

Appendix A

RF Test Data for BT V4.0(BDR/EDR) (Conducted Measurement)

Product Name: Aquarium Luminaire

Trade Mark: Fluval

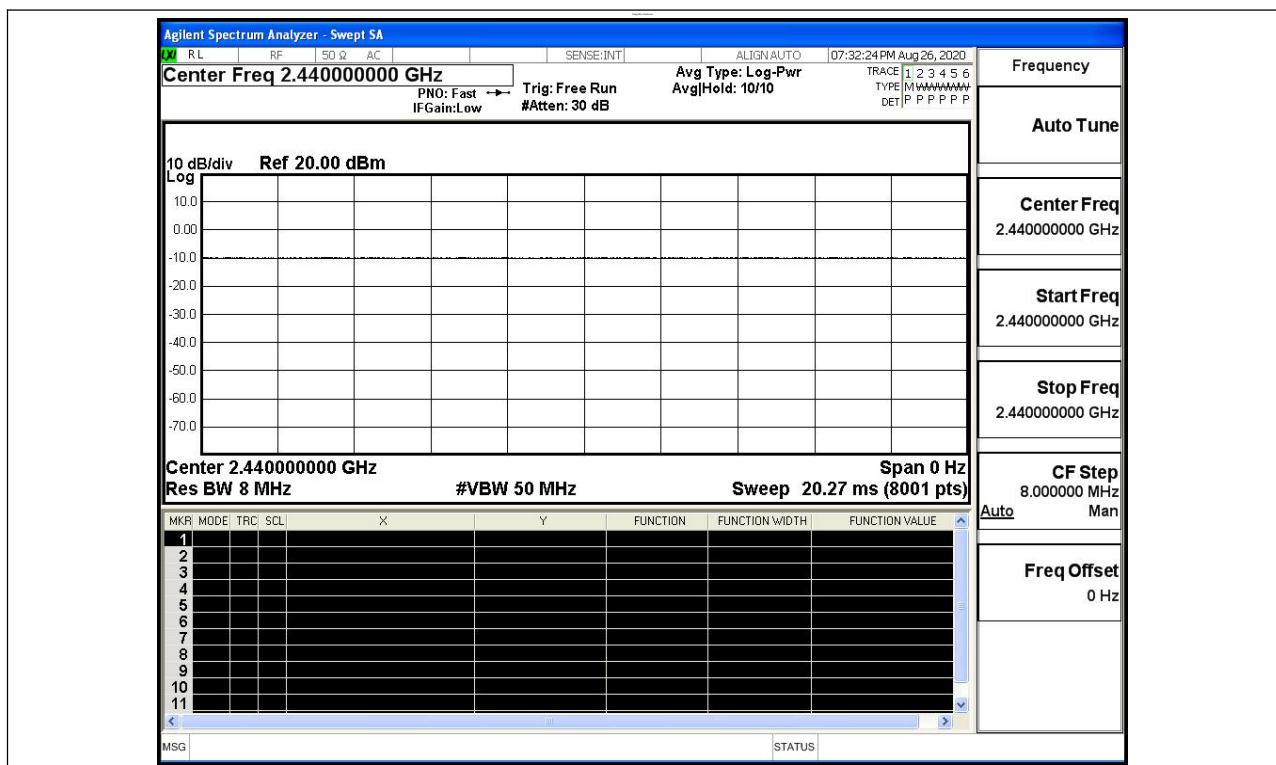
Test Model: A13300

Environmental Conditions

Temperature:	24.6° C
Relative Humidity:	54.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Jam Zheng
Supervised by:	Li Huan

