



Appendix A

RF Test Data for BT LE (Conducted Measurement)

Product Name: Camera

Test Model: NHC01

Environmental Conditions

Temperature:	23.8 °C
Relative Humidity:	52.2%
ATM Pressure:	100.0 kPa
Test Engineer:	<i>monkey.Li</i> Monkey Li
Supervised by:	<i>LiHuan</i> Li Huan





A.1 DTS Bandwidth

Test Result

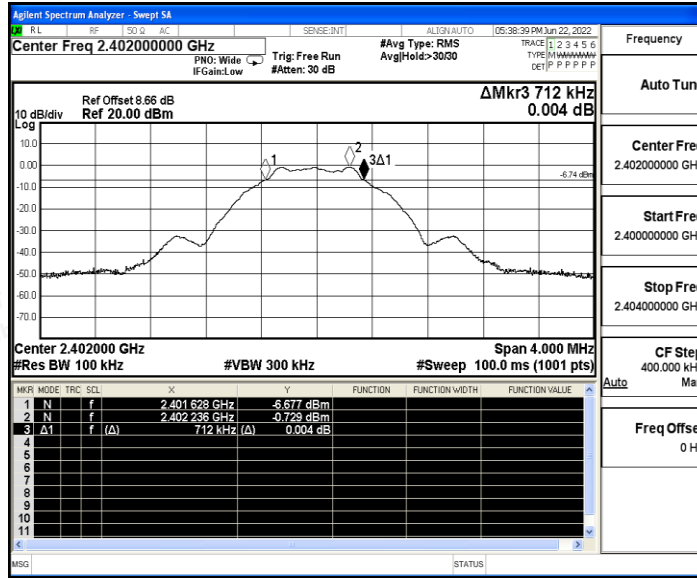
TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.712	2401.628	2402.340	0.5	PASS
		2440	0.712	2439.628	2440.340	0.5	PASS
		2480	0.712	2479.632	2480.344	0.5	PASS



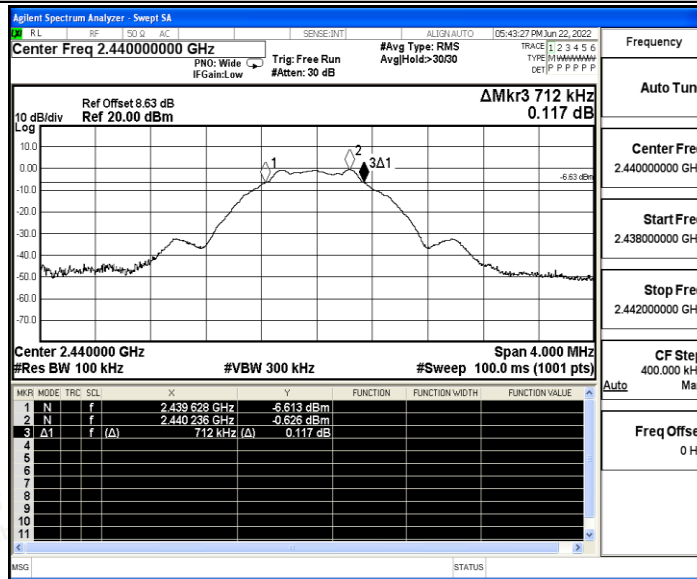


Test Graphs

BLE_1M_Ant1_2402

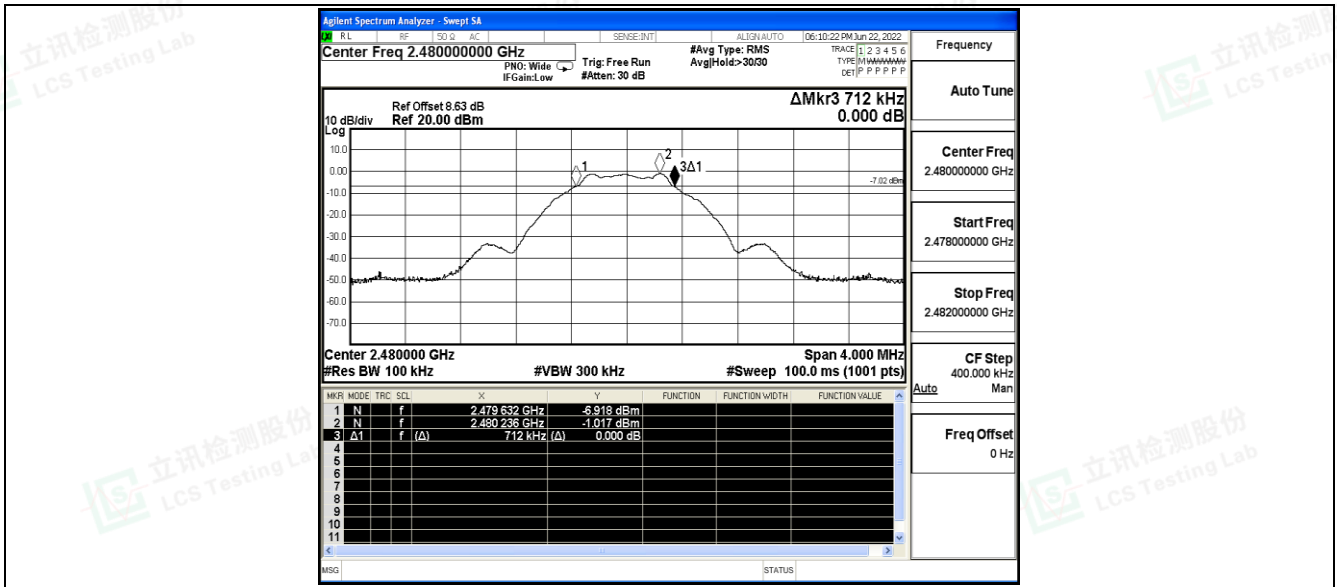


BLE_1M_Ant1_2440



BLE_1M_Ant1_2480







A.2 Maximum peak conducted output power

Test Result

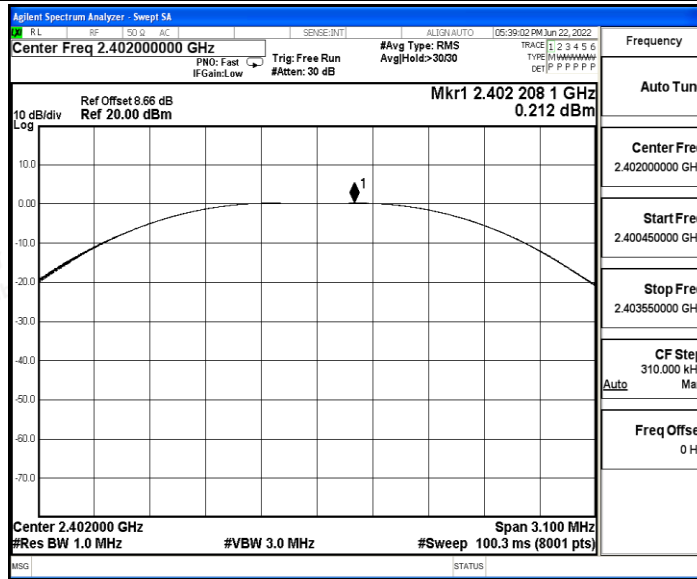
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	0.21	≤30	PASS
		2440	0.33	≤30	PASS
		2480	-0.06	≤30	PASS



