

Appendix B

RF Test Data for BT V5.0(LE) (Conducted Measurement)

Product Name: Remote control

Trade Mark: /

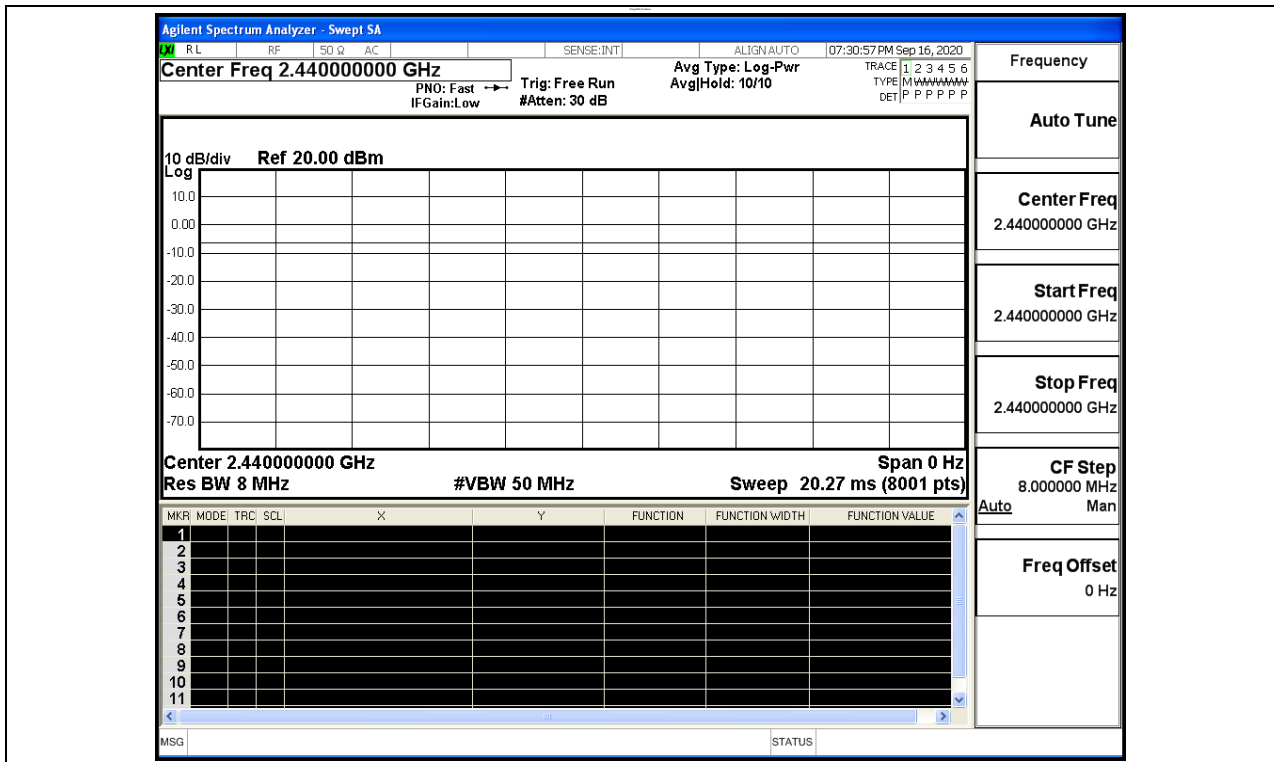
Test Model: NeoPix Easy 2+

Environmental Conditions

Temperature:	23.5 ° C
Relative Humidity:	54.2 %
ATM Pressure:	100.0 kPa
Test Engineer:	Jay Li
Supervised by:	Tom.Liu

