

Appendix A

RF Test Data for BT LE (Conducted Measurement)

Product Name: Mouse

Test Model: E9PRO

Environmental Conditions

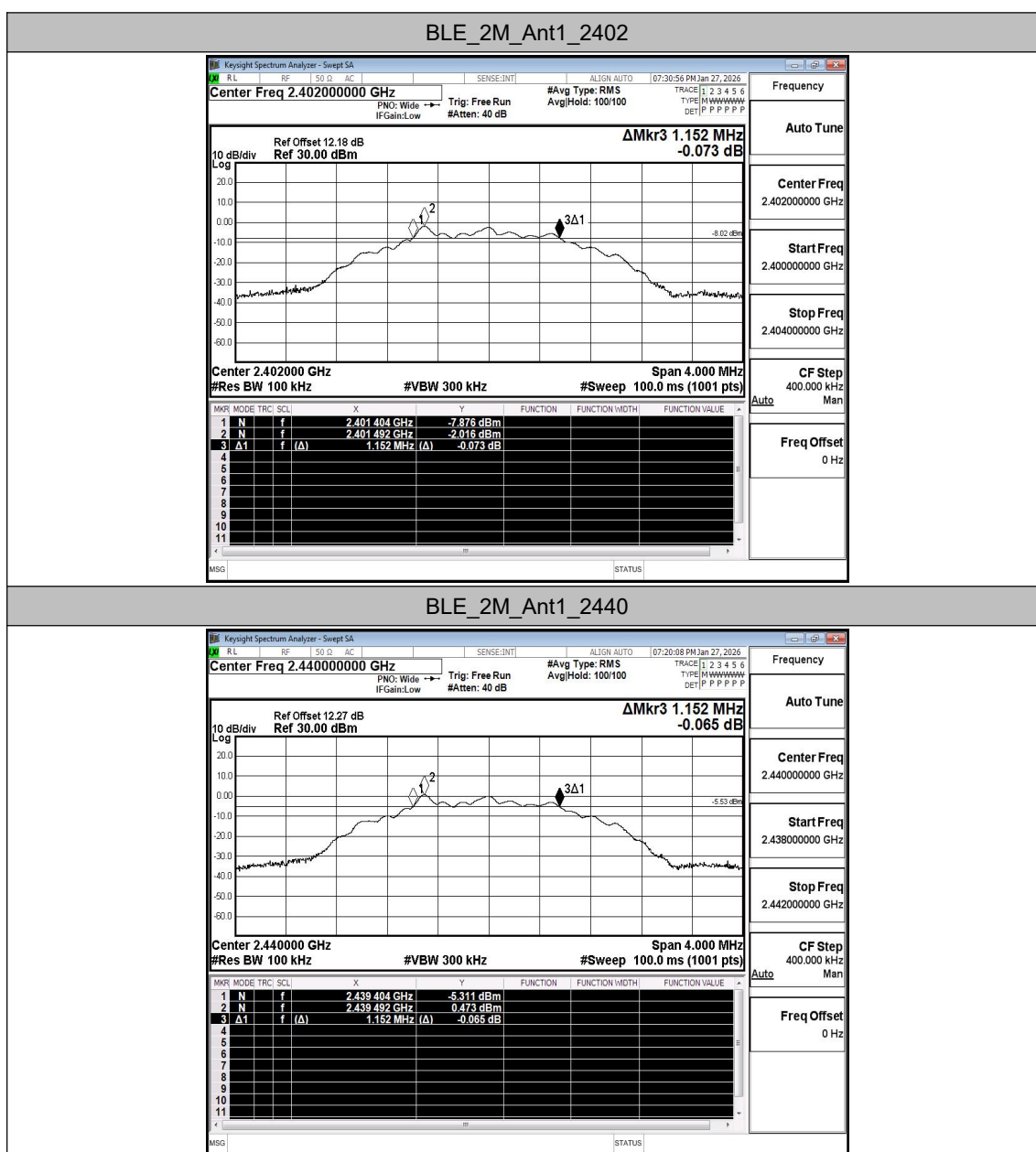
Temperature:	23.4°C
Relative Humidity:	52.7%
ATM Pressure:	100.0 kPa
Test Engineer:	Ting He
Supervised by:	Fengliu Tang

A.1 DTS Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_2M	Ant1	2402	1.152	2401.404	2402.556	0.5	PASS
		2440	1.152	2439.404	2440.556	0.5	PASS
		2480	1.148	2479.404	2480.552	0.5	PASS