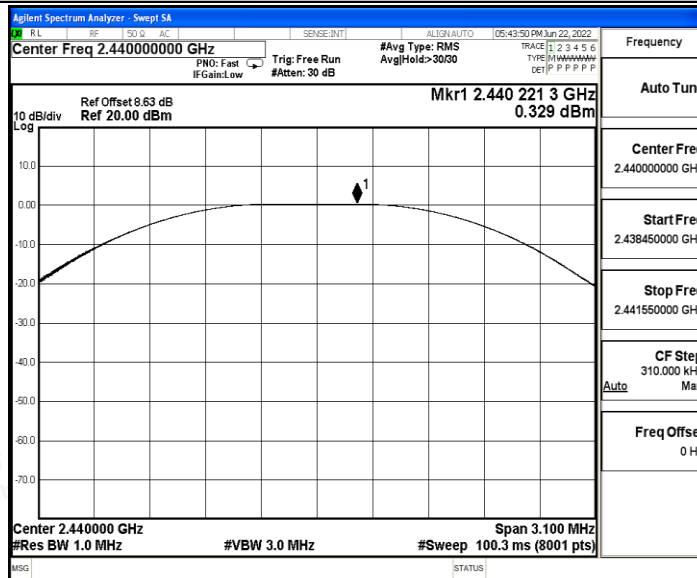


Test Graphs

BLE_1M_Ant1_2402

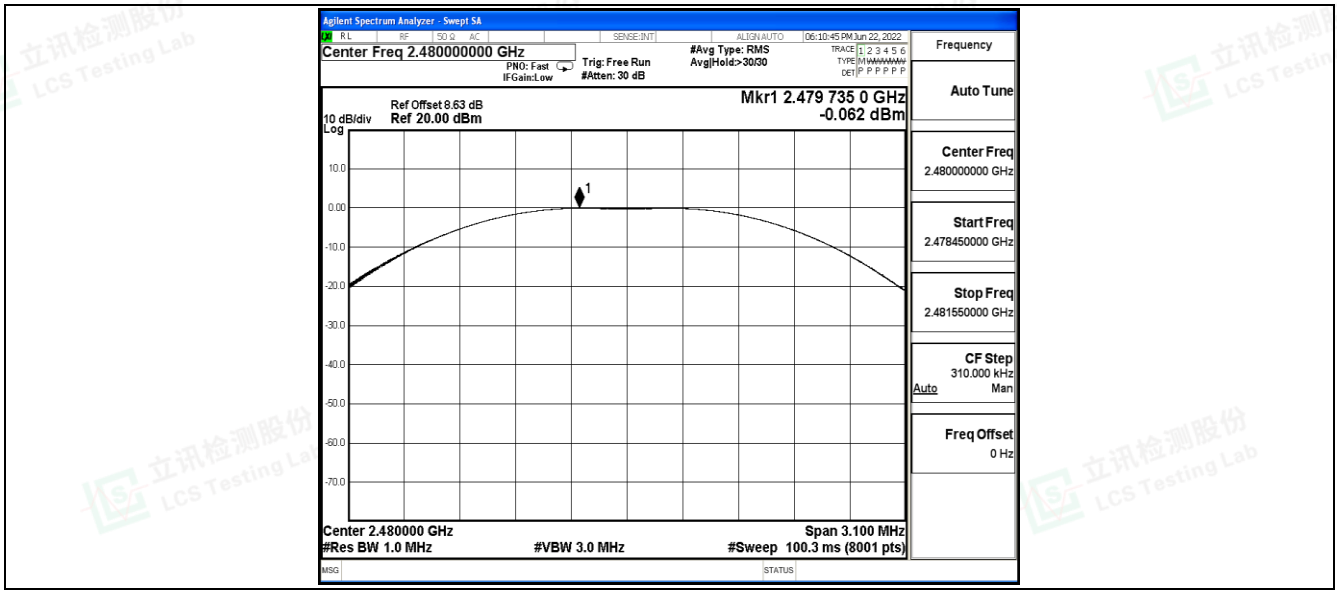


BLE_1M_Ant1_2440



BLE_1M_Ant1_2480







A.3 Maximum power spectral density

Test Result

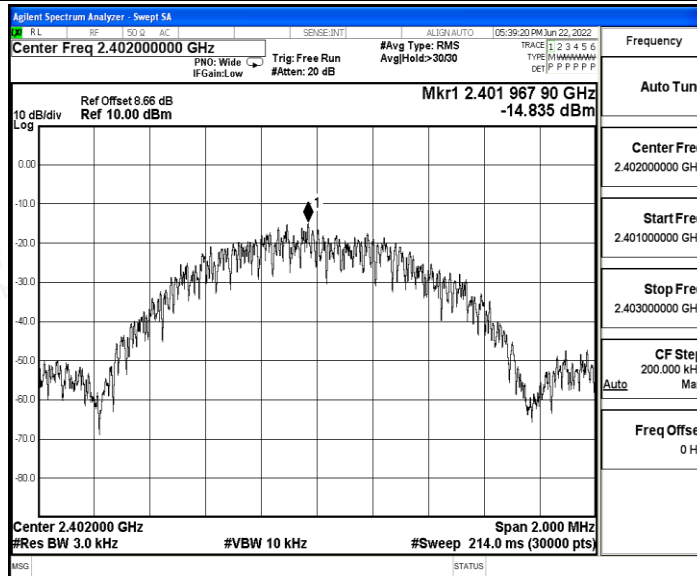
TestMode	Antenna	Channel	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-14.84	≤8.00	PASS
		2440	-14.79	≤8.00	PASS
		2480	-15.16	≤8.00	PASS



