

Appendix A

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

Product Name: WCA2CS



Trade Mark:

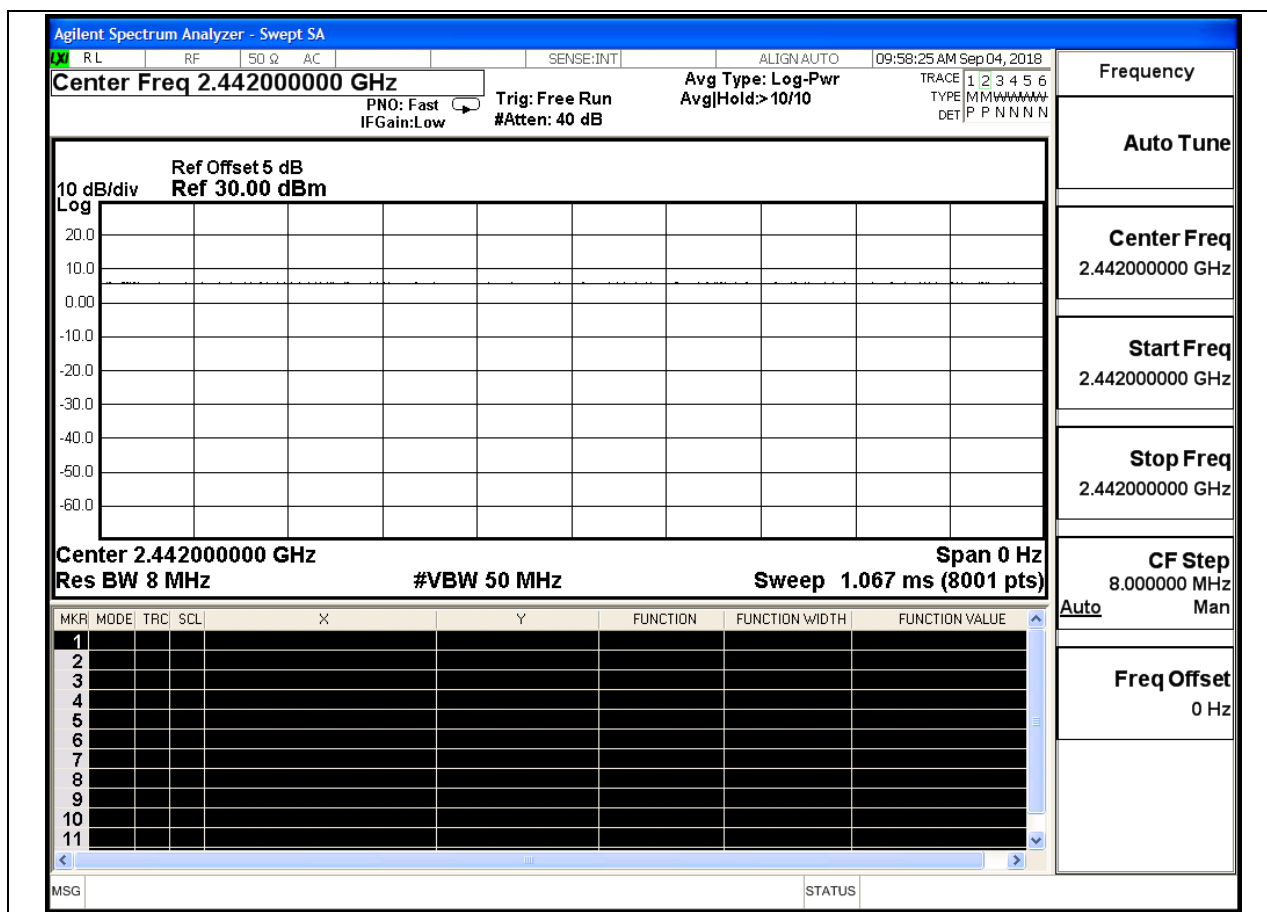
Test Model: WCA2CS

Environmental Conditions

Temperature:	23.3° C
Relative Humidity:	51.3%
ATM Pressure:	100.0 kPa
Test Engineer:	WangChuang
Supervised by:	Jayden.Zhuo

