



Appendix B

RF Test Data for BT LE (Conducted Measurement)

Product Name: bluetooth headset

Test Model: A6pro

Environmental Conditions

Temperature:	23.8 ° C
Relative Humidity:	52.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Joker Hu
Supervised by:	Jack Cheng





B.1 DTS Bandwidth

Test Result

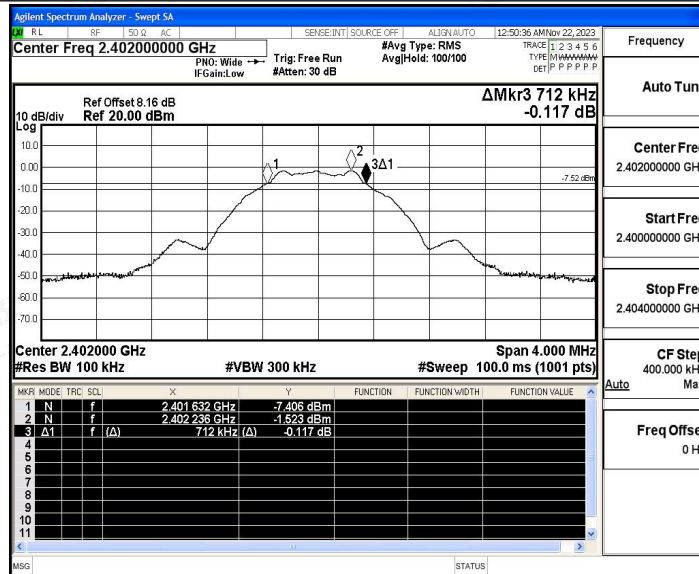
TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.712	2401.632	2402.344	0.5	PASS
		2440	0.712	2439.628	2440.340	0.5	PASS
		2480	0.716	2479.628	2480.344	0.5	PASS



