

Appendix B

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

Product Name: Bluetooth speaker

Trade Mark: N/A

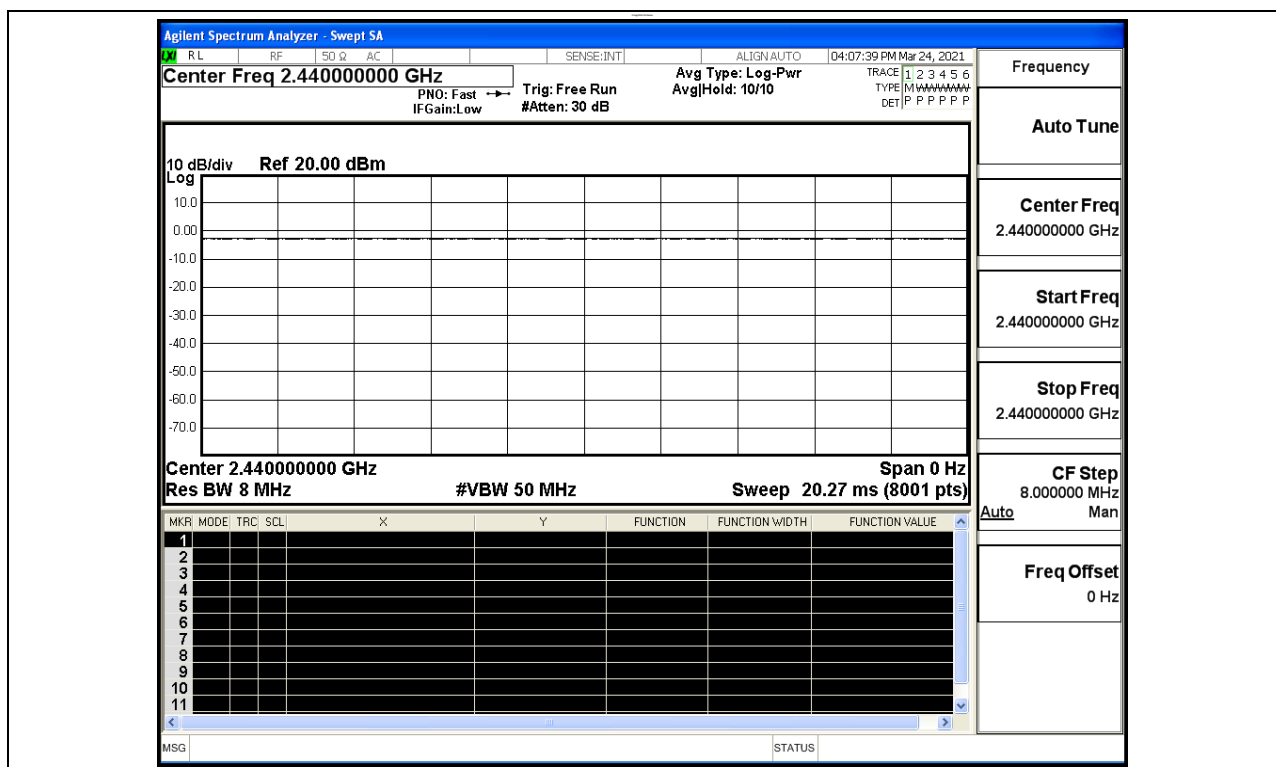
Test Model: SMARTCOM-323

Environmental Conditions

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

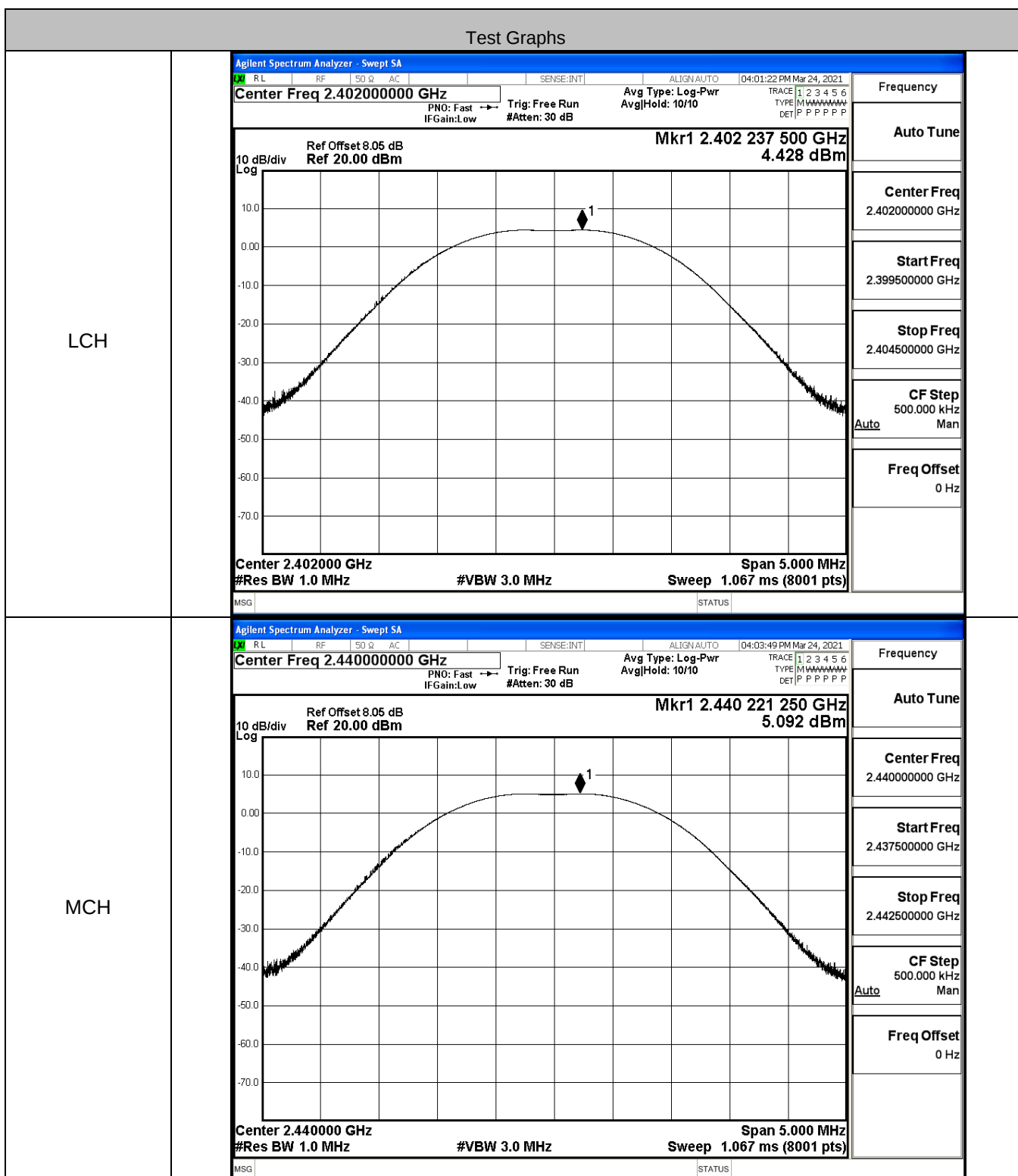
B.1 Duty Cycle

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

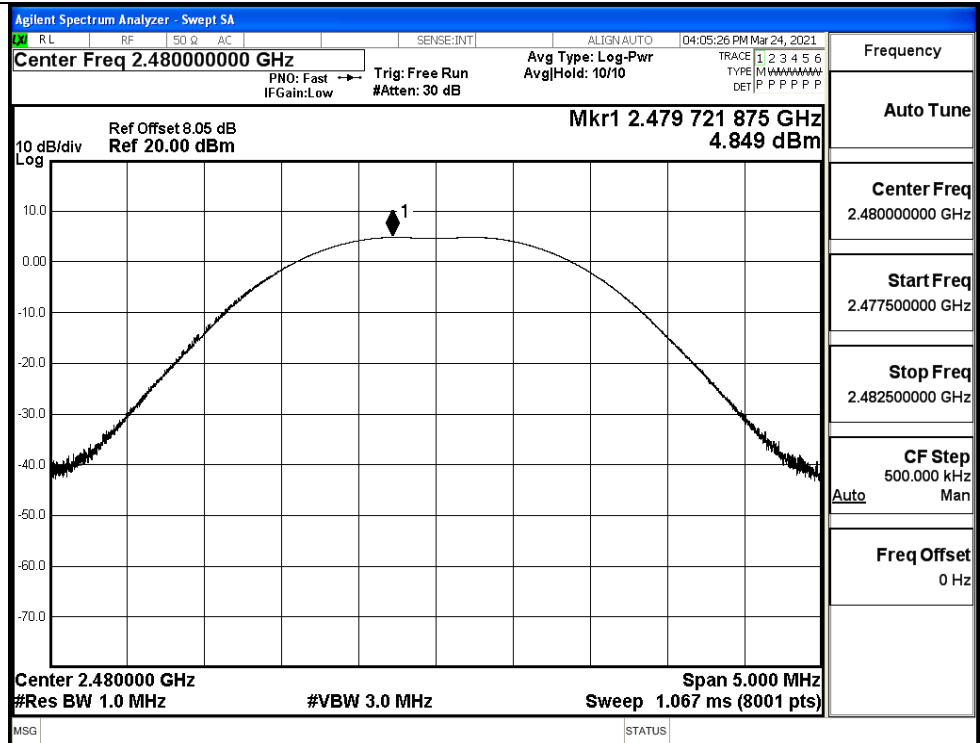


B.2 Maximum Conducted Peak Output Power

Mode	Channel	Conduct Peak Power[dBm]	Limit [dBm]	Verdict
BT LE	LCH	4.428	30	PASS
BT LE	MCH	5.092	30	PASS
BT LE	HCH	4.849	30	PASS



