



Appendix B

RF Test Data for BT LE (Conducted Measurement)

Product Name: GNSS Receiver

Test Model: N6

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

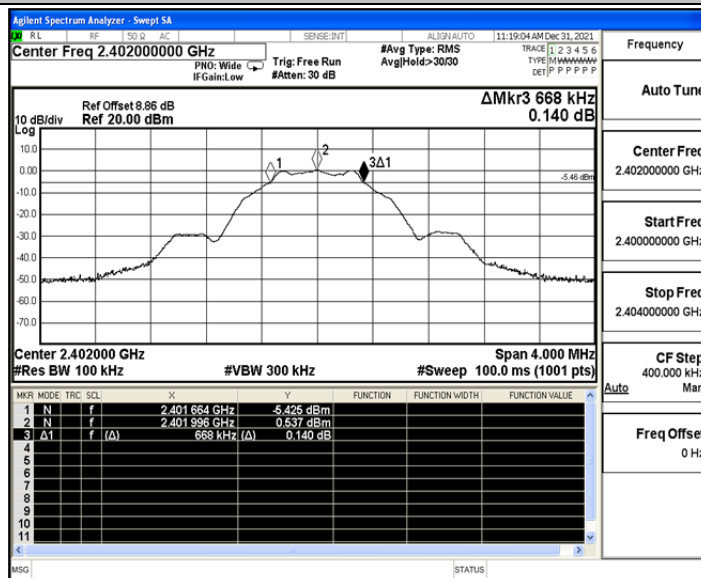
Test Result

TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.668	2401.664	2402.332	0.5	PASS
		2440	0.664	2439.664	2440.328	0.5	PASS
		2480	0.668	2479.660	2480.328	0.5	PASS

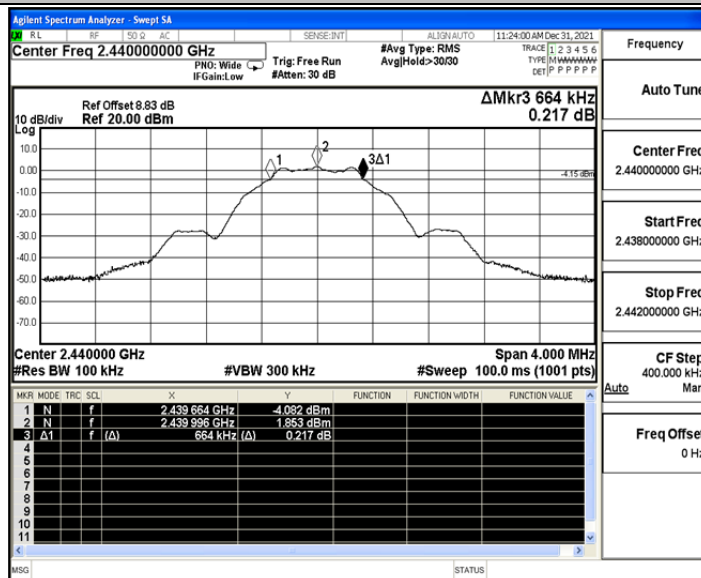


Test Graphs

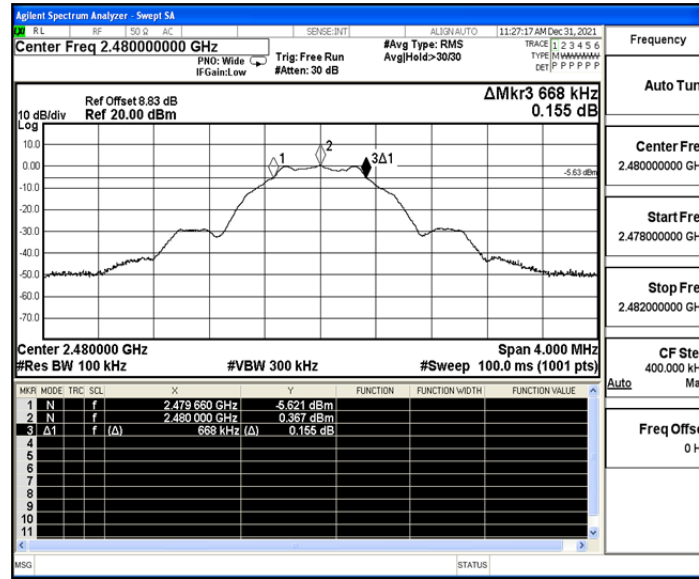
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480