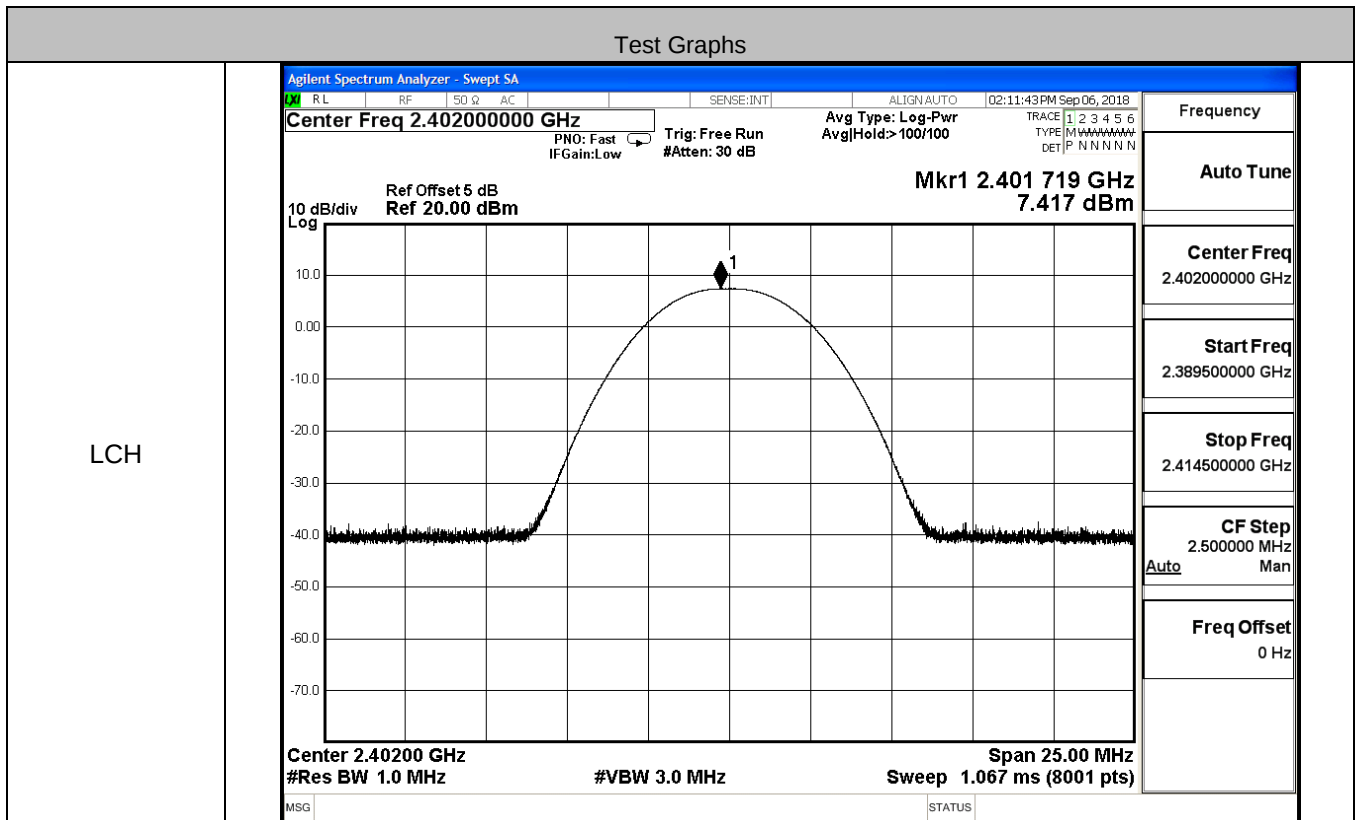
A.1 Duty Cycle

Test Mode	Test Channel	Ant	Duty Cycle[%]	Verdict
BT LE	2442	Ant1	100	PASS

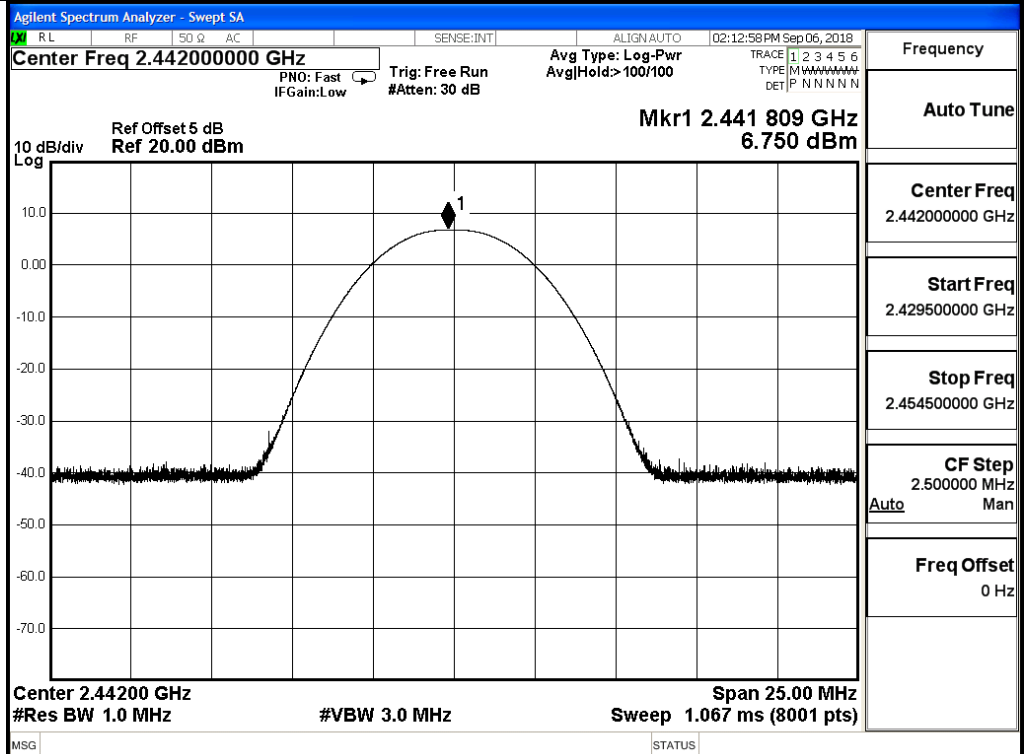


A.2 Maximum Conducted Peak Output Power

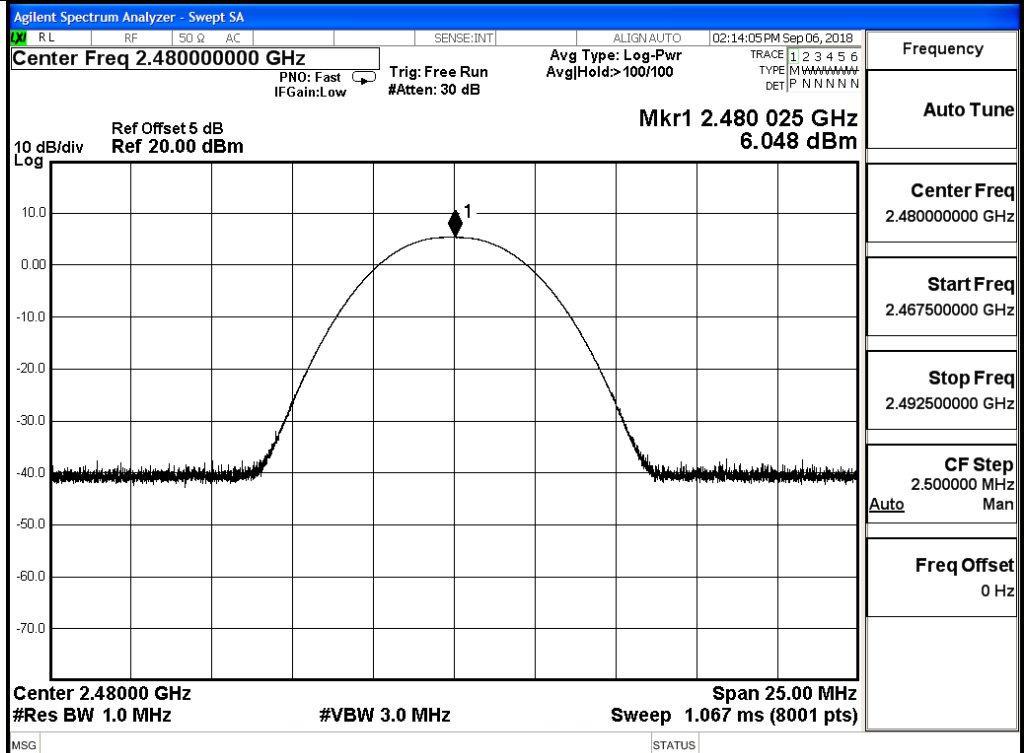
Mode	Channel	Conduct Peak Power[dBm]	Limit [dBm]	Verdict
BT LE	LCH	7.417	30	PASS
BT LE	MCH	6.750	30	PASS
BT LE	HCH	6.048	30	PASS



