

FCC Appendix RF Test Data for BLE

FCC ID : 2BAQY-HE6WIFI

Company : HIFIMAN KUNSHAN TECHNOLOGY GROUP CO., LTD.

EUT : WiFi streaming tablet diaphragm headphones

Model Number : HE6 WiFi

Report No. : CTA26090201801

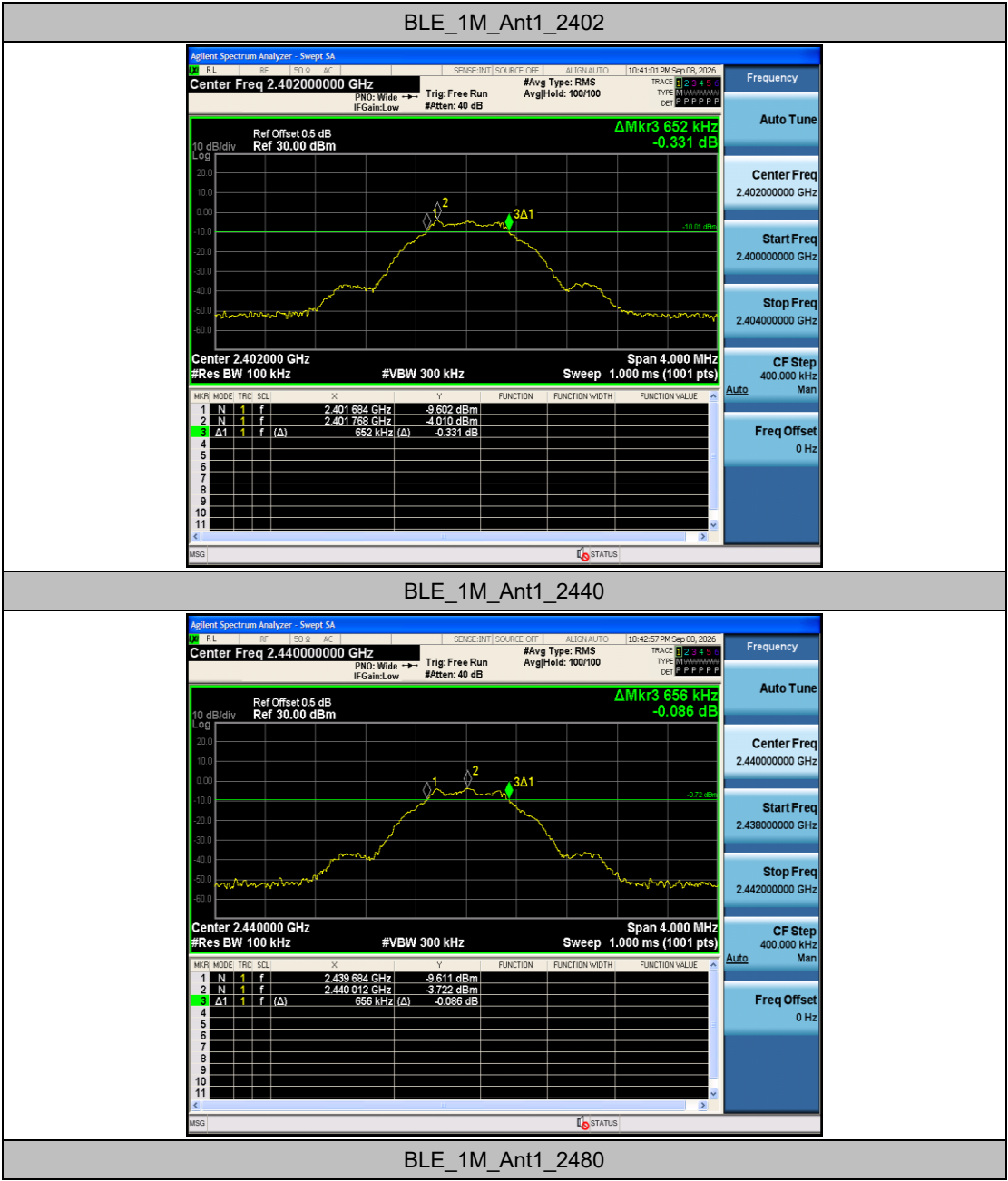
Reviewed By : Eric Wang

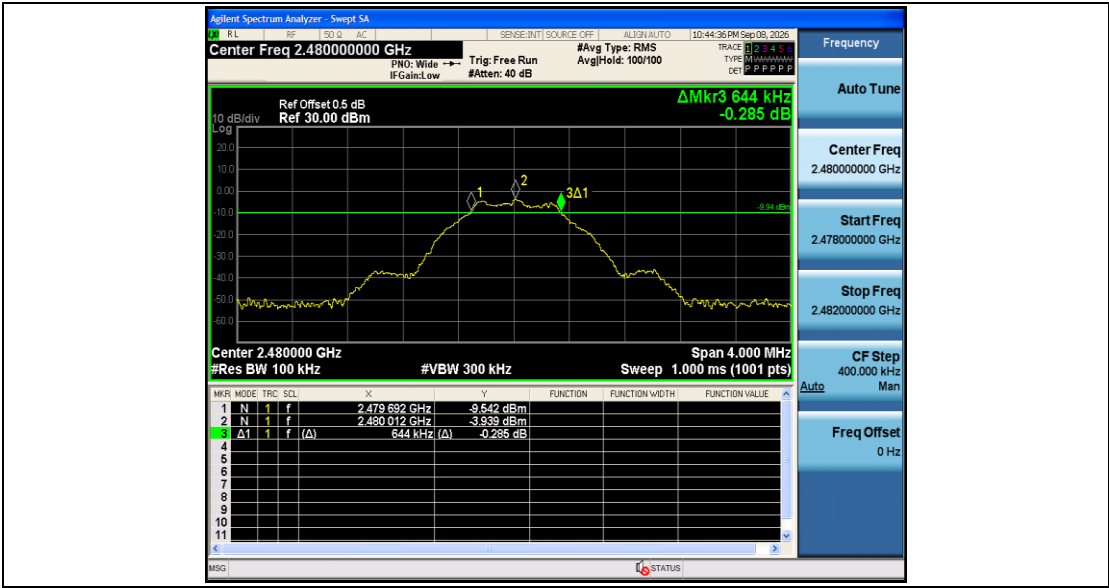
Appendix A: DTS Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.652	2401.684	2402.336	0.5	PASS
		2440	0.656	2439.684	2440.340	0.5	PASS
		2480	0.644	2479.692	2480.336	0.5	PASS

