

Appendix B

RF Test Data for BT V4.2(BLE) (Conducted Measurement)

Product Name: Social Distancing Smart Bracelet

Trade Mark: N/A

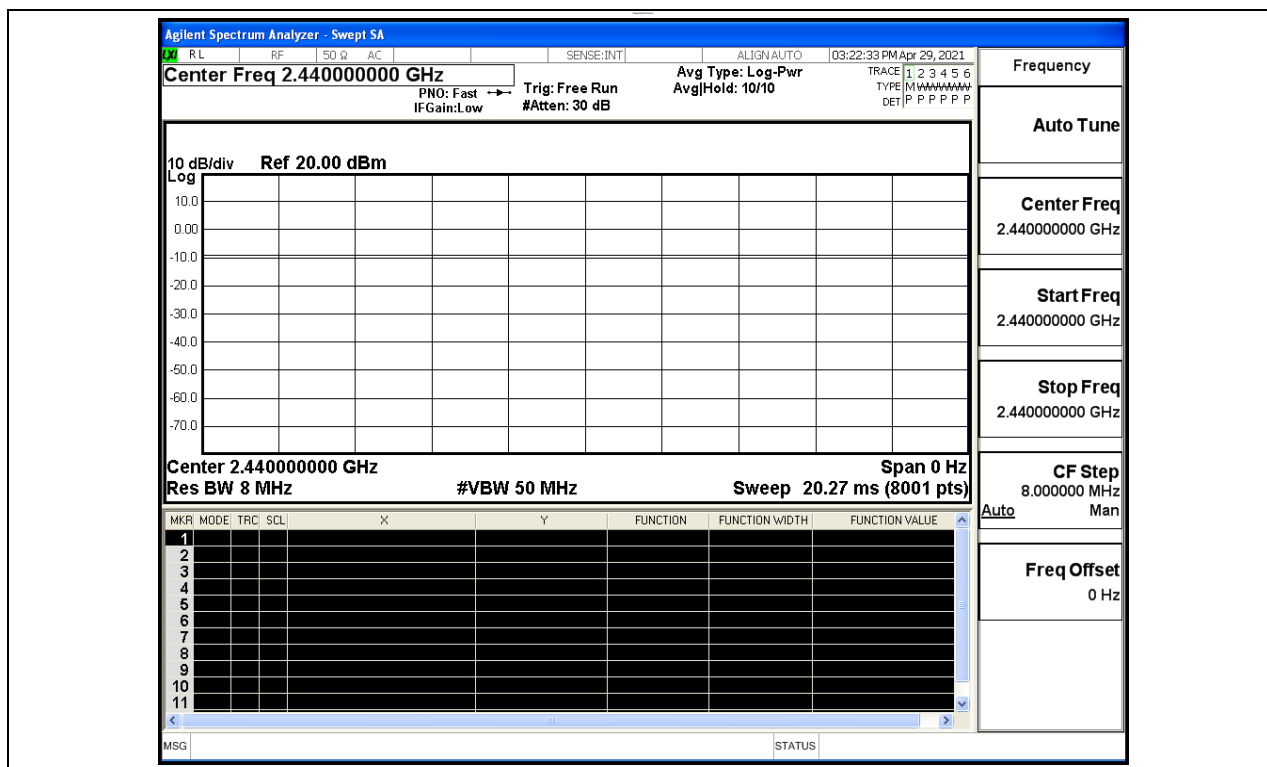
Test Model: ST-W102 Pro

Environmental Conditions

Temperature:	24.6 ° C
Relative Humidity:	54.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Kay Hu
Supervised by:	Li Huan

