

Appendix A

RF Test Data for BT V4.1(BDR/EDR) (Conducted Measurement)

Product Name: SmartPlate 1

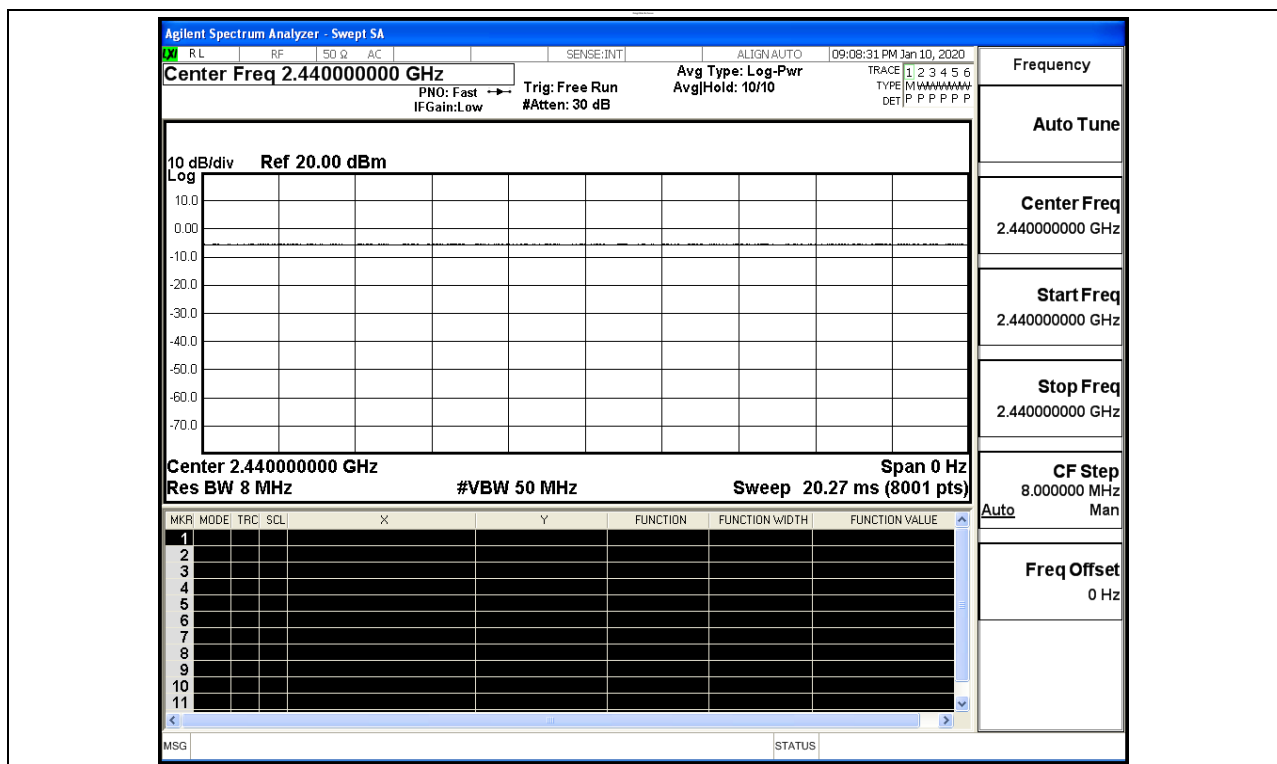
Test Model: SmartPlate 1

Environmental Conditions

Temperature:	23.9°C
Relative Humidity:	52.6%
ATM Pressure:	100.0 kPa
Test Engineer:	Diamond Lu
Supervised by:	Li Huan

