Appendix A

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

Product Name: Tablet PC

Trade Mark: KRONO

Test Model: ULTRA

FCC ID: 2AFD9ULTRA

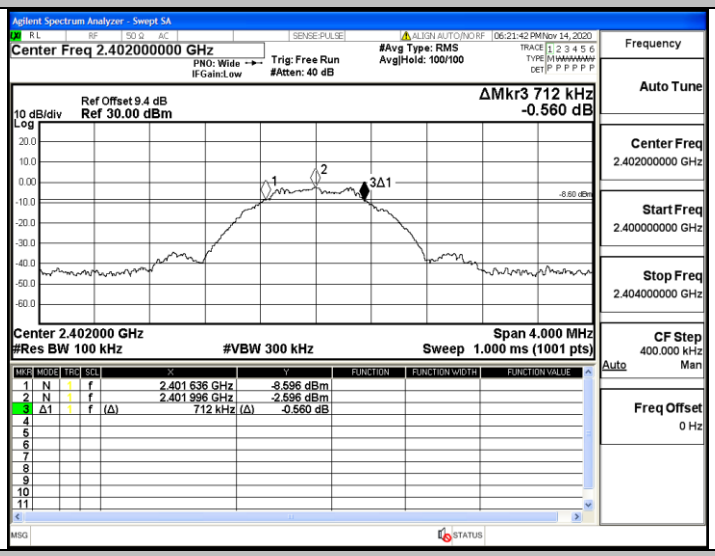
Environmental Conditions

Temperature:	22.8° C
Relative Humidity:	50%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

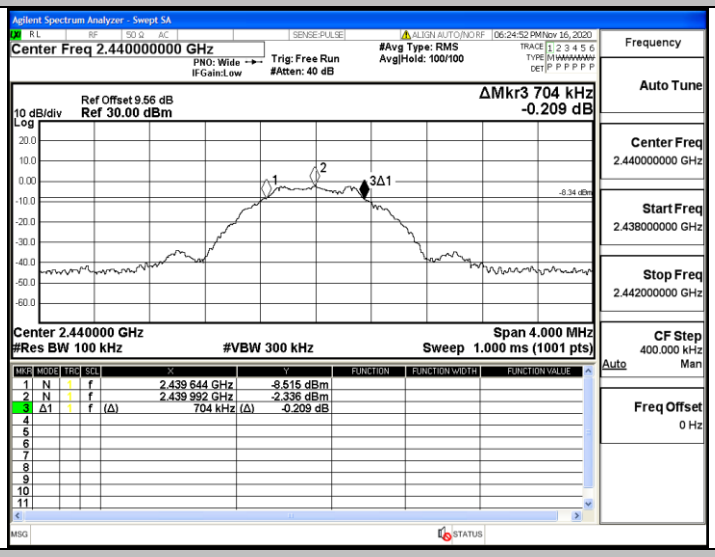
A.1. 6dB Bandwidth

TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.712	2401.636	2402.348	0.5	PASS
		2440	0.704	2439.644	2440.348	0.5	PASS
		2480	0.700	2479.632	2480.332	0.5	PASS

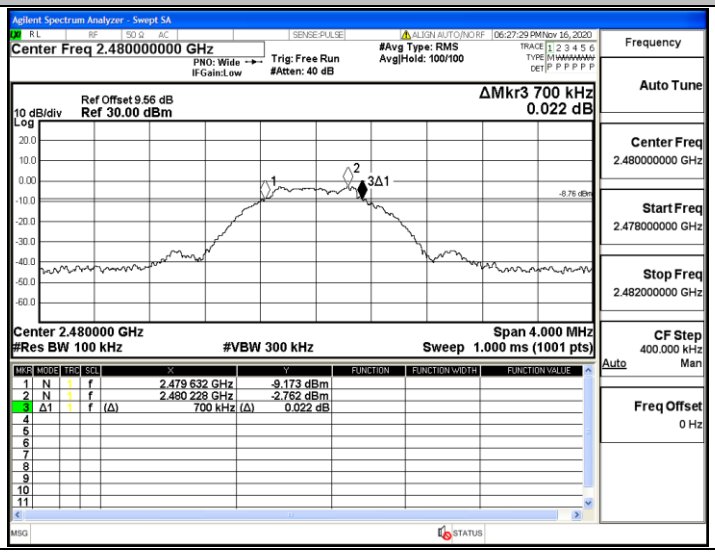
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



