



Appendix B

RF Test Data for BT LE (Conducted Measurement)

Product Name: HYbook
Test Model: HT14CCIC46EG

Environmental Conditions

Temperature:	23.8 °C
Relative Humidity:	52.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Nick Peng
Supervised by:	Ling Zhu





B.1 DTS Bandwidth

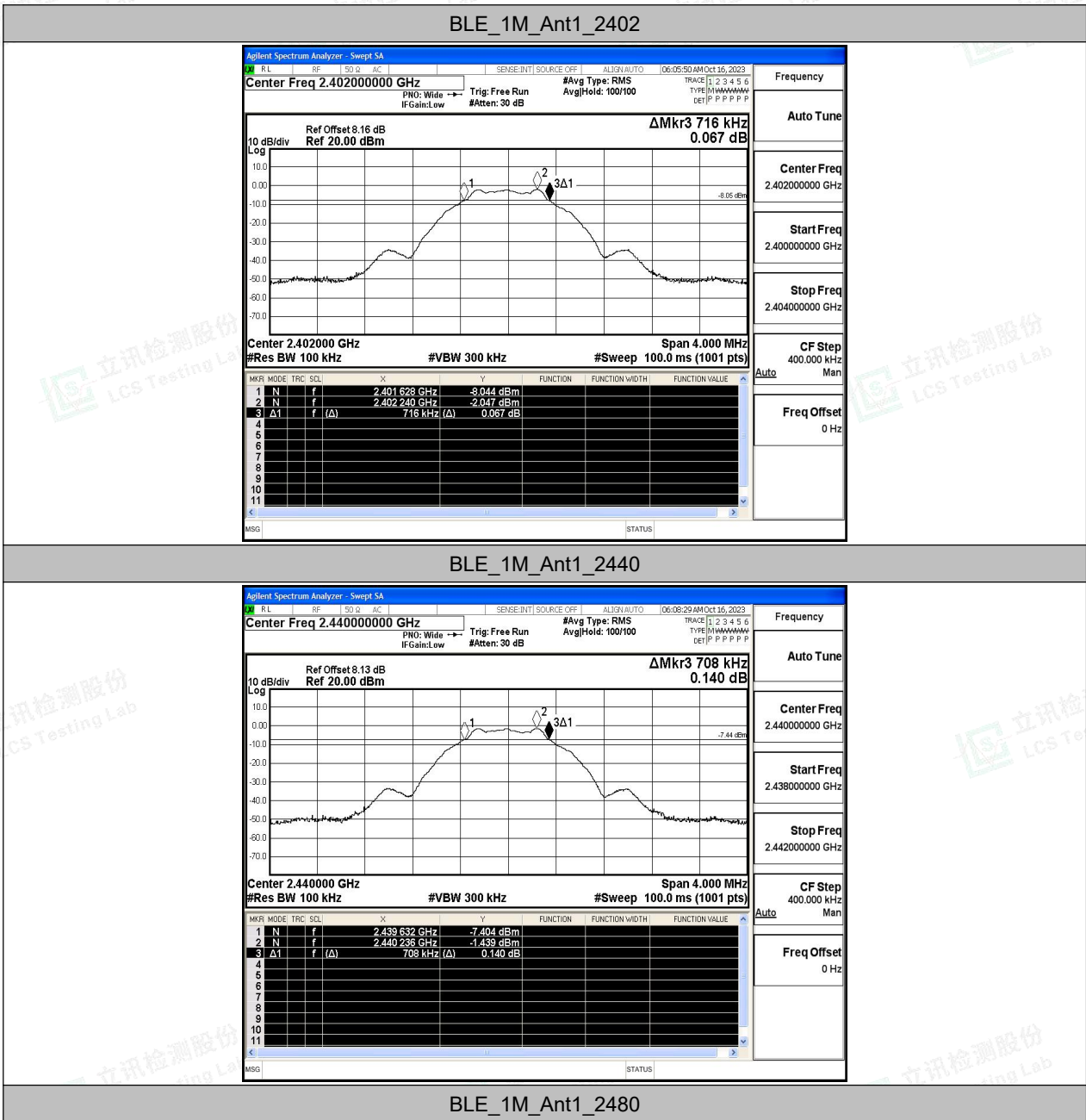
Test Result

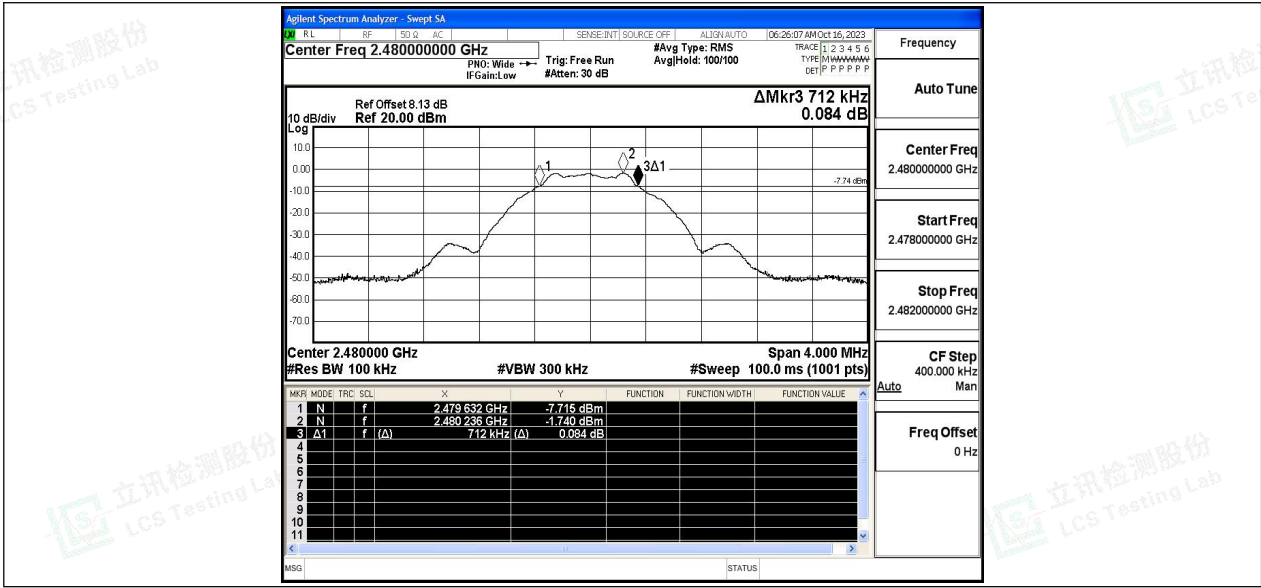
TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.716	2401.628	2402.344	0.5	PASS
		2440	0.708	2439.632	2440.340	0.5	PASS
		2480	0.712	2479.632	2480.344	0.5	PASS





