

RF Test Data for LTE (Conducted Measurement)

Product Name: Smartphone
Trade Mark: Vortex
Test Model: V20
Sample ID: TZ210502250-1#
FCC ID: 2A2EB-V20

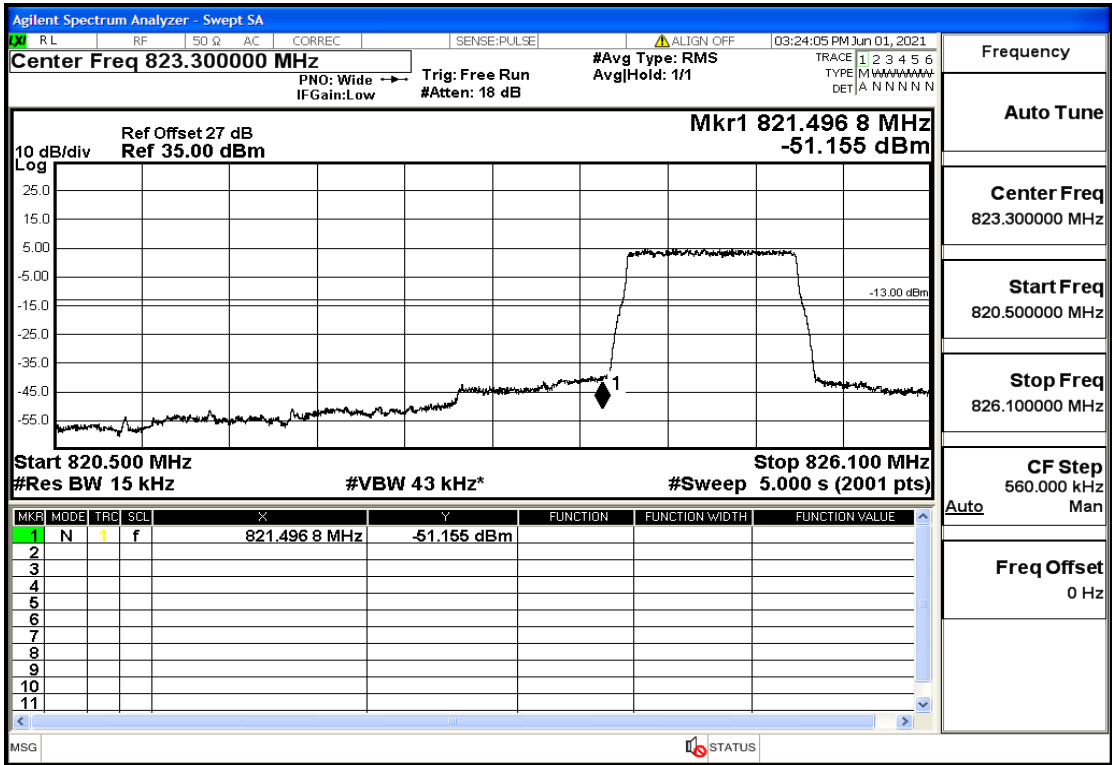
Environmental Conditions

Temperature:	23.8℃
Relative Humidity:	56%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
Remark:	For LTE Band5

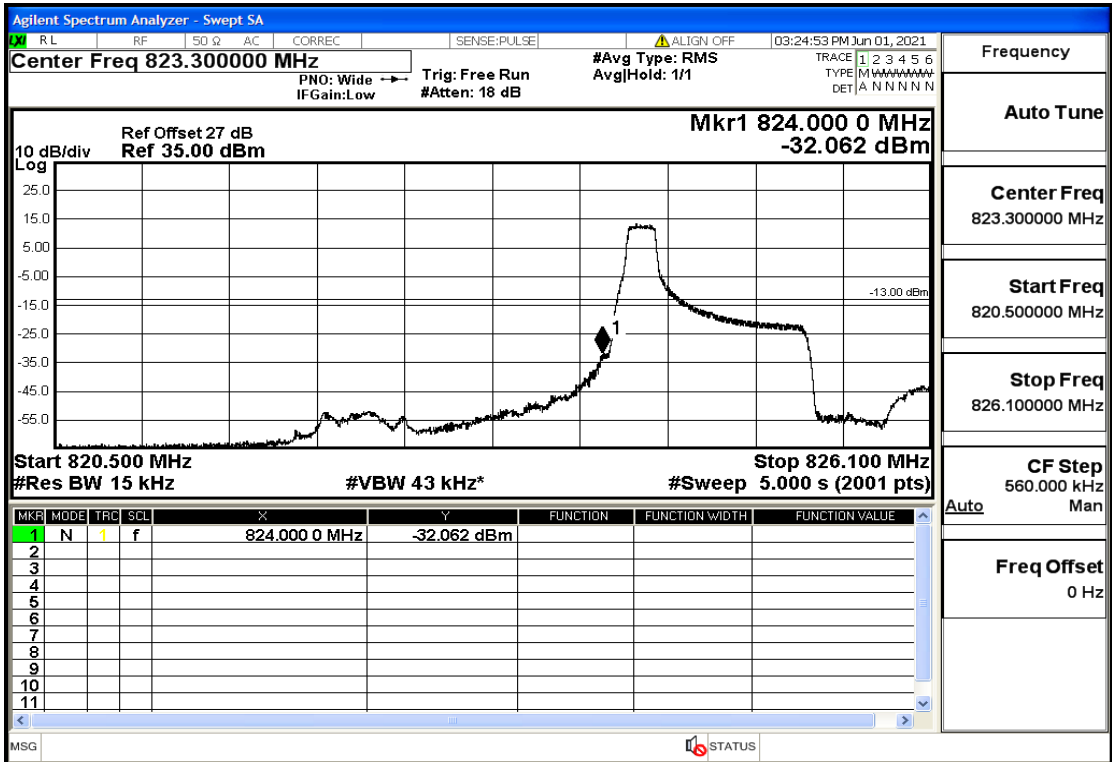
Band Edge and Emission Mask

Band	Bandwidth(MHz)	UL Frequency(MHz)	Modulation	RB Size	RB Offset	Conclusion
Band5	1.4	824.7	QPSK	6	LOW	Pass
Band5	1.4	824.7	QPSK	1	LOW	Pass
Band5	1.4	824.7	16QAM	6	LOW	Pass
Band5	1.4	824.7	16QAM	1	LOW	Pass
Band5	1.4	848.3	QPSK	6	LOW	Pass
Band5	1.4	848.3	QPSK	1	HIGH	Pass
Band5	1.4	848.3	16QAM	6	LOW	Pass
Band5	1.4	848.3	16QAM	1	HIGH	Pass
Band5	3	825.5	QPSK	15	LOW	Pass
Band5	3	825.5	QPSK	1	LOW	Pass
Band5	3	825.5	16QAM	15	LOW	Pass
Band5	3	825.5	16QAM	1	LOW	Pass
Band5	3	847.5	QPSK	15	LOW	Pass
Band5	3	847.5	QPSK	1	HIGH	Pass
Band5	3	847.5	16QAM	15	LOW	Pass
Band5	3	847.5	16QAM	1	HIGH	Pass
Band5	5	826.5	QPSK	25	LOW	Pass
Band5	5	826.5	QPSK	1	LOW	Pass
Band5	5	826.5	16QAM	25	LOW	Pass
Band5	5	826.5	16QAM	1	LOW	Pass
Band5	5	846.5	QPSK	25	LOW	Pass
Band5	5	846.5	QPSK	1	HIGH	Pass
Band5	5	846.5	16QAM	25	LOW	Pass
Band5	5	846.5	16QAM	1	HIGH	Pass
Band5	10	829	QPSK	50	LOW	Pass
Band5	10	829	QPSK	1	LOW	Pass
Band5	10	829	16QAM	50	LOW	Pass
Band5	10	829	16QAM	1	LOW	Pass
Band5	10	844	QPSK	50	LOW	Pass
Band5	10	844	QPSK	1	HIGH	Pass
Band5	10	844	16QAM	50	LOW	Pass
Band5	10	844	16QAM	1	HIGH	Pass

