

Appendix A

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

Product Name: WTA



Trade Mark:

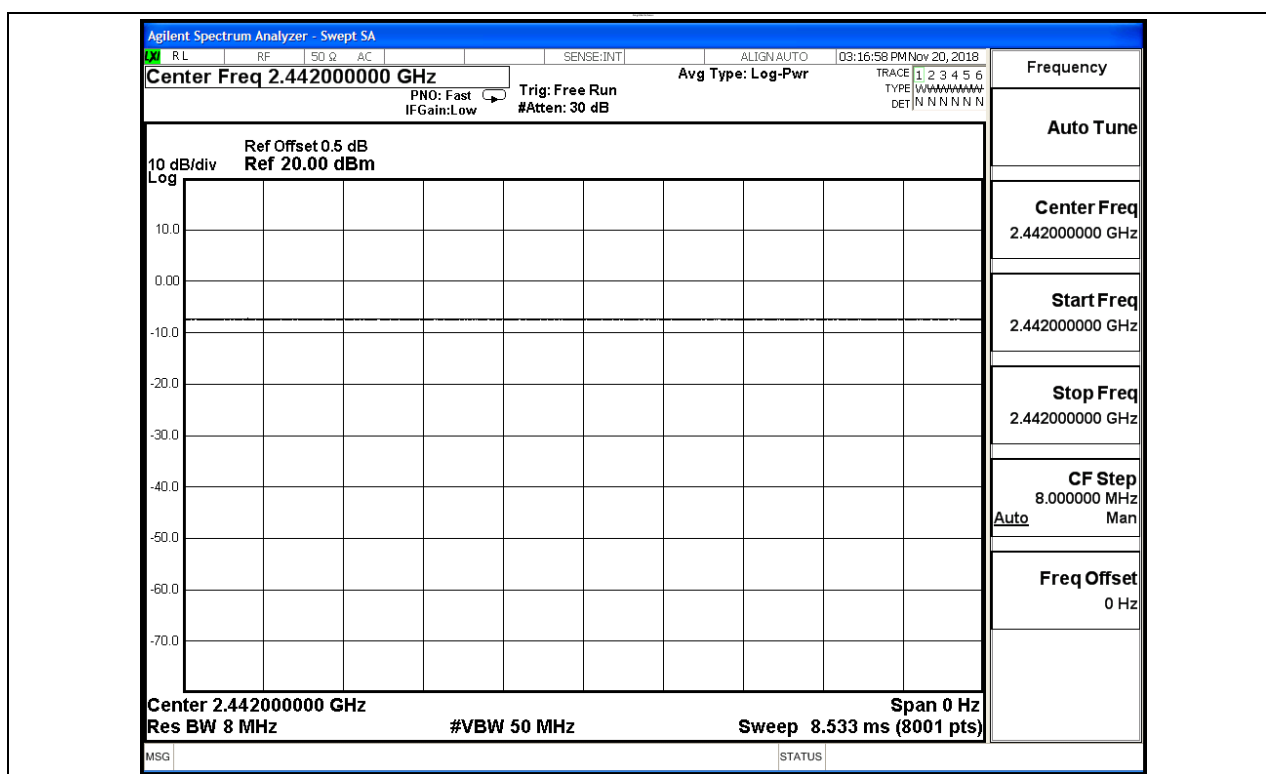
Test Model: Beacon Tag

Environmental Conditions

Temperature:	23.5° C
Relative Humidity:	55%
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

