

Appendix A Test Data for BT LE

RF Test Data for BT V4.2(BDR/EDR) (Conducted Measurement)

Product Name: BluePad-55 v2

Trade Mark: N/A

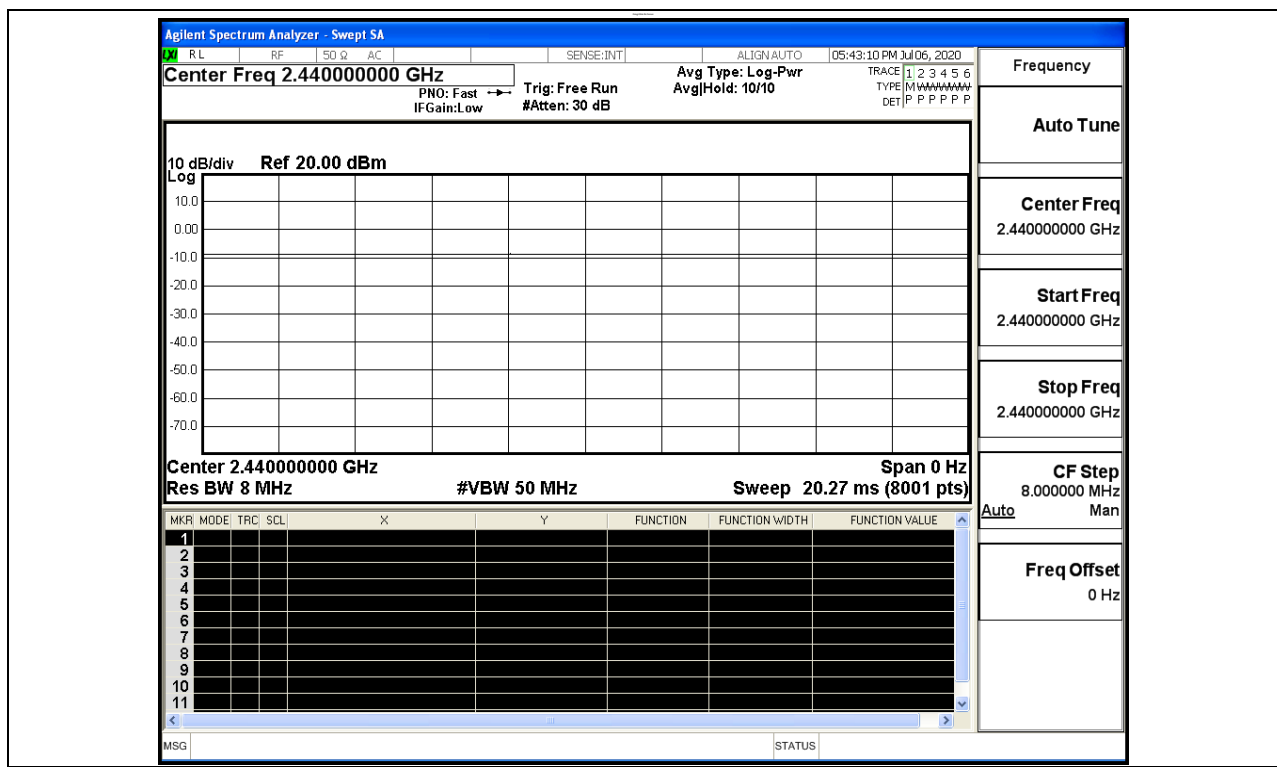
Test Model: BluePad-55 v2

Environmental Conditions

Temperature:	24.3° C
Relative Humidity:	54.3%
ATM Pressure:	100.0 kPa
Test Engineer:	Diamond Lu
Supervised by:	Li Huan

