Appendix N: Test Data for E-UTRA Band 71

Product Name: Smart Phone

Test Model: HPPL67A

Environmental Conditions

Temperature:	23.8° C
Relative Humidity:	52.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Can Kun
Supervised by:	Nick Peng

N.1 Conducted Power Output Data

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band71	5MHz	QPSK	133147	1RB#0	22.91	PASS
Band71	5MHz	16QAM	133147	1RB#0	21.84	PASS
Band71	5MHz	QPSK	133147	1RB#12	23.02	PASS
Band71	5MHz	16QAM	133147	1RB#12	21.98	PASS
Band71	5MHz	QPSK	133147	1RB#24	22.90	PASS
Band71	5MHz	16QAM	133147	1RB#24	21.81	PASS
Band71	5MHz	QPSK	133147	12RB#0	21.93	PASS
Band71	5MHz	16QAM	133147	12RB#0	20.85	PASS
Band71	5MHz	QPSK	133147	12RB#6	21.89	PASS
Band71	5MHz	16QAM	133147	12RB#6	20.88	PASS
Band71	5MHz	QPSK	133147	12RB#13	21.92	PASS
Band71	5MHz	16QAM	133147	12RB#13	20.88	PASS
Band71	5MHz	QPSK	133147	25RB#0	21.96	PASS
Band71	5MHz	16QAM	133147	25RB#0	20.93	PASS
Band71	5MHz	QPSK	133297	1RB#0	22.79	PASS
Band71	5MHz	16QAM	133297	1RB#0	21.91	PASS
Band71	5MHz	QPSK	133297	1RB#12	22.86	PASS
Band71	5MHz	16QAM	133297	1RB#12	22.04	PASS
Band71	5MHz	QPSK	133297	1RB#24	22.70	PASS
Band71	5MHz	16QAM	133297	1RB#24	21.85	PASS
Band71	5MHz	QPSK	133297	12RB#0	21.87	PASS
Band71	5MHz	16QAM	133297	12RB#0	20.90	PASS
Band71	5MHz	QPSK	133297	12RB#6	21.93	PASS
Band71	5MHz	16QAM	133297	12RB#6	20.88	PASS
Band71	5MHz	QPSK	133297	12RB#13	21.85	PASS
Band71	5MHz	16QAM	133297	12RB#13	20.84	PASS
Band71	5MHz	QPSK	133297	25RB#0	21.90	PASS
Band71	5MHz	16QAM	133297	25RB#0	20.84	PASS
Band71	5MHz	QPSK	133447	1RB#0	22.86	PASS
Band71	5MHz	16QAM	133447	1RB#0	21.77	PASS
Band71	5MHz	QPSK	133447	1RB#12	22.94	PASS
Band71	5MHz	16QAM	133447	1RB#12	21.84	PASS
Band71	5MHz	QPSK	133447	1RB#24	22.82	PASS
Band71	5MHz	16QAM	133447	1RB#24	21.76	PASS
Band71	5MHz	QPSK	133447	12RB#0	21.93	PASS
Band71	5MHz	16QAM	133447	12RB#0	20.89	PASS
Band71	5MHz	QPSK	133447	12RB#6	21.90	PASS

Band71	5MHz	16QAM	133447	12RB#6	20.86	PASS
Band71	5MHz	QPSK	133447	12RB#13	21.82	PASS
Band71	5MHz	16QAM	133447	12RB#13	20.79	PASS
Band71	5MHz	QPSK	133447	25RB#0	21.92	PASS
Band71	5MHz	16QAM	133447	25RB#0	20.89	PASS
Band71	10MHz	QPSK	133172	1RB#0	22.99	PASS
Band71	10MHz	16QAM	133172	1RB#0	21.86	PASS
Band71	10MHz	QPSK	133172	1RB#24	23.12	PASS
Band71	10MHz	16QAM	133172	1RB#24	21.87	PASS
Band71	10MHz	QPSK	133172	1RB#49	22.56	PASS
Band71	10MHz	16QAM	133172	1RB#49	21.47	PASS
Band71	10MHz	QPSK	133172	25RB#0	21.67	PASS
Band71	10MHz	16QAM	133172	25RB#0	20.61	PASS
Band71	10MHz	QPSK	133172	25RB#12	21.80	PASS
Band71	10MHz	16QAM	133172	25RB#12	20.48	PASS
Band71	10MHz	QPSK	133172	25RB#25	21.60	PASS
Band71	10MHz	16QAM	133172	25RB#25	20.80	PASS
Band71	10MHz	QPSK	133172	50RB#0	21.43	PASS
Band71	10MHz	16QAM	133172	50RB#0	20.72	PASS
Band71	10MHz	QPSK	133297	1RB#0	22.49	PASS
Band71	10MHz	16QAM	133297	1RB#0	21.56	PASS
Band71	10MHz	QPSK	133297	1RB#24	22.64	PASS
Band71	10MHz	16QAM	133297	1RB#24	21.55	PASS
Band71	10MHz	QPSK	133297	1RB#49	22.40	PASS
Band71	10MHz	16QAM	133297	1RB#49	21.41	PASS
Band71	10MHz	QPSK	133297	25RB#0	21.72	PASS
Band71	10MHz	16QAM	133297	25RB#0	20.58	PASS
Band71	10MHz	QPSK	133297	25RB#12	21.73	PASS
Band71	10MHz	16QAM	133297	25RB#12	20.57	PASS
Band71	10MHz	QPSK	133297	25RB#25	21.83	PASS
Band71	10MHz	16QAM	133297	25RB#25	20.76	PASS
Band71	10MHz	QPSK	133297	50RB#0	21.88	PASS
Band71	10MHz	16QAM	133297	50RB#0	20.86	PASS
Band71	10MHz	QPSK	133422	1RB#0	22.70	PASS
Band71	10MHz	16QAM	133422	1RB#0	21.61	PASS
Band71	10MHz	QPSK	133422	1RB#24	22.67	PASS
Band71	10MHz	16QAM	133422	1RB#24	21.62	PASS
Band71	10MHz	QPSK	133422	1RB#49	22.57	PASS
Band71	10MHz	16QAM	133422	1RB#49	21.46	PASS
Band71	10MHz	QPSK	133422	25RB#0	21.67	PASS
Band71	10MHz	16QAM	133422	25RB#0	20.77	PASS
Band71	10MHz	QPSK	133422	25RB#12	21.97	PASS
Band71	10MHz	16QAM	133422	25RB#12	20.94	PASS

Band71	10MHz	QPSK	133422	25RB#25	21.91	PASS
Band71	10MHz	16QAM	133422	25RB#25	20.72	PASS
Band71	10MHz	QPSK	133422	50RB#0	21.88	PASS
Band71	10MHz	16QAM	133422	50RB#0	20.97	PASS
Band71	15MHz	QPSK	133197	1RB#0	22.83	PASS
Band71	15MHz	16QAM	133197	1RB#0	22.02	PASS
Band71	15MHz	QPSK	133197	1RB#38	22.94	PASS
Band71	15MHz	16QAM	133197	1RB#38	22.07	PASS
Band71	15MHz	QPSK	133197	1RB#74	22.73	PASS
Band71	15MHz	16QAM	133197	1RB#74	22.01	PASS
Band71	15MHz	QPSK	133197	38RB#0	22.03	PASS
Band71	15MHz	16QAM	133197	38RB#0	21.99	PASS
Band71	15MHz	QPSK	133197	38RB#18	22.11	PASS
Band71	15MHz	16QAM	133197	38RB#18	22.12	PASS
Band71	15MHz	QPSK	133197	38RB#37	21.98	PASS
Band71	15MHz	16QAM	133197	38RB#37	21.98	PASS
Band71	15MHz	QPSK	133197	75RB#0	22.03	PASS
Band71	15MHz	16QAM	133197	75RB#0	20.99	PASS
Band71	15MHz	QPSK	133297	1RB#0	22.93	PASS
Band71	15MHz	16QAM	133297	1RB#0	21.71	PASS
Band71	15MHz	QPSK	133297	1RB#38	22.88	PASS
Band71	15MHz	16QAM	133297	1RB#38	21.73	PASS
Band71	15MHz	QPSK	133297	1RB#74	22.86	PASS
Band71	15MHz	16QAM	133297	1RB#74	21.70	PASS
Band71	15MHz	QPSK	133297	38RB#0	21.71	PASS
Band71	15MHz	16QAM	133297	38RB#0	21.73	PASS
Band71	15MHz	QPSK	133297	38RB#18	21.73	PASS
Band71	15MHz	16QAM	133297	38RB#18	21.75	PASS
Band71	15MHz	QPSK	133297	38RB#37	21.63	PASS
Band71	15MHz	16QAM	133297	38RB#37	21.72	PASS
Band71	15MHz	QPSK	133297	75RB#0	21.99	PASS
Band71	15MHz	16QAM	133297	75RB#0	20.98	PASS
Band71	15MHz	QPSK	133397	1RB#0	22.77	PASS
Band71	15MHz	16QAM	133397	1RB#0	21.88	PASS
Band71	15MHz	QPSK	133397	1RB#38	22.91	PASS
Band71	15MHz	16QAM	133397	1RB#38	21.97	PASS
Band71	15MHz	QPSK	133397	1RB#74	22.86	PASS
Band71	15MHz	16QAM	133397	1RB#74	21.95	PASS
Band71	15MHz	QPSK	133397	38RB#0	21.91	PASS
Band71	15MHz	16QAM	133397	38RB#0	21.88	PASS
Band71	15MHz	QPSK	133397	38RB#18	21.97	PASS
Band71	15MHz	16QAM	133397	38RB#18	21.99	PASS
Band71	15MHz	QPSK	133397	38RB#37	21.94	PASS