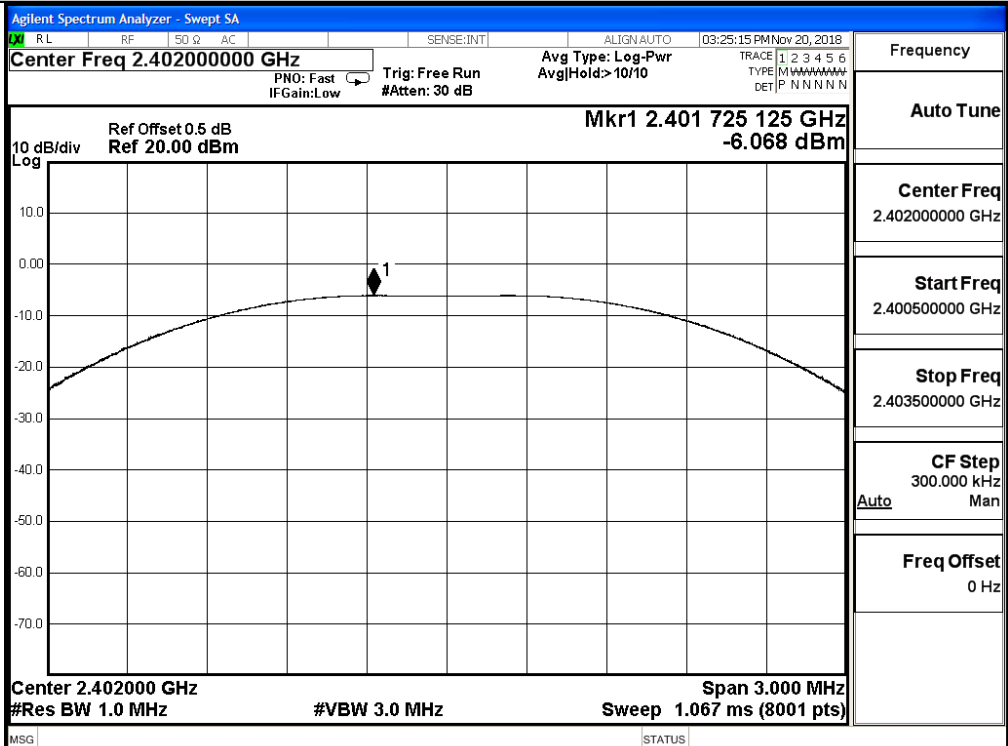


A.2 Maximum Conducted Peak Output Power

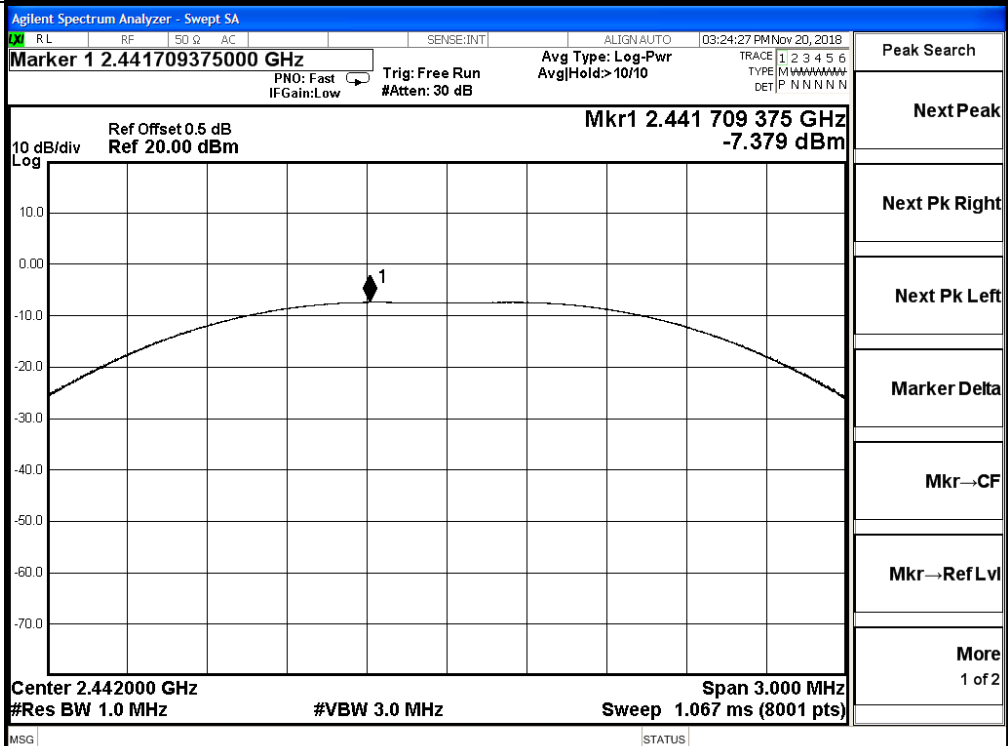
Mode	Channel	Conduct Peak Power[dBm]	Limit [dBm]	Verdict
BT LE	LCH	-6.068	30	PASS
BT LE	MCH	-7.379	30	PASS
BT LE	HCH	-6.337	30	PASS

