

Appendix B

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

Product Name: Bluetooth Speaker

Trade Mark: N/A

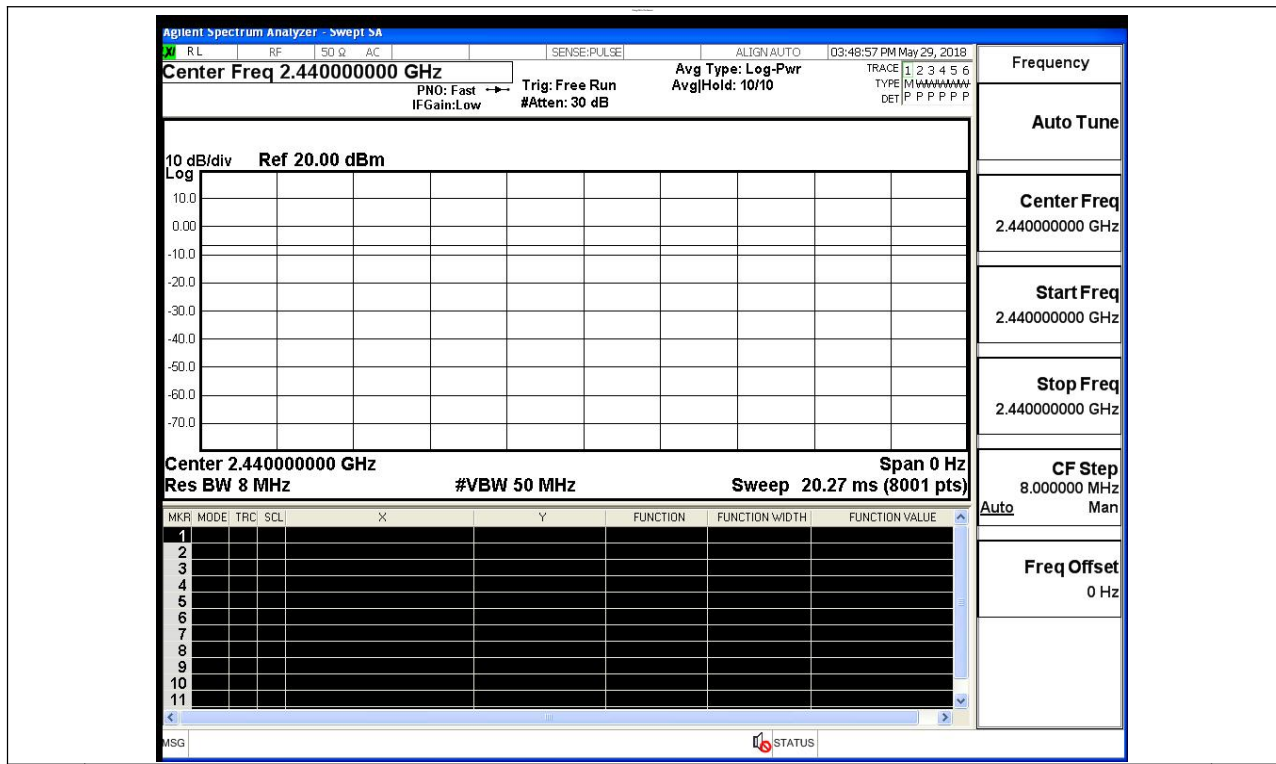
Test Model: S20

Environmental Conditions

Temperature:	22.8° C
Relative Humidity:	53.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Diamond.Lu
Supervised by:	Jayden.Zhuo

