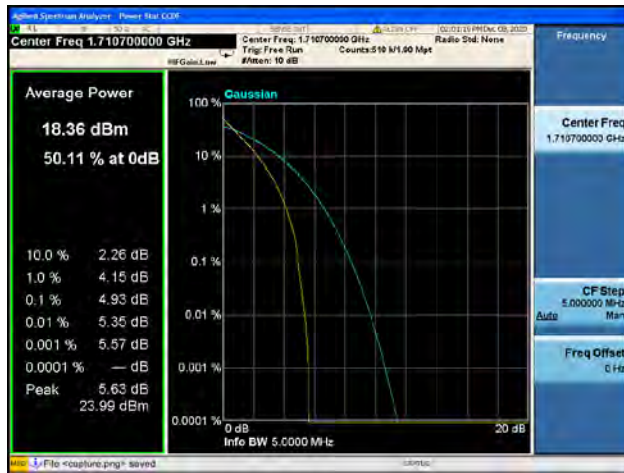
Band2 / 20MHz / High CH / 16QAM



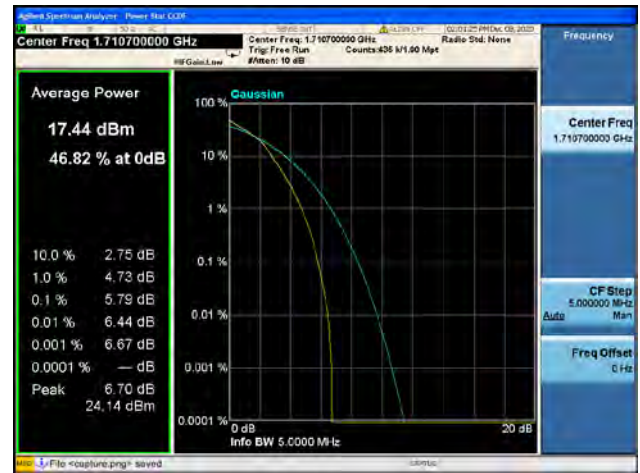
Band2 / 20MHz / High CH / 64QAM



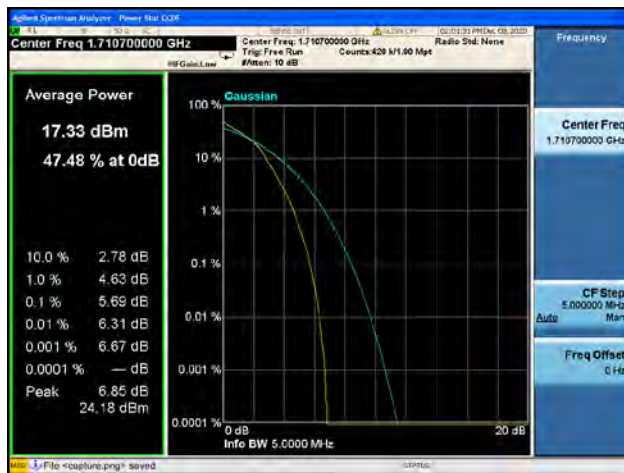
Band4 / 1.4MHz / Low CH / QPSK



Band4 / 1.4MHz / Low CH / 16QAM



Band4 / 1.4MHz / Low CH / 64QAM



Band4 / 1.4MHz / Mid CH / QPSK



Band4 / 1.4MHz / Mid CH / 16QAM

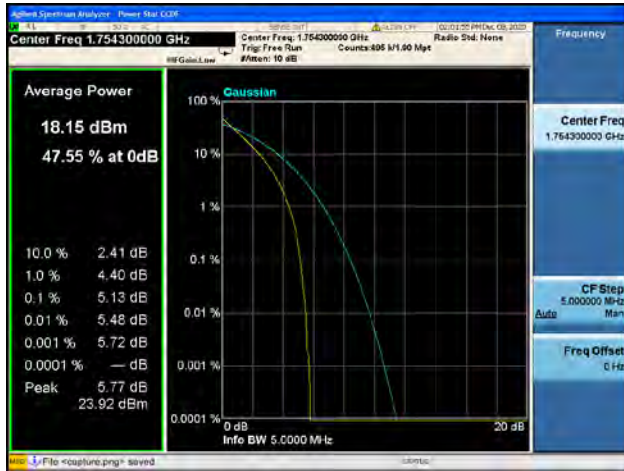


Band4 / 1.4MHz / Mid CH / 64QAM





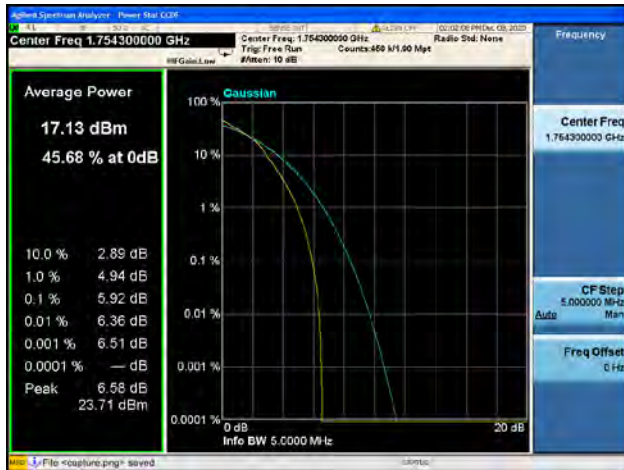
Band4 / 1.4MHz / High CH / QPSK



Band4 / 1.4MHz / High CH / 16QAM



Band4 / 1.4MHz / High CH / 64QAM



Band4 / 3MHz / Low CH / QPSK



Band4 / 3MHz / Low CH / 16QAM

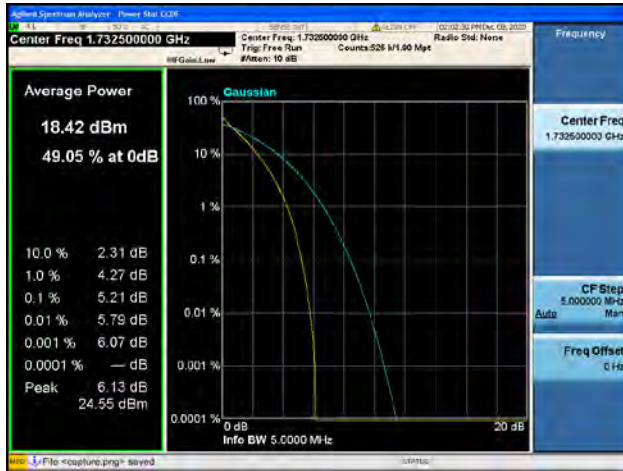


Band4 / 3MHz / Low CH / 64QAM

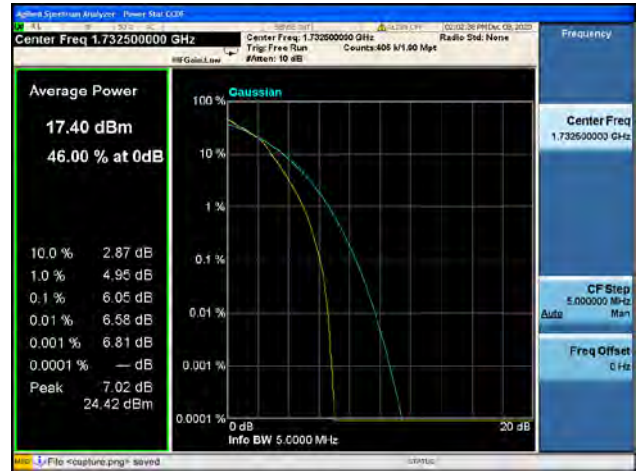




Band4 / 3MHz / Mid CH / QPSK



