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VERITAS

Test Report No.: W7L-P23010024RF06

Band1 2	10MHz	64QAM	23130	50RB#0	NV	0	2.72	0.003826	±2.5	PASS
Band1 2	10MHz	64QAM	23130	50RB#0	NV	10	9.18	0.012911	±2.5	PASS
Band1 2	10MHz	64QAM	23130	50RB#0	NV	20	17.09	0.024037	±2.5	PASS
Band1 2	10MHz	64QAM	23130	50RB#0	NV	30	20.84	0.029311	±2.5	PASS
Band1 2	10MHz	64QAM	23130	50RB#0	NV	40	27.58	0.038790	±2.5	PASS
Band1 2	10MHz	64QAM	23130	50RB#0	NV	50	34.16	0.048045	±2.5	PASS



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LTE BAND13

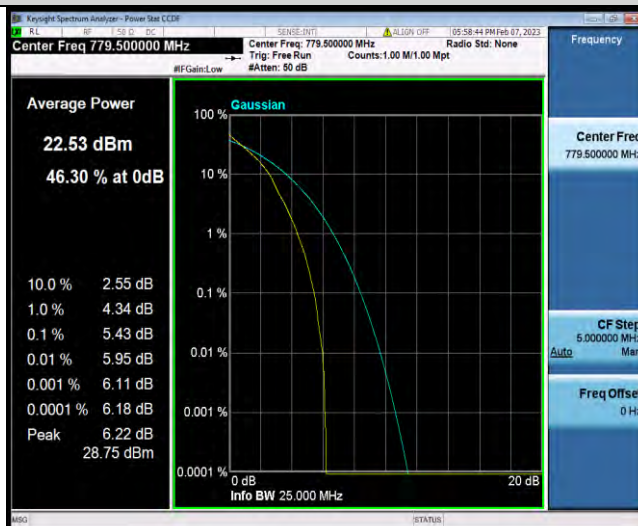
PEAK-TO-AVERAGE RATIO(CCDF)

Test Result

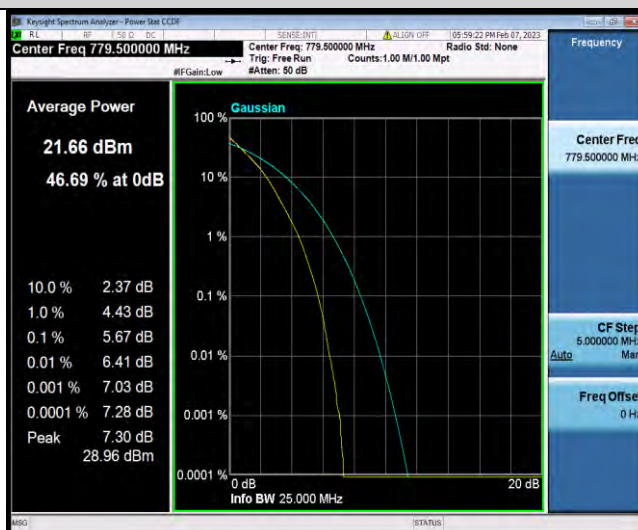
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band13	5MHz	QPSK	23205	1RB#0	5.43	13	PASS
Band13	5MHz	QPSK	23205	25RB#0	5.67	13	PASS
Band13	5MHz	QPSK	23230	1RB#0	5.51	13	PASS
Band13	5MHz	QPSK	23230	25RB#0	5.66	13	PASS
Band13	5MHz	QPSK	23255	1RB#0	5.44	13	PASS
Band13	5MHz	QPSK	23255	25RB#0	5.61	13	PASS
Band13	5MHz	16QAM	23205	1RB#0	6.83	13	PASS
Band13	5MHz	16QAM	23205	25RB#0	6.39	13	PASS
Band13	5MHz	16QAM	23230	1RB#0	6.66	13	PASS
Band13	5MHz	16QAM	23230	25RB#0	6.37	13	PASS
Band13	5MHz	16QAM	23255	1RB#0	6.19	13	PASS
Band13	5MHz	16QAM	23255	25RB#0	6.39	13	PASS
Band13	5MHz	64QAM	23205	1RB#0	6.86	13	PASS
Band13	5MHz	64QAM	23205	25RB#0	6.66	13	PASS
Band13	5MHz	64QAM	23230	1RB#0	6.70	13	PASS
Band13	5MHz	64QAM	23230	25RB#0	6.60	13	PASS
Band13	5MHz	64QAM	23255	1RB#0	6.40	13	PASS
Band13	5MHz	64QAM	23255	25RB#0	6.76	13	PASS
Band13	10MHz	QPSK	23230	1RB#0	5.53	13	PASS
Band13	10MHz	QPSK	23230	50RB#0	5.58	13	PASS
Band13	10MHz	16QAM	23230	1RB#0	6.80	13	PASS
Band13	10MHz	16QAM	23230	50RB#0	6.44	13	PASS
Band13	10MHz	64QAM	23230	1RB#0	6.37	13	PASS
Band13	10MHz	64QAM	23230	50RB#0	6.68	13	PASS

Test Graphs

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



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



Band13-5MHz-QPSK-23230-1RB#0

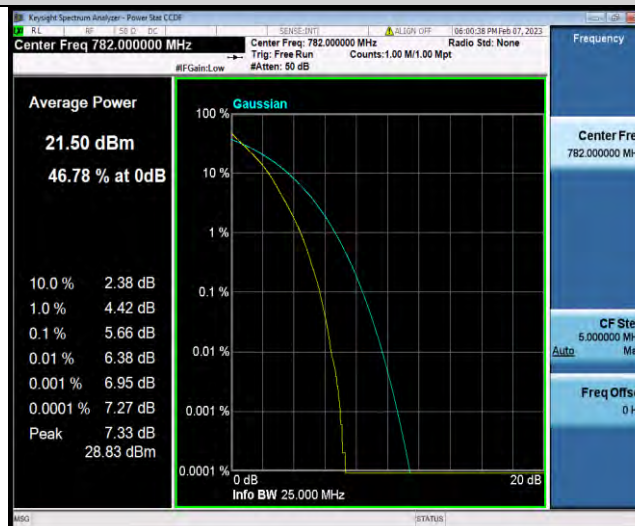


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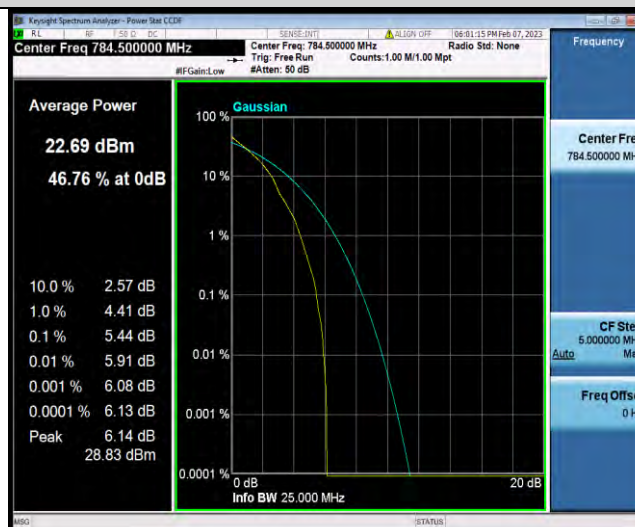
Test Report No.: W7L-P23010024RF06



Band13-5MHz-QPSK-23230-25RB#0



Band13-5MHz-QPSK-23255-1RB#0

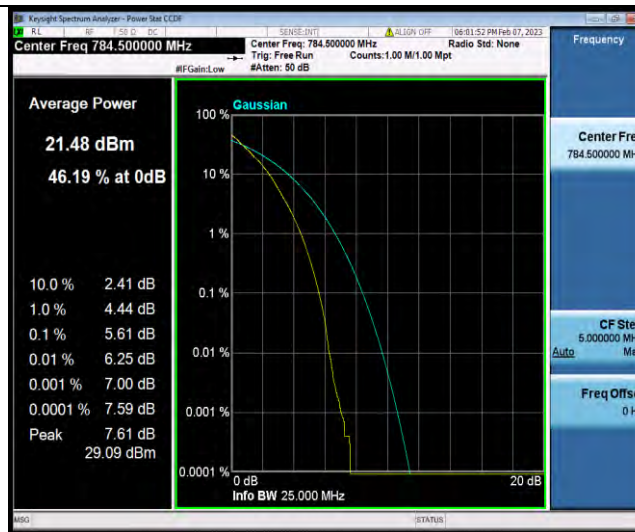


Band13-5MHz-QPSK-23255-25RB#0

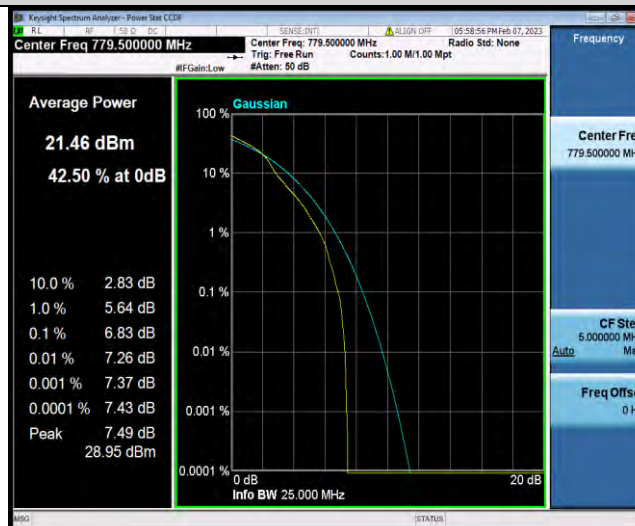


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Test Report No.: W7L-P23010024RF06



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



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

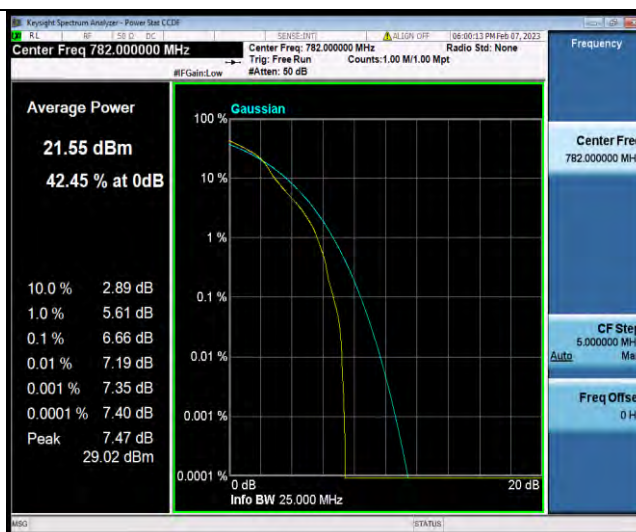


Band13-5MHz-16QAM-23230-1RB#0



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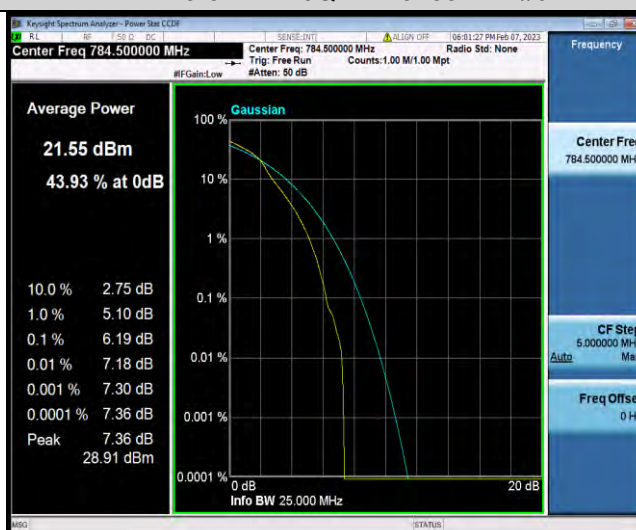
Test Report No.: W7L-P23010024RF06



