

Appendix B

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

Product Name: Ruggedized In-vehicle Tablet

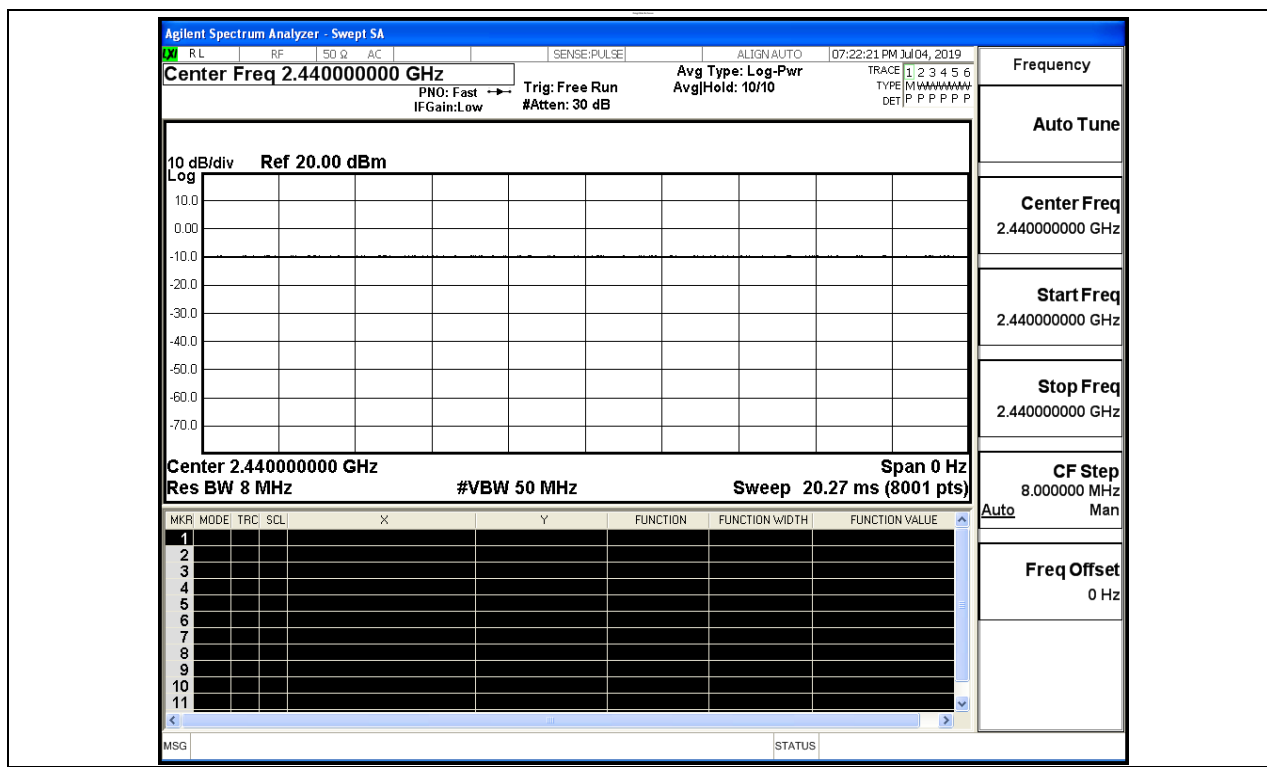
Test Model: APOLLO 10L

Environmental Conditions

Temperature:	23.8 ° C
Relative Humidity:	53.6%
ATM Pressure:	100.0 kPa
Test Engineer:	Tom Liu
Supervised by:	Aking Jin

