Frequency stability

LTE Band 2 (QPSK) / 1880MHz / BW20M					
Temperature (°C)	**Voltage (Volt)**	**Freq. Dev. (Hz)**	**Freq. Dev. (ppm)**	**Limit**	**Result**
50	Normal Voltage	0.34	0.000	2.5ppm	PASS
40		0.12	0.000		
30		-0.55	0.000		
20		-0.96	-0.001		
10		-0.52	0.000		
0		0.34	0.000		
-10		-0.45	0.000		
-20		0.25	0.000		
-30		0.41	0.000		
20	Maximum Voltage	0.24	0.000		
20	BEP	0.86	0.000		

LTE Band 2 (16QAM) / 1880MHz / BW20M					
Temperature (°C)	**Voltage (Volt)**	**Freq. Dev. (Hz)**	**Freq. Dev. (ppm)**	**Limit**	**Result**
50	Normal Voltage	-1.92	-0.001	2.5ppm	PASS
40		2.00	0.001		
30		-1.43	-0.001		
20		1.75	0.001		
10		-2.00	-0.001		
0		1.53	0.001		
-10		1.57	0.001		
-20		1.99	0.001		
-30		-1.67	-0.001		
20	Maximum Voltage	2.31	0.001		
20	BEP	-0.75	0.000		

LTE Band 5 (QPSK) / 836.5MHz / BW10M					
Temperature (°C)	Voltage (Volt)	Freq. Dev. (Hz)	Freq. Dev. (ppm)	Limit	Result
50	Normal Voltage	-0.62	-0.001	2.5ppm	PASS
40		0.39	0.000		
30		0.45	0.001		
20		-0.74	-0.001		
10		-0.24	0.000		
0		0.24	0.000		
-10		0.41	0.000		
-20		0.23	0.000		
-30		0.69	0.001		
20	Maximum Voltage	0.46	0.001		
20	BEP	-0.33	0.000		

LTE Band 5 (16QAM) / 836.5MHz / BW10M					
Temperature (°C)	Voltage (Volt)	Freq. Dev. (Hz)	Freq. Dev. (ppm)	Limit	Result
50	Normal Voltage	-1.09	-0.001	2.5ppm	PASS
40		-1.46	-0.002		
30		-1.44	-0.002		
20		0.72	0.001		
10		0.94	0.001		
0		-0.92	-0.001		
-10		-1.09	-0.001		
-20		-1.25	-0.001		
-30		-1.43	-0.002		
20	Maximum Voltage	-0.57	-0.001		
20	BEP	2.07	0.002		

LTE Band 12 (QPSK) / 707.5MHz / BW10M					
Temperature (°C)	Voltage (Volt)	Freq. Dev. (Hz)	Freq. Dev. (ppm)	Limit	Result
50	Normal Voltage	-0.51	-0.001	2.5ppm	PASS
40		0.49	0.001		
30		-0.53	-0.001		
20		-1.03	-0.001		
10		0.50	0.001		
0		0.55	0.001		
-10		-0.10	0.000		
-20		-0.22	0.000		
-30		0.52	0.001		
20	Maximum Voltage	0.53	0.001		
20	BEP	0.82	0.001		

LTE Band 12 (16QAM) / 707.5MHz / BW10M					
Temperature (°C)	Voltage (Volt)	Freq. Dev. (Hz)	Freq. Dev. (ppm)	Limit	Result
50	Normal Voltage	0.78	0.001	2.5ppm	PASS
40		-0.63	-0.001		
30		0.58	0.001		
20		-0.09	0.000		
10		1.01	0.001		
0		-1.07	-0.002		
-10		-0.86	-0.001		
-20		-0.87	-0.001		
-30		0.52	0.001		
20	Maximum Voltage	-0.37	-0.001		
20	BEP	1.23	0.002		

LTE Band 13 (QPSK) / 782MHz / BW10M					
Temperature (°C)	Voltage (Volt)	Freq. Dev. (Hz)	Freq. Dev. (ppm)	Limit	Result
50	Normal Voltage	0.36	0.000	2.5ppm	PASS
40		-0.37	0.000		
30		-0.01	0.000		
20		-1.13	-0.001		
10		-0.02	0.000		
0		0.48	0.001		
-10		0.01	0.000		
-20		-0.33	0.000		
-30		-0.14	0.000		
20	Maximum Voltage	-0.17	0.000		
20	BEP	0.63	0.001		

LTE Band 13 (16QAM) / 782MHz / BW10M					
Temperature (°C)	Voltage (Volt)	Freq. Dev. (Hz)	Freq. Dev. (ppm)	Limit	Result
50	Normal Voltage	-0.39	0.000	2.5ppm	PASS
40		0.90	0.001		
30		-0.62	-0.001		
20		-0.36	0.000		
10		0.89	0.001		
0		0.86	0.001		
-10		-0.88	-0.001		
-20		-0.59	-0.001		
-30		-0.51	-0.001		
20	Maximum Voltage	0.81	0.001		
20	BEP	1.23	0.002		

LTE Band 17 (QPSK) / 710MHz / BW10M					
Temperature (°C)	Voltage (Volt)	Freq. Dev. (Hz)	Freq. Dev. (ppm)	Limit	Result
50	Normal Voltage	-0.43	-0.001	2.5ppm	PASS
40		-0.22	0.000		
30		0.46	0.001		
20		-0.67	-0.001		
10		-0.68	-0.001		
0		-0.34	0.000		
-10		0.37	0.001		
-20		-0.77	-0.001		
-30		-0.23	0.000		
20	Maximum Voltage	-0.19	0.000		
20	BEP	-0.31	0.000		

LTE Band 17 (16QAM) / 710MHz / BW10M					
Temperature (°C)	Voltage (Volt)	Freq. Dev. (Hz)	Freq. Dev. (ppm)	Limit	Result
50	Normal Voltage	0.71	0.001	2.5ppm	PASS
40		-0.91	-0.001		
30		-0.62	-0.001		
20		0.16	0.000		
10		1.08	0.002		
0		-0.85	-0.001		
-10		-0.67	-0.001		
-20		1.14	0.002		
-30		-1.20	-0.002		
20	Maximum Voltage	1.76	0.002		
20	BEP	-0.51	-0.001		

LTE Band 66 (QPSK) / 1745MHz / BW20M					
Temperature (°C)	Voltage (Volt)	Freq. Dev. (Hz)	Freq. Dev. (ppm)	Limit	Result
50	Normal Voltage	0.58	0.000	2.5ppm	PASS
40		0.79	0.000		
30		0.47	0.000		
20		-0.26	0.000		
10		0.91	0.001		
0		0.47	0.000		
-10		0.55	0.000		
-20		0.93	0.001		
-30		-0.70	0.000		
20	Maximum Voltage	-0.32	0.000		
20	BEP	-0.22	0.000		

LTE Band 66 (16QAM) / 1745MHz / BW20M					
Temperature (°C)	Voltage (Volt)	Freq. Dev. (Hz)	Freq. Dev. (ppm)	Limit	Result
50	Normal Voltage	1.29	0.001	2.5ppm	PASS
40		-1.51	-0.001		
30		1.34	0.001		
20		1.29	0.001		
10		-1.74	-0.001		
0		1.60	0.001		
-10		1.28	0.001		
-20		1.42	0.001		
-30		-1.62	-0.001		
20	Maximum Voltage	1.82	0.001		
20	BEP	-0.86	0.000		

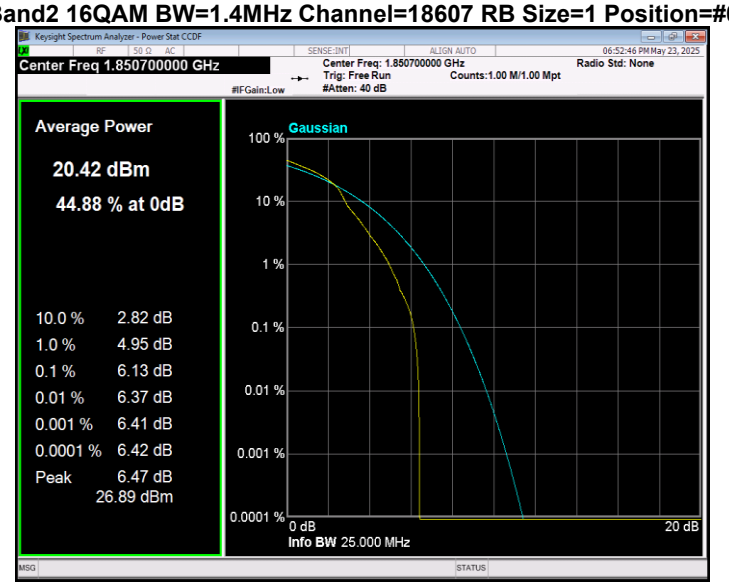
Peak-to-Average Ratio

Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Result (dB)	high Limit (dB)	Verdict
Band2	1.4	18607	1	#0	QPSK	5.31	13	PASS
Band2	1.4	18607	1	#0	16QAM	6.13	13	PASS
Band2	1.4	18900	1	#0	QPSK	4.61	13	PASS
Band2	1.4	18900	1	#0	16QAM	5.31	13	PASS
Band2	1.4	19193	1	#0	QPSK	4.79	13	PASS
Band2	1.4	19193	1	#0	16QAM	5.42	13	PASS
Band2	3	18615	1	#0	QPSK	5.18	13	PASS
Band2	3	18615	1	#0	16QAM	6.19	13	PASS
Band2	3	18900	1	#0	QPSK	4.72	13	PASS
Band2	3	18900	1	#0	16QAM	5.57	13	PASS
Band2	3	19185	1	#0	QPSK	5.03	13	PASS
Band2	3	19185	1	#0	16QAM	5.90	13	PASS
Band2	5	18625	1	#0	QPSK	5.04	13	PASS
Band2	5	18625	1	#0	16QAM	6.05	13	PASS
Band2	5	18900	1	#0	QPSK	4.77	13	PASS
Band2	5	18900	1	#0	16QAM	5.46	13	PASS
Band2	5	19175	1	#0	QPSK	5.51	13	PASS
Band2	5	19175	1	#0	16QAM	5.86	13	PASS
Band2	10	18650	1	#0	QPSK	5.15	13	PASS
Band2	10	18650	1	#0	16QAM	6.07	13	PASS
Band2	10	18900	1	#0	QPSK	4.99	13	PASS
Band2	10	18900	1	#0	16QAM	5.61	13	PASS
Band2	10	19150	1	#0	QPSK	5.22	13	PASS
Band2	10	19150	1	#0	16QAM	5.89	13	PASS
Band2	15	18675	1	#0	QPSK	5.15	13	PASS
Band2	15	18675	1	#0	16QAM	6.15	13	PASS
Band2	15	18900	1	#0	QPSK	5.34	13	PASS
Band2	15	18900	1	#0	16QAM	5.99	13	PASS
Band2	15	19125	1	#0	QPSK	5.37	13	PASS
Band2	15	19125	1	#0	16QAM	6.31	13	PASS
Band2	20	18700	1	#0	QPSK	5.39	13	PASS
Band2	20	18700	1	#0	16QAM	6.01	13	PASS
Band2	20	18900	1	#0	QPSK	5.46	13	PASS
Band2	20	18900	1	#0	16QAM	5.62	13	PASS
Band2	20	19100	1	#0	QPSK	5.72	13	PASS
Band2	20	19100	1	#0	16QAM	6.22	13	PASS
Band5	1.4	20407	1	#0	QPSK	4.80	13	PASS
Band5	1.4	20407	1	#0	16QAM	5.45	13	PASS
Band5	1.4	20525	1	#0	QPSK	4.75	13	PASS
Band5	1.4	20525	1	#0	16QAM	5.31	13	PASS
Band5	1.4	20643	1	#0	QPSK	4.57	13	PASS
Band5	1.4	20643	1	#0	16QAM	5.18	13	PASS
Band5	3	20415	1	#0	QPSK	4.79	13	PASS
Band5	3	20415	1	#0	16QAM	5.75	13	PASS
Band5	3	20525	1	#0	QPSK	4.83	13	PASS
Band5	3	20525	1	#0	16QAM	5.22	13	PASS
Band5	3	20635	1	#0	QPSK	4.43	13	PASS
Band5	3	20635	1	#0	16QAM	5.08	13	PASS
Band5	5	20425	1	#0	QPSK	4.57	13	PASS
Band5	5	20425	1	#0	16QAM	5.61	13	PASS
Band5	5	20525	1	#0	QPSK	4.49	13	PASS
Band5	5	20525	1	#0	16QAM	5.21	13	PASS
Band5	5	20625	1	#0	QPSK	4.24	13	PASS
Band5	5	20625	1	#0	16QAM	4.65	13	PASS
Band5	10	20450	1	#0	QPSK	4.64	13	PASS
Band5	10	20450	1	#0	16QAM	5.63	13	PASS
Band5	10	20525	1	#0	QPSK	4.19	13	PASS
Band5	10	20525	1	#0	16QAM	4.99	13	PASS
Band5	10	20600	1	#0	QPSK	5.20	13	PASS
Band5	10	20600	1	#0	16QAM	5.91	13	PASS
Band12	1.4	23017	1	#0	QPSK	6.23	13	PASS
Band12	1.4	23017	1	#0	16QAM	6.95	13	PASS
Band12	1.4	23095	1	#0	QPSK	5.54	13	PASS
Band12	1.4	23095	1	#0	16QAM	6.06	13	PASS