A.1 Duty Cycle

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

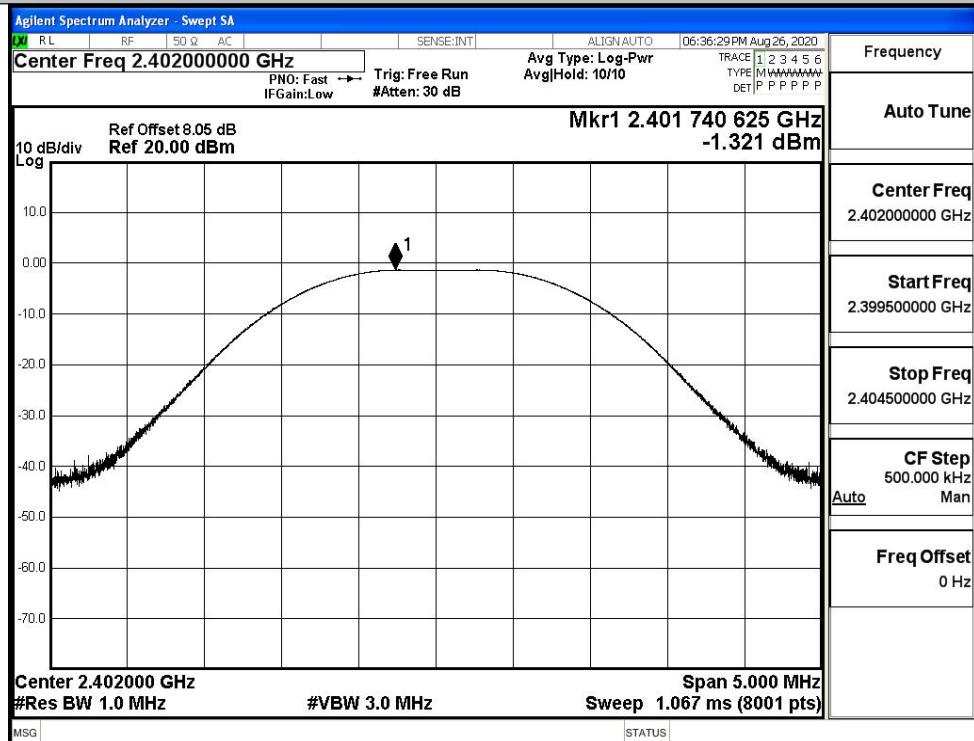


A.2 Maximum Conducted Peak Output Power

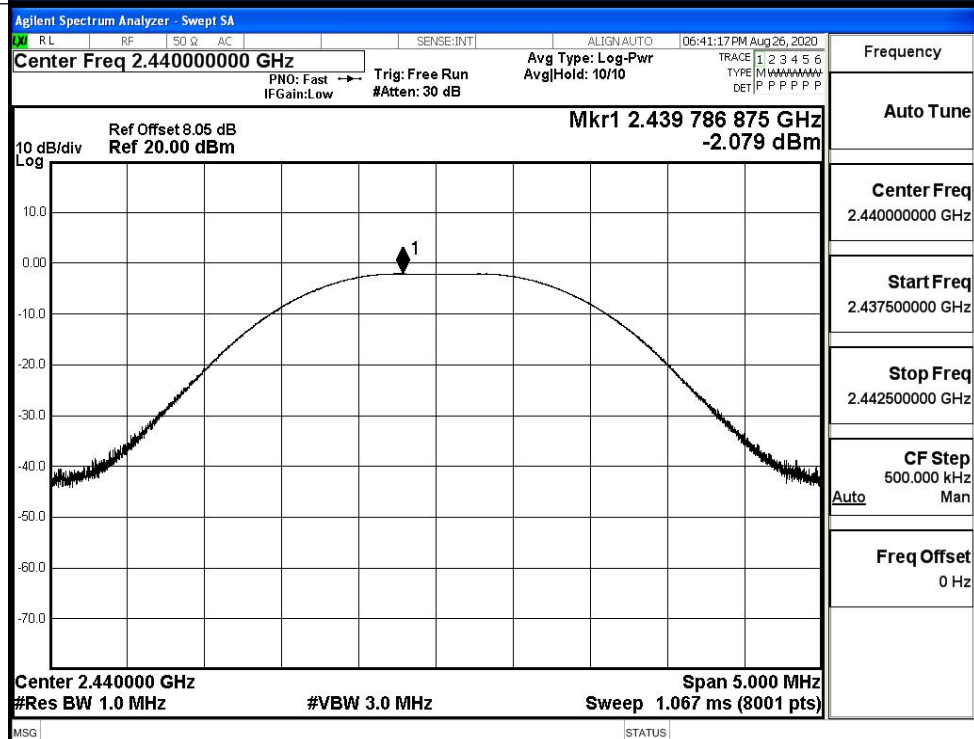
Mode	Channel	Conduct Peak Power[dBm]	Limit [dBm]	Verdict
BT LE	LCH	-1.321	30	PASS
BT LE	MCH	-2.079	30	PASS
BT LE	HCH	-2.62	30	PASS

