

4G-Band 13 TEST DATA

Trade Mark: AIRBOLT

Test Model: ABGPS-23

Environmental Conditions

Temperature:	24.6° C
Relative Humidity:	52.4%
ATM Pressure:	987.0 kPa
Test Engineer:	Simba huang
Supervised by:	Seal Chen

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1.Effective (Isotropic) Radiated Power Output Data

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	ERP(dBm)	Limit(dBm)	Verdict
Band13	5MHz	QPSK	23205	1RB#0	24.45	24.72	34.77	PASS
Band13	5MHz	QPSK	23205	1RB#12	24.47	24.74	34.77	PASS
Band13	5MHz	QPSK	23205	1RB#24	24.36	24.63	34.77	PASS
Band13	5MHz	QPSK	23205	25RB#0	23.57	23.84	34.77	PASS
Band13	5MHz	QPSK	23230	1RB#0	24.47	24.74	34.77	PASS
Band13	5MHz	QPSK	23230	1RB#12	24.36	24.63	34.77	PASS
Band13	5MHz	QPSK	23230	1RB#24	24.32	24.59	34.77	PASS
Band13	5MHz	QPSK	23230	25RB#0	23.61	23.88	34.77	PASS
Band13	5MHz	QPSK	23255	1RB#0	24.48	24.75	34.77	PASS
Band13	5MHz	QPSK	23255	1RB#12	24.23	24.5	34.77	PASS
Band13	5MHz	QPSK	23255	1RB#24	24.15	24.42	34.77	PASS
Band13	5MHz	QPSK	23255	25RB#0	23.61	23.88	34.77	PASS
Band13	5MHz	16QAM	23205	1RB#0	23.93	24.2	34.77	PASS
Band13	5MHz	16QAM	23205	1RB#12	23.9	24.17	34.77	PASS
Band13	5MHz	16QAM	23205	1RB#24	23.78	24.05	34.77	PASS
Band13	5MHz	16QAM	23205	25RB#0	22.63	22.9	34.77	PASS
Band13	5MHz	16QAM	23230	1RB#0	23.89	24.16	34.77	PASS
Band13	5MHz	16QAM	23230	1RB#12	23.93	24.2	34.77	PASS
Band13	5MHz	16QAM	23230	1RB#24	23.46	23.73	34.77	PASS
Band13	5MHz	16QAM	23230	25RB#0	22.64	22.91	34.77	PASS
Band13	5MHz	16QAM	23255	1RB#0	23.94	24.21	34.77	PASS
Band13	5MHz	16QAM	23255	1RB#12	23.87	24.14	34.77	PASS
Band13	5MHz	16QAM	23255	1RB#24	23.32	23.59	34.77	PASS
Band13	5MHz	16QAM	23255	25RB#0	22.58	22.85	34.77	PASS
Band13	10MHz	QPSK	23230	1RB#0	24.3	24.57	34.77	PASS
Band13	10MHz	QPSK	23230	1RB#24	24.35	24.62	34.77	PASS
Band13	10MHz	QPSK	23230	1RB#49	24.12	24.39	34.77	PASS
Band13	10MHz	QPSK	23230	50RB#0	23.68	23.95	34.77	PASS

Band13	10MHz	16QAM	23230	1RB#0	23.89	24.16	34.77	PASS
Band13	10MHz	16QAM	23230	1RB#24	23.81	24.08	34.77	PASS
Band13	10MHz	16QAM	23230	1RB#49	23.83	24.1	34.77	PASS
Band13	10MHz	16QAM	23230	50RB#0	22.66	22.93	34.77	PASS

