

Appendix B

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

Product Name: Smart Door Lock

Trade Mark: KAADAS, Alfred

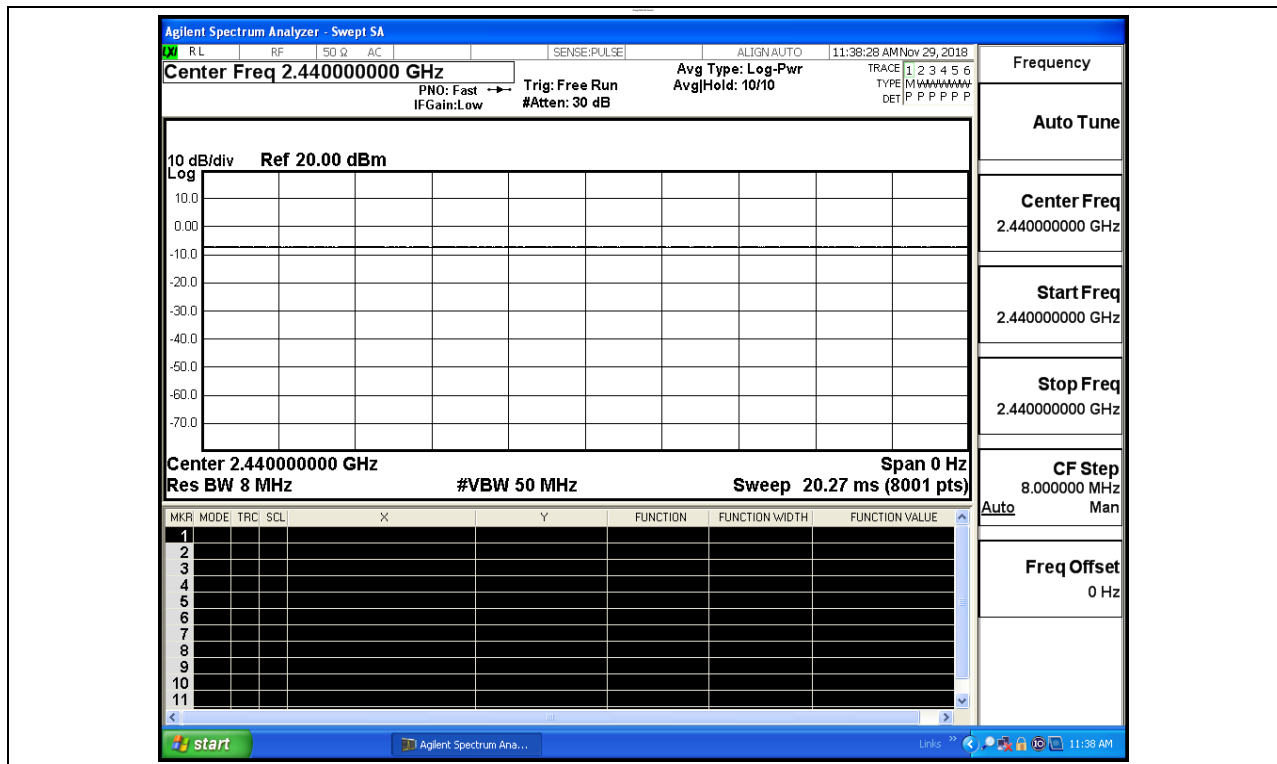
Test Model: DB1

Environmental Conditions

Temperature:	23.5 ° C
Relative Humidity:	52.6%
ATM Pressure:	100.0 kPa
Test Engineer:	Diamond.Lu
Supervised by:	Jayden.Zhuo

