

## RF Test Data for LTE (Conducted Measurement)

**Product Name: Real-time temperature logger**

**Trade Mark: Frigga**

**Test Model: V5C Non-Li(4G-60)**

**Sample ID: TZ220603347-1#**

**FCC ID: 2ATWZ-V5X4G**

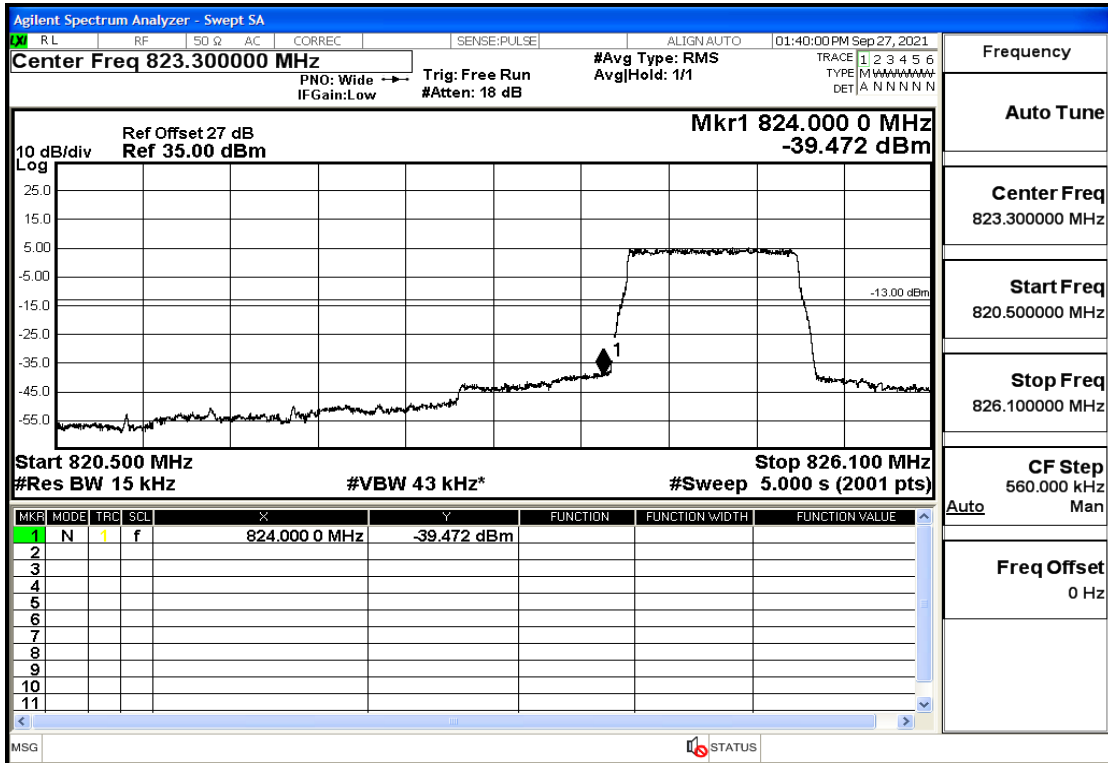
### Environmental Conditions

Temperature:	23.5°C
Relative Humidity:	57%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
Remark:	For LTE Band5

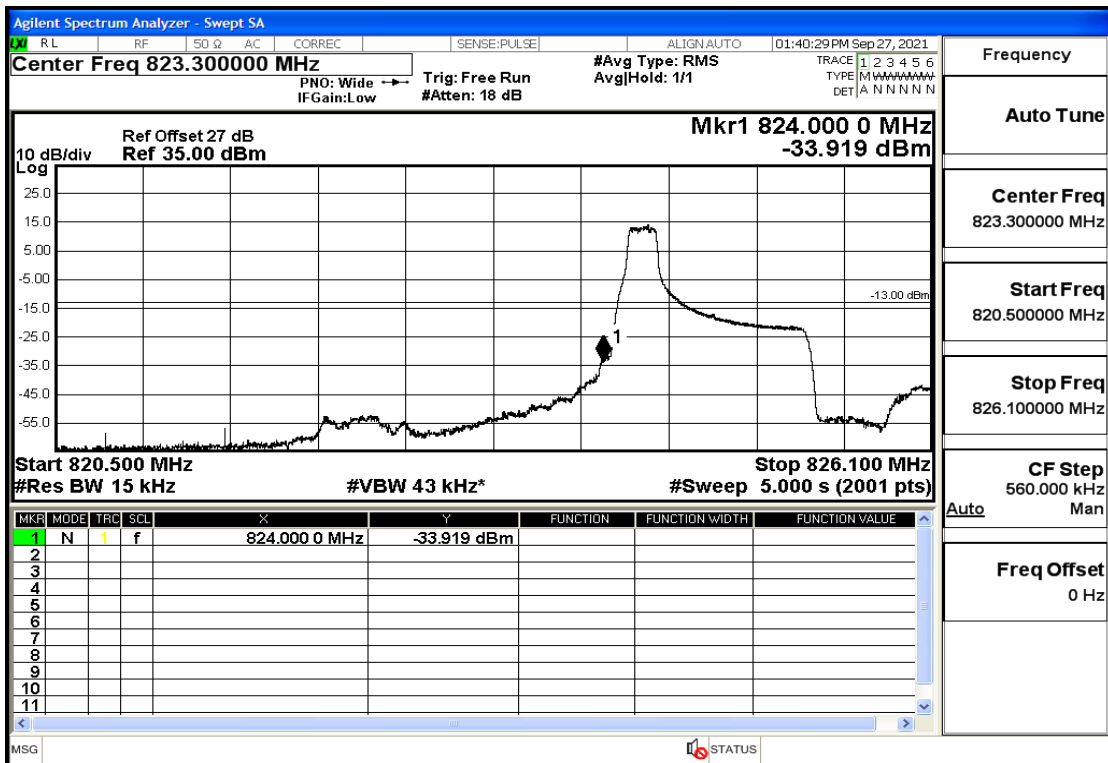
## Band Edge and Emission Mask

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	12	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	12	HIGH	Pass
Band5	10	844	16QAM	1	HIGH	Pass