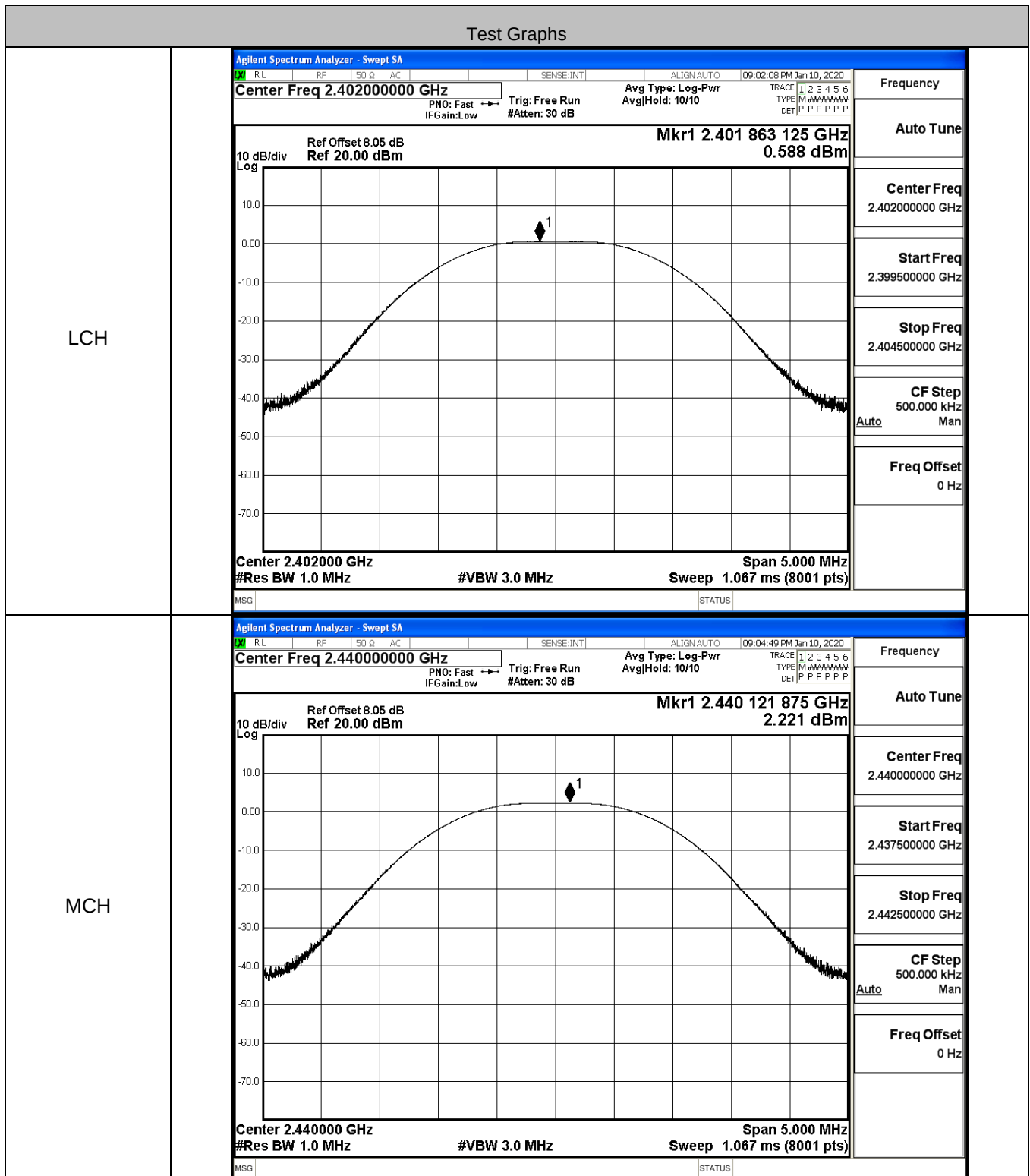
A.1 Duty Cycle

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

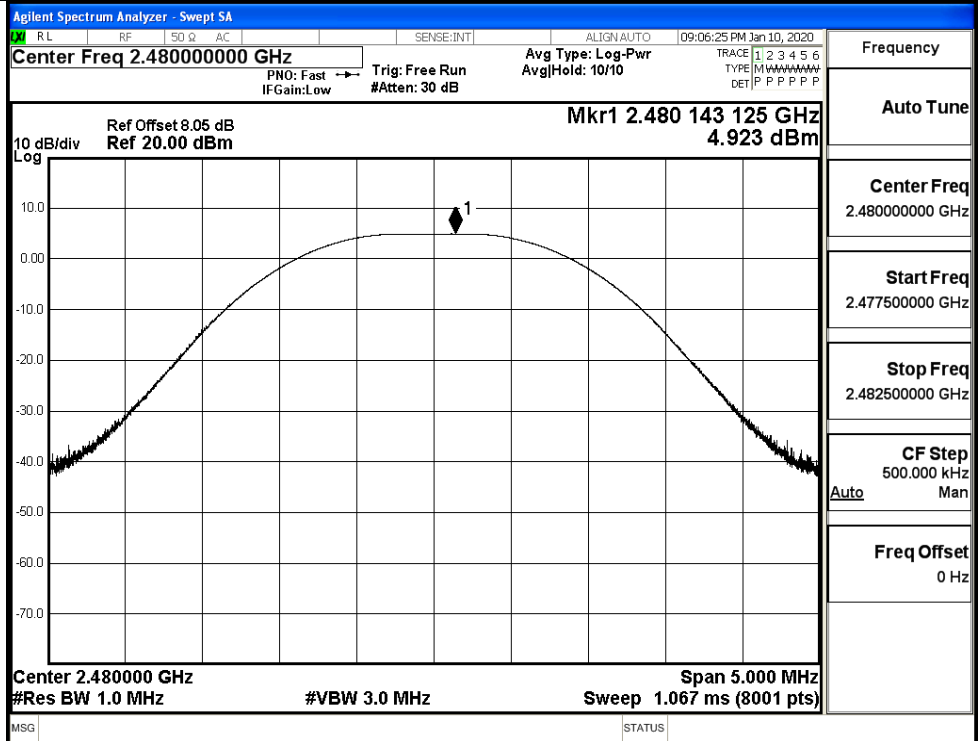


A.2 Maximum Conducted Peak Output Power

Mode	Channel	Conduct Peak Power[dBm]	Limit [dBm]	Verdict
BT LE	LCH	0.588	30	PASS
BT LE	MCH	2.221	30	PASS
BT LE	HCH	4.923	30	PASS



HCH

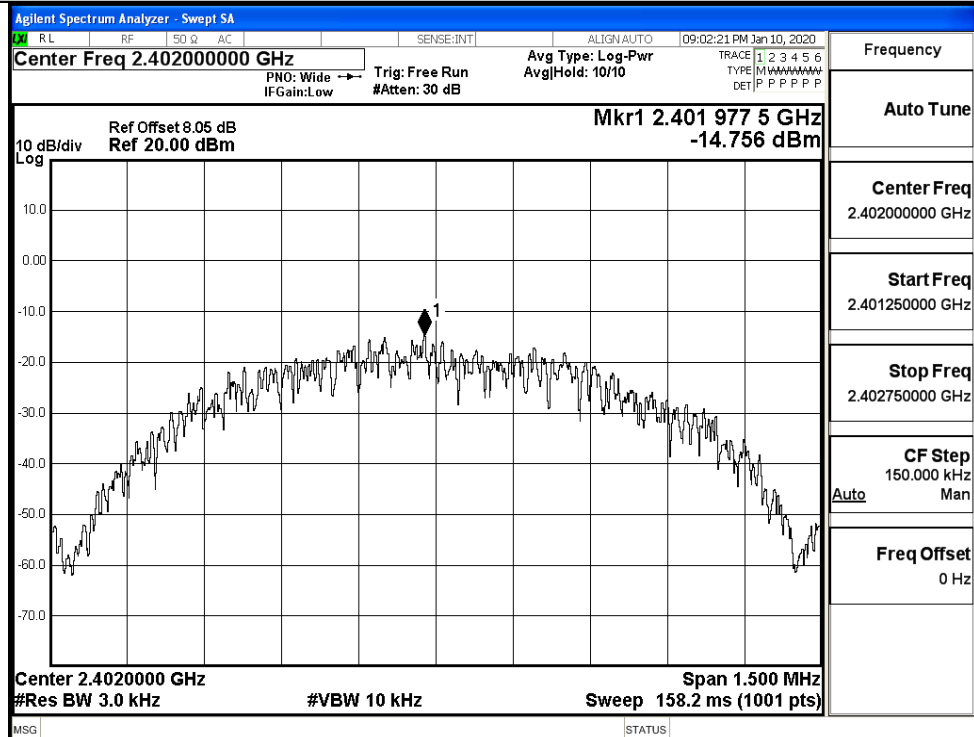


A.3 Maximum Power Spectral Density

Mode	Channel	PSD [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
BT LE	LCH	-14.756	8	PASS
BT LE	MCH	-13.252	8	PASS
BT LE	HCH	-10.469	8	PASS

