

FCC Appendix RF Test Data for BLE

FCC ID : 2A9YM-DPL1330L-W

Company : Guangdong SID Technology Co.,Ltd.

EUT : e-paper photo frame

Model Number : DPL1330L-W

Report No. : CTA26060901401

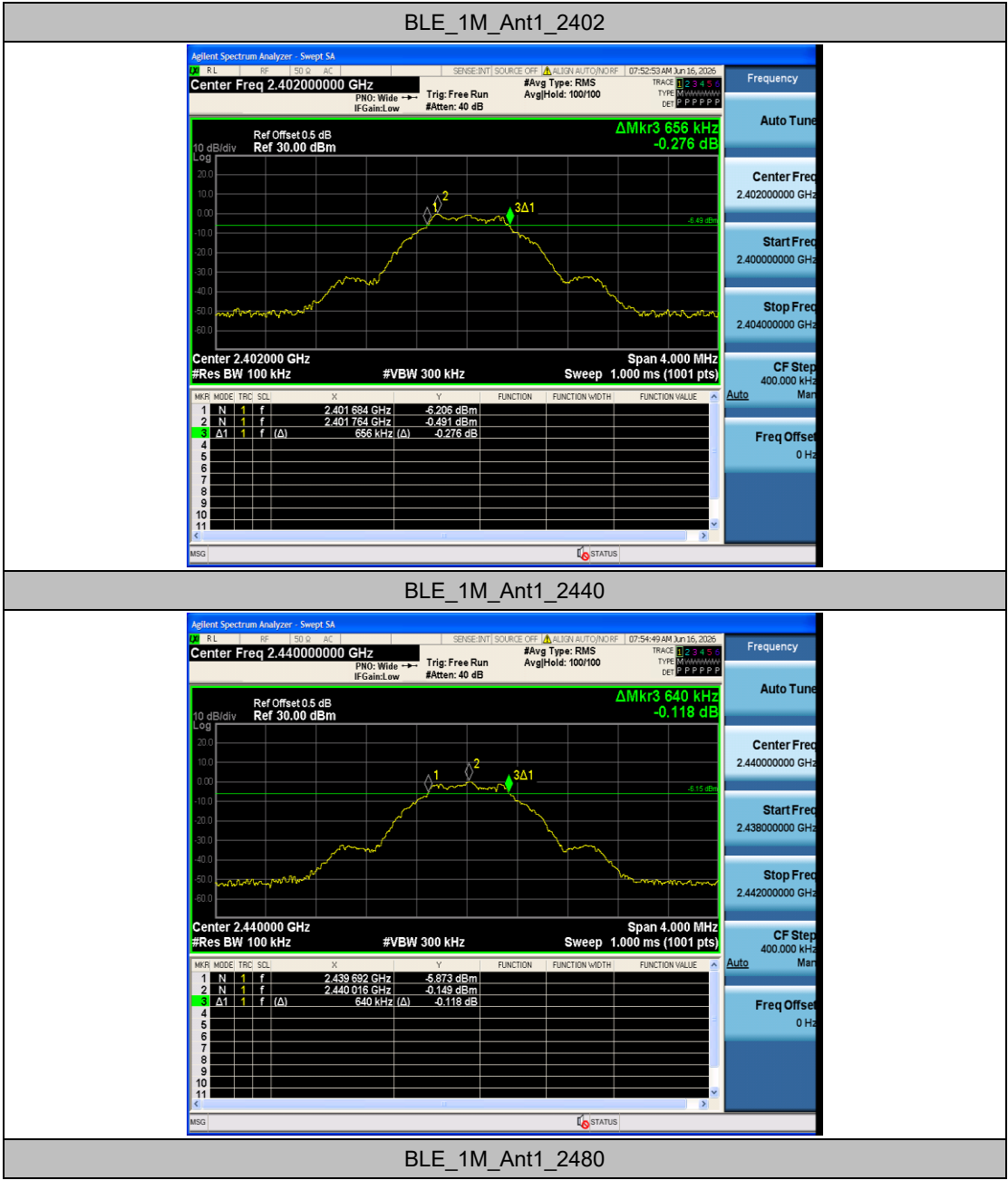
Reviewed By : Eric Wang

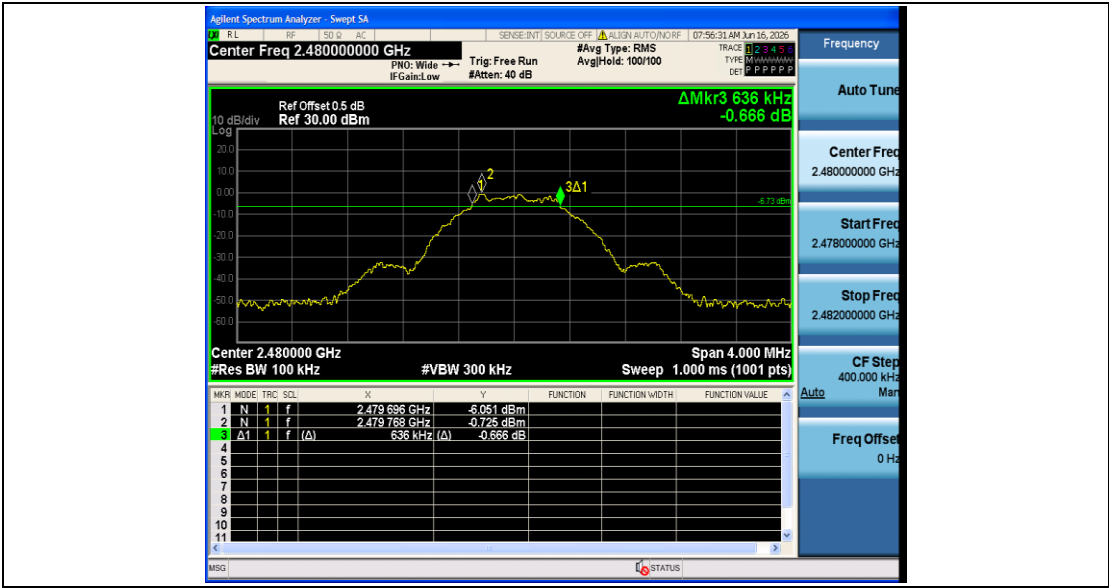
Appendix A: DTS Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.656	2401.684	2402.340	0.5	PASS
		2440	0.640	2439.692	2440.332	0.5	PASS
		2480	0.636	2479.696	2480.332	0.5	PASS