Band4 / 3MHz / Mid CH / 16QAM



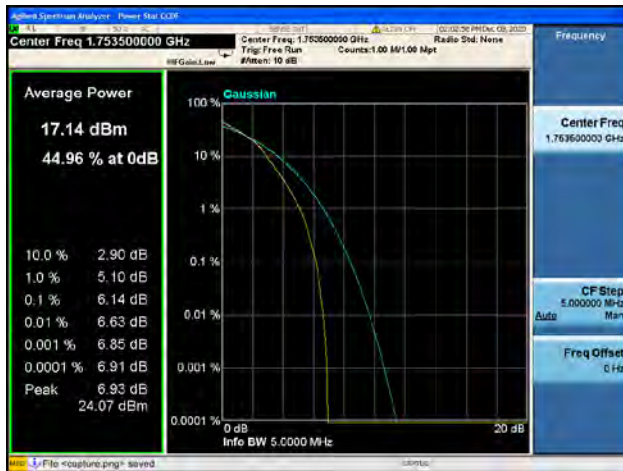
Band4 / 3MHz / Mid CH / 64QAM



Band4 / 3MHz / High CH / QPSK



Band4 / 3MHz / High CH / 16QAM



Band4 / 3MHz / High CH / 64QAM

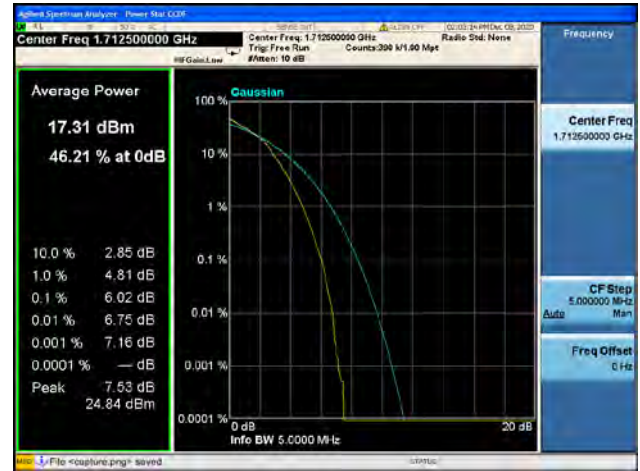




Band4 / 5MHz / Low CH / QPSK



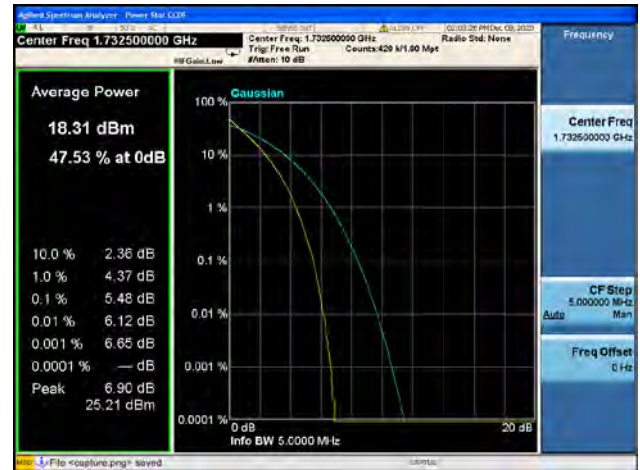
Band4 / 5MHz / Low CH / 16QAM



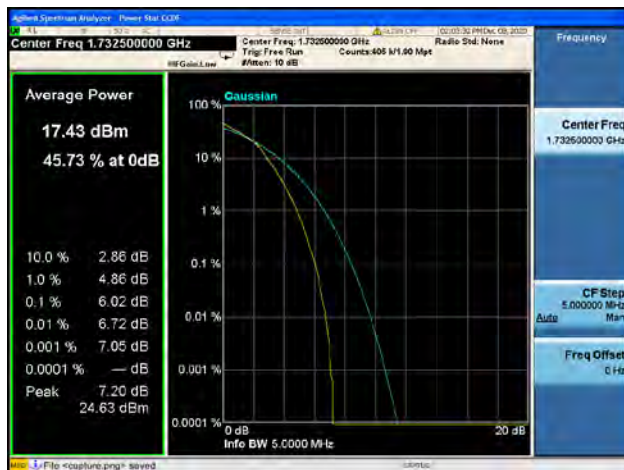
Band4 / 5MHz / Low CH / 64QAM



Band4 / 5MHz / Mid CH / QPSK



Band4 / 5MHz / Mid CH / 16QAM

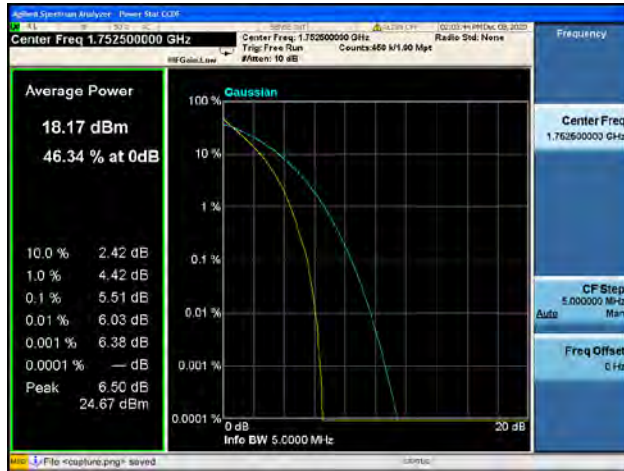


Band4 / 5MHz / Mid CH / 64QAM





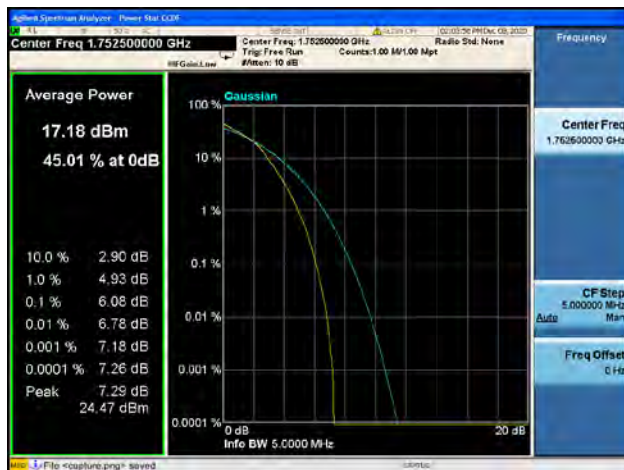
Band4 / 5MHz / High CH / QPSK



Band4 / 5MHz / High CH / 16QAM



Band4 / 5MHz / High CH / 64QAM



Band4 / 10MHz / Low CH / QPSK



Band4 / 10MHz / Low CH / 16QAM

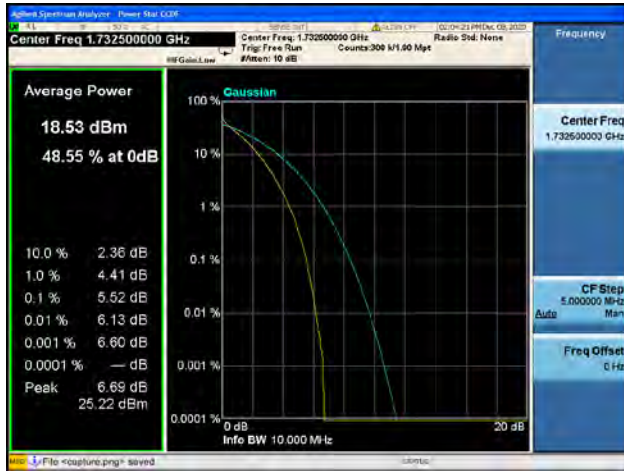