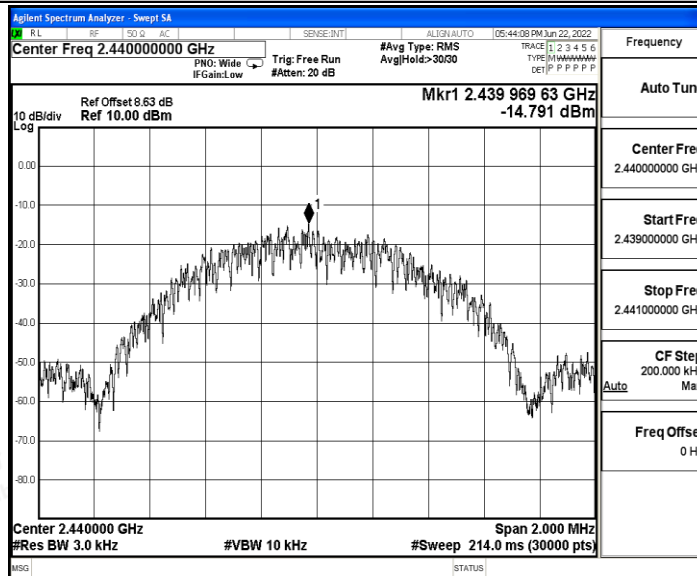


Test Graphs

BLE_1M_Ant1_2402

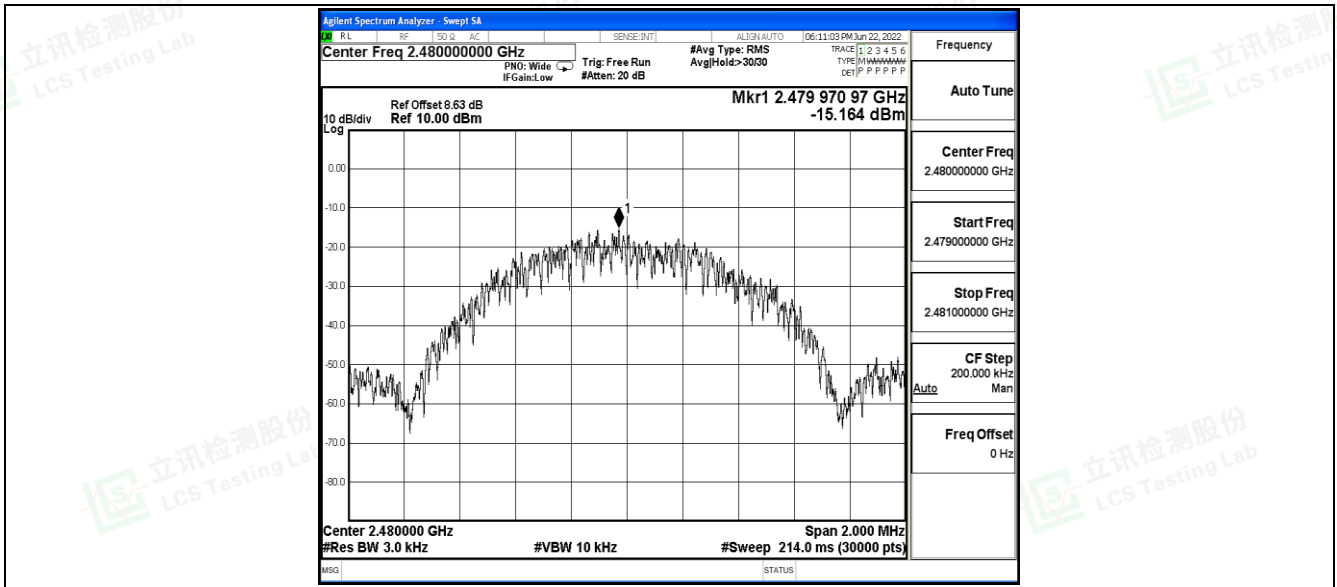


BLE_1M_Ant1_2440



BLE_1M_Ant1_2480







A.4 Band edge measurements

Test Result

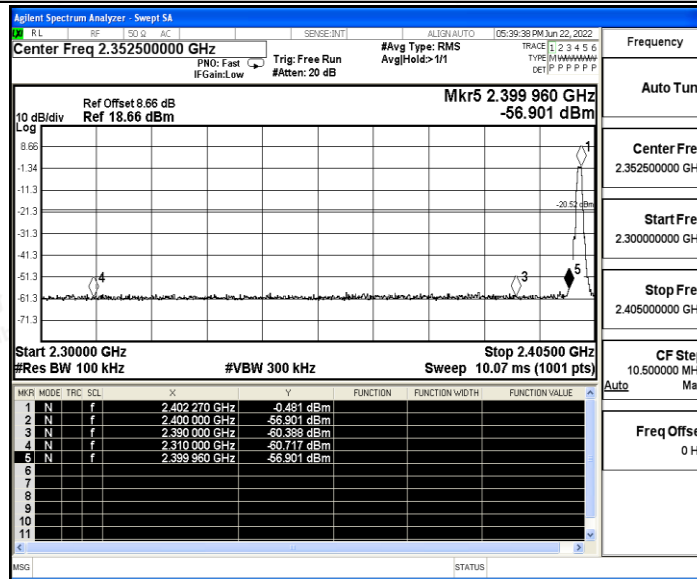
TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-0.52	-56.9	≤-20.52	PASS
		High	2480	-0.79	-57.24	≤-20.79	PASS