Test Graphs



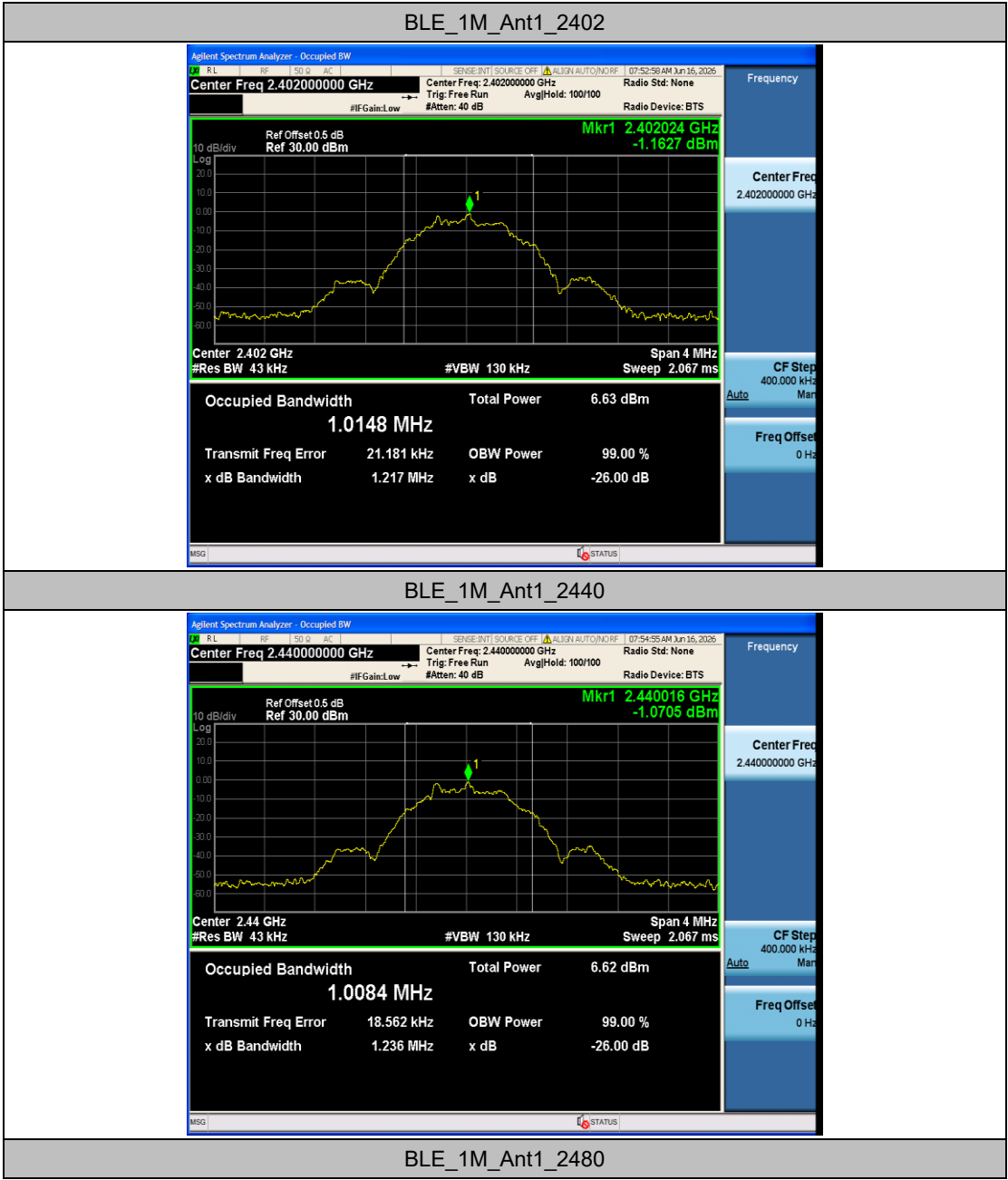


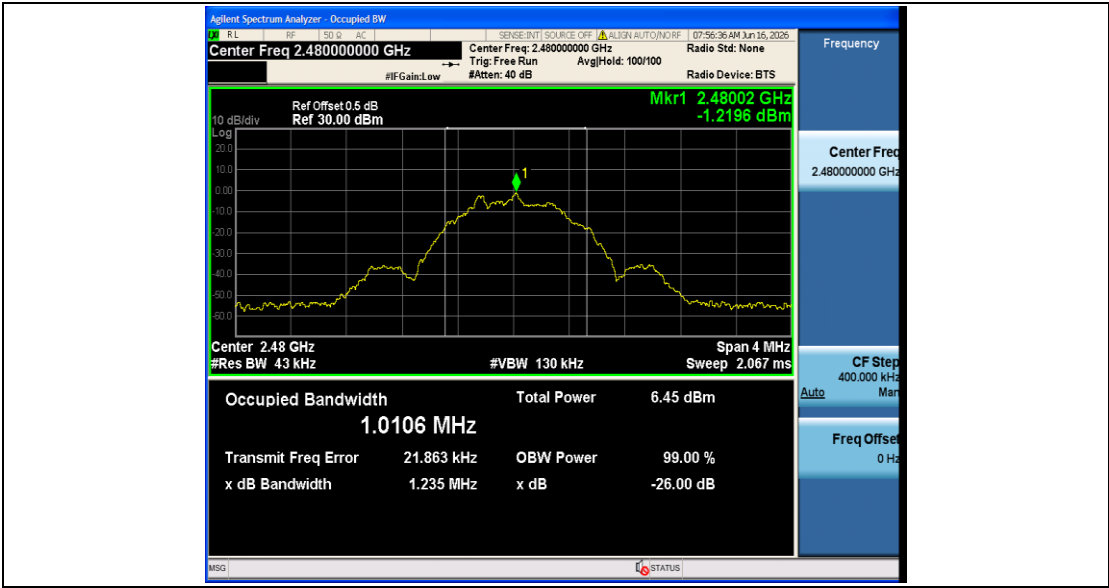
Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0148	2401.5138	2402.5286	---	---
		2440	1.0084	2439.5144	2440.5228	---	---
		2480	1.0106	2479.5166	2480.5272	---	---

