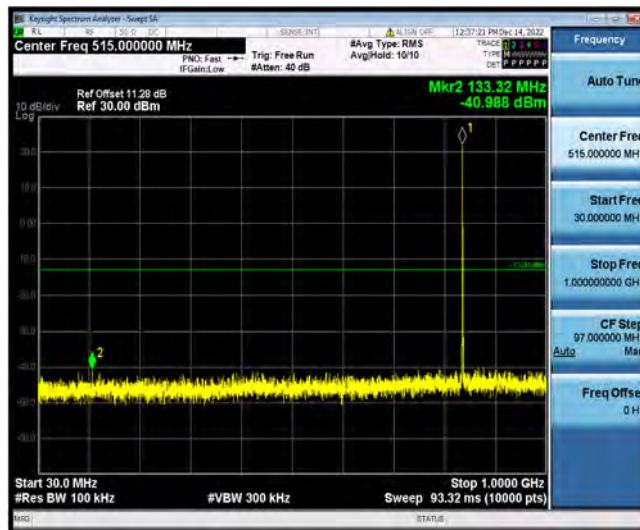
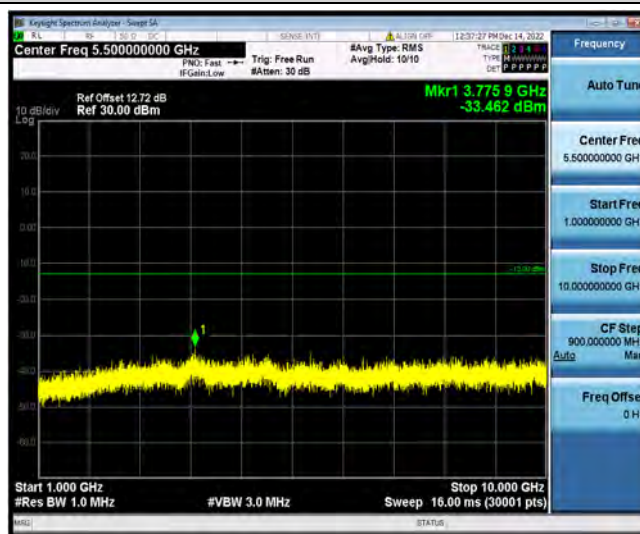


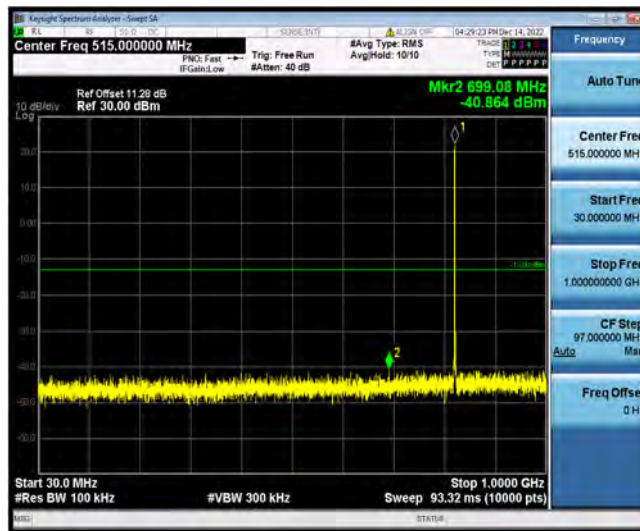
N5-10MHz-QPSK-168800-1RB#0-Range1:30~1000MHz



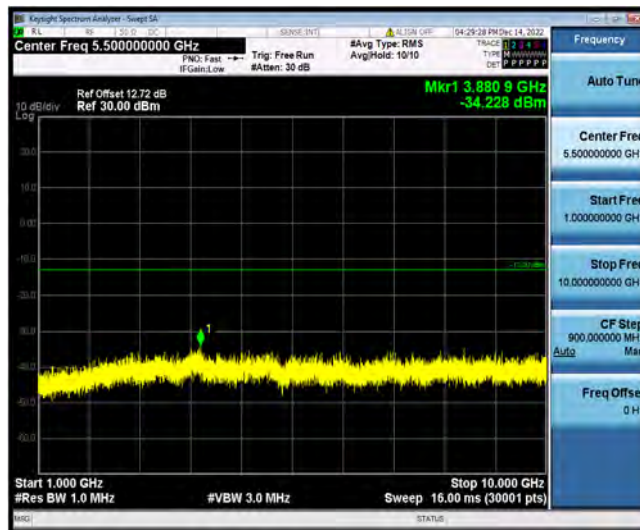
N5-10MHz-QPSK-168800-1RB#0-Range2:1000~10000MHz



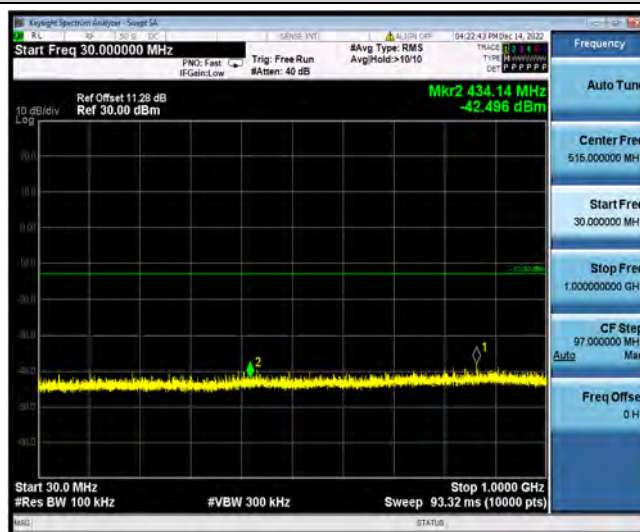
N5-20MHz-QPSK-166800-1RB#0-Range1:30~1000MHz



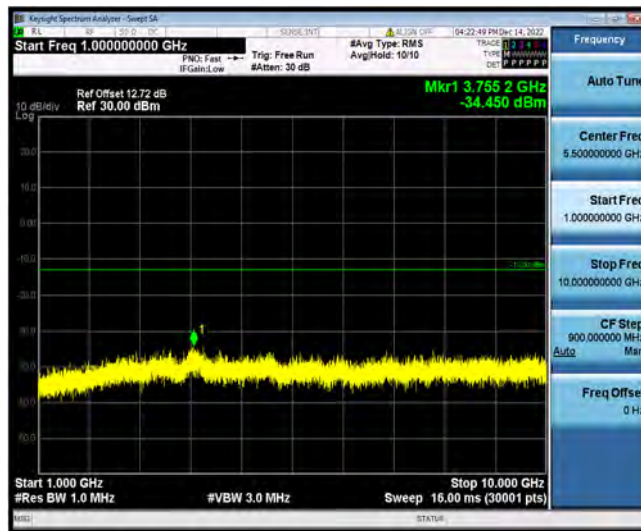
N5-20MHz-QPSK-166800-1RB#0-Range2:1000~10000MHz



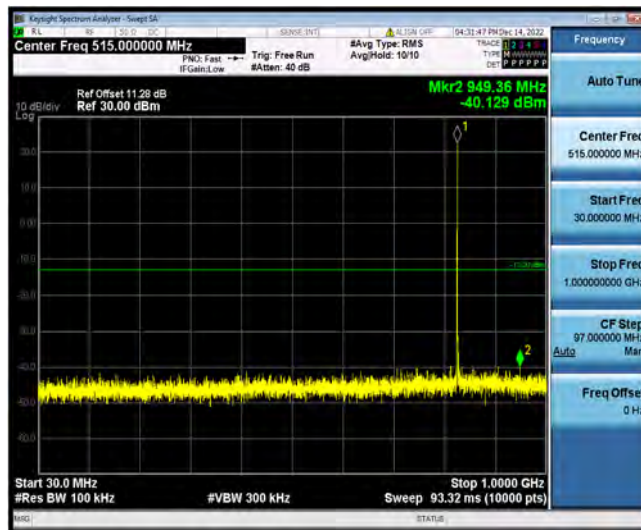
N5-20MHz-QPSK-167300-1RB#0-Range1:30~1000MHz



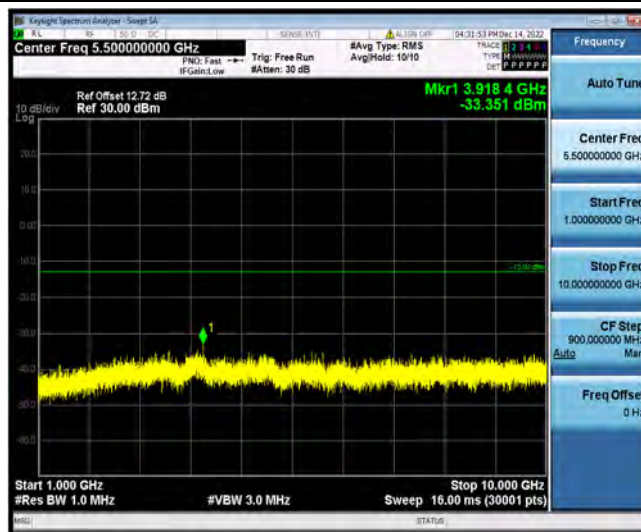
N5-20MHz-QPSK-167300-1RB#0-Range2:1000~10000MHz



N5-20MHz-QPSK-167800-1RB#0-Range1:30~1000MHz



N5-20MHz-QPSK-167800-1RB#0-Range2:1000~10000MHz



# Frequency Stability

## Test Result

Voltage&Temperature										
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
n5	20MHz	QPSK	167300	100RB#0	VL	NT	-10.92	-0.013057	±2.5	PASS
n5	20MHz	QPSK	167300	100RB#0	VN	NT	0.42	0.000500	±2.5	PASS
n5	20MHz	QPSK	167300	100RB#0	VH	NT	-0.63	-0.000755	±2.5	PASS
n5	20MHz	QPSK	167300	100RB#0	NV	-30	2.55	0.003044	±2.5	PASS
n5	20MHz	QPSK	167300	100RB#0	NV	-20	0.18	0.000213	±2.5	PASS
n5	20MHz	QPSK	167300	100RB#0	NV	0	5.01	0.005992	±2.5	PASS
n5	20MHz	QPSK	167300	100RB#0	NV	10	1.42	0.001702	±2.5	PASS
n5	20MHz	QPSK	167300	100RB#0	NV	20	-0.93	-0.001117	±2.5	PASS
n5	20MHz	QPSK	167300	100RB#0	NV	30	15.87	0.018974	±2.5	PASS
n5	20MHz	QPSK	167300	100RB#0	NV	40	0.16	0.000185	±2.5	PASS
n5	20MHz	QPSK	167300	100RB#0	NV	50	4.30	0.005139	±2.5	PASS

## N7

### Peak-to-Average Ratio(CCDF)

#### Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
N7	20MHz	QPSK	502000	1RB#0	3.60	13	PASS
N7	20MHz	QPSK	502000	100RB#0	4.87	13	PASS
N7	20MHz	QPSK	507000	1RB#0	3.59	13	PASS
N7	20MHz	QPSK	507000	100RB#0	4.39	13	PASS
N7	20MHz	QPSK	512000	1RB#0	4.04	13	PASS
N7	20MHz	QPSK	512000	100RB#0	4.37	13	PASS



