

Appendix B

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

Product Name: LED Lighting Speaker

Trade Mark: N/A

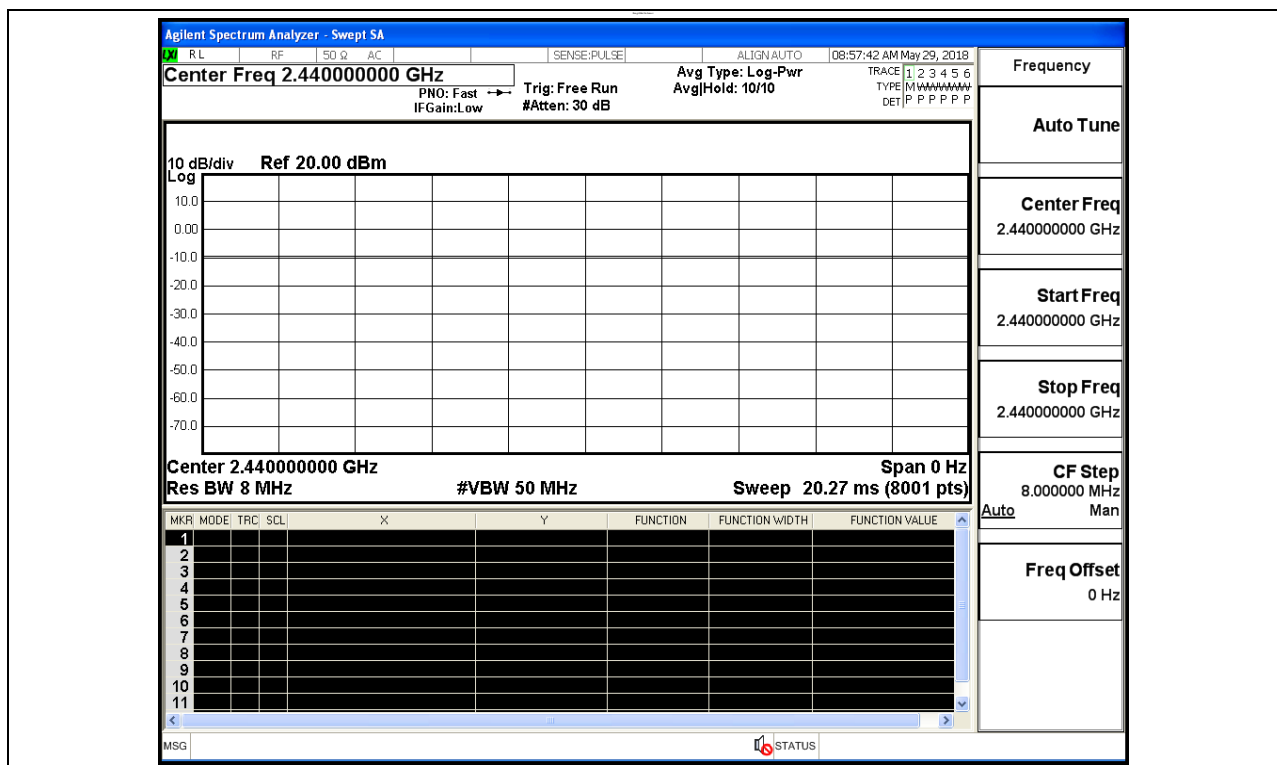
Test Model: SP0011/ORB

Environmental Conditions

Temperature:	24.5 ° C
Relative Humidity:	52.4%
ATM Pressure:	100.0 kPa
Test Engineer:	WANGCHUANG
Supervised by:	Jayden.Zhuo