Test Graphs







Appendix C: Maximum conducted output power

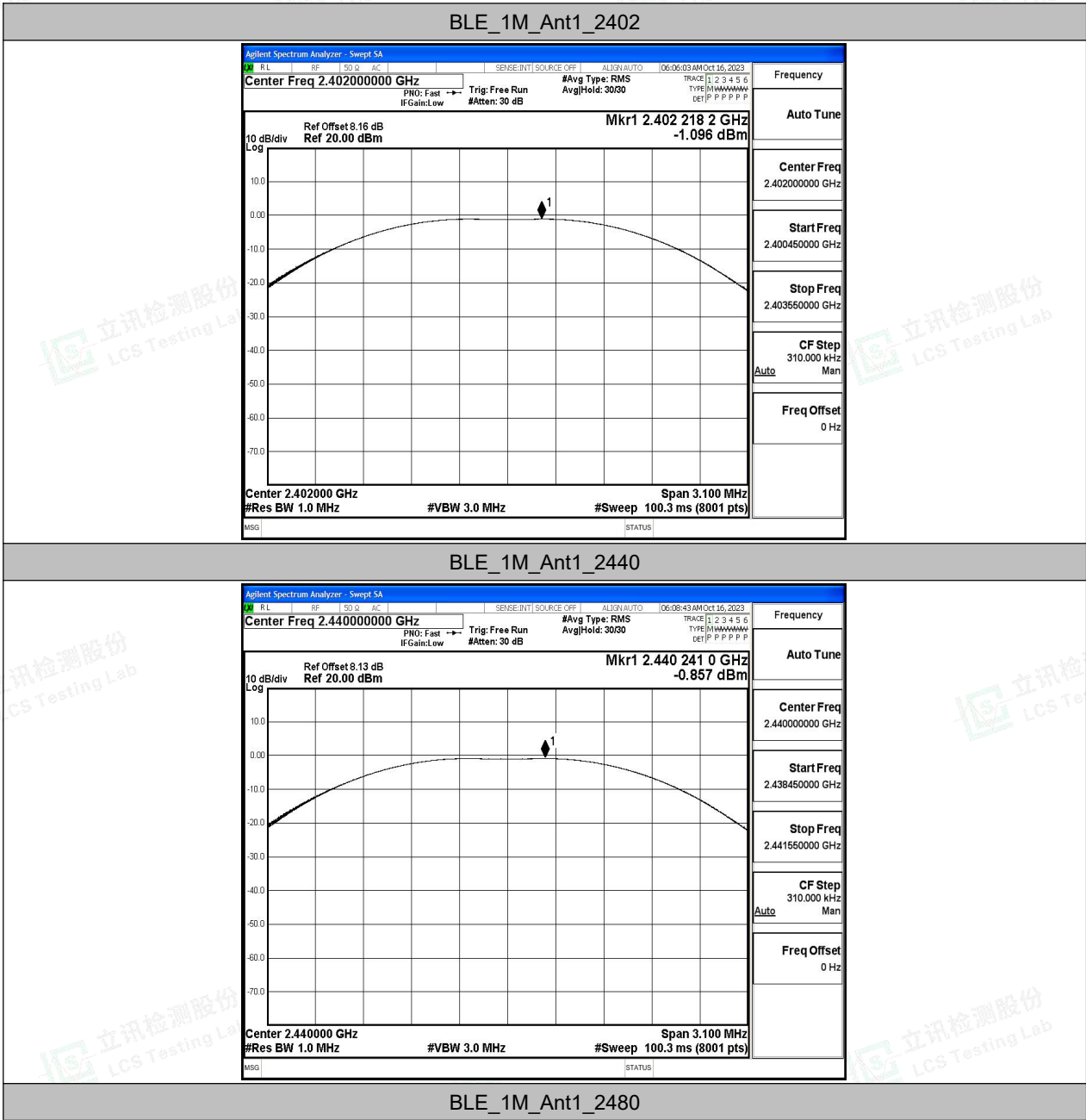
Test Result

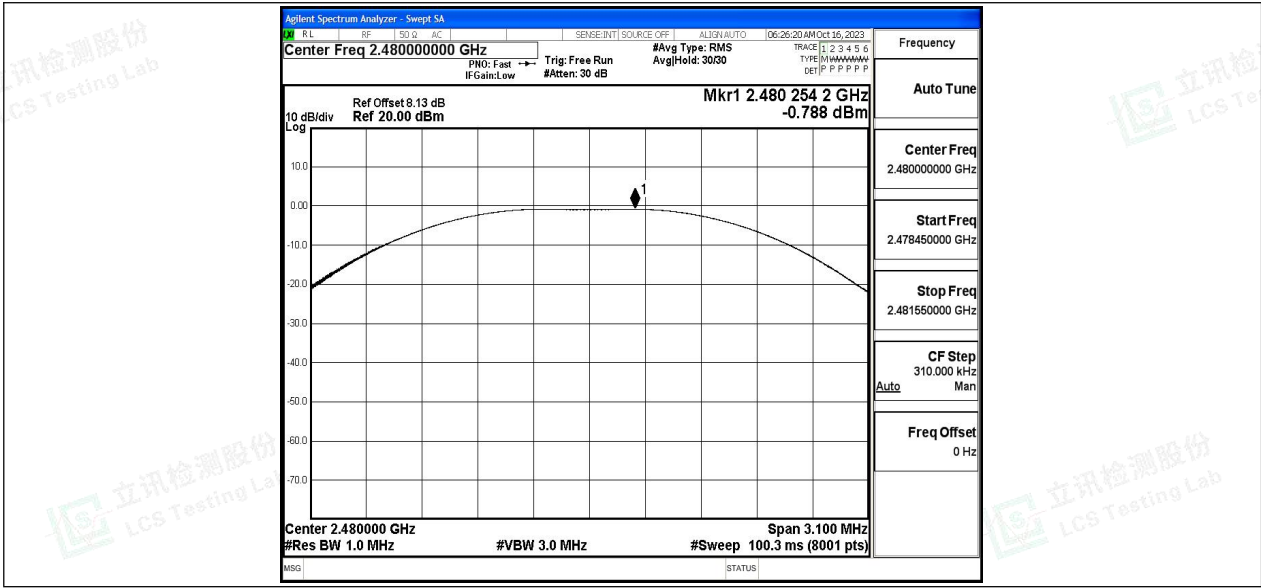
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	-1.1	≤30	PASS
		2440	-0.86	≤30	PASS
		2480	-0.79	≤30	PASS