HCH

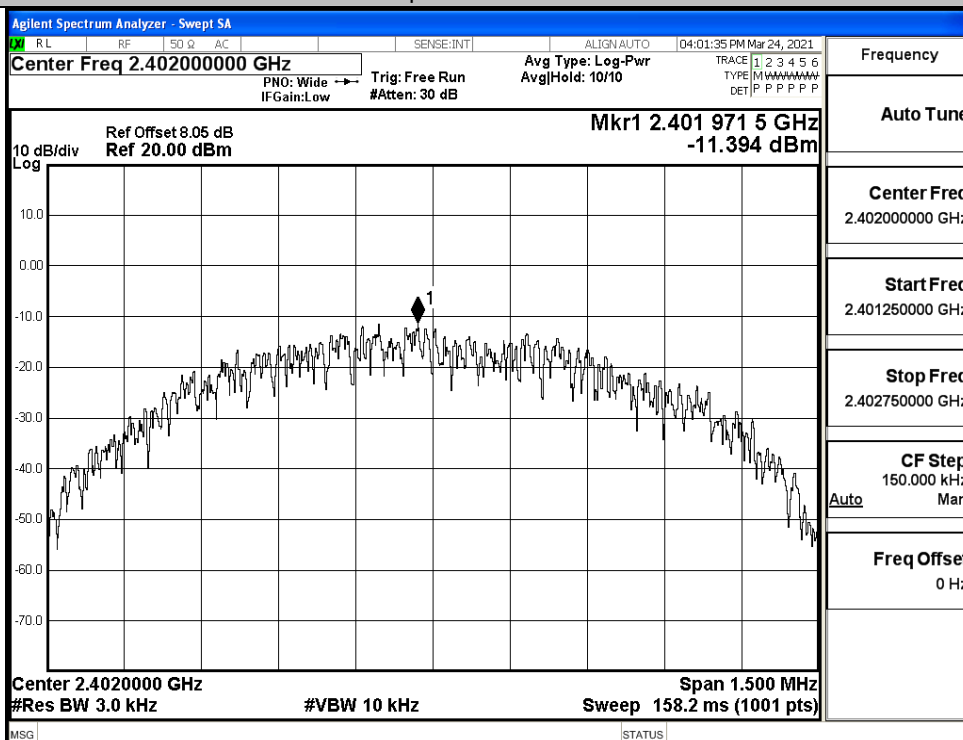


B.3 Maximum Power Spectral Density

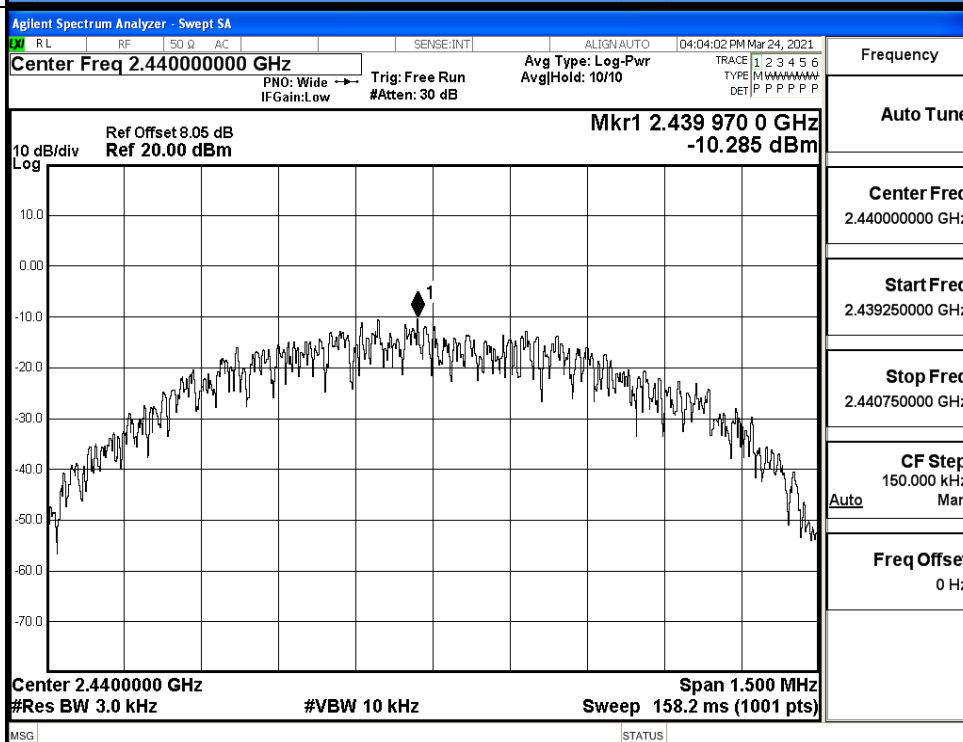
Mode	Channel	PSD [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
BT LE	LCH	-11.394	8	PASS
BT LE	MCH	-10.285	8	PASS
BT LE	HCH	-10.199	8	PASS