B.1 Duty Cycle

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

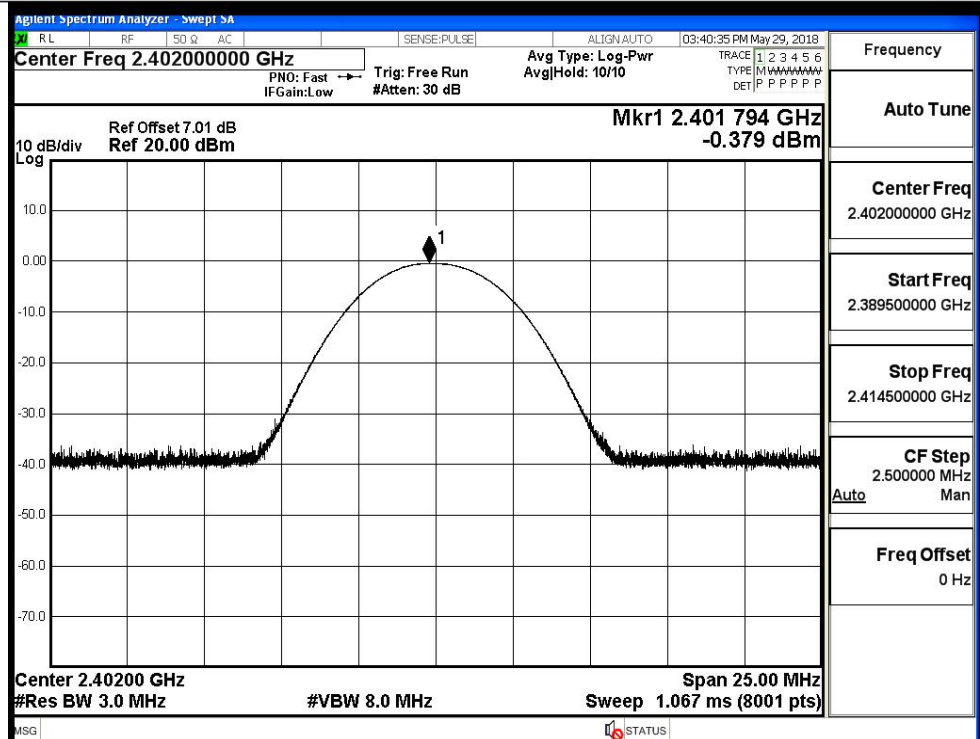


B.2 Maximum Conducted Peak Output Power

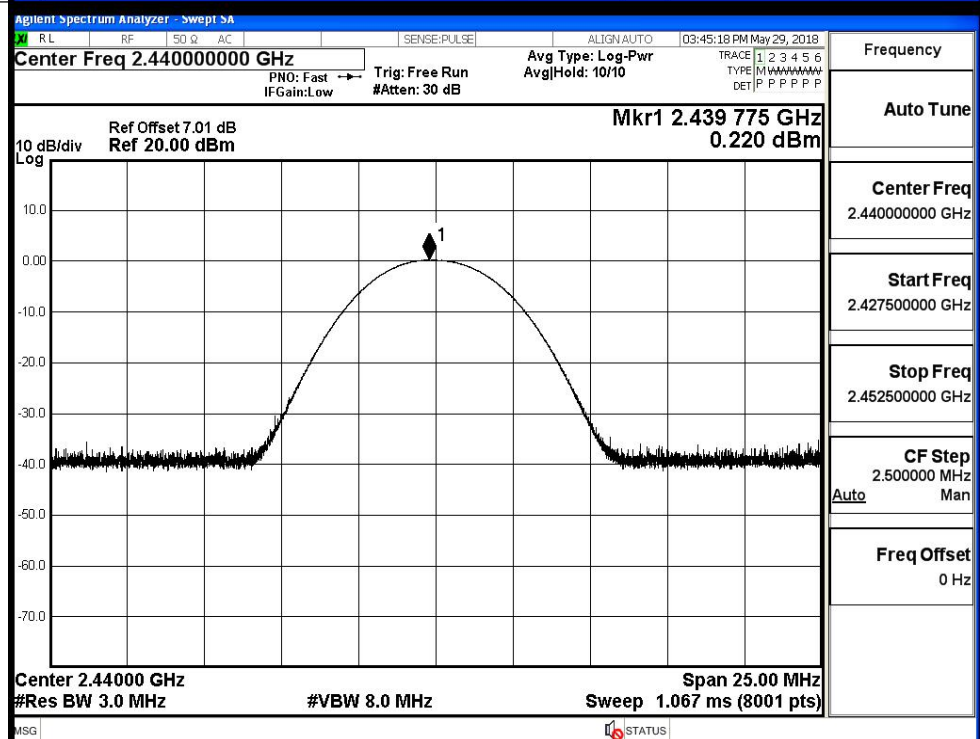
Mode	Channel	Conduct Peak Power[dBm]	Limit [dBm]	Verdict
BT LE	LCH	-0.379	30	PASS
BT LE	MCH	0.22	30	PASS
BT LE	HCH	-0.525	30	PASS

