

Appendix A

RF Test Data for BT LE (Conducted Measurement)

Product Name: Cabinet Lock

Trade Mark: Digilock

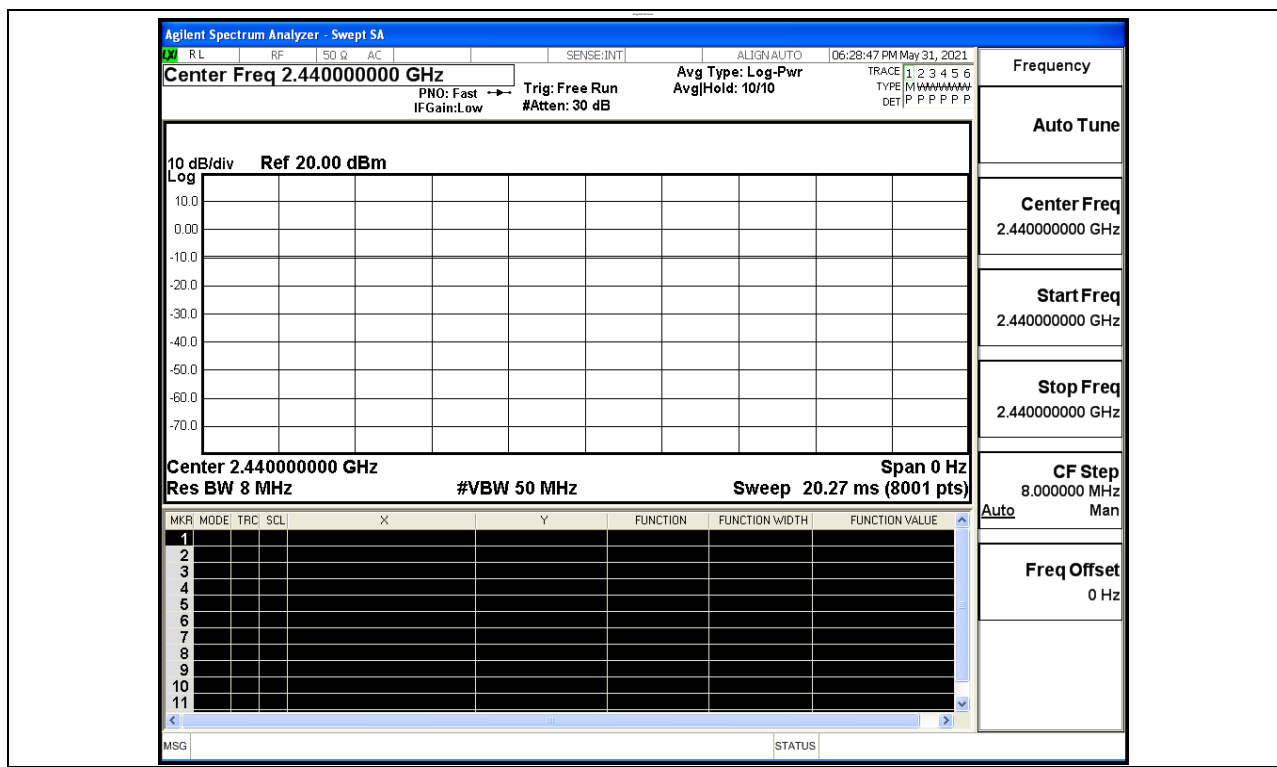
Test Model: D6ON-XXSX-0XXX

Environmental Conditions

Temperature:	25 ° C
Relative Humidity:	50%
ATM Pressure:	100.0 kPa
Test Engineer:	Carl Fu
Supervised by:	Li Huan

