



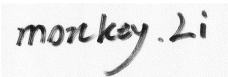
Appendix A

RF Test Data for BT LE V4.2(DTS) (Conducted Measurement)

Product Name: Remote Control

Test Model: RT-103

Environmental Conditions

Temperature:	22.3℃
Relative Humidity:	53.6%
ATM Pressure:	100.0 kPa
Test Engineer:	 Monkey Li
Supervised by:	 Li Huan



A.1 DTS Bandwidth

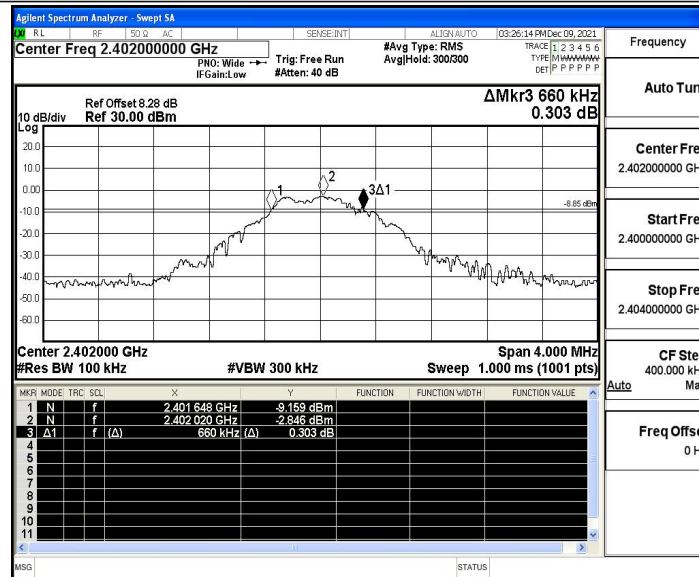
Test Result

TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.660	2401.648	2402.308	≥0.5	PASS
		2440	0.644	2439.652	2440.296	≥0.5	PASS
		2480	0.704	2479.656	2480.360	≥0.5	PASS

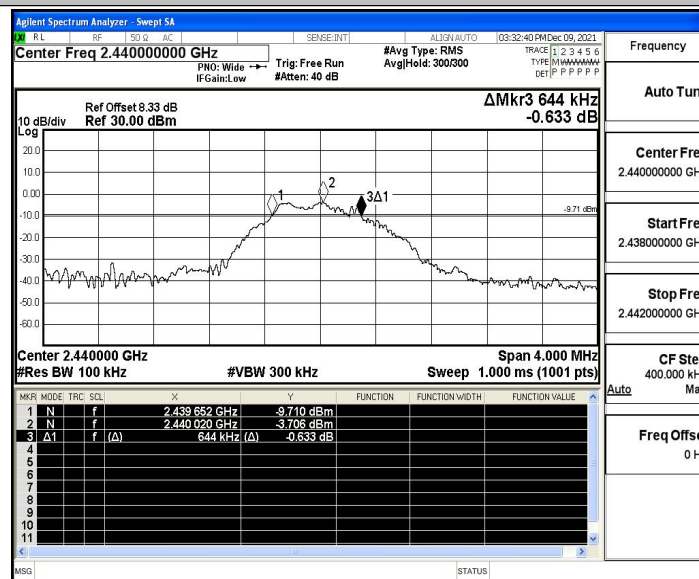


Test Graphs

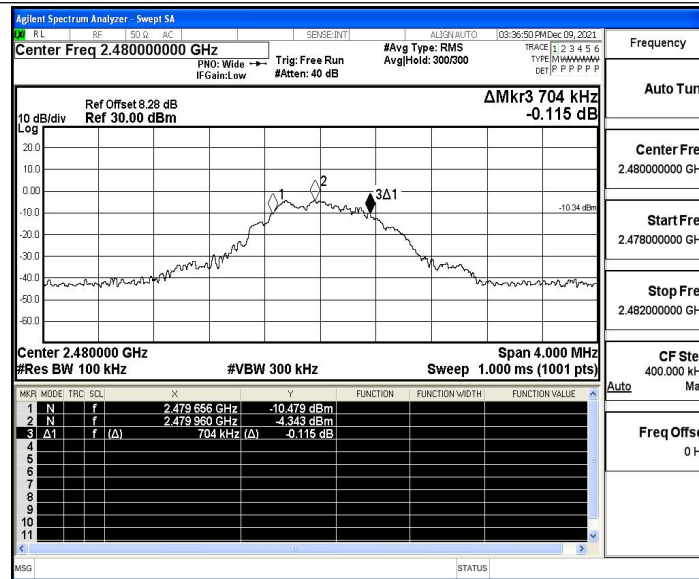
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480