Test Graphs

LCH

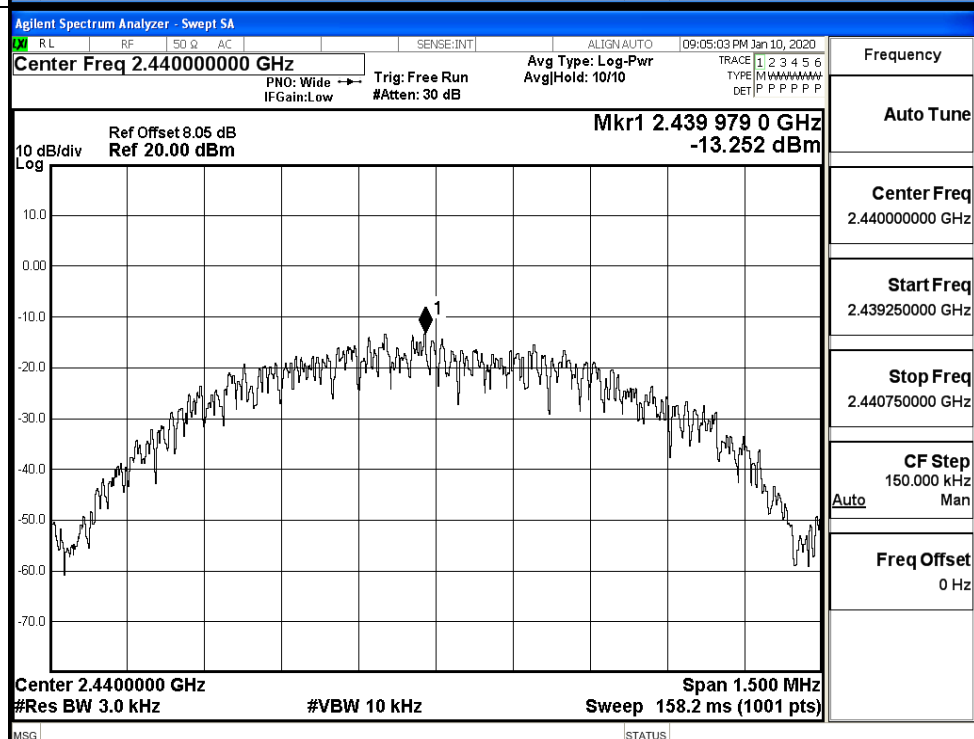


Frequency

Auto Tune

Center Freq
2.402000000 GHzStart Freq
2.401250000 GHzStop Freq
2.402750000 GHzCF Step
150.000 kHz
Auto ManFreq Offset
0 Hz

MCH

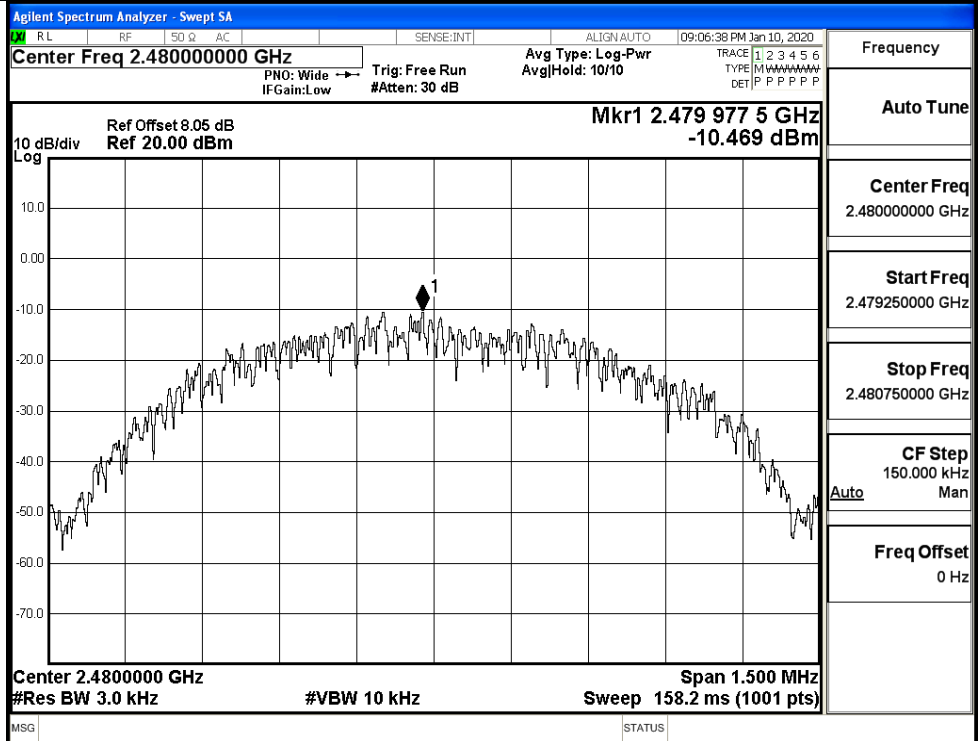


Frequency

Auto Tune

Center Freq
2.440000000 GHzStart Freq
2.439250000 GHzStop Freq
2.440750000 GHzCF Step
150.000 kHz
Auto ManFreq Offset
0 Hz