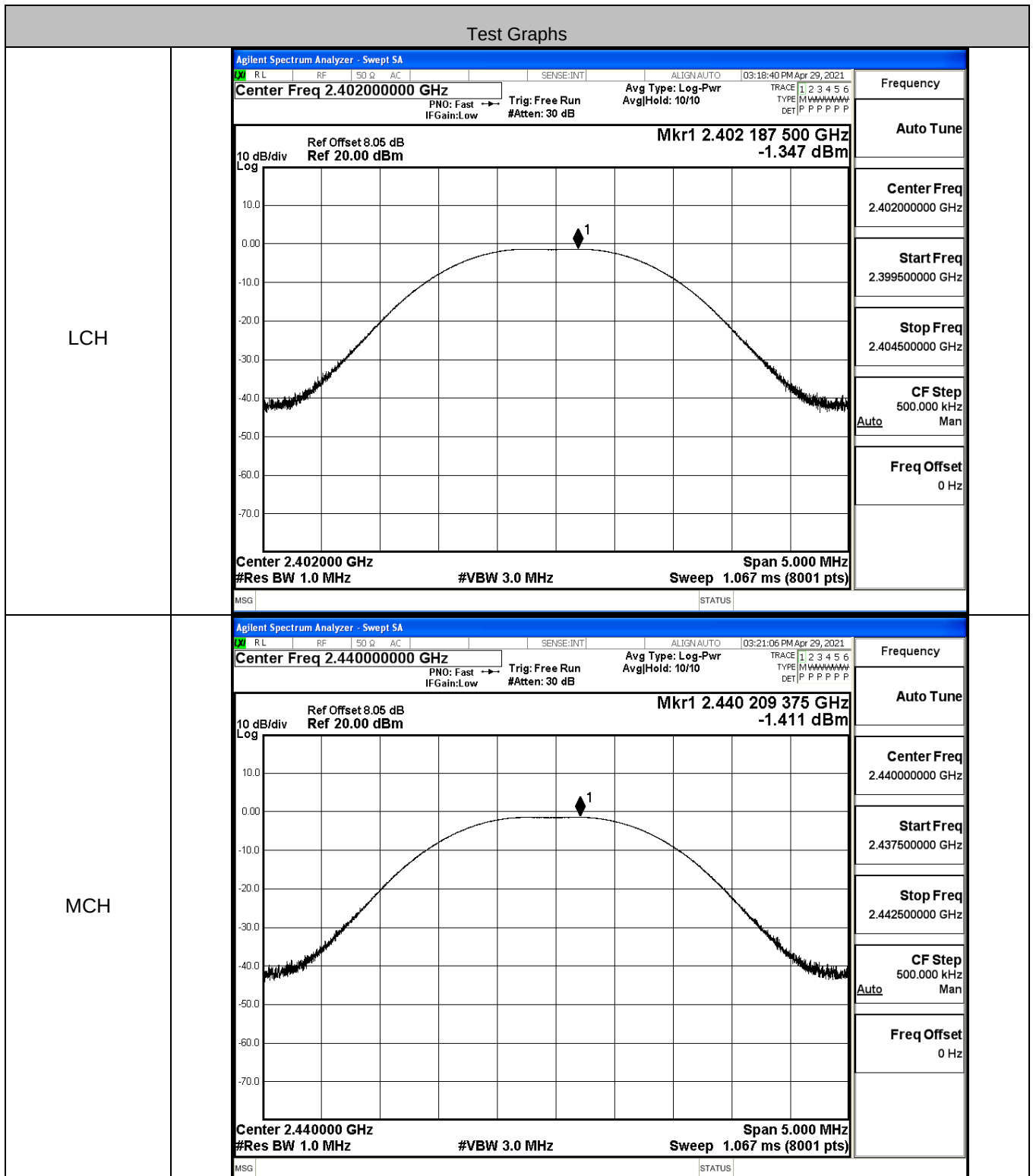
A.1 Duty Cycle

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

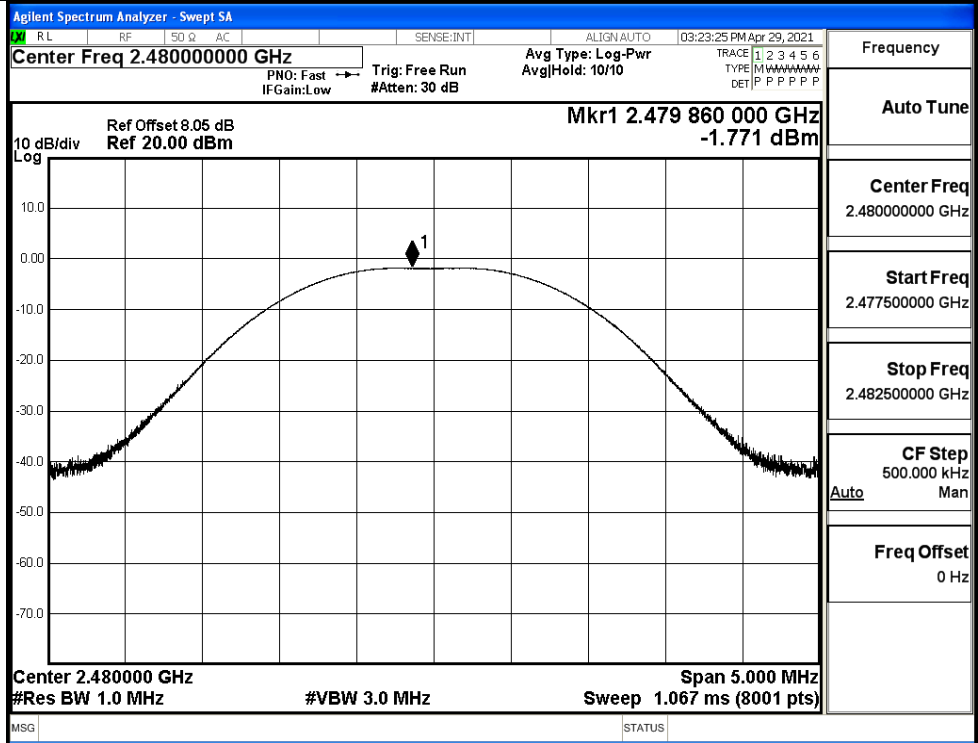


A.2 Maximum Conducted Peak Output Power

Mode	Channel	Conduct Peak Power[dBm]	Limit [dBm]	Verdict
BT LE	LCH	-1.347	30	PASS
BT LE	MCH	-1.411	30	PASS
BT LE	HCH	-1.771	30	PASS