A.2 Maximum peak conducted output power

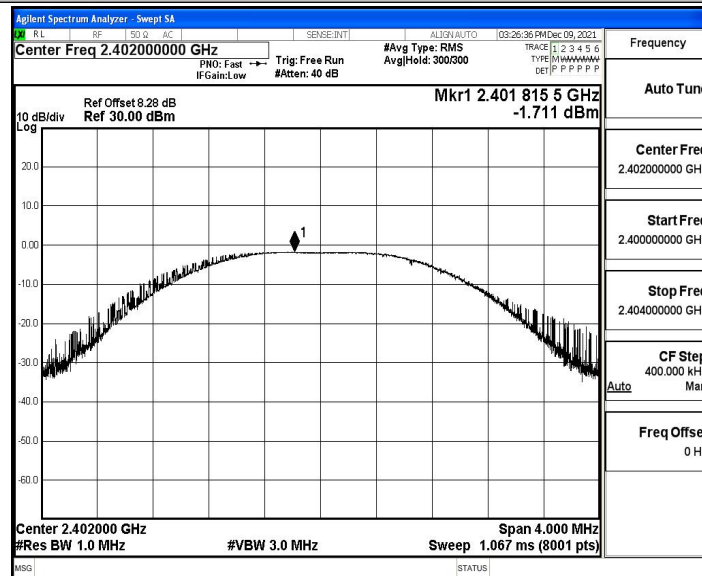
Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	-1.71	≤30	PASS
		2440	-2.84	≤30	PASS
		2480	-3.64	≤30	PASS

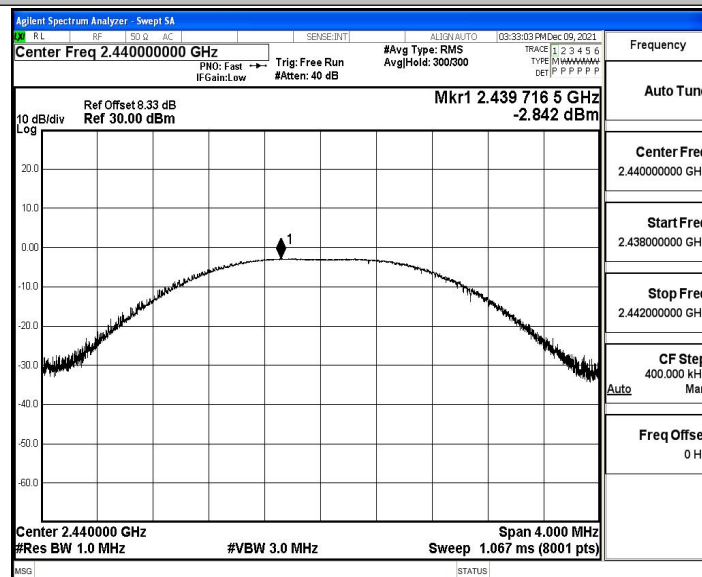


Test Graphs

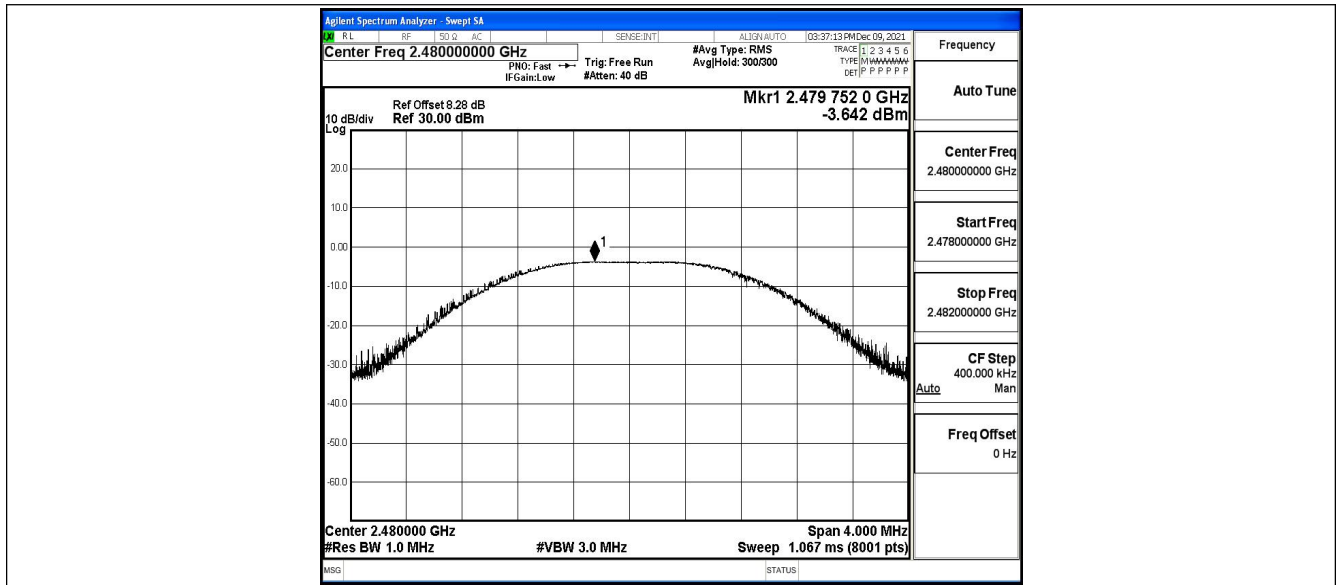
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480