B.2 Maximum peak conducted output power

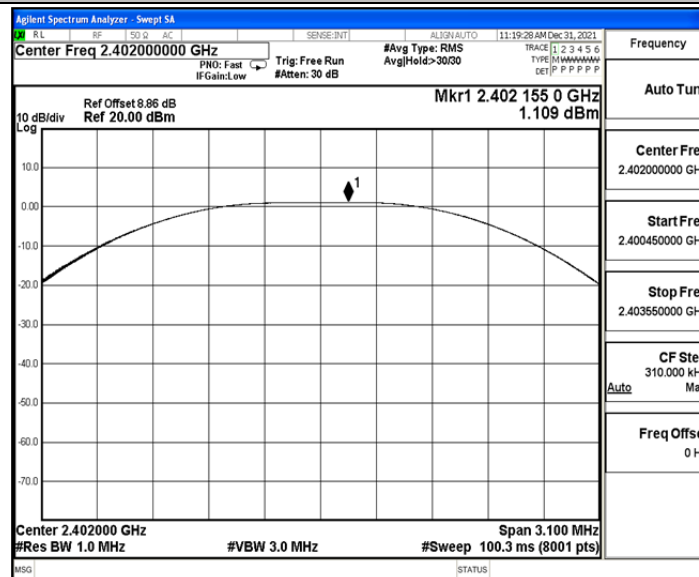
Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	1.11	≤30	PASS
		2440	2.38	≤30	PASS
		2480	0.92	≤30	PASS

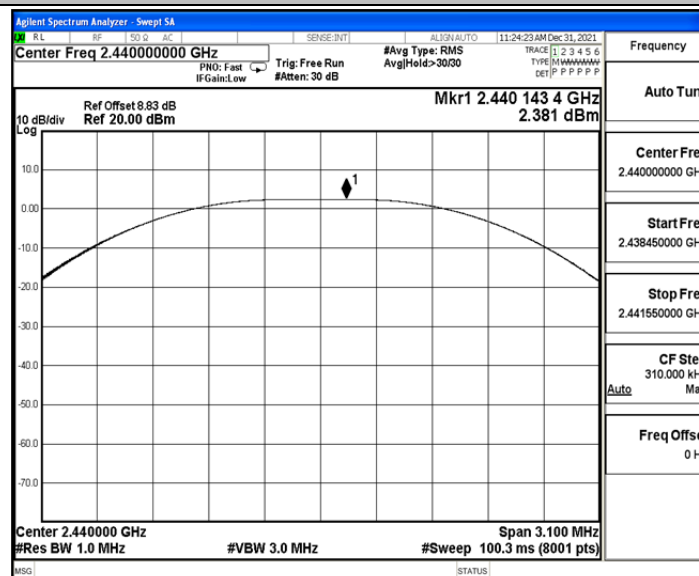


Test Graphs

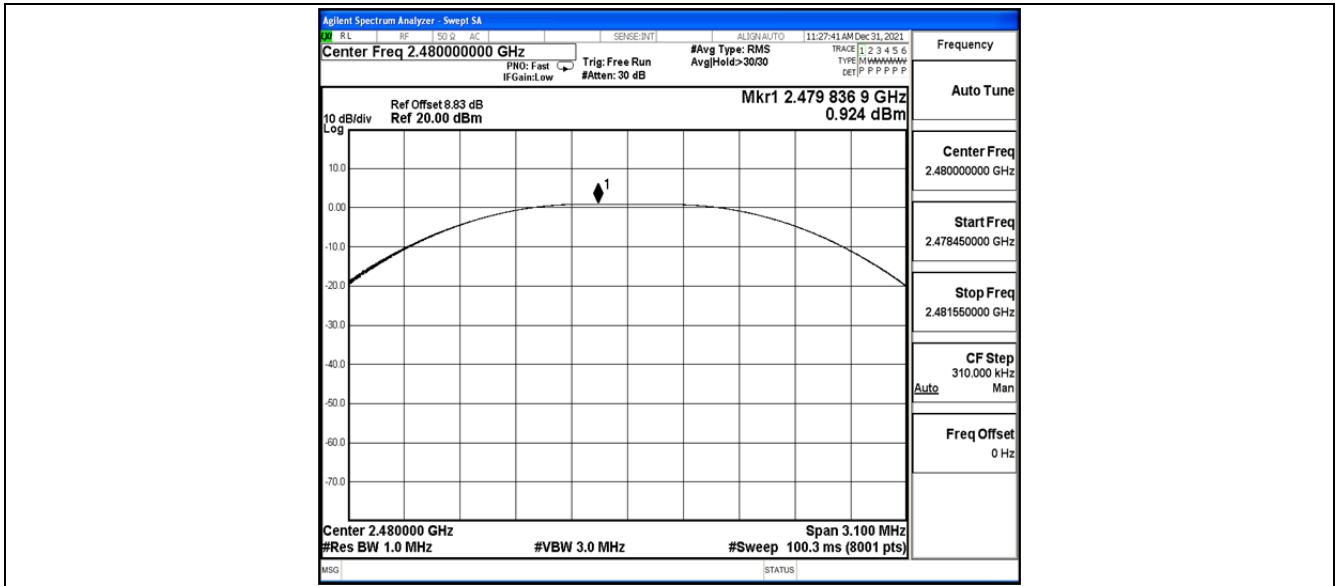
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480