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	0.02	≤30	PASS
		2440	-0.02	≤30	PASS
		2480	-0.24	≤30	PASS

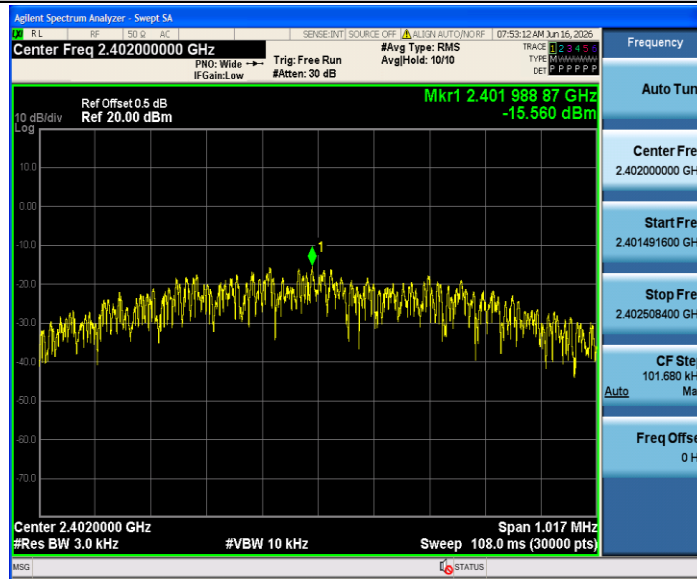
Appendix D: Maximum power spectral density

Test Result

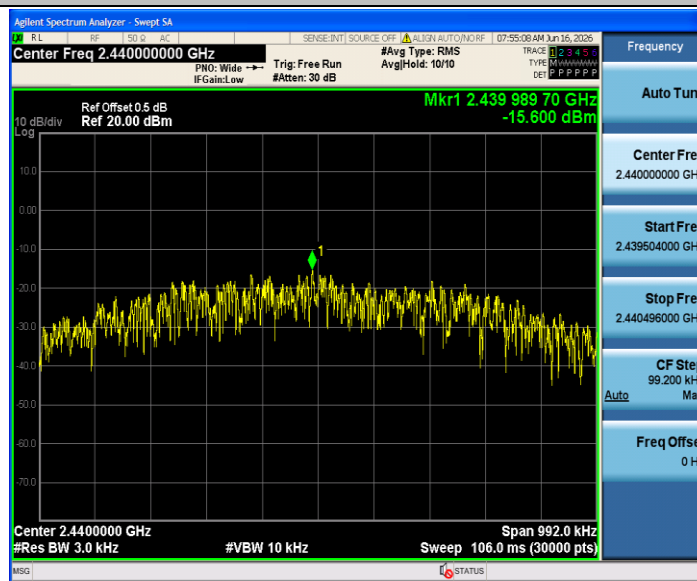
TestMode	Antenna	Freq(MHz)	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-15.56	≤8.00	PASS
		2440	-15.60	≤8.00	PASS
		2480	-16.16	≤8.00	PASS

Test Graphs

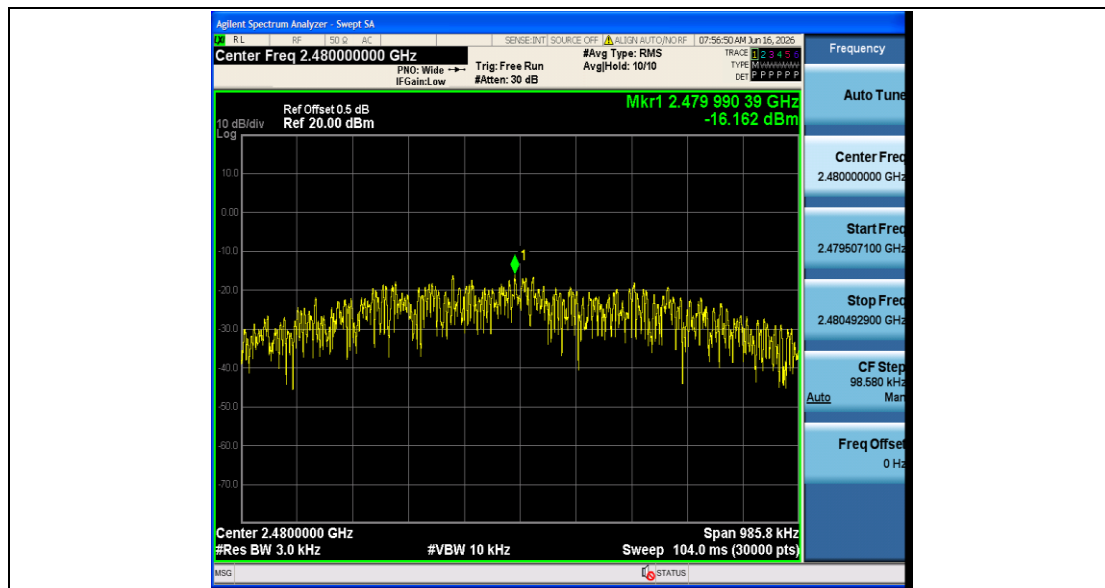
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480