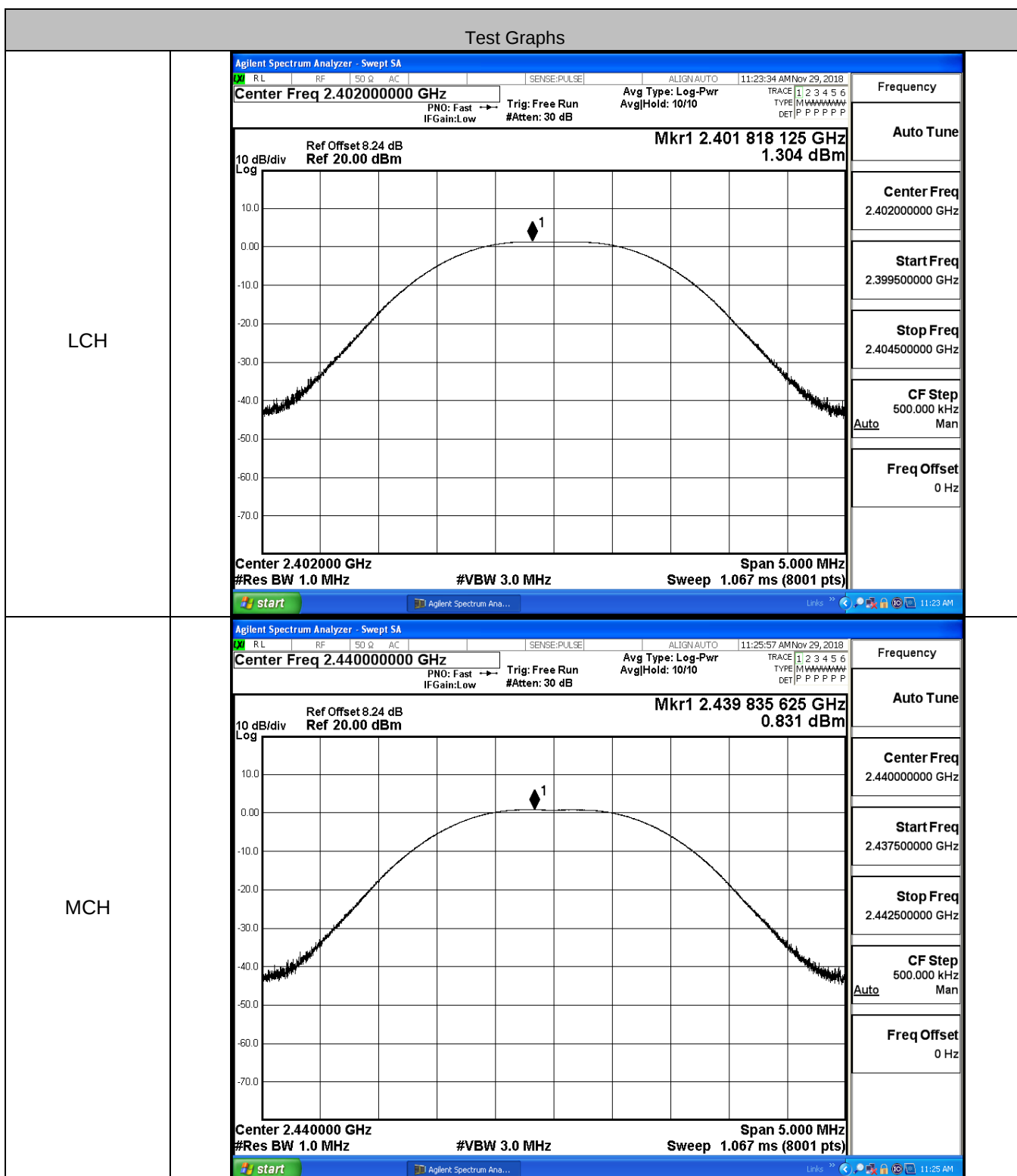
B.1 Duty Cycle

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

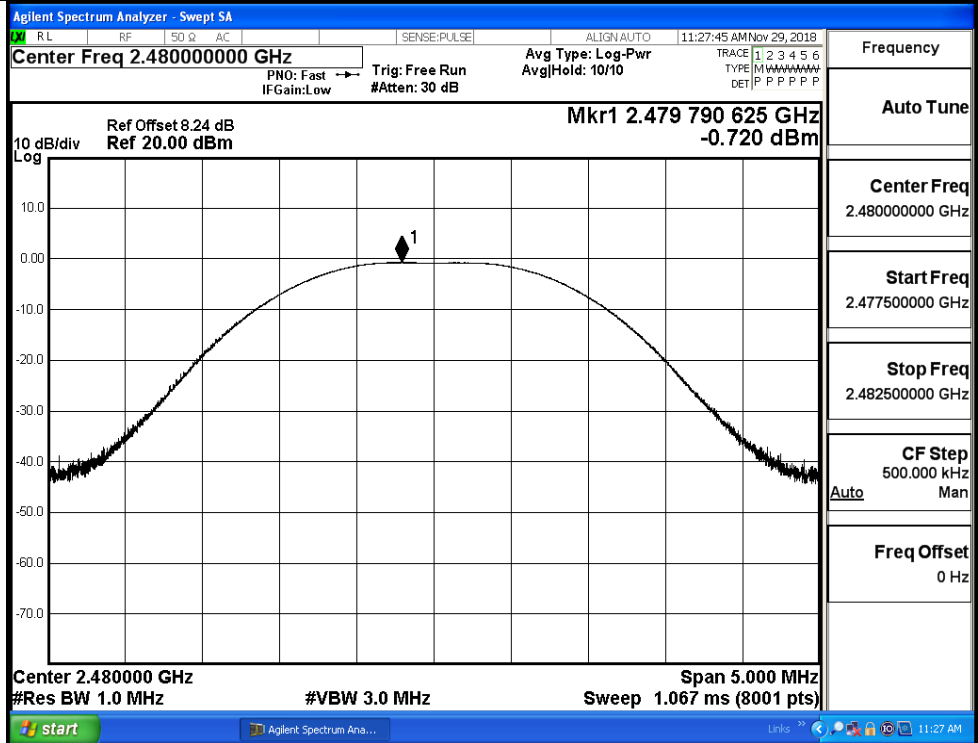


B.2 Maximum Conducted Peak Output Power

Mode	Channel	Conduct Peak Power[dBm]	Limit [dBm]	Verdict
BT LE	LCH	1.304	30	PASS
BT LE	MCH	0.831	30	PASS
BT LE	HCH	-0.72	30	PASS



