

Appendix B

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

Product Name: WIFI Bulb

Trade Mark: /

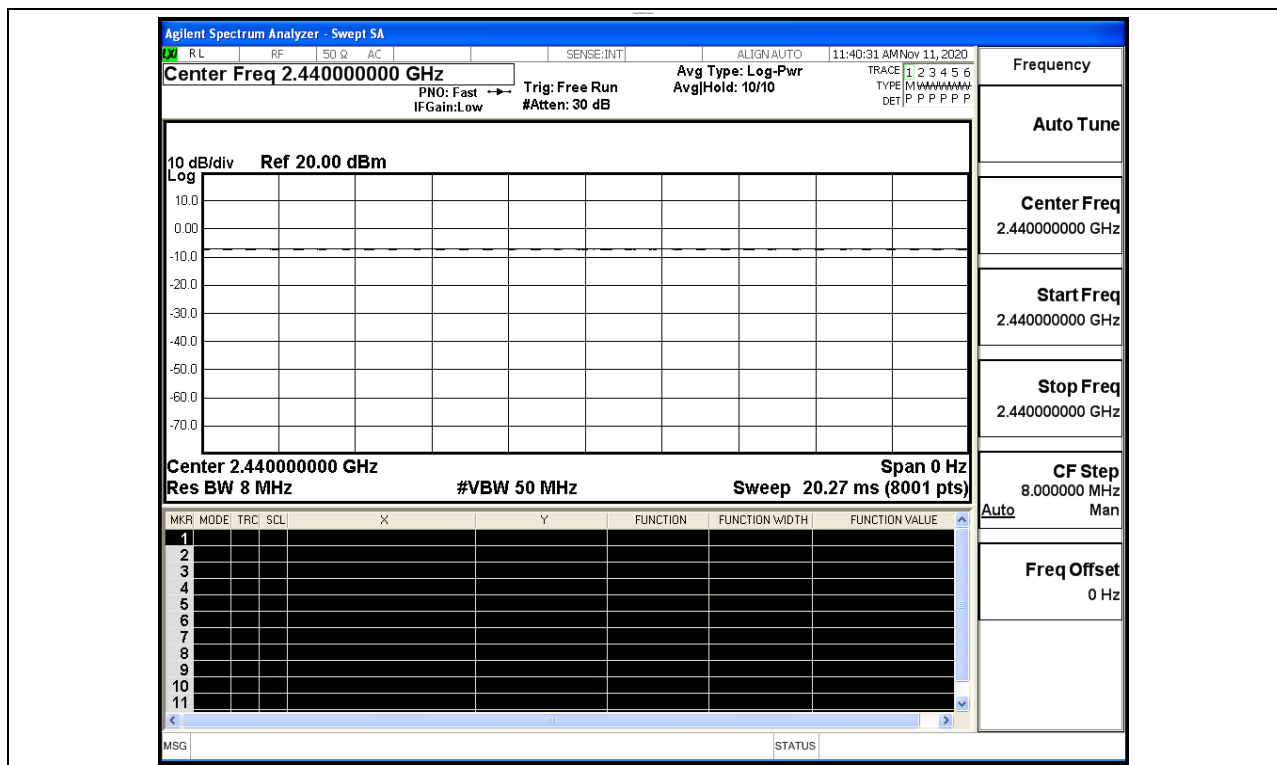
Test Model: ZJ-BWBL1-RGBWW

Environmental Conditions

Temperature:	22.9°C
Relative Humidity:	52.5%
ATM Pressure:	100.0 kPa
Test Engineer:	Kay Hu
Supervised by:	Li Huan