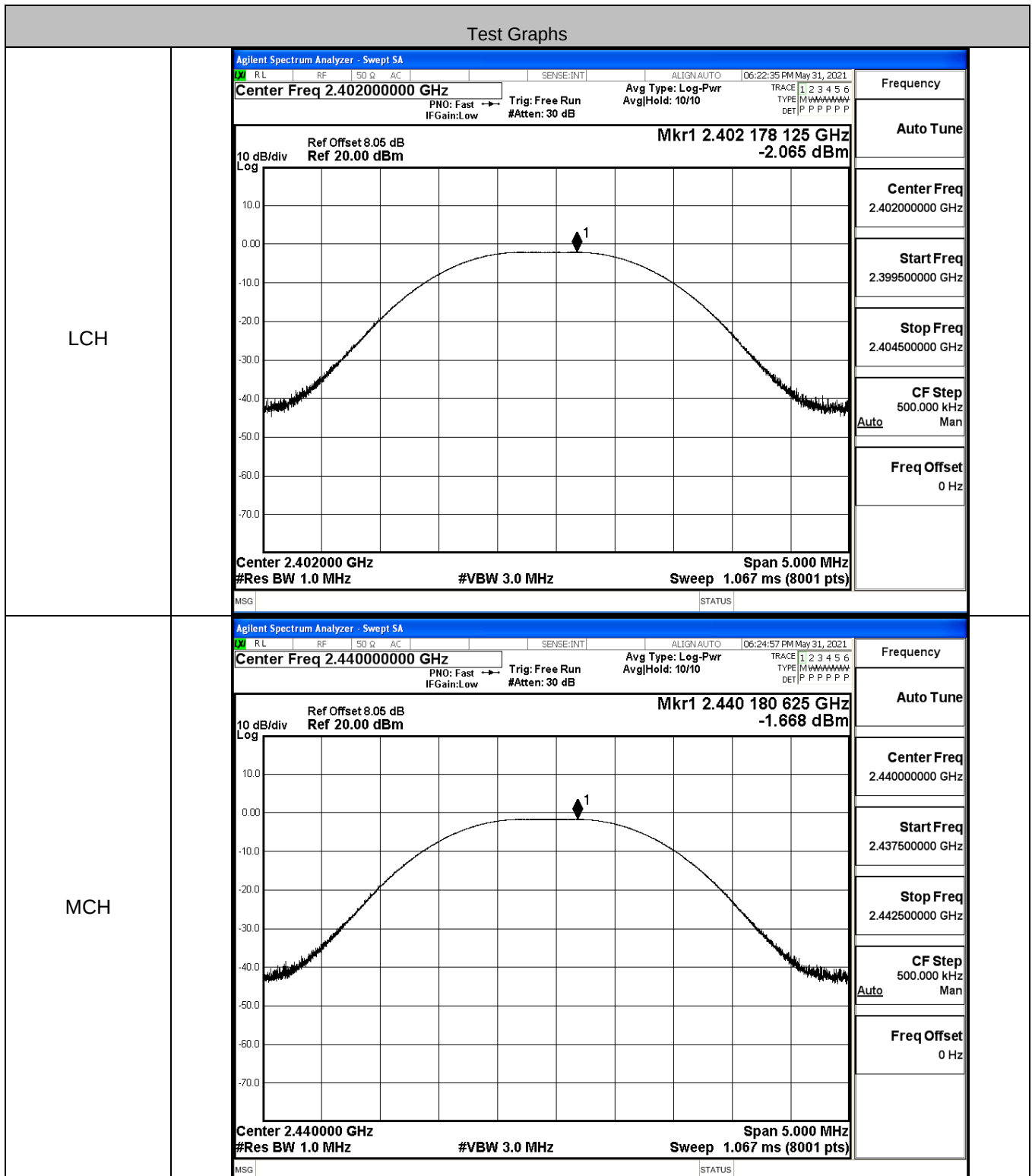
A.1 Duty Cycle

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

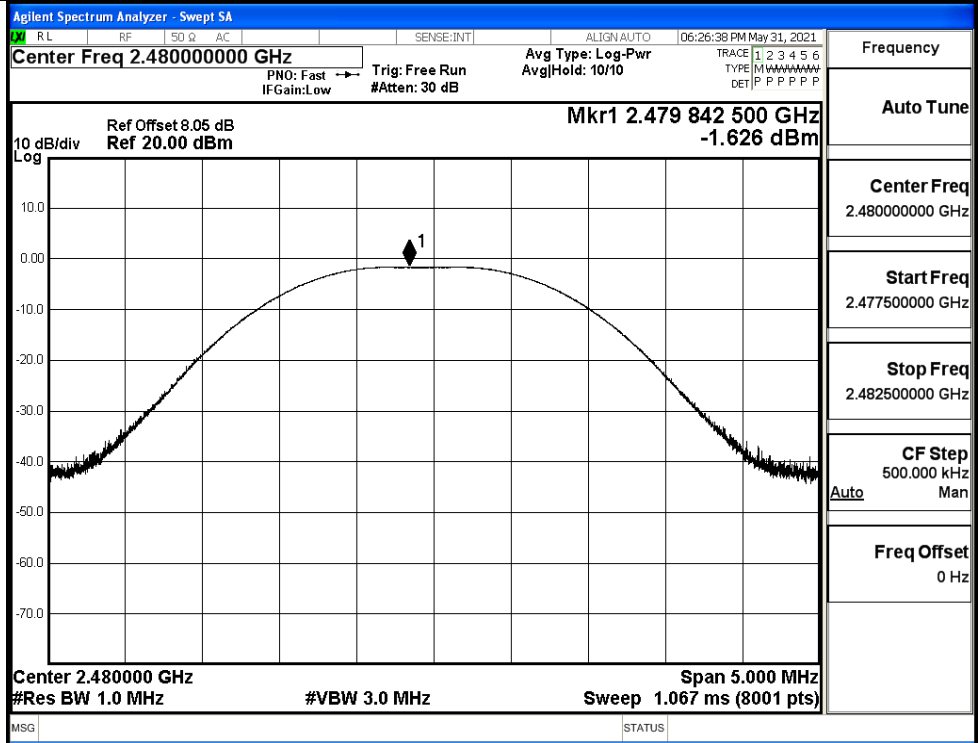


B.2 Maximum Conducted Peak Output Power

Mode	Channel	Conduct Peak Power[dBm]	Limit [dBm]	Verdict
BT LE	LCH	-2.065	30	PASS
BT LE	MCH	-1.668	30	PASS
BT LE	HCH	-1.626	30	PASS

