

Appendix A

RF Test Data for BT V4.0(BDR/EDR) (Conducted Measurement)

Product Name: Desktop UHF Reader

Trade Mark: Chainway

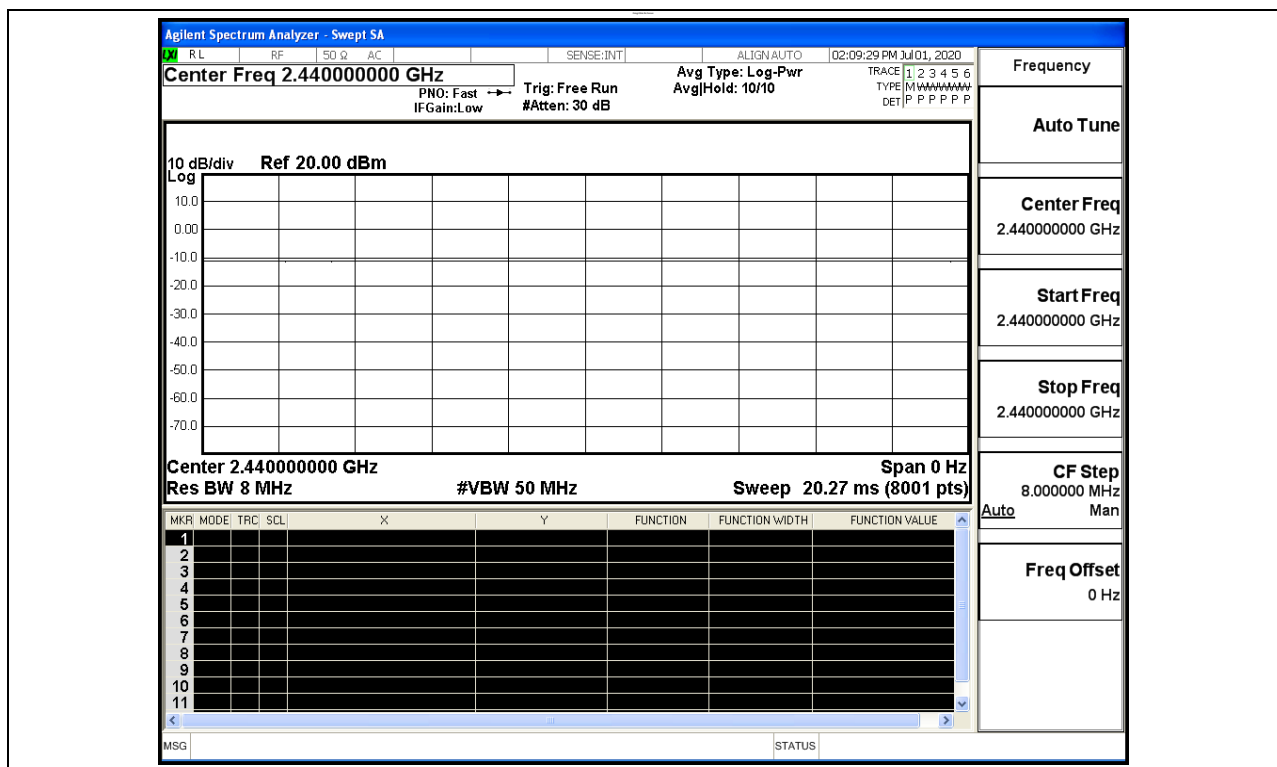
Test Model: R3

Environmental Conditions

Temperature:	22.5°C
Relative Humidity:	53.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Li Huan
Supervised by:	Tom Liu