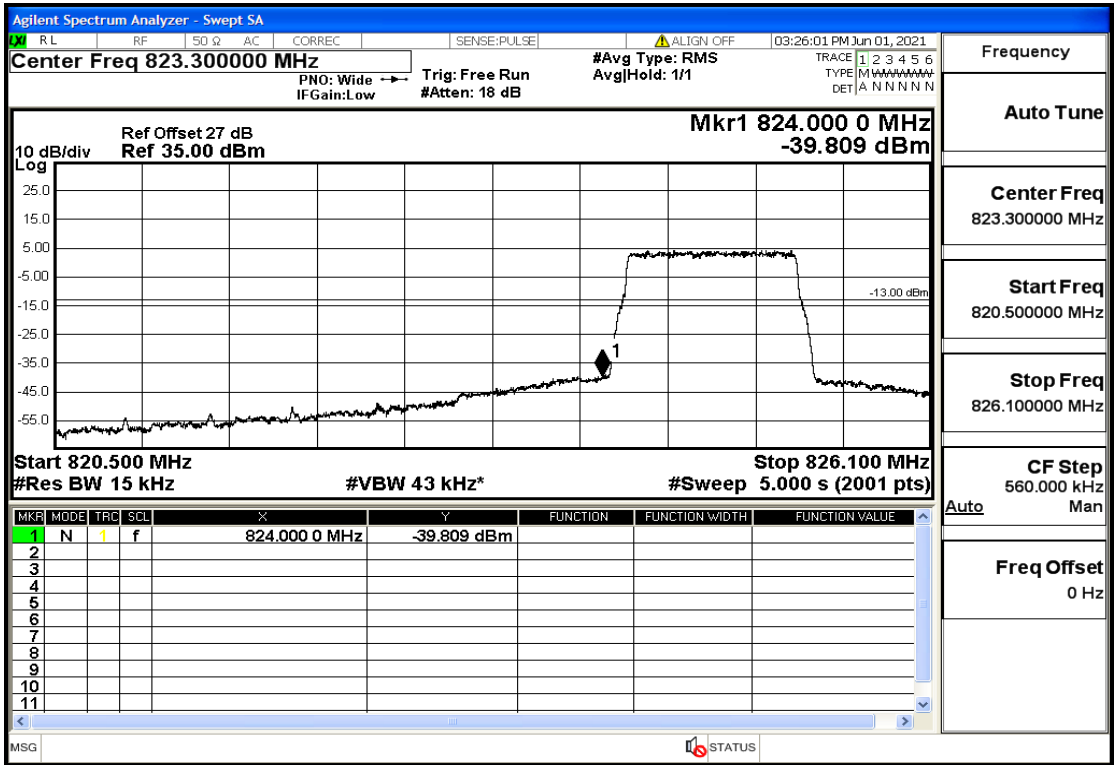
Band5-1.4-824.7-QPSK-6#LOW@Pass



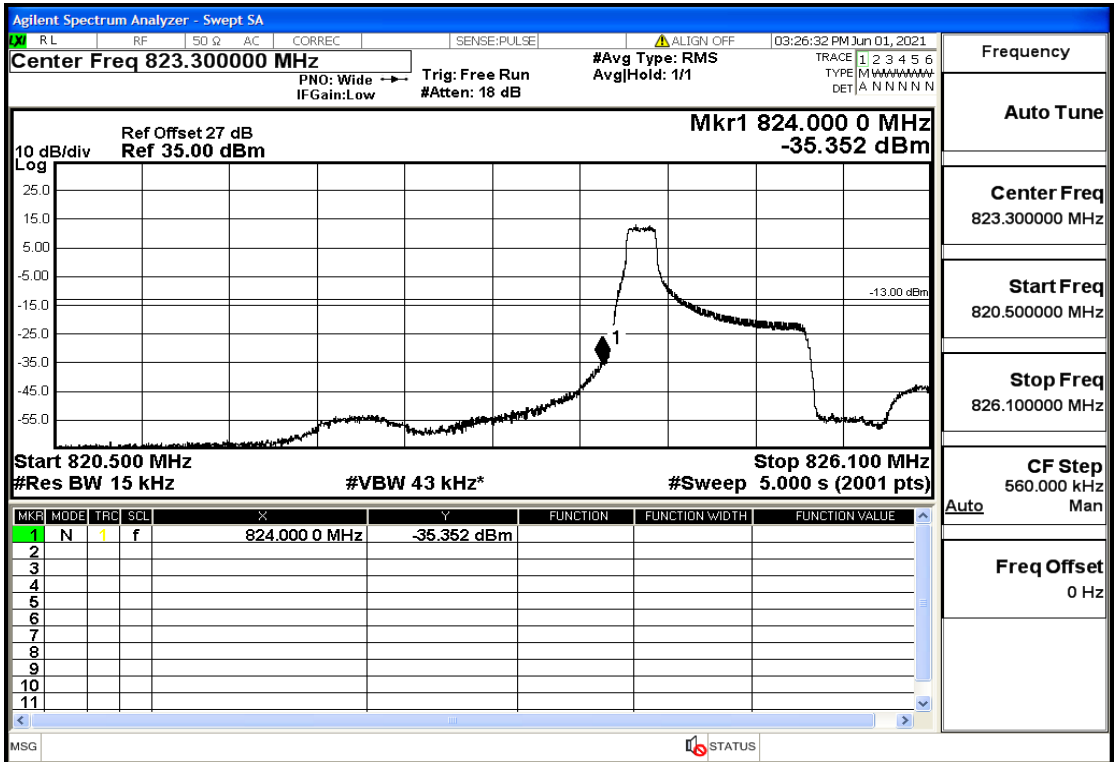
Band5-1.4-824.7-QPSK-1#LOW@Pass



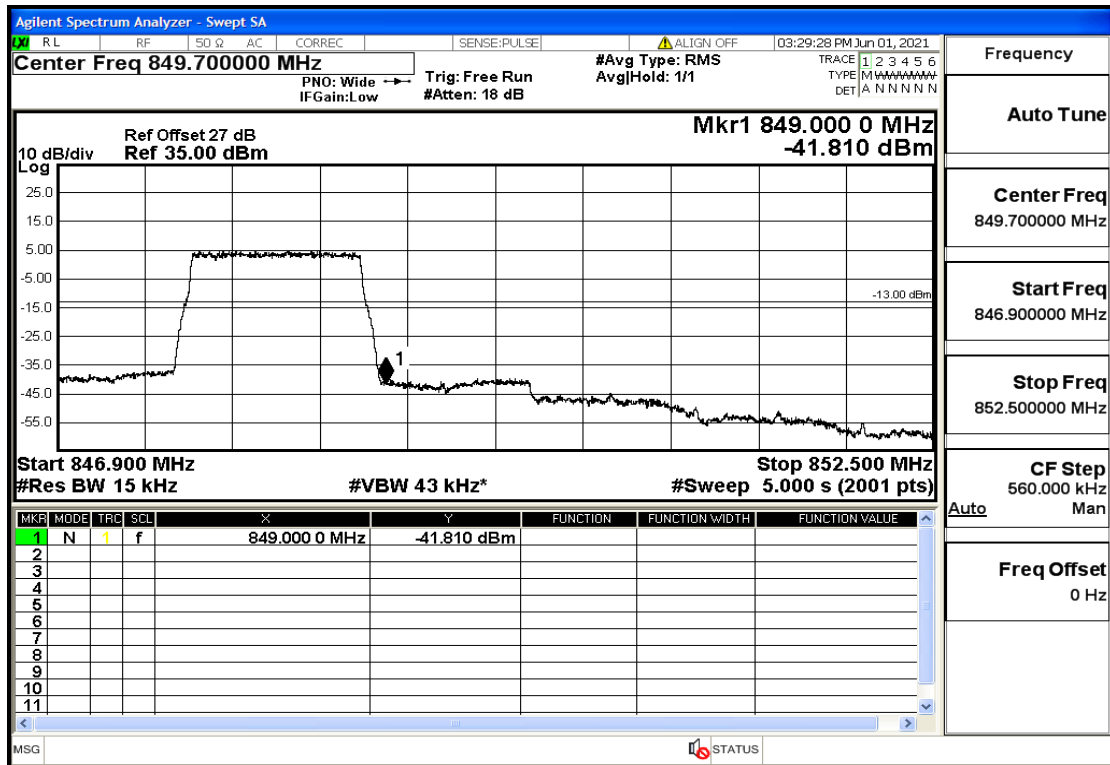
Band5-1.4-824.7-16QAM-6#LOW@Pass



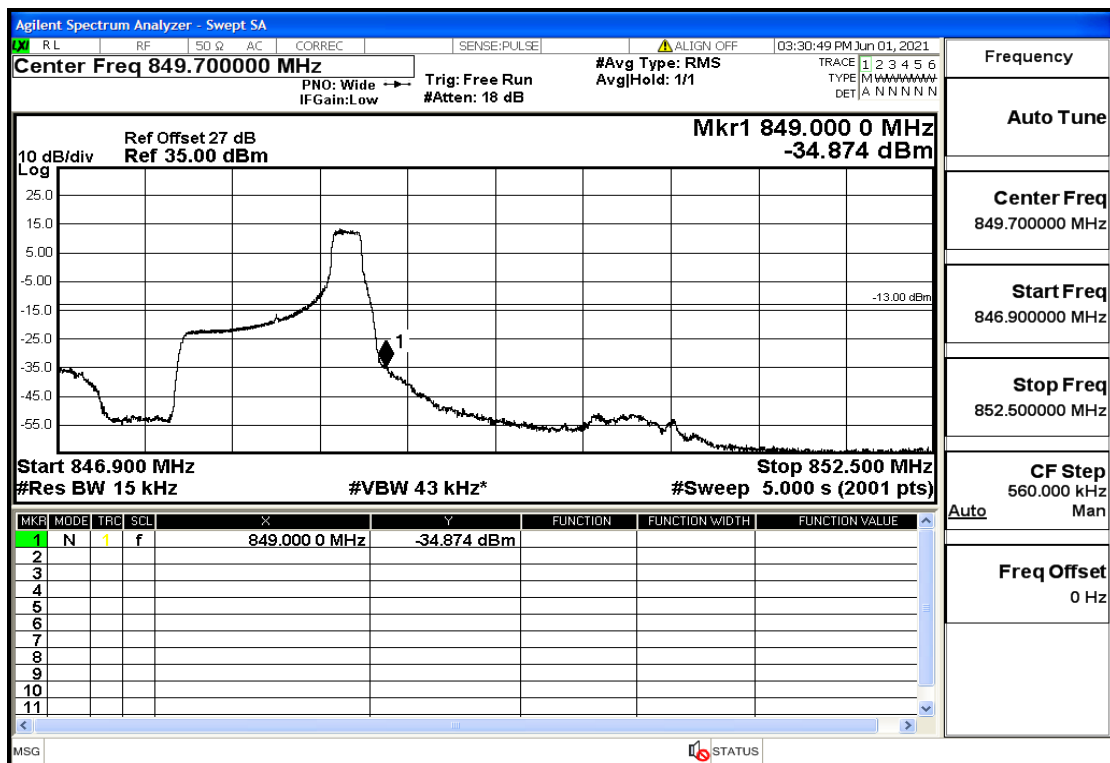
Band5-1.4-824.7-16QAM-1#LOW@Pass



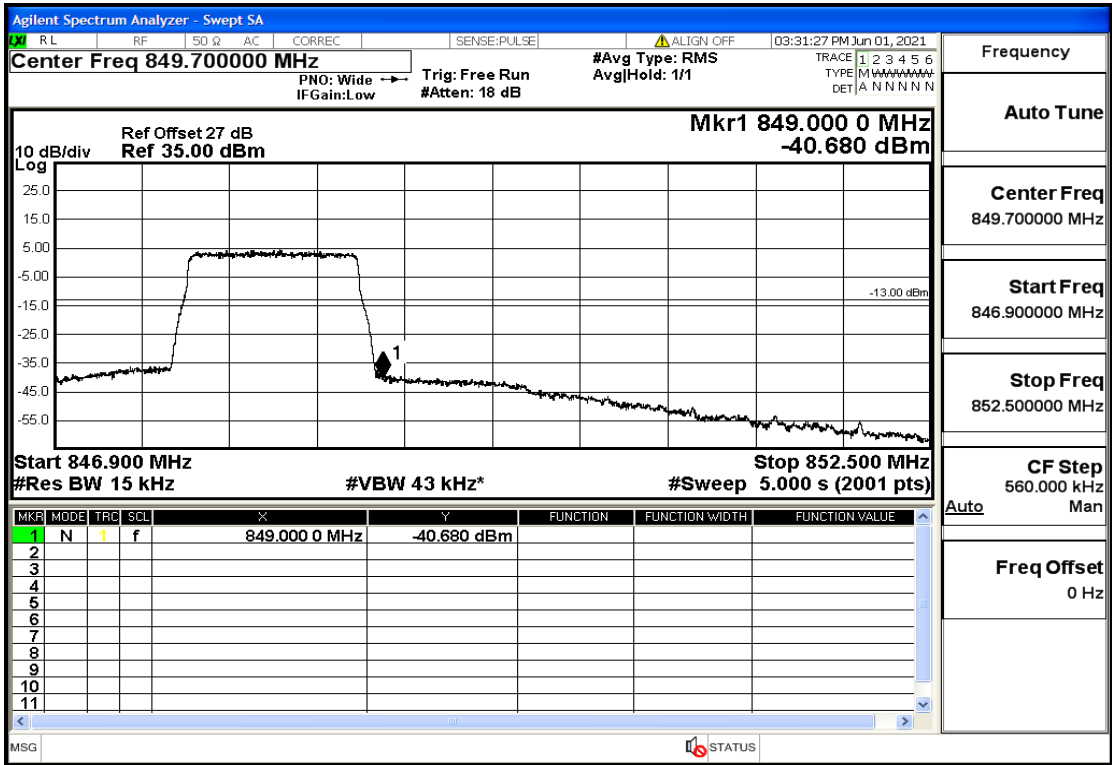
Band5-1.4-848.3-QPSK-6#LOW@Pass



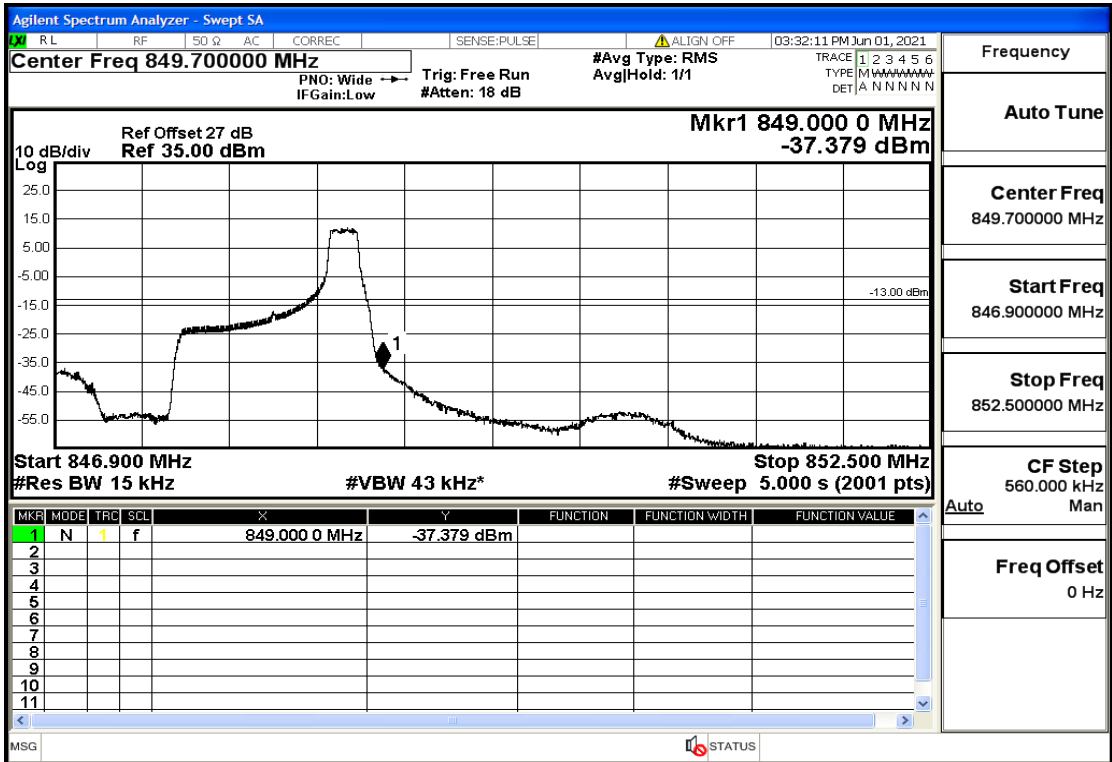
Band5-1.4-848.3-QPSK-1#HIGH@Pass



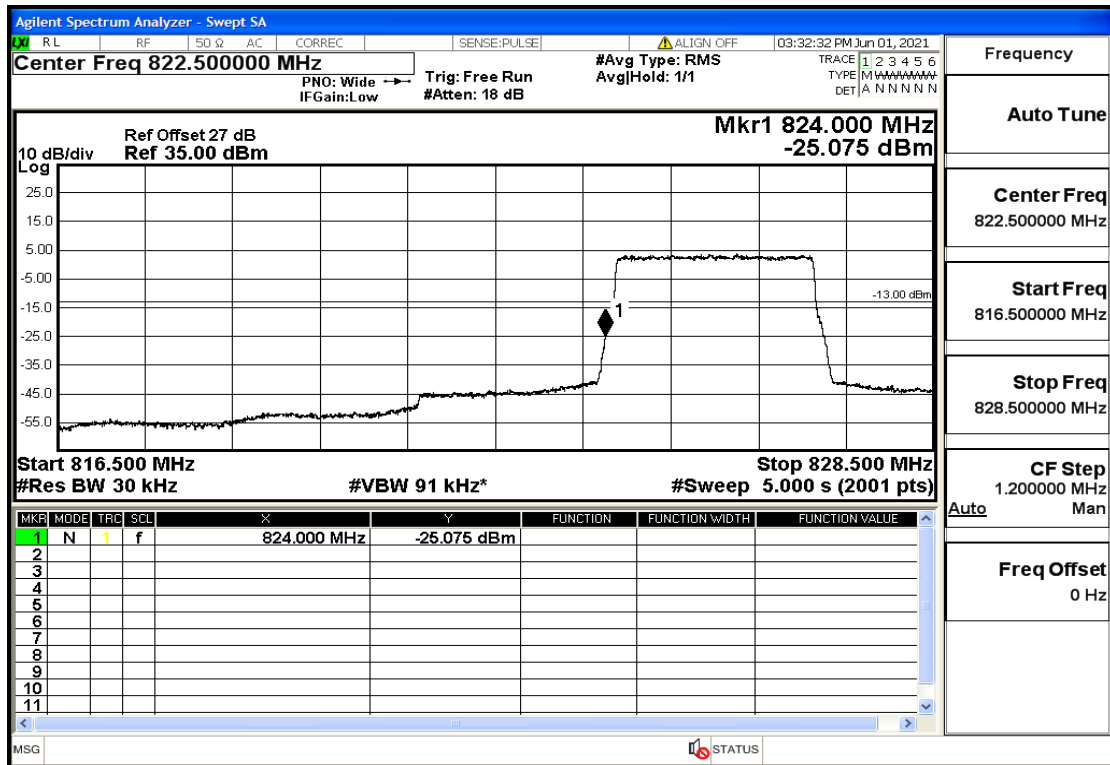
Band5-1.4-848.3-16QAM-6#LOW@Pass



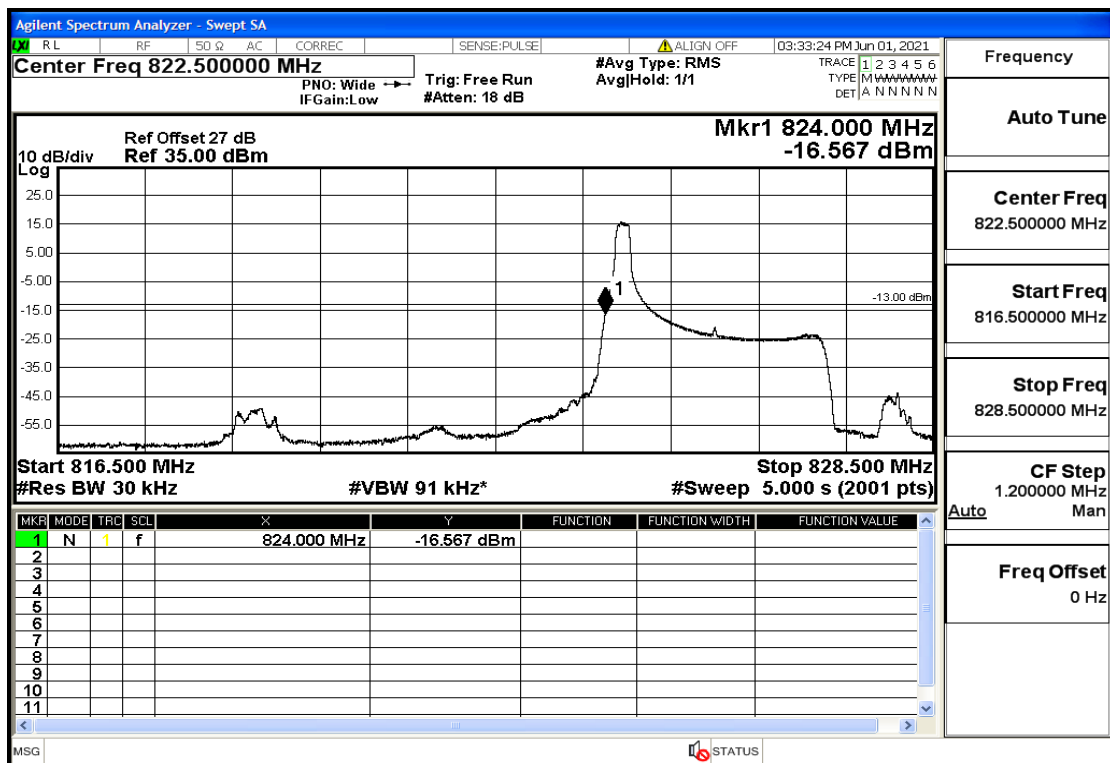
Band5-1.4-848.3-16QAM-1#HIGH@Pass



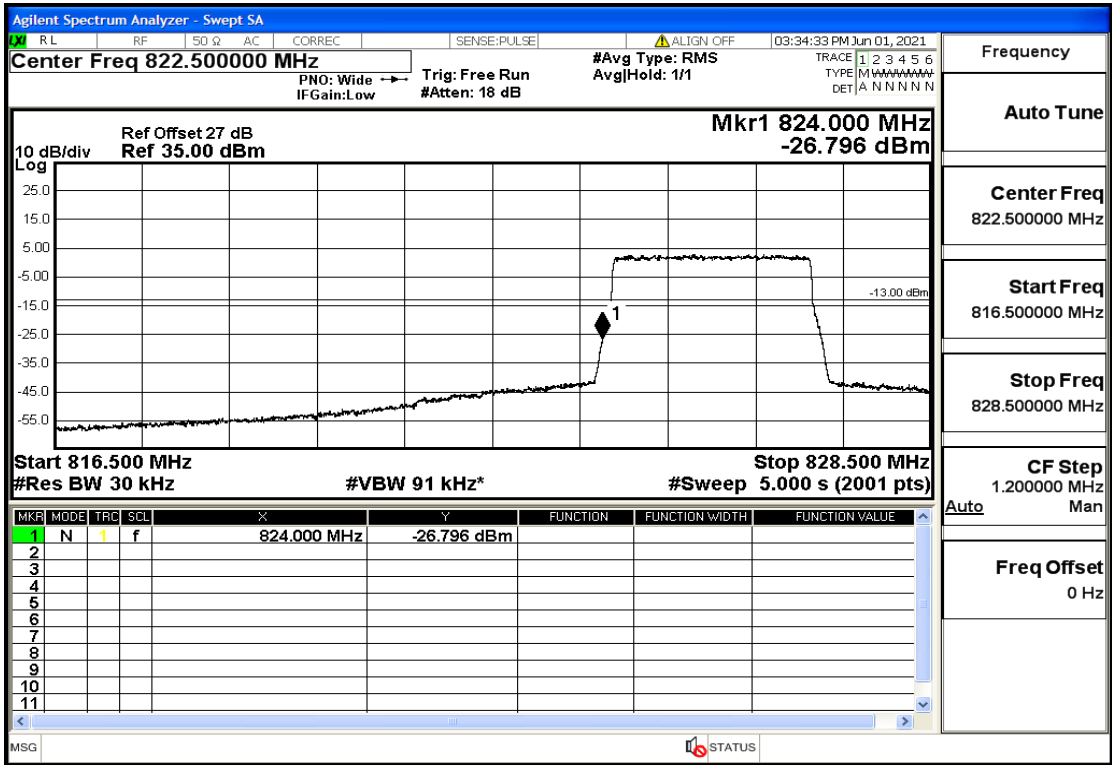
Band5-3-825.5-QPSK-15#LOW@Pass



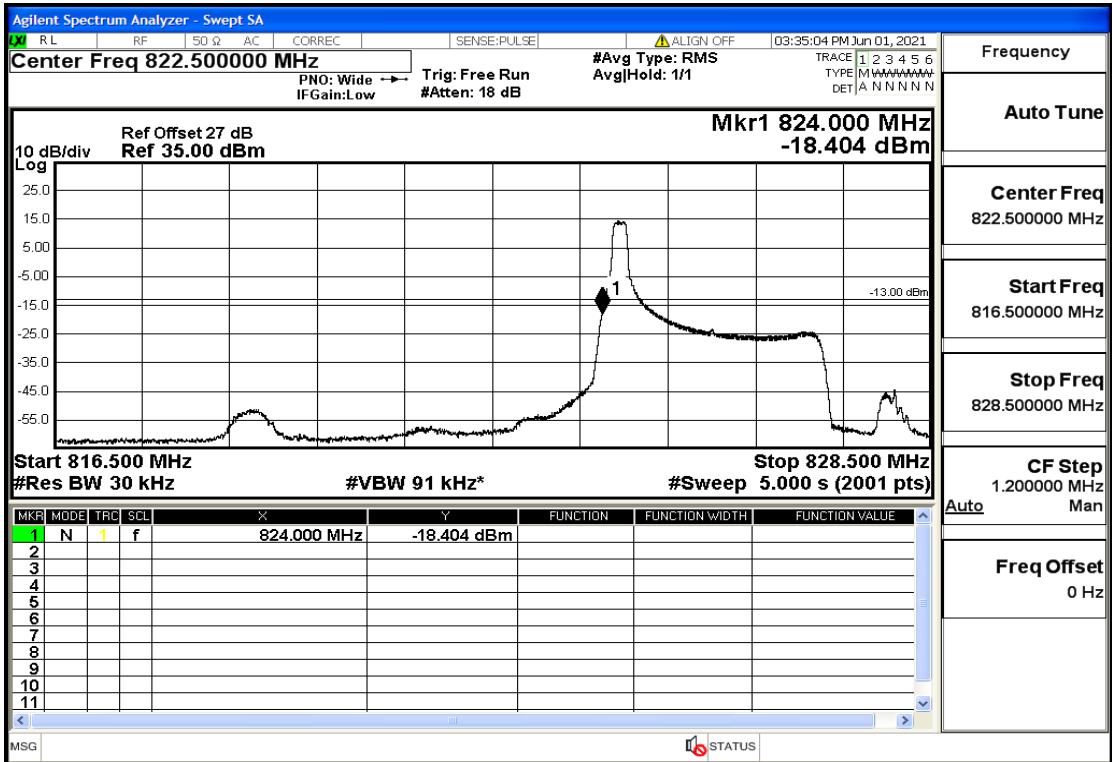
Band5-3-825.5-QPSK-1#LOW@Pass



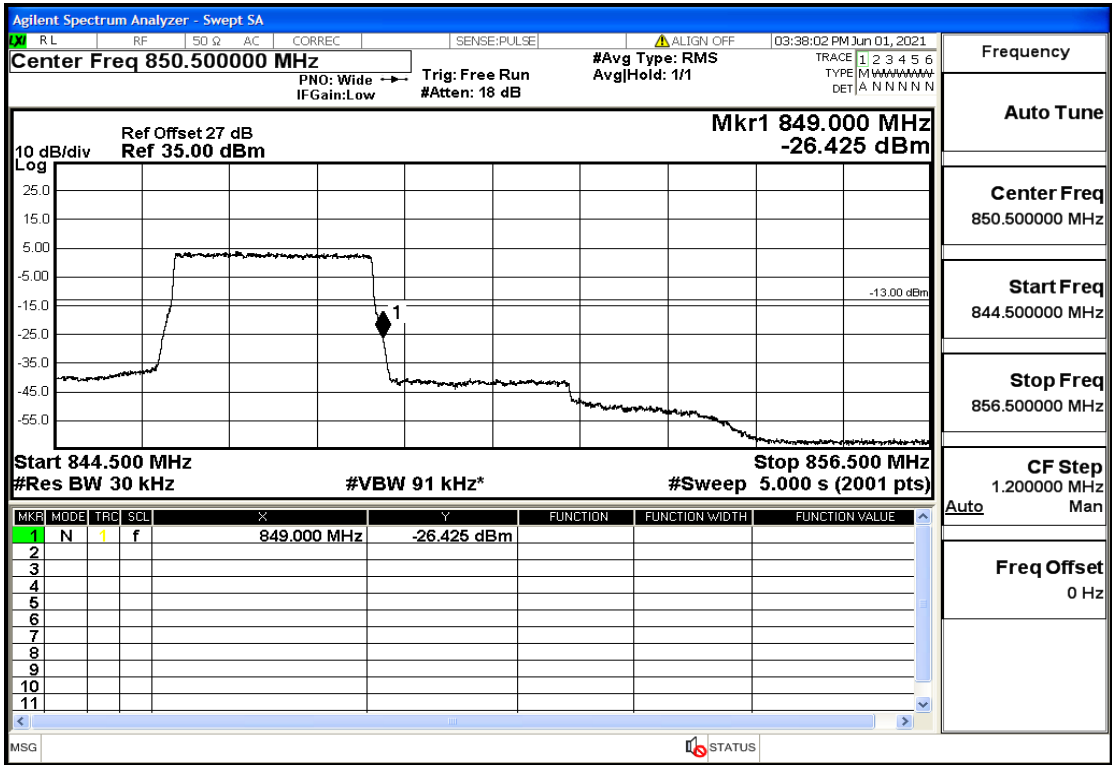
Band5-3-825.5-16QAM-15#LOW@Pass



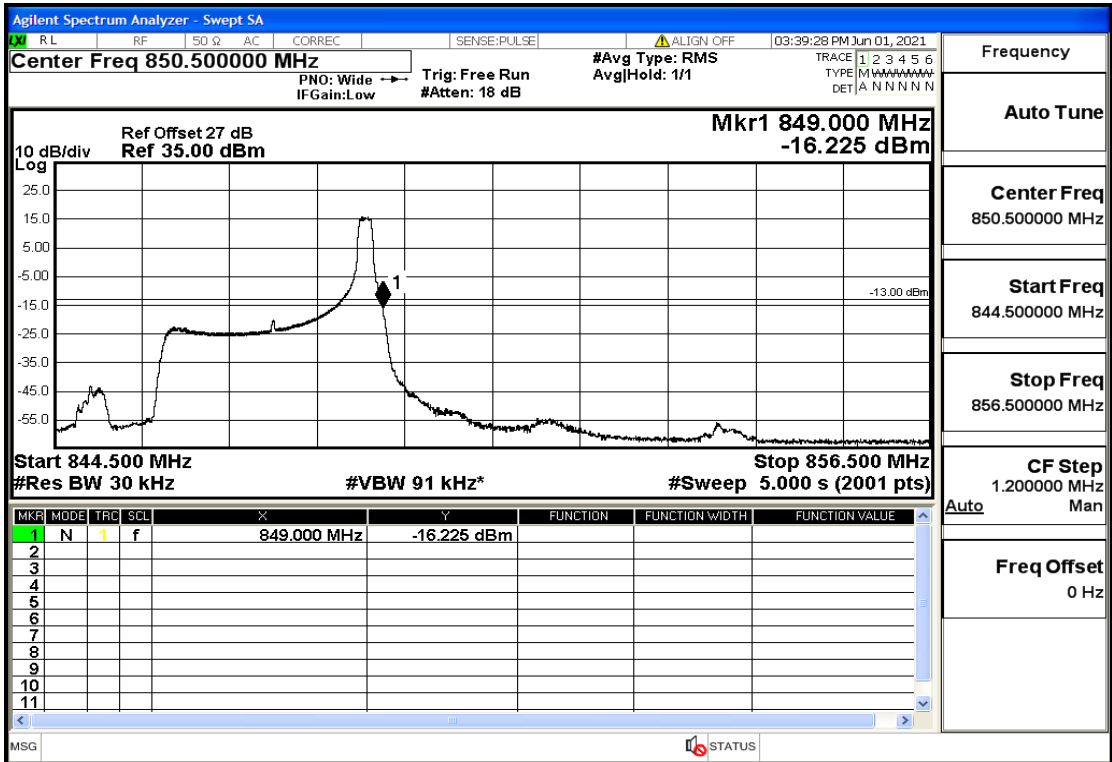
Band5-3-825.5-16QAM-1#LOW@Pass



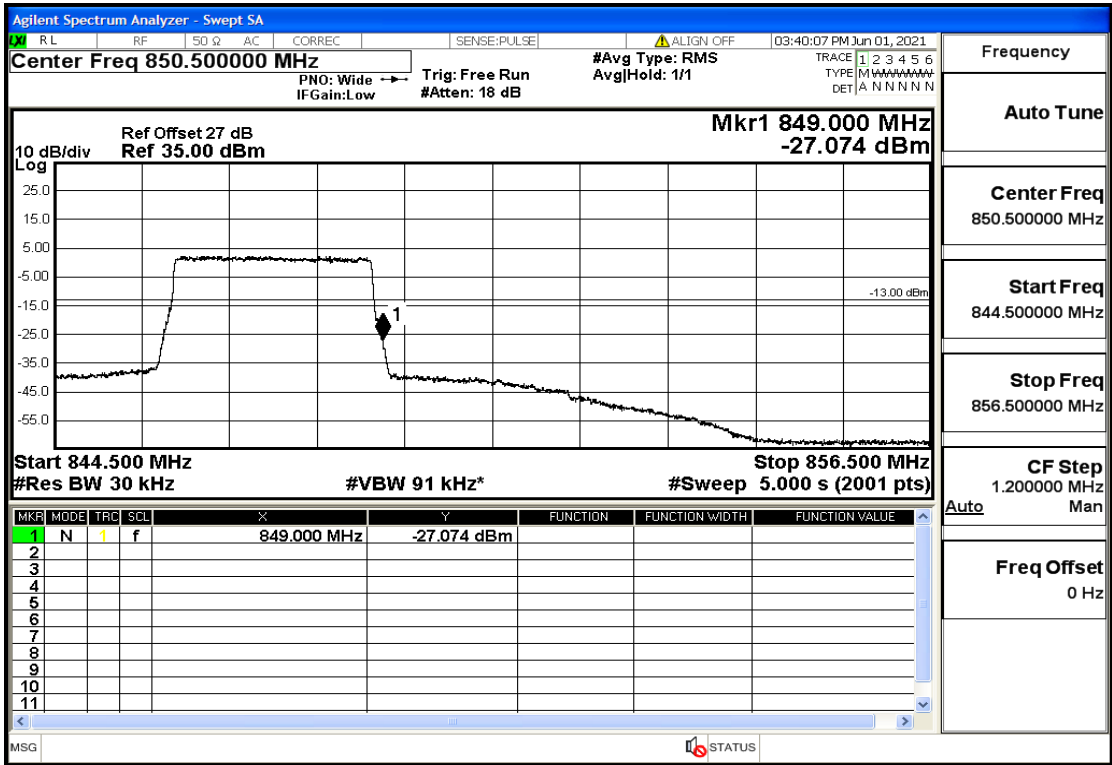
Band5-3-847.5-QPSK-15#LOW@Pass



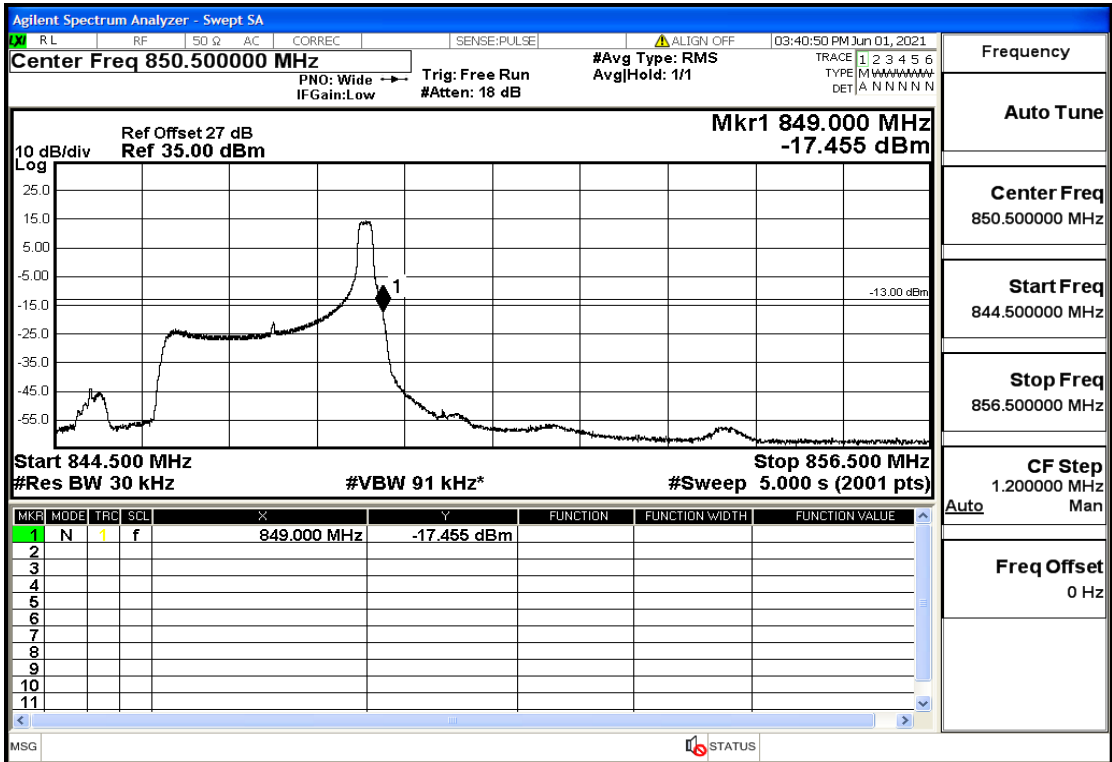
Band5-3-847.5-QPSK-1#HIGH@Pass



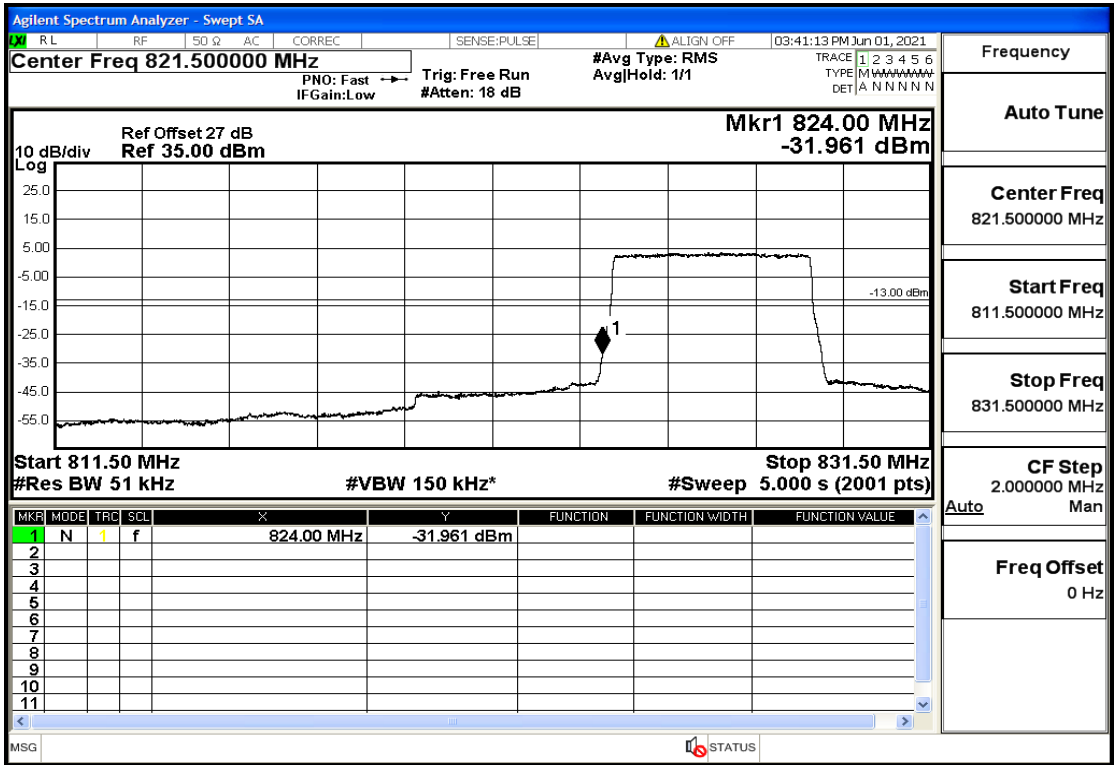
Band5-3-847.5-16QAM-15#LOW@Pass



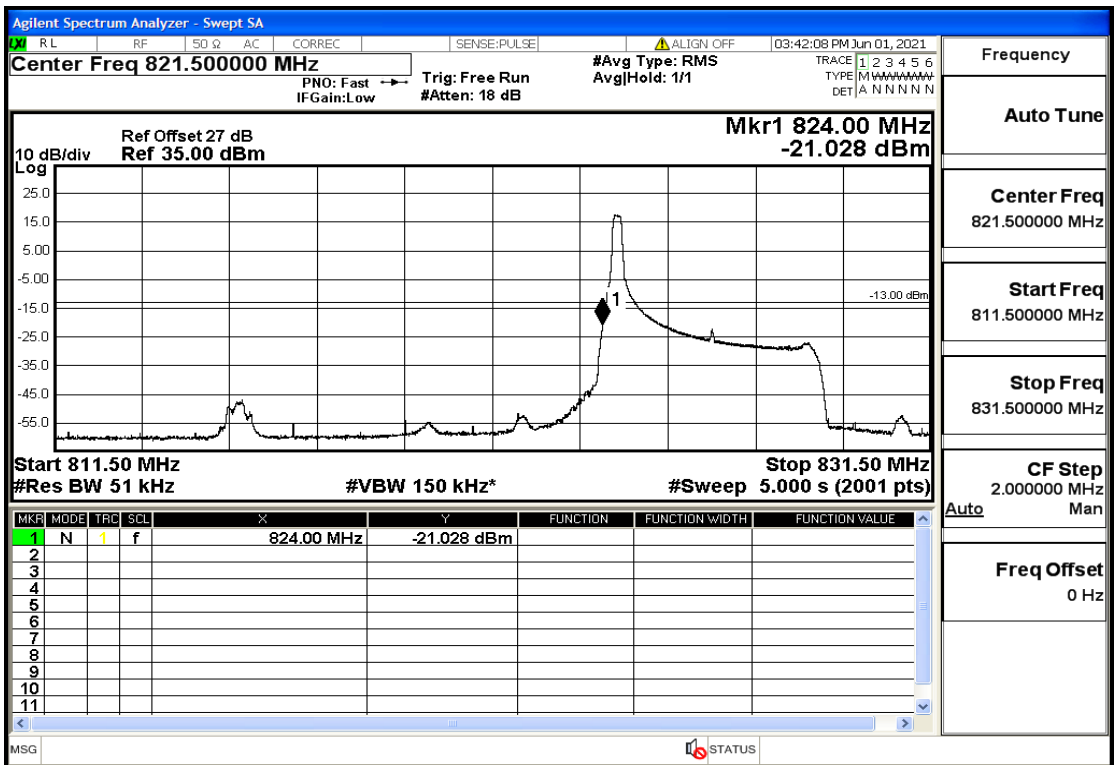
Band5-3-847.5-16QAM-1#HIGH@Pass



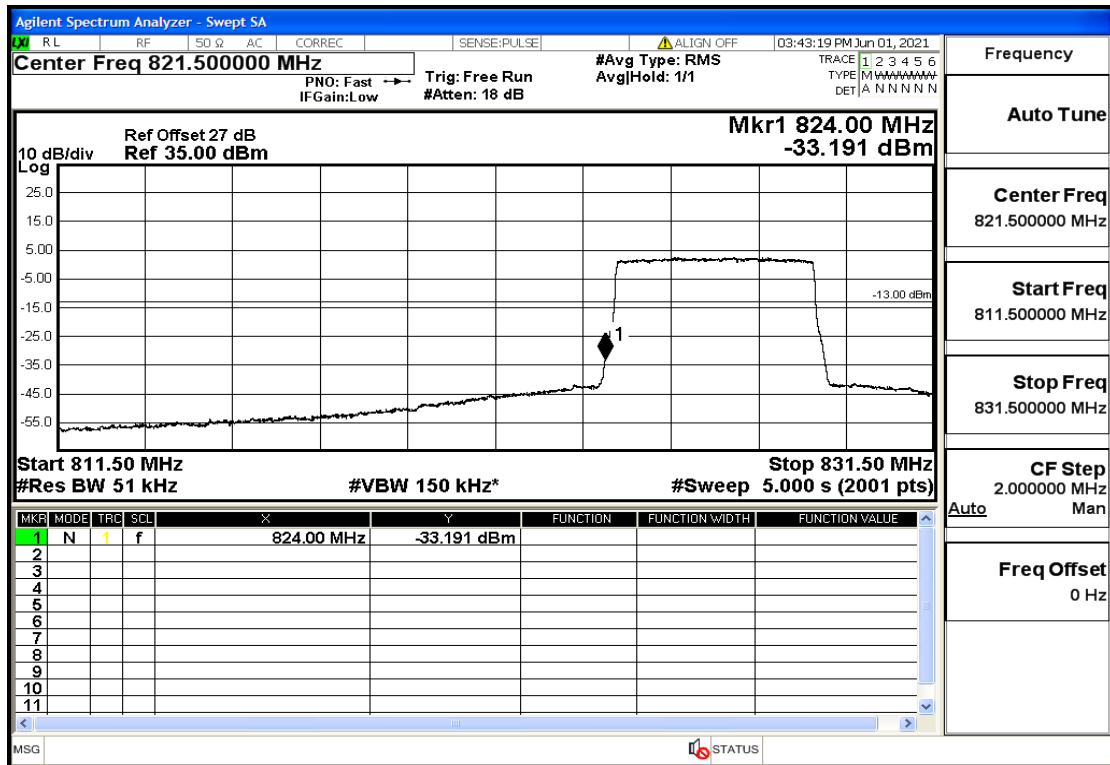
Band5-5-826.5-QPSK-25#LOW@Pass



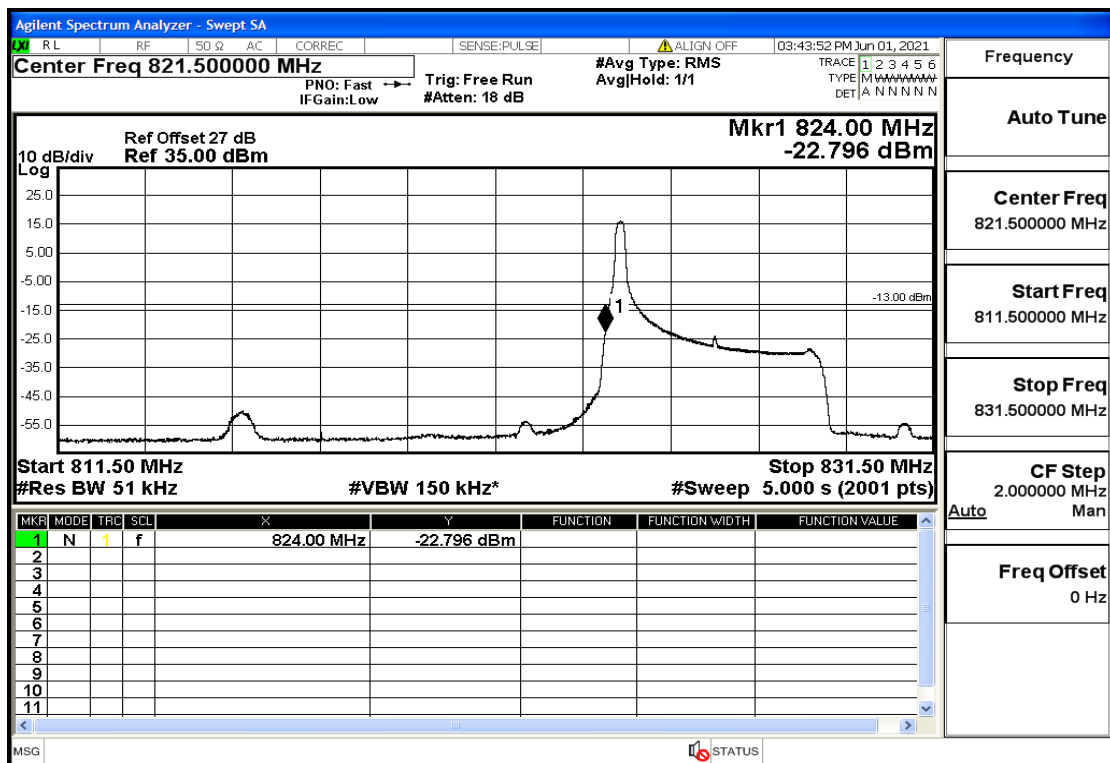
Band5-5-826.5-QPSK-1#LOW@Pass



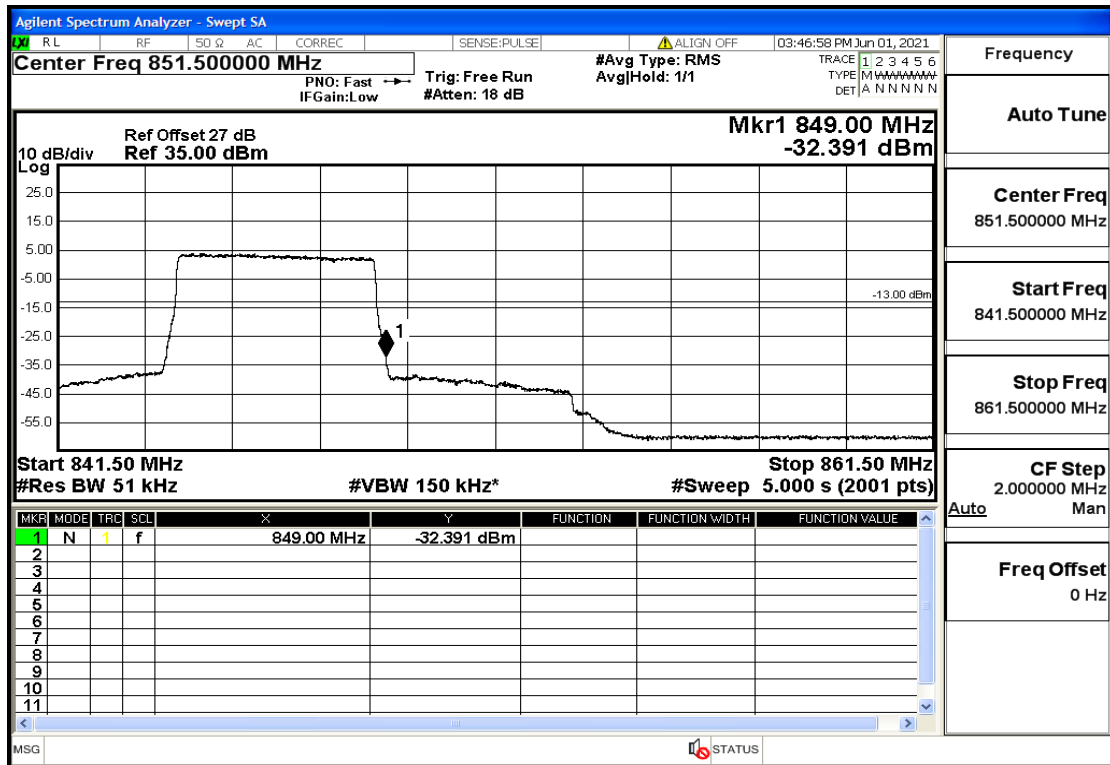
Band5-5-826.5-16QAM-25#LOW@Pass



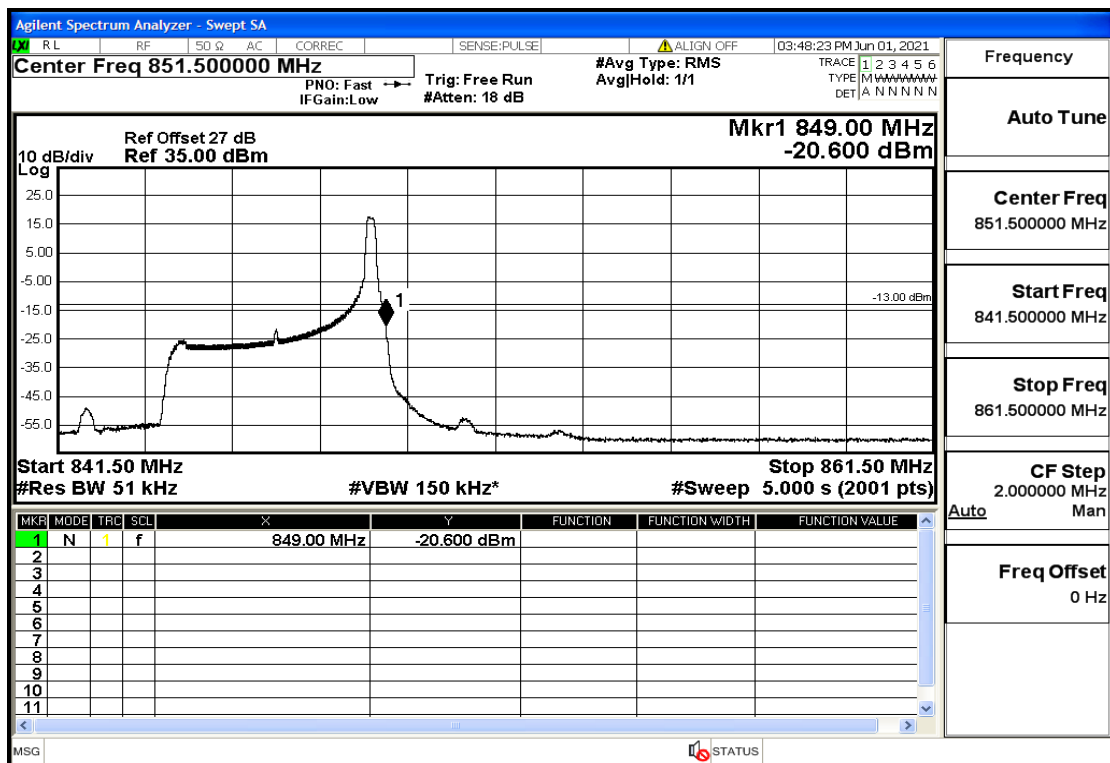
Band5-5-826.5-16QAM-1#LOW@Pass



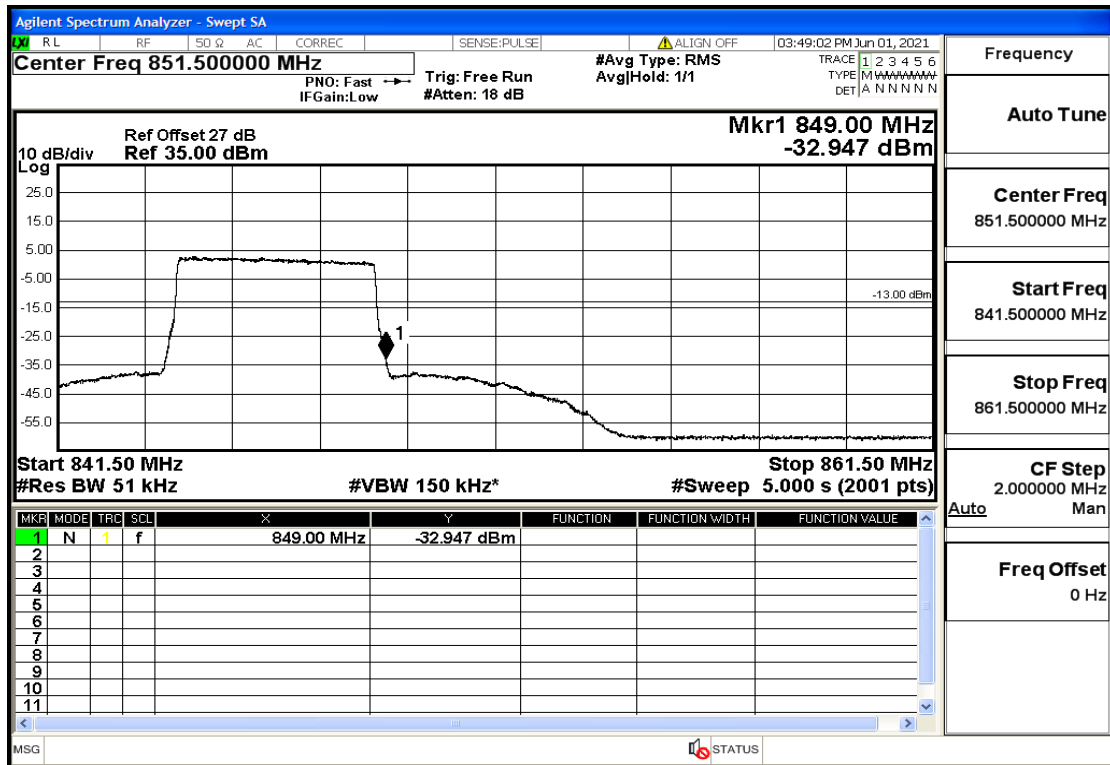
Band5-5-846.5-QPSK-25#LOW@Pass



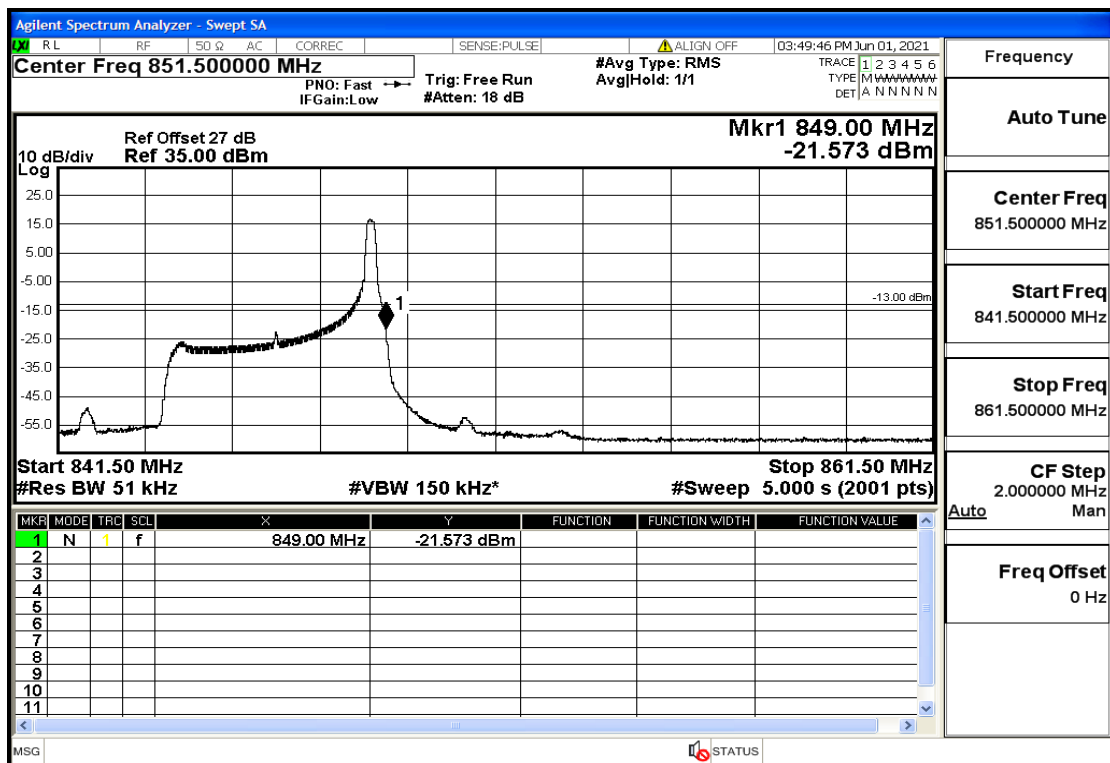
Band5-5-846.5-QPSK-1#HIGH@Pass



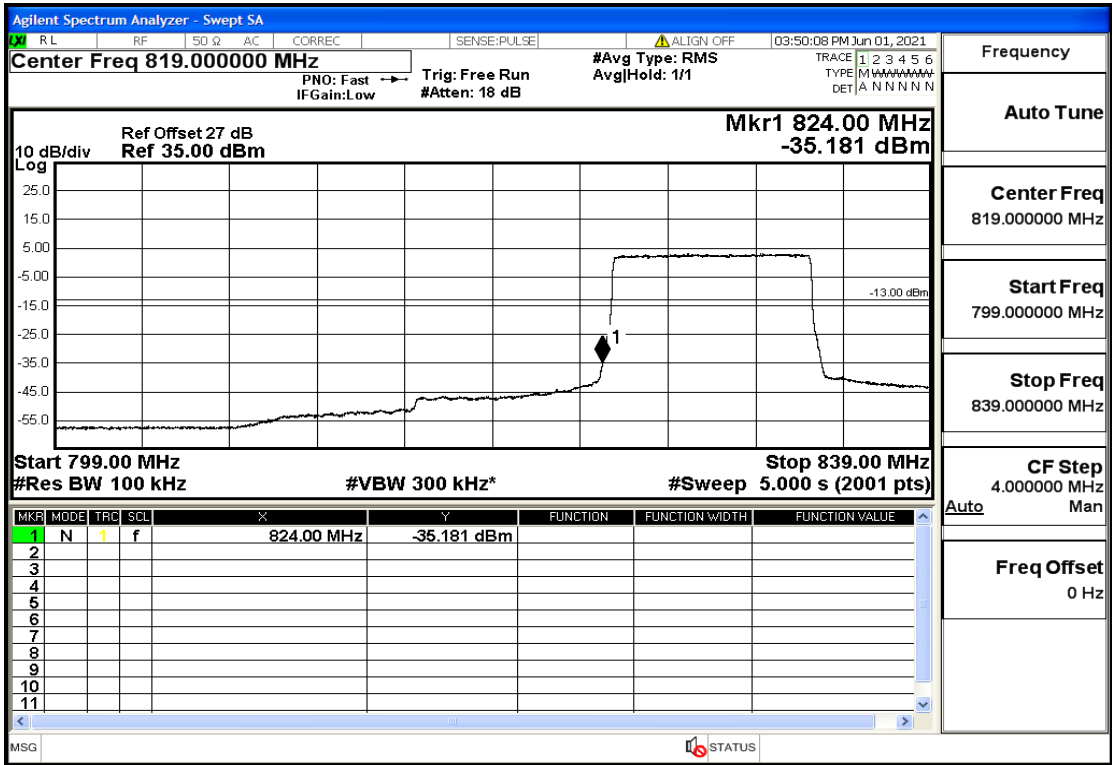
Band5-5-846.5-16QAM-25#LOW@Pass



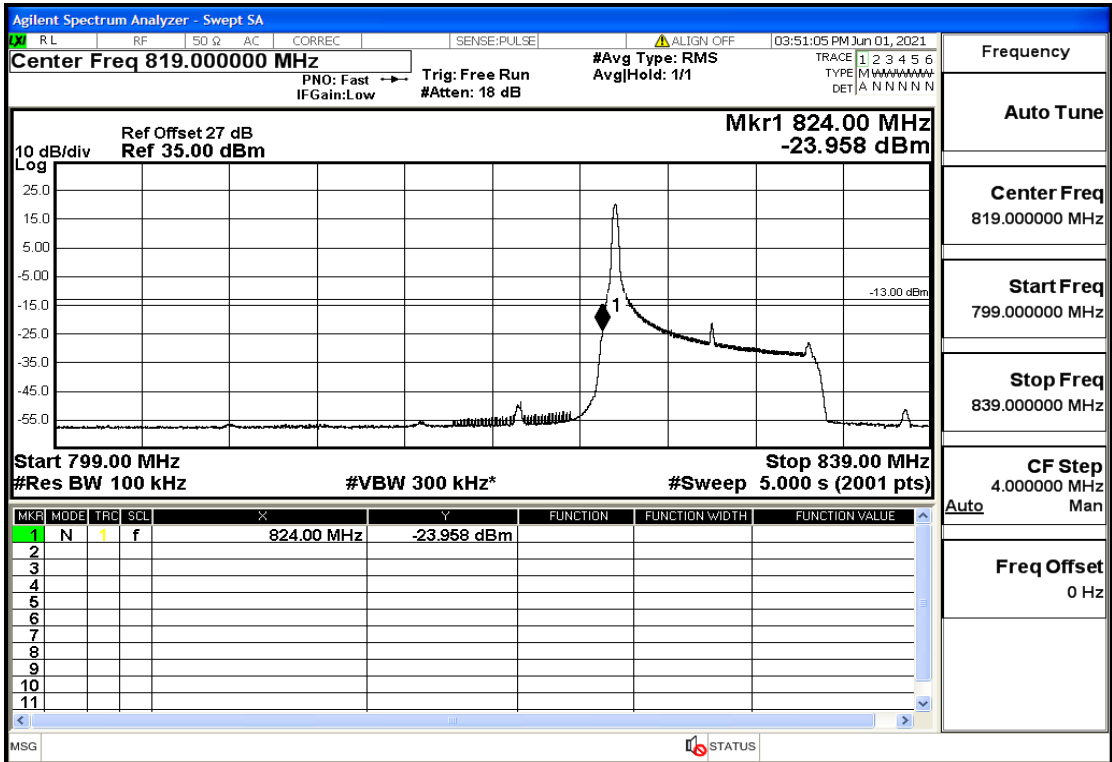
Band5-5-846.5-16QAM-1#HIGH@Pass



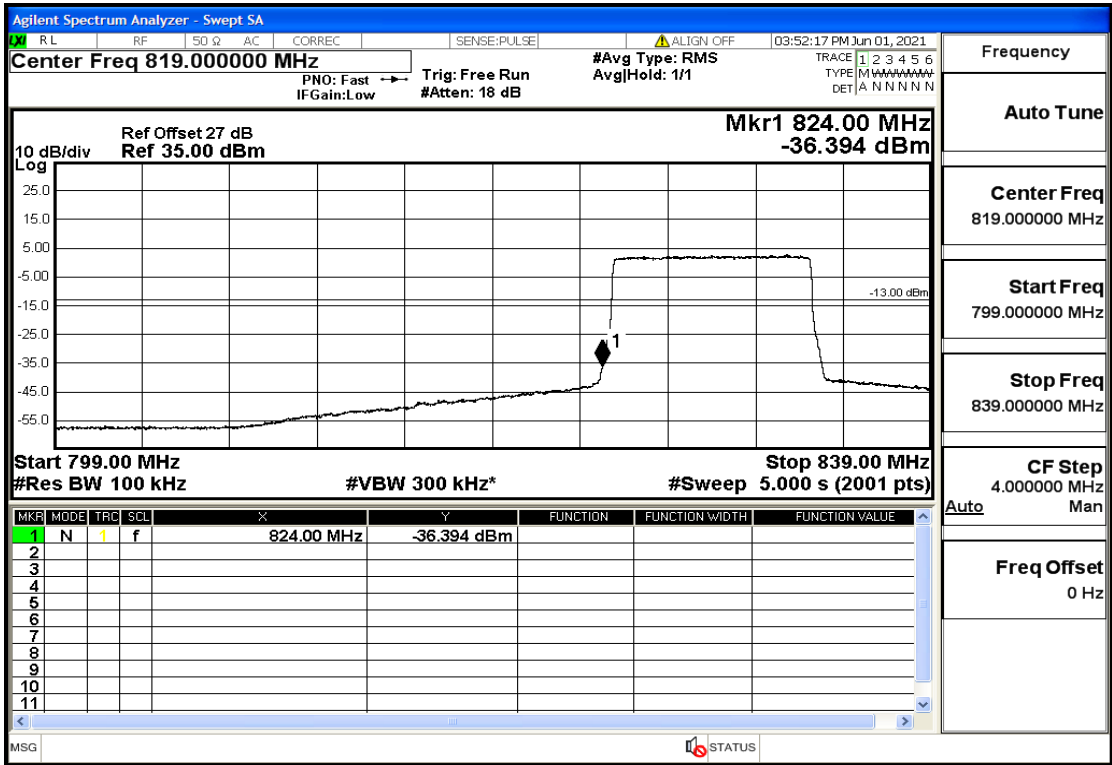
Band5-10-829-QPSK-50#LOW@Pass



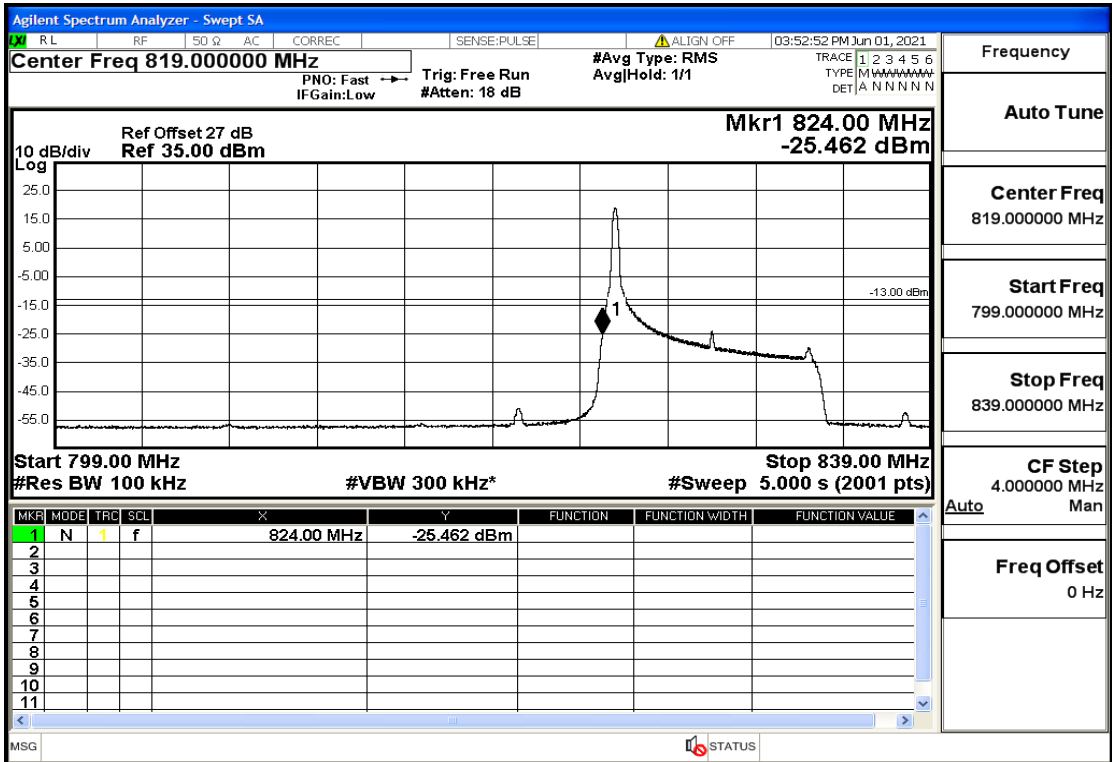
Band5-10-829-QPSK-1#LOW@Pass



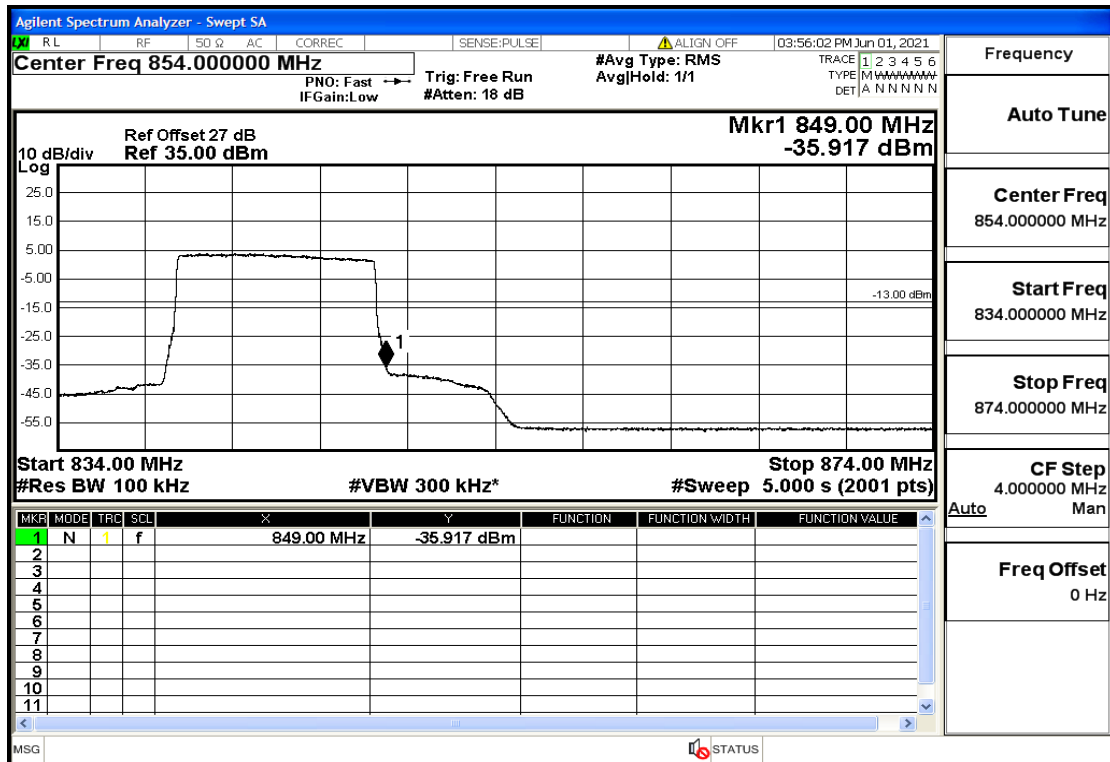
Band5-10-829-16QAM-50#LOW@Pass



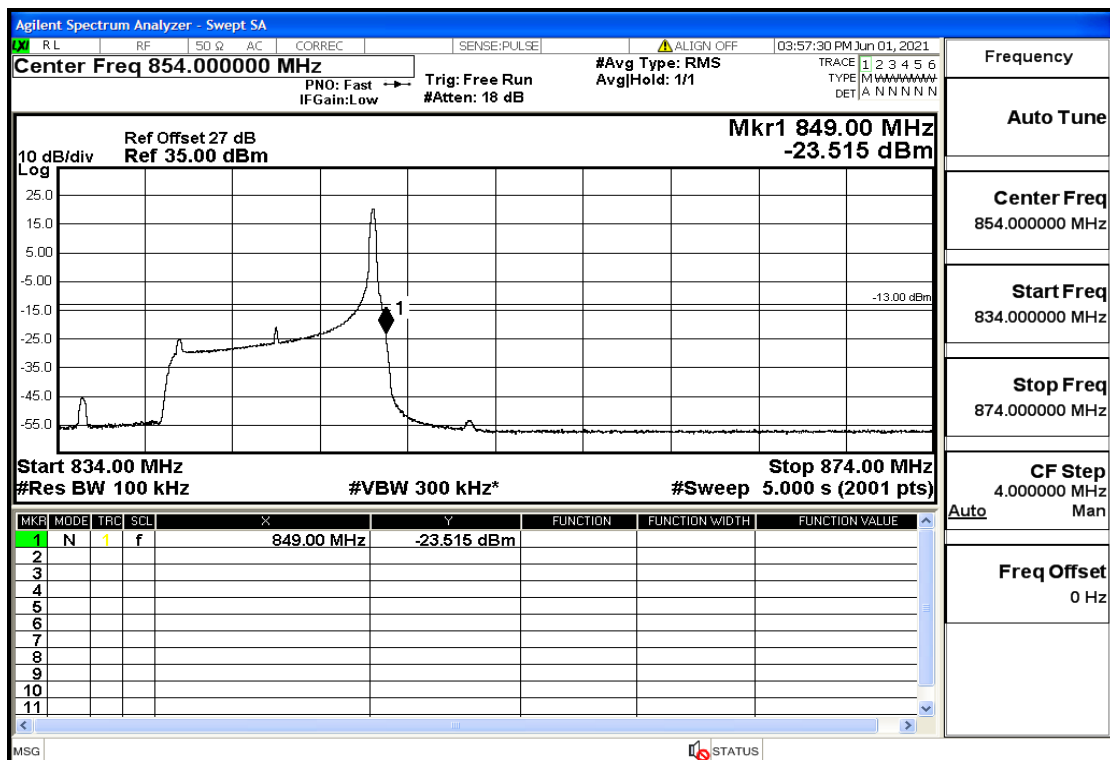
Band5-10-829-16QAM-1#LOW@Pass



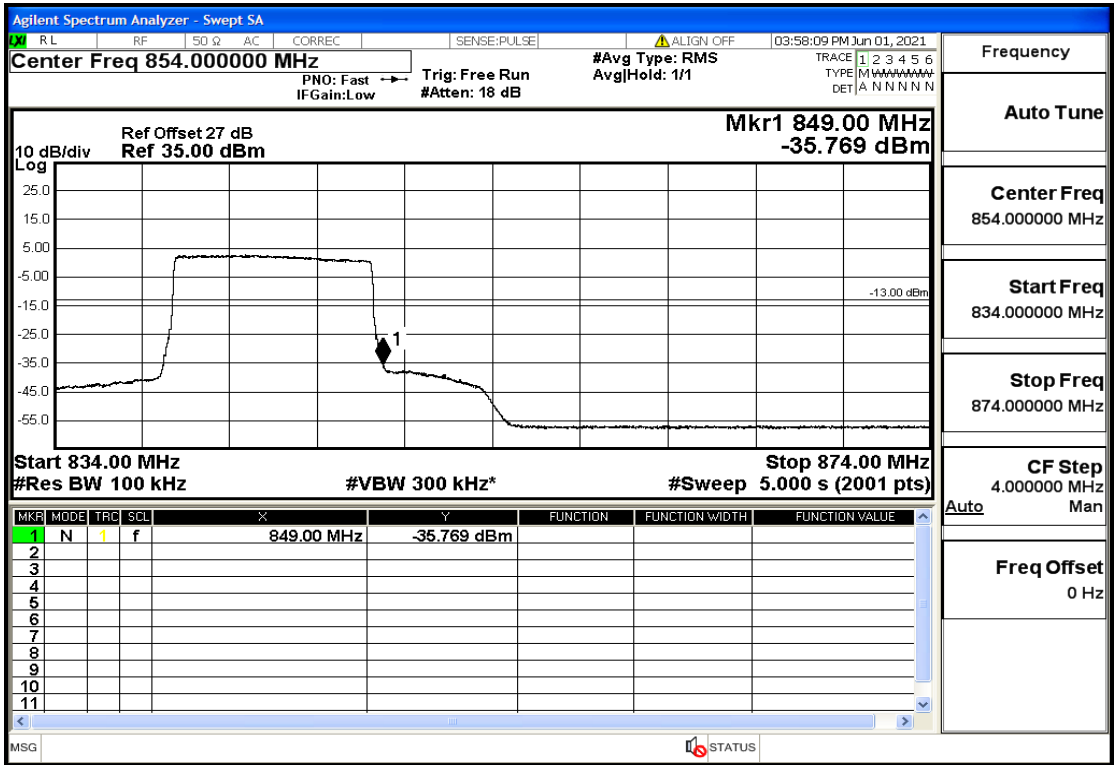
Band5-10-844-QPSK-50#LOW@Pass



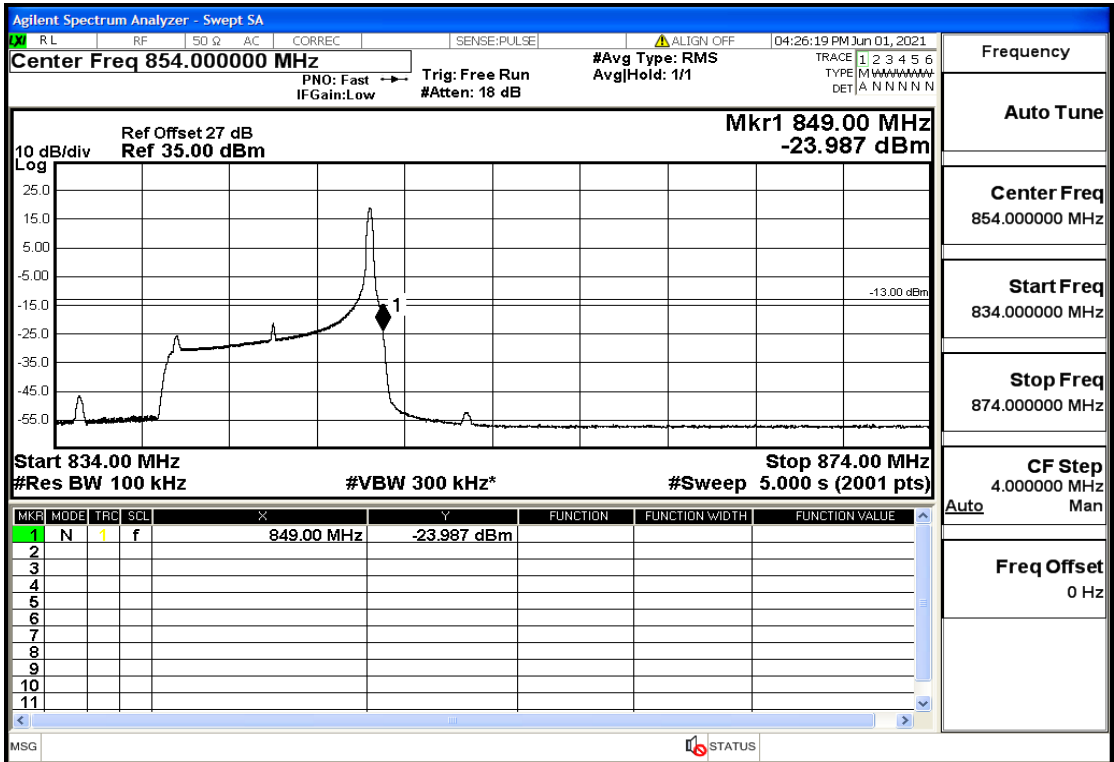
Band5-10-844-QPSK-1#HIGH@Pass



Band5-10-844-16QAM-50#LOW@Pass



Band5-10-844-16QAM-1#HIGH@Pass

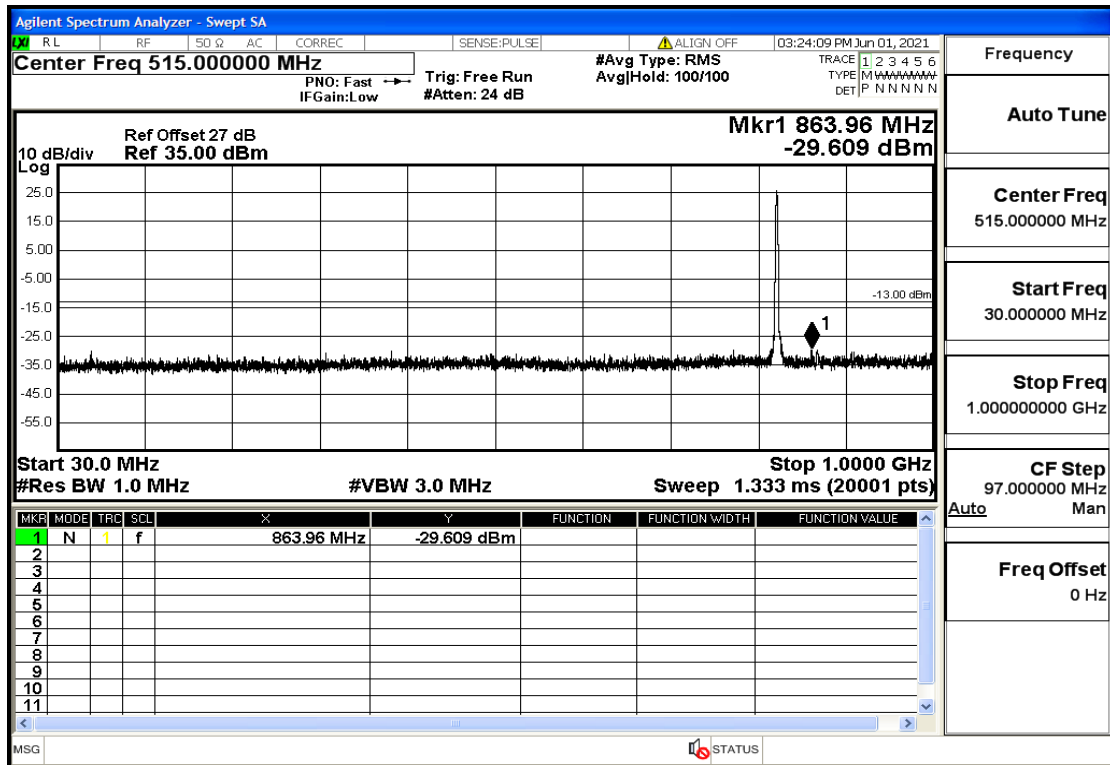


Conducted Spurious Emission

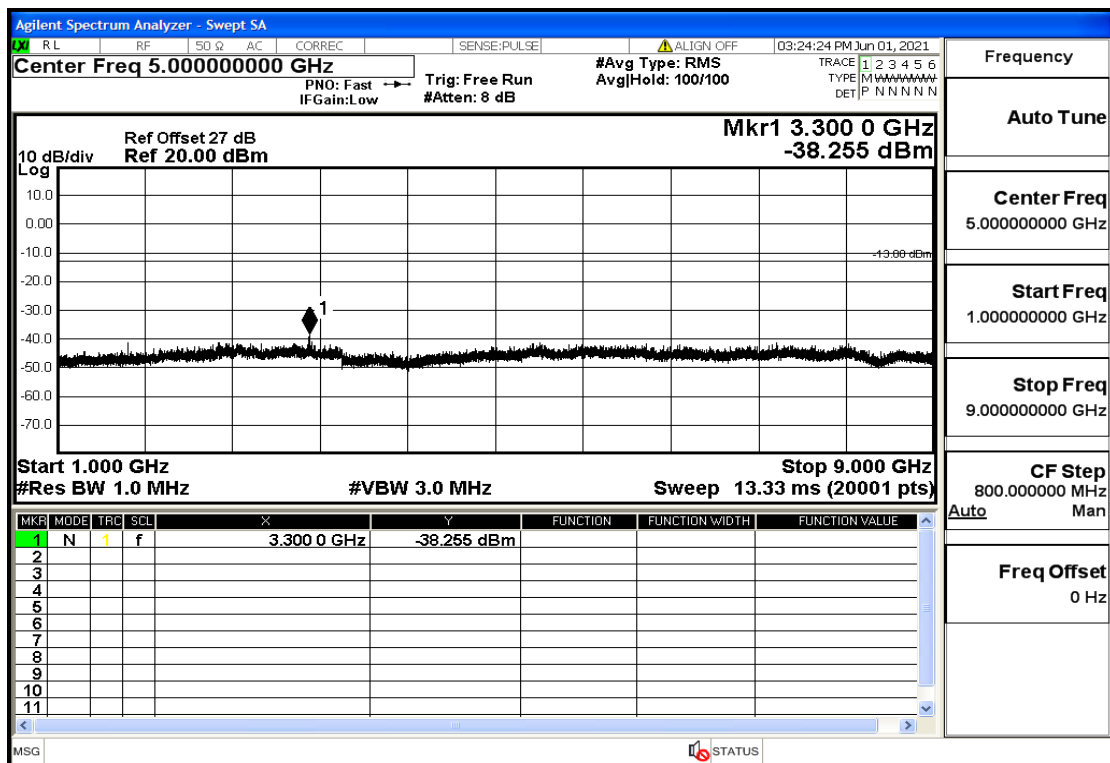
Band	Bandwidth(MHz)	UL Frequency(MHz)	Modulation	RB Size	RB Offset	Test Condition	Transmitter Spurious Emission(Pass/Fail)
OB5	1.4	824.7	QPSK	6	LOW	30mHz-1GHz	Pass
OB5	1.4	824.7	QPSK	6	LOW	1GHz-9GHz	Pass
OB5	1.4	824.7	QPSK	1	LOW	30mHz-1GHz	Pass
OB5	1.4	824.7	QPSK	1	LOW	1GHz-9GHz	Pass
OB5	1.4	824.7	QPSK	1	HIGH	30mHz-1GHz	Pass
OB5	1.4	824.7	QPSK	1	HIGH	1GHz-9GHz	Pass
OB5	1.4	836.5	QPSK	6	LOW	30mHz-1GHz	Pass
OB5	1.4	836.5	QPSK	6	LOW	1GHz-9GHz	Pass
OB5	1.4	836.5	QPSK	1	LOW	30mHz-1GHz	Pass
OB5	1.4	836.5	QPSK	1	LOW	1GHz-9GHz	Pass
OB5	1.4	836.5	QPSK	1	HIGH	30mHz-1GHz	Pass
