

Appendix B

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

Product Name: Mechanical bluetooth keyboard

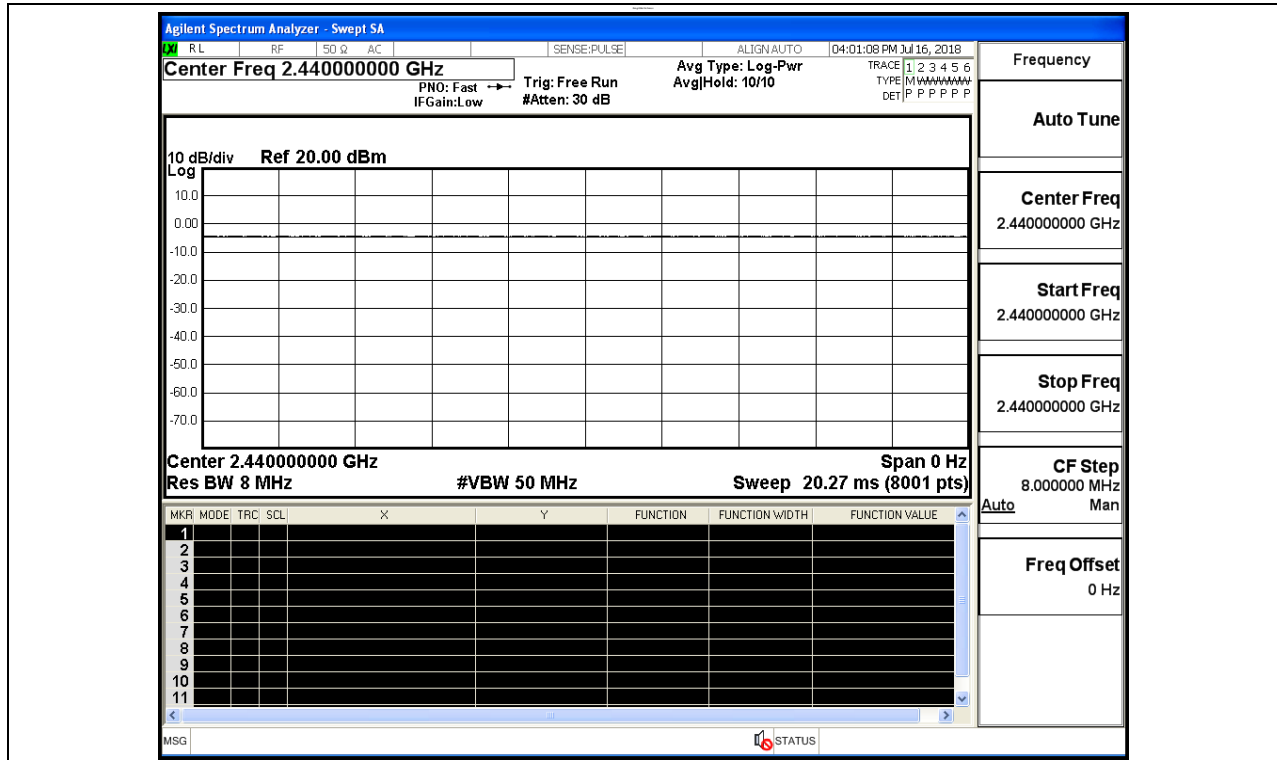
Test Model: K950

Environmental Conditions

Temperature:	22.3 ° C
Relative Humidity:	52.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Mina.Xu
Supervised by:	Jayden.Zhuo