A.3 Maximum power spectral density

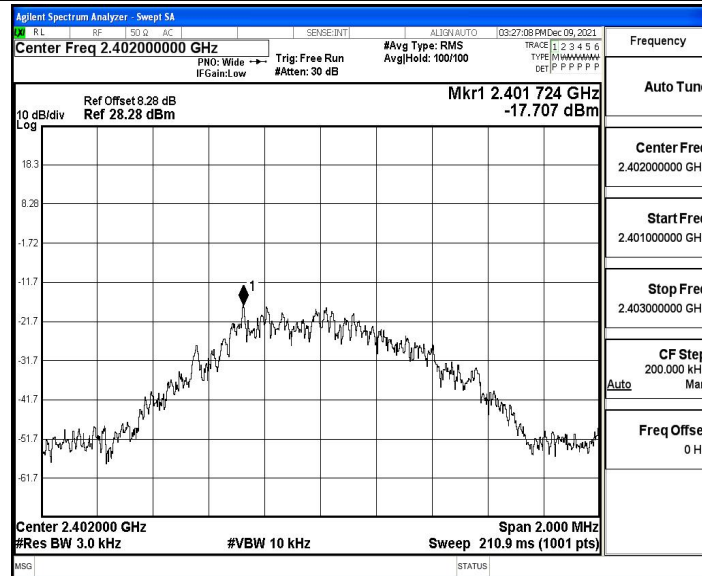
Test Result

TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-17.71	≤8	PASS
		2440	-19.15	≤8	PASS
		2480	-19.79	≤8	PASS

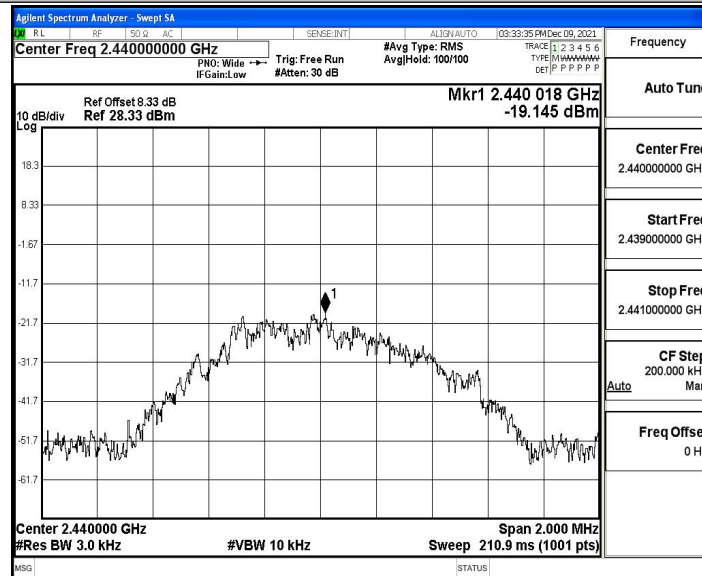


Test Graphs

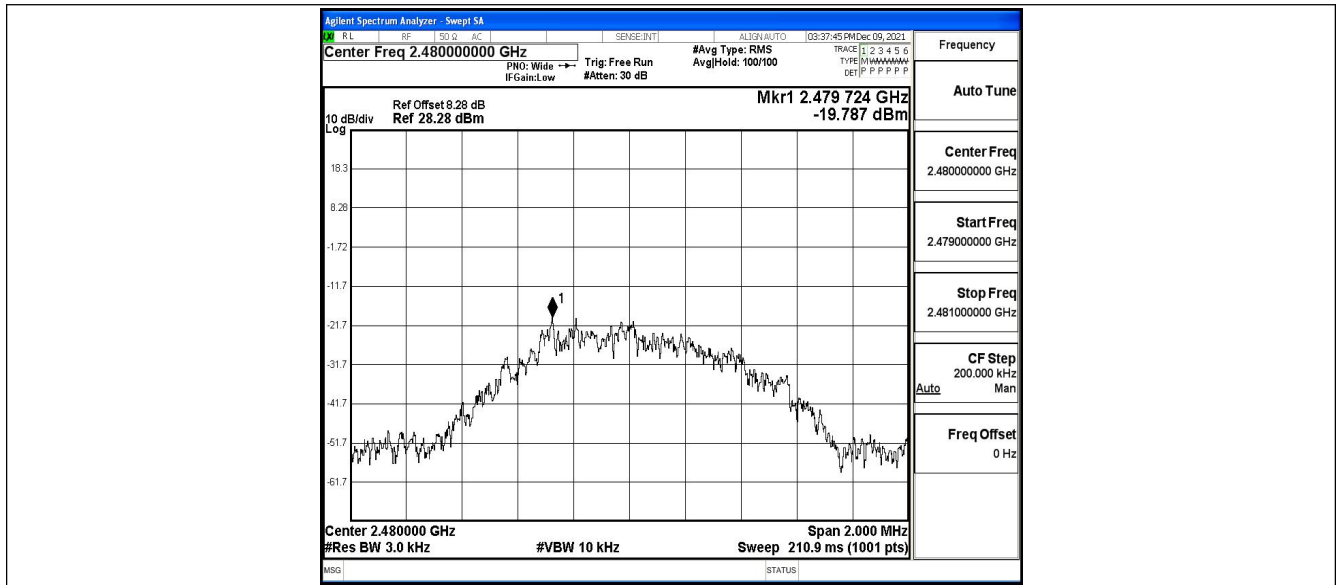
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480