# Test Graphs

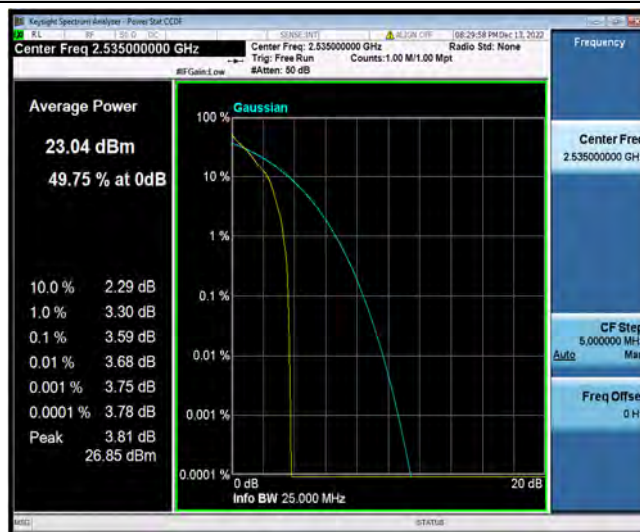
N7-20MHz-QPSK-502000-1RB#0



N7-20MHz-QPSK-502000-100RB#0



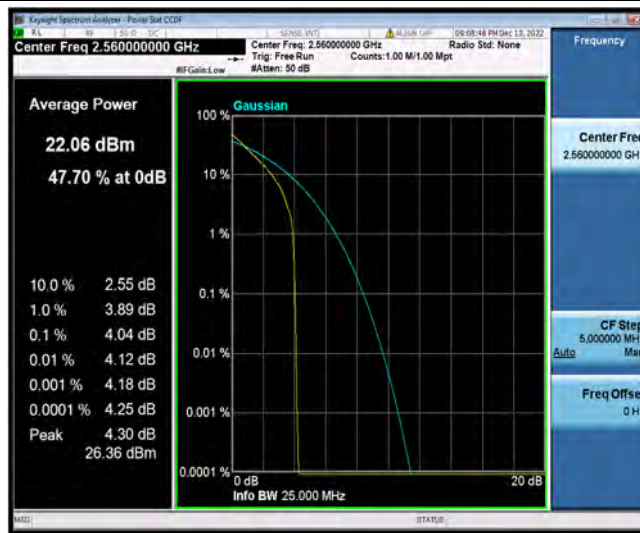
N7-20MHz-QPSK-507000-1RB#0



N7-20MHz-QPSK-507000-100RB#0



N7-20MHz-QPSK-512000-1RB#0



N7-20MHz-QPSK-512000-100RB#0



## 26dB Bandwidth and Occupied Bandwidth

### Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
N7	5MHz	QPSK	507000	25RB#0	4.5113	4.874	PASS
N7	5MHz	16QAM	507000	25RB#0	4.4870	4.813	PASS
N7	5MHz	64QAM	507000	25RB#0	4.4902	4.787	PASS
N7	5MHz	BPSK	507000	25RB#0	4.4929	4.846	PASS
N7	5MHz	256QAM	507000	25RB#0	4.4888	4.786	PASS
N7	10MHz	QPSK	507000	50RB#0	8.9708	9.503	PASS
N7	10MHz	16QAM	507000	50RB#0	8.9820	9.489	PASS
N7	10MHz	64QAM	507000	50RB#0	8.9906	9.508	PASS
N7	10MHz	256QAM	507000	50RB#0	8.9810	9.526	PASS
N7	10MHz	BPSK	507000	50RB#0	8.9663	9.496	PASS
N7	15MHz	QPSK	507000	75RB#0	13.485	14.23	PASS
N7	15MHz	16QAM	507000	75RB#0	13.462	14.21	PASS
N7	15MHz	64QAM	507000	75RB#0	13.447	14.21	PASS
N7	15MHz	256QAM	507000	75RB#0	13.475	14.23	PASS
N7	15MHz	BPSK	507000	75RB#0	13.486	14.24	PASS
N7	20MHz	QPSK	507000	100RB#0	17.906	18.95	PASS
N7	20MHz	16QAM	507000	100RB#0	17.921	18.93	PASS
N7	20MHz	64QAM	507000	100RB#0	17.946	18.94	PASS
N7	20MHz	BPSK	507000	100RB#0	17.936	18.94	PASS
N7	20MHz	256QAM	507000	100RB#0	17.897	18.92	PASS



# Test Graphs

N7-5MHz-QPSK-507000-25RB#0



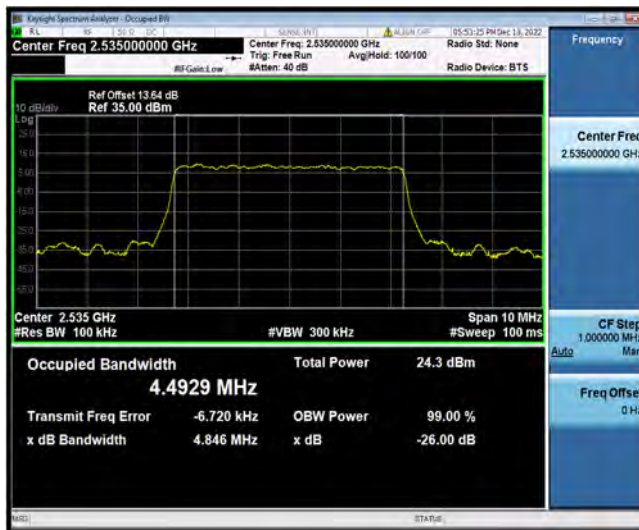
N7-5MHz-16QAM-507000-25RB#0



N7-5MHz-64QAM-507000-25RB#0



N7-5MHz-BPSK-507000-25RB#0



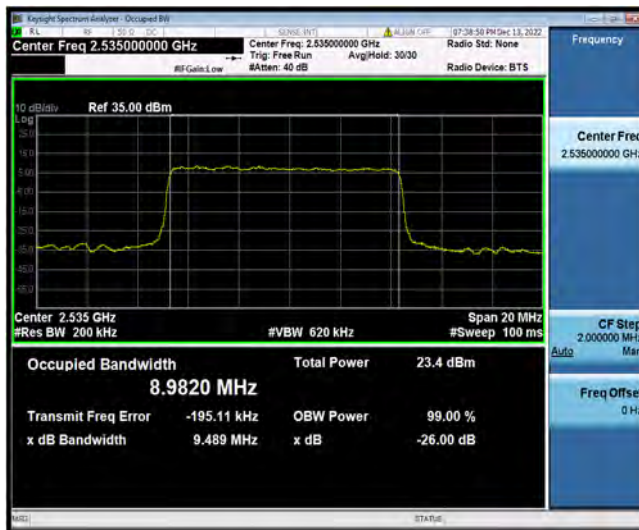
N7-5MHz-256QAM-507000-25RB#0



N7-10MHz-QPSK-507000-50RB#0



N7-10MHz-16QAM-507000-50RB#0



N7-10MHz-64QAM-507000-50RB#0



N7-10MHz-256QAM-507000-50RB#0



N7-10MHz-BPSK-507000-50RB#0



N7-15MHz-QPSK-507000-75RB#0



N7-15MHz-16QAM-507000-75RB#0





N7-15MHz-64QAM-507000-75RB#0



N7-15MHz-256QAM-507000-75RB#0



N7-15MHz-BPSK-507000-75RB#0



N7-20MHz-QPSK-507000-100RB#0



N7-20MHz-16QAM-507000-100RB#0



N7-20MHz-64QAM-507000-100RB#0





N7-20MHz-BPSK-507000-100RB#0



N7-20MHz-256QAM-507000-100RB#0



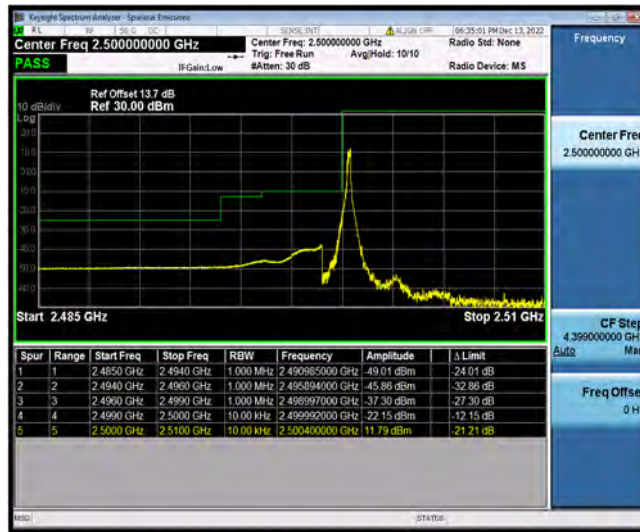
## Band Edge

### Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
N7	5MHz	QPSK	500500	1RB#0	-49.01,-45.86,-37.30,-22.15	PASS
N7	5MHz	QPSK	500500	1RB#24	-49.30,-49.18,-48.51,-61.62	PASS
N7	5MHz	QPSK	500500	25RB#0	-43.75,-36.84,-30.34,-32.39	PASS
N7	5MHz	QPSK	513500	1RB#0	-62.27,-48.57,-49.17,-49.12	PASS
N7	5MHz	QPSK	513500	1RB#24	-27.27,-37.54,-48.36,-49.04	PASS
N7	5MHz	QPSK	513500	25RB#0	-30.12,-29.46,-40.31,-42.98	PASS
N7	5MHz	16QAM	500500	1RB#0	-48.85,-45.97,-38.23,-32.94	PASS
N7	5MHz	16QAM	500500	1RB#24	-49.37,-49.07,-48.61,-61.41	PASS
N7	5MHz	16QAM	500500	25RB#0	-42.12,-34.98,-30.62,-33.29	PASS
N7	5MHz	16QAM	513500	1RB#0	-60.39,-48.27,-49.22,-49.23	PASS
N7	5MHz	16QAM	513500	1RB#24	-34.04,-38.76,-47.06,-48.77	PASS
N7	5MHz	16QAM	513500	25RB#0	-32.83,-30.15,-39.23,-42.25	PASS
N7	10MHz	QPSK	501000	1RB#0	-49.21,-47.37,-38.03,-22.94	PASS
N7	10MHz	QPSK	501000	50RB#0	-46.80,-31.36,-27.98,-29.40	PASS
N7	10MHz	QPSK	513000	1RB#49	-26.58,-38.73,-48.39,-49.32	PASS
N7	10MHz	QPSK	513000	50RB#0	-29.03,-26.30,-32.39,-41.40	PASS
N7	20MHz	QPSK	502000	1RB#0	-48.91,-47.16,-39.59,-32.27	PASS
N7	20MHz	QPSK	502000	100RB#0	-35.58,-31.87,-29.31,-31.47	PASS
N7	20MHz	QPSK	512000	1RB#99	-31.78,-40.30,-48.74,-49.66	PASS
N7	20MHz	QPSK	512000	100RB#0	-32.48,-30.03,-34.65,-49.00	PASS

