

Appendix A

RF Test Data for BT LE V5.1(DTS) (Conducted Measurement)

Product Name: Wi-Fi & Bluetooth Module

Trade Mark: Dialog

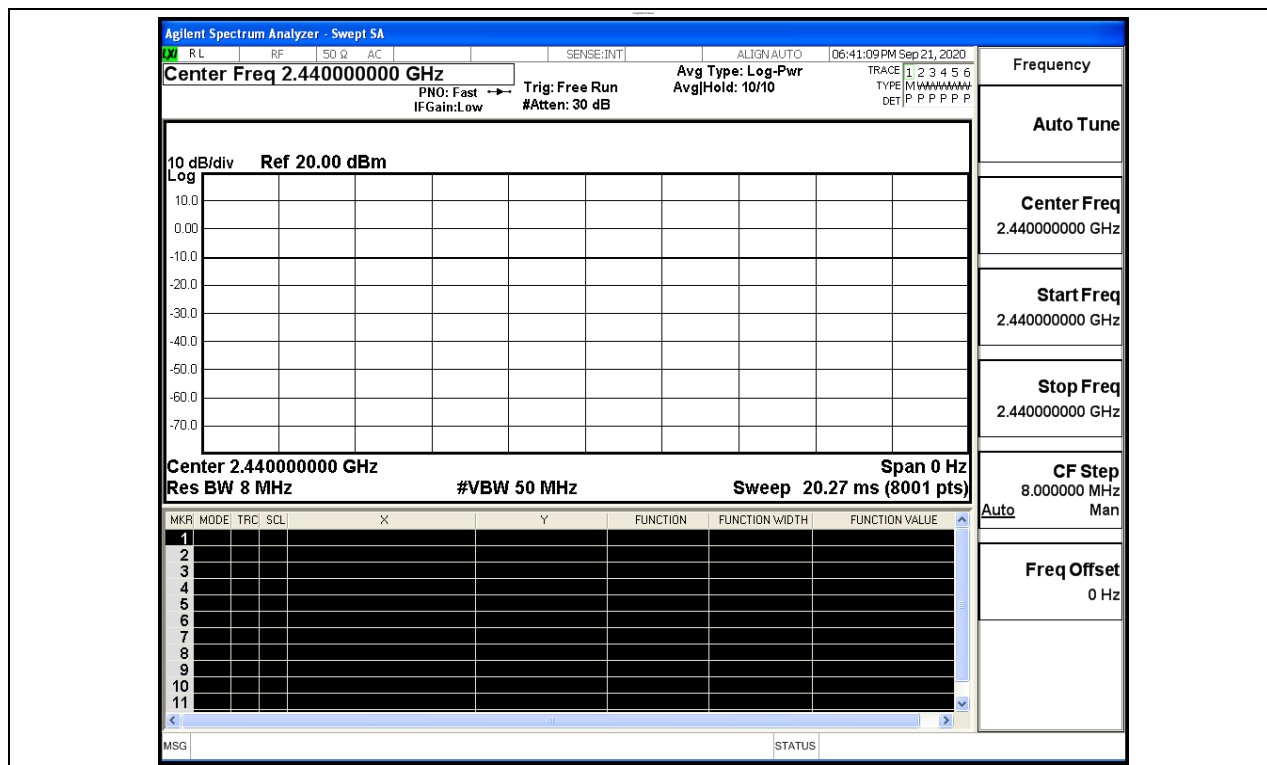
Test Model: DA16600MOD-AAC4WA32

Environmental Conditions

Temperature:	23.1 ° C
Relative Humidity:	54.5%
ATM Pressure:	100.0 kPa
Test Engineer:	Carl Fu
Supervised by:	Li Huan