HCH

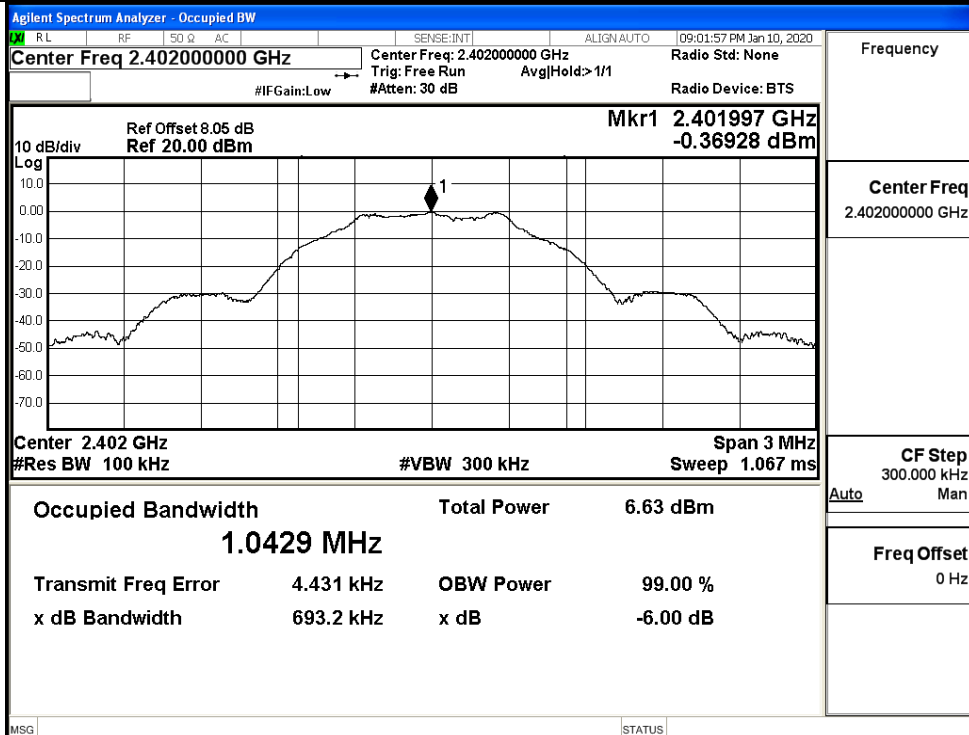


A.4 6dB Bandwidth

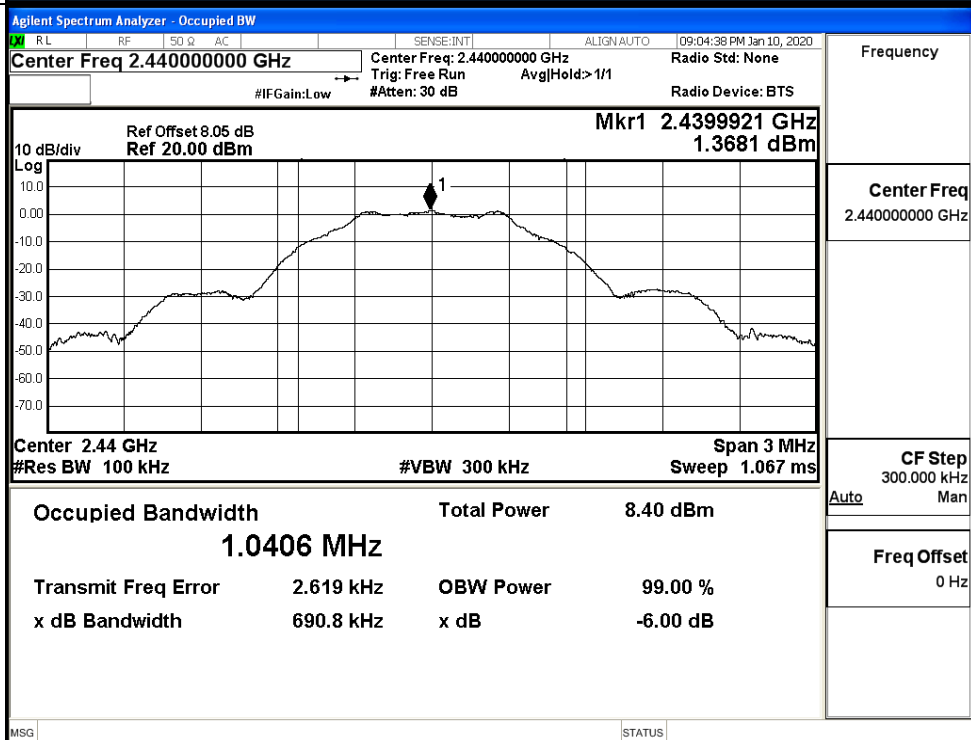
Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
BT LE	LCH	0.6932	≥ 0.5	PASS
BT LE	MCH	0.6908	≥ 0.5	PASS
BT LE	HCH	0.6903	≥ 0.5	PASS

