

Appendix A

RF Test Data for BT V5.0 (Conducted Measurement)

Product Name: Wi-Fi RGB LED Controller+24Keys Remote Controller

Trade Mark: N/A

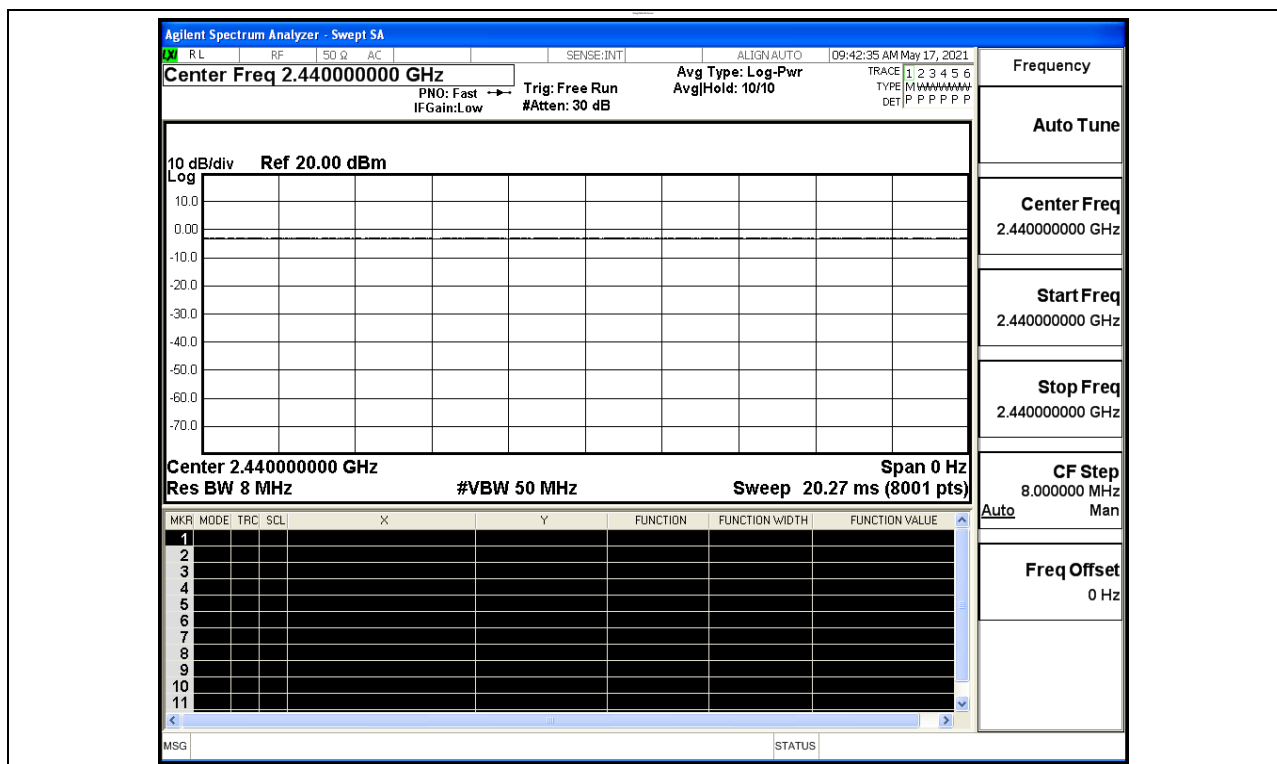
Test Model: ZJ-BWCG-RGB-R24B1

Environmental Conditions

Temperature:	24.6° C
Relative Humidity:	54.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Jay Li
Supervised by:	Li Huan

