

Appendix B

RF Test Data for BT LE (Conducted Measurement)

Product Name: Portable Wireless Display Monitor
Test Model: MVT89PDBW

Environmental Conditions

Temperature:	24.9°C
Relative Humidity:	53.8%
ATM Pressure:	100.0 kPa
Test Engineer:	Zhang Hai
Supervised by:	Fengliu Tang

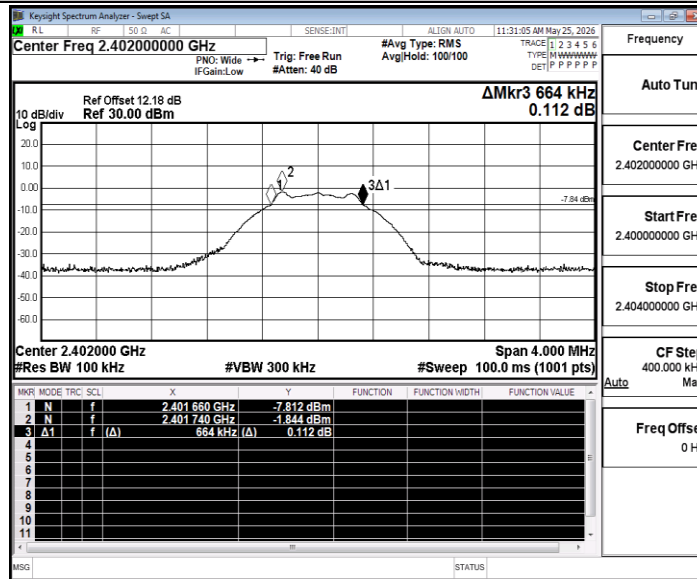
B.1 -6dB Bandwidth

Test Result

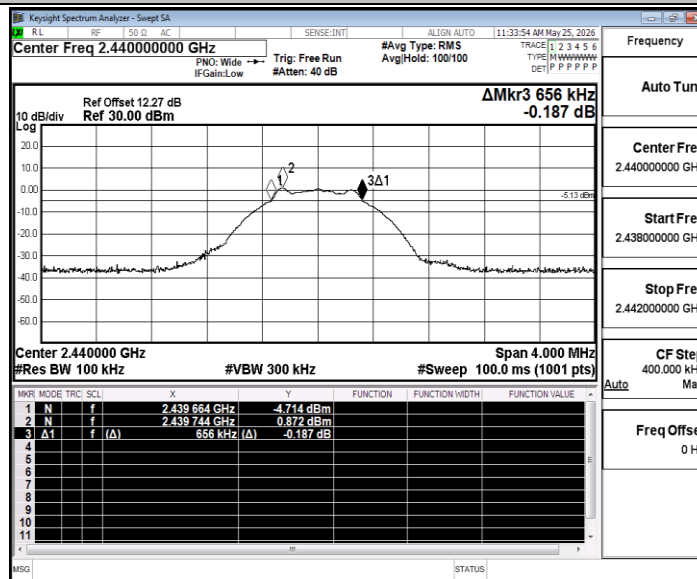
TestMode	Antenna	Freq(MHz)	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE	Ant1	2402	0.664	2401.660	2402.324	0.5	PASS
		2440	0.656	2439.664	2440.320	0.5	PASS
		2480	0.664	2479.660	2480.324	0.5	PASS

