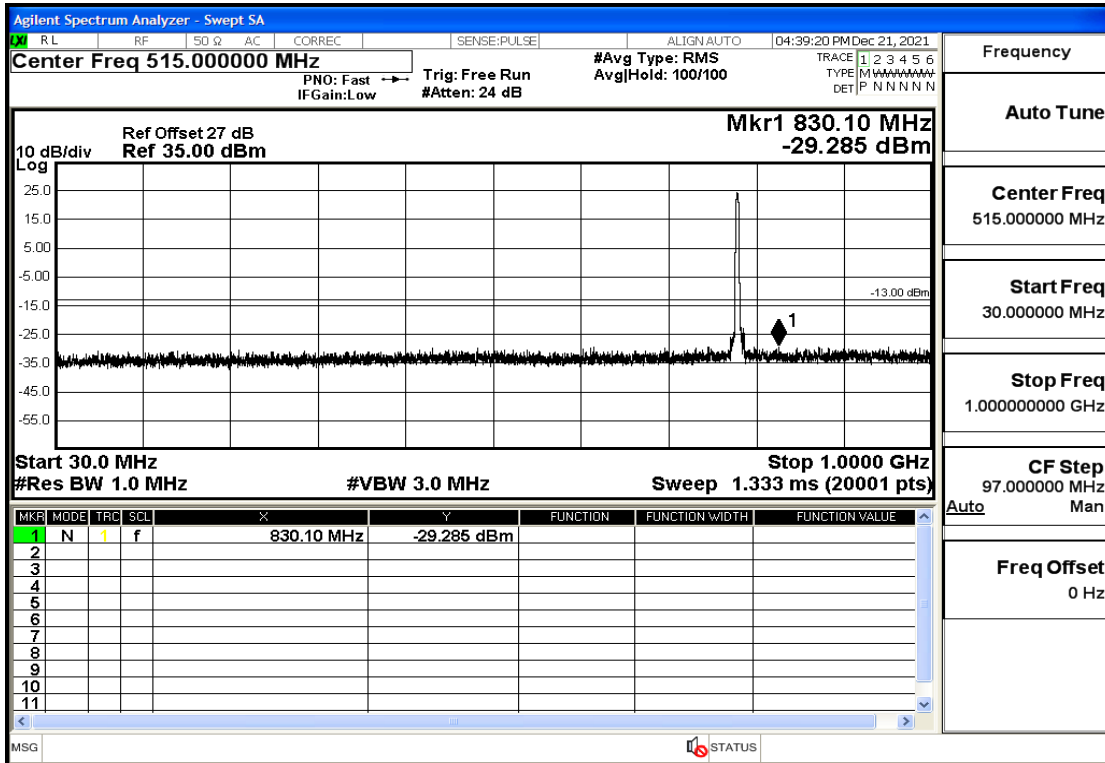
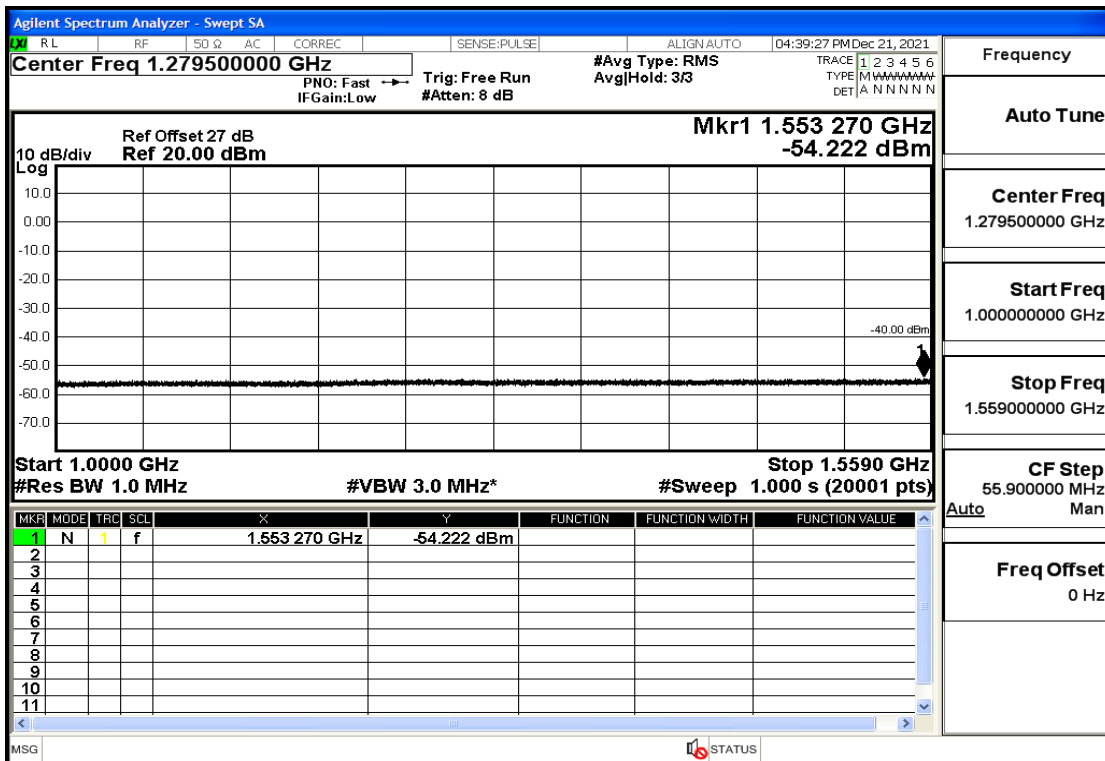


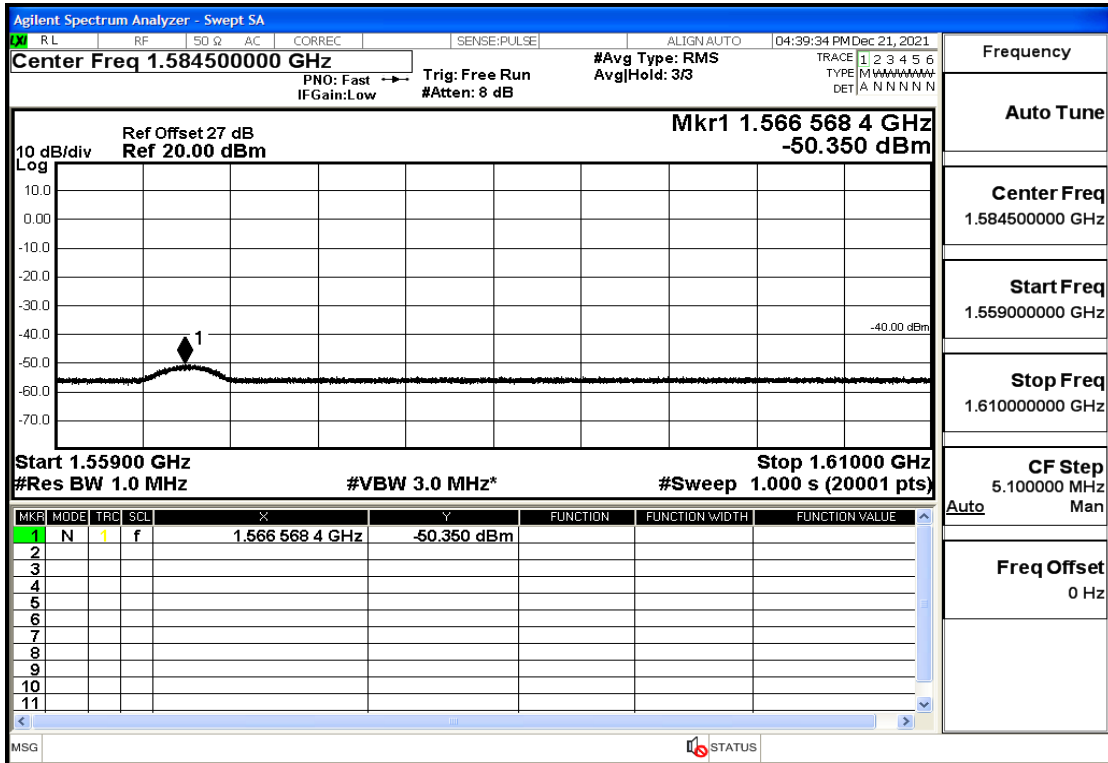
OB13-5-784.5-QPSK-12#LOW@30mHz-1GHz@Pass



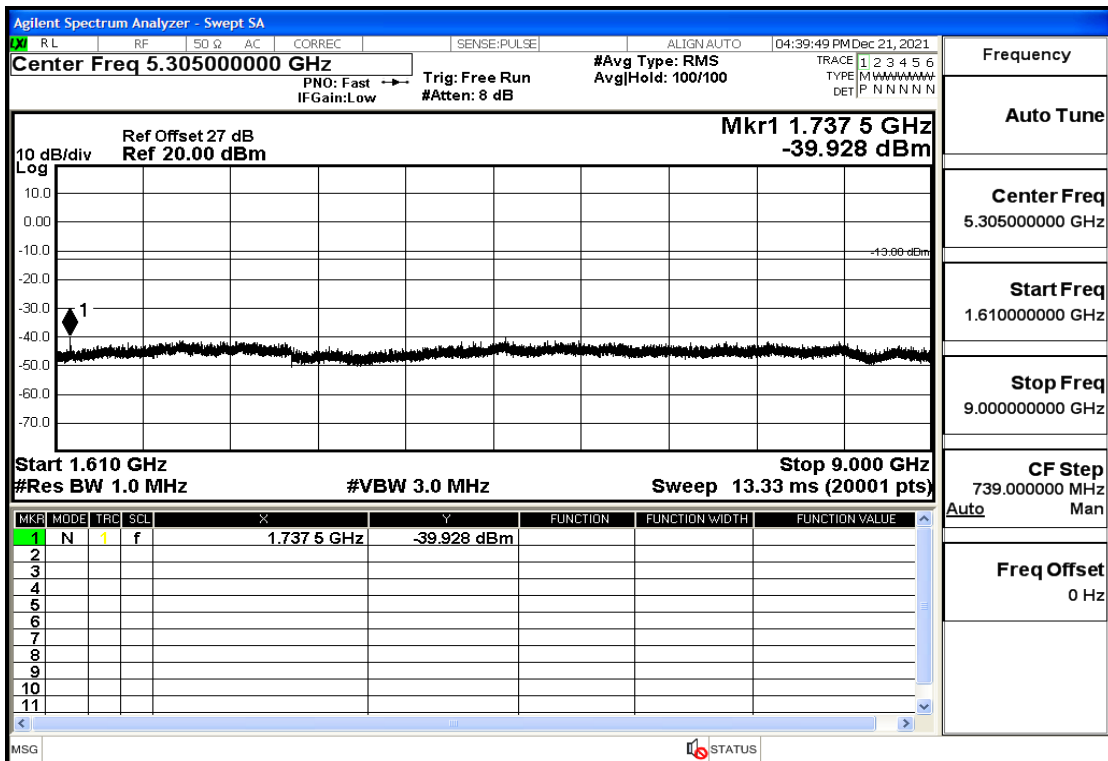
OB13-5-784.5-QPSK-12#LOW@1GHz-1.559GHz@Pass



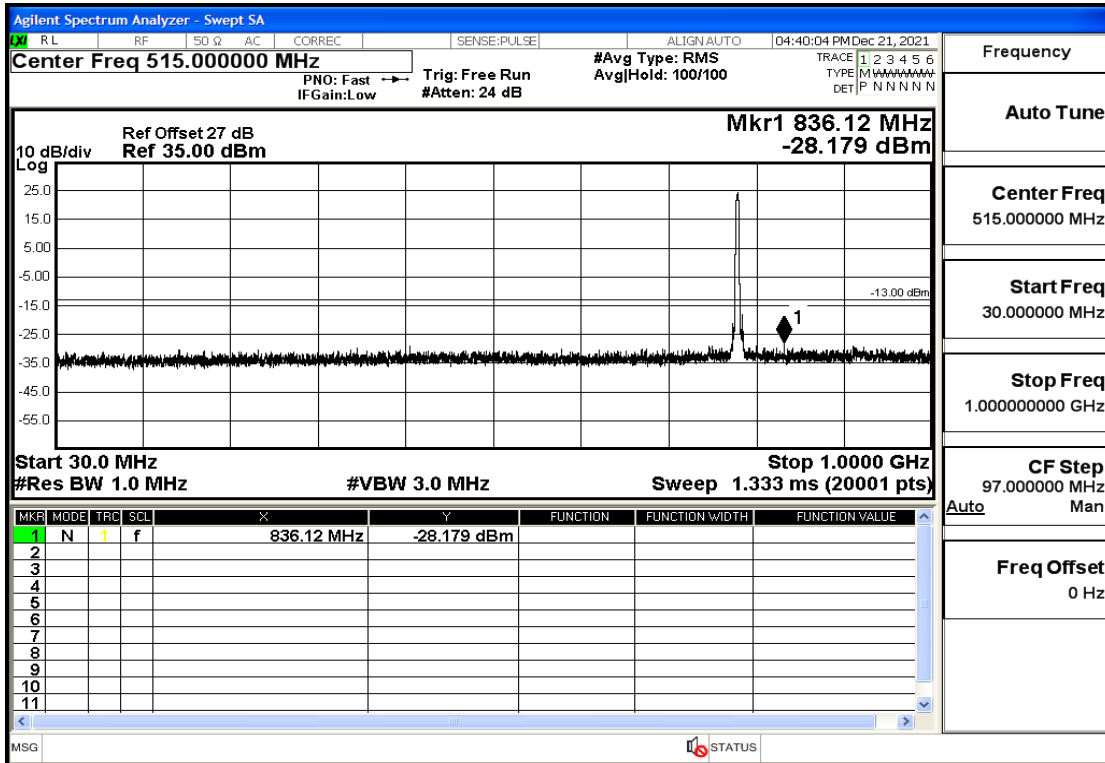
OB13-5-784.5-QPSK-12#LOW@1.559GHz-1.61GHz@Pass



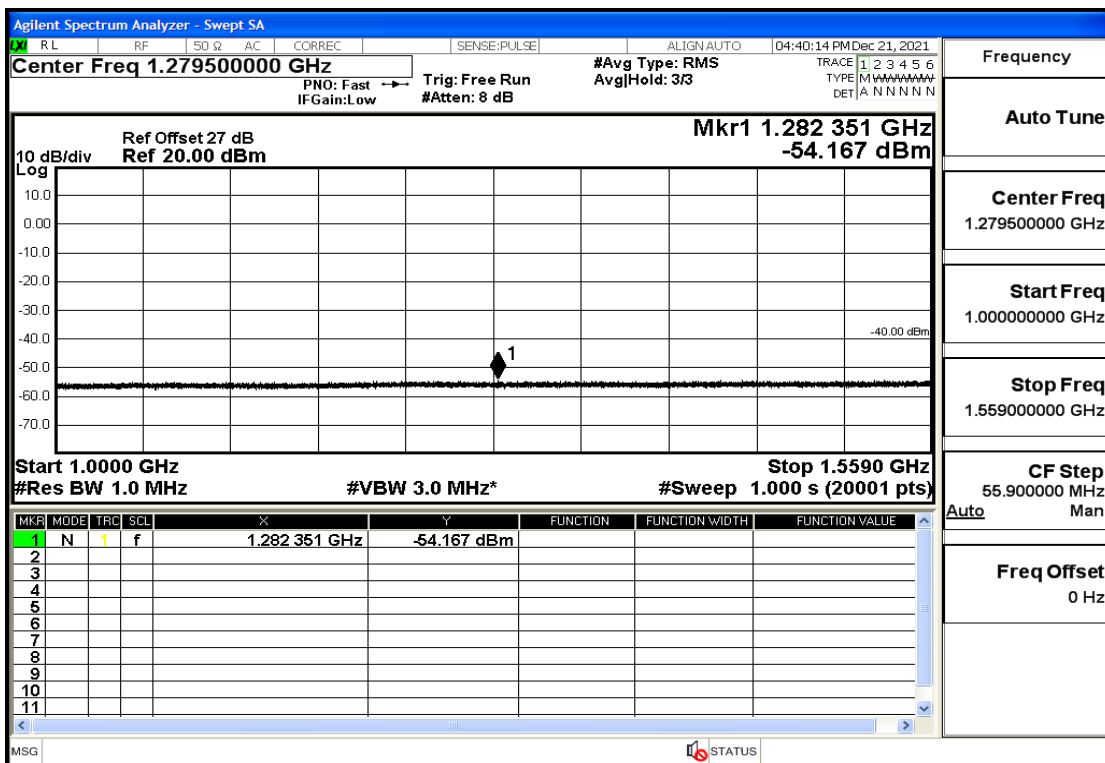
OB13-5-784.5-QPSK-12#LOW@1.61GHz-9GHz@Pass



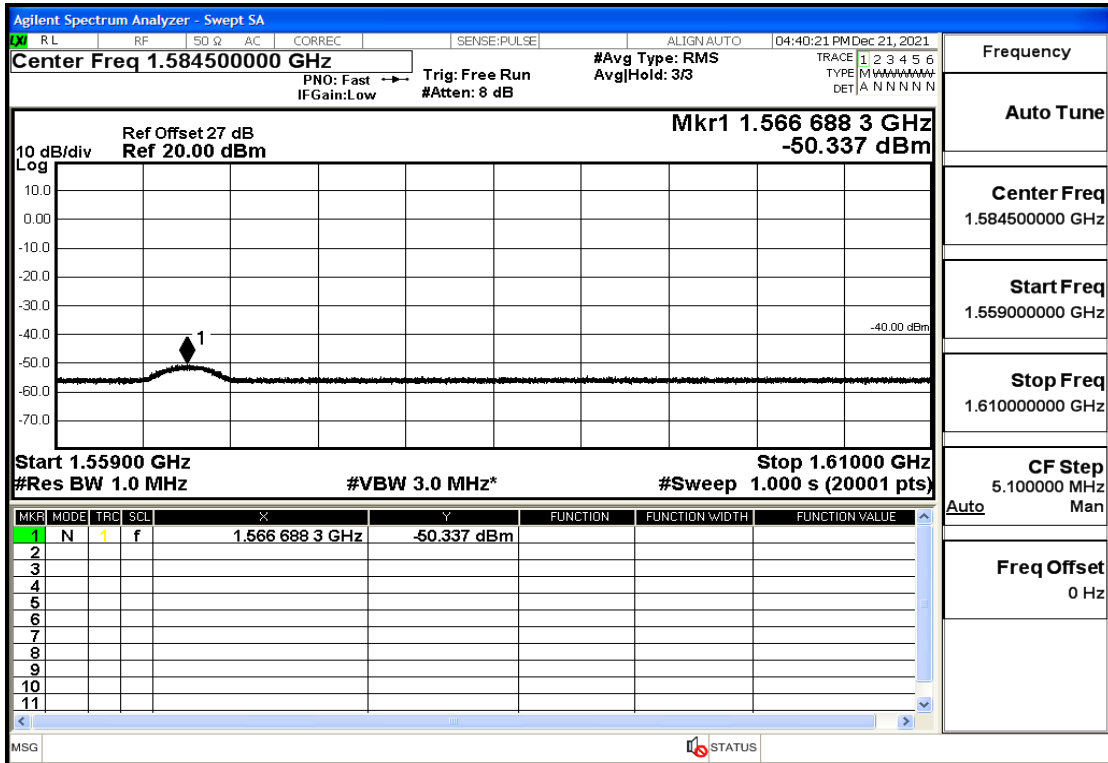
OB13-5-784.5-QPSK-12#MID@30mHz-1GHz@Pass



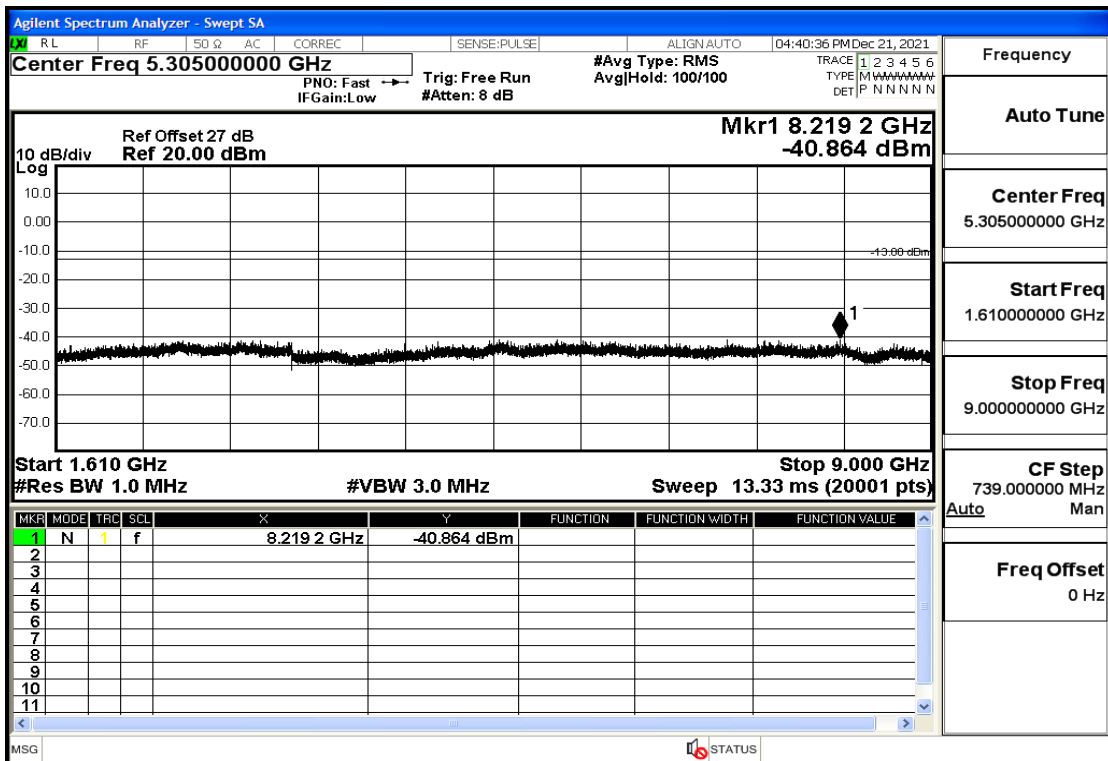
OB13-5-784.5-QPSK-12#MID@1GHz-1.559GHz@Pass



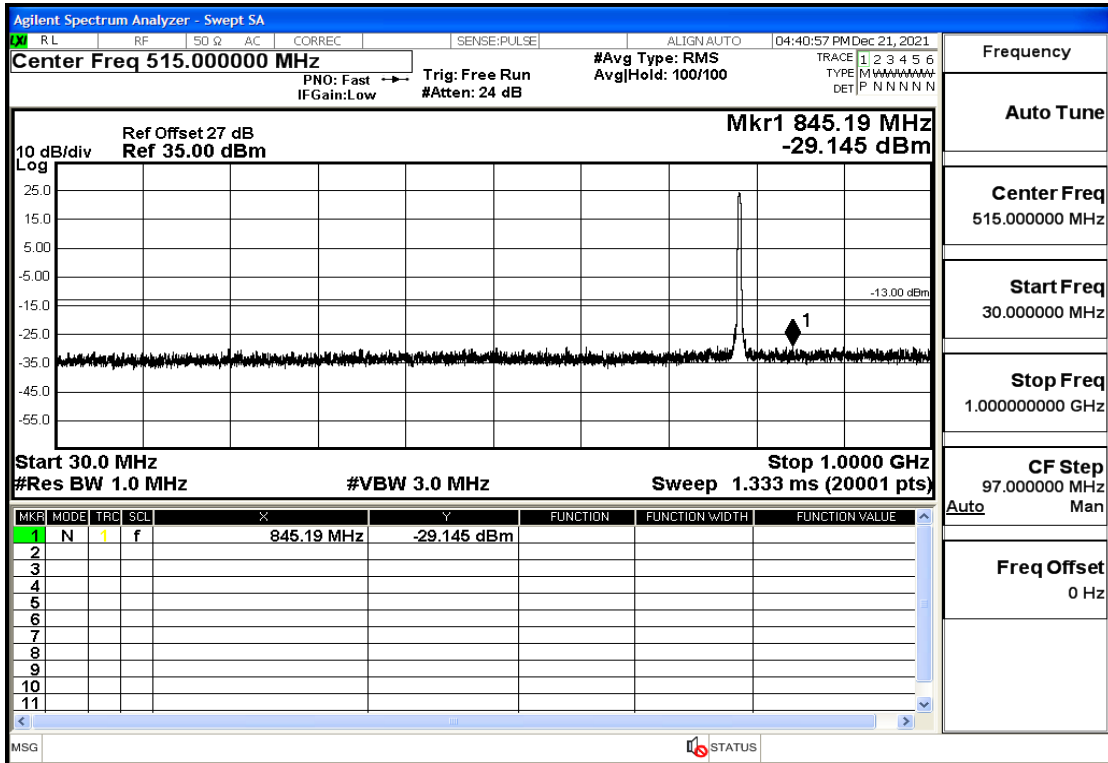
OB13-5-784.5-QPSK-12#MID@1.559GHz-1.61GHz@Pass