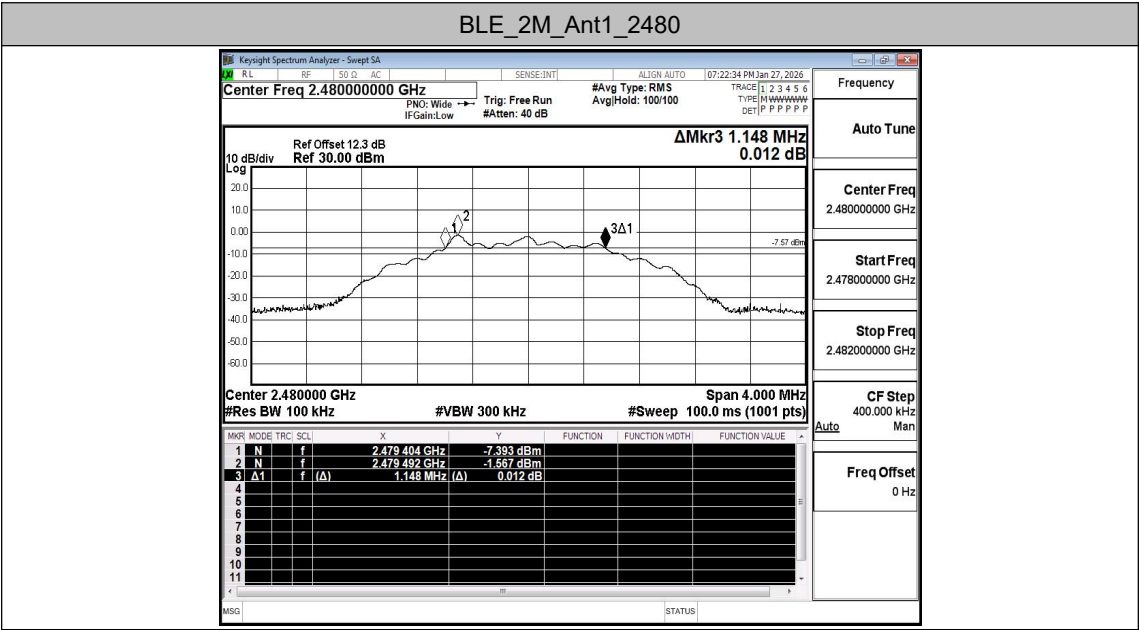
Test Graphs



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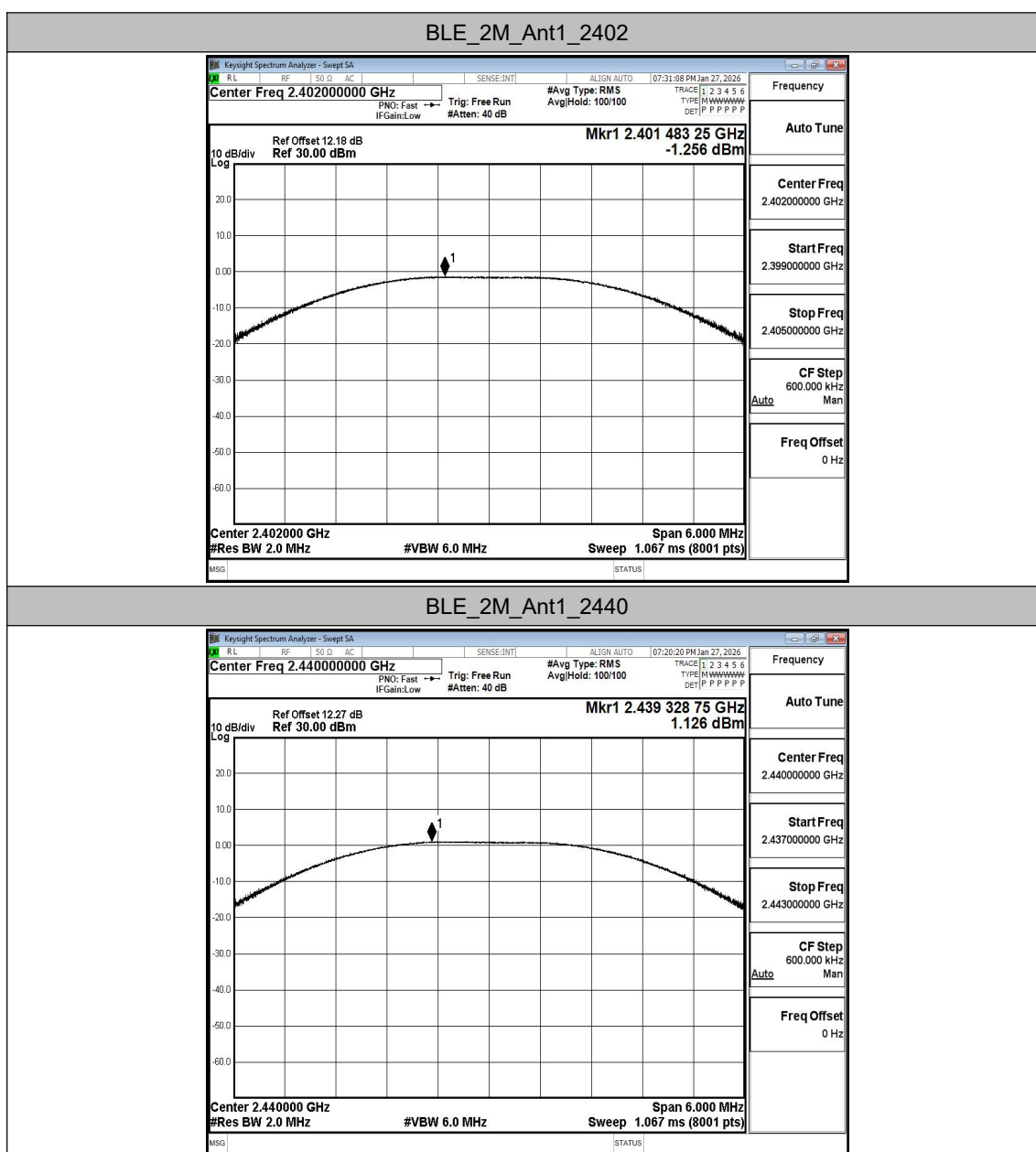


A.2 Maximum Peak conducted output power

Test Result Peak

TestMode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE_2M	Ant1	2402	-1.26	≤30	PASS
		2440	1.13	≤30	PASS
		2480	-0.69	≤30	PASS

