



BUREAU  
VERITAS

Test Report No.: W7L-P21120037RF05





## BAND EDGE

### Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band13	5MHz	QPSK	23205	1RB#0	-15.45	PASS
Band13	5MHz	QPSK	23205	25RB#0	-26.78	PASS
Band13	5MHz	QPSK	23255	1RB#24	-14.68	PASS
Band13	5MHz	QPSK	23255	25RB#0	-26.63	PASS
Band13	5MHz	16QAM	23205	1RB#0	-16.86	PASS
Band13	5MHz	16QAM	23205	25RB#0	-28.73	PASS
Band13	5MHz	16QAM	23255	1RB#24	-17.47	PASS
Band13	5MHz	16QAM	23255	25RB#0	-28.34	PASS
Band13	10MHz	QPSK	23230	1RB#0	-18.59,-38.78	PASS
Band13	10MHz	QPSK	23230	1RB#49	-38.88,-19.29	PASS
Band13	10MHz	QPSK	23230	50RB#0	-30.31,-30.47	PASS
Band13	10MHz	16QAM	23230	1RB#0	-19.91,-39.69	PASS
Band13	10MHz	16QAM	23230	1RB#49	-38.91,-20.18	PASS
Band13	10MHz	16QAM	23230	50RB#0	-31.87,-31.38	PASS
Band13	5MHz	64QAM	23205	1RB#0	-18.34	PASS
Band13	5MHz	64QAM	23205	25RB#0	-29.91	PASS
Band13	5MHz	64QAM	23255	1RB#24	-18.75	PASS
Band13	5MHz	64QAM	23255	25RB#0	-29.02	PASS
Band13	10MHz	64QAM	23230	1RB#0	-20.64,-39.79	PASS
Band13	10MHz	64QAM	23230	1RB#49	-39.34,-21.63	PASS
Band13	10MHz	64QAM	23230	50RB#0	-33.45,-32.01	PASS

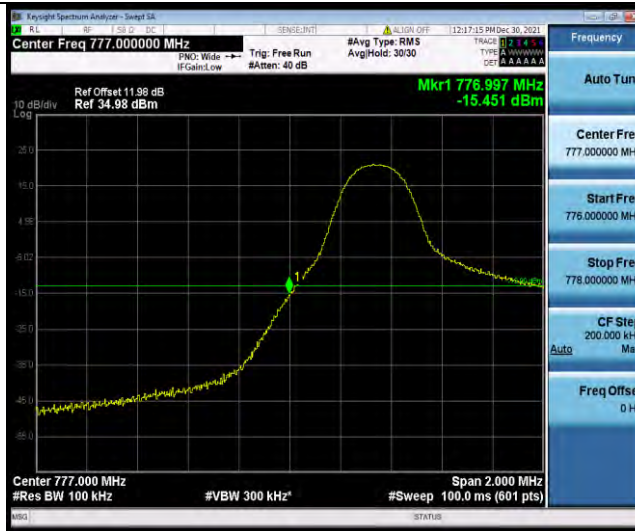
### Test Graphs

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



BUREAU VERITAS

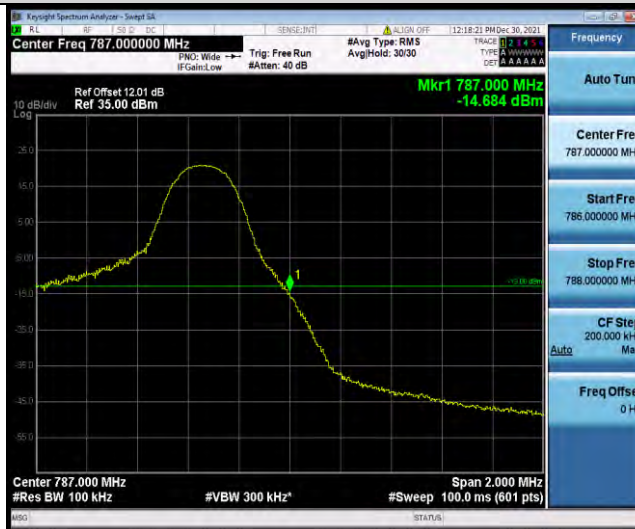
Test Report No.: W7L-P21120037RF05



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



Band13-5MHz-QPSK-23255-1RB#24



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



BUREAU VERITAS

Test Report No.: W7L-P21120037RF05



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



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

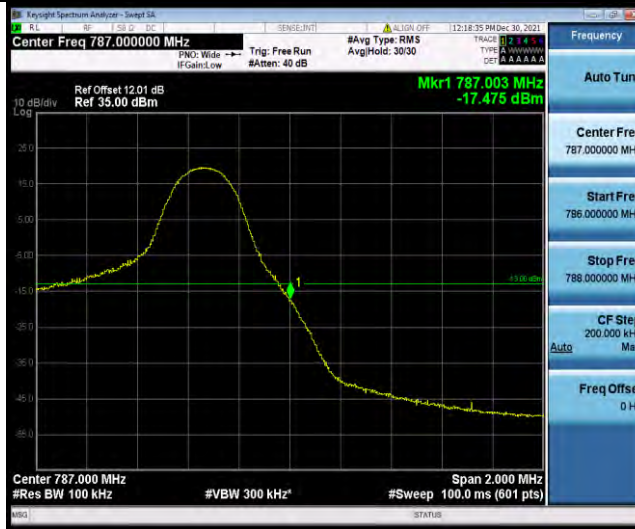


Band13-5MHz-16QAM-23255-1RB#24



BUREAU VERITAS

Test Report No.: W7L-P21120037RF05



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



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

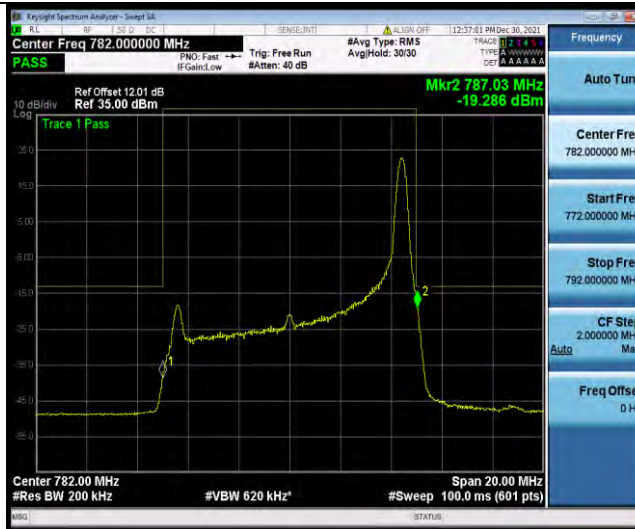


Band13-10MHz-QPSK-23230-1RB#49



BUREAU VERITAS

### Test Report No.: W7L-P21120037RF05



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



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

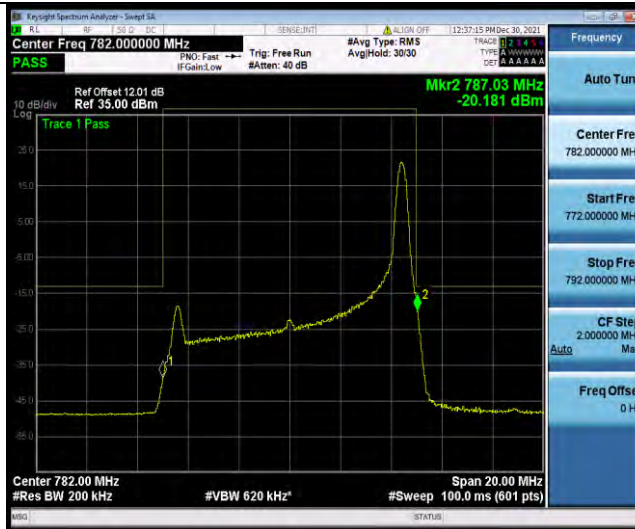


Band13-10MHz-16QAM-23230-1RB#49

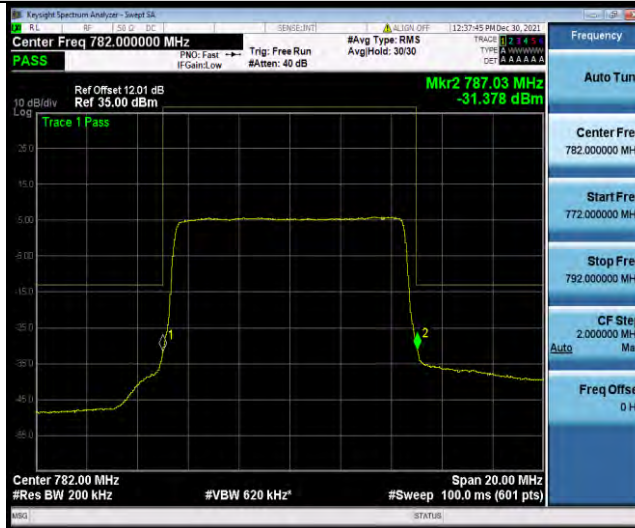


BUREAU VERITAS

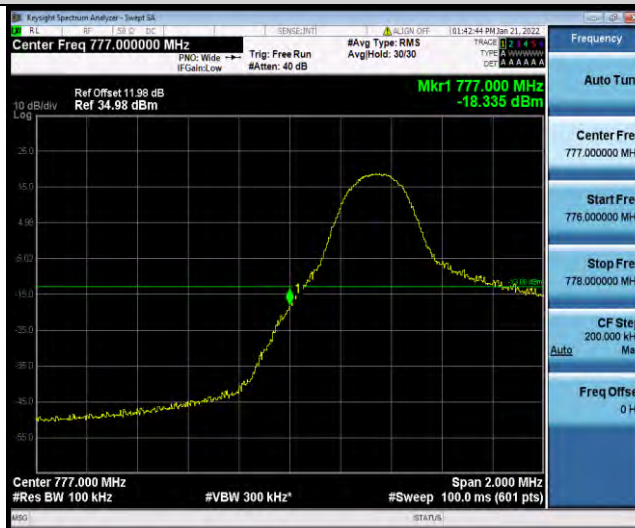
Test Report No.: W7L-P21120037RF05



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



Band13-5MHz-64QAM-23205-1RB#0



Band13-5MHz-64QAM-23205-25RB#0



BUREAU VERITAS

Test Report No.: W7L-P21120037RF05



Band13-5MHz-64QAM-23255-1RB#24



Band13-5MHz-64QAM-23255-25RB#0



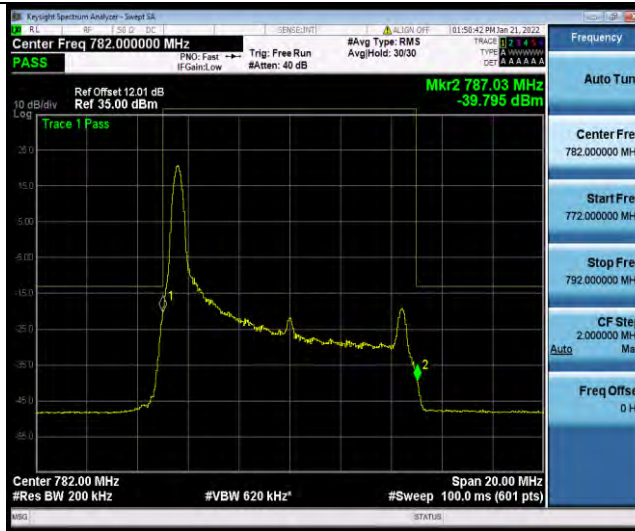
Band13-10MHz-64QAM-23230-1RB#0





BUREAU VERITAS

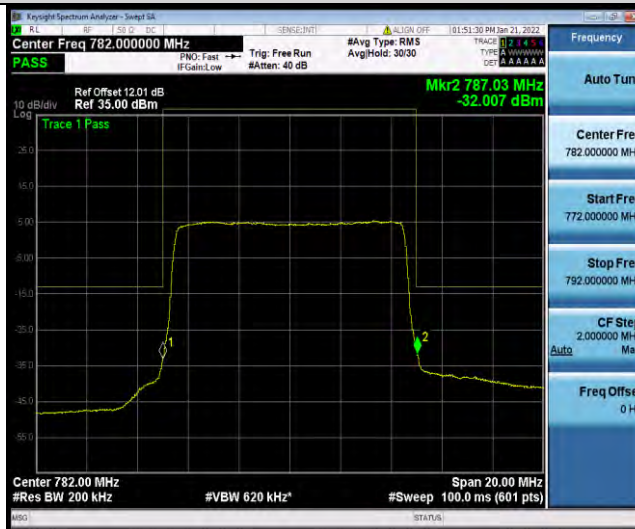
Test Report No.: W7L-P21120037RF05



Band13-10MHz-64QAM-23230-1RB#49



Band13-10MHz-64QAM-23230-50RB#0





Test Report No.: W7L-P21120037RF05

## CONDUCTED SPURIOUS EMISSION

### Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Frequency Range	Result (dBm)	Verdict
Band13	5MHz	QPSK	23205	1RB#0	Range1:30~1000MHz	-51.23	PASS
Band13	5MHz	QPSK	23205	1RB#0	Range3:763~775MHz	-52.77	PASS
Band13	5MHz	QPSK	23205	1RB#0	Range4:793~805MHz	-52	PASS
Band13	5MHz	QPSK	23205	1RB#0	Range2:1000~10000MHz	-34.04	PASS
Band13	5MHz	QPSK	23205	1RB#0	Range5:1559~1610MHz	-55.66	PASS
Band13	5MHz	QPSK	23230	1RB#0	Range1:30~1000MHz	-53.49	PASS
Band13	5MHz	QPSK	23230	1RB#0	Range3:763~775MHz	-51.73	PASS
Band13	5MHz	QPSK	23230	1RB#0	Range4:793~805MHz	-52.72	PASS
Band13	5MHz	QPSK	23230	1RB#0	Range2:1000~10000MHz	-34.89	PASS
Band13	5MHz	QPSK	23230	1RB#0	Range5:1559~1610MHz	-59.65	PASS
Band13	5MHz	QPSK	23255	1RB#0	Range1:30~1000MHz	-50.89	PASS
Band13	5MHz	QPSK	23255	1RB#0	Range3:763~775MHz	-53.03	PASS
Band13	5MHz	QPSK	23255	1RB#0	Range4:793~805MHz	-52.83	PASS
Band13	5MHz	QPSK	23255	1RB#0	Range2:1000~10000MHz	-34.03	PASS
Band13	5MHz	QPSK	23255	1RB#0	Range5:1559~1610MHz	-59.38	PASS
Band13	5MHz	16QAM	23205	1RB#0	Range1:30~1000MHz	-50.9	PASS
Band13	5MHz	16QAM	23205	1RB#0	Range3:763~775MHz	-51.75	PASS
Band13	5MHz	16QAM	23205	1RB#0	Range4:793~805MHz	-52.48	PASS
Band13	5MHz	16QAM	23205	1RB#0	Range2:1000~10000MHz	-34.85	PASS
Band13	5MHz	16QAM	23205	1RB#0	Range5:1559~1610MHz	-54.42	PASS
Band13	5MHz	16QAM	23230	1RB#0	Range1:30~1000MHz	-50.11	PASS
Band13	5MHz	16QAM	23230	1RB#0	Range3:763~775MHz	-52.28	PASS
Band13	5MHz	16QAM	23230	1RB#0	Range4:793~805MHz	-52.24	PASS
Band13	5MHz	16QAM	23230	1RB#0	Range2:1000~10000MHz	-34.77	PASS
Band13	5MHz	16QAM	23230	1RB#0	Range5:1559~1610MHz	-60.29	PASS
Band13	5MHz	16QAM	23255	1RB#0	Range1:30~1000MHz	-49.99	PASS
Band13	5MHz	16QAM	23255	1RB#0	Range3:763~775MHz	-52.48	PASS
Band13	5MHz	16QAM	23255	1RB#0	Range4:793~805MHz	-52.62	PASS
Band13	5MHz	16QAM	23255	1RB#0	Range2:1000~10000MHz	-34.26	PASS
Band13	5MHz	16QAM	23255	1RB#0	Range5:1559~1610MHz	-59.94	PASS
Band13	10MHz	QPSK	23230	1RB#0	Range1:30~1000MHz	-51.09	PASS
Band13	10MHz	QPSK	23230	1RB#0	Range3:763~775MHz	-52.73	PASS
Band13	10MHz	QPSK	23230	1RB#0	Range4:793~805MHz	-52.16	PASS
Band13	10MHz	QPSK	23230	1RB#0	Range2:1000~10000MHz	-34.96	PASS
Band13	10MHz	QPSK	23230	1RB#0	Range5:1559~1610MHz	-59.41	PASS
Band13	10MHz	16QAM	23230	1RB#0	Range1:30~1000MHz	-50.33	PASS
Band13	10MHz	16QAM	23230	1RB#0	Range3:763~775MHz	-52.44	PASS
Band13	10MHz	16QAM	23230	1RB#0	Range4:793~805MHz	-37.08	PASS
Band13	10MHz	16QAM	23230	1RB#0	Range2:1000~10000MHz	-34.71	PASS
Band13	10MHz	16QAM	23230	1RB#0	Range5:1559~1610MHz	-60.22	PASS
Band13	5MHz	64QAM	23205	1RB#0	Range1:30~1000MHz	-41.02	PASS
Band13	5MHz	64QAM	23205	1RB#0	Range2:1000~10000MHz	-34.8	PASS
Band13	5MHz	64QAM	23205	1RB#0	Range3:1559~1610MHz	-59.83	PASS
Band13	5MHz	64QAM	23230	1RB#0	Range1:30~1000MHz	-40.69	PASS

