

TEST REPORT

Report No.: BCTC2205535730-2E

Applicant: UMOVAL IoT Technology Co., Ltd

Product Name: 3G/4G LTE Solar Security PTZ Cameras

Model/Type
reference: UM-Q6-4G

Tested Date: 2022-05-26 to 2022-06-30

Issued Date: 2022-06-30

Shenzhen BCTC Testing Co., Ltd.

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Appendix 1. Conducted output power

Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Power (dBm)	Gain (dBi)	EIRP (dBm)	Verdict
Band4	1.4	19957	1	#0	QPSK	21.38	5	26.38	PASS
Band4	1.4	19957	1	#Mid	QPSK	21.31	5	26.31	PASS
Band4	1.4	19957	1	#Max	QPSK	21.14	5	26.14	PASS
Band4	1.4	19957	3	#0	QPSK	21.24	5	26.24	PASS
Band4	1.4	19957	3	#Mid	QPSK	21.27	5	26.27	PASS
Band4	1.4	19957	3	#Max	QPSK	21.25	5	26.25	PASS
Band4	1.4	19957	6	#0	QPSK	20.45	5	25.45	PASS
Band4	1.4	19957	1	#0	QAM16	20.20	5	25.20	PASS
Band4	1.4	19957	1	#Mid	QAM16	20.28	5	25.28	PASS
Band4	1.4	19957	1	#Max	QAM16	20.06	5	25.06	PASS
Band4	1.4	19957	3	#0	QAM16	20.22	5	25.22	PASS
Band4	1.4	19957	3	#Mid	QAM16	20.14	5	25.14	PASS
Band4	1.4	19957	3	#Max	QAM16	20.05	5	25.05	PASS
Band4	1.4	19957	6	#0	QAM16	19.48	5	24.48	PASS
Band4	1.4	20175	1	#0	QPSK	21.64	5	26.64	PASS
Band4	1.4	20175	1	#Mid	QPSK	21.65	5	26.65	PASS
Band4	1.4	20175	1	#Max	QPSK	21.60	5	26.60	PASS
Band4	1.4	20175	3	#0	QPSK	21.36	5	26.36	PASS
Band4	1.4	20175	3	#Mid	QPSK	21.51	5	26.51	PASS
Band4	1.4	20175	3	#Max	QPSK	21.41	5	26.41	PASS
Band4	1.4	20175	6	#0	QPSK	20.43	5	25.43	PASS
Band4	1.4	20175	1	#0	QAM16	20.44	5	25.44	PASS
Band4	1.4	20175	1	#Mid	QAM16	20.54	5	25.54	PASS
Band4	1.4	20175	1	#Max	QAM16	20.34	5	25.34	PASS
Band4	1.4	20175	3	#0	QAM16	20.28	5	25.28	PASS
Band4	1.4	20175	3	#Mid	QAM16	20.32	5	25.32	PASS
Band4	1.4	20175	3	#Max	QAM16	20.31	5	25.31	PASS
Band4	1.4	20175	6	#0	QAM16	19.48	5	24.48	PASS
Band4	1.4	20393	1	#0	QPSK	21.22	5	26.22	PASS
Band4	1.4	20393	1	#Mid	QPSK	21.46	5	26.46	PASS
Band4	1.4	20393	1	#Max	QPSK	21.27	5	26.27	PASS
Band4	1.4	20393	3	#0	QPSK	21.32	5	26.32	PASS
Band4	1.4	20393	3	#Mid	QPSK	21.40	5	26.40	PASS
Band4	1.4	20393	3	#Max	QPSK	21.30	5	26.30	PASS
Band4	1.4	20393	6	#0	QPSK	20.41	5	25.41	PASS
Band4	1.4	20393	1	#0	QAM16	19.89	5	24.89	PASS
Band4	1.4	20393	1	#Mid	QAM16	19.93	5	24.93	PASS

Band4	1.4	20393	1	#Max	QAM16	19.73	5	24.73	PASS
Band4	1.4	20393	3	#0	QAM16	19.90	5	24.90	PASS
Band4	1.4	20393	3	#Mid	QAM16	19.91	5	24.91	PASS
Band4	1.4	20393	3	#Max	QAM16	19.81	5	24.81	PASS
Band4	1.4	20393	6	#0	QAM16	19.21	5	24.21	PASS
Band4	3	19965	1	#0	QPSK	21.35	5	26.35	PASS
Band4	3	19965	1	#Mid	QPSK	21.24	5	26.24	PASS
Band4	3	19965	1	#Max	QPSK	21.22	5	26.22	PASS
Band4	3	19965	8	#0	QPSK	20.45	5	25.45	PASS
Band4	3	19965	8	#Mid	QPSK	20.30	5	25.30	PASS
Band4	3	19965	8	#Max	QPSK	20.25	5	25.25	PASS
Band4	3	19965	15	#0	QPSK	20.33	5	25.33	PASS
Band4	3	19965	1	#0	QAM16	20.58	5	25.58	PASS
Band4	3	19965	1	#Mid	QAM16	20.90	5	25.90	PASS
Band4	3	19965	1	#Max	QAM16	20.49	5	25.49	PASS
Band4	3	19965	8	#0	QAM16	19.55	5	24.55	PASS
Band4	3	19965	8	#Mid	QAM16	19.42	5	24.42	PASS
Band4	3	19965	8	#Max	QAM16	19.36	5	24.36	PASS
Band4	3	19965	15	#0	QAM16	19.55	5	24.55	PASS
Band4	3	20175	1	#0	QPSK	21.28	5	26.28	PASS
Band4	3	20175	1	#Mid	QPSK	21.65	5	26.65	PASS
Band4	3	20175	1	#Max	QPSK	21.69	5	26.69	PASS
Band4	3	20175	8	#0	QPSK	20.49	5	25.49	PASS
Band4	3	20175	8	#Mid	QPSK	20.48	5	25.48	PASS
Band4	3	20175	8	#Max	QPSK	20.52	5	25.52	PASS
Band4	3	20175	15	#0	QPSK	20.45	5	25.45	PASS
Band4	3	20175	1	#0	QAM16	20.15	5	25.15	PASS
Band4	3	20175	1	#Mid	QAM16	20.35	5	25.35	PASS
Band4	3	20175	1	#Max	QAM16	20.25	5	25.25	PASS
Band4	3	20175	8	#0	QAM16	19.29	5	24.29	PASS
Band4	3	20175	8	#Mid	QAM16	19.25	5	24.25	PASS
Band4	3	20175	8	#Max	QAM16	19.28	5	24.28	PASS
Band4	3	20175	15	#0	QAM16	19.30	5	24.30	PASS
Band4	3	20385	1	#0	QPSK	21.17	5	26.17	PASS
Band4	3	20385	1	#Mid	QPSK	21.24	5	26.24	PASS
Band4	3	20385	1	#Max	QPSK	21.28	5	26.28	PASS
Band4	3	20385	8	#0	QPSK	20.30	5	25.30	PASS
Band4	3	20385	8	#Mid	QPSK	20.24	5	25.24	PASS
Band4	3	20385	8	#Max	QPSK	20.21	5	25.21	PASS
Band4	3	20385	15	#0	QPSK	20.31	5	25.31	PASS
Band4	3	20385	1	#0	QAM16	20.06	5	25.06	PASS
Band4	3	20385	1	#Mid	QAM16	19.78	5	24.78	PASS
Band4	3	20385	1	#Max	QAM16	19.68	5	24.68	PASS

Band4	3	20385	8	#0	QAM16	19.19	5	24.19	PASS
Band4	3	20385	8	#Mid	QAM16	19.06	5	24.06	PASS
Band4	3	20385	8	#Max	QAM16	19.12	5	24.12	PASS
Band4	3	20385	15	#0	QAM16	19.16	5	24.16	PASS
Band4	5	19975	1	#0	QPSK	21.18	5	26.18	PASS
Band4	5	19975	1	#Mid	QPSK	21.37	5	26.37	PASS
Band4	5	19975	1	#Max	QPSK	21.26	5	26.26	PASS
Band4	5	19975	12	#0	QPSK	20.37	5	25.37	PASS
Band4	5	19975	12	#Mid	QPSK	20.26	5	25.26	PASS
Band4	5	19975	12	#Max	QPSK	20.23	5	25.23	PASS
Band4	5	19975	25	#0	QPSK	20.30	5	25.30	PASS
Band4	5	19975	1	#0	QAM16	20.24	5	25.24	PASS
Band4	5	19975	1	#Mid	QAM16	19.91	5	24.91	PASS
Band4	5	19975	1	#Max	QAM16	19.98	5	24.98	PASS
Band4	5	19975	12	#0	QAM16	19.37	5	24.37	PASS
Band4	5	19975	12	#Mid	QAM16	19.34	5	24.34	PASS
Band4	5	19975	12	#Max	QAM16	19.24	5	24.24	PASS
Band4	5	19975	25	#0	QAM16	19.35	5	24.35	PASS
Band4	5	20175	1	#0	QPSK	21.21	5	26.21	PASS
Band4	5	20175	1	#Mid	QPSK	21.43	5	26.43	PASS
Band4	5	20175	1	#Max	QPSK	21.38	5	26.38	PASS
Band4	5	20175	12	#0	QPSK	20.36	5	25.36	PASS
Band4	5	20175	12	#Mid	QPSK	20.55	5	25.55	PASS
Band4	5	20175	12	#Max	QPSK	20.57	5	25.57	PASS
Band4	5	20175	25	#0	QPSK	20.38	5	25.38	PASS
Band4	5	20175	1	#0	QAM16	20.20	5	25.20	PASS
Band4	5	20175	1	#Mid	QAM16	20.41	5	25.41	PASS
Band4	5	20175	1	#Max	QAM16	20.31	5	25.31	PASS
Band4	5	20175	12	#0	QAM16	19.11	5	24.11	PASS
Band4	5	20175	12	#Mid	QAM16	19.24	5	24.24	PASS
Band4	5	20175	12	#Max	QAM16	19.34	5	24.34	PASS
Band4	5	20175	25	#0	QAM16	19.29	5	24.29	PASS
Band4	5	20375	1	#0	QPSK	21.29	5	26.29	PASS
Band4	5	20375	1	#Mid	QPSK	21.38	5	26.38	PASS
Band4	5	20375	1	#Max	QPSK	21.35	5	26.35	PASS
Band4	5	20375	12	#0	QPSK	20.37	5	25.37	PASS
Band4	5	20375	12	#Mid	QPSK	20.30	5	25.30	PASS
Band4	5	20375	12	#Max	QPSK	20.31	5	25.31	PASS
Band4	5	20375	25	#0	QPSK	20.36	5	25.36	PASS
Band4	5	20375	1	#0	QAM16	20.34	5	25.34	PASS
Band4	5	20375	1	#Mid	QAM16	19.93	5	24.93	PASS
Band4	5	20375	1	#Max	QAM16	19.82	5	24.82	PASS
Band4	5	20375	12	#0	QAM16	19.51	5	24.51	PASS

Band4	5	20375	12	#Mid	QAM16	19.44	5	24.44	PASS
Band4	5	20375	12	#Max	QAM16	19.18	5	24.18	PASS
Band4	5	20375	25	#0	QAM16	19.27	5	24.27	PASS
Band4	10	20000	1	#0	QPSK	21.19	5	26.19	PASS
Band4	10	20000	1	#Mid	QPSK	21.20	5	26.20	PASS
Band4	10	20000	1	#Max	QPSK	21.00	5	26.00	PASS
Band4	10	20000	25	#0	QPSK	20.38	5	25.38	PASS
Band4	10	20000	25	#Mid	QPSK	20.28	5	25.28	PASS
Band4	10	20000	25	#Max	QPSK	20.27	5	25.27	PASS
Band4	10	20000	50	#0	QPSK	20.32	5	25.32	PASS
Band4	10	20000	1	#0	QAM16	20.70	5	25.70	PASS
Band4	10	20000	1	#Mid	QAM16	20.63	5	25.63	PASS
Band4	10	20000	1	#Max	QAM16	20.44	5	25.44	PASS
Band4	10	20000	25	#0	QAM16	19.29	5	24.29	PASS
Band4	10	20000	25	#Mid	QAM16	19.38	5	24.38	PASS
Band4	10	20000	25	#Max	QAM16	19.28	5	24.28	PASS
Band4	10	20000	50	#0	QAM16	19.40	5	24.40	PASS
Band4	10	20175	1	#0	QPSK	21.15	5	26.15	PASS
Band4	10	20175	1	#Mid	QPSK	21.62	5	26.62	PASS
Band4	10	20175	1	#Max	QPSK	21.70	5	26.70	PASS
Band4	10	20175	25	#0	QPSK	20.37	5	25.37	PASS
Band4	10	20175	25	#Mid	QPSK	20.48	5	25.48	PASS
Band4	10	20175	25	#Max	QPSK	20.56	5	25.56	PASS
Band4	10	20175	50	#0	QPSK	20.38	5	25.38	PASS
Band4	10	20175	1	#0	QAM16	19.93	5	24.93	PASS
Band4	10	20175	1	#Mid	QAM16	20.24	5	25.24	PASS
Band4	10	20175	1	#Max	QAM16	20.11	5	25.11	PASS
Band4	10	20175	25	#0	QAM16	19.35	5	24.35	PASS
Band4	10	20175	25	#Mid	QAM16	19.53	5	24.53	PASS
Band4	10	20175	25	#Max	QAM16	19.63	5	24.63	PASS
Band4	10	20175	50	#0	QAM16	19.36	5	24.36	PASS
Band4	10	20350	1	#0	QPSK	21.47	5	26.47	PASS
Band4	10	20350	1	#Mid	QPSK	21.40	5	26.40	PASS
Band4	10	20350	1	#Max	QPSK	21.32	5	26.32	PASS
Band4	10	20350	25	#0	QPSK	20.48	5	25.48	PASS
Band4	10	20350	25	#Mid	QPSK	20.39	5	25.39	PASS
Band4	10	20350	25	#Max	QPSK	20.30	5	25.30	PASS
Band4	10	20350	50	#0	QPSK	20.33	5	25.33	PASS
Band4	10	20350	1	#0	QAM16	20.35	5	25.35	PASS
Band4	10	20350	1	#Mid	QAM16	20.15	5	25.15	PASS
Band4	10	20350	1	#Max	QAM16	20.29	5	25.29	PASS
Band4	10	20350	25	#0	QAM16	19.61	5	24.61	PASS
Band4	10	20350	25	#Mid	QAM16	19.60	5	24.60	PASS

Band4	10	20350	25	#Max	QAM16	19.22	5	24.22	PASS
Band4	10	20350	50	#0	QAM16	19.30	5	24.30	PASS
Band4	15	20025	1	#0	QPSK	21.28	5	26.28	PASS
Band4	15	20025	1	#Mid	QPSK	20.99	5	25.99	PASS
Band4	15	20025	1	#Max	QPSK	21.09	5	26.09	PASS
Band4	15	20025	36	#0	QPSK	20.43	5	25.43	PASS
Band4	15	20025	36	#Mid	QPSK	20.23	5	25.23	PASS
Band4	15	20025	36	#Max	QPSK	20.14	5	25.14	PASS
Band4	15	20025	75	#0	QPSK	20.25	5	25.25	PASS
Band4	15	20025	1	#0	QAM16	20.78	5	25.78	PASS
Band4	15	20025	1	#Mid	QAM16	20.49	5	25.49	PASS
Band4	15	20025	1	#Max	QAM16	20.42	5	25.42	PASS
Band4	15	20025	36	#0	QAM16	19.45	5	24.45	PASS
Band4	15	20025	36	#Mid	QAM16	19.26	5	24.26	PASS
Band4	15	20025	36	#Max	QAM16	19.06	5	24.06	PASS
Band4	15	20025	75	#0	QAM16	19.31	5	24.31	PASS
Band4	15	20175	1	#0	QPSK	20.99	5	25.99	PASS
Band4	15	20175	1	#Mid	QPSK	21.83	5	26.83	PASS
Band4	15	20175	1	#Max	QPSK	21.59	5	26.59	PASS
Band4	15	20175	36	#0	QPSK	20.27	5	25.27	PASS
Band4	15	20175	36	#Mid	QPSK	20.56	5	25.56	PASS
Band4	15	20175	36	#Max	QPSK	20.56	5	25.56	PASS
Band4	15	20175	75	#0	QPSK	20.38	5	25.38	PASS
Band4	15	20175	1	#0	QAM16	19.98	5	24.98	PASS
Band4	15	20175	1	#Mid	QAM16	20.71	5	25.71	PASS
Band4	15	20175	1	#Max	QAM16	20.33	5	25.33	PASS
Band4	15	20175	36	#0	QAM16	19.50	5	24.50	PASS
Band4	15	20175	36	#Mid	QAM16	19.59	5	24.59	PASS
Band4	15	20175	36	#Max	QAM16	19.78	5	24.78	PASS
Band4	15	20175	75	#0	QAM16	19.35	5	24.35	PASS
Band4	15	20325	1	#0	QPSK	21.63	5	26.63	PASS
Band4	15	20325	1	#Mid	QPSK	21.32	5	26.32	PASS
Band4	15	20325	1	#Max	QPSK	21.28	5	26.28	PASS
Band4	15	20325	36	#0	QPSK	20.60	5	25.60	PASS
Band4	15	20325	36	#Mid	QPSK	20.42	5	25.42	PASS
Band4	15	20325	36	#Max	QPSK	20.39	5	25.39	PASS
Band4	15	20325	75	#0	QPSK	20.45	5	25.45	PASS
Band4	15	20325	1	#0	QAM16	20.85	5	25.85	PASS
Band4	15	20325	1	#Mid	QAM16	20.57	5	25.57	PASS
Band4	15	20325	1	#Max	QAM16	20.54	5	25.54	PASS
Band4	15	20325	36	#0	QAM16	19.73	5	24.73	PASS
Band4	15	20325	36	#Mid	QAM16	19.56	5	24.56	PASS
Band4	15	20325	36	#Max	QAM16	19.26	5	24.26	PASS

Band4	15	20325	75	#0	QAM16	19.55	5	24.55	PASS
Band4	20	20050	1	#0	QPSK	21.26	5	26.26	PASS
Band4	20	20050	1	#Mid	QPSK	20.95	5	25.95	PASS
Band4	20	20050	1	#Max	QPSK	21.30	5	26.30	PASS
Band4	20	20050	50	#0	QPSK	20.36	5	25.36	PASS
Band4	20	20050	50	#Mid	QPSK	20.22	5	25.22	PASS
Band4	20	20050	50	#Max	QPSK	20.25	5	25.25	PASS
Band4	20	20050	100	#0	QPSK	20.21	5	25.21	PASS
Band4	20	20050	1	#0	QAM16	20.11	5	25.11	PASS
Band4	20	20050	1	#Mid	QAM16	19.58	5	24.58	PASS
Band4	20	20050	1	#Max	QAM16	20.24	5	25.24	PASS
Band4	20	20050	50	#0	QAM16	19.40	5	24.40	PASS
Band4	20	20050	50	#Mid	QAM16	19.35	5	24.35	PASS
Band4	20	20050	50	#Max	QAM16	19.28	5	24.28	PASS
Band4	20	20050	100	#0	QAM16	19.19	5	24.19	PASS
Band4	20	20175	1	#0	QPSK	21.26	5	26.26	PASS
Band4	20	20175	1	#Mid	QPSK	21.92	5	26.92	PASS
Band4	20	20175	1	#Max	QPSK	21.79	5	26.79	PASS
Band4	20	20175	50	#0	QPSK	20.21	5	25.21	PASS
Band4	20	20175	50	#Mid	QPSK	20.49	5	25.49	PASS
Band4	20	20175	50	#Max	QPSK	20.60	5	25.60	PASS
Band4	20	20175	100	#0	QPSK	20.42	5	25.42	PASS
Band4	20	20175	1	#0	QAM16	19.80	5	24.80	PASS
Band4	20	20175	1	#Mid	QAM16	20.51	5	25.51	PASS
Band4	20	20175	1	#Max	QAM16	20.04	5	25.04	PASS
Band4	20	20175	50	#0	QAM16	19.15	5	24.15	PASS
Band4	20	20175	50	#Mid	QAM16	19.55	5	24.55	PASS
Band4	20	20175	50	#Max	QAM16	19.64	5	24.64	PASS
Band4	20	20175	100	#0	QAM16	19.44	5	24.44	PASS
Band4	20	20300	1	#0	QPSK	21.66	5	26.66	PASS
Band4	20	20300	1	#Mid	QPSK	21.67	5	26.67	PASS
Band4	20	20300	1	#Max	QPSK	21.16	5	26.16	PASS
Band4	20	20300	50	#0	QPSK	20.54	5	25.54	PASS
Band4	20	20300	50	#Mid	QPSK	20.51	5	25.51	PASS
Band4	20	20300	50	#Max	QPSK	20.32	5	25.32	PASS
Band4	20	20300	100	#0	QPSK	20.57	5	25.57	PASS
Band4	20	20300	1	#0	QAM16	20.26	5	25.26	PASS
Band4	20	20300	1	#Mid	QAM16	20.05	5	25.05	PASS
Band4	20	20300	1	#Max	QAM16	19.69	5	24.69	PASS
Band4	20	20300	50	#0	QAM16	19.85	5	24.85	PASS
Band4	20	20300	50	#Mid	QAM16	19.64	5	24.64	PASS
Band4	20	20300	50	#Max	QAM16	19.38	5	24.38	PASS
Band4	20	20300	100	#0	QAM16	19.67	5	24.67	PASS