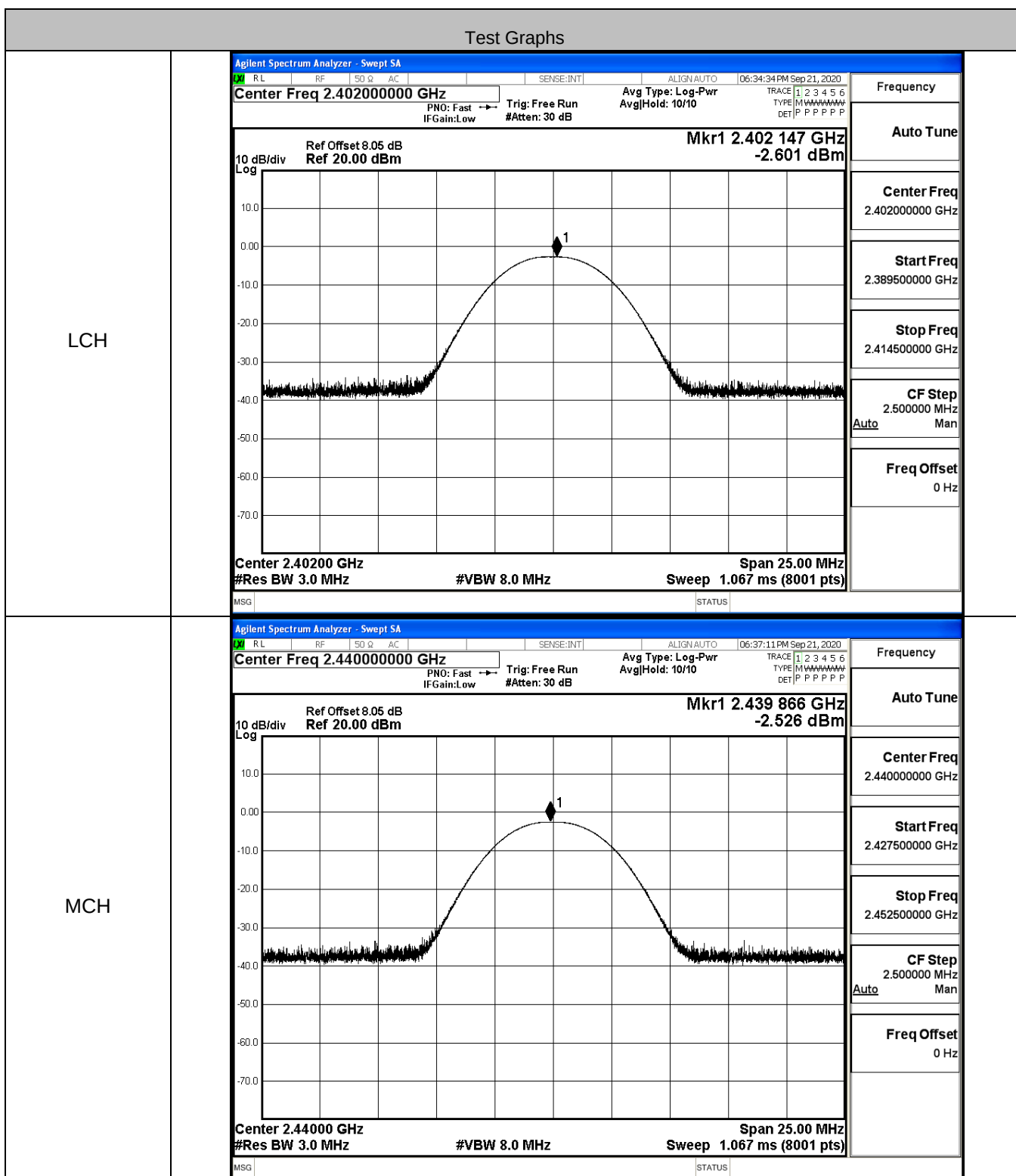
A.1 Duty Cycle

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

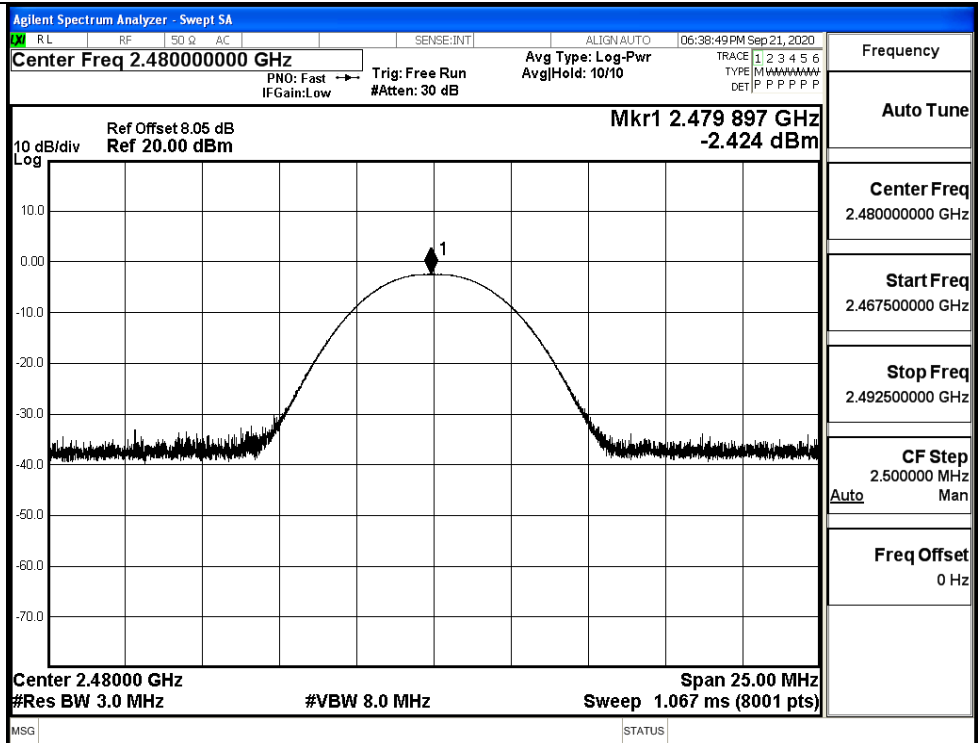


A.2 Maximum Conducted Peak Output Power

Mode	Channel	Conduct Peak Power[dBm]	Limit [dBm]	Verdict
BT LE	LCH	-2.601	30	PASS
BT LE	MCH	-2.526	30	PASS
BT LE	HCH	-2.424	30	PASS



HCH

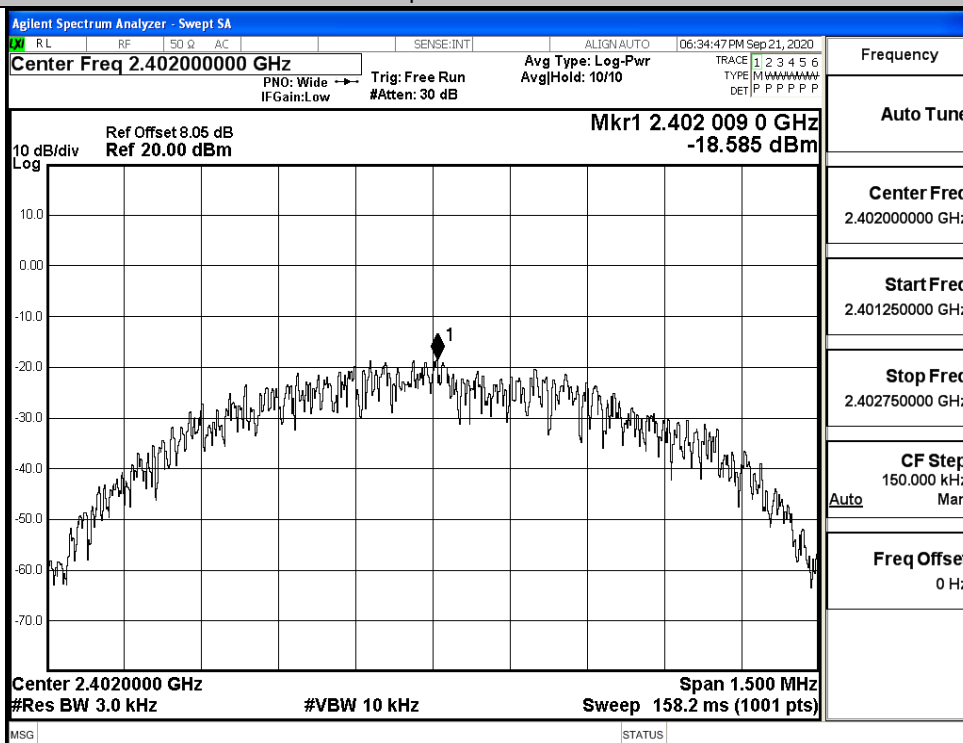


A.3 Maximum Power Spectral Density

Mode	Channel	PSD [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
BT LE	LCH	-18.585	8	PASS
BT LE	MCH	-17.747	8	PASS
BT LE	HCH	-17.944	8	PASS