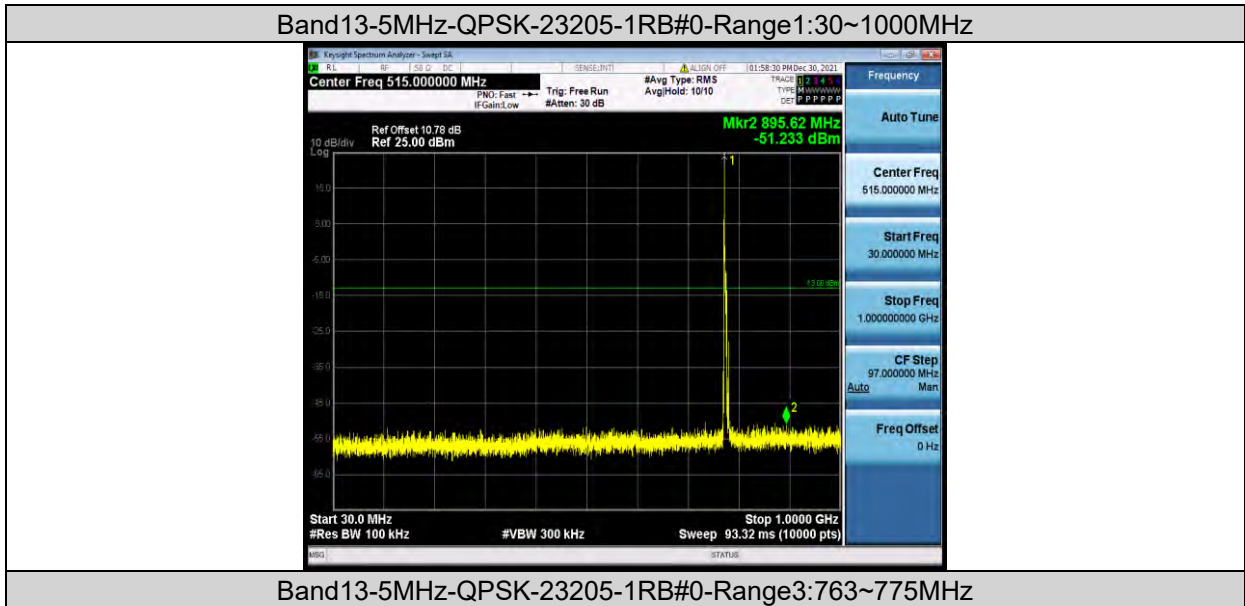


**BUREAU  
VERITAS**

**Test Report No.: W7L-P21120037RF05**

Band13	5MHz	64QAM	23230	1RB#0	Range2:1000~10000MHz	-33.6	PASS
Band13	5MHz	64QAM	23230	1RB#0	Range3:1559~1610MHz	-51.99	PASS
Band13	5MHz	64QAM	23255	1RB#0	Range1:30~1000MHz	-40.83	PASS
Band13	5MHz	64QAM	23255	1RB#0	Range2:1000~10000MHz	-35.46	PASS
Band13	5MHz	64QAM	23255	1RB#0	Range3:1559~1610MHz	-50.12	PASS
Band13	10MHz	64QAM	23230	1RB#0	Range1:30~1000MHz	-40.5	PASS
Band13	10MHz	64QAM	23230	1RB#0	Range2:1000~10000MHz	-35.04	PASS
Band13	10MHz	64QAM	23230	1RB#0	Range3:1559~1610MHz	-59.74	PASS

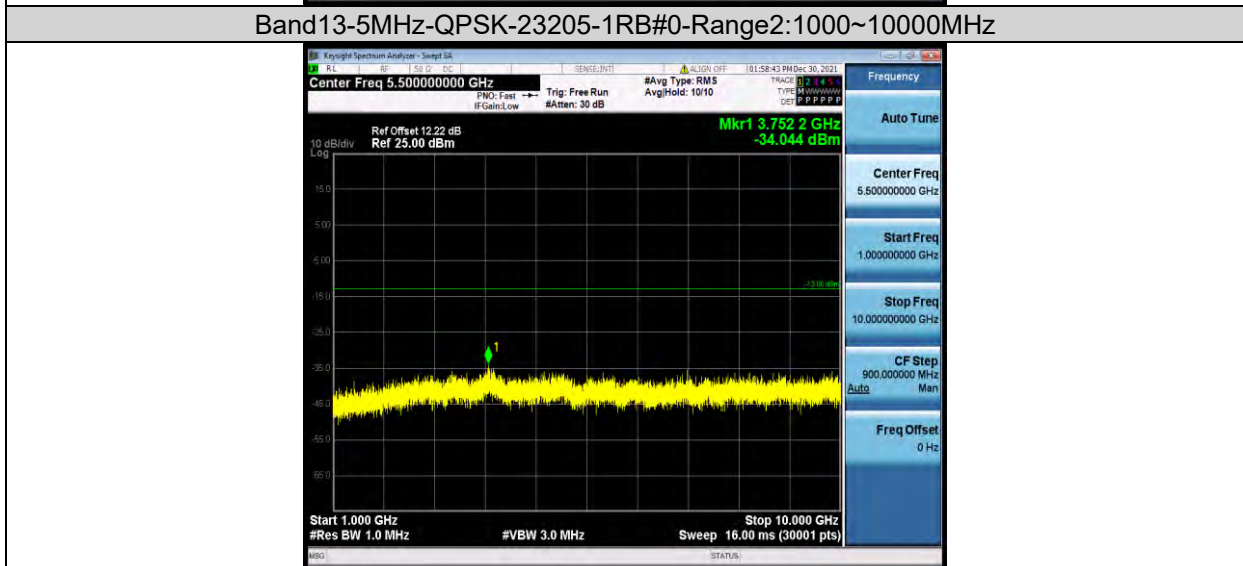
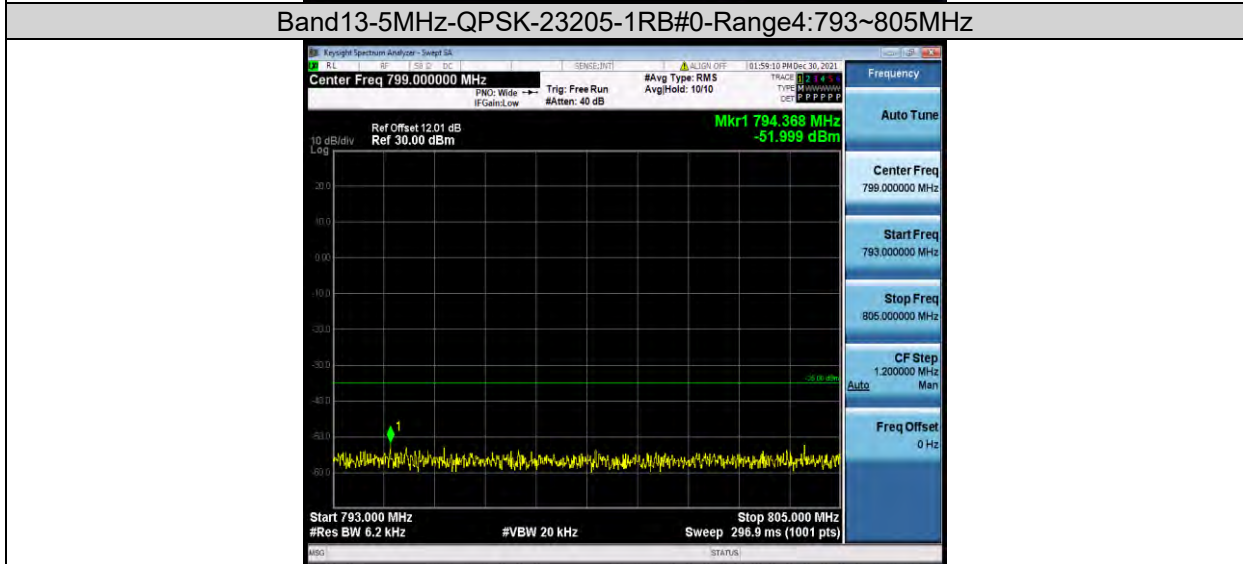
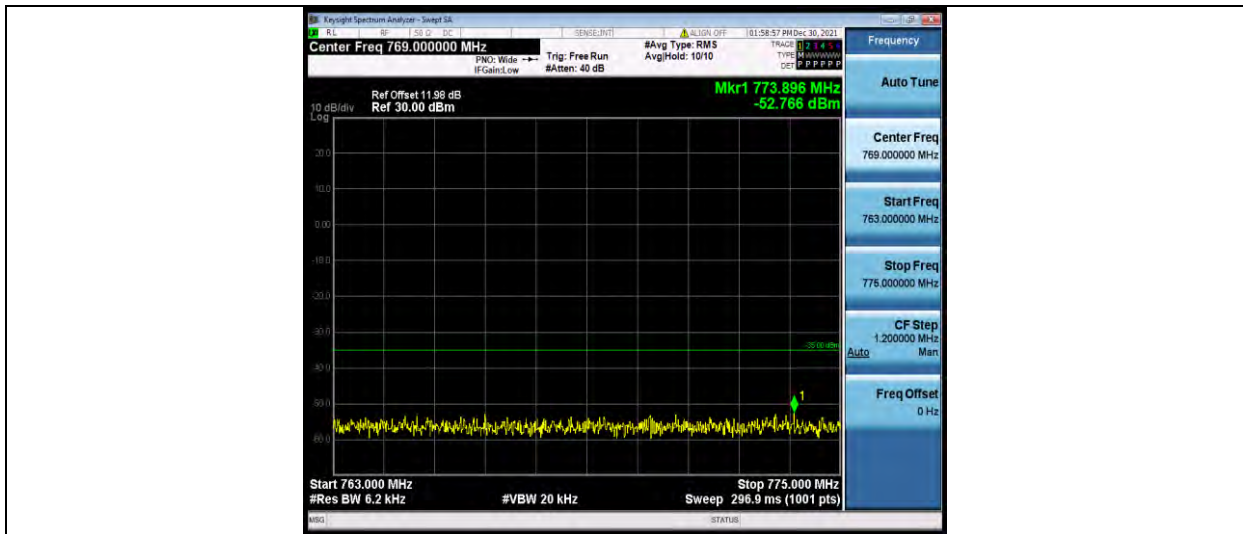
**Test Graphs**