A.1 Duty Cycle

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

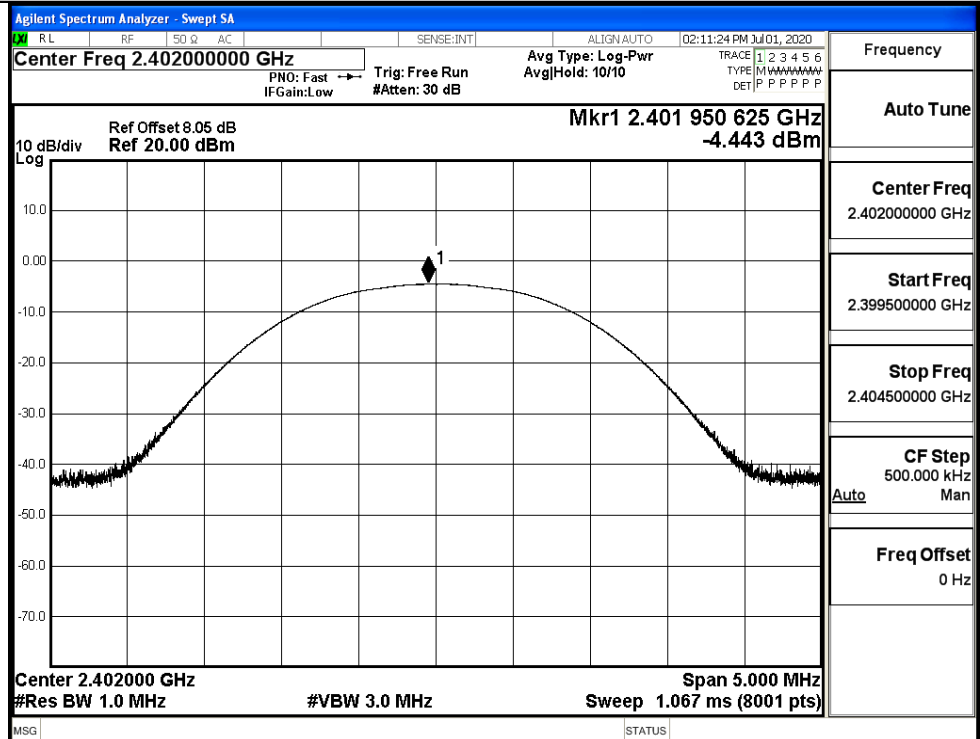


A.2 Maximum Conducted Peak Output Power

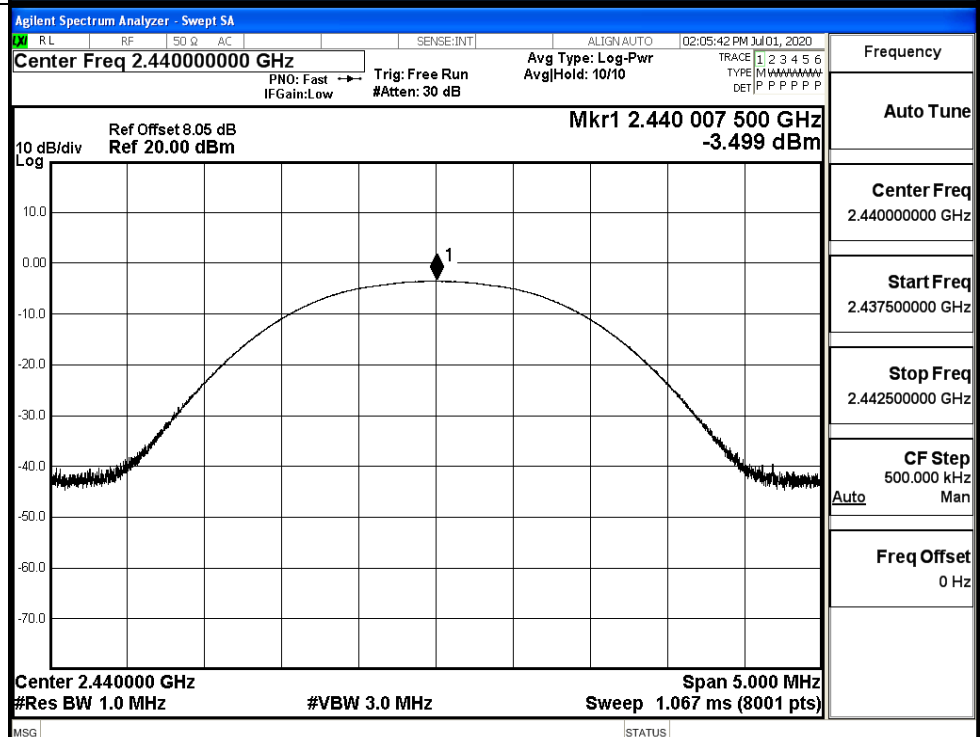
Mode	Channel	Conduct Peak Power[dBm]	Limit [dBm]	Verdict
BT LE	LCH	-4.443	30	PASS
BT LE	MCH	-3.499	30	PASS
BT LE	HCH	-4.592	30	PASS

Test Graphs

LCH



MCH

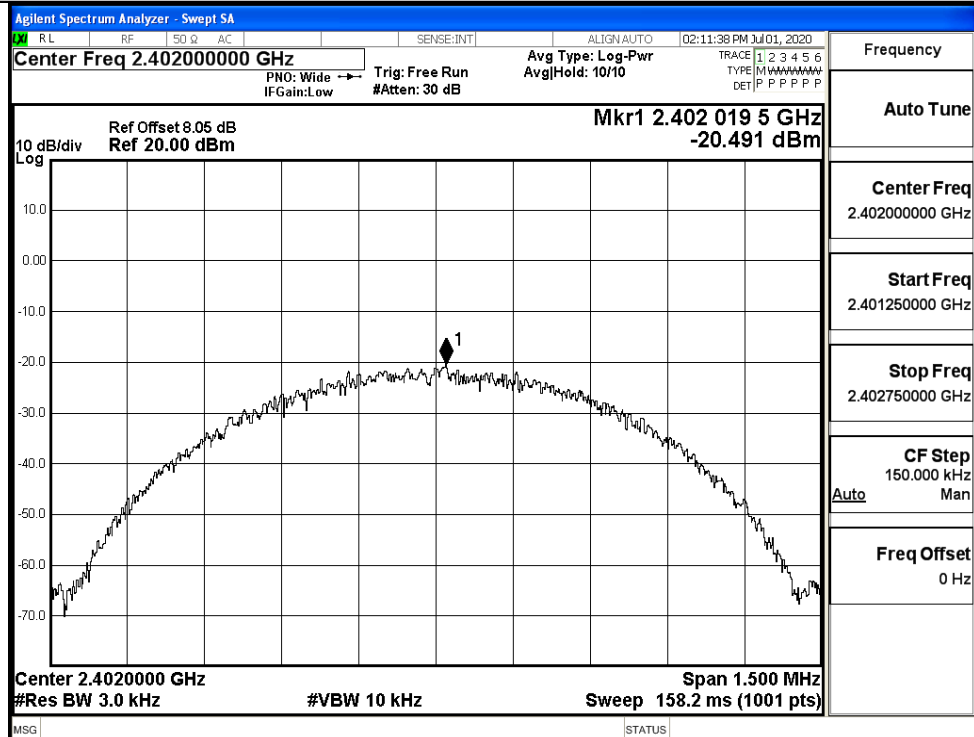


A.3 Maximum Power Spectral Density

Mode	Channel	PSD [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
BT LE	LCH	-20.491	8	PASS
BT LE	MCH	-19.510	8	PASS
BT LE	HCH	-21.046	8	PASS