B.1 Duty Cycle

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

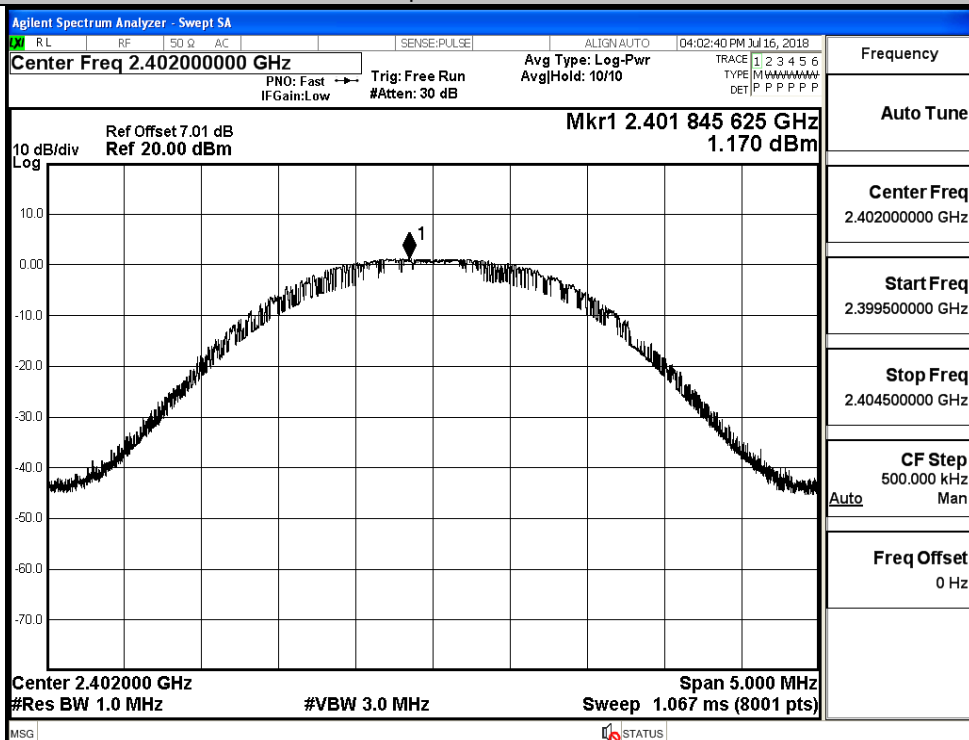


B.2 Maximum Conducted Peak Output Power

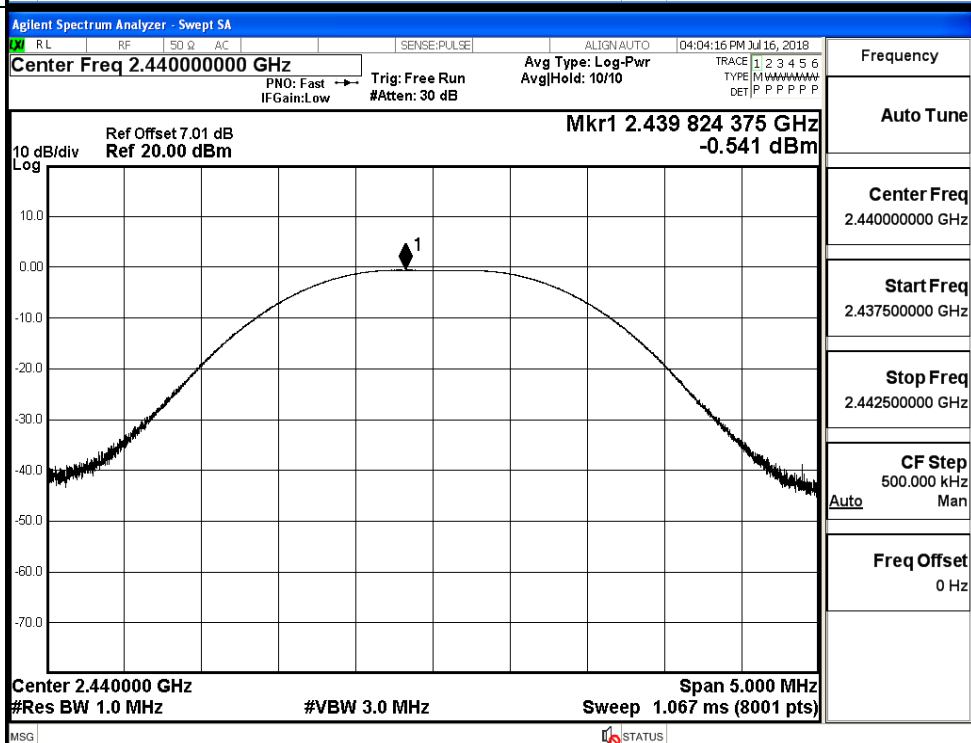
Mode	Channel	Conduct Peak Power[dBm]	Limit [dBm]	Verdict
BT LE	LCH	1.17	30	PASS
BT LE	MCH	-0.541	30	PASS
BT LE	HCH	-0.312	30	PASS