Band13-5MHz-16QAM-23230-25RB#0



Band13-5MHz-16QAM-23255-1RB#0

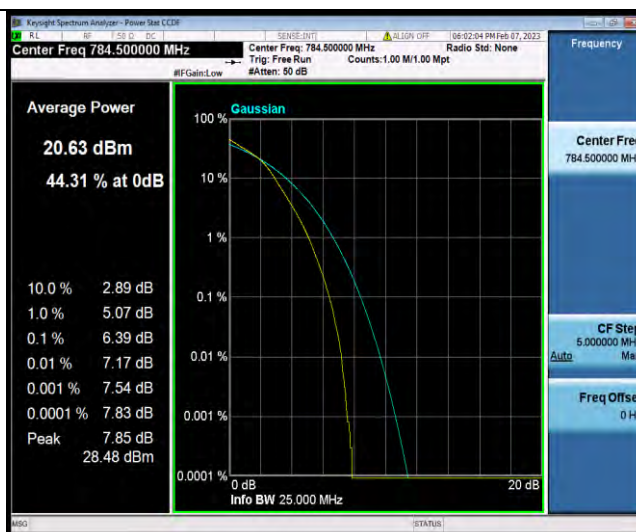


Band13-5MHz-16QAM-23255-25RB#0

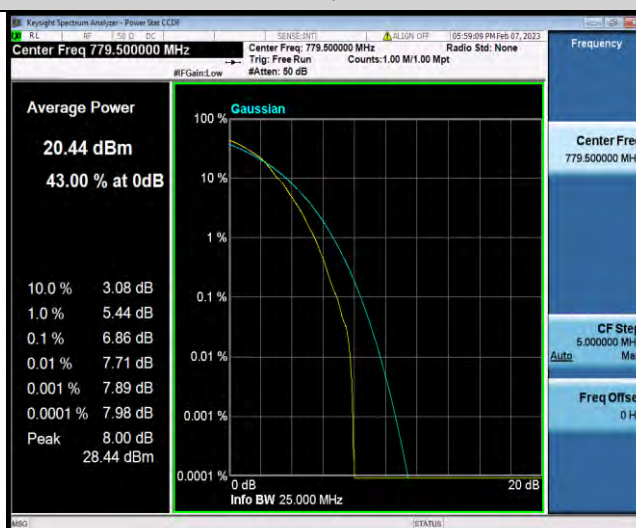


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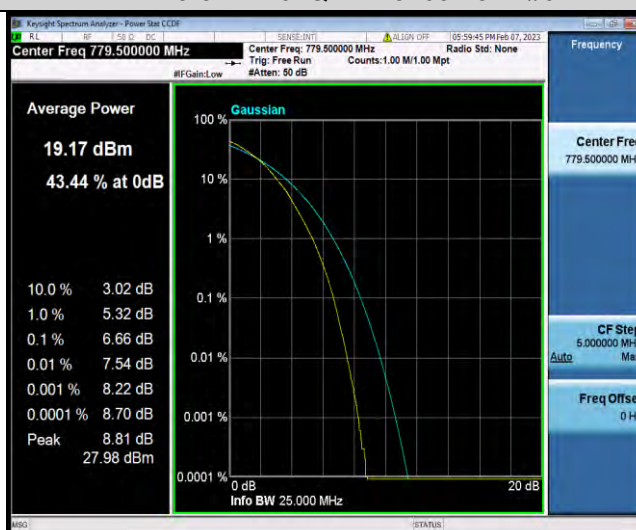
Test Report No.: W7L-P23010024RF06



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



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



Band13-5MHz-64QAM-23230-1RB#0

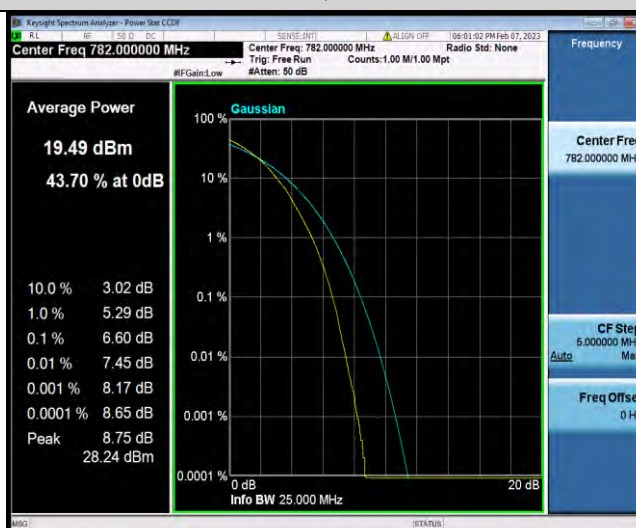


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Test Report No.: W7L-P23010024RF06



Band13-5MHz-64QAM-23230-25RB#0



Band13-5MHz-64QAM-23255-1RB#0



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

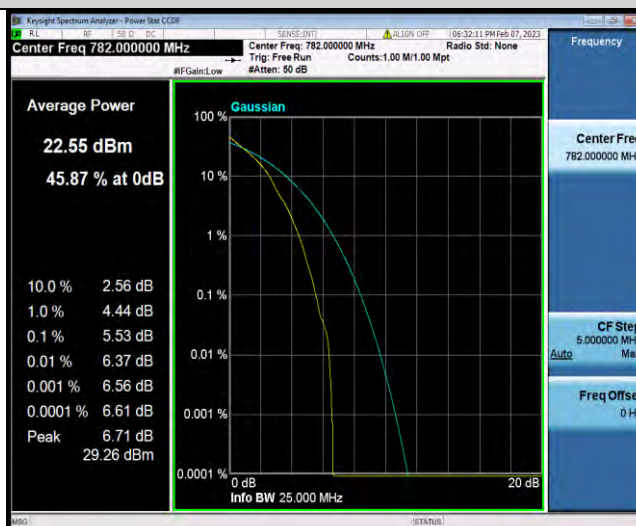


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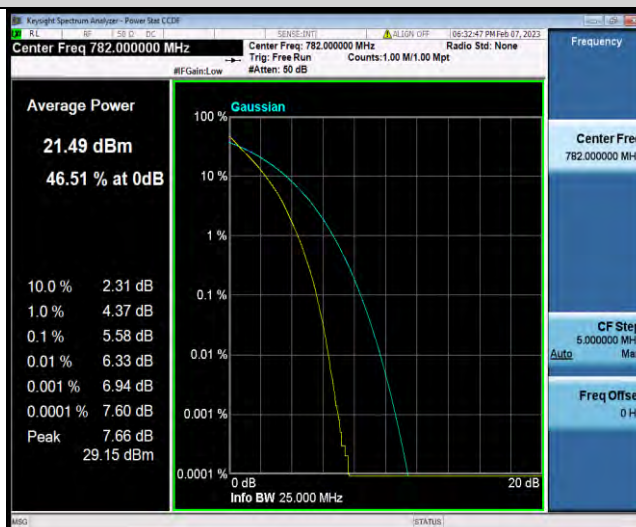
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Band13-10MHz-QPSK-23230-1RB#0



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



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

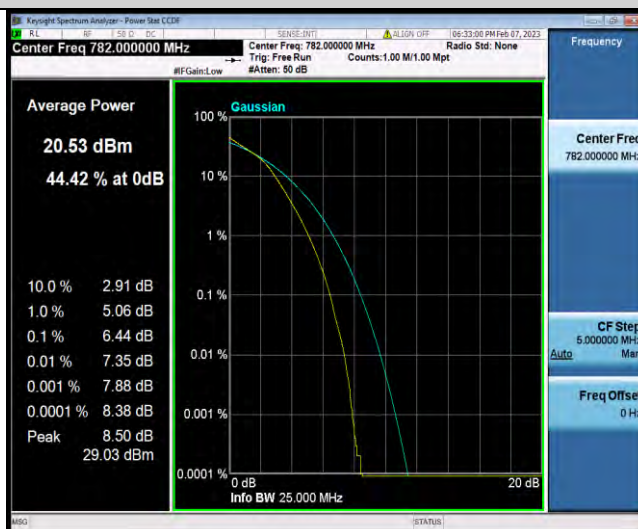


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Test Report No.: W7L-P23010024RF06



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



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

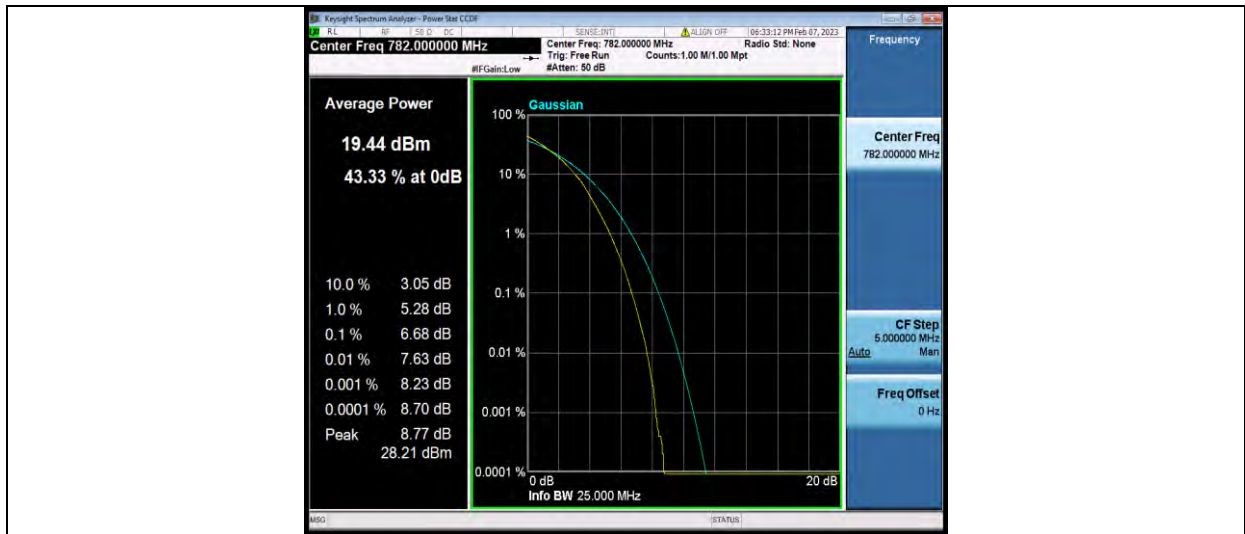


Band13-10MHz-64QAM-23230-50RB#0



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Test Report No.: W7L-P23010024RF06

