

Appendix A

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

Product Name: BT Mesh Bulb

Trade Mark: N/A

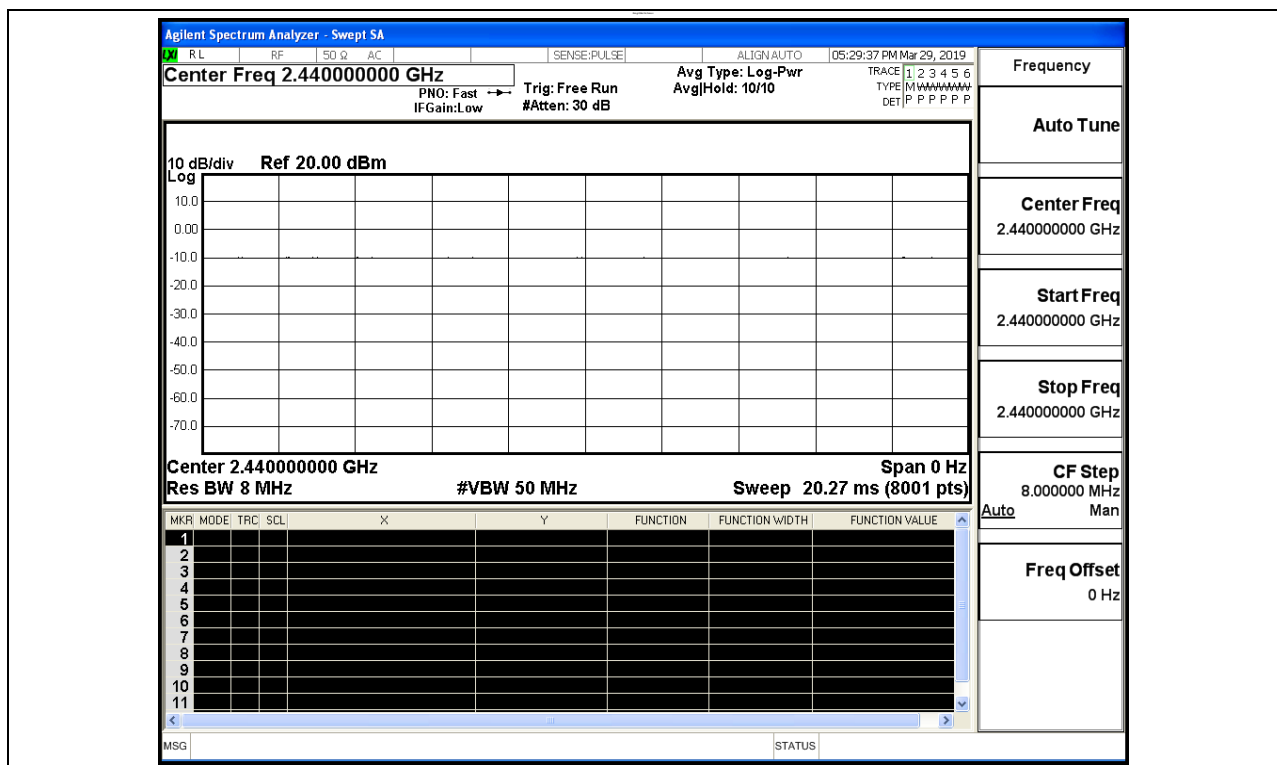
Test Model: ZJ-MHBK-RGBWW

Environmental Conditions

Temperature:	23.4 ° C
Relative Humidity:	51.8%
ATM Pressure:	100.0 kPa
Test Engineer:	JERRY.Zeng
Supervised by:	Tom.Liu