Test Graphs

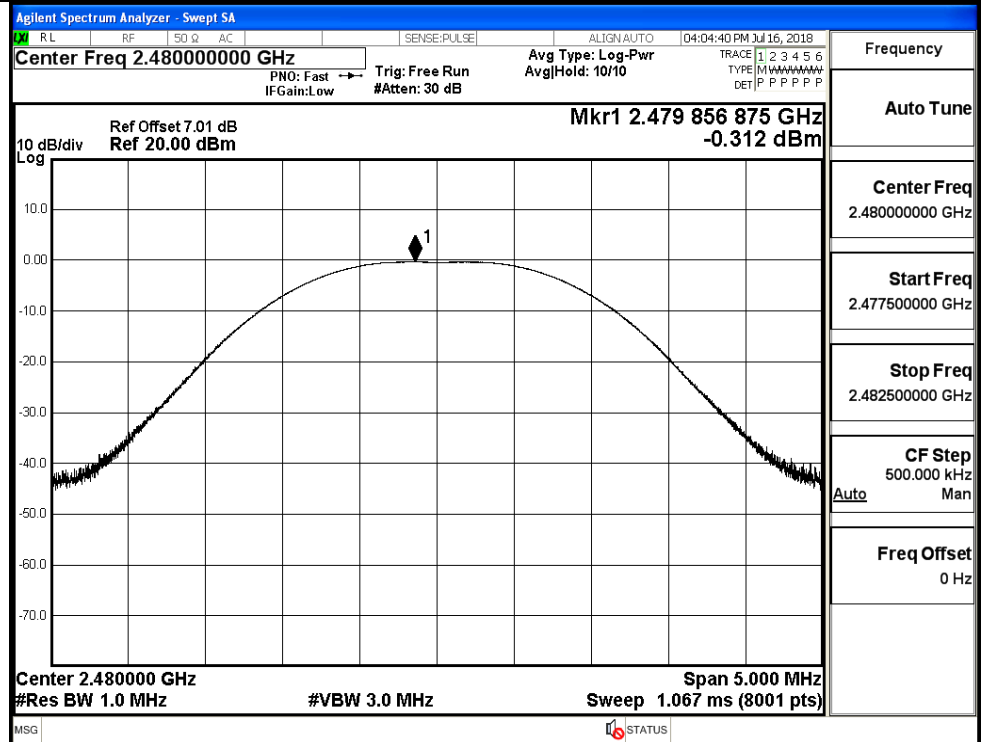
LCH



MCH



HCH

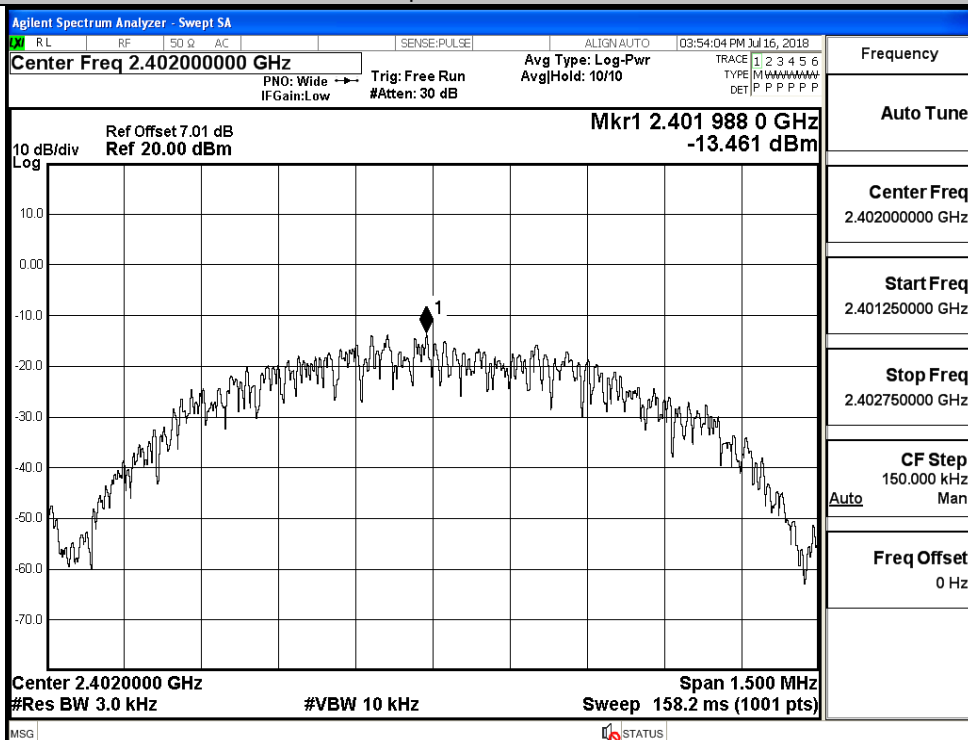


B.3 Maximum Power Spectral Density

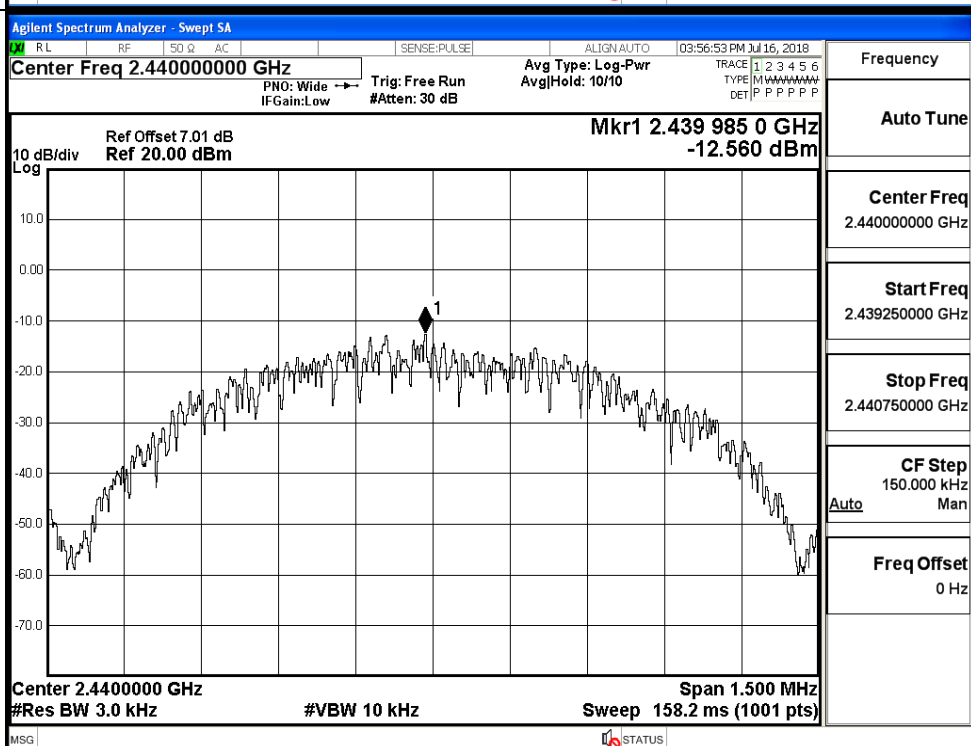
Mode	Channel	PSD [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
BT LE	LCH	-13.461	8	PASS
BT LE	MCH	-12.560	8	PASS