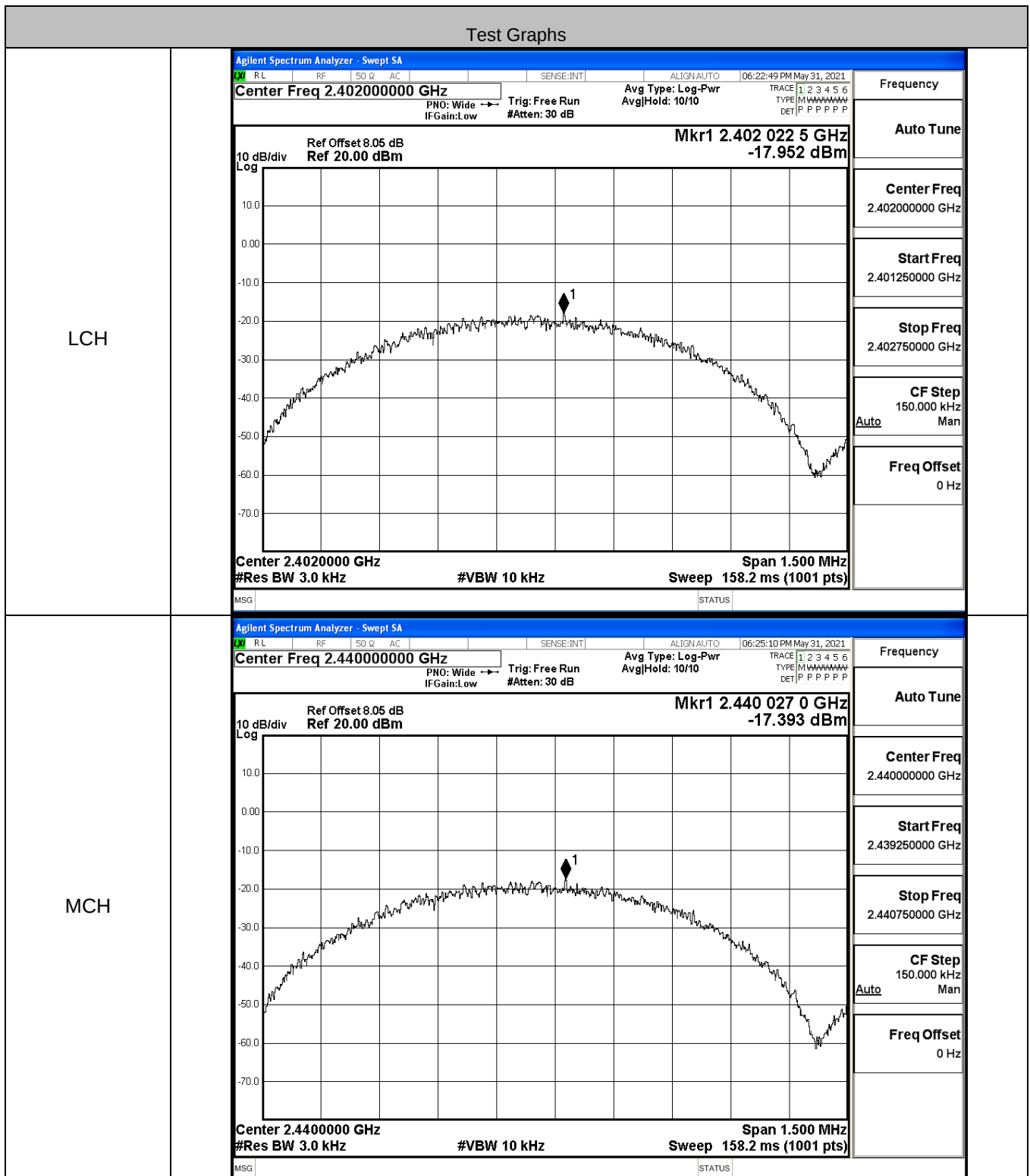


HCH

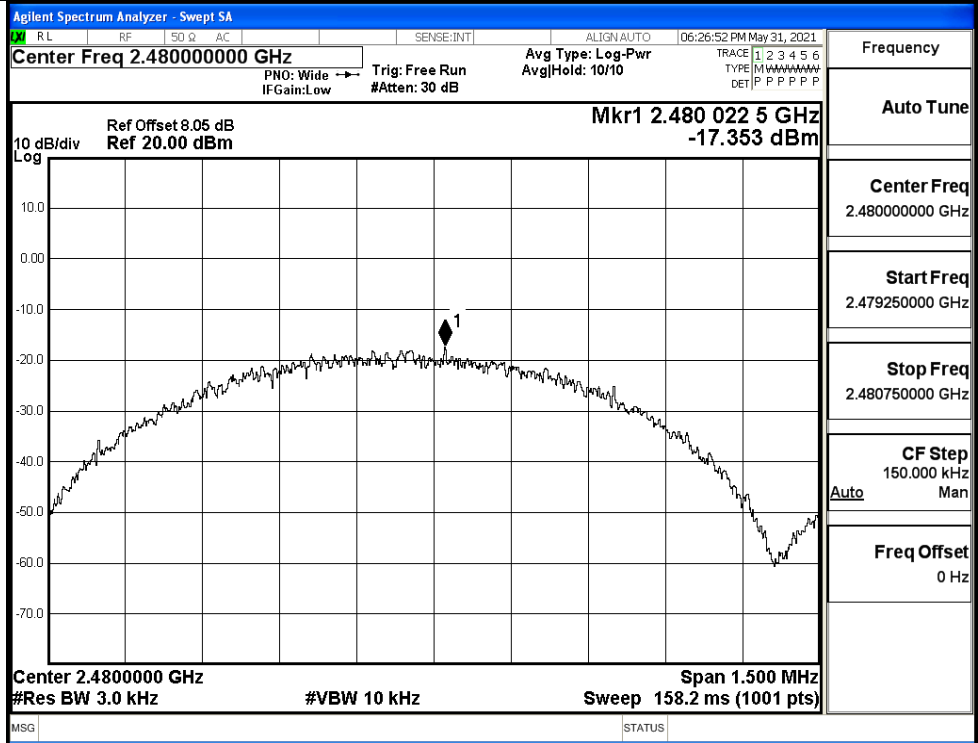


A.3 Maximum Power Spectral Density

Mode	Channel	PSD [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
BT LE	LCH	-17.952	8	PASS
BT LE	MCH	-17.393	8	PASS
BT LE	HCH	-17.353	8	PASS

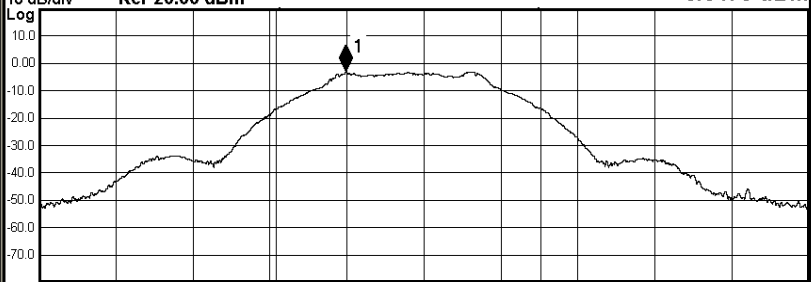
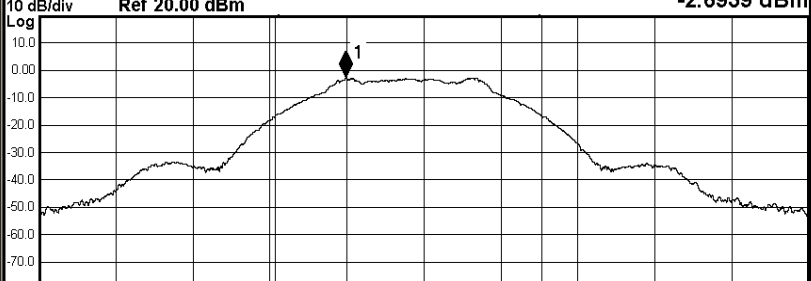