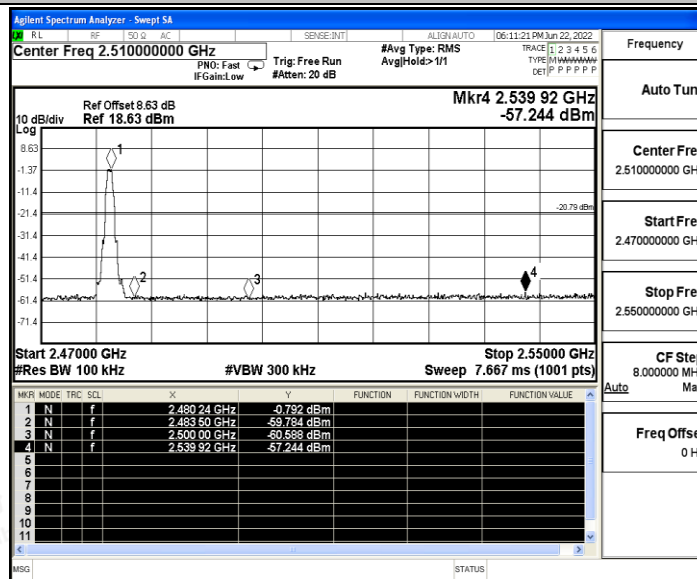


Test Graphs

BLE_1M_Ant1_Low_2402



BLE_1M_Ant1_High_2480





A.5 Conducted Spurious Emission

Test Result

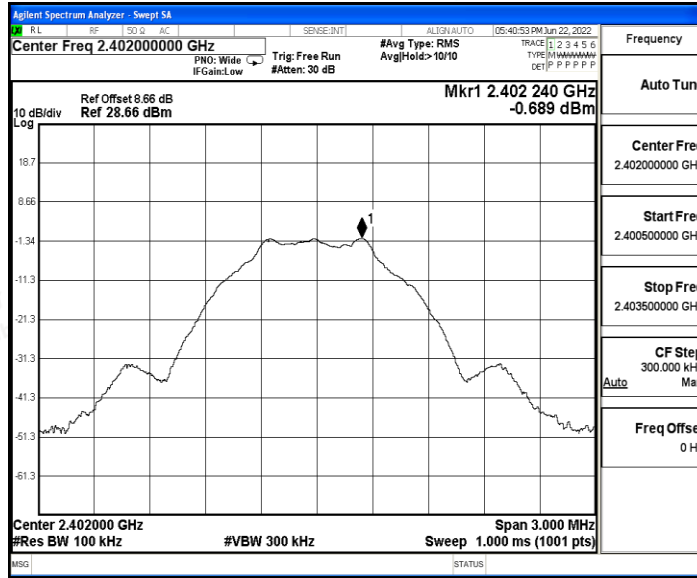
TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-0.69	-0.69	---	PASS
			30~1000	-0.69	-60.67	≤-20.69	PASS
			1000~26500	-0.69	-45.73	≤-20.69	PASS
		2440	Reference	-0.61	-0.61	---	PASS
			30~1000	-0.61	-60.85	≤-20.61	PASS
			1000~26500	-0.61	-46.25	≤-20.61	PASS
		2480	Reference	-0.99	-0.99	---	PASS
			30~1000	-0.99	-60.58	≤-20.99	PASS
			1000~26500	-0.99	-45.75	≤-20.99	PASS