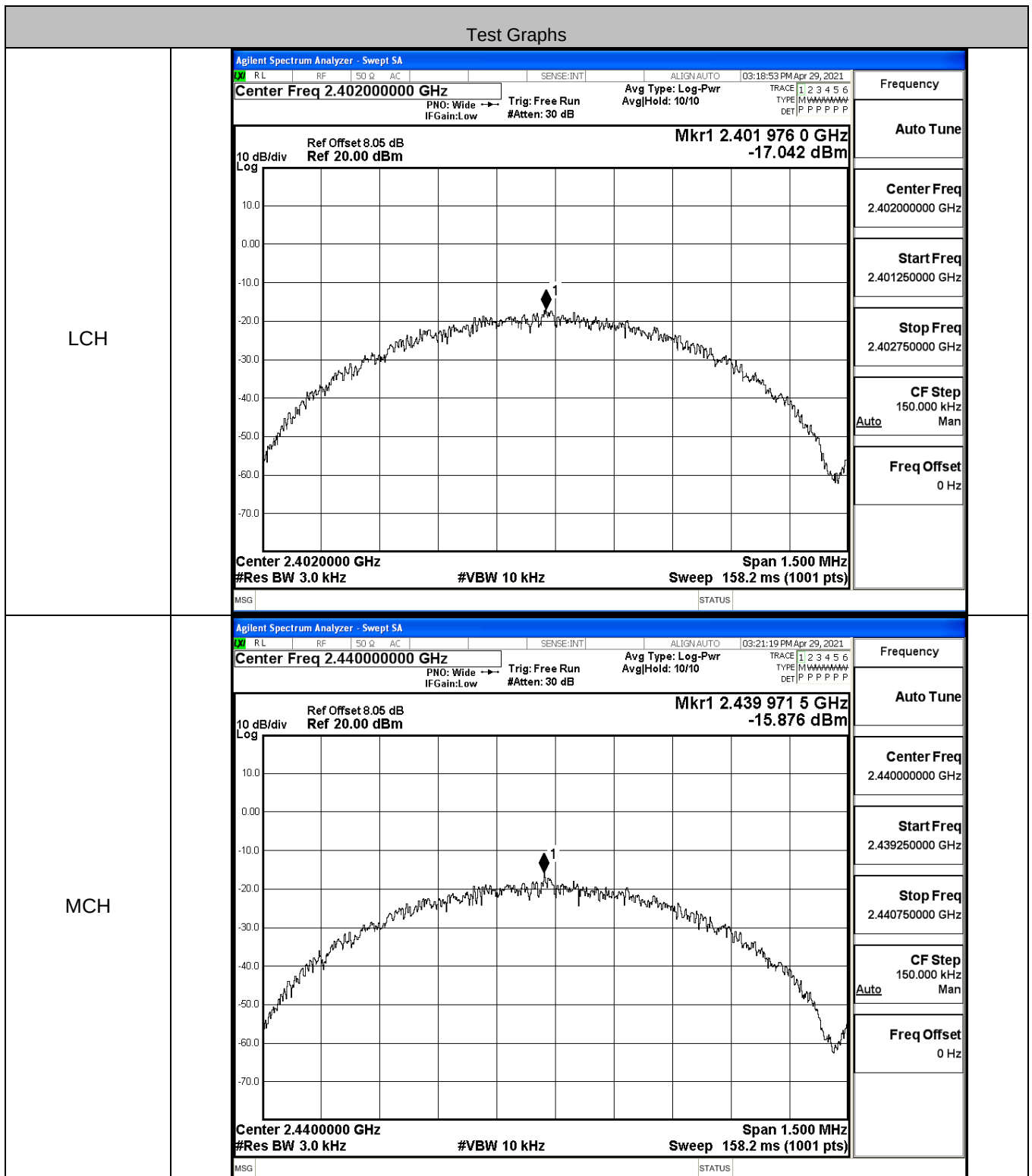


HCH

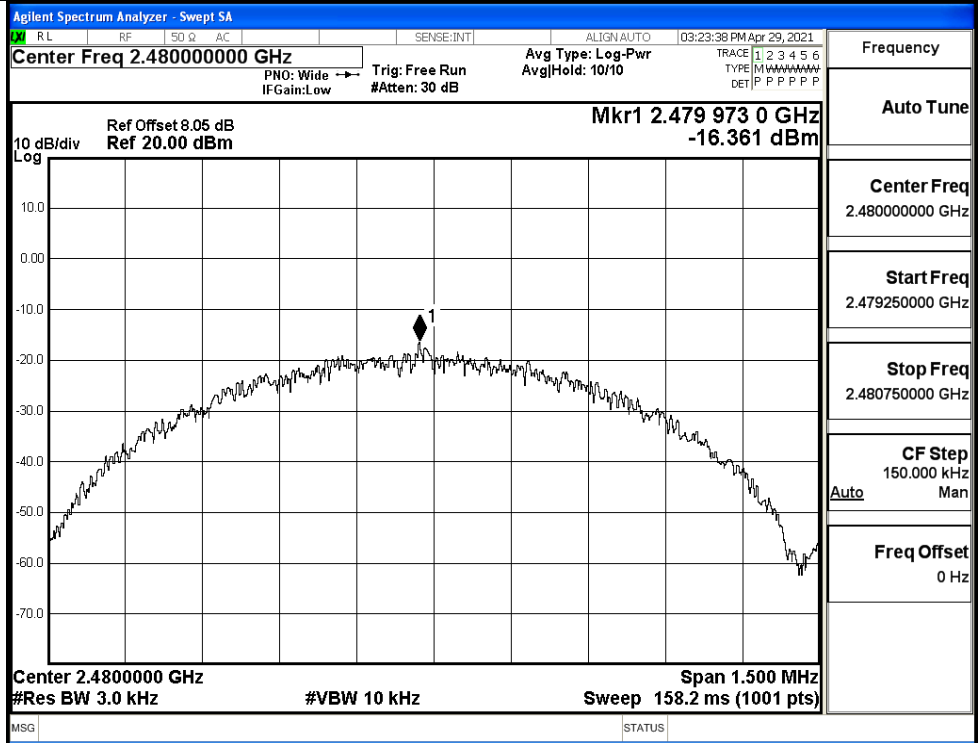


A.3 Maximum Power Spectral Density

Mode	Channel	PSD [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
BT LE	LCH	-17.042	8	PASS
BT LE	MCH	-15.876	8	PASS
BT LE	HCH	-16.361	8	PASS