Test Graphs



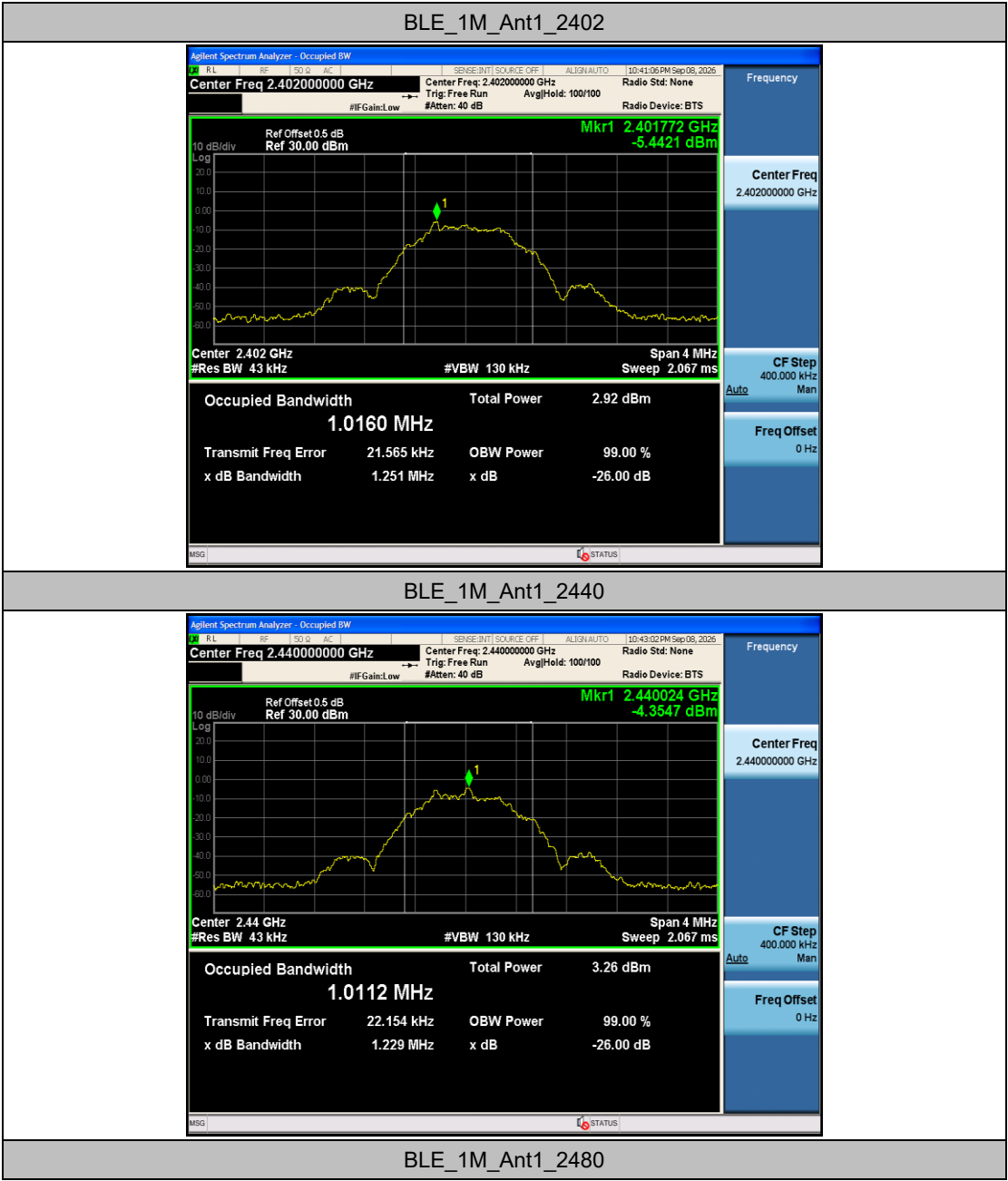


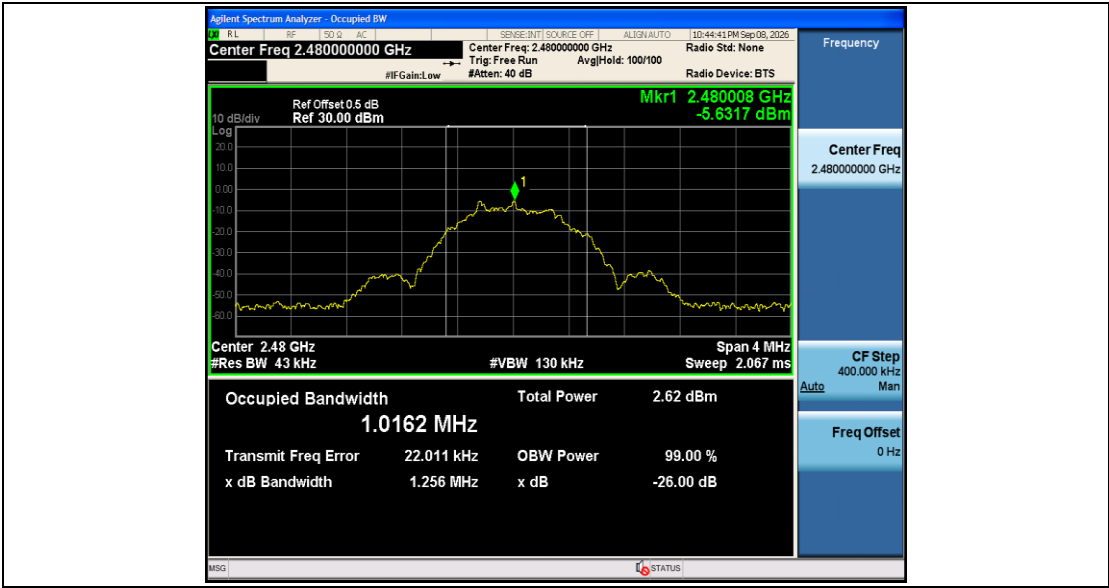
Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0160	2401.5136	2402.5296	---	---
		2440	1.0112	2439.5166	2440.5278	---	---
		2480	1.0162	2479.5139	2480.5301	---	---

Test Graphs





Appendix C: Maximum conducted output power

Test Result Peak

TestMode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE_1M	Ant1	2402	-3.34	≤30	PASS