A.1 Duty Cycle

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

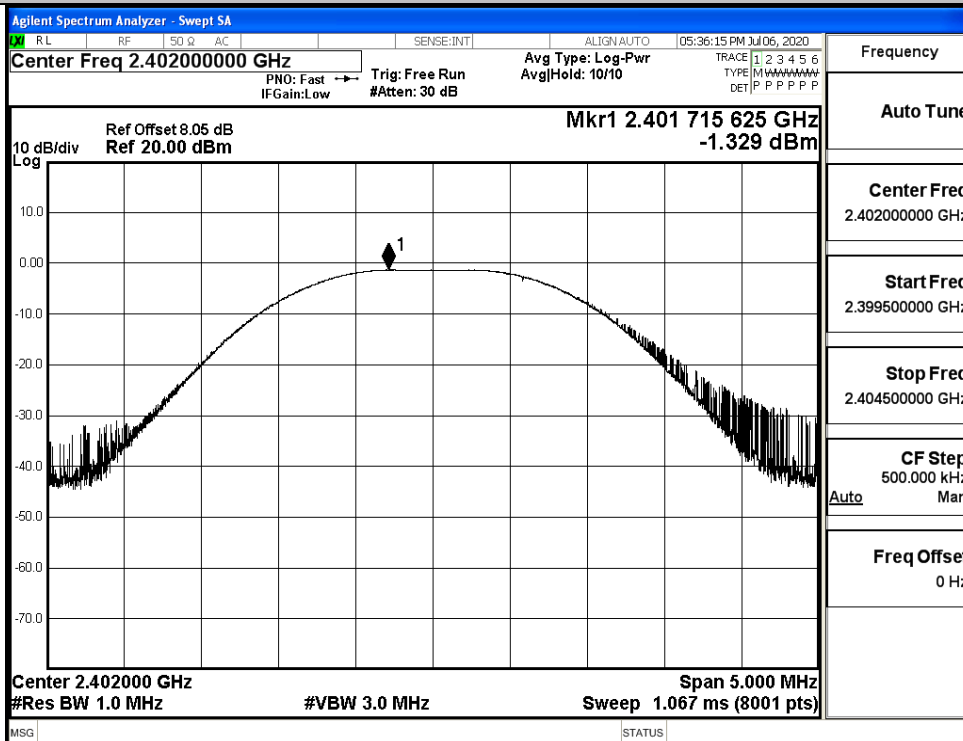


A.2 Maximum Conducted Peak Output Power

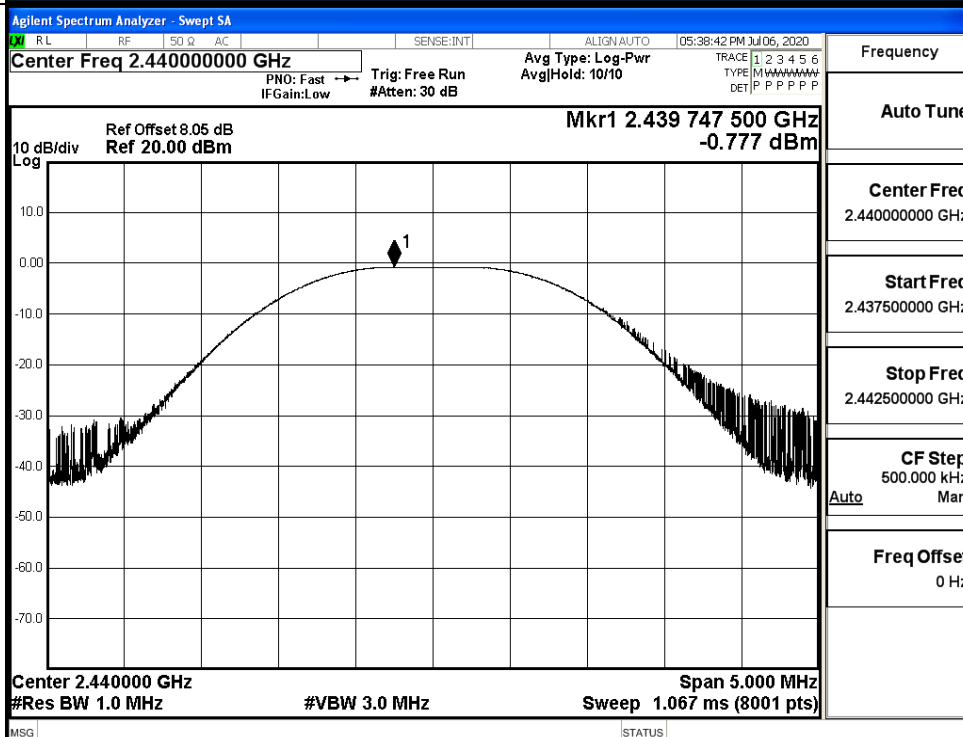
Mode	Channel	Conduct Peak Power[dBm]	Limit [dBm]	Verdict
BT LE	LCH	-1.329	30	PASS
BT LE	MCH	-0.777	30	PASS
BT LE	HCH	-1.298	30	PASS