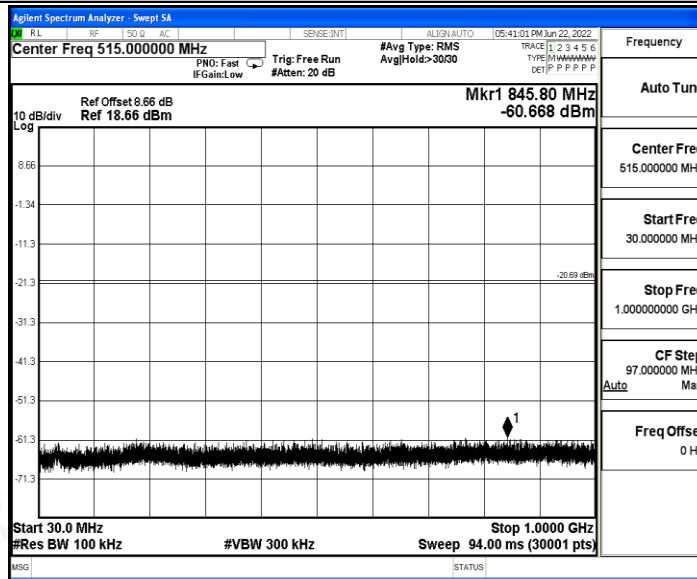


Test Graphs

BLE_1M_Ant1_2402_0~Reference

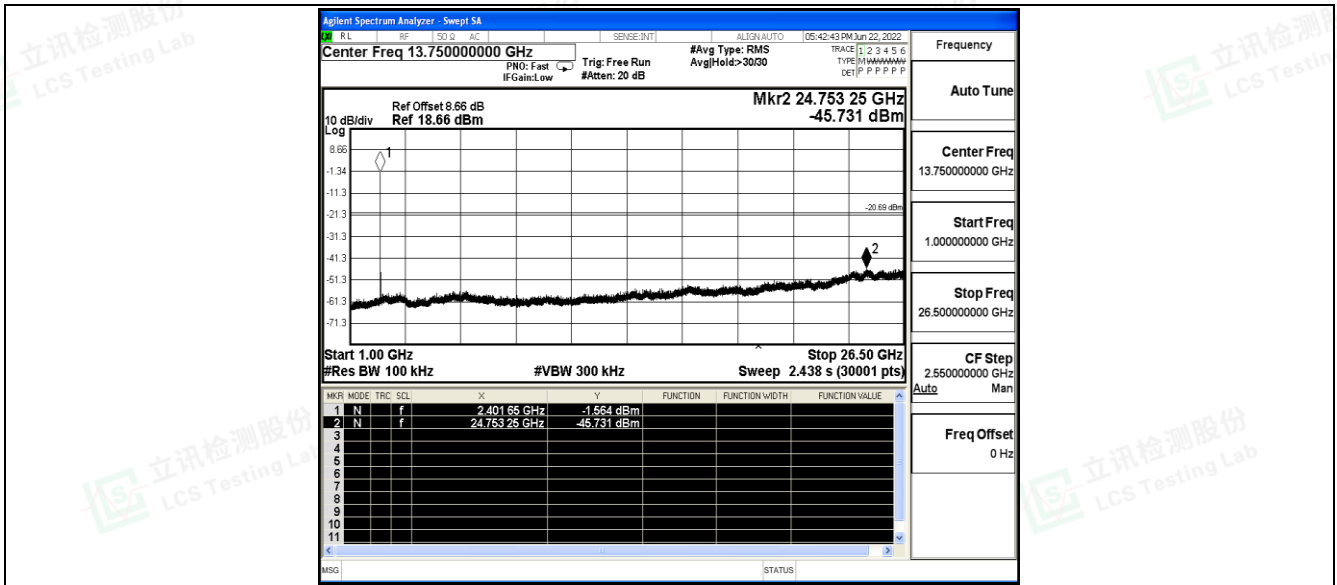


BLE_1M_Ant1_2402_30~1000

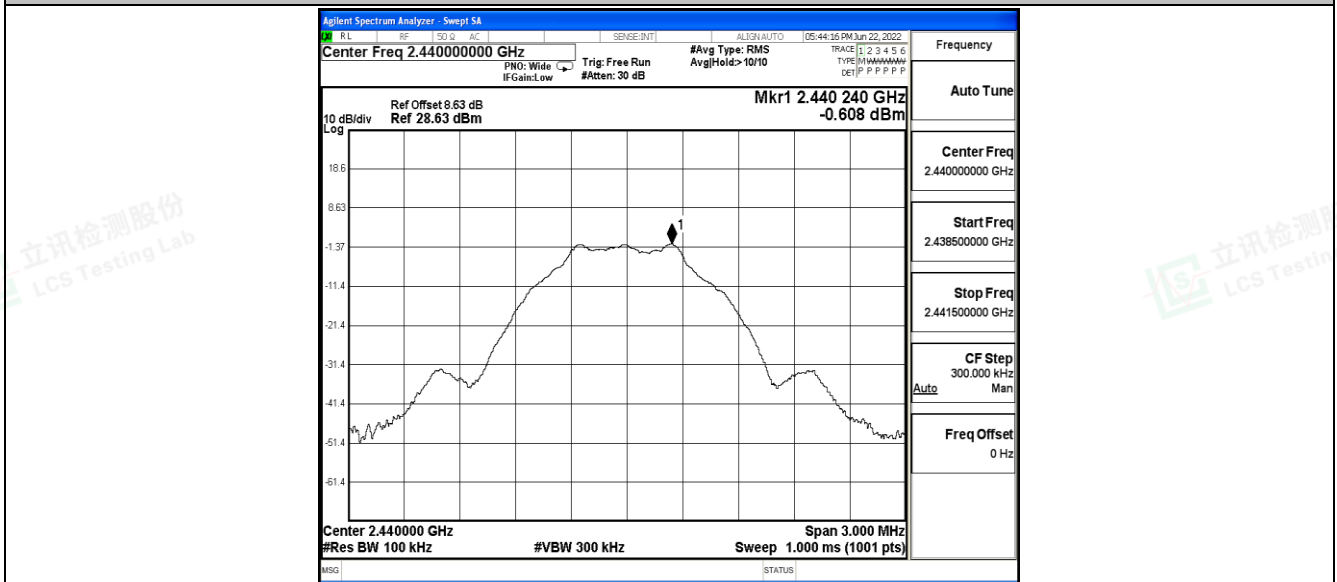


BLE_1M_Ant1_2402_1000~26500



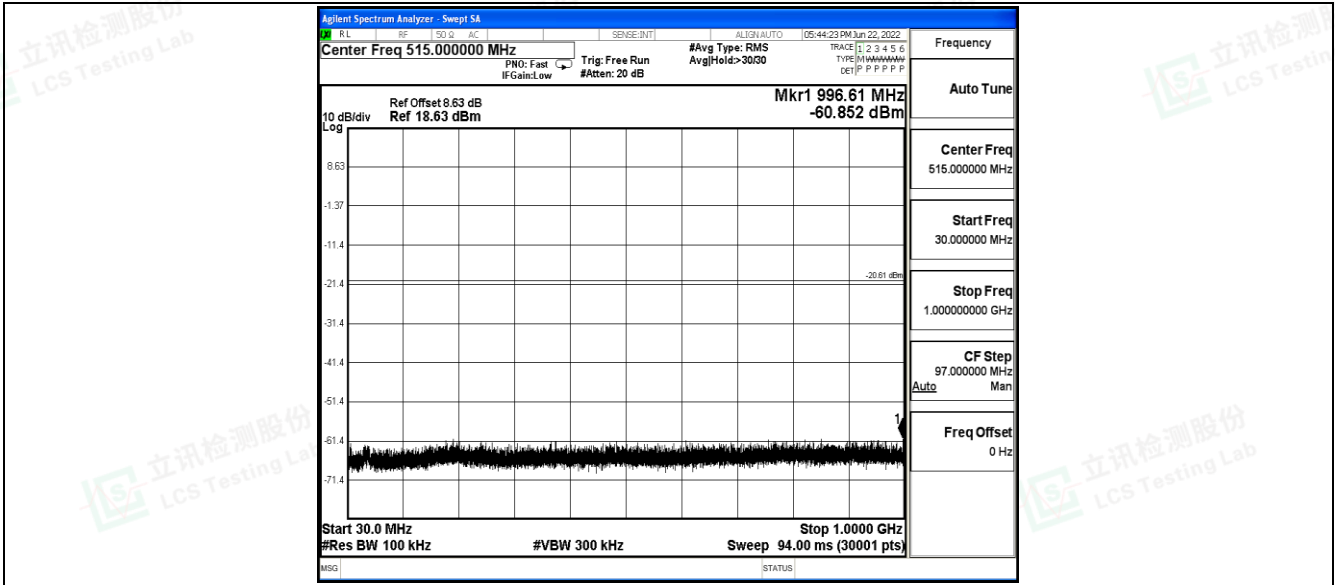


BLE_1M_Ant1_2440_0~Reference