Band71	15MHz	16QAM	133397	38RB#37	21.94	PASS
Band71	15MHz	QPSK	133397	75RB#0	21.97	PASS
Band71	15MHz	16QAM	133397	75RB#0	20.91	PASS
Band71	20MHz	QPSK	133222	1RB#0	22.79	PASS
Band71	20MHz	16QAM	133222	1RB#0	21.98	PASS
Band71	20MHz	QPSK	133222	1RB#49	23.07	PASS
Band71	20MHz	16QAM	133222	1RB#49	22.27	PASS
Band71	20MHz	QPSK	133222	1RB#99	22.67	PASS
Band71	20MHz	16QAM	133222	1RB#99	21.84	PASS
Band71	20MHz	QPSK	133222	50RB#0	21.96	PASS
Band71	20MHz	16QAM	133222	50RB#0	20.96	PASS
Band71	20MHz	QPSK	133222	50RB#25	21.91	PASS
Band71	20MHz	16QAM	133222	50RB#25	20.94	PASS
Band71	20MHz	QPSK	133222	50RB#50	21.88	PASS
Band71	20MHz	16QAM	133222	50RB#50	20.98	PASS
Band71	20MHz	QPSK	133222	100RB#0	21.95	PASS
Band71	20MHz	16QAM	133222	100RB#0	20.91	PASS
Band71	20MHz	QPSK	133322	1RB#0	22.69	PASS
Band71	20MHz	16QAM	133322	1RB#0	21.58	PASS
Band71	20MHz	QPSK	133322	1RB#49	22.98	PASS
Band71	20MHz	16QAM	133322	1RB#49	21.88	PASS
Band71	20MHz	QPSK	133322	1RB#99	22.68	PASS
Band71	20MHz	16QAM	133322	1RB#99	21.55	PASS
Band71	20MHz	QPSK	133322	50RB#0	22.07	PASS
Band71	20MHz	16QAM	133322	50RB#0	21.11	PASS
Band71	20MHz	QPSK	133322	50RB#25	22.05	PASS
Band71	20MHz	16QAM	133322	50RB#25	21.08	PASS
Band71	20MHz	QPSK	133322	50RB#50	22.07	PASS
Band71	20MHz	16QAM	133322	50RB#50	21.05	PASS
Band71	20MHz	QPSK	133322	100RB#0	22.02	PASS
Band71	20MHz	16QAM	133322	100RB#0	21.01	PASS
Band71	20MHz	QPSK	133372	1RB#0	22.72	PASS
Band71	20MHz	16QAM	133372	1RB#0	21.70	PASS
Band71	20MHz	QPSK	133372	1RB#49	23.08	PASS
Band71	20MHz	16QAM	133372	1RB#49	21.93	PASS
Band71	20MHz	QPSK	133372	1RB#99	22.77	PASS
Band71	20MHz	16QAM	133372	1RB#99	21.68	PASS
Band71	20MHz	QPSK	133372	50RB#0	21.99	PASS
Band71	20MHz	16QAM	133372	50RB#0	21.06	PASS
Band71	20MHz	QPSK	133372	50RB#25	22.08	PASS
Band71	20MHz	16QAM	133372	50RB#25	21.08	PASS
Band71	20MHz	QPSK	133372	50RB#50	21.97	PASS
Band71	20MHz	16QAM	133372	50RB#50	20.93	PASS

Band71	20MHz	QPSK	133372	100RB#0	21.96	PASS
Band71	20MHz	16QAM	133372	100RB#0	20.97	PASS

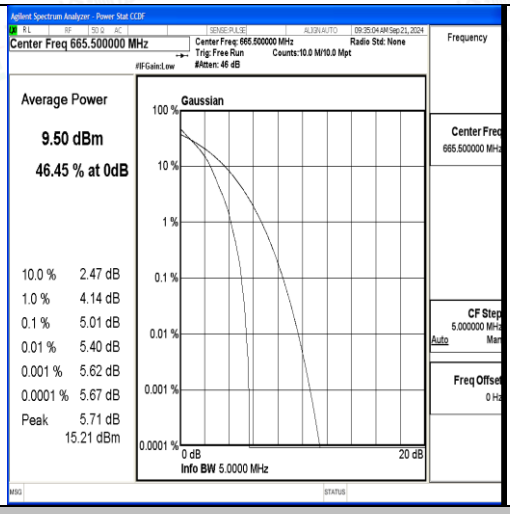
N.2 Peak-to-Average Ratio(CCDF)

Test Result

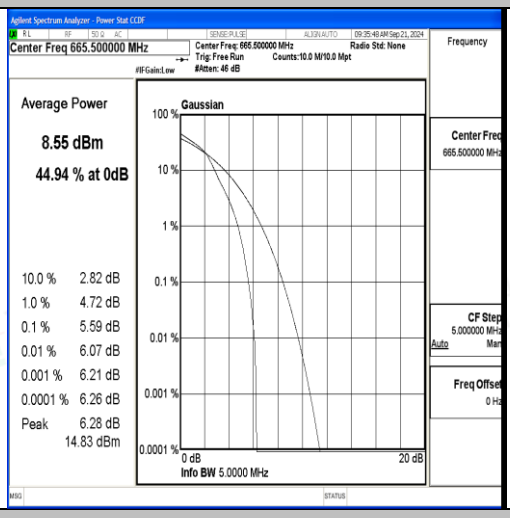
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band71	5MHz	QPSK	133147	1RB#0	5.01	13	PASS
Band71	5MHz	16QAM	133147	1RB#0	5.59	13	PASS
Band71	5MHz	QPSK	133147	25RB#0	5.60	13	PASS
Band71	5MHz	16QAM	133147	25RB#0	6.23	13	PASS
Band71	5MHz	QPSK	133297	1RB#0	5.61	13	PASS
Band71	5MHz	16QAM	133297	1RB#0	6.00	13	PASS
Band71	5MHz	QPSK	133297	25RB#0	5.74	13	PASS
Band71	5MHz	16QAM	133297	25RB#0	6.31	13	PASS
Band71	5MHz	QPSK	133447	1RB#0	5.49	13	PASS
Band71	5MHz	16QAM	133447	1RB#0	5.84	13	PASS
Band71	5MHz	QPSK	133447	25RB#0	5.59	13	PASS
Band71	5MHz	16QAM	133447	25RB#0	6.22	13	PASS
Band71	10MHz	QPSK	133172	1RB#0	4.78	13	PASS
Band71	10MHz	16QAM	133172	1RB#0	5.60	13	PASS
Band71	10MHz	QPSK	133172	50RB#0	5.66	13	PASS
Band71	10MHz	16QAM	133172	50RB#0	6.30	13	PASS
Band71	10MHz	QPSK	133297	1RB#0	5.30	13	PASS
Band71	10MHz	16QAM	133297	1RB#0	6.14	13	PASS
Band71	10MHz	QPSK	133297	50RB#0	5.74	13	PASS
Band71	10MHz	16QAM	133297	50RB#0	6.36	13	PASS
Band71	10MHz	QPSK	133422	1RB#0	5.29	13	PASS
Band71	10MHz	16QAM	133422	1RB#0	6.16	13	PASS
Band71	10MHz	QPSK	133422	50RB#0	5.70	13	PASS
Band71	10MHz	16QAM	133422	50RB#0	6.34	13	PASS
Band71	15MHz	QPSK	133197	1RB#0	4.82	13	PASS
Band71	15MHz	16QAM	133197	1RB#0	5.66	13	PASS
Band71	15MHz	QPSK	133197	75RB#0	5.93	13	PASS
Band71	15MHz	16QAM	133197	75RB#0	6.36	13	PASS
Band71	15MHz	QPSK	133297	1RB#0	5.08	13	PASS
Band71	15MHz	16QAM	133297	1RB#0	5.94	13	PASS
Band71	15MHz	QPSK	133297	75RB#0	6.07	13	PASS
Band71	15MHz	16QAM	133297	75RB#0	6.48	13	PASS
Band71	15MHz	QPSK	133397	1RB#0	5.19	13	PASS
Band71	15MHz	16QAM	133397	1RB#0	6.03	13	PASS
Band71	15MHz	QPSK	133397	75RB#0	6.08	13	PASS
Band71	15MHz	16QAM	133397	75RB#0	6.51	13	PASS

Band71	20MHz	QPSK	133222	1RB#0	4.75	13	PASS
Band71	20MHz	16QAM	133222	1RB#0	5.38	13	PASS
Band71	20MHz	QPSK	133222	100RB#0	5.70	13	PASS
Band71	20MHz	16QAM	133222	100RB#0	6.38	13	PASS
Band71	20MHz	QPSK	133322	1RB#0	5.03	13	PASS
Band71	20MHz	16QAM	133322	1RB#0	5.62	13	PASS
Band71	20MHz	QPSK	133322	100RB#0	5.74	13	PASS
Band71	20MHz	16QAM	133322	100RB#0	6.40	13	PASS
Band71	20MHz	QPSK	133372	1RB#0	5.50	13	PASS
Band71	20MHz	16QAM	133372	1RB#0	6.26	13	PASS
Band71	20MHz	QPSK	133372	100RB#0	5.87	13	PASS
Band71	20MHz	16QAM	133372	100RB#0	6.42	13	PASS