Test Graphs

LCH

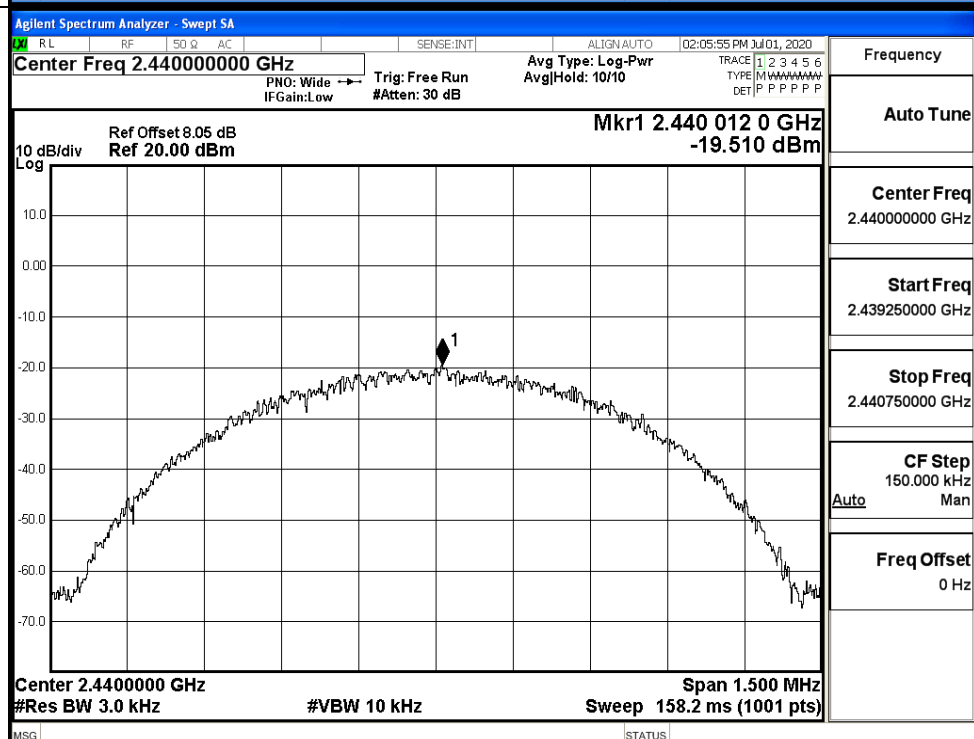


Frequency

Auto Tune

Center Freq
2.402000000 GHzStart Freq
2.401250000 GHzStop Freq
2.402750000 GHzCF Step
150.000 kHz
Auto ManFreq Offset
0 Hz

MCH

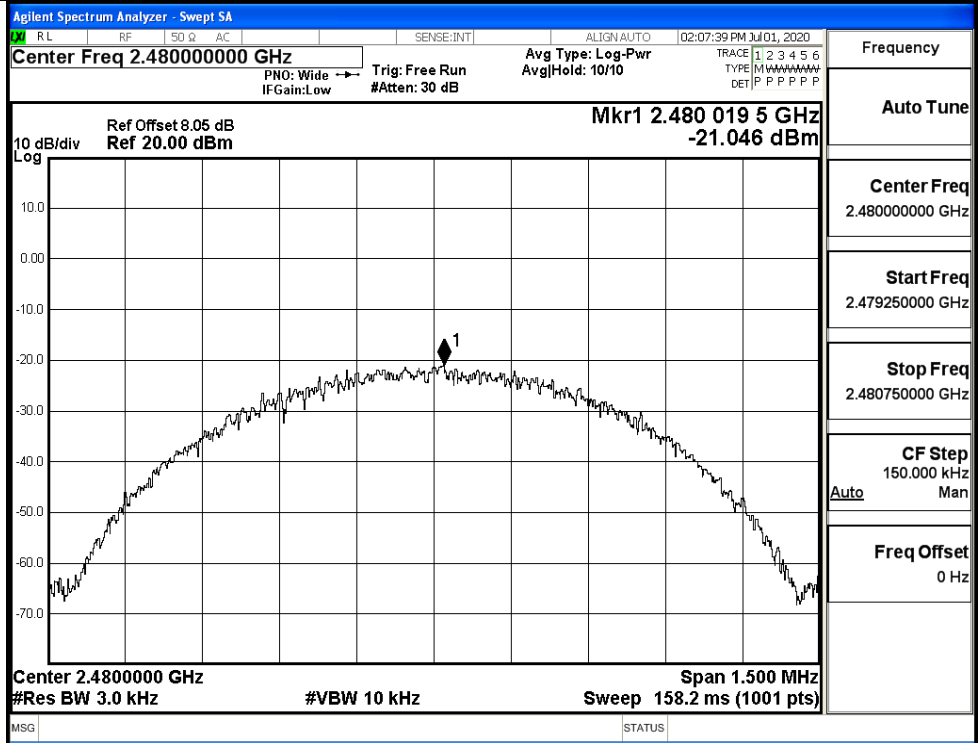


Frequency

Auto Tune

Center Freq
2.440000000 GHzStart Freq
2.439250000 GHzStop Freq
2.440750000 GHzCF Step
150.000 kHz
Auto ManFreq Offset
0 Hz