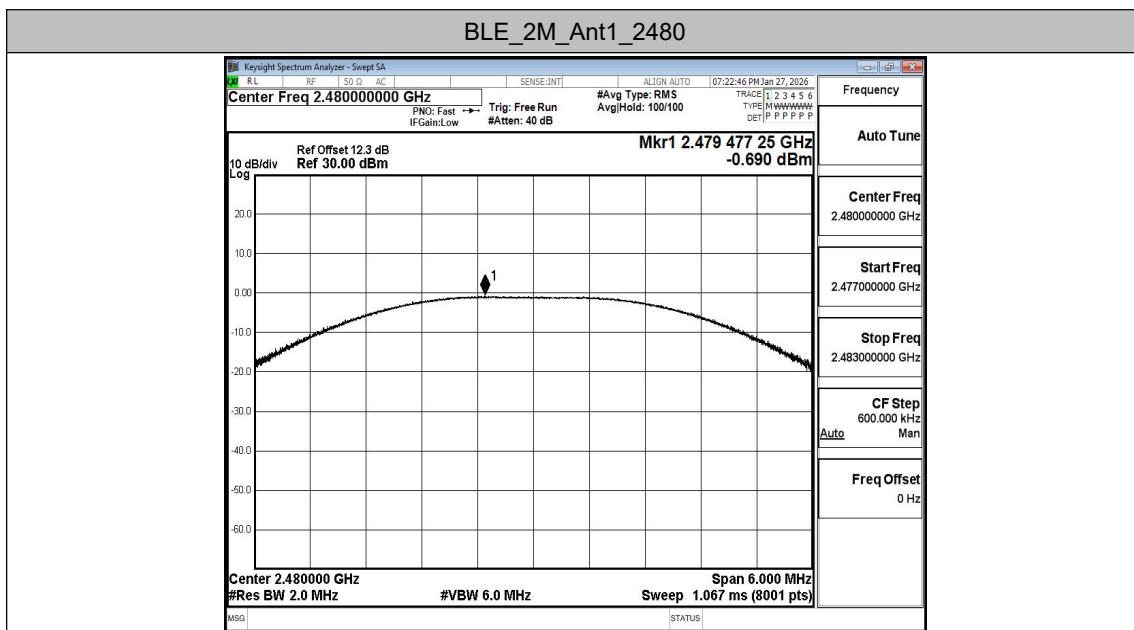
Test Graphs Peak



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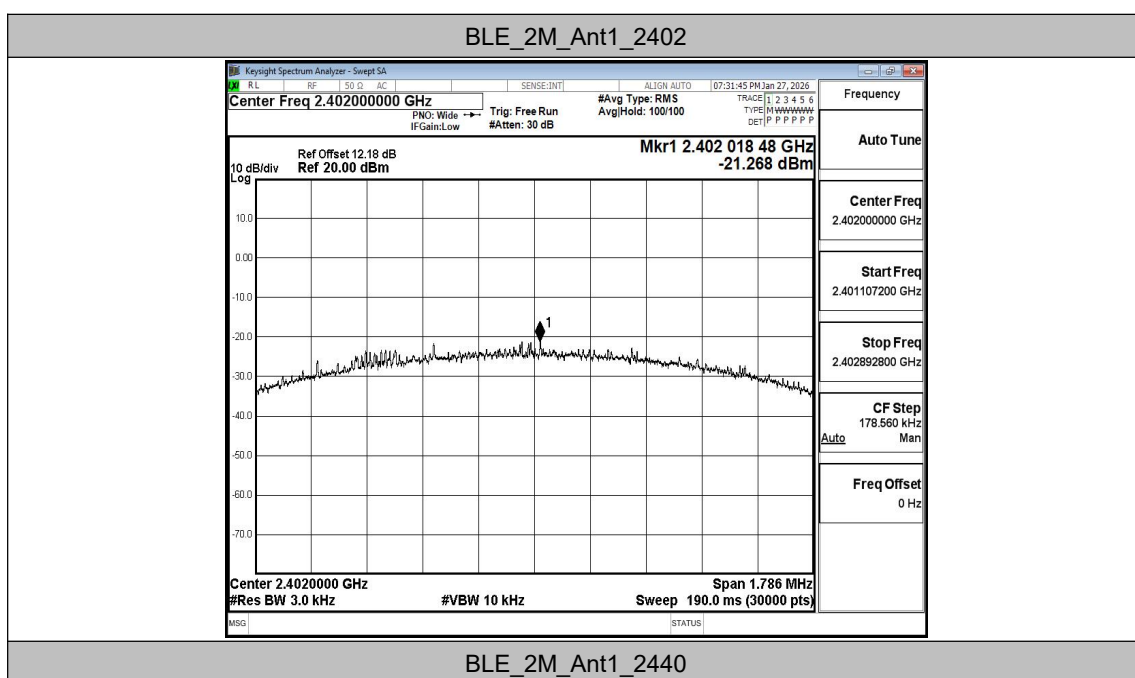
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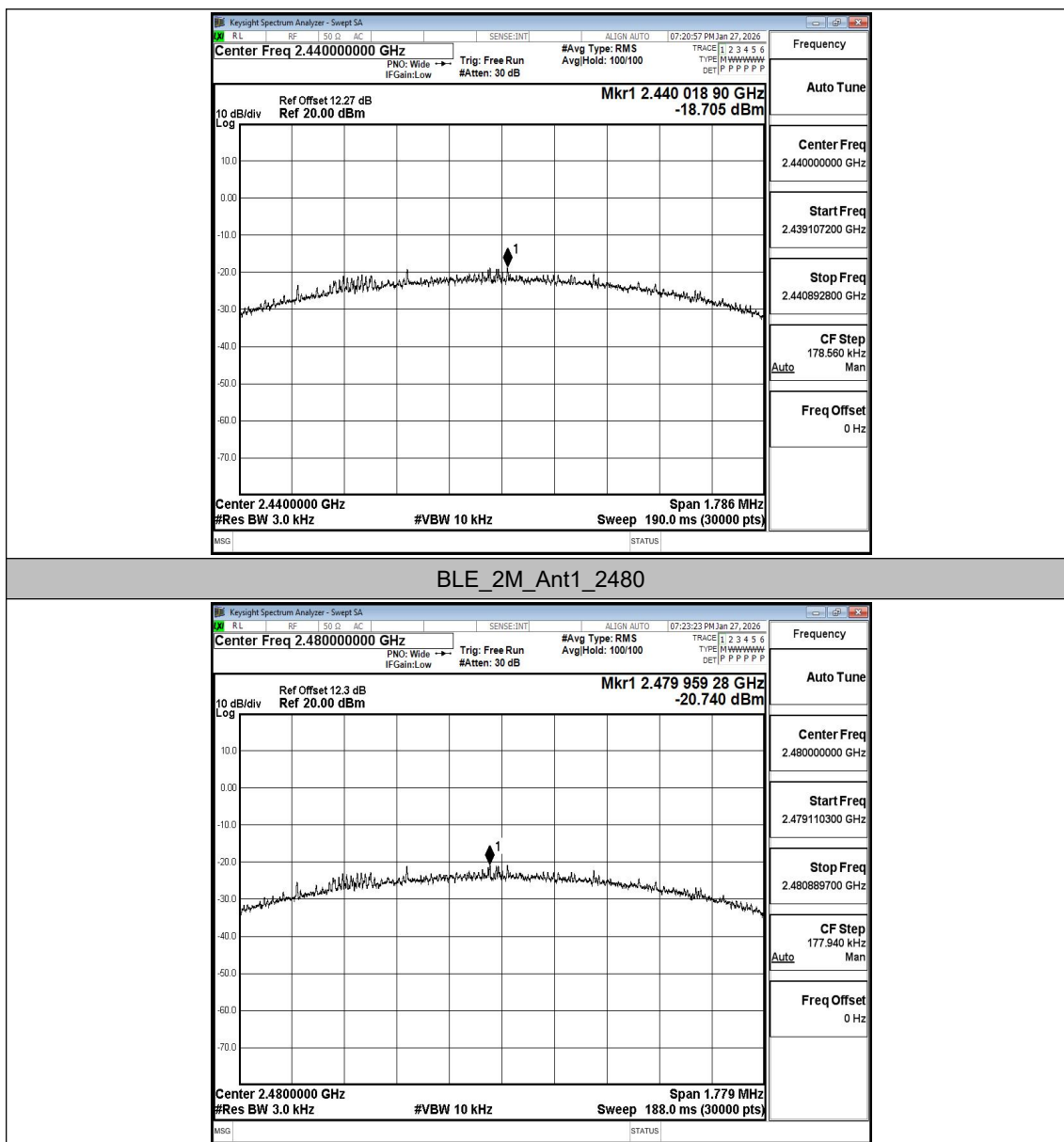
A.3 Maximum power spectral density

Test Result