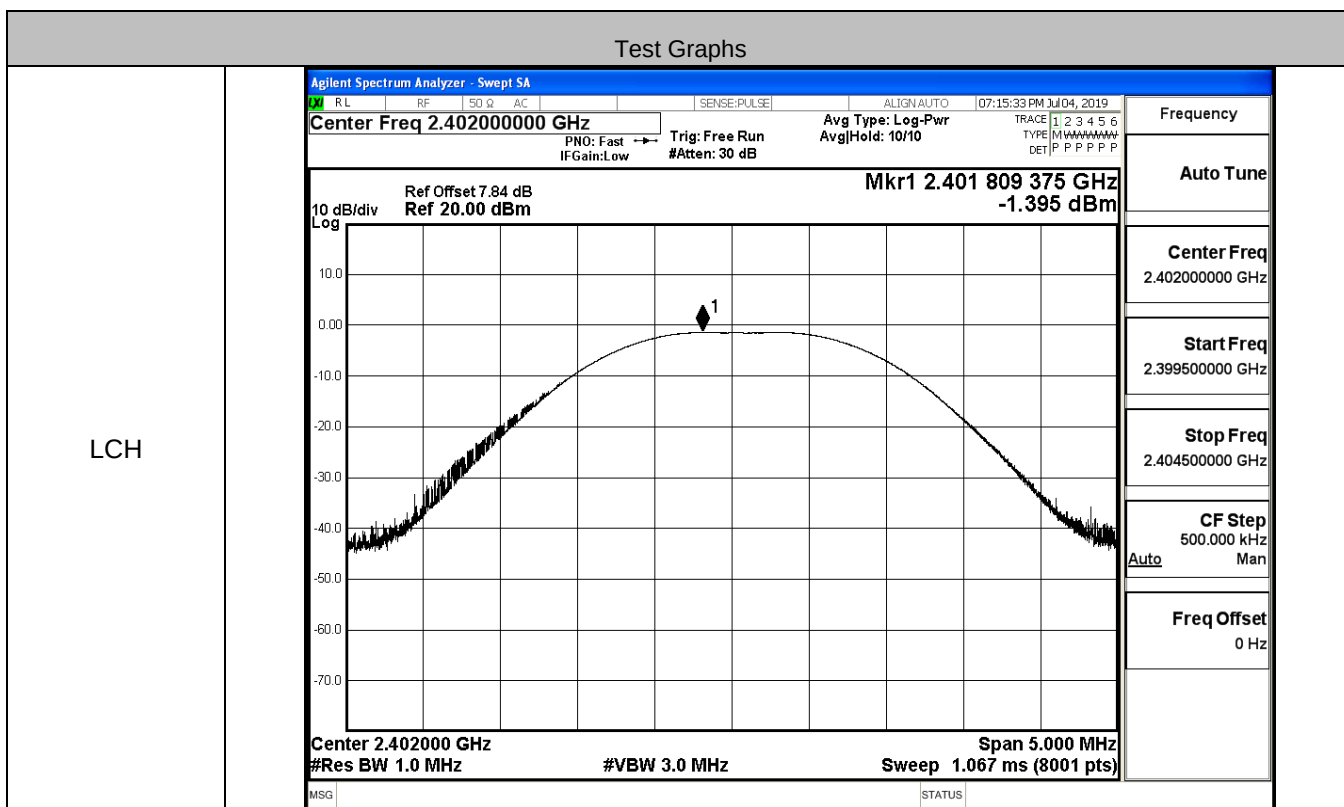
B.1 Duty Cycle

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

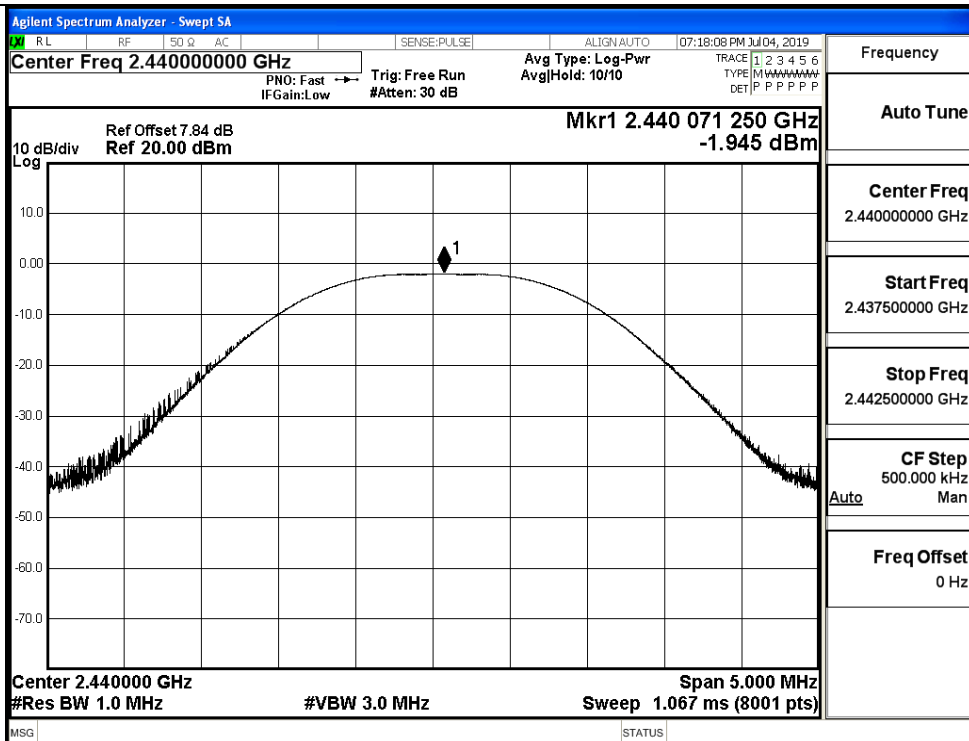


B.2 Maximum Conducted Peak Output Power

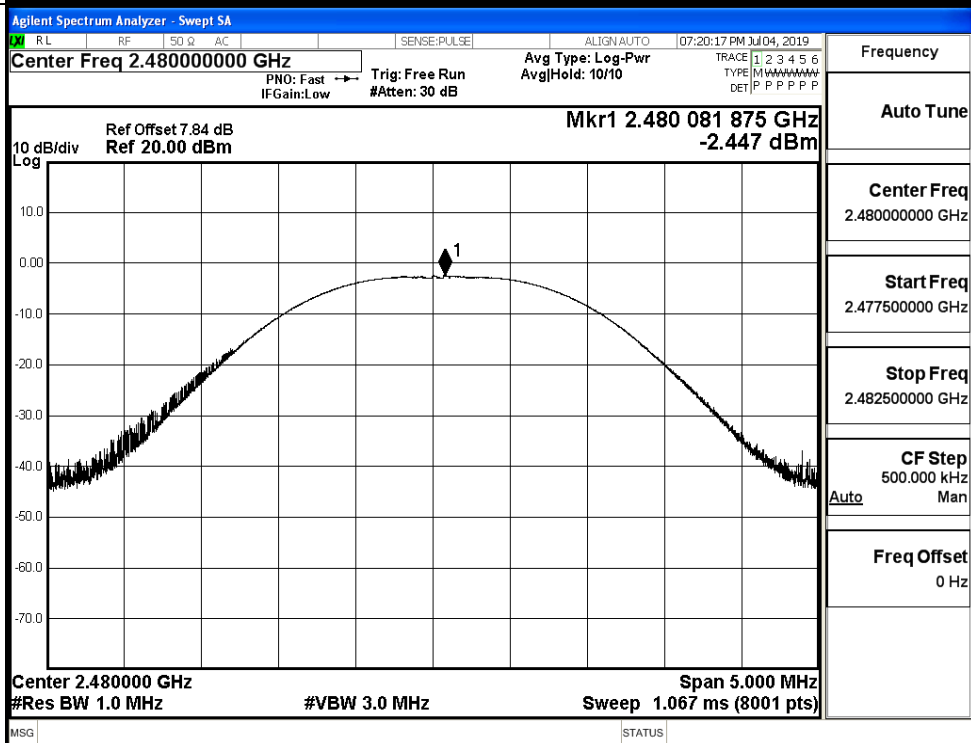
Mode	Channel	Conduct Peak Power[dBm]	Conduct Average Power[dBm]	Limit [dBm]	Verdict
BT LE	LCH	-1.395	-1.588	30	PASS
BT LE	MCH	-1.945	-2.081	30	PASS
BT LE	HCH	-2.447	-2.603	30	PASS