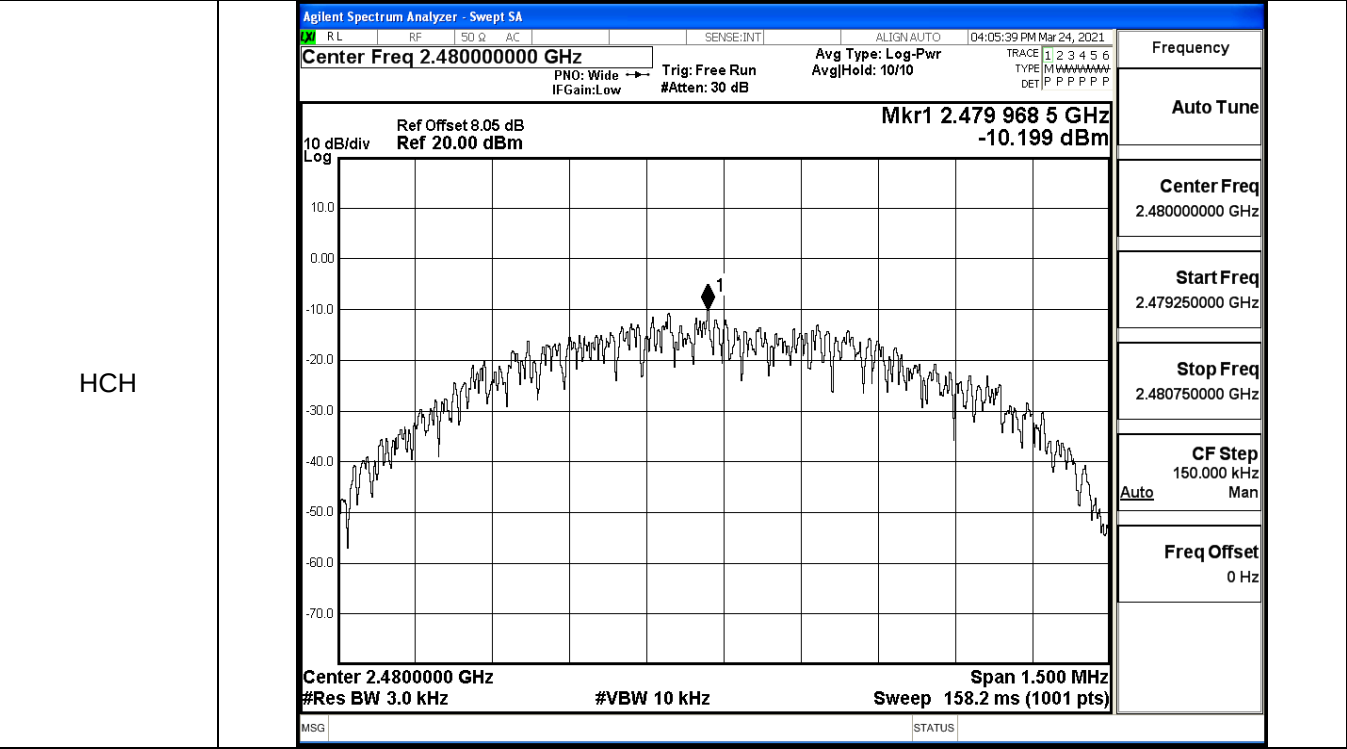
Test Graphs

LCH



MCH



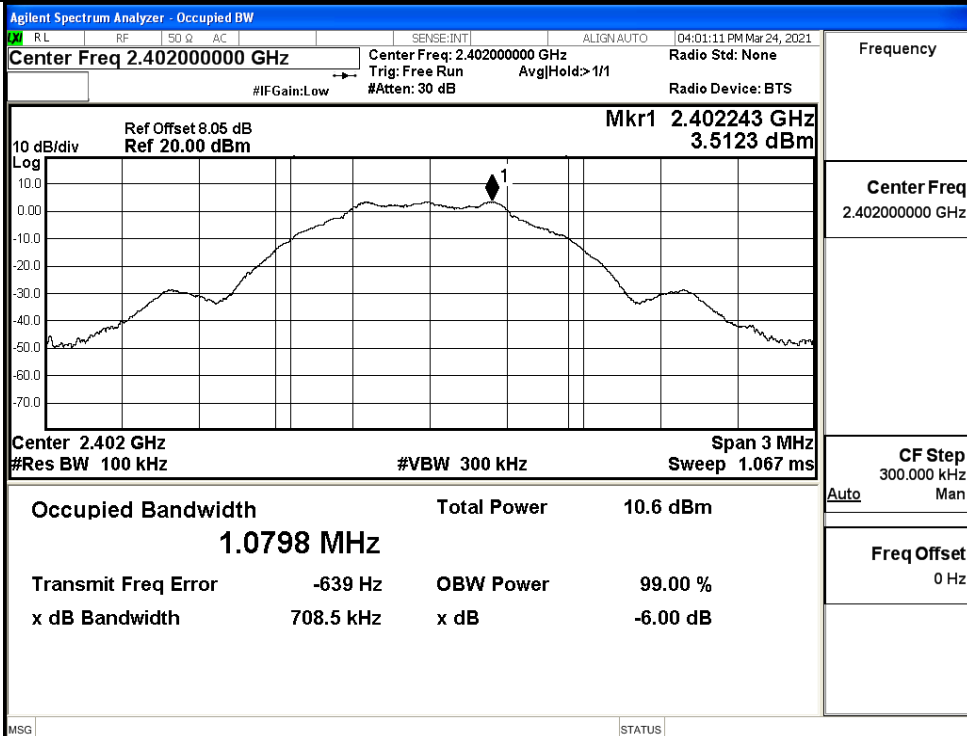


B.4 6dB Bandwidth

Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
BT LE	LCH	0.7085	≥ 0.5	PASS
BT LE	MCH	0.7118	≥ 0.5	PASS
BT LE	HCH	0.7074	≥ 0.5	PASS