HCH

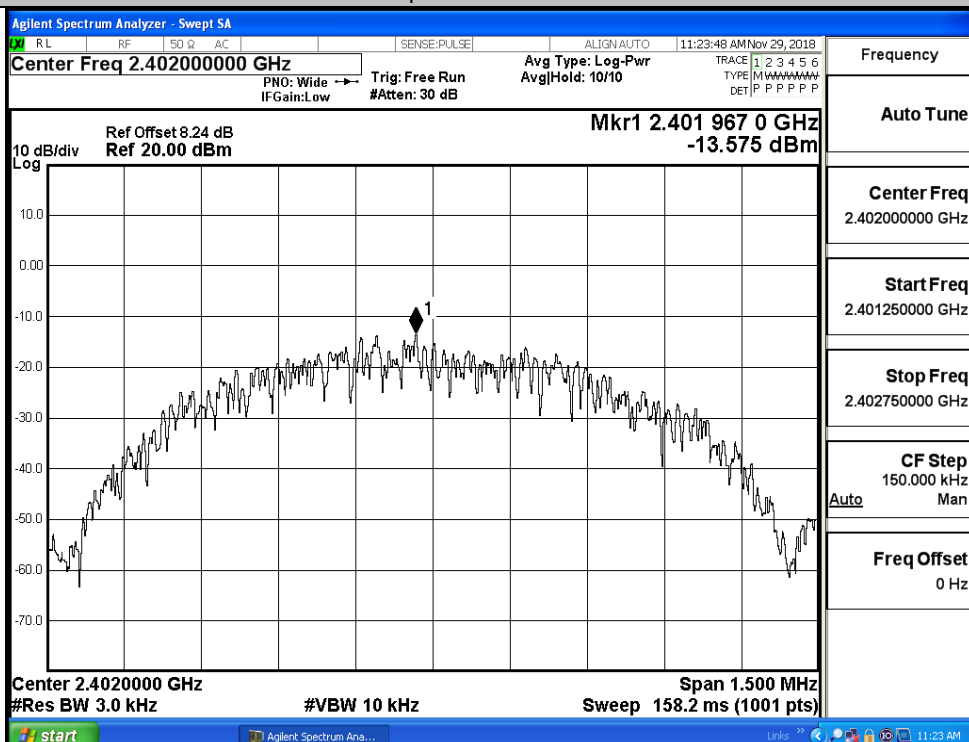


B.3 Maximum Power Spectral Density

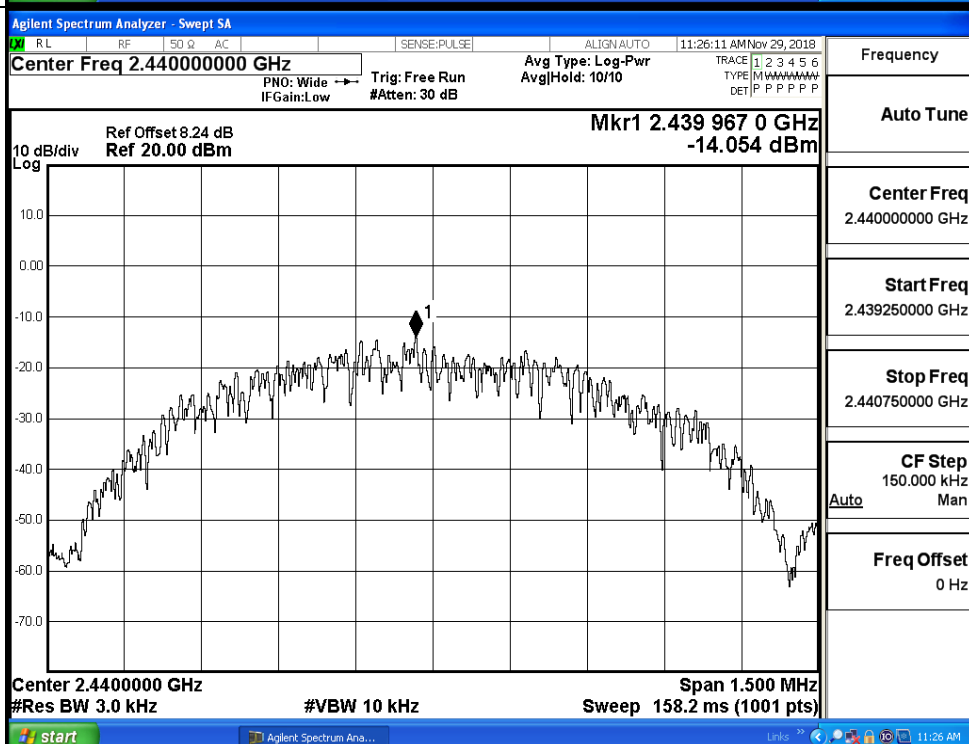
Mode	Channel	PSD [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
BT LE	LCH	-13.575	8	PASS
BT LE	MCH	-14.054	8	PASS
BT LE	HCH	-15.774	8	PASS