B.1 Duty Cycle

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

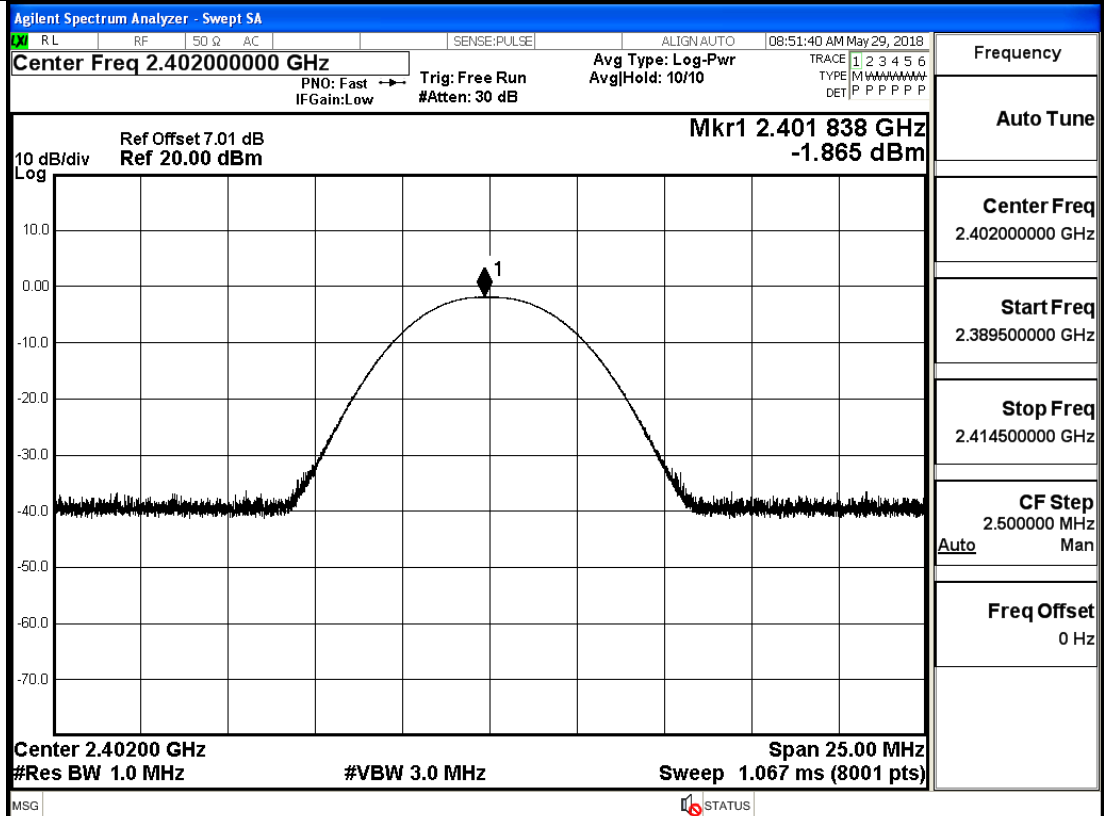


B.2 Maximum Conducted Peak Output Power

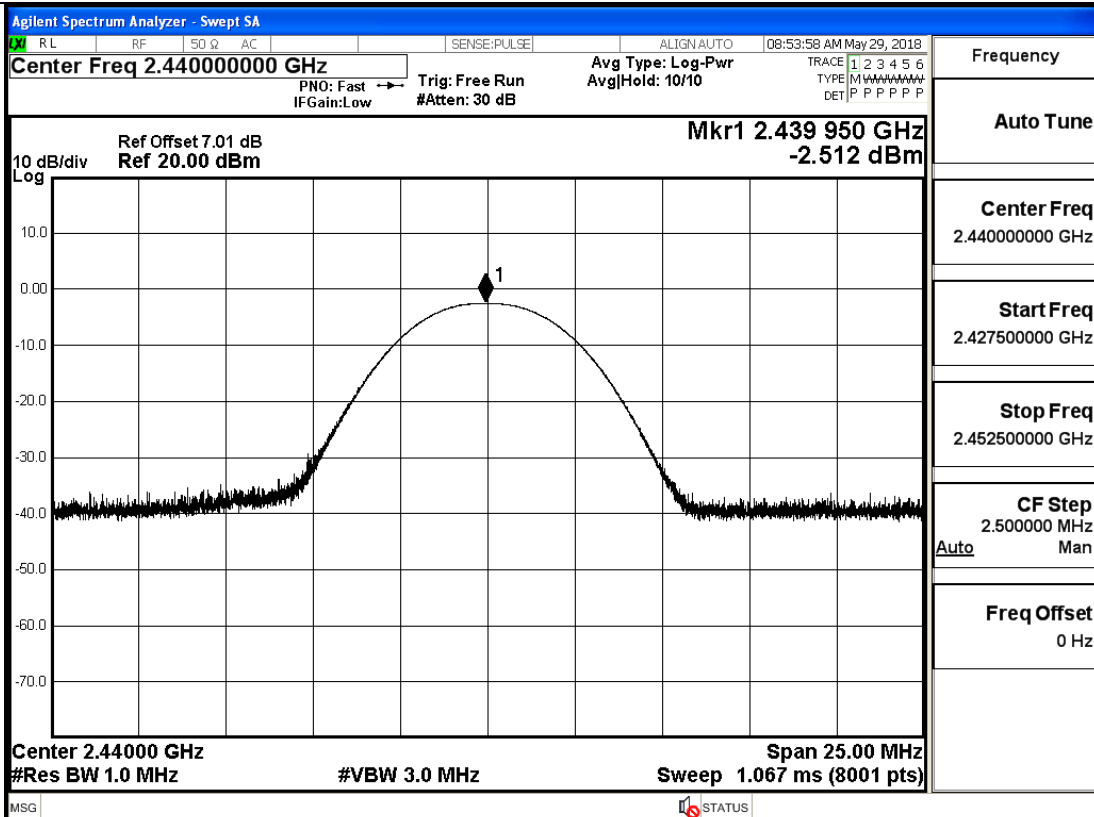
Mode	Channel	Conduct Peak Power[dBm]	Limit [dBm]	Verdict
BT LE	LCH	-1.865	30	PASS
BT LE	MCH	-2.512	30	PASS
BT LE	HCH	-2.197	30	PASS

