Appendix A

RF Test Data for BT(BLE) (Conducted Measurement)

Product Name: Smart Teddy

Trade Mark: N/A

Test Model: ST-01

FCC ID: 2AZPXST-01

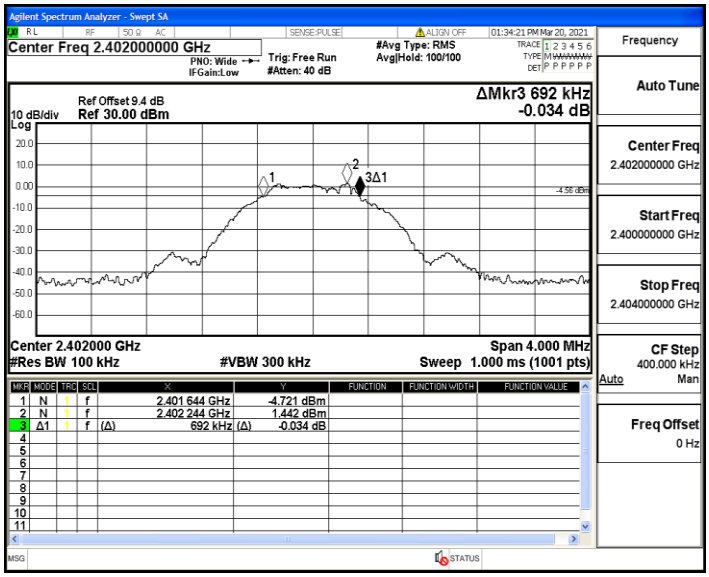
Environmental Conditions

Temperature:	23.8℃
Relative Humidity:	51%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

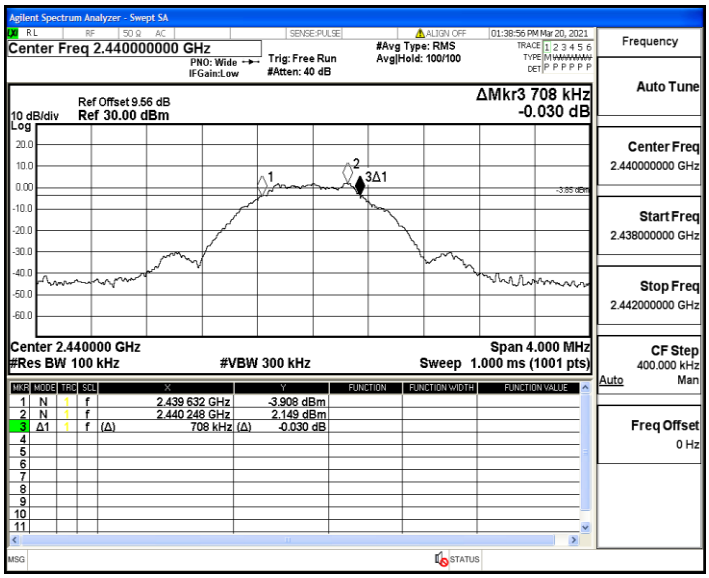
A.1. 6dB Bandwidth

TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.692	2401.644	2402.336	0.5	PASS
		2440	0.708	2439.632	2440.340	0.5	PASS
		2480	0.712	2479.624	2480.336	0.5	PASS

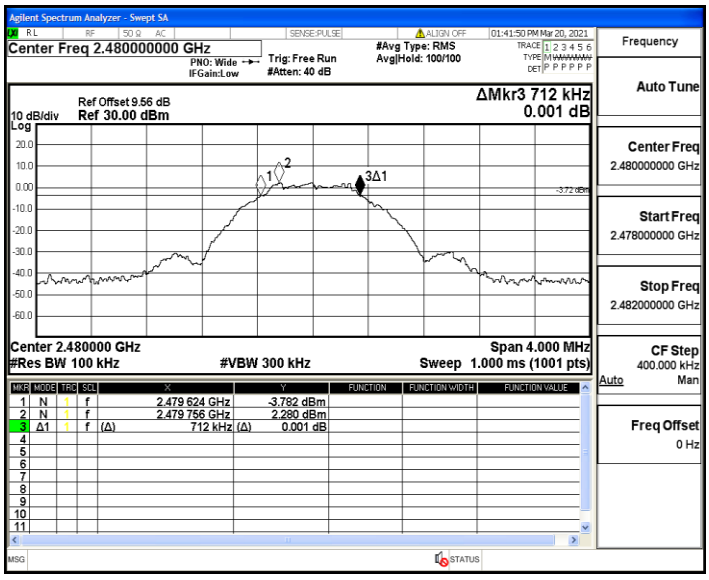
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