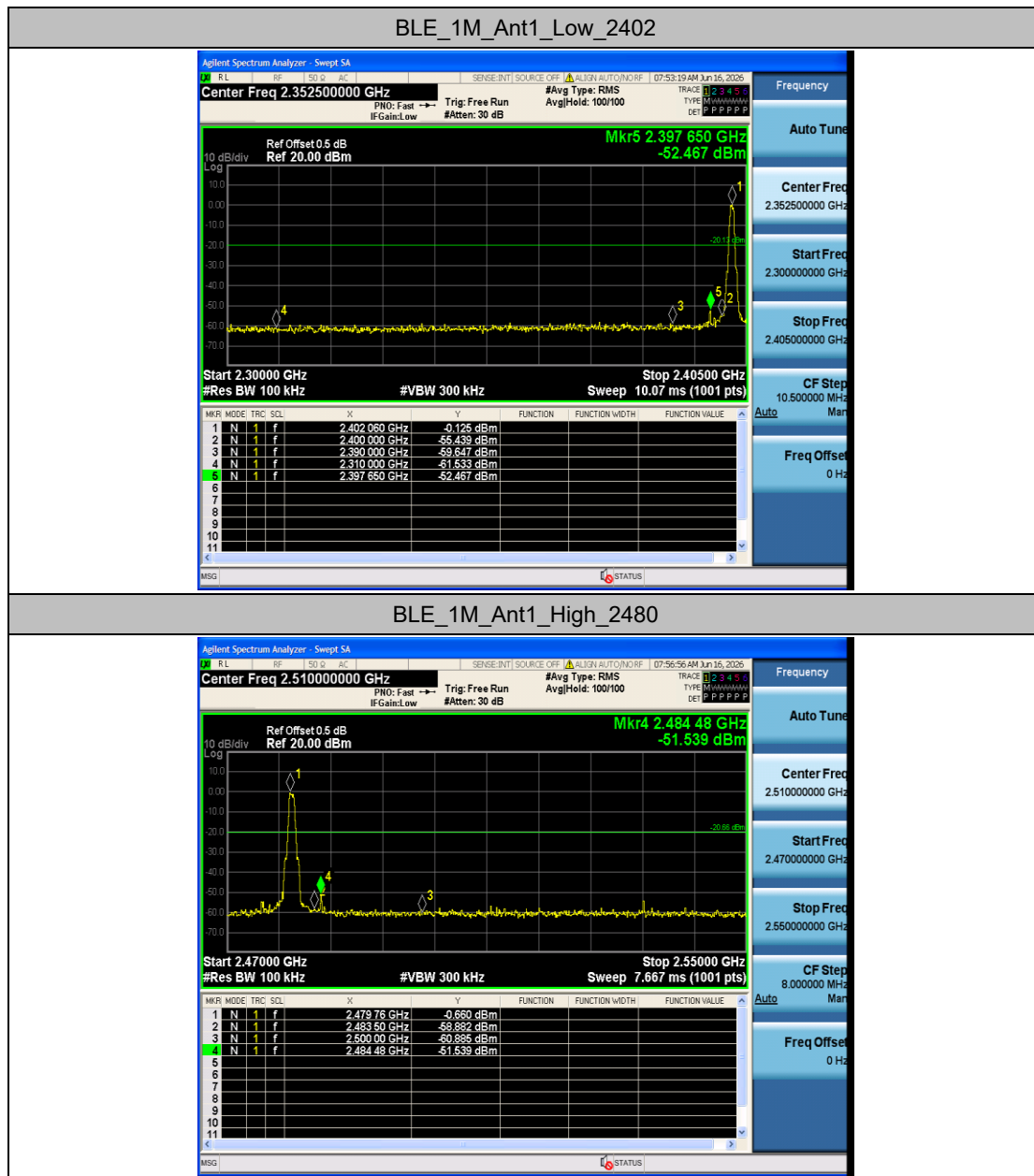


Appendix E: Band edge measurements

Test Result

TestMode	Antenna	Channel	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-0.13	-52.47	≤-20.13	PASS
		High	2480	-0.66	-51.54	≤-20.66	PASS