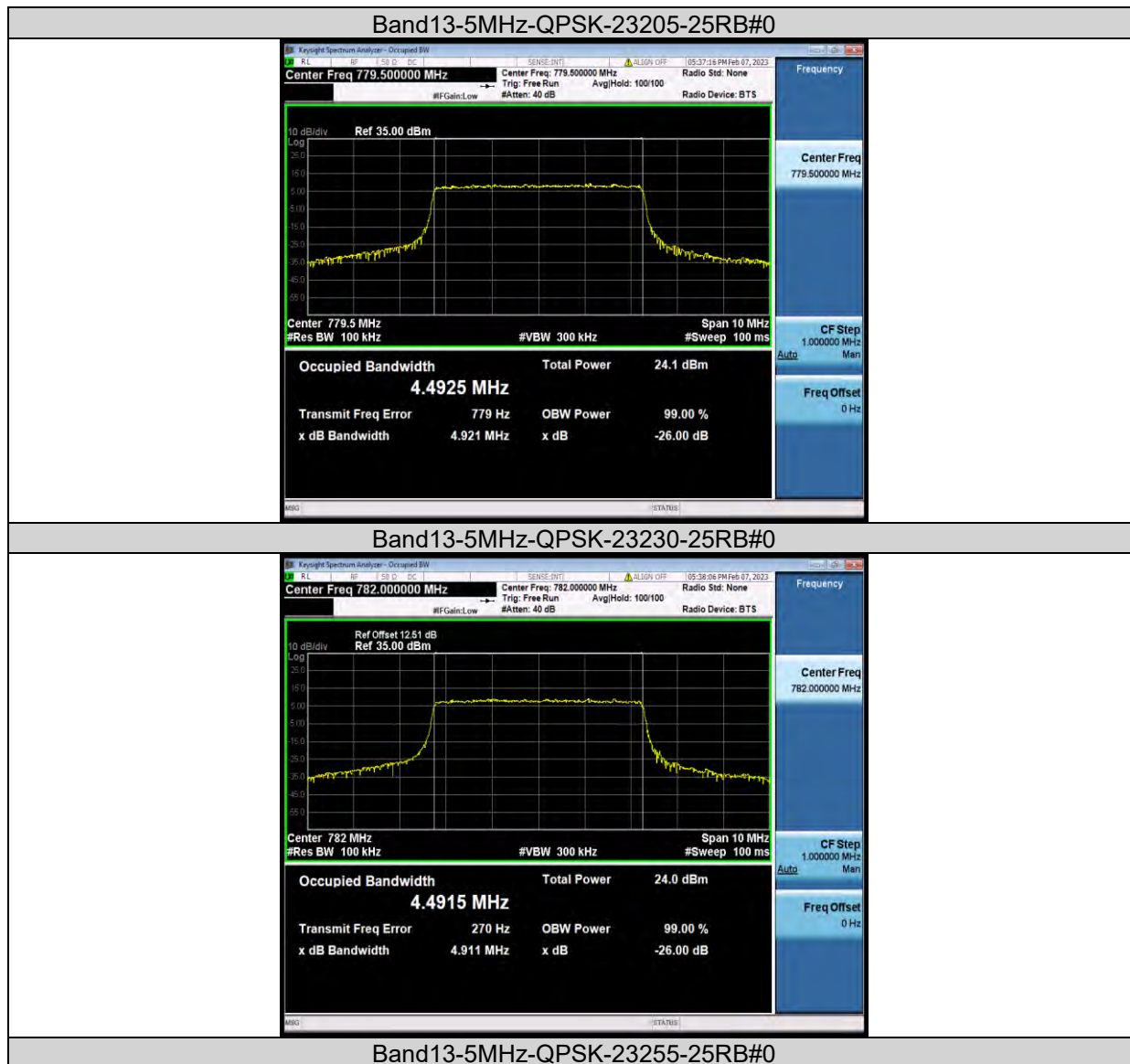


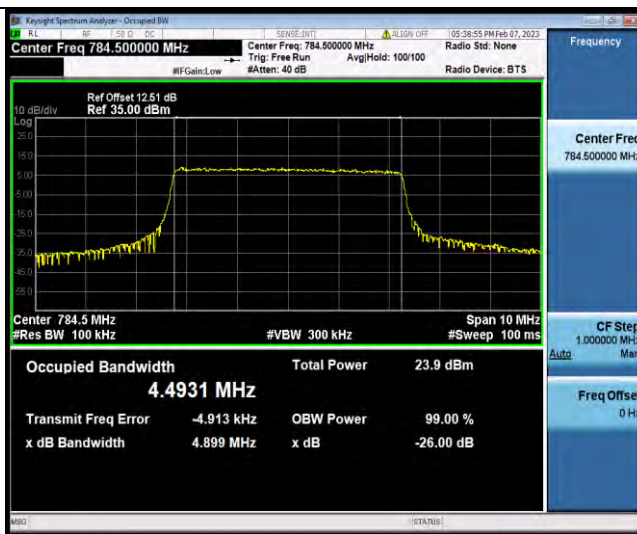
26DB BANDWIDTH AND OCCUPIED BANDWIDTH

Test Result

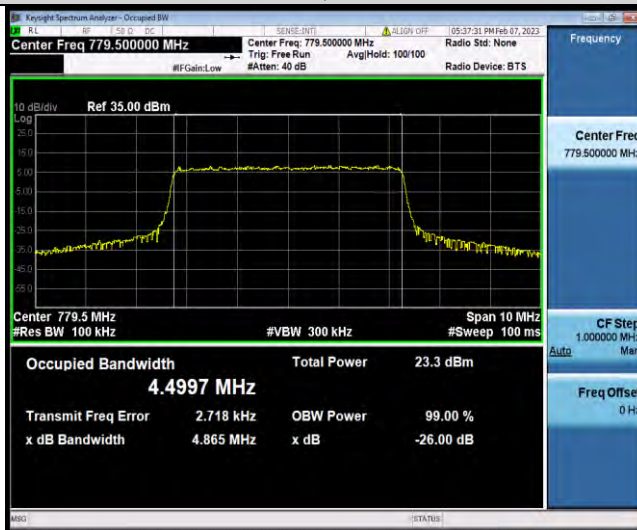
Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band13	5MHz	QPSK	23205	25RB#0	4.4925	4.921	PASS
Band13	5MHz	QPSK	23230	25RB#0	4.4915	4.911	PASS
Band13	5MHz	QPSK	23255	25RB#0	4.4931	4.899	PASS
Band13	5MHz	16QAM	23205	25RB#0	4.4997	4.865	PASS
Band13	5MHz	16QAM	23230	25RB#0	4.4965	4.866	PASS
Band13	5MHz	16QAM	23255	25RB#0	4.4918	4.870	PASS
Band13	5MHz	64QAM	23205	25RB#0	4.4972	4.891	PASS
Band13	5MHz	64QAM	23230	25RB#0	4.4940	4.895	PASS
Band13	5MHz	64QAM	23255	25RB#0	4.5034	4.889	PASS
Band13	10MHz	QPSK	23230	50RB#0	8.9565	9.574	PASS
Band13	10MHz	16QAM	23230	50RB#0	8.9560	9.540	PASS
Band13	10MHz	64QAM	23230	50RB#0	8.9556	9.566	PASS

Test Graphs





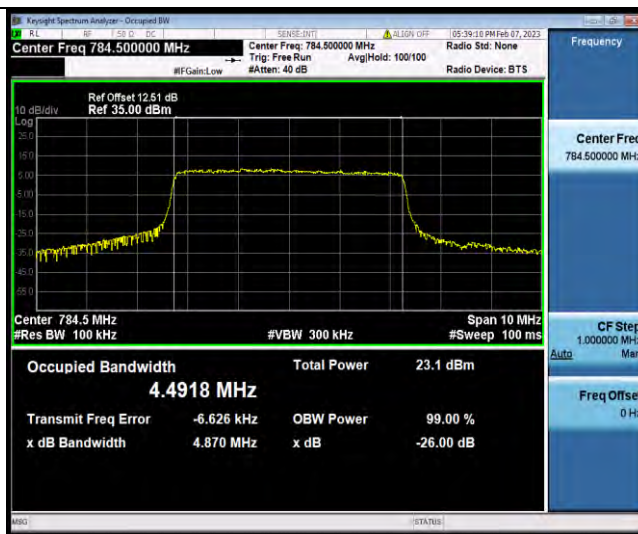
Band13-5MHz-16QAM-23205-25RB#0



Band13-5MHz-16QAM-23230-25RB#0



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



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



Band13-5MHz-64QAM-23230-25RB#0



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



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



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



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



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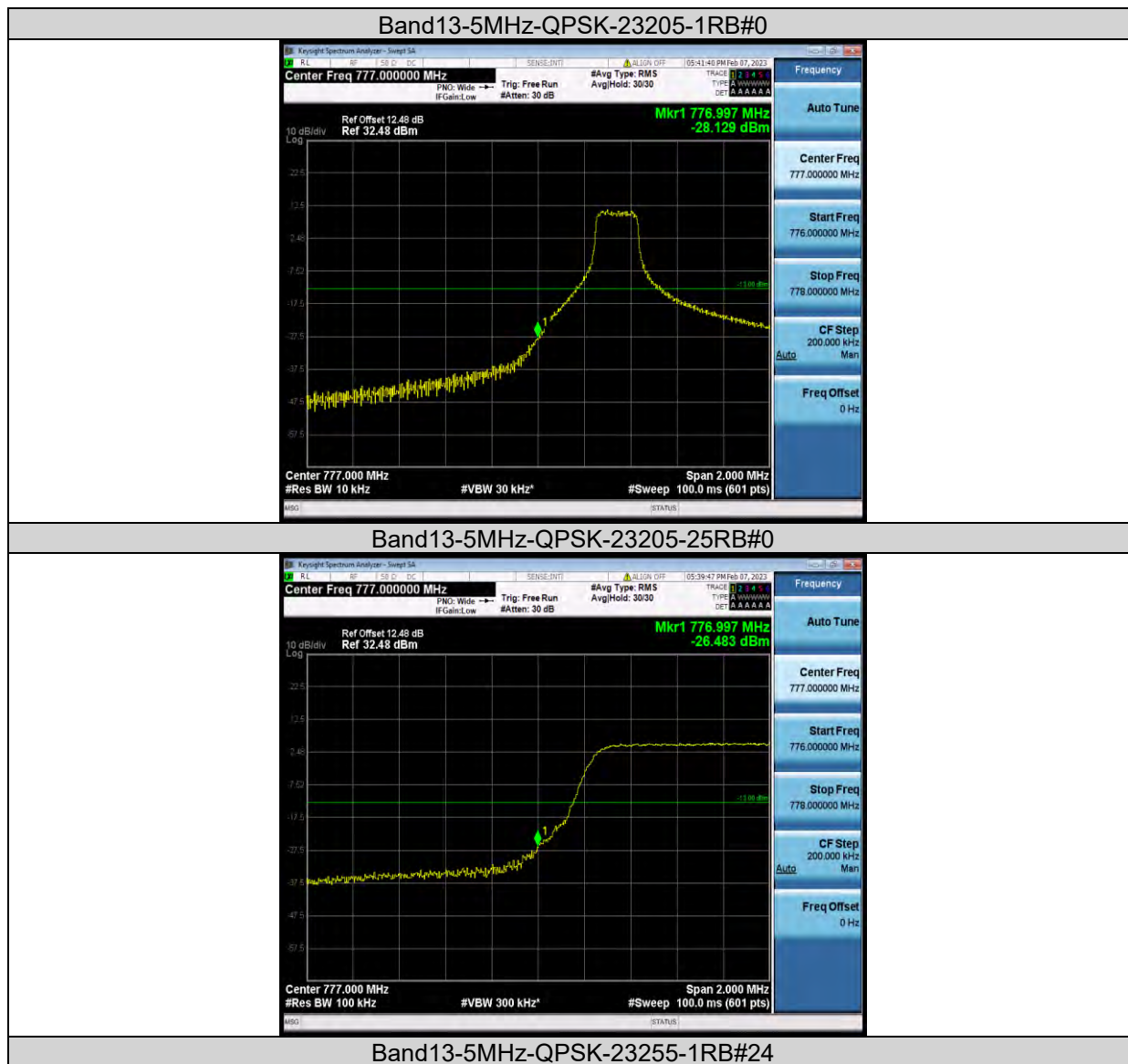