MCH



HCH

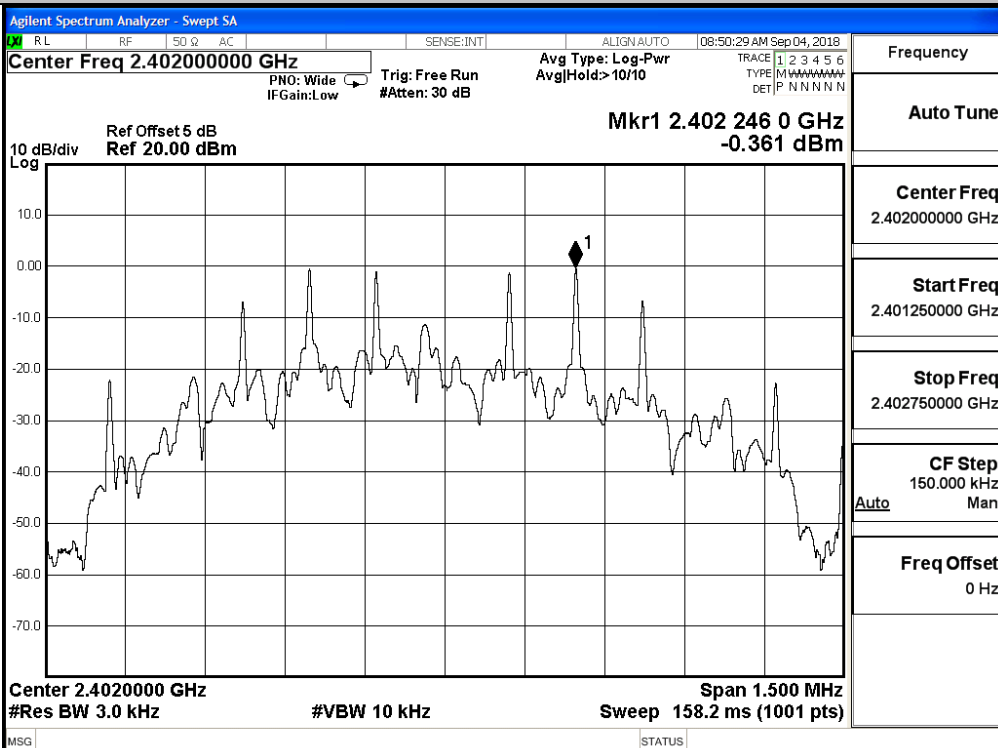


A.3 Maximum Power Spectral Density

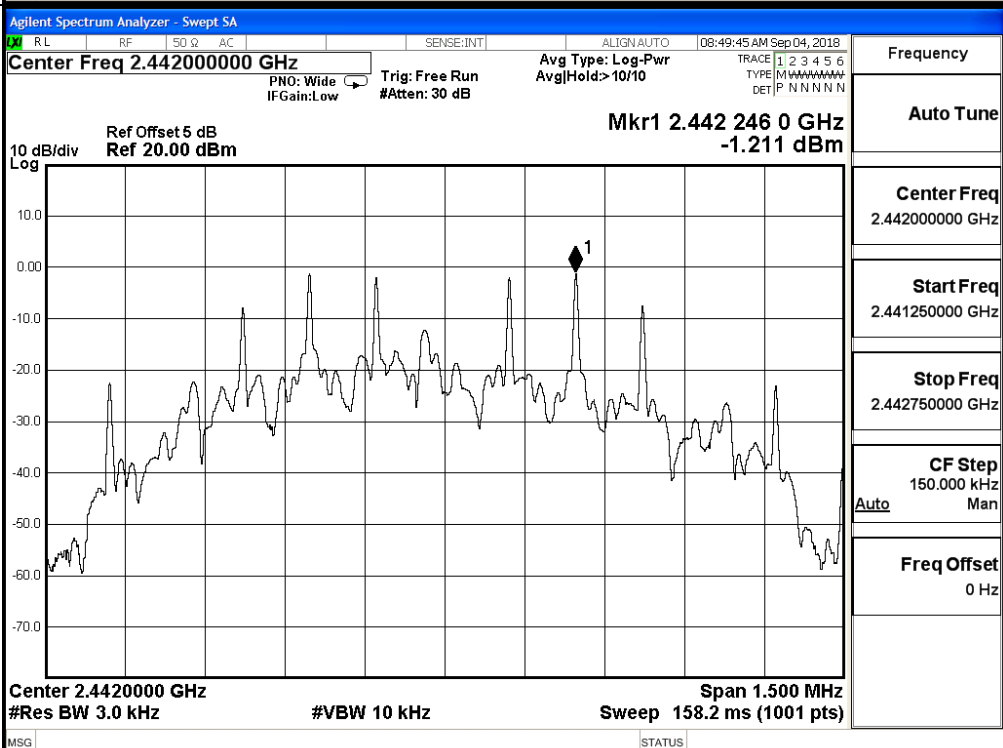
Mode	Channel	PSD [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
BT LE	LCH	-0.361	8	PASS
BT LE	MCH	-1.211	8	PASS
BT LE	HCH	-2.821	8	PASS

