



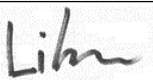
Appendix B

RF Test Data for BT LE V5.1 (DTS) (Conducted Measurement)

Product Name: Wireless receiver and transmitter

Test Model: RT5066

Environmental Conditions

Temperature:	23.5℃
Relative Humidity:	52.2%
ATM Pressure:	100.0 kPa
Test Engineer:	 Monkey Li
Supervised by:	 Li Huan



B.1 DTS Bandwidth

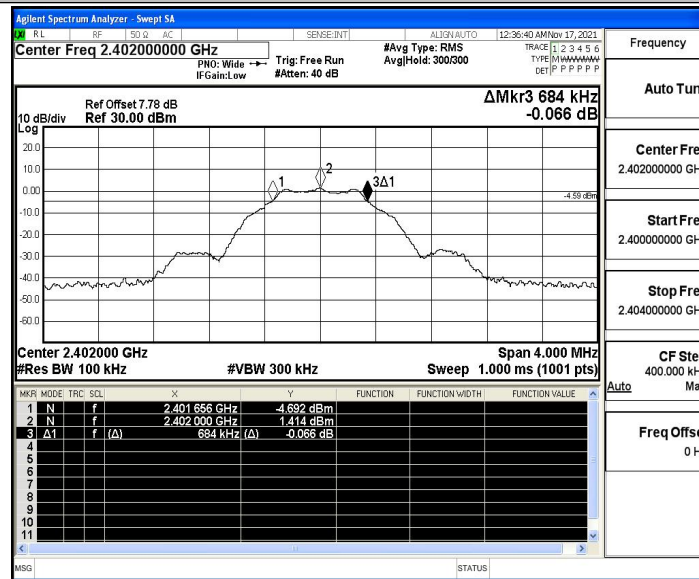
Test Result

TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.684	2401.656	2402.340	≥ 0.5	PASS
		2440	0.668	2439.660	2440.328	≥ 0.5	PASS
		2480	0.676	2479.664	2480.340	≥ 0.5	PASS

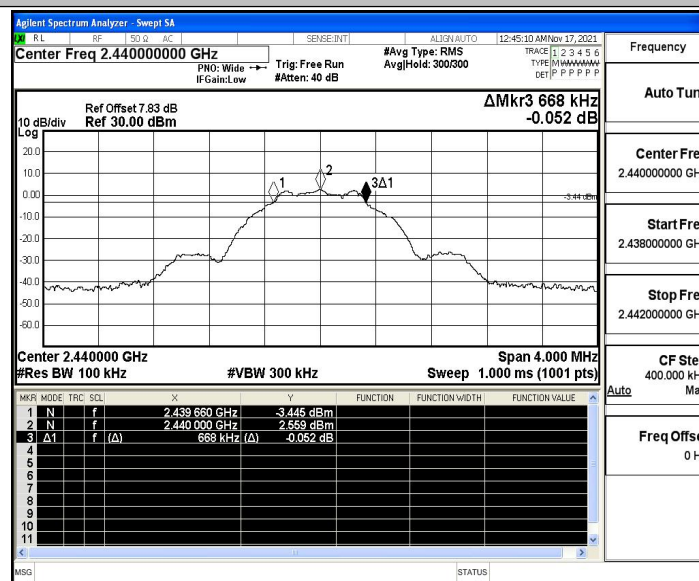


Test Graphs

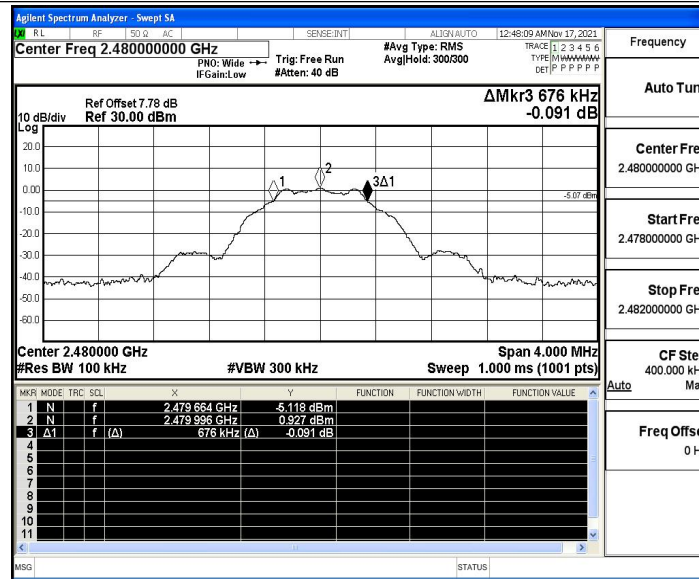
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480