A.1 Duty Cycle

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

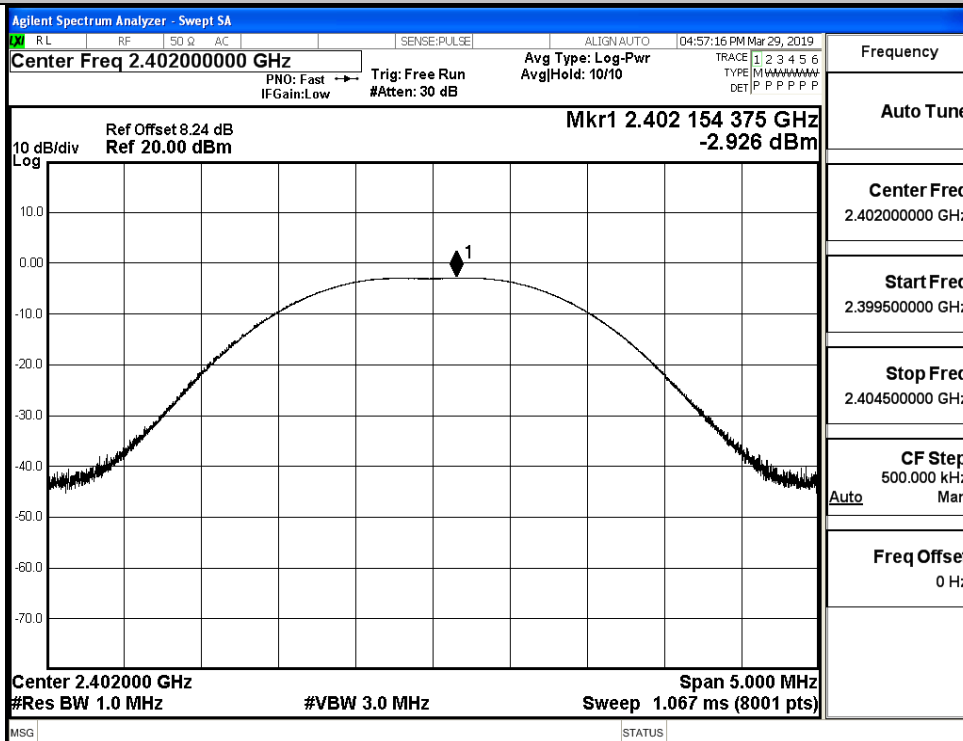


A.2 Maximum Conducted Peak Output Power

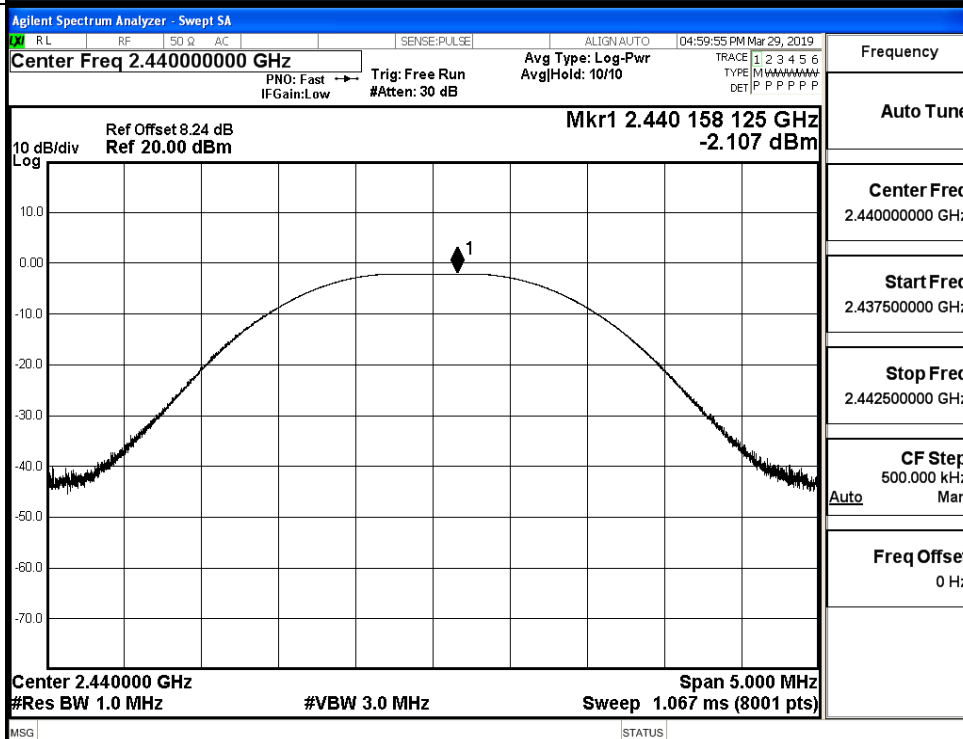
Mode	Channel	Conduct Peak Power[dBm]	Limit [dBm]	Verdict
BT LE	LCH	-2.926	30	PASS
BT LE	MCH	-2.107	30	PASS
BT LE	HCH	-2.859	30	PASS