Test Graphs

LCH

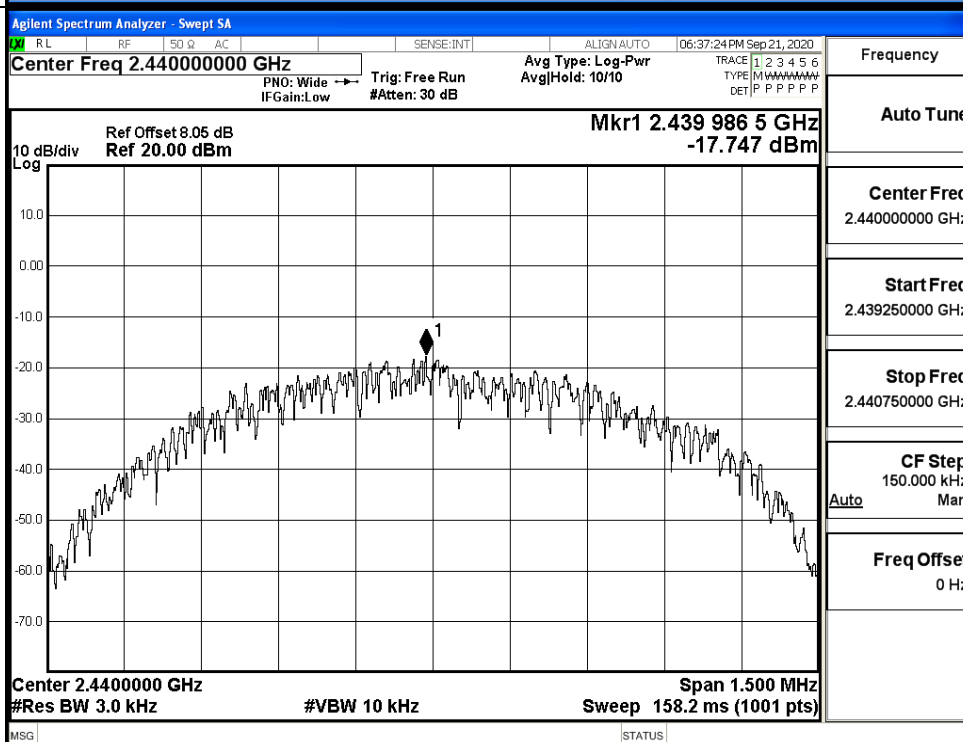


Frequency

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

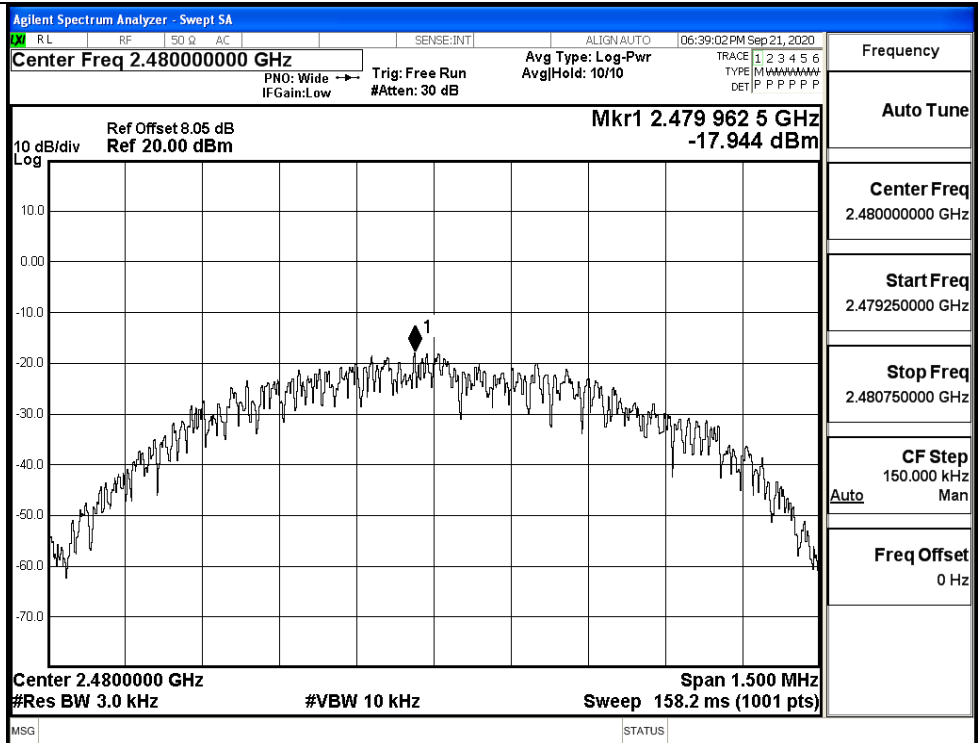


Frequency

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

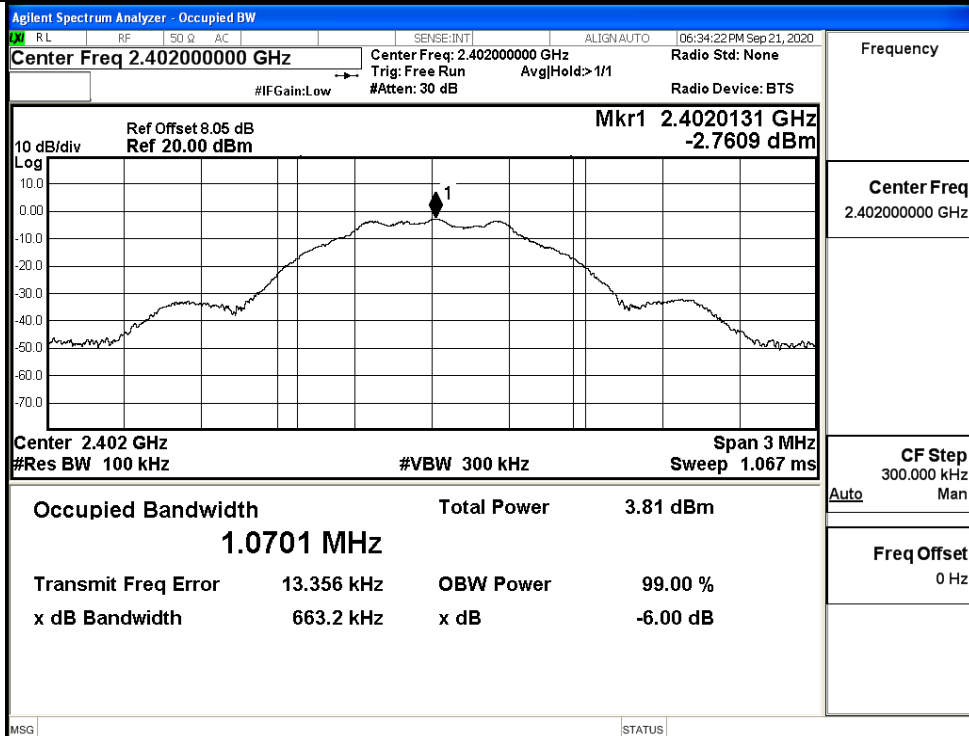


A.4 6dB Bandwidth

Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
BT LE	LCH	0.6632	≥ 0.5	PASS
BT LE	MCH	0.6715	≥ 0.5	PASS
BT LE	HCH	0.6804	≥ 0.5	PASS

