

Appendix B

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

Product Name: Urbanista Sydney

Trade Mark: Urbanista

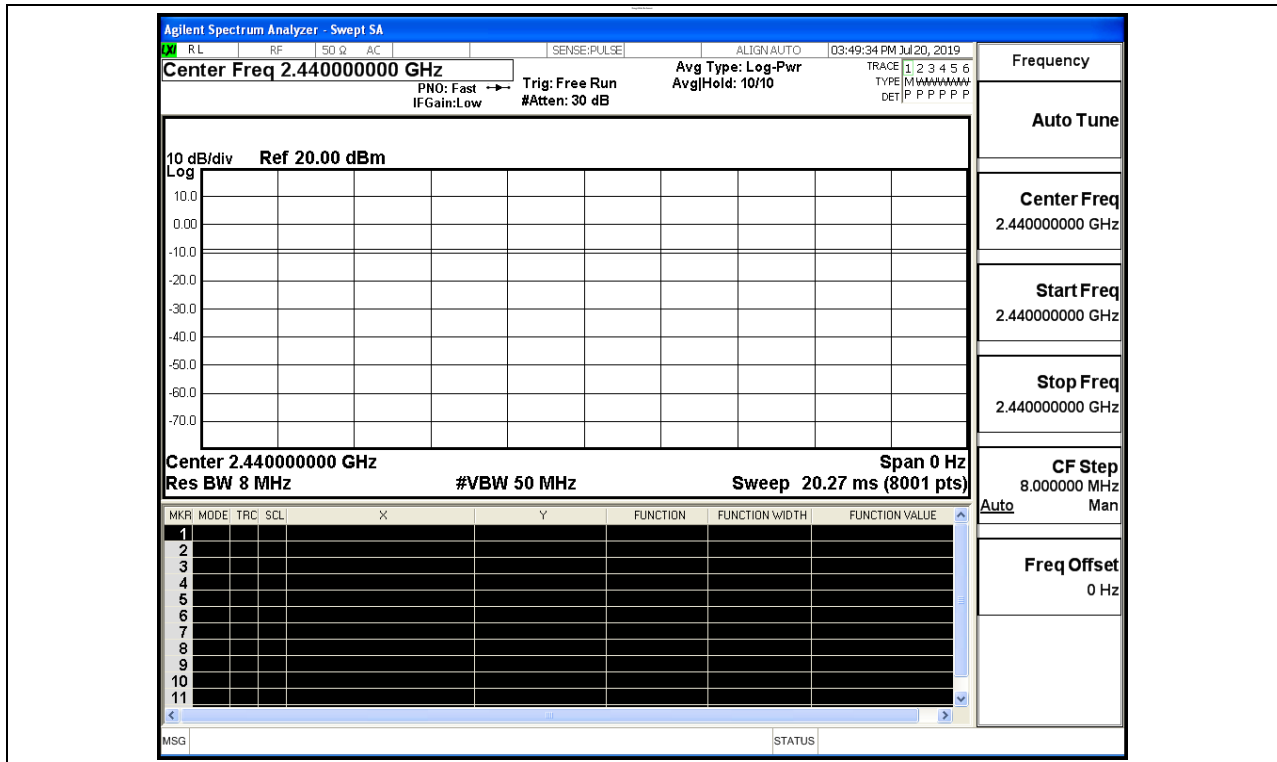
Test Model: Urbanista Sydney

Environmental Conditions

Temperature:	23.9° C
Relative Humidity:	52.9%
ATM Pressure:	100.0 kPa
Test Engineer:	JERRY ZENG
Supervised by:	Wang.Chuang