B.3 Maximum power spectral density

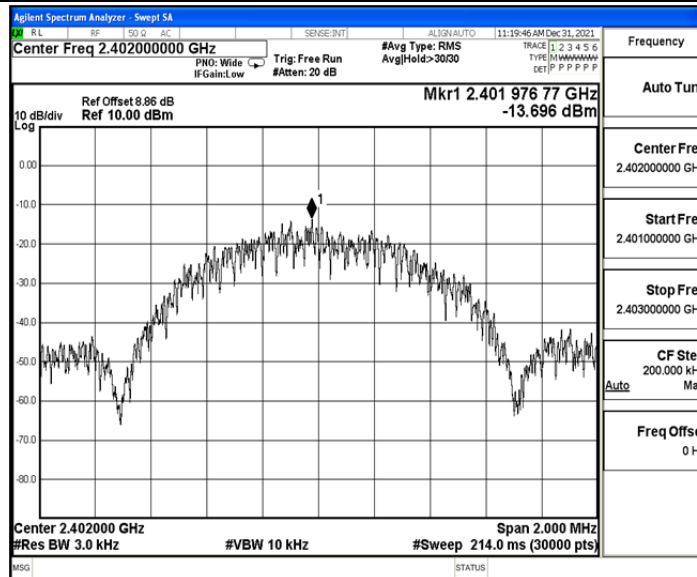
Test Result

TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-13.7	≤8.00	PASS
		2440	-12.36	≤8.00	PASS
		2480	-13.87	≤8.00	PASS

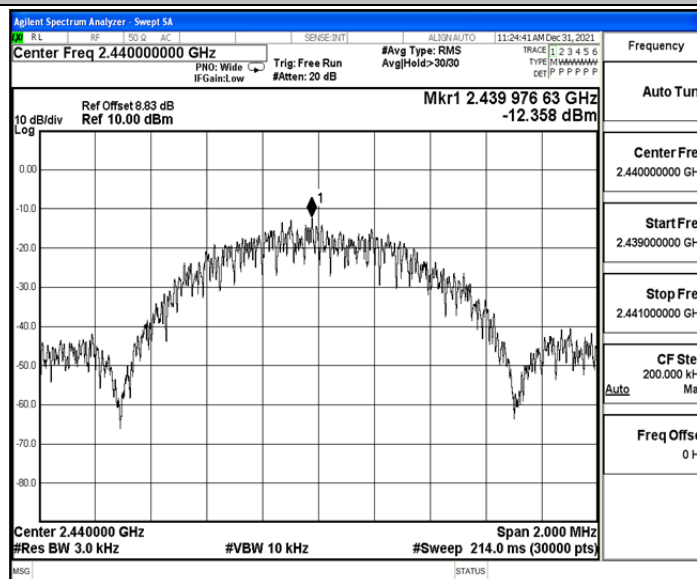


Test Graphs

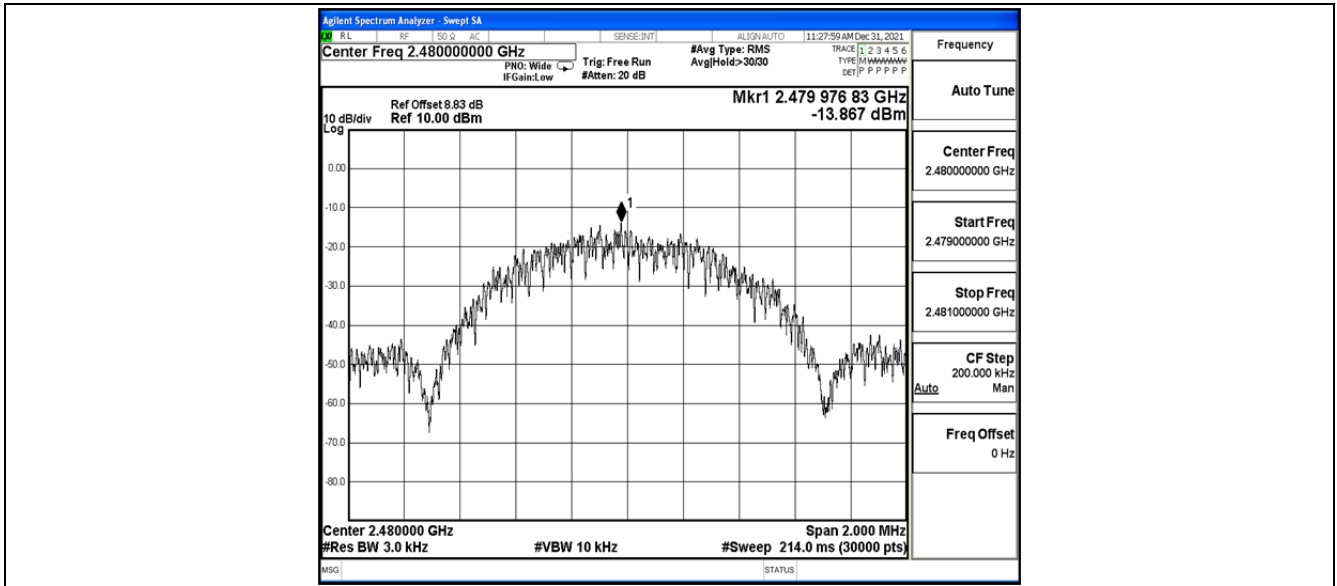
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480