Test Graphs

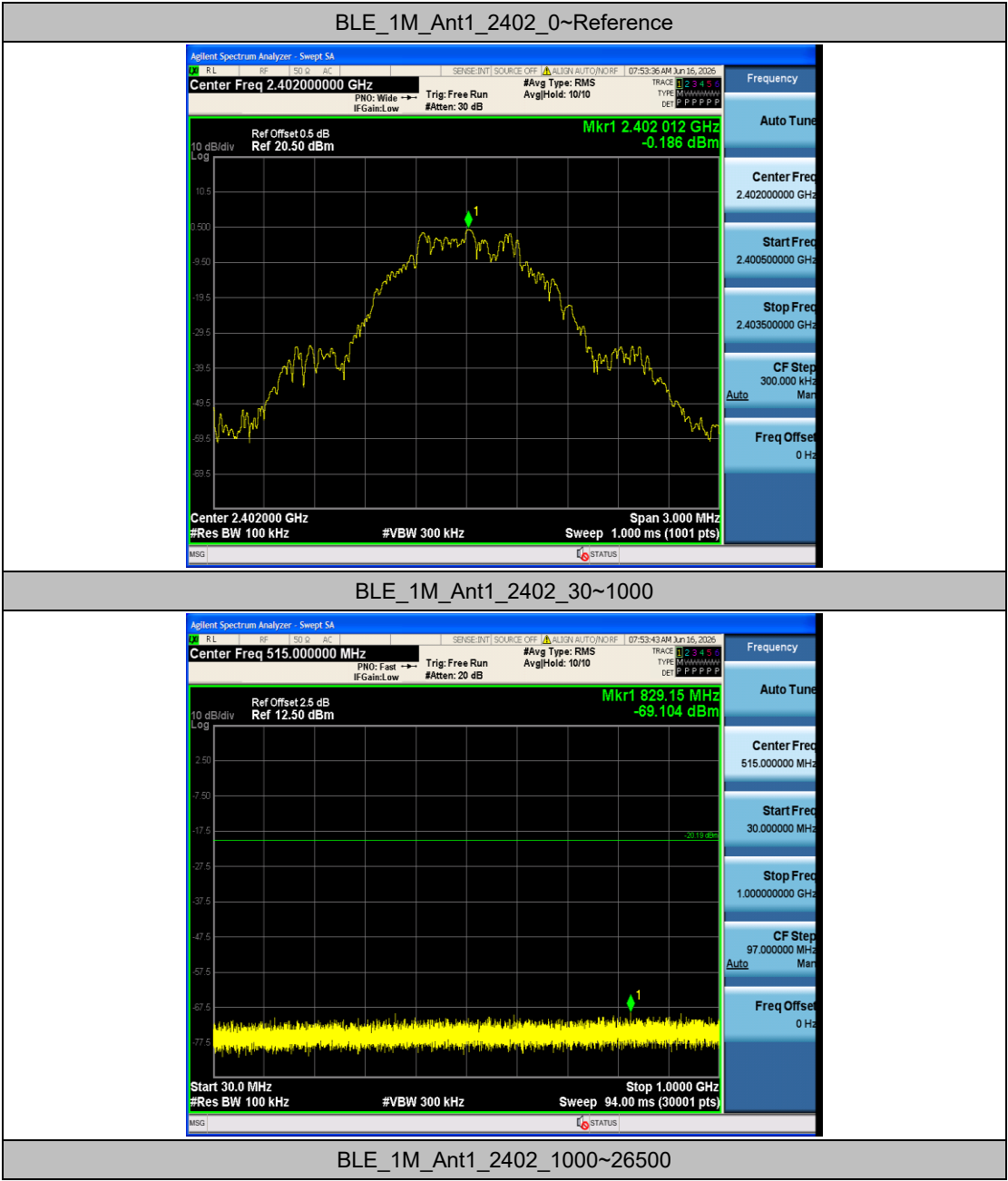


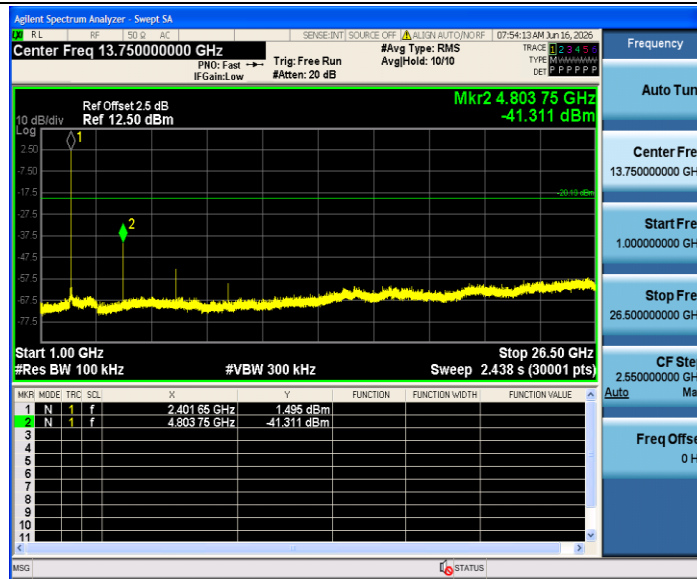
Appendix F: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-0.19	-0.19	---	PASS
			30~1000	-0.19	-69.1	≤-20.19	PASS
			1000~26500	-0.19	-41.31	≤-20.19	PASS
		2440	Reference	-0.33	-0.33	---	PASS
			30~1000	-0.33	-68.28	≤-20.33	PASS
			1000~26500	-0.33	-40.95	≤-20.33	PASS
		2480	Reference	-0.70	-0.70	---	PASS
			30~1000	-0.70	-68.7	≤-20.7	PASS
			1000~26500	-0.70	-39.6	≤-20.7	PASS