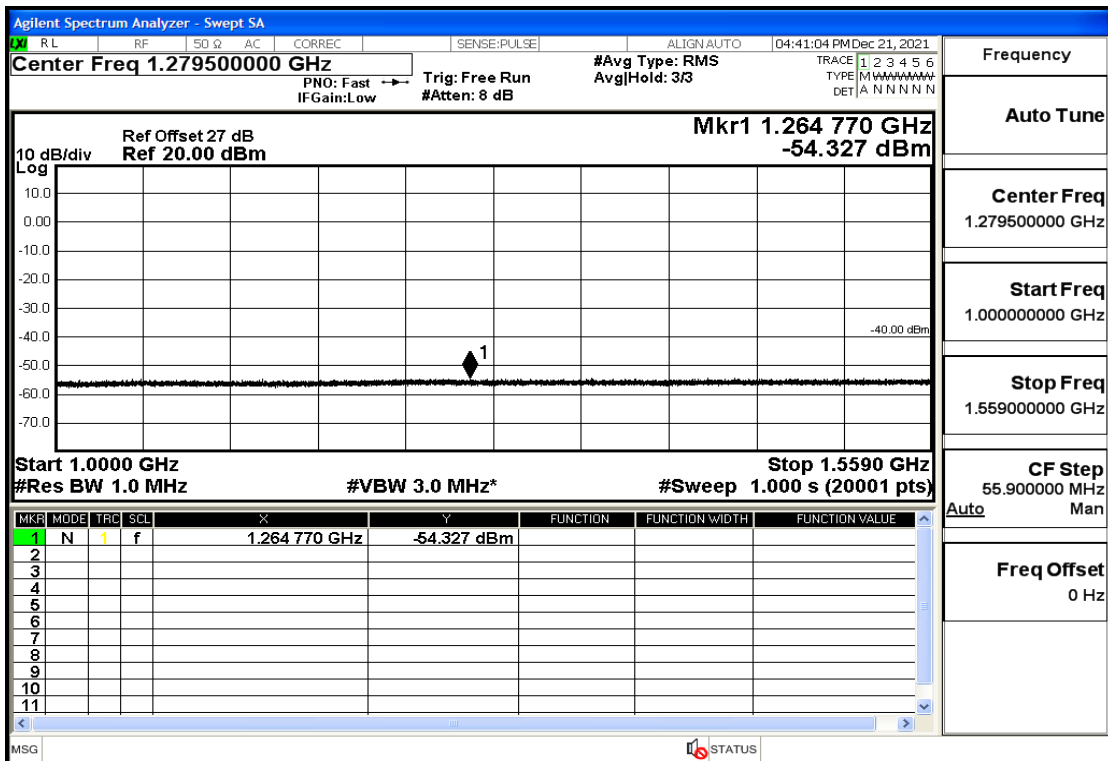
OB13-5-784.5-QPSK-12#MID@1.61GHz-9GHz@Pass



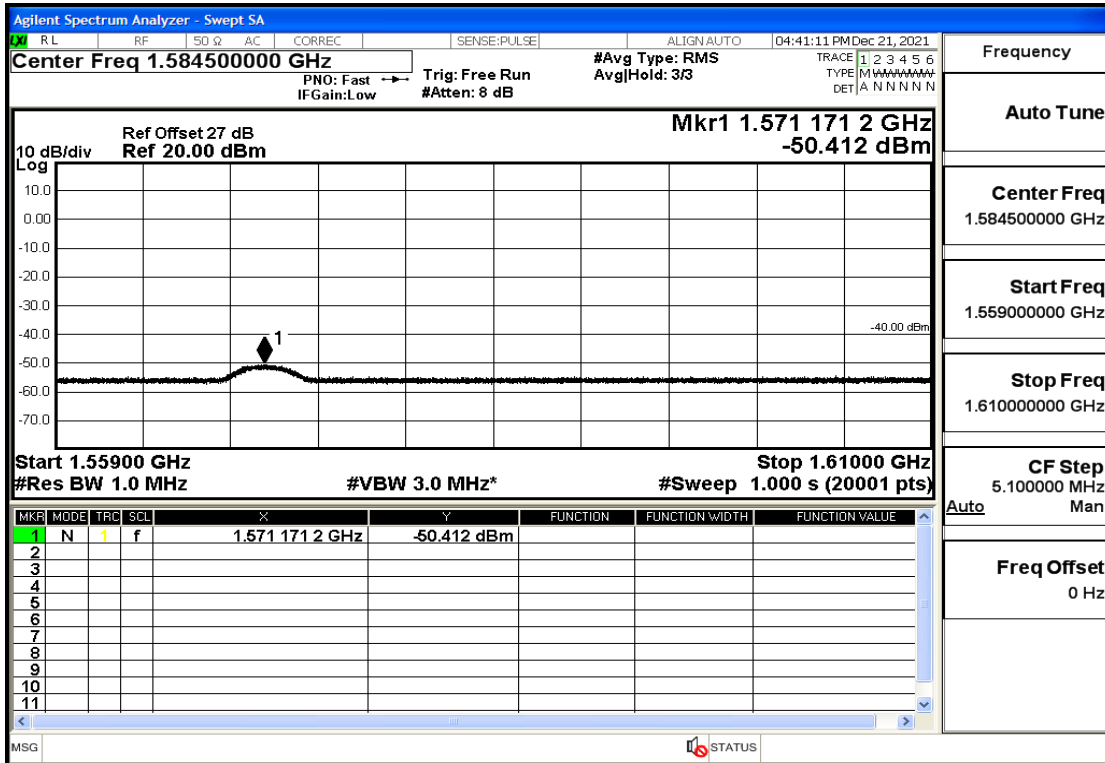
OB13-5-784.5-QPSK-12#HIGH@30mHz-1GHz@Pass



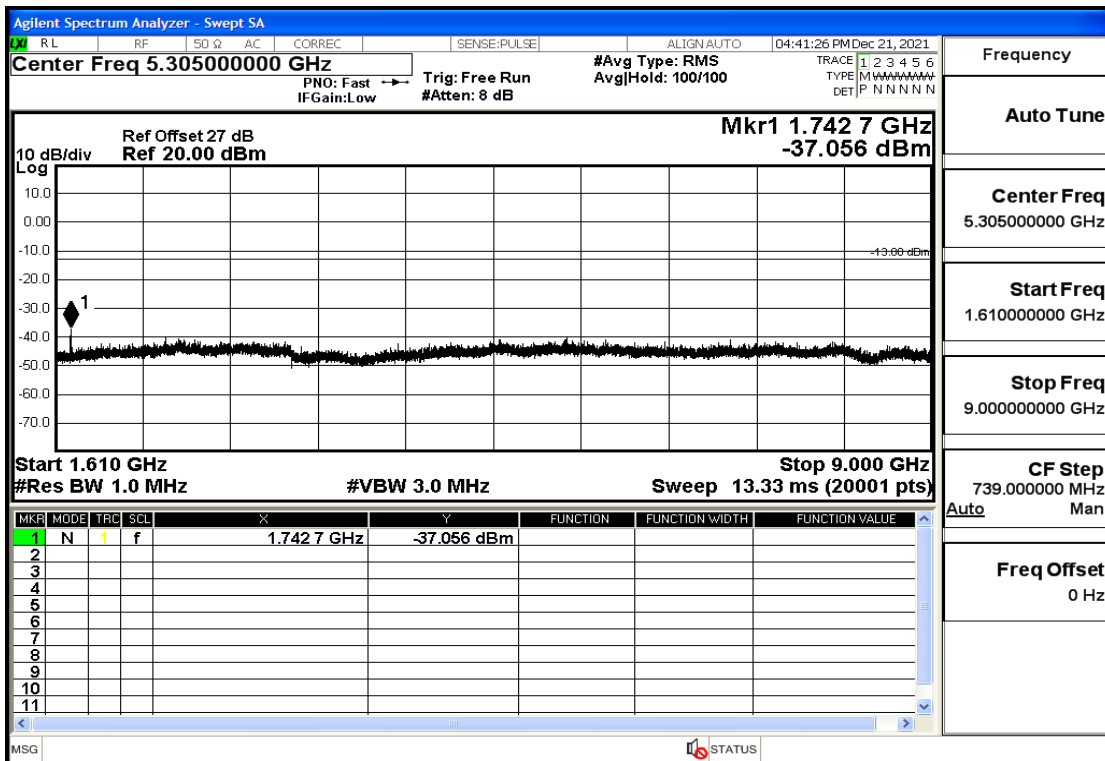
OB13-5-784.5-QPSK-12#HIGH@1GHz-1.559GHz@Pass



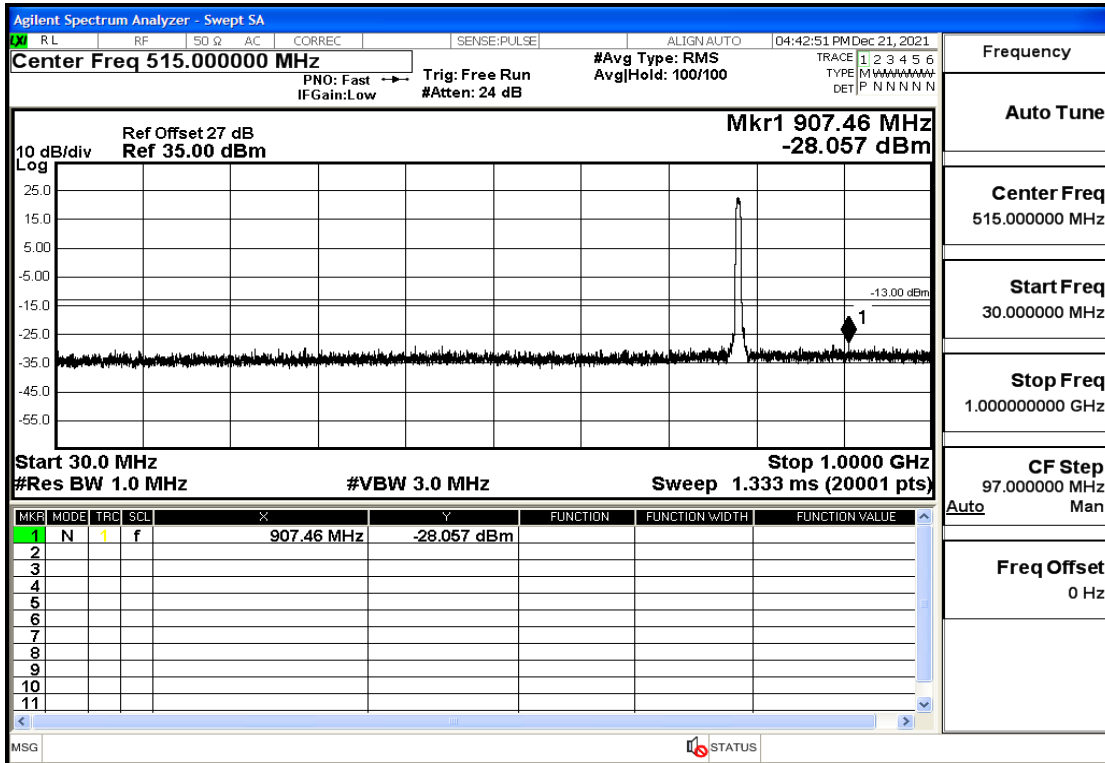
OB13-5-784.5-QPSK-12#HIGH@1.559GHz-1.61GHz@Pass



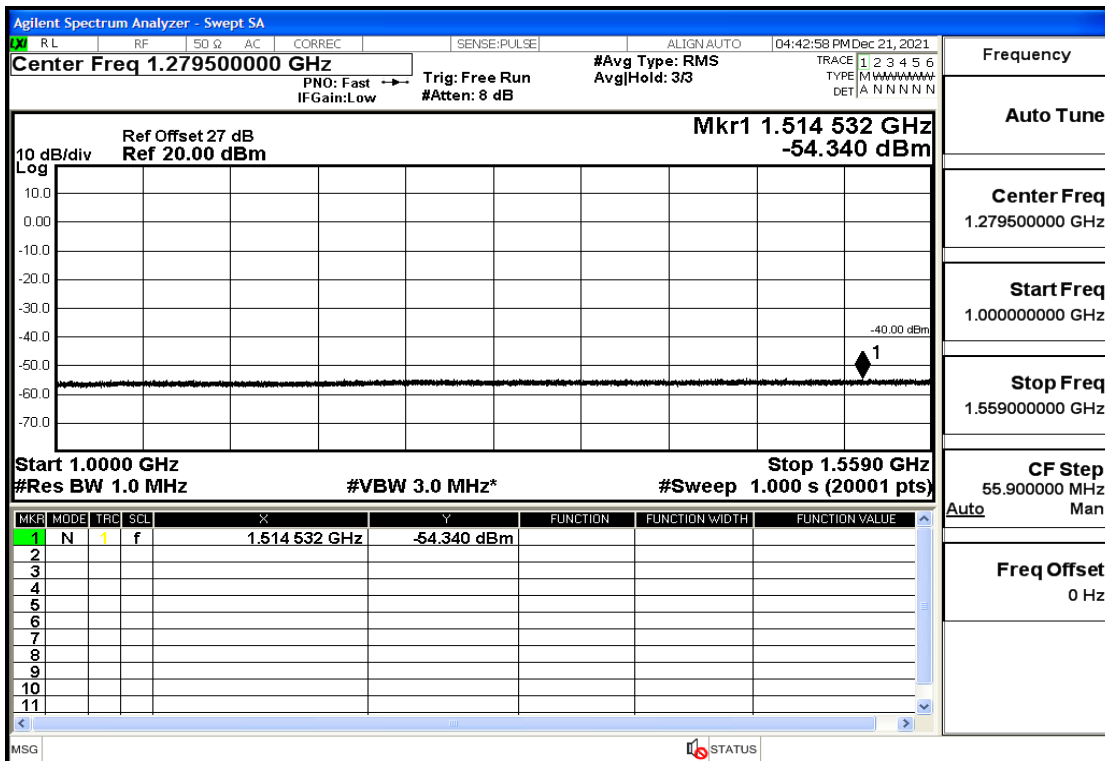
OB13-5-784.5-QPSK-12#HIGH@1.61GHz-9GHz@Pass



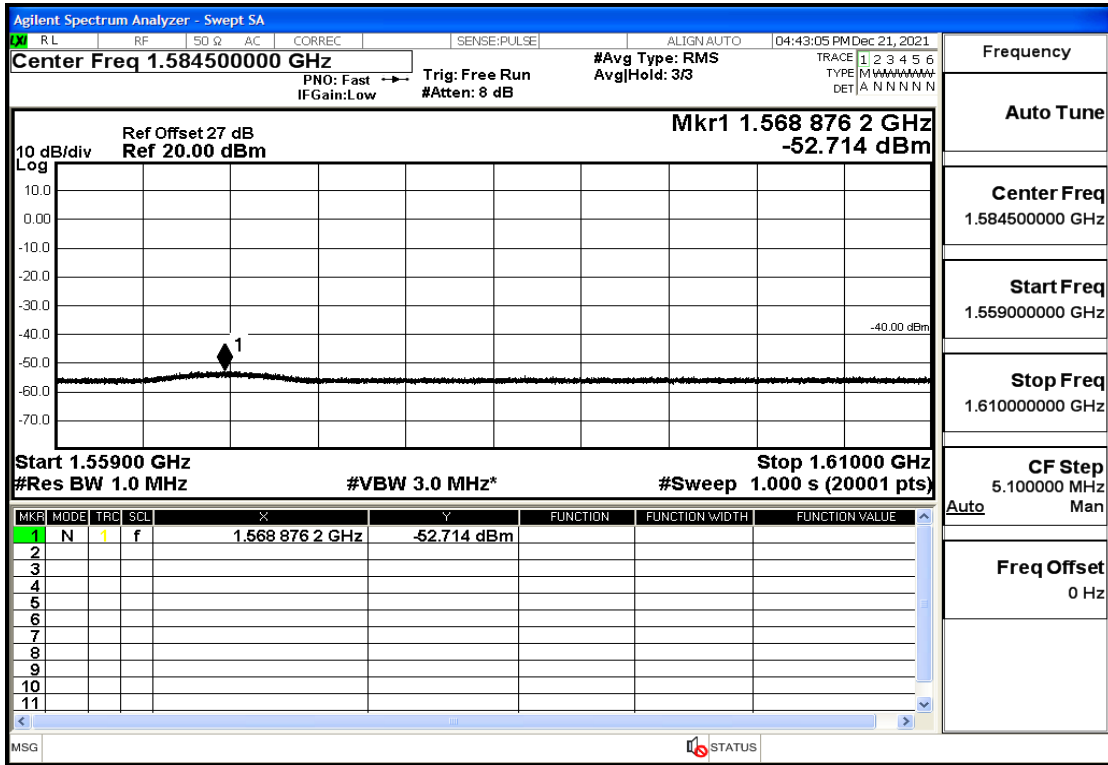
OB13-5-784.5-Q16-25#LOW@30mHz-1GHz@Pass



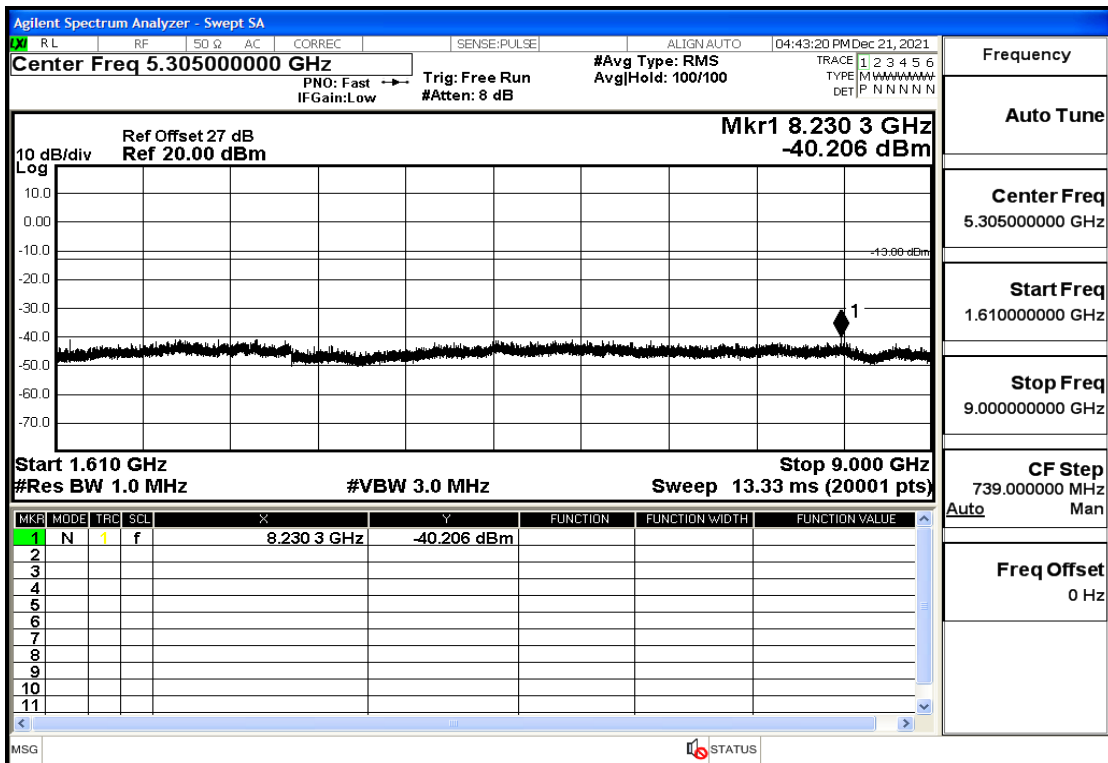
OB13-5-784.5-Q16-25#LOW@1GHz-1.559GHz@Pass



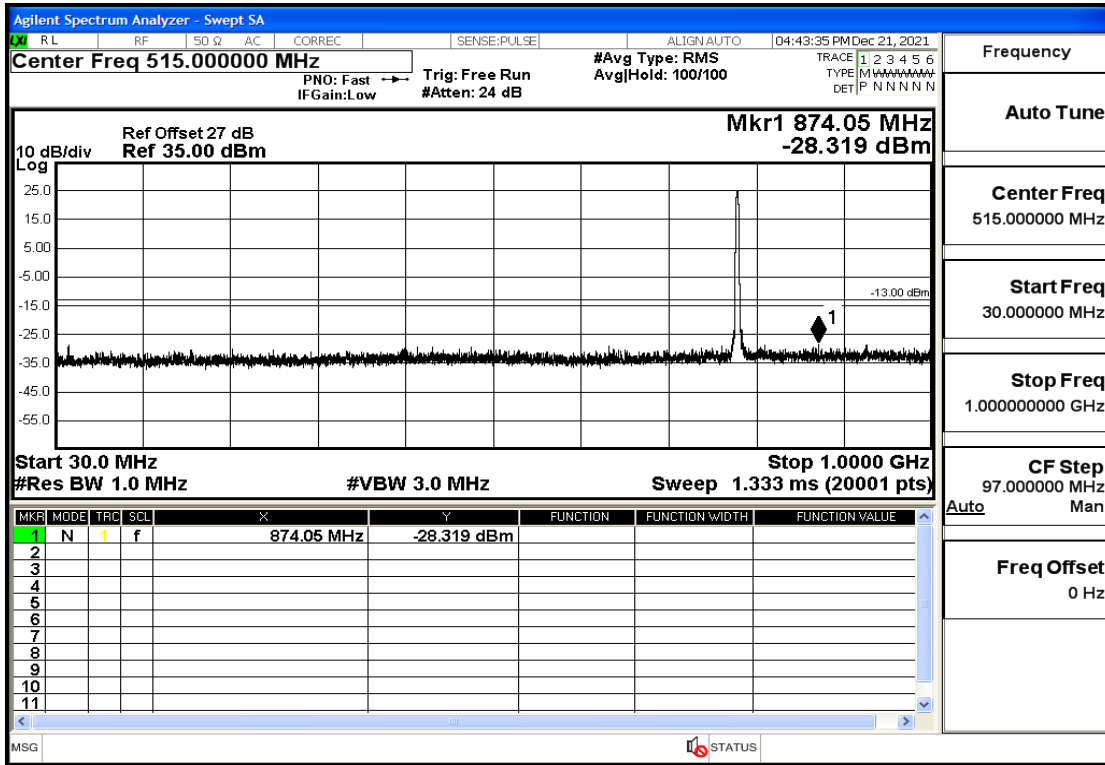
OB13-5-784.5-Q16-25#LOW@1.559GHz-1.61GHz@Pass



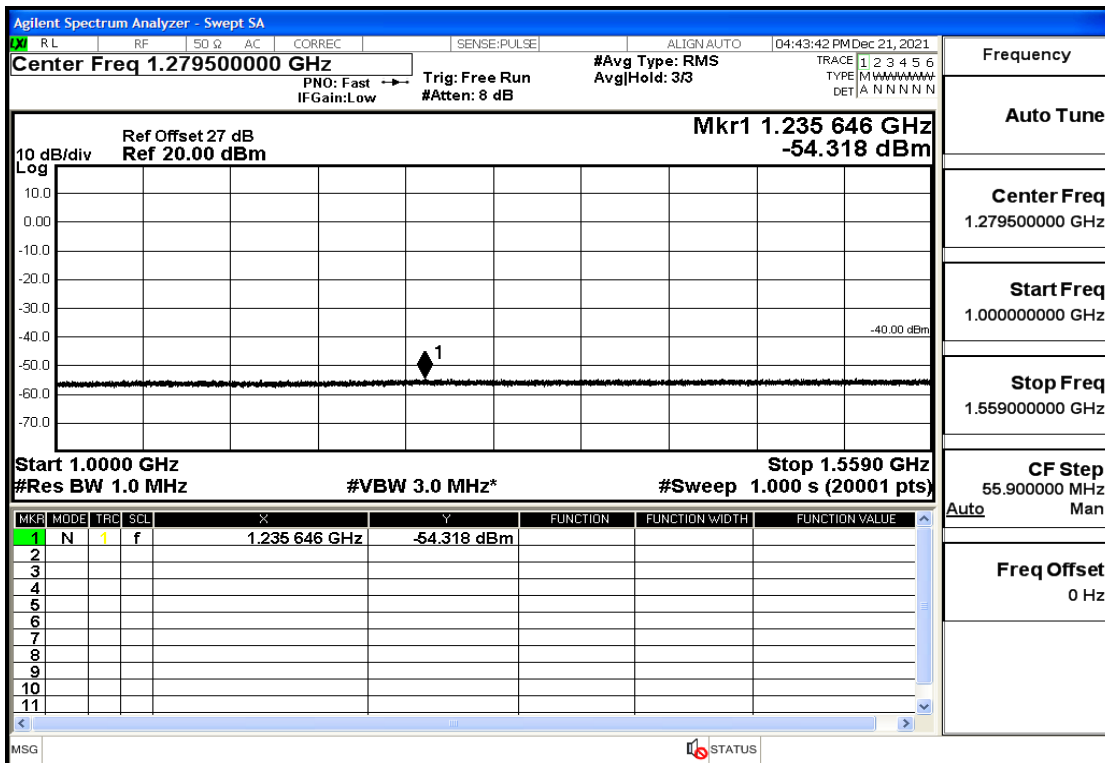
OB13-5-784.5-Q16-25#LOW@1.61GHz-9GHz@Pass



