



Appendix H: Test Data for E-UTRA Band 13

Product Name: 4G PHONE

Test Model: MiniVision2

Environmental Conditions

Temperature:	23.5° C
Relative Humidity:	52.2%
ATM Pressure:	100.0 kPa
Test Engineer:	Ling Zhu
Supervised by:	Li Huan



H.1 Effective (Isotropic) Radiated Power Output Data

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band13	5MHz	QPSK	23205	1RB#0	22.79	PASS
Band13	5MHz	QPSK	23205	1RB#12	22.63	PASS
Band13	5MHz	QPSK	23205	1RB#24	22.68	PASS
Band13	5MHz	QPSK	23205	12RB#0	21.69	PASS
Band13	5MHz	QPSK	23205	12RB#6	21.67	PASS
Band13	5MHz	QPSK	23205	12RB#13	21.59	PASS
Band13	5MHz	QPSK	23205	25RB#0	21.56	PASS
Band13	5MHz	QPSK	23230	1RB#0	22.84	PASS
Band13	5MHz	QPSK	23230	1RB#12	22.89	PASS
Band13	5MHz	QPSK	23230	1RB#24	22.92	PASS
Band13	5MHz	QPSK	23230	12RB#0	21.69	PASS
Band13	5MHz	QPSK	23230	12RB#6	21.75	PASS
Band13	5MHz	QPSK	23230	12RB#13	21.77	PASS
Band13	5MHz	QPSK	23230	25RB#0	21.70	PASS
Band13	5MHz	QPSK	23255	1RB#0	22.81	PASS
Band13	5MHz	QPSK	23255	1RB#12	23.07	PASS
Band13	5MHz	QPSK	23255	1RB#24	23.06	PASS
Band13	5MHz	QPSK	23255	12RB#0	21.79	PASS
Band13	5MHz	QPSK	23255	12RB#6	22.17	PASS
Band13	5MHz	QPSK	23255	12RB#13	21.79	PASS
Band13	5MHz	QPSK	23255	25RB#0	22.06	PASS
Band13	5MHz	16QAM	23205	1RB#0	21.58	PASS
Band13	5MHz	16QAM	23205	1RB#12	21.54	PASS
Band13	5MHz	16QAM	23205	1RB#24	21.29	PASS
Band13	5MHz	16QAM	23205	12RB#0	20.64	PASS
Band13	5MHz	16QAM	23205	12RB#6	20.53	PASS
Band13	5MHz	16QAM	23205	12RB#13	20.56	PASS
Band13	5MHz	16QAM	23205	25RB#0	20.59	PASS
Band13	5MHz	16QAM	23230	1RB#0	21.55	PASS
Band13	5MHz	16QAM	23230	1RB#12	21.87	PASS
Band13	5MHz	16QAM	23230	1RB#24	21.61	PASS
Band13	5MHz	16QAM	23230	12RB#0	20.77	PASS
Band13	5MHz	16QAM	23230	12RB#6	20.74	PASS



Band13	5MHz	16QAM	23230	12RB#13	20.64	PASS
Band13	5MHz	16QAM	23230	25RB#0	20.70	PASS
Band13	5MHz	16QAM	23255	1RB#0	21.78	PASS
Band13	5MHz	16QAM	23255	1RB#12	22.03	PASS
Band13	5MHz	16QAM	23255	1RB#24	21.92	PASS
Band13	5MHz	16QAM	23255	12RB#0	20.71	PASS
Band13	5MHz	16QAM	23255	12RB#6	20.69	PASS
Band13	5MHz	16QAM	23255	12RB#13	20.83	PASS
Band13	5MHz	16QAM	23255	25RB#0	20.70	PASS
Band13	10MHz	QPSK	23230	1RB#0	22.57	PASS
Band13	10MHz	QPSK	23230	1RB#24	22.89	PASS
Band13	10MHz	QPSK	23230	1RB#49	23.03	PASS
Band13	10MHz	QPSK	23230	25RB#0	21.88	PASS
Band13	10MHz	QPSK	23230	25RB#12	21.78	PASS
Band13	10MHz	QPSK	23230	25RB#25	21.94	PASS
Band13	10MHz	QPSK	23230	50RB#0	22.03	PASS
Band13	10MHz	16QAM	23230	1RB#0	21.89	PASS
Band13	10MHz	16QAM	23230	1RB#24	22.23	PASS
Band13	10MHz	16QAM	23230	1RB#49	22.07	PASS
Band13	10MHz	16QAM	23230	25RB#0	20.59	PASS
Band13	10MHz	16QAM	23230	25RB#12	20.58	PASS
Band13	10MHz	16QAM	23230	25RB#25	20.89	PASS
Band13	10MHz	16QAM	23230	50RB#0	20.91	PASS



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

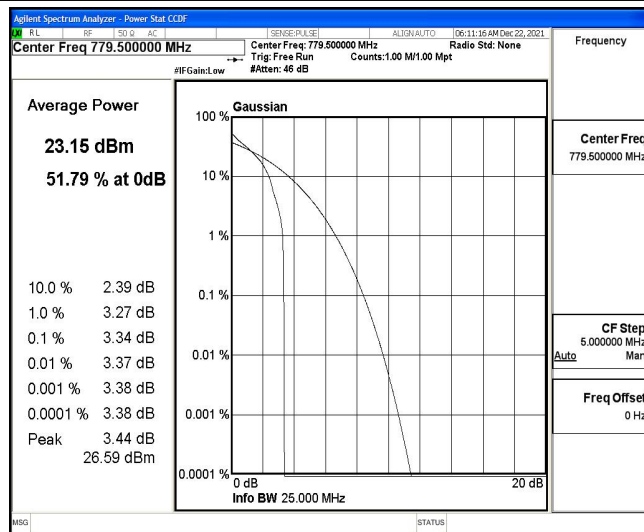
Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band13	5MHz	QPSK	23205	1RB#0	3.34	13	PASS
Band13	5MHz	QPSK	23205	25RB#0	4.13	13	PASS
Band13	5MHz	QPSK	23230	1RB#0	3.32	13	PASS
Band13	5MHz	QPSK	23230	25RB#0	4.30	13	PASS
Band13	5MHz	QPSK	23255	1RB#0	3.46	13	PASS
Band13	5MHz	QPSK	23255	25RB#0	4.50	13	PASS
Band13	5MHz	16QAM	23205	1RB#0	4.17	13	PASS
Band13	5MHz	16QAM	23205	25RB#0	5.02	13	PASS
Band13	5MHz	16QAM	23230	1RB#0	4.12	13	PASS
Band13	5MHz	16QAM	23230	25RB#0	5.09	13	PASS
Band13	5MHz	16QAM	23255	1RB#0	4.43	13	PASS
Band13	5MHz	16QAM	23255	25RB#0	5.39	13	PASS
Band13	10MHz	QPSK	23230	1RB#0	3.44	13	PASS
Band13	10MHz	QPSK	23230	50RB#0	4.51	13	PASS
Band13	10MHz	16QAM	23230	1RB#0	4.23	13	PASS
Band13	10MHz	16QAM	23230	50RB#0	5.37	13	PASS