BUREAU VERITAS

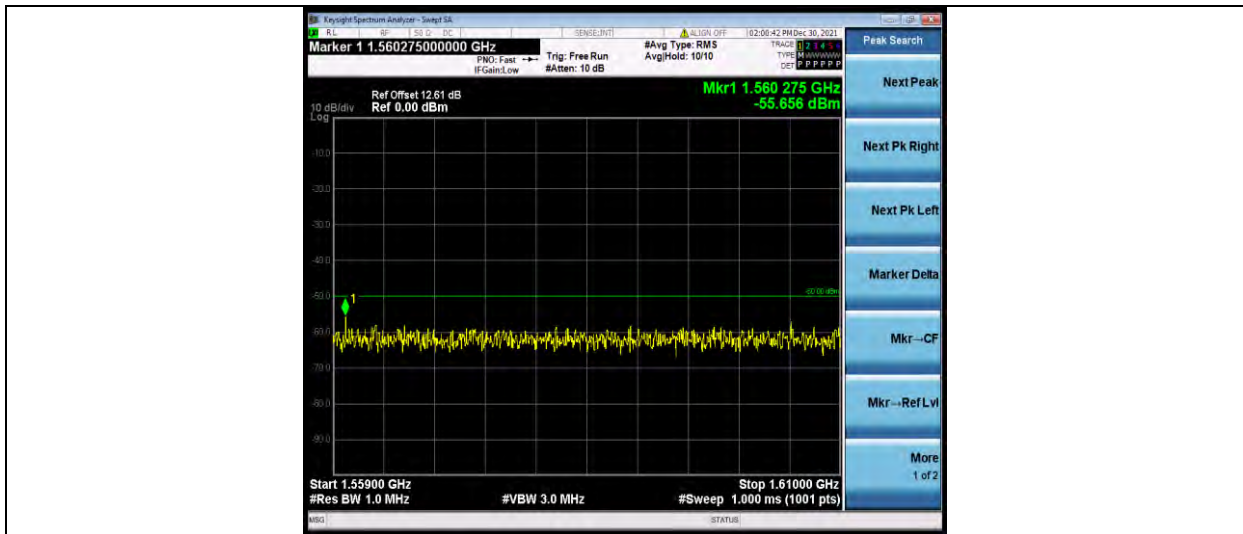
Test Report No.: W7L-P21120037RF05



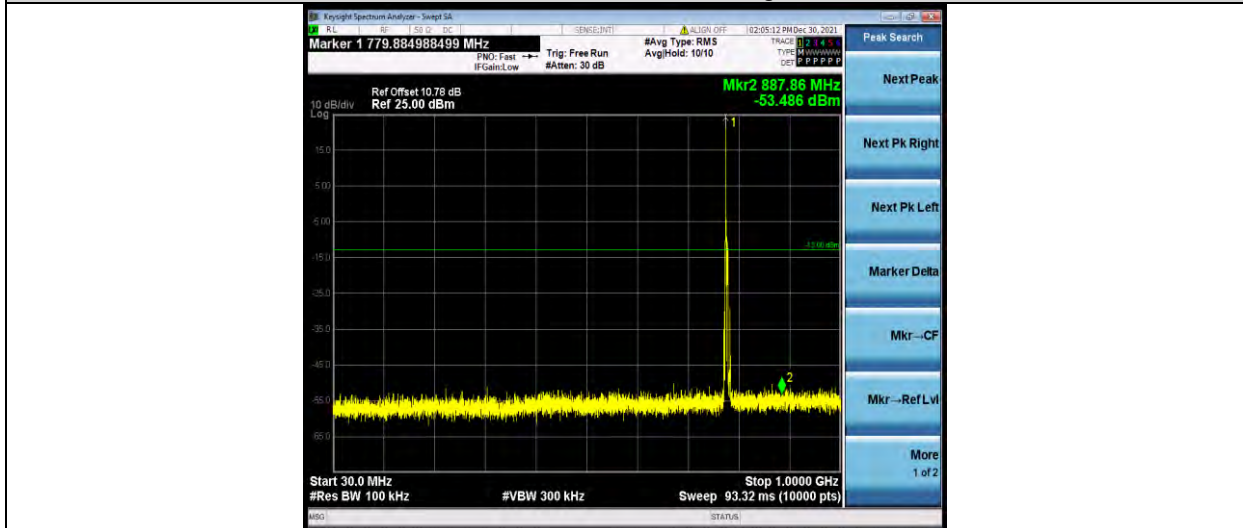


BUREAU VERITAS

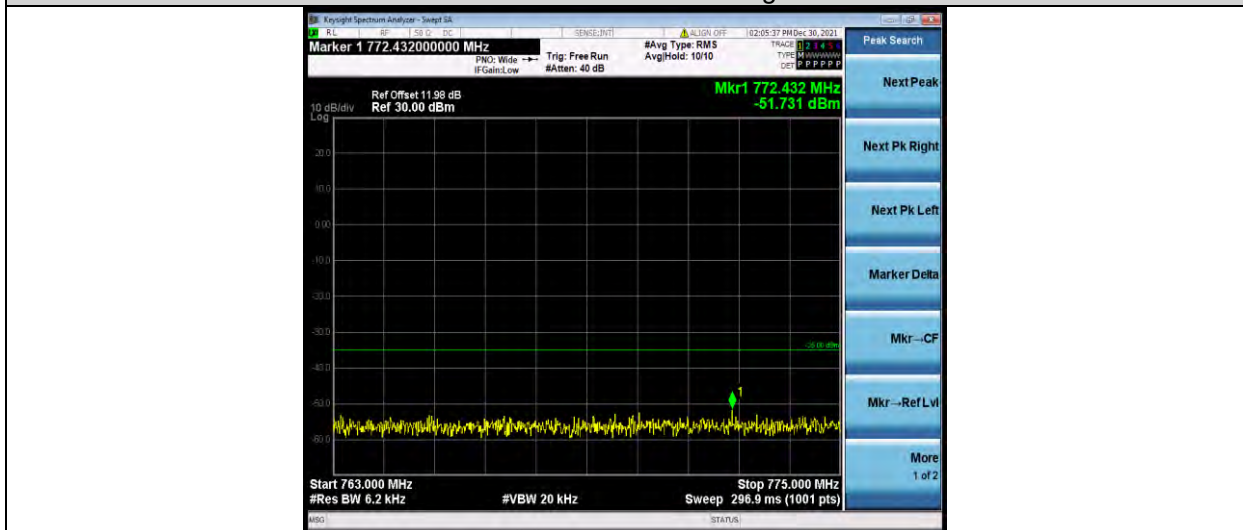
Test Report No.: W7L-P21120037RF05



Band13-5MHz-QPSK-23230-1RB#0-Range1:30~1000MHz



Band13-5MHz-QPSK-23230-1RB#0-Range3:763~775MHz

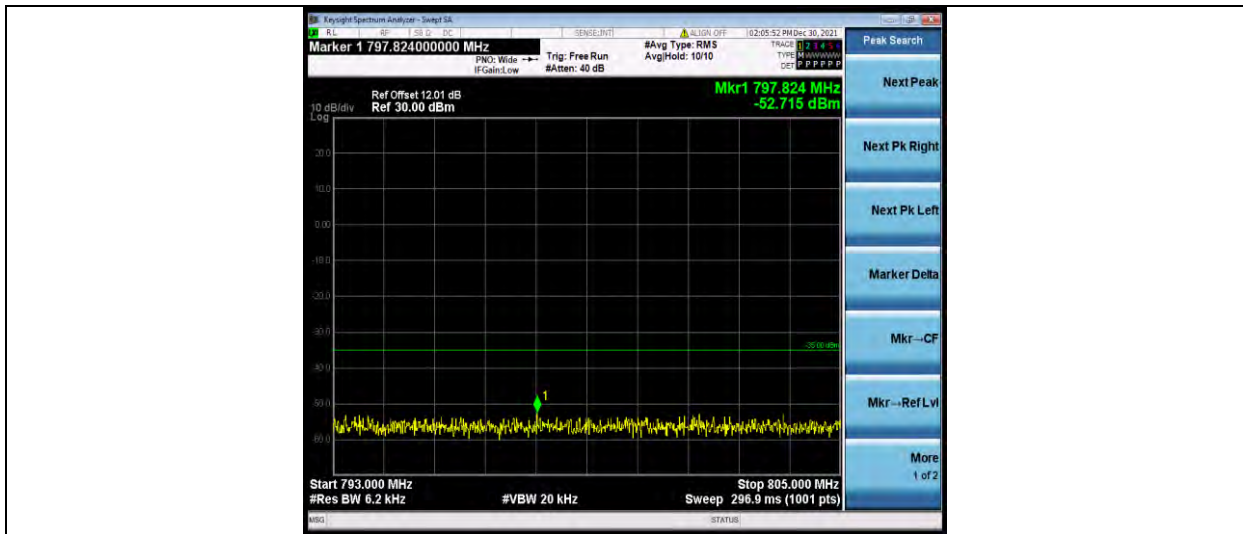


Band13-5MHz-QPSK-23230-1RB#0-Range4:793~805MHz

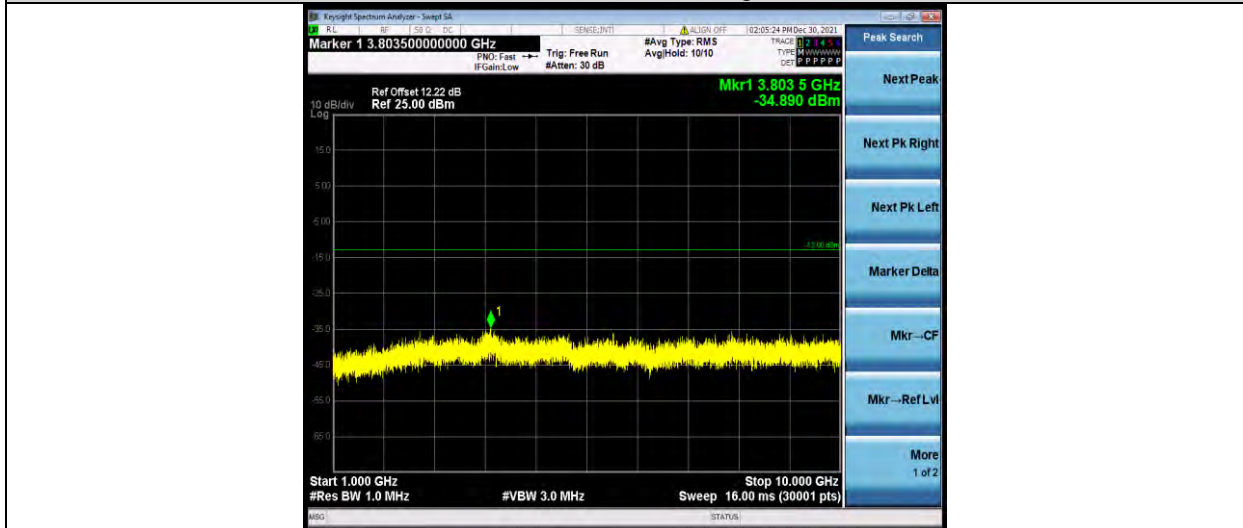


BUREAU VERITAS

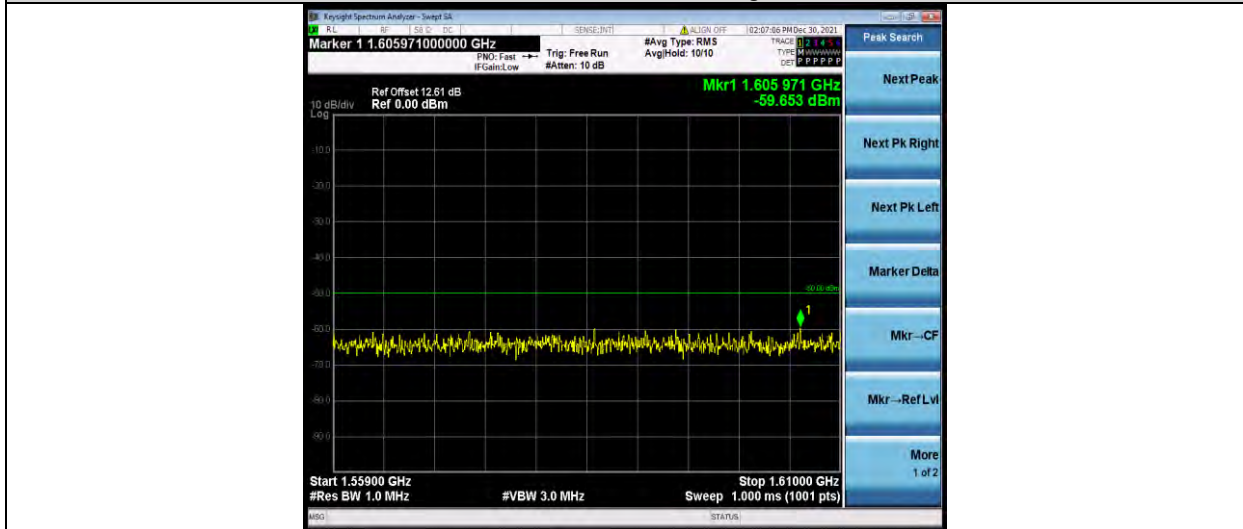
Test Report No.: W7L-P21120037RF05



Band13-5MHz-QPSK-23230-1RB#0-Range2: 1000~10000MHz



Band13-5MHz-QPSK-23230-1RB#0-Range5: 1559~1610MHz

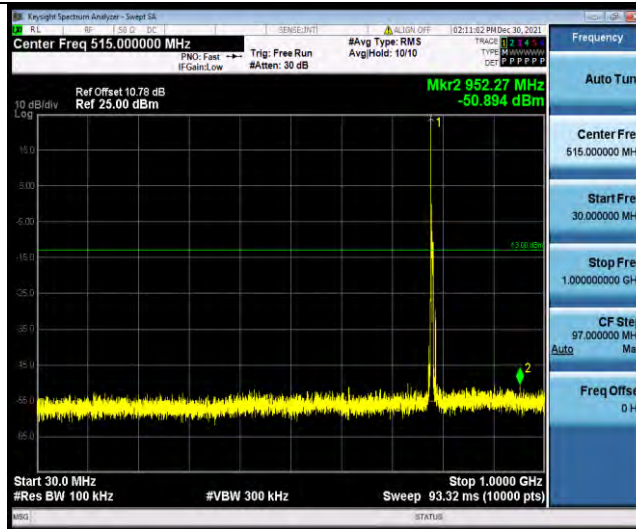


Band13-5MHz-QPSK-23255-1RB#0-Range1: 30~1000MHz

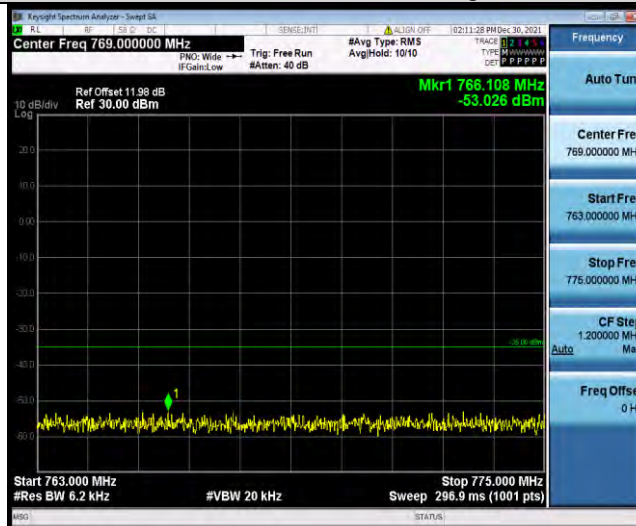


BUREAU VERITAS

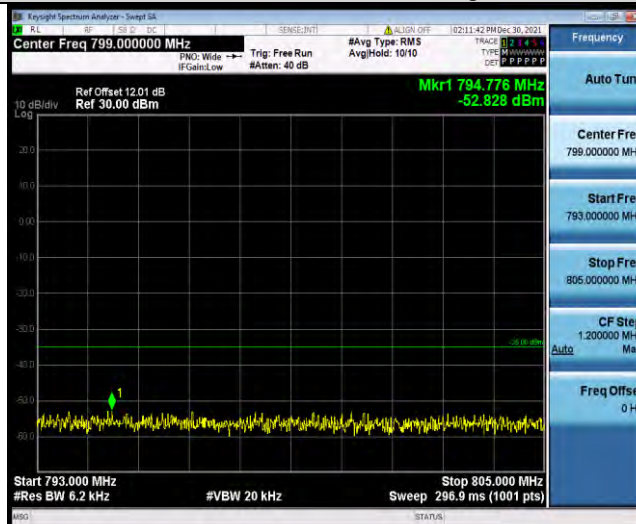
Test Report No.: W7L-P21120037RF05



Band13-5MHz-QPSK-23255-1RB#0-Range3:763~775MHz



Band13-5MHz-QPSK-23255-1RB#0-Range4:793~805MHz

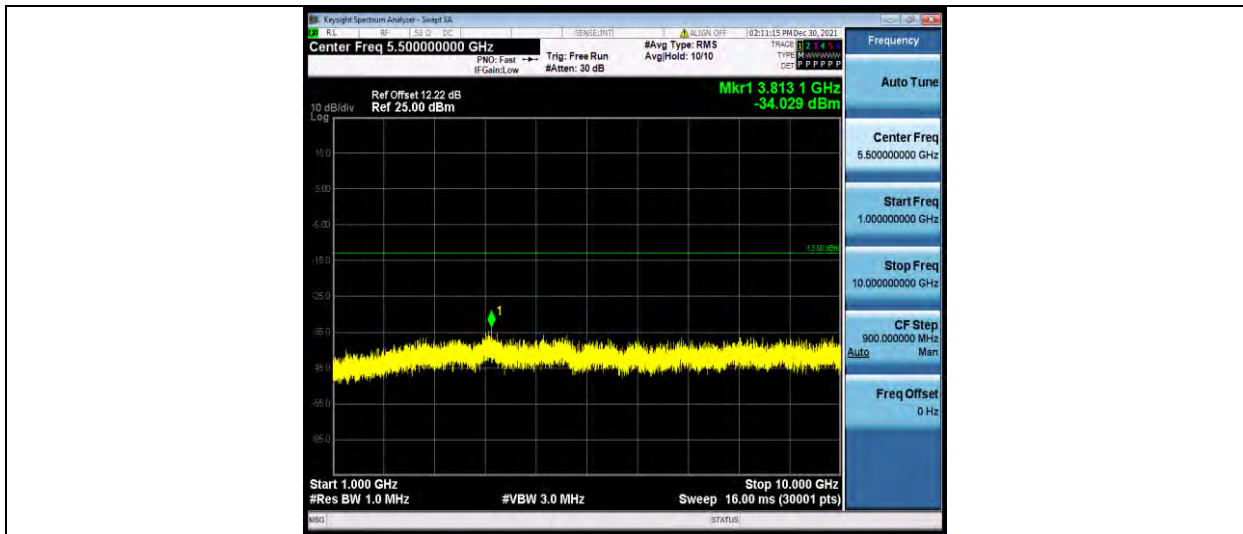


Band13-5MHz-QPSK-23255-1RB#0-Range2:1000~10000MHz

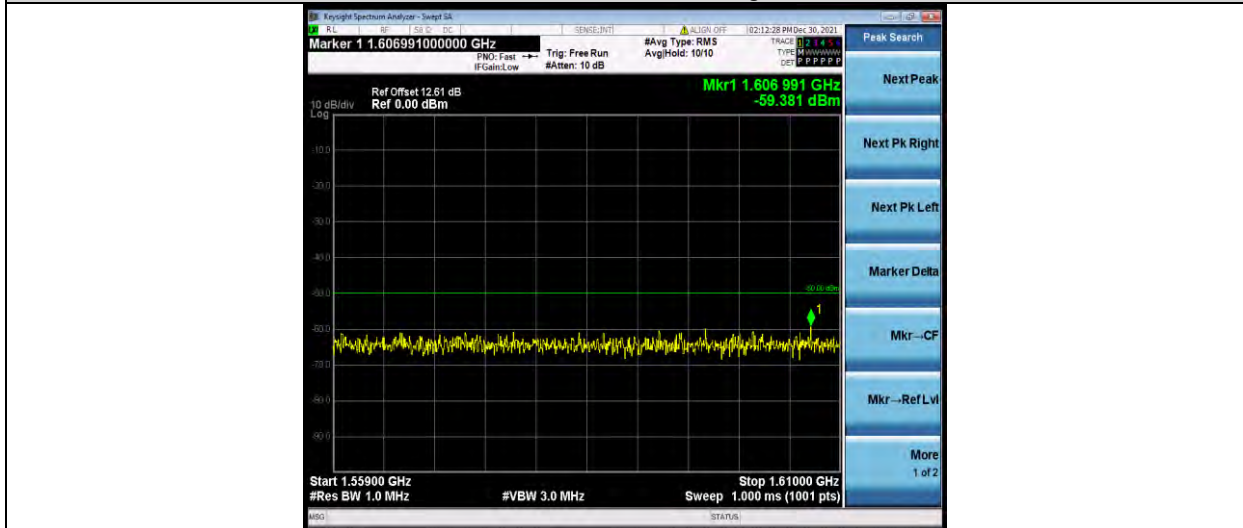


BUREAU VERITAS

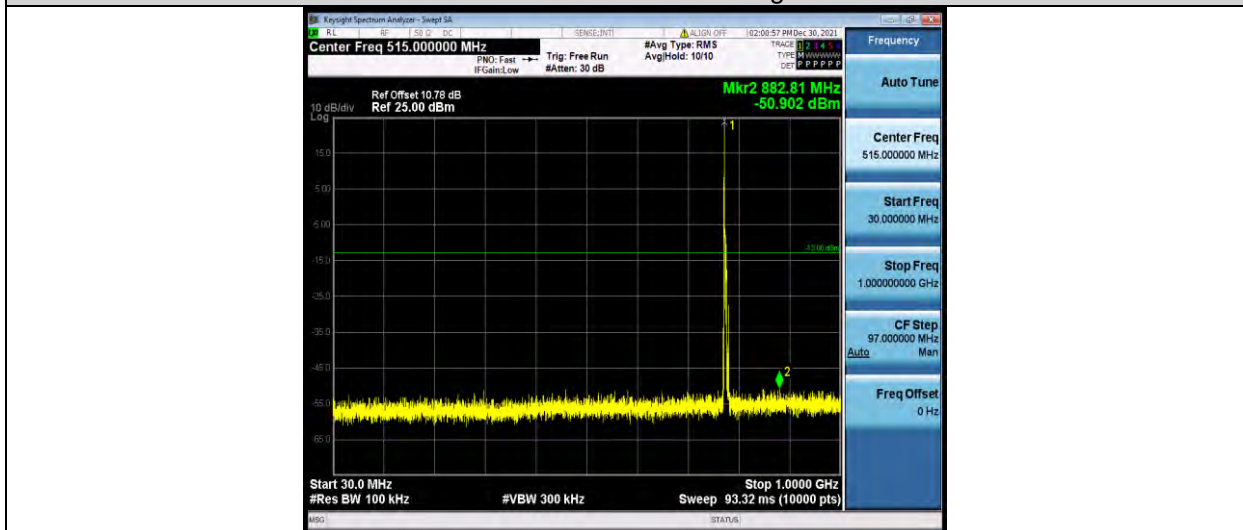
Test Report No.: W7L-P21120037RF05



Band13-5MHz-QPSK-23255-1RB#0-Range5:1559~1610MHz



Band13-5MHz-16QAM-23205-1RB#0-Range1:30~1000MHz



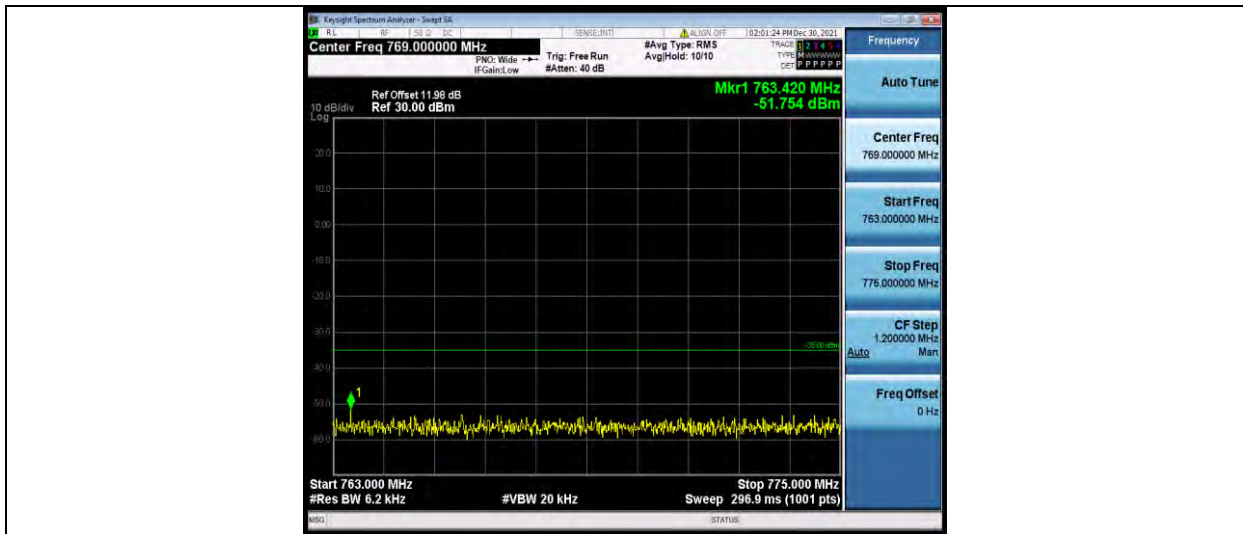
Band13-5MHz-16QAM-23205-1RB#0-Range3:763~775MHz