Test Graphs

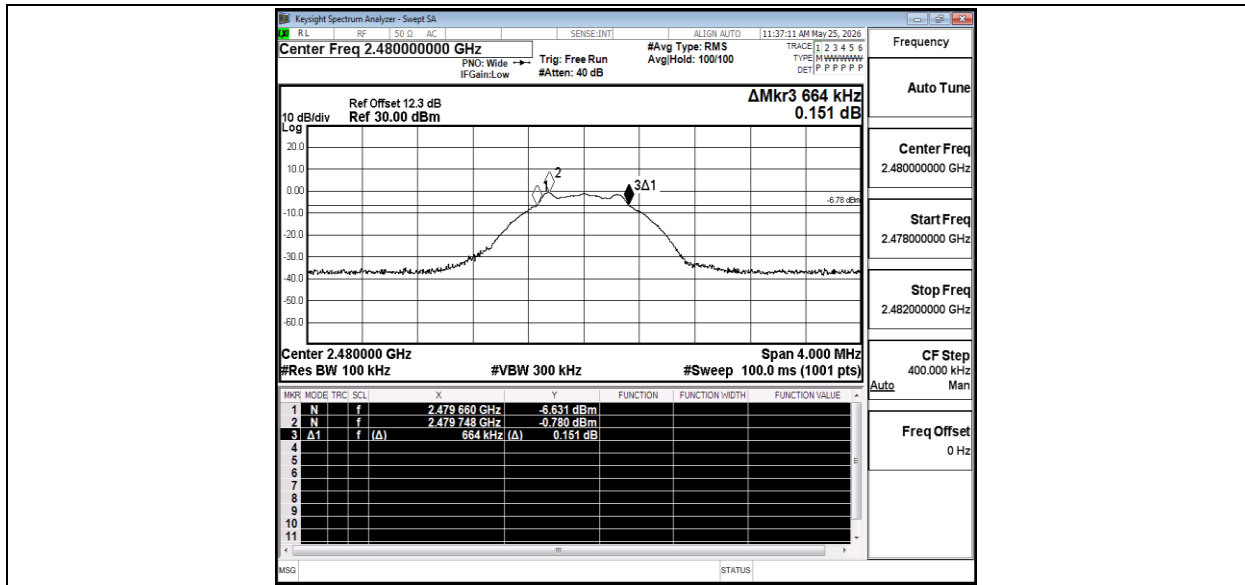
BLE_Ant1_2402



BLE_Ant1_2440



BLE_Ant1_2480

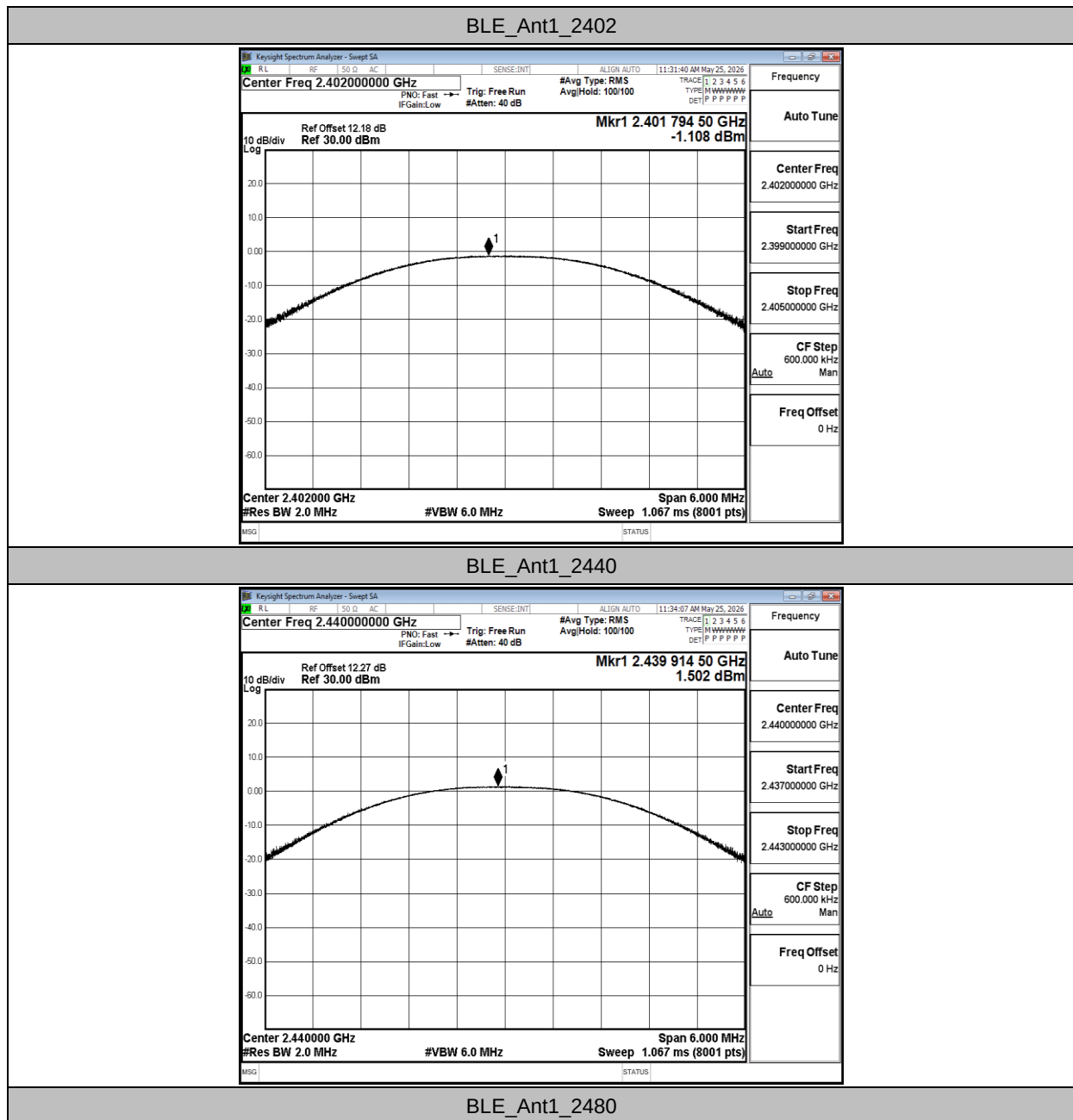


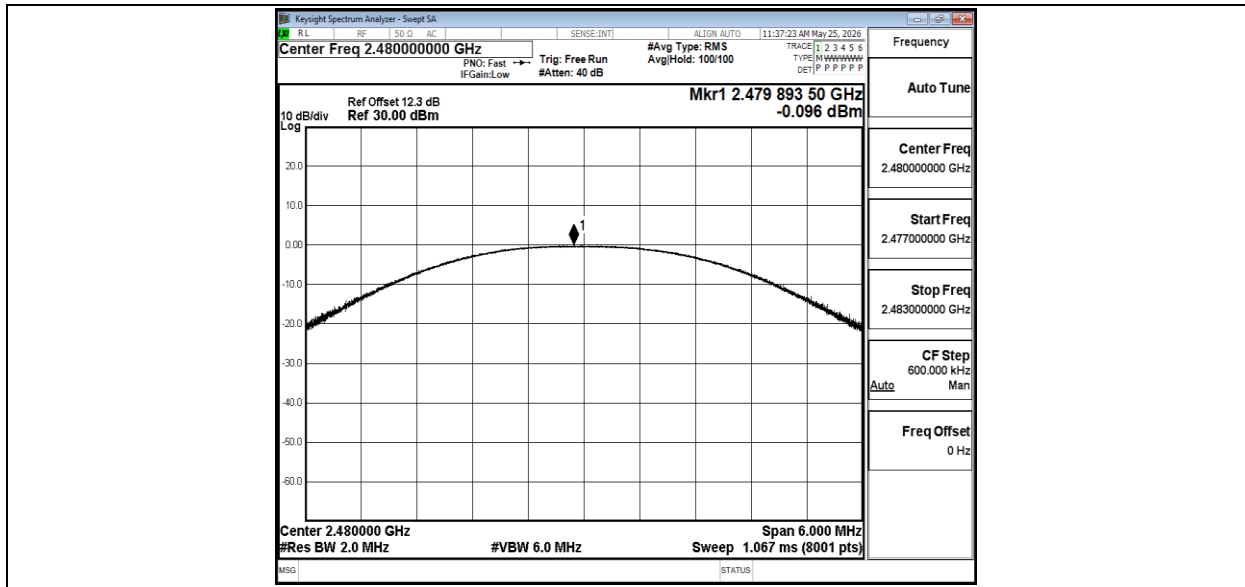
B.2 Maximum Peak Conducted Output Power

Test Result Peak

TestMode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE	Ant1	2402	-1.11	≤30	PASS
		2440	1.50	≤30	PASS