Test Graphs

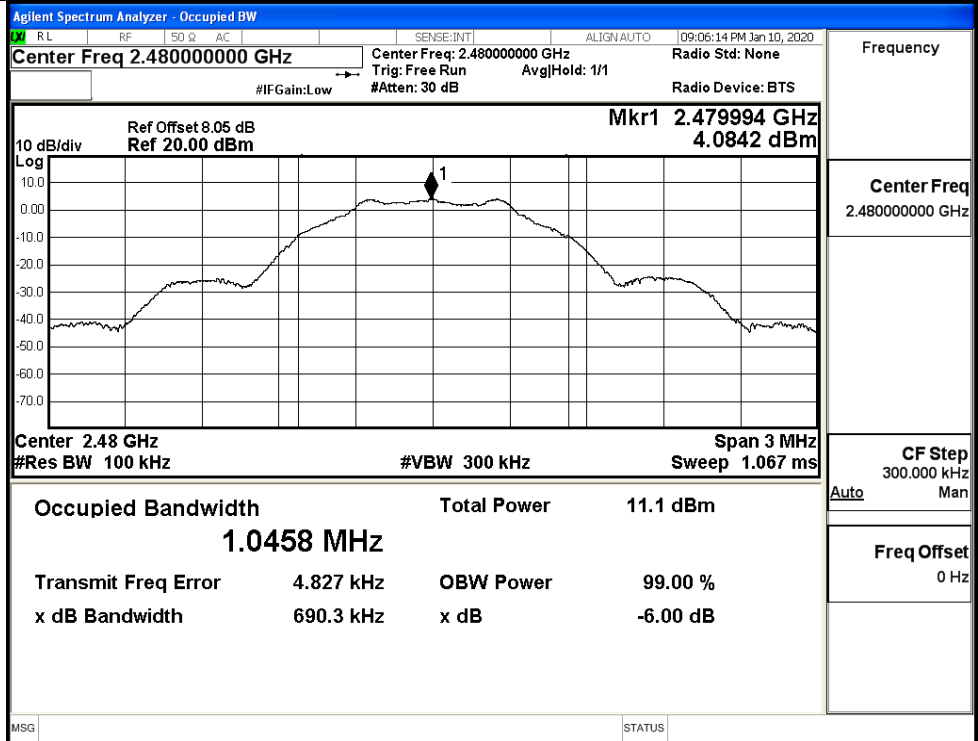
LCH



MCH



HCH

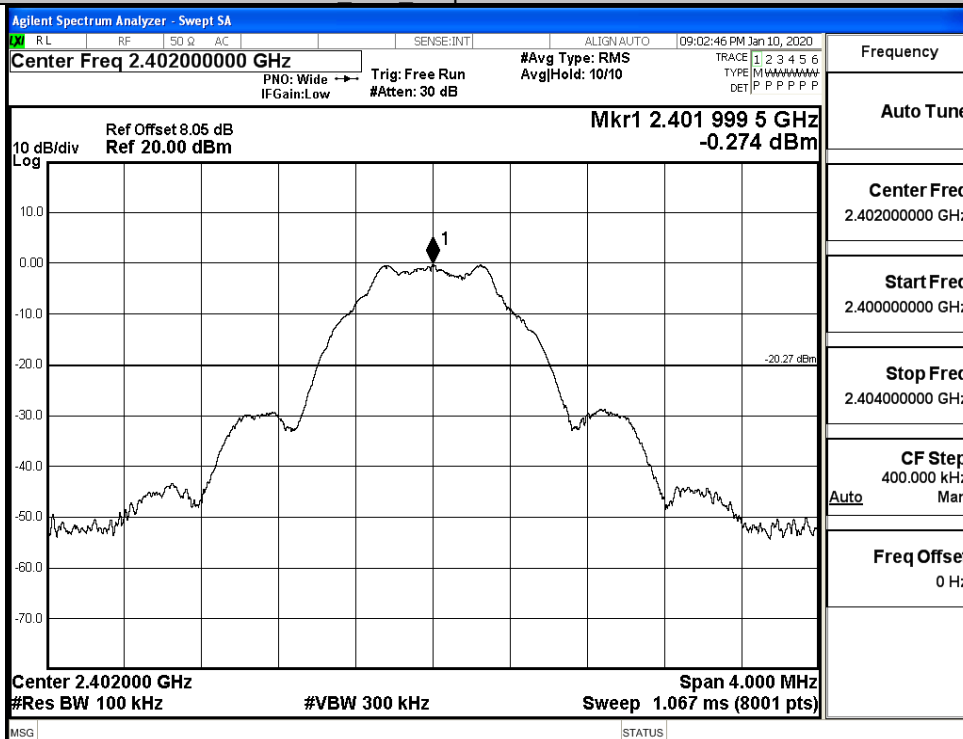


A.5 RF Conducted Spurious Emissions

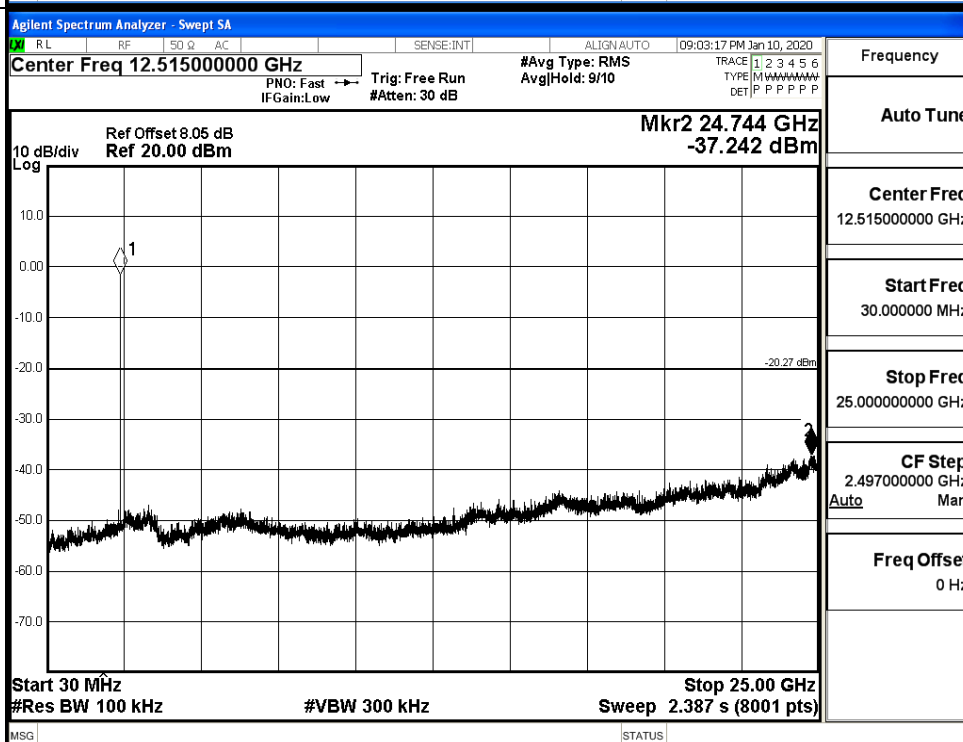
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	-0.274	-37.242	-20.274	PASS
BT LE	MCH	1.34	-36.846	-18.660	PASS
BT LE	HCH	4.075	-36.506	-15.925	PASS

