

Appendix A

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

Product Name: Mobile phone

Trade Mark: PCD

Test Model: P40

FCC ID: 2ALJJP40

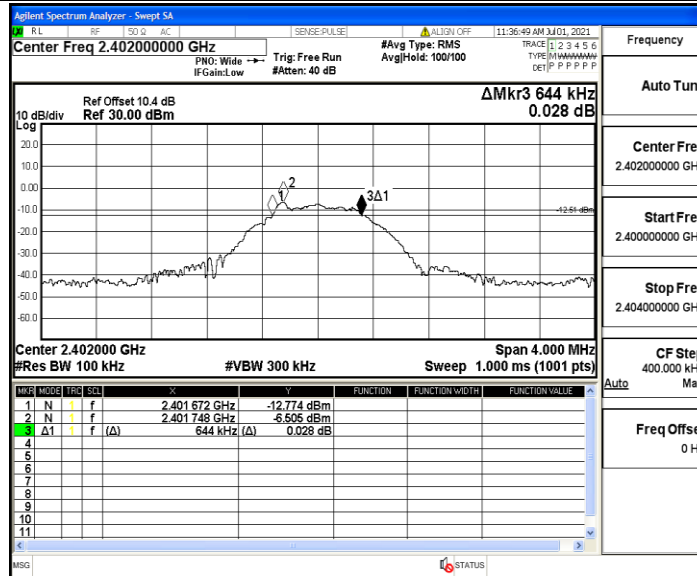
Environmental Conditions

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

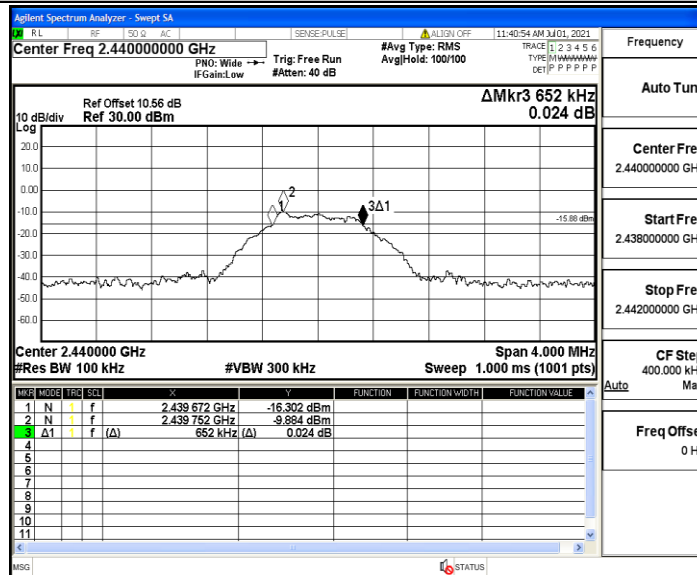
A.1. 6dB Bandwidth

TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.644	2401.672	2402.316	0.5	PASS
		2440	0.652	2439.672	2440.324	0.5	PASS
		2480	0.636	2479.672	2480.308	0.5	PASS

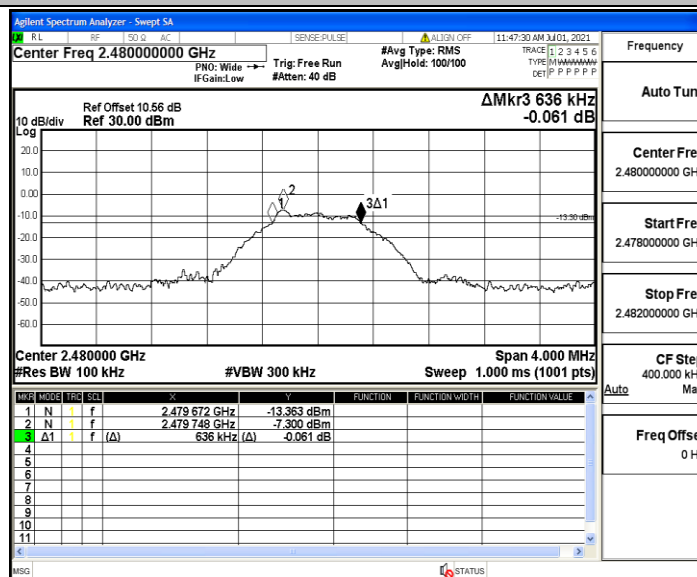
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



