

Appendix A

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

Product Name: Cabinet Lock

Trade Mark: Digilock

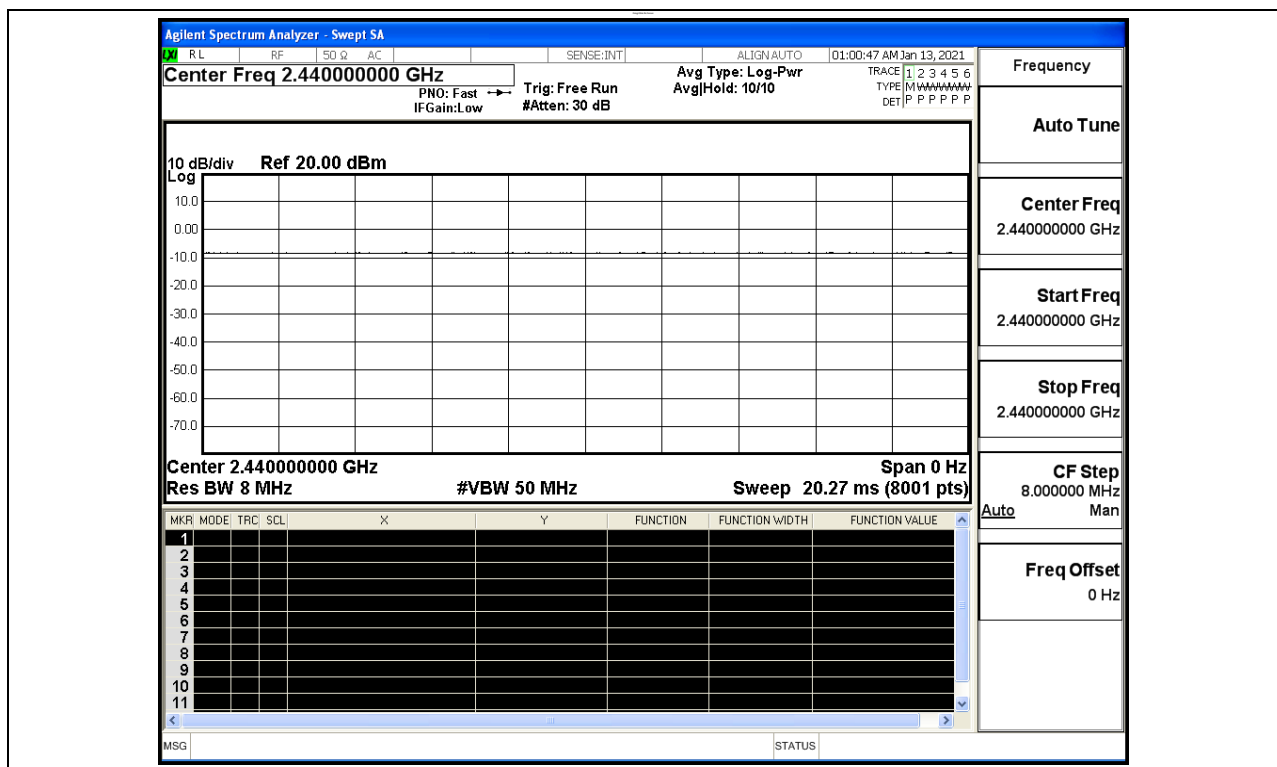
Test Model: D6ARN-XXN2

Environmental Conditions

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

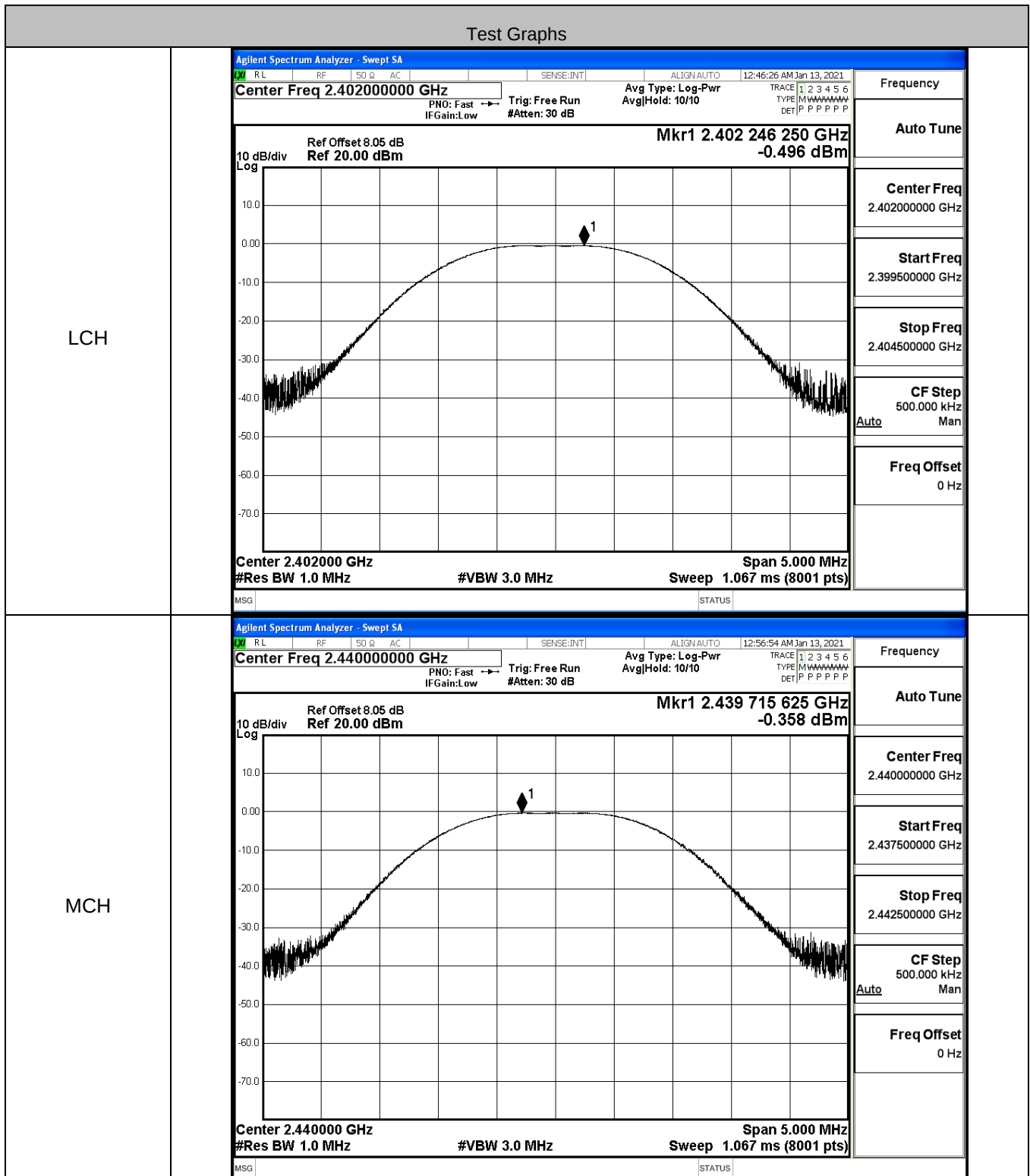