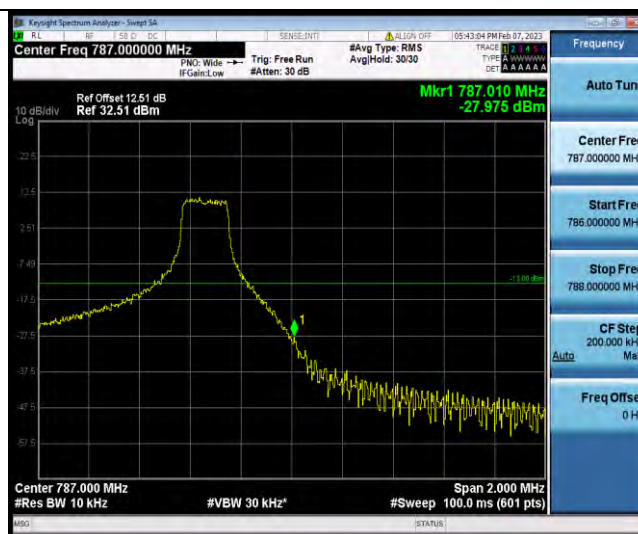
BAND EDGE

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band13	5MHz	QPSK	23205	1RB#0	-28.13	PASS
Band13	5MHz	QPSK	23205	25RB#0	-26.48	PASS
Band13	5MHz	QPSK	23255	1RB#24	-27.98	PASS
Band13	5MHz	QPSK	23255	25RB#0	-27.60	PASS
Band13	5MHz	16QAM	23205	1RB#0	-29.48	PASS
Band13	5MHz	16QAM	23205	25RB#0	-27.53	PASS
Band13	5MHz	16QAM	23255	1RB#24	-28.72	PASS
Band13	5MHz	16QAM	23255	25RB#0	-28.24	PASS
Band13	5MHz	64QAM	23205	1RB#0	-29.27	PASS
Band13	5MHz	64QAM	23205	25RB#0	-28.83	PASS
Band13	5MHz	64QAM	23255	1RB#24	-30.49	PASS
Band13	5MHz	64QAM	23255	25RB#0	-30.29	PASS
Band13	10MHz	QPSK	23230	1RB#0	-33.07,-52.29	PASS
Band13	10MHz	QPSK	23230	1RB#49	-49.45,-36.55	PASS
Band13	10MHz	QPSK	23230	50RB#0	-30.63,-31.54	PASS
Band13	10MHz	16QAM	23230	1RB#0	-33.10,-54.19	PASS
Band13	10MHz	16QAM	23230	1RB#49	-48.52,-36.03	PASS
Band13	10MHz	16QAM	23230	50RB#0	-31.40,-32.07	PASS
Band13	10MHz	64QAM	23230	1RB#0	-33.76,-51.92	PASS
Band13	10MHz	64QAM	23230	1RB#49	-51.63,-38.14	PASS
Band13	10MHz	64QAM	23230	50RB#0	-32.23,-33.59	PASS

Test Graphs

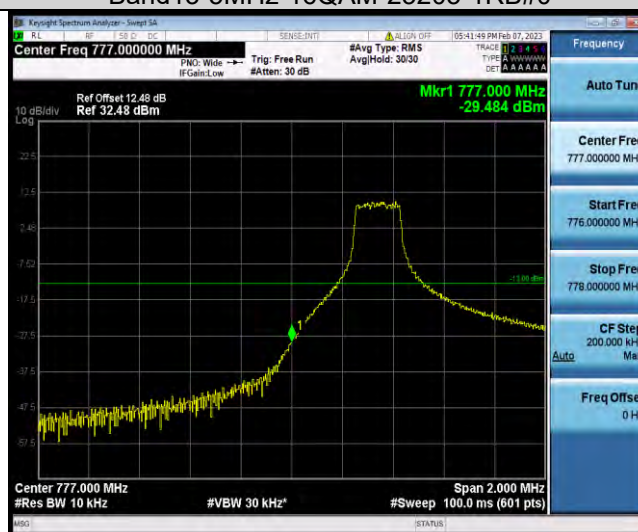




Band13-5MHz-QPSK-23255-25RB#0



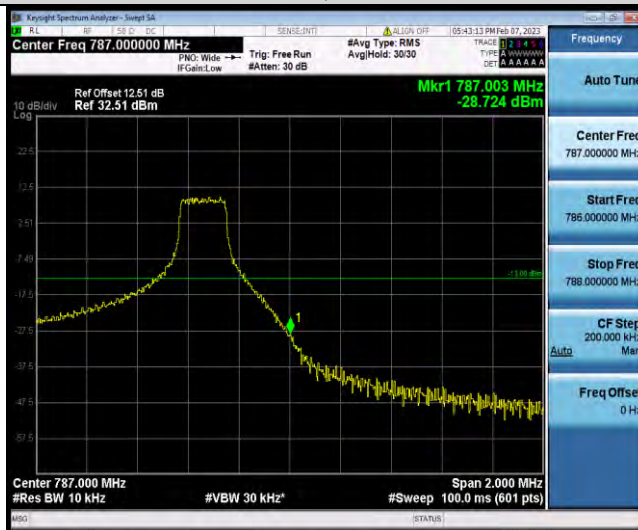
Band13-5MHz-16QAM-23205-1RB#0



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



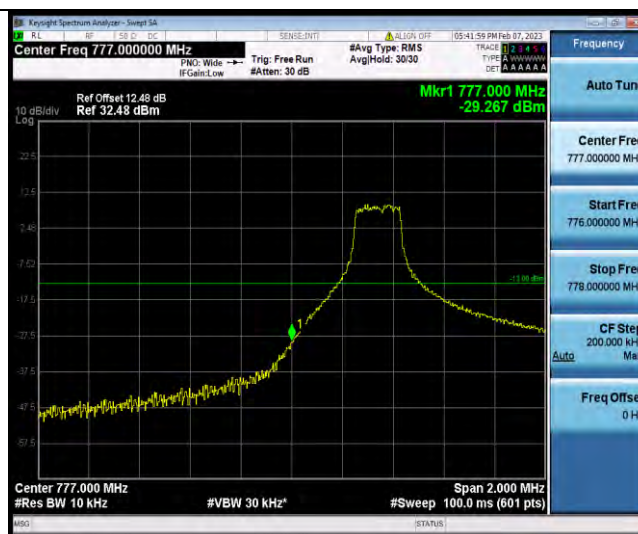
Band13-5MHz-16QAM-23255-1RB#24



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



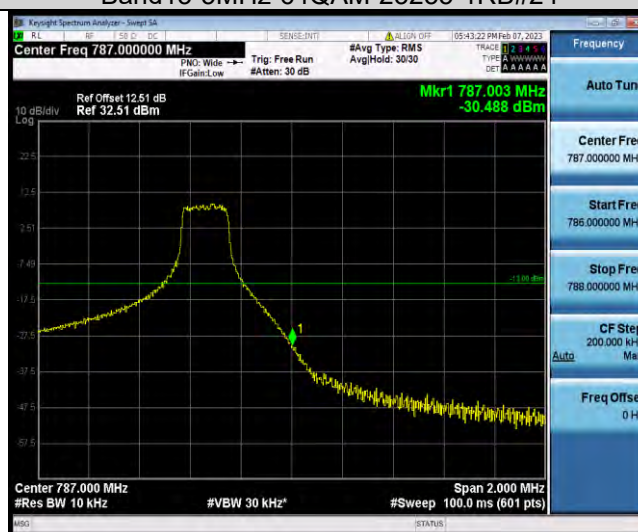
Band13-5MHz-64QAM-23205-1RB#0



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



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



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

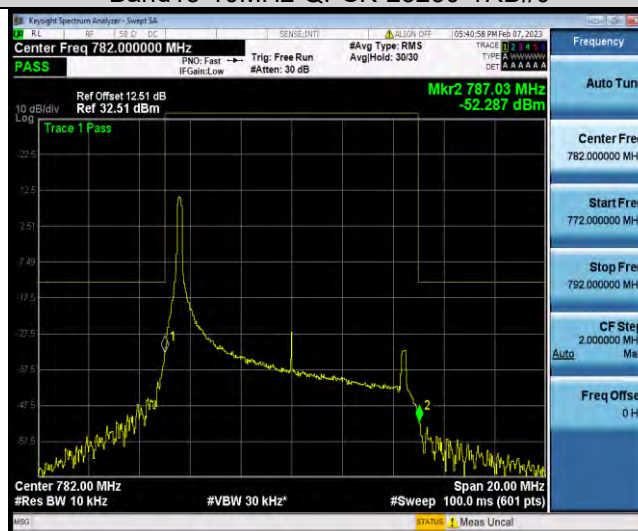


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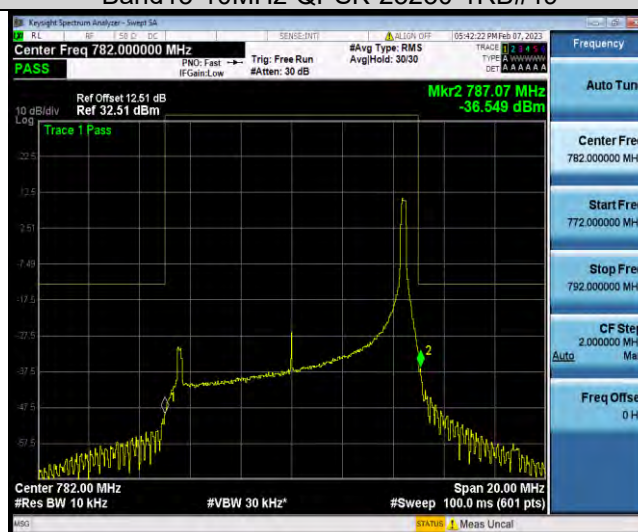
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Band13-10MHz-QPSK-23230-1RB#0



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



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

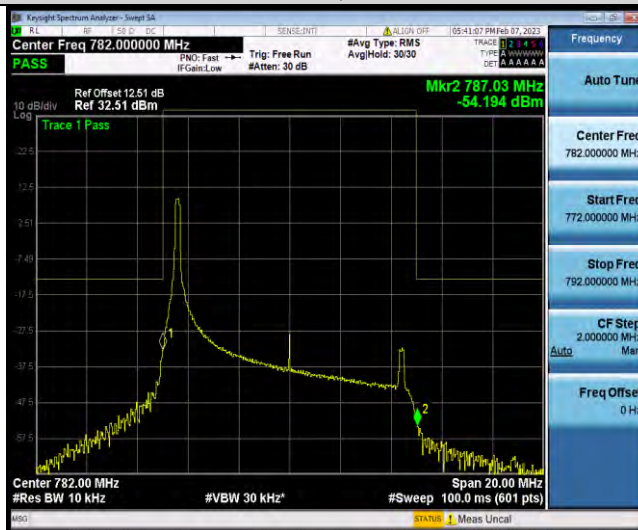


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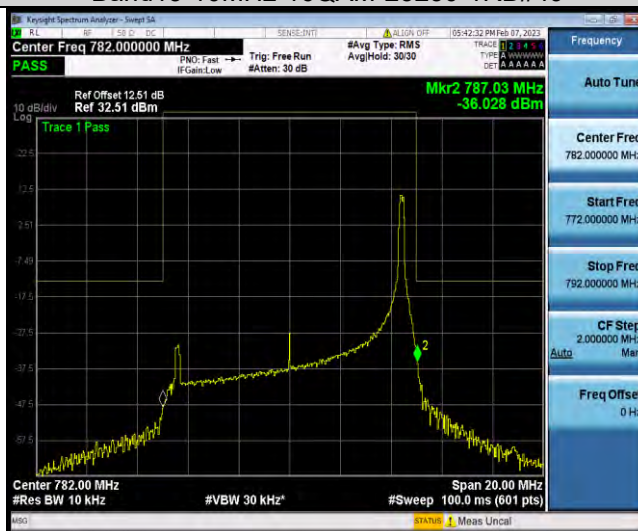
Test Report No.: W7L-P23010024RF06