Appendix 2. Frequency stability

Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Voltage (Vdc)	Temperature (C)	Result (Hz)	Result (ppm)	Low Limit (ppm)	high Limit (ppm)	Verdict
Band 4	1.4	19957	6	#0	QPSK	LV	NT	1.57	0.001	-2.5	2.5	PASS
Band 4	1.4	19957	6	#0	QPSK	NV	NT	3.05	0.002	-2.5	2.5	PASS
Band 4	1.4	19957	6	#0	QPSK	HV	NT	1.17	0.001	-2.5	2.5	PASS
Band 4	1.4	19957	6	#0	QAM16	LV	NT	0.97	0.001	-2.5	2.5	PASS
Band 4	1.4	19957	6	#0	QAM16	NV	NT	1.80	0.001	-2.5	2.5	PASS
Band 4	1.4	19957	6	#0	QAM16	HV	NT	1.73	0.001	-2.5	2.5	PASS
Band 4	1.4	20175	6	#0	QPSK	LV	NT	0.19	0.000	-2.5	2.5	PASS
Band 4	1.4	20175	6	#0	QPSK	NV	NT	1.17	0.001	-2.5	2.5	PASS
Band 4	1.4	20175	6	#0	QPSK	HV	NT	1.37	0.001	-2.5	2.5	PASS
Band 4	1.4	20175	6	#0	QAM16	LV	NT	0.49	0.000	-2.5	2.5	PASS
Band 4	1.4	20175	6	#0	QAM16	NV	NT	-0.41	0.000	-2.5	2.5	PASS
Band 4	1.4	20175	6	#0	QAM16	HV	NT	-0.39	0.000	-2.5	2.5	PASS
Band 4	1.4	20393	6	#0	QPSK	LV	NT	-2.00	-0.001	-2.5	2.5	PASS
Band 4	1.4	20393	6	#0	QPSK	NV	NT	-1.80	-0.001	-2.5	2.5	PASS
Band 4	1.4	20393	6	#0	QPSK	HV	NT	-1.33	-0.001	-2.5	2.5	PASS
Band 4	1.4	20393	6	#0	QAM16	LV	NT	-1.60	-0.001	-2.5	2.5	PASS
Band 4	1.4	20393	6	#0	QAM16	NV	NT	-2.88	-0.002	-2.5	2.5	PASS

Band 4	1.4	20393	6	#0	QAM16	HV	NT	-3.12	-0.00 2	-2.5	2.5	PASS
Band 4	3	19965	15	#0	QPSK	LV	NT	0.06	0.000	-2.5	2.5	PASS
Band 4	3	19965	15	#0	QPSK	NV	NT	1.27	0.001	-2.5	2.5	PASS
Band 4	3	19965	15	#0	QPSK	HV	NT	-0.24	0.000	-2.5	2.5	PASS
Band 4	3	19965	15	#0	QAM16	LV	NT	-0.60	0.000	-2.5	2.5	PASS
Band 4	3	19965	15	#0	QAM16	NV	NT	0.53	0.000	-2.5	2.5	PASS
Band 4	3	19965	15	#0	QAM16	HV	NT	2.07	0.001	-2.5	2.5	PASS
Band 4	3	20175	15	#0	QPSK	LV	NT	-0.47	0.000	-2.5	2.5	PASS
Band 4	3	20175	15	#0	QPSK	NV	NT	-0.76	0.000	-2.5	2.5	PASS
Band 4	3	20175	15	#0	QPSK	HV	NT	-1.46	-0.00 1	-2.5	2.5	PASS
Band 4	3	20175	15	#0	QAM16	LV	NT	-0.56	0.000	-2.5	2.5	PASS
Band 4	3	20175	15	#0	QAM16	NV	NT	0.34	0.000	-2.5	2.5	PASS
Band 4	3	20175	15	#0	QAM16	HV	NT	0.66	0.000	-2.5	2.5	PASS
Band 4	3	20385	15	#0	QPSK	LV	NT	0.00	0.000	-2.5	2.5	PASS
Band 4	3	20385	15	#0	QPSK	NV	NT	-1.87	-0.00 1	-2.5	2.5	PASS
Band 4	3	20385	15	#0	QPSK	HV	NT	-1.06	-0.00 1	-2.5	2.5	PASS
Band 4	3	20385	15	#0	QAM16	LV	NT	-0.90	-0.00 1	-2.5	2.5	PASS
Band 4	3	20385	15	#0	QAM16	NV	NT	0.79	0.000	-2.5	2.5	PASS
Band 4	3	20385	15	#0	QAM16	HV	NT	0.93	0.001	-2.5	2.5	PASS
Band 4	5	19975	25	#0	QPSK	LV	NT	0.97	0.001	-2.5	2.5	PASS
Band 4	5	19975	25	#0	QPSK	NV	NT	1.49	0.001	-2.5	2.5	PASS
Band 4	5	19975	25	#0	QPSK	HV	NT	2.45	0.001	-2.5	2.5	PASS

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Band 4	5	19975	25	#0	QAM16	LV	NT	1.66	0.001	-2.5	2.5	PASS
Band 4	5	19975	25	#0	QAM16	NV	NT	0.10	0.000	-2.5	2.5	PASS
Band 4	5	19975	25	#0	QAM16	HV	NT	-0.41	0.000	-2.5	2.5	PASS
Band 4	5	20175	25	#0	QPSK	LV	NT	1.93	0.001	-2.5	2.5	PASS
Band 4	5	20175	25	#0	QPSK	NV	NT	0.56	0.000	-2.5	2.5	PASS
Band 4	5	20175	25	#0	QPSK	HV	NT	-0.43	0.000	-2.5	2.5	PASS
Band 4	5	20175	25	#0	QAM16	LV	NT	0.23	0.000	-2.5	2.5	PASS
Band 4	5	20175	25	#0	QAM16	NV	NT	-2.37	-0.001	-2.5	2.5	PASS
Band 4	5	20175	25	#0	QAM16	HV	NT	-0.49	0.000	-2.5	2.5	PASS
Band 4	5	20375	25	#0	QPSK	LV	NT	-2.40	-0.001	-2.5	2.5	PASS
Band 4	5	20375	25	#0	QPSK	NV	NT	-2.39	-0.001	-2.5	2.5	PASS
Band 4	5	20375	25	#0	QPSK	HV	NT	-3.39	-0.002	-2.5	2.5	PASS
Band 4	5	20375	25	#0	QAM16	LV	NT	-2.42	-0.001	-2.5	2.5	PASS
Band 4	5	20375	25	#0	QAM16	NV	NT	-0.86	0.000	-2.5	2.5	PASS
Band 4	5	20375	25	#0	QAM16	HV	NT	-2.35	-0.001	-2.5	2.5	PASS
Band 4	10	20000	50	#0	QPSK	LV	NT	-1.72	-0.001	-2.5	2.5	PASS
Band 4	10	20000	50	#0	QPSK	NV	NT	-2.23	-0.001	-2.5	2.5	PASS
Band 4	10	20000	50	#0	QPSK	HV	NT	-3.60	-0.002	-2.5	2.5	PASS
Band 4	10	20000	50	#0	QAM16	LV	NT	-3.78	-0.002	-2.5	2.5	PASS
Band 4	10	20000	50	#0	QAM16	NV	NT	-3.79	-0.002	-2.5	2.5	PASS
Band 4	10	20000	50	#0	QAM16	HV	NT	-3.18	-0.002	-2.5	2.5	PASS

Band 4	10	20175	50	#0	QPSK	LV	NT	-0.66	0.000	-2.5	2.5	PASS
Band 4	10	20175	50	#0	QPSK	NV	NT	-0.66	0.000	-2.5	2.5	PASS
Band 4	10	20175	50	#0	QPSK	HV	NT	-0.06	0.000	-2.5	2.5	PASS
Band 4	10	20175	50	#0	QAM16	LV	NT	0.07	0.000	-2.5	2.5	PASS
Band 4	10	20175	50	#0	QAM16	NV	NT	-0.54	0.000	-2.5	2.5	PASS
Band 4	10	20175	50	#0	QAM16	HV	NT	0.53	0.000	-2.5	2.5	PASS
Band 4	10	20350	50	#0	QPSK	LV	NT	1.26	0.001	-2.5	2.5	PASS
Band 4	10	20350	50	#0	QPSK	NV	NT	1.50	0.001	-2.5	2.5	PASS
Band 4	10	20350	50	#0	QPSK	HV	NT	2.73	0.002	-2.5	2.5	PASS
Band 4	10	20350	50	#0	QAM16	LV	NT	1.80	0.001	-2.5	2.5	PASS
Band 4	10	20350	50	#0	QAM16	NV	NT	1.29	0.001	-2.5	2.5	PASS
Band 4	10	20350	50	#0	QAM16	HV	NT	-0.16	0.000	-2.5	2.5	PASS
Band 4	15	20025	75	#0	QPSK	LV	NT	-0.01	0.000	-2.5	2.5	PASS
Band 4	15	20025	75	#0	QPSK	NV	NT	-1.10	-0.001	-2.5	2.5	PASS
Band 4	15	20025	75	#0	QPSK	HV	NT	1.65	0.001	-2.5	2.5	PASS
Band 4	15	20025	75	#0	QAM16	LV	NT	0.66	0.000	-2.5	2.5	PASS
Band 4	15	20025	75	#0	QAM16	NV	NT	-0.62	0.000	-2.5	2.5	PASS
Band 4	15	20025	75	#0	QAM16	HV	NT	-0.39	0.000	-2.5	2.5	PASS
Band 4	15	20175	75	#0	QPSK	LV	NT	0.50	0.000	-2.5	2.5	PASS
Band 4	15	20175	75	#0	QPSK	NV	NT	0.59	0.000	-2.5	2.5	PASS
Band 4	15	20175	75	#0	QPSK	HV	NT	-1.42	-0.001	-2.5	2.5	PASS
Band 4	15	20175	75	#0	QAM16	LV	NT	1.43	0.001	-2.5	2.5	PASS

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Band 4	15	20175	75	#0	QAM16	NV	NT	0.74	0.000	-2.5	2.5	PASS
Band 4	15	20175	75	#0	QAM16	HV	NT	-1.02	-0.001	-2.5	2.5	PASS
Band 4	15	20325	75	#0	QPSK	LV	NT	1.06	0.001	-2.5	2.5	PASS
Band 4	15	20325	75	#0	QPSK	NV	NT	-0.29	0.000	-2.5	2.5	PASS
Band 4	15	20325	75	#0	QPSK	HV	NT	0.34	0.000	-2.5	2.5	PASS
Band 4	15	20325	75	#0	QAM16	LV	NT	-0.09	0.000	-2.5	2.5	PASS
Band 4	15	20325	75	#0	QAM16	NV	NT	0.69	0.000	-2.5	2.5	PASS
Band 4	15	20325	75	#0	QAM16	HV	NT	-1.04	-0.001	-2.5	2.5	PASS
Band 4	20	20050	100	#0	QPSK	LV	NT	1.59	0.001	-2.5	2.5	PASS
Band 4	20	20050	100	#0	QPSK	NV	NT	0.31	0.000	-2.5	2.5	PASS
Band 4	20	20050	100	#0	QPSK	HV	NT	1.63	0.001	-2.5	2.5	PASS
Band 4	20	20050	100	#0	QAM16	LV	NT	2.47	0.001	-2.5	2.5	PASS
Band 4	20	20050	100	#0	QAM16	NV	NT	0.76	0.000	-2.5	2.5	PASS
Band 4	20	20050	100	#0	QAM16	HV	NT	1.24	0.001	-2.5	2.5	PASS
Band 4	20	20175	100	#0	QPSK	LV	NT	-0.11	0.000	-2.5	2.5	PASS
Band 4	20	20175	100	#0	QPSK	NV	NT	0.76	0.000	-2.5	2.5	PASS
Band 4	20	20175	100	#0	QPSK	HV	NT	0.67	0.000	-2.5	2.5	PASS
Band 4	20	20175	100	#0	QAM16	LV	NT	-0.54	0.000	-2.5	2.5	PASS
Band 4	20	20175	100	#0	QAM16	NV	NT	0.83	0.000	-2.5	2.5	PASS
Band 4	20	20175	100	#0	QAM16	HV	NT	0.53	0.000	-2.5	2.5	PASS
Band 4	20	20300	100	#0	QPSK	LV	NT	-3.22	-0.002	-2.5	2.5	PASS

Band 4	20	20300	100	#0	QPSK	NV	NT	-3.50	-0.00 2	-2.5	2.5	PASS
Band 4	20	20300	100	#0	QPSK	HV	NT	-3.46	-0.00 2	-2.5	2.5	PASS
Band 4	20	20300	100	#0	QAM16	LV	NT	-3.33	-0.00 2	-2.5	2.5	PASS
Band 4	20	20300	100	#0	QAM16	NV	NT	-2.20	-0.00 1	-2.5	2.5	PASS
Band 4	20	20300	100	#0	QAM16	HV	NT	-2.00	-0.00 1	-2.5	2.5	PASS

Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Voltage (Vdc)	Temperature (C)	Result (Hz)	Result (ppm)	Low Limit (ppm)	High Limit (ppm)	Verdict
Band 4	1.4	19957	6	#0	QPSK	NV	-30	2.26	0.001	-2.5	2.5	PASS
Band 4	1.4	19957	6	#0	QPSK	NV	-20	3.48	0.002	-2.5	2.5	PASS
Band 4	1.4	19957	6	#0	QPSK	NV	0	1.10	0.001	-2.5	2.5	PASS
Band 4	1.4	19957	6	#0	QPSK	NV	10	2.39	0.001	-2.5	2.5	PASS
Band 4	1.4	19957	6	#0	QPSK	NV	20	2.19	0.001	-2.5	2.5	PASS
Band 4	1.4	19957	6	#0	QAM16	NV	-30	2.82	0.002	-2.5	2.5	PASS
Band 4	1.4	19957	6	#0	QAM16	NV	-20	1.76	0.001	-2.5	2.5	PASS
Band 4	1.4	19957	6	#0	QAM16	NV	0	1.92	0.001	-2.5	2.5	PASS
Band 4	1.4	19957	6	#0	QAM16	NV	10	0.36	0.000	-2.5	2.5	PASS
Band 4	1.4	19957	6	#0	QAM16	NV	20	-0.10	0.000	-2.5	2.5	PASS
Band 4	1.4	20175	6	#0	QPSK	NV	-30	-2.69	-0.00 2	-2.5	2.5	PASS
Band 4	1.4	20175	6	#0	QPSK	NV	-20	-0.31	0.000	-2.5	2.5	PASS
Band 4	1.4	20175	6	#0	QPSK	NV	0	-0.90	-0.00 1	-2.5	2.5	PASS
Band 4	1.4	20175	6	#0	QPSK	NV	10	-1.59	-0.00 1	-2.5	2.5	PASS

Band 4	1.4	20175	6	#0	QPSK	NV	20	0.11	0.000	-2.5	2.5	PASS
Band 4	1.4	20175	6	#0	QAM16	NV	-30	-0.36	0.000	-2.5	2.5	PASS
Band 4	1.4	20175	6	#0	QAM16	NV	-20	2.00	0.001	-2.5	2.5	PASS
Band 4	1.4	20175	6	#0	QAM16	NV	0	1.32	0.001	-2.5	2.5	PASS
Band 4	1.4	20175	6	#0	QAM16	NV	10	0.96	0.001	-2.5	2.5	PASS
Band 4	1.4	20175	6	#0	QAM16	NV	20	0.20	0.000	-2.5	2.5	PASS
Band 4	1.4	20393	6	#0	QPSK	NV	-30	-2.03	-0.001	-2.5	2.5	PASS
Band 4	1.4	20393	6	#0	QPSK	NV	-20	-3.40	-0.002	-2.5	2.5	PASS
Band 4	1.4	20393	6	#0	QPSK	NV	0	-3.29	-0.002	-2.5	2.5	PASS
Band 4	1.4	20393	6	#0	QPSK	NV	10	-2.90	-0.002	-2.5	2.5	PASS
Band 4	1.4	20393	6	#0	QPSK	NV	20	-3.29	-0.002	-2.5	2.5	PASS
Band 4	1.4	20393	6	#0	QAM16	NV	-30	-3.48	-0.002	-2.5	2.5	PASS
Band 4	1.4	20393	6	#0	QAM16	NV	-20	-3.43	-0.002	-2.5	2.5	PASS
Band 4	1.4	20393	6	#0	QAM16	NV	0	-4.32	-0.002	-2.5	2.5	PASS
Band 4	1.4	20393	6	#0	QAM16	NV	10	-1.29	-0.001	-2.5	2.5	PASS
Band 4	1.4	20393	6	#0	QAM16	NV	20	-2.73	-0.002	-2.5	2.5	PASS
Band 4	3	19965	15	#0	QPSK	NV	-30	0.06	0.000	-2.5	2.5	PASS
Band 4	3	19965	15	#0	QPSK	NV	-20	-0.39	0.000	-2.5	2.5	PASS
Band 4	3	19965	15	#0	QPSK	NV	0	-1.37	-0.001	-2.5	2.5	PASS
Band 4	3	19965	15	#0	QPSK	NV	10	-1.86	-0.001	-2.5	2.5	PASS
Band 4	3	19965	15	#0	QPSK	NV	20	-2.57	-0.002	-2.5	2.5	PASS
Band 4	3	19965	15	#0	QAM16	NV	-30	-1.09	-0.00	-2.5	2.5	PASS

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Band 4	3	19965	15	#0	QAM16	NV	-20	0.83	0.000	-2.5	2.5	PASS
Band 4	3	19965	15	#0	QAM16	NV	0	2.82	0.002	-2.5	2.5	PASS
Band 4	3	19965	15	#0	QAM16	NV	10	0.31	0.000	-2.5	2.5	PASS
Band 4	3	19965	15	#0	QAM16	NV	20	2.69	0.002	-2.5	2.5	PASS
Band 4	3	20175	15	#0	QPSK	NV	-30	1.59	0.001	-2.5	2.5	PASS
Band 4	3	20175	15	#0	QPSK	NV	-20	0.86	0.000	-2.5	2.5	PASS
Band 4	3	20175	15	#0	QPSK	NV	0	-1.20	-0.001	-2.5	2.5	PASS
Band 4	3	20175	15	#0	QPSK	NV	10	0.31	0.000	-2.5	2.5	PASS
Band 4	3	20175	15	#0	QPSK	NV	20	-0.74	0.000	-2.5	2.5	PASS
Band 4	3	20175	15	#0	QAM16	NV	-30	0.47	0.000	-2.5	2.5	PASS
Band 4	3	20175	15	#0	QAM16	NV	-20	0.04	0.000	-2.5	2.5	PASS
Band 4	3	20175	15	#0	QAM16	NV	0	1.47	0.001	-2.5	2.5	PASS
Band 4	3	20175	15	#0	QAM16	NV	10	0.59	0.000	-2.5	2.5	PASS
Band 4	3	20175	15	#0	QAM16	NV	20	0.64	0.000	-2.5	2.5	PASS
Band 4	3	20385	15	#0	QPSK	NV	-30	0.59	0.000	-2.5	2.5	PASS
Band 4	3	20385	15	#0	QPSK	NV	-20	-1.33	-0.001	-2.5	2.5	PASS
Band 4	3	20385	15	#0	QPSK	NV	0	0.11	0.000	-2.5	2.5	PASS
Band 4	3	20385	15	#0	QPSK	NV	10	1.44	0.001	-2.5	2.5	PASS
Band 4	3	20385	15	#0	QPSK	NV	20	-0.46	0.000	-2.5	2.5	PASS
Band 4	3	20385	15	#0	QAM16	NV	-30	0.27	0.000	-2.5	2.5	PASS
Band 4	3	20385	15	#0	QAM16	NV	-20	-0.83	0.000	-2.5	2.5	PASS

Band 4	3	20385	15	#0	QAM16	NV	0	0.47	0.000	-2.5	2.5	PASS
Band 4	3	20385	15	#0	QAM16	NV	10	-0.44	0.000	-2.5	2.5	PASS
Band 4	3	20385	15	#0	QAM16	NV	20	-0.09	0.000	-2.5	2.5	PASS
Band 4	5	19975	25	#0	QPSK	NV	-30	2.90	0.002	-2.5	2.5	PASS
Band 4	5	19975	25	#0	QPSK	NV	-20	0.44	0.000	-2.5	2.5	PASS
Band 4	5	19975	25	#0	QPSK	NV	0	2.59	0.002	-2.5	2.5	PASS
Band 4	5	19975	25	#0	QPSK	NV	10	1.62	0.001	-2.5	2.5	PASS
Band 4	5	19975	25	#0	QPSK	NV	20	2.53	0.001	-2.5	2.5	PASS
Band 4	5	19975	25	#0	QAM16	NV	-30	-0.06	0.000	-2.5	2.5	PASS
Band 4	5	19975	25	#0	QAM16	NV	-20	1.06	0.001	-2.5	2.5	PASS
Band 4	5	19975	25	#0	QAM16	NV	0	1.16	0.001	-2.5	2.5	PASS
Band 4	5	19975	25	#0	QAM16	NV	10	0.09	0.000	-2.5	2.5	PASS
Band 4	5	19975	25	#0	QAM16	NV	20	0.47	0.000	-2.5	2.5	PASS
Band 4	5	20175	25	#0	QPSK	NV	-30	1.83	0.001	-2.5	2.5	PASS
Band 4	5	20175	25	#0	QPSK	NV	-20	1.49	0.001	-2.5	2.5	PASS
Band 4	5	20175	25	#0	QPSK	NV	0	0.50	0.000	-2.5	2.5	PASS
Band 4	5	20175	25	#0	QPSK	NV	10	1.26	0.001	-2.5	2.5	PASS
Band 4	5	20175	25	#0	QPSK	NV	20	1.44	0.001	-2.5	2.5	PASS
Band 4	5	20175	25	#0	QAM16	NV	-30	-0.16	0.000	-2.5	2.5	PASS
Band 4	5	20175	25	#0	QAM16	NV	-20	0.34	0.000	-2.5	2.5	PASS
Band 4	5	20175	25	#0	QAM16	NV	0	-1.24	-0.001	-2.5	2.5	PASS
Band 4	5	20175	25	#0	QAM16	NV	10	-0.92	-0.00	-2.5	2.5	PASS

