

Appendix B

RF Test Data for BT V4.2(BT LE) (Conducted Measurement)

Product Name: Wi-Fi Module

Trade Mark: N/A

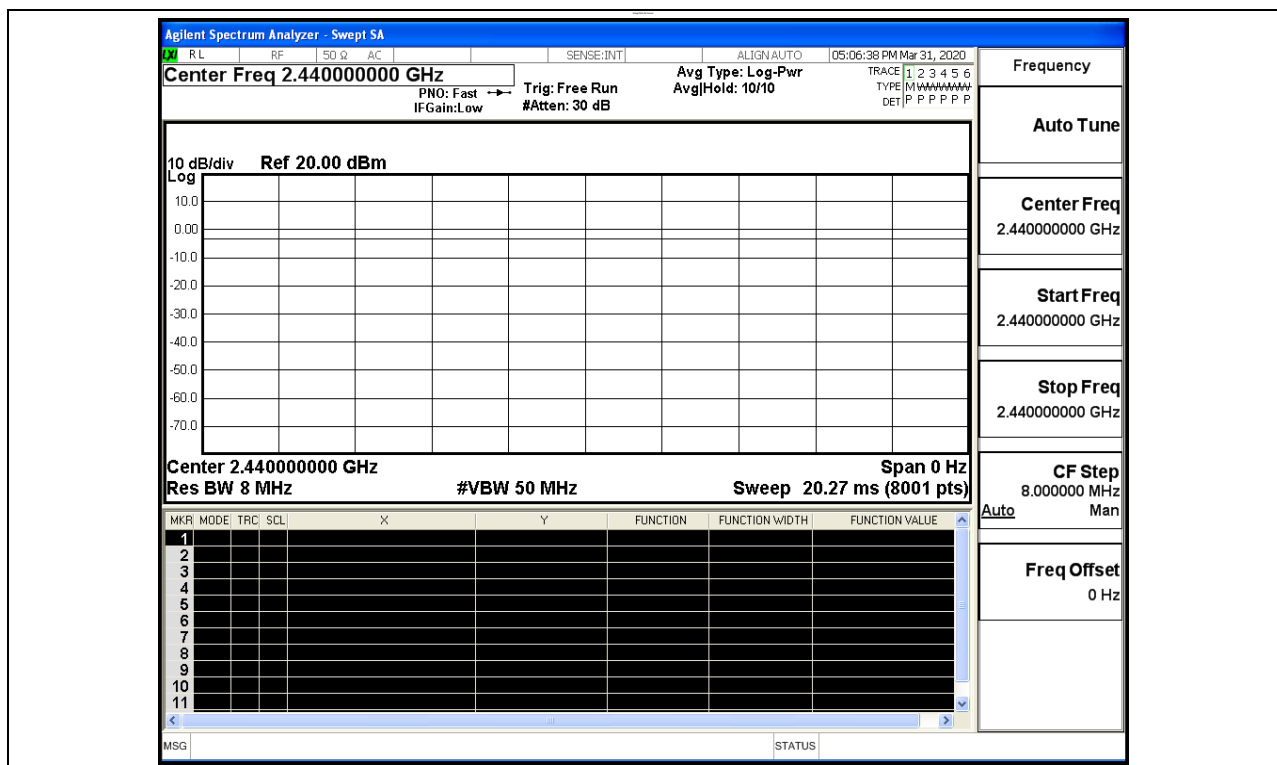
Test Model: EWN-1638ACX2AA

Environmental Conditions

Temperature:	21.2°C
Relative Humidity:	52.7%
ATM Pressure:	100.0 kPa
Test Engineer:	Jack Liu
Supervised by:	Li Huan