BT LE	HCH	-12.392	8	PASS

Test Graphs

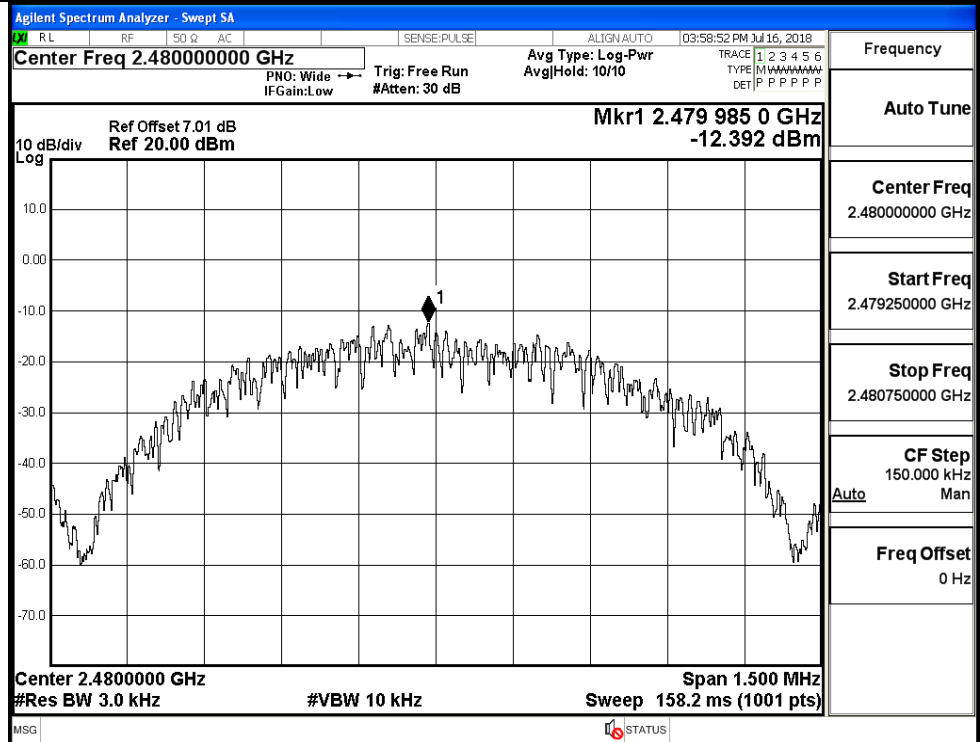
LCH



MCH



HCH

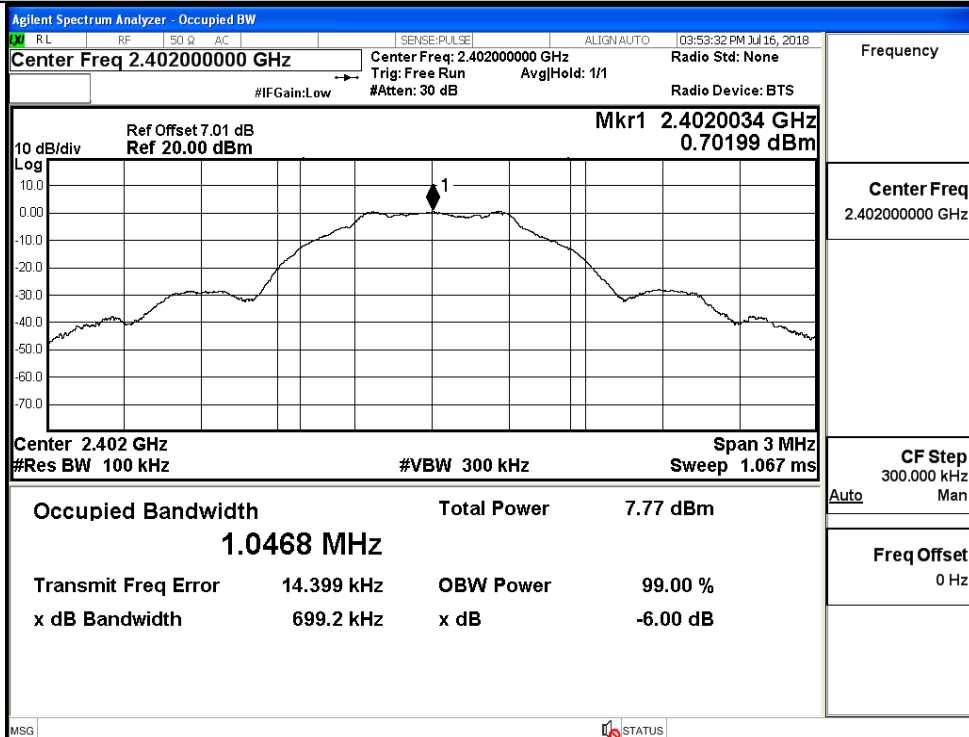


B.4 6dB Bandwidth

Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
BT LE	LCH	0.6992	≥ 0.5	PASS
BT LE	MCH	0.6990	≥ 0.5	PASS
BT LE	HCH	0.6864	≥ 0.5	PASS