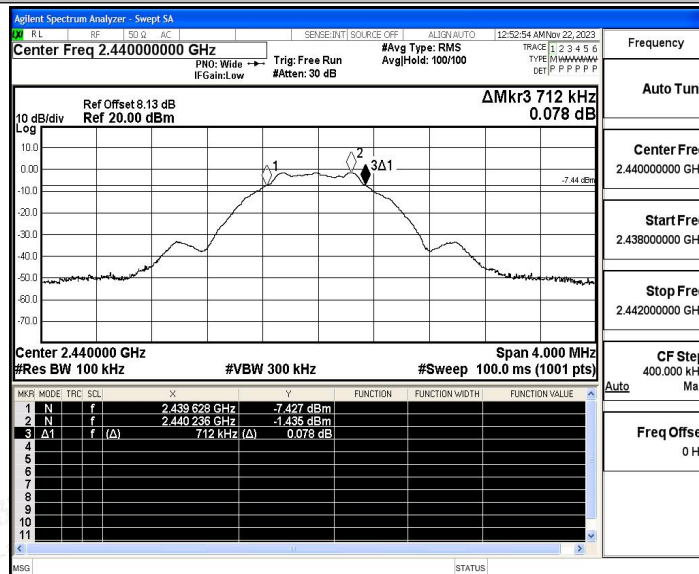


Test Graphs

BLE_1M_Ant1_2402

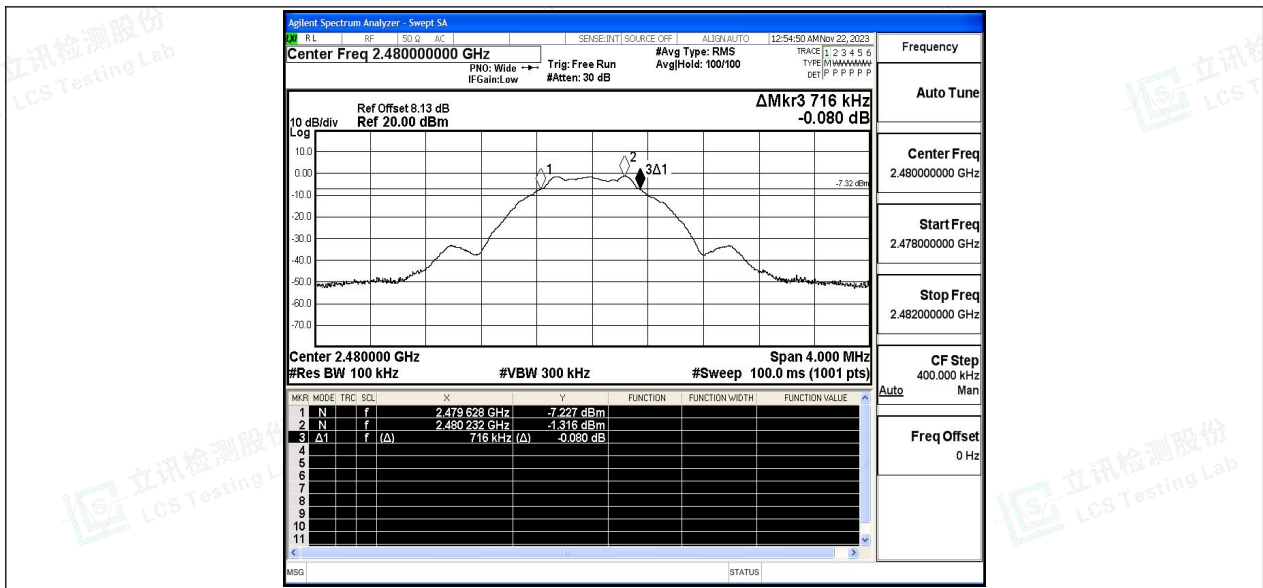


BLE_1M_Ant1_2440



BLE_1M_Ant1_2480







B.2 Maximum peak conducted output power

Test Result

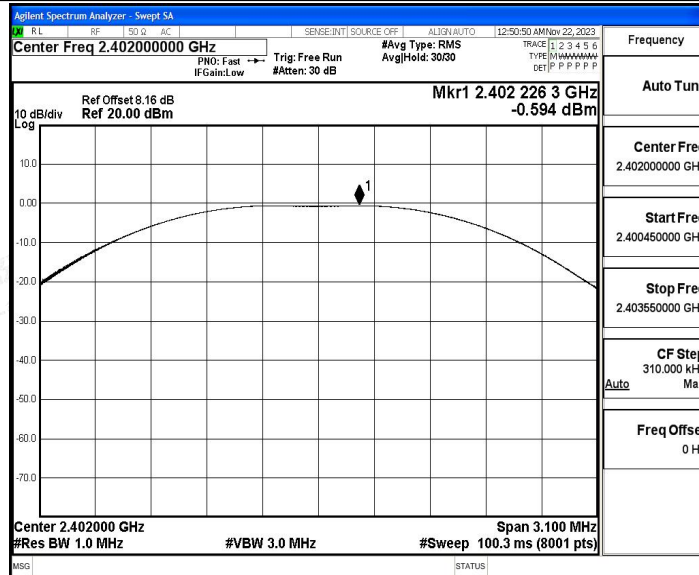
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	-0.59	≤30	PASS
		2440	-0.52	≤30	PASS
		2480	-0.37	≤30	PASS