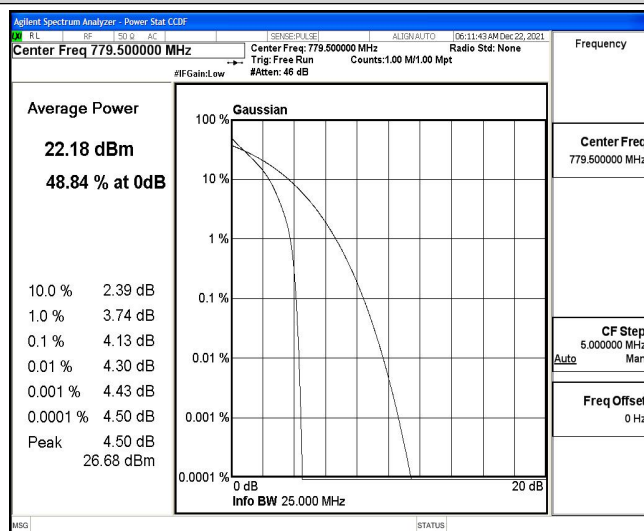


Test Graphs

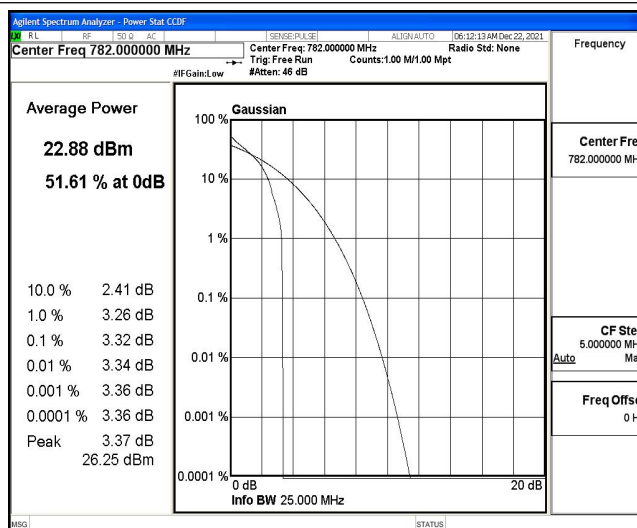
Band13-5MHz-QPSK-23205-1RB#0



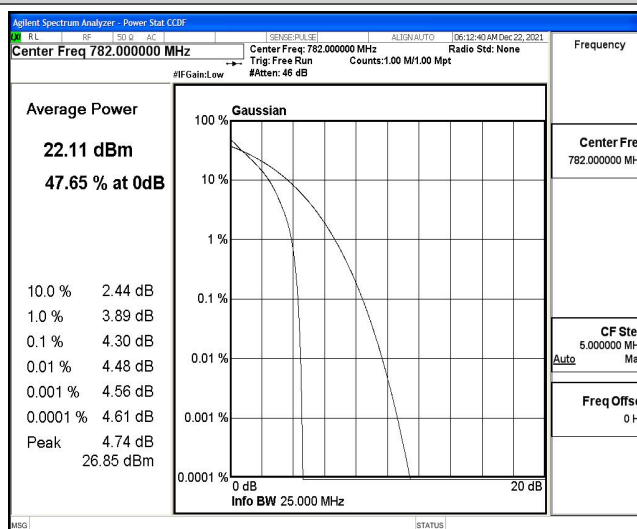
Band13-5MHz-QPSK-23205-25RB#0



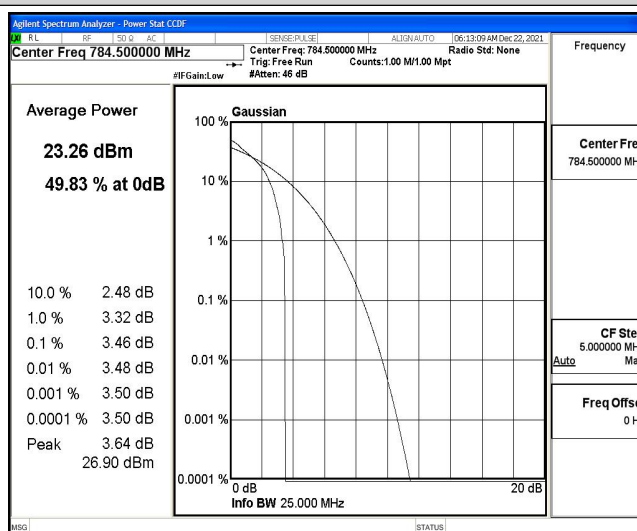
Band13-5MHz-QPSK-23230-1RB#0



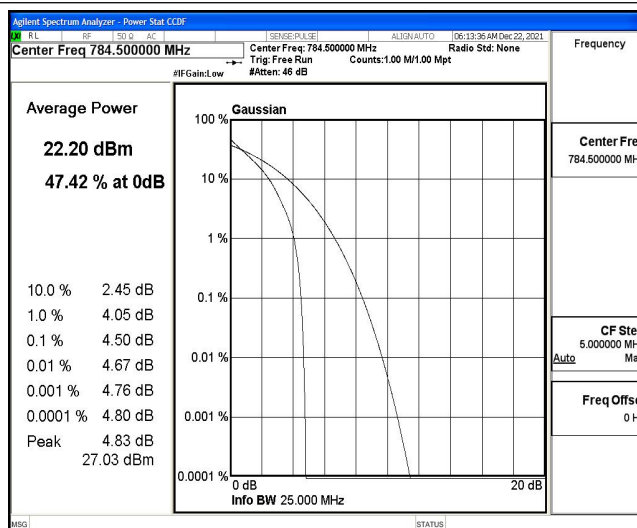
Band13-5MHz-QPSK-23230-25RB#0



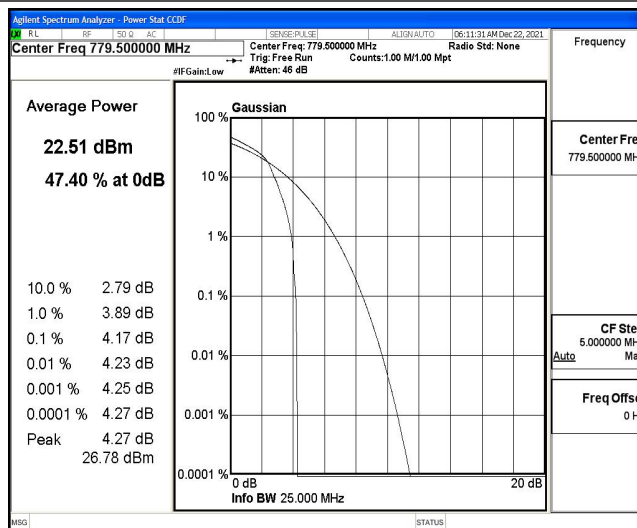
Band13-5MHz-QPSK-23255-1RB#0



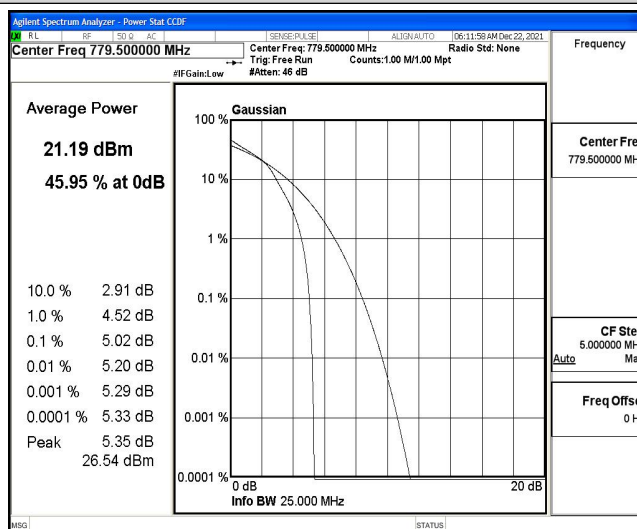
Band13-5MHz-QPSK-23255-25RB#0



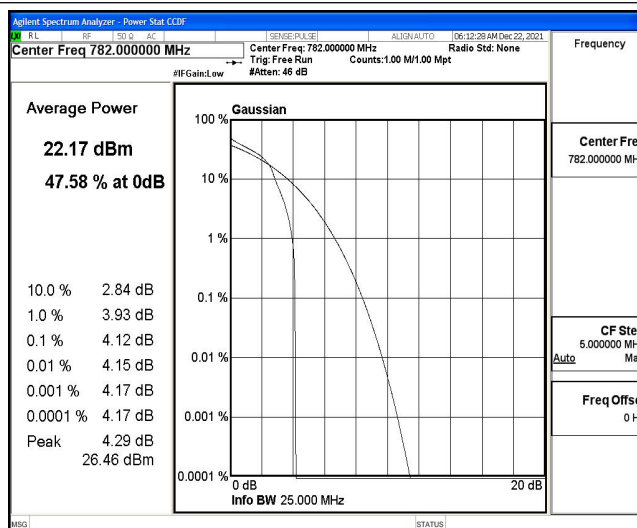
Band13-5MHz-16QAM-23205-1RB#0



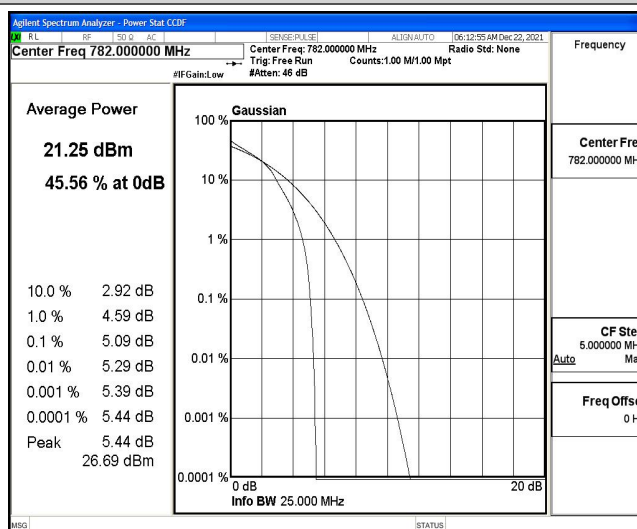