A.1 Duty Cycle

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



A.2 Maximum Conducted Peak Output Power

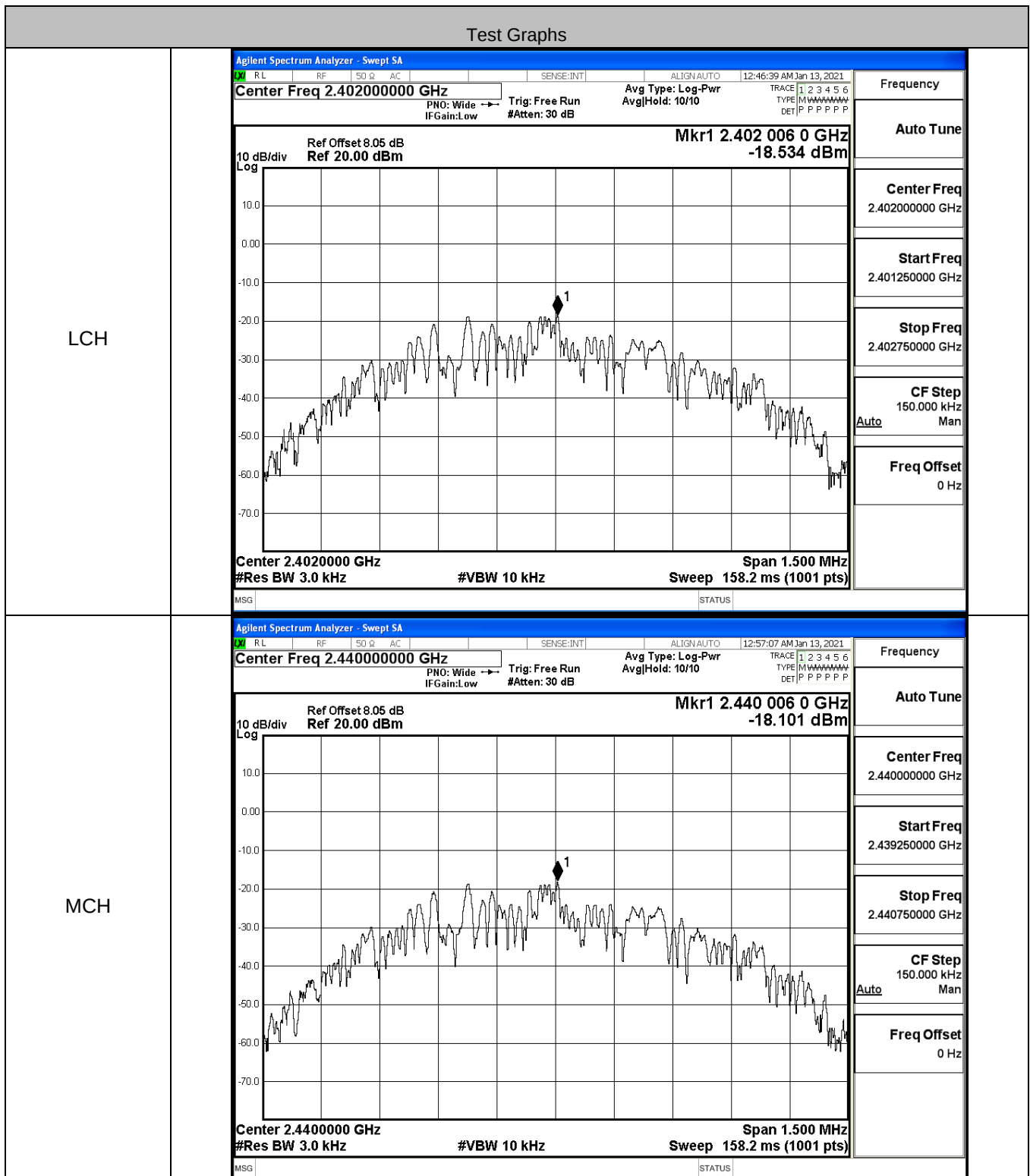
Mode	Channel	Conduct Peak Power[dBm]	Limit [dBm]	Verdict
BT LE	LCH	-0.496	30	PASS
BT LE	MCH	-0.358	30	PASS
BT LE	HCH	-0.391	30	PASS



