

Appendix B

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

Product Name: The headphone especially for student attention

Trade Mark: N/A

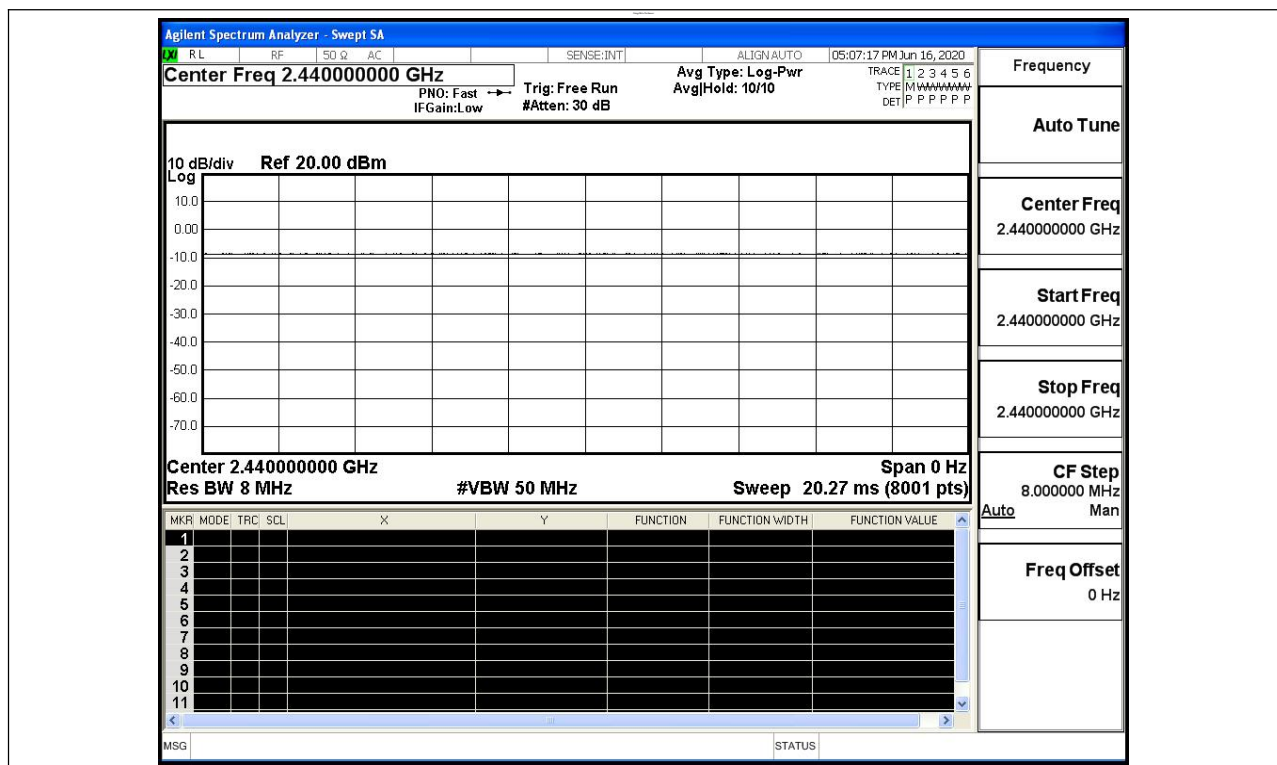
Test Model: BT1902

Environmental Conditions

Temperature:	22.5 ° C
Relative Humidity:	52.8%
ATM Pressure:	100.0 kPa
Test Engineer:	Scout Wu
Supervised by:	Li Huan