A.4 Band edge measurements

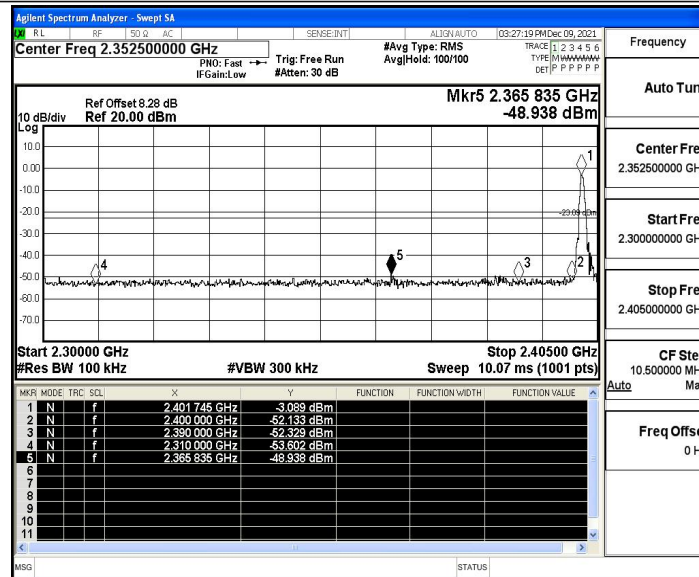
Test Result

TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-3.09	-48.94	≤-23.09	PASS
		High	2480	-4.78	-48.39	≤-24.78	PASS

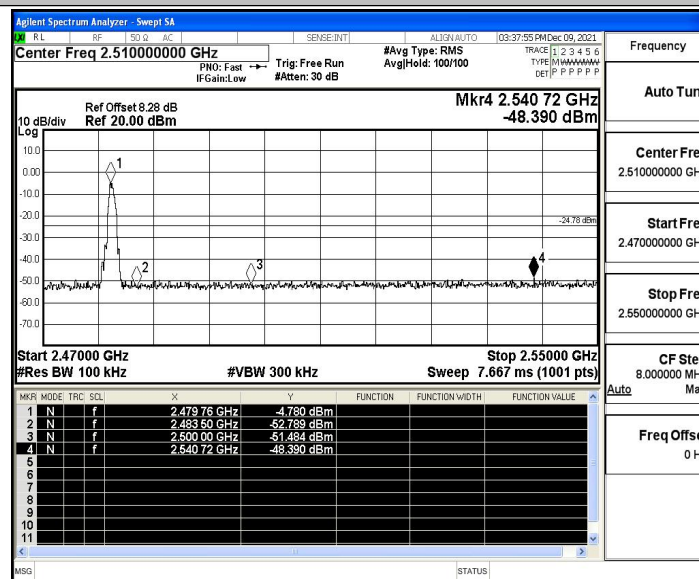


Test Graphs

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	-3.20	-3.20	---	PASS
			30~1000	-3.20	-44.06	≤ -23.2	PASS
			1000~26500	-3.20	-36.23	≤ -23.2	PASS
		2440	Reference	-3.80	-3.80	---	PASS
			30~1000	-3.80	-44.18	≤ -23.8	PASS
			1000~26500	-3.80	-35.5	≤ -23.8	PASS
		2480	Reference	-4.29	-4.29	---	PASS
			30~1000	-4.29	-43.94	≤ -24.29	PASS
			1000~26500	-4.29	-37.54	≤ -24.29	PASS