HCH

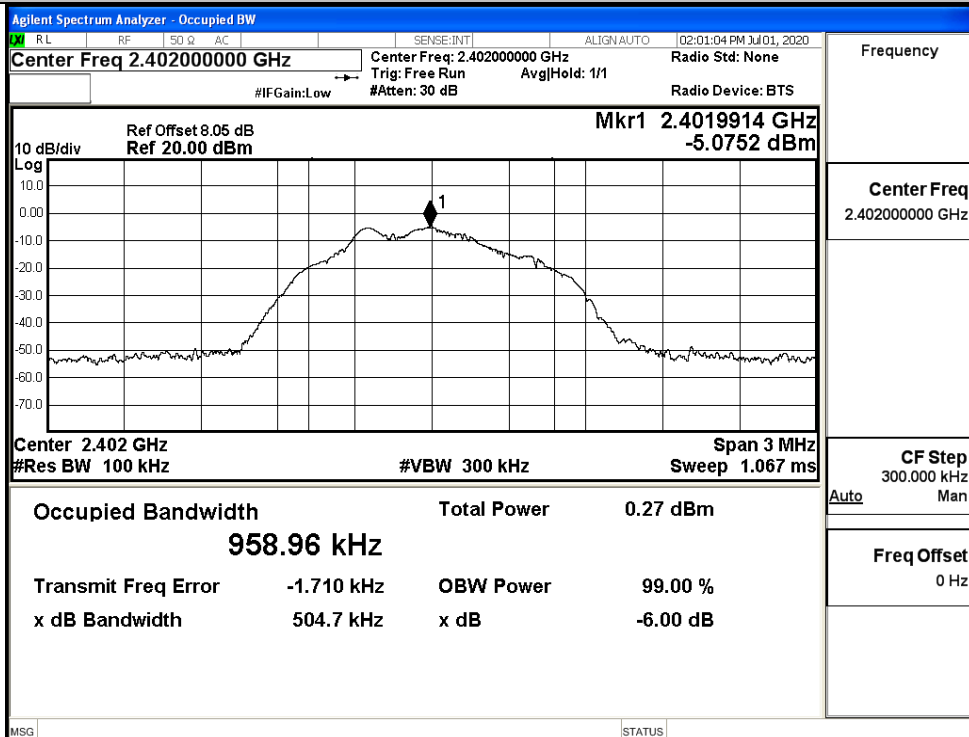


A.4 6dB Bandwidth

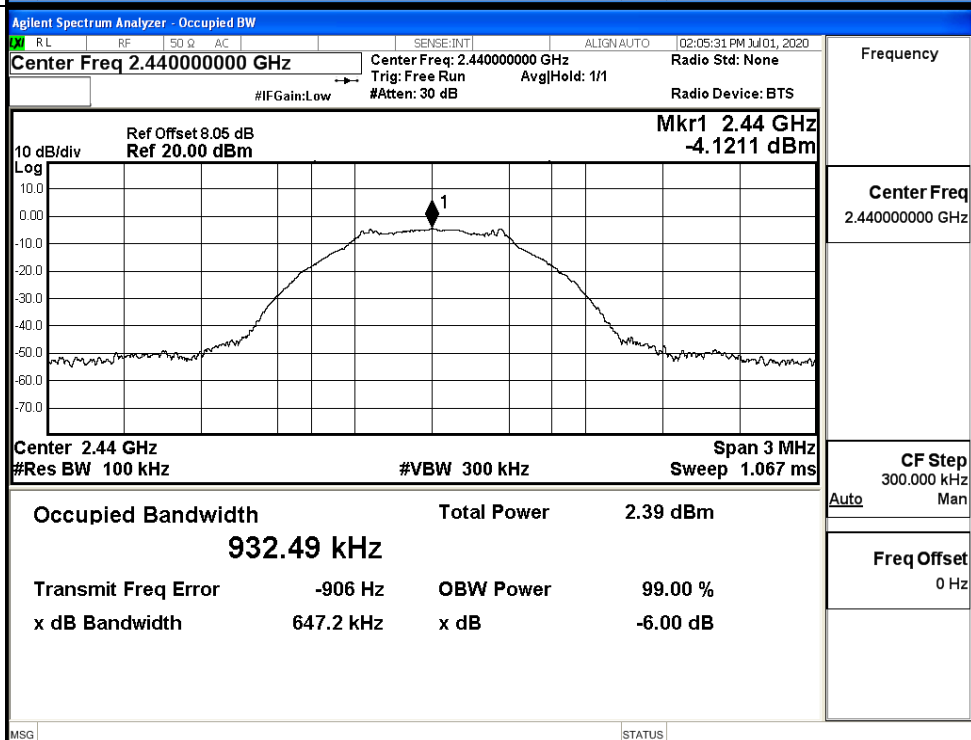
Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
BT LE	LCH	0.5047	≥ 0.5	PASS
BT LE	MCH	0.6472	≥ 0.5	PASS
BT LE	HCH	0.6524	≥ 0.5	PASS