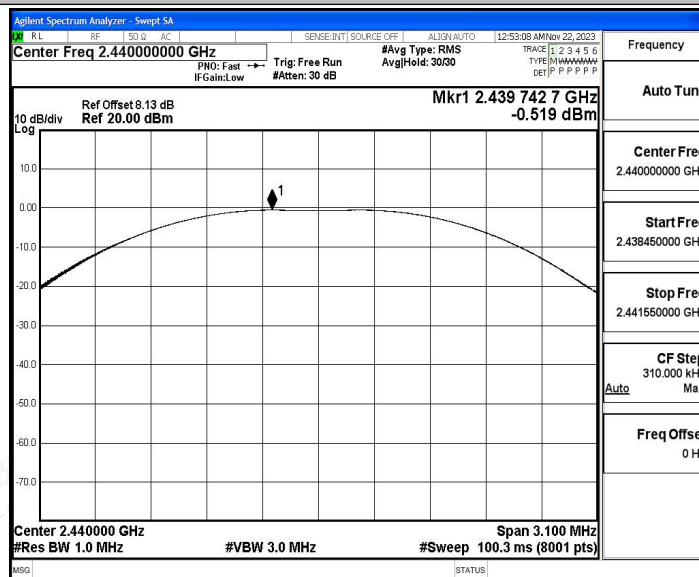


Test Graphs

BLE_1M_Ant1_2402

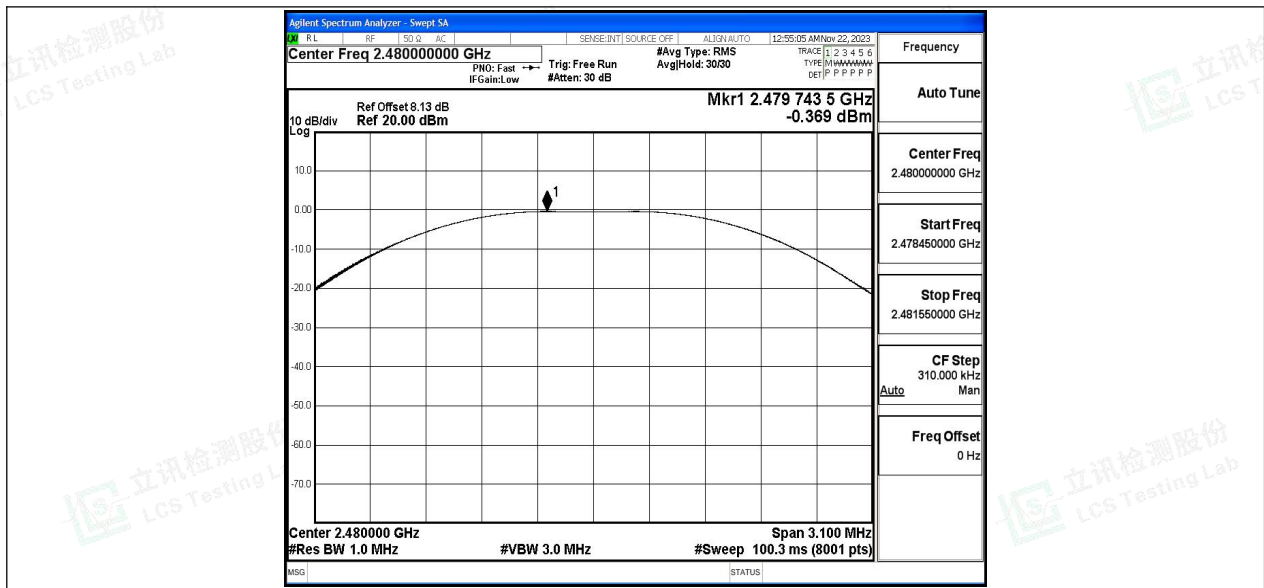


BLE_1M_Ant1_2440



BLE_1M_Ant1_2480







B.3 Maximum power spectral density

Test Result

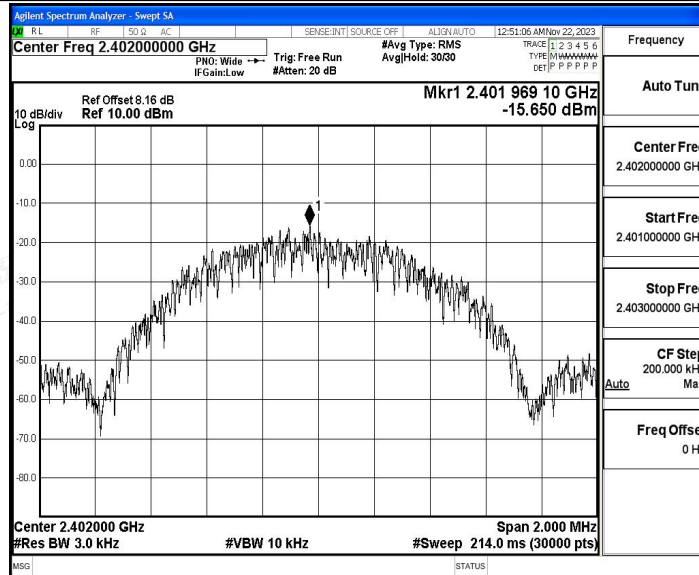
TestMode	Antenna	Channel	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-15.65	≤8.00	PASS
		2440	-15.55	≤8.00	PASS
		2480	-15.44	≤8.00	PASS