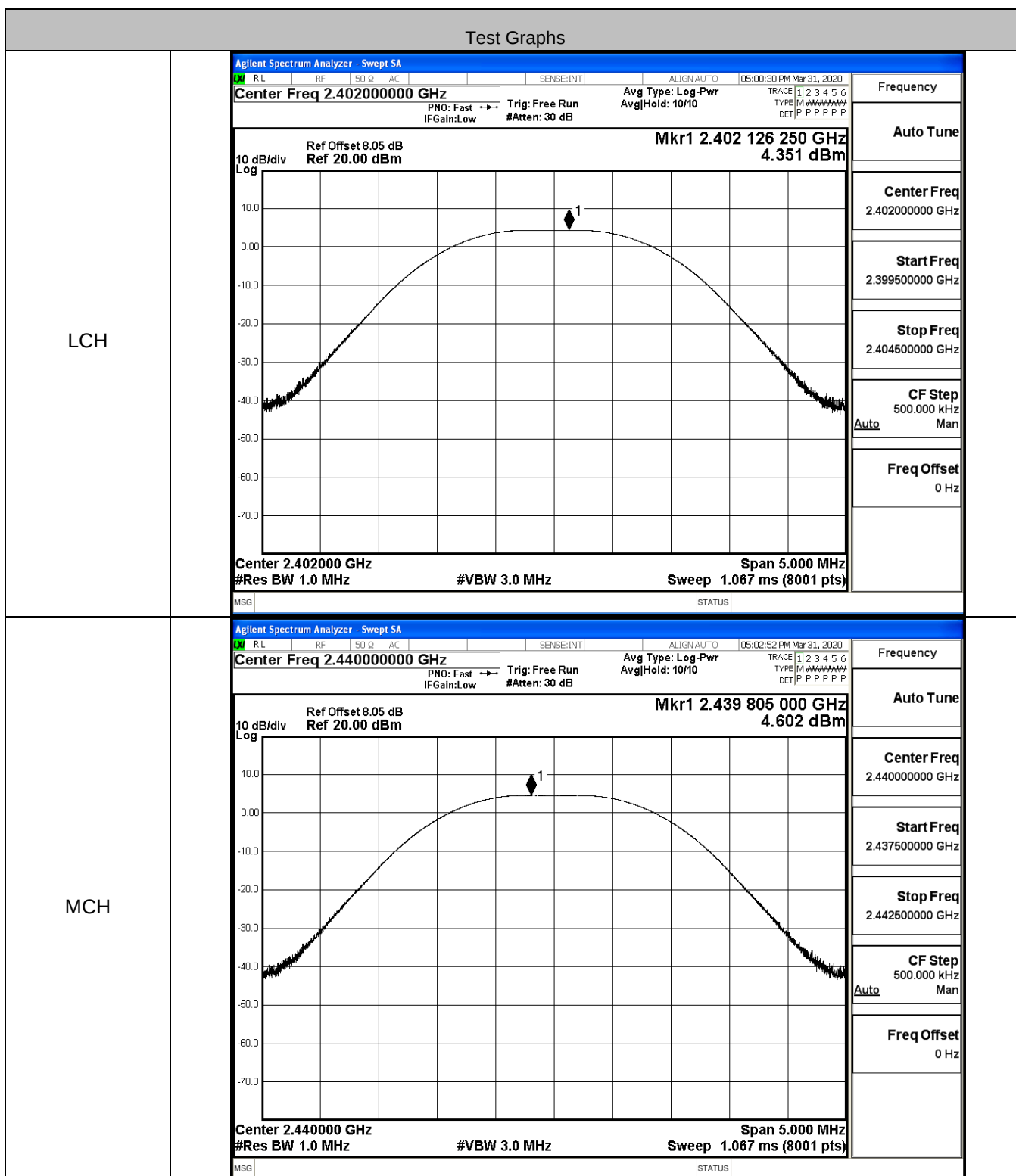
B.1 Duty Cycle

Test Mode	Test Channel	Ant	Duty Cycle[%]	Verdict
BT LE	2440	Ant1	100	PASS

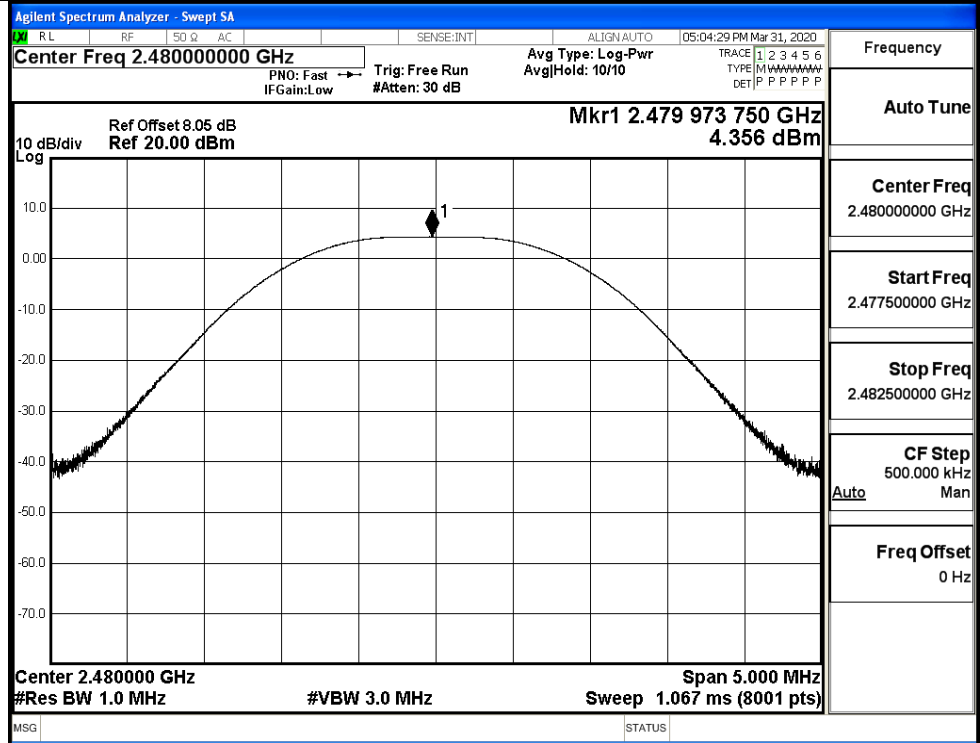


B.2 Maximum Conducted Peak Output Power

Mode	Channel	Conduct Peak Power[dBm]	Limit [dBm]	Verdict
BT LE	LCH	4.351	30	PASS
BT LE	MCH	4.602	30	PASS
BT LE	HCH	4.356	30	PASS