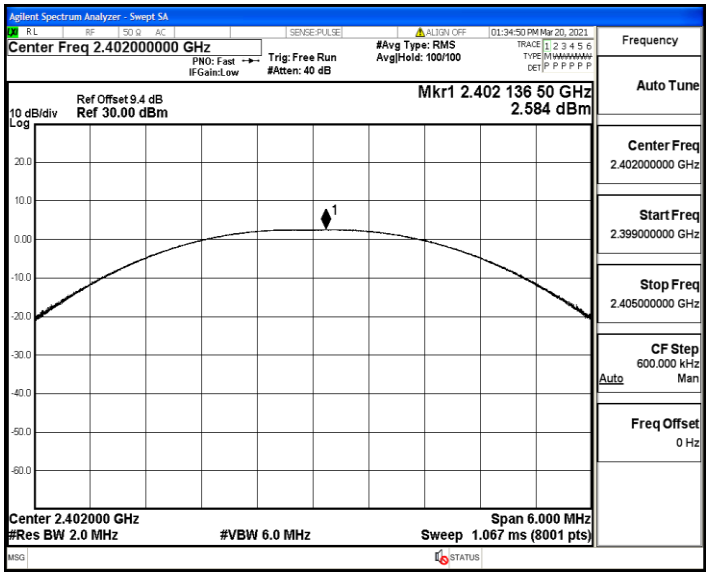
A.2. Occupied Bandwidth

Test Mode	Test Channel	Ant	OBW[MHz]	Limit[MHz]	Verdict

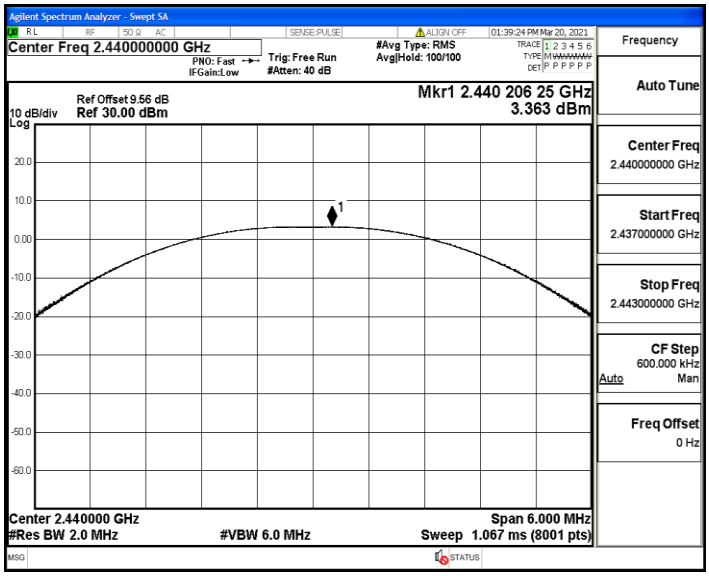
A.3. Maximum peak conducted output power

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	2.58	<=30	PASS
		2440	3.36	<=30	PASS
		2480	3.54	<=30	PASS

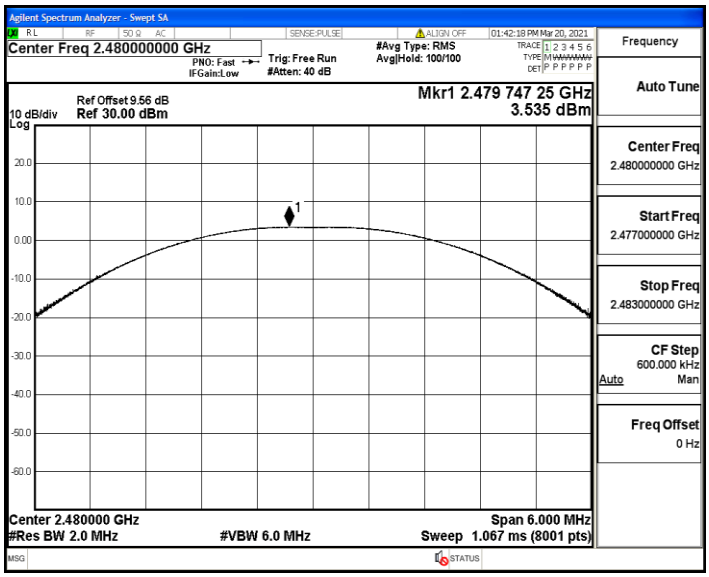
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