Test Graphs

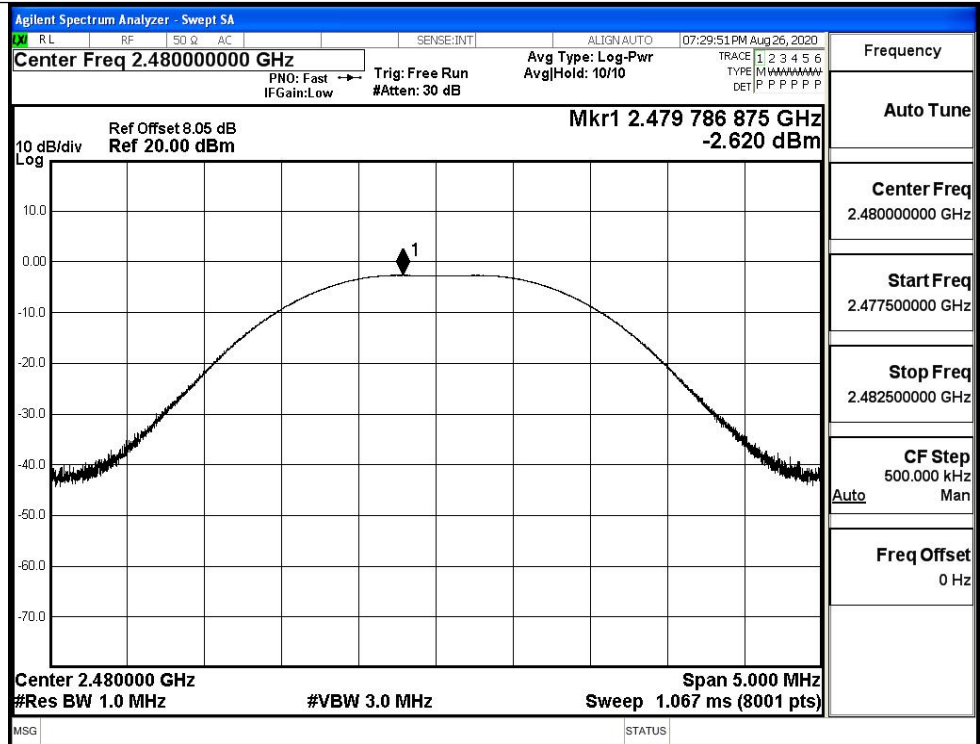
LCH



MCH



HCH

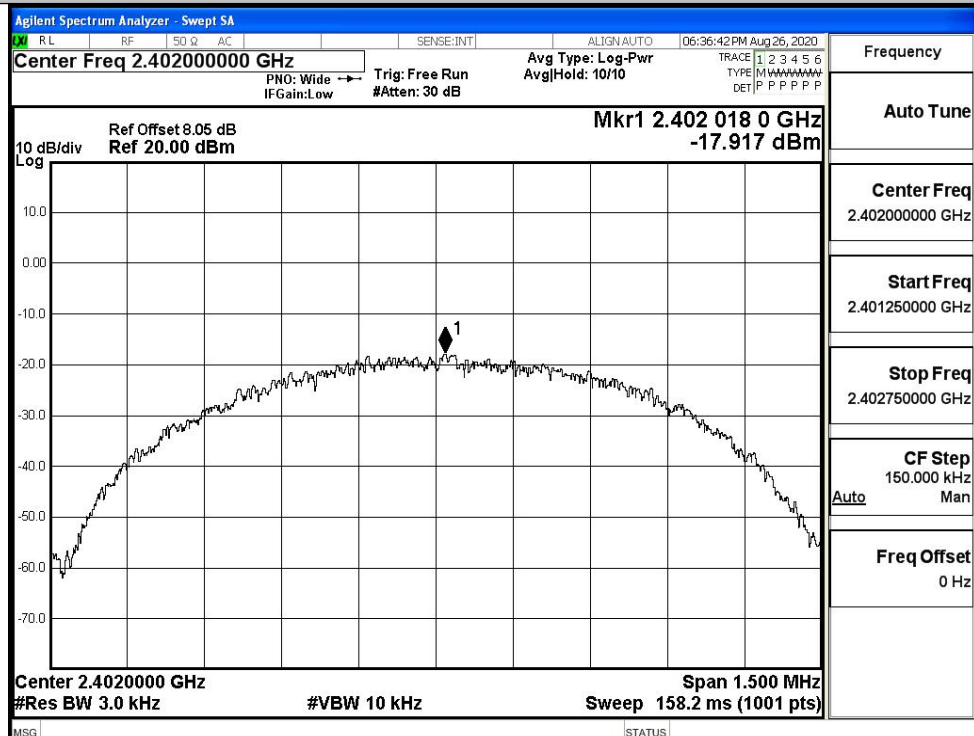


A.3 Maximum Power Spectral Density

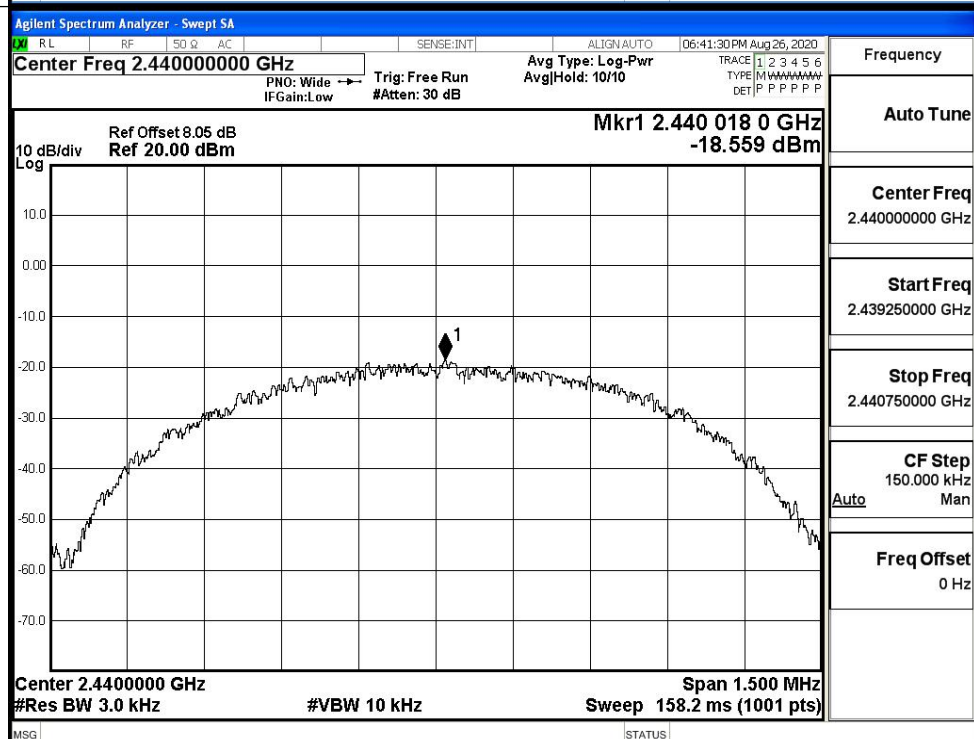
Mode	Channel	PSD [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
BT LE	LCH	-17.917	8	PASS
BT LE	MCH	-18.559	8	PASS
BT LE	HCH	-19.066	8	PASS