Test Graphs

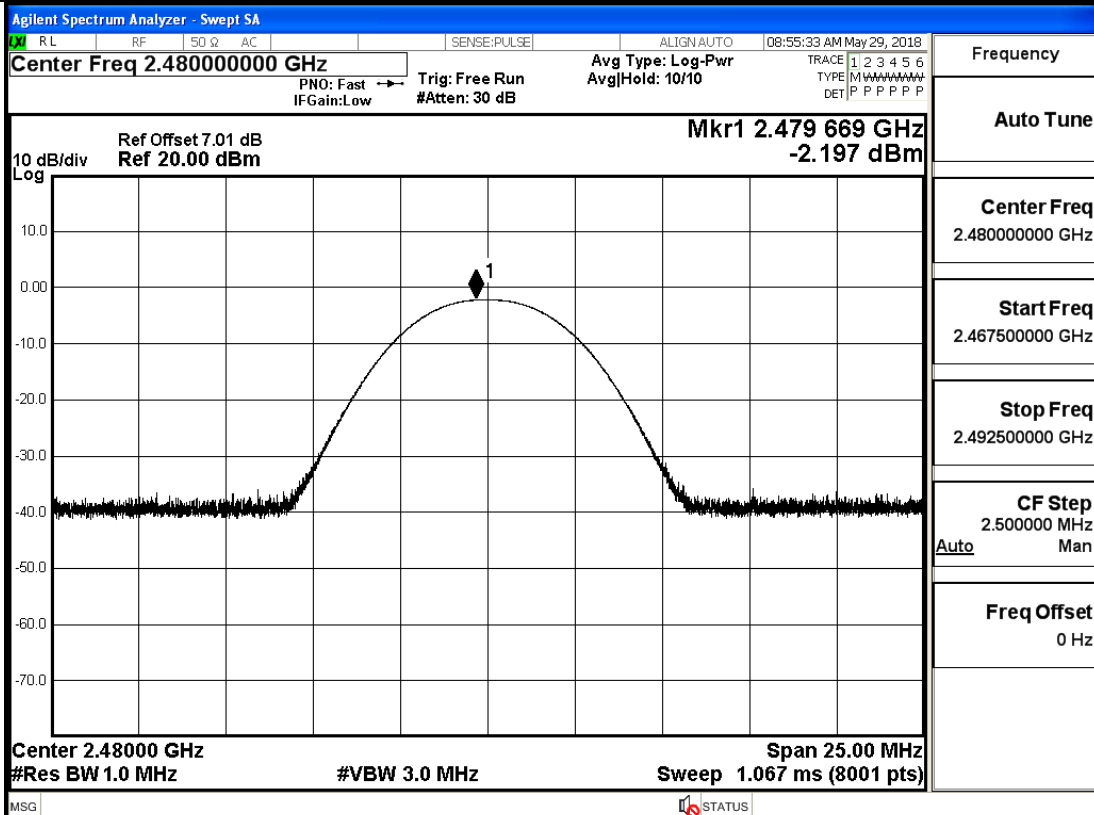
LCH



MCH



HCH

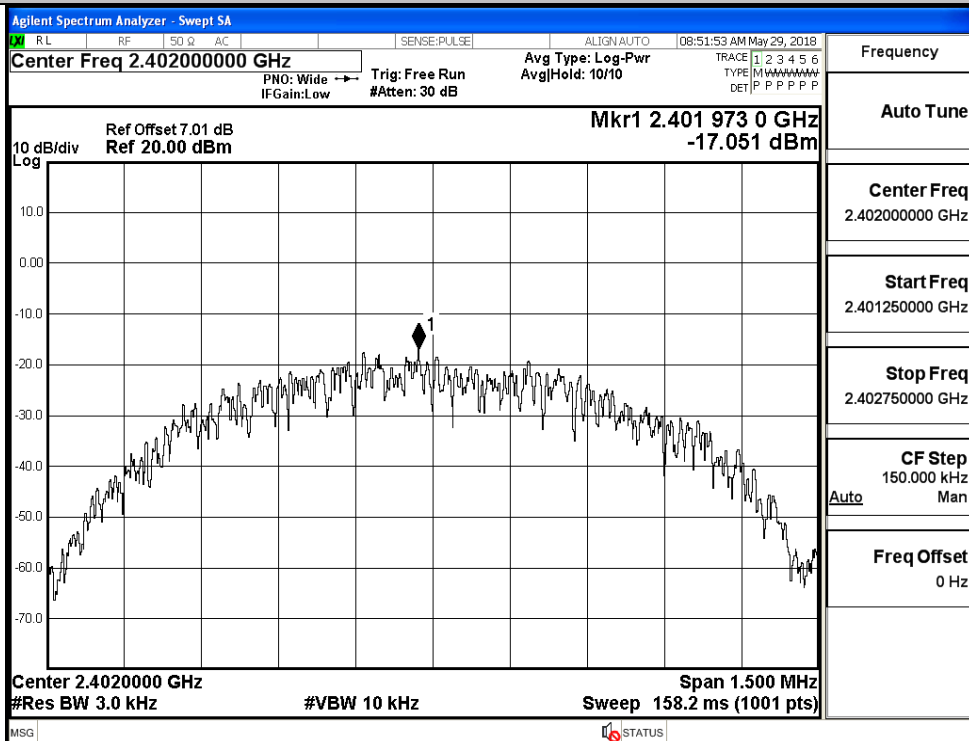


B.3 Maximum Power Spectral Density

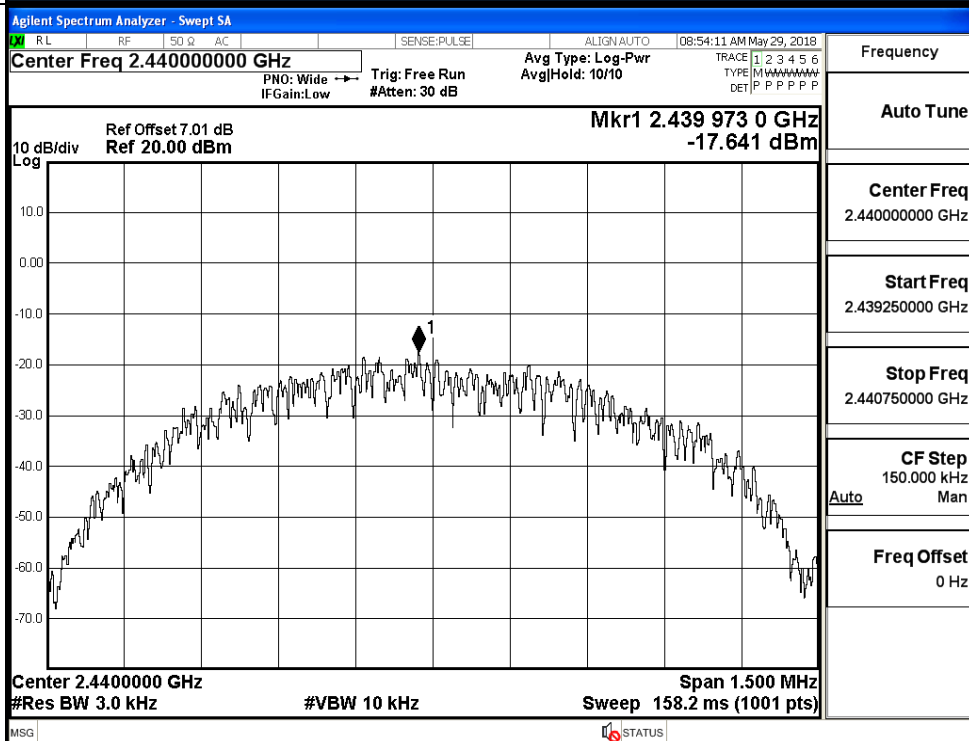
Mode	Channel	PSD [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
BT LE	LCH	-17.051	8	PASS
BT LE	MCH	-17.641	8	PASS
BT LE	HCH	-17.317	8	PASS