Test Graphs

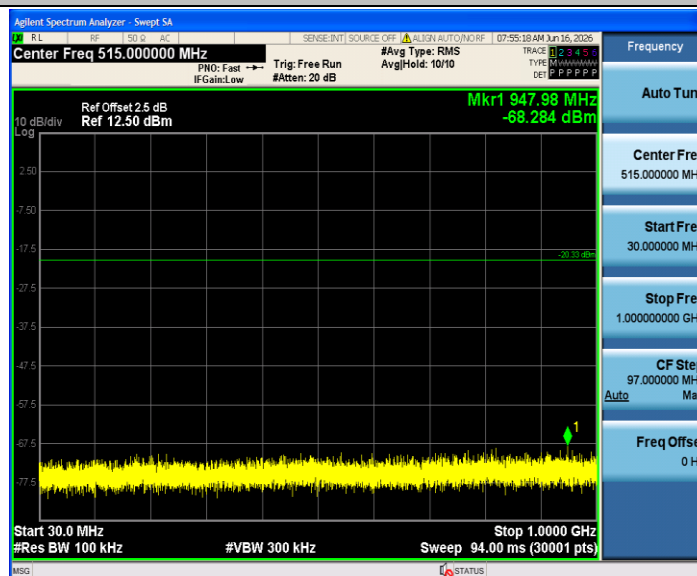




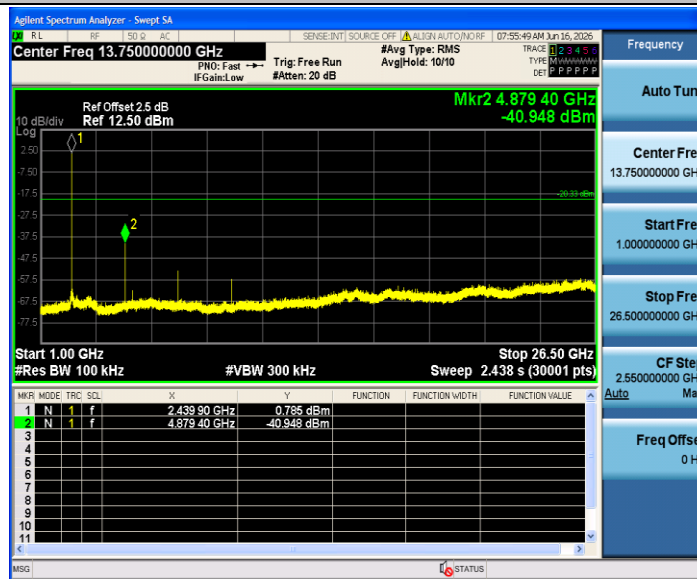
BLE_1M_Ant1_2440_0~Reference



BLE_1M_Ant1_2440_30~1000



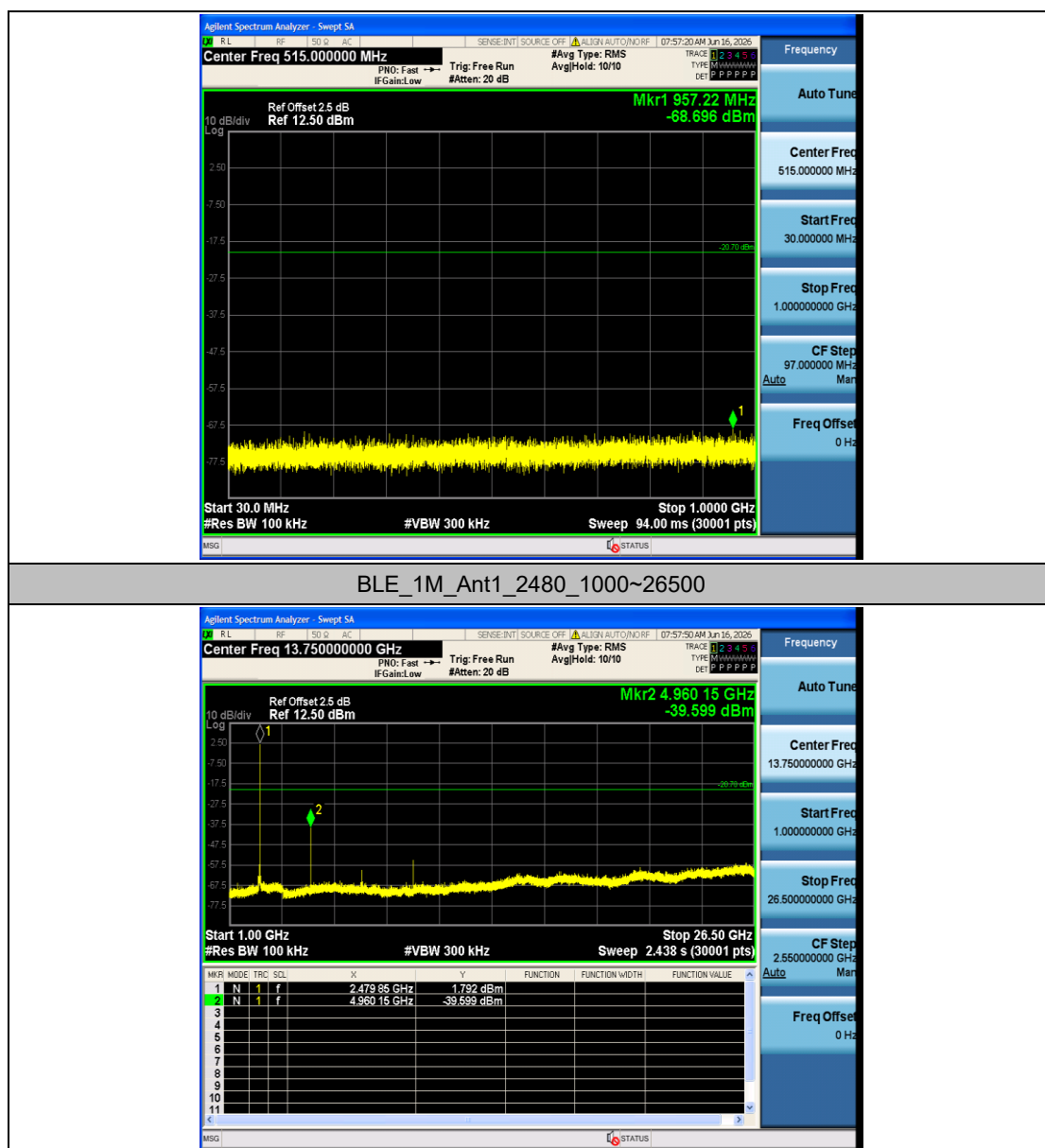
BLE_1M_Ant1_2440_1000~26500



BLE_1M_Ant1_2480_0~Reference