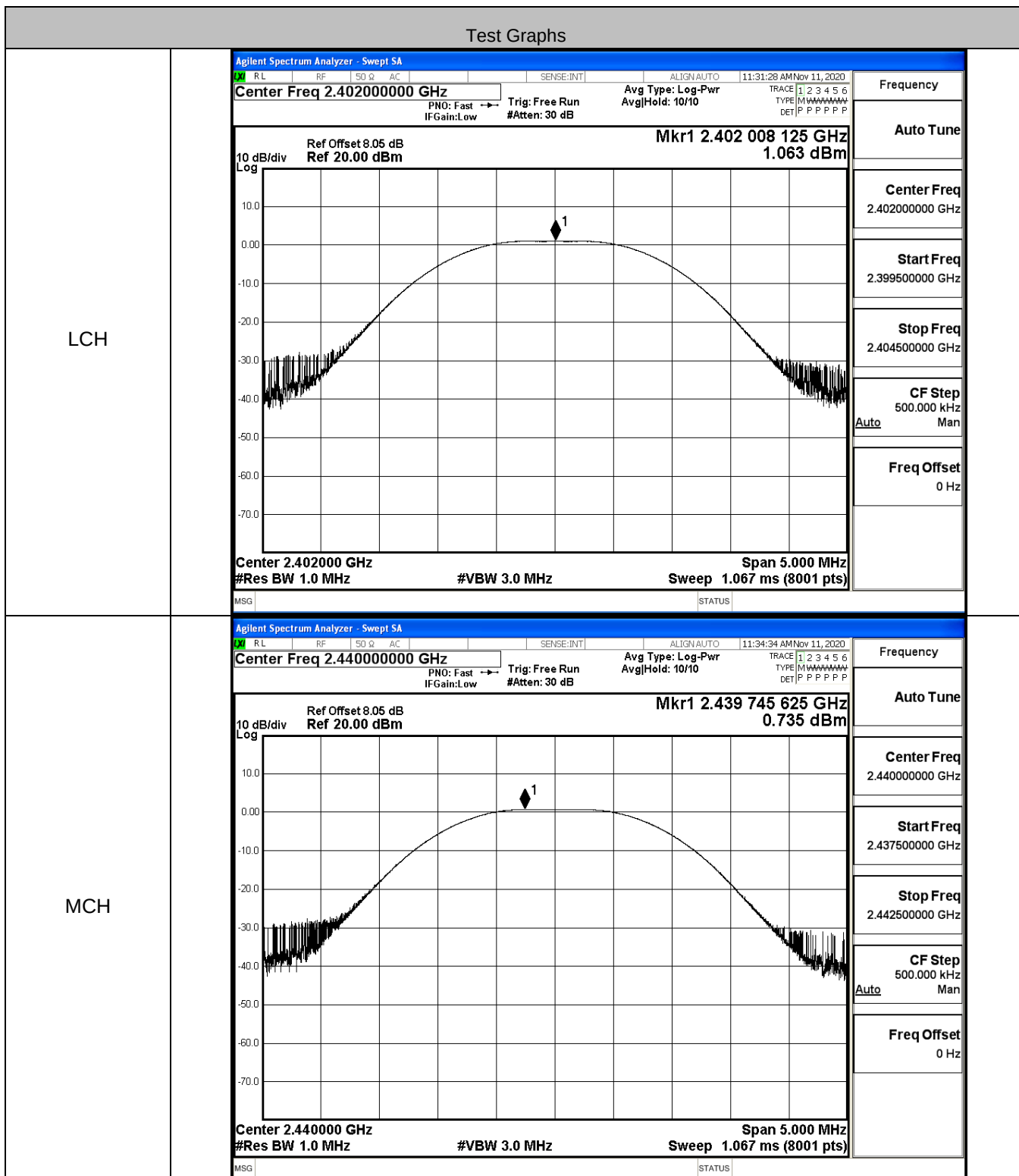
B.1 Duty Cycle

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

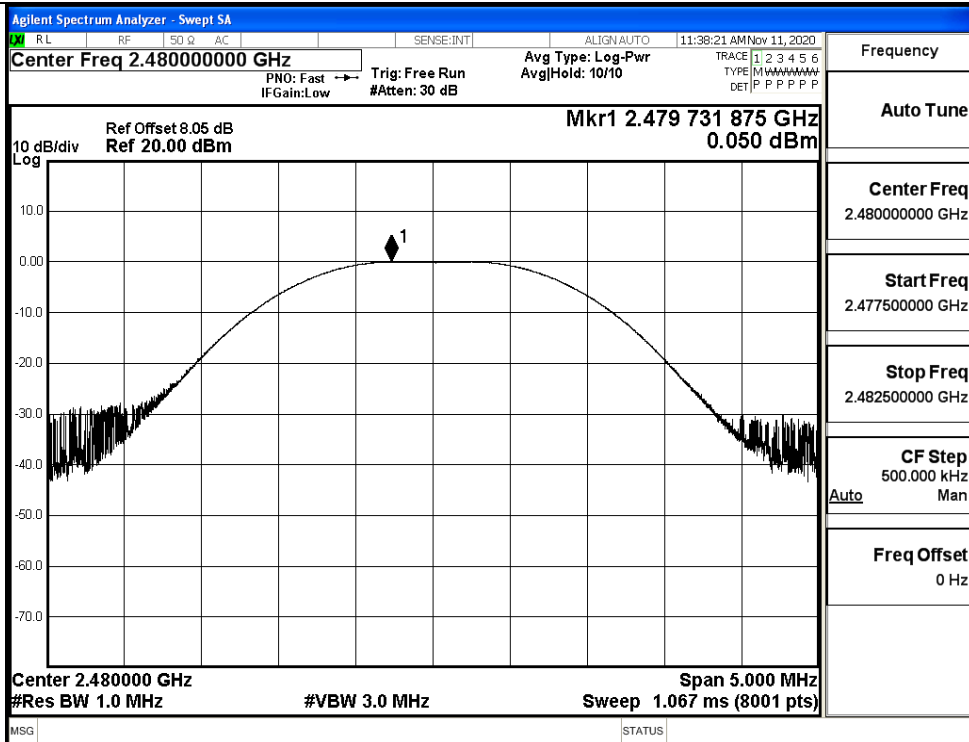


B.2 Maximum Conducted Peak Output Power

Mode	Channel	Conduct Peak Power[dBm]	Limit [dBm]	Verdict
BT LE	LCH	1.063	30	PASS
BT LE	MCH	0.735	30	PASS
BT LE	HCH	0.05	30	PASS