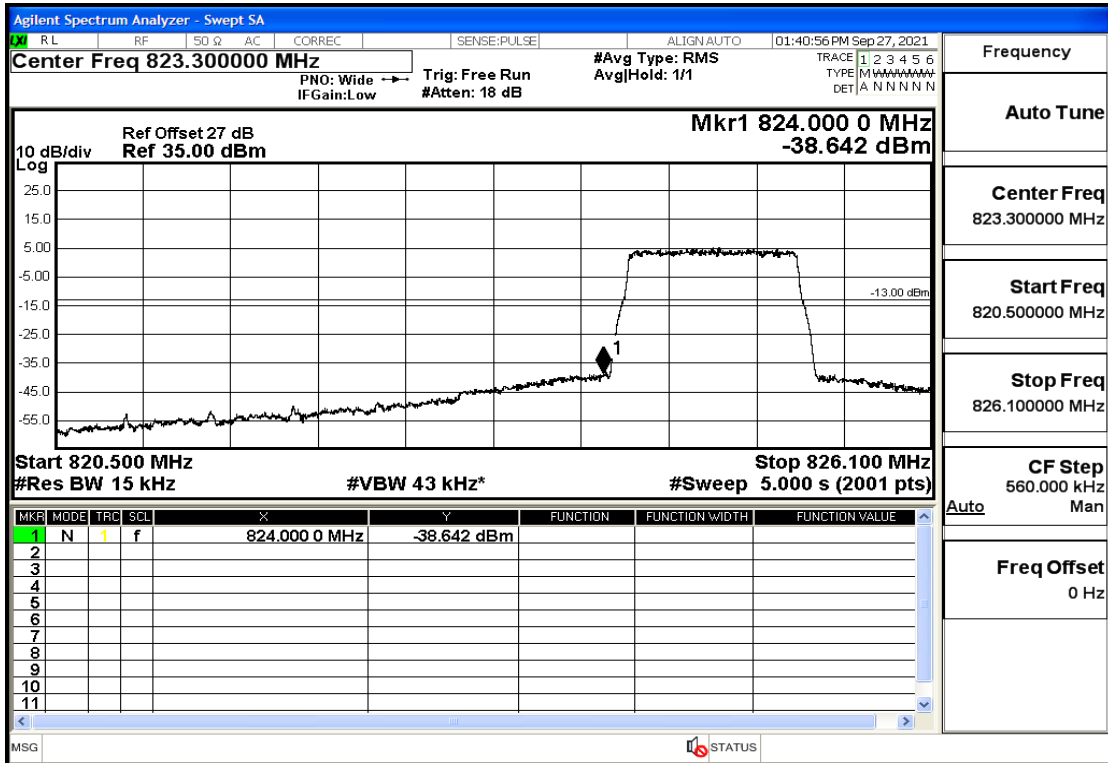
Band5-1.4-824.7-QPSK-6#LOW@Pass



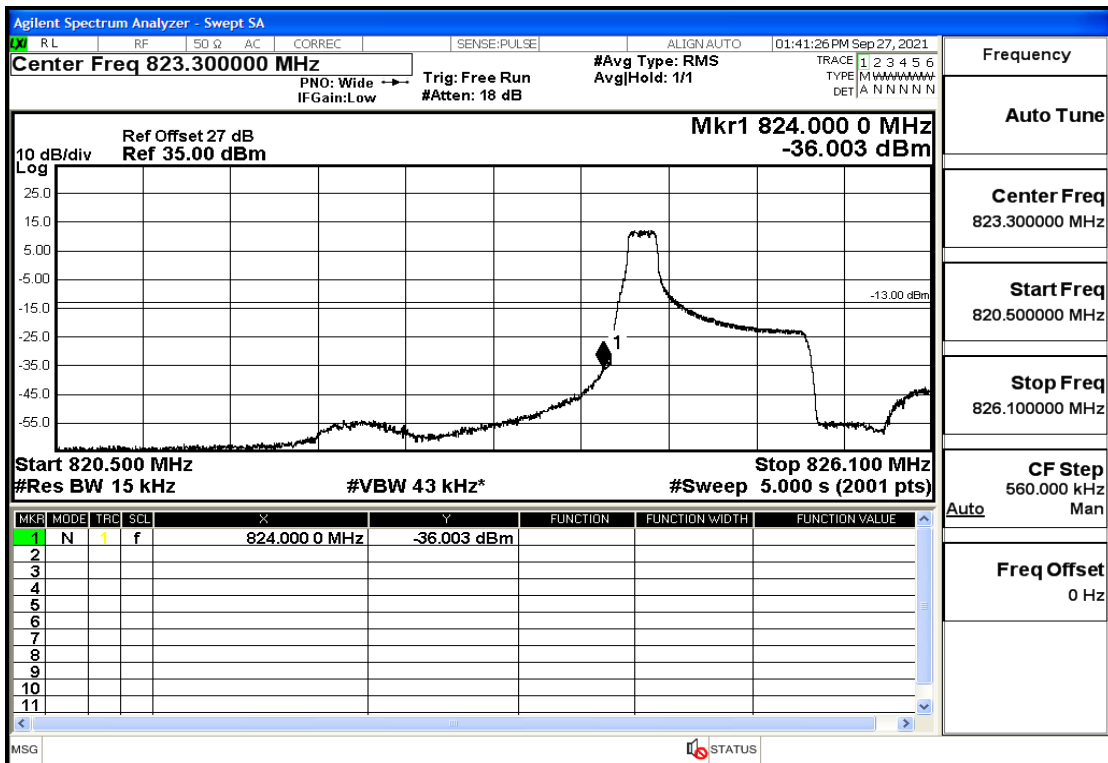
Band5-1.4-824.7-QPSK-1#LOW@Pass



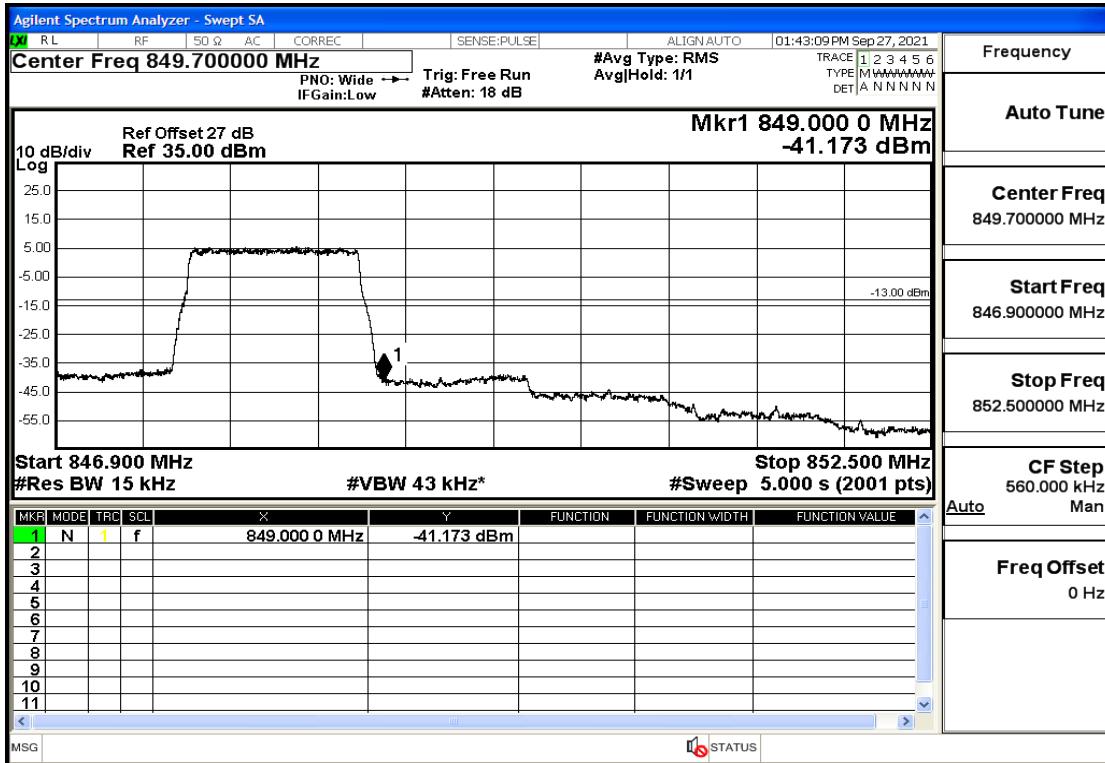
Band5-1.4-824.7-16QAM-6#LOW@Pass



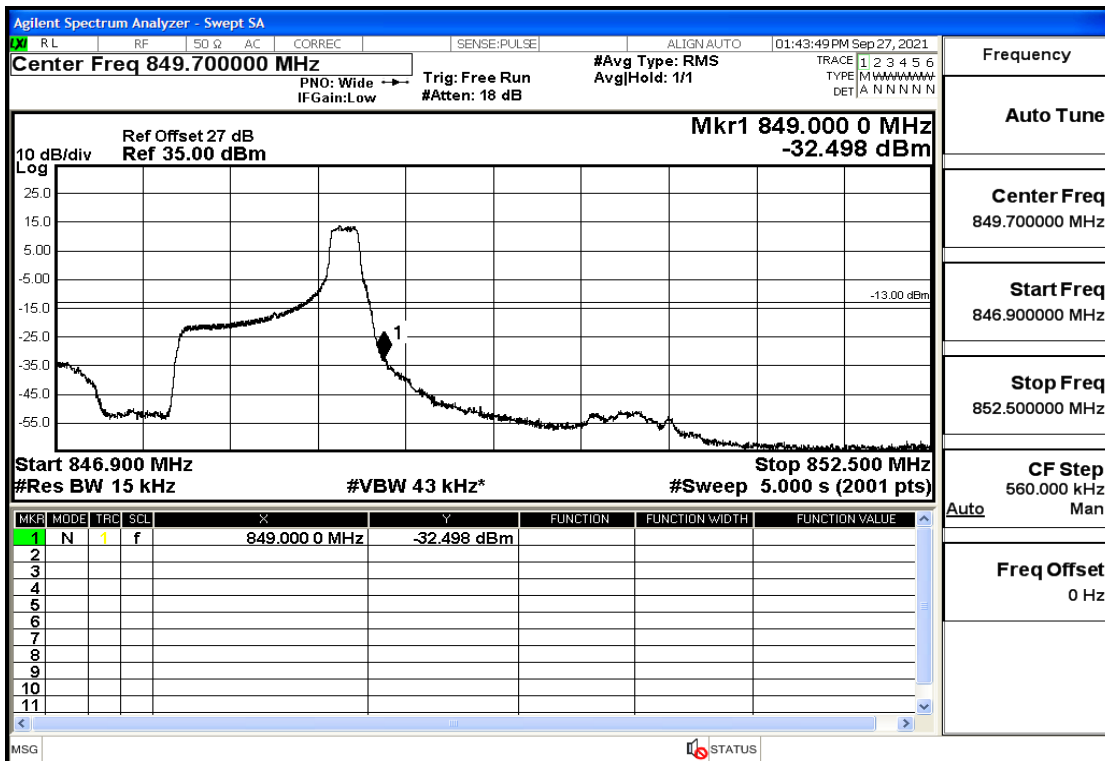
Band5-1.4-824.7-16QAM-1#LOW@Pass



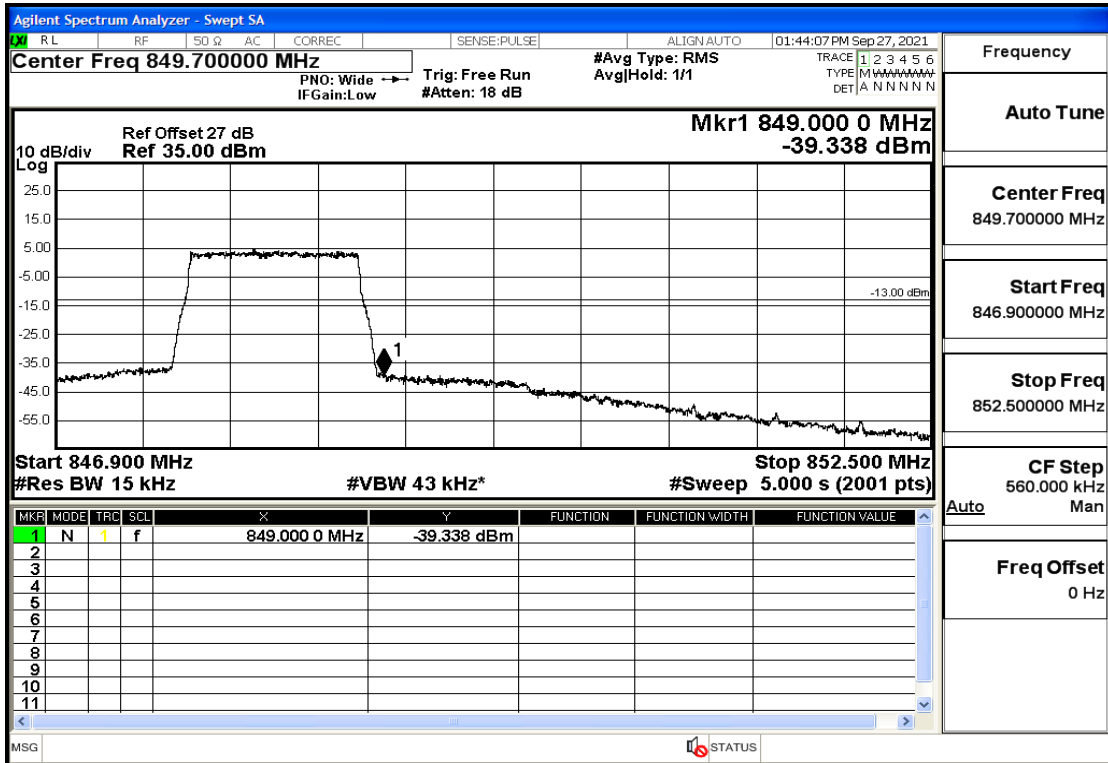
Band5-1.4-848.3-QPSK-6#LOW@Pass



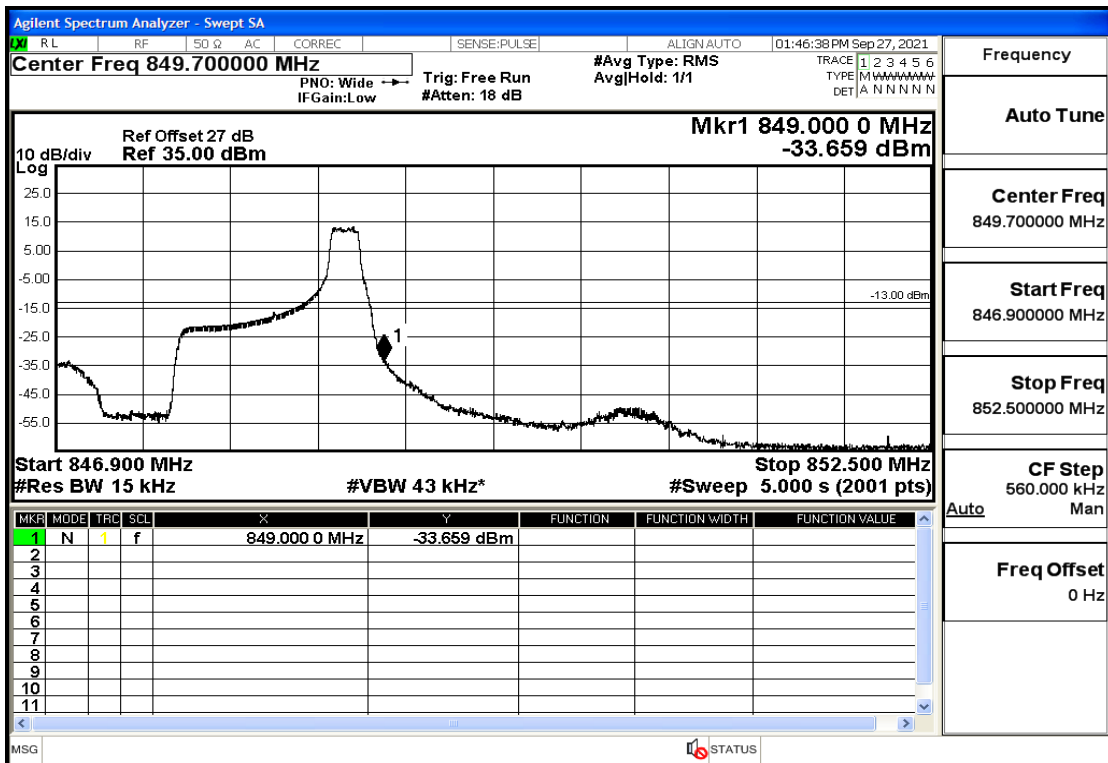
Band5-1.4-848.3-QPSK-1#HIGH@Pass



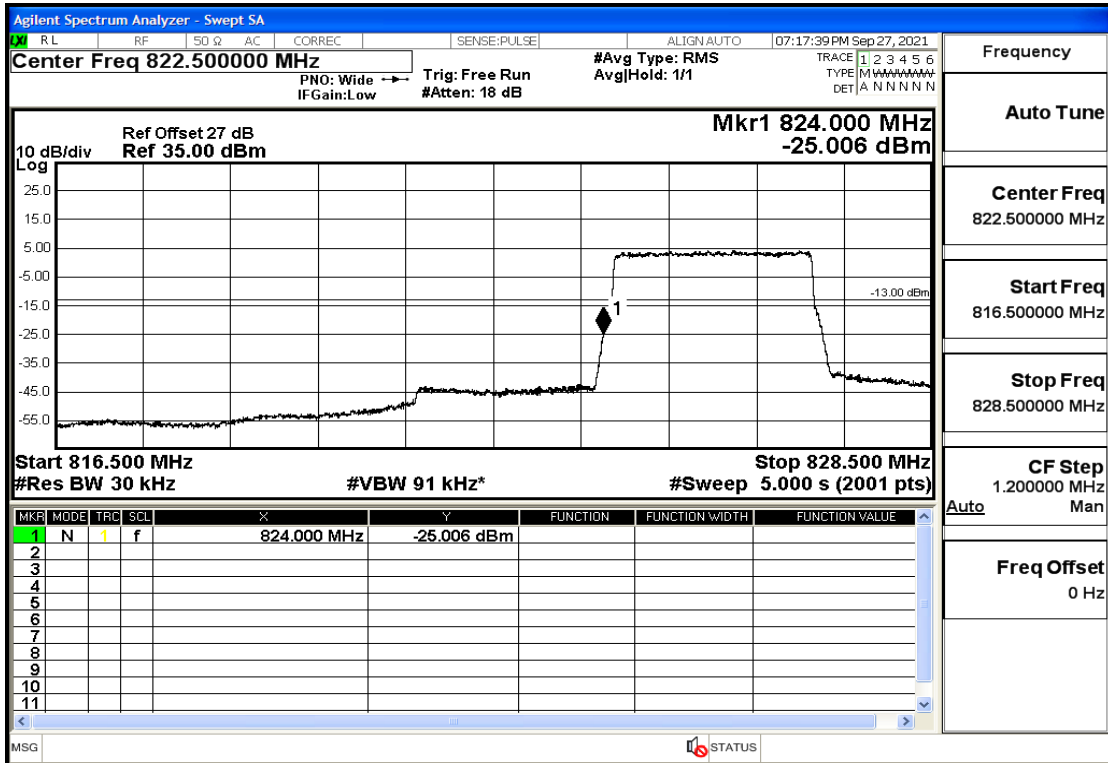
Band5-1.4-848.3-16QAM-6#LOW@Pass



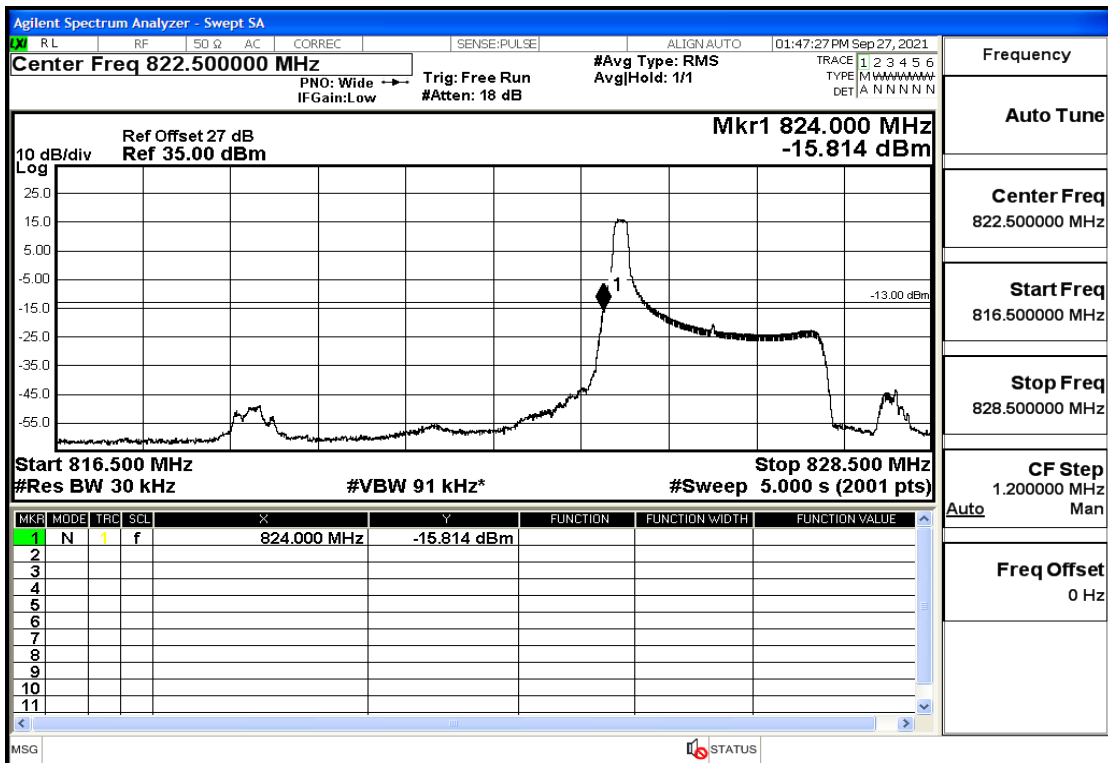
Band5-1.4-848.3-16QAM-1#HIGH@Pass



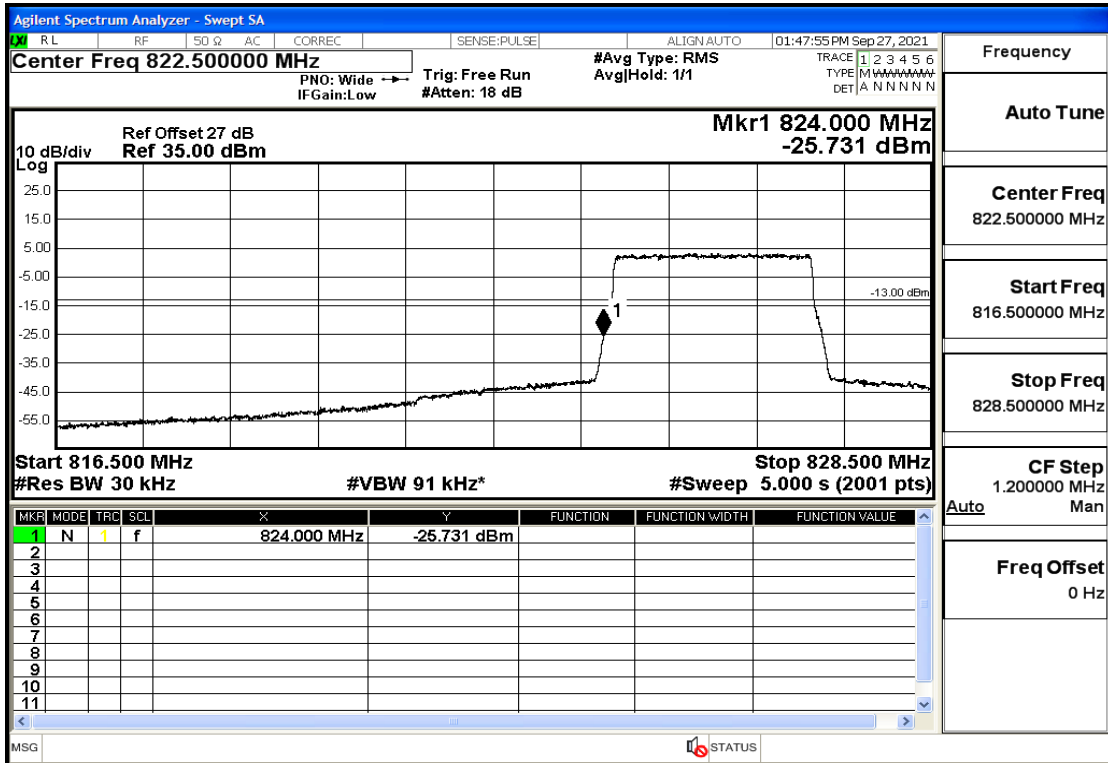
Band5-3-825.5-QPSK-15#LOW@Pass



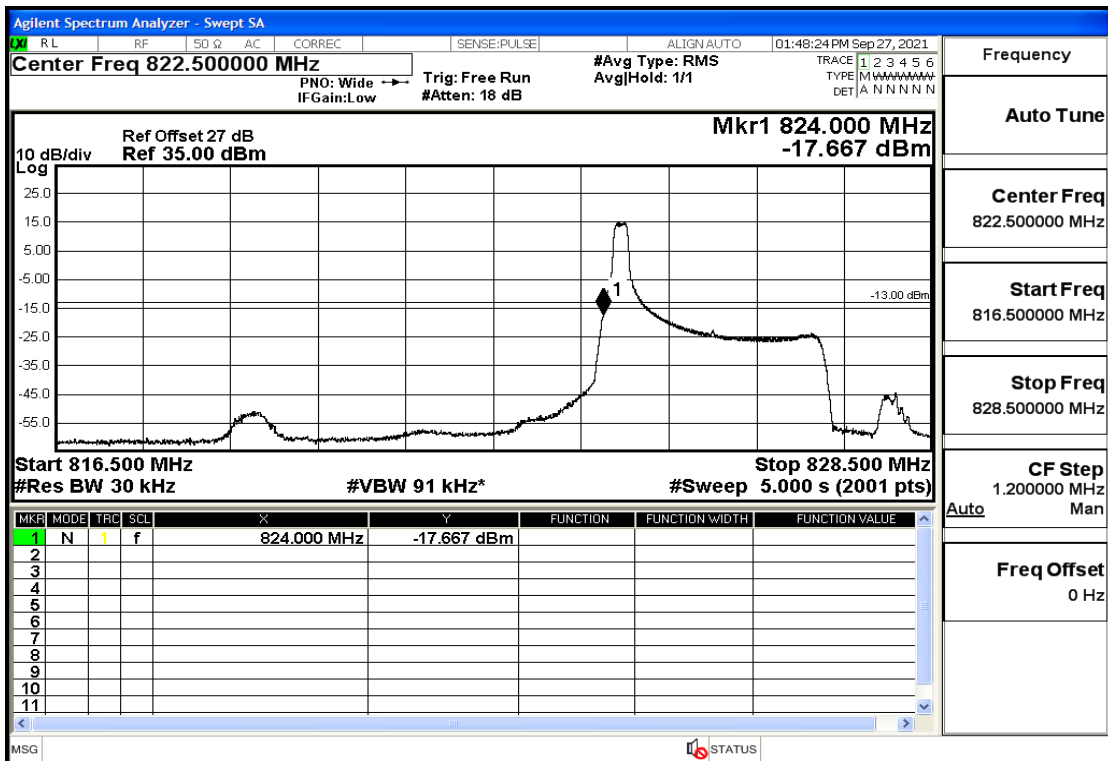
Band5-3-825.5-QPSK-1#LOW@Pass



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

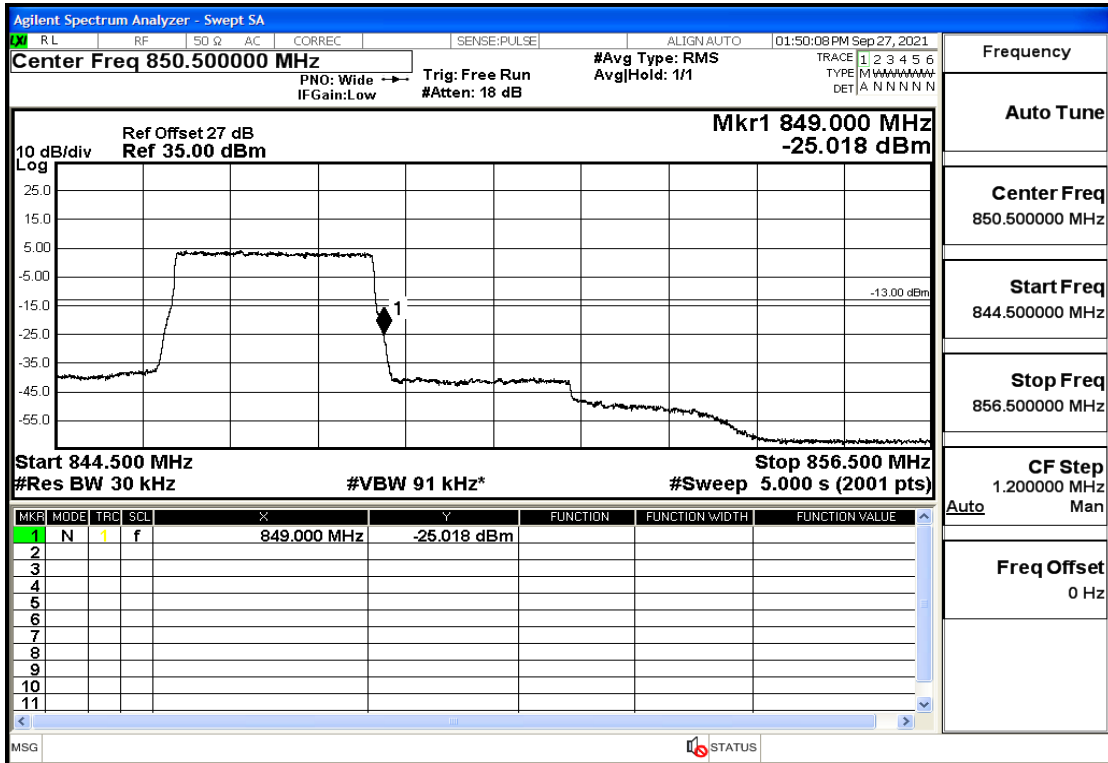


Band5-3-825.5-16QAM-1#LOW@Pass

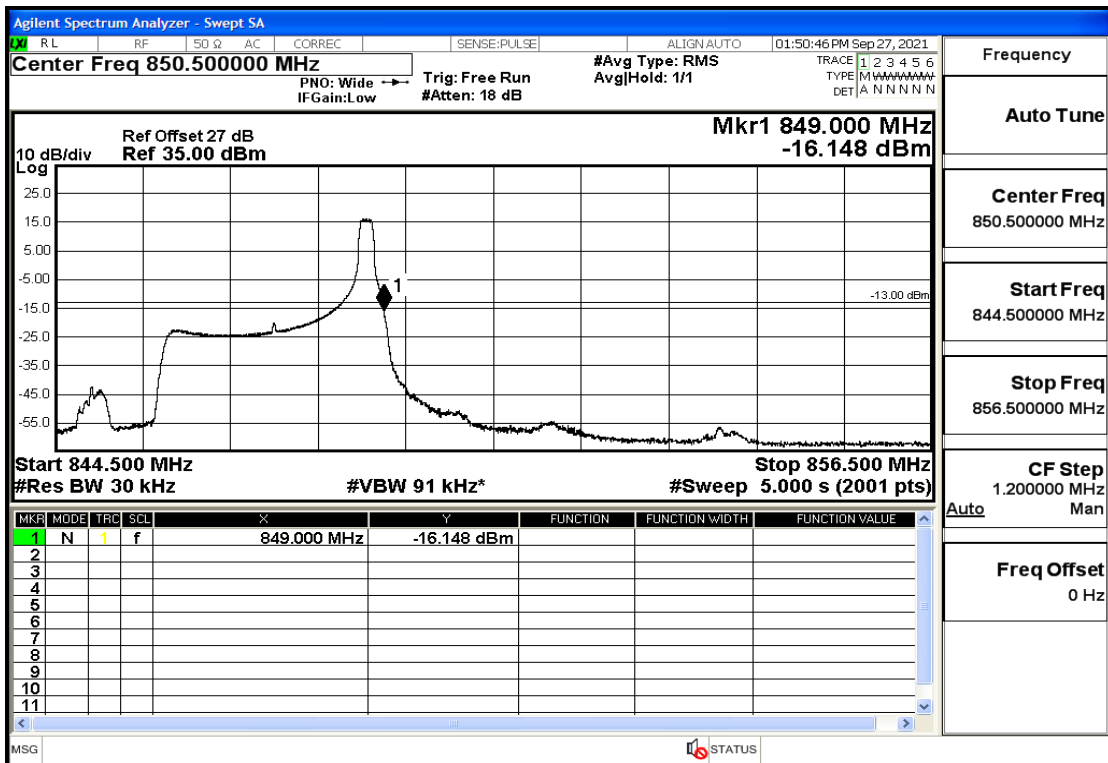




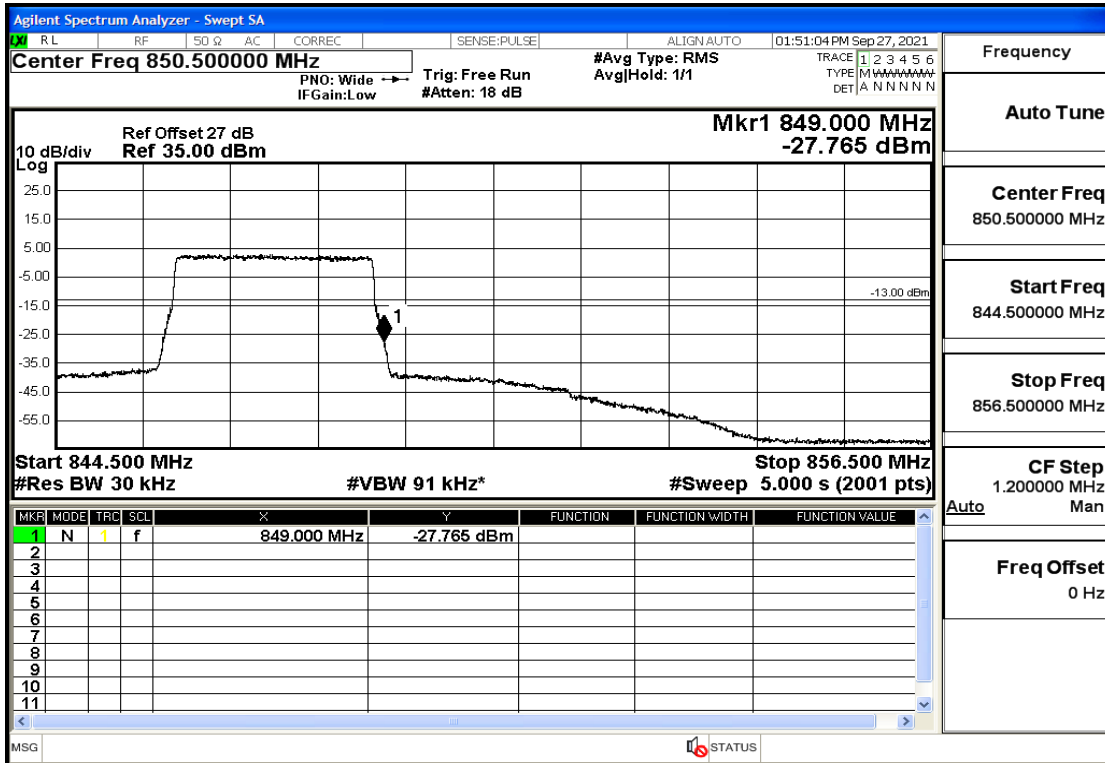
Band5-3-847.5-QPSK-15#LOW@Pass



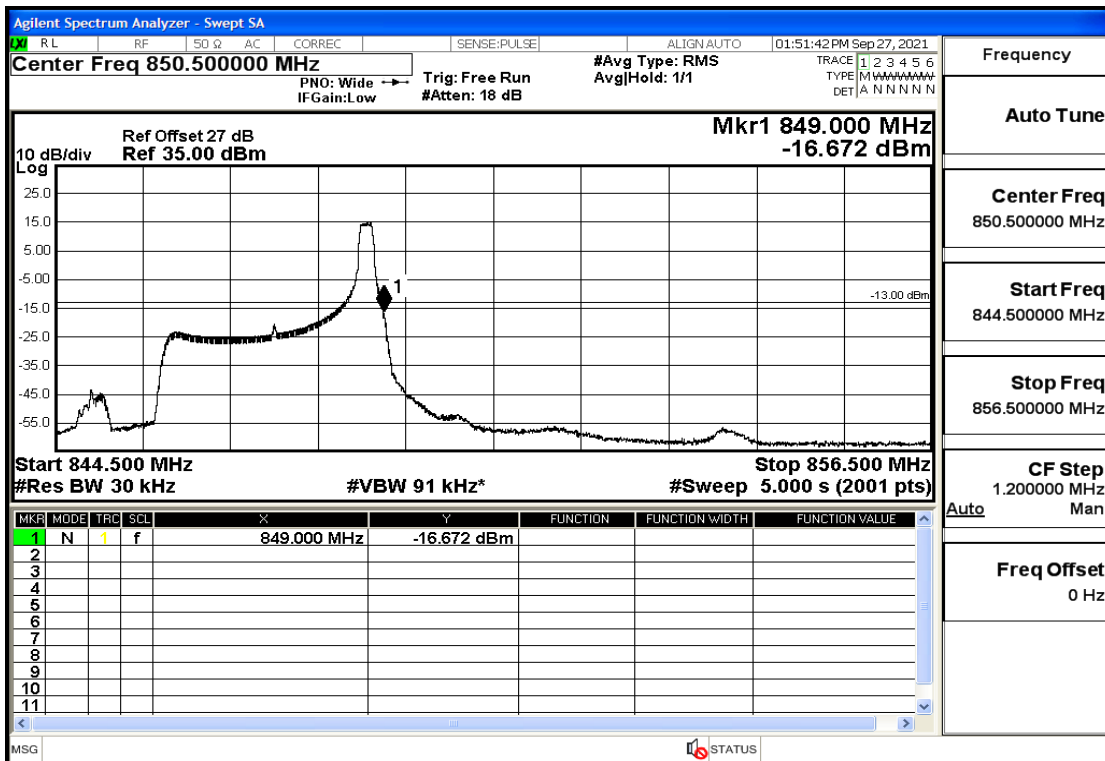
Band5-3-847.5-QPSK-1#HIGH@Pass



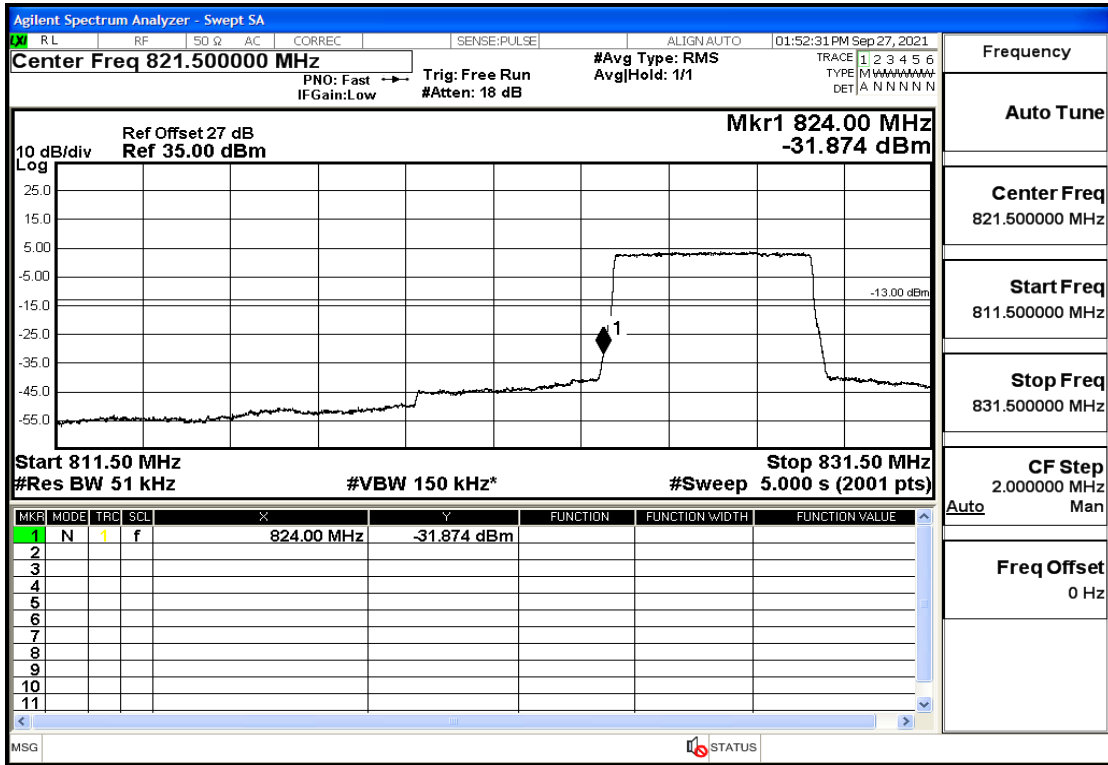
Band5-3-847.5-16QAM-15#LOW@Pass



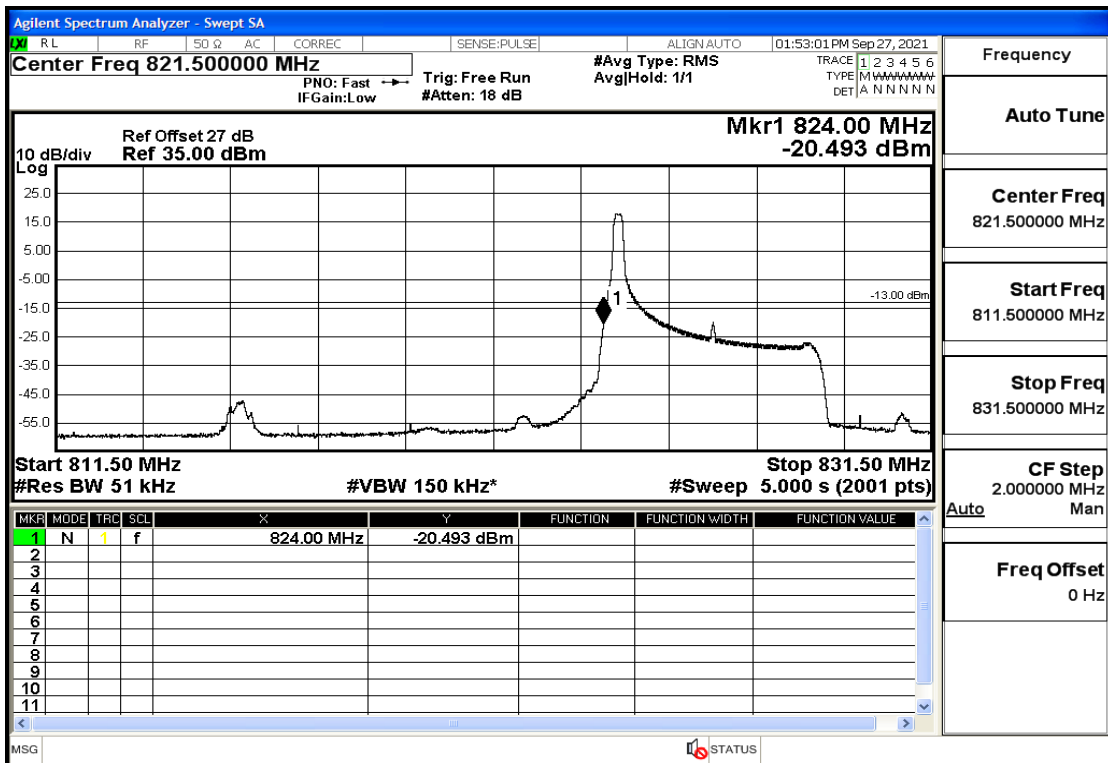
Band5-3-847.5-16QAM-1#HIGH@Pass



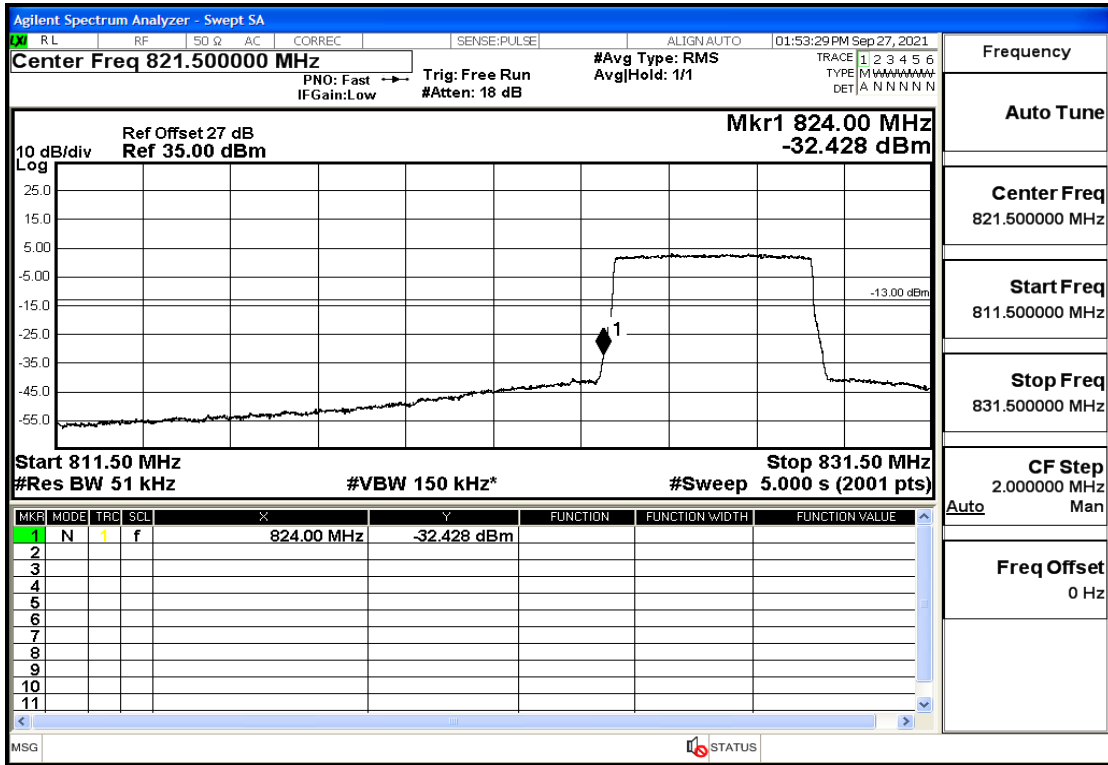
Band5-5-826.5-QPSK-25#LOW@Pass



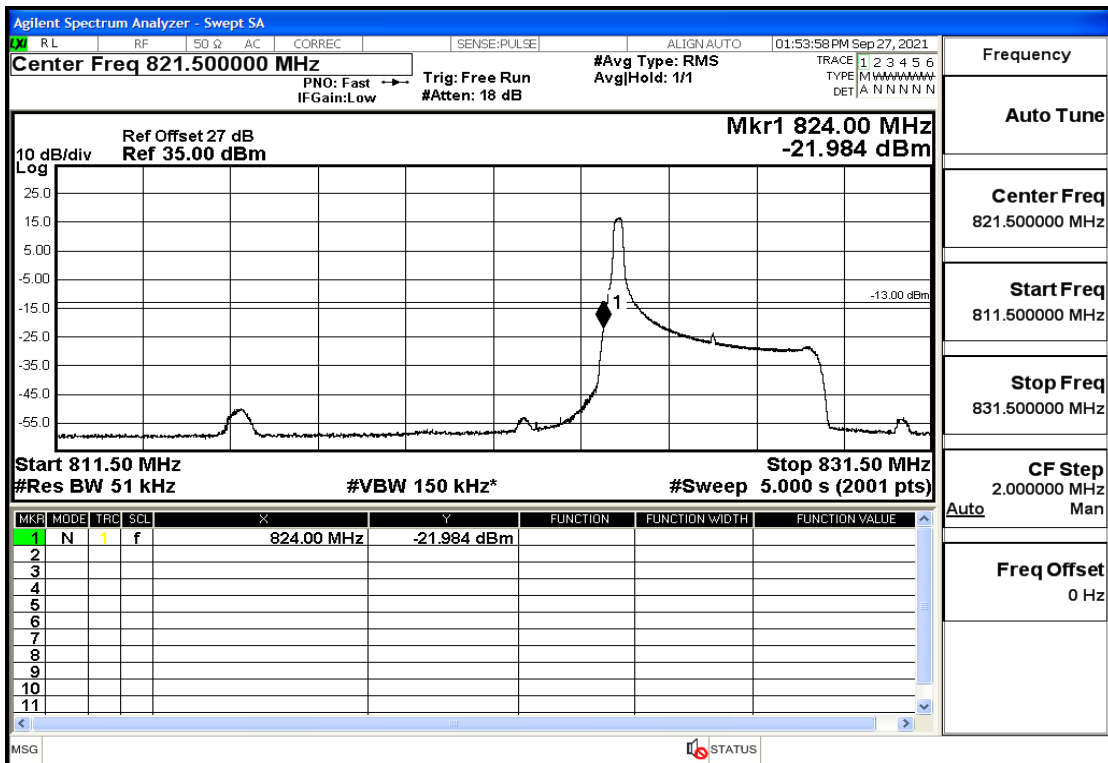
Band5-5-826.5-QPSK-1#LOW@Pass



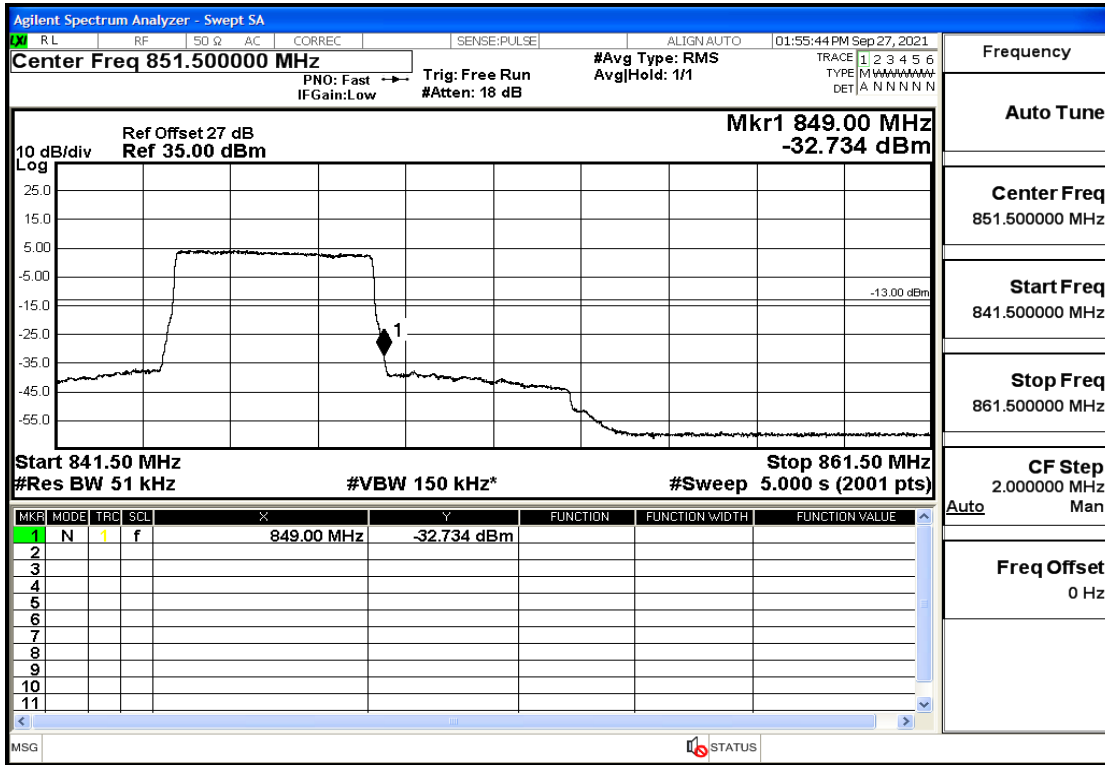
Band5-5-826.5-16QAM-25#LOW@Pass



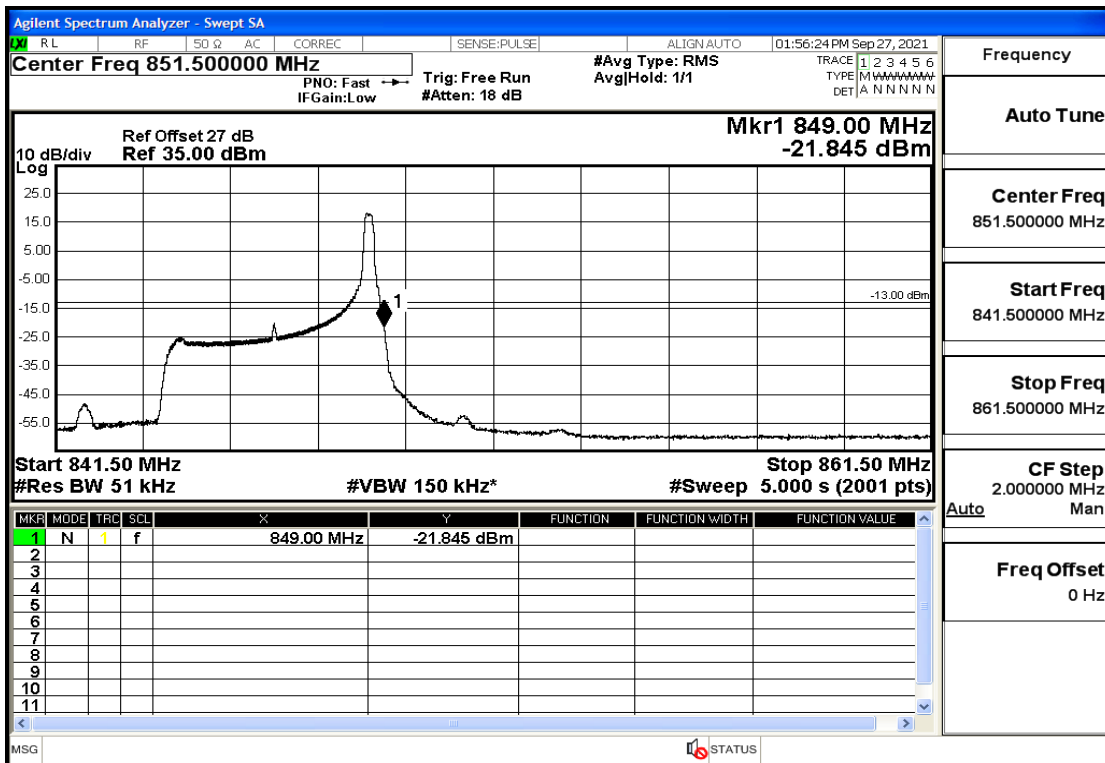
Band5-5-826.5-16QAM-1#LOW@Pass



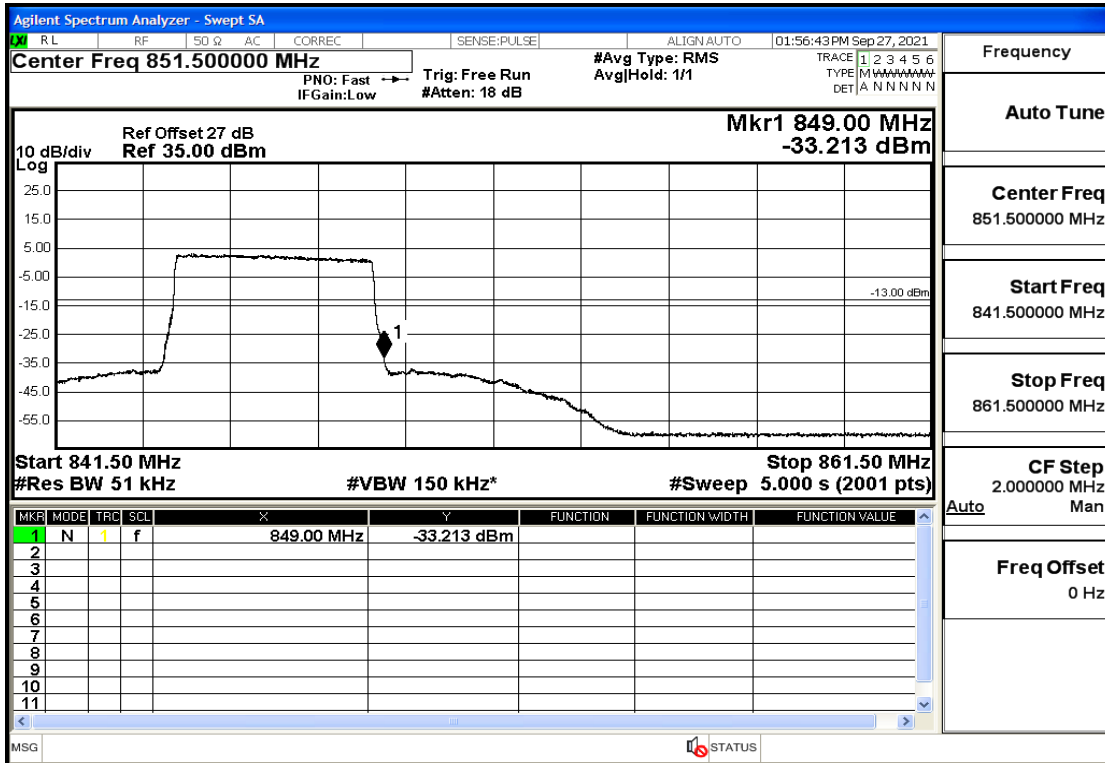
Band5-5-846.5-QPSK-25#LOW@Pass



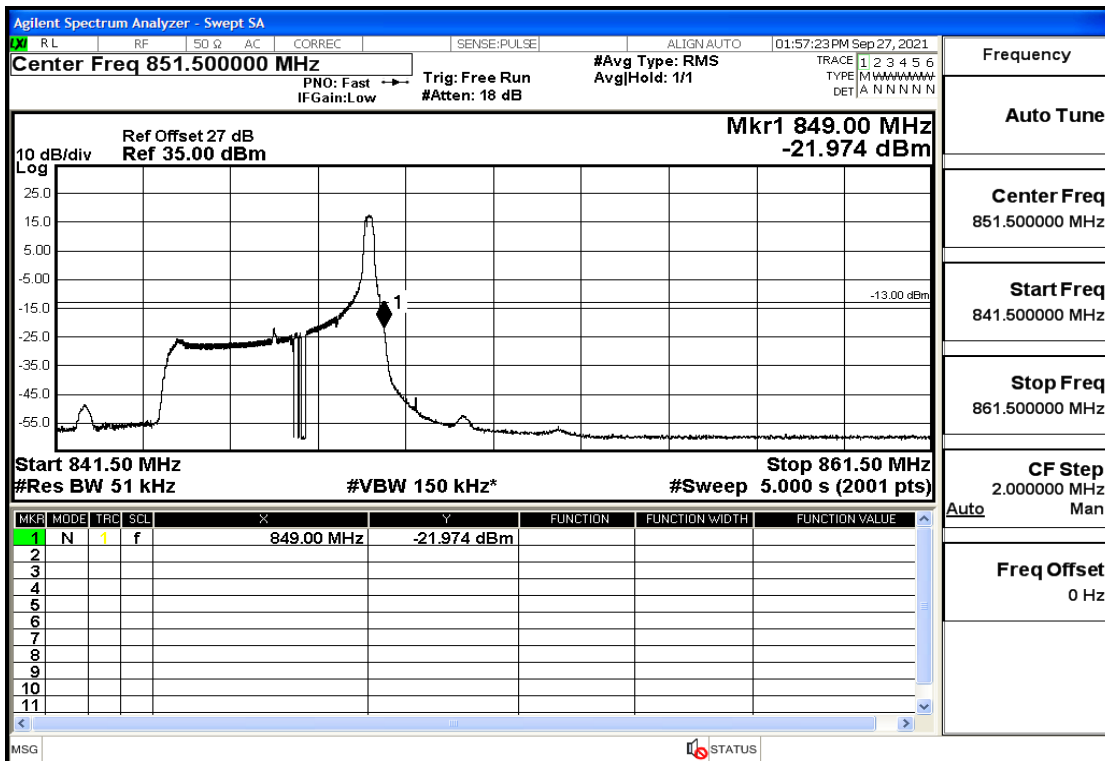
Band5-5-846.5-QPSK-1#HIGH@Pass



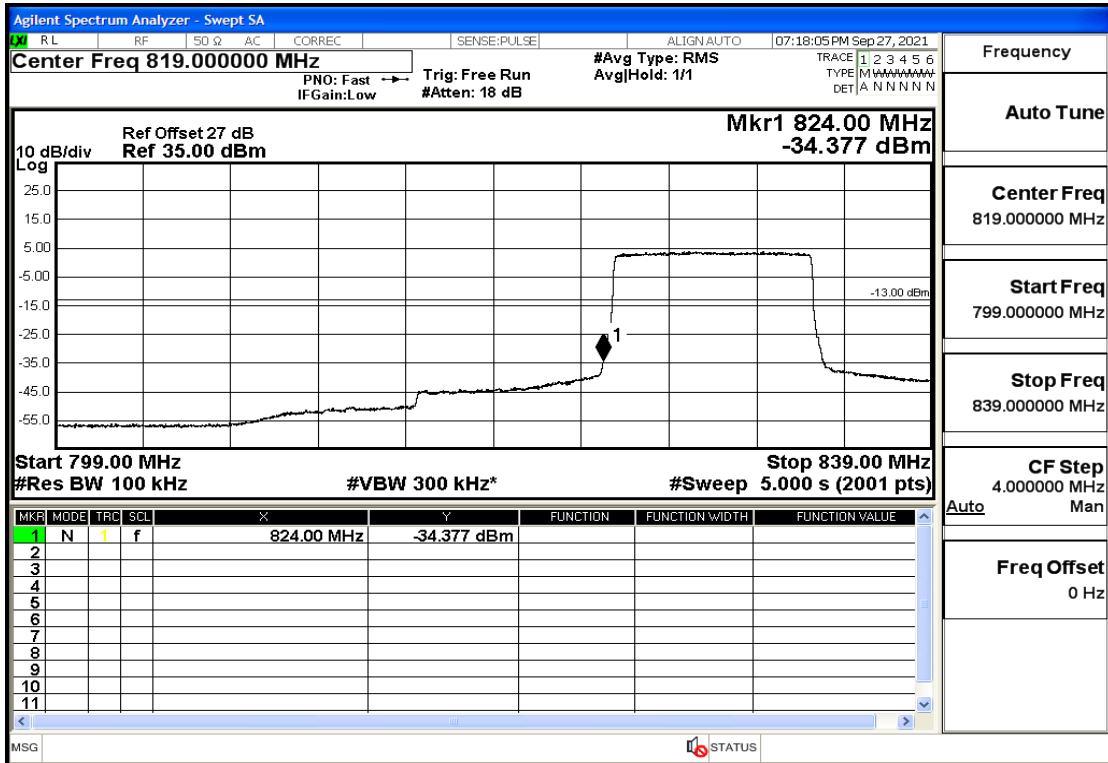
Band5-5-846.5-16QAM-25#LOW@Pass



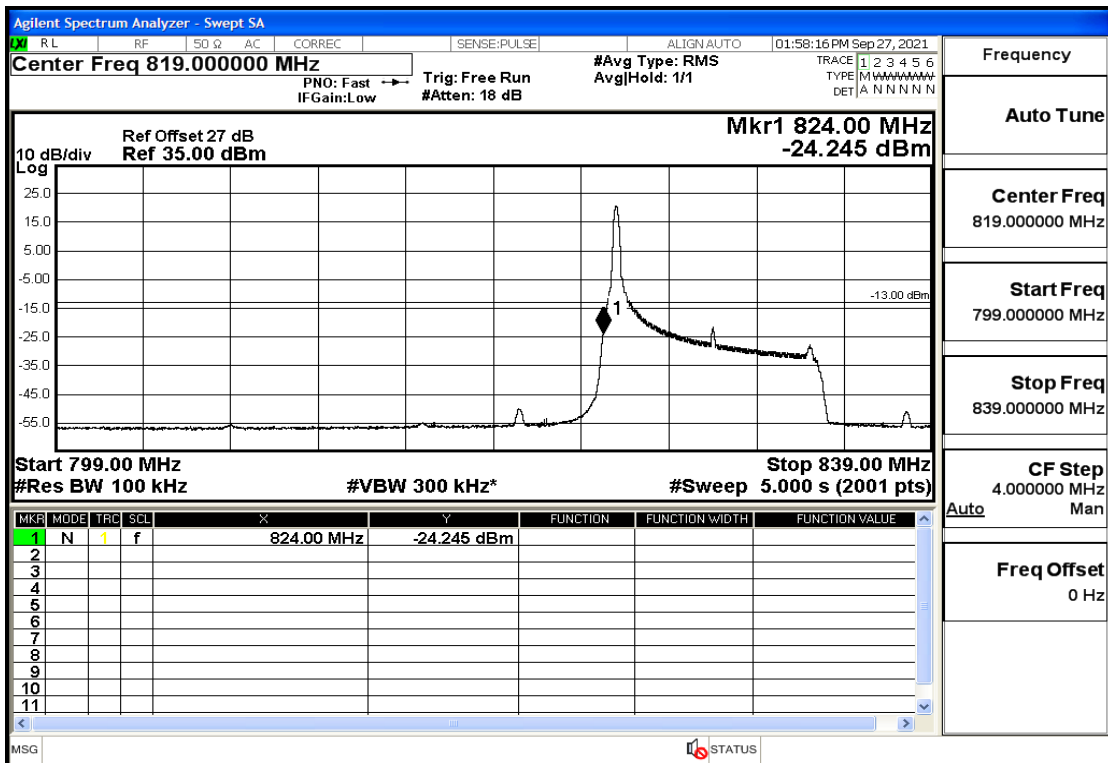
Band5-5-846.5-16QAM-1#HIGH@Pass



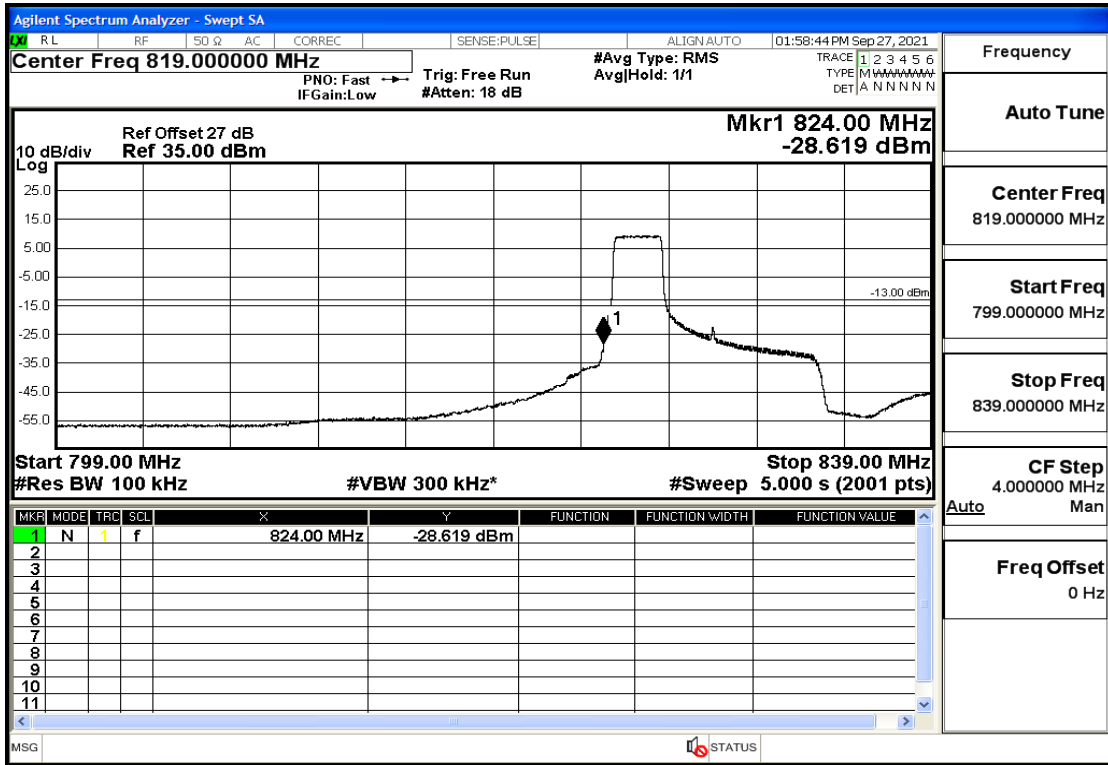
Band5-10-829-QPSK-50#LOW@Pass



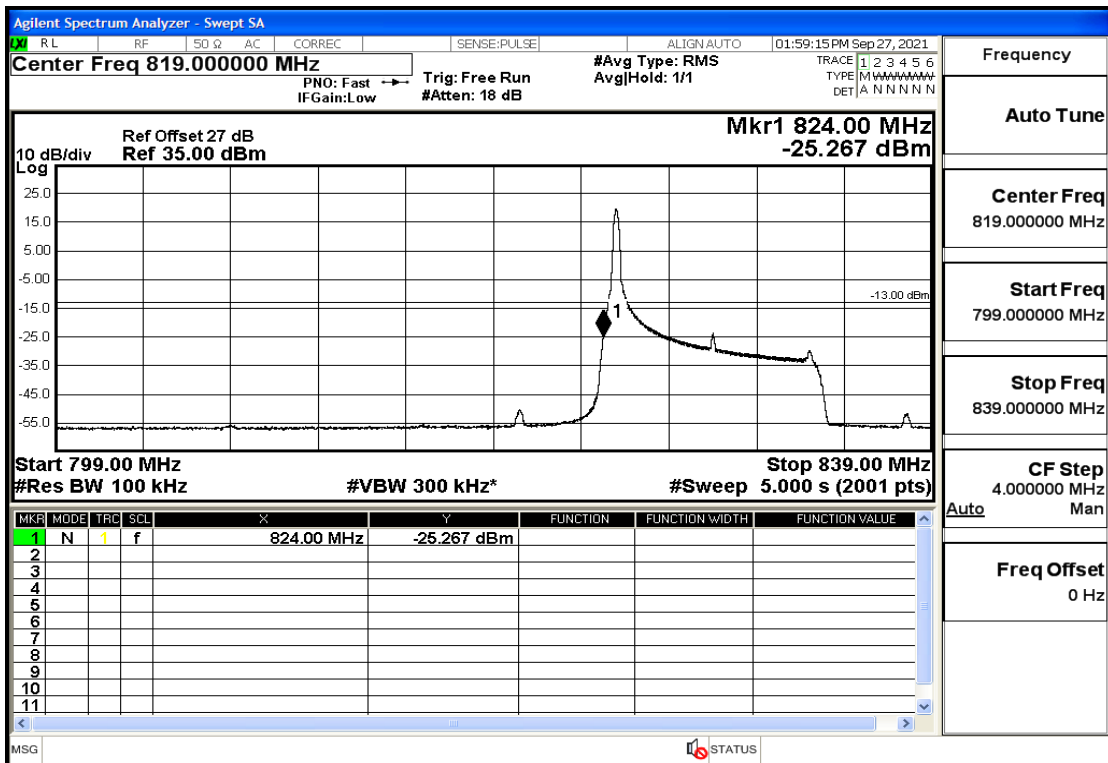
Band5-10-829-QPSK-1#LOW@Pass



Band5-10-829-16QAM-12#LOW@Pass

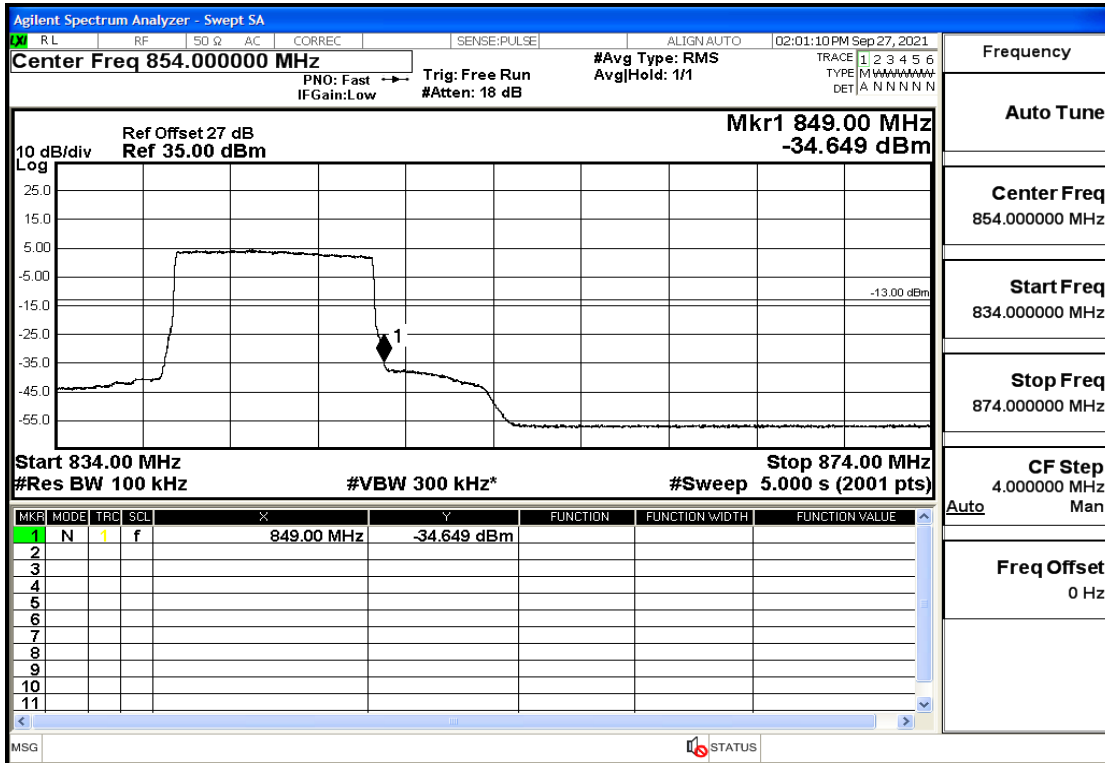


Band5-10-829-16QAM-1#LOW@Pass

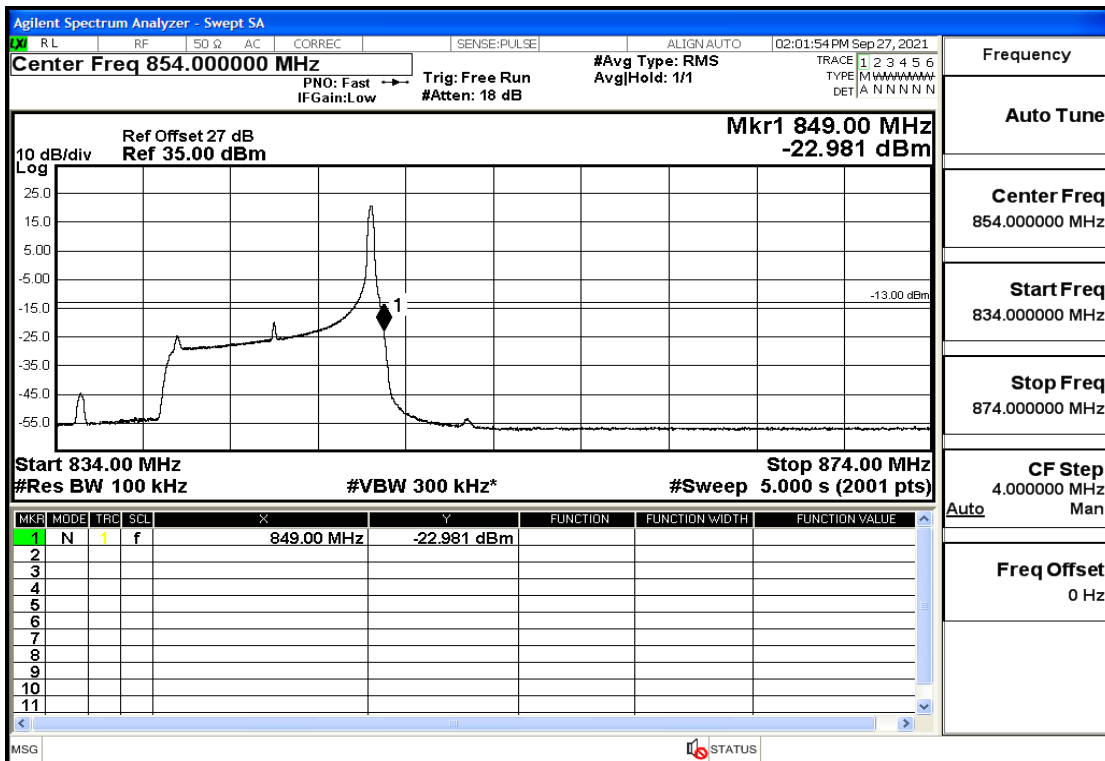




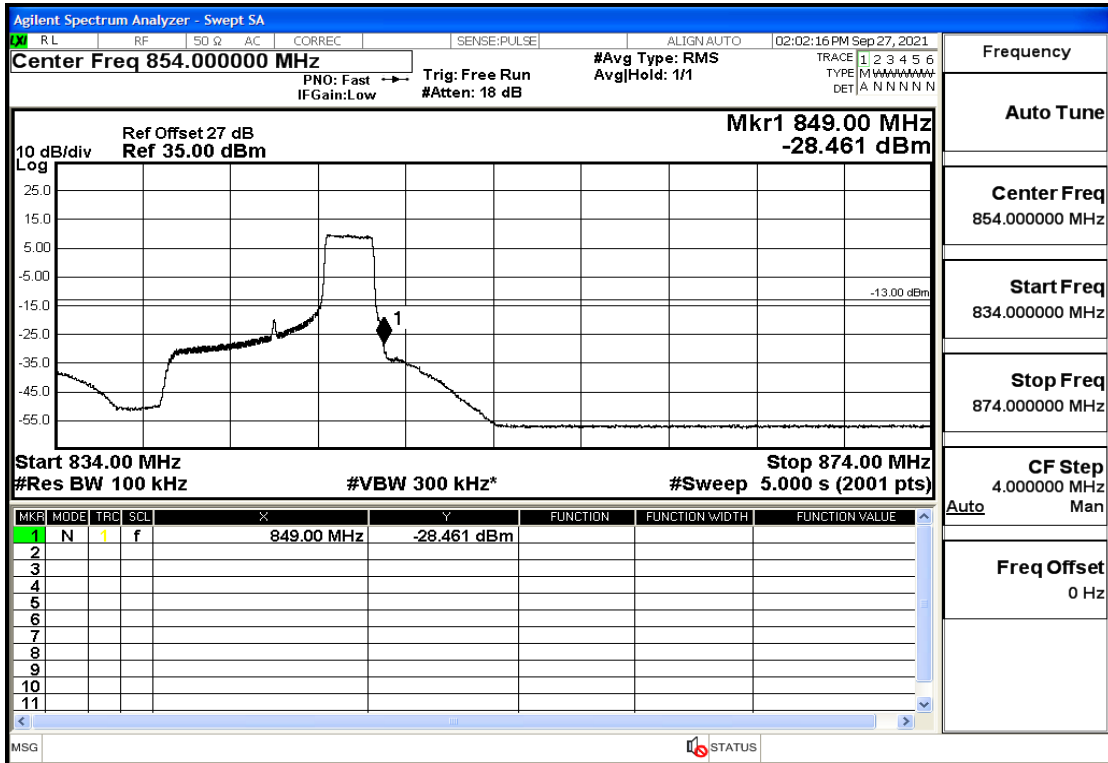
Band5-10-844-QPSK-50#LOW@Pass



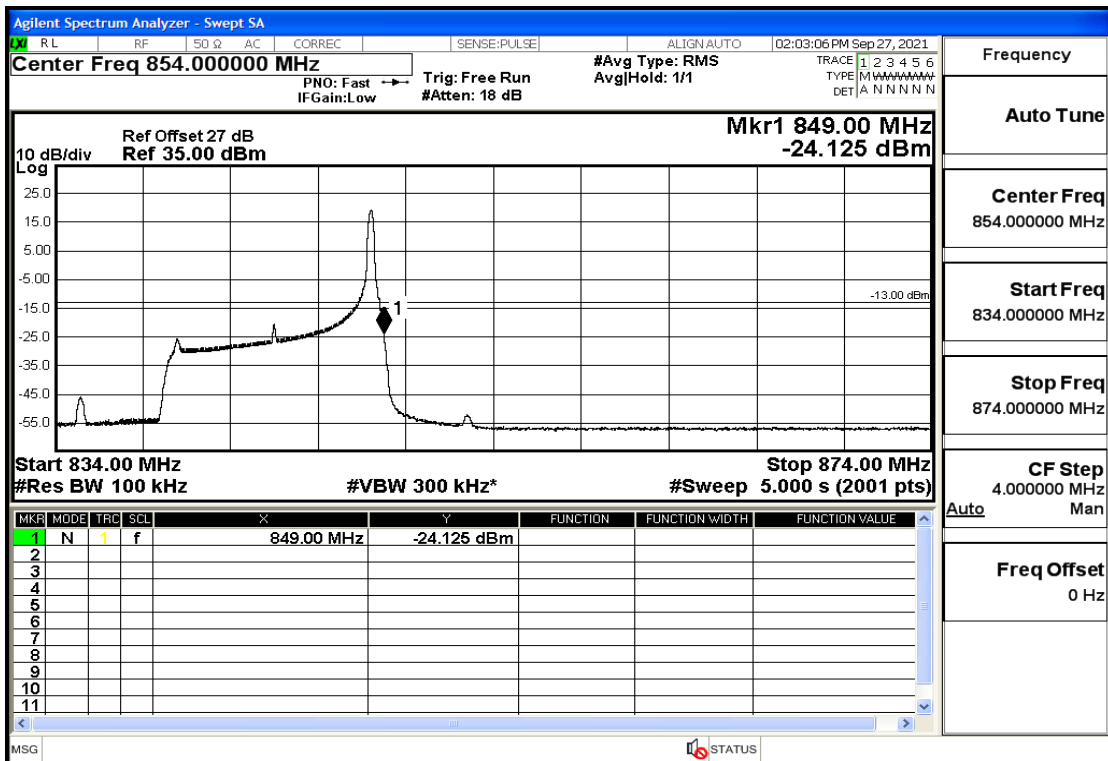
Band5-10-844-QPSK-1#HIGH@Pass



Band5-10-844-16QAM-12#HIGH@Pass



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

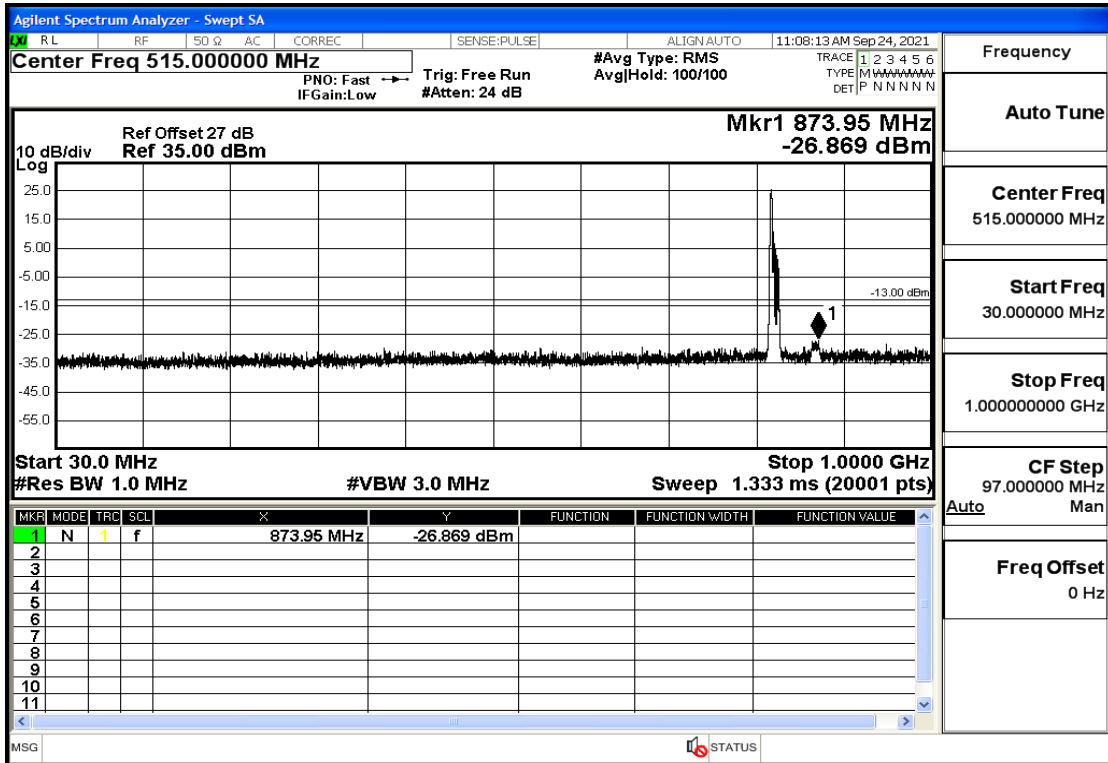


## Conducted Spurious Emission

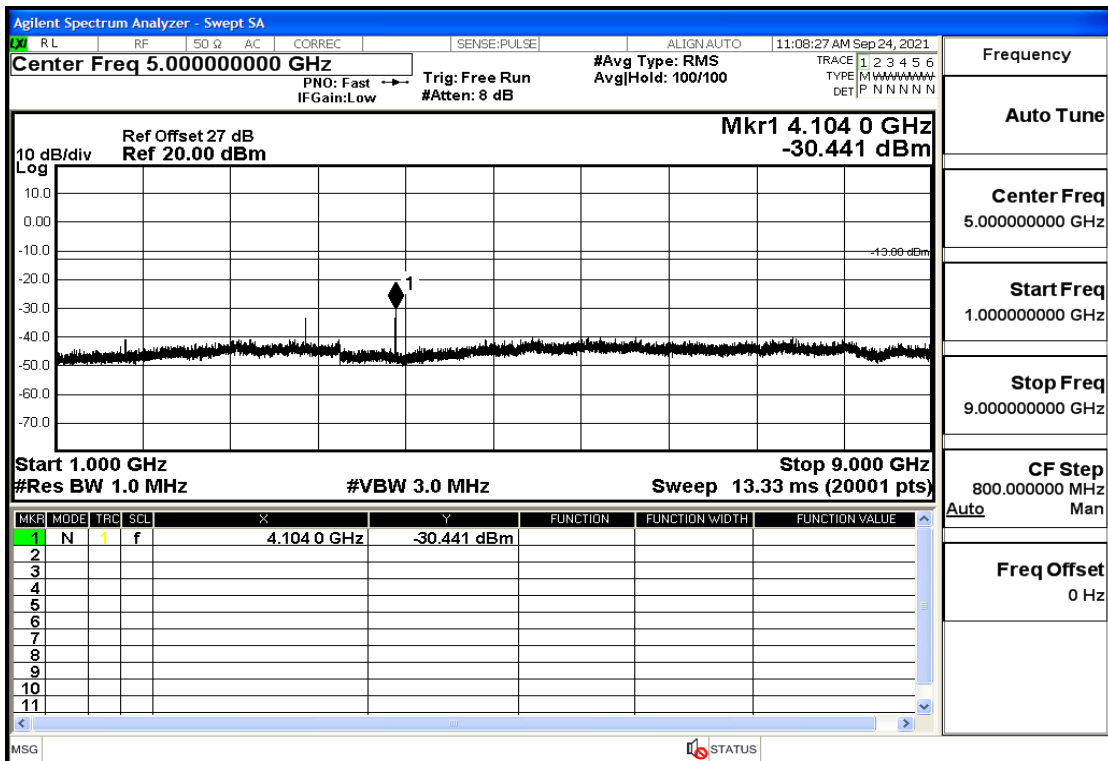
Band	Bandwidth(MHz)	UL Frequency(MHz)	Modulation	RB Size	RB Offset	Test Condition	Transmitter Spurious Emission(Pass/Fail)
OB5	1.4	824.7	QPSK	6	0	30mHz-1GHz	Pass
OB5	1.4	824.7	QPSK	6	0	1GHz-9GHz	Pass
OB5	1.4	824.7	QPSK	1	0	30mHz-1GHz	Pass
OB5	1.4	824.7	QPSK	1	0	1GHz-9GHz	Pass
OB5	1.4	824.7	QPSK	1	5	30mHz-1GHz	Pass
OB5	1.4	824.7	QPSK	1	5	1GHz-9GHz	Pass
OB5	1.4	836.5	QPSK	6	0	30mHz-1GHz	Pass
OB5	1.4	836.5	QPSK	6	0	1GHz-9GHz	Pass
OB5	1.4	836.5	QPSK	1	0	30mHz-1GHz	Pass
OB5	1.4	836.5	QPSK	1	0	1GHz-9GHz	Pass
OB5	1.4	836.5	QPSK	1	5	30mHz-1GHz	Pass
OB5	1.4	836.5	QPSK	1	5	1GHz-9GHz	Pass
OB5	1.4	848.3	QPSK	6	0	30mHz-1GHz	Pass
OB5	1.4	848.3	QPSK	6	0	1GHz-9GHz	Pass
OB5	1.4	848.3	QPSK	1	0	30mHz-1GHz	Pass
OB5	1.4	848.3	QPSK	1	0	1GHz-9GHz	Pass
OB5	1.4	848.3	QPSK	1	5	30mHz-1GHz	Pass
OB5	1.4	848.3	QPSK	1	5	1GHz-9GHz	Pass
OB5	3	825.5	QPSK	15	0	30mHz-1GHz	Pass
OB5	3	825.5	QPSK	15	0	1GHz-9GHz	Pass
OB5	3	825.5	QPSK	1	0	30mHz-1GHz	Pass
OB5	3	825.5	QPSK	1	0	1GHz-9GHz	Pass
OB5	3	825.5	QPSK	1	14	30mHz-1GHz	Pass
OB5	3	825.5	QPSK	1	14	1GHz-9GHz	Pass
OB5	3	836.5	QPSK	15	0	30mHz-1GHz	Pass
OB5	3	836.5	QPSK	15	0	1GHz-9GHz	Pass
OB5	3	836.5	QPSK	1	0	30mHz-1GHz	Pass
OB5	3	836.5	QPSK	1	0	1GHz-9GHz	Pass
OB5	3	836.5	QPSK	1	14	30mHz-1GHz	Pass
OB5	3	836.5	QPSK	1	14	1GHz-9GHz	Pass
OB5	3	847.5	QPSK	15	0	30mHz-1GHz	Pass
OB5	3	847.5	QPSK	15	0	1GHz-9GHz	Pass
OB5	3	847.5	QPSK	1	0	30mHz-1GHz	Pass
OB5	3	847.5	QPSK	1	0	1GHz-9GHz	Pass
OB5	3	847.5	QPSK	1	14	30mHz-1GHz	Pass
OB5	3	847.5	QPSK	1	14	1GHz-9GHz	Pass
OB5	5	826.5	QPSK	25	0	30mHz-1GHz	Pass
OB5	5	826.5	QPSK	25	0	1GHz-9GHz	Pass
OB5	5	826.5	QPSK	1	0	30mHz-1GHz	Pass
OB5	5	826.5	QPSK	1	0	1GHz-9GHz	Pass