MCH



HCH

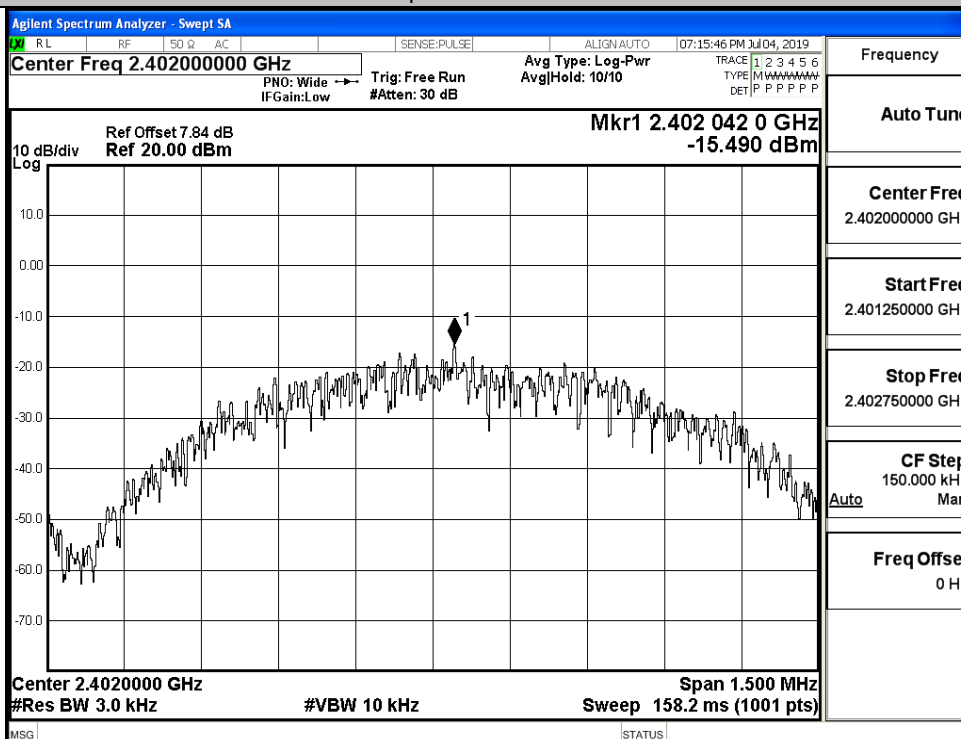


B.3 Maximum Power Spectral Density

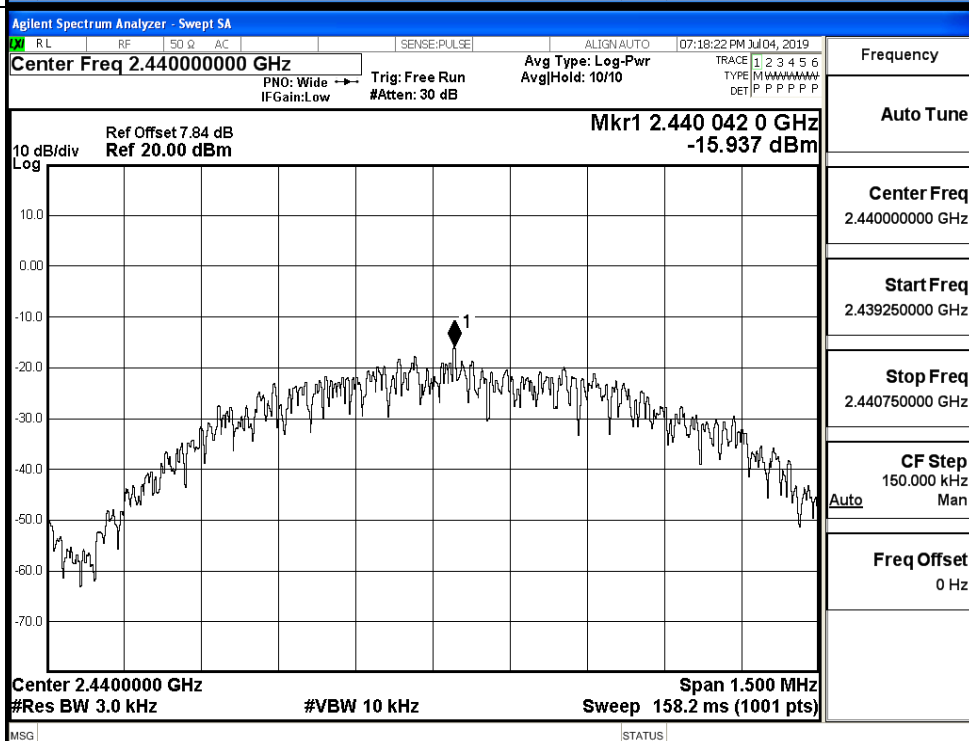
Mode	Channel	PSD [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
BT LE	LCH	-15.490	8	PASS
BT LE	MCH	-15.937	8	PASS
BT LE	HCH	-16.670	8	PASS