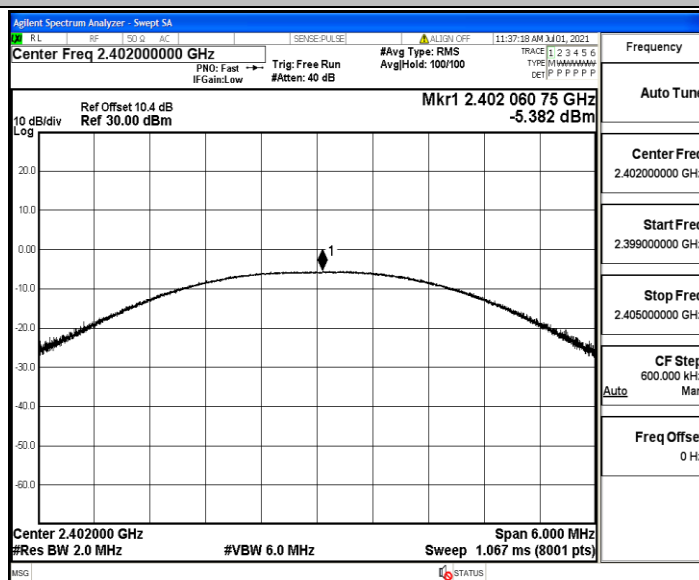
A.2. Occupied Bandwidth

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

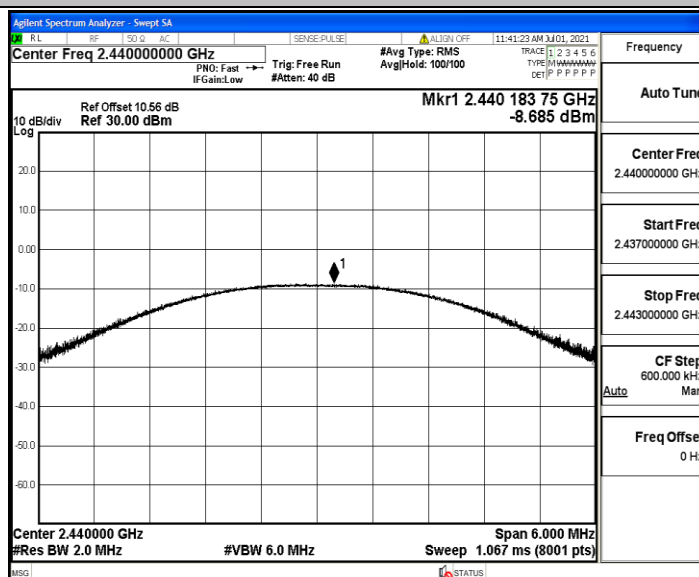
A.3. Maximum peak conducted output power

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	-5.38	<=30	PASS
		2440	-8.69	<=30	PASS
		2480	-6.46	<=30	PASS

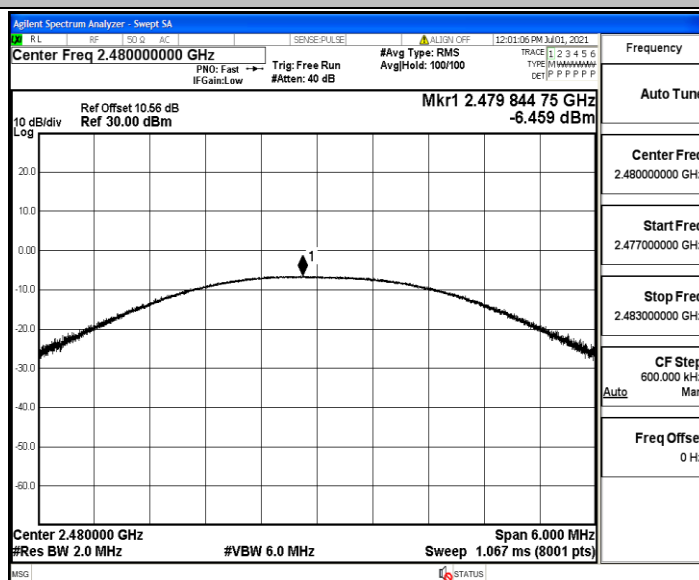
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