		2480	-0.10	≤30	PASS

Test Graphs Peak





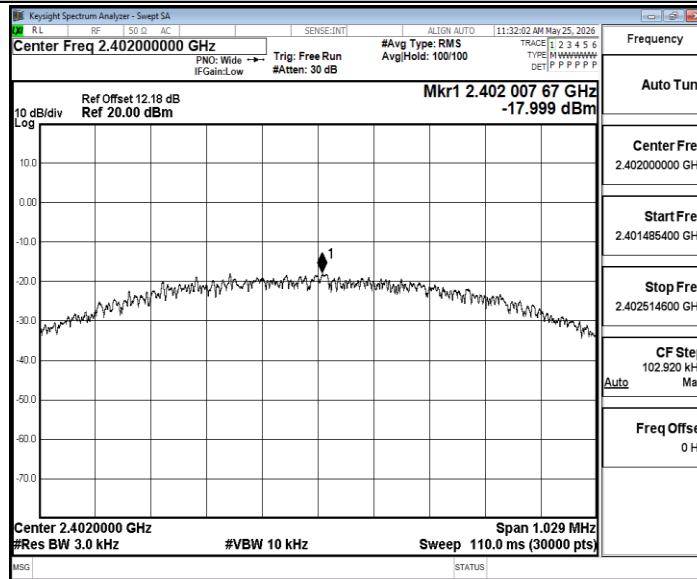
B.3 Maximum Power Spectral Density Level

Test Result

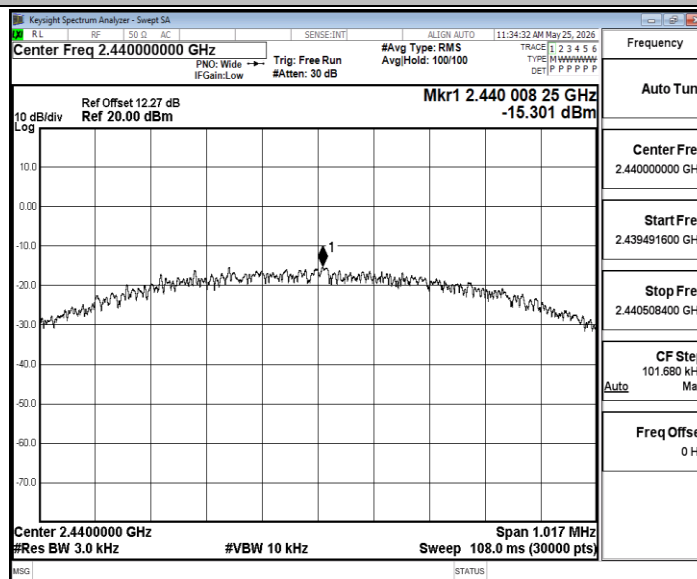
TestMode	Antenna	Freq(MHz)	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE	Ant1	2402	-18.00	≤8.00	PASS
		2440	-15.30	≤8.00	PASS
		2480	-16.98	≤8.00	PASS