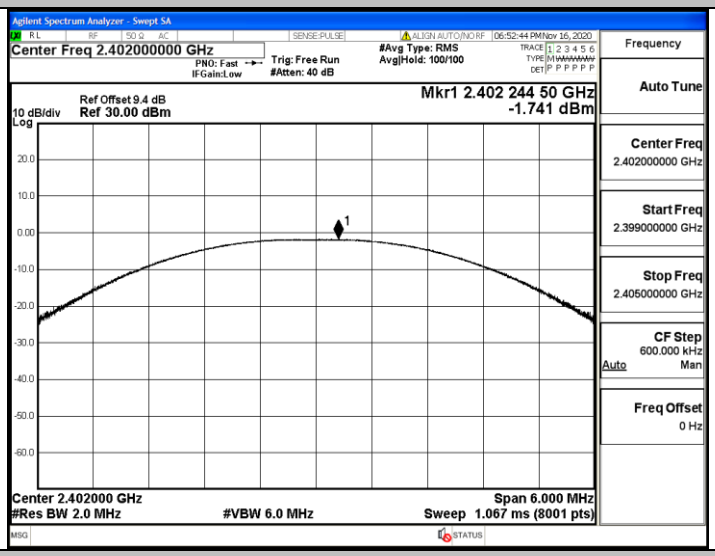
A.2. Occupied Bandwidth

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

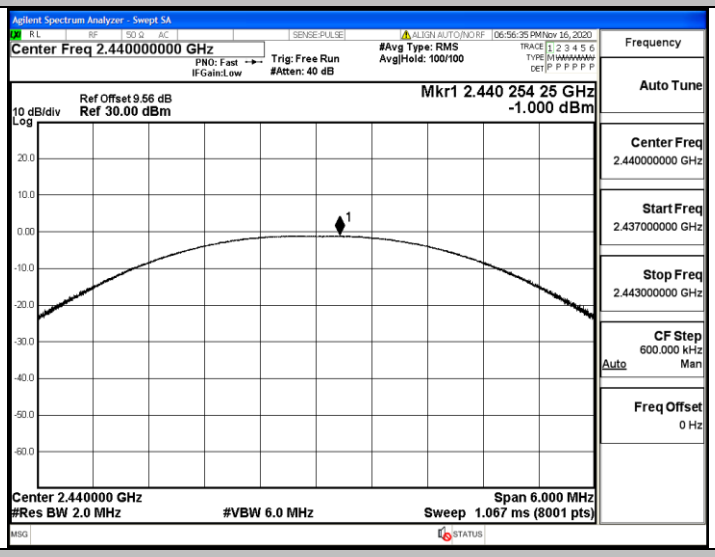
A.3. Maximum peak conducted output power

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	-1.74	<=30	PASS
		2440	-1	<=30	PASS
		2480	-1.28	<=30	PASS

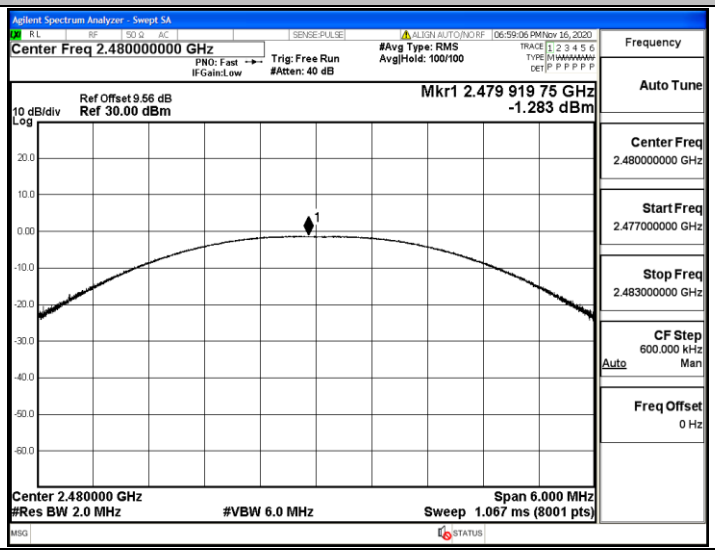
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