Band13-5MHz-16QAM-23205-25RB#0



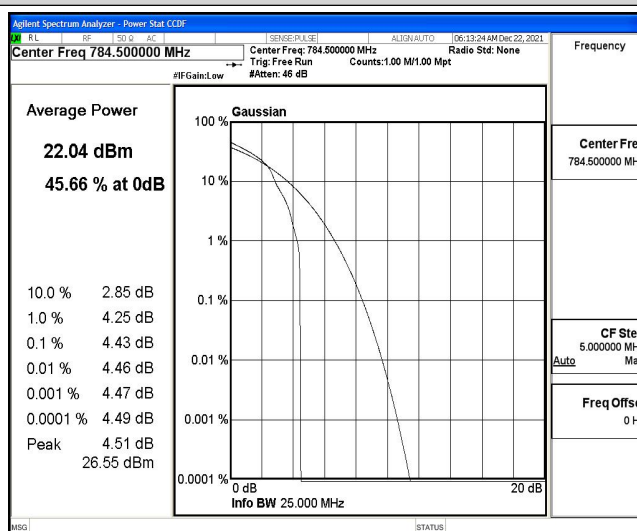
Band13-5MHz-16QAM-23230-1RB#0



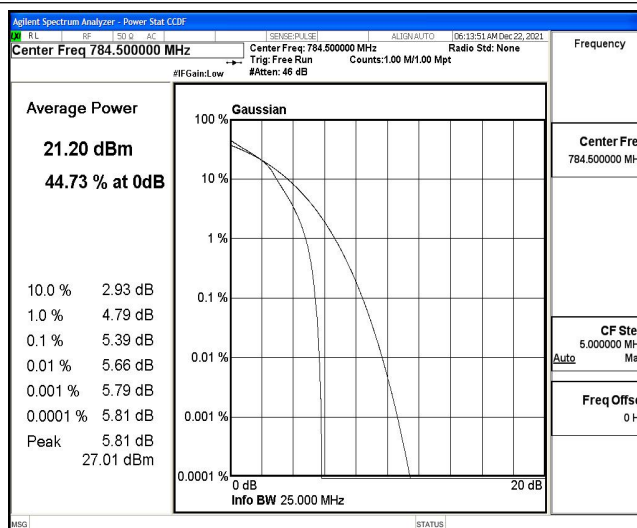
Band13-5MHz-16QAM-23230-25RB#0



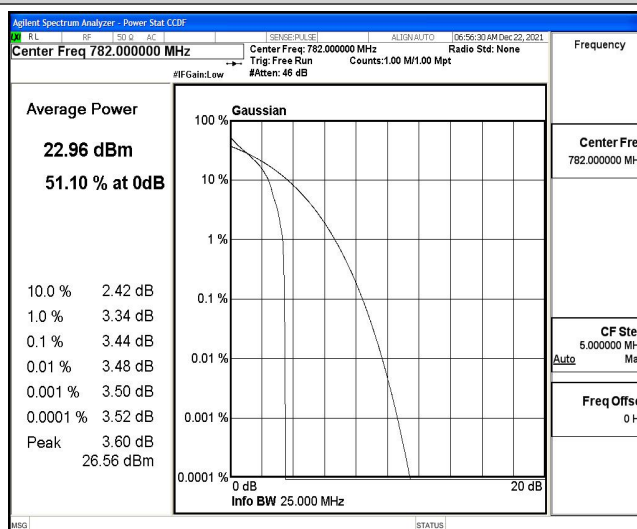
Band13-5MHz-16QAM-23255-1RB#0



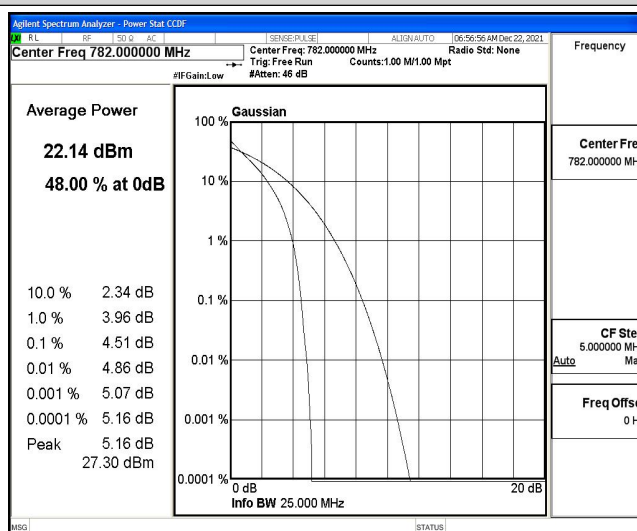
Band13-5MHz-16QAM-23255-25RB#0



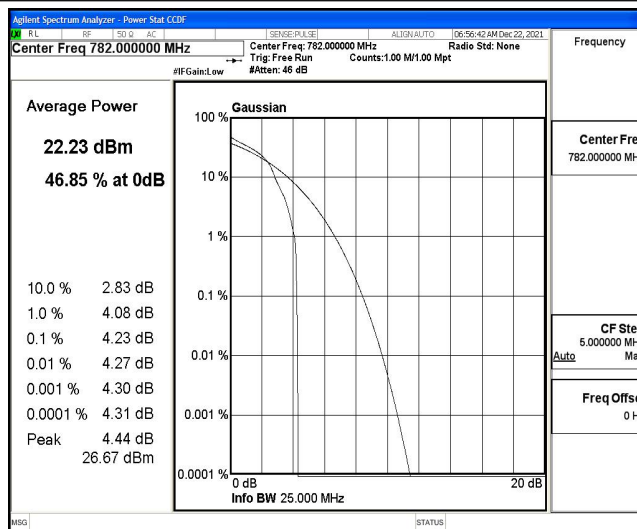
Band13-10MHz-QPSK-23230-1RB#0



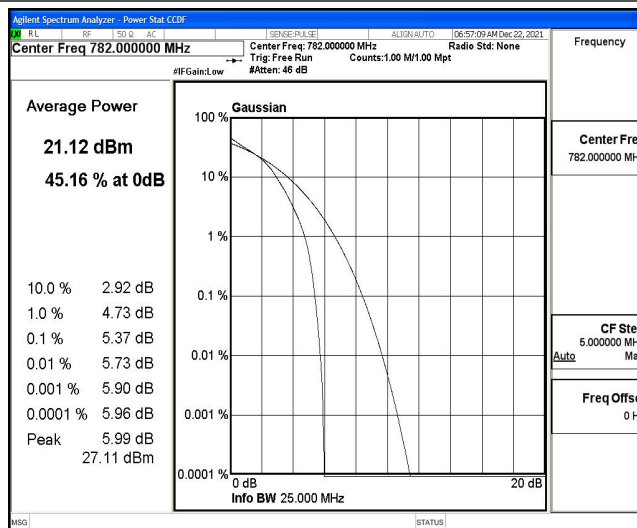
Band13-10MHz-QPSK-23230-50RB#0



Band13-10MHz-16QAM-23230-1RB#0



Band13-10MHz-16QAM-23230-50RB#0



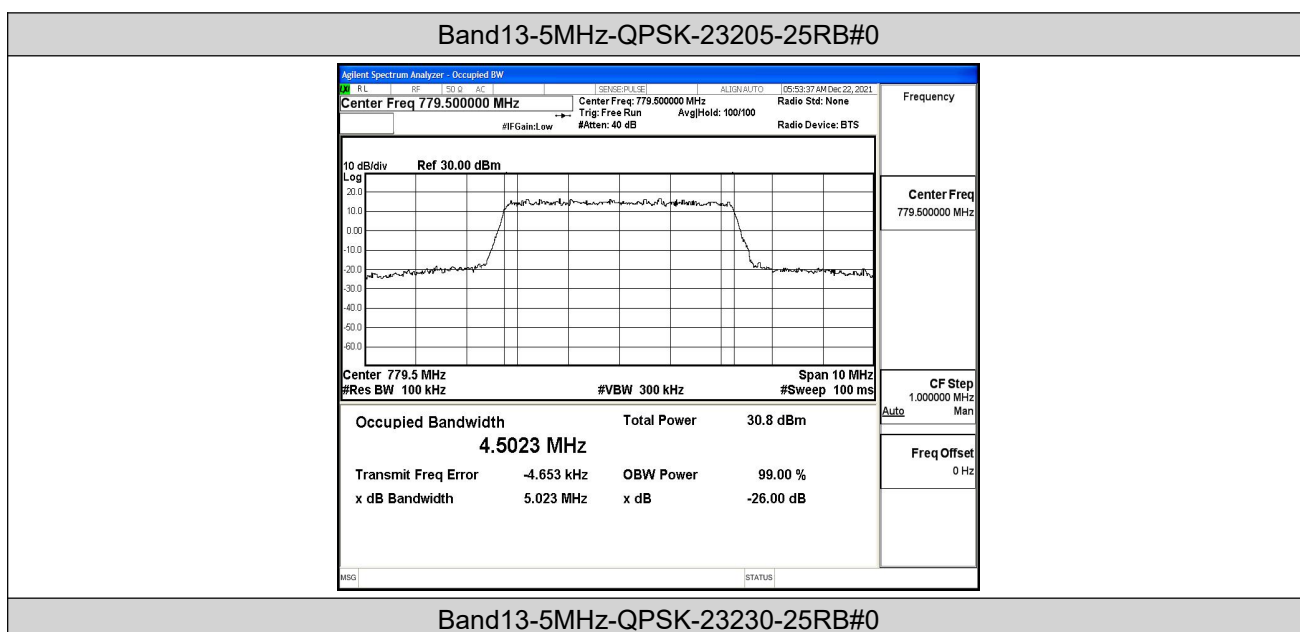