B.2 Maximum peak conducted output power

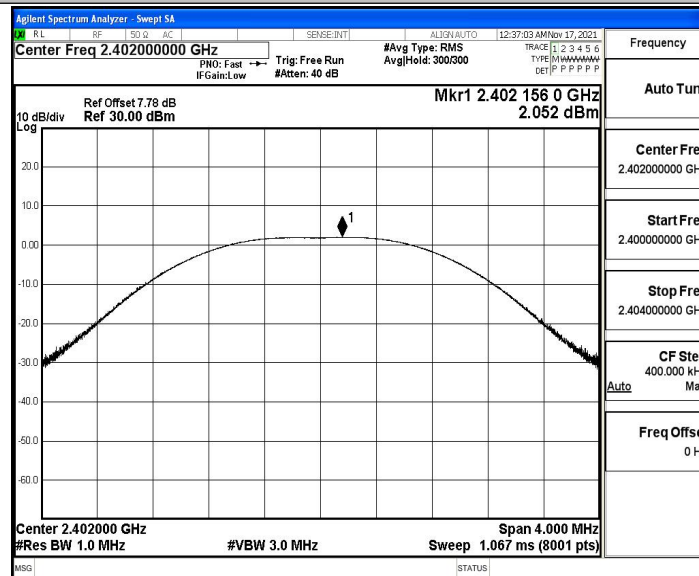
Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	2.05	≤ 30	PASS
		2440	3.14	≤ 30	PASS
		2480	1.55	≤ 30	PASS

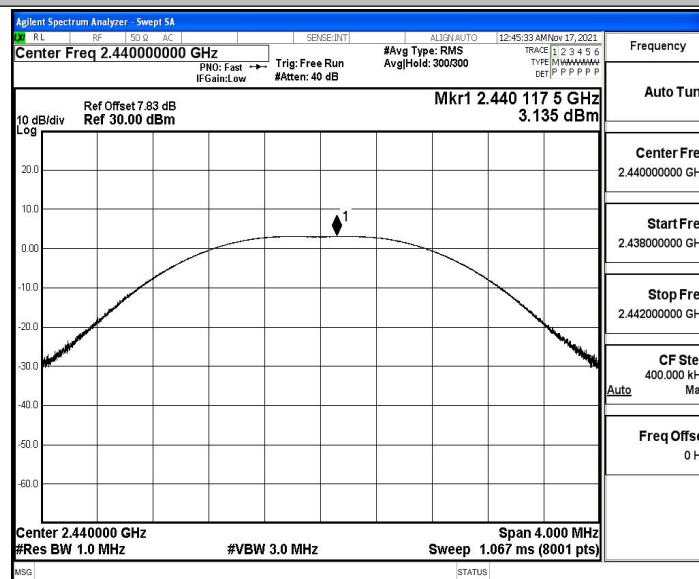


Test Graphs

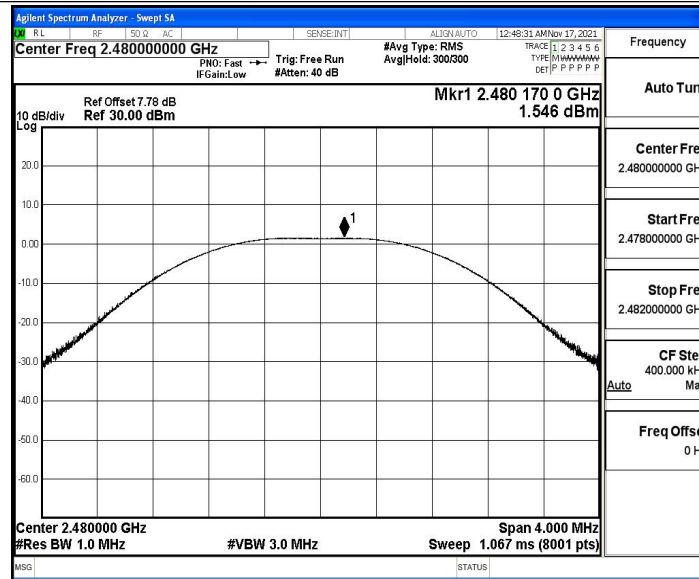
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480





B.3 Maximum power spectral density

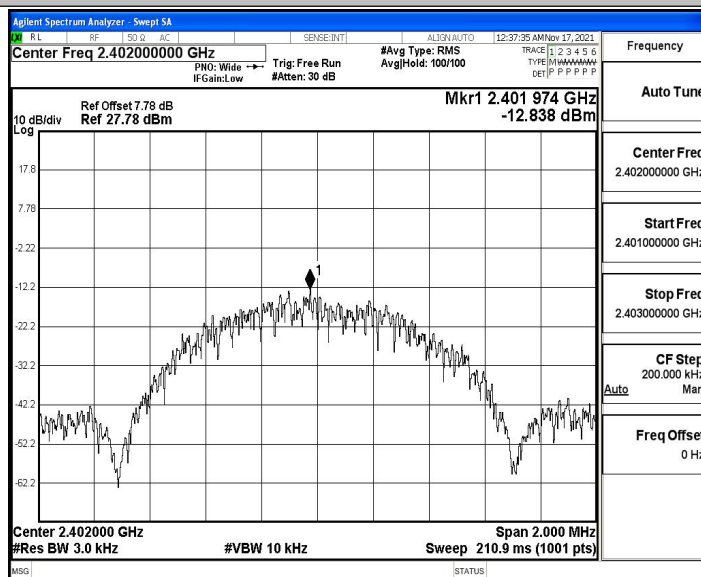
Test Result

TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-12.84	≤8	PASS
		2440	-11.68	≤8	PASS
		2480	-13.26	≤8	PASS

