

Appendix B

RF Test Data for BT V5.0 (BT LE) (Conducted Measurement)

Product Name: Bluetooth speaker

Trade Mark: N/A

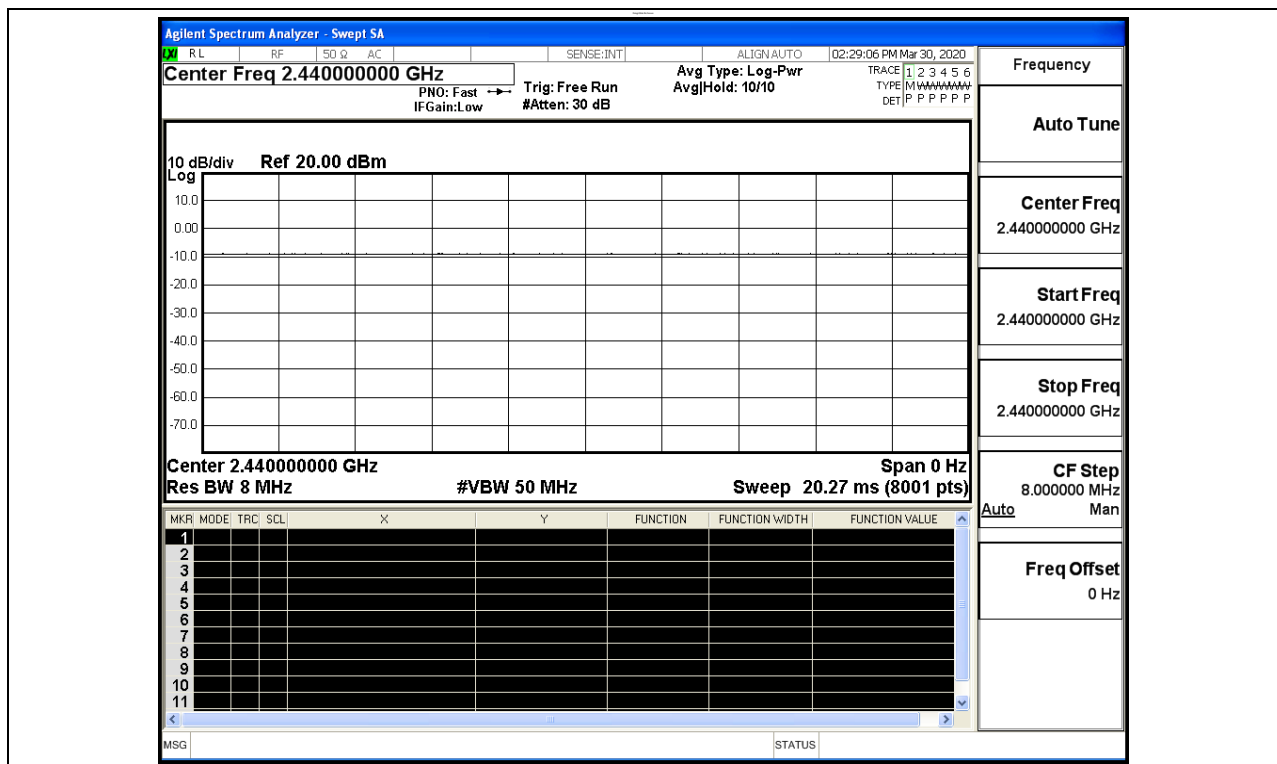
Test Model: XO-9927

Environmental Conditions

Temperature:	25 ° C
Relative Humidity:	50%
ATM Pressure:	100.0 kPa
Test Engineer:	Qu Xin
Supervised by:	Tom.Liu