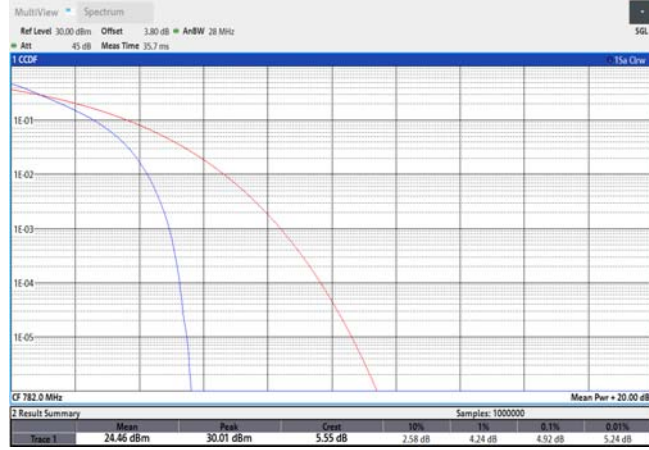
2. Peak-to-Average Ratio(CCDF)

Test Result

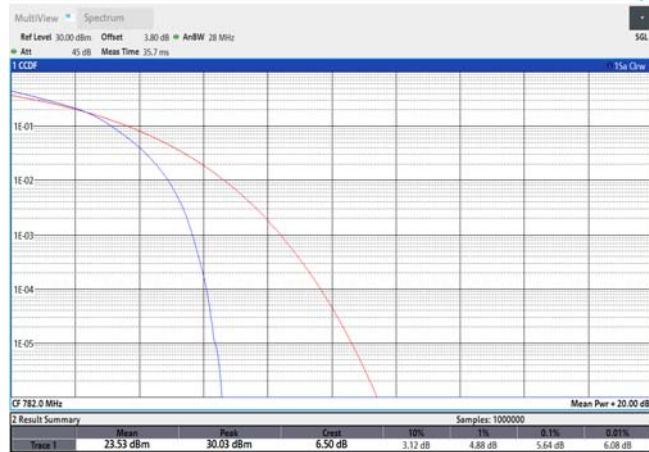
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band13	10MHz	QPSK	23230	50RB#0	4.92	13	PASS
Band13	10MHz	16QAM	23230	50RB#0	5.64	13	PASS

Test Graphs

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



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



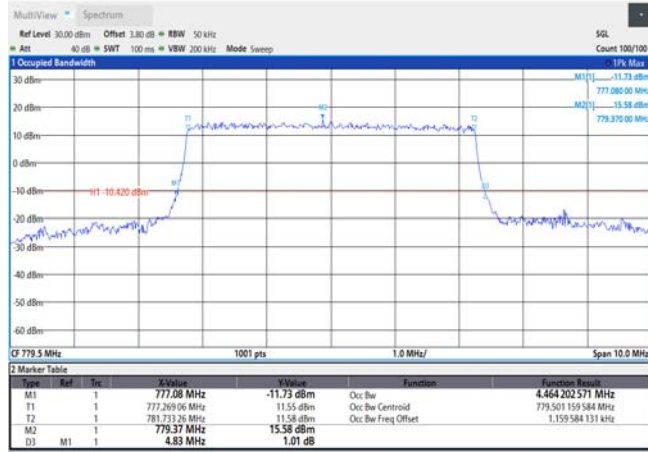
3.26dB Bandwidth and Occupied Bandwidth

Test Result

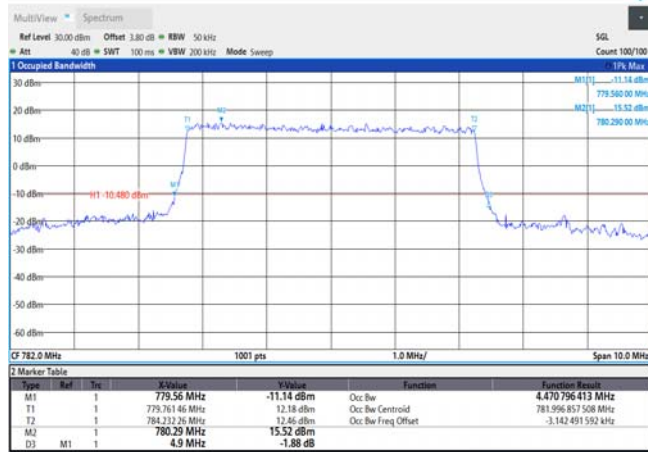
Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band13	5MHz	QPSK	23205	25RB#0	4.464	4.83	PASS
Band13	5MHz	QPSK	23230	25RB#0	4.471	4.90	PASS
Band13	5MHz	QPSK	23255	25RB#0	4.473	4.85	PASS
Band13	5MHz	16QAM	23205	25RB#0	4.46	4.89	PASS
Band13	5MHz	16QAM	23230	25RB#0	4.469	4.90	PASS
Band13	5MHz	16QAM	23255	25RB#0	4.466	4.89	PASS
Band13	10MHz	QPSK	23230	50RB#0	8.932	9.58	PASS
Band13	10MHz	16QAM	23230	50RB#0	8.92	9.56	PASS