B.4 Band edge measurements

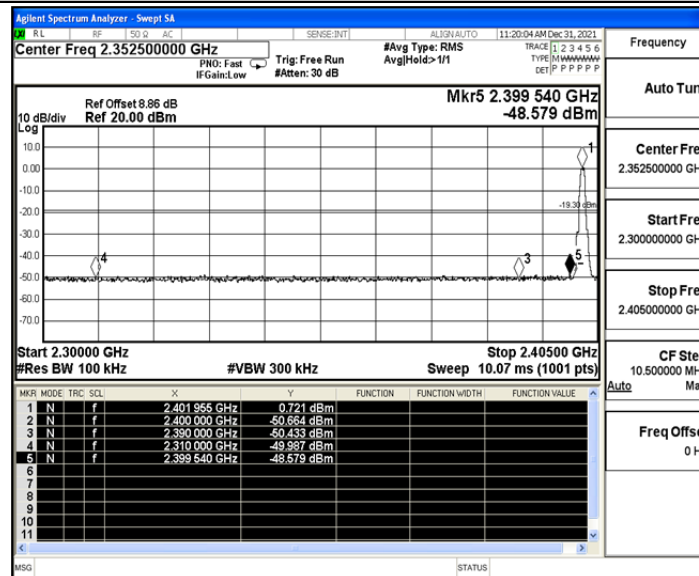
Test Result

TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	0.71	-48.58	≤ -19.3	PASS
		High	2480	0.48	-47.45	≤ -19.52	PASS

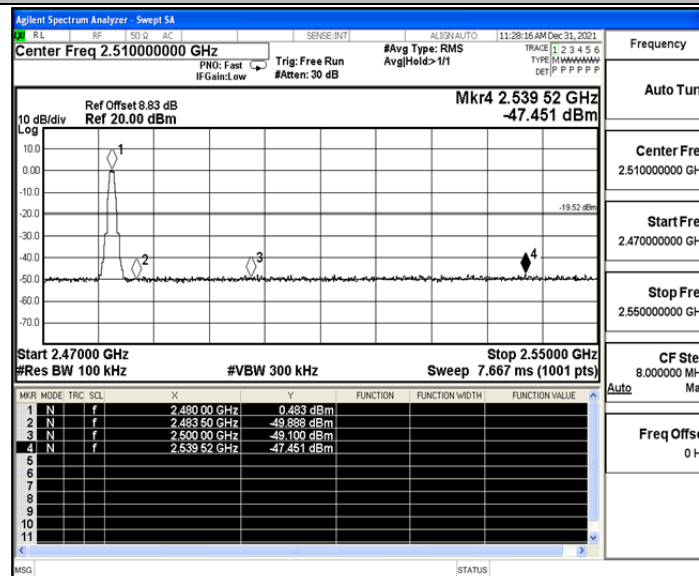


Test Graphs

BLE_1M_Ant1_Low_2402



BLE_1M_Ant1_High_2480





B.5 Conducted Spurious Emission

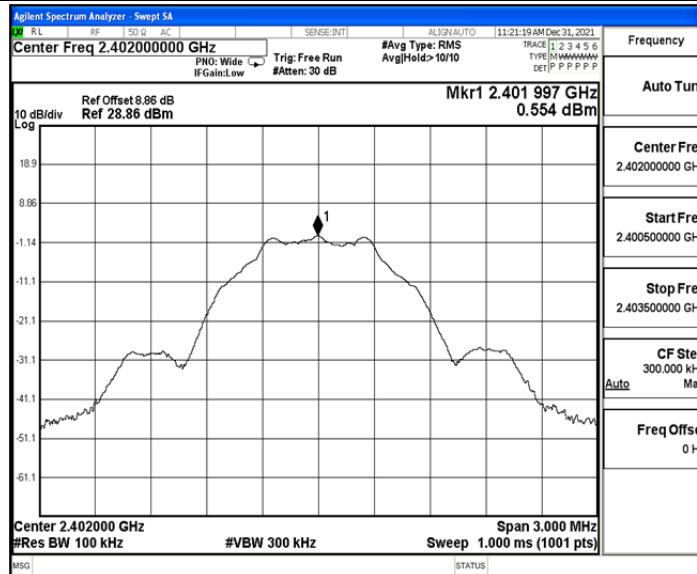
Test Result

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	0.55	0.55	---	PASS
			30~1000	0.55	-59.78	≤ -19.45	PASS
			1000~26500	0.55	-46.03	≤ -19.45	PASS
		2440	Reference	1.87	1.87	---	PASS
			30~1000	1.87	-59.52	≤ -18.13	PASS
			1000~26500	1.87	-45.57	≤ -18.13	PASS
		2480	Reference	0.35	0.35	---	PASS
			30~1000	0.35	-59.92	≤ -19.65	PASS
			1000~26500	0.35	-45.8	≤ -19.65	PASS