Test Graphs

LCH



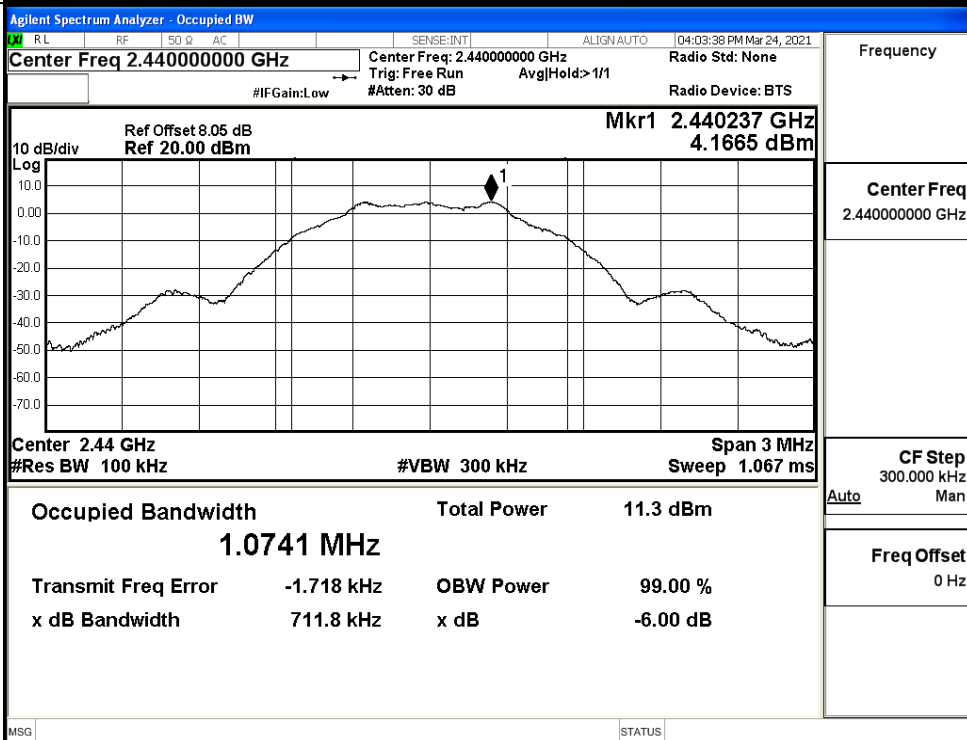
Frequency

Center Freq
2.402000000 GHz

CF Step
300.000 kHz
Auto Man

Freq Offset
0 Hz

MCH



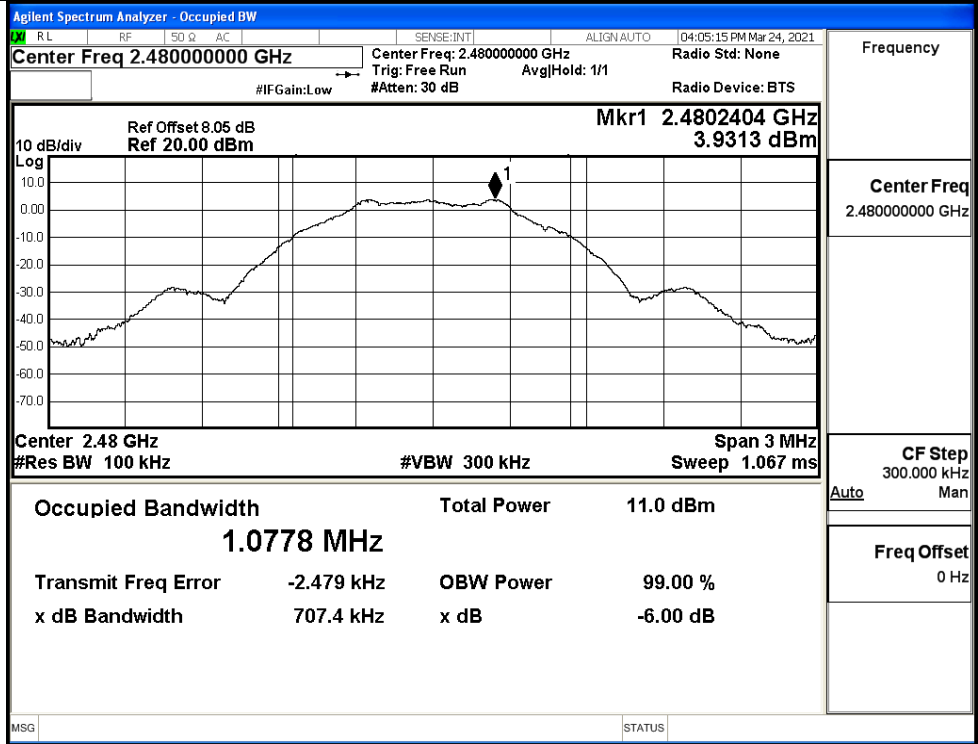
Frequency

Center Freq
2.440000000 GHz

CF Step
300.000 kHz
Auto Man