Test Graphs

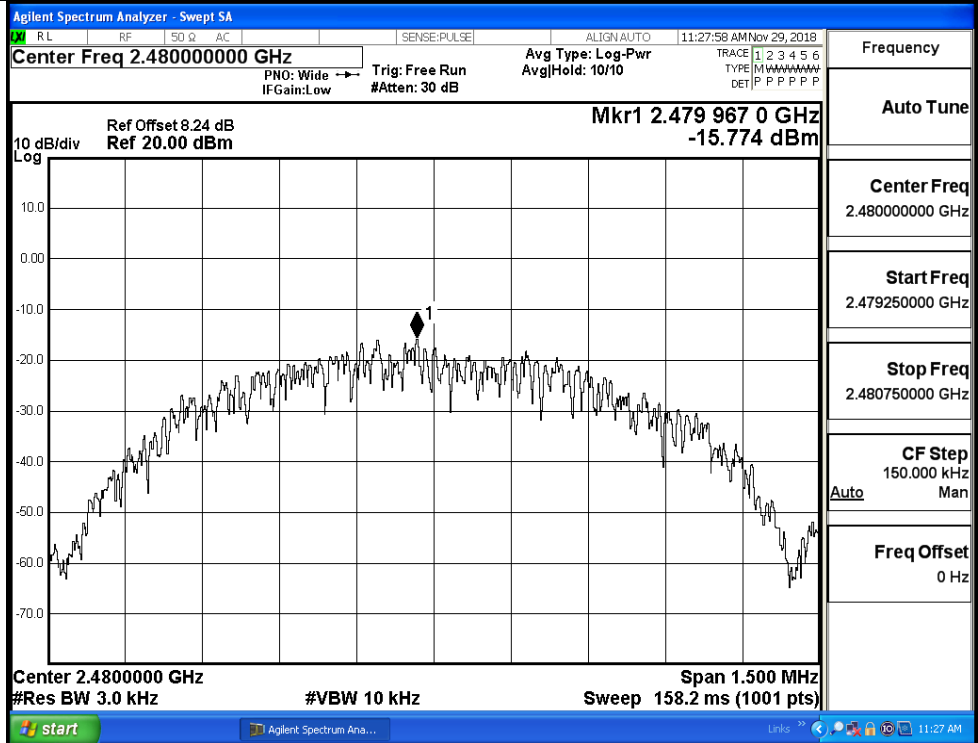
LCH



MCH



HCH

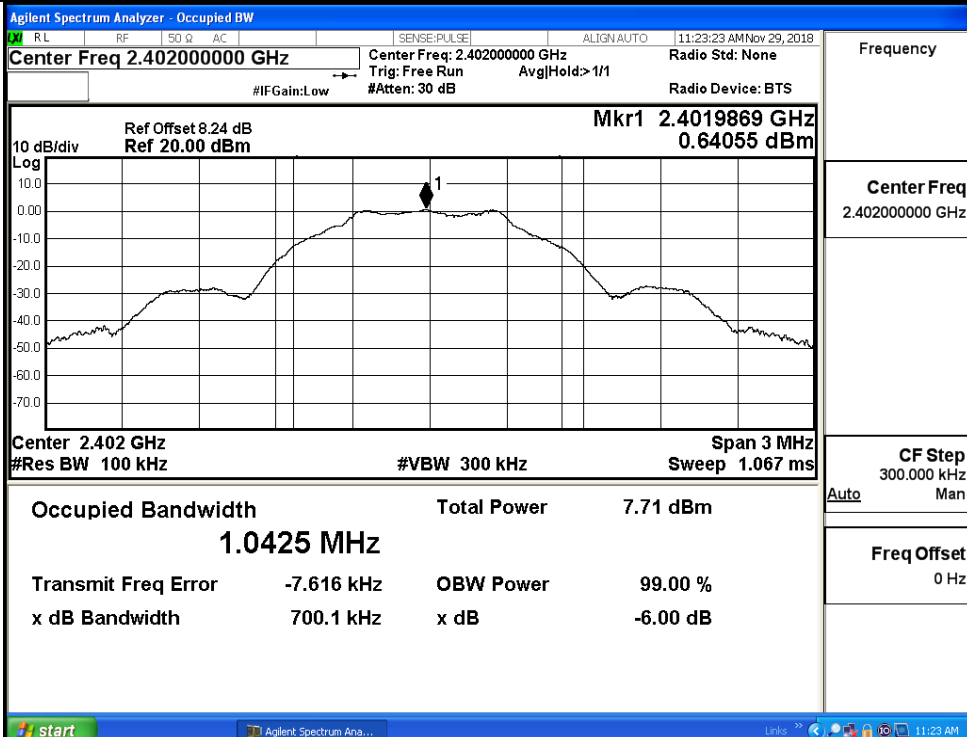


B.4 6dB Bandwidth

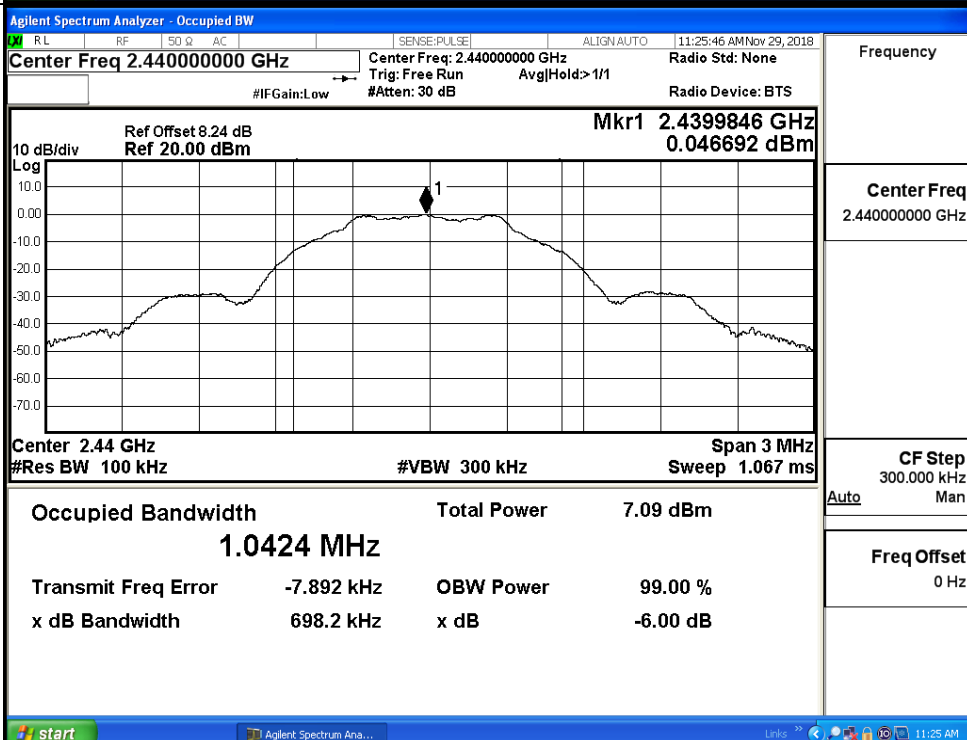
Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
BT LE	LCH	0.7001	≥ 0.5	PASS
BT LE	MCH	0.6982	≥ 0.5	PASS
BT LE	HCH	0.6915	≥ 0.5	PASS