Band4 / 10MHz / Low CH / 64QAM





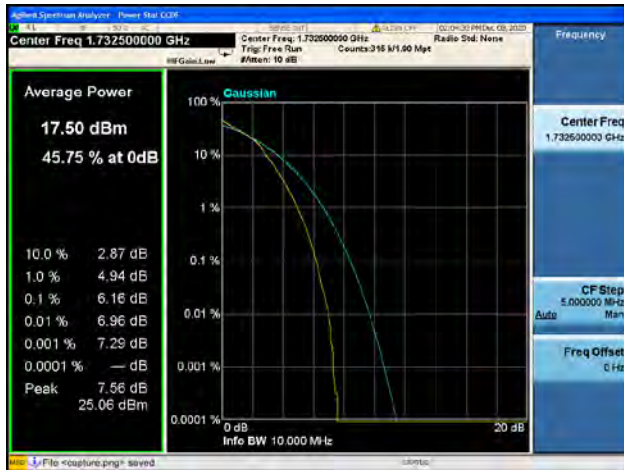
Band4 / 10MHz / Mid CH / QPSK



Band4 / 10MHz / Mid CH / 16QAM



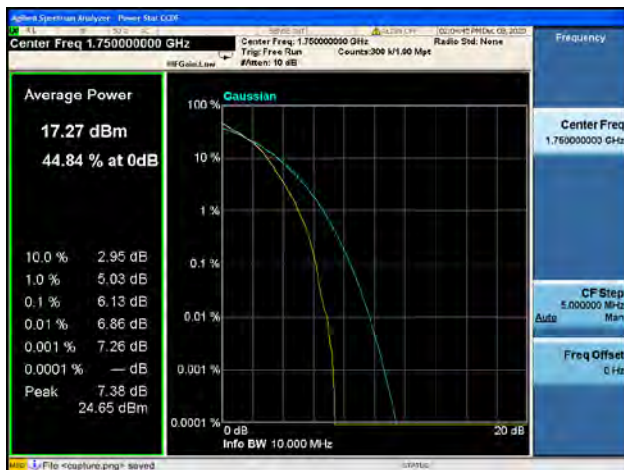
Band4 / 10MHz / Mid CH / 64QAM



Band4 / 10MHz / High CH / QPSK



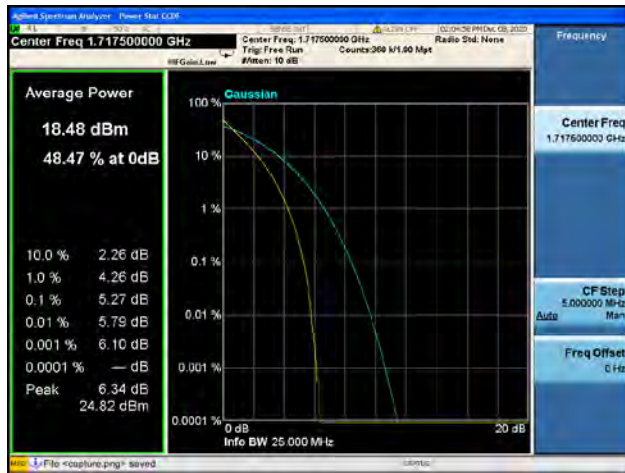
Band4 / 10MHz / High CH / 16QAM



Band4 / 10MHz / High CH / 64QAM



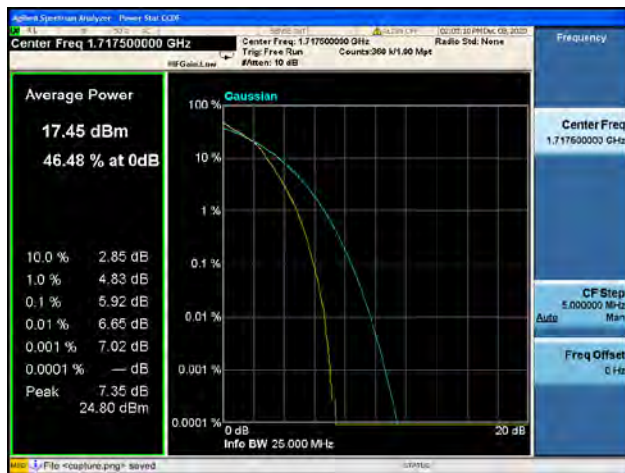
Band4 / 15MHz / Low CH / QPSK



Band4 / 15MHz / Low CH / 16QAM



Band4 / 15MHz / Low CH / 64QAM



Band4 / 15MHz / Mid CH / QPSK



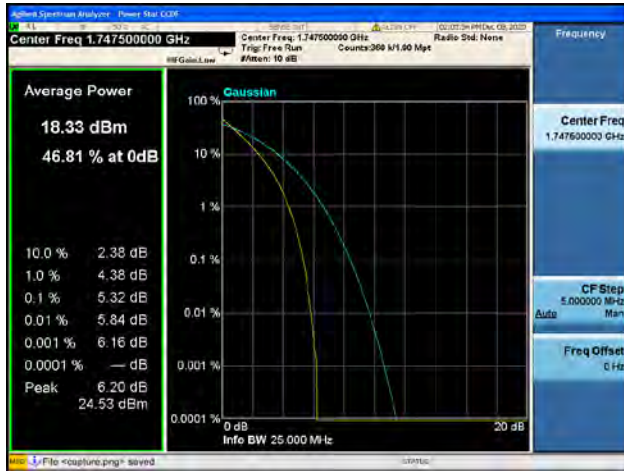
Band4 / 15MHz / Mid CH / 16QAM



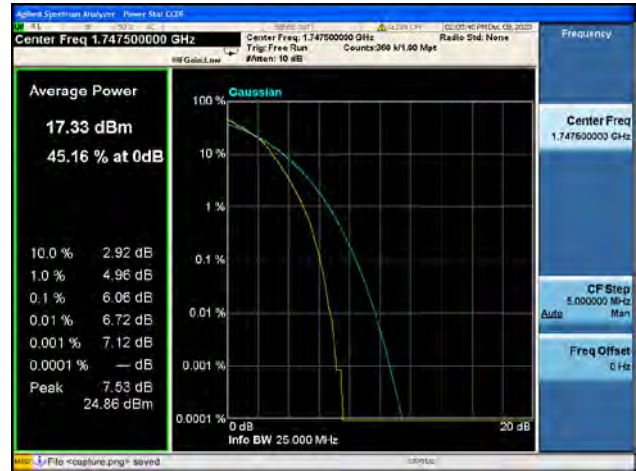
Band4 / 15MHz / Mid CH / 64QAM



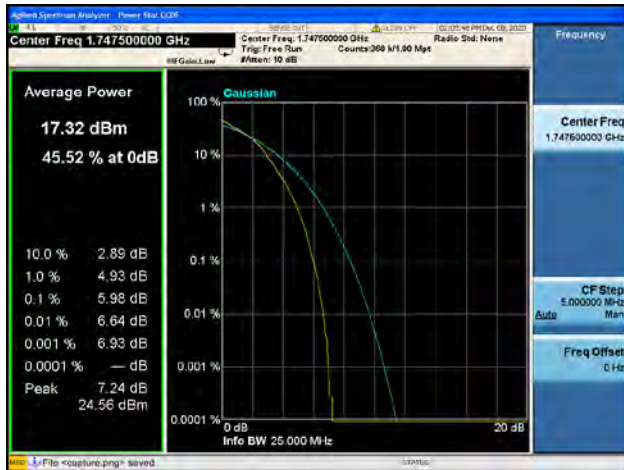
Band4 / 15MHz / High CH / QPSK