OB5	1.4	836.5	QPSK	1	HIGH	1GHz-9GHz	Pass
OB5	1.4	848.3	QPSK	6	LOW	30mHz-1GHz	Pass
OB5	1.4	848.3	QPSK	6	LOW	1GHz-9GHz	Pass
OB5	1.4	848.3	QPSK	1	LOW	30mHz-1GHz	Pass
OB5	1.4	848.3	QPSK	1	LOW	1GHz-9GHz	Pass
OB5	1.4	848.3	QPSK	1	HIGH	30mHz-1GHz	Pass
OB5	1.4	848.3	QPSK	1	HIGH	1GHz-9GHz	Pass
OB5	3	825.5	QPSK	15	LOW	30mHz-1GHz	Pass
OB5	3	825.5	QPSK	15	LOW	1GHz-9GHz	Pass
OB5	3	825.5	QPSK	1	LOW	30mHz-1GHz	Pass
OB5	3	825.5	QPSK	1	LOW	1GHz-9GHz	Pass
OB5	3	825.5	QPSK	1	HIGH	30mHz-1GHz	Pass
OB5	3	825.5	QPSK	1	HIGH	1GHz-9GHz	Pass
OB5	3	836.5	QPSK	15	LOW	30mHz-1GHz	Pass
OB5	3	836.5	QPSK	15	LOW	1GHz-9GHz	Pass
OB5	3	836.5	QPSK	1	LOW	30mHz-1GHz	Pass
OB5	3	836.5	QPSK	1	LOW	1GHz-9GHz	Pass
OB5	3	836.5	QPSK	1	HIGH	30mHz-1GHz	Pass
OB5	3	836.5	QPSK	1	HIGH	1GHz-9GHz	Pass
OB5	3	847.5	QPSK	15	LOW	30mHz-1GHz	Pass
OB5	3	847.5	QPSK	15	LOW	1GHz-9GHz	Pass
OB5	3	847.5	QPSK	1	LOW	30mHz-1GHz	Pass
OB5	3	847.5	QPSK	1	LOW	1GHz-9GHz	Pass
OB5	3	847.5	QPSK	1	HIGH	30mHz-1GHz	Pass
OB5	3	847.5	QPSK	1	HIGH	1GHz-9GHz	Pass
OB5	5	826.5	QPSK	25	LOW	30mHz-1GHz	Pass
OB5	5	826.5	QPSK	25	LOW	1GHz-9GHz	Pass
OB5	5	826.5	QPSK	1	LOW	30mHz-1GHz	Pass
OB5	5	826.5	QPSK	1	LOW	1GHz-9GHz	Pass

OB5	5	826.5	QPSK	1	HIGH	30mHz-1GHz	Pass
OB5	5	826.5	QPSK	1	HIGH	1GHz-9GHz	Pass
OB5	5	836.5	QPSK	25	LOW	30mHz-1GHz	Pass
OB5	5	836.5	QPSK	25	LOW	1GHz-9GHz	Pass
OB5	5	836.5	QPSK	1	LOW	30mHz-1GHz	Pass
OB5	5	836.5	QPSK	1	LOW	1GHz-9GHz	Pass
OB5	5	836.5	QPSK	1	HIGH	30mHz-1GHz	Pass
OB5	5	836.5	QPSK	1	HIGH	1GHz-9GHz	Pass
OB5	5	846.5	QPSK	25	LOW	30mHz-1GHz	Pass
OB5	5	846.5	QPSK	25	LOW	1GHz-9GHz	Pass
OB5	5	846.5	QPSK	1	LOW	30mHz-1GHz	Pass
OB5	5	846.5	QPSK	1	LOW	1GHz-9GHz	Pass
OB5	5	846.5	QPSK	1	HIGH	30mHz-1GHz	Pass
OB5	5	846.5	QPSK	1	HIGH	1GHz-9GHz	Pass
OB5	10	829	QPSK	50	LOW	30mHz-1GHz	Pass
OB5	10	829	QPSK	50	LOW	1GHz-9GHz	Pass
OB5	10	829	QPSK	1	LOW	30mHz-1GHz	Pass
OB5	10	829	QPSK	1	LOW	1GHz-9GHz	Pass
OB5	10	829	QPSK	1	HIGH	30mHz-1GHz	Pass
OB5	10	829	QPSK	1	HIGH	1GHz-9GHz	Pass
OB5	10	836.5	QPSK	50	LOW	30mHz-1GHz	Pass
OB5	10	836.5	QPSK	50	LOW	1GHz-9GHz	Pass
OB5	10	836.5	QPSK	1	LOW	30mHz-1GHz	Pass
OB5	10	836.5	QPSK	1	LOW	1GHz-9GHz	Pass
OB5	10	836.5	QPSK	1	HIGH	30mHz-1GHz	Pass
OB5	10	836.5	QPSK	1	HIGH	1GHz-9GHz	Pass
OB5	10	844	QPSK	50	LOW	30mHz-1GHz	Pass
OB5	10	844	QPSK	50	LOW	1GHz-9GHz	Pass
OB5	10	844	QPSK	1	LOW	30mHz-1GHz	Pass
OB5	10	844	QPSK	1	LOW	1GHz-9GHz	Pass
OB5	10	844	QPSK	1	HIGH	30mHz-1GHz	Pass
OB5	10	844	QPSK	1	HIGH	1GHz-9GHz	Pass

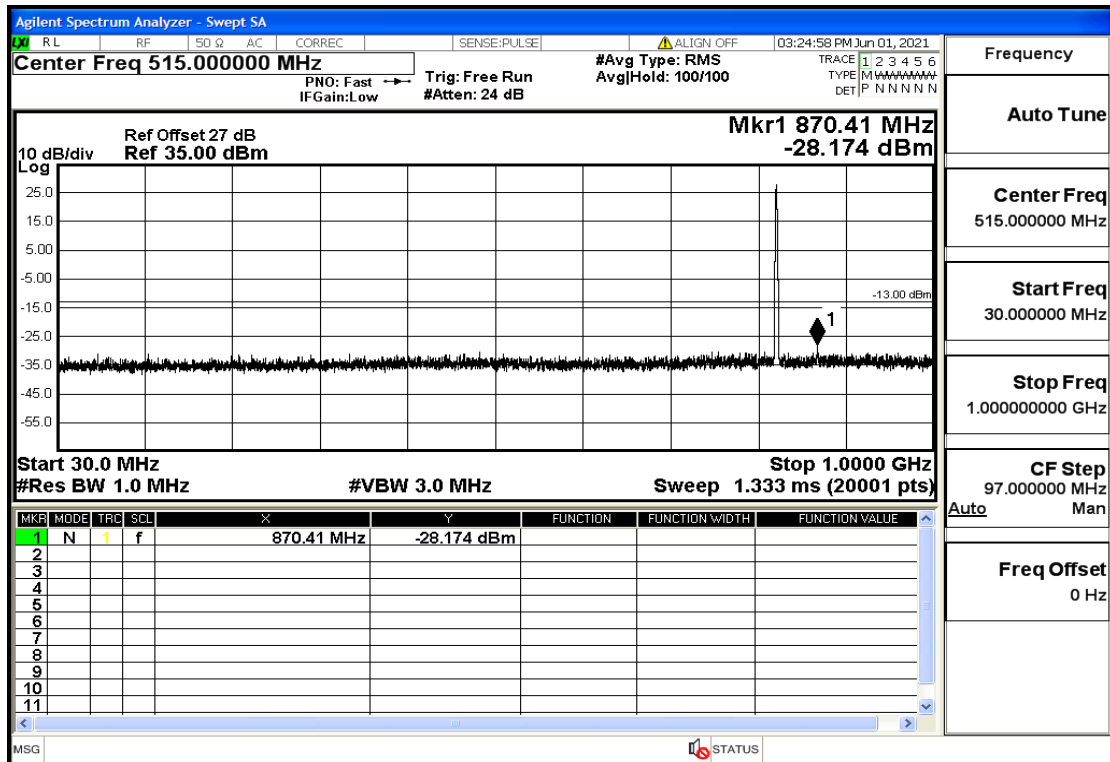
OB5-1.4-824.7-QPSK-6#LOW@30mHz-1GHz@Pass



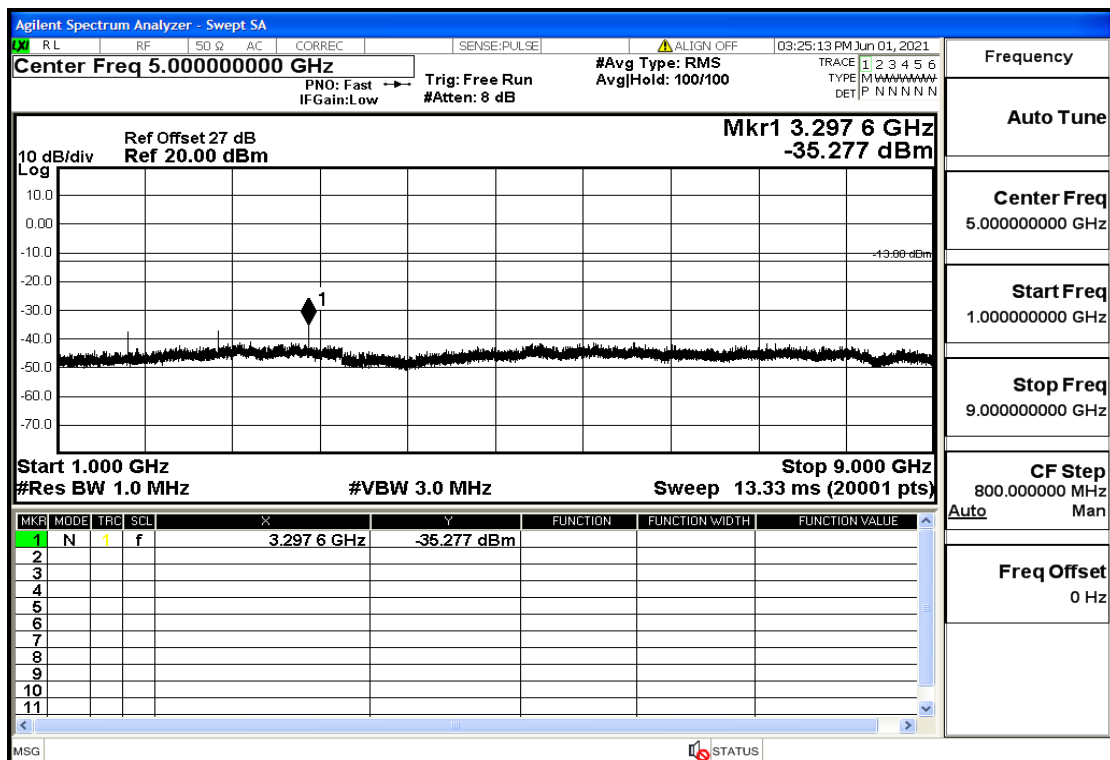
OB5-1.4-824.7-QPSK-6#LOW@1GHz-9GHz@Pass



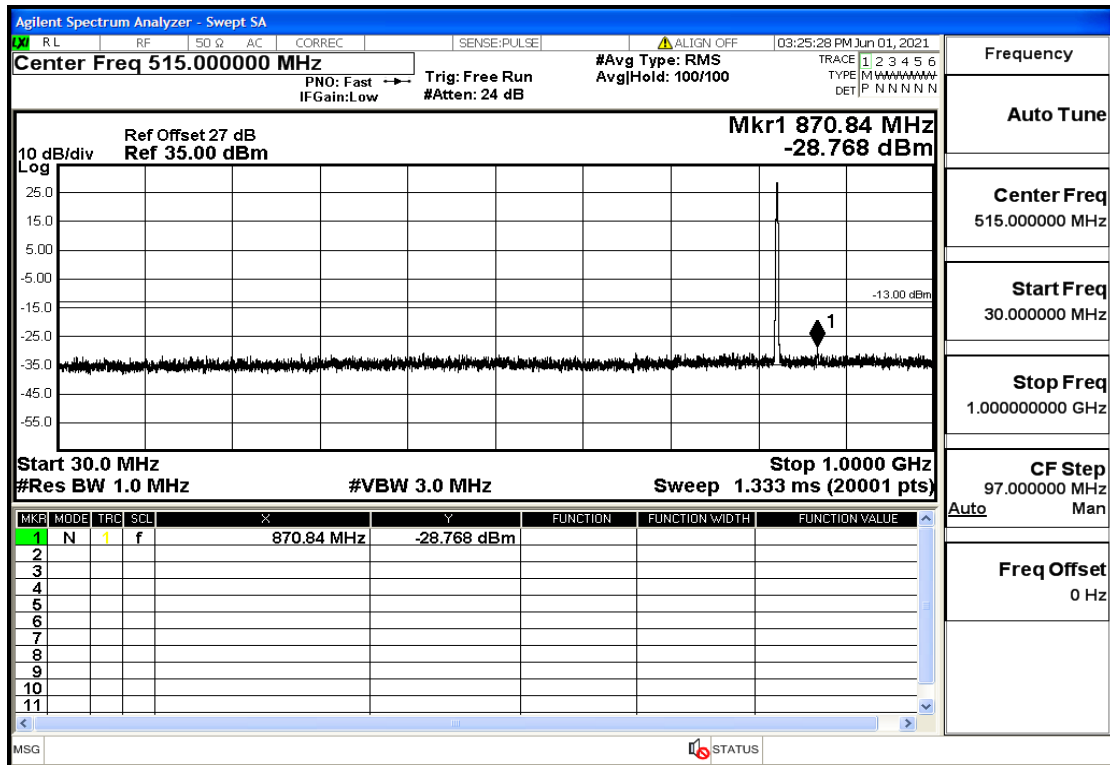
OB5-1.4-824.7-QPSK-1#LOW@30mHz-1GHz@Pass



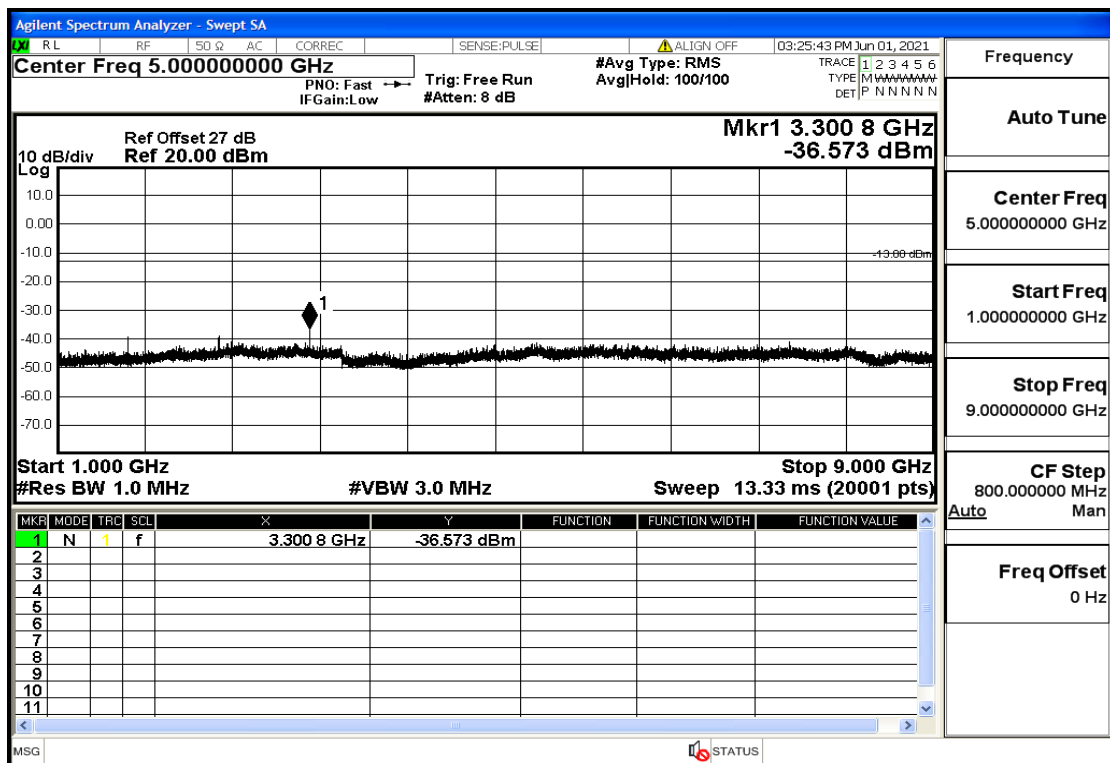
OB5-1.4-824.7-QPSK-1#LOW@1GHz-9GHz@Pass



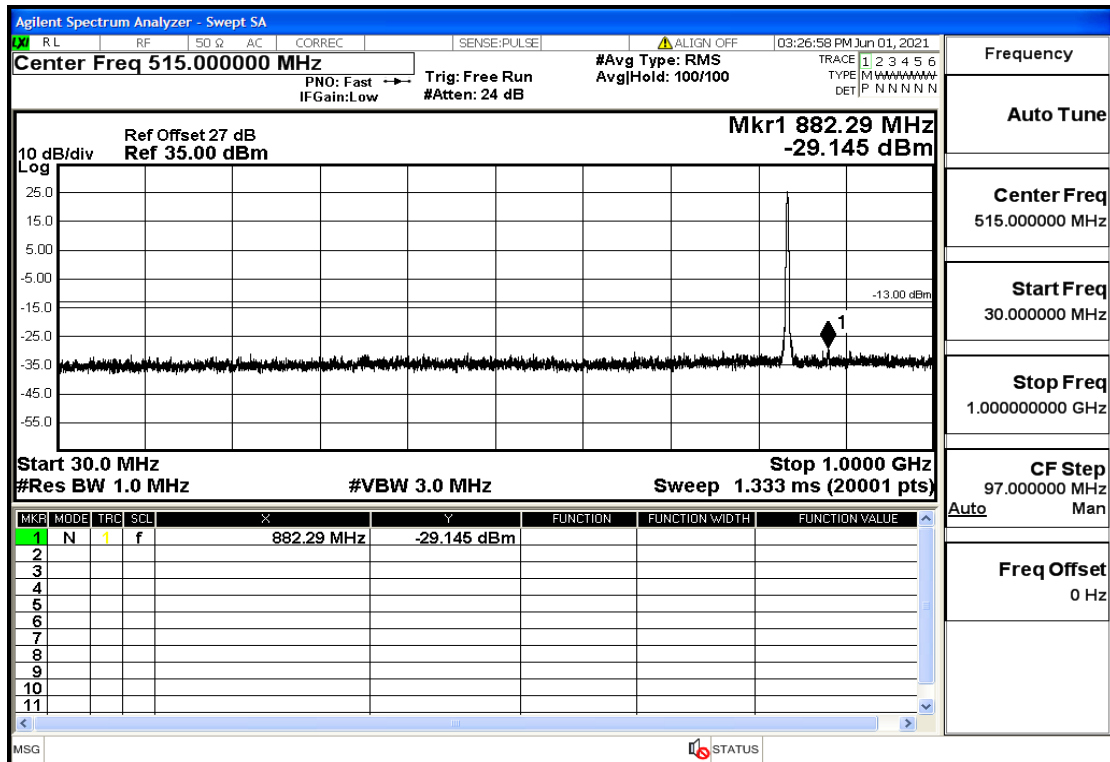
OB5-1.4-824.7-QPSK-1#HIGH@30mHz-1GHz@Pass



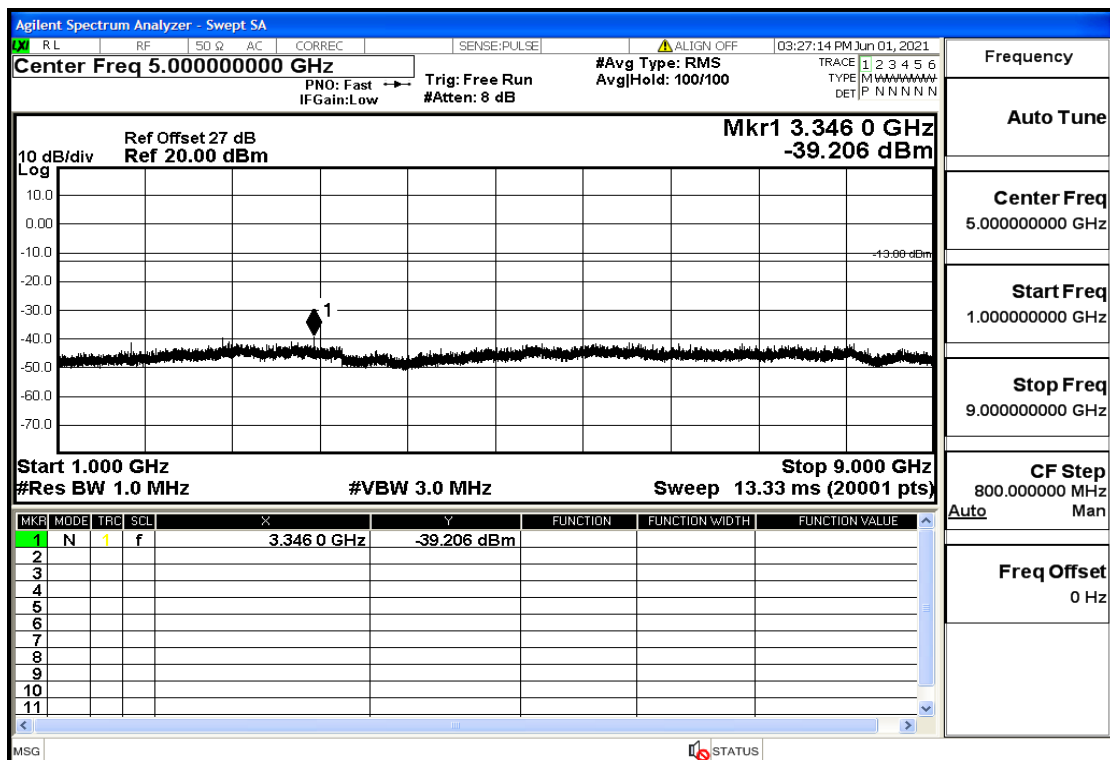
OB5-1.4-824.7-QPSK-1#HIGH@1GHz-9GHz@Pass



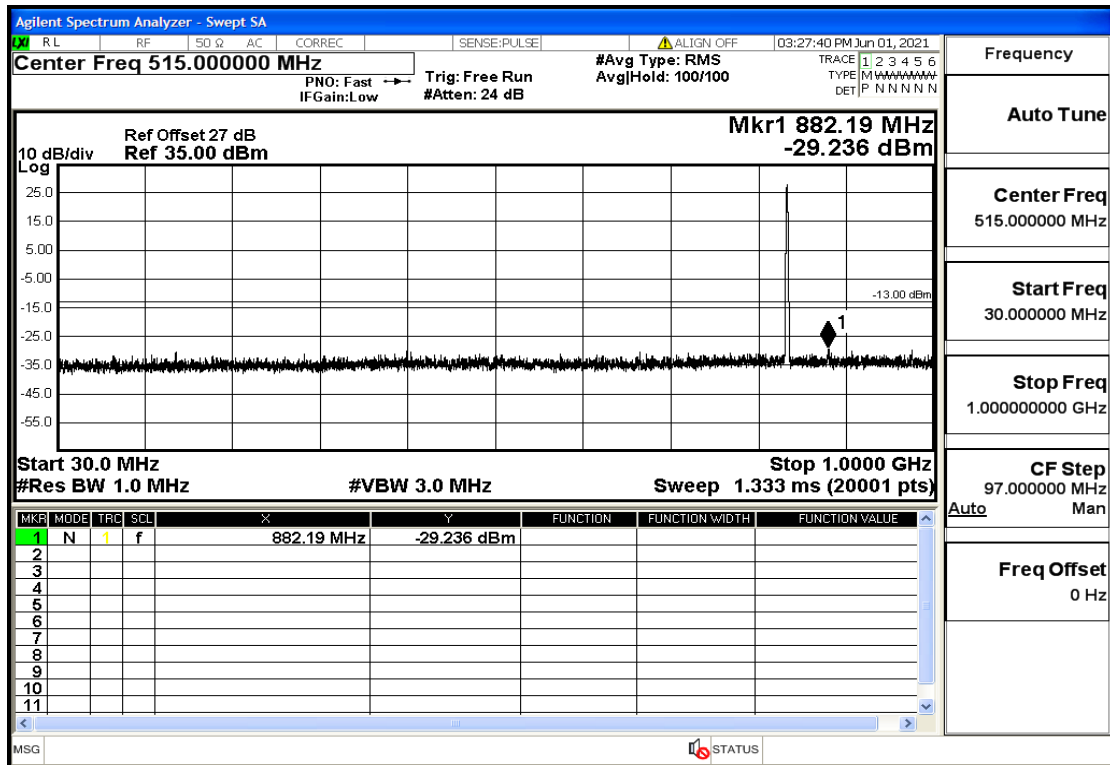
OB5-1.4-836.5-QPSK-6#LOW@30mHz-1GHz@Pass