Test Graphs

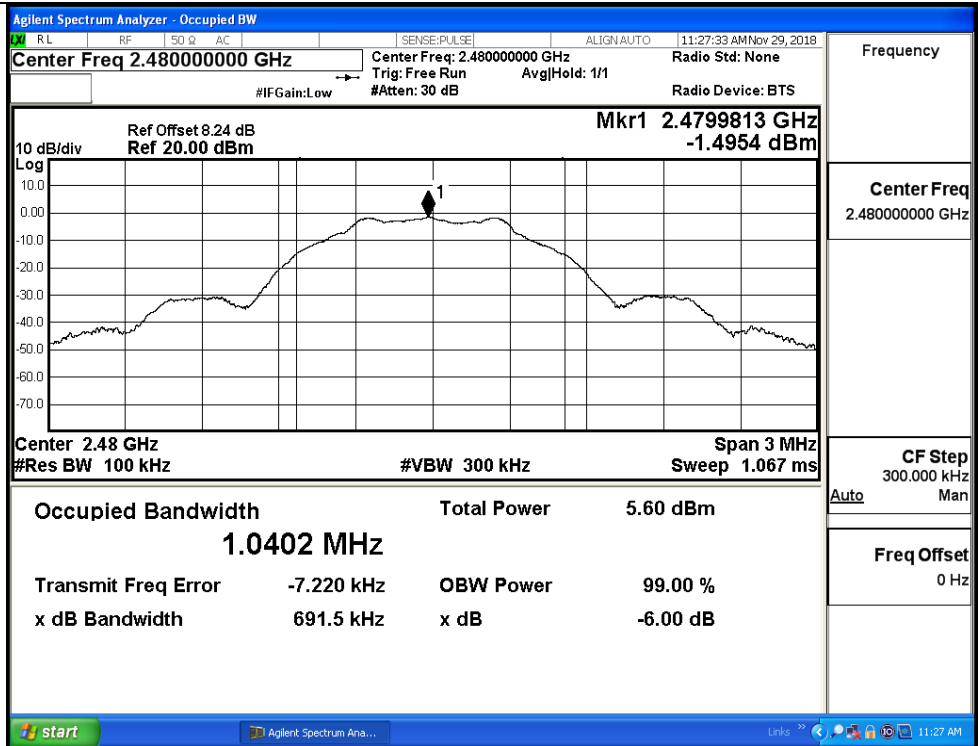
LCH



MCH



HCH



Frequency

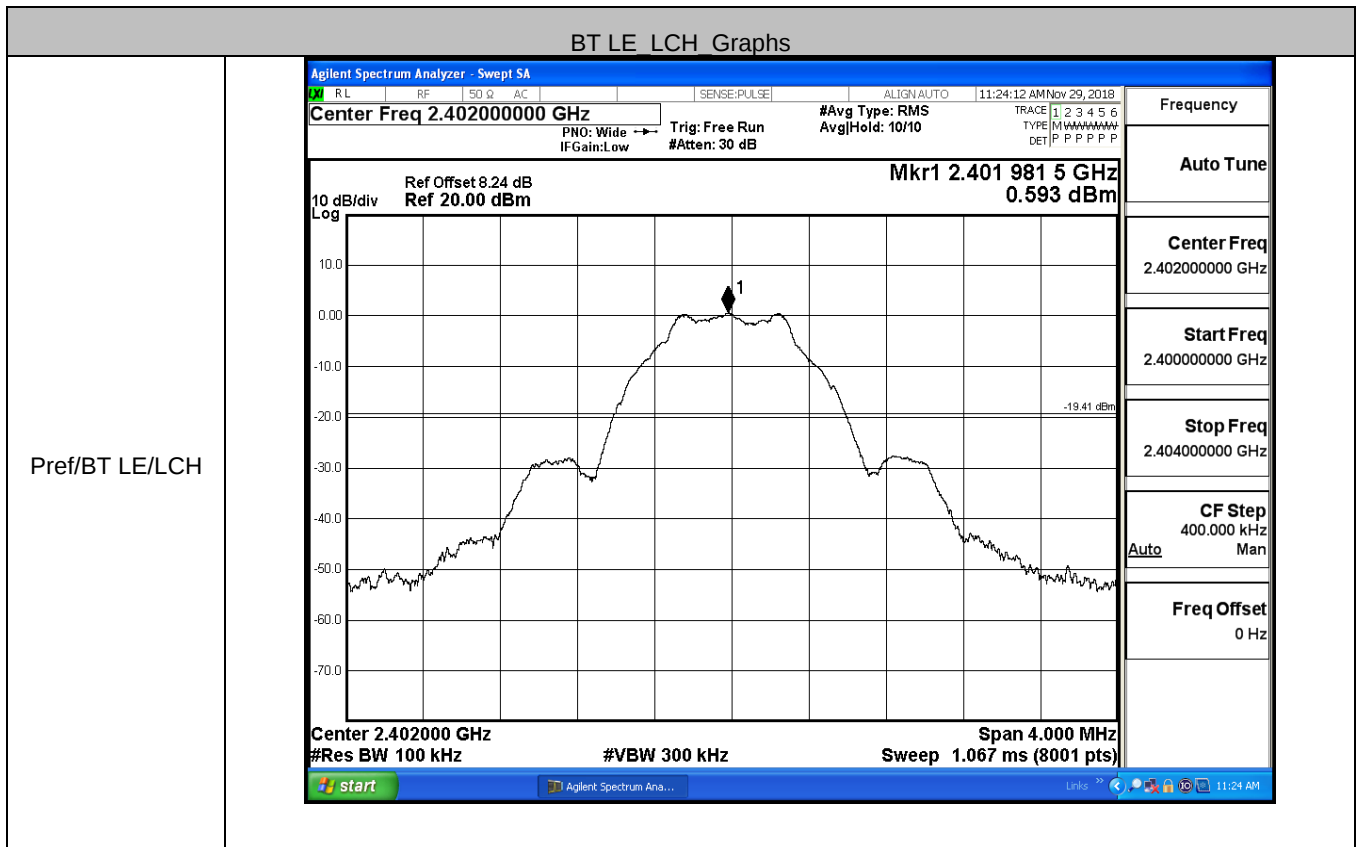
Center Freq
2.480000000 GHz

CF Step
300.000 kHz
Auto Man

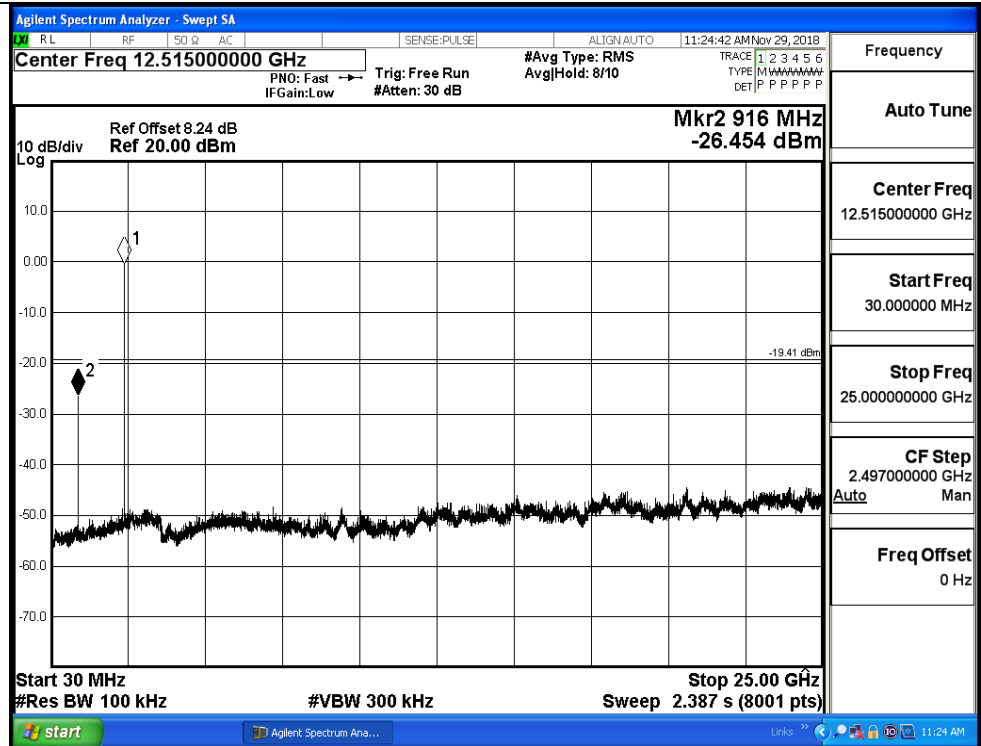
Freq Offset
0 Hz

B.5 RF Conducted Spurious Emissions

Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	0.593	-26.454	-19.407	PASS
BT LE	MCH	0.044	-33.329	-19.956	PASS
BT LE	HCH	-1.532	-37.446	-21.532	PASS