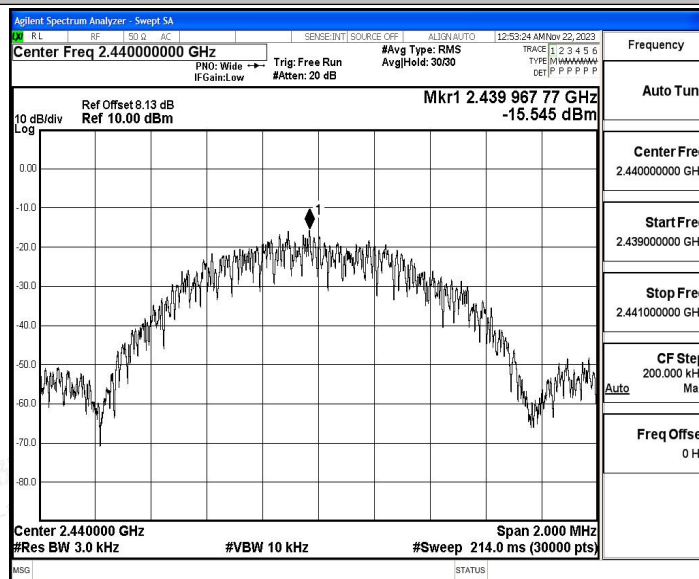


Test Graphs

BLE_1M_Ant1_2402

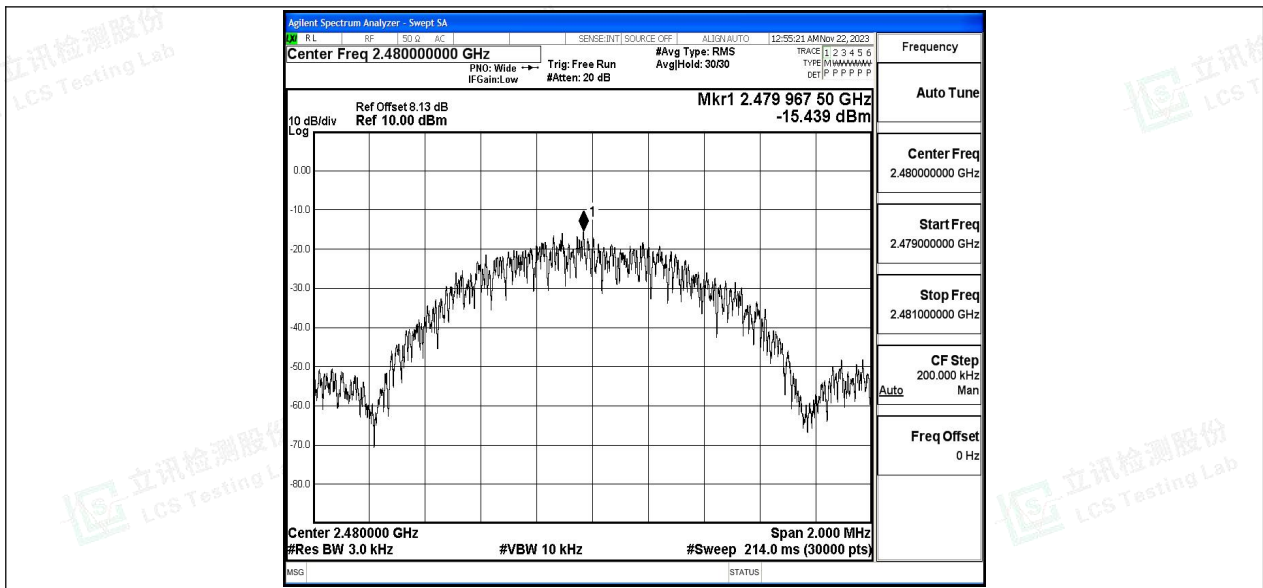


BLE_1M_Ant1_2440



BLE_1M_Ant1_2480







B.4 Band edge measurements

Test Result

TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-1.30	-58.61	≤ -21.3	PASS
		High	2480	-1.12	-59.06	≤ -21.12	PASS





Test Graphs





B.5 Conducted Spurious Emission

Test Result

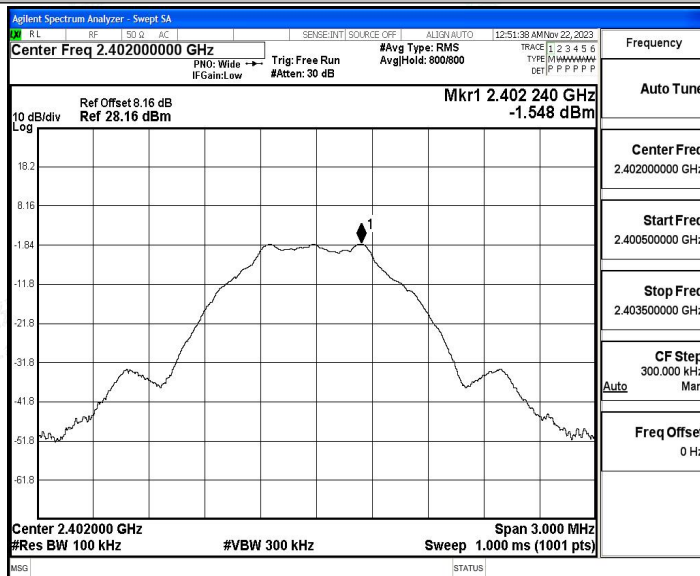
TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-1.55	-1.55	---	PASS
			30~1000	-1.55	-61.05	≤-21.55	PASS
			1000~26500	-1.55	-49.11	≤-21.55	PASS
		2440	Reference	-1.53	-1.53	---	PASS
			30~1000	-1.53	-60.8	≤-21.53	PASS
			1000~26500	-1.53	-48.64	≤-21.53	PASS
		2480	Reference	-1.30	-1.30	---	PASS
			30~1000	-1.30	-61.67	≤-21.3	PASS
			1000~26500	-1.30	-49.19	≤-21.3	PASS