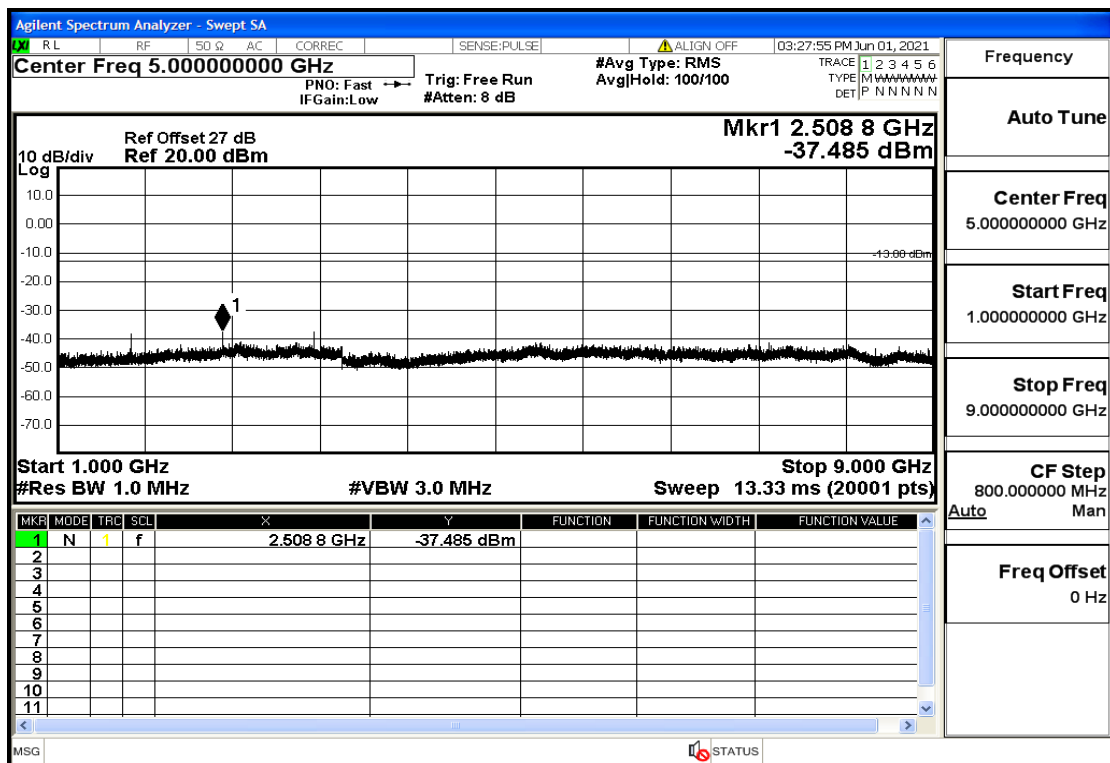
OB5-1.4-836.5-QPSK-6#LOW@1GHz-9GHz@Pass



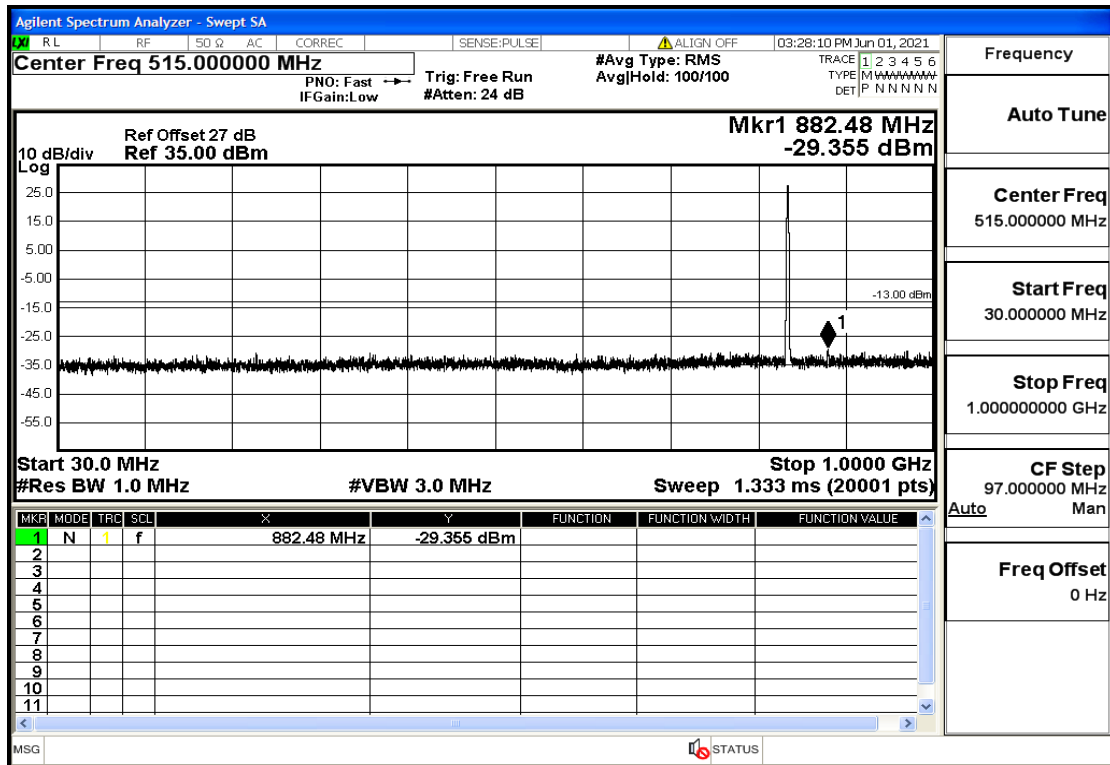
OB5-1.4-836.5-QPSK-1#LOW@30mHz-1GHz@Pass



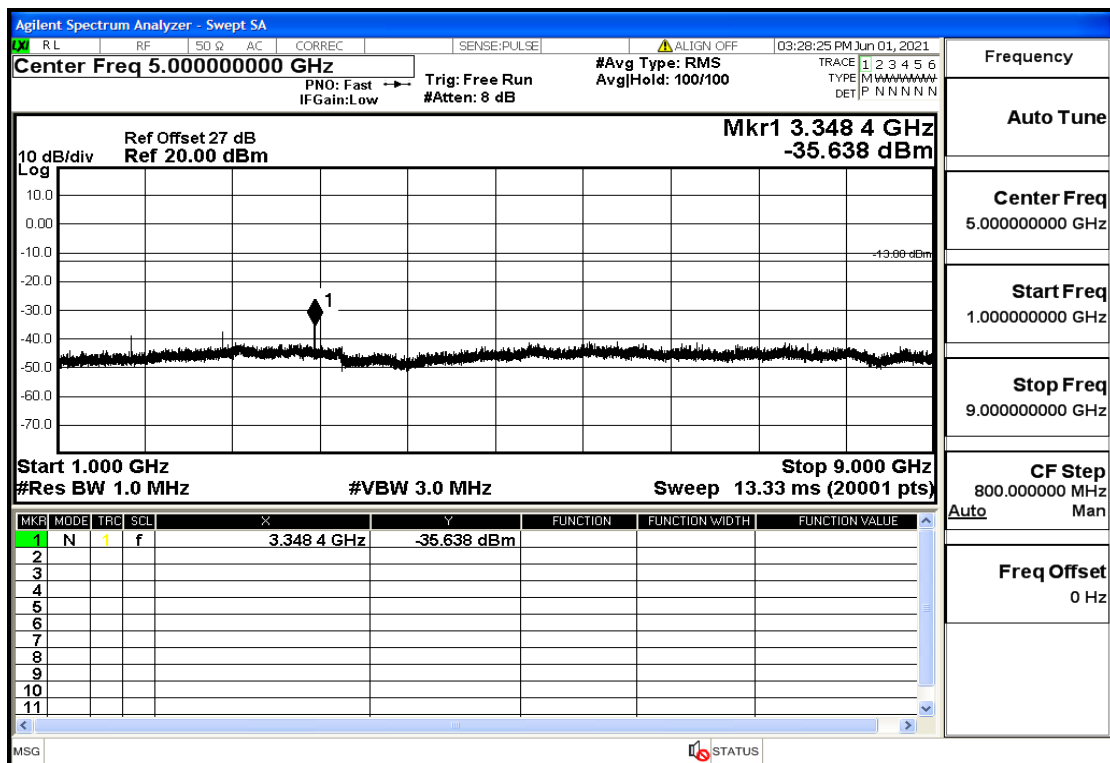
OB5-1.4-836.5-QPSK-1#LOW@1GHz-9GHz@Pass



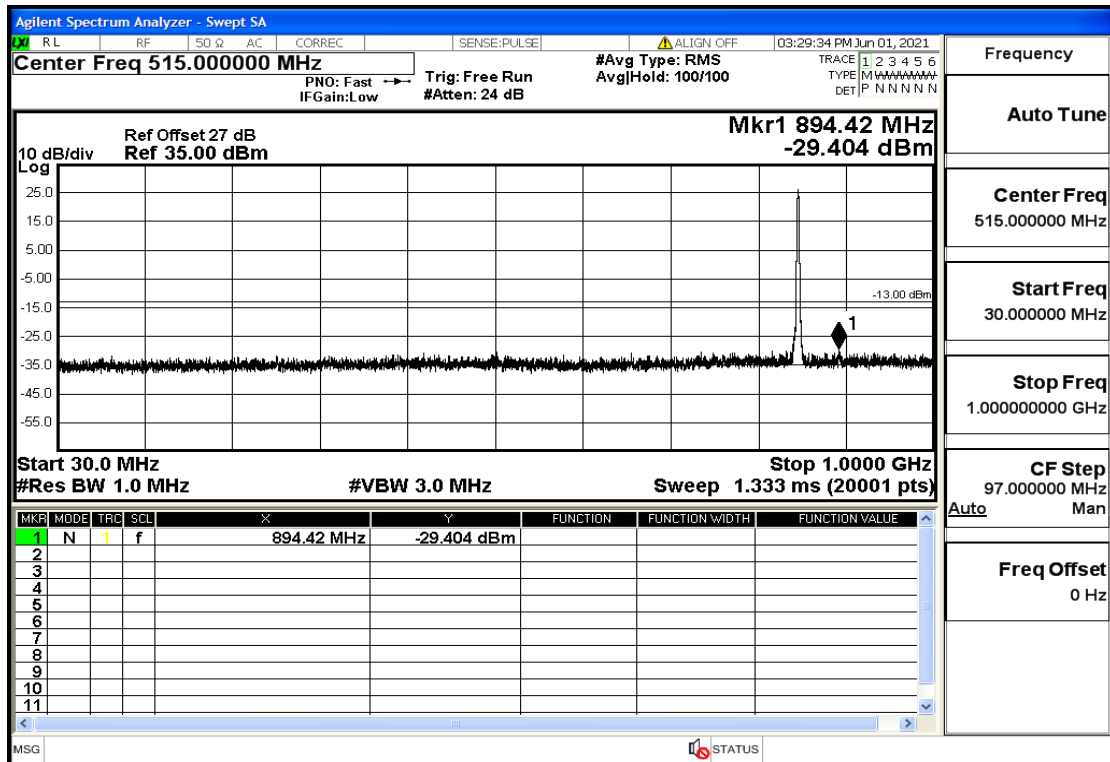
OB5-1.4-836.5-QPSK-1#HIGH@30mHz-1GHz@Pass



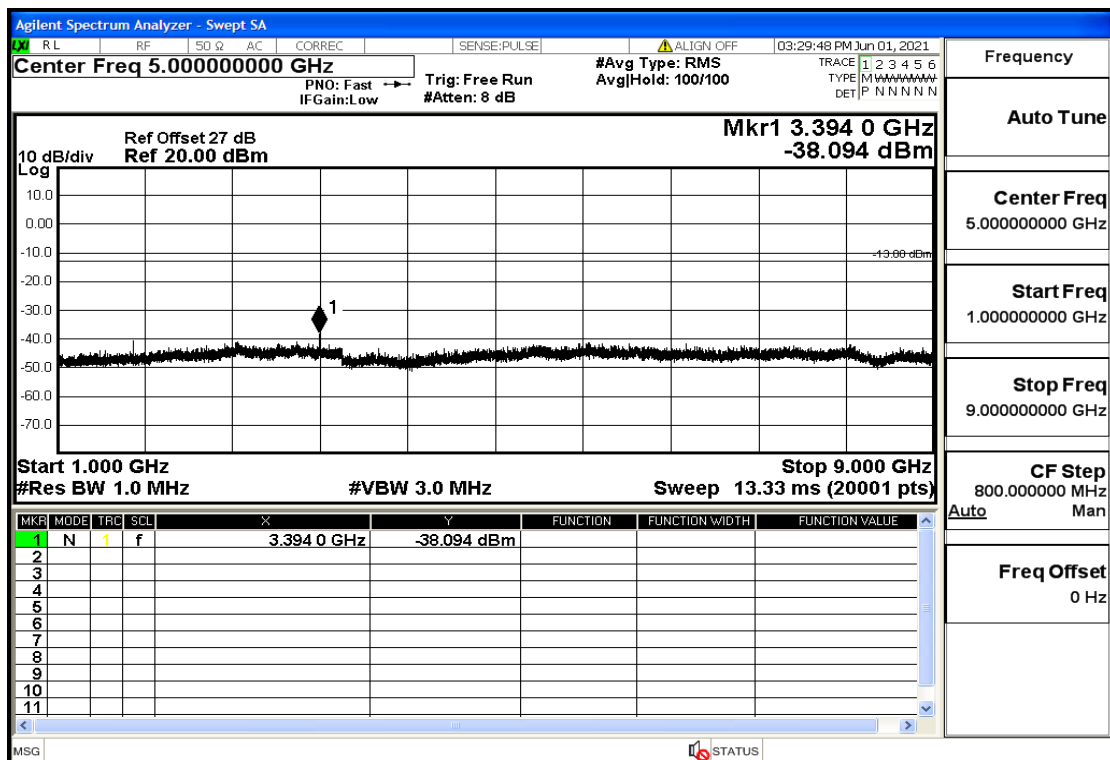
OB5-1.4-836.5-QPSK-1#HIGH@1GHz-9GHz@Pass



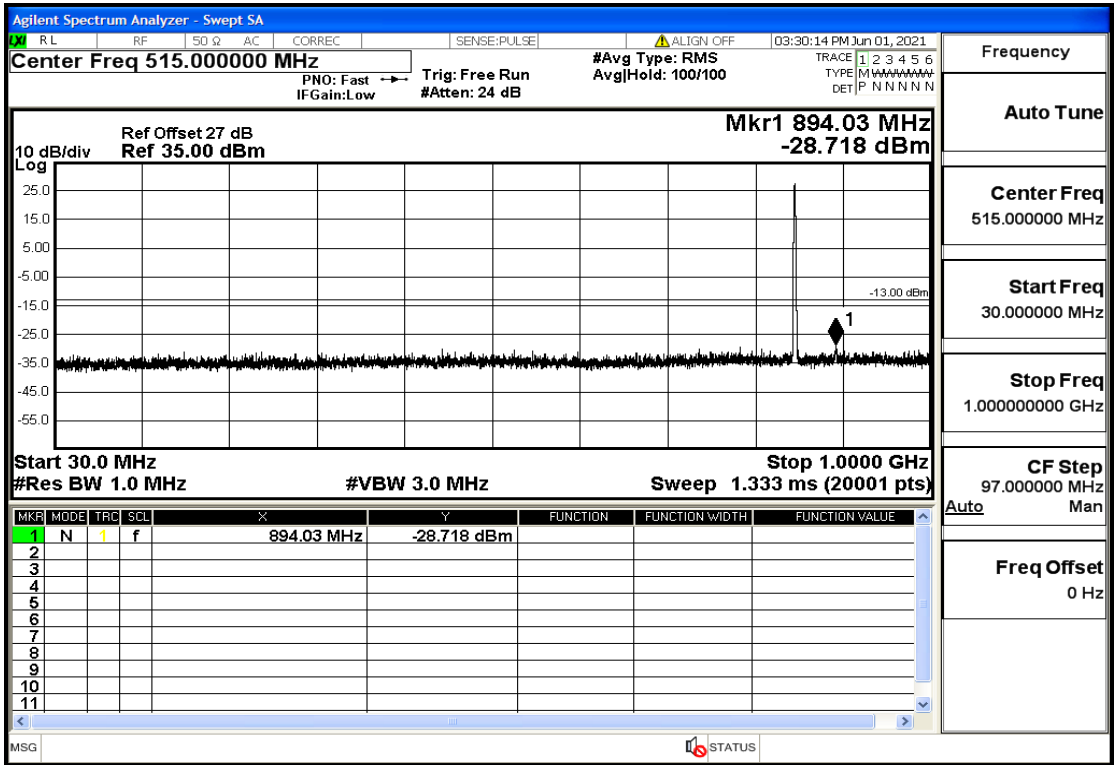
OB5-1.4-848.3-QPSK-6#LOW@30mHz-1GHz@Pass



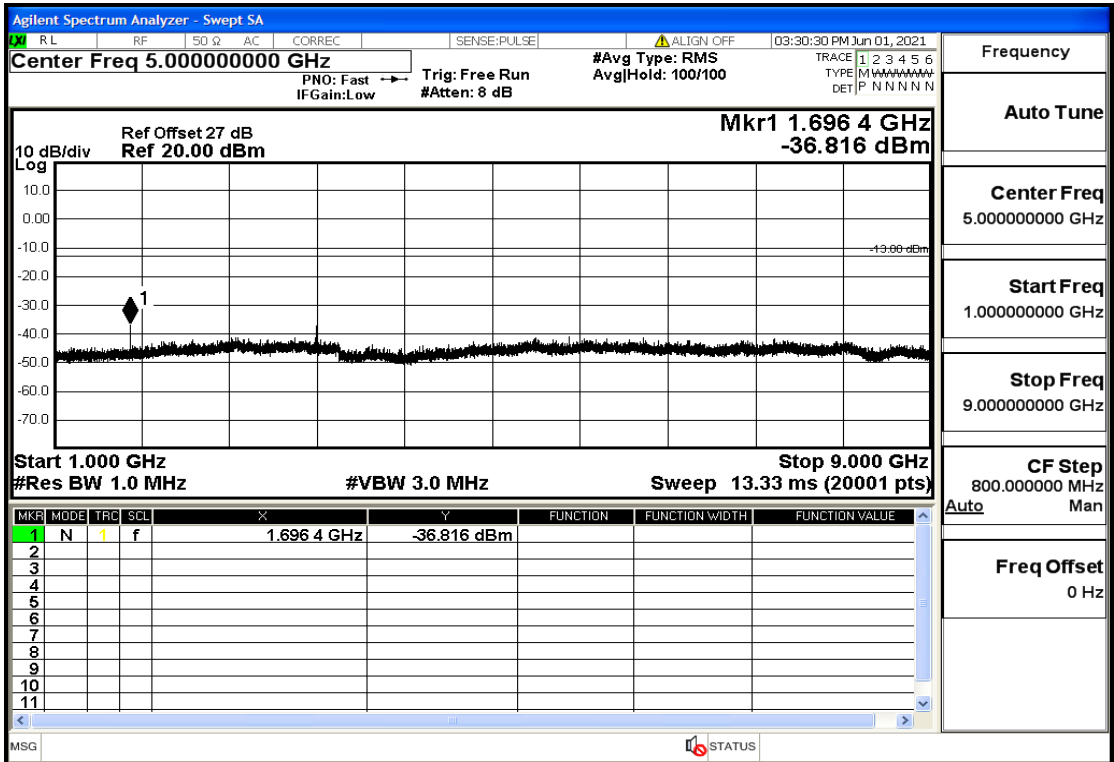
OB5-1.4-848.3-QPSK-6#LOW@1GHz-9GHz@Pass



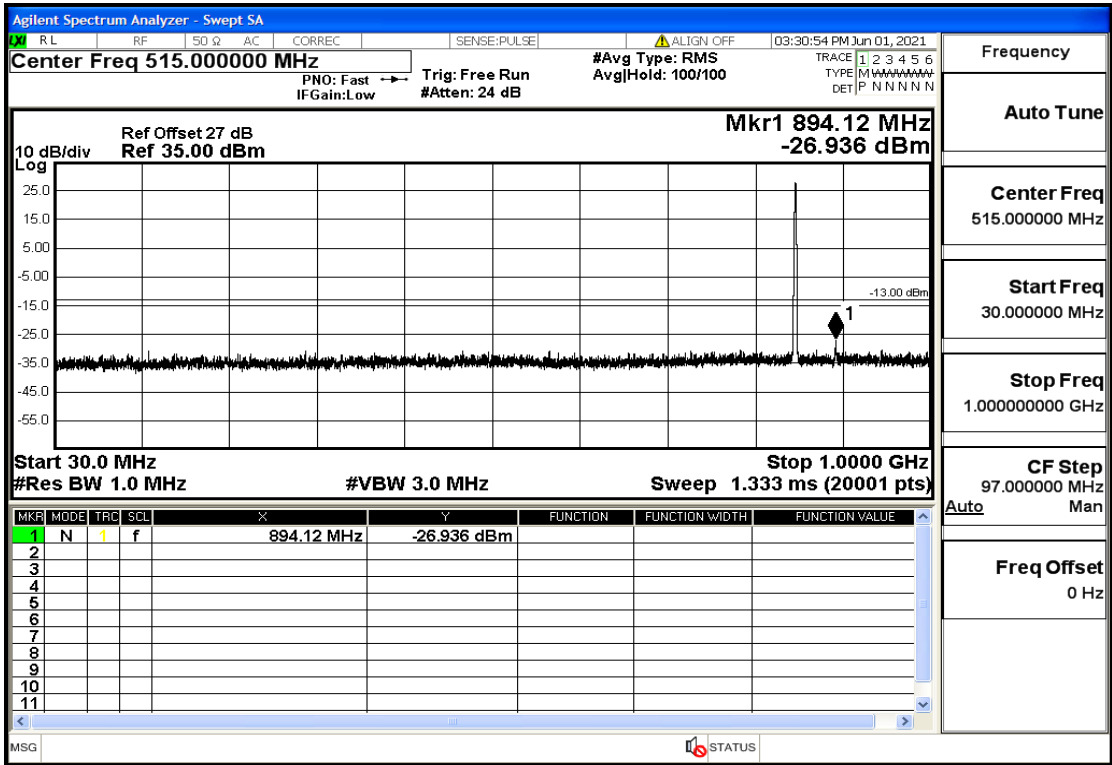
OB5-1.4-848.3-QPSK-1#LOW@30mHz-1GHz@Pass



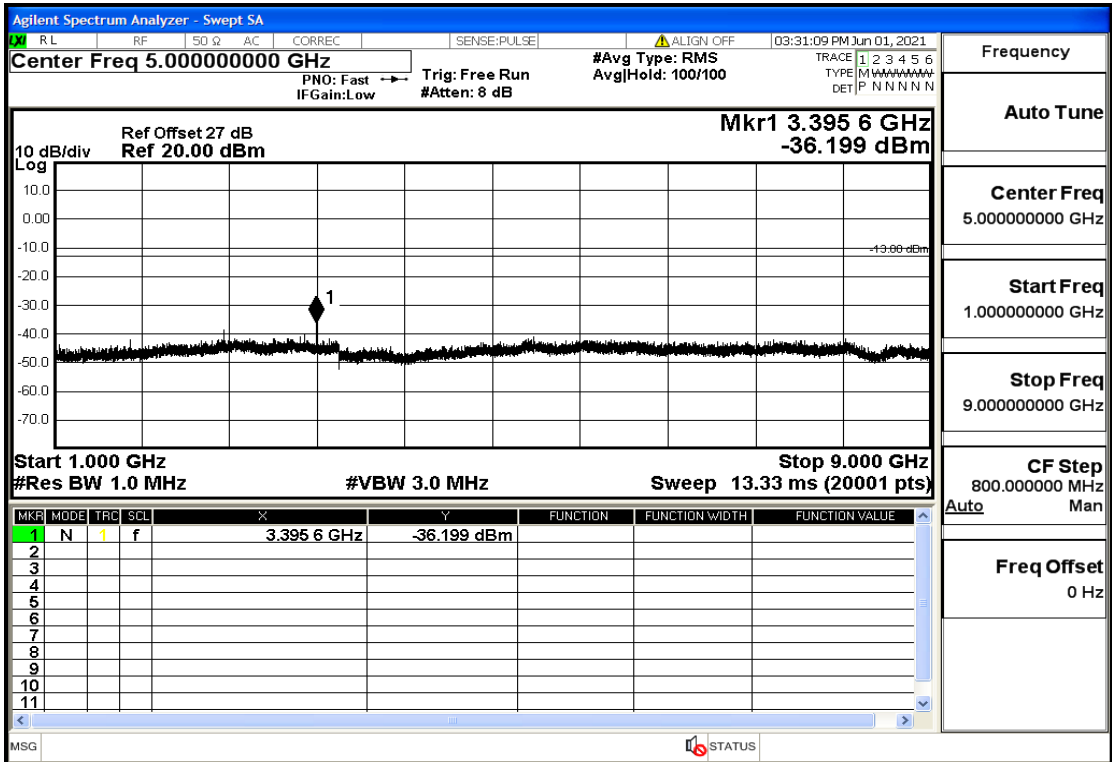
OB5-1.4-848.3-QPSK-1#LOW@1GHz-9GHz@Pass



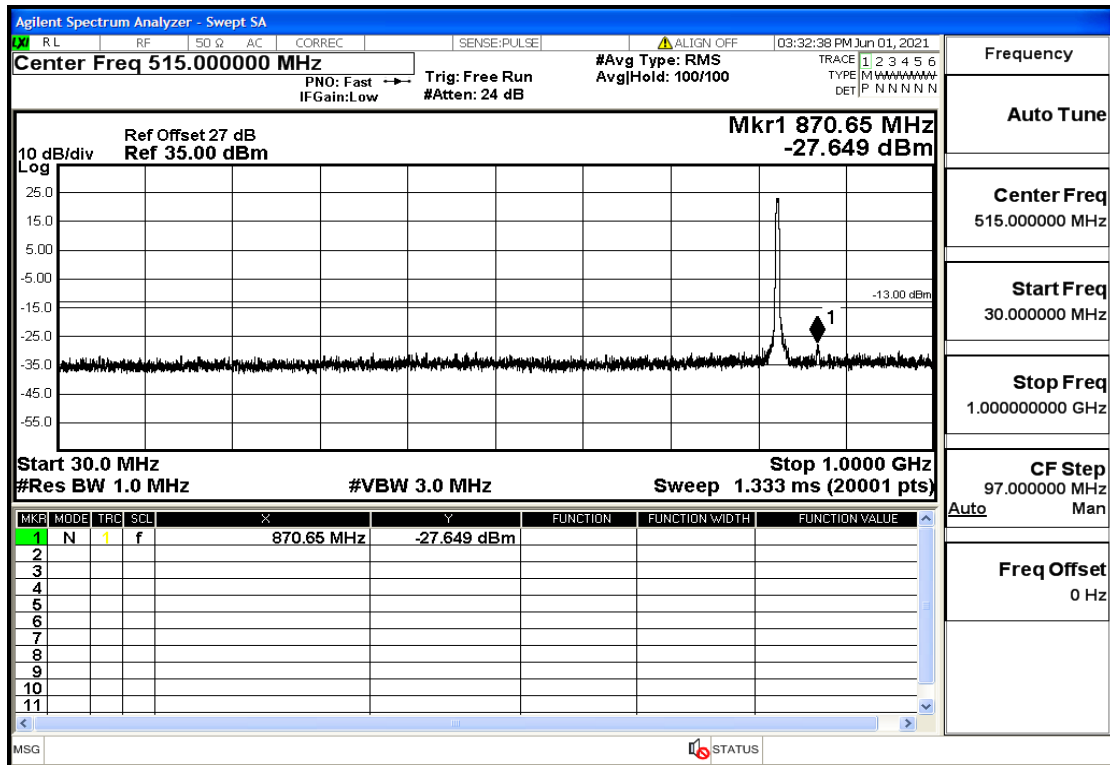
OB5-1.4-848.3-QPSK-1#HIGH@30mHz-1GHz@Pass



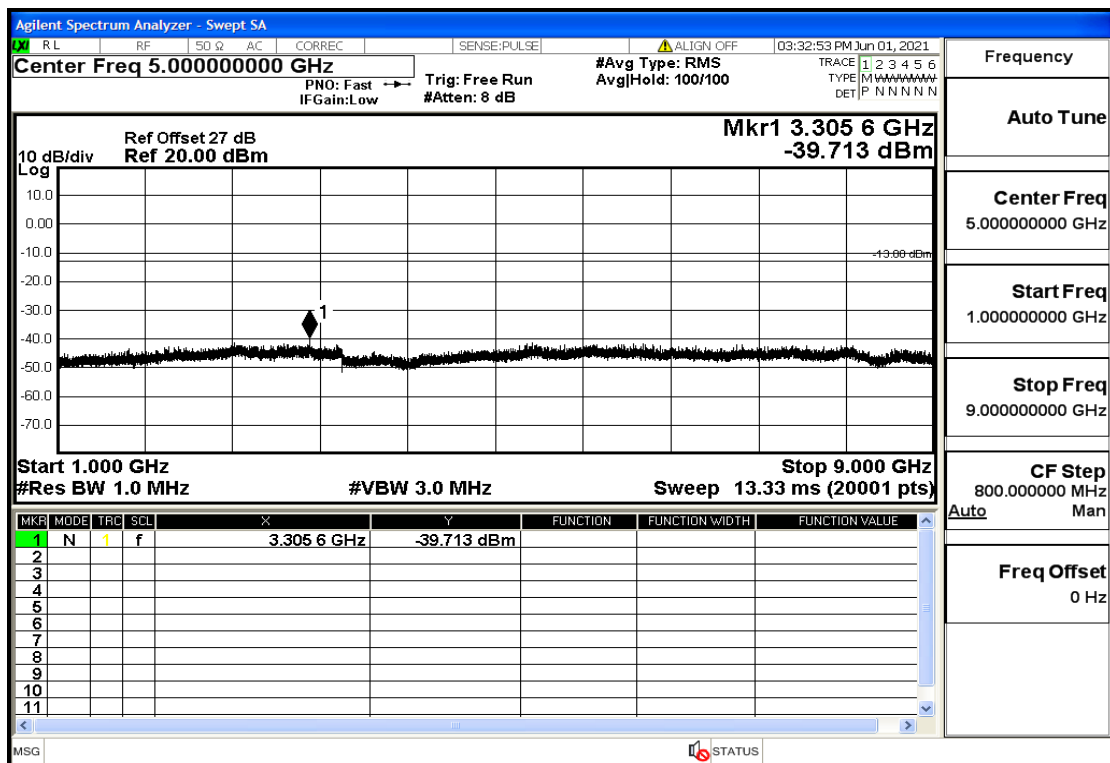
OB5-1.4-848.3-QPSK-1#HIGH@1GHz-9GHz@Pass