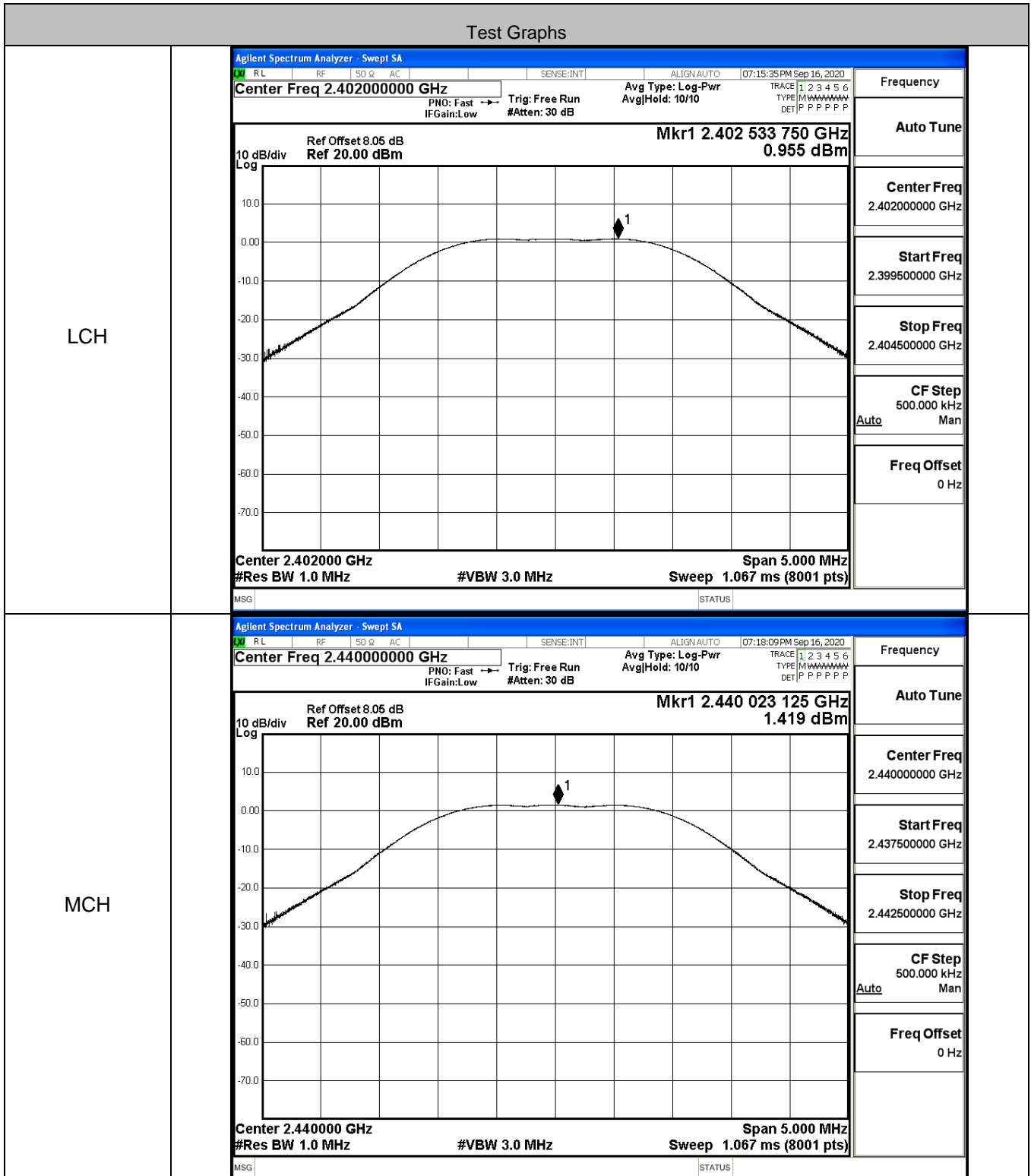
A.1 Duty Cycle

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

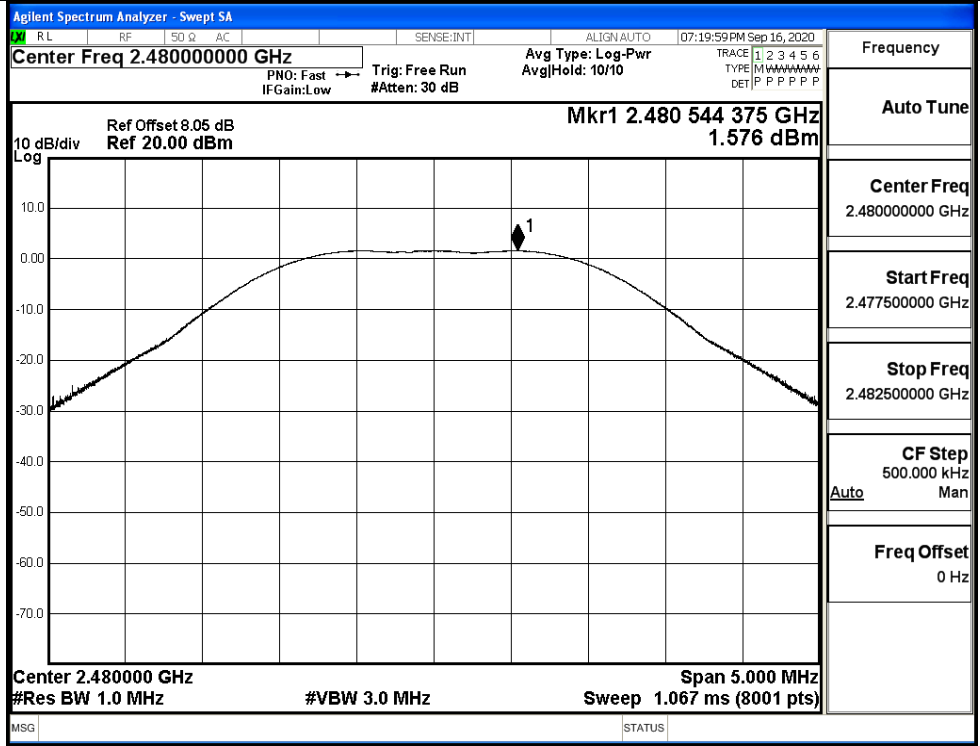


A.2 Maximum Conducted Peak Output Power

Mode	Channel	Conduct Peak Power[dBm]	Limit [dBm]	Verdict
BT LE	LCH	0.955	30	PASS
BT LE	MCH	1.419	30	PASS
BT LE	HCH	1.576	30	PASS