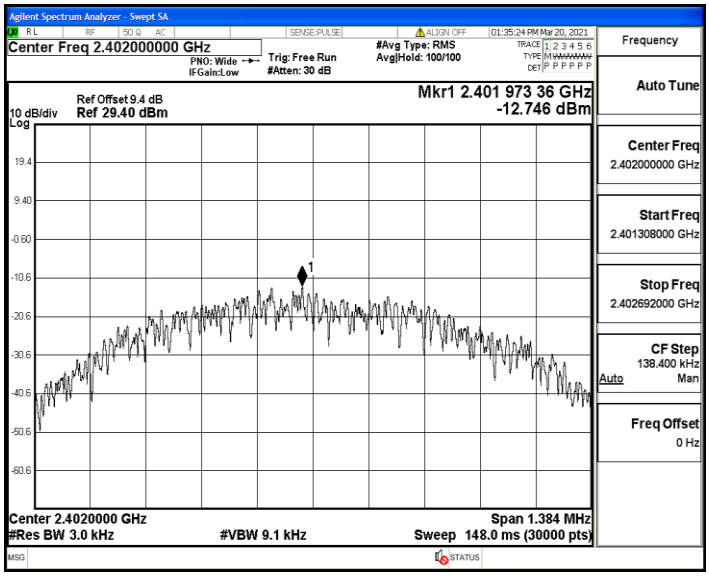
BLE_1M_Ant1_2480



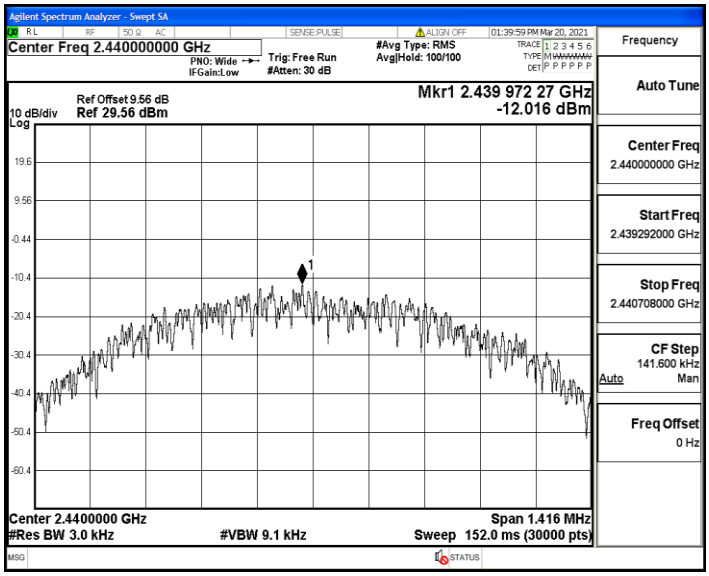
A.4. Maximum Peak power spectral density

TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-12.75	<=8	PASS
		2440	-12.02	<=8	PASS
		2480	-11.74	<=8	PASS

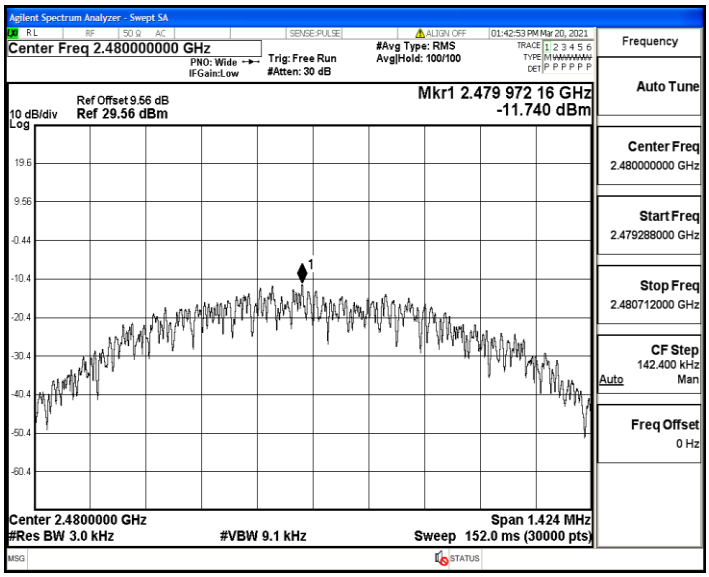
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