HCH

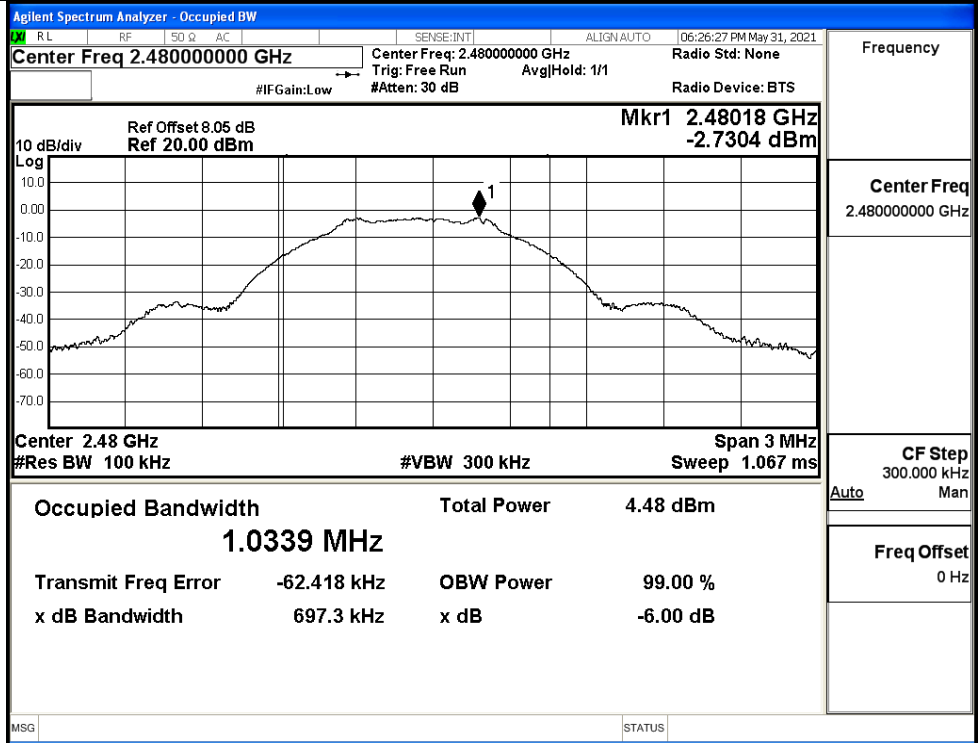


A.4 6dB Bandwidth

Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
BT LE	LCH	0.6946	≥ 0.5	PASS
BT LE	MCH	0.6962	≥ 0.5	PASS
BT LE	HCH	0.6973	≥ 0.5	PASS

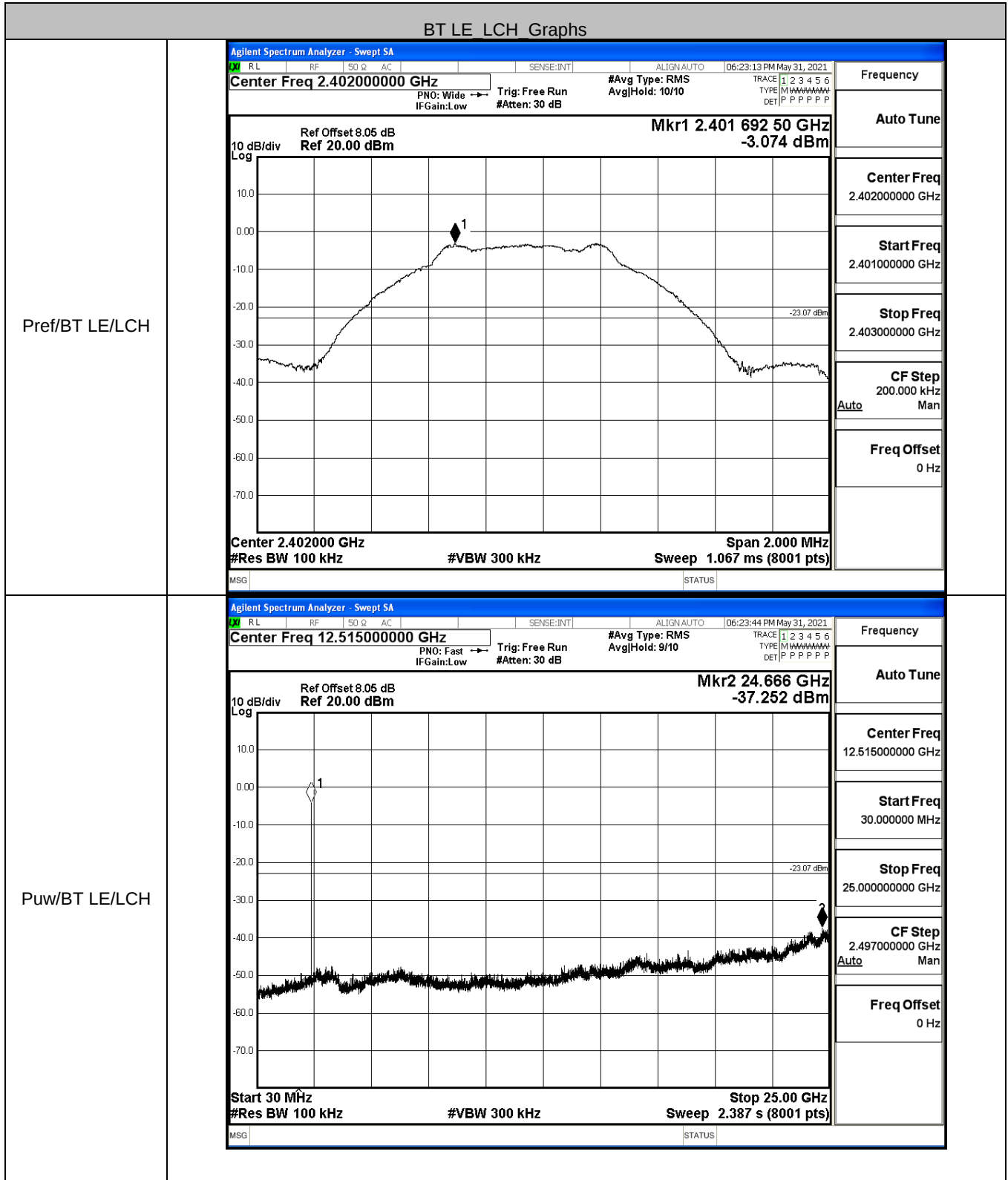
Test Graphs			
LCH		Agilent Spectrum Analyzer - Occupied BW RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 06:22:24 PM May 31, 2021 Center Freq 2.402000000 GHz Center Freq: 2.402000000 GHz Radio Std: None Trig: Free Run Avg/Hold: 1/1 #IF Gain: Low #Atten: 30 dB Radio Device: BTS Ref Offset 8.05 dB Mkr1 2.4016966 GHz Ref 20.00 dBm -3.0473 dBm 10 dB/div Log  Center 2.402 GHz Span 3 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 1.067 ms Occupied Bandwidth Total Power 4.10 dBm 1.0300 MHz Transmit Freq Error -59.201 kHz OBW Power 99.00 % x dB Bandwidth 694.6 kHz x dB -6.00 dB MSG STATUS	Frequency Center Freq 2.402000000 GHz CF Step 300.000 kHz Auto Man Freq Offset 0 Hz
MCH		Agilent Spectrum Analyzer - Occupied BW RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 06:24:46 PM May 31, 2021 Center Freq 2.440000000 GHz Center Freq: 2.440000000 GHz Radio Std: None Trig: Free Run Avg/Hold: 1/1 #IF Gain: Low #Atten: 30 dB Radio Device: BTS Ref Offset 8.05 dB Mkr1 2.439697 GHz Ref 20.00 dBm -2.6939 dBm 10 dB/div Log  Center 2.44 GHz Span 3 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 1.067 ms Occupied Bandwidth Total Power 4.49 dBm 1.0301 MHz Transmit Freq Error -57.454 kHz OBW Power 99.00 % x dB Bandwidth 696.2 kHz x dB -6.00 dB MSG STATUS	Frequency Center Freq 2.440000000 GHz CF Step 300.000 kHz Auto Man Freq Offset 0 Hz