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Band 4	5	20175	25	#0	QAM16	NV	20	-0.64	0.000	-2.5	2.5	PASS
Band 4	5	20375	25	#0	QPSK	NV	-30	-2.09	-0.001	-2.5	2.5	PASS
Band 4	5	20375	25	#0	QPSK	NV	-20	-3.81	-0.002	-2.5	2.5	PASS
Band 4	5	20375	25	#0	QPSK	NV	0	-3.08	-0.002	-2.5	2.5	PASS
Band 4	5	20375	25	#0	QPSK	NV	10	-0.40	0.000	-2.5	2.5	PASS
Band 4	5	20375	25	#0	QPSK	NV	20	-2.00	-0.001	-2.5	2.5	PASS
Band 4	5	20375	25	#0	QAM16	NV	-30	-3.78	-0.002	-2.5	2.5	PASS
Band 4	5	20375	25	#0	QAM16	NV	-20	-3.65	-0.002	-2.5	2.5	PASS
Band 4	5	20375	25	#0	QAM16	NV	0	-4.16	-0.002	-2.5	2.5	PASS
Band 4	5	20375	25	#0	QAM16	NV	10	-2.20	-0.001	-2.5	2.5	PASS
Band 4	5	20375	25	#0	QAM16	NV	20	-2.70	-0.002	-2.5	2.5	PASS
Band 4	10	20000	50	#0	QPSK	NV	-30	-4.63	-0.003	-2.5	2.5	PASS
Band 4	10	20000	50	#0	QPSK	NV	-20	-4.09	-0.002	-2.5	2.5	PASS
Band 4	10	20000	50	#0	QPSK	NV	0	-2.20	-0.001	-2.5	2.5	PASS
Band 4	10	20000	50	#0	QPSK	NV	10	-3.20	-0.002	-2.5	2.5	PASS
Band 4	10	20000	50	#0	QPSK	NV	20	-1.24	-0.001	-2.5	2.5	PASS
Band 4	10	20000	50	#0	QAM16	NV	-30	-2.96	-0.002	-2.5	2.5	PASS
Band 4	10	20000	50	#0	QAM16	NV	-20	-2.62	-0.002	-2.5	2.5	PASS
Band 4	10	20000	50	#0	QAM16	NV	0	-2.60	-0.002	-2.5	2.5	PASS
Band 4	10	20000	50	#0	QAM16	NV	10	-3.39	-0.002	-2.5	2.5	PASS
Band 4	10	20000	50	#0	QAM16	NV	20	-3.22	-0.002	-2.5	2.5	PASS

Band 4	10	20175	50	#0	QPSK	NV	-30	1.02	0.001	-2.5	2.5	PASS
Band 4	10	20175	50	#0	QPSK	NV	-20	-0.26	0.000	-2.5	2.5	PASS
Band 4	10	20175	50	#0	QPSK	NV	0	-0.53	0.000	-2.5	2.5	PASS
Band 4	10	20175	50	#0	QPSK	NV	10	1.79	0.001	-2.5	2.5	PASS
Band 4	10	20175	50	#0	QPSK	NV	20	-0.17	0.000	-2.5	2.5	PASS
Band 4	10	20175	50	#0	QAM16	NV	-30	0.13	0.000	-2.5	2.5	PASS
Band 4	10	20175	50	#0	QAM16	NV	-20	-0.03	0.000	-2.5	2.5	PASS
Band 4	10	20175	50	#0	QAM16	NV	0	0.19	0.000	-2.5	2.5	PASS
Band 4	10	20175	50	#0	QAM16	NV	10	-0.83	0.000	-2.5	2.5	PASS
Band 4	10	20175	50	#0	QAM16	NV	20	1.06	0.001	-2.5	2.5	PASS
Band 4	10	20350	50	#0	QPSK	NV	-30	2.20	0.001	-2.5	2.5	PASS
Band 4	10	20350	50	#0	QPSK	NV	-20	0.54	0.000	-2.5	2.5	PASS
Band 4	10	20350	50	#0	QPSK	NV	0	0.73	0.000	-2.5	2.5	PASS
Band 4	10	20350	50	#0	QPSK	NV	10	1.16	0.001	-2.5	2.5	PASS
Band 4	10	20350	50	#0	QPSK	NV	20	1.53	0.001	-2.5	2.5	PASS
Band 4	10	20350	50	#0	QAM16	NV	-30	3.53	0.002	-2.5	2.5	PASS
Band 4	10	20350	50	#0	QAM16	NV	-20	1.72	0.001	-2.5	2.5	PASS
Band 4	10	20350	50	#0	QAM16	NV	0	0.36	0.000	-2.5	2.5	PASS
Band 4	10	20350	50	#0	QAM16	NV	10	1.83	0.001	-2.5	2.5	PASS
Band 4	10	20350	50	#0	QAM16	NV	20	1.70	0.001	-2.5	2.5	PASS
Band 4	15	20025	75	#0	QPSK	NV	-30	1.12	0.001	-2.5	2.5	PASS
Band 4	15	20025	75	#0	QPSK	NV	-20	-0.03	0.000	-2.5	2.5	PASS

4												
Band 4	15	20025	75	#0	QPSK	NV	0	0.24	0.000	-2.5	2.5	PASS
Band 4	15	20025	75	#0	QPSK	NV	10	-0.30	0.000	-2.5	2.5	PASS
Band 4	15	20025	75	#0	QPSK	NV	20	0.37	0.000	-2.5	2.5	PASS
Band 4	15	20025	75	#0	QAM16	NV	-30	0.59	0.000	-2.5	2.5	PASS
Band 4	15	20025	75	#0	QAM16	NV	-20	0.80	0.000	-2.5	2.5	PASS
Band 4	15	20025	75	#0	QAM16	NV	0	1.33	0.001	-2.5	2.5	PASS
Band 4	15	20025	75	#0	QAM16	NV	10	0.39	0.000	-2.5	2.5	PASS
Band 4	15	20025	75	#0	QAM16	NV	20	1.33	0.001	-2.5	2.5	PASS
Band 4	15	20175	75	#0	QPSK	NV	-30	0.72	0.000	-2.5	2.5	PASS
Band 4	15	20175	75	#0	QPSK	NV	-20	0.77	0.000	-2.5	2.5	PASS
Band 4	15	20175	75	#0	QPSK	NV	0	0.62	0.000	-2.5	2.5	PASS
Band 4	15	20175	75	#0	QPSK	NV	10	0.62	0.000	-2.5	2.5	PASS
Band 4	15	20175	75	#0	QPSK	NV	20	-0.40	0.000	-2.5	2.5	PASS
Band 4	15	20175	75	#0	QAM16	NV	-30	-0.39	0.000	-2.5	2.5	PASS
Band 4	15	20175	75	#0	QAM16	NV	-20	-0.13	0.000	-2.5	2.5	PASS
Band 4	15	20175	75	#0	QAM16	NV	0	0.30	0.000	-2.5	2.5	PASS
Band 4	15	20175	75	#0	QAM16	NV	10	1.14	0.001	-2.5	2.5	PASS
Band 4	15	20175	75	#0	QAM16	NV	20	-0.06	0.000	-2.5	2.5	PASS
Band 4	15	20325	75	#0	QPSK	NV	-30	1.14	0.001	-2.5	2.5	PASS
Band 4	15	20325	75	#0	QPSK	NV	-20	-0.51	0.000	-2.5	2.5	PASS
Band 4	15	20325	75	#0	QPSK	NV	0	0.10	0.000	-2.5	2.5	PASS

Band 4	15	20325	75	#0	QPSK	NV	10	-1.22	-0.00 1	-2.5	2.5	PASS
Band 4	15	20325	75	#0	QPSK	NV	20	2.32	0.001	-2.5	2.5	PASS
Band 4	15	20325	75	#0	QAM16	NV	-30	0.33	0.000	-2.5	2.5	PASS
Band 4	15	20325	75	#0	QAM16	NV	-20	-0.04	0.000	-2.5	2.5	PASS
Band 4	15	20325	75	#0	QAM16	NV	0	-0.86	0.000	-2.5	2.5	PASS
Band 4	15	20325	75	#0	QAM16	NV	10	-0.20	0.000	-2.5	2.5	PASS
Band 4	15	20325	75	#0	QAM16	NV	20	1.90	0.001	-2.5	2.5	PASS
Band 4	20	20050	100	#0	QPSK	NV	-30	1.23	0.001	-2.5	2.5	PASS
Band 4	20	20050	100	#0	QPSK	NV	-20	1.33	0.001	-2.5	2.5	PASS
Band 4	20	20050	100	#0	QPSK	NV	0	2.57	0.001	-2.5	2.5	PASS
Band 4	20	20050	100	#0	QPSK	NV	10	1.34	0.001	-2.5	2.5	PASS
Band 4	20	20050	100	#0	QPSK	NV	20	0.40	0.000	-2.5	2.5	PASS
Band 4	20	20050	100	#0	QAM16	NV	-30	2.23	0.001	-2.5	2.5	PASS
Band 4	20	20050	100	#0	QAM16	NV	-20	1.54	0.001	-2.5	2.5	PASS
Band 4	20	20050	100	#0	QAM16	NV	0	2.40	0.001	-2.5	2.5	PASS
Band 4	20	20050	100	#0	QAM16	NV	10	1.44	0.001	-2.5	2.5	PASS
Band 4	20	20050	100	#0	QAM16	NV	20	1.30	0.001	-2.5	2.5	PASS
Band 4	20	20175	100	#0	QPSK	NV	-30	1.22	0.001	-2.5	2.5	PASS
Band 4	20	20175	100	#0	QPSK	NV	-20	1.24	0.001	-2.5	2.5	PASS
Band 4	20	20175	100	#0	QPSK	NV	0	2.16	0.001	-2.5	2.5	PASS
Band 4	20	20175	100	#0	QPSK	NV	10	0.90	0.001	-2.5	2.5	PASS
Band 4	20	20175	100	#0	QPSK	NV	20	0.00	0.000	-2.5	2.5	PASS

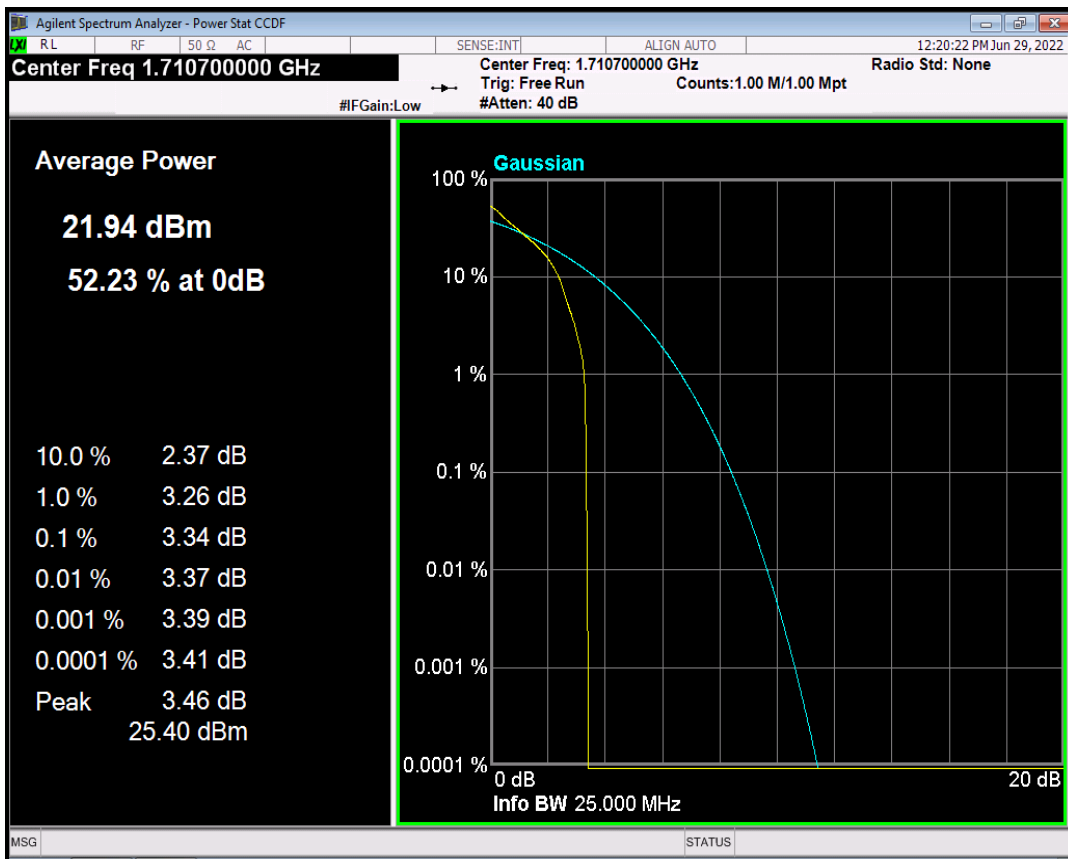
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Band 4	20	20175	100	#0	QAM16	NV	-30	0.76	0.000	-2.5	2.5	PASS
Band 4	20	20175	100	#0	QAM16	NV	-20	2.15	0.001	-2.5	2.5	PASS
Band 4	20	20175	100	#0	QAM16	NV	0	0.44	0.000	-2.5	2.5	PASS
Band 4	20	20175	100	#0	QAM16	NV	10	-0.34	0.000	-2.5	2.5	PASS
Band 4	20	20175	100	#0	QAM16	NV	20	1.39	0.001	-2.5	2.5	PASS
Band 4	20	20300	100	#0	QPSK	NV	-30	-3.42	-0.002	-2.5	2.5	PASS
Band 4	20	20300	100	#0	QPSK	NV	-20	-3.45	-0.002	-2.5	2.5	PASS
Band 4	20	20300	100	#0	QPSK	NV	0	-1.63	-0.001	-2.5	2.5	PASS
Band 4	20	20300	100	#0	QPSK	NV	10	-3.48	-0.002	-2.5	2.5	PASS
Band 4	20	20300	100	#0	QPSK	NV	20	-2.95	-0.002	-2.5	2.5	PASS
Band 4	20	20300	100	#0	QAM16	NV	-30	-1.52	-0.001	-2.5	2.5	PASS
Band 4	20	20300	100	#0	QAM16	NV	-20	-2.62	-0.002	-2.5	2.5	PASS
Band 4	20	20300	100	#0	QAM16	NV	0	-3.23	-0.002	-2.5	2.5	PASS
Band 4	20	20300	100	#0	QAM16	NV	10	-2.52	-0.001	-2.5	2.5	PASS
Band 4	20	20300	100	#0	QAM16	NV	20	-3.00	-0.002	-2.5	2.5	PASS

Appendix 3. Peak-to-Average Ratio

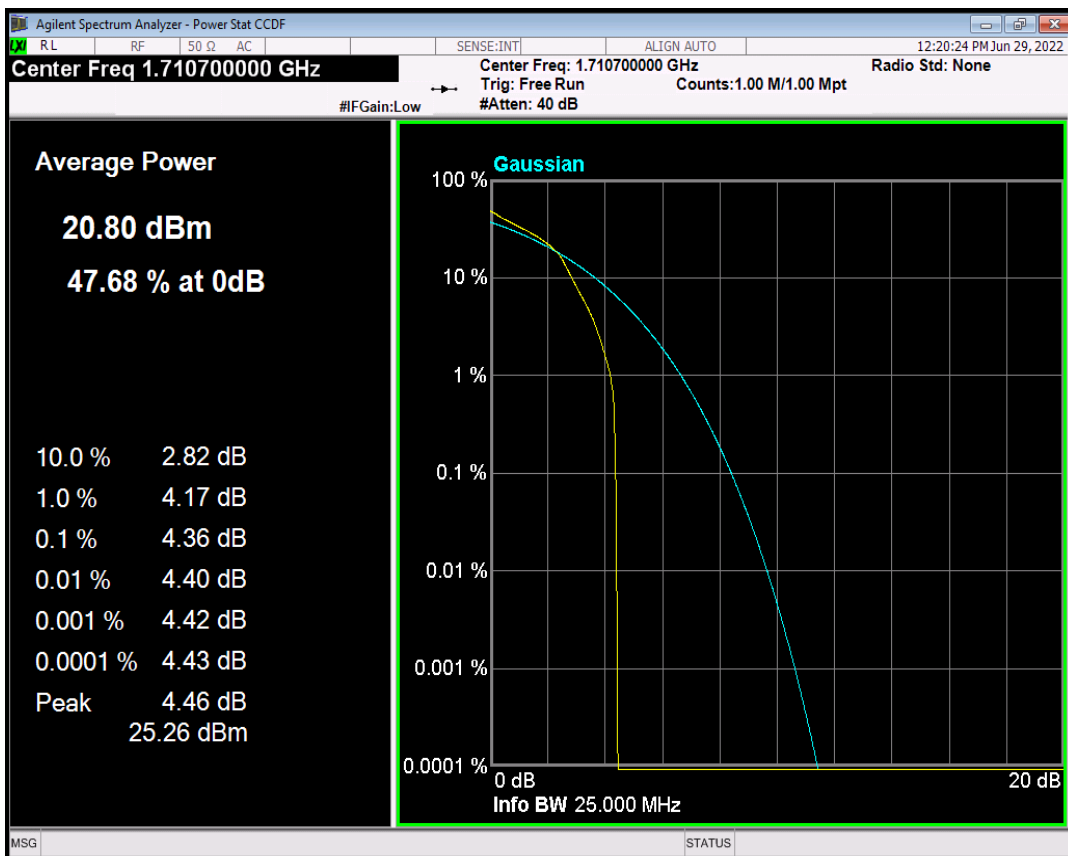
Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Result (dB)	high Limit (dB)	Verdict
Band4	1.4	19957	1	#0	QPSK	3.34	13	PASS
Band4	1.4	19957	1	#0	QAM16	4.36	13	PASS
Band4	1.4	20175	1	#0	QPSK	4.46	13	PASS
Band4	1.4	20175	1	#0	QAM16	5.33	13	PASS
Band4	1.4	20393	1	#0	QPSK	4.64	13	PASS
Band4	1.4	20393	1	#0	QAM16	5.52	13	PASS
Band4	3	19965	1	#0	QPSK	3.47	13	PASS
Band4	3	19965	1	#0	QAM16	4.27	13	PASS
Band4	3	20175	1	#0	QPSK	4.41	13	PASS
Band4	3	20175	1	#0	QAM16	5.27	13	PASS
Band4	3	20385	1	#0	QPSK	4.61	13	PASS
Band4	3	20385	1	#0	QAM16	5.40	13	PASS
Band4	5	19975	1	#0	QPSK	3.50	13	PASS
Band4	5	19975	1	#0	QAM16	4.20	13	PASS
Band4	5	20175	1	#0	QPSK	4.45	13	PASS
Band4	5	20175	1	#0	QAM16	5.20	13	PASS
Band4	5	20375	1	#0	QPSK	4.46	13	PASS
Band4	5	20375	1	#0	QAM16	5.27	13	PASS
Band4	10	20000	1	#0	QPSK	3.55	13	PASS
Band4	10	20000	1	#0	QAM16	4.34	13	PASS
Band4	10	20175	1	#0	QPSK	4.55	13	PASS
Band4	10	20175	1	#0	QAM16	5.37	13	PASS
Band4	10	20350	1	#0	QPSK	4.29	13	PASS
Band4	10	20350	1	#0	QAM16	5.16	13	PASS
Band4	15	20025	1	#0	QPSK	3.43	13	PASS
Band4	15	20025	1	#0	QAM16	4.33	13	PASS
Band4	15	20175	1	#0	QPSK	4.67	13	PASS
Band4	15	20175	1	#0	QAM16	5.54	13	PASS
Band4	15	20325	1	#0	QPSK	4.48	13	PASS
Band4	15	20325	1	#0	QAM16	5.33	13	PASS
Band4	20	20050	1	#0	QPSK	3.53	13	PASS
Band4	20	20050	1	#0	QAM16	4.36	13	PASS
Band4	20	20175	1	#0	QPSK	4.80	13	PASS
Band4	20	20175	1	#0	QAM16	5.64	13	PASS
Band4	20	20300	1	#0	QPSK	4.51	13	PASS
Band4	20	20300	1	#0	QAM16	5.41	13	PASS