HCH

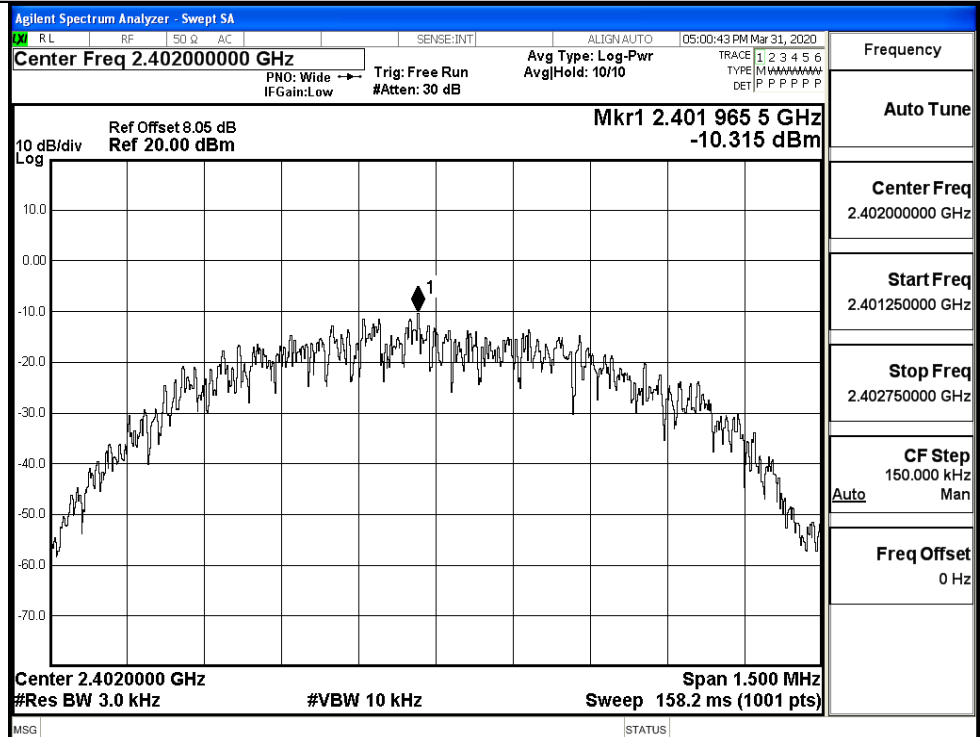


B.3 Maximum Power Spectral Density

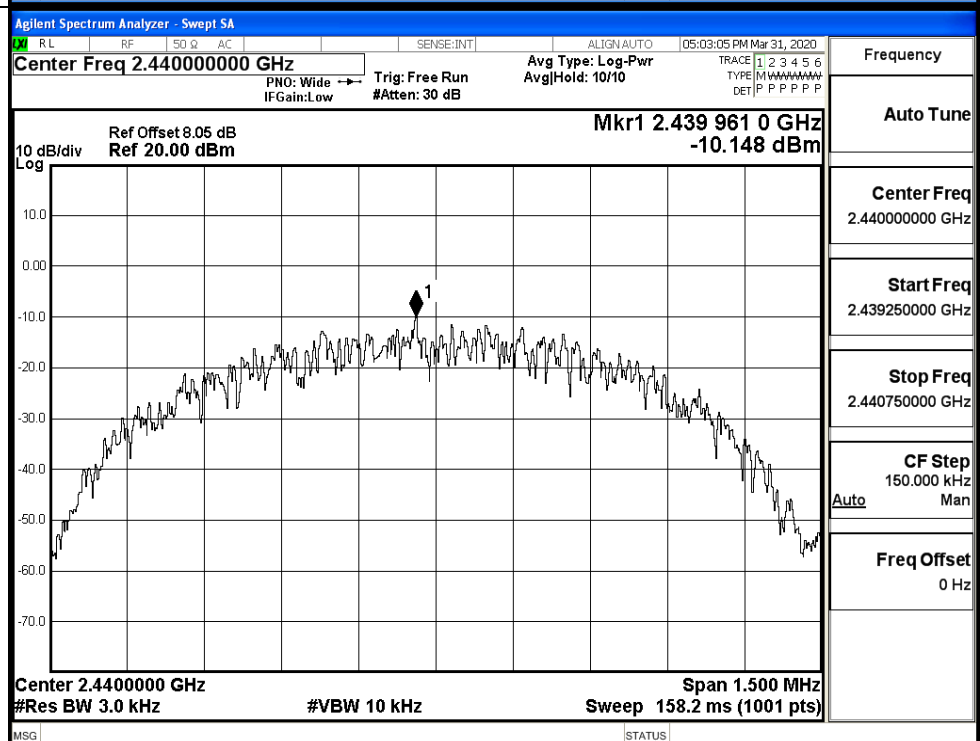
Mode	Channel	PSD [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
BT LE	LCH	-10.315	8	PASS
BT LE	MCH	-10.148	8	PASS
BT LE	HCH	-10.614	8	PASS