Test Graphs

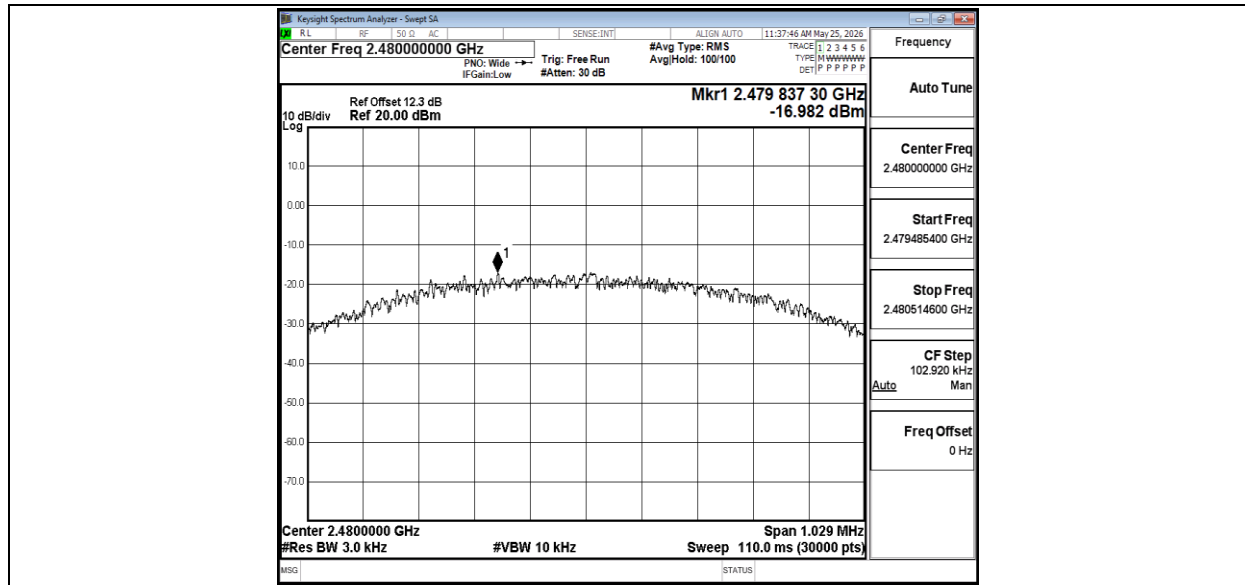
BLE_Ant1_2402



BLE_Ant1_2440



BLE_Ant1_2480



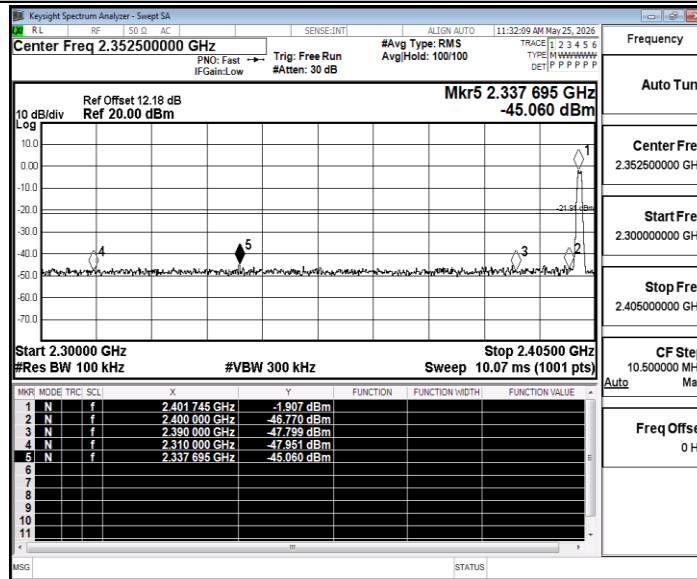
B.4 Band Edge

Test Result

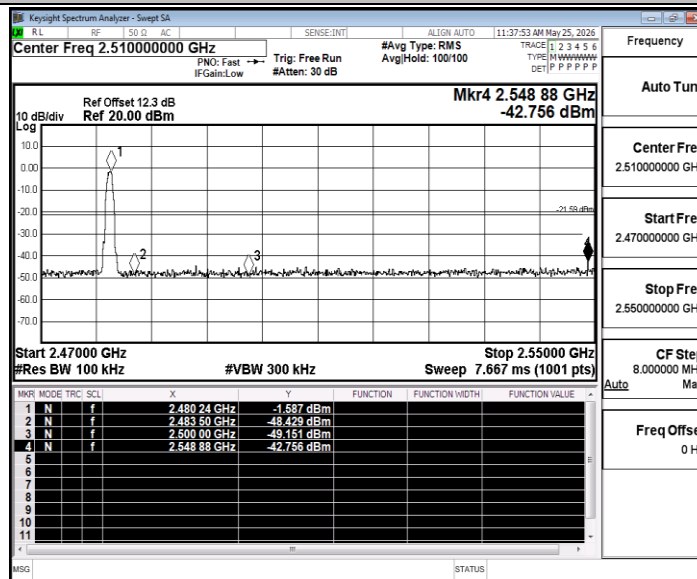
TestMode	Antenna	ChName	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE	Ant1	Low	2402	-1.91	-45.06	≤-21.91	PASS
		High	2480	-1.59	-42.76	≤-21.59	PASS