HCH



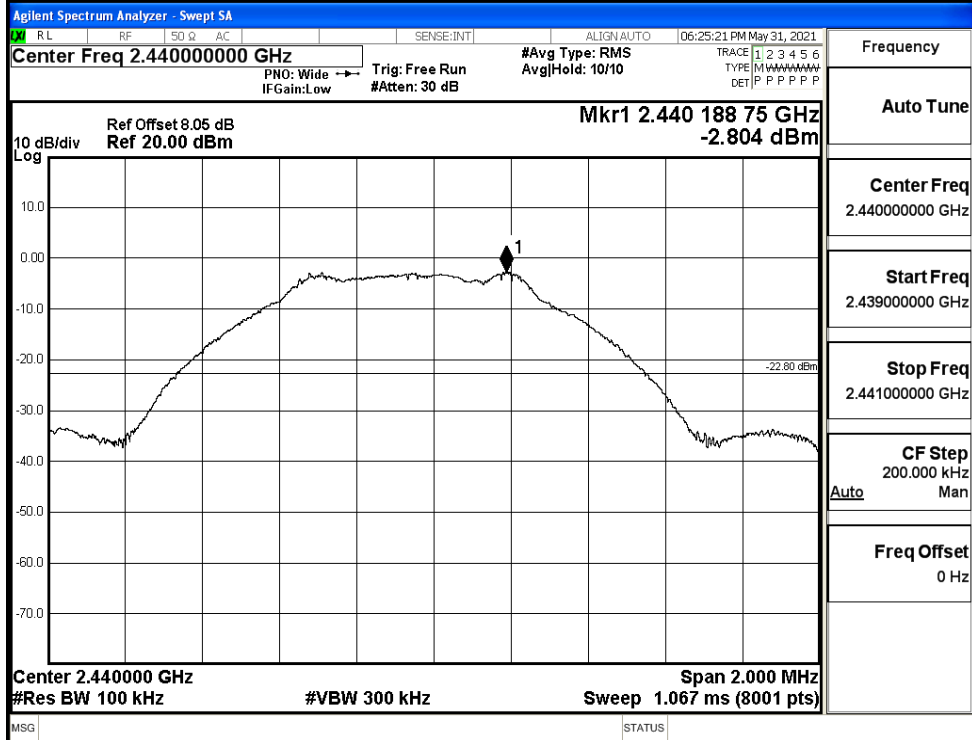
A.5 RF Conducted Spurious Emissions

Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	-3.074	-37.252	-23.074	PASS
BT LE	MCH	-2.804	-38.267	-22.804	PASS
BT LE	HCH	-2.764	-36.831	-22.764	PASS