		2440	-3.44	≤30	PASS
		2480	-3.67	≤30	PASS

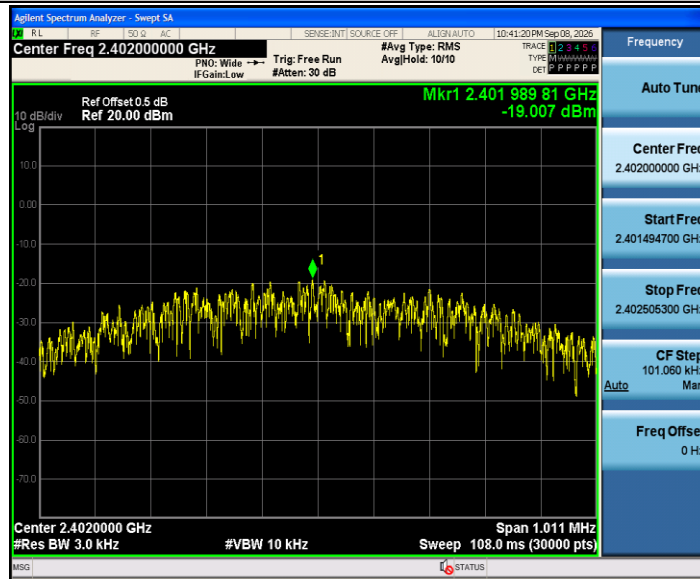
Appendix D: Maximum power spectral density

Test Result

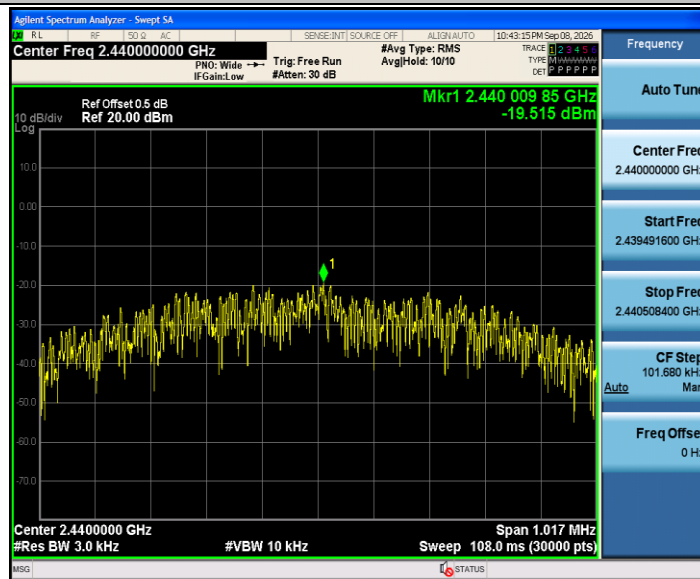
TestMode	Antenna	Freq(MHz)	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-19.01	≤8.00	PASS
		2440	-19.52	≤8.00	PASS
		2480	-19.48	≤8.00	PASS

Test Graphs

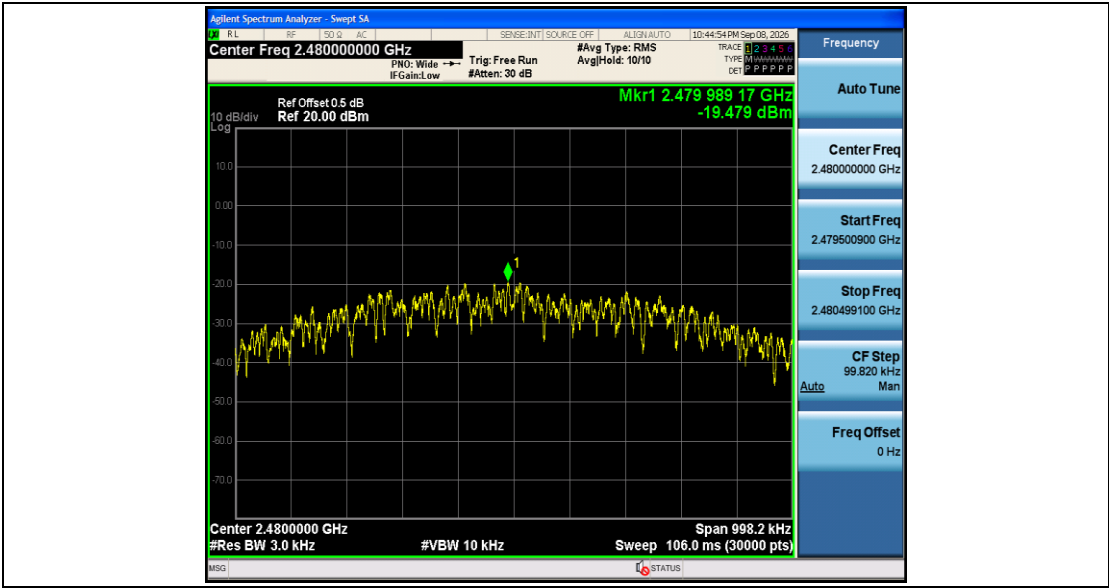
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480