# Test Graphs

N7-5MHz-QPSK-500500-1RB#0



N7-5MHz-QPSK-500500-25RB#0



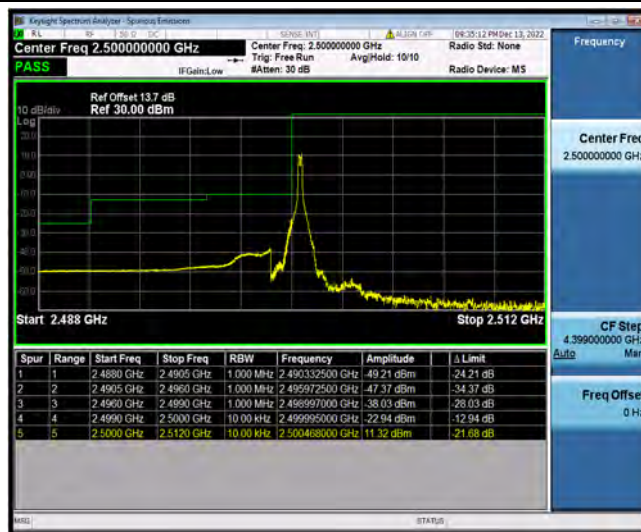
N7-5MHz-QPSK-513500-1RB#24



N7-5MHz-QPSK-513500-25RB#0



N7-10MHz-QPSK-501000-1RB#0



N7-10MHz-QPSK-501000-50RB#0





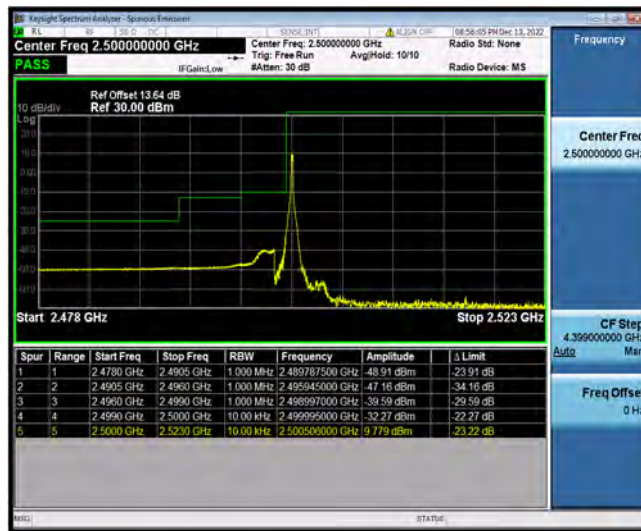
N7-10MHz-QPSK-513000-1RB#49



N7-10MHz-QPSK-513000-50RB#0



N7-20MHz-QPSK-502000-1RB#0



N7-20MHz-QPSK-502000-100RB#0



N7-20MHz-QPSK-512000-1RB#99



N7-20MHz-QPSK-512000-100RB#0





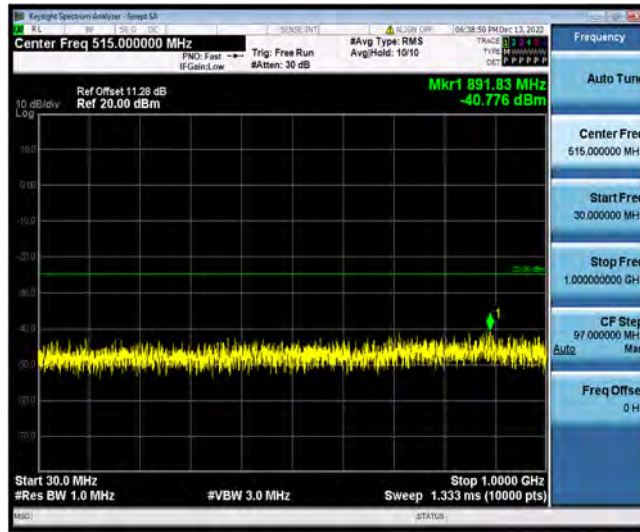
## Conducted Spurious Emission

### Test Result

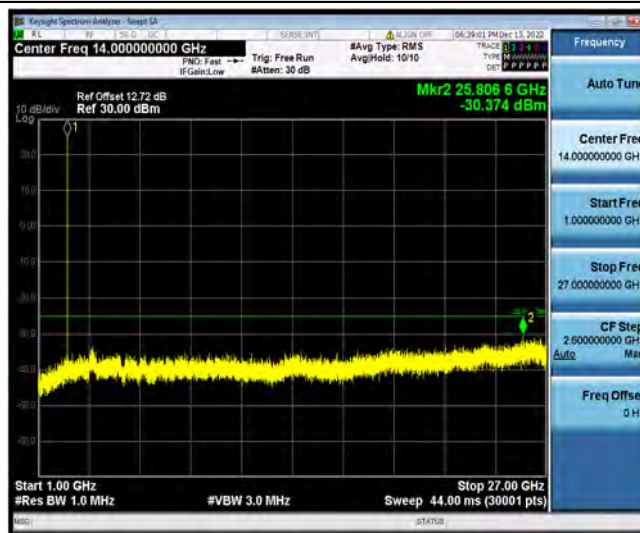
Band	Bandwidth	Modulation	Channel	RB Configuration	Frequency Range	Result (dBm)	Verdict
N7	5MHz	QPSK	500500	1RB#0	Range1:30~1000MHz	-40.78	PASS
N7	5MHz	QPSK	500500	1RB#0	Range2:1000~27000MHz	-30.37	PASS
N7	5MHz	QPSK	507000	1RB#0	Range1:30~1000MHz	-40.53	PASS
N7	5MHz	QPSK	507000	1RB#0	Range2:1000~27000MHz	-30.86	PASS
N7	5MHz	QPSK	513500	1RB#0	Range1:30~1000MHz	-41.49	PASS
N7	5MHz	QPSK	513500	1RB#0	Range2:1000~27000MHz	-30.92	PASS
N7	10MHz	QPSK	501000	1RB#0	Range1:30~1000MHz	-39.89	PASS
N7	10MHz	QPSK	501000	1RB#0	Range2:1000~27000MHz	-31.01	PASS
N7	10MHz	QPSK	513000	1RB#0	Range1:30~1000MHz	-40.61	PASS
N7	10MHz	QPSK	513000	1RB#0	Range2:1000~27000MHz	-31.17	PASS
N7	20MHz	QPSK	502000	1RB#0	Range1:30~1000MHz	-41	PASS
N7	20MHz	QPSK	502000	1RB#0	Range2:1000~27000MHz	-30.81	PASS
N7	20MHz	QPSK	507000	1RB#0	Range1:30~1000MHz	-39.73	PASS
N7	20MHz	QPSK	507000	1RB#0	Range2:1000~27000MHz	-30.95	PASS
N7	20MHz	QPSK	512000	1RB#0	Range1:30~1000MHz	-40.65	PASS
N7	20MHz	QPSK	512000	1RB#0	Range2:1000~27000MHz	-30.29	PASS

# Test Graphs

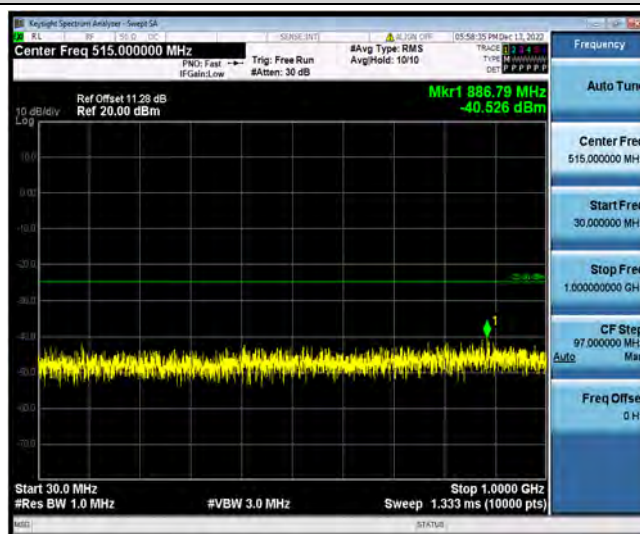
N7-5MHz-QPSK-500500-1RB#0-Range1:30~1000MHz



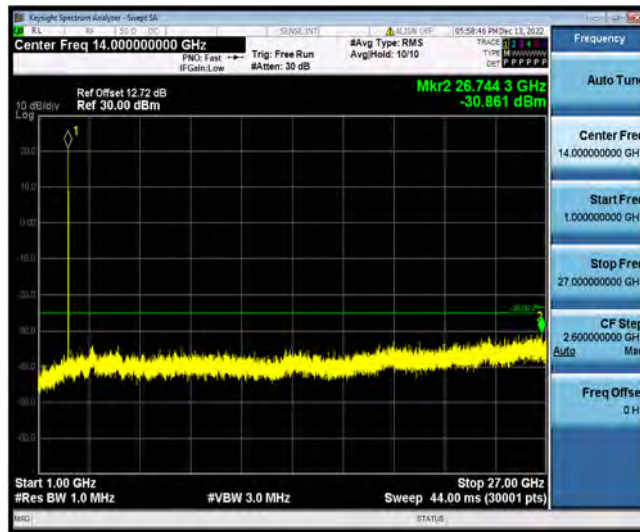
N7-5MHz-QPSK-500500-1RB#0-Range2:1000~27000MHz



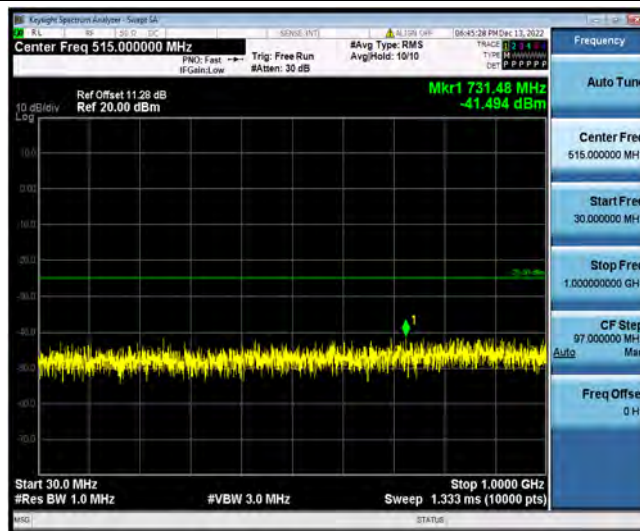
N7-5MHz-QPSK-507000-1RB#0-Range1:30~1000MHz



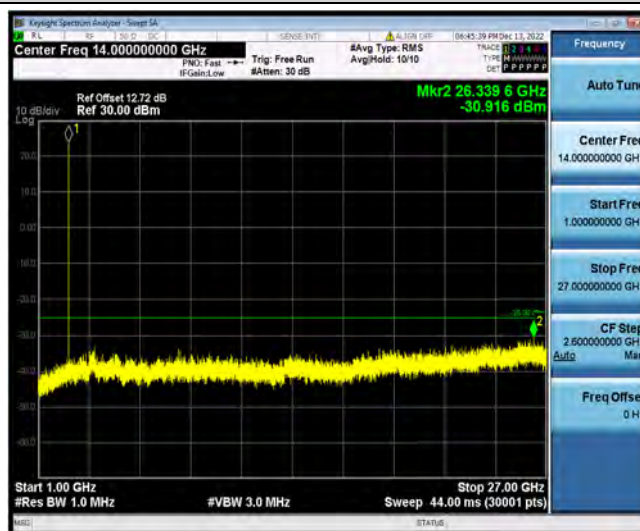
N7-5MHz-QPSK-507000-1RB#0-Range2:1000~27000MHz