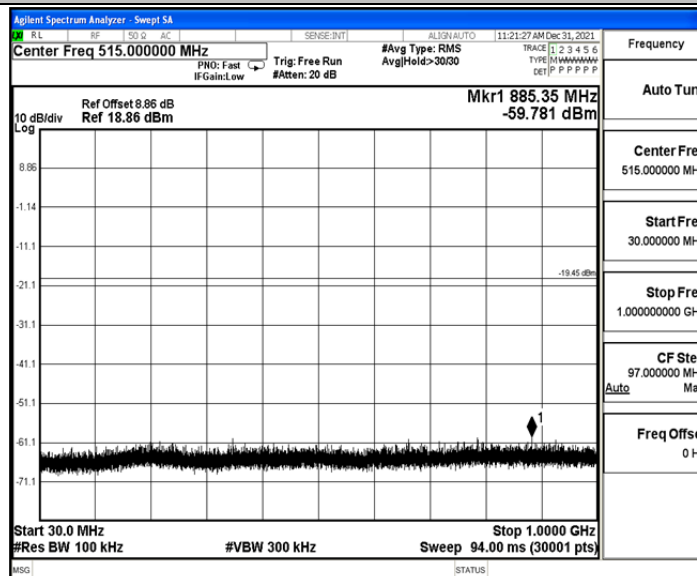


Test Graphs

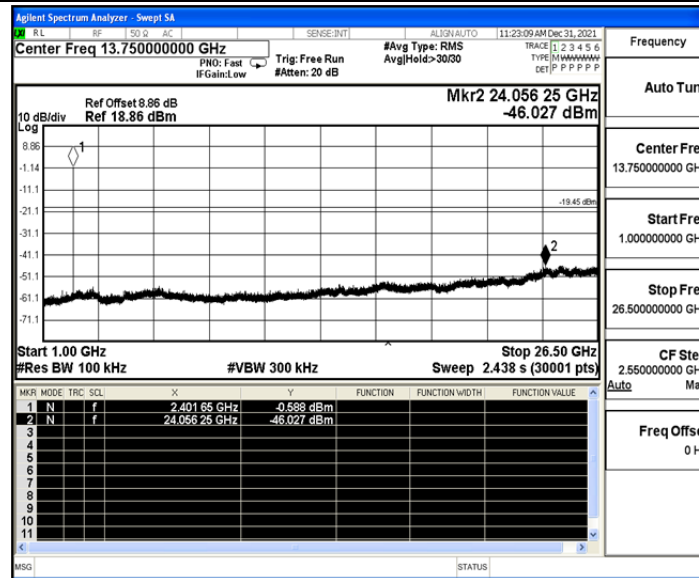
BLE_1M_Ant1_2402_0~Reference



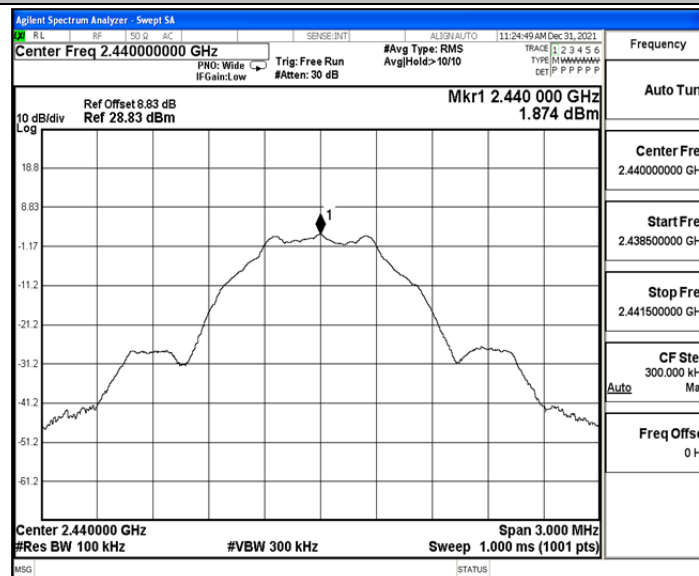
BLE_1M_Ant1_2402_30~1000



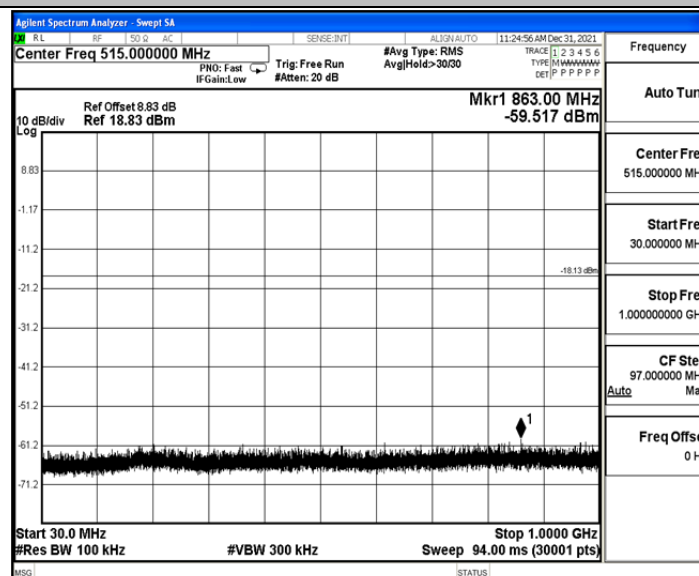
BLE_1M_Ant1_2402_1000~26500



BLE_1M_Ant1_2440_0~Reference

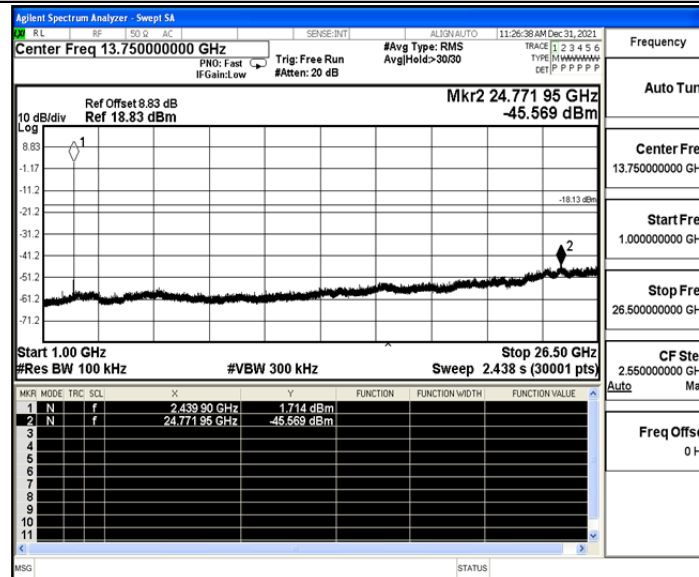


BLE_1M_Ant1_2440_30~1000

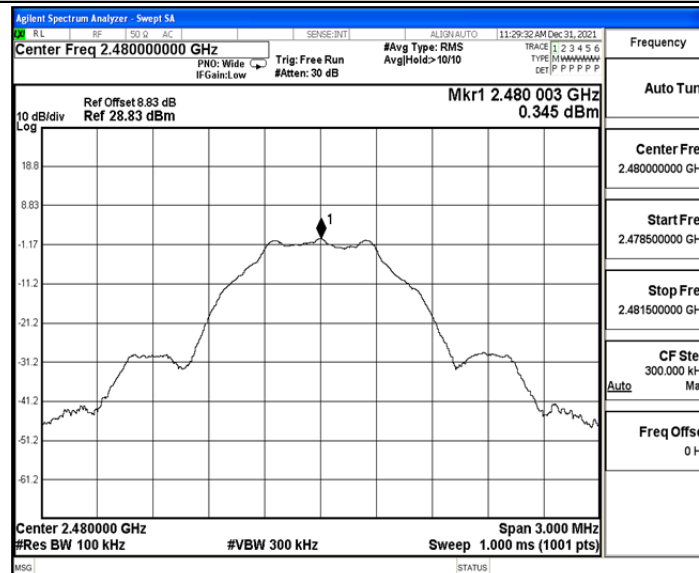




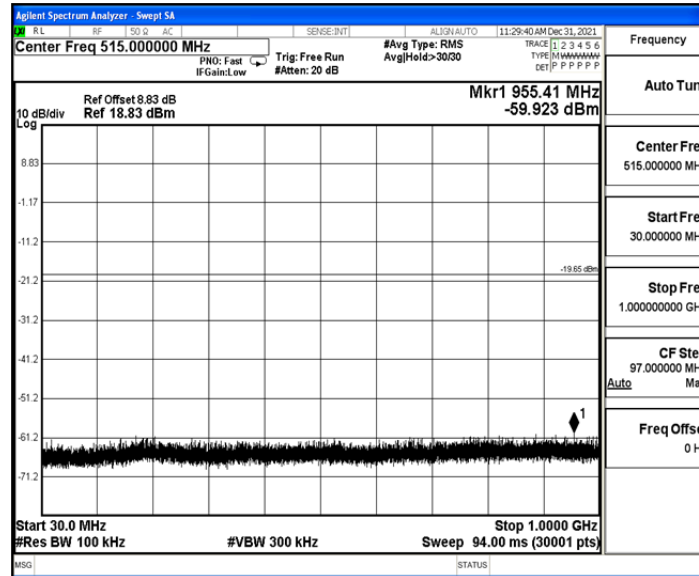