B.1 Duty Cycle

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

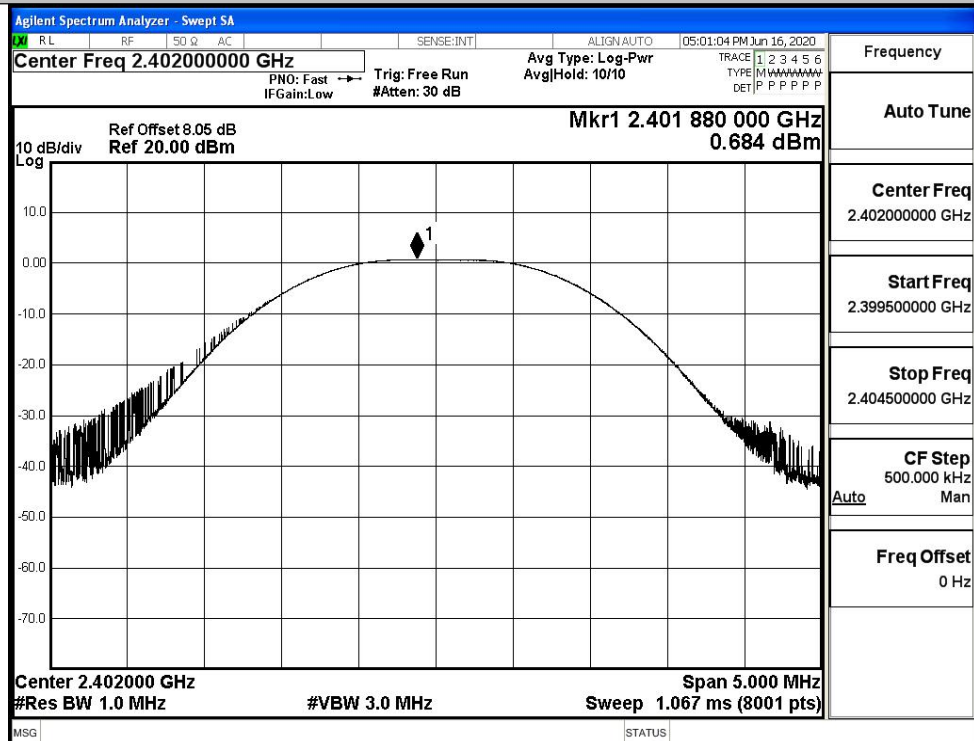


B.2 Maximum Conducted Peak Output Power

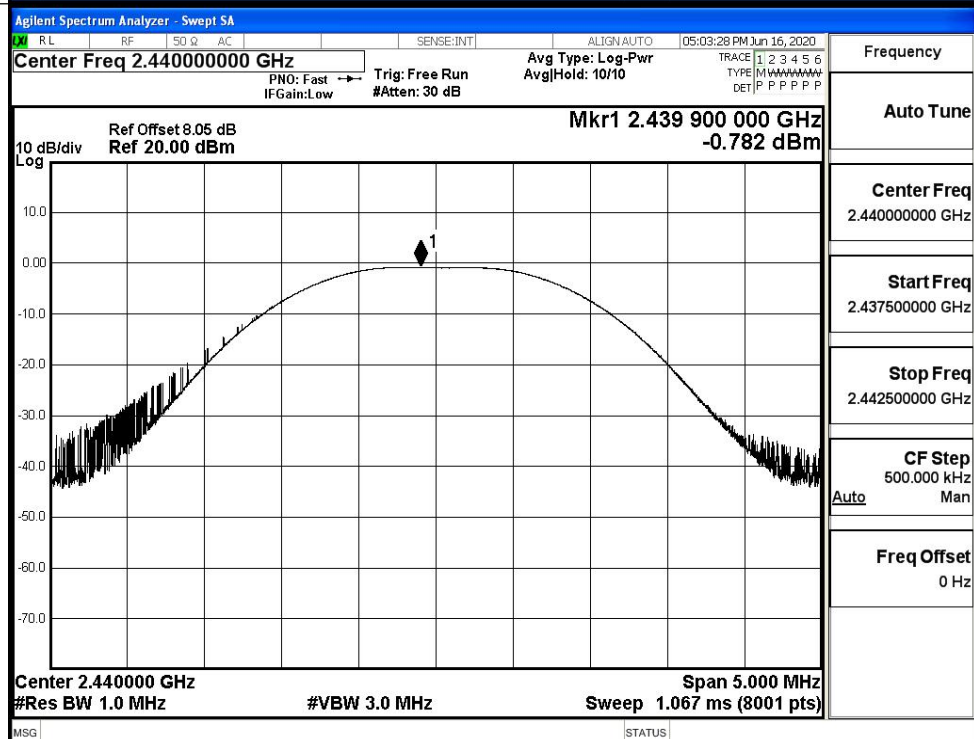
Mode	Channel	Conduct Peak Power[dBm]	Limit [dBm]	Verdict
BT LE	LCH	0.684	30	PASS
BT LE	MCH	-0.782	30	PASS
BT LE	HCH	-2.553	30	PASS