Test Graphs

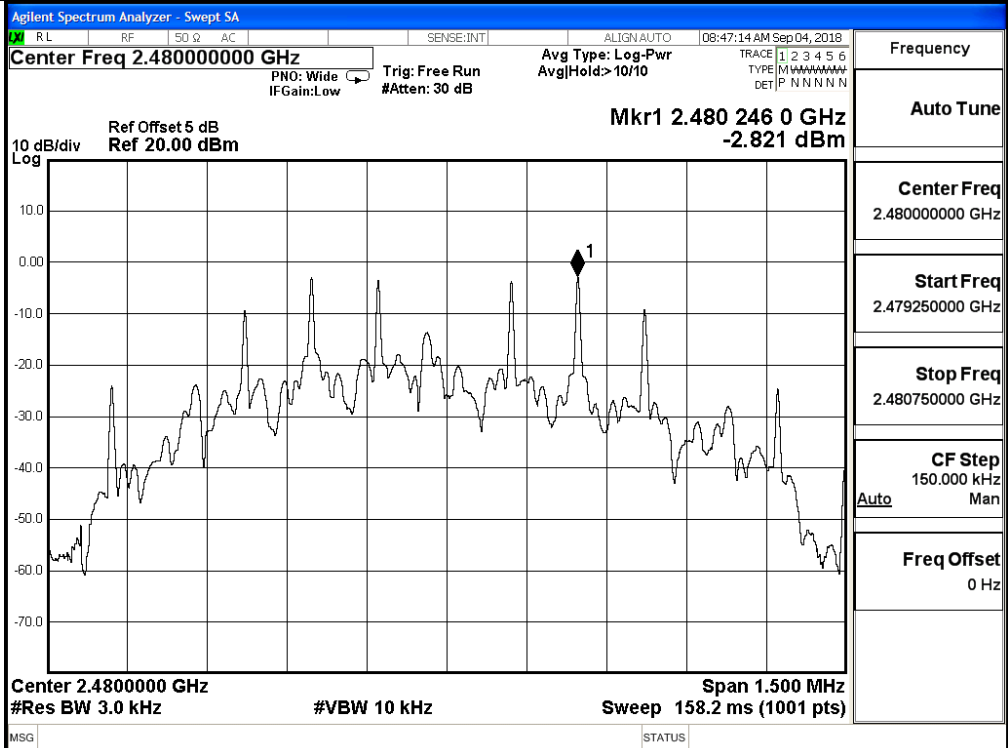
LCH



MCH



HCH

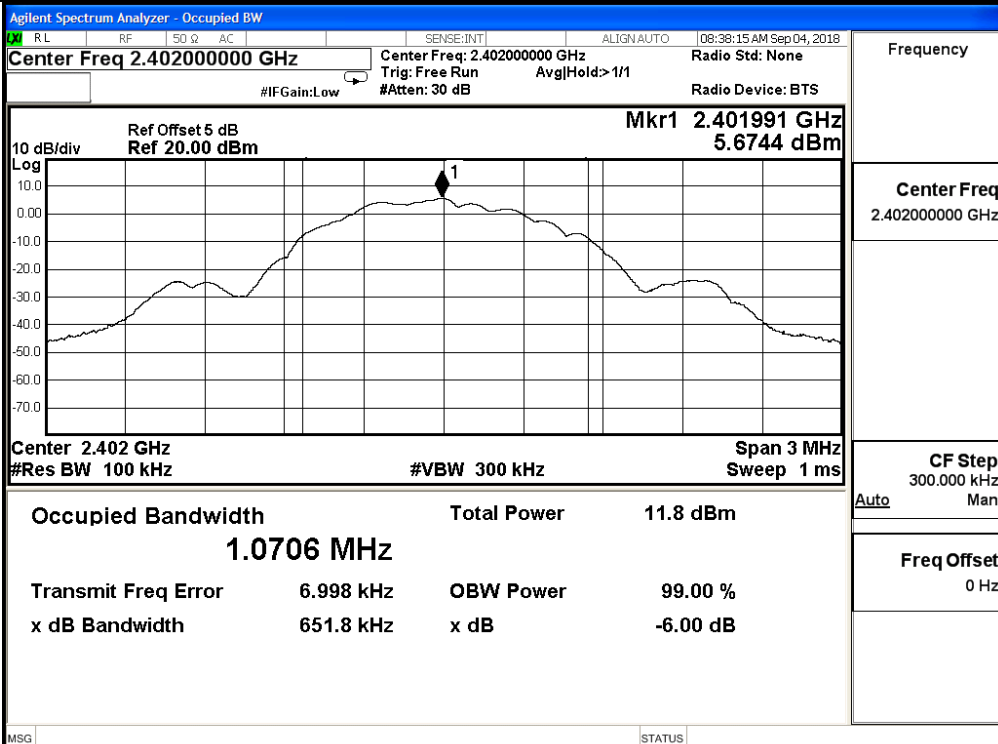


A.4 6dB Bandwidth

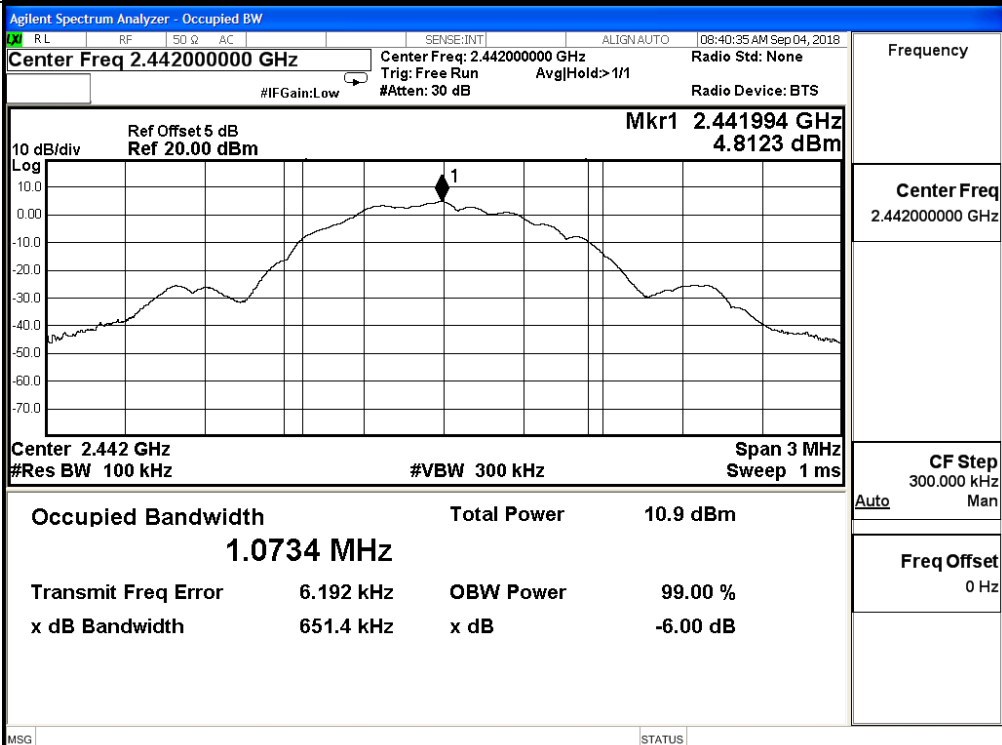
Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
BT LE	LCH	0.6518	≥ 0.5	PASS
BT LE	MCH	0.6514	≥ 0.5	PASS
BT LE	HCH	0.6534	≥ 0.5	PASS