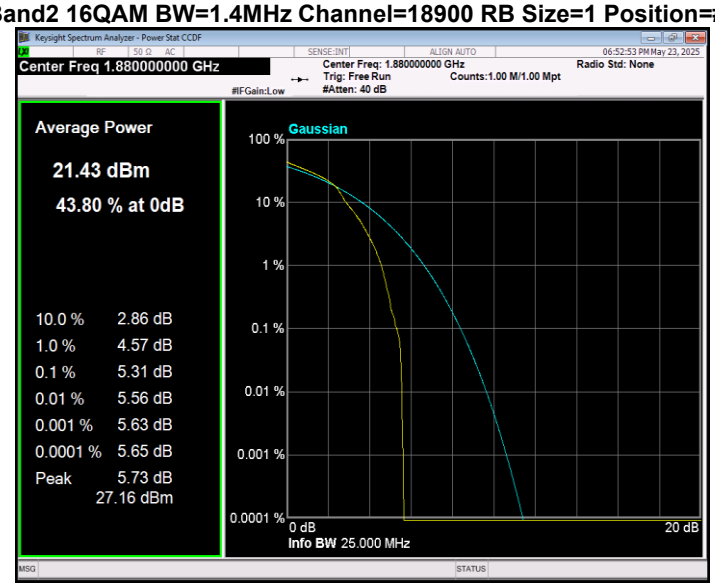
Band12	1.4	23173	1	#0	QPSK	4.74	13	PASS
Band12	1.4	23173	1	#0	16QAM	5.51	13	PASS
Band12	3	23025	1	#0	QPSK	6.35	13	PASS
Band12	3	23025	1	#0	16QAM	7.28	13	PASS
Band12	3	23095	1	#0	QPSK	5.25	13	PASS
Band12	3	23095	1	#0	16QAM	5.80	13	PASS
Band12	3	23165	1	#0	QPSK	5.72	13	PASS
Band12	3	23165	1	#0	16QAM	6.46	13	PASS
Band12	5	23035	1	#0	QPSK	5.97	13	PASS
Band12	5	23035	1	#0	16QAM	7.13	13	PASS
Band12	5	23095	1	#0	QPSK	4.82	13	PASS
Band12	5	23095	1	#0	16QAM	5.69	13	PASS
Band12	5	23155	1	#0	QPSK	6.45	13	PASS
Band12	5	23155	1	#0	16QAM	6.58	13	PASS
Band12	10	23060	1	#0	QPSK	6.22	13	PASS
Band12	10	23060	1	#0	16QAM	6.87	13	PASS
Band12	10	23095	1	#0	QPSK	5.35	13	PASS
Band12	10	23095	1	#0	16QAM	5.92	13	PASS
Band12	10	23130	1	#0	QPSK	5.32	13	PASS
Band12	10	23130	1	#0	16QAM	5.96	13	PASS
Band13	5	23205	1	#0	QPSK	5.62	13	PASS
Band13	5	23205	1	#0	16QAM	6.39	13	PASS
Band13	5	23230	1	#0	QPSK	5.94	13	PASS
Band13	5	23230	1	#0	16QAM	6.38	13	PASS
Band13	5	23255	1	#0	QPSK	5.03	13	PASS
Band13	5	23255	1	#0	16QAM	5.62	13	PASS
Band13	10	23230	1	#0	QPSK	5.81	13	PASS
Band13	10	23230	1	#0	16QAM	6.51	13	PASS
Band17	5	23755	1	#0	QPSK	4.91	13	PASS
Band17	5	23755	1	#0	16QAM	5.76	13	PASS
Band17	5	23790	1	#0	QPSK	5.61	13	PASS
Band17	5	23790	1	#0	16QAM	6.38	13	PASS
Band17	5	23825	1	#0	QPSK	6.49	13	PASS
Band17	5	23825	1	#0	16QAM	6.67	13	PASS
Band17	10	23780	1	#0	QPSK	4.64	13	PASS
Band17	10	23780	1	#0	16QAM	5.75	13	PASS
Band17	10	23790	1	#0	QPSK	4.90	13	PASS
Band17	10	23790	1	#0	16QAM	5.71	13	PASS
Band17	10	23800	1	#0	QPSK	5.26	13	PASS
Band17	10	23800	1	#0	16QAM	5.94	13	PASS
Band66	1.4	131979	1	#0	QPSK	4.38	13	PASS
Band66	1.4	131979	1	#0	16QAM	5.16	13	PASS
Band66	1.4	132322	1	#0	QPSK	4.26	13	PASS
Band66	1.4	132322	1	#0	16QAM	4.90	13	PASS
Band66	1.4	132665	1	#0	QPSK	5.18	13	PASS
Band66	1.4	132665	1	#0	16QAM	5.87	13	PASS
Band66	3	131987	1	#0	QPSK	4.54	13	PASS
Band66	3	131987	1	#0	16QAM	5.30	13	PASS
Band66	3	132322	1	#0	QPSK	4.25	13	PASS
Band66	3	132322	1	#0	16QAM	4.96	13	PASS
Band66	3	132657	1	#0	QPSK	5.12	13	PASS
Band66	3	132657	1	#0	16QAM	5.93	13	PASS
Band66	5	131997	1	#0	QPSK	4.17	13	PASS
Band66	5	131997	1	#0	16QAM	5.12	13	PASS
Band66	5	132322	1	#0	QPSK	4.04	13	PASS
Band66	5	132322	1	#0	16QAM	4.79	13	PASS
Band66	5	132647	1	#0	QPSK	4.78	13	PASS
Band66	5	132647	1	#0	16QAM	5.33	13	PASS
Band66	10	132022	1	#0	QPSK	3.94	13	PASS
Band66	10	132022	1	#0	16QAM	4.85	13	PASS
Band66	10	132322	1	#0	QPSK	3.98	13	PASS
Band66	10	132322	1	#0	16QAM	4.42	13	PASS
Band66	10	132622	1	#0	QPSK	4.52	13	PASS
Band66	10	132622	1	#0	16QAM	5.23	13	PASS
Band66	15	132047	1	#0	QPSK	4.04	13	PASS
Band66	15	132047	1	#0	16QAM	4.91	13	PASS
Band66	15	132322	1	#0	QPSK	3.92	13	PASS
Band66	15	132322	1	#0	16QAM	4.58	13	PASS

Band66	15	132597	1	#0	QPSK	5.13	13	PASS
Band66	15	132597	1	#0	16QAM	5.95	13	PASS
Band66	20	132072	1	#0	QPSK	3.90	13	PASS
Band66	20	132072	1	#0	16QAM	4.60	13	PASS
Band66	20	132322	1	#0	QPSK	4.19	13	PASS
Band66	20	132322	1	#0	16QAM	4.78	13	PASS
Band66	20	132572	1	#0	QPSK	4.06	13	PASS
Band66	20	132572	1	#0	16QAM	4.77	13	PASS

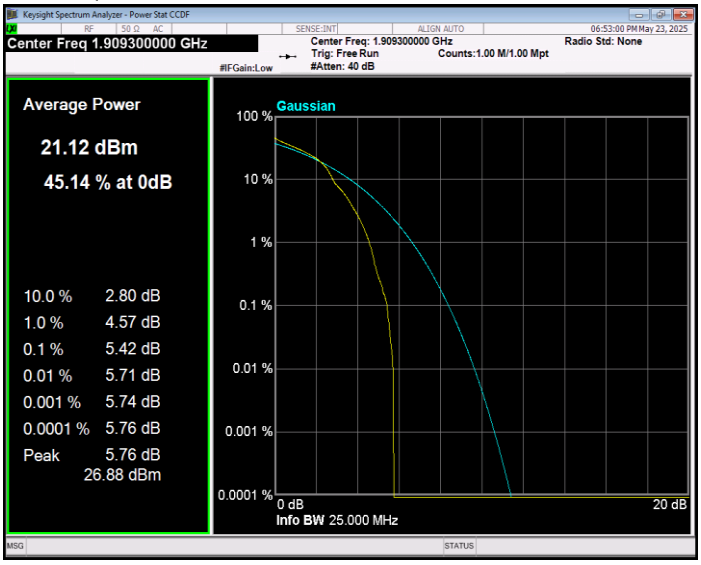
Band2 16QAM BW=1.4MHz Channel=18607 RB Size=1 Position=#0



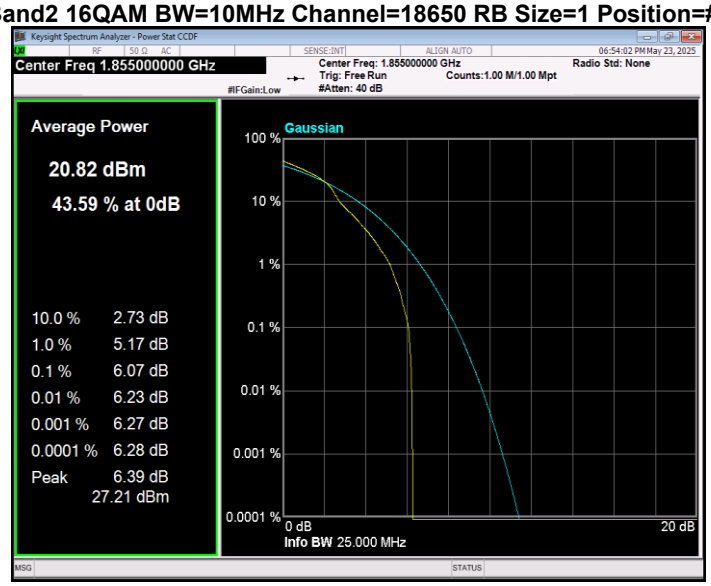
Band2 16QAM BW=1.4MHz Channel=18900 RB Size=1 Position=#0



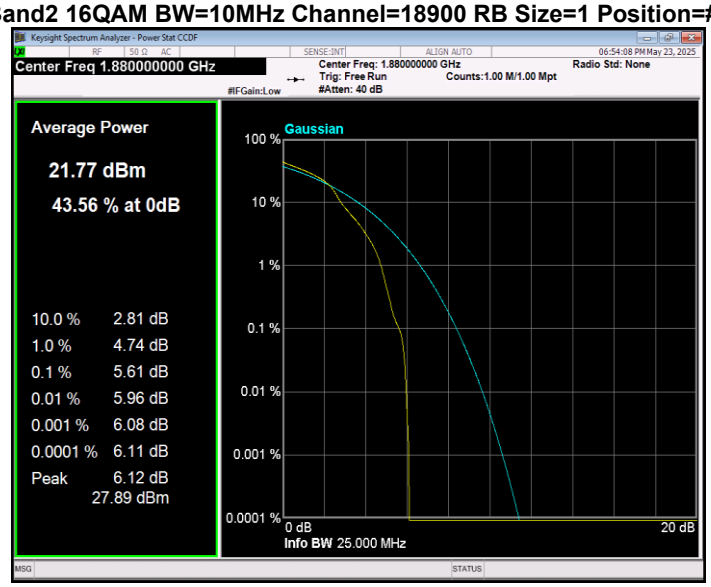
Band2 16QAM BW=1.4MHz Channel=19193 RB Size=1 Position=#0



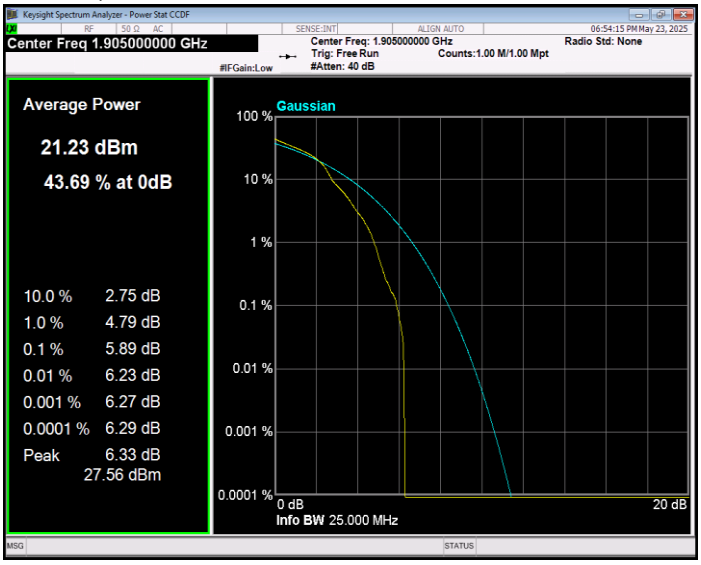
Band2 16QAM BW=10MHz Channel=18650 RB Size=1 Position=#0



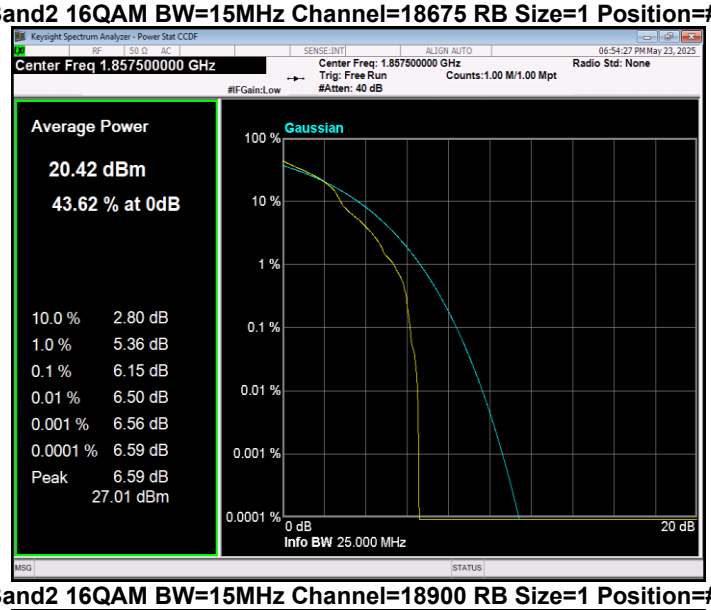
Band2 16QAM BW=10MHz Channel=18900 RB Size=1 Position=#0