TestMode	Antenna	Freq(MHz)	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_2M	Ant1	2402	-21.27	≤8.00	PASS
		2440	-18.71	≤8.00	PASS
		2480	-20.74	≤8.00	PASS

Test Graphs





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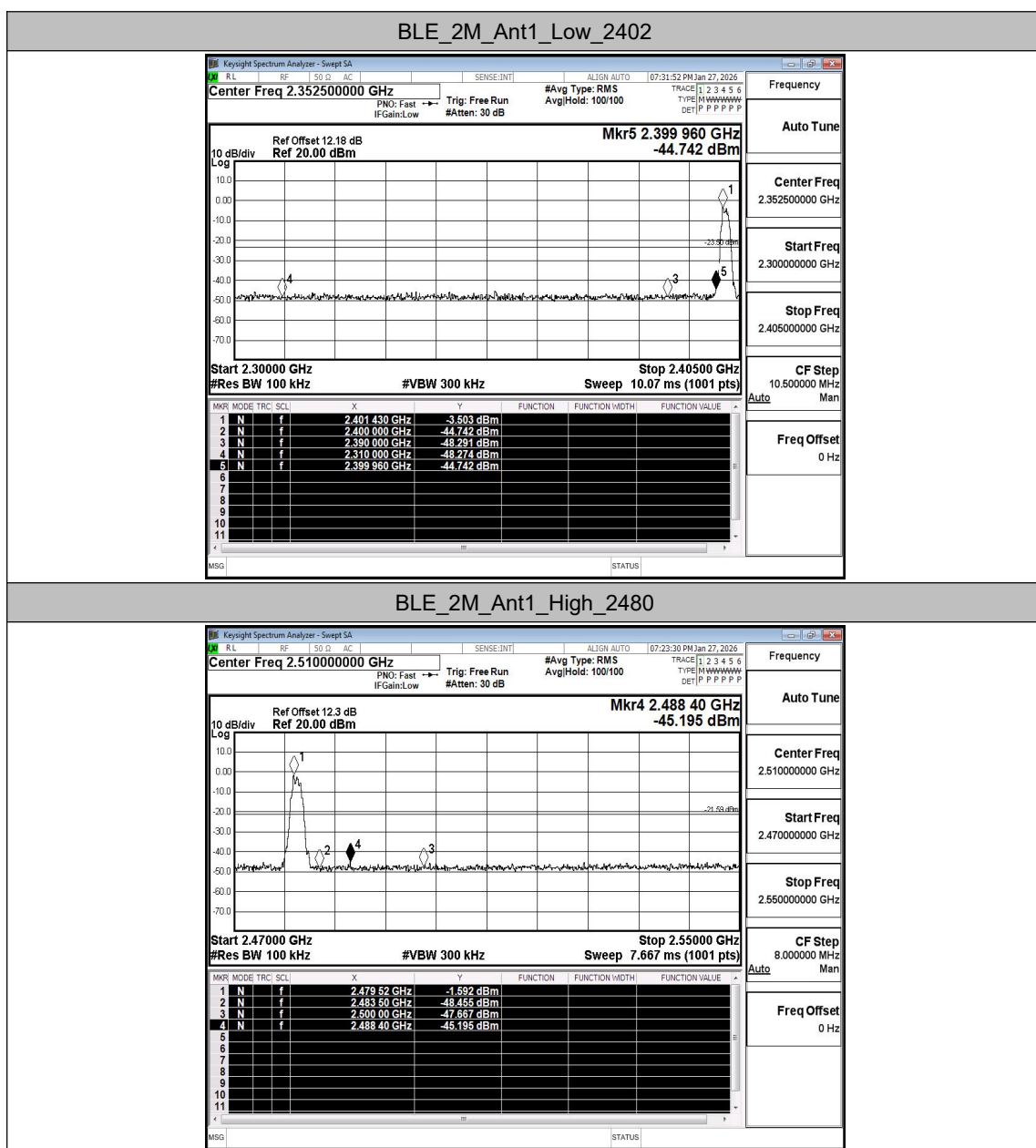
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A.4 Band edge measurements