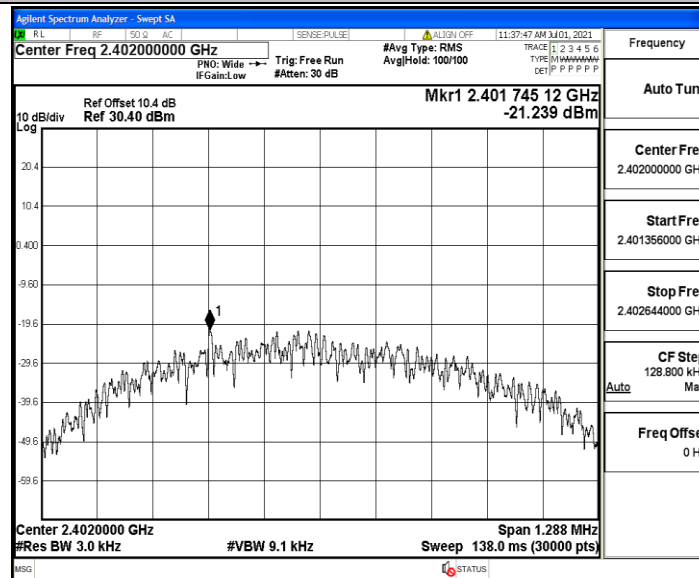
BLE_1M_Ant1_2480



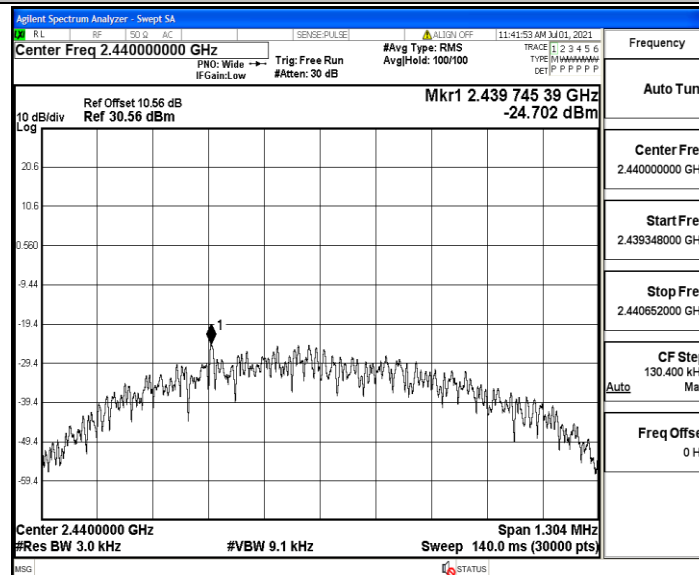
A.4. Maximum Peak power spectral density

TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-21.24	<=8	PASS
		2440	-24.7	<=8	PASS
		2480	-22	<=8	PASS

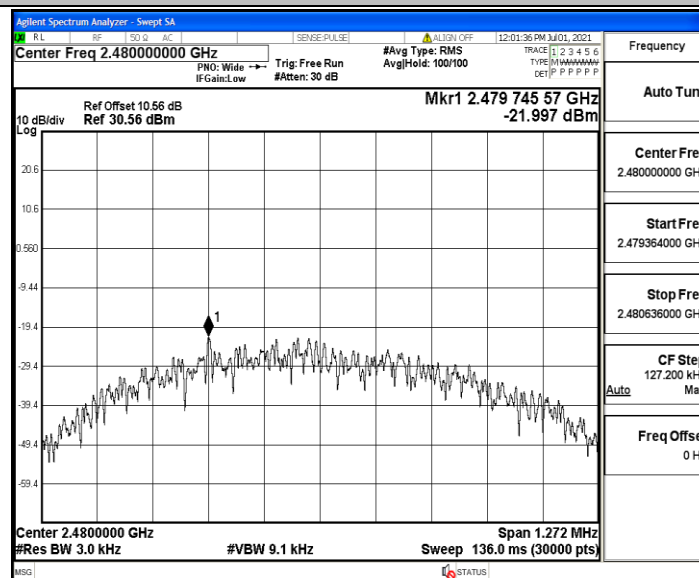
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