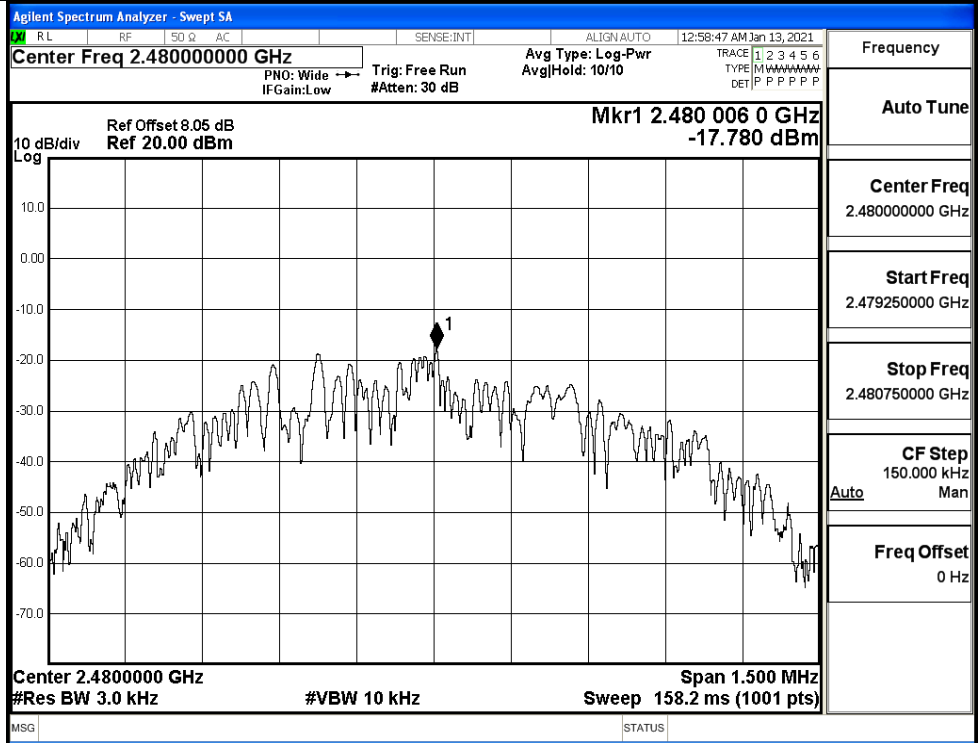


A.3 Maximum Power Spectral Density

Mode	Channel	PSD [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
BT LE	LCH	-18.534	8	PASS
BT LE	MCH	-18.101	8	PASS
BT LE	HCH	-17.780	8	PASS



HCH

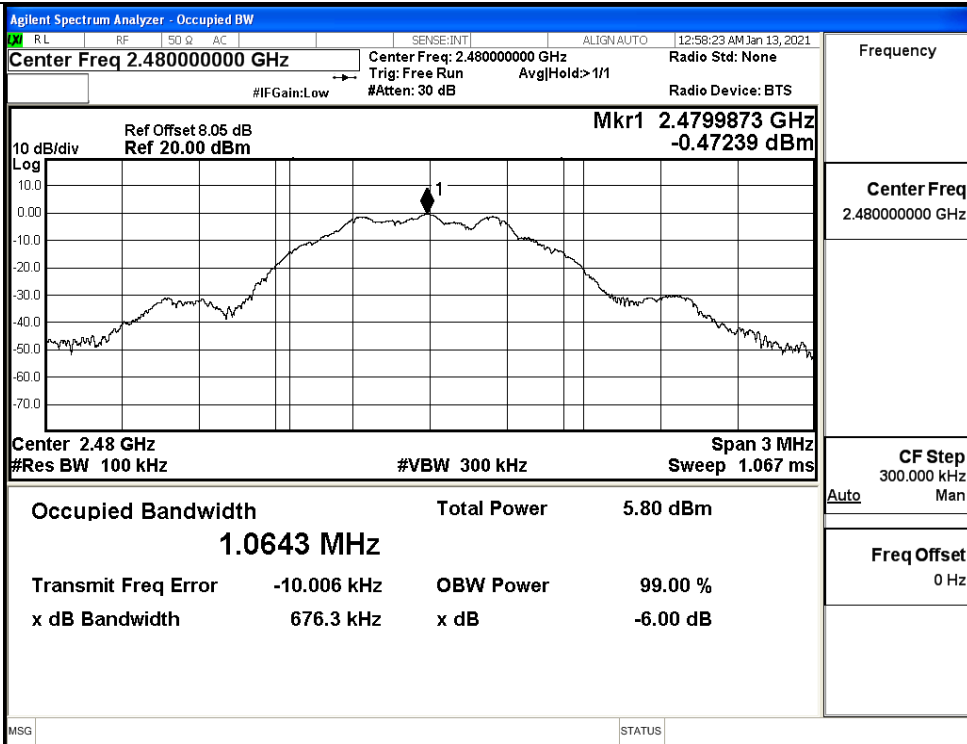


A.4 6dB Bandwidth

Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
BT LE	LCH	0.6889	≥ 0.5	PASS
BT LE	MCH	0.6893	≥ 0.5	PASS
BT LE	HCH	0.6763	≥ 0.5	PASS