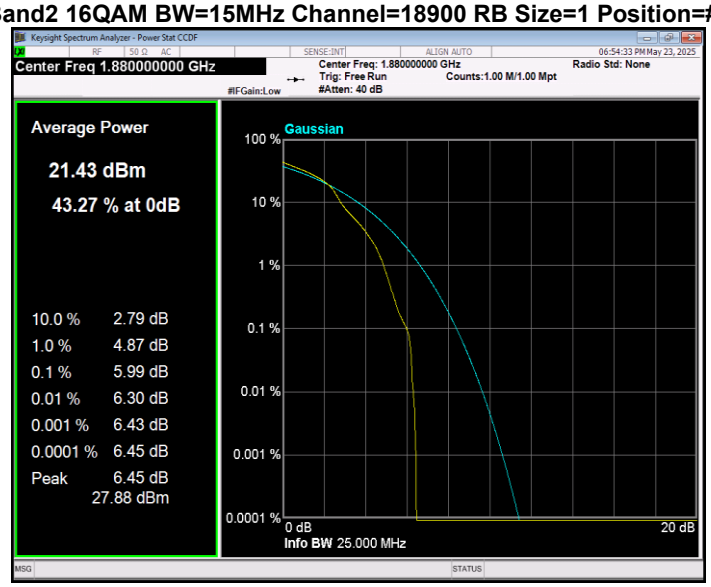
Band2 16QAM BW=10MHz Channel=19150 RB Size=1 Position=#0



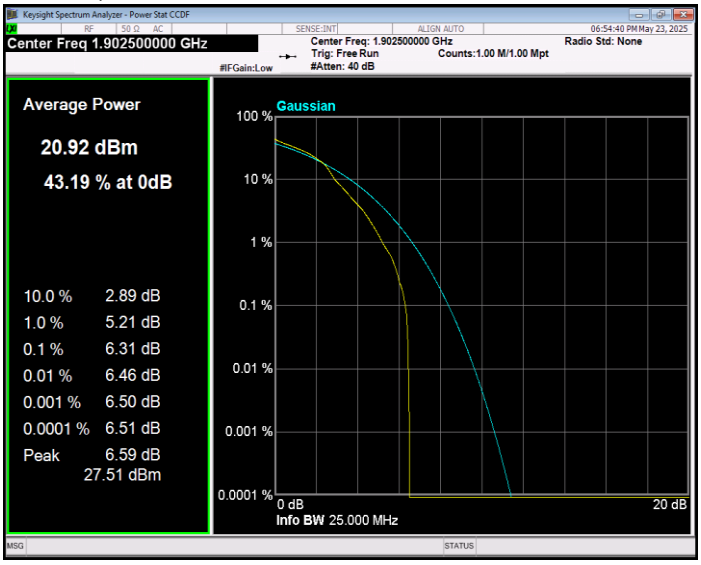
Band2 16QAM BW=15MHz Channel=18675 RB Size=1 Position=#0



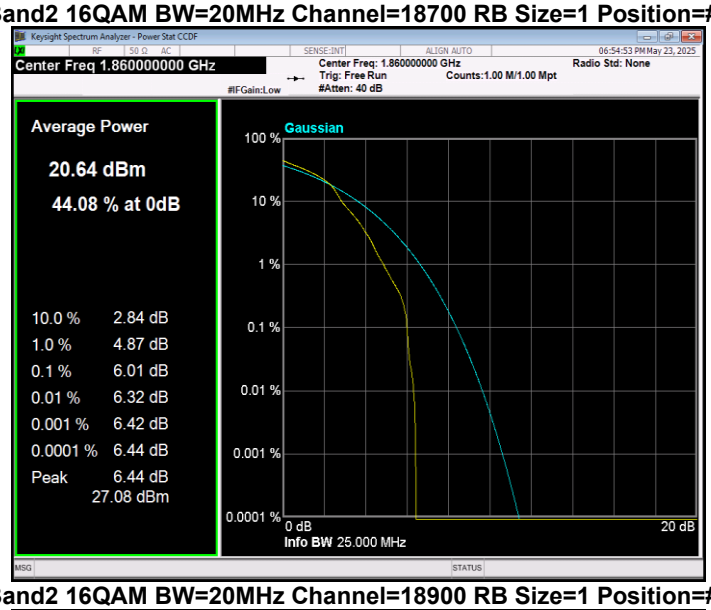
Band2 16QAM BW=15MHz Channel=18900 RB Size=1 Position=#0



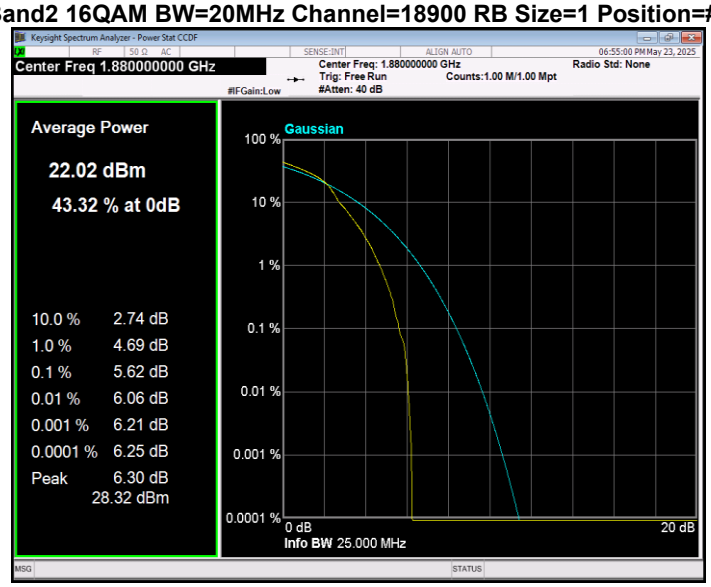
Band2 16QAM BW=15MHz Channel=19125 RB Size=1 Position=#0



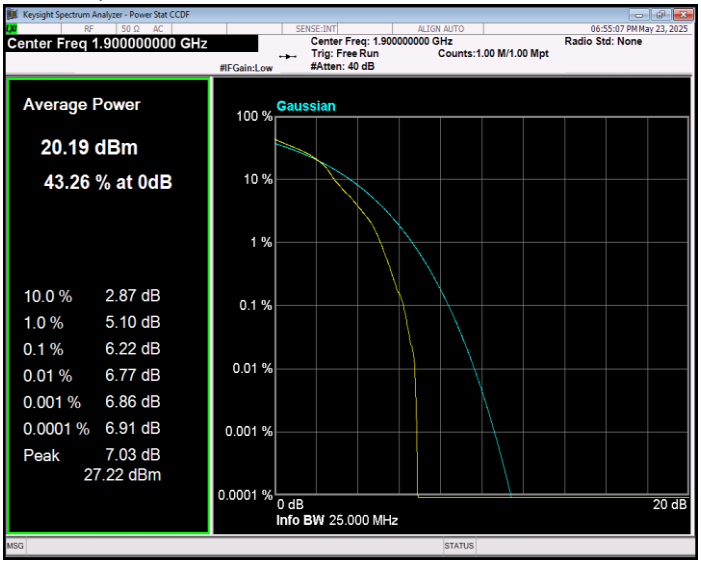
Band2 16QAM BW=20MHz Channel=18700 RB Size=1 Position=#0



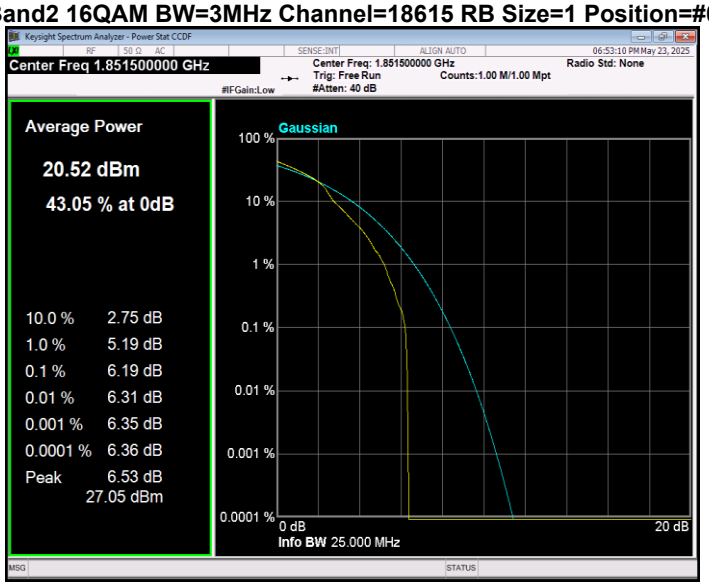
Band2 16QAM BW=20MHz Channel=18900 RB Size=1 Position=#0



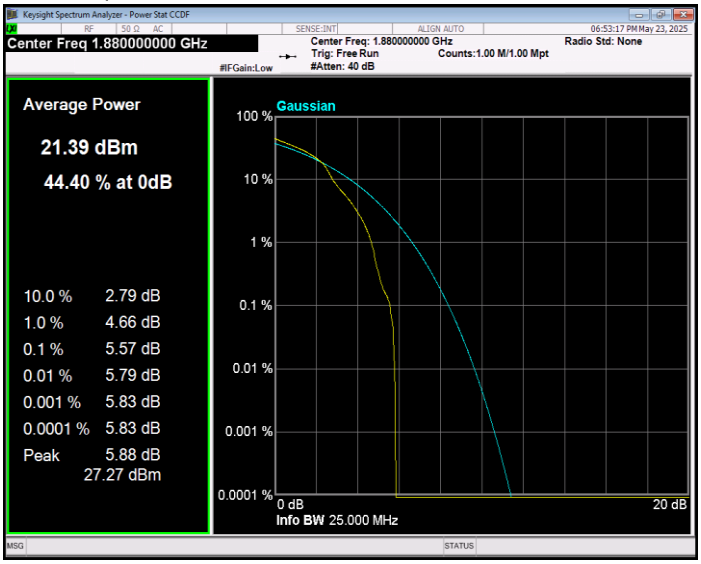
Band2 16QAM BW=20MHz Channel=19100 RB Size=1 Position=#0



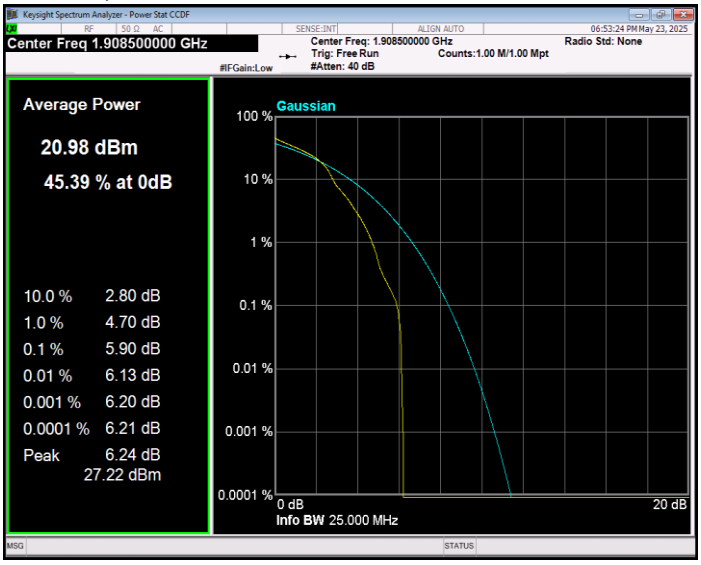
Band2 16QAM BW=3MHz Channel=18615 RB Size=1 Position=#0



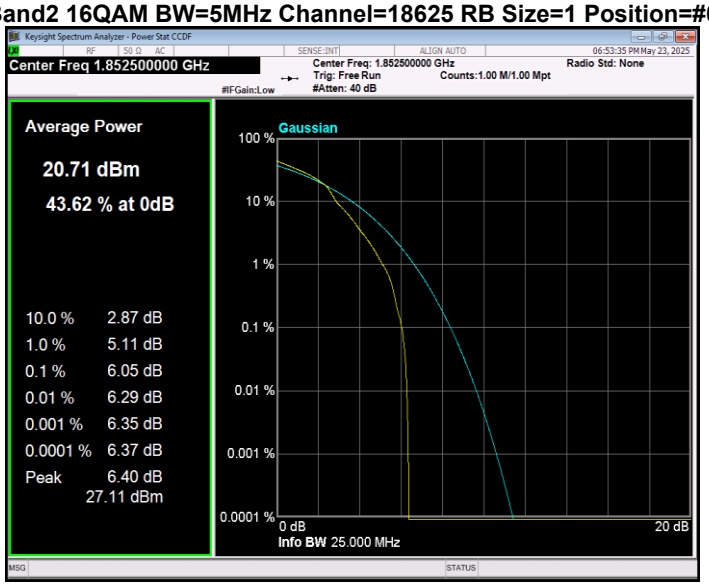
Band2 16QAM BW=3MHz Channel=18900 RB Size=1 Position=#0