Band4 QPSK BW=1.4MHz Channel=19957 RB Size=1 Position=#0

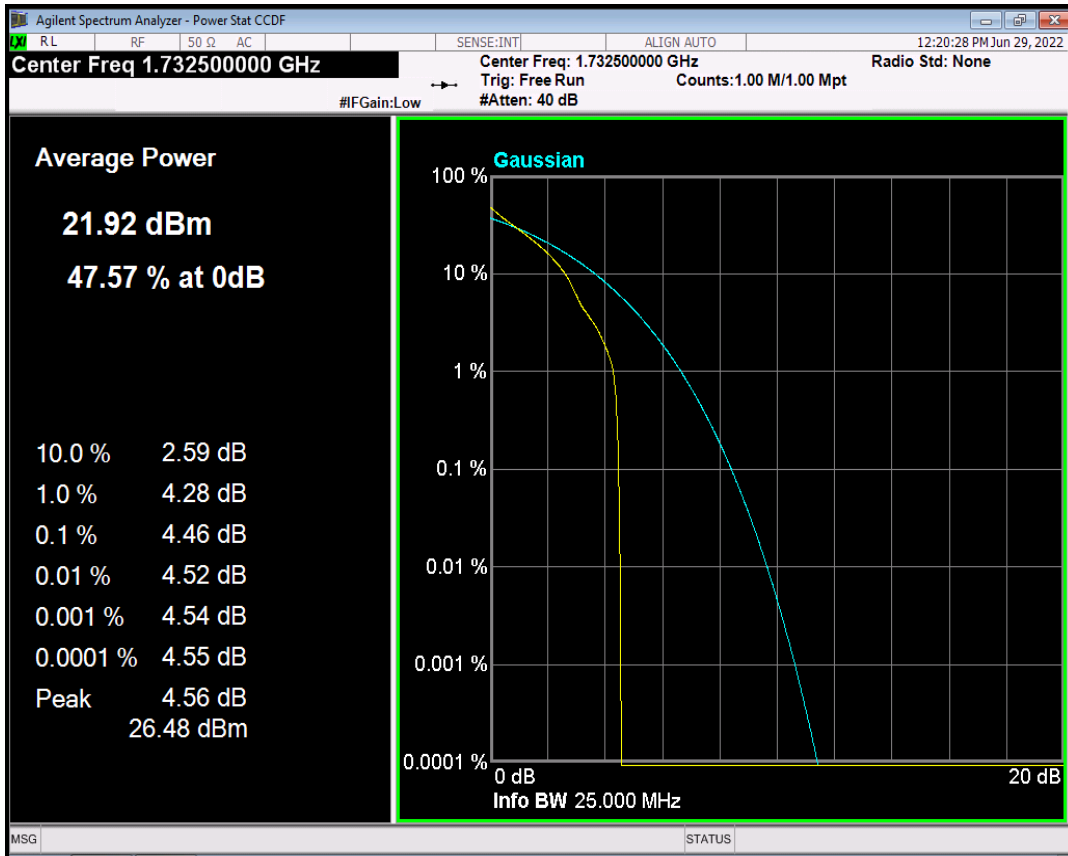


Band4 QAM16 BW=1.4MHz Channel=19957 RB Size=1 Position=#0

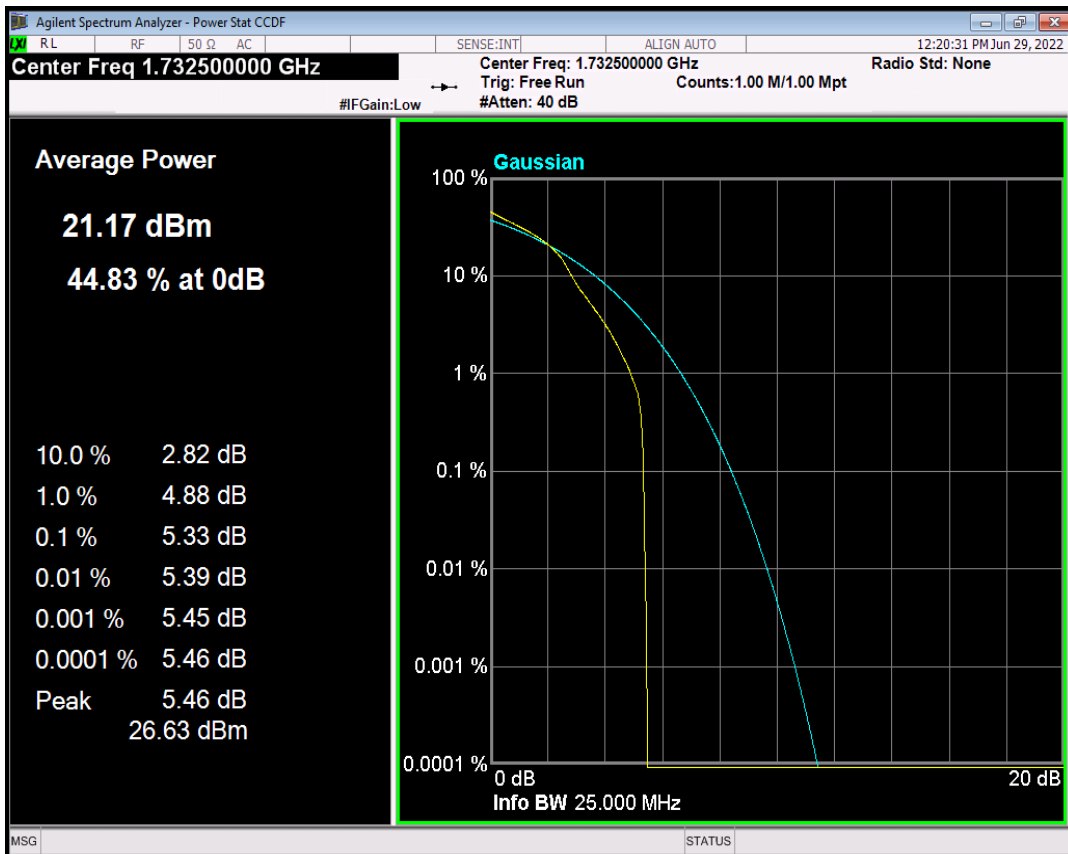




Band4 QPSK BW=1.4MHz Channel=20175 RB Size=1 Position=#0

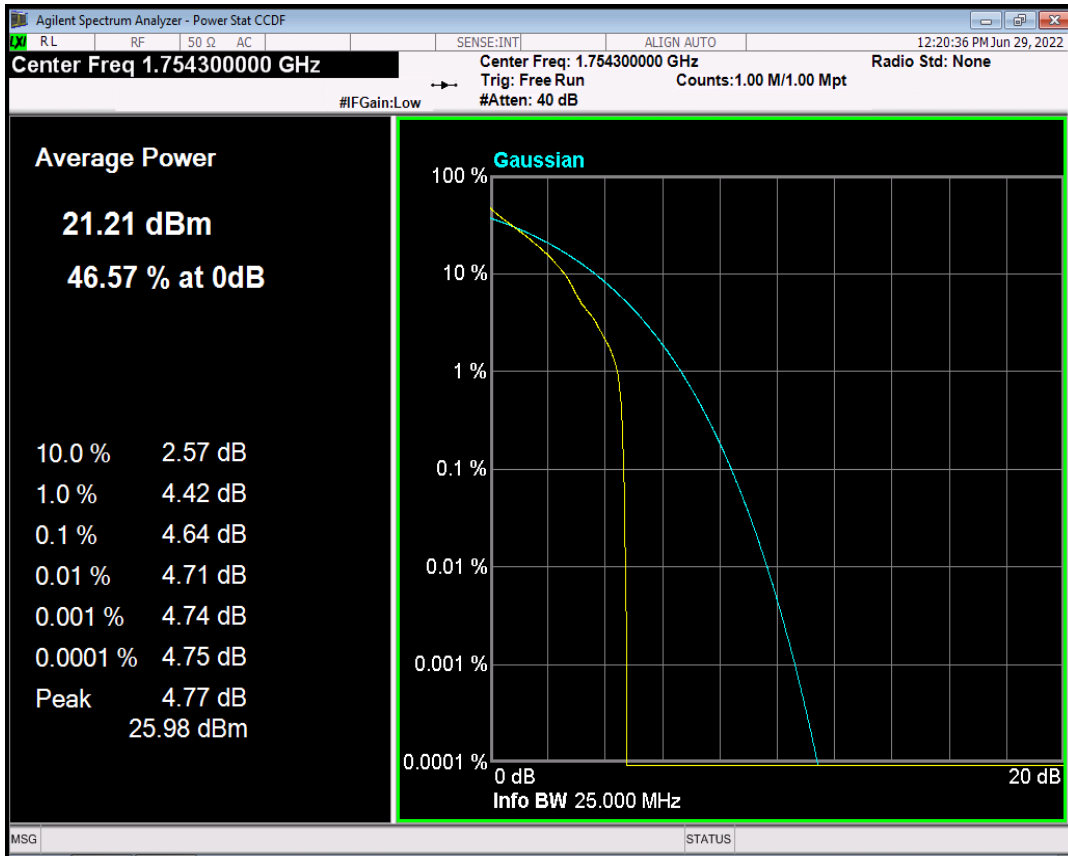


Band4 QAM16 BW=1.4MHz Channel=20175 RB Size=1 Position=#0

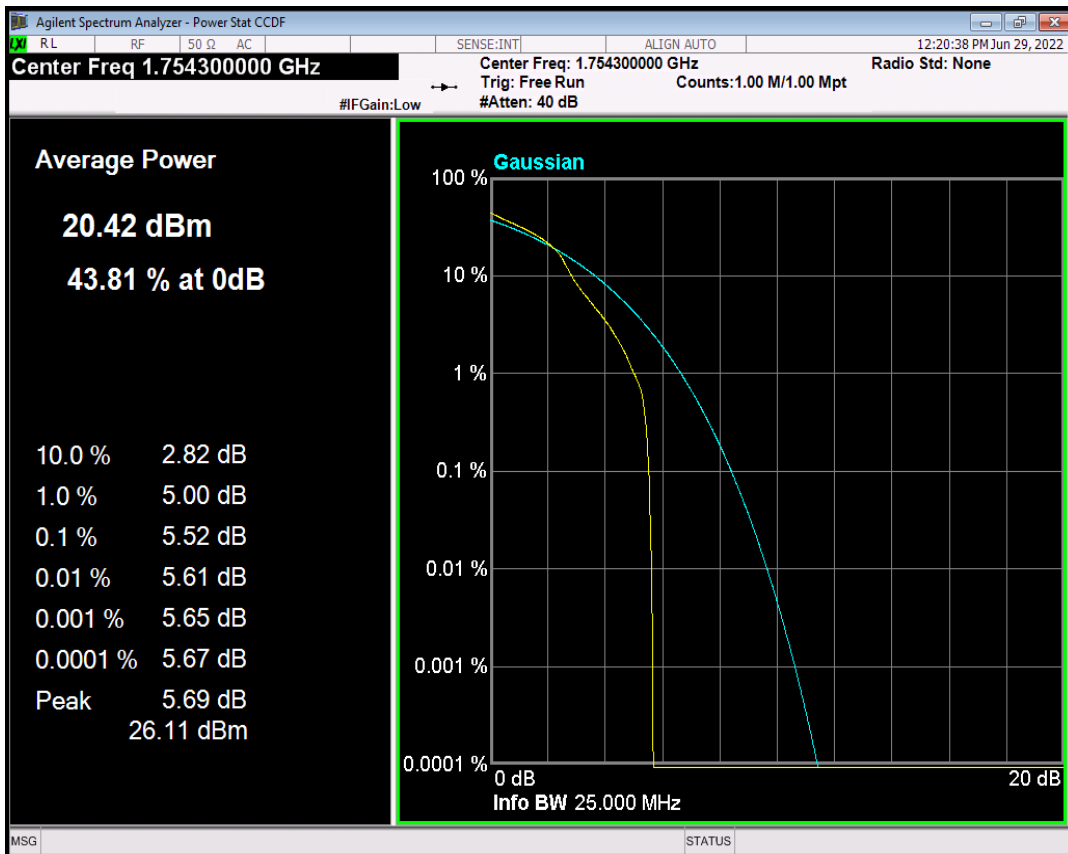




Band4 QPSK BW=1.4MHz Channel=20393 RB Size=1 Position=#0

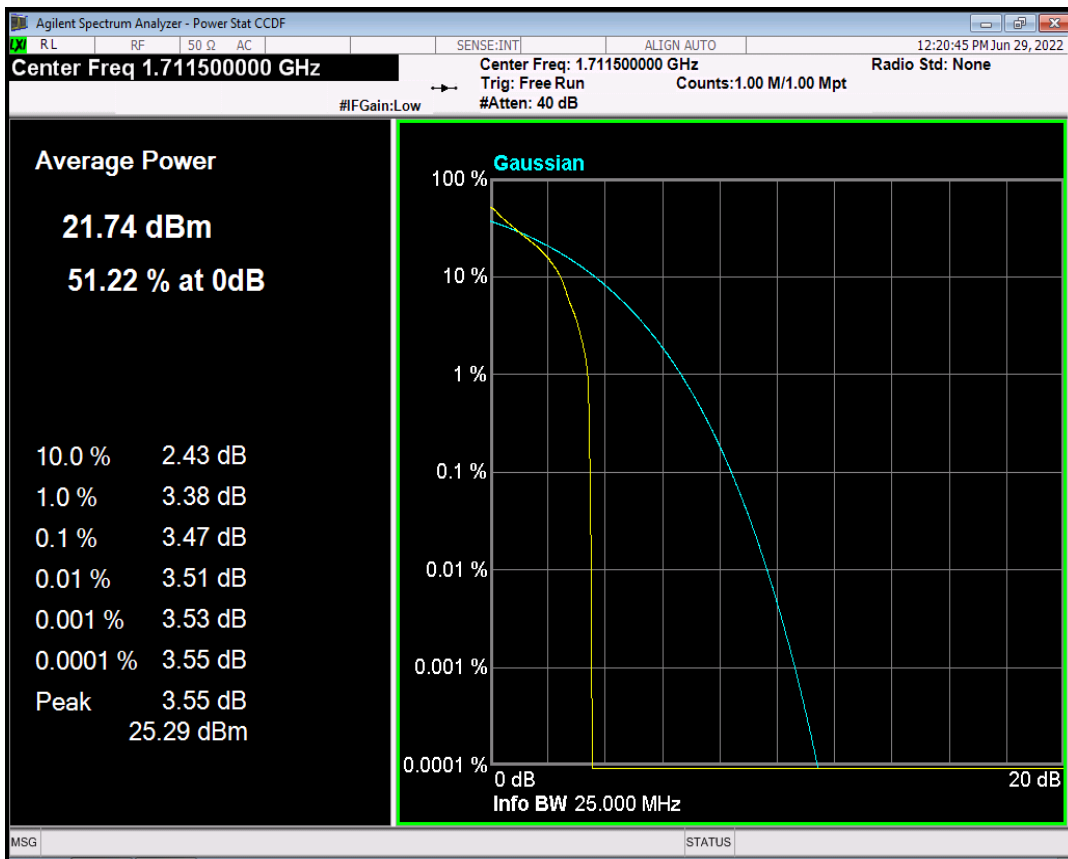


Band4 QAM16 BW=1.4MHz Channel=20393 RB Size=1 Position=#0

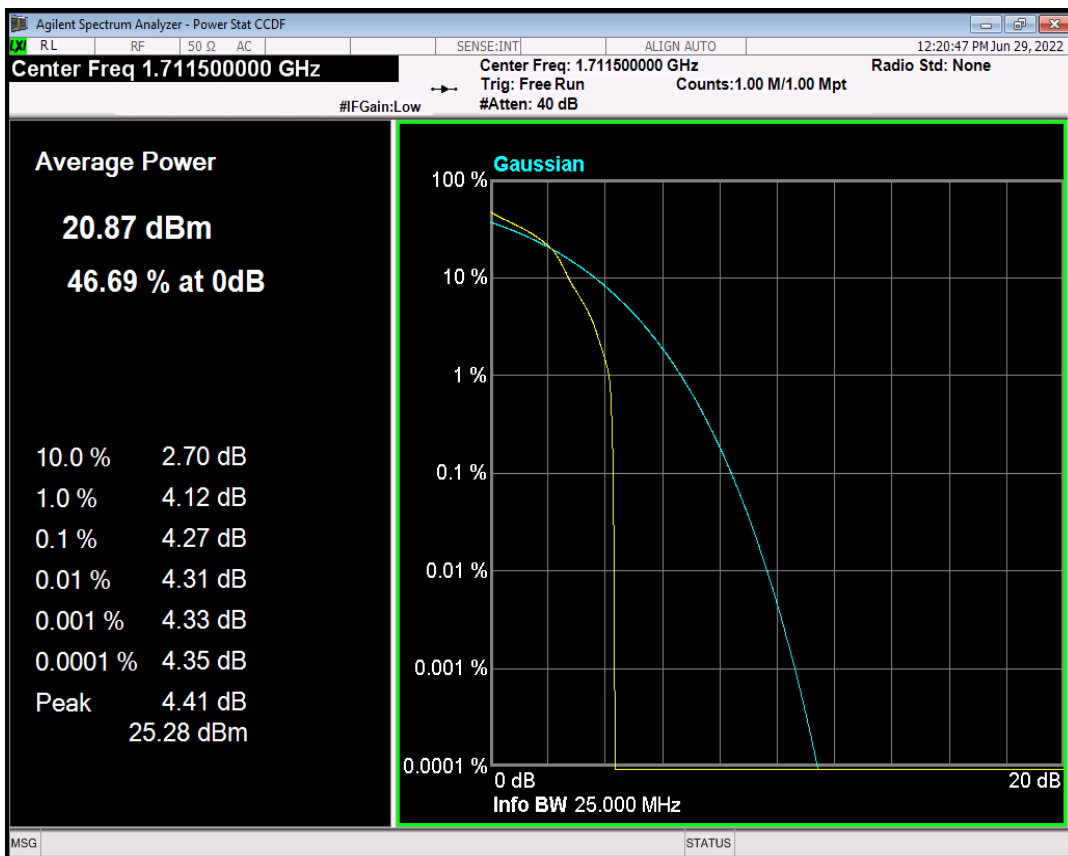




Band4 QPSK BW=3MHz Channel=19965 RB Size=1 Position=#0

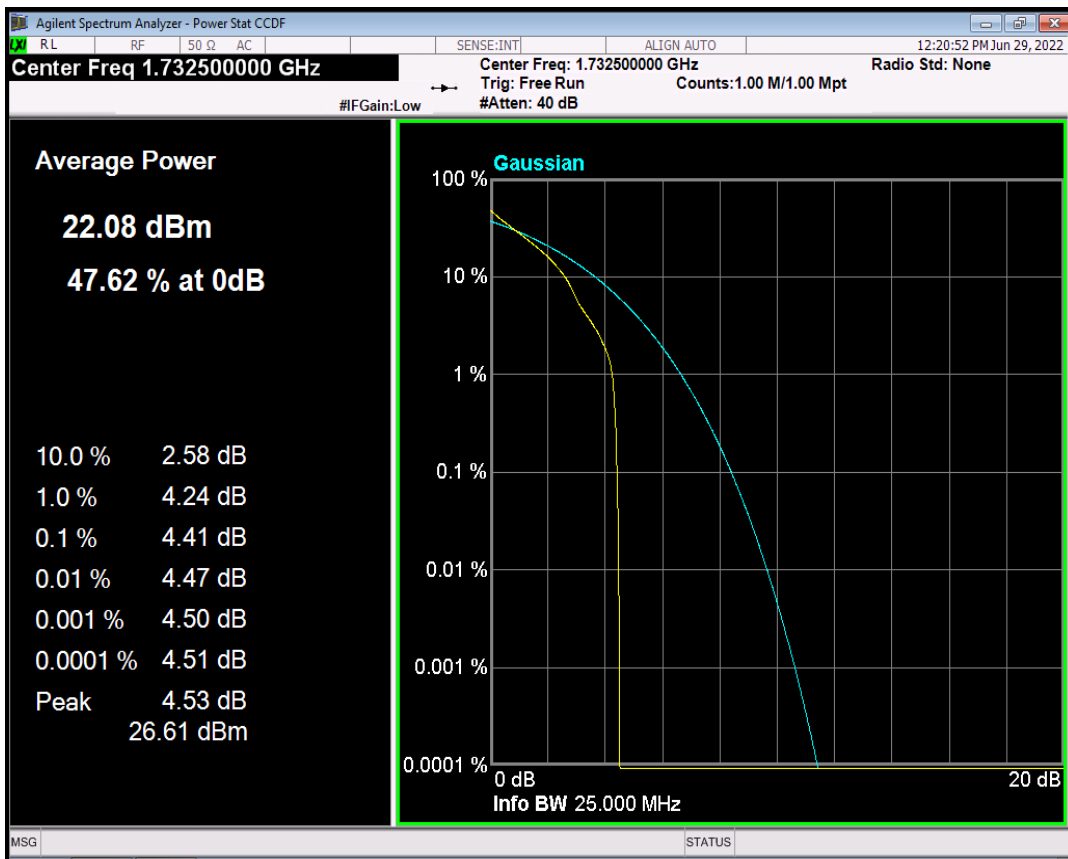