Test Graphs

BLE_Ant1_Low_2402



BLE_Ant1_High_2480

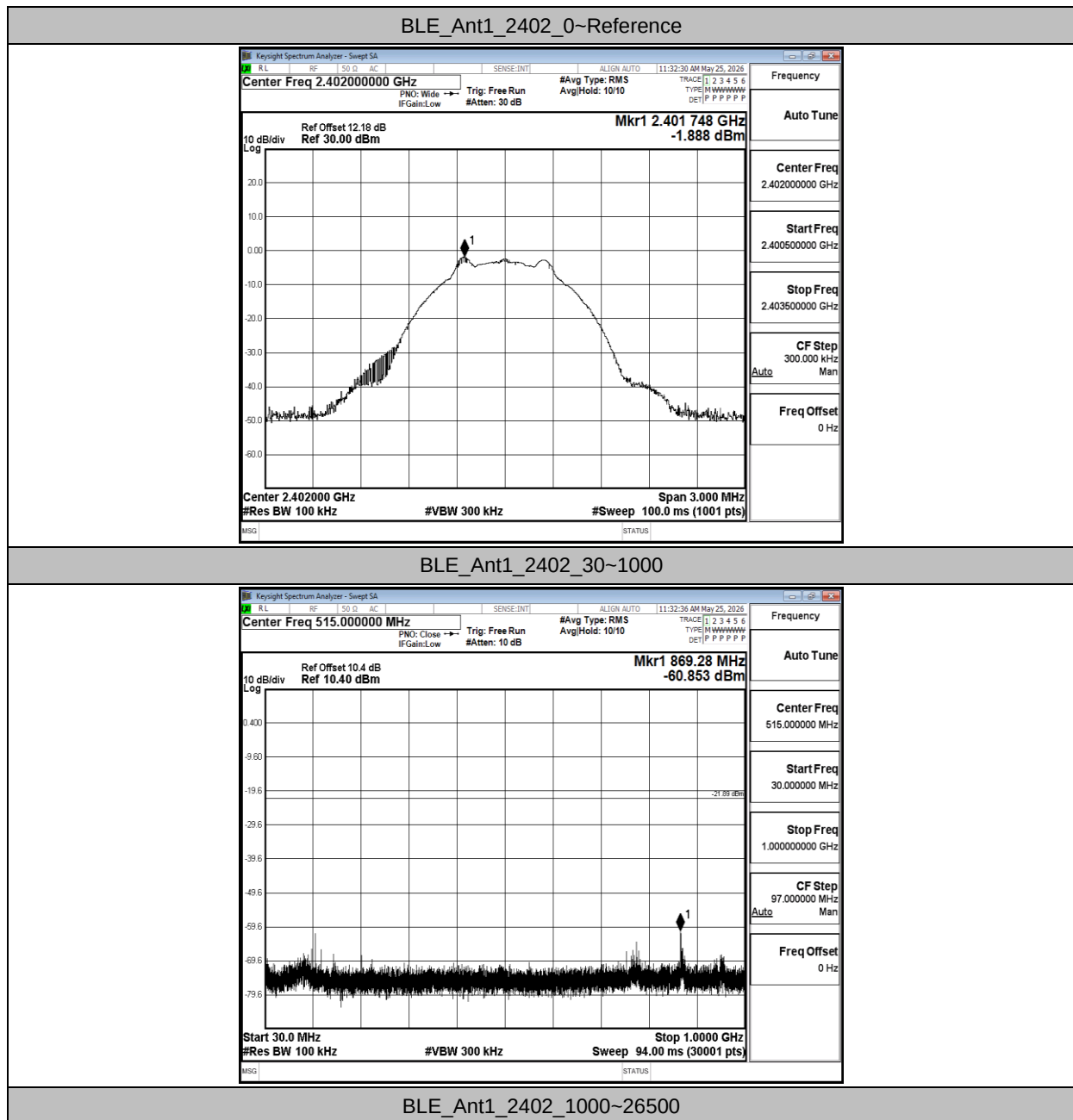


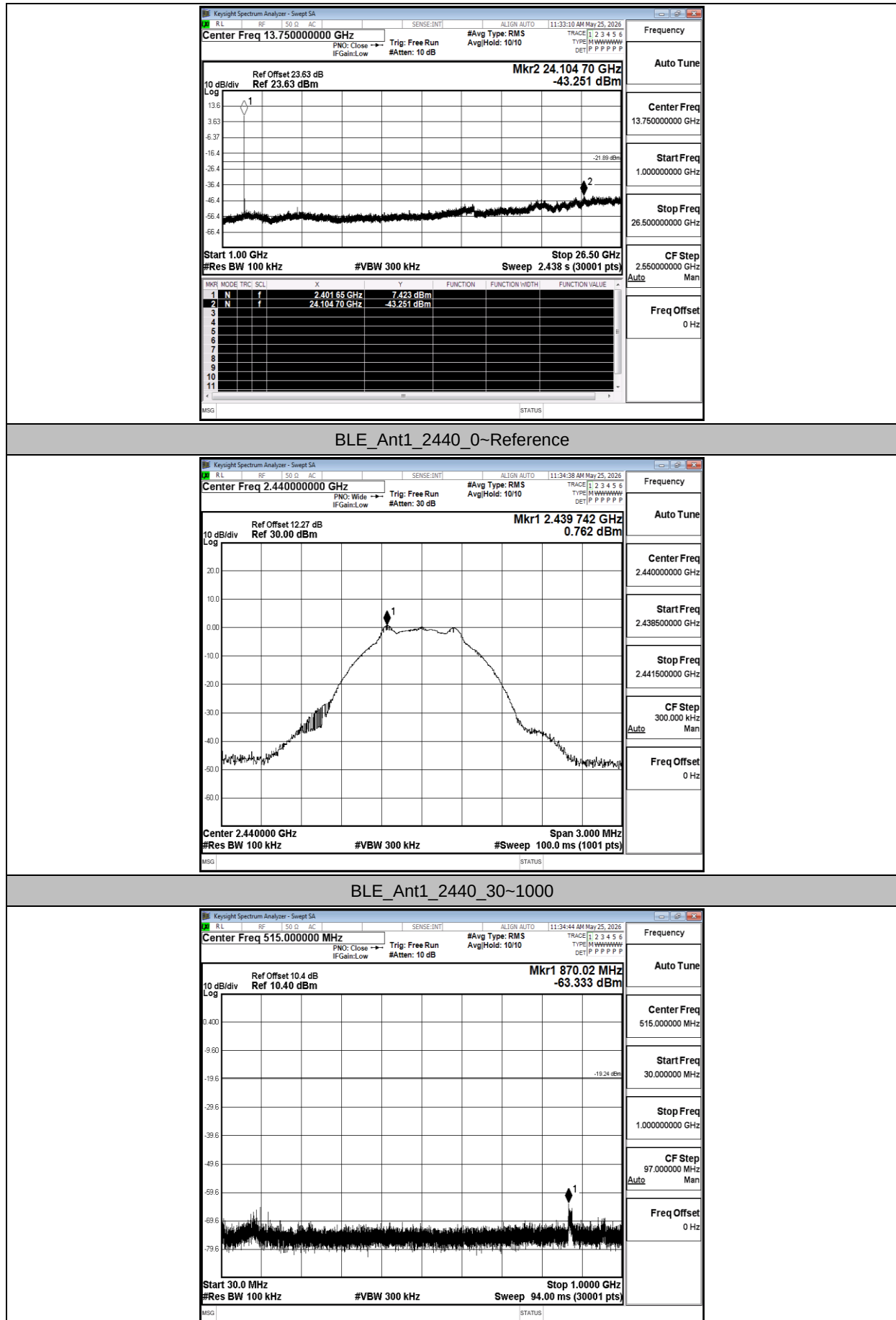
B.5 Conducted RF Spurious Emission

Test Result

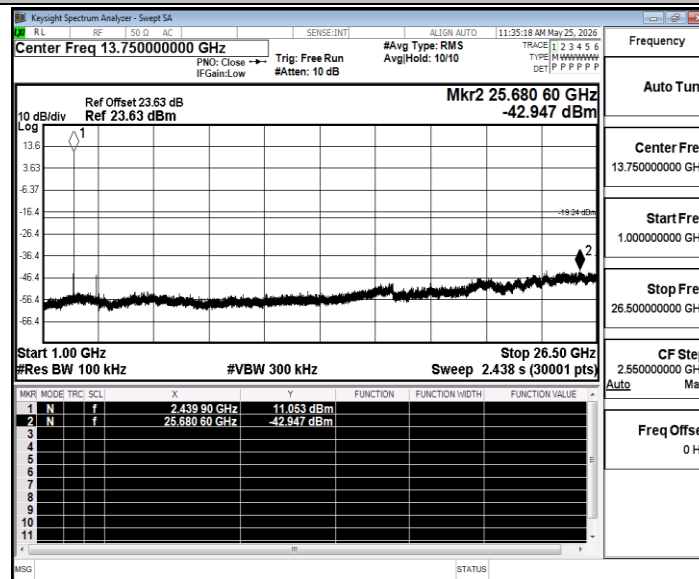
TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE	Ant1	2402	Reference	-1.89	-1.89	---	PASS
			30~1000	-1.89	-60.85	≤-21.89	PASS
			1000~26500	-1.89	-43.25	≤-21.89	PASS
		2440	Reference	0.76	0.76	---	PASS
			30~1000	0.76	-63.33	≤-19.24	PASS
			1000~26500	0.76	-42.95	≤-19.24	PASS
		2480	Reference	-0.84	-0.84	---	PASS
			30~1000	-0.84	-60.59	≤-20.84	PASS
			1000~26500	-0.84	-42.56	≤-20.84	PASS