Test Graphs

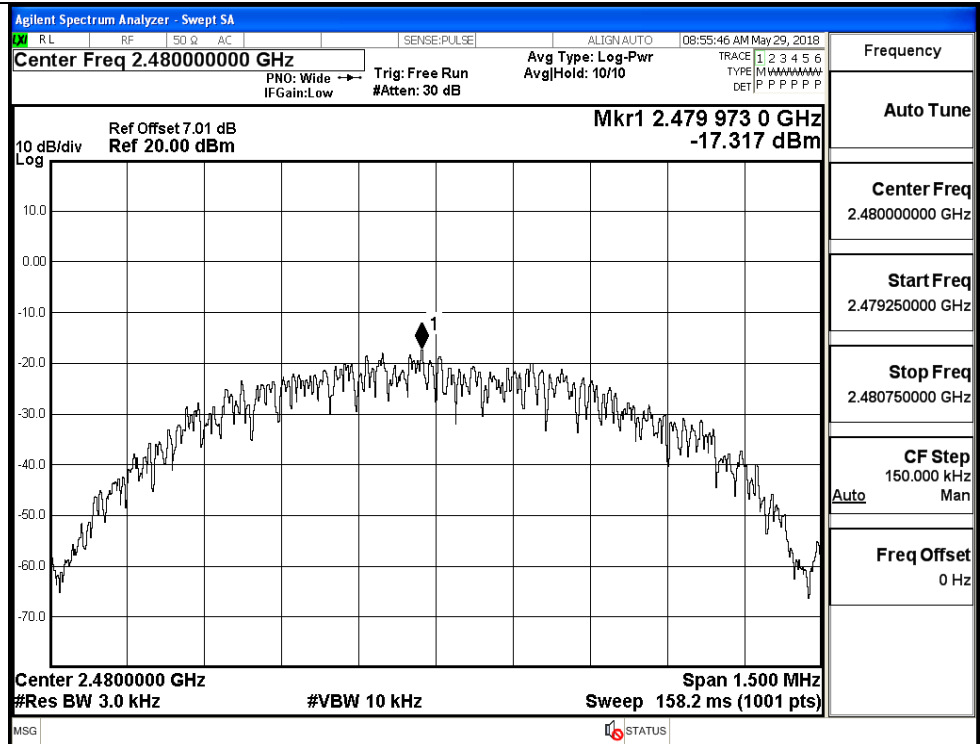
LCH



MCH



HCH

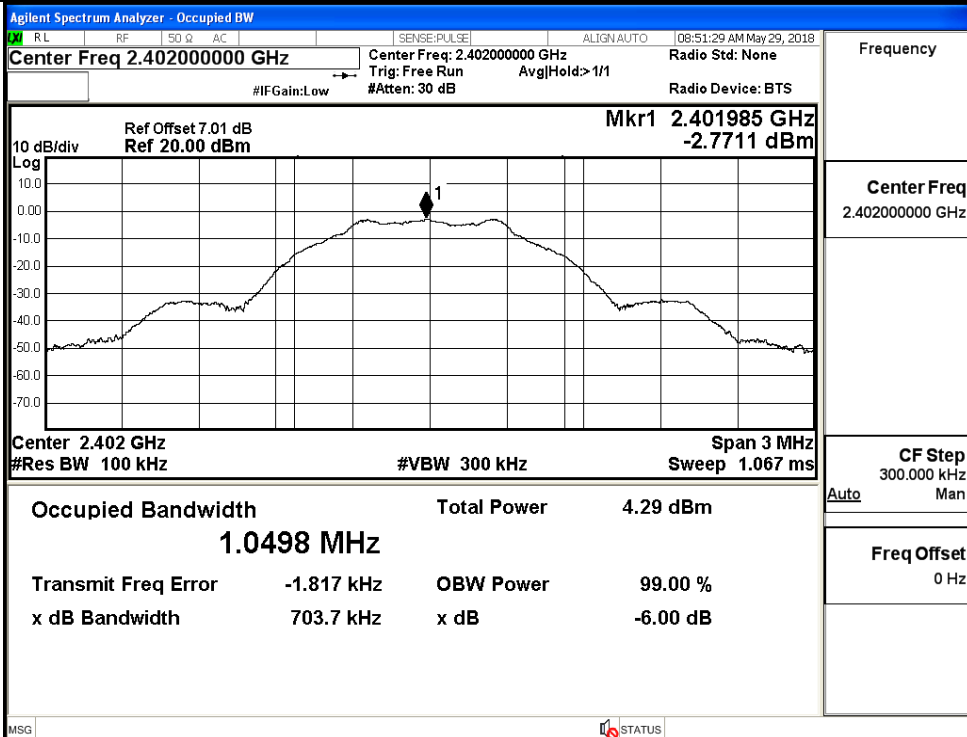


B.4 6dB Bandwidth

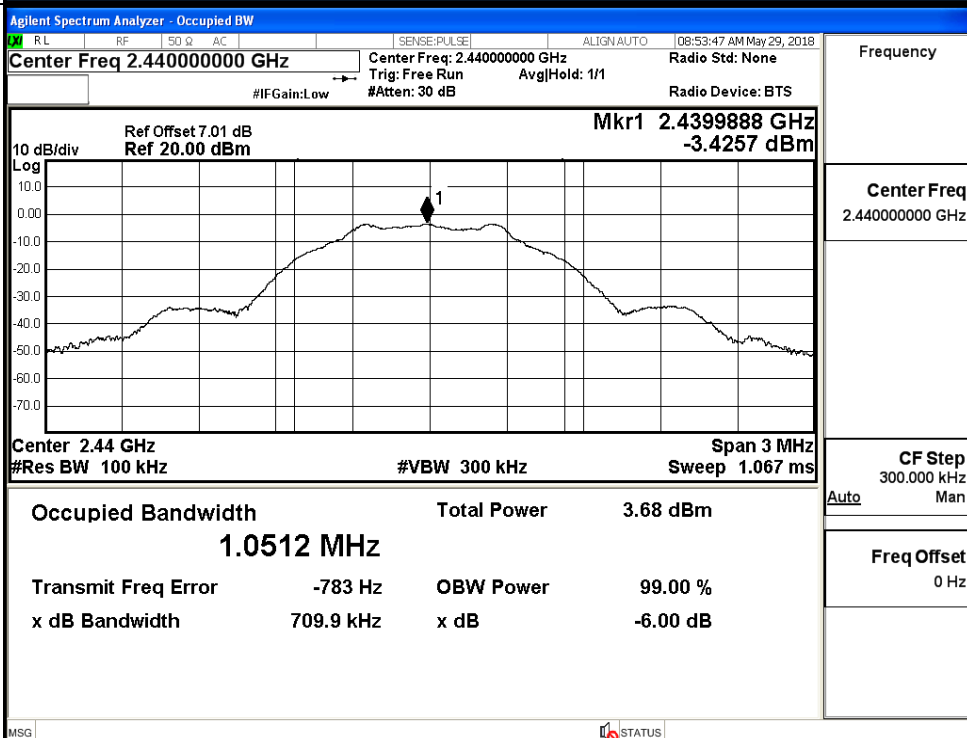
Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
BT LE	LCH	0.7037	≥ 0.5	PASS
BT LE	MCH	0.7099	≥ 0.5	PASS
BT LE	HCH	0.7118	≥ 0.5	PASS