Test Graphs

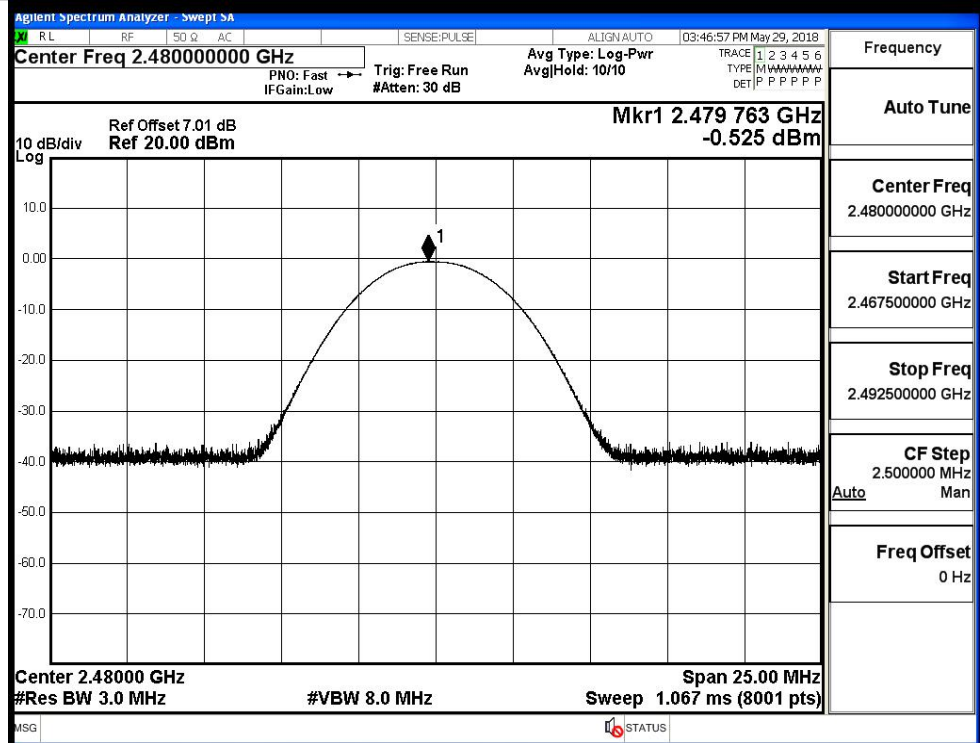
LCH



MCH



HCH

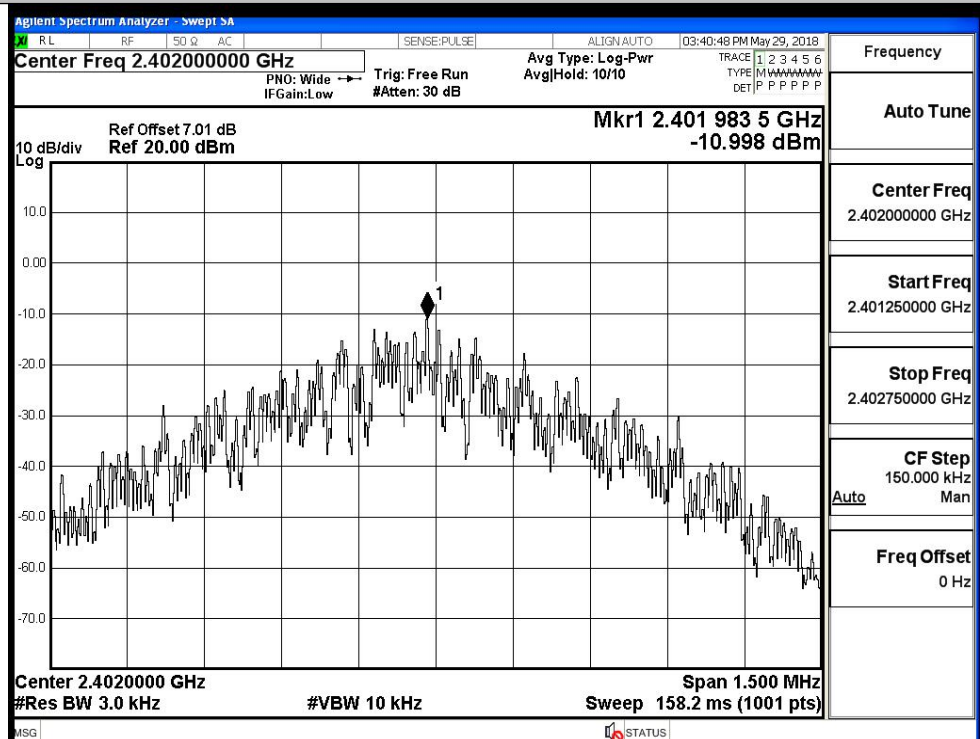


B.3 Maximum Power Spectral Density

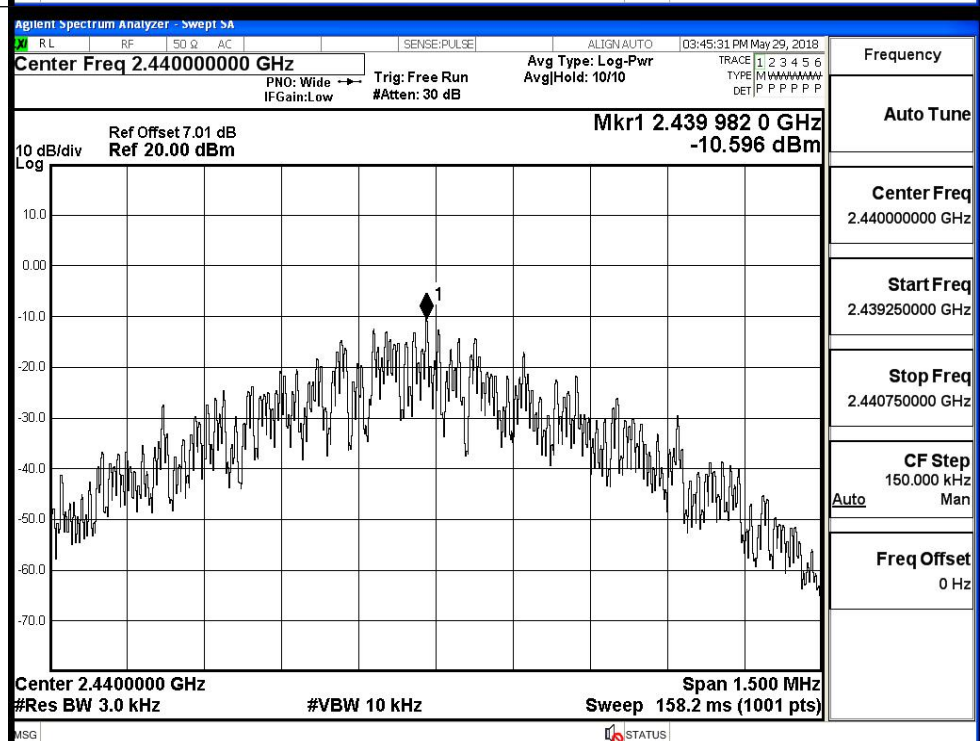
Mode	Channel	PSD [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
BT LE	LCH	-10.998	8	PASS
BT LE	MCH	-10.596	8	PASS