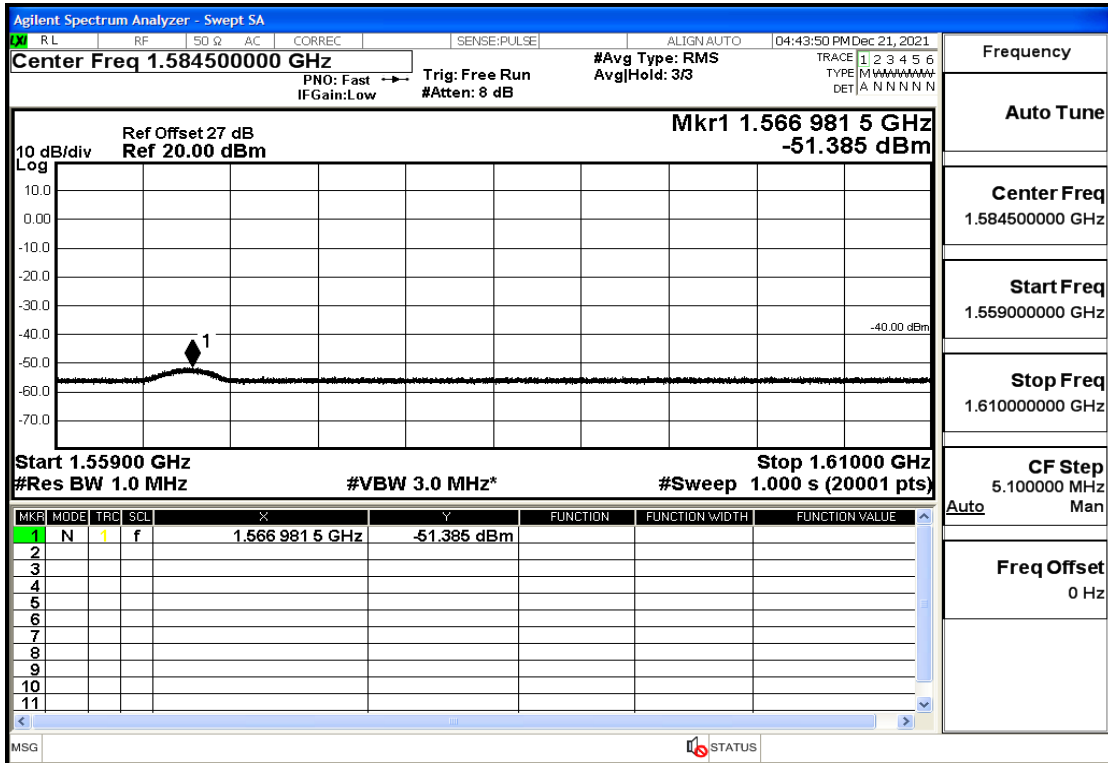
OB13-5-784.5-Q16-12#LOW@30mHz-1GHz@Pass



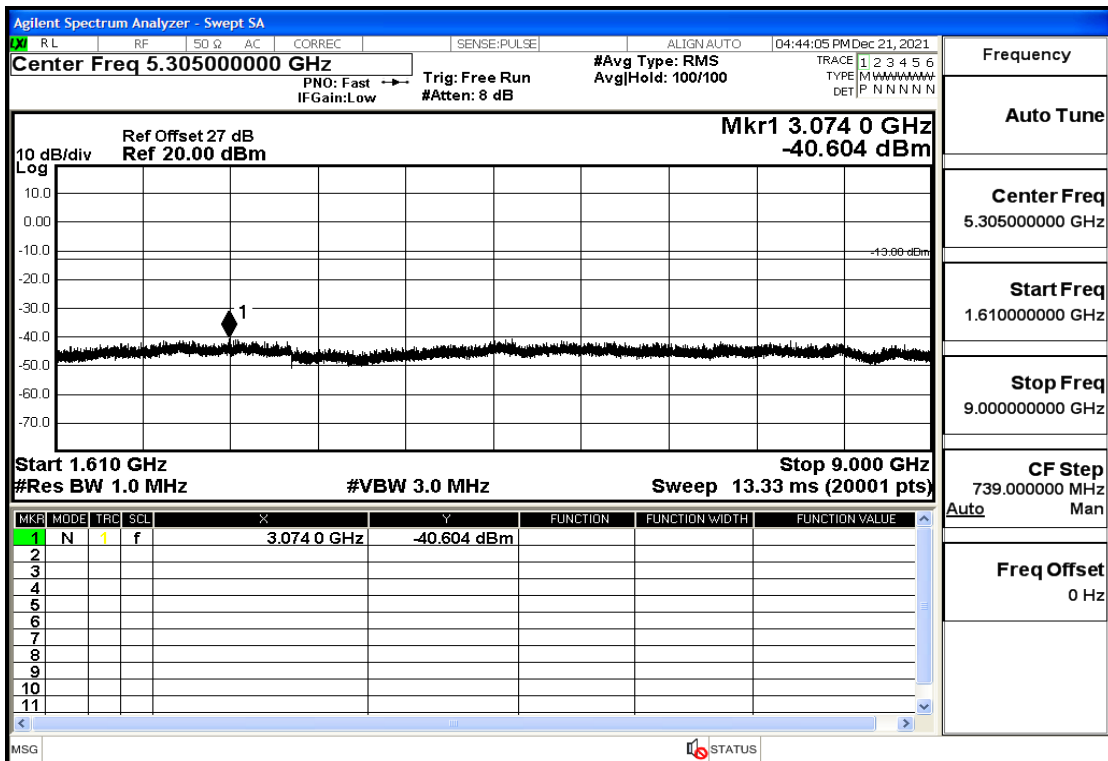
OB13-5-784.5-Q16-12#LOW@1GHz-1.559GHz@Pass



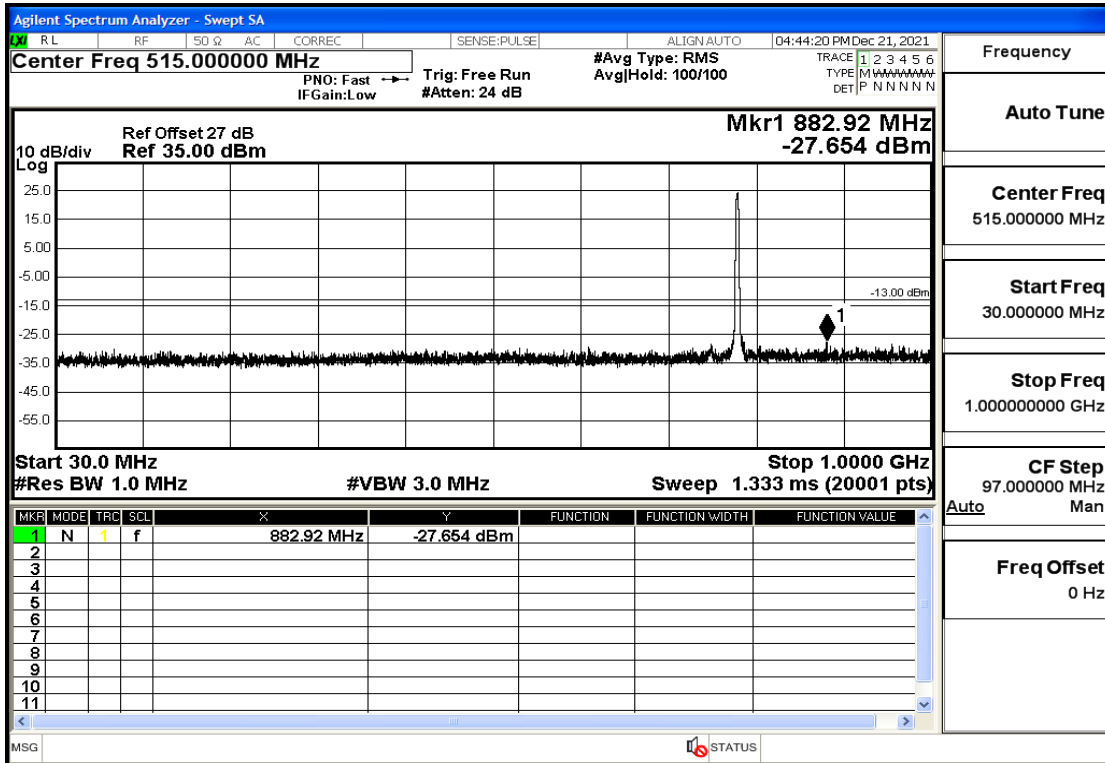
OB13-5-784.5-Q16-12#LOW@1.559GHz-1.61GHz@Pass



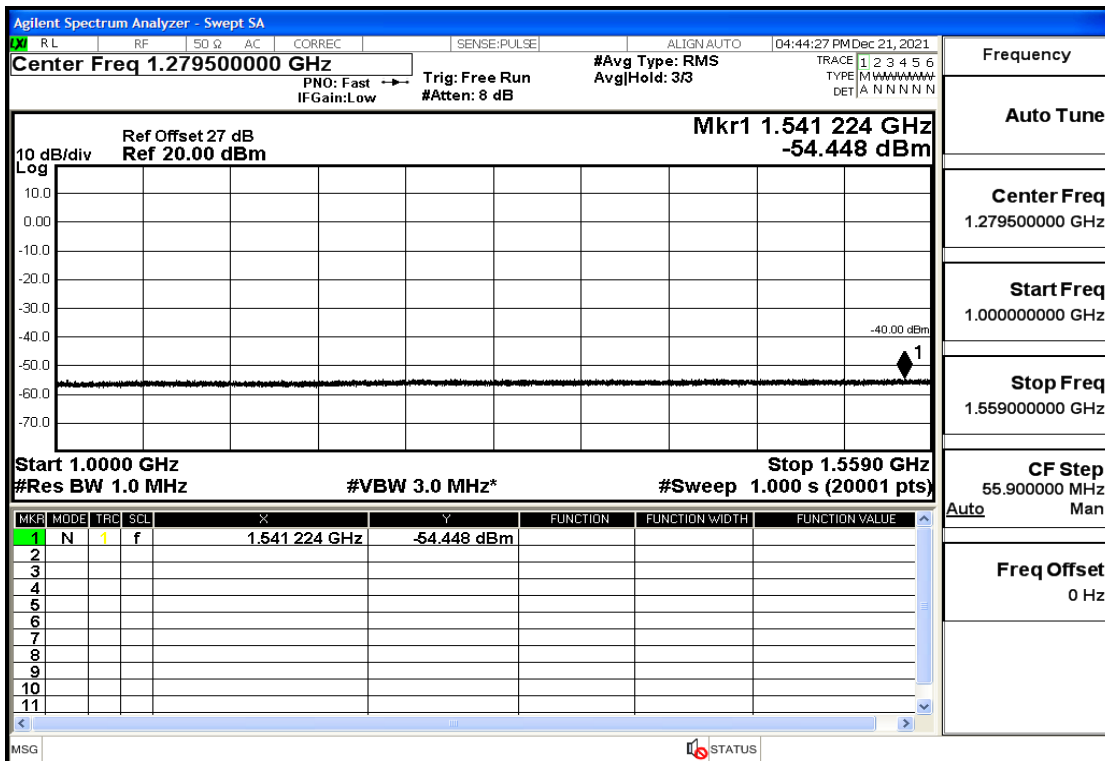
OB13-5-784.5-Q16-12#LOW@1.61GHz-9GHz@Pass



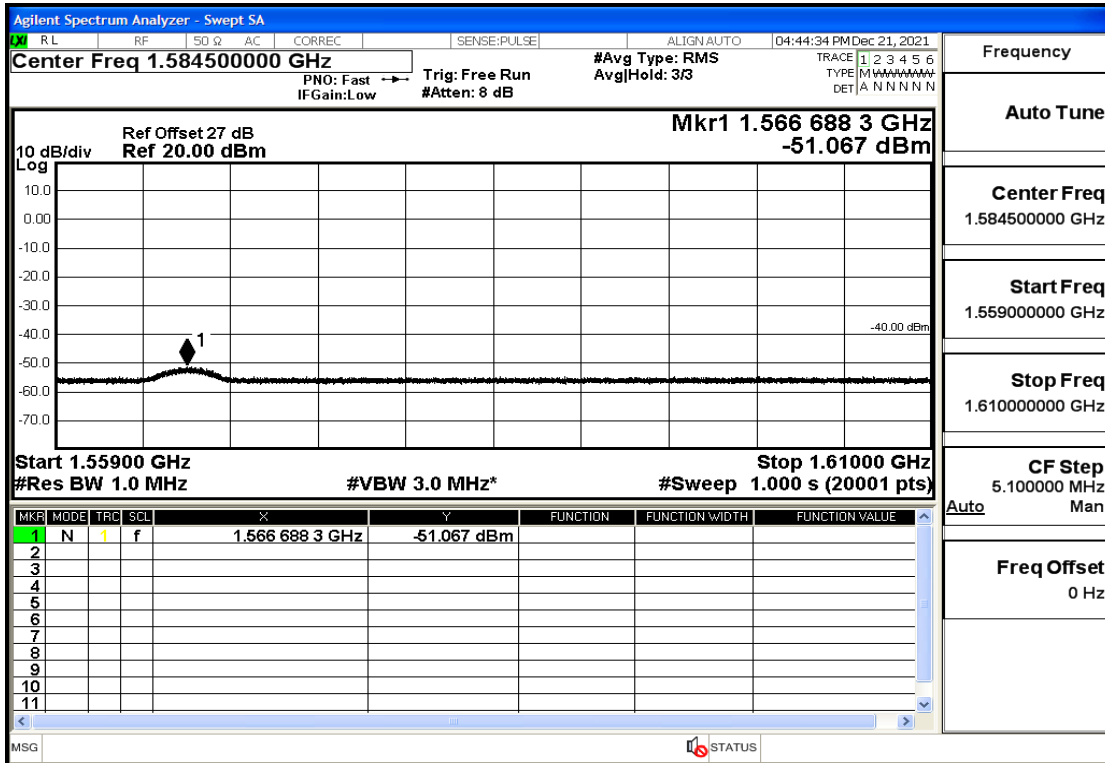
OB13-5-784.5-Q16-12#MID@30mHz-1GHz@Pass



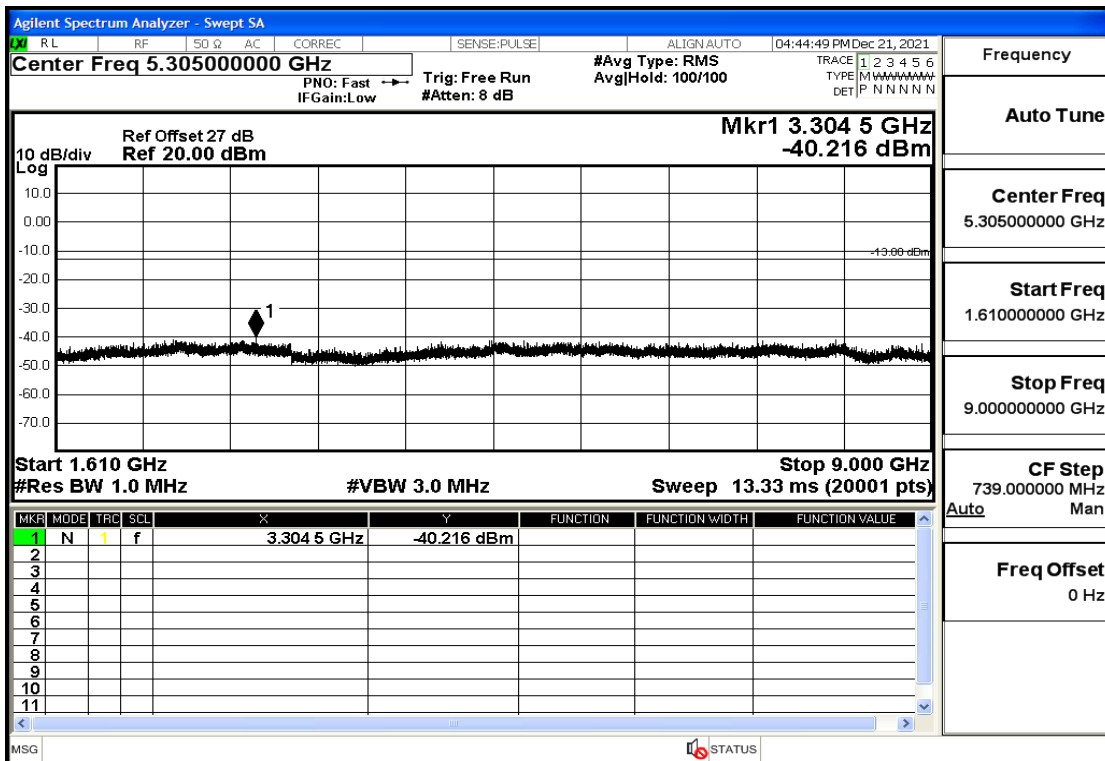
OB13-5-784.5-Q16-12#MID@1GHz-1.559GHz@Pass



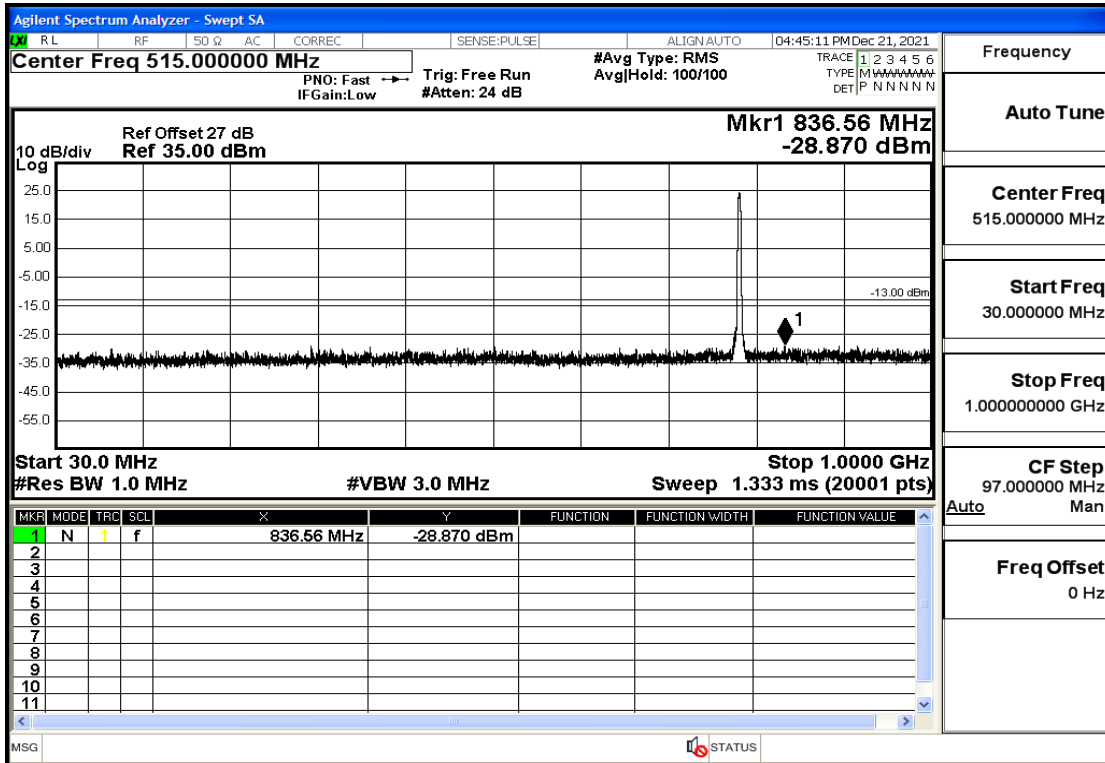
OB13-5-784.5-Q16-12#MID@1.559GHz-1.61GHz@Pass



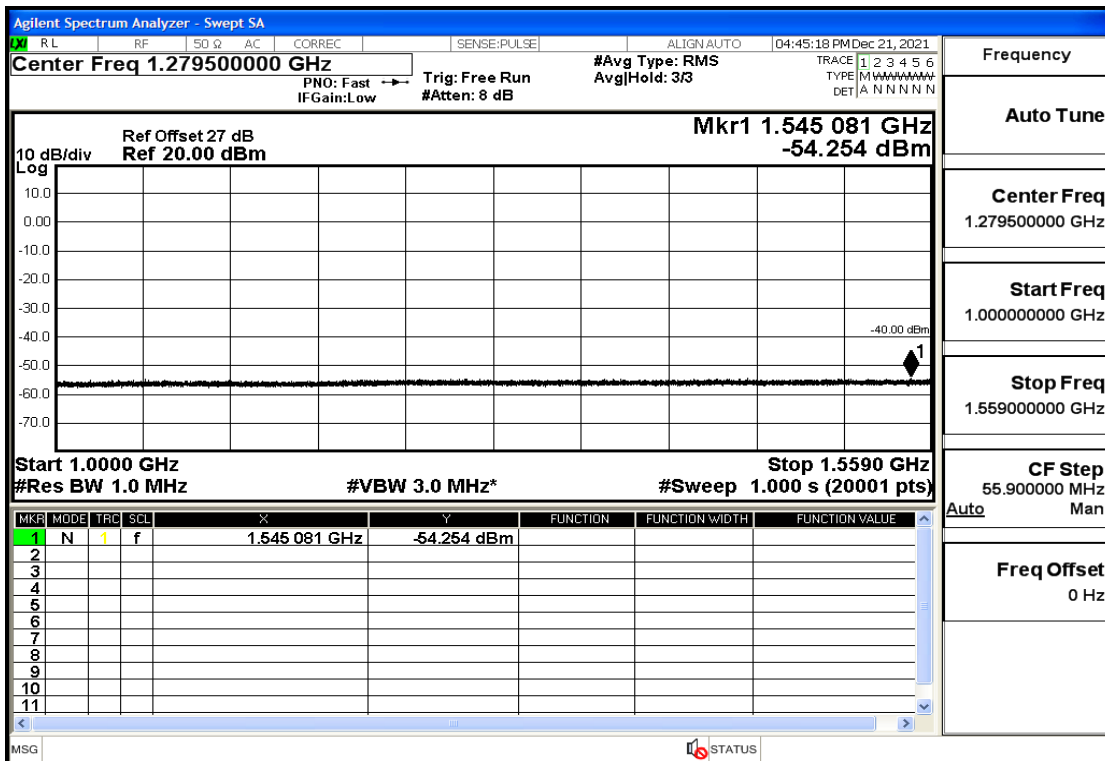
OB13-5-784.5-Q16-12#MID@1.61GHz-9GHz@Pass



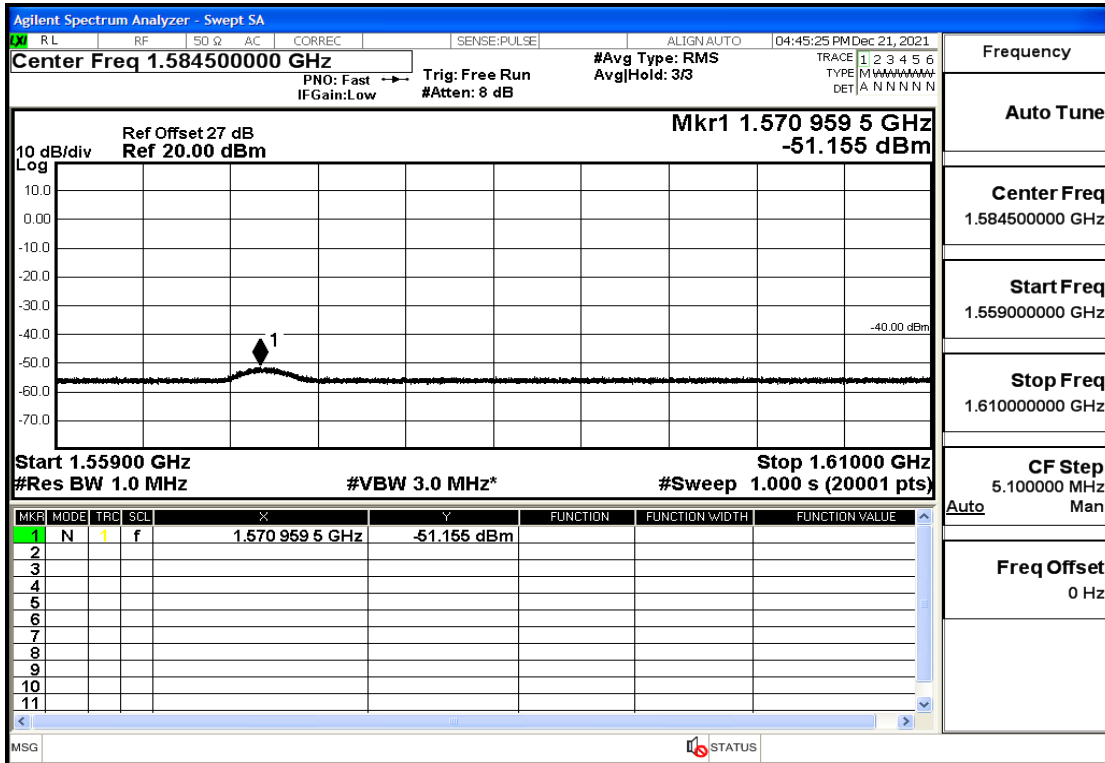
OB13-5-784.5-Q16-12#HIGH@30mHz-1GHz@Pass