BT LE LCH Graphs

Pref/BT LE/LCH

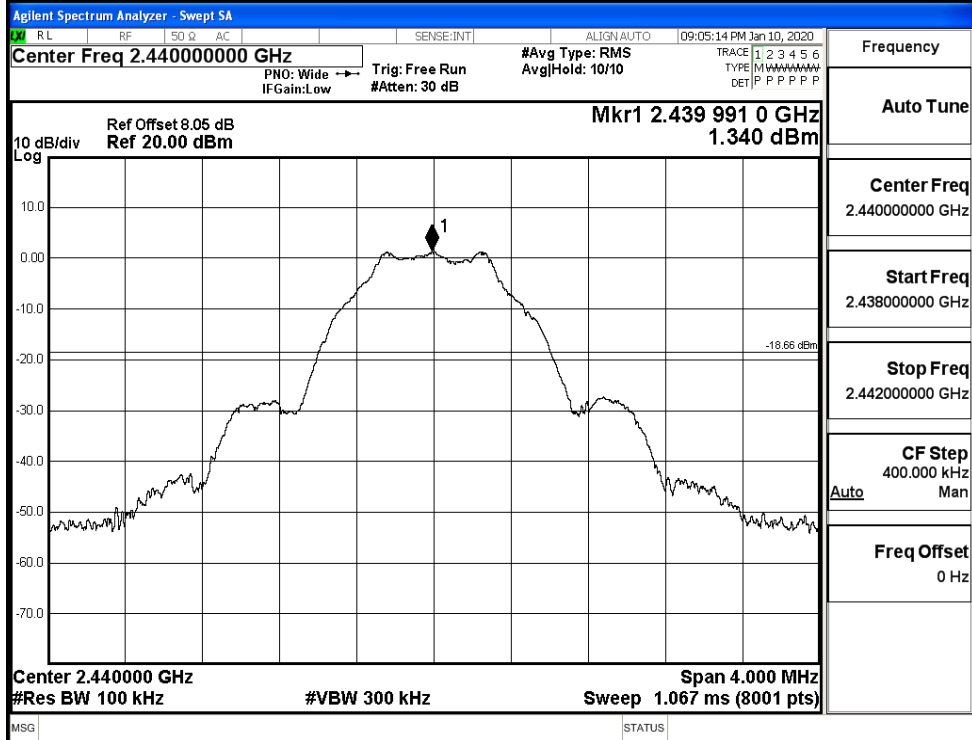


Puw/BT LE/LCH

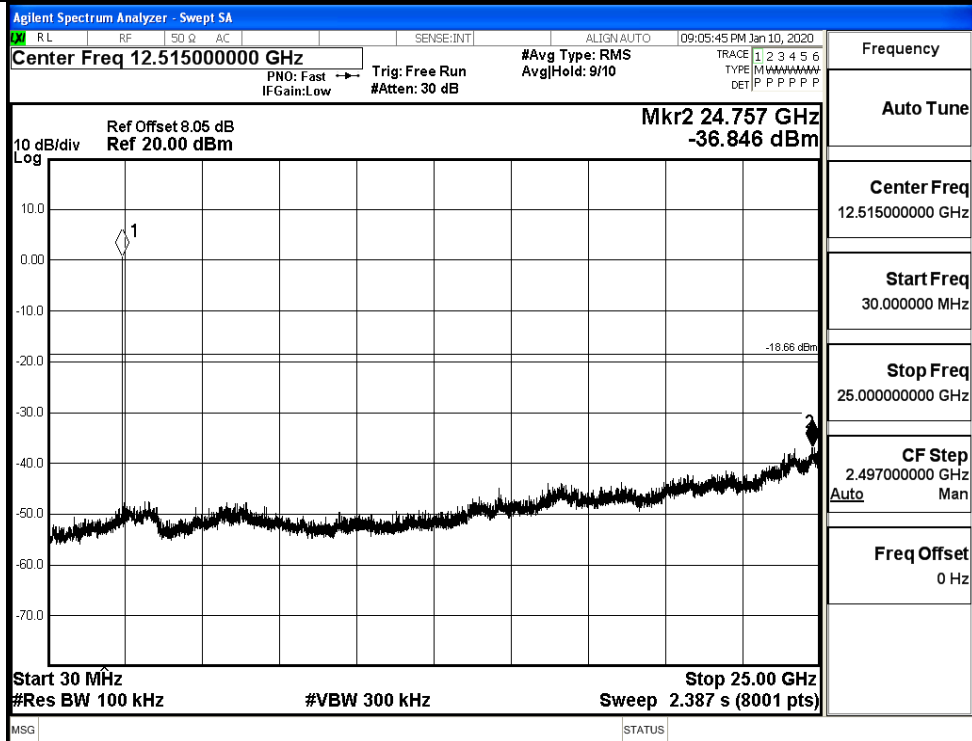


BT LE MCH Graphs

Pref/BT LE/MCH

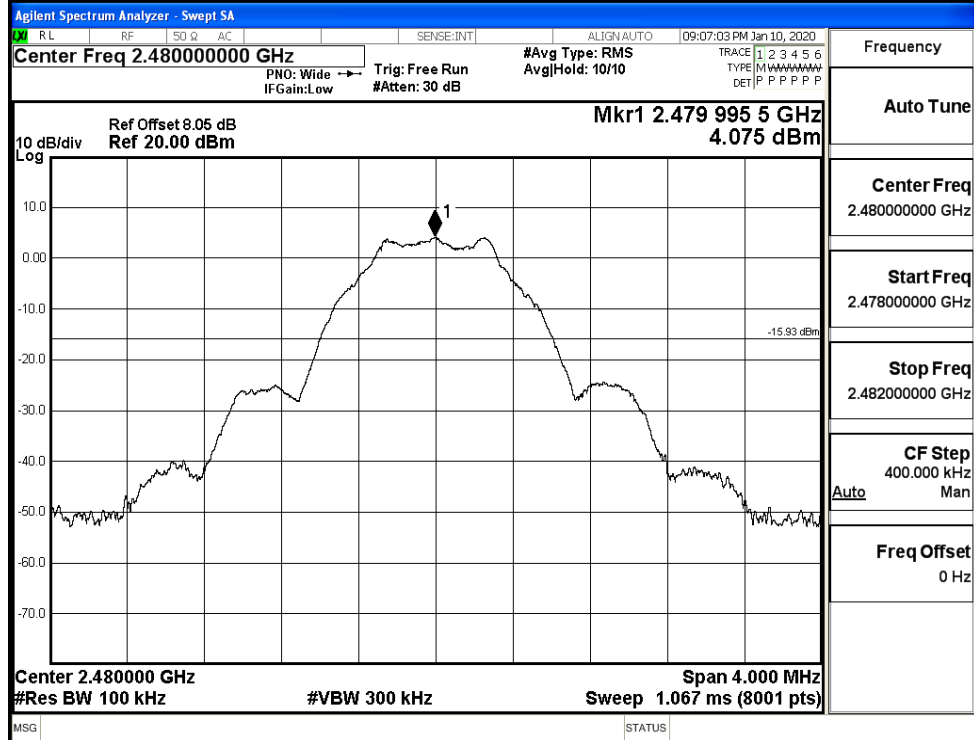


Puw/BT LE/MCH

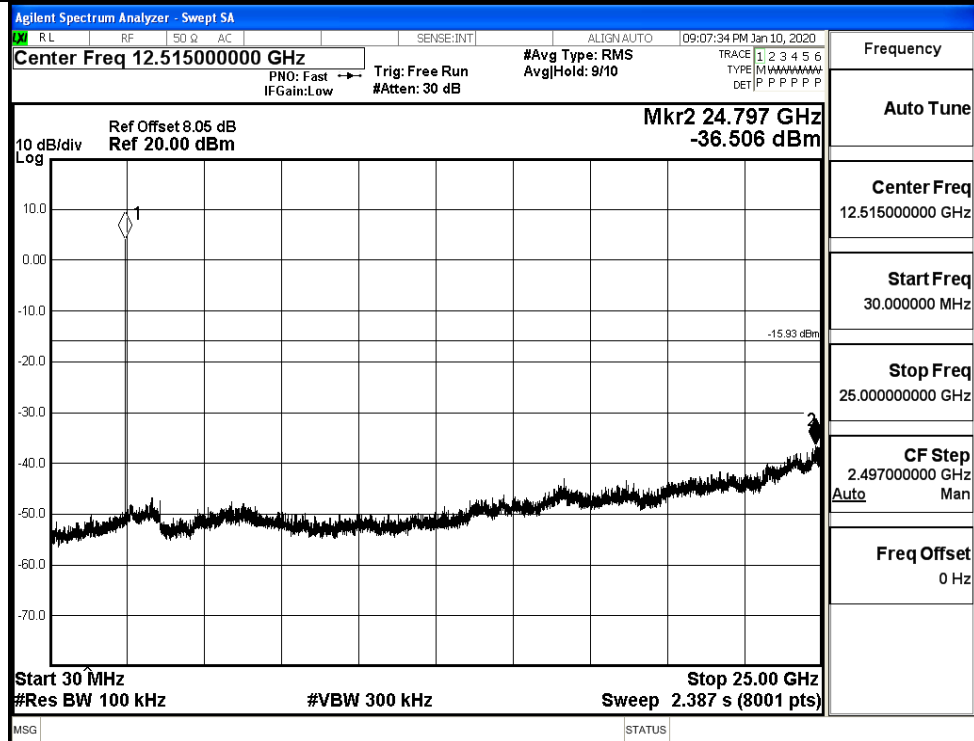