Test Graphs

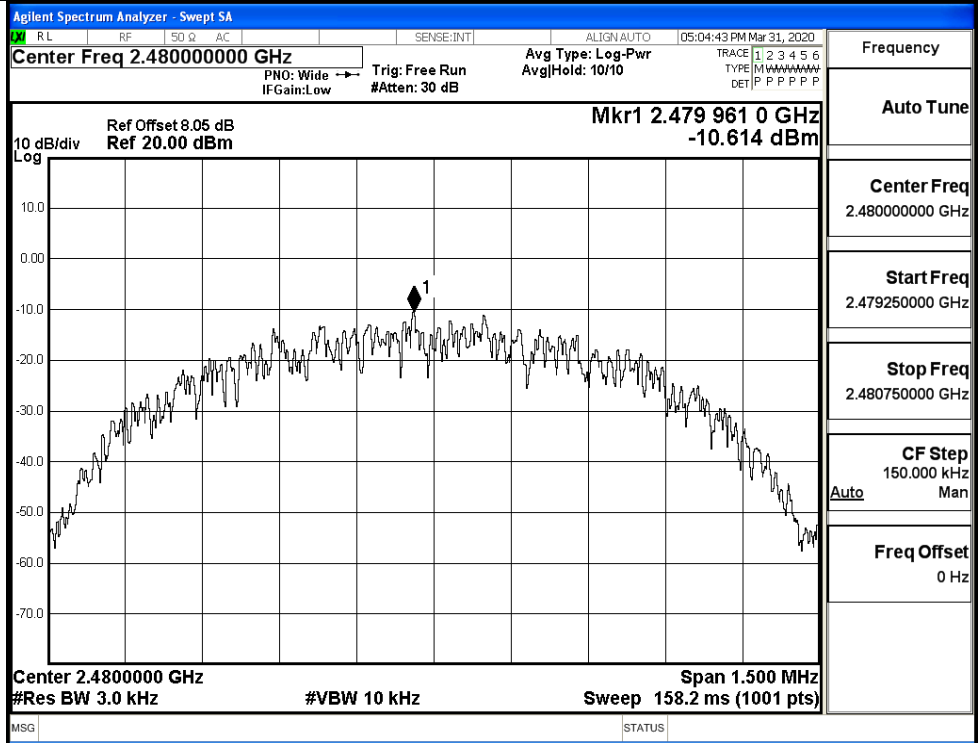
LCH



MCH



HCH

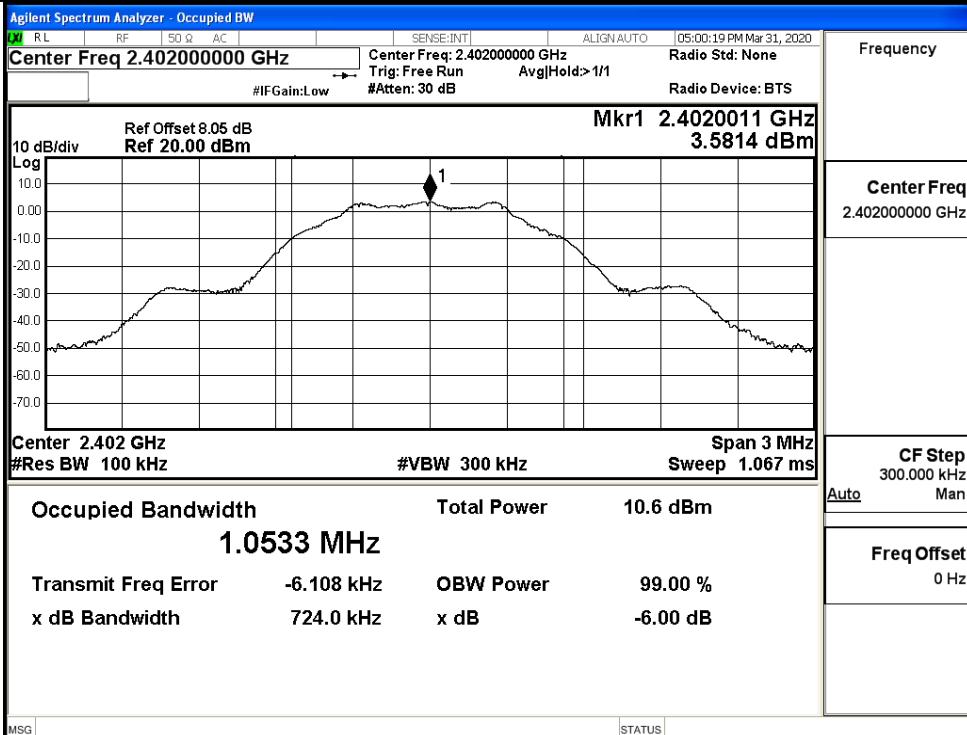


B.4 6dB Bandwidth

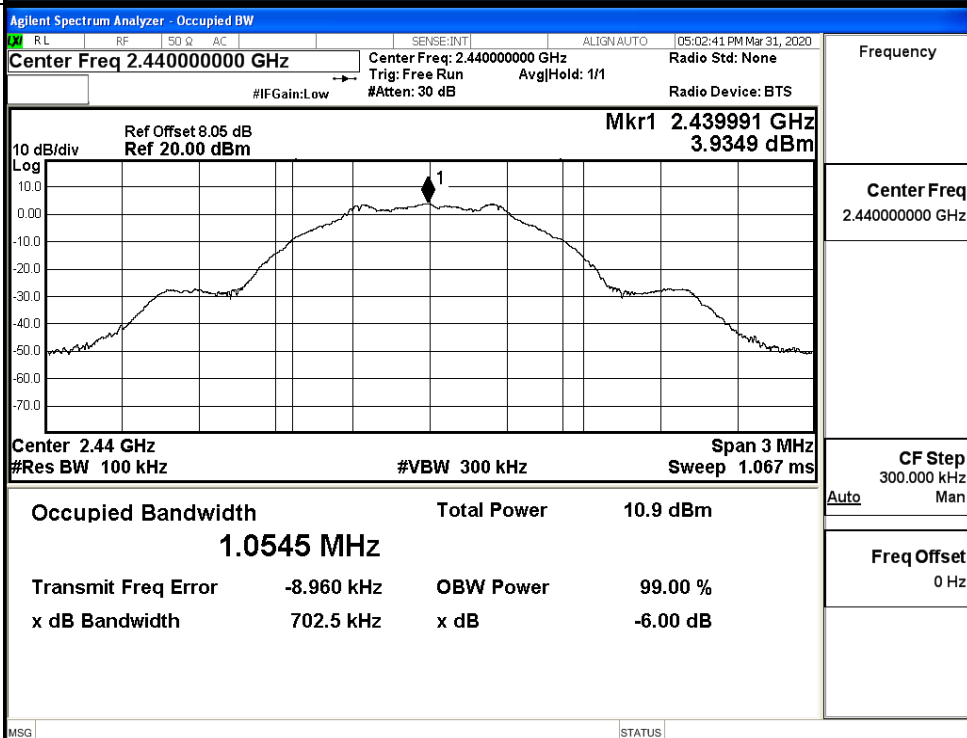
Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
BT LE	LCH	0.7240	≥ 0.5	PASS
BT LE	MCH	0.7025	≥ 0.5	PASS
BT LE	HCH	0.7136	≥ 0.5	PASS