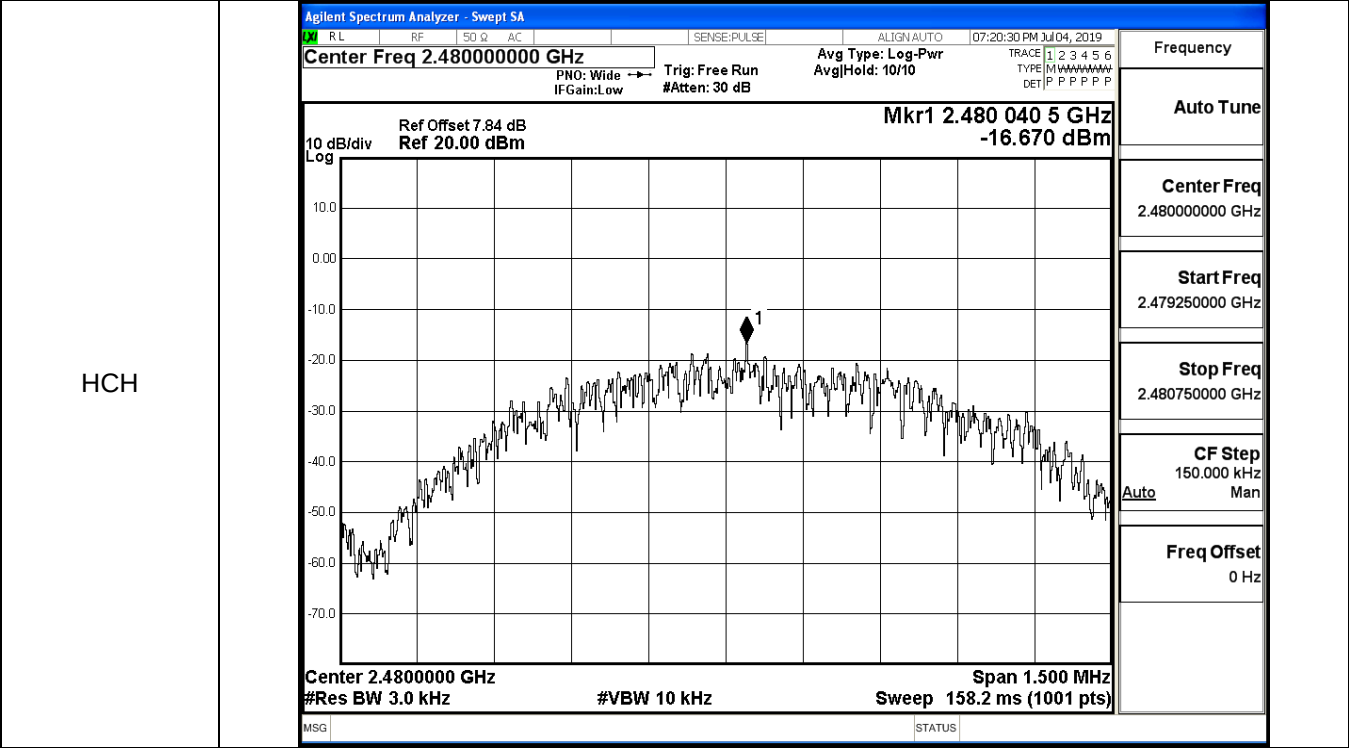
Test Graphs

LCH



MCH



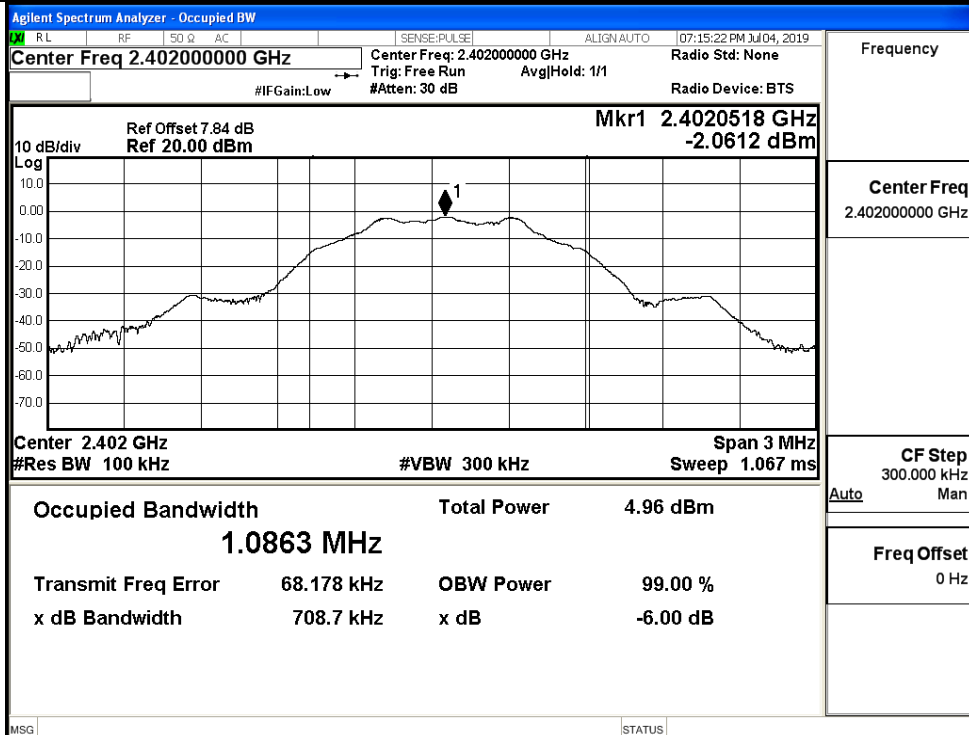


B.4 6dB Bandwidth

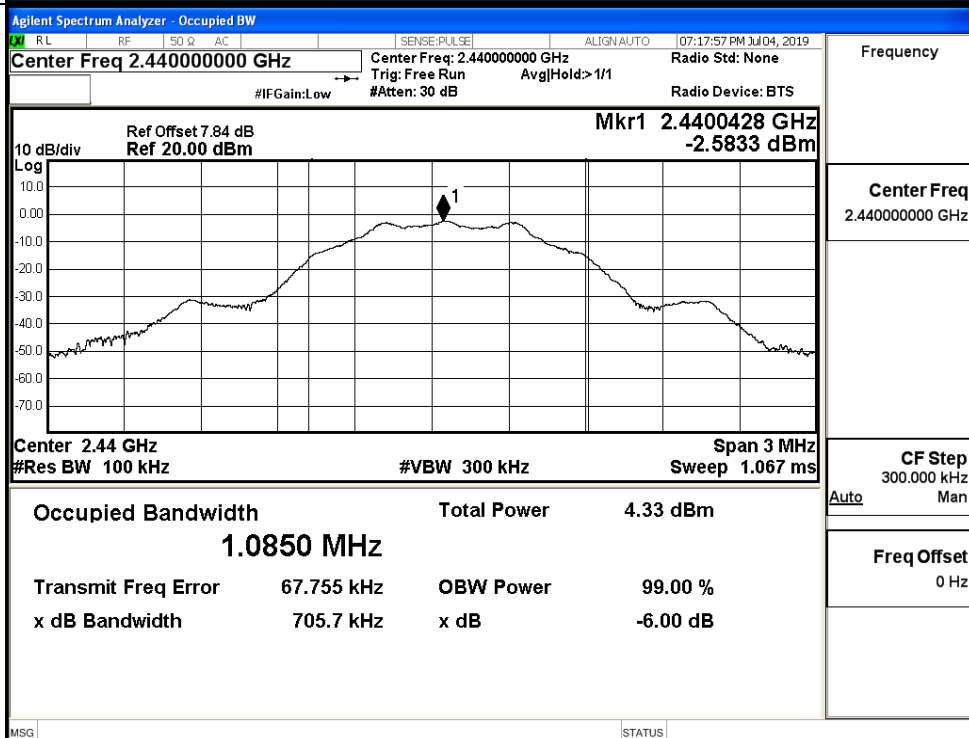
Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
BT LE	LCH	0.7087	≥ 0.5	PASS
BT LE	MCH	0.7057	≥ 0.5	PASS
BT LE	HCH	0.6716	≥ 0.5	PASS