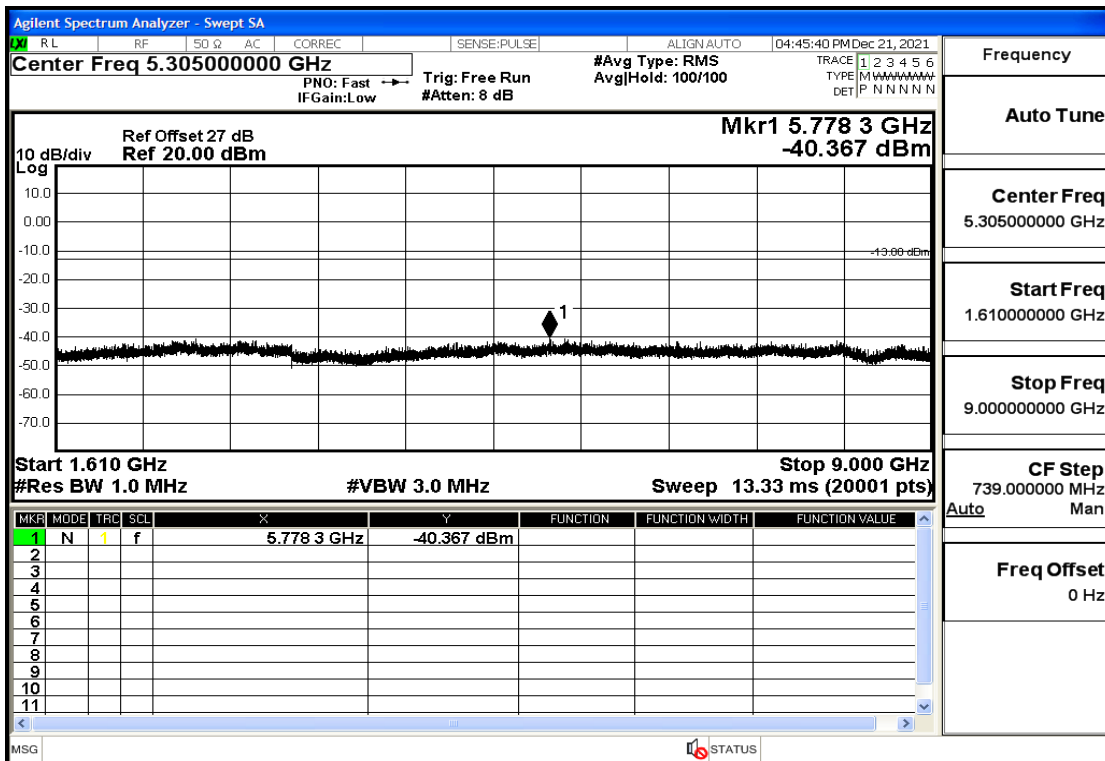
OB13-5-784.5-Q16-12#HIGH@1GHz-1.559GHz@Pass



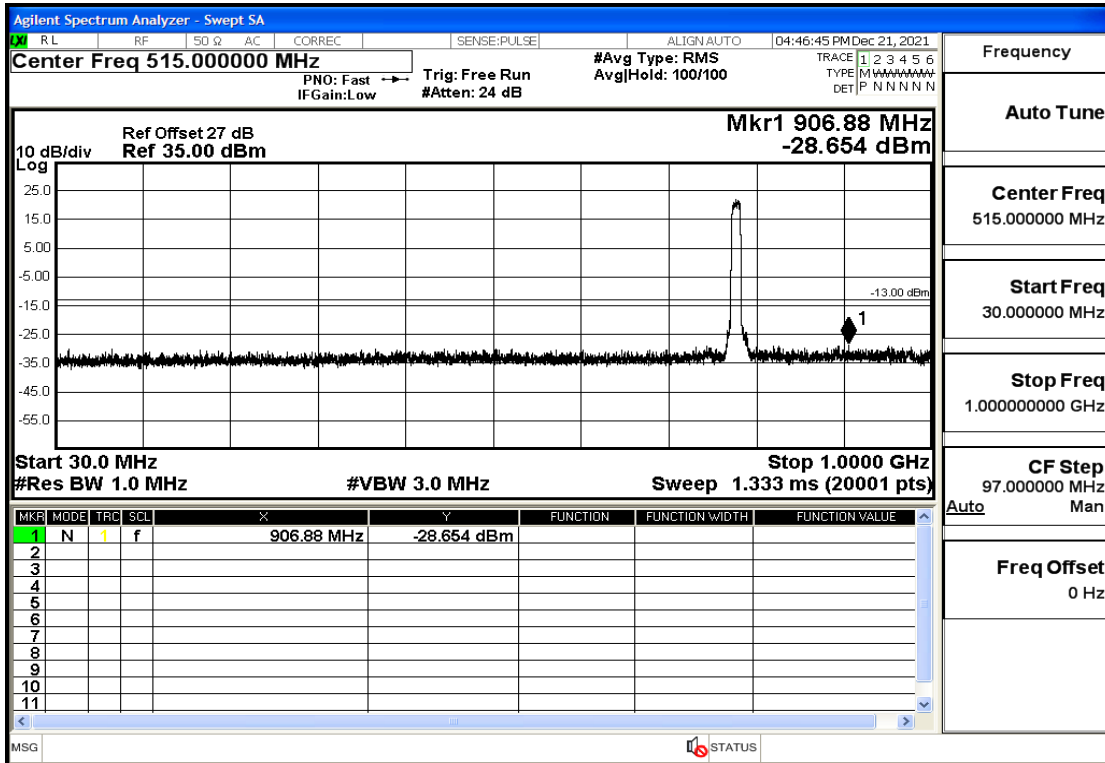
OB13-5-784.5-Q16-12#HIGH@1.559GHz-1.61GHz@Pass



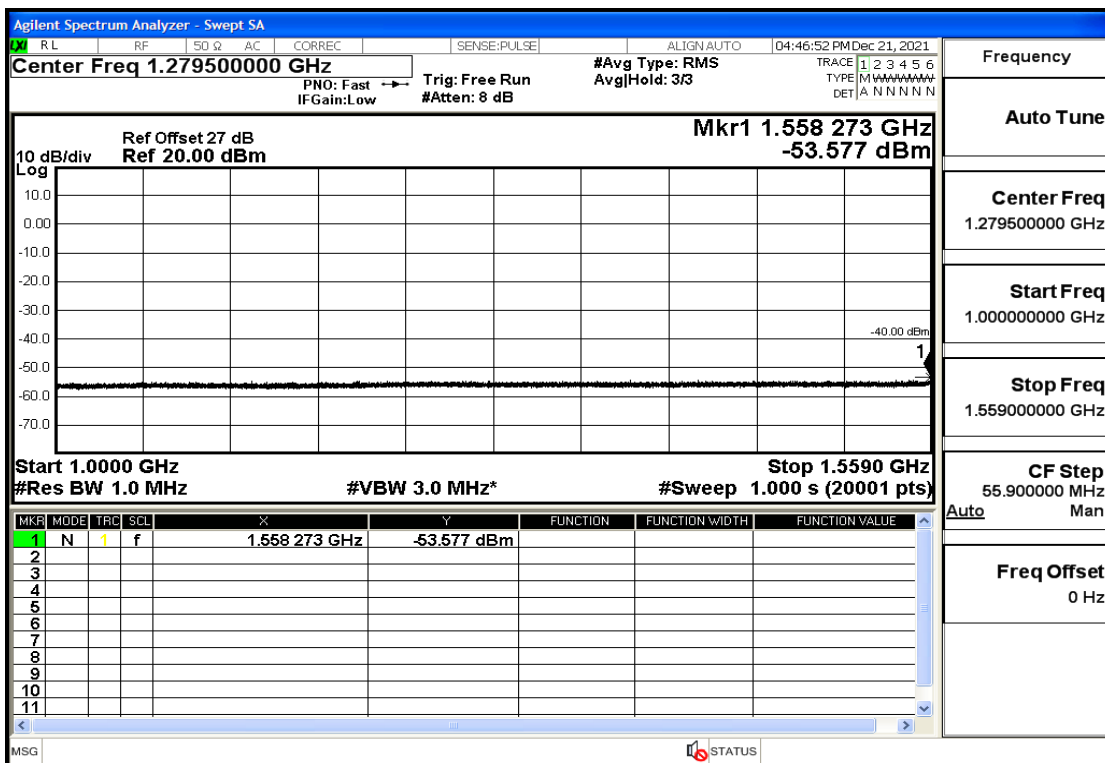
OB13-5-784.5-Q16-12#HIGH@1.61GHz-9GHz@Pass



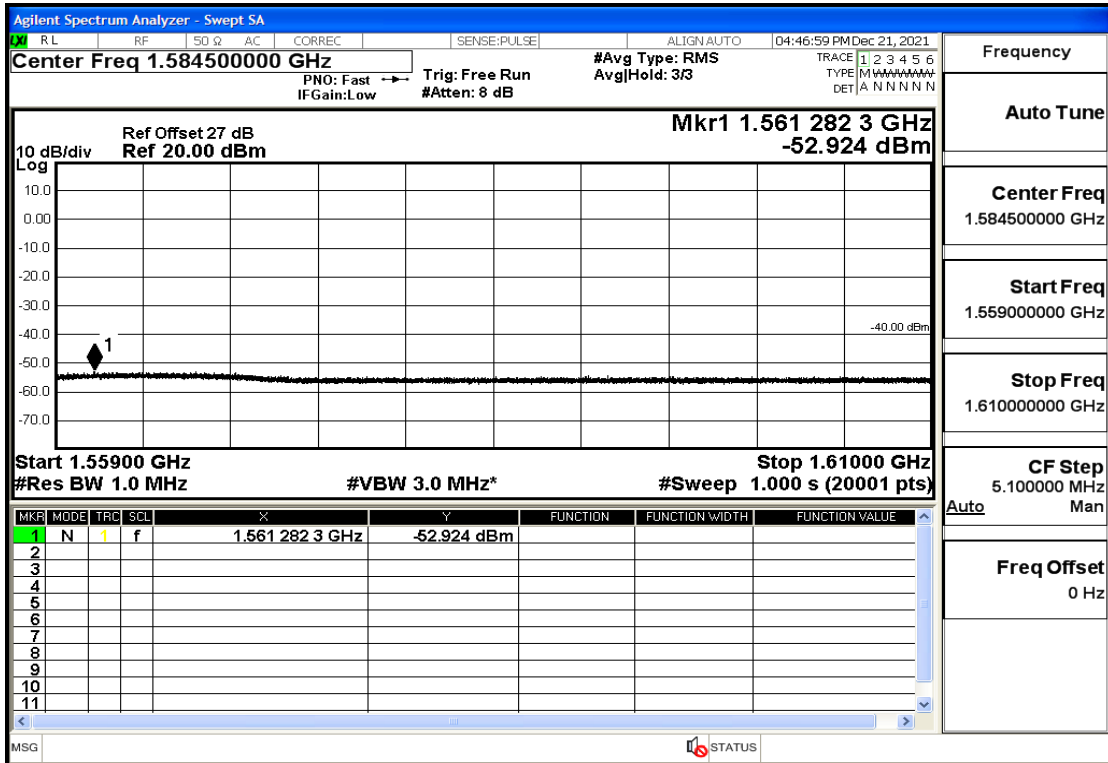
OB13-10-782-QPSK-50#LOW@30mHz-1GHz@Pass



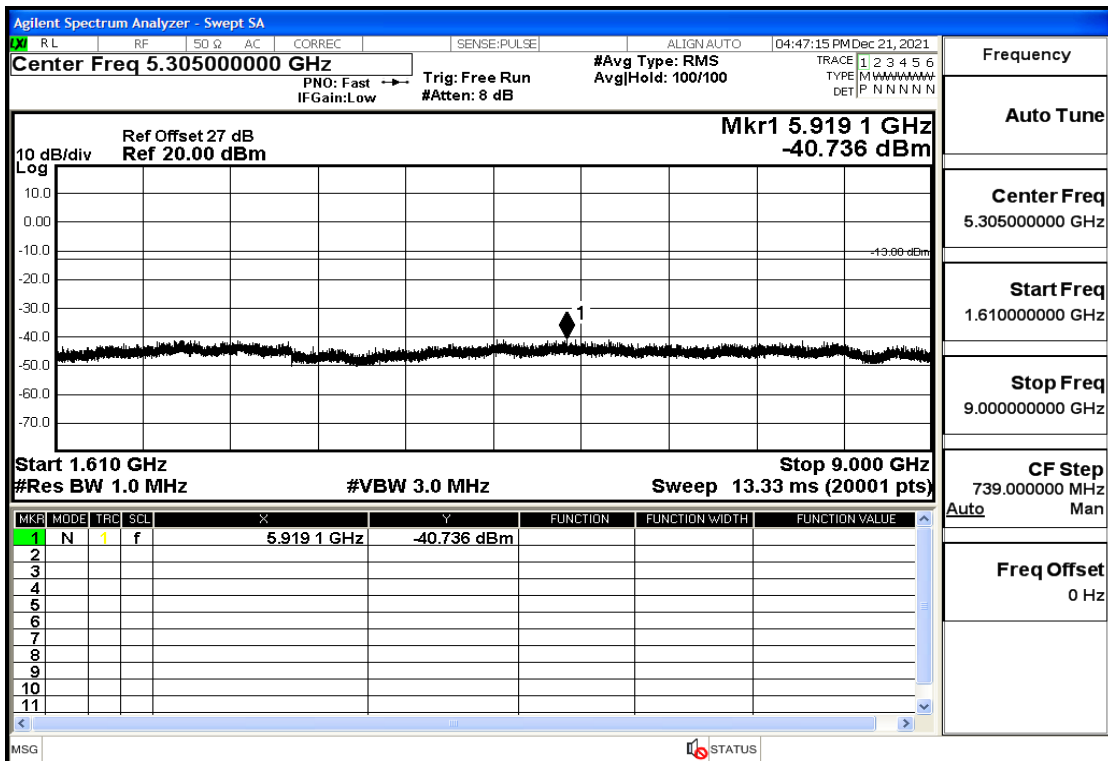
OB13-10-782-QPSK-50#LOW@1GHz-1.559GHz@Pass



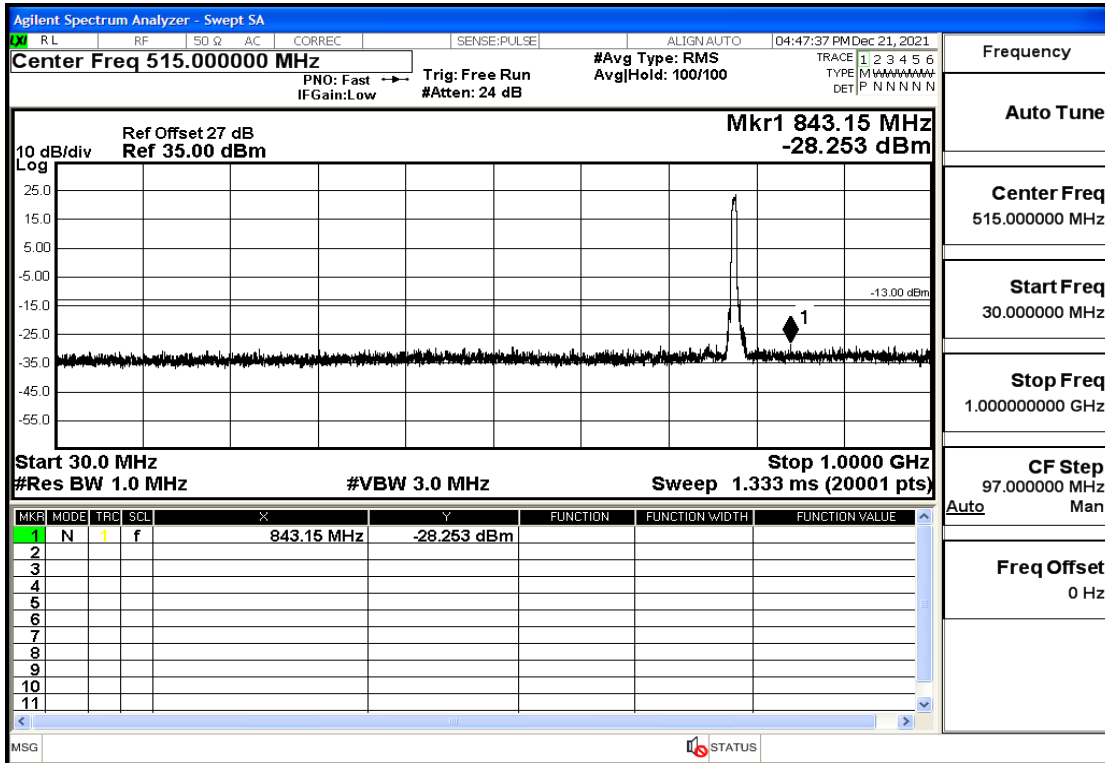
OB13-10-782-QPSK-50#LOW@1.559GHz-1.61GHz@Pass



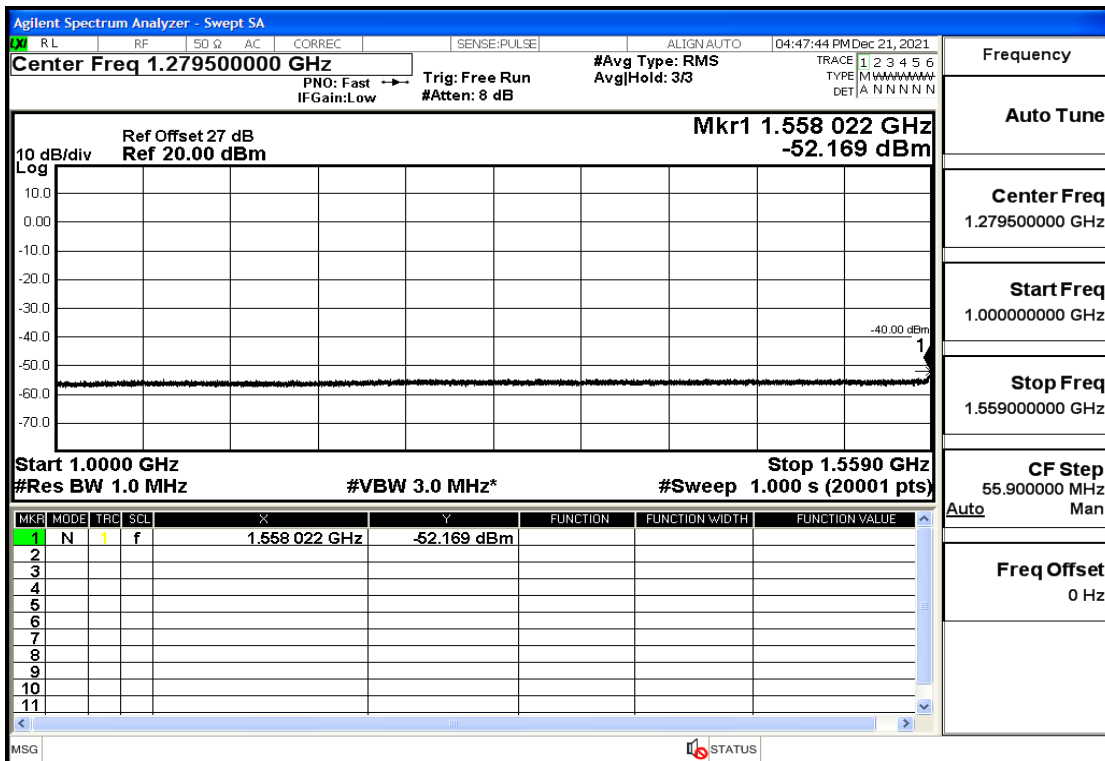
OB13-10-782-QPSK-50#LOW@1.61GHz-9GHz@Pass



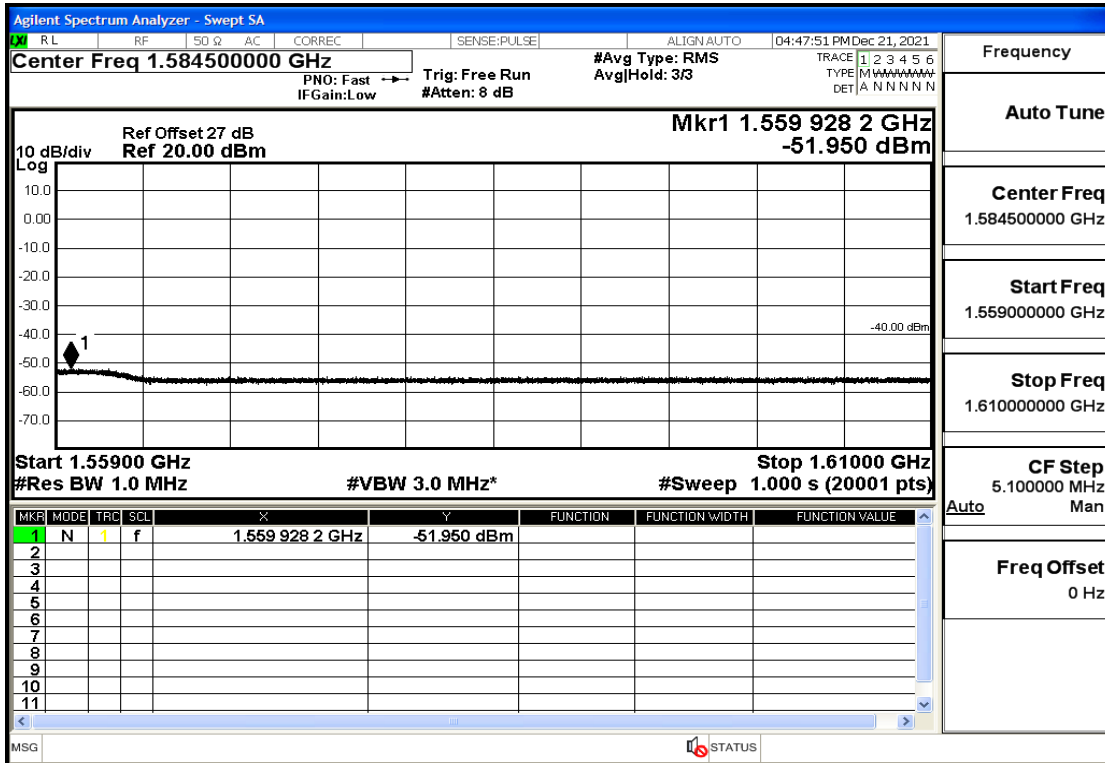
OB13-10-782-QPSK-25#LOW@30mHz-1GHz@Pass



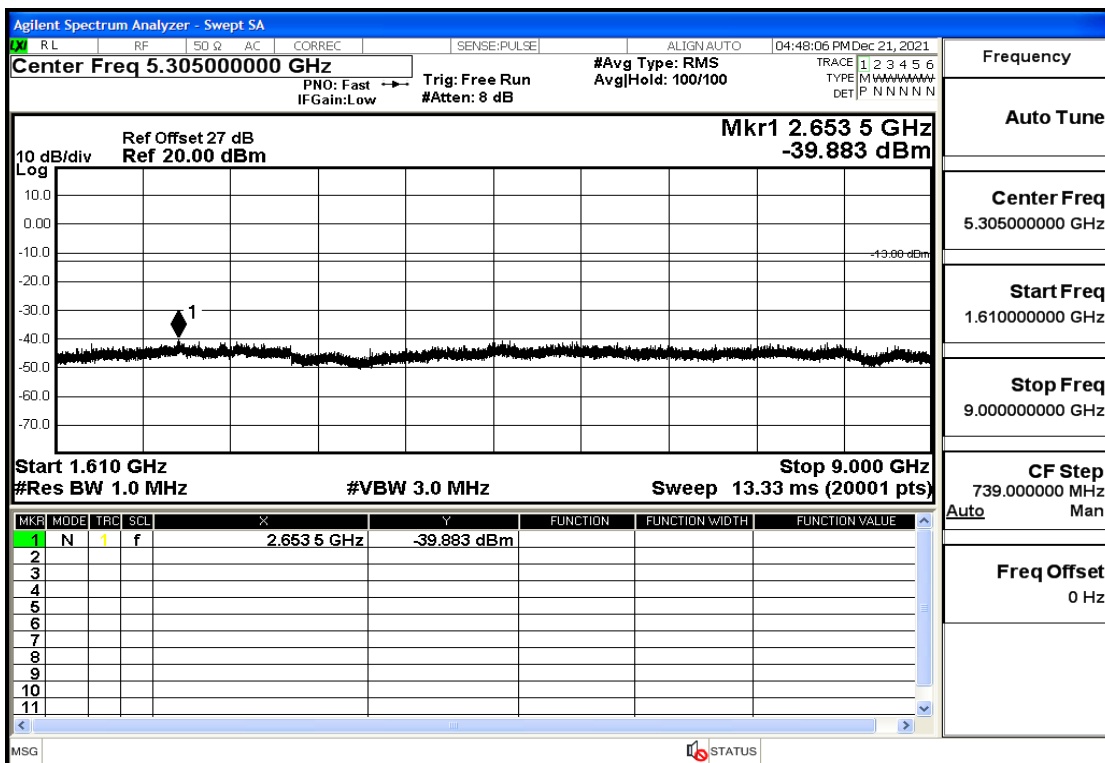
OB13-10-782-QPSK-25#LOW@1GHz-1.559GHz@Pass