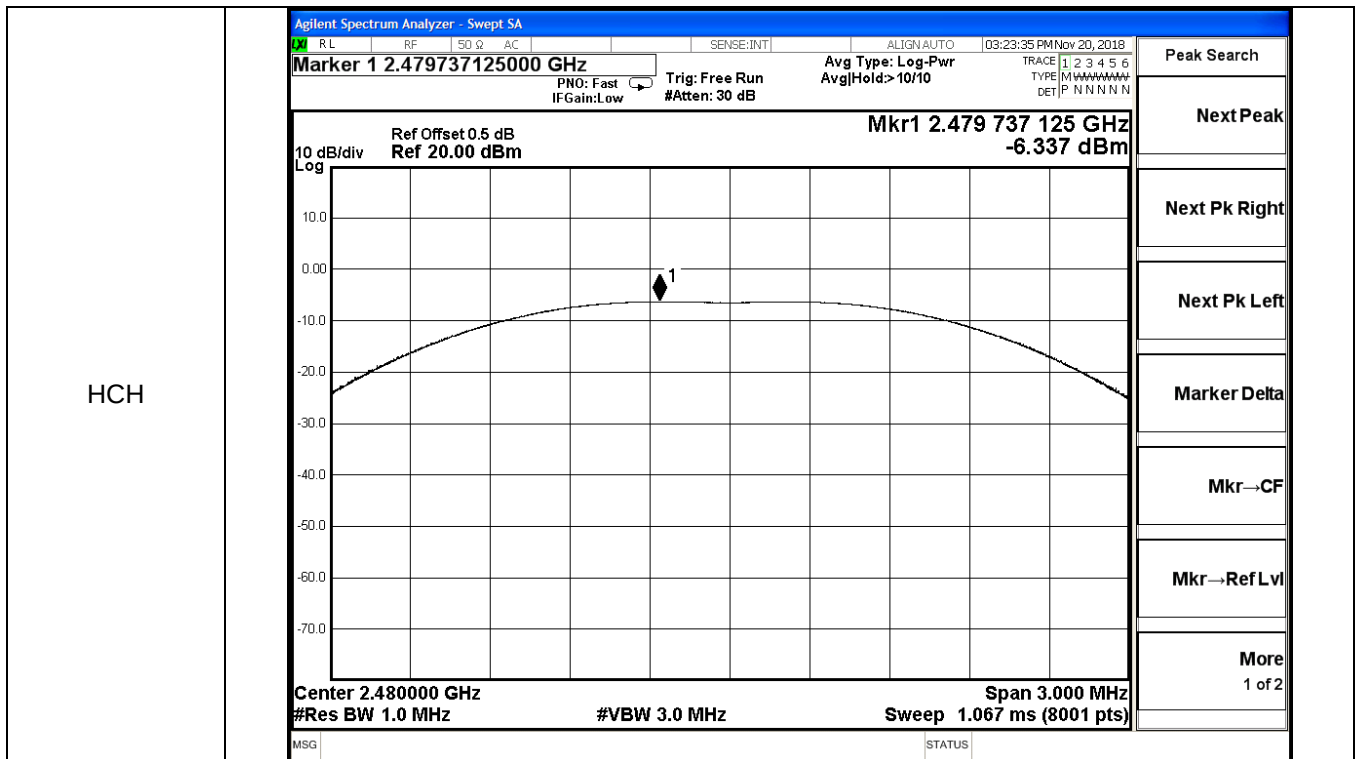
Test Graphs

LCH



MCH



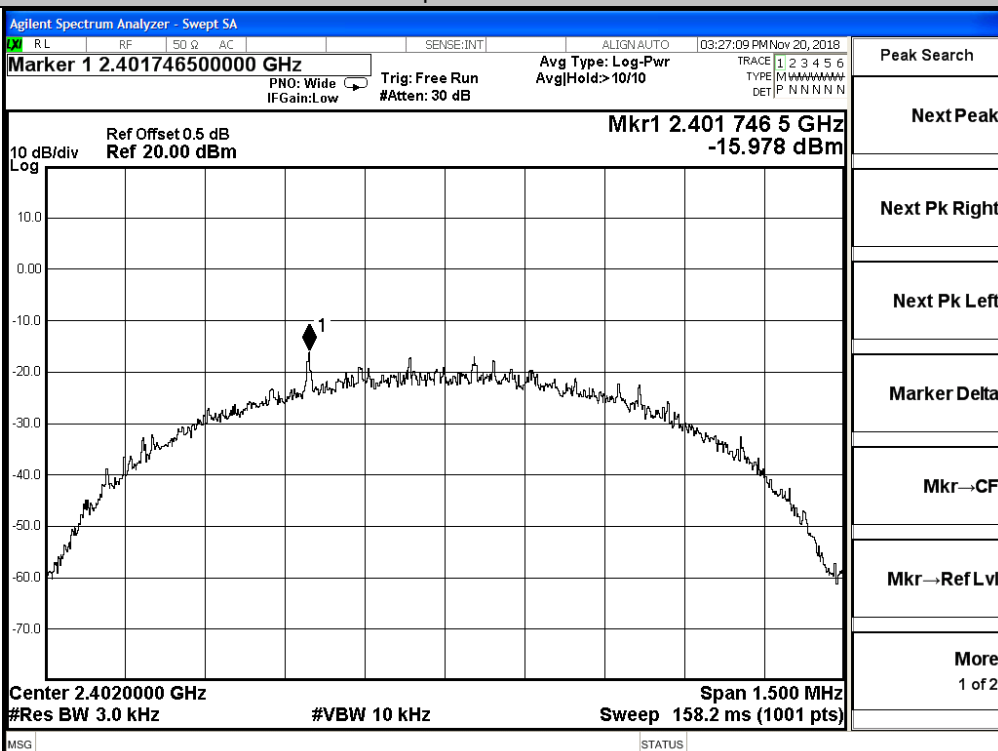


A.3 Maximum Power Spectral Density

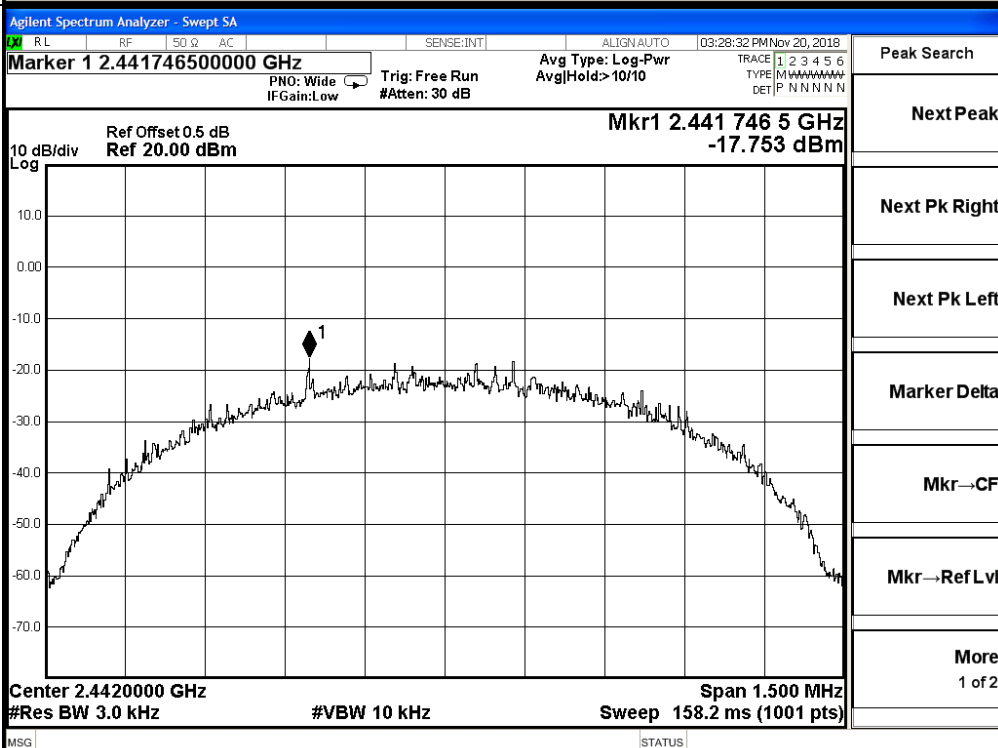
Mode	Channel	PSD [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
BT LE	LCH	-15.978	8	PASS
BT LE	MCH	-17.753	8	PASS
BT LE	HCH	-16.929	8	PASS