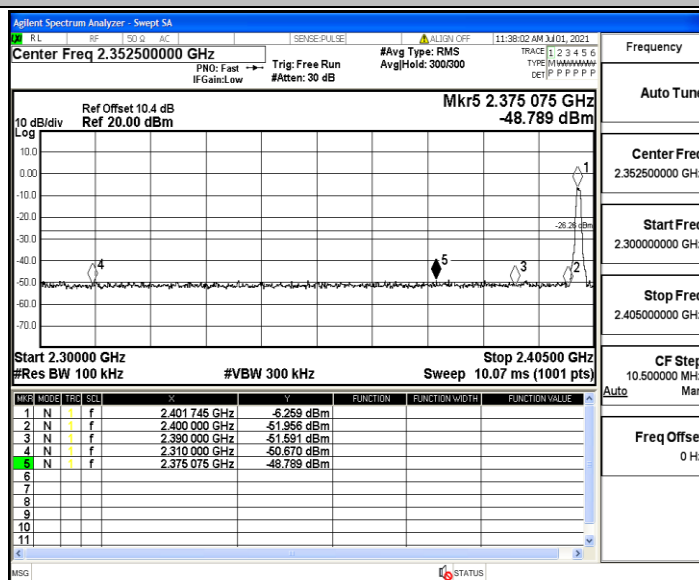
BLE_1M_Ant1_2480



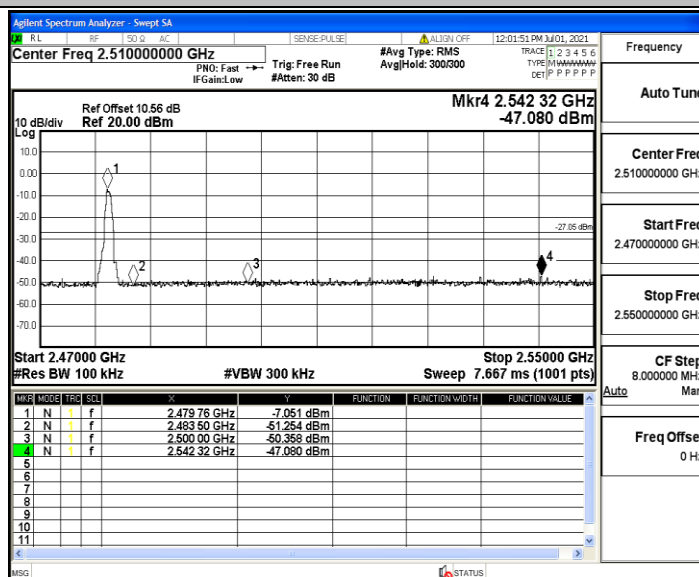
A.5. Band-edge for RF Conducted Emissions

TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-6.26	-48.79	<=-26.26	PASS
		High	2480	-7.05	-47.08	<=-27.05	PASS