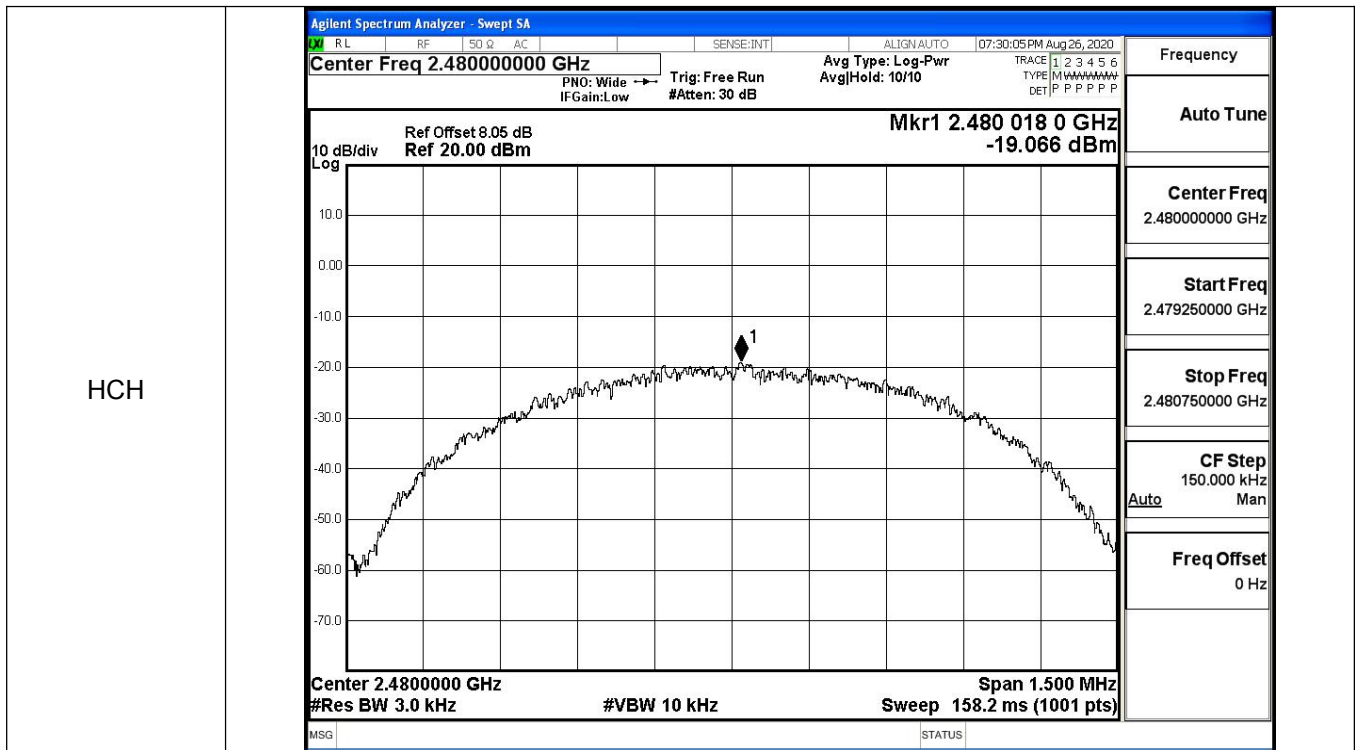
Test Graphs

LCH



MCH



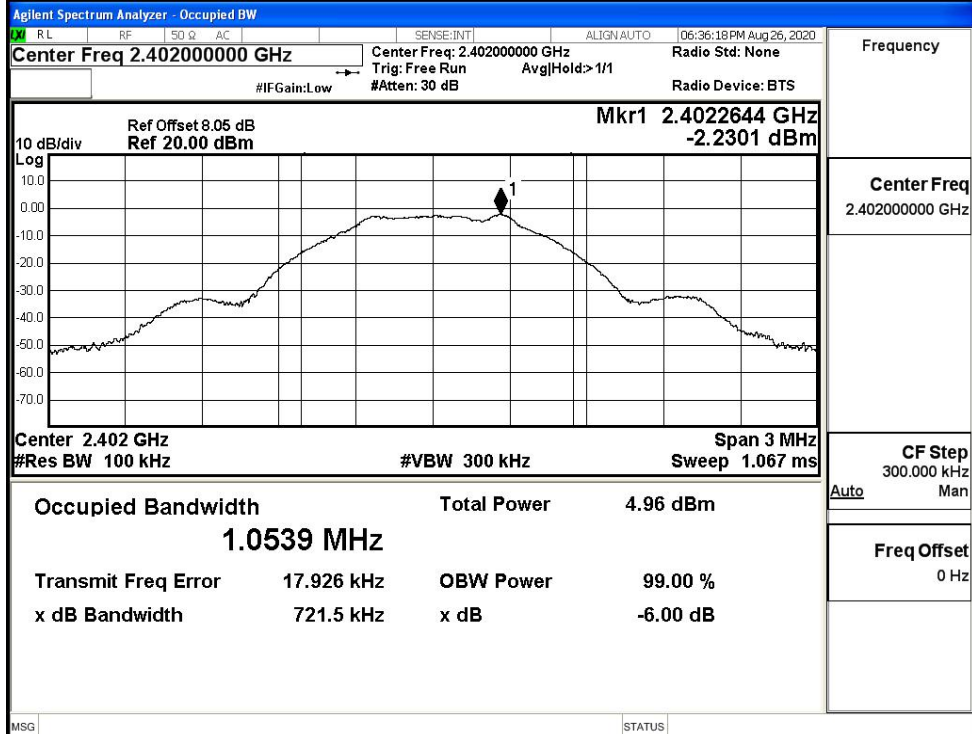


A.4 6dB Bandwidth

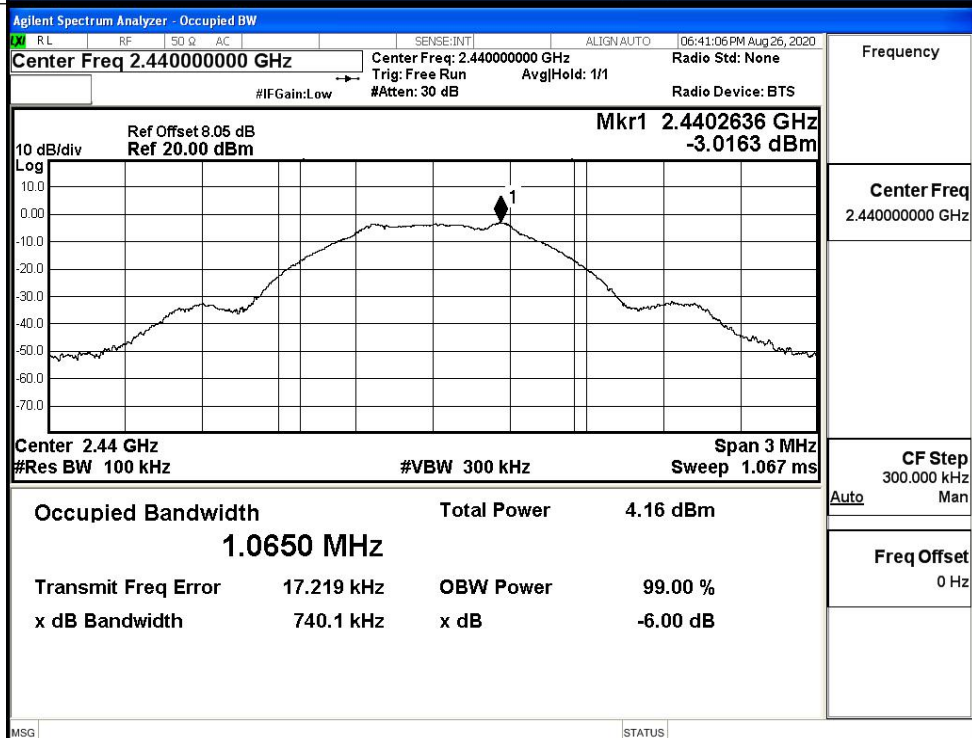
Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
BT LE	LCH	0.7215	≥ 0.5	PASS
BT LE	MCH	0.7401	≥ 0.5	PASS
BT LE	HCH	0.7256	≥ 0.5	PASS