Test Graphs

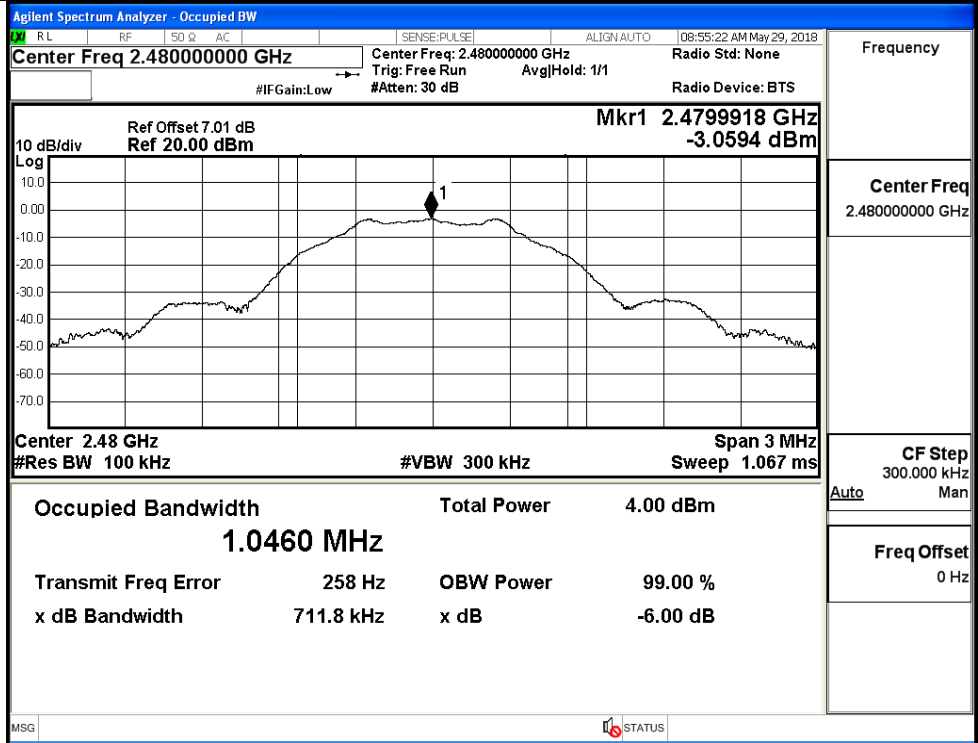
LCH



MCH



HCH

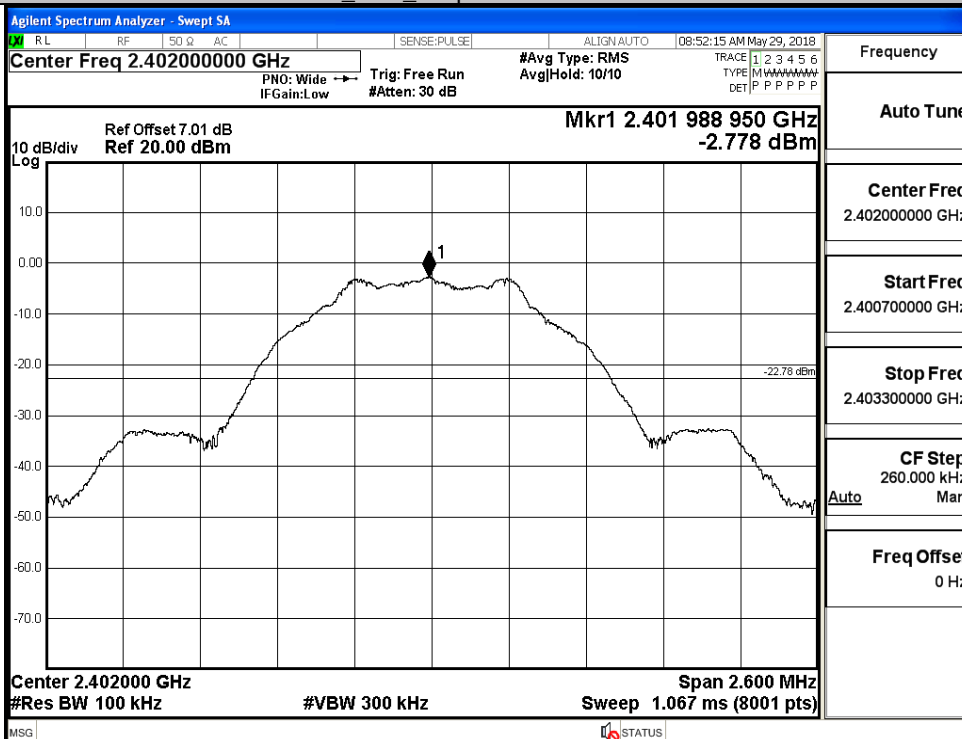


B.5 RF Conducted Spurious Emissions

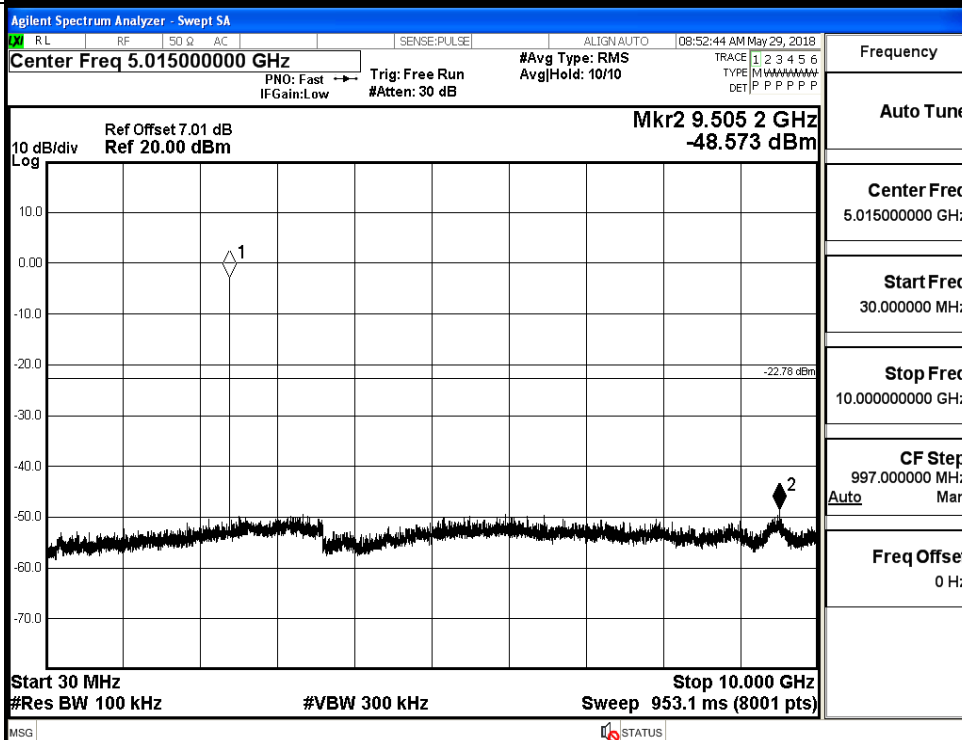
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	-2.778	-48.573	-22.778	PASS
BT LE	MCH	-3.451	-48.341	-23.451	PASS
BT LE	HCH	-3.059	-48.766	-23.059	PASS