Test Graphs

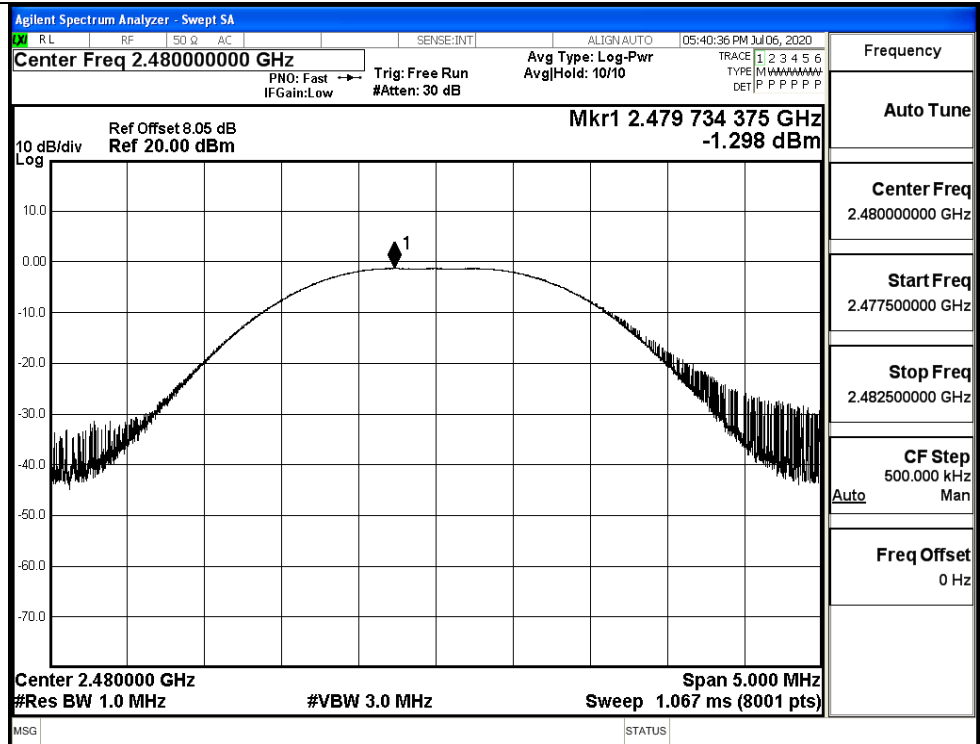
LCH



MCH



HCH

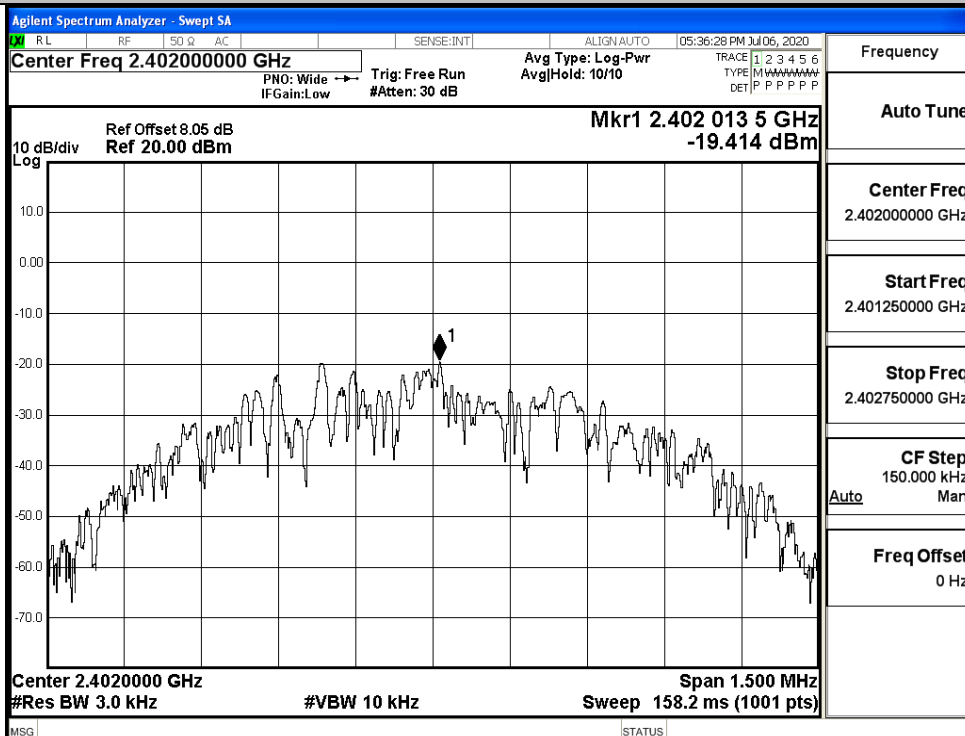


A.3 Maximum Power Spectral Density

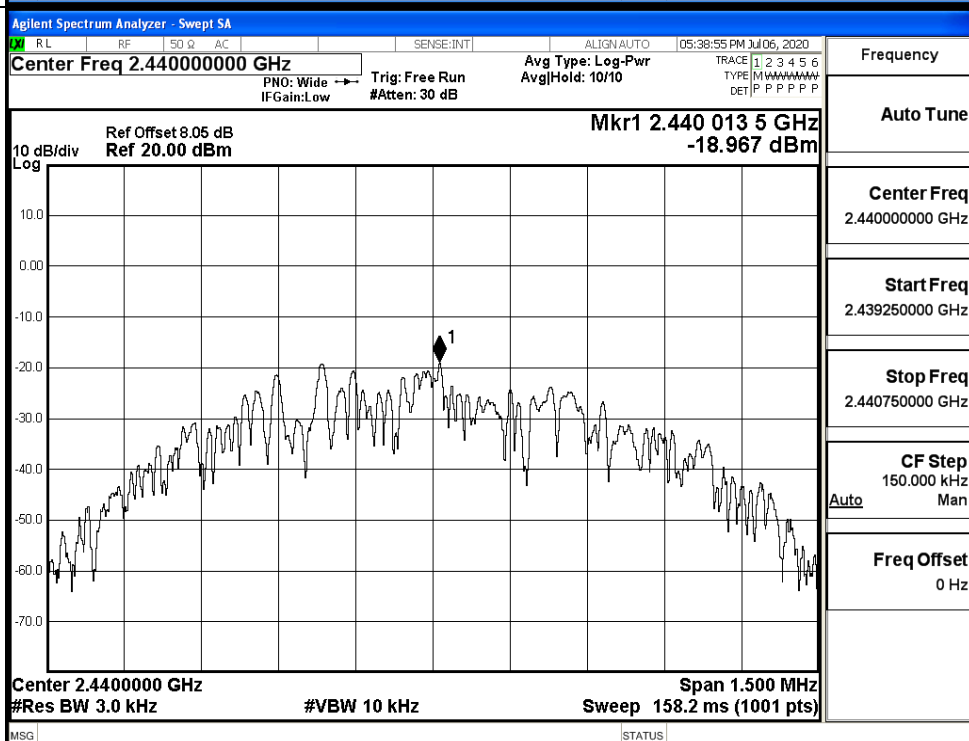
Mode	Channel	PSD [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
BT LE	LCH	-19.414	8	PASS
BT LE	MCH	-18.967	8	PASS
BT LE	HCH	-19.643	8	PASS