Test Graphs

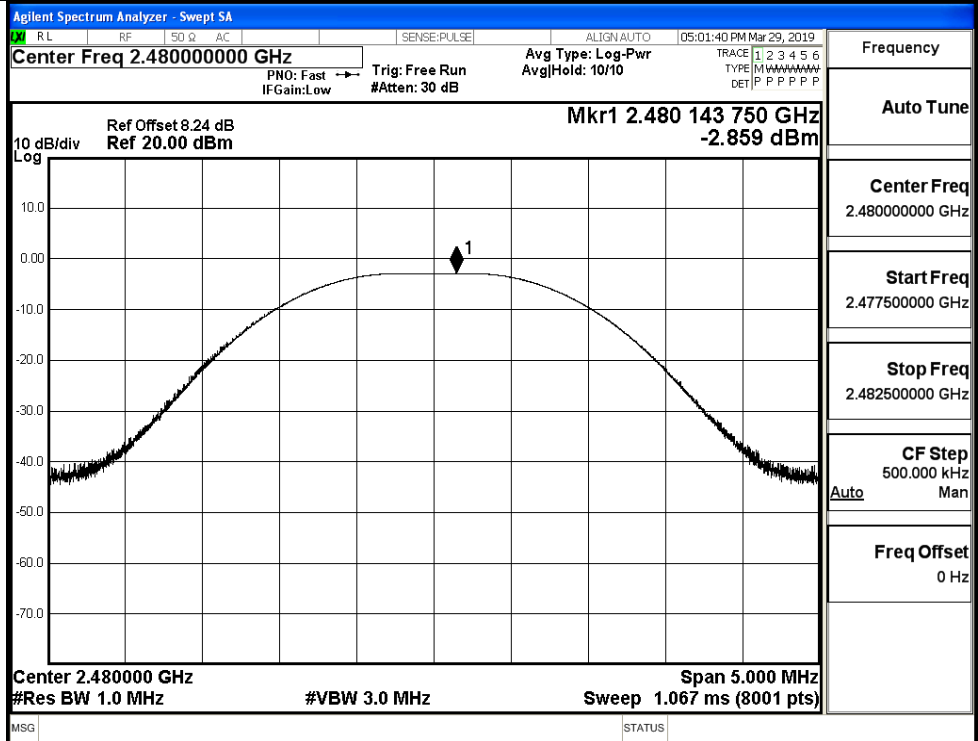
LCH



MCH



HCH

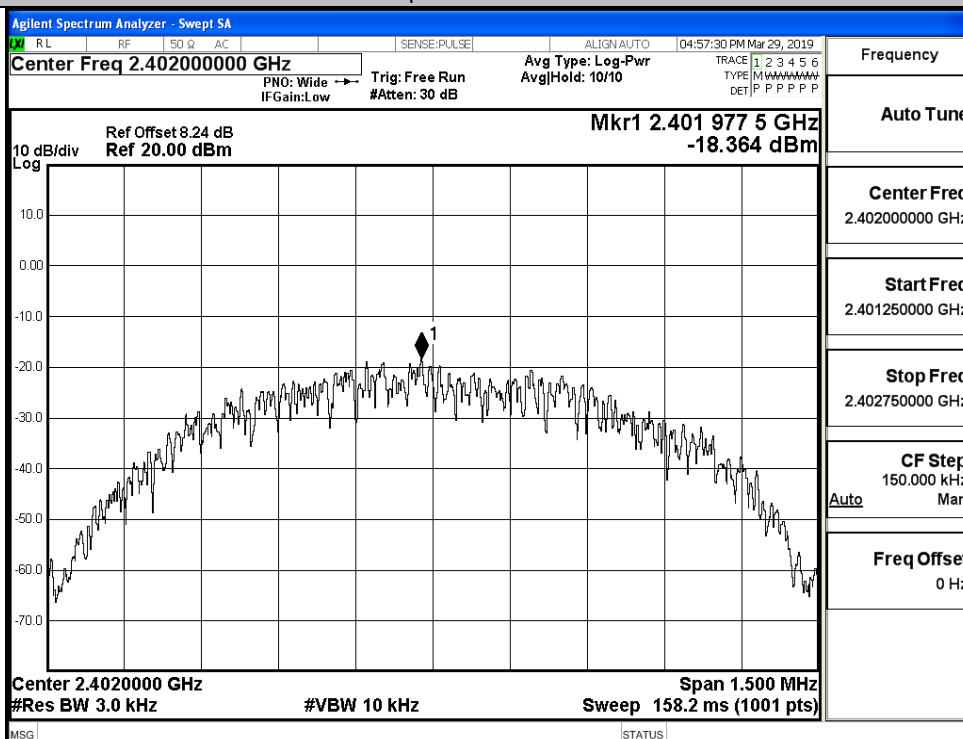


A.3 Maximum Power Spectral Density

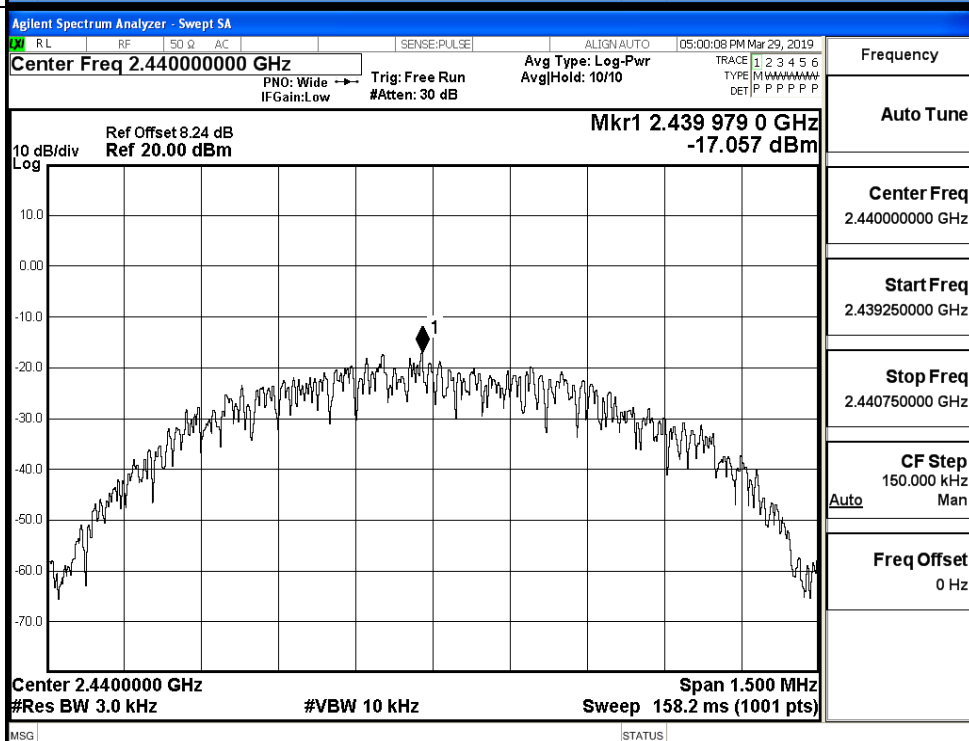
Mode	Channel	PSD [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
BT LE	LCH	-18.364	8	PASS
BT LE	MCH	-17.057	8	PASS
BT LE	HCH	-17.910	8	PASS