A.4. Maximum Peak power spectral density

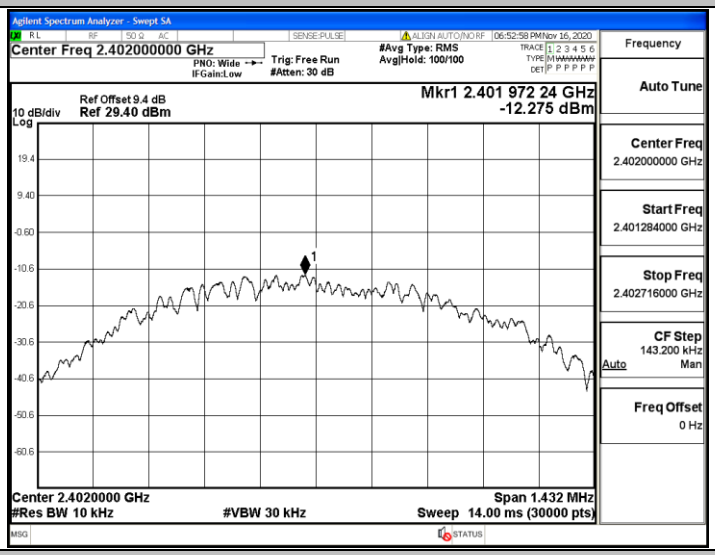
Test Mode	Ant	Test	PSD[dBm/10KHz]	Converter Factor [dB]	PSD[dBm/3KHz]	Limit[dBm/3KHz]	Verdict
BLE(1Mbps)	Ant1	2402	-12.28	5.23	-17.12	8.00	PASS
		2440	-11.57	5.23	-16.76	8.00	PASS
		2480	-11.88	5.23	-17.03	8.00	PASS

Note:

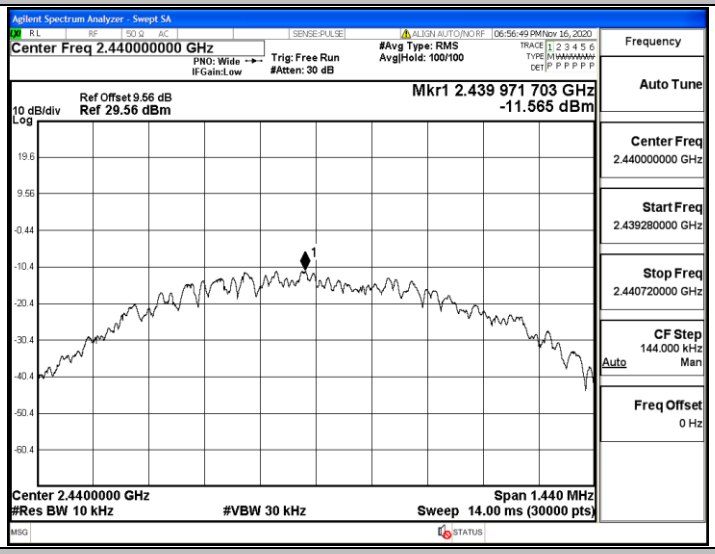
1,Converter factor = 10 * lg(RBW/3 kHz) = 5.23 (dB)

2, PSD[dBm/3KHz] = PSD[dBm/10KHz] - Converter Factor

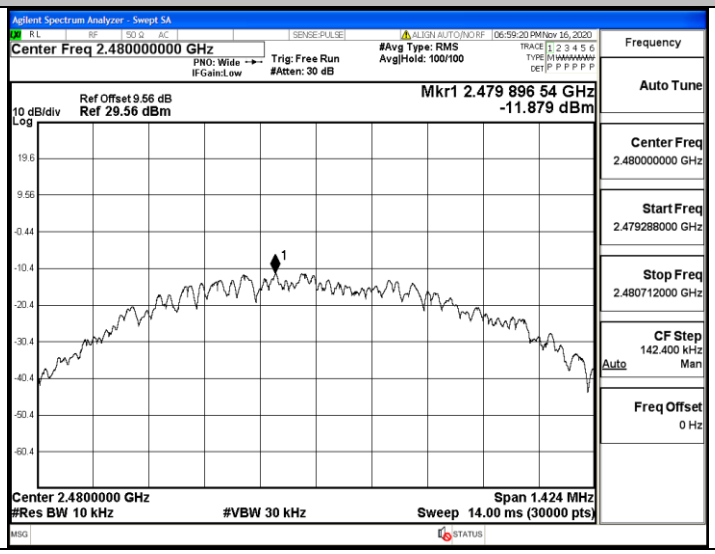
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440