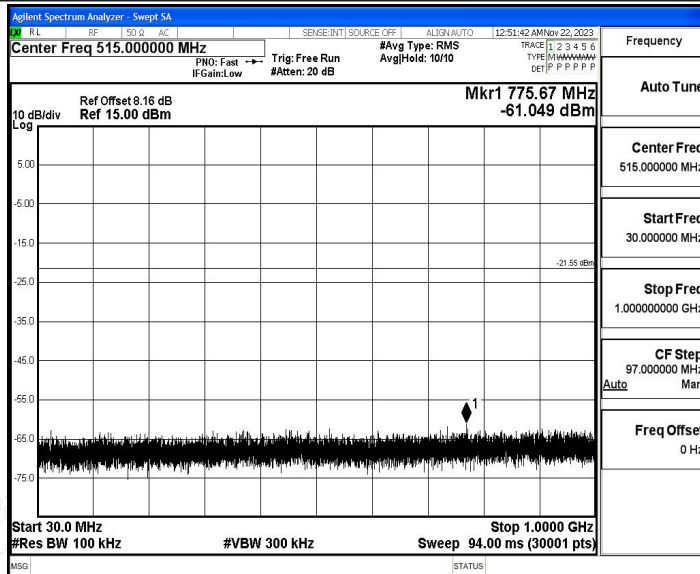


Test Graphs

BLE_1M_Ant1_2402_0~Reference

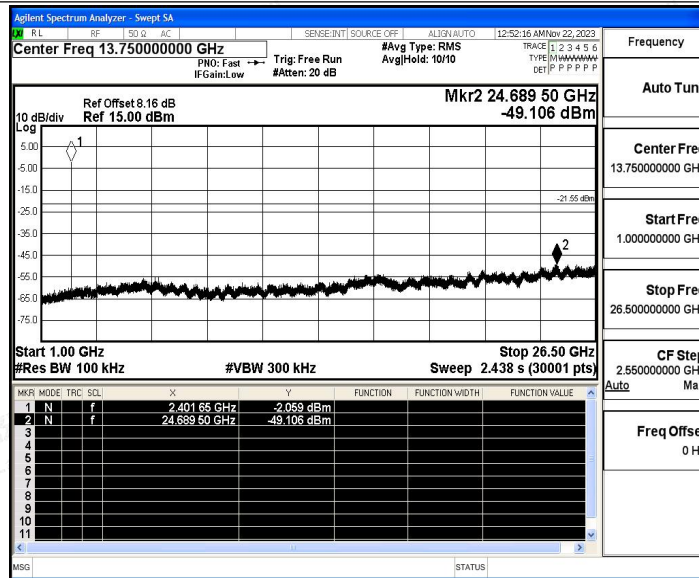


BLE_1M_Ant1_2402_30~1000

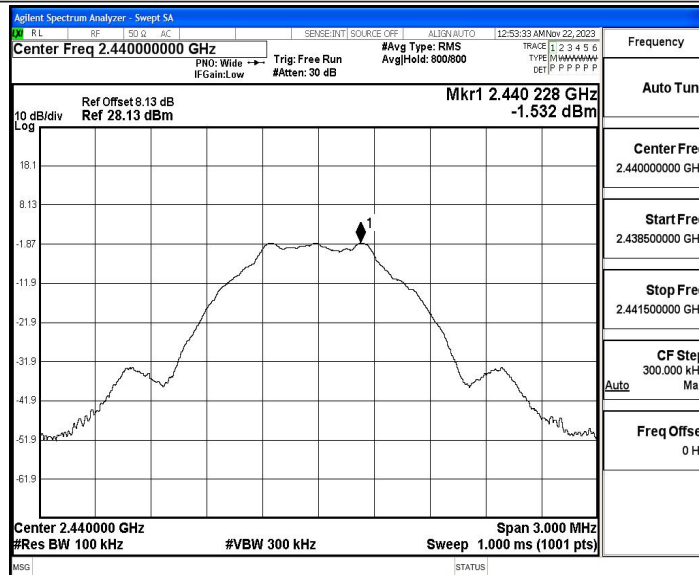


BLE_1M_Ant1_2402_1000~26500



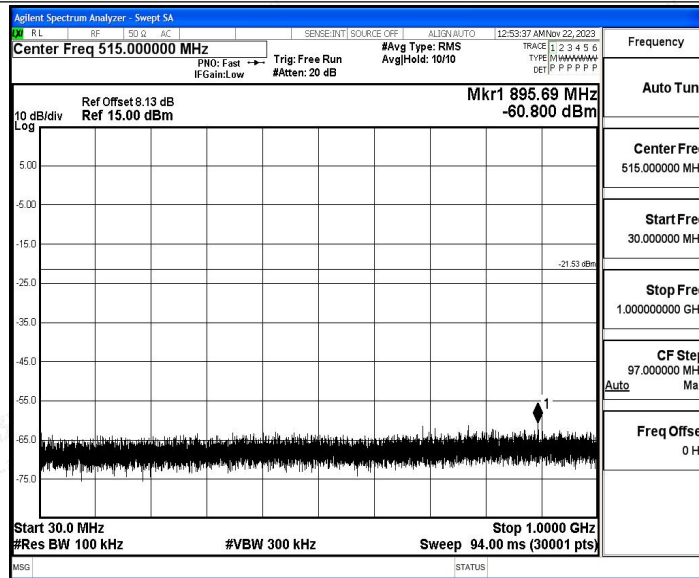


BLE_1M_Ant1_2440_0~Reference

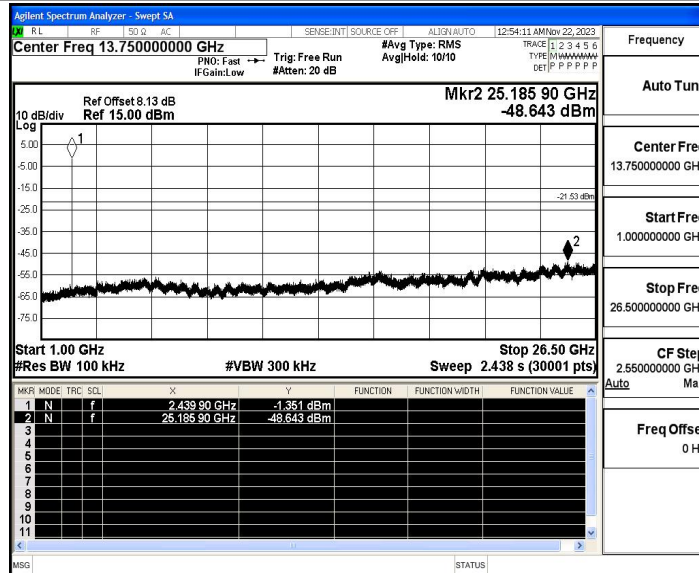