BLE_1M_Ant1_2480_30~1000

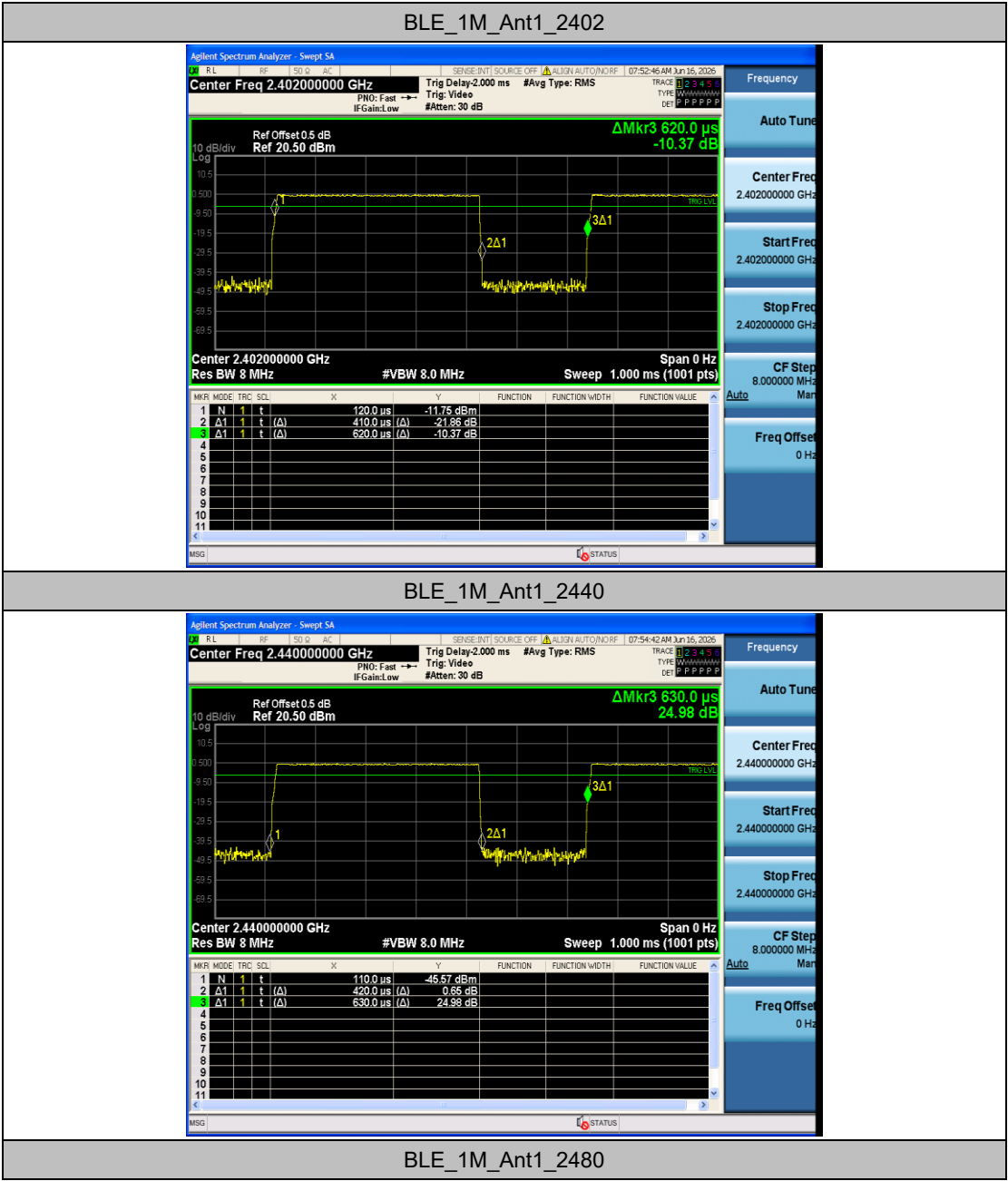


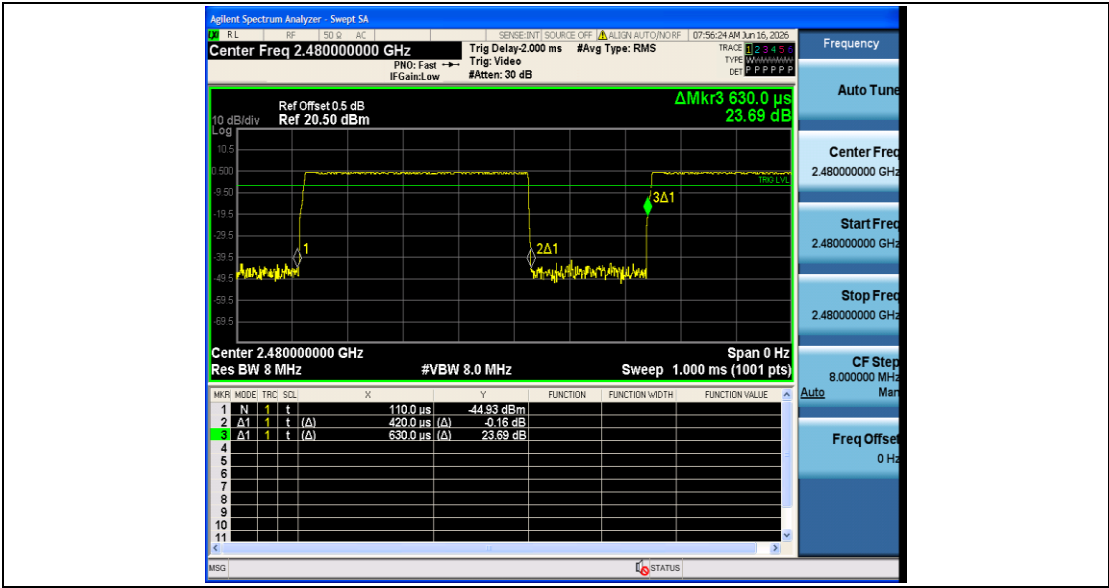
Appendix G: Duty Cycle

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	0.42	0.63	0.6667	66.67	1.76	---	---
		2480	0.42	0.63	0.6667	66.67	1.76	---	---