Test Result

TestMode	Antenna	ChName	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_2M	Ant1	Low	2402	-3.50	-44.74	≤-23.5	PASS
		High	2480	-1.59	-45.2	≤-21.59	PASS

Test Graphs



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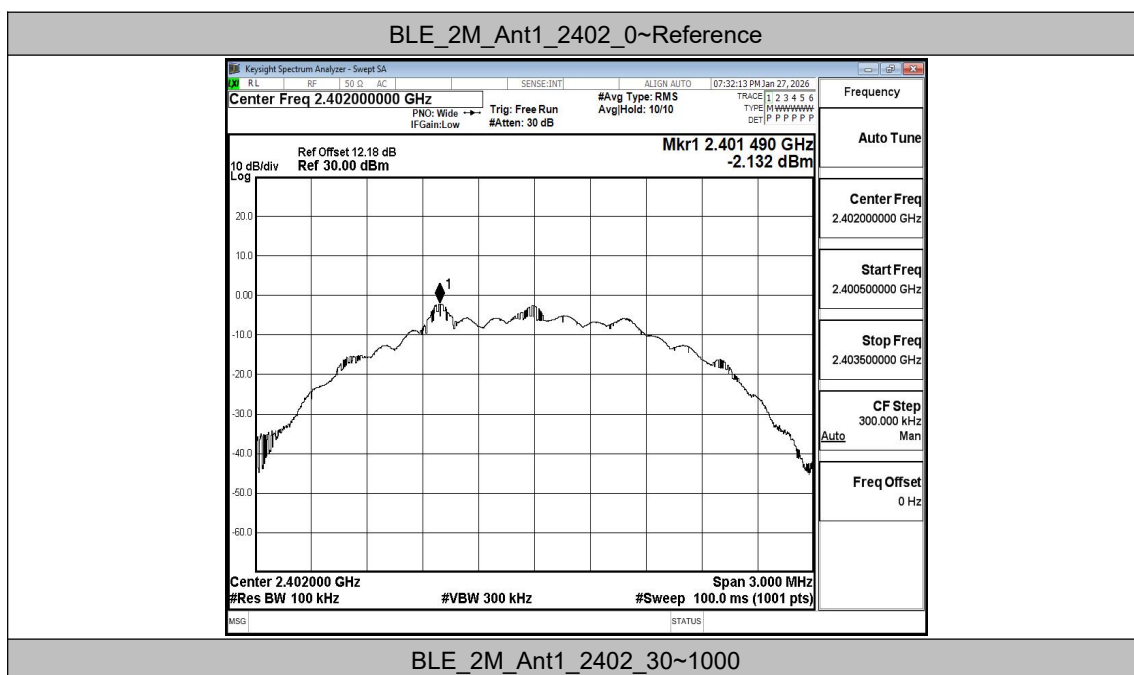
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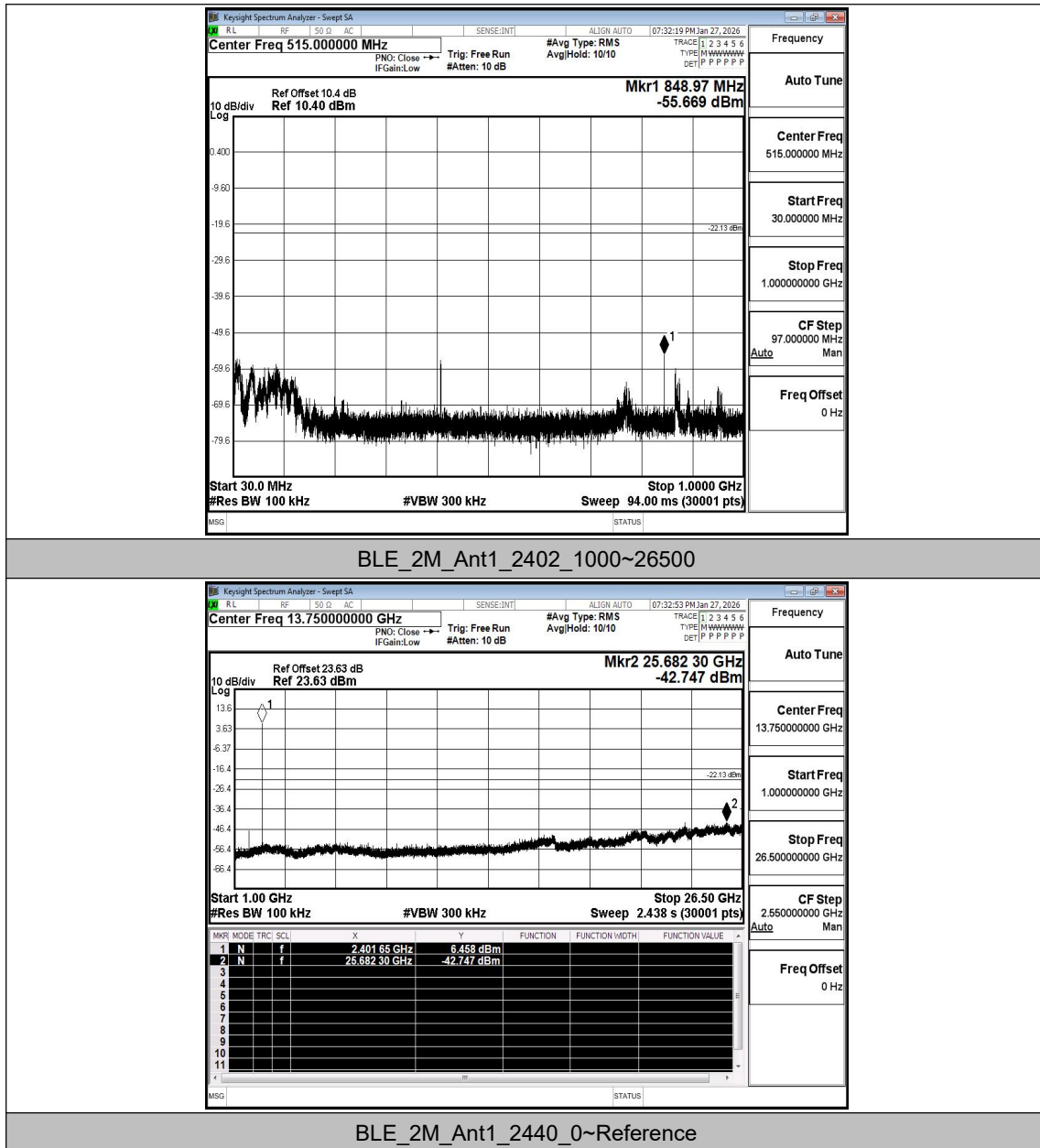
A.5 Conducted Spurious Emission