Test Graphs

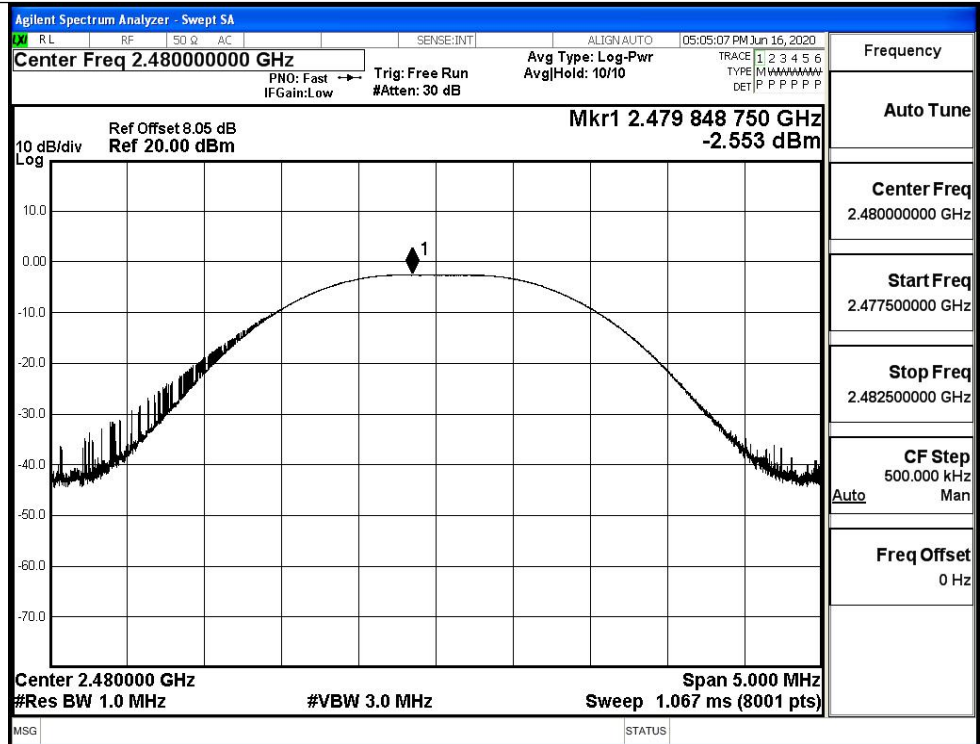
LCH



MCH



HCH

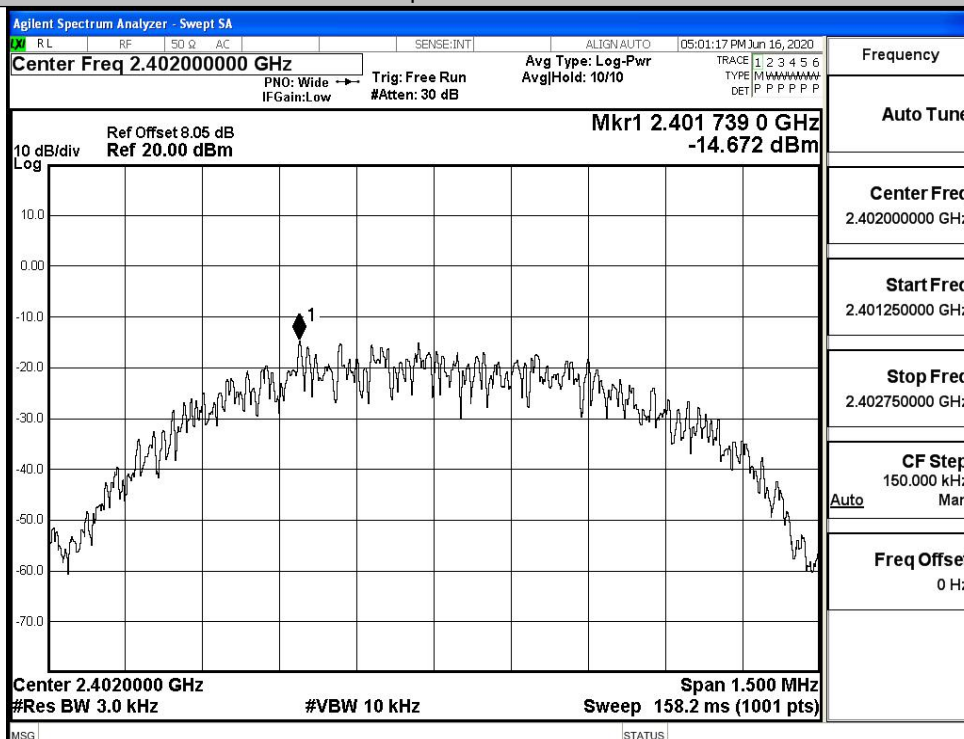


B.3 Maximum Power Spectral Density

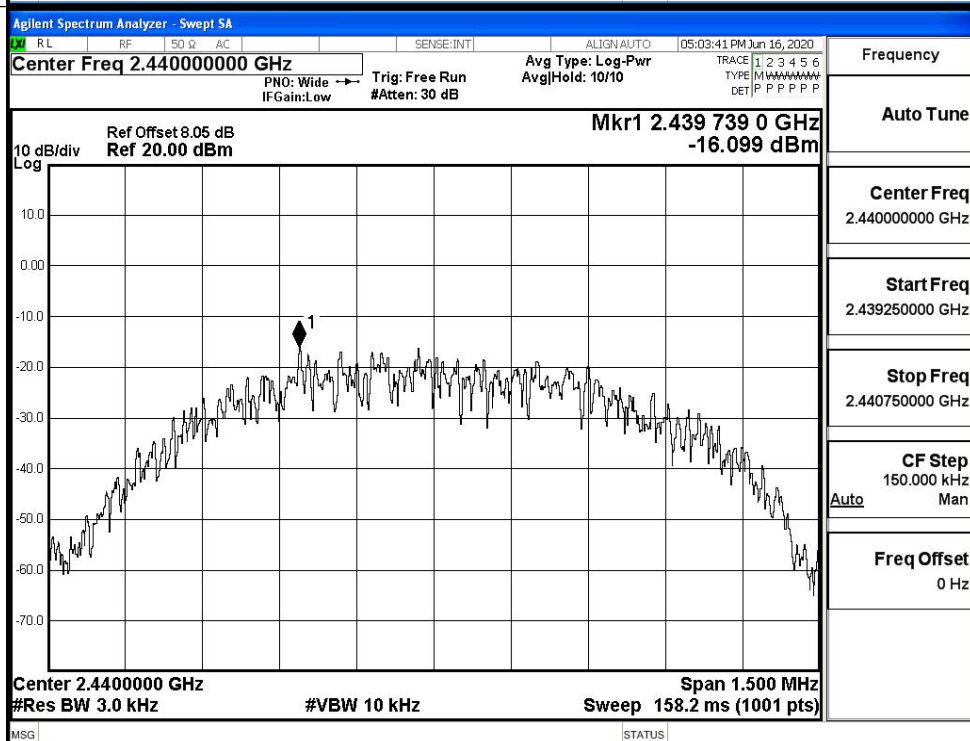
Mode	Channel	PSD [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
BT LE	LCH	-14.672	8	PASS
BT LE	MCH	-16.099	8	PASS
BT LE	HCH	-18.152	8	PASS

