

Appendix B

RF Test Data for BT V4.0(LE) (Conducted Measurement)

Product Name: Smart Doorbell

Trade Mark: BOSMA

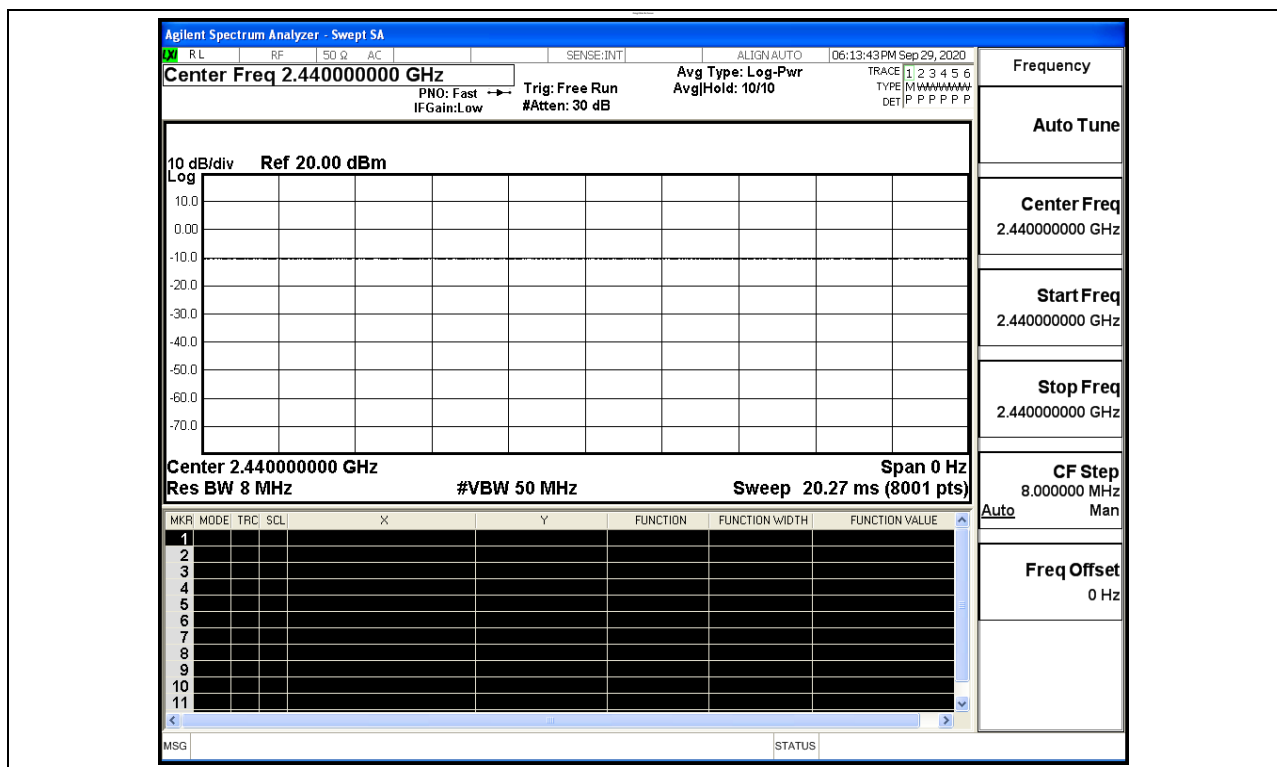
Test Model: SENTRY PRO

Environmental Conditions

Temperature:	23.2 ° C
Relative Humidity:	53.7%
ATM Pressure:	100.0 kPa
Test Engineer:	Kay Hu
Supervised by:	Li Huan