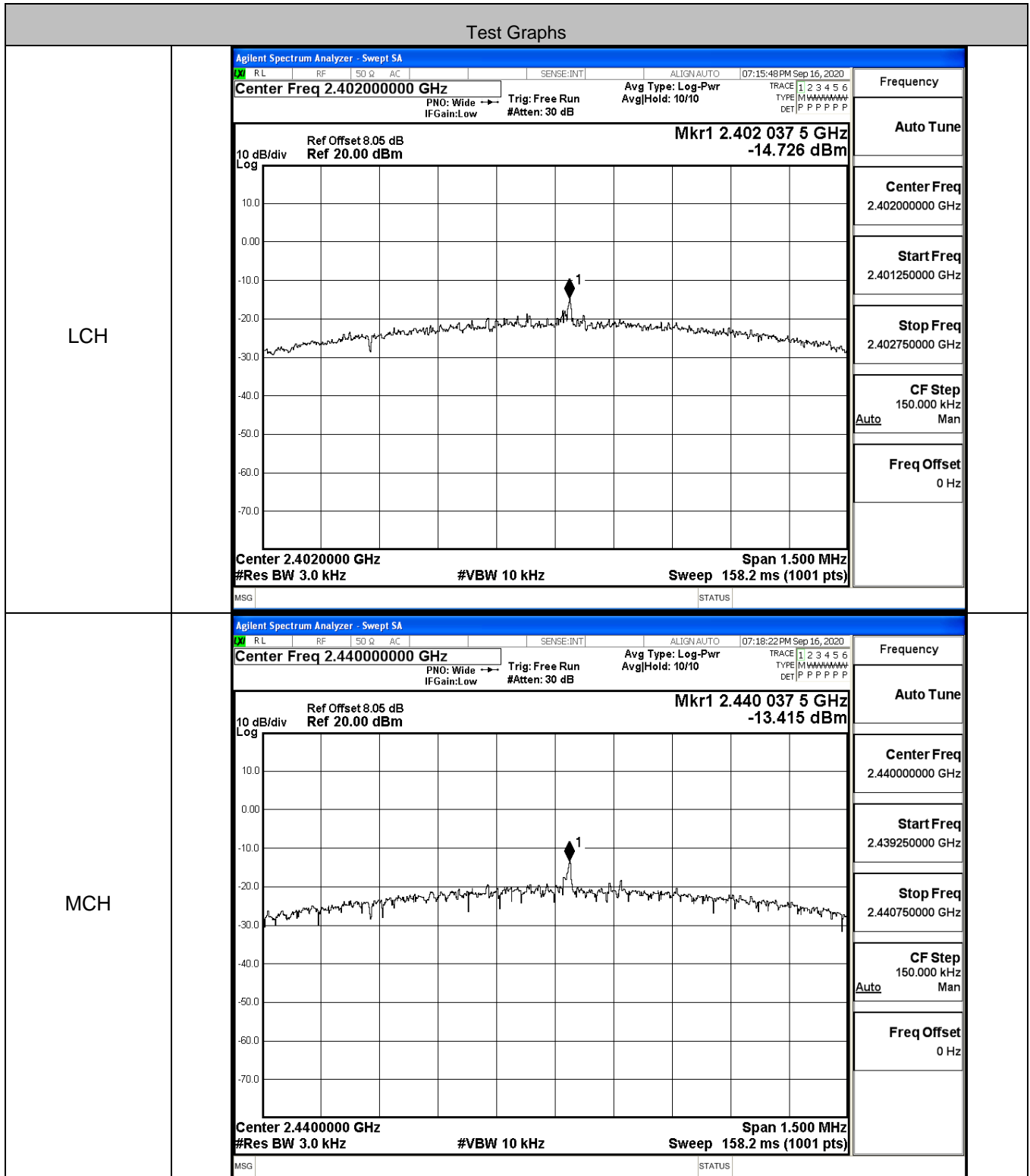


HCH



A.3 Maximum Power Spectral Density

Mode	Channel	PSD [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
BT LE	LCH	-14.726	8	PASS
BT LE	MCH	-13.415	8	PASS
BT LE	HCH	-13.375	8	PASS



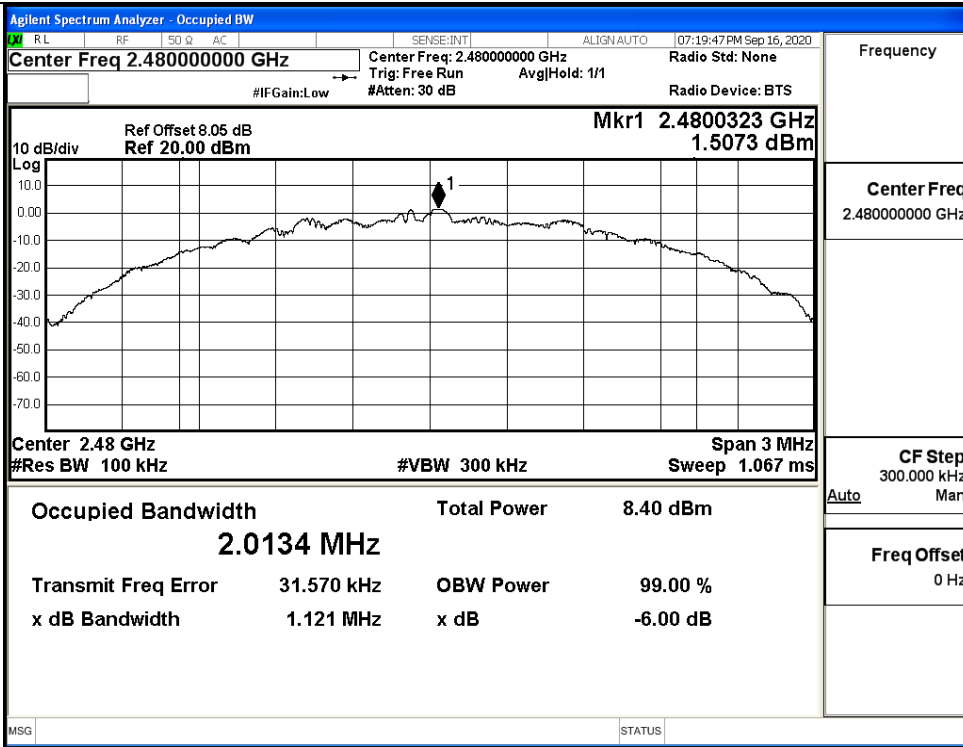
A.4 6dB Bandwidth

Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
BT LE	LCH	1.098	≥0.5	PASS
BT LE	MCH	1.098	≥0.5	PASS
BT LE	HCH	1.121	≥0.5	PASS

Test Graphs

LCH	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.40200000 GHz</p> <p>Center Freq: 2.40200000 GHz</p> <p>Mkr1 2.4020364 GHz</p> <p>0.83127 dBm</p> <p>Occupied Bandwidth 1.9958 MHz</p> <p>Total Power 7.89 dBm</p> <p>Transmit Freq Error 30.088 kHz</p> <p>OBW Power 99.00 %</p> <p>x dB Bandwidth 1.098 MHz</p> <p>x dB -6.00 dB</p>	<p>Frequency</p> <p>Center Freq 2.40200000 GHz</p> <p>CF Step 300.000 kHz</p> <p>Freq Offset 0 Hz</p>
	MCH	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.44000000 GHz</p> <p>Center Freq: 2.44000000 GHz</p> <p>Mkr1 2.44003 GHz</p> <p>1.2930 dBm</p> <p>Occupied Bandwidth 2.0024 MHz</p> <p>Total Power 8.41 dBm</p> <p>Transmit Freq Error 30.456 kHz</p> <p>OBW Power 99.00 %</p> <p>x dB Bandwidth 1.098 MHz</p> <p>x dB -6.00 dB</p>