Test Graphs







B.3 Maximum power spectral density

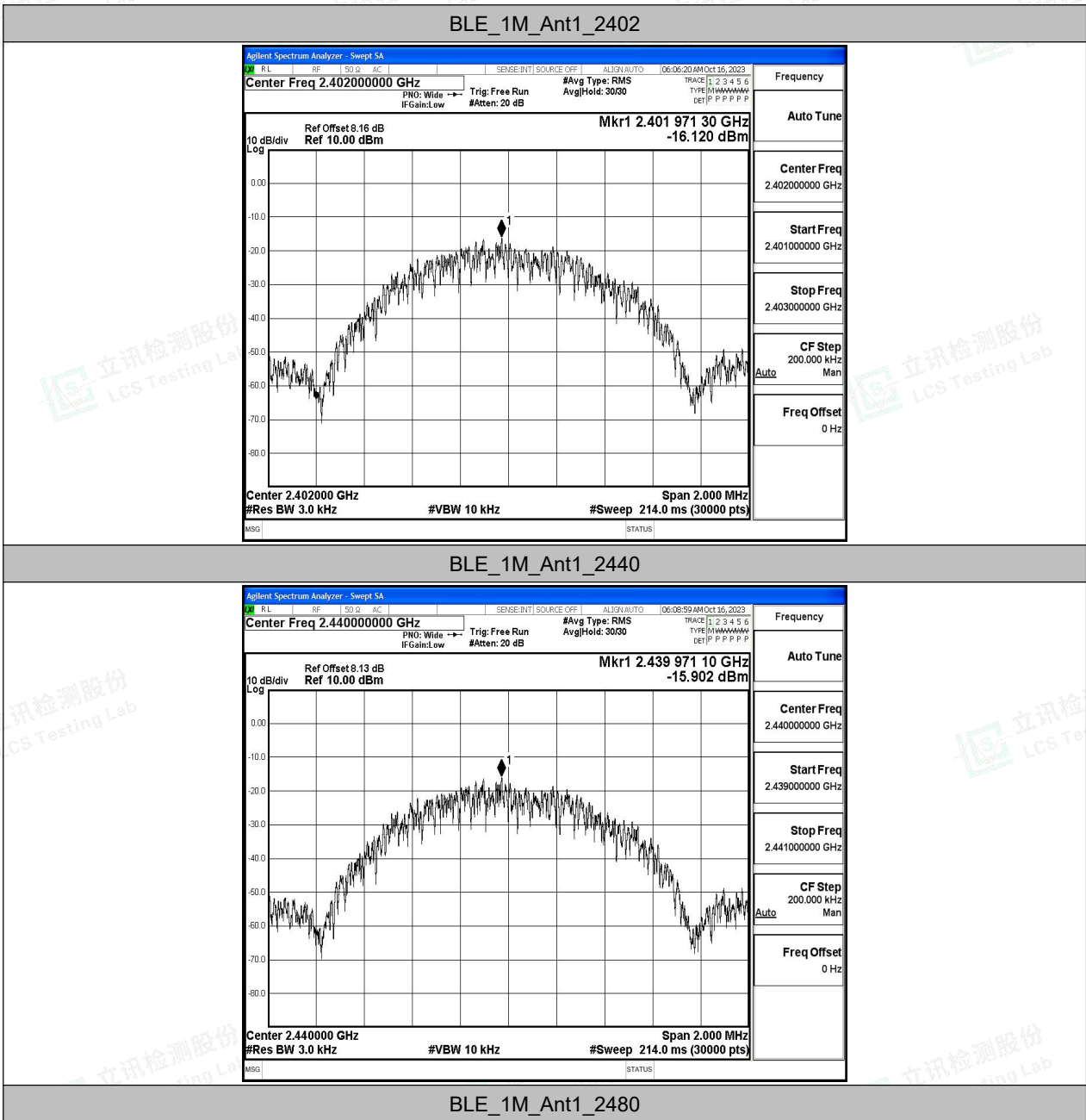
Test Result

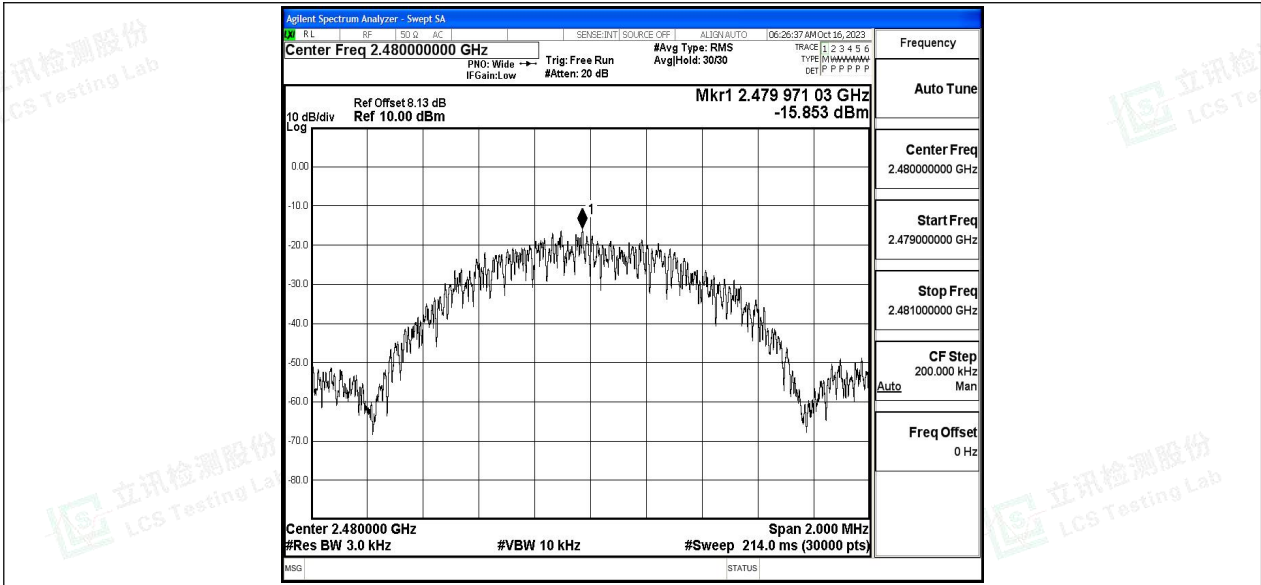
TestMode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-16.12	≤8.00	PASS
		2440	-15.9	≤8.00	PASS
		2480	-15.85	≤8.00	PASS





Test Graphs







B.4 Band edge measurements

Test Result

TestMode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-1.77	-60.35	≤-21.77	PASS
		High	2480	-1.60	-59.79	≤-21.6	PASS





Test Graphs





B.5 Conducted Spurious Emission

Test Result

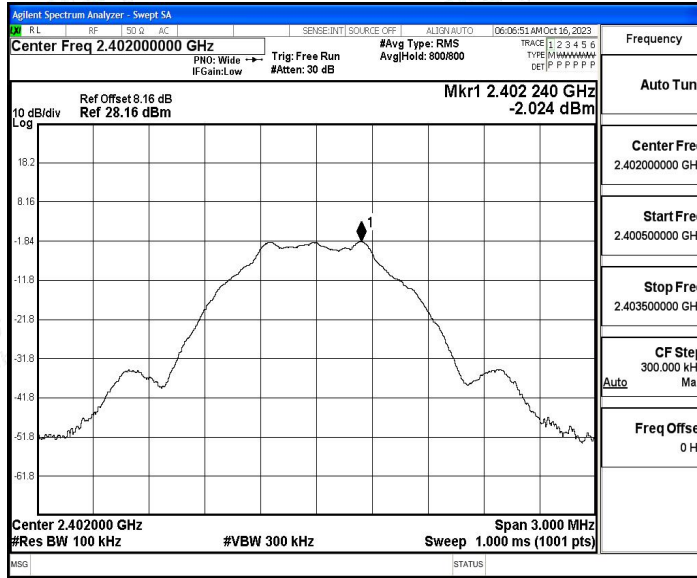
TestMode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-2.02	-2.02	---	PASS
			30~1000	-2.02	-61.09	≤-22.02	PASS
			1000~26500	-2.02	-49.17	≤-22.02	PASS
		2440	Reference	-1.80	-1.80	---	PASS
			30~1000	-1.80	-61.32	≤-21.8	PASS
			1000~26500	-1.80	-48.85	≤-21.8	PASS
		2480	Reference	-1.72	-1.72	---	PASS
			30~1000	-1.72	-61.28	≤-21.72	PASS
			1000~26500	-1.72	-47.57	≤-21.72	PASS