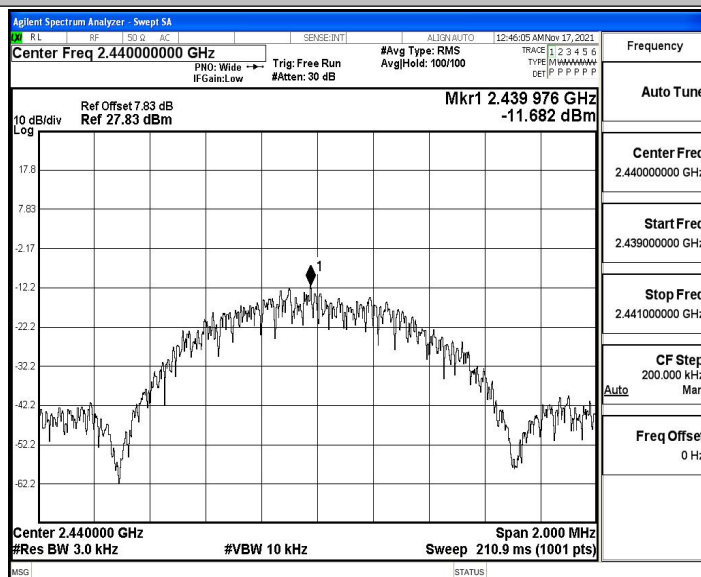


Test Graphs

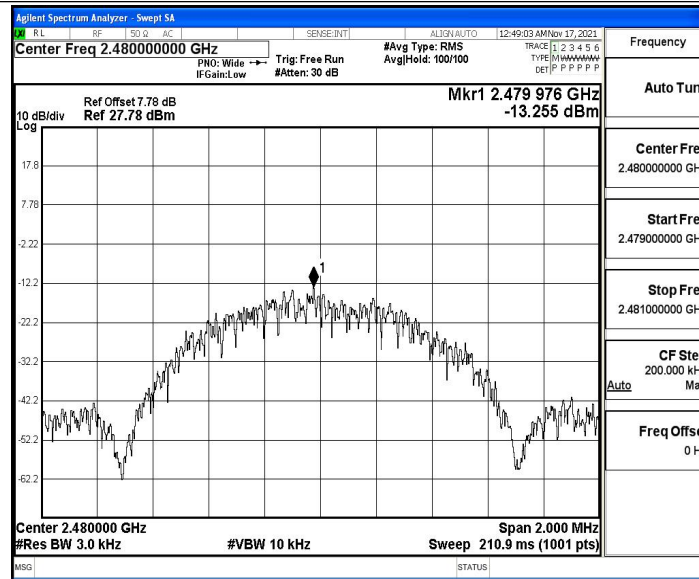
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480





B.4 Band edge measurements

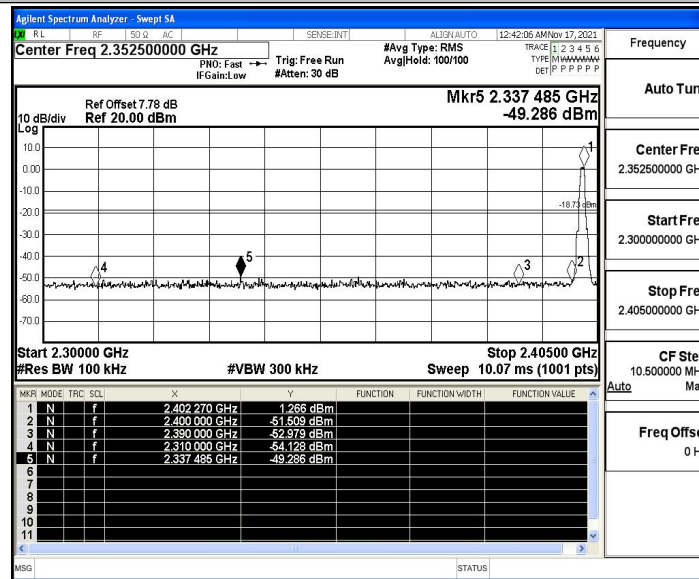
Test Result

TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	1.27	-49.29	≤ -18.73	PASS
		High	2480	0.70	-49.33	≤ -19.3	PASS