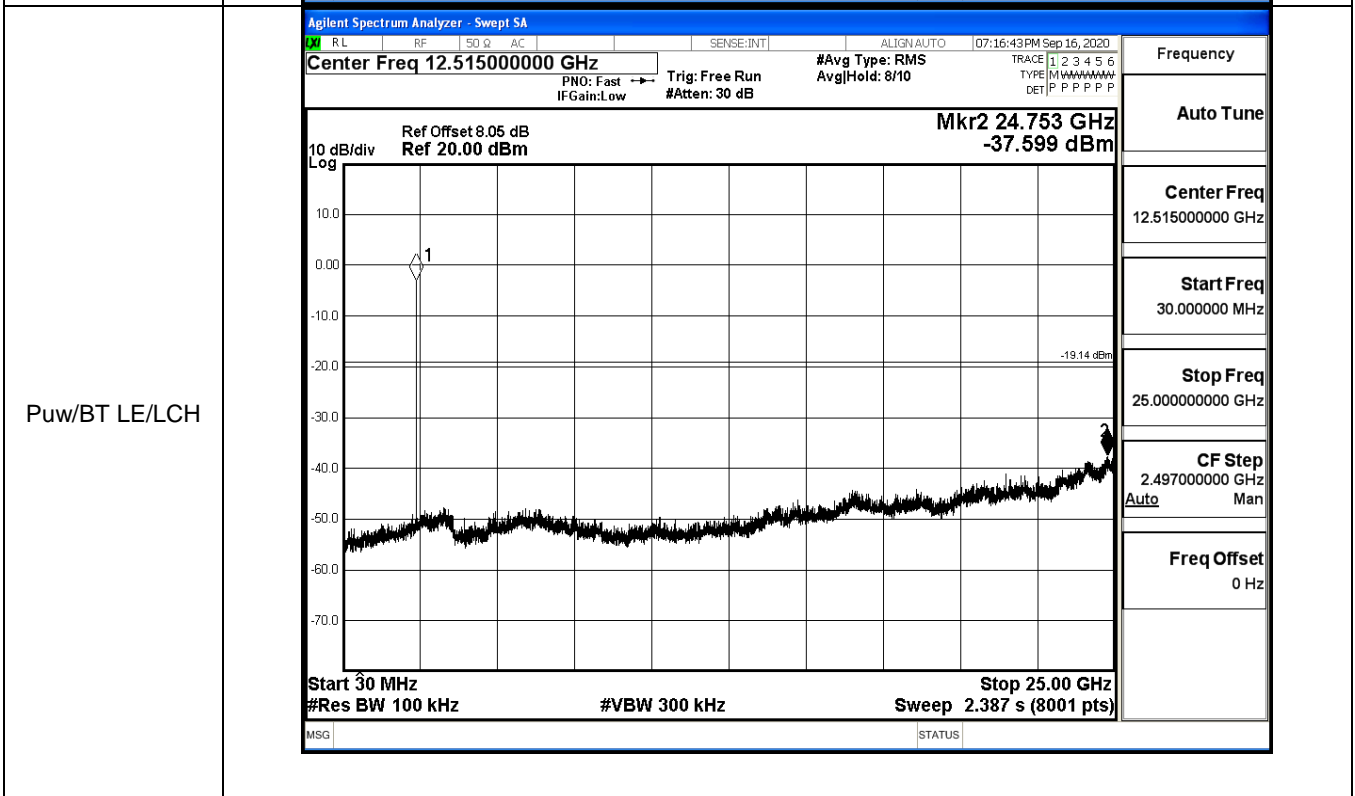
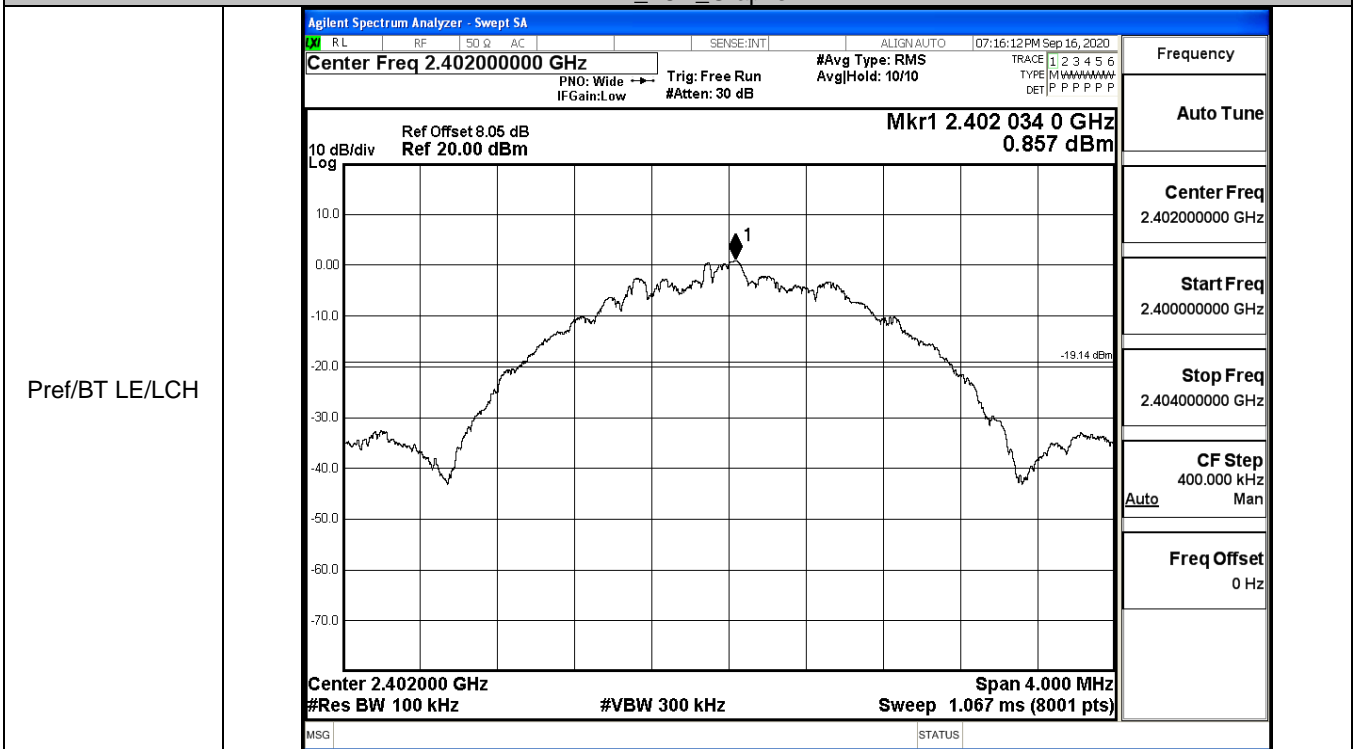
HCH