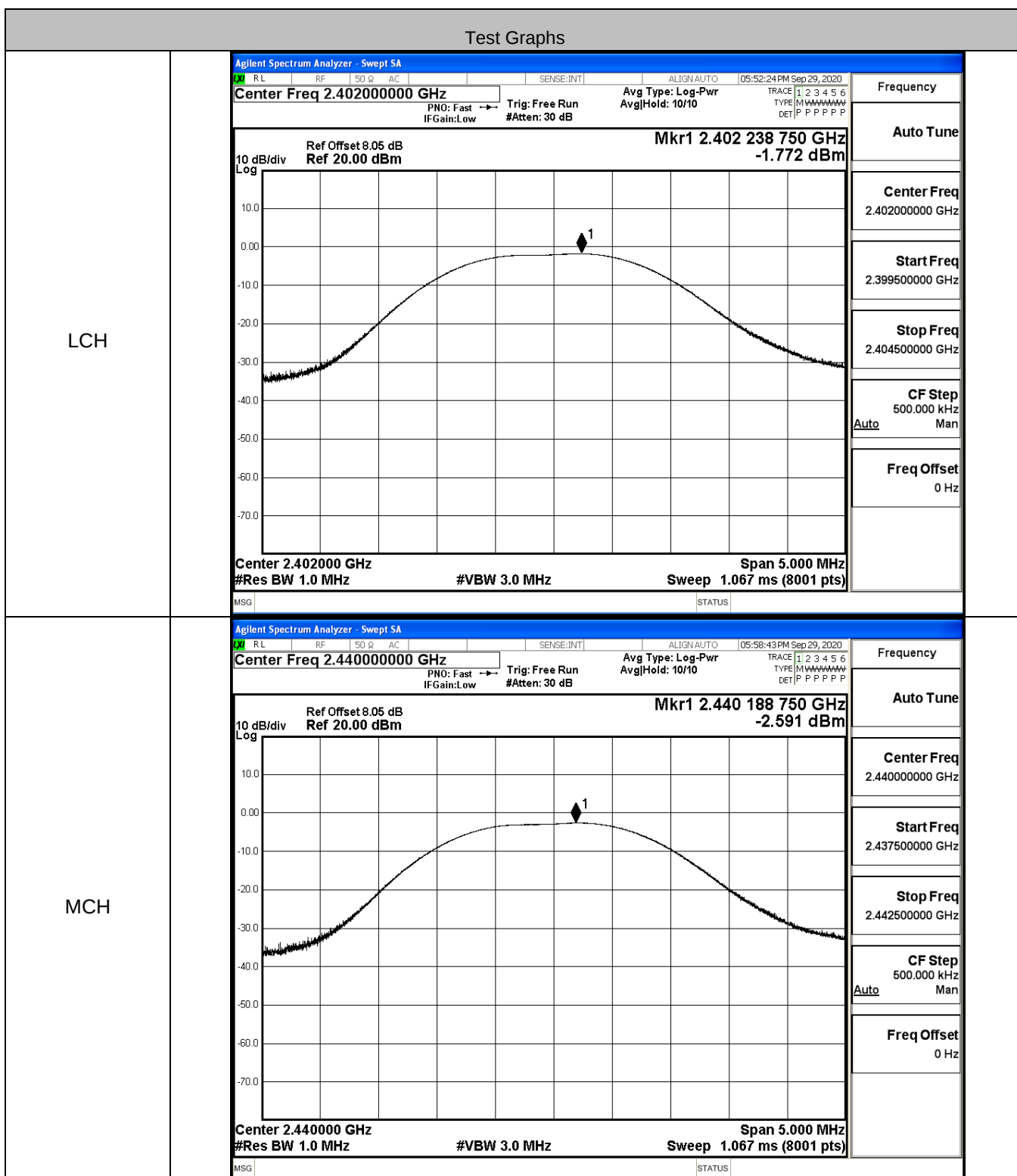
B.1 Duty Cycle

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

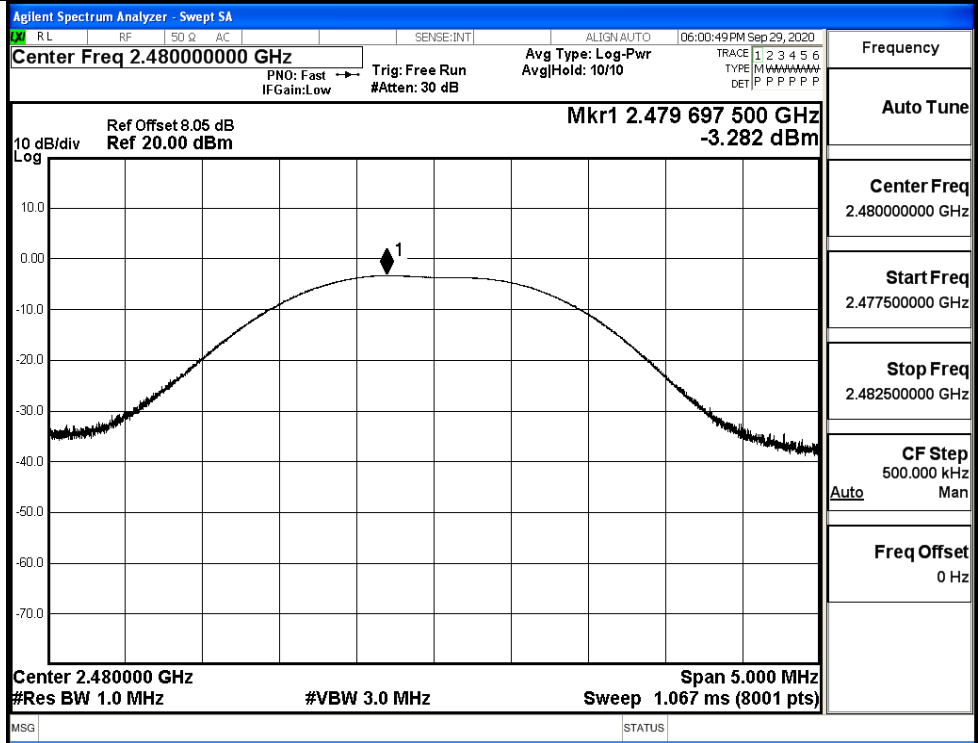


B.2 Maximum Conducted Peak Output Power

Mode	Channel	Conduct Peak Power[dBm]	Limit [dBm]	Verdict
BT LE	LCH	-1.772	30	PASS
BT LE	MCH	-2.591	30	PASS
BT LE	HCH	-3.282	30	PASS