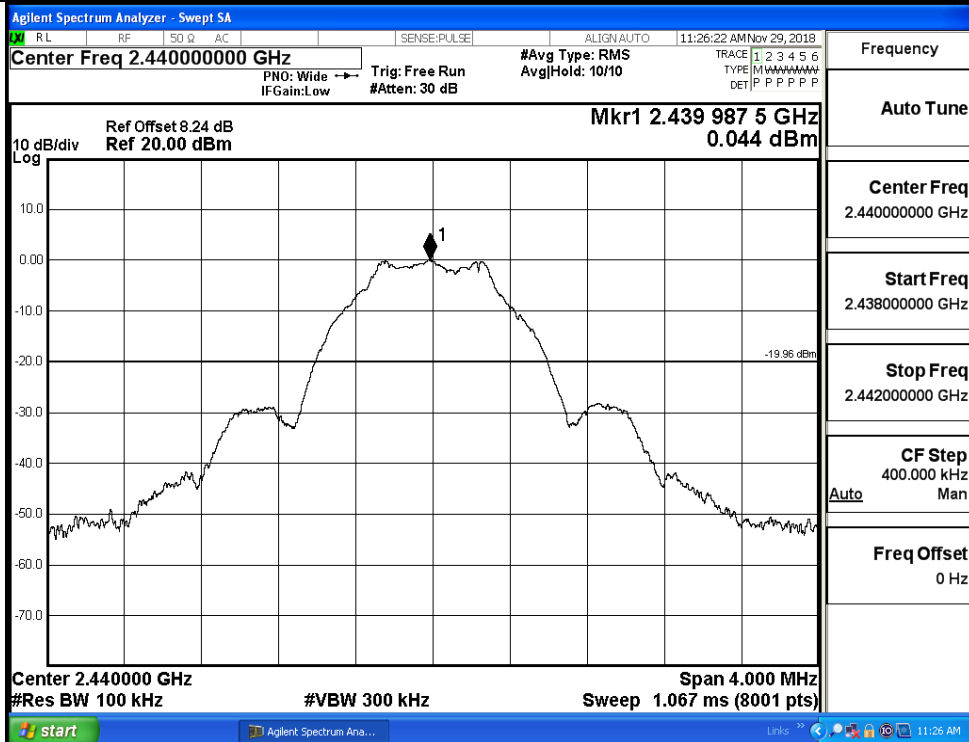


Puw/BT LE/LCH

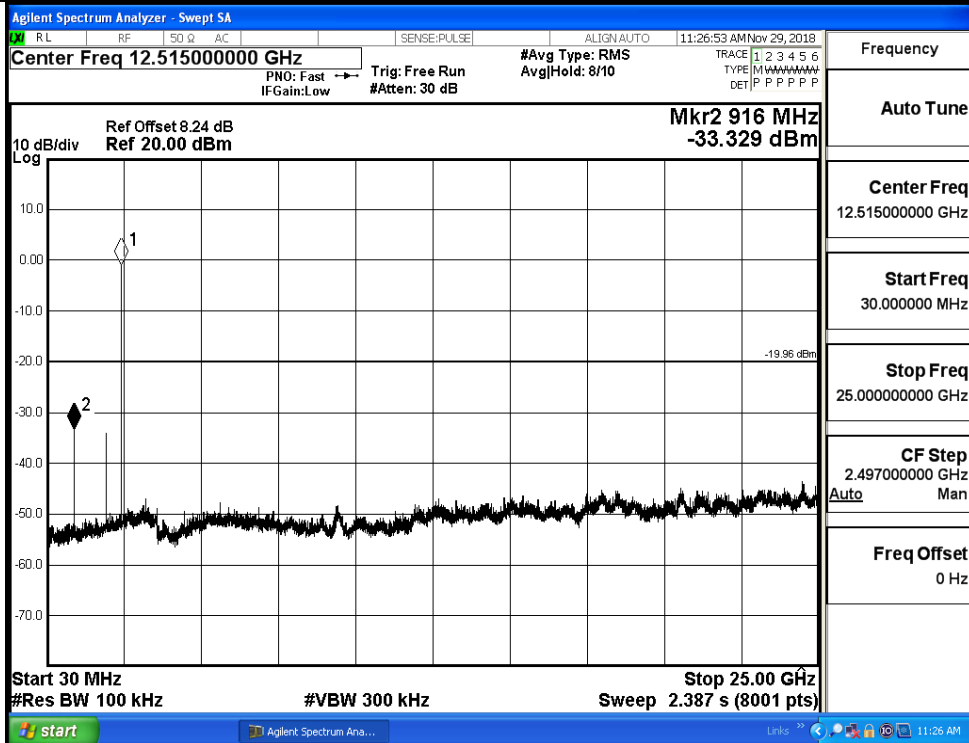


BT LE MCH Graphs

Pref/BT LE/MCH

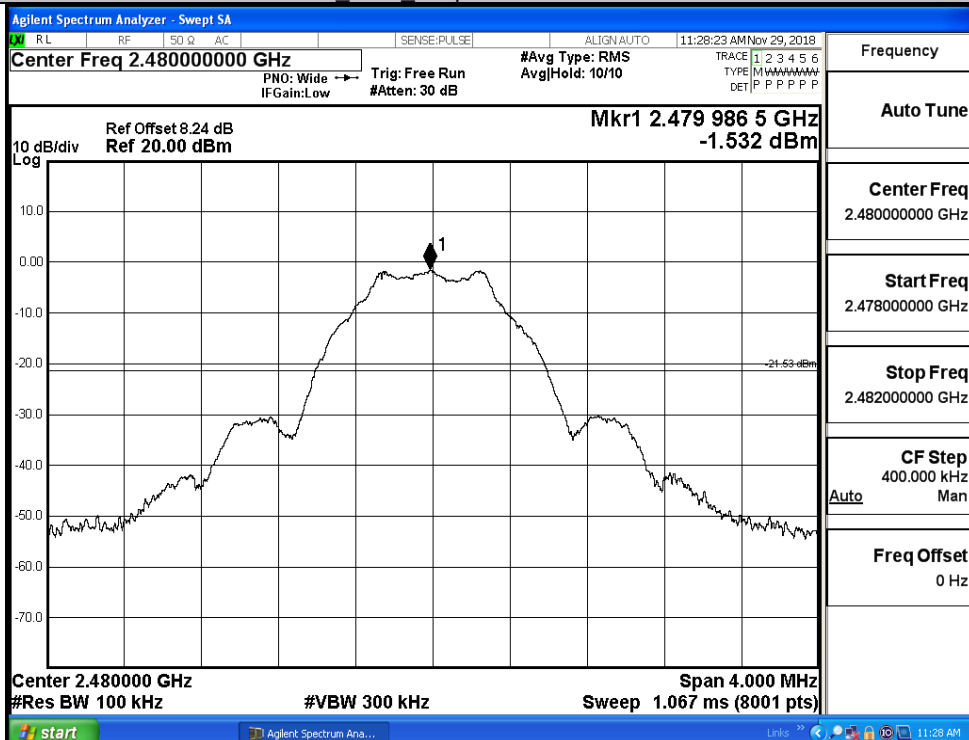


Puw/BT LE/MCH

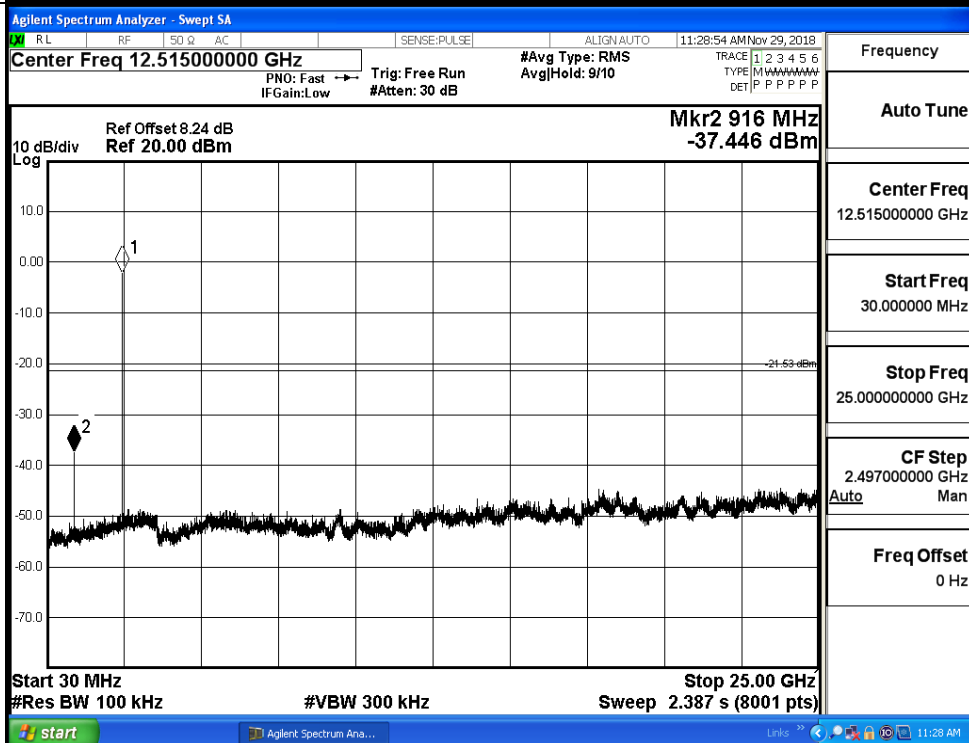


BT LE HCH Graphs

Pref/BT LE/HCH