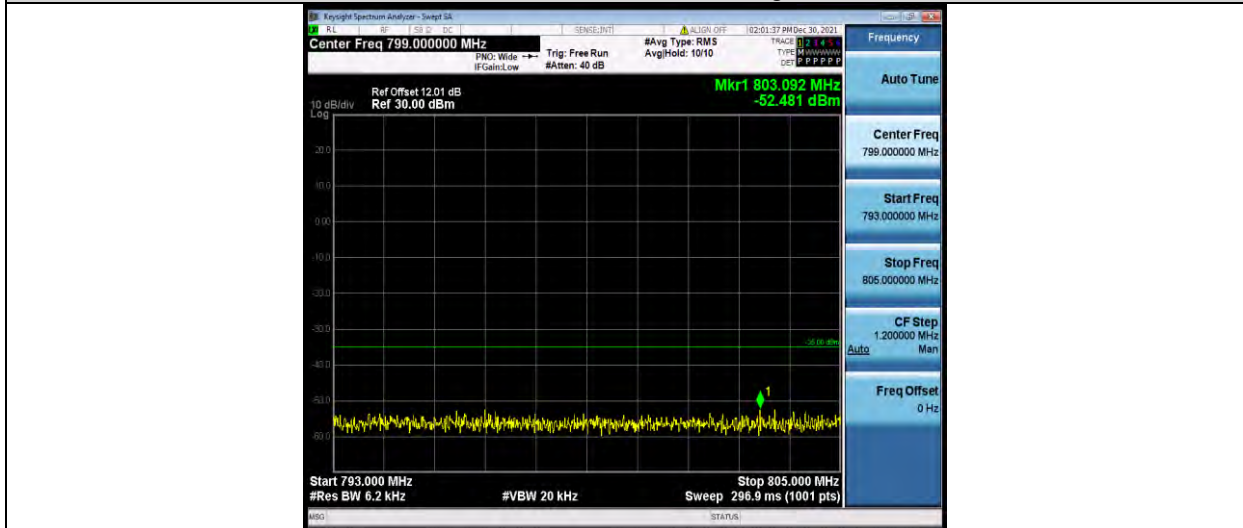


BUREAU VERITAS

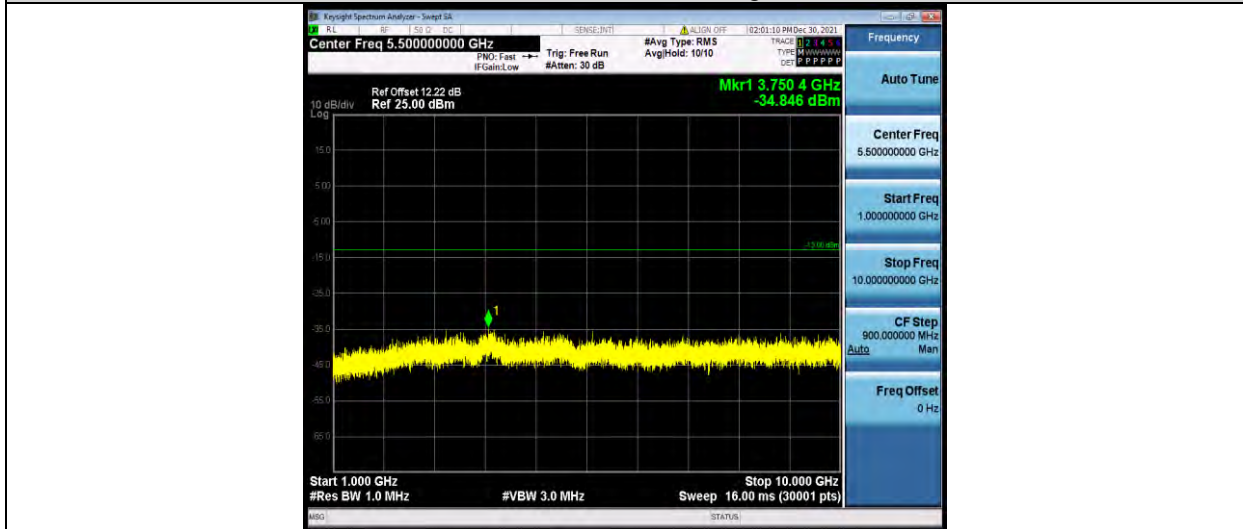
Test Report No.: W7L-P21120037RF05



Band13-5MHz-16QAM-23205-1RB#0-Range4:793~805MHz



Band13-5MHz-16QAM-23205-1RB#0-Range2:1000~1000MHz

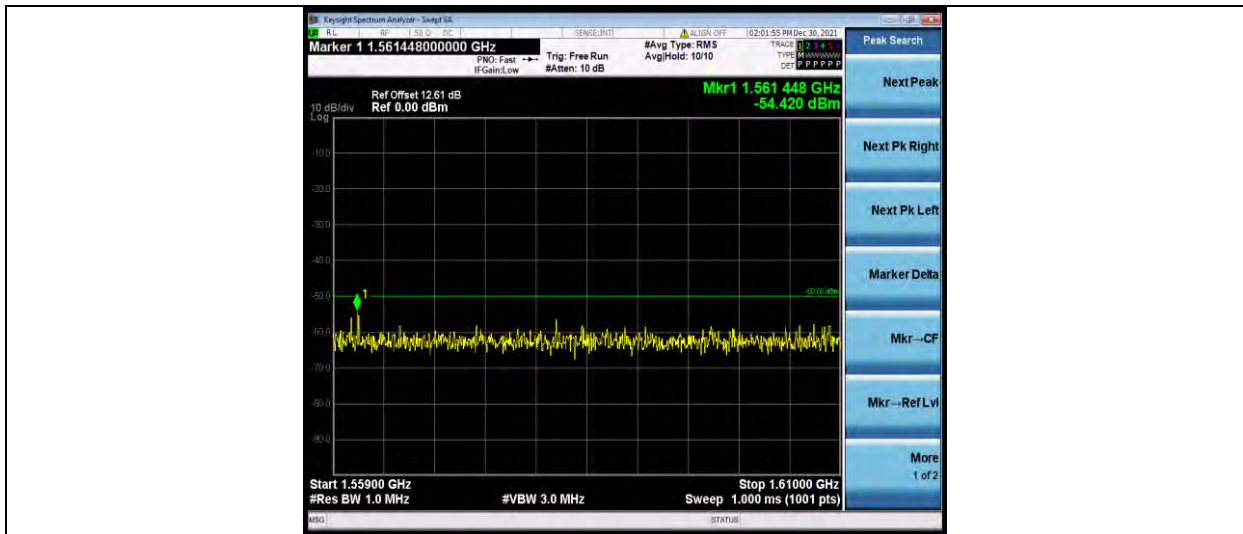


Band13-5MHz-16QAM-23205-1RB#0-Range5:1559~1610MHz

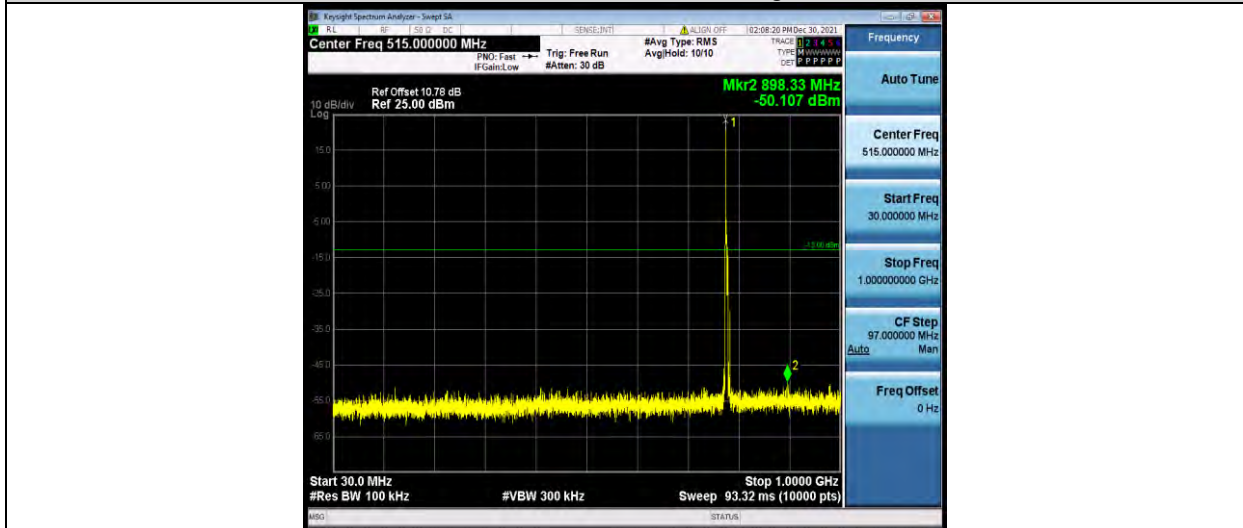


BUREAU VERITAS

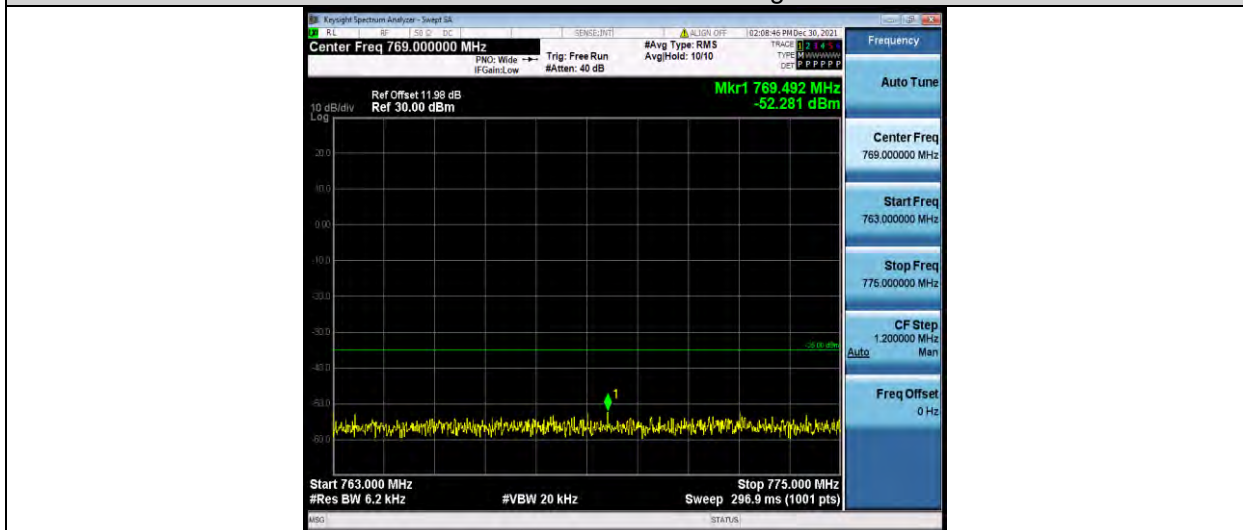
Test Report No.: W7L-P21120037RF05



Band13-5MHz-16QAM-23230-1RB#0-Range1:30~1000MHz



Band13-5MHz-16QAM-23230-1RB#0-Range3:763~775MHz

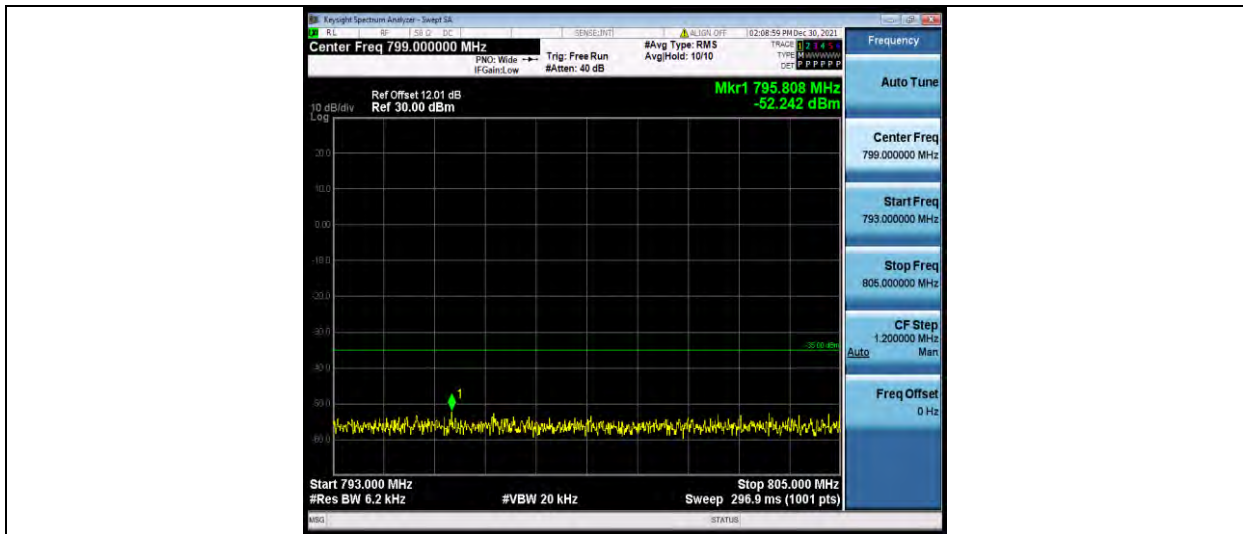


Band13-5MHz-16QAM-23230-1RB#0-Range4:793~805MHz

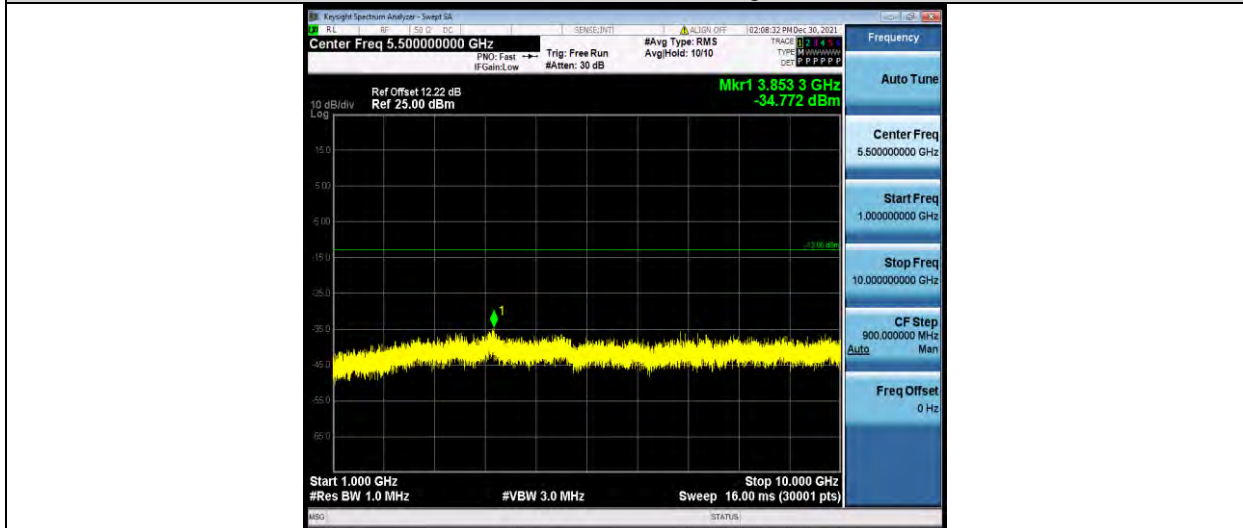


BUREAU VERITAS

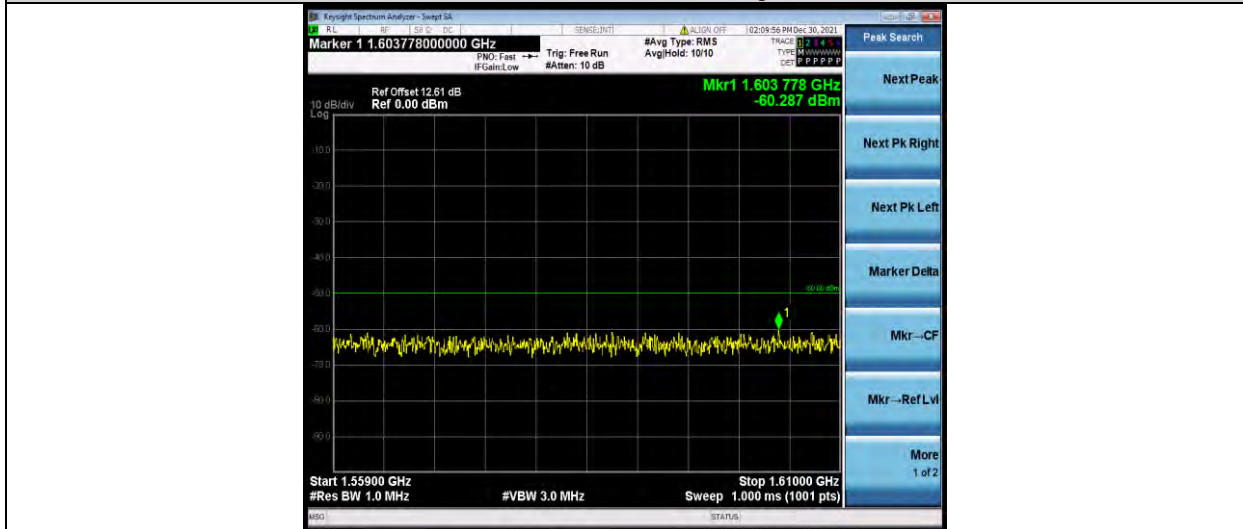
Test Report No.: W7L-P21120037RF05



Band13-5MHz-16QAM-23230-1RB#0-Range2:1000~10000MHz



Band13-5MHz-16QAM-23230-1RB#0-Range5:1559~1610MHz