HCH

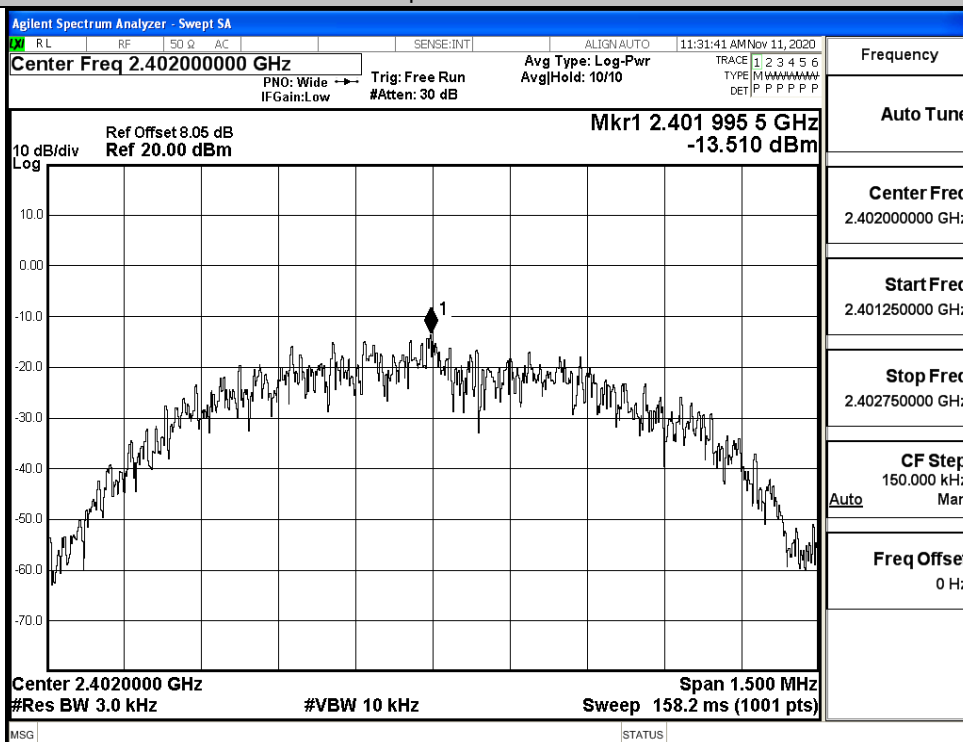


B.3 Maximum Power Spectral Density

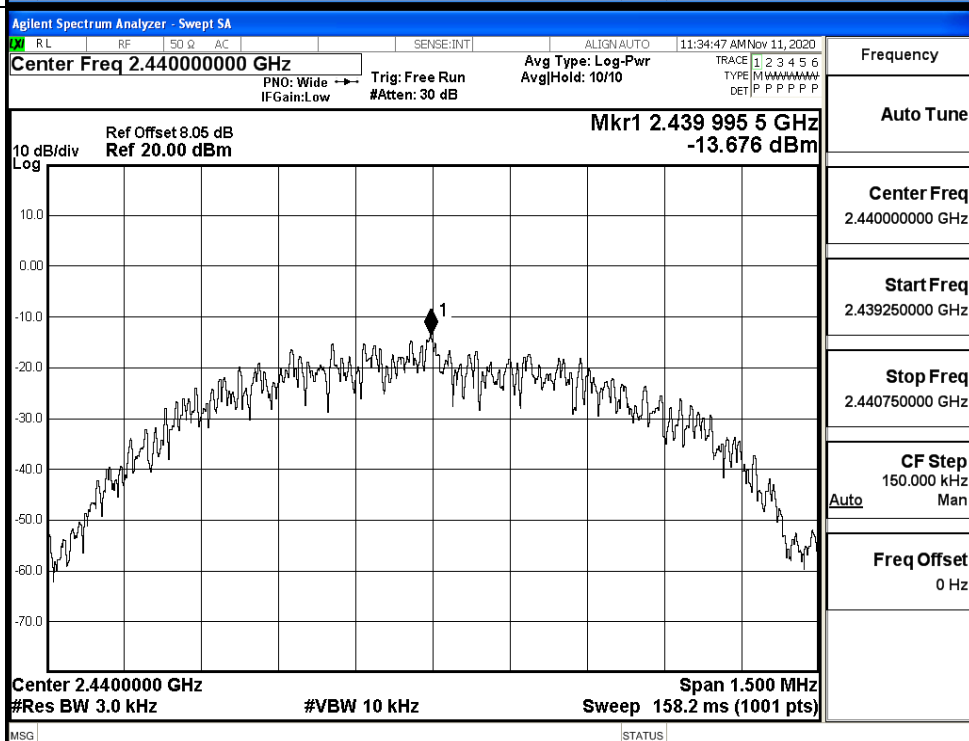
Mode	Channel	PSD [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
BT LE	LCH	-13.510	8	PASS
BT LE	MCH	-13.676	8	PASS
BT LE	HCH	-14.635	8	PASS