Test Graphs

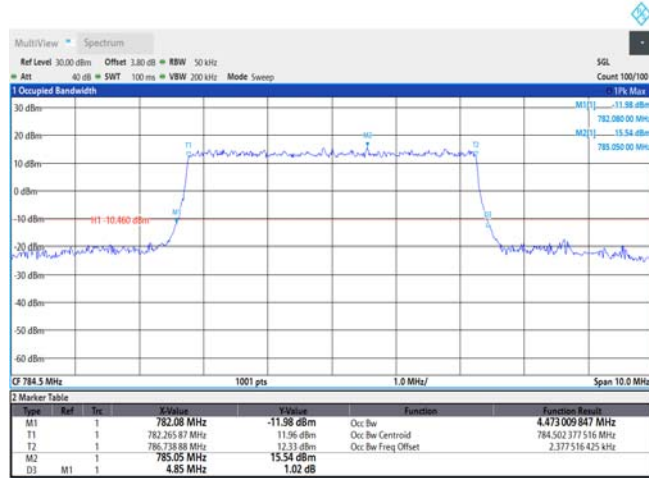
Band13-5MHz-QPSK-23205-25RB#0



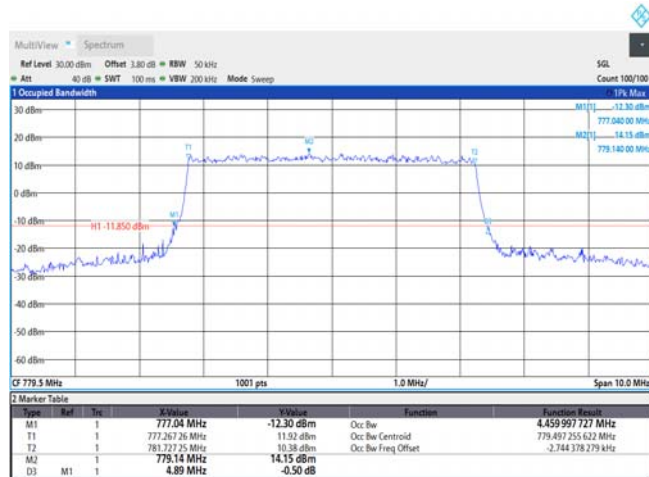
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Band13-5MHz-QPSK-23255-25RB#0