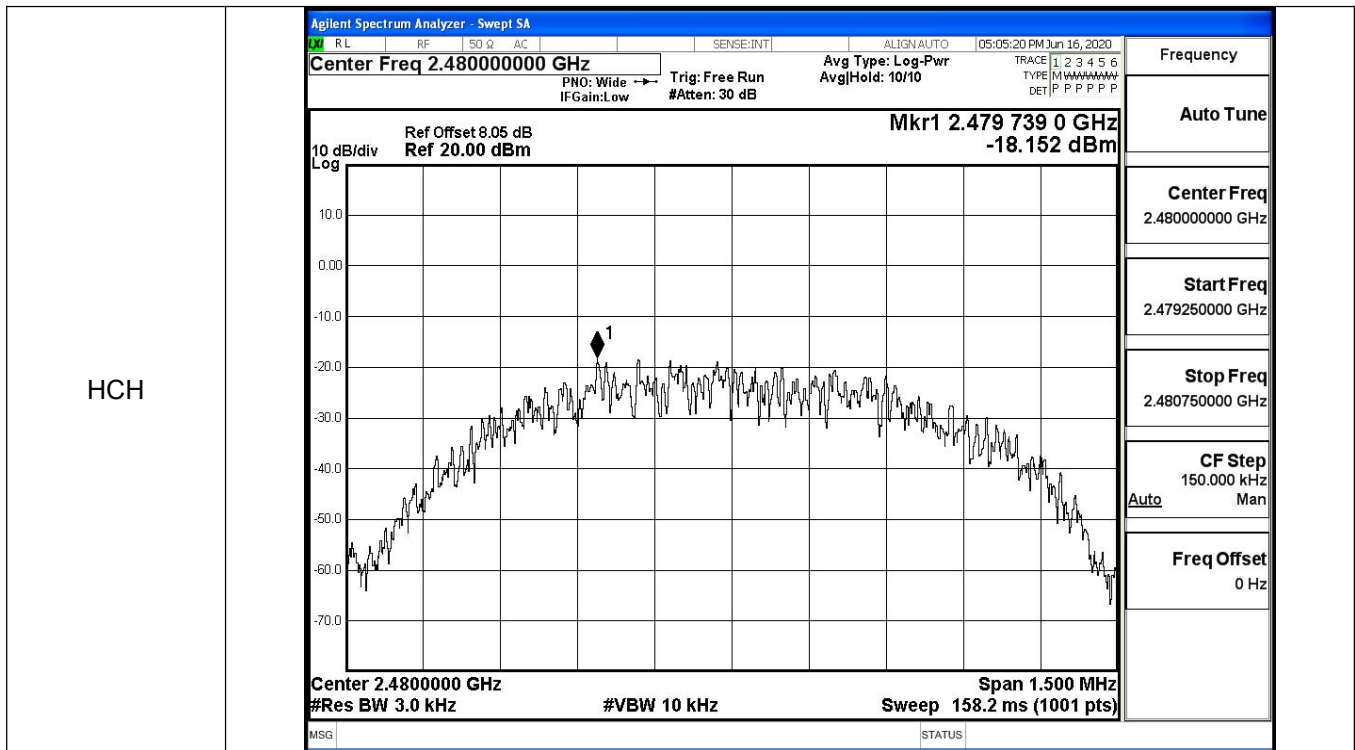
Test Graphs

LCH



MCH



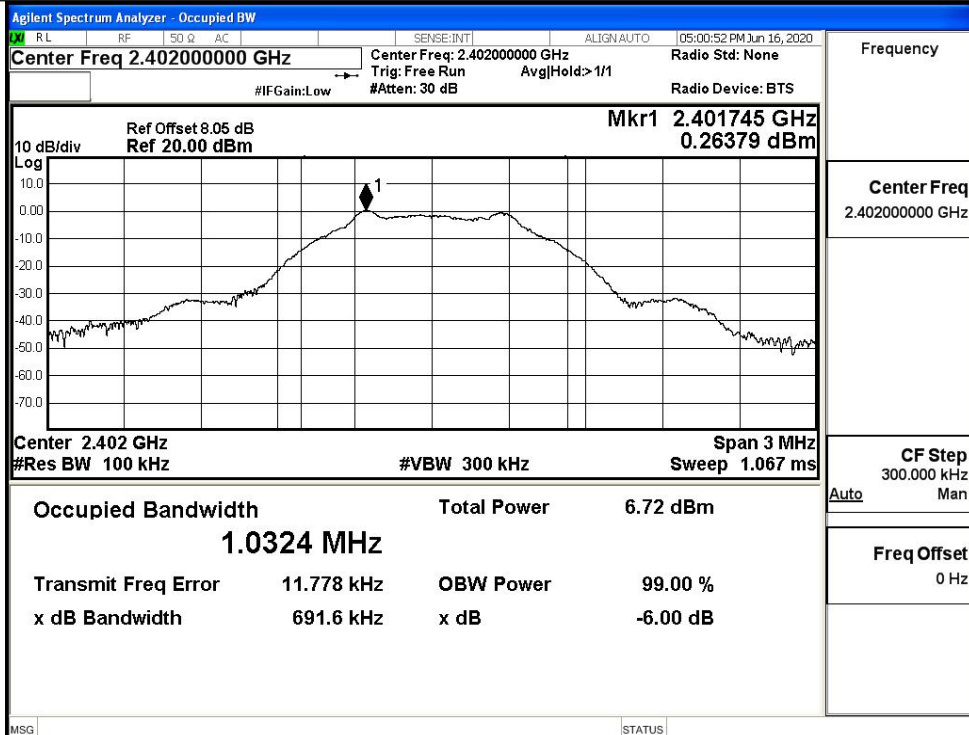


B.4 6dB Bandwidth

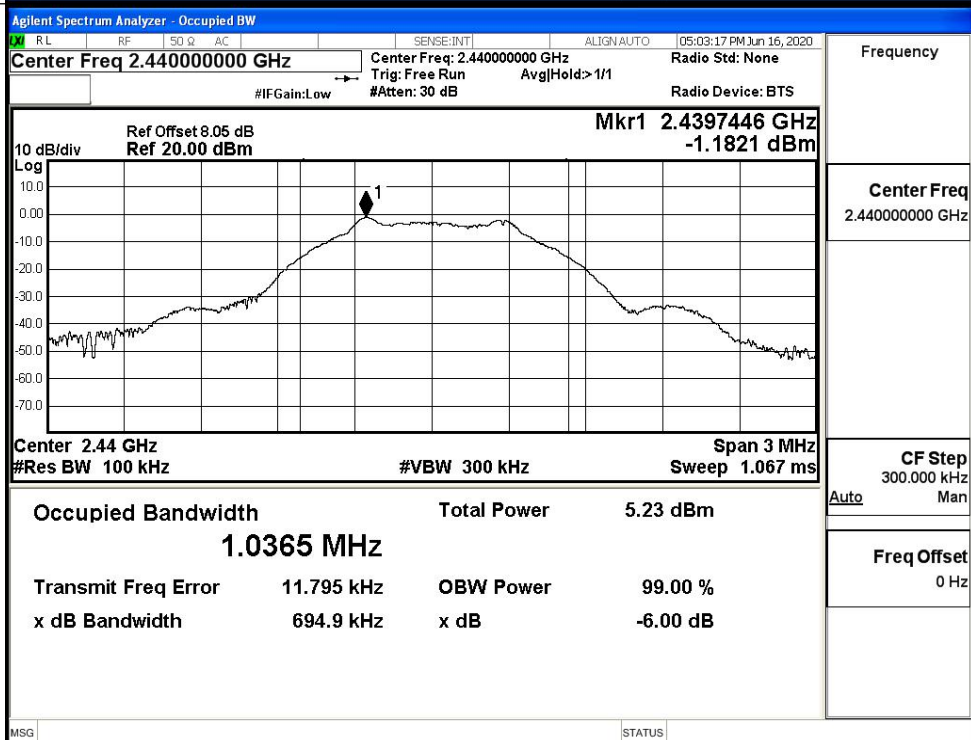
Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
BT LE	LCH	0.6916	≥ 0.5	PASS
BT LE	MCH	0.6949	≥ 0.5	PASS
BT LE	HCH	0.6835	≥ 0.5	PASS