Test Graphs

LCH



MCH



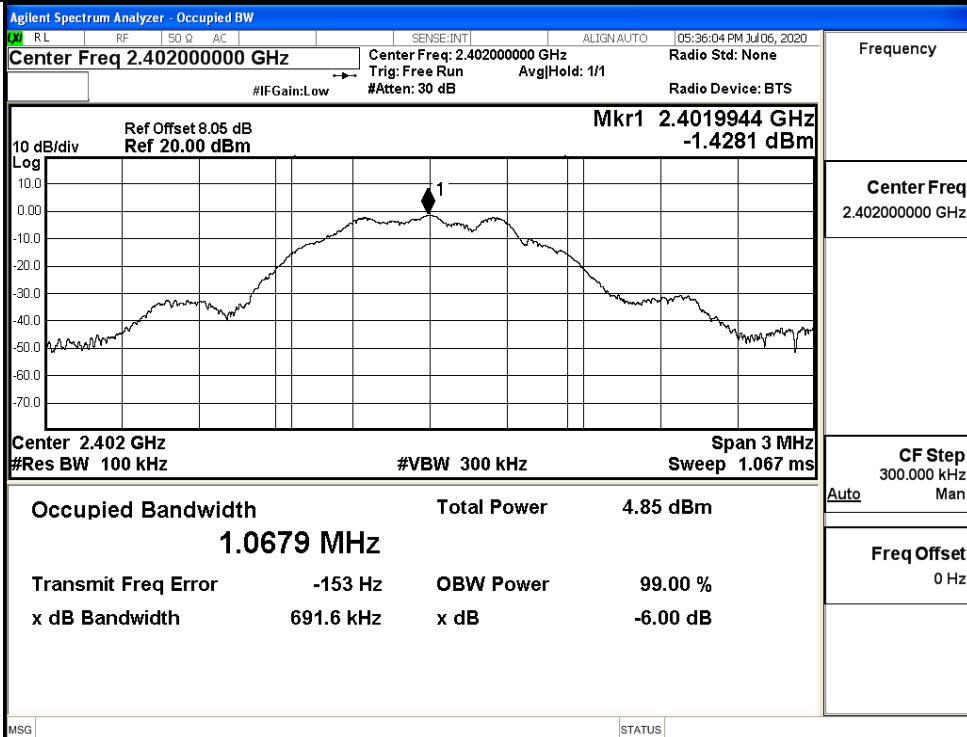


A.4 6dB Bandwidth

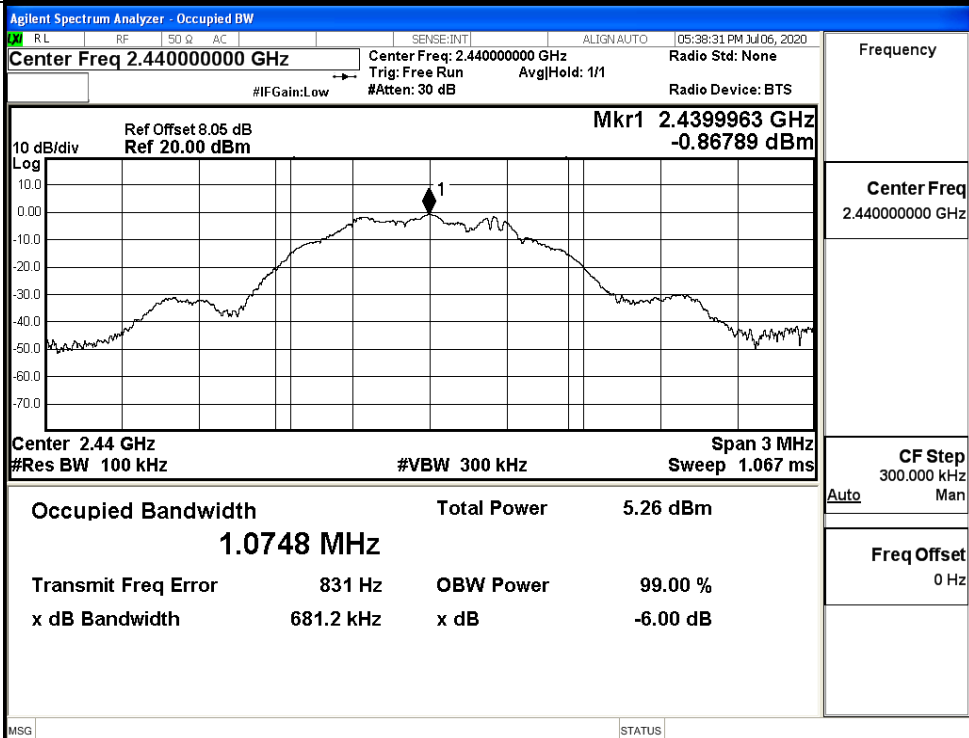
Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
BT LE	LCH	0.6916	≥ 0.5	PASS
BT LE	MCH	0.6812	≥ 0.5	PASS
BT LE	HCH	0.6839	≥ 0.5	PASS