BLE_1M_Ant1_2440_30~1000



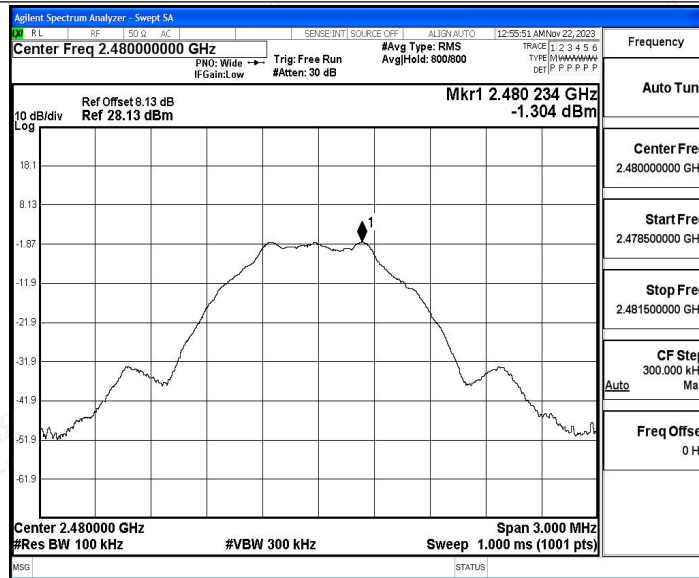


BLE_1M_Ant1_2440_1000~26500

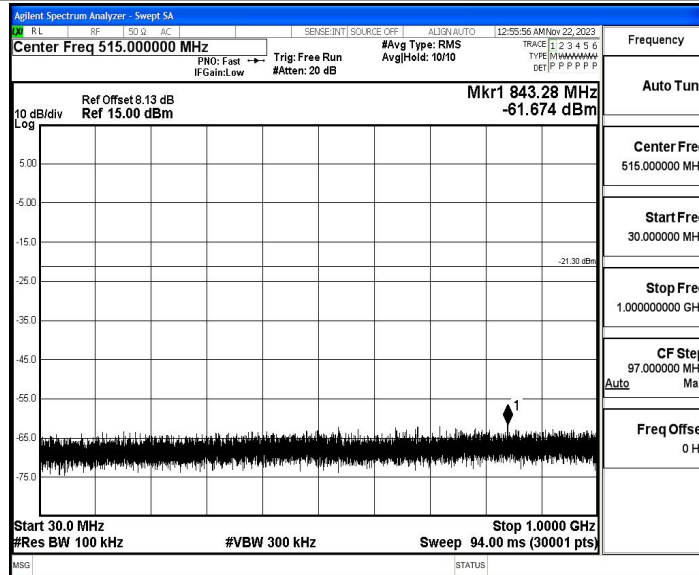


BLE_1M_Ant1_2480_0~Reference



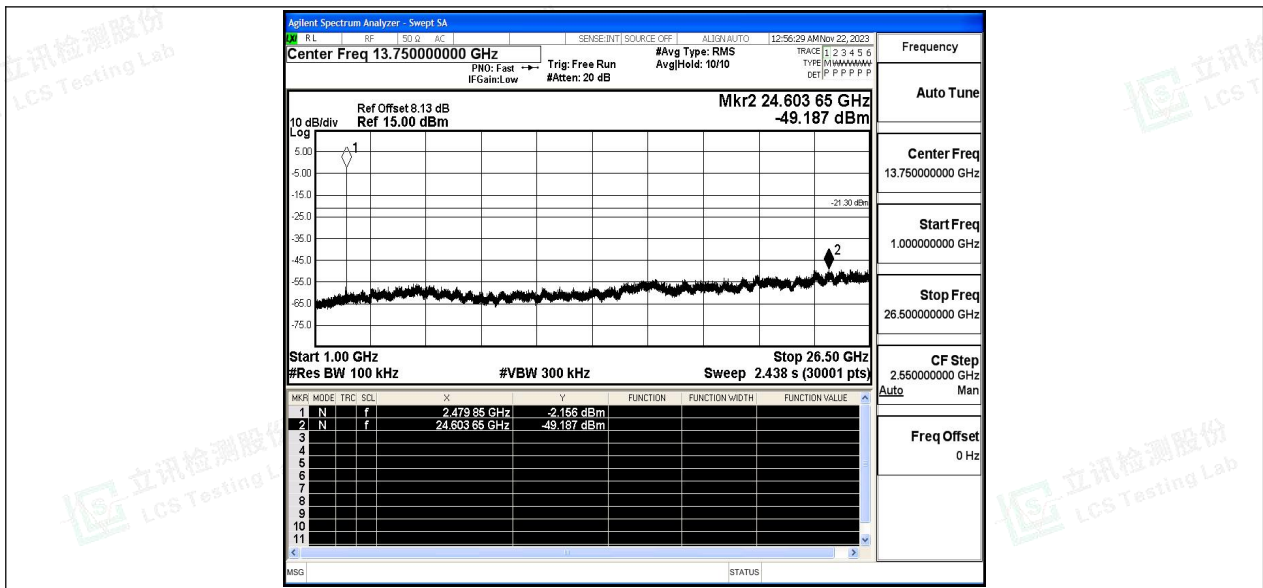


BLE_1M_Ant1_2480_30~1000



BLE_1M_Ant1_2480_1000~26500





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Scan code to check authenticity