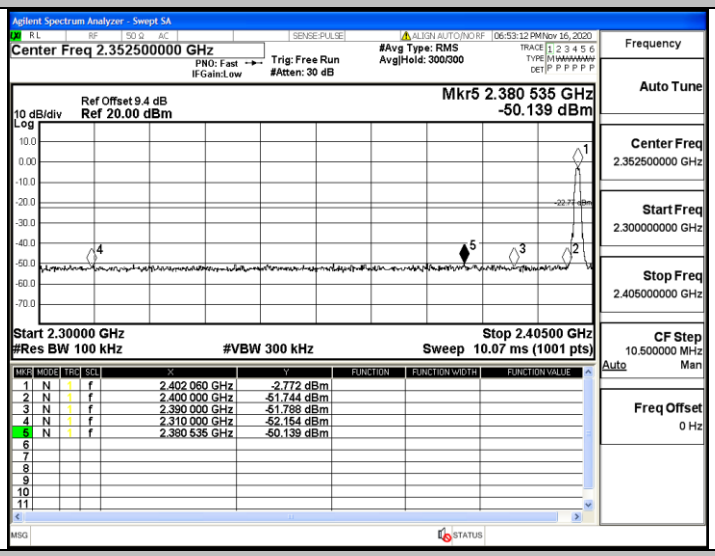


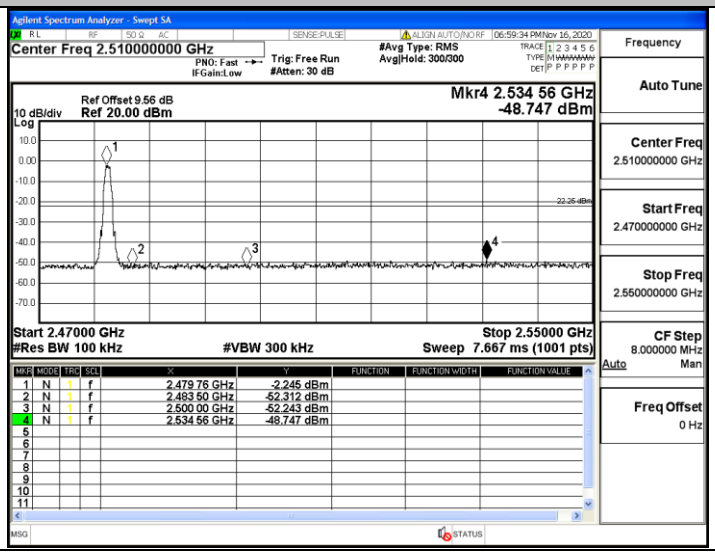
BLE_1M_Ant1_2480



A.5. Band-edge for RF Conducted Emissions

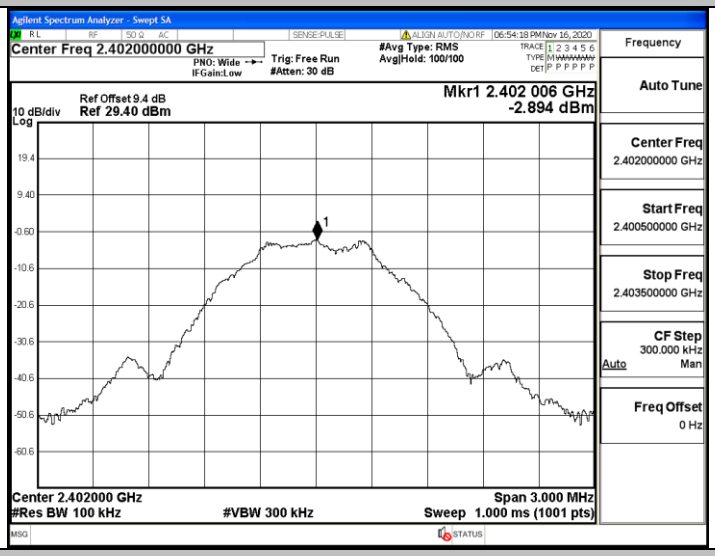
TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-2.77	-50.14	<=-22.77	PASS
		High	2480	-2.25	-48.75	<=-22.25	PASS