HCH

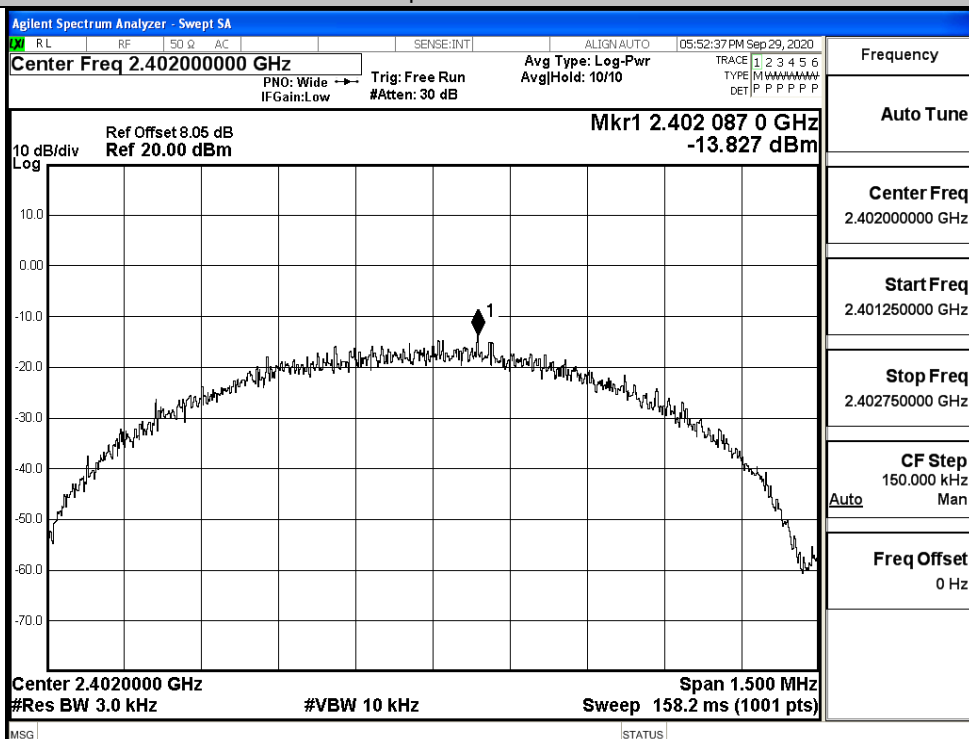


B.3 Maximum Power Spectral Density

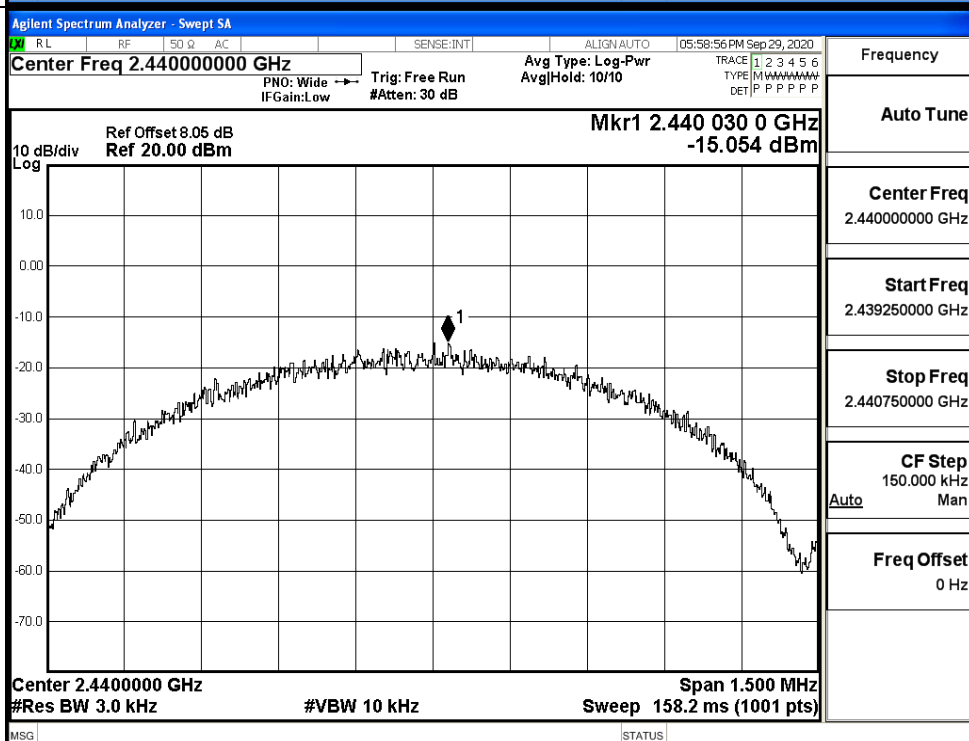
Mode	Channel	PSD [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
BT LE	LCH	-13.827	8	PASS
BT LE	MCH	-15.054	8	PASS
BT LE	HCH	-16.947	8	PASS