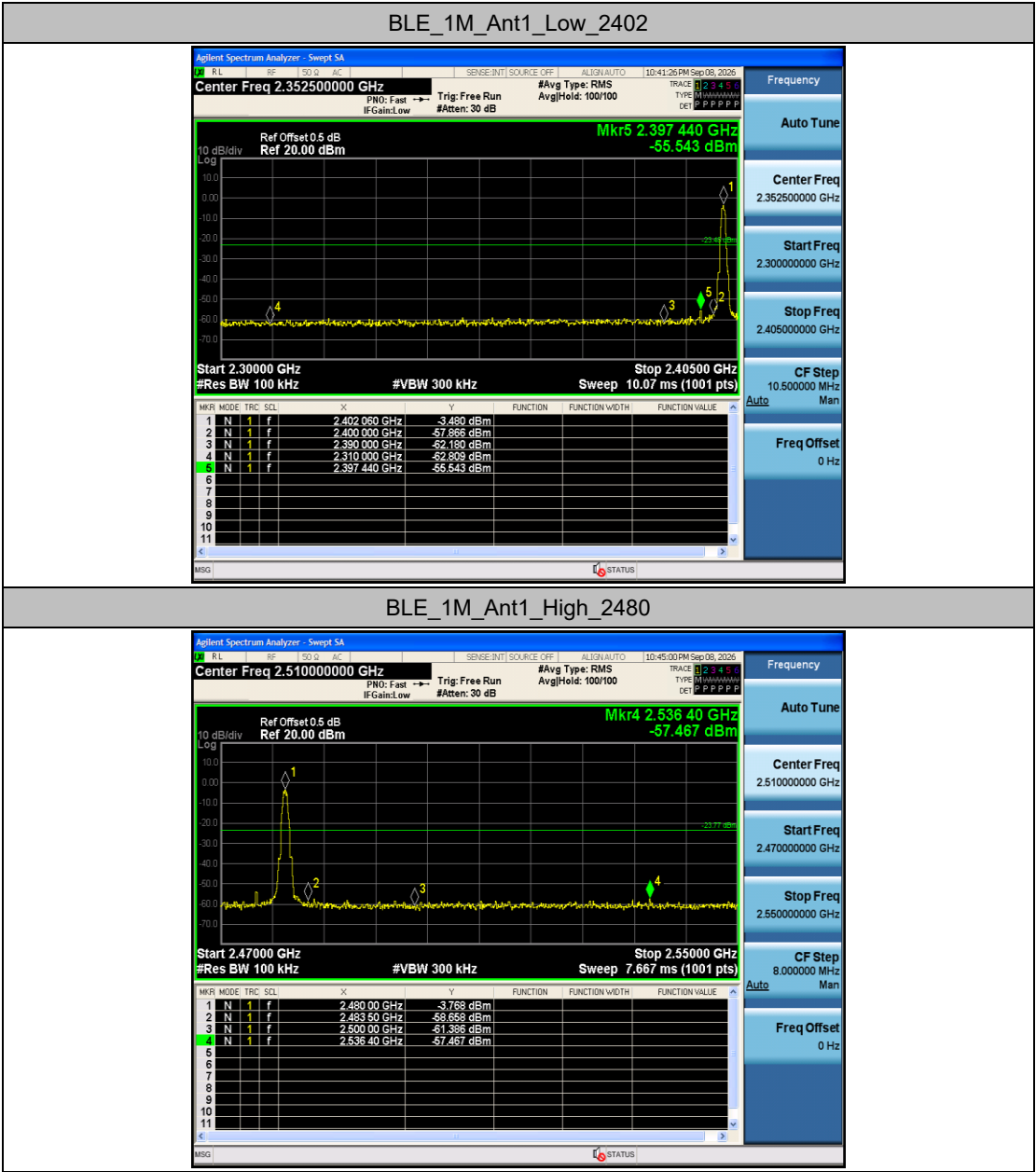


Appendix E: Band edge measurements

Test Result

TestMode	Antenna	Channel	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-3.48	-55.54	≤-23.48	PASS
		High	2480	-3.77	-57.47	≤-23.77	PASS