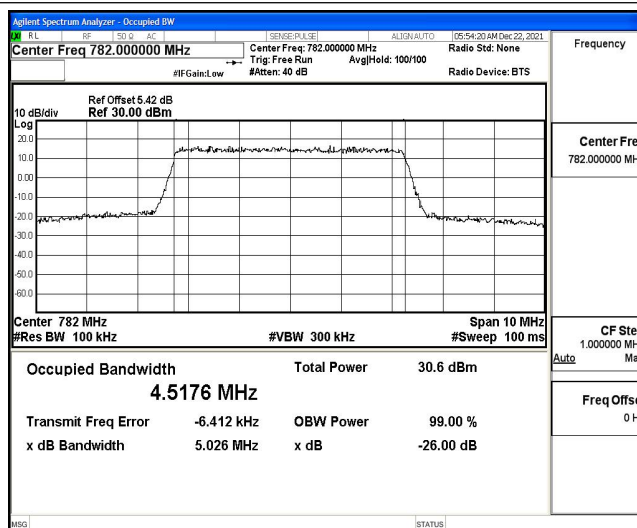
H.3 26dB Bandwidth and Occupied Bandwidth

Test Result

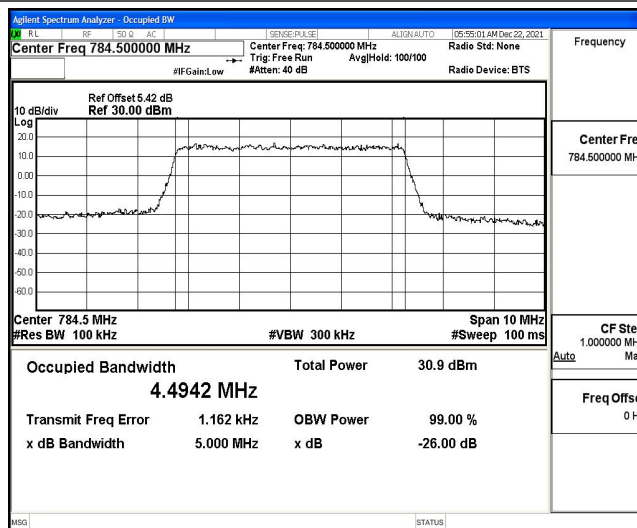
Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band13	5MHz	QPSK	23205	25RB#0	4.5023	5.023	PASS
Band13	5MHz	QPSK	23230	25RB#0	4.5176	5.026	PASS
Band13	5MHz	QPSK	23255	25RB#0	4.4942	5.000	PASS
Band13	5MHz	16QAM	23205	25RB#0	4.5029	4.952	PASS
Band13	5MHz	16QAM	23230	25RB#0	4.5025	5.018	PASS
Band13	5MHz	16QAM	23255	25RB#0	4.5182	5.055	PASS
Band13	10MHz	QPSK	23230	50RB#0	8.9616	9.896	PASS
Band13	10MHz	16QAM	23230	50RB#0	8.9525	9.864	PASS