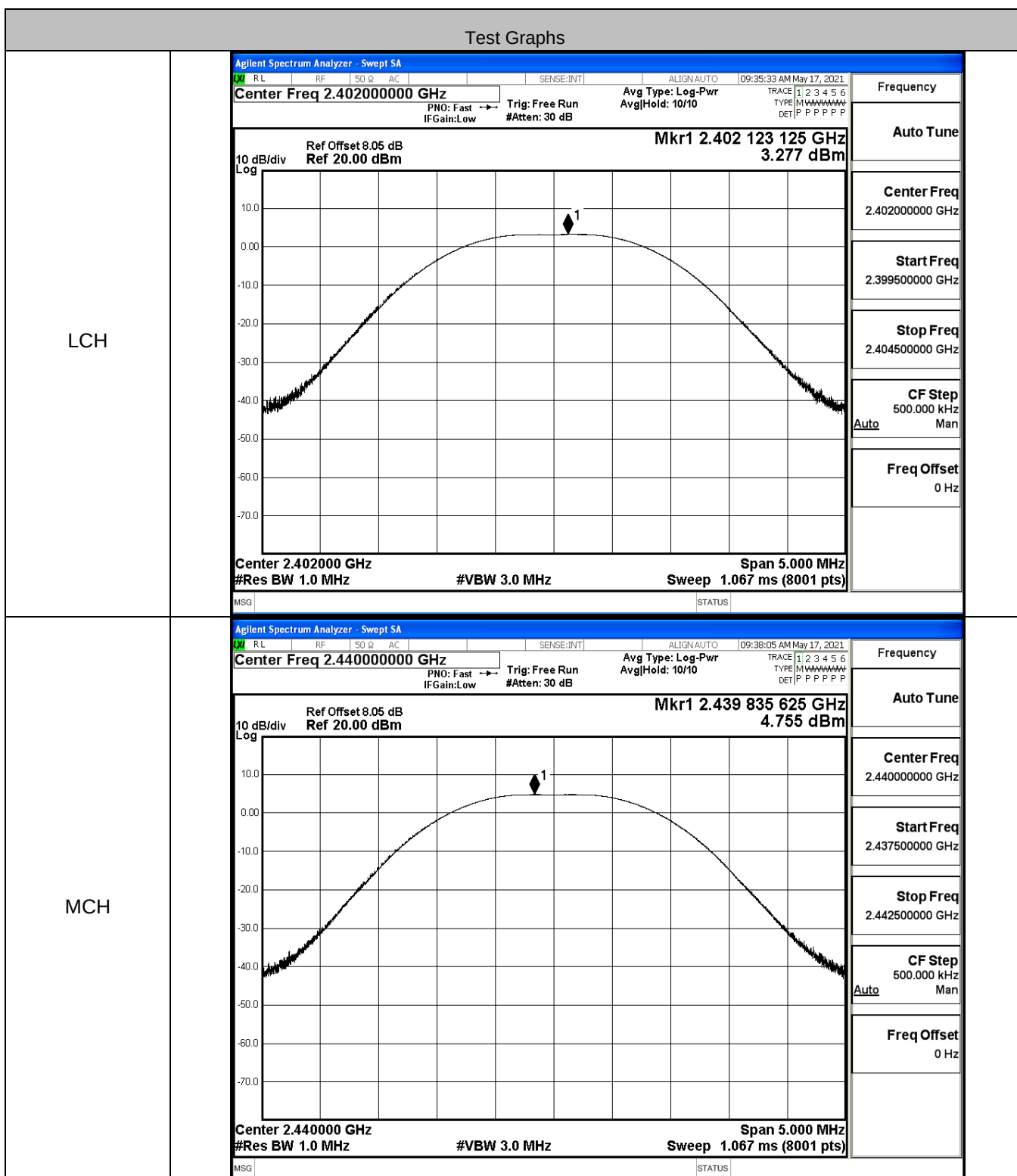
A.1 Duty Cycle

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

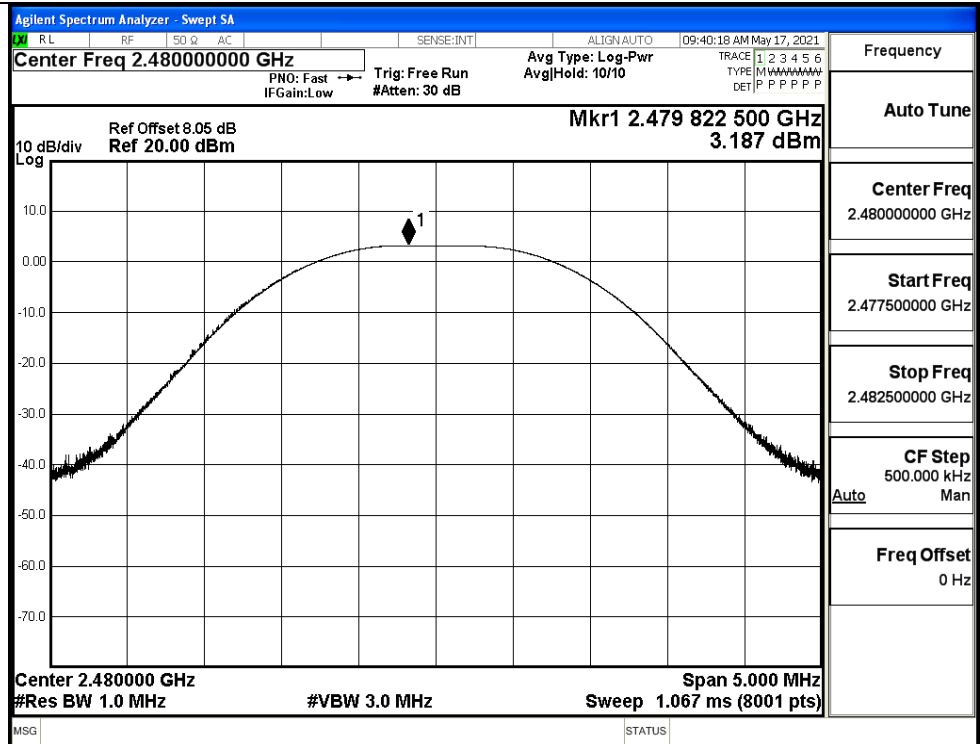


A.2 Maximum Conducted Peak Output Power

Mode	Channel	Conduct Peak Power[dBm]	Limit [dBm]	Verdict
BT LE	LCH	3.277	30	PASS
BT LE	MCH	4.755	30	PASS
BT LE	HCH	3.187	30	PASS