Test Graphs

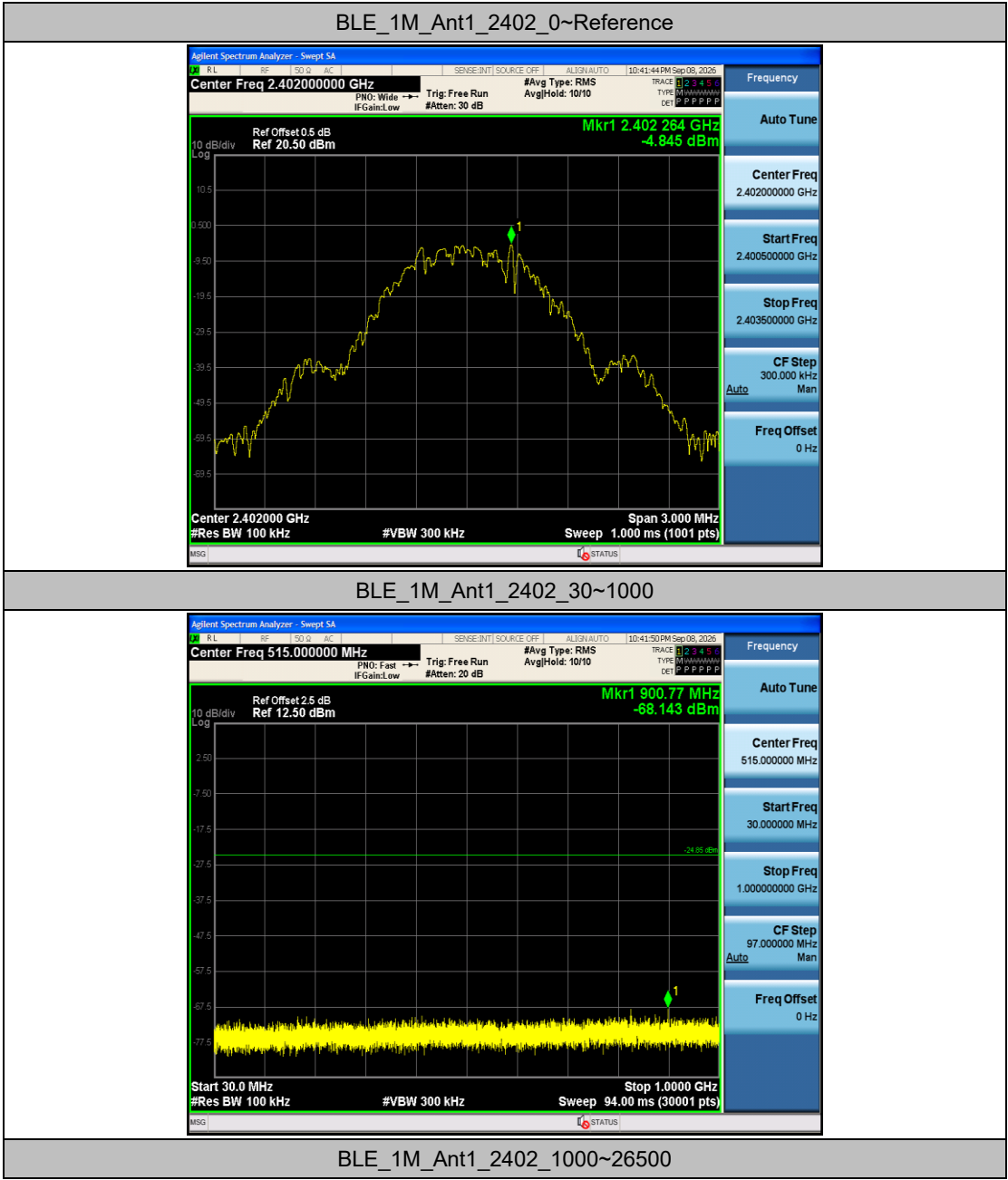


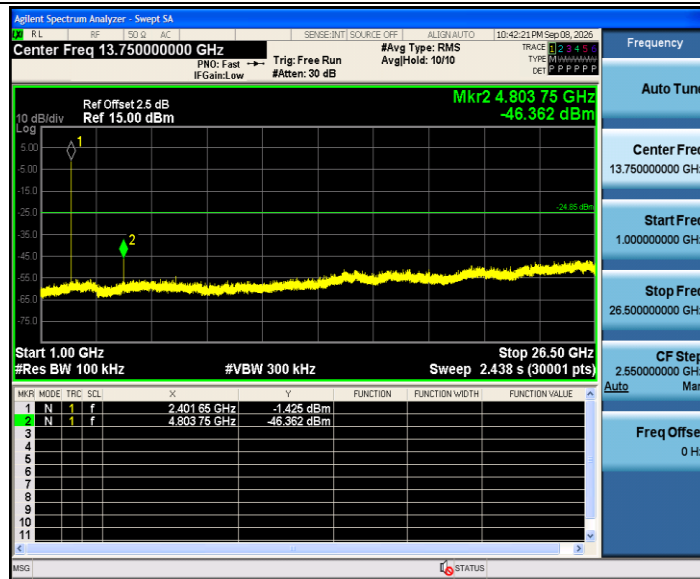
Appendix F: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-4.85	-4.85	---	PASS
			30~1000	-4.85	-68.14	≤-24.85	PASS
			1000~26500	-4.85	-46.36	≤-24.85	PASS
		2440	Reference	-4.49	-4.49	---	PASS
			30~1000	-4.49	-39.34	≤-24.49	PASS
			1000~26500	-4.49	-46.46	≤-24.49	PASS
		2480	Reference	-4.63	-4.63	---	PASS
			30~1000	-4.63	-68.41	≤-24.63	PASS
			1000~26500	-4.63	-45.99	≤-24.63	PASS