OB5	5	826.5	QPSK	1	24	30mHz-1GHz	Pass
OB5	5	826.5	QPSK	1	24	1GHz-9GHz	Pass
OB5	5	836.5	QPSK	25	0	30mHz-1GHz	Pass
OB5	5	836.5	QPSK	25	0	1GHz-9GHz	Pass
OB5	5	836.5	QPSK	1	0	30mHz-1GHz	Pass
OB5	5	836.5	QPSK	1	0	1GHz-9GHz	Pass
OB5	5	836.5	QPSK	1	24	30mHz-1GHz	Pass
OB5	5	836.5	QPSK	1	24	1GHz-9GHz	Pass
OB5	5	846.5	QPSK	25	0	30mHz-1GHz	Pass
OB5	5	846.5	QPSK	25	0	1GHz-9GHz	Pass
OB5	5	846.5	QPSK	1	0	30mHz-1GHz	Pass
OB5	5	846.5	QPSK	1	0	1GHz-9GHz	Pass
OB5	5	846.5	QPSK	1	24	30mHz-1GHz	Pass
OB5	5	846.5	QPSK	1	24	1GHz-9GHz	Pass
OB5	10	829	QPSK	50	0	30mHz-1GHz	Pass
OB5	10	829	QPSK	50	0	1GHz-9GHz	Pass
OB5	10	829	QPSK	1	0	30mHz-1GHz	Pass
OB5	10	829	QPSK	1	0	1GHz-9GHz	Pass
OB5	10	829	QPSK	1	49	30mHz-1GHz	Pass
OB5	10	829	QPSK	1	49	1GHz-9GHz	Pass
OB5	10	836.5	QPSK	50	0	30mHz-1GHz	Pass
OB5	10	836.5	QPSK	50	0	1GHz-9GHz	Pass
OB5	10	836.5	QPSK	1	0	30mHz-1GHz	Pass
OB5	10	836.5	QPSK	1	0	1GHz-9GHz	Pass
OB5	10	836.5	QPSK	1	49	30mHz-1GHz	Pass
OB5	10	836.5	QPSK	1	49	1GHz-9GHz	Pass
OB5	10	844	QPSK	50	0	30mHz-1GHz	Pass
OB5	10	844	QPSK	50	0	1GHz-9GHz	Pass
OB5	10	844	QPSK	1	0	30mHz-1GHz	Pass
OB5	10	844	QPSK	1	0	1GHz-9GHz	Pass
OB5	10	844	QPSK	1	49	30mHz-1GHz	Pass
OB5	10	844	QPSK	1	49	1GHz-9GHz	Pass