Test Graphs

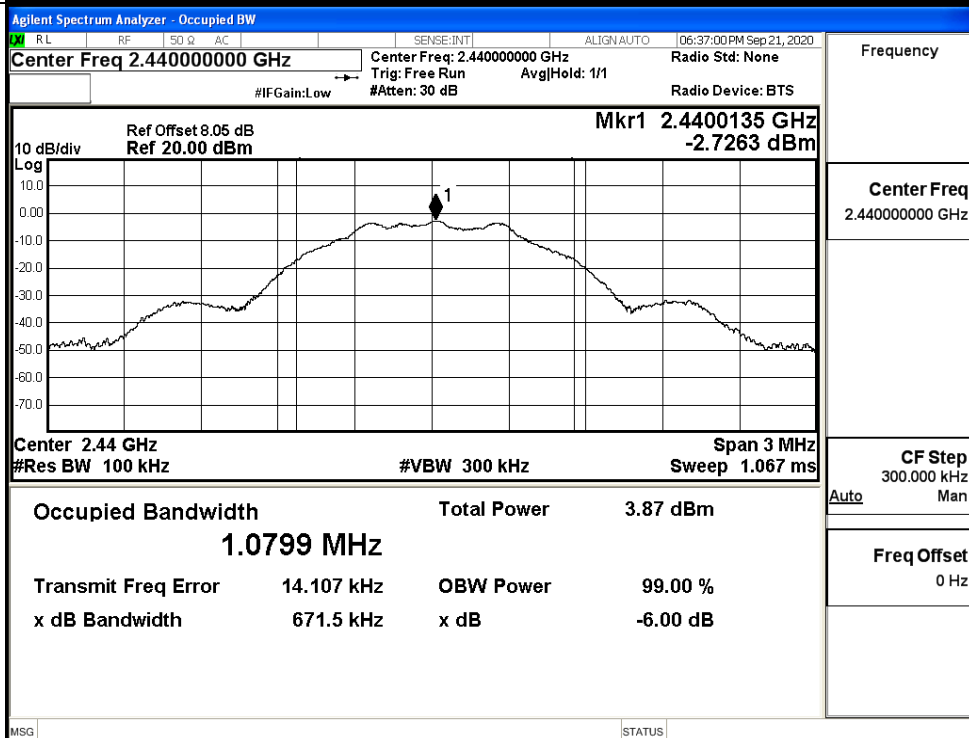
LCH



Frequency

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

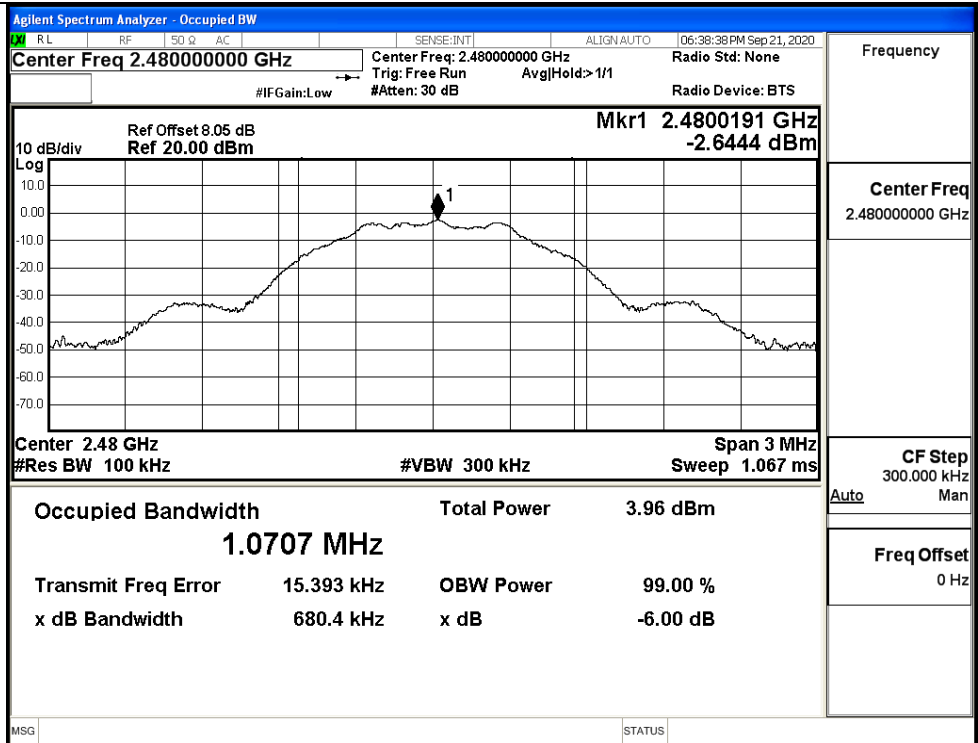
MCH



Frequency

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

HCH

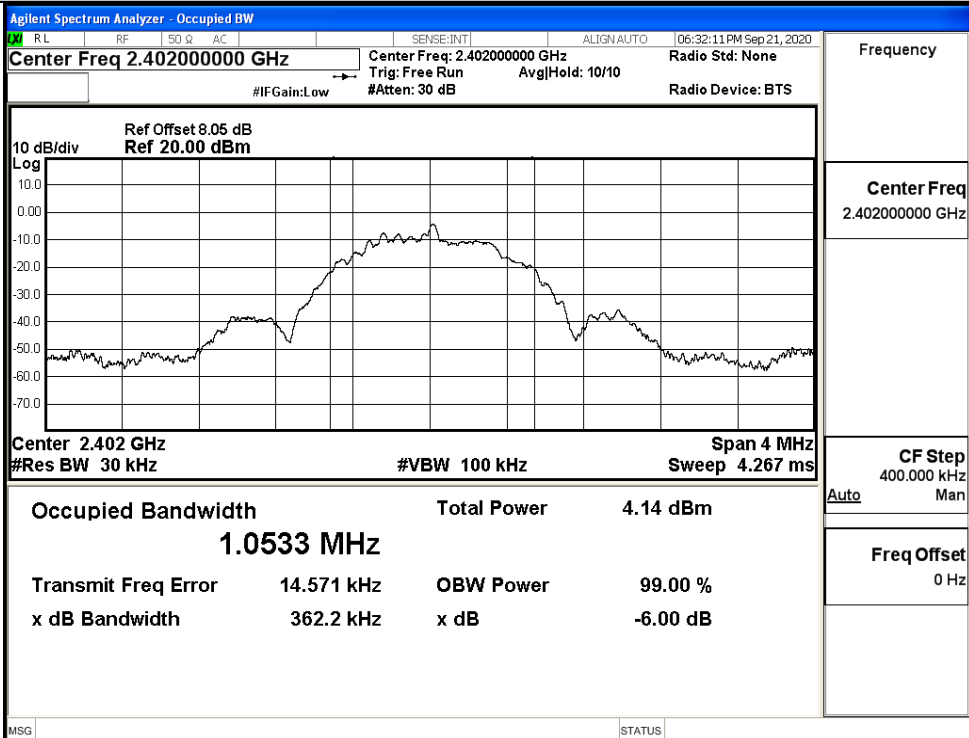


A.5 Occupied Bandwidth

Mode	Channel	Occupied Bandwidth [MHz]	Verdict
BT LE	LCH	1.0533	PASS
BT LE	MCH	1.0604	PASS
BT LE	HCH	1.0542	PASS