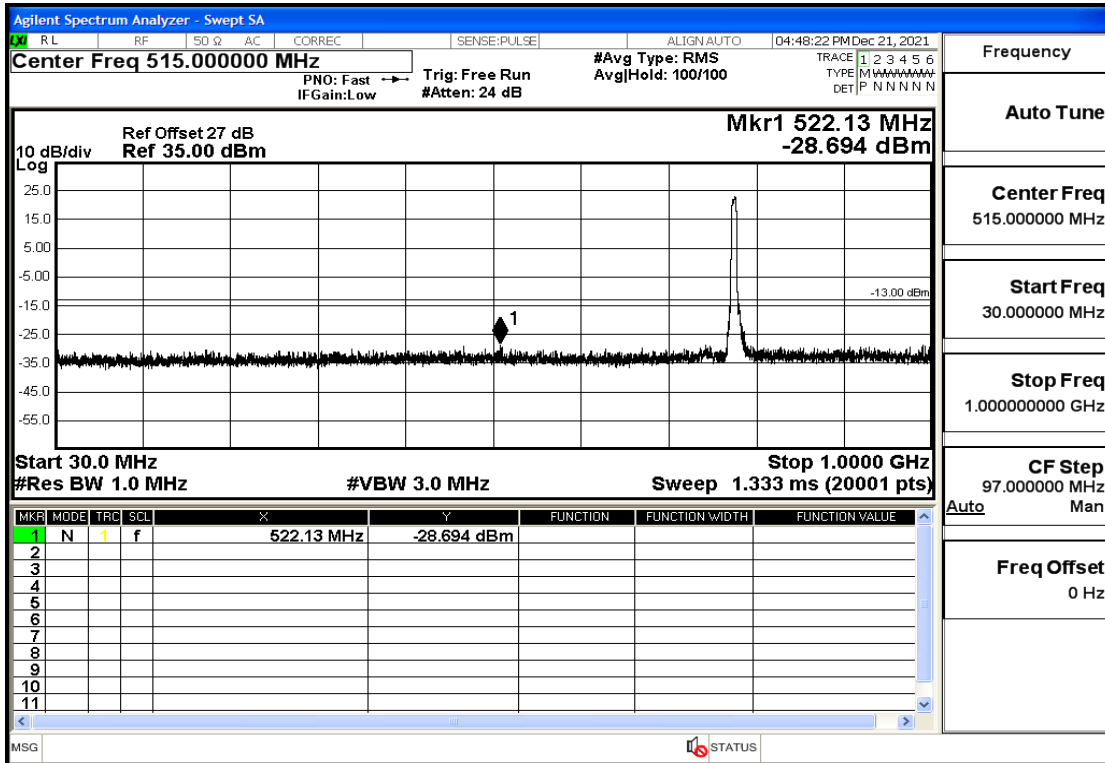
OB13-10-782-QPSK-25#LOW@1.559GHz-1.61GHz@Pass



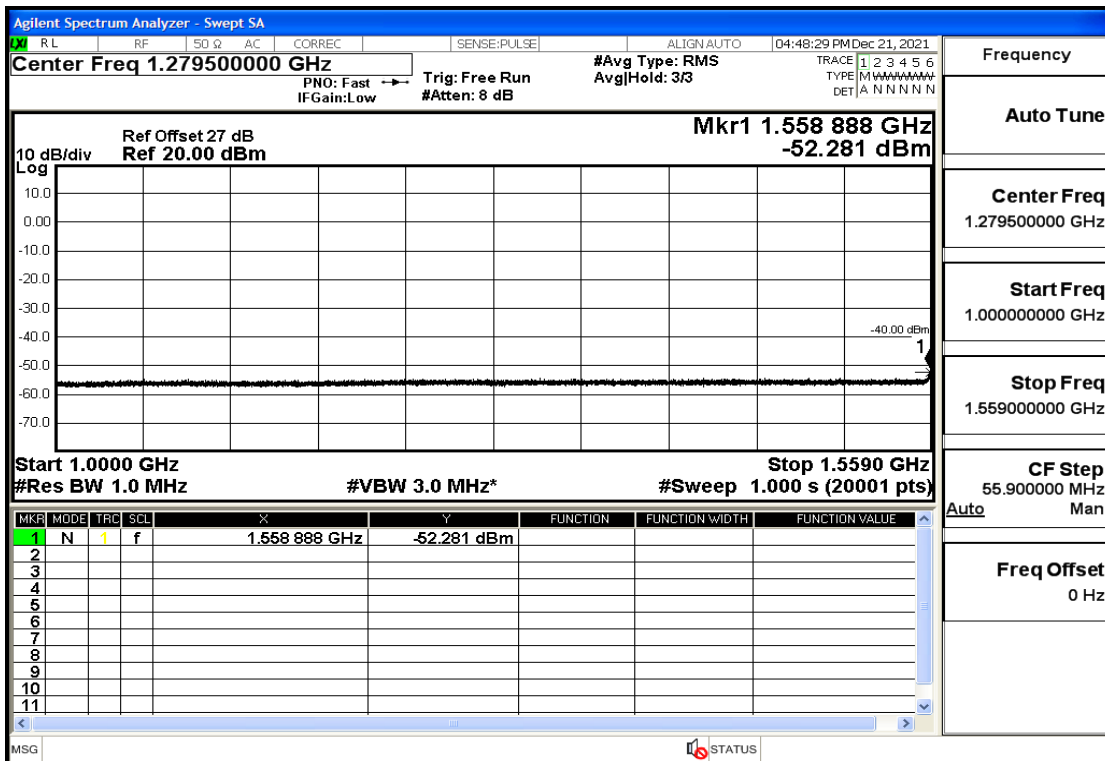
OB13-10-782-QPSK-25#LOW@1.61GHz-9GHz@Pass



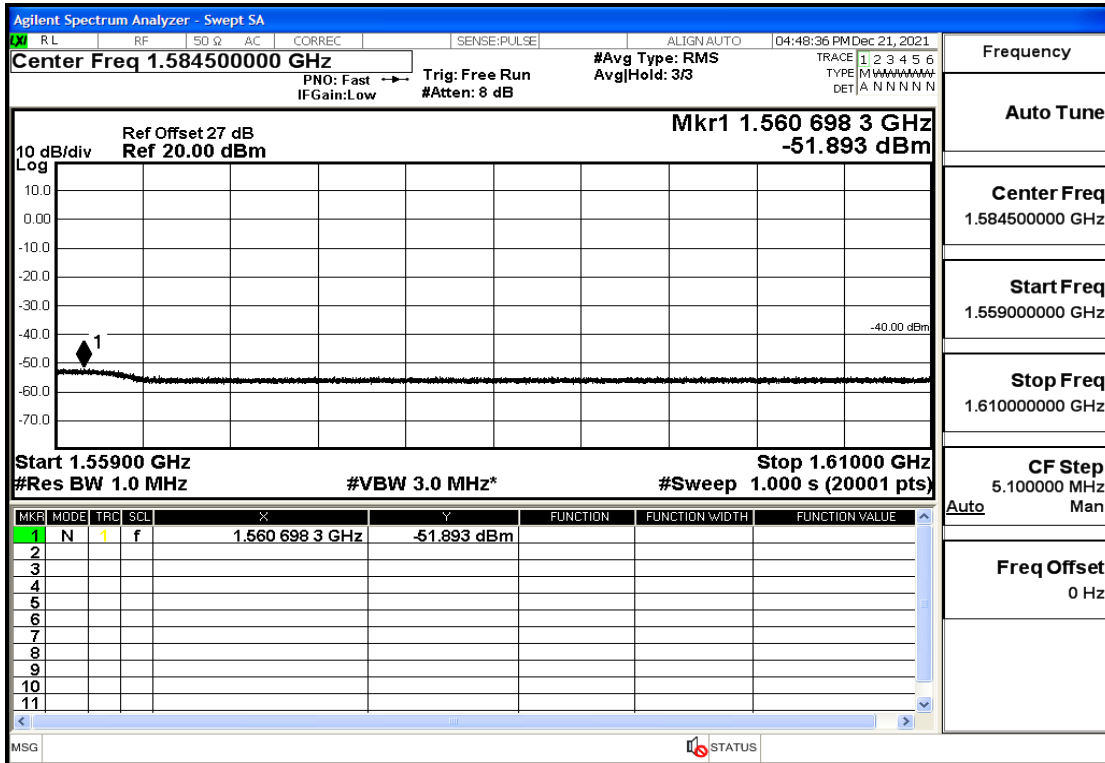
OB13-10-782-QPSK-25#MID@30mHz-1GHz@Pass



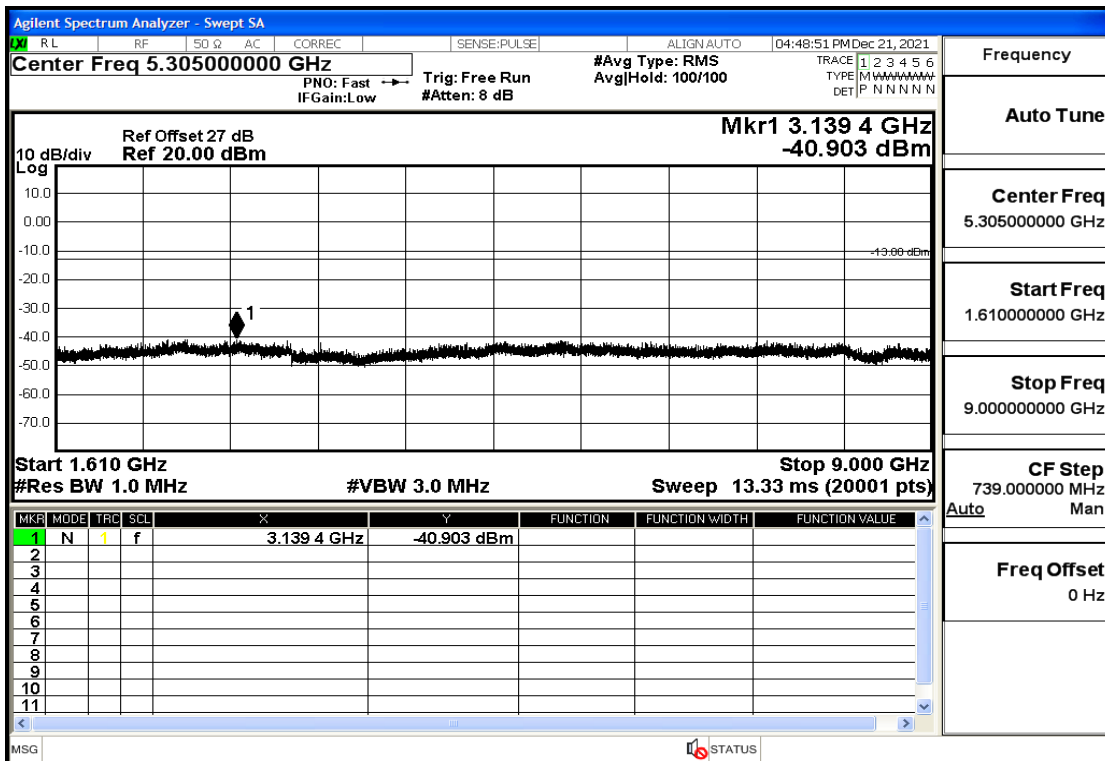
OB13-10-782-QPSK-25#MID@1GHz-1.559GHz@Pass



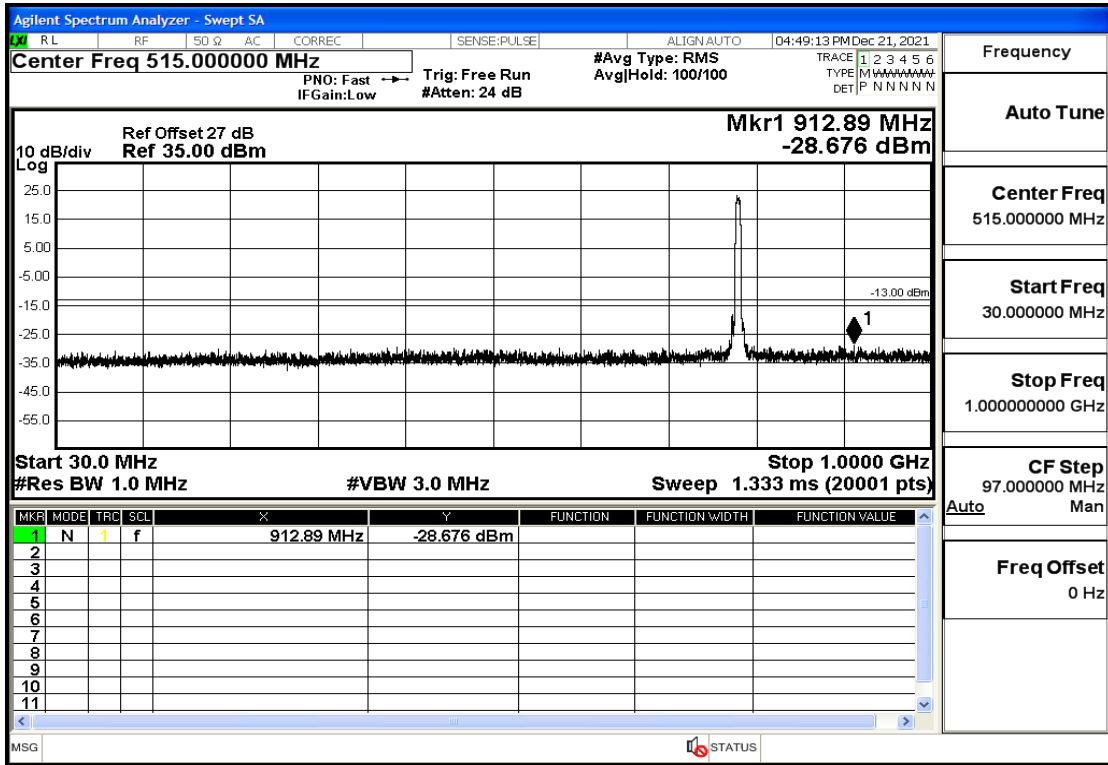
OB13-10-782-QPSK-25#MID@1.559GHz-1.61GHz@Pass



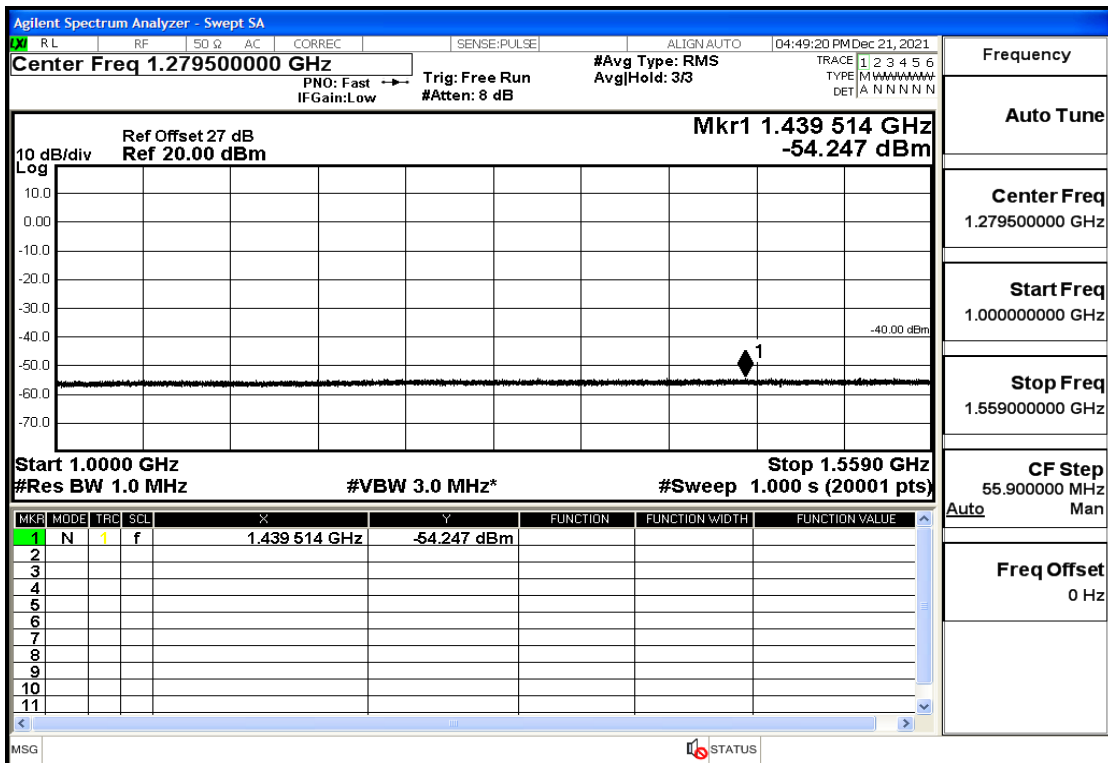
OB13-10-782-QPSK-25#MID@1.61GHz-9GHz@Pass



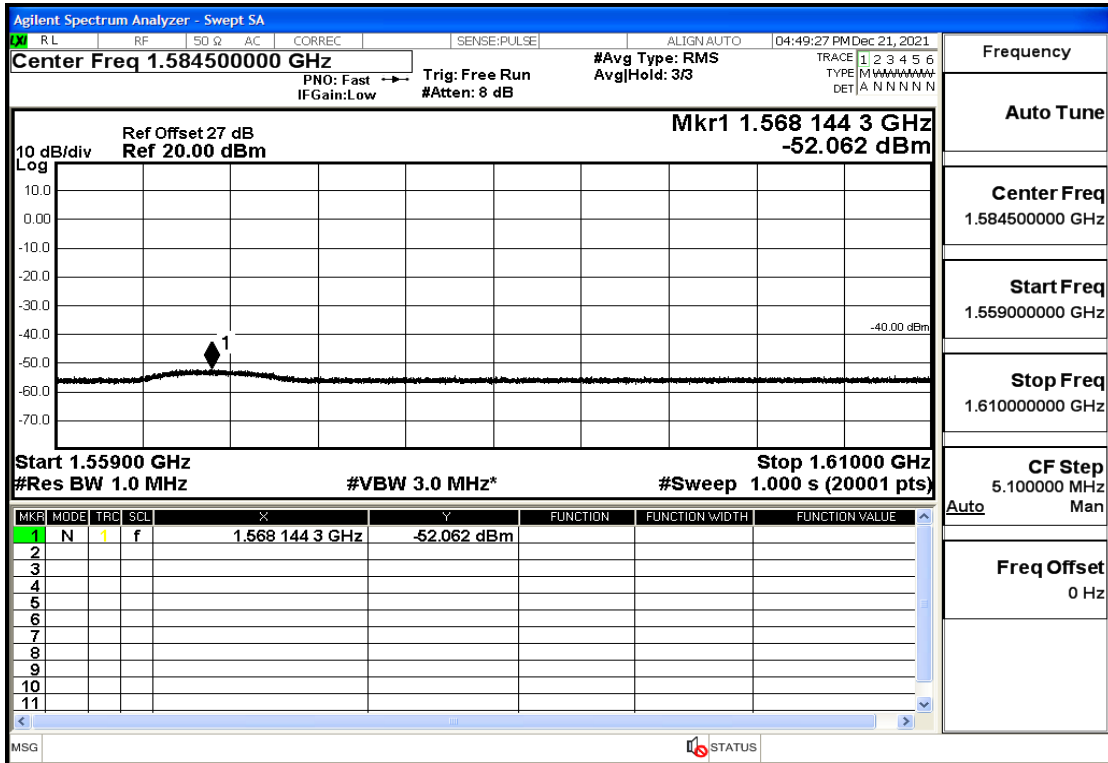
OB13-10-782-QPSK-25#HIGH@30mHz-1GHz@Pass



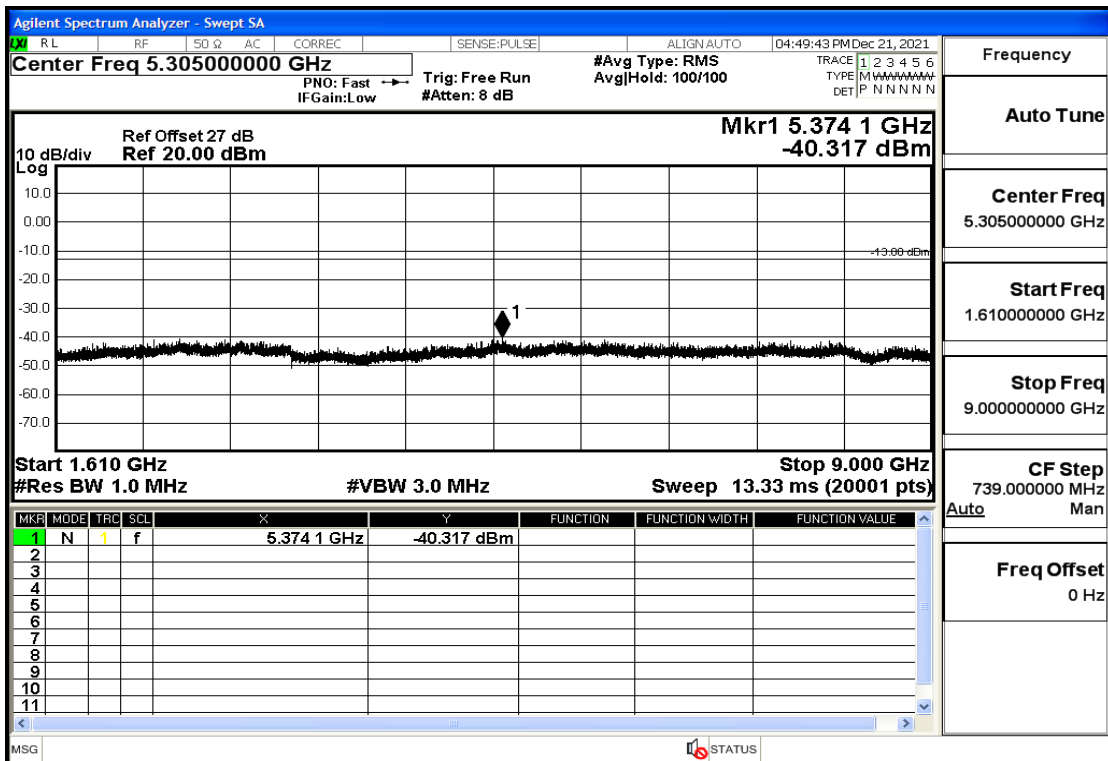
OB13-10-782-QPSK-25#HIGH@1GHz-1.559GHz@Pass