Test Graphs

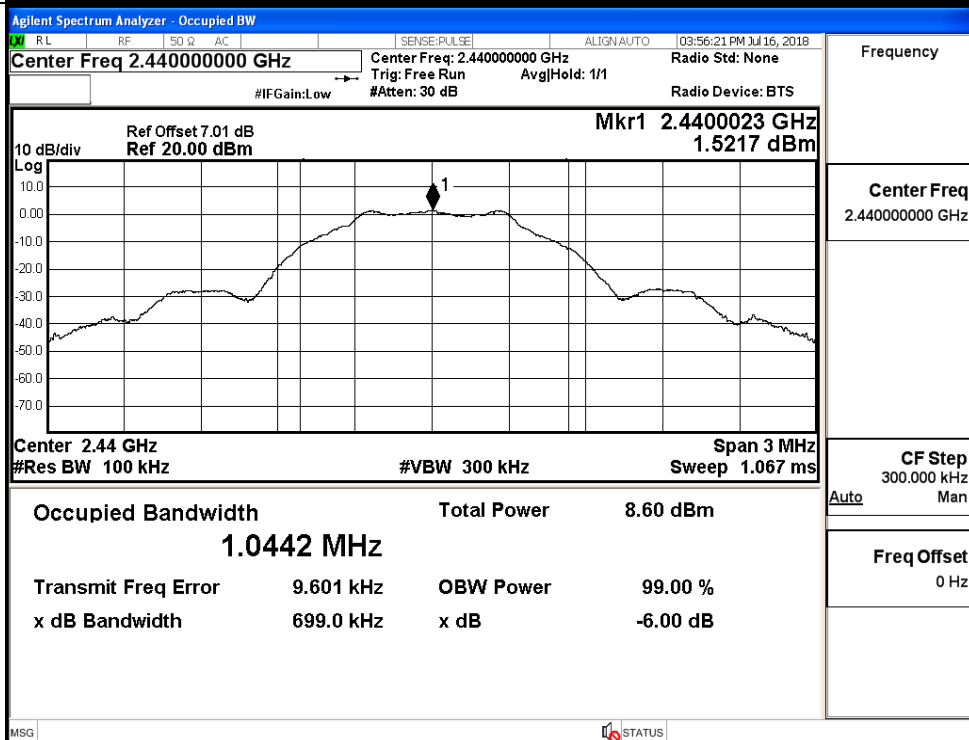
LCH



Frequency

Center Freq
2.402000000 GHzCF Step
300.000 kHz
Auto ManFreq Offset
0 Hz

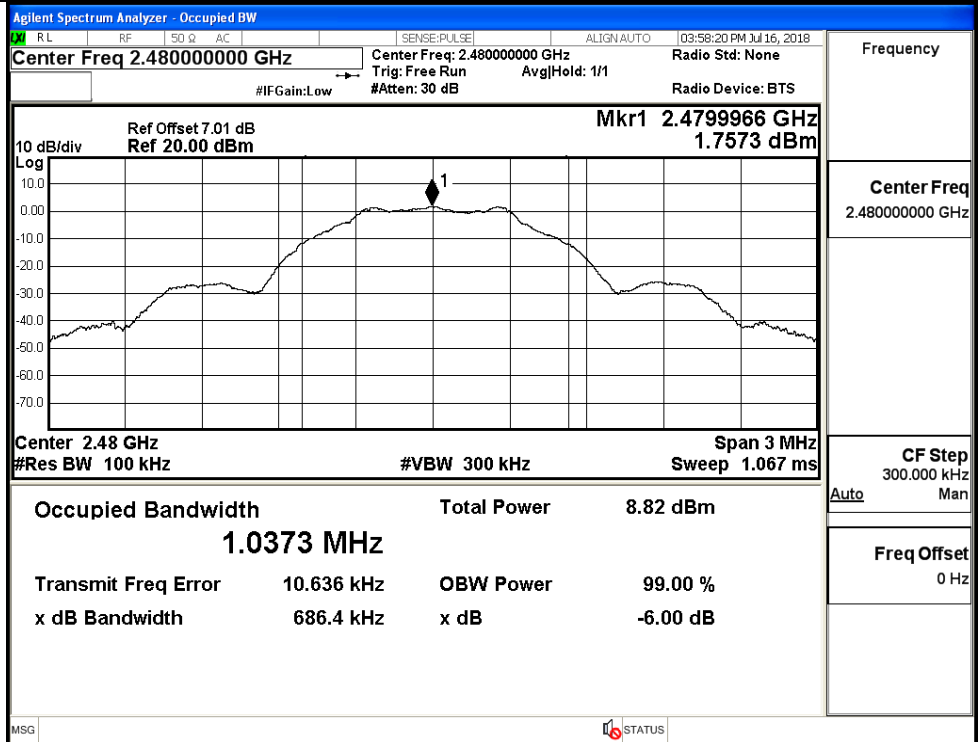
MCH



Frequency

Center Freq
2.440000000 GHzCF Step
300.000 kHz
Auto ManFreq Offset
0 Hz

HCH

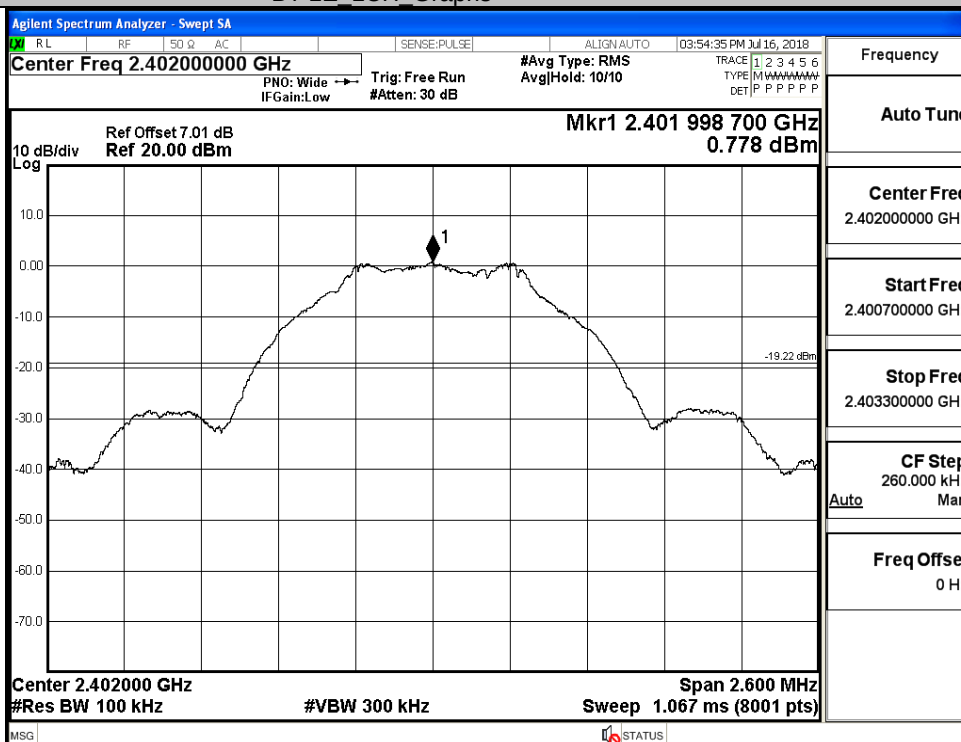


B.5 RF Conducted Spurious Emissions

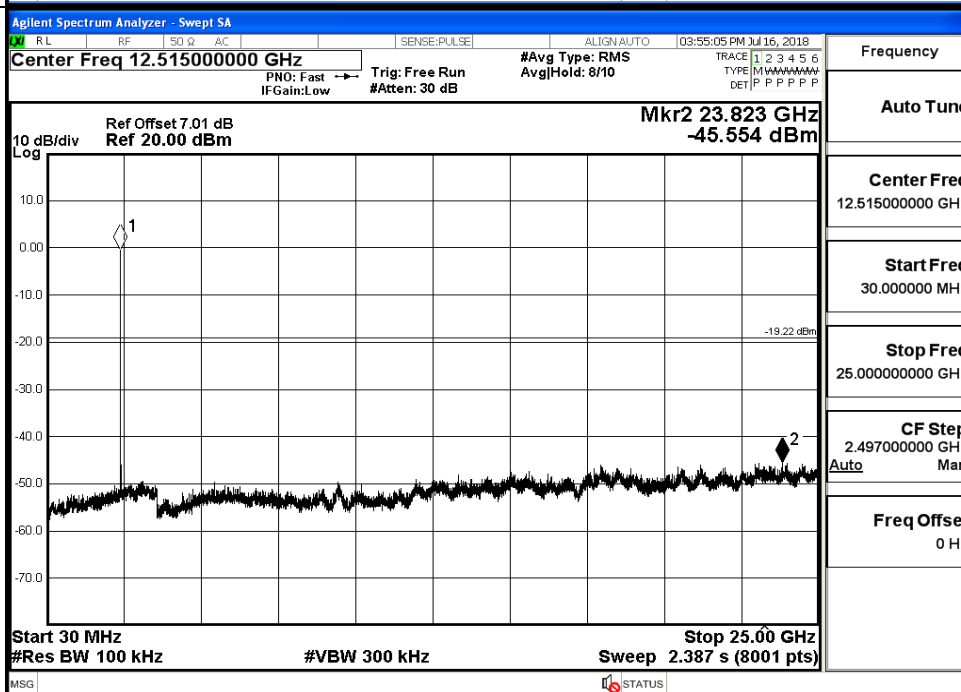
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	0.778	-45.554	-19.222	PASS
BT LE	MCH	1.517	-44.916	-18.483	PASS
BT LE	HCH	1.798	-45.484	-18.202	PASS