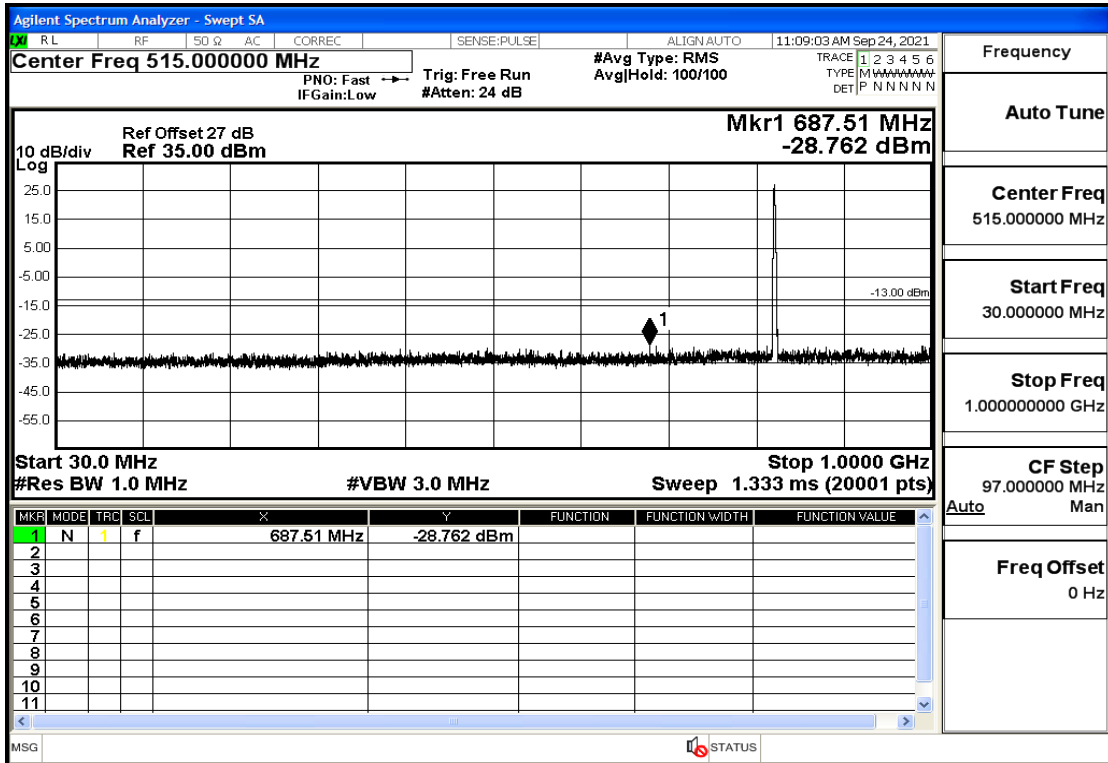
OB5-1.4-824.7-QPSK-6#0@30mHz-1GHz@Pass



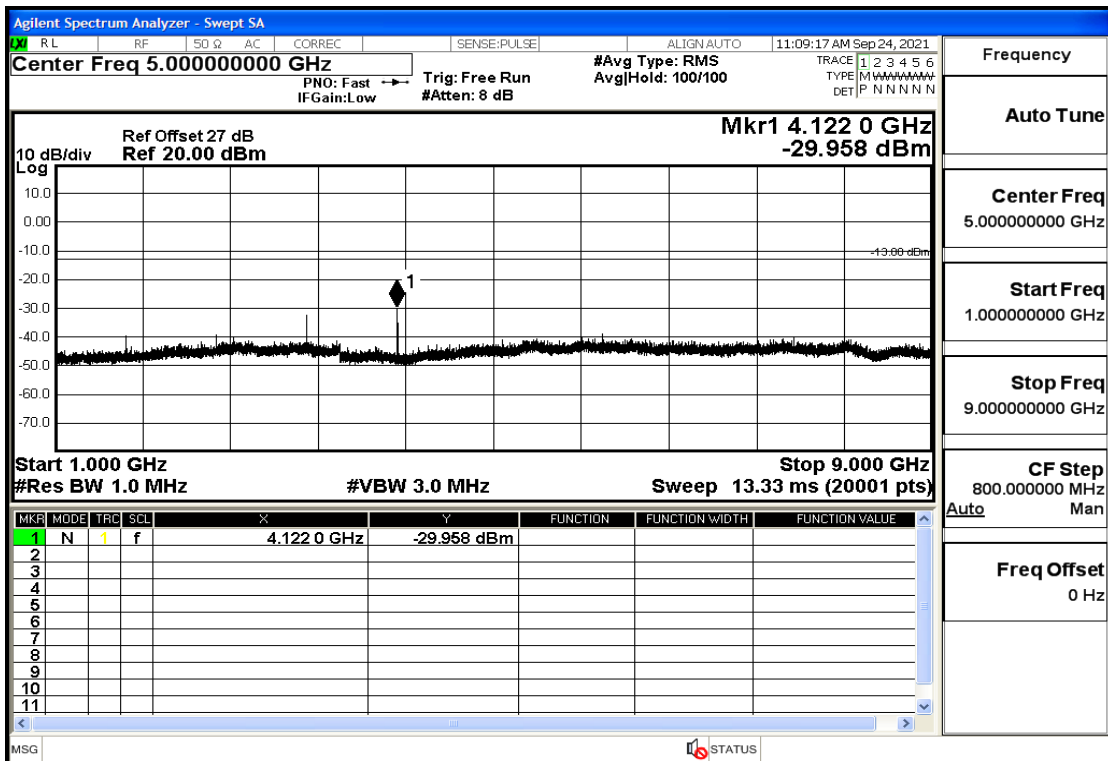
OB5-1.4-824.7-QPSK-6#0@1GHz-9GHz@Pass



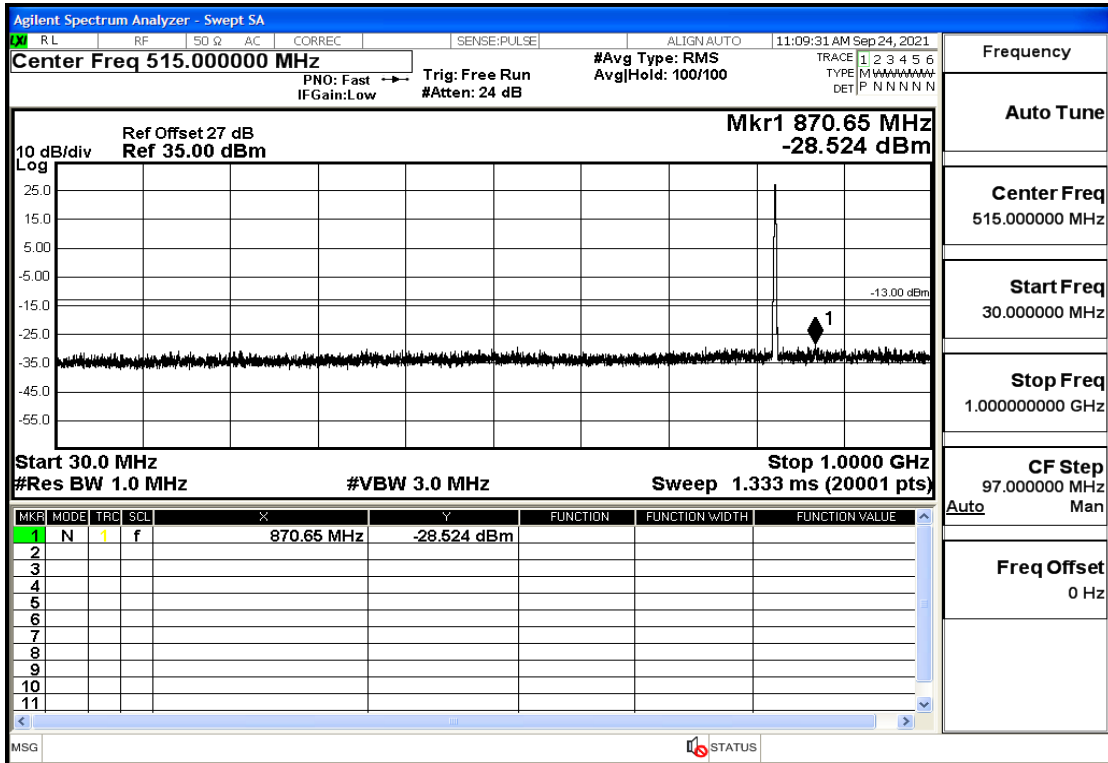
OB5-1.4-824.7-QPSK-1#0@30mHz-1GHz@Pass



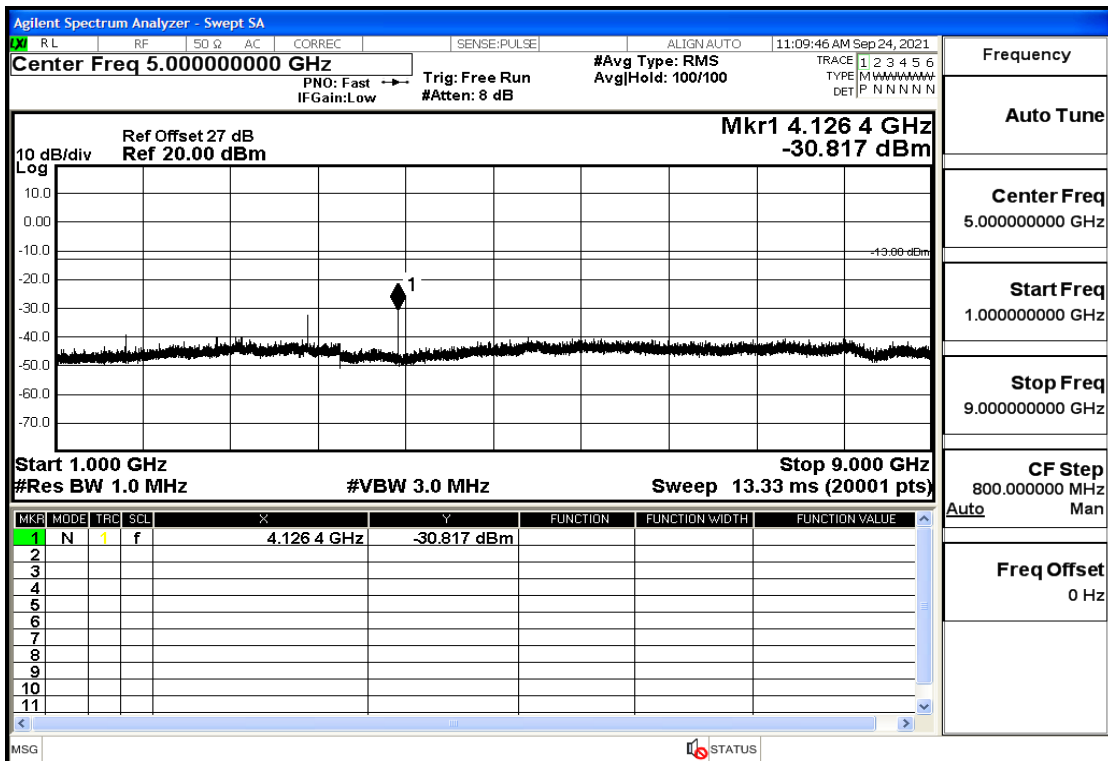
OB5-1.4-824.7-QPSK-1#0@1GHz-9GHz@Pass



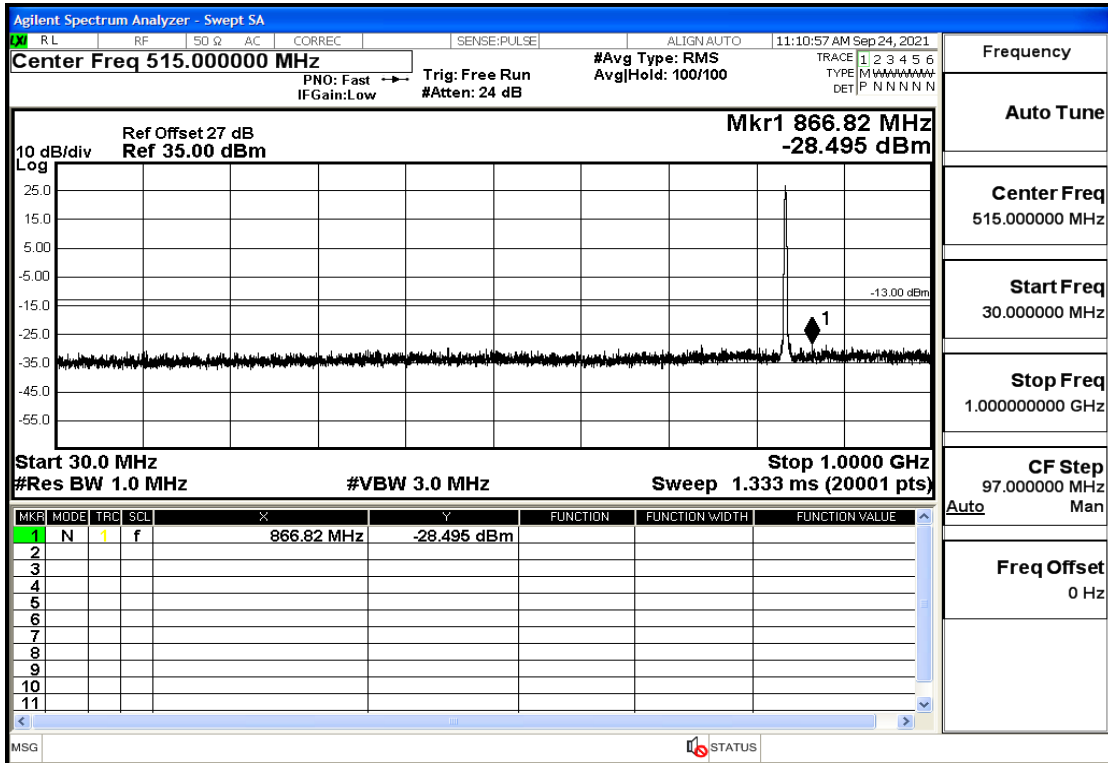
OB5-1.4-824.7-QPSK-1#5@30mHz-1GHz@Pass



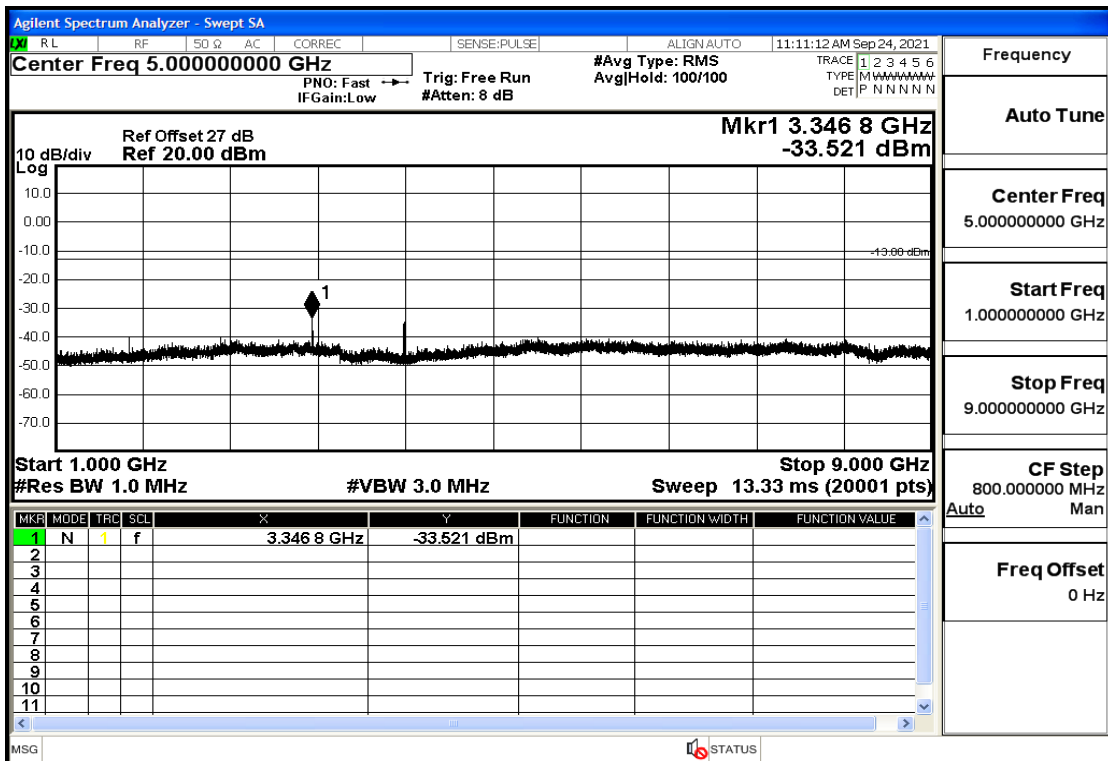
OB5-1.4-824.7-QPSK-1#5@1GHz-9GHz@Pass



OB5-1.4-836.5-QPSK-6#0@30mHz-1GHz@Pass

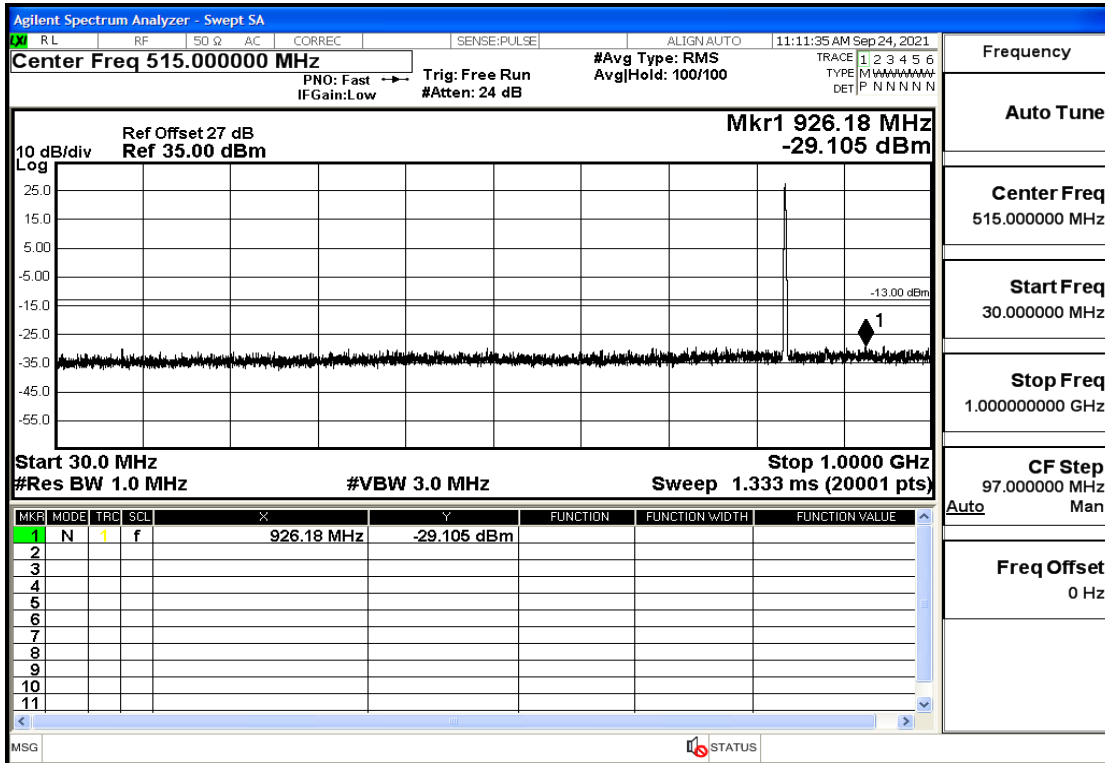


OB5-1.4-836.5-QPSK-6#0@1GHz-9GHz@Pass

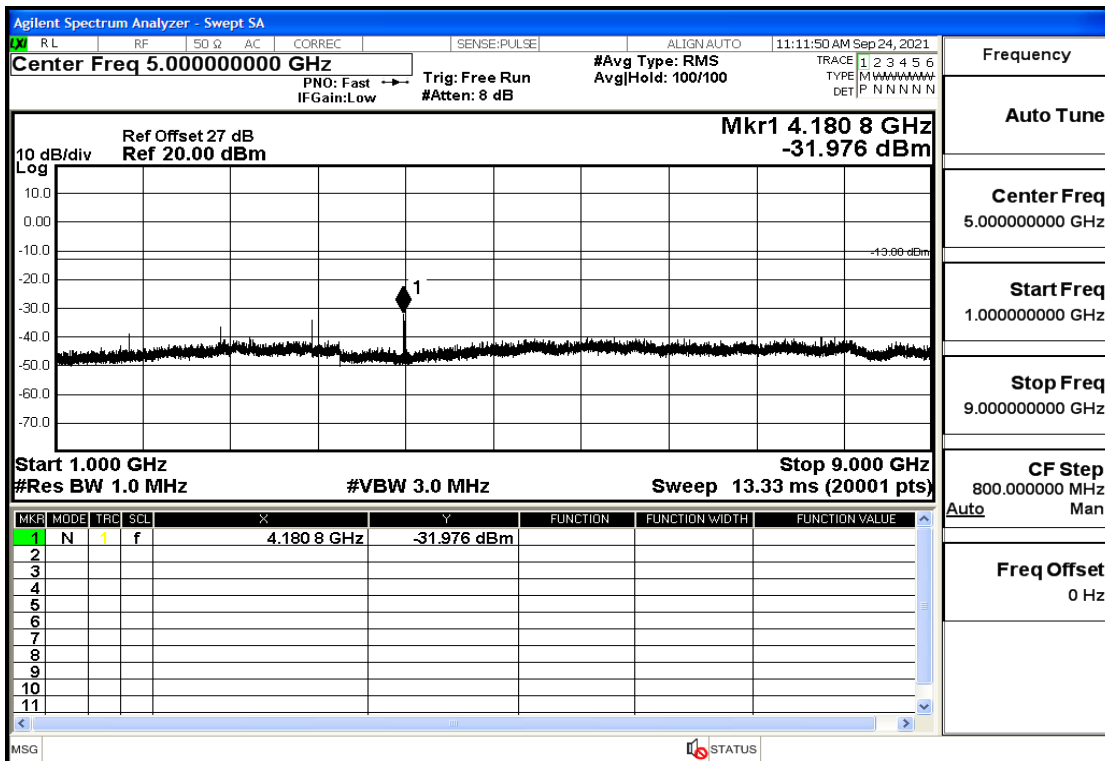




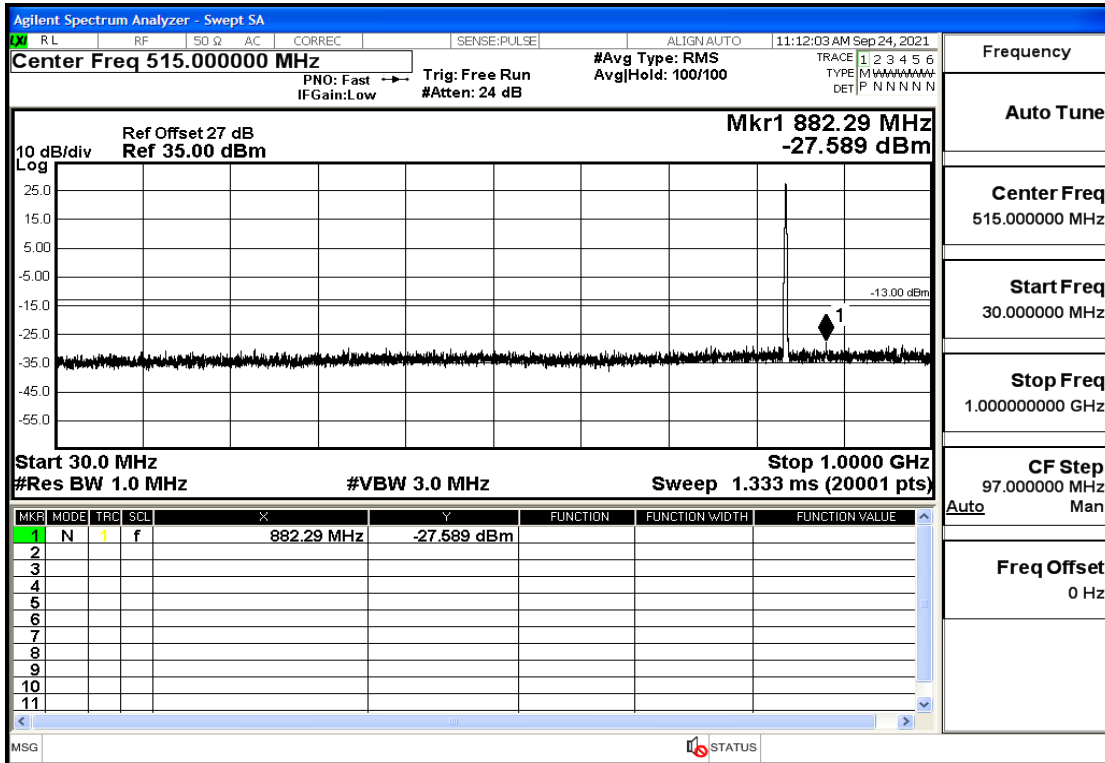
OB5-1.4-836.5-QPSK-1#0@30mHz-1GHz@Pass



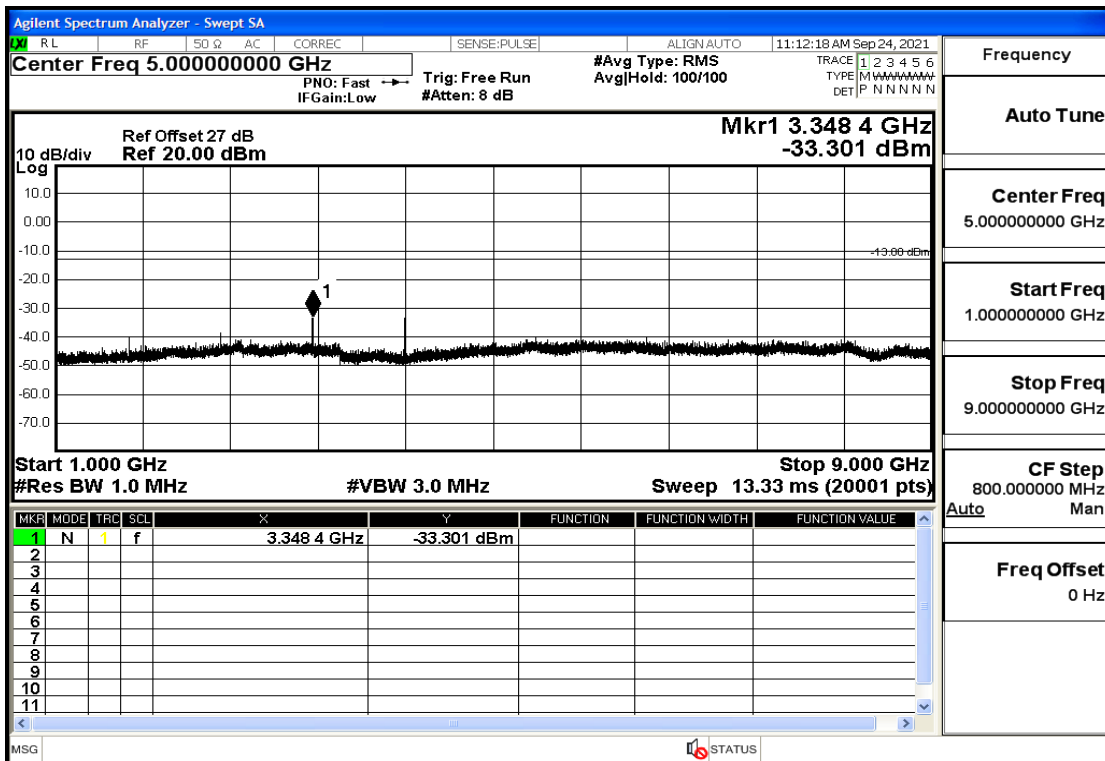
OB5-1.4-836.5-QPSK-1#0@1GHz-9GHz@Pass



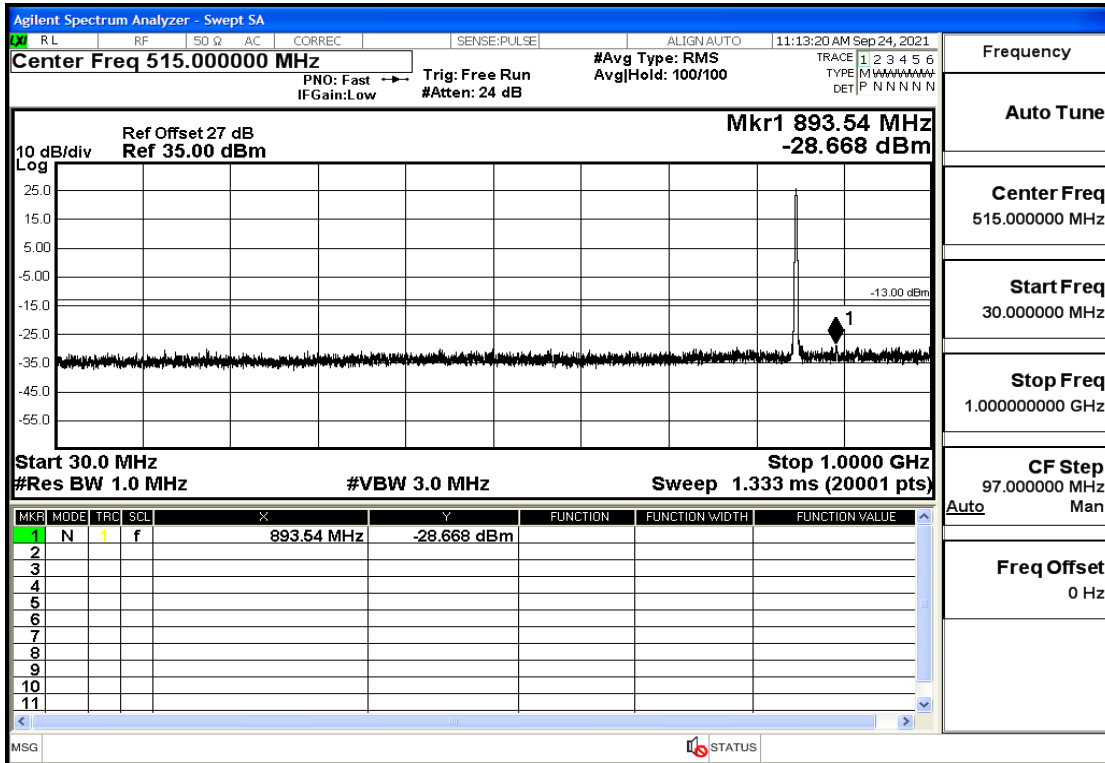
OB5-1.4-836.5-QPSK-1#5@30mHz-1GHz@Pass



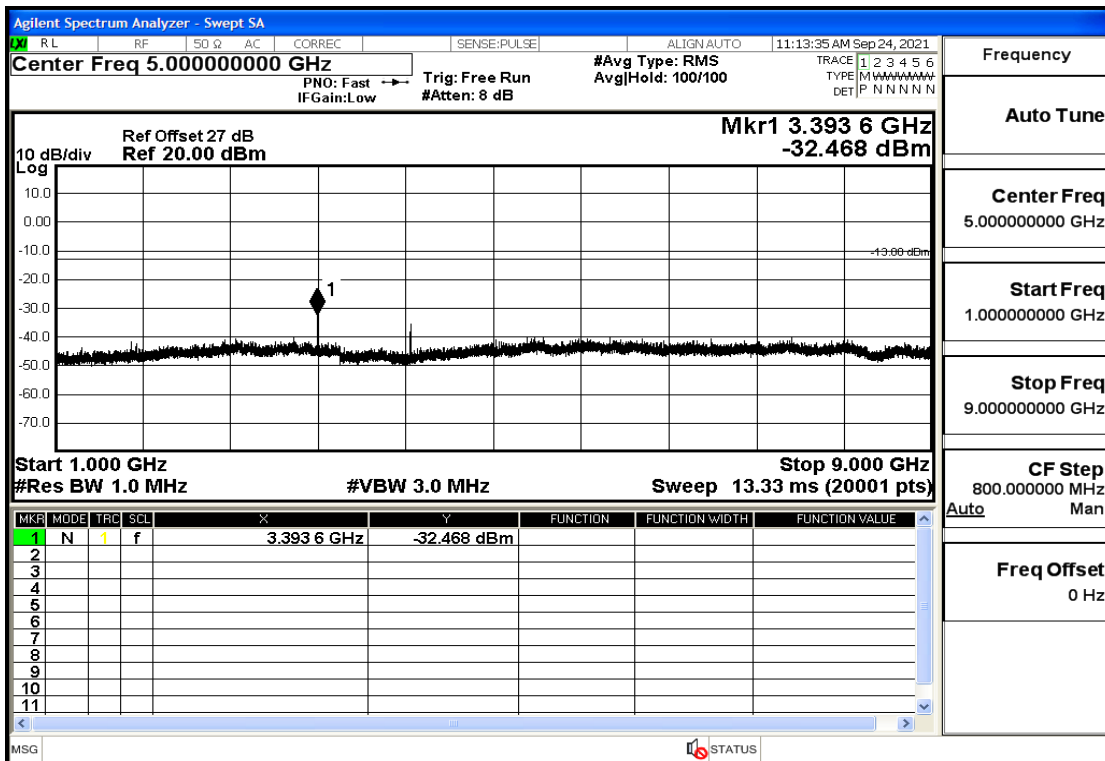
OB5-1.4-836.5-QPSK-1#5@1GHz-9GHz@Pass



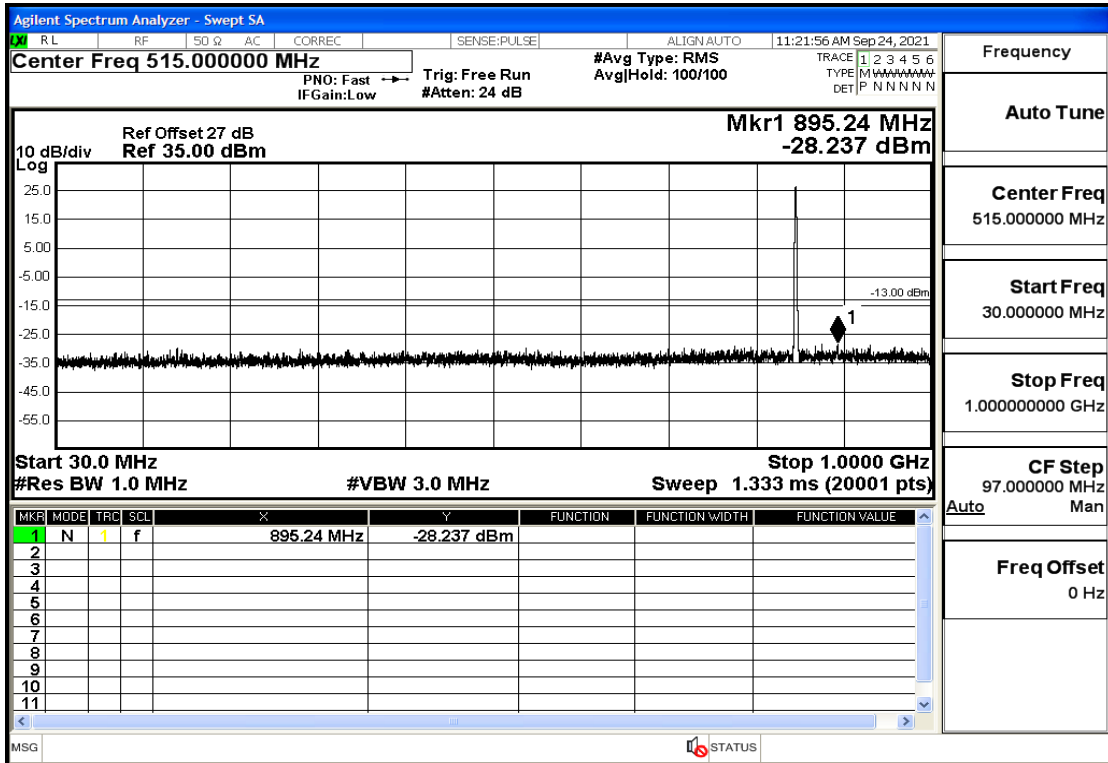
OB5-1.4-848.3-QPSK-6#0@30mHz-1GHz@Pass



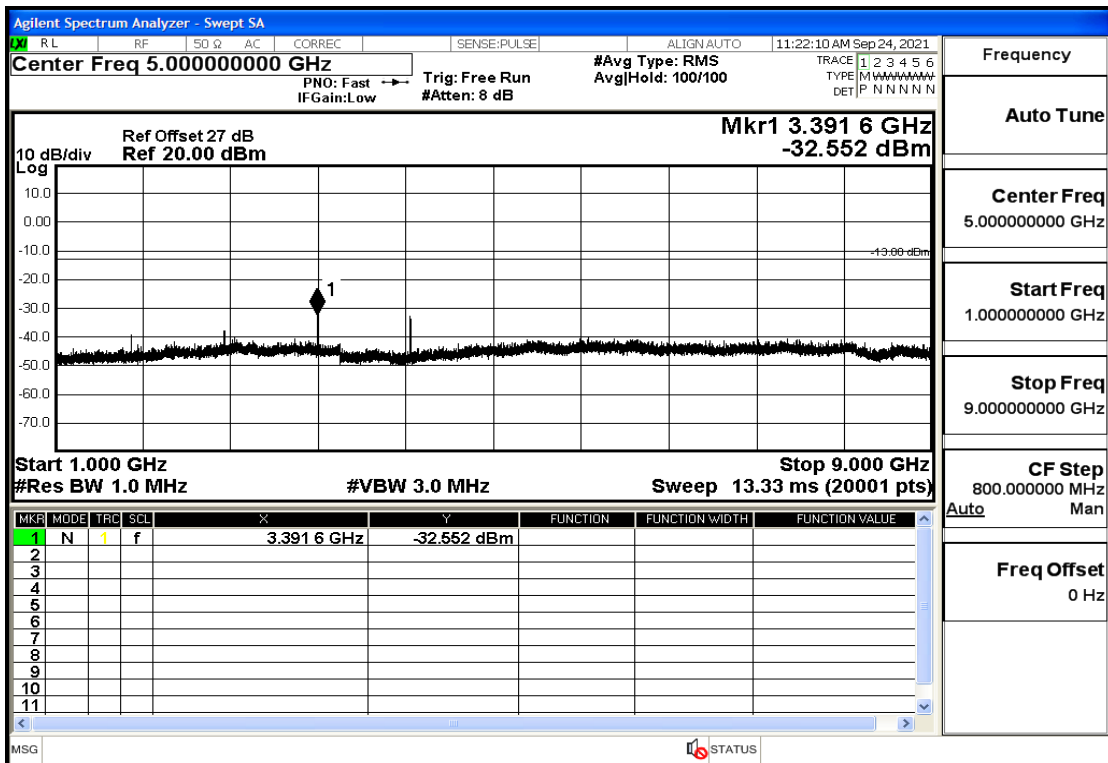
OB5-1.4-848.3-QPSK-6#0@1GHz-9GHz@Pass



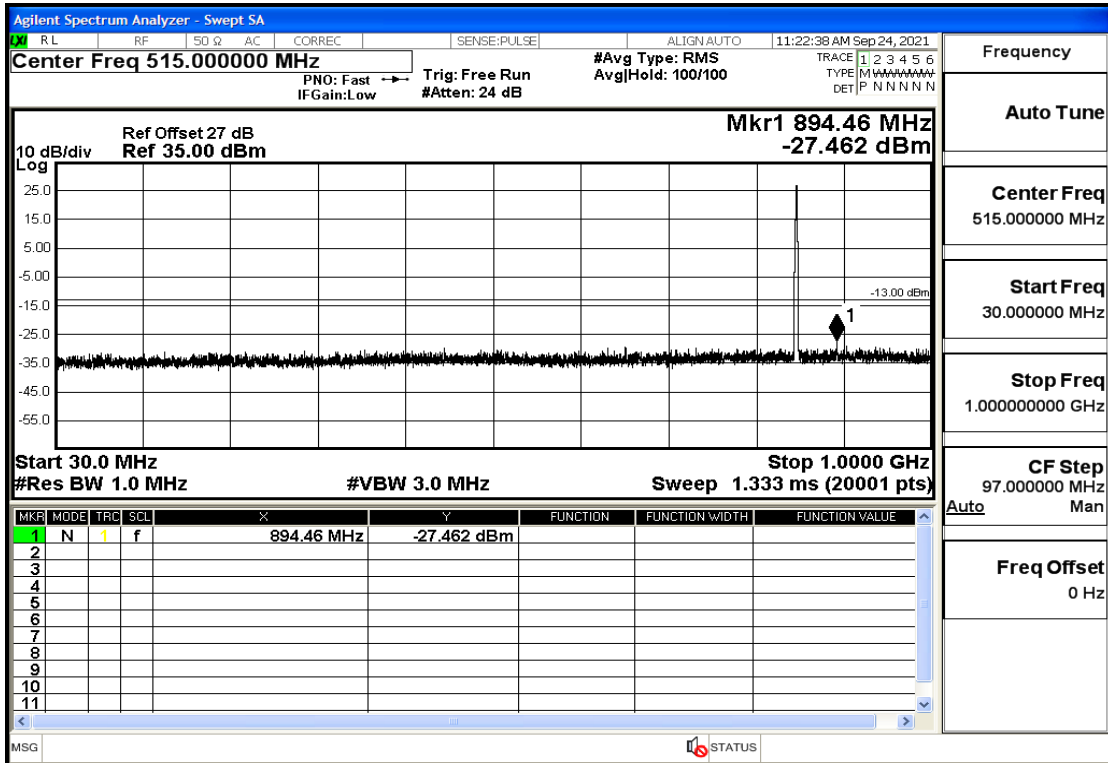
OB5-1.4-848.3-QPSK-1#0@30mHz-1GHz@Pass



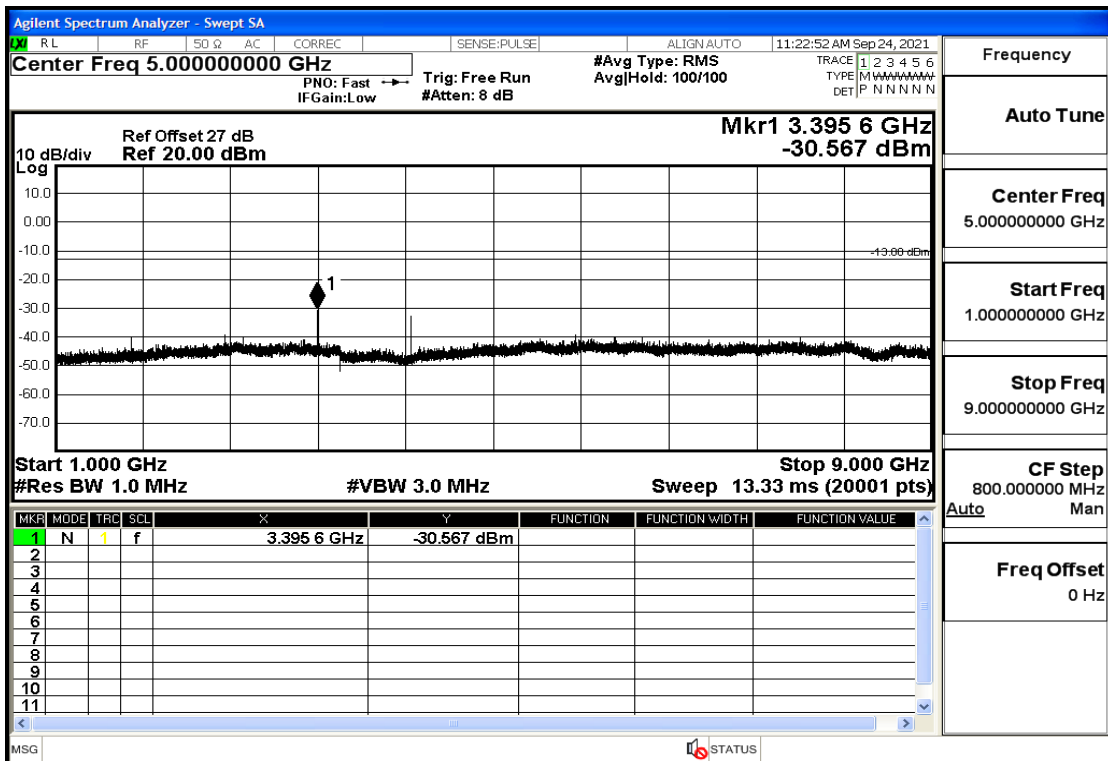
OB5-1.4-848.3-QPSK-1#0@1GHz-9GHz@Pass



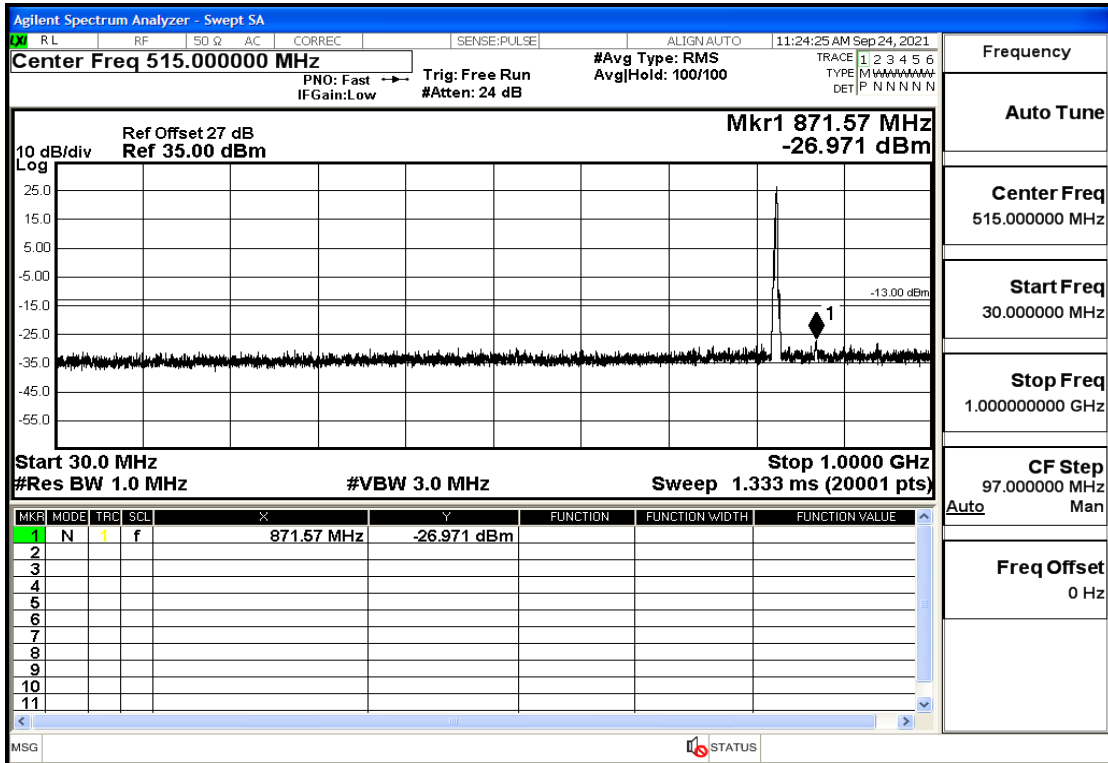
OB5-1.4-848.3-QPSK-1#5@30mHz-1GHz@Pass



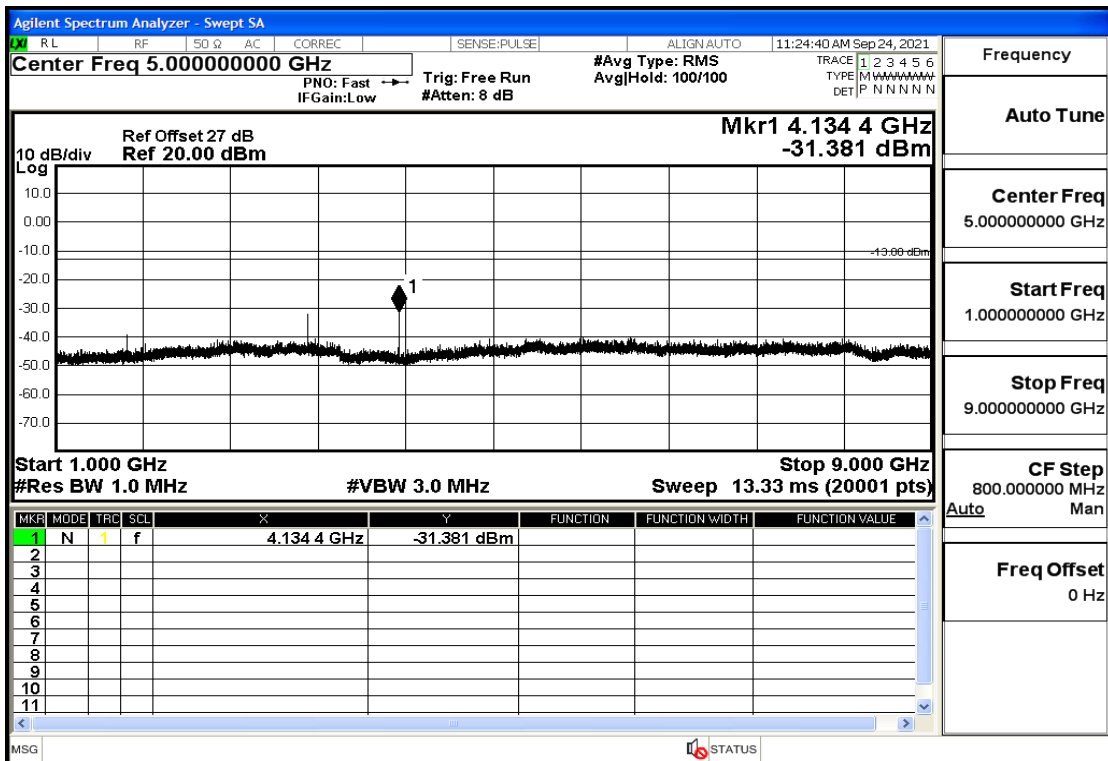
OB5-1.4-848.3-QPSK-1#5@1GHz-9GHz@Pass



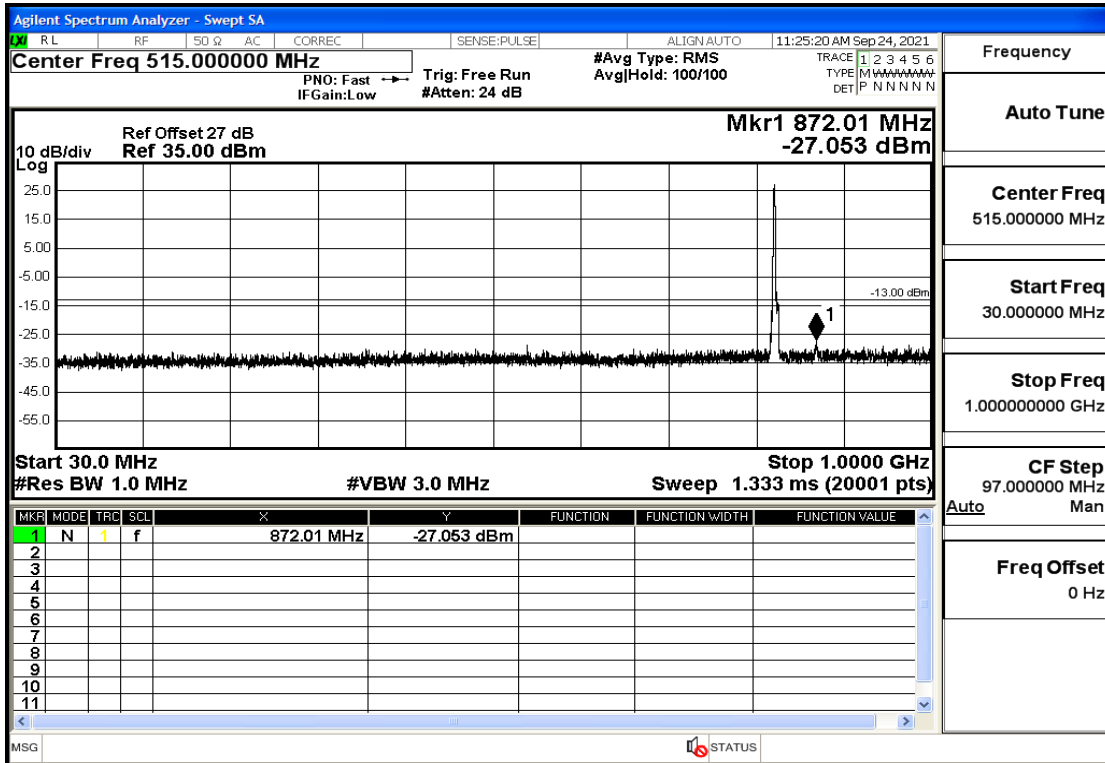
OB5-3-825.5-QPSK-15#0@30mHz-1GHz@Pass



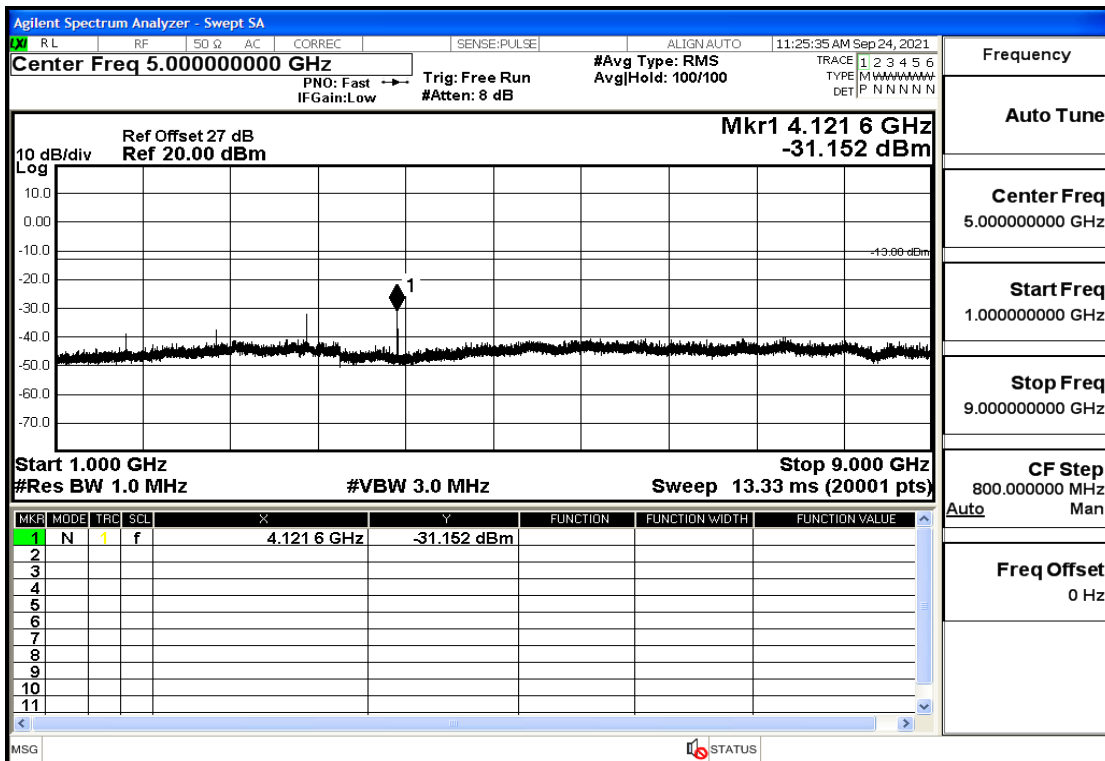
OB5-3-825.5-QPSK-15#0@1GHz-9GHz@Pass



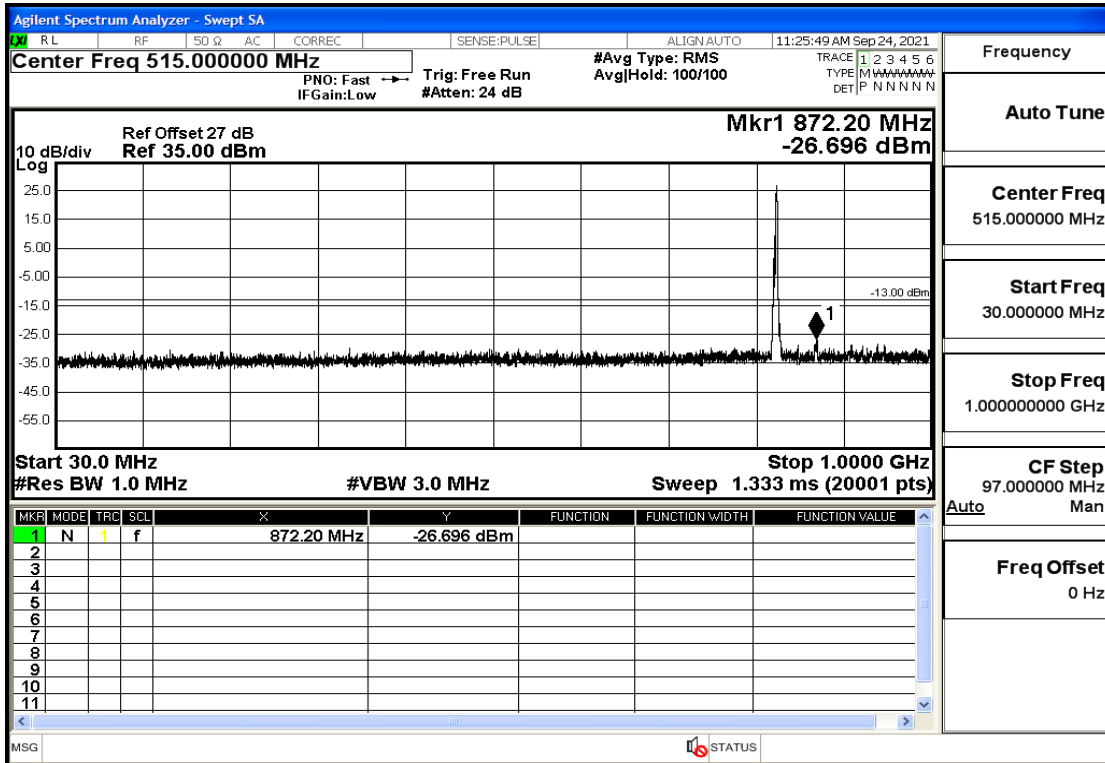
OB5-3-825.5-QPSK-1#0@30mHz-1GHz@Pass



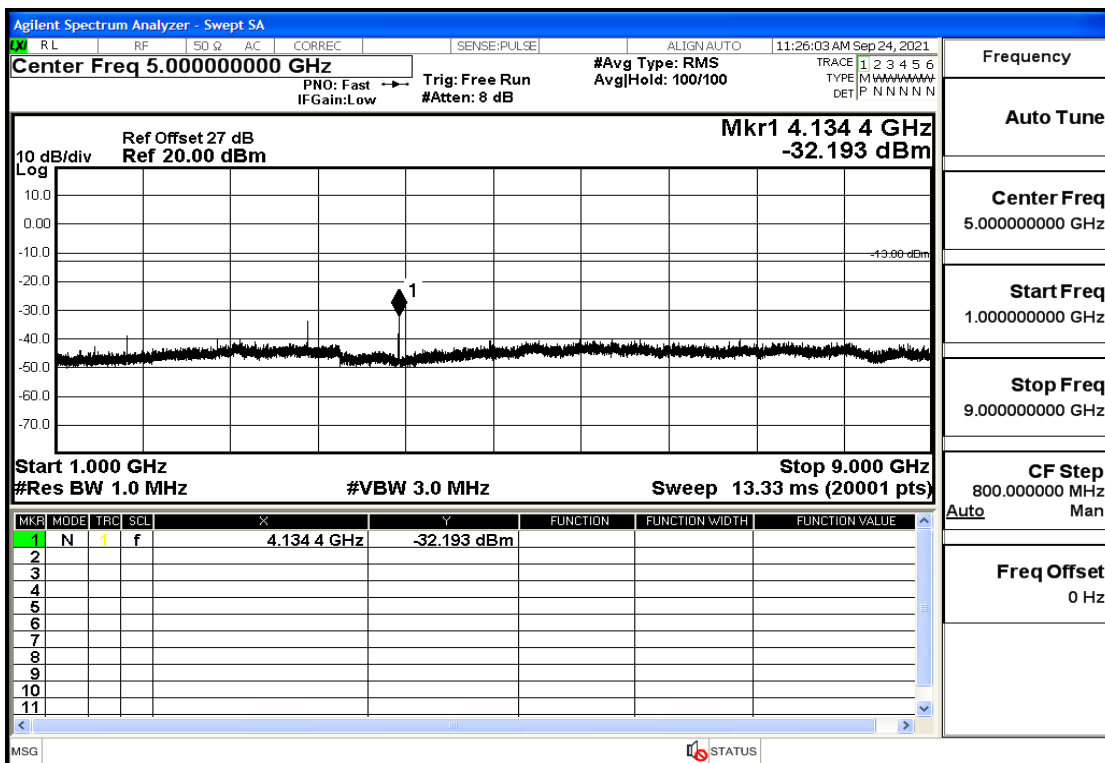
OB5-3-825.5-QPSK-1#0@1GHz-9GHz@Pass



OB5-3-825.5-QPSK-1#14@30mHz-1GHz@Pass

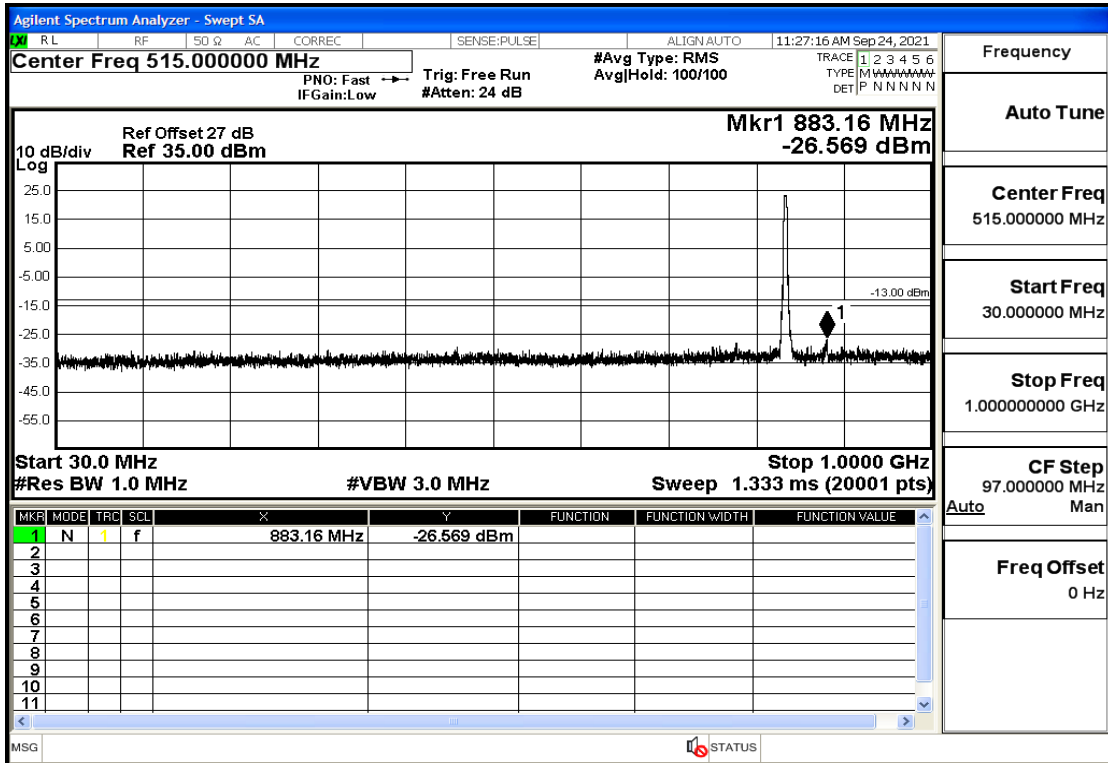


OB5-3-825.5-QPSK-1#14@1GHz-9GHz@Pass

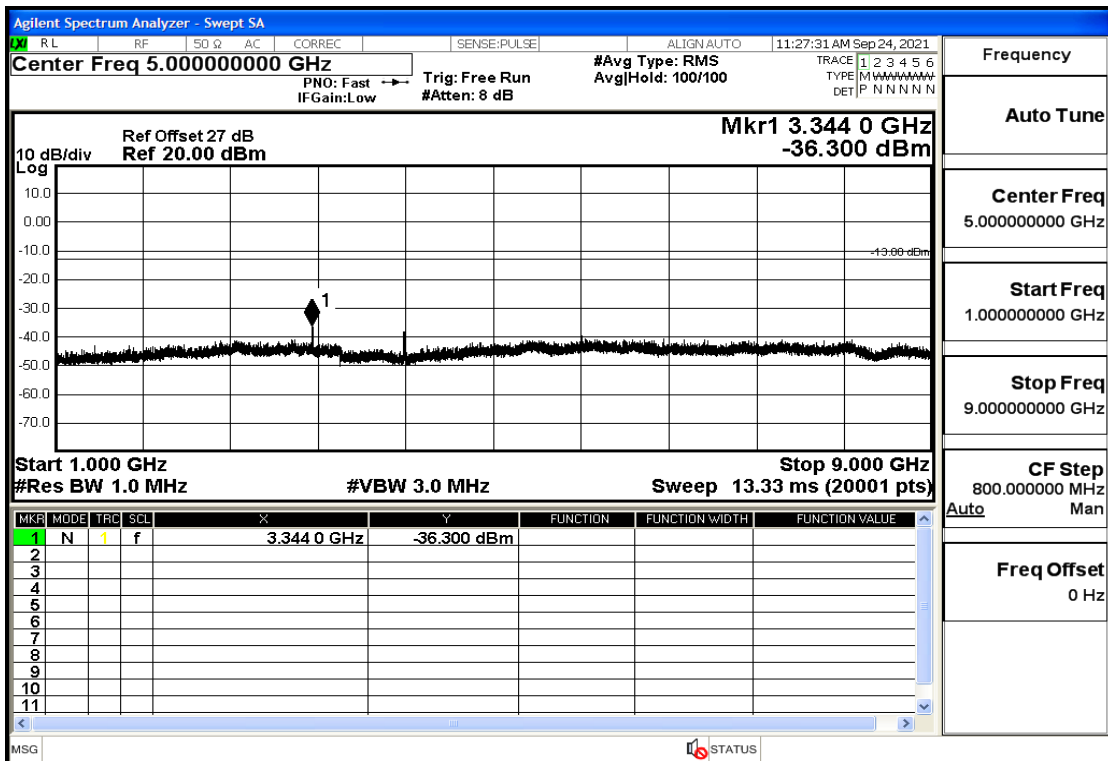




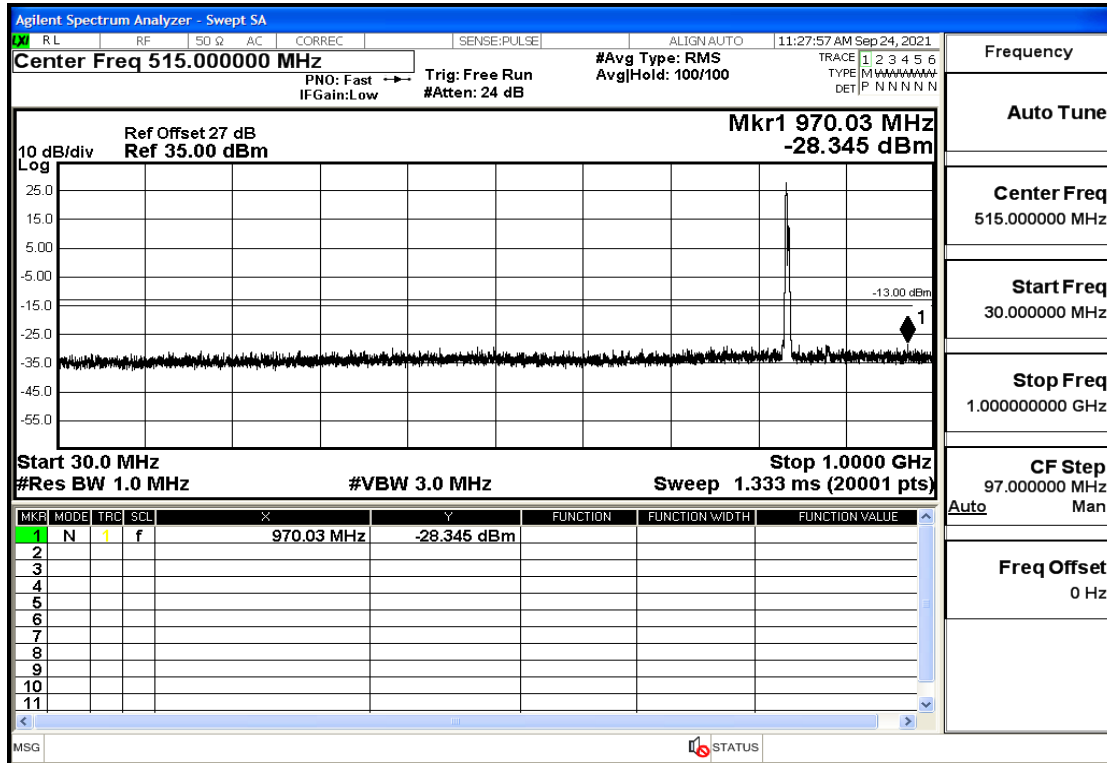
OB5-3-836.5-QPSK-15#0@30mHz-1GHz@Pass