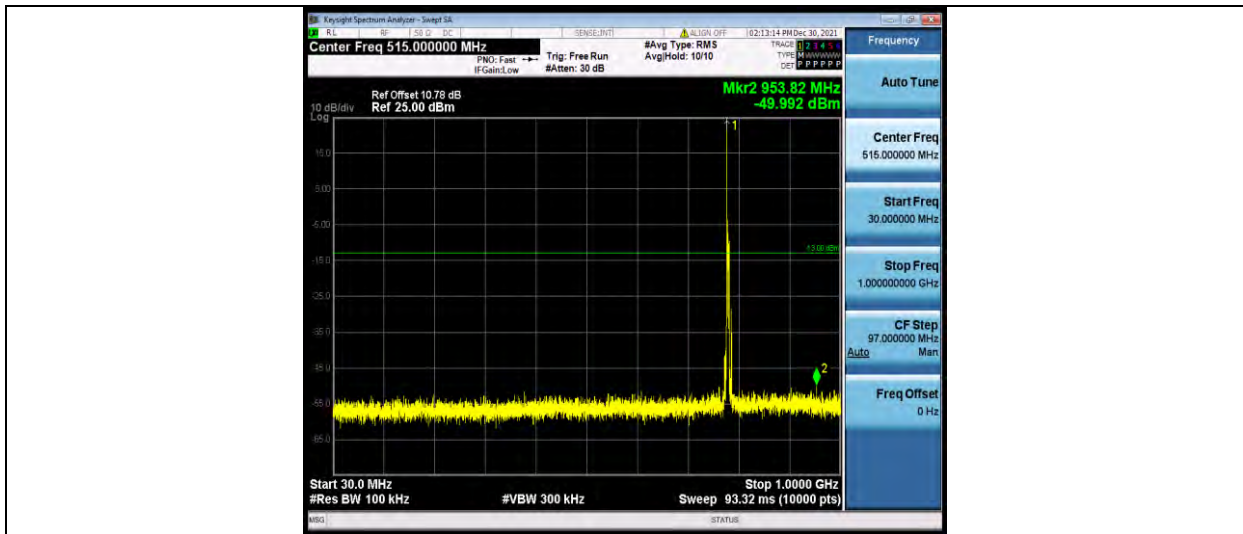


Band13-5MHz-16QAM-23255-1RB#0-Range1:30~1000MHz

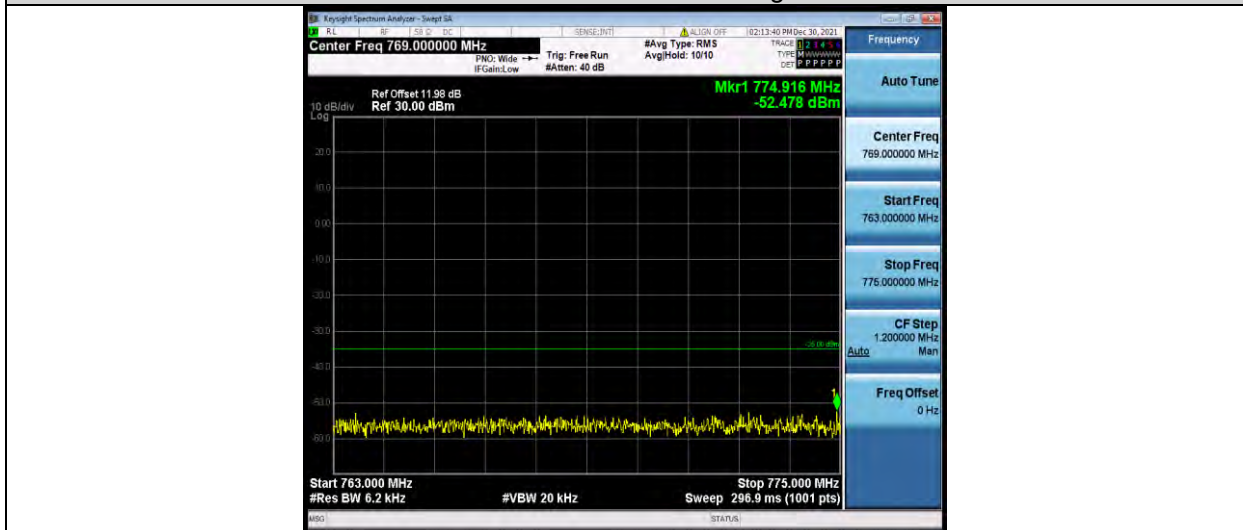


BUREAU VERITAS

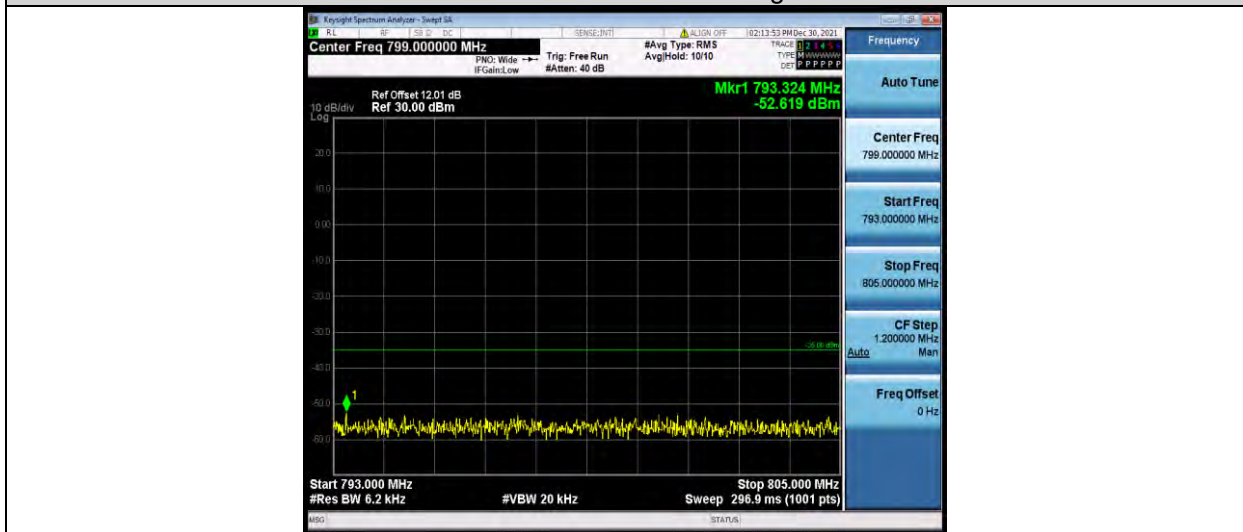
Test Report No.: W7L-P21120037RF05



Band13-5MHz-16QAM-23255-1RB#0-Range3:763~775MHz



Band13-5MHz-16QAM-23255-1RB#0-Range4:793~805MHz

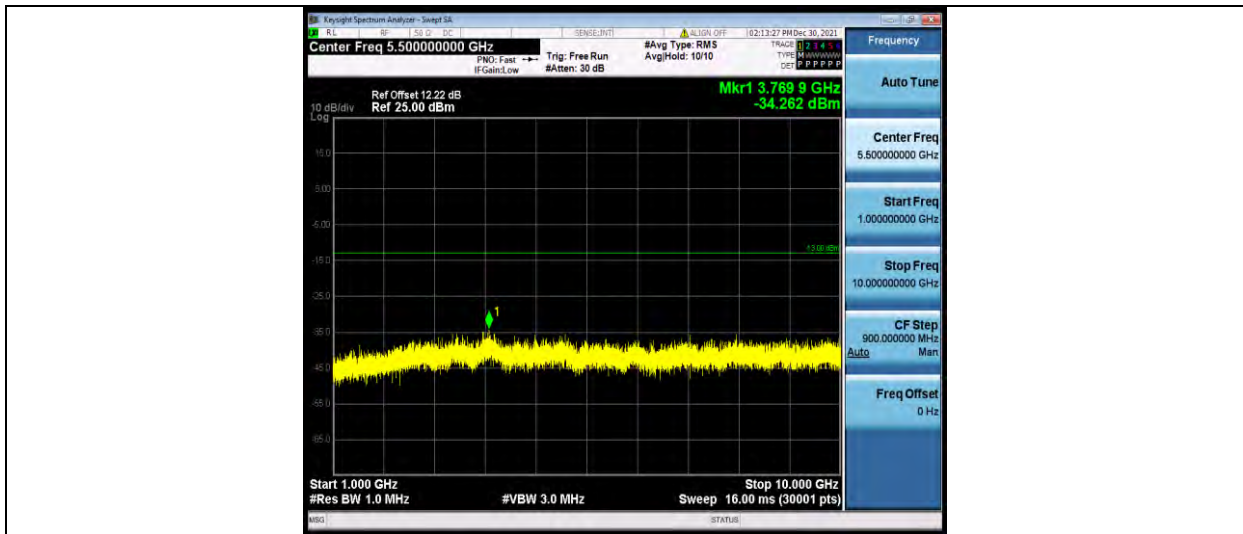


Band13-5MHz-16QAM-23255-1RB#0-Range2:1000~10000MHz

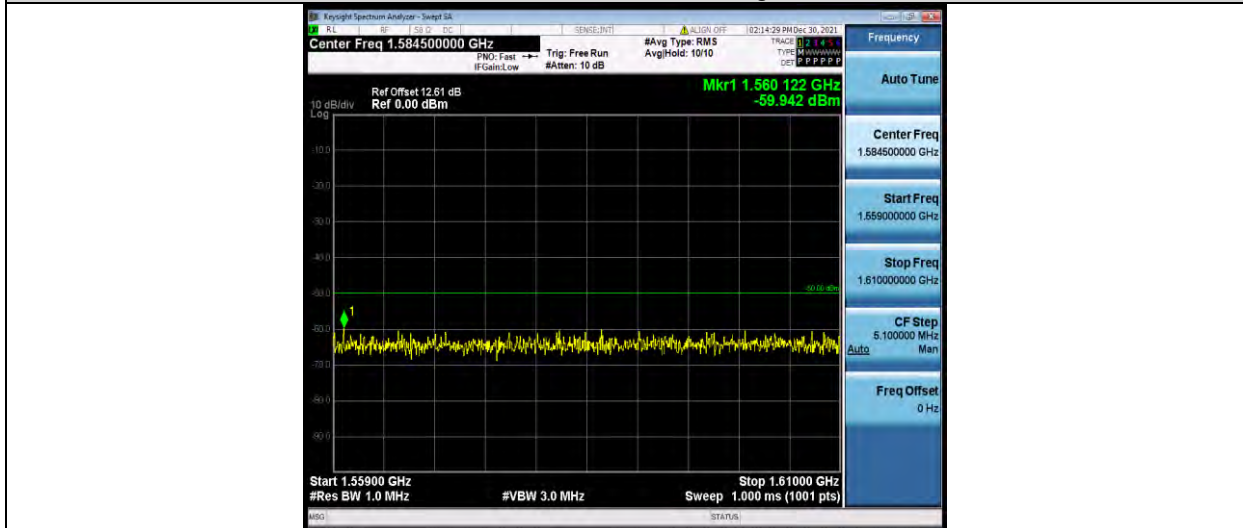


BUREAU VERITAS

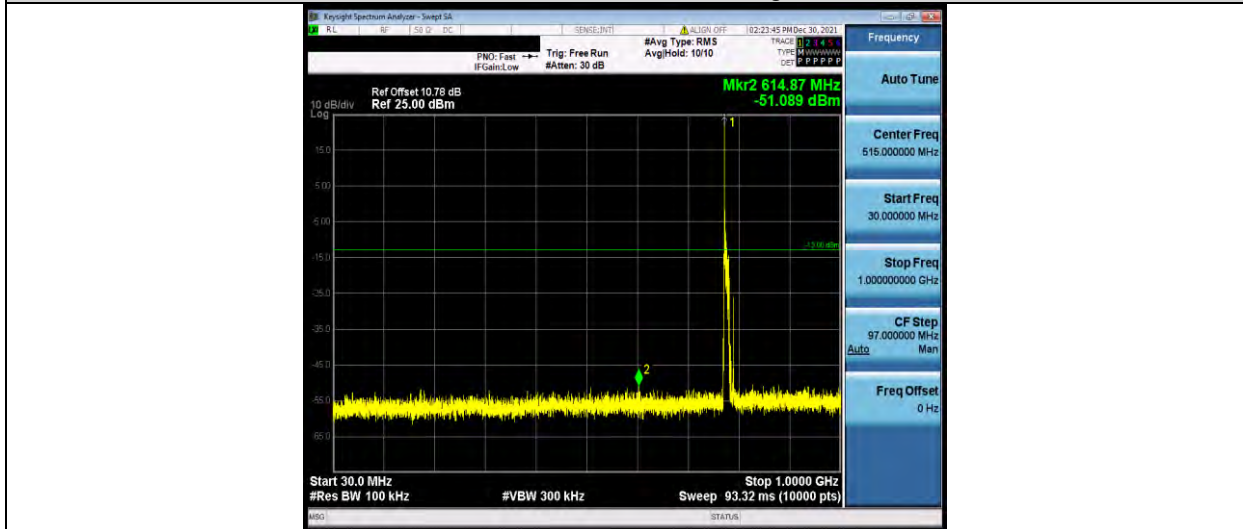
Test Report No.: W7L-P21120037RF05



Band13-5MHz-16QAM-23255-1RB#0-Range5:1.559~1610MHz



Band13-10MHz-QPSK-23230-1RB#0-Range1:30~1000MHz

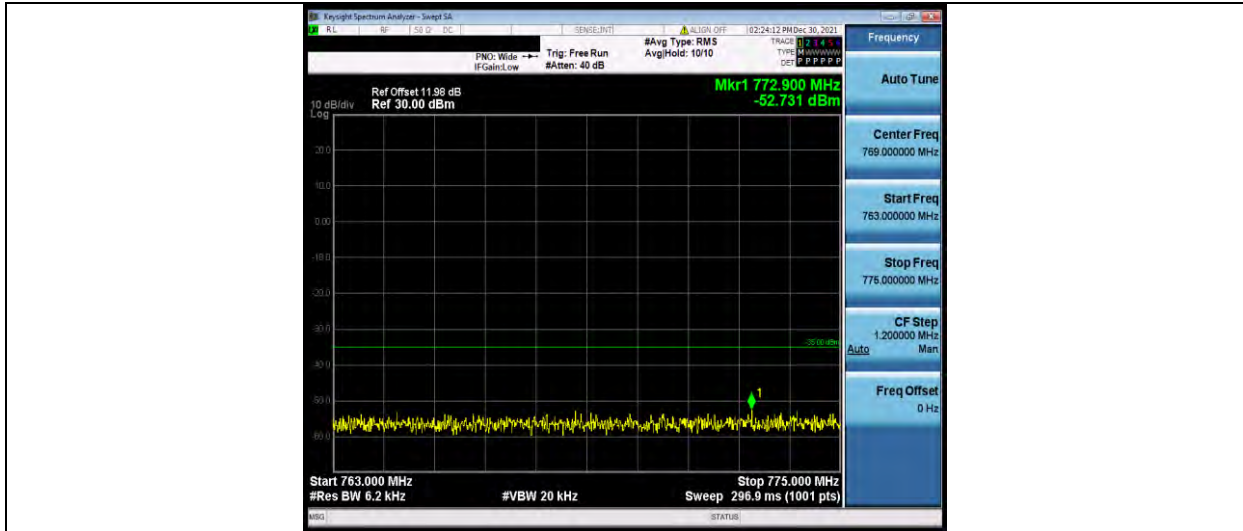


Band13-10MHz-QPSK-23230-1RB#0-Range3:763~775MHz

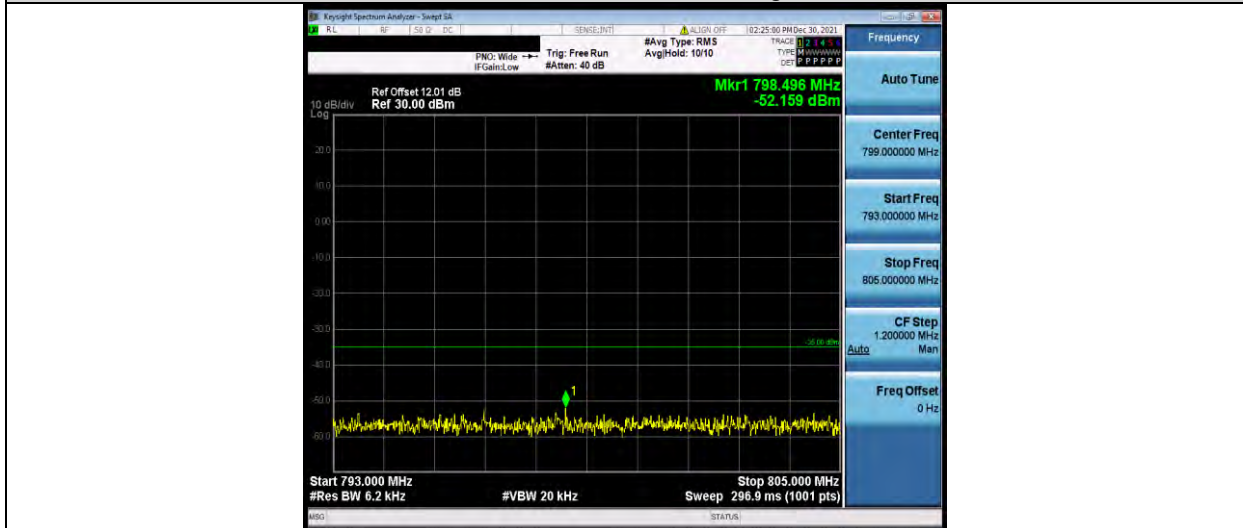


BUREAU VERITAS

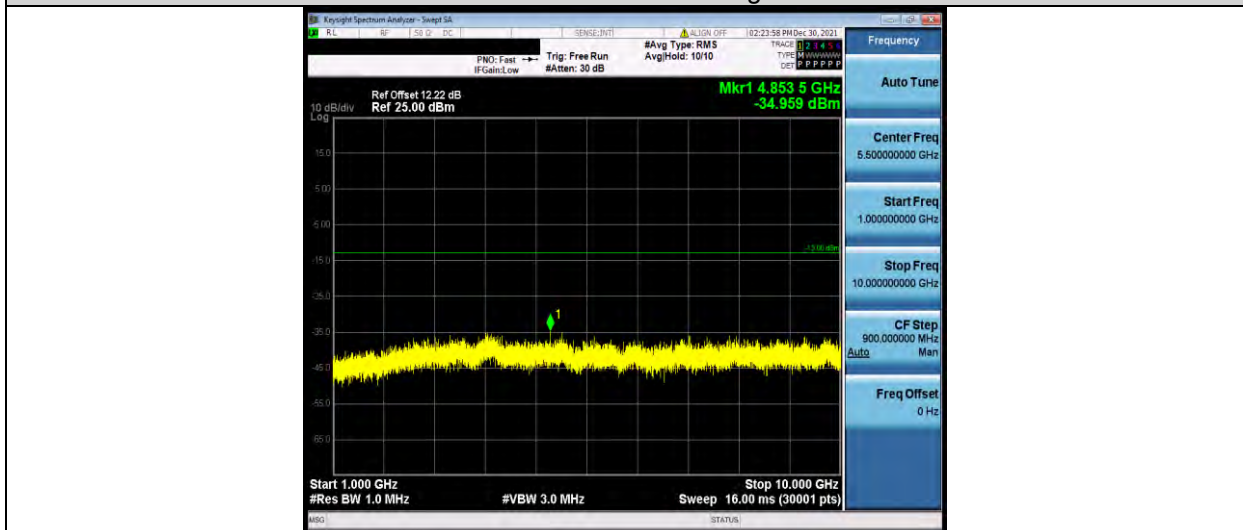