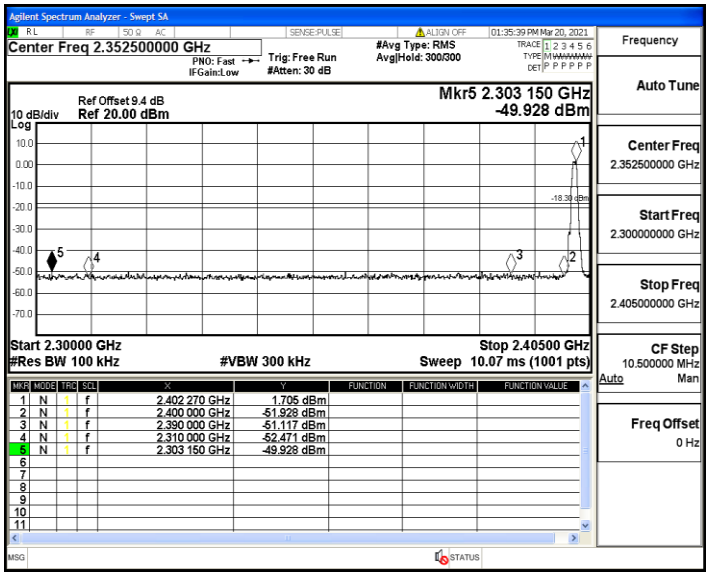
BLE_1M_Ant1_2480



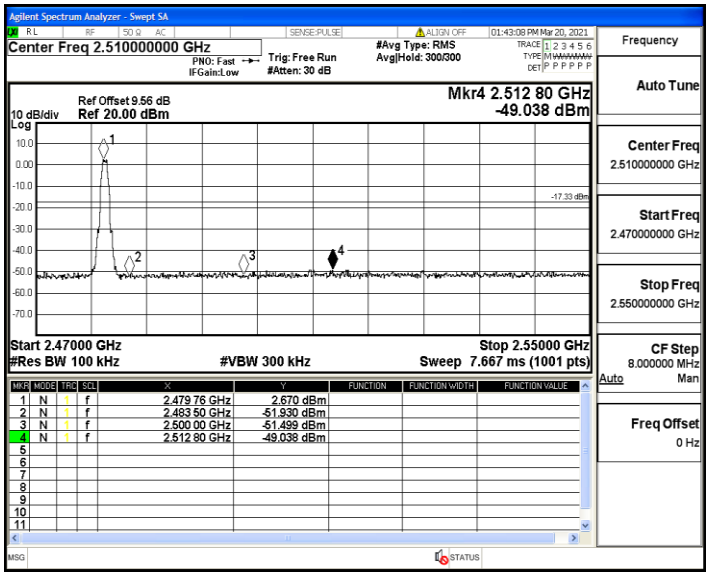
A.5. Band-edge for RF Conducted Emissions

TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	1.71	-49.93	<=-18.3	PASS
		High	2480	2.67	-49.04	<=-17.33	PASS