A.5 RF Conducted Spurious Emissions

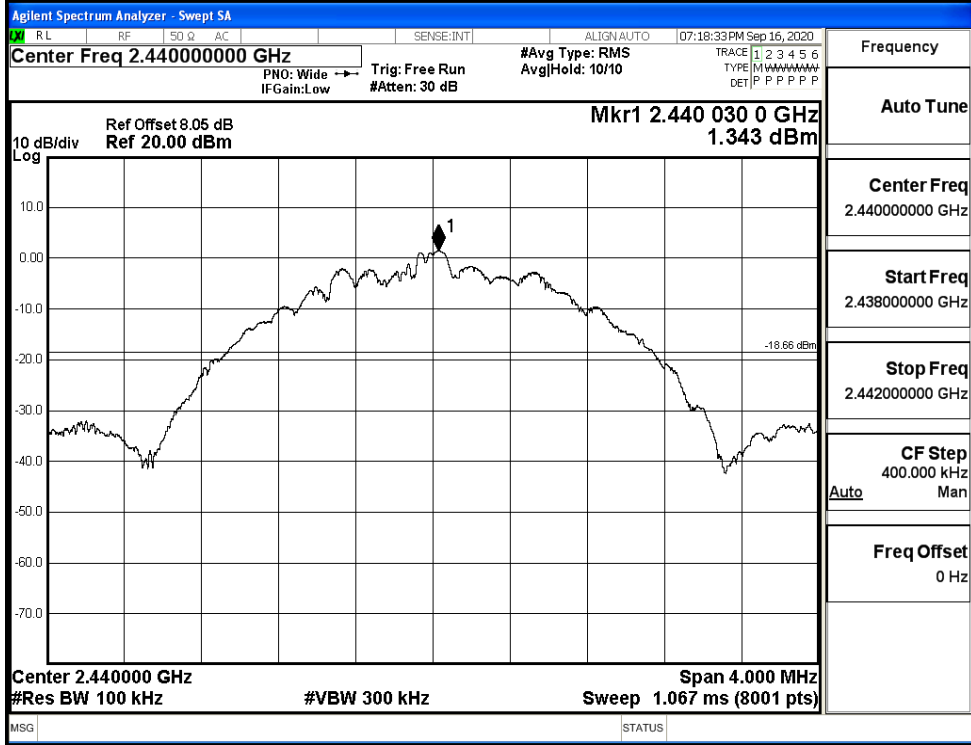
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	0.857	-37.599	-19.143	PASS
BT LE	MCH	1.343	-37.307	-18.657	PASS
BT LE	HCH	1.451	-37.807	-18.549	PASS