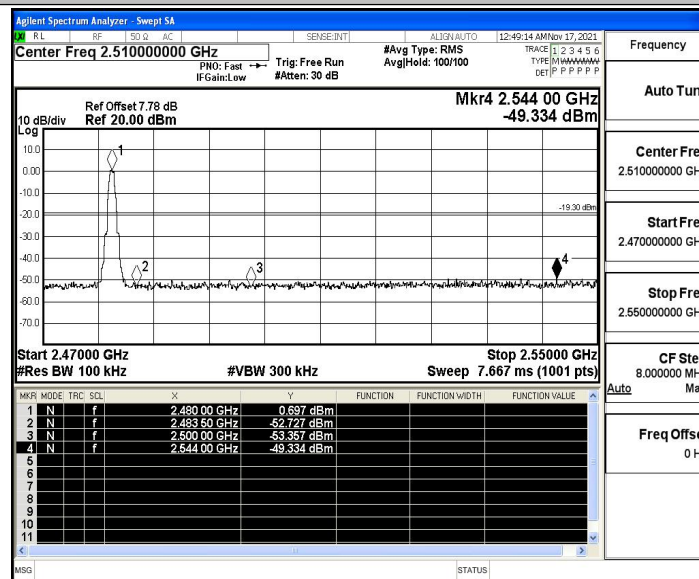


Test Graphs

BLE_1M_Ant1_Low_2402



BLE_1M_Ant1_High_2480





B.5 Conducted Spurious Emission

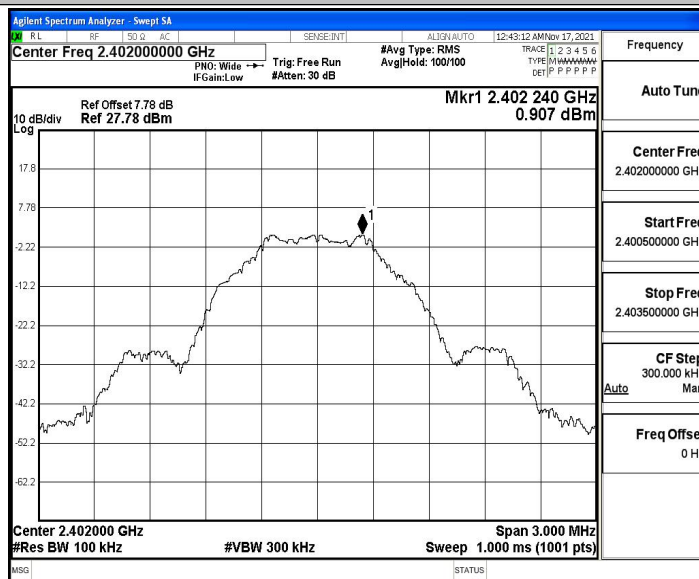
Test Result

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	0.91	0.91	---	PASS
			30~1000	0.91	-60.99	≤ -19.09	PASS
			1000~26500	0.91	-46.56	≤ -19.09	PASS
		2440	Reference	2.49	2.49	---	PASS
			30~1000	2.49	-61.27	≤ -17.51	PASS
			1000~26500	2.49	-46.69	≤ -17.51	PASS
		2480	Reference	0.96	0.96	---	PASS
			30~1000	0.96	-61.3	≤ -19.04	PASS
			1000~26500	0.96	-46.86	≤ -19.04	PASS