BLE_1M_Ant1_Low_2402

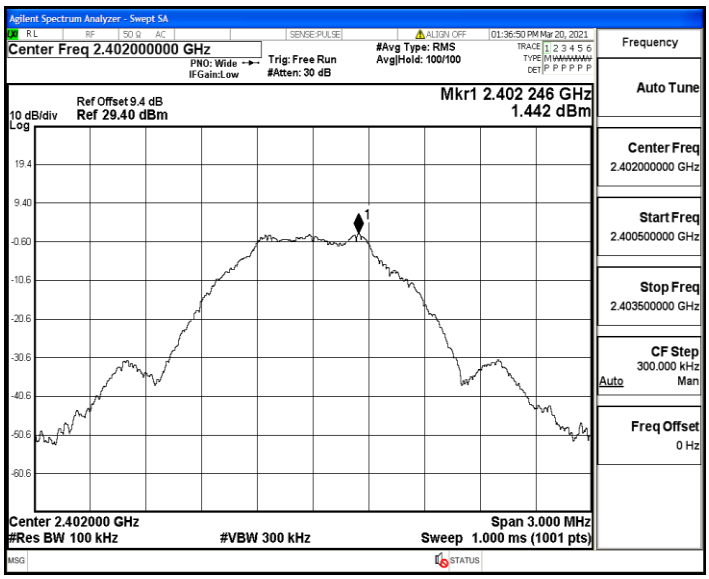


BLE_1M_Ant1_High_2480

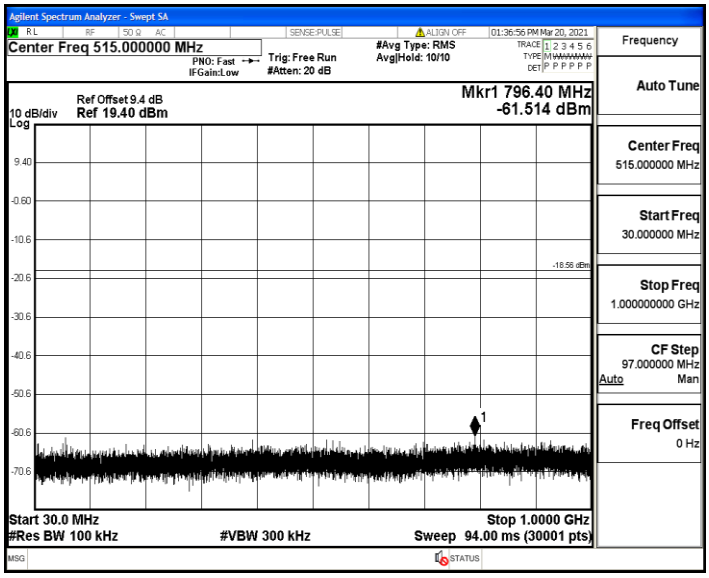


A.6. RF Conducted Spurious Emissions

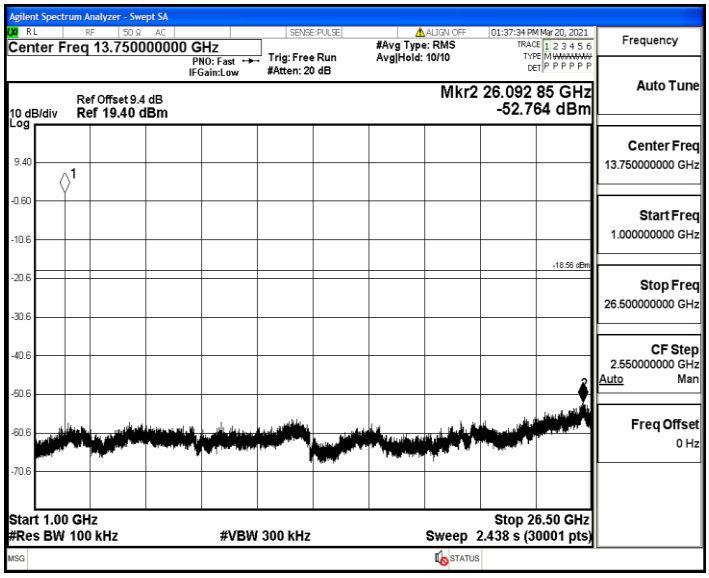
BLE_1M_Ant1_2402_0~Reference



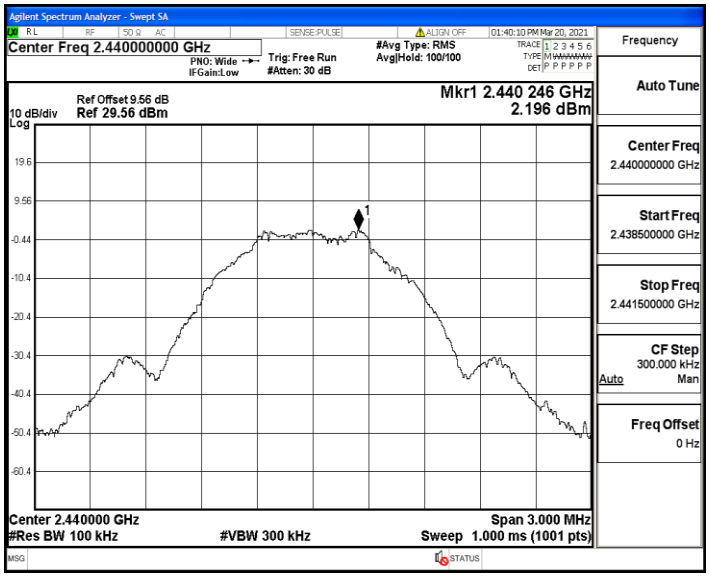
BLE_1M_Ant1_2402_30~1000



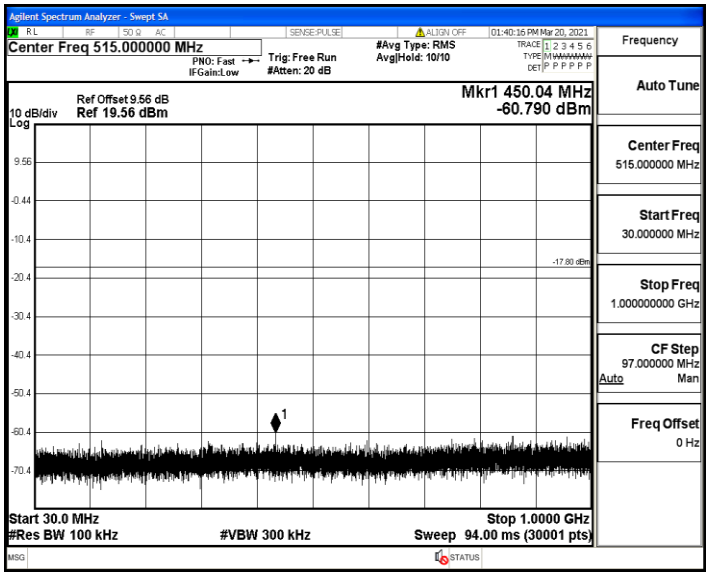
BLE_1M_Ant1_2402_1000~26500



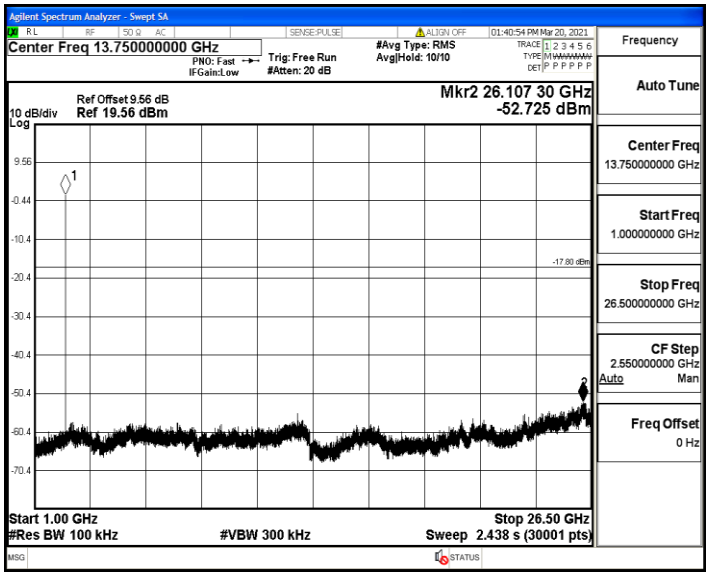
BLE_1M_Ant1_2440_0~Reference