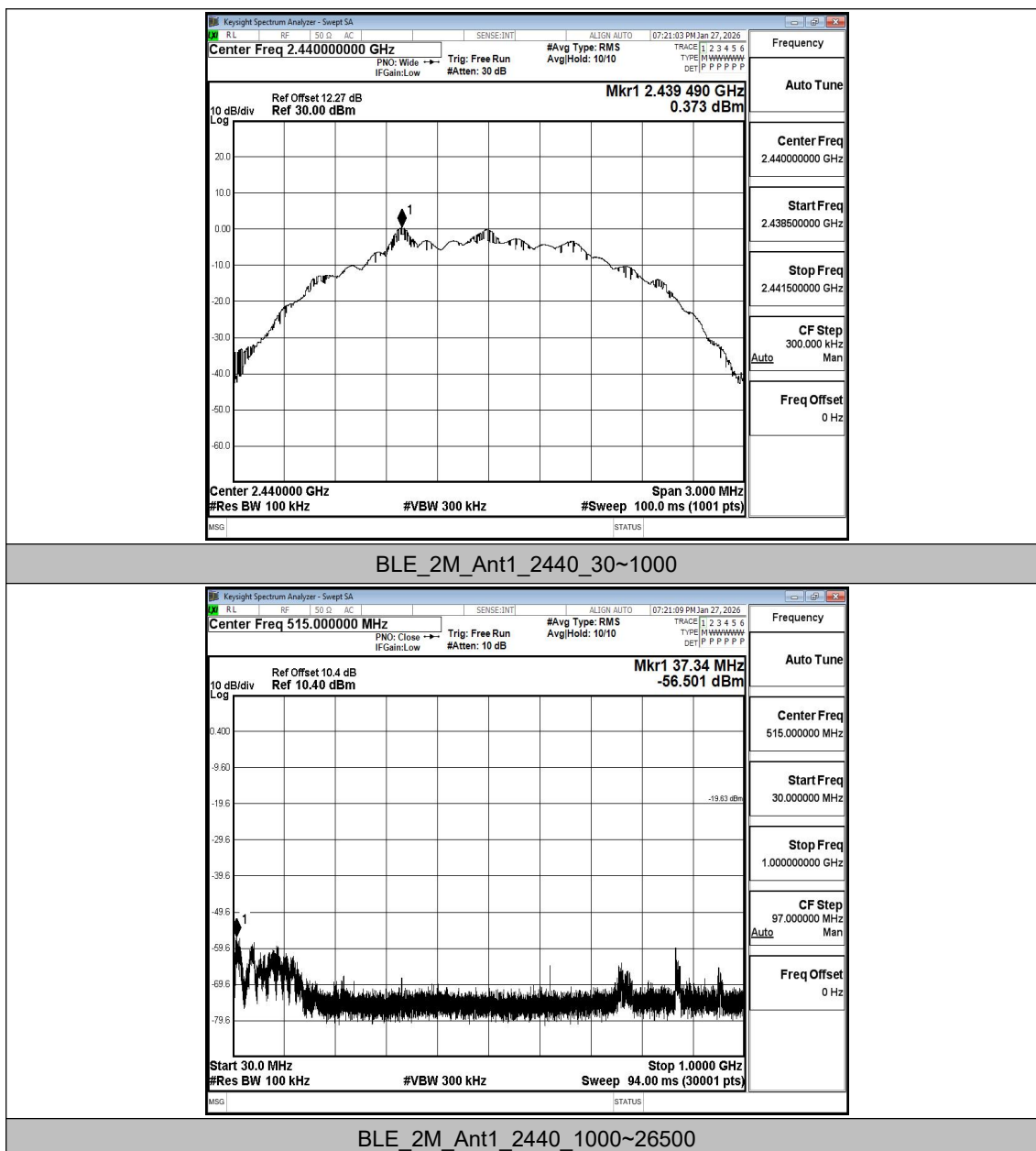
Test Result

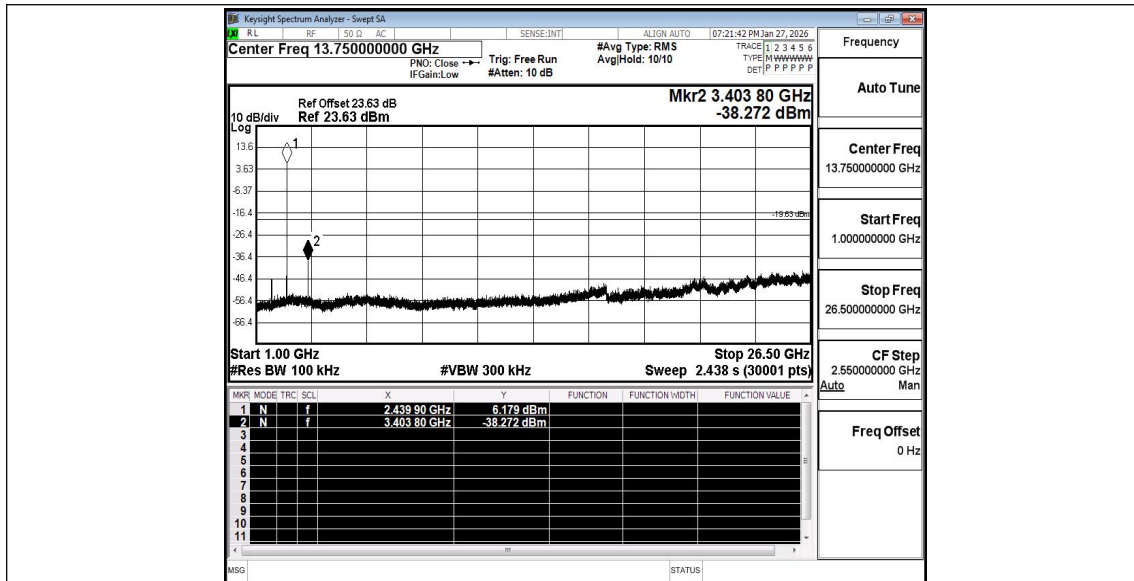
TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_2M	Ant1	2402	Reference	-2.13	-2.13	---	PASS
			30~1000	-2.13	-55.67	≤-22.13	PASS
			1000~26500	-2.13	-42.75	≤-22.13	PASS
		2440	Reference	0.37	0.37	---	PASS
			30~1000	0.37	-56.5	≤-19.63	PASS
			1000~26500	0.37	-38.27	≤-19.63	PASS
		2480	Reference	-1.64	-1.64	---	PASS
			30~1000	-1.64	-56.64	≤-21.64	PASS
			1000~26500	-1.64	-33.13	≤-21.64	PASS