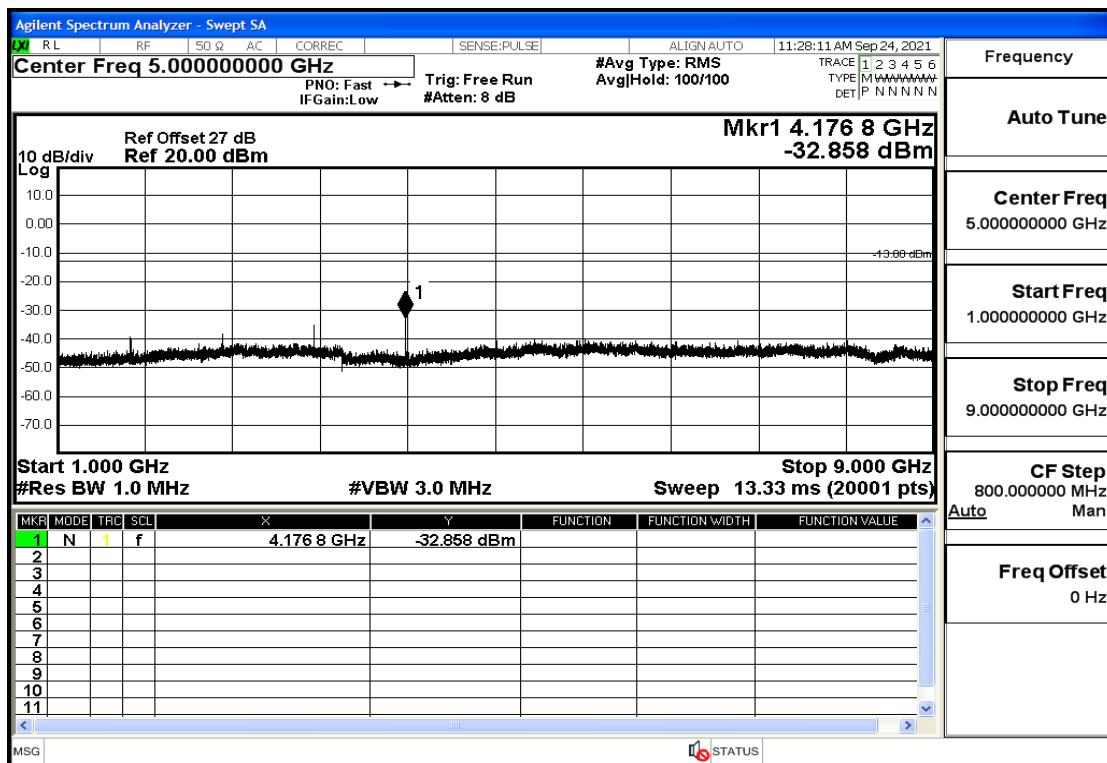
OB5-3-836.5-QPSK-15#0@1GHz-9GHz@Pass



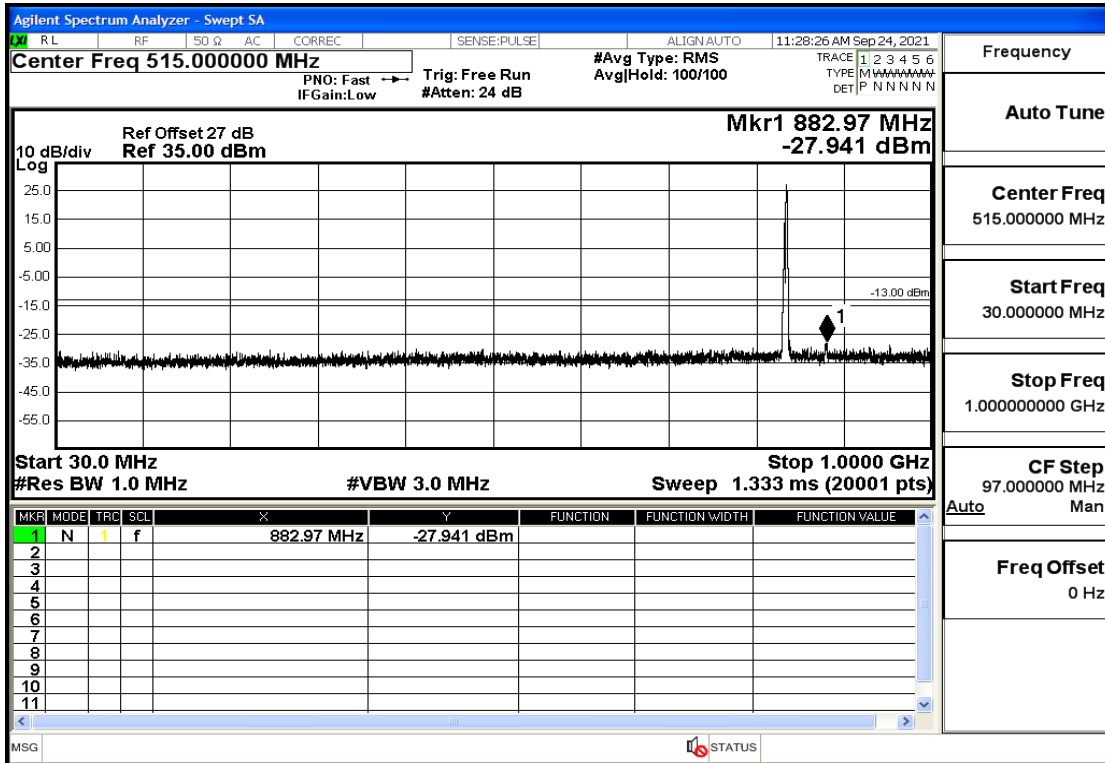
OB5-3-836.5-QPSK-1#0@30mHz-1GHz@Pass



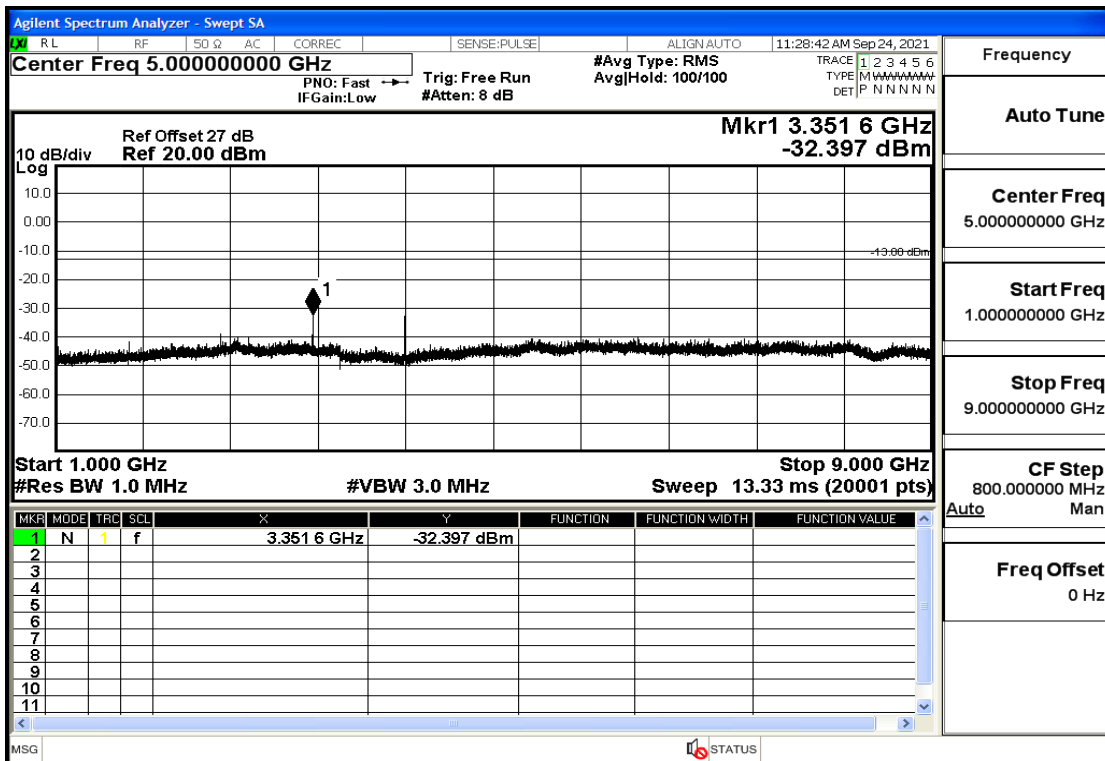
OB5-3-836.5-QPSK-1#0@1GHz-9GHz@Pass



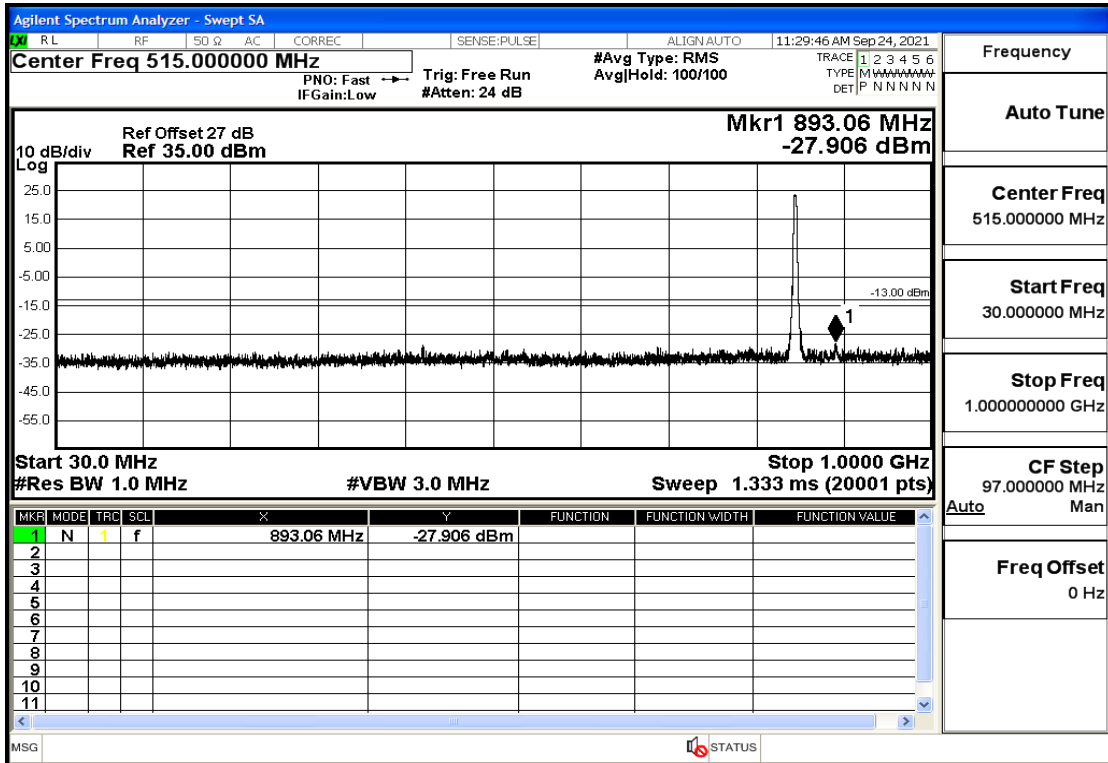
OB5-3-836.5-QPSK-1#14@30mHz-1GHz@Pass



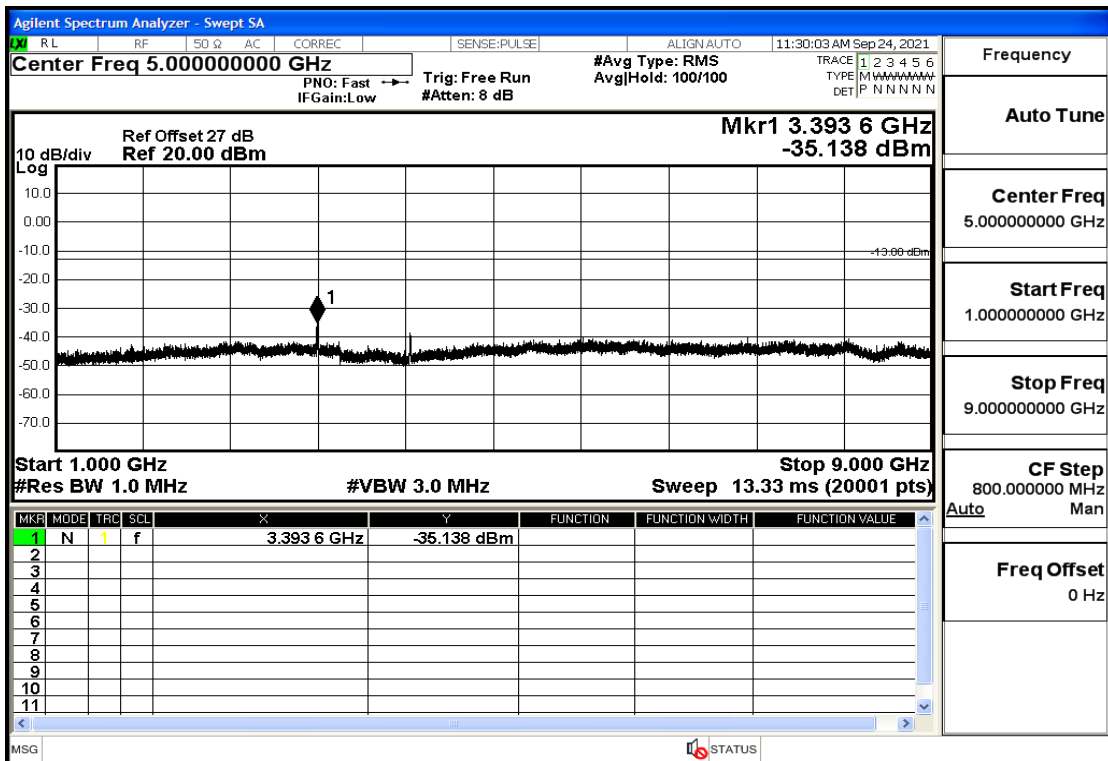
OB5-3-836.5-QPSK-1#14@1GHz-9GHz@Pass



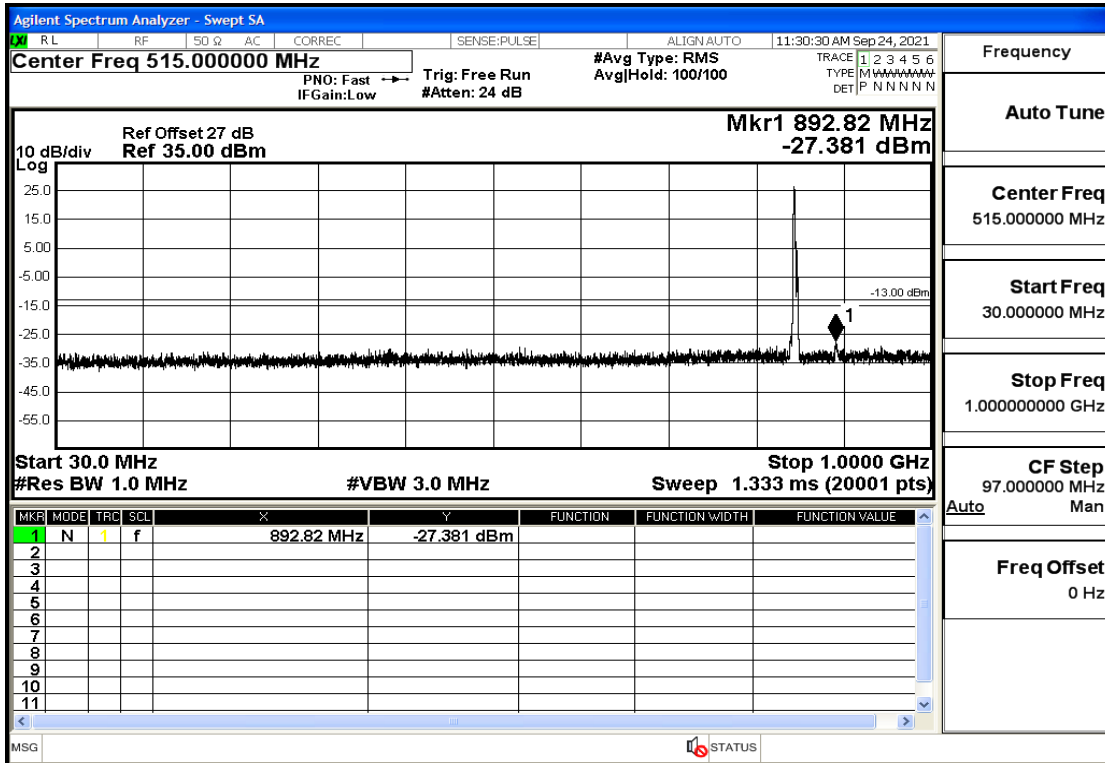
OB5-3-847.5-QPSK-15#0@30mHz-1GHz@Pass



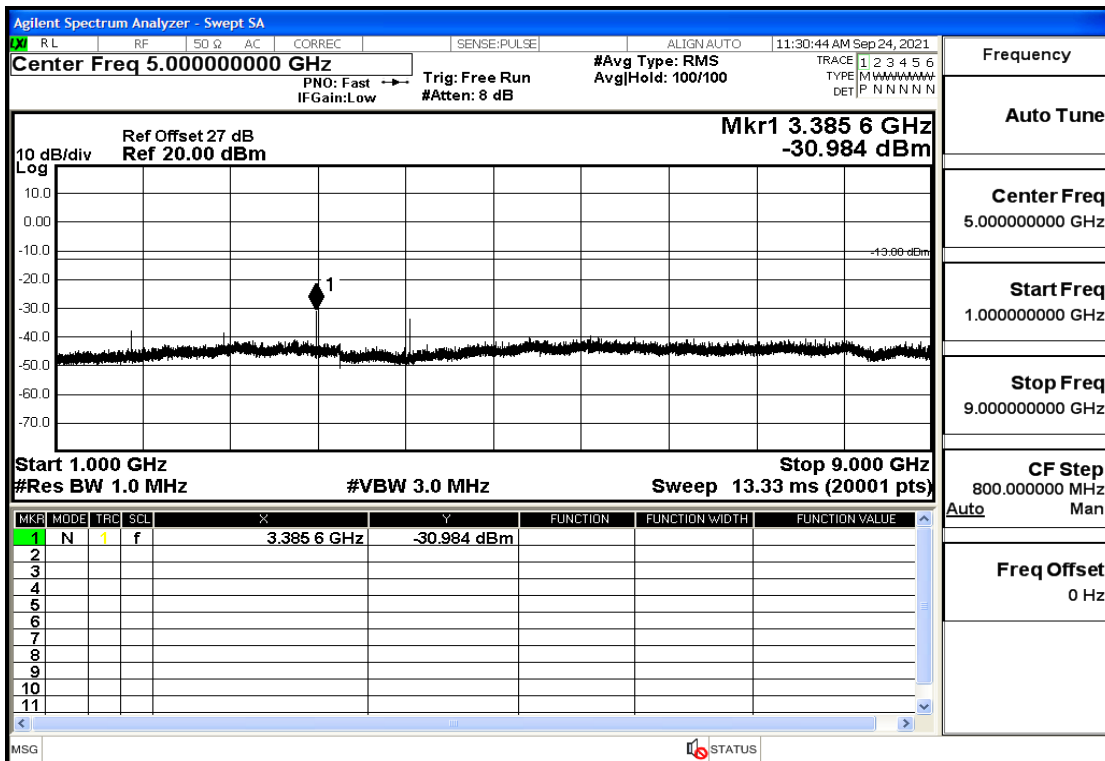
OB5-3-847.5-QPSK-15#0@1GHz-9GHz@Pass



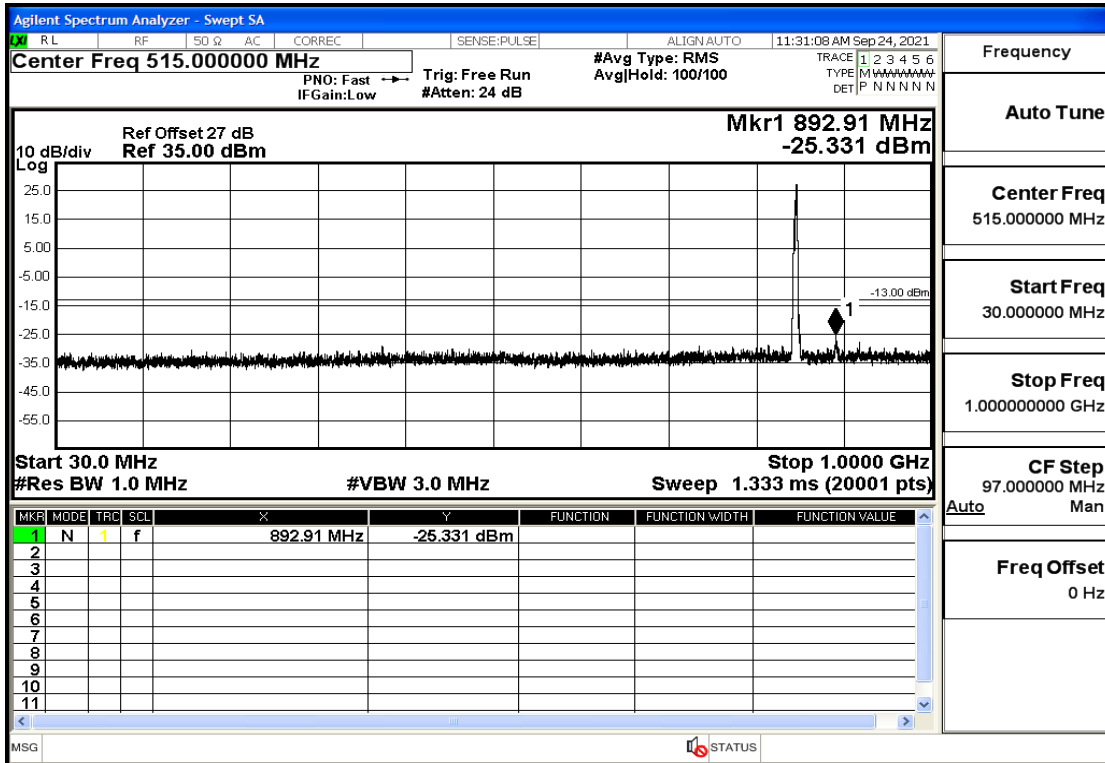
OB5-3-847.5-QPSK-1#0@30mHz-1GHz@Pass



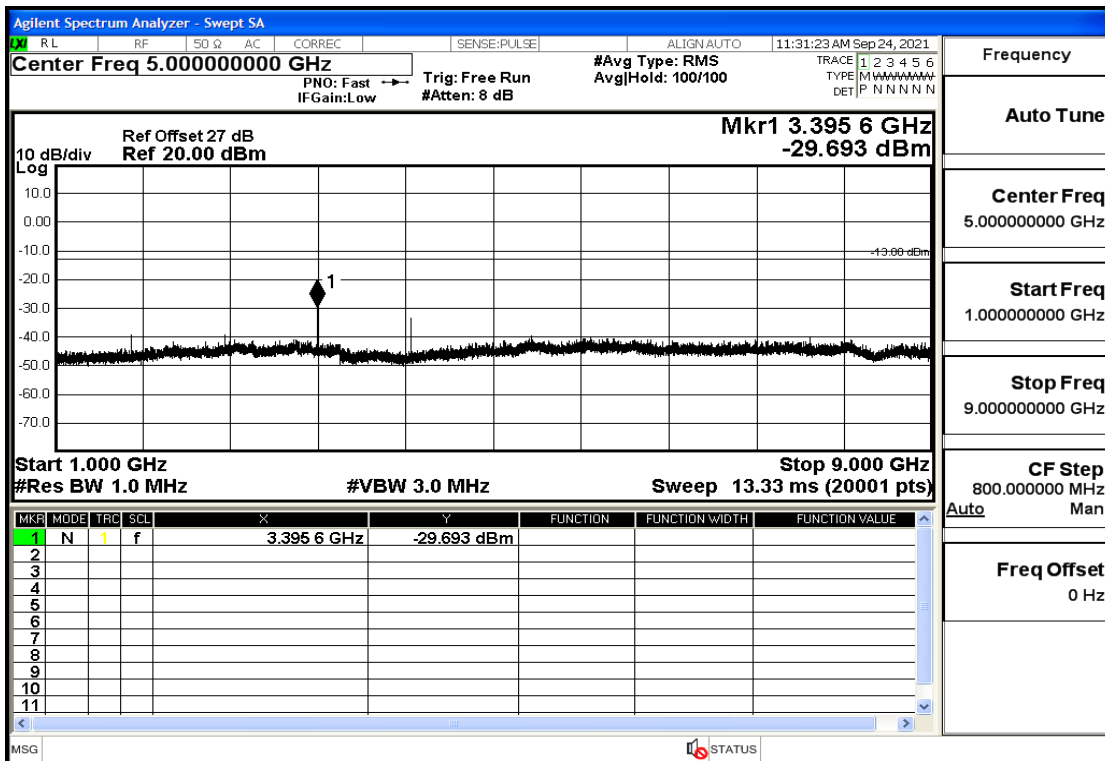
OB5-3-847.5-QPSK-1#0@1GHz-9GHz@Pass



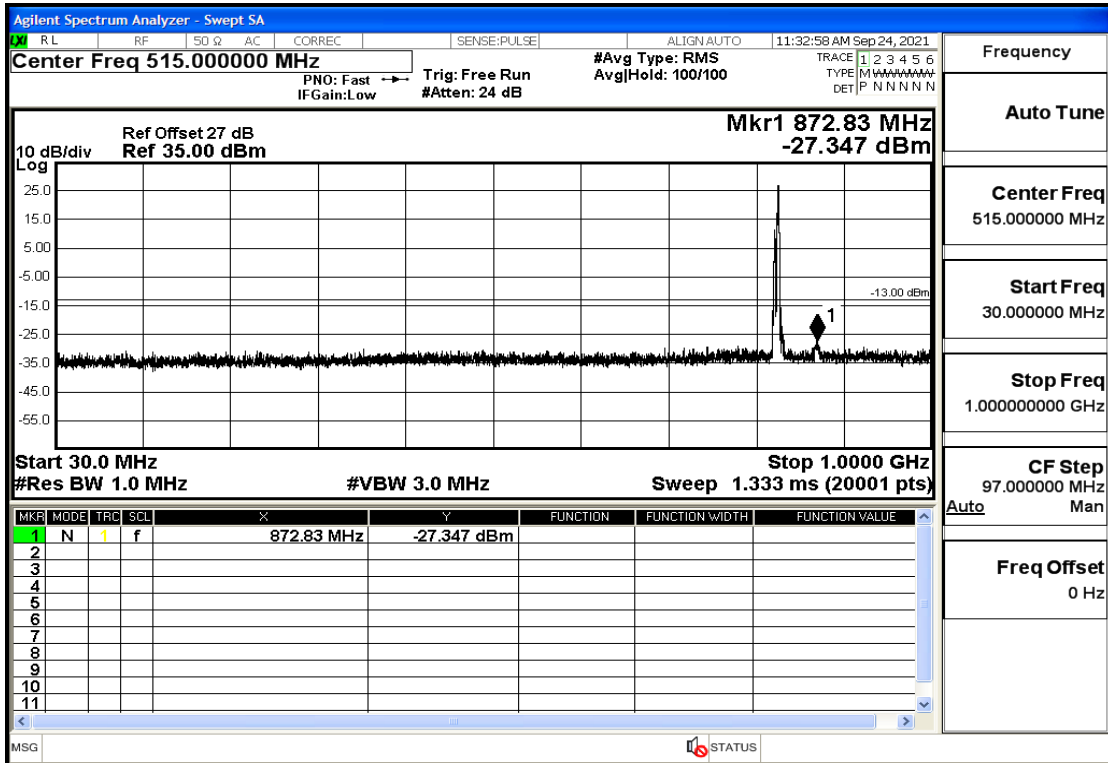
OB5-3-847.5-QPSK-1#14@30mHz-1GHz@Pass



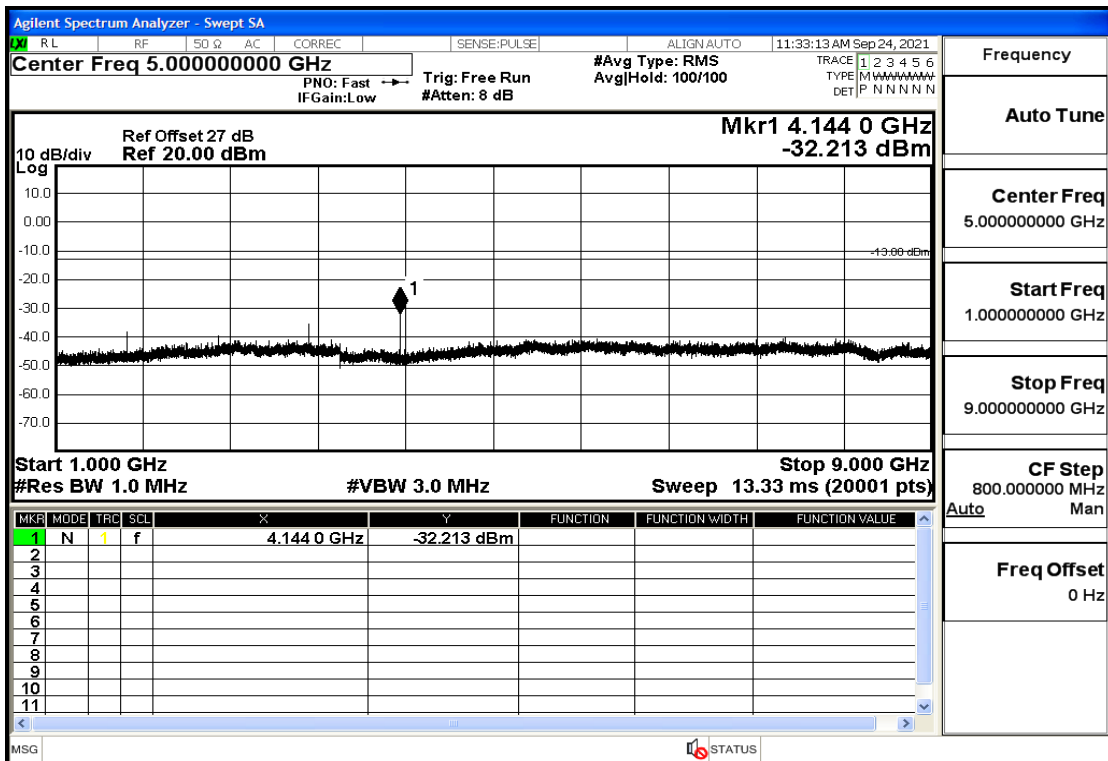
OB5-3-847.5-QPSK-1#14@1GHz-9GHz@Pass



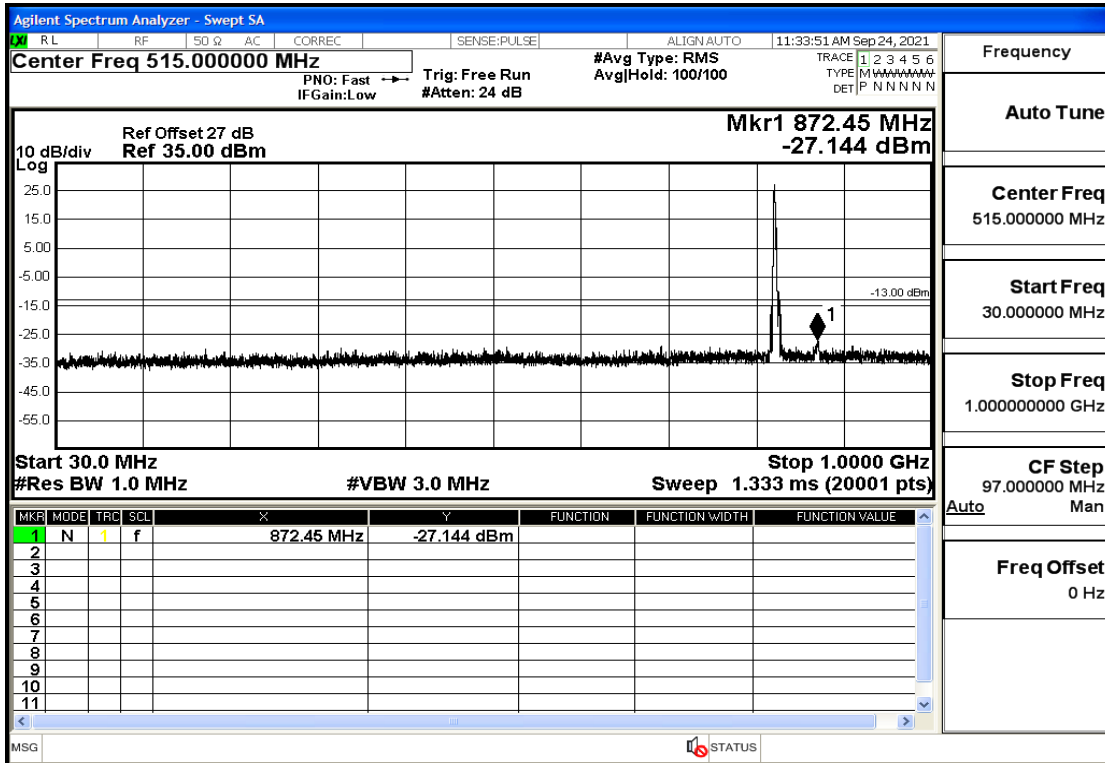
OB5-5-826.5-QPSK-25#0@30MHz-1GHz@Pass



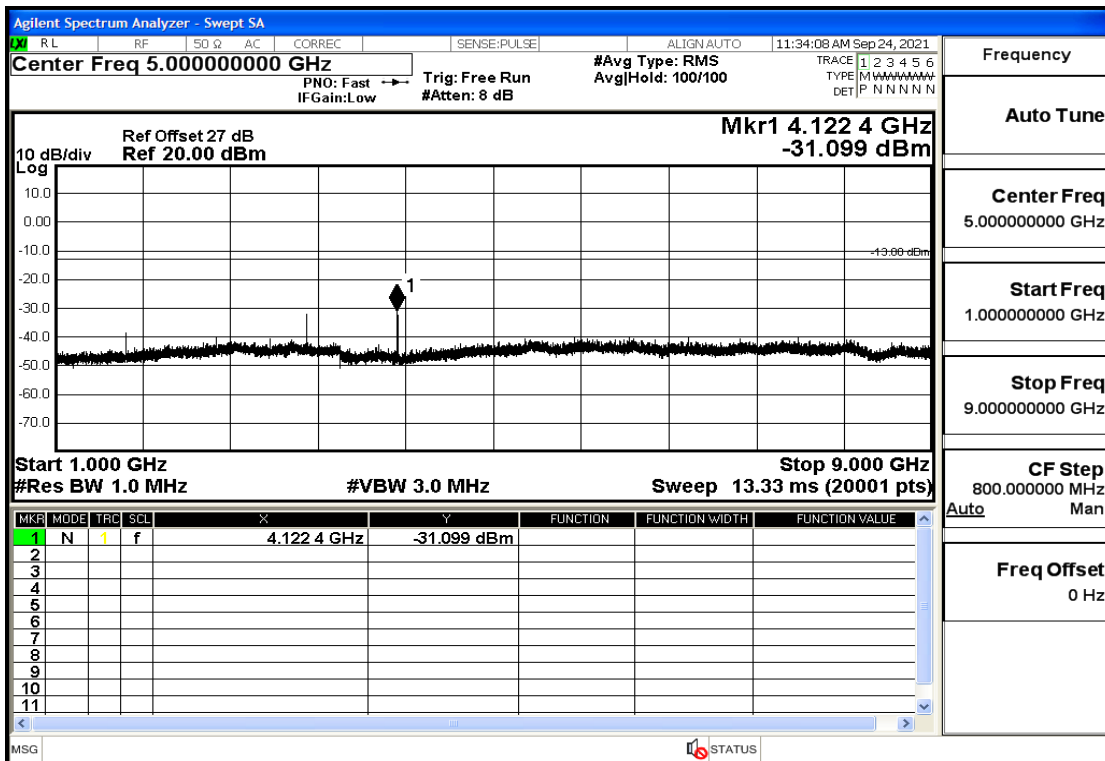
OB5-5-826.5-QPSK-25#0@1GHz-9GHz@Pass



OB5-5-826.5-QPSK-1#0@30mHz-1GHz@Pass

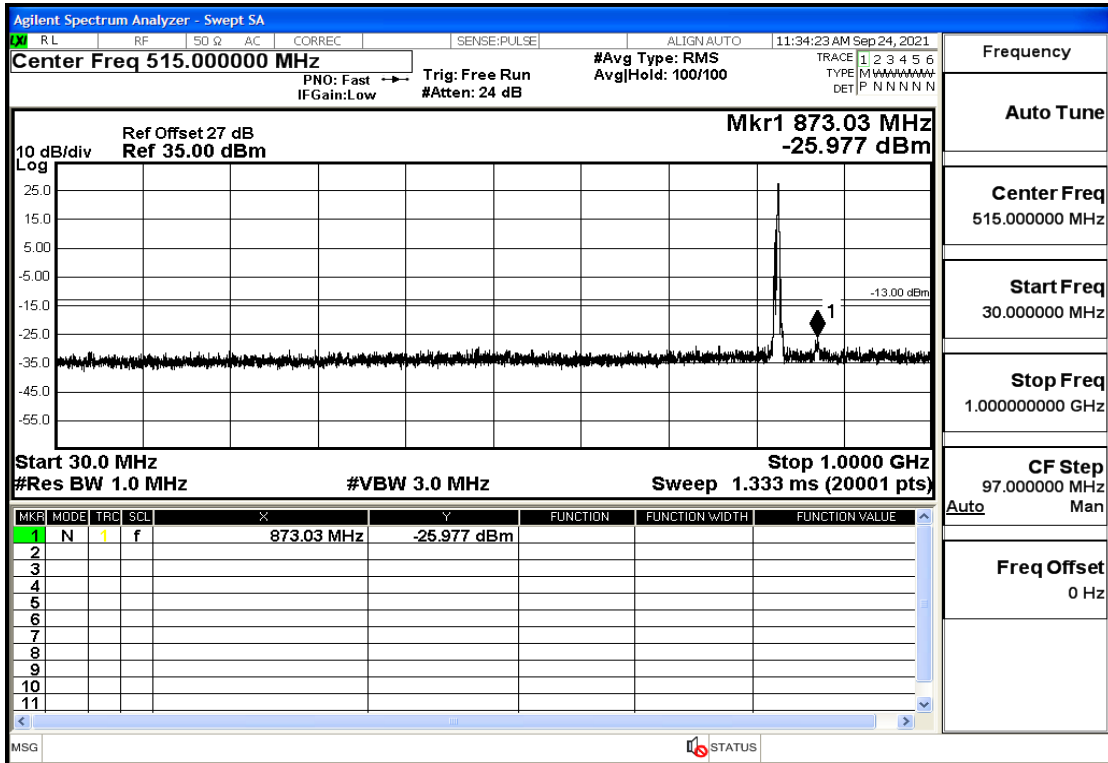


OB5-5-826.5-QPSK-1#0@1GHz-9GHz@Pass

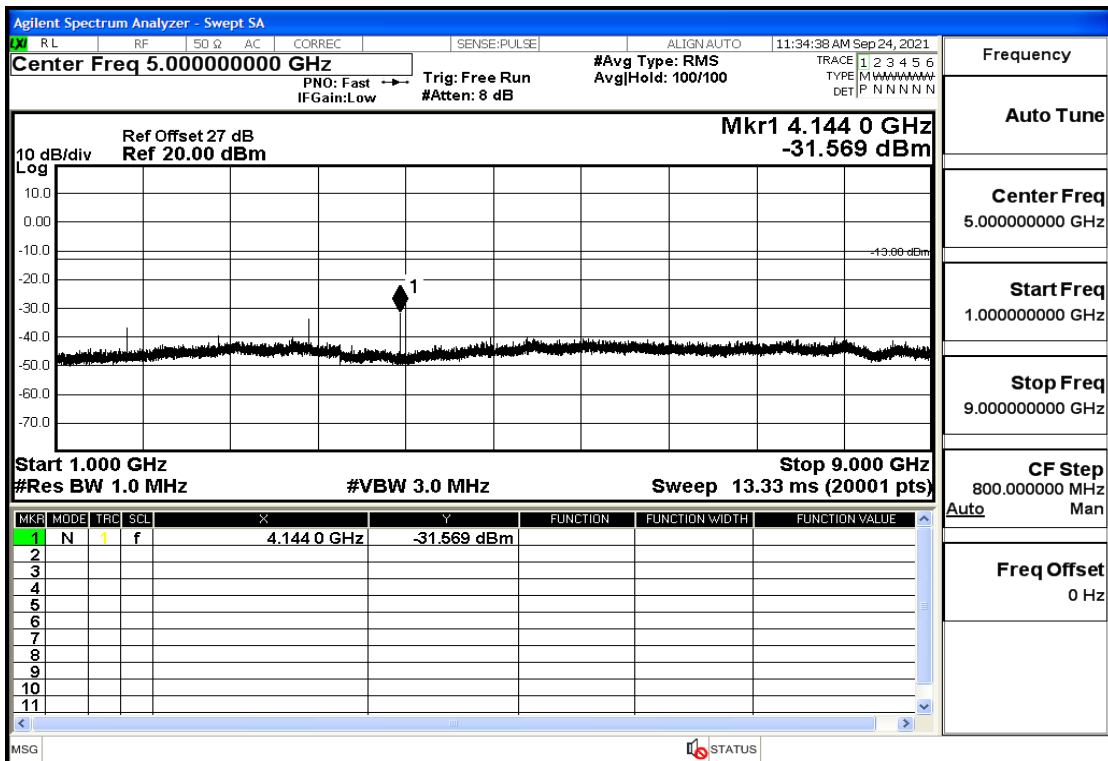




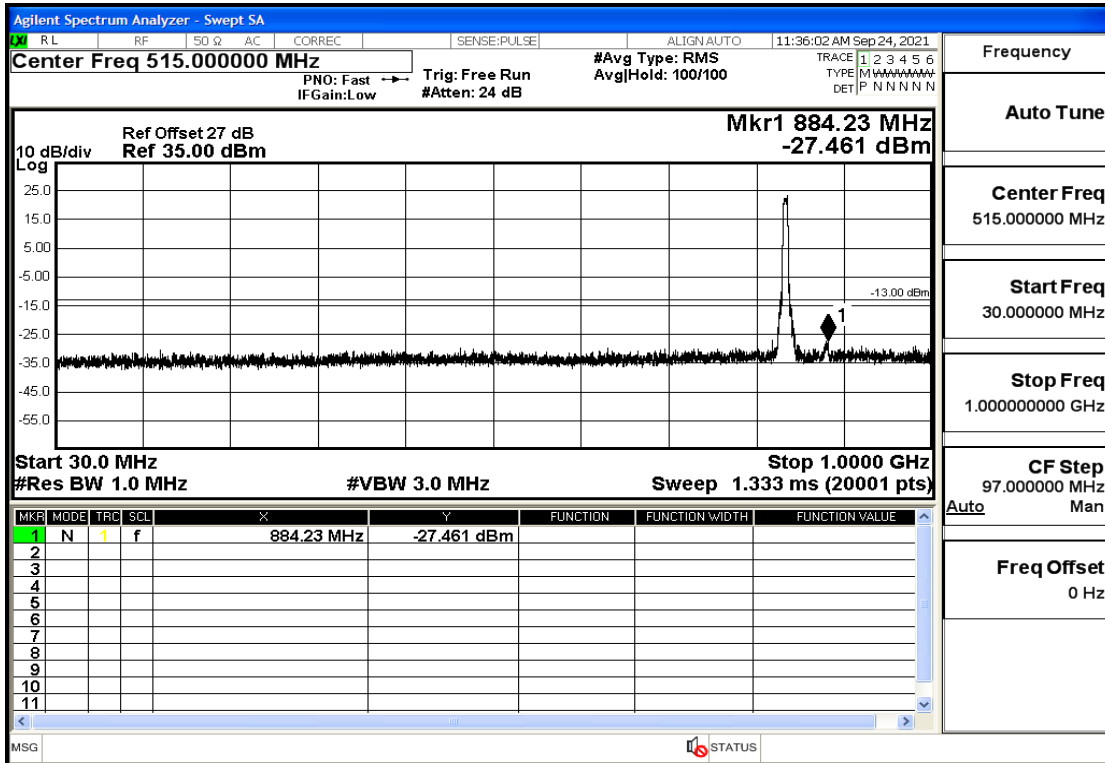
OB5-5-826.5-QPSK-1#24@30mHz-1GHz@Pass



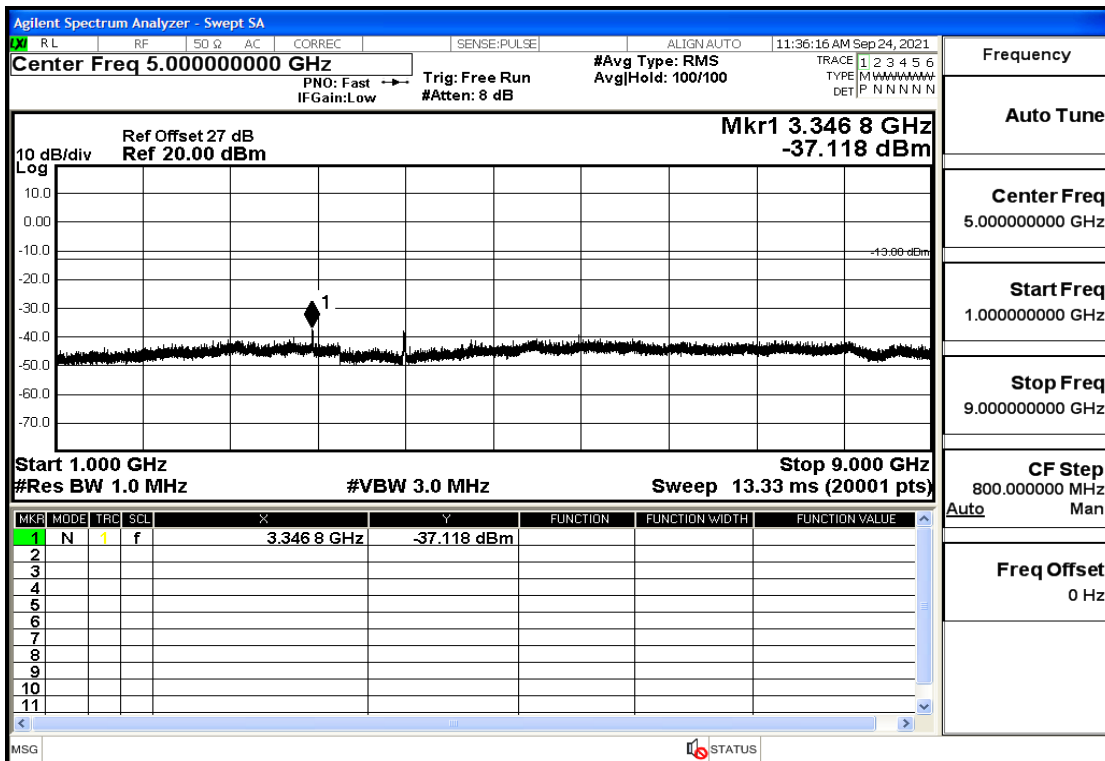
OB5-5-826.5-QPSK-1#24@1GHz-9GHz@Pass



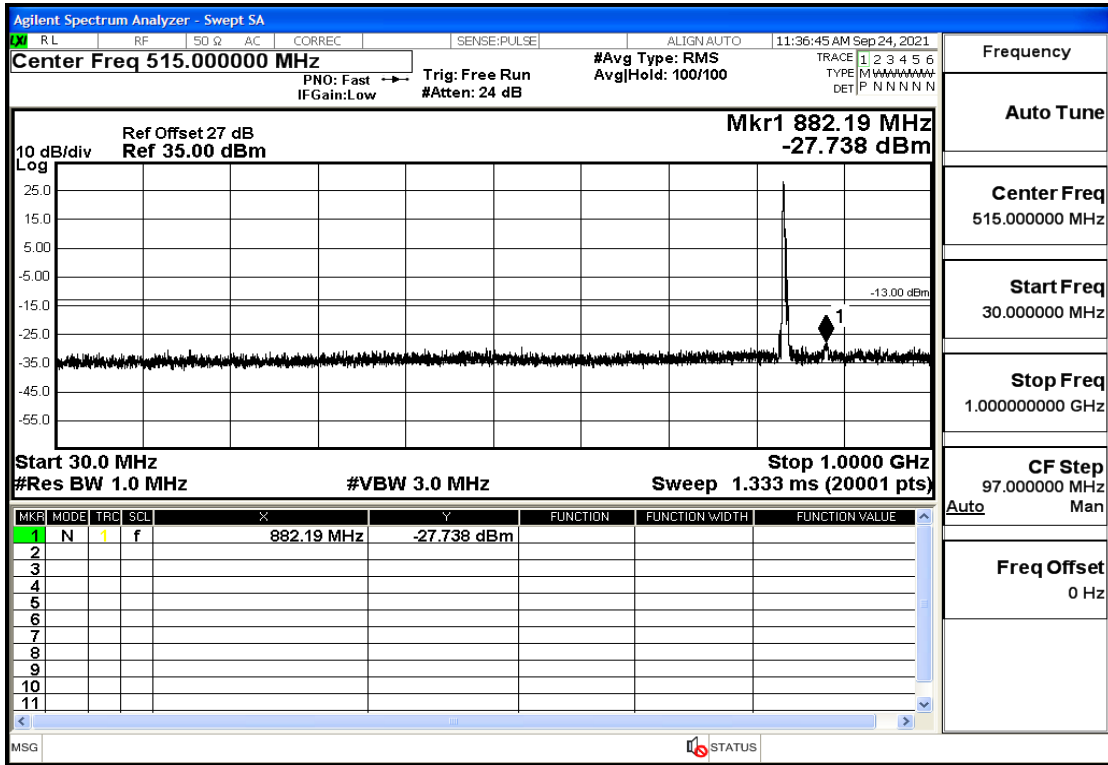
OB5-5-836.5-QPSK-25#0@30mHz-1GHz@Pass



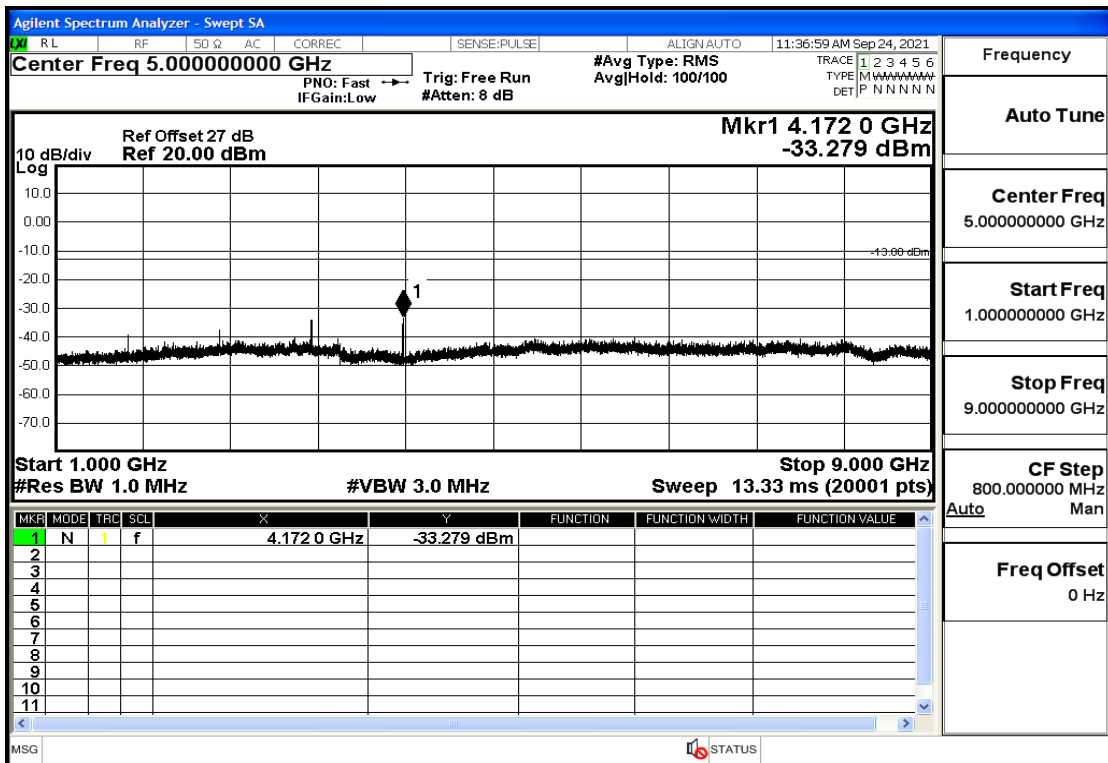
OB5-5-836.5-QPSK-25#0@1GHz-9GHz@Pass



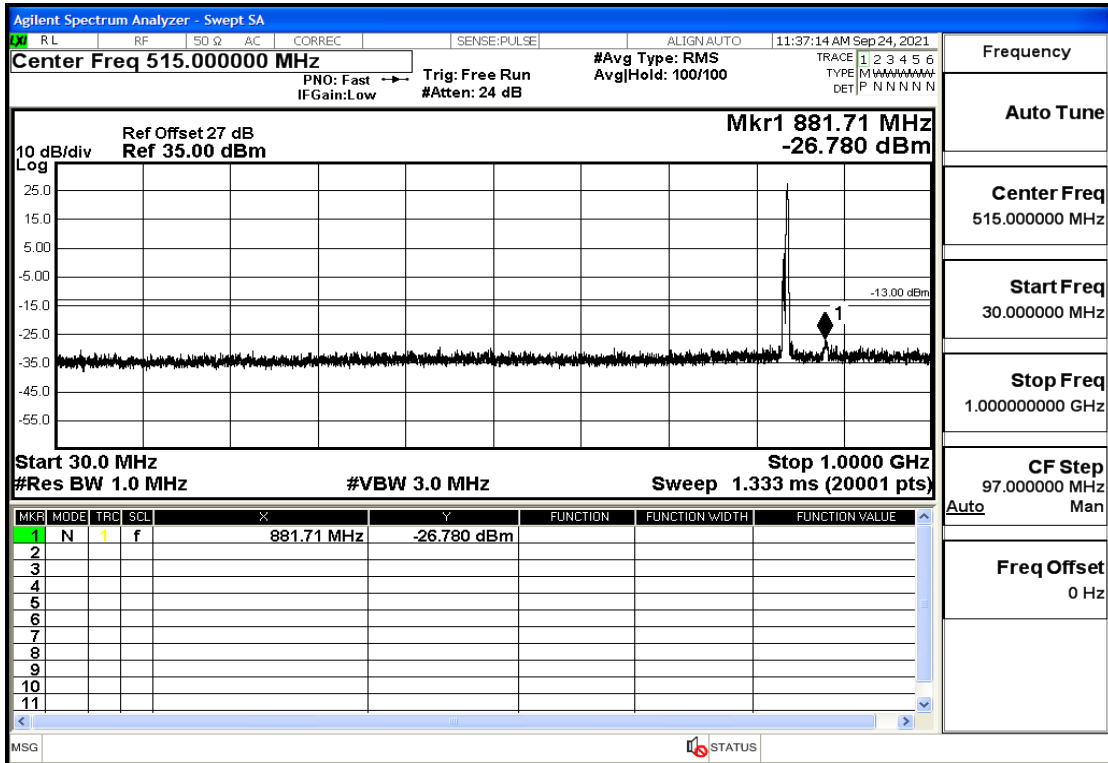
OB5-5-836.5-QPSK-1#0@30mHz-1GHz@Pass



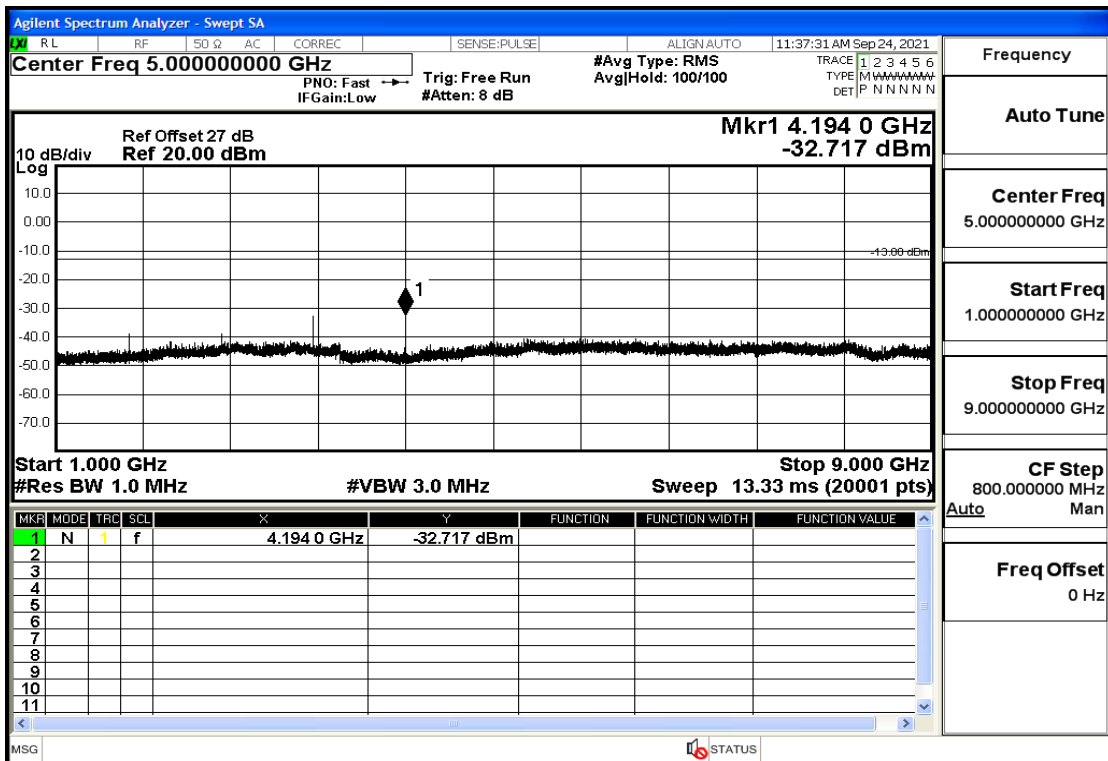
OB5-5-836.5-QPSK-1#0@1GHz-9GHz@Pass



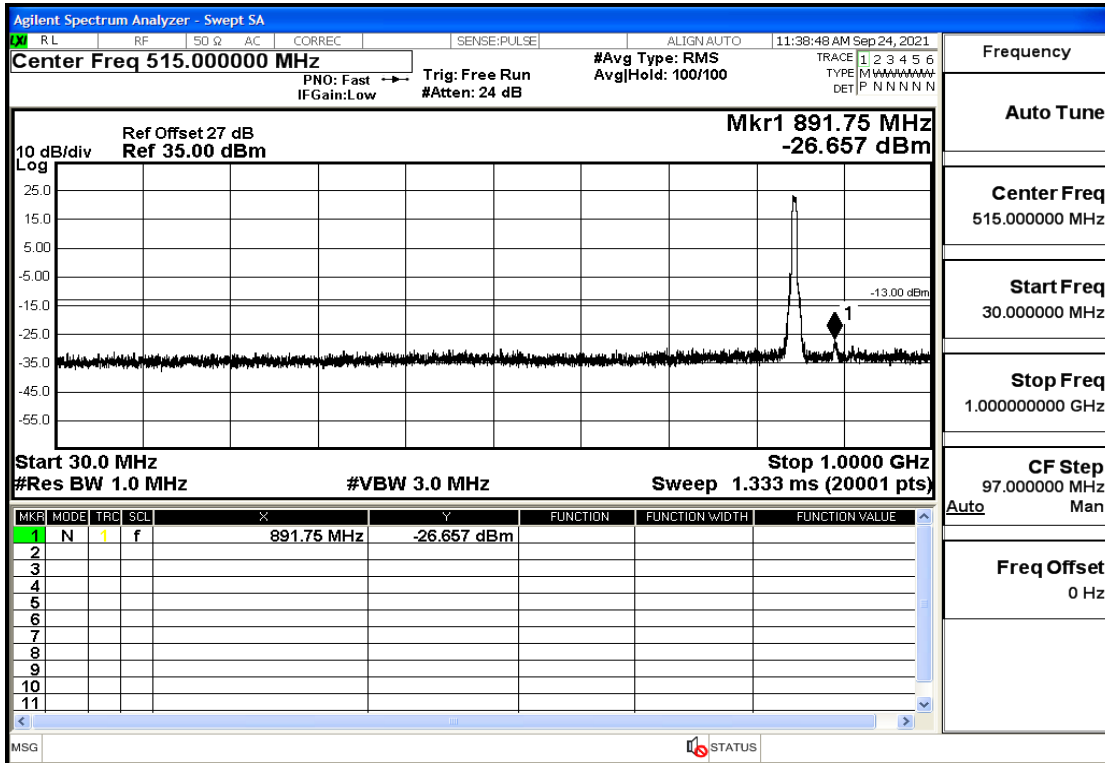
OB5-5-836.5-QPSK-1#24@30mHz-1GHz@Pass



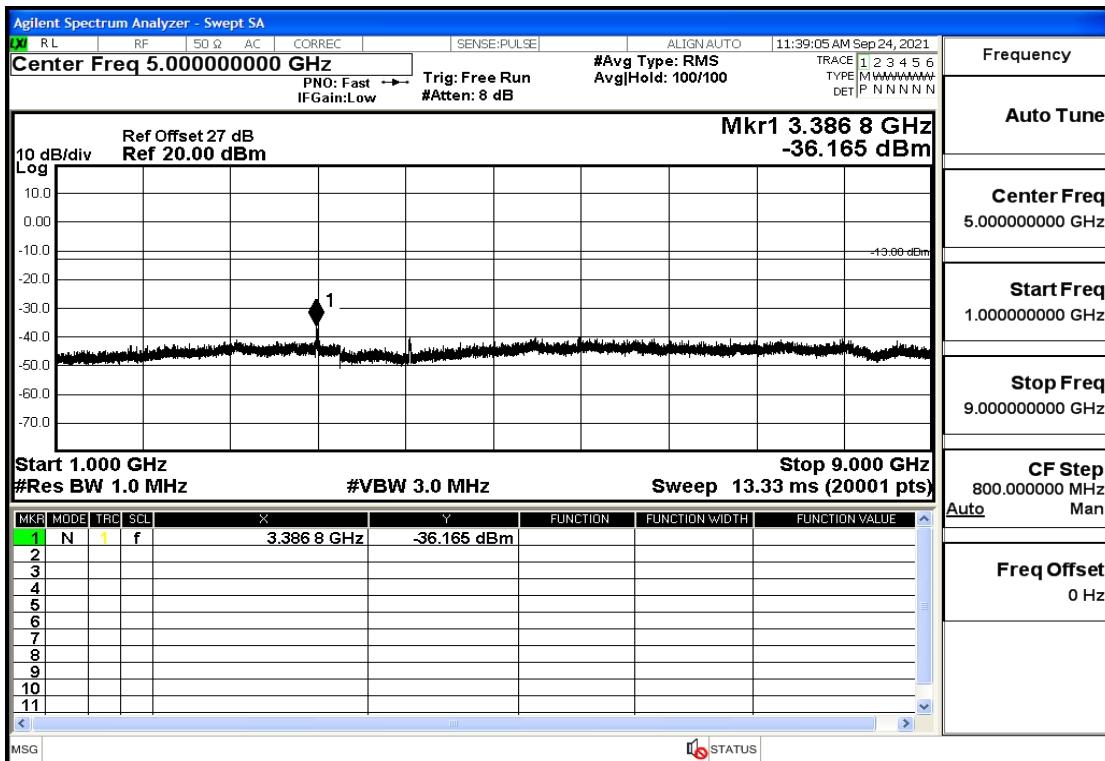
OB5-5-836.5-QPSK-1#24@1GHz-9GHz@Pass



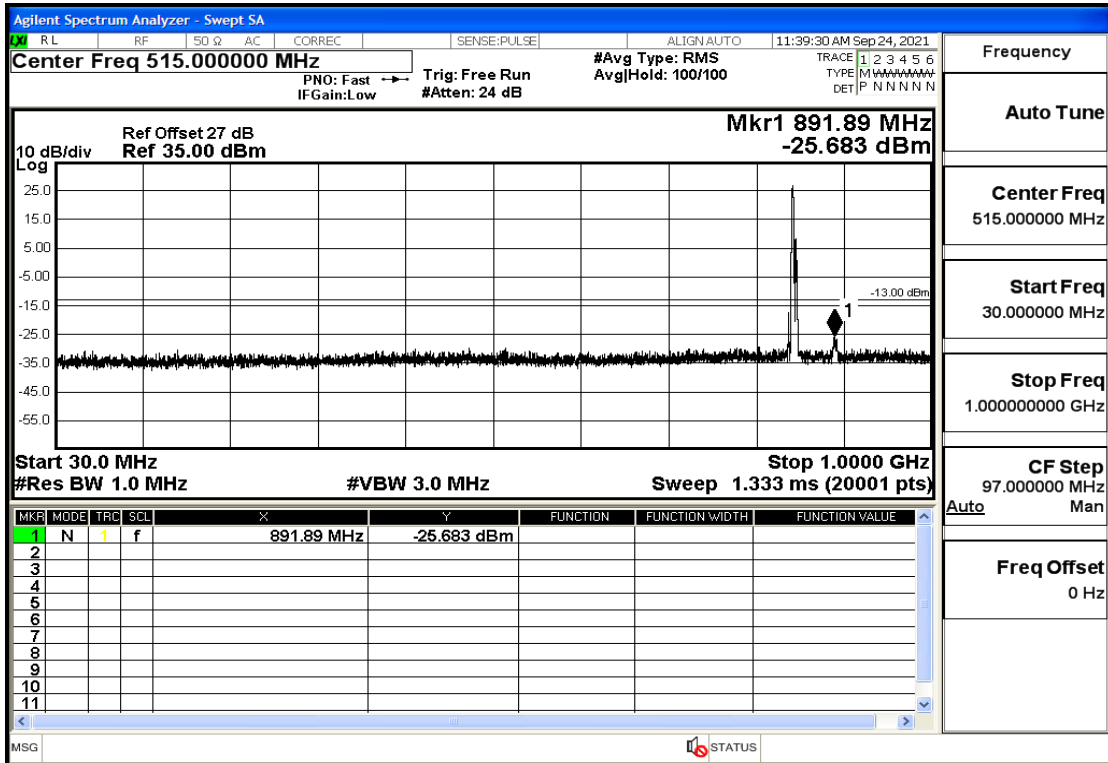
OB5-5-846.5-QPSK-25#0@30mHz-1GHz@Pass



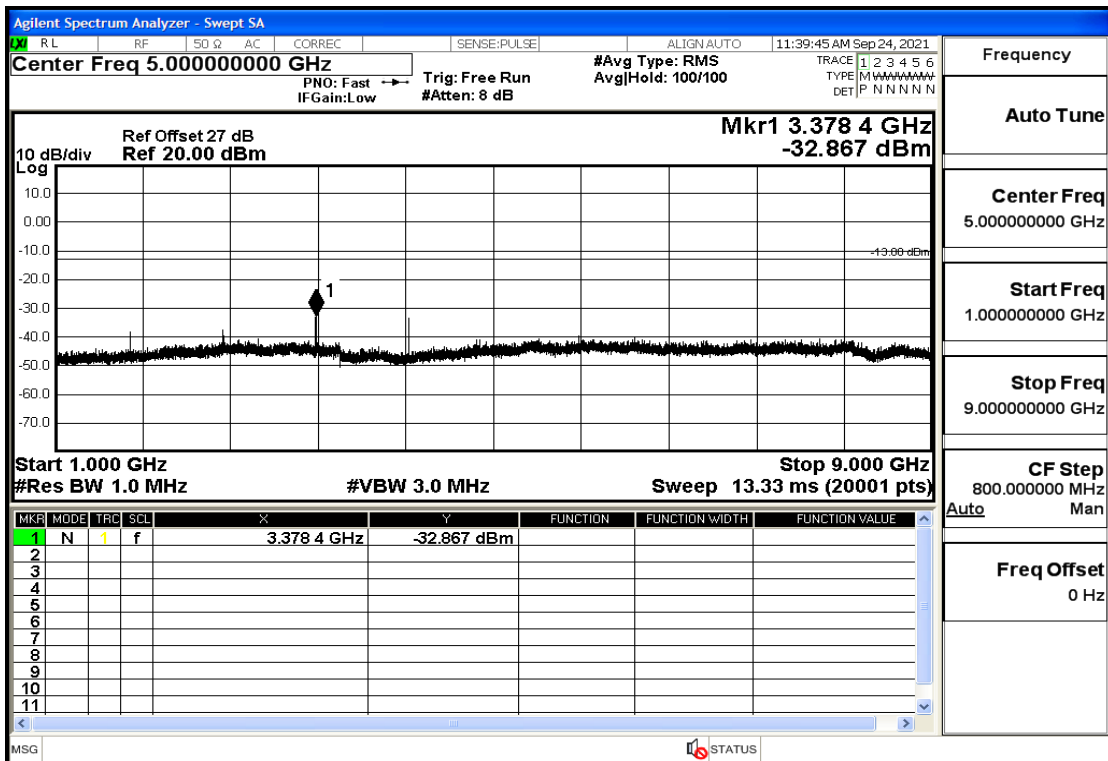
OB5-5-846.5-QPSK-25#0@1GHz-9GHz@Pass



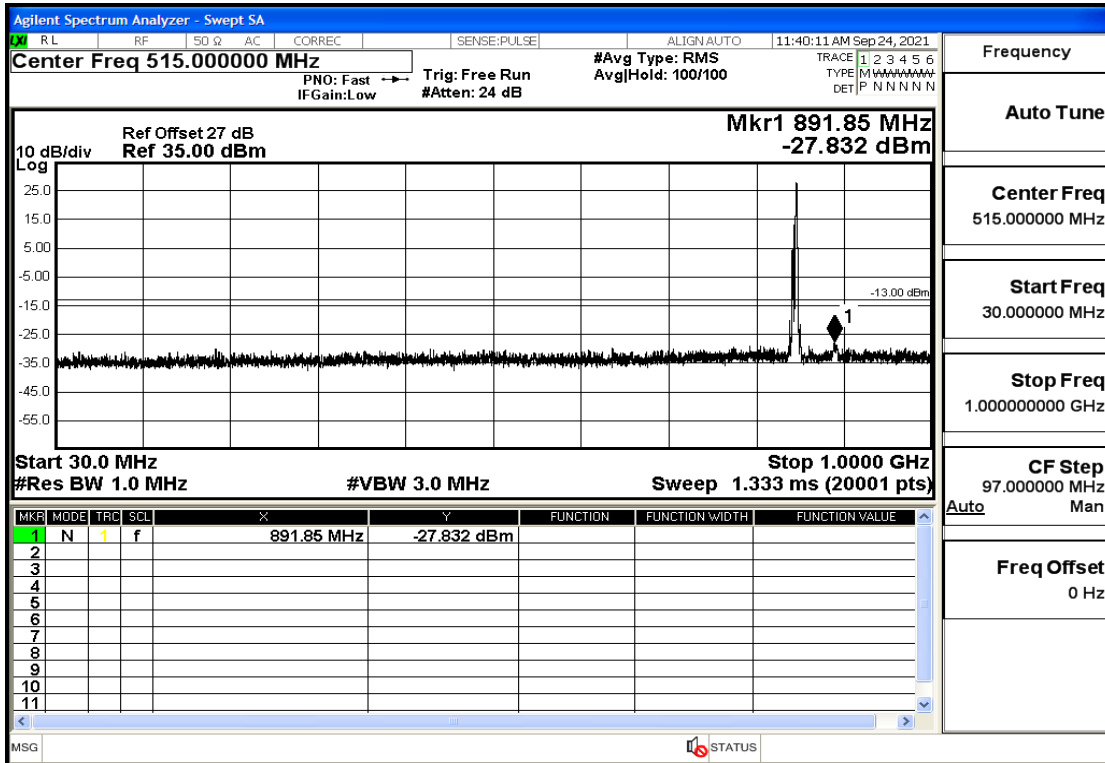