B.6 Duty Cycle

Test Result

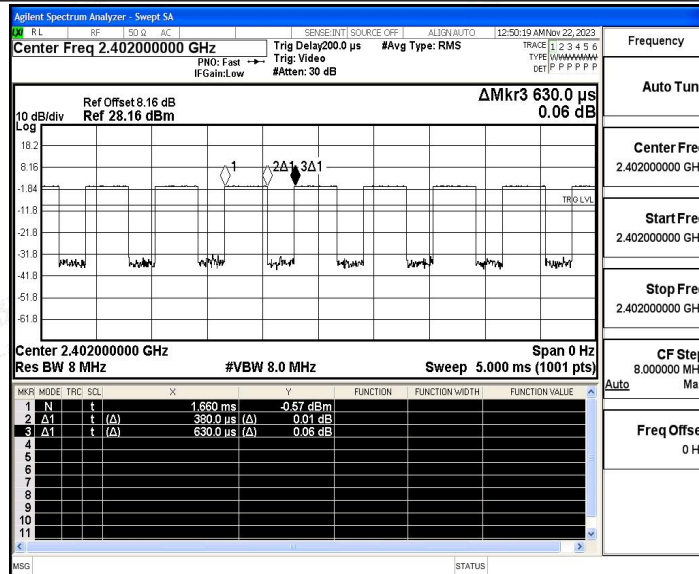
TestMode	Antenna	Channel	ON Time [ms]	Period [ms]	X	DC [%]	xFactor	1/T	Limit	Verdict
BLE_1M	Ant1	2402	0.38	0.63	0.6032	60.32	2.20	2.63	---	---
		2440	0.38	0.63	0.6032	60.32	2.20	2.63	---	---
		2480	0.38	0.63	0.6032	60.32	2.20	2.63	---	---