BT LE_LCH_Graphs

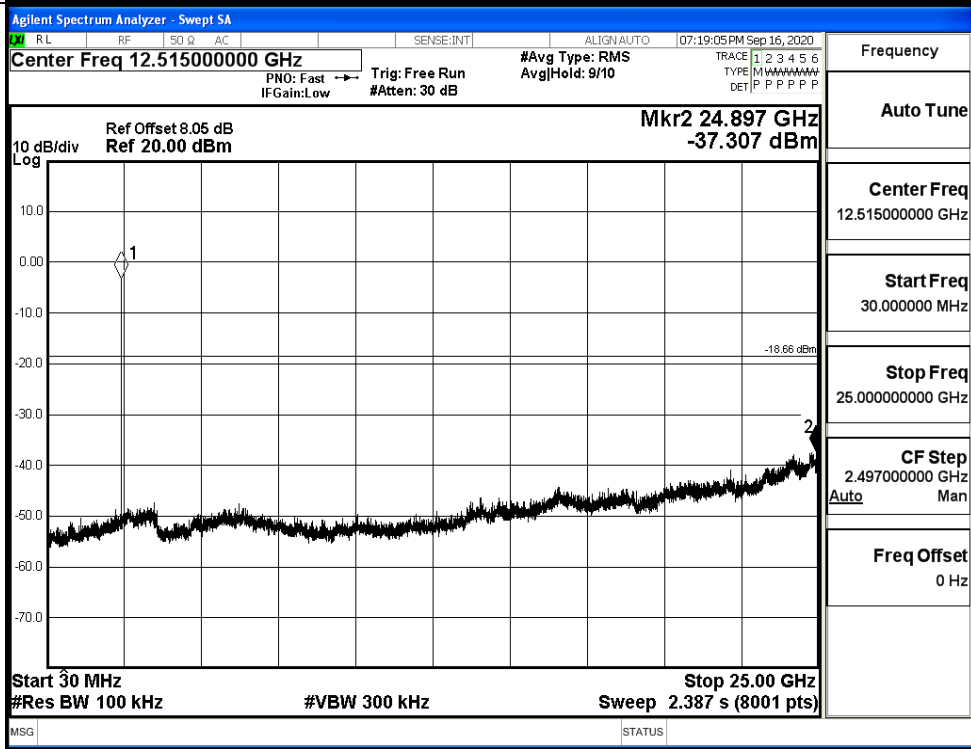


BT LE_MCH_Graphs

Pref/BT LE/MCH

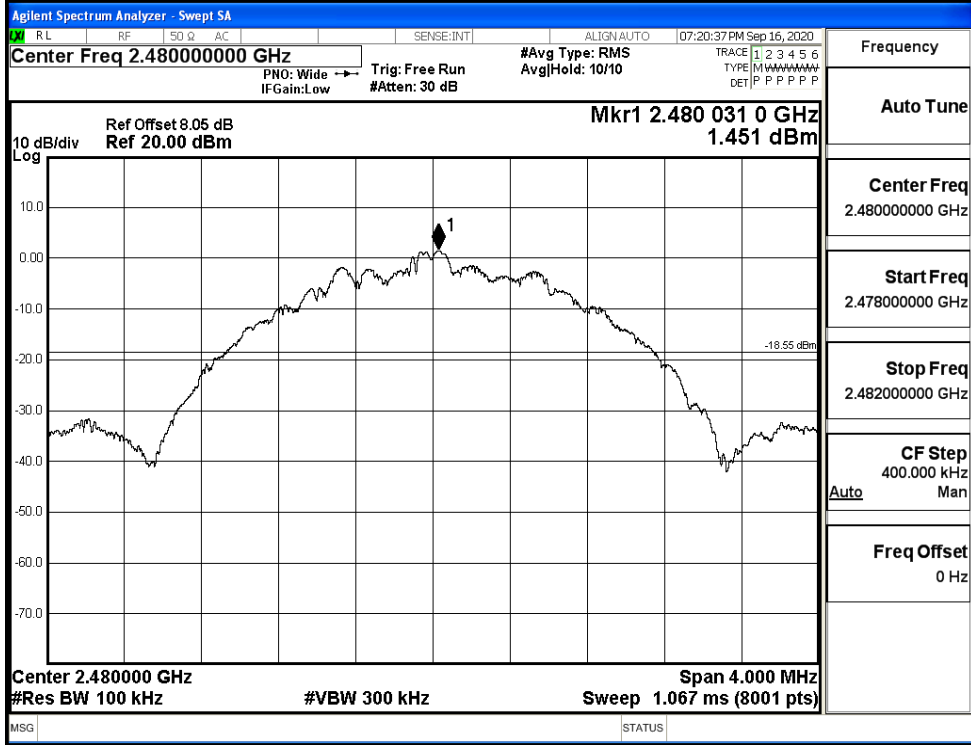


Puw/BT LE/MCH

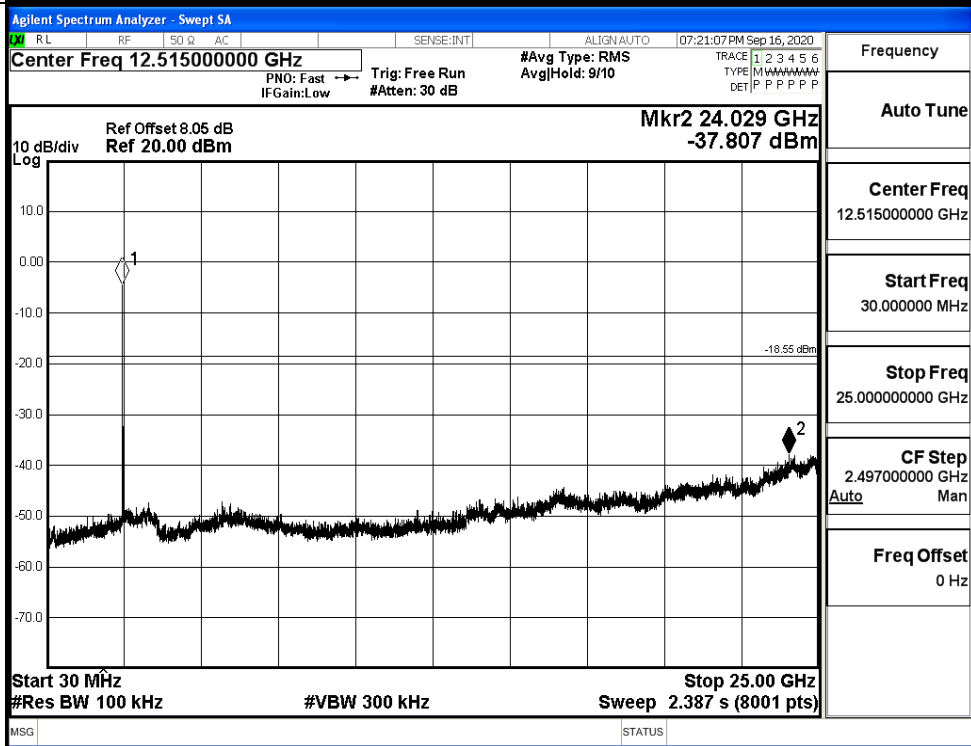


BT LE_HCH_Graphs

Pref/BT LE/HCH



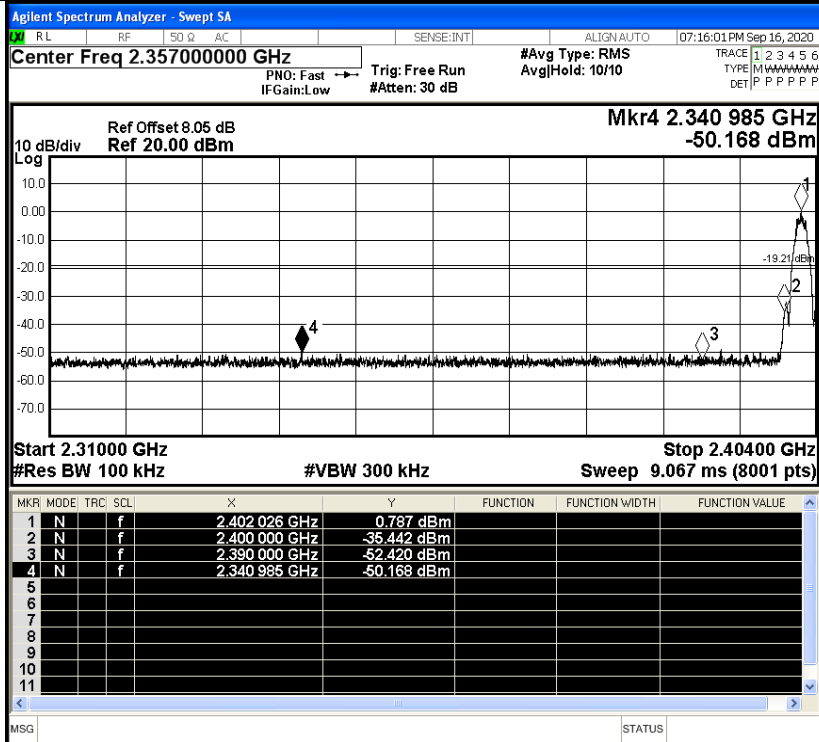
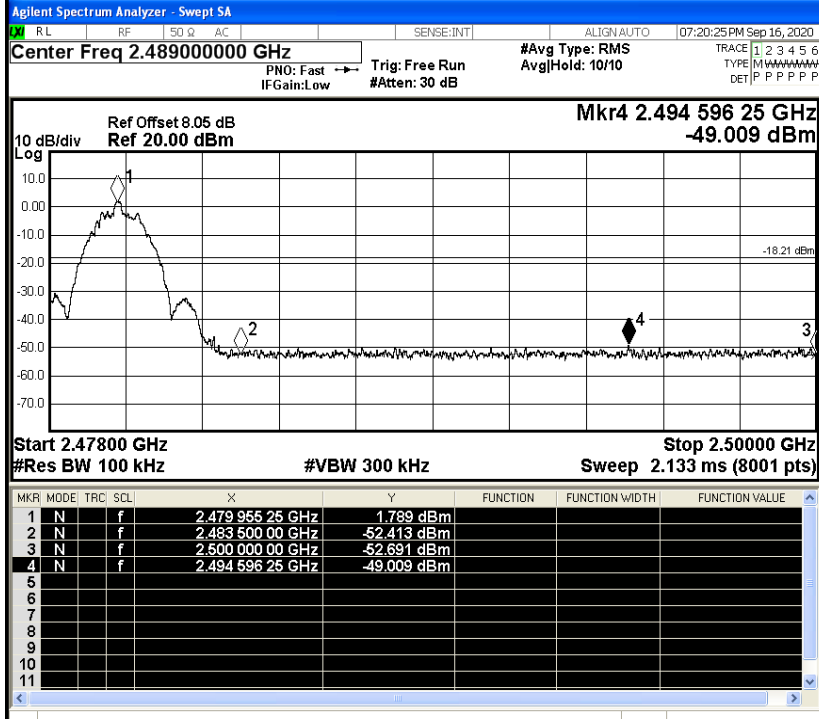
Puw/BT LE/HCH



A.6 Band-edge for RF Conducted Emissions

Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	0.787	-50.168	-19.21	PASS