Test Graphs

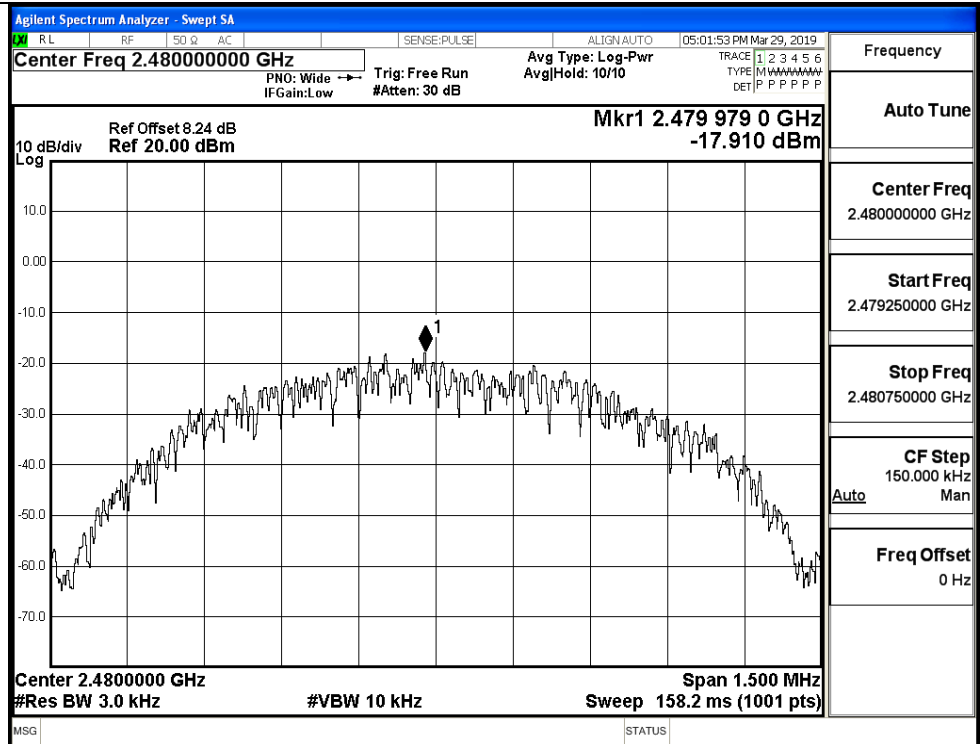
LCH



MCH



HCH

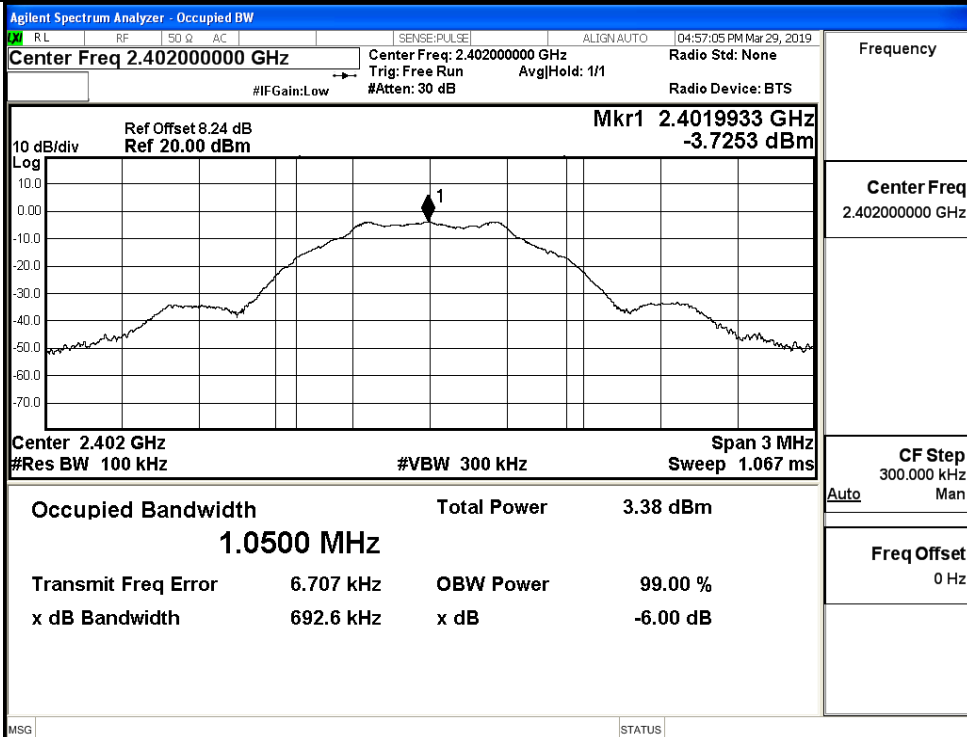


A.4 6dB Bandwidth

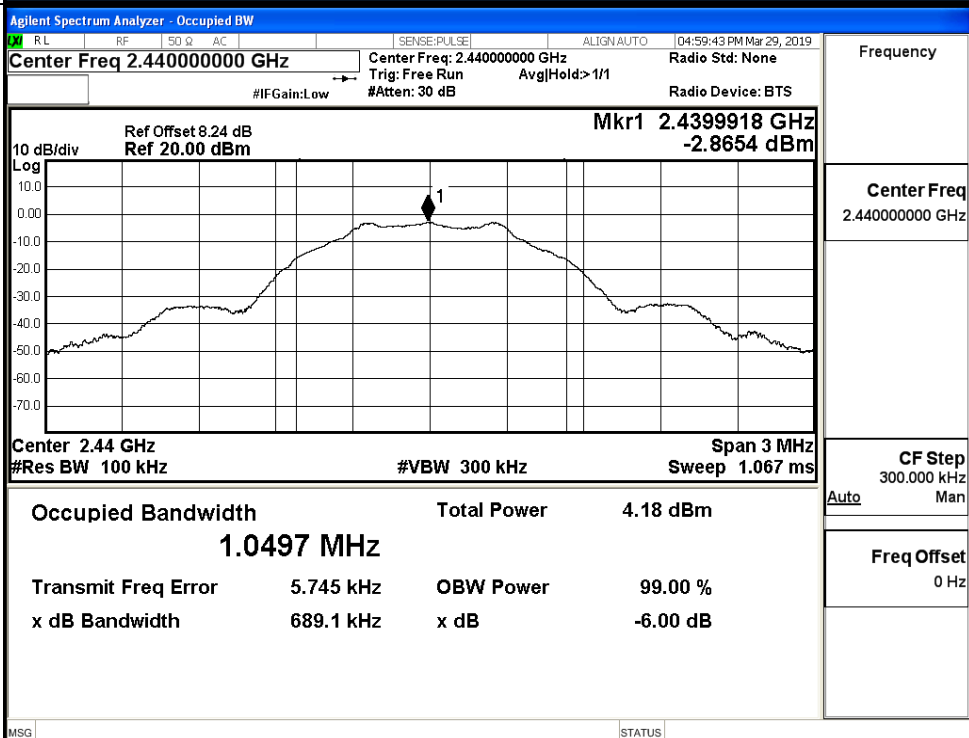
Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
BT LE	LCH	0.6926	≥ 0.5	PASS
BT LE	MCH	0.6891	≥ 0.5	PASS
BT LE	HCH	0.6847	≥ 0.5	PASS