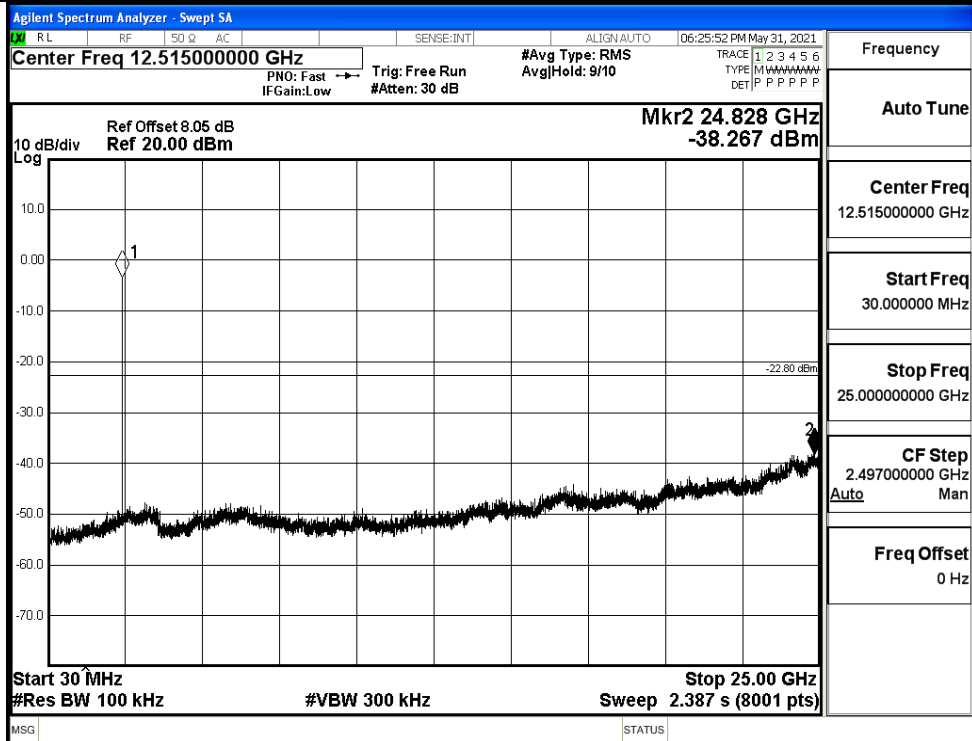


BT LE MCH Graphs

Pref/BT LE/MCH

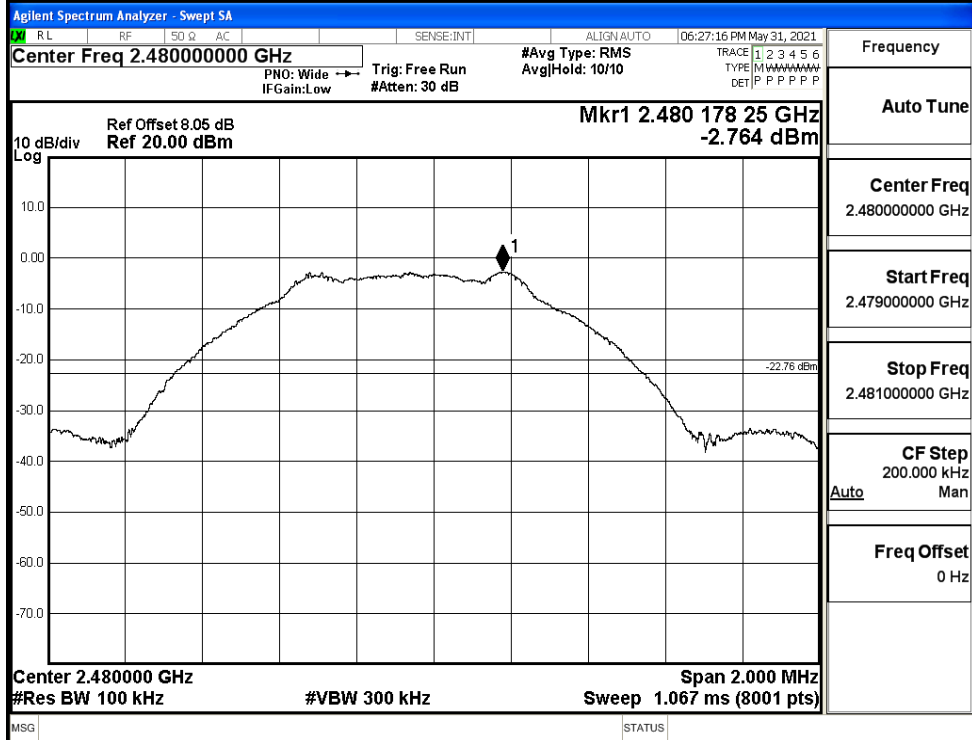


Puw/BT LE/MCH

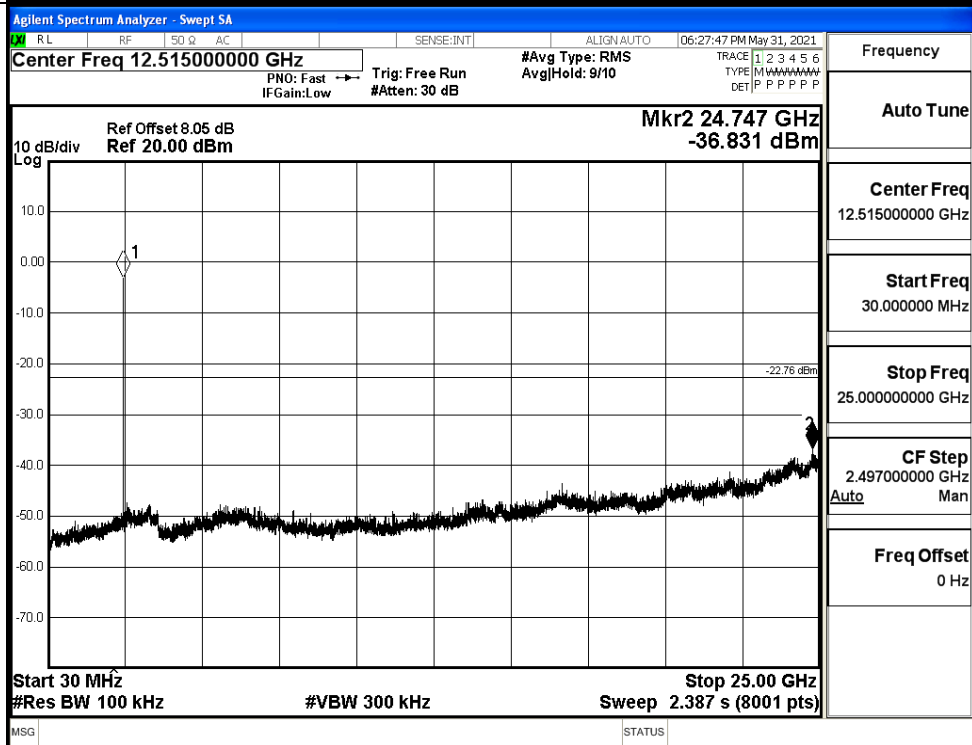


BT LE HCH Graphs

Pref/BT LE/HCH



Puw/BT LE/HCH