Test Graphs

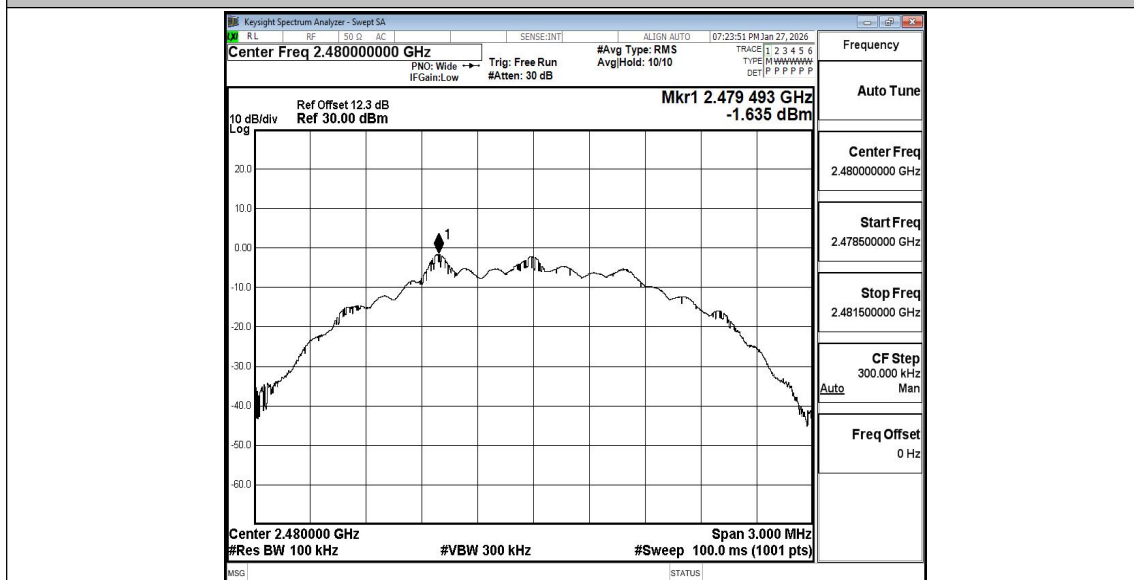




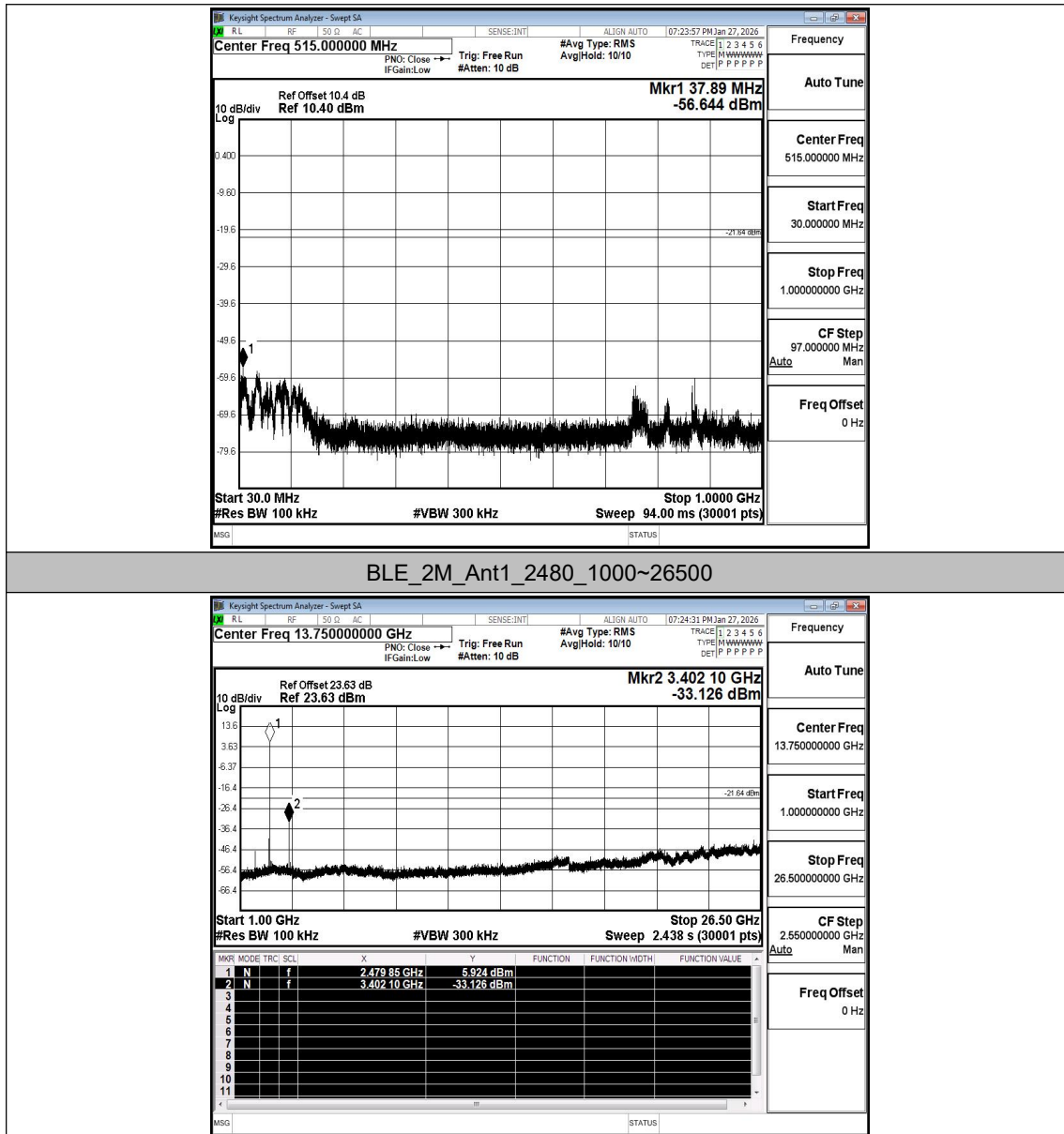




BLE_2M_Ant1_2480_0~Reference



BLE_2M_Ant1_2480_30~1000



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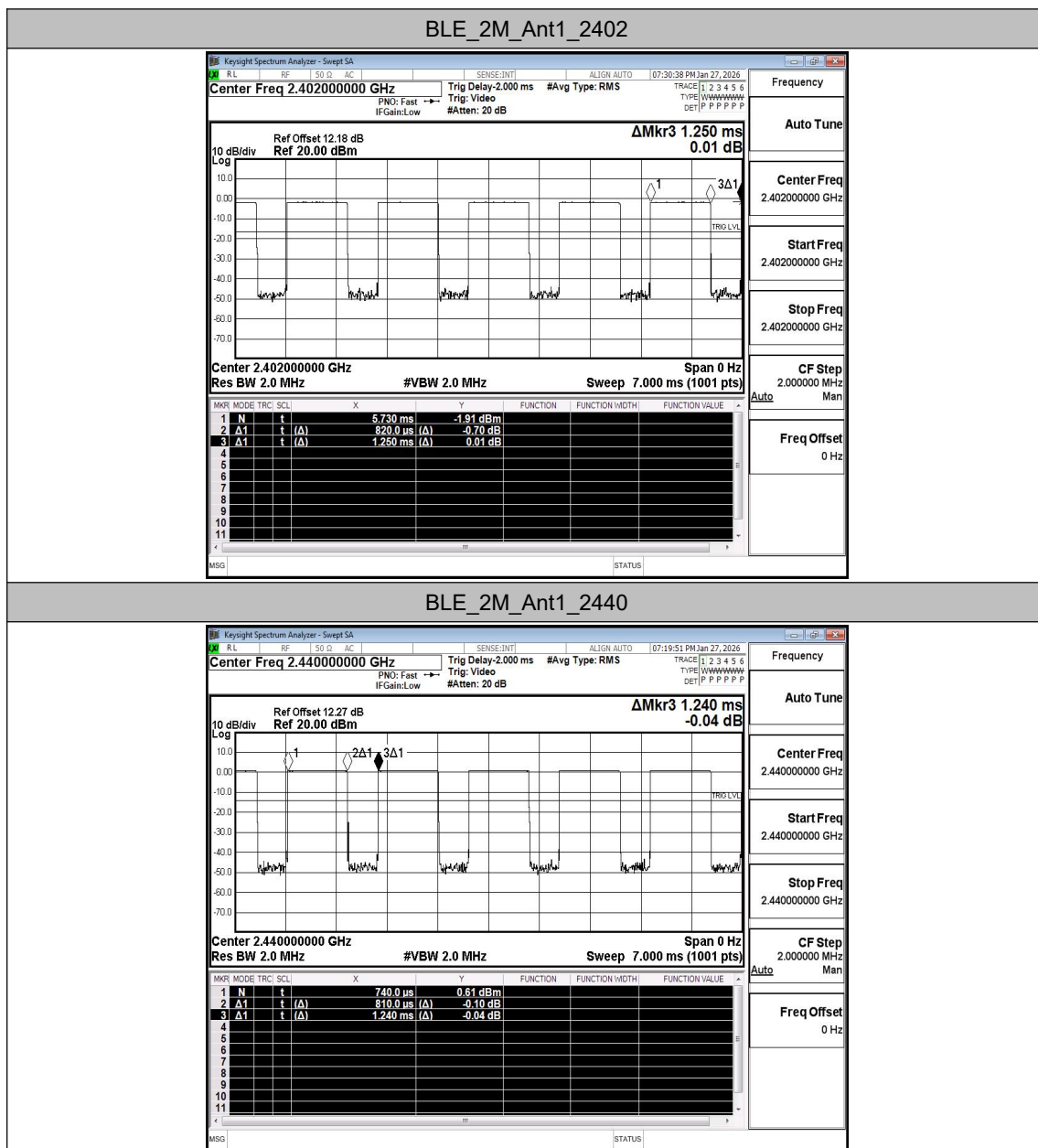
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A.6 Duty Cycle

Test Result

TestMode	Antenna	Freq(MHz)	ON Time [ms]	Period [ms]	X	DC [%]	xFactor	Limit	Verdict
BLE_2M	Ant1	2402	0.82	1.25	0.6560	65.60	1.83	---	---
		2440	0.81	1.24	0.6532	65.32	1.85	---	---
		2480	0.82	1.24	0.6613	66.13	1.80	---	---

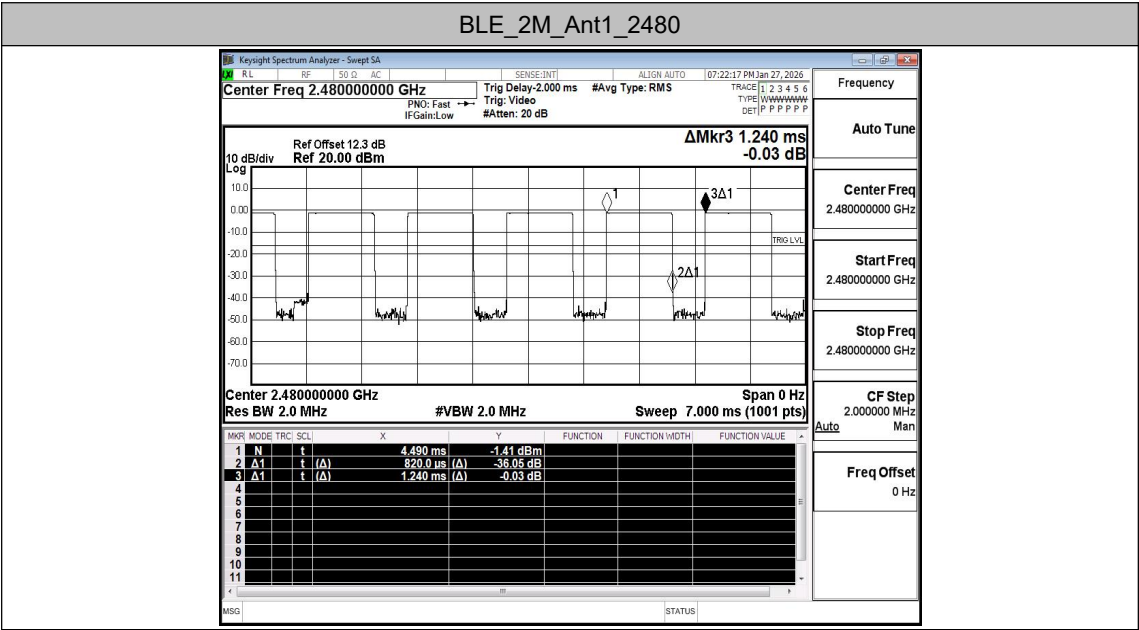
Test Graphs



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A.7 Emissions in Restricted Bands