Test Graphs

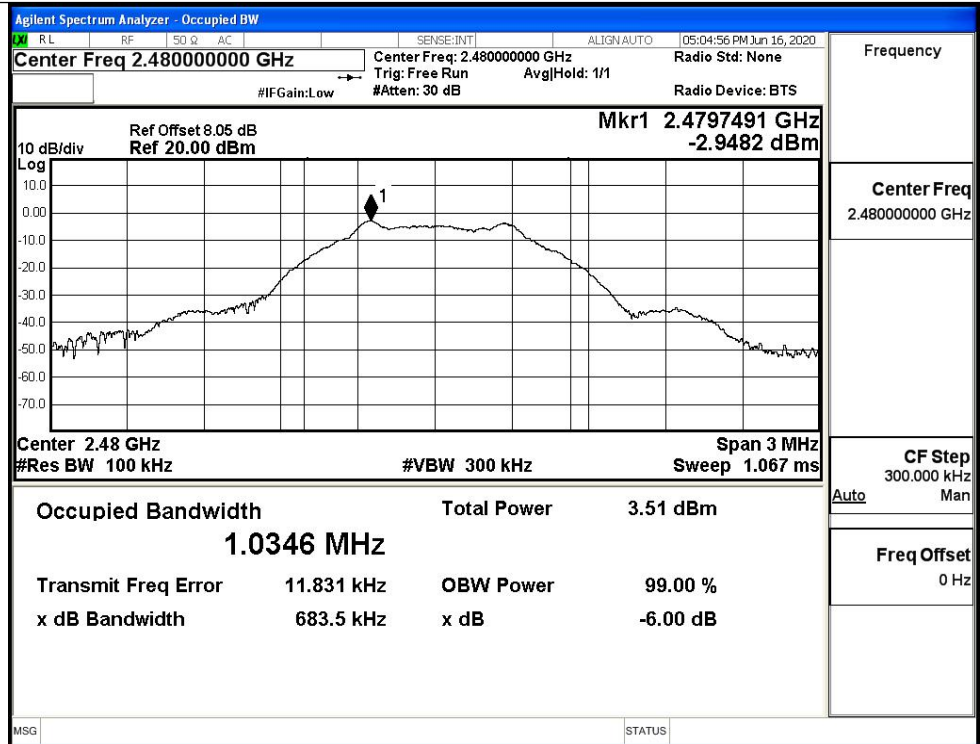
LCH



MCH



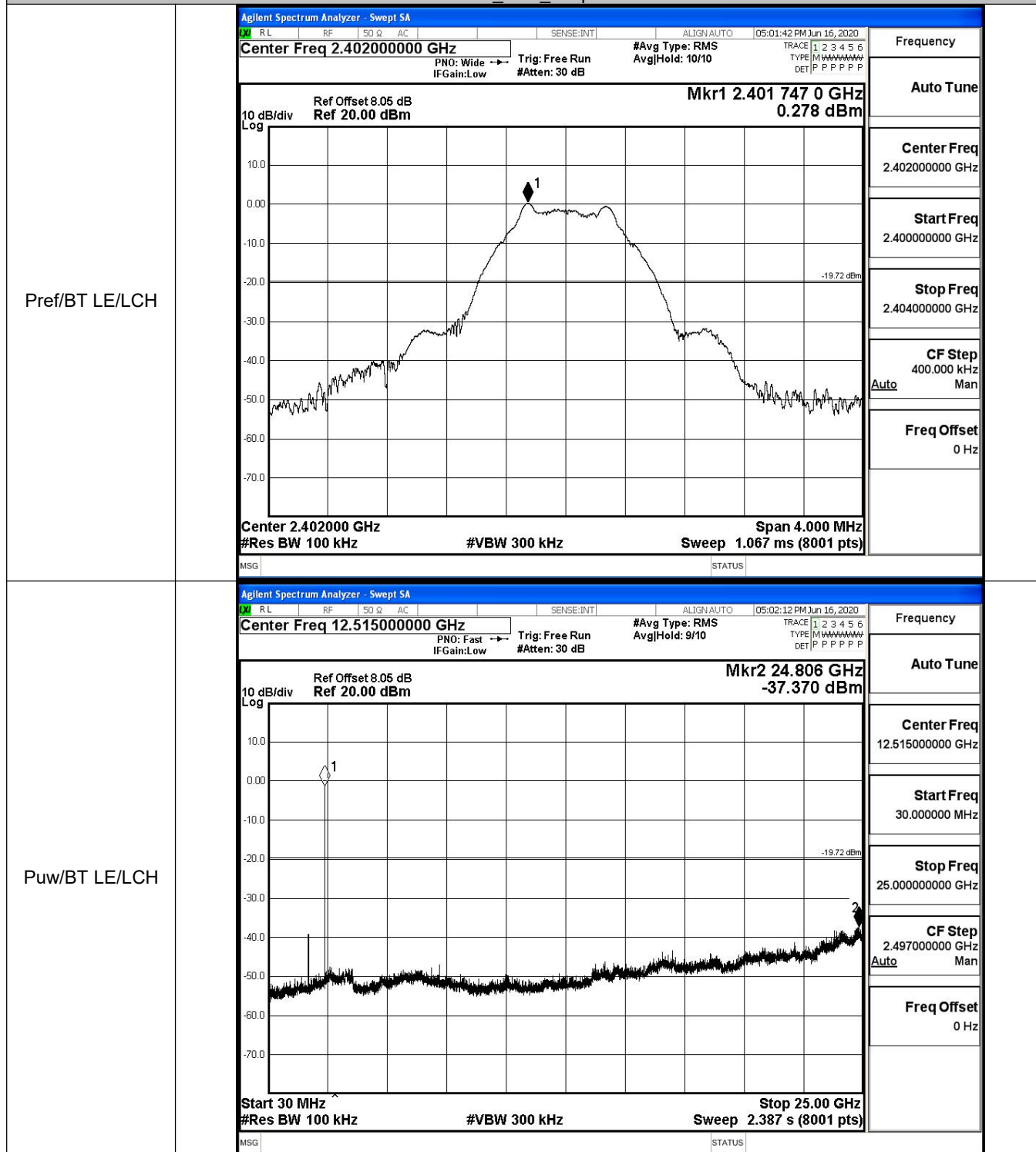
HCH



B.5 RF Conducted Spurious Emissions

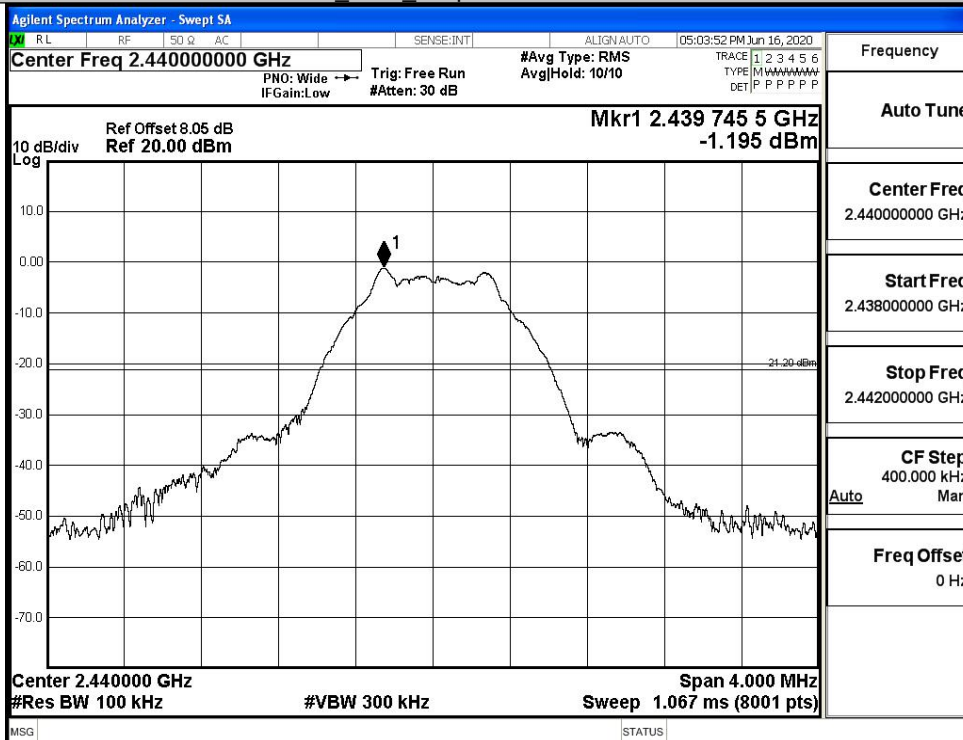
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	0.278	-37.370	-19.722	PASS
BT LE	MCH	-1.195	-37.466	-21.195	PASS
BT LE	HCH	-3.208	-36.921	-23.208	PASS