Test Graphs

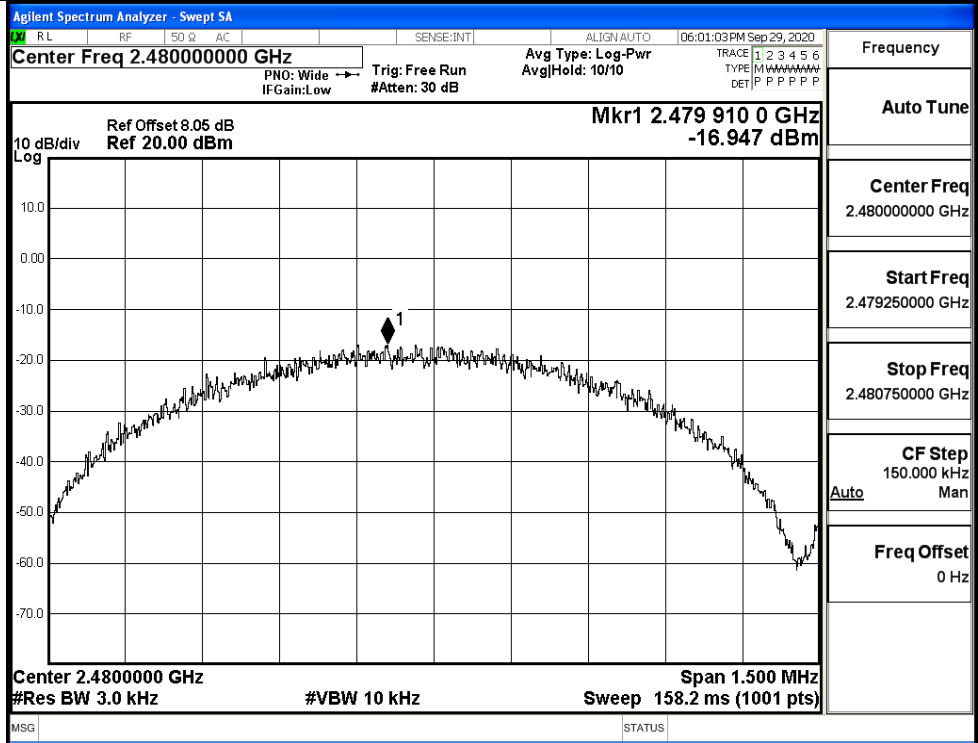
LCH



MCH



HCH

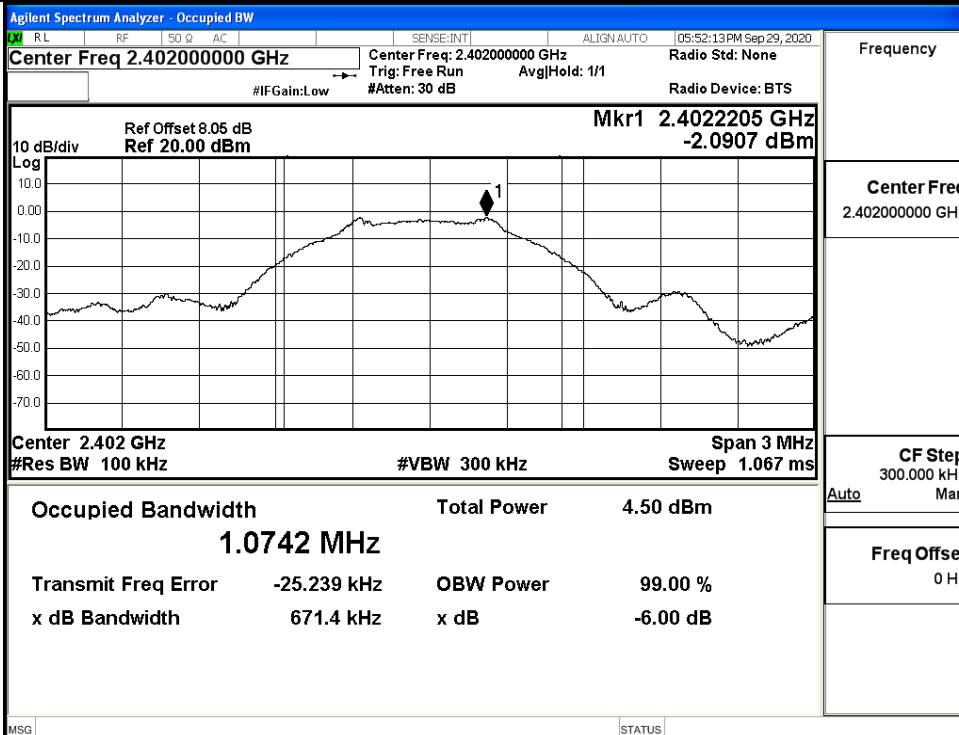


B.4 6dB Bandwidth

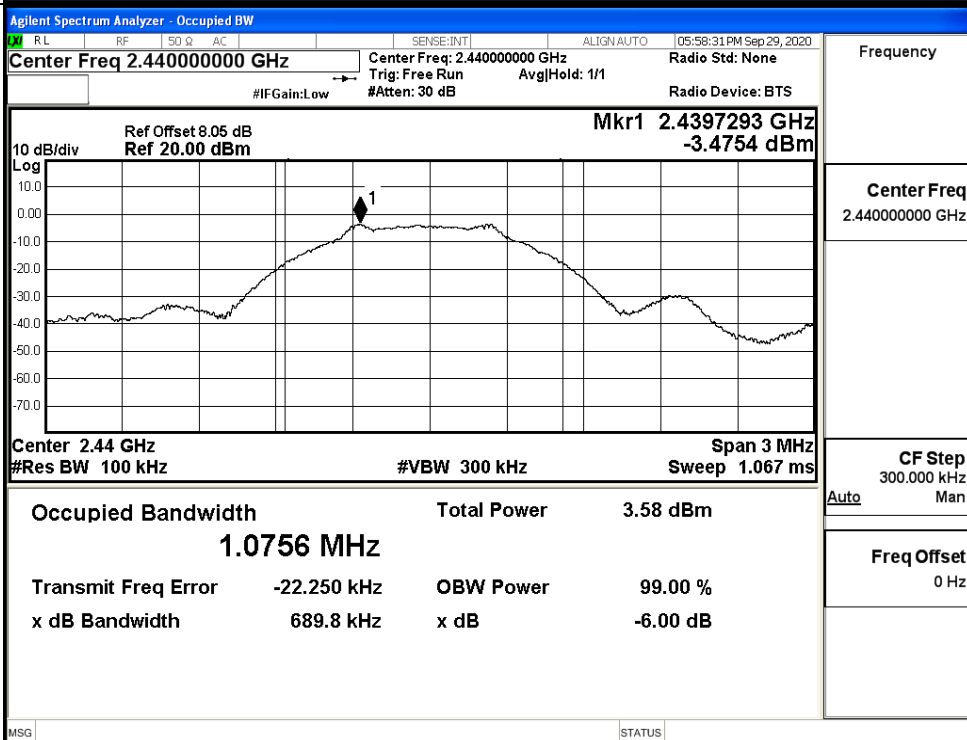
Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
BT LE	LCH	0.6714	≥ 0.5	PASS
BT LE	MCH	0.6898	≥ 0.5	PASS
BT LE	HCH	0.6813	≥ 0.5	PASS