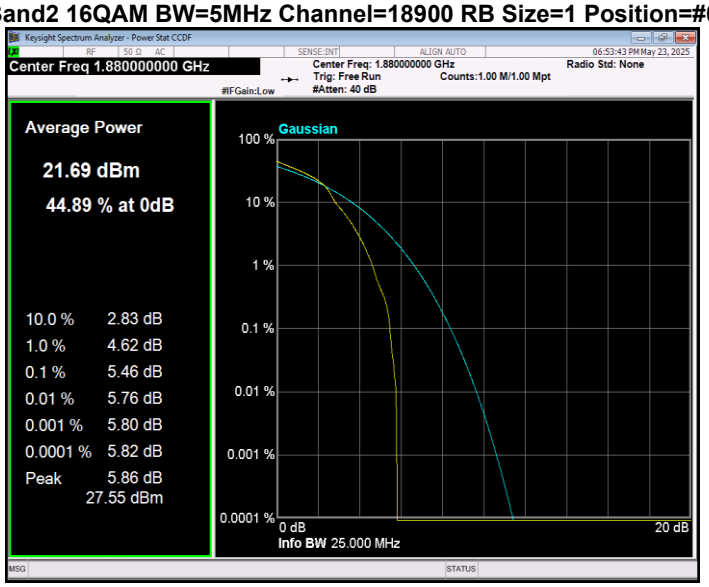
Band2 16QAM BW=3MHz Channel=19185 RB Size=1 Position=#0



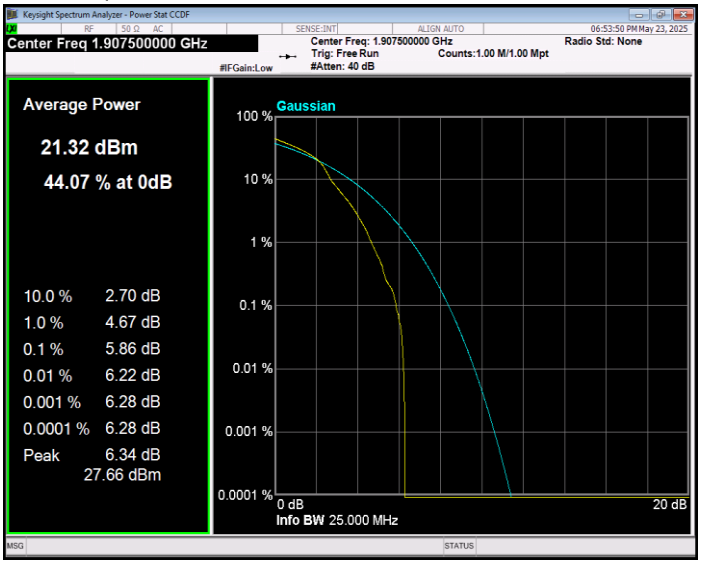
Band2 16QAM BW=5MHz Channel=18625 RB Size=1 Position=#0



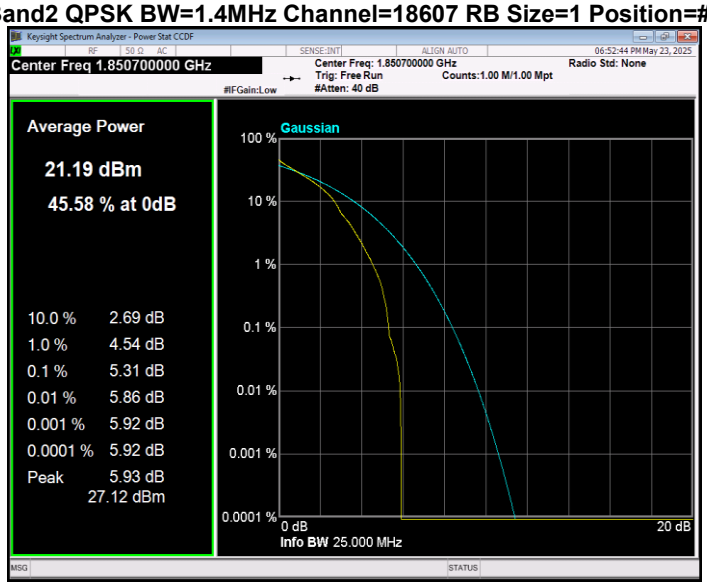
Band2 16QAM BW=5MHz Channel=18900 RB Size=1 Position=#0



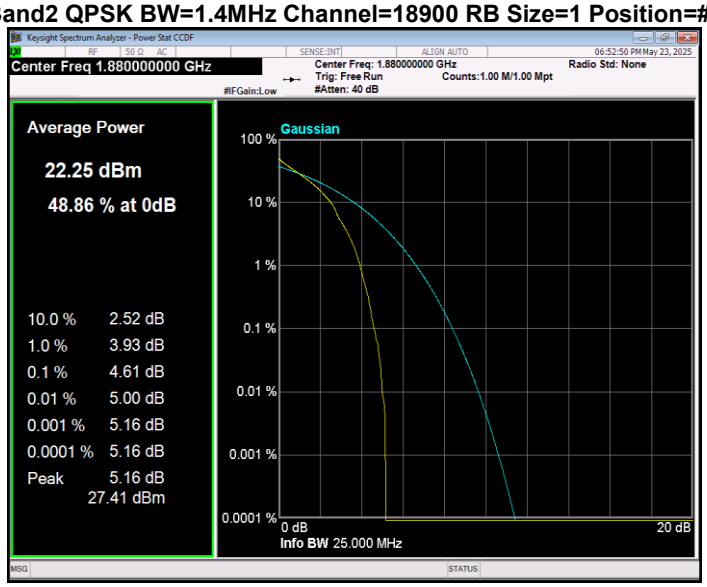
Band2 16QAM BW=5MHz Channel=19175 RB Size=1 Position=#0



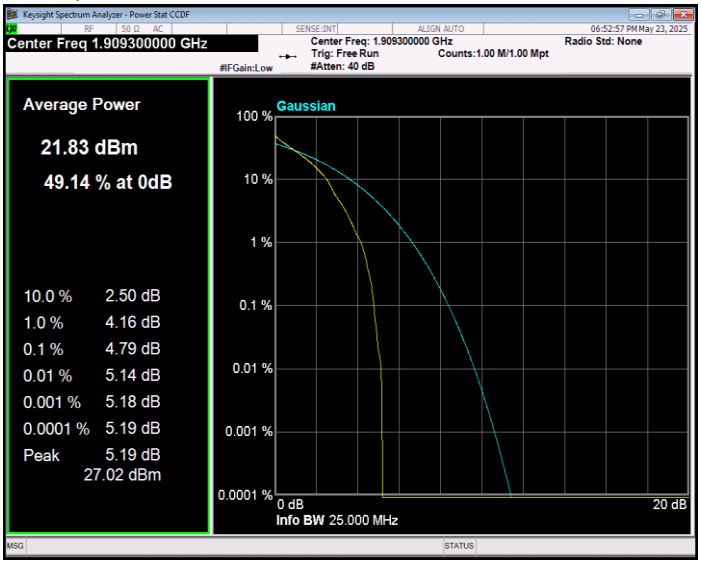
Band2 QPSK BW=1.4MHz Channel=18607 RB Size=1 Position=#0



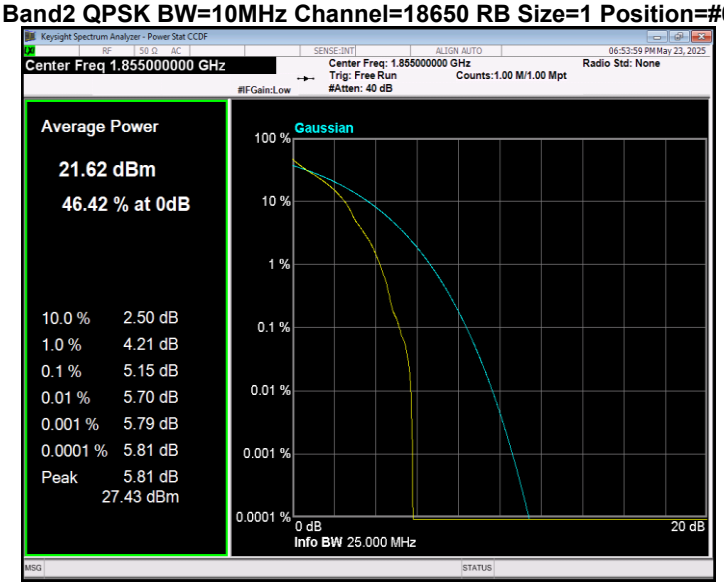
Band2 QPSK BW=1.4MHz Channel=18900 RB Size=1 Position=#0



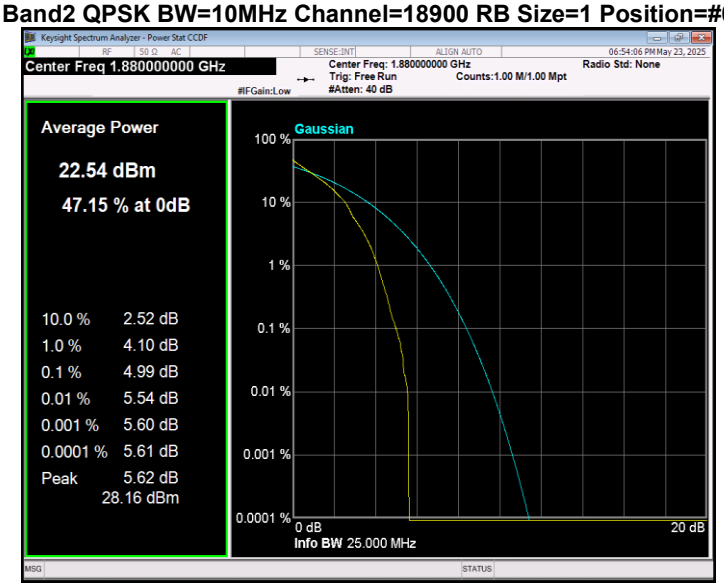
Band2 QPSK BW=1.4MHz Channel=19193 RB Size=1 Position=#0



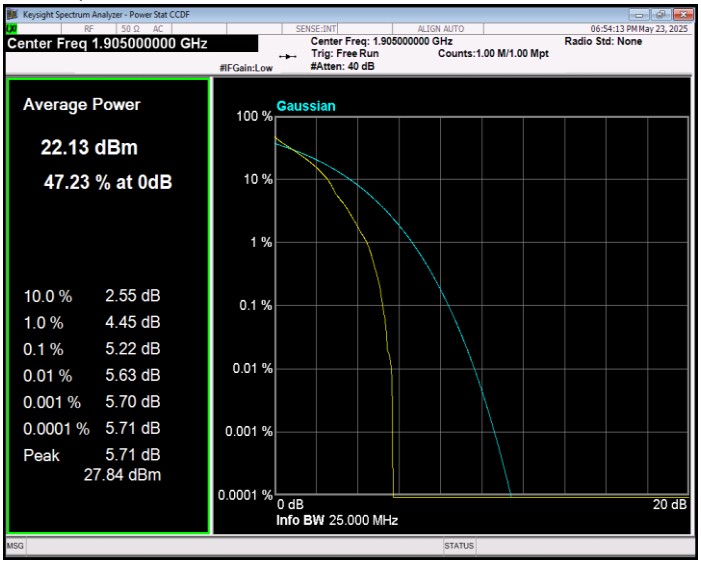
Band2 QPSK BW=10MHz Channel=18650 RB Size=1 Position=#0



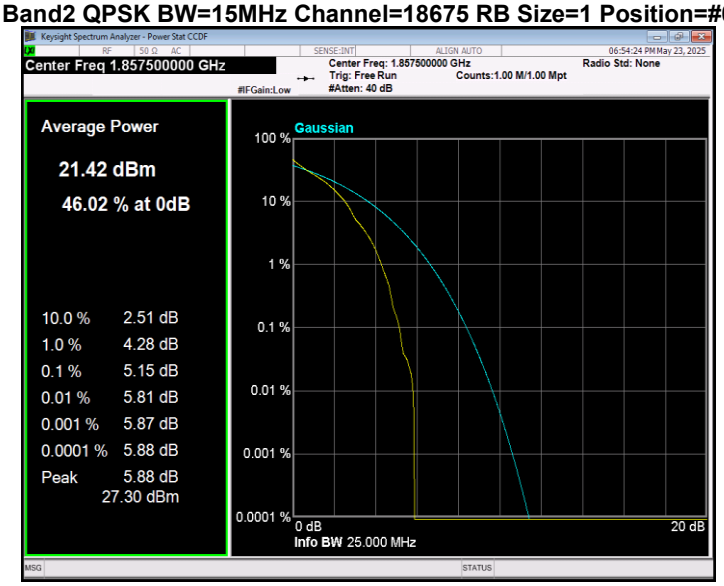
Band2 QPSK BW=10MHz Channel=18900 RB Size=1 Position=#0