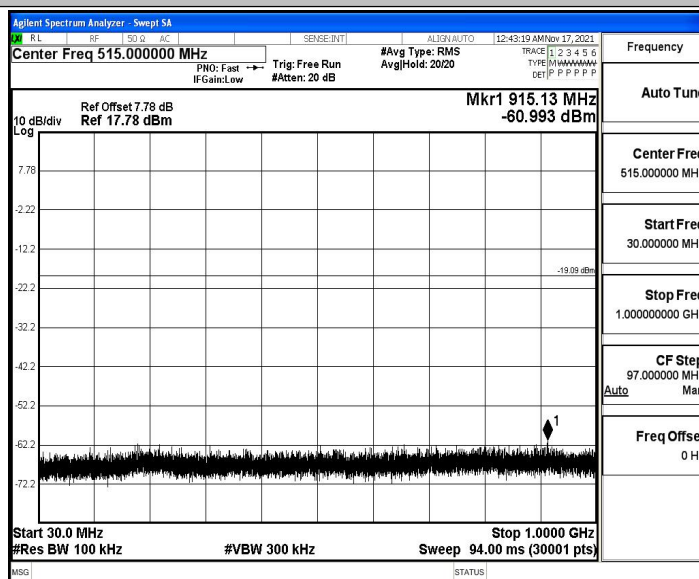


Test Graphs

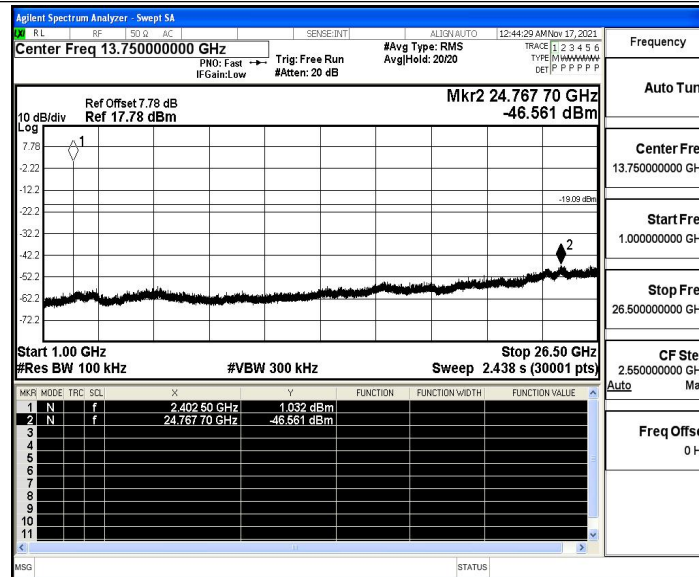
BLE_1M_Ant1_2402_0~Reference



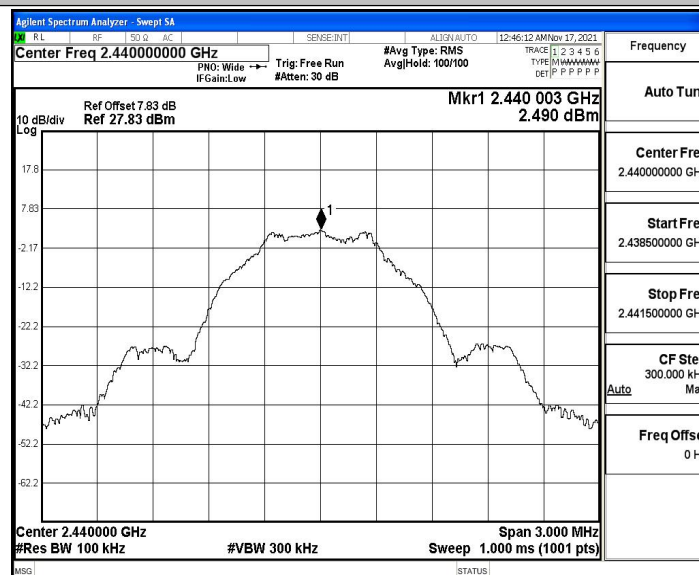
BLE_1M_Ant1_2402_30~1000



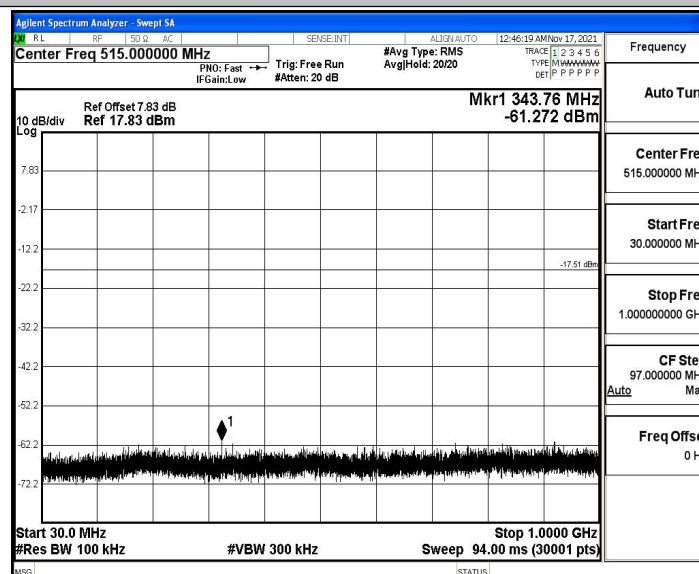
BLE_1M_Ant1_2402_1000~26500



BLE_1M_Ant1_2440_0~Reference

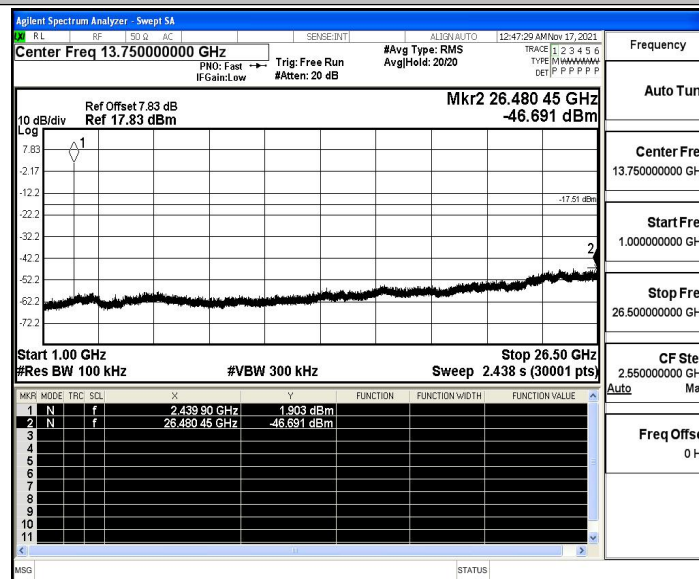


BLE_1M_Ant1_2440_30~1000