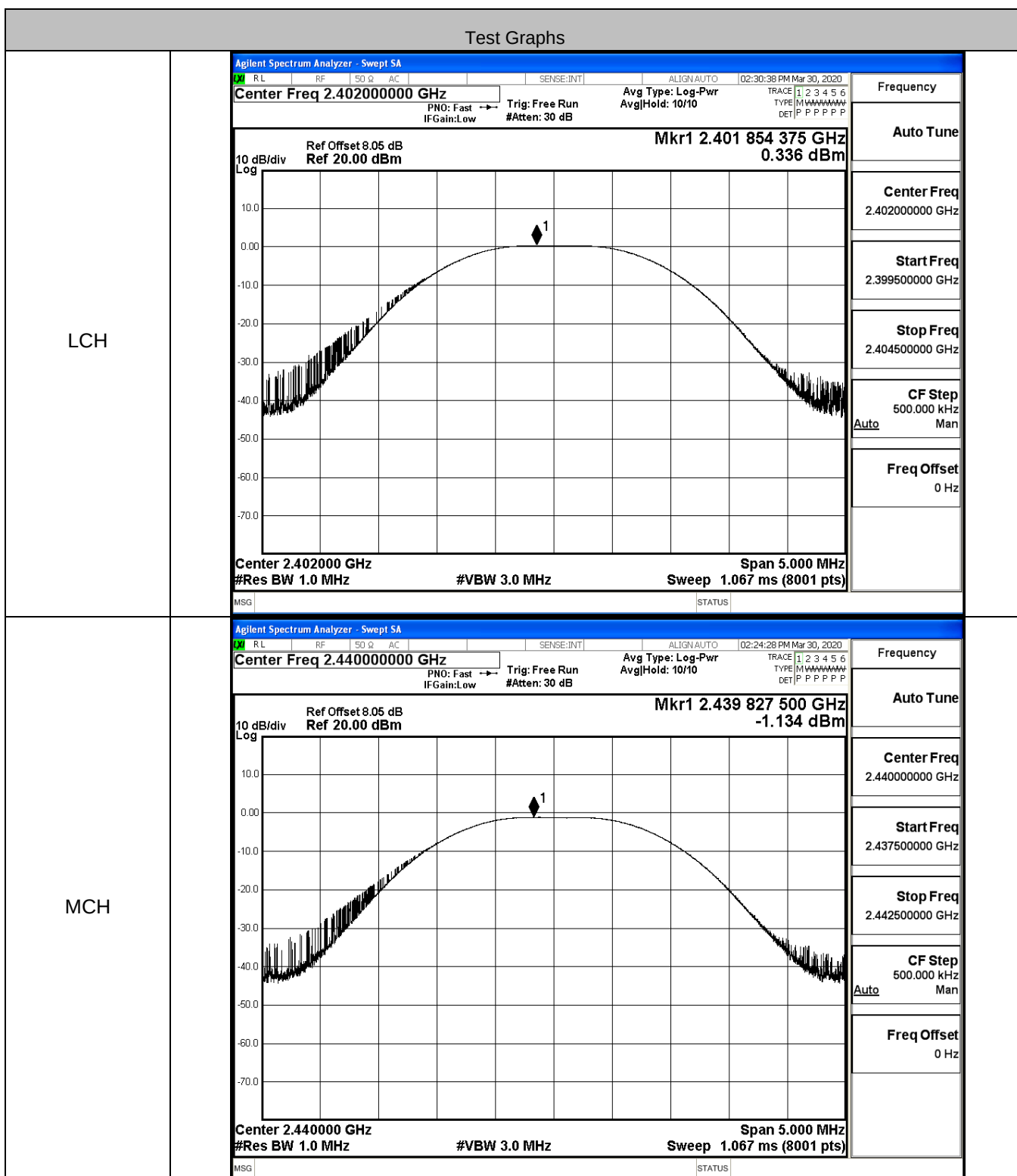
B.1 Duty Cycle

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

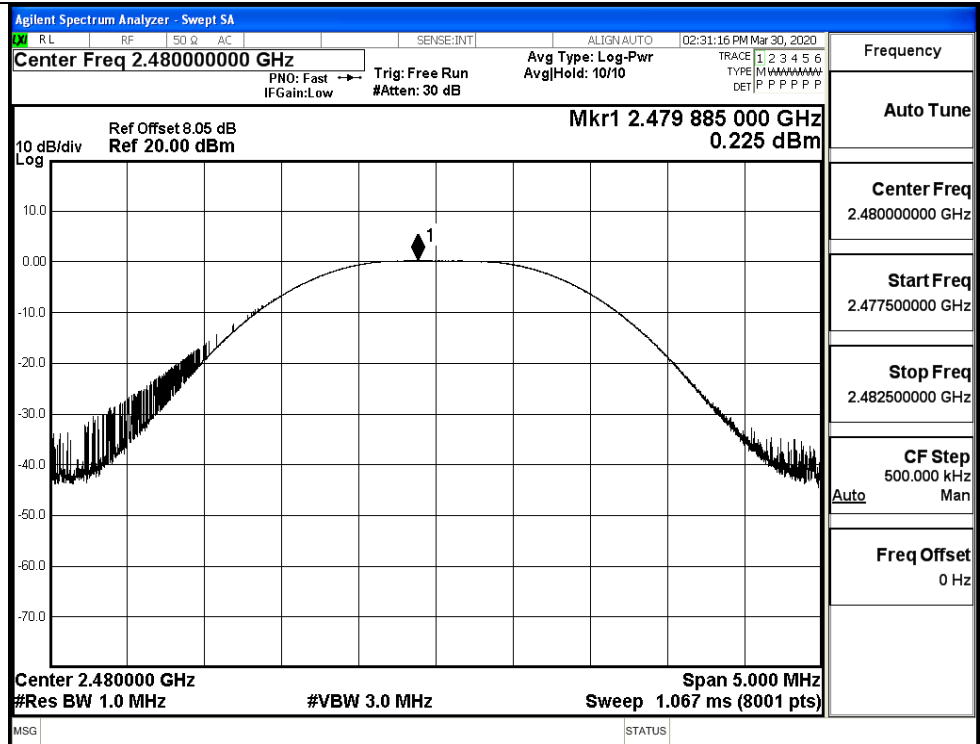


B.2 Maximum Conducted Peak Output Power

Mode	Channel	Conduct Peak Power[dBm]	Limit [dBm]	Verdict
BT LE	LCH	0.336	30	PASS
BT LE	MCH	-1.134	30	PASS
BT LE	HCH	0.225	30	PASS



HCH

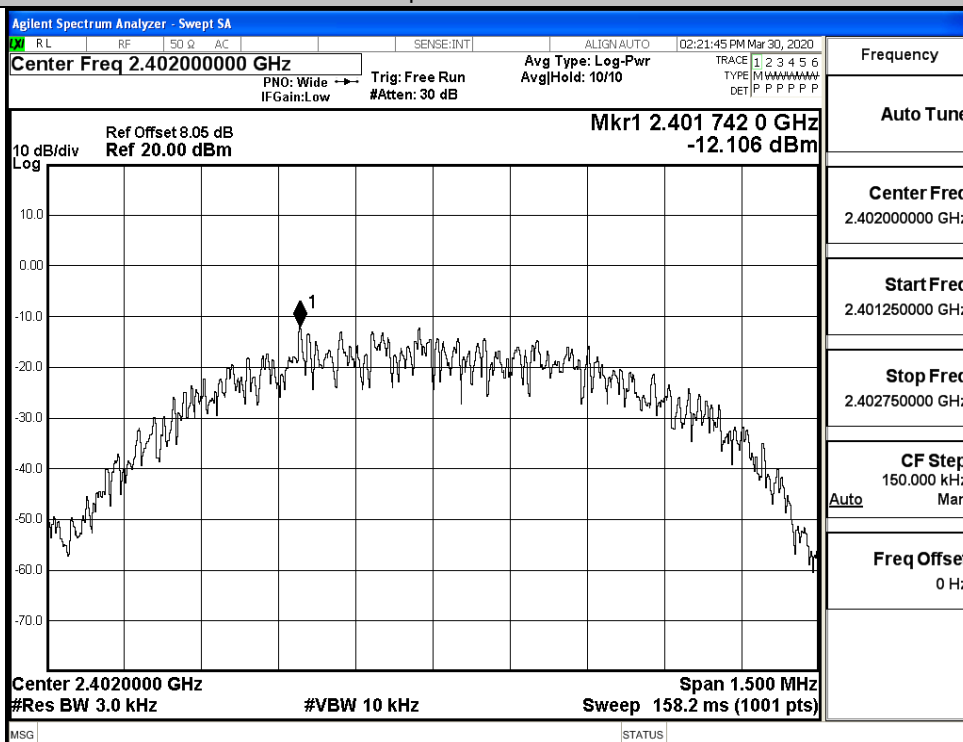


B.3 Maximum Power Spectral Density

Mode	Channel	PSD [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
BT LE	LCH	-12.106	8	PASS
BT LE	MCH	-16.518	8	PASS
BT LE	HCH	-18.048	8	PASS