Test Graphs

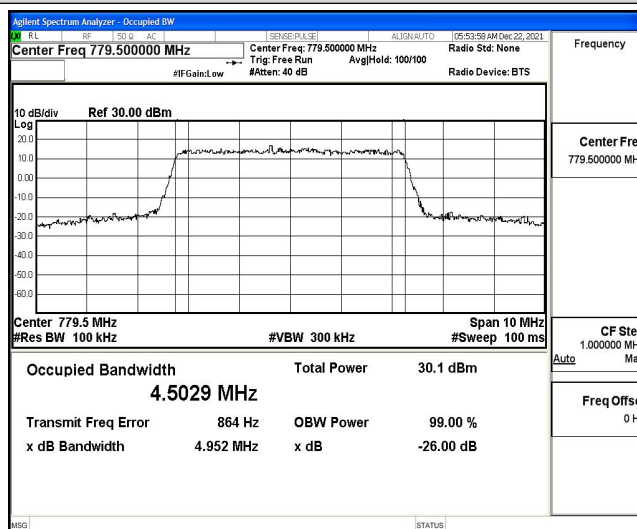




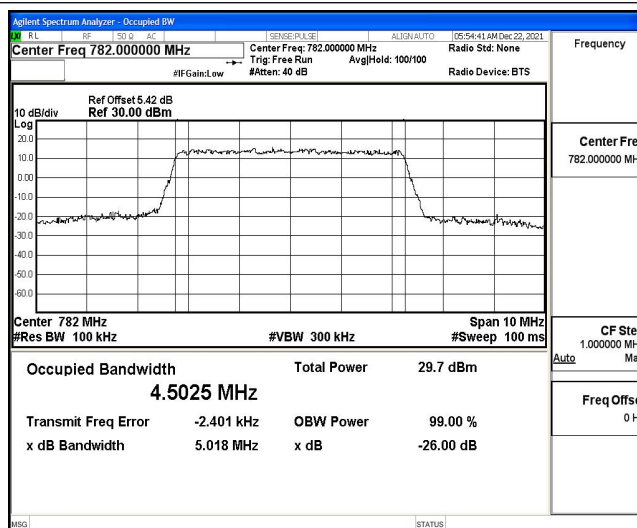
Band13-5MHz-QPSK-23255-25RB#0



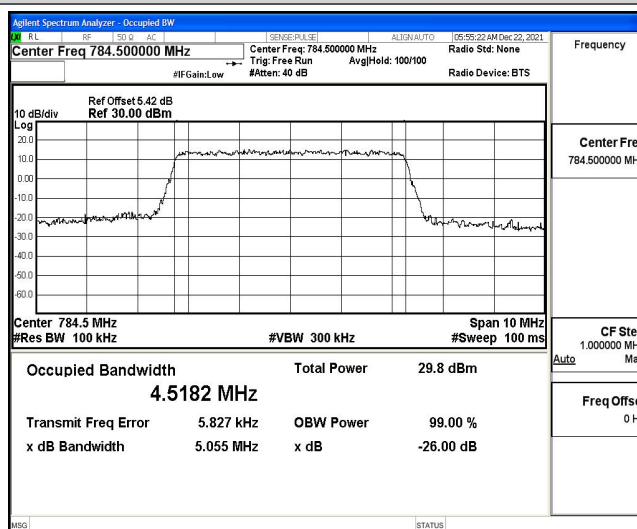
Band13-5MHz-16QAM-23205-25RB#0



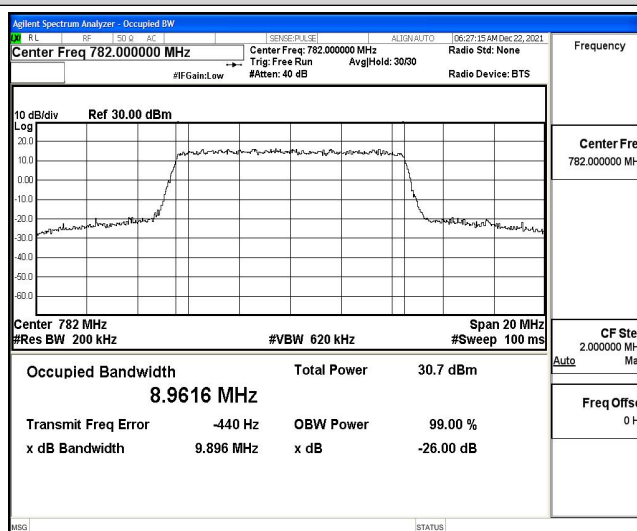
Band13-5MHz-16QAM-23230-25RB#0



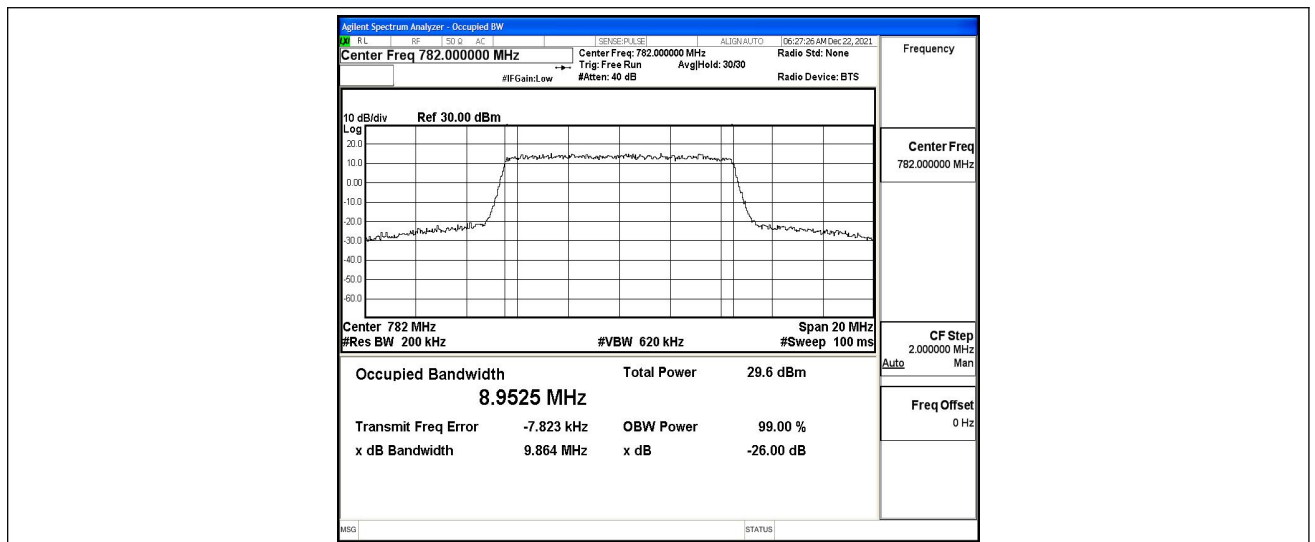
Band13-5MHz-16QAM-23255-25RB#0



Band13-10MHz-QPSK-23230-50RB#0



Band13-10MHz-16QAM-23230-50RB#0





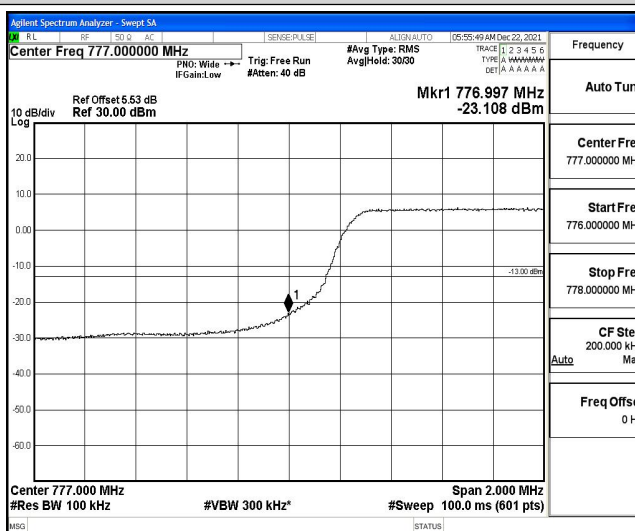
H.4 Band Edge

Test Result

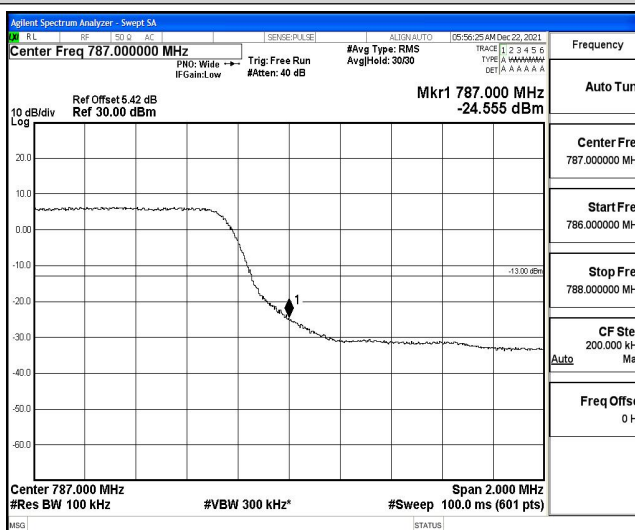
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band13	5MHz	QPSK	23205	25RB#0	-23.11	PASS
Band13	5MHz	QPSK	23255	25RB#0	-24.55	PASS
Band13	5MHz	16QAM	23205	25RB#0	-25.37	PASS
Band13	5MHz	16QAM	23255	25RB#0	-26.05	PASS
Band13	10MHz	QPSK	23230	50RB#0	-26.75	PASS
Band13	10MHz	16QAM	23230	50RB#0	-28.82	PASS