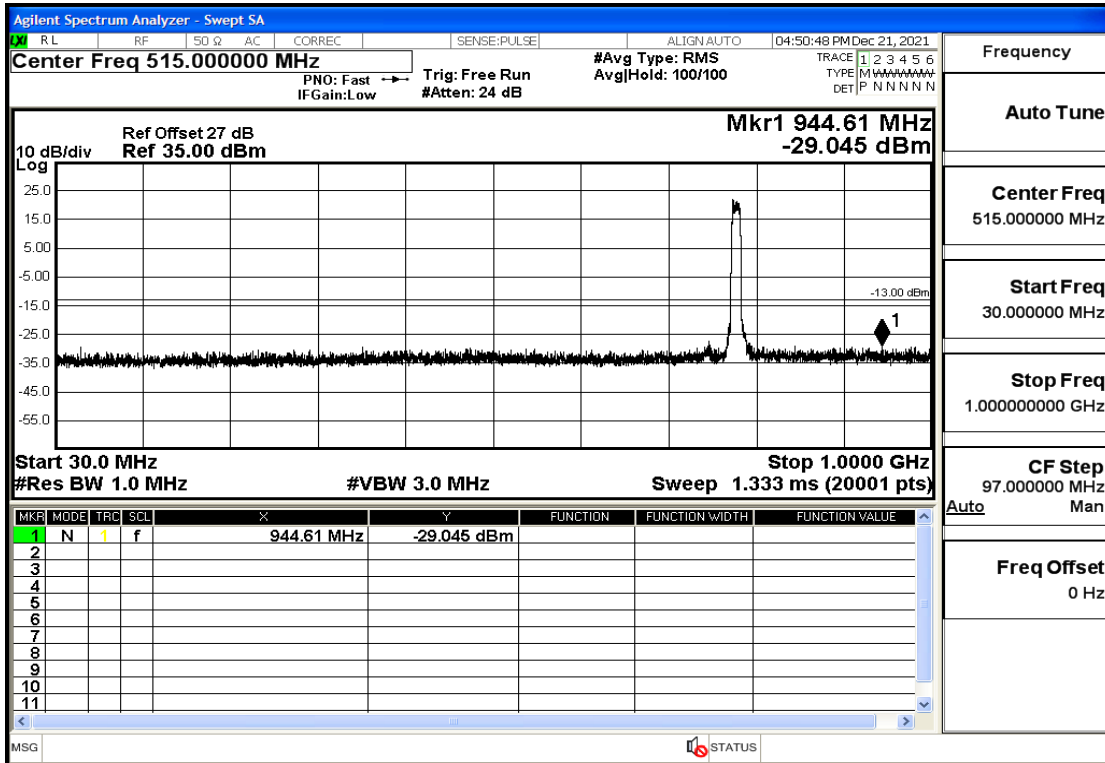
OB13-10-782-QPSK-25#HIGH@1.559GHz-1.61GHz@Pass



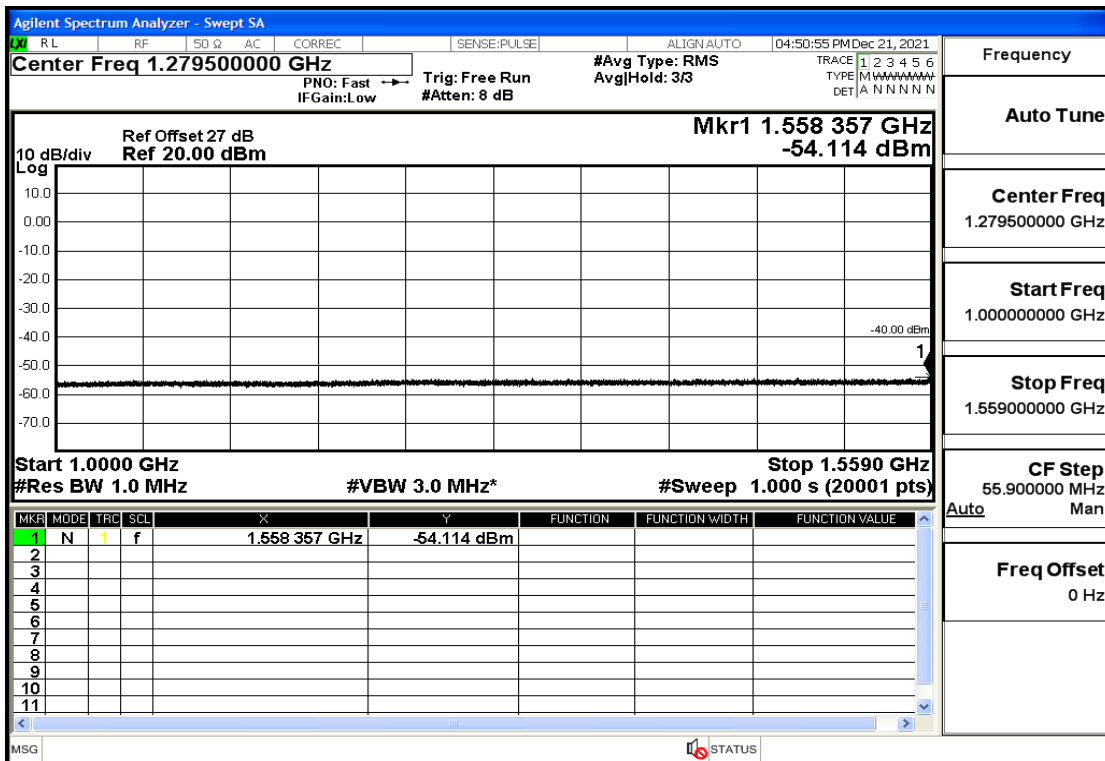
OB13-10-782-QPSK-25#HIGH@1.61GHz-9GHz@Pass



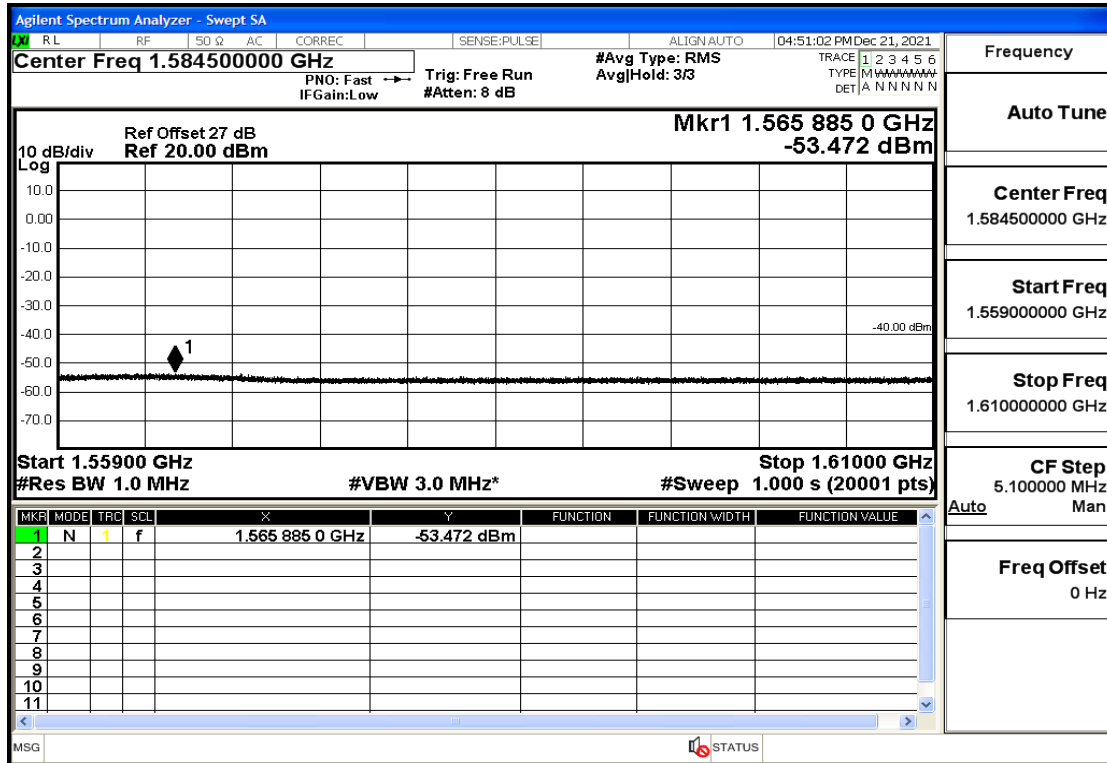
OB13-10-782-Q16-50#LOW@30mHz-1GHz@Pass



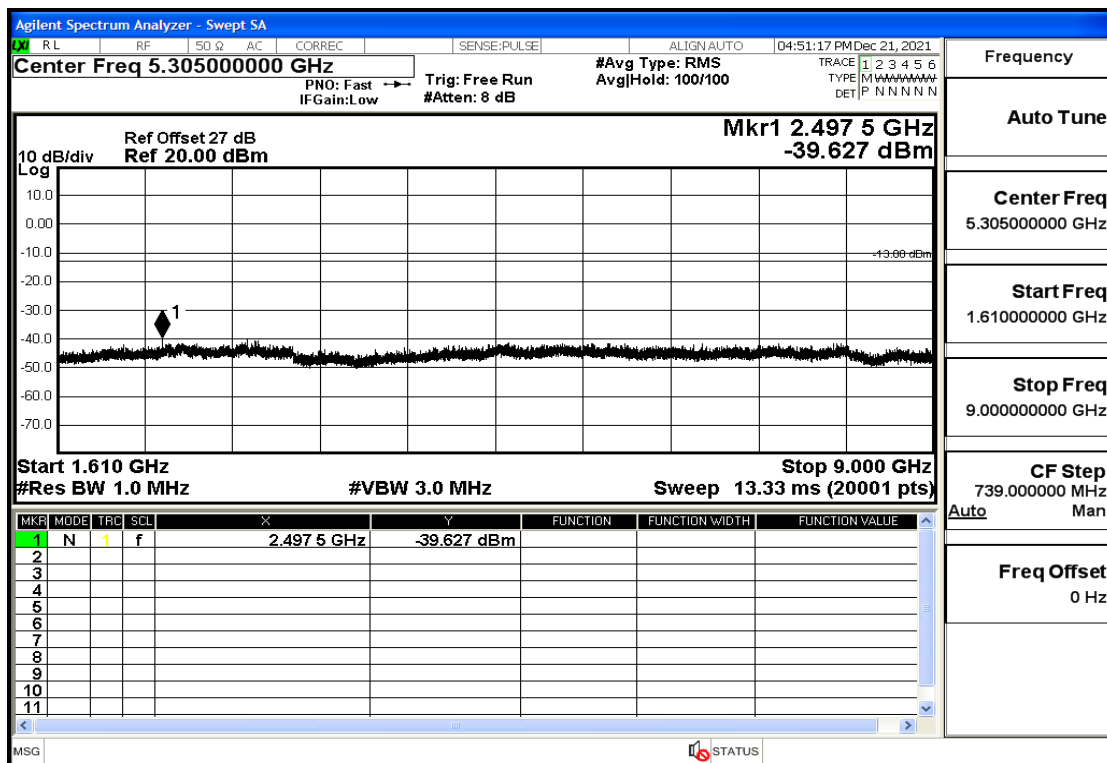
OB13-10-782-Q16-50#LOW@1GHz-1.559GHz@Pass



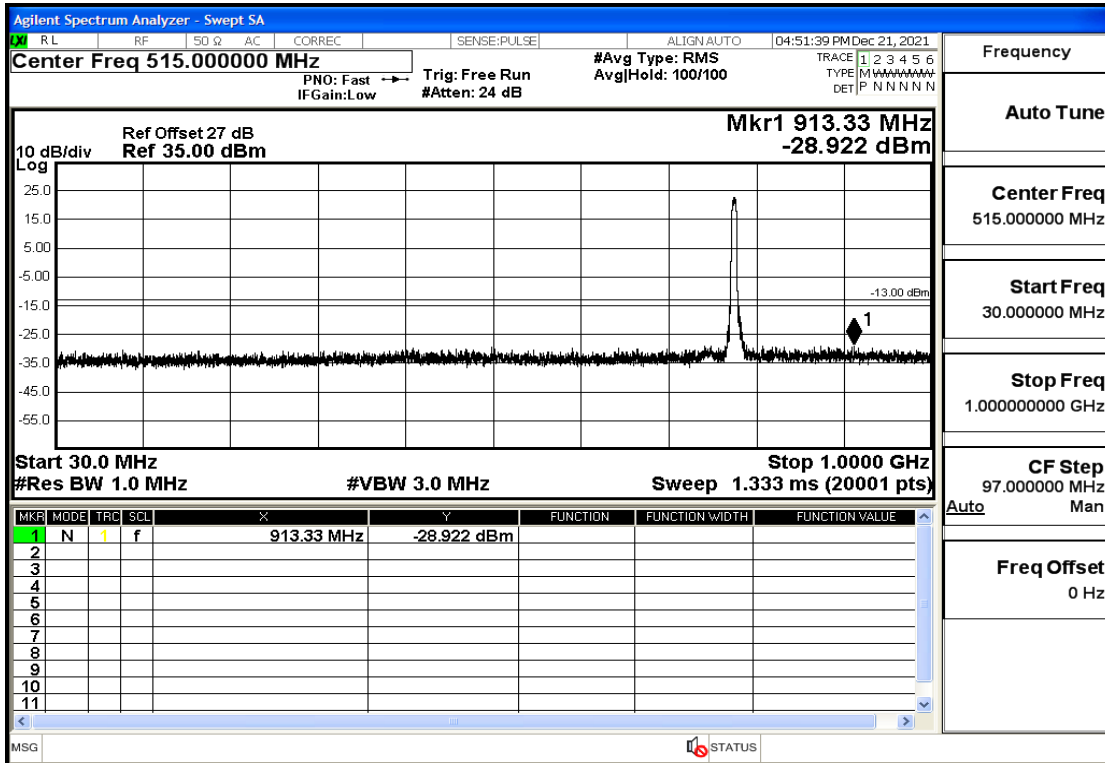
OB13-10-782-Q16-50#LOW@1.559GHz-1.61GHz@Pass



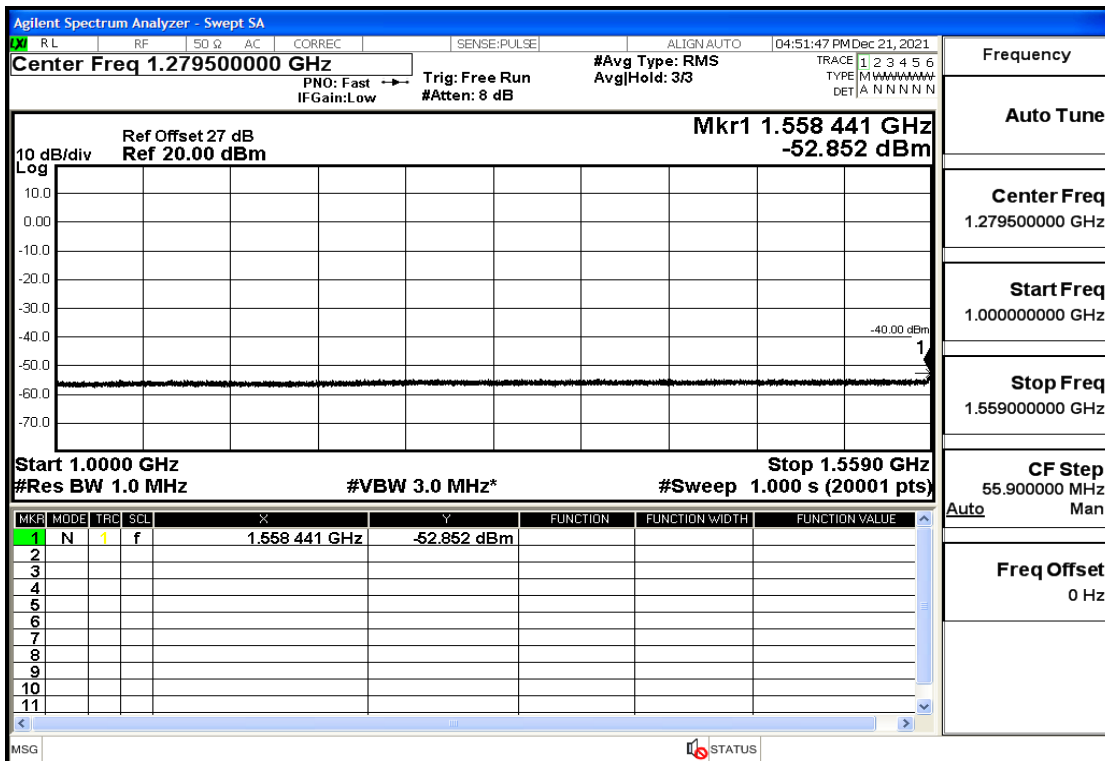
OB13-10-782-Q16-50#LOW@1.61GHz-9GHz@Pass



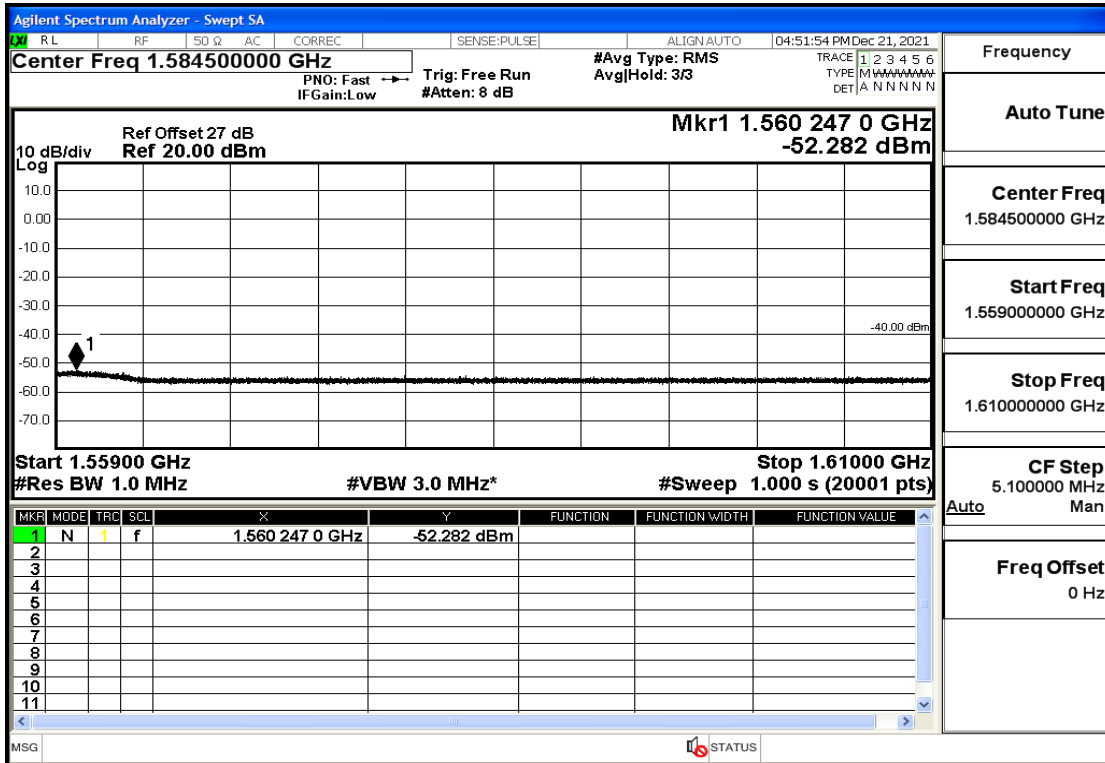
OB13-10-782-Q16-25#LOW@30mHz-1GHz@Pass



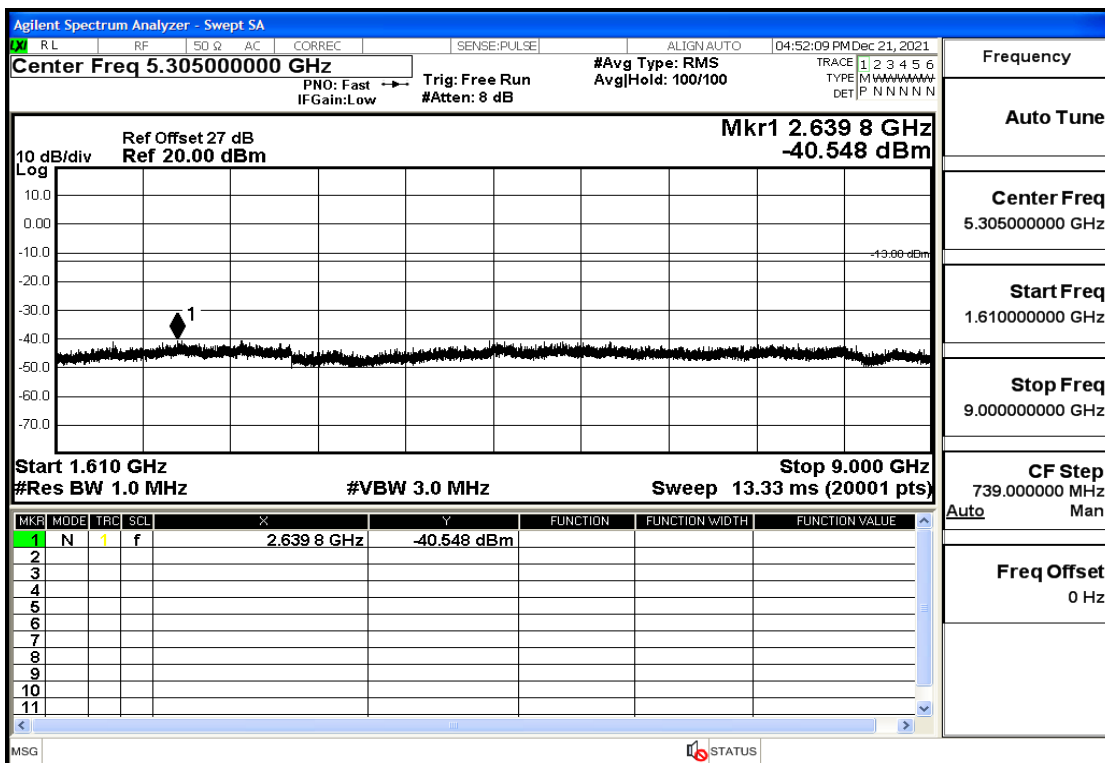
OB13-10-782-Q16-25#LOW@1GHz-1.559GHz@Pass



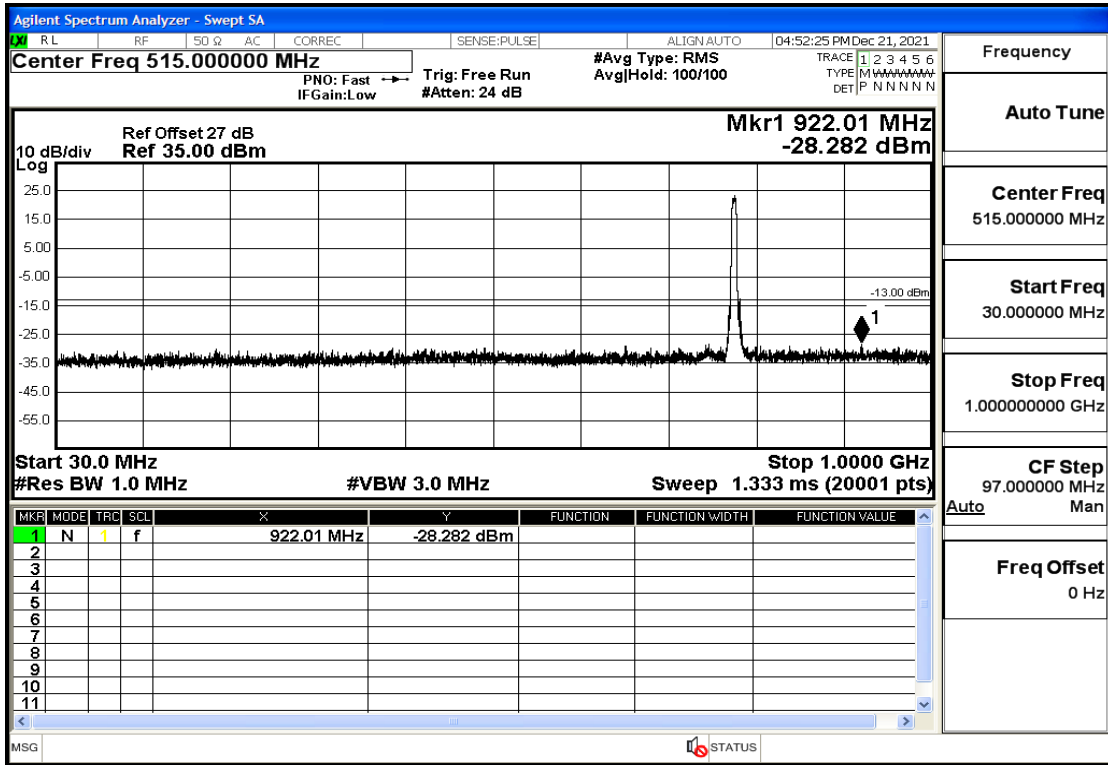
OB13-10-782-Q16-25#LOW@1.559GHz-1.61GHz@Pass