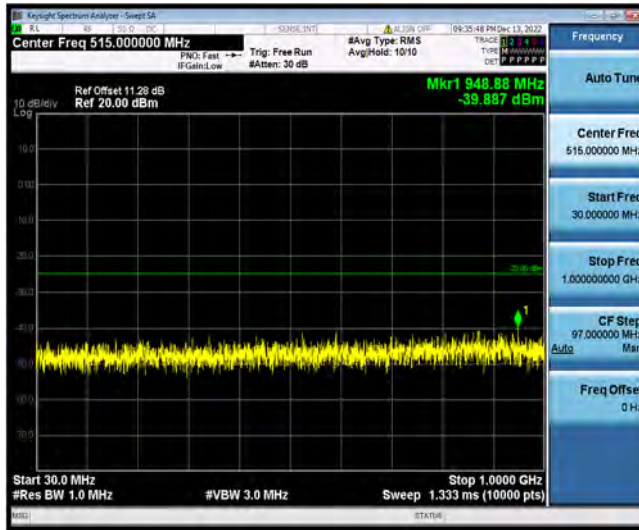
N7-5MHz-QPSK-513500-1RB#0-Range1:30~1000MHz



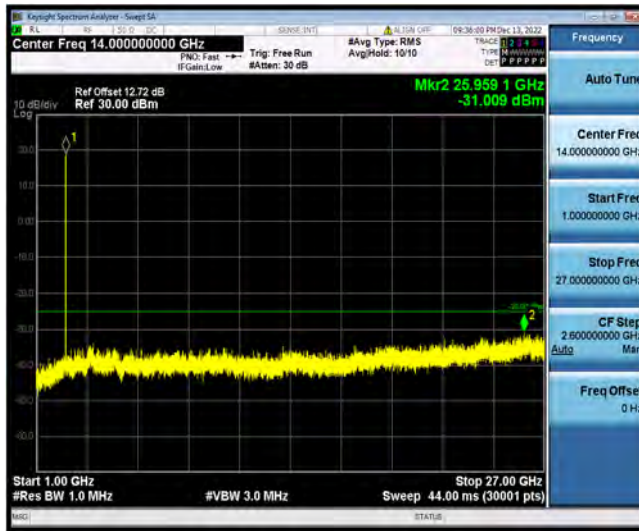
N7-5MHz-QPSK-513500-1RB#0-Range2:1000~27000MHz



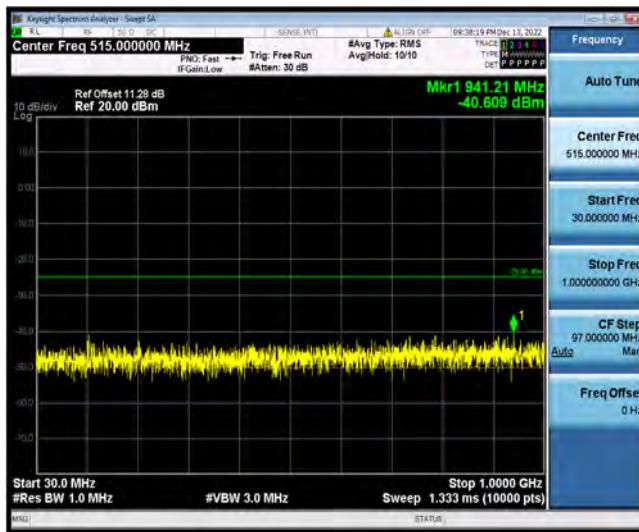
N7-10MHz-QPSK-501000-1RB#0-Range1:30~1000MHz



N7-10MHz-QPSK-501000-1RB#0-Range2:1000~27000MHz

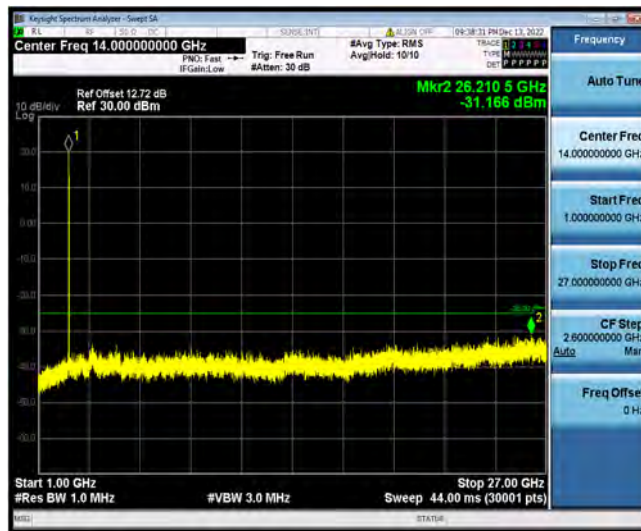


N7-10MHz-QPSK-513000-1RB#0-Range1:30~1000MHz

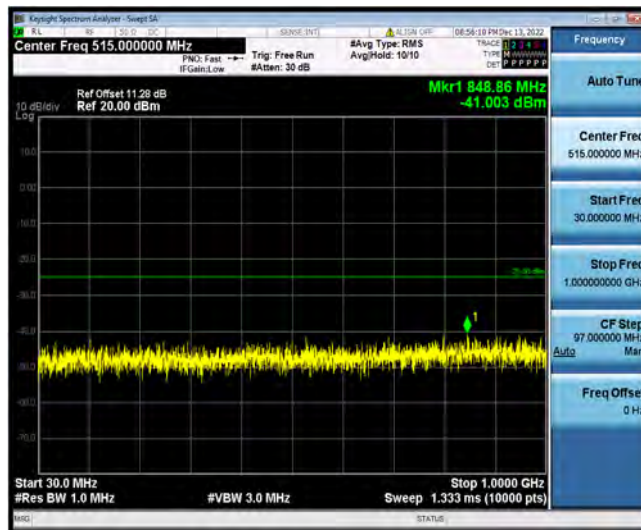


N7-10MHz-QPSK-513000-1RB#0-Range2:1000~27000MHz

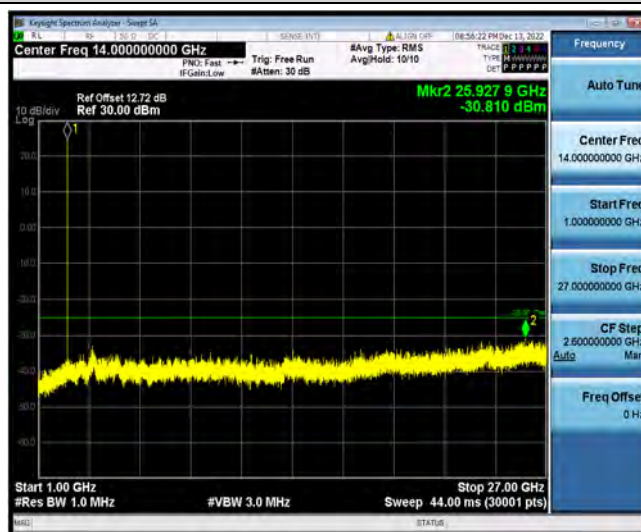




N7-20MHz-QPSK-502000-1RB#0-Range1:30~1000MHz

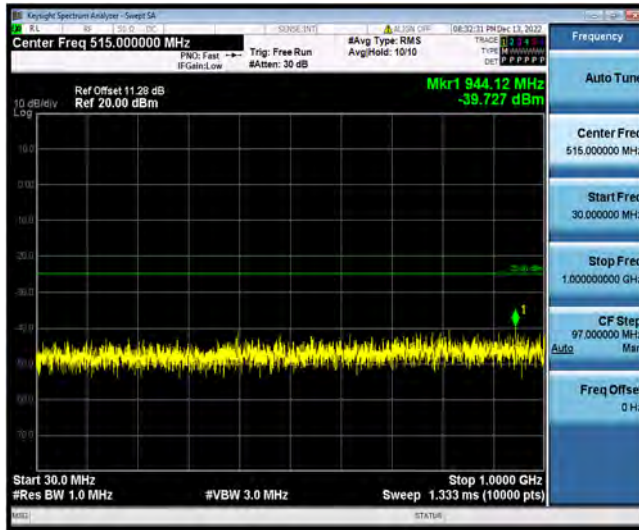


N7-20MHz-QPSK-502000-1RB#0-Range2:1000~27000MHz

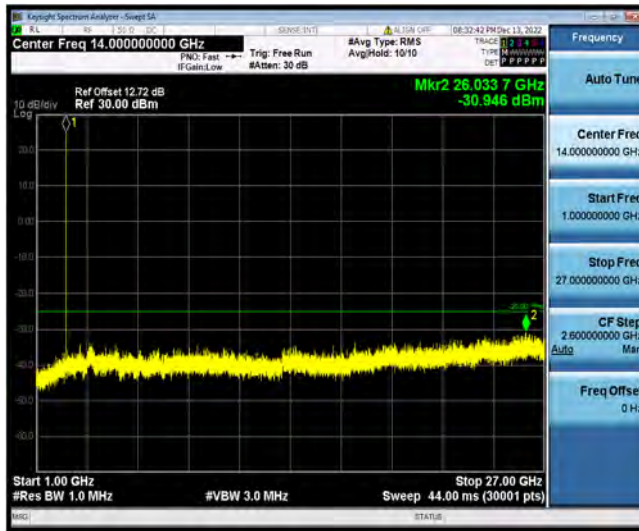


N7-20MHz-QPSK-507000-1RB#0-Range1:30~1000MHz

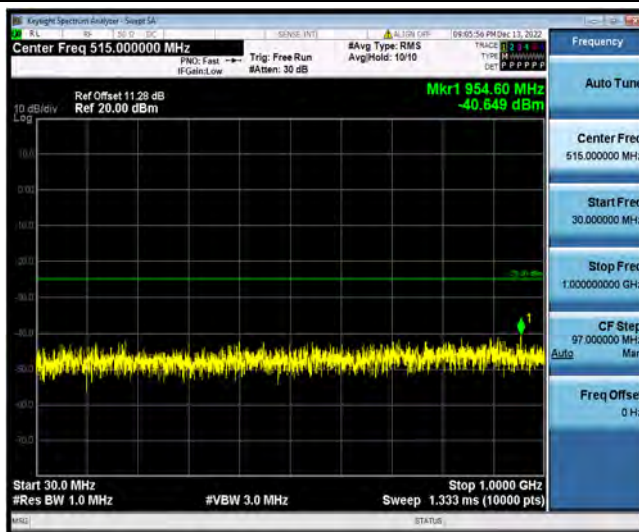




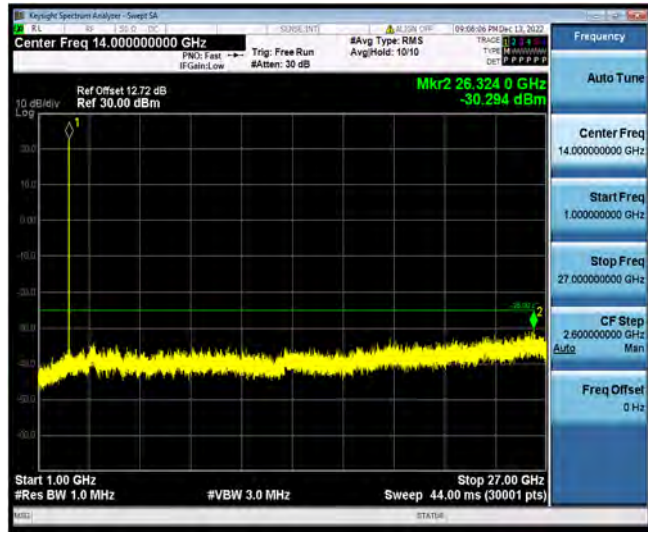
N7-20MHz-QPSK-507000-1RB#0-Range2:1000~27000MHz