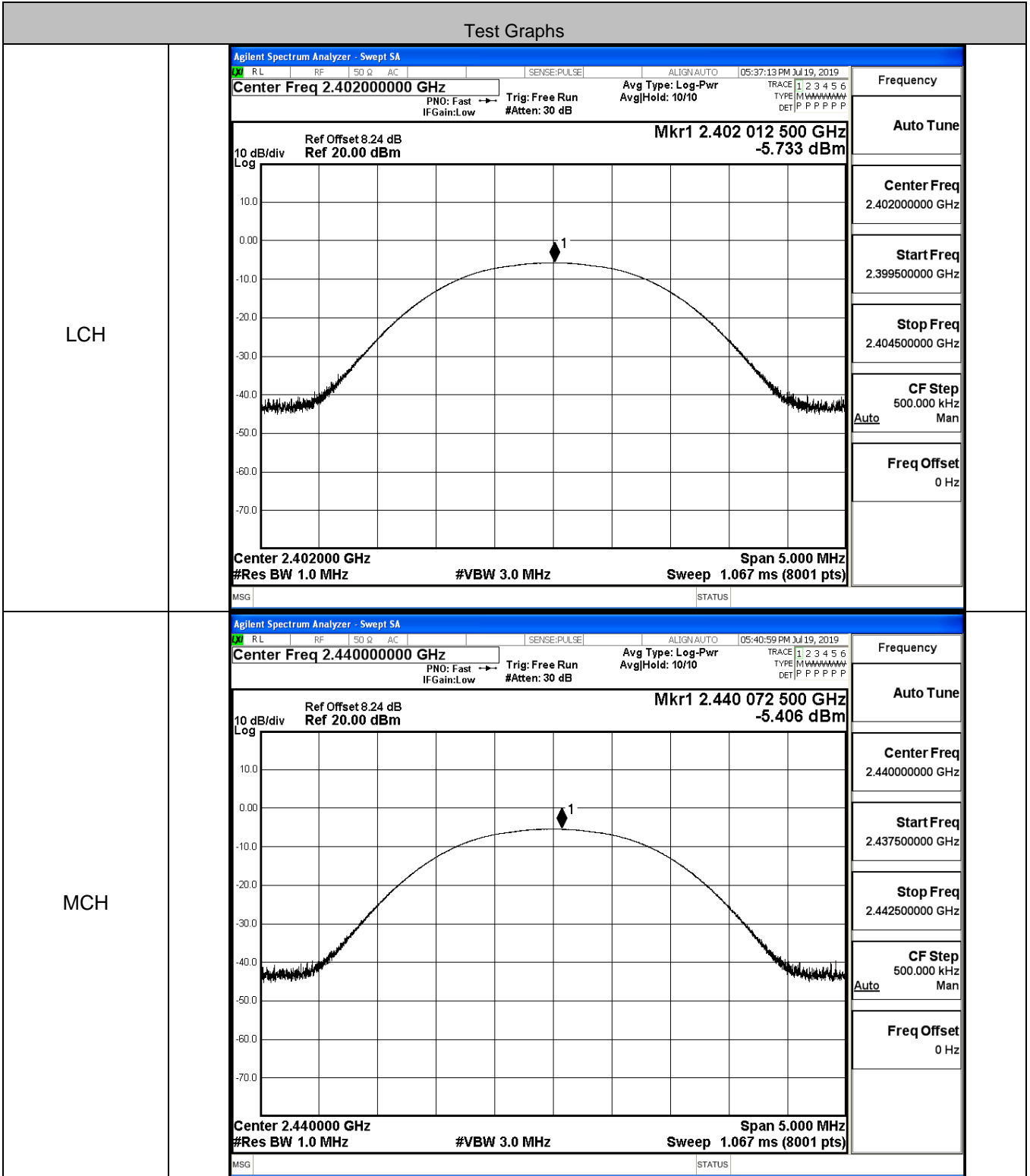
B.1 Duty Cycle

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