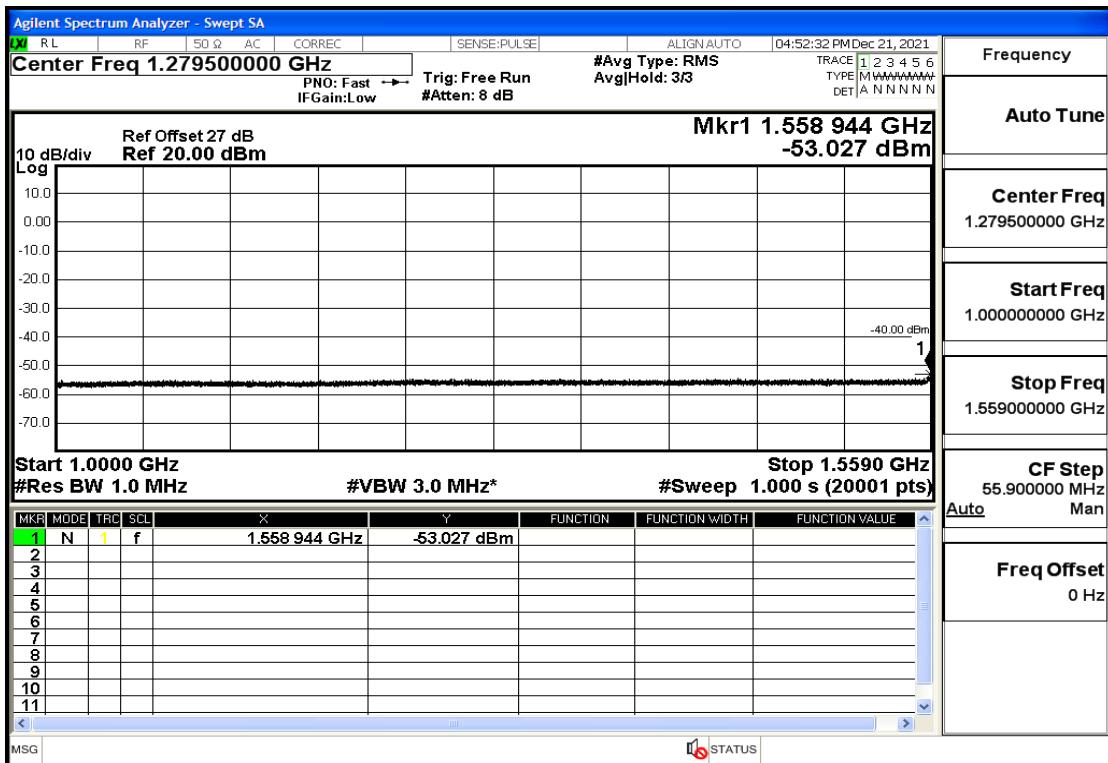
OB13-10-782-Q16-25#LOW@1.61GHz-9GHz@Pass



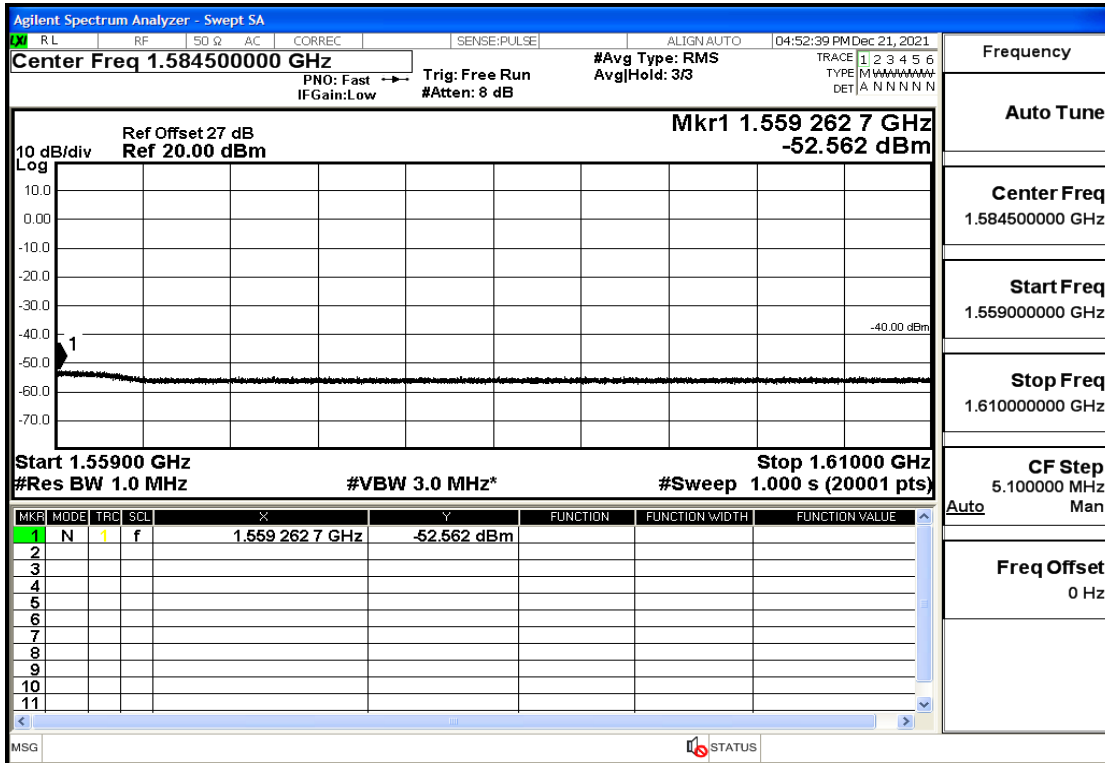
OB13-10-782-Q16-25#MID@30mHz-1GHz@Pass



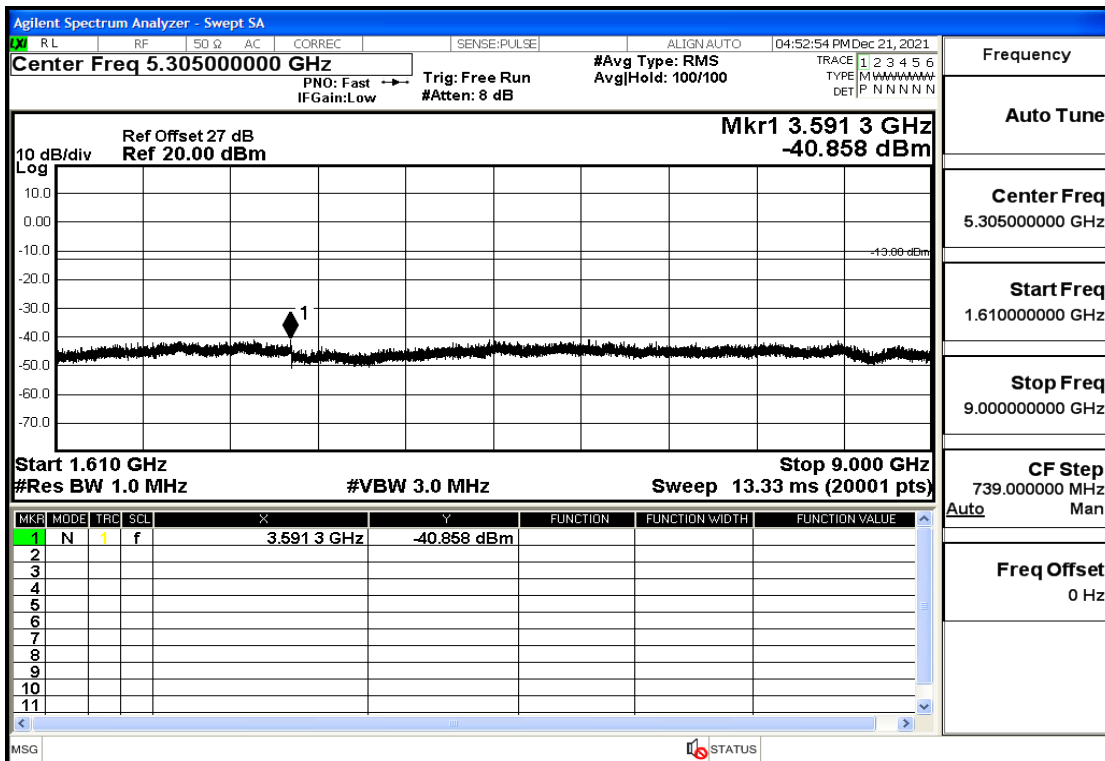
OB13-10-782-Q16-25#MID@1GHz-1.559GHz@Pass



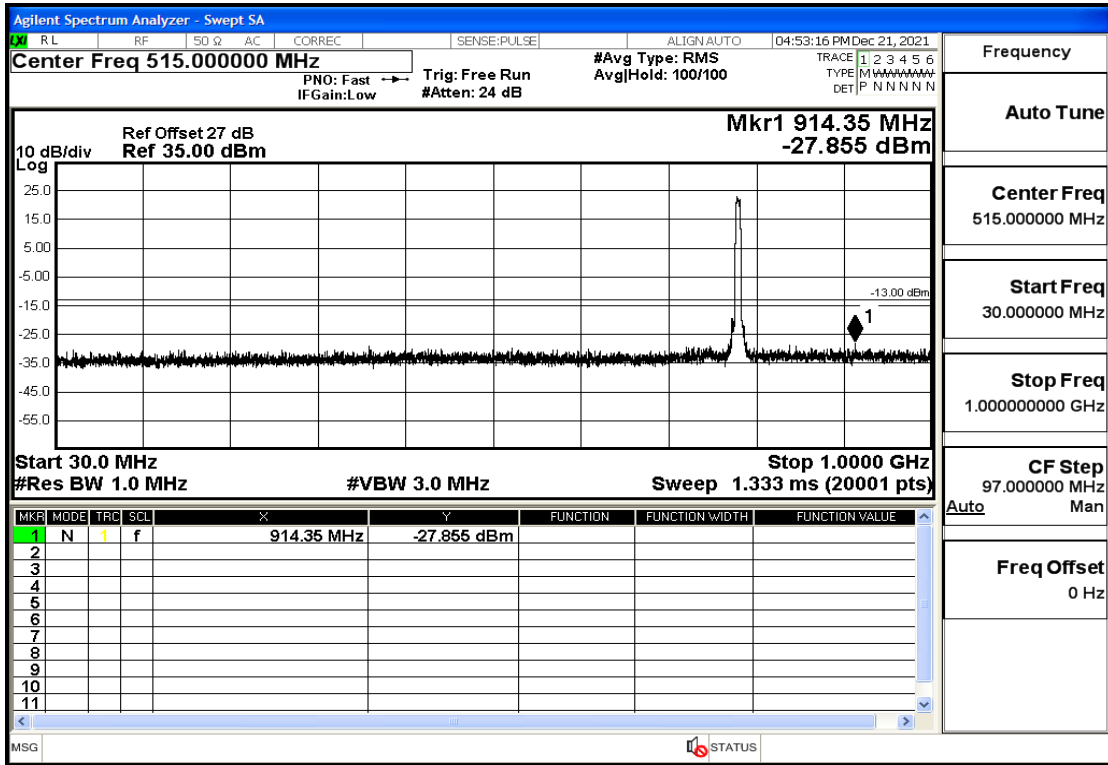
OB13-10-782-Q16-25#MID@1.559GHz-1.61GHz@Pass



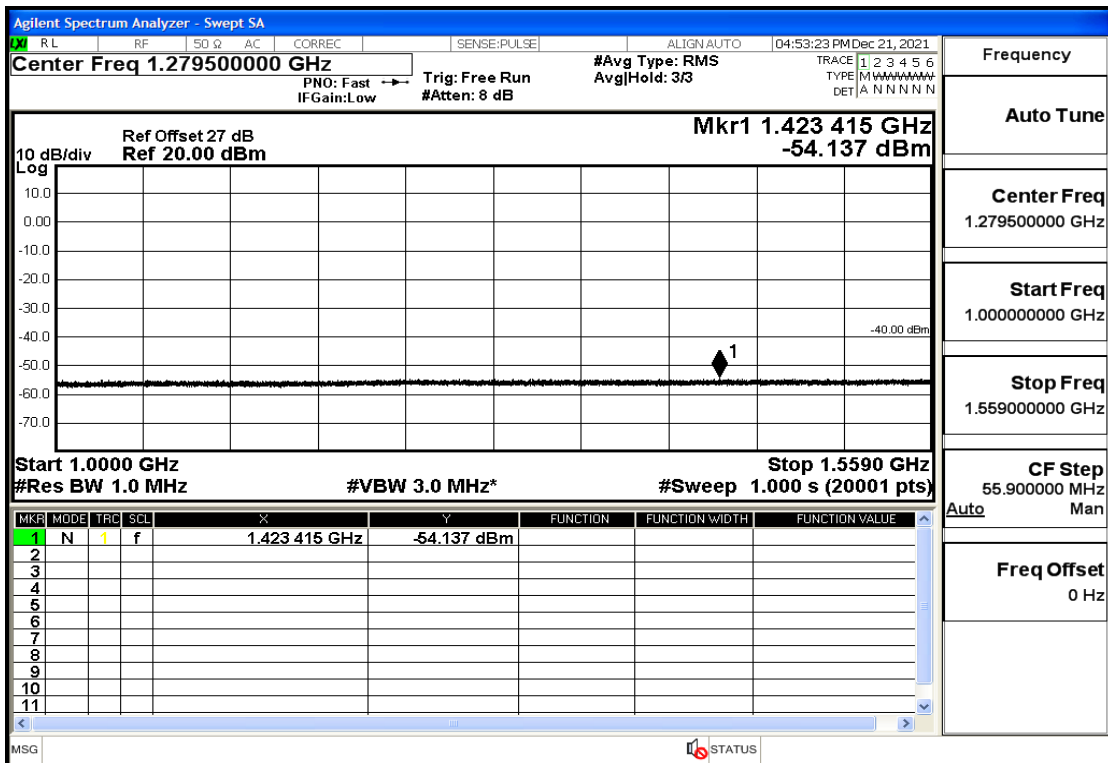
OB13-10-782-Q16-25#MID@1.61GHz-9GHz@Pass



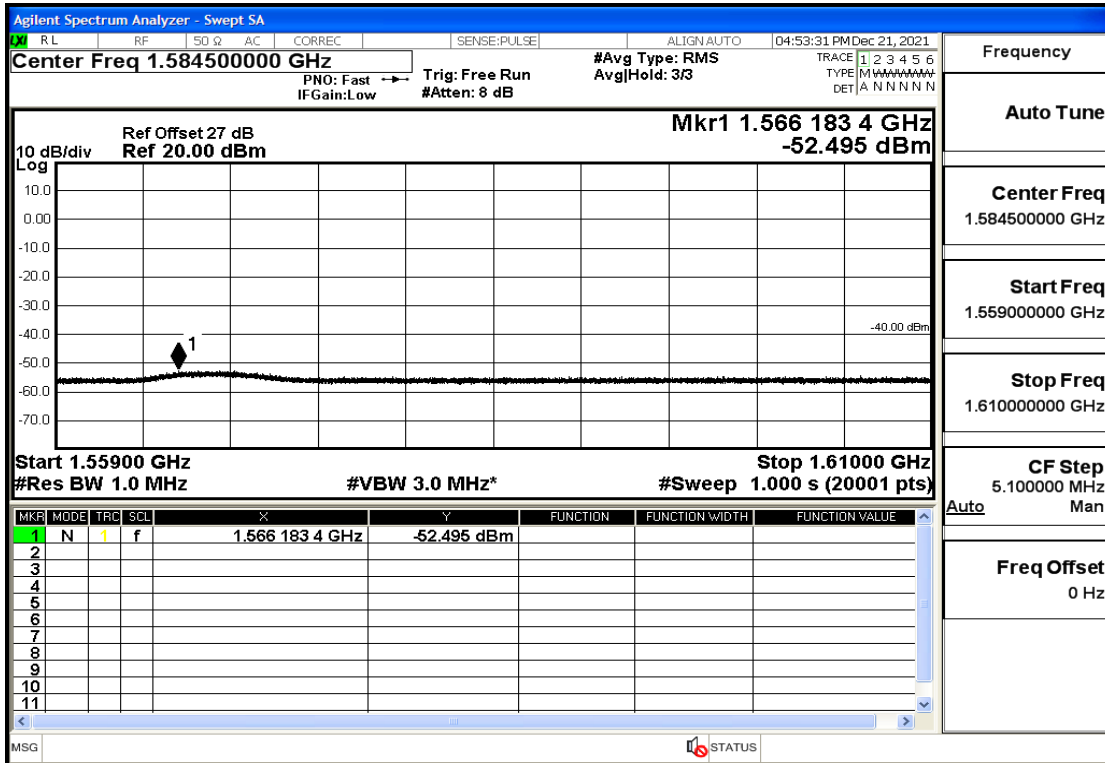
OB13-10-782-Q16-25#HIGH@30mHz-1GHz@Pass



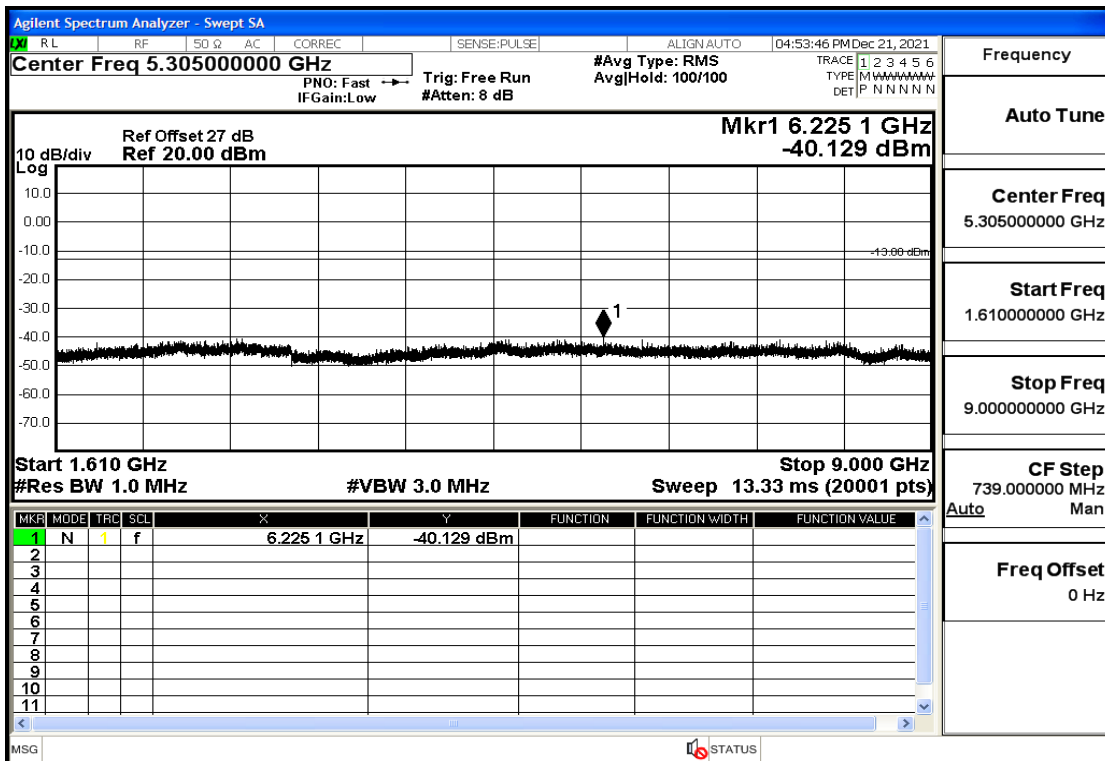
OB13-10-782-Q16-25#HIGH@1GHz-1.559GHz@Pass



OB13-10-782-Q16-25#HIGH@1.559GHz-1.61GHz@Pass



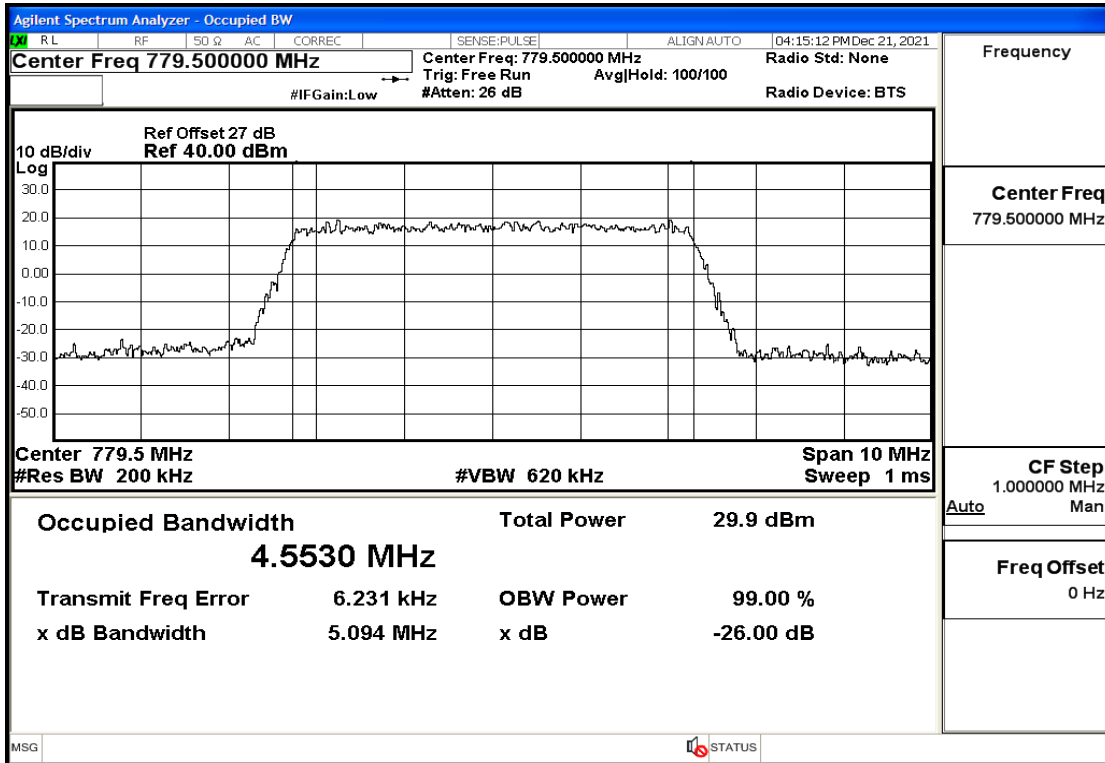
OB13-10-782-Q16-25#HIGH@1.61GHz-9GHz@Pass



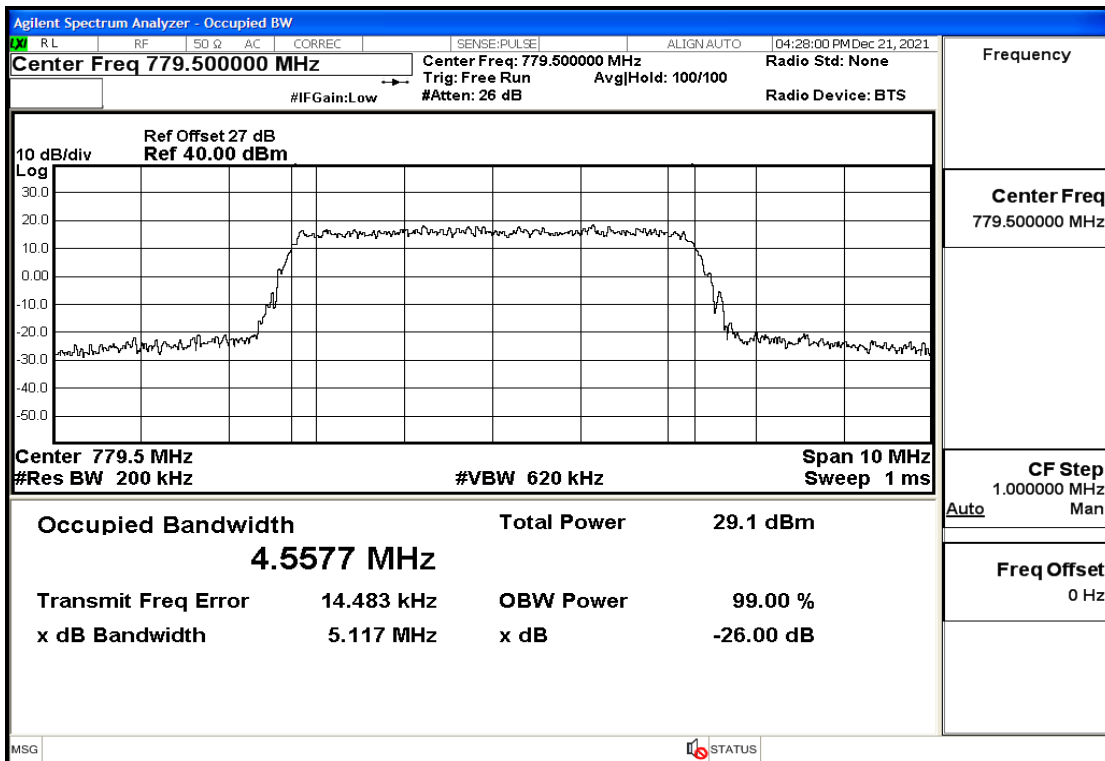
Emission bandwidth and OBW

Band	Bandwidth(MHz)	UL Frequency(MHz)	Modulation	RB Size	RB Offset	Occupied Bandwidth(KHz)	Emission Bandwidth(KHz)	Limit
Band13	5	779.5	QPSK	25	LOW	4553	5094	No limit
Band13	5	779.5	16QAM	25	LOW	4557.7	5117	No limit
Band13	5	782	QPSK	25	LOW	4558.5	5079	No limit
Band13	5	782	16QAM	25	LOW	4569.4	5055	No limit
Band13	5	784.5	QPSK	25	LOW	4559	5066	No limit
Band13	5	784.5	16QAM	25	LOW	4573.8	5092	No limit
Band13	10	782	QPSK	50	LOW	9045.9	10030	No limit
Band13	10	782	16QAM	50	LOW	9027.9	10040	No limit