Test Graphs			
LCH		Agilent Spectrum Analyzer - Occupied BW RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 12:46:14 AM Jan 13, 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 2.4019786 GHz Ref 20.00 dBm -0.57292 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 5.57 dBm 1.0677 MHz Transmit Freq Error -8.011 kHz OBW Power 99.00 % x dB Bandwidth 688.9 kHz x dB -6.00 dB MSG STATUS	Frequency Center Freq 2.402000000 GHz CF Step 300.000 kHz Man Freq Offset 0 Hz
		Agilent Spectrum Analyzer - Occupied BW RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 12:56:43 AM Jan 13, 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 2.4399805 GHz Ref 20.00 dBm -0.45079 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 5.85 dBm 1.0601 MHz Transmit Freq Error -10.817 kHz OBW Power 99.00 % x dB Bandwidth 689.3 kHz x dB -6.00 dB MSG STATUS	Frequency Center Freq 2.440000000 GHz CF Step 300.000 kHz Man Freq Offset 0 Hz
MCH			

HCH

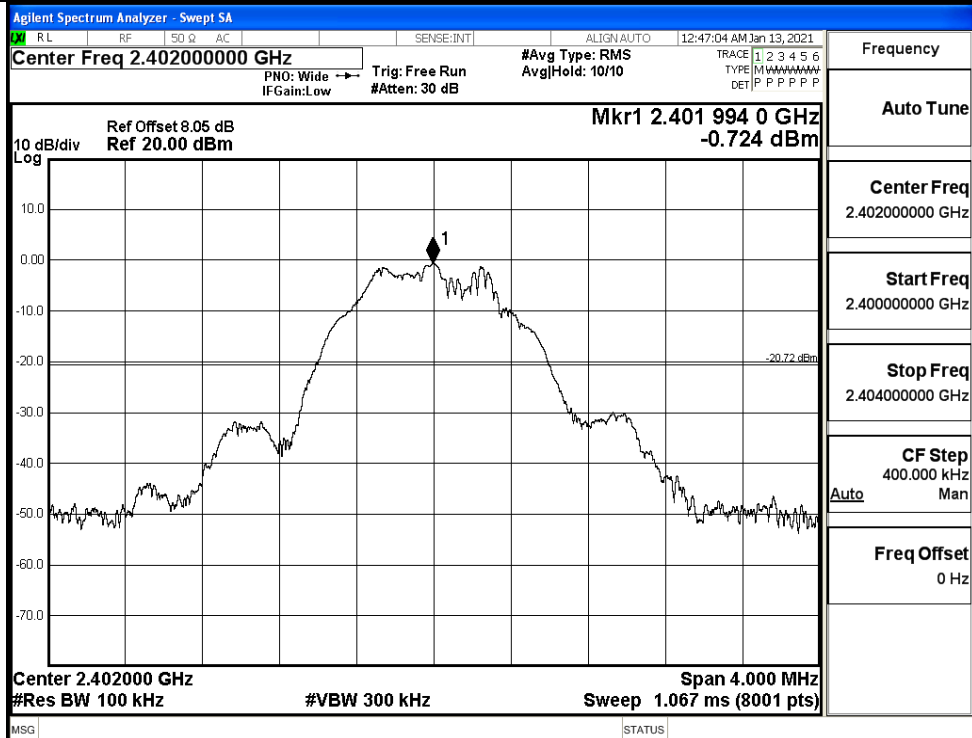


A.5 RF Conducted Spurious Emissions

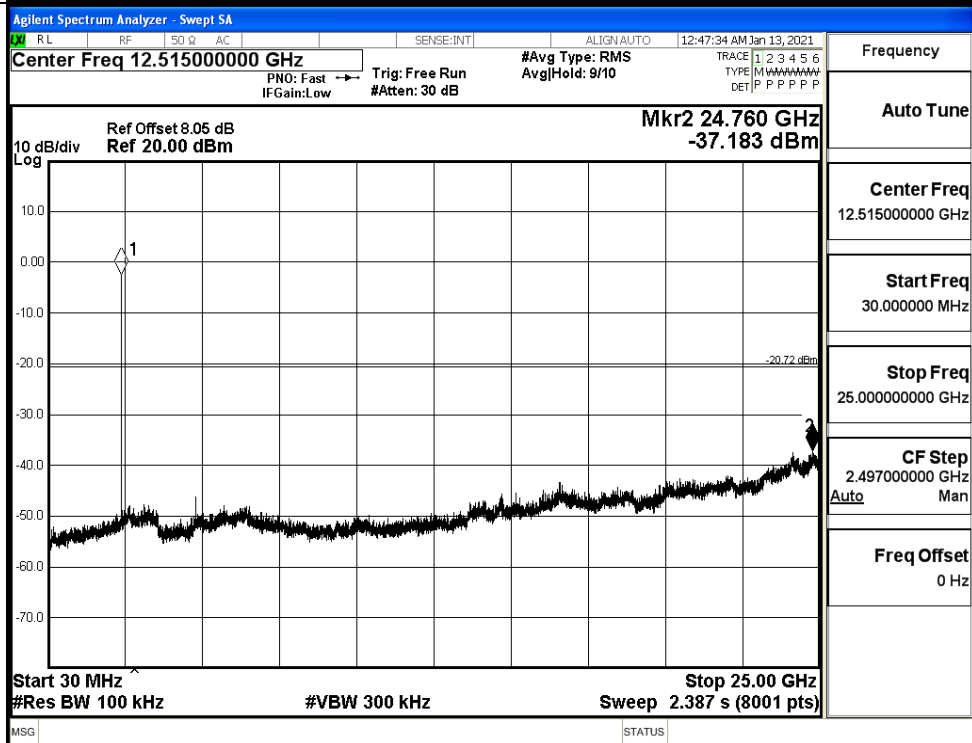
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	-0.724	-37.183	-20.724	PASS
BT LE	MCH	-0.433	-36.756	-20.433	PASS
BT LE	HCH	-0.466	-37.159	-20.466	PASS