Test Graphs

LCH

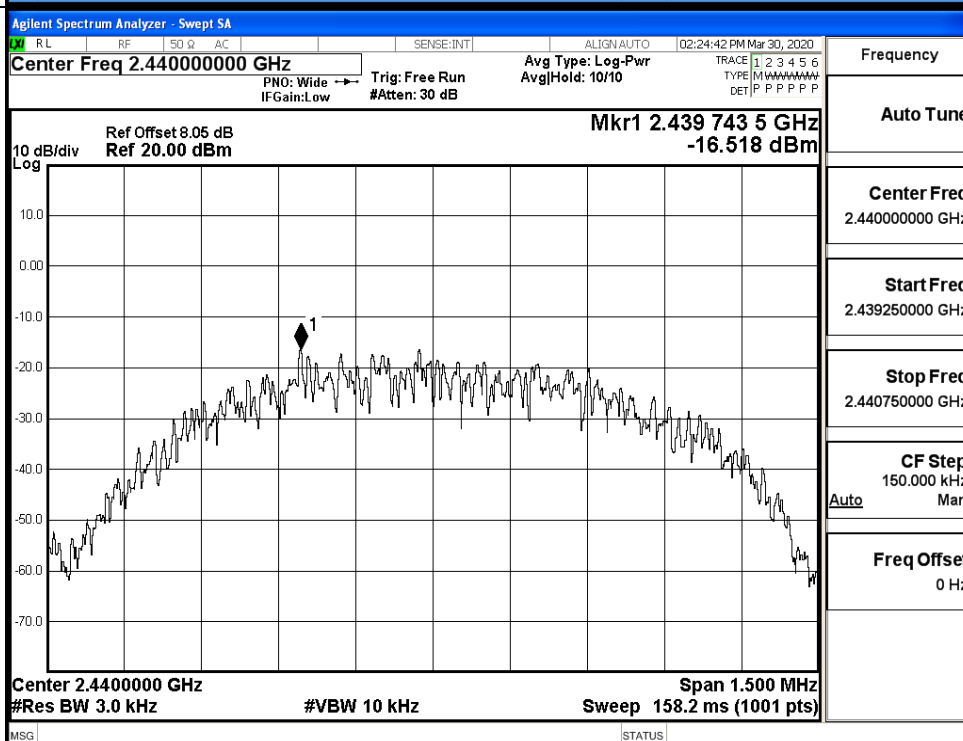


Frequency

Auto Tune

Center Freq
2.402000000 GHzStart Freq
2.401250000 GHzStop Freq
2.402750000 GHzCF Step
150.000 kHz
Auto ManFreq Offset
0 Hz

MCH

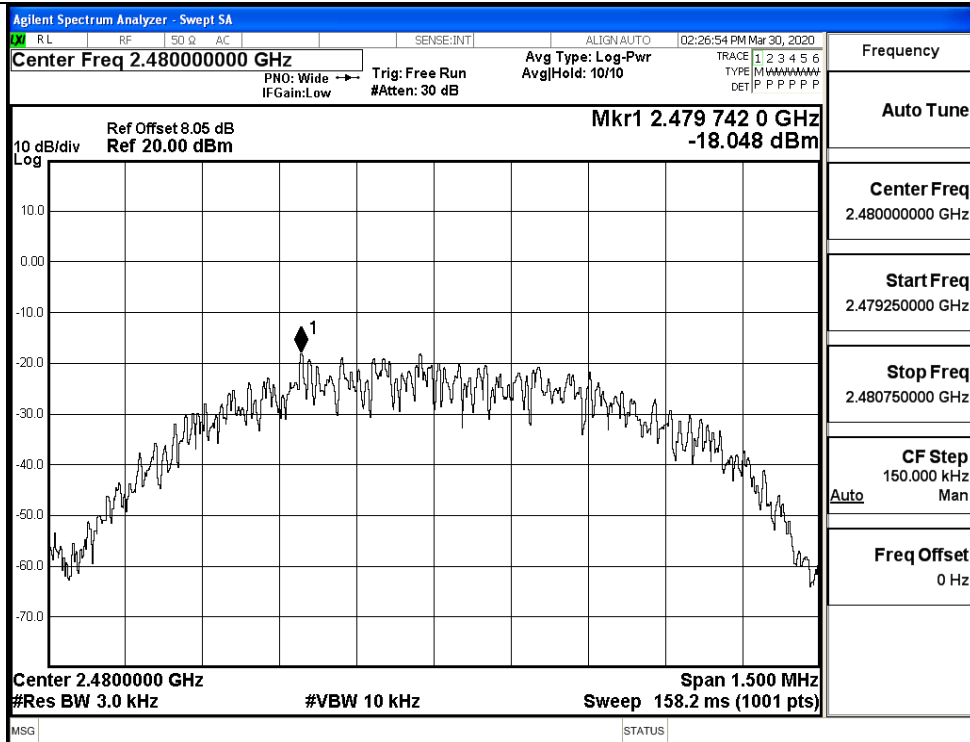


Frequency

Auto Tune

Center Freq
2.440000000 GHzStart Freq
2.439250000 GHzStop Freq
2.440750000 GHzCF Step
150.000 kHz
Auto ManFreq Offset
0 Hz