HCH

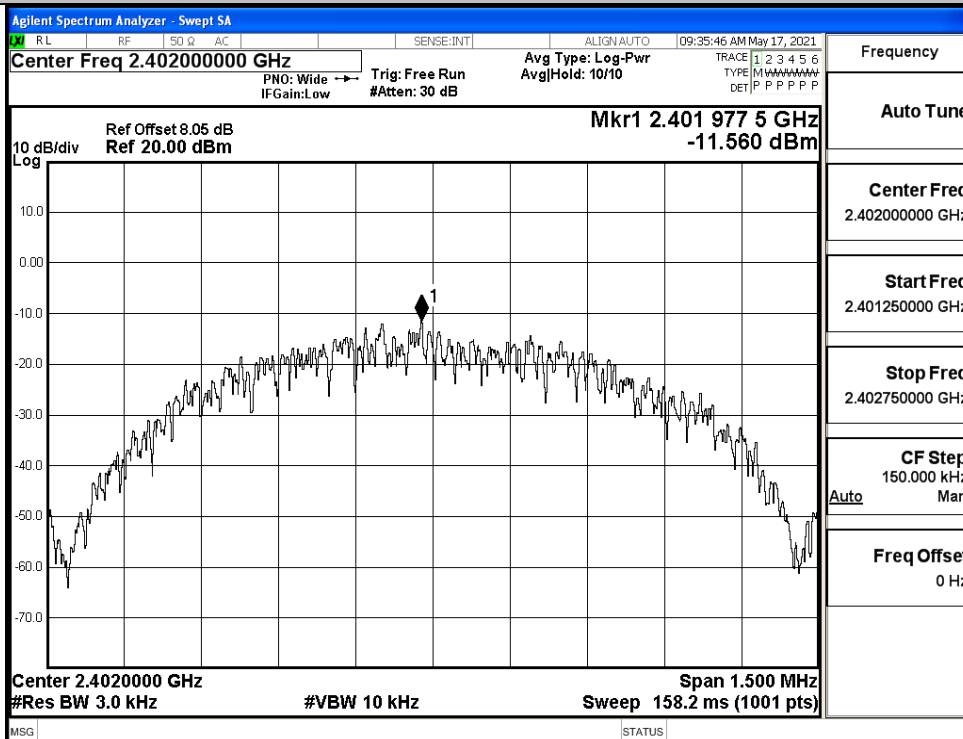


A.3 Maximum Power Spectral Density

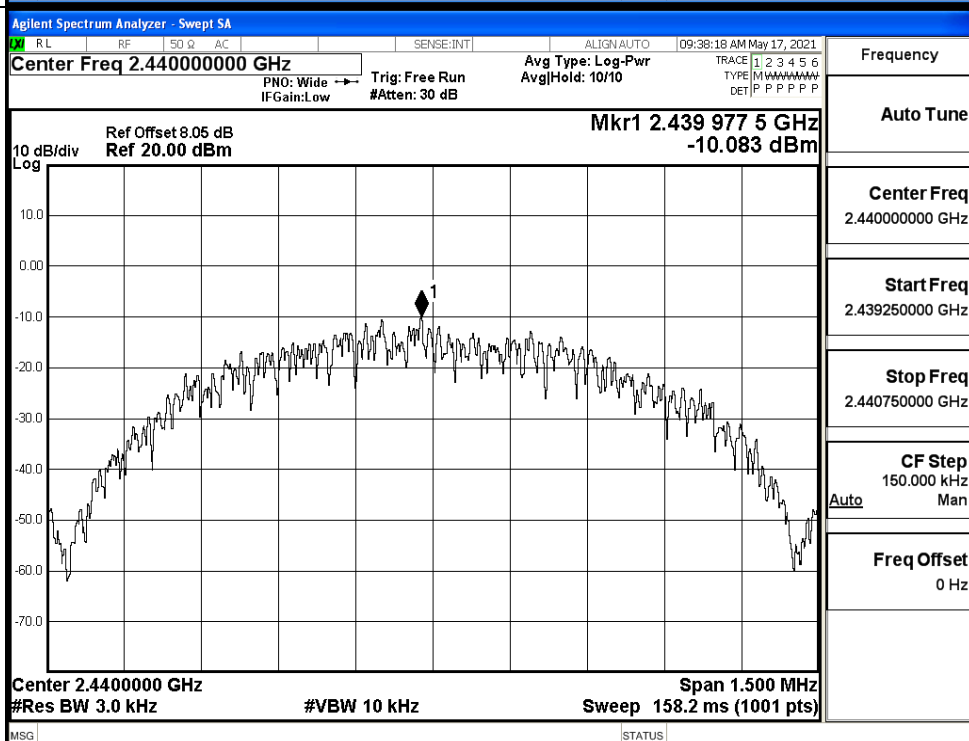
Mode	Channel	PSD [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
BT LE	LCH	-11.560	8	PASS
BT LE	MCH	-10.083	8	PASS
BT LE	HCH	-12.391	8	PASS