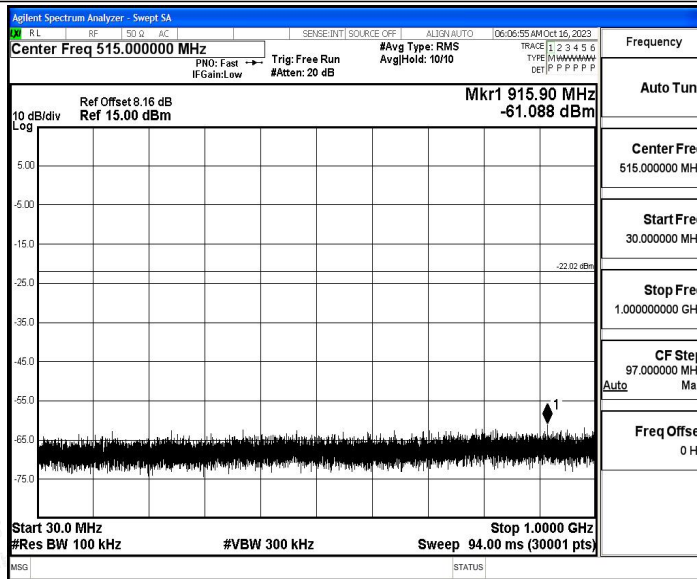


Test Graphs

BLE_1M_Ant1_2402_0~Reference

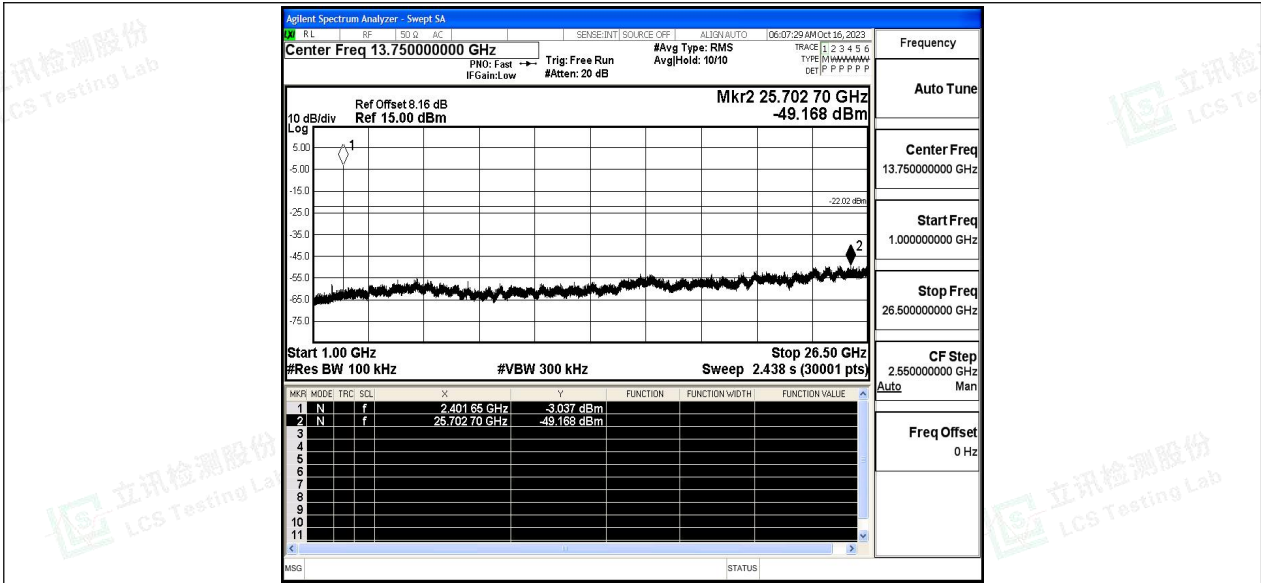


BLE_1M_Ant1_2402_30~1000

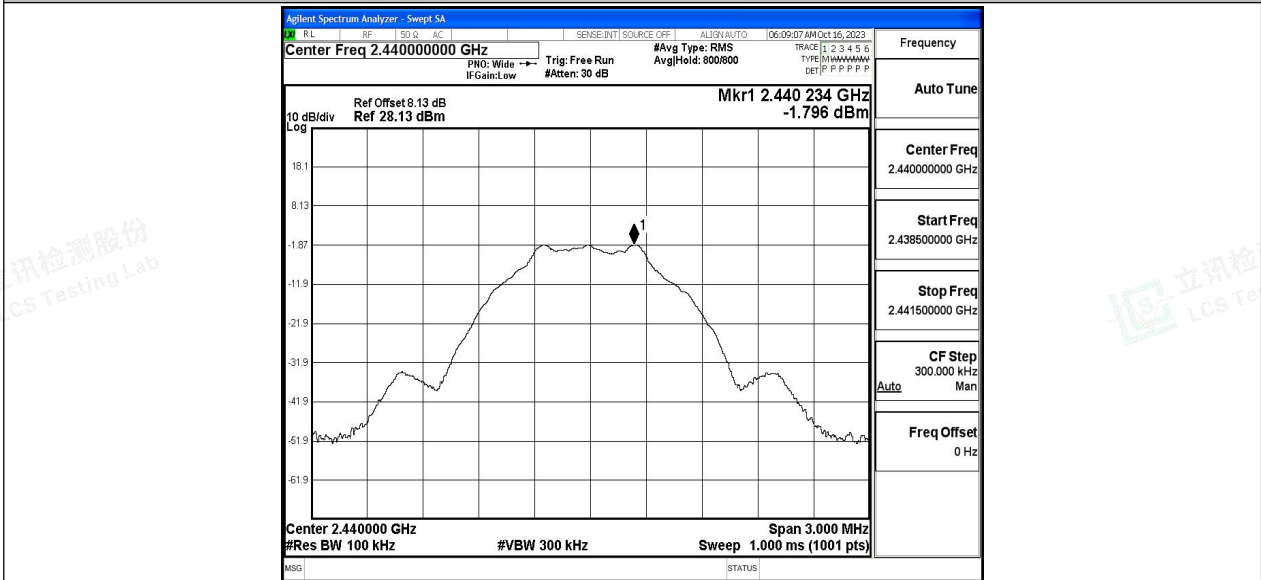


BLE_1M_Ant1_2402_1000~26500



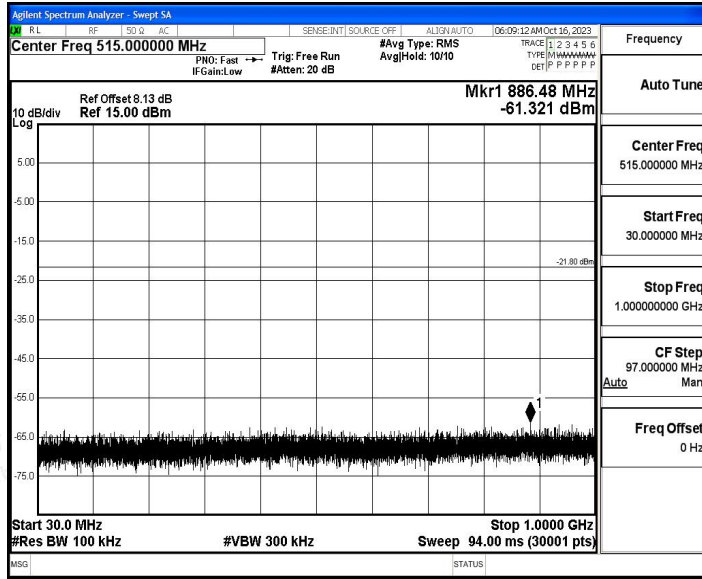


BLE_1M_Ant1_2440_0~Reference