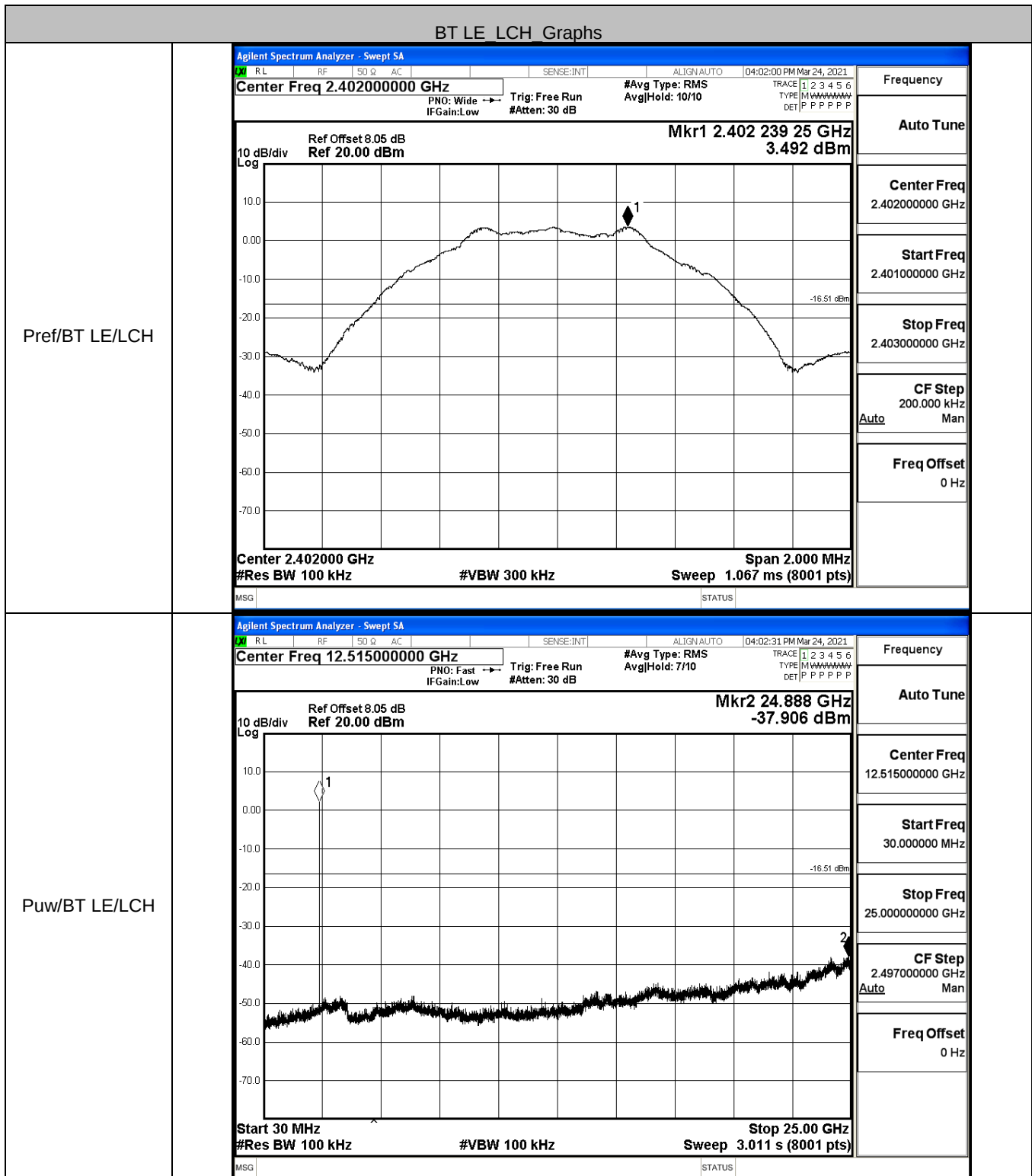
Freq Offset
0 Hz

HCH



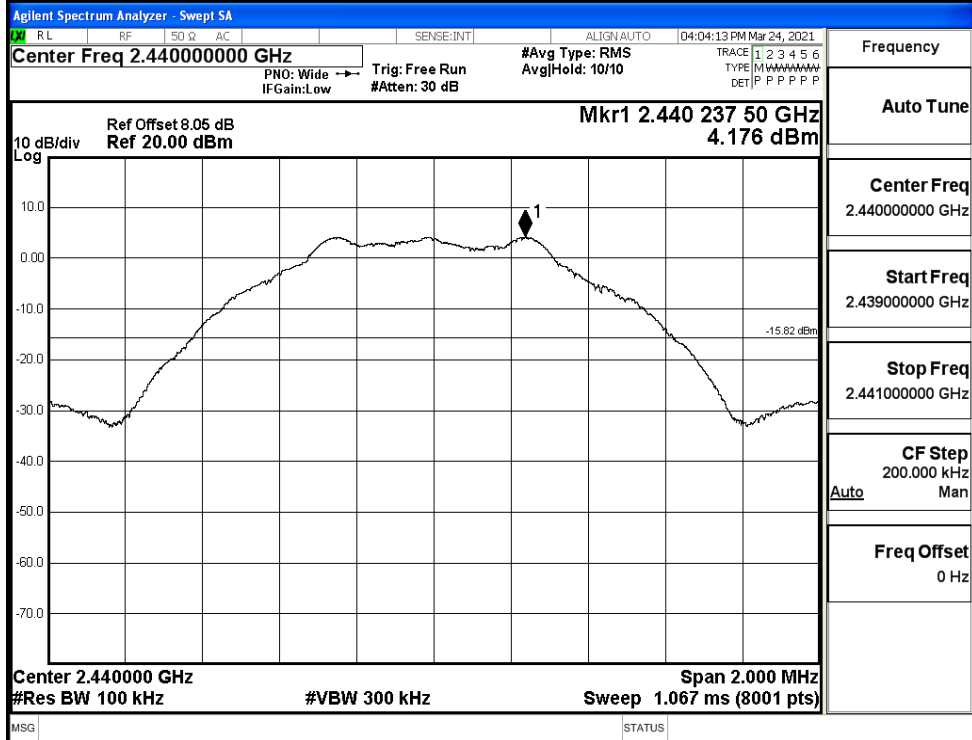
B.5 RF Conducted Spurious Emissions

Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	3.492	-37.906	-16.508	PASS
BT LE	MCH	4.176	-35.794	-15.824	PASS
BT LE	HCH	3.937	-37.826	-16.063	PASS