Test Graphs

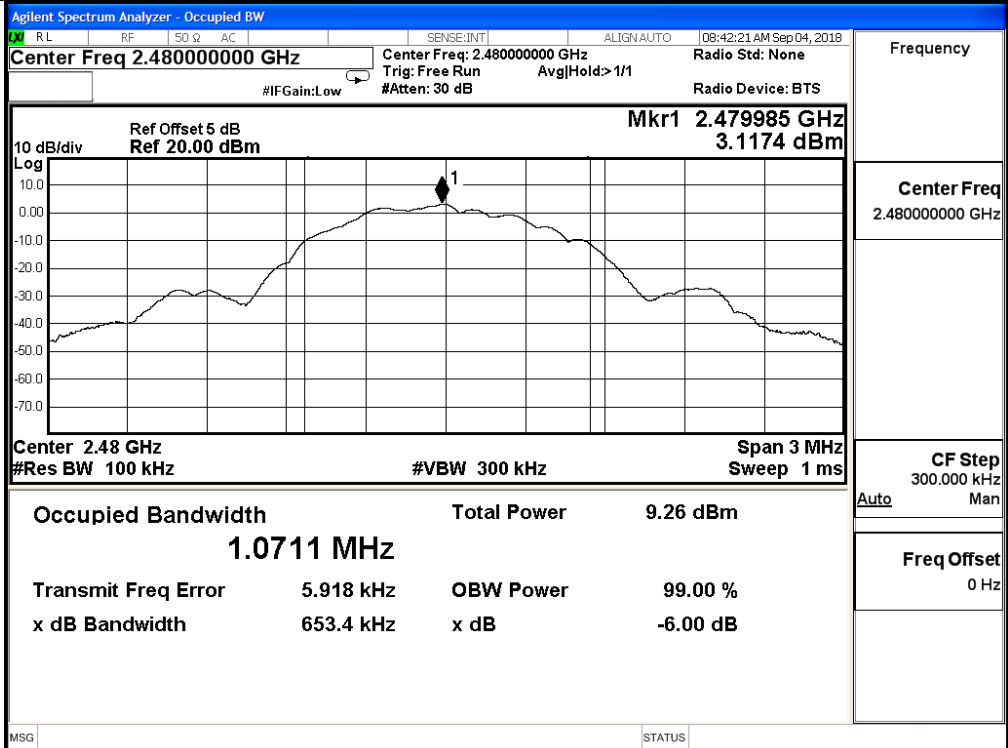
LCH



MCH

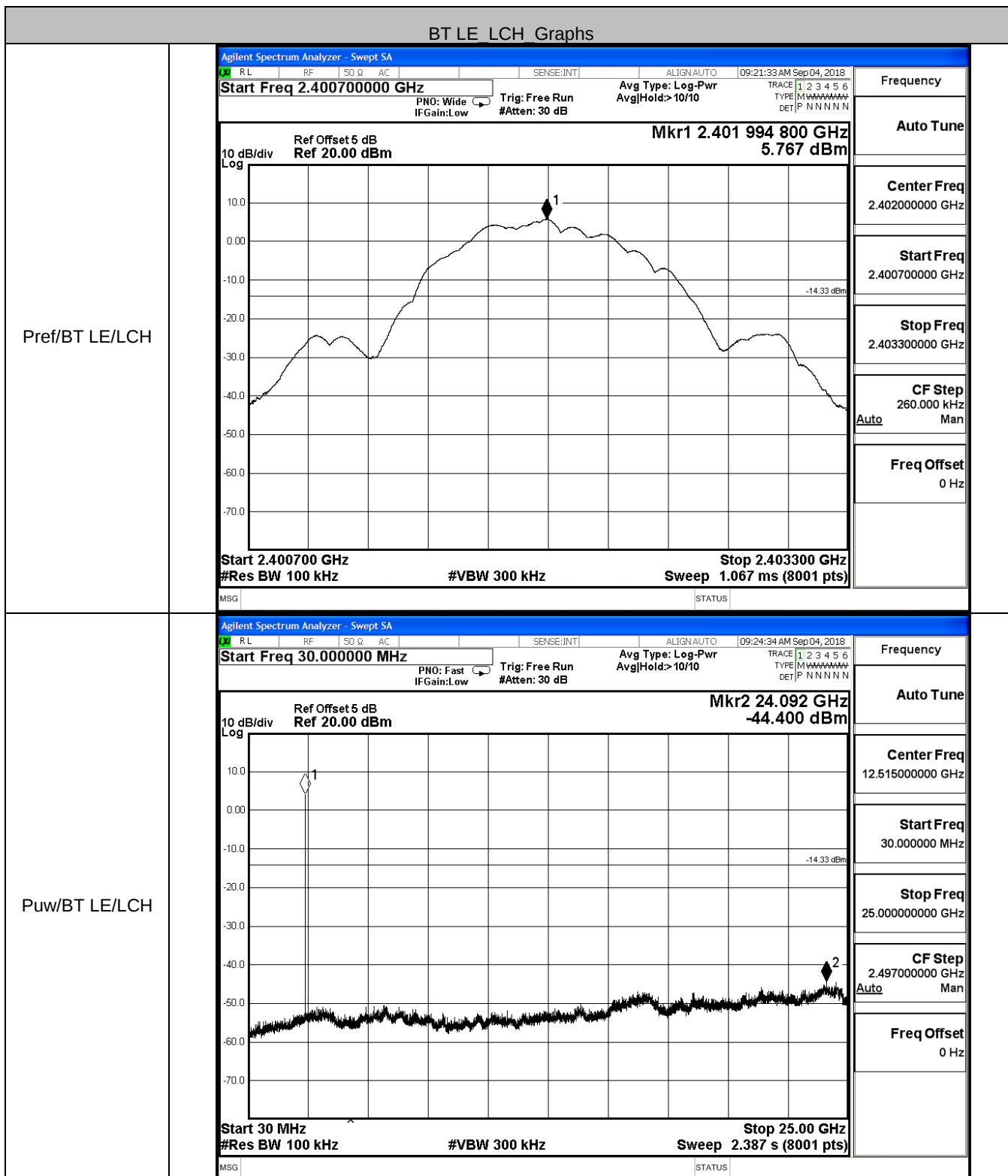


HCH



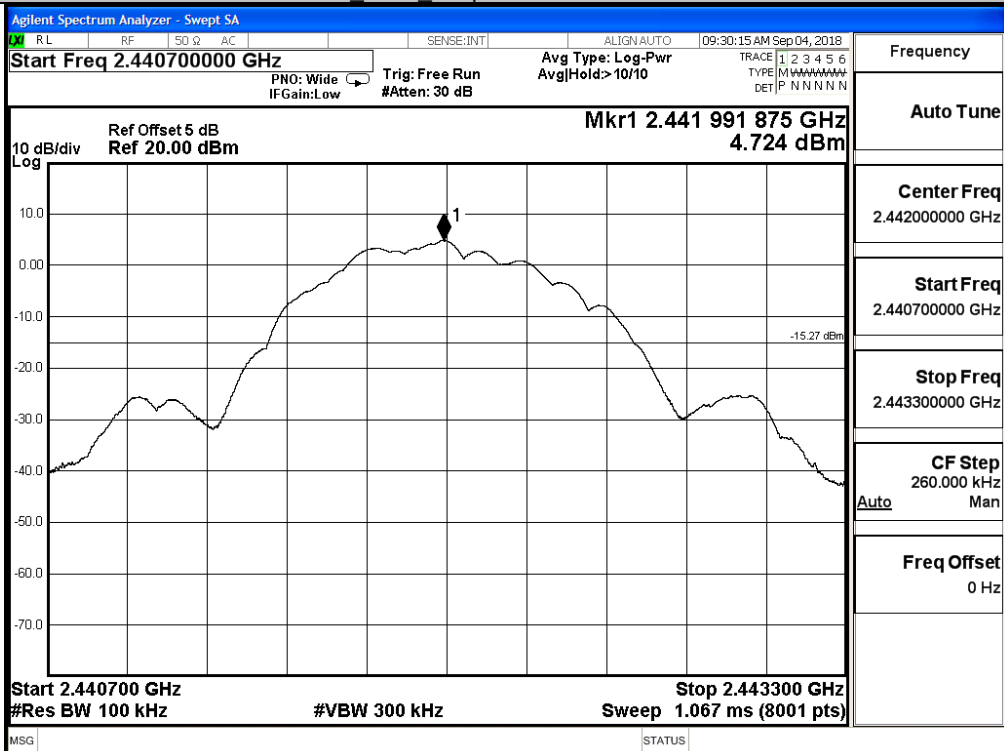
A.5 RF Conducted Spurious Emissions

Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	5.767	-44.400	-14.33	PASS
BT LE	MCH	4.724	-45.190	-15.27	PASS
BT LE	HCH	3.168	-45.860	-16.83	PASS