BLE_1M_Ant1_2440_1000~26500



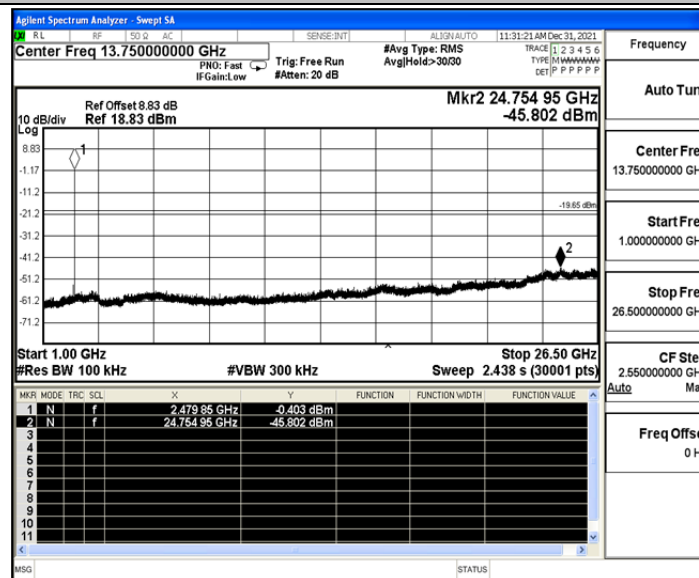
BLE_1M_Ant1_2480_0~Reference



BLE_1M_Ant1_2480_30~1000



BLE_1M_Ant1_2480_1000~26500





B.6 Duty Cycle

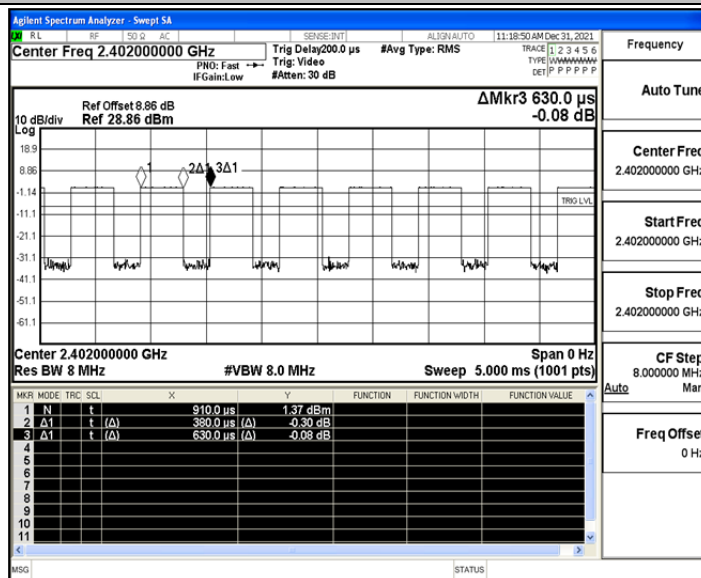
Test Result

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

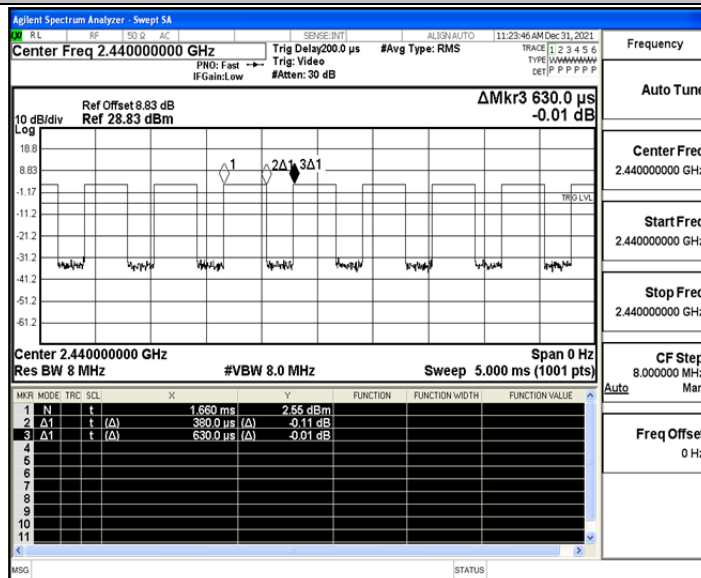


Test Graphs

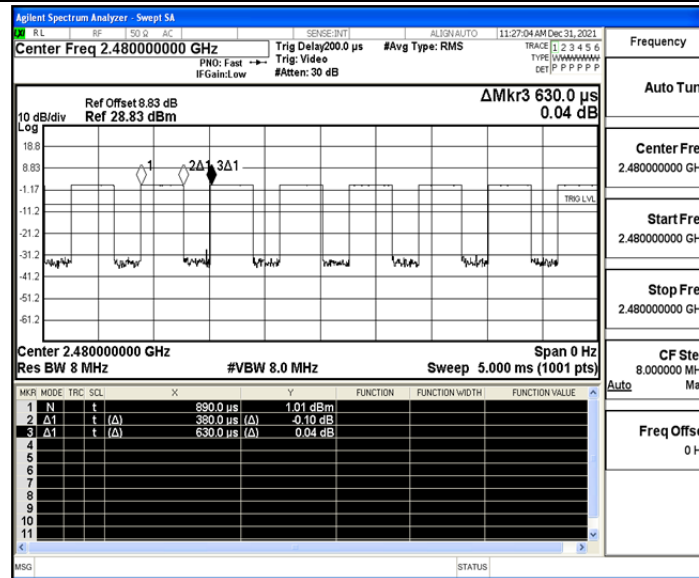
BLE_1M_Ant1_2402