BT LE LCH Graphs

Pref/BT LE/LCH

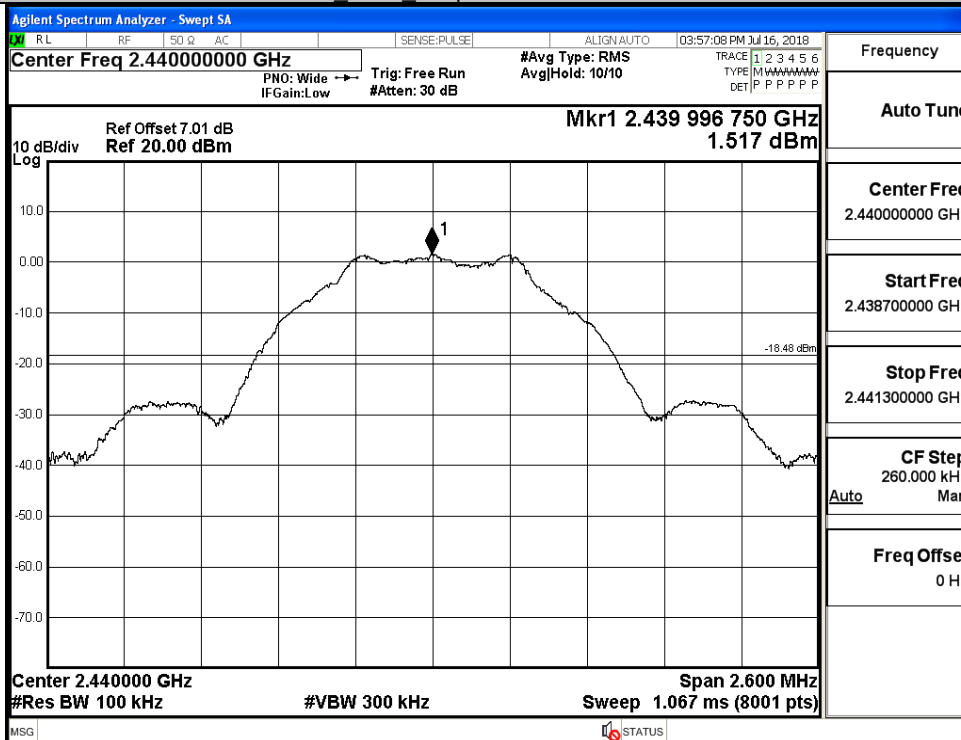


Puw/BT LE/LCH

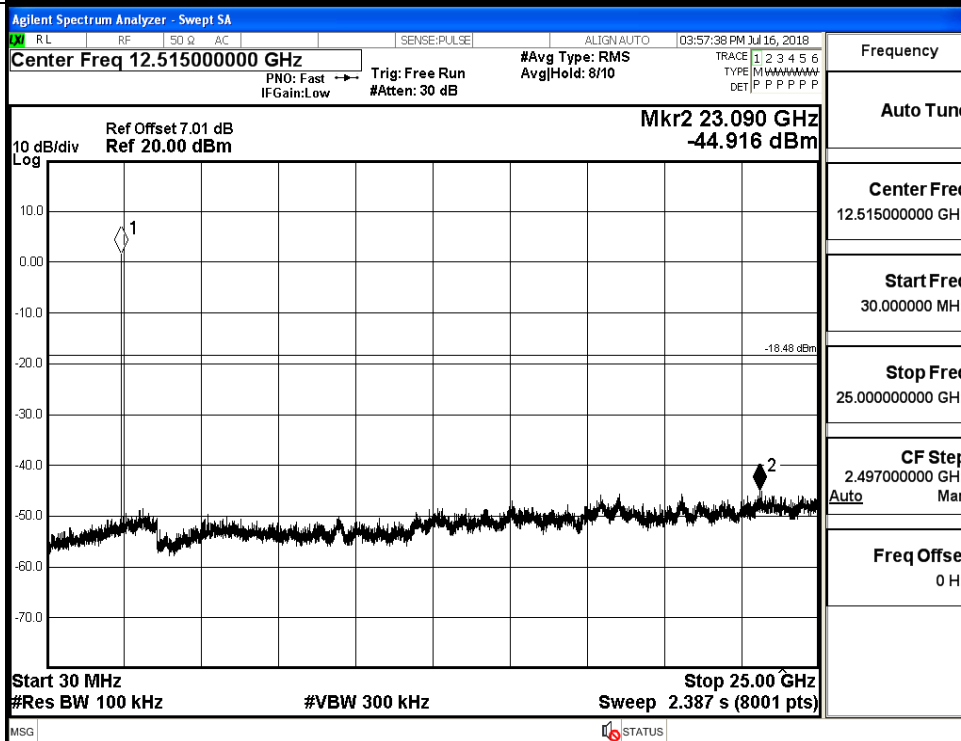


BT LE MCH Graphs

Pref/BT LE/MCH

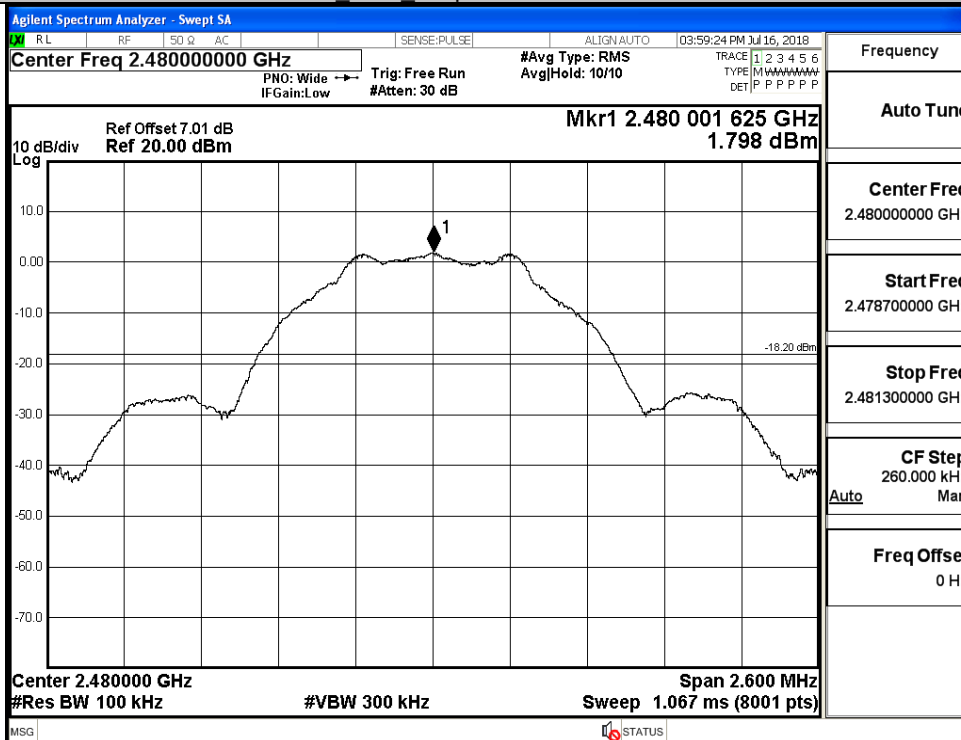


Puw/BT LE/MCH

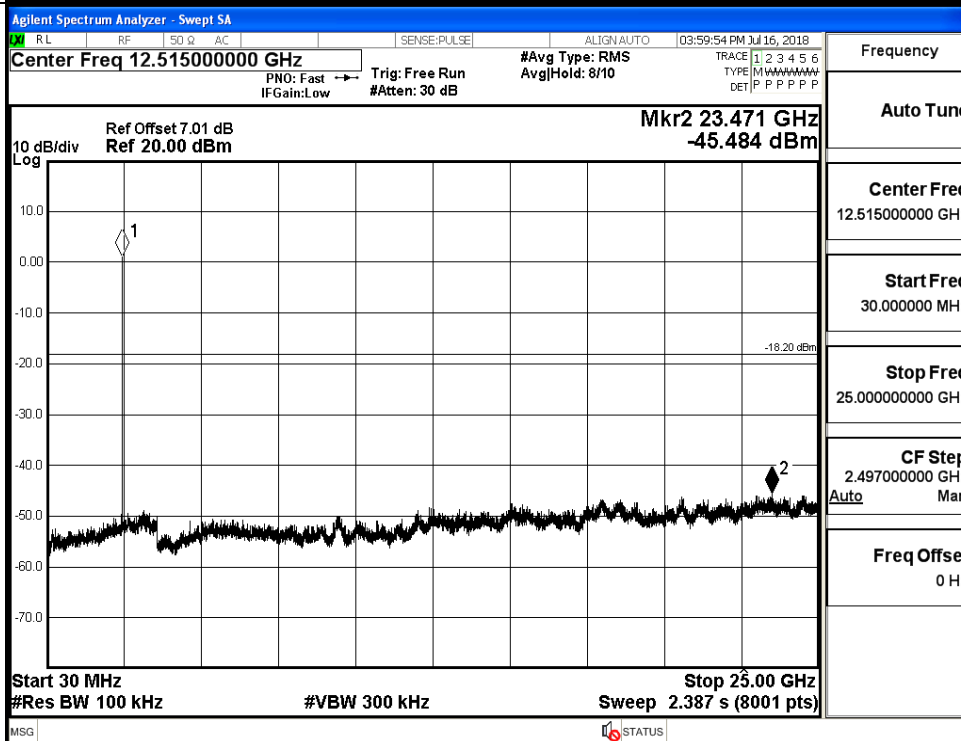


BT LE HCH Graphs