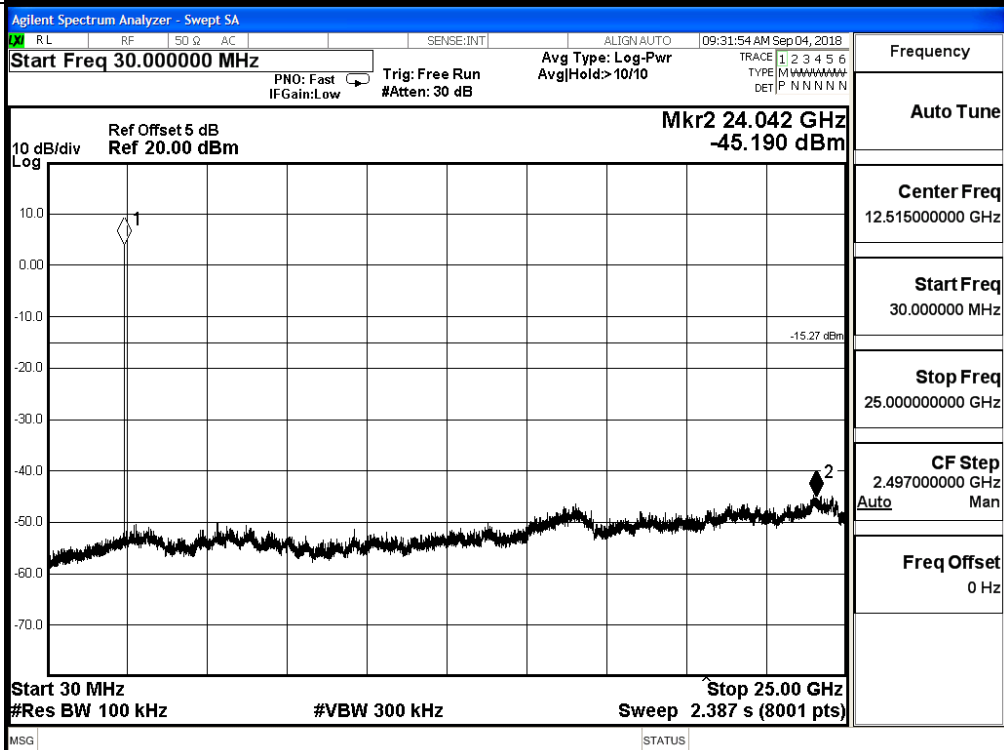


BT LE MCH Graphs

Pref/BT LE/MCH

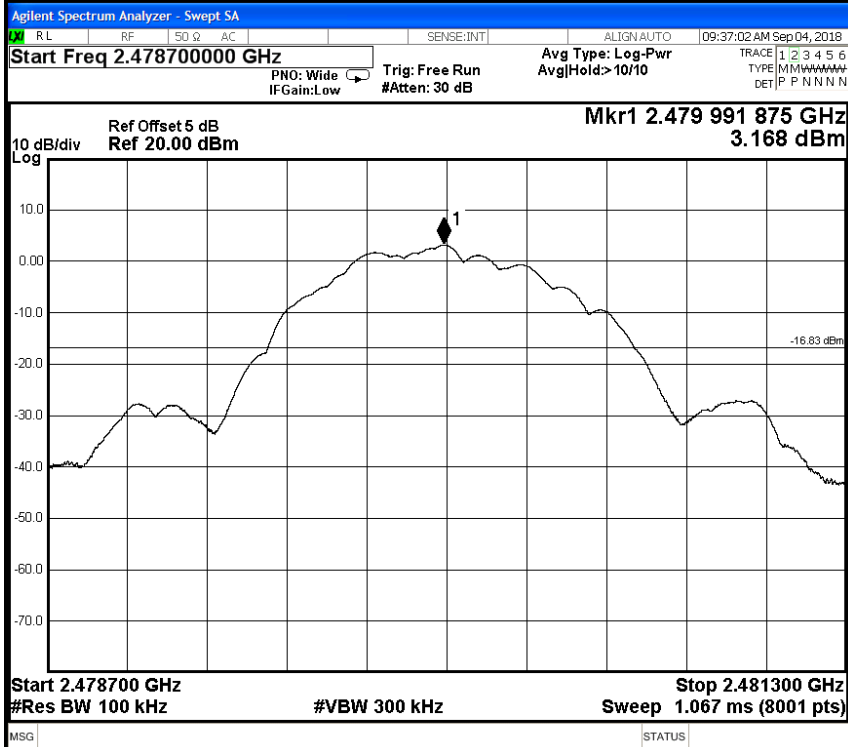


Puw/BT LE/MCH



BT LE HCH Graphs

Pref/BT LE/HCH

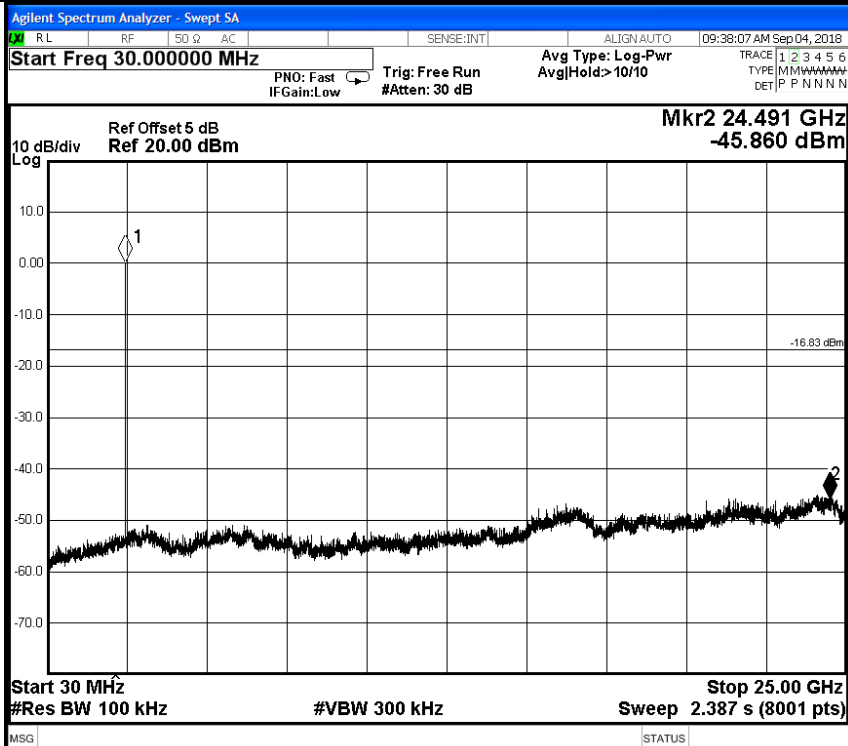


Frequency

Auto Tune

Center Freq
2.480000000 GHzStart Freq
2.478700000 GHzStop Freq
2.481300000 GHzCF Step
260.000 kHz
Auto ManFreq Offset
0 Hz