Test Graphs

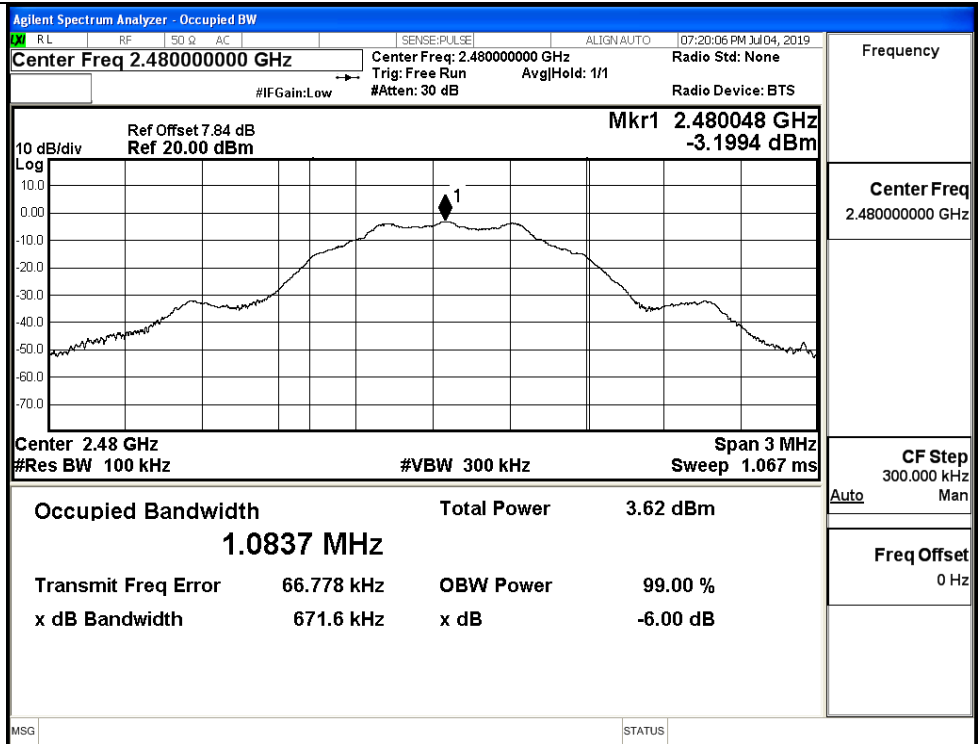
LCH



MCH



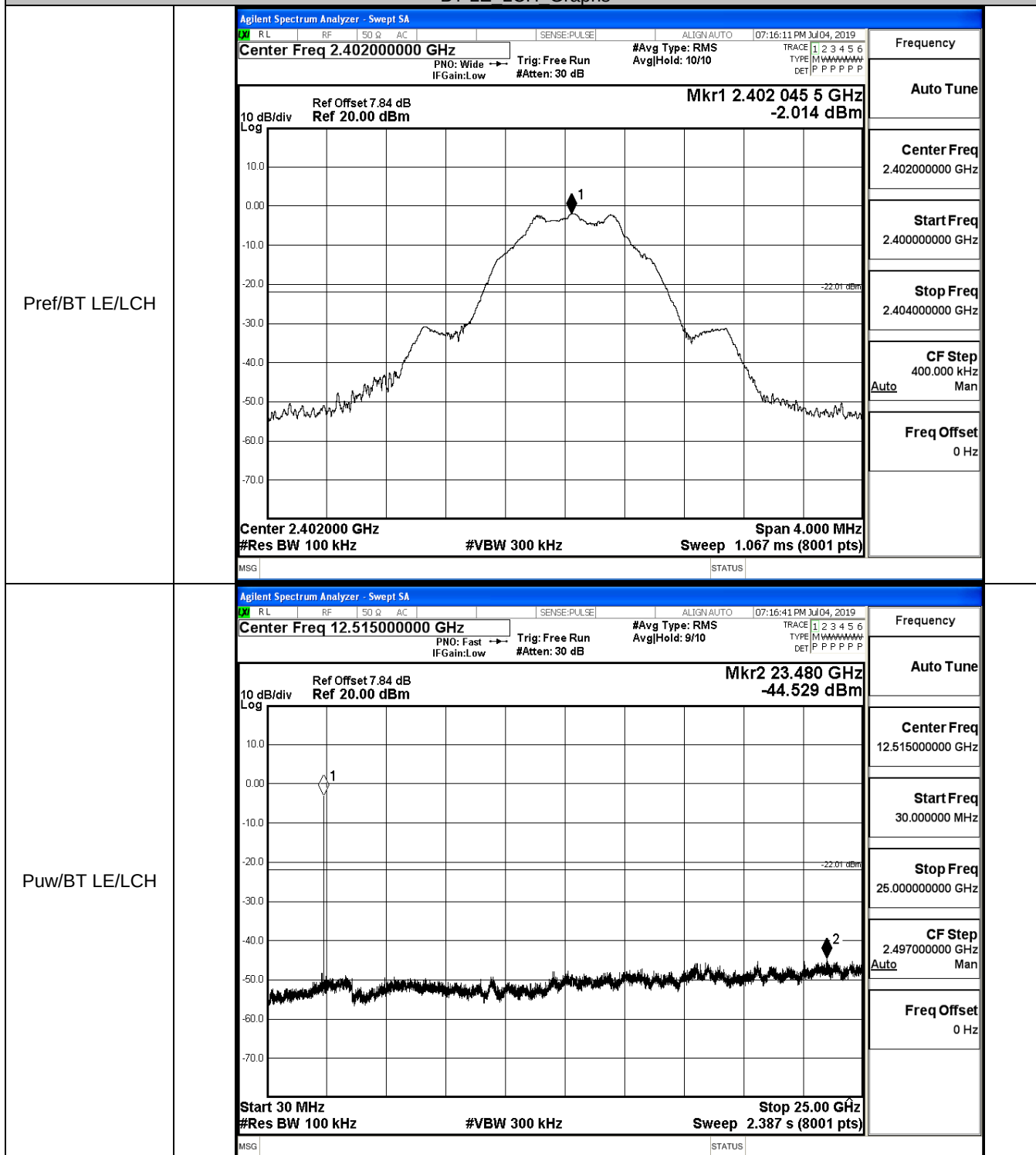
HCH



B.5 RF Conducted Spurious Emissions

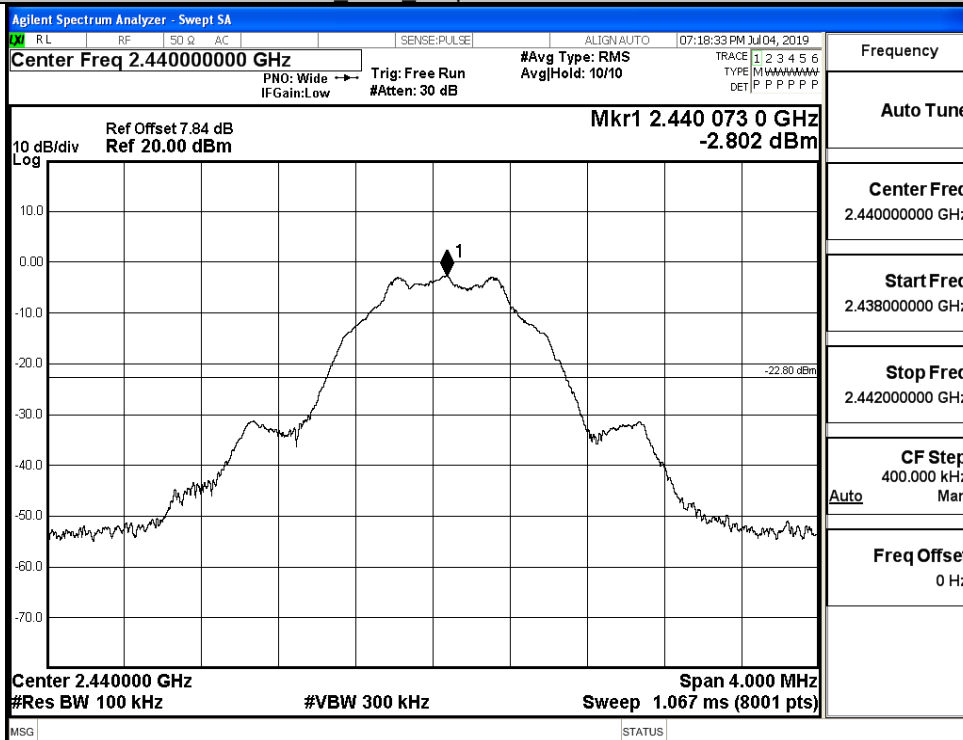
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	-2.014	-44.529	-22.014	PASS
BT LE	MCH	-2.802	-45.016	-22.802	PASS
BT LE	HCH	-3.289	-43.764	-23.289	PASS