Test Graphs

Band13-5MHz-QPSK-23205-25RB#0

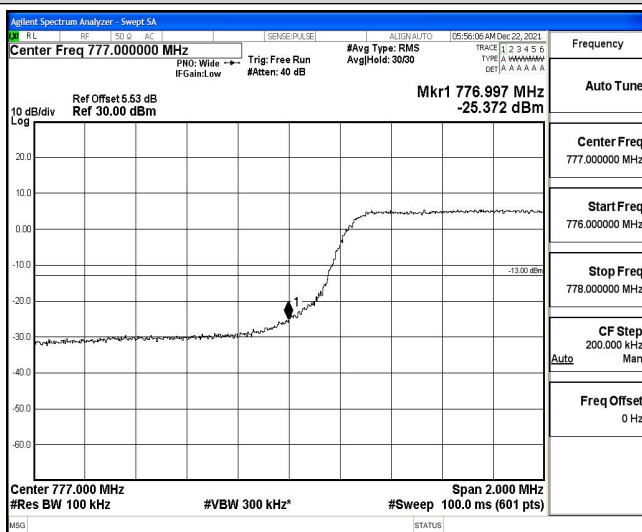


Band13-5MHz-QPSK-23255-25RB#0

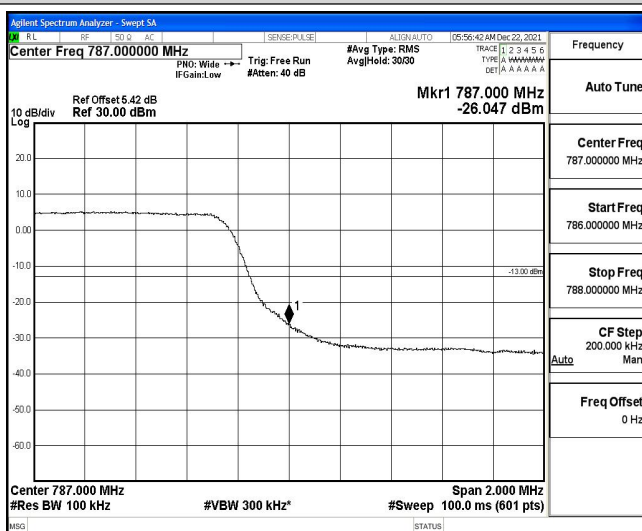




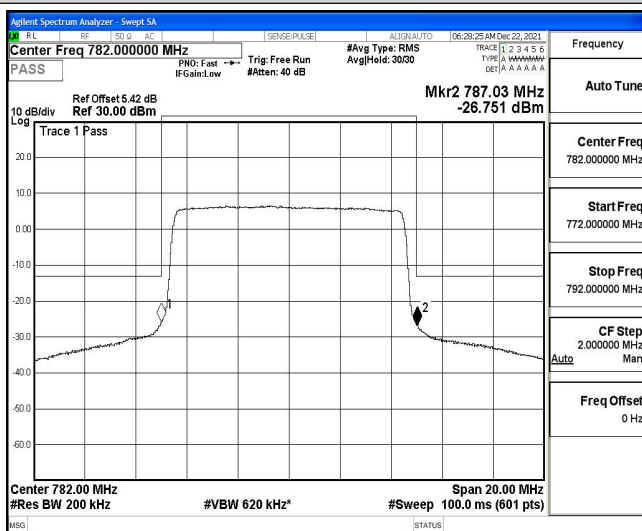
Band13-5MHz-16QAM-23205-25RB#0



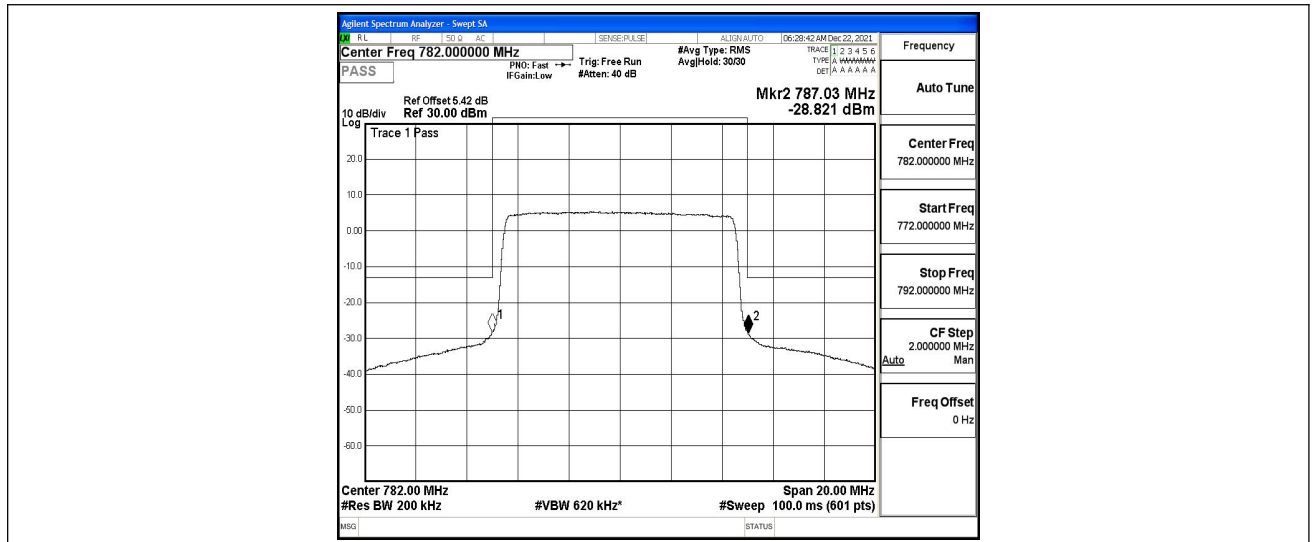
Band13-5MHz-16QAM-23255-25RB#0



Band13-10MHz-QPSK-23230-50RB#0



Band13-10MHz-16QAM-23230-50RB#0





H.5 Conducted Spurious Emission

Test Result

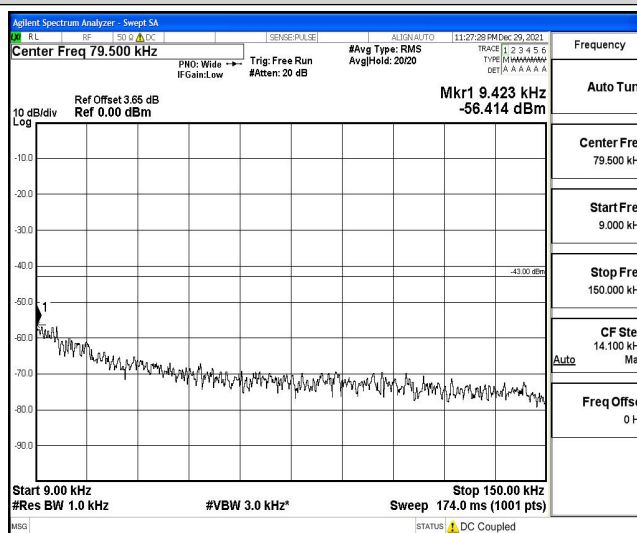
Band	Bandwidth	Modulation	Channel	RB Configuration	Frequency Range	Result (dBm)	Verdict
Band13	5MHz	QPSK	23205	1RB#0	Range1:0.009~0.15MHz	-56.41	PASS
Band13	5MHz	QPSK	23205	1RB#0	Range2:0.15~30MHz	-52.15	PASS
Band13	5MHz	QPSK	23205	1RB#0	Range3:30~1000MHz	-41.38	PASS
Band13	5MHz	QPSK	23205	1RB#0	Range5:763~775MHz	-54.81	PASS
Band13	5MHz	QPSK	23205	1RB#0	Range6:793~805MHz	-61.55	PASS
Band13	5MHz	QPSK	23205	1RB#0	Range4:1000~10000MHz	-45.44	PASS
Band13	5MHz	QPSK	23205	1RB#0	Range7:1559~1610MHz	-63.07	PASS
Band13	5MHz	QPSK	23230	1RB#0	Range1:0.009~0.15MHz	-54.94	PASS
Band13	5MHz	QPSK	23230	1RB#0	Range2:0.15~30MHz	-51.58	PASS
Band13	5MHz	QPSK	23230	1RB#0	Range3:30~1000MHz	-40.52	PASS
Band13	5MHz	QPSK	23230	1RB#0	Range5:763~775MHz	-59.13	PASS
Band13	5MHz	QPSK	23230	1RB#0	Range6:793~805MHz	-61.5	PASS
Band13	5MHz	QPSK	23230	1RB#0	Range4:1000~10000MHz	-45.21	PASS
Band13	5MHz	QPSK	23230	1RB#0	Range7:1559~1610MHz	-64.65	PASS
Band13	5MHz	QPSK	23255	1RB#0	Range1:0.009~0.15MHz	-54.92	PASS
Band13	5MHz	QPSK	23255	1RB#0	Range2:0.15~30MHz	-52.85	PASS
Band13	5MHz	QPSK	23255	1RB#0	Range3:30~1000MHz	-41.61	PASS
Band13	5MHz	QPSK	23255	1RB#0	Range5:763~775MHz	-56.1	PASS
Band13	5MHz	QPSK	23255	1RB#0	Range6:793~805MHz	-60.55	PASS
Band13	5MHz	QPSK	23255	1RB#0	Range4:1000~10000MHz	-45.48	PASS
Band13	5MHz	QPSK	23255	1RB#0	Range7:1559~1610MHz	-64.53	PASS
Band13	5MHz	16QAM	23205	1RB#0	Range1:0.009~0.15MHz	-55.9	PASS
Band13	5MHz	16QAM	23205	1RB#0	Range2:0.15~30MHz	-49.88	PASS
Band13	5MHz	16QAM	23205	1RB#0	Range3:30~1000MHz	-40.23	PASS
Band13	5MHz	16QAM	23205	1RB#0	Range5:763~775MHz	-55.98	PASS