Test Graphs

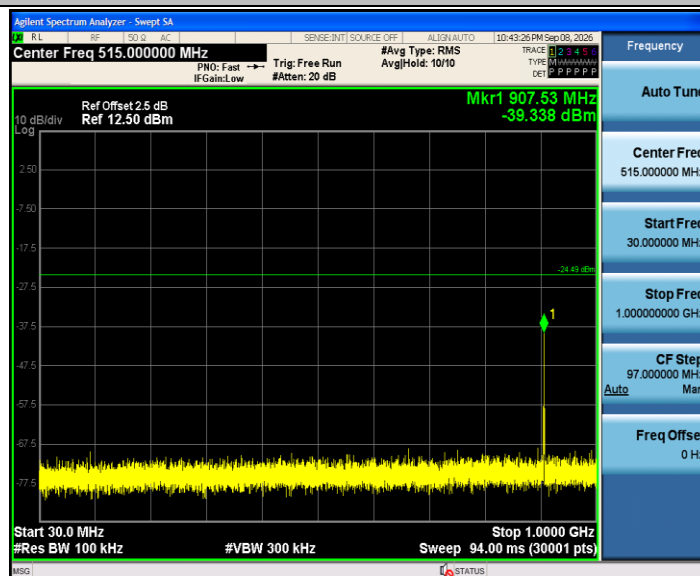




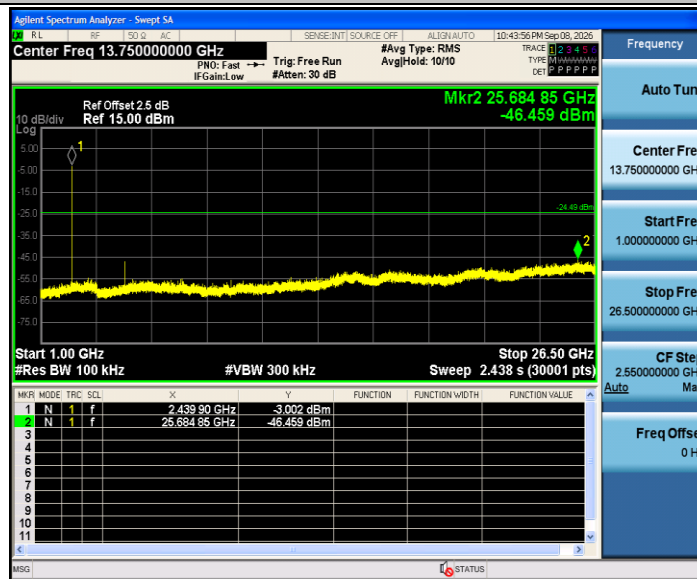
BLE_1M_Ant1_2440_0~Reference



BLE_1M_Ant1_2440_30~1000



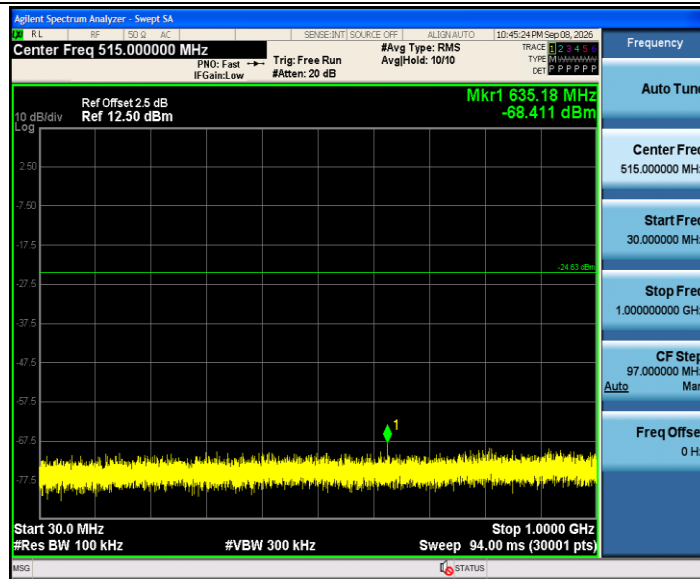
BLE_1M_Ant1_2440_1000~26500



BLE_1M_Ant1_2480_0~Reference



BLE_1M_Ant1_2480_30~1000



BLE_1M_Ant1_2480_1000~26500