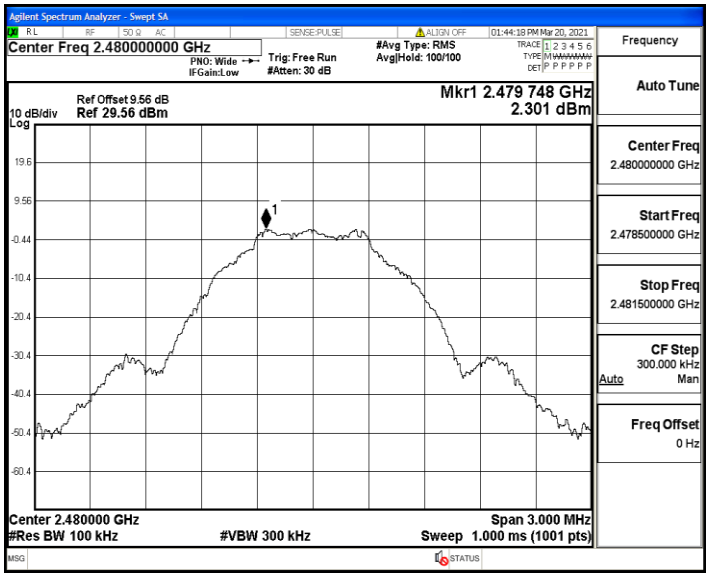
BLE_1M_Ant1_2440_30~1000



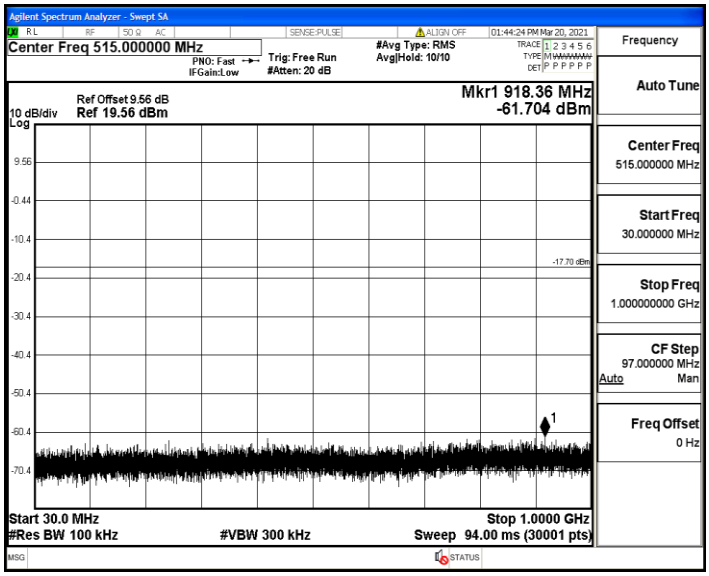
BLE_1M_Ant1_2440_1000~26500



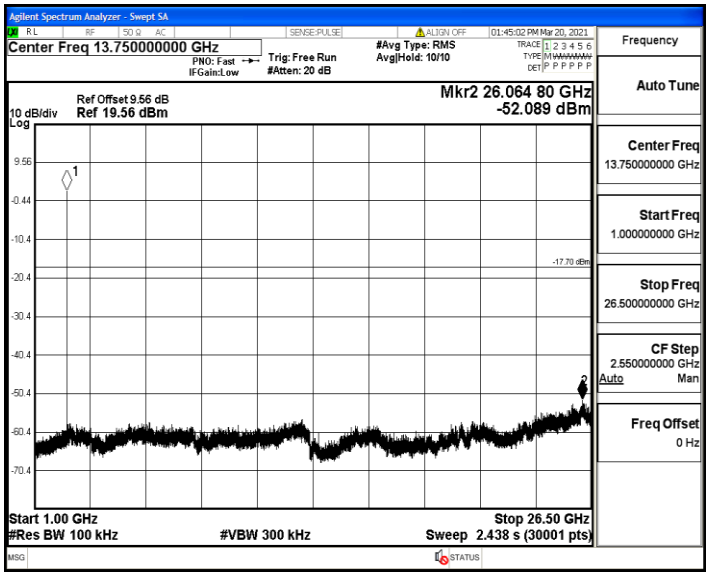
BLE_1M_Ant1_2480_0~Reference



BLE_1M_Ant1_2480_30~1000



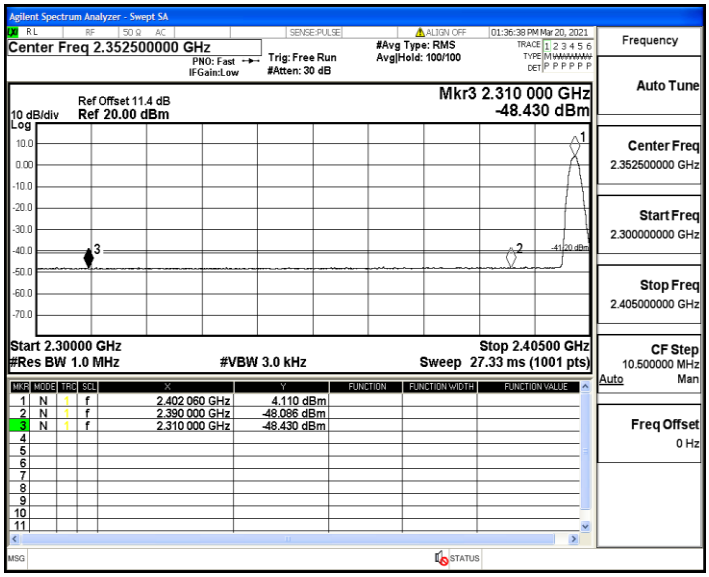
BLE_1M_Ant1_2480_1000~26500



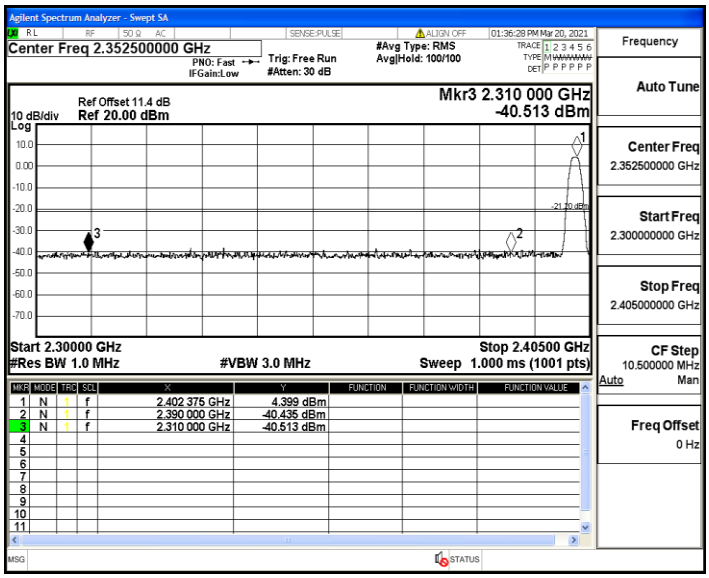
A.7. Restrict-band band-edge measurements

TestMode	Antenna	ChName	Channel	Detector	Freq. [MHz]	Result [dBm]	Limit [dBm]	Verdict
BLE_1M	Ant1	Low	2402	AV	2310.000	-48.43	<=-41.20	PASS
				AV	2365.835	-47.59	<=-41.20	PASS
				AV	2390.000	-48.09	<=-41.20	PASS
				Peak	2310.000	-40.51	<=-21.20	PASS
				Peak	2329.400	-38.31	<=-21.20	PASS
				Peak	2390.000	-40.44	<=-21.20	PASS
		High	2480	AV	2483.500	-46.35	<=-41.20	PASS
				AV	2500.000	-47.49	<=-41.20	PASS
				Peak	2483.500	-41.37	<=-21.20	PASS
				Peak	2498.560	-38.01	<=-21.20	PASS
				Peak	2500.000	-41.6	<=-21.20	PASS