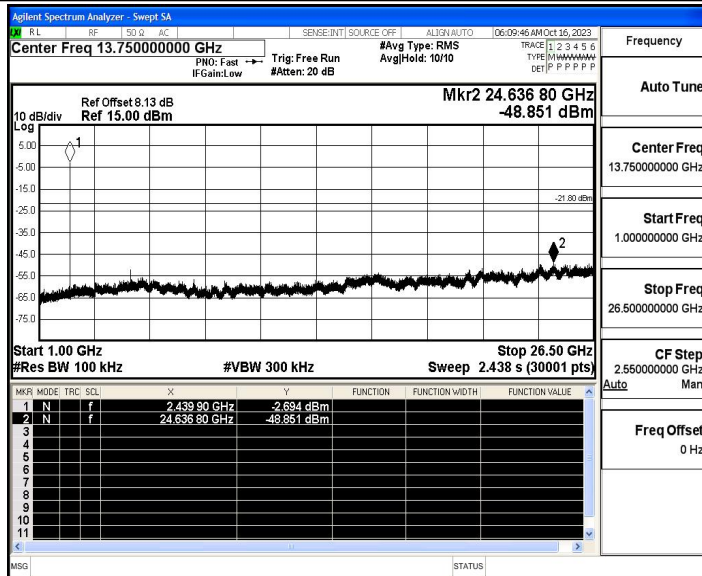


BLE_1M_Ant1_2440_30~1000



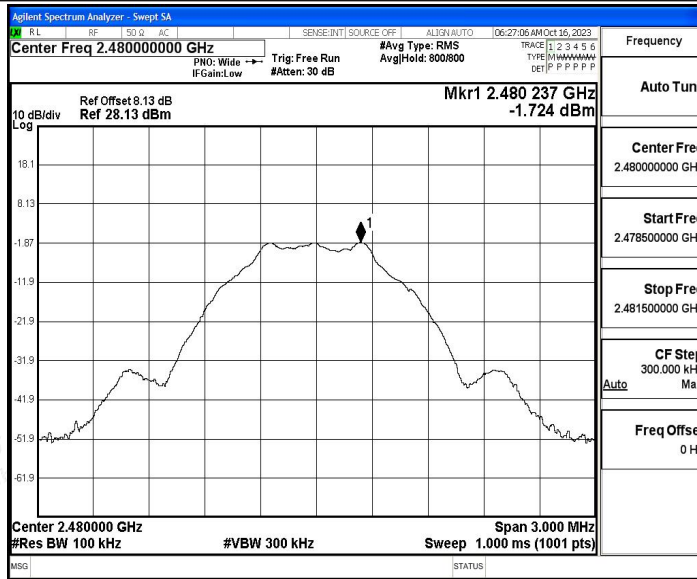


BLE_1M_Ant1_2440_1000~26500

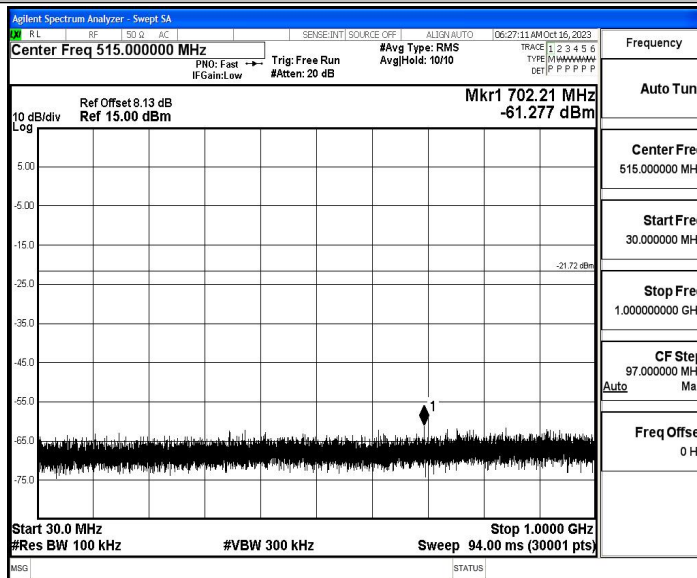


BLE_1M_Ant1_2480_0~Reference



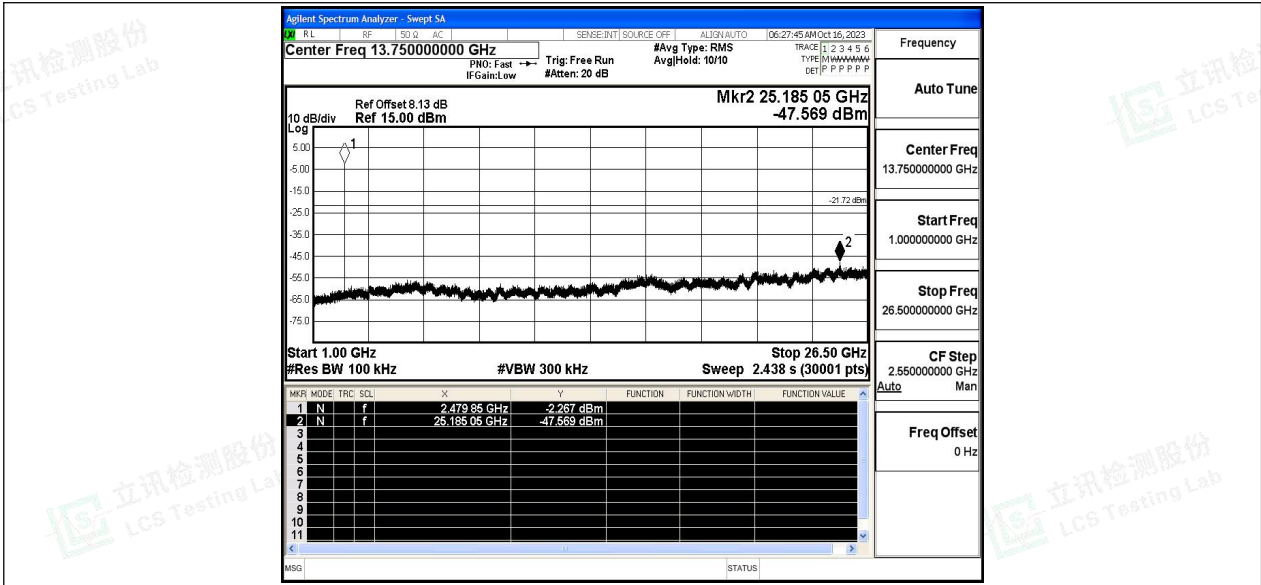


BLE_1M_Ant1_2480_30~1000



BLE_1M_Ant1_2480_1000~26500