Test Graphs

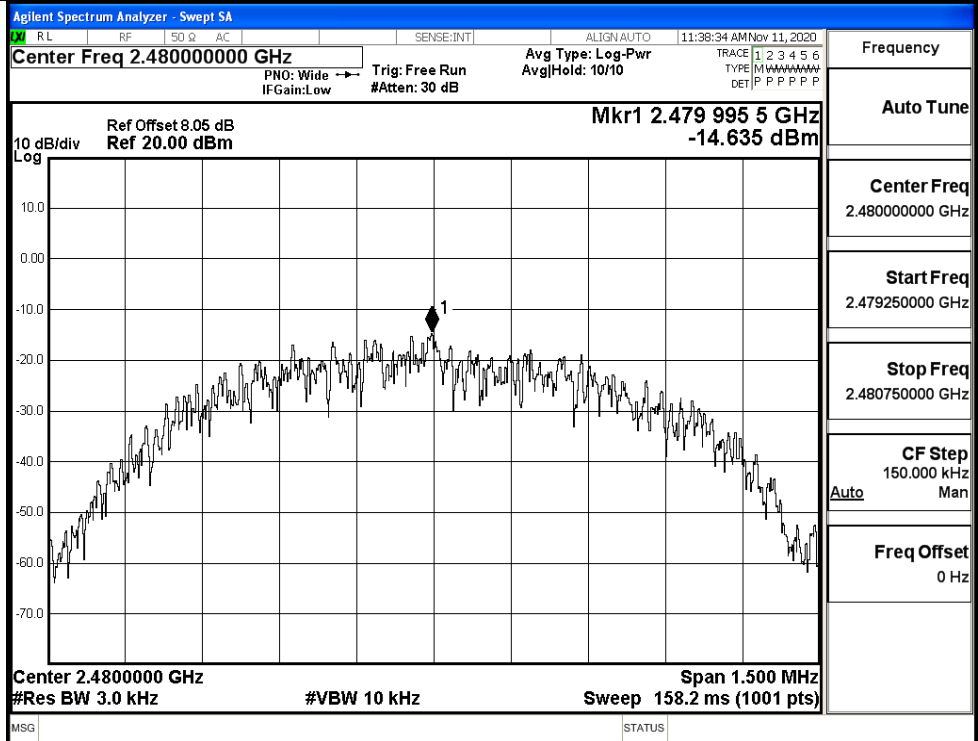
LCH



MCH



HCH

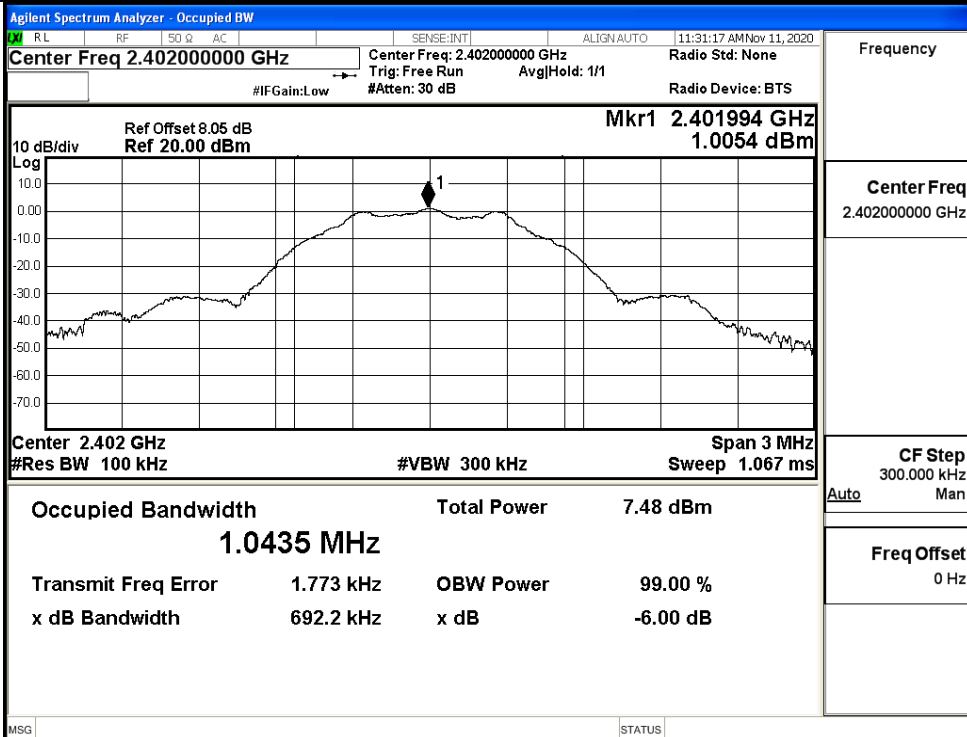


B.4 6dB Bandwidth

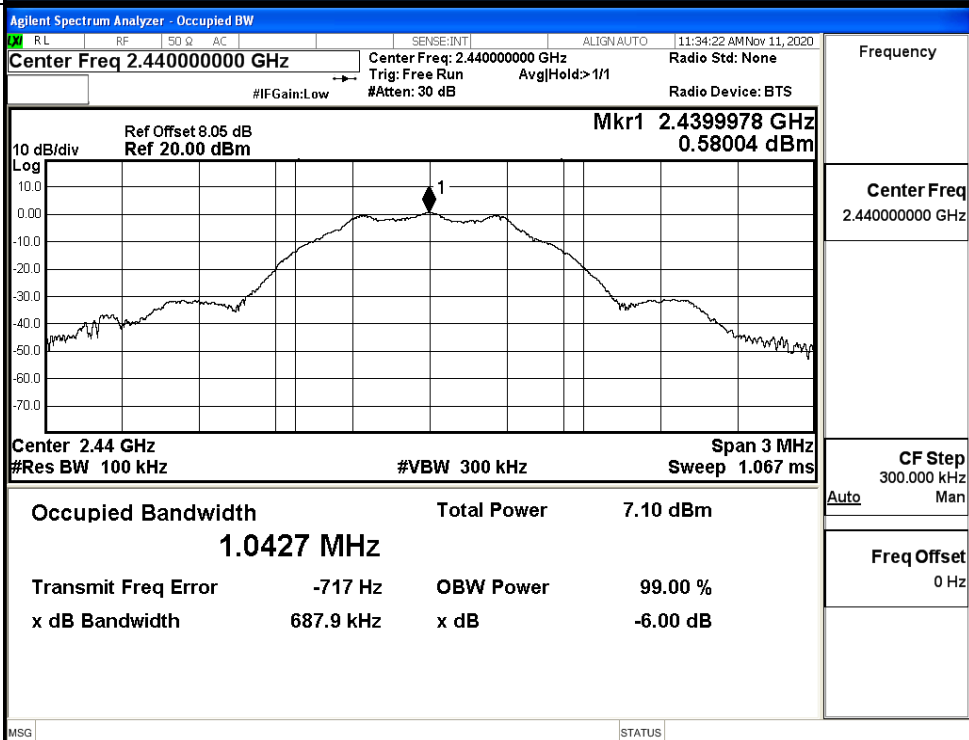
Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
BT LE	LCH	0.6922	≥ 0.5	PASS
BT LE	MCH	0.6879	≥ 0.5	PASS
BT LE	HCH	0.6966	≥ 0.5	PASS