B.2 Maximum Conducted Peak Output Power

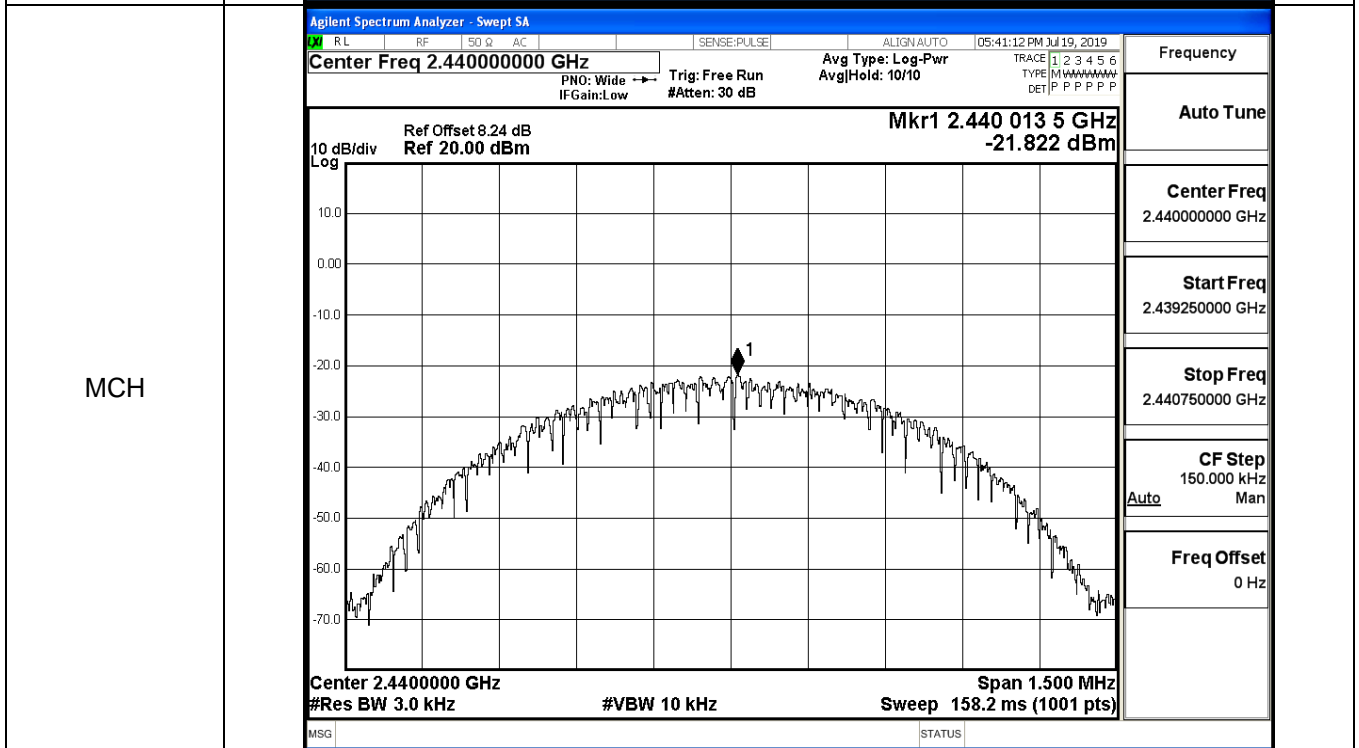
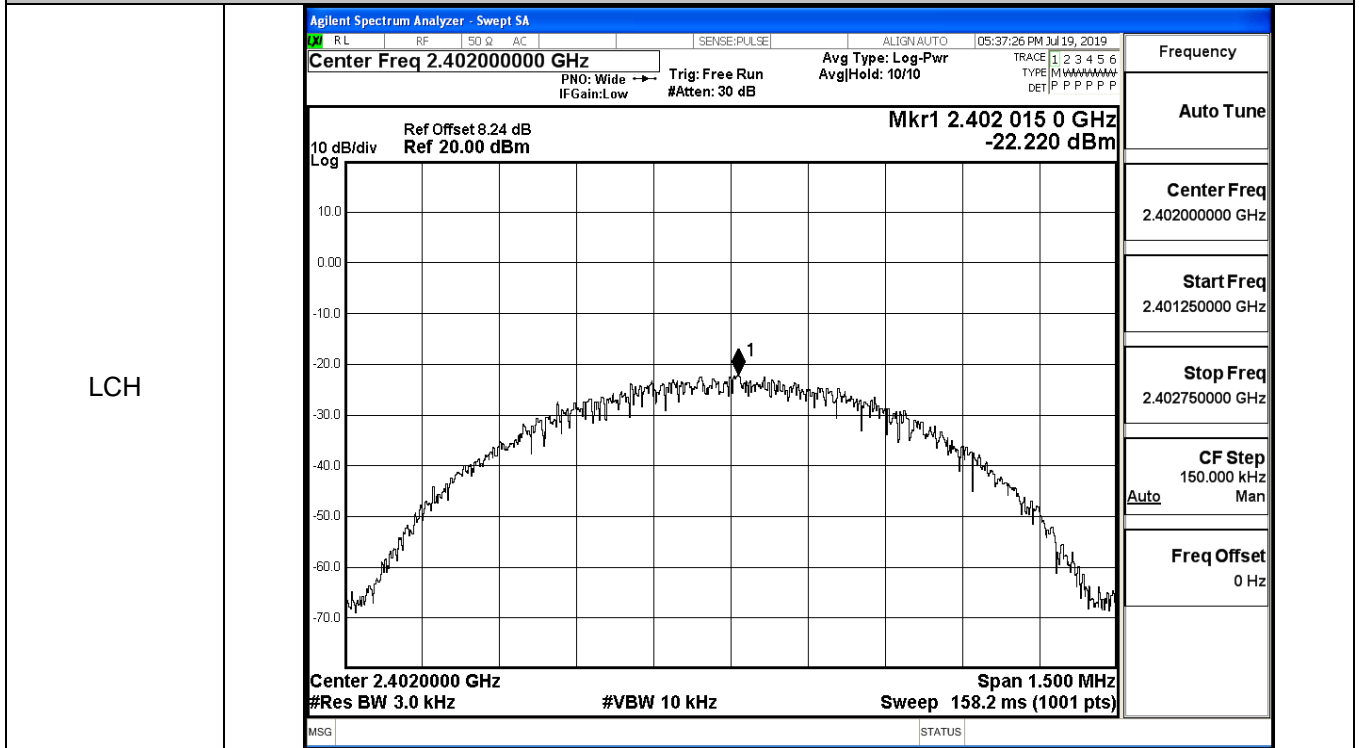
Mode	Channel	Conduct Peak Power[dBm]	Limit [dBm]	Verdict
BT LE	LCH	-5.733	30	PASS
BT LE	MCH	-5.406	30	PASS
BT LE	HCH	-6.288	30	PASS