Band13	5MHz	16QAM	23205	1RB#0	Range6:793~805MHz	-60.85	PASS
Band13	5MHz	16QAM	23205	1RB#0	Range4:1000~10000MHz	-45.48	PASS
Band13	5MHz	16QAM	23205	1RB#0	Range7:1559~1610MHz	-63.25	PASS
Band13	5MHz	16QAM	23230	1RB#0	Range1:0.009~0.15MHz	-55.17	PASS
Band13	5MHz	16QAM	23230	1RB#0	Range2:0.15~30MHz	-51.44	PASS
Band13	5MHz	16QAM	23230	1RB#0	Range3:30~1000MHz	-41.93	PASS
Band13	5MHz	16QAM	23230	1RB#0	Range5:763~775MHz	-60.28	PASS
Band13	5MHz	16QAM	23230	1RB#0	Range6:793~805MHz	-61.53	PASS
Band13	5MHz	16QAM	23230	1RB#0	Range4:1000~10000MHz	-45.54	PASS
Band13	5MHz	16QAM	23230	1RB#0	Range7:1559~1610MHz	-64.56	PASS



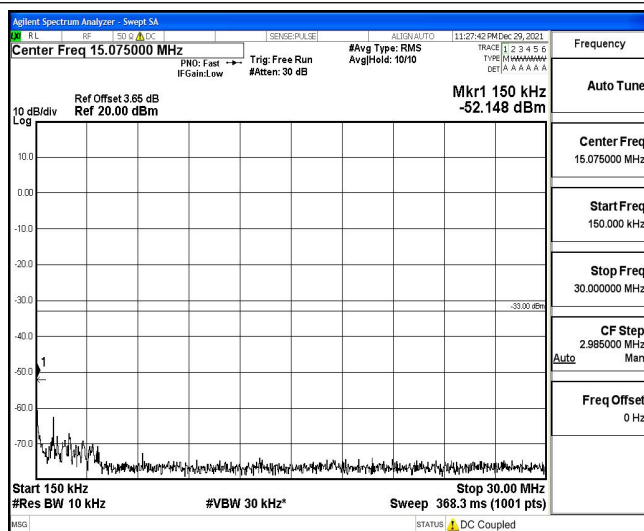
Band13	5MHz	16QAM	23255	1RB#0	Range1:0.009~0.15MHz	-56.28	PASS
Band13	5MHz	16QAM	23255	1RB#0	Range2:0.15~30MHz	-53.12	PASS
Band13	5MHz	16QAM	23255	1RB#0	Range3:30~1000MHz	-40.05	PASS
Band13	5MHz	16QAM	23255	1RB#0	Range5:763~775MHz	-59.44	PASS
Band13	5MHz	16QAM	23255	1RB#0	Range6:793~805MHz	-61.86	PASS
Band13	5MHz	16QAM	23255	1RB#0	Range4:1000~10000MHz	-45.54	PASS
Band13	5MHz	16QAM	23255	1RB#0	Range7:1559~1610MHz	-64.51	PASS
Band13	10MHz	QPSK	23230	1RB#0	Range1:0.009~0.15MHz	-56.3	PASS
Band13	10MHz	QPSK	23230	1RB#0	Range2:0.15~30MHz	-51.82	PASS
Band13	10MHz	QPSK	23230	1RB#0	Range3:30~1000MHz	-41.33	PASS
Band13	10MHz	QPSK	23230	1RB#0	Range5:763~775MHz	-56.01	PASS
Band13	10MHz	QPSK	23230	1RB#0	Range6:793~805MHz	-55.83	PASS
Band13	10MHz	QPSK	23230	1RB#0	Range4:1000~10000MHz	-45.34	PASS
Band13	10MHz	QPSK	23230	1RB#0	Range7:1559~1610MHz	-62.94	PASS
Band13	10MHz	16QAM	23230	1RB#0	Range1:0.009~0.15MHz	-56.29	PASS
Band13	10MHz	16QAM	23230	1RB#0	Range2:0.15~30MHz	-51.11	PASS
Band13	10MHz	16QAM	23230	1RB#0	Range3:30~1000MHz	-40.06	PASS
Band13	10MHz	16QAM	23230	1RB#0	Range5:763~775MHz	-51.38	PASS
Band13	10MHz	16QAM	23230	1RB#0	Range6:793~805MHz	-57.1	PASS
Band13	10MHz	16QAM	23230	1RB#0	Range4:1000~10000MHz	-45.46	PASS
Band13	10MHz	16QAM	23230	1RB#0	Range7:1559~1610MHz	-63.07	PASS

Test Graphs

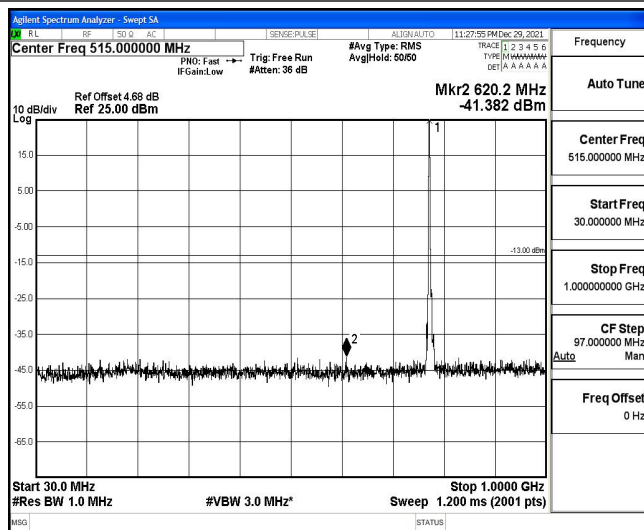
Band13-5MHz-QPSK-23205-1RB#0-Range1:0.009~0.15MHz