Test Graphs

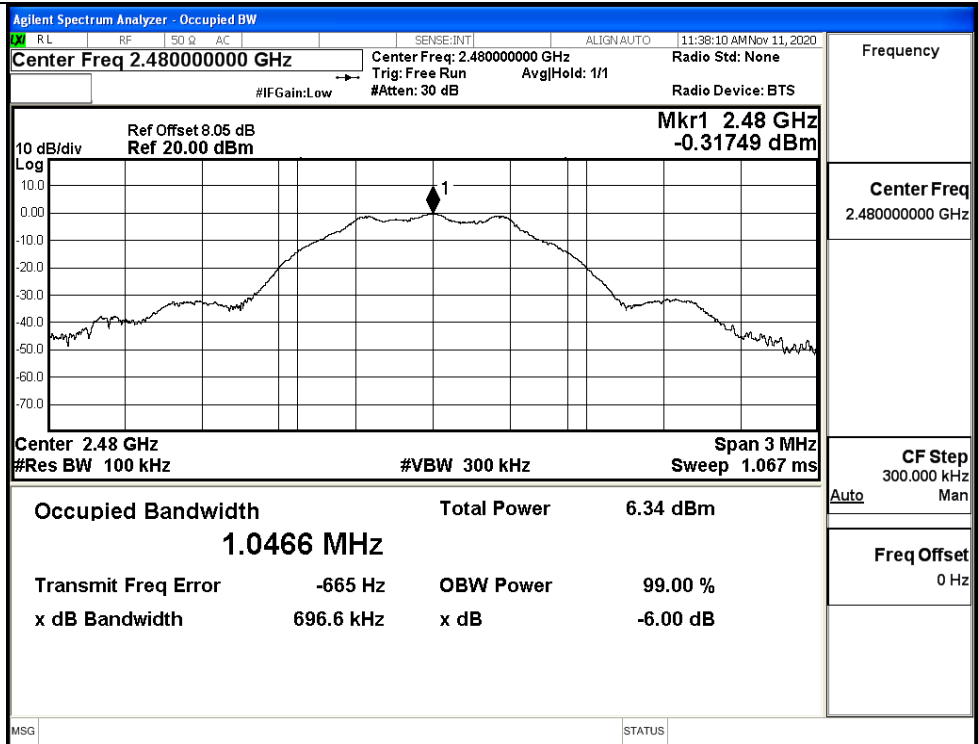
LCH



MCH



HCH

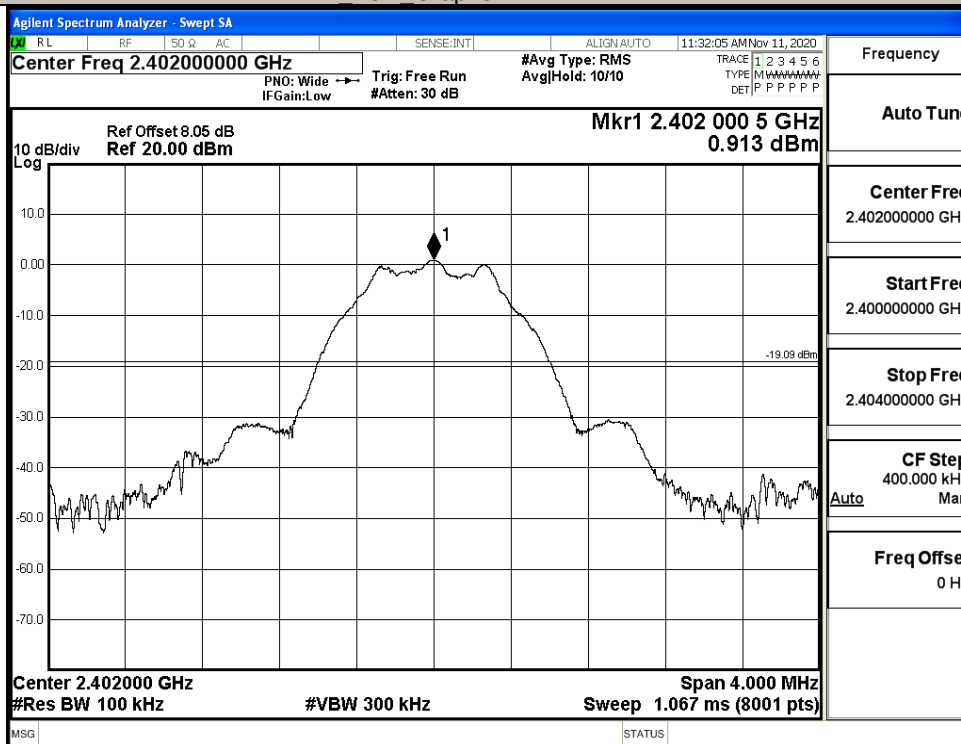


B.5 RF Conducted Spurious Emissions

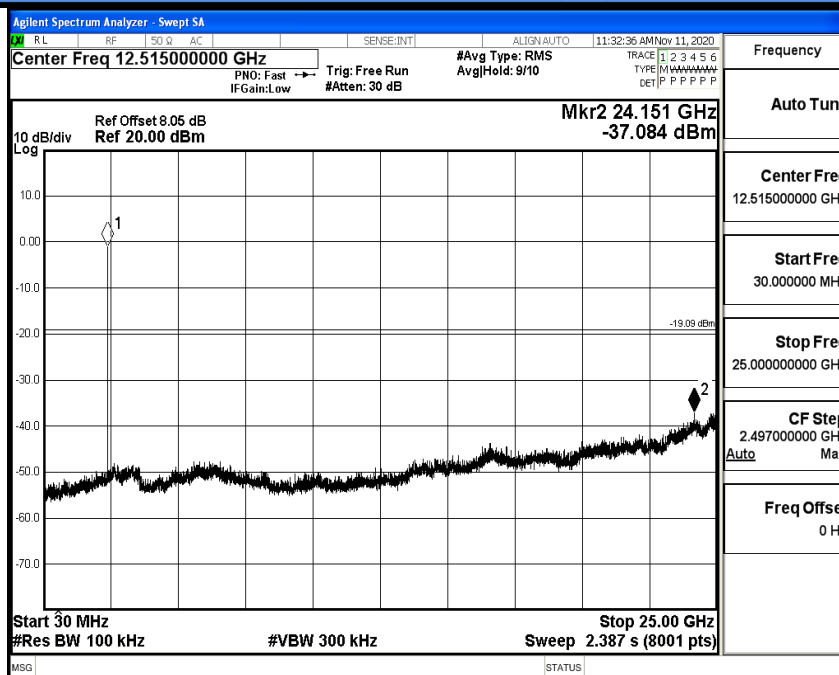
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	0.913	-37.084	-19.087	PASS
BT LE	MCH	0.565	-37.538	-19.435	PASS
BT LE	HCH	-0.261	-37.821	-20.261	PASS