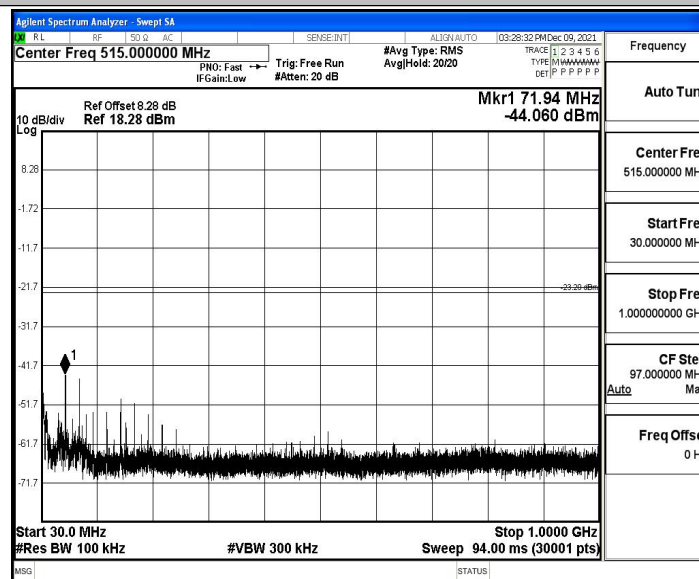


Test Graphs

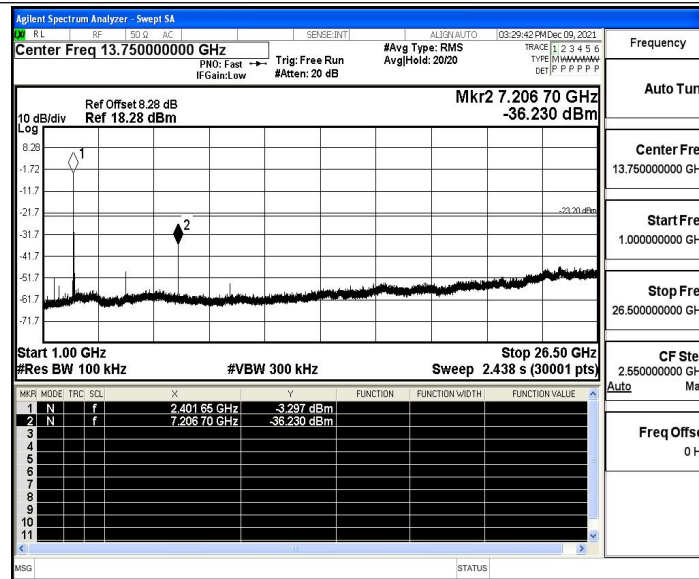
BLE_1M_Ant1_2402_0~Reference



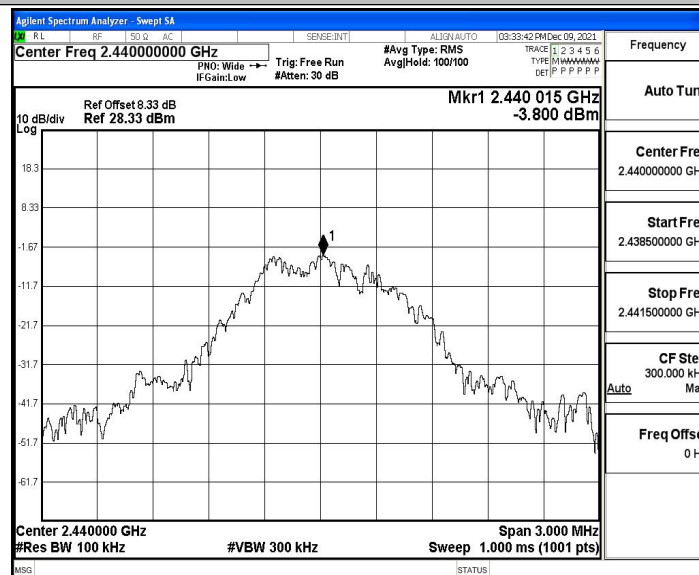
BLE_1M_Ant1_2402_30~1000



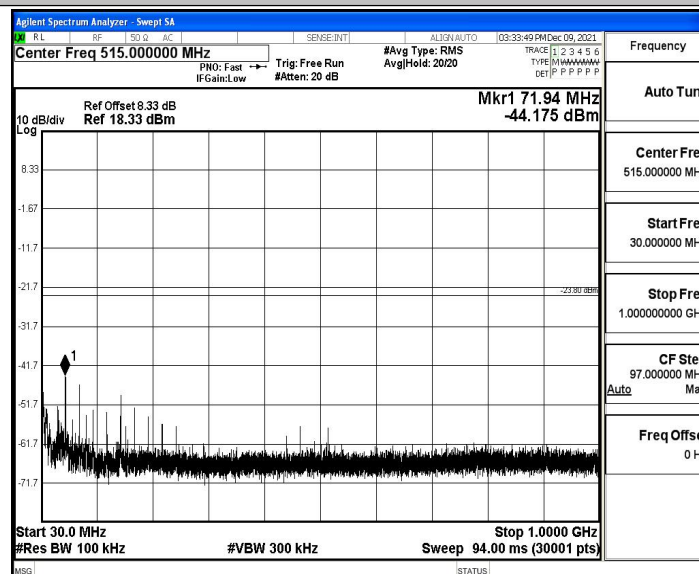
BLE_1M_Ant1_2402_1000~26500



BLE_1M_Ant1_2440_0~Reference

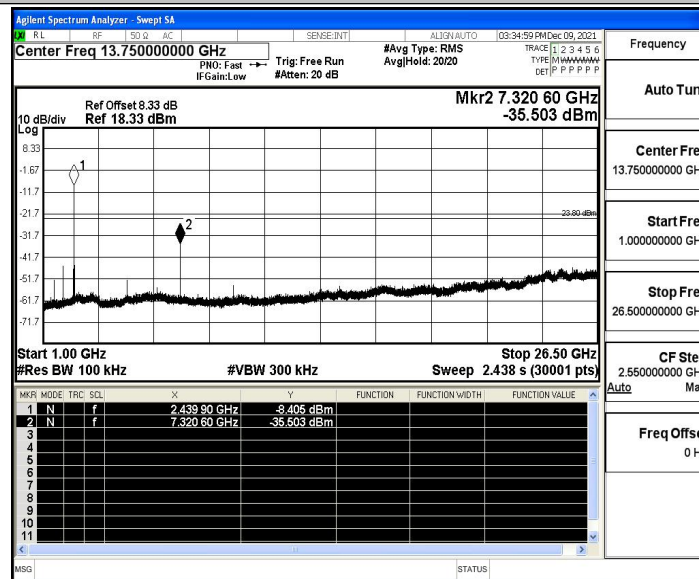


BLE_1M_Ant1_2440_30~1000

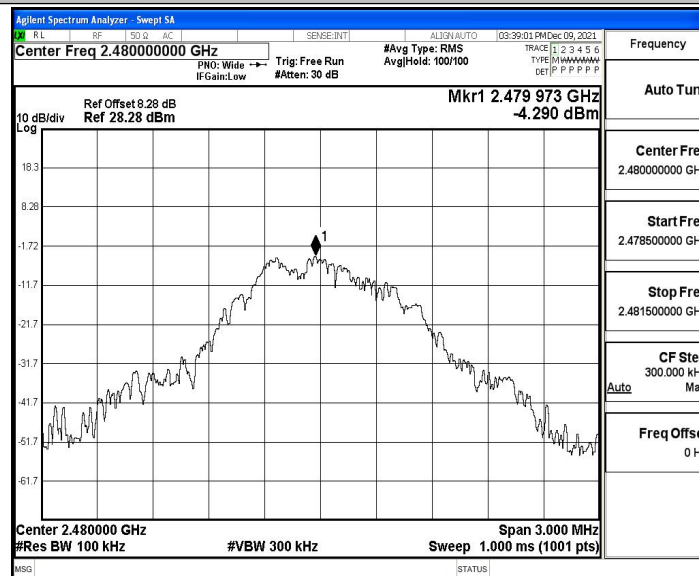




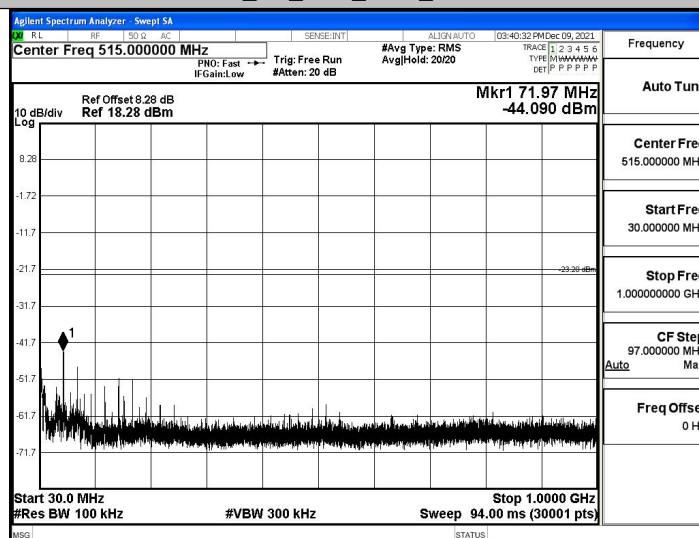