HCH

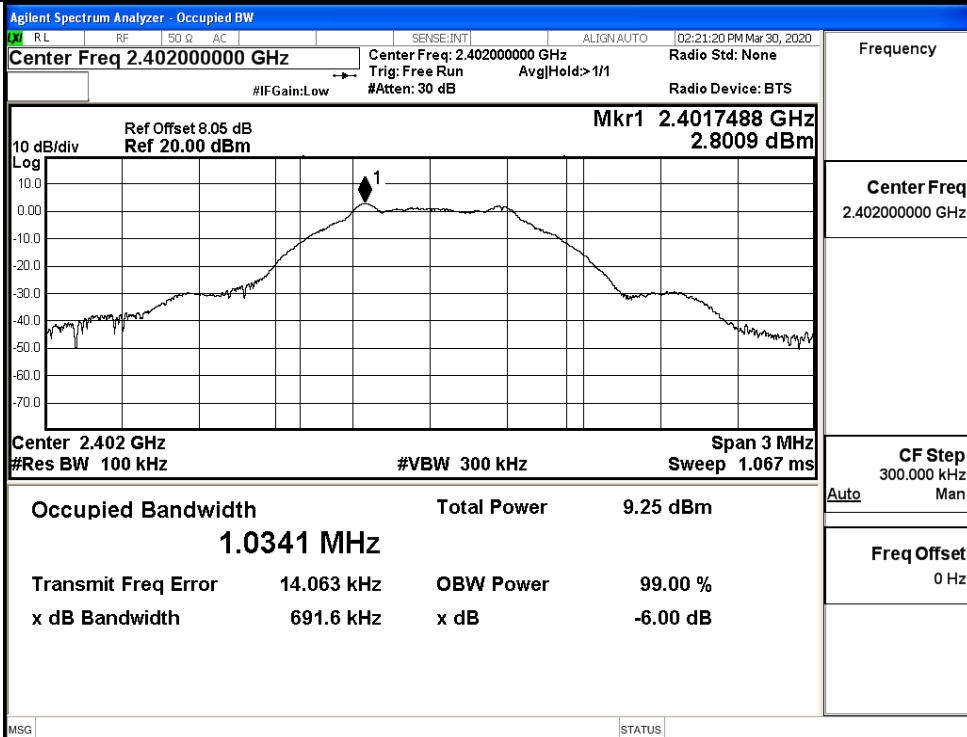


B.4 6dB Bandwidth

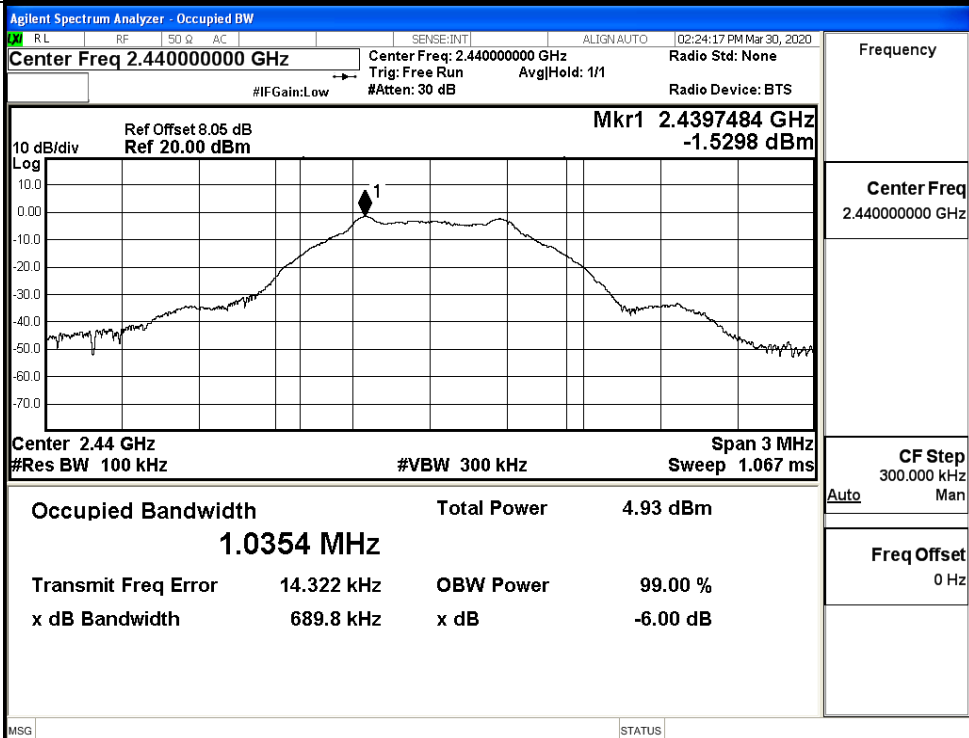
Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
BT LE	LCH	0.6916	≥ 0.5	PASS
BT LE	MCH	0.6898	≥ 0.5	PASS
BT LE	HCH	0.6925	≥ 0.5	PASS