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



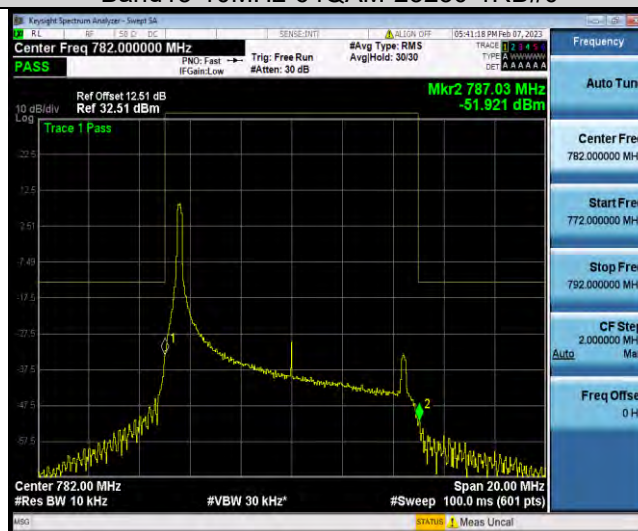
Band13-10MHz-16QAM-23230-1RB#49



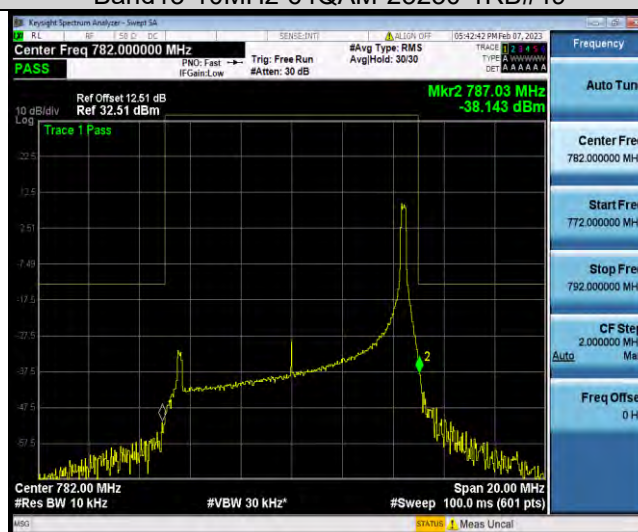
Band13-10MHz-16QAM-23230-50RB#0



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



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



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



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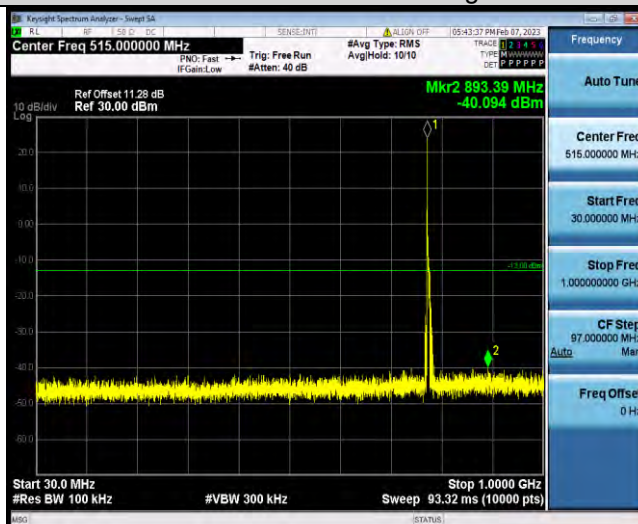
CONDUCTED SPURIOUS EMISSION

Test Result

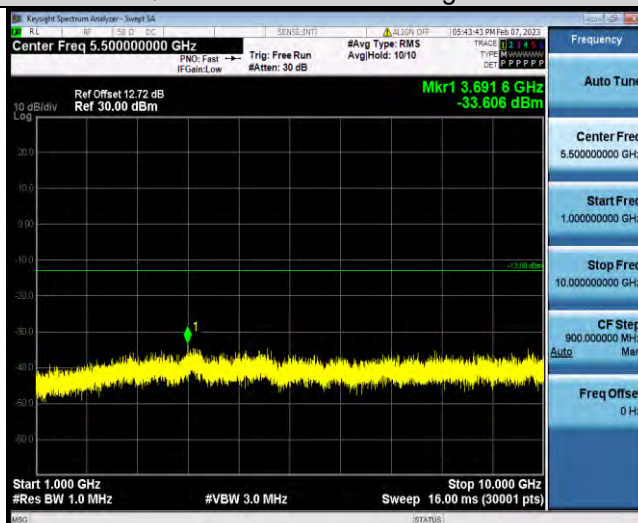
Band	Bandwidth	Modulation	Channel	RB Configuration	Frequency Range	Result (dBm)	Verdict
Band13	5MHz	QPSK	23205	1RB#0	Range1:30~1000MHz	-40.09	PASS
Band13	5MHz	QPSK	23205	1RB#0	Range2:1000~10000MHz	-33.61	PASS
Band13	5MHz	QPSK	23205	1RB#0	Range3:1559~1610MHz	-59.27	PASS
Band13	5MHz	QPSK	23230	1RB#0	Range1:30~1000MHz	-40.41	PASS
Band13	5MHz	QPSK	23230	1RB#0	Range2:1000~10000MHz	-33.59	PASS
Band13	5MHz	QPSK	23230	1RB#0	Range3:1559~1610MHz	-48.96	PASS
Band13	5MHz	QPSK	23255	1RB#0	Range1:30~1000MHz	-39.78	PASS
Band13	5MHz	QPSK	23255	1RB#0	Range2:1000~10000MHz	-33.51	PASS
Band13	5MHz	QPSK	23255	1RB#0	Range3:1559~1610MHz	-50.45	PASS
Band13	5MHz	16QAM	23205	1RB#0	Range1:30~1000MHz	-40.58	PASS
Band13	5MHz	16QAM	23205	1RB#0	Range2:1000~10000MHz	-33.97	PASS
Band13	5MHz	16QAM	23205	1RB#0	Range3:1559~1610MHz	-59.15	PASS
Band13	5MHz	16QAM	23230	1RB#0	Range1:30~1000MHz	-38.43	PASS
Band13	5MHz	16QAM	23230	1RB#0	Range2:1000~10000MHz	-33.98	PASS
Band13	5MHz	16QAM	23230	1RB#0	Range3:1559~1610MHz	-50.03	PASS
Band13	5MHz	16QAM	23255	1RB#0	Range1:30~1000MHz	-39.98	PASS
Band13	5MHz	16QAM	23255	1RB#0	Range2:1000~10000MHz	-34.84	PASS
Band13	5MHz	16QAM	23255	1RB#0	Range3:1559~1610MHz	-51.72	PASS
Band13	5MHz	64QAM	23205	1RB#0	Range1:30~1000MHz	-40.54	PASS
Band13	5MHz	64QAM	23205	1RB#0	Range2:1000~10000MHz	-33.94	PASS
Band13	5MHz	64QAM	23205	1RB#0	Range3:1559~1610MHz	-59.3	PASS
Band13	5MHz	64QAM	23230	1RB#0	Range1:30~1000MHz	-40.51	PASS
Band13	5MHz	64QAM	23230	1RB#0	Range2:1000~10000MHz	-34.32	PASS
Band13	5MHz	64QAM	23230	1RB#0	Range3:1559~1610MHz	-51.04	PASS
Band13	5MHz	64QAM	23255	1RB#0	Range1:30~1000MHz	-40.63	PASS
Band13	5MHz	64QAM	23255	1RB#0	Range2:1000~10000MHz	-33.98	PASS
Band13	5MHz	64QAM	23255	1RB#0	Range3:1559~1610MHz	-53.27	PASS
Band13	10MHz	QPSK	23230	1RB#0	Range1:30~1000MHz	-40.06	PASS
Band13	10MHz	QPSK	23230	1RB#0	Range2:1000~10000MHz	-34.04	PASS
Band13	10MHz	QPSK	23230	1RB#0	Range3:1559~1610MHz	-59.22	PASS
Band13	10MHz	16QAM	23230	1RB#0	Range1:30~1000MHz	-39.79	PASS
Band13	10MHz	16QAM	23230	1RB#0	Range2:1000~10000MHz	-34.9	PASS
Band13	10MHz	16QAM	23230	1RB#0	Range3:1559~1610MHz	-59.25	PASS
Band13	10MHz	64QAM	23230	1RB#0	Range1:30~1000MHz	-39.47	PASS
Band13	10MHz	64QAM	23230	1RB#0	Range2:1000~10000MHz	-33.96	PASS
Band13	10MHz	64QAM	23230	1RB#0	Range3:1559~1610MHz	-59.29	PASS

Test Graphs

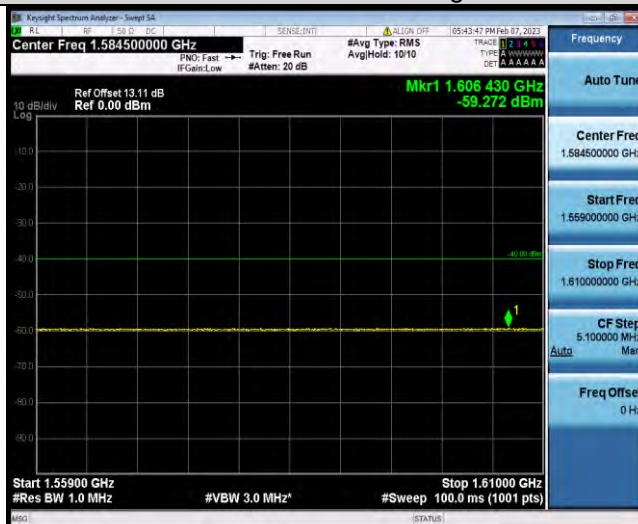
Band13-5MHz-QPSK-23205-1RB#0-Range1:30~1000MHz



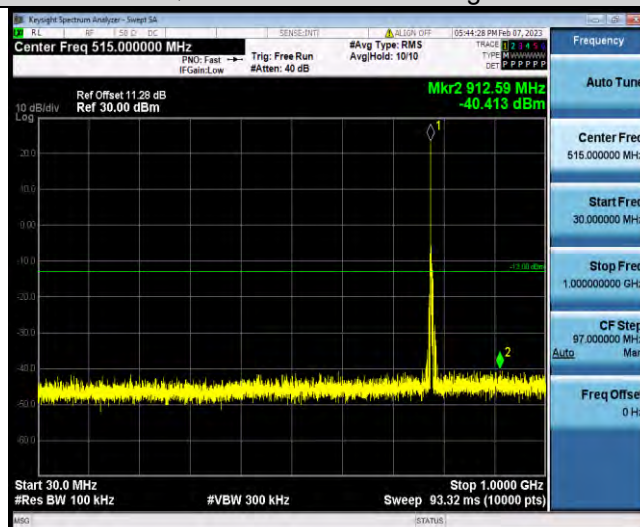
Band13-5MHz-QPSK-23205-1RB#0-Range2:1000~10000MHz



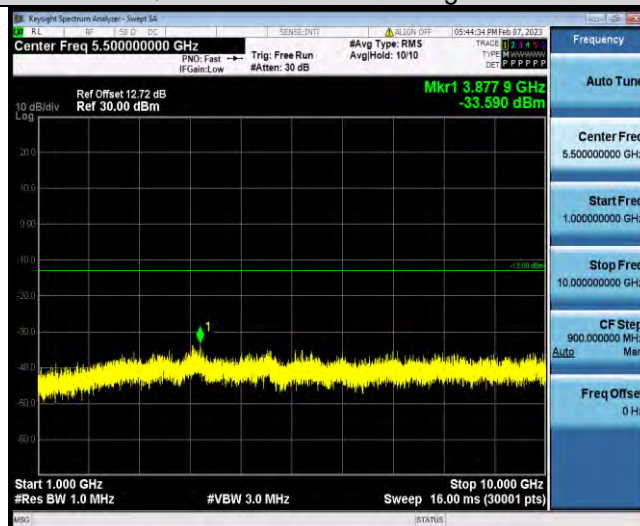
Band13-5MHz-QPSK-23205-1RB#0-Range3:1559~1610MHz



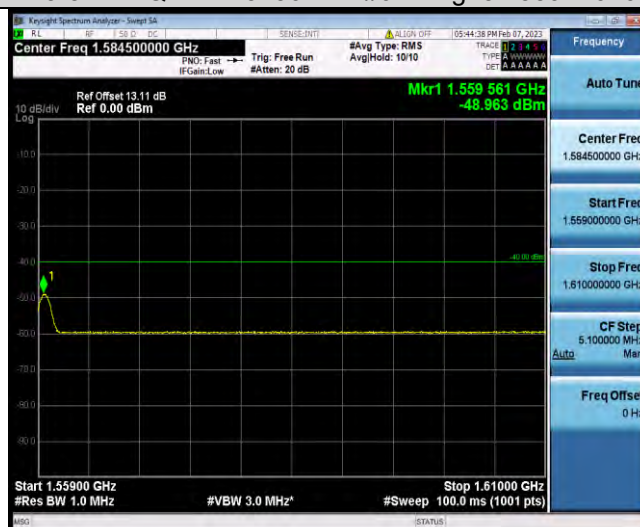
Band13-5MHz-QPSK-23230-1RB#0-Range1:30~1000MHz