B.6 Duty Cycle

Test Result

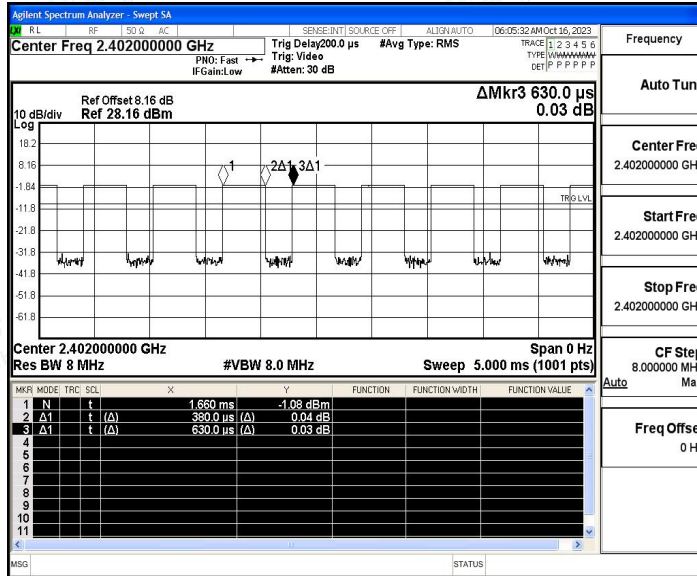
TestMode	Antenna	Frequency[MHz]	ON Time [ms]	Period [ms]	Duty Cycle [%]	Duty Cycle Factor[dB]	1/T Factor[dB]
BLE_1M	Ant1	2402	0.38	0.63	60.32	2.20	2.63
		2440	0.38	0.63	60.32	2.20	2.63
		2480	0.38	0.63	60.32	2.20	2.63