Test Graphs

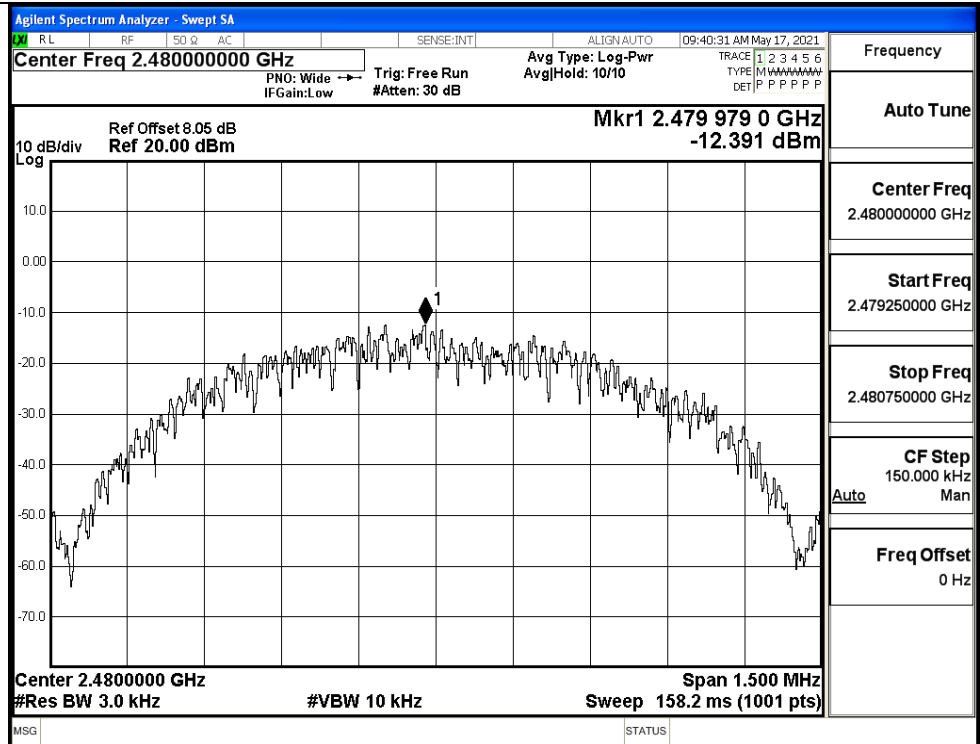
LCH



MCH



HCH

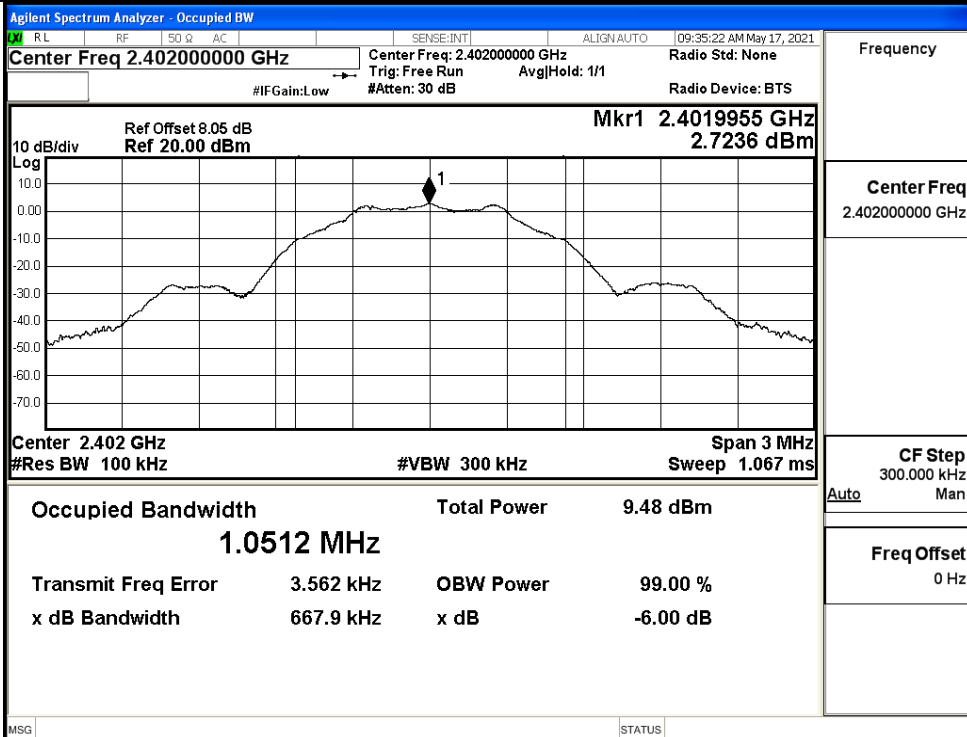


A.4 6dB Bandwidth

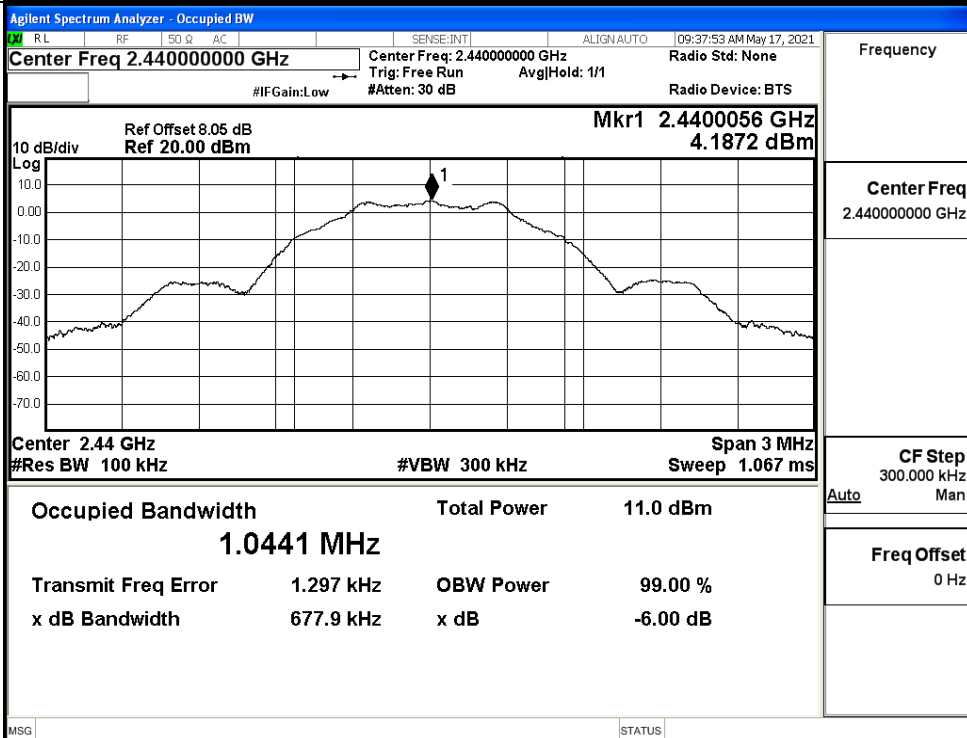
Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
BT LE	LCH	0.6679	≥ 0.5	PASS
BT LE	MCH	0.6779	≥ 0.5	PASS
BT LE	HCH	0.6745	≥ 0.5	PASS