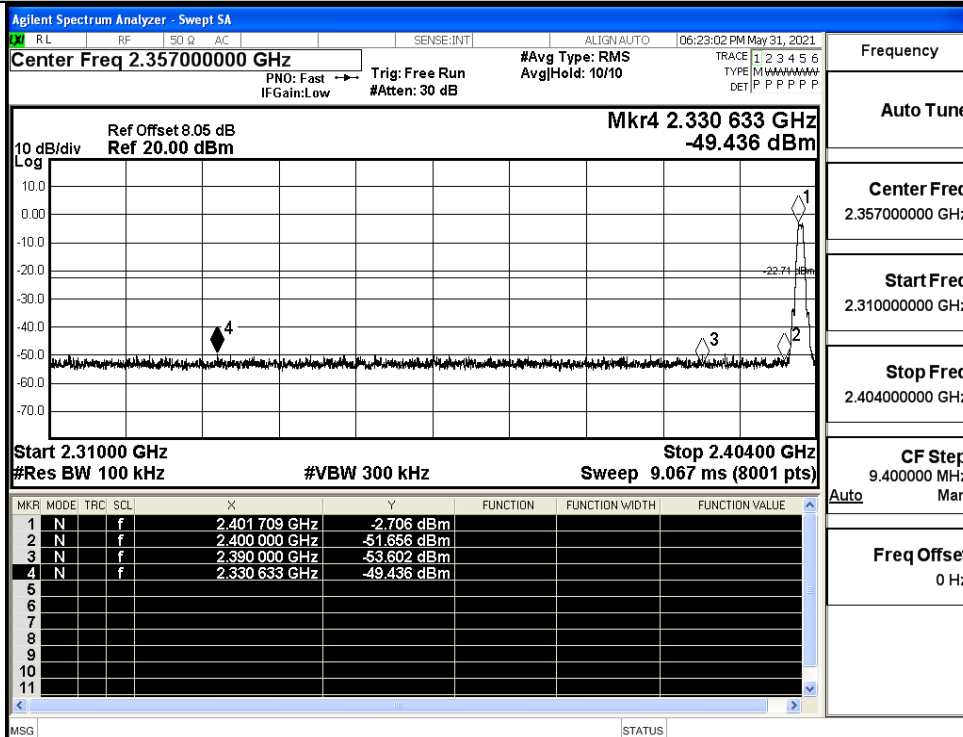


A.6 Band-edge for RF Conducted Emissions

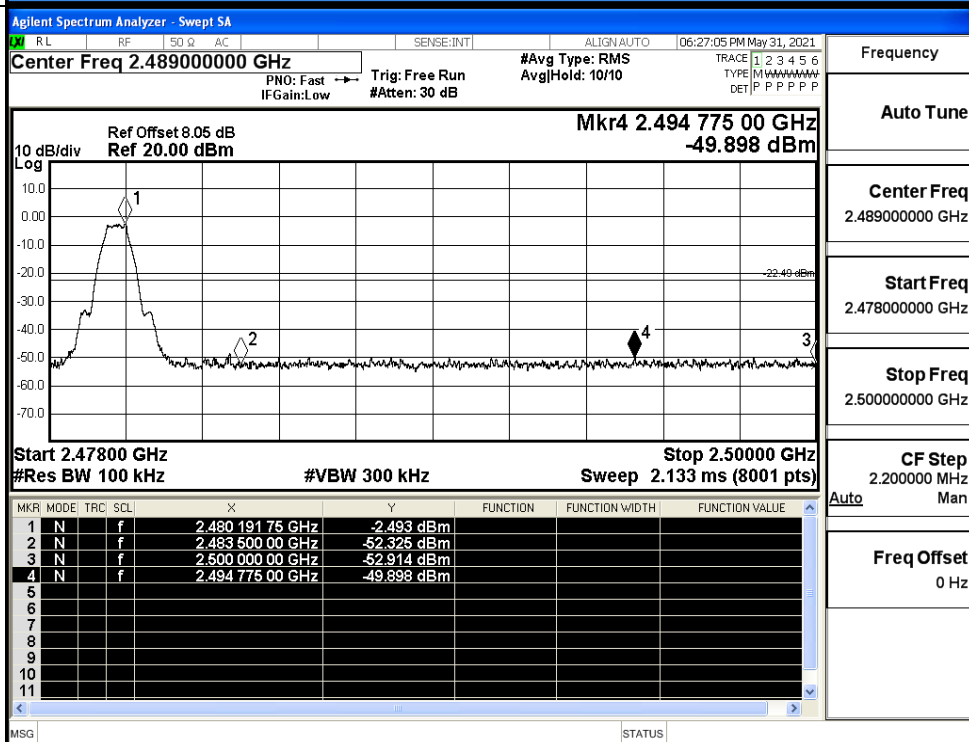
Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	-2.706	-49.436	-22.71	PASS
BT LE	HCH	-2.493	-49.898	-22.49	PASS