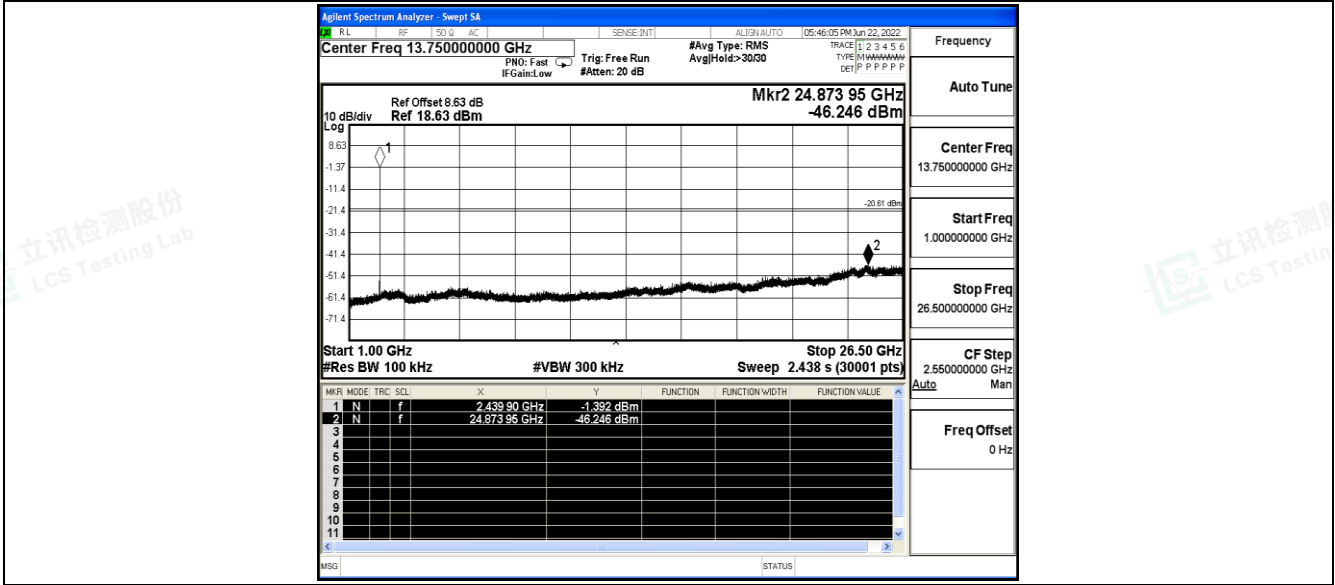


BLE_1M_Ant1_2440_30~1000



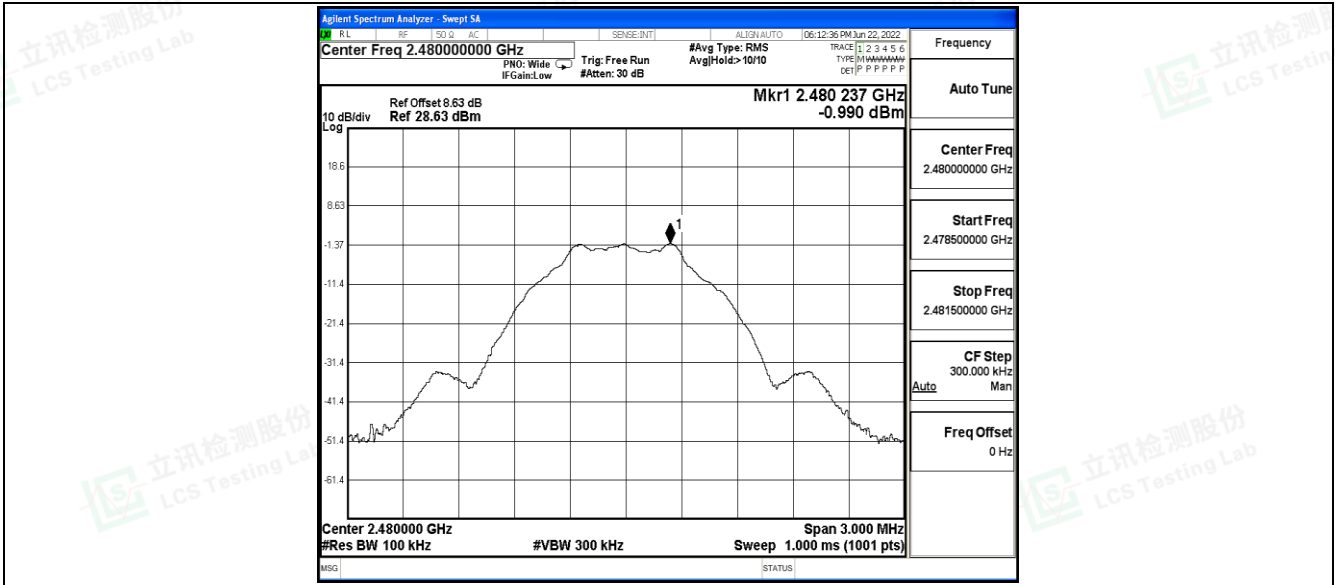


BLE_1M_Ant1_2440_1000~26500

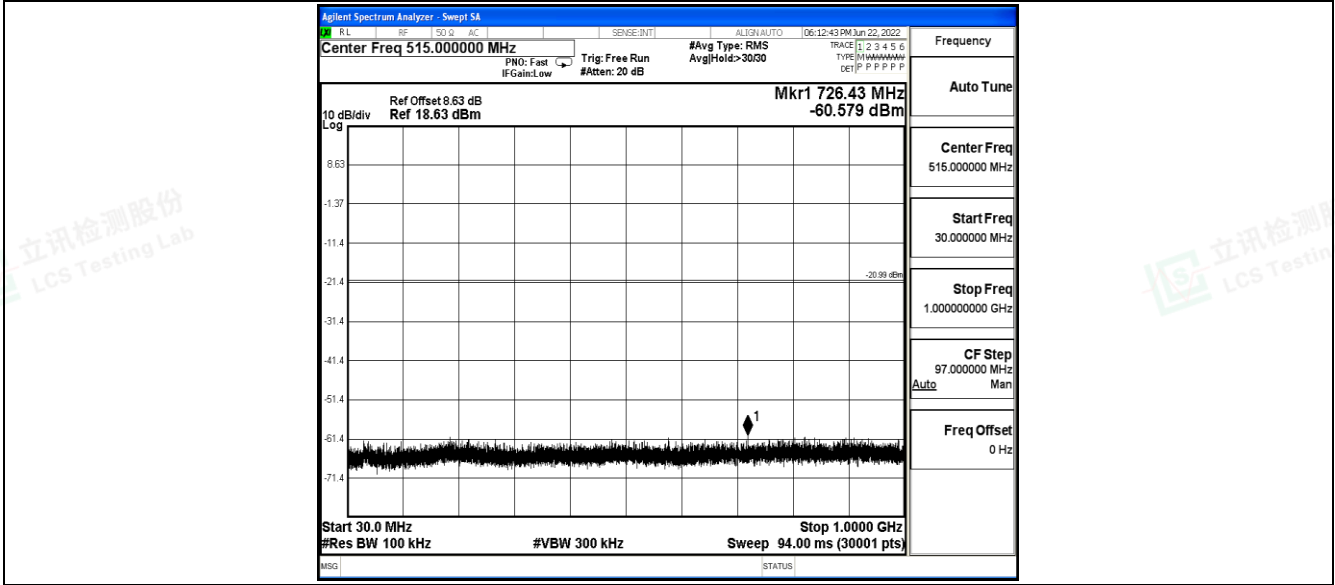


BLE_1M_Ant1_2480_0~Reference



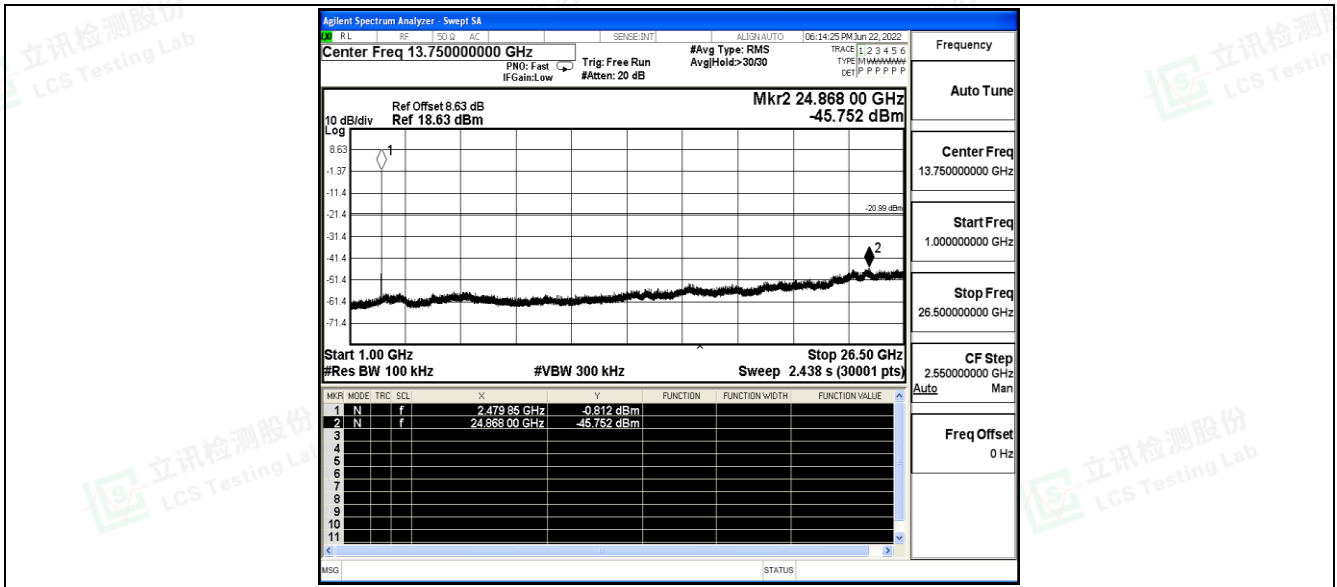


BLE_1M_Ant1_2480_30~1000



BLE_1M_Ant1_2480_1000~26500