Test Graphs

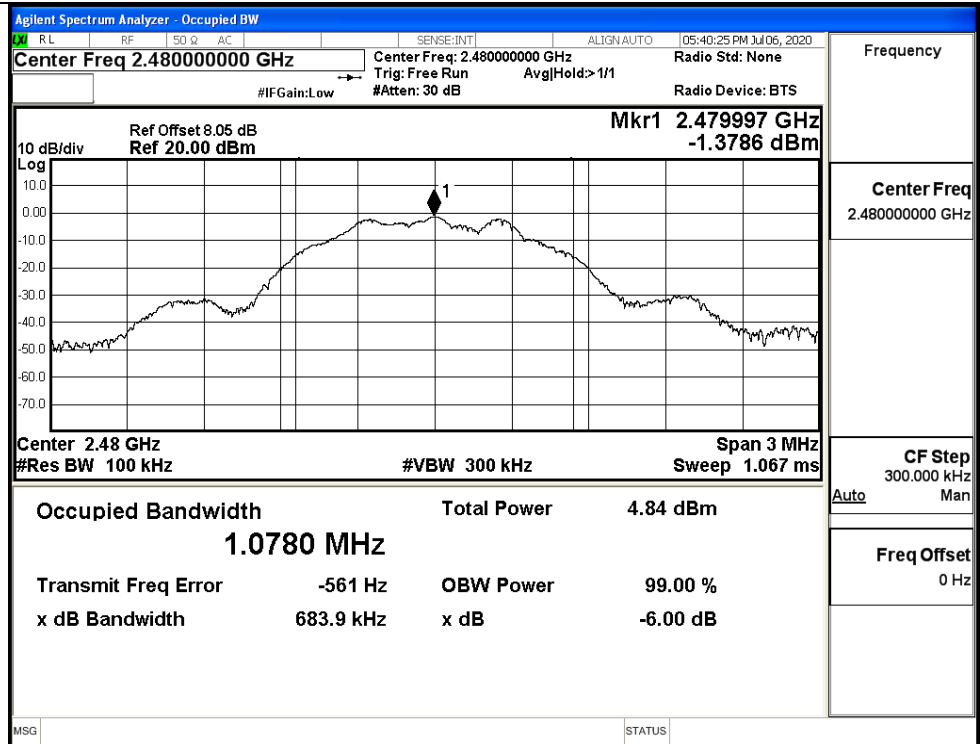
LCH



MCH



HCH

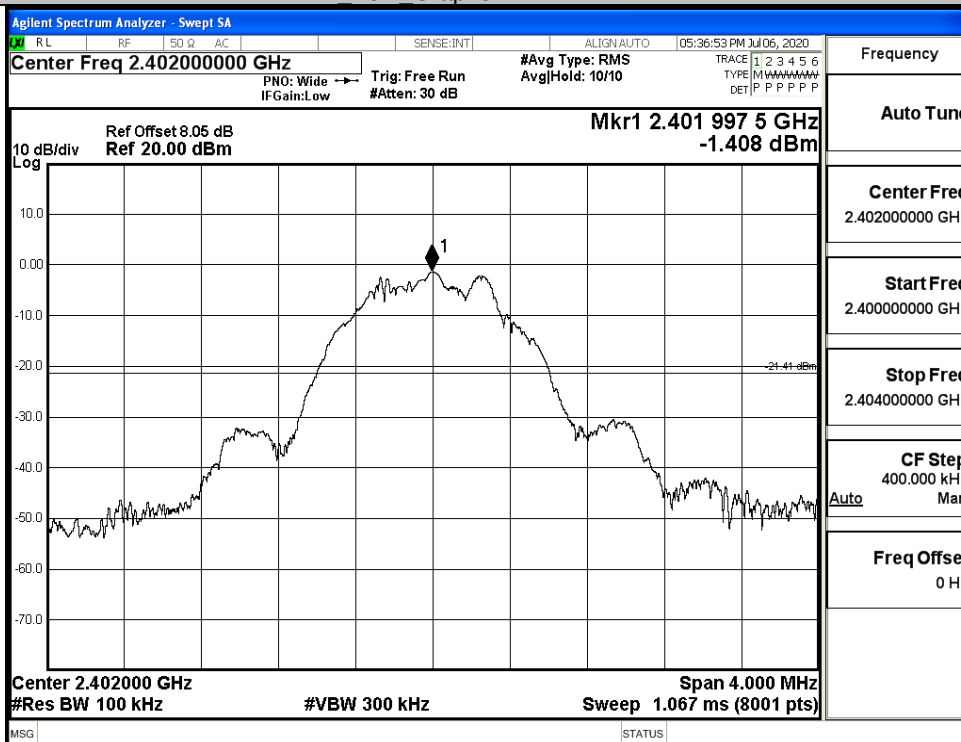


A.5 RF Conducted Spurious Emissions

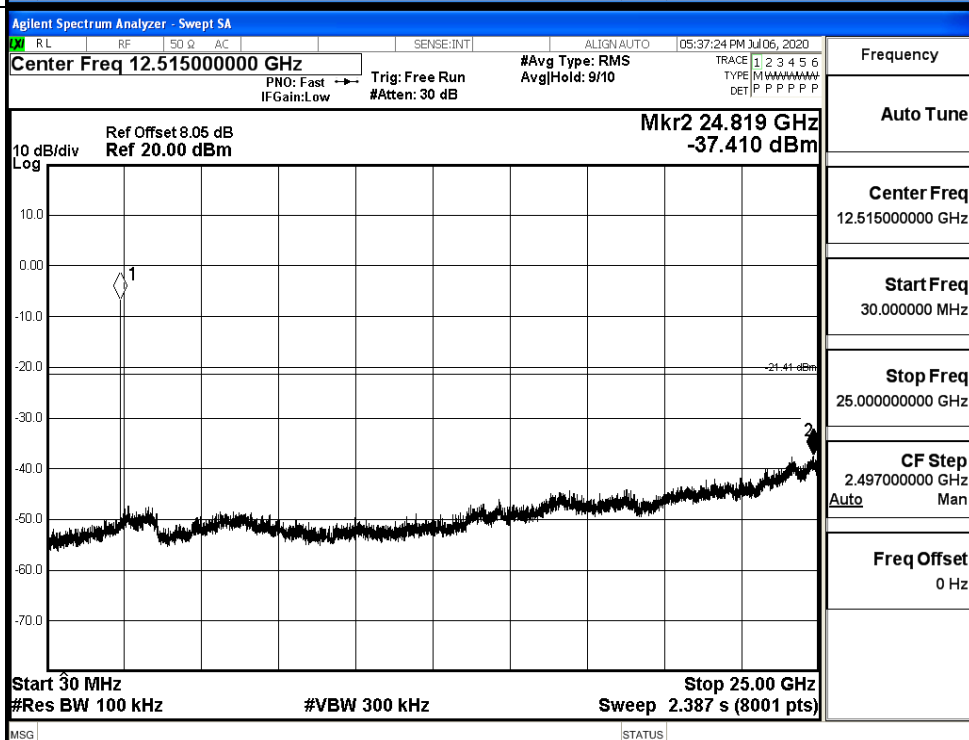
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	-1.408	-37.410	-21.408	PASS
BT LE	MCH	-1.085	-36.867	-21.085	PASS
BT LE	HCH	-1.384	-37.416	-21.384	PASS