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





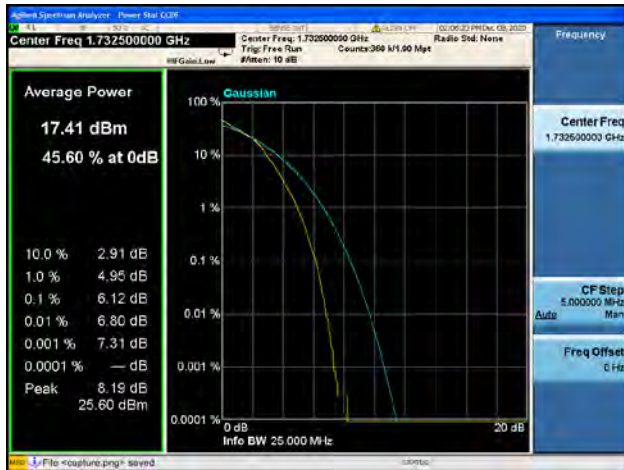
Band4 / 20MHz / Mid CH / QPSK



Band4 / 20MHz / Mid CH / 16QAM



Band4 / 20MHz / Mid CH / 64QAM



Band4 / 20MHz / High CH / QPSK



Band4 / 20MHz / High CH / 16QAM

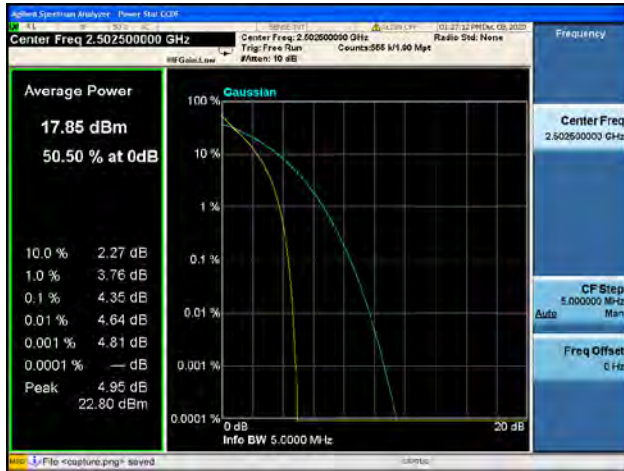


Band4 / 20MHz / High CH / 64QAM





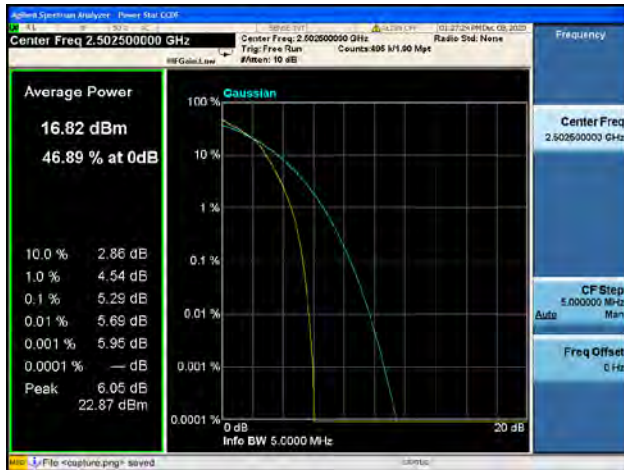
Band7 / 5MHz / Low CH / QPSK



Band7 / 5MHz / Low CH / 16QAM



Band7 / 5MHz / Low CH / 64QAM



Band7 / 5MHz / Mid CH / QPSK



Band7 / 5MHz / Mid CH / 16QAM



Band7 / 5MHz / Mid CH / 64QAM

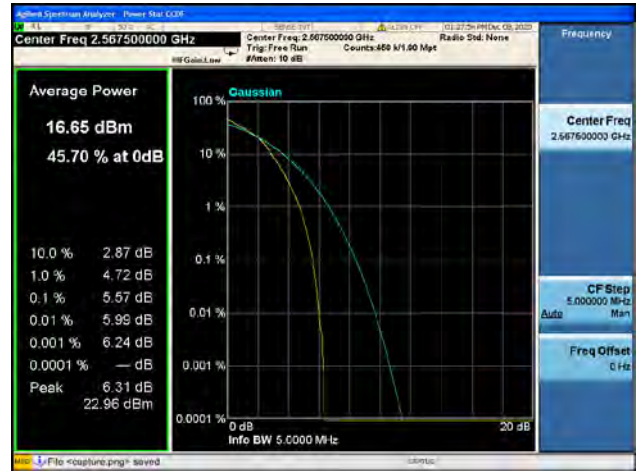




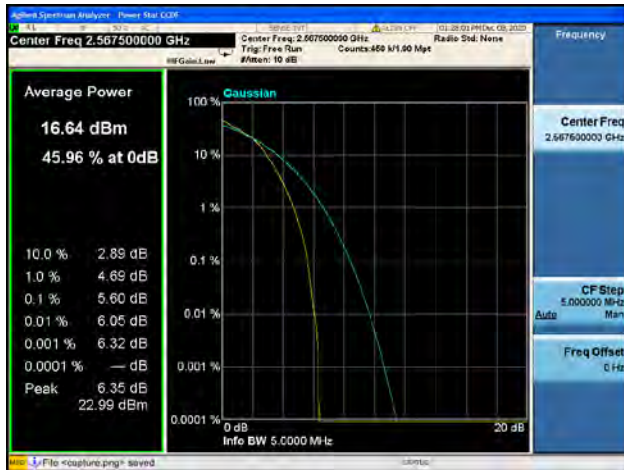
Band7 / 5MHz / High CH / QPSK



Band7 / 5MHz / High CH / 16QAM



Band7 / 5MHz / High CH / 64QAM



Band7 / 10MHz / Low CH / QPSK



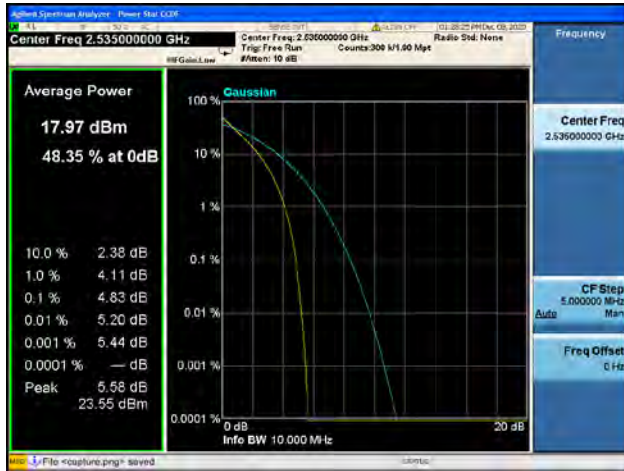