BT LE LCH Graphs

Pref/BT LE/LCH

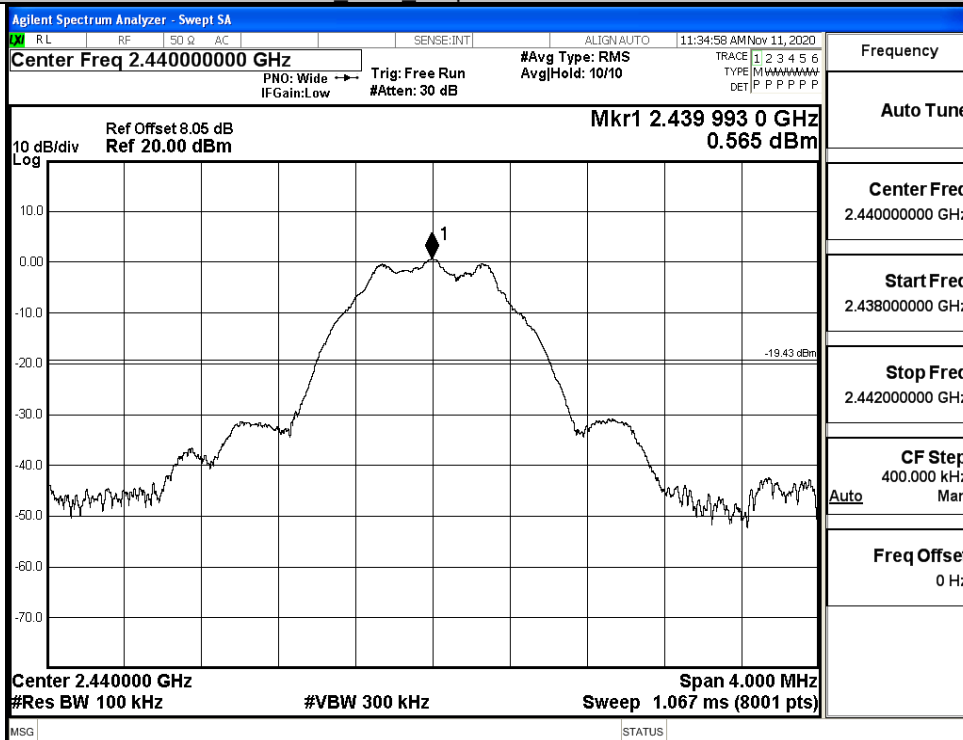


Puw/BT LE/LCH

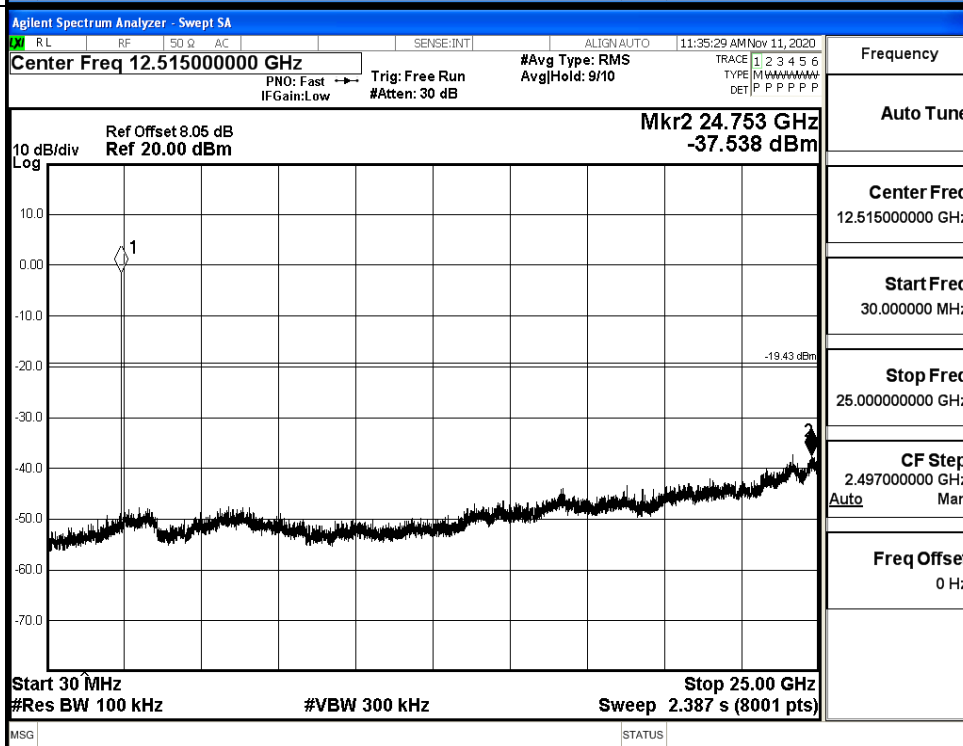


BT LE MCH Graphs

Pref/BT LE/MCH

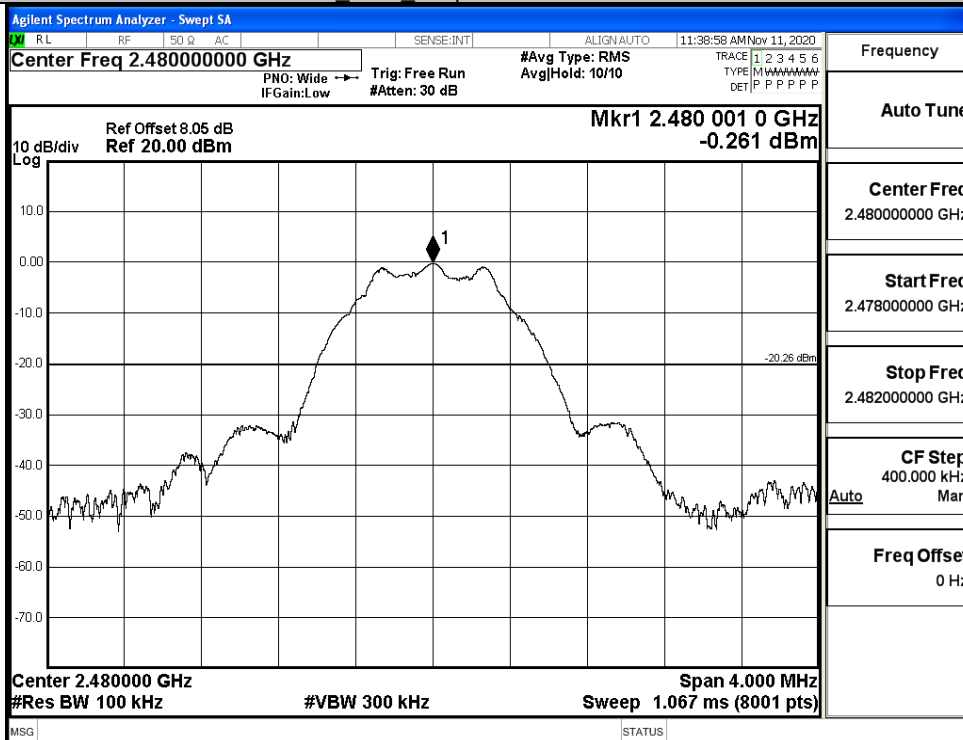


Puw/BT LE/MCH



BT LE HCH Graphs

Pref/BT LE/HCH



Puw/BT LE/HCH

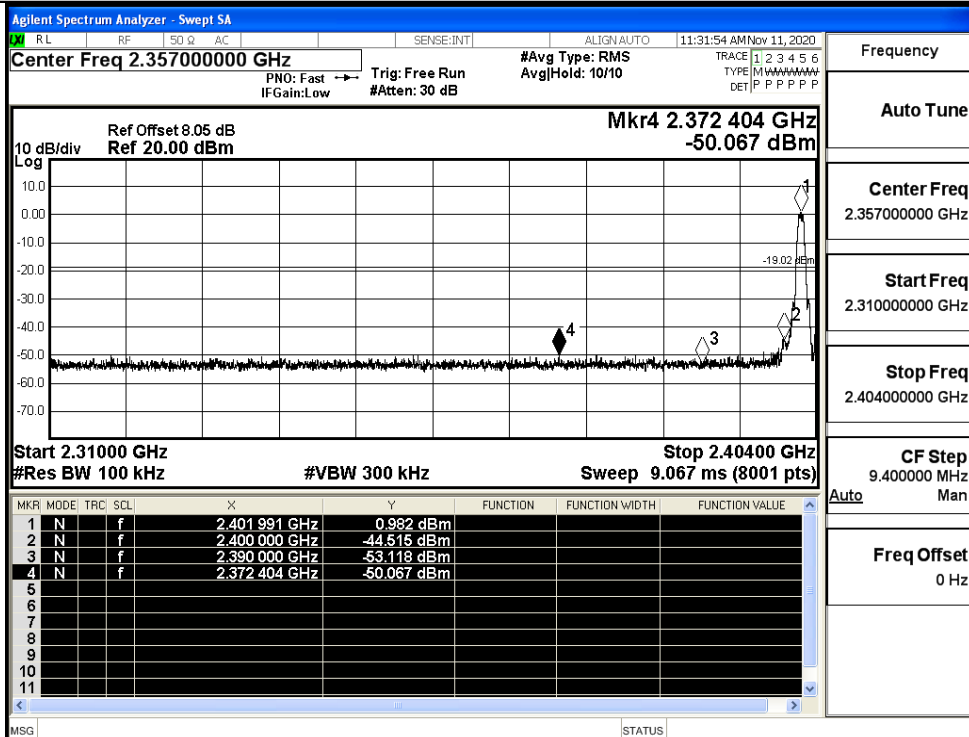


B.6 Band-edge for RF Conducted Emissions

Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	0.982	-50.067	-19.02	PASS
BT LE	HCH	-0.301	-48.817	-20.3	PASS