Test Graphs

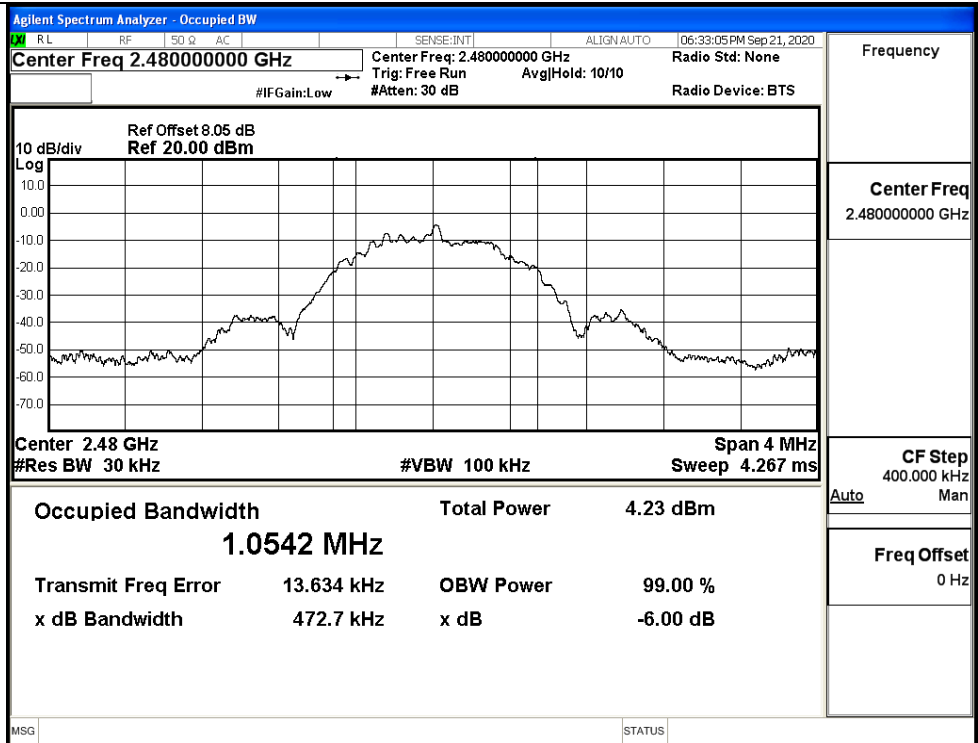
LCH



MCH



HCH

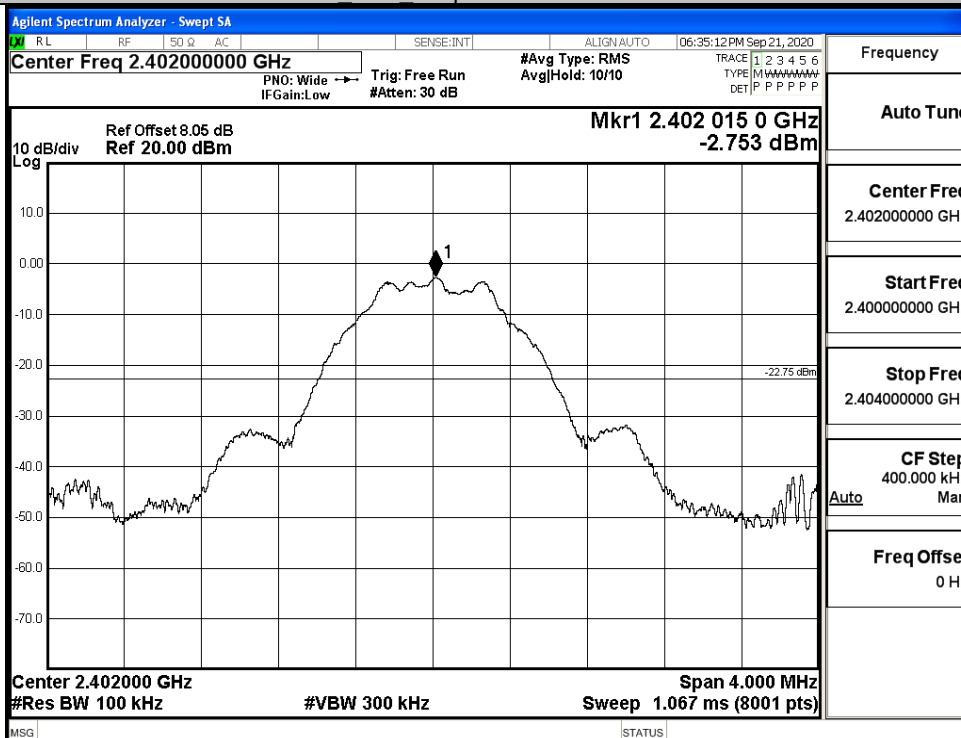


A.6 RF Conducted Spurious Emissions

Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	-2.753	-37.318	-22.753	PASS
BT LE	MCH	-2.715	-37.554	-22.715	PASS
BT LE	HCH	-2.669	-37.314	-22.669	PASS