BLE_1M_Ant1_Low_2402

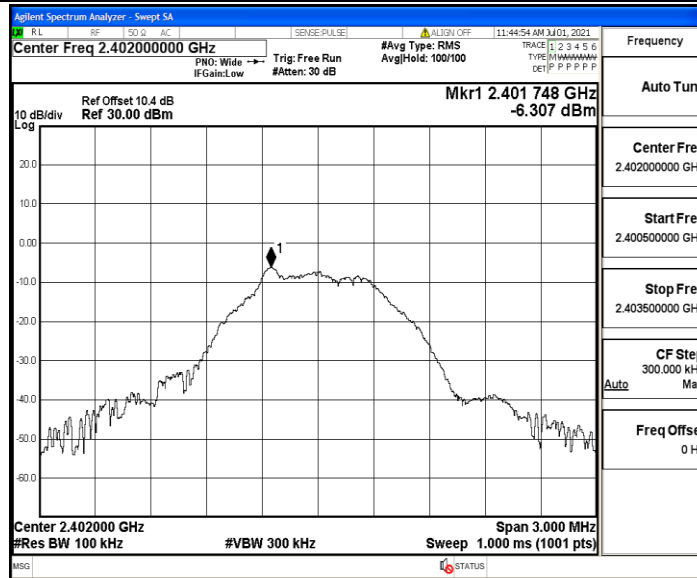


BLE_1M_Ant1_High_2480

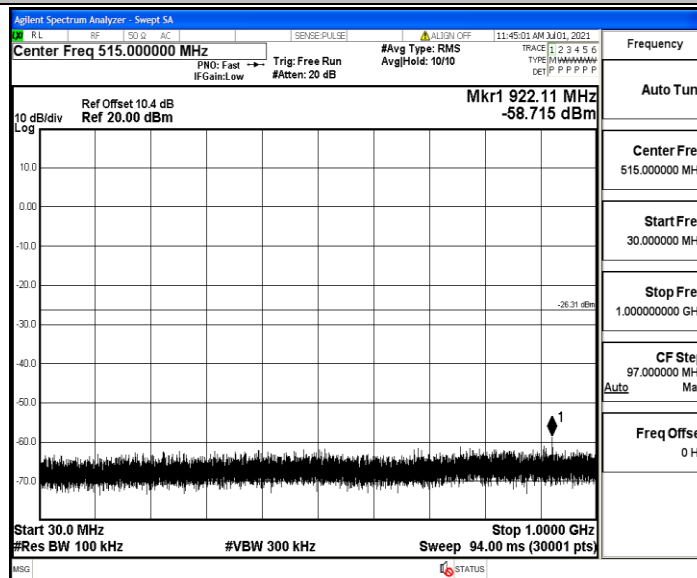


A.6. RF Conducted Spurious Emissions

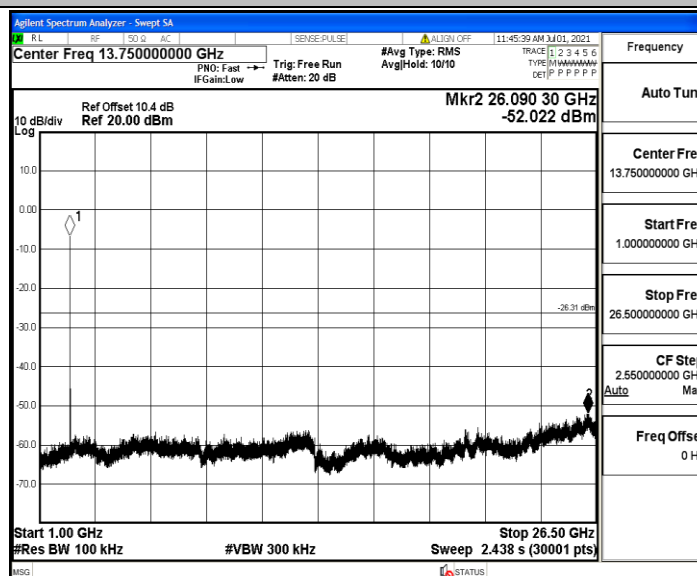
BLE_1M_Ant1_2402_0~Reference



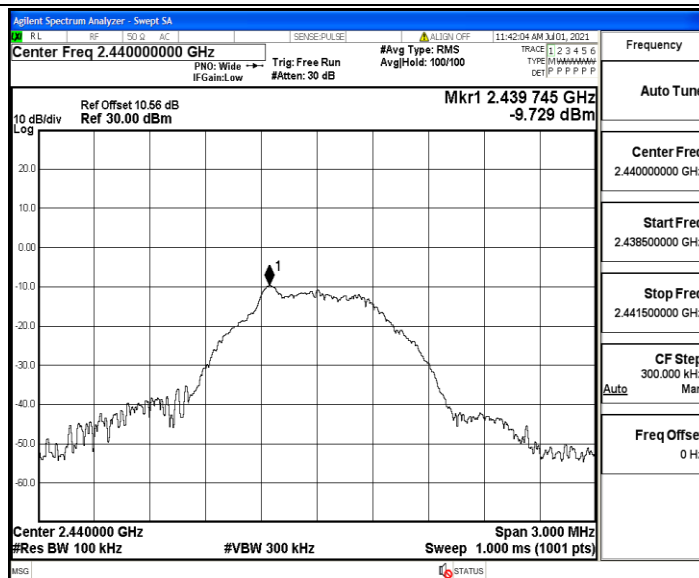
BLE_1M_Ant1_2402_30~1000



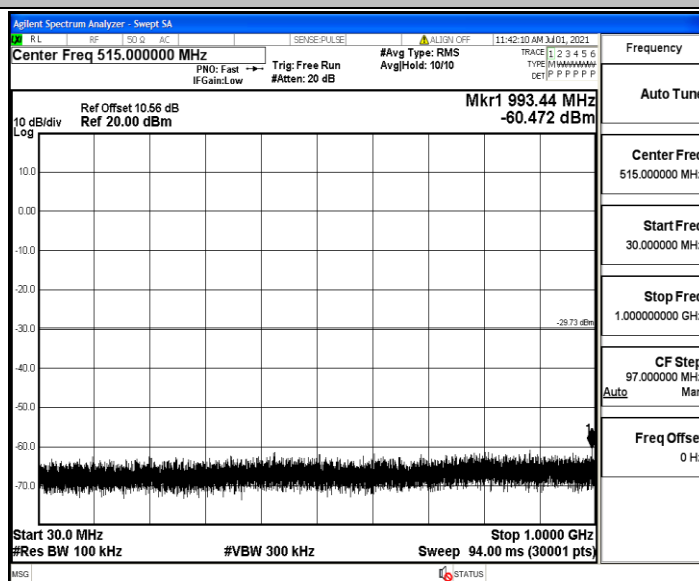
BLE_1M_Ant1_2402_1000~26500



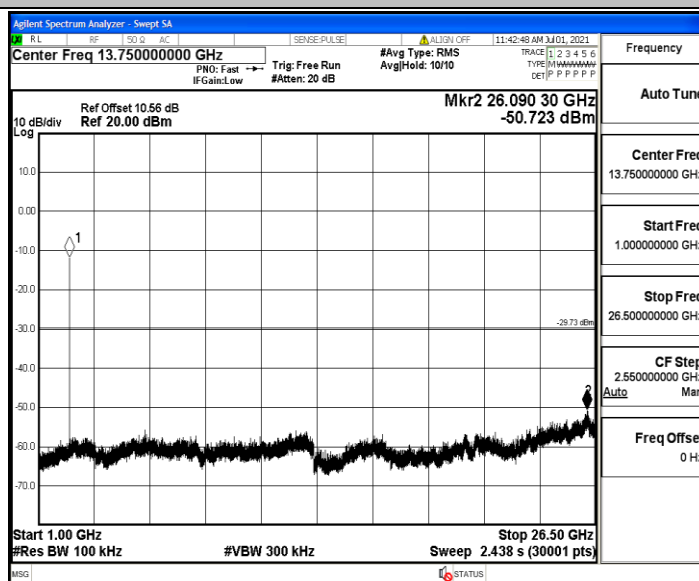