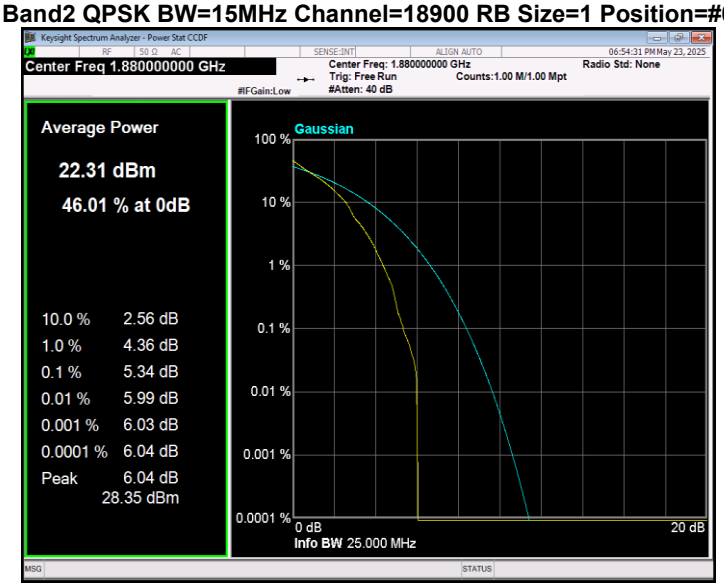
Band2 QPSK BW=10MHz Channel=19150 RB Size=1 Position=#0



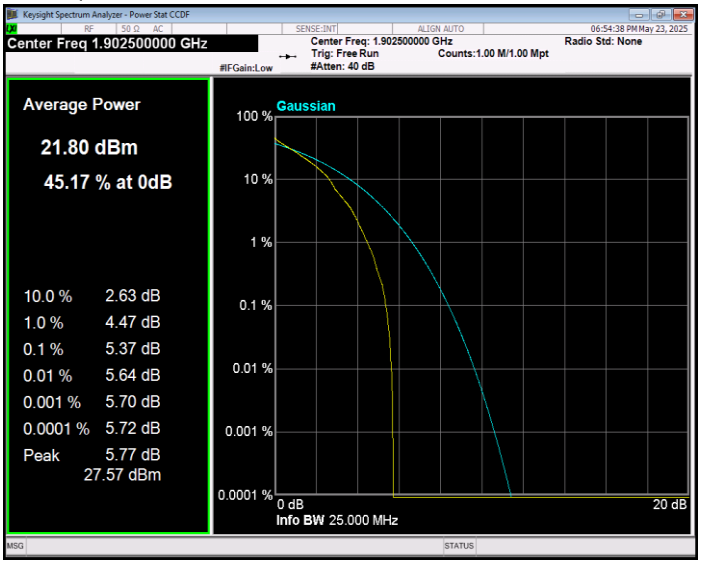
Band2 QPSK BW=15MHz Channel=18675 RB Size=1 Position=#0



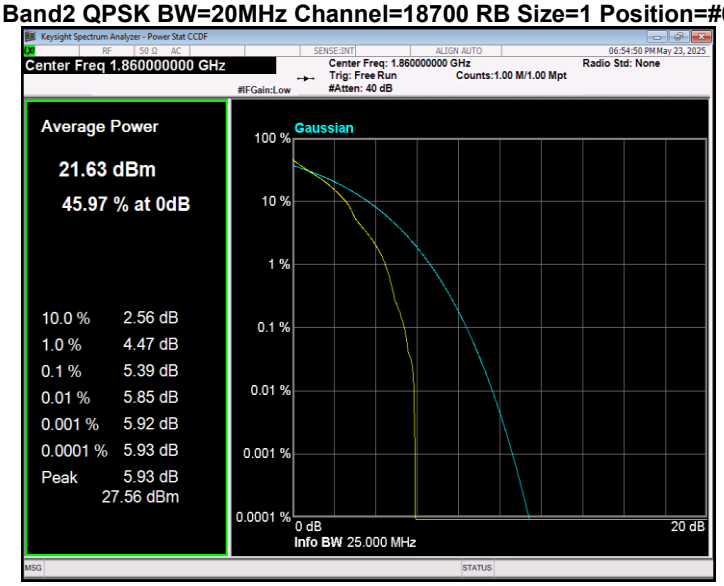
Band2 QPSK BW=15MHz Channel=18900 RB Size=1 Position=#0



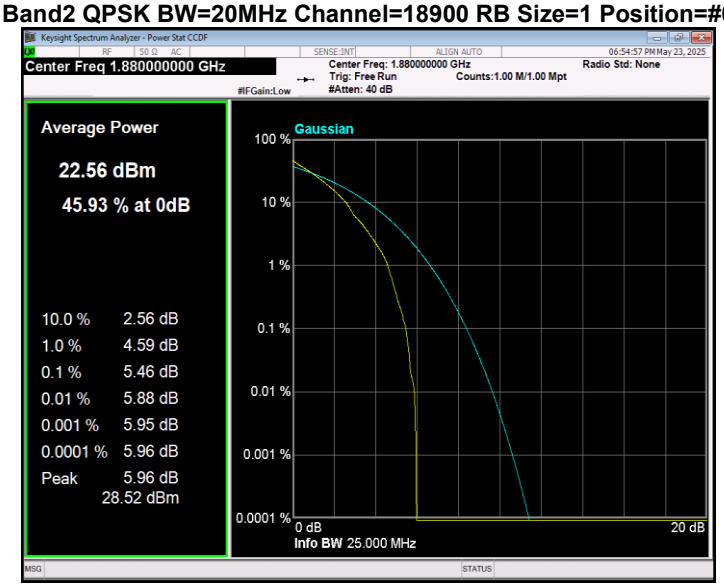
Band2 QPSK BW=15MHz Channel=19125 RB Size=1 Position=#0



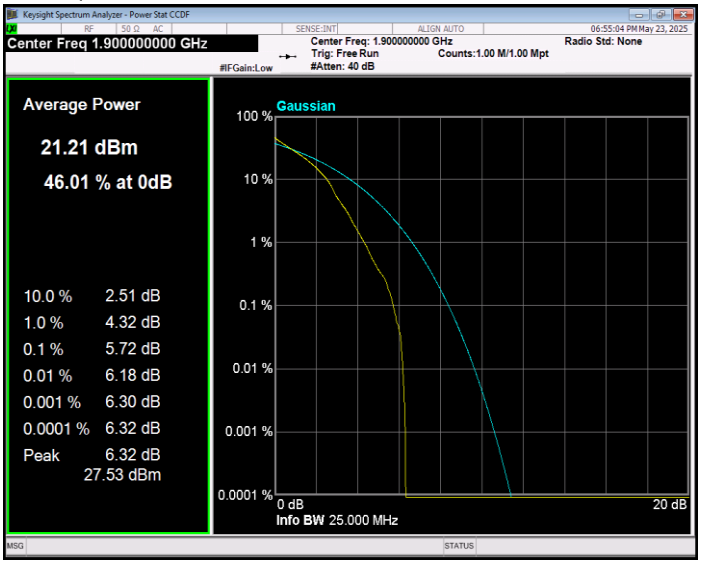
Band2 QPSK BW=20MHz Channel=18700 RB Size=1 Position=#0



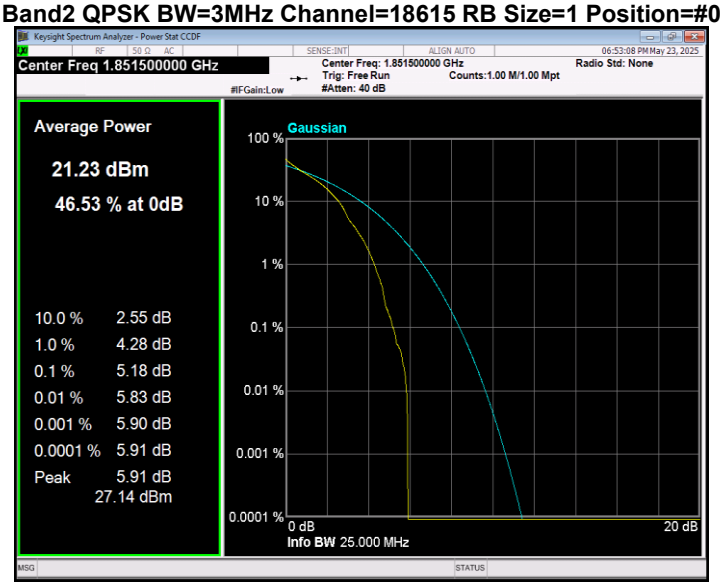
Band2 QPSK BW=20MHz Channel=18900 RB Size=1 Position=#0



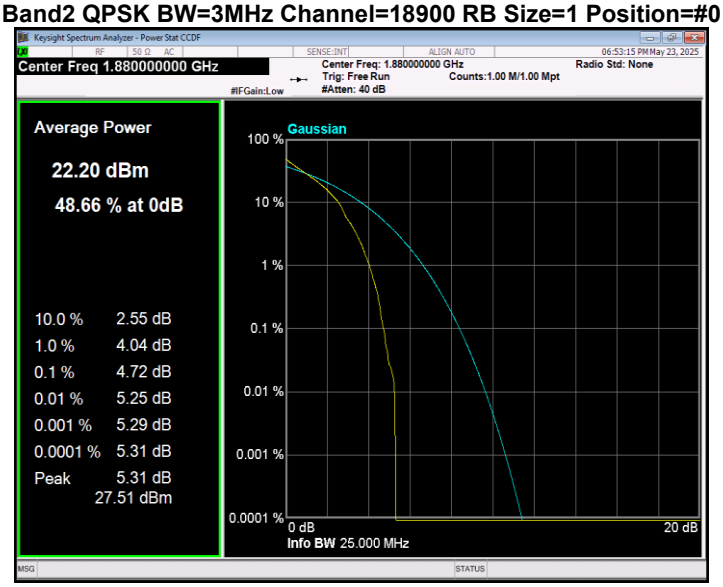
Band2 QPSK BW=20MHz Channel=19100 RB Size=1 Position=#0



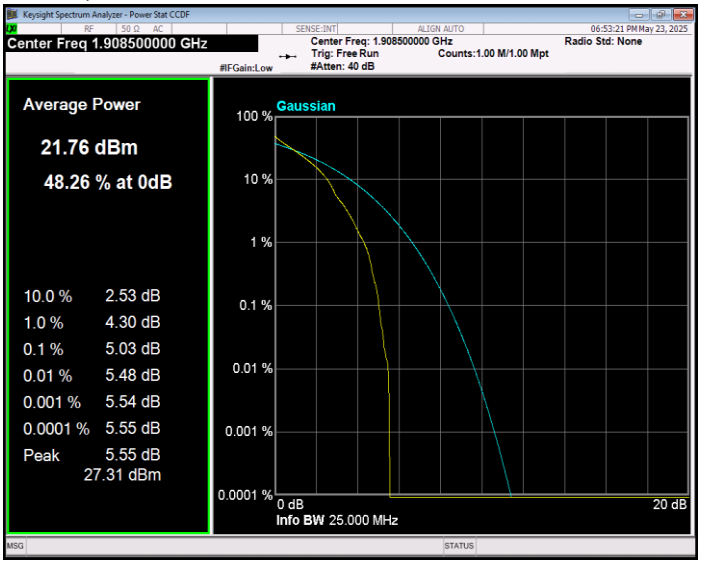
Band2 QPSK BW=3MHz Channel=18615 RB Size=1 Position=#0



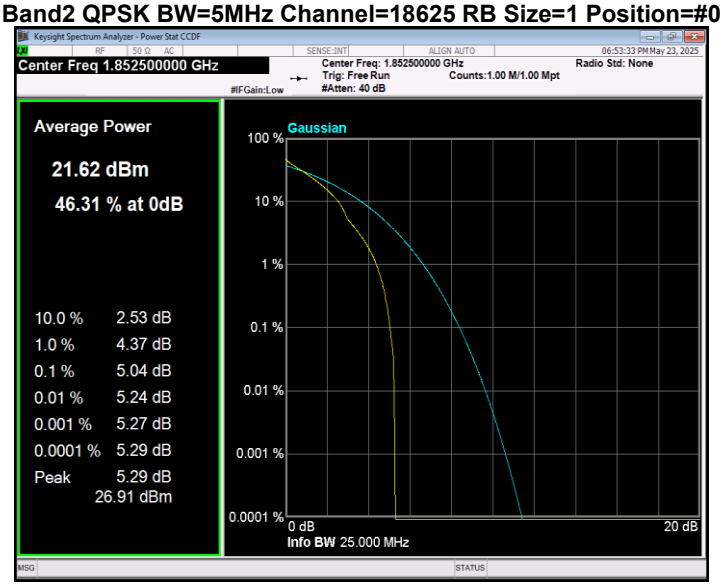
Band2 QPSK BW=3MHz Channel=18900 RB Size=1 Position=#0



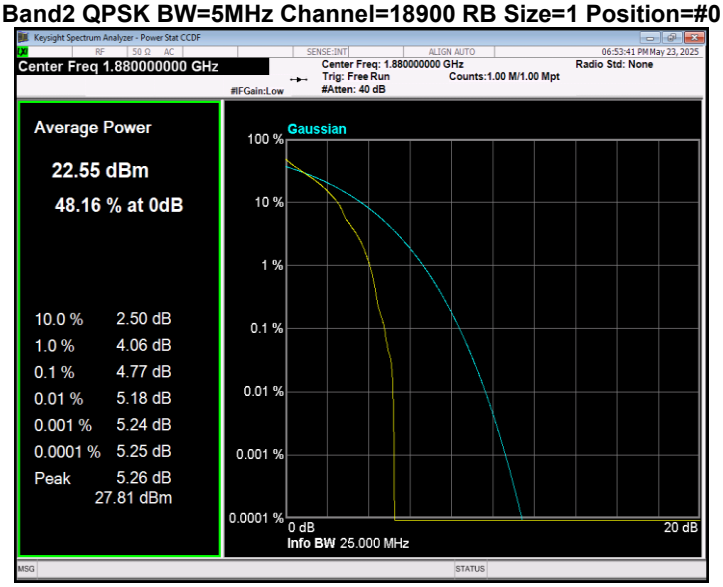
Band2 QPSK BW=3MHz Channel=19185 RB Size=1 Position=#0