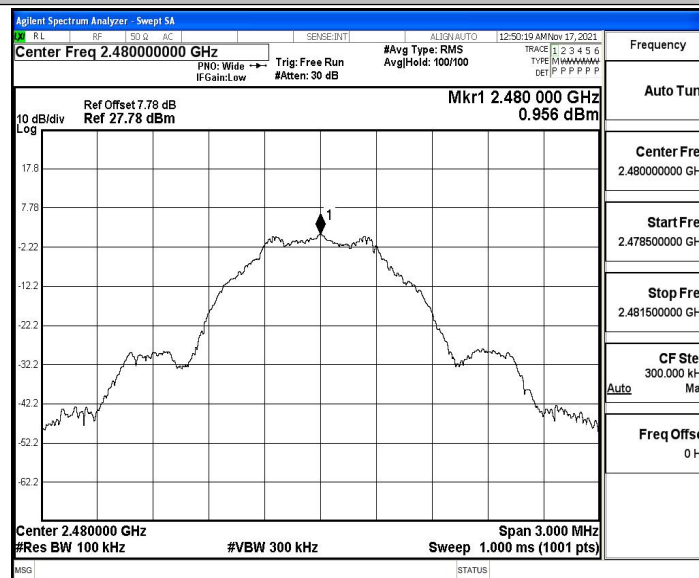




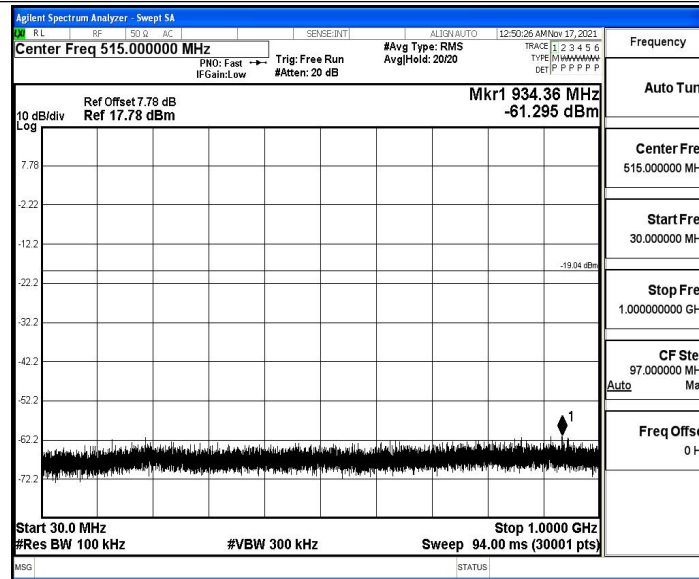
BLE_1M_Ant1_2440_1000~26500



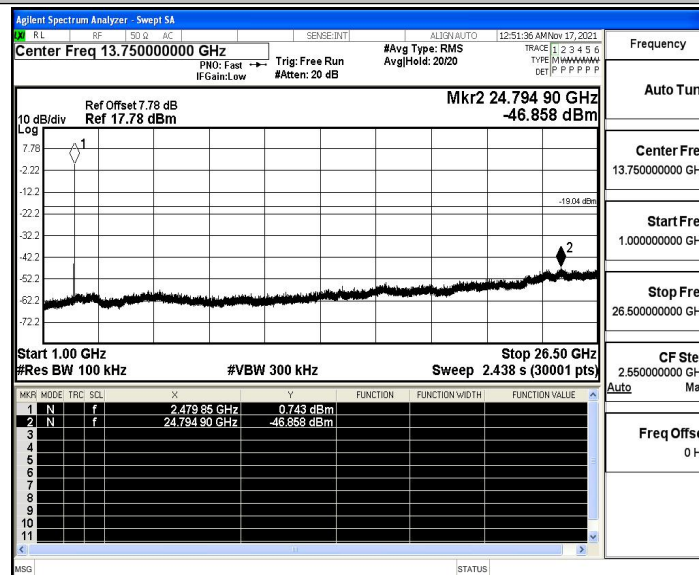
BLE_1M_Ant1_2480_0~Reference



BLE_1M_Ant1_2480_30~1000



BLE_1M_Ant1_2480_1000~26500





B.6 Duty Cycle

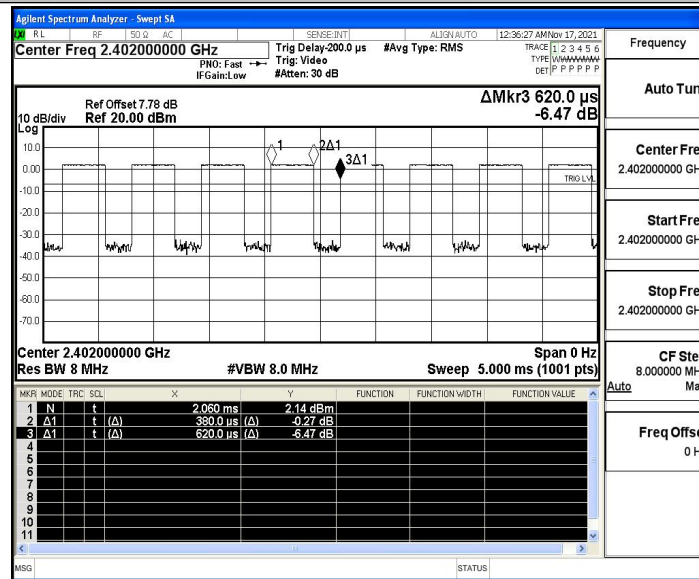
Test Result