BT LE HCH Graphs

Pref/BT LE/HCH



Puw/BT LE/HCH

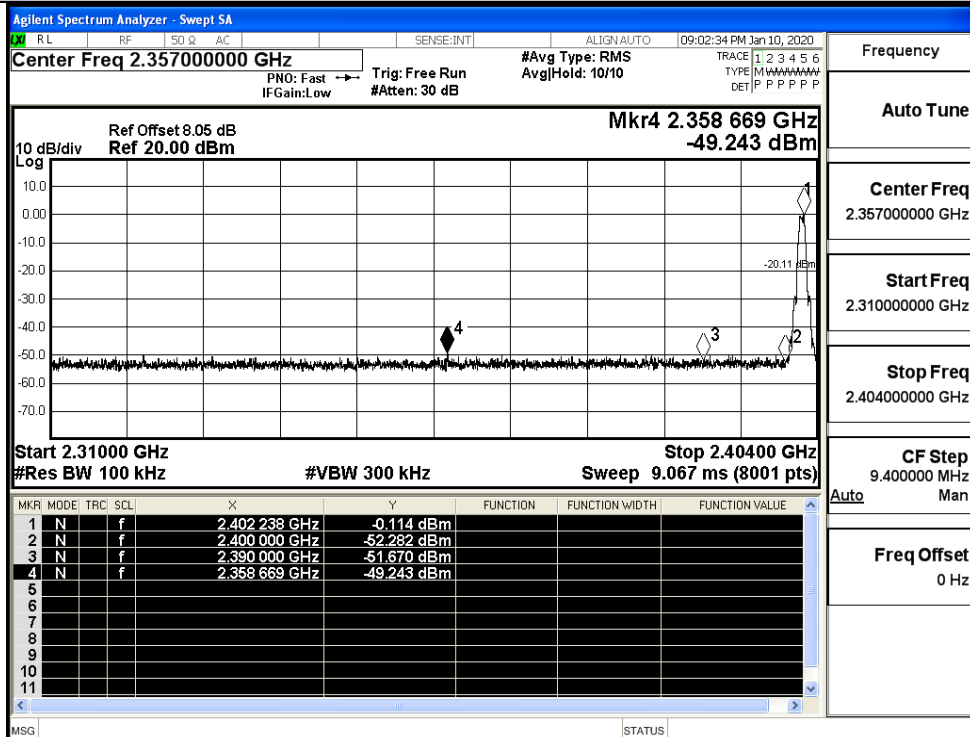


A.6 Band-edge for RF Conducted Emissions

Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	-0.114	-49.243	-20.11	PASS
BT LE	HCH	4.120	-48.664	-15.88	PASS