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



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

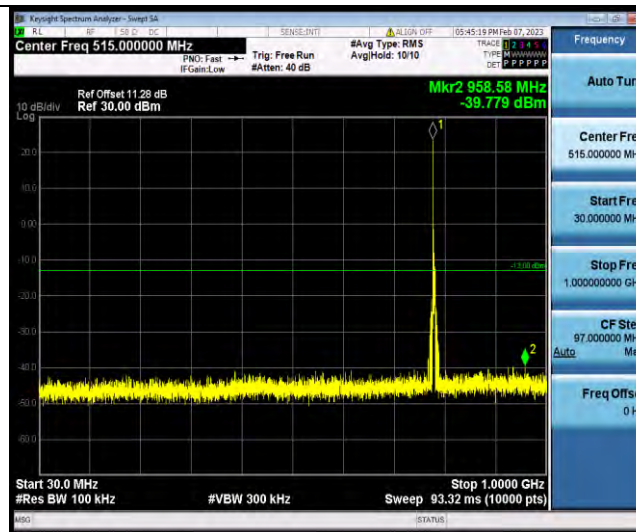


Band13-5MHz-QPSK-23255-1RB#0-Range1:30~1000MHz

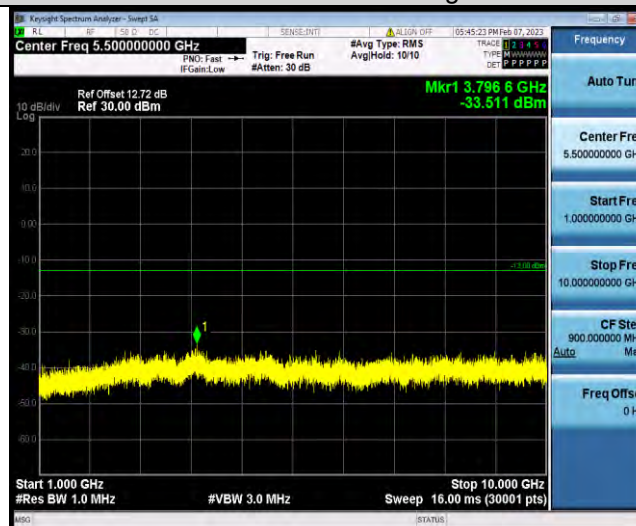


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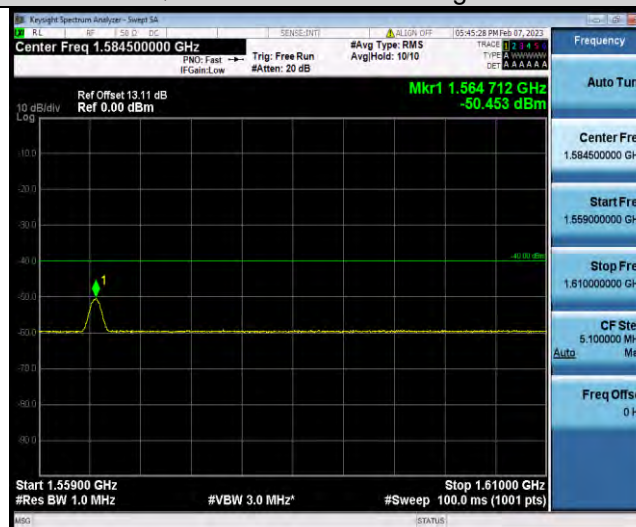
Test Report No.: W7L-P23010024RF06



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



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

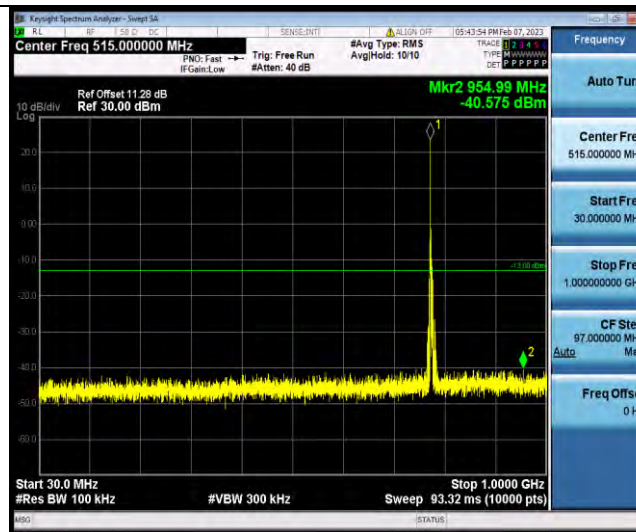


Band13-5MHz-16QAM-23205-1RB#0-Range1:30~1000MHz

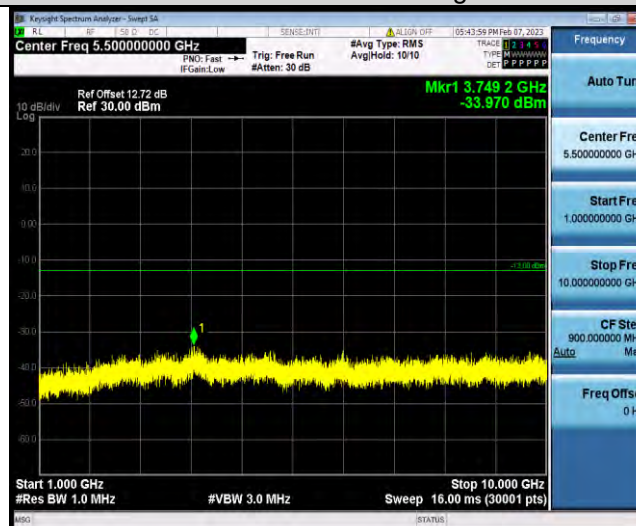


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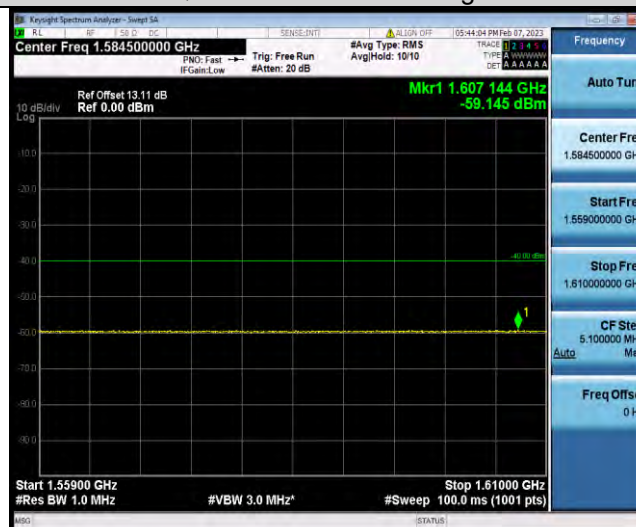
Test Report No.: W7L-P23010024RF06



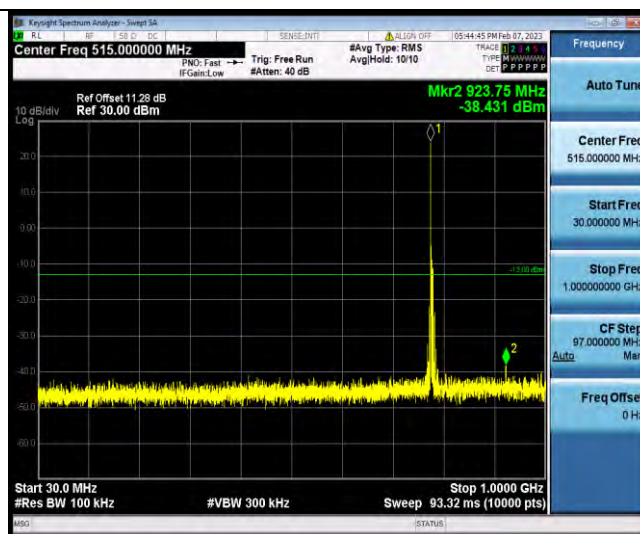
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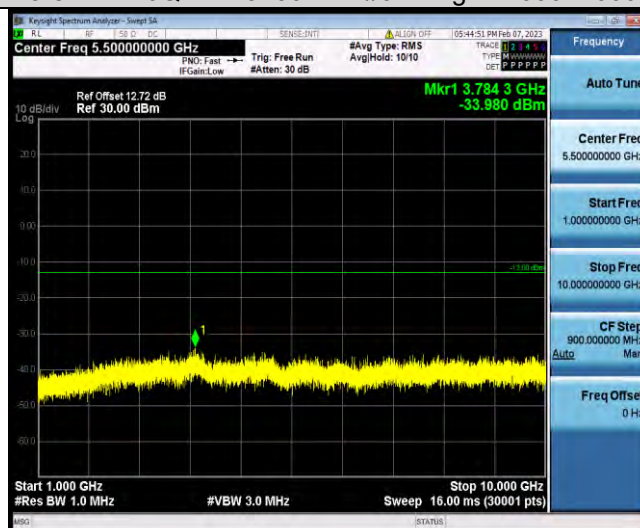
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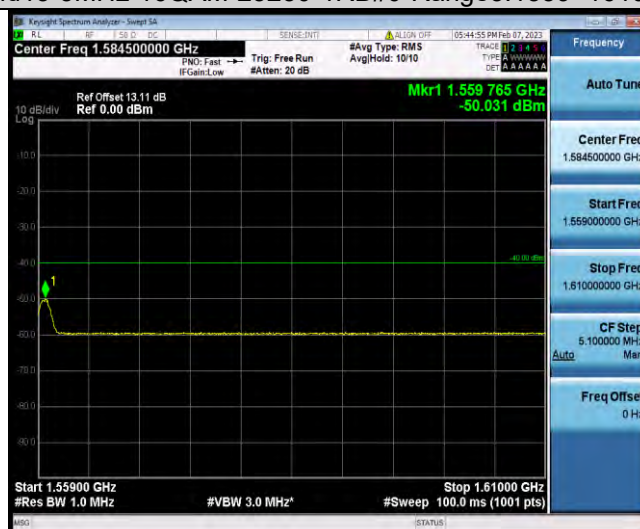
Band13-5MHz-16QAM-23230-1RB#0-Range1:30~1000MHz