Test Graphs

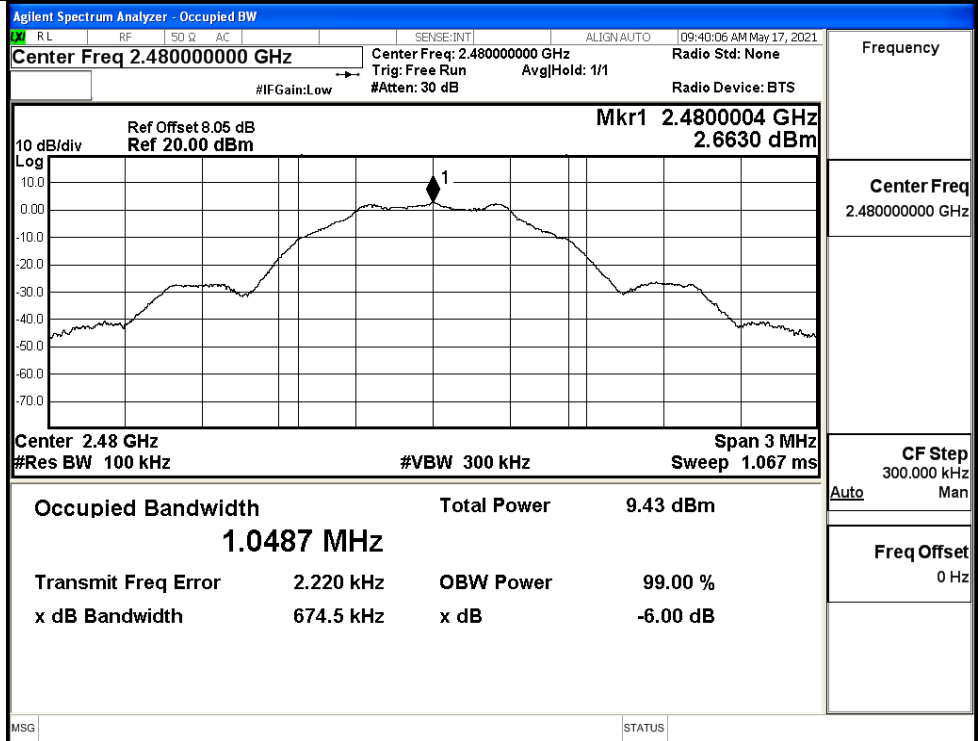
LCH



MCH



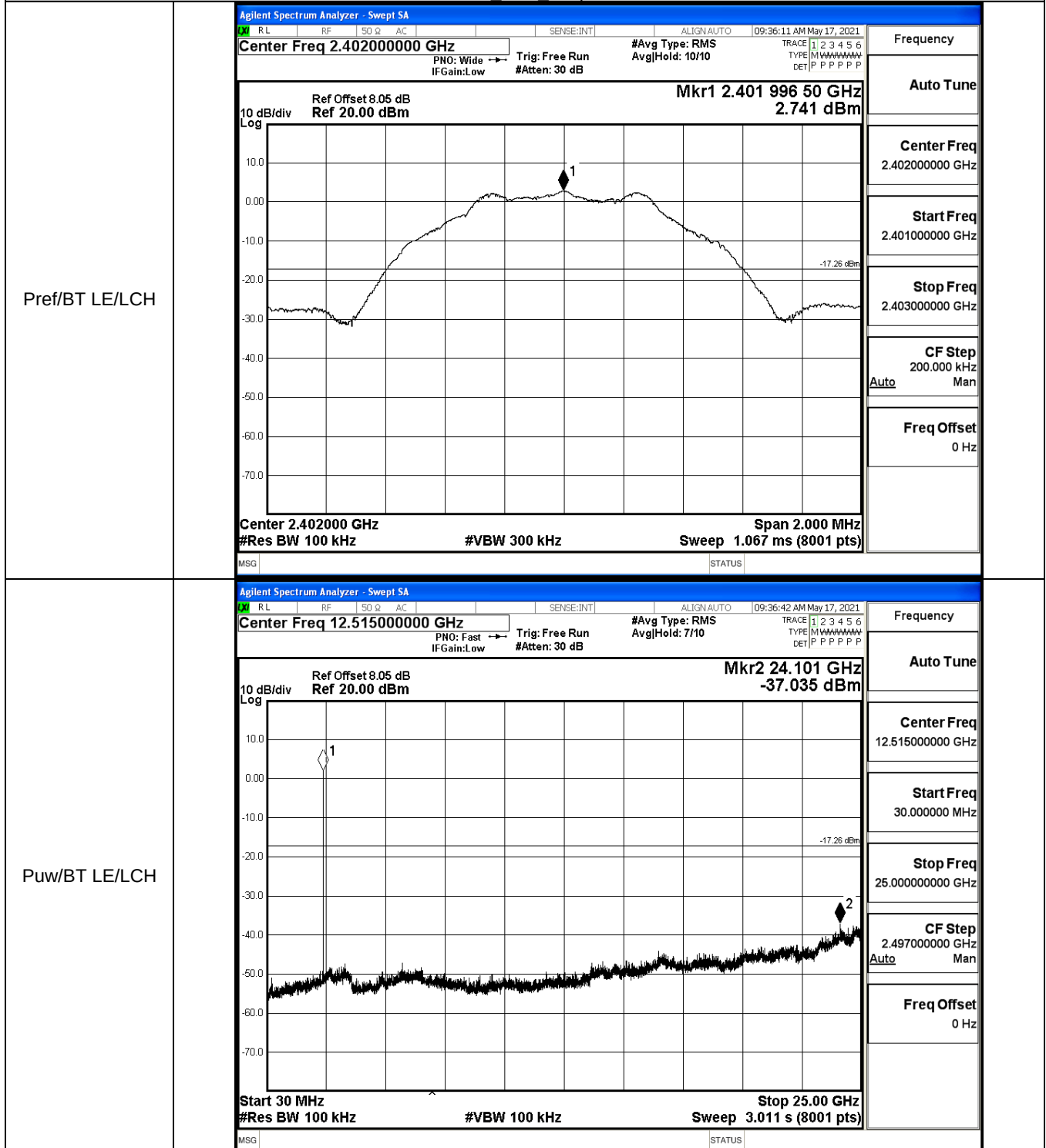
HCH



A.5 RF Conducted Spurious Emissions

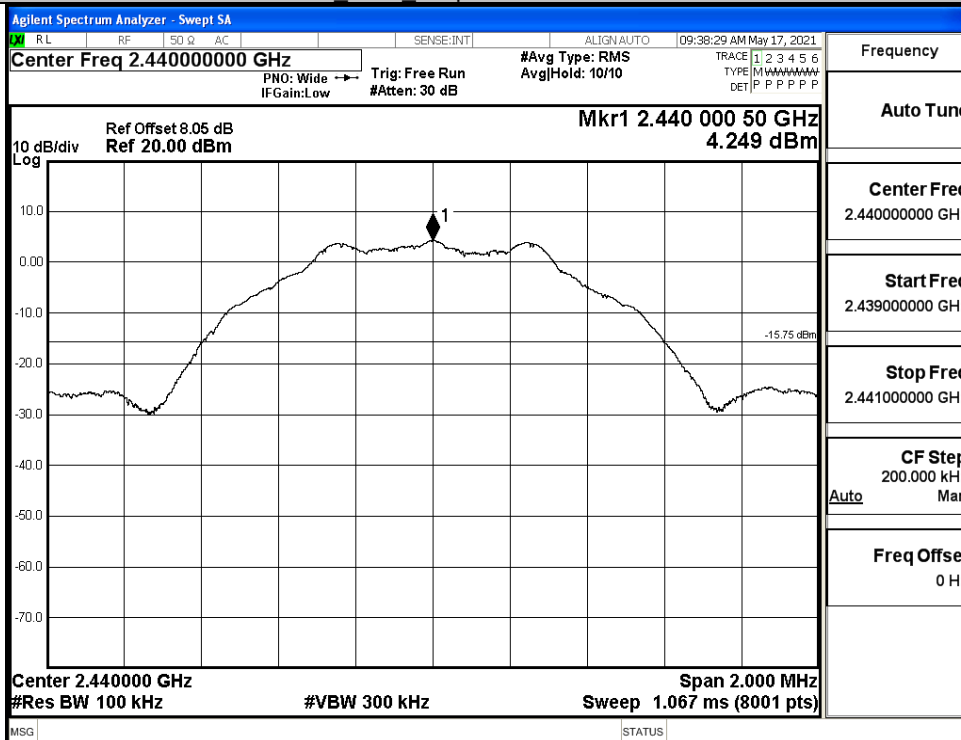
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	2.741	-37.035	-17.259	PASS
BT LE	MCH	4.249	-37.568	-15.751	PASS
BT LE	HCH	2.629	-37.670	-17.371	PASS