HCH

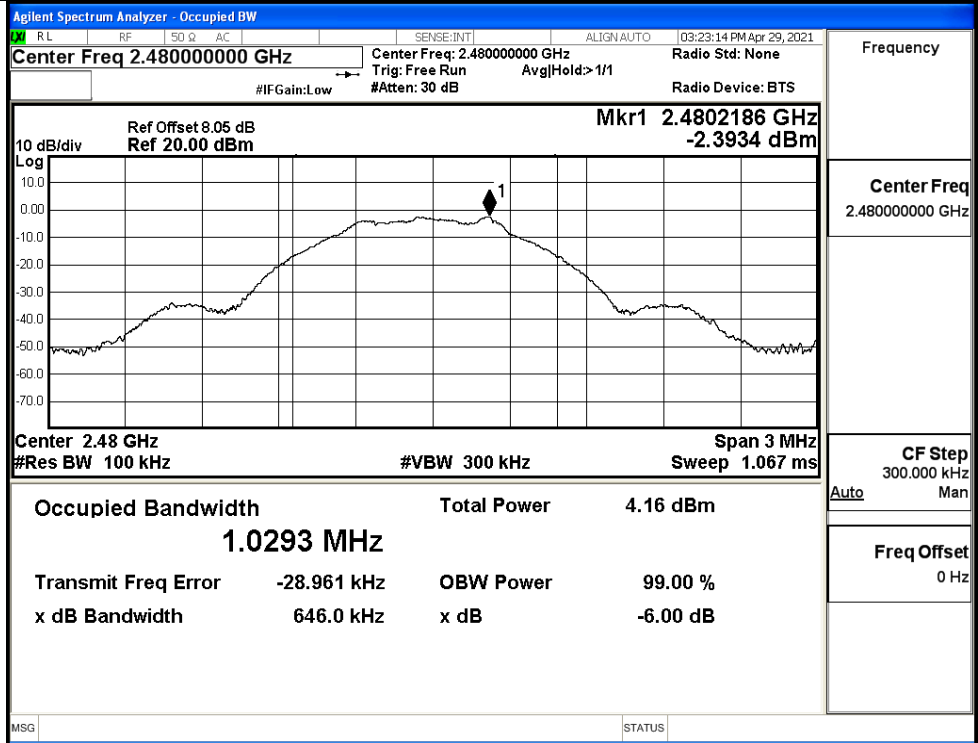


A.4 6dB Bandwidth

Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
BT LE	LCH	0.6466	≥ 0.5	PASS
BT LE	MCH	0.6506	≥ 0.5	PASS
BT LE	HCH	0.6460	≥ 0.5	PASS

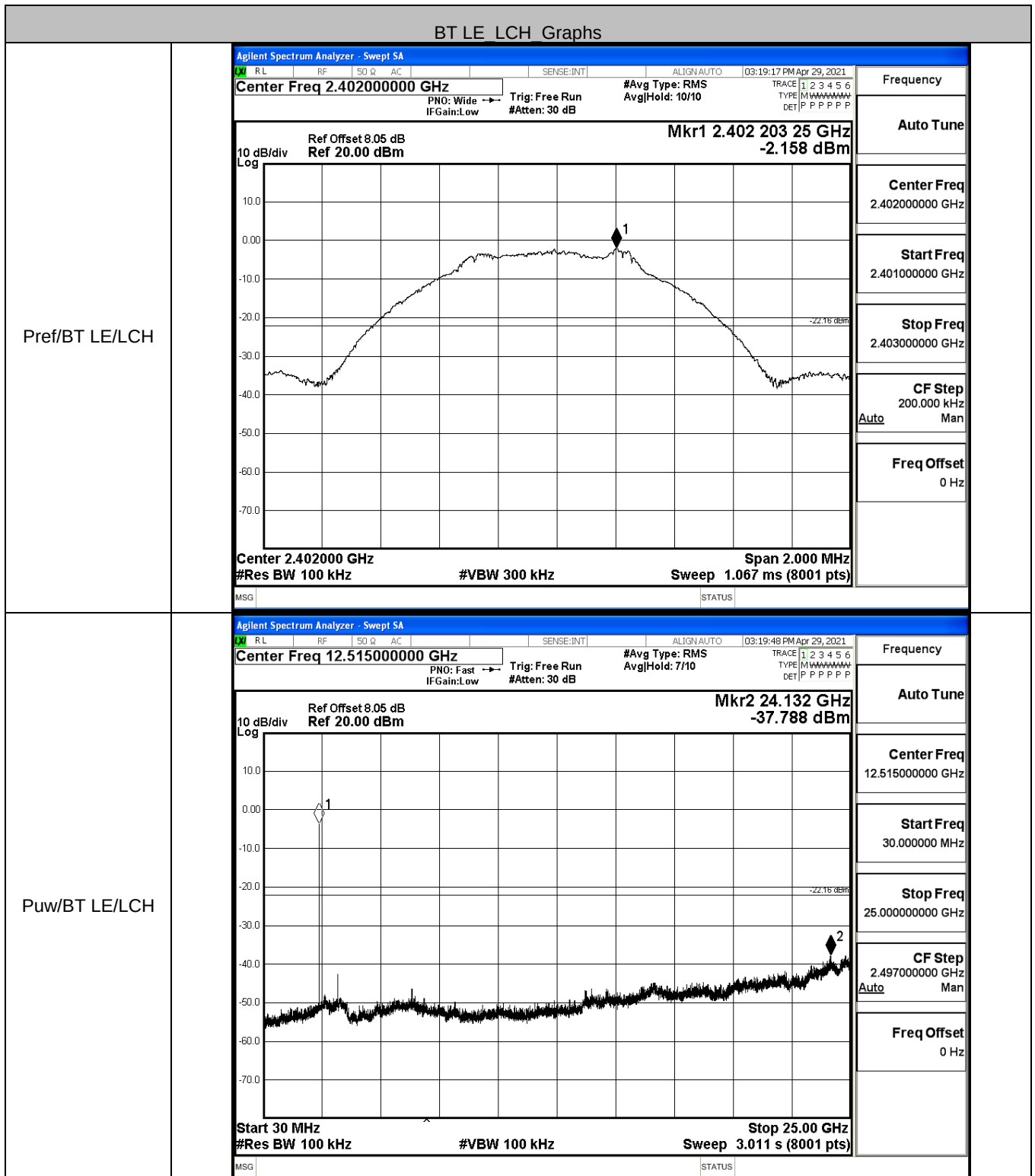
Test Graphs			
LCH		Agilent Spectrum Analyzer - Occupied BW RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 03:18:28 PM Apr 29, 2021 Center Freq 2.402000000 GHz Center Freq: 2.402000000 GHz Radio Std: None Trig: Free Run AvgHld: >1/1 #IFGain: Low #Atten: 30 dB Radio Device: BTS Ref Offset 8.05 dB Mkr1 2.401964 GHz Ref 20.00 dBm -1.8070 dBm Center 2.402 GHz Span 3 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 1.067 ms Occupied Bandwidth Total Power 4.62 dBm 1.0296 MHz Transmit Freq Error -24.479 kHz OBW Power 99.00 % x dB Bandwidth 646.6 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
		Agilent Spectrum Analyzer - Occupied BW RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 03:20:55 PM Apr 29, 2021 Center Freq 2.440000000 GHz Center Freq: 2.440000000 GHz Radio Std: None Trig: Free Run AvgHld: 1/1 #IFGain: Low #Atten: 30 dB Radio Device: BTS Ref Offset 8.05 dB Mkr1 2.4402261 GHz Ref 20.00 dBm -2.0632 dBm Center 2.44 GHz Span 3 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 1.067 ms Occupied Bandwidth Total Power 4.59 dBm 1.0287 MHz Transmit Freq Error -27.030 kHz OBW Power 99.00 % x dB Bandwidth 650.6 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
MCH			