Band4 QAM16 BW=3MHz Channel=19965 RB Size=1 Position=#0

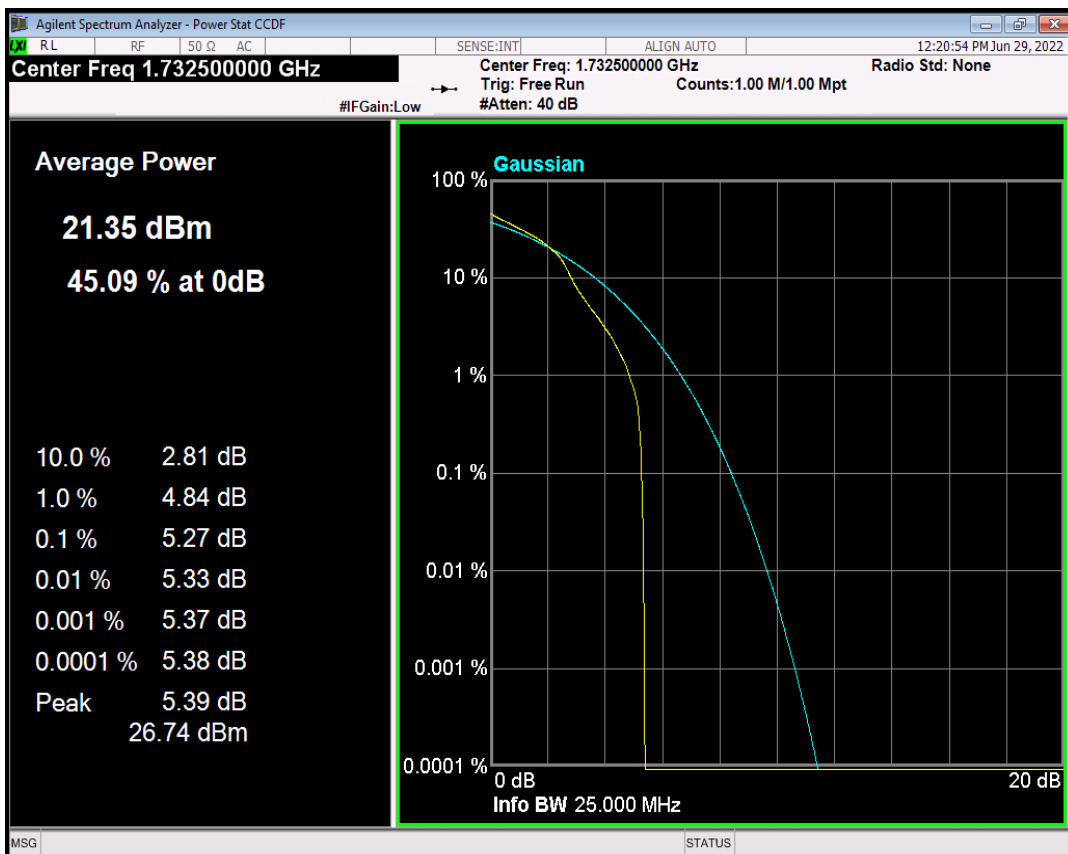




Band4 QPSK BW=3MHz Channel=20175 RB Size=1 Position=#0

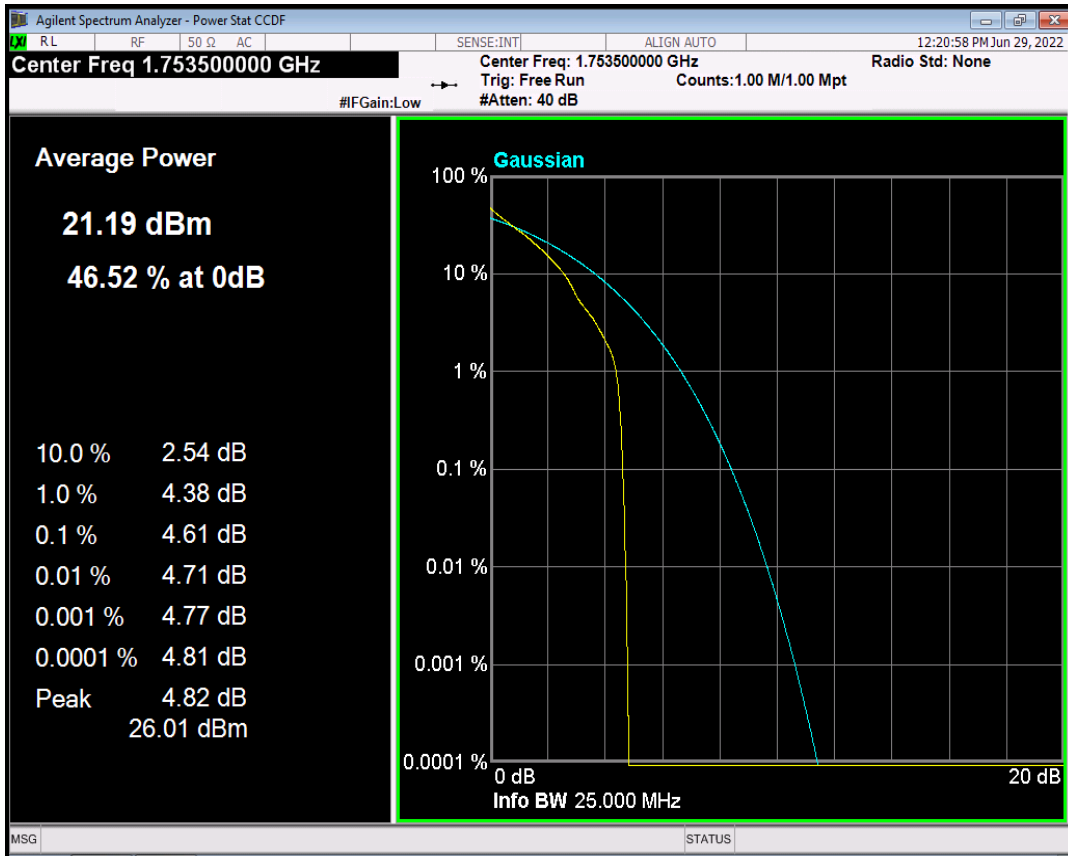


Band4 QAM16 BW=3MHz Channel=20175 RB Size=1 Position=#0

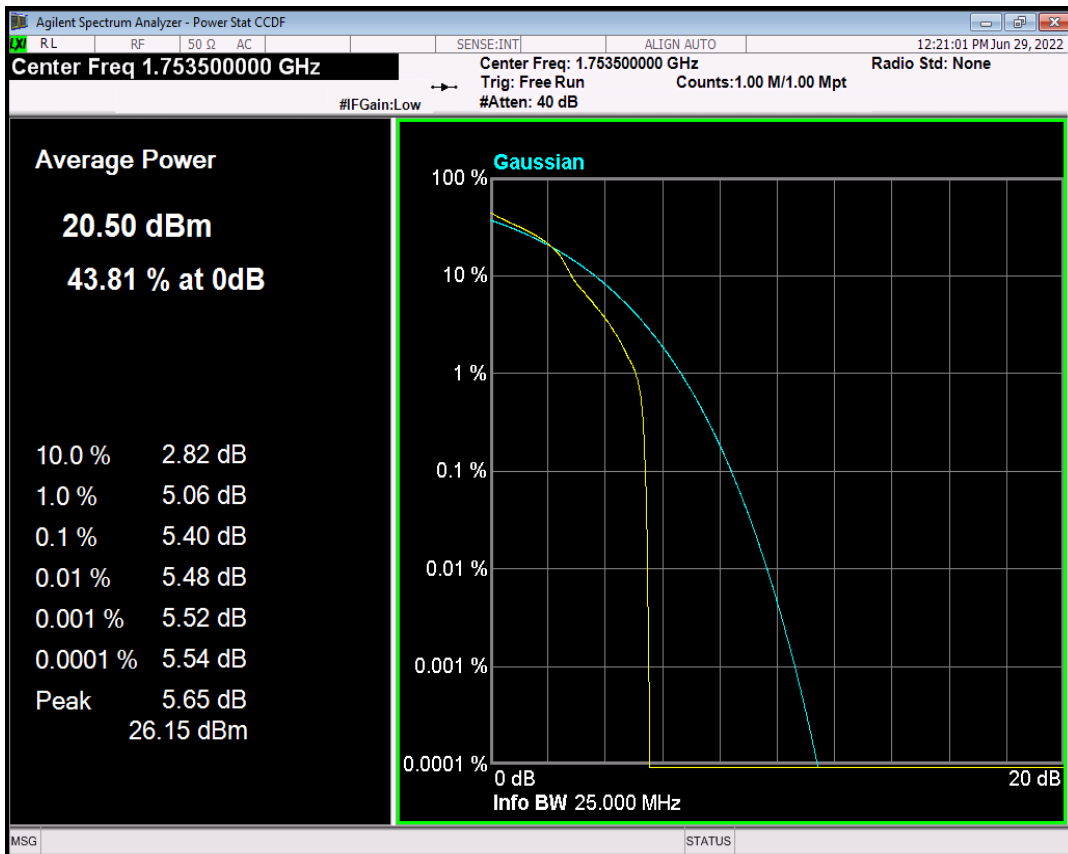




Band4 QPSK BW=3MHz Channel=20385 RB Size=1 Position=#0

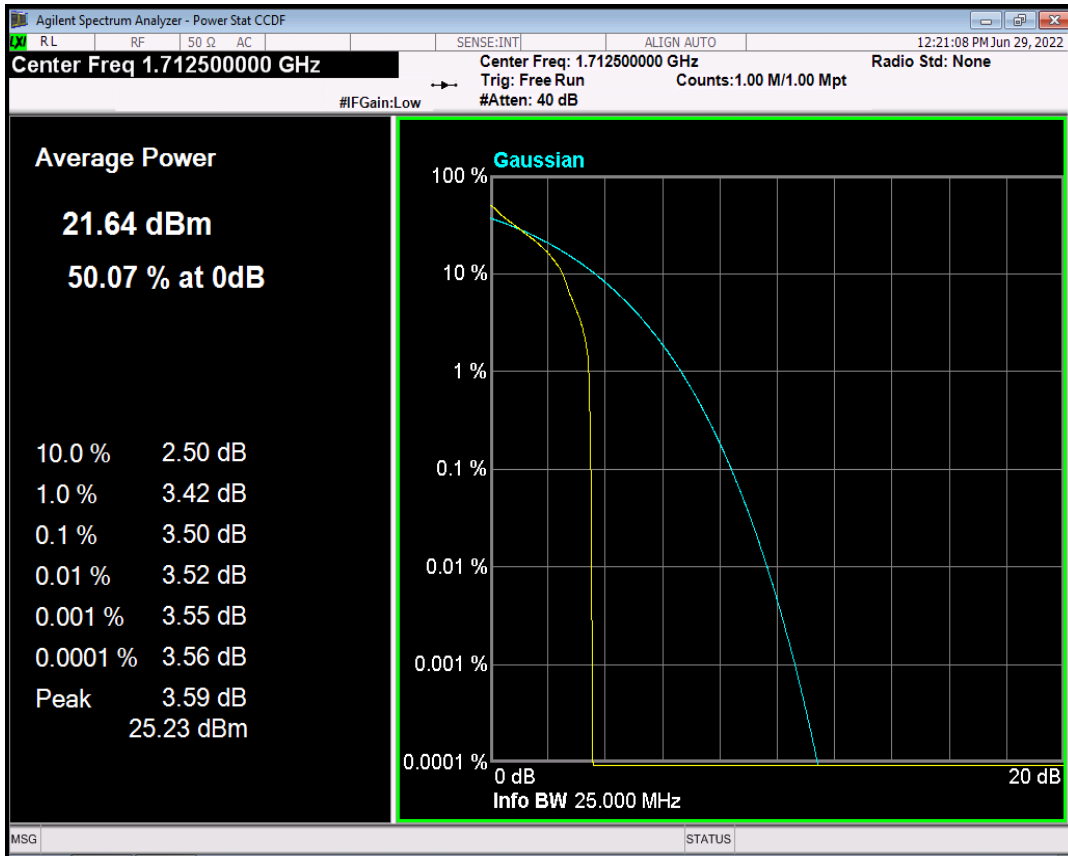


Band4 QAM16 BW=3MHz Channel=20385 RB Size=1 Position=#0

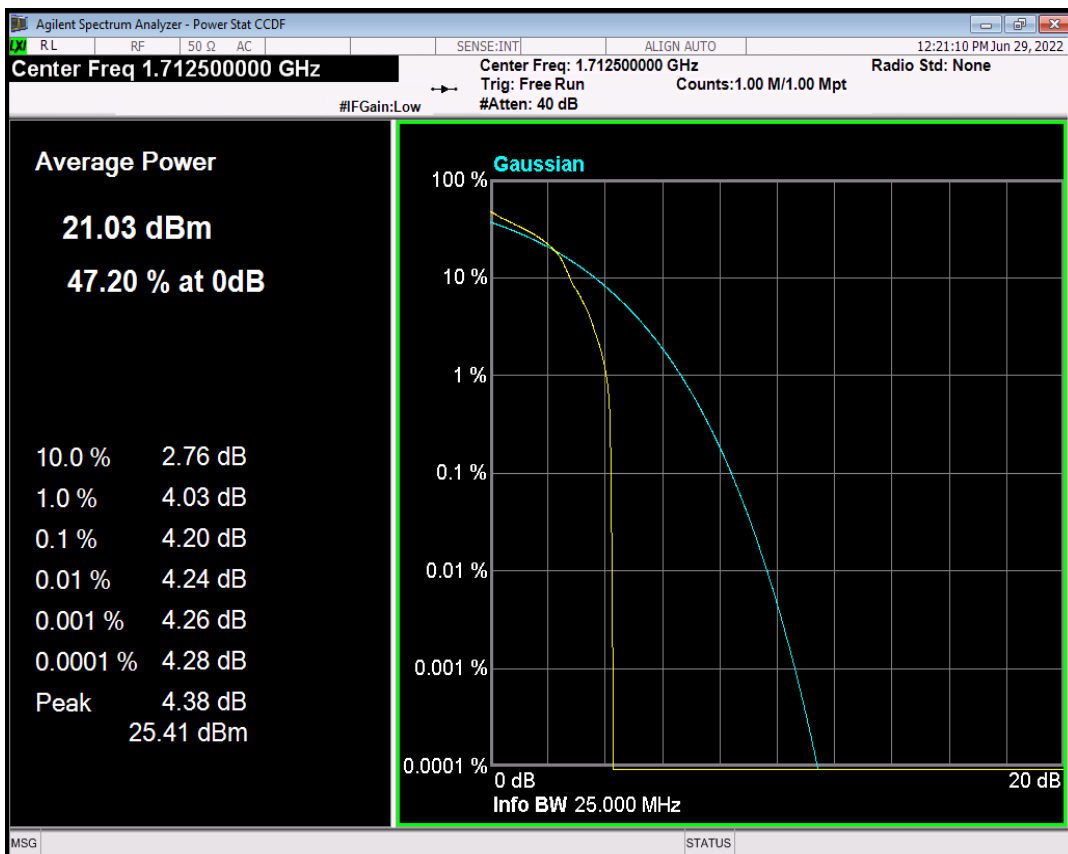




Band4 QPSK BW=5MHz Channel=19975 RB Size=1 Position=#0

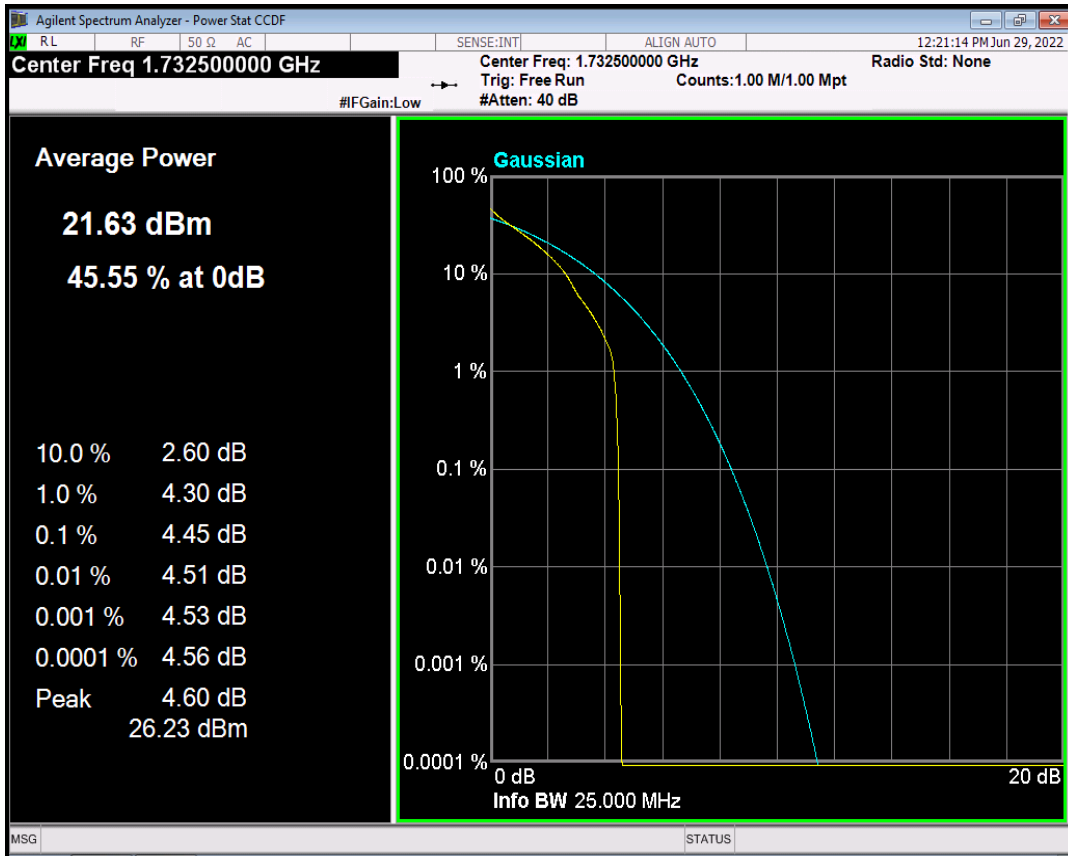


Band4 QAM16 BW=5MHz Channel=19975 RB Size=1 Position=#0

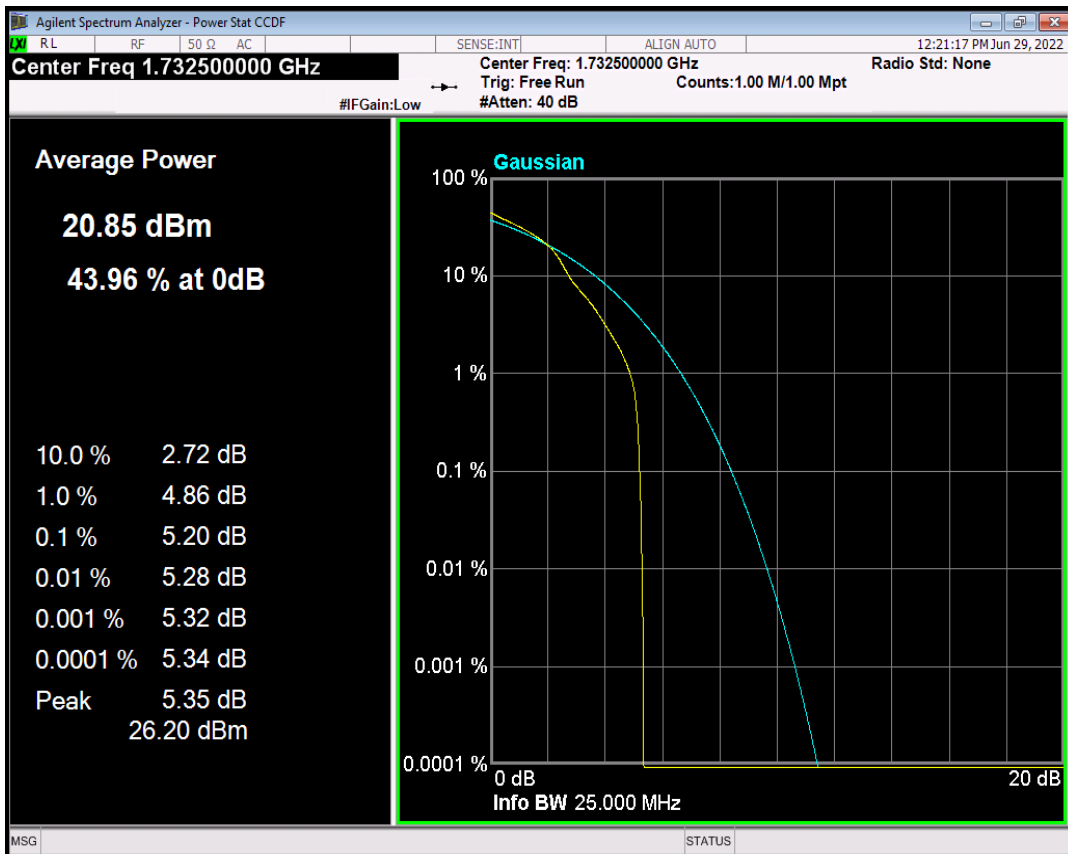




Band4 QPSK BW=5MHz Channel=20175 RB Size=1 Position=#0