Test Graphs

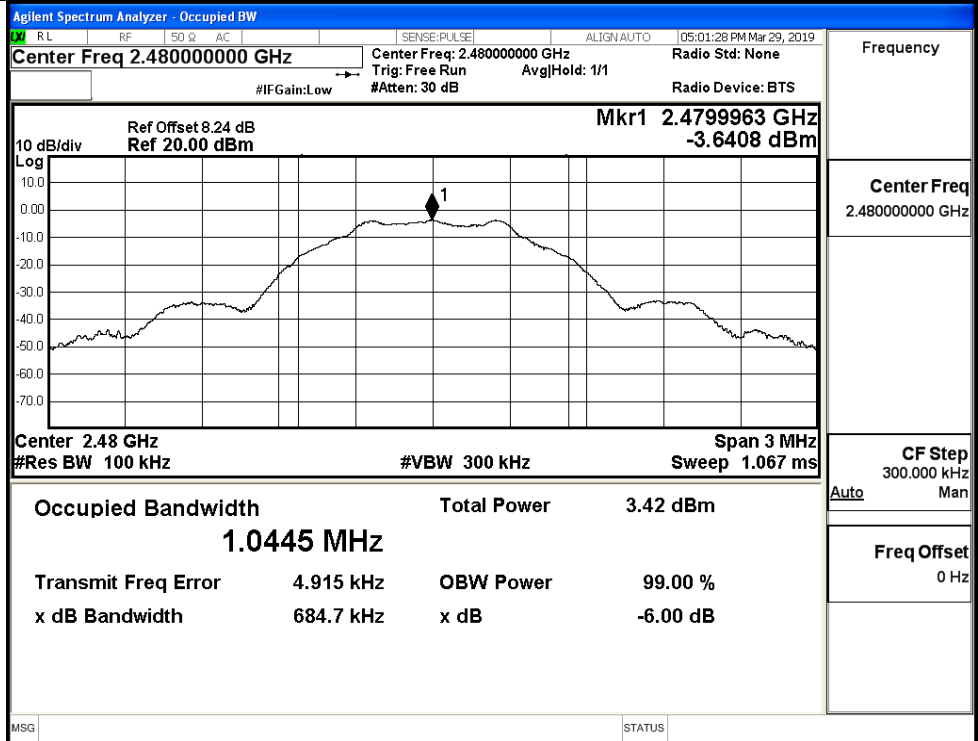
LCH



MCH



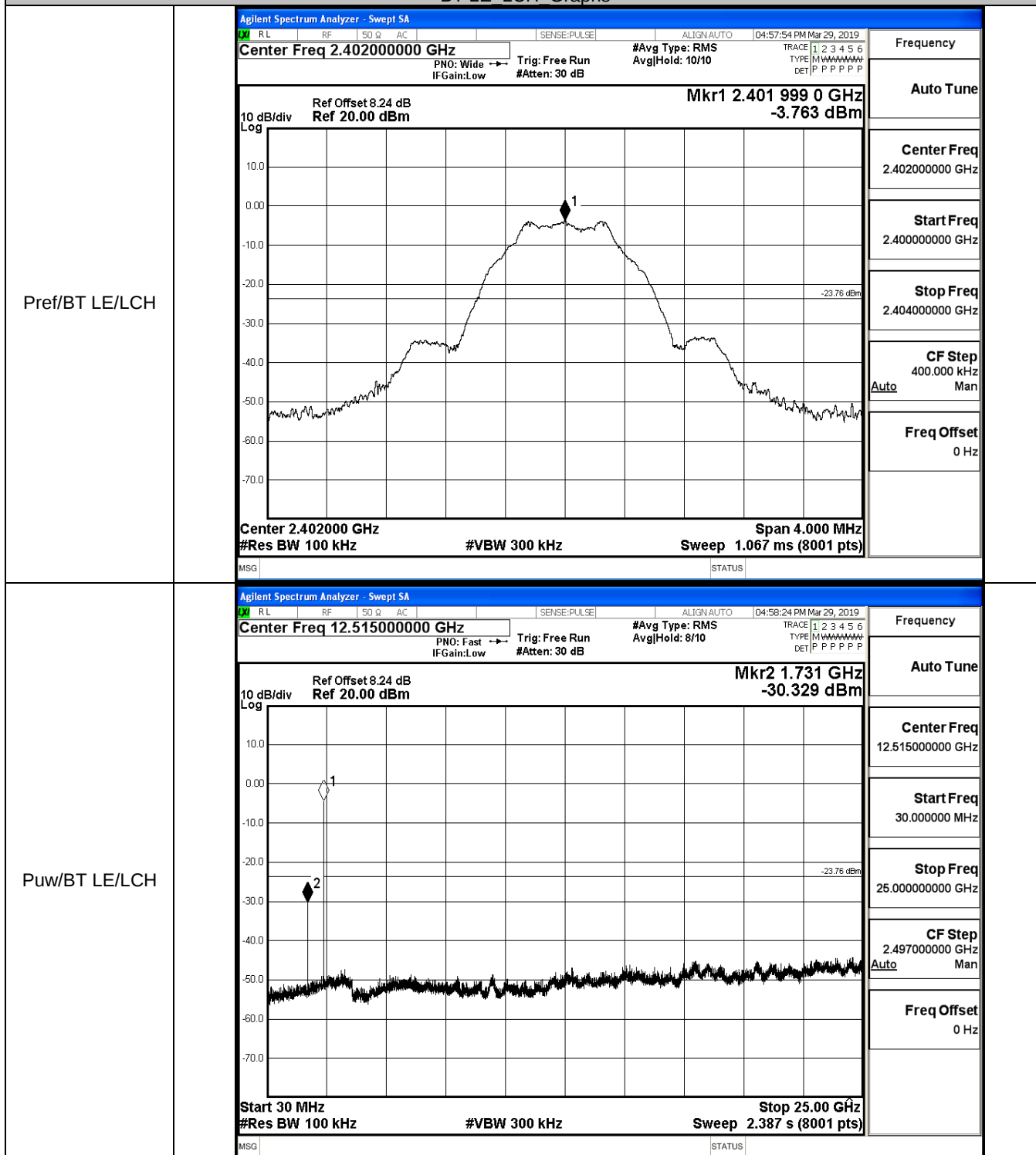
HCH



A.5 RF Conducted Spurious Emissions

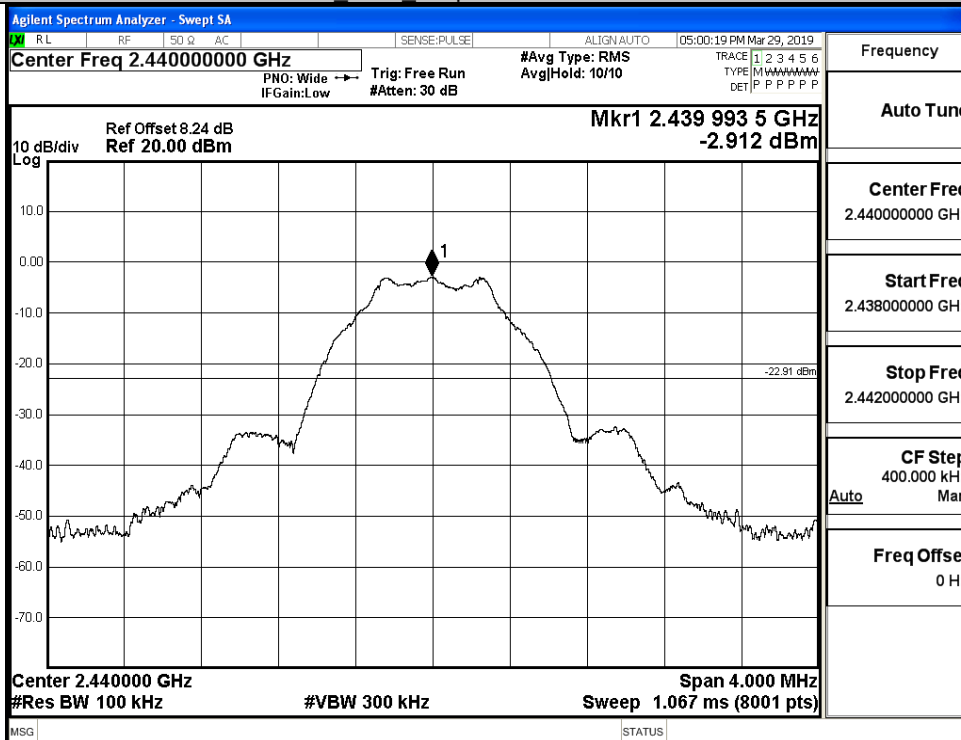
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	-3.763	-30.329	-23.763	PASS
BT LE	MCH	-2.912	-37.176	-22.912	PASS
BT LE	HCH	-3.74	-43.197	-23.740	PASS