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



Band13-5MHz-16QAM-23230-1RB#0-Range3:1559~1610MHz

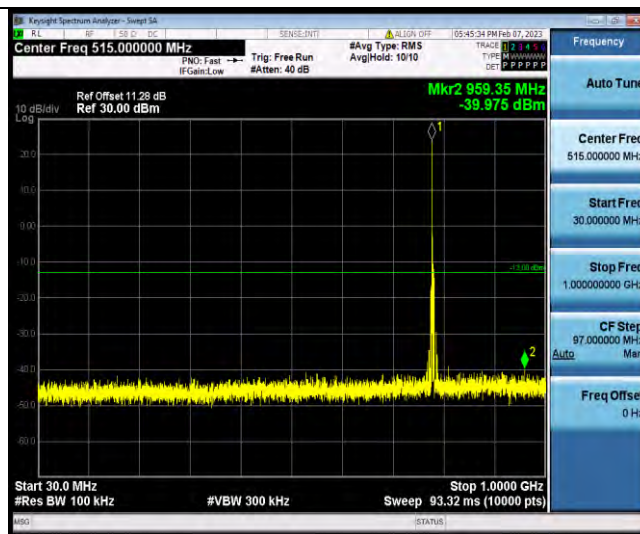


Band13-5MHz-16QAM-23255-1RB#0-Range1:30~1000MHz

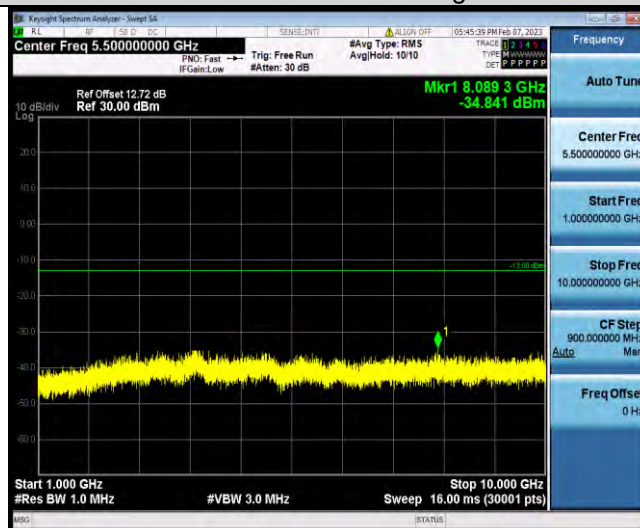


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Band13-5MHz-16QAM-23255-1RB#0-Range2:1000~10000MHz



Band13-5MHz-16QAM-23255-1RB#0-Range3:1559~1610MHz

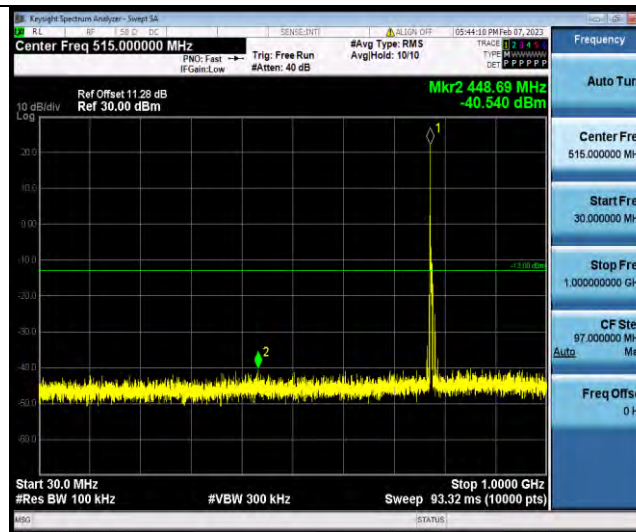


Band13-5MHz-64QAM-23205-1RB#0-Range1:30~1000MHz

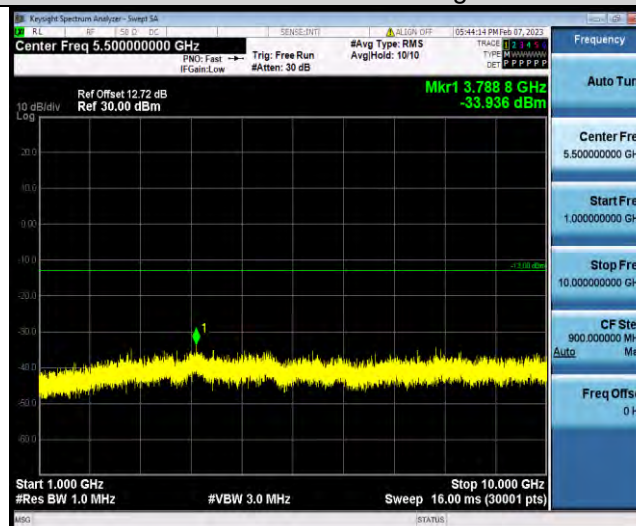


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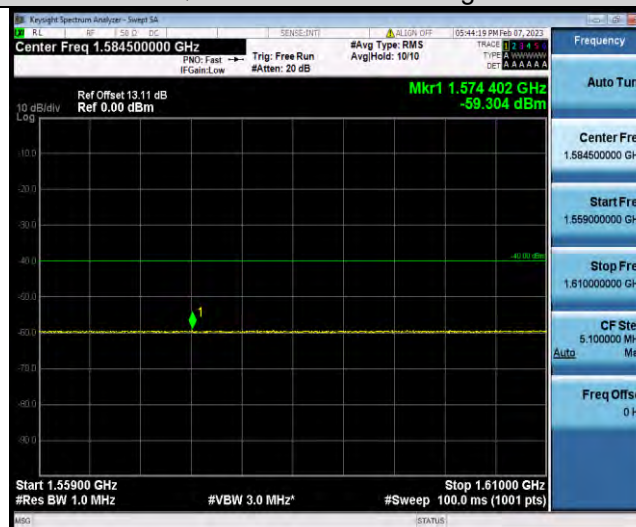
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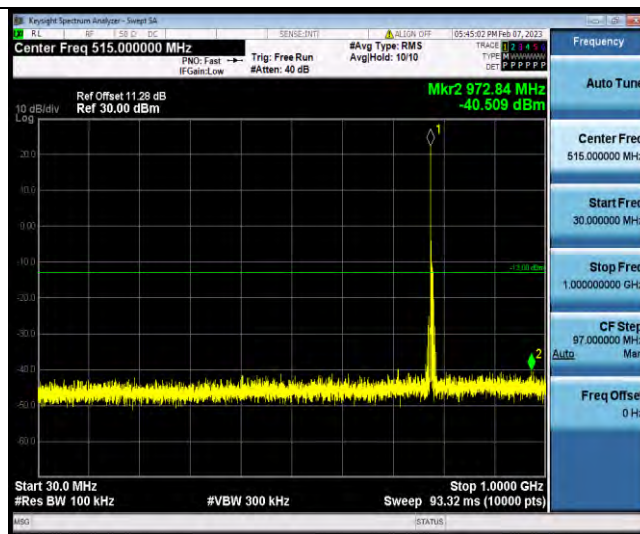
Band13-5MHz-64QAM-23205-1RB#0-Range2:1000~10000MHz



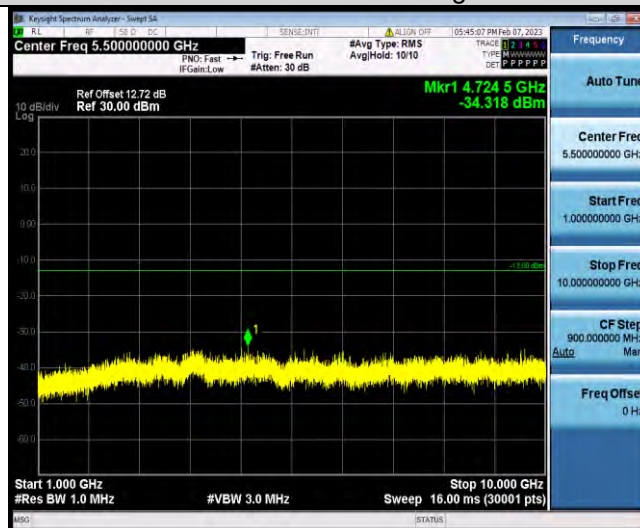
Band13-5MHz-64QAM-23205-1RB#0-Range3:1559~1610MHz



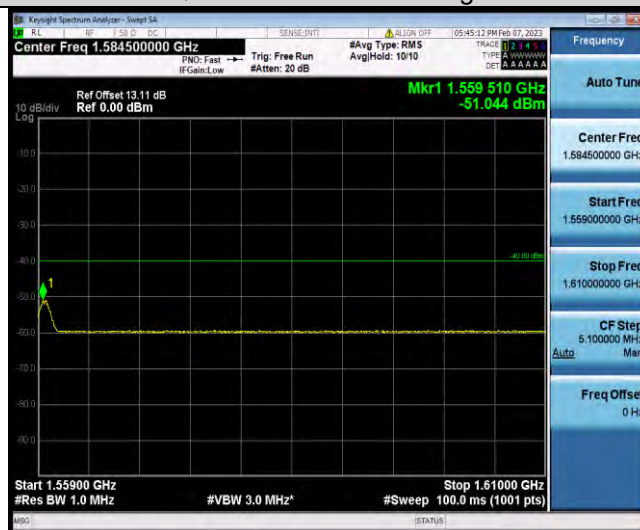
Band13-5MHz-64QAM-23230-1RB#0-Range1:30~1000MHz



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



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

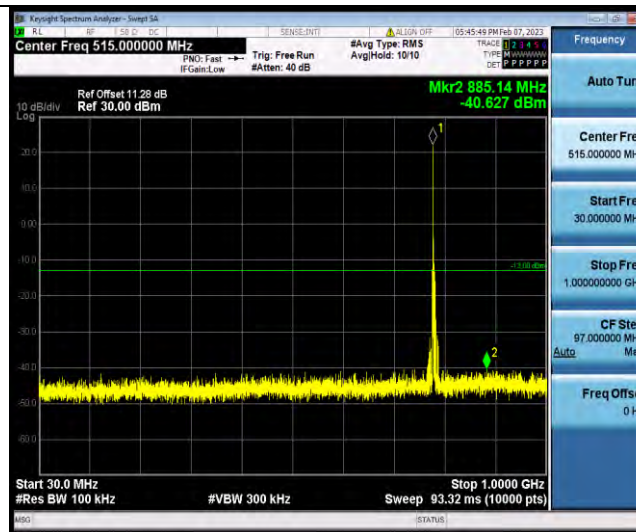


Band13-5MHz-64QAM-23255-1RB#0-Range1:30~1000MHz

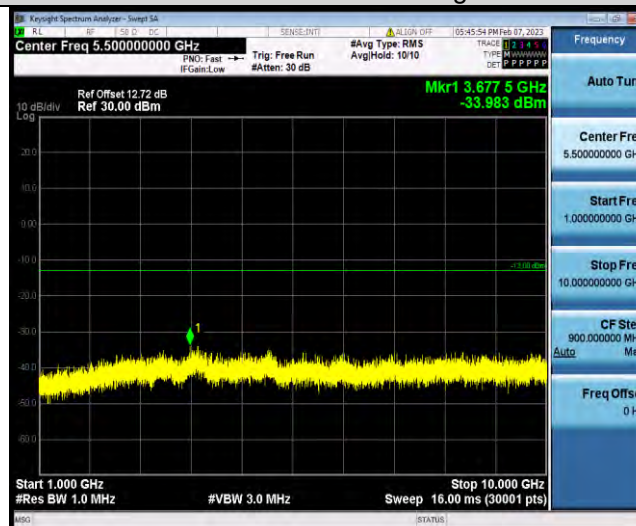


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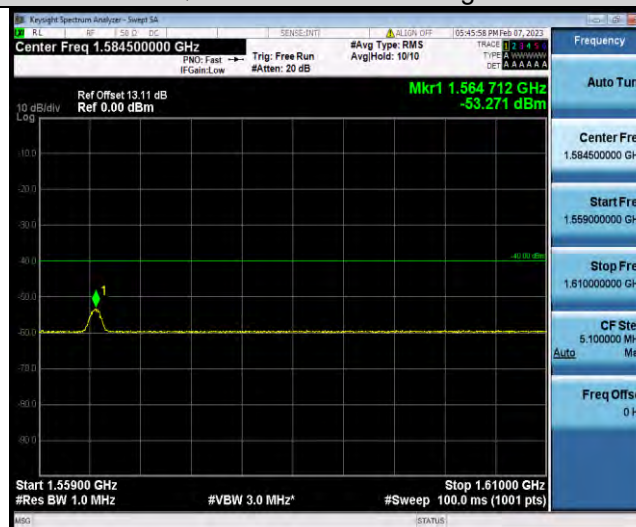
Test Report No.: W7L-P23010024RF06