BT LE	HCH	-11.361	8	PASS

Test Graphs

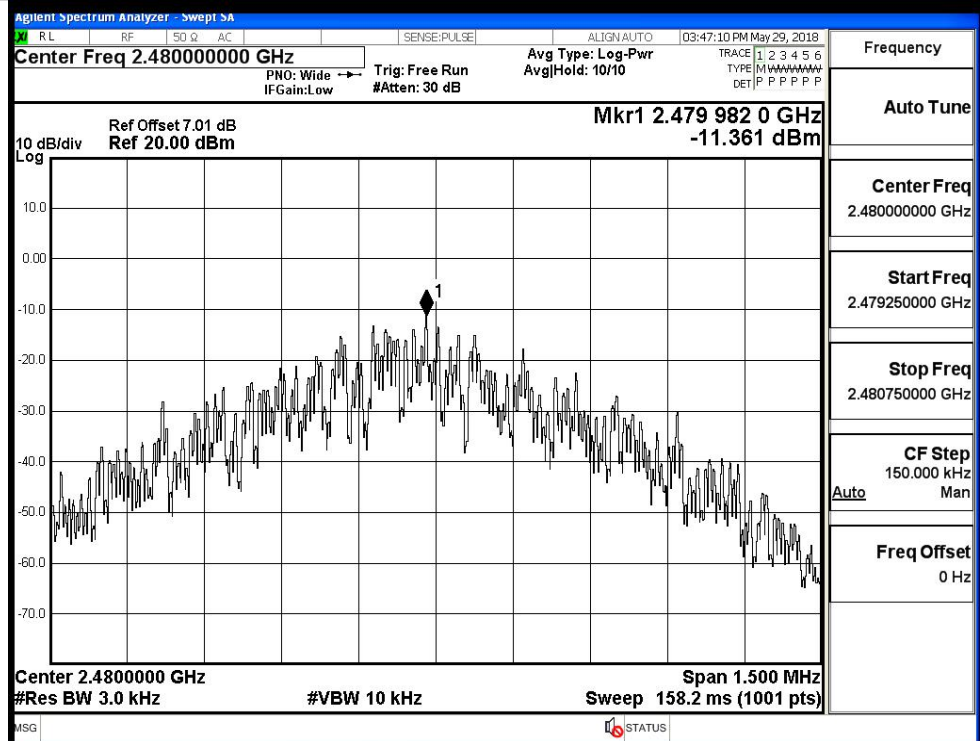
LCH



MCH



HCH

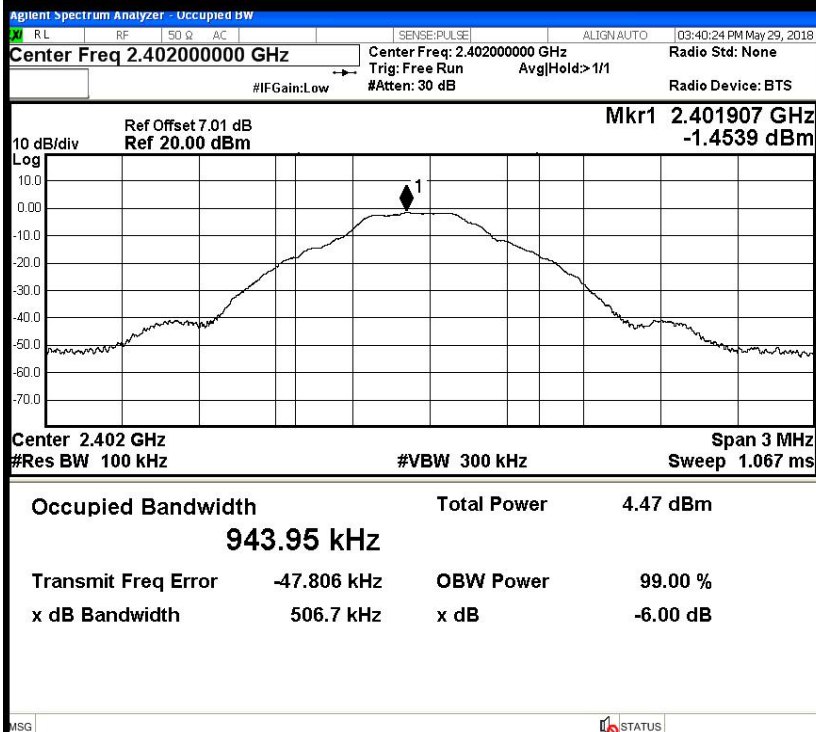


B.4 6dB Bandwidth

Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
BT LE	LCH	0.5067	≥ 0.5	PASS
BT LE	MCH	0.5052	≥ 0.5	PASS
BT LE	HCH	0.5051	≥ 0.5	PASS