Test Graphs

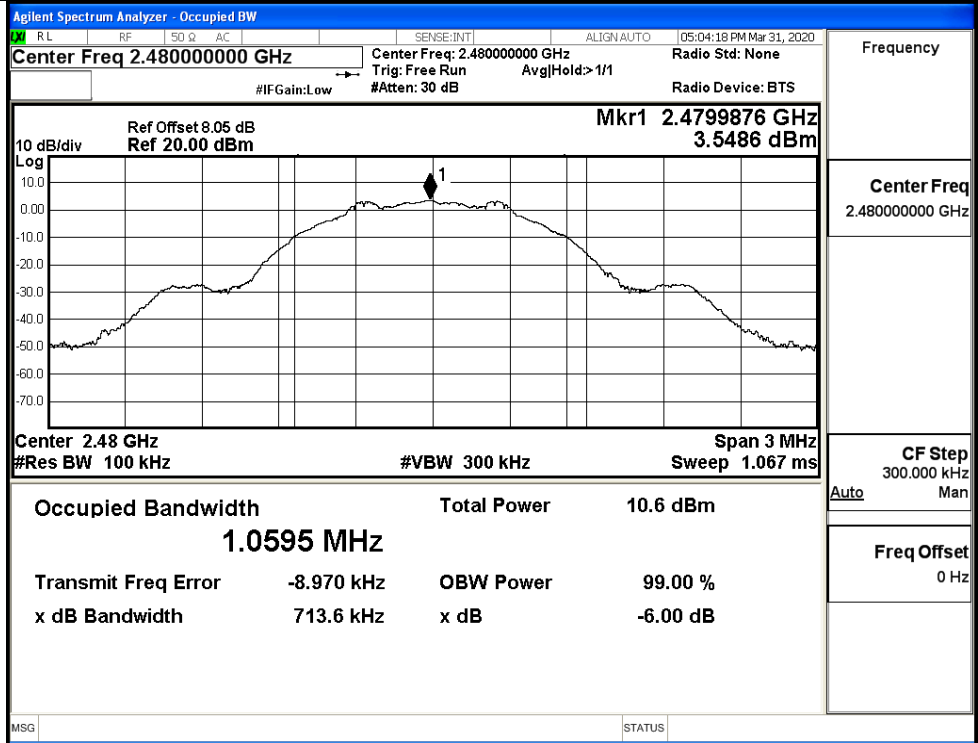
LCH



MCH

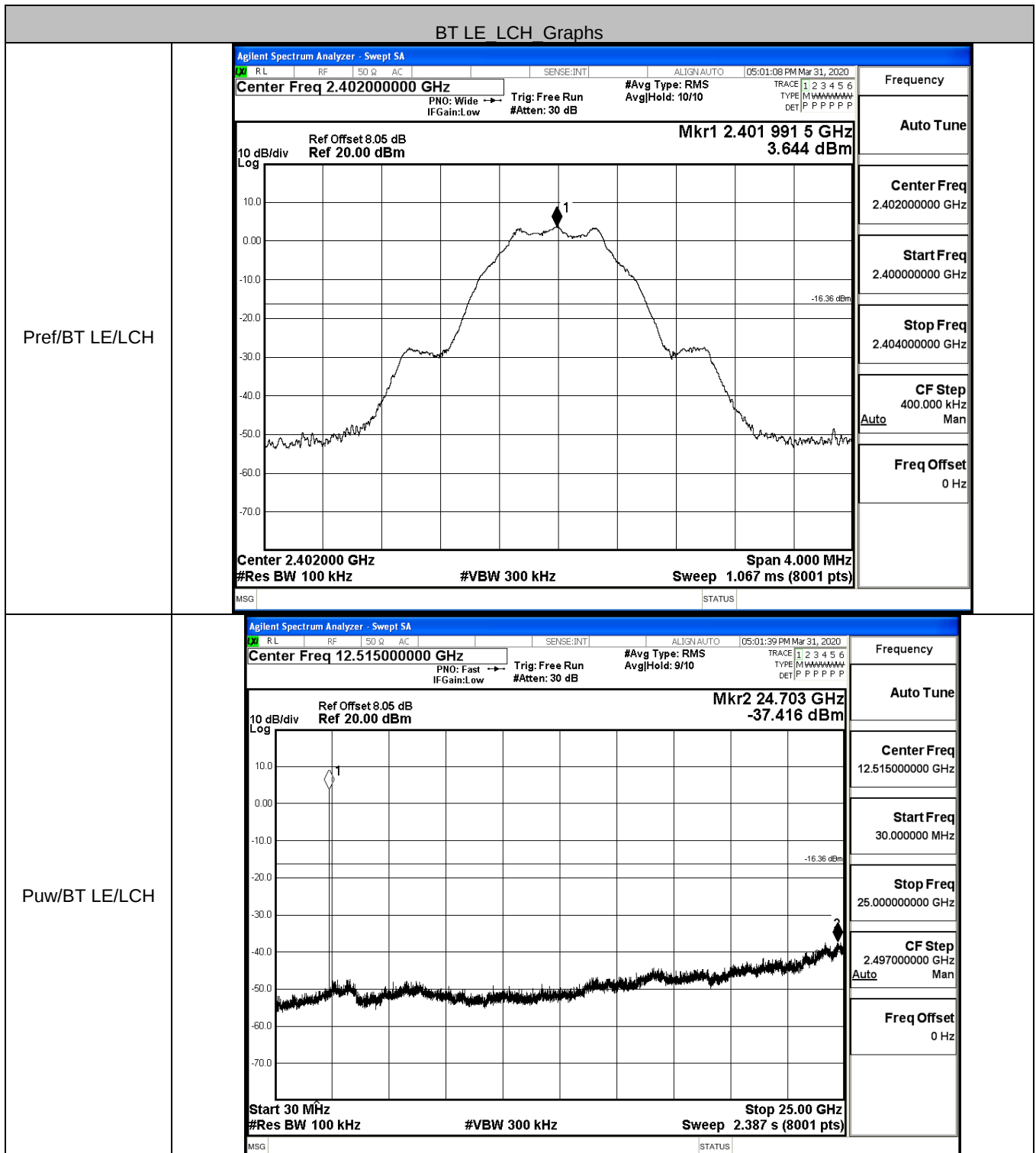


HCH



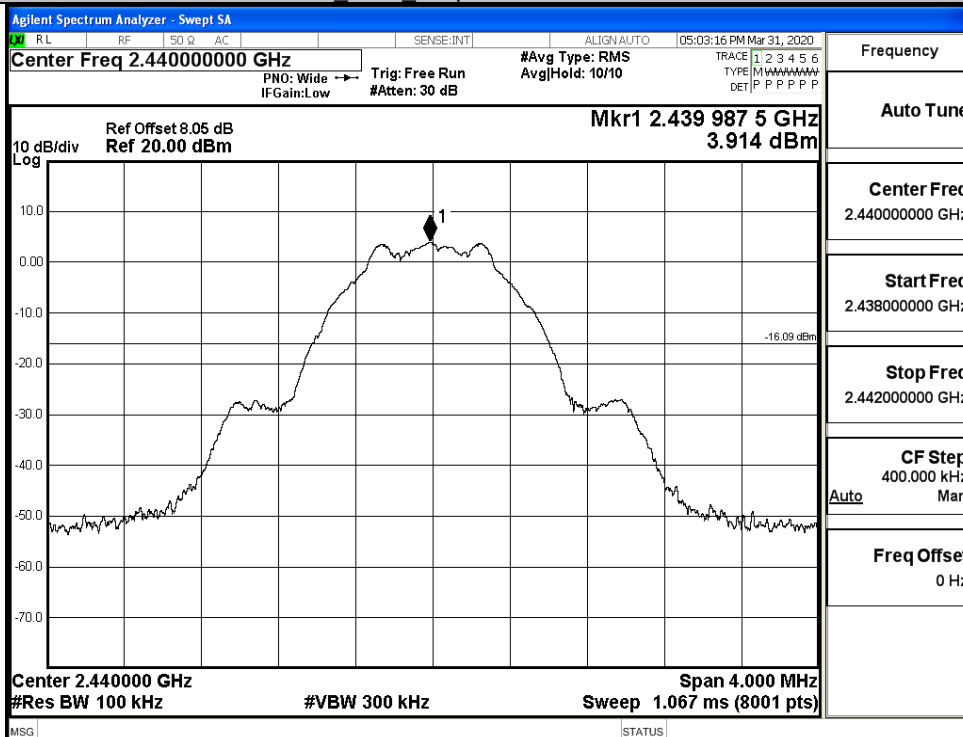
B.5 RF Conducted Spurious Emissions

Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	3.644	-37.416	-16.356	PASS
BT LE	MCH	3.914	-37.199	-16.086	PASS
BT LE	HCH	3.567	-36.964	-16.433	PASS