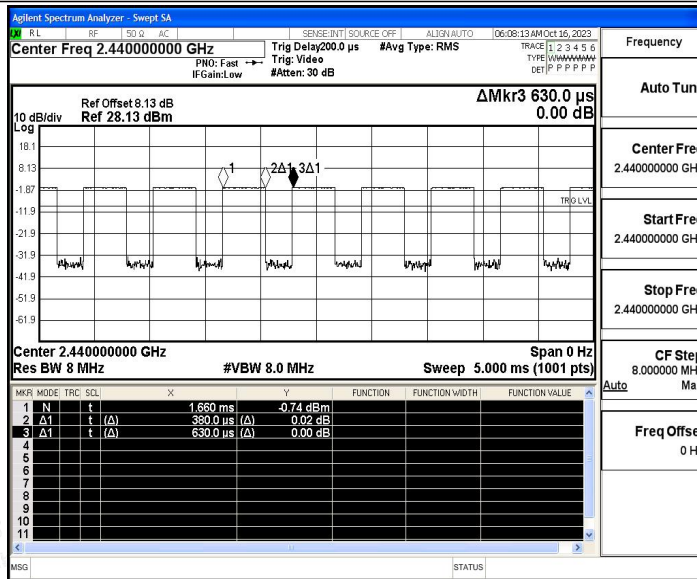


Test Graphs

BLE_1M_Ant1_2402

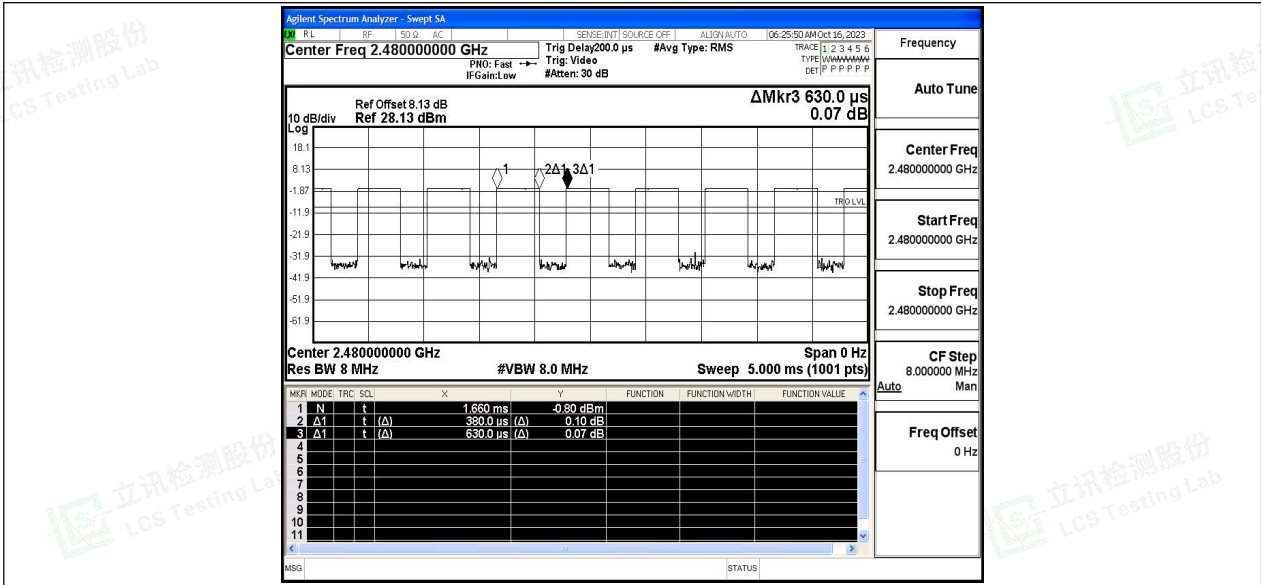


BLE_1M_Ant1_2440



BLE_1M_Ant1_2480







B.7 Emissions in Restricted Bands

Test Result

TestMode	Antenna	Channel Name	Frequency [MHz]	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
BLE_1M	Ant1	Low	2402	AV	2310.000	-58.51	≤-41.20	36.69	≤54	PASS
				AV	2343.785	-57.55	≤-41.20	37.65	≤54	PASS
				AV	2390.000	-58.19	≤-41.20	37.01	≤54	PASS
				Peak	2310.000	-51.71	≤-21.20	43.49	≤74	PASS
				Peak	2349.140	-49.17	≤-21.20	46.03	≤74	PASS
				Peak	2390.000	-51.75	≤-21.20	43.45	≤74	PASS