TestMode	Antenna	Channel	ON Time [ms]	Period [ms]	X	DC [%]	xFactor	Minimum VBW(KHz)	Limit	Verdict
BLE_1M	Ant1	2402	0.38	0.62	0.6129	61.29	2.13	2.63	---	PASS
		2440	0.39	0.63	0.6190	61.90	2.08	2.56	---	PASS
		2480	0.38	0.62	0.6129	61.29	2.13	2.63	---	PASS

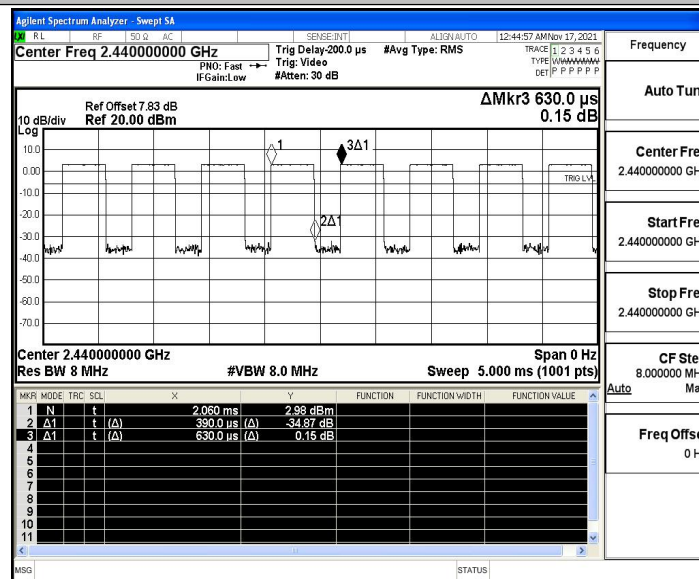


Test Graphs

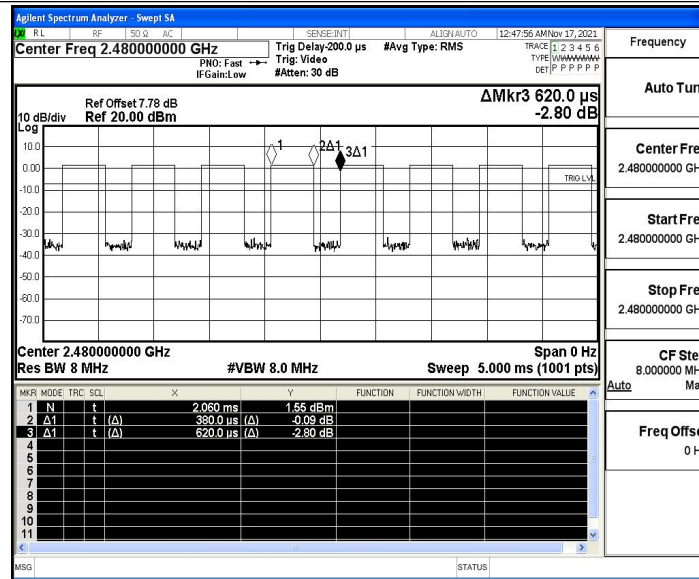
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480