Test Graphs

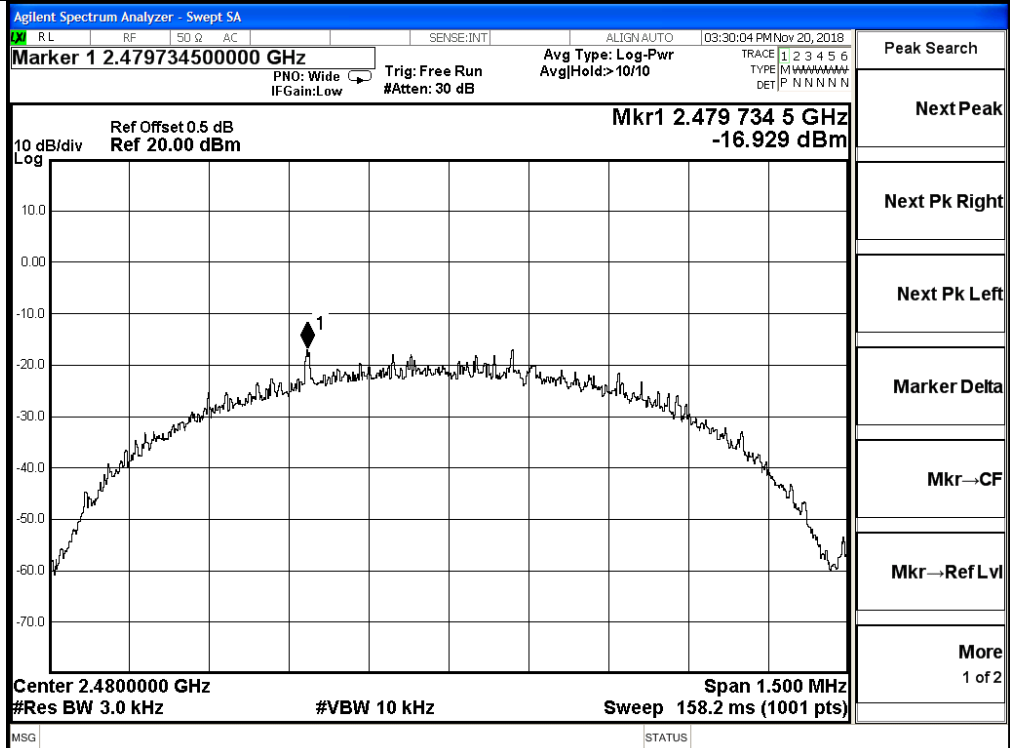
LCH



MCH



HCH

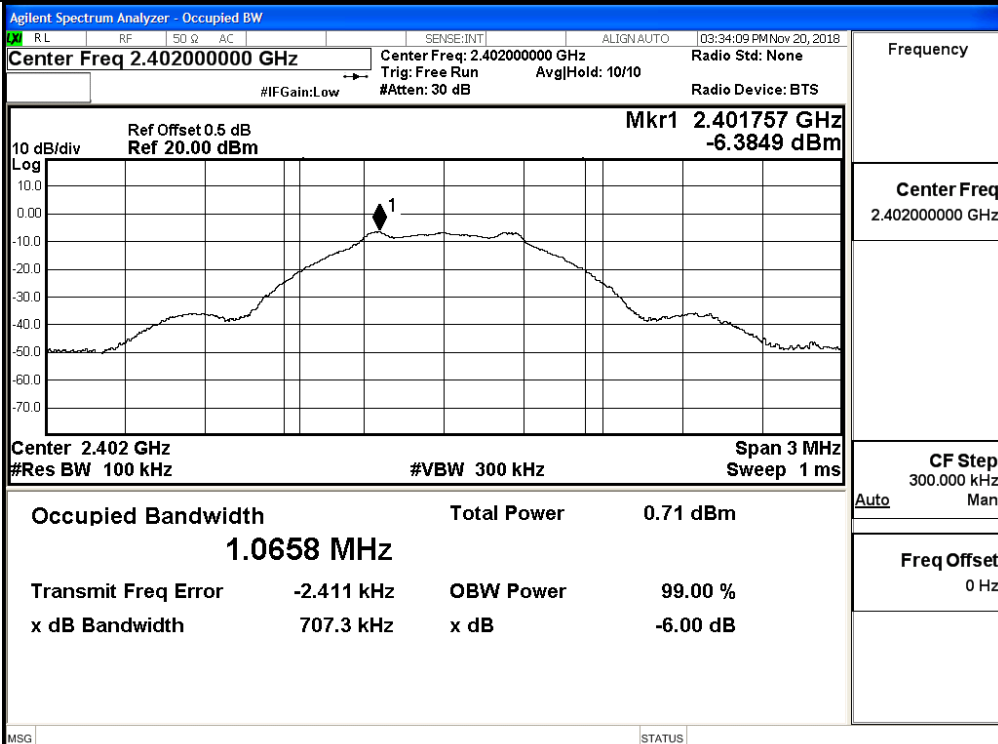


A.4 6dB Bandwidth

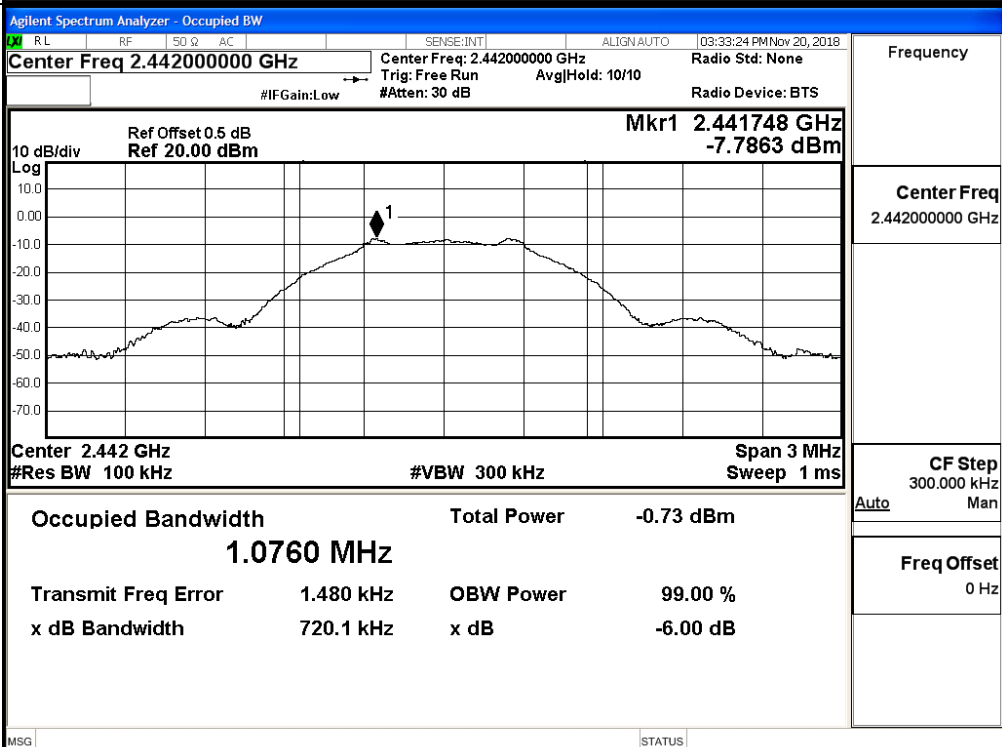
Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
BT LE	LCH	0.7073	≥ 0.5	PASS
BT LE	MCH	0.7201	≥ 0.5	PASS
BT LE	HCH	0.7253	≥ 0.5	PASS