BT LE LCH Graphs

Pref/BT LE/LCH

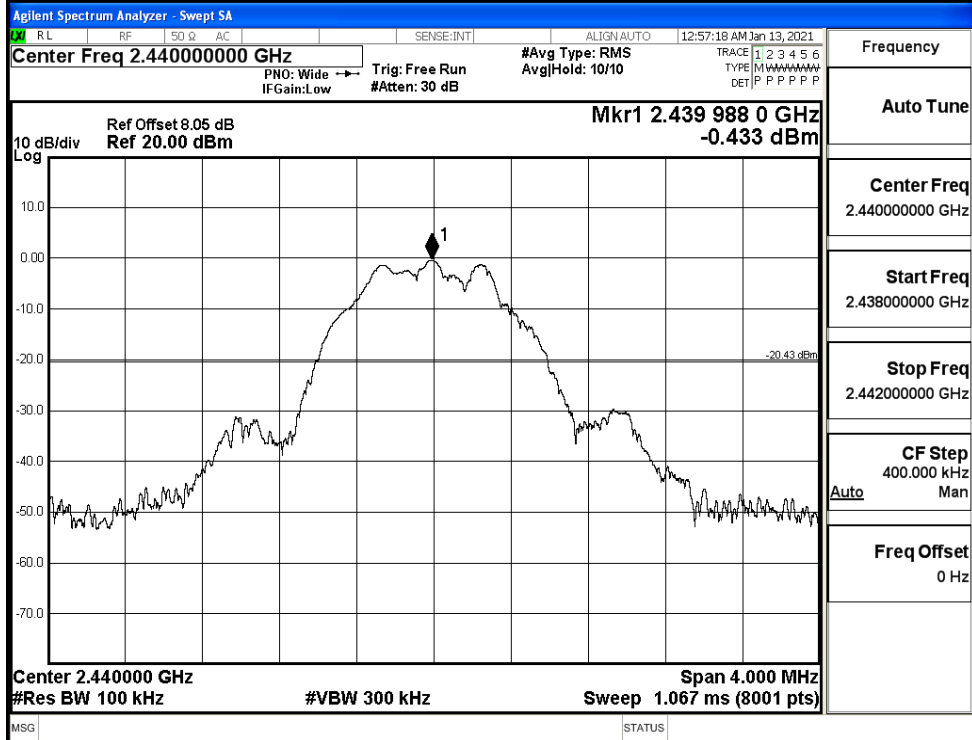


Puw/BT LE/LCH

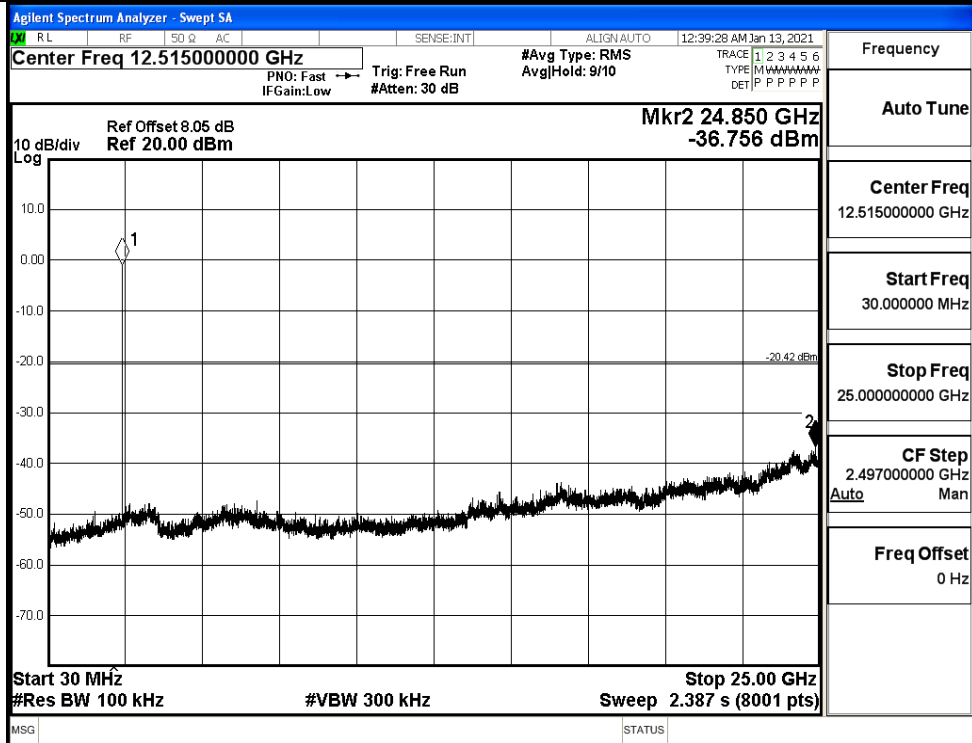


BT LE MCH Graphs

Pref/BT LE/MCH