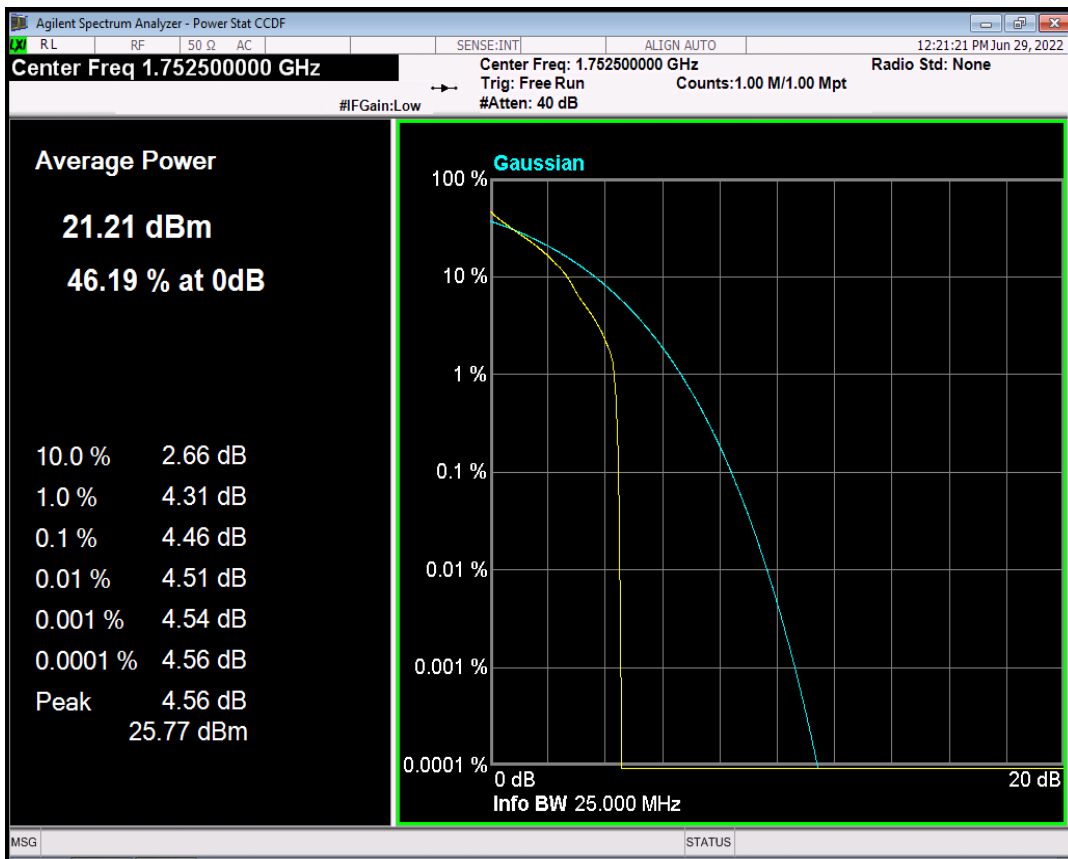


Band4 QAM16 BW=5MHz Channel=20175 RB Size=1 Position=#0

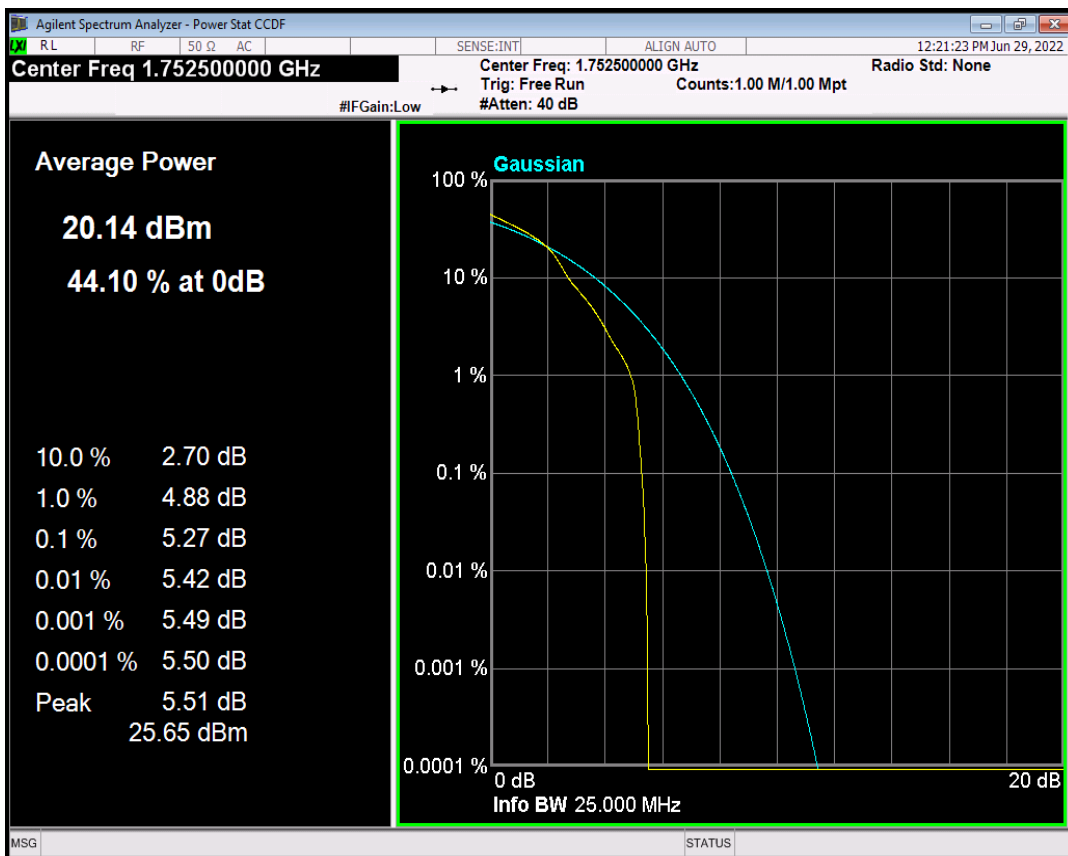




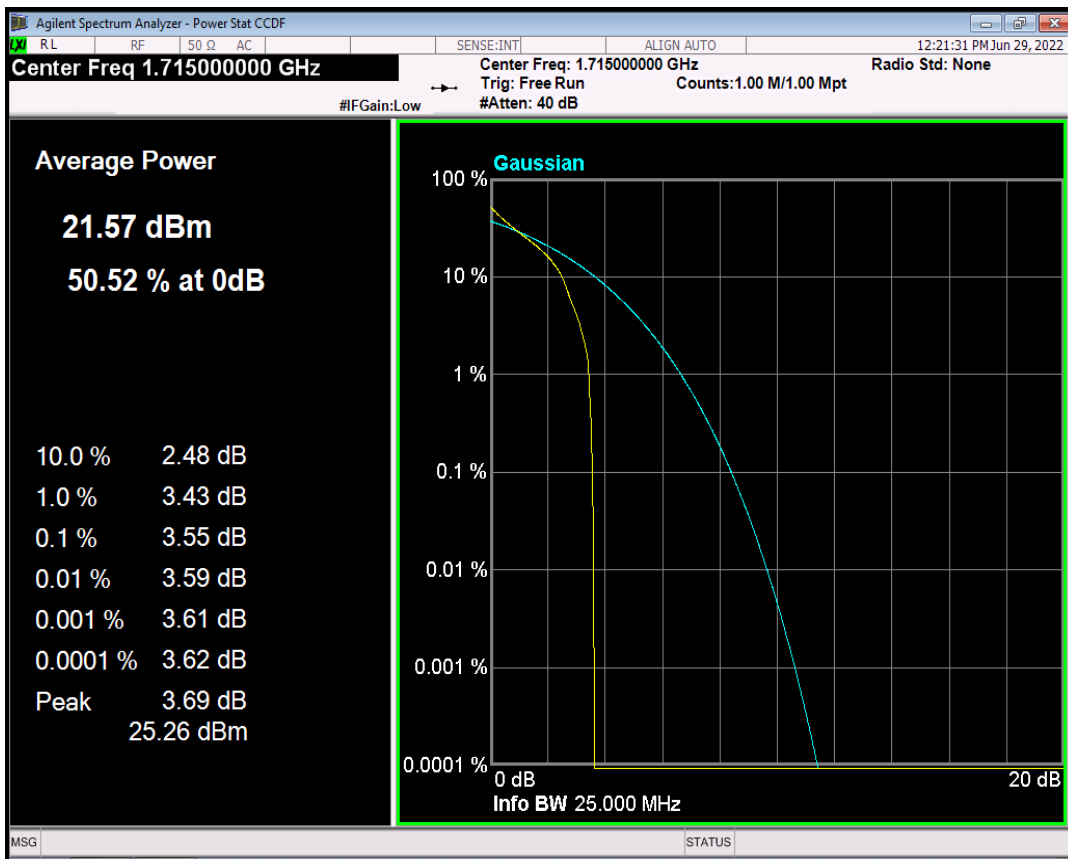
Band4 QPSK BW=5MHz Channel=20375 RB Size=1 Position=#0



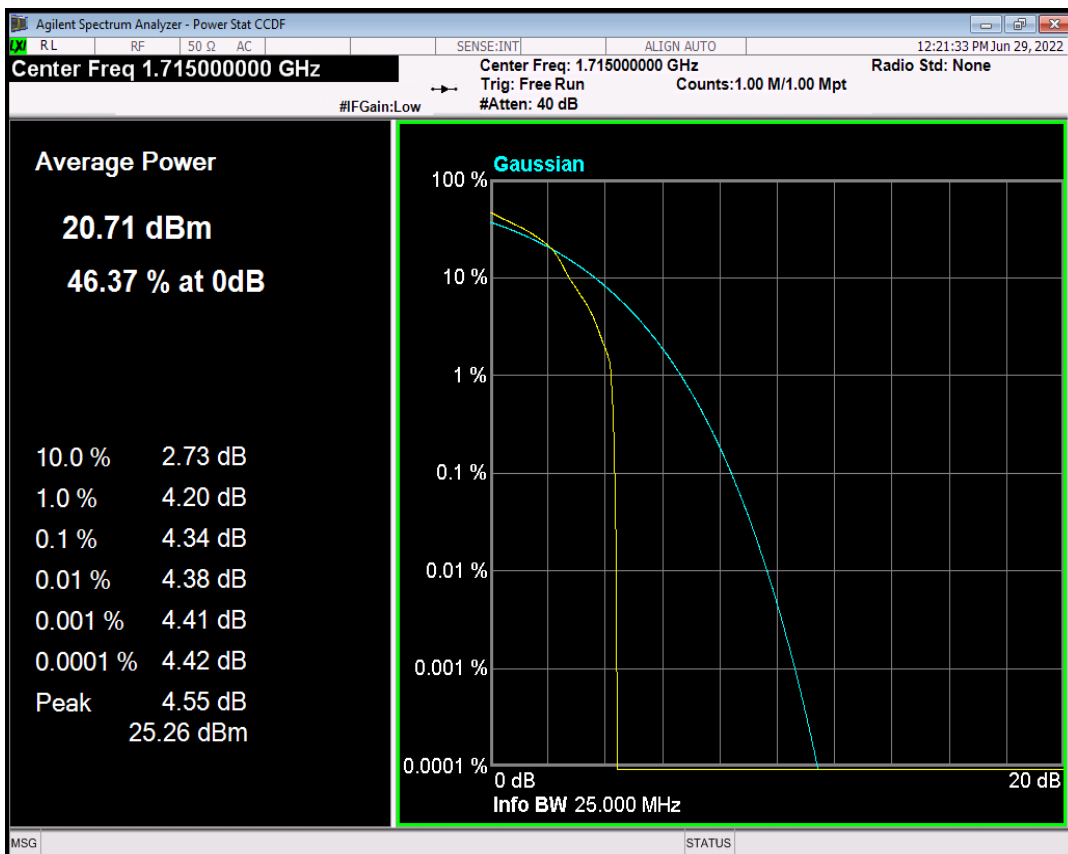
Band4 QAM16 BW=5MHz Channel=20375 RB Size=1 Position=#0



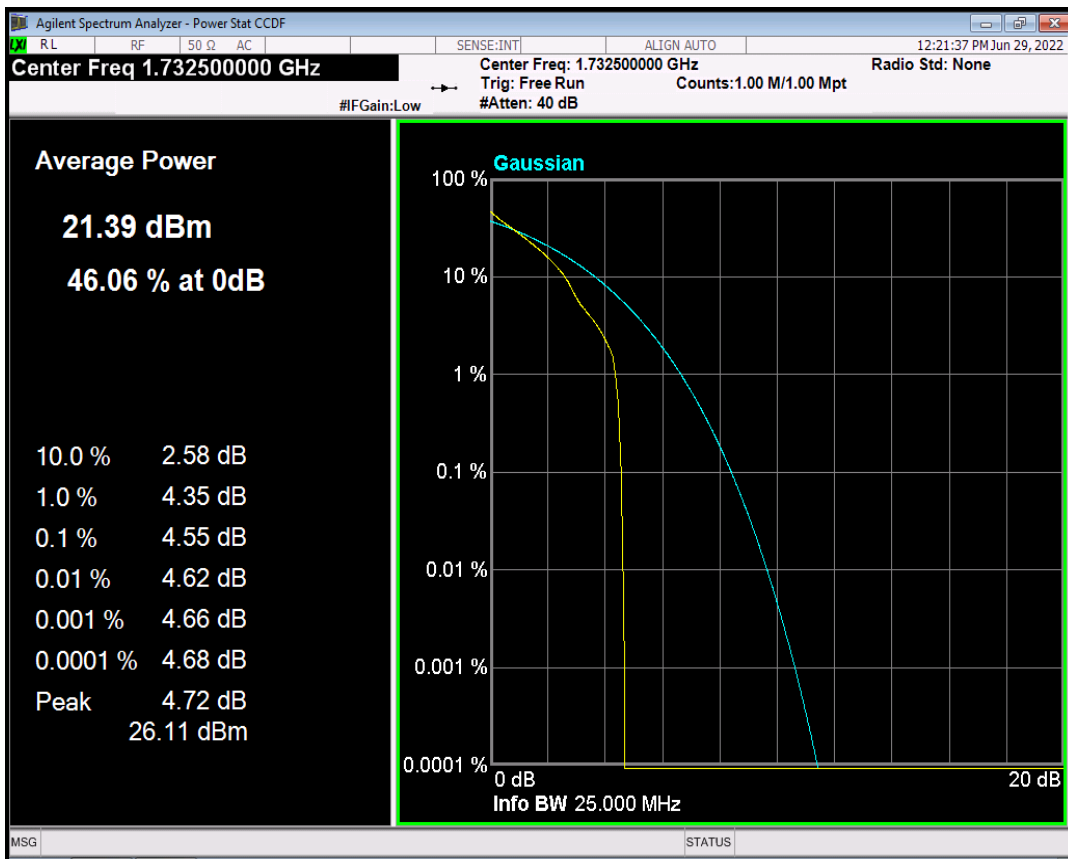
Band4 QPSK BW=10MHz Channel=20000 RB Size=1 Position=#0



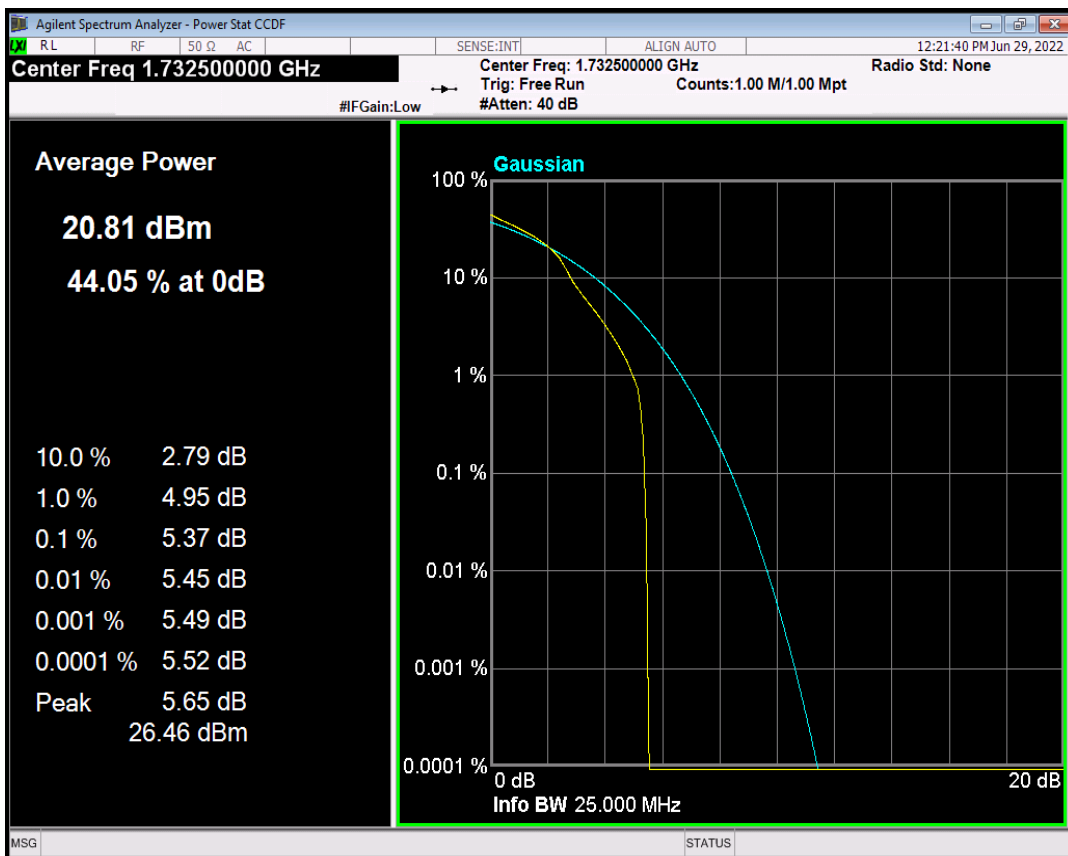
Band4 QAM16 BW=10MHz Channel=20000 RB Size=1 Position=#0



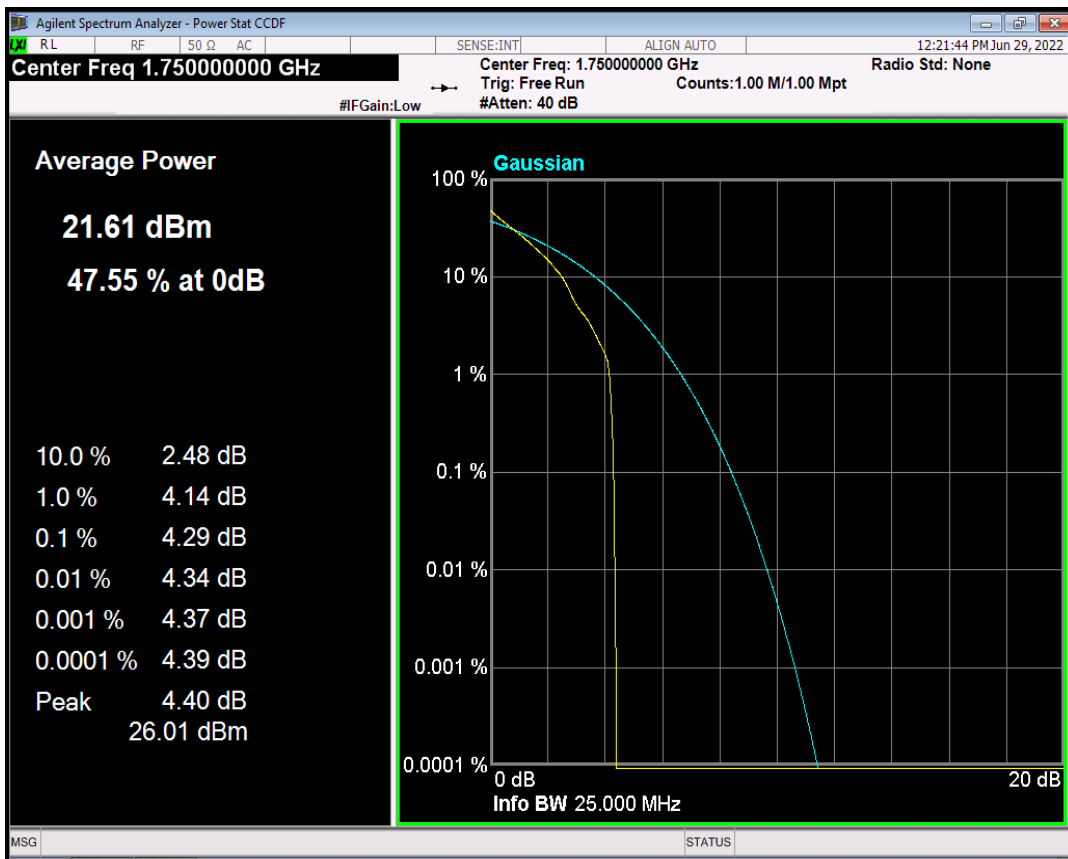
Band4 QPSK BW=10MHz Channel=20175 RB Size=1 Position=#0



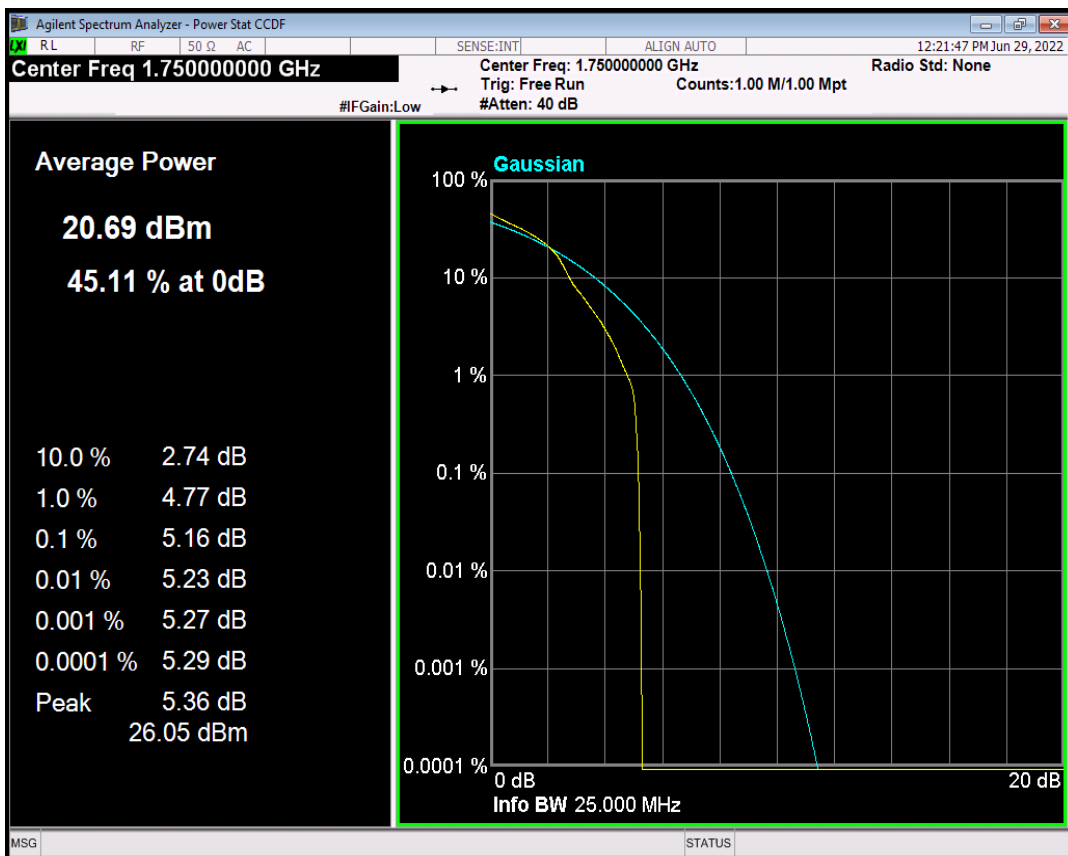
Band4 QAM16 BW=10MHz Channel=20175 RB Size=1 Position=#0