N7-20MHz-QPSK-512000-1RB#0-Range1:30~1000MHz



N7-20MHz-QPSK-512000-1RB#0-Range2:1000~27000MHz



# Frequency Stability

## Test Result

Voltage&Temperature										
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
n7	20MHz	QPSK	50700 0	100RB#0	VL	NT	-7.97	-0.003145	±2.5	PASS
n7	20MHz	QPSK	50700 0	100RB#0	VN	NT	0.80	0.000954	±2.5	PASS
n7	20MHz	QPSK	50700 0	100RB#0	VH	NT	-0.06	-0.000066	±2.5	PASS
n7	20MHz	QPSK	50700 0	100RB#0	NV	-30	5.42	0.006484	±2.5	PASS
n7	20MHz	QPSK	50700 0	100RB#0	NV	-20	2.68	0.003201	±2.5	PASS
n7	20MHz	QPSK	50700 0	100RB#0	NV	0	6.68	0.007982	±2.5	PASS
n7	20MHz	QPSK	50700 0	100RB#0	NV	10	2.06	0.002467	±2.5	PASS
n7	20MHz	QPSK	50700 0	100RB#0	NV	20	1.22	0.001455	±2.5	PASS
n7	20MHz	QPSK	50700 0	100RB#0	NV	30	16.18	0.019342	±2.5	PASS
n7	20MHz	QPSK	50700 0	100RB#0	NV	40	2.07	0.002469	±2.5	PASS
n7	20MHz	QPSK	50700 0	100RB#0	NV	50	4.72	0.005648	±2.5	PASS

## N12

### Peak-to-Average Ratio (CCDF)

#### Test Result

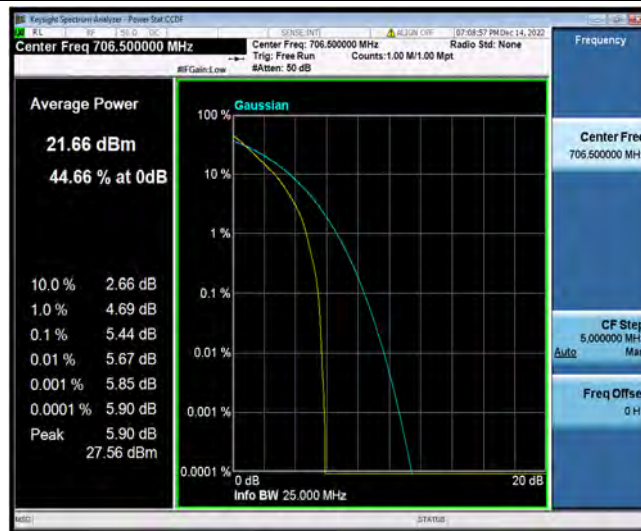
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
N12	15MHz	QPSK	141300	1RB#0	5.10	13	PASS
N12	15MHz	QPSK	141300	75RB#0	5.44	13	PASS
N12	15MHz	QPSK	141500	1RB#0	5.31	13	PASS
N12	15MHz	QPSK	141500	75RB#0	4.67	13	PASS
N12	15MHz	QPSK	141700	1RB#0	5.12	13	PASS
N12	15MHz	QPSK	141700	75RB#0	4.64	13	PASS

# Test Graphs

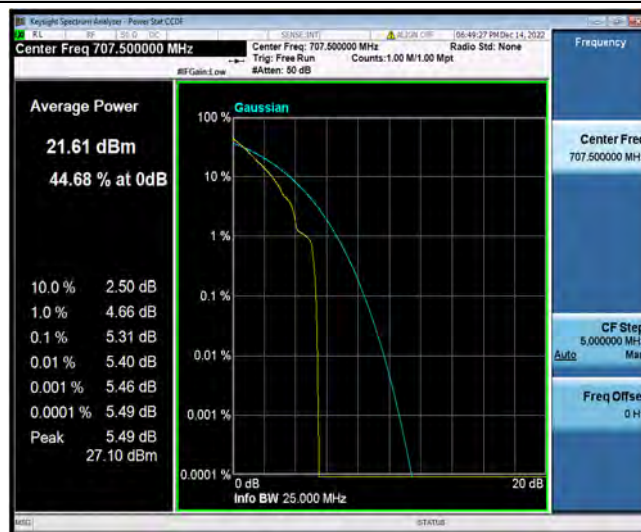
N12-15MHz-QPSK-141300-1RB#0



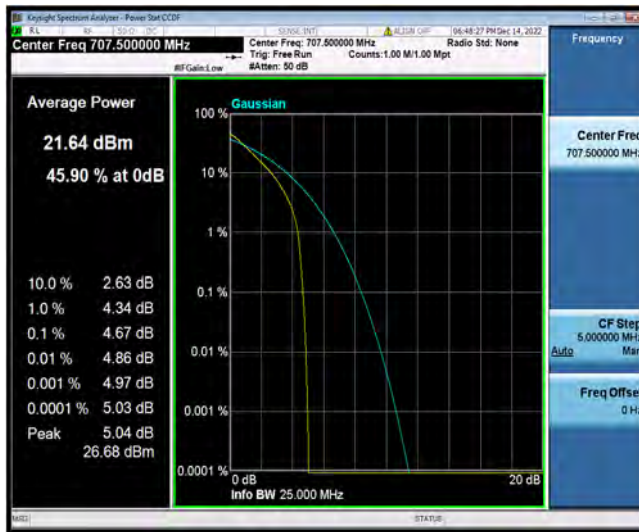
N12-15MHz-QPSK-141300-75RB#0



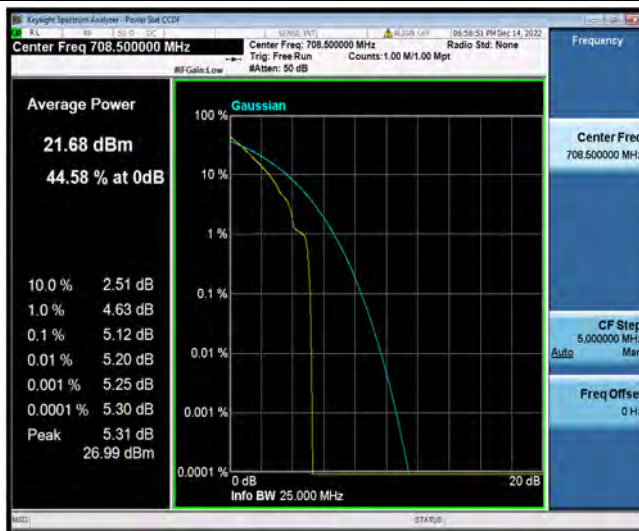
N12-15MHz-QPSK-141500-1RB#0



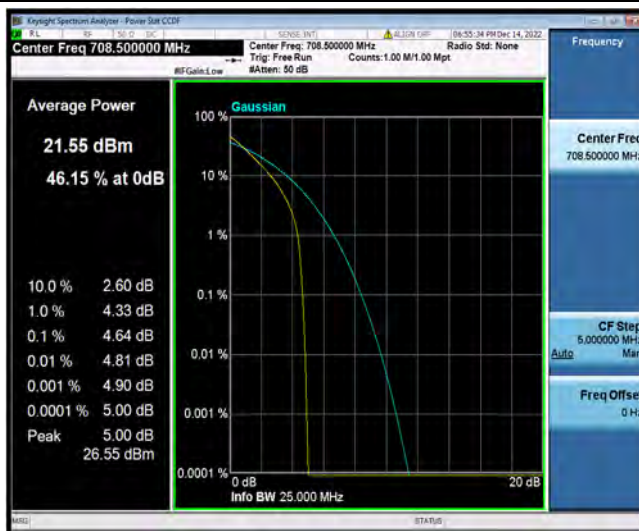
N12-15MHz-QPSK-141500-75RB#0



N12-15MHz-QPSK-141700-1RB#0



N12-15MHz-QPSK-141700-75RB#0





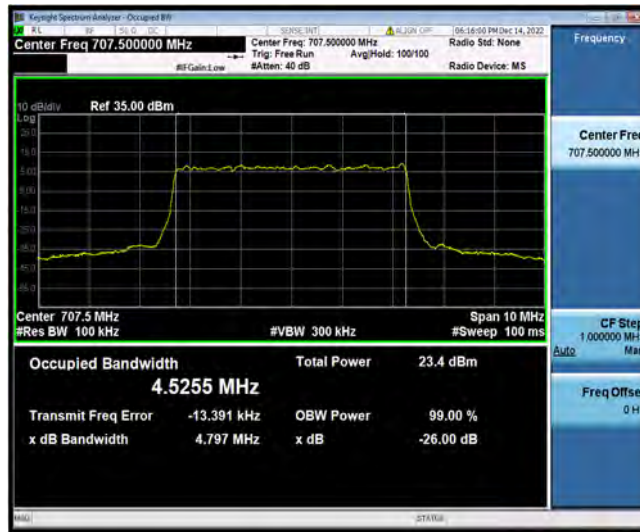
## 26dB Bandwidth and Occupied Bandwidth

### Test Result

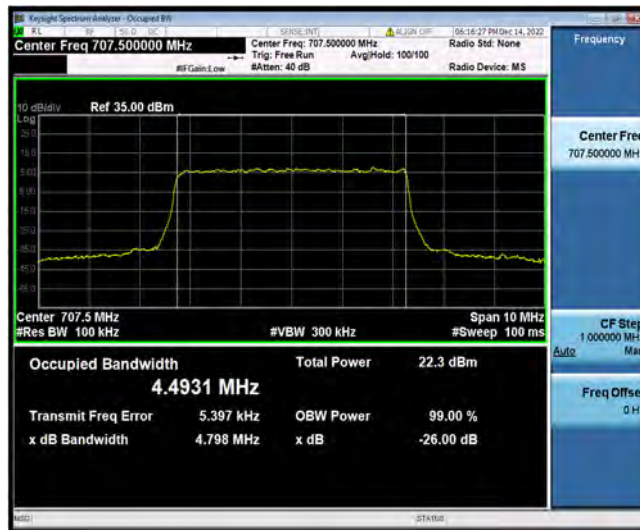
Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
N12	5MHz	QPSK	141500	25RB#0	4.5255	4.797	PASS
N12	5MHz	16QAM	141500	25RB#0	4.4931	4.798	PASS
N12	5MHz	64QAM	141500	25RB#0	4.5205	4.843	PASS
N12	5MHz	256QAM	141500	25RB#0	4.5010	4.864	PASS
N12	5MHz	BPSK	141500	25RB#0	4.4953	4.790	PASS
N12	10MHz	QPSK	141500	50RB#0	8.9219	9.461	PASS
N12	10MHz	16QAM	141500	50RB#0	8.9432	9.472	PASS
N12	10MHz	64QAM	141500	50RB#0	8.9485	9.488	PASS
N12	10MHz	BPSK	141500	50RB#0	8.9269	9.459	PASS
N12	10MHz	256QAM	141500	50RB#0	8.9232	9.464	PASS
N12	15MHz	QPSK	141500	75RB#0	13.375	14.18	PASS
N12	15MHz	16QAM	141500	75RB#0	13.405	14.18	PASS
N12	15MHz	64QAM	141500	75RB#0	13.400	14.19	PASS
N12	15MHz	BPSK	141500	75RB#0	13.415	14.20	PASS
N12	15MHz	256QAM	141500	75RB#0	13.397	14.19	PASS