Test Graphs

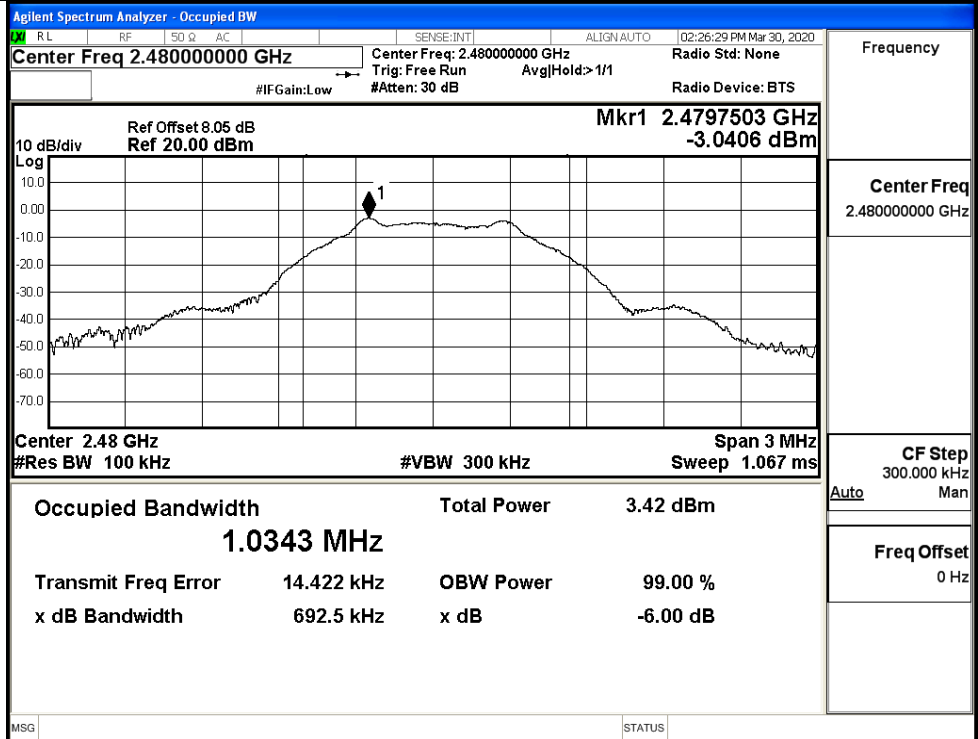
LCH



MCH



HCH

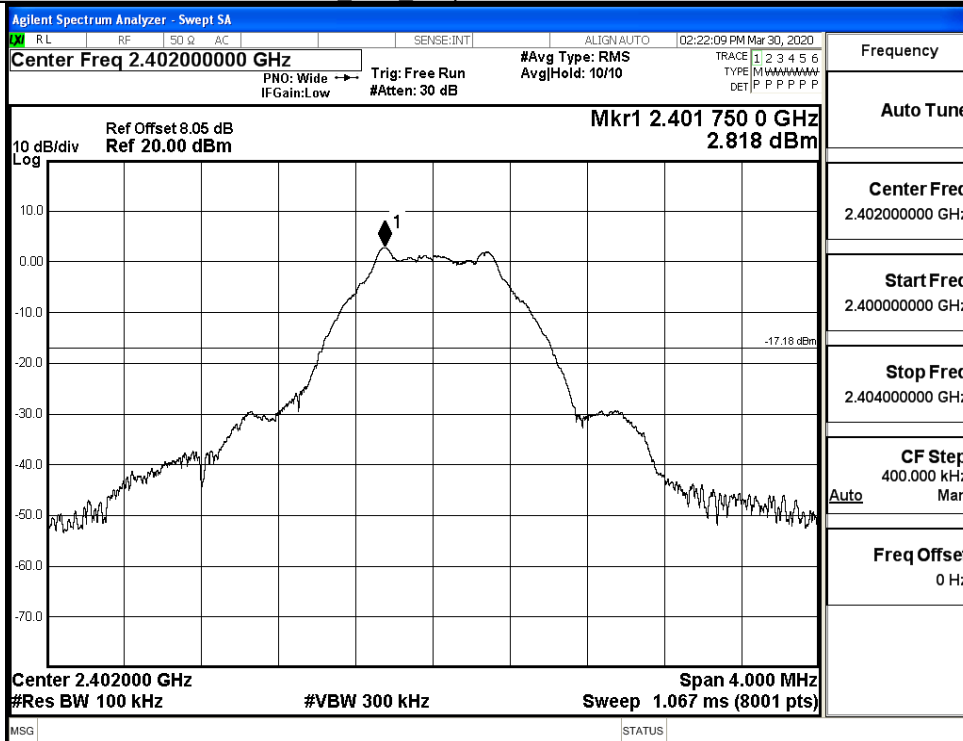


B.5 RF Conducted Spurious Emissions

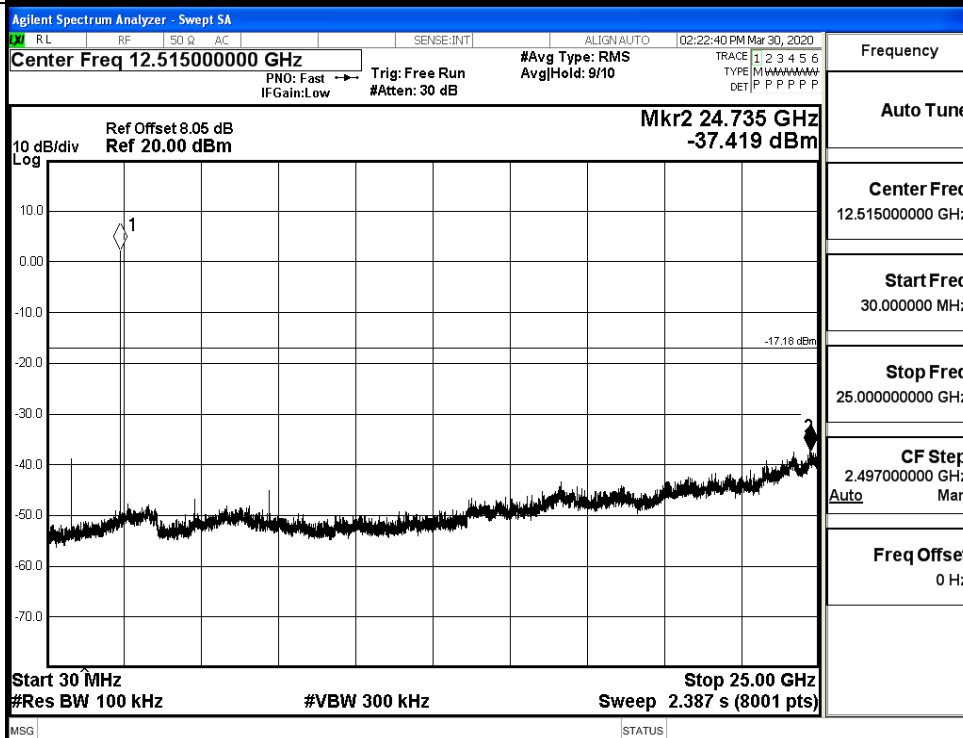
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	2.818	-37.419	-17.182	PASS
BT LE	MCH	-1.537	-36.970	-21.537	PASS
BT LE	HCH	-3.052	-37.495	-23.052	PASS