BT LE_LCH_Graphs

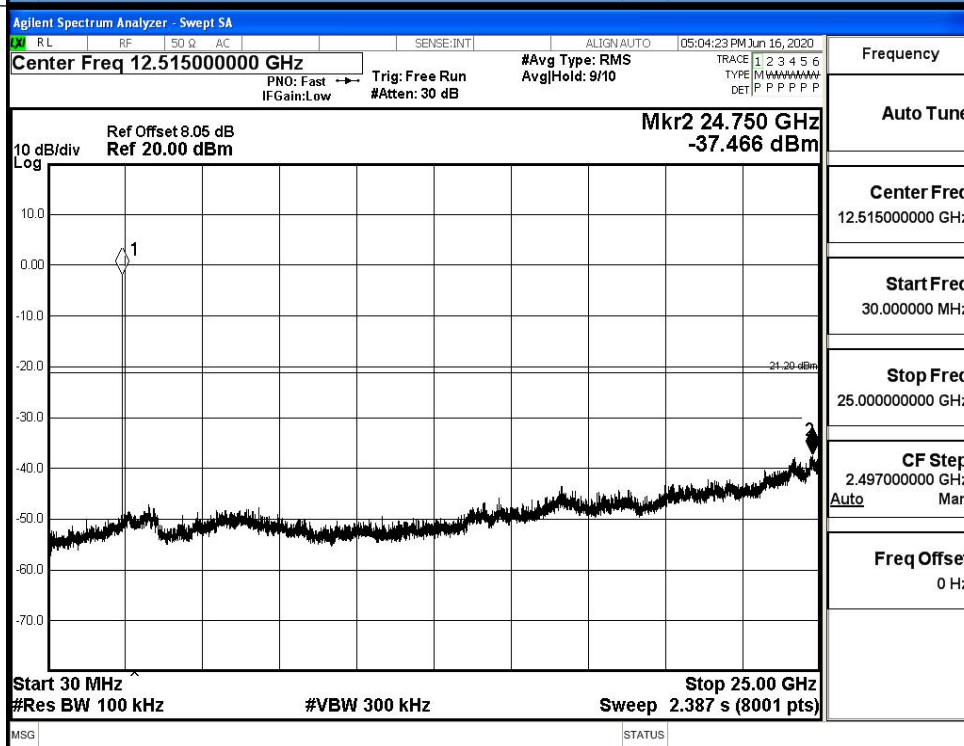


BT LE MCH Graphs

Pref/BT LE/MCH

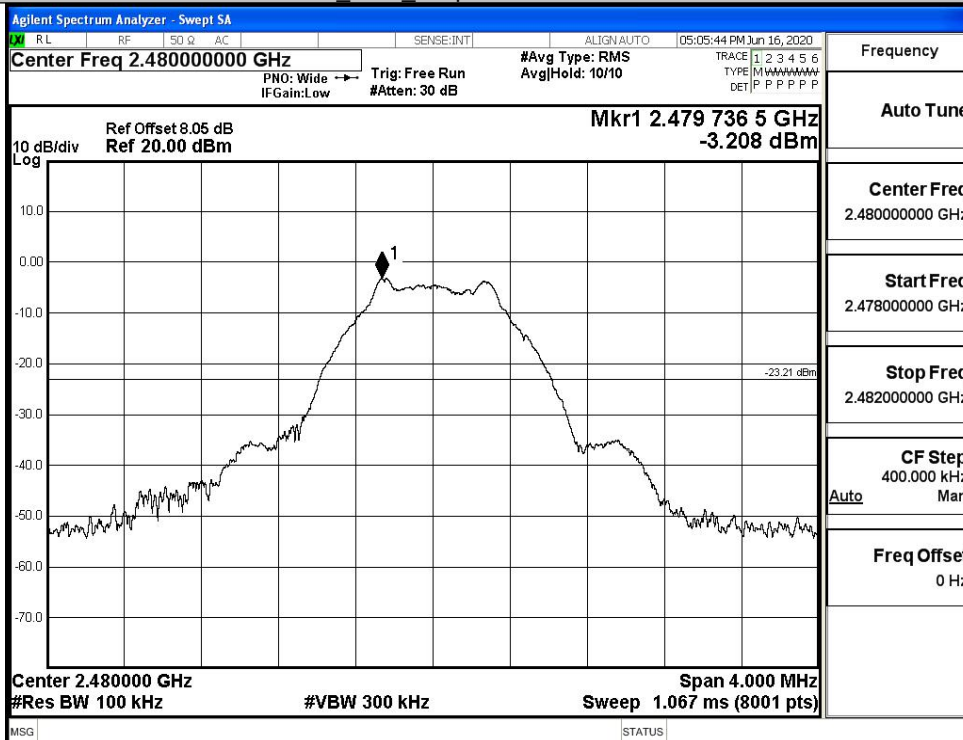


Puw/BT LE/MCH

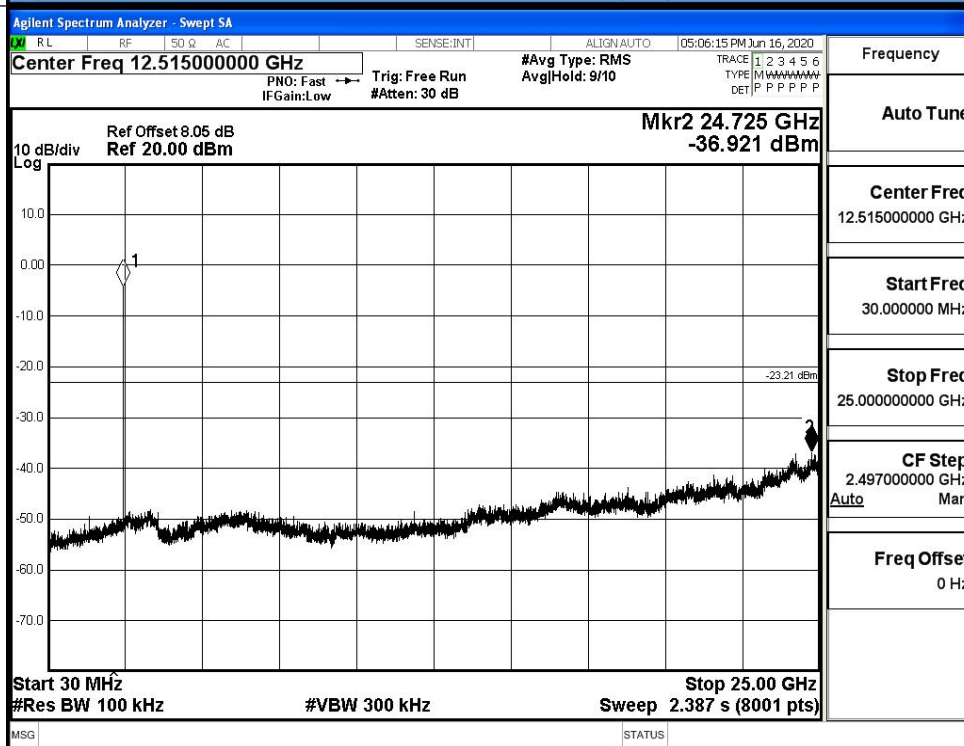


BT LE HCH Graphs

Pref/BT LE/HCH



Puw/BT LE/HCH

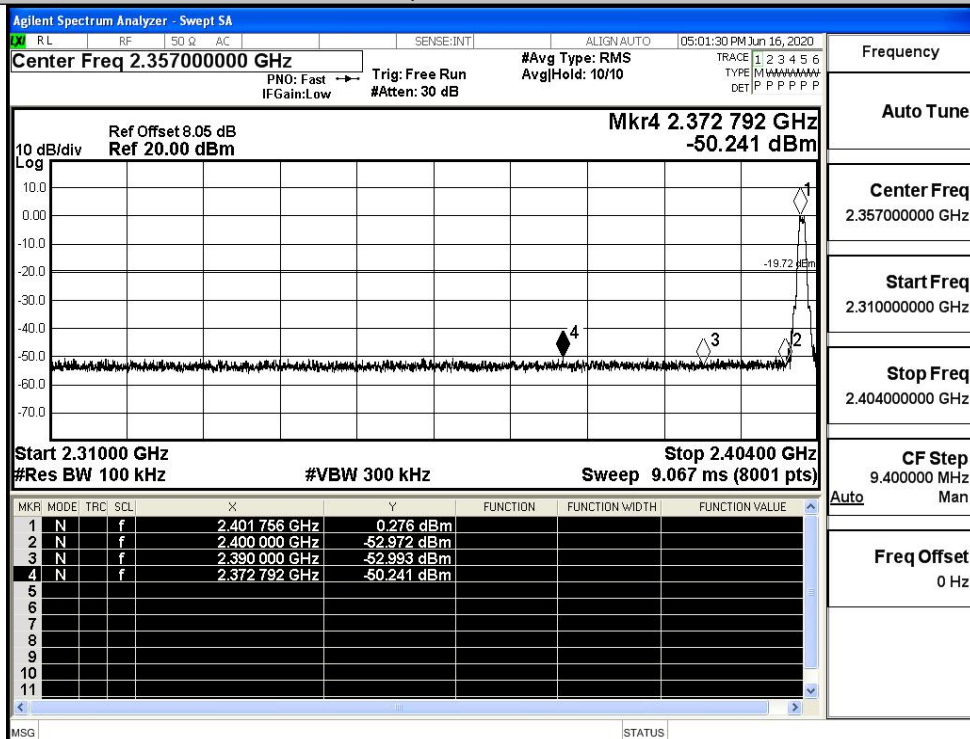


B.6 Band-edge for RF Conducted Emissions

Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	0.276	-50.241	-19.72	PASS
BT LE	HCH	-2.934	-49.153	-22.93	PASS