A.6 Duty Cycle

Test Result

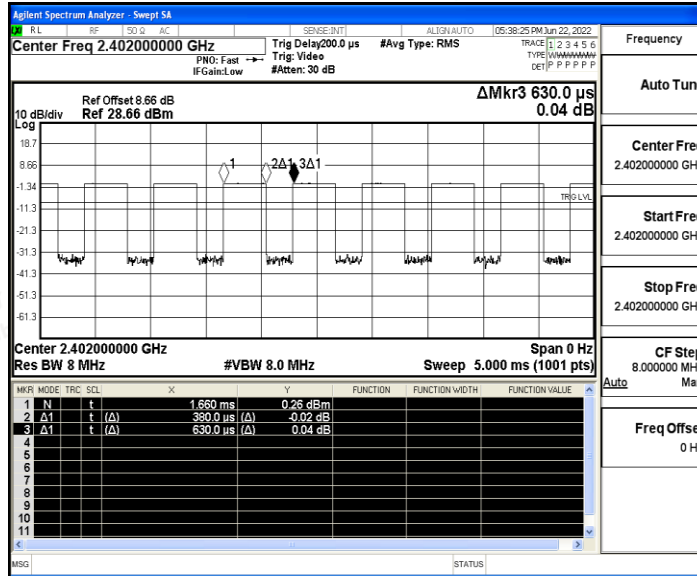
TestMode	Antenna	Channel	ON Time [ms]	Period [ms]	X	DC [%]	xFactor	1/T	Limit	Verdict
BLE_1M	Ant1	2402	0.38	0.63	0.6032	60.32	2.20	2.63	---	---
		2440	0.38	0.63	0.6032	60.32	2.20	2.63	---	---
		2480	0.38	0.62	0.6129	61.29	2.13	2.63	---	---