BLE_1M_Ant1_2440_0~Reference



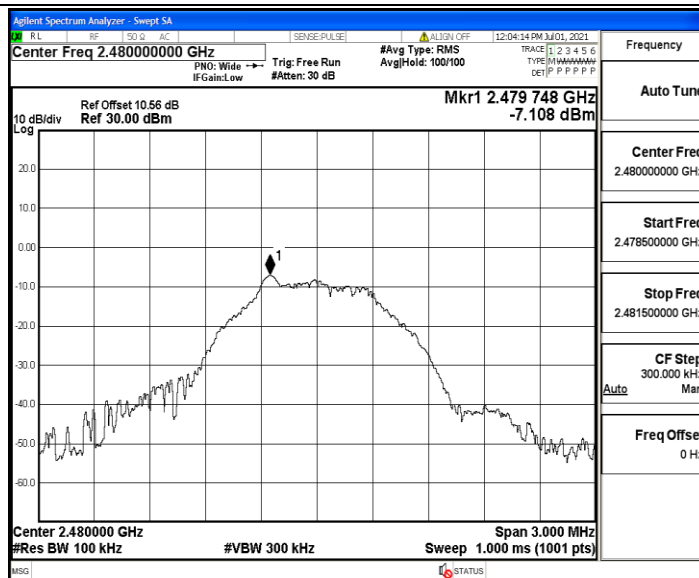
BLE_1M_Ant1_2440_30~1000



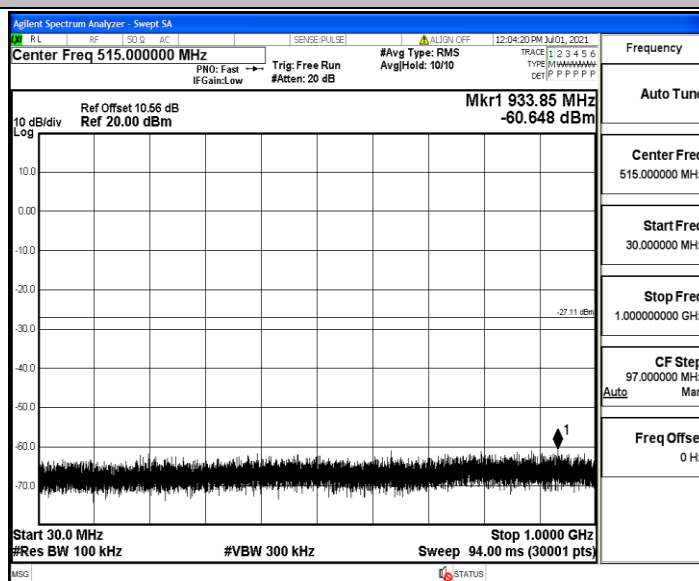
BLE_1M_Ant1_2440_1000~26500



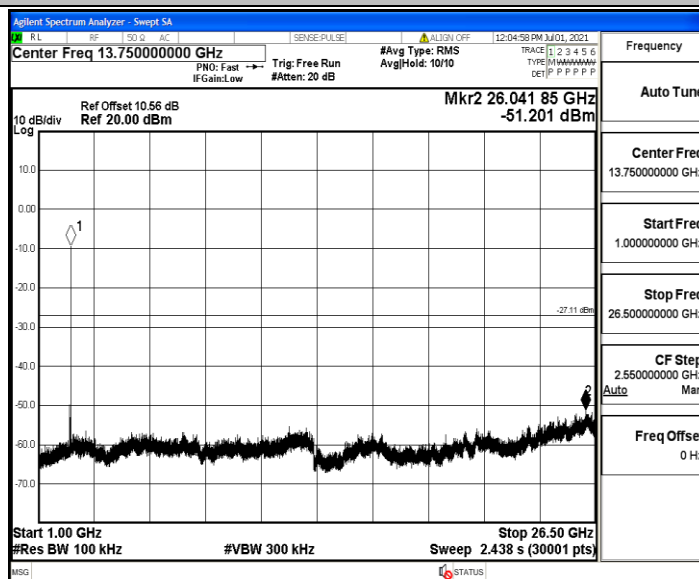
BLE_1M_Ant1_2480_0~Reference



BLE_1M_Ant1_2480_30~1000



BLE_1M_Ant1_2480_1000~26500



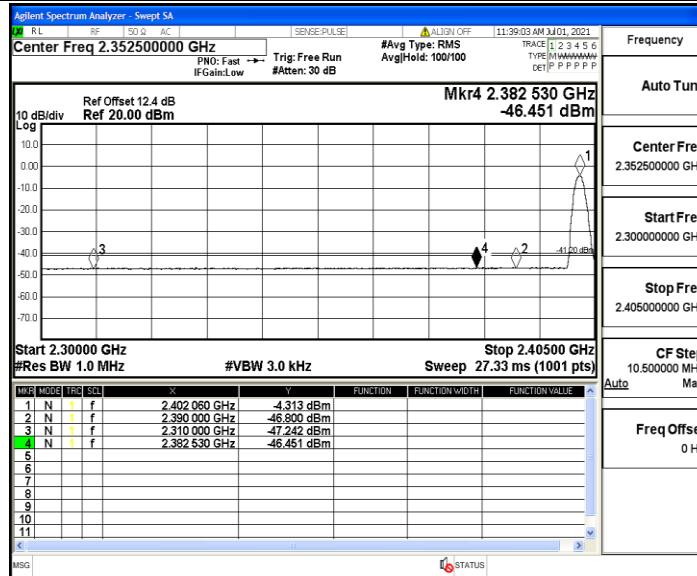
A.7. Restrict-band band-edge measurements