Test Report No.: W7L-P21120037RF05



Band13-10MHz-QPSK-23230-1RB#0-Range4:793~805MHz



Band13-10MHz-QPSK-23230-1RB#0-Range2:1000~10000MHz

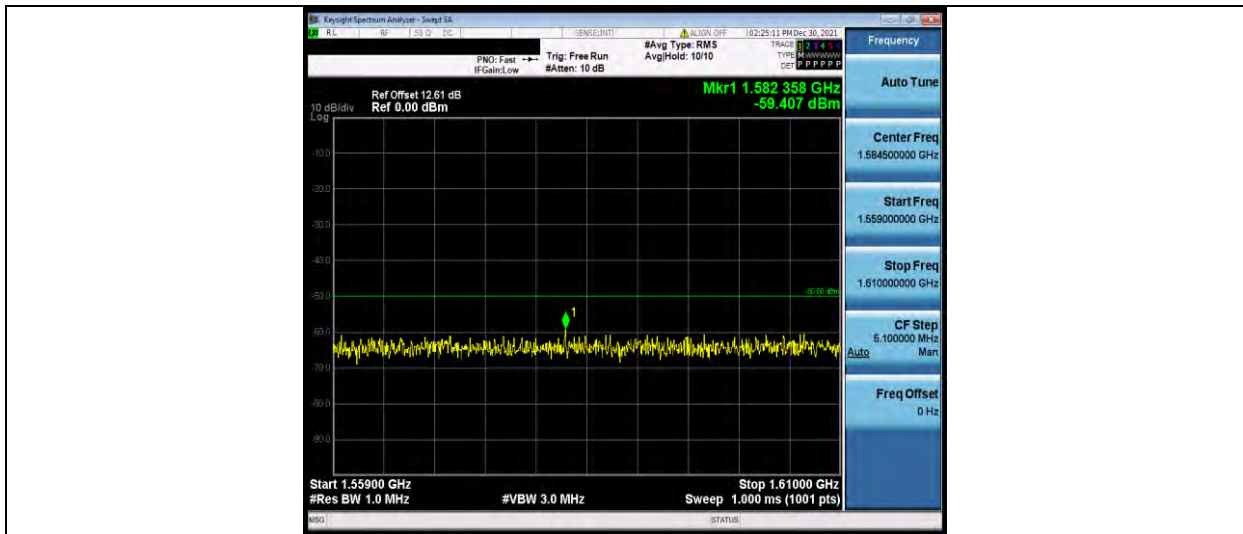


Band13-10MHz-QPSK-23230-1RB#0-Range5:1559~1610MHz

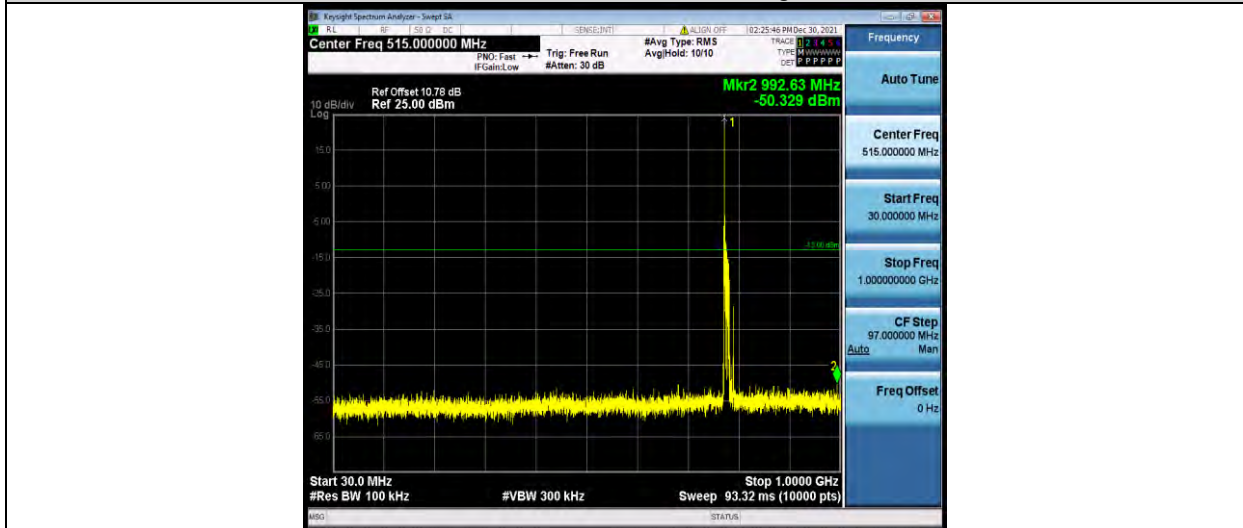


BUREAU VERITAS

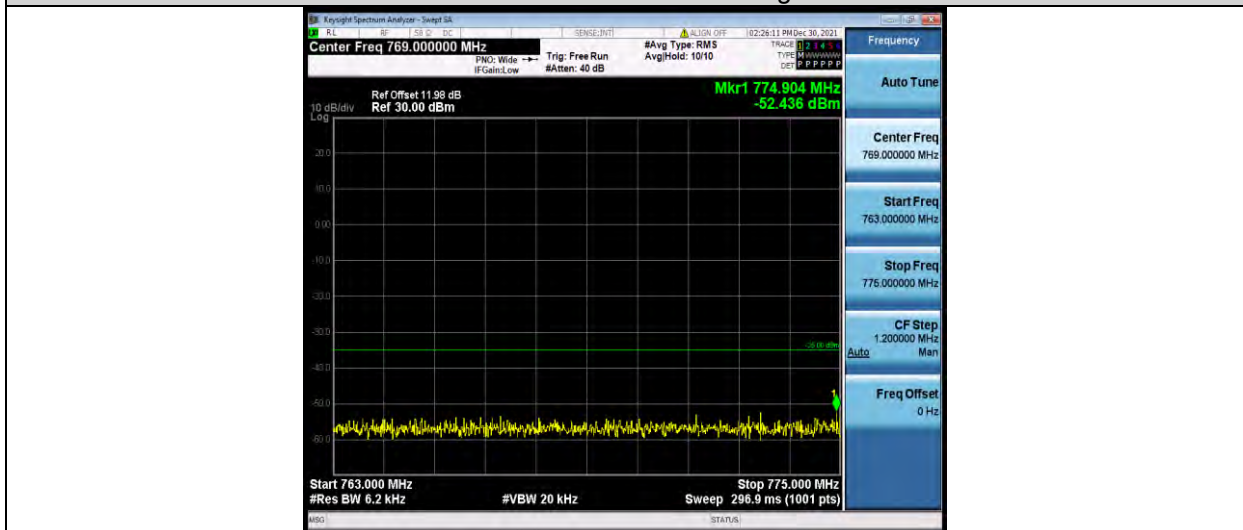
Test Report No.: W7L-P21120037RF05



Band13-10MHz-16QAM-23230-1RB#0-Range1:30~1000MHz



Band13-10MHz-16QAM-23230-1RB#0-Range3:763~775MHz

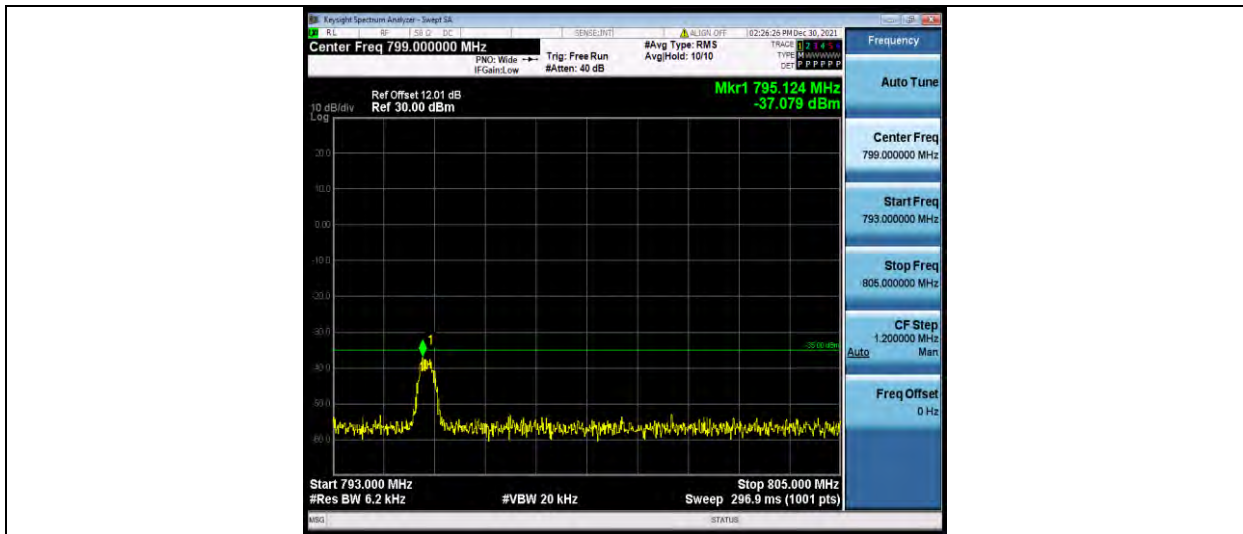


Band13-10MHz-16QAM-23230-1RB#0-Range4:793~805MHz

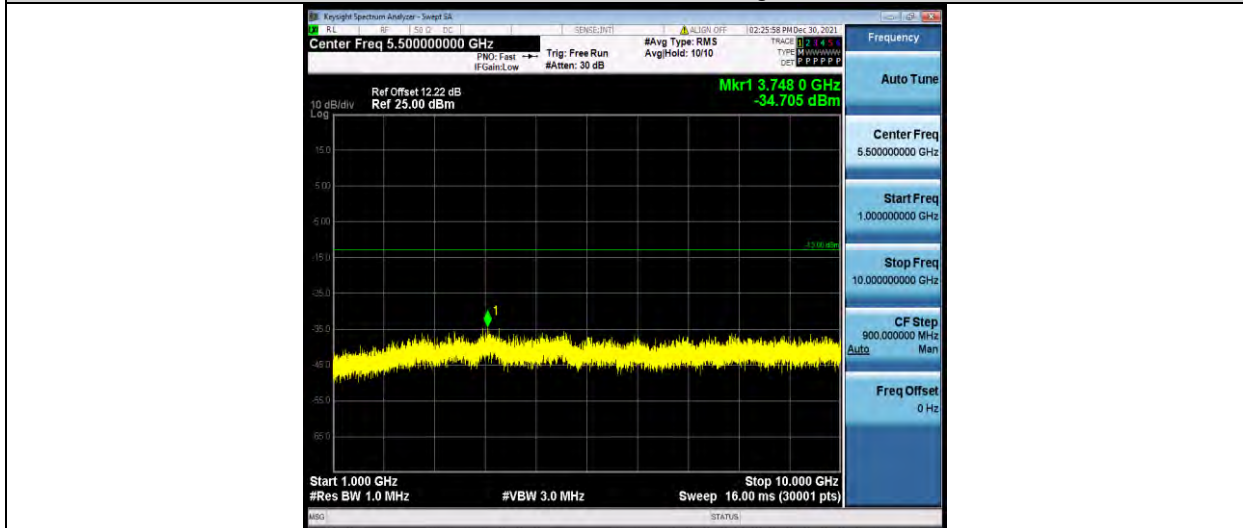


BUREAU VERITAS

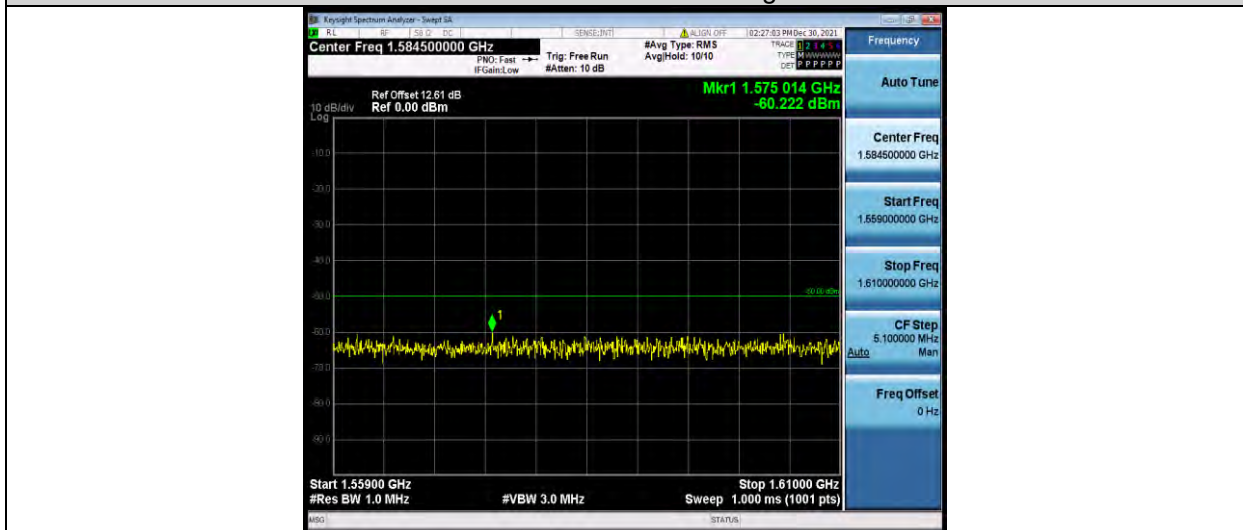
Test Report No.: W7L-P21120037RF05



Band13-10MHz-16QAM-23230-1RB#0-Range2: 1000~10000MHz



Band13-10MHz-16QAM-23230-1RB#0-Range5: 1559~1610MHz



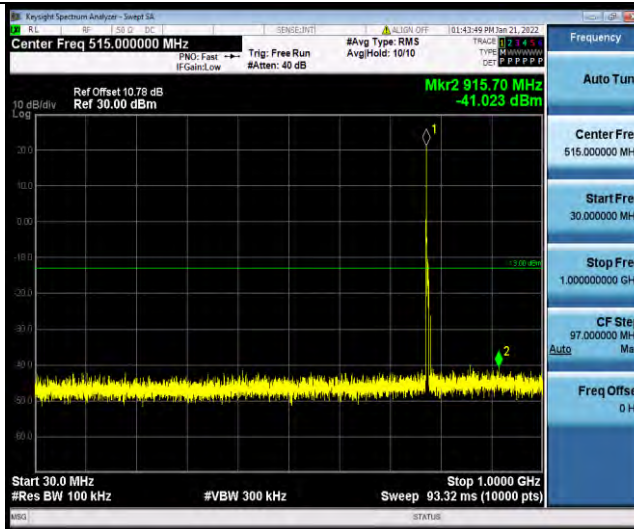
Band13-5MHz-64QAM-23205-1RB#0-Range1: 30~1000MHz