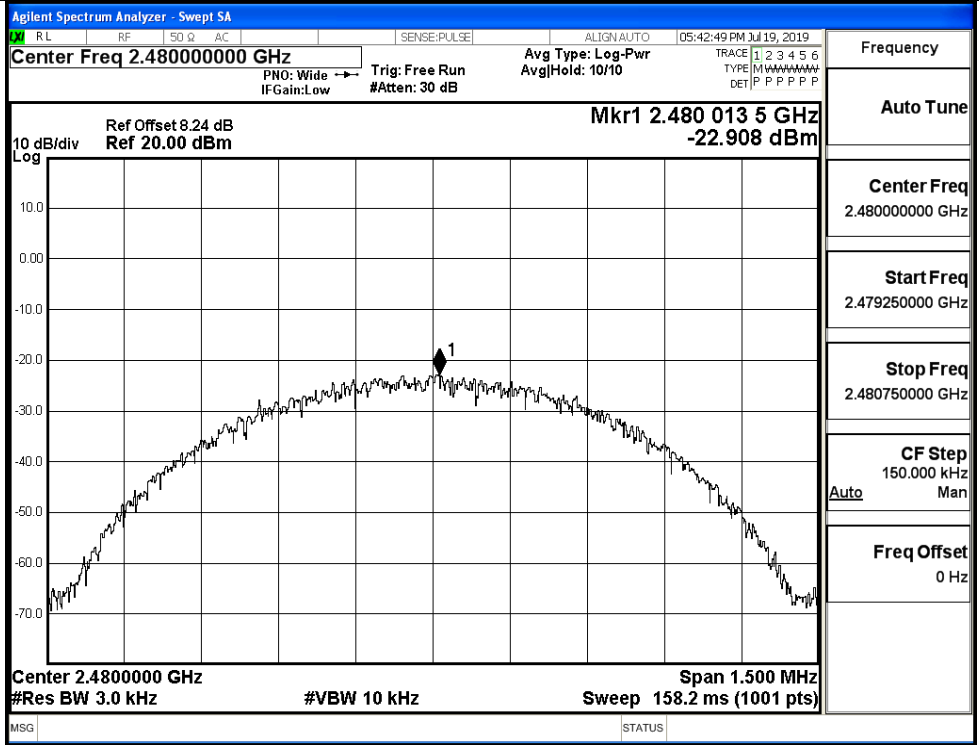
B.3 Maximum Power Spectral Density

Mode	Channel	PSD [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
BT LE	LCH	-22.220	8	PASS
BT LE	MCH	-21.822	8	PASS
BT LE	HCH	-22.908	8	PASS

Test Graphs



HCH

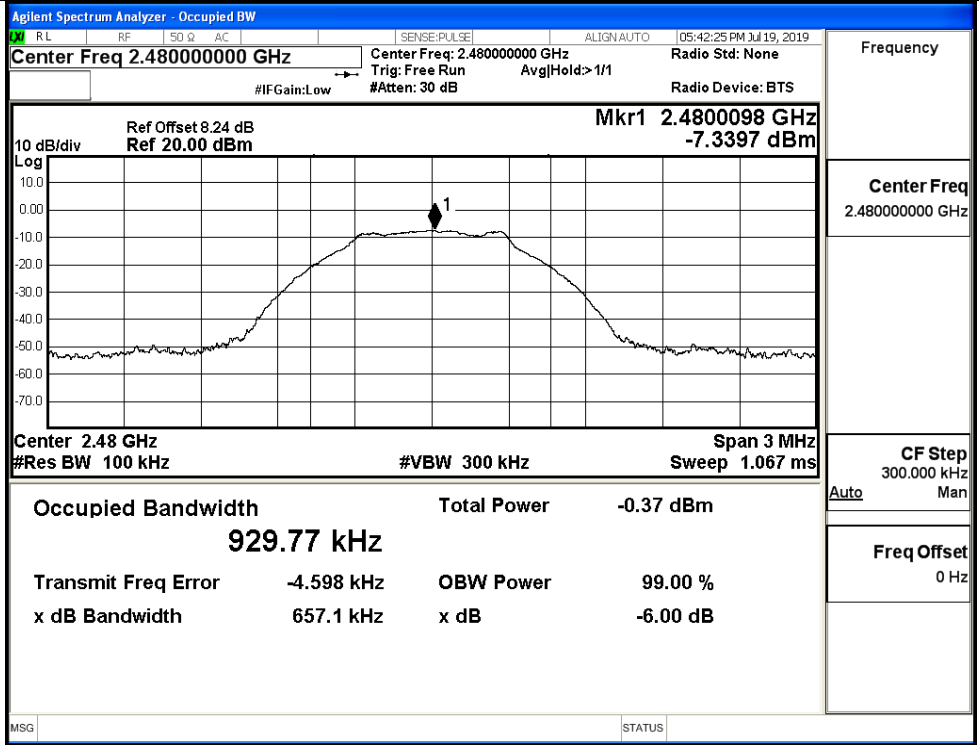


B.4 6dB Bandwidth

Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
BT LE	LCH	0.6483	≥0.5	PASS
BT LE	MCH	0.6464	≥0.5	PASS
BT LE	HCH	0.6571	≥0.5	PASS