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



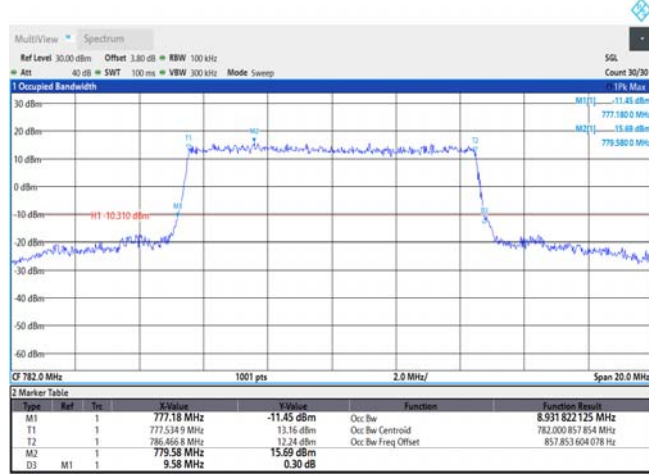
Band13-5MHz-16QAM-23230-25RB#0



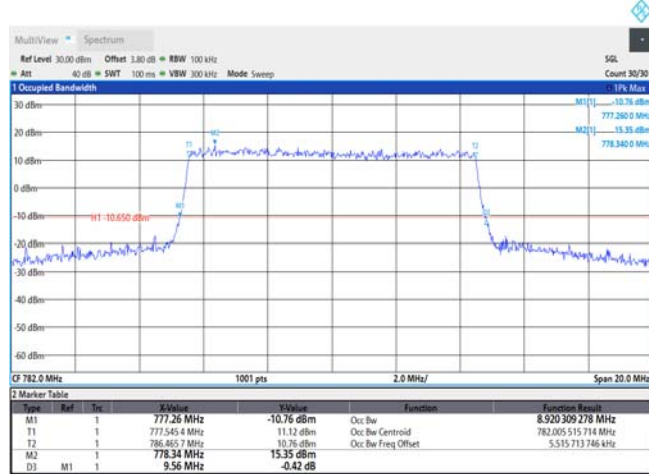
Band13-5MHz-16QAM-23255-25RB#0