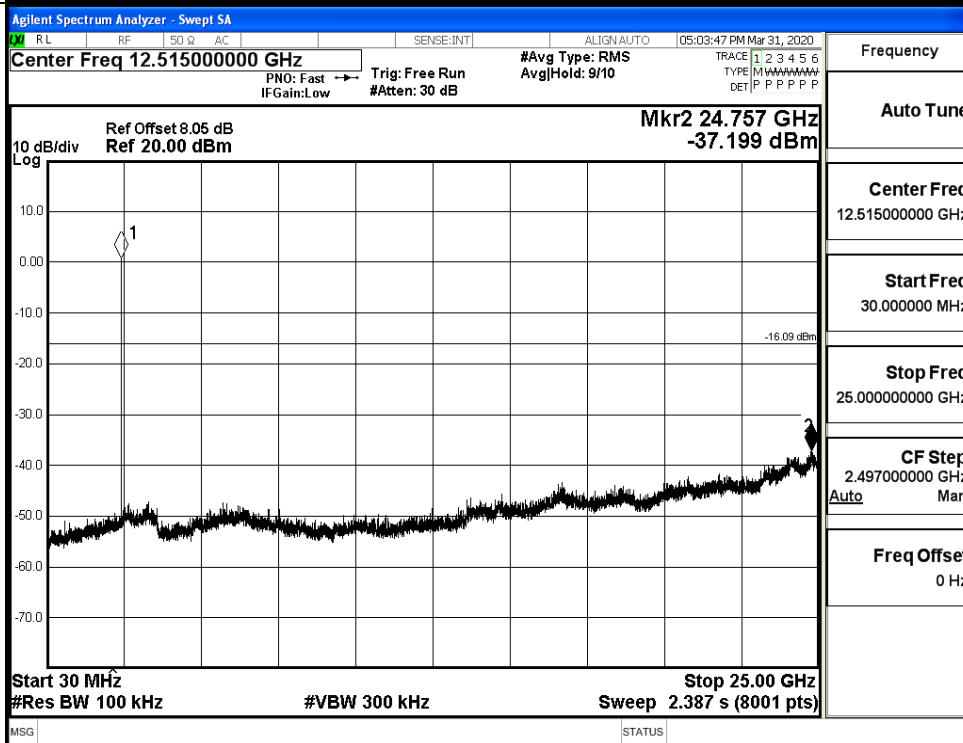


BT LE MCH Graphs

Pref/BT LE/MCH

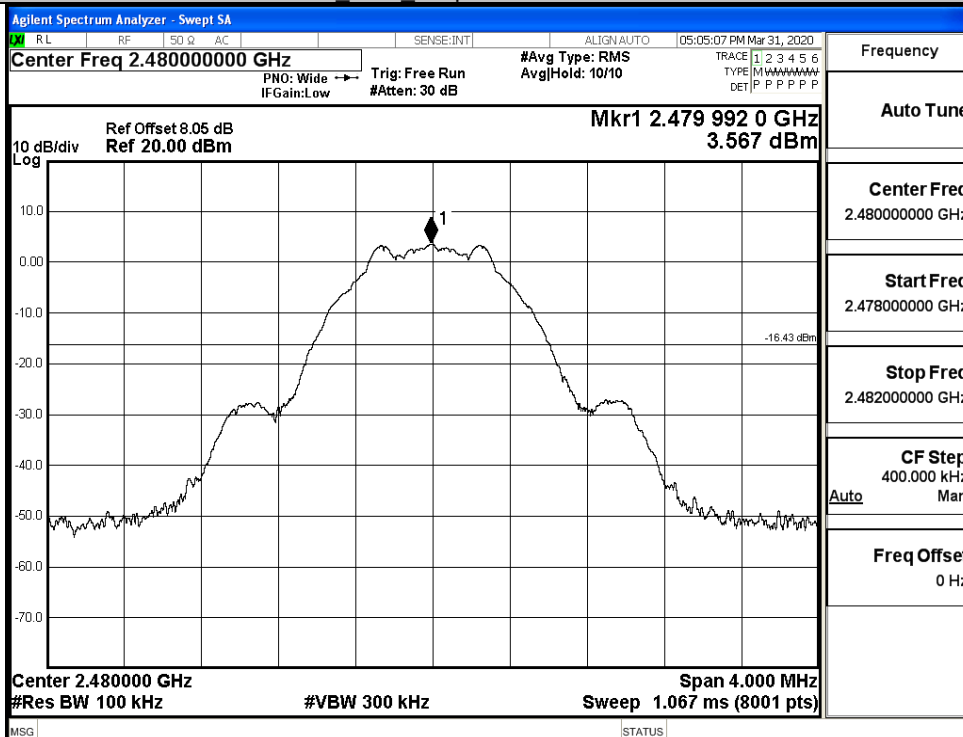


Puw/BT LE/MCH

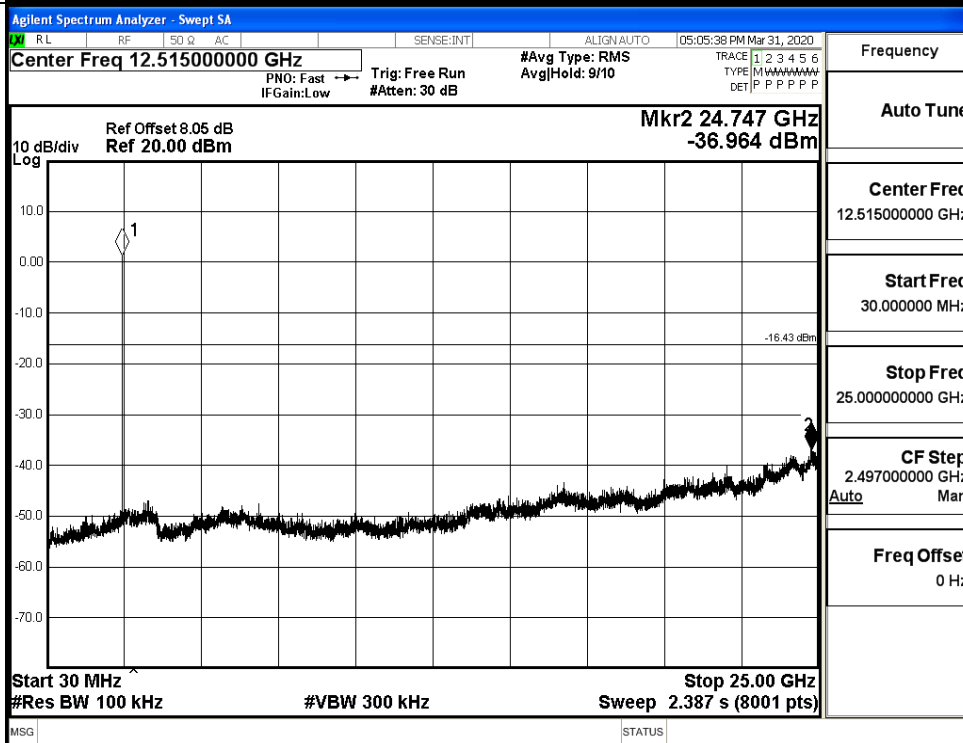


BT LE HCH Graphs

Pref/BT LE/HCH



Puw/BT LE/HCH

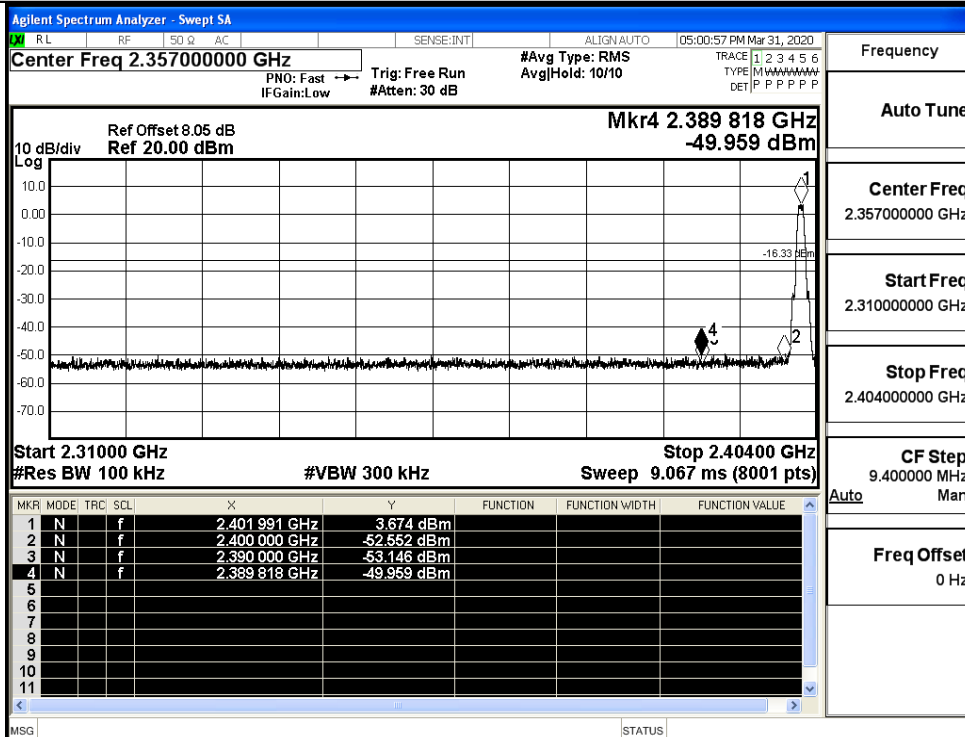


B.6 Band-edge for RF Conducted Emissions

Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	3.674	-49.959	-16.33	PASS
BT LE	HCH	3.604	-49.230	-16.4	PASS