Test Graphs

LCH



Frequency

Auto Tune

Center Freq

2.357000000 GHz

Start Freq

2.310000000 GHz

Stop Freq

2.404000000 GHz

CF Step

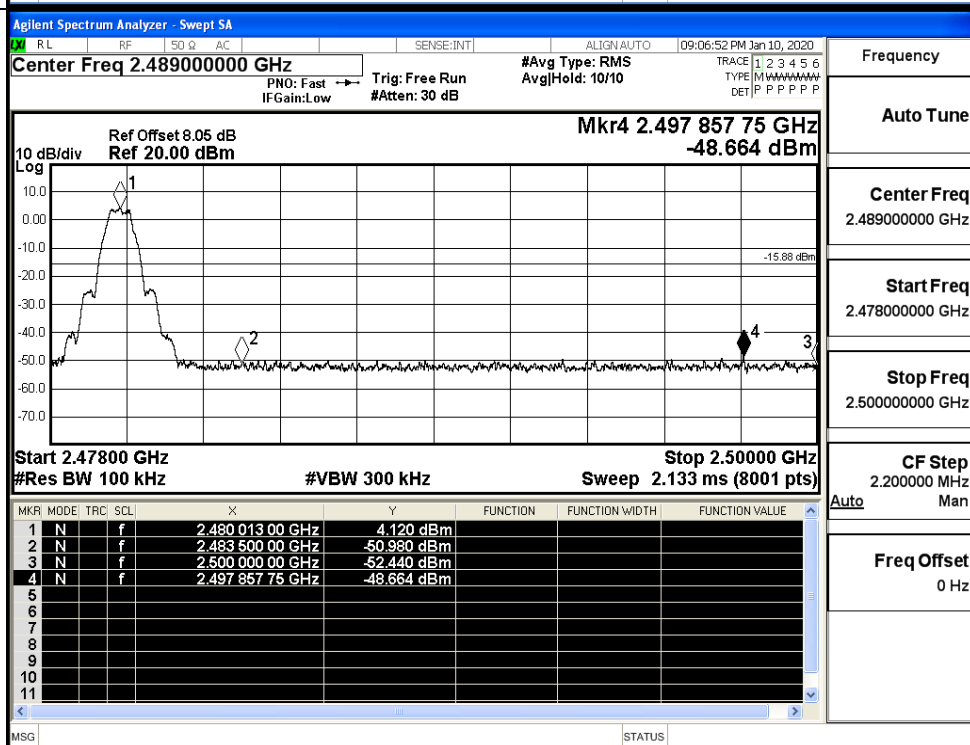
9.400000 MHz

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

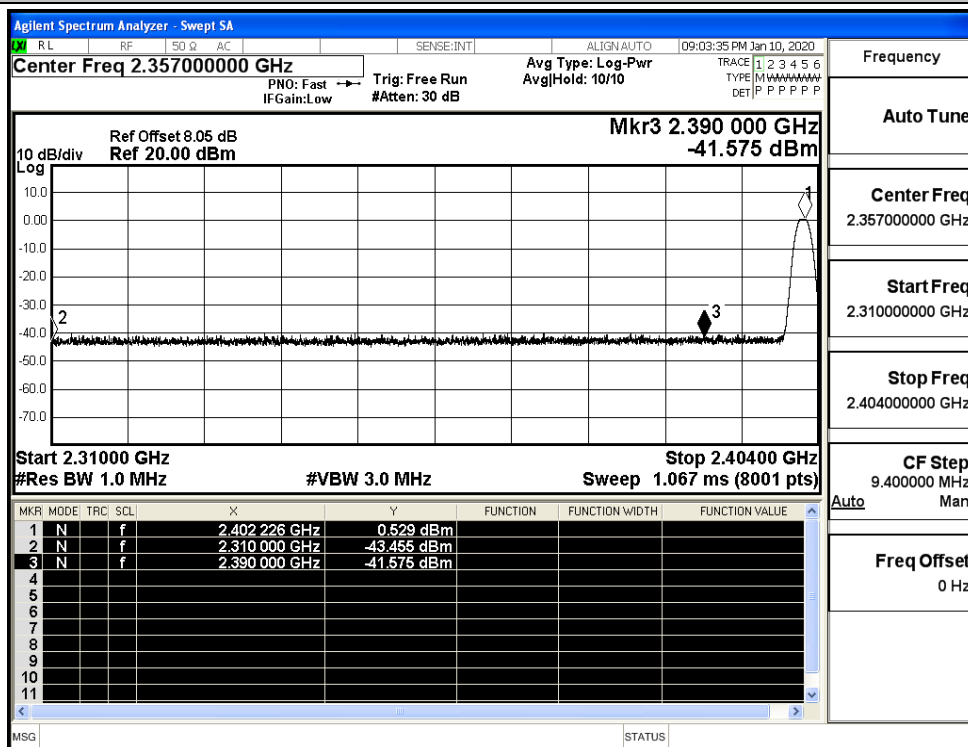
Freq Offset

0 Hz

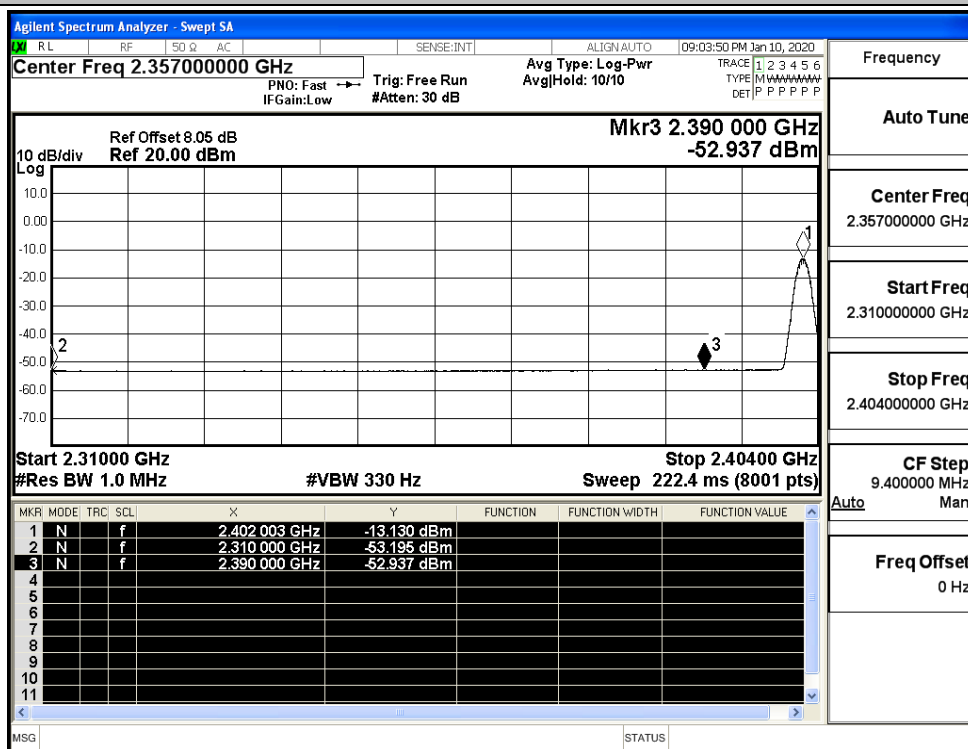
A.7 Restrict-band band-edge measurements

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	-43.46	2.0	0	53.77	PEAK	74	PASS
		Ant1	2310.0	-53.20	2.0	0	44.03	AV	54	PASS
		Ant1	2390.0	-41.58	2.0	0	55.65	PEAK	74	PASS
		Ant1	2390.0	-52.94	2.0	0	44.29	AV	54	PASS
	2480	Ant1	2483.5	-42.31	2.0	0	54.92	PEAK	74	PASS
		Ant1	2483.5	-52.15	2.0	0	45.08	AV	54	PASS
		Ant1	2500.0	-41.74	2.0	0	55.49	PEAK	74	PASS
		Ant1	2500.0	-52.22	2.0	0	45.01	AV	54	PASS

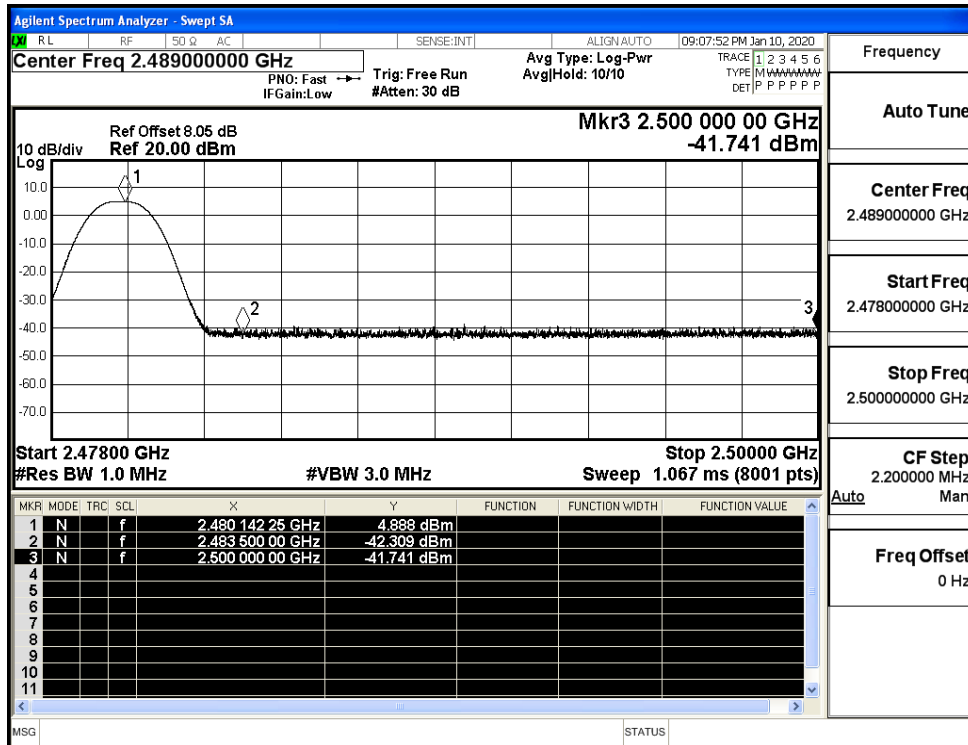
Restrict-band band-edge measurements_BT LE_2402_Ant1_PEAK



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