BT LE LCH Graphs

Pref/BT LE/LCH

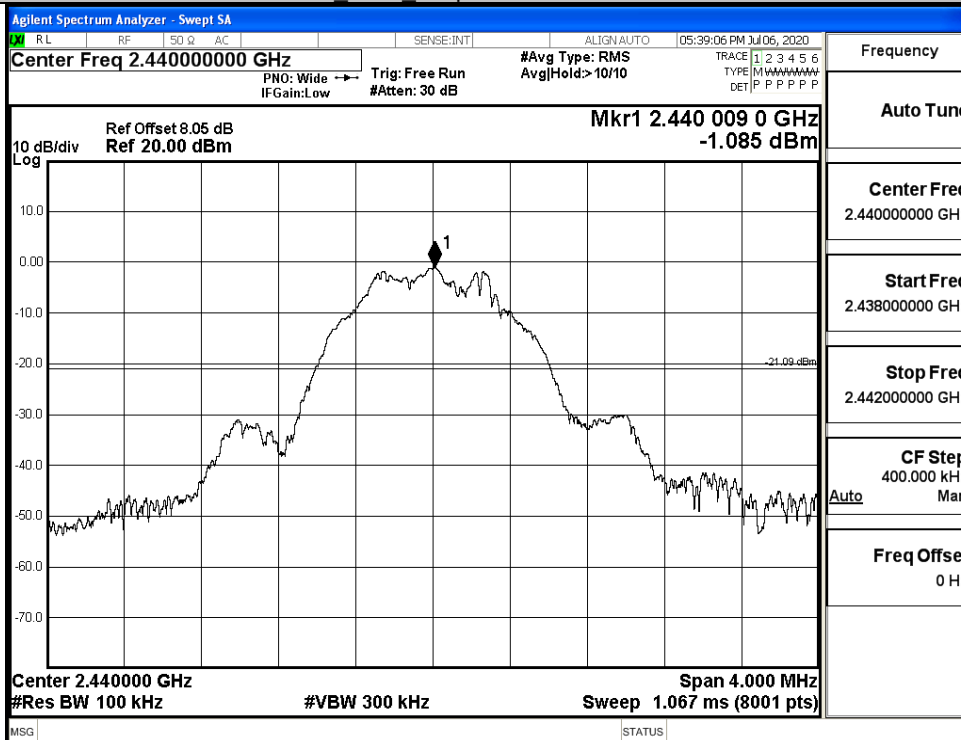


Puw/BT LE/LCH

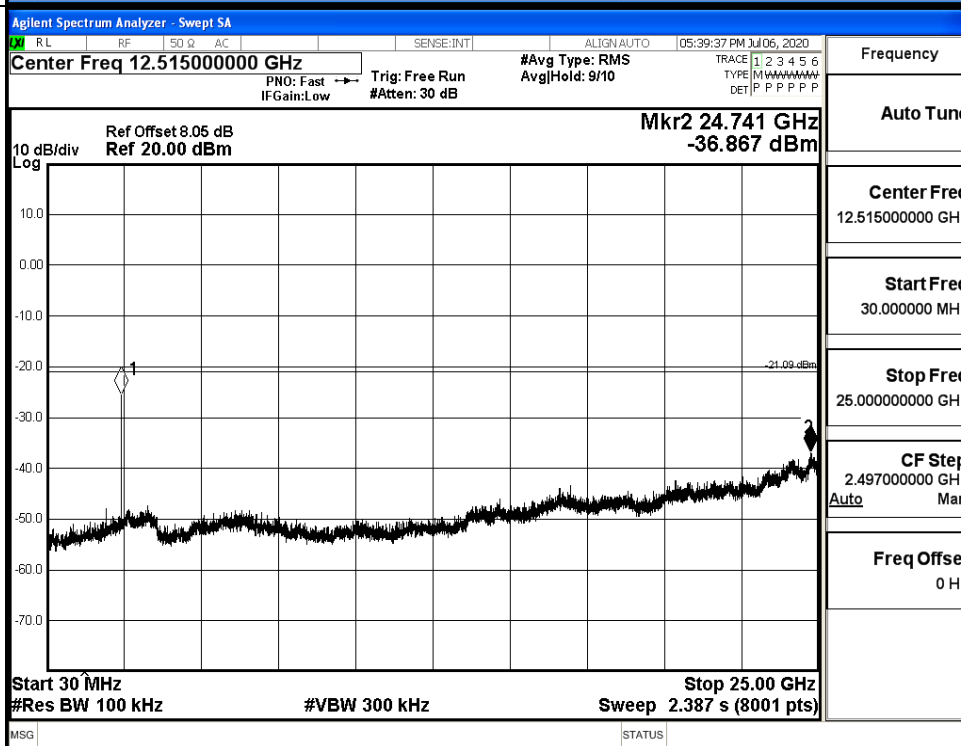


BT LE MCH Graphs

Pref/BT LE/MCH

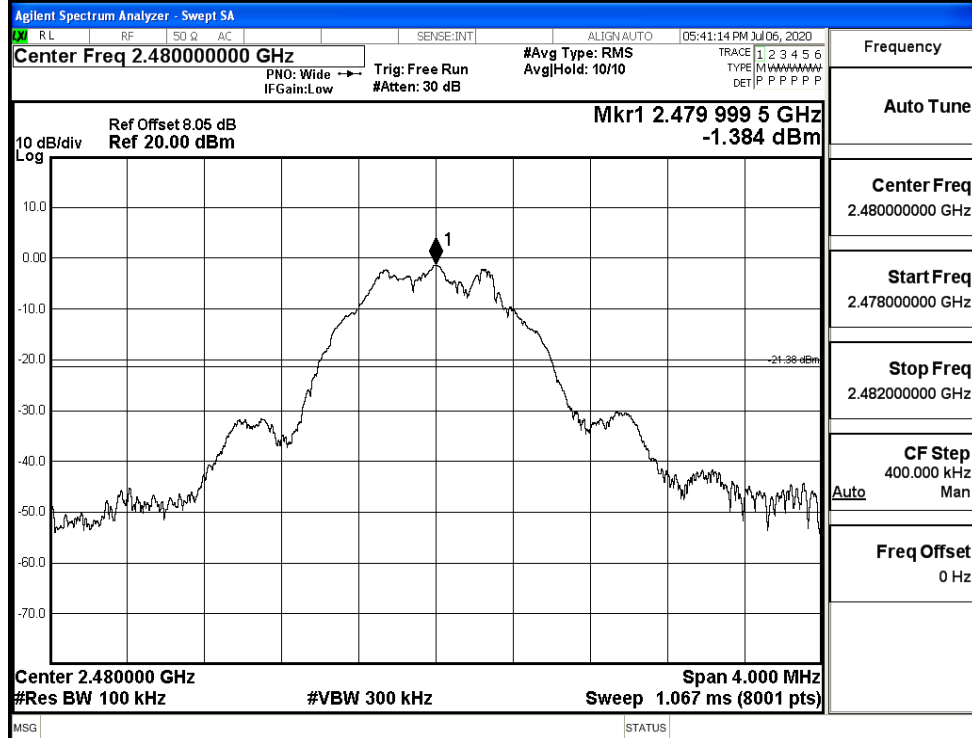


Puw/BT LE/MCH

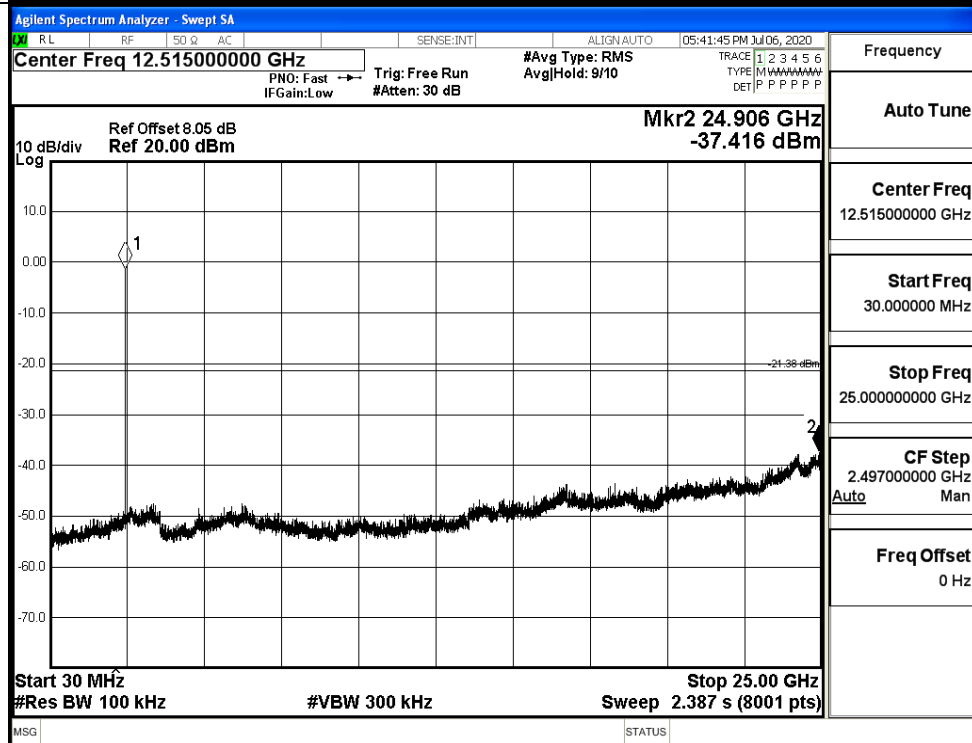