BLE_1M_Ant1_2440_1000~26500



BLE_1M_Ant1_2480_0~Reference

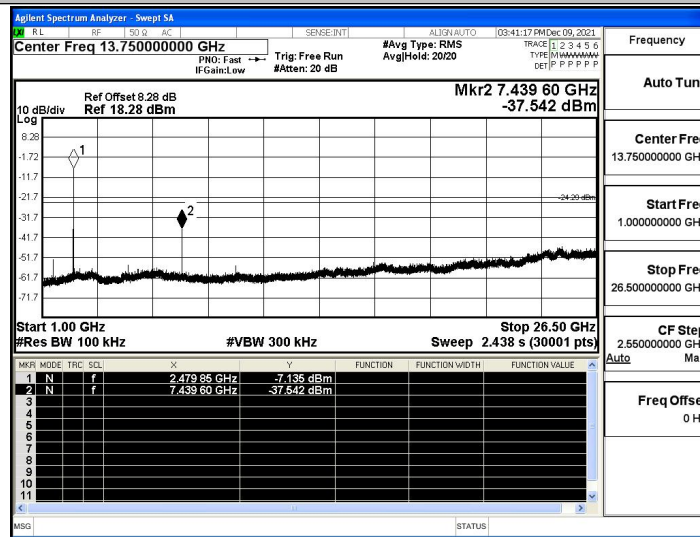


BLE_1M_Ant1_2480_30~1000





BLE_1M_Ant1_2480_1000~26500





A.6 Duty Cycle

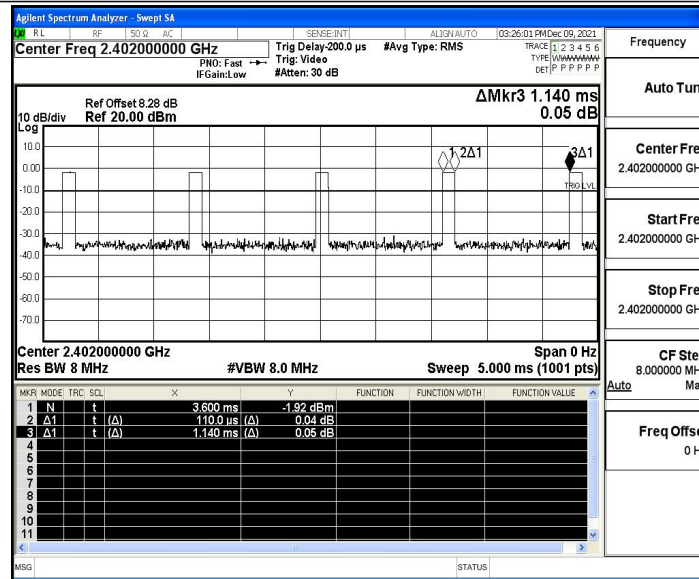
Test Result

TestMode	Antenna	Channel	ON Time [ms]	Period [ms]	X	DC [%]	xFactor	Limit	Verdict
BLE_1M	Ant1	2402	0.11	1.14	0.0965	9.65	10.15	---	PASS
		2440	0.11	1.14	0.0965	9.65	10.15	---	PASS
		2480	0.11	1.14	0.0965	9.65	10.15	---	PASS