BT LE LCH Graphs

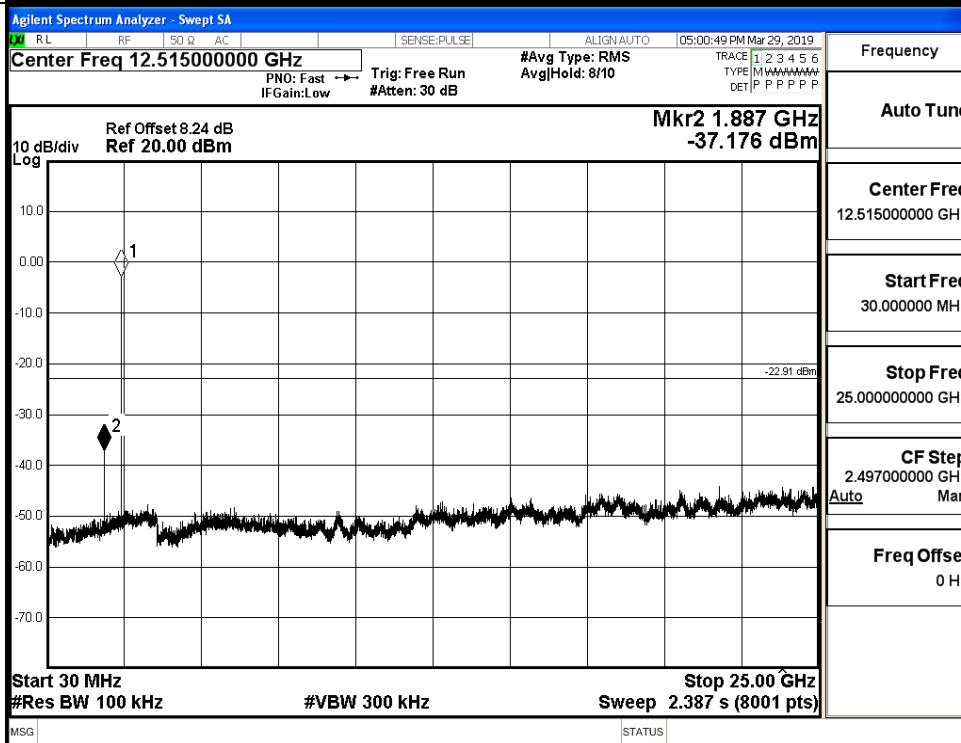


BT LE MCH Graphs

Pref/BT LE/MCH

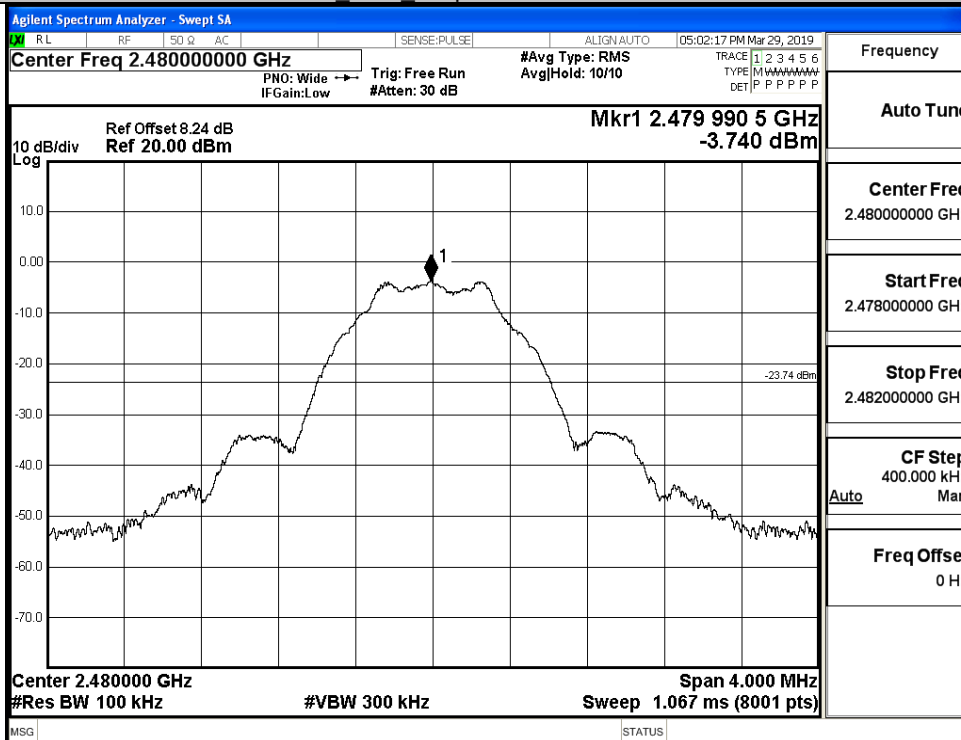


Puw/BT LE/MCH

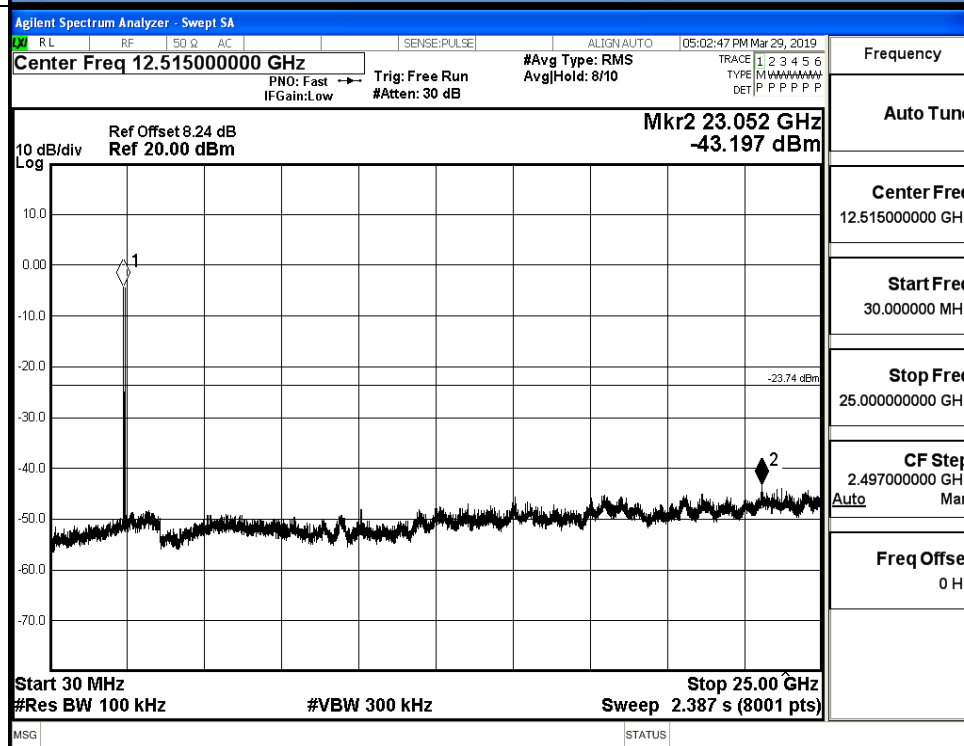


BT LE HCH Graphs

Pref/BT LE/HCH



Puw/BT LE/HCH

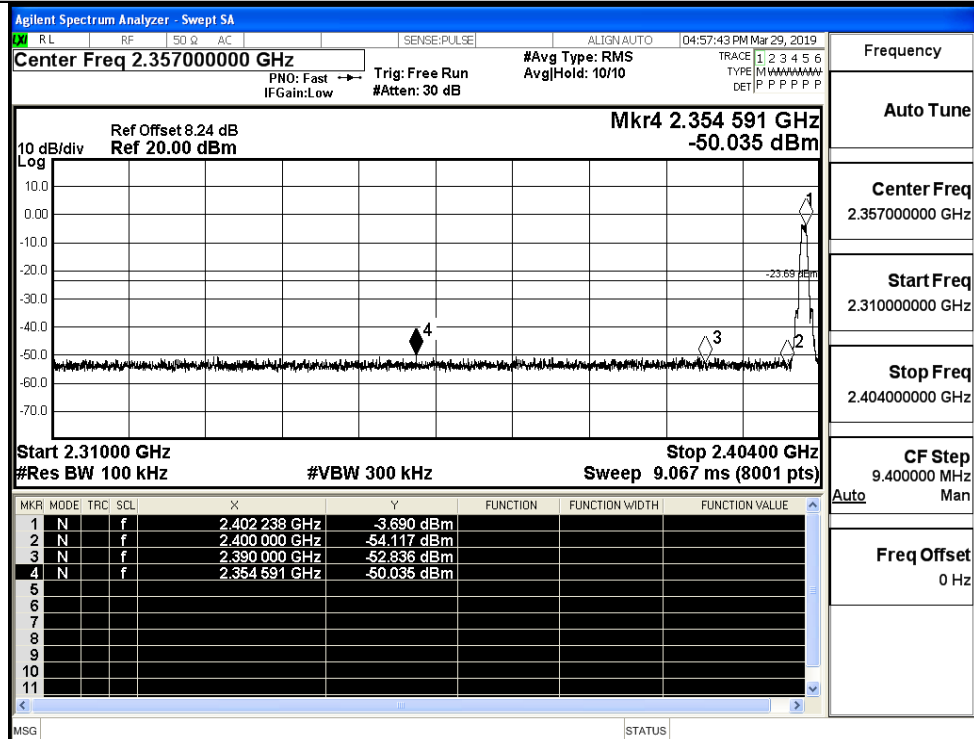


A.6 Band-edge for RF Conducted Emissions

Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	-3.690	-50.035	-23.69	PASS
BT LE	HCH	-3.489	-50.207	-23.49	PASS