Test Graphs

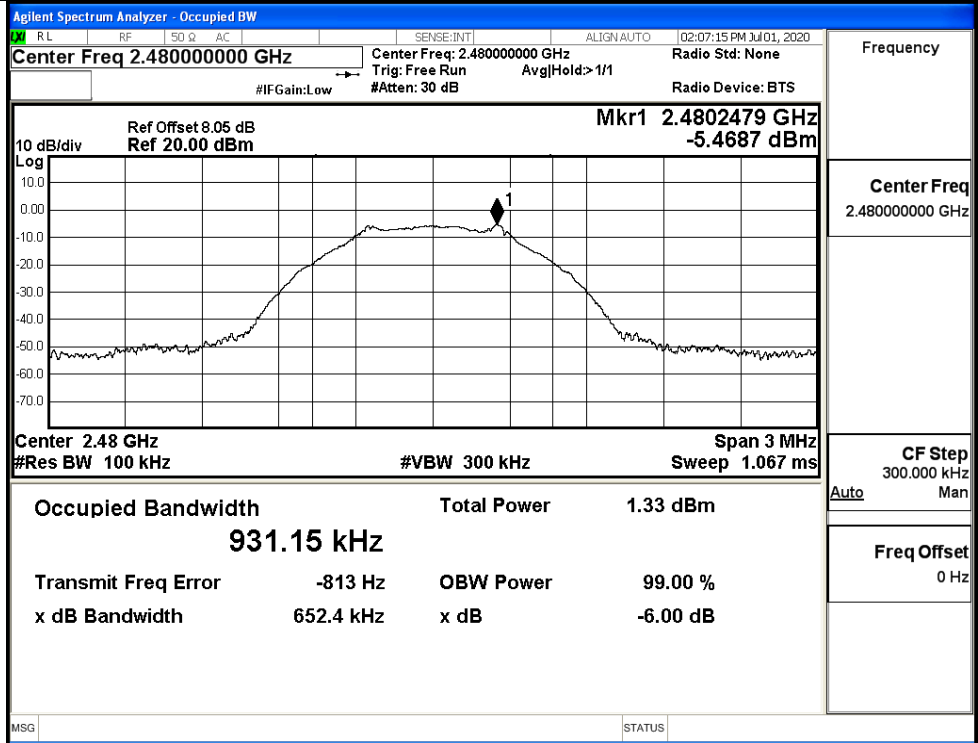
LCH



MCH



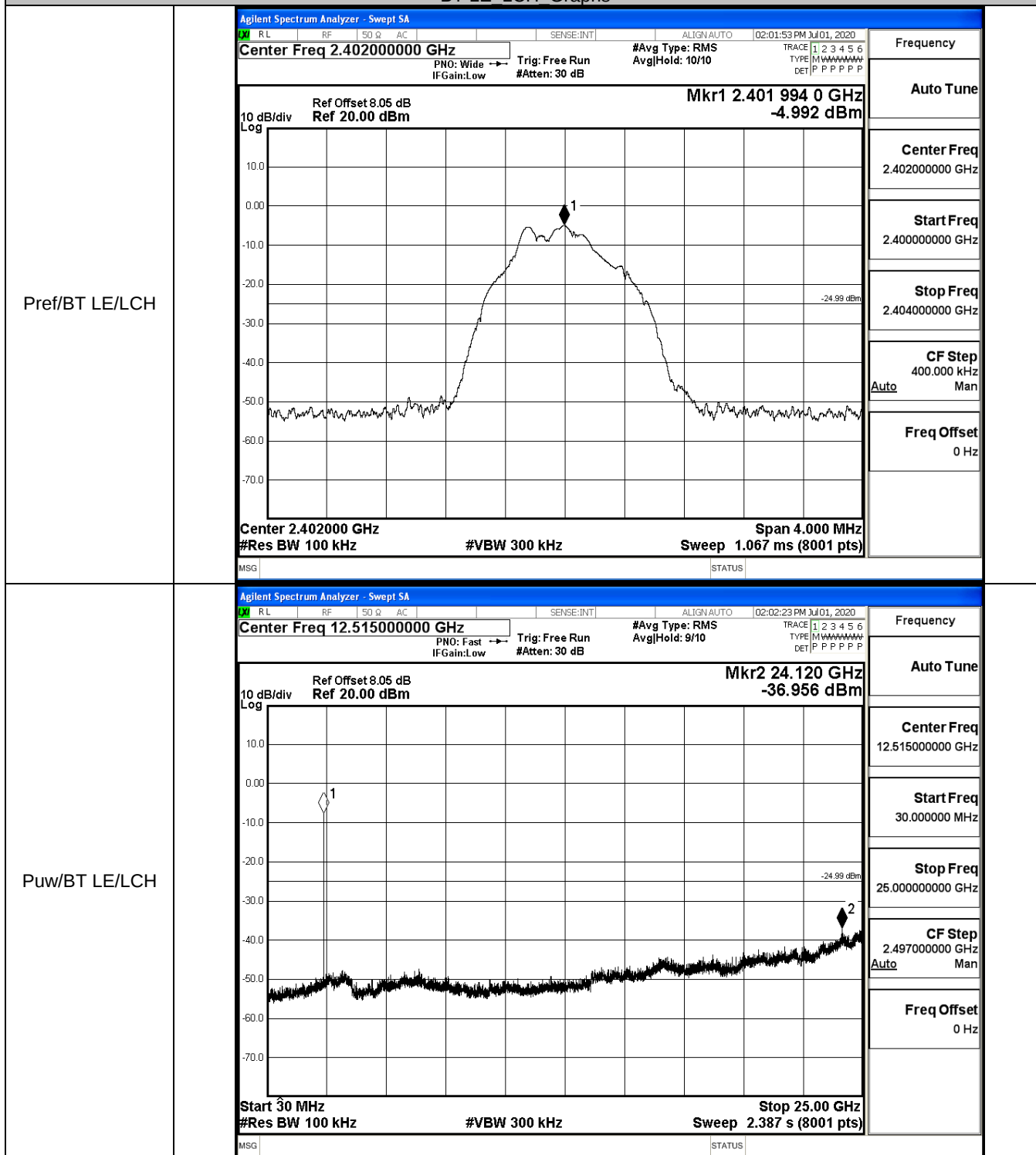
HCH



A.5 RF Conducted Spurious Emissions

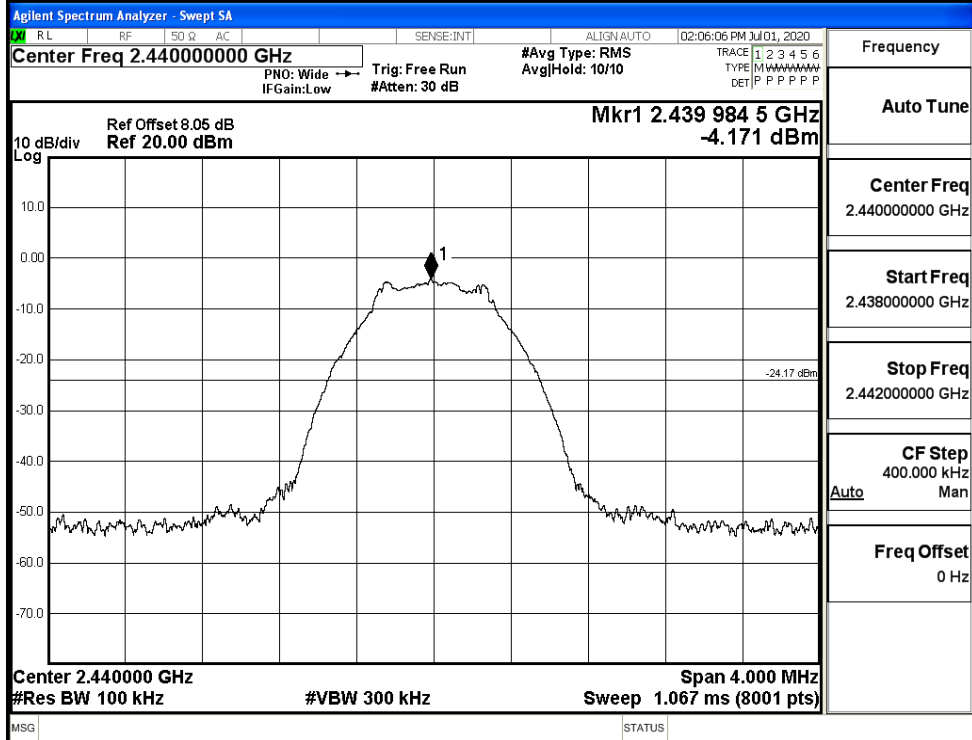
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	-4.992	-36.956	-24.992	PASS
BT LE	MCH	-4.171	-36.883	-24.171	PASS
BT LE	HCH	-5.121	-36.912	-25.121	PASS