OB5-5-846.5-QPSK-1#0@30mHz-1GHz@Pass



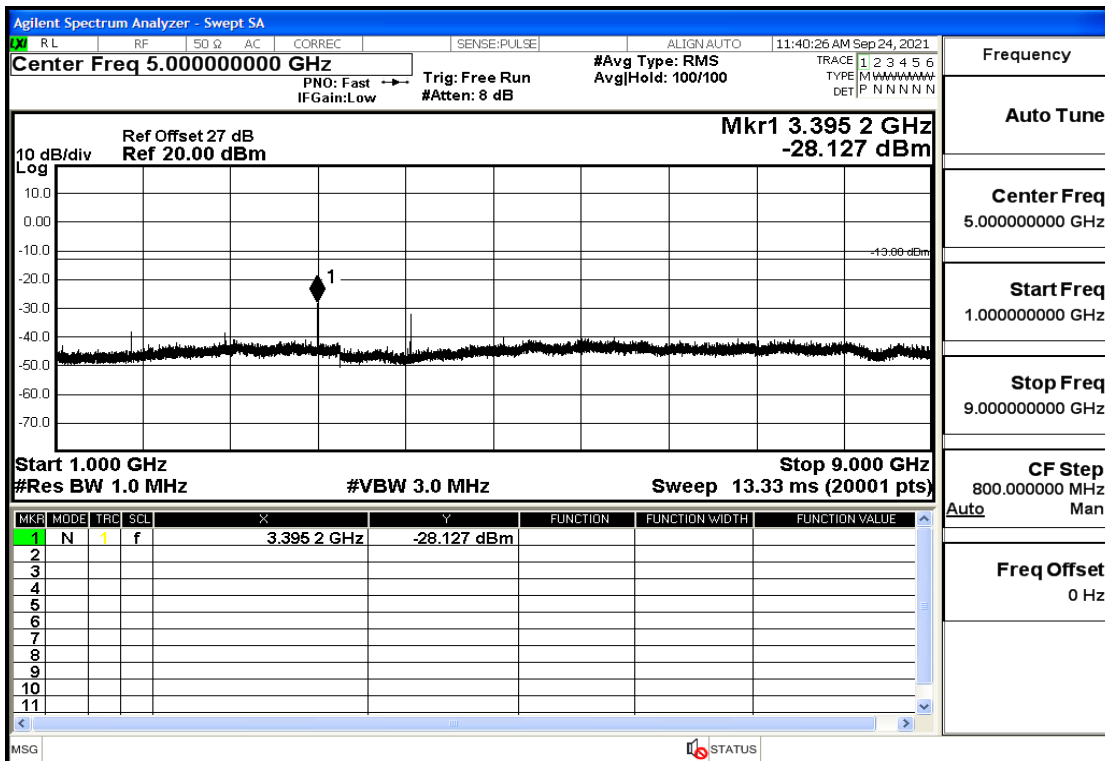
OB5-5-846.5-QPSK-1#0@1GHz-9GHz@Pass



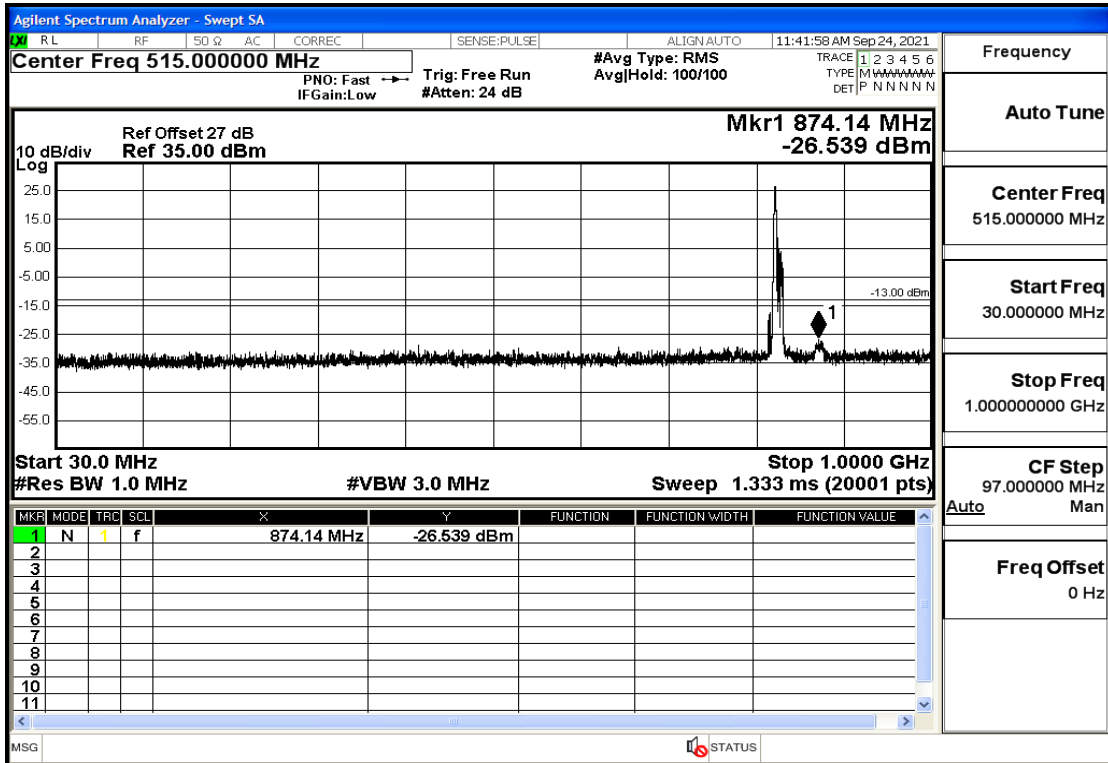
OB5-5-846.5-QPSK-1#24@30mHz-1GHz@Pass



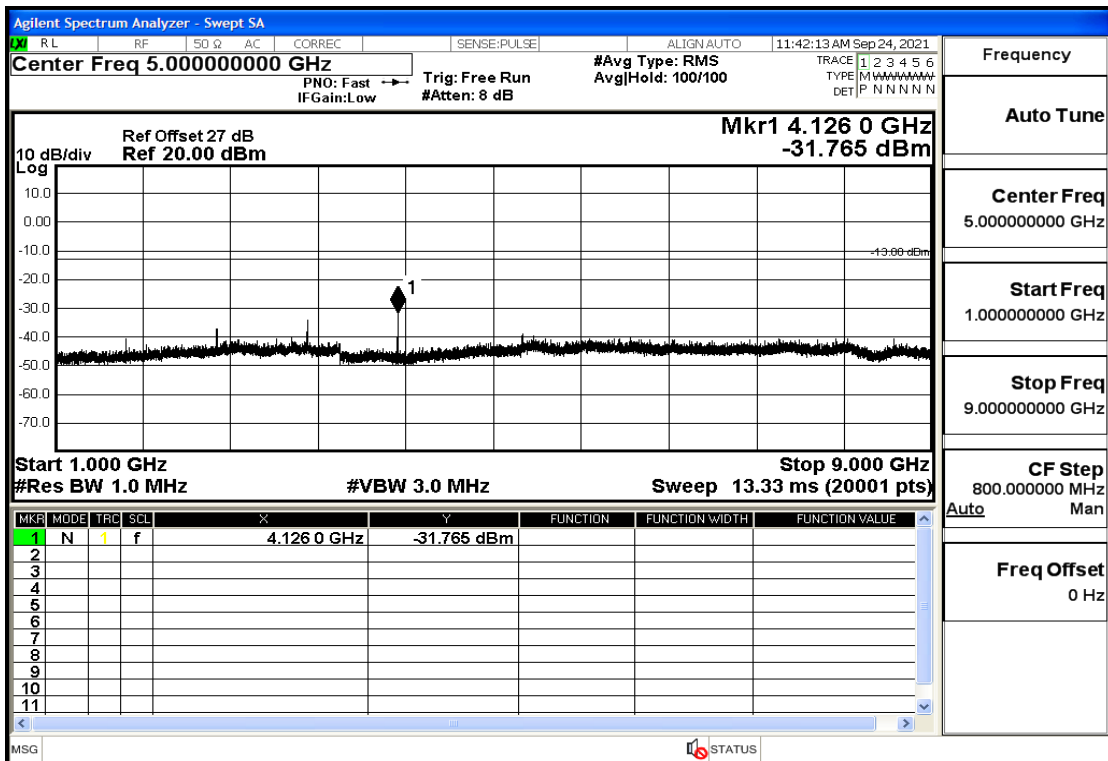
OB5-5-846.5-QPSK-1#24@1GHz-9GHz@Pass



OB5-10-829-QPSK-50#0@30mHz-1GHz@Pass

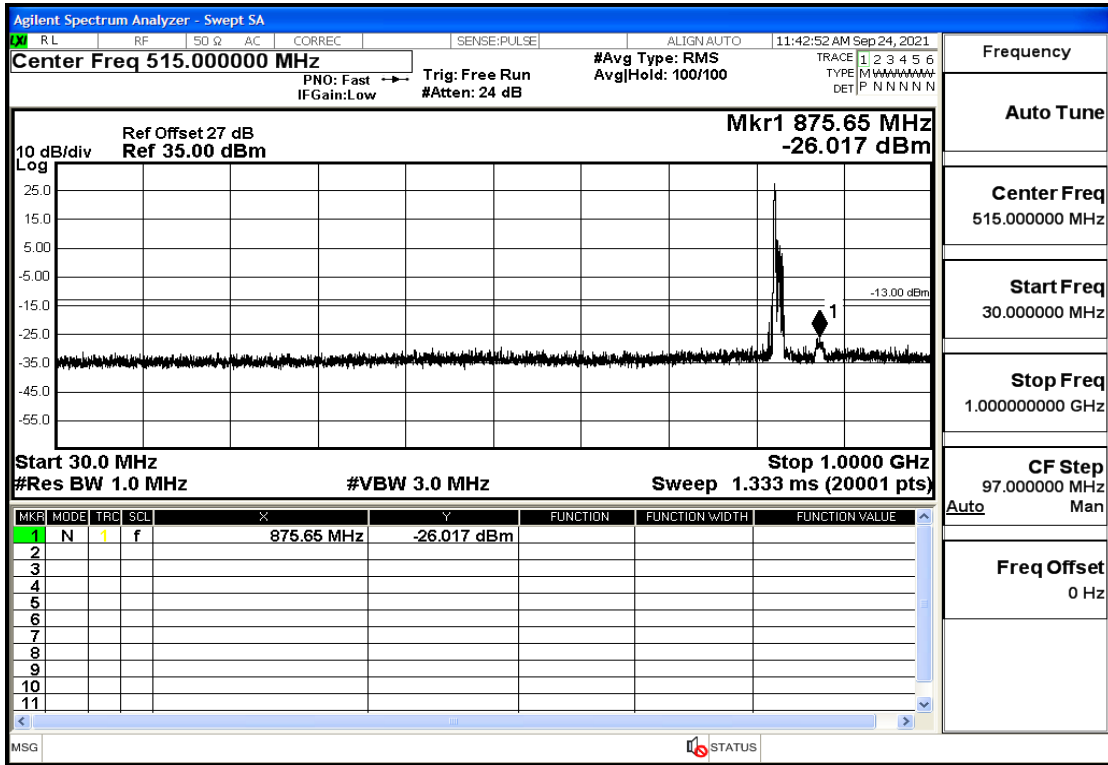


OB5-10-829-QPSK-50#0@1GHz-9GHz@Pass

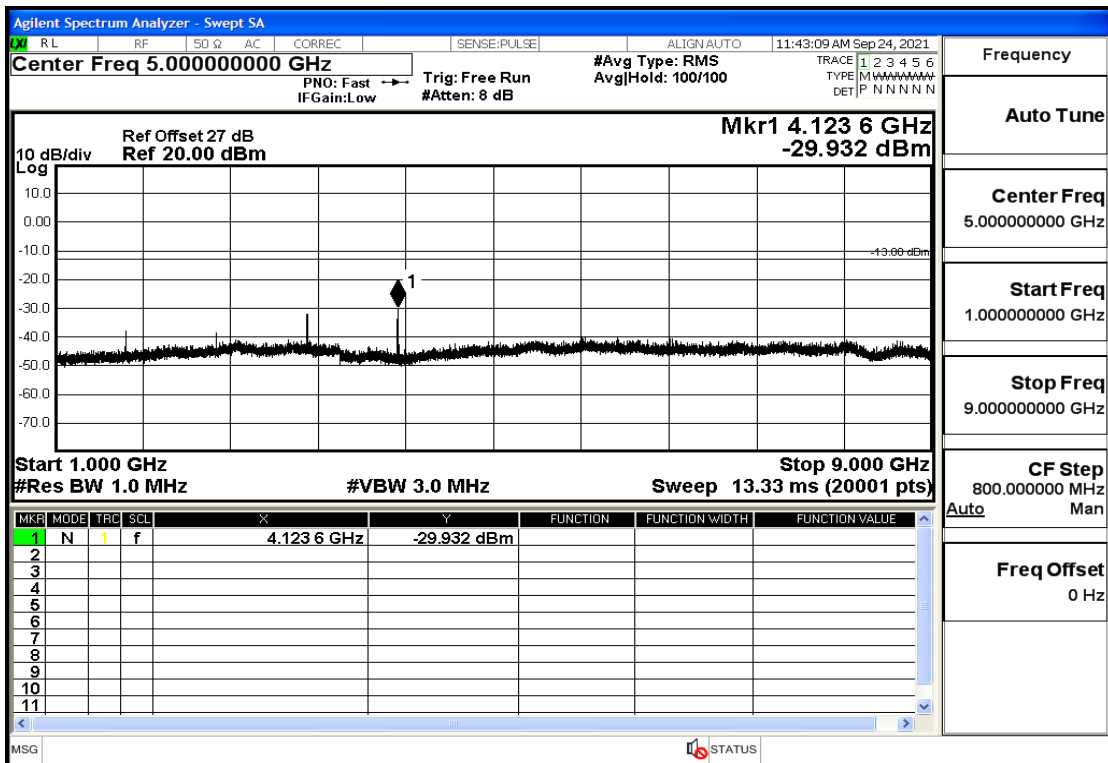




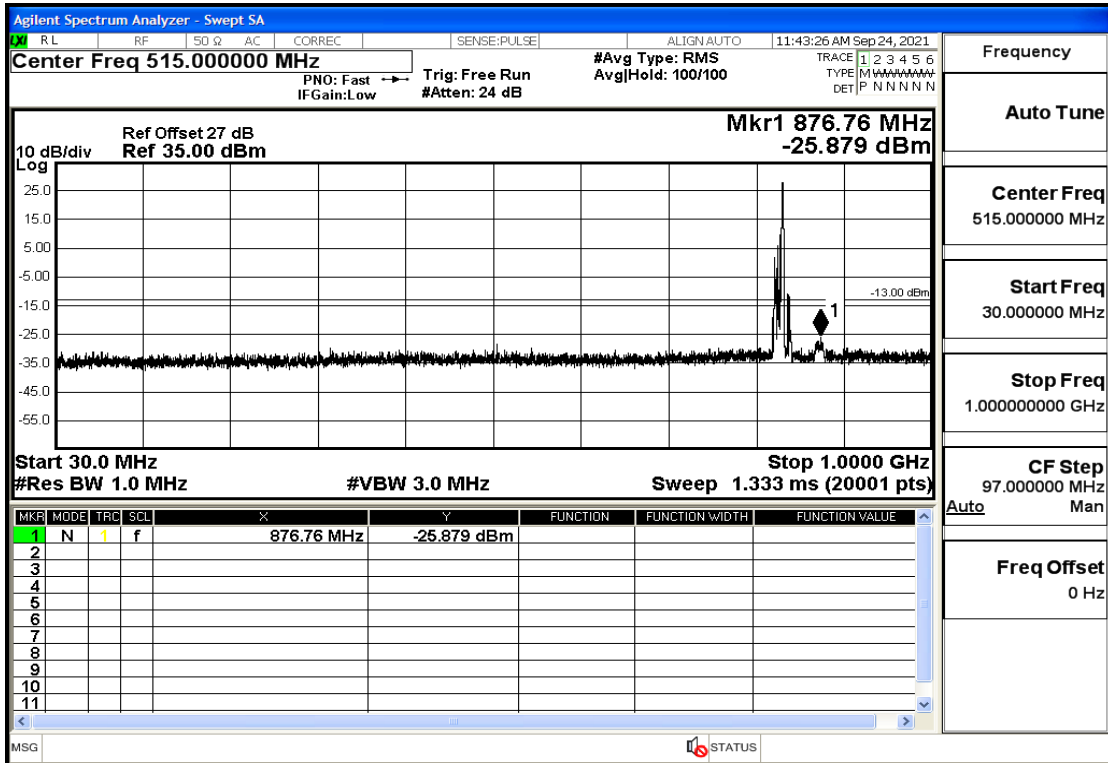
OB5-10-829-QPSK-1#0@30mHz-1GHz@Pass



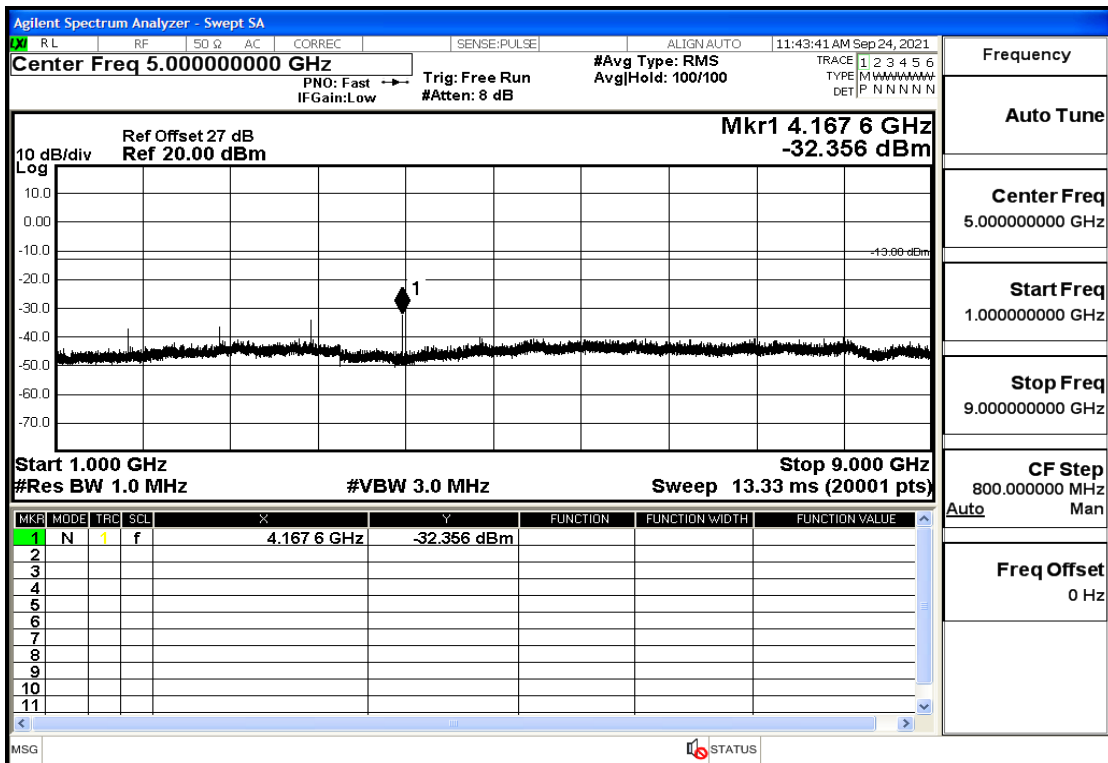
OB5-10-829-QPSK-1#0@1GHz-9GHz@Pass



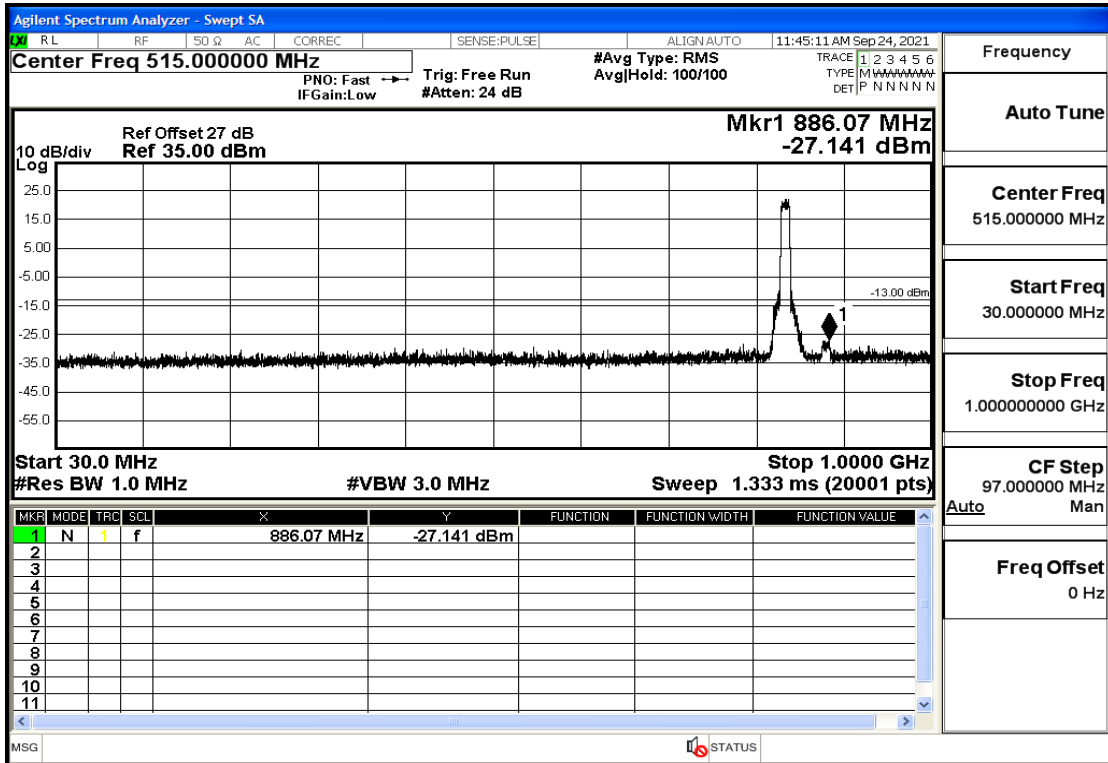
OB5-10-829-QPSK-1#49@30mHz-1GHz@Pass



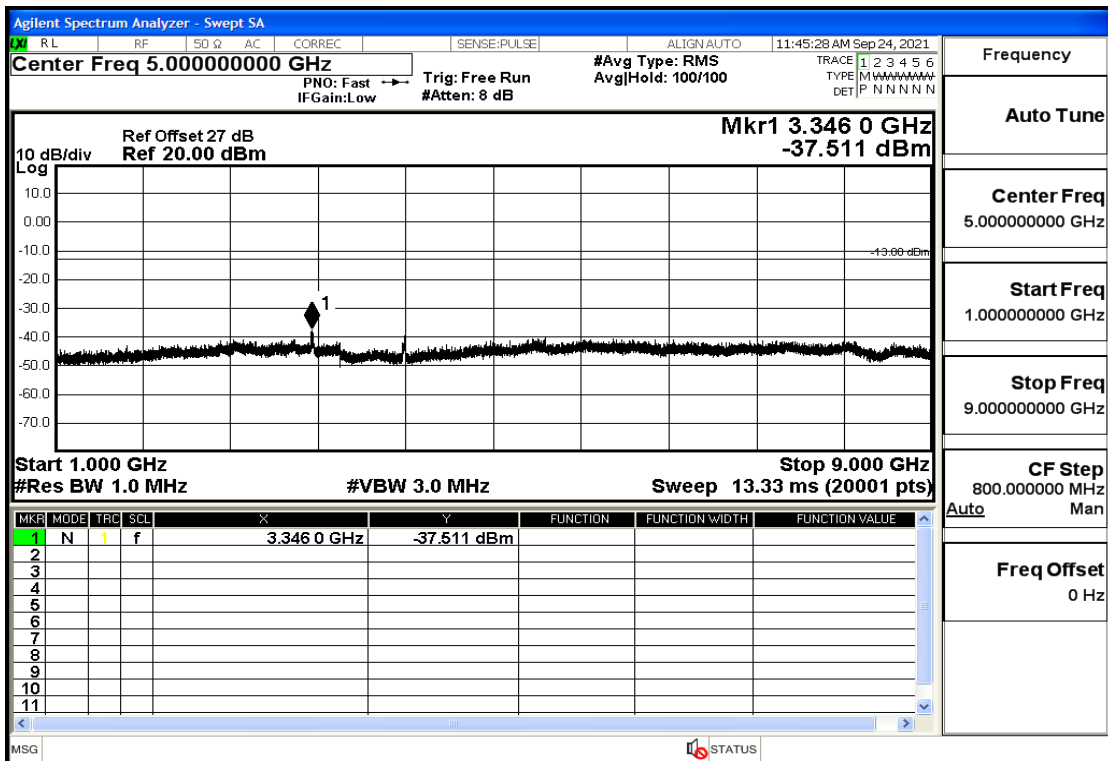
OB5-10-829-QPSK-1#49@1GHz-9GHz@Pass



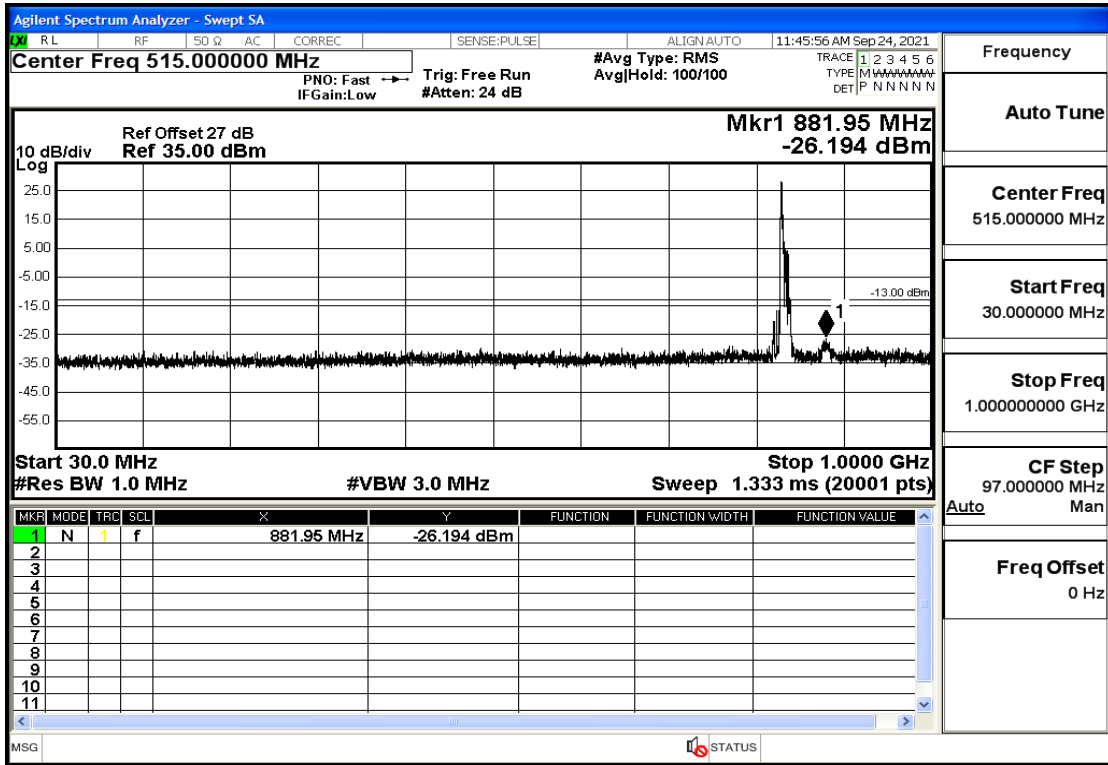
OB5-10-836.5-QPSK-50#0@30mHz-1GHz@Pass



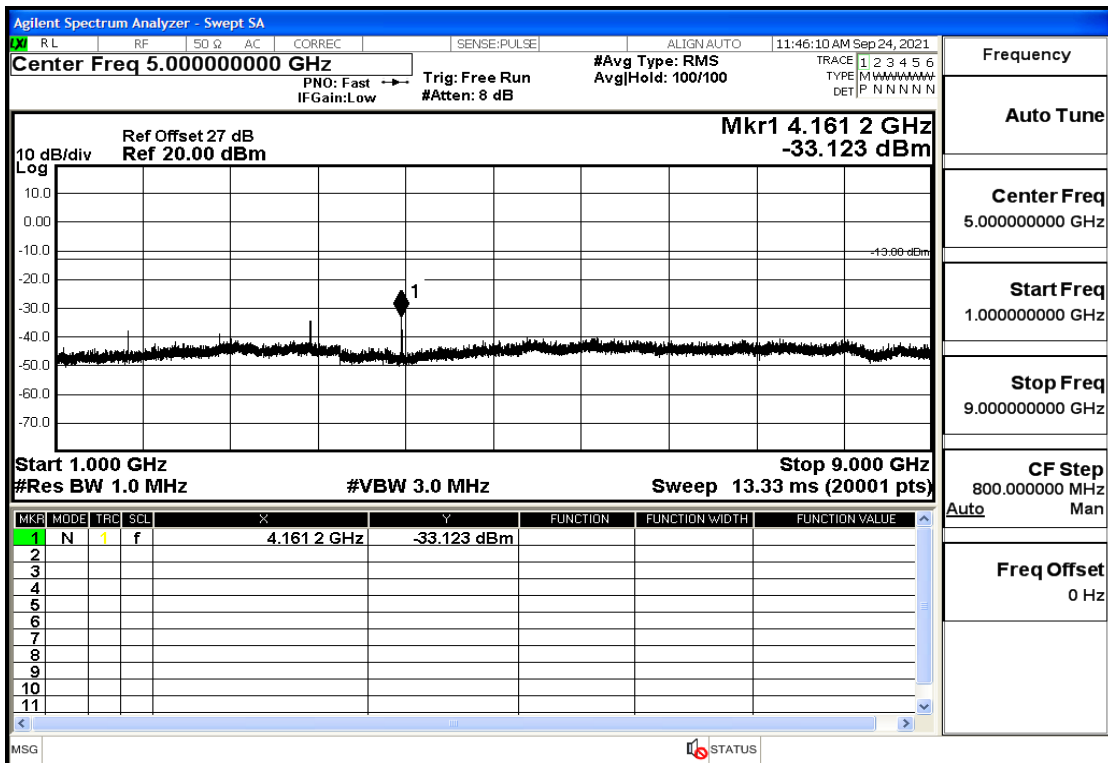
OB5-10-836.5-QPSK-50#0@1GHz-9GHz@Pass



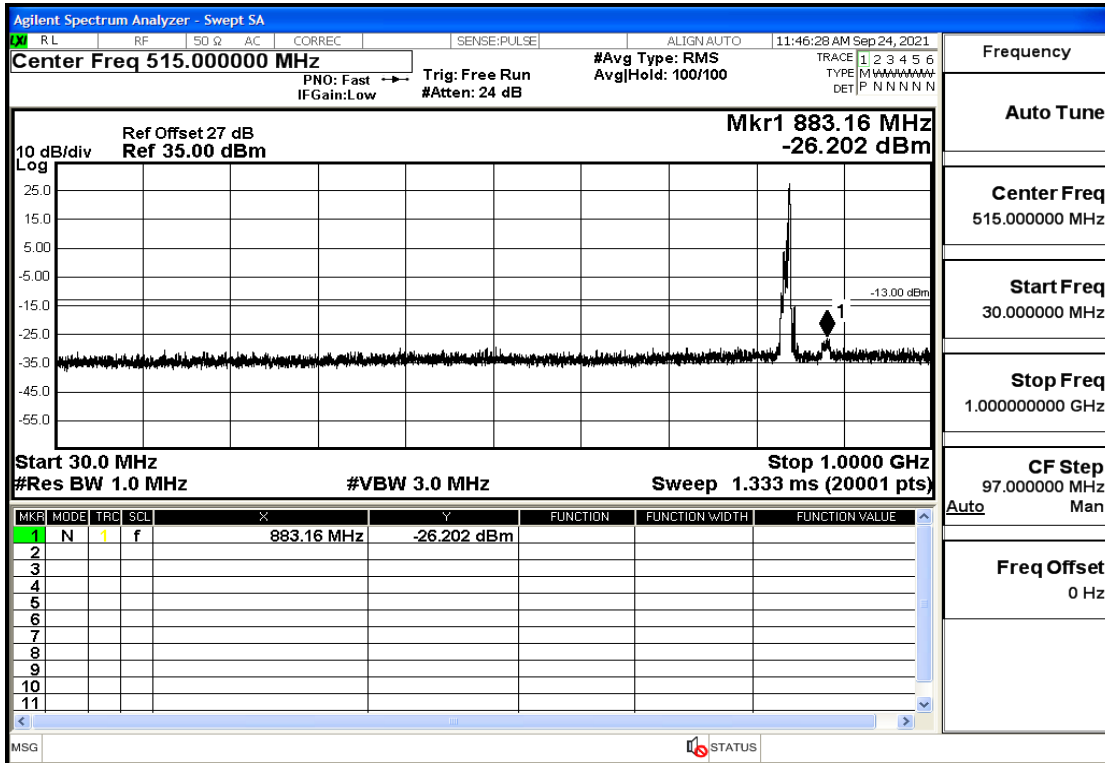
OB5-10-836.5-QPSK-1#0@30mHz-1GHz@Pass



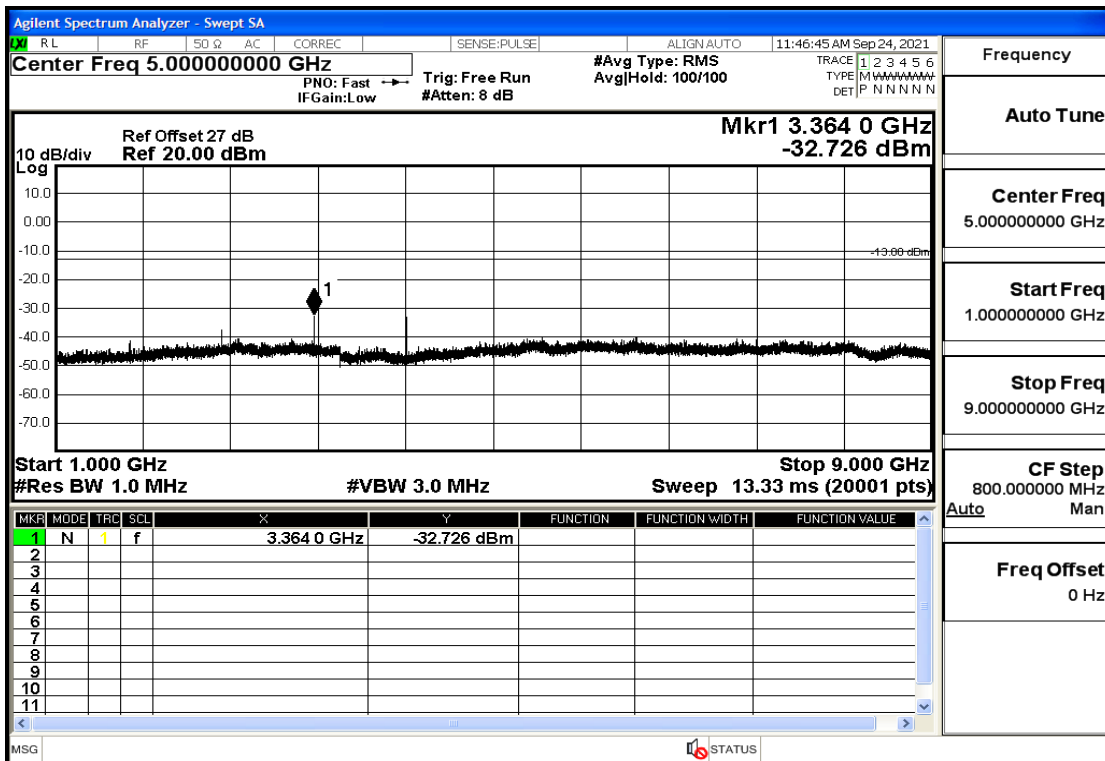
OB5-10-836.5-QPSK-1#0@1GHz-9GHz@Pass



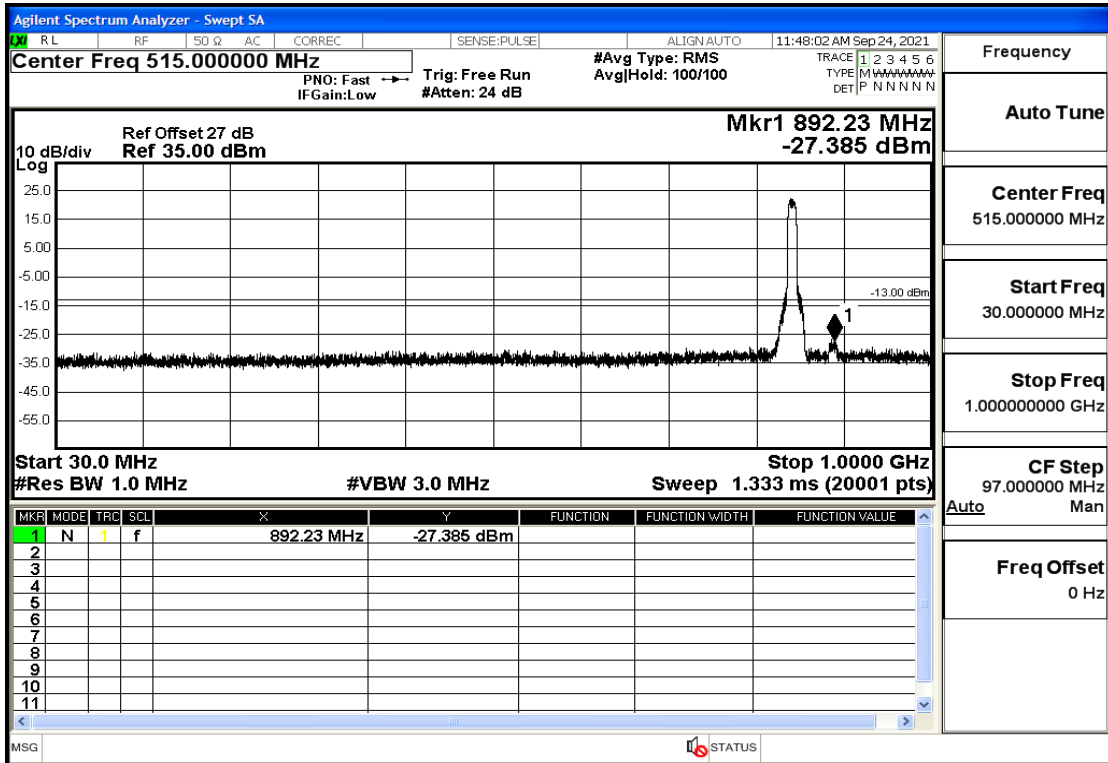
OB5-10-836.5-QPSK-1#49@30mHz-1GHz@Pass



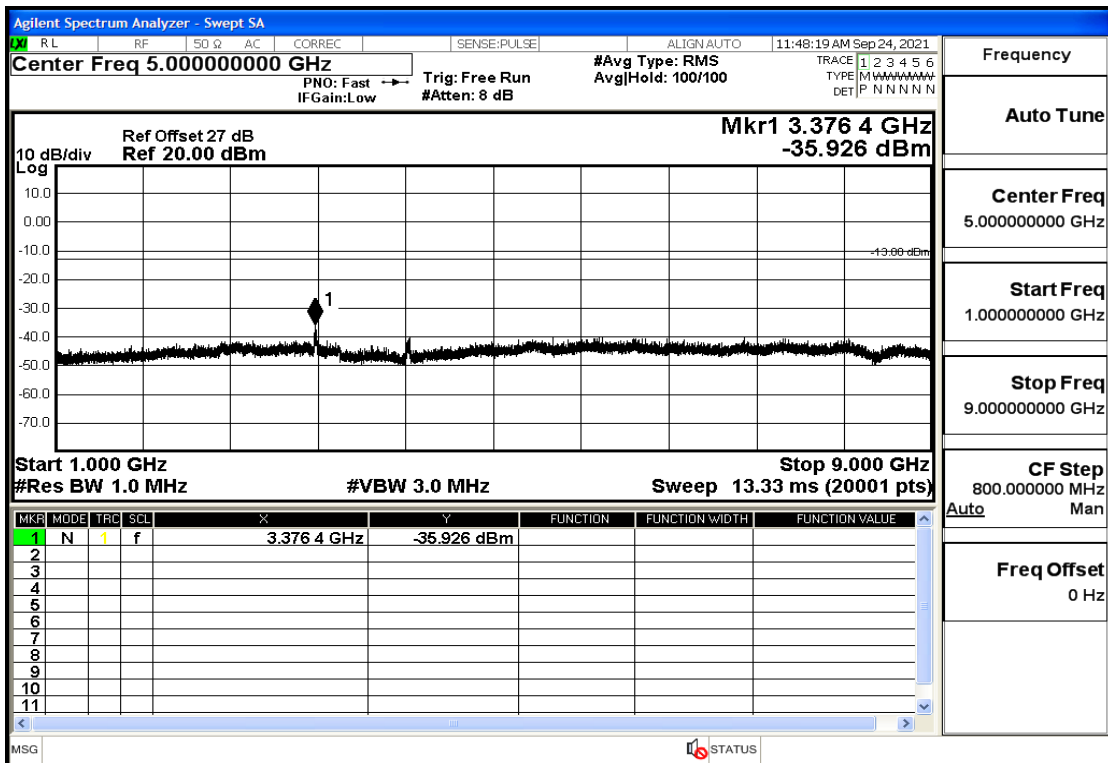
OB5-10-836.5-QPSK-1#49@1GHz-9GHz@Pass



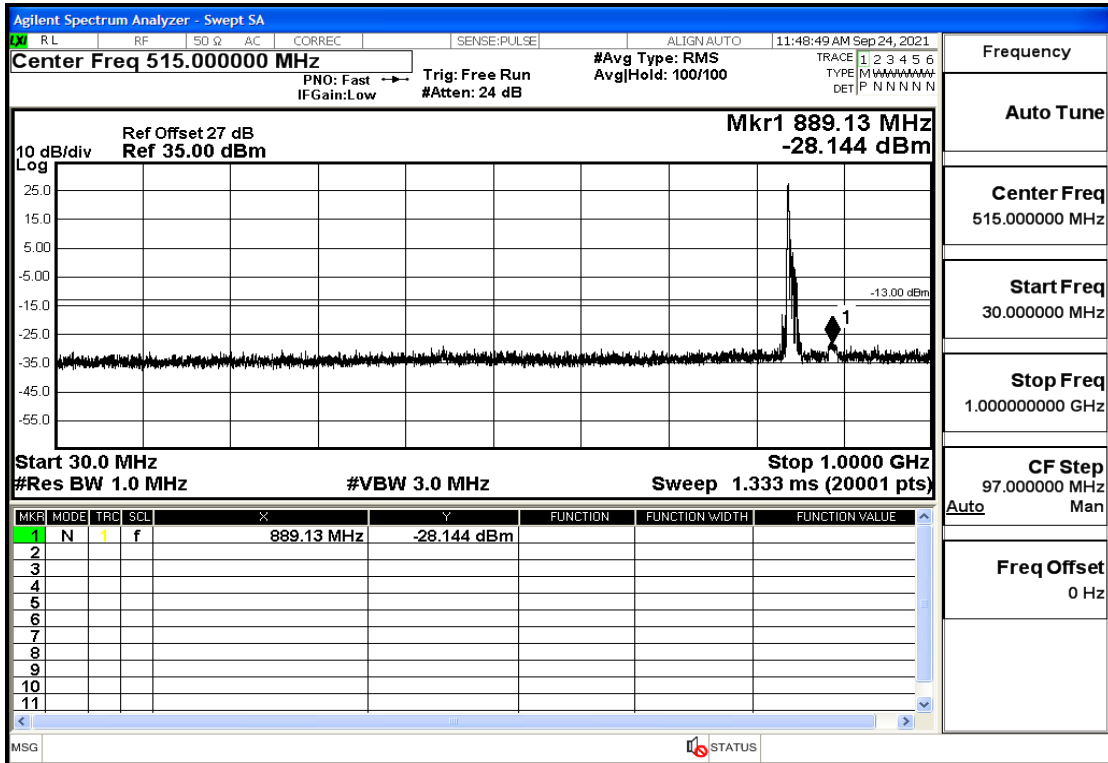
OB5-10-844-QPSK-50#0@30mHz-1GHz@Pass



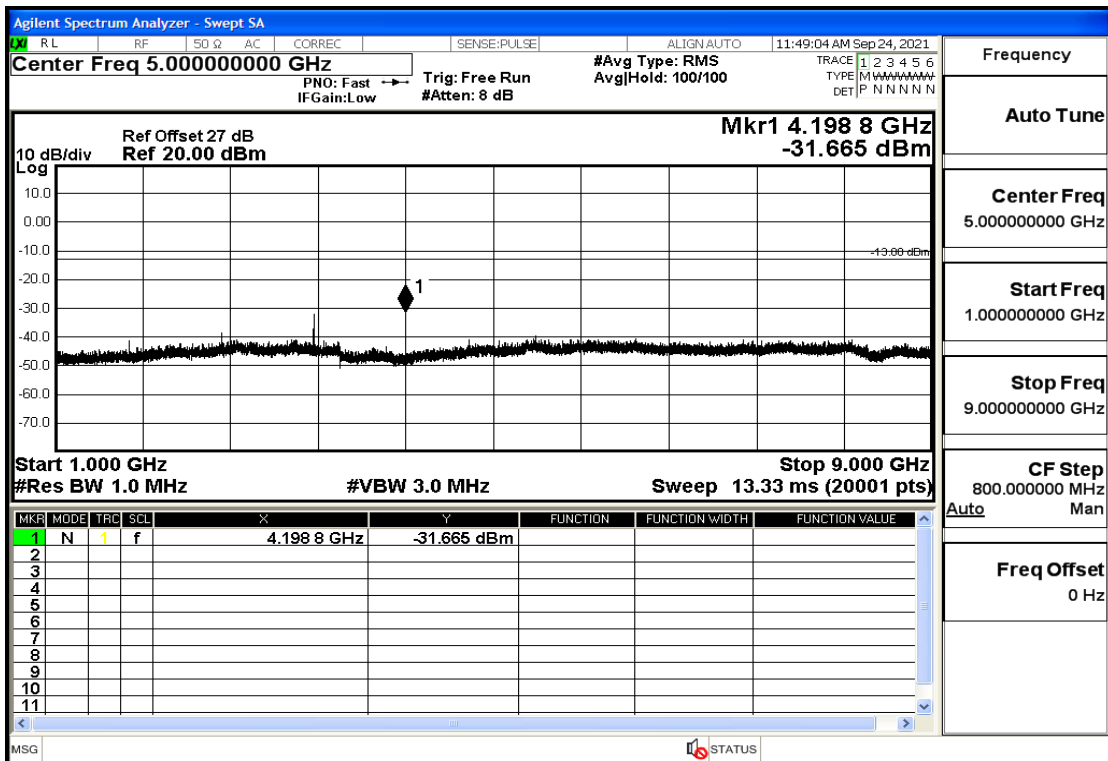
OB5-10-844-QPSK-50#0@1GHz-9GHz@Pass



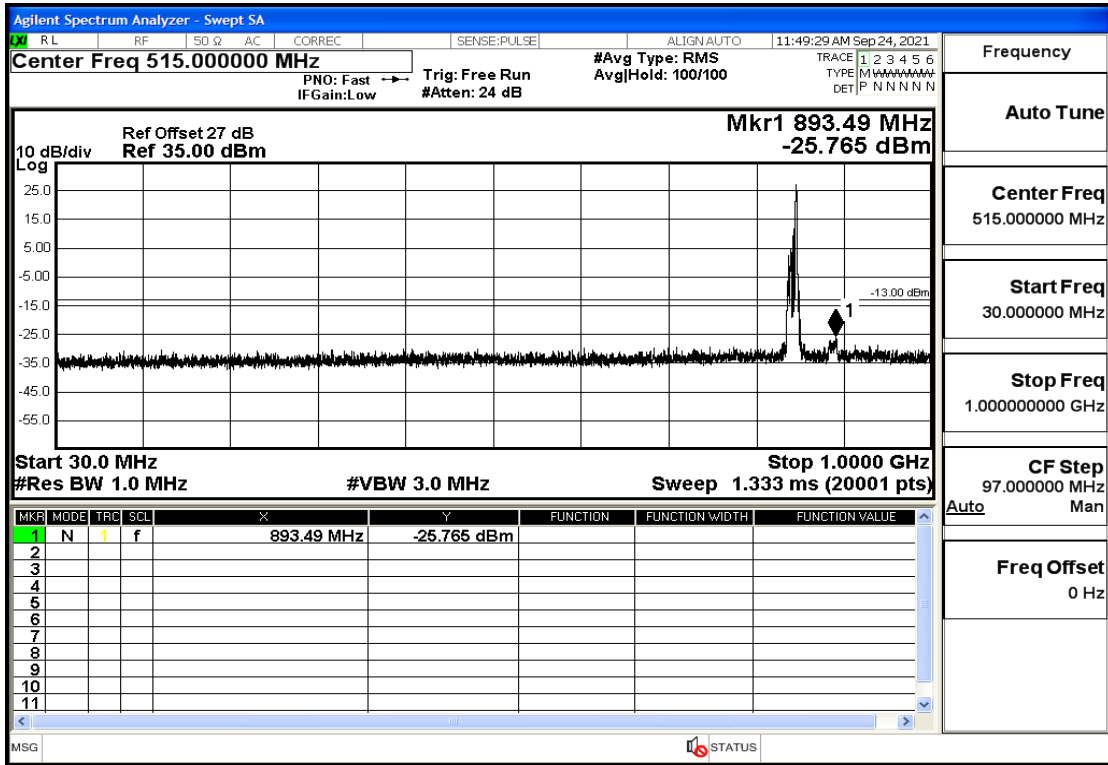
OB5-10-844-QPSK-1#0@30mHz-1GHz@Pass



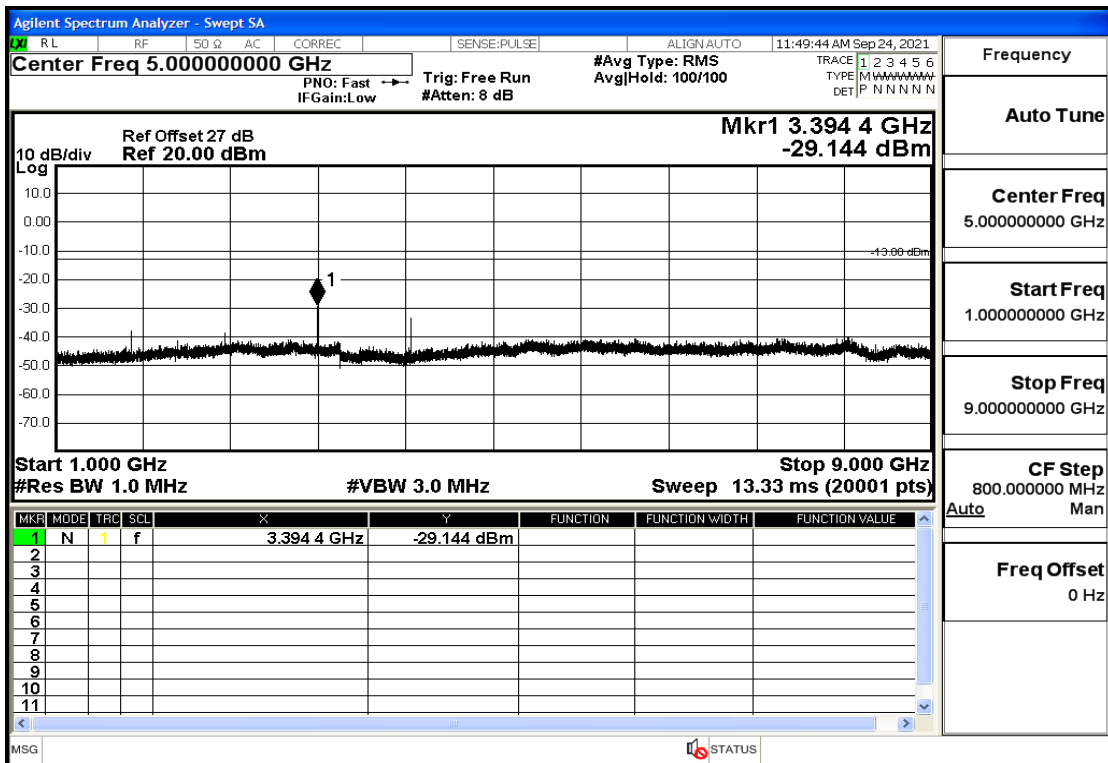
OB5-10-844-QPSK-1#0@1GHz-9GHz@Pass



OB5-10-844-QPSK-1#49@30mHz-1GHz@Pass



OB5-10-844-QPSK-1#49@1GHz-9GHz@Pass

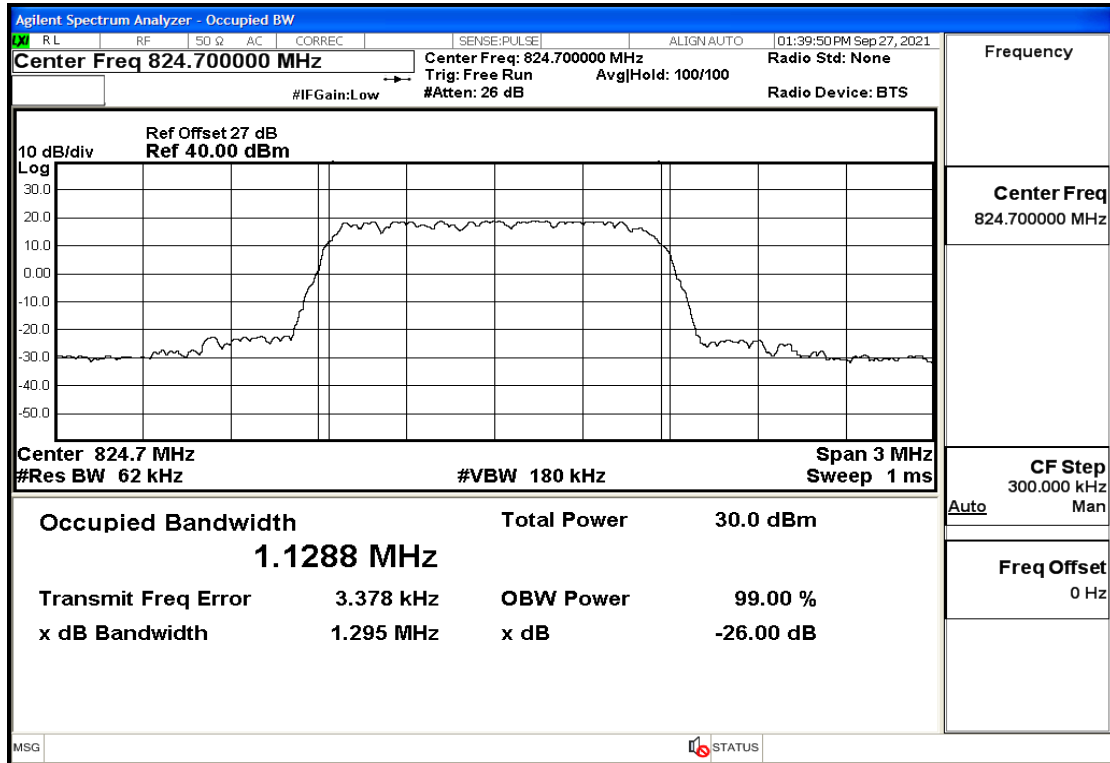




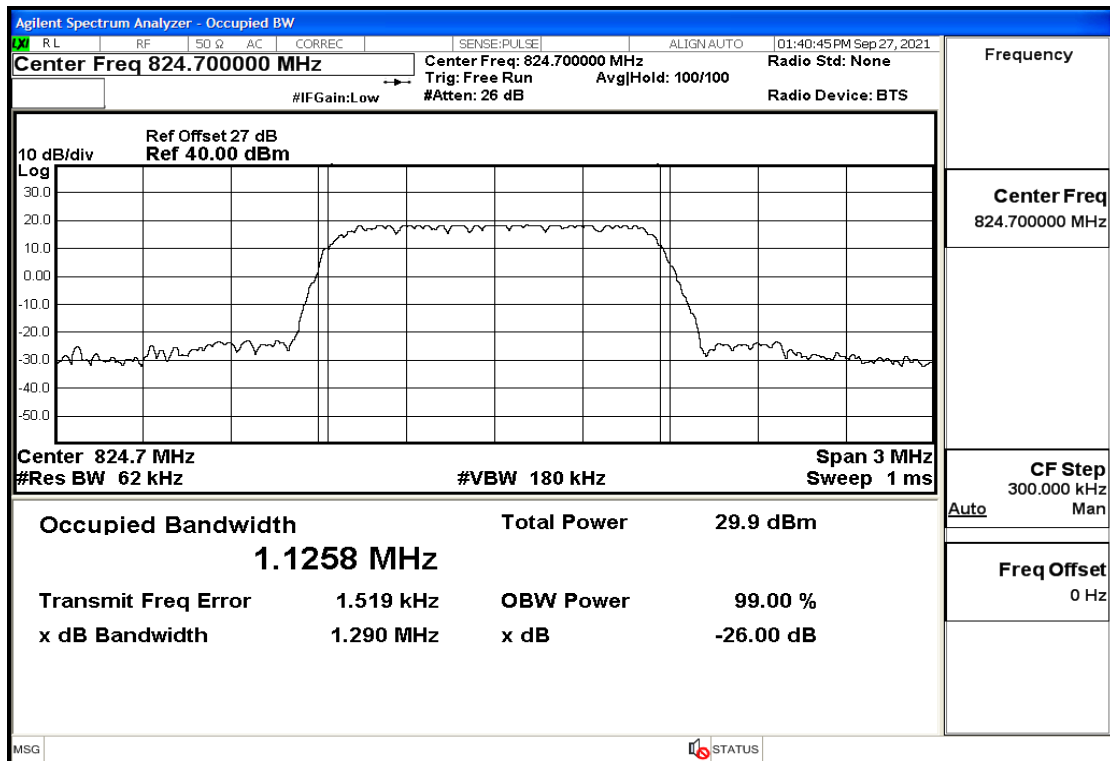
### Emission bandwidth and OBW

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	1128.8	1295	No limit
Band5	1.4	824.7	16QAM	6	LOW	1125.8	1290	No limit
Band5	1.4	836.5	QPSK	6	LOW	1121.7	1288	No limit
Band5	1.4	836.5	16QAM	6	LOW	1123.9	1301	No limit
Band5	1.4	848.3	QPSK	6	LOW	1120.4	1291	No limit