Test Graphs

LCH



Frequency

Auto Tune

Center Freq

2.357000000 GHz

Start Freq

2.310000000 GHz

Stop Freq

2.404000000 GHz

CF Step

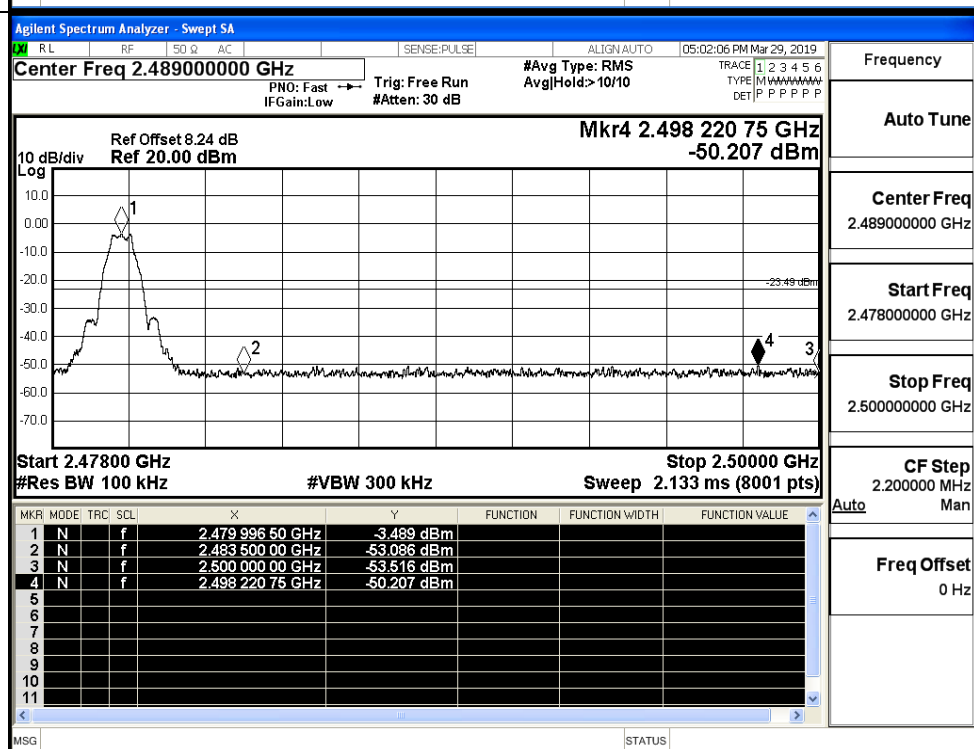
9.400000 MHz

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

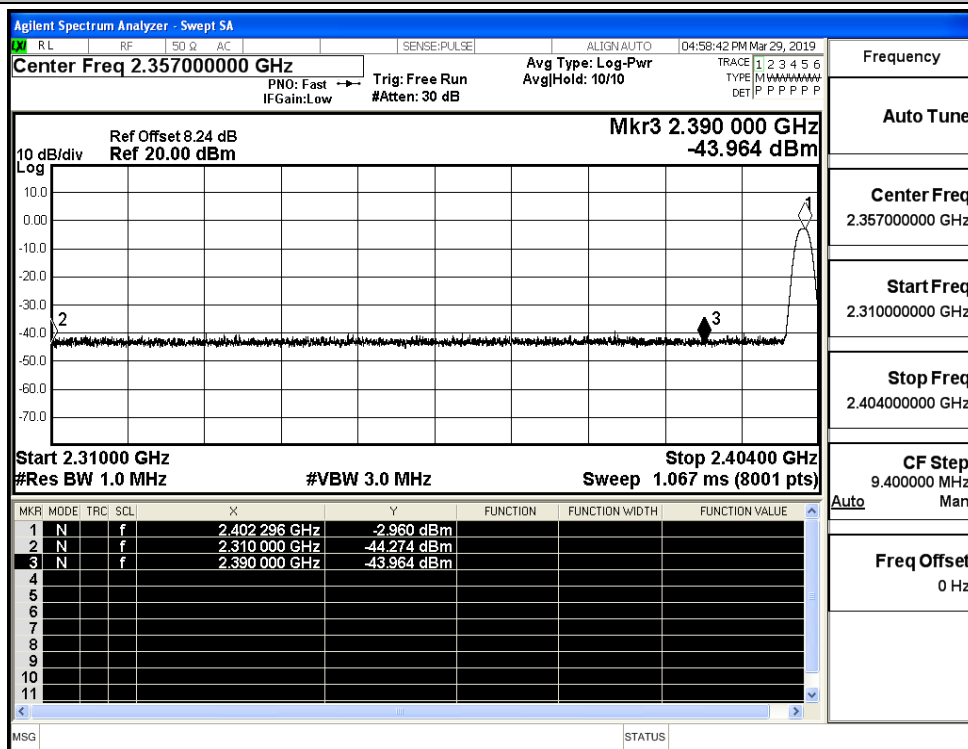
Freq Offset

0 Hz

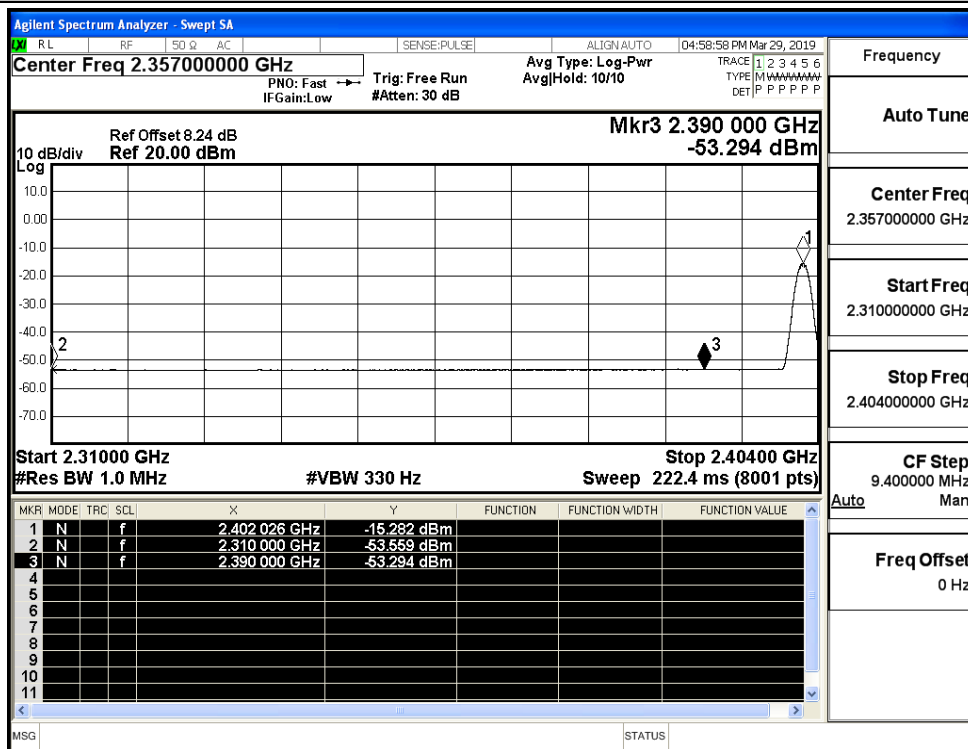
A.7 Restrict-band band-edge measurements

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	-44.27	2.0	0	52.98	PEAK	74	PASS