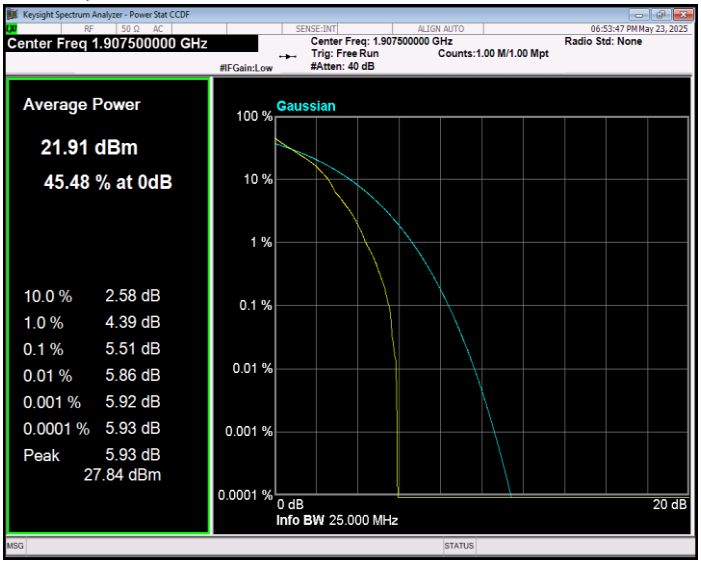
Band2 QPSK BW=5MHz Channel=18625 RB Size=1 Position=#0



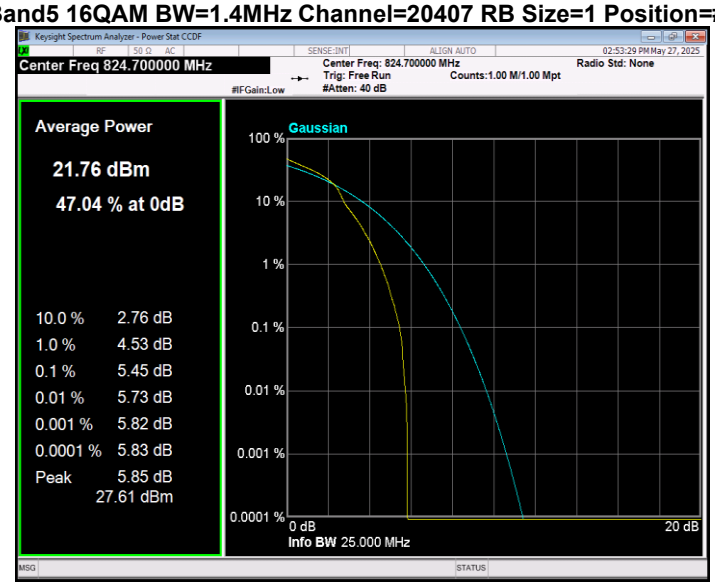
Band2 QPSK BW=5MHz Channel=18900 RB Size=1 Position=#0



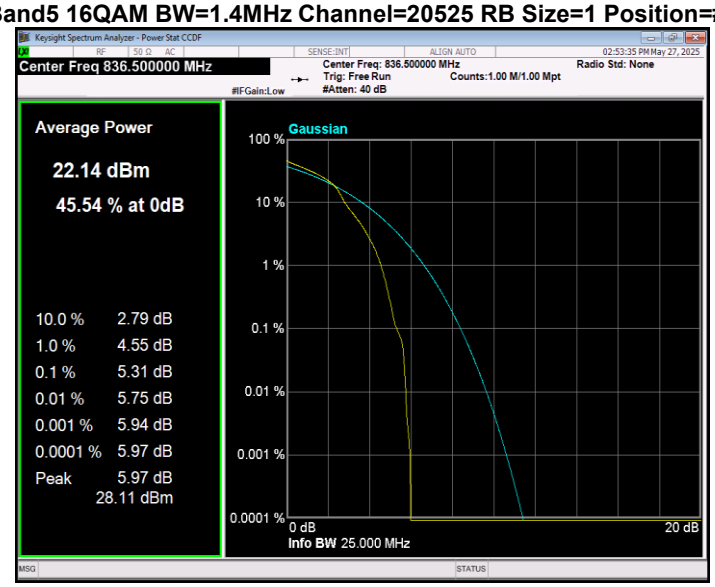
Band2 QPSK BW=5MHz Channel=19175 RB Size=1 Position=#0



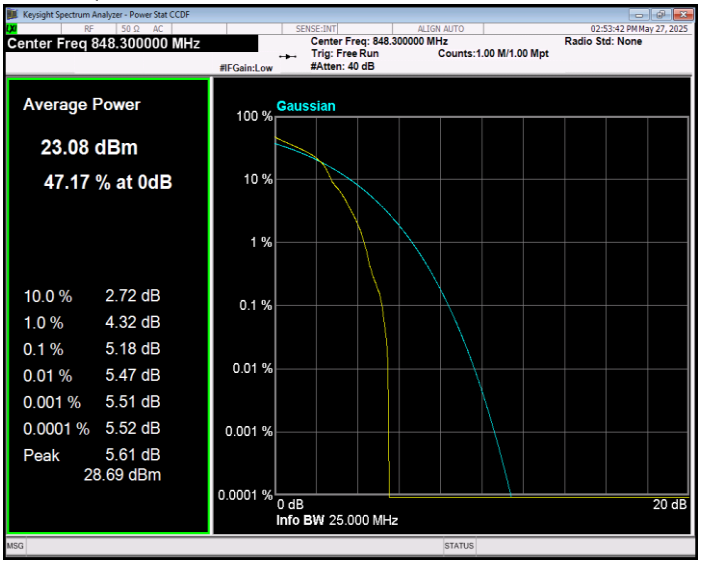
Band5 16QAM BW=1.4MHz Channel=20407 RB Size=1 Position=#0



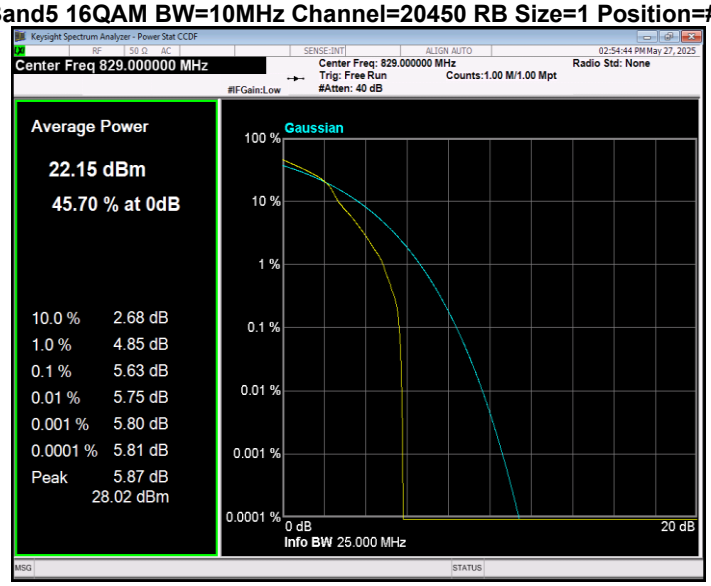
Band5 16QAM BW=1.4MHz Channel=20525 RB Size=1 Position=#0



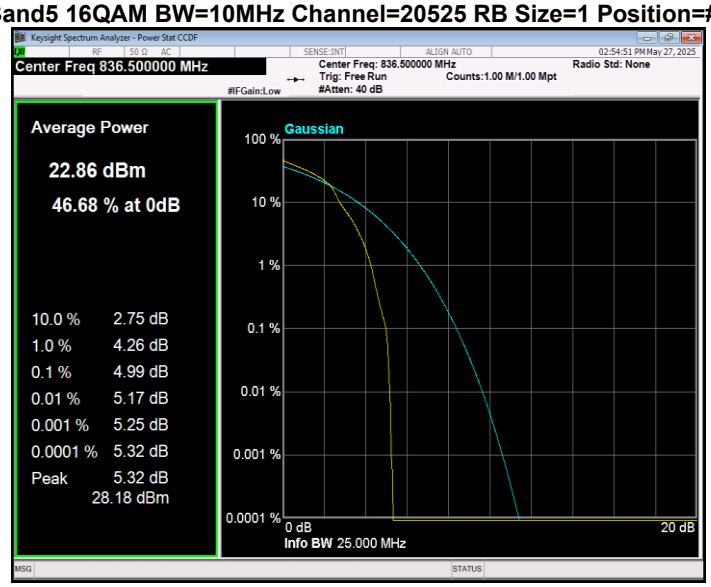
Band5 16QAM BW=1.4MHz Channel=20643 RB Size=1 Position=#0



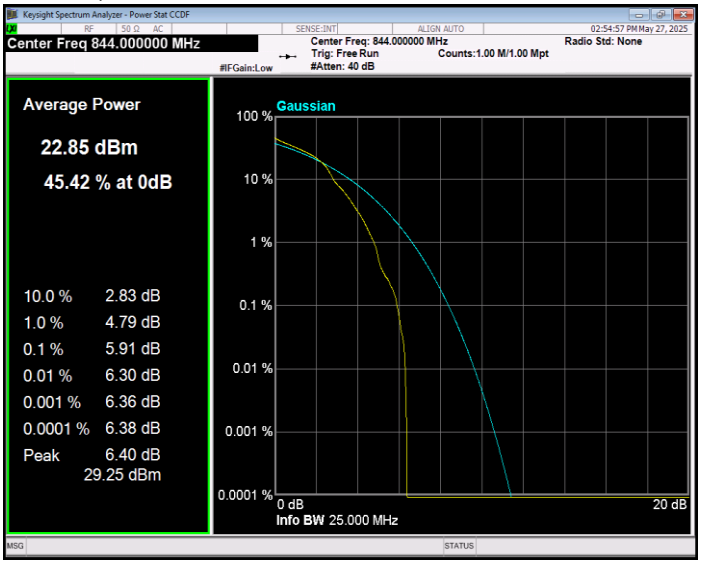
Band5 16QAM BW=10MHz Channel=20450 RB Size=1 Position=#0



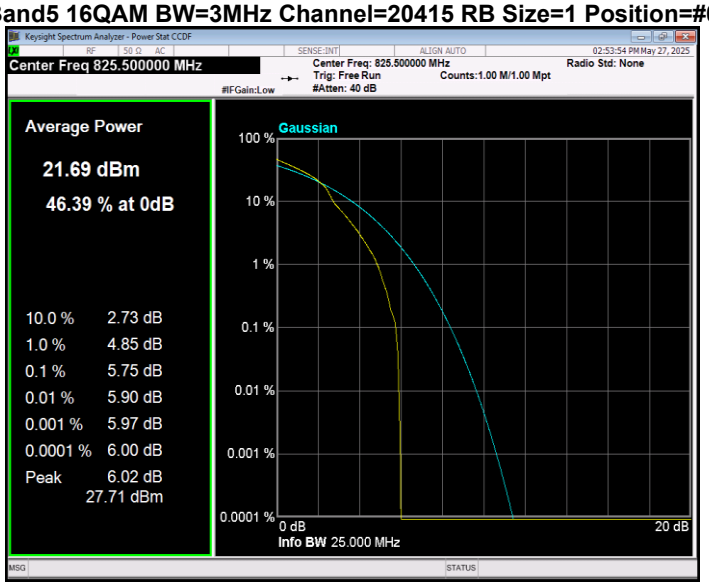
Band5 16QAM BW=10MHz Channel=20525 RB Size=1 Position=#0



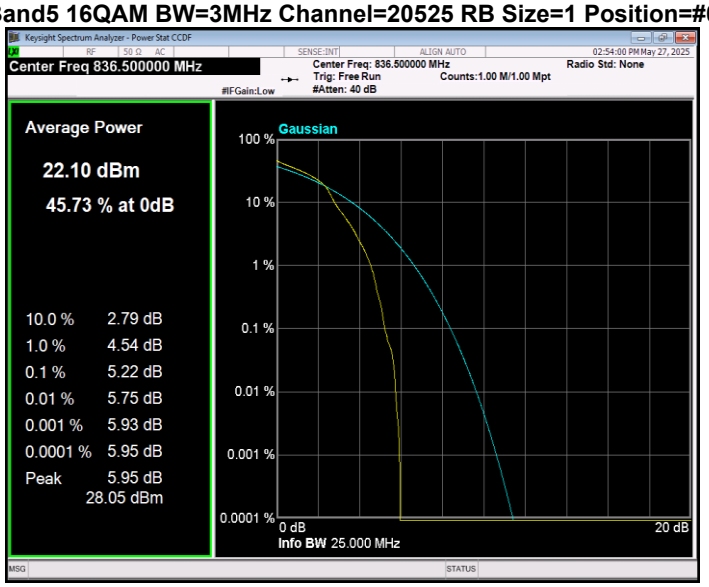
Band5 16QAM BW=10MHz Channel=20600 RB Size=1 Position=#0