BT LE LCH Graphs

Pref/BT LE/LCH



Frequency

Auto Tune

Center Freq
2.402000000 GHz

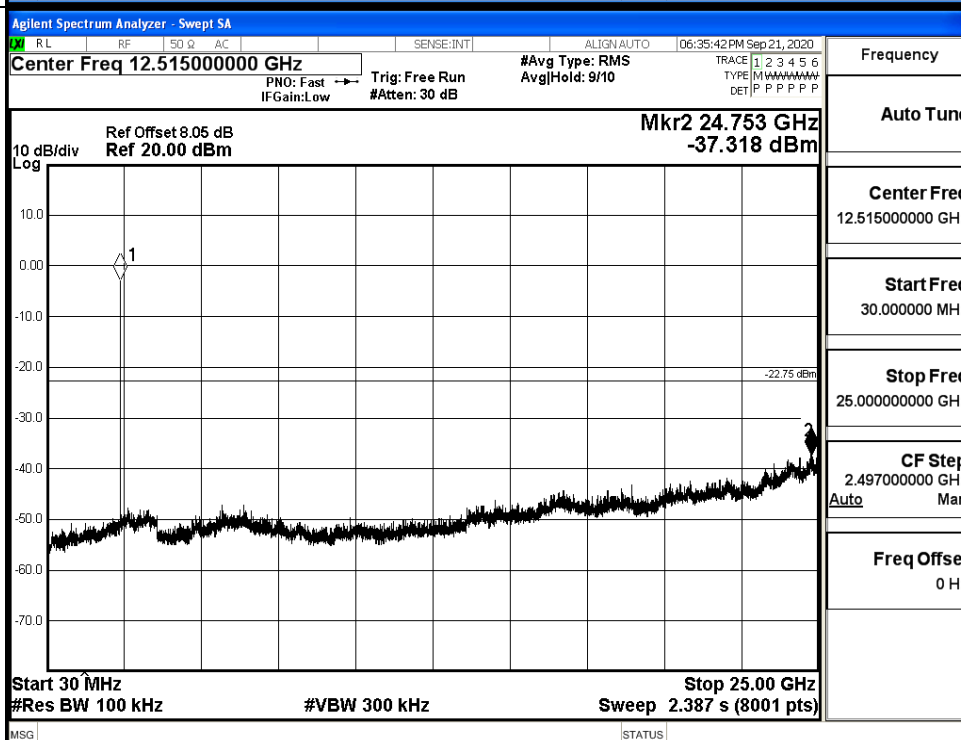
Start Freq
2.400000000 GHz

Stop Freq
2.404000000 GHz

CF Step
400.000 kHz
Auto Man

Freq Offset
0 Hz

Puw/BT LE/LCH



Frequency

Auto Tune

Center Freq
12.515000000 GHz

Start Freq
30.000000 MHz

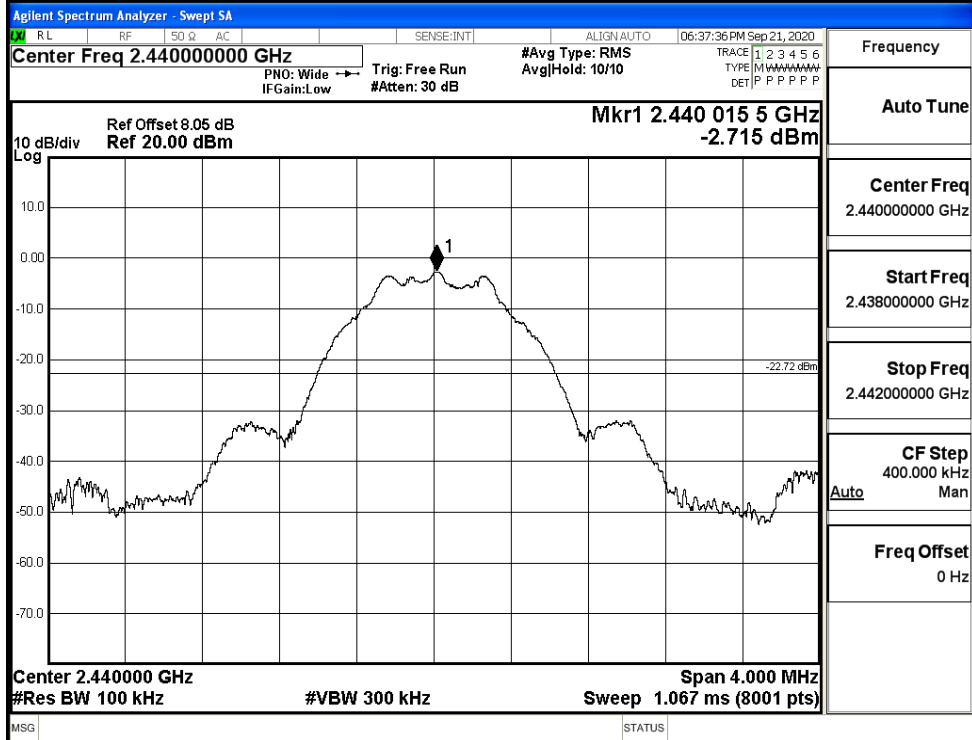
Stop Freq
25.000000000 GHz

CF Step
2.497000000 GHz
Auto Man