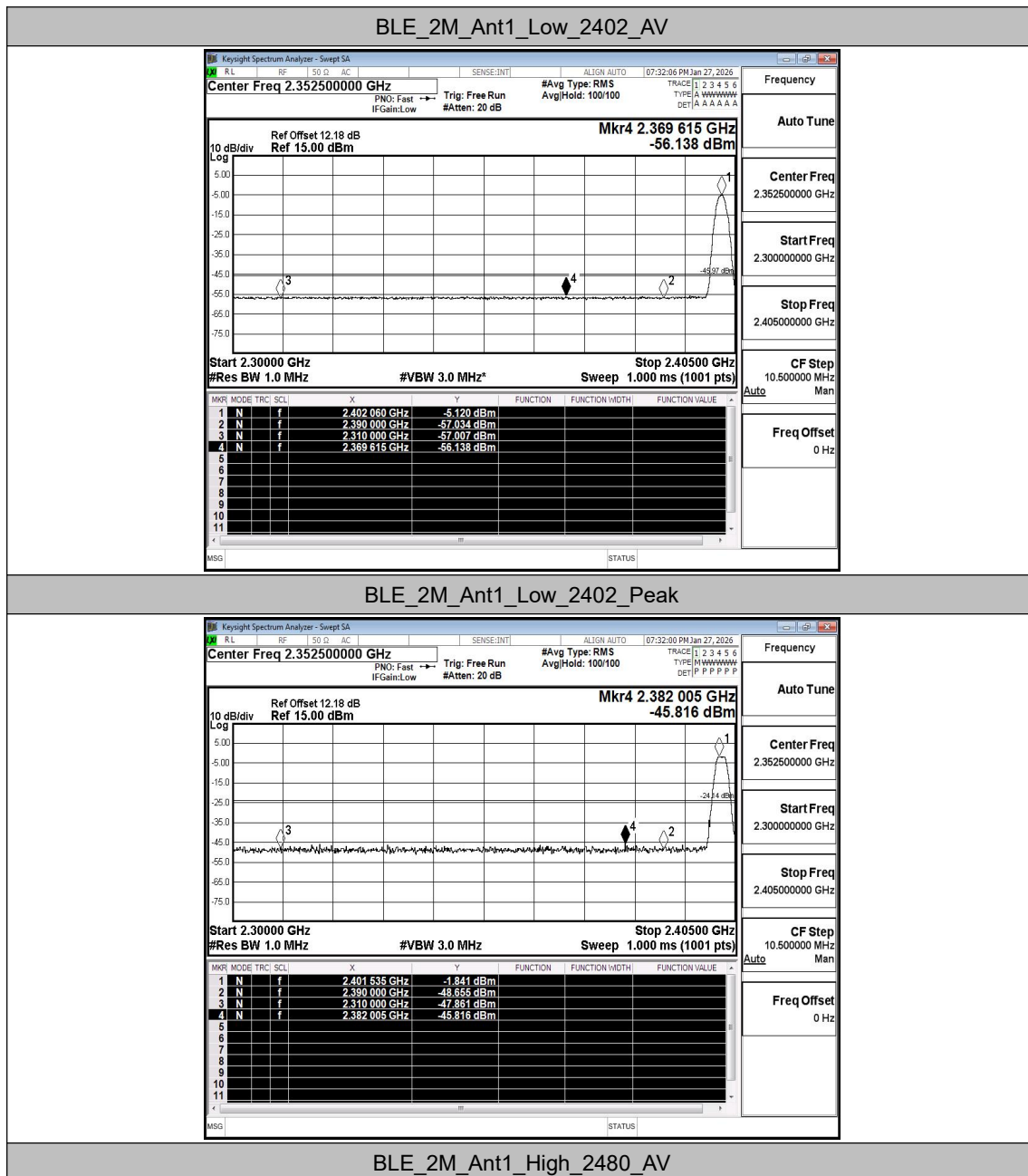
Test Result

TestMode	Antenna	ChName	Freq(MHz)	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Gain [dBi]	DC Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
BLE_2M	Ant1	Low	2402	AV	2310.000	-57.01	≤-45.97	2.48	1.83	42.5	≤54	PASS
				AV	2369.615	-56.14	≤-45.97	2.48	1.83	43.37	≤54	PASS
				AV	2390.000	-57.03	≤-45.97	2.48	1.83	42.48	≤54	PASS
				Peak	2310.000	-47.86	≤-24.14	2.48	0.00	49.82	≤74	PASS
				Peak	2382.005	-45.82	≤-24.14	2.48	0.00	51.86	≤74	PASS
				Peak	2390.000	-48.66	≤-24.14	2.48	0.00	49.02	≤74	PASS
		High	2480	AV	2483.500	-55.99	≤-45.94	2.48	1.80	43.49	≤54	PASS
				AV	2488.400	-55.43	≤-45.94	2.48	1.80	44.05	≤54	PASS
				AV	2500.000	-56.08	≤-45.94	2.48	1.80	43.4	≤54	PASS
				Peak	2483.500	-48.89	≤-24.14	2.48	0.00	48.79	≤74	PASS
				Peak	2487.360	-46.47	≤-24.14	2.48	0.00	51.21	≤74	PASS
				Peak	2500.000	-47.76	≤-24.14	2.48	0.00	49.92	≤74	PASS

Note:

1. The Antenna Gain is compensated in the graph.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

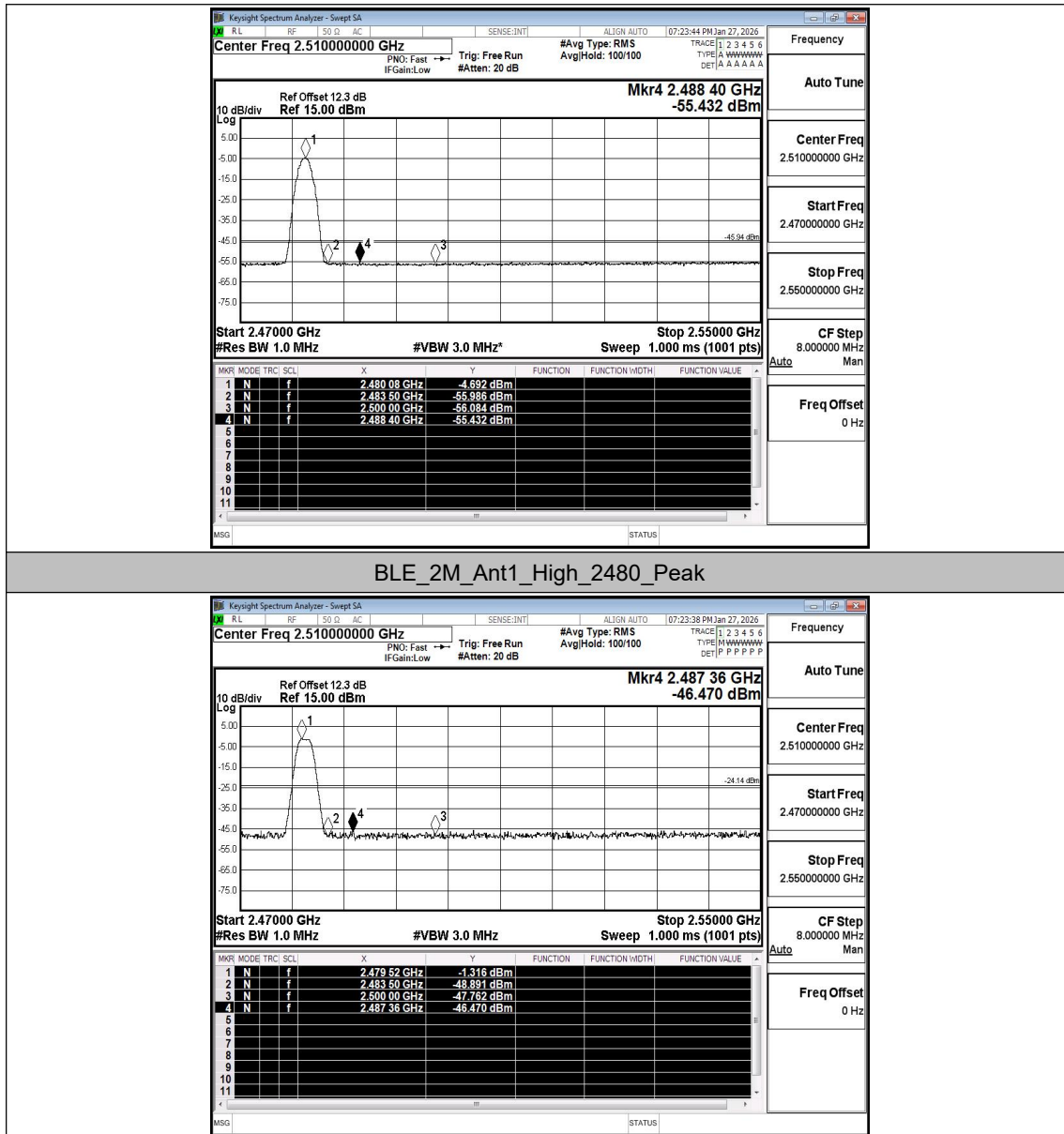
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