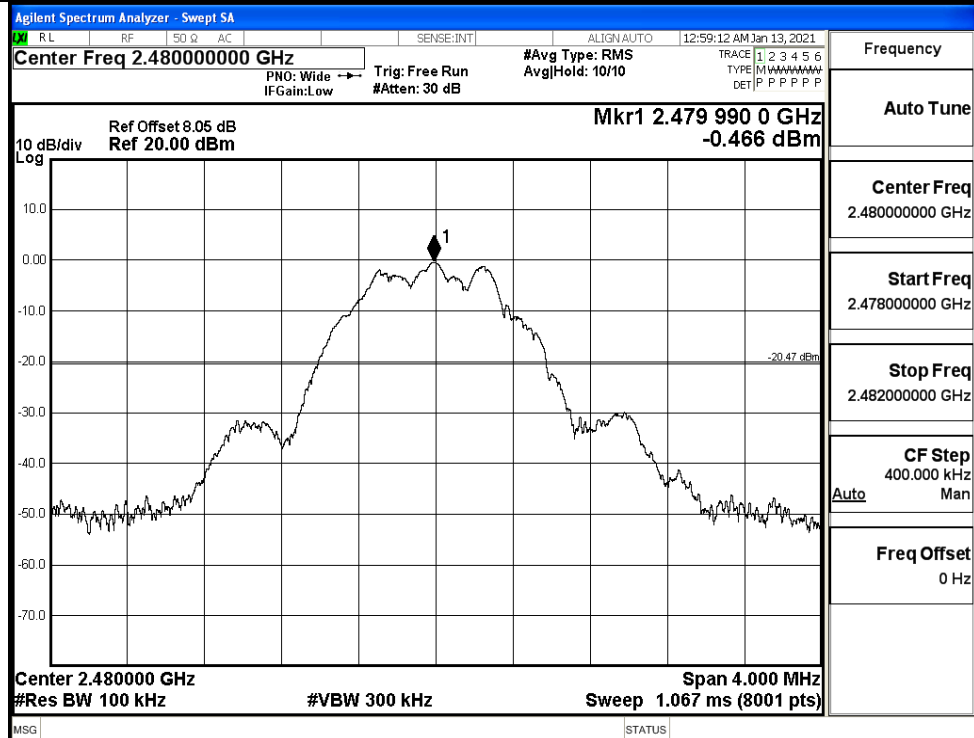


Puw/BT LE/MCH

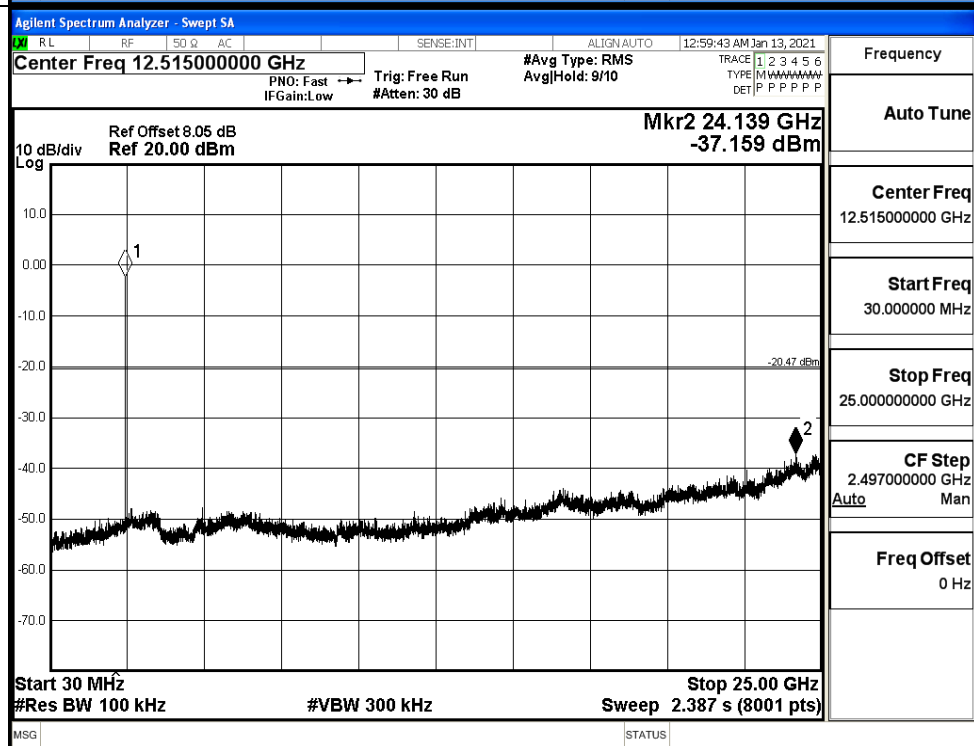


BT LE HCH Graphs

Pref/BT LE/HCH

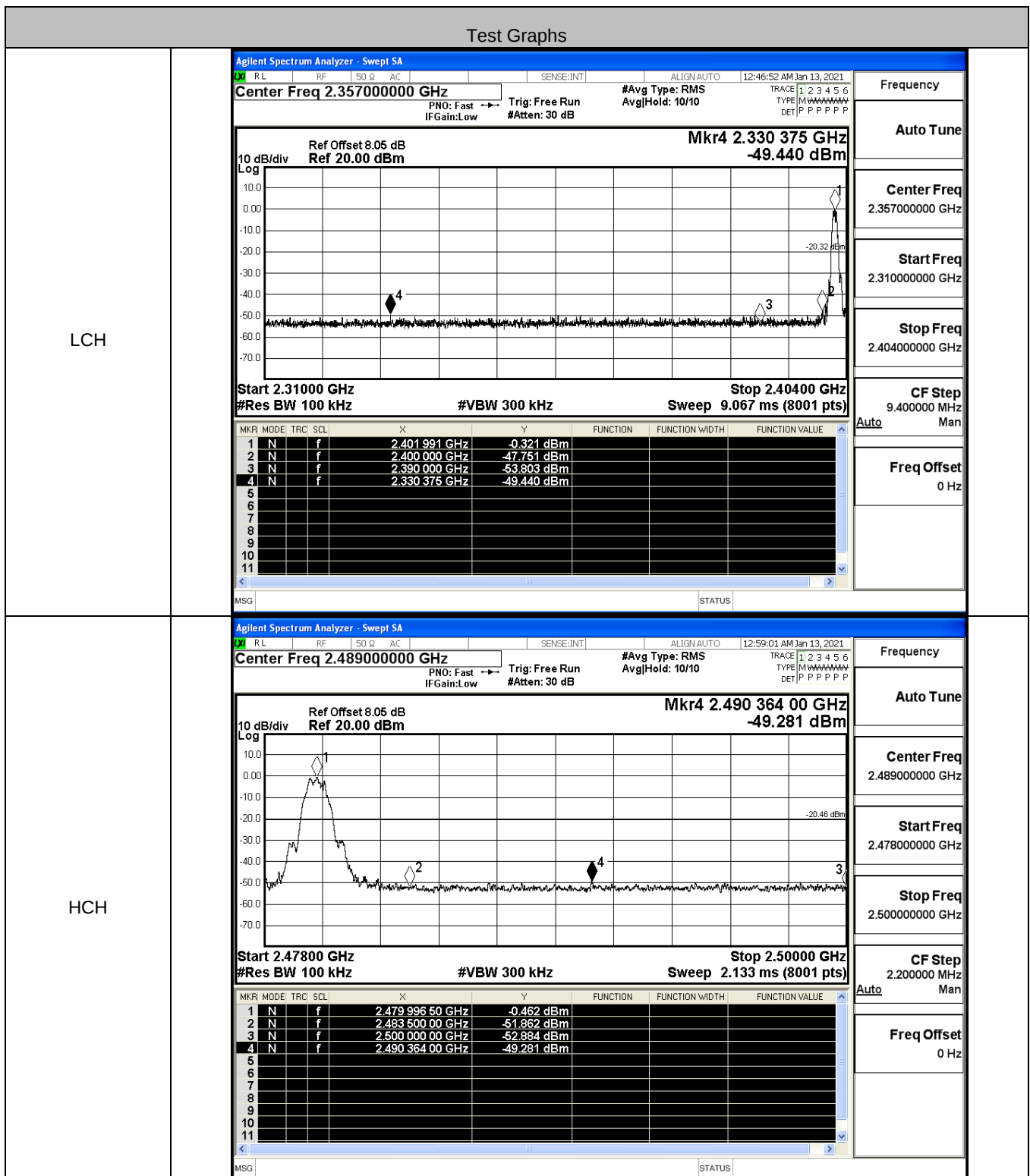


Puw/BT LE/HCH