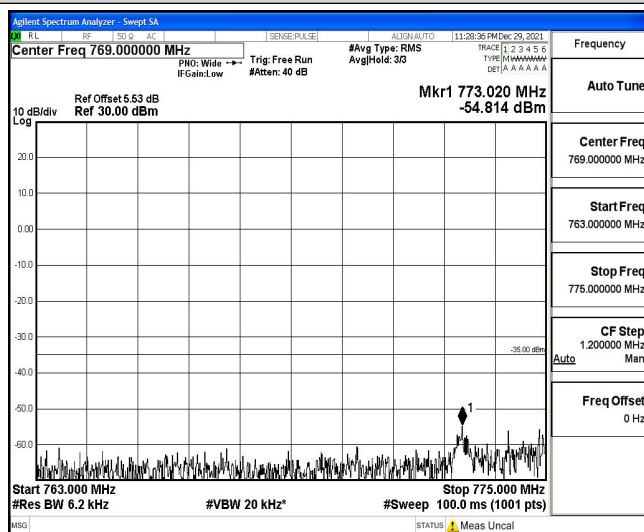
Band13-5MHz-QPSK-23205-1RB#0-Range2:0.15~30MHz



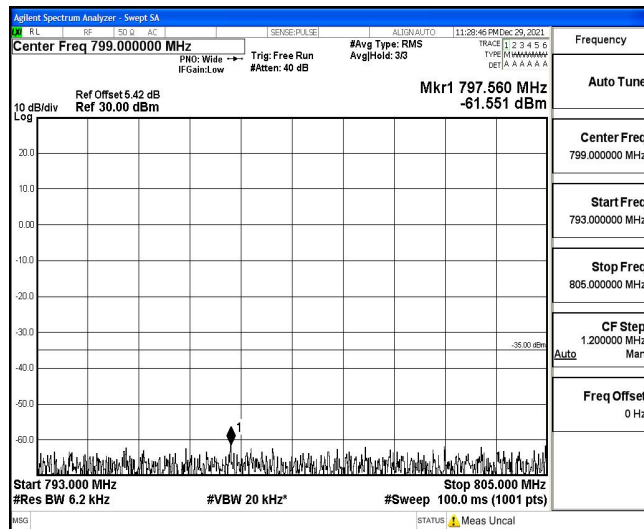
Band13-5MHz-QPSK-23205-1RB#0-Range3:30~1000MHz



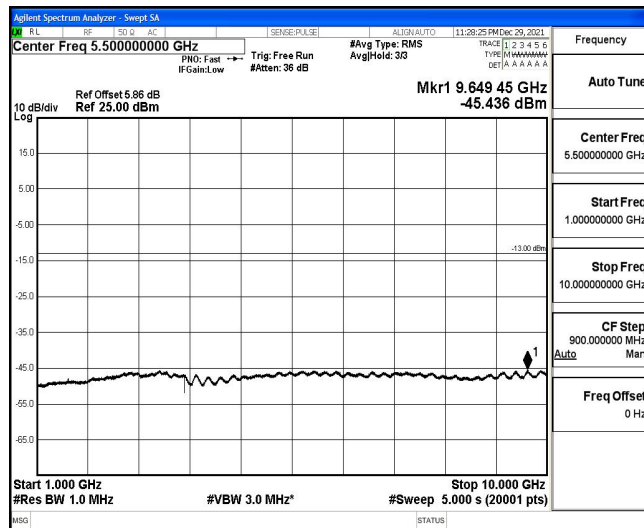
Band13-5MHz-QPSK-23205-1RB#0-Range5:763~775MHz



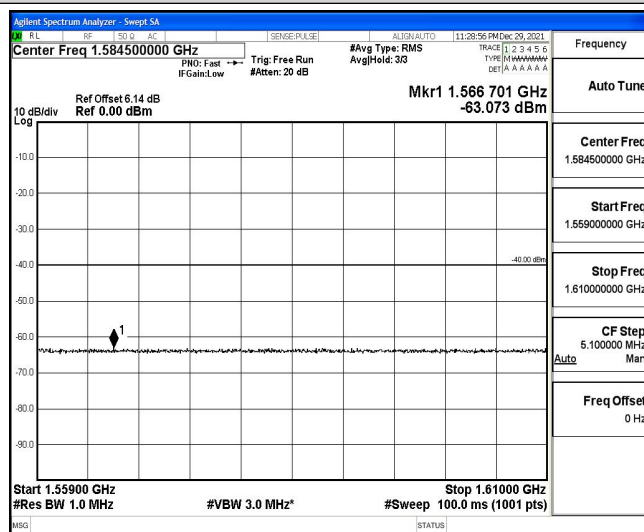
Band13-5MHz-QPSK-23205-1RB#0-Range6:793~805MHz



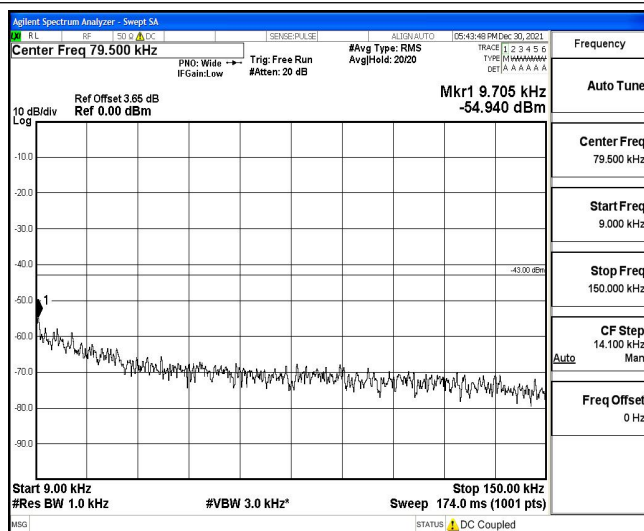
Band13-5MHz-QPSK-23205-1RB#0-Range4:1000~10000MHz



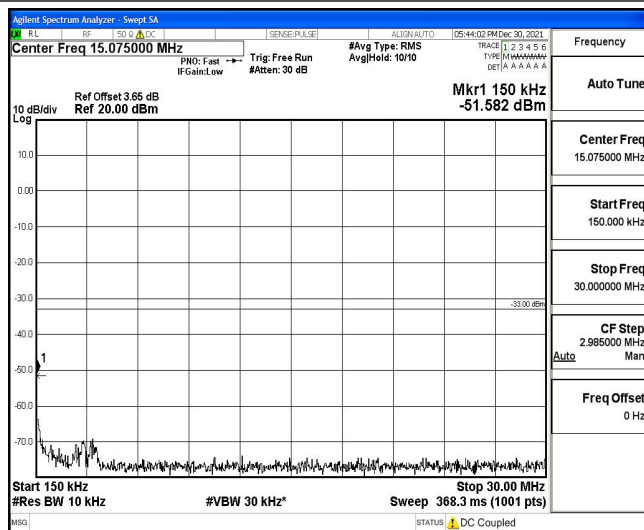
Band13-5MHz-QPSK-23205-1RB#0-Range7:1559~1610MHz



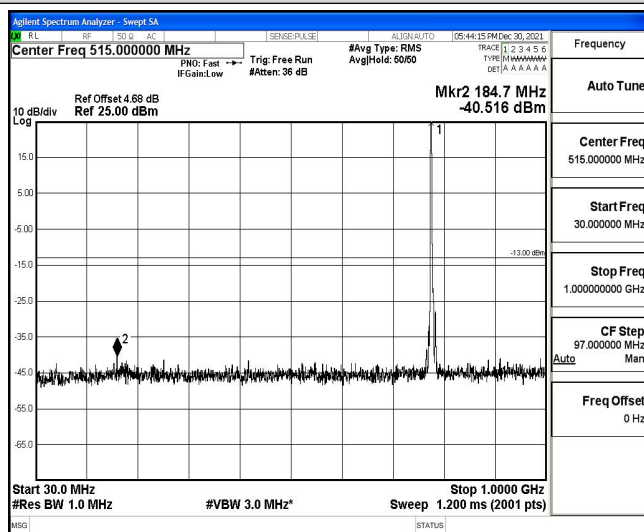
Band13-5MHz-QPSK-23230-1RB#0-Range1:0.009~0.15MHz



Band13-5MHz-QPSK-23230-1RB#0-Range2:0.15~30MHz



Band13-5MHz-QPSK-23230-1RB#0-Range3:30~1000MHz



Band13-5MHz-QPSK-23230-1RB#0-Range5:763~775MHz