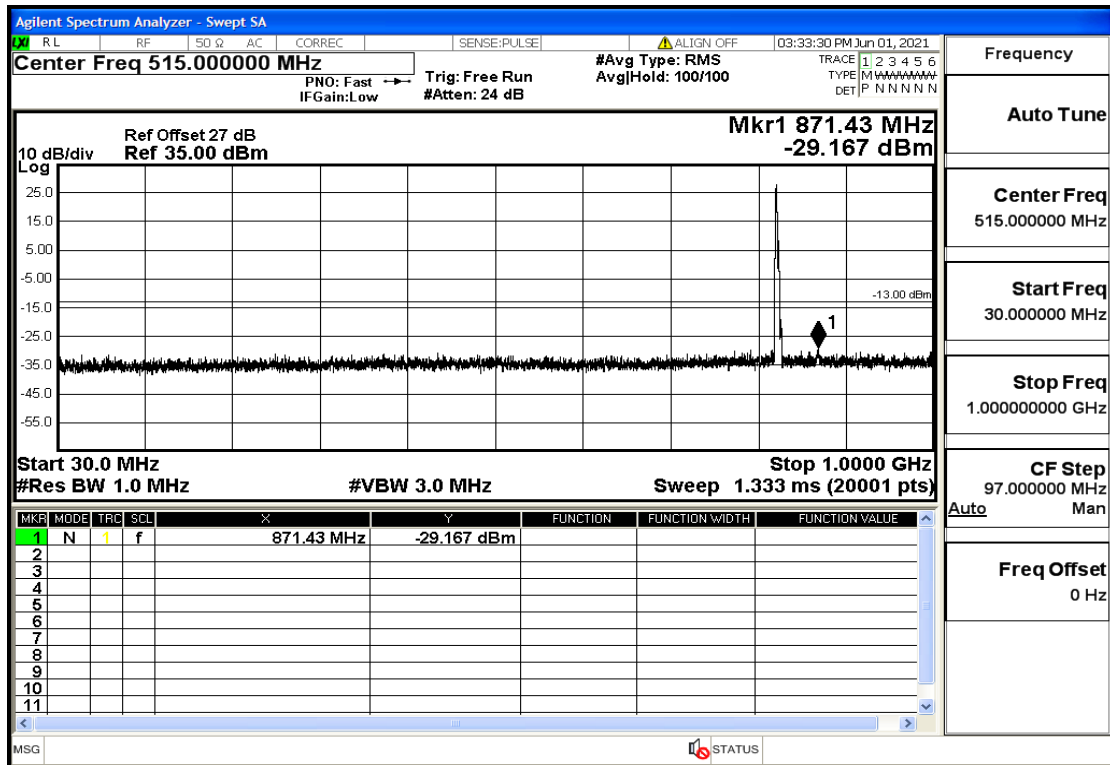
OB5-3-825.5-QPSK-15#LOW@30mHz-1GHz@Pass



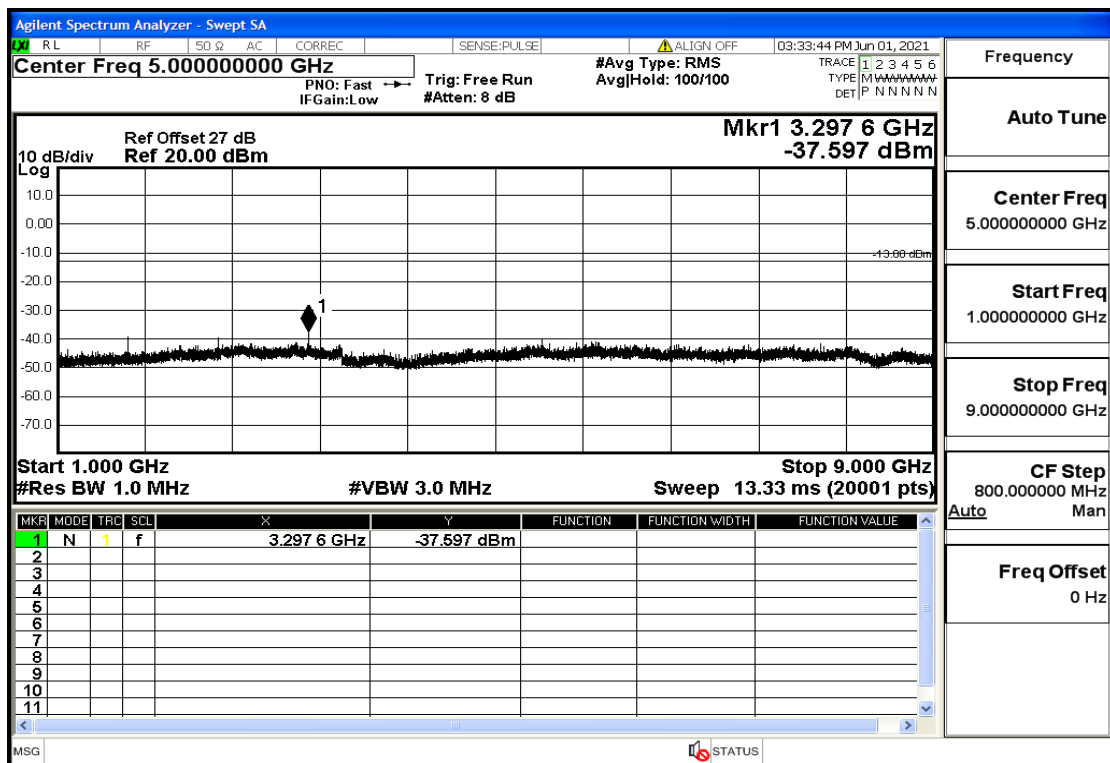
OB5-3-825.5-QPSK-15#LOW@1GHz-9GHz@Pass



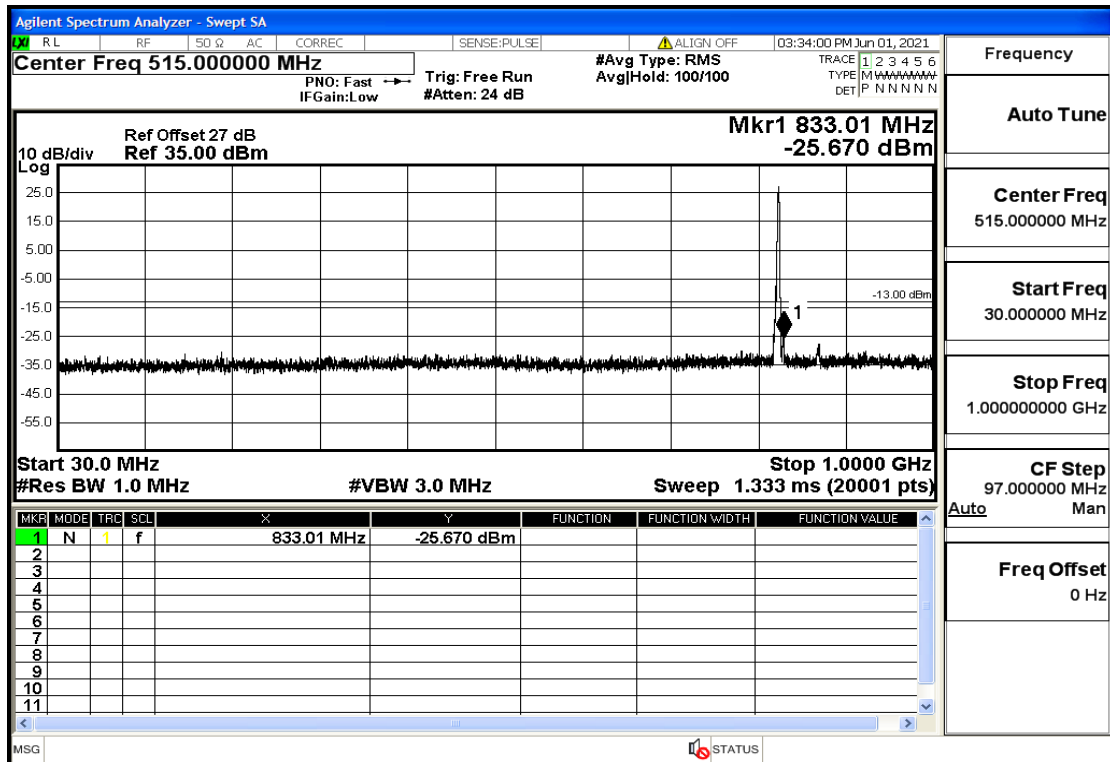
OB5-3-825.5-QPSK-1#LOW@30mHz-1GHz@Pass



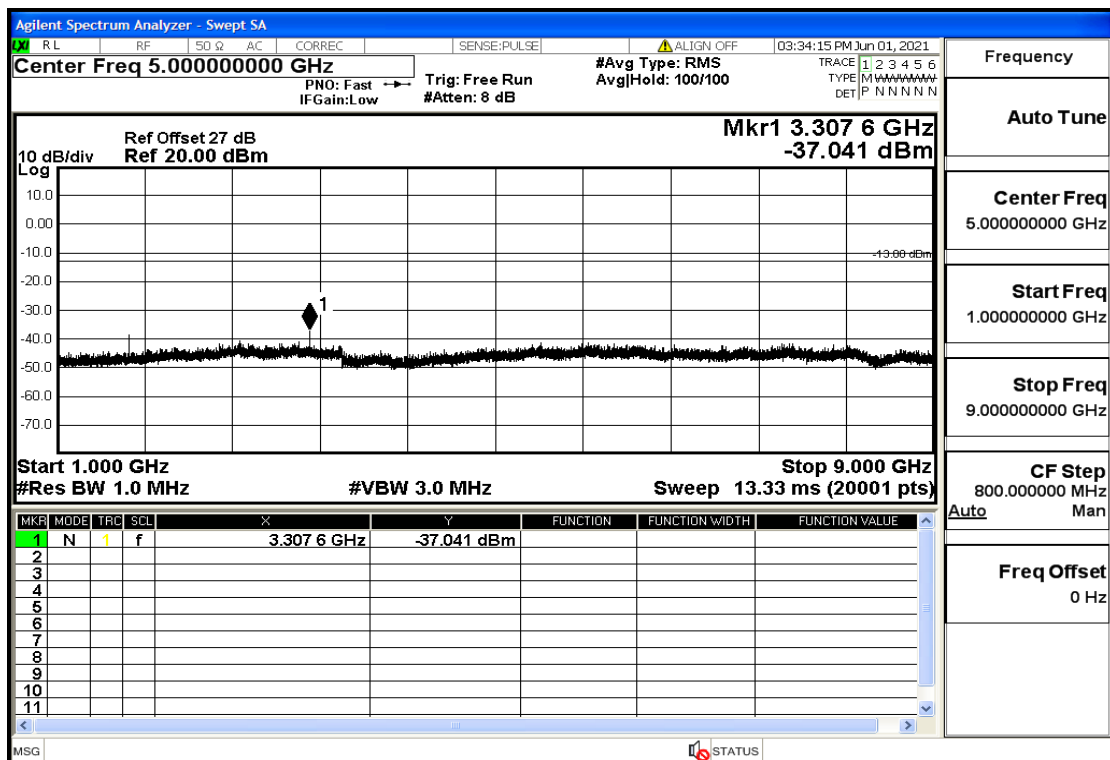
OB5-3-825.5-QPSK-1#LOW@1GHz-9GHz@Pass



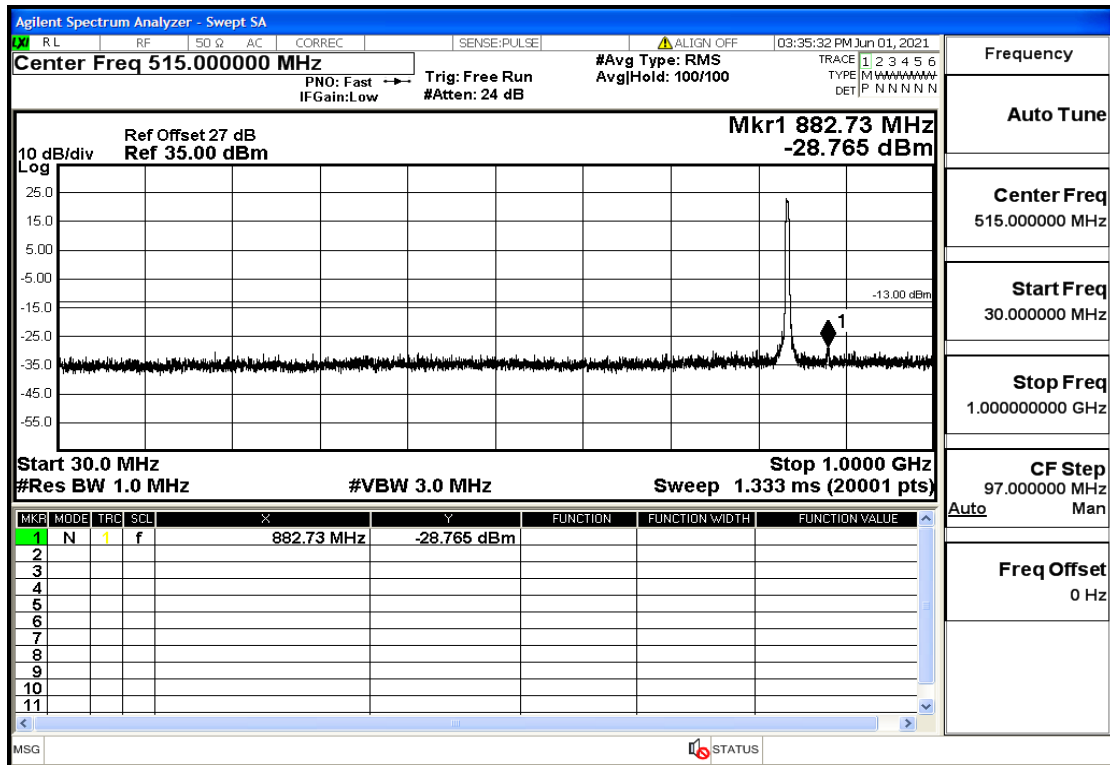
OB5-3-825.5-QPSK-1#HIGH@30MHz-1GHz@Pass



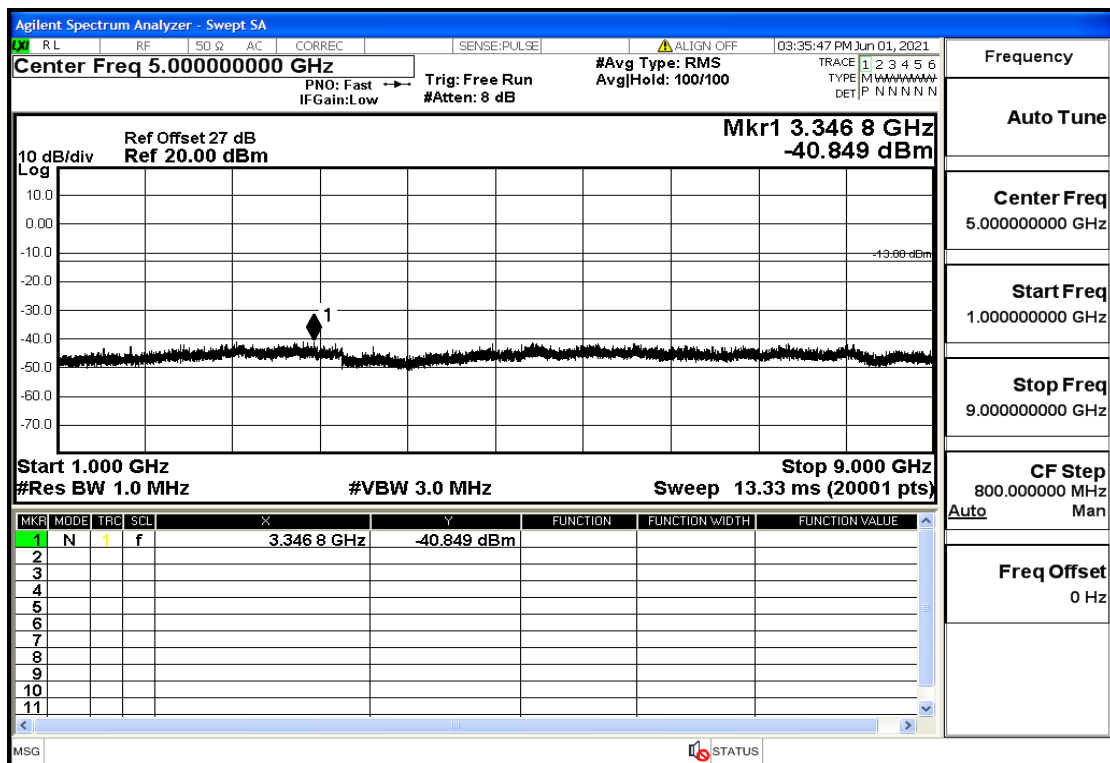
OB5-3-825.5-QPSK-1#HIGH@1GHz-9GHz@Pass



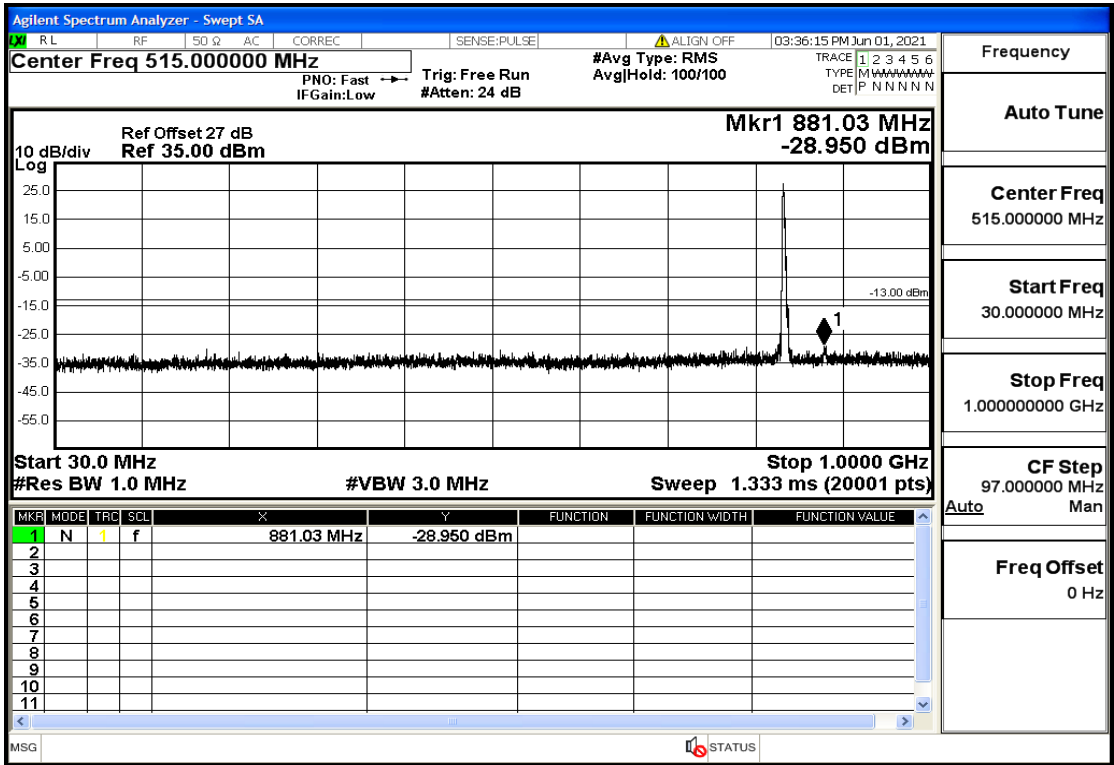
OB5-3-836.5-QPSK-15#LOW@30mHz-1GHz@Pass



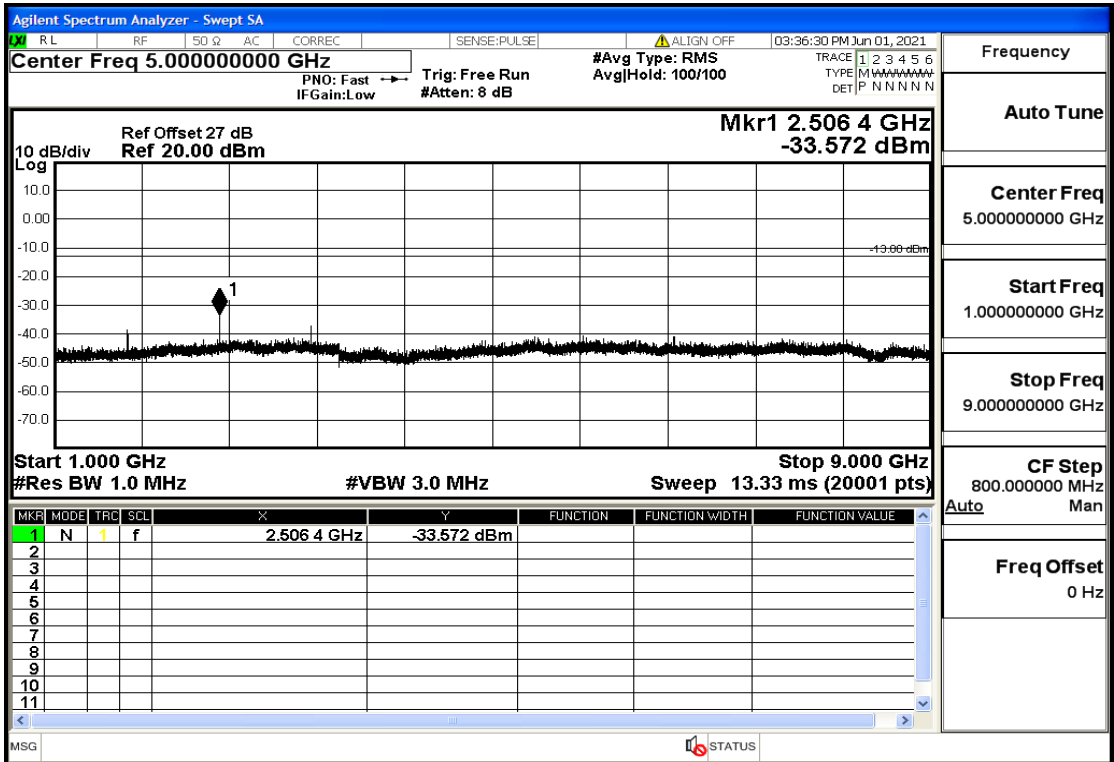
OB5-3-836.5-QPSK-15#LOW@1GHz-9GHz@Pass



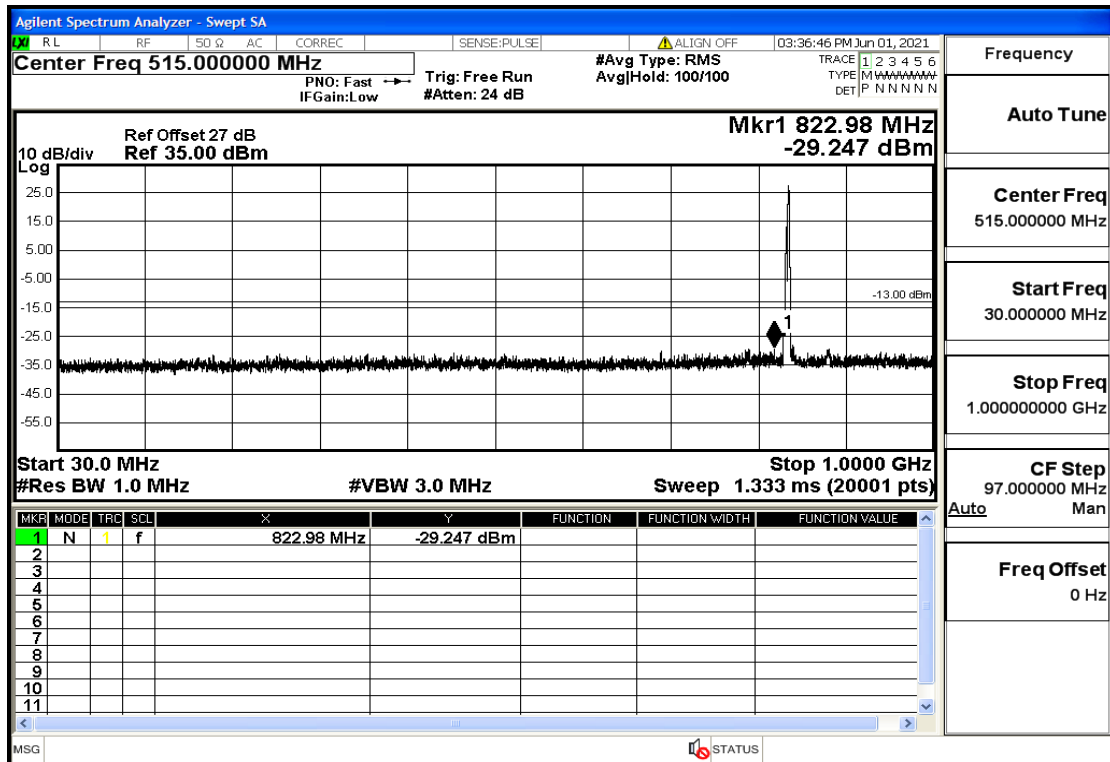
OB5-3-836.5-QPSK-1#LOW@30mHz-1GHz@Pass



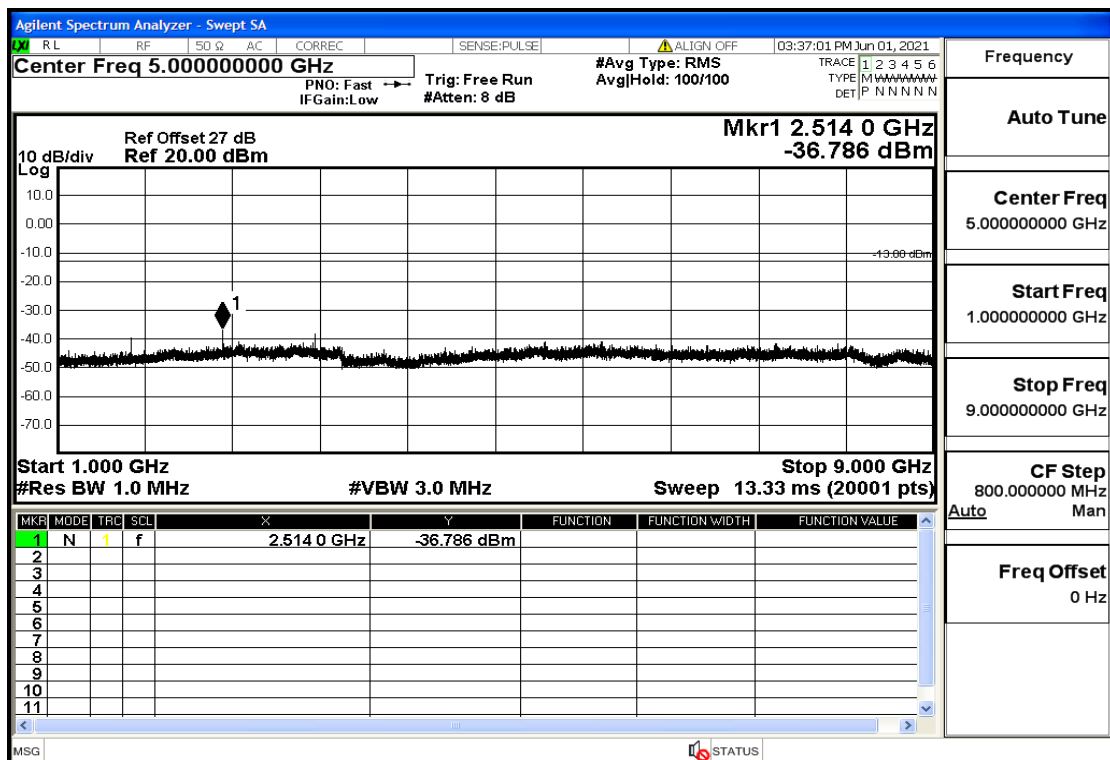
OB5-3-836.5-QPSK-1#LOW@1GHz-9GHz@Pass



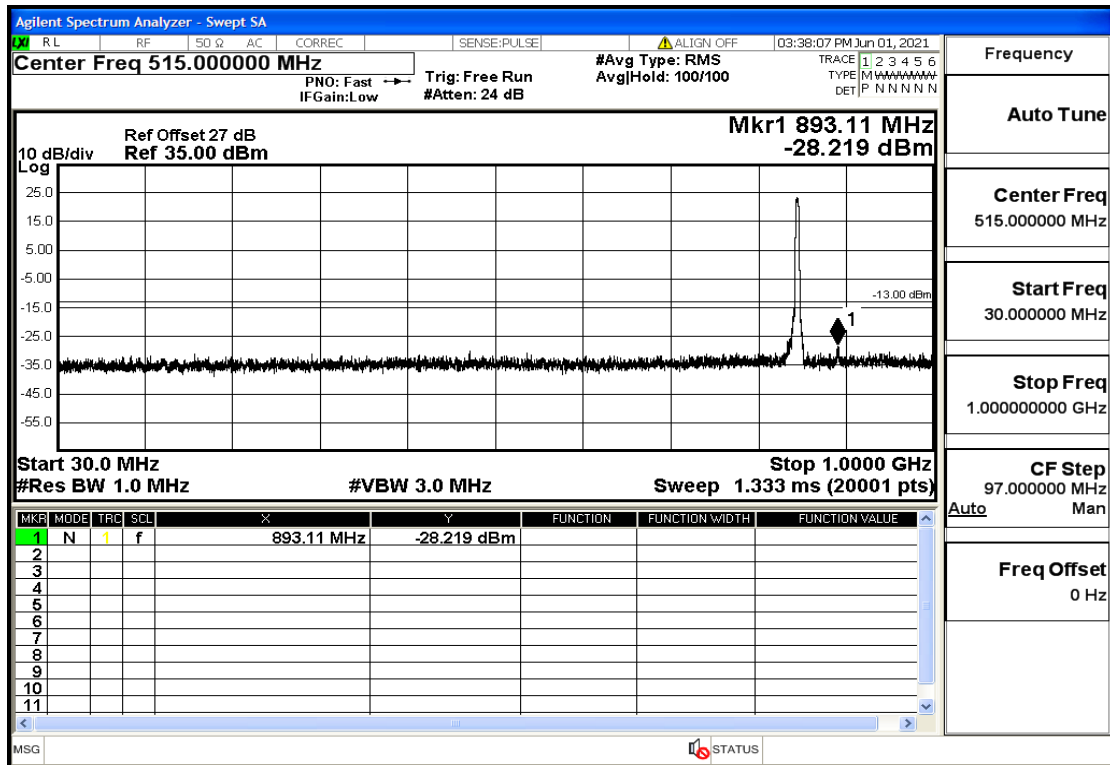
OB5-3-836.5-QPSK-1#HIGH@30MHz-1GHz@Pass



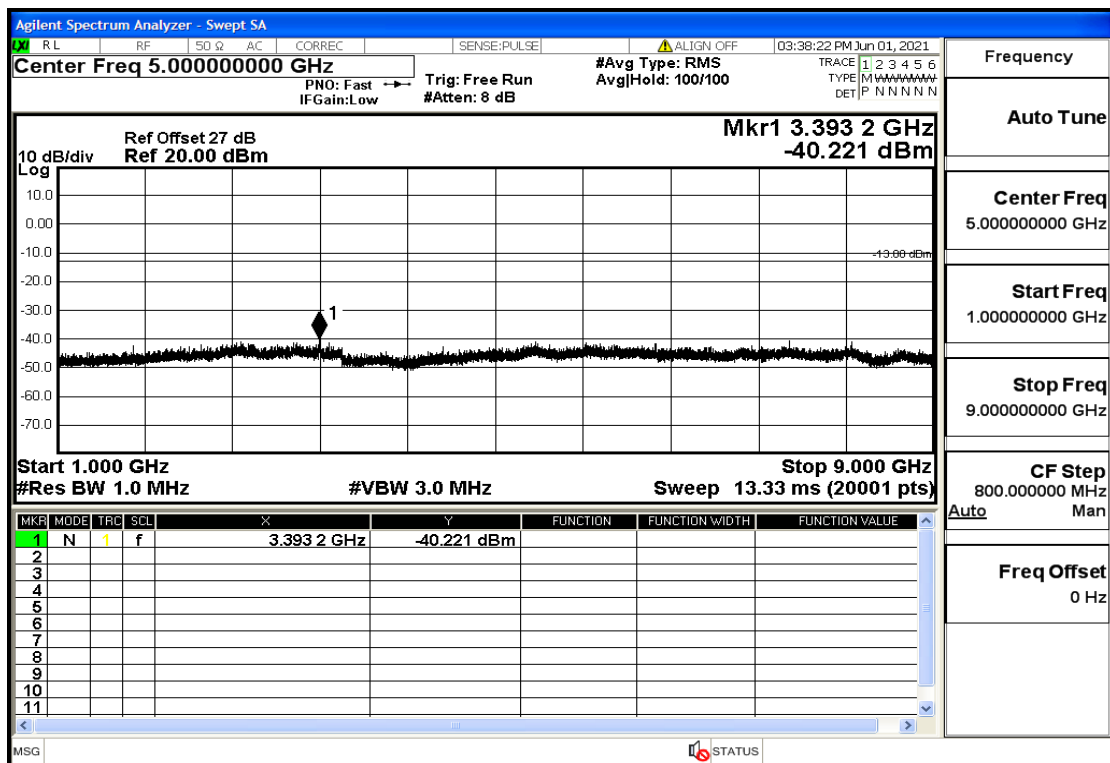
OB5-3-836.5-QPSK-1#HIGH@1GHz-9GHz@Pass



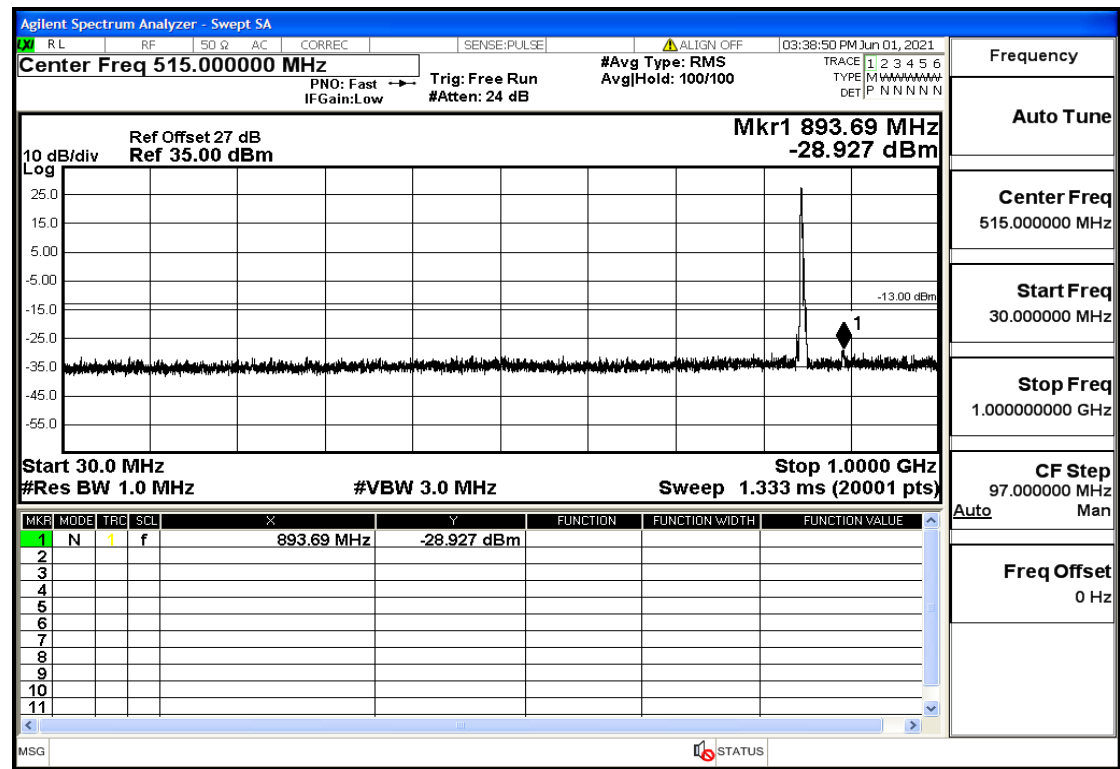
OB5-3-847.5-QPSK-15#LOW@30mHz-1GHz@Pass



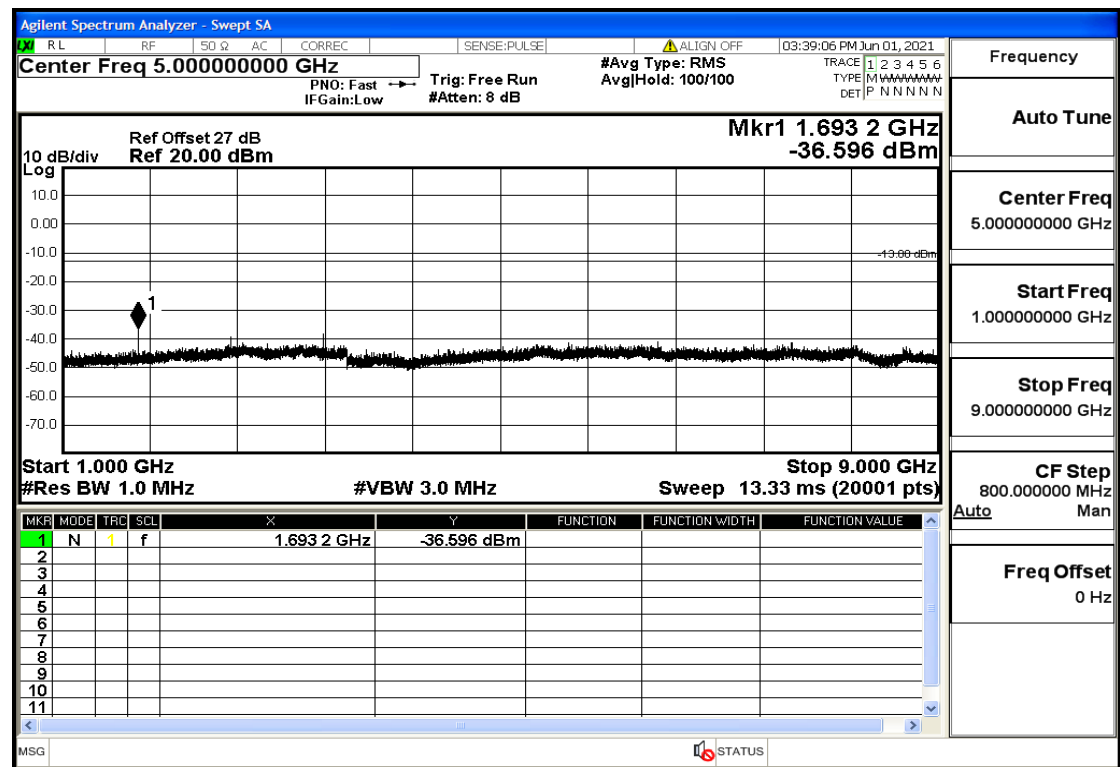
OB5-3-847.5-QPSK-15#LOW@1GHz-9GHz@Pass



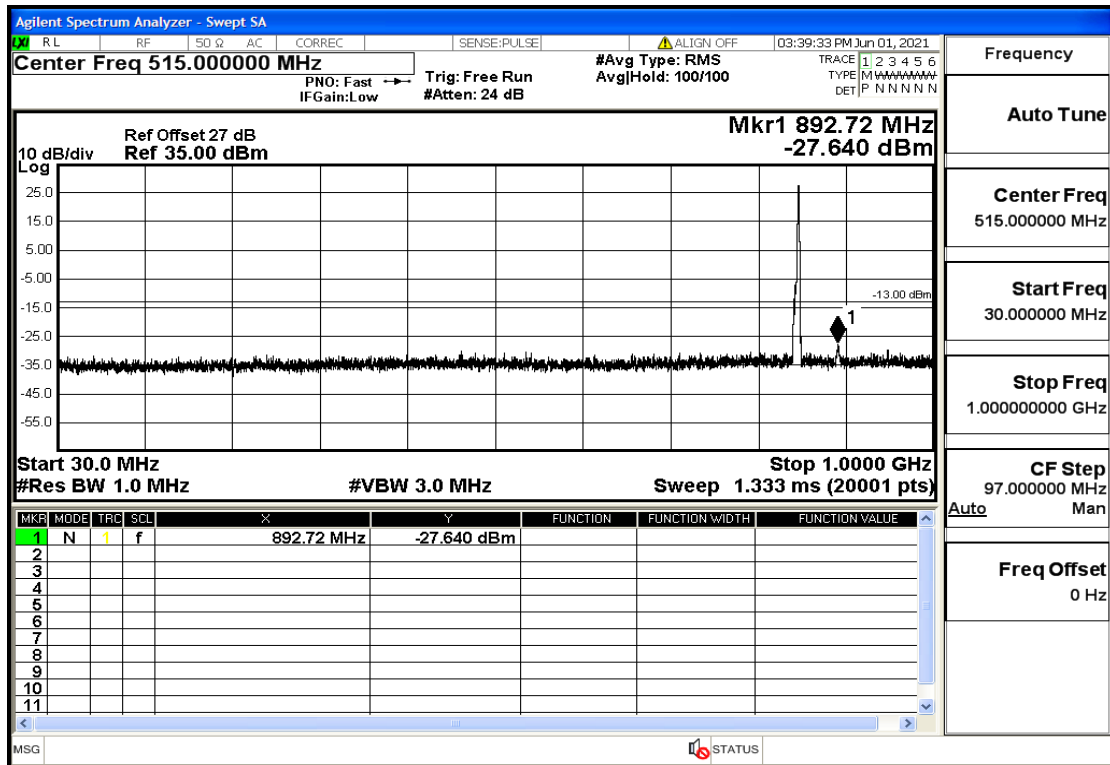
OB5-3-847.5-QPSK-1#LOW@30mHz-1GHz@Pass



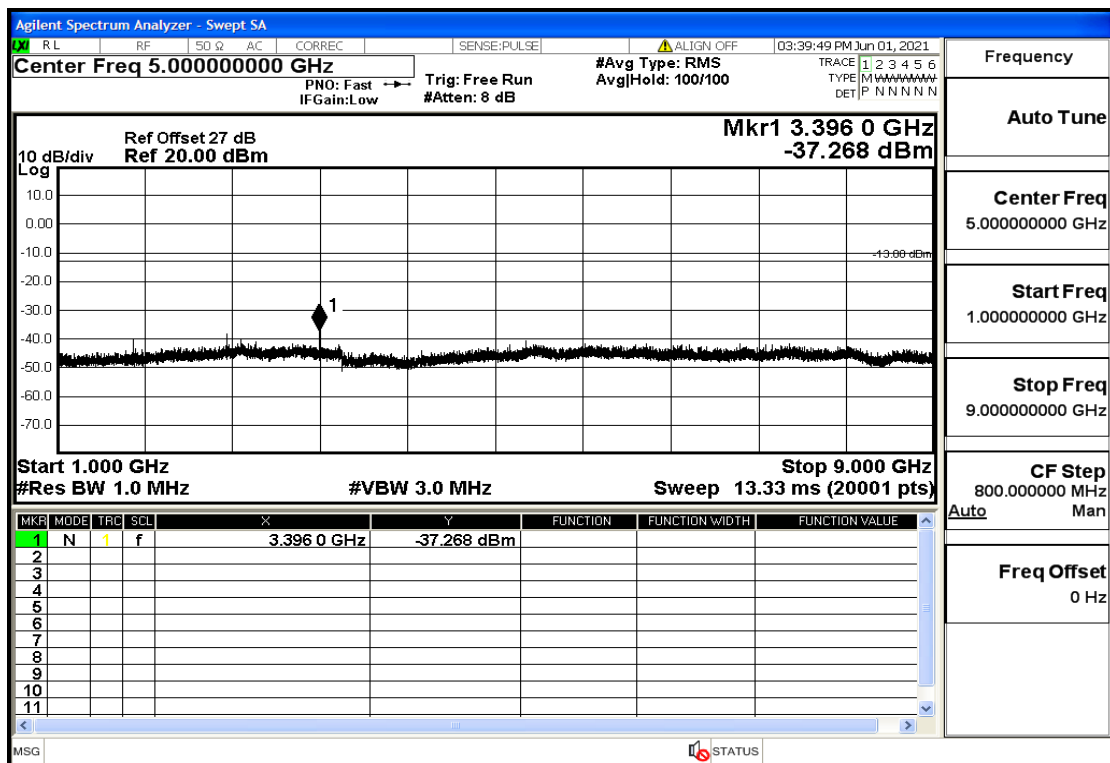