Test Graphs

LCH



Frequency

Auto Tune

Center Freq

2.357000000 GHz

Start Freq

2.310000000 GHz

Stop Freq

2.404000000 GHz

CF Step

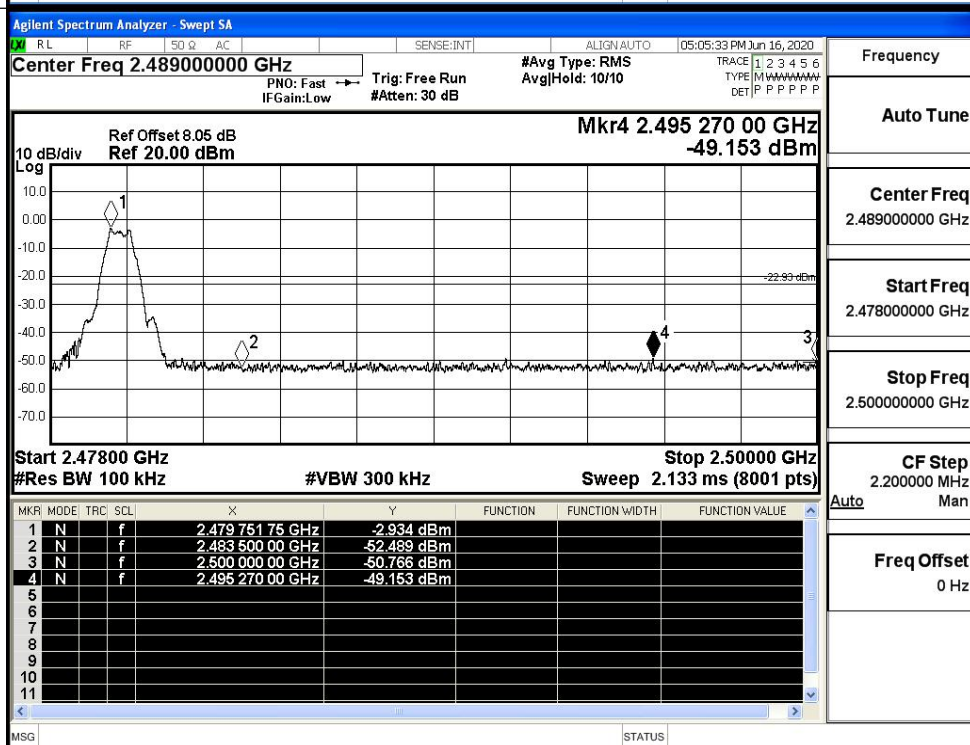
9.400000 MHz

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

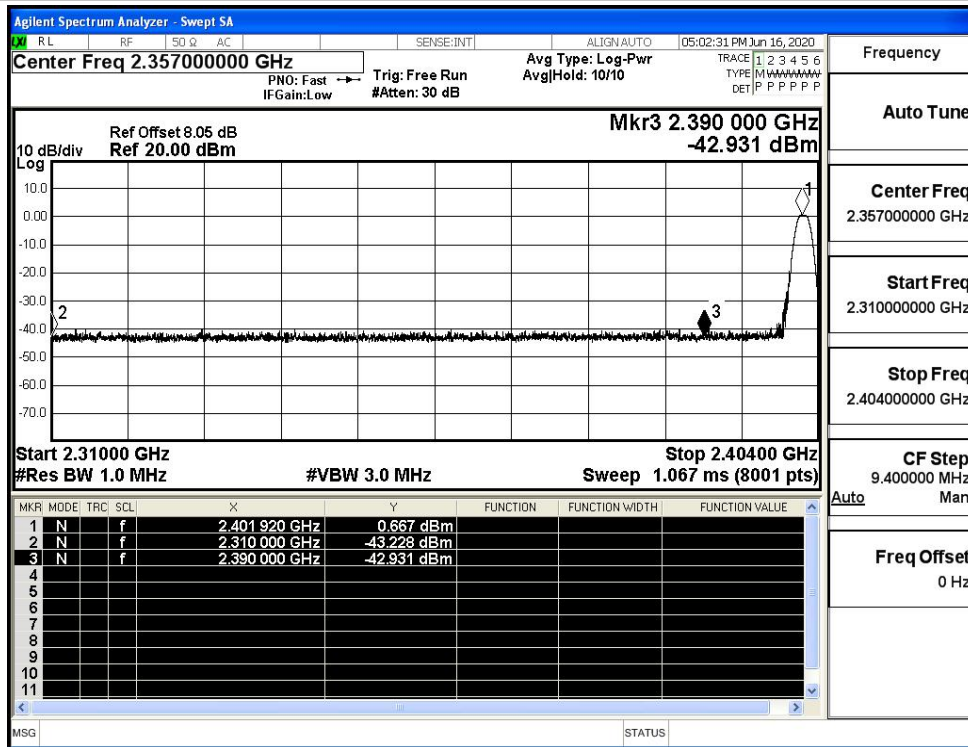
Freq Offset

0 Hz

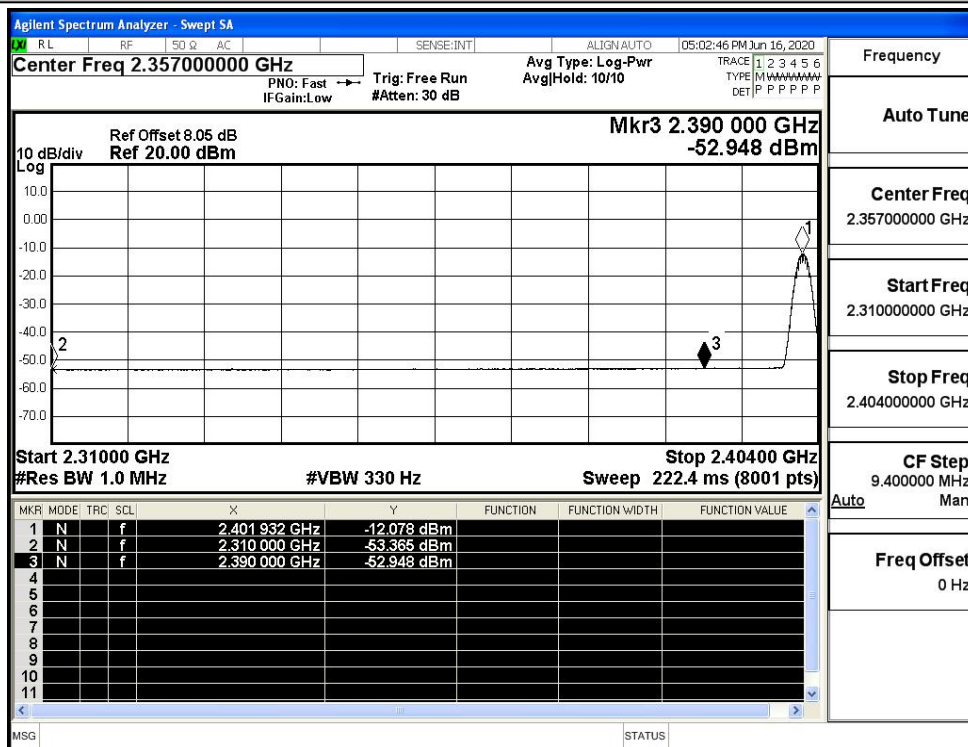
B.7 Restrict-band band-edge measurements

Test Mode	Test Channel	Ant	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdi
BT LE	2402	Ant1	2310.0	-43.23	2.0	0	52.03	PEAK	74	PASS