Band5	1.4	848.3	16QAM	6	LOW	1110.8	1278	No limit
Band5	3	825.5	QPSK	15	LOW	2746.1	3086	No limit
Band5	3	825.5	16QAM	15	LOW	2764.7	3080	No limit
Band5	3	836.5	QPSK	15	LOW	2762.6	3103	No limit
Band5	3	836.5	16QAM	15	LOW	2755.1	3118	No limit
Band5	3	847.5	QPSK	15	LOW	2771	3115	No limit
Band5	3	847.5	16QAM	15	LOW	2751.6	3107	No limit
Band5	5	826.5	QPSK	25	LOW	4588.7	5062	No limit
Band5	5	826.5	16QAM	25	LOW	4570.9	5106	No limit
Band5	5	836.5	QPSK	25	LOW	4586.7	5115	No limit
Band5	5	836.5	16QAM	25	LOW	4584.3	5068	No limit
Band5	5	846.5	QPSK	25	LOW	4572.1	5078	No limit
Band5	5	846.5	16QAM	25	LOW	4574.1	4988	No limit
Band5	10	829	QPSK	50	LOW	9098.8	10110	No limit
Band5	10	829	16QAM	12	LOW	4238.3	7186	No limit
Band5	10	836.5	QPSK	50	LOW	9075.9	10030	No limit
Band5	10	836.5	16QAM	12	LOW	3965.7	6996	No limit
Band5	10	844	QPSK	50	LOW	9100.6	10060	No limit
Band5	10	844	16QAM	12	LOW	3785.6	6586	No limit

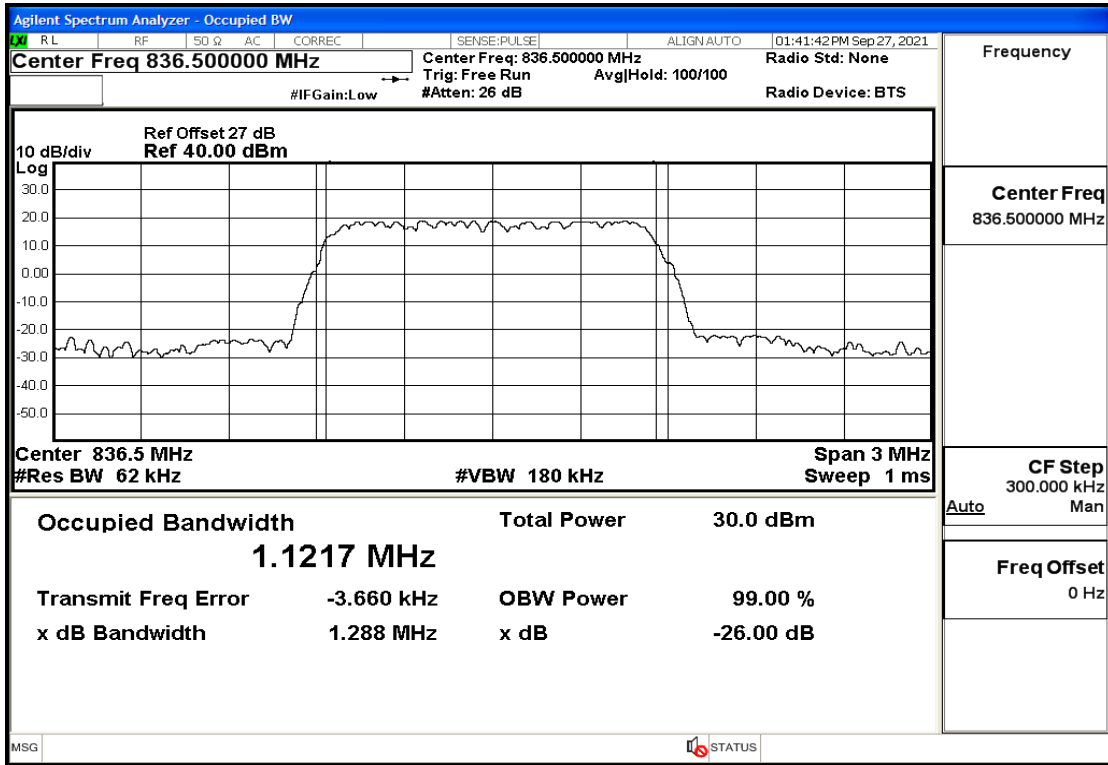
Band5-1.4-824.7-QPSK-6#LOW@26dB and 99PCT Bandwidth



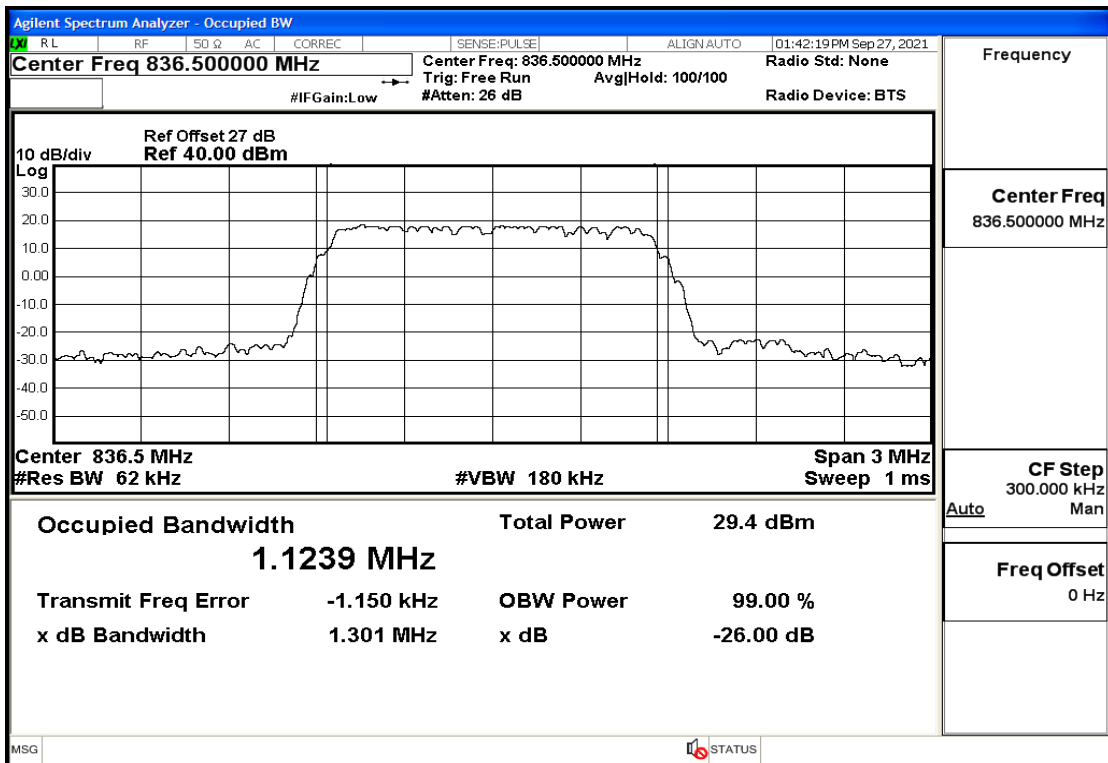
Band5-1.4-824.7-16QAM-6#LOW@26dB and 99PCT Bandwidth



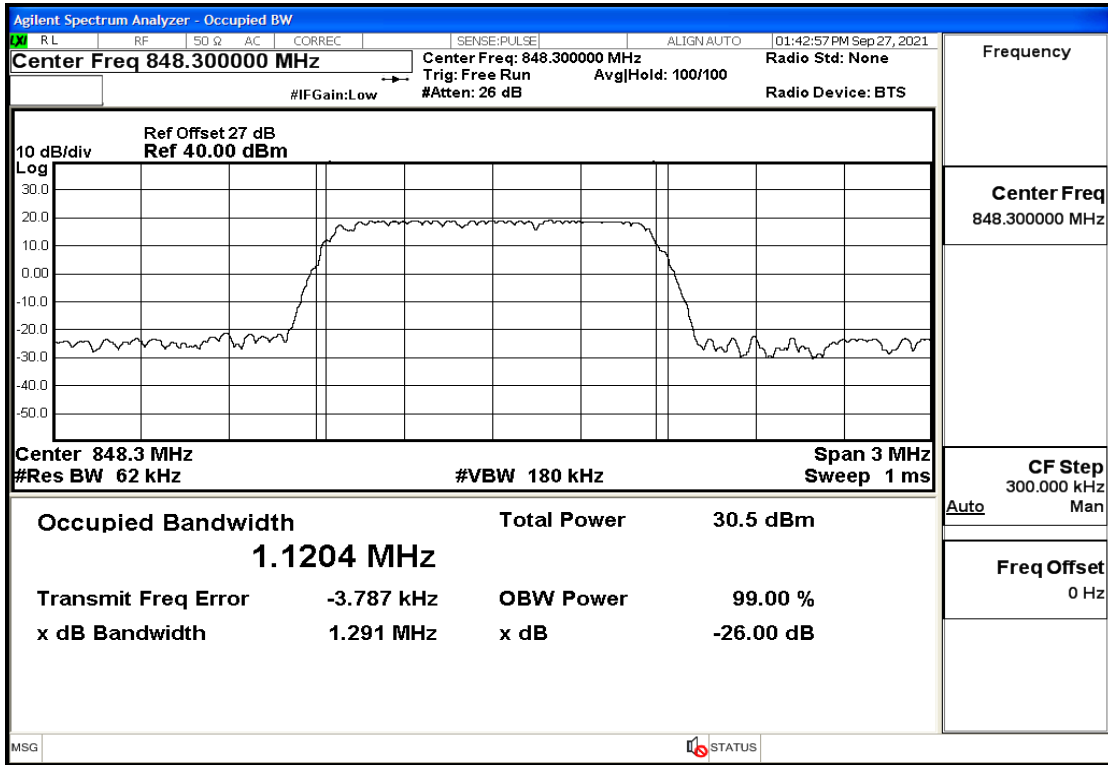
Band5-1.4-836.5-QPSK-6#LOW@26dB and 99PCT Bandwidth



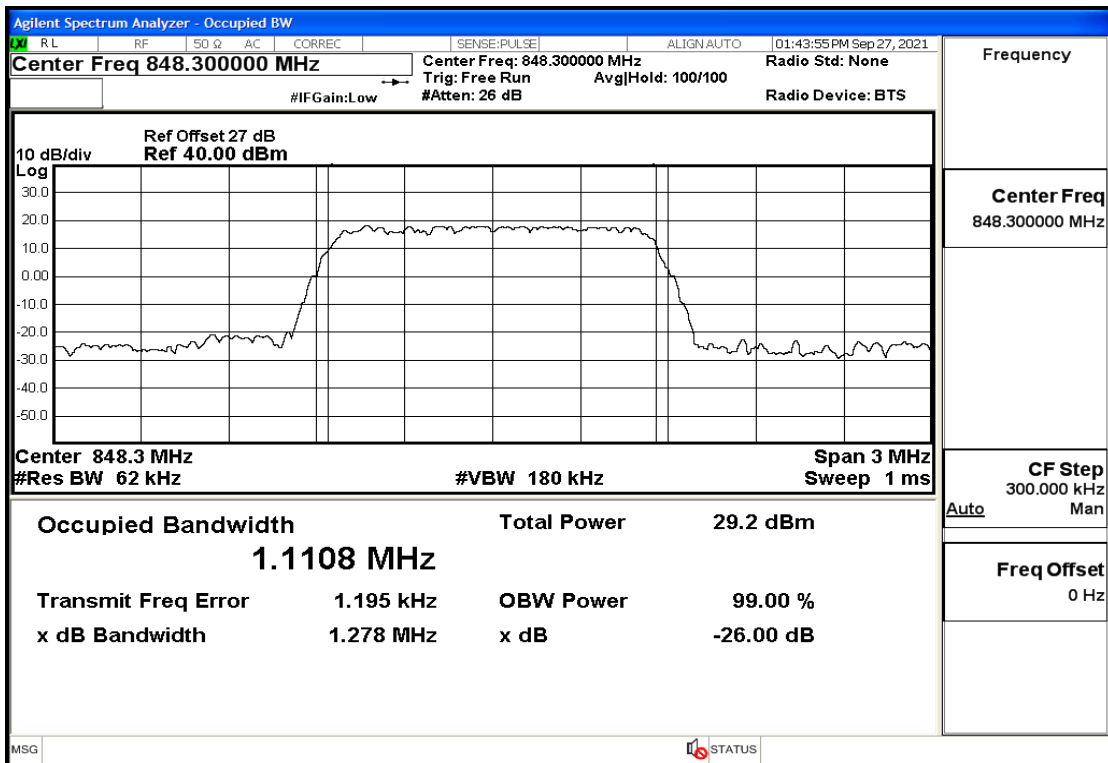
Band5-1.4-836.5-16QAM-6#LOW@26dB and 99PCT Bandwidth



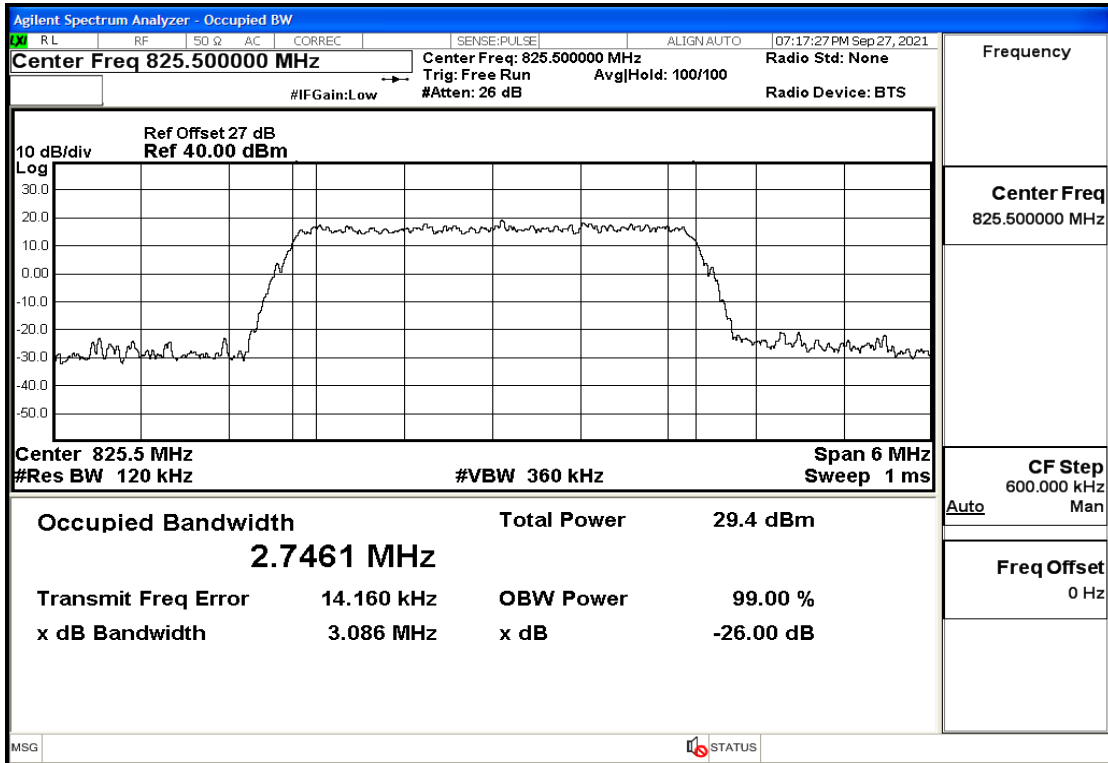
Band5-1.4-848.3-QPSK-6#LOW@26dB and 99PCT Bandwidth



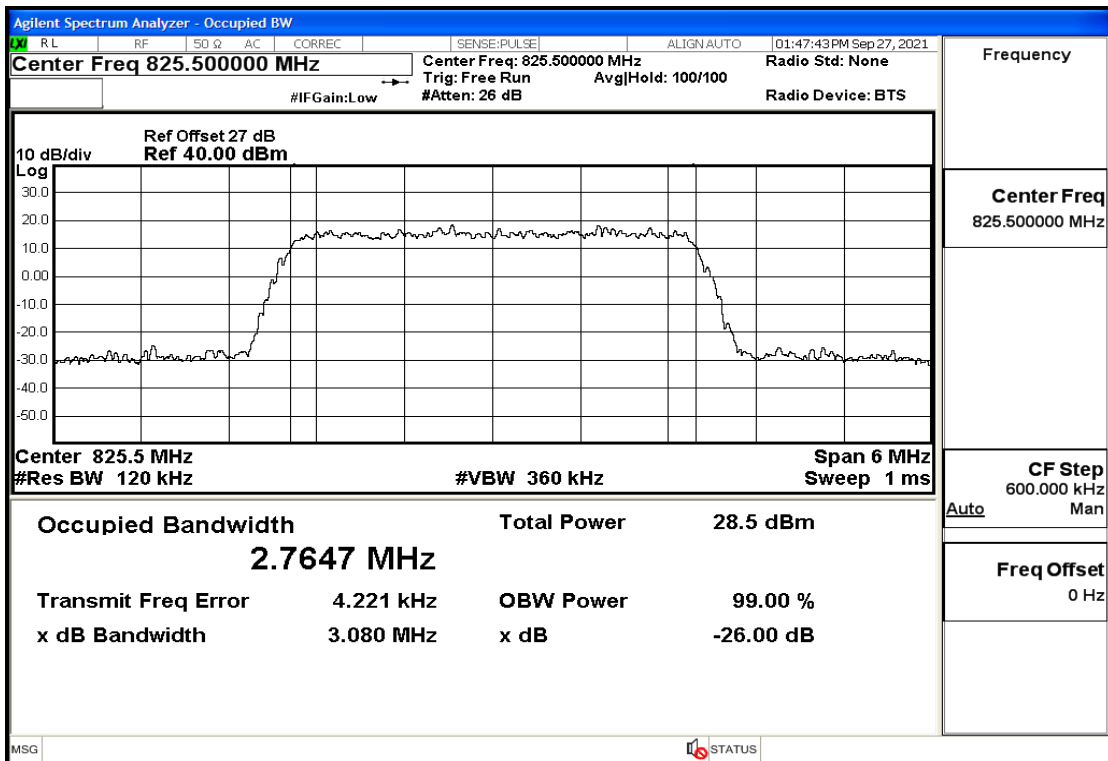
Band5-1.4-848.3-16QAM-6#LOW@26dB and 99PCT Bandwidth



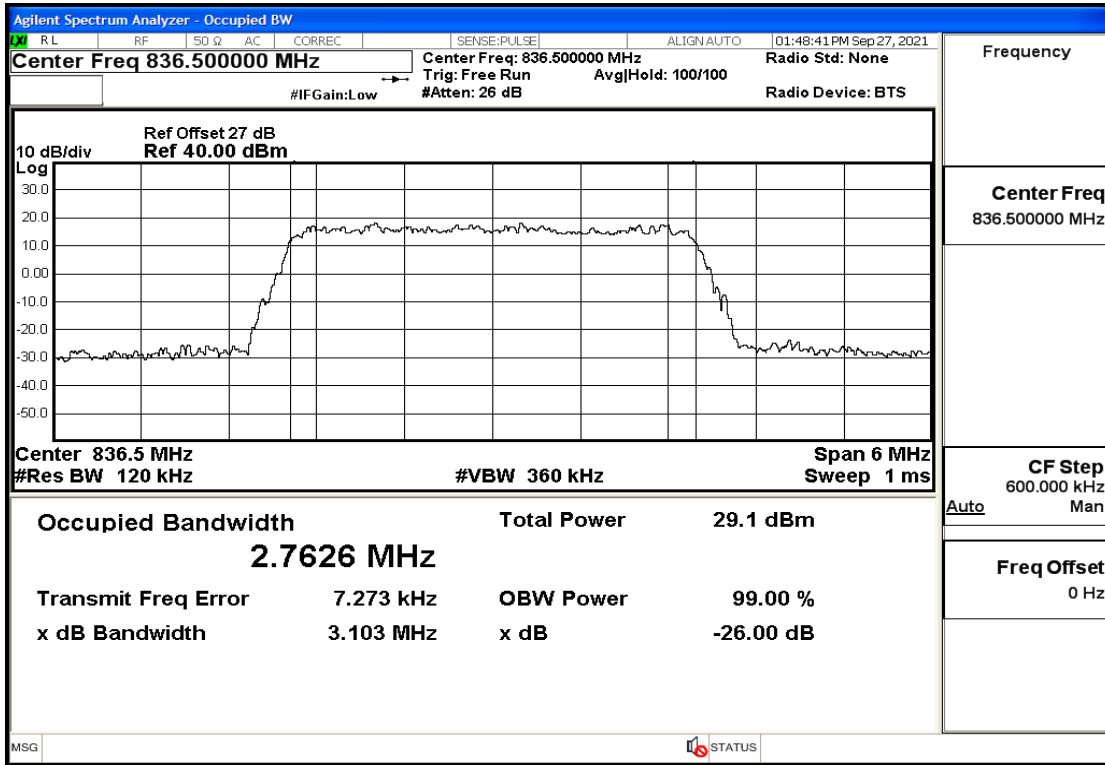
Band5-3-825.5-QPSK-15#LOW@26dB and 99PCT Bandwidth



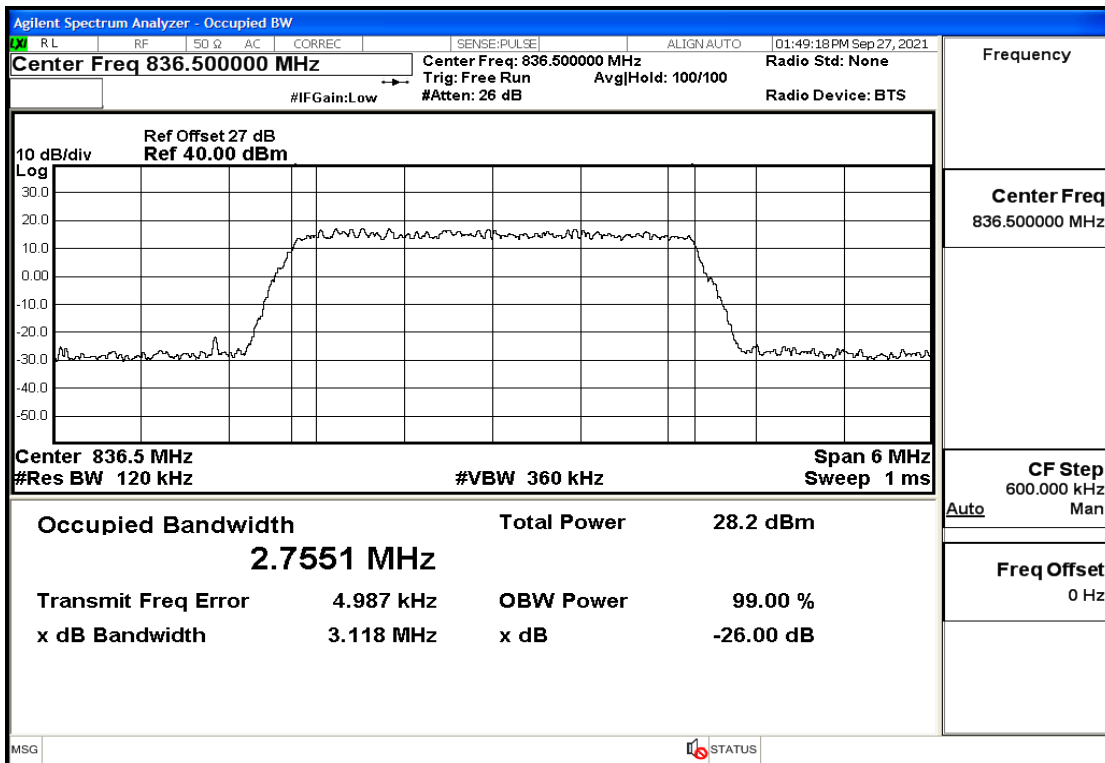
Band5-3-825.5-16QAM-15#LOW@26dB and 99PCT Bandwidth



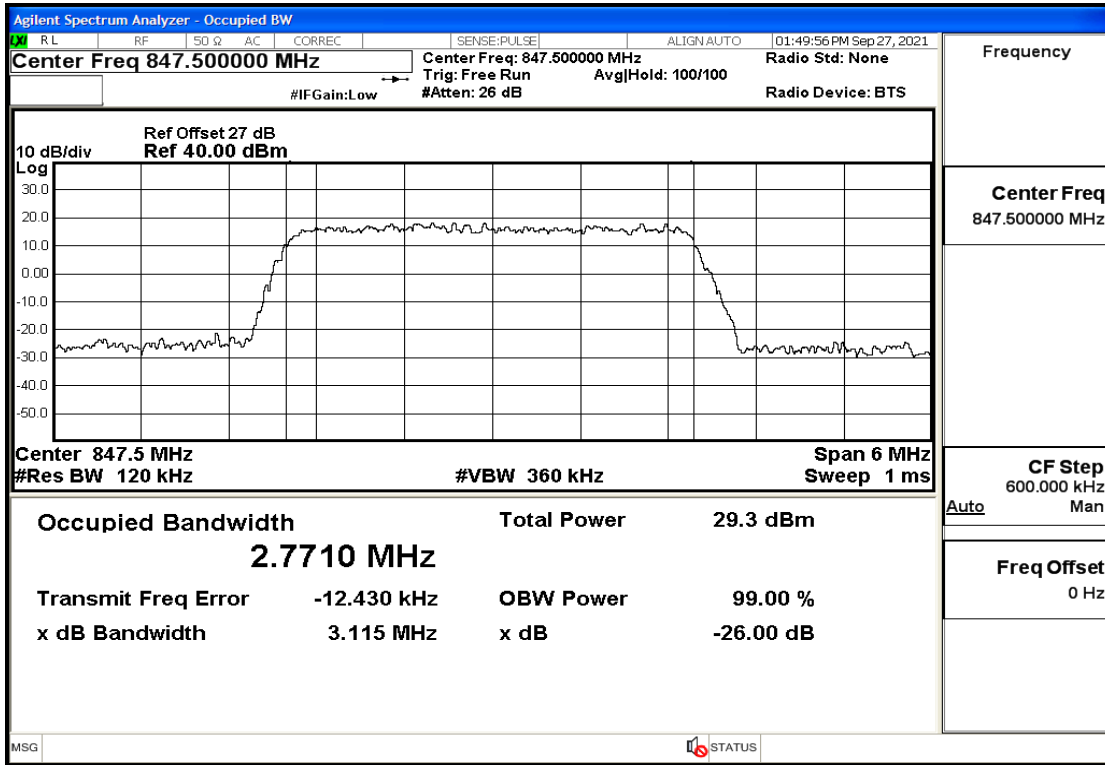
Band5-3-836.5-QPSK-15#LOW@26dB and 99PCT Bandwidth



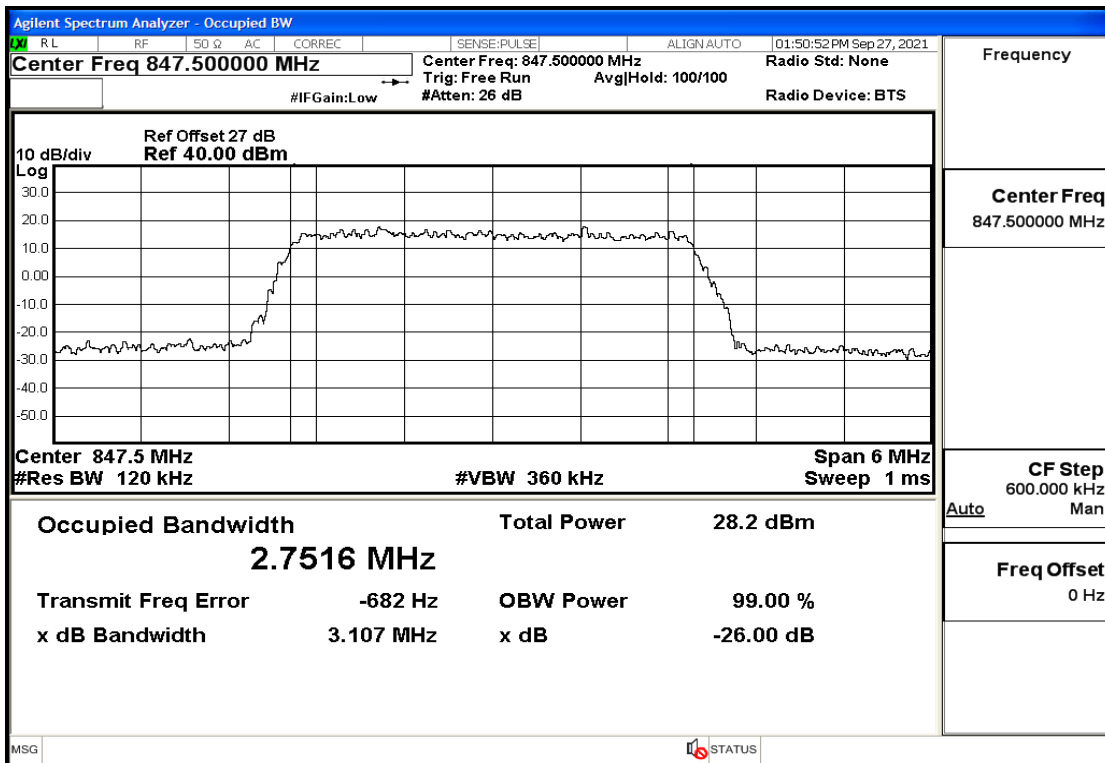
Band5-3-836.5-16QAM-15#LOW@26dB and 99PCT Bandwidth



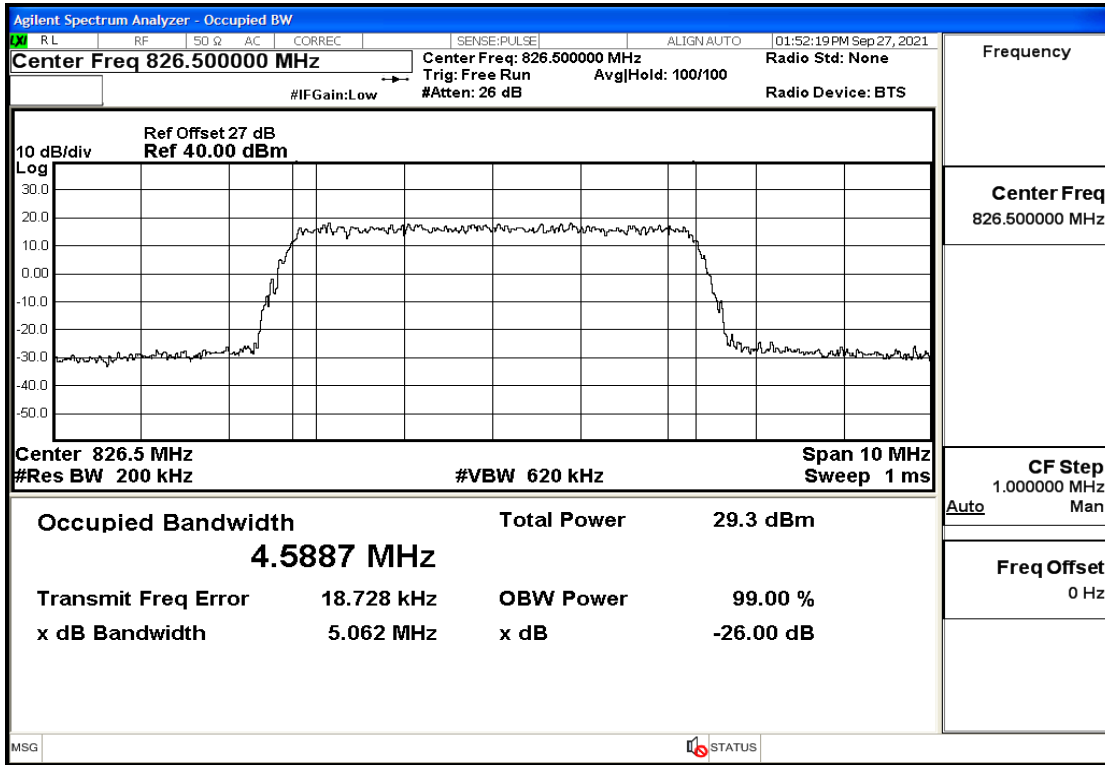
Band5-3-847.5-QPSK-15#LOW@26dB and 99PCT Bandwidth



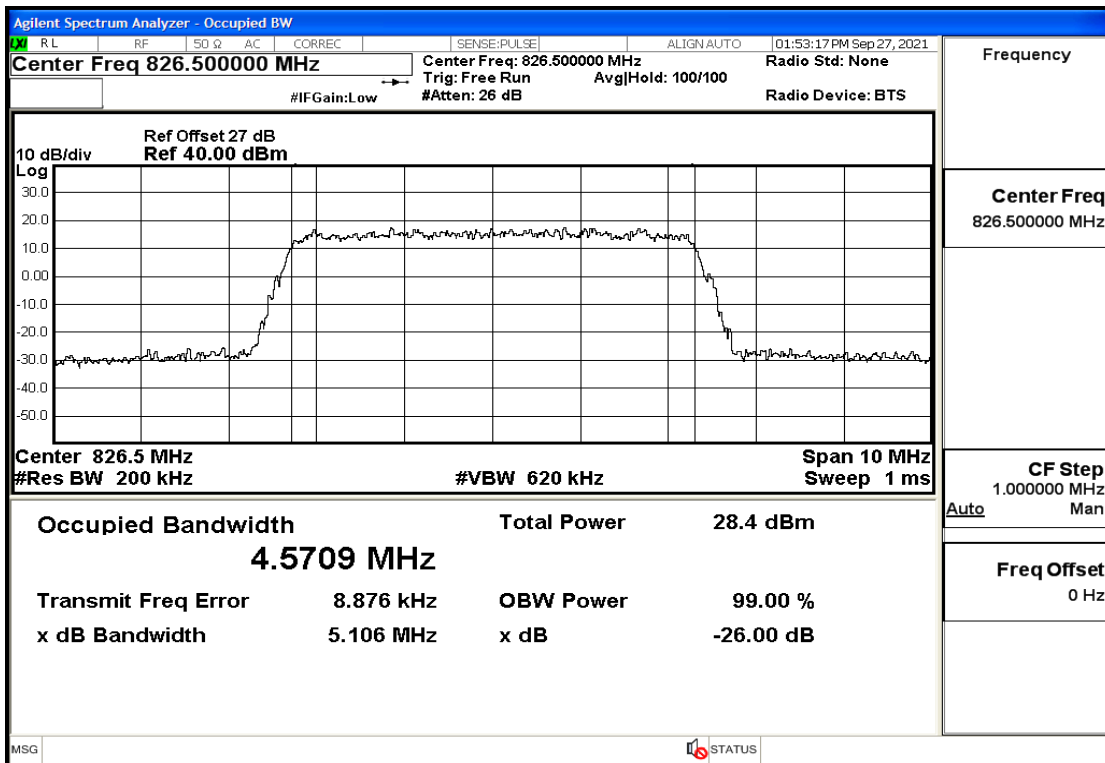
Band5-3-847.5-16QAM-15#LOW@26dB and 99PCT Bandwidth