Test Graphs

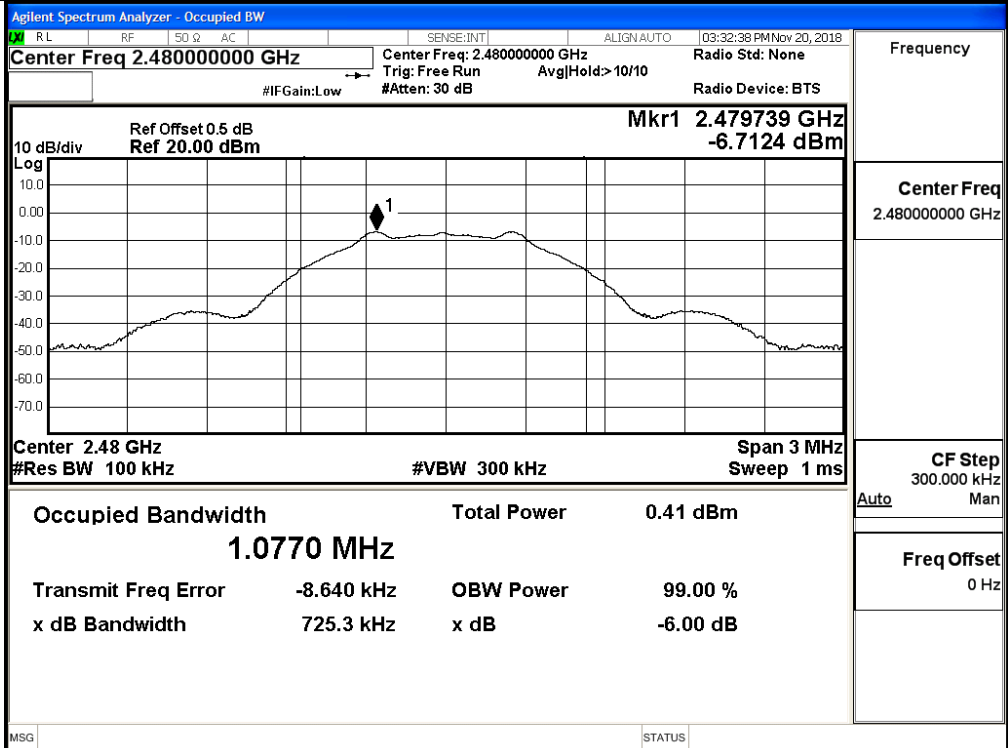
LCH



MCH

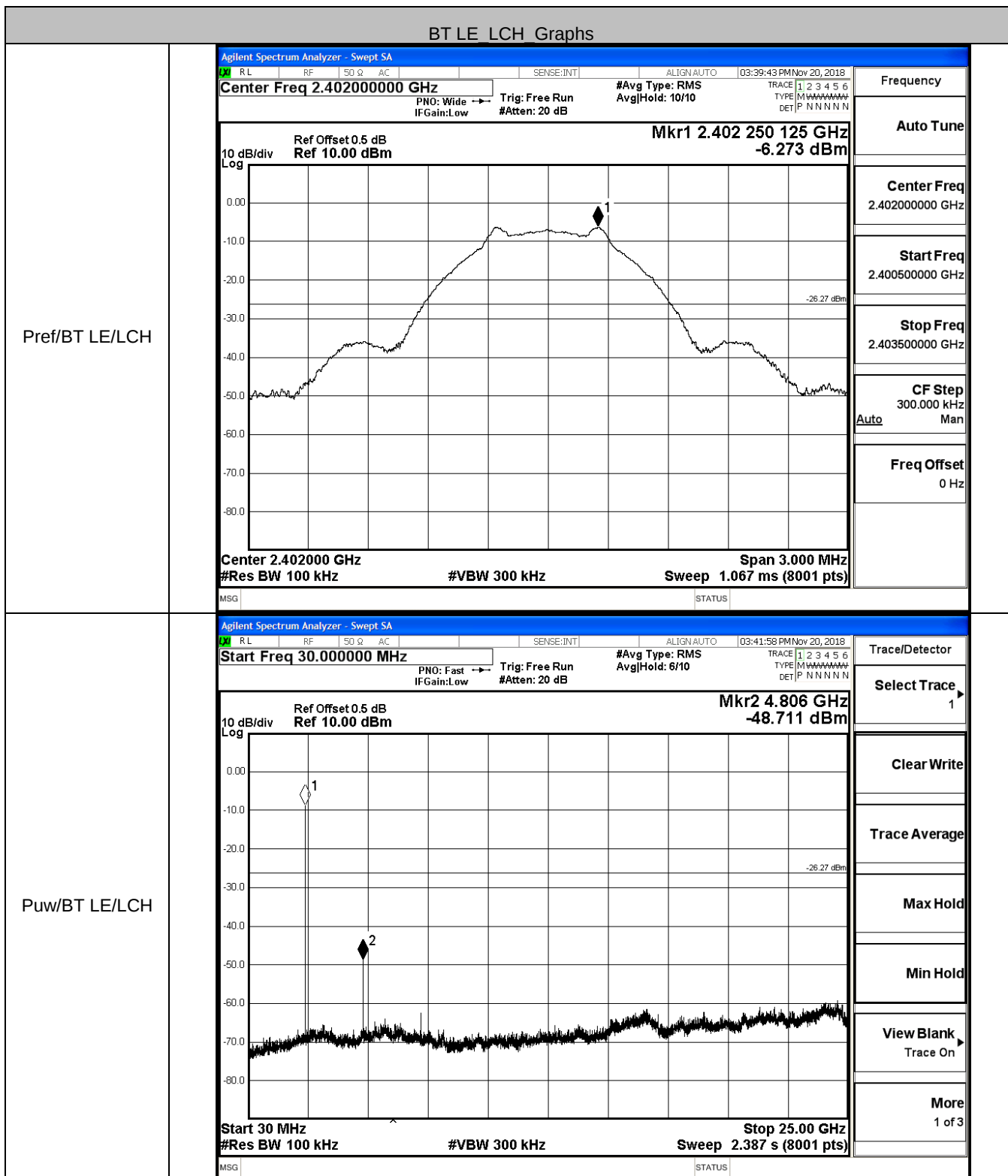


HCH



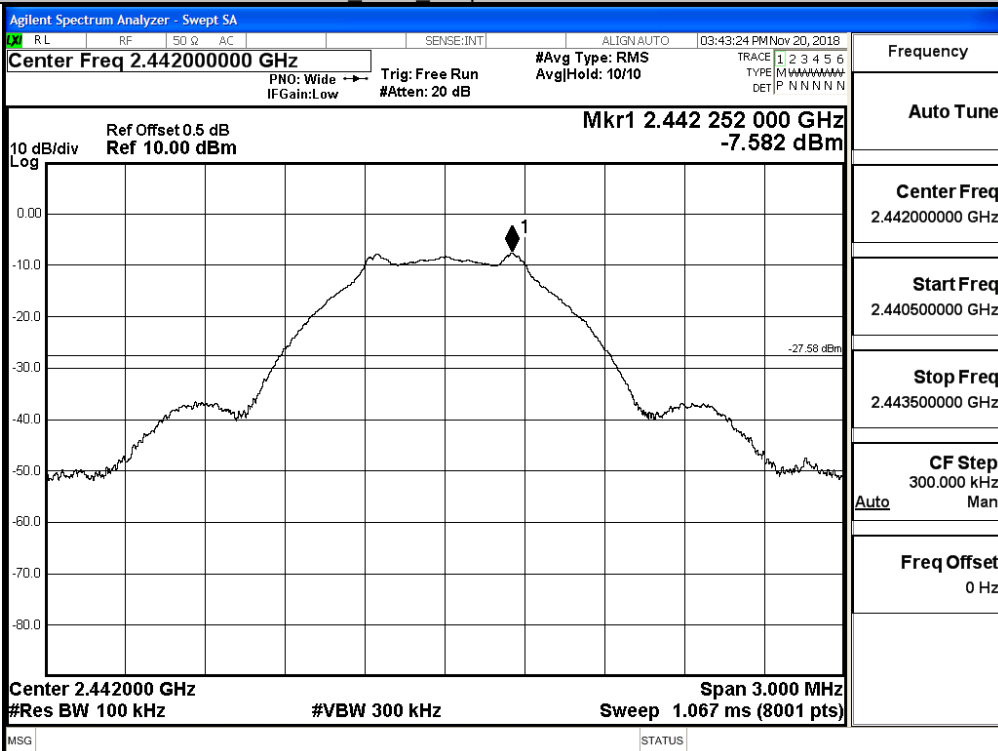
A.5 RF Conducted Spurious Emissions

Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	-6.273	-48.711	-26.27	PASS
BT LE	MCH	-7.582	-51.413	-27.56	PASS
BT LE	HCH	-6.557	-56.432	-26.56	PASS