Test Graphs

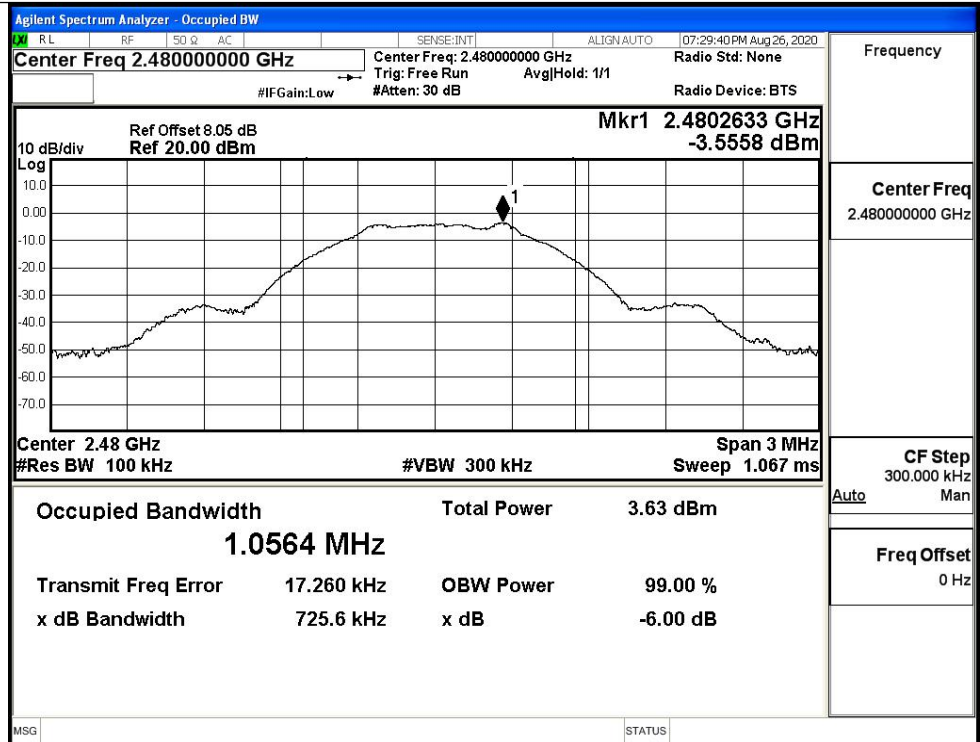
LCH



MCH



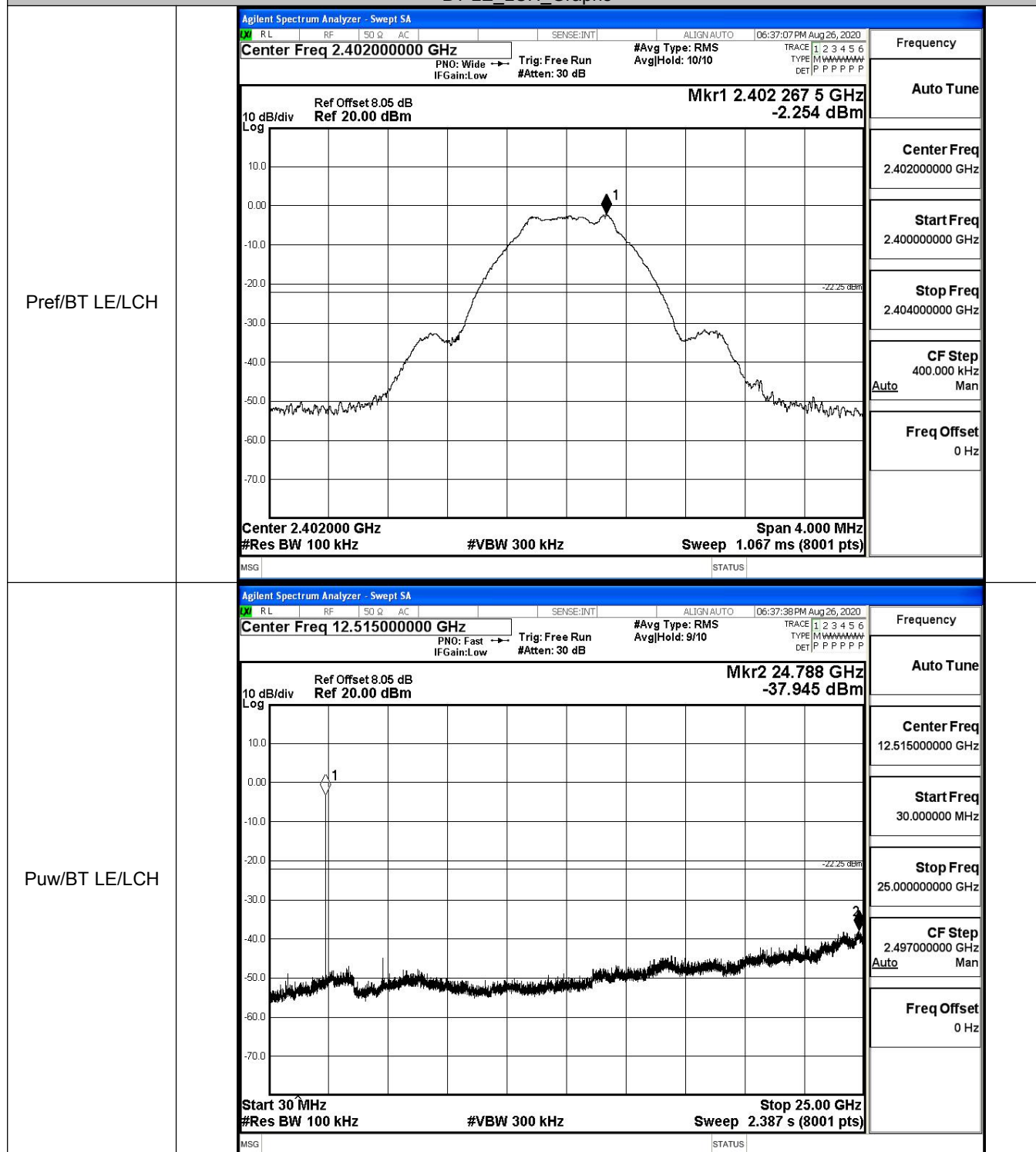
HCH



A.5 RF Conducted Spurious Emissions

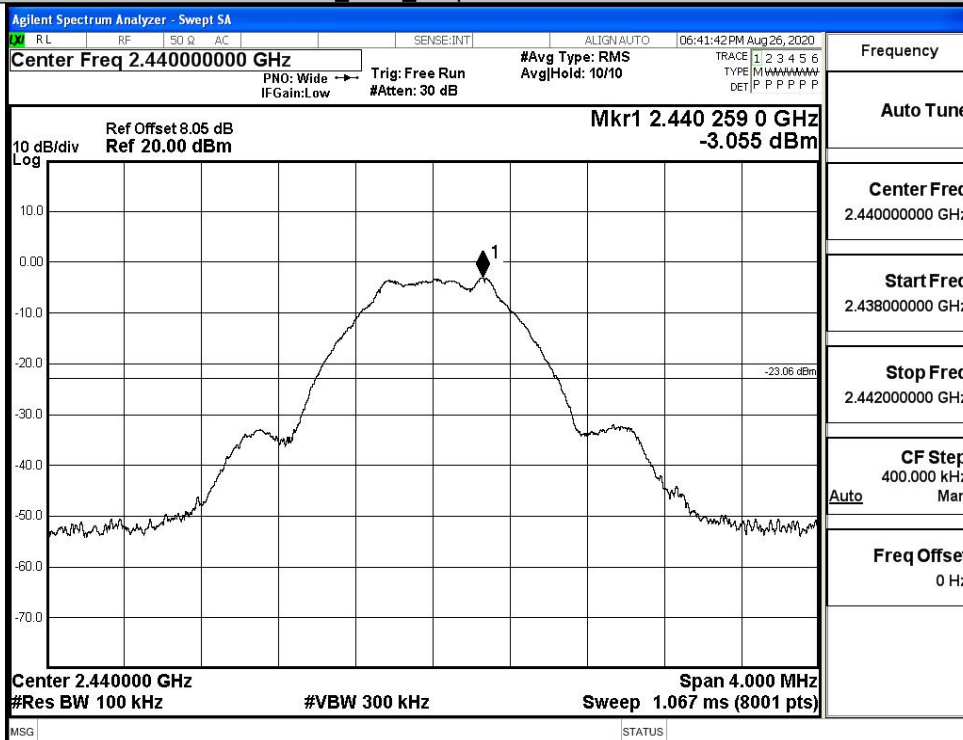
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	-2.254	-37.945	-22.254	PASS
BT LE	MCH	-3.055	-36.884	-23.055	PASS
BT LE	HCH	-3.602	-37.082	-23.602	PASS