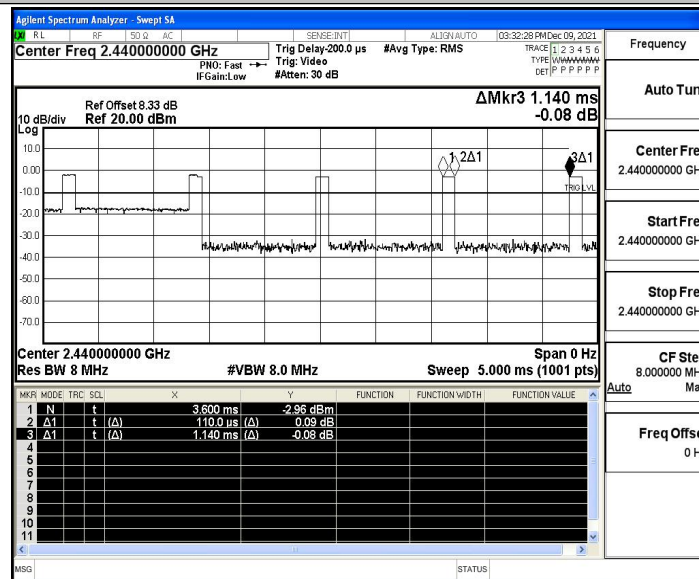


Test Graphs

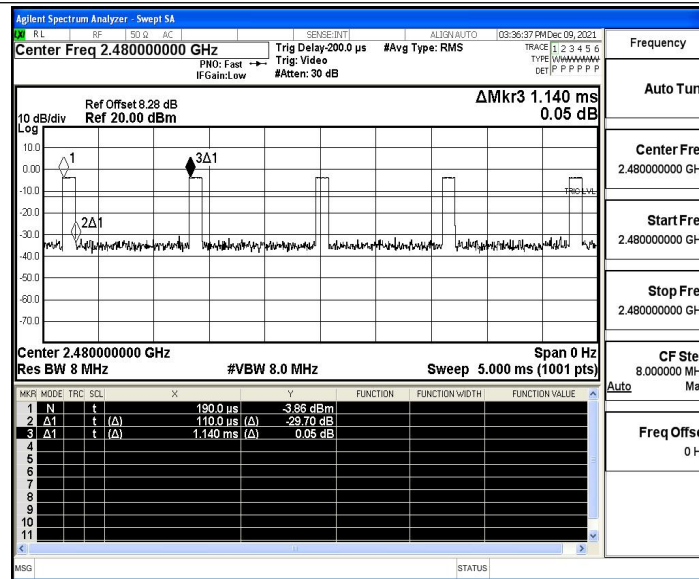
BLE_1M_Ant1_2402



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	-47.11	≤-41.20	48.09	≤54	PASS
				AV	2386.310	-42.88	≤-41.20	52.32	≤54	PASS
				AV	2390.000	-46.83	≤-41.20	48.37	≤54	PASS
				Peak	2310.000	-40.93	≤-21.20	54.27	≤74	PASS
				Peak	2387.150	-32.1	≤-21.20	63.10	≤74	PASS
				Peak	2390.000	-40.88	≤-21.20	54.32	≤74	PASS
		High	2480	AV	2483.500	-45.94	≤-41.20	49.26	≤54	PASS
				AV	2487.440	-45.24	≤-41.20	49.96	≤54	PASS