# Test Graphs

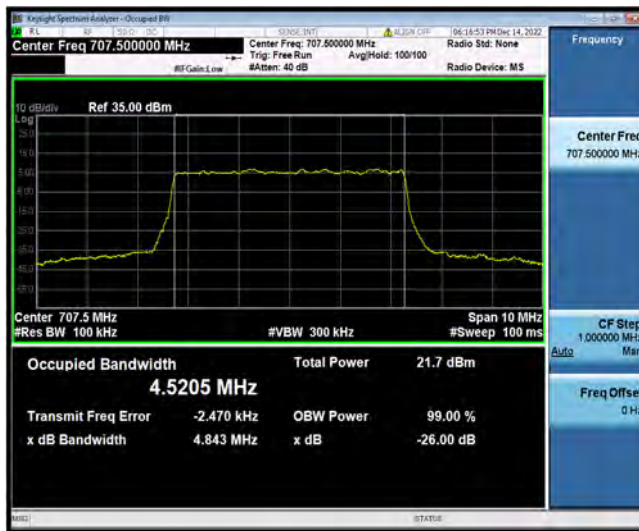
N12-5MHz-QPSK-141500-25RB#0



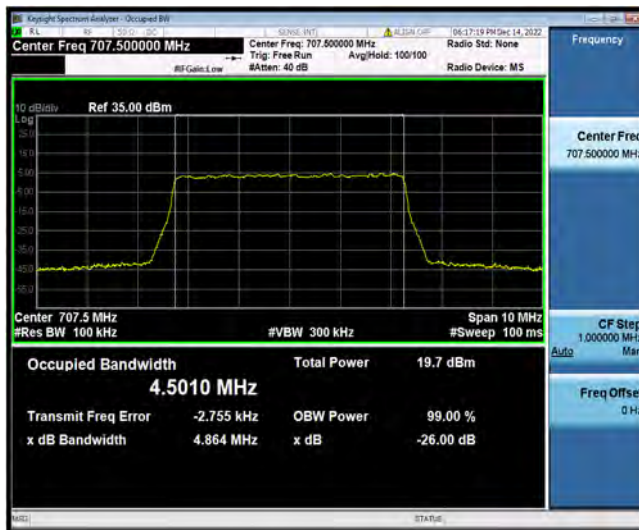
N12-5MHz-16QAM-141500-25RB#0



N12-5MHz-64QAM-141500-25RB#0



N12-5MHz-256QAM-141500-25RB#0



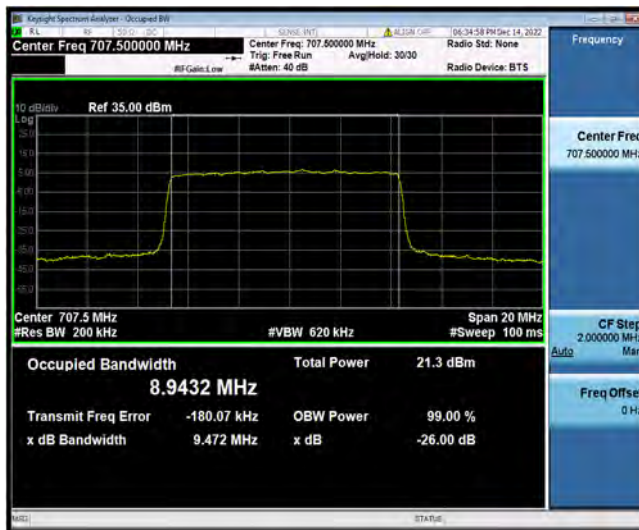
N12-5MHz-BPSK-141500-25RB#0



N12-10MHz-QPSK-141500-50RB#0



N12-10MHz-16QAM-141500-50RB#0



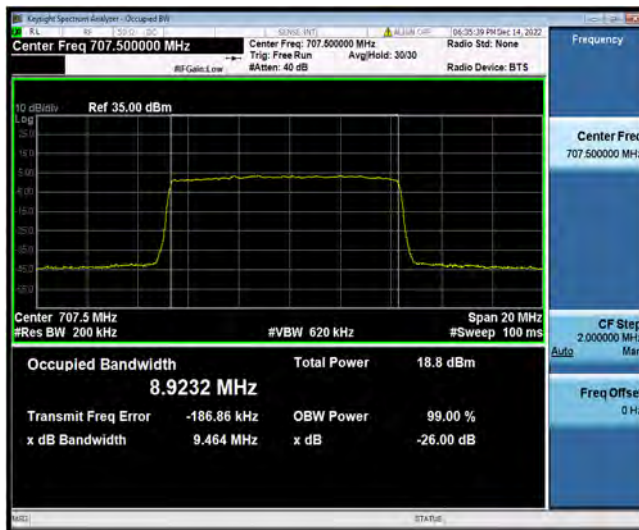
N12-10MHz-64QAM-141500-50RB#0



N12-10MHz-BPSK-141500-50RB#0



N12-10MHz-256QAM-141500-50RB#0



N12-15MHz-QPSK-141500-75RB#0



N12-15MHz-16QAM-141500-75RB#0





N12-15MHz-64QAM-141500-75RB#0

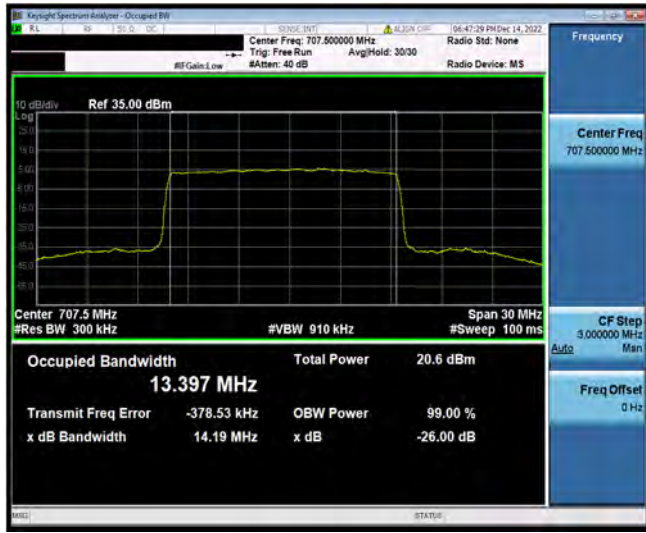


N12-15MHz-BPSK-141500-75RB#0



N12-15MHz-256QAM-141500-75RB#0





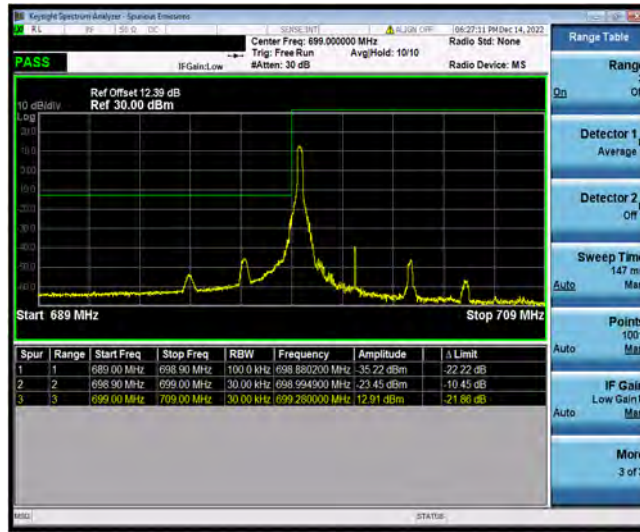
## Band Edge

### Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
N12	5MHz	QPSK	140300	1RB#0	-35.22,- 23.45	PASS
N12	5MHz	QPSK	140300	25RB#0	-34.55,- 33.94	PASS
N12	5MHz	QPSK	142700	1RB#24	-24.41,- 36.61	PASS
N12	5MHz	QPSK	142700	25RB#0	-33.88,- 33.88	PASS
N12	10MHz	QPSK	140800	1RB#0	-34.50,- 22.85	PASS
N12	10MHz	QPSK	140800	50RB#0	-39.21,- 40.63	PASS
N12	10MHz	QPSK	142200	1RB#49	-26.94,- 37.24	PASS
N12	10MHz	QPSK	142200	50RB#0	-42.81,- 40.45	PASS
N12	15MHz	QPSK	141300	1RB#0	-30.87,- 27.21	PASS
N12	15MHz	QPSK	141300	75RB#0	-38.05,- 40.24	PASS
N12	15MHz	QPSK	141700	1RB#74	-29.63,- 43.13	PASS
N12	15MHz	QPSK	141700	75RB#0	-44.49,- 41.00	PASS