Test Graphs





Appendix H: Emissions in Restricted Bands

Test Result

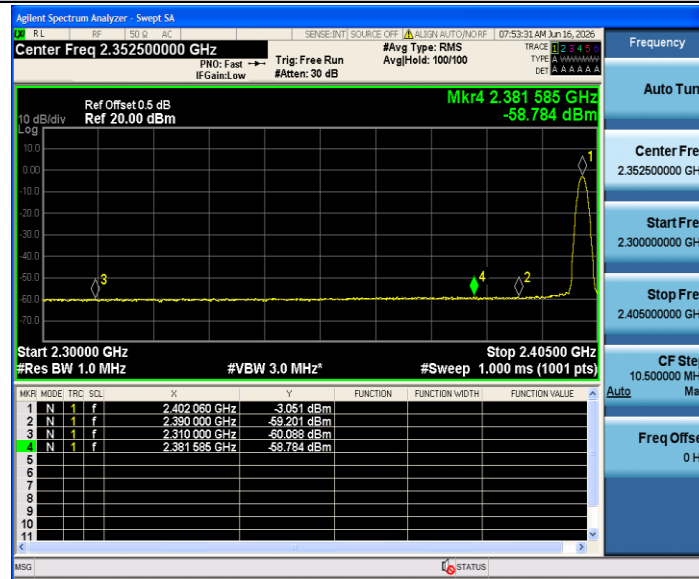
TestMode	Antenna	Channel	Freq(MHz)	Detector	Freq [MHz]	Result [dBm]	Gain [dB]	DC Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
BLE_1M	Ant1	Low	2402	AV	2310.000	-60.09	2.00	1.80	38.91	≤54	PASS
				AV	2381.585	-58.78	2.00	1.80	40.22	≤54	PASS
				AV	2390.000	-59.2	2.00	1.80	39.80	≤54	PASS
				Peak	2310.000	-51.62	2.00	0.00	45.58	≤74	PASS
				Peak	2376.020	-48.33	2.00	0.00	48.87	≤74	PASS
				Peak	2390.000	-51.33	2.00	0.00	45.87	≤74	PASS
		High	2480	AV	2483.500	-57.72	2.00	1.76	41.24	≤54	PASS
				AV	2483.840	-57.43	2.00	1.76	41.53	≤54	PASS
				AV	2500.000	-59.58	2.00	1.76	39.38	≤54	PASS
				Peak	2483.500	-50	2.00	0.00	47.20	≤74	PASS
				Peak	2485.680	-46.2	2.00	0.00	51.00	≤74	PASS
				Peak	2500.000	-52.8	2.00	0.00	44.40	≤74	PASS

Note:

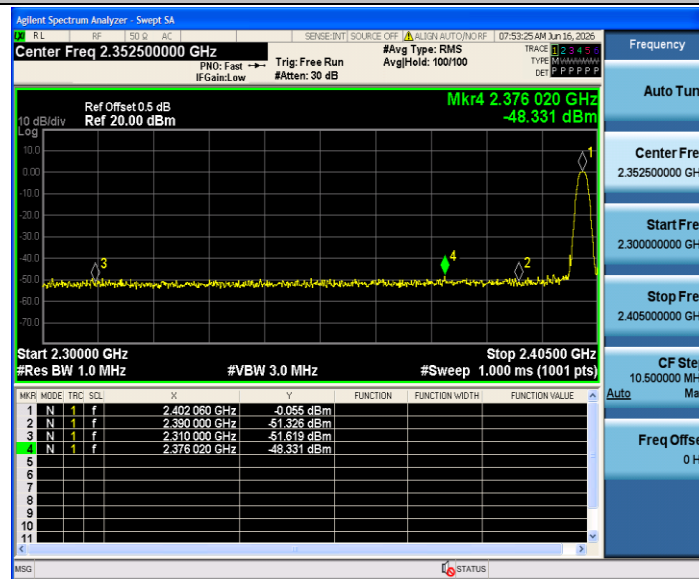
- The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

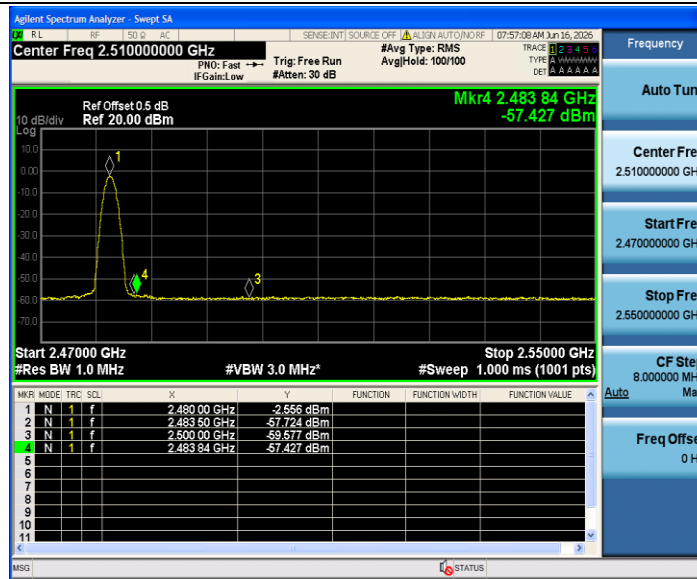
BLE_1M_Ant1_Low_2402_AV



BLE_1M_Ant1_Low_2402_Peak



BLE_1M_Ant1_High_2480_AV



BLE_1M_Ant1_High_2480_Peak