Pref/BT LE/HCH



Puw/BT LE/HCH

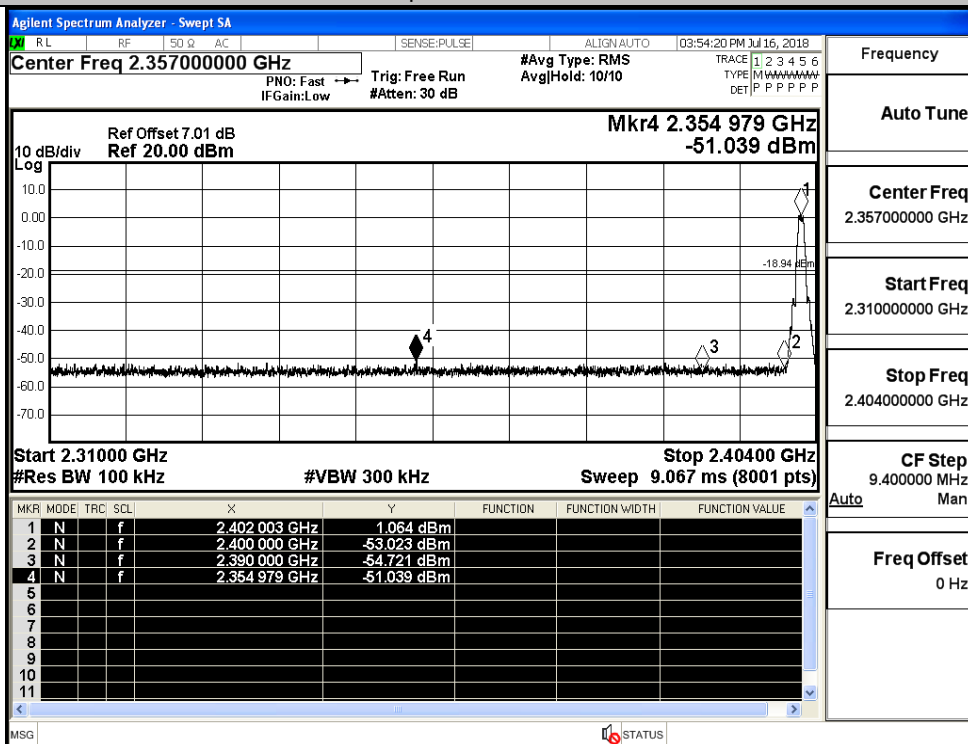


B.6 Band-edge for RF Conducted Emissions

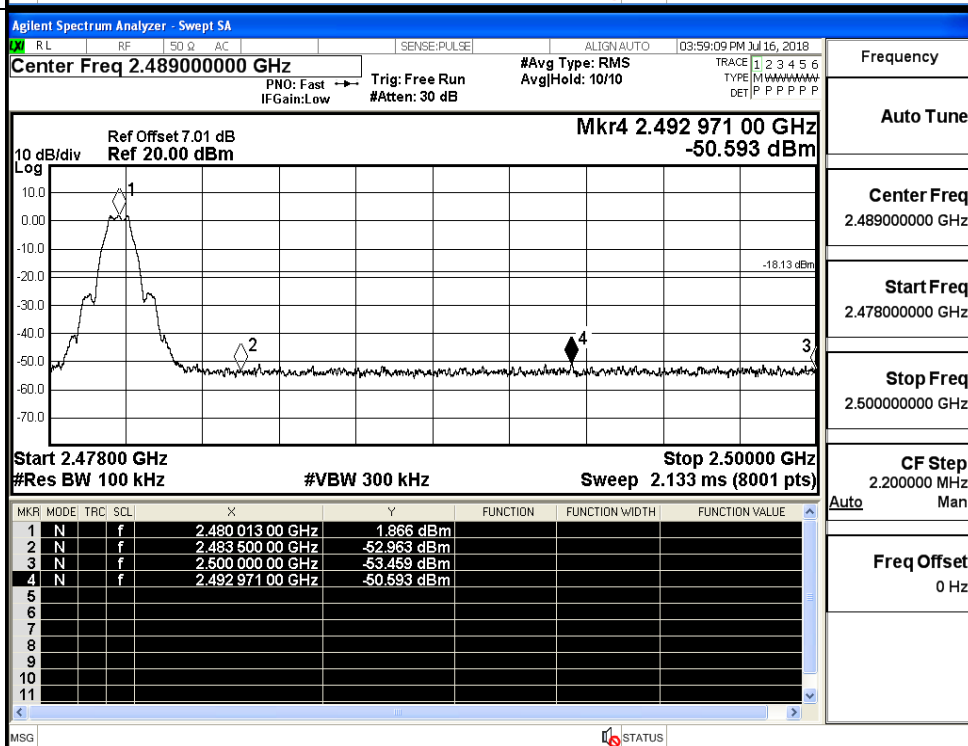
Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	1.064	-51.039	-18.94	PASS
BT LE	HCH	1.866	-50.593	-18.13	PASS