Puw/BT LE/HCH



Frequency

Auto Tune

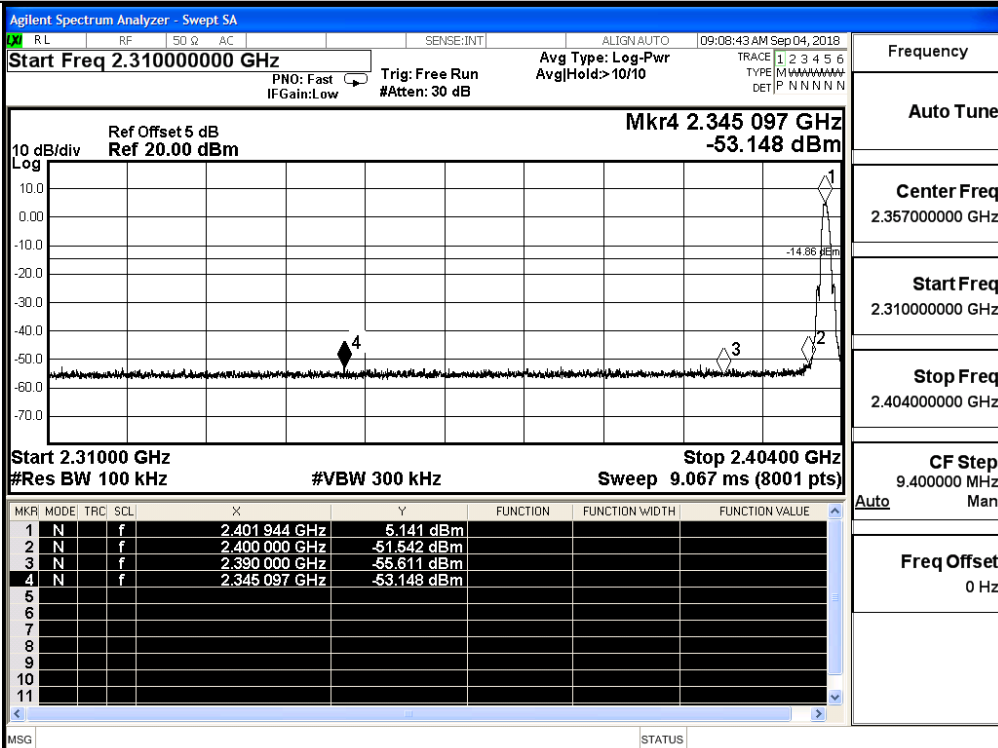
Center Freq
12.515000000 GHzStart Freq
30.000000 MHzStop Freq
25.000000000 GHzCF Step
2.497000000 GHz
Auto ManFreq Offset
0 Hz

A.6 Band-edge for RF Conducted Emissions

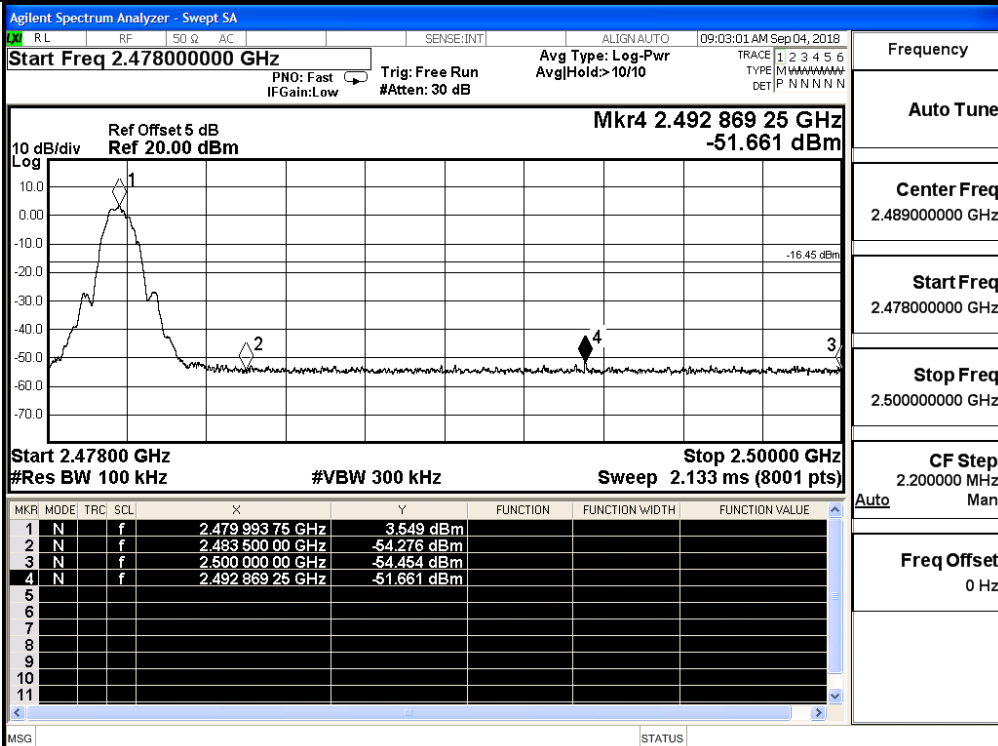
Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	5.141	-53.148	-14.86	PASS
BT LE	HCH	3.549	-51.661	-16.45	PASS