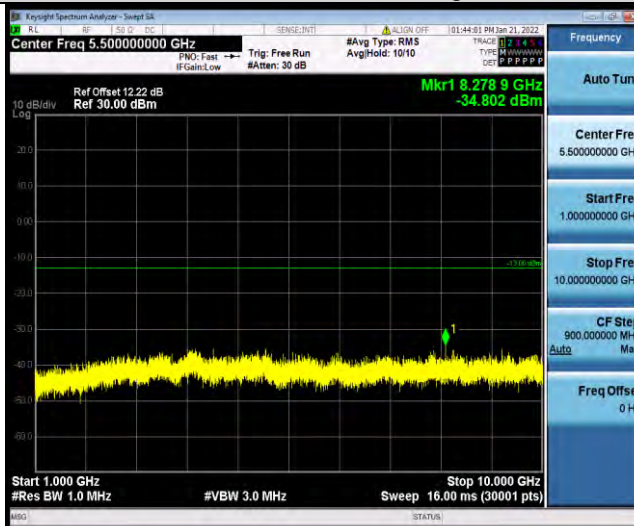


BUREAU VERITAS

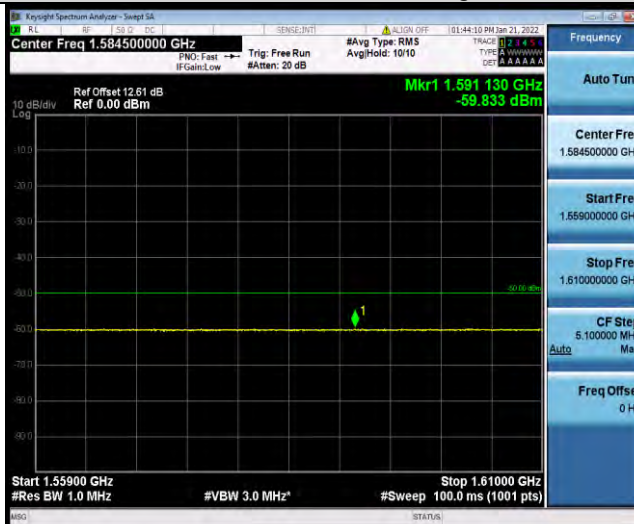
Test Report No.: W7L-P21120037RF05



Band13-5MHz-64QAM-23205-1RB#0-Range2:1000~10000MHz



Band13-5MHz-64QAM-23205-1RB#0-Range3:1559~1610MHz

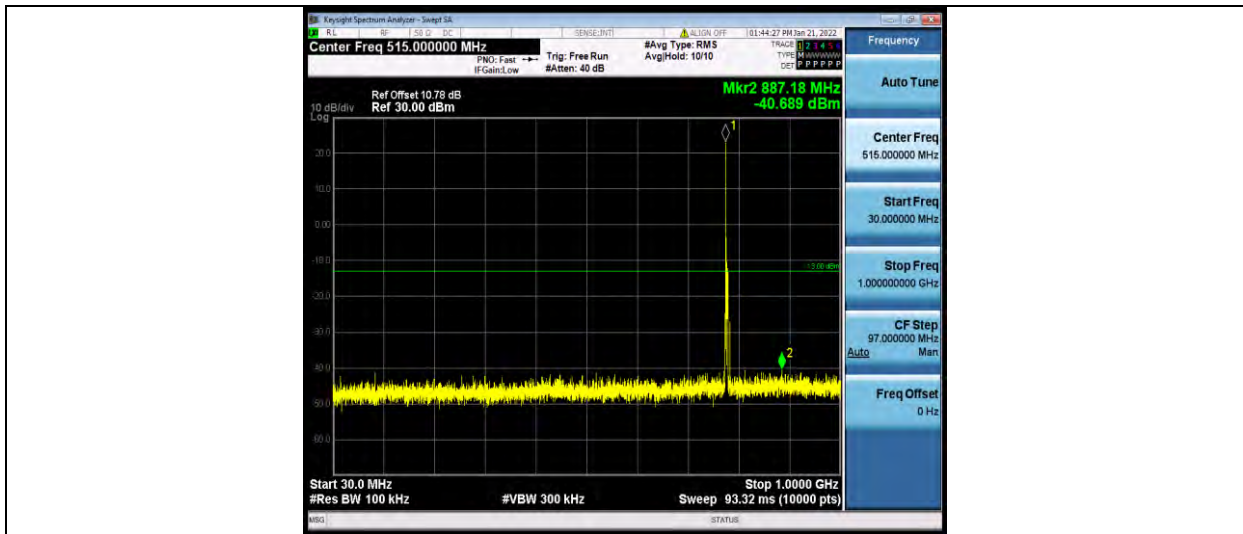


Band13-5MHz-64QAM-23230-1RB#0-Range1:30~1000MHz

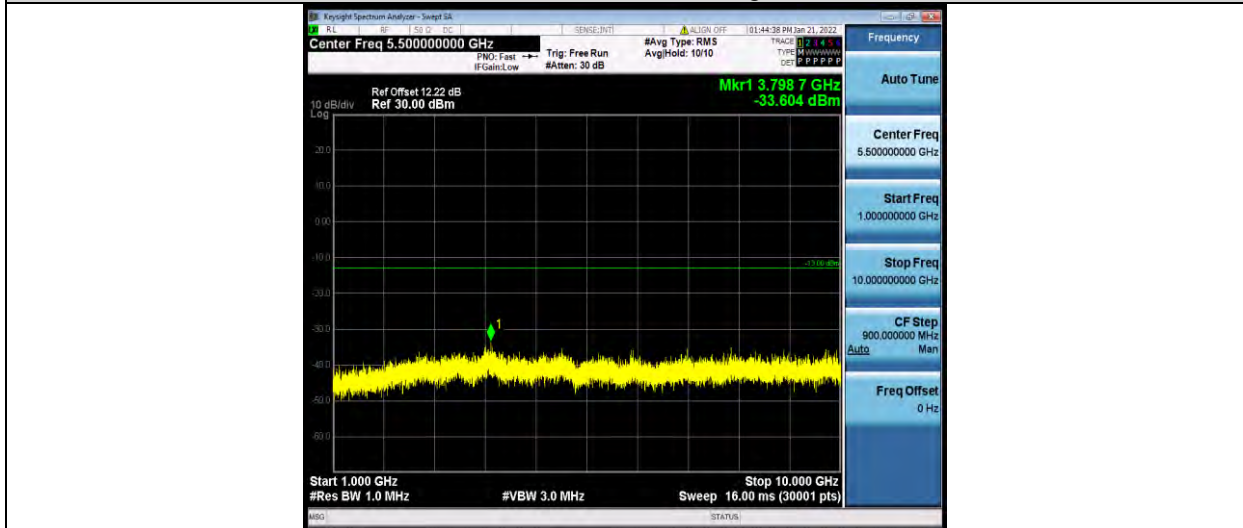


BUREAU VERITAS

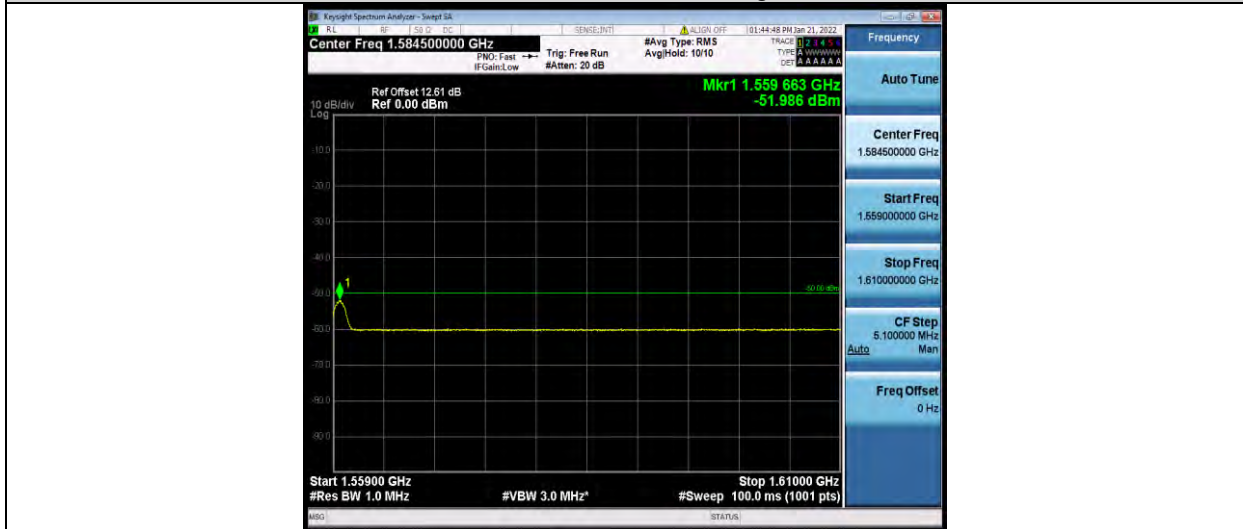
Test Report No.: W7L-P21120037RF05



Band13-5MHz-64QAM-23230-1RB#0-Range2:1000~10000MHz



Band13-5MHz-64QAM-23230-1RB#0-Range3:1559~1610MHz

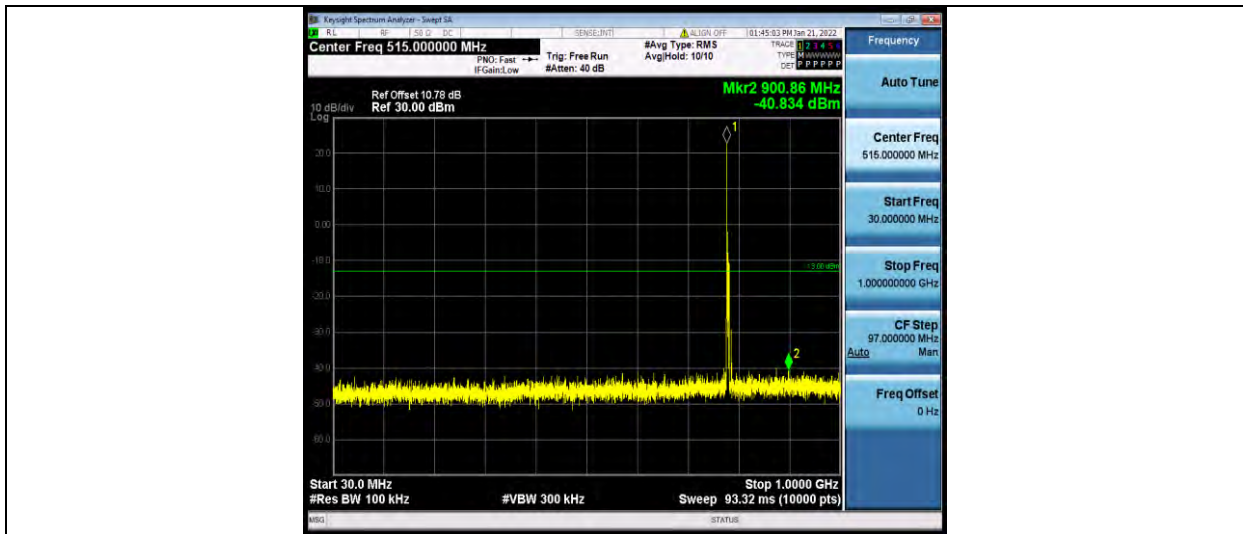


Band13-5MHz-64QAM-23255-1RB#0-Range1:30~1000MHz

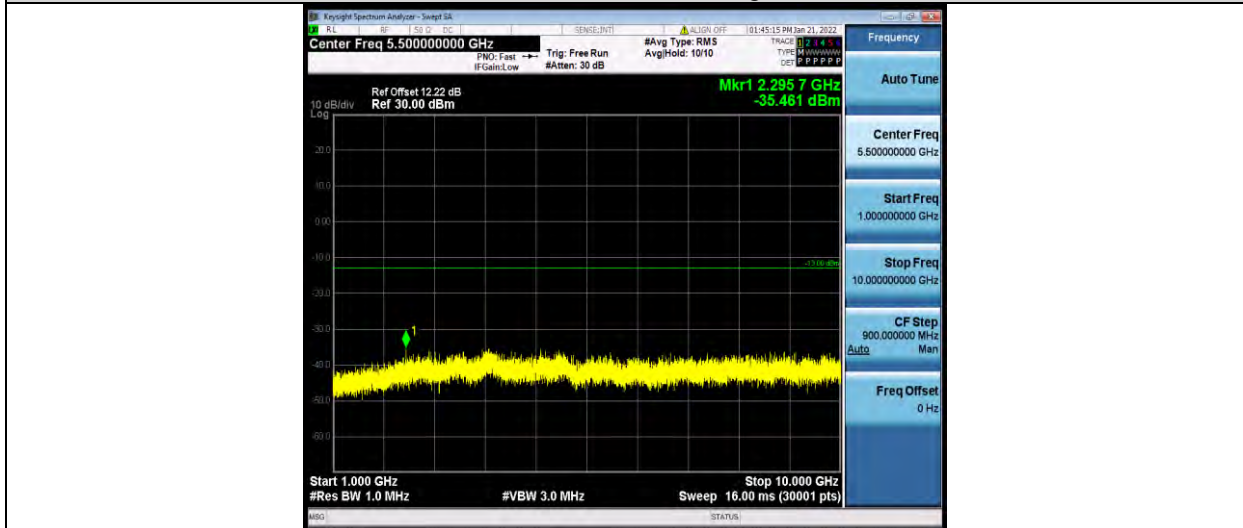


BUREAU VERITAS

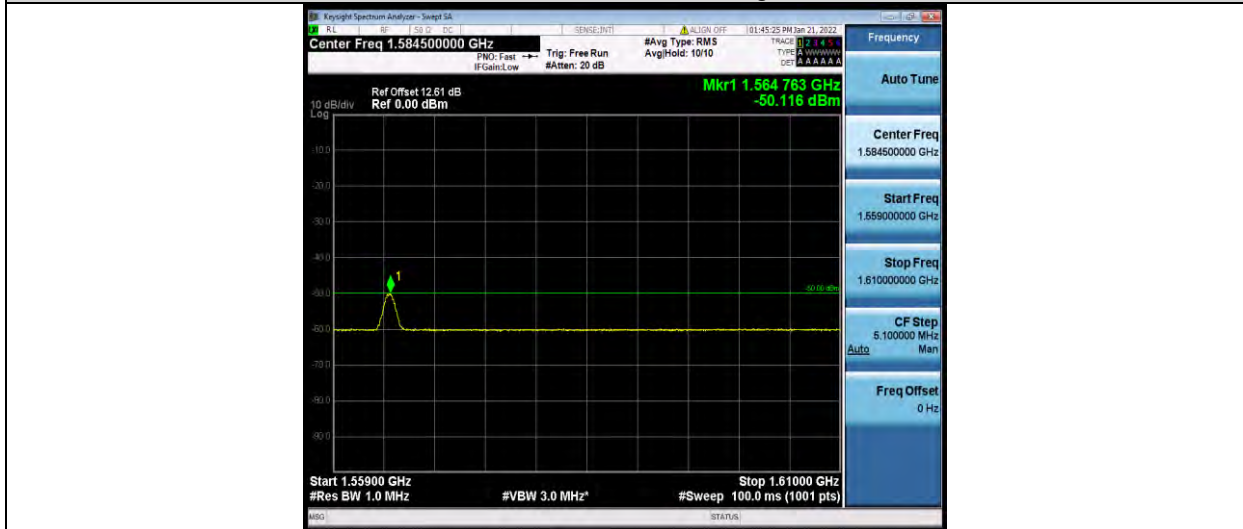
Test Report No.: W7L-P21120037RF05



Band13-5MHz-64QAM-23255-1RB#0-Range2:1000~10000MHz



Band13-5MHz-64QAM-23255-1RB#0-Range3:1559~1610MHz

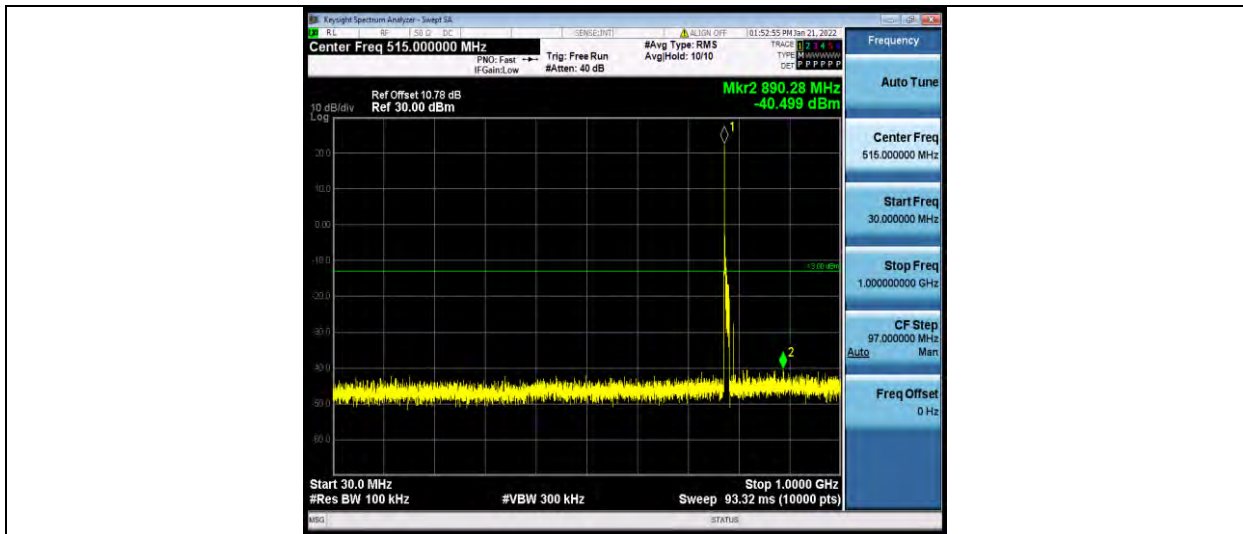


Band13-10MHz-64QAM-23230-1RB#0-Range1:30~1000MHz

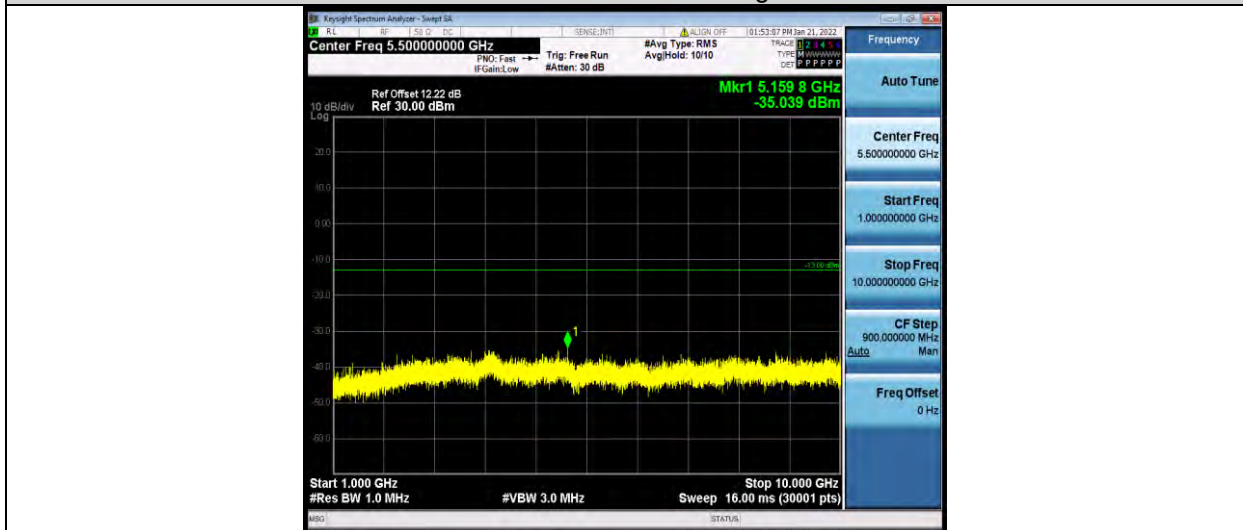


BUREAU VERITAS

Test Report No.: W7L-P21120037RF05



Band13-10MHz-64QAM-23230-1RB#0-Range2: 1000~10000MHz



Band13-10MHz-64QAM-23230-1RB#0-Range3: 1559~1610MHz





Test Report No.: W7L-P21120037RF05

## FREQUENCY STABILITY

### Test Result

Band	Bandwidth	Modulation	Channel	RB Configure	Voltage		Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
					Voltage [Vdc]	Temperature (°C)				
Band1_3	5MHz	QPSK	23205	25RB#0	VL	NT	24.81	0.031828	±2.5	PASS
Band1_3	5MHz	QPSK	23205	25RB#0	VN	NT	24.35	0.031238	±2.5	PASS
Band1_3	5MHz	QPSK	23205	25RB#0	VH	NT	25.69	0.032957	±2.5	PASS
Band1_3	5MHz	QPSK	23230	25RB#0	VL	NT	33.93	0.043389	±2.5	PASS
Band1_3	5MHz	QPSK	23230	25RB#0	VN	NT	13.76	0.017596	±2.5	PASS
Band1_3	5MHz	QPSK	23230	25RB#0	VH	NT	21.76	0.027826	±2.5	PASS
Band1_3	5MHz	QPSK	23255	25RB#0	VL	NT	17.78	0.022664	±2.5	PASS
Band1_3	5MHz	QPSK	23255	25RB#0	VN	NT	11.16	0.014226	±2.5	PASS
Band1_3	5MHz	QPSK	23255	25RB#0	VH	NT	5.78	0.007368	±2.5	PASS
Band1_3	5MHz	16QAM	23205	25RB#0	VL	NT	-4.16	-0.005337	±2.5	PASS
Band1_3	5MHz	16QAM	23205	25RB#0	VN	NT	-5.84	-0.007492	±2.5	PASS
Band1_3	5MHz	16QAM	23205	25RB#0	VH	NT	13.92	0.017858	±2.5	PASS
Band1_3	5MHz	16QAM	23230	25RB#0	VL	NT	-3.26	-0.004169	±2.5	PASS
Band1_3	5MHz	16QAM	23230	25RB#0	VN	NT	-4.68	-0.005985	±2.5	PASS
Band1_3	5MHz	16QAM	23230	25RB#0	VH	NT	10.96	0.014015	±2.5	PASS
Band1_3	5MHz	16QAM	23255	25RB#0	VL	NT	8.71	0.011103	±2.5	PASS
Band1_3	5MHz	16QAM	23255	25RB#0	VN	NT	-52.90	-0.067431	±2.5	PASS