Band7 / 10MHz / Low CH / 16QAM



Band7 / 10MHz / Low CH / 64QAM



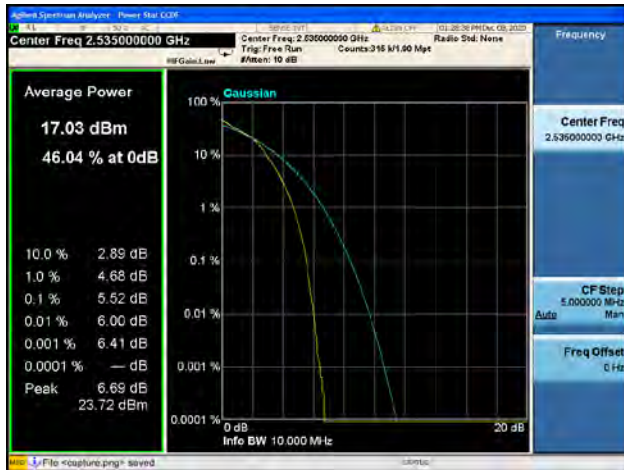
Band7 / 10MHz / Mid CH / QPSK



Band7 / 10MHz / Mid CH / 16QAM



Band7 / 10MHz / Mid CH / 64QAM



Band7 / 10MHz / High CH / QPSK



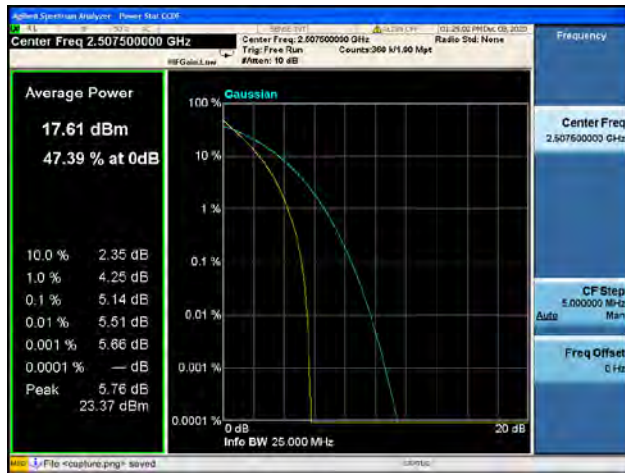
Band7 / 10MHz / High CH / 16QAM



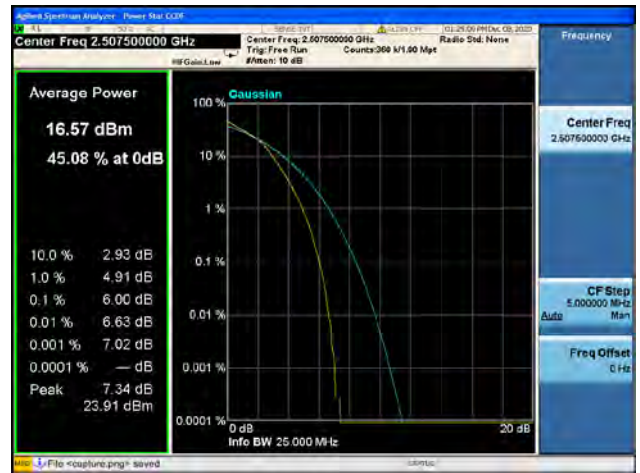
Band7 / 10MHz / High CH / 64QAM



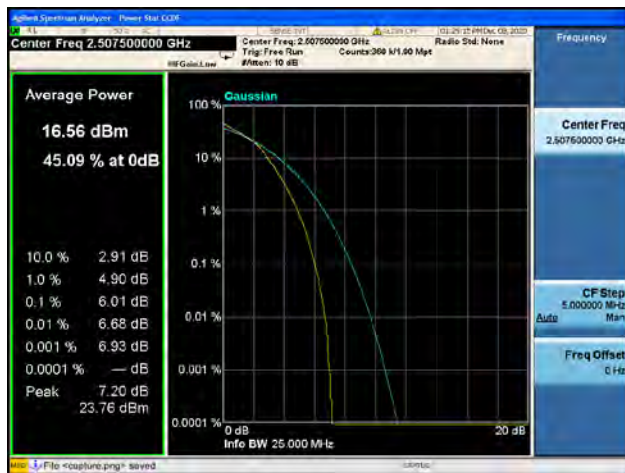
Band7 / 15MHz / Low CH / QPSK



Band7 / 15MHz / Low CH / 16QAM



Band7 / 15MHz / Low CH / 64QAM



Band7 / 15MHz / Mid CH / QPSK



Band7 / 15MHz / Mid CH / 16QAM

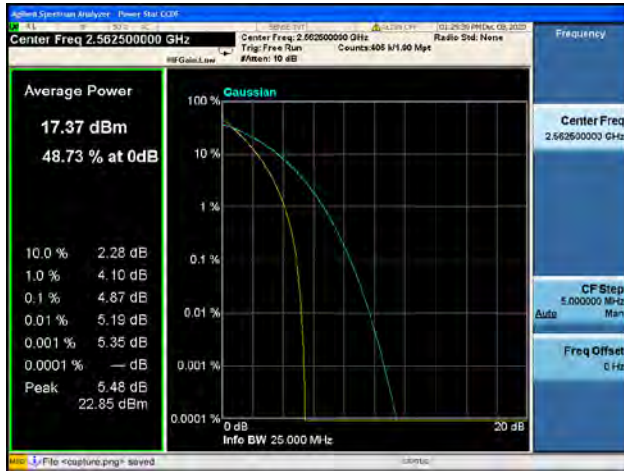


Band7 / 15MHz / Mid CH / 64QAM

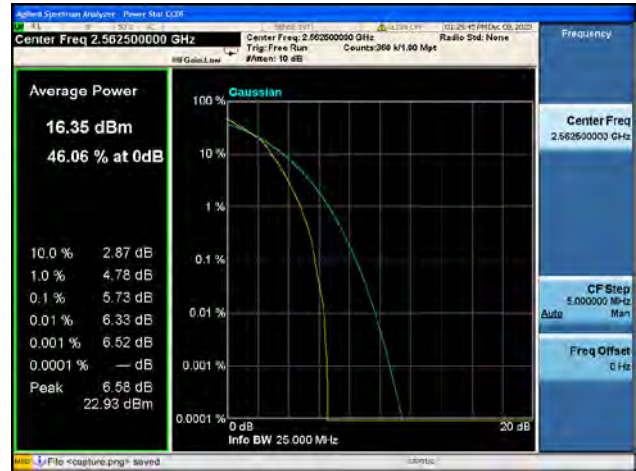




Band7 / 15MHz / High CH / QPSK



Band7 / 15MHz / High CH / 16QAM