Band5-5-826.5-QPSK-25#LOW@26dB and 99PCT Bandwidth

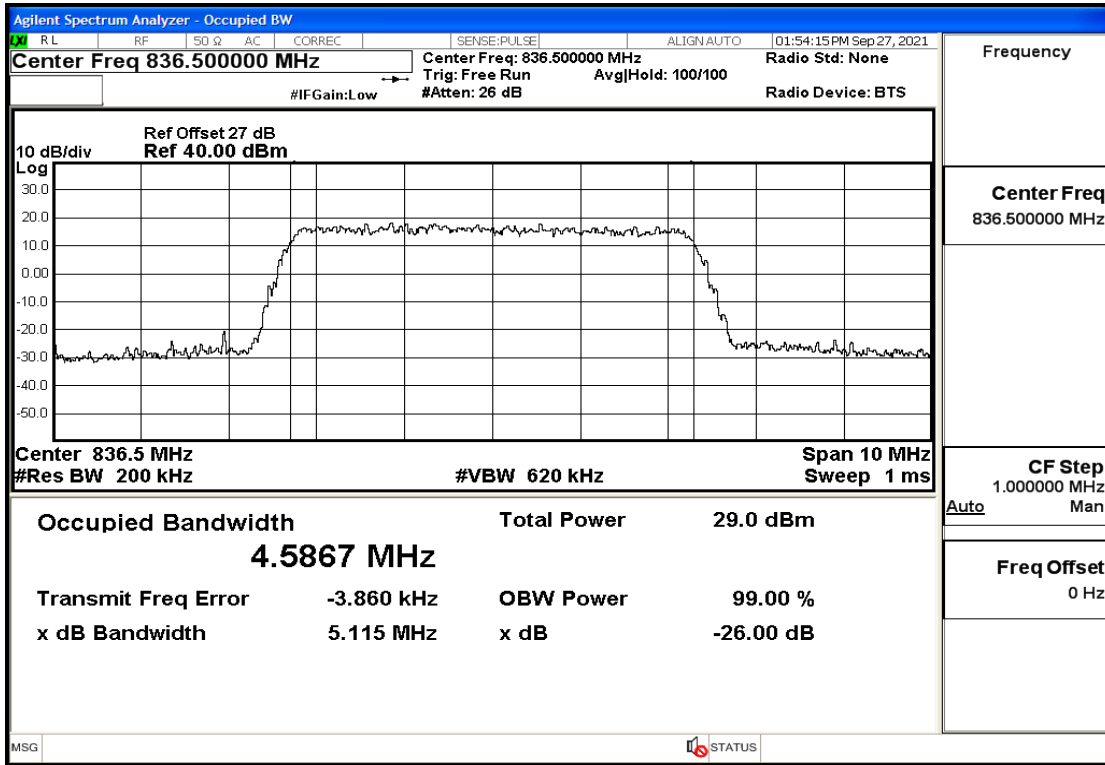


Band5-5-826.5-16QAM-25#LOW@26dB and 99PCT Bandwidth

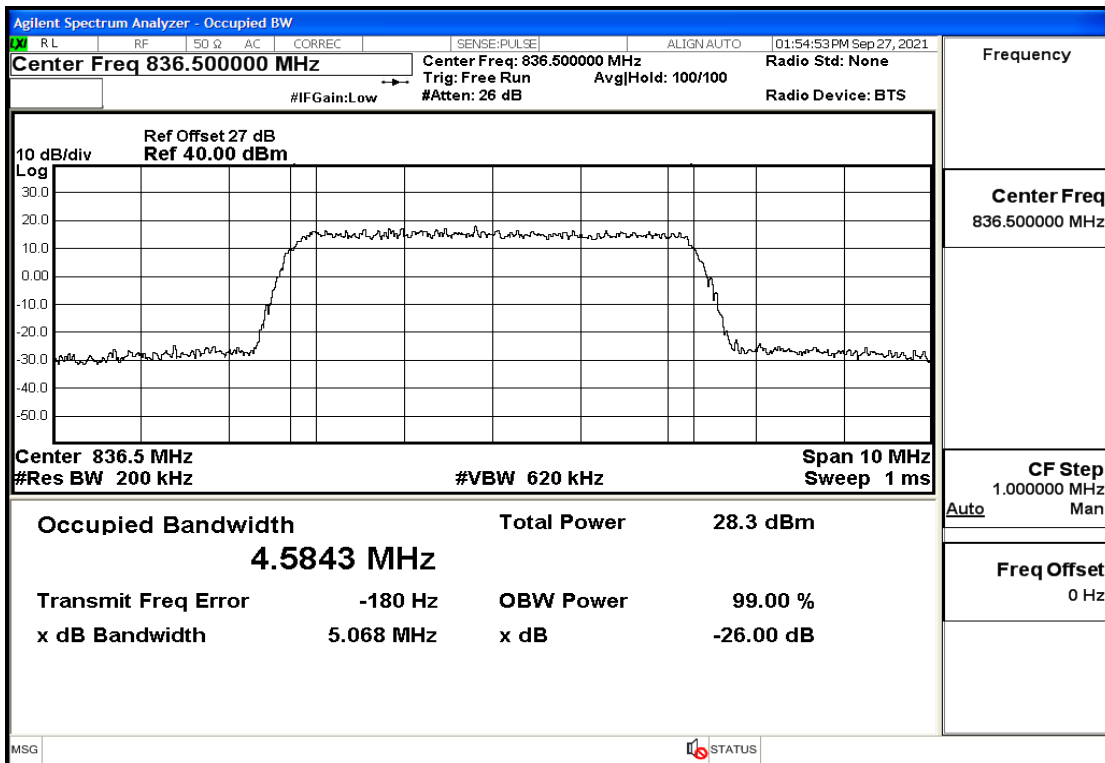




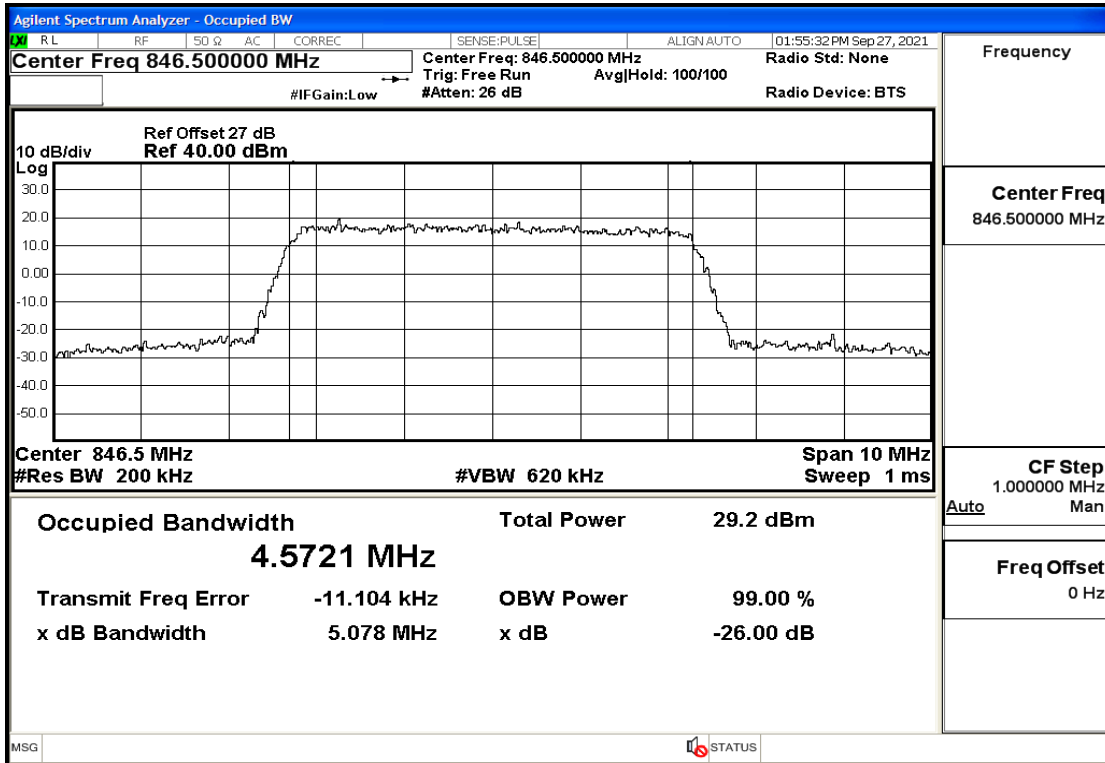
Band5-5-836.5-QPSK-25#LOW@26dB and 99PCT Bandwidth



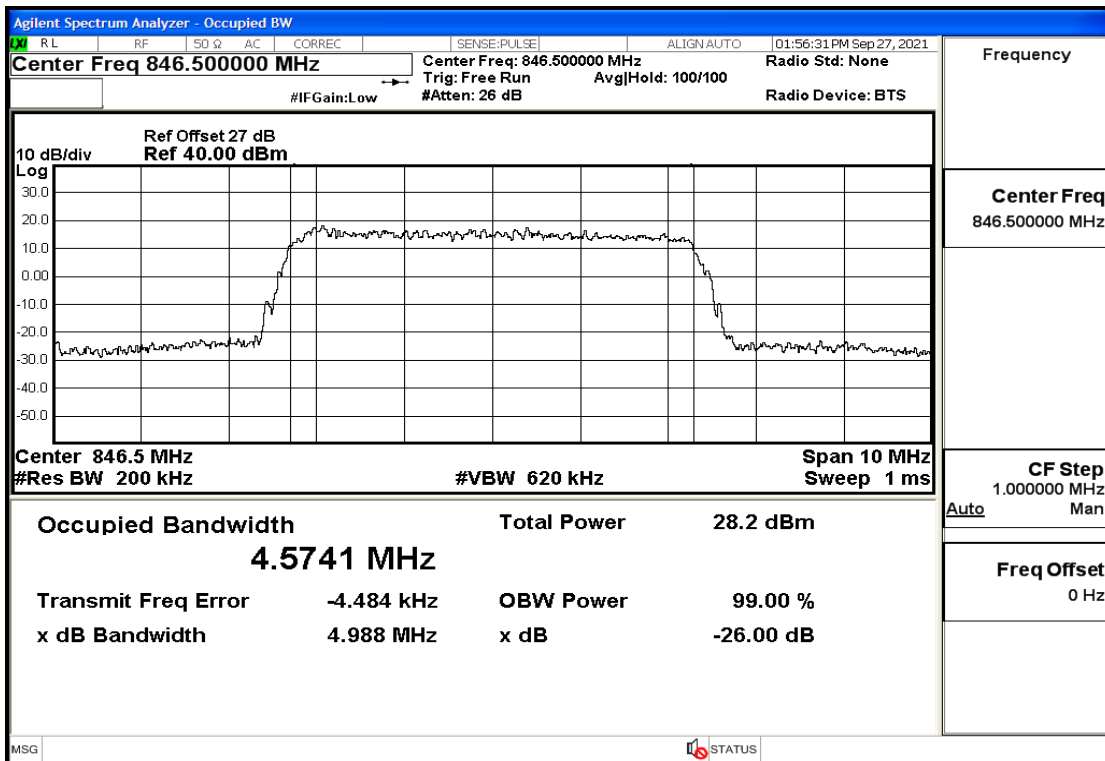
Band5-5-836.5-16QAM-25#LOW@26dB and 99PCT Bandwidth



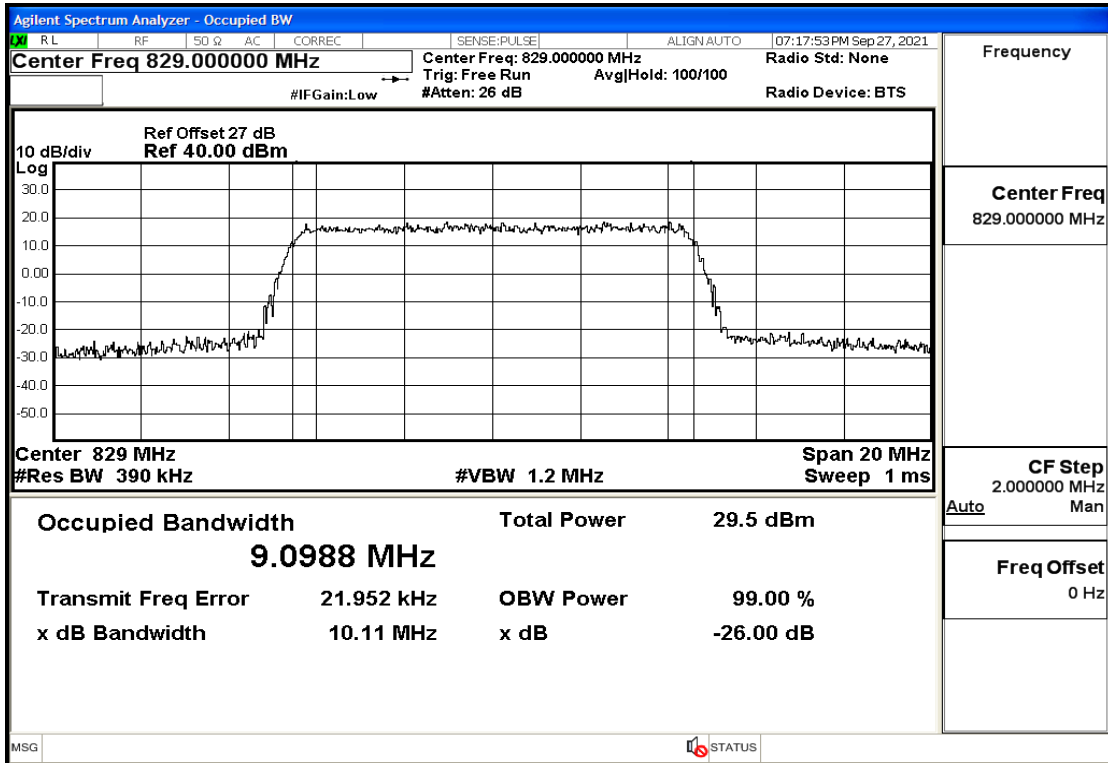
Band5-5-846.5-QPSK-25#LOW@26dB and 99PCT Bandwidth



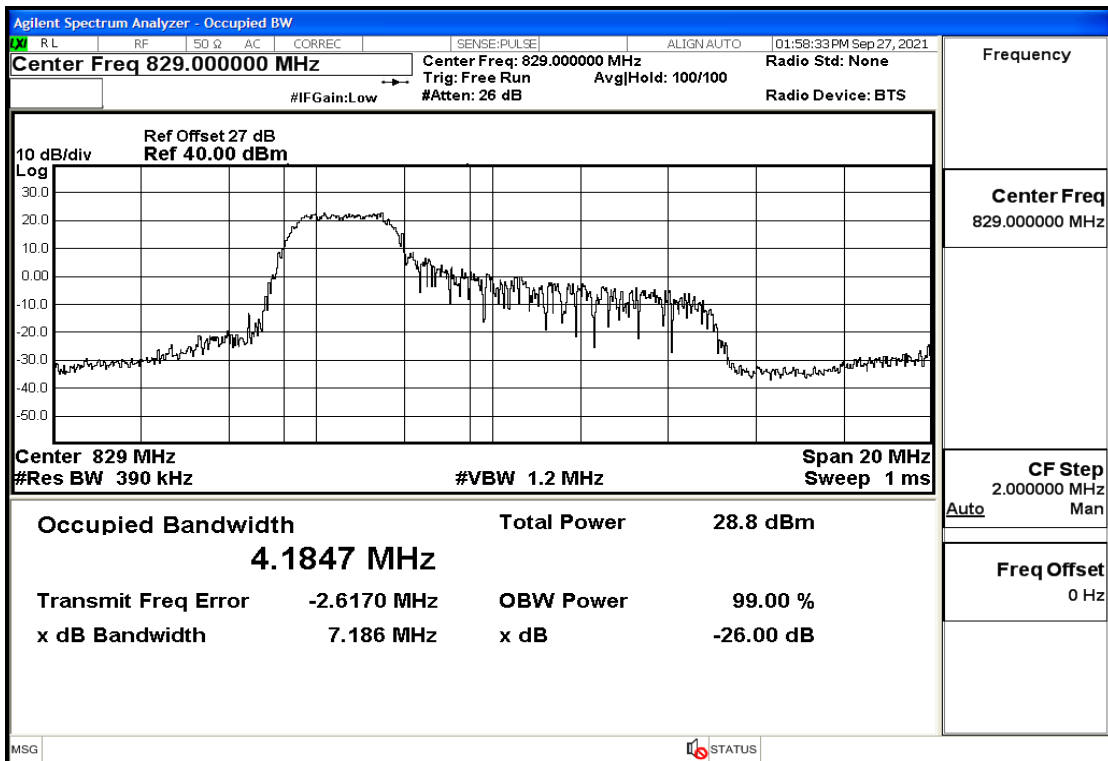
Band5-5-846.5-16QAM-25#LOW@26dB and 99PCT Bandwidth



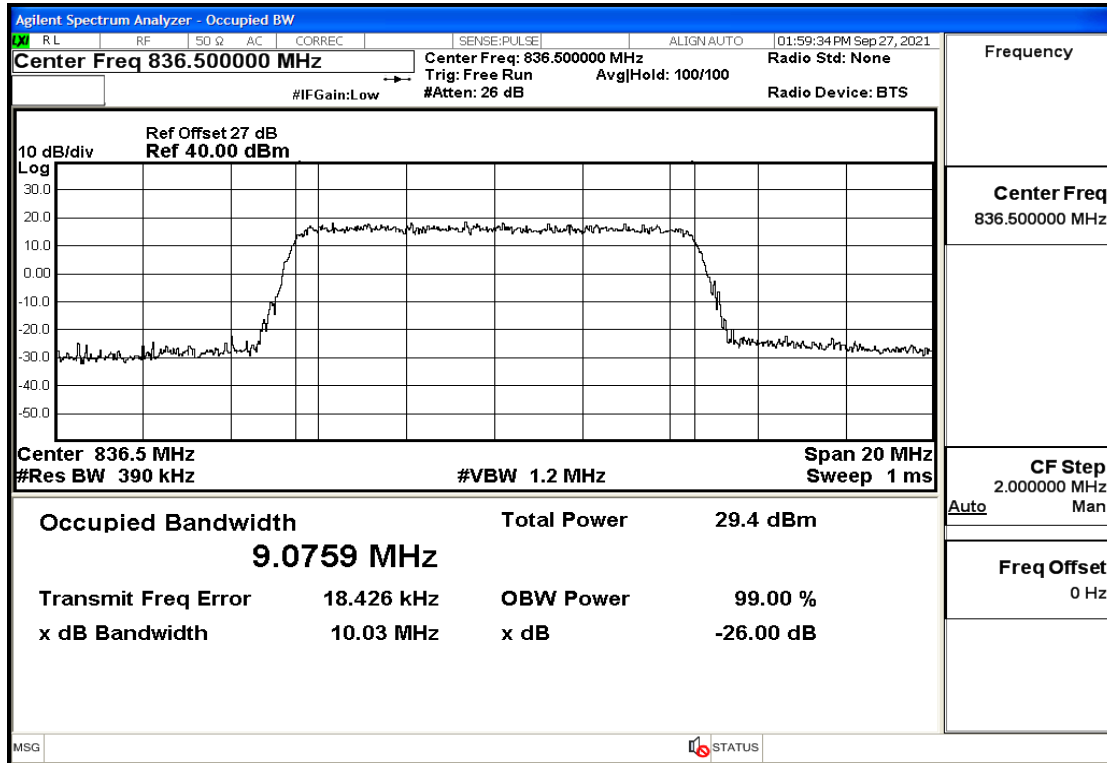
Band5-10-829-QPSK-50#LOW@26dB and 99PCT Bandwidth



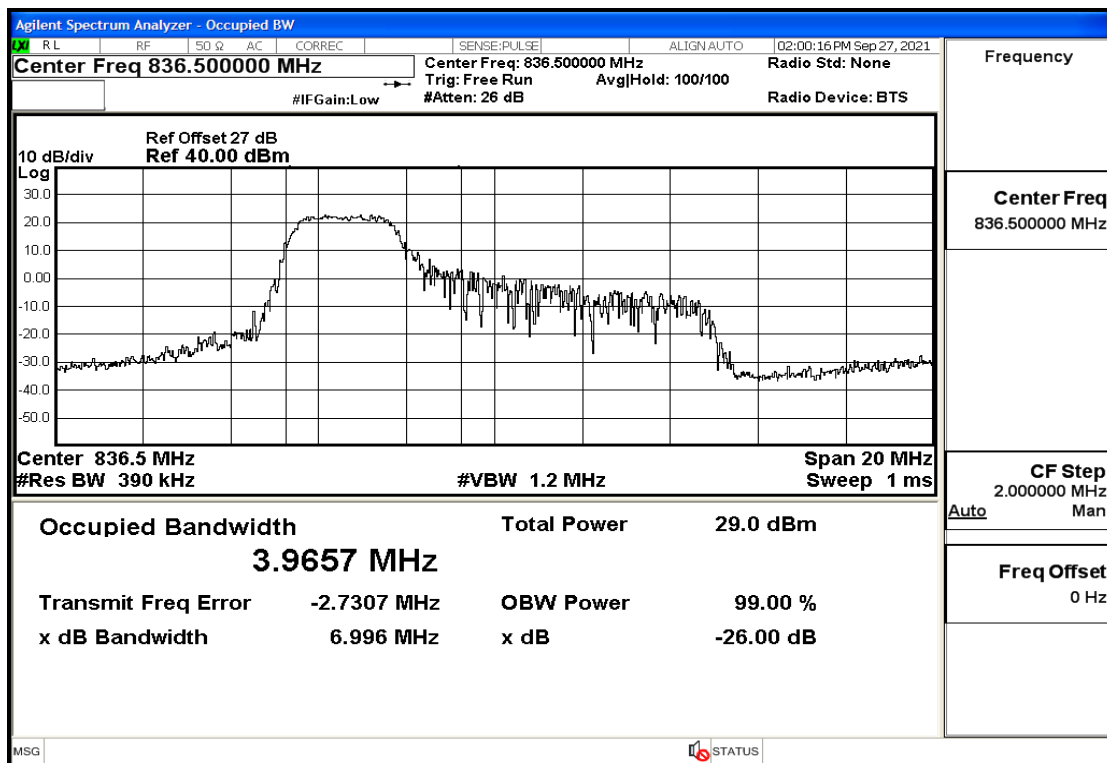
Band5-10-829-16QAM-12#LOW@26dB and 99PCT Bandwidth



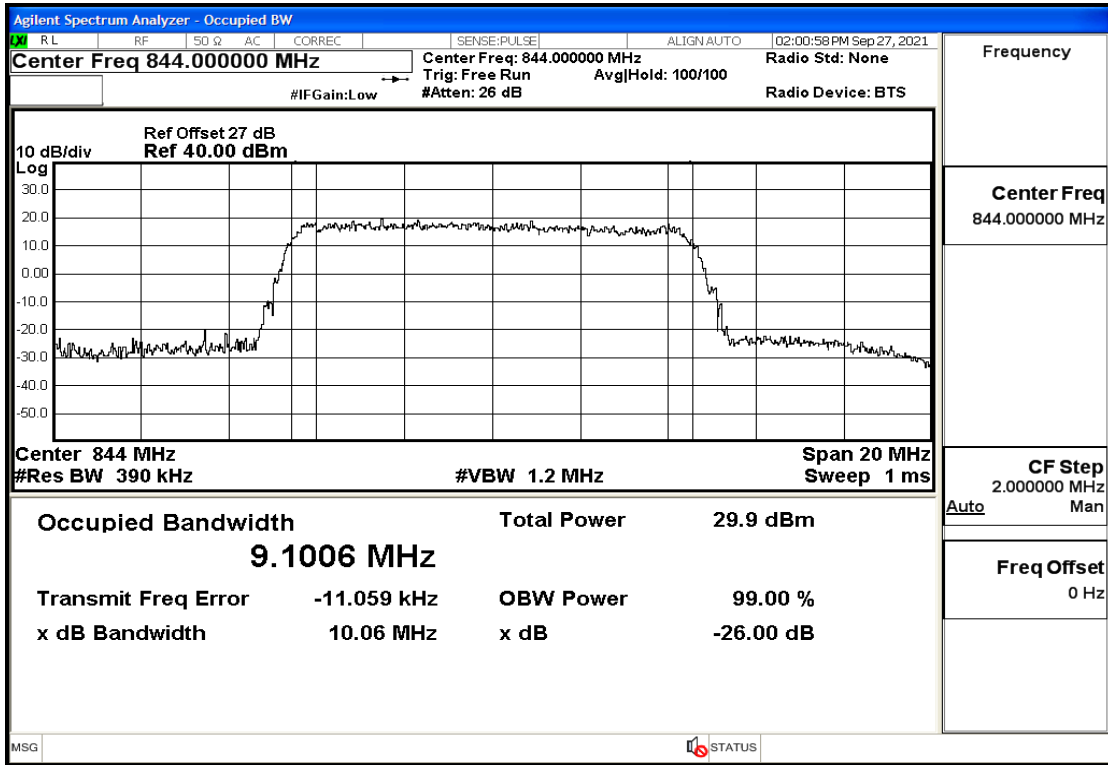
Band5-10-836.5-QPSK-50#LOW@26dB and 99PCT Bandwidth



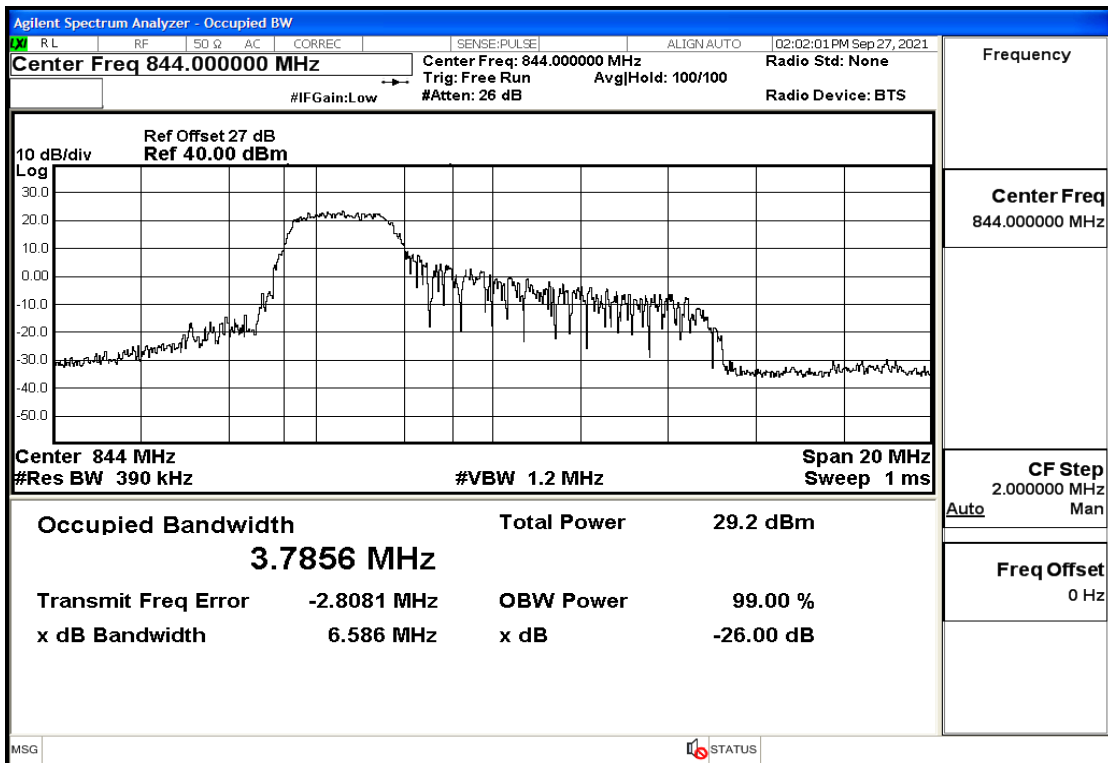
Band5-10-836.5-16QAM-12#LOW@26dB and 99PCT Bandwidth



Band5-10-844-QPSK-50#LOW@26dB and 99PCT Bandwidth



Band5-10-844-16QAM-12#LOW@26dB and 99PCT Bandwidth



## Frequency Stability

Test Conditions		LTE Band 5 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 5MHz	2.5ppm
		Deviation (ppm)	Result
50	Normal Voltage	0.0678	PASS
40	Normal Voltage	0.0368	
30	Normal Voltage	0.0163	
20(Ref.)	Normal Voltage	0.0284	
10	Normal Voltage	0.0683	
0	Normal Voltage	0.0199	
-10	Normal Voltage	0.0418	
-20	Normal Voltage	0.0368	
-30	Normal Voltage	0.0165	
20	Maximum Voltage	0.0195	
20	Normal Voltage	0.0259	
20	Battery End Point	0.0678	

## 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
Band5	1.4	824.7	QPSK	6	LOW	21.81	27.92	6.11	13	-0.89	18.77	38.5	Pass
Band5	1.4	824.7	QPSK	3	LOW	22.84	29.02	6.18	13	-0.89	19.8	38.5	Pass
Band5	1.4	824.7	QPSK	3	MID	22.93	29.06	6.13	13	-0.89	19.89	38.5	Pass
Band5	1.4	824.7	QPSK	3	HIGH	22.94	29.01	6.07	13	-0.89	19.9	38.5	Pass
Band5	1.4	824.7	QPSK	1	LOW	22.96	28.34	5.38	13	-0.89	19.92	38.5	Pass
Band5	1.4	824.7	QPSK	1	MID	22.89	28.28	5.39	13	-0.89	19.85	38.5	Pass
Band5	1.4	824.7	QPSK	1	HIGH	22.94	28.37	5.43	13	-0.89	19.9	38.5	Pass
Band5	1.4	824.7	16QAM	6	LOW	21.49	28.53	7.04	13	-0.89	18.45	38.5	Pass
Band5	1.4	824.7	16QAM	3	LOW	21.99	28.83	6.84	13	-0.89	18.95	38.5	Pass
Band5	1.4	824.7	16QAM	3	MID	21.97	28.85	6.88	13	-0.89	18.93	38.5	Pass
Band5	1.4	824.7	16QAM	3	HIGH	22.01	28.85	6.84	13	-0.89	18.97	38.5	Pass
Band5	1.4	824.7	16QAM	1	LOW	21.64	26.98	5.34	13	-0.89	18.6	38.5	Pass
Band5	1.4	824.7	16QAM	1	MID	21.72	27.05	5.33	13	-0.89	18.68	38.5	Pass
Band5	1.4	824.7	16QAM	1	HIGH	21.7	27.02	5.32	13	-0.89	18.66	38.5	Pass
Band5	1.4	836.5	QPSK	6	LOW	21.82	28.37	6.55	13	-0.89	18.78	38.5	Pass
Band5	1.4	836.5	QPSK	3	LOW	22.91	28.97	6.06	13	-0.89	19.87	38.5	Pass
Band5	1.4	836.5	QPSK	3	MID	23.01	29.06	6.05	13	-0.89	19.97	38.5	Pass
Band5	1.4	836.5	QPSK	3	HIGH	22.92	28.9	5.98	13	-0.89	19.88	38.5	Pass
Band5	1.4	836.5	QPSK	1	LOW	22.92	28.63	5.71	13	-0.89	19.88	38.5	Pass
Band5	1.4	836.5	QPSK	1	MID	22.92	28.67	5.75	13	-0.89	19.88	38.5	Pass
Band5	1.4	836.5	QPSK	1	HIGH	22.91	28.65	5.74	13	-0.89	19.87	38.5	Pass
Band5	1.4	836.5	16QAM	6	LOW	21.04	28.32	7.28	13	-0.89	18	38.5	Pass
Band5	1.4	836.5	16QAM	3	LOW	21.98	28.22	6.24	13	-0.89	18.94	38.5	Pass
Band5	1.4	836.5	16QAM	3	MID	21.98	28.22	6.24	13	-0.89	18.94	38.5	Pass
Band5	1.4	836.5	16QAM	3	HIGH	22.08	28.26	6.18	13	-0.89	19.04	38.5	Pass
Band5	1.4	836.5	16QAM	1	LOW	22.62	28.36	5.74	13	-0.89	19.58	38.5	Pass
Band5	1.4	836.5	16QAM	1	MID	22.49	28.29	5.8	13	-0.89	19.45	38.5	Pass
Band5	1.4	836.5	16QAM	1	HIGH	22.62	28.39	5.77	13	-0.89	19.58	38.5	Pass
Band5	1.4	848.3	QPSK	6	LOW	21.97	27.84	5.87	13	-0.89	18.93	38.5	Pass
Band5	1.4	848.3	QPSK	3	LOW	23	28.42	5.42	13	-0.89	19.96	38.5	Pass
Band5	1.4	848.3	QPSK	3	MID	22.96	28.41	5.45	13	-0.89	19.92	38.5	Pass
Band5	1.4	848.3	QPSK	3	HIGH	22.92	28.29	5.37	13	-0.89	19.88	38.5	Pass
Band5	1.4	848.3	QPSK	1	LOW	23.04	28.23	5.19	13	-0.89	20	38.5	Pass
Band5	1.4	848.3	QPSK	1	MID	23.01	28.21	5.2	13	-0.89	19.97	38.5	Pass
Band5	1.4	848.3	QPSK	1	HIGH	23.02	28.2	5.18	13	-0.89	19.98	38.5	Pass
Band5	1.4	848.3	16QAM	6	LOW	20.94	27.75	6.81	13	-0.89	17.9	38.5	Pass
Band5	1.4	848.3	16QAM	3	LOW	21.93	28.42	6.49	13	-0.89	18.89	38.5	Pass
Band5	1.4	848.3	16QAM	3	MID	21.91	28.45	6.54	13	-0.89	18.87	38.5	Pass
Band5	1.4	848.3	16QAM	3	HIGH	21.95	28.53	6.58	13	-0.89	18.91	38.5	Pass
Band5	1.4	848.3	16QAM	1	LOW	22.86	27.66	4.8	13	-0.89	19.82	38.5	Pass

Band5	1.4	848.3	16QAM	1	MID	22.84	27.59	4.75	13	-0.89	19.8	38.5	Pass
Band5	1.4	848.3	16QAM	1	HIGH	22.79	27.56	4.77	13	-0.89	19.75	38.5	Pass
Band5	3	825.5	QPSK	15	LOW	22.2	28.78	6.58	13	-0.89	19.16	38.5	Pass
Band5	3	825.5	QPSK	8	LOW	21.72	27.87	6.15	13	-0.89	18.68	38.5	Pass
Band5	3	825.5	QPSK	8	MID	21.85	27.81	5.96	13	-0.89	18.81	38.5	Pass
Band5	3	825.5	QPSK	8	HIGH	22.04	28.14	6.1	13	-0.89	19	38.5	Pass
Band5	3	825.5	QPSK	1	LOW	22.76	27.96	5.2	13	-0.89	19.72	38.5	Pass
Band5	3	825.5	QPSK	1	MID	22.98	28.16	5.18	13	-0.89	19.94	38.5	Pass
Band5	3	825.5	QPSK	1	HIGH	22.74	27.93	5.19	13	-0.89	19.7	38.5	Pass
Band5	3	825.5	16QAM	15	LOW	21.34	27.93	6.59	13	-0.89	18.3	38.5	Pass
Band5	3	825.5	16QAM	8	LOW	21.47	28.48	7.01	13	-0.89	18.43	38.5	Pass
Band5	3	825.5	16QAM	8	MID	21.47	28.53	7.06	13	-0.89	18.43	38.5	Pass
Band5	3	825.5	16QAM	8	HIGH	21.04	27.94	6.9	13	-0.89	18	38.5	Pass
Band5	3	825.5	16QAM	1	LOW	22.16	28.77	6.61	13	-0.89	19.12	38.5	Pass
Band5	3	825.5	16QAM	1	MID	22.07	28.71	6.64	13	-0.89	19.03	38.5	Pass
Band5	3	825.5	16QAM	1	HIGH	22.24	28.74	6.5	13	-0.89	19.2	38.5	Pass
Band5	3	836.5	QPSK	15	LOW	21.89	28.12	6.23	13	-0.89	18.85	38.5	Pass
Band5	3	836.5	QPSK	8	LOW	21.83	27.97	6.14	13	-0.89	18.79	38.5	Pass
Band5	3	836.5	QPSK	8	MID	21.83	28.07	6.24	13	-0.89	18.79	38.5	Pass
Band5	3	836.5	QPSK	8	HIGH	21.8	27.95	6.15	13	-0.89	18.76	38.5	Pass
Band5	3	836.5	QPSK	1	LOW	22.87	28.36	5.49	13	-0.89	19.83	38.5	Pass
Band5	3	836.5	QPSK	1	MID	22.97	28.41	5.44	13	-0.89	19.93	38.5	Pass
Band5	3	836.5	QPSK	1	HIGH	22.86	28.33	5.47	13	-0.89	19.82	38.5	Pass
Band5	3	836.5	16QAM	15	LOW	20.99	28.03	7.04	13	-0.89	17.95	38.5	Pass
Band5	3	836.5	16QAM	8	LOW	21.25	27.94	6.69	13	-0.89	18.21	38.5	Pass
Band5	3	836.5	16QAM	8	MID	21.41	27.7	6.29	13	-0.89	18.37	38.5	Pass
Band5	3	836.5	16QAM	8	HIGH	20.94	27.56	6.62	13	-0.89	17.9	38.5	Pass
Band5	3	836.5	16QAM	1	LOW	22.44	27.41	4.97	13	-0.89	19.4	38.5	Pass
Band5	3	836.5	16QAM	1	MID	22.41	27.76	5.35	13	-0.89	19.37	38.5	Pass
Band5	3	836.5	16QAM	1	HIGH	22.44	27.52	5.08	13	-0.89	19.4	38.5	Pass
Band5	3	847.5	QPSK	15	LOW	22.07	28.54	6.47	13	-0.89	19.03	38.5	Pass
Band5	3	847.5	QPSK	8	LOW	21.95	28.27	6.32	13	-0.89	18.91	38.5	Pass
Band5	3	847.5	QPSK	8	MID	21.95	28.33	6.38	13	-0.89	18.91	38.5	Pass
Band5	3	847.5	QPSK	8	HIGH	21.98	28.32	6.34	13	-0.89	18.94	38.5	Pass
Band5	3	847.5	QPSK	1	LOW	22.95	28.17	5.22	13	-0.89	19.91	38.5	Pass
Band5	3	847.5	QPSK	1	MID	22.94	28.01	5.07	13	-0.89	19.9	38.5	Pass
Band5	3	847.5	QPSK	1	HIGH	23.02	28.02	5	13	-0.89	19.98	38.5	Pass
Band5	3	847.5	16QAM	15	LOW	20.95	28.45	7.5	13	-0.89	17.91	38.5	Pass
Band5	3	847.5	16QAM	8	LOW	21.06	27.8	6.74	13	-0.89	18.02	38.5	Pass
Band5	3	847.5	16QAM	8	MID	21.08	27.96	6.88	13	-0.89	18.04	38.5	Pass
Band5	3	847.5	16QAM	8	HIGH	21.1	27.69	6.59	13	-0.89	18.06	38.5	Pass
Band5	3	847.5	16QAM	1	LOW	21.98	27.27	5.29	13	-0.89	18.94	38.5	Pass
Band5	3	847.5	16QAM	1	MID	21.78	26.99	5.21	13	-0.89	18.74	38.5	Pass
Band5	3	847.5	16QAM	1	HIGH	21.85	27.02	5.17	13	-0.89	18.81	38.5	Pass
Band5	5	826.5	QPSK	25	LOW	21.75	28.21	6.46	13	-0.89	18.71	38.5	Pass
Band5	5	826.5	QPSK	12	LOW	21.83	28.05	6.22	13	-0.89	18.79	38.5	Pass



Band5	5	826.5	QPSK	12	MID	21.83	27.84	6.01	13	-0.89	18.79	38.5	Pass
Band5	5	826.5	QPSK	12	HIGH	21.91	27.83	5.92	13	-0.89	18.87	38.5	Pass
Band5	5	826.5	QPSK	1	LOW	22.91	29.29	6.38	13	-0.89	19.87	38.5	Pass
Band5	5	826.5	QPSK	1	MID	22.9	29.19	6.29	13	-0.89	19.86	38.5	Pass
Band5	5	826.5	QPSK	1	HIGH	22.82	29.06	6.24	13	-0.89	19.78	38.5	Pass
Band5	5	826.5	16QAM	25	LOW	20.98	28.2	7.22	13	-0.89	17.94	38.5	Pass
Band5	5	826.5	16QAM	12	LOW	21.29	28.84	7.55	13	-0.89	18.25	38.5	Pass
Band5	5	826.5	16QAM	12	MID	21.13	28.66	7.53	13	-0.89	18.09	38.5	Pass
Band5	5	826.5	16QAM	12	HIGH	20.86	28.4	7.54	13	-0.89	17.82	38.5	Pass
Band5	5	826.5	16QAM	1	LOW	21.12	27.05	5.93	13	-0.89	18.08	38.5	Pass
Band5	5	826.5	16QAM	1	MID	21.12	27.03	5.91	13	-0.89	18.08	38.5	Pass
Band5	5	826.5	16QAM	1	HIGH	21.08	26.97	5.89	13	-0.89	18.04	38.5	Pass
Band5	5	836.5	QPSK	25	LOW	21.69	28.48	6.79	13	-0.89	18.65	38.5	Pass
Band5	5	836.5	QPSK	12	LOW	21.83	28.34	6.51	13	-0.89	18.79	38.5	Pass
Band5	5	836.5	QPSK	12	MID	21.83	28.53	6.7	13	-0.89	18.79	38.5	Pass
Band5	5	836.5	QPSK	12	HIGH	21.76	28.58	6.82	13	-0.89	18.72	38.5	Pass
Band5	5	836.5	QPSK	1	LOW	22.95	28.34	5.39	13	-0.89	19.91	38.5	Pass
Band5	5	836.5	QPSK	1	MID	22.88	28.26	5.38	13	-0.89	19.84	38.5	Pass
Band5	5	836.5	QPSK	1	HIGH	22.92	28.29	5.37	13	-0.89	19.88	38.5	Pass
Band5	5	836.5	16QAM	25	LOW	20.82	29.18	8.36	13	-0.89	17.78	38.5	Pass
Band5	5	836.5	16QAM	12	LOW	21.49	28.29	6.8	13	-0.89	18.45	38.5	Pass
Band5	5	836.5	16QAM	12	MID	21.34	28.13	6.79	13	-0.89	18.3	38.5	Pass
Band5	5	836.5	16QAM	12	HIGH	20.85	27.71	6.86	13	-0.89	17.81	38.5	Pass
Band5	5	836.5	16QAM	1	LOW	21.98	27.95	5.97	13	-0.89	18.94	38.5	Pass
Band5	5	836.5	16QAM	1	MID	21.98	27.95	5.97	13	-0.89	18.94	38.5	Pass
Band5	5	836.5	16QAM	1	HIGH	22.06	27.98	5.92	13	-0.89	19.02	38.5	Pass
Band5	5	846.5	QPSK	25	LOW	21.94	28.37	6.43	13	-0.89	18.9	38.5	Pass
Band5	5	846.5	QPSK	12	LOW	22.09	28.13	6.04	13	-0.89	19.05	38.5	Pass
Band5	5	846.5	QPSK	12	MID	22.1	28.16	6.06	13	-0.89	19.06	38.5	Pass
Band5	5	846.5	QPSK	12	HIGH	22.02	27.96	5.94	13	-0.89	18.98	38.5	Pass
Band5	5	846.5	QPSK	1	LOW	22.88	28.39	5.51	13	-0.89	19.84	38.5	Pass
Band5	5	846.5	QPSK	1	MID	22.89	28.43	5.54	13	-0.89	19.85	38.5	Pass
Band5	5	846.5	QPSK	1	HIGH	22.8	28.2	5.4	13	-0.89	19.76	38.5	Pass
Band5	5	846.5	16QAM	25	LOW	20.74	28.49	7.75	13	-0.89	17.7	38.5	Pass
Band5	5	846.5	16QAM	12	LOW	21.31	28.32	7.01	13	-0.89	18.27	38.5	Pass
Band5	5	846.5	16QAM	12	MID	21.33	28.04	6.71	13	-0.89	18.29	38.5	Pass
Band5	5	846.5	16QAM	12	HIGH	20.89	27.8	6.91	13	-0.89	17.85	38.5	Pass
Band5	5	846.5	16QAM	1	LOW	21.72	28.24	6.52	13	-0.89	18.68	38.5	Pass
Band5	5	846.5	16QAM	1	MID	21.69	28.24	6.55	13	-0.89	18.65	38.5	Pass
Band5	5	846.5	16QAM	1	HIGH	21.58	28.02	6.44	13	-0.89	18.54	38.5	Pass
Band5	10	829	QPSK	50	LOW	22.02	28.66	6.64	13	-0.89	18.98	38.5	Pass
Band5	10	829	QPSK	25	LOW	21.79	28.25	6.46	13	-0.89	18.75	38.5	Pass
Band5	10	829	QPSK	25	MID	21.91	28.42	6.51	13	-0.89	18.87	38.5	Pass
Band5	10	829	QPSK	25	HIGH	22.03	28.59	6.56	13	-0.89	18.99	38.5	Pass
Band5	10	829	QPSK	1	LOW	22.81	28.03	5.22	13	-0.89	19.77	38.5	Pass
Band5	10	829	QPSK	1	MID	22.67	27.85	5.18	13	-0.89	19.63	38.5	Pass

Band5	10	829	QPSK	1	HIGH	22.77	27.95	5.18	13	-0.89	19.73	38.5	Pass
Band5	10	829	16QAM	12	LOW	21.85	28.43	6.58	13	-0.89	18.81	38.5	Pass
Band5	10	829	16QAM	6	LOW	21.92	28.69	6.77	13	-0.89	18.88	38.5	Pass
Band5	10	829	16QAM	6	MID	21.94	28.7	6.76	13	-0.89	18.9	38.5	Pass
Band5	10	829	16QAM	6	HIGH	22.14	28.76	6.62	13	-0.89	19.1	38.5	Pass
Band5	10	829	16QAM	1	LOW	22.05	28.69	6.64	13	-0.89	19.01	38.5	Pass
Band5	10	829	16QAM	1	MID	22.26	28.75	6.49	13	-0.89	19.22	38.5	Pass
Band5	10	829	16QAM	1	HIGH	22.05	28.55	6.5	13	-0.89	19.01	38.5	Pass
Band5	10	836.5	QPSK	50	LOW	22	28.25	6.25	13	-0.89	18.96	38.5	Pass
Band5	10	836.5	QPSK	25	LOW	21.84	28.04	6.2	13	-0.89	18.8	38.5	Pass
Band5	10	836.5	QPSK	25	MID	21.84	28.28	6.44	13	-0.89	18.8	38.5	Pass
Band5	10	836.5	QPSK	25	HIGH	21.96	28.49	6.53	13	-0.89	18.92	38.5	Pass
Band5	10	836.5	QPSK	1	LOW	23.07	28.54	5.47	13	-0.89	20.03	38.5	Pass
Band5	10	836.5	QPSK	1	MID	23.17	28.56	5.39	13	-0.89	20.13	38.5	Pass
Band5	10	836.5	QPSK	1	HIGH	23.11	28.54	5.43	13	-0.89	20.07	38.5	Pass
Band5	10	836.5	16QAM	12	LOW	21.89	28.94	7.05	13	-0.89	18.85	38.5	Pass
Band5	10	836.5	16QAM	6	LOW	22.04	28.74	6.7	13	-0.89	19	38.5	Pass
Band5	10	836.5	16QAM	6	MID	22.21	28.8	6.59	13	-0.89	19.17	38.5	Pass
Band5	10	836.5	16QAM	6	HIGH	22.47	28.93	6.46	13	-0.89	19.43	38.5	Pass
Band5	10	836.5	16QAM	1	LOW	21.98	27.76	5.78	13	-0.89	18.94	38.5	Pass
Band5	10	836.5	16QAM	1	MID	22.05	27.03	4.98	13	-0.89	19.01	38.5	Pass
Band5	10	836.5	16QAM	1	HIGH	22.6	28.13	5.53	13	-0.89	19.56	38.5	Pass
Band5	10	844	QPSK	50	LOW	22.3	28.61	6.31	13	-0.89	19.26	38.5	Pass
Band5	10	844	QPSK	25	LOW	22.33	28.88	6.55	13	-0.89	19.29	38.5	Pass
Band5	10	844	QPSK	25	MID	22.33	29.13	6.8	13	-0.89	19.29	38.5	Pass
Band5	10	844	QPSK	25	HIGH	21.91	28.7	6.79	13	-0.89	18.87	38.5	Pass
Band5	10	844	QPSK	1	LOW	22.82	28.16	5.34	13	-0.89	19.78	38.5	Pass
Band5	10	844	QPSK	1	MID	23	28.22	5.22	13	-0.89	19.96	38.5	Pass
Band5	10	844	QPSK	1	HIGH	23.05	28.15	5.1	13	-0.89	20.01	38.5	Pass
Band5	10	844	16QAM	12	LOW	22.32	28.75	6.43	13	-0.89	19.28	38.5	Pass
Band5	10	844	16QAM	12	HIGH	22.13	28.56	6.43	13	-0.89	19.09	38.5	Pass
Band5	10	844	16QAM	6	LOW	22.51	29.02	6.51	13	-0.89	19.47	38.5	Pass
Band5	10	844	16QAM	6	MID	22.52	29.02	6.5	13	-0.89	19.48	38.5	Pass
Band5	10	844	16QAM	6	HIGH	22.16	28.61	6.45	13	-0.89	19.12	38.5	Pass
Band5	10	844	16QAM	1	LOW	21.56	26.87	5.31	13	-0.89	18.52	38.5	Pass
Band5	10	844	16QAM	1	MID	22.1	27.38	5.28	13	-0.89	19.06	38.5	Pass
Band5	10	844	16QAM	1	HIGH	21.77	27.33	5.56	13	-0.89	18.73	38.5	Pass