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



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

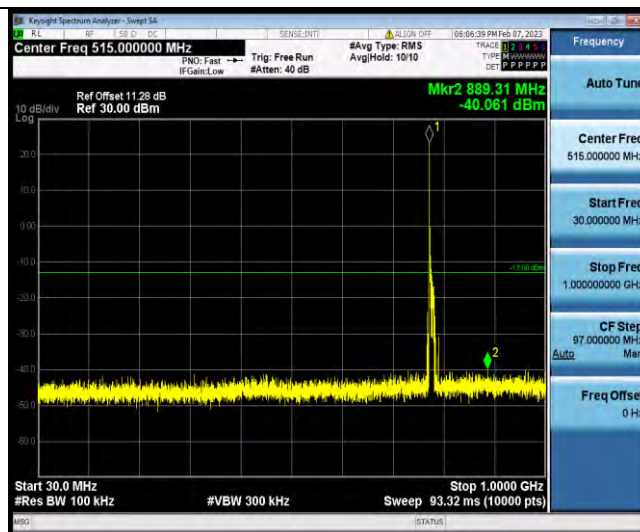


Band13-10MHz-QPSK-23230-1RB#0-Range1:30~1000MHz

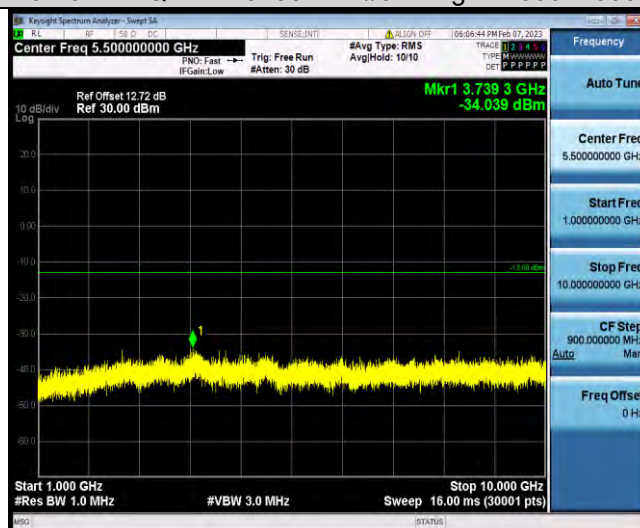


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Test Report No.: W7L-P23010024RF06



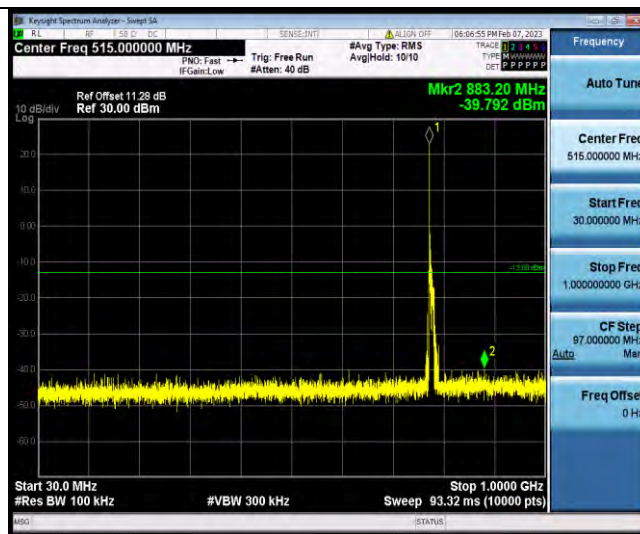
Band13-10MHz-QPSK-23230-1RB#0-Range2:1000~10000MHz



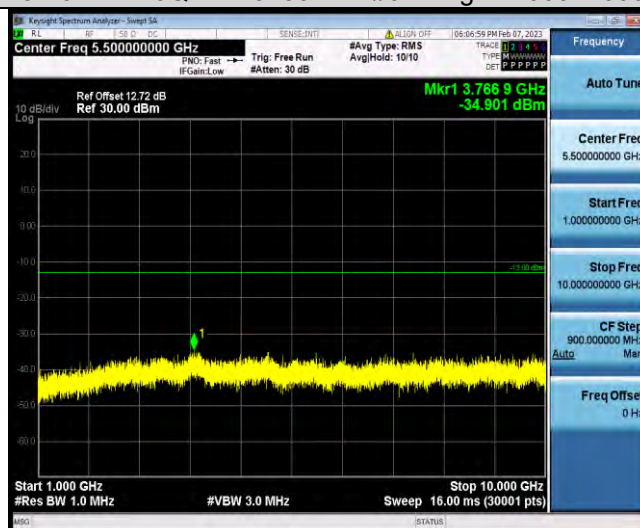
Band13-10MHz-QPSK-23230-1RB#0-Range3:1559~1610MHz



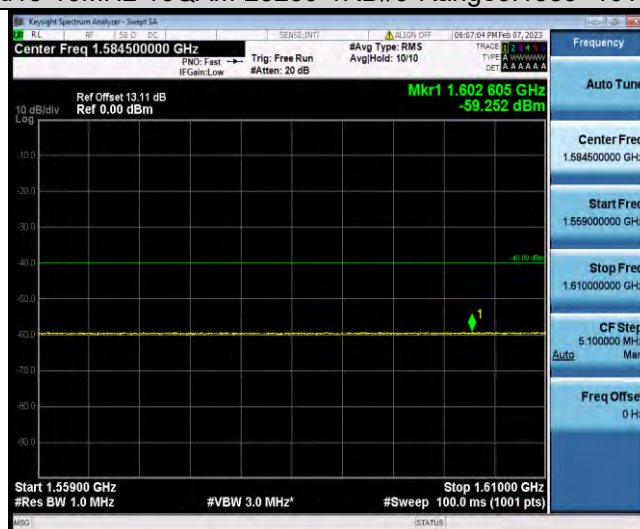
Band13-10MHz-16QAM-23230-1RB#0-Range1:30~1000MHz



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



Band13-10MHz-16QAM-23230-1RB#0-Range3: 1559~1610MHz

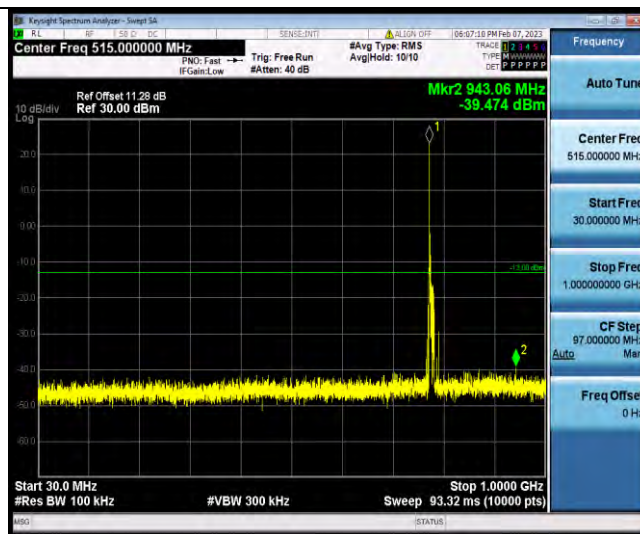


Band13-10MHz-64QAM-23230-1RB#0-Range1:30~1000MHz

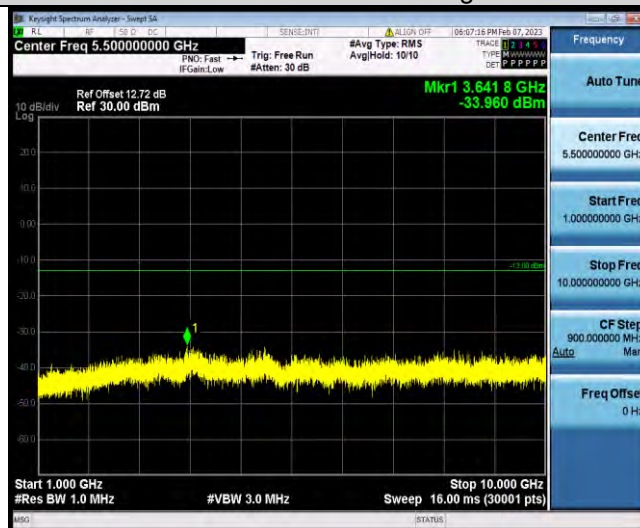


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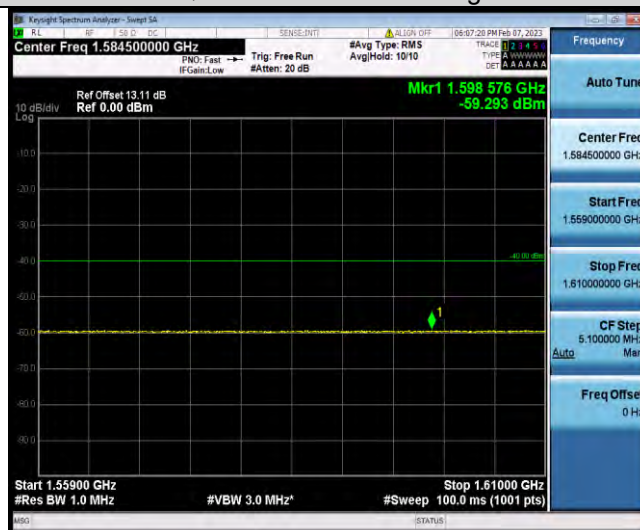
Test Report No.: W7L-P23010024RF06



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



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



FREQUENCY STABILITY

Test Result

Voltage										
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band1_3	5MHz	QPSK	23205	25RB#0	VL	NT	3.08	0.003951	±2.5	PASS
Band1_3	5MHz	QPSK	23205	25RB#0	VN	NT	13.70	0.017575	±2.5	PASS
Band1_3	5MHz	QPSK	23205	25RB#0	VH	NT	-13.07	-0.016767	±2.5	PASS
Band1_3	5MHz	QPSK	23230	25RB#0	VL	NT	7.15	0.009143	±2.5	PASS
Band1_3	5MHz	QPSK	23230	25RB#0	VN	NT	17.74	0.022685	±2.5	PASS
Band1_3	5MHz	QPSK	23230	25RB#0	VH	NT	-15.01	-0.019194	±2.5	PASS
Band1_3	5MHz	QPSK	23255	25RB#0	VL	NT	7.42	0.009458	±2.5	PASS
Band1_3	5MHz	QPSK	23255	25RB#0	VN	NT	8.78	0.011192	±2.5	PASS
Band1_3	5MHz	QPSK	23255	25RB#0	VH	NT	1.32	0.001683	±2.5	PASS
Band1_3	5MHz	16QAM	23205	25RB#0	VL	NT	-50.45	-0.064721	±2.5	PASS
Band1_3	5MHz	16QAM	23205	25RB#0	VN	NT	-47.08	-0.060398	±2.5	PASS
Band1_3	5MHz	16QAM	23205	25RB#0	VH	NT	-52.73	-0.067646	±2.5	PASS
Band1_3	5MHz	16QAM	23230	25RB#0	VL	NT	-12.72	-0.016266	±2.5	PASS
Band1_3	5MHz	16QAM	23230	25RB#0	VN	NT	-15.31	-0.019578	±2.5	PASS
Band1_3	5MHz	16QAM	23230	25RB#0	VH	NT	-5.62	-0.007187	±2.5	PASS
Band1_3	5MHz	16QAM	23255	25RB#0	VL	NT	5.91	0.007533	±2.5	PASS
Band1_3	5MHz	16QAM	23255	25RB#0	VN	NT	-51.08	-0.065112	±2.5	PASS
Band1_3	5MHz	16QAM	23255	25RB#0	VH	NT	11.53	0.014697	±2.5	PASS
Band1_3	5MHz	64QAM	23205	25RB#0	VL	NT	-16.28	-0.020885	±2.5	PASS
Band1_3	5MHz	64QAM	23205	25RB#0	VN	NT	-17.91	-0.022976	±2.5	PASS
Band1_3	5MHz	64QAM	23205	25RB#0	VH	NT	-6.77	-0.008685	±2.5	PASS
Band1	5MHz	64QAM	23230	25RB#0	VL	NT	1.92	0.002455	±2.5	PASS