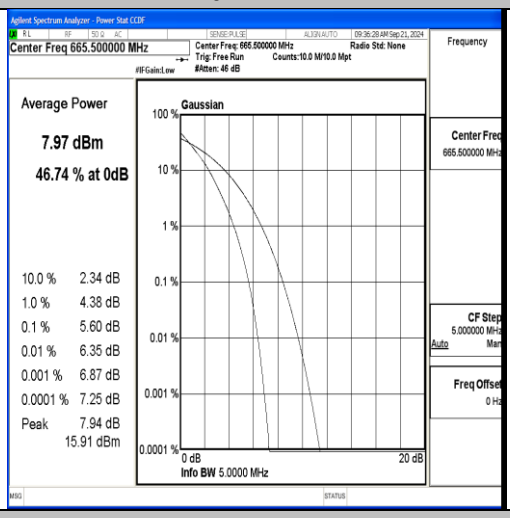
Test Graphs



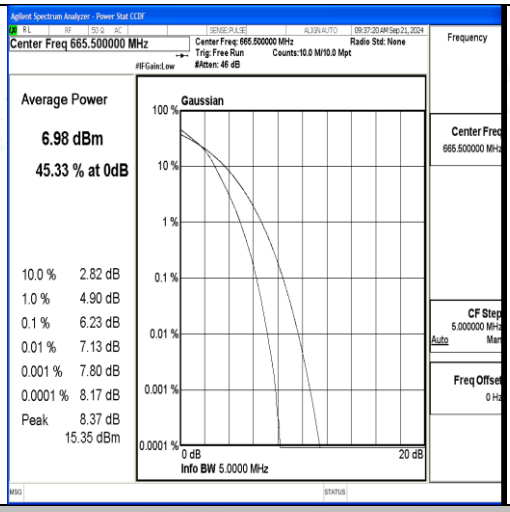
Band71-5MHz-QPSK-133147-1RB#0-PASS



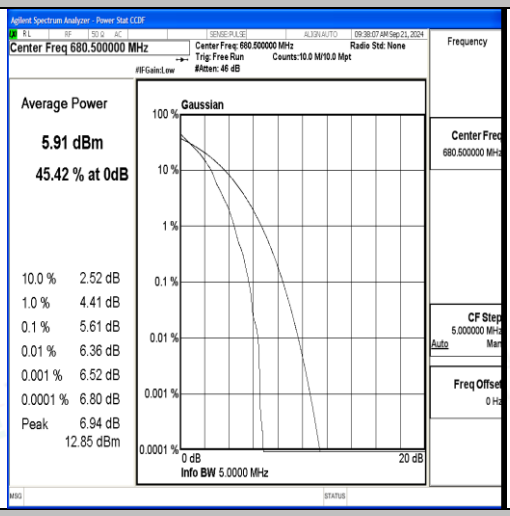
Band71-5MHz-16QAM-133147-1RB#0-PASS



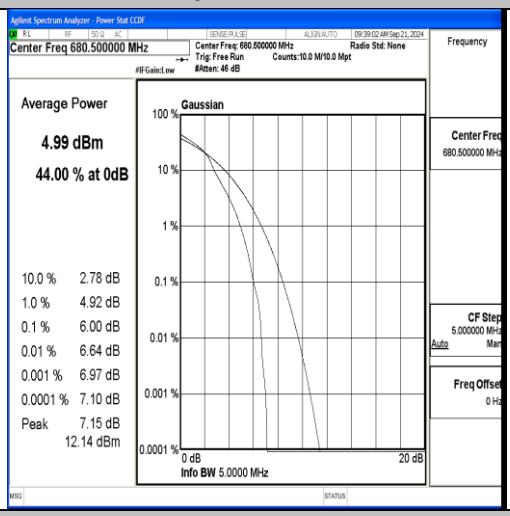
Band71-5MHz-QPSK-133147-25RB#0-PASS



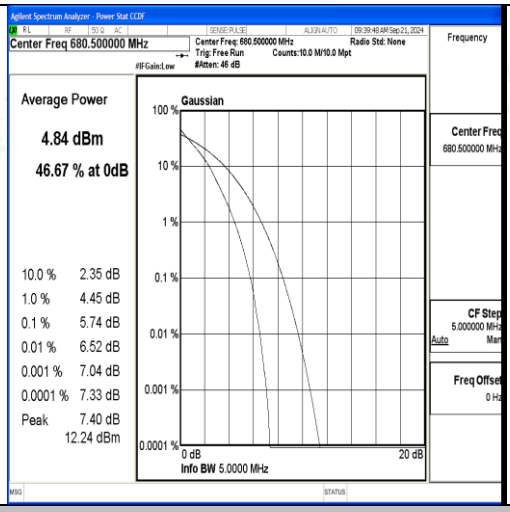
Band71-5MHz-16QAM-133147-25RB#0-PASS



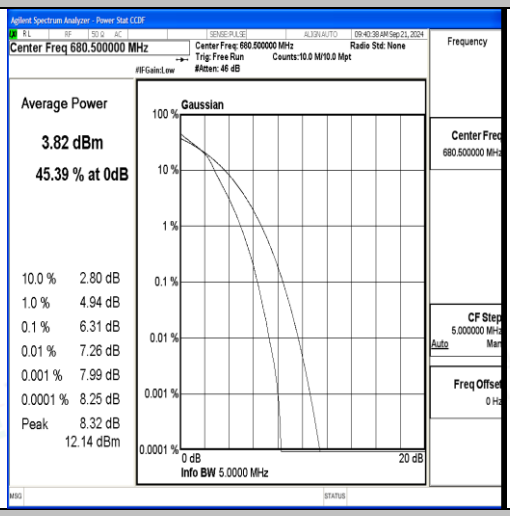
Band71-5MHz-QPSK-133297-1RB#0-PASS



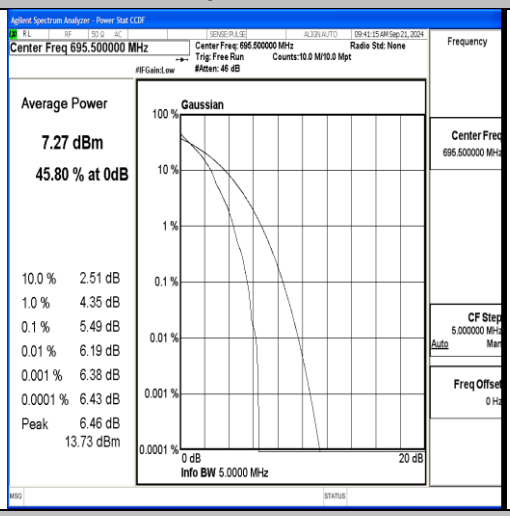
Band71-5MHz-16QAM-133297-1RB#0-PASS



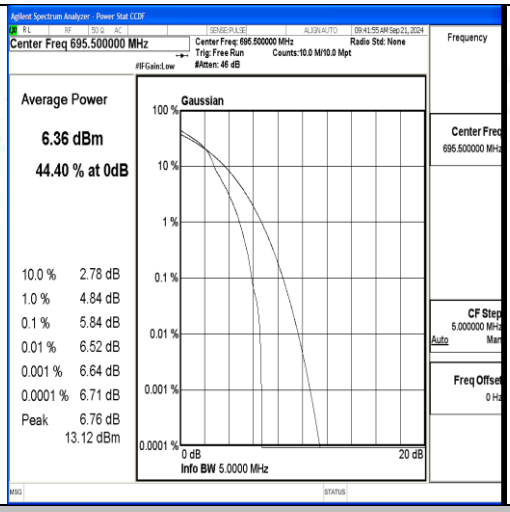
Band71-5MHz-QPSK-133297-25RB#0-PASS



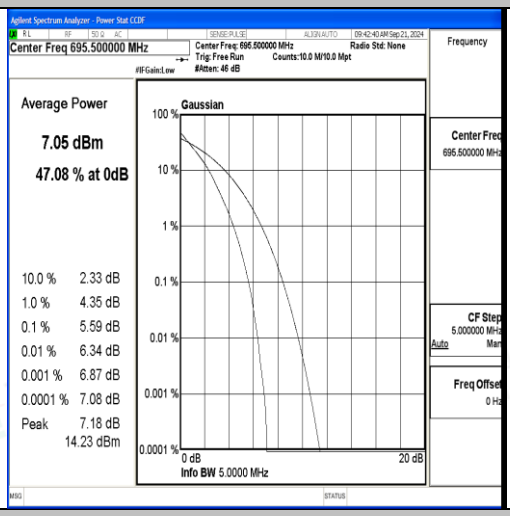
Band71-5MHz-16QAM-133297-25RB#0-PASS



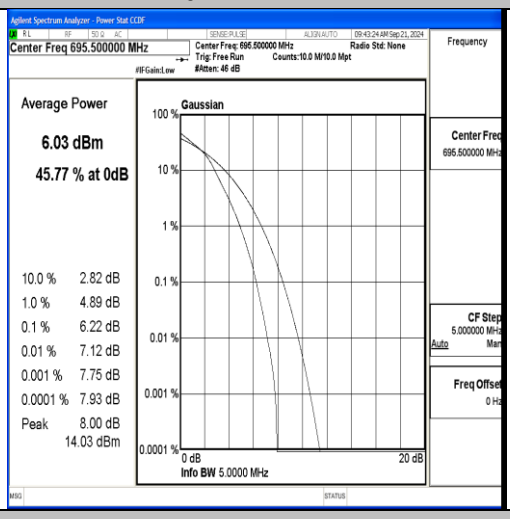
Band71-5MHz-QPSK-133447-1RB#0-PASS



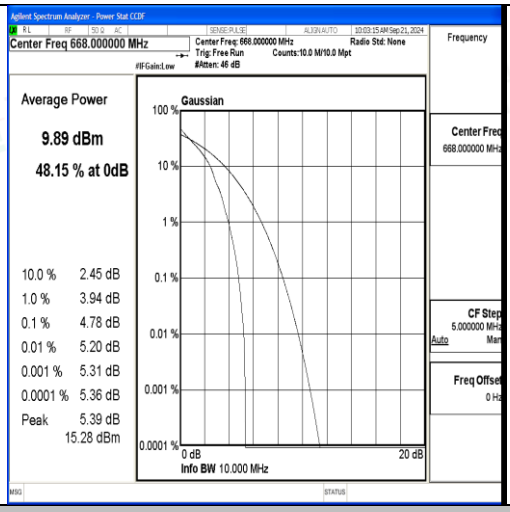
Band71-5MHz-16QAM-133447-1RB#0-PASS



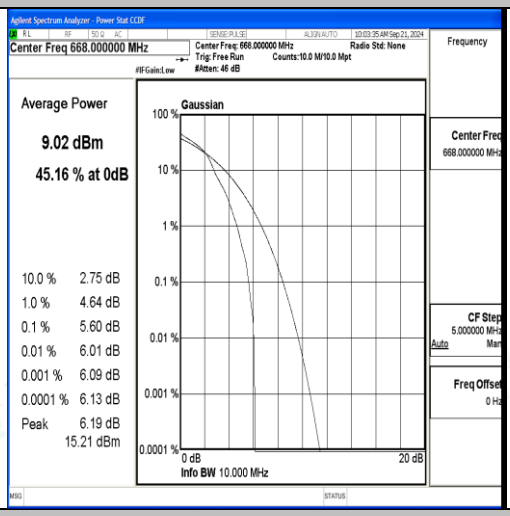
Band71-5MHz-QPSK-133447-25RB#0-PASS



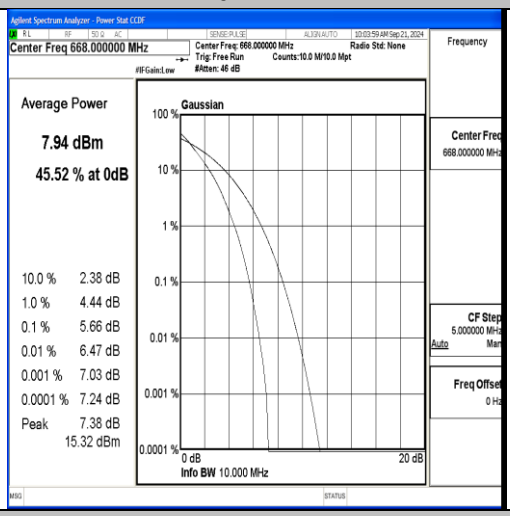
Band71-5MHz-16QAM-133447-25RB#0-PASS



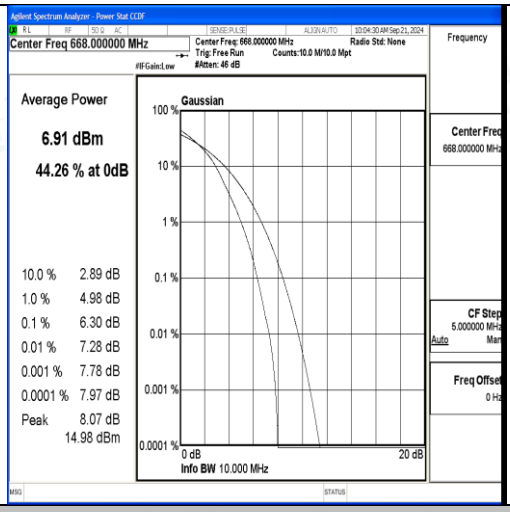