BT LE LCH Graphs

Pref/BT LE/LCH

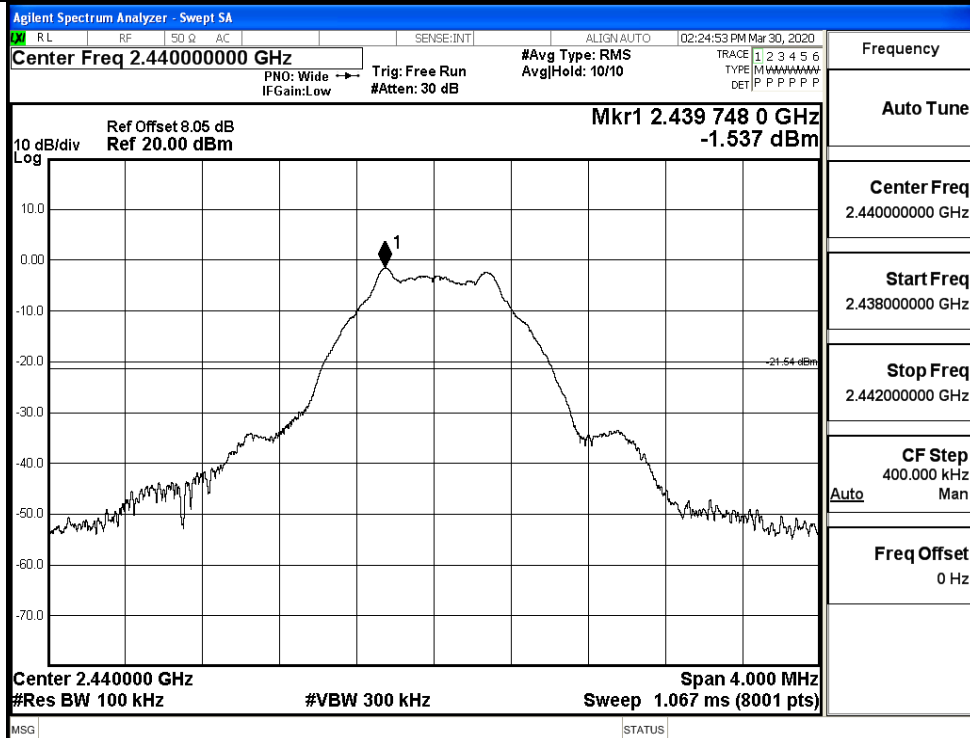


Puw/BT LE/LCH

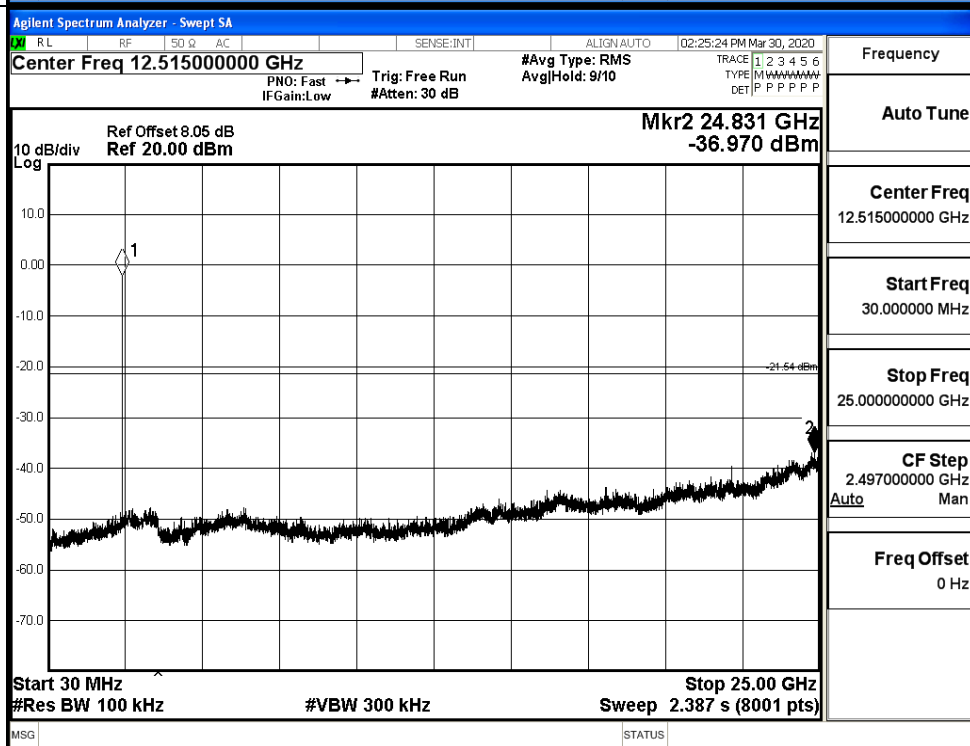


BT LE MCH Graphs

Pref/BT LE/MCH

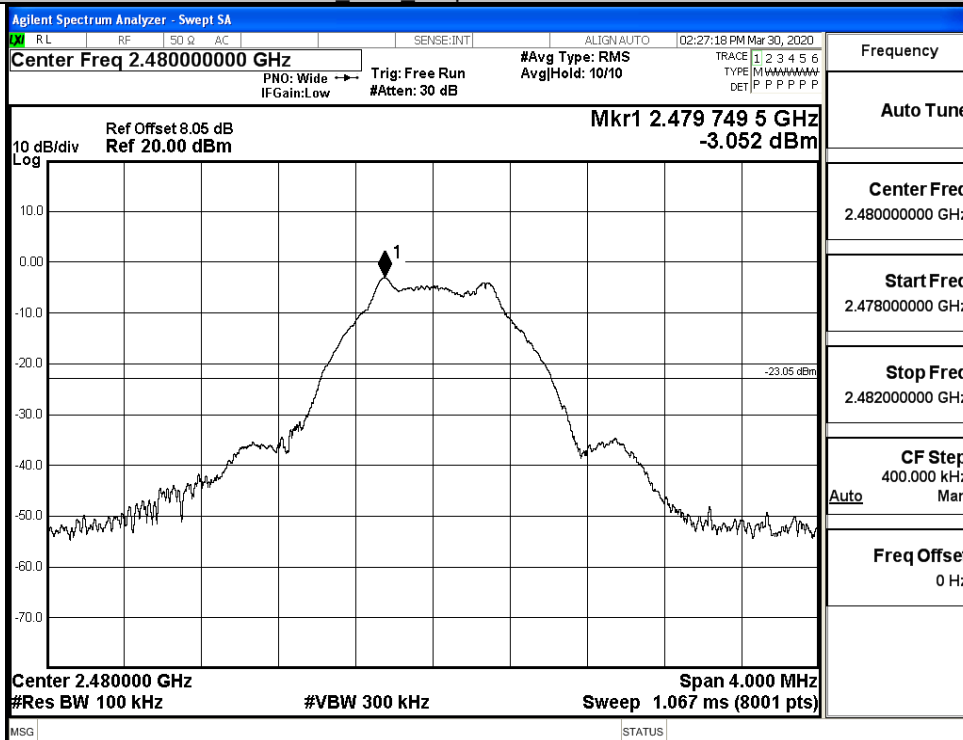


Puw/BT LE/MCH



BT LE HCH Graphs

Pref/BT LE/HCH



Puw/BT LE/HCH

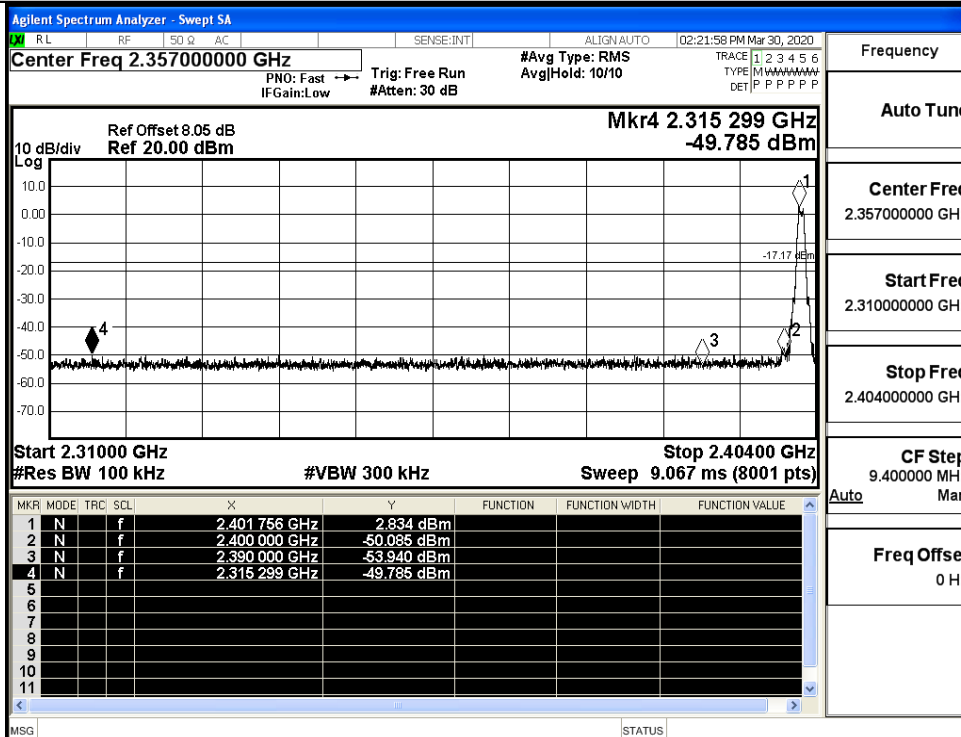


B.6 Band-edge for RF Conducted Emissions

Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	2.834	-49.785	-17.17	PASS
BT LE	HCH	-3.030	-48.688	-23.03	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