Test Graphs

LCH



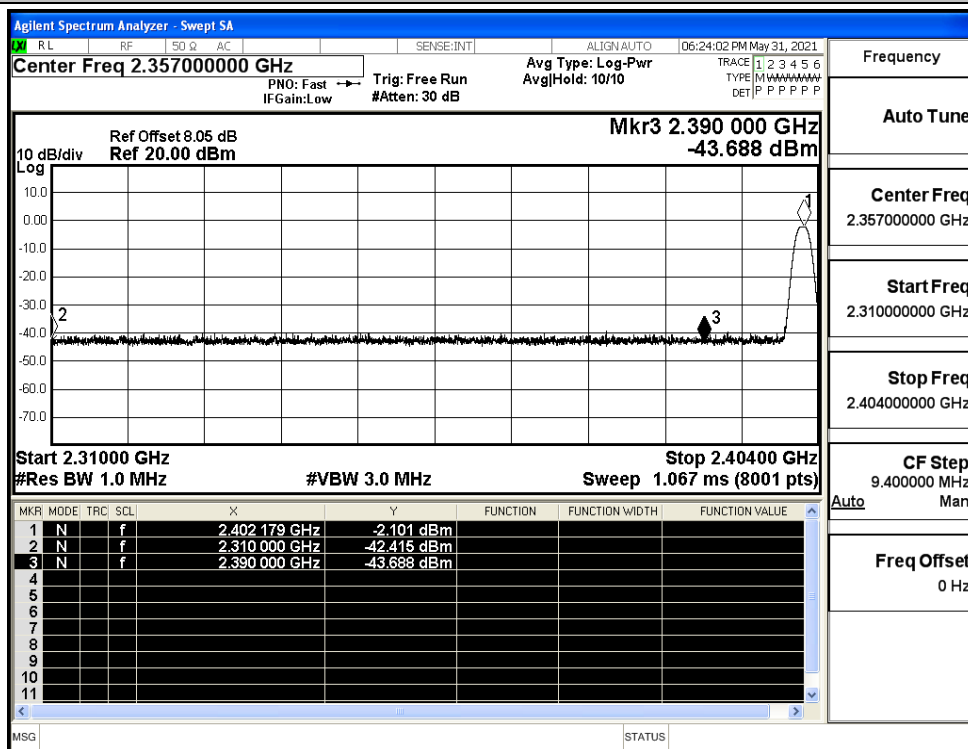
HCH



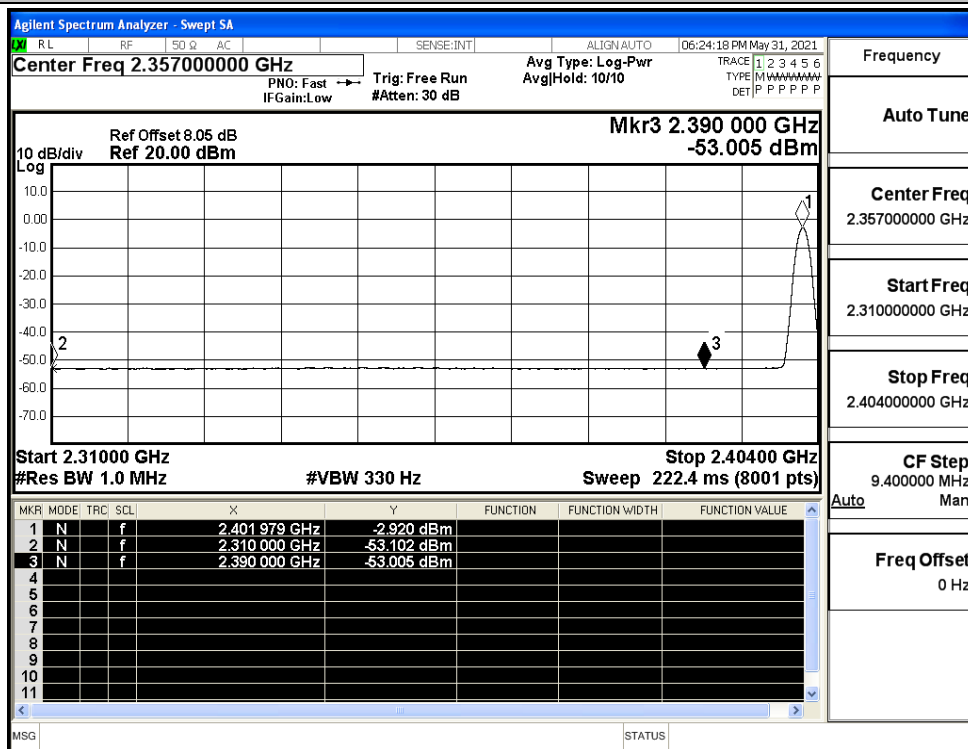
A.7 Restrict-band band-edge measurements

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	-42.42	2.0	0	54.81	PEAK	74	PASS
		Ant1	2310.0	-53.10	2.0	0	44.13	AV	54	PASS
		Ant1	2390.0	-43.69	2.0	0	53.54	PEAK	74	PASS
		Ant1	2390.0	-53.01	2.0	0	44.22	AV	54	PASS
	2480	Ant1	2483.5	-42.07	2.0	0	55.16	PEAK	74	PASS
		Ant1	2483.5	-52.51	2.0	0	44.72	AV	54	PASS
		Ant1	2500.0	-42.34	2.0	0	54.89	PEAK	74	PASS
		Ant1	2500.0	-52.44	2.0	0	44.79	AV	54	PASS

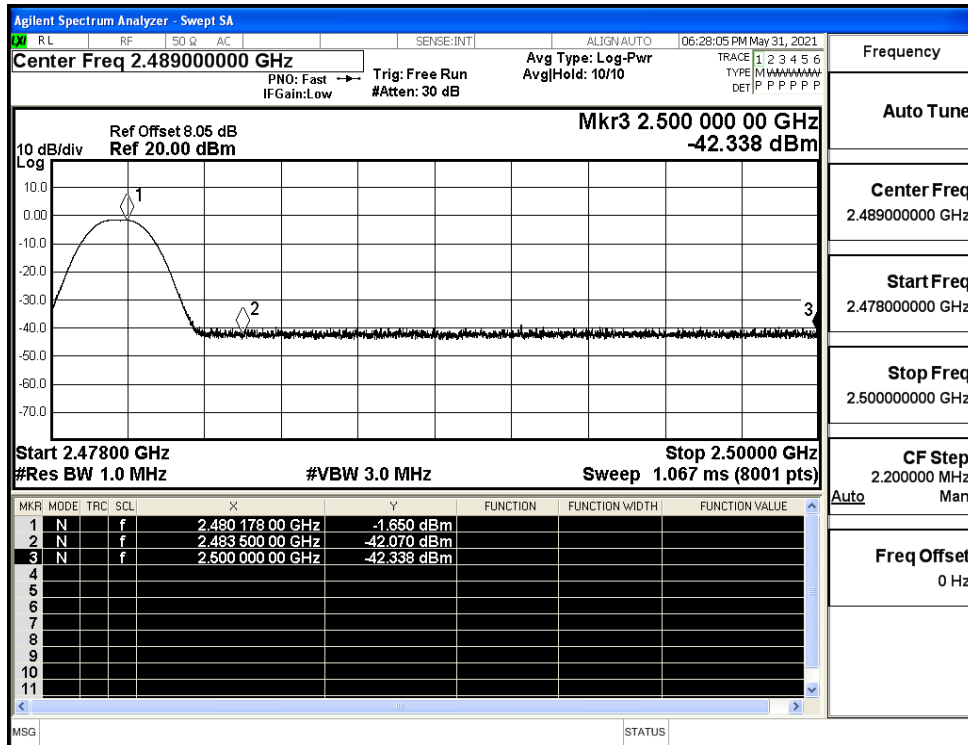
Restrict-band band-edge measurements_BT LE_2402_Ant1_PEAK



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