		Ant1	2310.0	-53.56	2.0	0	43.70	AV	54	PASS
		Ant1	2390.0	-43.96	2.0	0	53.29	PEAK	74	PASS
		Ant1	2390.0	-53.29	2.0	0	43.96	AV	54	PASS
	2480	Ant1	2483.5	-42.27	2.0	0	54.99	PEAK	74	PASS
		Ant1	2483.5	-53.11	2.0	0	44.14	AV	54	PASS
		Ant1	2500.0	-42.91	2.0	0	54.34	PEAK	74	PASS
		Ant1	2500.0	-53.00	2.0	0	44.26	AV	54	PASS

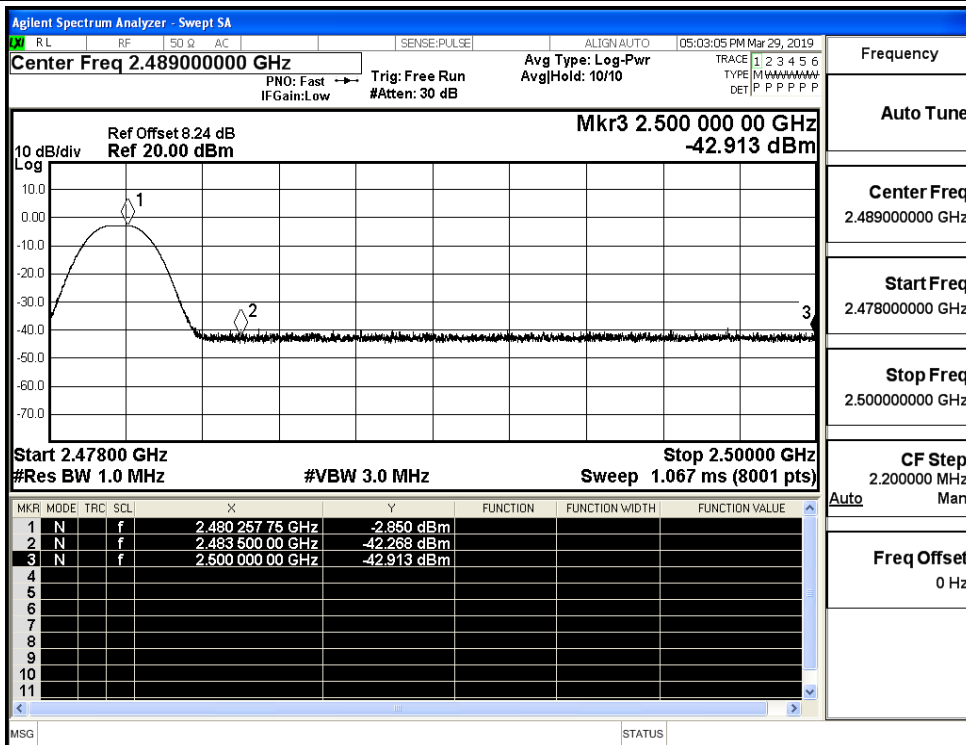
Restrict-band band-edge measurements_BT LE_2402_Ant1_PEAK



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