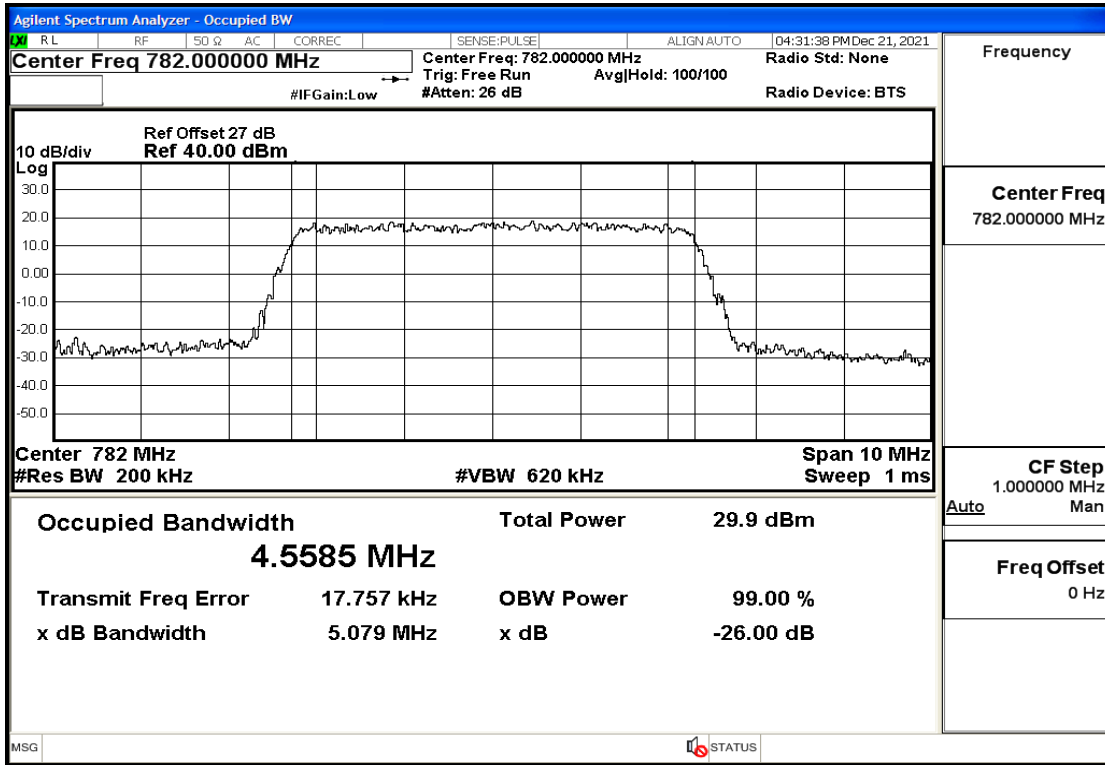
Band13-5-779.5-QPSK-25#LOW@26dB and 99PCT Bandwidth



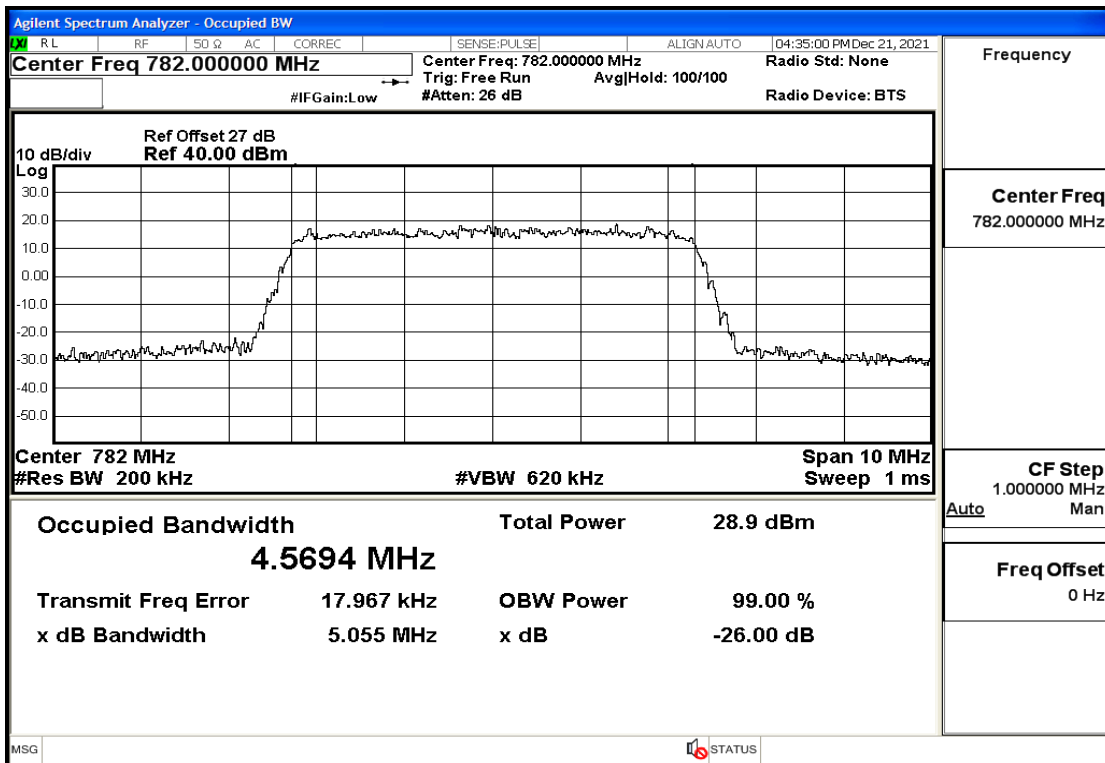
Band13-5-779.5-16QAM-25#LOW@26dB and 99PCT Bandwidth



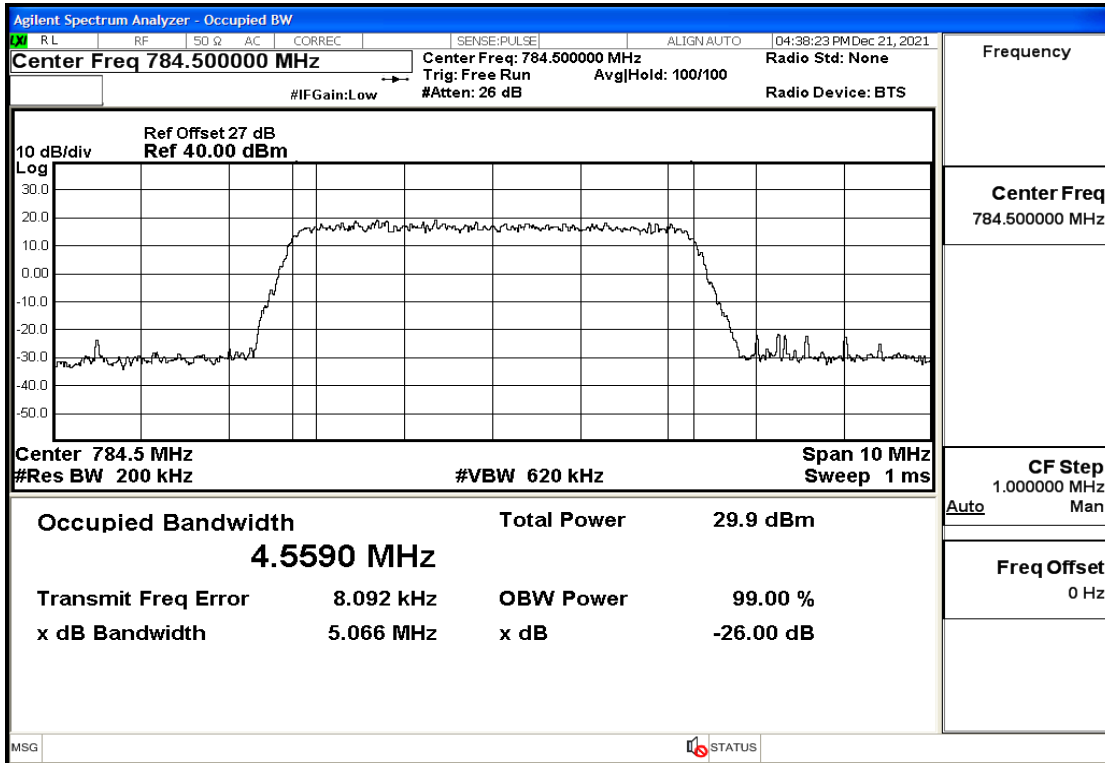
Band13-5-782-QPSK-25#LOW@26dB and 99PCT Bandwidth



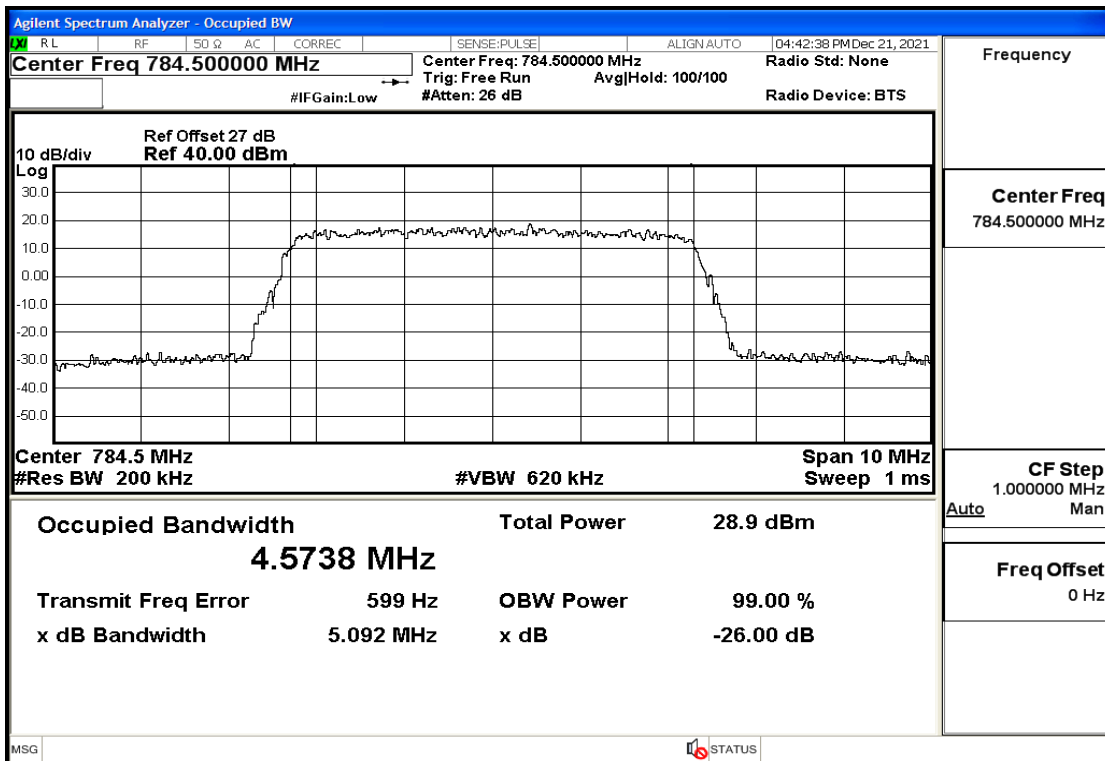
Band13-5-782-16QAM-25#LOW@26dB and 99PCT Bandwidth



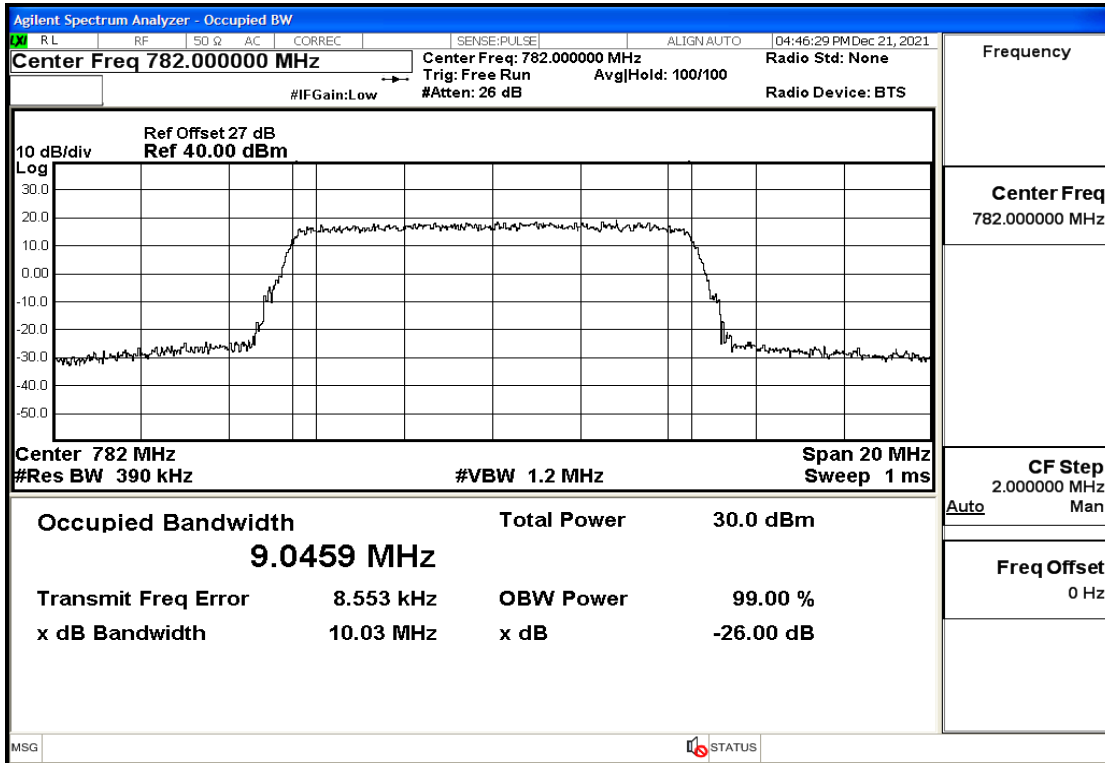
Band13-5-784.5-QPSK-25#LOW@26dB and 99PCT Bandwidth



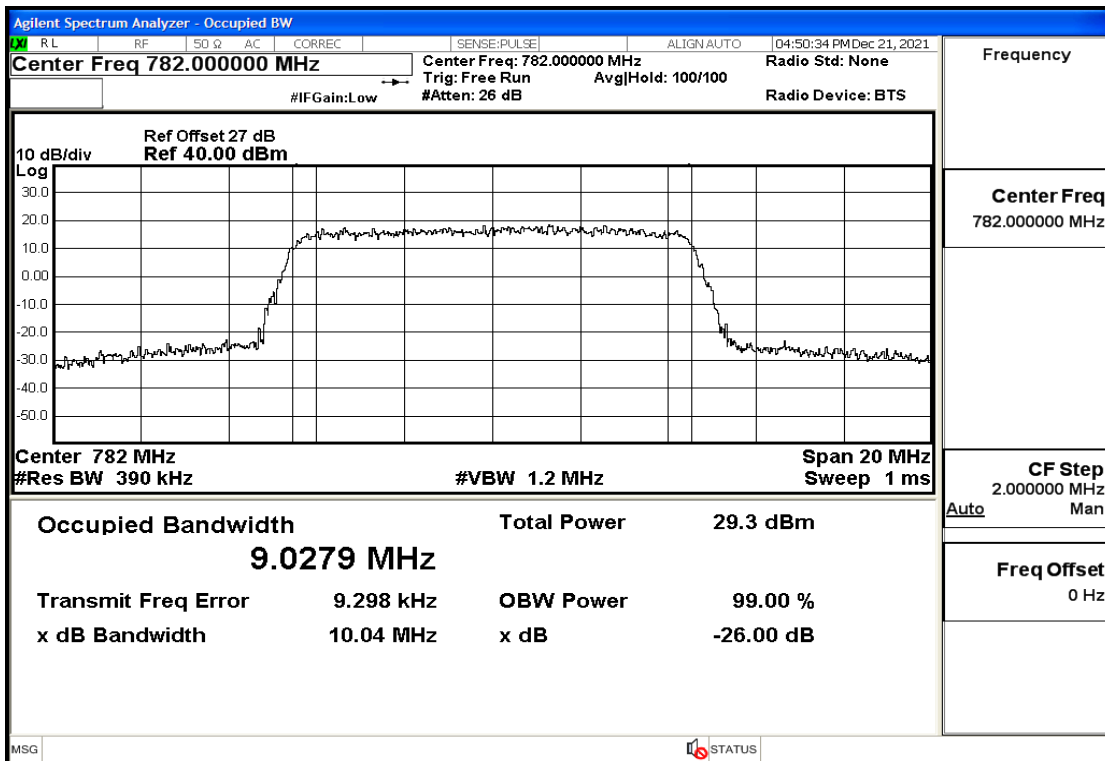
Band13-5-784.5-16QAM-25#LOW@26dB and 99PCT Bandwidth



Band13-10-782-QPSK-50#LOW@26dB and 99PCT Bandwidth



Band13-10-782-16QAM-50#LOW@26dB and 99PCT Bandwidth



Frequency Stability

Test Conditions		LTE Band 13 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 5MHz	2.5ppm
		Deviation (ppm)	Result
50	Normal Voltage	0.0694	PASS
40	Normal Voltage	0.0324	
30	Normal Voltage	0.0179	
20(Ref.)	Normal Voltage	0.0276	
10	Normal Voltage	0.0597	
0	Normal Voltage	0.0165	
-10	Normal Voltage	0.0402	
-20	Normal Voltage	0.0326	
-30	Normal Voltage	0.0163	
20	Maximum Voltage	0.0163	
20	Normal Voltage	0.0292	
20	Battery End Point	0.0623	

Peak and Average Power

Band	Bandwidth(MHz)	UL Frequency(MHz)	Modulation	RB Size	RB Offset	Average Power	Peak Power	Peak to Average(dB)	limit(dB)	AntGain(dBi)	ERP/EIRP(dBm)	Limit(dBm)	Conclusion
Band13	5	779.5	QPSK	25	LOW	22.6	29.22	6.62	13	0.3	20.75	34.8	Pass
Band13	5	779.5	QPSK	12	LOW	22.52	29.03	6.51	13	0.3	20.67	34.8	Pass
Band13	5	779.5	QPSK	12	MID	22.52	29.1	6.58	13	0.3	20.67	34.8	Pass
Band13	5	779.5	QPSK	12	HIGH	22.52	29.05	6.53	13	0.3	20.67	34.8	Pass
Band13	5	779.5	QPSK	1	LOW	23.32	29.54	6.22	13	0.3	21.47	34.8	Pass
Band13	5	779.5	QPSK	1	MID	23.49	29.58	6.09	13	0.3	21.64	34.8	Pass
Band13	5	779.5	QPSK	1	HIGH	23.25	29.59	6.34	13	0.3	21.4	34.8	Pass
Band13	5	779.5	16QAM	25	LOW	21.52	29.73	8.21	13	0.3	19.67	34.8	Pass
Band13	5	779.5	16QAM	12	LOW	21.45	29.12	7.67	13	0.3	19.6	34.8	Pass
Band13	5	779.5	16QAM	12	MID	21.56	28.84	7.28	13	0.3	19.71	34.8	Pass
Band13	5	779.5	16QAM	12	HIGH	21.58	29.19	7.61	13	0.3	19.73	34.8	Pass
Band13	5	779.5	16QAM	1	LOW	22.34	29.51	7.17	13	0.3	20.49	34.8	Pass
Band13	5	779.5	16QAM	1	MID	22.65	29.73	7.08	13	0.3	20.8	34.8	Pass
Band13	5	779.5	16QAM	1	HIGH	22.2	29.5	7.3	13	0.3	20.35	34.8	Pass
Band13	5	782	QPSK	25	LOW	22.42	29.08	6.66	13	0.3	20.57	34.8	Pass
Band13	5	782	QPSK	12	LOW	22.57	29.47	6.9	13	0.3	20.72	34.8	Pass
Band13	5	782	QPSK	12	MID	22.57	29.37	6.8	13	0.3	20.72	34.8	Pass
Band13	5	782	QPSK	12	HIGH	22.58	28.85	6.27	13	0.3	20.73	34.8	Pass
Band13	5	782	QPSK	1	LOW	23.27	30.16	6.89	13	0.3	21.42	34.8	Pass
Band13	5	782	QPSK	1	MID	23.56	29.85	6.29	13	0.3	21.71	34.8	Pass
Band13	5	782	QPSK	1	HIGH	23.36	29.59	6.23	13	0.3	21.51	34.8	Pass
Band13	5	782	16QAM	25	LOW	21.79	29.48	7.69	13	0.3	19.94	34.8	Pass
Band13	5	782	16QAM	12	LOW	21.41	29.51	8.1	13	0.3	19.56	34.8	Pass
Band13	5	782	16QAM	12	MID	21.4	29.53	8.13	13	0.3	19.55	34.8	Pass
Band13	5	782	16QAM	12	HIGH	21.53	29.24	7.71	13	0.3	19.68	34.8	Pass
Band13	5	782	16QAM	1	LOW	22.02	28.49	6.47	13	0.3	20.17	34.8	Pass
Band13	5	782	16QAM	1	MID	22.41	28.67	6.26	13	0.3	20.56	34.8	Pass
Band13	5	782	16QAM	1	HIGH	21.94	28.03	6.09	13	0.3	20.09	34.8	Pass
Band13	5	784.5	QPSK	25	LOW	22.49	29.17	6.68	13	0.3	20.64	34.8	Pass
Band13	5	784.5	QPSK	12	LOW	22.54	29.17	6.63	13	0.3	20.69	34.8	Pass
Band13	5	784.5	QPSK	12	MID	22.46	29.19	6.73	13	0.3	20.61	34.8	Pass
Band13	5	784.5	QPSK	12	HIGH	22.57	29.09	6.52	13	0.3	20.72	34.8	Pass
Band13	5	784.5	QPSK	1	LOW	23.22	29.17	5.95	13	0.3	21.37	34.8	Pass
Band13	5	784.5	QPSK	1	MID	23.29	28.75	5.46	13	0.3	21.44	34.8	Pass
Band13	5	784.5	QPSK	1	HIGH	23.38	29.11	5.73	13	0.3	21.53	34.8	Pass
Band13	5	784.5	16QAM	25	LOW	21.4	29.43	8.03	13	0.3	19.55	34.8	Pass
Band13	5	784.5	16QAM	12	LOW	21.42	28.6	7.18	13	0.3	19.57	34.8	Pass
Band13	5	784.5	16QAM	12	MID	21.35	28.43	7.08	13	0.3	19.5	34.8	Pass
Band13	5	784.5	16QAM	12	HIGH	21.35	28.25	6.9	13	0.3	19.5	34.8	Pass
Band13	5	784.5	16QAM	1	LOW	23.33	29.6	6.27	13	0.3	21.48	34.8	Pass

Band13	5	784.5	16QAM	1	MID	23.4	29.12	5.72	13	0.3	21.55	34.8	Pass
Band13	5	784.5	16QAM	1	HIGH	22.36	28.59	6.23	13	0.3	20.51	34.8	Pass
Band13	10	782	QPSK	50	LOW	22.37	28.85	6.48	13	0.3	20.52	34.8	Pass
Band13	10	782	QPSK	25	LOW	22.6	29.64	7.04	13	0.3	20.75	34.8	Pass
Band13	10	782	QPSK	25	MID	22.52	29.63	7.11	13	0.3	20.67	34.8	Pass
Band13	10	782	QPSK	25	HIGH	22.56	29.21	6.65	13	0.3	20.71	34.8	Pass
Band13	10	782	QPSK	1	LOW	23.57	29.3	5.73	13	0.3	21.72	34.8	Pass
Band13	10	782	QPSK	1	MID	23.75	29.23	5.48	13	0.3	21.9	34.8	Pass
Band13	10	782	QPSK	1	HIGH	23.34	28.75	5.41	13	0.3	21.49	34.8	Pass
Band13	10	782	16QAM	50	LOW	21.51	29.32	7.81	13	0.3	19.66	34.8	Pass
Band13	10	782	16QAM	25	LOW	21.38	29.4	8.02	13	0.3	19.53	34.8	Pass
Band13	10	782	16QAM	25	MID	21.38	29.46	8.08	13	0.3	19.53	34.8	Pass
Band13	10	782	16QAM	25	HIGH	21.47	29.05	7.58	13	0.3	19.62	34.8	Pass
Band13	10	782	16QAM	1	LOW	22.34	29.55	7.21	13	0.3	20.49	34.8	Pass
Band13	10	782	16QAM	1	MID	23.08	29.84	6.76	13	0.3	21.23	34.8	Pass
Band13	10	782	16QAM	1	HIGH	22.8	29.38	6.58	13	0.3	20.95	34.8	Pass