BLE_1M_Ant1_Low_2402


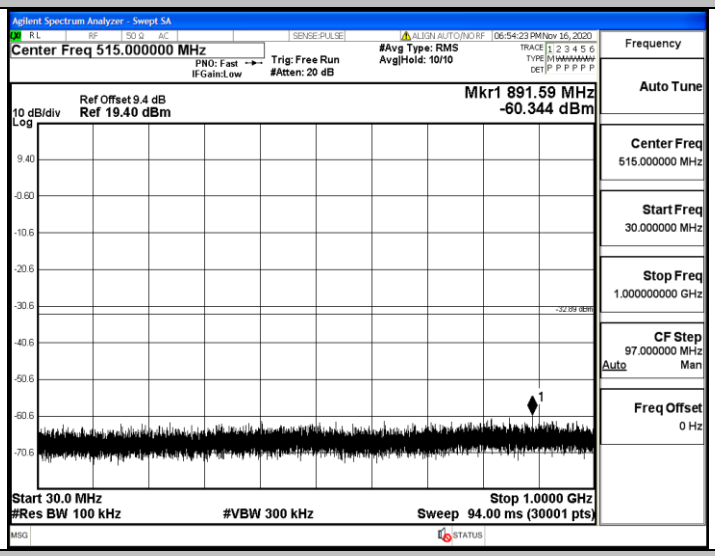
BLE_1M_Ant1_High_2480


A.6. RF Conducted Spurious Emissions

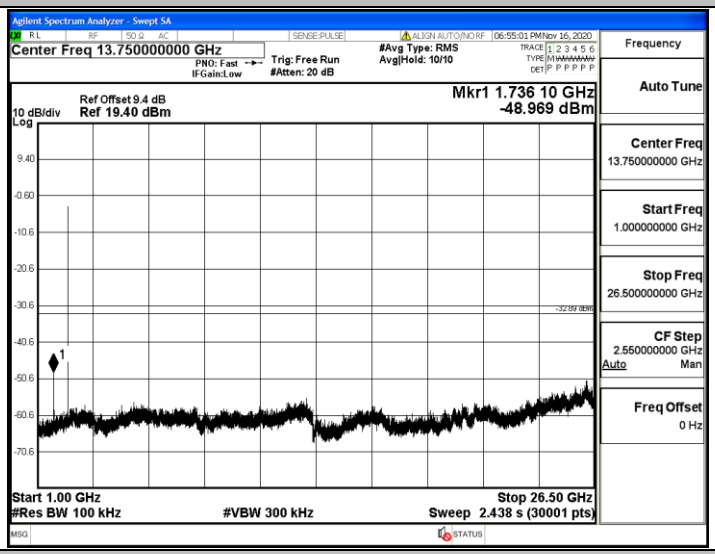
BLE_1M_Ant1_2402_0~Reference



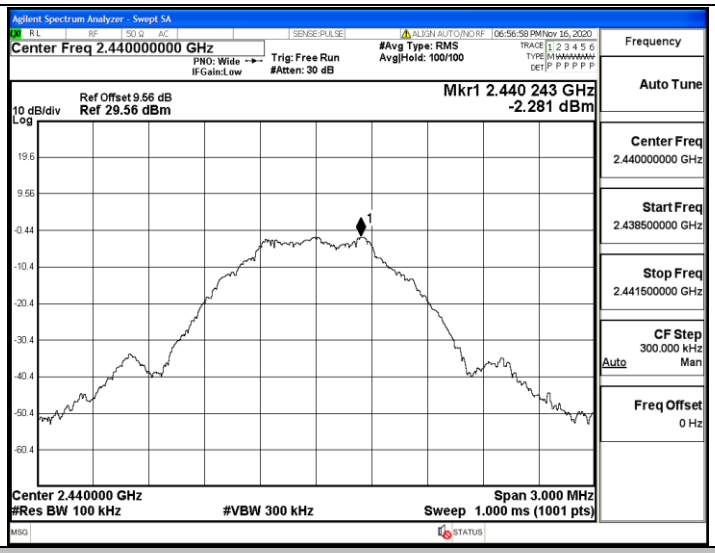
BLE_1M_Ant1_2402_30~1000



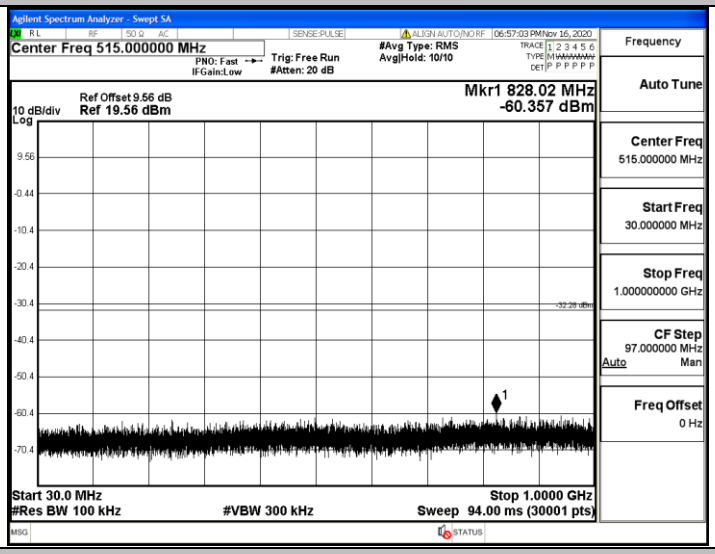
BLE_1M_Ant1_2402_1000~26500



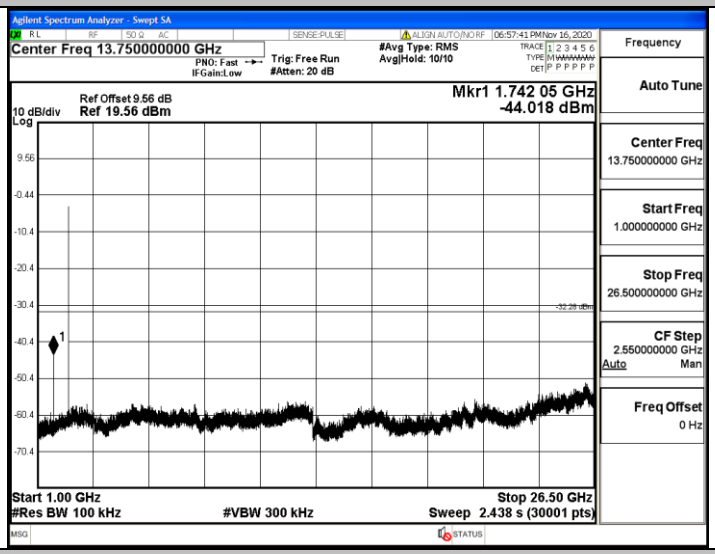
BLE_1M_Ant1_2440_0~Reference



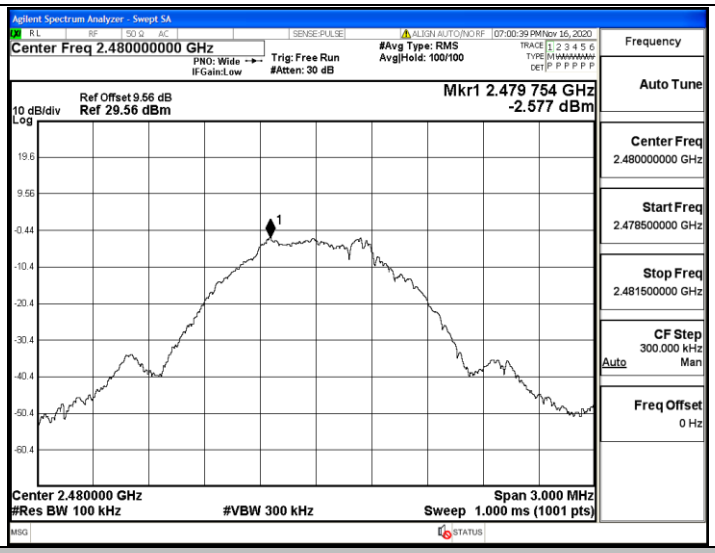