Test Graphs

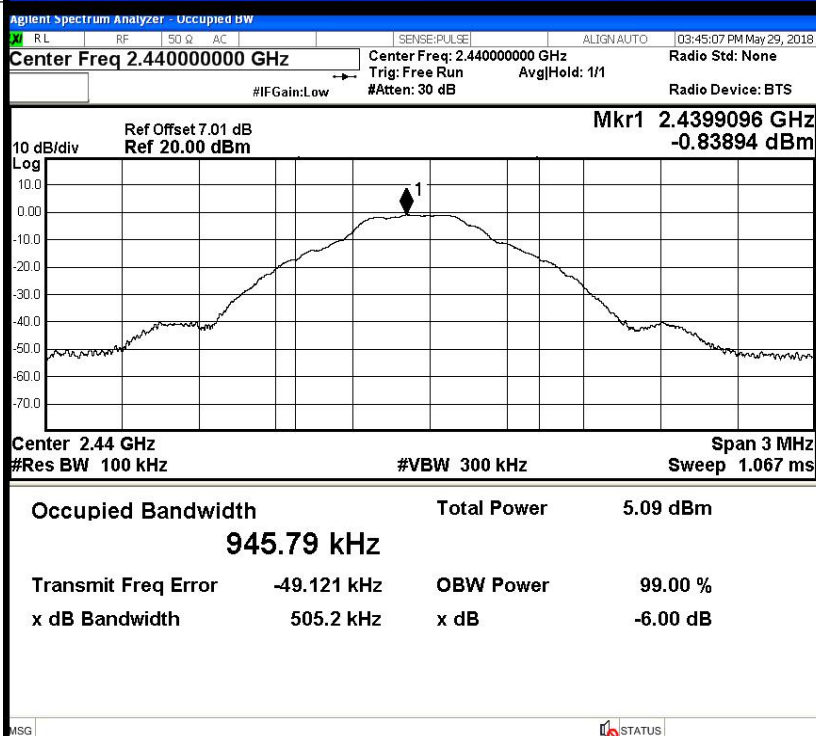
LCH



Frequency

Center Freq
2.402000000 GHzCF Step
300.000 kHz
Auto ManFreq Offset
0 Hz

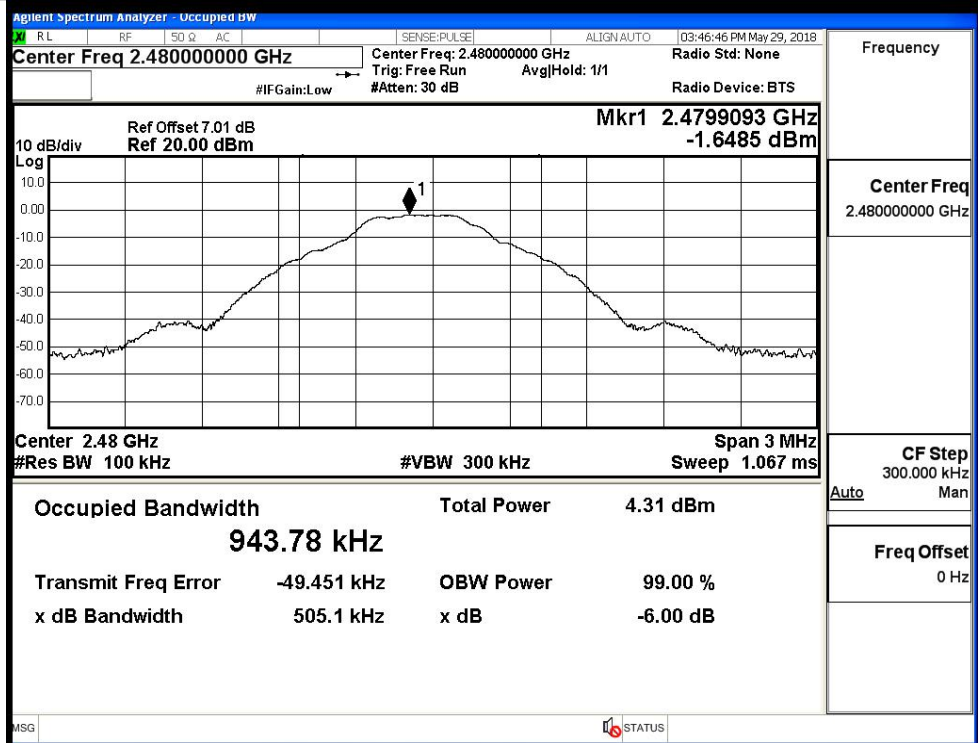
MCH



Frequency

Center Freq
2.440000000 GHzCF Step
300.000 kHz
Auto ManFreq Offset
0 Hz

HCH

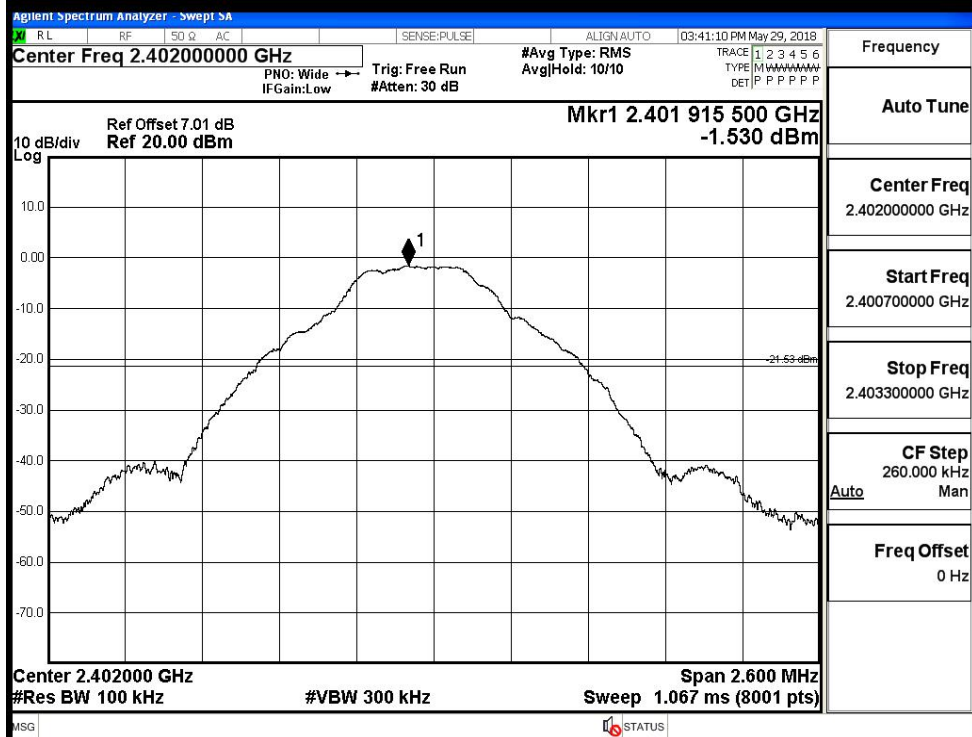


B.5 RF Conducted Spurious Emissions

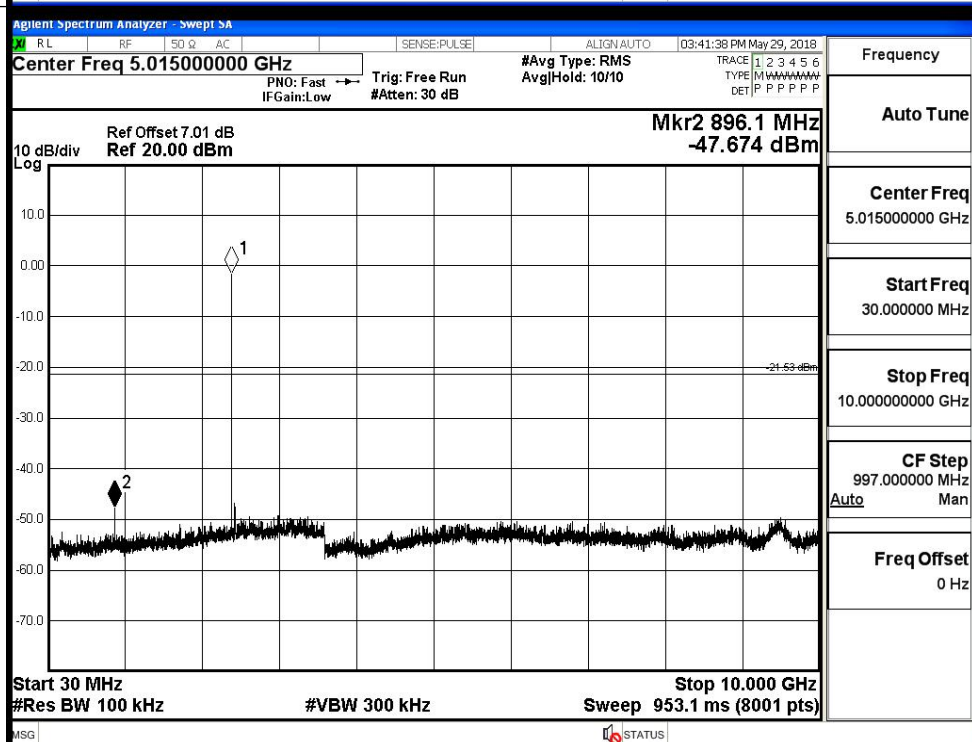
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	-1.53	-47.674	-21.530	PASS
BT LE	MCH	-0.913	-49.049	-20.913	PASS
BT LE	HCH	-1.647	-48.808	-21.647	PASS