Test Graphs

LCH



Frequency

Auto Tune

Center Freq

2.357000000 GHz

Start Freq

2.310000000 GHz

Stop Freq

2.404000000 GHz

CF Step

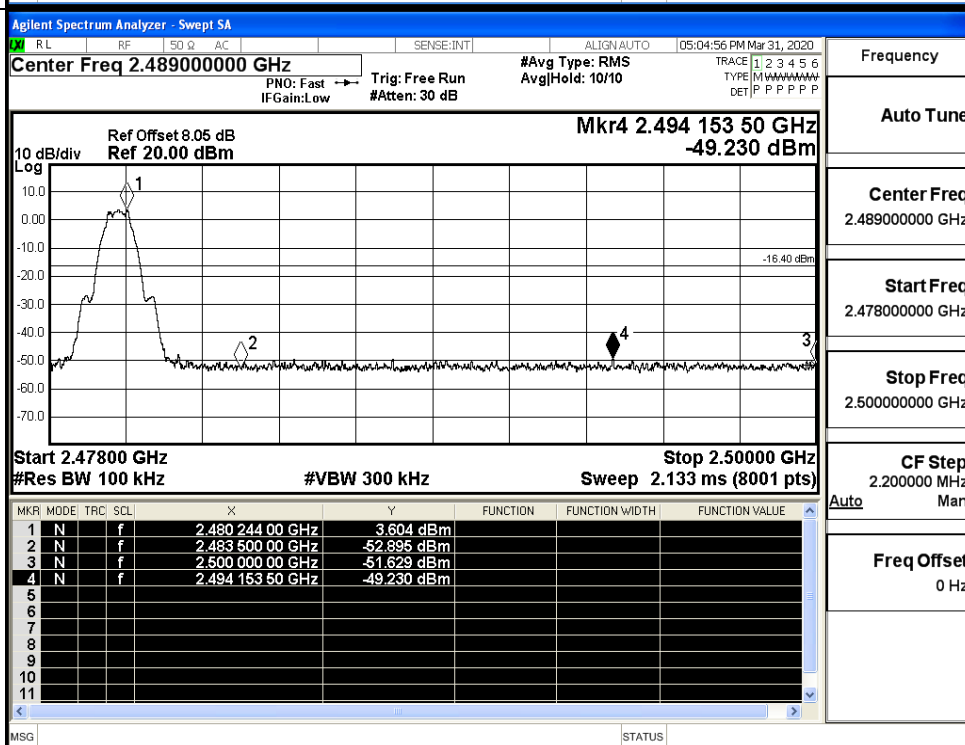
9.400000 MHz

Auto Man

Freq Offset

0 Hz

HCH



Frequency

Auto Tune

Center Freq

2.489000000 GHz

Start Freq

2.478000000 GHz

Stop Freq

2.500000000 GHz

CF Step

2.200000 MHz

Auto Man

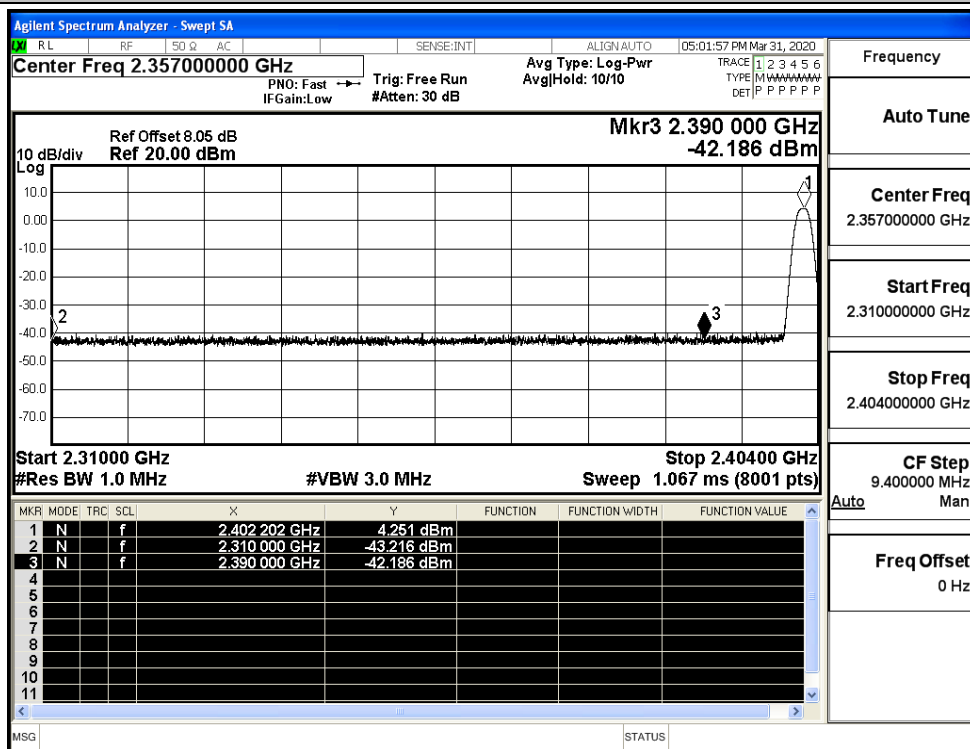
Freq Offset

0 Hz

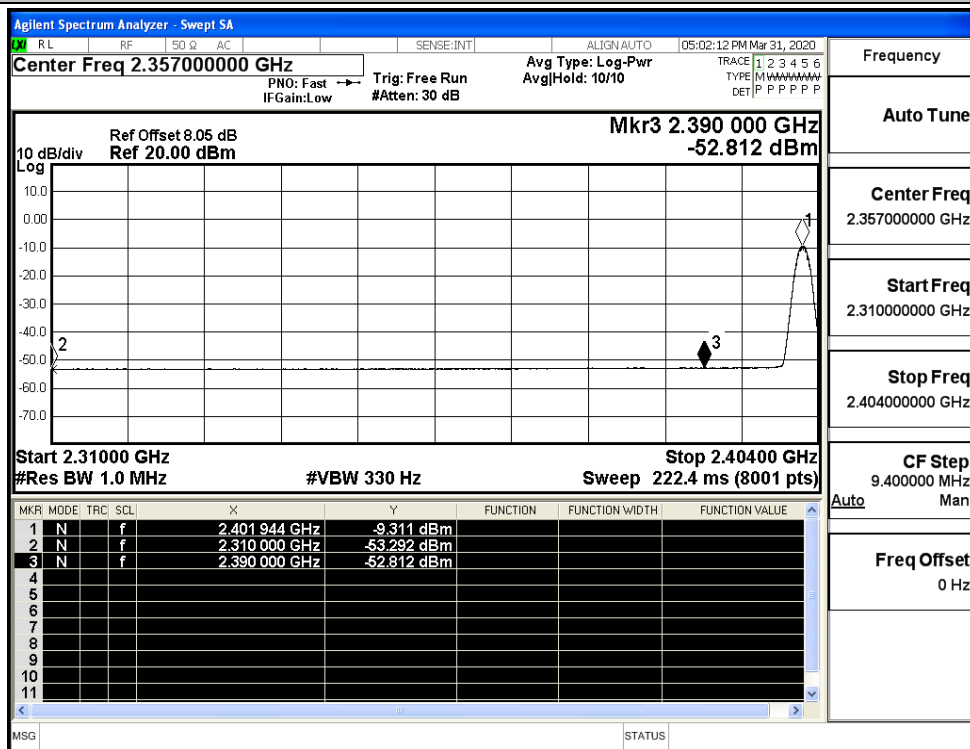
B.7 Restrict-band band-edge measurements

Test Mode	Test Channel	Ant	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdi
BT LE	2402	Ant1	2310.0	-43.22	2.0	0	54.04	PEAK	74	PASS