Band71-10MHz-QPSK-133172-1RB#0-PASS



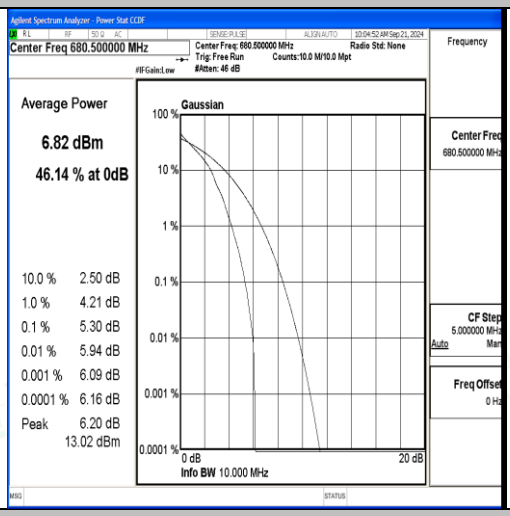
Band71-10MHz-16QAM-133172-1RB#0-PASS



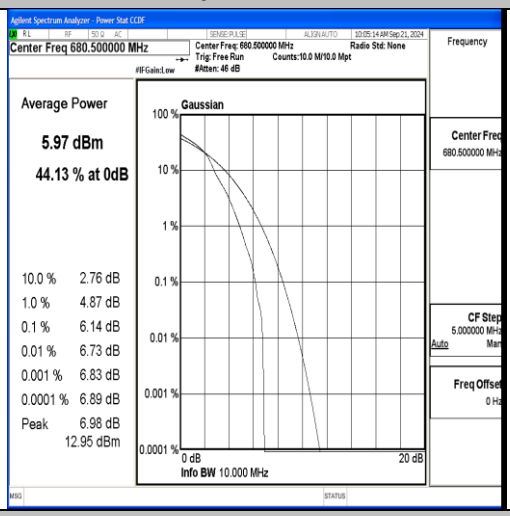
Band71-10MHz-QPSK-133172-50RB#0-PASS



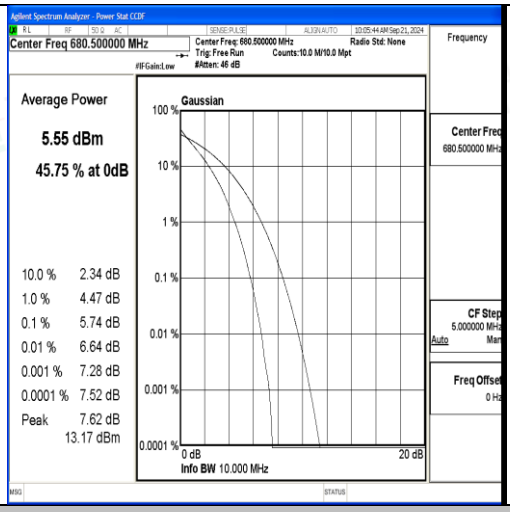
Band71-10MHz-16QAM-133172-50RB#0-PASS



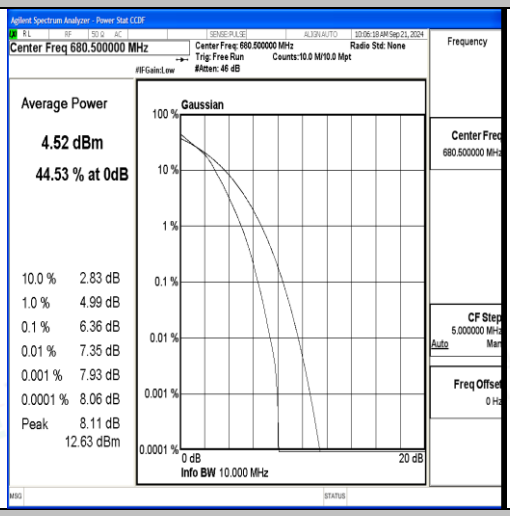
Band71-10MHz-QPSK-133297-1RB#0-PASS



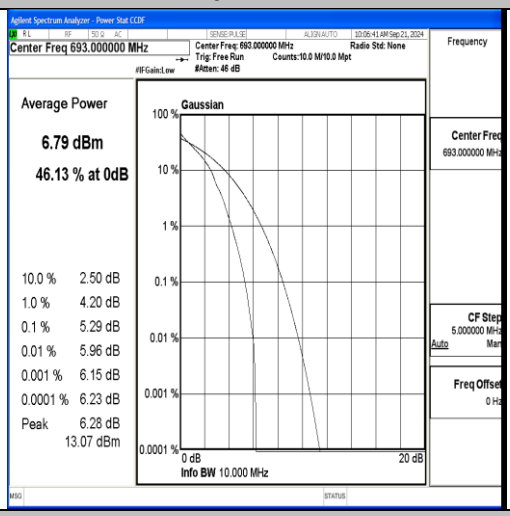
Band71-10MHz-16QAM-133297-1RB#0-PASS



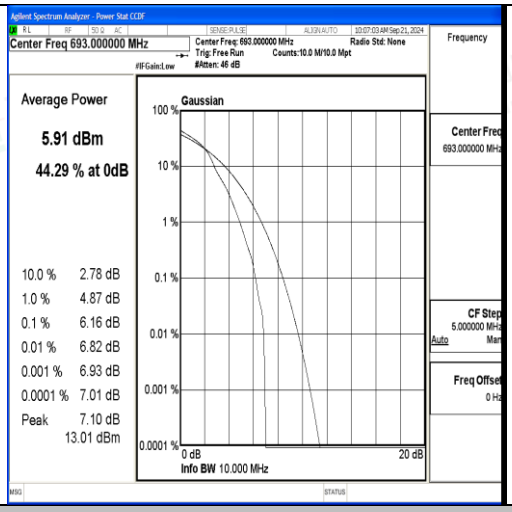
Band71-10MHz-QPSK-133297-50RB#0-PASS



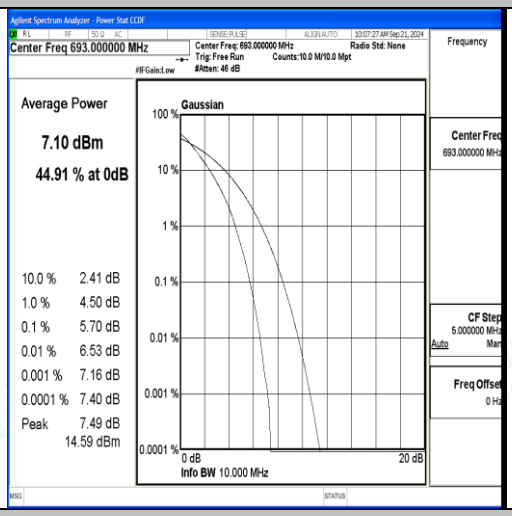
Band71-10MHz-16QAM-133297-50RB#0-PASS



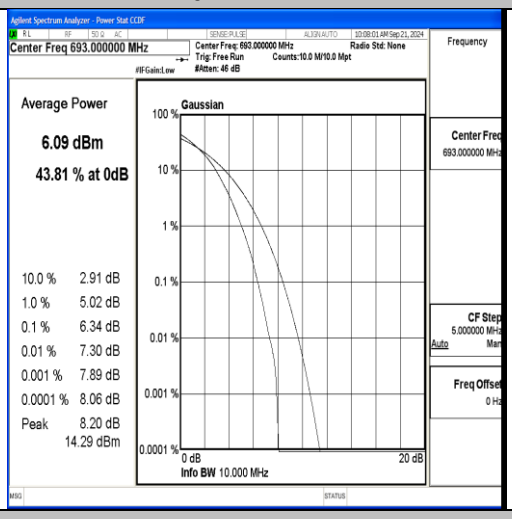
Band71-10MHz-QPSK-133422-1RB#0-PASS



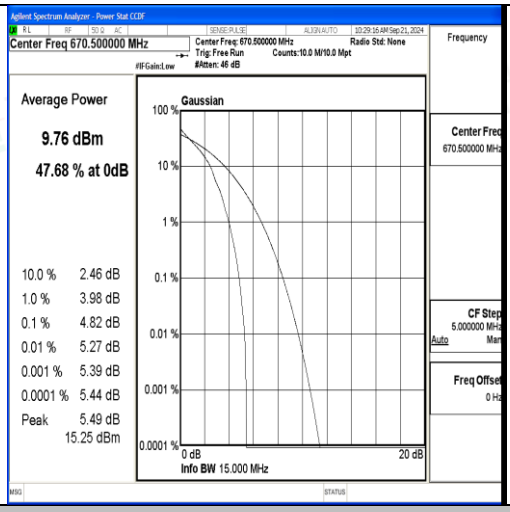
Band71-10MHz-16QAM-133422-1RB#0-PASS



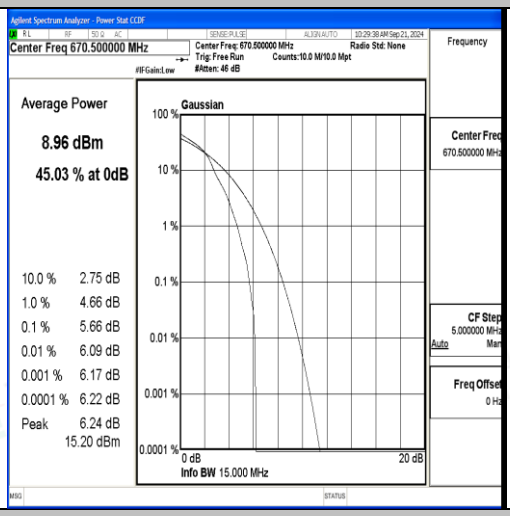
Band71-10MHz-QPSK-133422-50RB#0-PASS



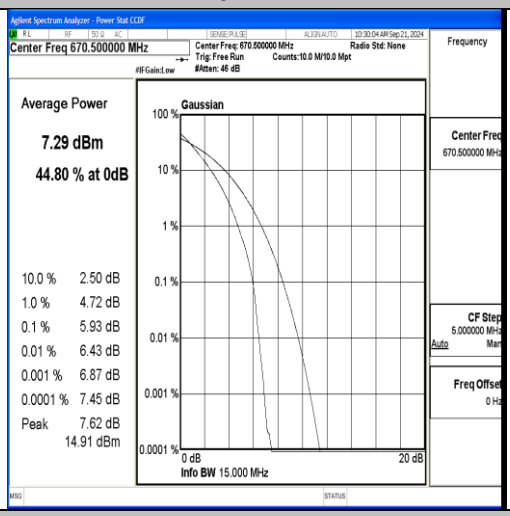
Band71-10MHz-16QAM-133422-50RB#0-PASS



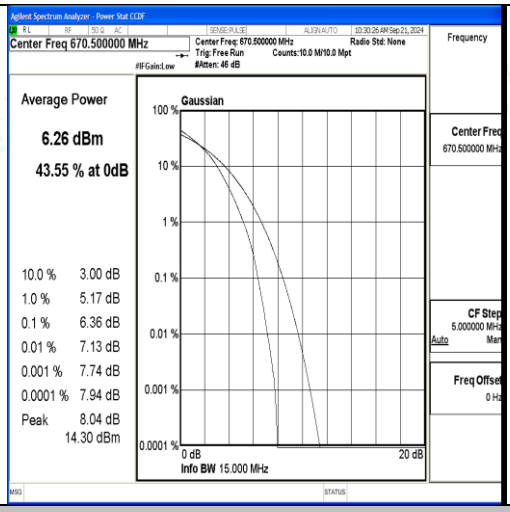
Band71-15MHz-QPSK-133197-1RB#0-PASS