Test Graphs

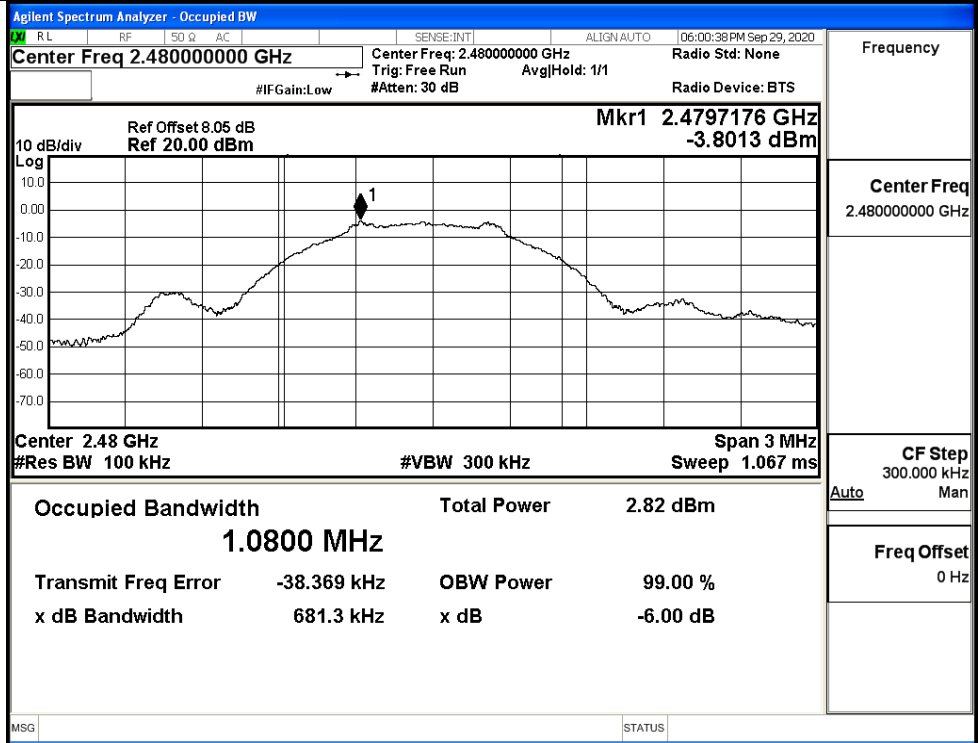
LCH



MCH

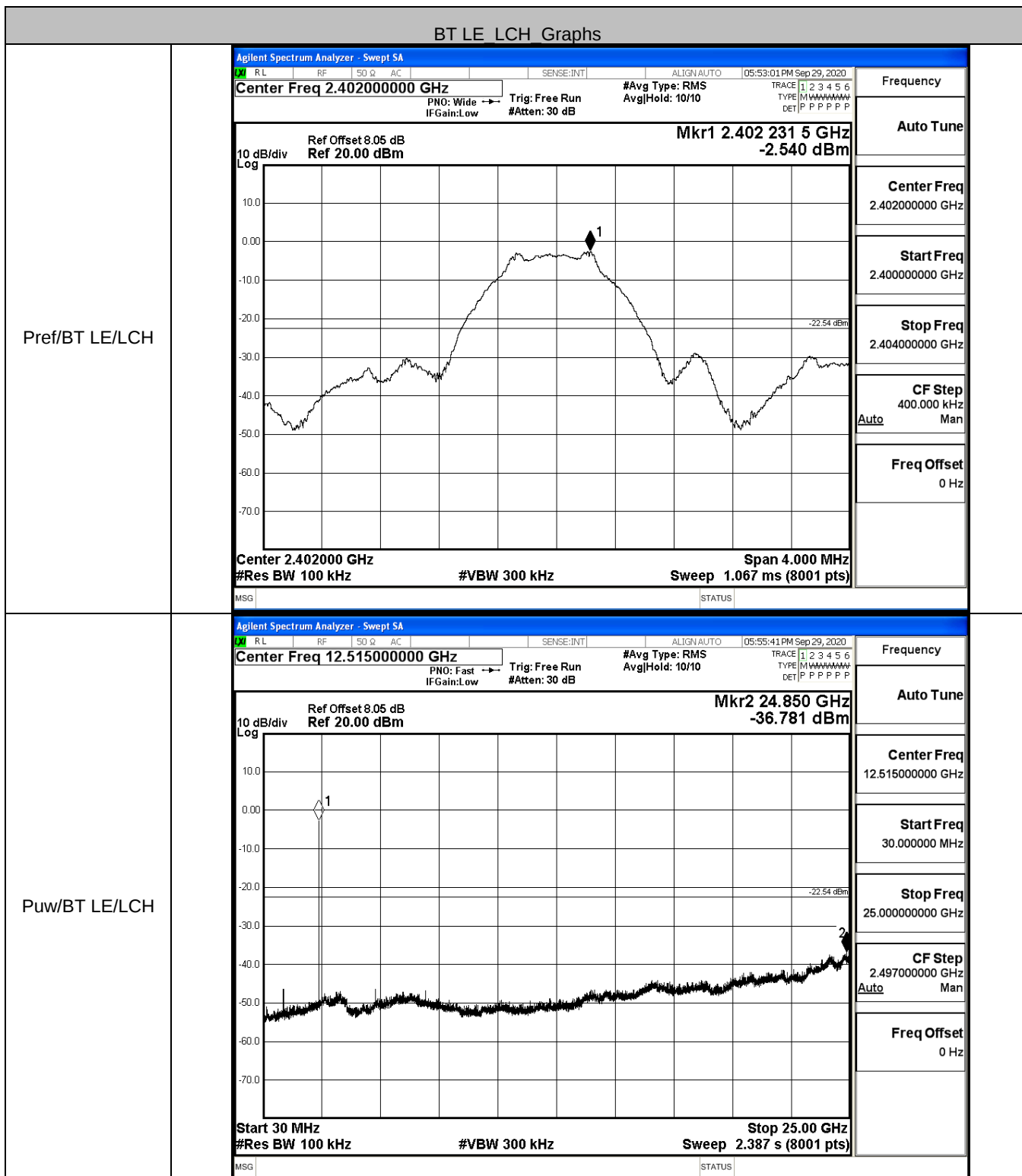


HCH



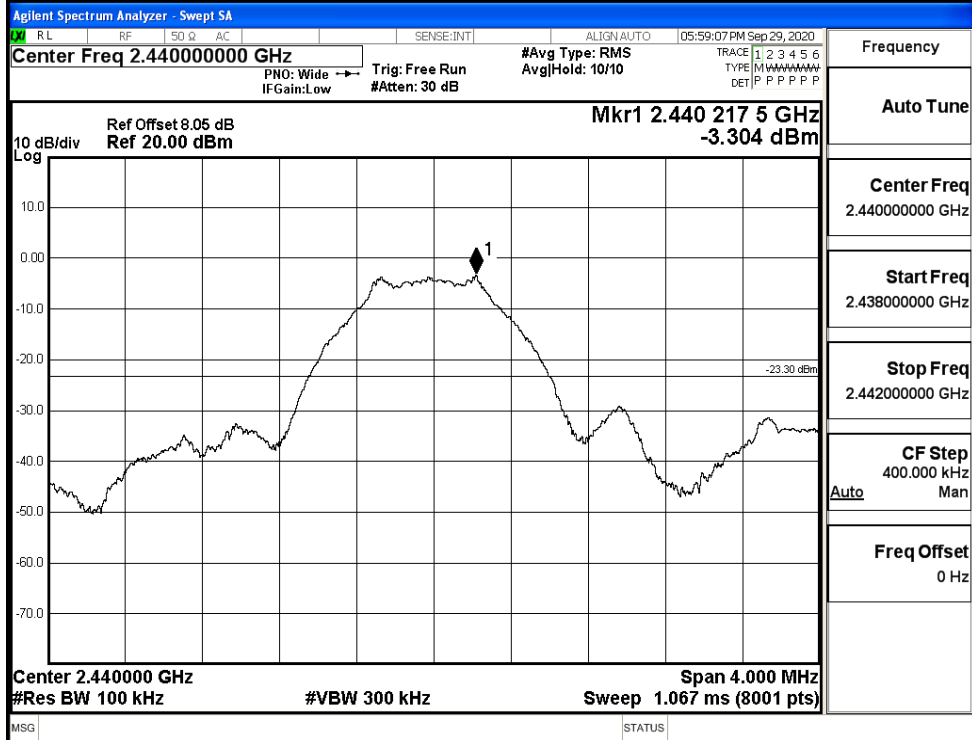
B.5 RF Conducted Spurious Emissions

Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	-2.54	-36.781	-22.540	PASS
BT LE	MCH	-3.304	-37.120	-23.304	PASS
BT LE	HCH	-4.05	-36.073	-24.050	PASS