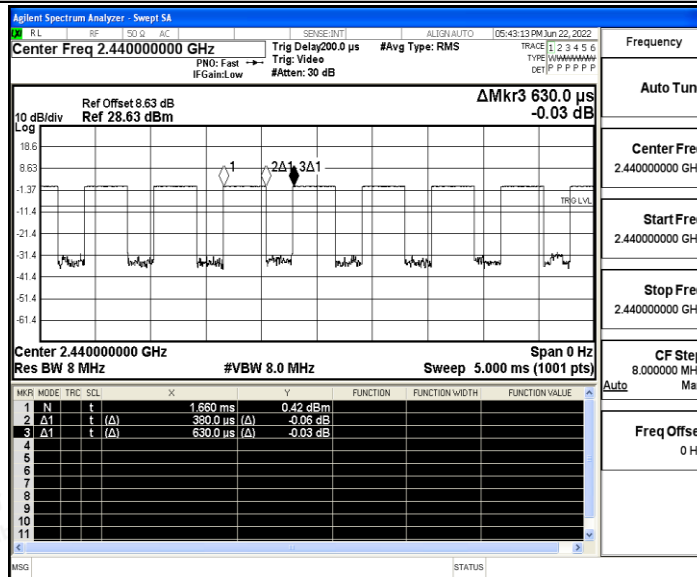


Test Graphs

BLE_1M_Ant1_2402

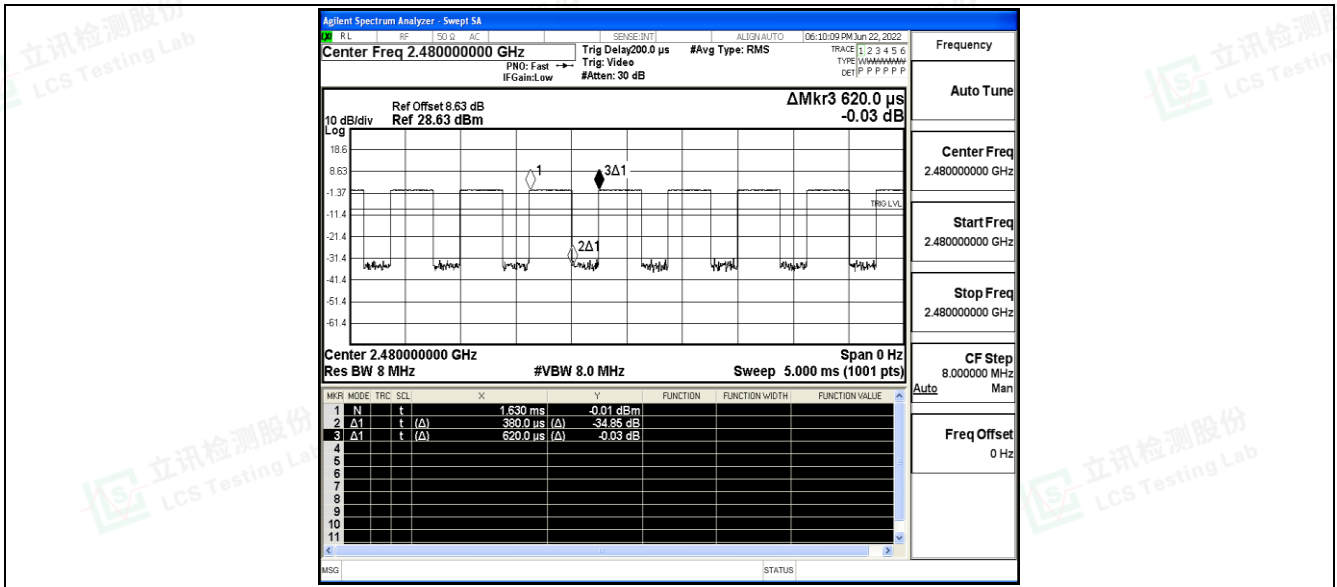


BLE_1M_Ant1_2440



BLE_1M_Ant1_2480







A.7 Emissions in Restricted Bands

Test Result

TestMode	Antenna	ChName	Channel	Detector	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
BLE_1M	Ant1	Low	2402	AV	2310.000	-57.15	≤-41.20	38.05	≤54	PASS
				AV	2377.910	-56.41	≤-41.20	38.79	≤54	PASS
				AV	2390.000	-56.79	≤-41.20	38.41	≤54	PASS
				Peak	2310.000	-48.46	≤-21.20	46.74	≤74	PASS
				Peak	2335.280	-46.03	≤-21.20	49.17	≤74	PASS
				Peak	2390.000	-46.8	≤-21.20	48.40	≤74	PASS
		High	2480	AV	2483.500	-53.4	≤-41.20	41.80	≤54	PASS
				AV	2483.520	-53.4	≤-41.20	41.80	≤54	PASS
				AV	2500.000	-56.32	≤-41.20	38.88	≤54	PASS
				Peak	2483.500	-46.92	≤-21.20	48.28	≤74	PASS
				Peak	2486.640	-46.4	≤-21.20	48.80	≤74	PASS
				Peak	2500.000	-47.6	≤-21.20	47.60	≤74	PASS

Note:

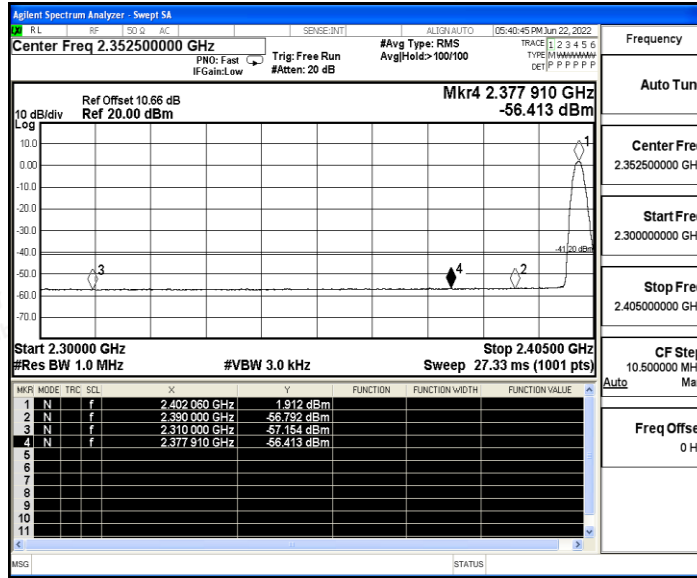
1. The Antenna Gain is compensated in the graph.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.



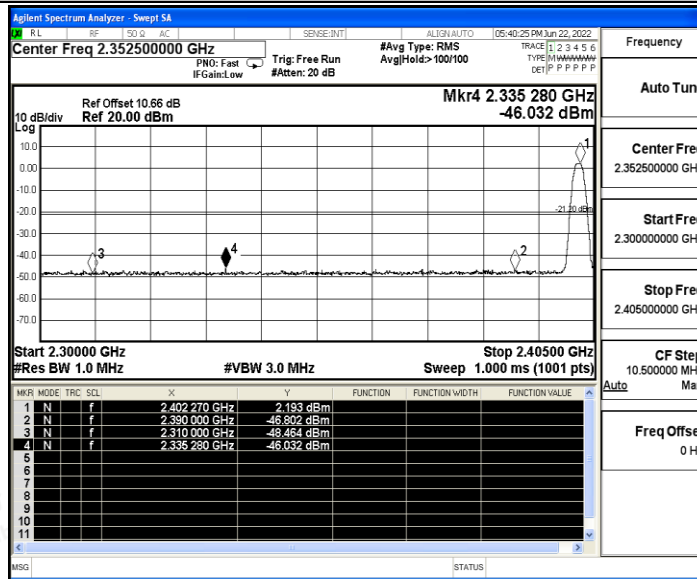


Test Graphs

BLE_1M_Ant1_Low_2402_AV

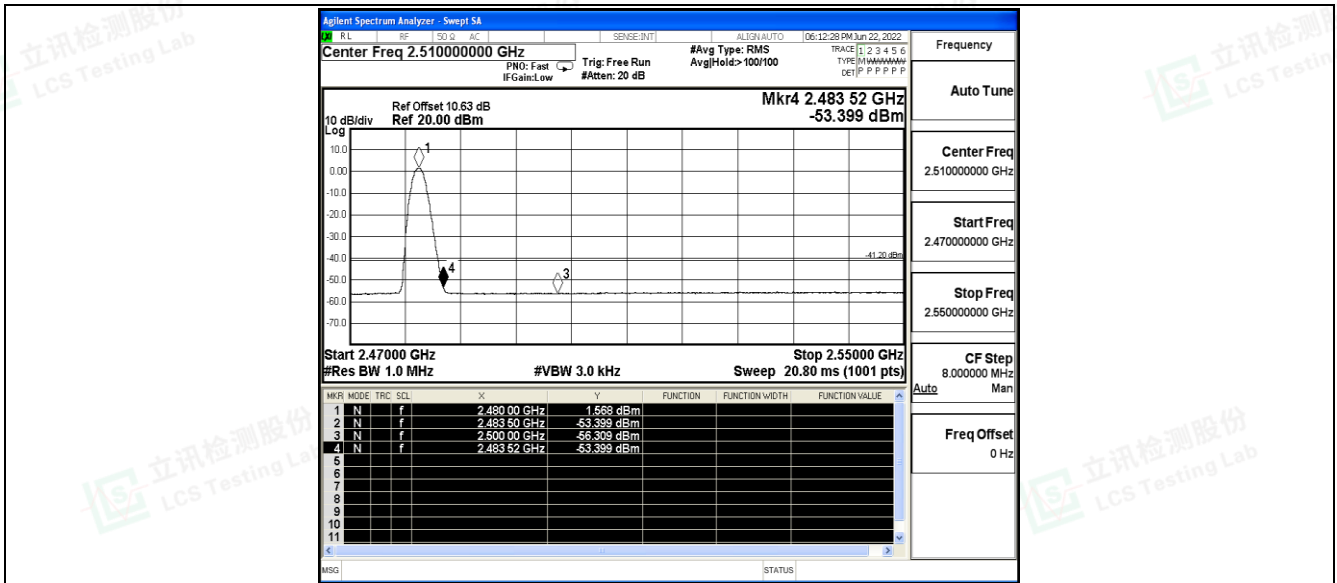


BLE_1M_Ant1_Low_2402_Peak



BLE_1M_Ant1_High_2480_AV





BLE_1M_Ant1_High_2480_Peak