A.6 Band-edge for RF Conducted Emissions

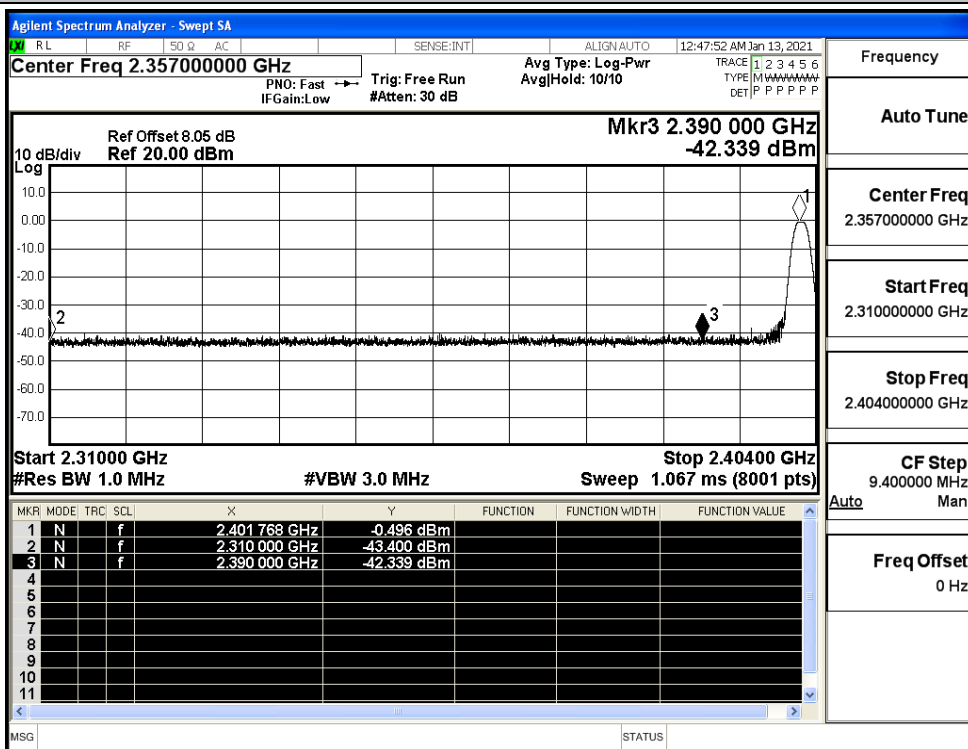
Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	-0.321	-49.440	-20.32	PASS
BT LE	HCH	-0.462	-49.281	-20.46	PASS