BT LE	HCH	1.789	-49.009	-18.21	PASS

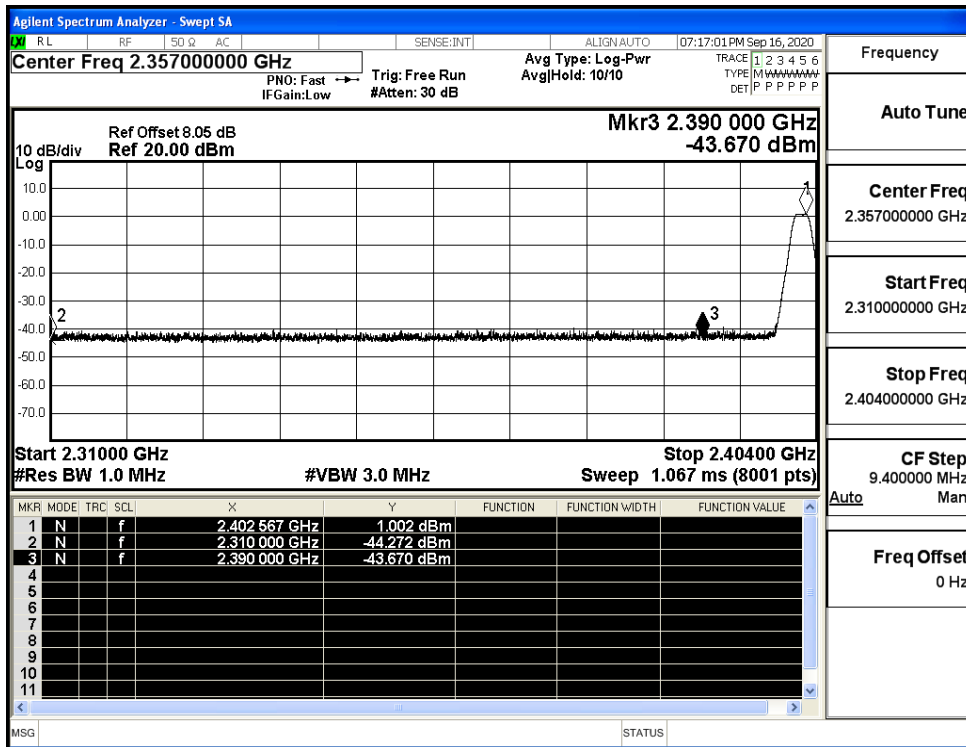
Test Graphs

LCH		<p>Frequency</p> <p>Auto Tune</p> <p>Center Freq 2.35700000 GHz</p> <p>Start Freq 2.31000000 GHz</p> <p>Stop Freq 2.40400000 GHz</p> <p>CF Step 9.400000 MHz</p> <p>Freq Offset 0 Hz</p>
HCH		<p>Frequency</p> <p>Auto Tune</p> <p>Center Freq 2.48900000 GHz</p> <p>Start Freq 2.47800000 GHz</p> <p>Stop Freq 2.50000000 GHz</p> <p>CF Step 2.200000 MHz</p> <p>Freq Offset 0 Hz</p>