BT LE LCH Graphs

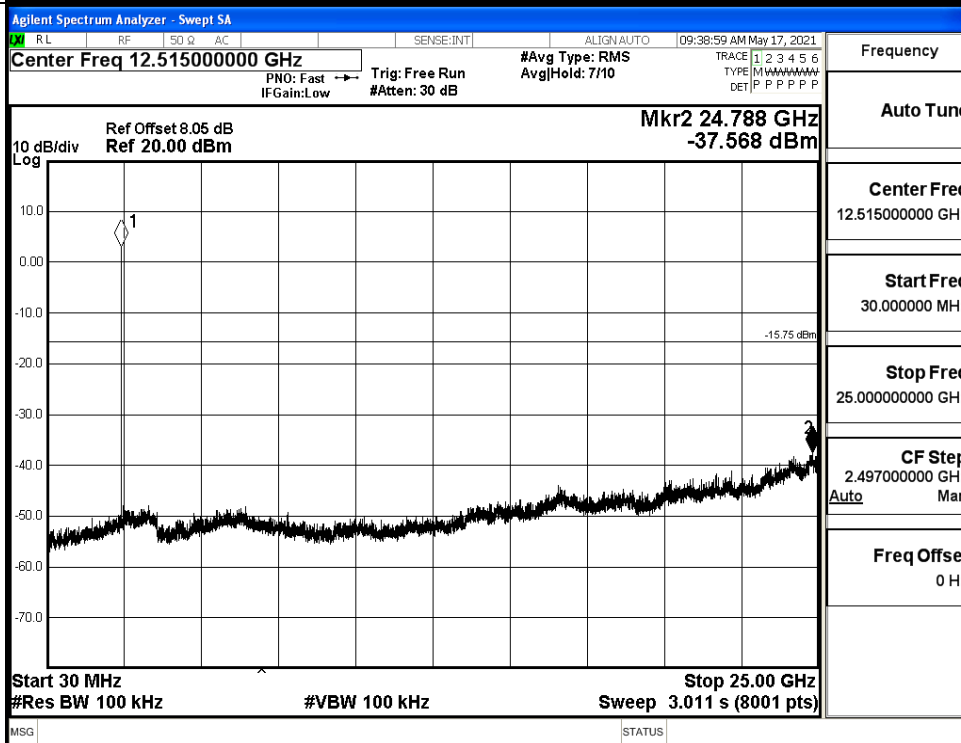


BT LE MCH Graphs

Pref/BT LE/MCH

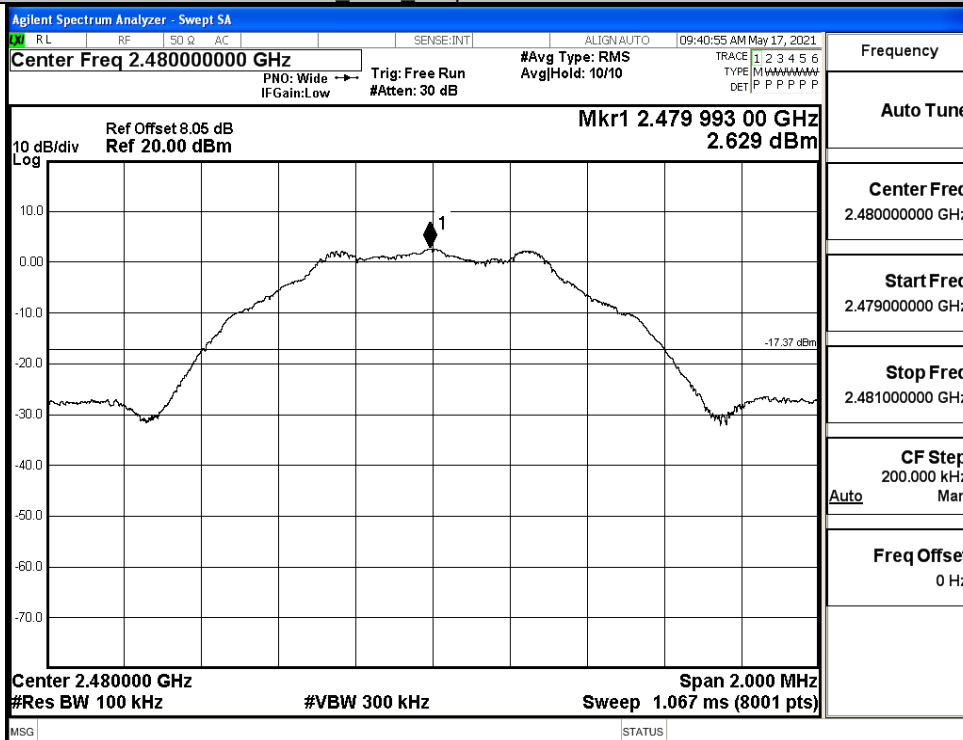


Puw/BT LE/MCH

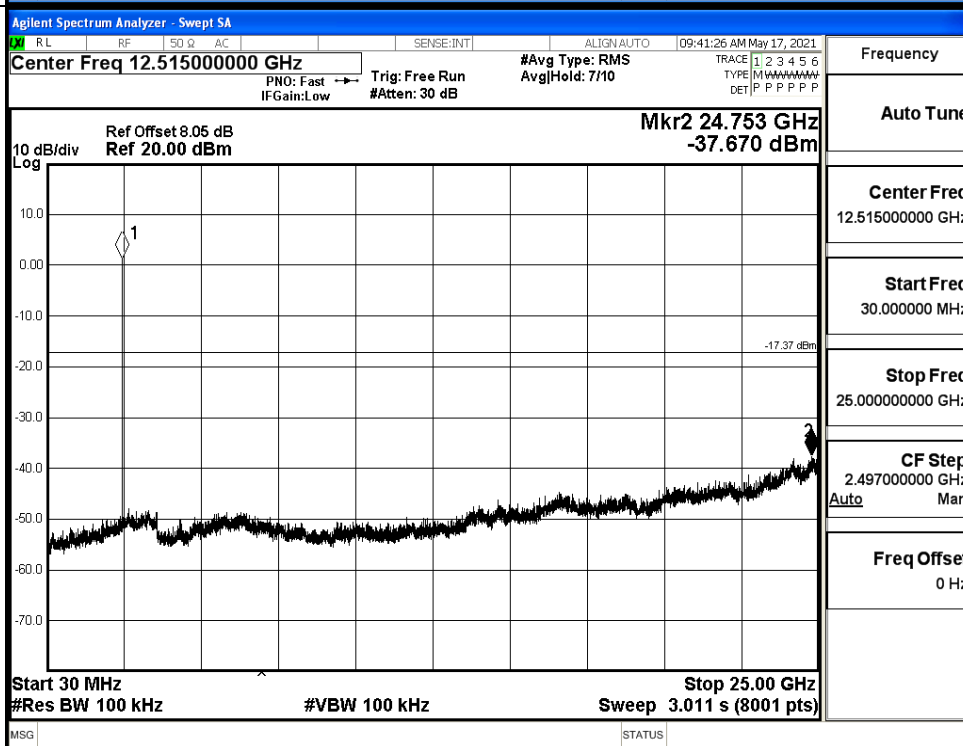


BT LE HCH Graphs

Pref/BT LE/HCH



Puw/BT LE/HCH

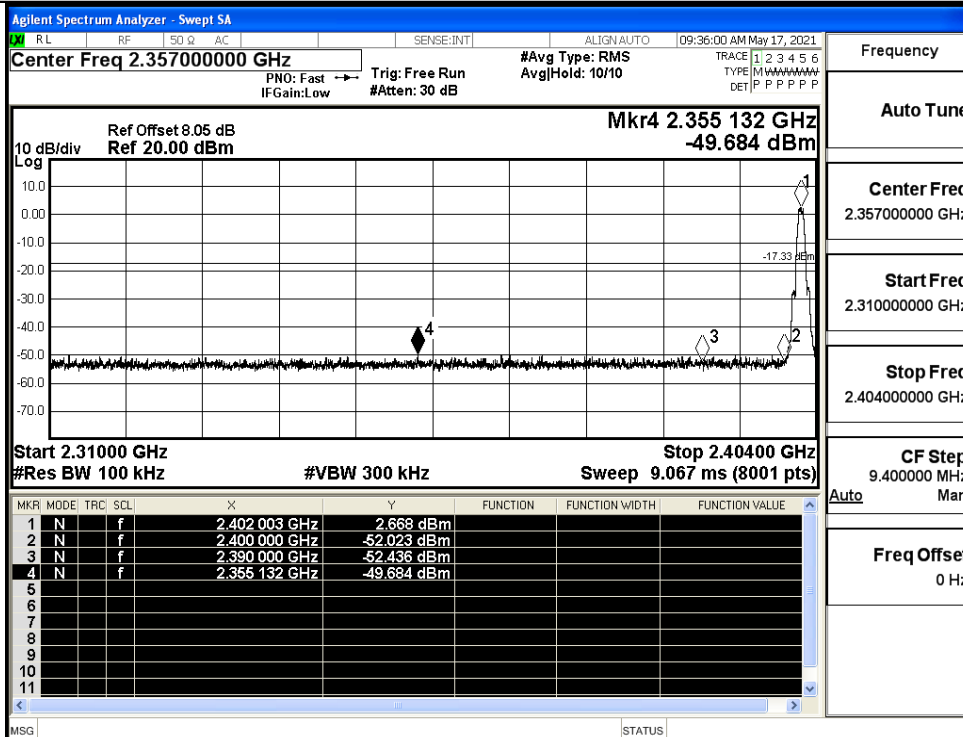


A.6 Band-edge for RF Conducted Emissions

Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	2.668	-49.684	-17.33	PASS
BT LE	HCH	2.760	-48.976	-17.24	PASS