HCH



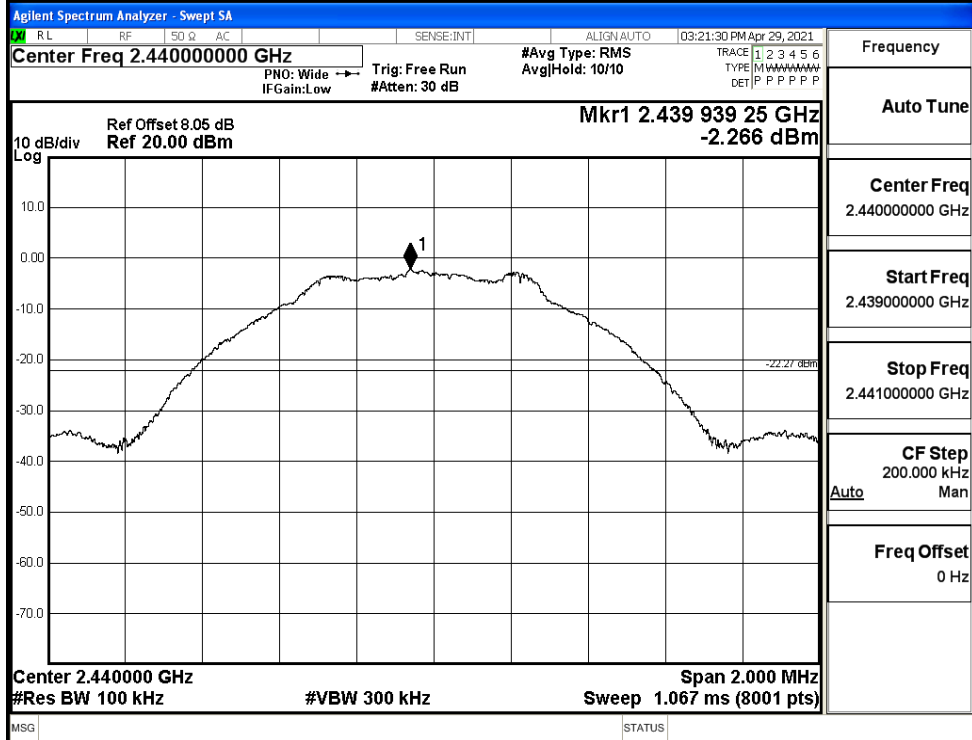
A.5 RF Conducted Spurious Emissions

Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	-2.158	-37.788	-22.158	PASS
BT LE	MCH	-2.266	-37.463	-22.266	PASS
BT LE	HCH	-2.432	-37.532	-22.432	PASS