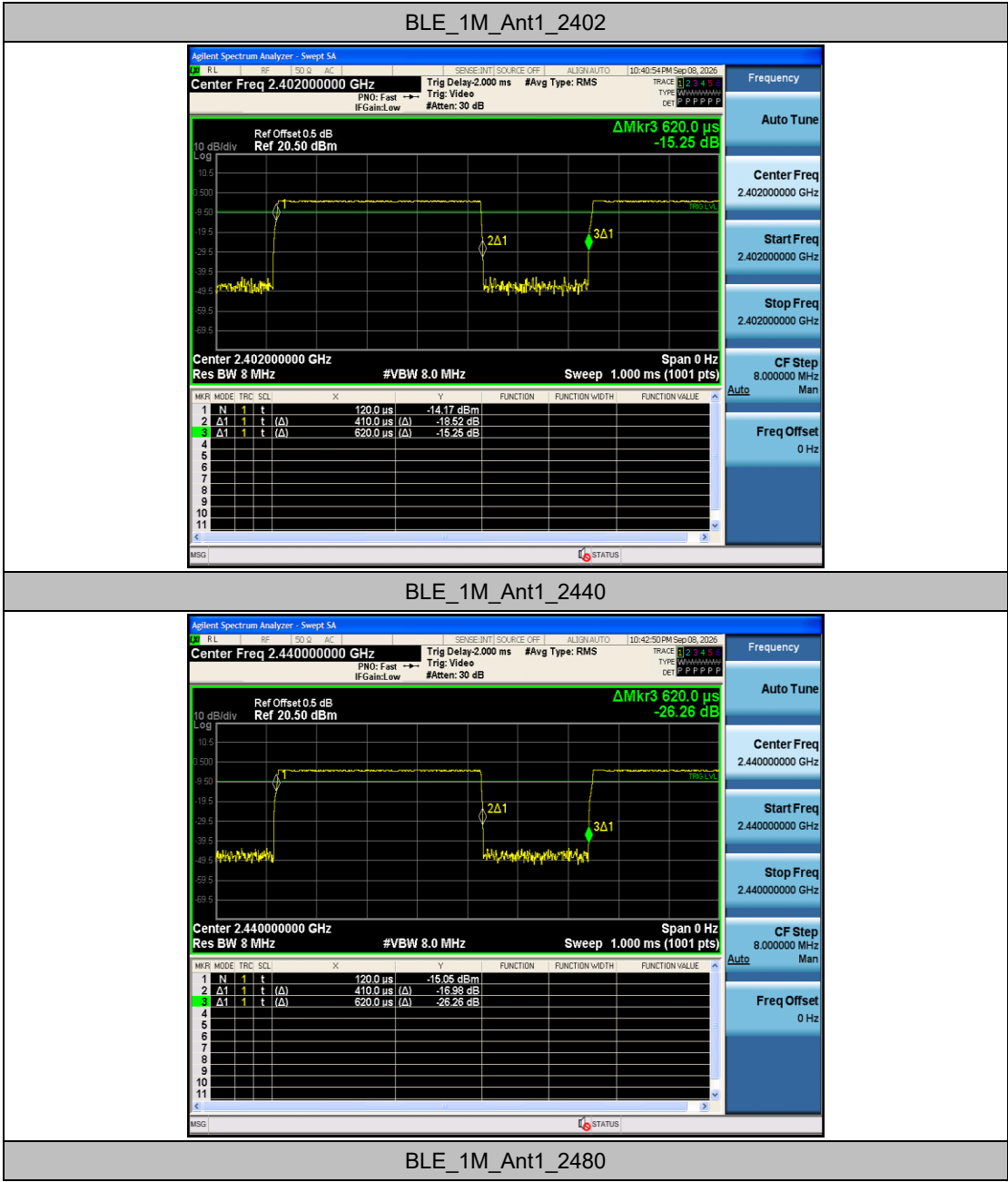


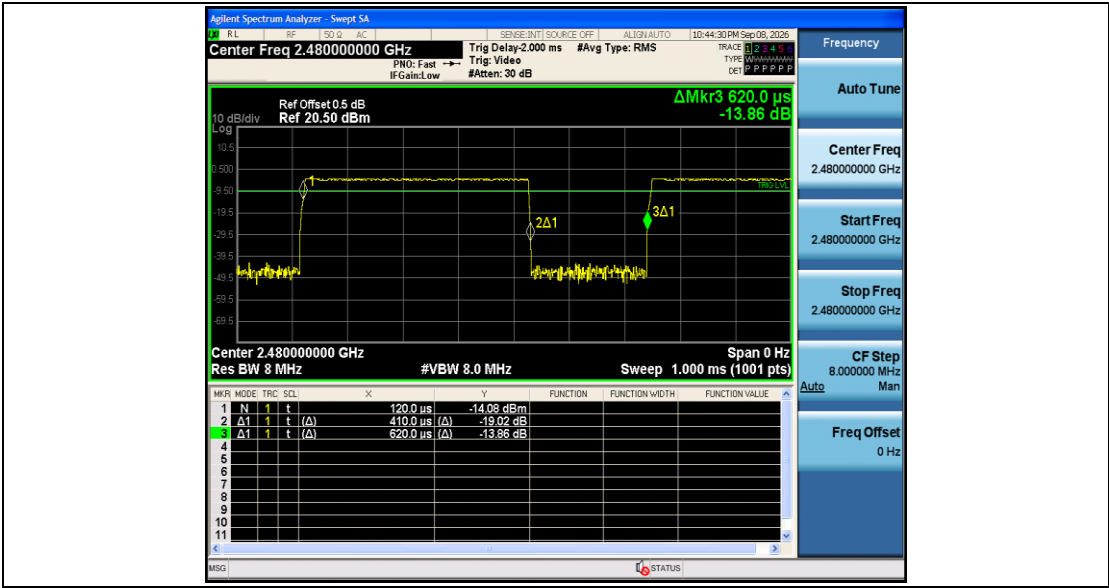
Appendix G: Duty Cycle

Test Result

TestMode	Antenna	Freq(MHz)	ON Time [ms]	Period [ms]	X	DC [%]	xFactor	Limit	Verdict
BLE_1M	Ant1	2402	0.41	0.62	0.6613	66.13	1.80	---	---
		2440	0.41	0.62	0.6613	66.13	1.80	---	---
		2480	0.41	0.62	0.6613	66.13	1.80	---	---