Test Graphs

LCH



Frequency

Auto Tune

Center Freq
2.357000000 GHz

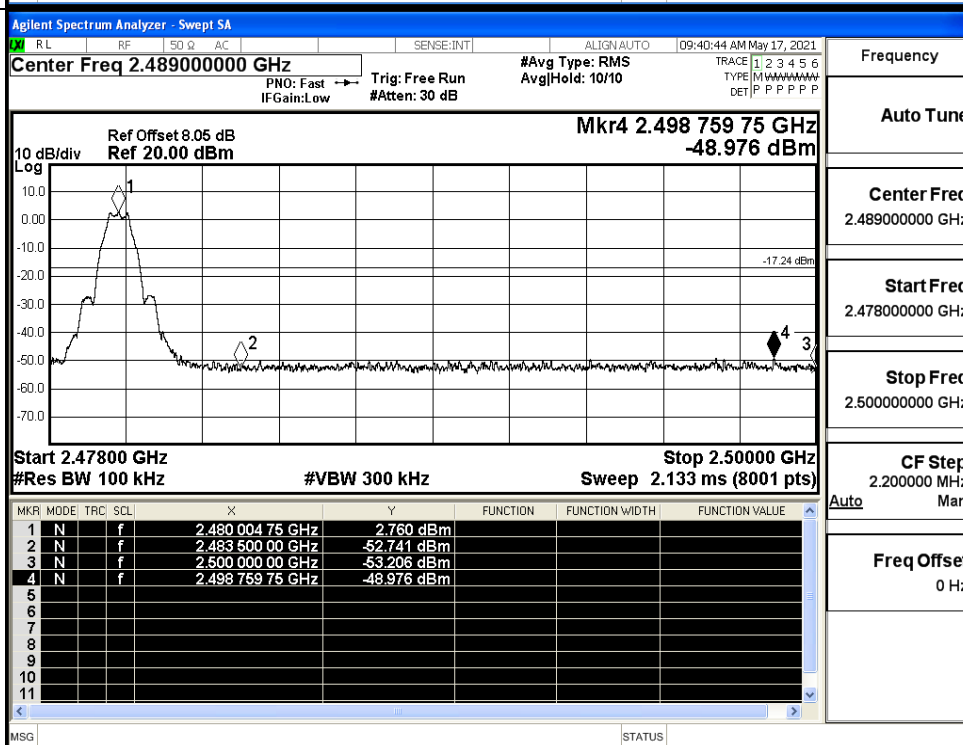
Start Freq
2.310000000 GHz

Stop Freq
2.404000000 GHz

CF Step
9.400000 MHz

Freq Offset
0 Hz

HCH



Frequency

Auto Tune

Center Freq
2.489000000 GHz

Start Freq
2.478000000 GHz

Stop Freq
2.500000000 GHz

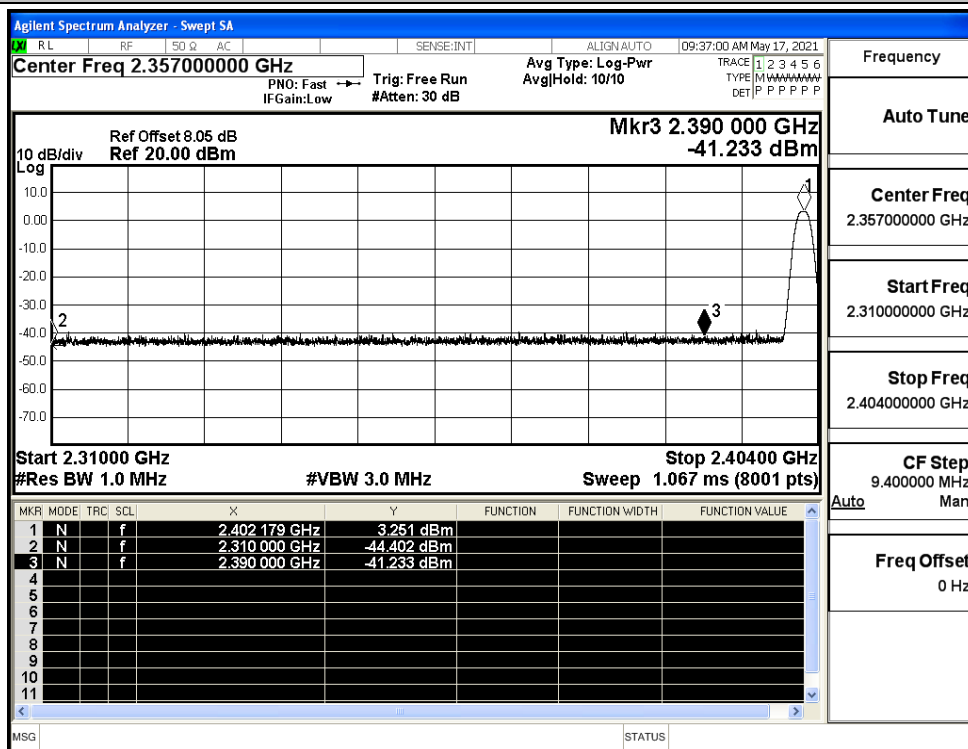
CF Step
2.200000 MHz

Freq Offset
0 Hz

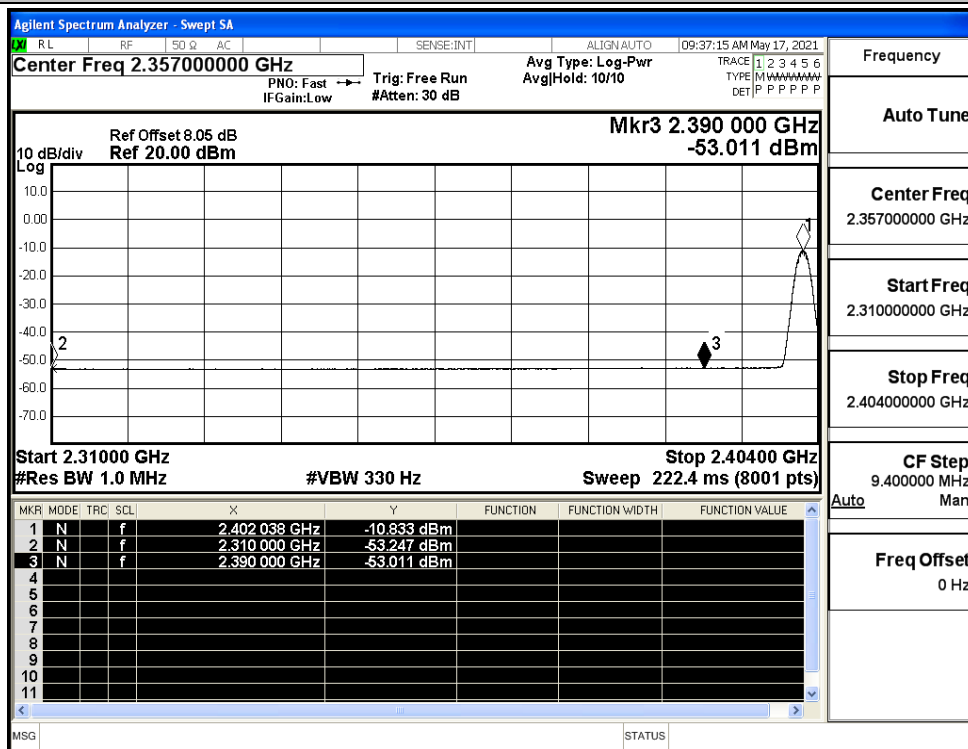
A.7 Restrict-band band-edge measurements

Test Mode	Test Channel	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