Band4 QPSK BW=10MHz Channel=20350 RB Size=1 Position=#0

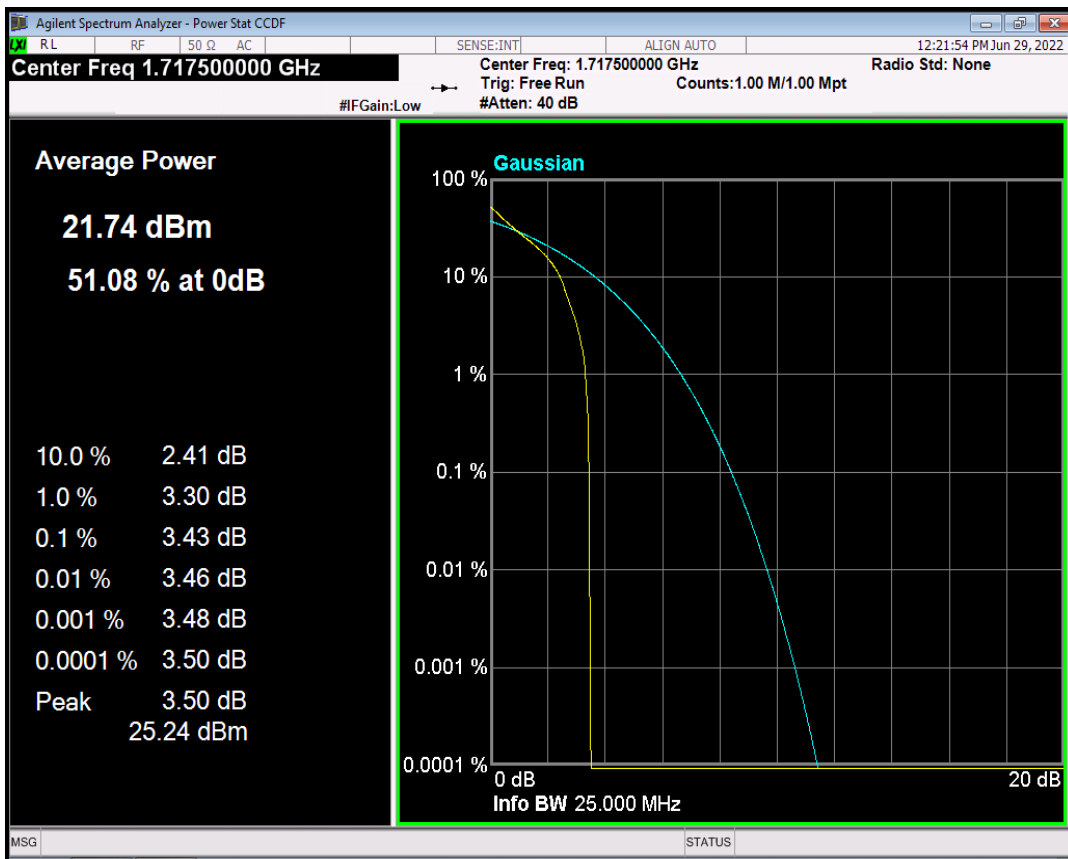


Band4 QAM16 BW=10MHz Channel=20350 RB Size=1 Position=#0

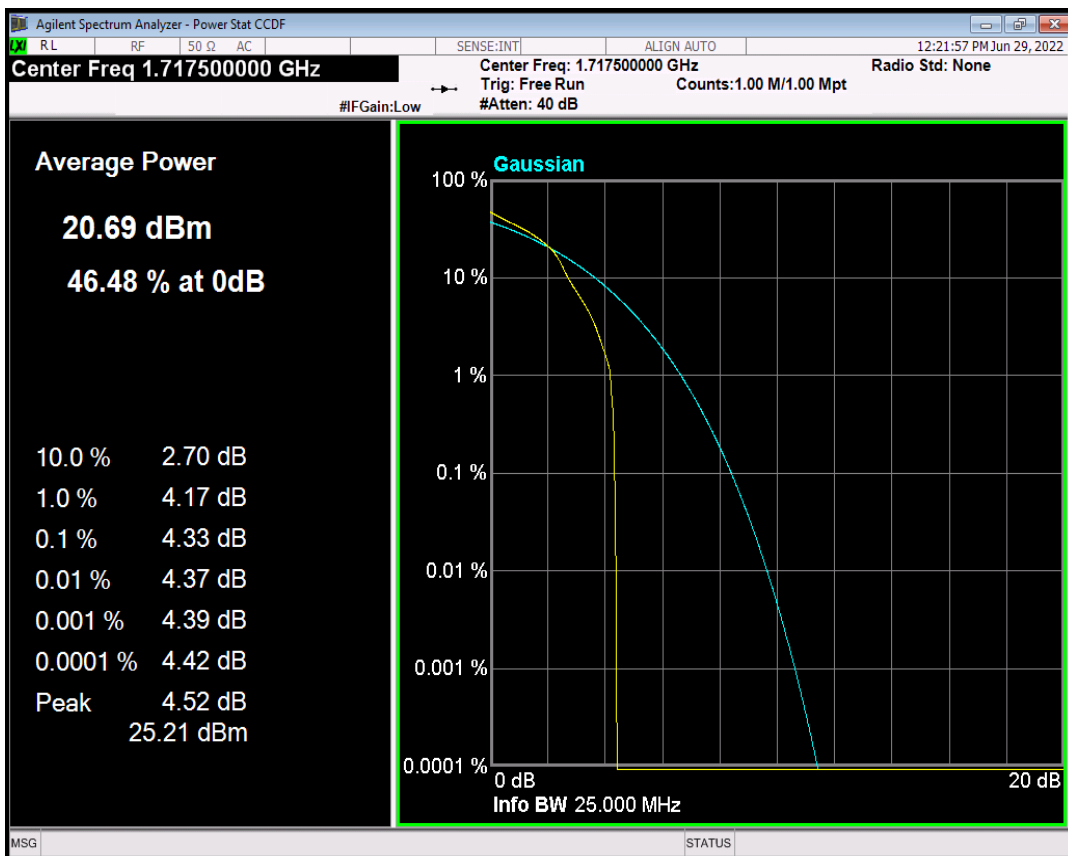




Band4 QPSK BW=15MHz Channel=20025 RB Size=1 Position=#0

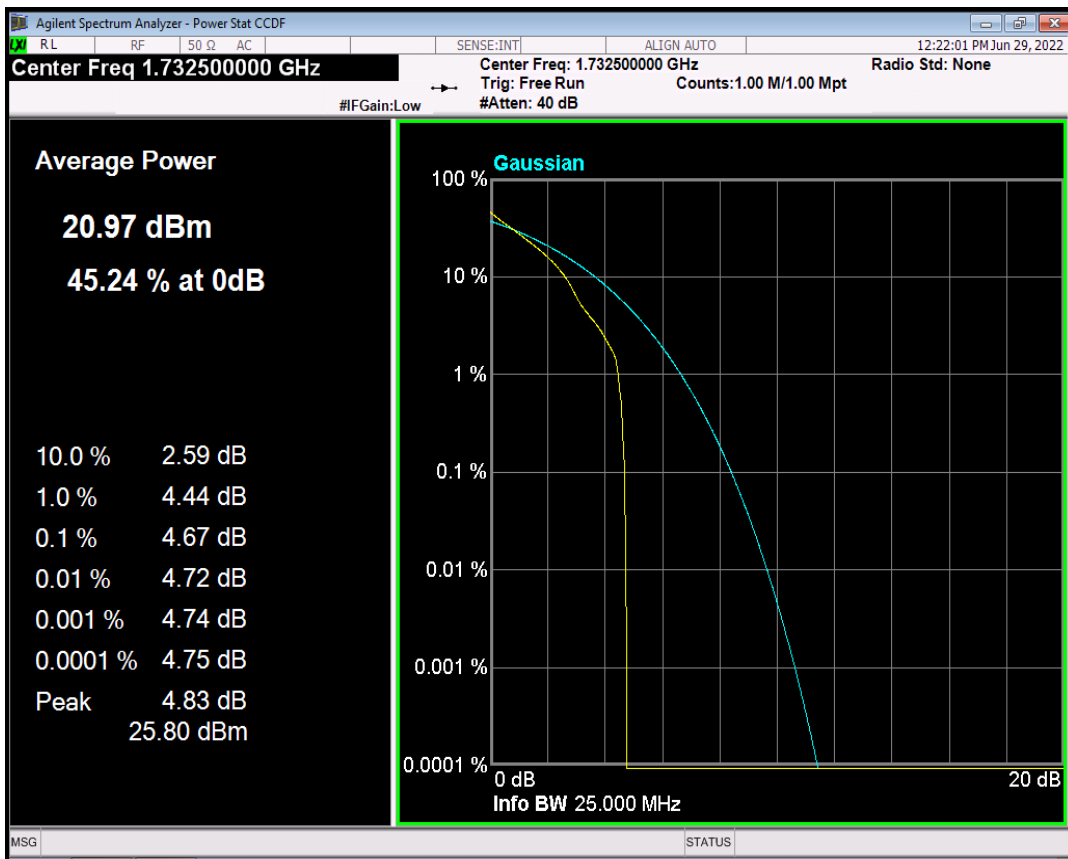


Band4 QAM16 BW=15MHz Channel=20025 RB Size=1 Position=#0

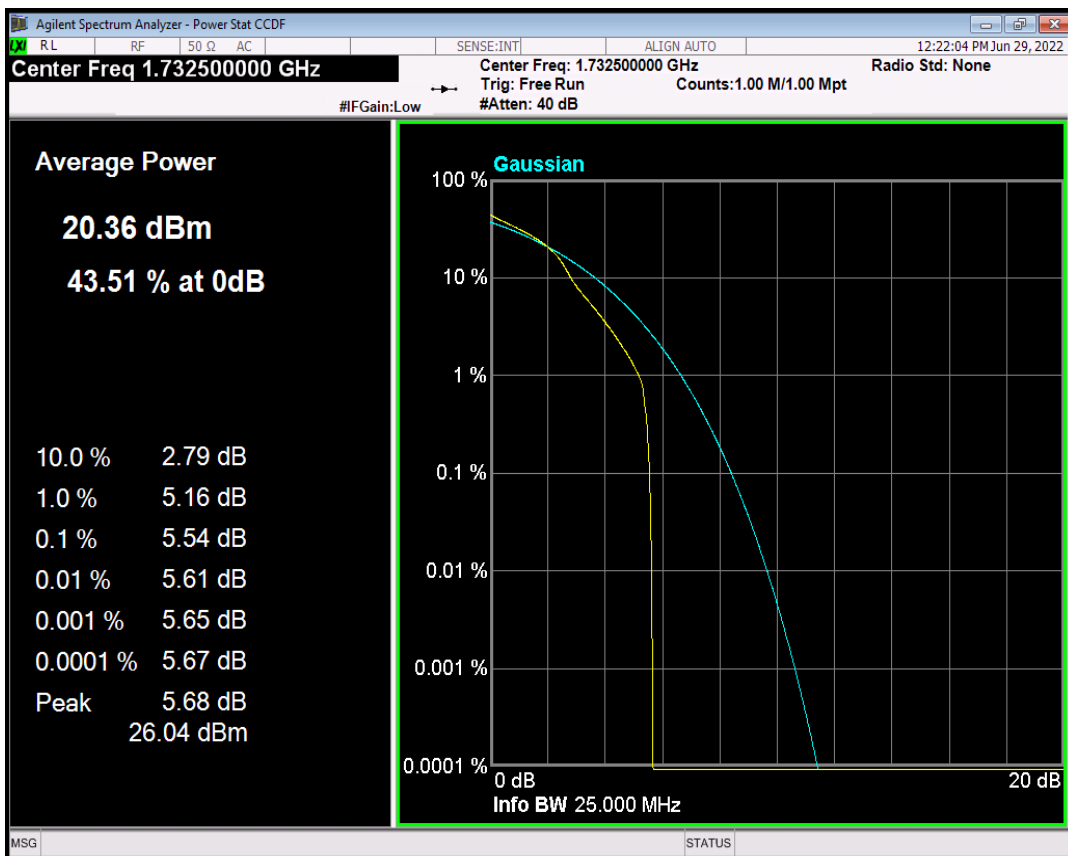




Band4 QPSK BW=15MHz Channel=20175 RB Size=1 Position=#0

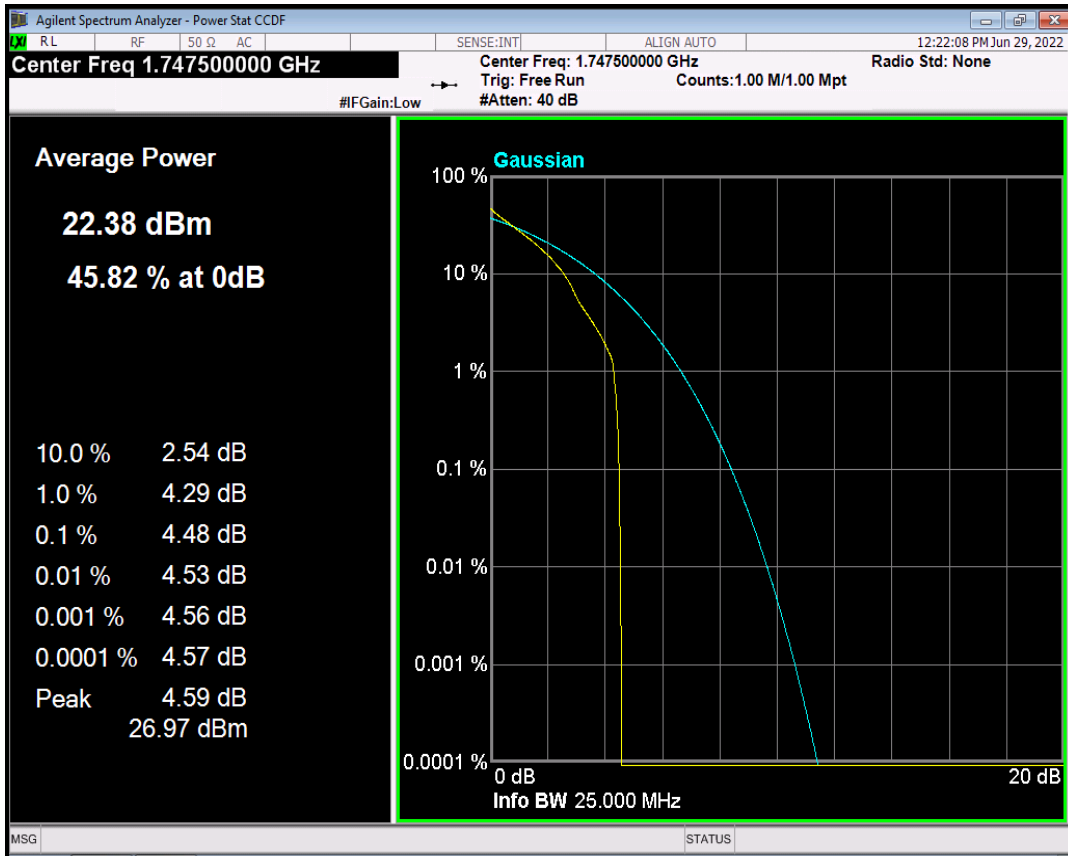


Band4 QAM16 BW=15MHz Channel=20175 RB Size=1 Position=#0

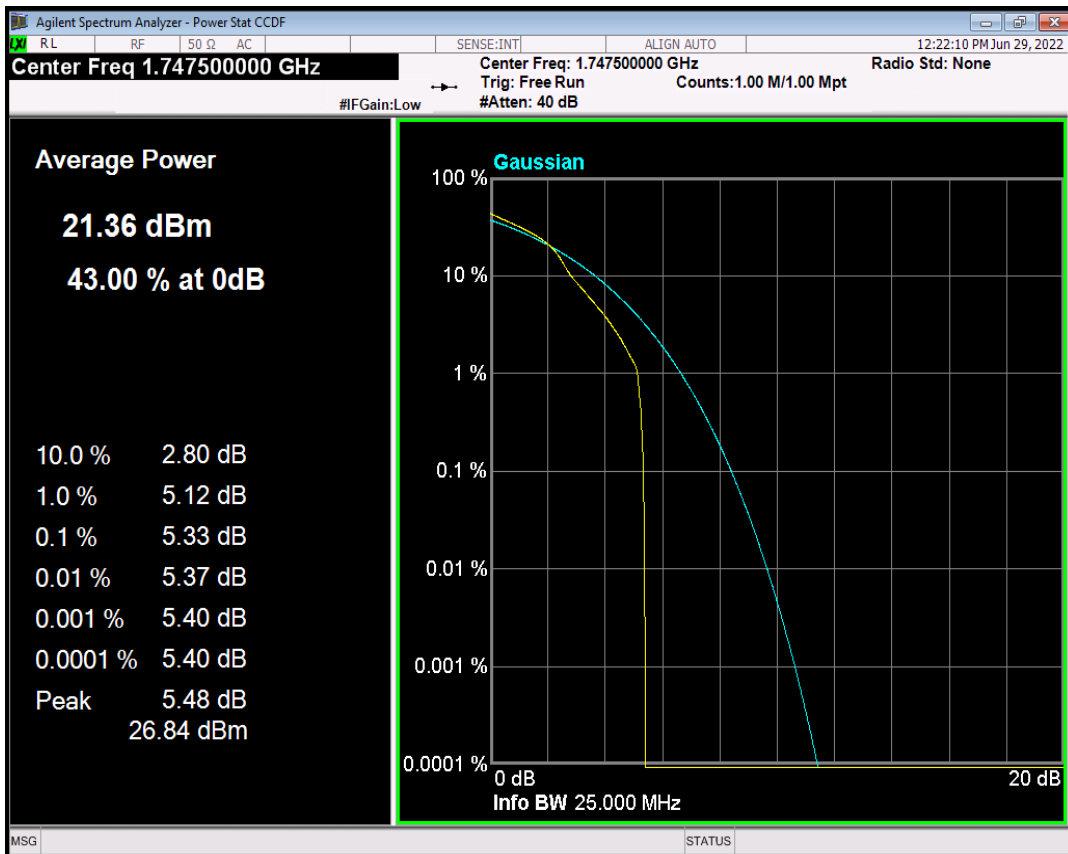




Band4 QPSK BW=15MHz Channel=20325 RB Size=1 Position=#0

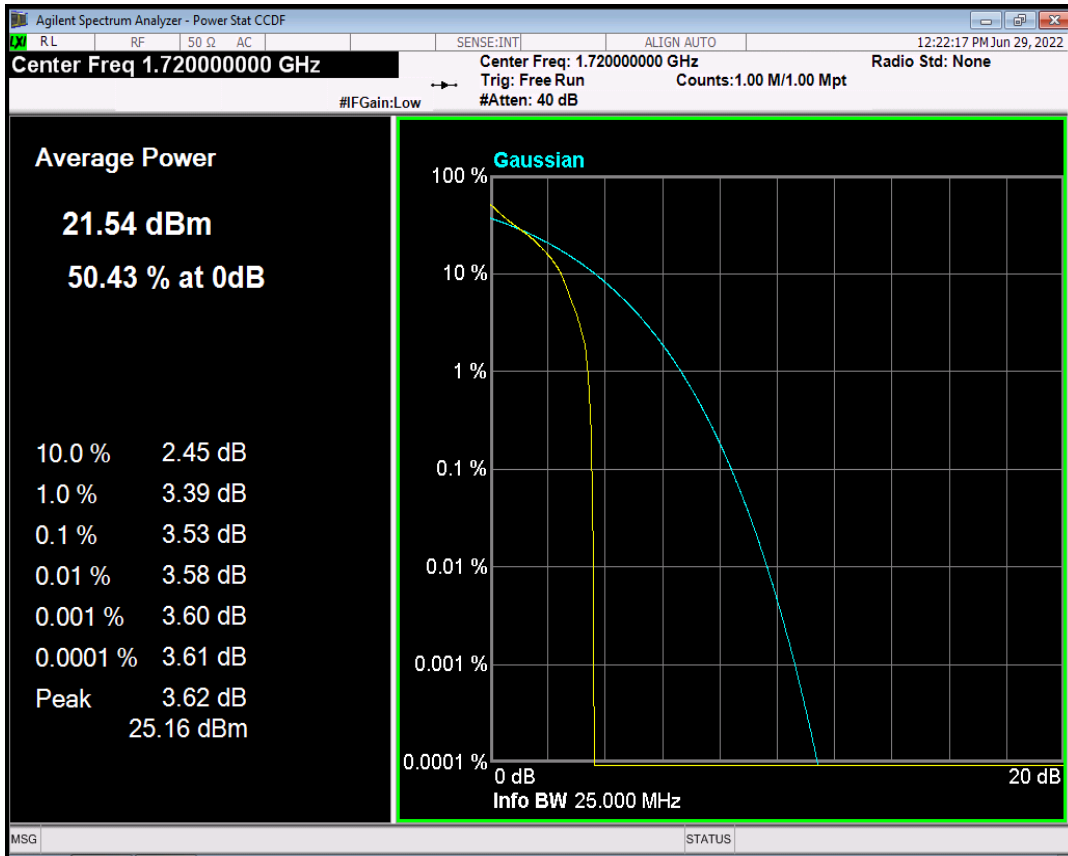


Band4 QAM16 BW=15MHz Channel=20325 RB Size=1 Position=#0

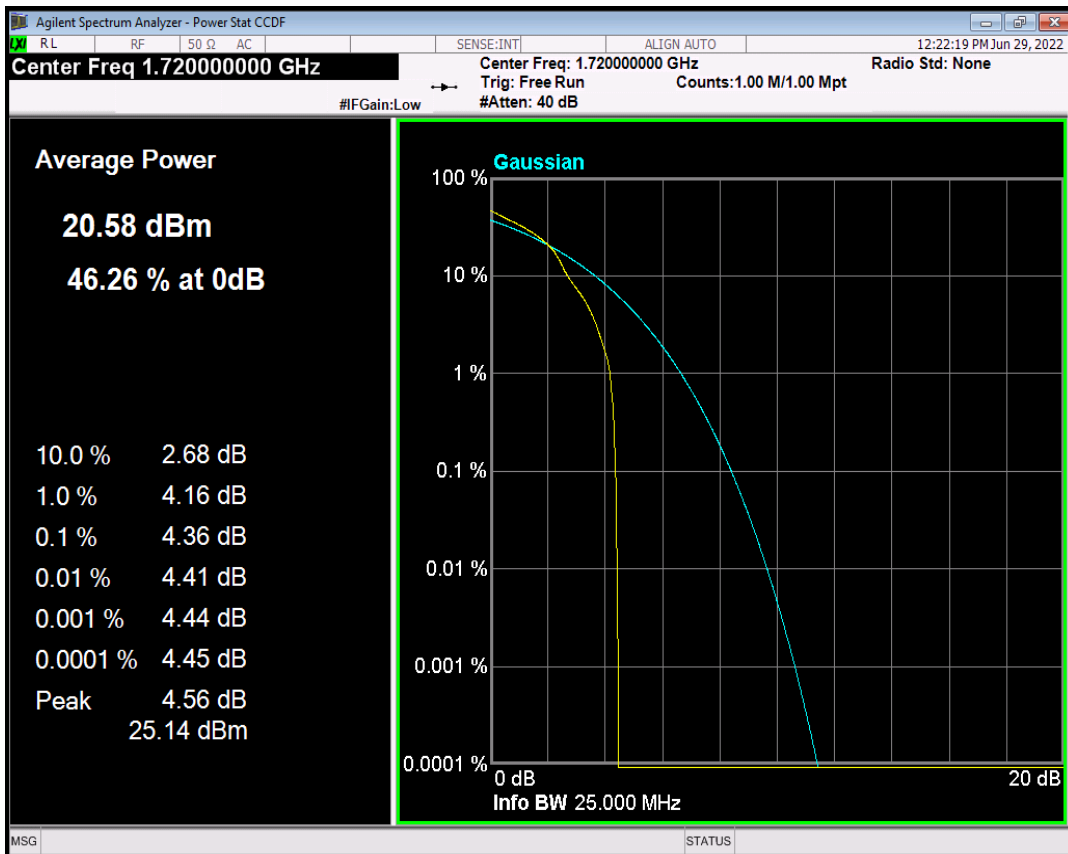




Band4 QPSK BW=20MHz Channel=20050 RB Size=1 Position=#0

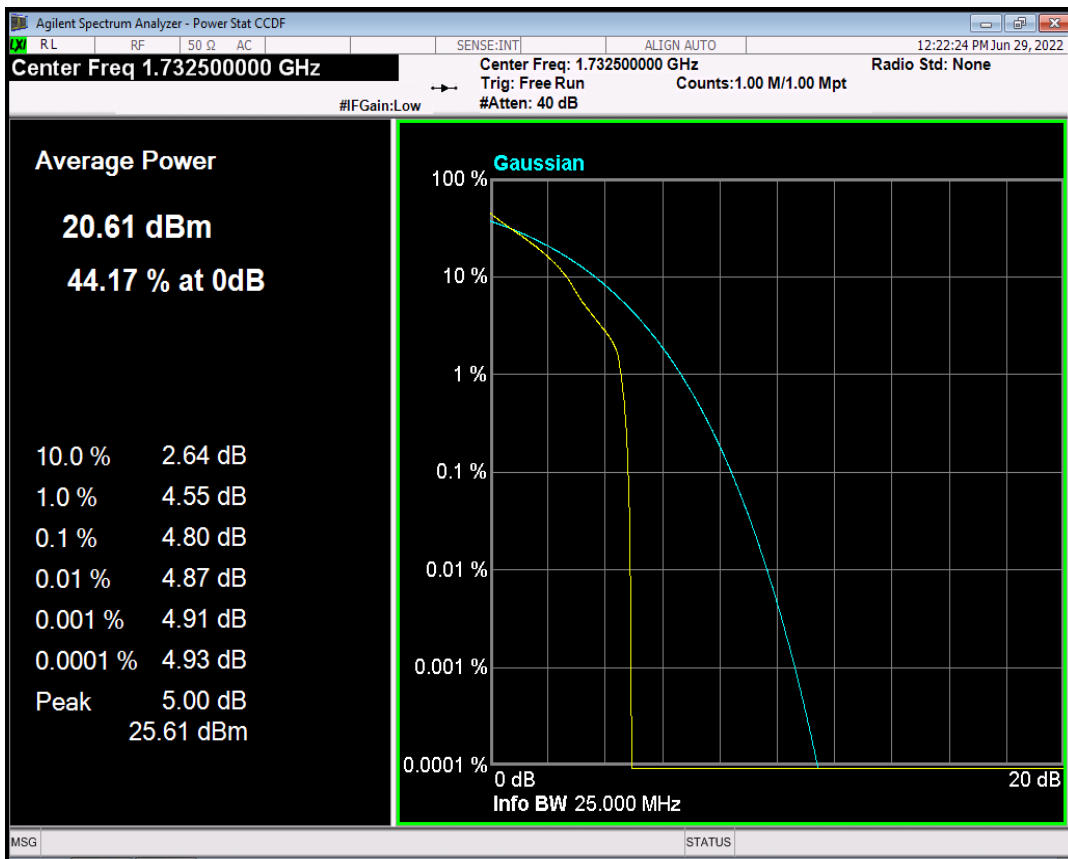


Band4 QAM16 BW=20MHz Channel=20050 RB Size=1 Position=#0

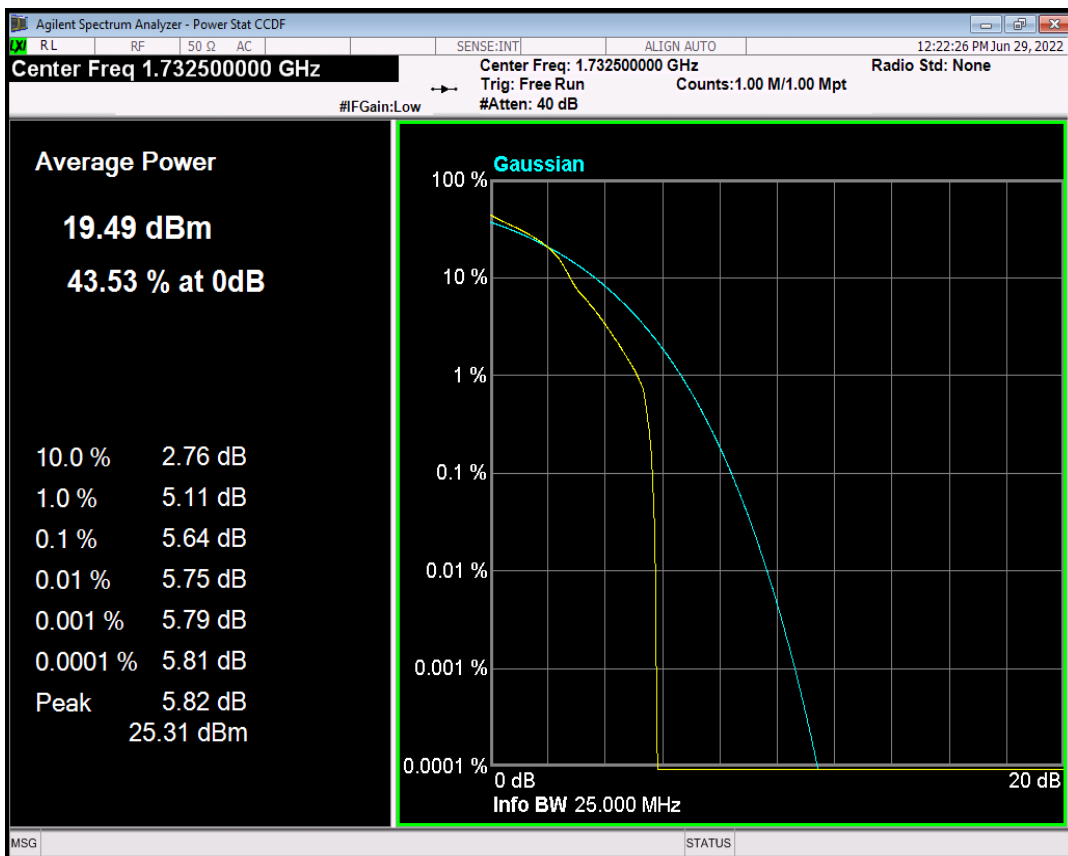




Band4 QPSK BW=20MHz Channel=20175 RB Size=1 Position=#0

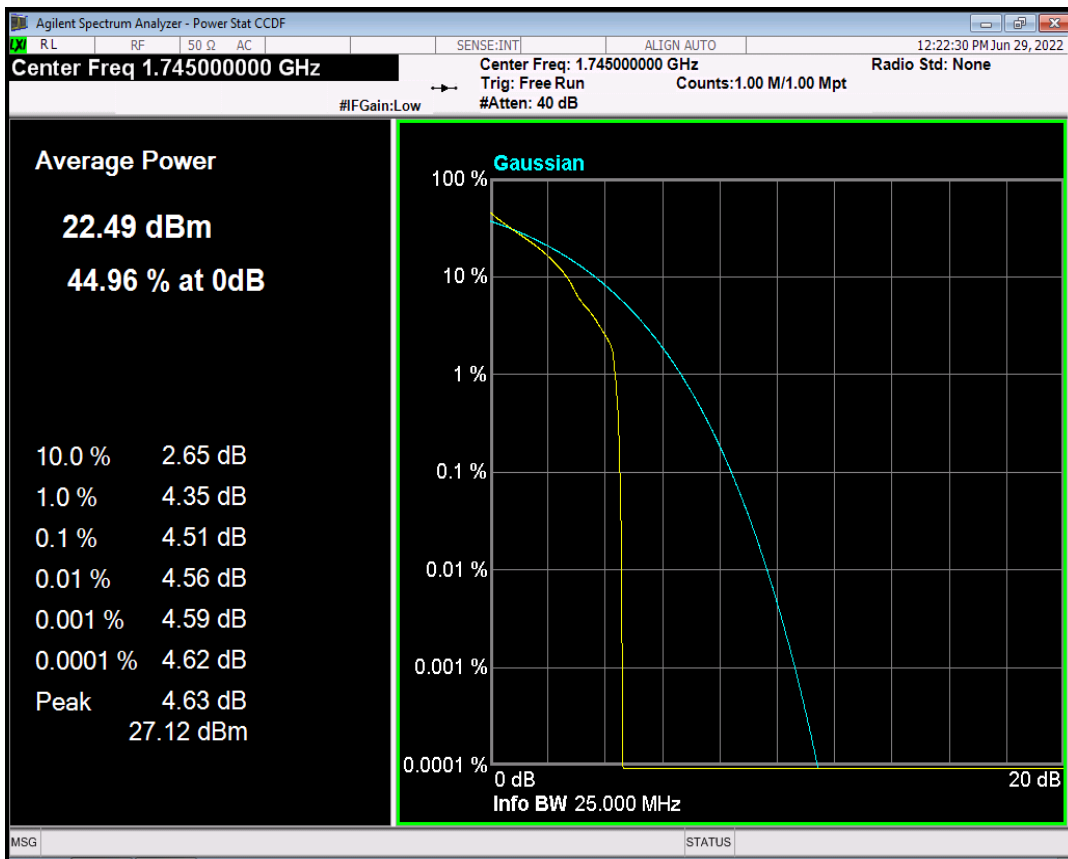


Band4 QAM16 BW=20MHz Channel=20175 RB Size=1 Position=#0

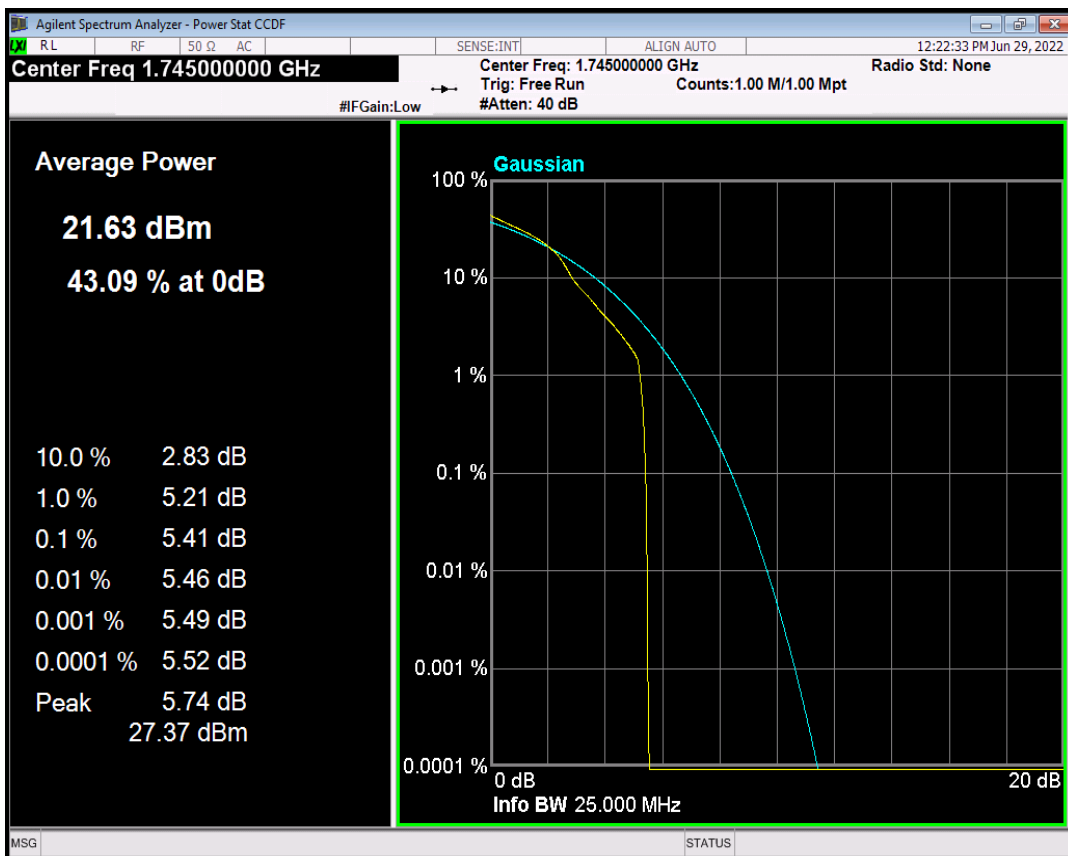




Band4 QPSK BW=20MHz Channel=20300 RB Size=1 Position=#0



Band4 QAM16 BW=20MHz Channel=20300 RB Size=1 Position=#0

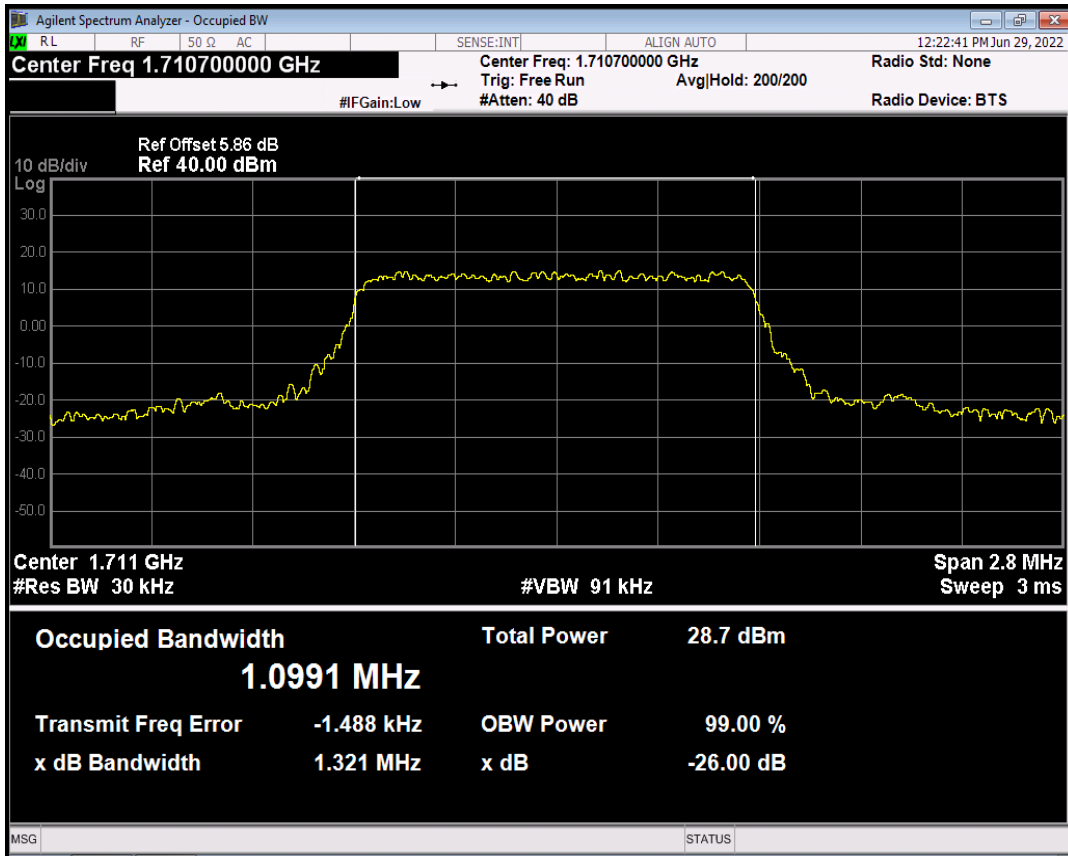


Appendix 4. Occupied bandwidth

Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	99% OBW (MHz)	-26dB EBW (MHz)	Verdict
Band4	1.4	19957	6	#0	QPSK	1.099	1.321	PASS
Band4	1.4	19957	6	#0	QAM16	1.108	1.312	PASS