		Ant1	2310.0	-53.37	2.0	0	41.89	AV	54	PASS
		Ant1	2390.0	-42.93	2.0	0	52.33	PEAK	74	PASS
		Ant1	2390.0	-52.95	2.0	0	42.31	AV	54	PASS
	2480	Ant1	2483.5	-42.54	2.0	0	52.72	PEAK	74	PASS
		Ant1	2483.5	-52.62	2.0	0	42.63	AV	54	PASS
		Ant1	2500.0	-41.93	2.0	0	53.33	PEAK	74	PASS
		Ant1	2500.0	-52.40	2.0	0	42.86	AV	54	PASS

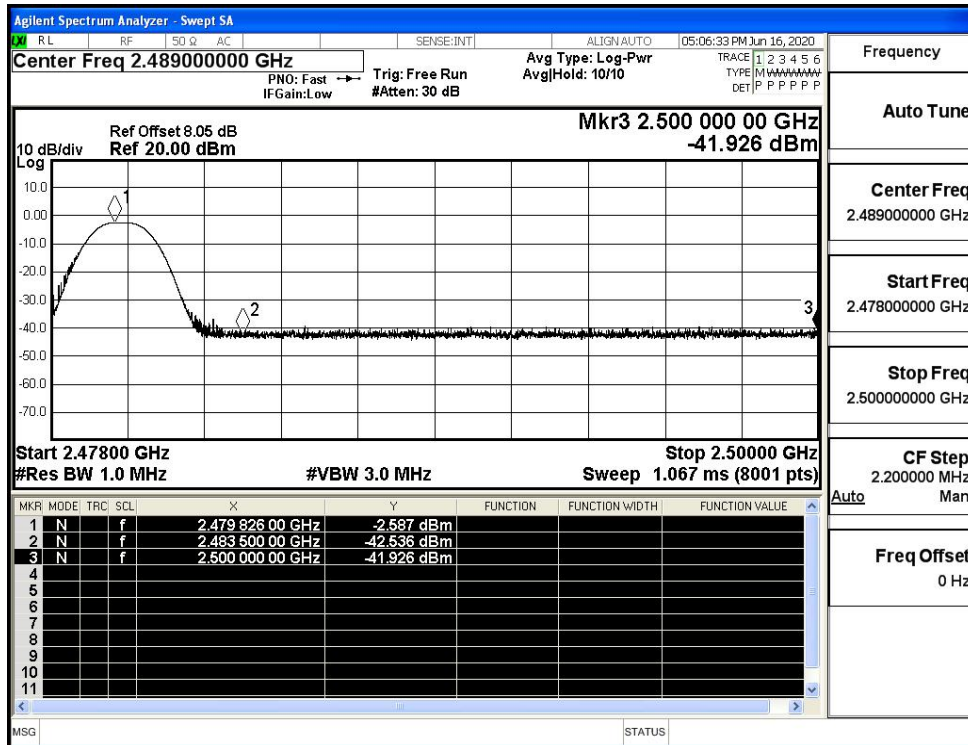
Restrict-band band-edge measurements_BT LE_2402_Ant1_PEAK



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