BT LE	2402	2310.0	-44.40	2.0	0	52.83	PEAK	74	PASS
		2310.0	-53.25	2.0	0	43.98	AV	54	PASS
		2390.0	-41.23	2.0	0	56.00	PEAK	74	PASS
		2390.0	-53.01	2.0	0	44.22	AV	54	PASS
	2480	2483.5	-41.89	2.0	0	55.34	PEAK	74	PASS
		2483.5	-52.41	2.0	0	44.82	AV	54	PASS
		2500.0	-41.66	2.0	0	55.57	PEAK	74	PASS
		2500.0	-52.27	2.0	0	44.96	AV	54	PASS

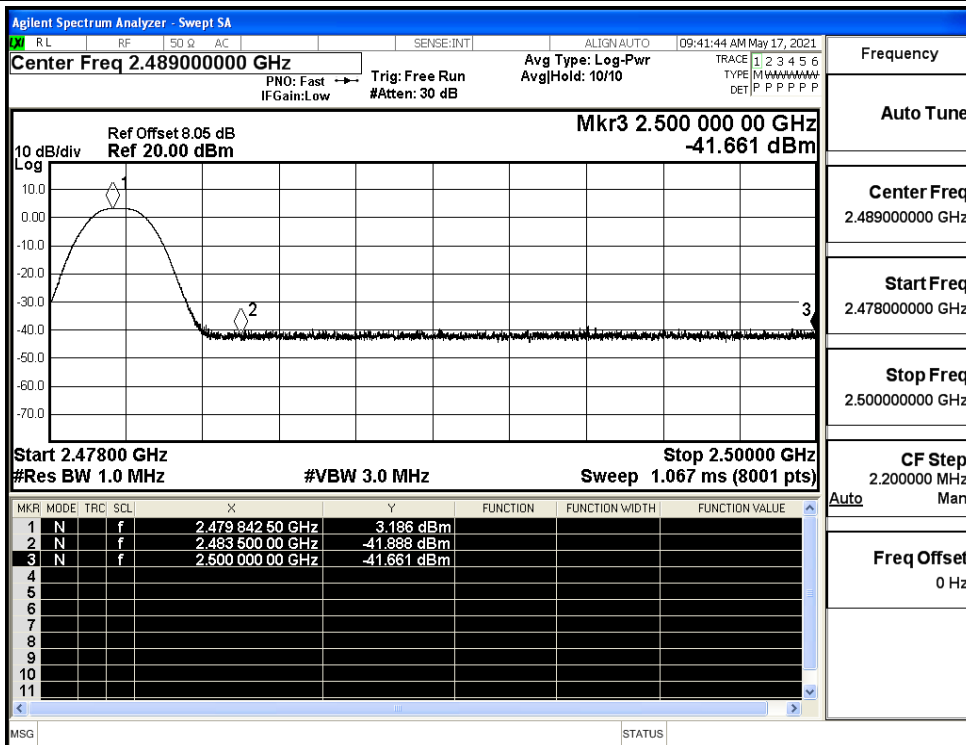
Restrict-band band-edge measurements_BT LE_2402_Ant1_PEAK



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