Band7 / 15MHz / High CH / 64QAM



Band7 / 20MHz / Low CH / QPSK



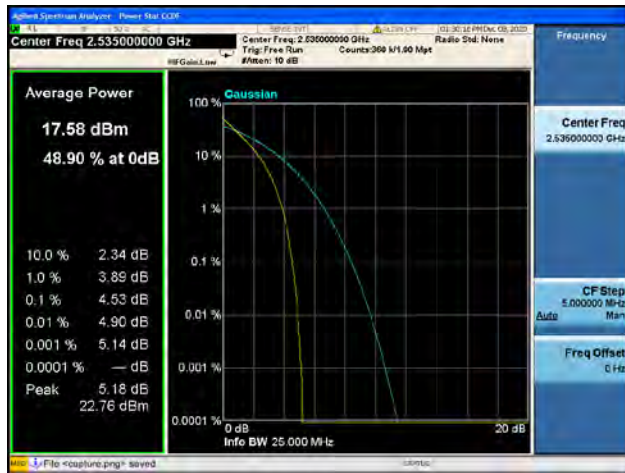
Band7 / 20MHz / Low CH / 16QAM



Band7 / 20MHz / Low CH / 64QAM



Band7 / 20MHz / Mid CH / QPSK



Band7 / 20MHz / Mid CH / 16QAM



Band7 / 20MHz / Mid CH / 64QAM



Band7 / 20MHz / High CH / QPSK



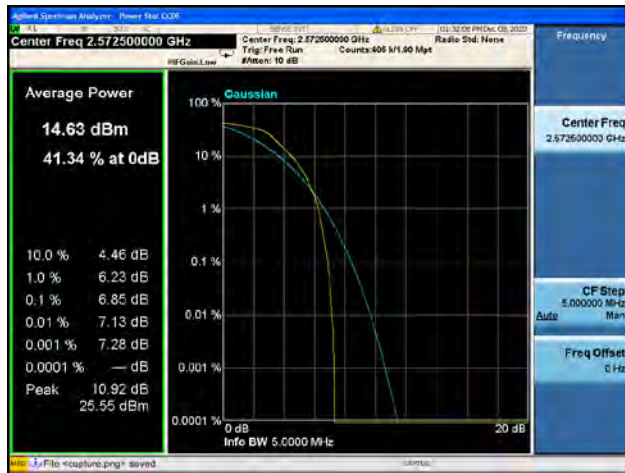
Band7 / 20MHz / High CH / 16QAM



Band7 / 20MHz / High CH / 64QAM



Band38 / 5MHz / Low CH / QPSK



Band38 / 5MHz / Low CH / 16QAM



Band38 / 5MHz / Low CH / 64QAM



Band38 / 5MHz / Mid CH / QPSK



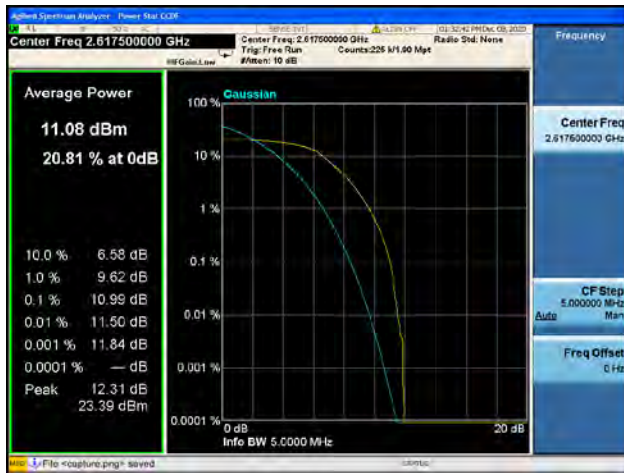
Band38 / 5MHz / Mid CH / 16QAM



Band38 / 5MHz / Mid CH / 64QAM



Band38 / 5MHz / High CH / QPSK



Band38 / 5MHz / High CH / 16QAM



Band38 / 5MHz / High CH / 64QAM



Band38 / 10MHz / Low CH / QPSK