Test Graphs

LCH



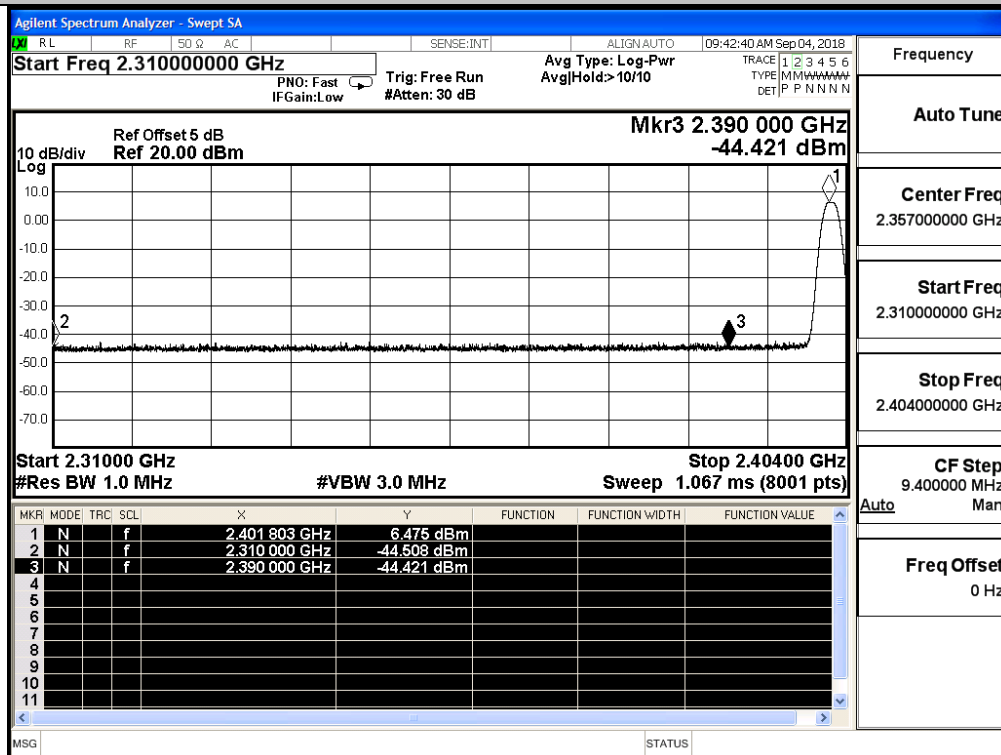
HCH



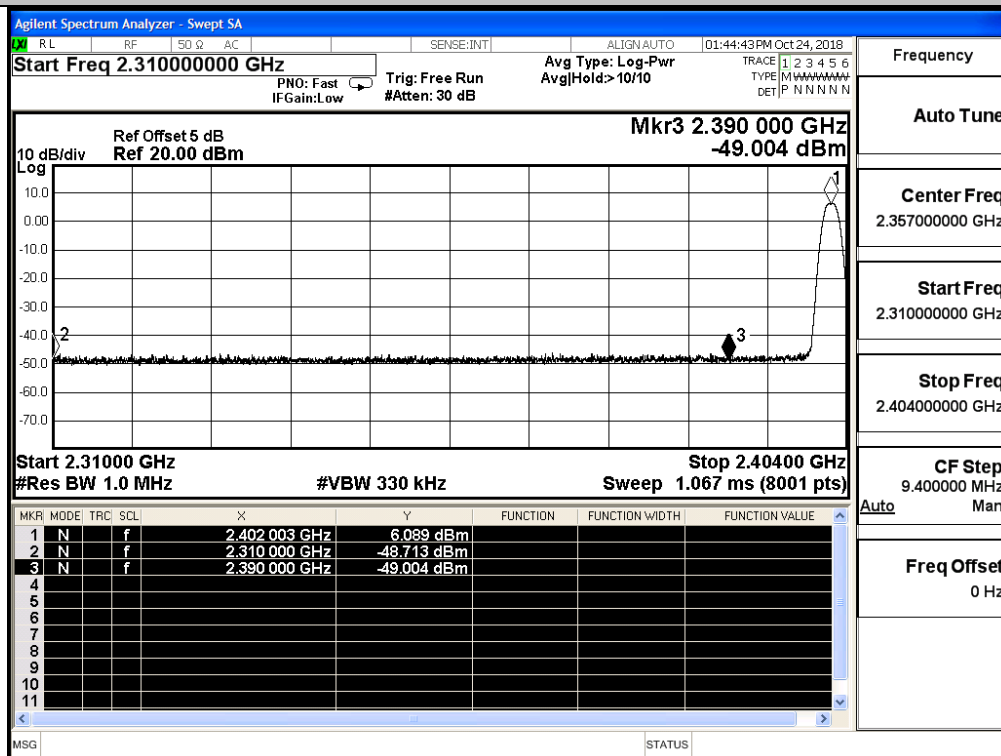
A.7 Restrict-band band-edge measurements

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	-44.508	2.0	0	52.75	PEAK	74	PASS
		Ant1	2310.0	-48.713	2.0	0	48.55	AV	54	PASS
		Ant1	2390.0	-44.421	2.0	0	52.84	PEAK	74	PASS
		Ant1	2390.0	-49.004	2.0	0	48.26	AV	54	PASS
	2480	Ant1	2483.5	-43.510	2.0	0	53.75	PEAK	74	PASS
		Ant1	2483.5	-48.564	2.0	0	48.70	AV	54	PASS
		Ant1	2500.0	-45.420	2.0	0	51.84	PEAK	74	PASS
		Ant1	2500.0	-48.436	2.0	0	48.82	AV	54	PASS

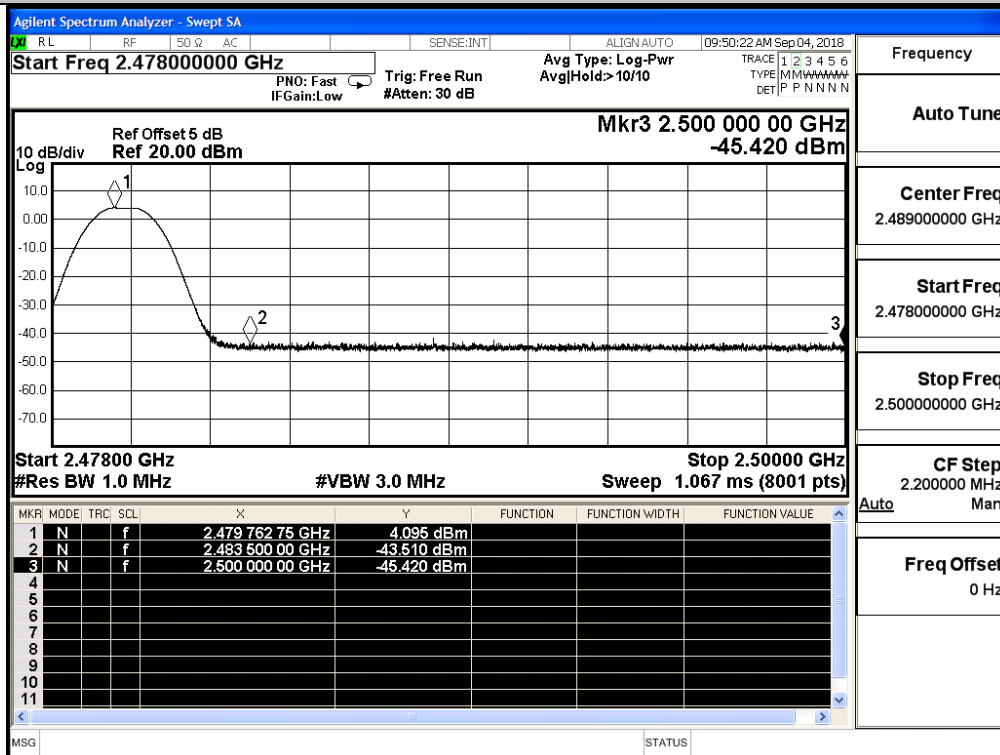
Restrict-band band-edge measurements_BT LE_2402_Ant1_PEAK



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