BT LE_LCH_Graphs

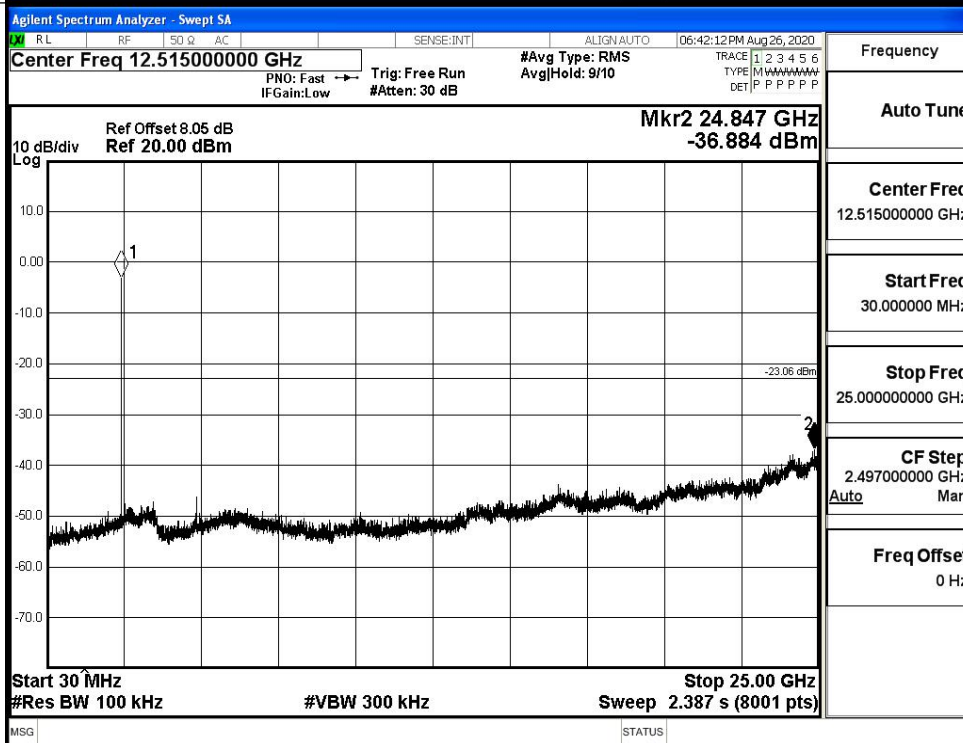


BT LE MCH Graphs

Pref/BT LE/MCH

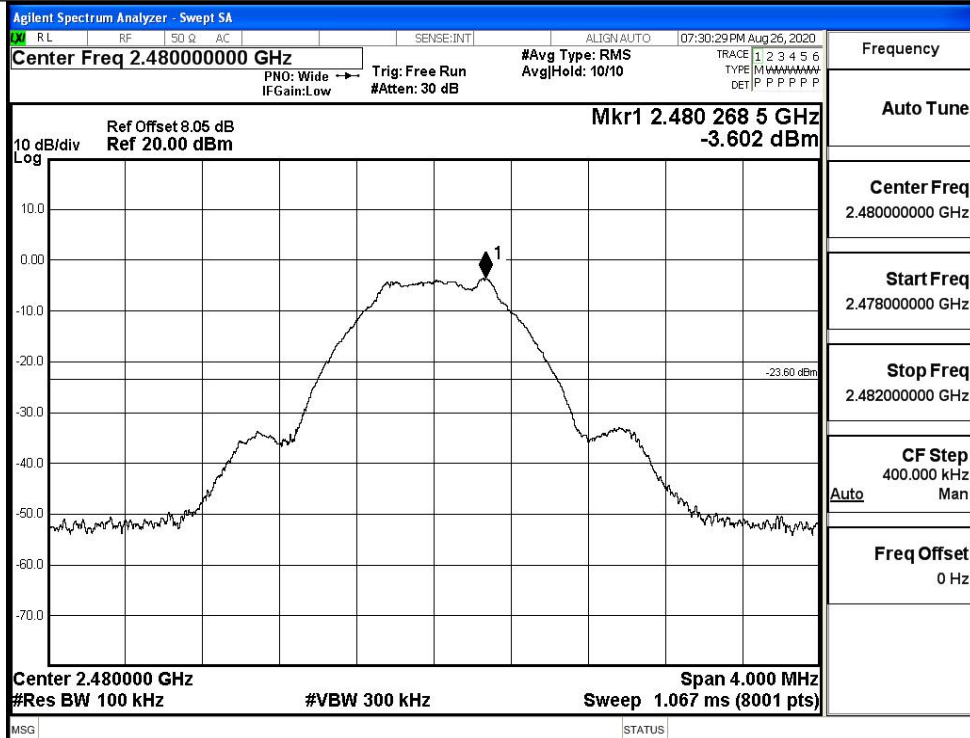


Puw/BT LE/MCH

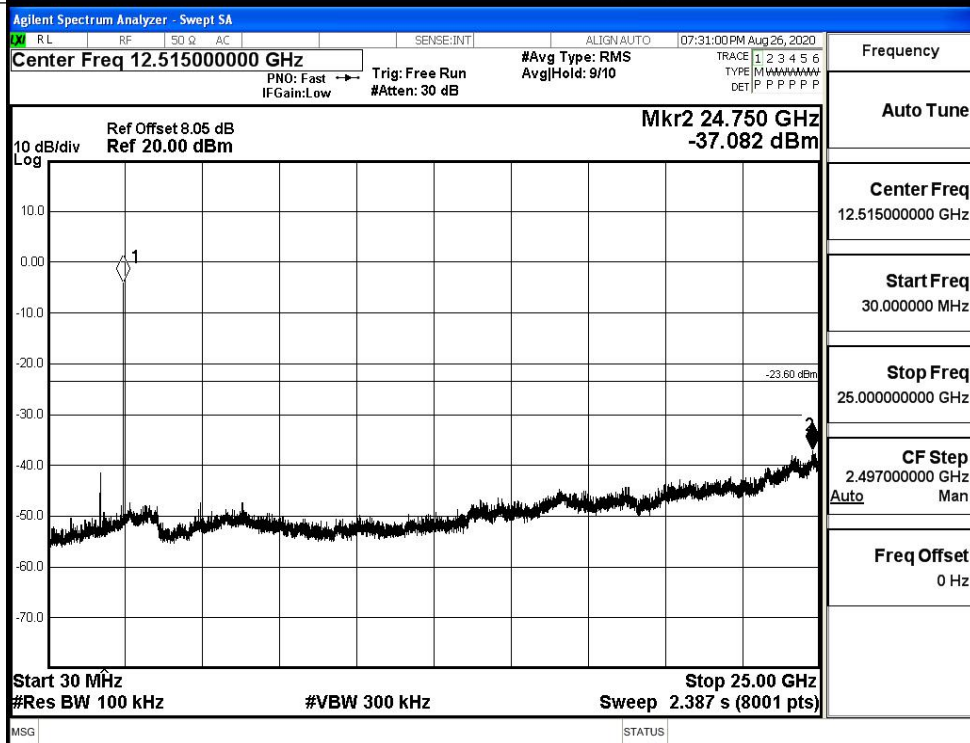


BT LE HCH Graphs

Pref/BT LE/HCH



Puw/BT LE/HCH

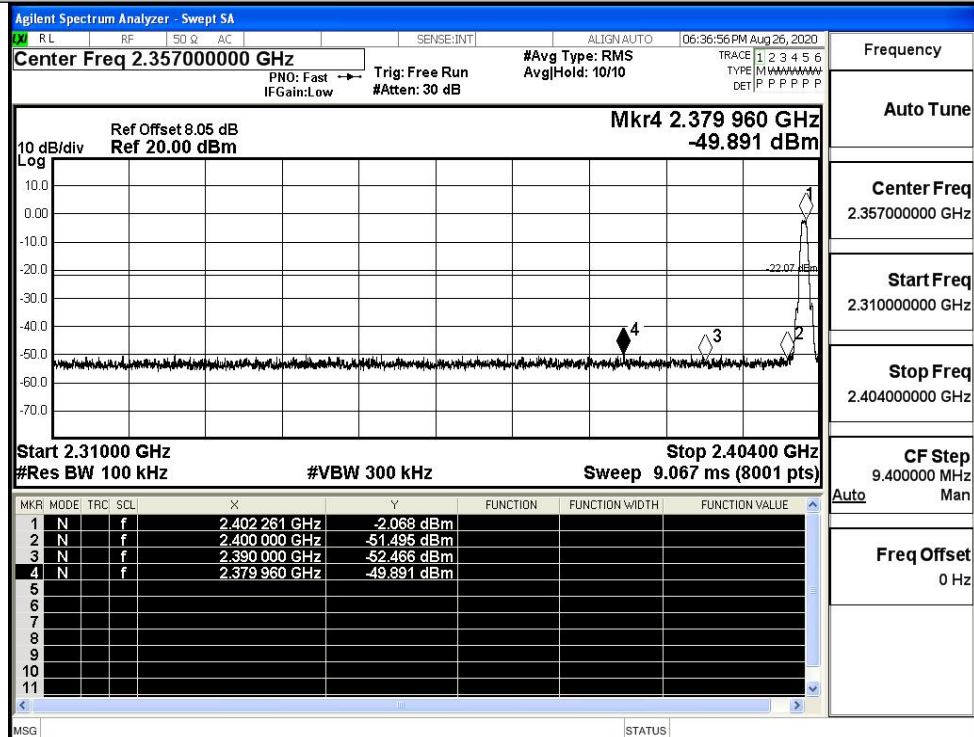


A.6 Band-edge for RF Conducted Emissions

Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	-2.068	-49.891	-22.07	PASS
BT LE	HCH	-3.364	-48.904	-23.36	PASS