OB5-3-847.5-QPSK-1#LOW@1GHz-9GHz@Pass



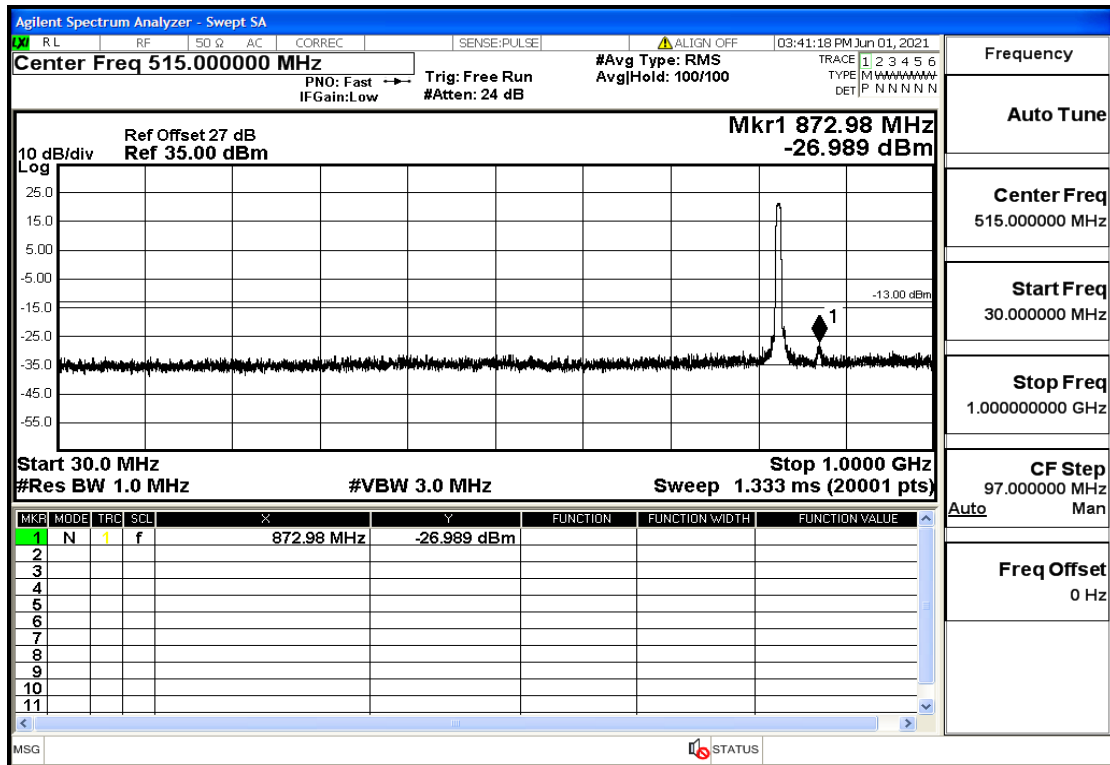
OB5-3-847.5-QPSK-1#HIGH@30MHz-1GHz@Pass



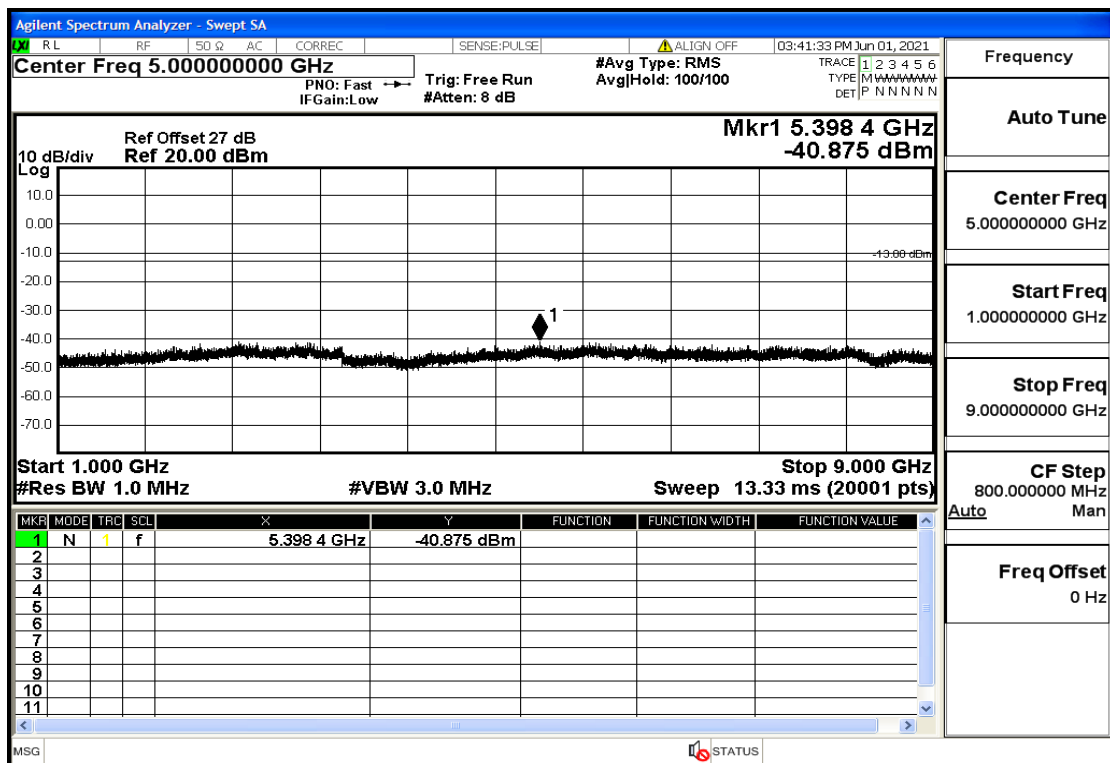
OB5-3-847.5-QPSK-1#HIGH@1GHz-9GHz@Pass



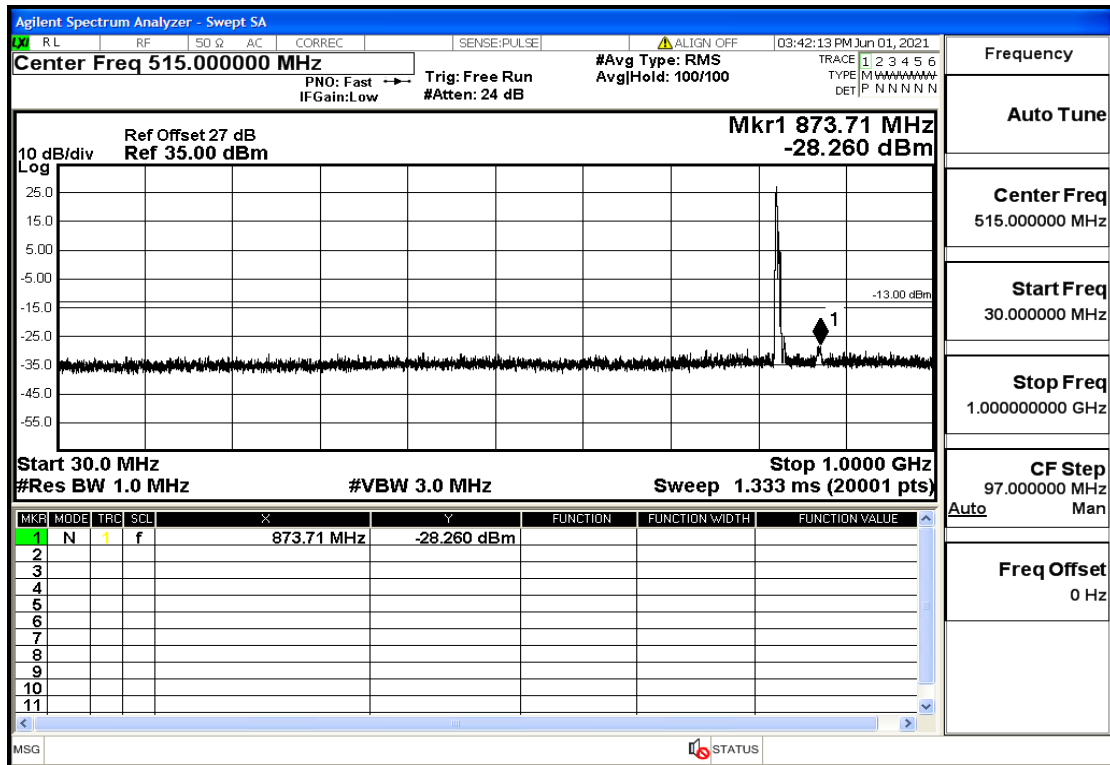
OB5-5-826.5-QPSK-25#LOW@30mHz-1GHz@Pass



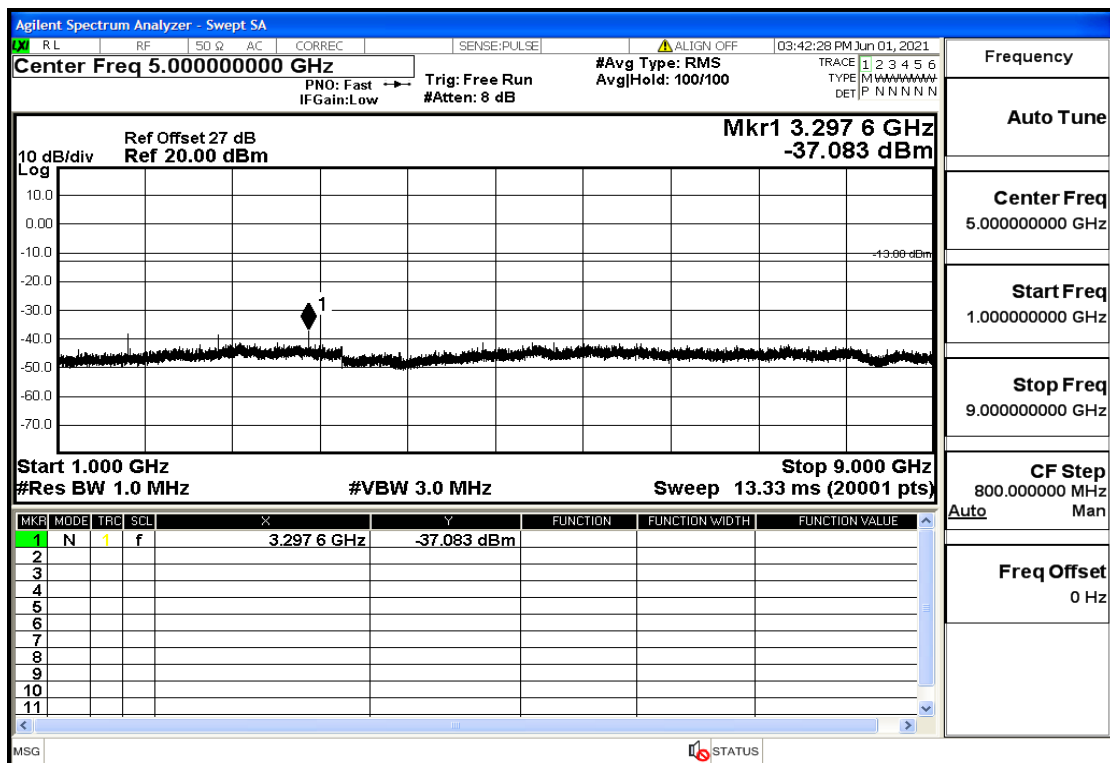
OB5-5-826.5-QPSK-25#LOW@1GHz-9GHz@Pass



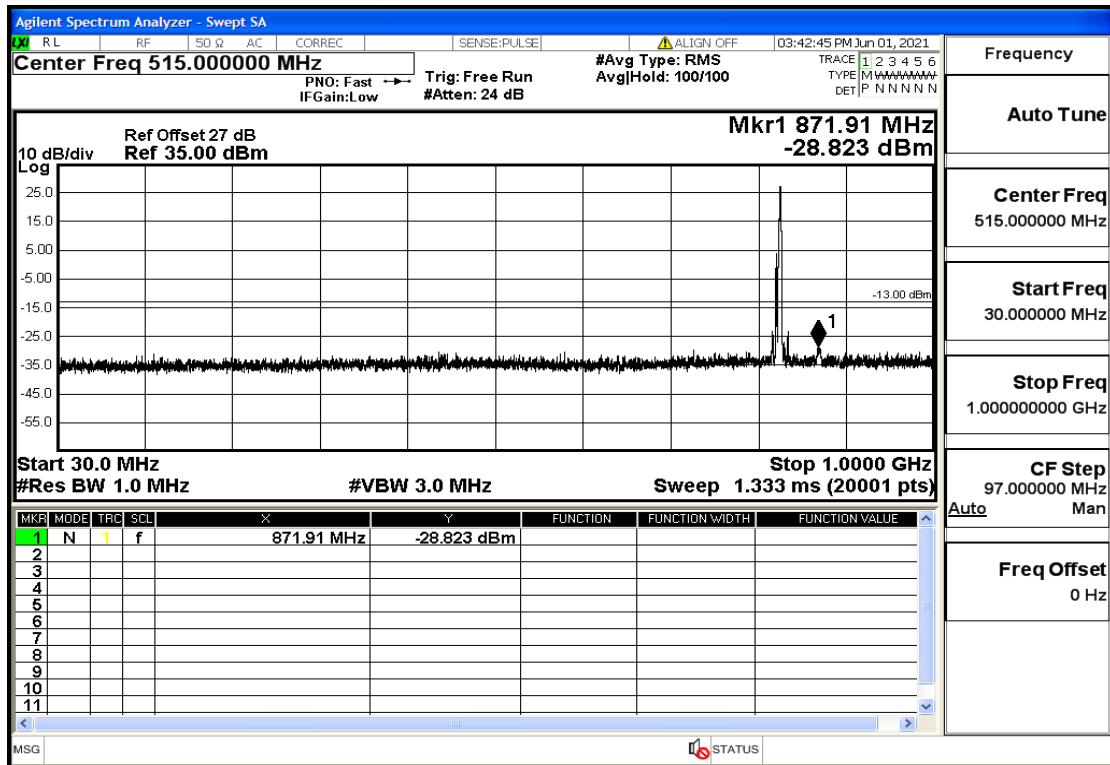
OB5-5-826.5-QPSK-1#LOW@30mHz-1GHz@Pass



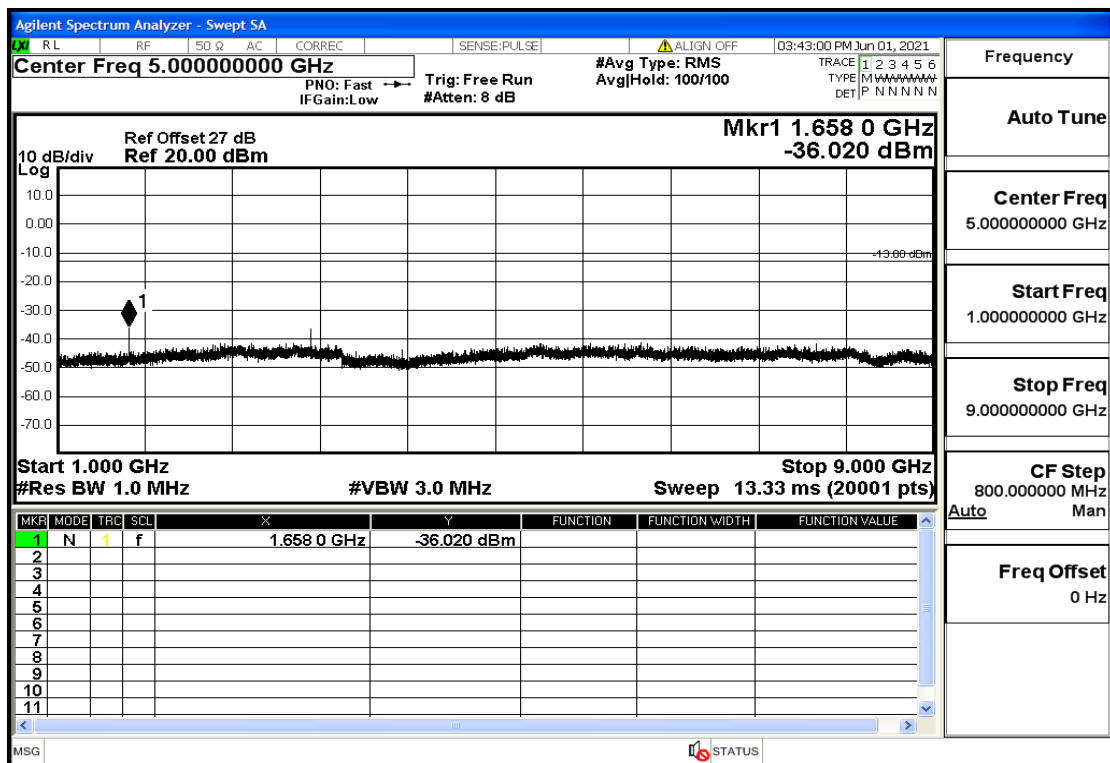
OB5-5-826.5-QPSK-1#LOW@1GHz-9GHz@Pass



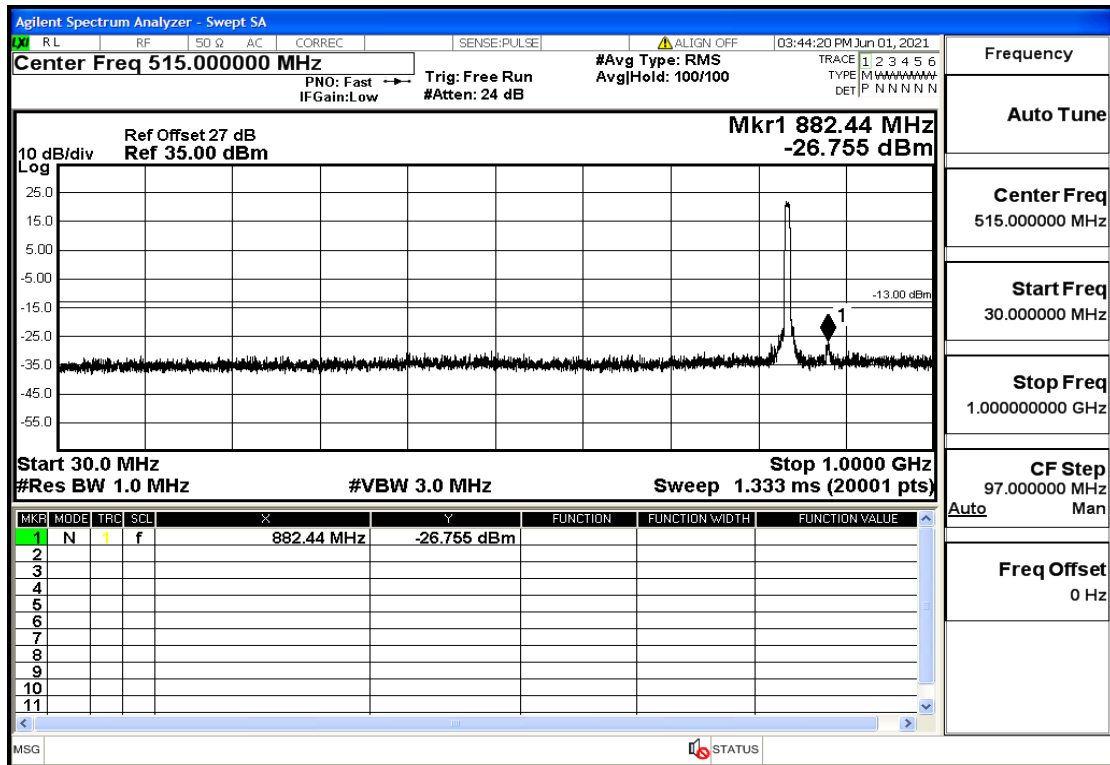
OB5-5-826.5-QPSK-1#HIGH@30MHz-1GHz@Pass



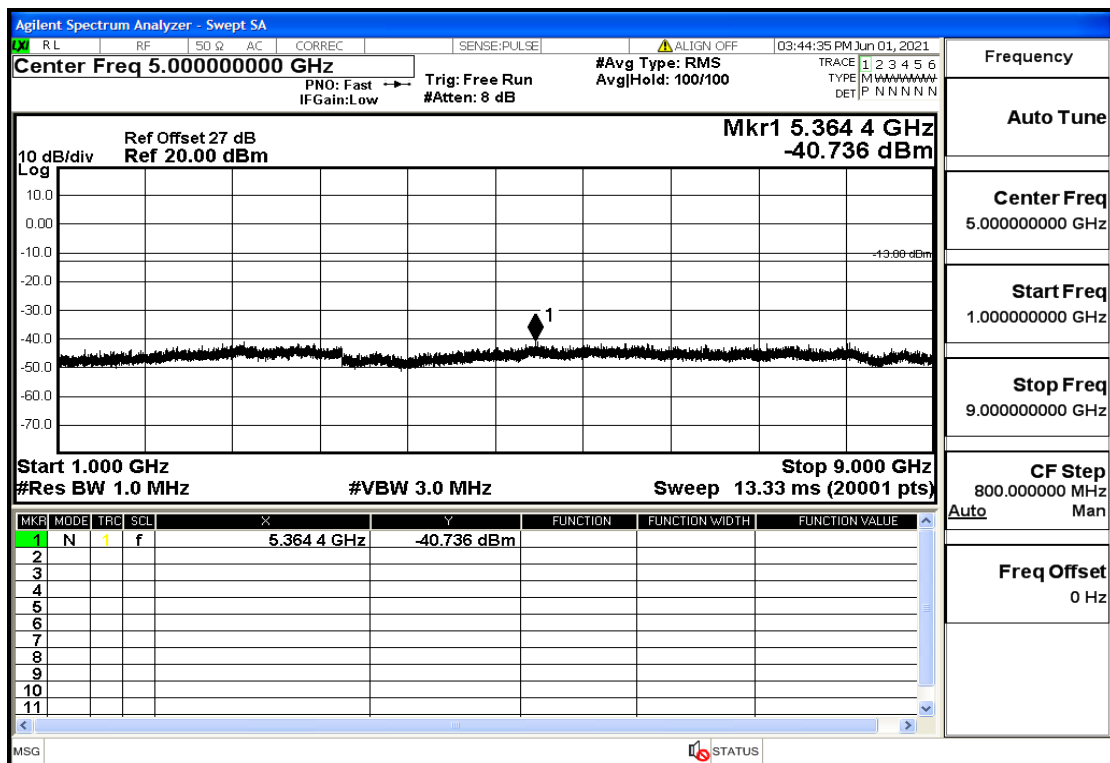
OB5-5-826.5-QPSK-1#HIGH@1GHz-9GHz@Pass



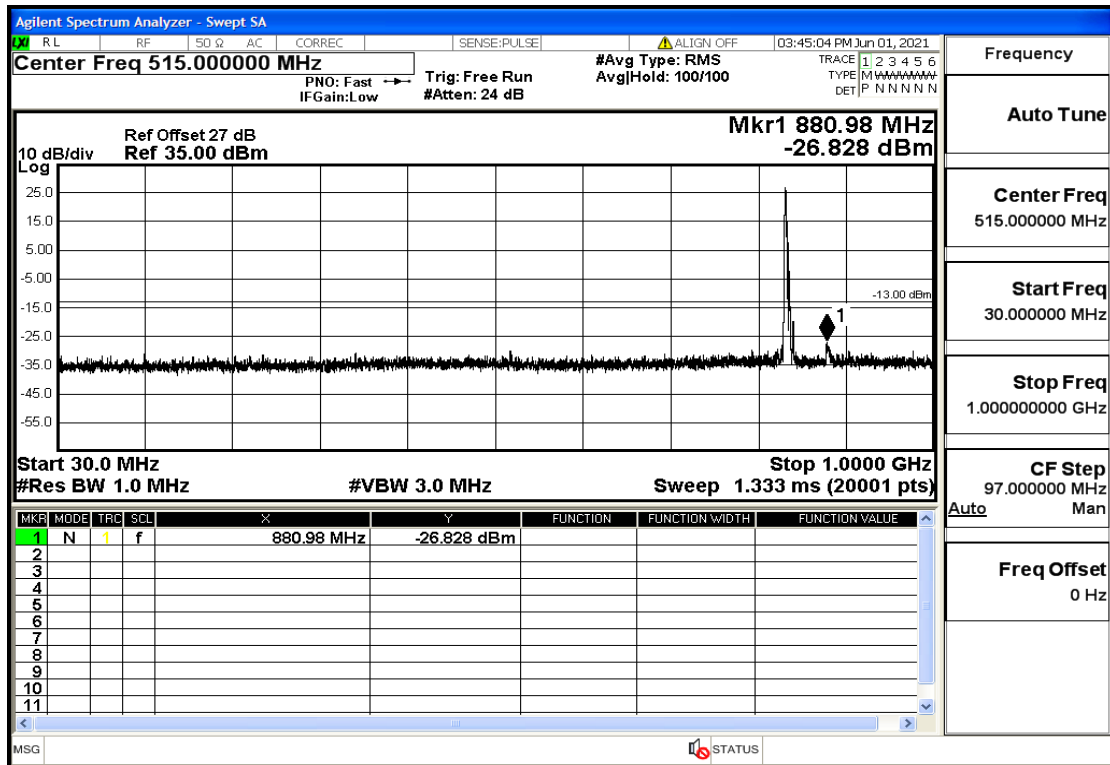
OB5-5-836.5-QPSK-25#LOW@30mHz-1GHz@Pass



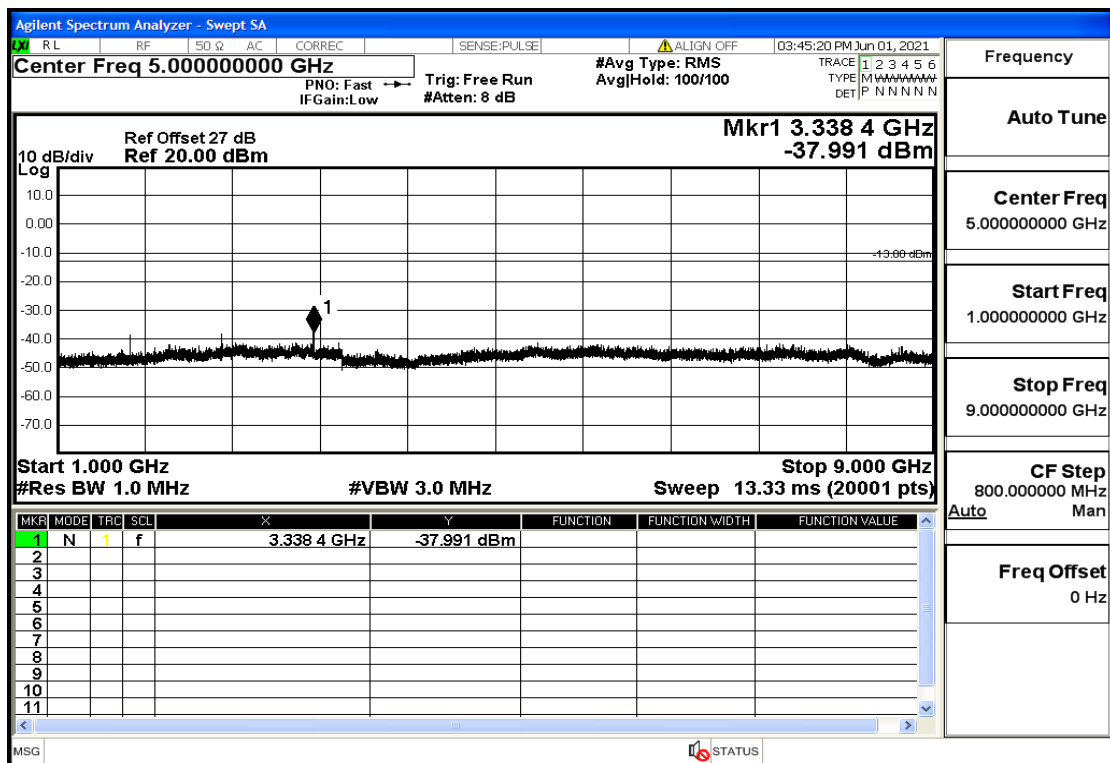
OB5-5-836.5-QPSK-25#LOW@1GHz-9GHz@Pass



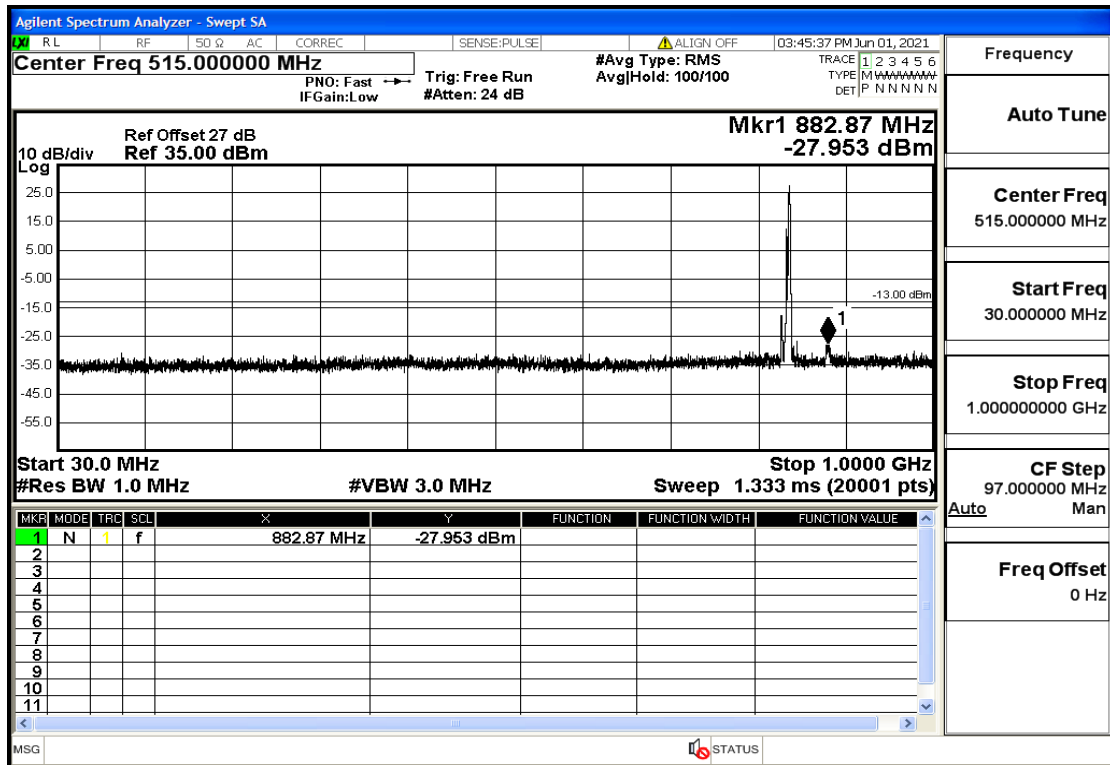
OB5-5-836.5-QPSK-1#LOW@30mHz-1GHz@Pass



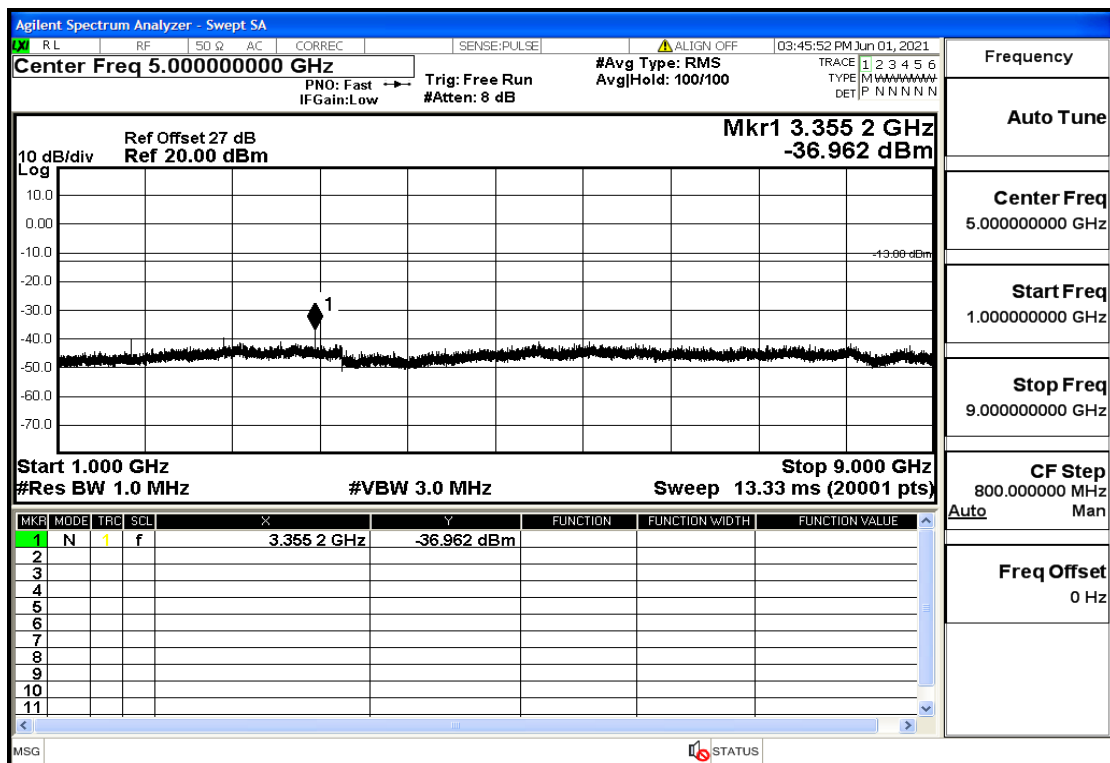
OB5-5-836.5-QPSK-1#LOW@1GHz-9GHz@Pass



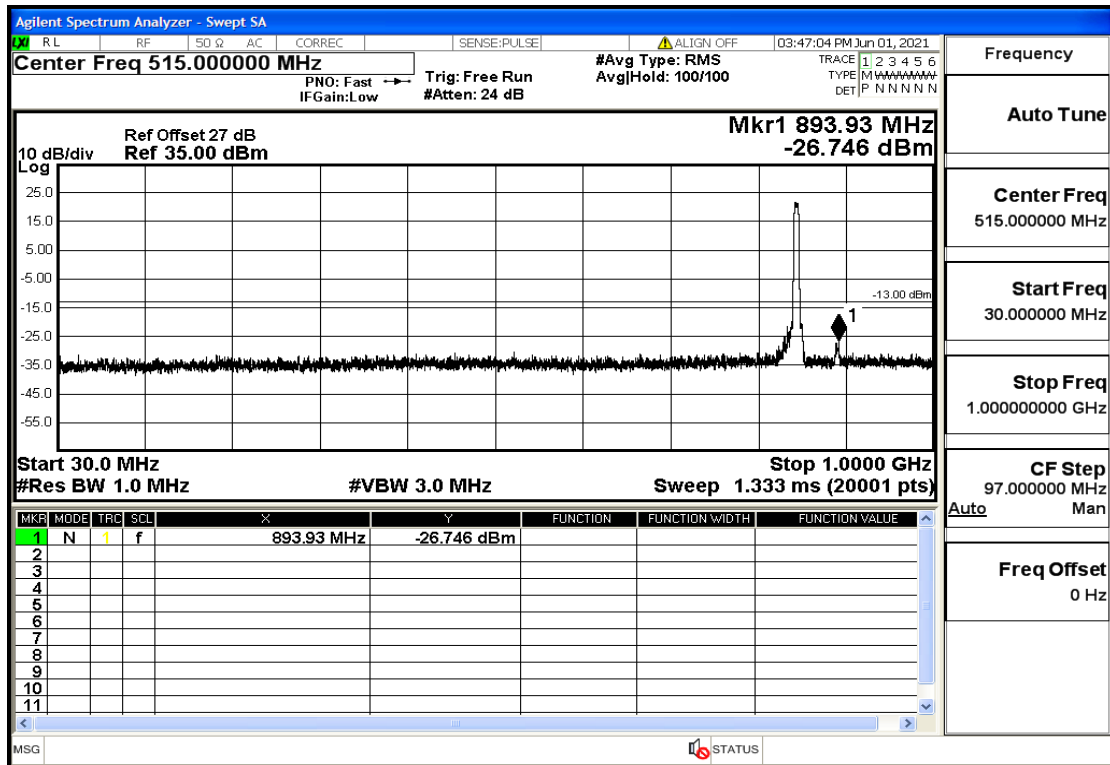
OB5-5-836.5-QPSK-1#HIGH@30MHz-1GHz@Pass



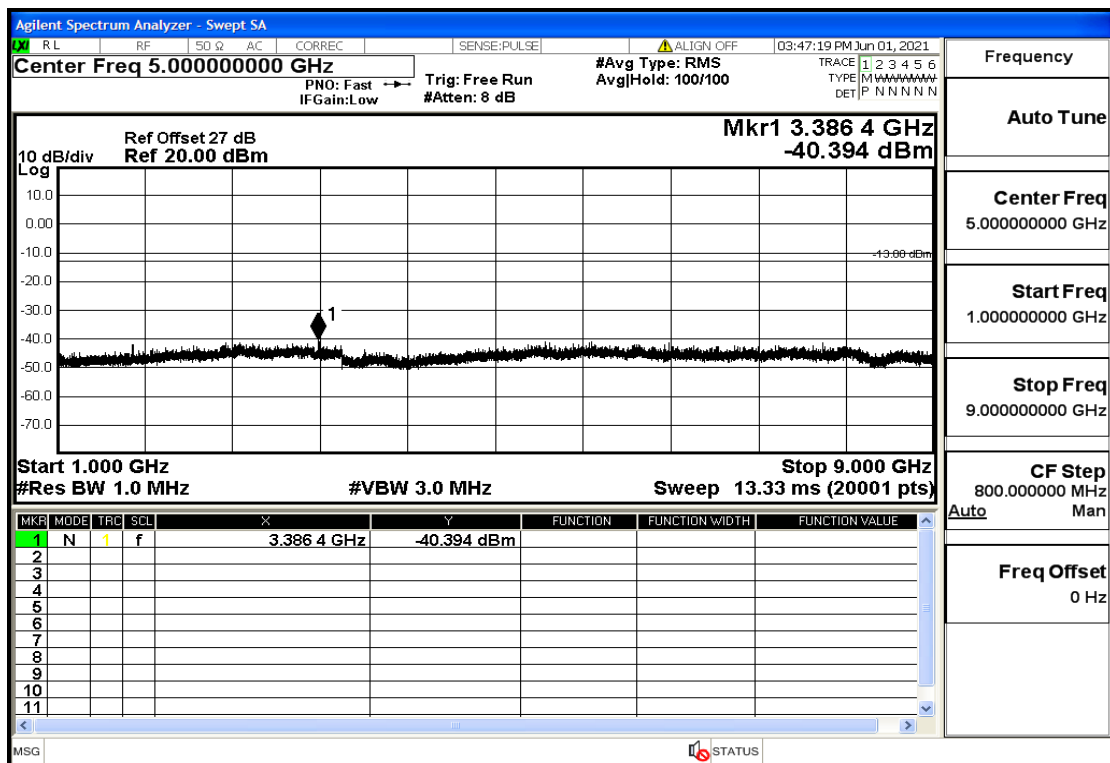
OB5-5-836.5-QPSK-1#HIGH@1GHz-9GHz@Pass



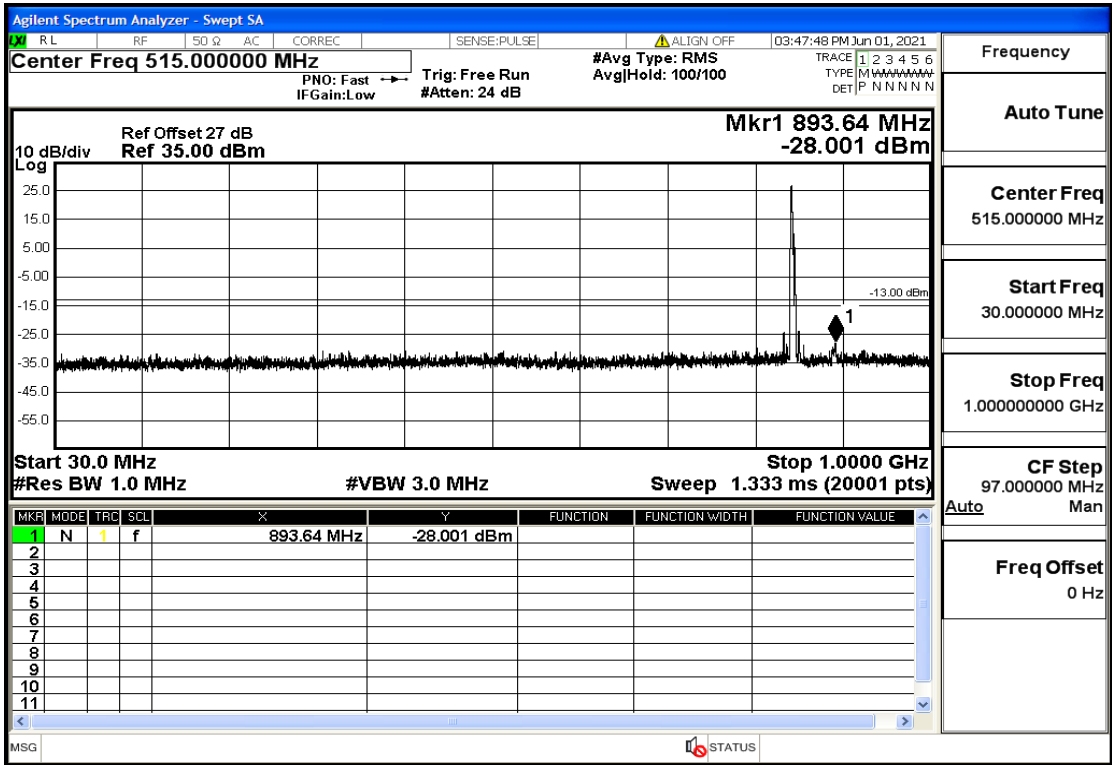
OB5-5-846.5-QPSK-25#LOW@30mHz-1GHz@Pass



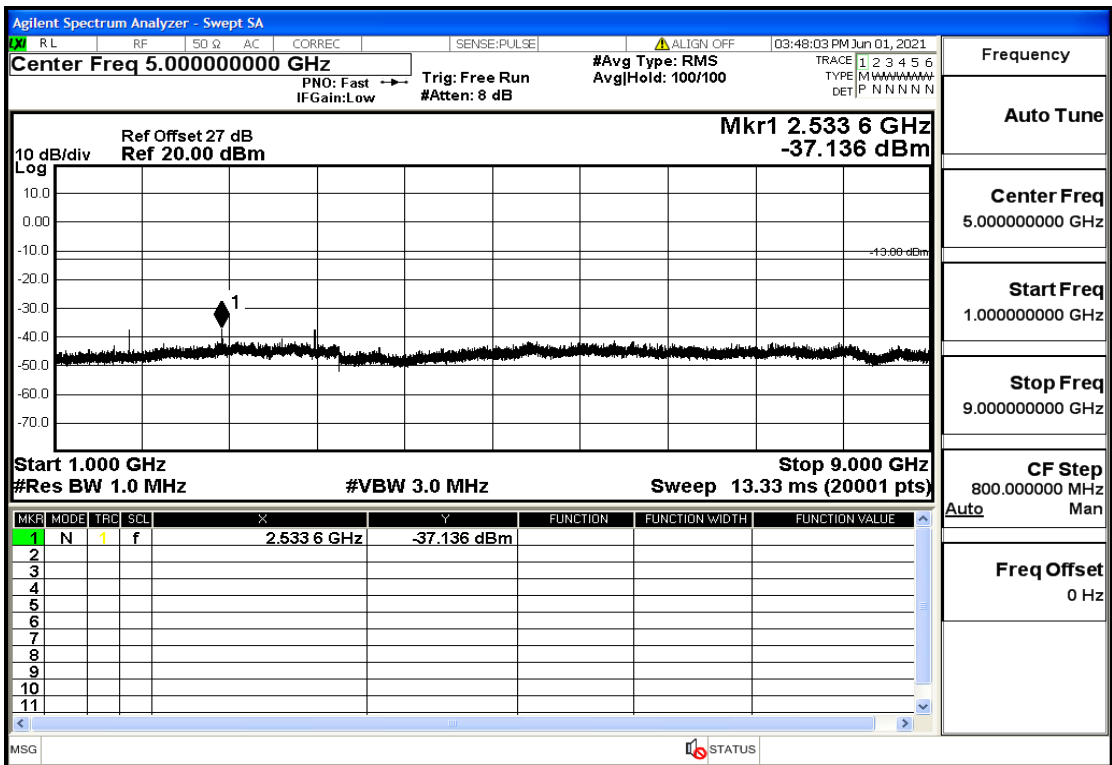