Test Graphs





Appendix H: Emissions in Restricted Bands

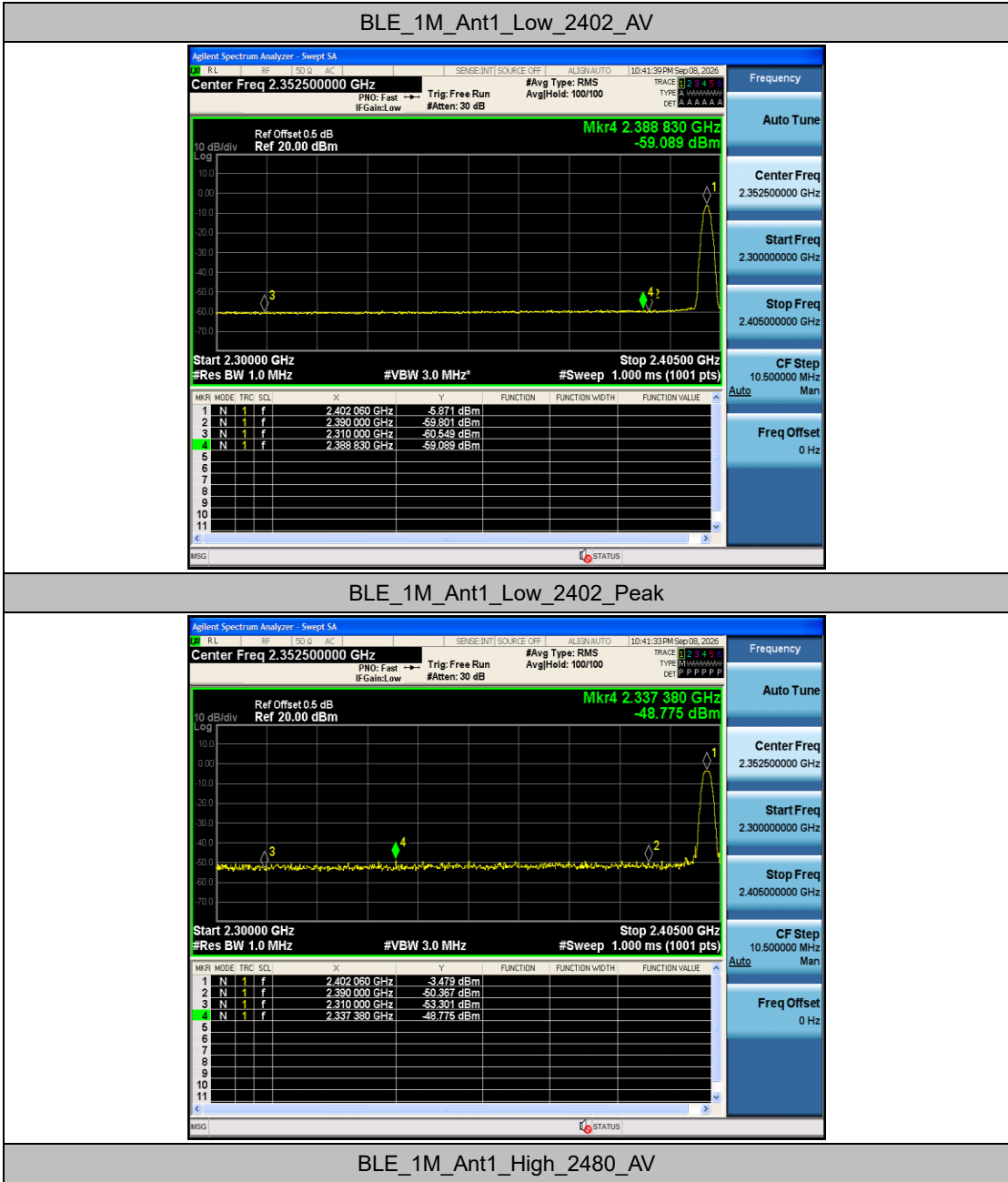
Test Result

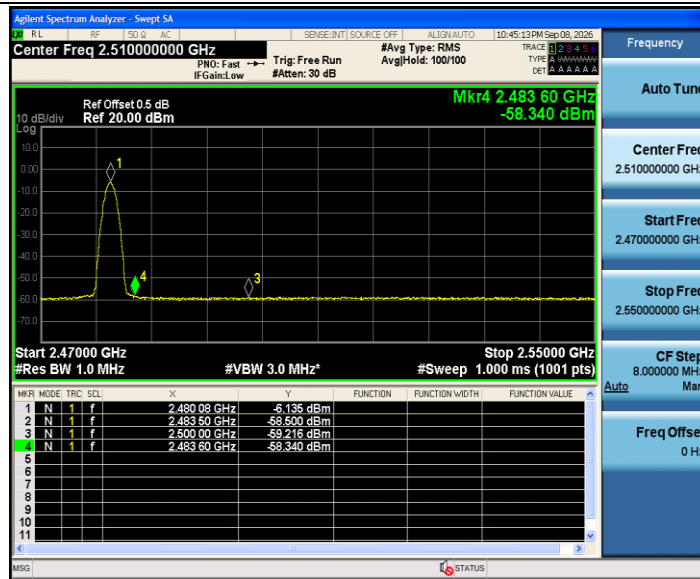
TestMode	Antenna	Channel	Freq(MHz)	Detector	Freq [MHz]	Result [dBm]	Gain [dB]	DC Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
BLE_1M	Ant1	Low	2402	AV	2310.000	-60.55	2.00	1.80	38.45	≤54	PASS
				AV	2388.830	-59.09	2.00	1.80	39.91	≤54	PASS
				AV	2390.000	-59.8	2.00	1.80	39.20	≤54	PASS
				Peak	2310.000	-53.3	2.00	0.00	43.90	≤74	PASS
				Peak	2337.380	-48.78	2.00	0.00	48.42	≤74	PASS
				Peak	2390.000	-50.37	2.00	0.00	46.83	≤74	PASS
		High	2480	AV	2483.500	-58.5	2.00	1.80	40.50	≤54	PASS
				AV	2483.600	-58.34	2.00	1.80	40.66	≤54	PASS
				AV	2500.000	-59.22	2.00	1.80	39.78	≤54	PASS
				Peak	2483.500	-50.79	2.00	0.00	46.41	≤74	PASS
				Peak	2484.800	-46.92	2.00	0.00	50.28	≤74	PASS
				Peak	2500.000	-50.41	2.00	0.00	46.79	≤74	PASS

Note:

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_1M_Ant1_High_2480_Peak