BT LE_LCH_Graphs

Pref/BT LE/LCH

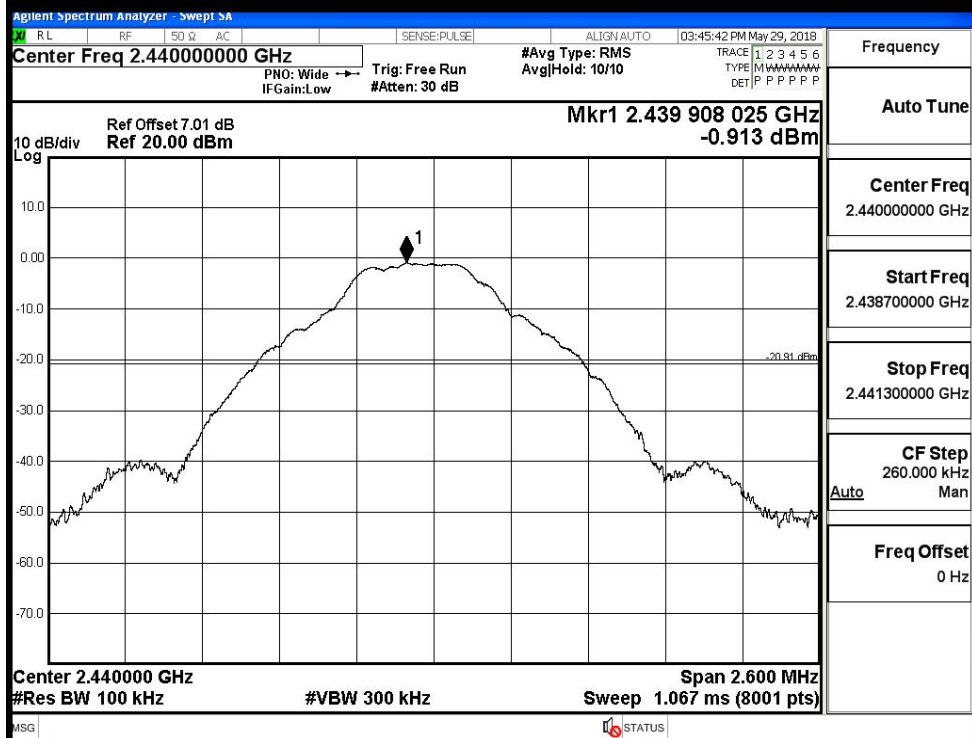


Puw/BT LE/LCH

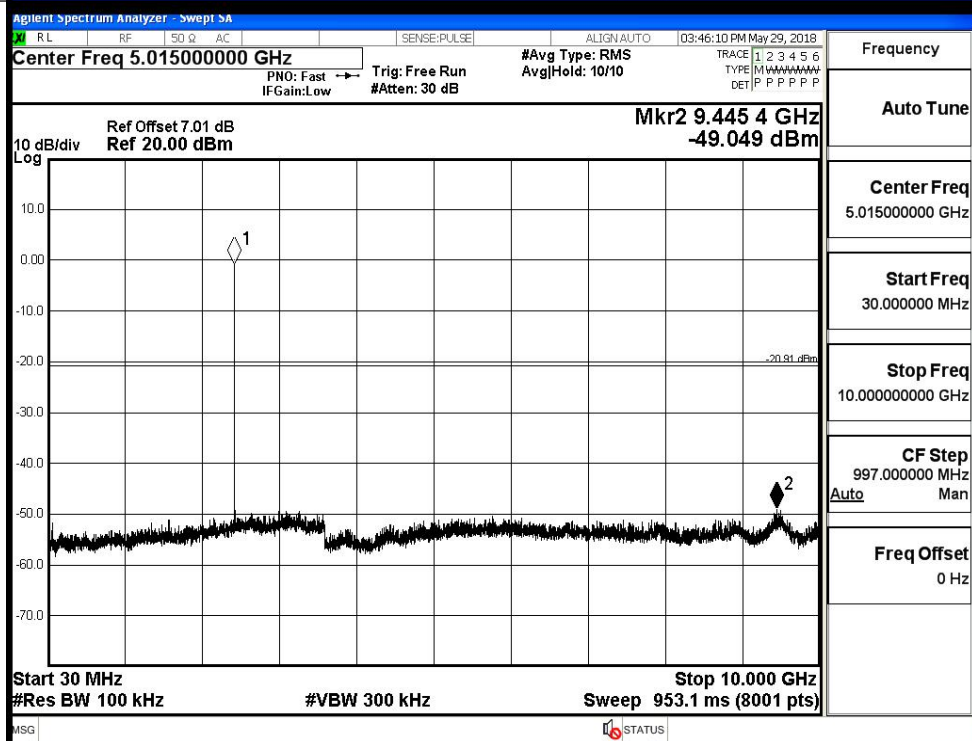


BT LE MCH Graphs

Pref/BT LE/MCH

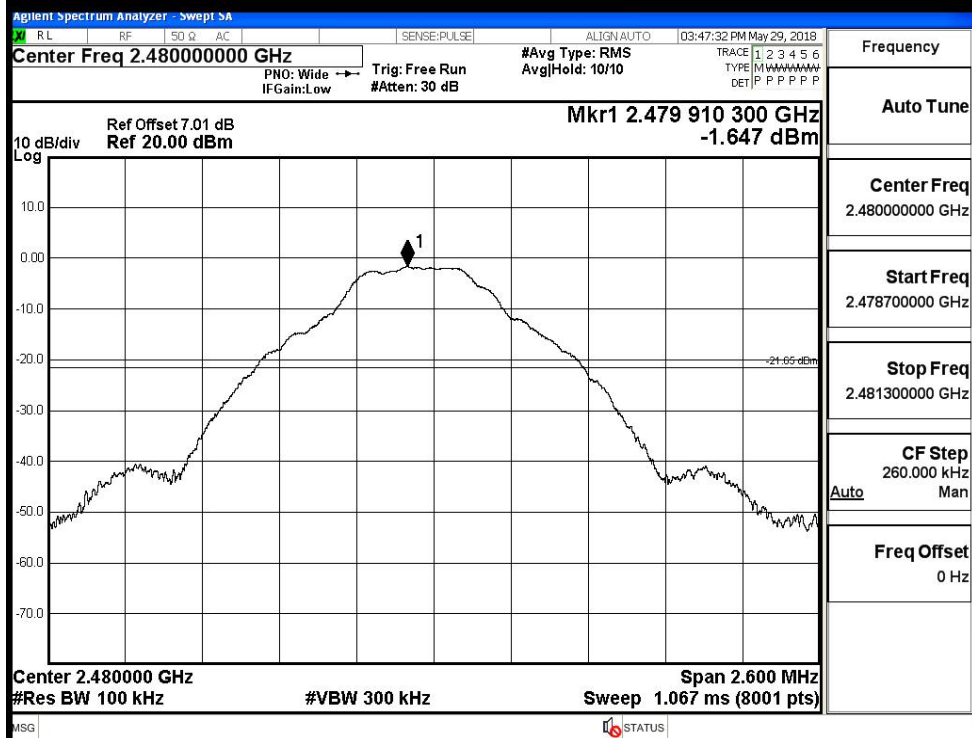


Puw/BT LE/MCH

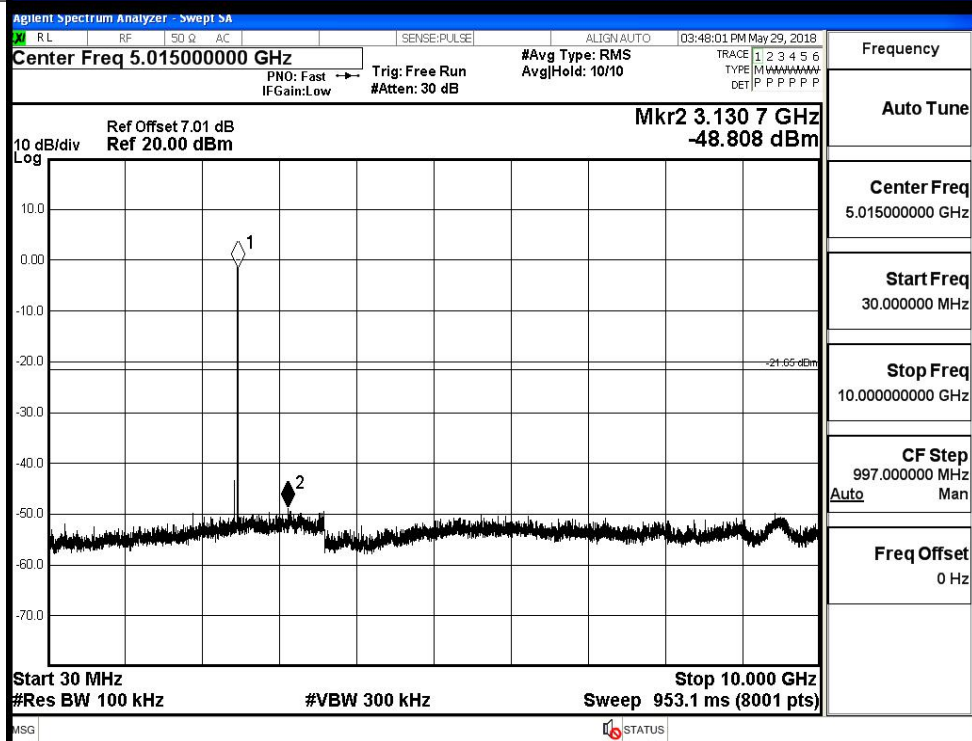


BT LE HCH Graphs