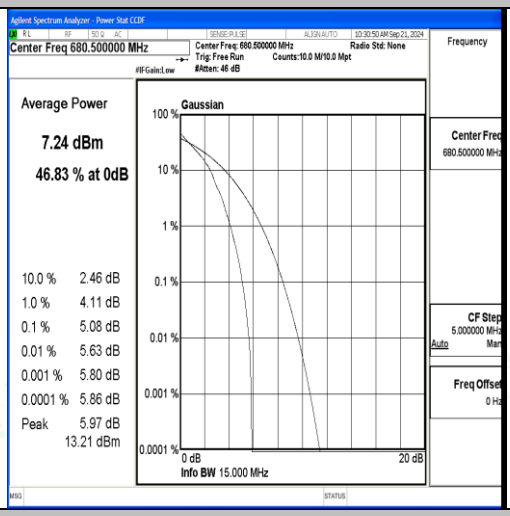
Band71-15MHz-16QAM-133197-1RB#0-PASS



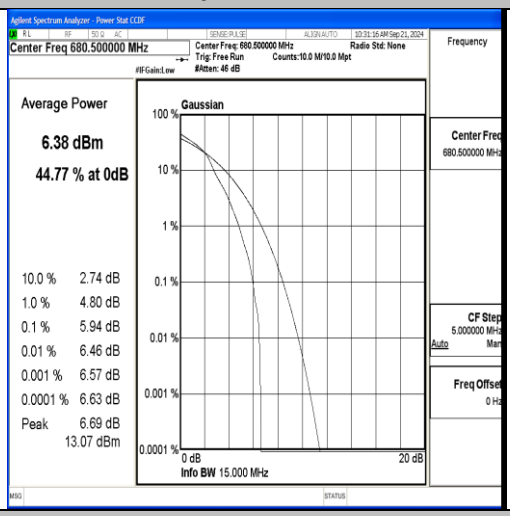
Band71-15MHz-QPSK-133197-75RB#0-PASS



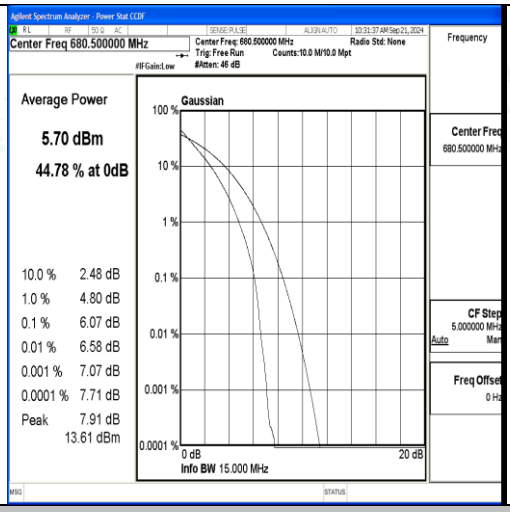
Band71-15MHz-16QAM-133197-75RB#0-PASS



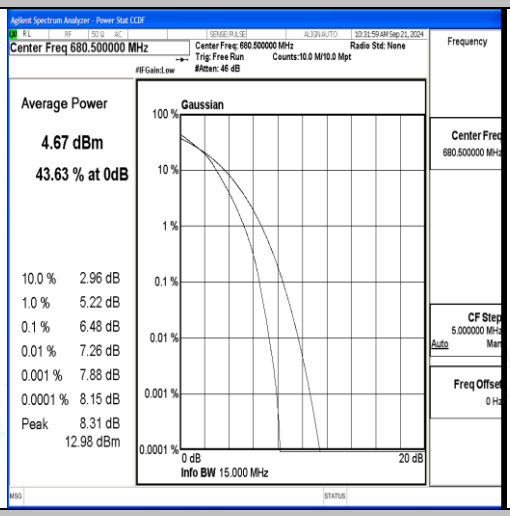
Band71-15MHz-QPSK-133297-1RB#0-PASS



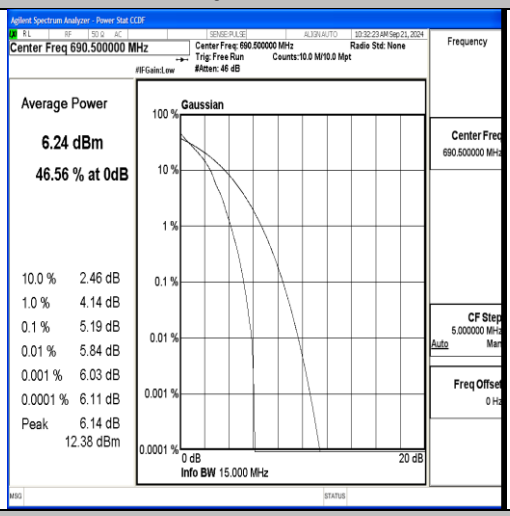
Band71-15MHz-16QAM-133297-1RB#0-PASS



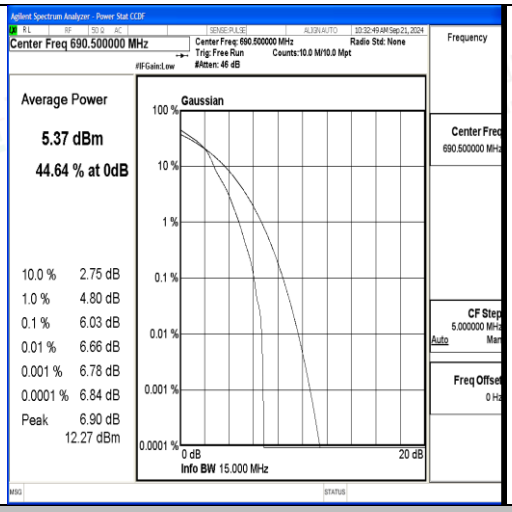
Band71-15MHz-QPSK-133297-75RB#0-PASS



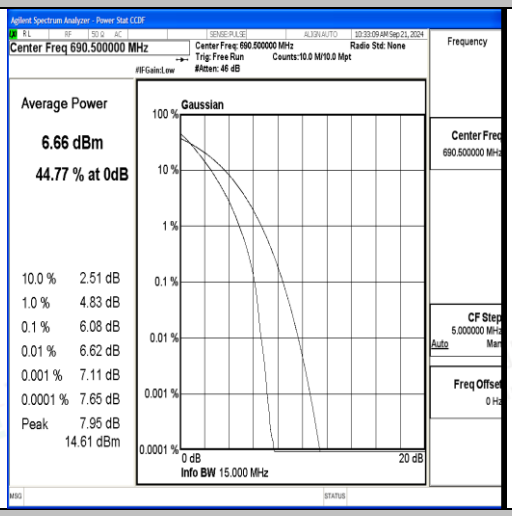
Band71-15MHz-16QAM-133297-75RB#0-PASS



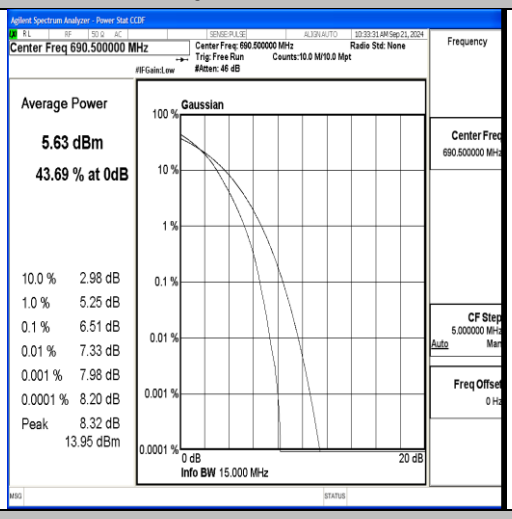
Band71-15MHz-QPSK-133397-1RB#0-PASS



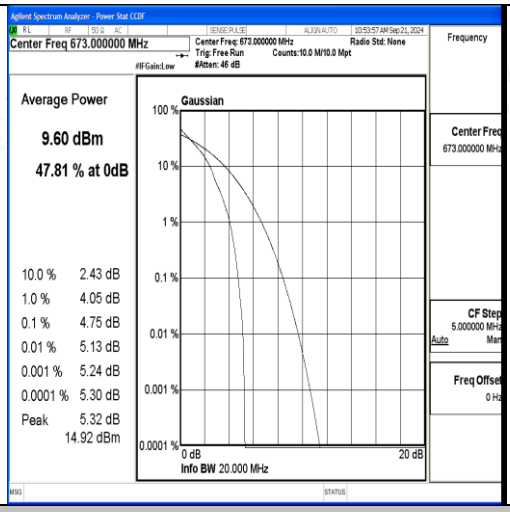
Band71-15MHz-16QAM-133397-1RB#0-PASS



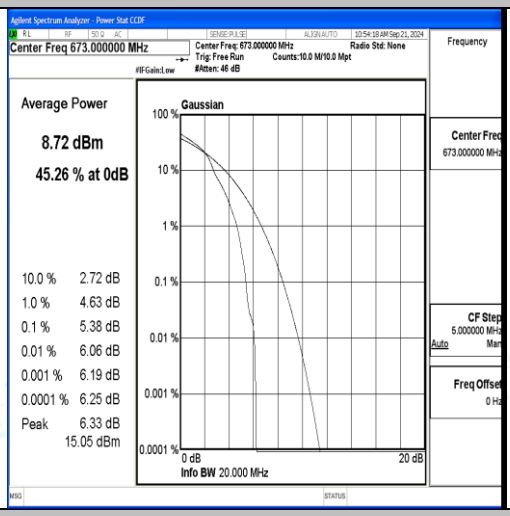
Band71-15MHz-QPSK-133397-75RB#0-PASS



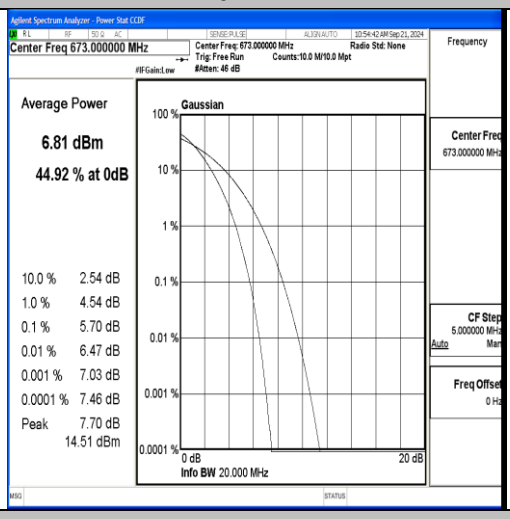
Band71-15MHz-16QAM-133397-75RB#0-PASS



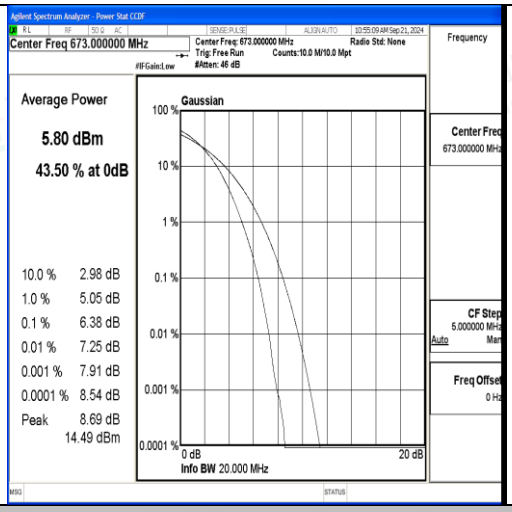
Band71-20MHz-QPSK-133222-1RB#0-PASS



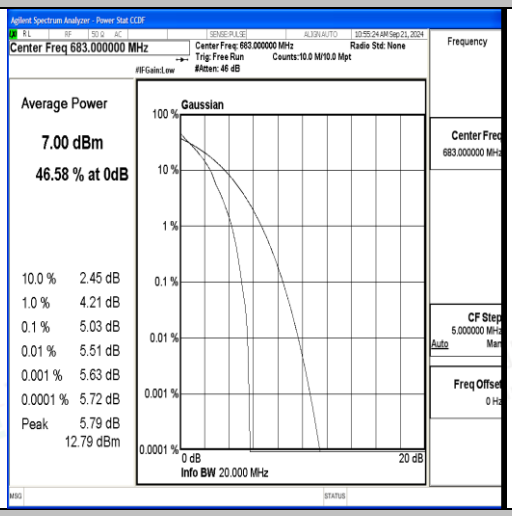
Band71-20MHz-16QAM-133222-1RB#0-PASS