BT LE LCH Graphs

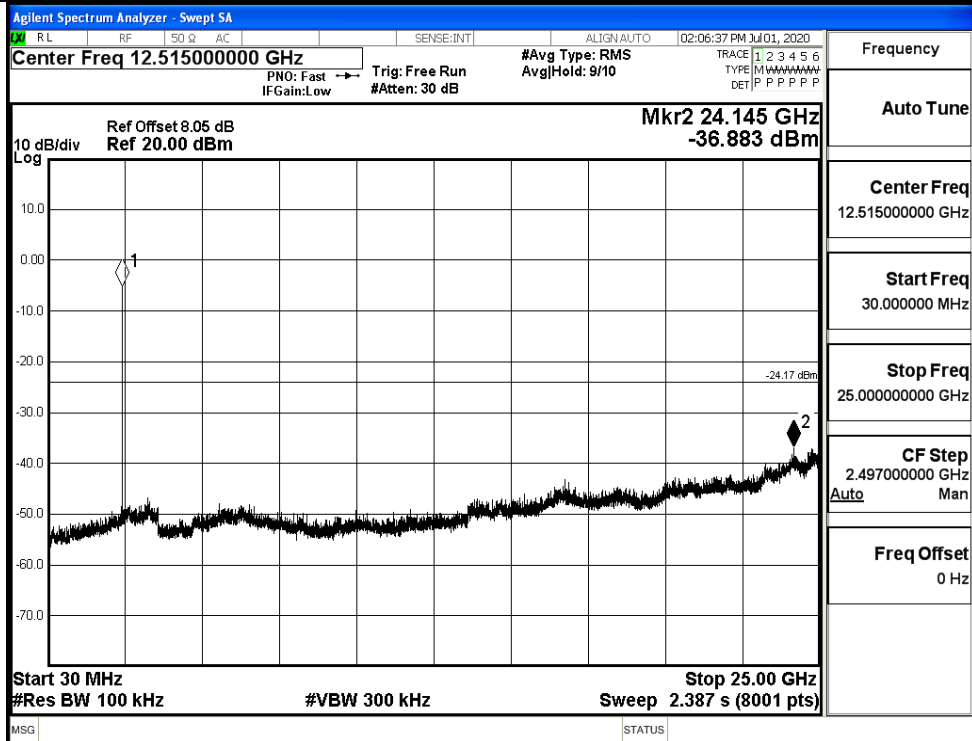


BT LE MCH Graphs

Pref/BT LE/MCH

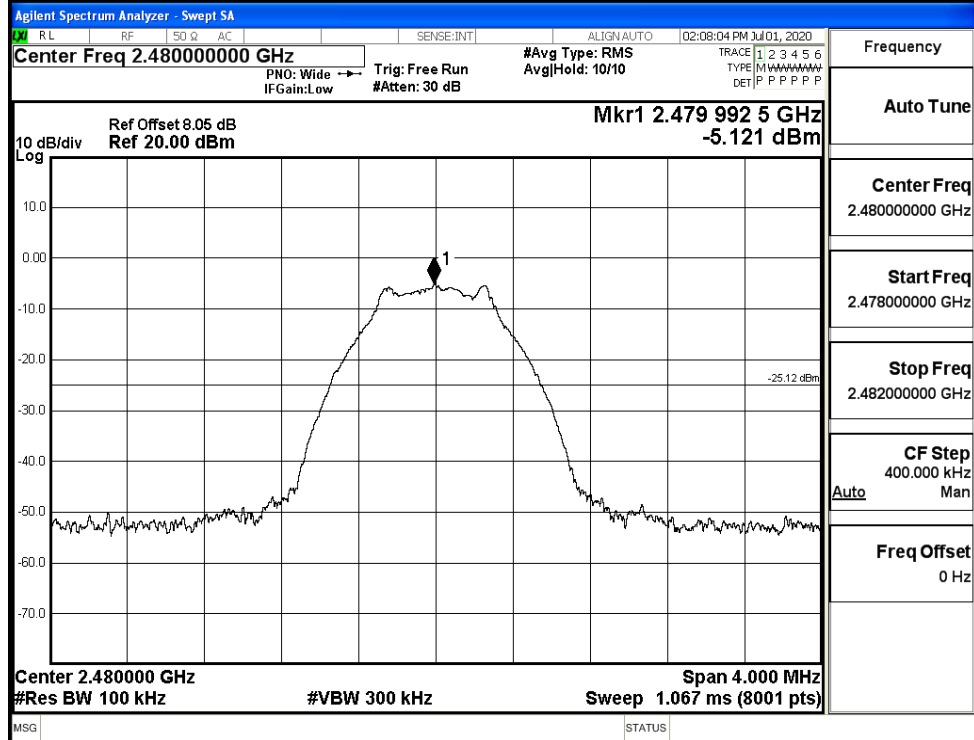


Puw/BT LE/MCH

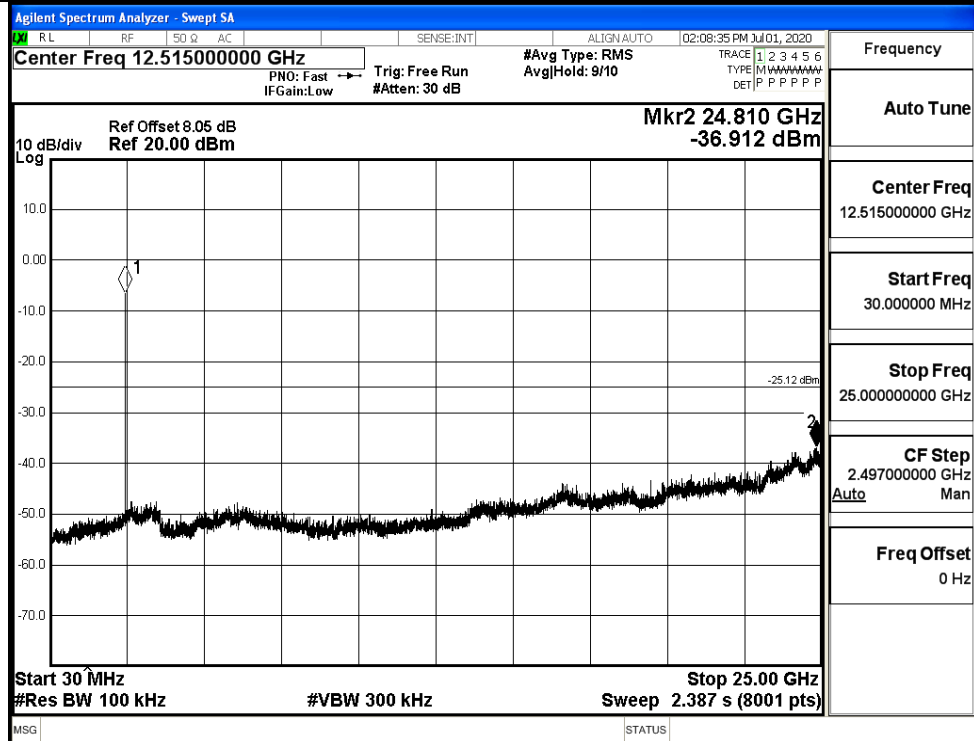


BT LE HCH Graphs

Pref/BT LE/HCH