Test Graphs

LCH



Frequency

Auto Tune

Center Freq

2.357000000 GHz

Start Freq

2.310000000 GHz

Stop Freq

2.404000000 GHz

CF Step

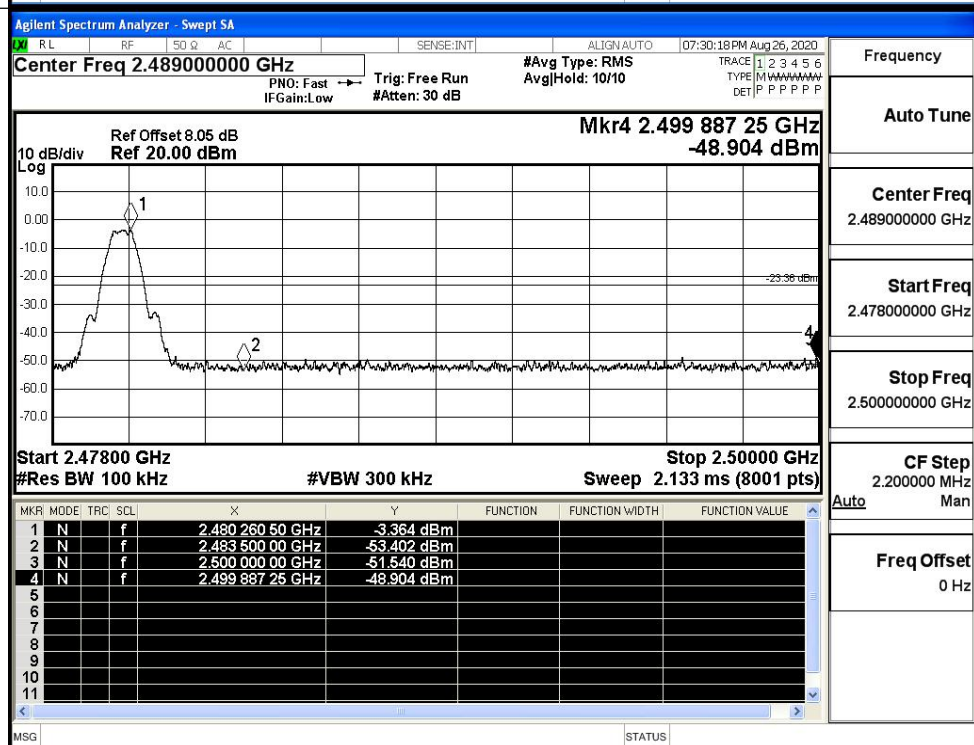
9.400000 MHz

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

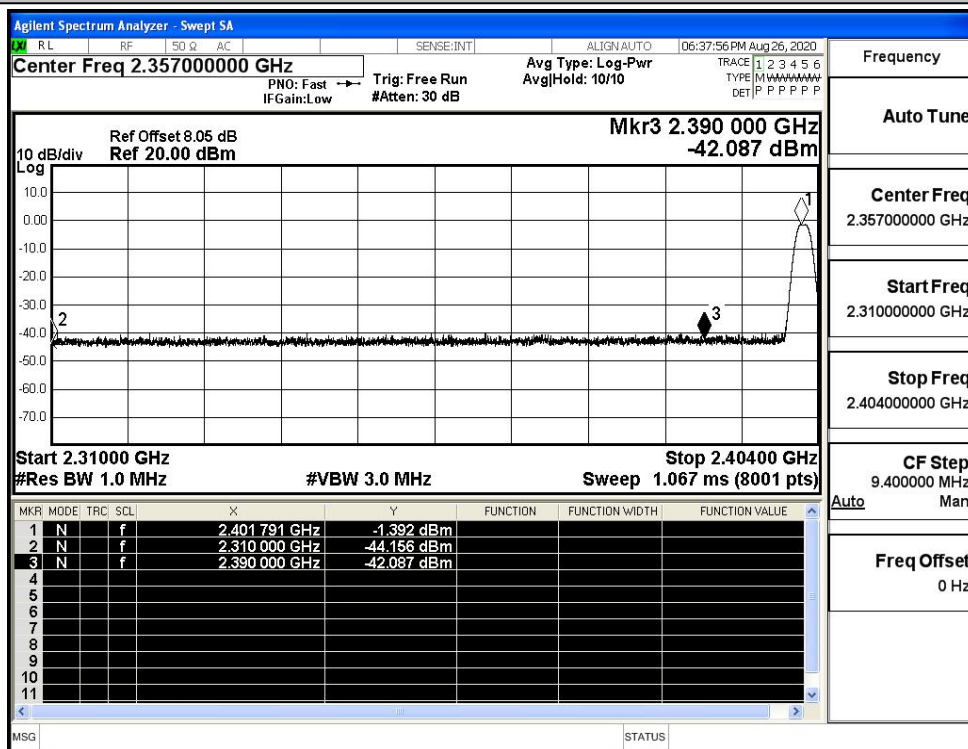
Freq Offset

0 Hz

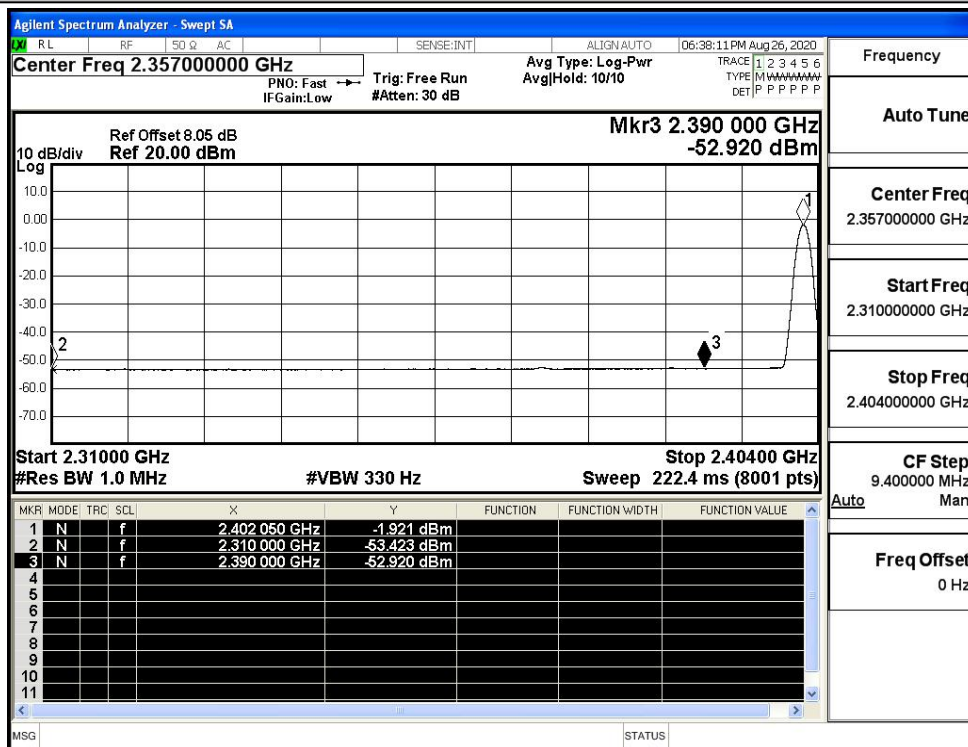
A.7 Restrict-band band-edge measurements

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	-44.16	2.65	0	53.72	PEAK	74	PASS