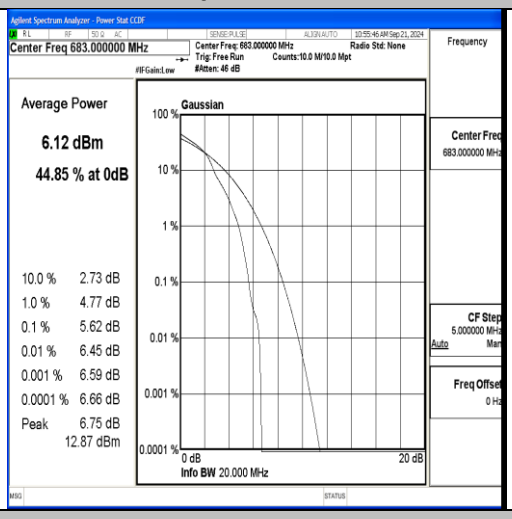
Band71-20MHz-QPSK-133222-100RB#0-PASS



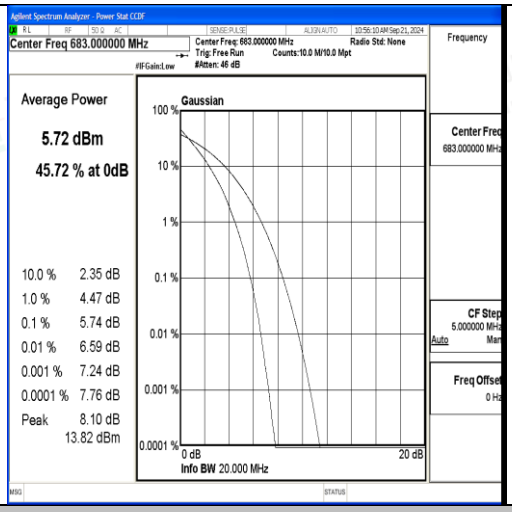
Band71-20MHz-16QAM-133222-100RB#0-PASS



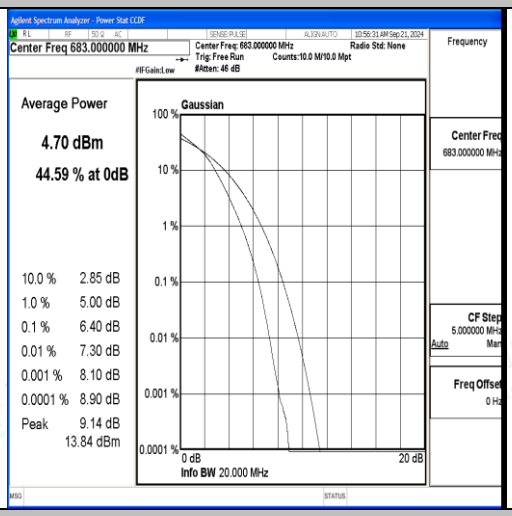
Band71-20MHz-QPSK-133322-1RB#0-PASS



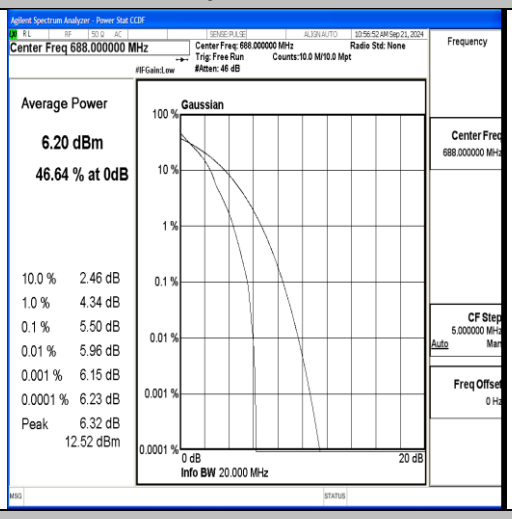
Band71-20MHz-16QAM-133322-1RB#0-PASS



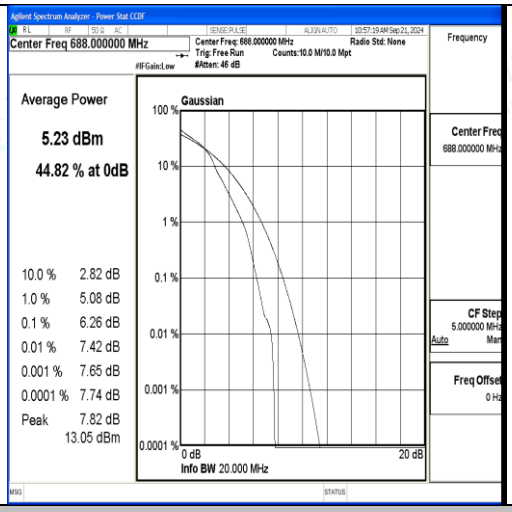
Band71-20MHz-QPSK-133322-100RB#0-PASS



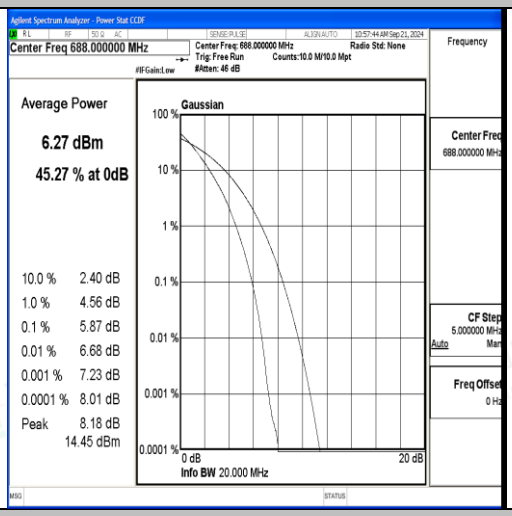
Band71-20MHz-16QAM-133322-100RB#0-PASS



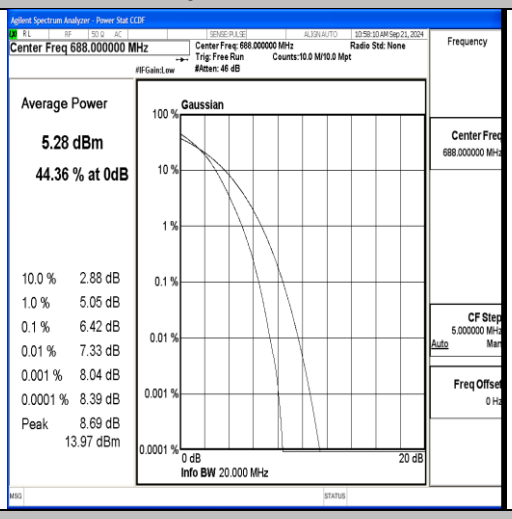
Band71-20MHz-QPSK-133372-1RB#0-PASS



Band71-20MHz-16QAM-133372-1RB#0-PASS



Band71-20MHz-QPSK-133372-100RB#0-PASS



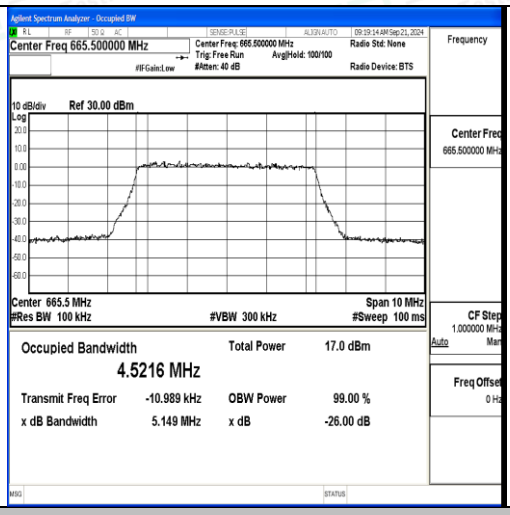
Band71-20MHz-16QAM-133372-100RB#0-PASS

N.3 26dB Bandwidth and Occupied Bandwidth

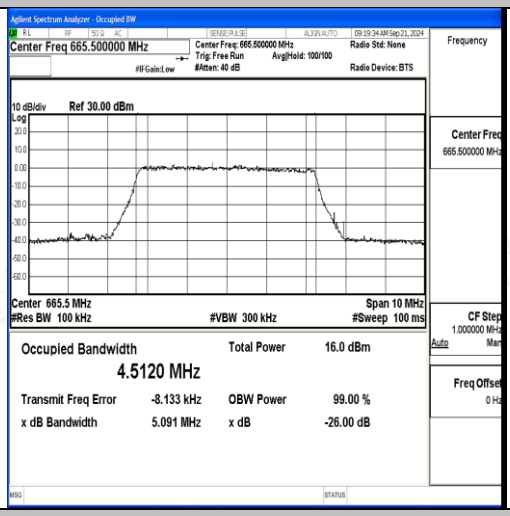
Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band71	5MHz	QPSK	133147	25RB#0	4.5216	5.149	PASS
Band71	5MHz	16QAM	133147	25RB#0	4.5120	5.091	PASS
Band71	5MHz	QPSK	133297	25RB#0	4.5324	5.199	PASS