Test Graphs

LCH



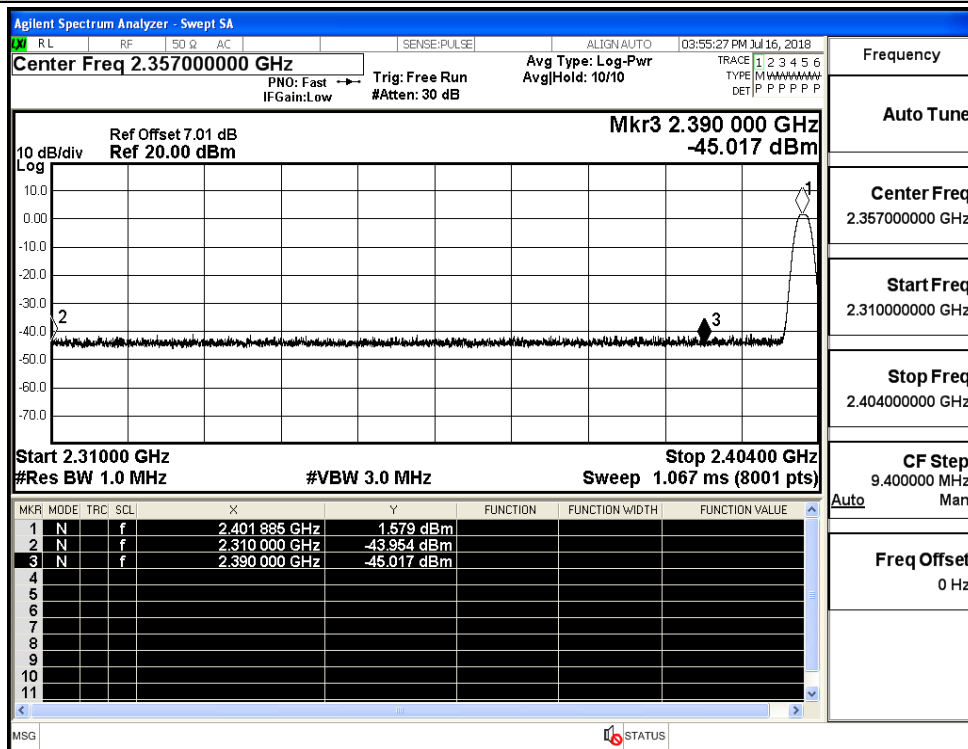
HCH



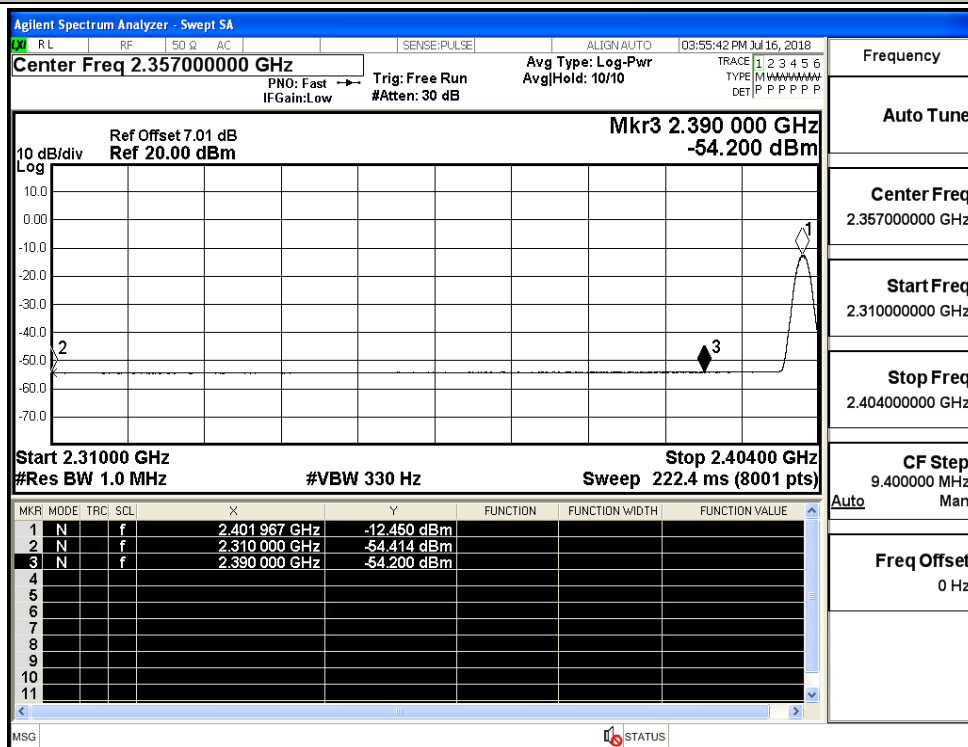
B.7 Restrict-band band-edge measurements

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	-43.954	4.0	0	55.274	PEAK	74	PASS
		Ant1	2310.0	-54.414	4.0	0	44.814	AV	54	PASS
		Ant1	2390.0	-45.017	4.0	0	54.211	PEAK	74	PASS
		Ant1	2390.0	-54.200	4.0	0	45.028	AV	54	PASS
	2480	Ant1	2483.5	-43.804	4.0	0	55.424	PEAK	74	PASS
		Ant1	2483.5	-53.741	4.0	0	45.487	AV	54	PASS
		Ant1	2500.0	-43.730	4.0	0	55.498	PEAK	74	PASS
		Ant1	2500.0	-53.662	4.0	0	45.566	AV	54	PASS

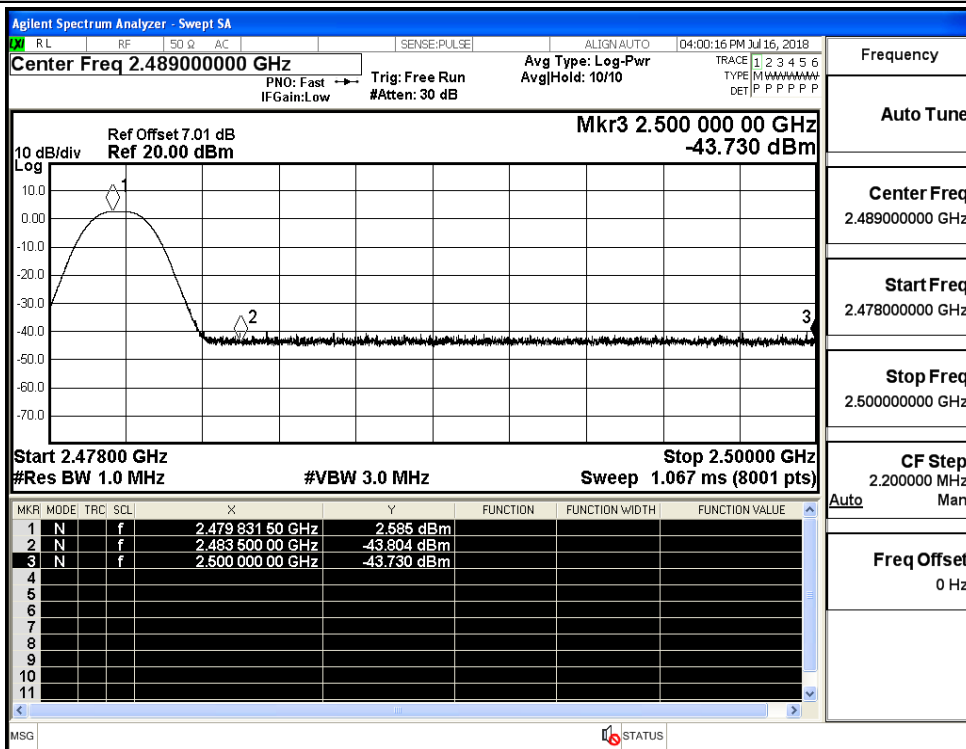
Restrict-band band-edge measurements_BT LE_2402_Ant1_PEAK



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