TestMode	Antenna	ChName	Channel	Detector	Freq. [MHz]	Result [dBm]	Limit [dBm]	Verdict
BLE_1M	Ant1	Low	2402	AV	2310.000	-47.24	<=-41.20	PASS
				AV	2382.530	-46.45	<=-41.20	PASS
				AV	2390.000	-46.8	<=-41.20	PASS
				Peak	2310.000	-39.71	<=-21.20	PASS
				Peak	2354.810	-37.49	<=-21.20	PASS
				Peak	2390.000	-40.01	<=-21.20	PASS
		High	2480	AV	2483.500	-46.43	<=-41.20	PASS
				AV	2490.240	-45.66	<=-41.20	PASS
				AV	2500.000	-46.17	<=-41.20	PASS
				Peak	2483.500	-40.79	<=-21.20	PASS
				Peak	2497.280	-37.33	<=-21.20	PASS
				Peak	2500.000	-39.08	<=-21.20	PASS

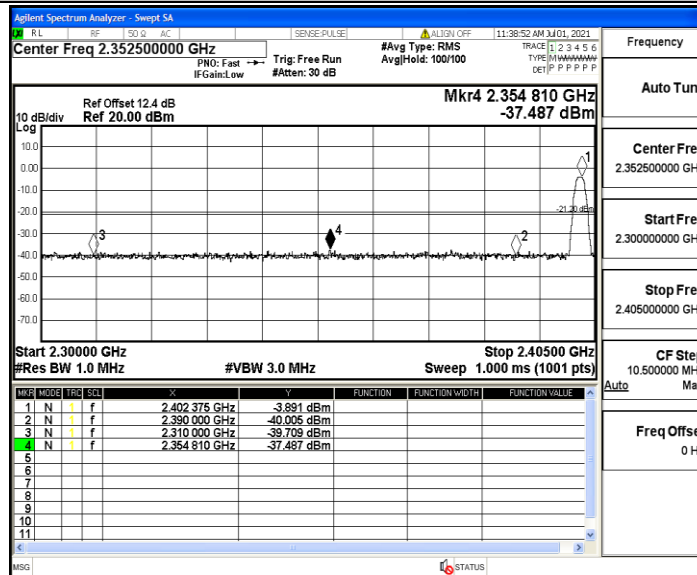
Note

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.