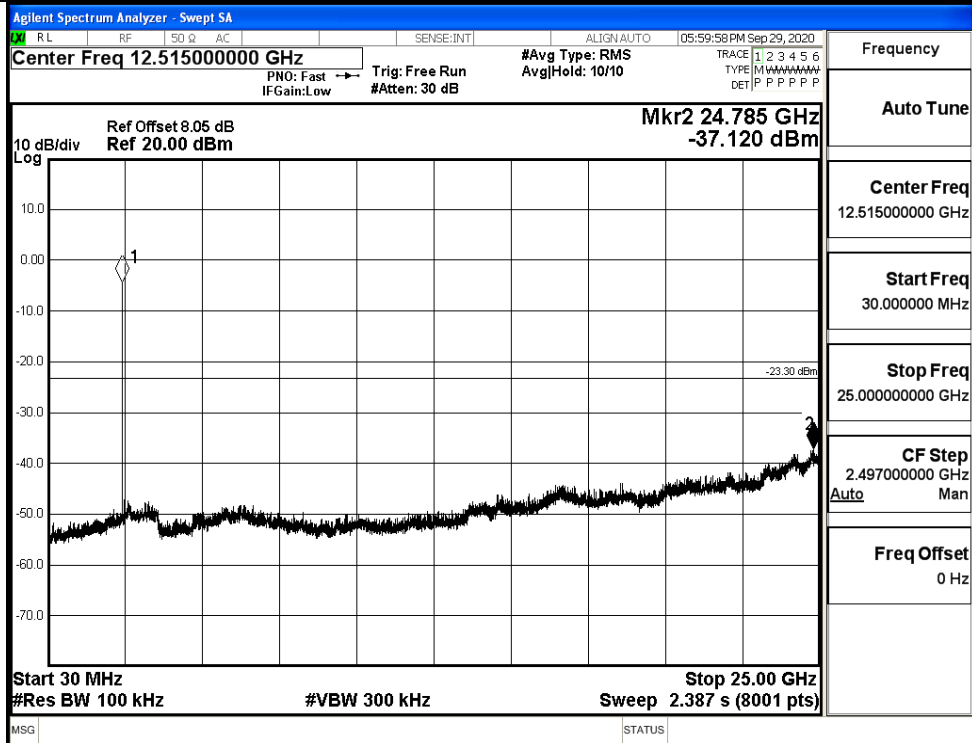


BT LE MCH Graphs

Pref/BT LE/MCH

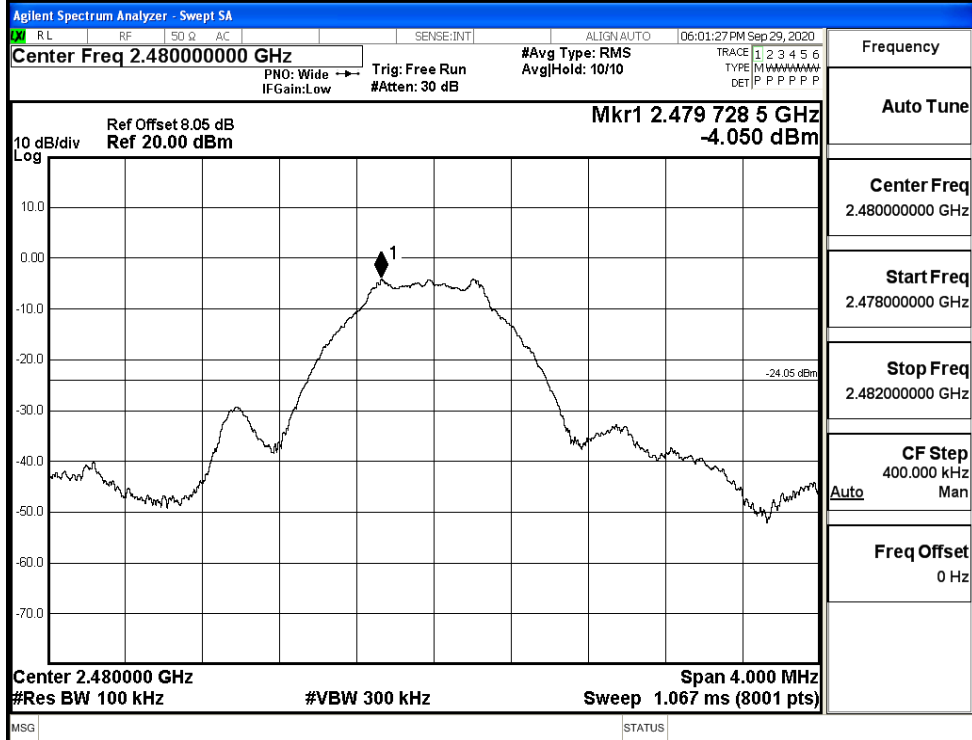


Puw/BT LE/MCH

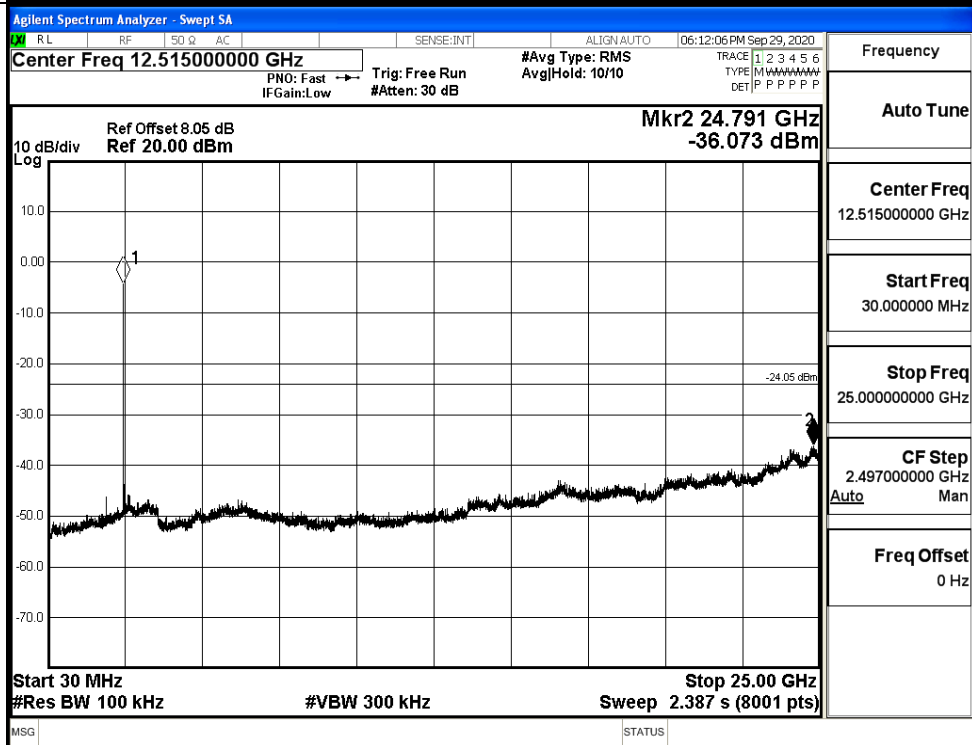


BT LE HCH Graphs

Pref/BT LE/HCH

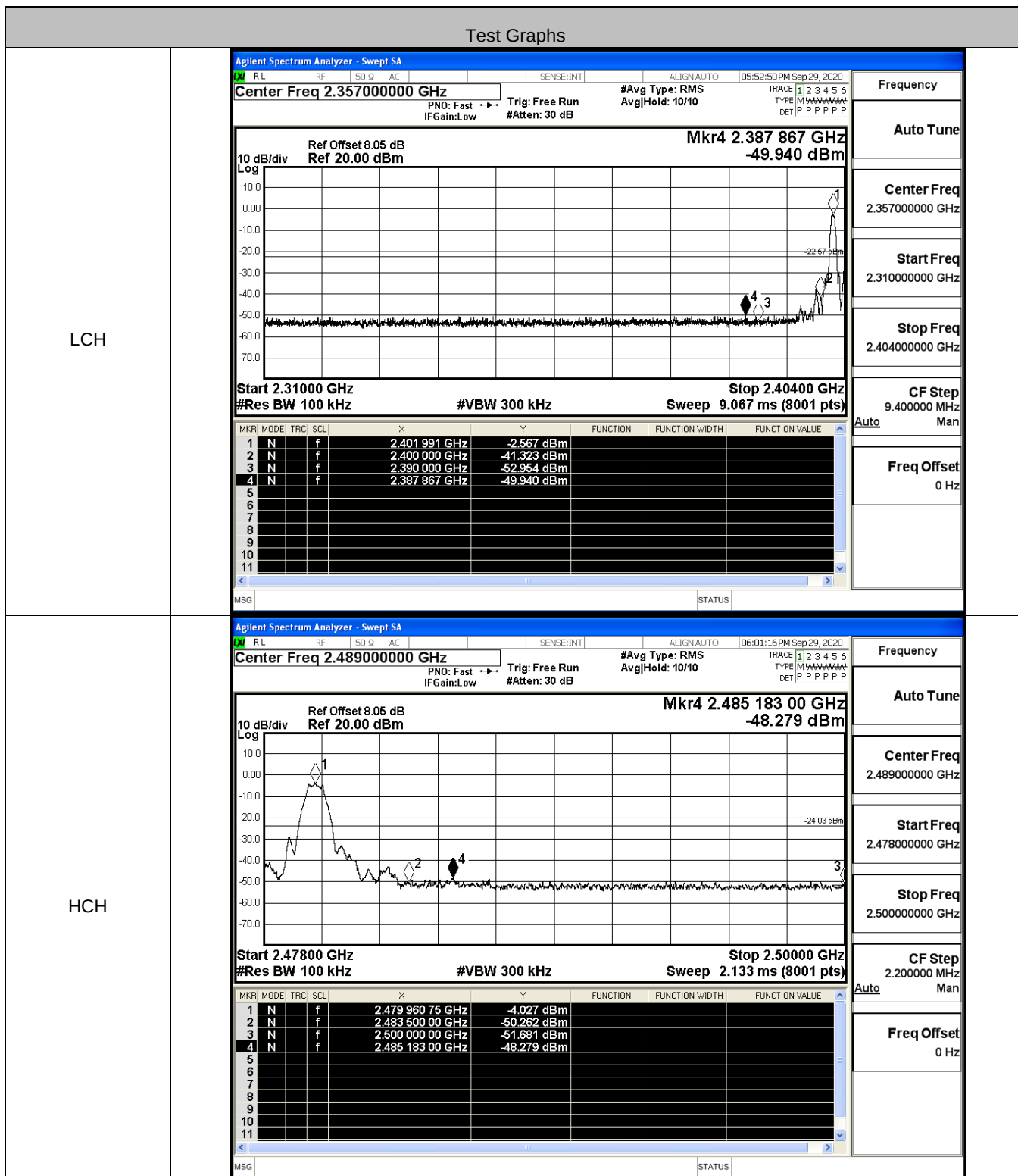