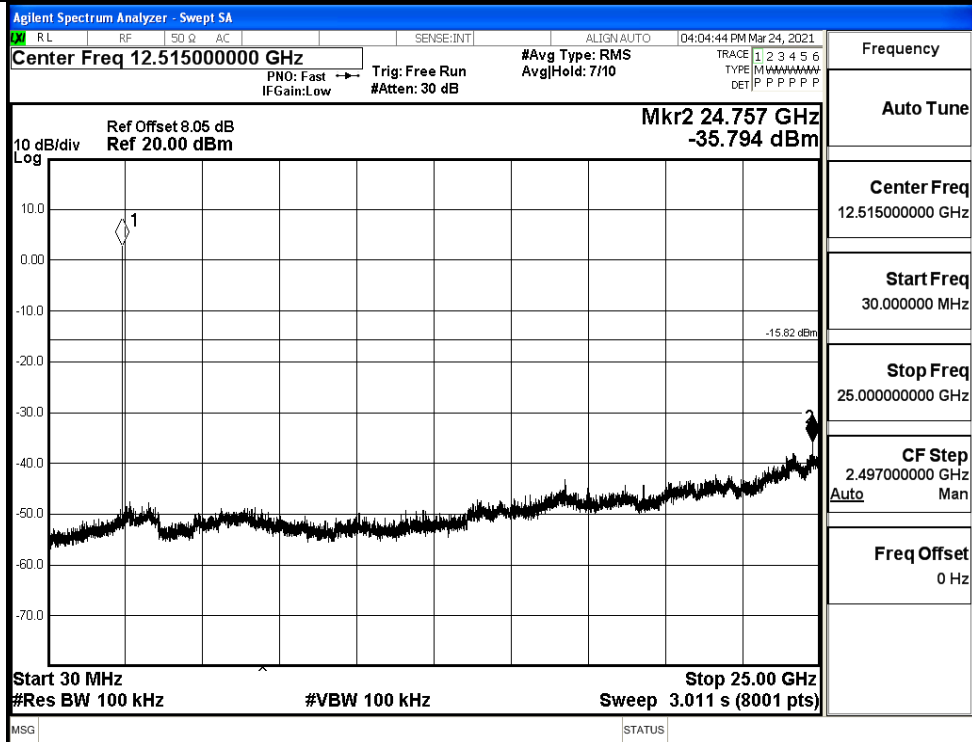


BT LE MCH Graphs

Pref/BT LE/MCH

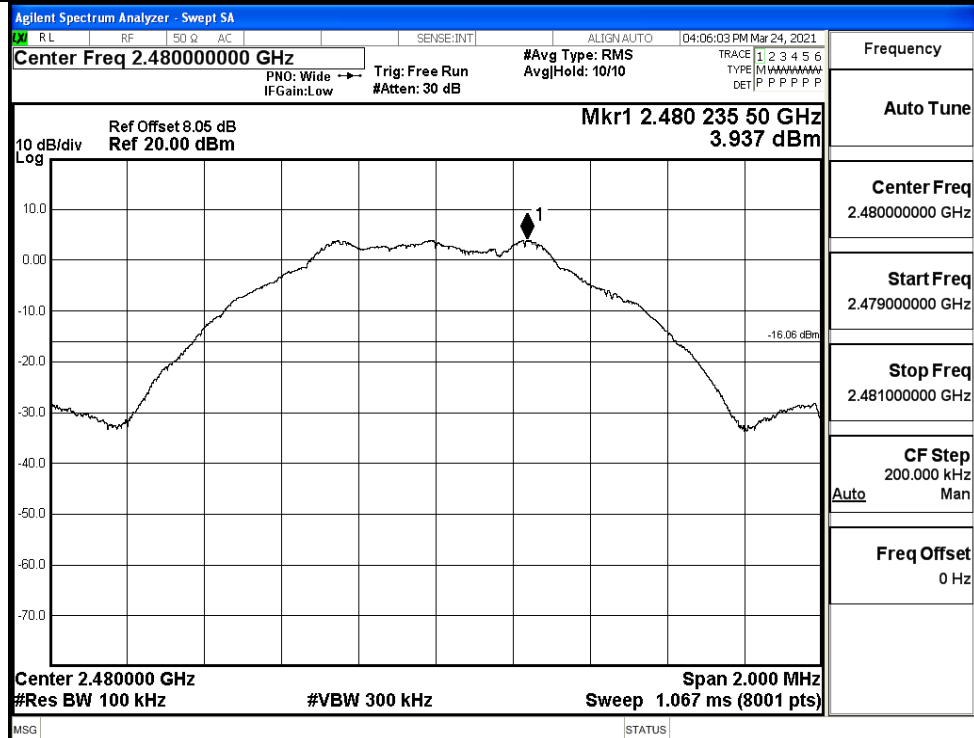


Puw/BT LE/MCH

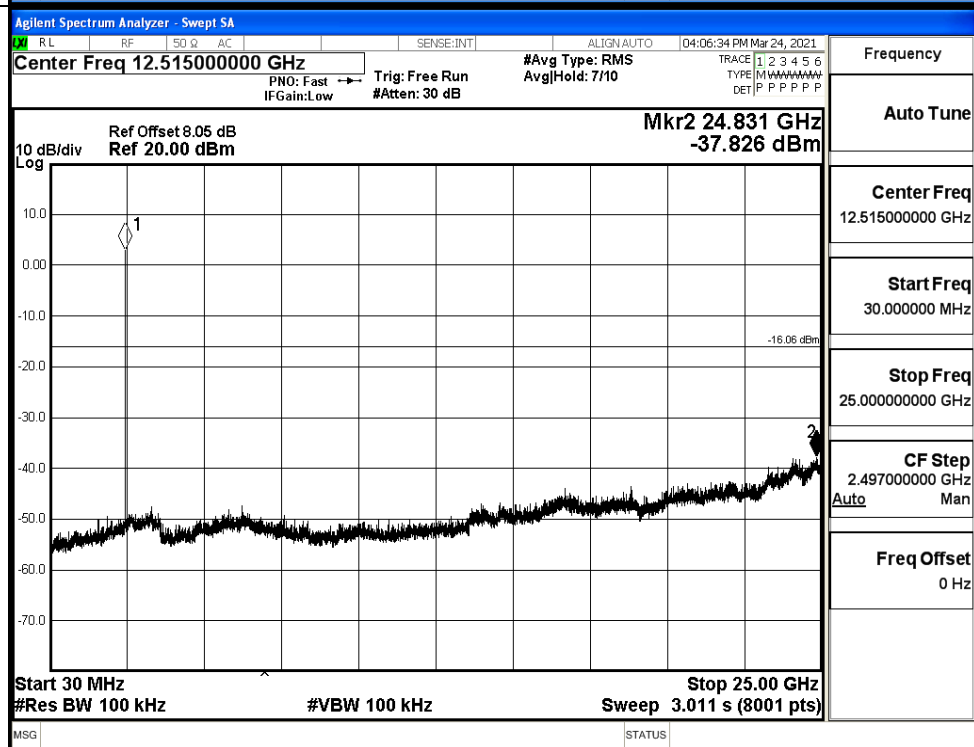


BT LE HCH Graphs

Pref/BT LE/HCH



Puw/BT LE/HCH

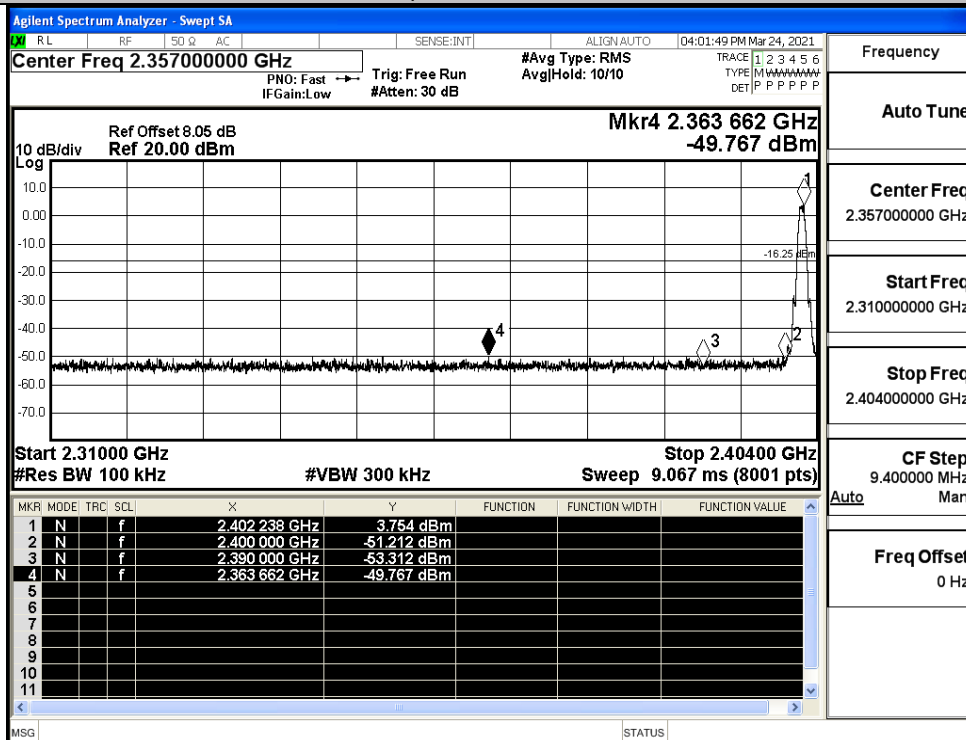


B.6 Band-edge for RF Conducted Emissions

Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	3.754	-49.767	-16.25	PASS
BT LE	HCH	4.173	-48.677	-15.83	PASS