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

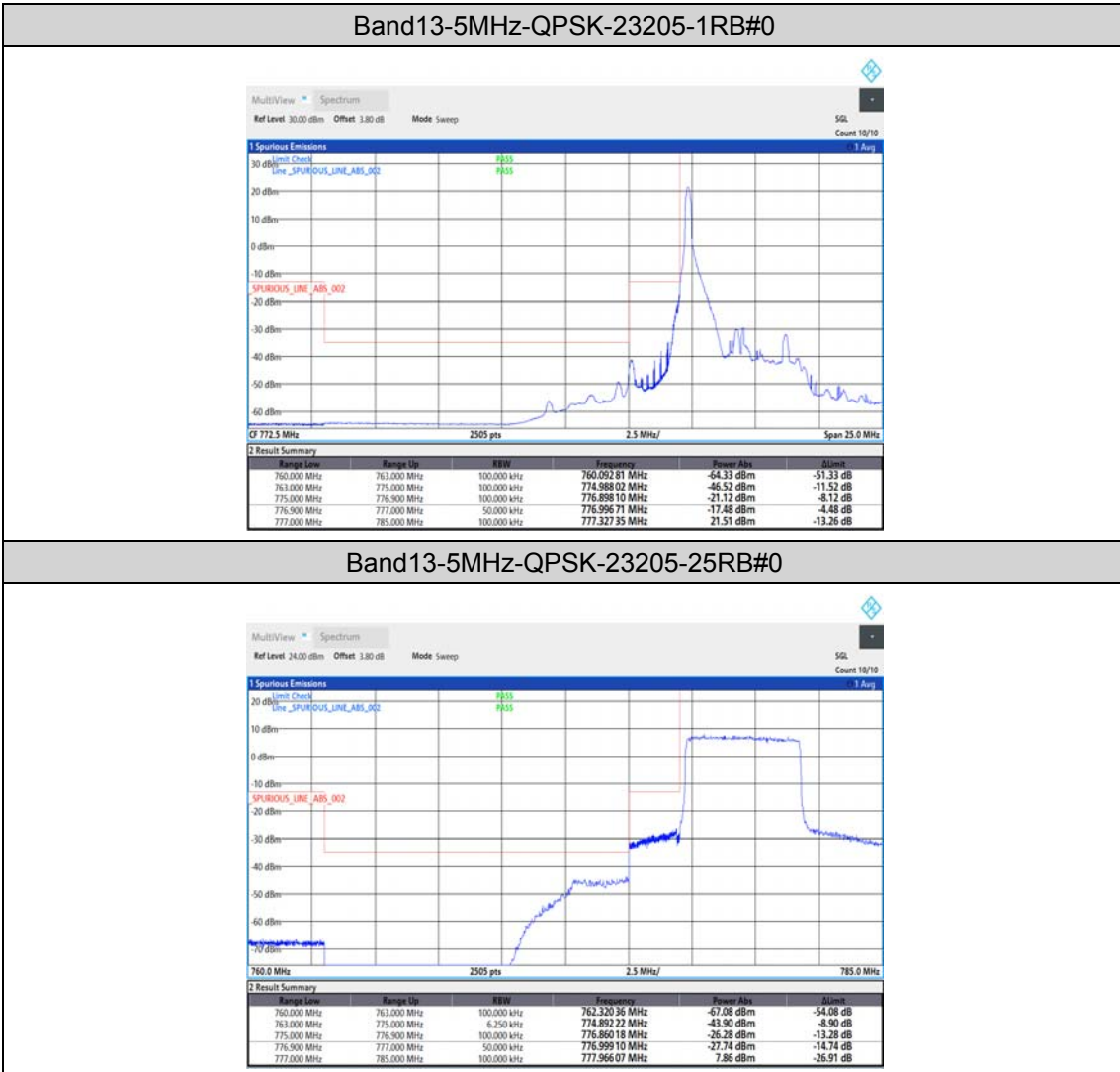


Band13-10MHz-16QAM-23230-50RB#0

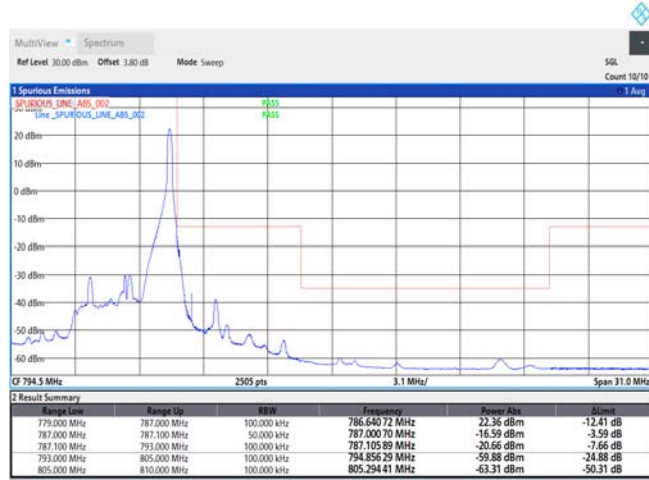


4. Band Edge

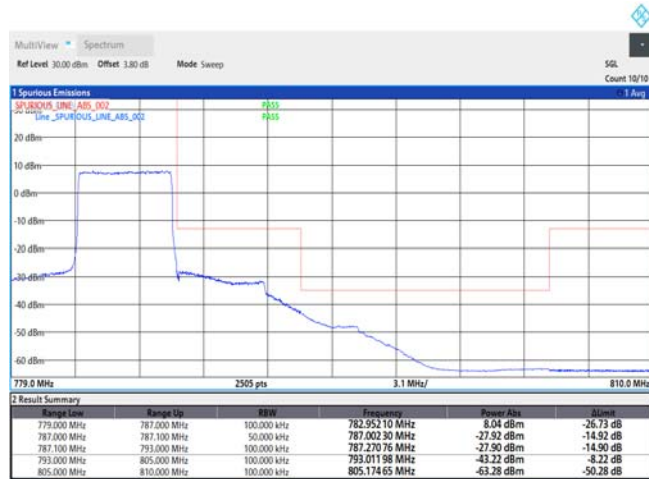
Test Graphs