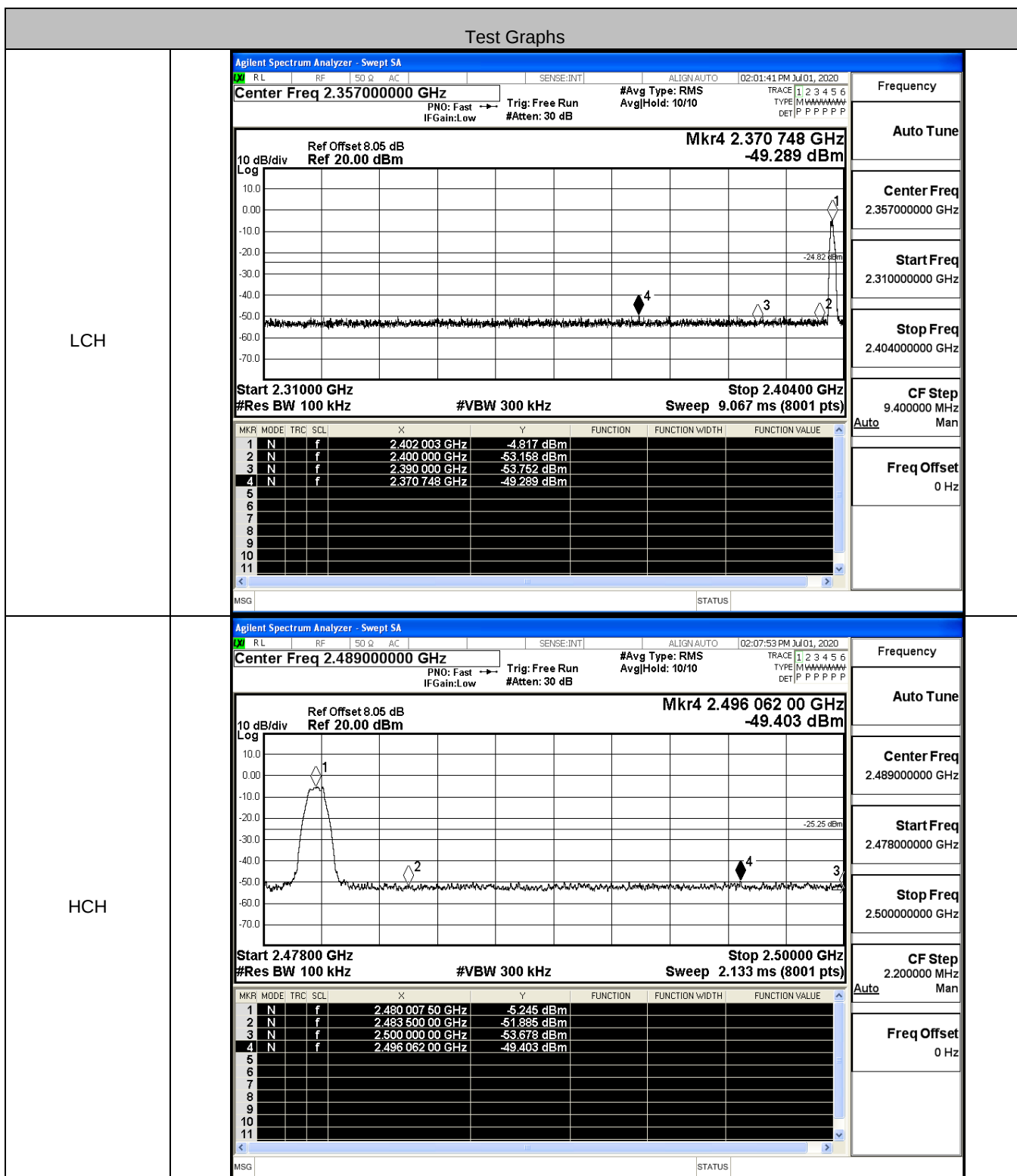


Puw/BT LE/HCH



A.6 Band-edge for RF Conducted Emissions

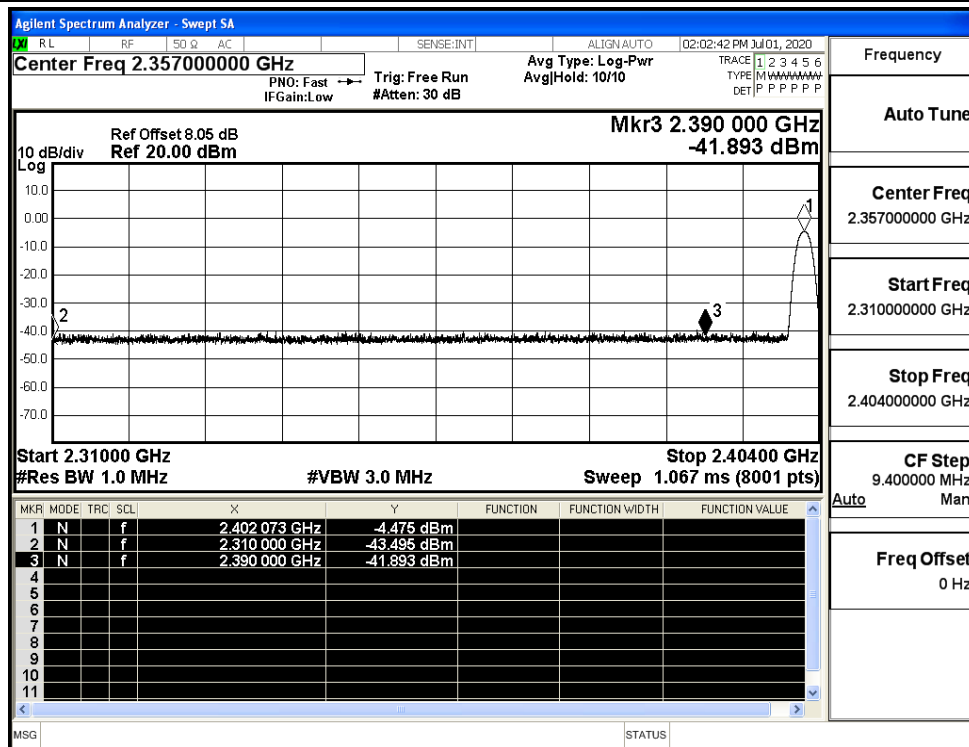
Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	-4.817	-49.289	-24.82	PASS
BT LE	HCH	-5.245	-49.403	-25.25	PASS