Test Graphs

LCH



Frequency

Auto Tune

Center Freq

2.35700000 GHz

Start Freq

2.31000000 GHz

Stop Freq

2.40400000 GHz

CF Step

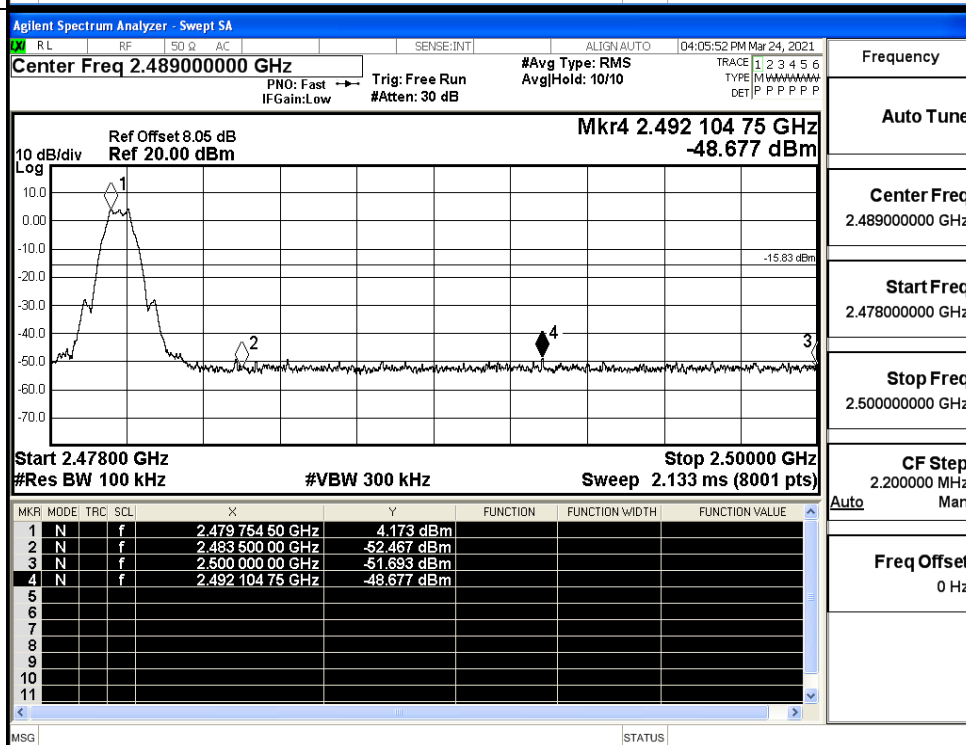
9.400000 MHz

Auto Man

Freq Offset

0 Hz

HCH



Frequency

Auto Tune

Center Freq

2.48900000 GHz

Start Freq

2.47800000 GHz

Stop Freq

2.50000000 GHz

CF Step

2.200000 MHz

Auto Man

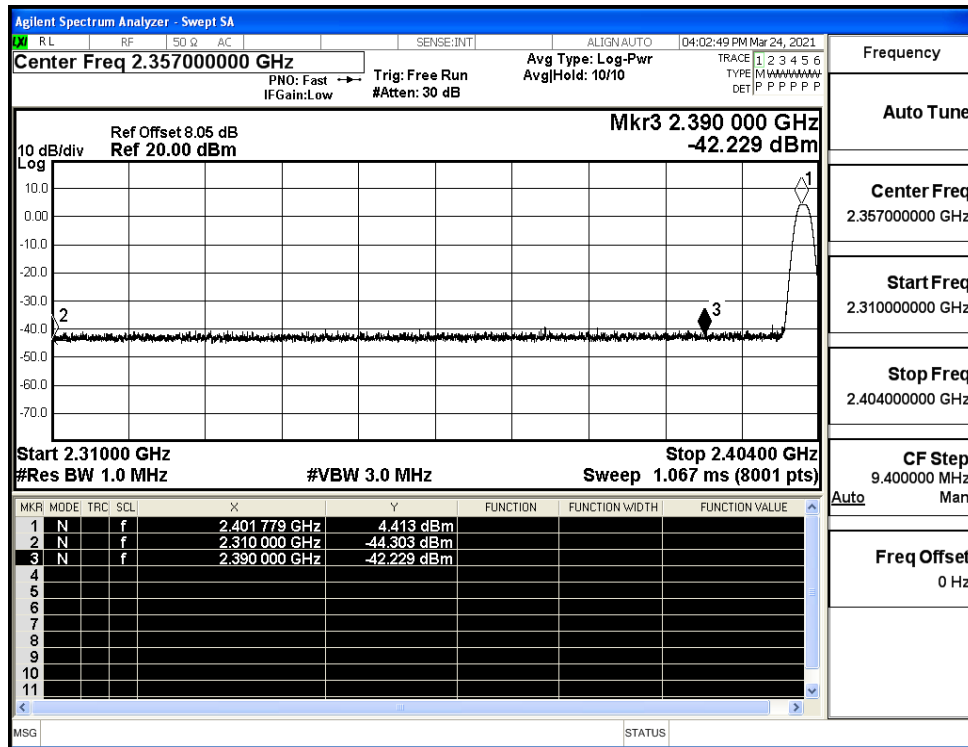
Freq Offset

0 Hz

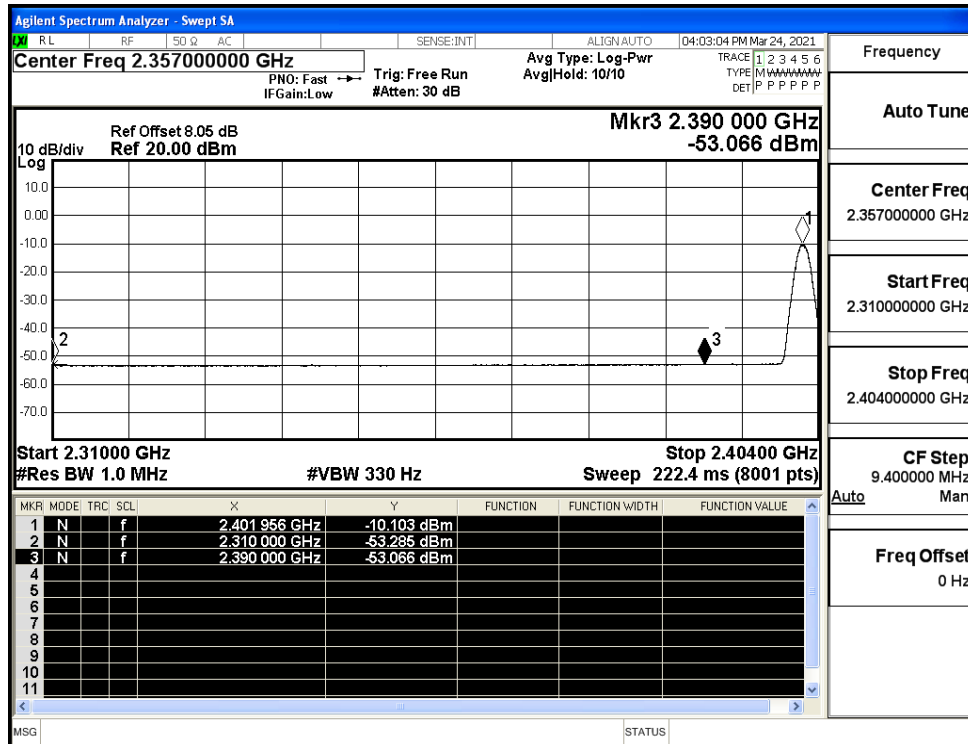
B.7 Restrict-band band-edge measurements