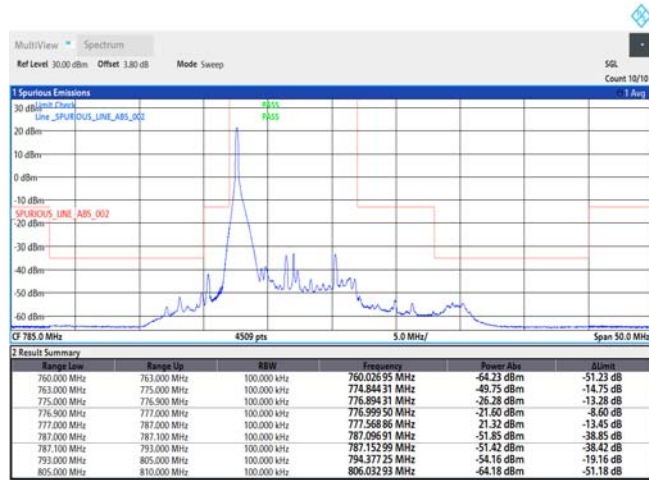
Band13-5MHz-QPSK-23255-1RB#24



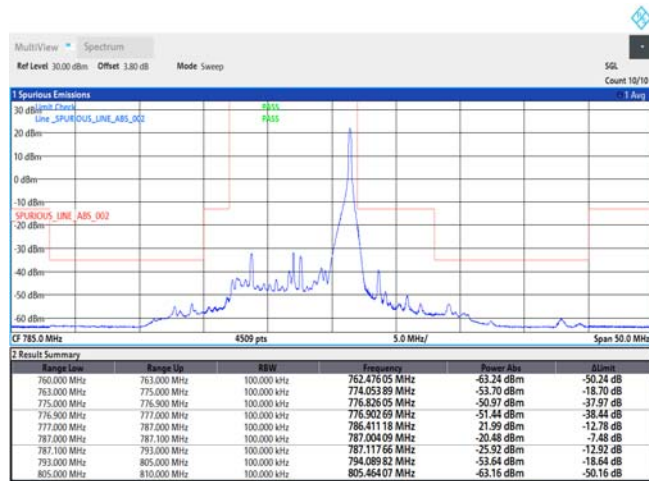
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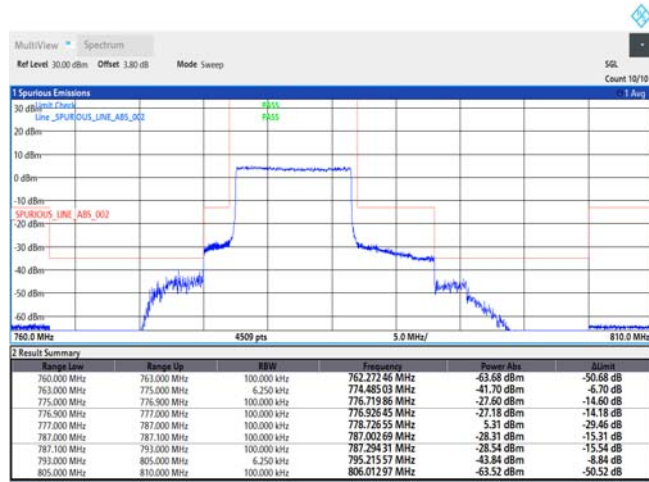
Band13-10MHz-QPSK-23230-1RB#0