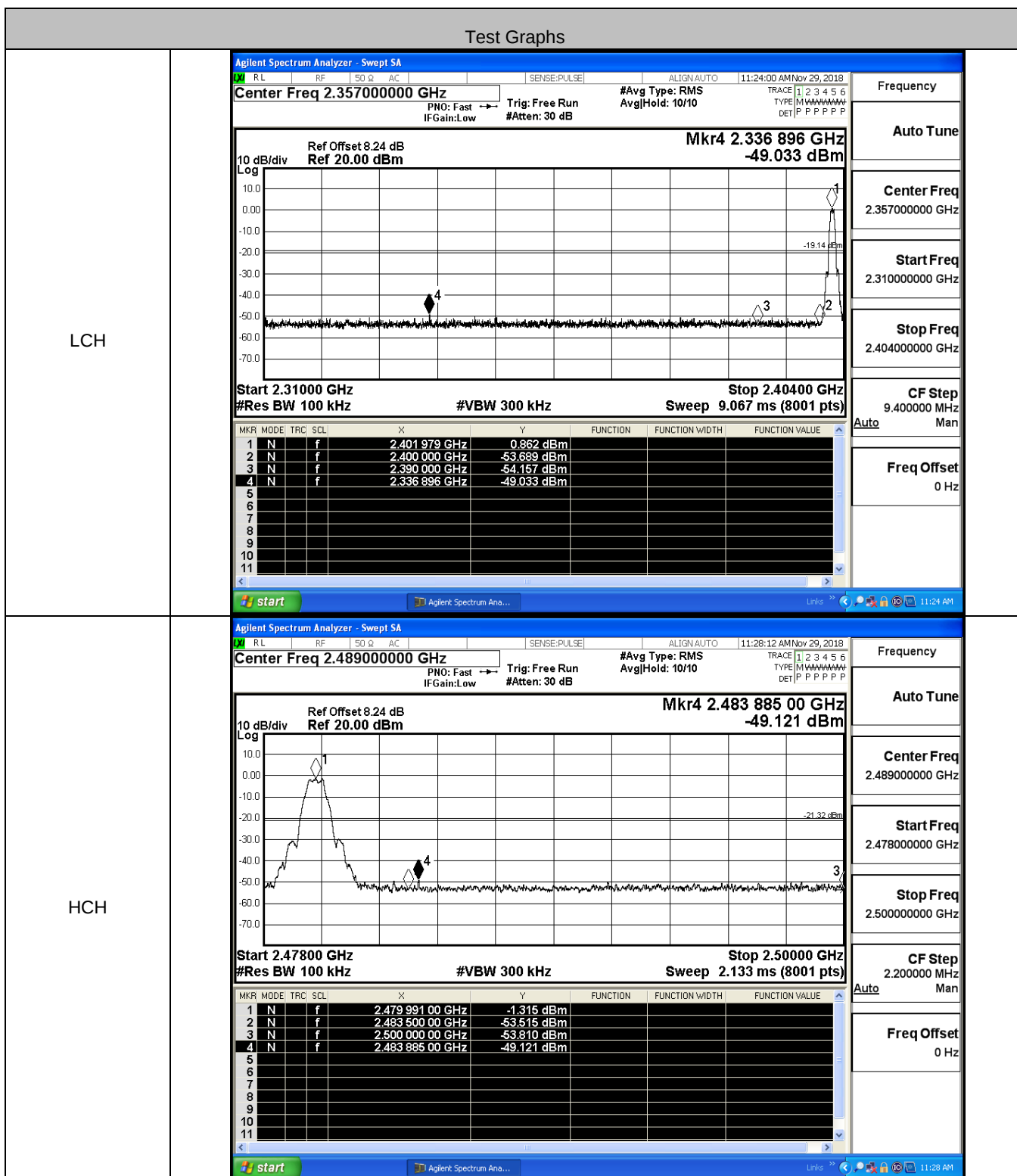


Puw/BT LE/HCH



B.6 Band-edge for RF Conducted Emissions

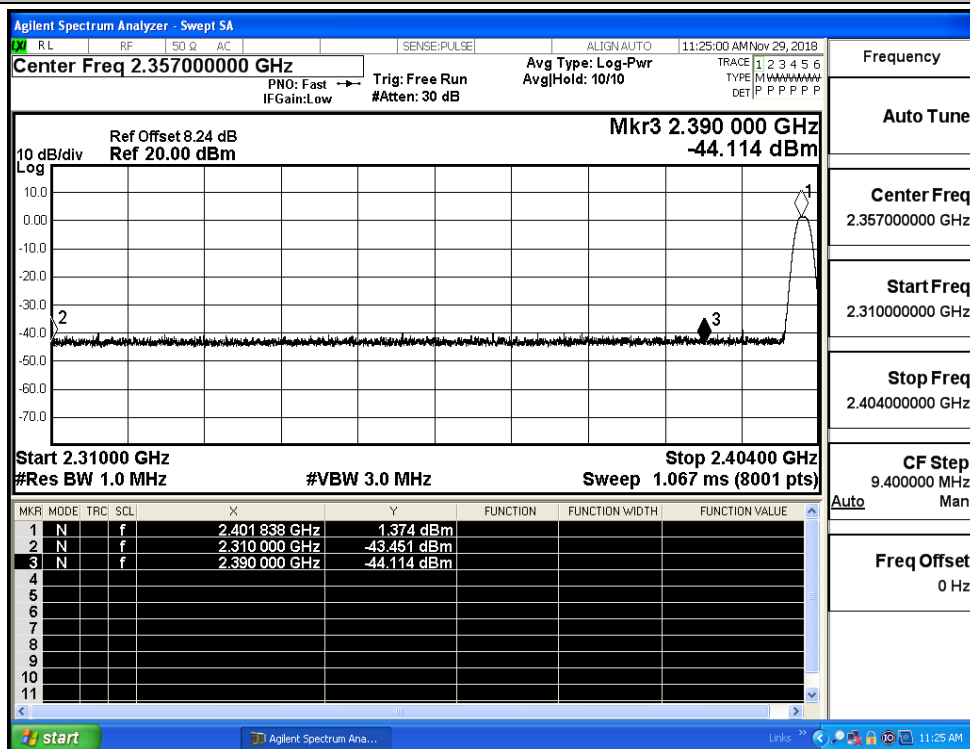
Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	0.862	-49.033	-19.14	PASS
BT LE	HCH	-1.315	-49.121	-21.32	PASS