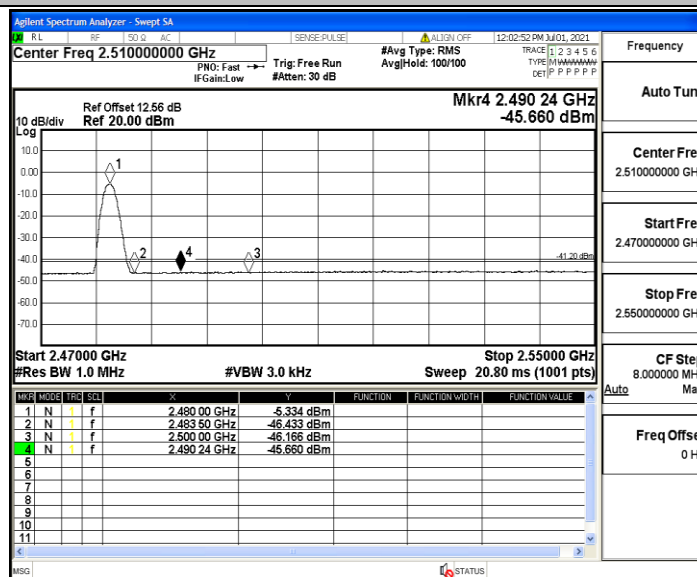
BLE_1M_Ant1_Low_2402_AV



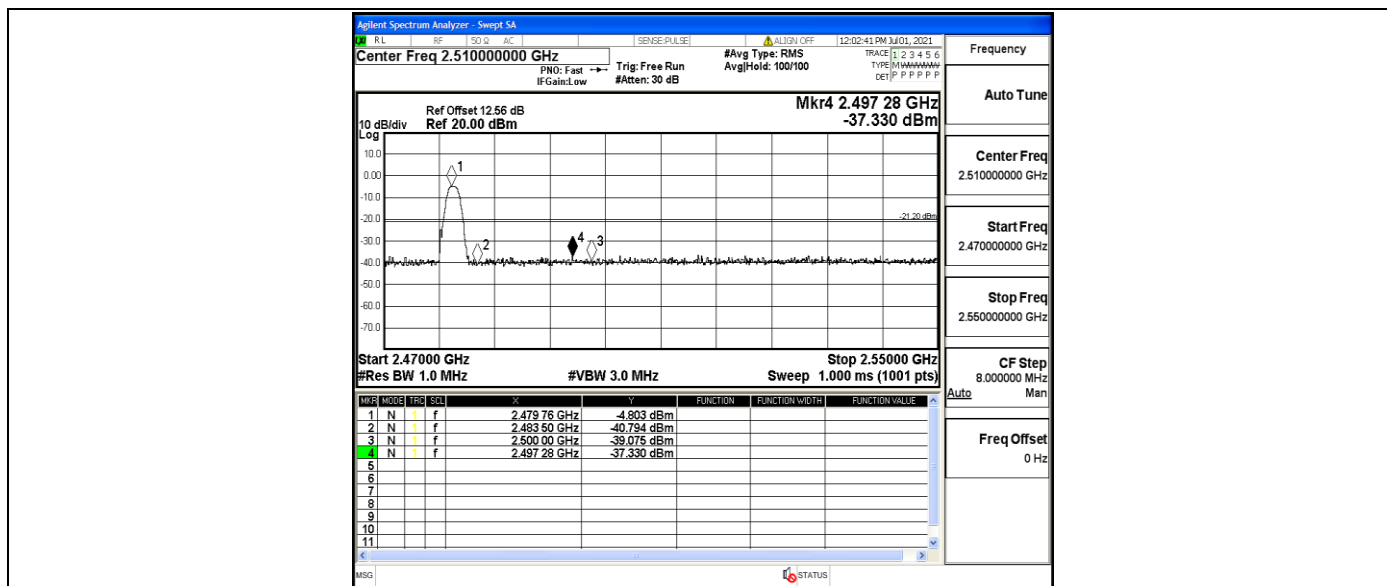
BLE_1M_Ant1_Low_2402_Peak



BLE_1M_Ant1_High_2480_AV



BLE_1M_Ant1_High_2480_Peak

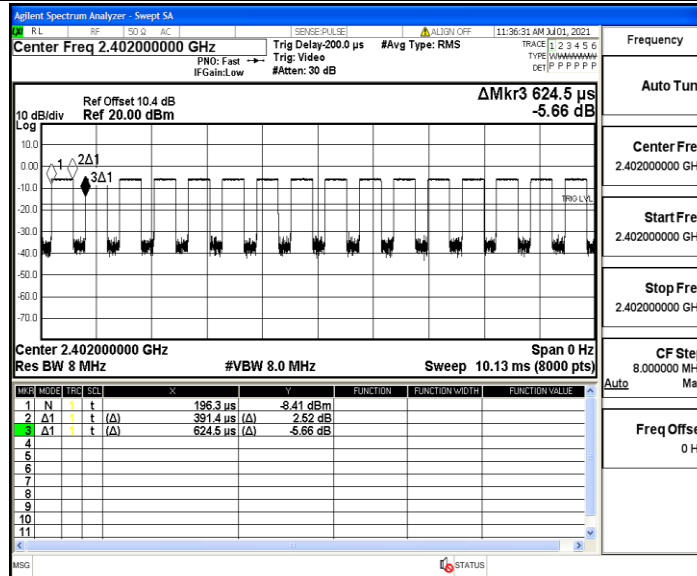


1. The Antenna Gain is compensated in the graph with 2dBi and Antenna Gain which is Higher.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

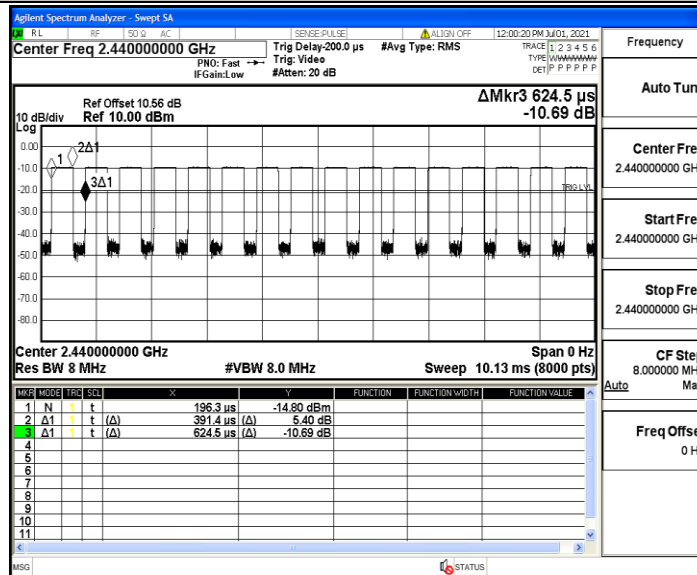
A.8. Duty Cycle

TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	1/B[KHz]
BLE_1M	Ant1	2402	0.39	0.62	62.90	2.56
		2440	0.39	0.62	62.90	2.56
		2480	0.39	0.62	62.90	2.56

BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480