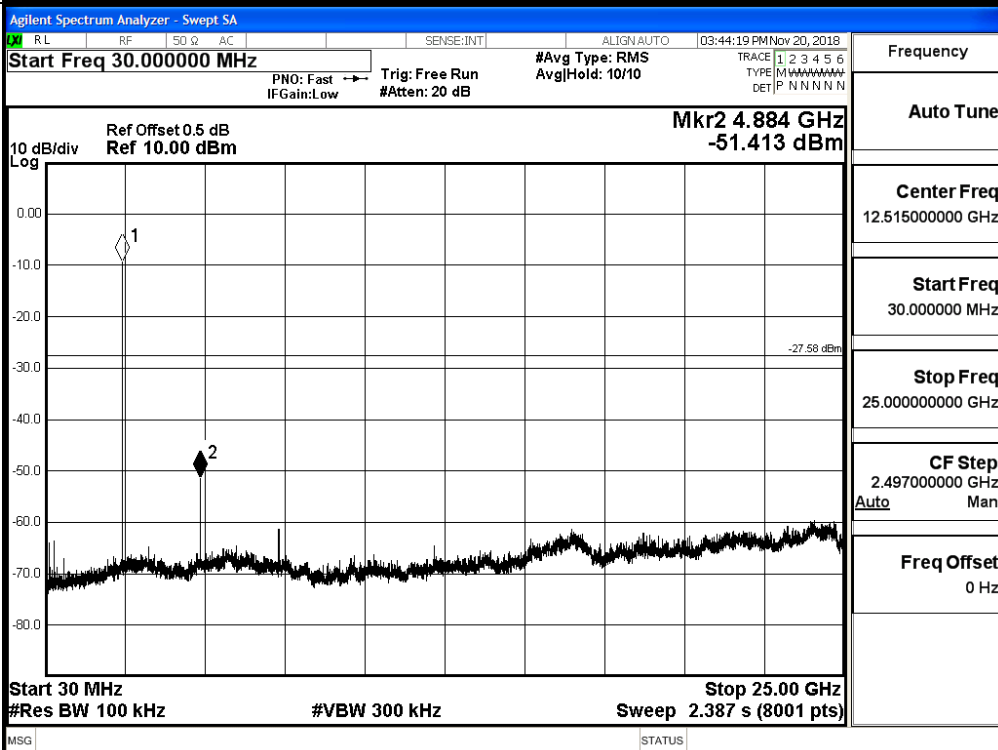


BT LE MCH Graphs

Pref/BT LE/MCH

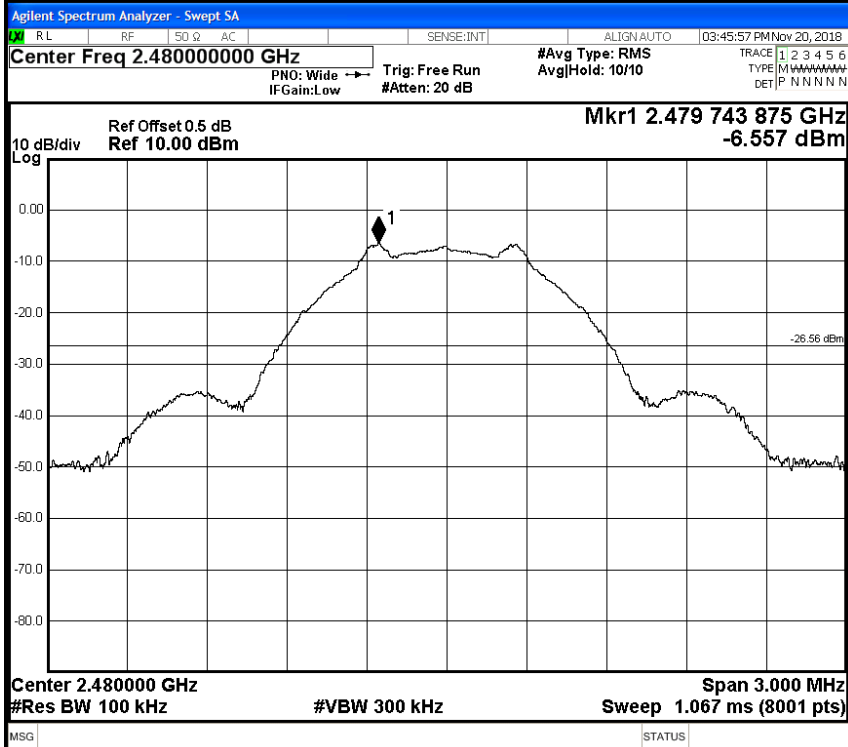


Puw/BT LE/MCH



BT LE HCH Graphs

Pref/BT LE/HCH

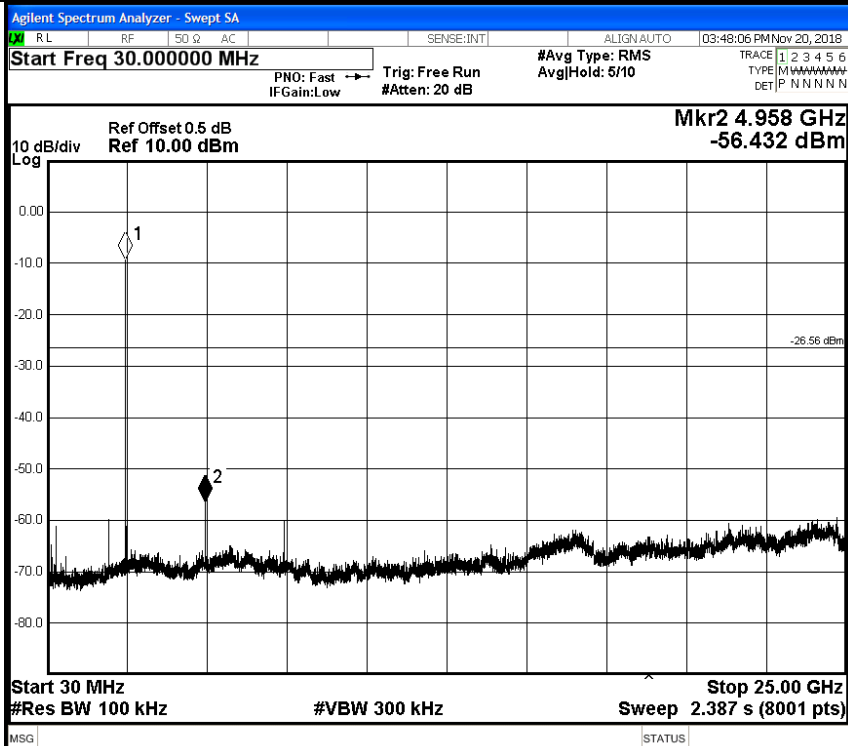


Frequency

Auto Tune

Center Freq
2.480000000 GHzStart Freq
2.478500000 GHzStop Freq
2.481500000 GHzCF Step
300.000 kHz
Auto ManFreq Offset
0 Hz