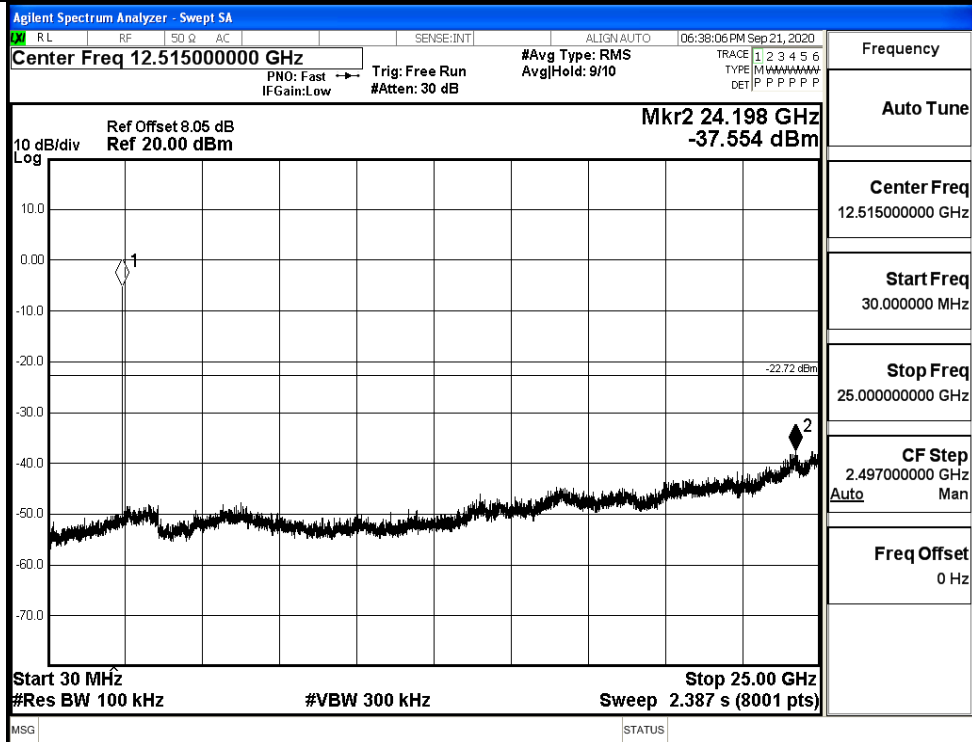
Freq Offset
0 Hz

BT LE MCH Graphs

Pref/BT LE/MCH

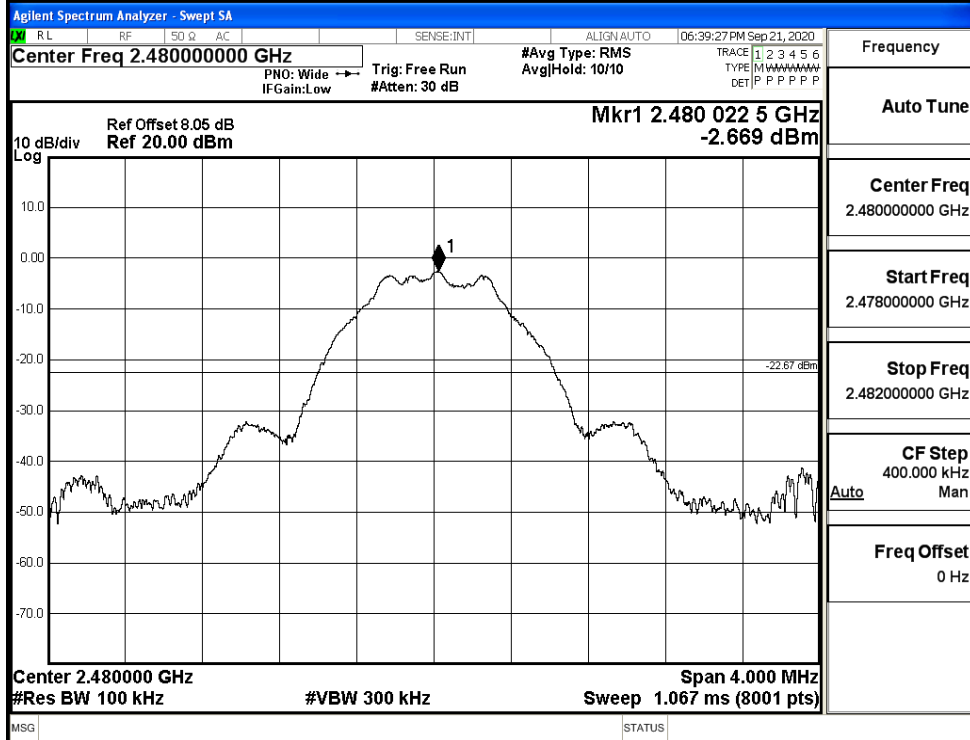


Puw/BT LE/MCH

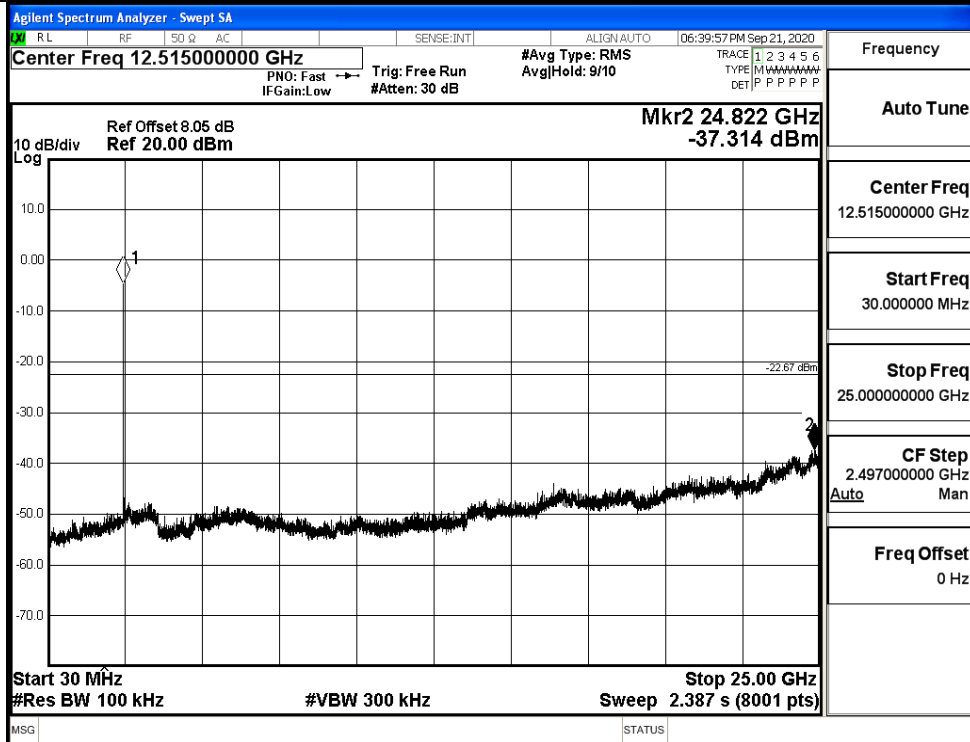


BT LE HCH Graphs

Pref/BT LE/HCH



Puw/BT LE/HCH

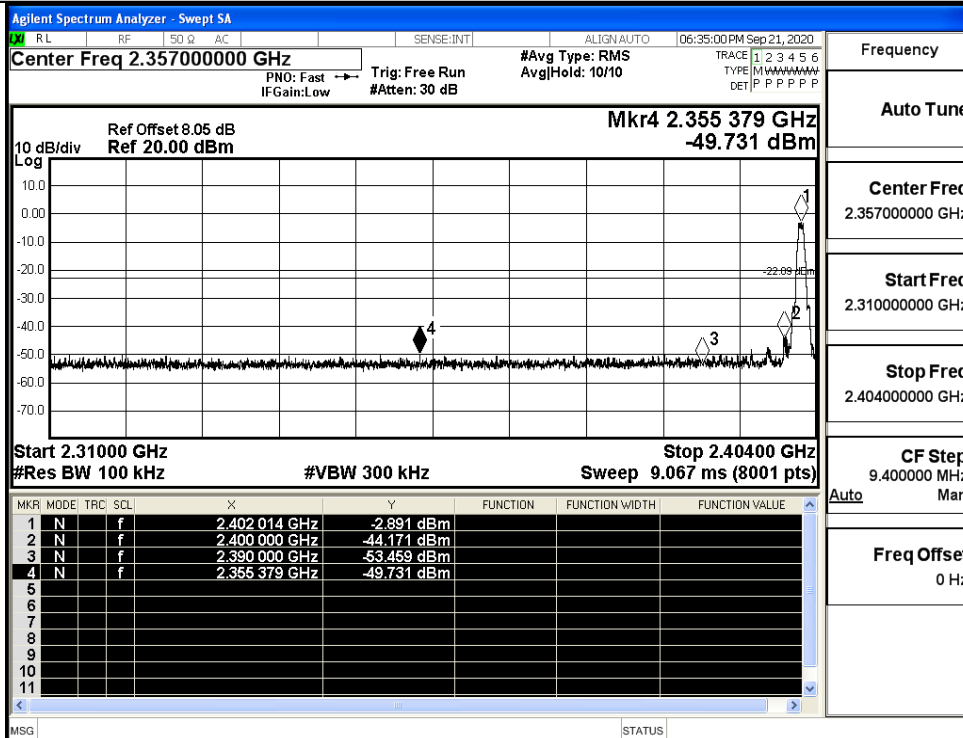


A.7 Band-edge for RF Conducted Emissions

Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	-2.891	-49.731	-22.89	PASS
BT LE	HCH	-2.647	-46.591	-22.65	PASS