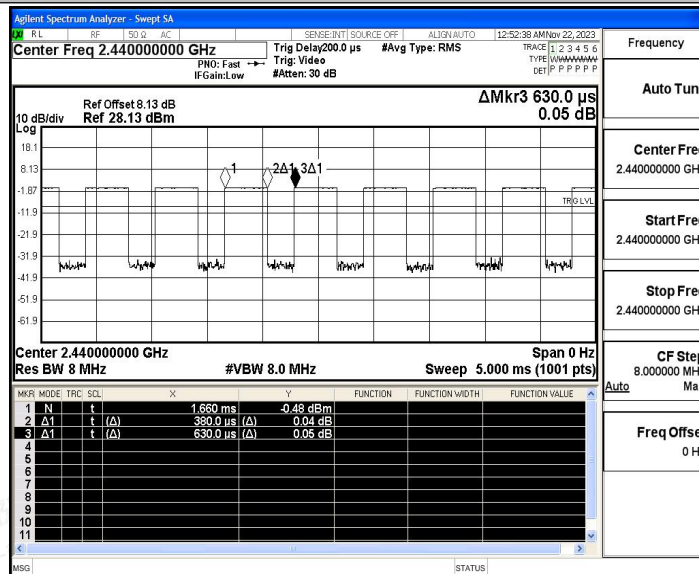


Test Graphs

BLE_1M_Ant1_2402

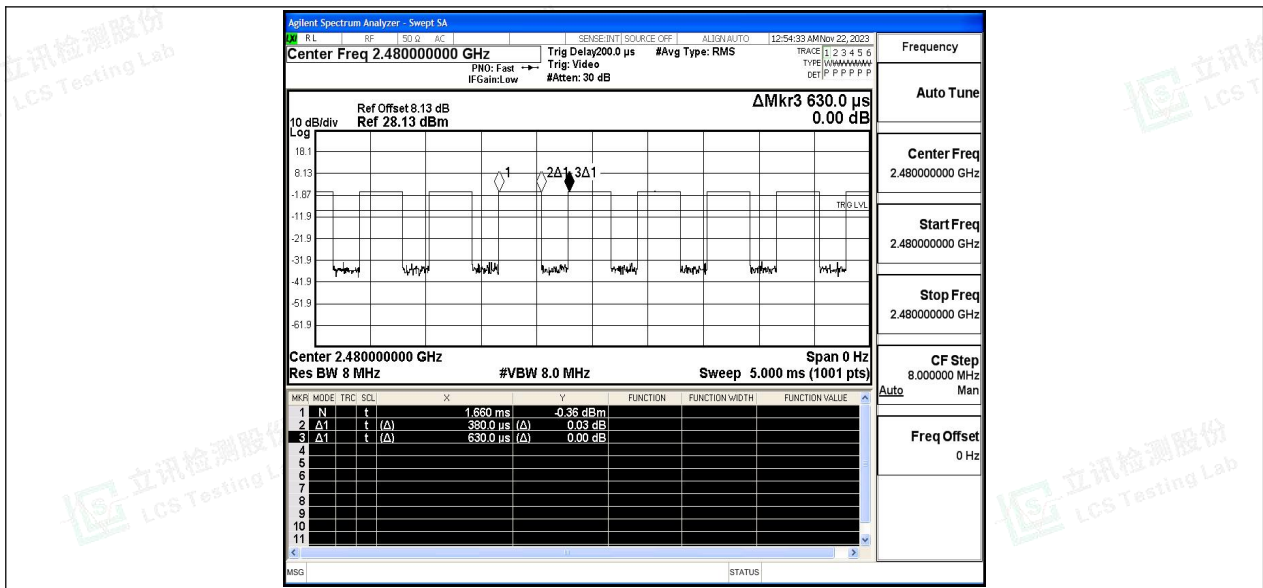


BLE_1M_Ant1_2440



BLE_1M_Ant1_2480





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B.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	-58.39	≤-41.20	36.81	≤54	PASS
				AV	2382.005	-57.54	≤-41.20	37.66	≤54	PASS
				AV	2390.000	-58.09	≤-41.20	37.11	≤54	PASS
				Peak	2310.000	-52.19	≤-21.20	43.01	≤74	PASS
				Peak	2374.235	-48.04	≤-21.20	47.16	≤74	PASS
				Peak	2390.000	-49.02	≤-21.20	46.18	≤74	PASS
		High	2480	AV	2483.500	-54.24	≤-41.20	40.96	≤54	PASS
				AV	2483.520	-54.24	≤-41.20	40.96	≤54	PASS
				AV	2500.000	-58.07	≤-41.20	37.13	≤54	PASS
				Peak	2483.500	-52.13	≤-21.20	43.07	≤74	PASS
				Peak	2495.520	-49.11	≤-21.20	46.09	≤74	PASS
				Peak	2500.000	-52.56	≤-21.20	42.64	≤74	PASS

Note:

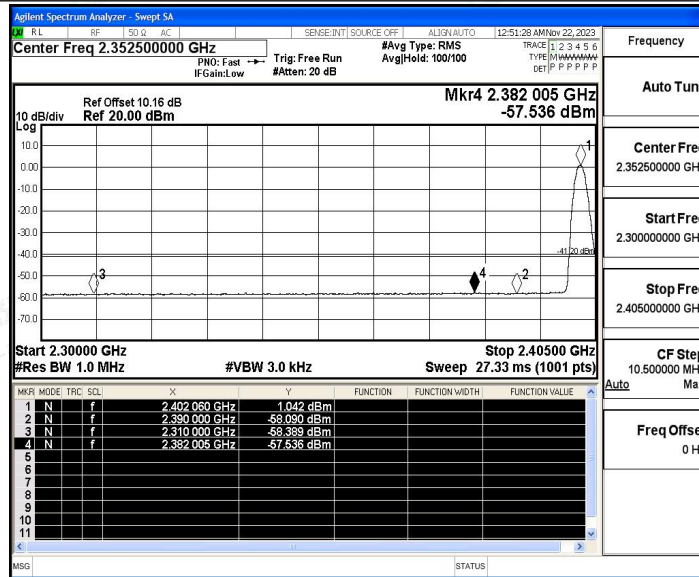
1. The Antenna Gain is compensated in the graph.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.



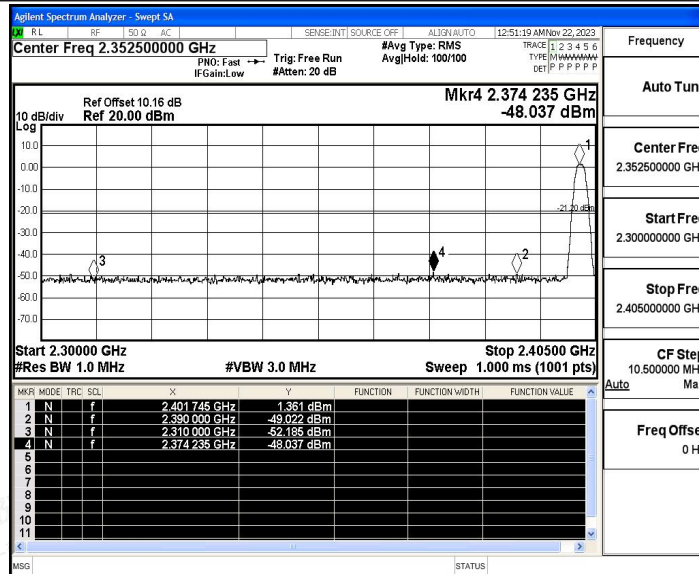


Test Graphs

BLE_1M_Ant1_Low_2402_AV

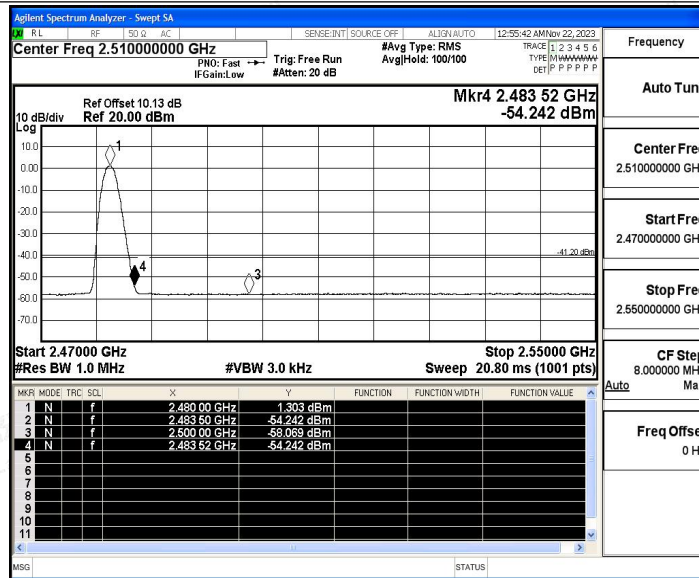


BLE_1M_Ant1_Low_2402_Peak



BLE_1M_Ant1_High_2480_AV





BLE_1M_Ant1_High_2480_Peak