Pref/BT LE/HCH



Puw/BT LE/HCH

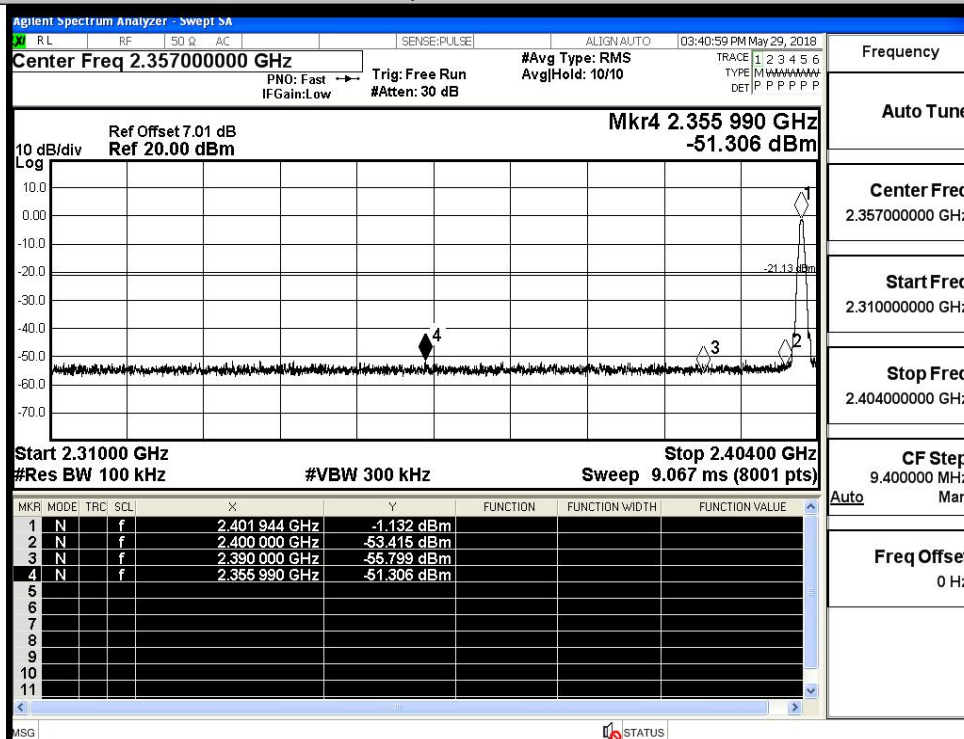


B.6 Band-edge for RF Conducted Emissions

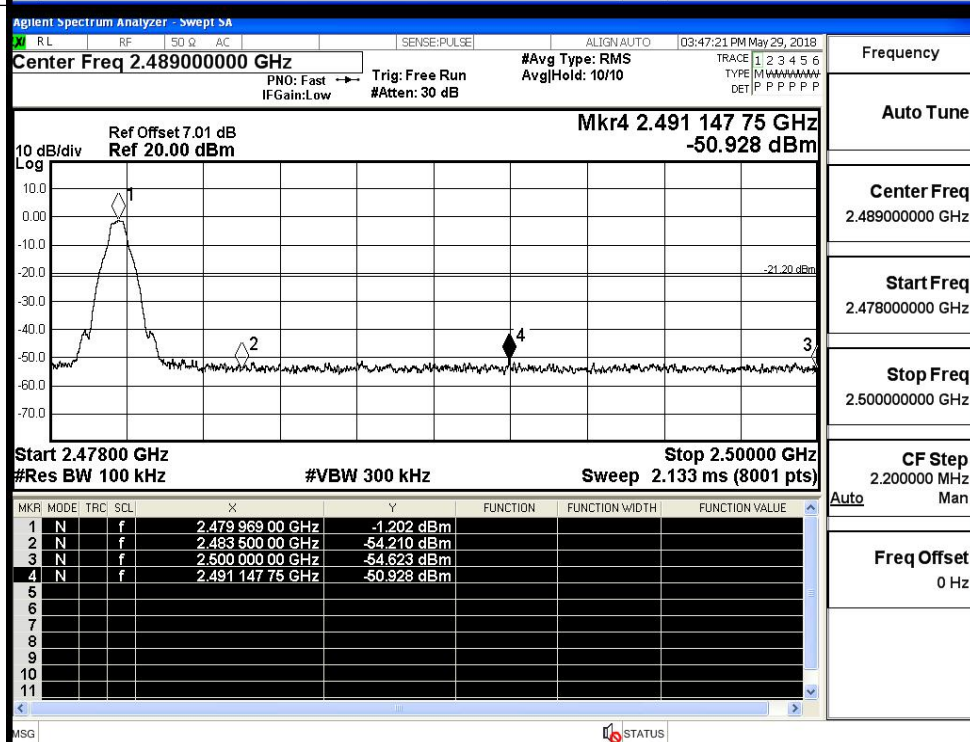
Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	-1.132	-51.306	-21.13	PASS
BT LE	HCH	-1.202	-50.928	-21.2	PASS