		Ant1	2310.0	-53.29	2.0	0	43.97	AV	54	PASS
		Ant1	2390.0	-42.19	2.0	0	55.07	PEAK	74	PASS
		Ant1	2390.0	-52.81	2.0	0	44.45	AV	54	PASS
	2480	Ant1	2483.5	-41.18	2.0	0	56.08	PEAK	74	PASS
		Ant1	2483.5	-52.21	2.0	0	45.05	AV	54	PASS
		Ant1	2500.0	-42.77	2.0	0	54.49	PEAK	74	PASS
		Ant1	2500.0	-52.26	2.0	0	45.00	AV	54	PASS

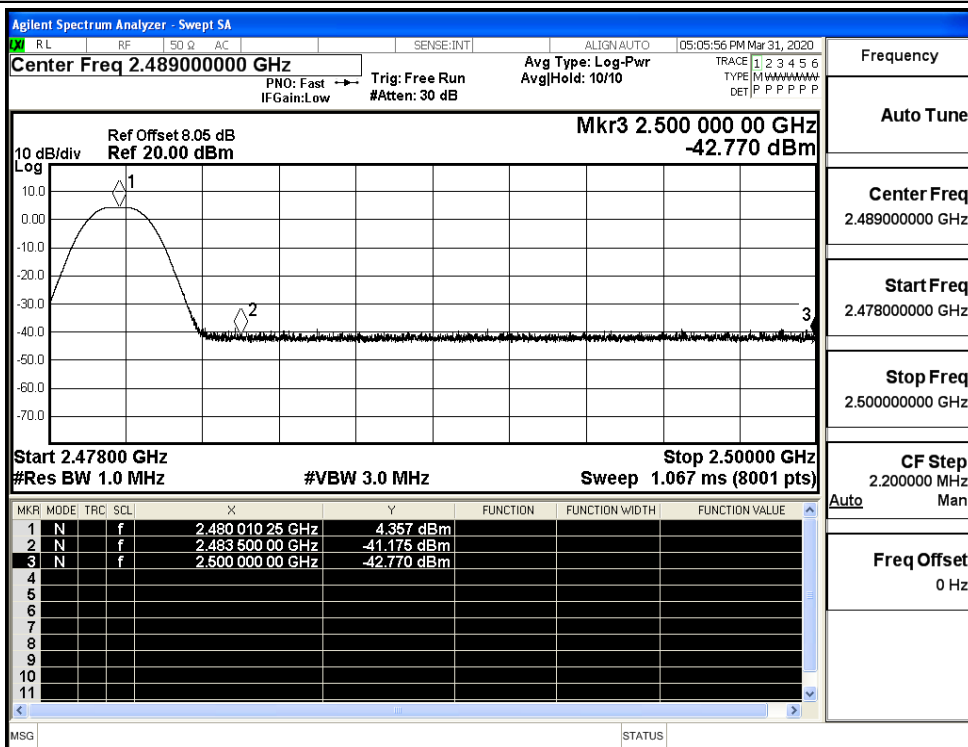
Restrict-band band-edge measurements_BT LE_2402_Ant1_PEAK



Restrict-band band-edge measurements_BT LE_2402_Ant1_AV



Restrict-band band-edge measurements_BT LE_2480_Ant1_PEAK



Restrict-band band-edge measurements_BT LE_2480_Ant1_AV