Test Graphs

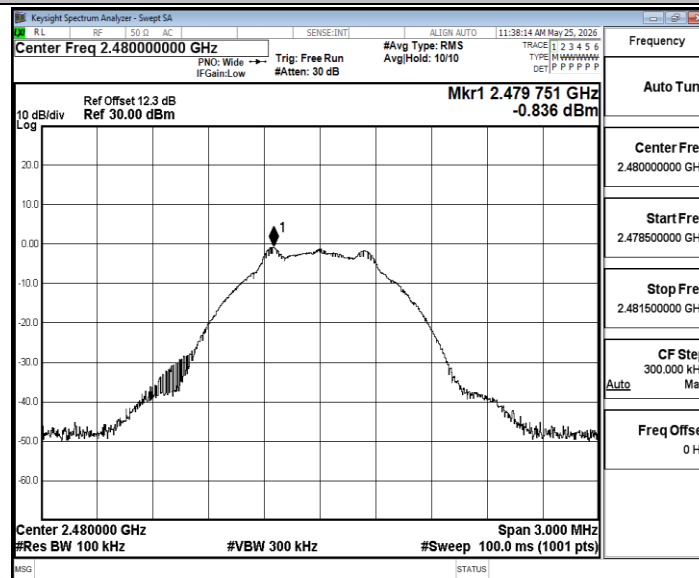




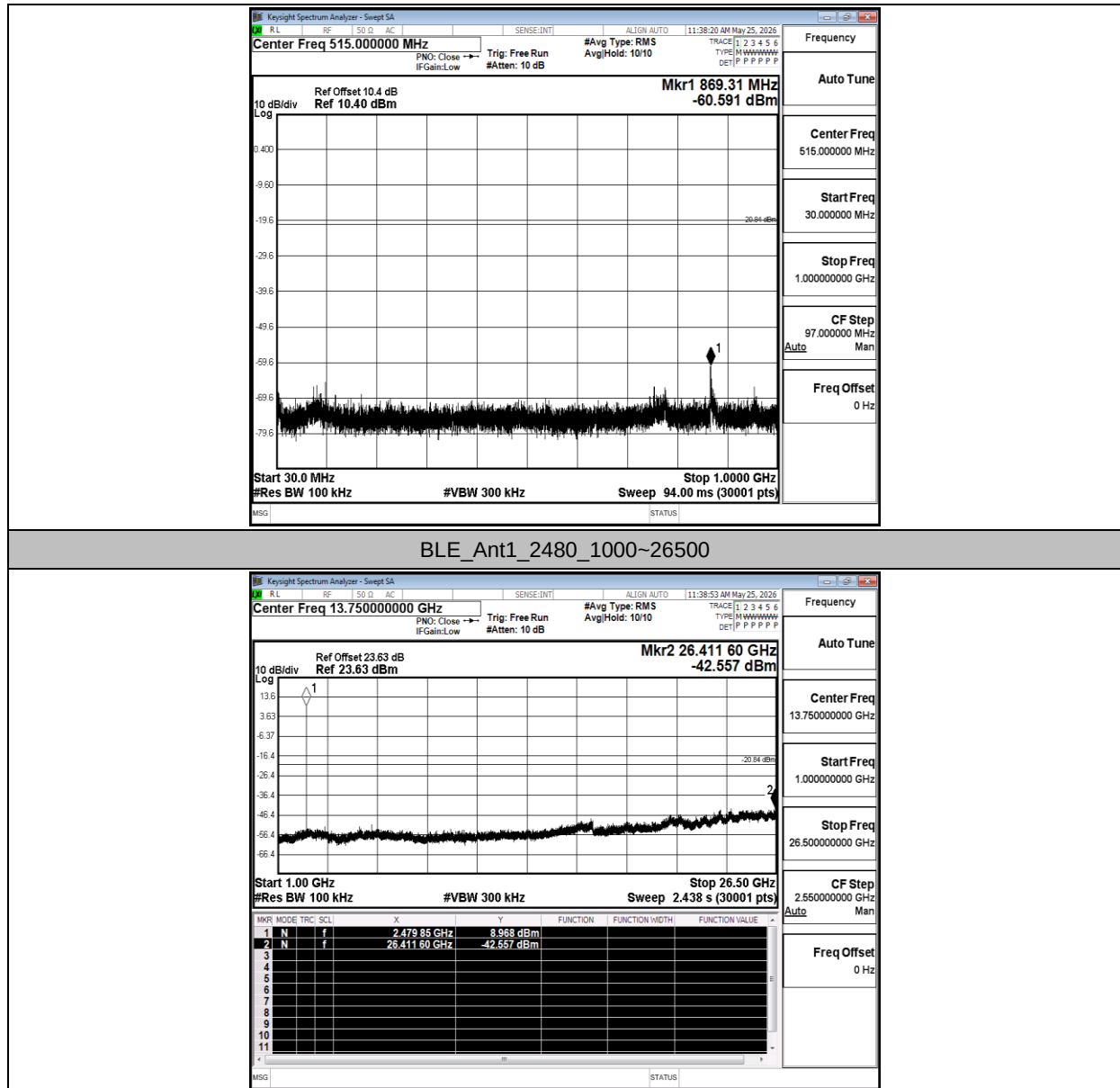
BLE_Ant1_2440_1000~26500



BLE_Ant1_2480_0~Reference



BLE_Ant1_2480_30~1000



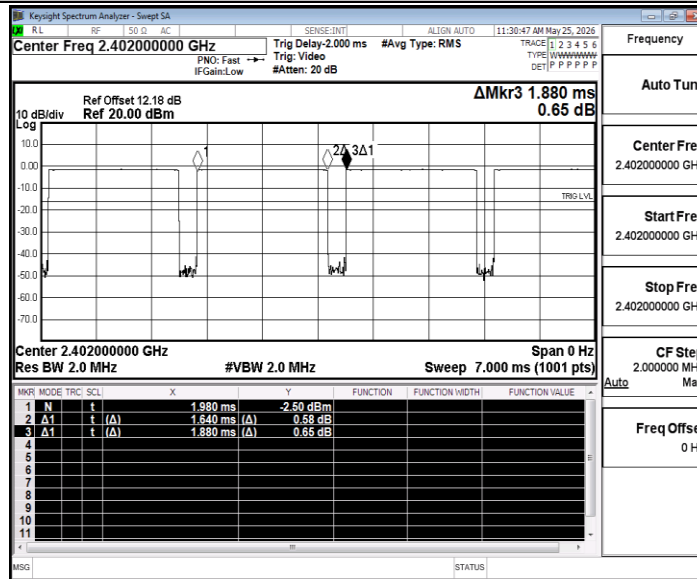
B.6 Duty Cycle

Test Result

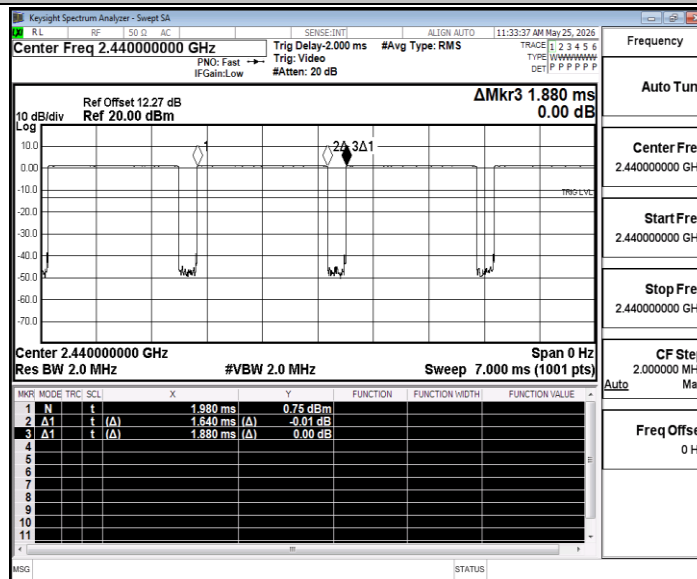
TestMode	Antenna	Freq(MHz)	ON Time [ms]	Period [ms]	X	DC [%]	xFactor	Limit	Verdict
BLE	Ant1	2402	1.64	1.88	0.8723	87.23	0.59	---	---
		2440	1.64	1.88	0.8723	87.23	0.59	---	---
		2480	1.64	1.88	0.8723	87.23	0.59	---	---

Test Graphs

BLE_Ant1_2402



BLE_Ant1_2440



BLE_Ant1_2480

B.7 Restrict Band

Test Result

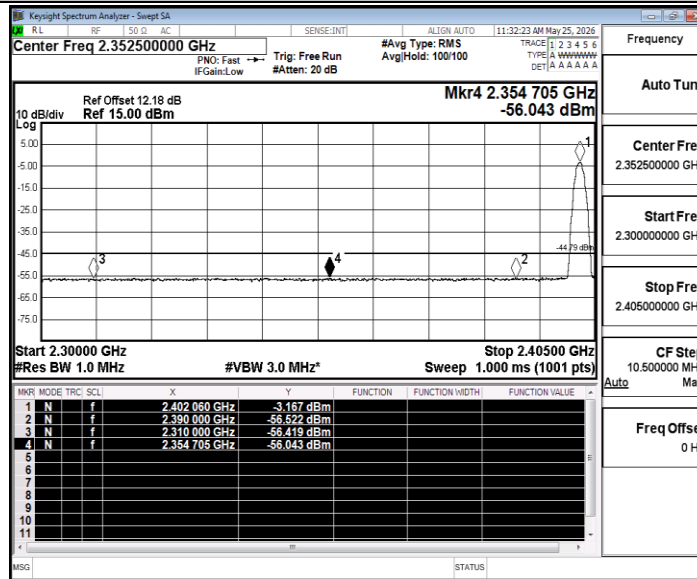
Test Mode	Antenna	Channel Name	Freq (MHz)	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Gain [dBi]	DC Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
BLE	Ant1	Low	2402	AV	2310.000	-56.42	≤-44.79	2.00	0.59	41.43	≤54	PASS