BT LE LCH Graphs

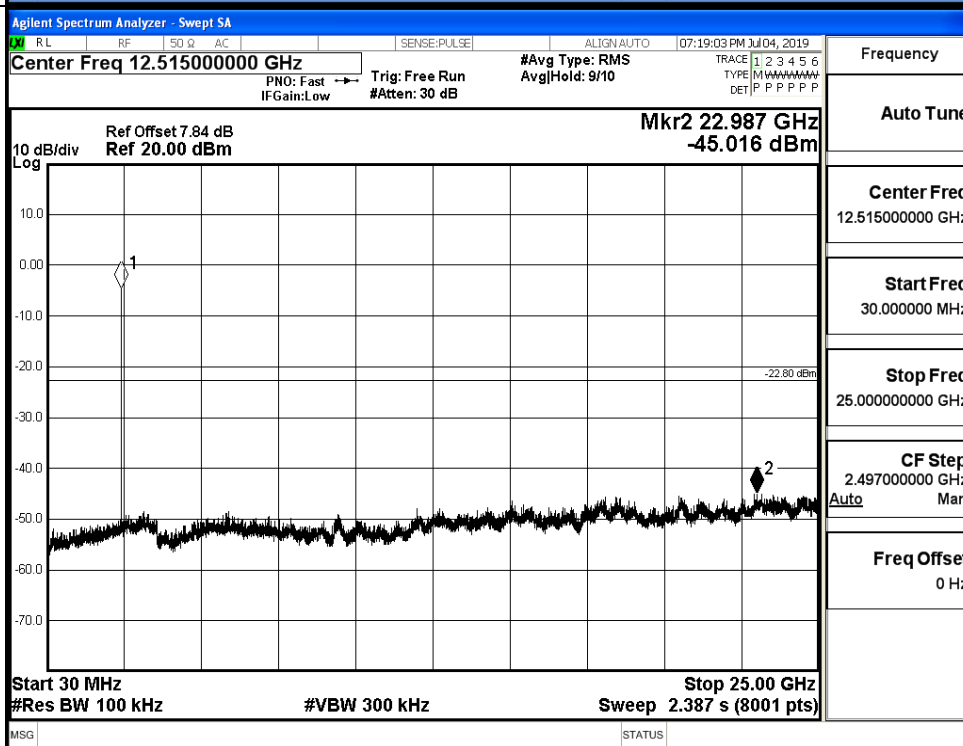


BT LE MCH Graphs

Pref/BT LE/MCH

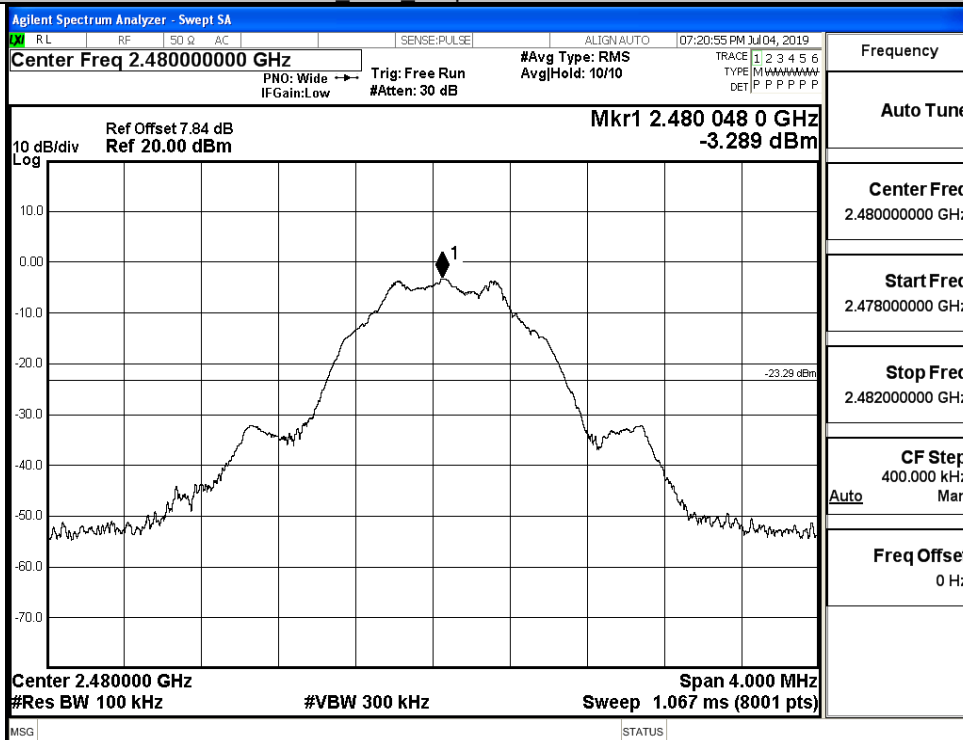


Puw/BT LE/MCH

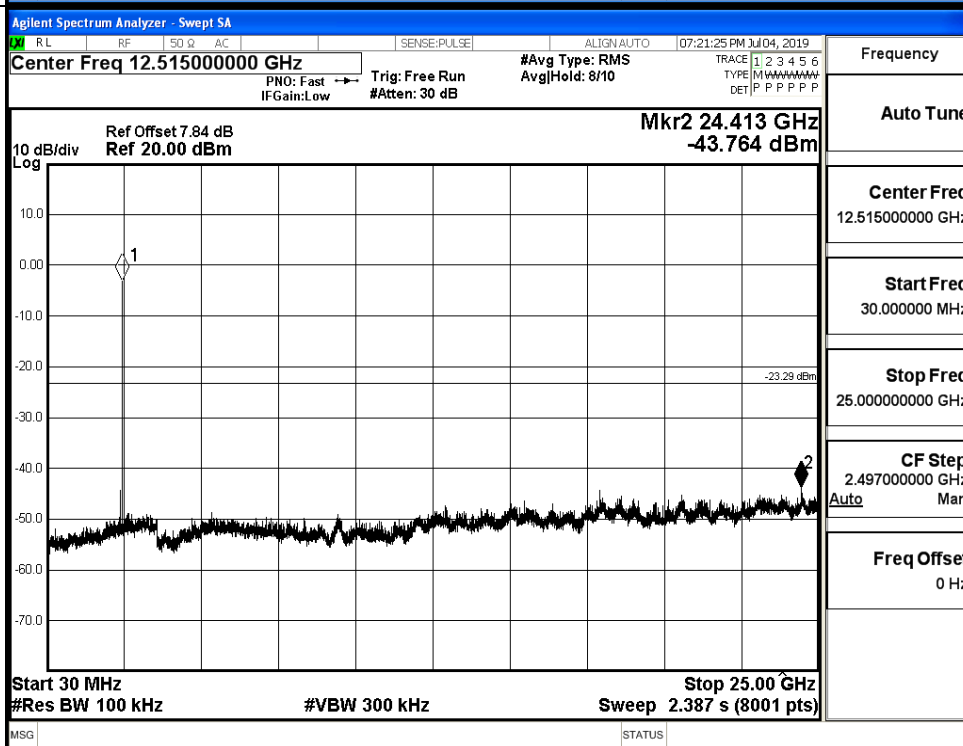


BT LE HCH Graphs

Pref/BT LE/HCH



Puw/BT LE/HCH

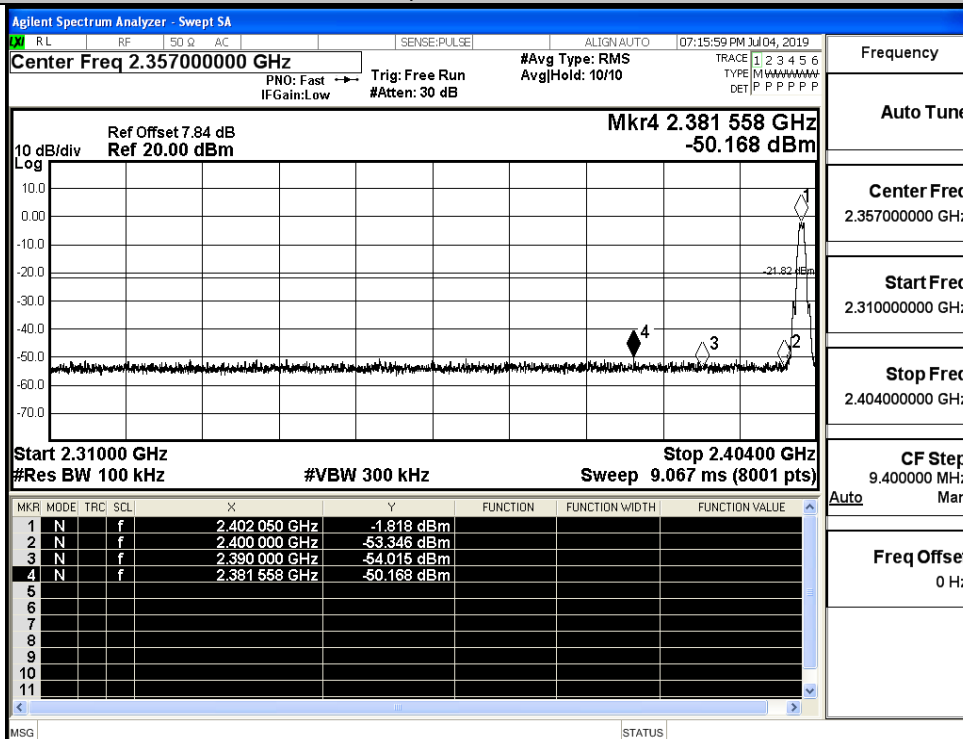


B.6 Band-edge for RF Conducted Emissions

Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	-1.818	-50.168	-21.82	PASS
BT LE	HCH	-3.001	-50.524	-23	PASS