				AV	2500.000	-45.87	≤-41.20	49.33	≤54	PASS
				Peak	2483.500	-39.66	≤-21.20	55.54	≤74	PASS
				Peak	2488.240	-35.3	≤-21.20	59.90	≤74	PASS
				Peak	2500.000	-39.75	≤-21.20	55.45	≤74	PASS

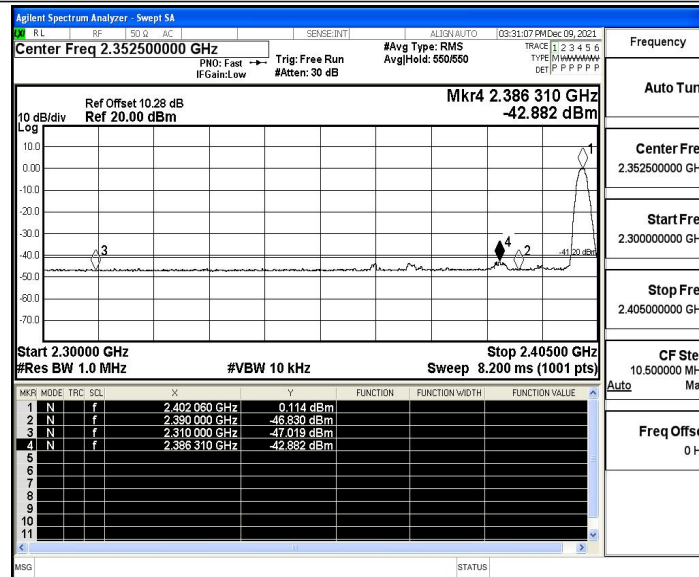
Note:

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.

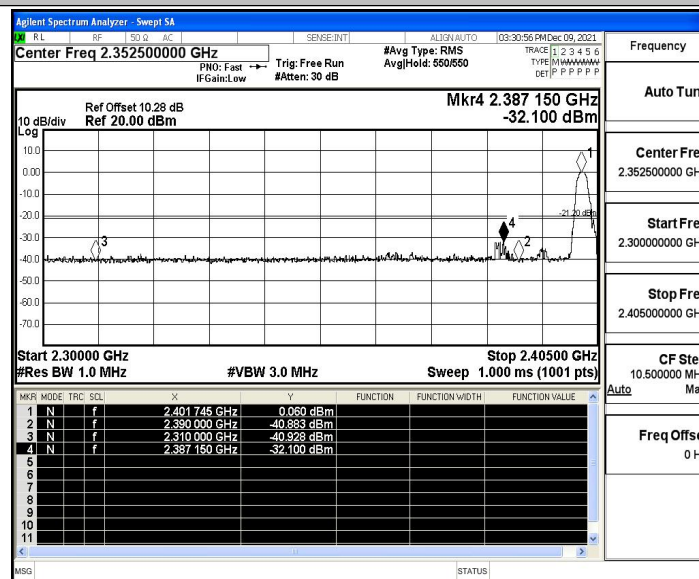


Test Graphs

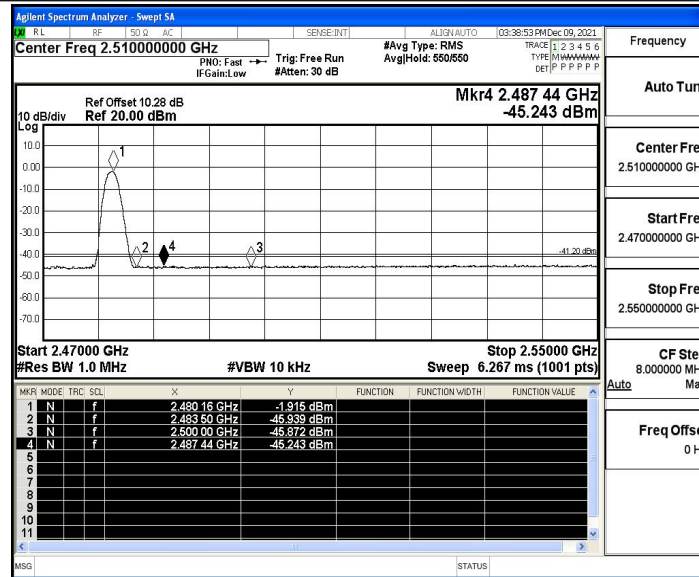
BLE_1M_Ant1_Low_2402_AV



BLE_1M_Ant1_Low_2402_Peak



BLE_1M_Ant1_High_2480_AV



BLE_1M_Ant1_High_2480_Peak