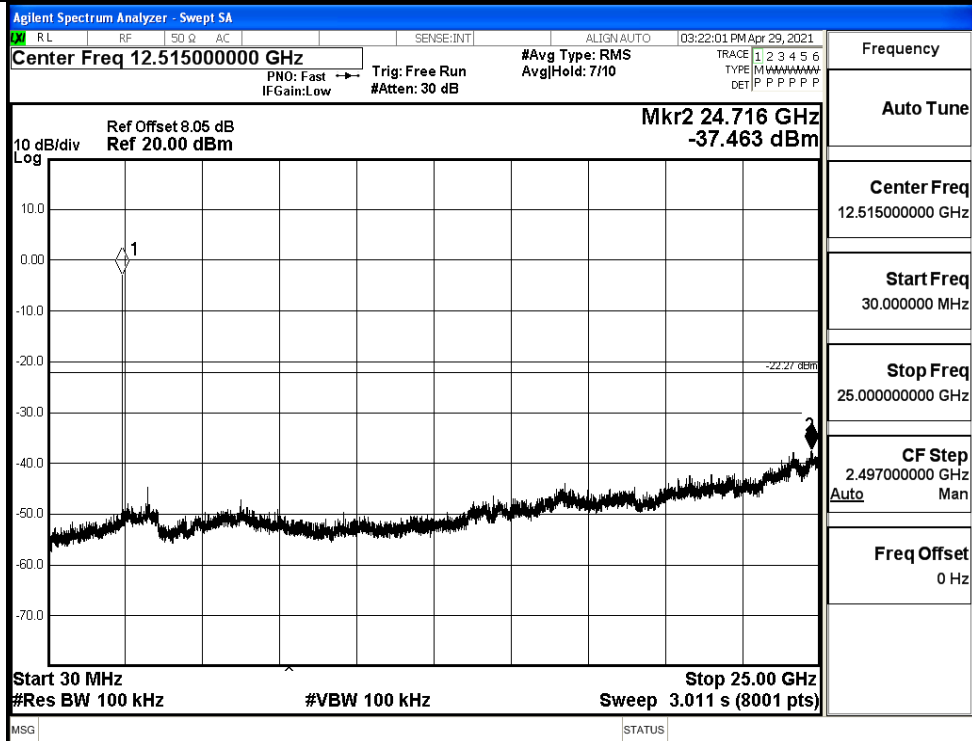


BT LE MCH Graphs

Pref/BT LE/MCH

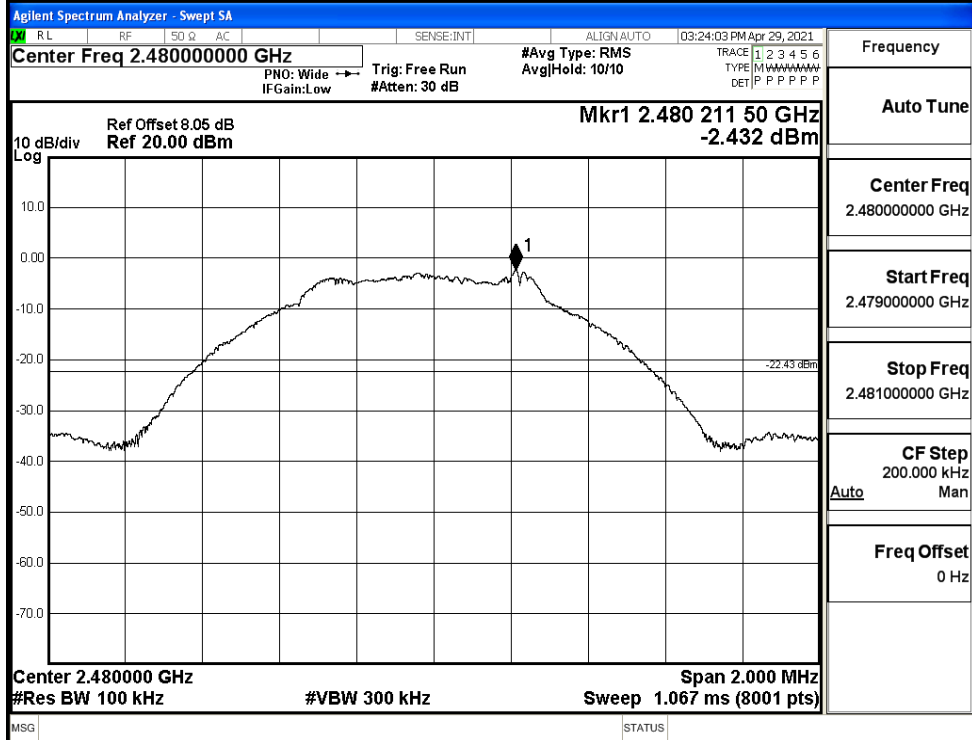


Puw/BT LE/MCH

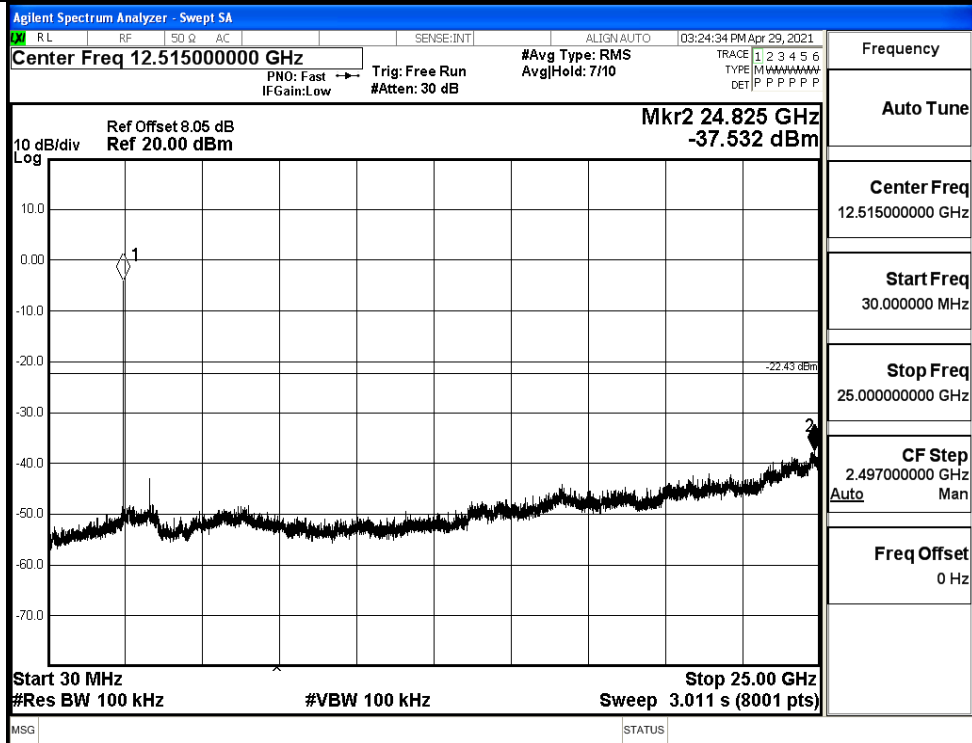


BT LE HCH Graphs

Pref/BT LE/HCH

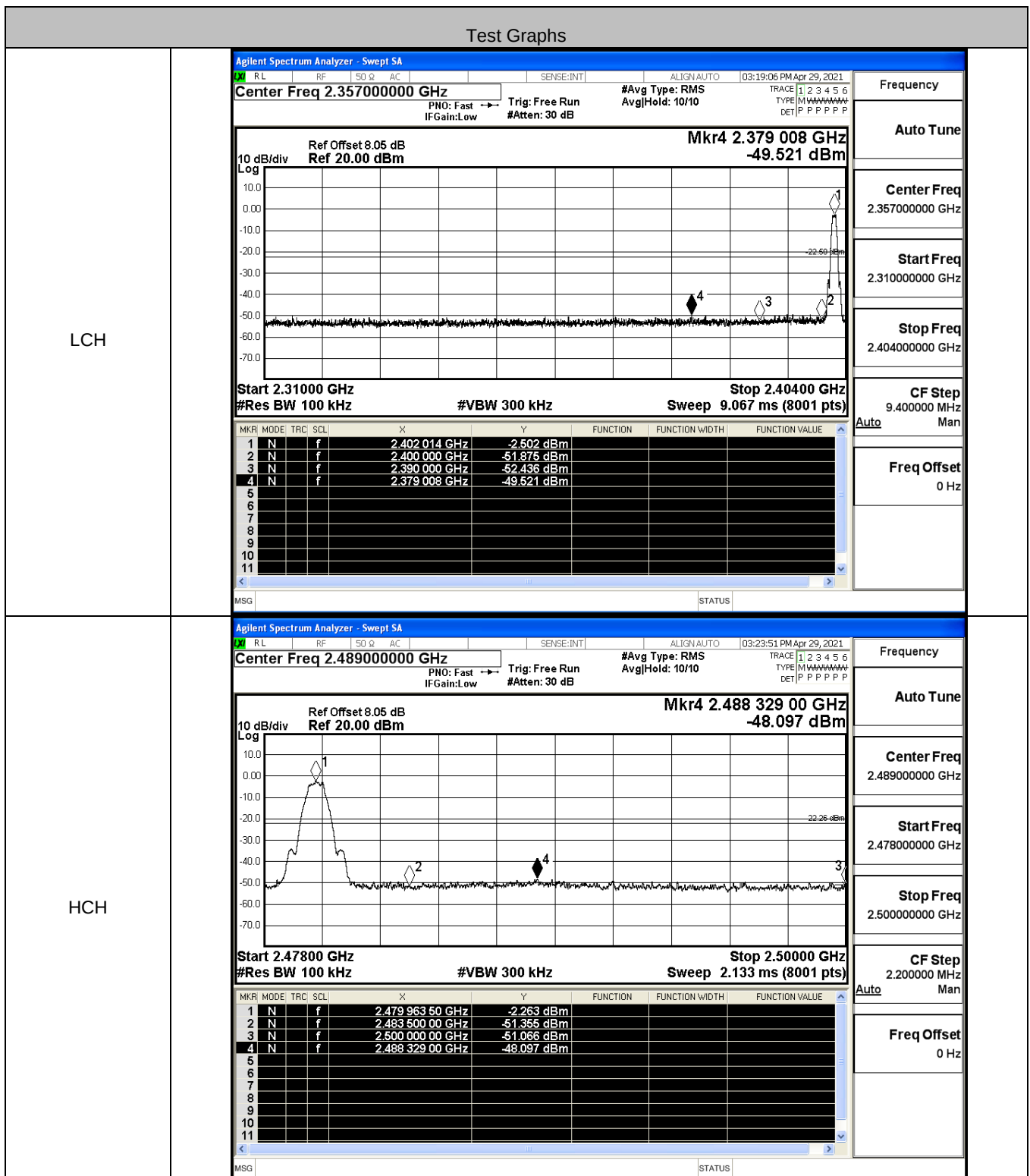