Test Graphs

LCH



Frequency

Auto Tune

Center Freq

2.357000000 GHz

Start Freq

2.310000000 GHz

Stop Freq

2.404000000 GHz

CF Step

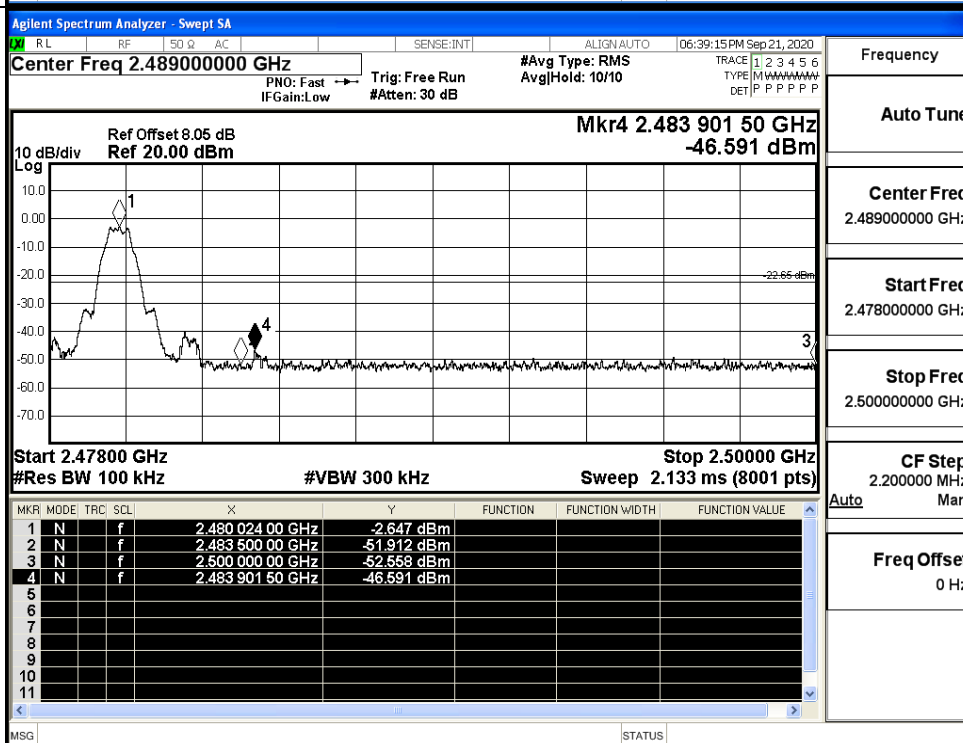
9.400000 MHz

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

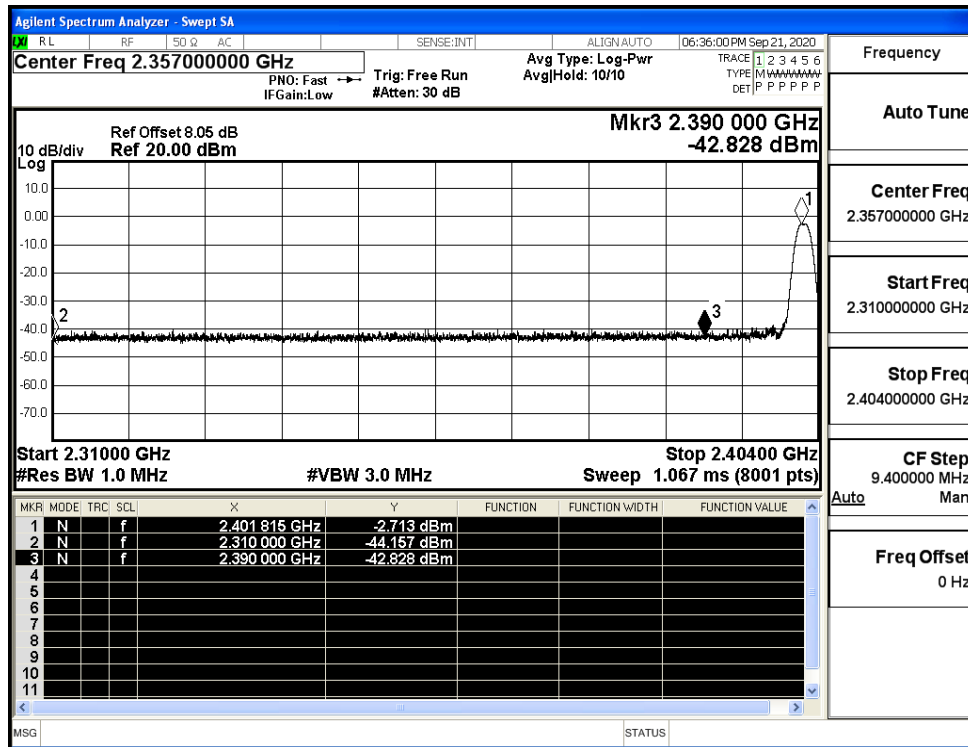
Freq Offset

0 Hz

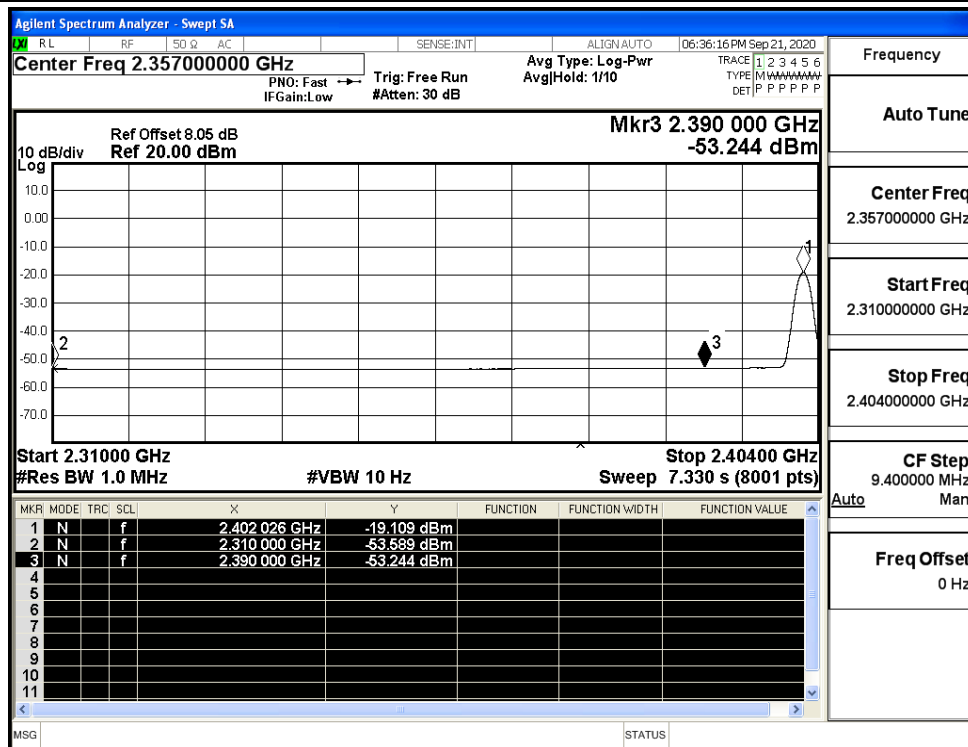
A.8 Restrict-band band-edge measurements

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	-44.16	2.0	0	53.07	PEAK	74	PASS
		Ant1	2310.0	-53.59	2.0	0	43.64	AV	54	PASS
		Ant1	2390.0	-42.83	2.0	0	54.40	PEAK	74	PASS
		Ant1	2390.0	-53.24	2.0	0	43.99	AV	54	PASS
	2480	Ant1	2483.5	-40.36	2.0	0	56.87	PEAK	74	PASS
		Ant1	2483.5	-52.68	2.0	0	44.55	AV	54	PASS
		Ant1	2500.0	-41.92	2.0	0	55.31	PEAK	74	PASS
		Ant1	2500.0	-52.63	2.0	0	44.60	AV	54	PASS

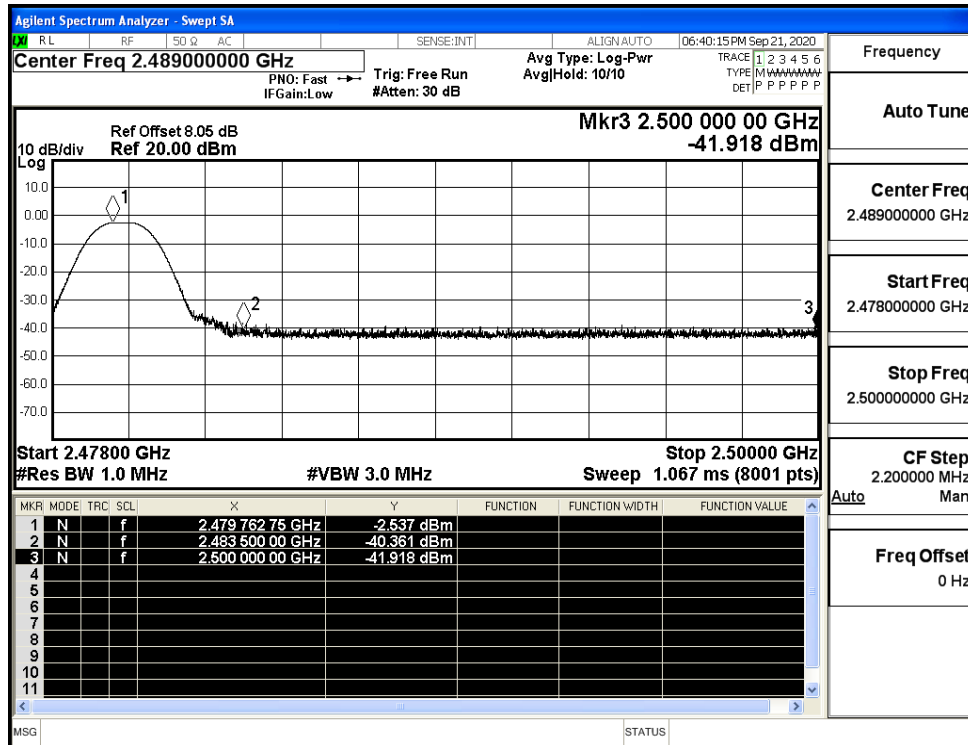
Restrict-band band-edge measurements_BT LE_2402_Ant1_PEAK



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