OB5-5-846.5-QPSK-25#LOW@1GHz-9GHz@Pass



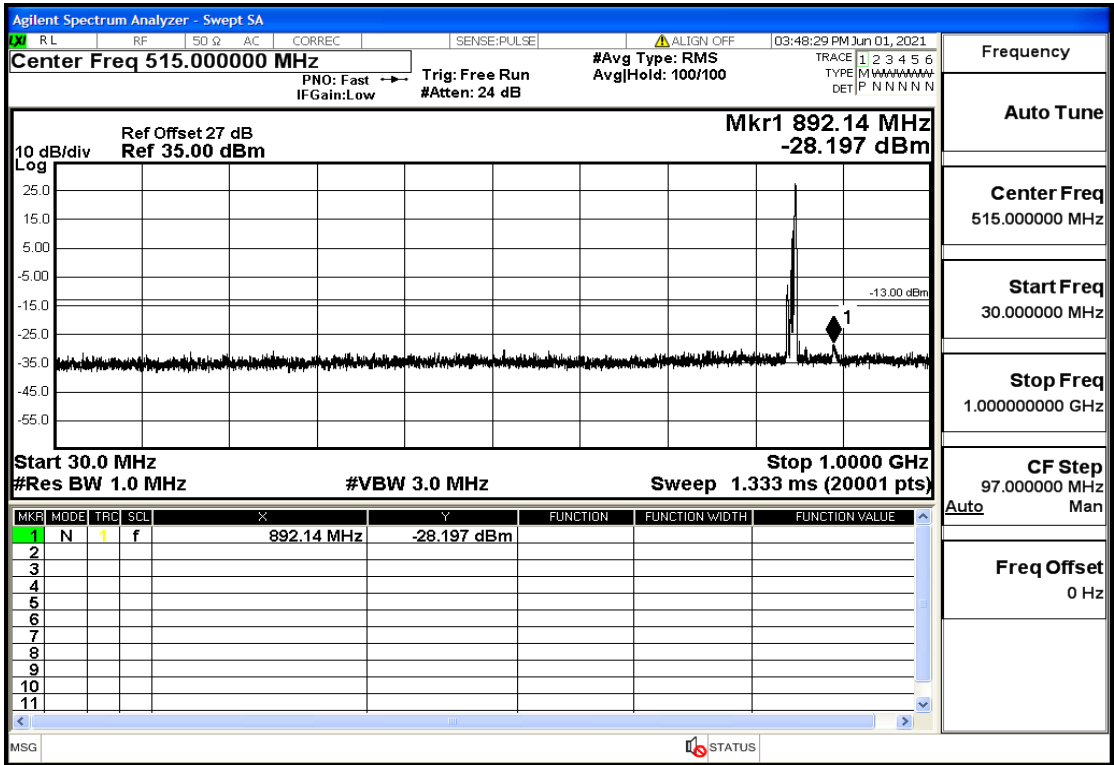
OB5-5-846.5-QPSK-1#LOW@30mHz-1GHz@Pass



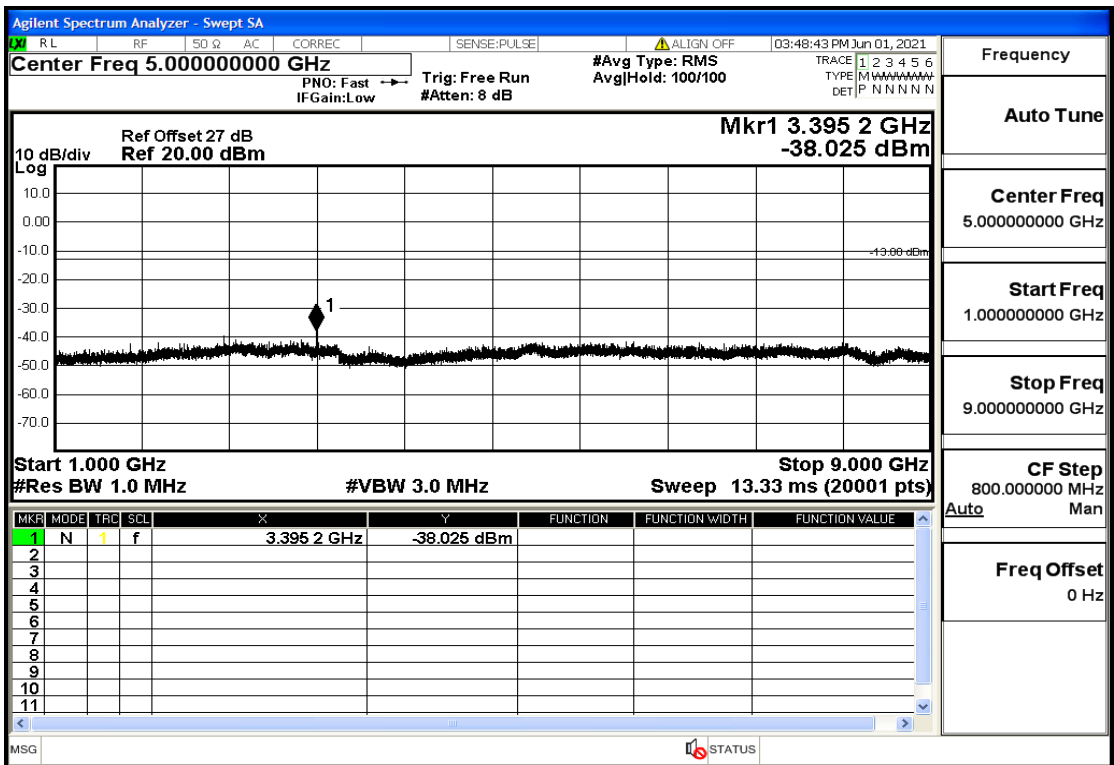
OB5-5-846.5-QPSK-1#LOW@1GHz-9GHz@Pass



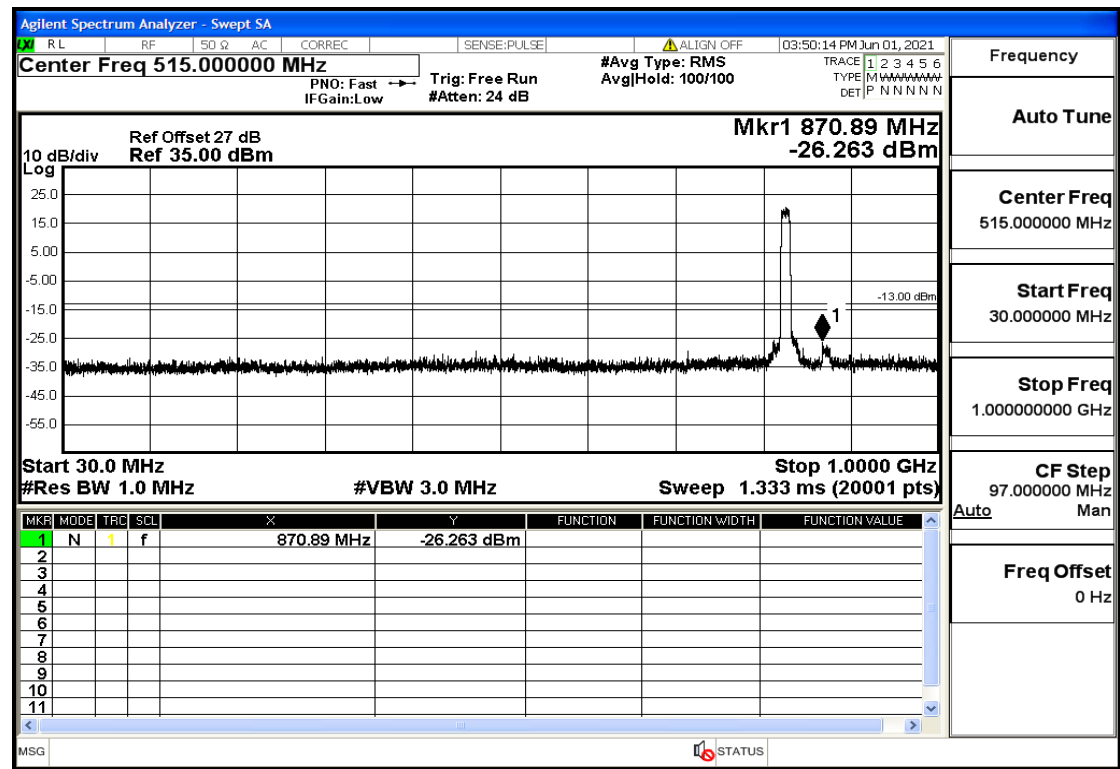
OB5-5-846.5-QPSK-1#HIGH@30mHz-1GHz@Pass



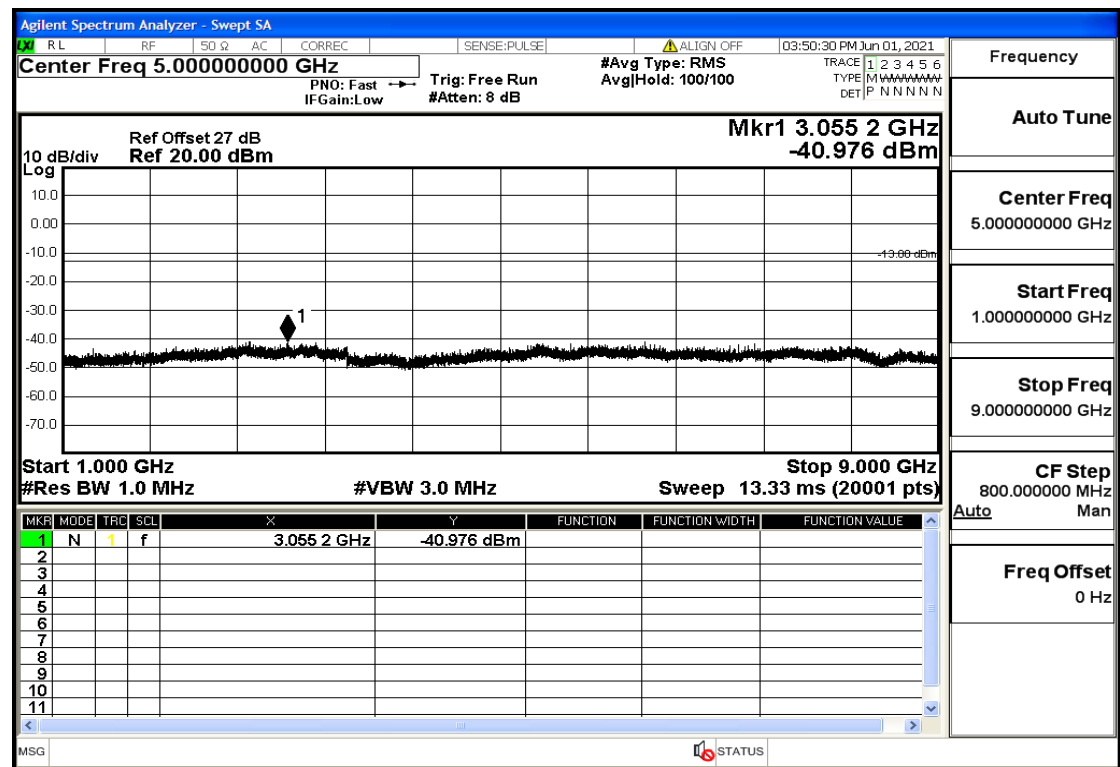
OB5-5-846.5-QPSK-1#HIGH@1GHz-9GHz@Pass



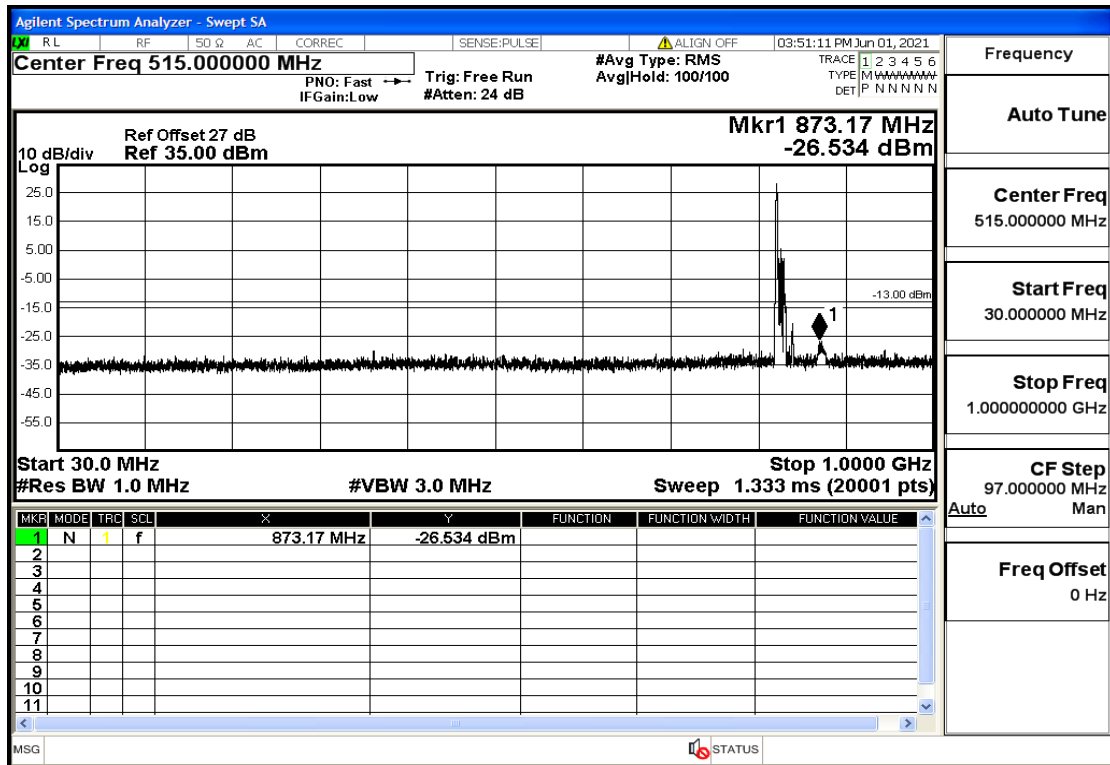
OB5-10-829-QPSK-50#LOW@30mHz-1GHz@Pass



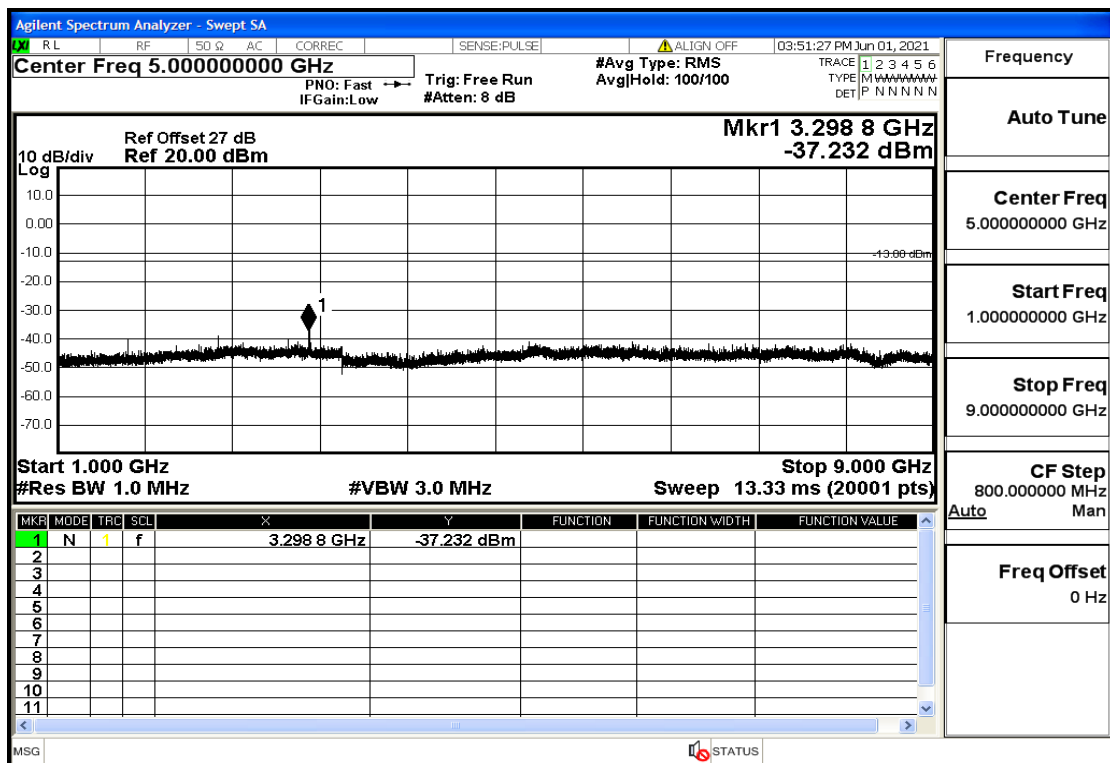
OB5-10-829-QPSK-50#LOW@1GHz-9GHz@Pass



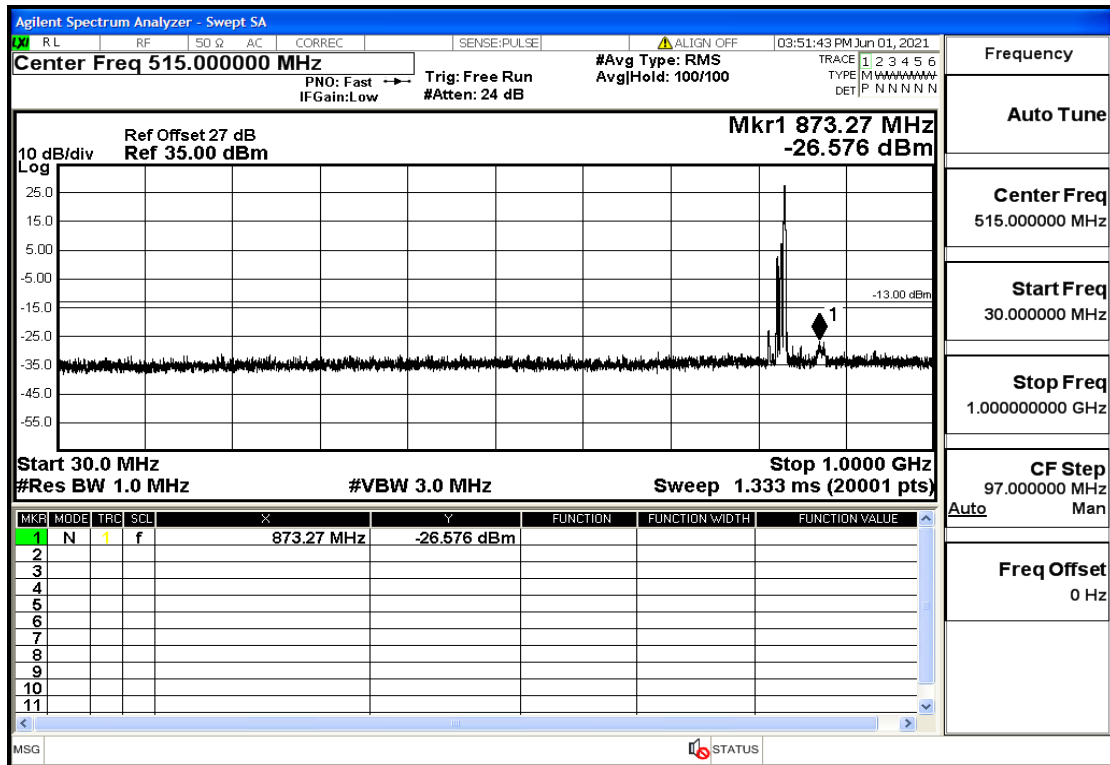
OB5-10-829-QPSK-1#LOW@30mHz-1GHz@Pass



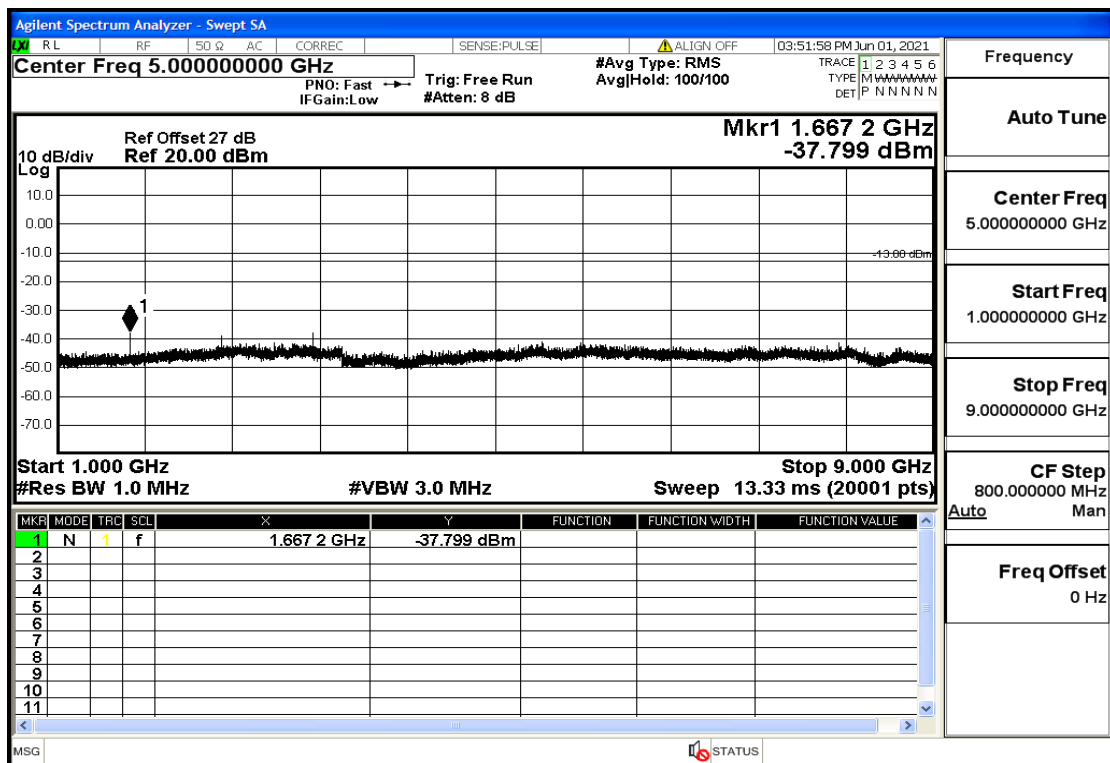
OB5-10-829-QPSK-1#LOW@1GHz-9GHz@Pass



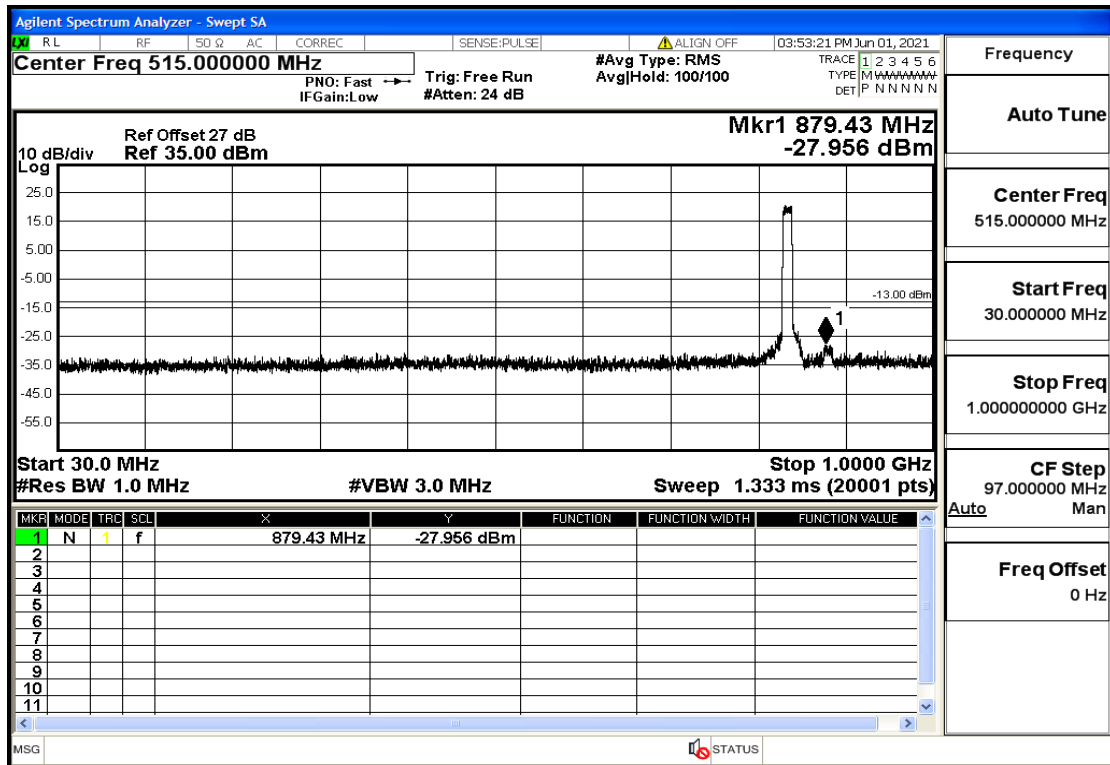
OB5-10-829-QPSK-1#HIGH@30mHz-1GHz@Pass



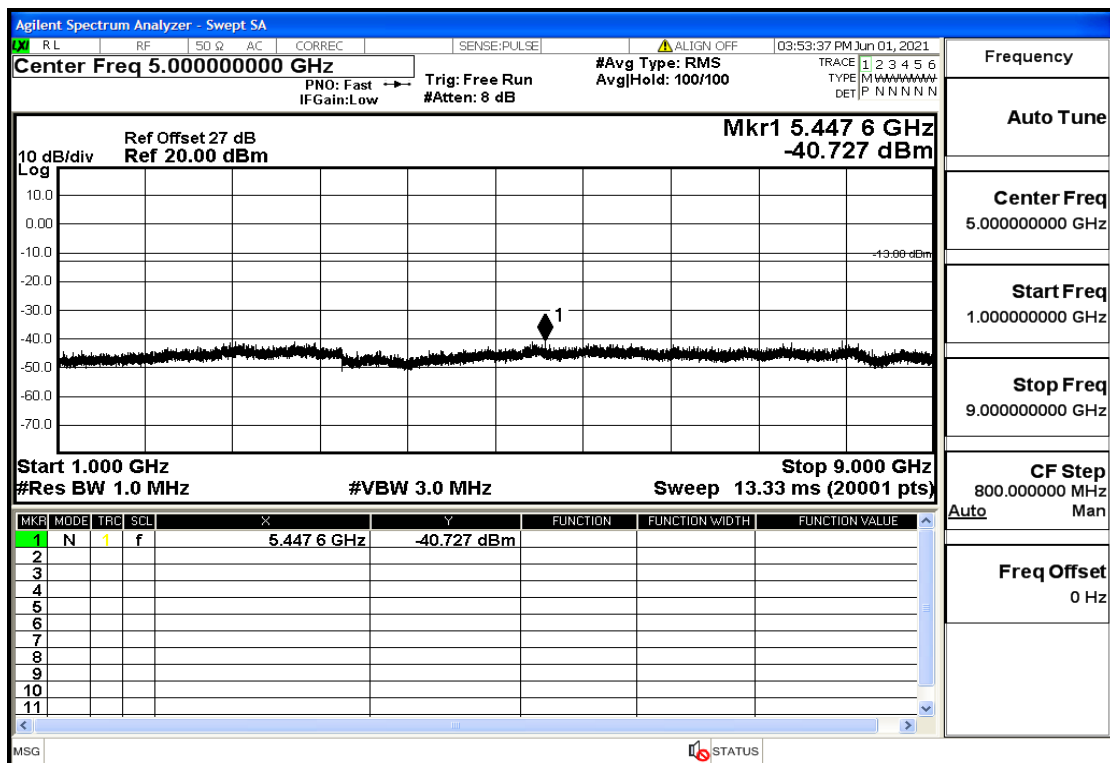
OB5-10-829-QPSK-1#HIGH@1GHz-9GHz@Pass



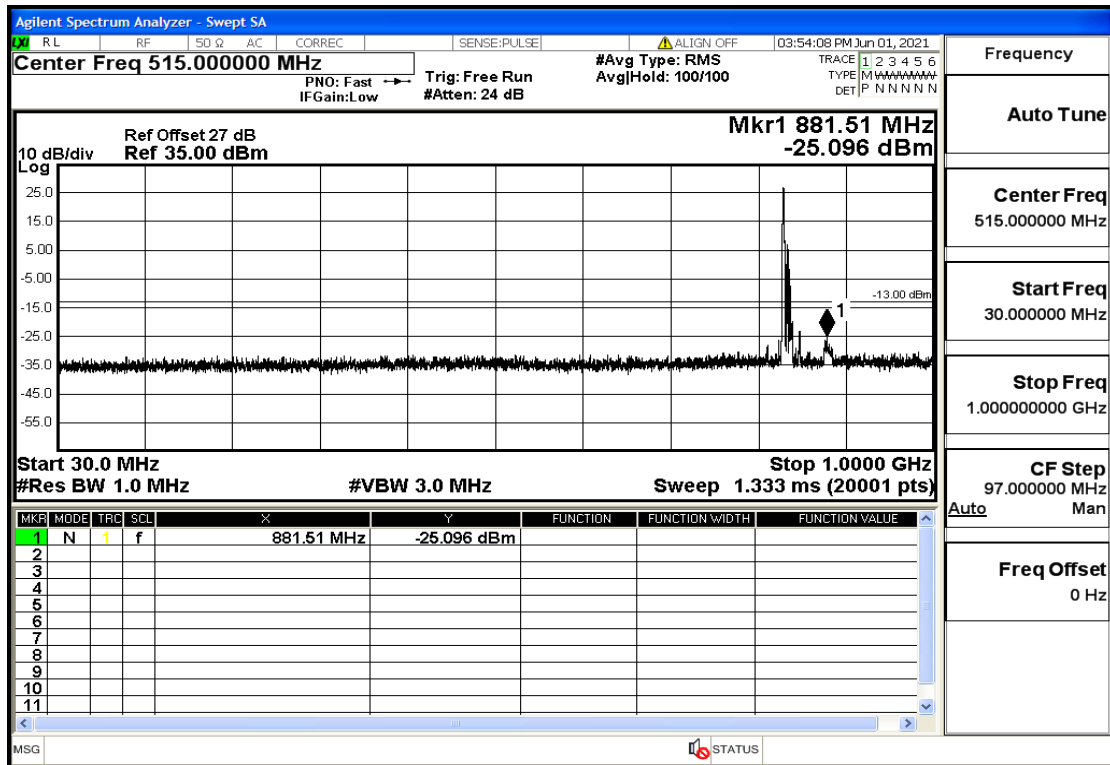
OB5-10-836.5-QPSK-50#LOW@30mHz-1GHz@Pass



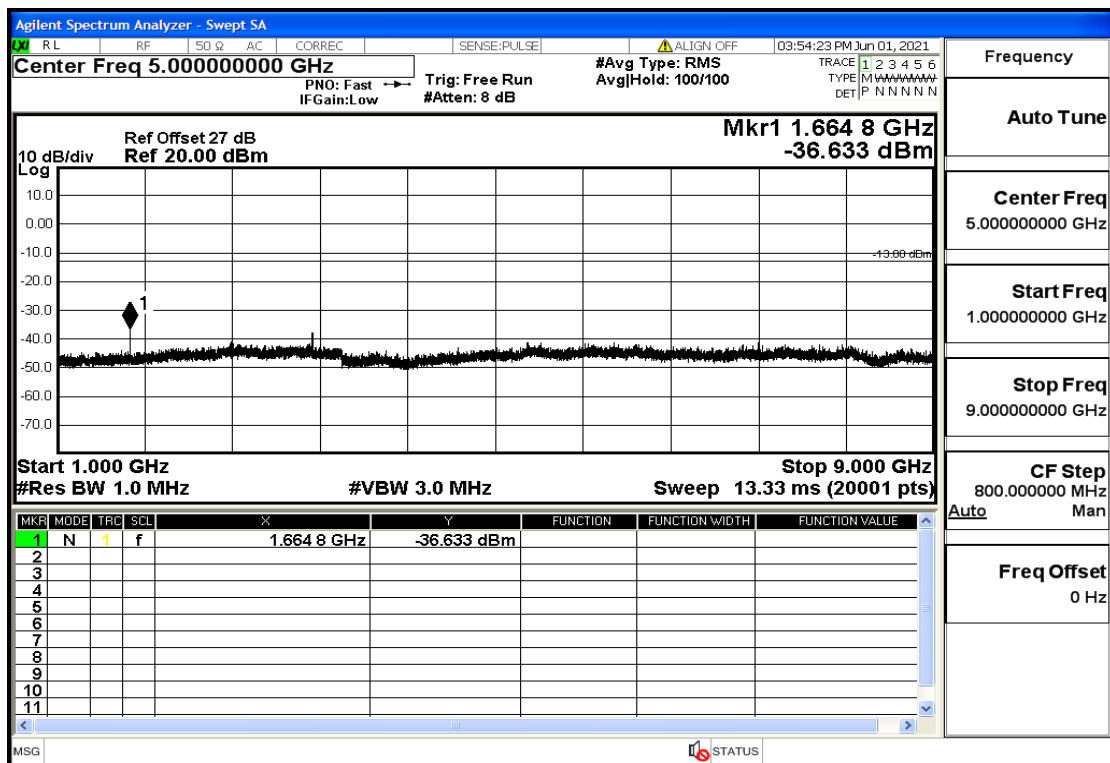
OB5-10-836.5-QPSK-50#LOW@1GHz-9GHz@Pass



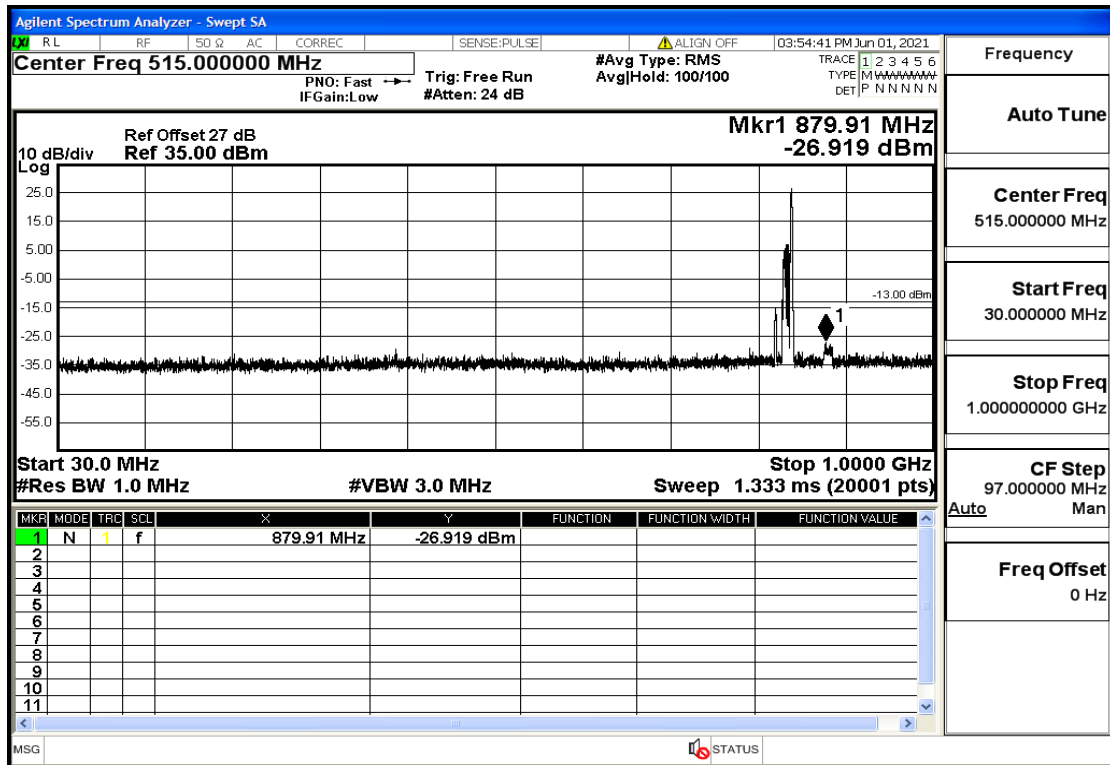
OB5-10-836.5-QPSK-1#LOW@30mHz-1GHz@Pass



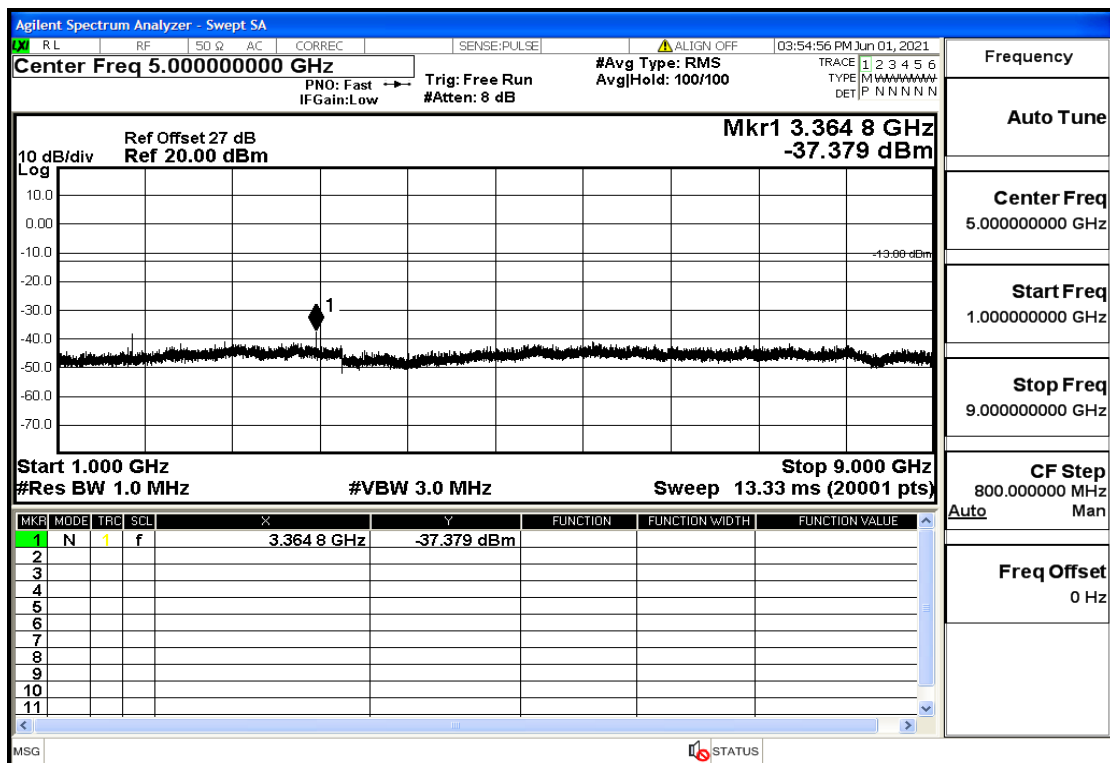
OB5-10-836.5-QPSK-1#LOW@1GHz-9GHz@Pass



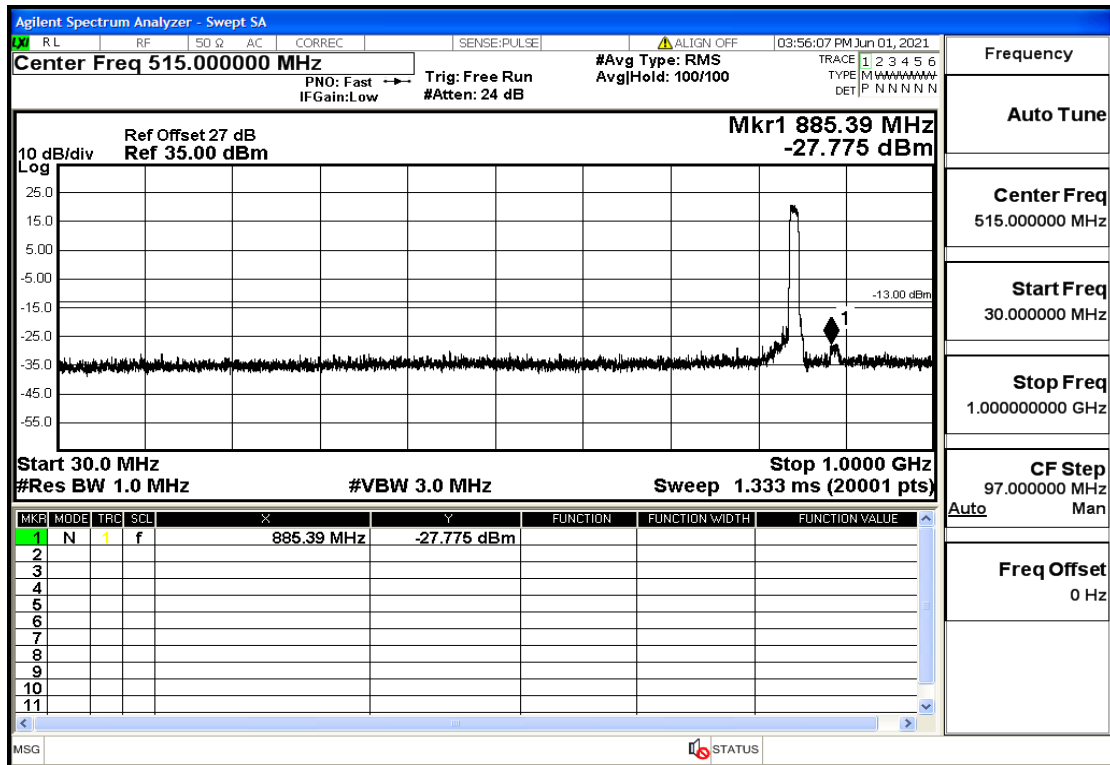
OB5-10-836.5-QPSK-1#HIGH@30mHz-1GHz@Pass