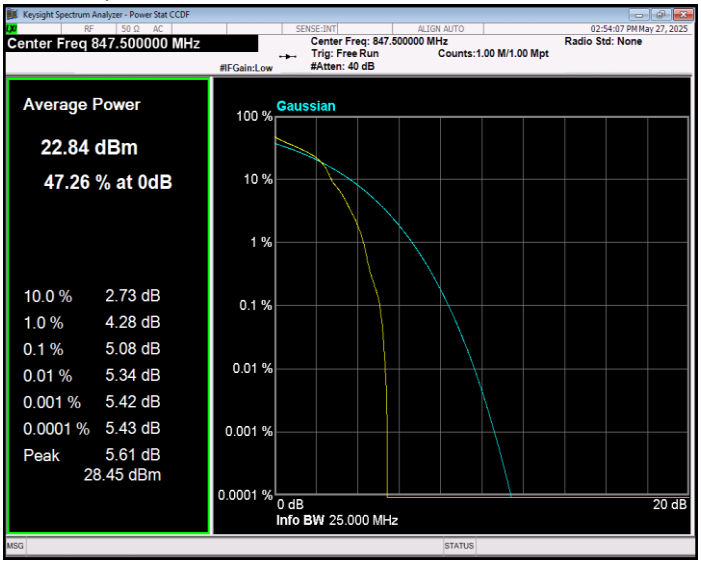
Band5 16QAM BW=3MHz Channel=20415 RB Size=1 Position=#0



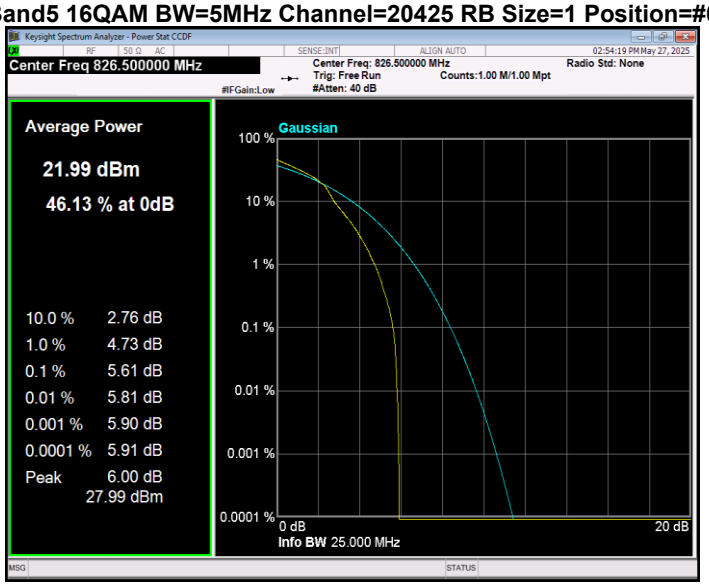
Band5 16QAM BW=3MHz Channel=20525 RB Size=1 Position=#0



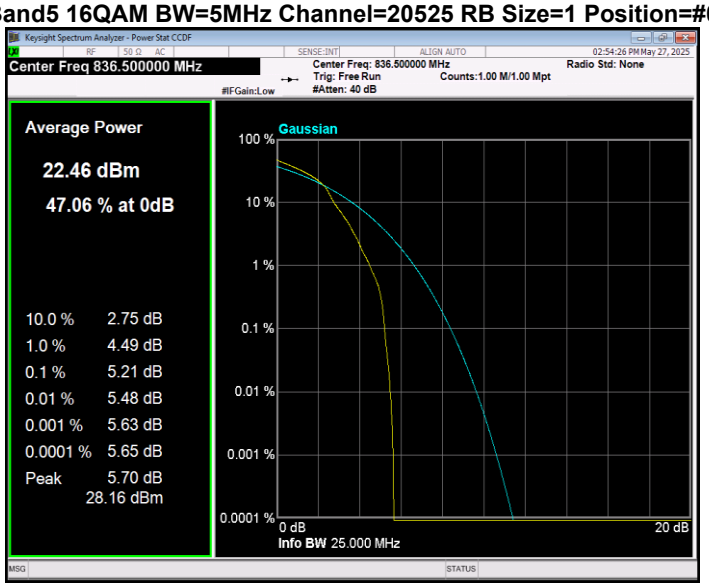
Band5 16QAM BW=3MHz Channel=20635 RB Size=1 Position=#0



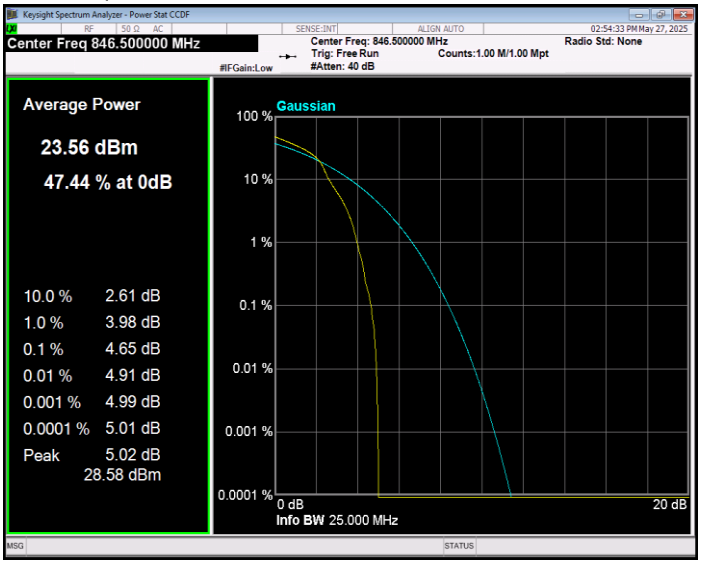
Band5 16QAM BW=5MHz Channel=20425 RB Size=1 Position=#0



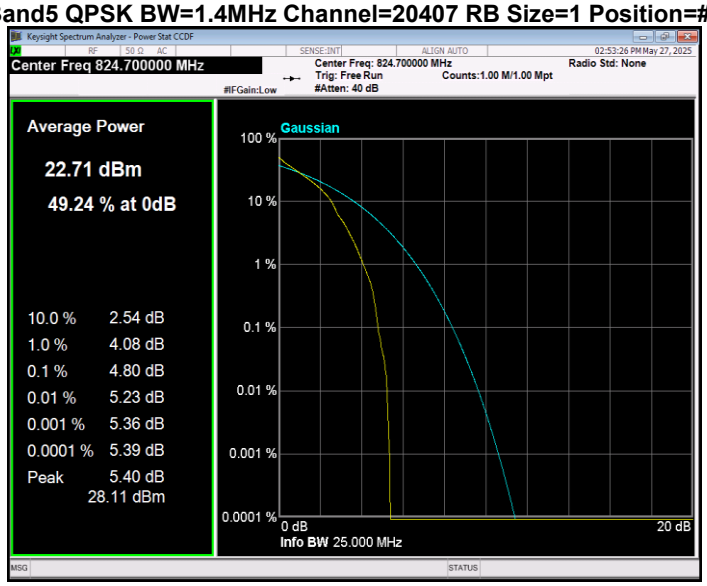
Band5 16QAM BW=5MHz Channel=20525 RB Size=1 Position=#0



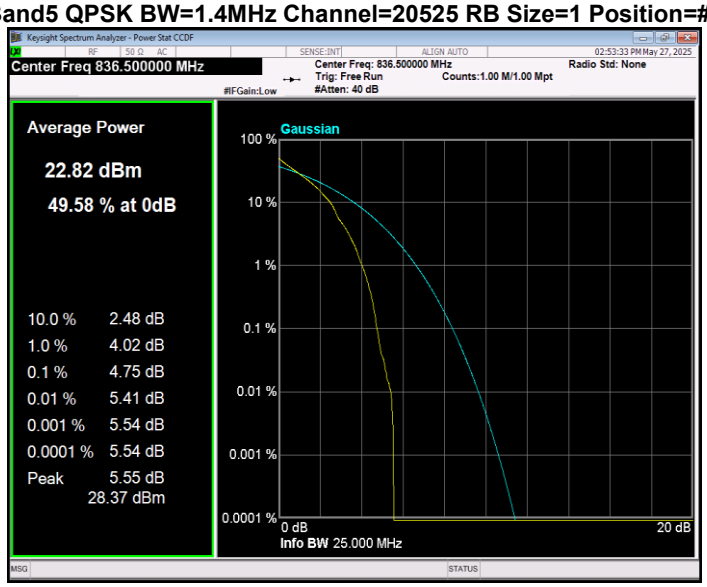
Band5 16QAM BW=5MHz Channel=20625 RB Size=1 Position=#0



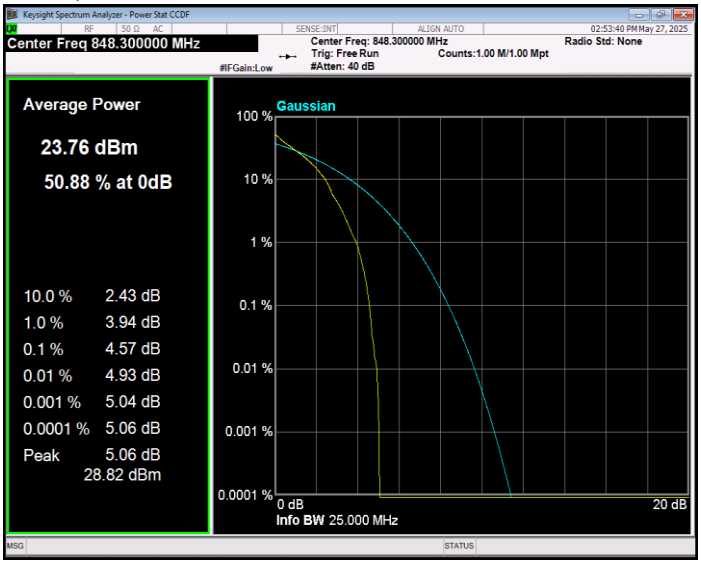
Band5 QPSK BW=1.4MHz Channel=20407 RB Size=1 Position=#0



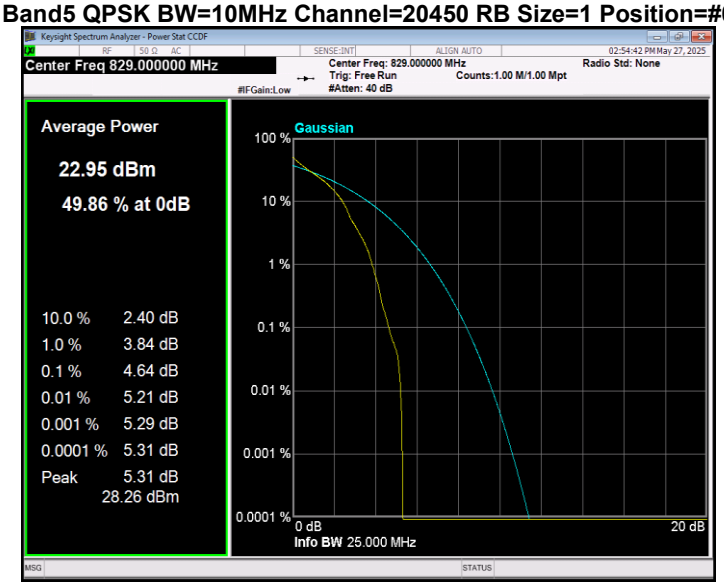
Band5 QPSK BW=1.4MHz Channel=20525 RB Size=1 Position=#0



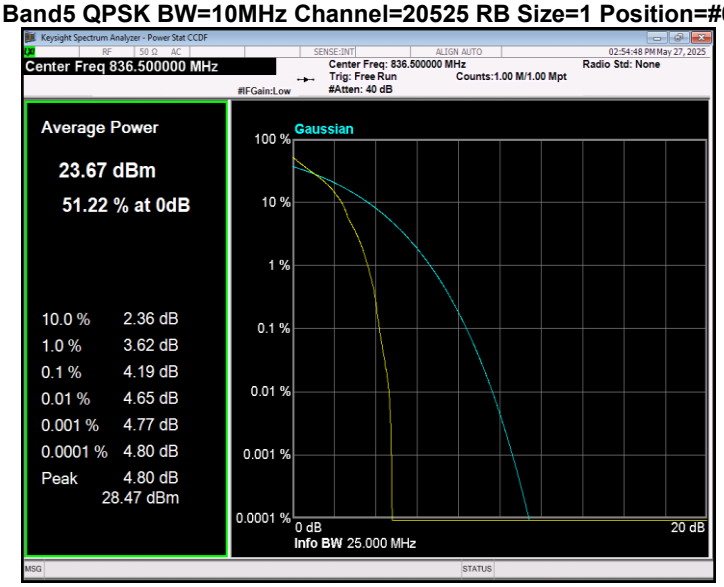
Band5 QPSK BW=1.4MHz Channel=20643 RB Size=1 Position=#0



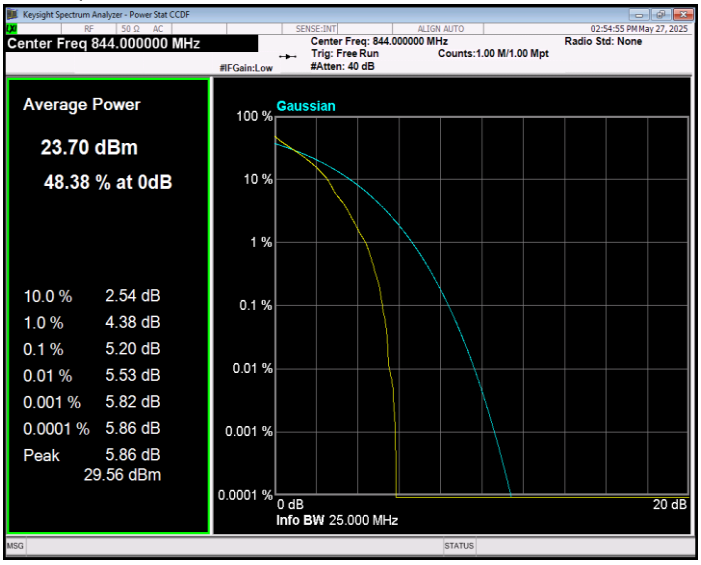
Band5 QPSK BW=10MHz Channel=20450 RB Size=1 Position=#0