				AV	2354.705	-56.04	≤-44.79	2.00	0.59	41.81	≤54	PASS
				AV	2390.000	-56.52	≤-44.79	2.00	0.59	41.33	≤54	PASS
				Peak	2310.000	-48.15	≤-24.20	2.00	0	49.11	≤74	PASS
				Peak	2339.690	-46.26	≤-24.20	2.00	0	51.00	≤74	PASS
				Peak	2390.000	-48.11	≤-24.20	2.00	0	49.15	≤74	PASS
		High	2480	AV	2483.500	-55.61	≤-44.79	2.00	0.59	42.24	≤54	PASS
				AV	2494.240	-55.45	≤-44.79	2.00	0.59	42.40	≤54	PASS
				AV	2500.000	-56.23	≤-44.79	2.00	0.59	41.62	≤54	PASS
				Peak	2483.500	-48.49	≤-24.20	2.00	0	48.77	≤74	PASS
				Peak	2488.000	-46.27	≤-24.20	2.00	0	50.99	≤74	PASS
				Peak	2500.000	-48.68	≤-24.20	2.00	0	48.58	≤74	PASS

Note:

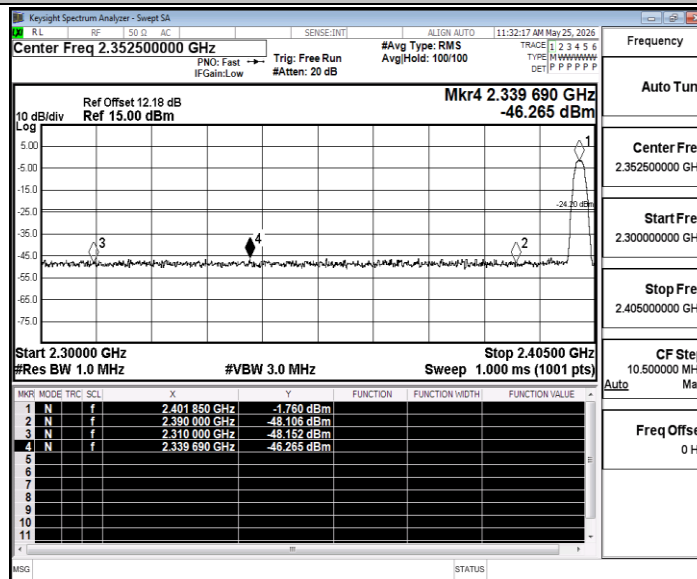
1. The Antenna Gain is compensated in the graph.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

BLE_Ant1_Low_2402_AV



BLE_Ant1_Low_2402_Peak



BLE_Ant1_High_2480_AV