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	-48.36	≤-41.20	46.84	≤54	PASS
				AV	2384.630	-47.45	≤-41.20	47.75	≤54	PASS
				AV	2390.000	-47.76	≤-41.20	47.44	≤54	PASS
				Peak	2310.000	-42.49	≤-21.20	52.71	≤74	PASS
				Peak	2382.005	-38.93	≤-21.20	56.27	≤74	PASS
				Peak	2390.000	-41.79	≤-21.20	53.41	≤74	PASS
		High	2480	AV	2483.500	-46.69	≤-41.20	48.51	≤54	PASS
				AV	2483.520	-46.69	≤-41.20	48.51	≤54	PASS
				AV	2500.000	-47.38	≤-41.20	47.82	≤54	PASS
				Peak	2483.500	-41.07	≤-21.20	54.13	≤74	PASS
				Peak	2495.440	-37.4	≤-21.20	57.80	≤74	PASS
				Peak	2500.000	-40.84	≤-21.20	54.36	≤74	PASS

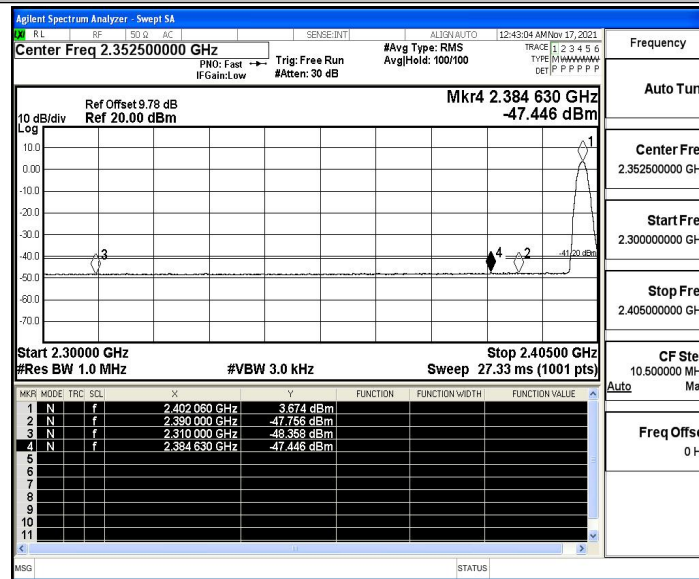
Note:

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.

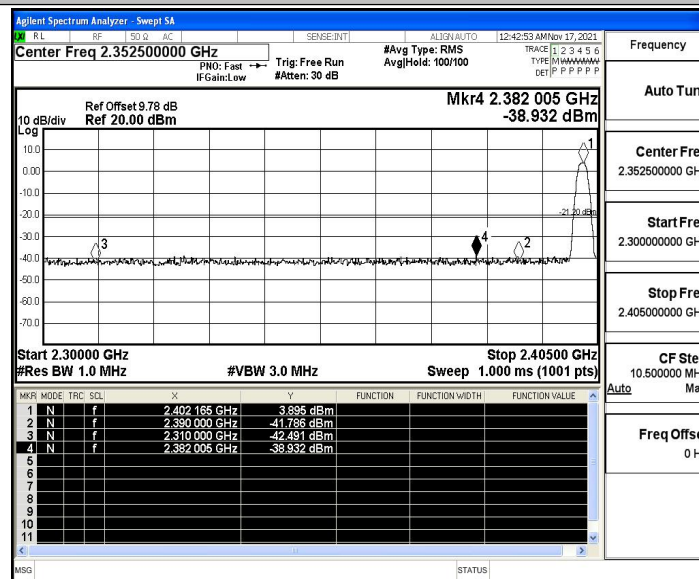


Test Graphs

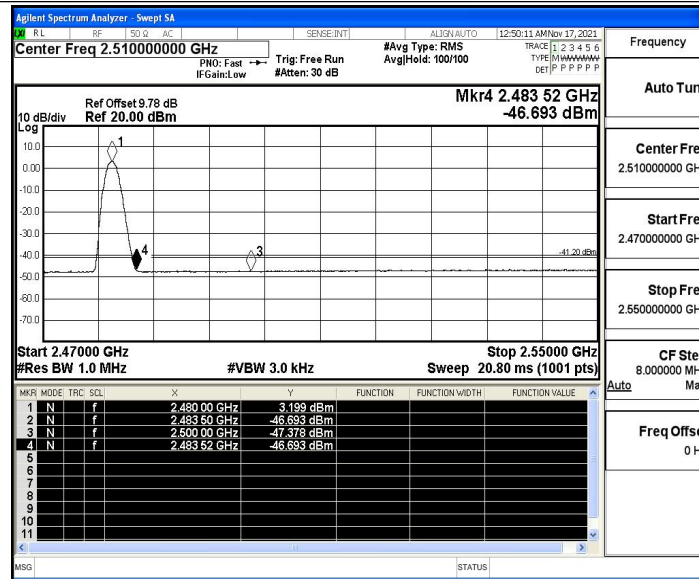
BLE_1M_Ant1_Low_2402_AV



BLE_1M_Ant1_Low_2402_Peak



BLE_1M_Ant1_High_2480_AV



BLE_1M_Ant1_High_2480_Peak