Band71	5MHz	16QAM	133297	25RB#0	4.5217	5.184	PASS
Band71	5MHz	QPSK	133447	25RB#0	4.5195	5.163	PASS
Band71	5MHz	16QAM	133447	25RB#0	4.5111	5.149	PASS
Band71	10MHz	QPSK	133172	50RB#0	9.0189	10.37	PASS
Band71	10MHz	16QAM	133172	50RB#0	8.9943	9.946	PASS
Band71	10MHz	QPSK	133297	50RB#0	9.0307	10.26	PASS
Band71	10MHz	16QAM	133297	50RB#0	9.0207	10.03	PASS
Band71	10MHz	QPSK	133422	50RB#0	9.0244	10.13	PASS
Band71	10MHz	16QAM	133422	50RB#0	9.0123	9.964	PASS
Band71	15MHz	QPSK	133197	75RB#0	13.481	14.95	PASS
Band71	15MHz	16QAM	133197	75RB#0	13.485	14.83	PASS
Band71	15MHz	QPSK	133297	75RB#0	13.547	15.09	PASS
Band71	15MHz	16QAM	133297	75RB#0	13.553	15.08	PASS
Band71	15MHz	QPSK	133397	75RB#0	13.566	15.08	PASS
Band71	15MHz	16QAM	133397	75RB#0	13.550	14.97	PASS
Band71	20MHz	QPSK	133222	100RB#0	17.968	19.70	PASS
Band71	20MHz	16QAM	133222	100RB#0	18.007	19.45	PASS
Band71	20MHz	QPSK	133322	100RB#0	18.027	19.66	PASS
Band71	20MHz	16QAM	133322	100RB#0	18.020	19.84	PASS
Band71	20MHz	QPSK	133372	100RB#0	18.074	20.00	PASS
Band71	20MHz	16QAM	133372	100RB#0	18.031	19.80	PASS