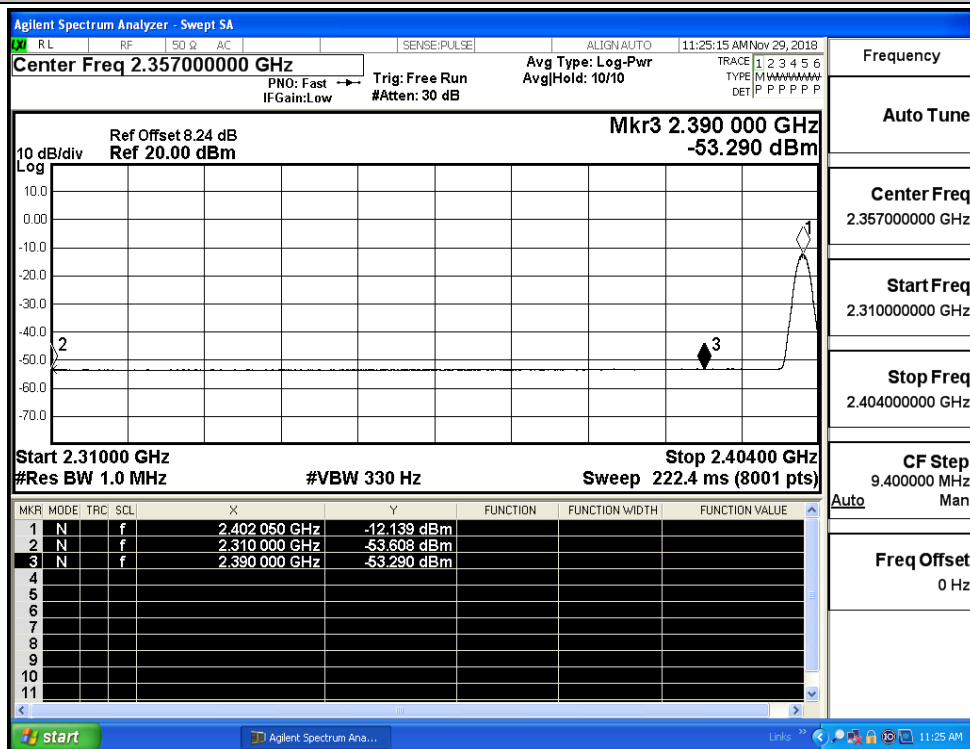
B.7 Restrict-band band-edge measurements

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	-43.45	2.0	0	51.81	PEAK	74	PASS
		Ant1	2310.0	-53.61	2.0	0	41.65	AV	54	PASS
		Ant1	2390.0	-44.11	2.0	0	51.14	PEAK	74	PASS
		Ant1	2390.0	-53.29	2.0	0	41.97	AV	54	PASS
	2480	Ant1	2483.5	-43.54	2.0	0	51.71	PEAK	74	PASS
		Ant1	2483.5	-52.97	2.0	0	42.29	AV	54	PASS
		Ant1	2500.0	-43.24	2.0	0	52.02	PEAK	74	PASS
		Ant1	2500.0	-52.82	2.0	0	42.44	AV	54	PASS

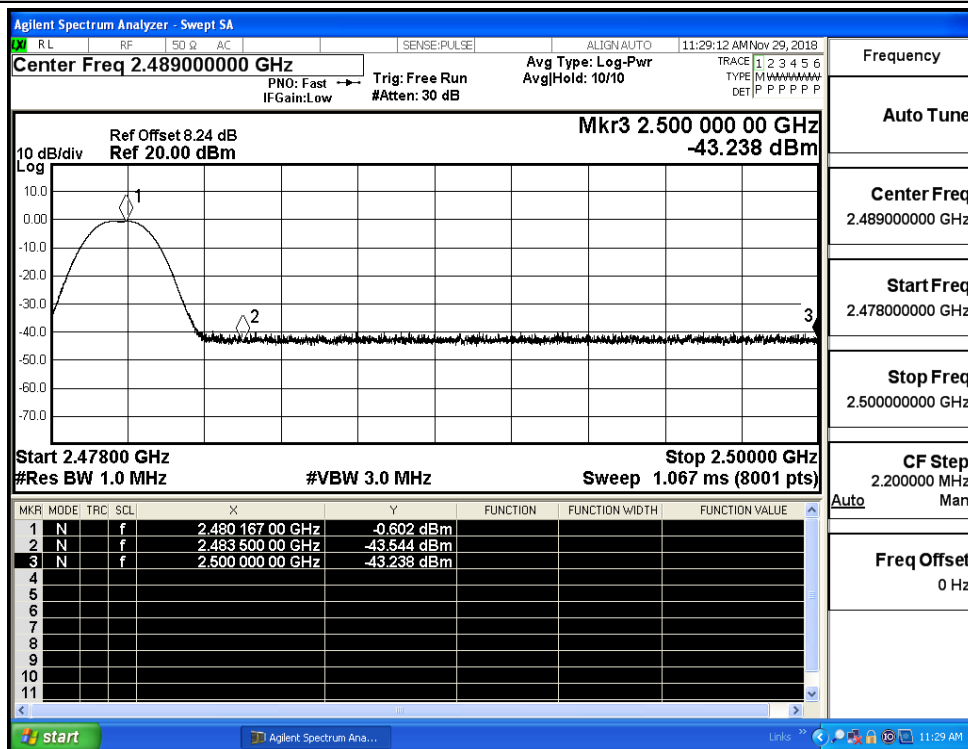
Restrict-band band-edge measurements_BT LE_2402_Ant1_PEAK



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