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	-44.30	2.0	0	50.95	PEAK	74	PASS
		Ant1	2310.0	-53.29	2.0	0	41.97	AV	54	PASS
		Ant1	2390.0	-42.23	2.0	0	53.03	PEAK	74	PASS
		Ant1	2390.0	-53.07	2.0	0	42.19	AV	54	PASS
	2480	Ant1	2483.5	-43.68	2.0	0	51.58	PEAK	74	PASS
		Ant1	2483.5	-52.35	2.0	0	42.90	AV	54	PASS
		Ant1	2500.0	-41.67	2.0	0	53.59	PEAK	74	PASS
		Ant1	2500.0	-52.26	2.0	0	42.99	AV	54	PASS

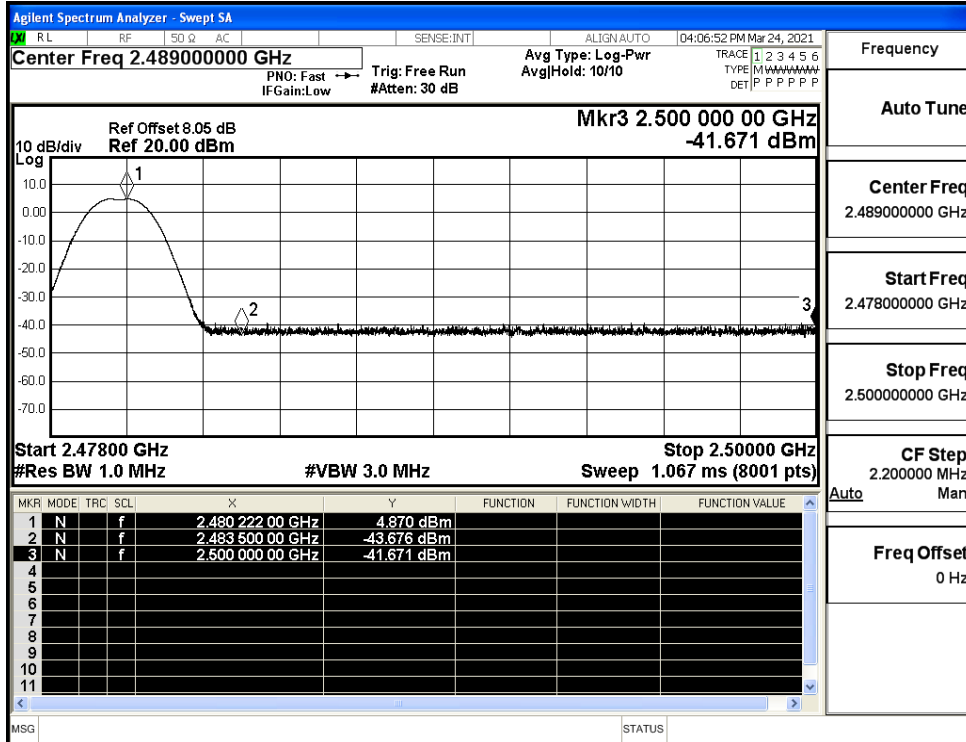
Restrict-band band-edge measurements_BT LE_2402_Ant1_PEAK



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