Puw/BT LE/HCH



A.6 Band-edge for RF Conducted Emissions

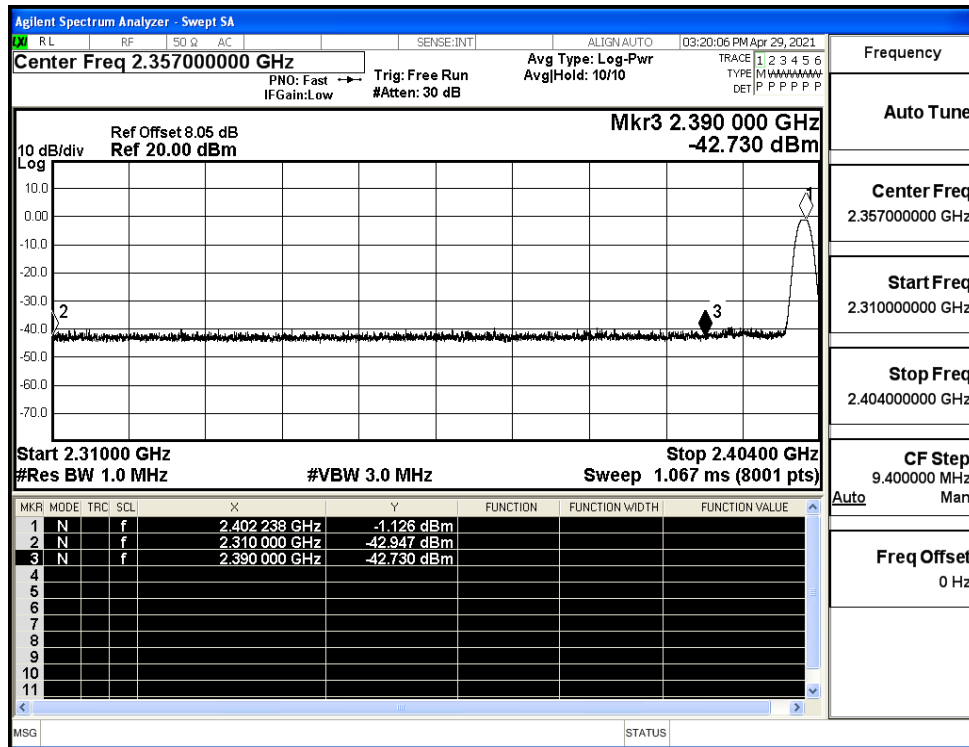
Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	-2.502	-49.521	-22.5	PASS
BT LE	HCH	-2.263	-48.097	-22.26	PASS