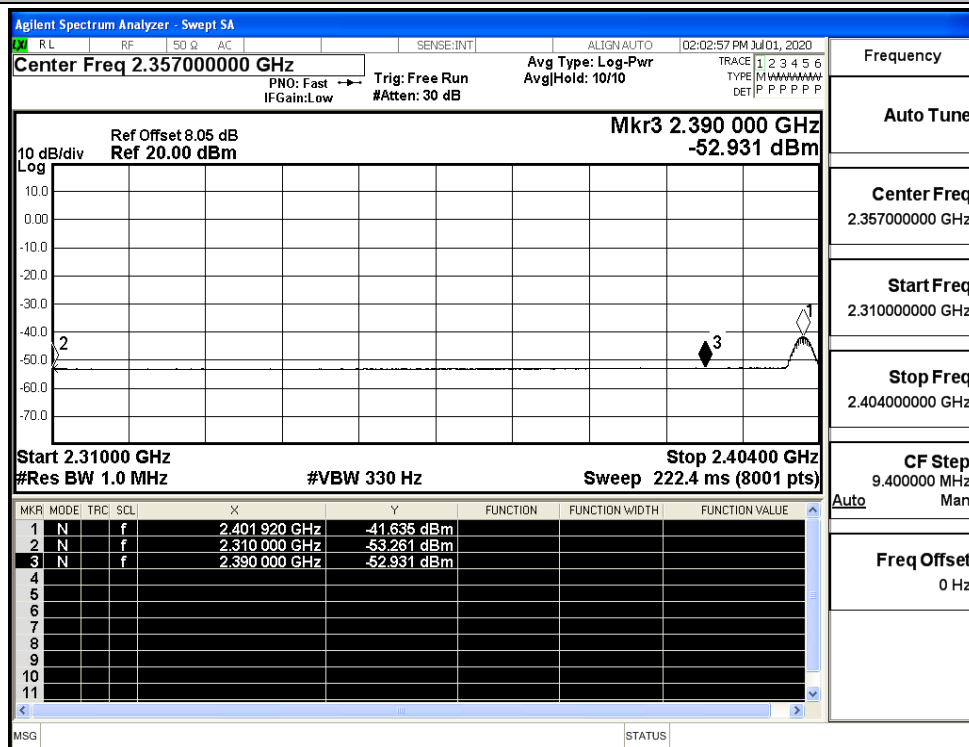
A.7 Restrict-band band-edge measurements

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	-43.50	2.1	0	53.83	PEAK	74	PASS
		Ant1	2310.0	-53.26	2.1	0	44.07	AV	54	PASS
		Ant1	2390.0	-41.89	2.1	0	55.44	PEAK	74	PASS
		Ant1	2390.0	-52.93	2.1	0	44.40	AV	54	PASS
	2480	Ant1	2483.5	-41.48	2.1	0	55.85	PEAK	74	PASS
		Ant1	2483.5	-52.47	2.1	0	44.86	AV	54	PASS
		Ant1	2500.0	-42.97	2.1	0	54.36	PEAK	74	PASS
		Ant1	2500.0	-52.21	2.1	0	45.12	AV	54	PASS

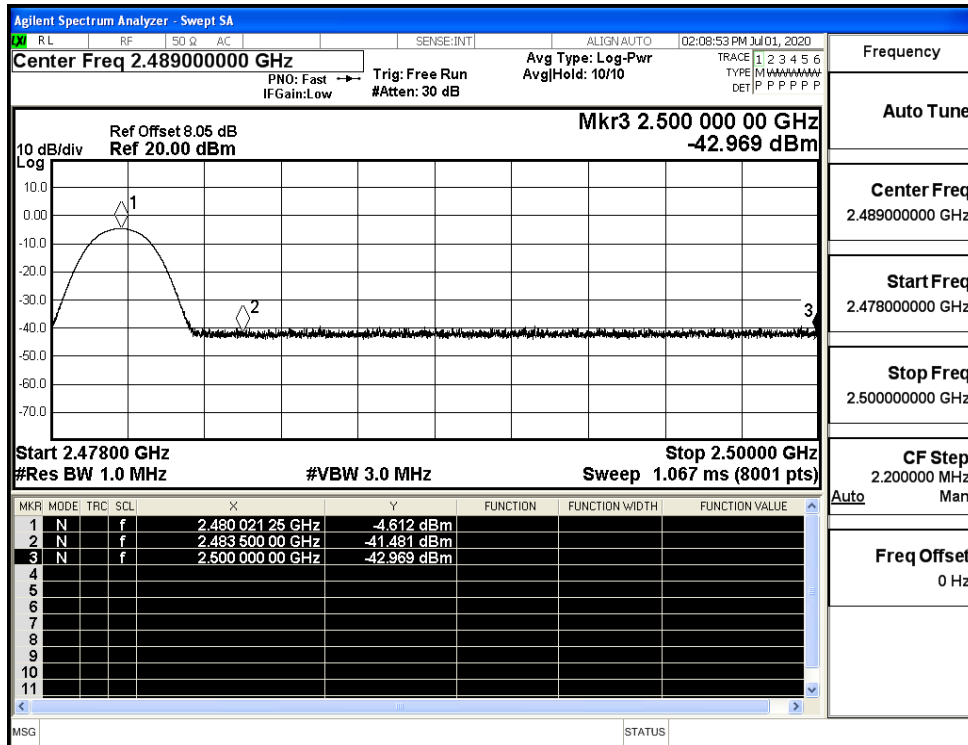
Restrict-band band-edge measurements_BT LE_2402_Ant1_PEAK



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