BLE_1M_Ant1_2440_30~1000



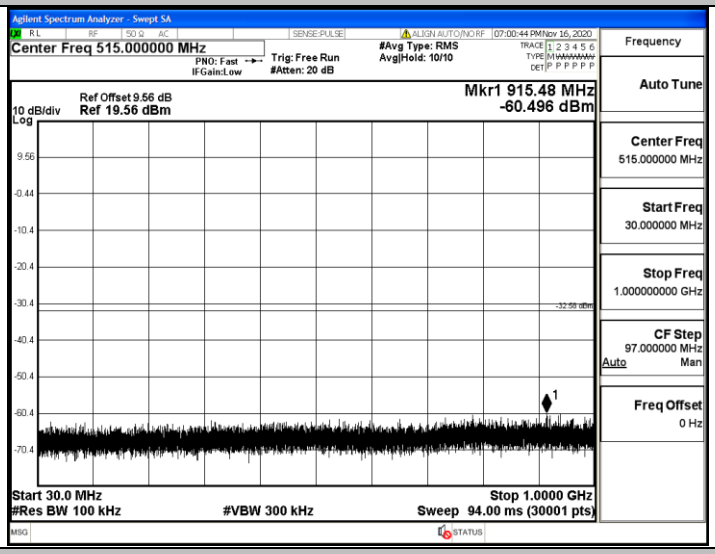
BLE_1M_Ant1_2440_1000~26500



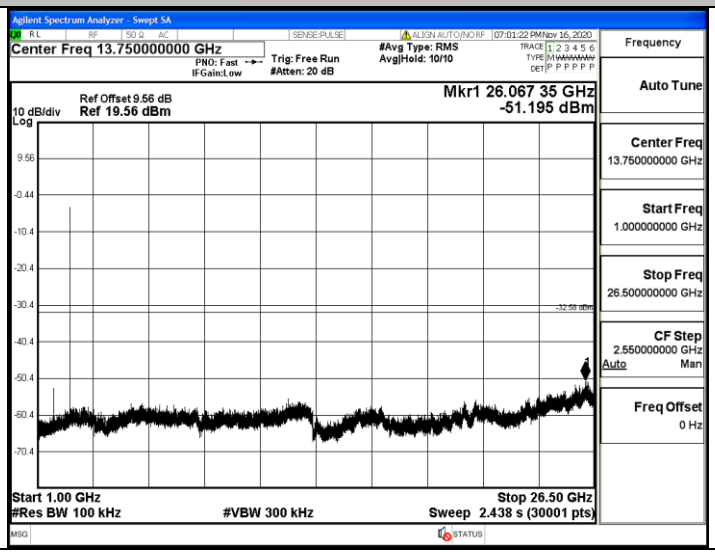
BLE_1M_Ant1_2480_0~Reference



BLE_1M_Ant1_2480_30~1000



BLE_1M_Ant1_2480_1000~26500



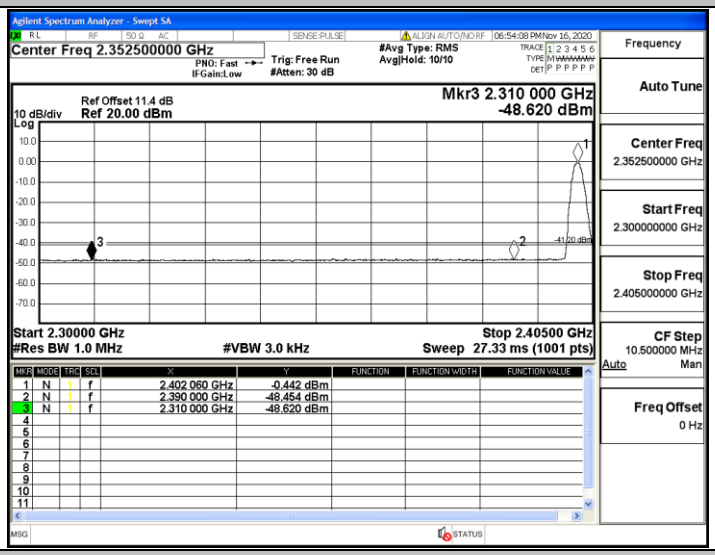
A.7. Restrict-band band-edge measurements

TestMode	Antenna	ChName	Channel	Detector	Freq. [MHz]	Result [dBm]	Limit [dBm]	Verdict