Test Graphs

LCH



Frequency

Auto Tune

Center Freq
2.357000000 GHz

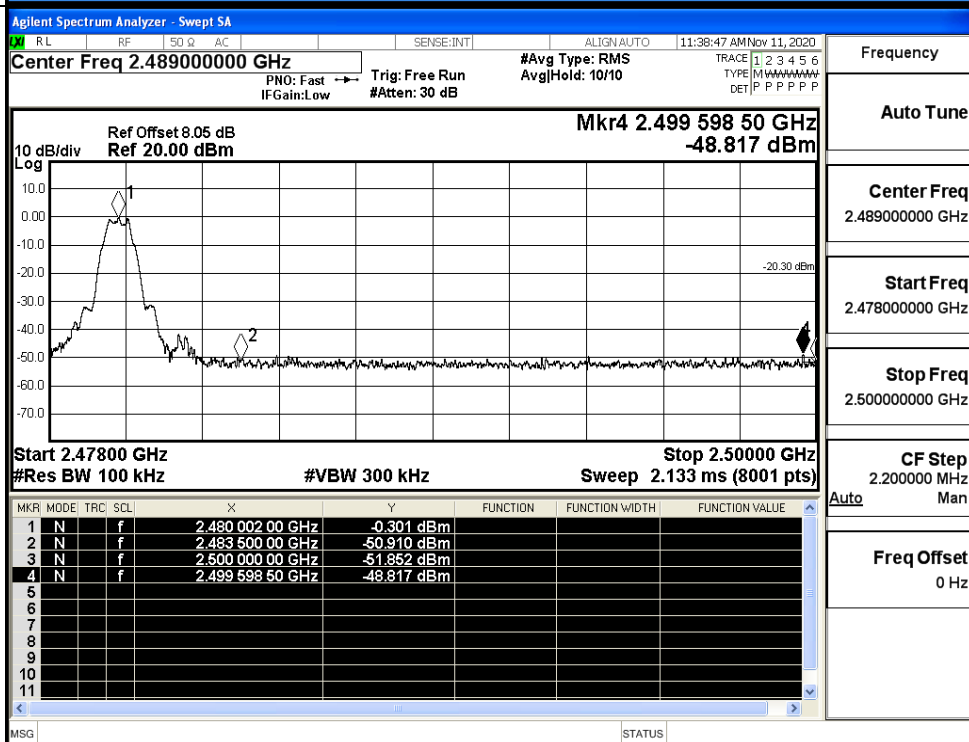
Start Freq
2.310000000 GHz

Stop Freq
2.404000000 GHz

CF Step
9.400000 MHz

Freq Offset
0 Hz

HCH



Frequency

Auto Tune

Center Freq
2.489000000 GHz

Start Freq
2.478000000 GHz

Stop Freq
2.500000000 GHz

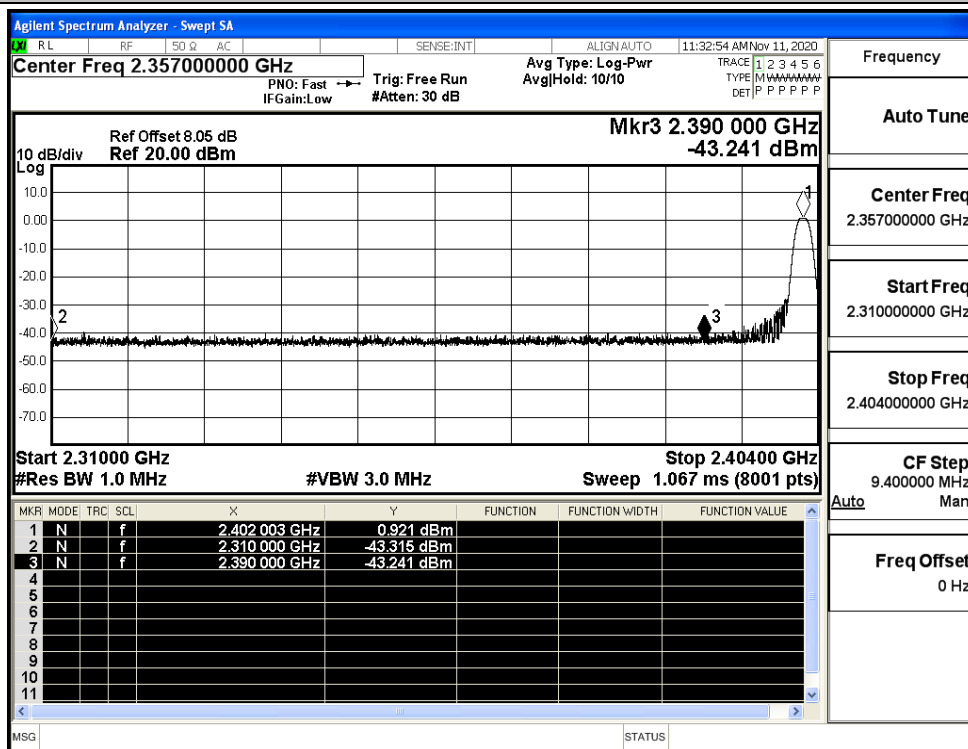
CF Step
2.200000 MHz

Freq Offset
0 Hz

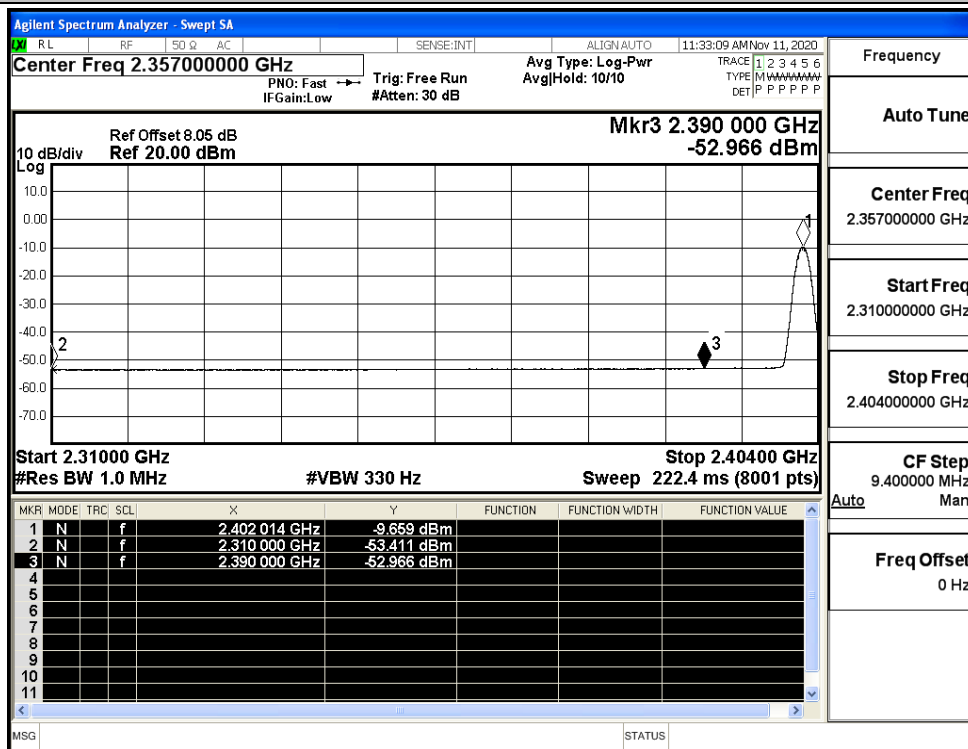
B.7 Restrict-band band-edge measurements