Puw/BT LE/HCH



Trace/Detector

Select Trace
1

Clear Write

Trace Average

Max Hold

Min Hold

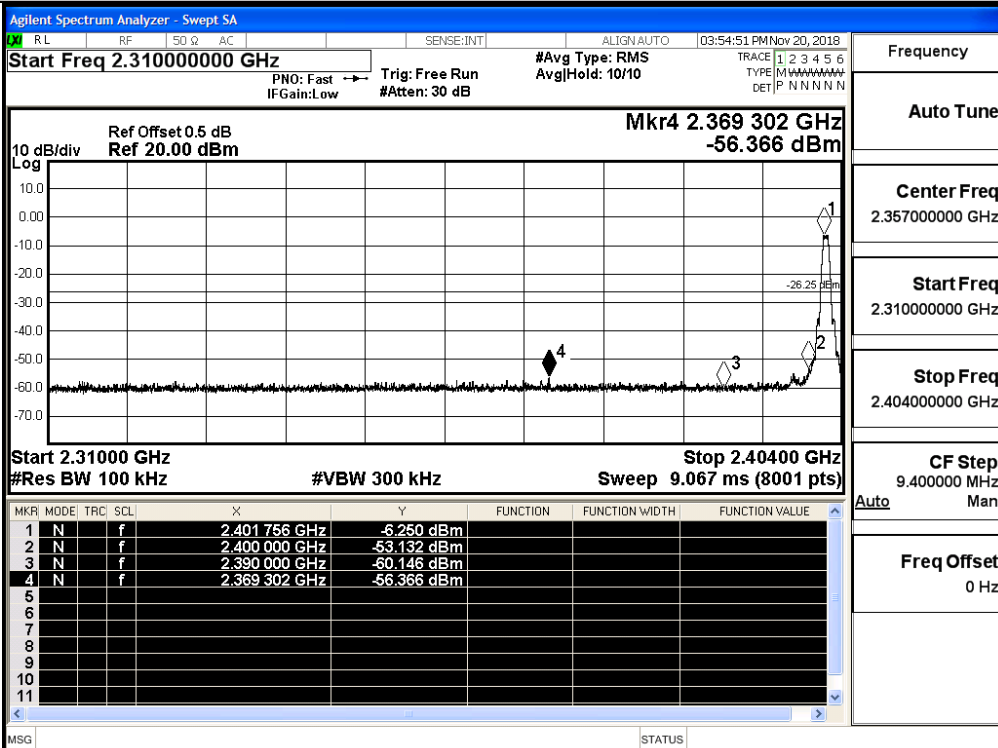
View Blank
Trace OnMore
1 of 3

A.6 Band-edge for RF Conducted Emissions

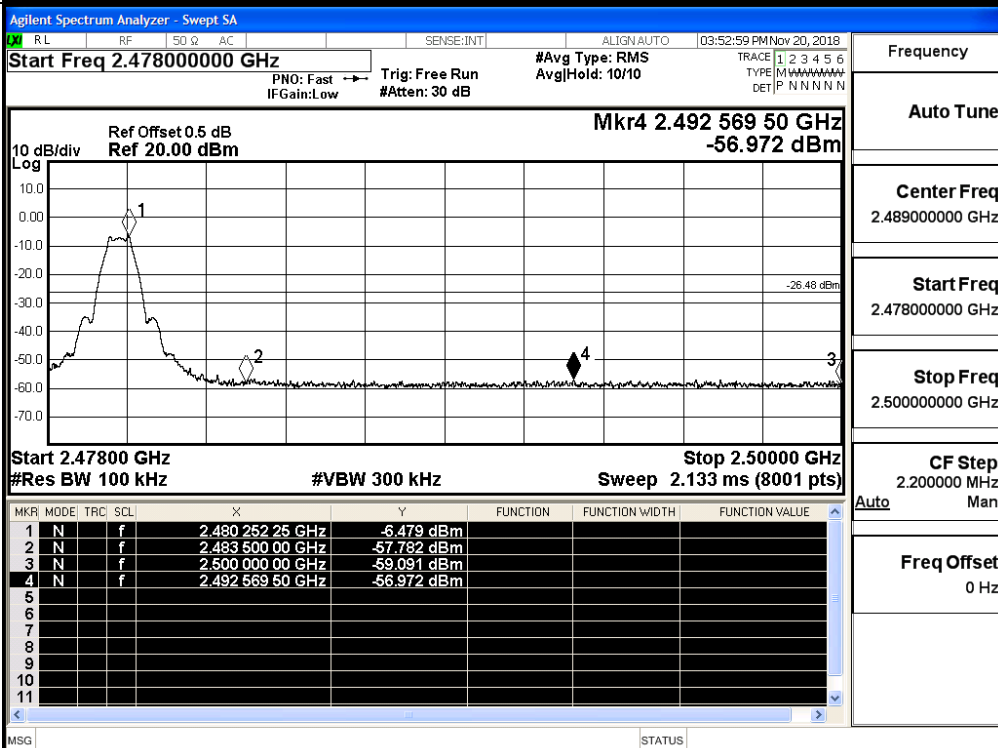
Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	-6.250	-56.366	-26.25	PASS
BT LE	HCH	-6.479	-56.972	-26.48	PASS