Test Graphs

LCH



Frequency

Auto Tune

Center Freq

2.357000000 GHz

Start Freq

2.310000000 GHz

Stop Freq

2.404000000 GHz

CF Step

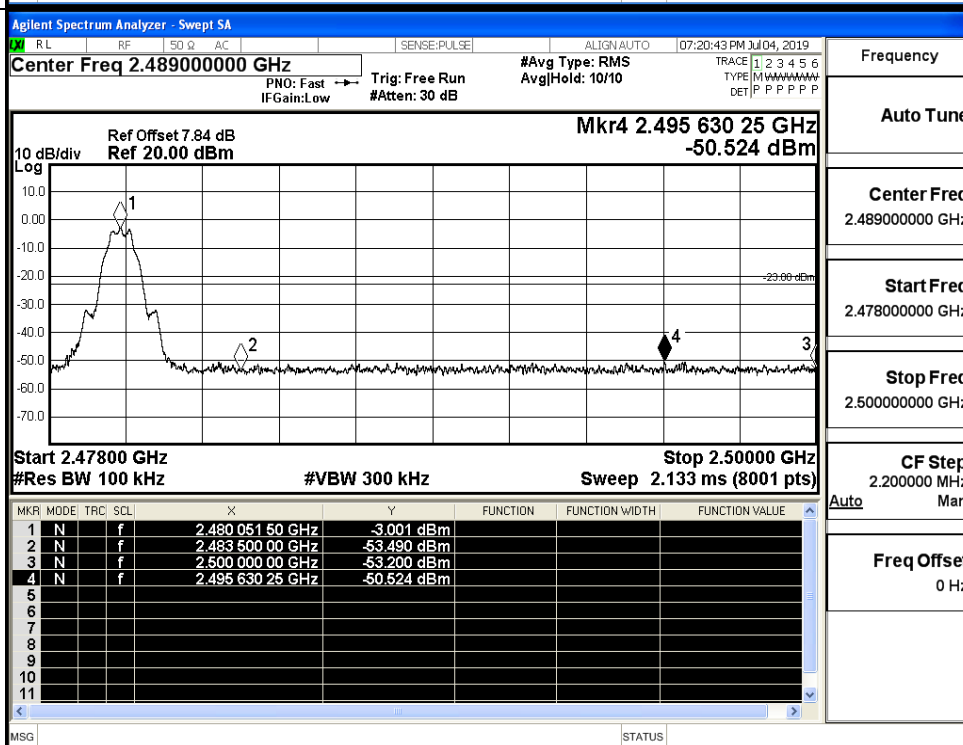
9.400000 MHz

Auto Man

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

Auto Man

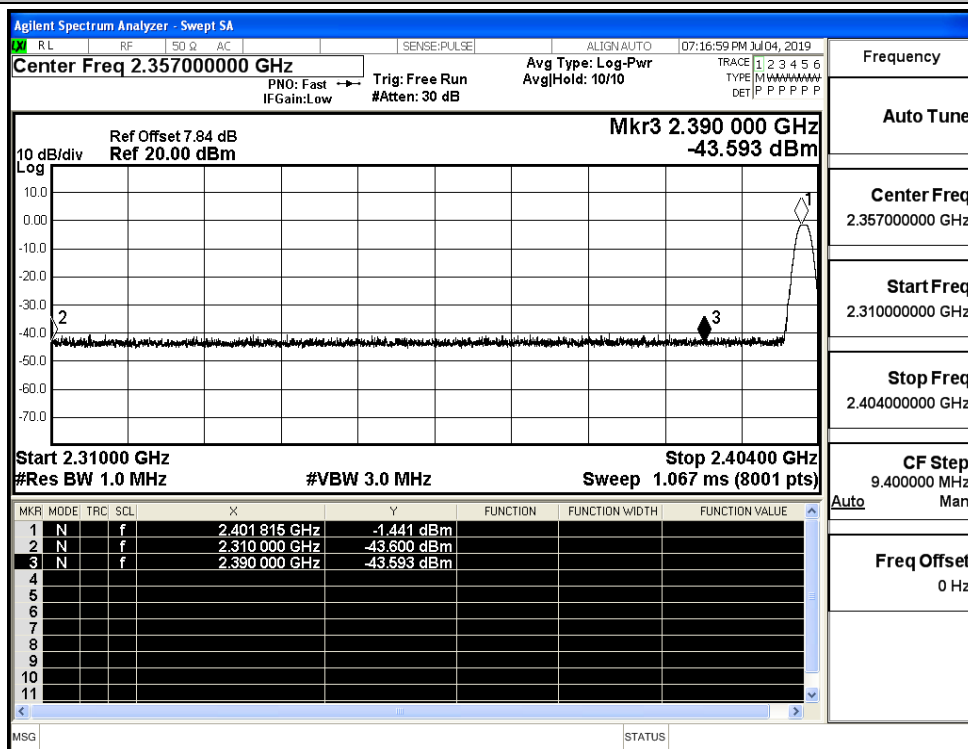
Freq Offset

0 Hz

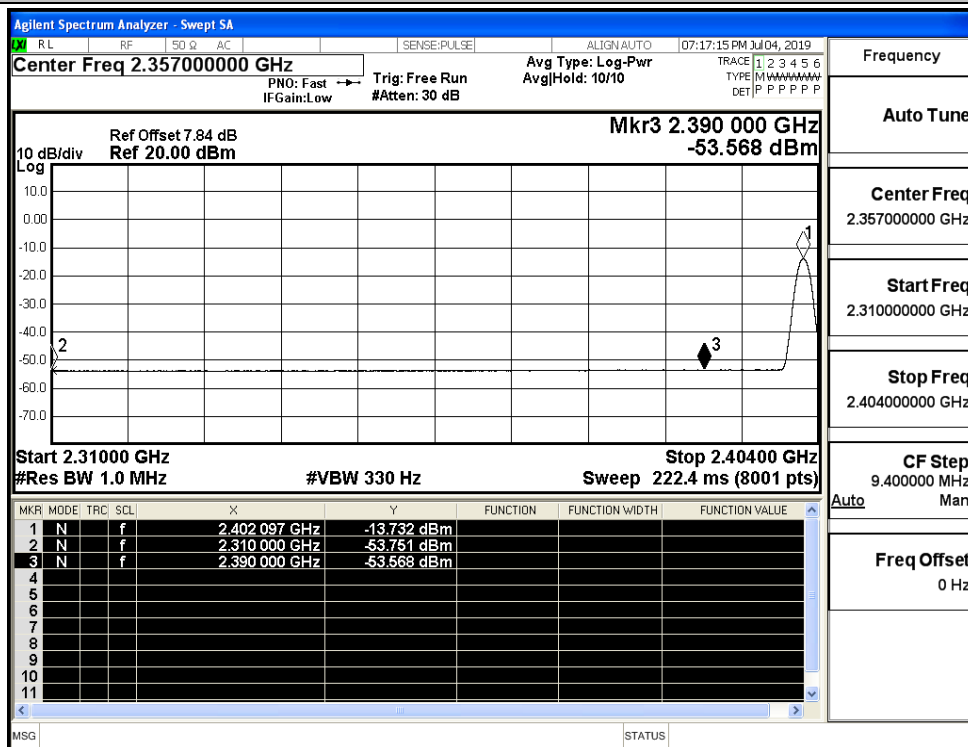
B.7 Restrict-band band-edge measurements

Test Mode	Test Channel	Ant	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