		High	2480	AV	2483.500	-54.44	≤-41.20	40.76	≤54	PASS
				AV	2483.520	-54.44	≤-41.20	40.76	≤54	PASS
				AV	2500.000	-57.88	≤-41.20	37.32	≤54	PASS
				Peak	2483.500	-52.74	≤-21.20	42.46	≤74	PASS
				Peak	2495.840	-49.32	≤-21.20	45.88	≤74	PASS
				Peak	2500.000	-50.87	≤-21.20	44.33	≤74	PASS

Note:

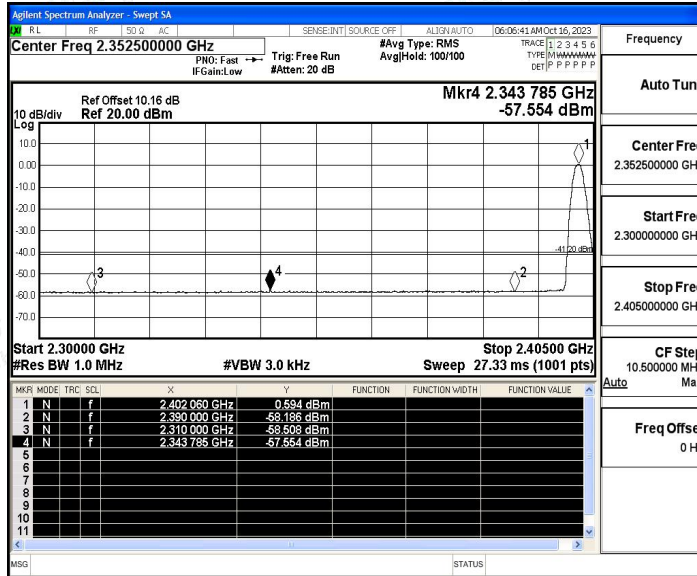
- The Antenna Gain is compensated in the graph.
- The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.



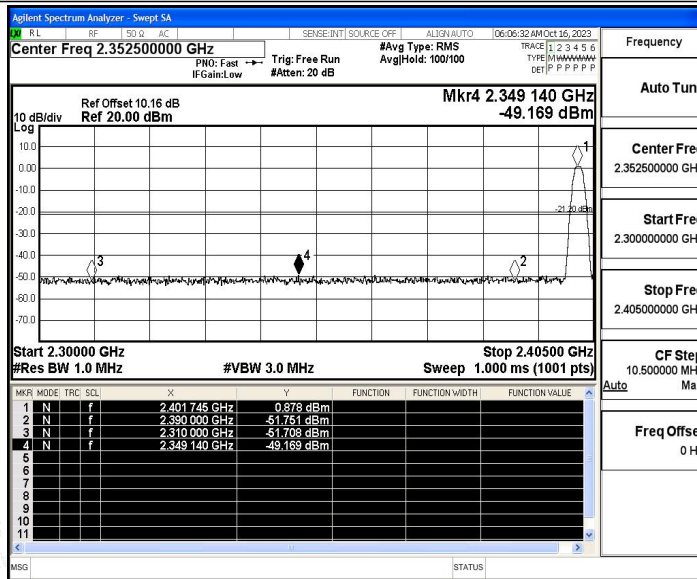


Test Graphs

BLE_1M_Ant1_Low_2402_AV

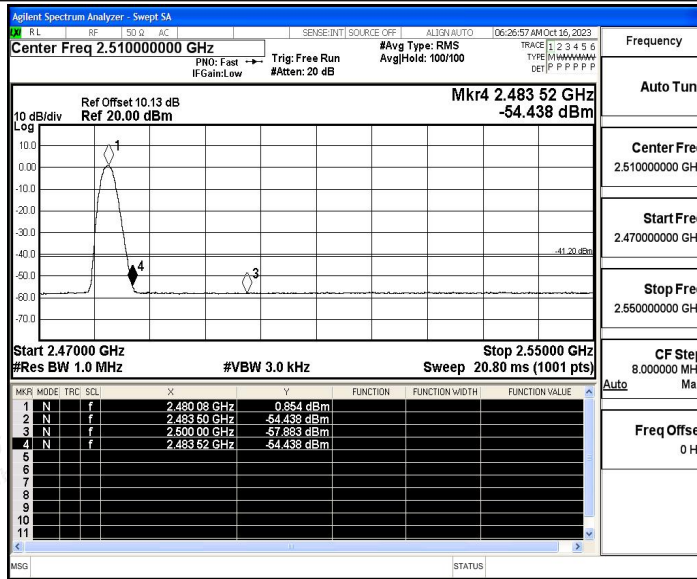


BLE_1M_Ant1_Low_2402_Peak



BLE_1M_Ant1_High_2480_AV





BLE_1M_Ant1_High_2480_Peak