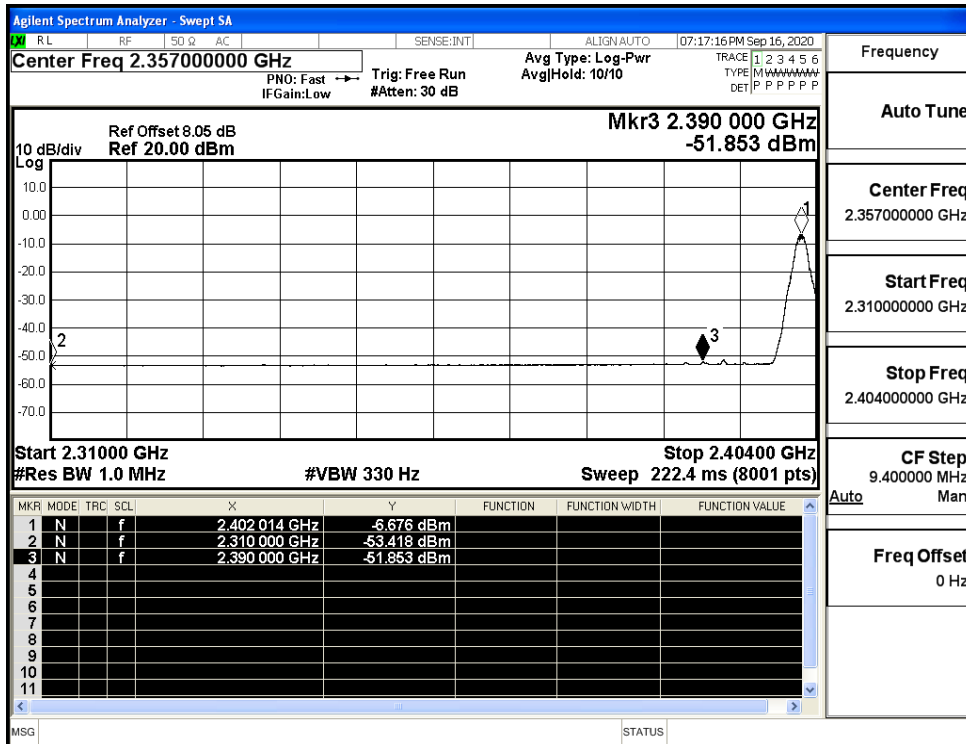
A.7 Restrict-band band-edge measurements

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	-44.27	2.0	0	50.99	PEAK	74	PASS
		Ant1	2310.0	-53.42	2.0	0	41.84	AV	54	PASS
		Ant1	2390.0	-43.67	2.0	0	51.59	PEAK	74	PASS
		Ant1	2390.0	-51.85	2.0	0	43.40	AV	54	PASS
	2480	Ant1	2483.5	-37.88	2.0	0	57.37	PEAK	74	PASS
		Ant1	2483.5	-51.66	2.0	0	43.60	AV	54	PASS
		Ant1	2500.0	-42.22	2.0	0	53.04	PEAK	74	PASS
		Ant1	2500.0	-52.29	2.0	0	42.97	AV	54	PASS

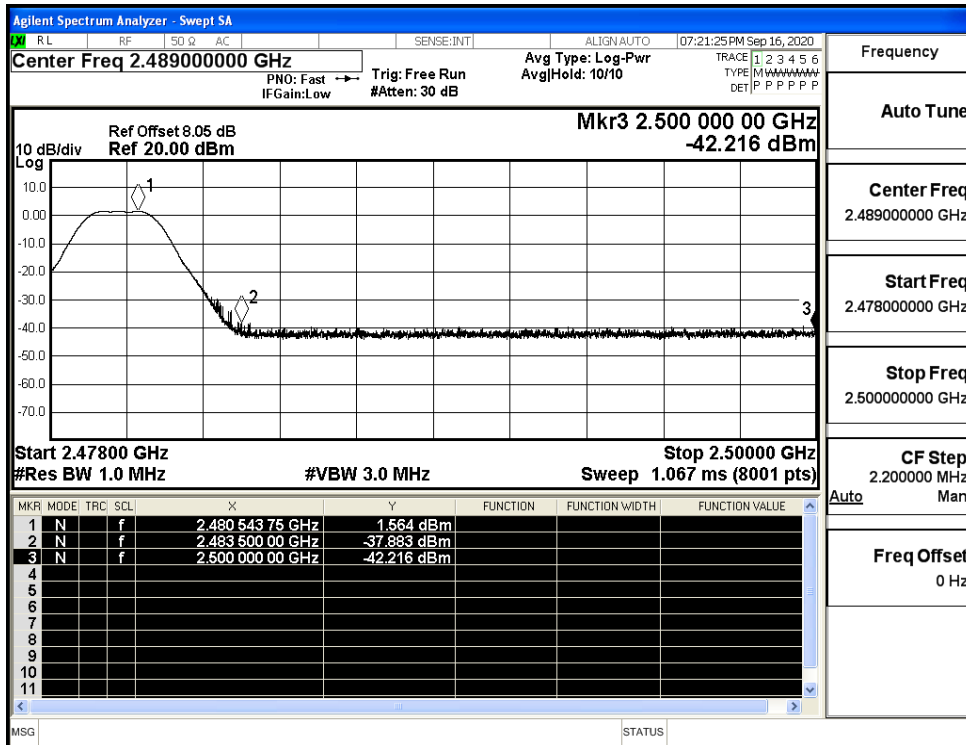
Restrict-band band-edge measurements_BT LE_2402_Ant1_PEAK



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