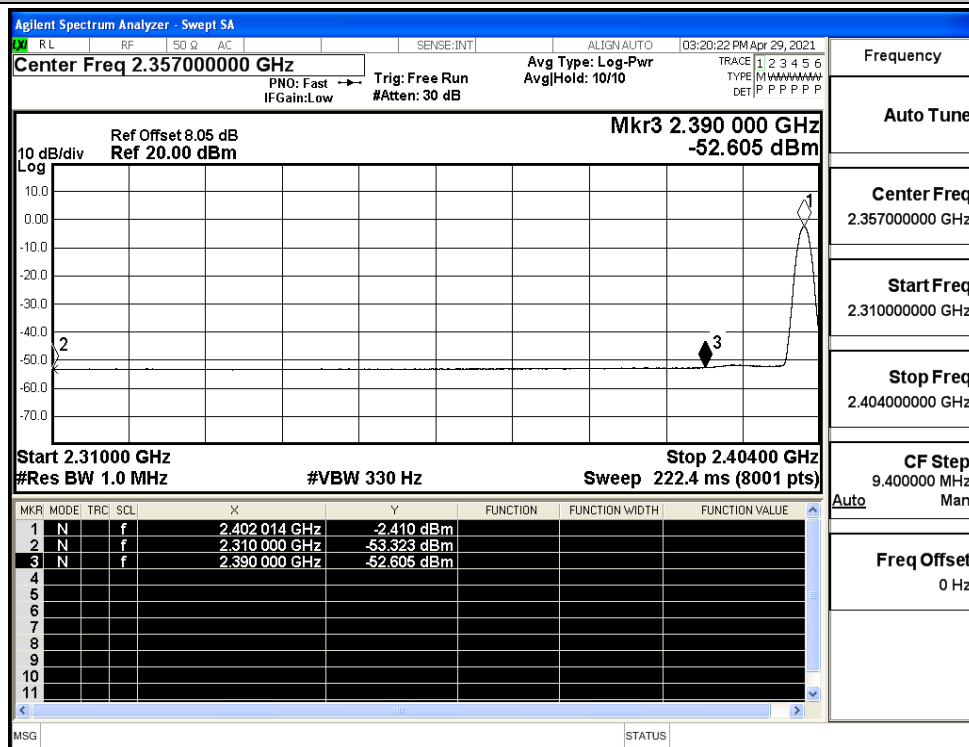
A.7 Restrict-band band-edge measurements

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	-42.95	2.0	0	52.31	PEAK	74	PASS
		Ant1	2310.0	-53.32	2.0	0	41.93	AV	54	PASS
		Ant1	2390.0	-42.73	2.0	0	52.53	PEAK	74	PASS
		Ant1	2390.0	-52.61	2.0	0	42.65	AV	54	PASS
	2480	Ant1	2483.5	-41.75	2.0	0	53.51	PEAK	74	PASS
		Ant1	2483.5	-51.48	2.0	0	43.77	AV	54	PASS
		Ant1	2500.0	-42.20	2.0	0	53.06	PEAK	74	PASS
		Ant1	2500.0	-52.13	2.0	0	43.13	AV	54	PASS

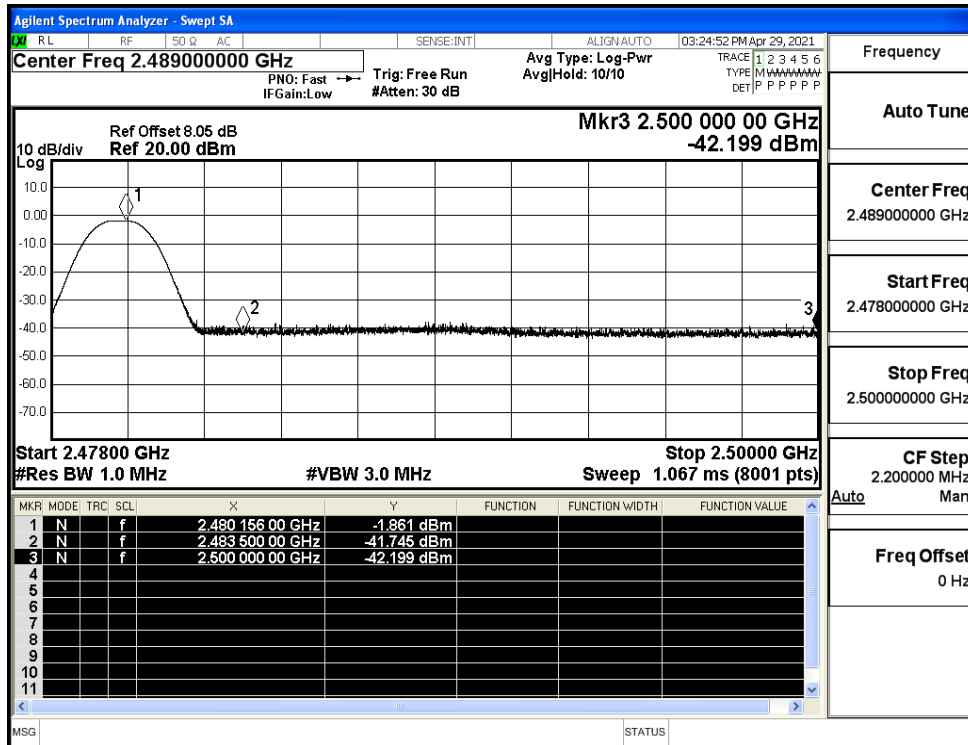
Restrict-band band-edge measurements_BT LE_2402_Ant1_PEAK



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