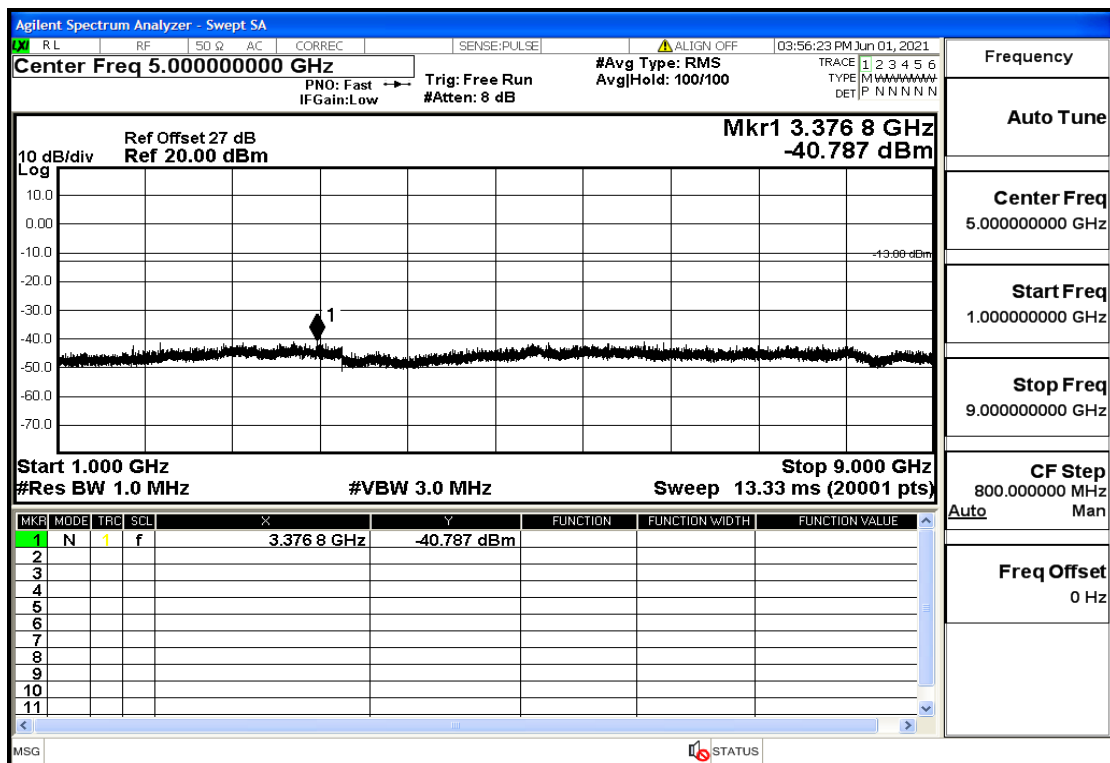
OB5-10-836.5-QPSK-1#HIGH@1GHz-9GHz@Pass



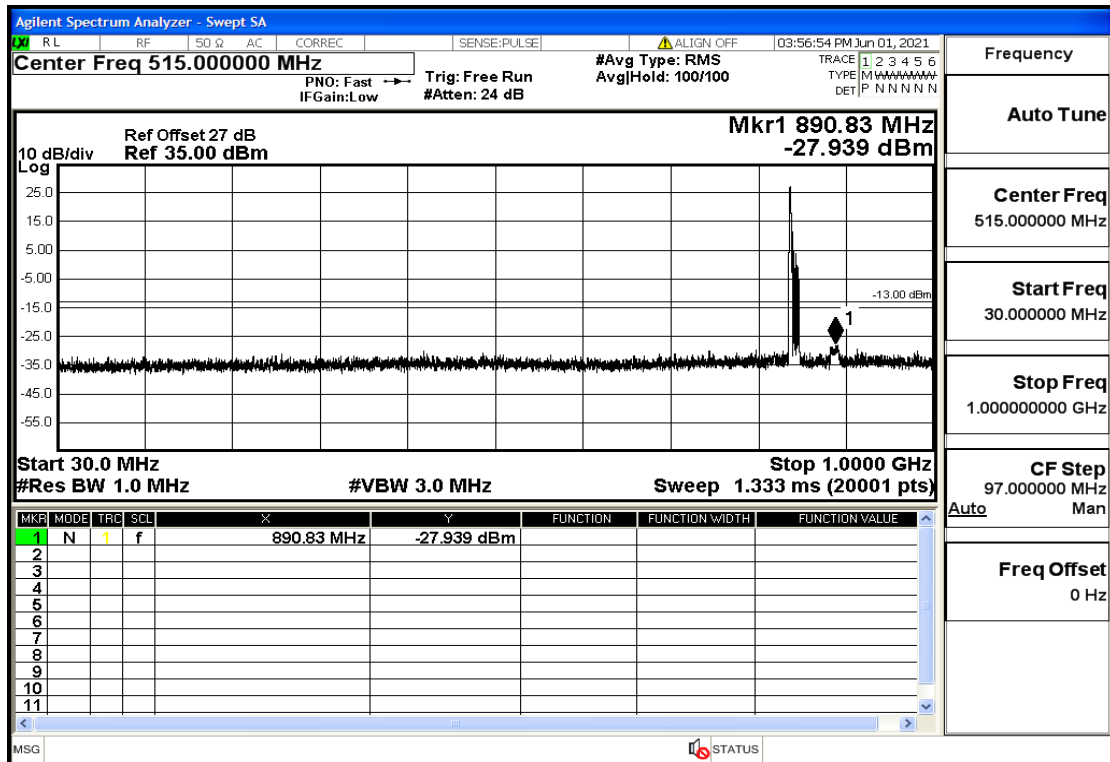
OB5-10-844-QPSK-50#LOW@30mHz-1GHz@Pass



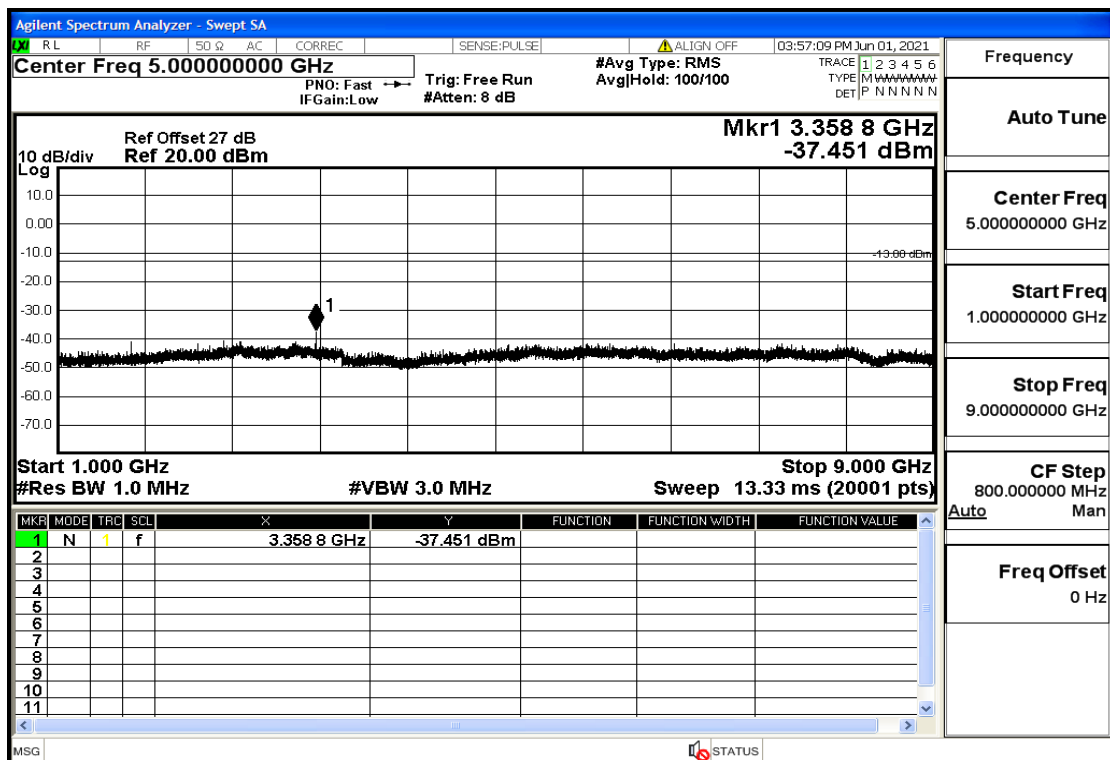
OB5-10-844-QPSK-50#LOW@1GHz-9GHz@Pass



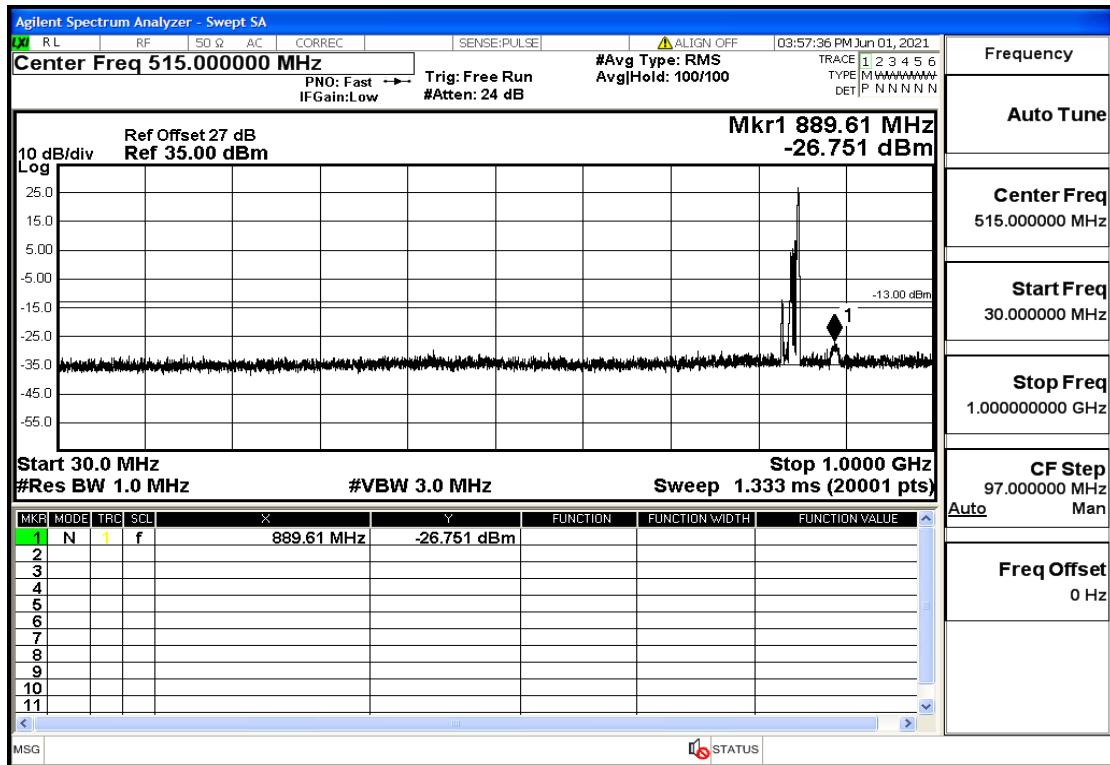
OB5-10-844-QPSK-1#LOW@30mHz-1GHz@Pass



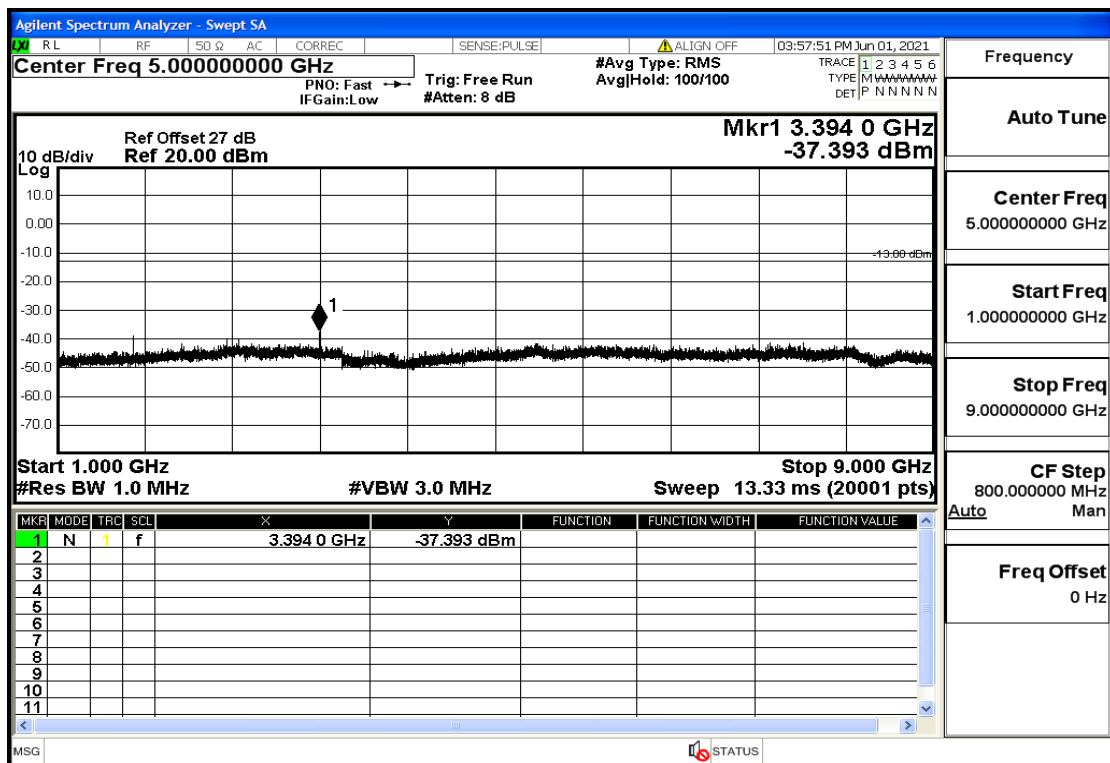
OB5-10-844-QPSK-1#LOW@1GHz-9GHz@Pass



OB5-10-844-QPSK-1#HIGH@30mHz-1GHz@Pass



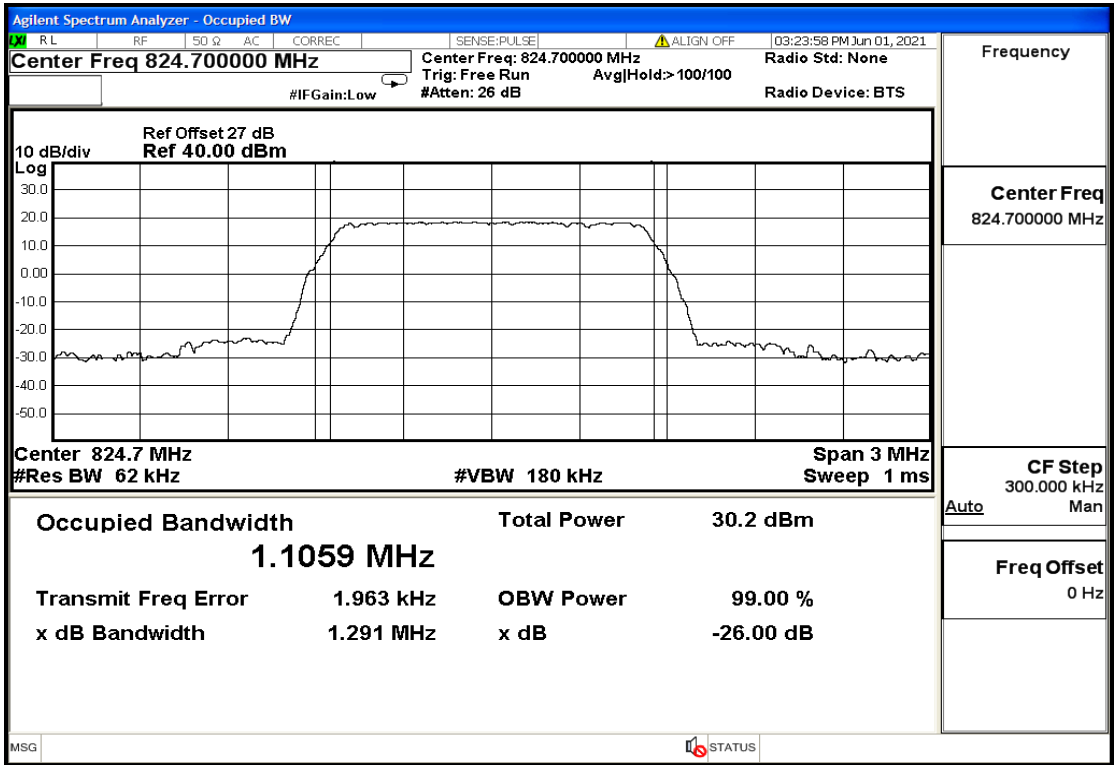
OB5-10-844-QPSK-1#HIGH@1GHz-9GHz@Pass



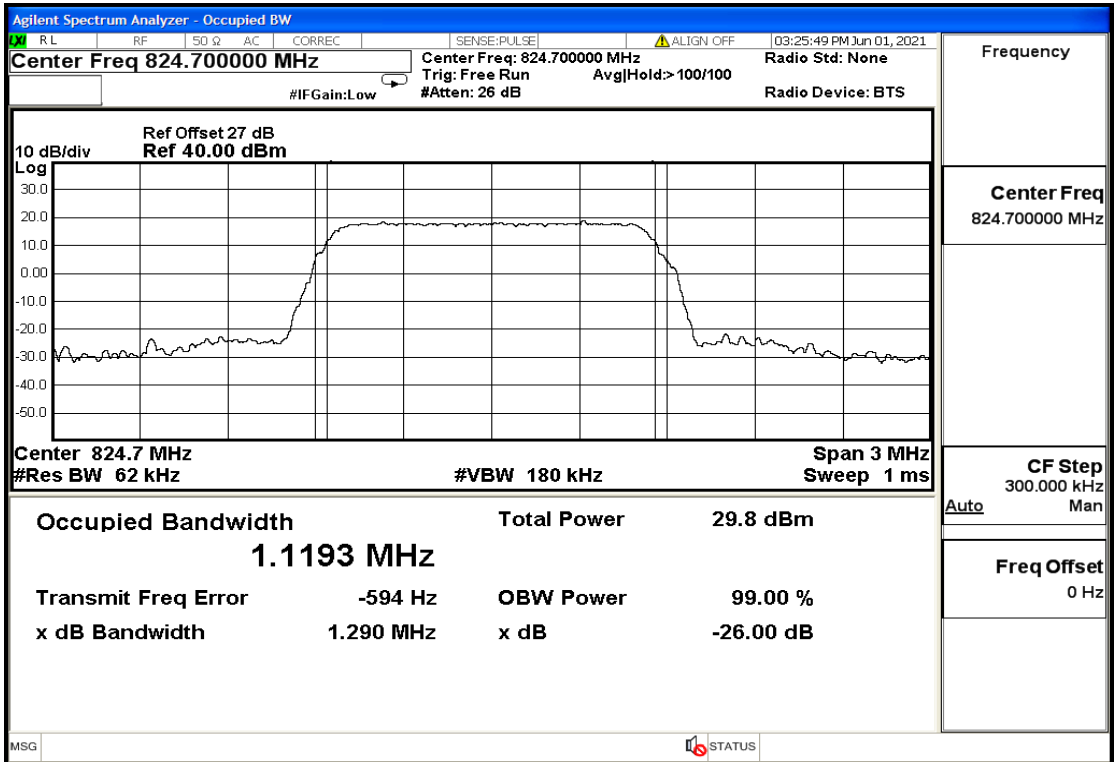
Emission bandwidth and OBW

Band	Bandwidth(MHz)	UL Frequency(MHz)	Modulation	RB Size	RB Offset	Occupied Bandwidth(KHz)	Emission Bandwidth(KHz)	Limit
Band5	1.4	824.7	QPSK	6	LOW	1105.9	1291	No limit
Band5	1.4	824.7	16QAM	6	LOW	1119.3	1290	No limit
Band5	1.4	836.5	QPSK	6	LOW	1125.5	1300	No limit
Band5	1.4	836.5	16QAM	6	LOW	1114.3	1292	No limit
Band5	1.4	848.3	QPSK	6	LOW	1126.7	1308	No limit
Band5	1.4	848.3	16QAM	6	LOW	1122.6	1293	No limit
Band5	3	825.5	QPSK	15	LOW	2756.1	3103	No limit
Band5	3	825.5	16QAM	15	LOW	2777.9	3111	No limit
Band5	3	836.5	QPSK	15	LOW	2769.3	3123	No limit
Band5	3	836.5	16QAM	15	LOW	2757.2	3126	No limit
Band5	3	847.5	QPSK	15	LOW	2781.0	3113	No limit
Band5	3	847.5	16QAM	15	LOW	2763.7	3100	No limit
Band5	5	826.5	QPSK	25	LOW	4608.5	5123	No limit
Band5	5	826.5	16QAM	25	LOW	4560.4	5053	No limit
Band5	5	836.5	QPSK	25	LOW	4577.7	5089	No limit
Band5	5	836.5	16QAM	25	LOW	4565.5	5058	No limit
Band5	5	846.5	QPSK	25	LOW	4592.9	5112	No limit
Band5	5	846.5	16QAM	25	LOW	4607.4	5096	No limit
Band5	10	829	QPSK	50	LOW	9082.5	10040	No limit
Band5	10	829	16QAM	50	LOW	9101.6	10190	No limit
Band5	10	836.5	QPSK	50	LOW	9132.8	10080	No limit
Band5	10	836.5	16QAM	50	LOW	9102.4	10090	No limit
Band5	10	844	QPSK	50	LOW	9073.5	10170	No limit
Band5	10	844	16QAM	50	LOW	9111.0	10100	No limit

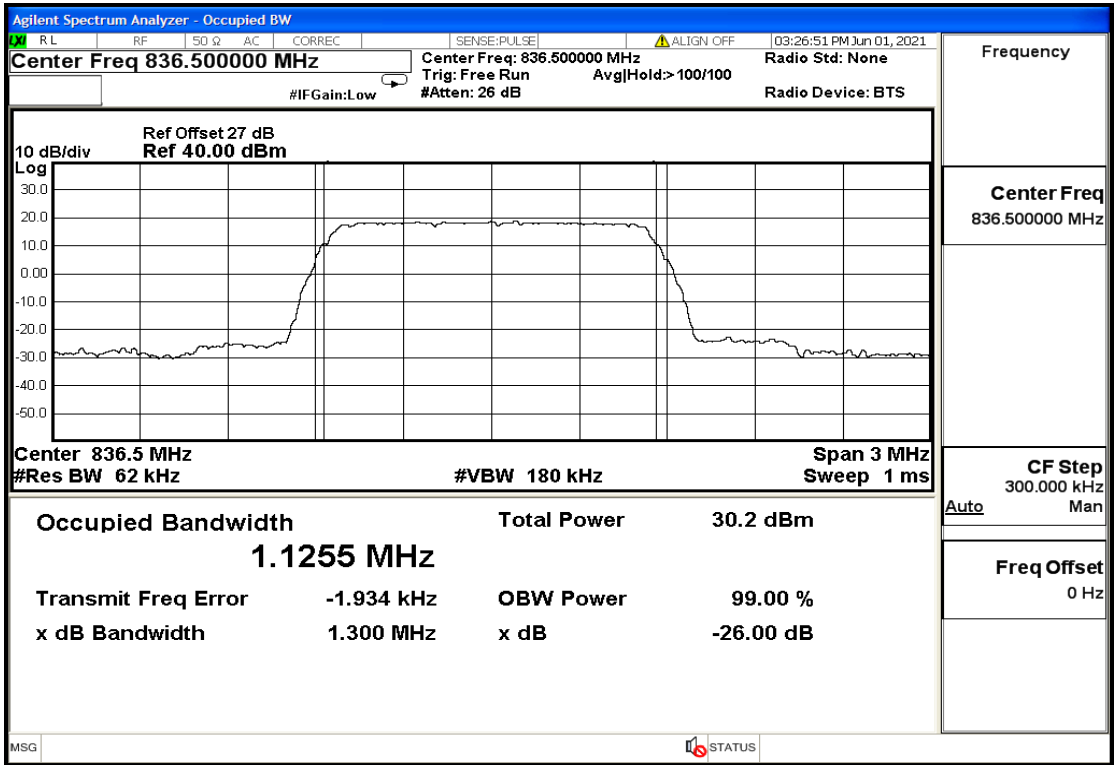
Band5-1.4-824.7-QPSK-6#LOW@26dB and 99PCT Bandwidth



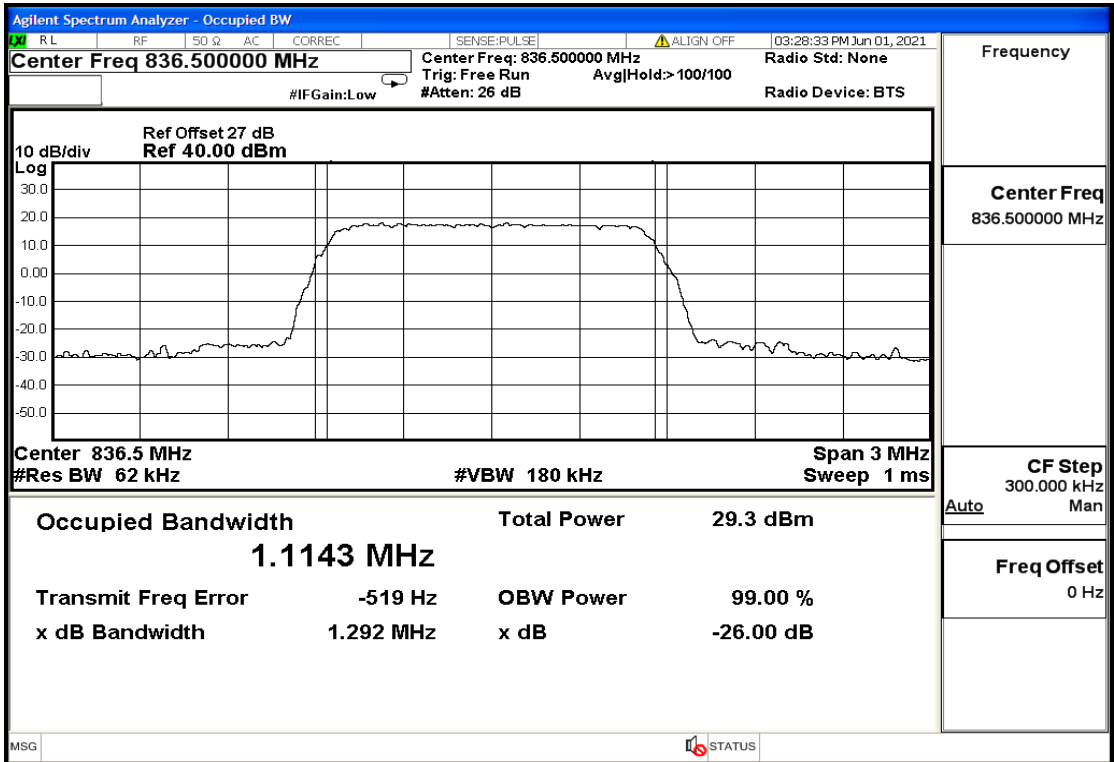
Band5-1.4-824.7-16QAM-6#LOW@26dB and 99PCT Bandwidth



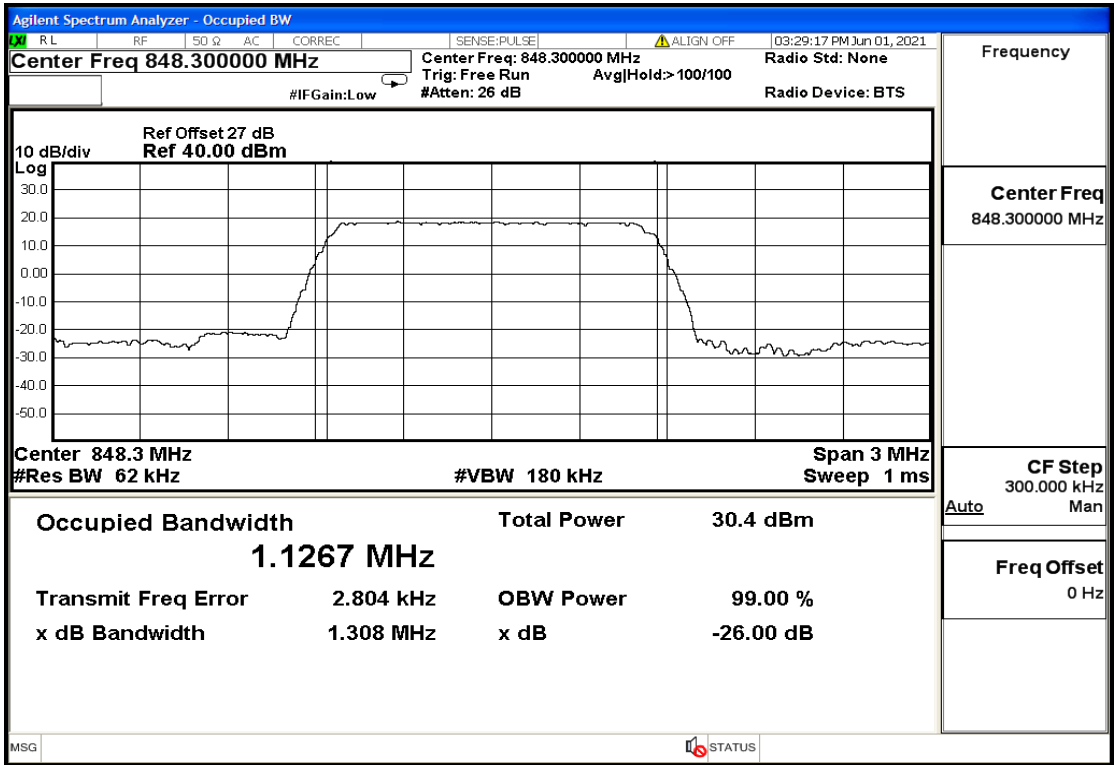
Band5-1.4-836.5-QPSK-6#LOW@26dB and 99PCT Bandwidth



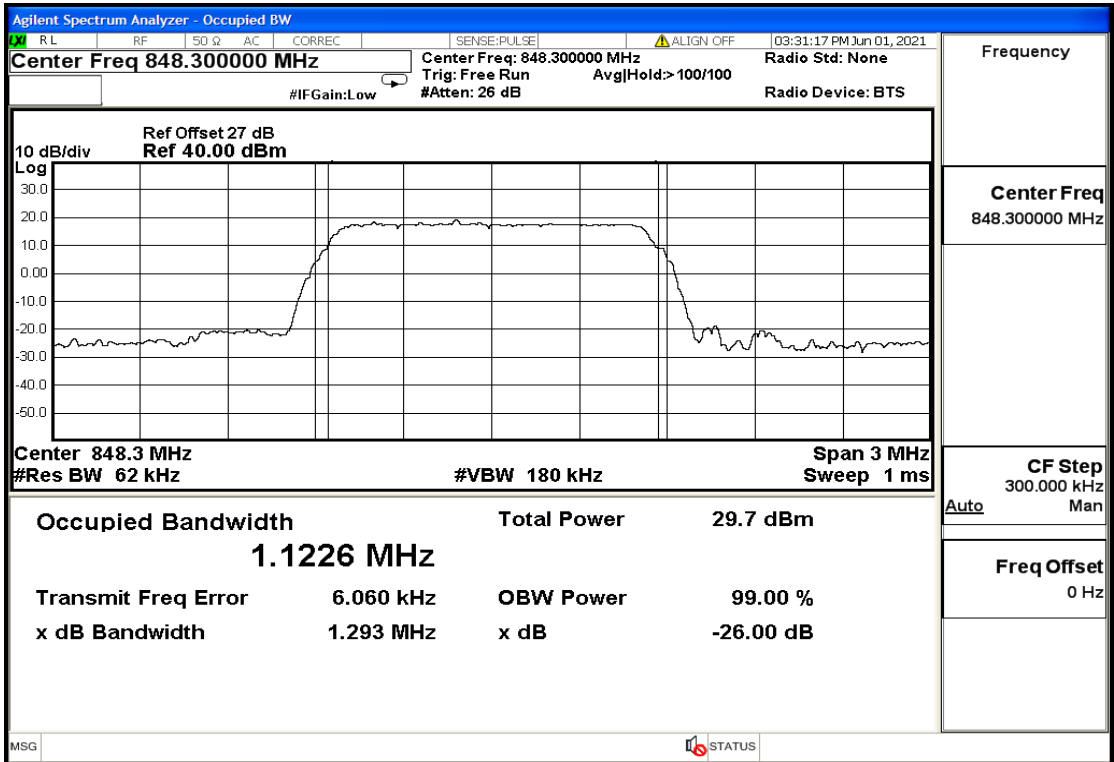
Band5-1.4-836.5-16QAM-6#LOW@26dB and 99PCT Bandwidth



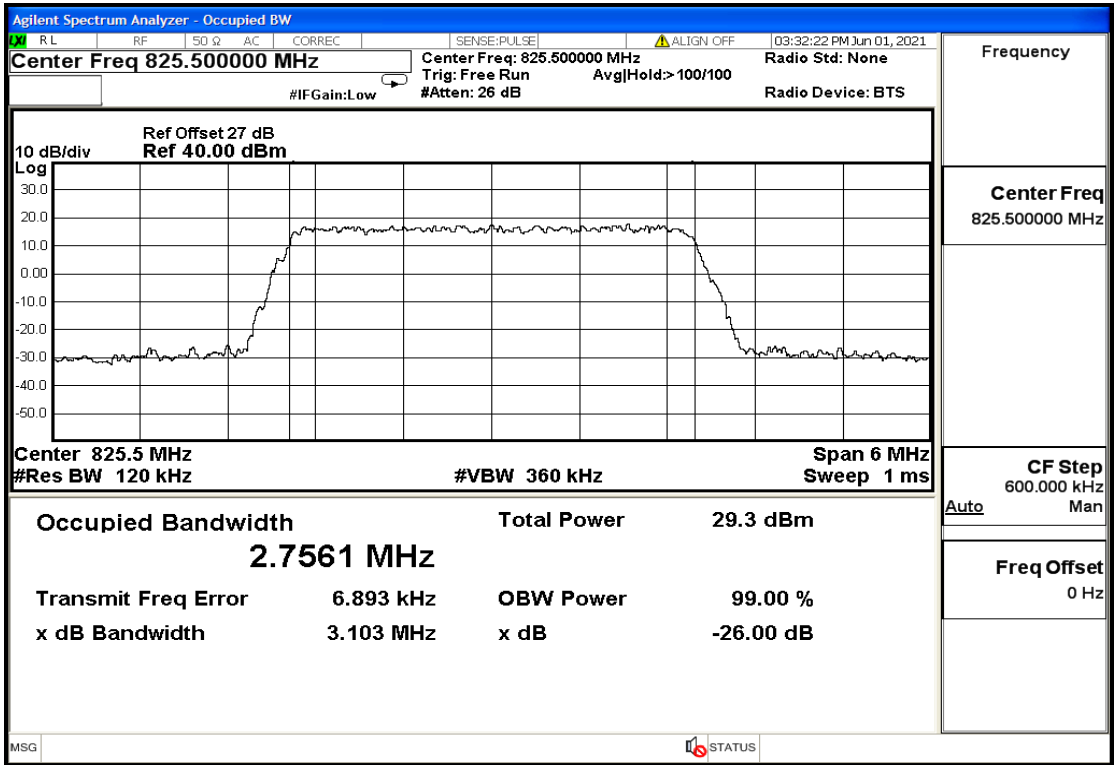
Band5-1.4-848.3-QPSK-6#LOW@26dB and 99PCT Bandwidth



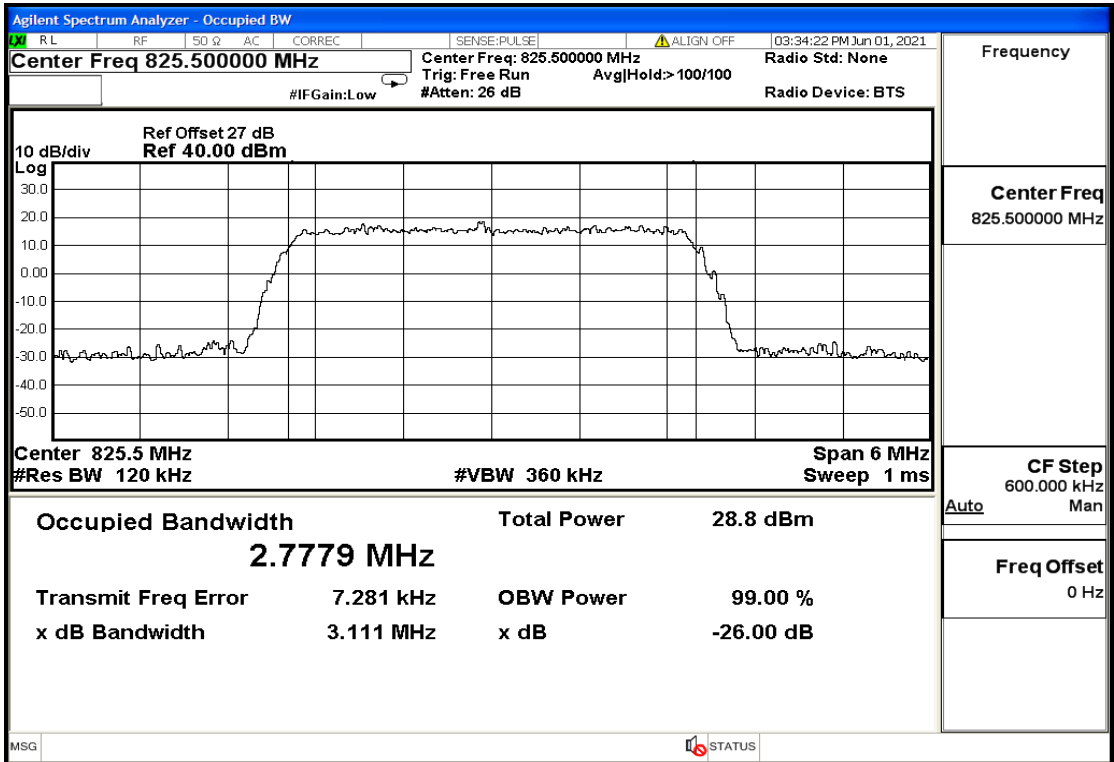
Band5-1.4-848.3-16QAM-6#LOW@26dB and 99PCT Bandwidth



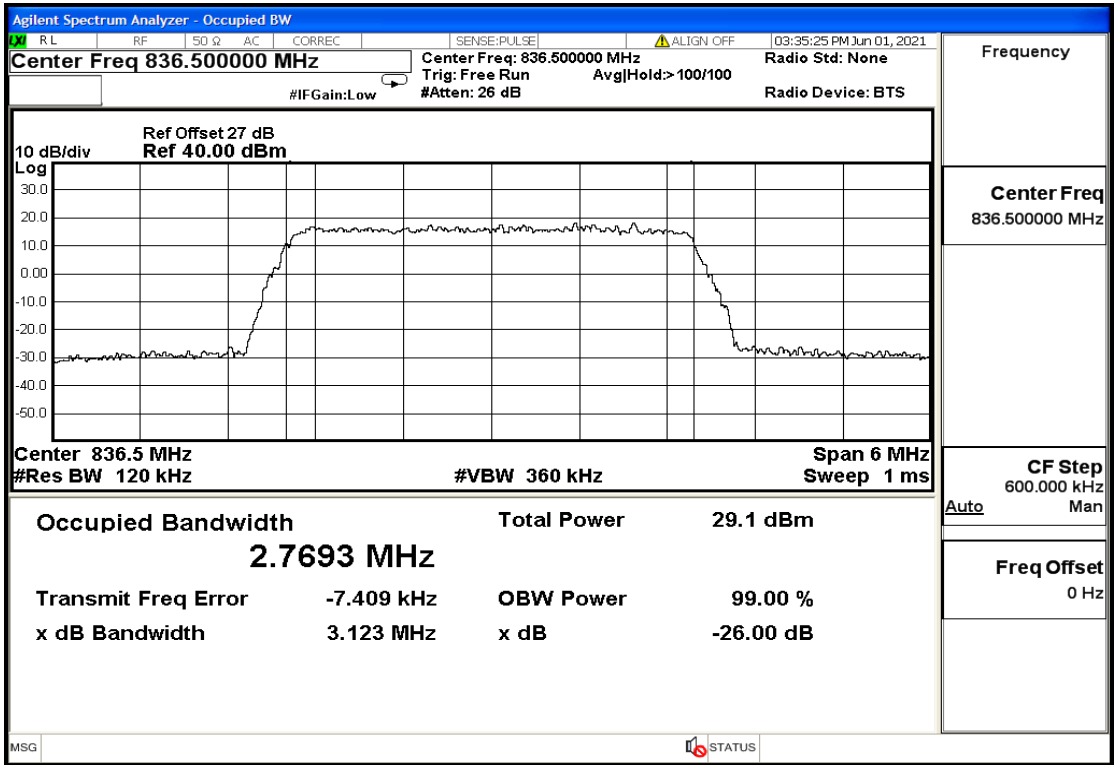
Band5-3-825.5-QPSK-15#LOW@26dB and 99PCT Bandwidth



Band5-3-825.5-16QAM-15#LOW@26dB and 99PCT Bandwidth



Band5-3-836.5-QPSK-15#LOW@26dB and 99PCT Bandwidth



Band5-3-836.5-16QAM-15#LOW@26dB and 99PCT Bandwidth