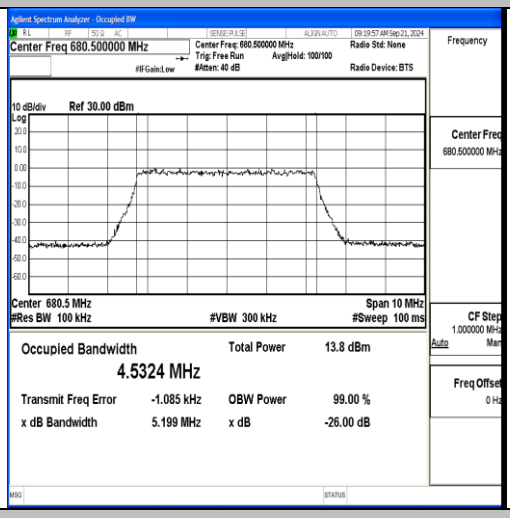
Test Graphs



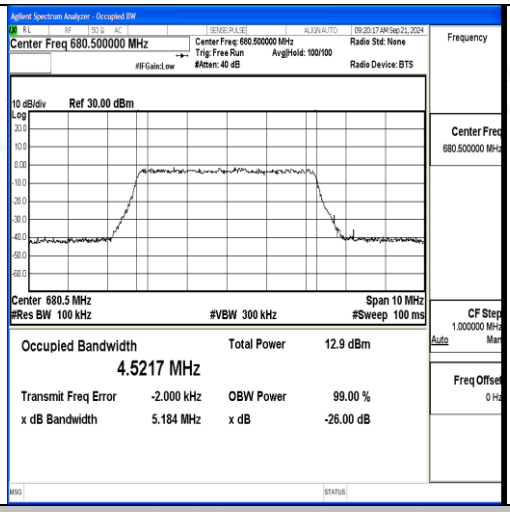
Band71-5MHz-QPSK-133147-25RB#0-PASS



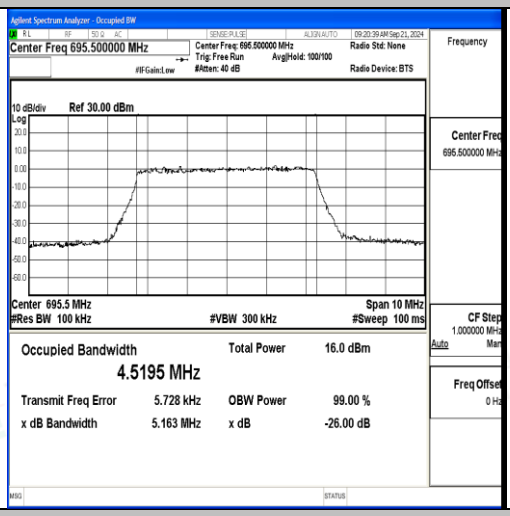
Band71-5MHz-16QAM-133147-25RB#0-PASS



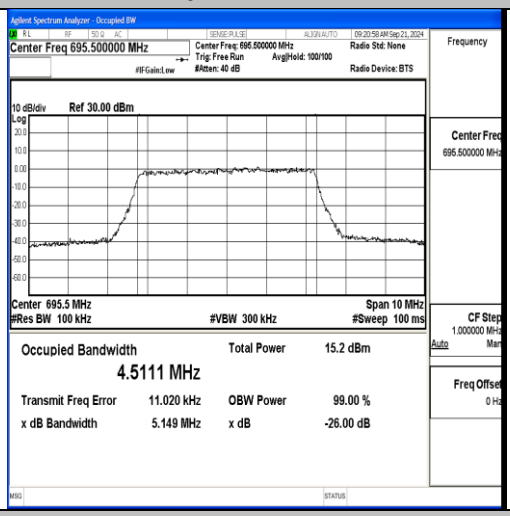
Band71-5MHz-QPSK-133297-25RB#0-PASS



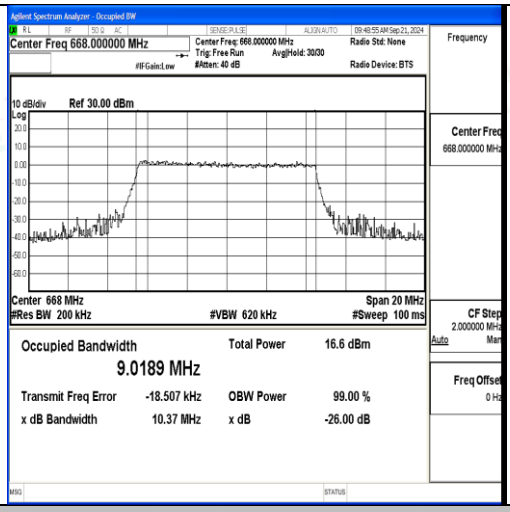
Band71-5MHz-16QAM-133297-25RB#0-PASS



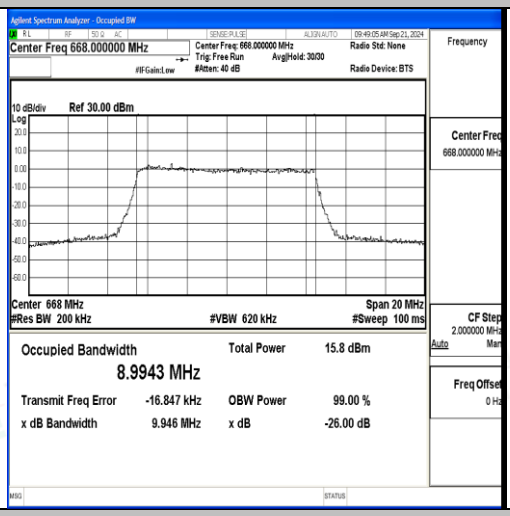
Band71-5MHz-QPSK-133447-25RB#0-PASS



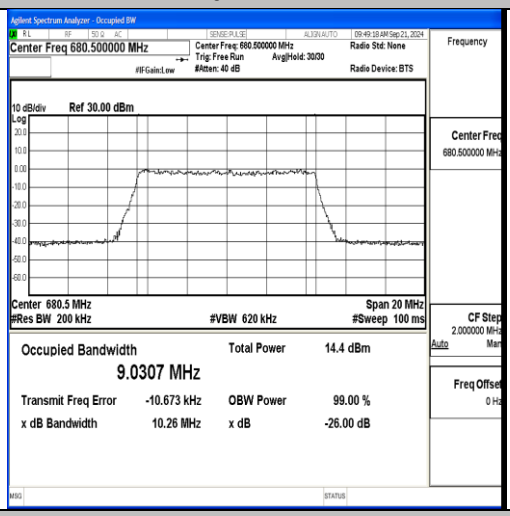
Band71-5MHz-16QAM-133447-25RB#0-PASS



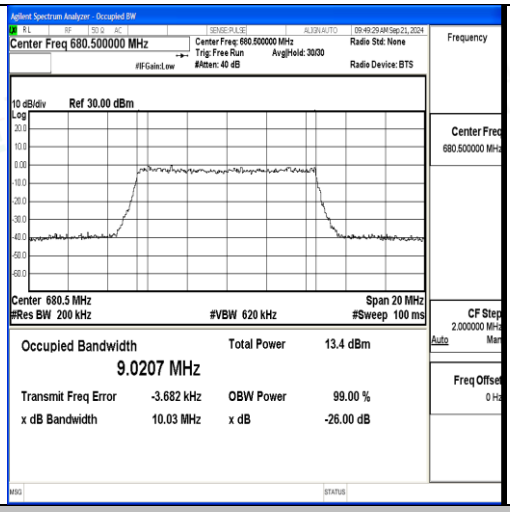
Band71-10MHz-QPSK-133172-50RB#0-PASS



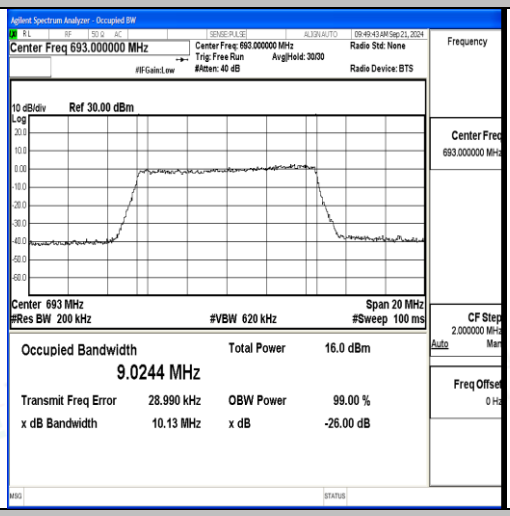
Band71-10MHz-16QAM-133172-50RB#0-PASS



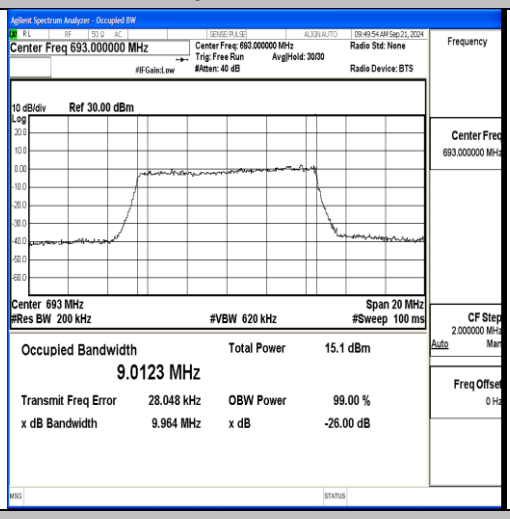
Band71-10MHz-QPSK-133297-50RB#0-PASS



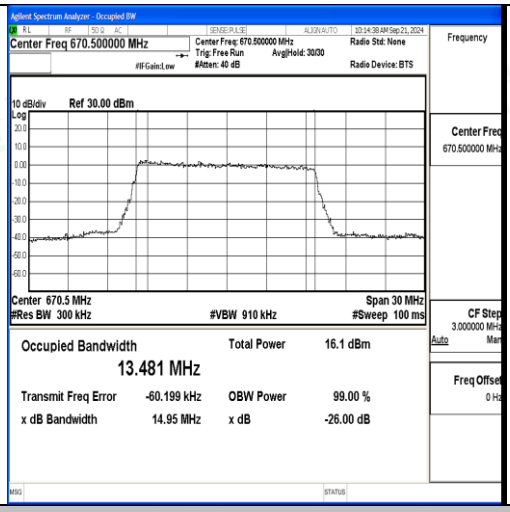
Band71-10MHz-16QAM-133297-50RB#0-PASS



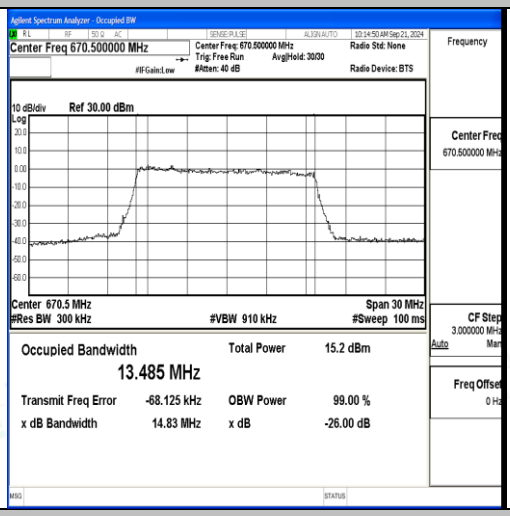
Band71-10MHz-QPSK-133422-50RB#0-PASS



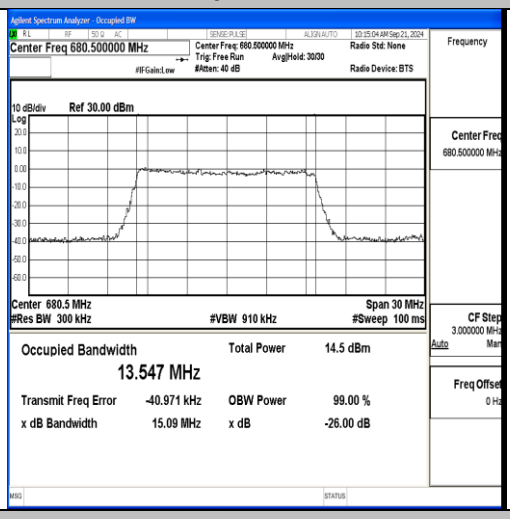
Band71-10MHz-16QAM-133422-50RB#0-PASS



Band71-15MHz-QPSK-133197-75RB#0-PASS



Band71-15MHz-16QAM-133197-75RB#0-PASS



Band71-15MHz-QPSK-133297-75RB#0-PASS