BT LE_LCH_Graphs

Pref/BT LE/LCH

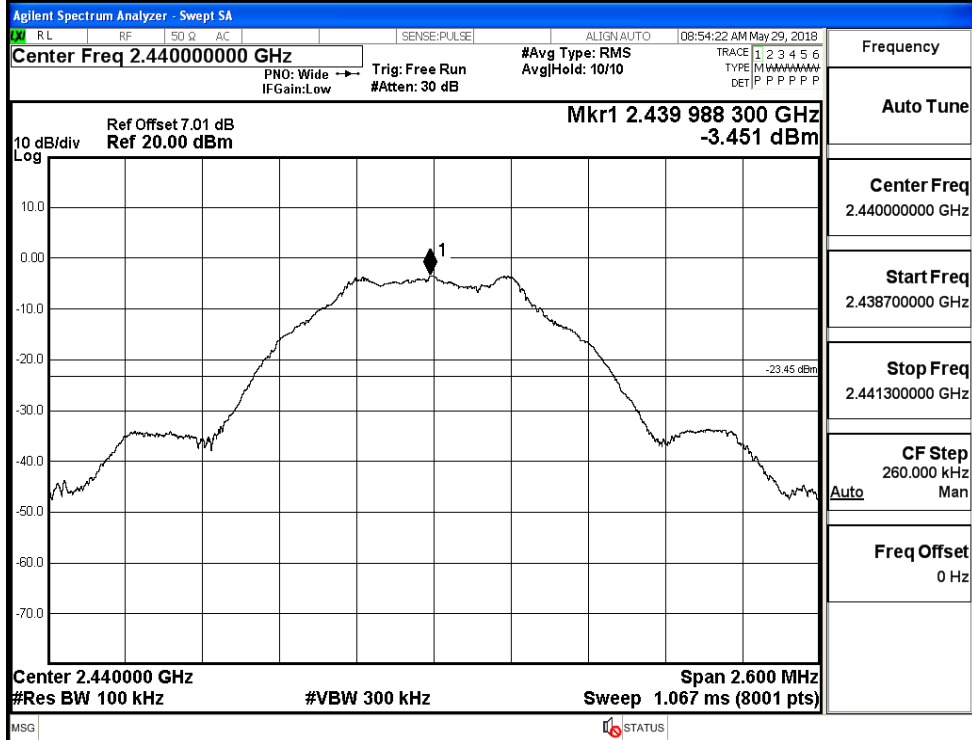


Puw/BT LE/LCH

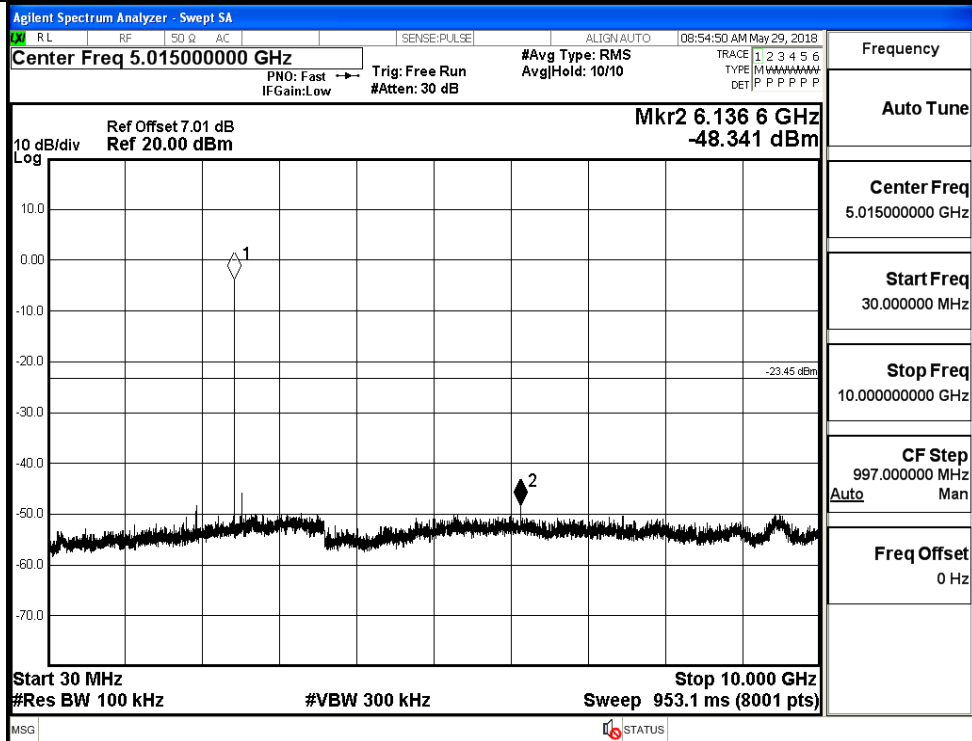


BT LE_MCH_Graphs

Pref/BT LE/MCH

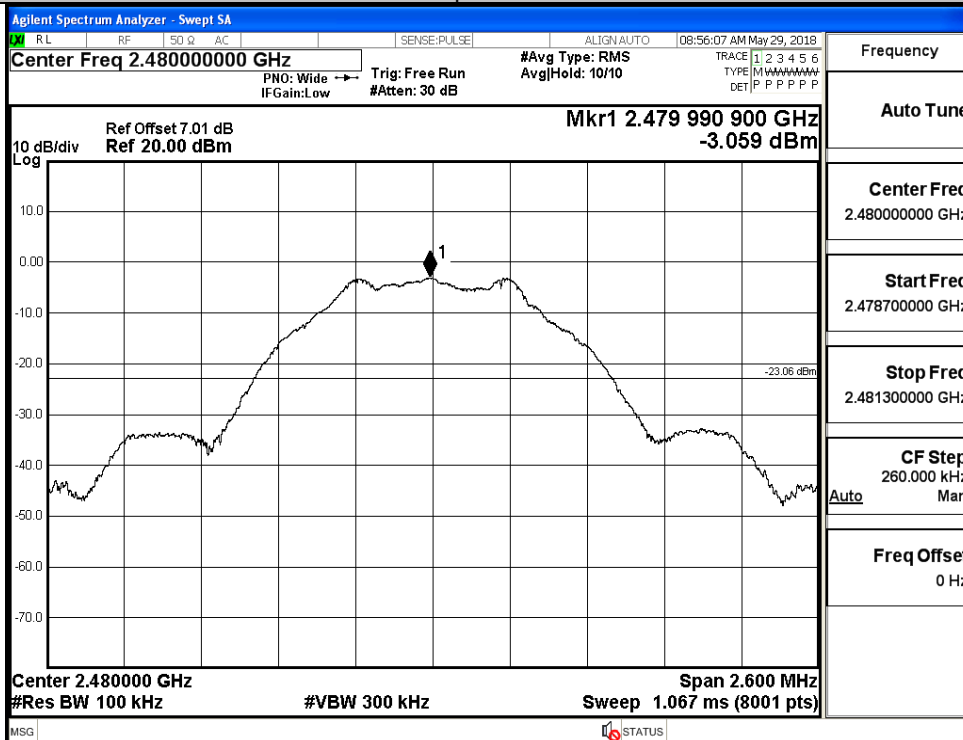


Puw/BT LE/MCH

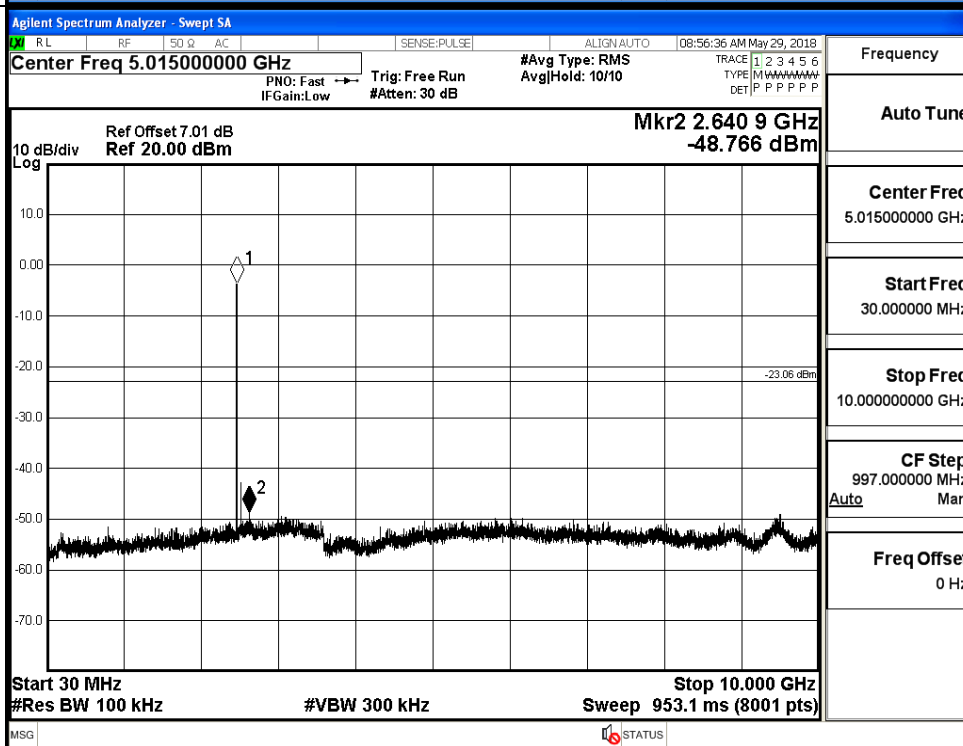