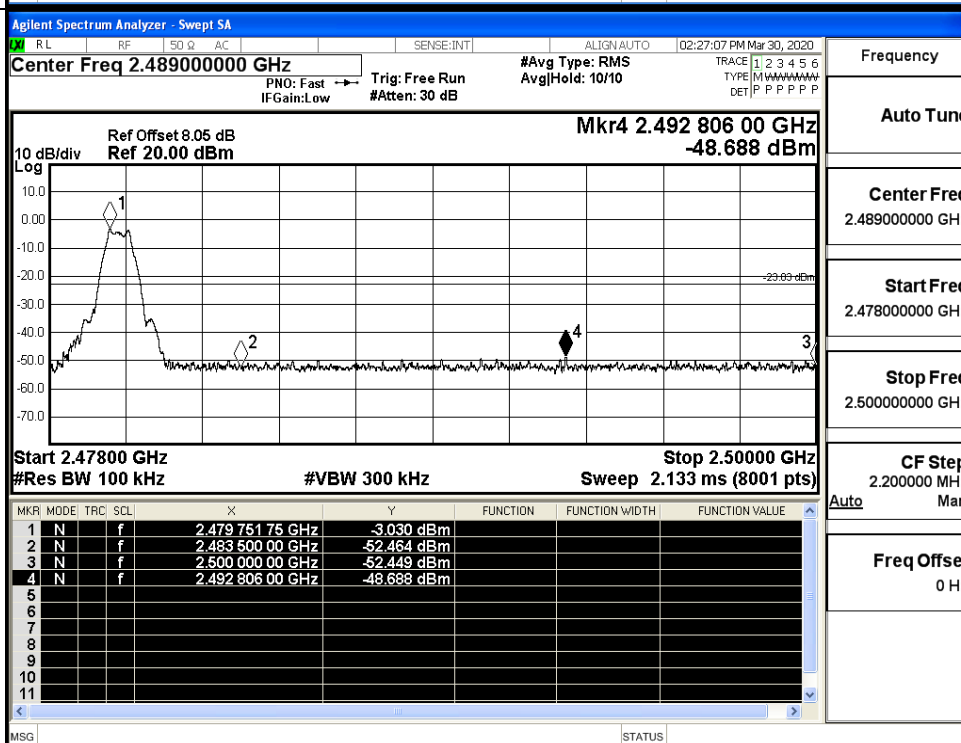
Auto

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

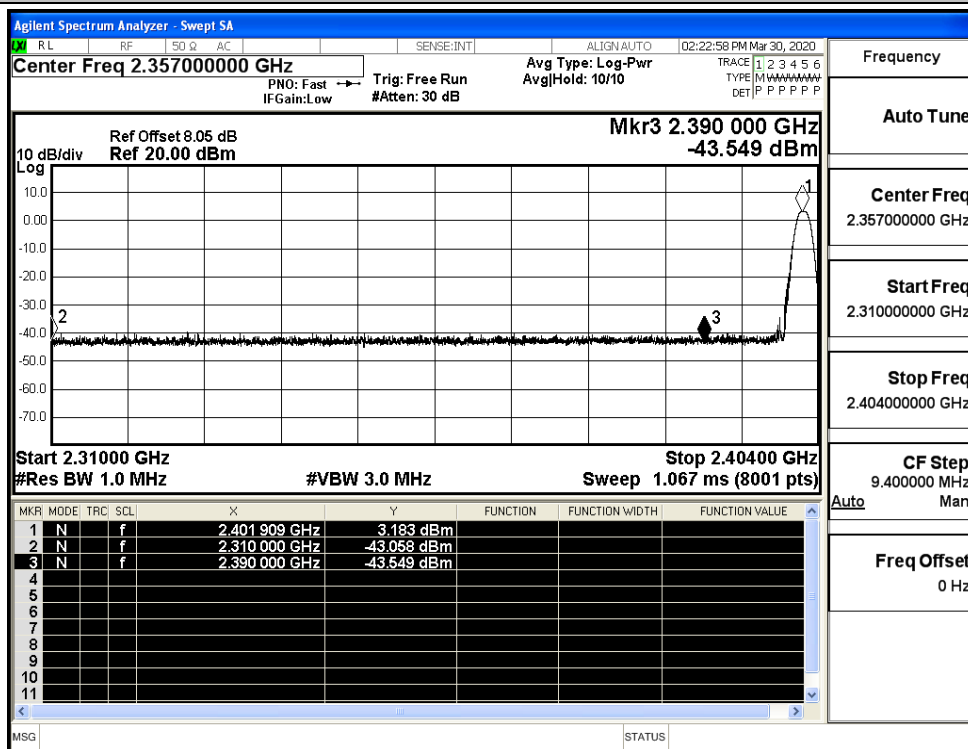
Freq Offset

0 Hz

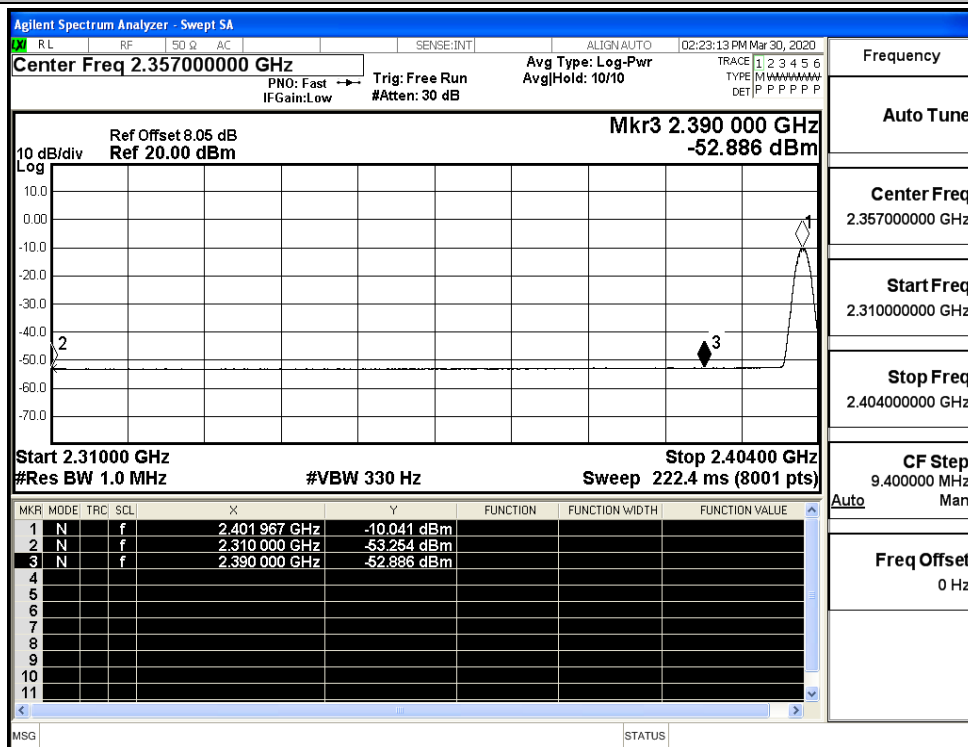
B.7 Restrict-band band-edge measurements

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	-43.06	2.0	0	54.2	PEAK	74	PASS
		Ant1	2310.0	-53.25	2.0	0	44.01	AV	54	PASS
		Ant1	2390.0	-43.55	2.0	0	53.71	PEAK	74	PASS