# Test Graphs

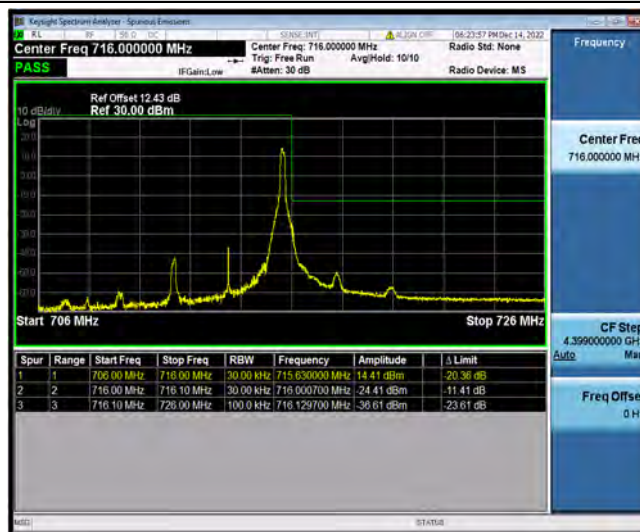
N12-5MHz-QPSK-140300-1RB#0



N12-5MHz-QPSK-140300-25RB#0



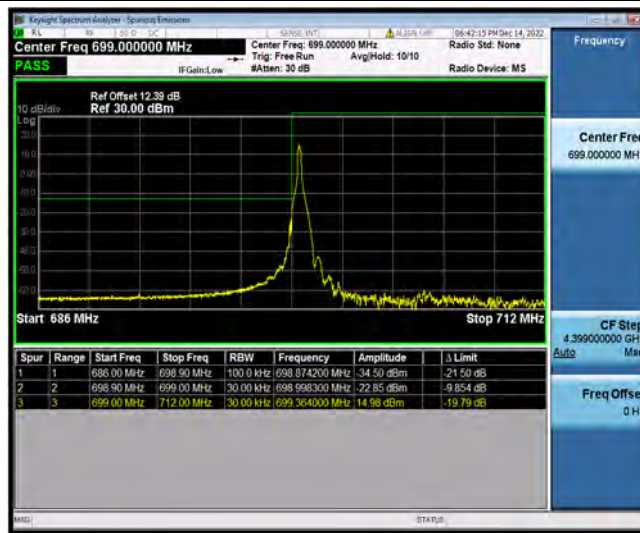
N12-5MHz-QPSK-142700-1RB#24



### N12-5MHz-QPSK-142700-25RB#0



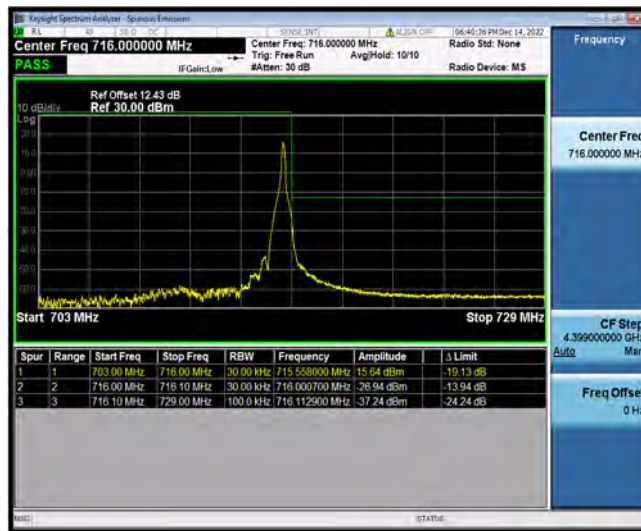
### N12-10MHz-QPSK-140800-1RB#0



### N12-10MHz-QPSK-140800-50RB#0



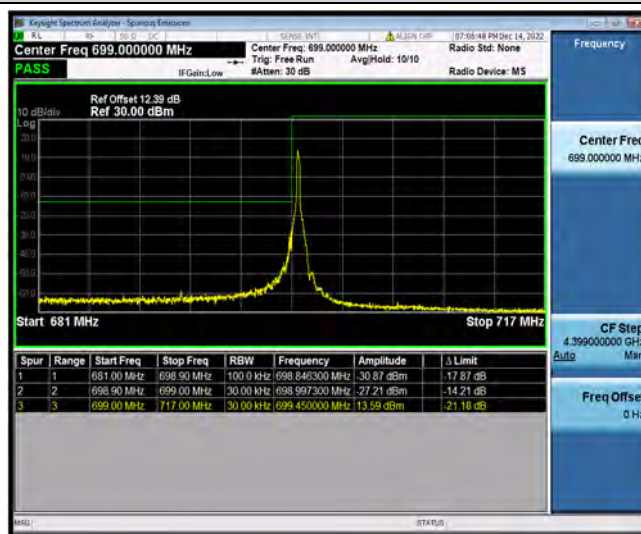
### N12-10MHz-QPSK-142200-1RB#49



N12-10MHz-QPSK-142200-50RB#0



N12-15MHz-QPSK-141300-1RB#0

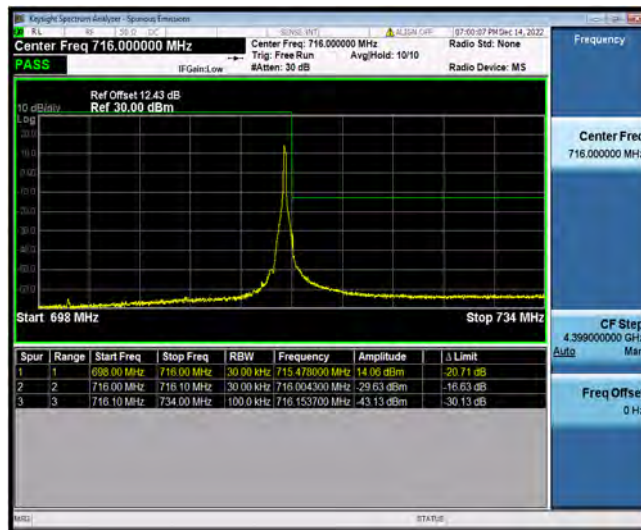


N12-15MHz-QPSK-141300-75RB#0





N12-15MHz-QPSK-141700-1RB#74



N12-15MHz-QPSK-141700-75RB#0

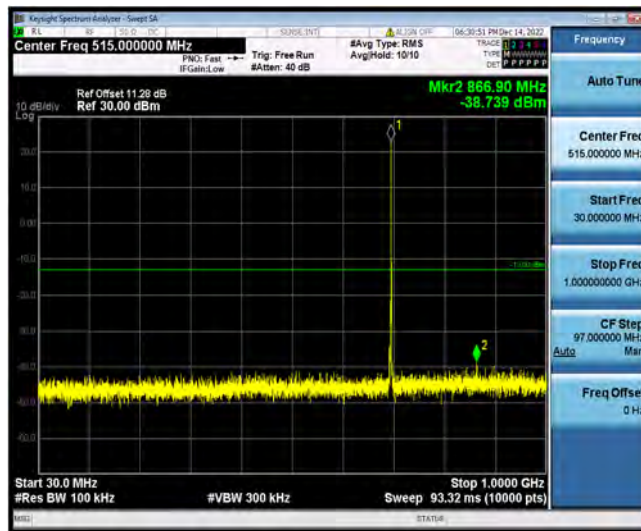


## Conducted Spurious Emission

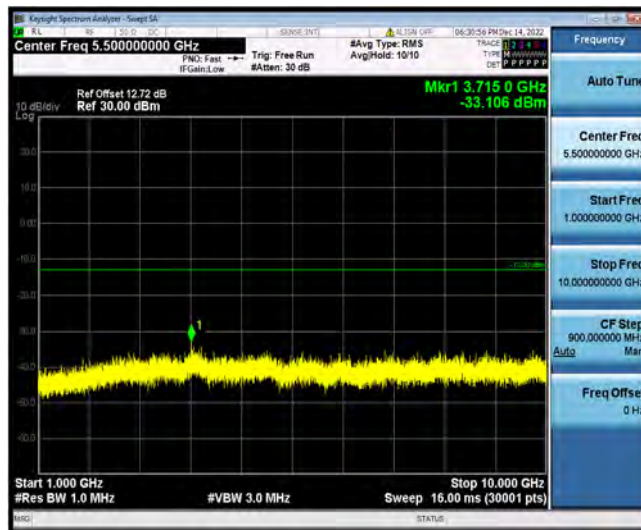
### Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Frequency Range	Result (dBm)	Verdict
N12	5MHz	QPSK	140300	1RB#0	Range1:30~1000MHz	- 40.16	PASS
N12	5MHz	QPSK	140300	1RB#0	Range2:1000~10000MHz	- 34.38	PASS
N12	5MHz	QPSK	141500	1RB#0	Range1:30~1000MHz	- 38.74	PASS
N12	5MHz	QPSK	141500	1RB#0	Range2:1000~10000MHz	- 33.11	PASS
N12	5MHz	QPSK	142700	1RB#0	Range1:30~1000MHz	-39.3	PASS
N12	5MHz	QPSK	142700	1RB#0	Range2:1000~10000MHz	- 34.33	PASS
N12	10MHz	QPSK	140800	1RB#0	Range1:30~1000MHz	- 39.48	PASS
N12	10MHz	QPSK	140800	1RB#0	Range2:1000~10000MHz	- 33.04	PASS
N12	10MHz	QPSK	141500	1RB#0	Range1:30~1000MHz	- 40.26	PASS
N12	10MHz	QPSK	141500	1RB#0	Range2:1000~10000MHz	- 34.26	PASS
N12	10MHz	QPSK	142200	1RB#0	Range1:30~1000MHz	- 40.39	PASS
N12	10MHz	QPSK	142200	1RB#0	Range2:1000~10000MHz	- 33.74	PASS
N12	15MHz	QPSK	141300	1RB#0	Range1:30~1000MHz	-40.5	PASS
N12	15MHz	QPSK	141300	1RB#0	Range2:1000~10000MHz	- 33.84	PASS
N12	15MHz	QPSK	141500	1RB#0	Range1:30~1000MHz	- 39.97	PASS
N12	15MHz	QPSK	141500	1RB#0	Range2:1000~10000MHz	- 34.47	PASS
N12	15MHz	QPSK	141700	1RB#0	Range1:30~1000MHz	- 40.07	PASS
N12	15MHz	QPSK	141700	1RB#0	Range2:1000~10000MHz	- 34.23	PASS

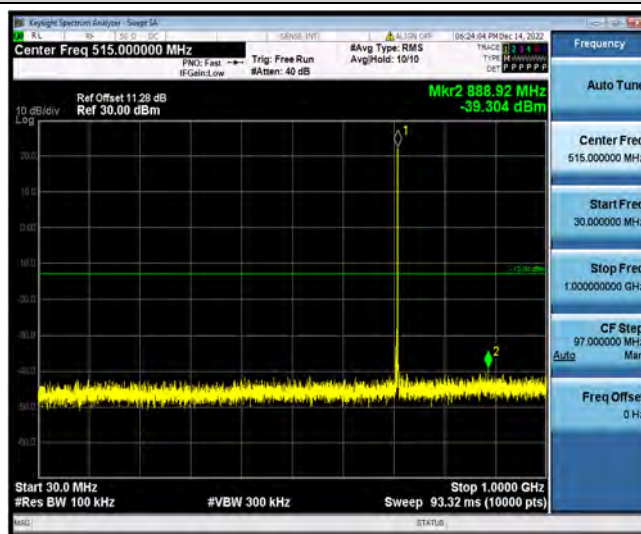




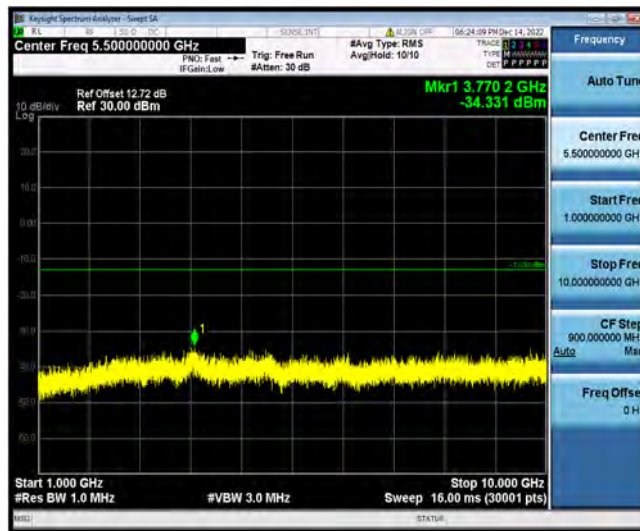
N12-5MHz-QPSK-141500-1RB#0-Range2:1000~10000MHz



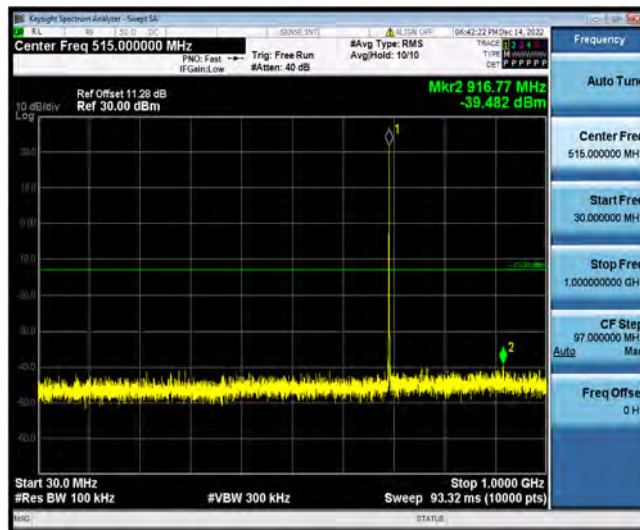
N12-5MHz-QPSK-142700-1RB#0-Range1:30~1000MHz