Puw/BT LE/HCH



B.6 Band-edge for RF Conducted Emissions

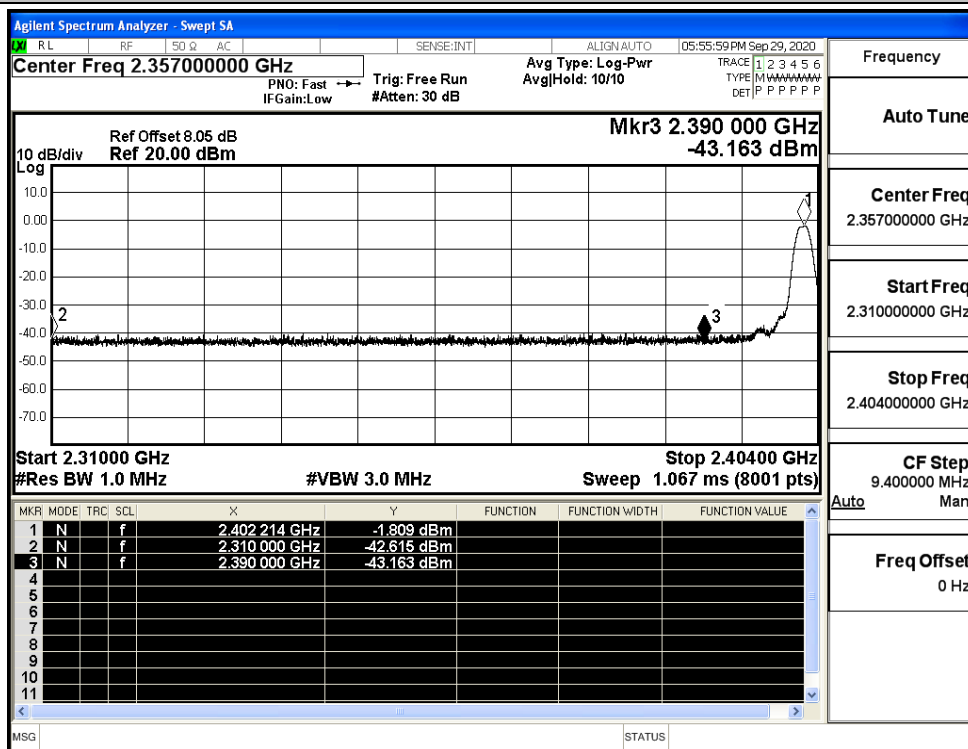
Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	-2.567	-49.940	-22.57	PASS
BT LE	HCH	-4.027	-48.279	-24.03	PASS