BT LE HCH Graphs

Pref/BT LE/HCH



Puw/BT LE/HCH

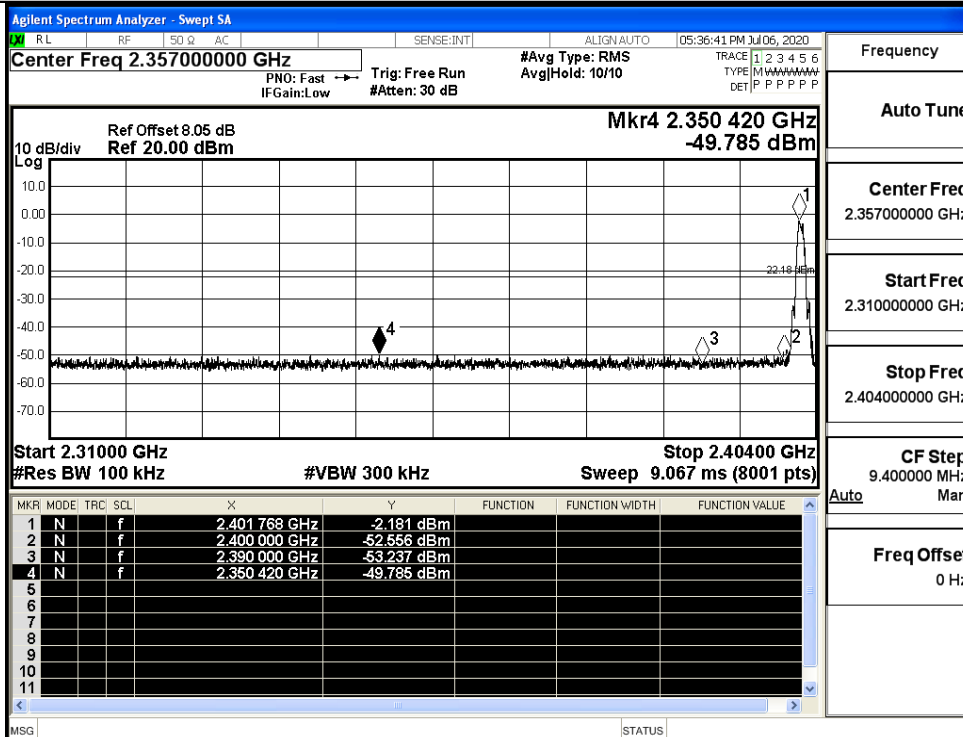


A.6 Band-edge for RF Conducted Emissions

Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	-2.181	-49.785	-22.18	PASS
BT LE	HCH	-1.296	-47.950	-21.3	PASS