Band38 / 10MHz / Low CH / 16QAM



Band38 / 10MHz / Low CH / 64QAM



Band38 / 10MHz / Mid CH / QPSK



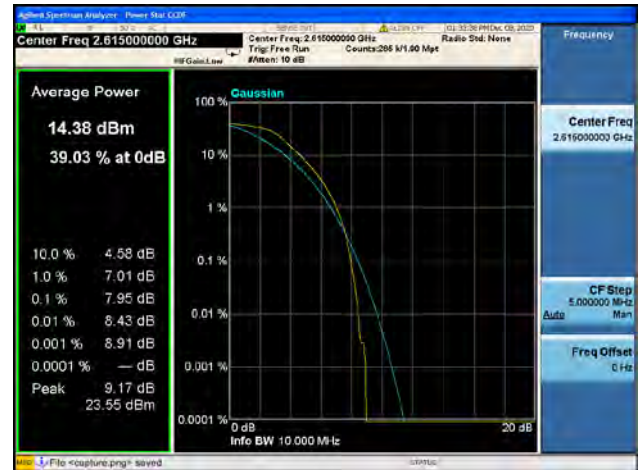
Band38 / 10MHz / Mid CH / 16QAM



Band38 / 10MHz / Mid CH / 64QAM



Band38 / 10MHz / High CH / QPSK



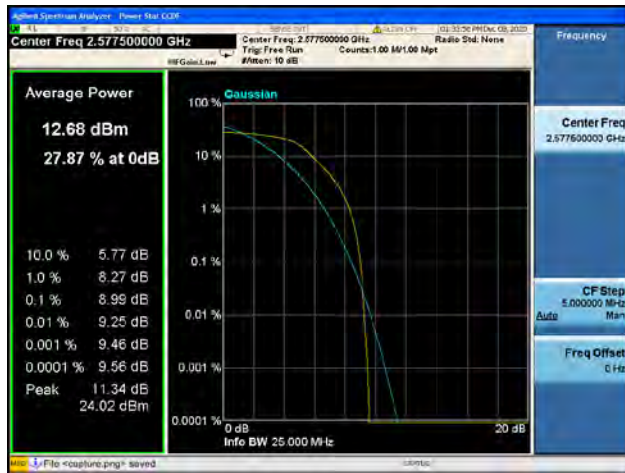
Band38 / 10MHz / High CH / 16QAM



Band38 / 10MHz / High CH / 64QAM



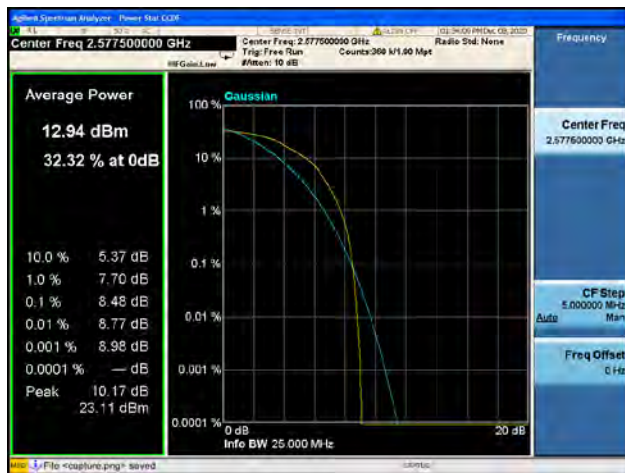
Band38 / 15MHz / Low CH / QPSK



Band38 / 15MHz / Low CH / 16QAM



Band38 / 15MHz / Low CH / 64QAM



Band38 / 15MHz / Mid CH / QPSK



Band38 / 15MHz / Mid CH / 16QAM

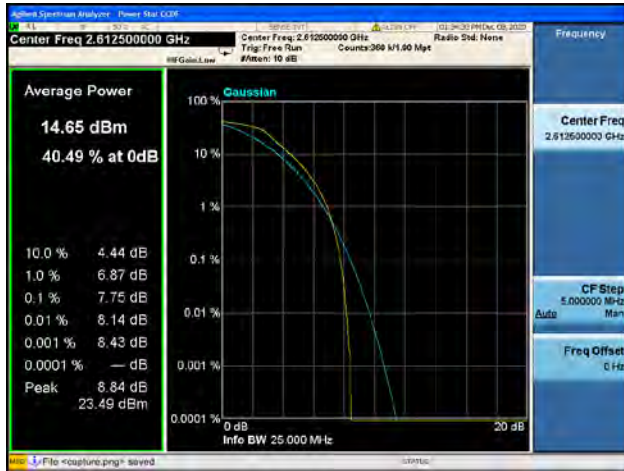


Band38 / 15MHz / Mid CH / 64QAM





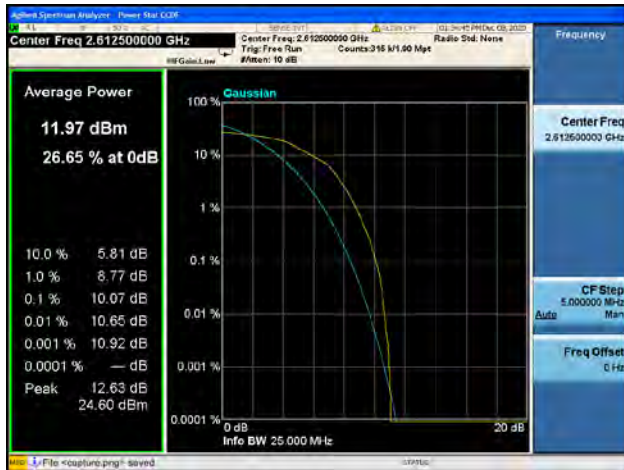
Band38 / 15MHz / High CH / QPSK



Band38 / 15MHz / High CH / 16QAM



Band38 / 15MHz / High CH / 64QAM