BT LE_HCH_Graphs

Pref/BT LE/HCH



Puw/BT LE/HCH

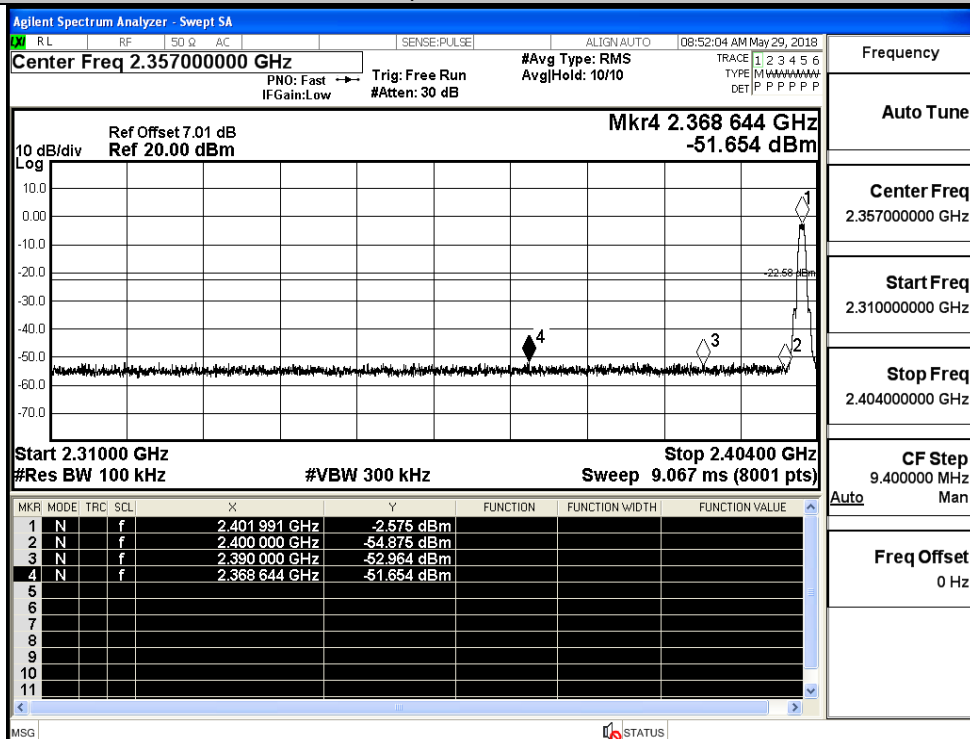


B.6 Band-edge for RF Conducted Emissions

Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	-2.575	-51.654	-22.58	PASS
BT LE	HCH	-2.994	-51.271	-22.99	PASS