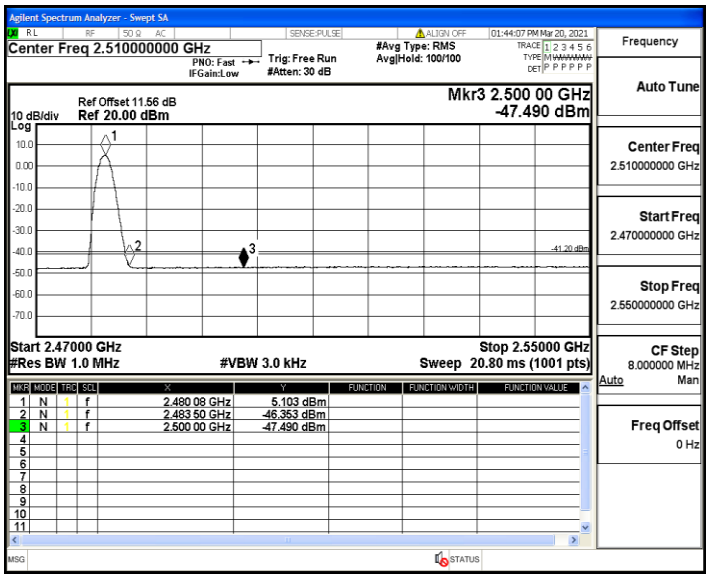
BLE_1M_Ant1_Low_2402_AV



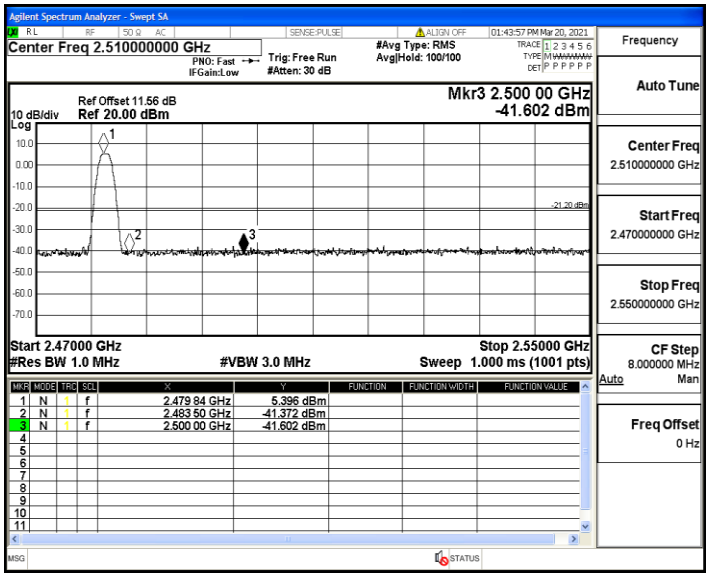
BLE_1M_Ant1_Low_2402_Peak



BLE_1M_Ant1_High_2480_AV



BLE_1M_Ant1_High_2480_Peak



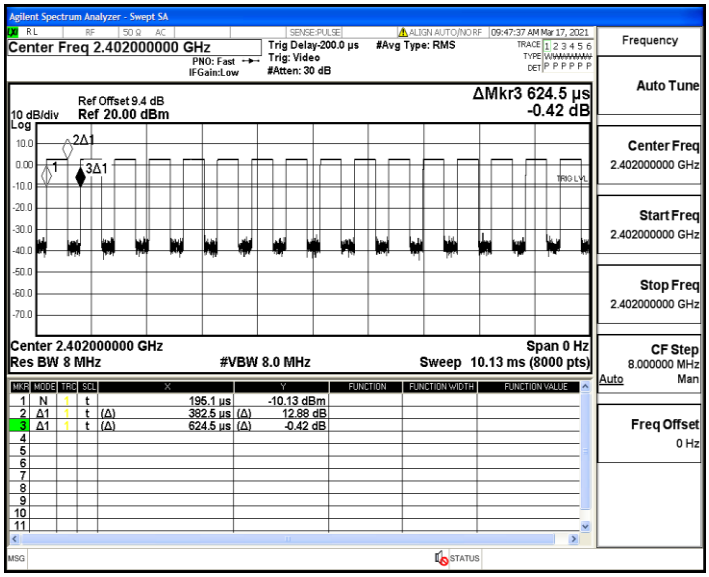
1. The Antenna Gain is compensated in the graph with 2dBi and Antenna Gain which is Higher.

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.

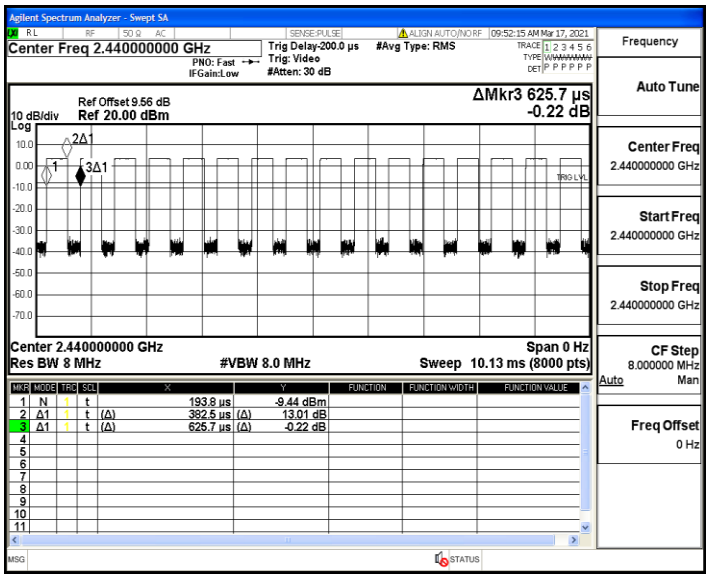
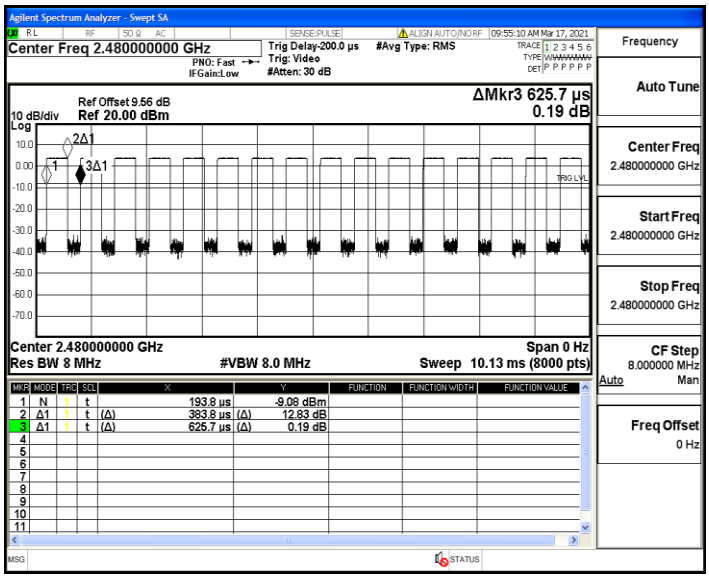
A.8. Duty Cycle

TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	1/B[KHz]
BLE_1M	Ant1	2402	0.38	0.62	61.29	2.63
		2440	0.38	0.63	60.32	2.63
		2480	0.38	0.63	60.32	2.63

BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480