Band4	1.4	20175	6	#0	QPSK	1.094	1.313	PASS
Band4	1.4	20175	6	#0	QAM16	1.093	1.277	PASS
Band4	1.4	20393	6	#0	QPSK	1.102	1.284	PASS
Band4	1.4	20393	6	#0	QAM16	1.096	1.285	PASS
Band4	3	19965	15	#0	QPSK	2.694	3.005	PASS
Band4	3	19965	15	#0	QAM16	2.697	2.951	PASS
Band4	3	20175	15	#0	QPSK	2.709	2.973	PASS
Band4	3	20175	15	#0	QAM16	2.694	2.960	PASS
Band4	3	20385	15	#0	QPSK	2.711	2.983	PASS
Band4	3	20385	15	#0	QAM16	2.698	3.013	PASS
Band4	5	19975	25	#0	QPSK	4.512	4.948	PASS
Band4	5	19975	25	#0	QAM16	4.513	5.010	PASS
Band4	5	20175	25	#0	QPSK	4.523	4.997	PASS
Band4	5	20175	25	#0	QAM16	4.512	5.013	PASS
Band4	5	20375	25	#0	QPSK	4.507	4.911	PASS
Band4	5	20375	25	#0	QAM16	4.516	5.010	PASS
Band4	10	20000	50	#0	QPSK	8.962	9.845	PASS
Band4	10	20000	50	#0	QAM16	8.973	9.819	PASS
Band4	10	20175	50	#0	QPSK	8.950	9.742	PASS
Band4	10	20175	50	#0	QAM16	8.973	9.720	PASS
Band4	10	20350	50	#0	QPSK	8.952	9.847	PASS
Band4	10	20350	50	#0	QAM16	8.971	9.878	PASS
Band4	15	20025	75	#0	QPSK	13.446	14.647	PASS
Band4	15	20025	75	#0	QAM16	13.468	14.663	PASS
Band4	15	20175	75	#0	QPSK	13.376	14.563	PASS
Band4	15	20175	75	#0	QAM16	13.384	14.646	PASS
Band4	15	20325	75	#0	QPSK	13.369	14.633	PASS
Band4	15	20325	75	#0	QAM16	13.385	14.595	PASS
Band4	20	20050	100	#0	QPSK	18.017	19.414	PASS
Band4	20	20050	100	#0	QAM16	18.092	19.329	PASS
Band4	20	20175	100	#0	QPSK	17.845	19.174	PASS
Band4	20	20175	100	#0	QAM16	17.838	19.329	PASS
Band4	20	20300	100	#0	QPSK	17.900	19.401	PASS
Band4	20	20300	100	#0	QAM16	17.865	19.031	PASS



Band4 QPSK BW=1.4MHz Channel=19957 RB Size=6 Position=#0



Band4 QAM16 BW=1.4MHz Channel=19957 RB Size=6 Position=#0