		Ant1	2390.0	-52.89	2.0	0	44.37	AV	54	PASS
	2480	Ant1	2483.5	-41.80	2.0	0	55.46	PEAK	74	PASS
		Ant1	2483.5	-52.39	2.0	0	44.87	AV	54	PASS
		Ant1	2500.0	-42.23	2.0	0	55.03	PEAK	74	PASS
		Ant1	2500.0	-52.21	2.0	0	45.05	AV	54	PASS

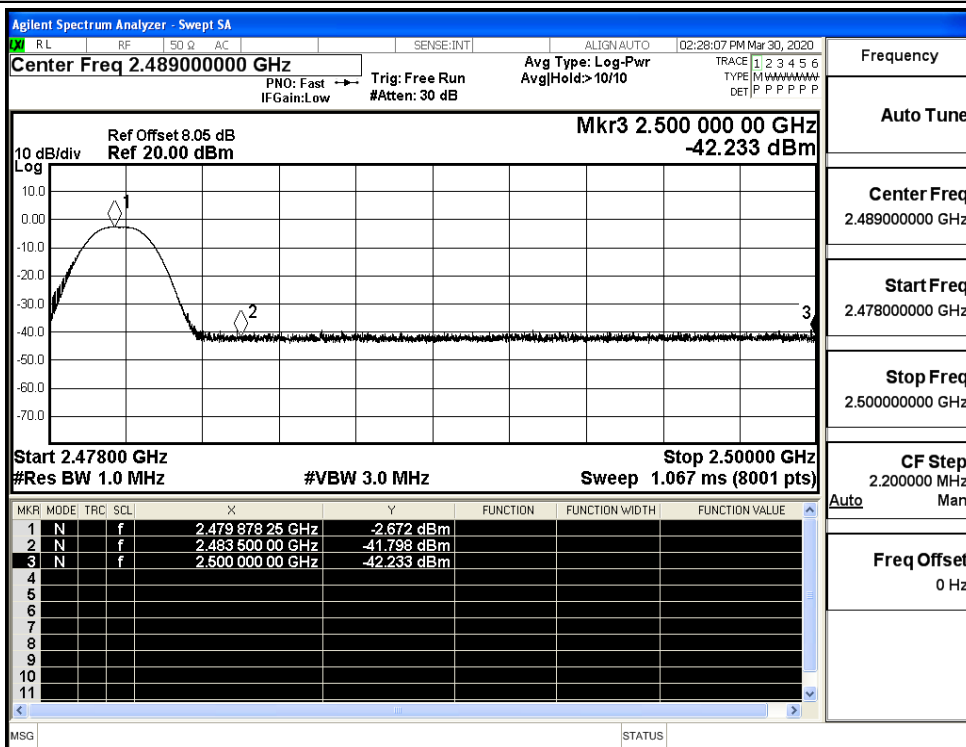
Restrict-band band-edge measurements_BT LE_2402_Ant1_PEAK



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