BLE_1M	Ant1	Low	2402	AV	2310.000	-48.62	<=-41.20	PASS
				AV	2390.000	-48.45	<=-41.20	PASS
				Peak	2310.000	-43.38	<=-21.20	PASS
				Peak	2390.000	-44.63	<=-21.20	PASS
		High	2480	AV	2483.500	-47.23	<=-41.20	PASS
				AV	2500.000	-47.78	<=-41.20	PASS
				Peak	2483.500	-42.43	<=-21.20	PASS
				Peak	2500.000	-44.85	<=-21.20	PASS

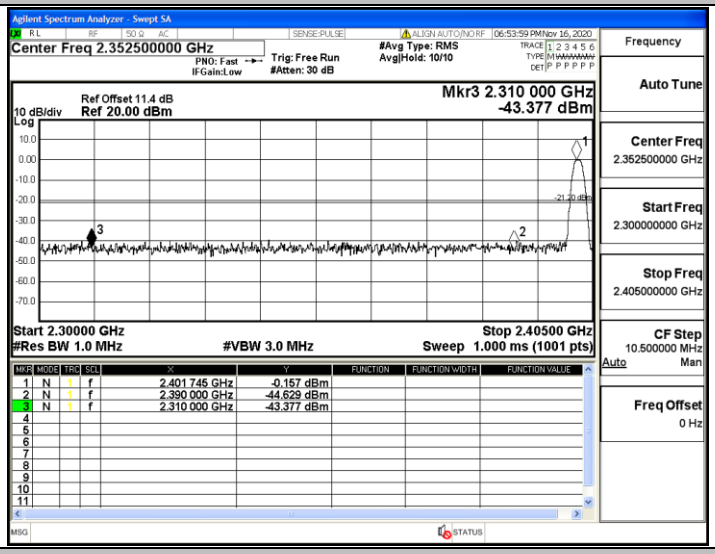
1. The Antenna Gain is compensated in the graph with 2dBi and Antenna Gain which is Higher.