Band38 / 20MHz / Low CH / QPSK



Band38 / 20MHz / Low CH / 16QAM



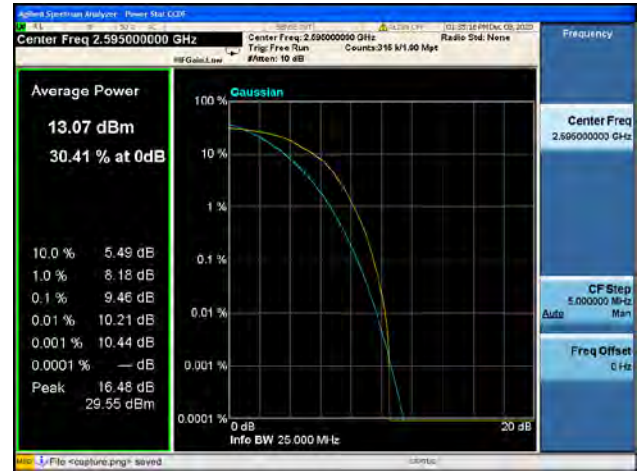
Band38 / 20MHz / Low CH / 64QAM



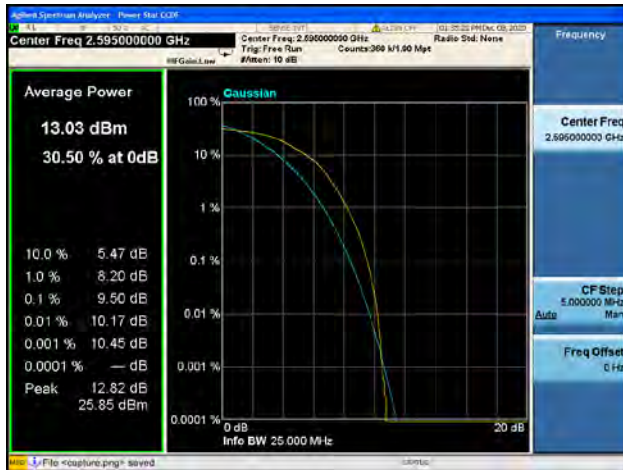
Band38 / 20MHz / Mid CH / QPSK



Band38 / 20MHz / Mid CH / 16QAM



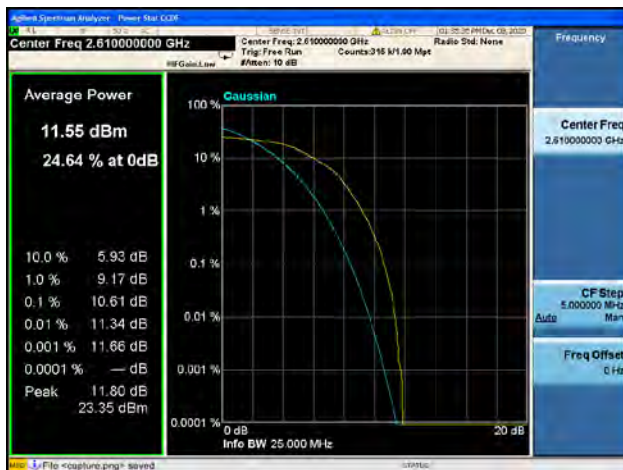
Band38 / 20MHz / Mid CH / 64QAM



Band38 / 20MHz / High CH / QPSK



Band38 / 20MHz / High CH / 16QAM

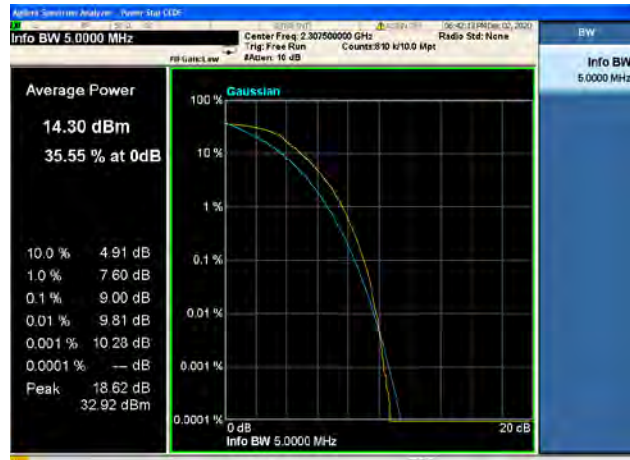


Band38 / 20MHz / High CH / 64QAM





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



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



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



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



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



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