Test Graphs

LCH



Frequency

Auto Tune

Center Freq

2.357000000 GHz

Start Freq

2.310000000 GHz

Stop Freq

2.404000000 GHz

CF Step

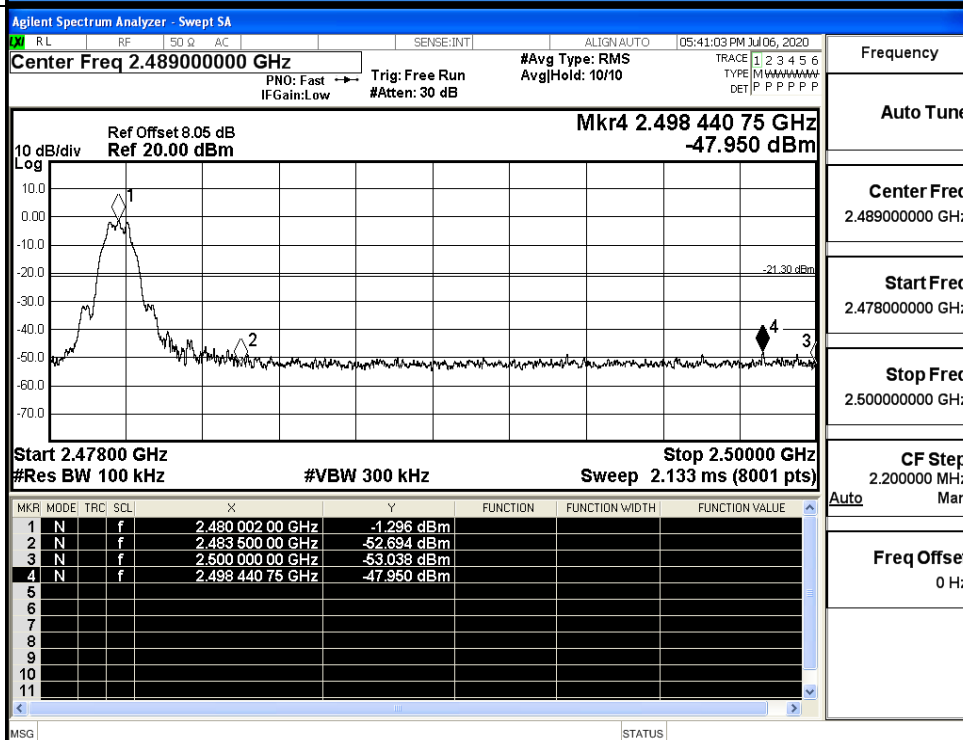
9.400000 MHz

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

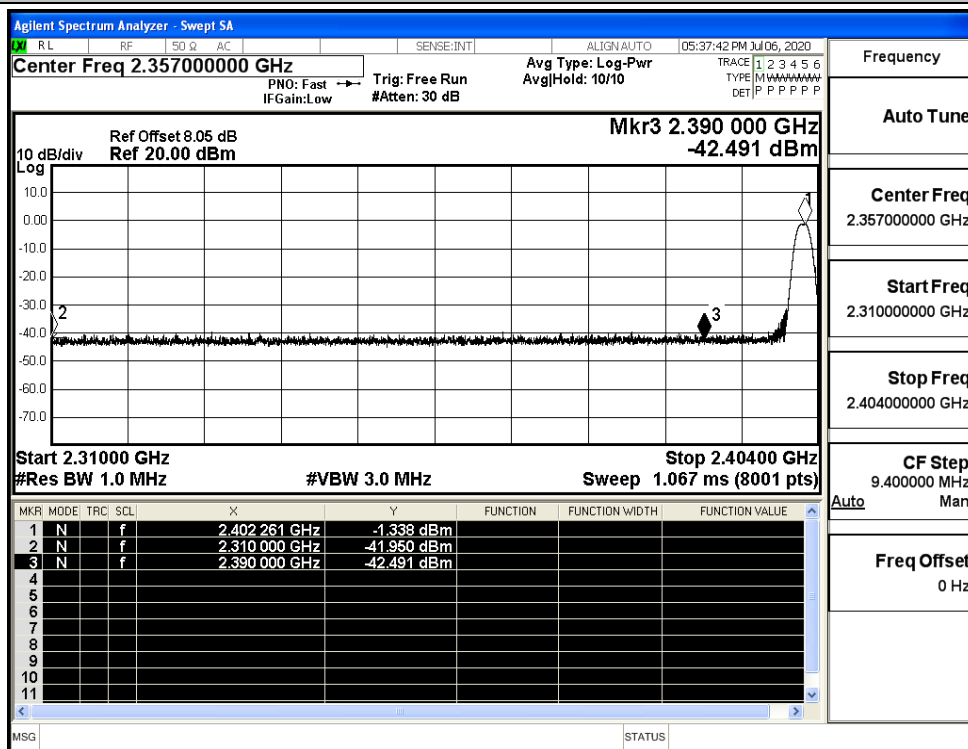
Freq Offset

0 Hz

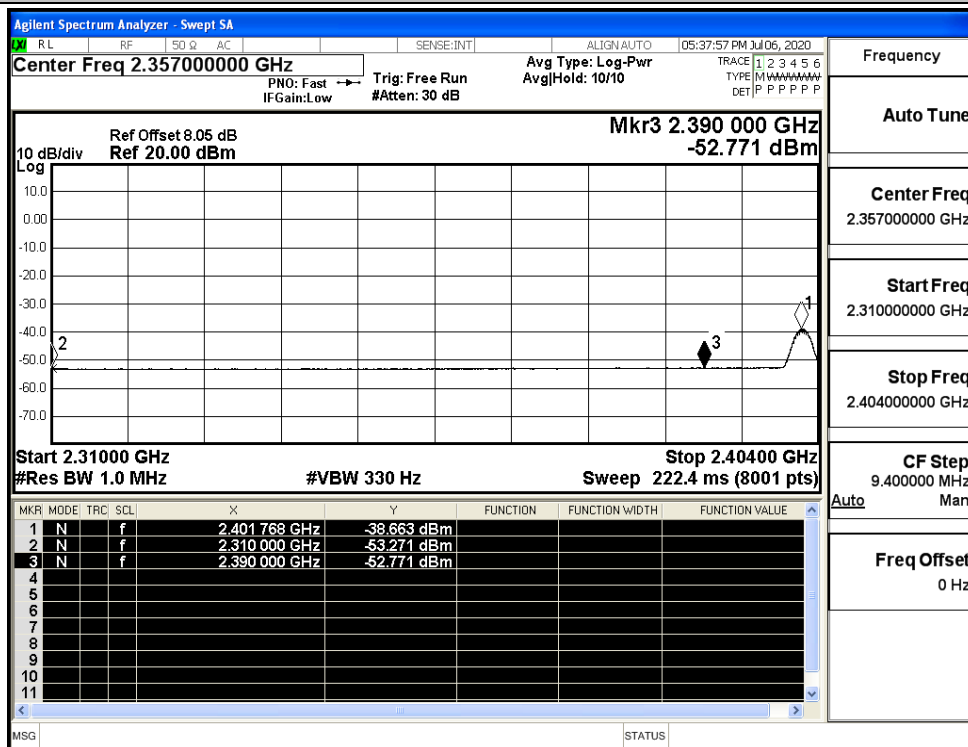
A.7 Restrict-band band-edge measurements

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	-41.95	2.0	0	53.31	PEAK	74	PASS
		Ant1	2310.0	-53.27	2.0	0	41.99	AV	54	PASS
		Ant1	2390.0	-42.49	2.0	0	52.77	PEAK	74	PASS
		Ant1	2390.0	-52.77	2.0	0	42.49	AV	54	PASS
	2480	Ant1	2483.5	-36.64	2.0	0	58.61	PEAK	74	PASS
		Ant1	2483.5	-52.34	2.0	0	42.92	AV	54	PASS
		Ant1	2500.0	-41.18	2.0	0	54.07	PEAK	74	PASS
		Ant1	2500.0	-52.23	2.0	0	43.03	AV	54	PASS

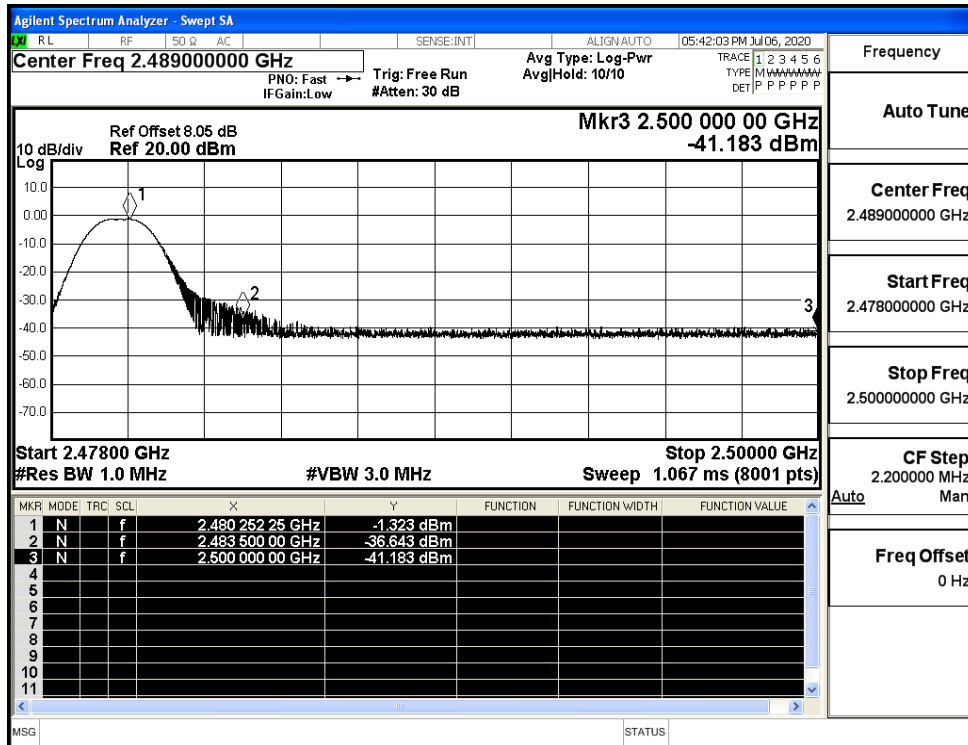
Restrict-band band-edge measurements_BT LE_2402_Ant1_PEAK



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