BT LE	2402	Ant1	2310.0	-43.60	2.0	0	53.66	PEAK	74	PASS
		Ant1	2310.0	-53.75	2.0	0	43.51	AV	54	PASS
		Ant1	2390.0	-43.59	2.0	0	53.66	PEAK	74	PASS
		Ant1	2390.0	-53.57	2.0	0	43.69	AV	54	PASS
	2480	Ant1	2483.5	-42.44	2.0	0	54.82	PEAK	74	PASS
		Ant1	2483.5	-53.32	2.0	0	43.94	AV	54	PASS
		Ant1	2500.0	-42.24	2.0	0	55.02	PEAK	74	PASS
		Ant1	2500.0	-53.20	2.0	0	44.06	AV	54	PASS

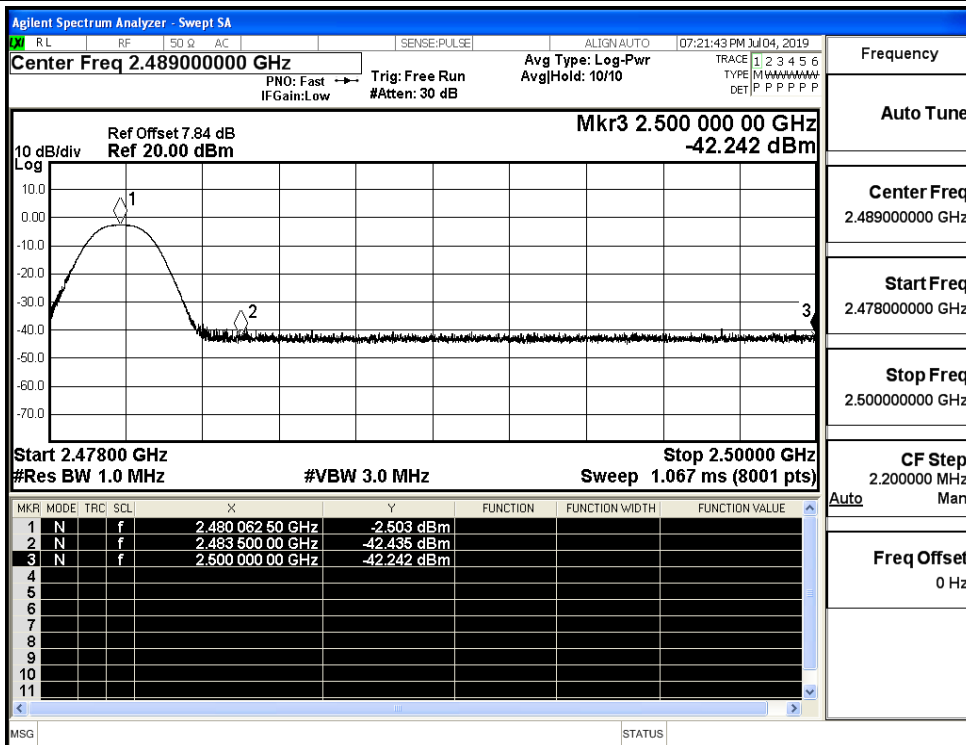
Restrict-band band-edge measurements_BT LE_2402_Ant1_PEAK



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