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



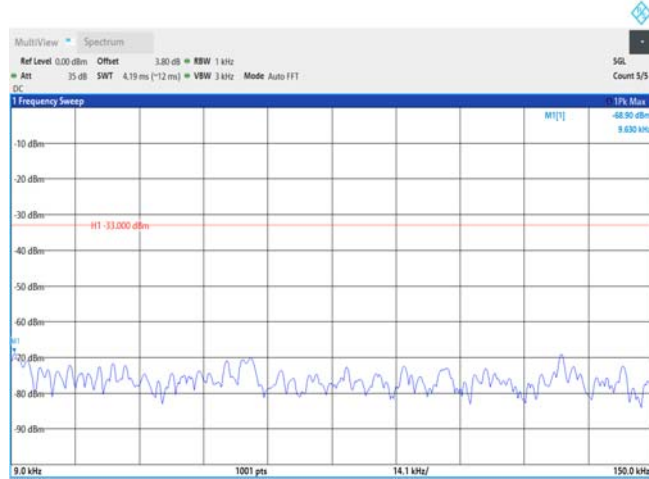
Band13-10MHz-QPSK-23230-50RB#0



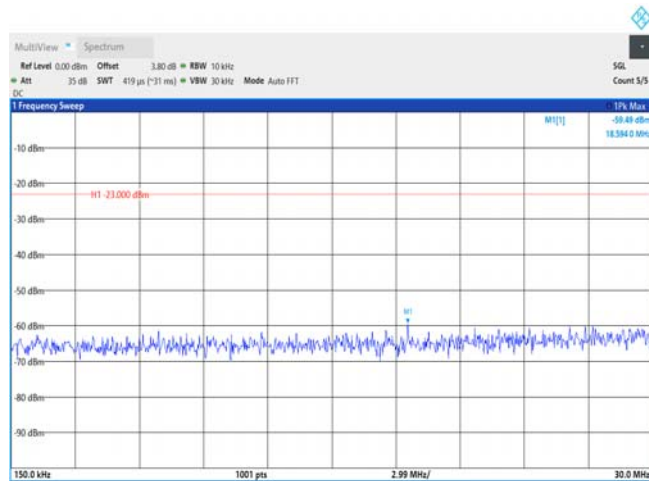
5. Conducted Spurious Emission

Test Graphs

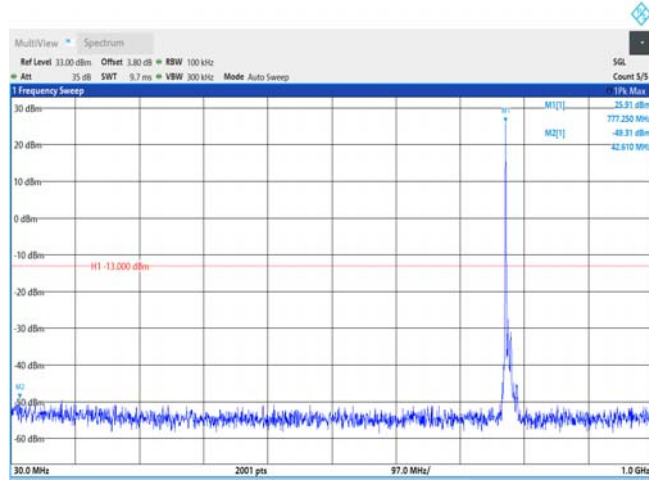
Band13-10MHz-QPSK-23230-1RB#0-Range1:0.009~0.15MHz



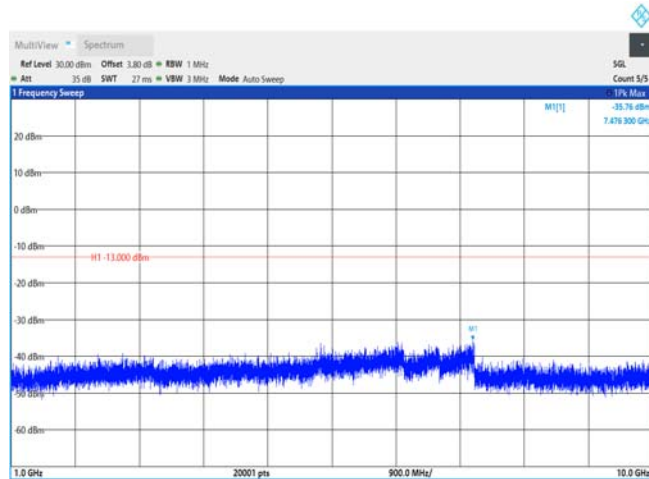
Band13-10MHz-QPSK-23230-1RB#0-Range2:0.15~30MHz



Band13-10MHz-QPSK-23230-1RB#0-Range3:30~1000MHz



Band13-10MHz-QPSK-23230-1RB#0-Range4:1000~10000MHz



6.Frequency Stability

Test Result

Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Verdict
Band13	10MHz	QPSK	23230	50RB#0	VL	NT	-1.10	-0.001407	PASS
Band13	10MHz	QPSK	23230	50RB#0	VN	NT	-3.70	-0.004731	PASS
Band13	10MHz	QPSK	23230	50RB#0	VH	NT	-2.20	-0.002813	PASS

Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Verdict
Band13	10MHz	QPSK	23230	50RB#0	NV	-20	1.10	0.001407	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	-10	-0.50	-0.000639	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	0	-5.50	-0.007033	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	10	1.10	0.001407	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	20	-3.50	-0.004476	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	30	2.10	0.002685	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	40	-2.10	-0.002685	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	50	-1.70	-0.002174	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	65	-2.60	-0.003325	PASS

(END OF REPORT)