Band1_3	5MHz	16QAM	23255	25RB#0	VH	NT	14.78	0.018840	±2.5	PASS
Band1_3	10MHz	QPSK	23230	50RB#0	VL	NT	26.74	0.034194	±2.5	PASS
Band1_3	10MHz	QPSK	23230	50RB#0	VN	NT	30.04	0.038414	±2.5	PASS
Band1_3	10MHz	QPSK	23230	50RB#0	VH	NT	19.63	0.025102	±2.5	PASS



**BUREAU  
VERITAS**

**Test Report No.: W7L-P21120037RF05**

Band1 3	10MHz	16QAM	23230	50RB#0	VL	NT	-7.74	-0.009898	±2.5	PASS
Band1 3	10MHz	16QAM	23230	50RB#0	VN	NT	-15.81	-0.020217	±2.5	PASS
Band1 3	10MHz	16QAM	23230	50RB#0	VH	NT	7.52	0.009616	±2.5	PASS
Band1 3	5MHz	64QAM	23205	25RB#0	VL	NT	-2.80	-0.003592	±2.5	PASS
Band1 3	5MHz	64QAM	23205	25RB#0	VN	NT	30.00	0.038486	±2.5	PASS
Band1 3	5MHz	64QAM	23205	25RB#0	VH	NT	13.00	0.016677	±2.5	PASS
Band1 3	5MHz	64QAM	23230	25RB#0	VL	NT	14.18	0.018133	±2.5	PASS
Band1 3	5MHz	64QAM	23230	25RB#0	VN	NT	6.09	0.007788	±2.5	PASS
Band1 3	5MHz	64QAM	23230	25RB#0	VH	NT	20.81	0.026611	±2.5	PASS
Band1 3	5MHz	64QAM	23255	25RB#0	VL	NT	43.52	0.055475	±2.5	PASS
Band1 3	5MHz	64QAM	23255	25RB#0	VN	NT	16.51	0.021045	±2.5	PASS
Band1 3	5MHz	64QAM	23255	25RB#0	VH	NT	-4.11	-0.005239	±2.5	PASS
Band1 3	10MHz	64QAM	23230	50RB#0	VL	NT	-9.58	-0.012251	±2.5	PASS
Band1 3	10MHz	64QAM	23230	50RB#0	VN	NT	10.50	0.013427	±2.5	PASS
Band1 3	10MHz	64QAM	23230	50RB#0	VH	NT	-10.56	-0.013504	±2.5	PASS

Temperature										
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band13	5MHz	QPSK	23205	25RB#0	NV	-30	19.86	0.025478	±2.5	PASS
Band13	5MHz	QPSK	23205	25RB#0	NV	-20	10.07	0.012919	±2.5	PASS
Band13	5MHz	QPSK	23205	25RB#0	NV	0	7.07	0.009070	±2.5	PASS
Band13	5MHz	QPSK	23205	25RB#0	NV	10	4.25	0.005452	±2.5	PASS
Band13	5MHz	QPSK	23205	25RB#0	NV	20	-4.91	-0.006299	±2.5	PASS
Band13	5MHz	QPSK	23205	25RB#0	NV	30	-5.15	-0.002739	±2.5	PASS
Band13	5MHz	QPSK	23205	25RB#0	NV	40	-4.47	-0.002378	±2.5	PASS
Band13	5MHz	QPSK	23205	25RB#0	NV	50	-2.98	-0.001585	±2.5	PASS
Band13	5MHz	QPSK	23230	25RB#0	NV	-30	15.62	0.019974	±2.5	PASS
Band13	5MHz	QPSK	23230	25RB#0	NV	-20	11.42	0.014604	±2.5	PASS
Band13	5MHz	QPSK	23230	25RB#0	NV	0	3.50	0.004476	±2.5	PASS
Band13	5MHz	QPSK	23230	25RB#0	NV	10	-2.69	-0.003440	±2.5	PASS
Band13	5MHz	QPSK	23230	25RB#0	NV	20	-4.61	-0.005895	±2.5	PASS

BV 7Layers Communications Technology  
(Shenzhen) Co. Ltd

No.B102, Dazu Chuangxin Mansion, North of Beihuan  
Avenue, North Area, Hi-Tech Industrial Park, Nanshan  
District, Shenzhen, Guangdong, China

Tel: +86 755 8869 6566  
Fax: +86 755 8869 6577  
Email: [customerservice.sw@bureauveritas.com](mailto:customerservice.sw@bureauveritas.com)