Test Graphs

LCH



Frequency

Auto Tune

Center Freq

2.357000000 GHz

Start Freq

2.310000000 GHz

Stop Freq

2.404000000 GHz

CF Step

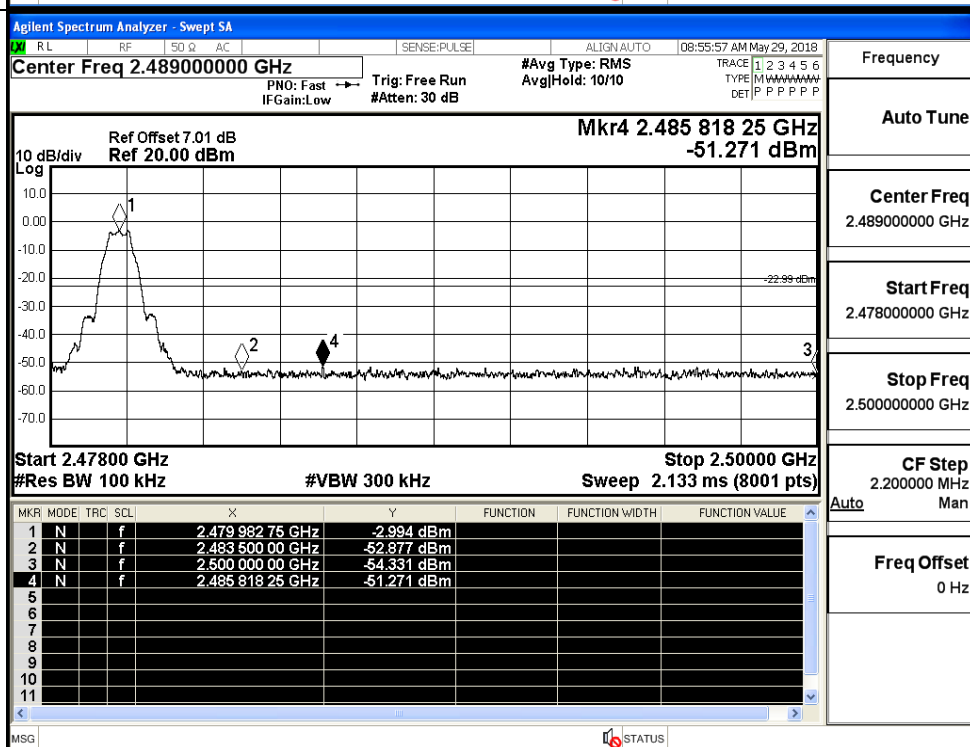
9.400000 MHz

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

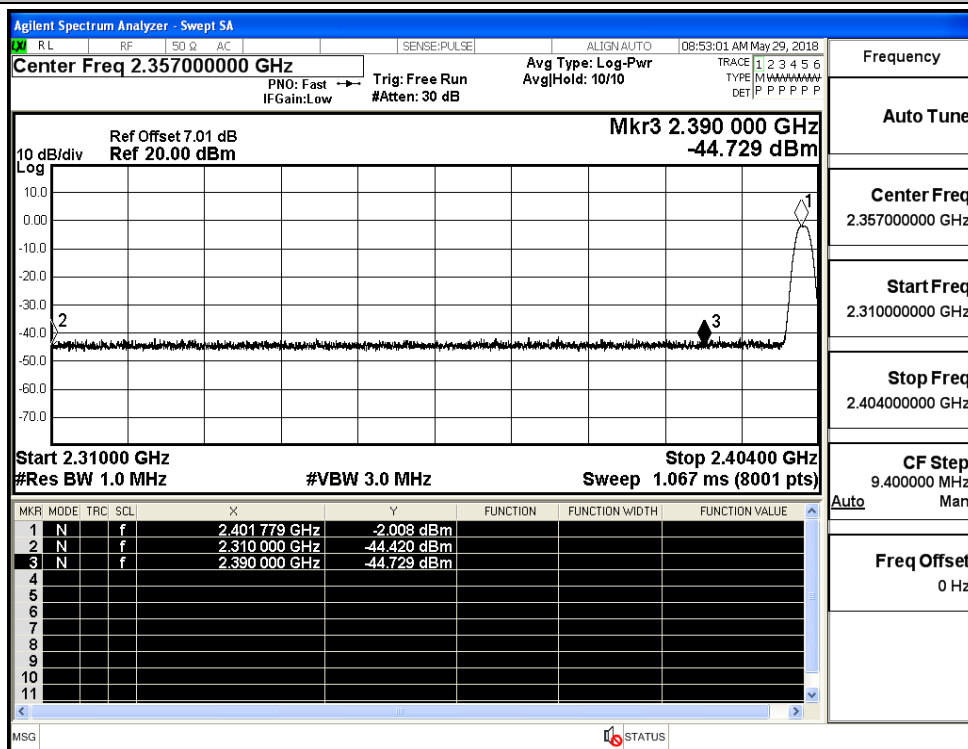
Freq Offset

0 Hz

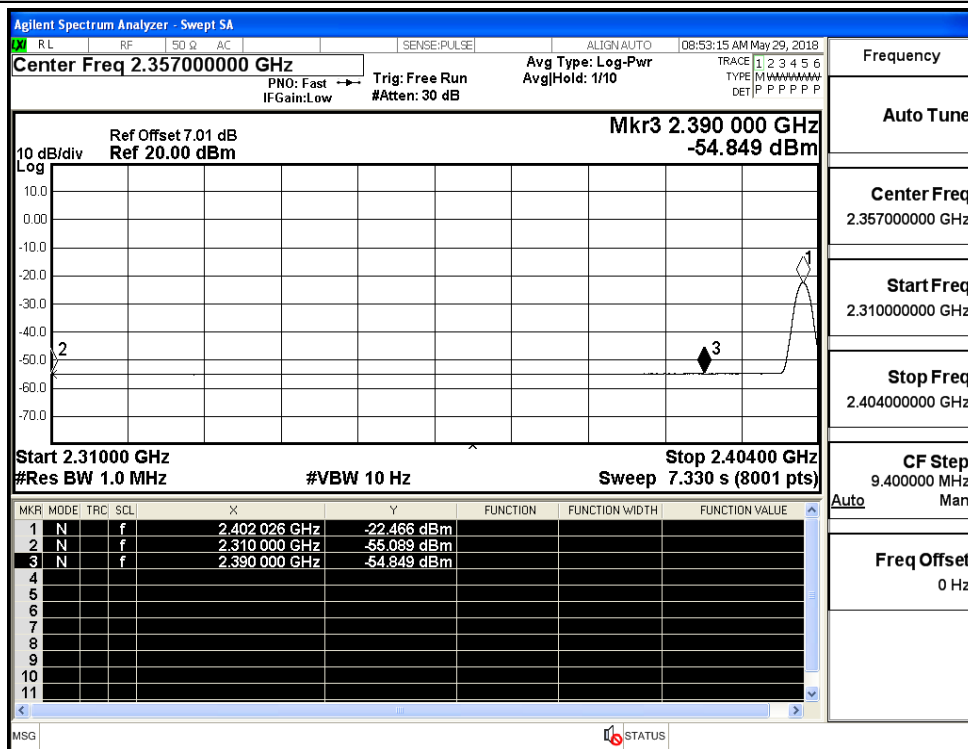
B.7 Restrict-band band-edge measurements

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	-44.42	2.0	0	52.84	PEAK	74	PASS
		Ant1	2310.0	-55.09	2.0	0	42.17	AV	54	PASS
		Ant1	2390.0	-44.73	2.0	0	52.53	PEAK	74	PASS
		Ant1	2390.0	-54.85	2.0	0	42.41	AV	54	PASS
	2480	Ant1	2483.5	-43.89	2.0	0	53.37	PEAK	74	PASS
		Ant1	2483.5	-54.62	2.0	0	42.64	AV	54	PASS
		Ant1	2500.0	-43.07	2.0	0	54.19	PEAK	74	PASS
		Ant1	2500.0	-54.45	2.0	0	42.81	AV	54	PASS

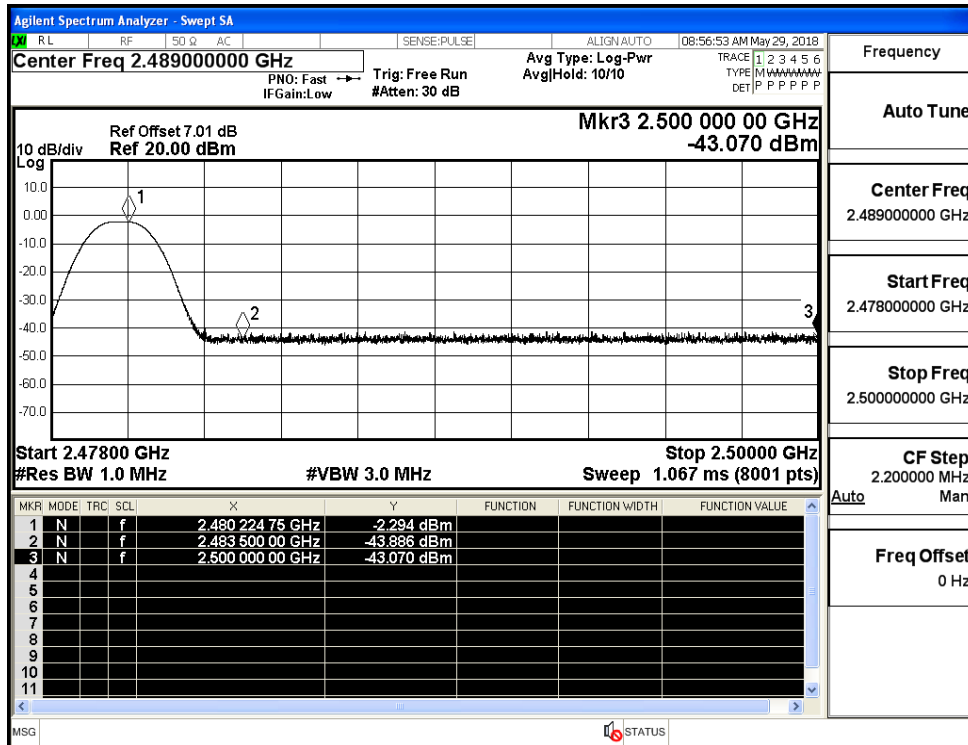
Restrict-band band-edge measurements_BT LE_2402_Ant1_PEAK



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