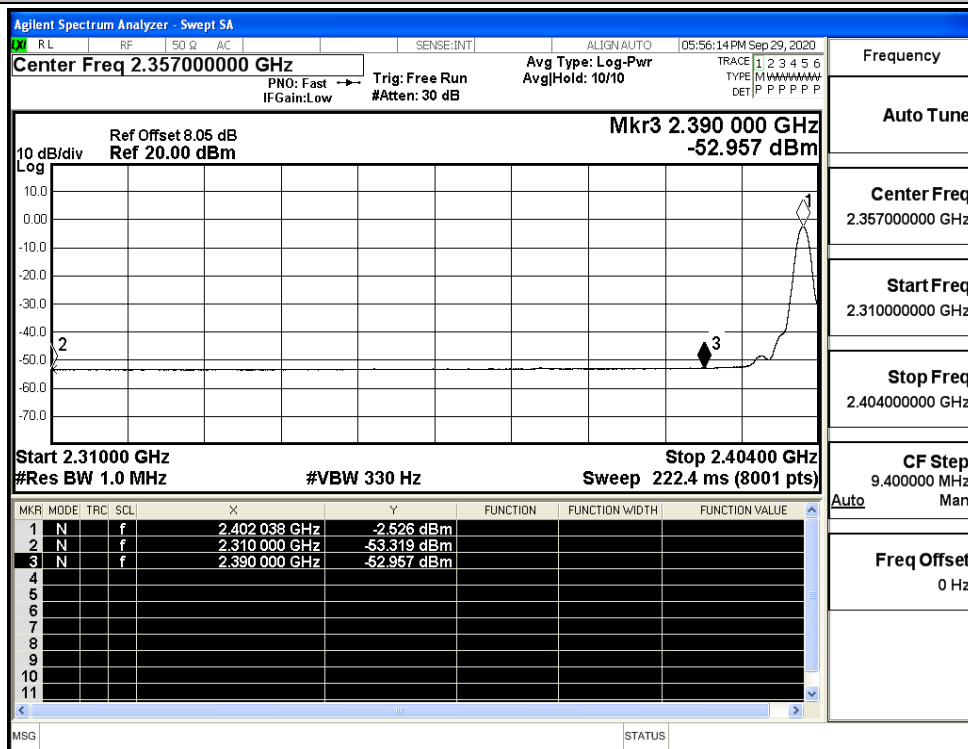
B.7 Restrict-band band-edge measurements

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	-42.62	3.0	0	55.64	PEAK	74	PASS
		Ant1	2310.0	-53.32	3.0	0	44.94	AV	54	PASS
		Ant1	2390.0	-43.16	3.0	0	55.1	PEAK	74	PASS
		Ant1	2390.0	-52.96	3.0	0	45.3	AV	54	PASS
	2480	Ant1	2483.5	-40.51	3.0	0	57.75	PEAK	74	PASS
		Ant1	2483.5	-49.49	3.0	0	48.77	AV	54	PASS
		Ant1	2500.0	-40.82	3.0	0	57.44	PEAK	74	PASS
		Ant1	2500.0	-52.29	3.0	0	45.97	AV	54	PASS

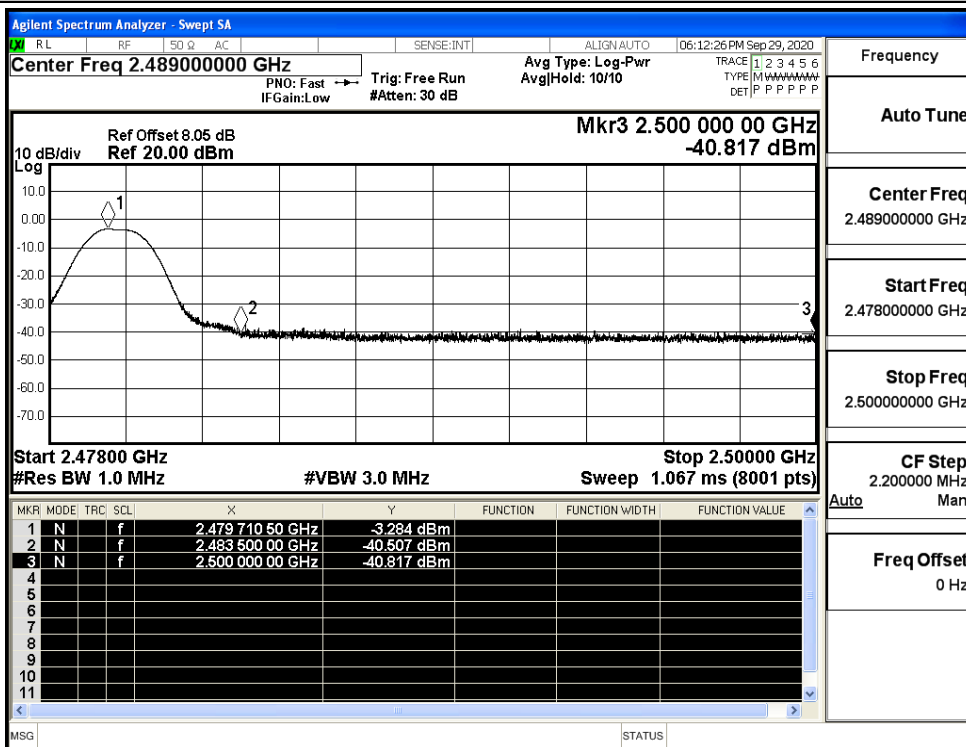
Restrict-band band-edge measurements_BT LE_2402_Ant1_PEAK



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