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	-47.04	≤-41.20	48.16	≤54	PASS
				AV	2355.860	-46.42	≤-41.20	48.78	≤54	PASS
				AV	2390.000	-46.72	≤-41.20	48.48	≤54	PASS
				Peak	2310.000	-37.97	≤-21.20	57.23	≤74	PASS
				Peak	2357.960	-36.34	≤-21.20	58.86	≤74	PASS
				Peak	2390.000	-38.09	≤-21.20	57.11	≤74	PASS
		High	2480	AV	2483.500	-45.85	≤-41.20	49.35	≤54	PASS
				AV	2492.480	-45.79	≤-41.20	49.41	≤54	PASS
				AV	2500.000	-46.22	≤-41.20	48.98	≤54	PASS
				Peak	2483.500	-37.9	≤-21.20	57.30	≤74	PASS
				Peak	2488.960	-35.47	≤-21.20	59.73	≤74	PASS
				Peak	2500.000	-37.09	≤-21.20	58.11	≤74	PASS

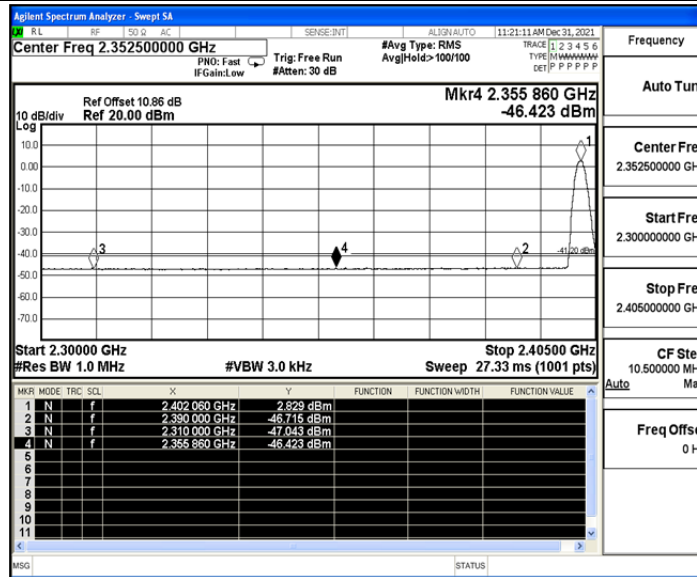
Note:

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.

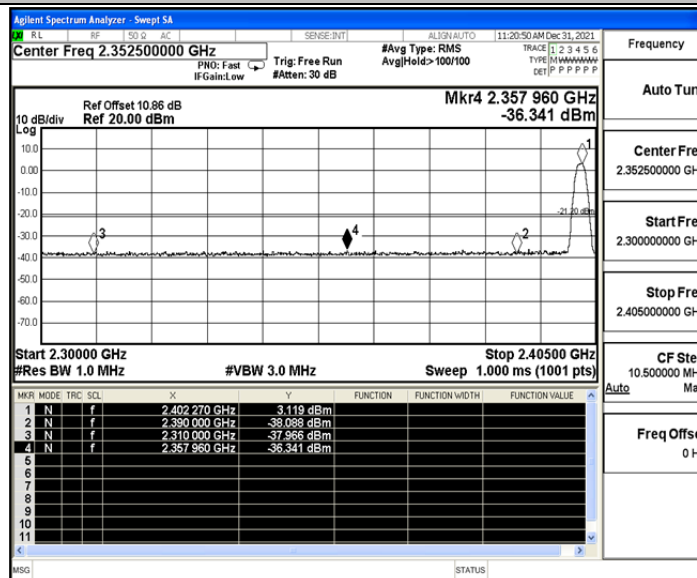


Test Graphs

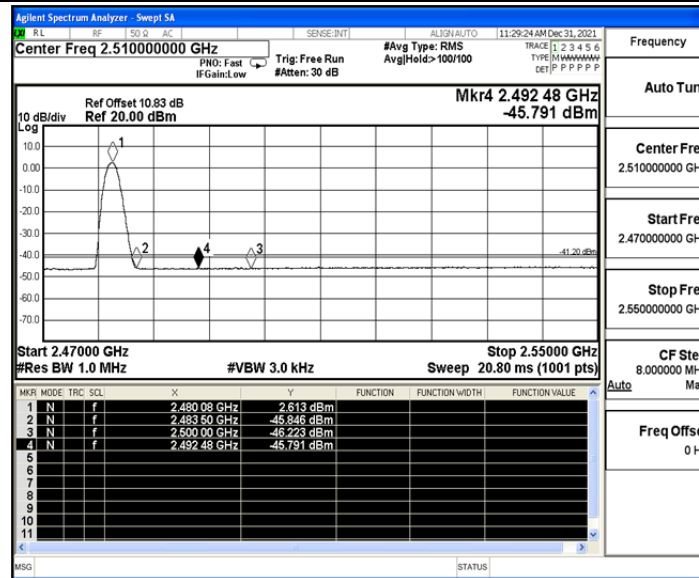
BLE_1M_Ant1_Low_2402_AV



BLE_1M_Ant1_Low_2402_Peak



BLE_1M_Ant1_High_2480_AV



BLE_1M_Ant1_High_2480_Peak