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.

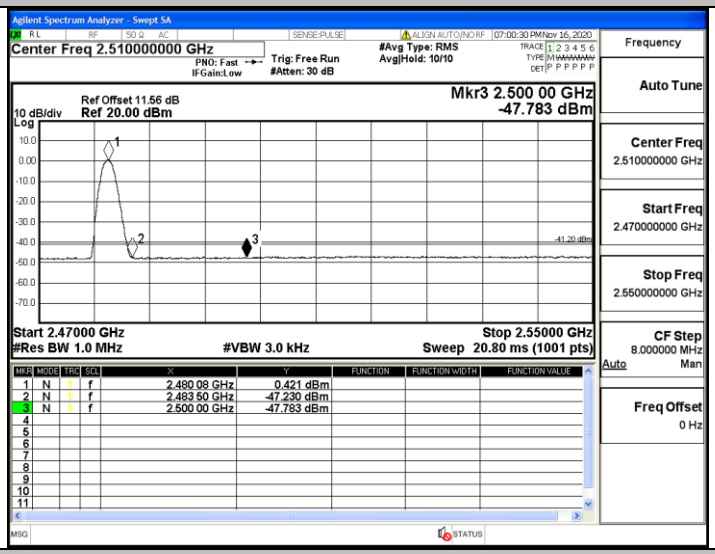
BLE_1M_Ant1_Low_2402_AV



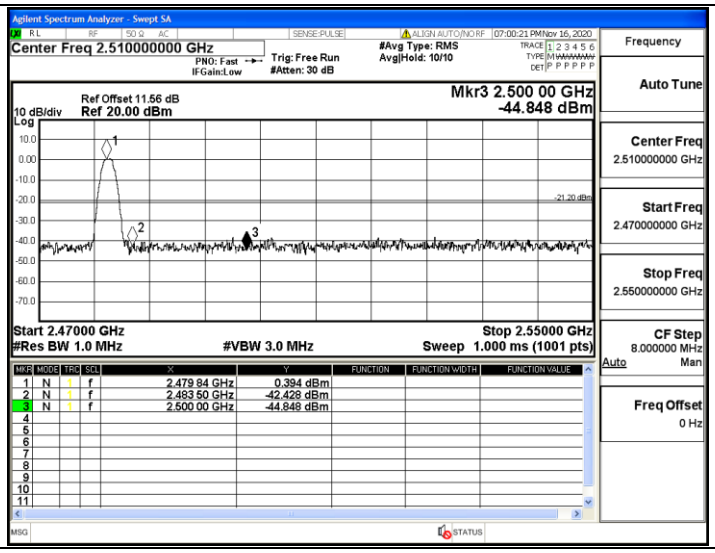
BLE_1M_Ant1_Low_2402_Peak



BLE_1M_Ant1_High_2480_AV



BLE_1M_Ant1_High_2480_Peak


Agilent Spectrum Analyzer - Swept SA
Center Freq 2.510000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
Avg|Hold: 10/10
07:00:21 PM Nov 16, 2020
Frequency
Auto Tune
Ref Offset 11.56 dB
10 dB/div
Ref 20.00 dBm
Log
Mkr3 2.500 00 GHz
-44.848 dBm
-21.20 dBm
Center Freq
2.510000000 GHz
Start Freq
2.470000000 GHz
Stop Freq
2.550000000 GHz
Start 2.47000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 2.55000 GHz
Sweep 1.000 ms (1001 pts)
CF Step
8.000000 MHz
Auto
Man
Freq Offset
0 Hz
1 N 1 f 2.479 84 GHz 0.394 dBm
2 N 1 f 2.483 50 GHz -42.428 dBm
3 N 1 f 2.500 00 GHz -44.848 dBm
MSG
STATUS

A.8. Duty Cycle

Test Mode	Test Channel	Ant	1/B(KHz)	Duty Cycle[%]	Verdict
BLE_1M	2440	Ant1	2.7	60.93	PASS

Duty Cycle_ BLE_1M _2440_Ant1