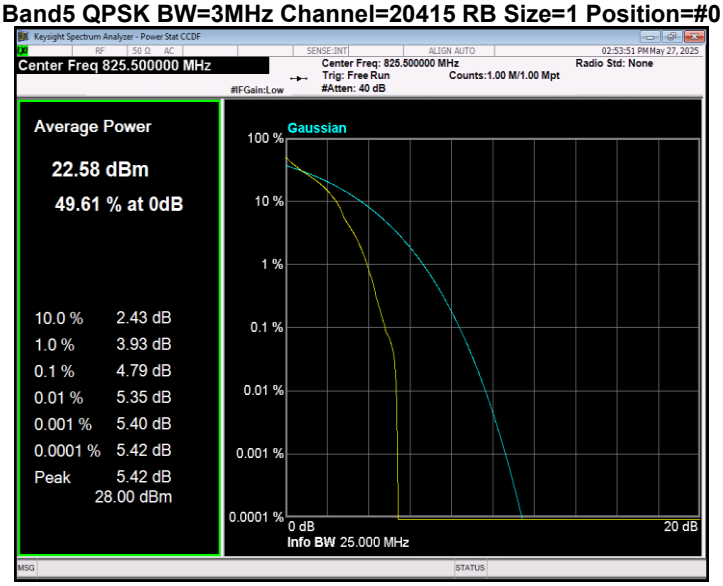
Band5 QPSK BW=10MHz Channel=20525 RB Size=1 Position=#0



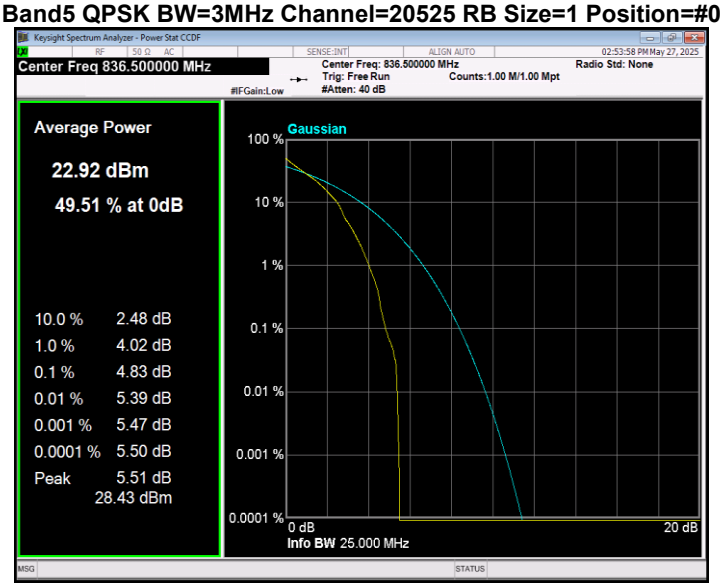
Band5 QPSK BW=10MHz Channel=20600 RB Size=1 Position=#0



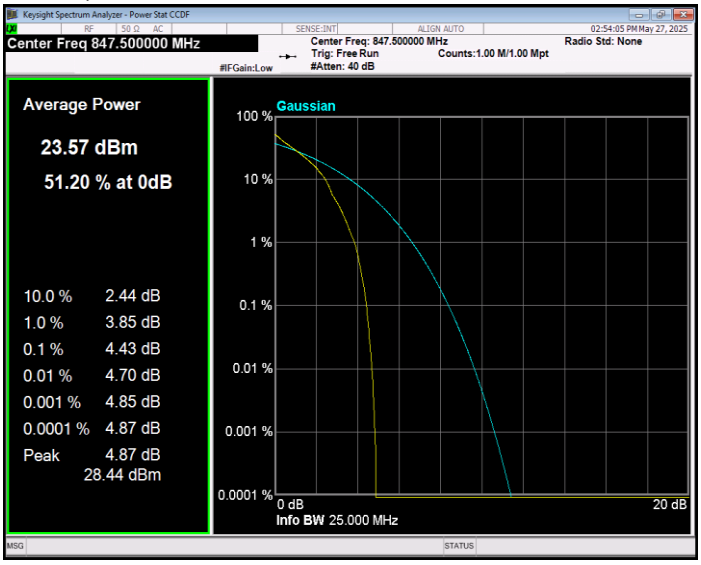
Band5 QPSK BW=3MHz Channel=20415 RB Size=1 Position=#0



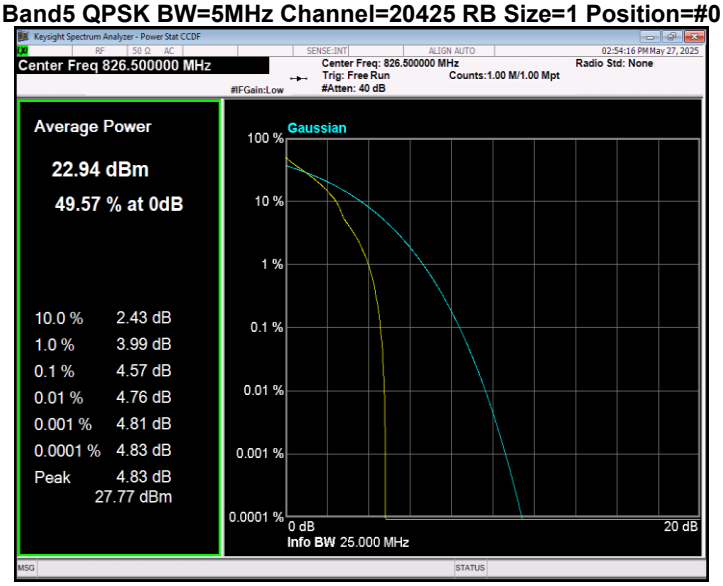
Band5 QPSK BW=3MHz Channel=20525 RB Size=1 Position=#0



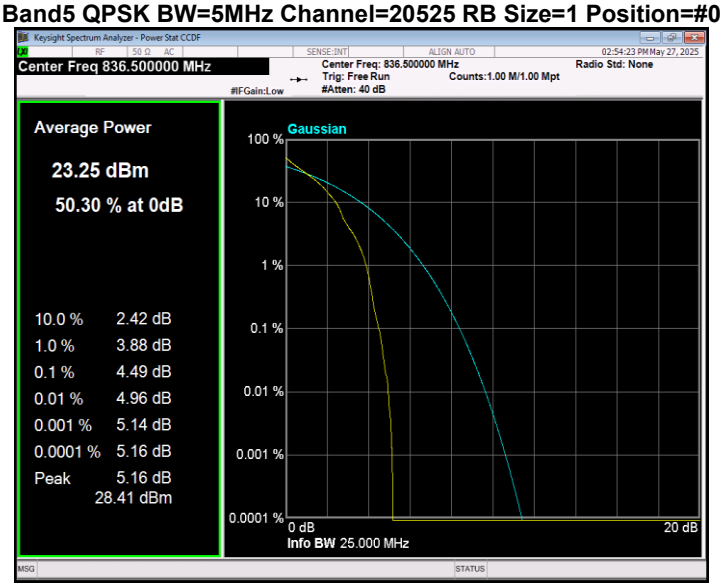
Band5 QPSK BW=3MHz Channel=20635 RB Size=1 Position=#0



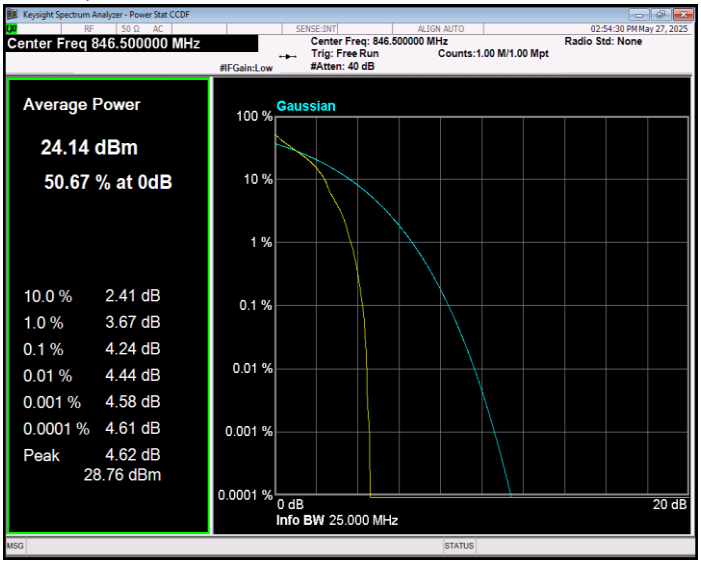
Band5 QPSK BW=5MHz Channel=20425 RB Size=1 Position=#0



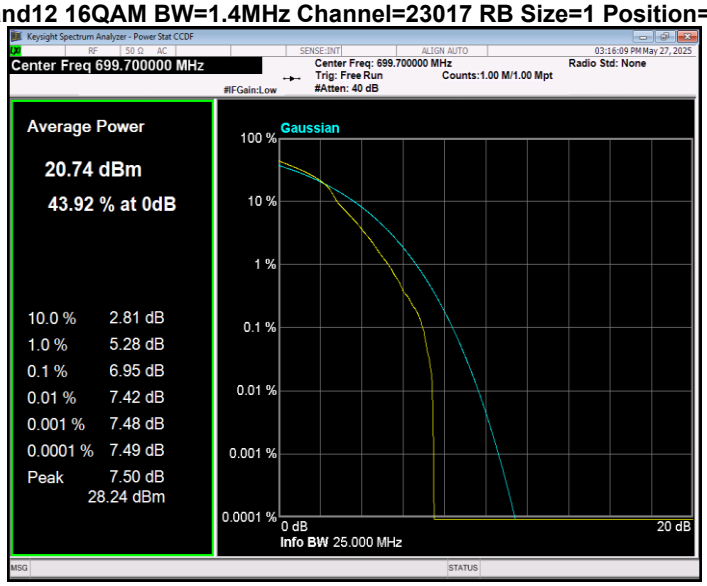
Band5 QPSK BW=5MHz Channel=20525 RB Size=1 Position=#0



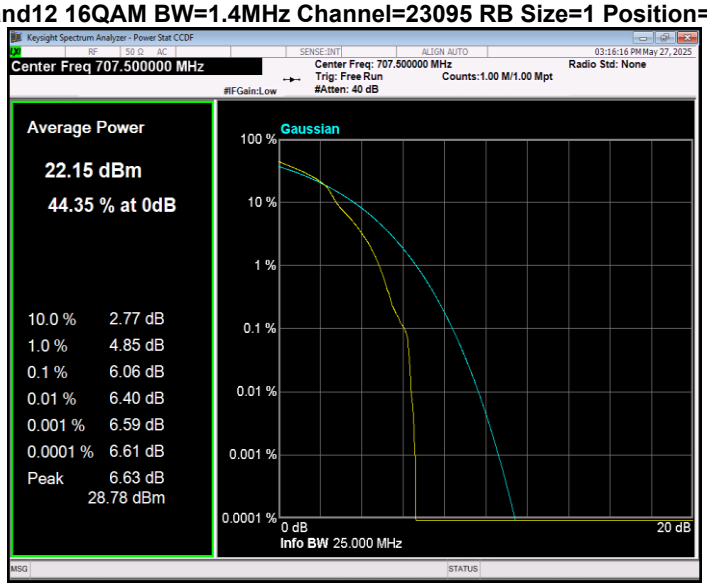
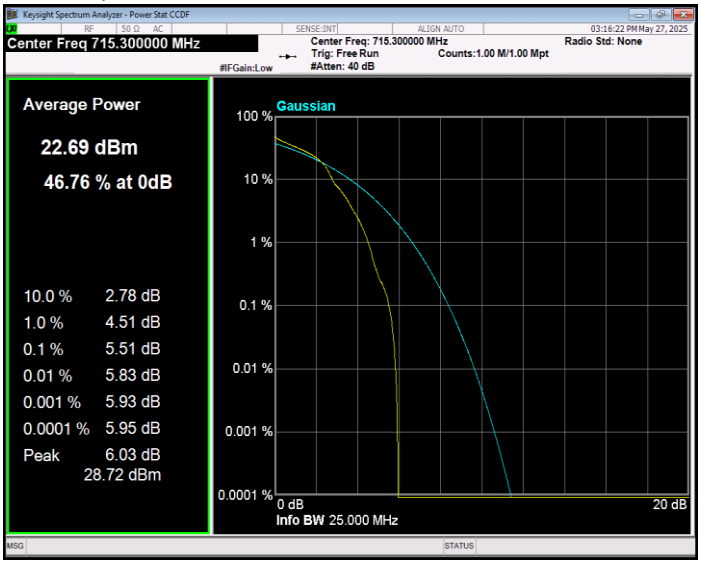
Band5 QPSK BW=5MHz Channel=20625 RB Size=1 Position=#0



Band12 16QAM BW=1.4MHz Channel=23017 RB Size=1 Position=#0



Band12 16QAM BW=1.4MHz Channel=23095 RB Size=1 Position=#0



Band12 16QAM BW=1.4MHz Channel=23173 RB Size=1 Position=#0