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	-43.32	2.0	0	53.94	PEAK	74	PASS
		Ant1	2310.0	-53.41	2.0	0	43.85	AV	54	PASS
		Ant1	2390.0	-43.24	2.0	0	54.02	PEAK	74	PASS
		Ant1	2390.0	-52.97	2.0	0	44.29	AV	54	PASS
	2480	Ant1	2483.5	-37.64	2.0	0	59.62	PEAK	74	PASS
		Ant1	2483.5	-52.43	2.0	0	44.83	AV	54	PASS
		Ant1	2500.0	-42.80	2.0	0	54.46	PEAK	74	PASS
		Ant1	2500.0	-52.40	2.0	0	44.85	AV	54	PASS

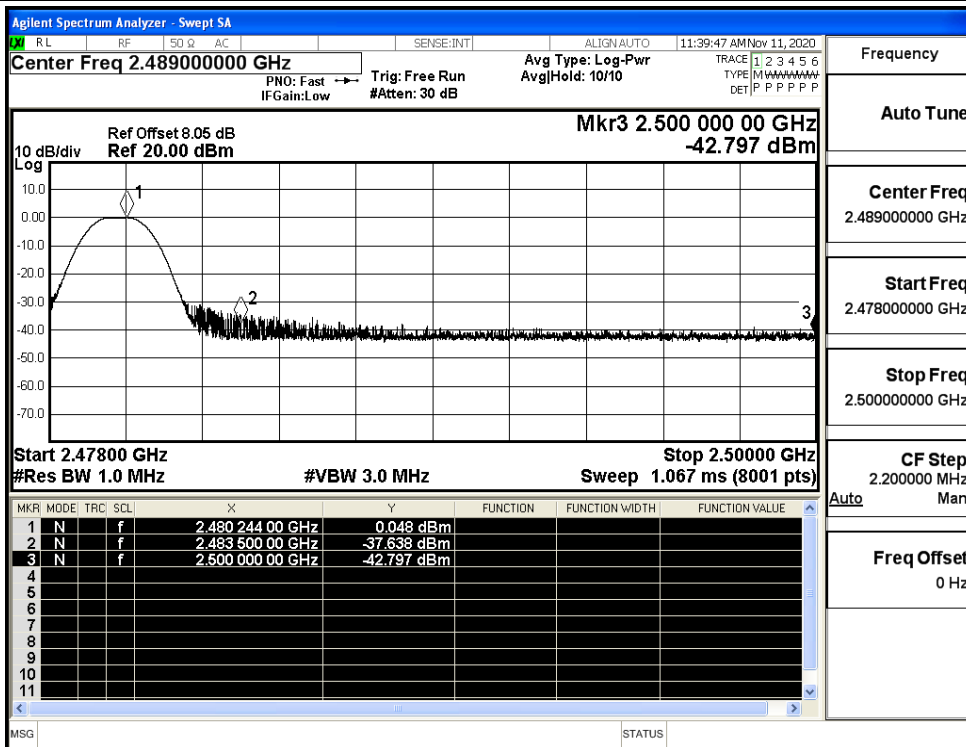
Restrict-band band-edge measurements_BT LE_2402_Ant1_PEAK



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