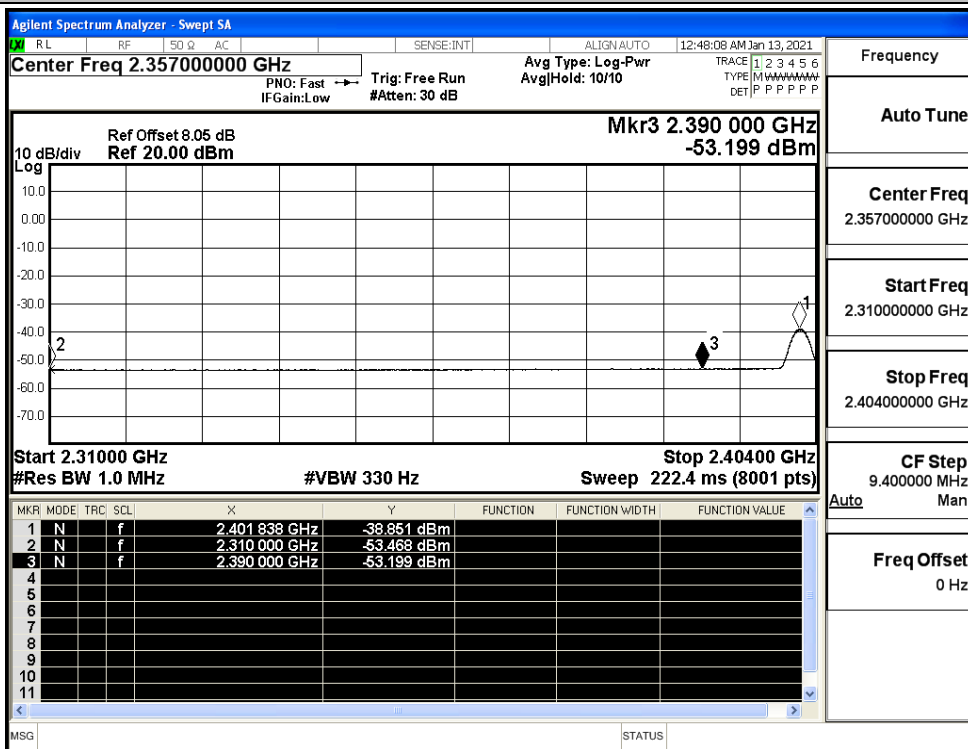
A.7 Restrict-band band-edge measurements

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	-43.40	2.0	0	51.86	PEAK	74	PASS
		Ant1	2310.0	-53.47	2.0	0	41.79	AV	54	PASS
		Ant1	2390.0	-42.34	2.0	0	52.92	PEAK	74	PASS
		Ant1	2390.0	-53.20	2.0	0	42.06	AV	54	PASS
	2480	Ant1	2483.5	-42.26	2.0	0	52.99	PEAK	74	PASS
		Ant1	2483.5	-52.75	2.0	0	42.50	AV	54	PASS
		Ant1	2500.0	-41.91	2.0	0	53.35	PEAK	74	PASS
		Ant1	2500.0	-52.54	2.0	0	42.72	AV	54	PASS

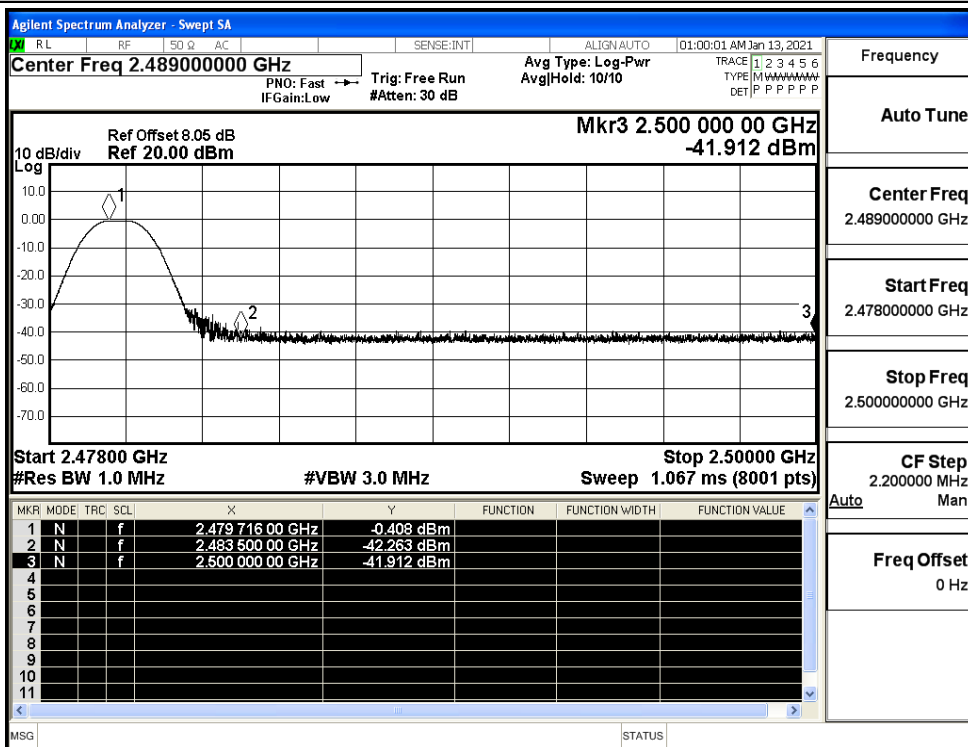
Restrict-band band-edge measurements_BT LE_2402_Ant1_PEAK



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