Test Graphs

LCH



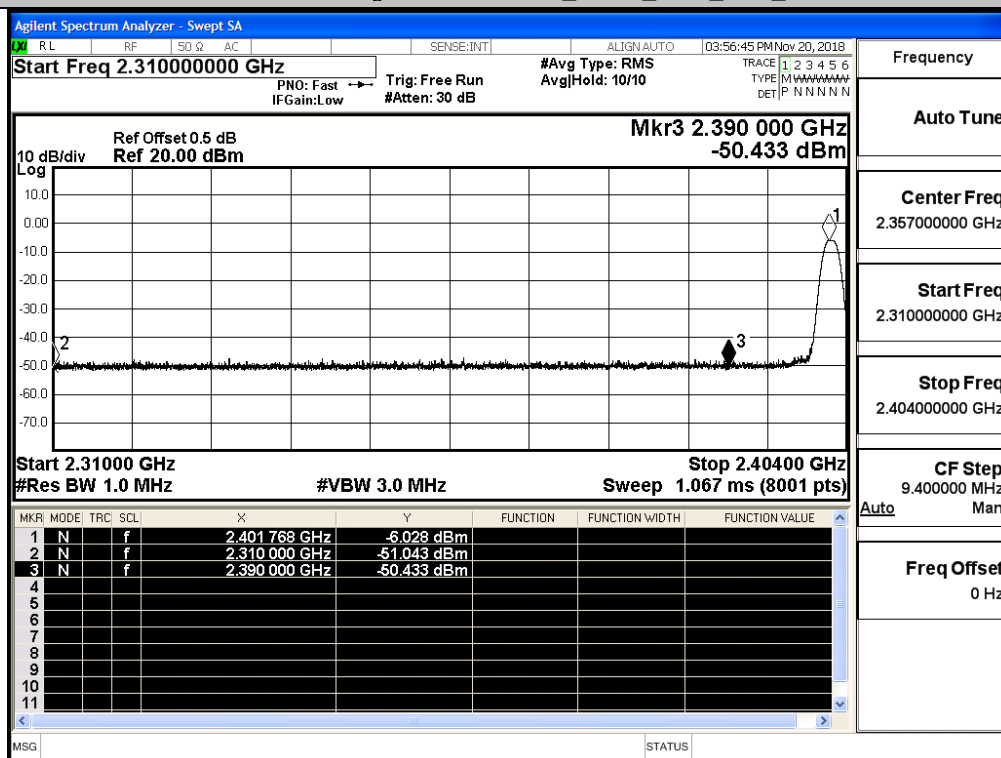
HCH



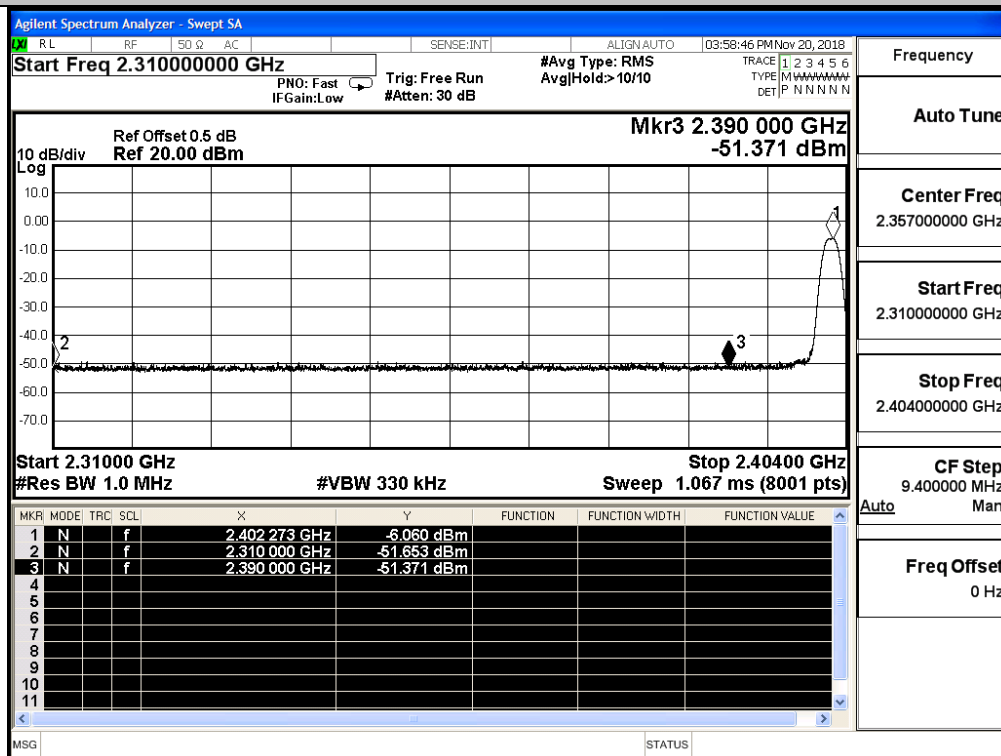
A.7 Restrict-band band-edge measurements

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	-51.043	2	0	46.22	PEAK	74	PASS
		Ant1	2310.0	-51.653	2	0	45.61	AV	54	PASS
		Ant1	2390.0	-50.433	2	0	46.83	PEAK	74	PASS
		Ant1	2390.0	-51.371	2	0	45.89	AV	54	PASS
	2480	Ant1	2483.5	-48.487	2	0	48.77	PEAK	74	PASS
		Ant1	2483.5	-50.942	2	0	46.32	AV	54	PASS
		Ant1	2500.0	-49.554	2	0	47.71	PEAK	74	PASS
		Ant1	2500.0	-50.769	2	0	46.49	AV	54	PASS

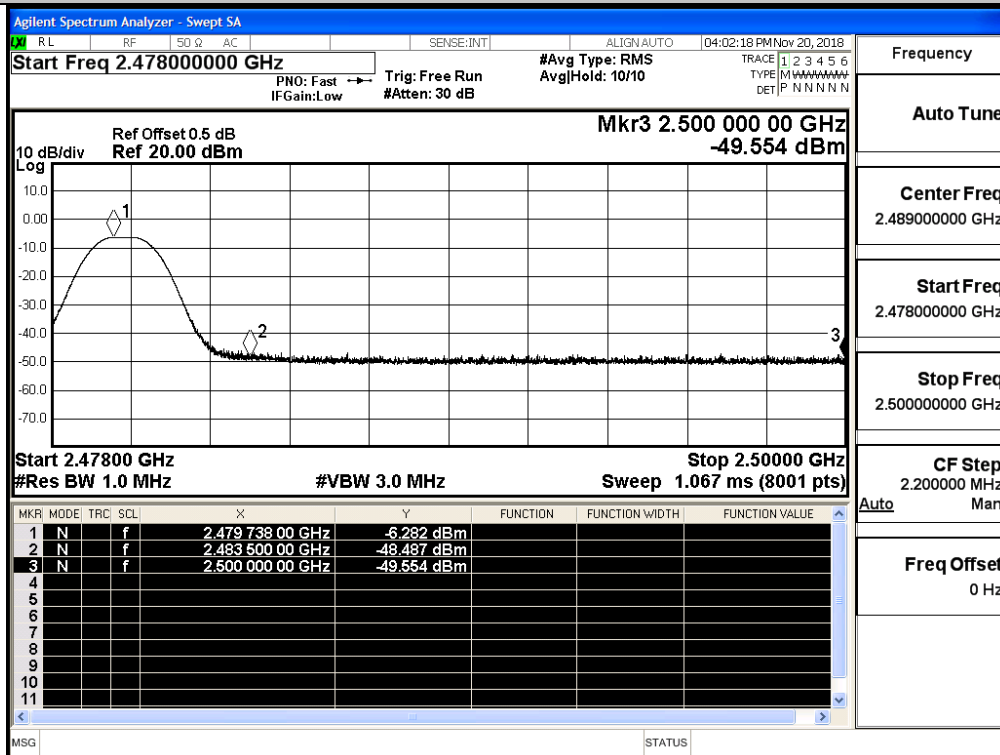
Restrict-band band-edge measurements_BT LE_2402_Ant1_PEAK



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