Test Graphs

LCH



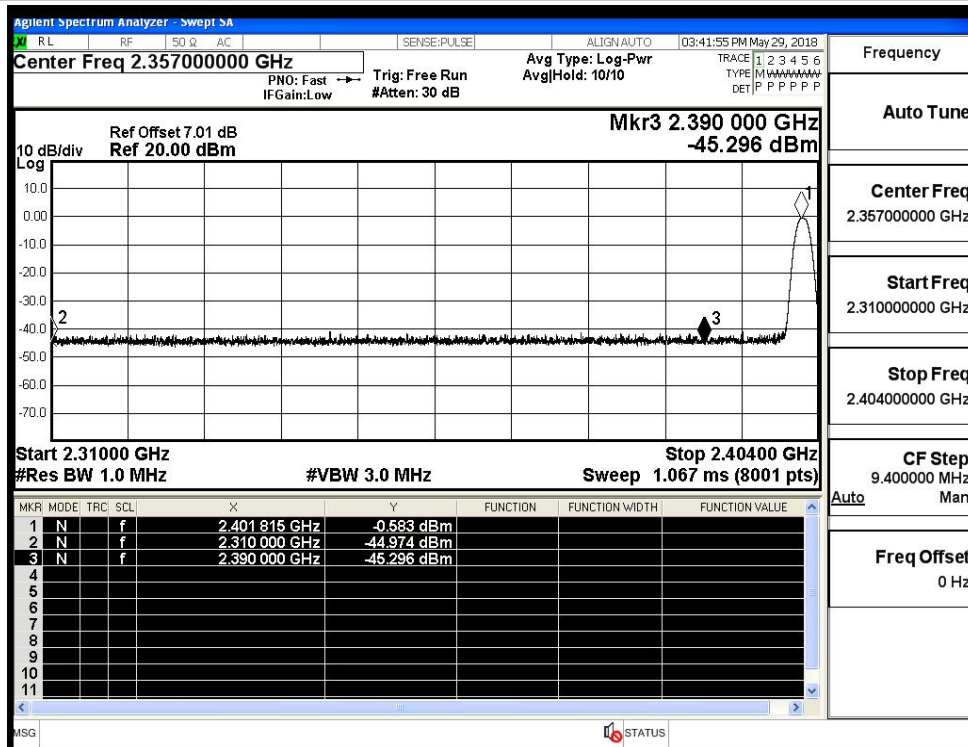
HCH



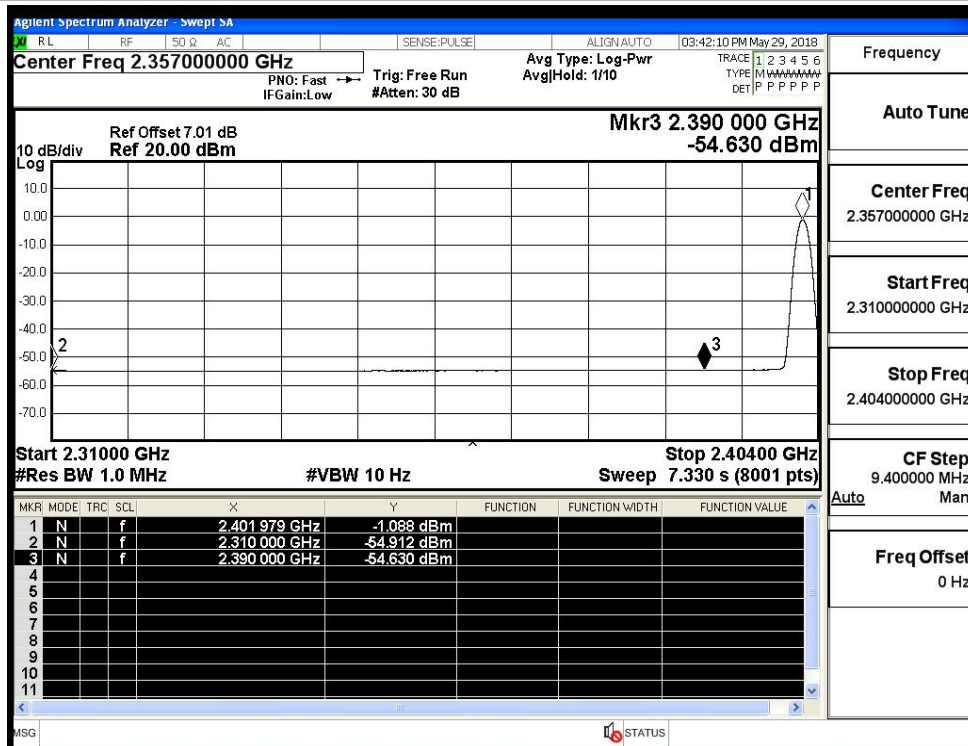
B.7 Restrict-band band-edge measurements

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	-44.97	2.0	0	50.28	PEAK	74	PASS
		Ant1	2310.0	-54.91	2.0	0	40.35	AV	54	PASS
		Ant1	2390.0	-45.30	2.0	0	49.96	PEAK	74	PASS
		Ant1	2390.0	-54.63	2.0	0	40.63	AV	54	PASS
	2480	Ant1	2483.5	-44.53	2.0	0	50.73	PEAK	74	PASS
		Ant1	2483.5	-54.25	2.0	0	41.01	AV	54	PASS
		Ant1	2500.0	-44.70	2.0	0	50.56	PEAK	74	PASS
		Ant1	2500.0	-54.28	2.0	0	40.98	AV	54	PASS

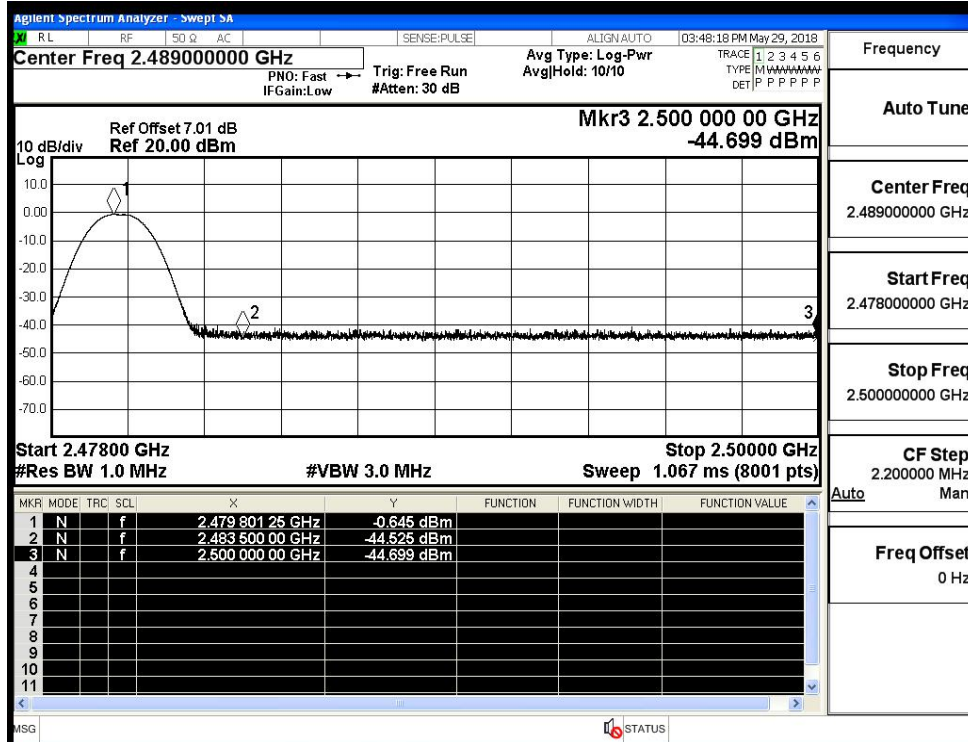
Restrict-band band-edge measurements_BT LE_2402_Ant1_PEAK



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