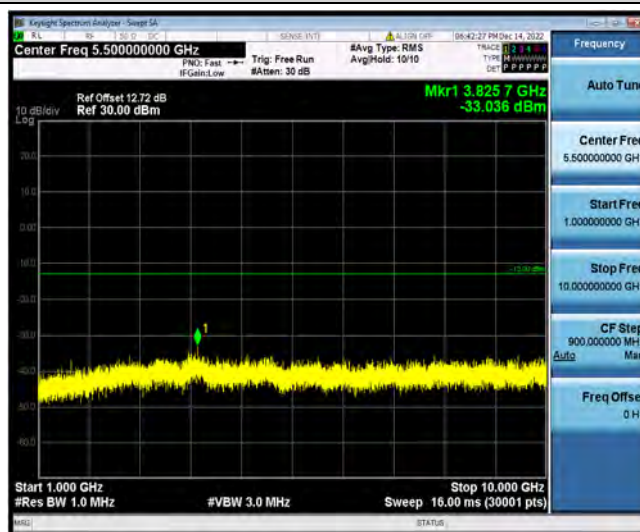
N12-5MHz-QPSK-142700-1RB#0-Range2:1000~10000MHz



N12-10MHz-QPSK-140800-1RB#0-Range1:30~1000MHz

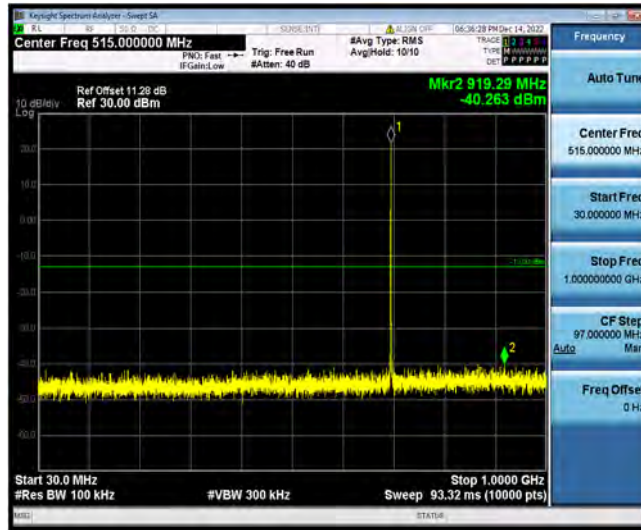


N12-10MHz-QPSK-140800-1RB#0-Range2:1000~10000MHz

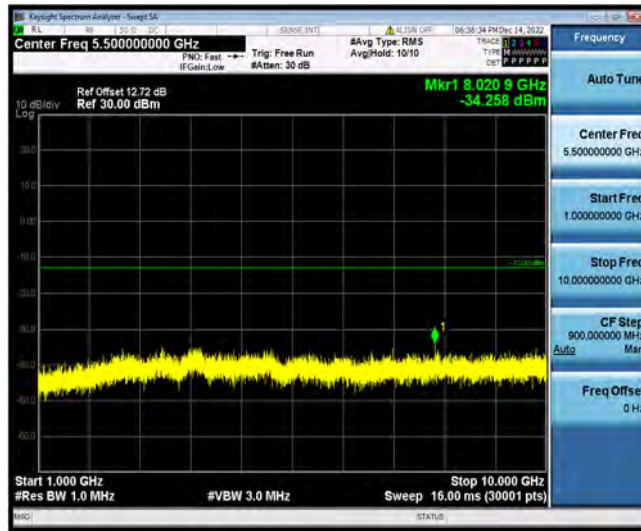


N12-10MHz-QPSK-141500-1RB#0-Range1:30~1000MHz

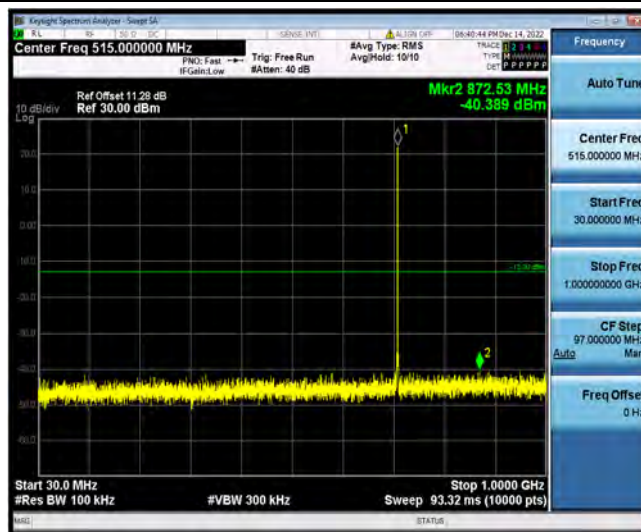




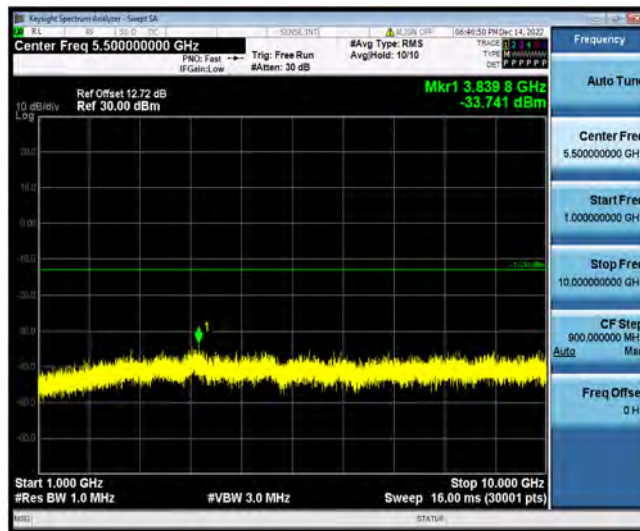
N12-10MHz-QPSK-141500-1RB#0-Range2:1000~10000MHz



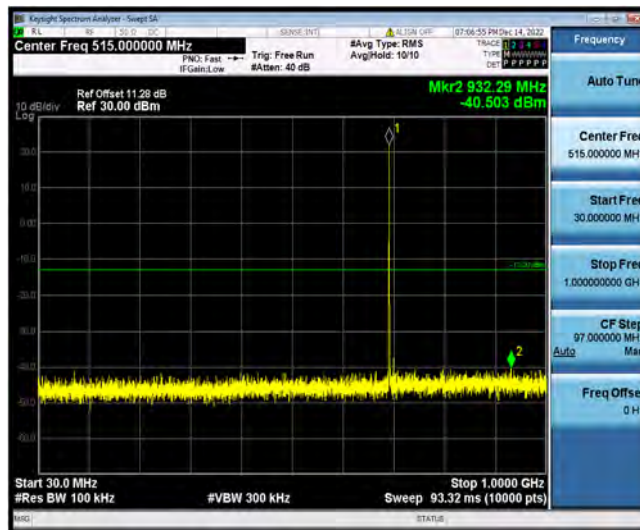
N12-10MHz-QPSK-142200-1RB#0-Range1:30~1000MHz



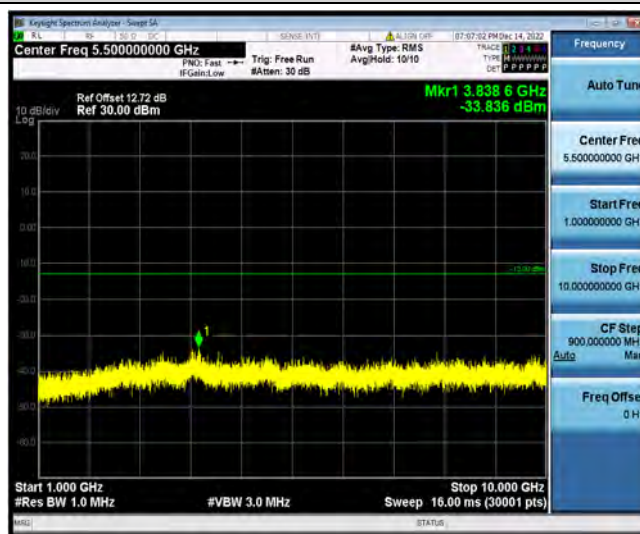
N12-10MHz-QPSK-142200-1RB#0-Range2:1000~10000MHz



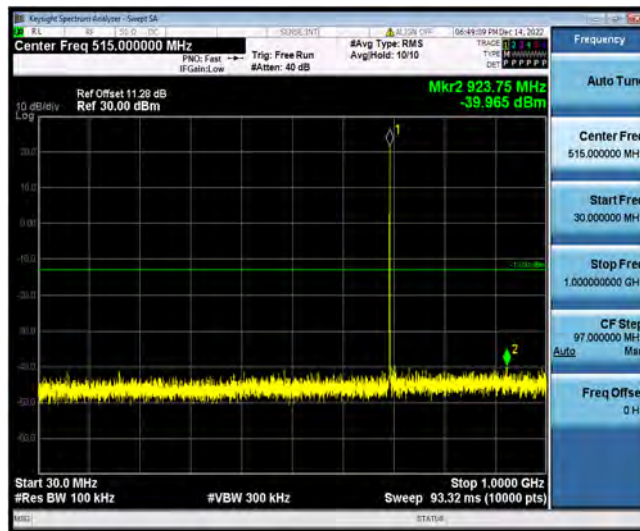
N12-15MHz-QPSK-141300-1RB#0-Range1:30~1000MHz



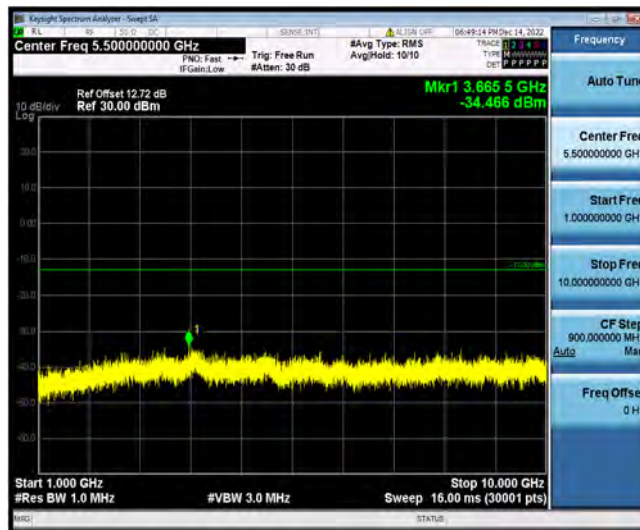
N12-15MHz-QPSK-141300-1RB#0-Range2:1000~10000MHz



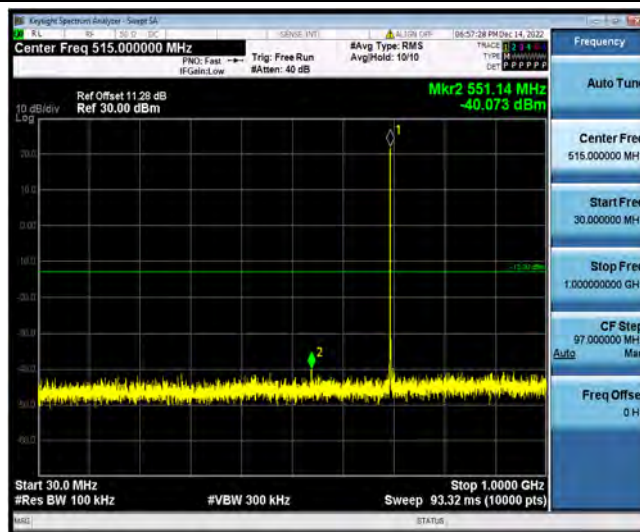
N12-15MHz-QPSK-141500-1RB#0-Range1:30~1000MHz



N12-15MHz-QPSK-141500-1RB#0-Range2:1000~10000MHz



N12-15MHz-QPSK-141700-1RB#0-Range1:30~1000MHz



N12-15MHz-QPSK-141700-1RB#0-Range2:1000~10000MHz