		Ant1	2310.0	-53.42	2.65	0	44.46	AV	54	PASS
		Ant1	2390.0	-42.09	2.65	0	55.79	PEAK	74	PASS
		Ant1	2390.0	-52.92	2.65	0	44.96	AV	54	PASS
	2480	Ant1	2483.5	-41.30	2.65	0	56.58	PEAK	74	PASS
		Ant1	2483.5	-52.36	2.65	0	45.52	AV	54	PASS
		Ant1	2500.0	-41.34	2.65	0	56.54	PEAK	74	PASS
		Ant1	2500.0	-52.25	2.65	0	45.63	AV	54	PASS

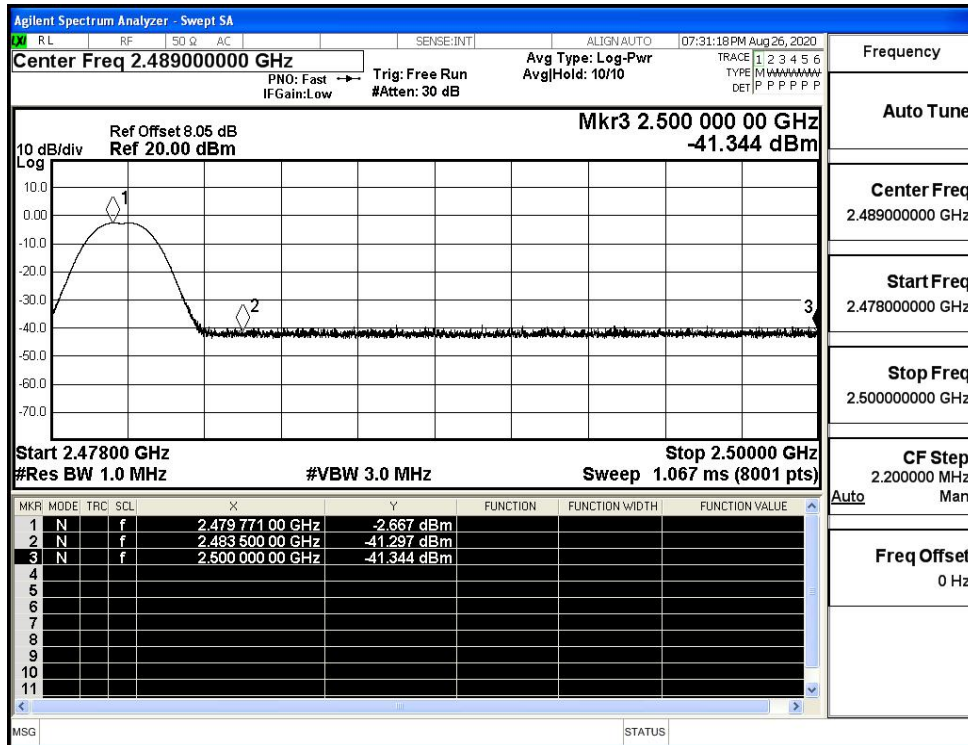
Restrict-band band-edge measurements_BT LE_2402_Ant1_PEAK



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