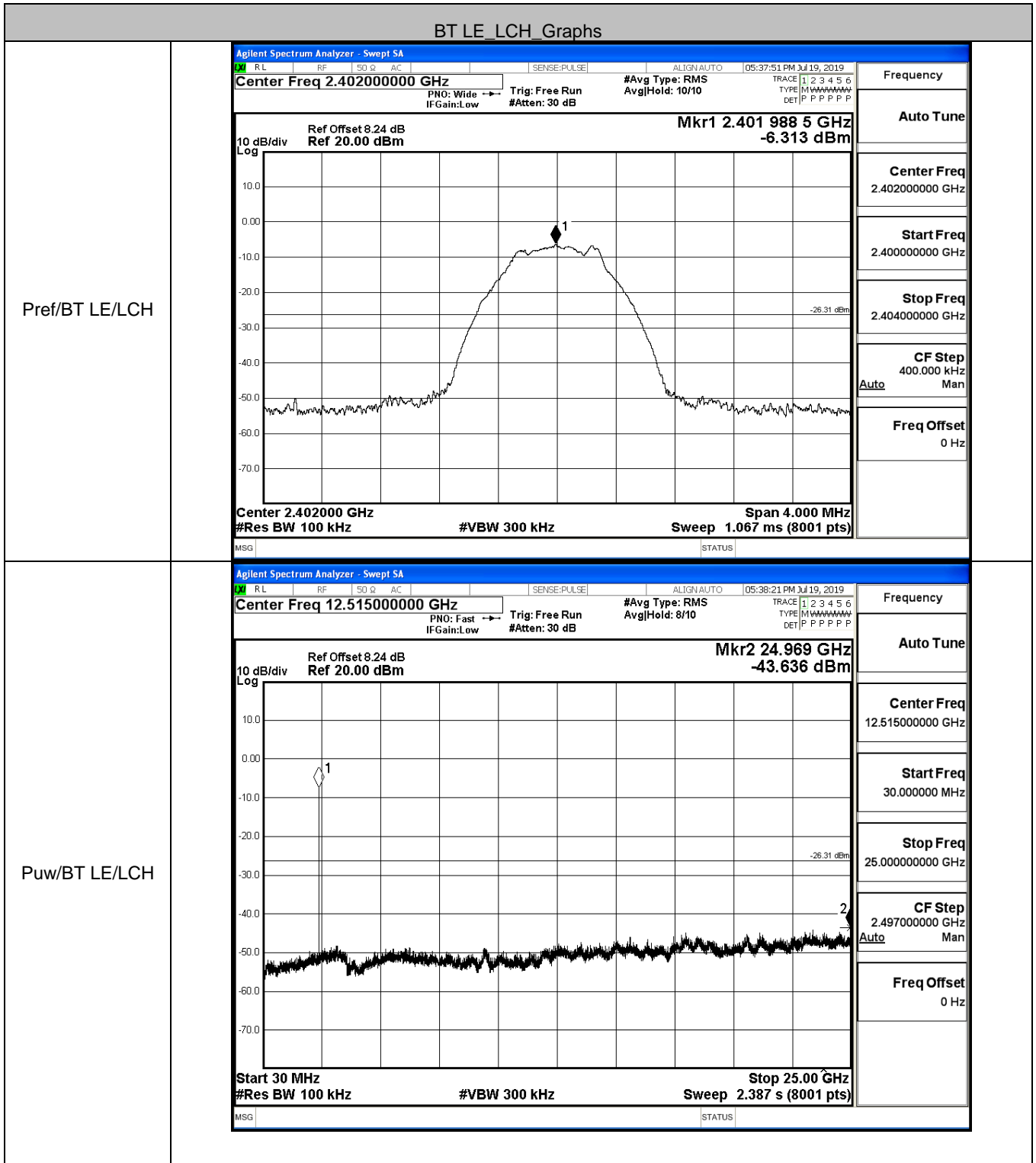
Test Graphs	
LCH	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.402000000 GHz Center Freq: 2.402000000 GHz Radio Std: None Trig: Free Run AvgHold: 1/1 #IFGain: Low #Atten: 30 dB Radio Device: BTS</p> <p>Center 2.402 GHz Span 3 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 1.067 ms</p> <p>Occupied Bandwidth Total Power 0.28 dBm 931.30 kHz</p> <p>Transmit Freq Error -4.016 kHz OBW Power 99.00 % x dB Bandwidth 648.3 kHz x dB -6.00 dB</p> <p>MSG STATUS</p>
	<p>Frequency</p> <p>Center Freq 2.402000000 GHz</p> <p>CF Step 300.000 kHz Auto Man</p> <p>Freq Offset 0 Hz</p>
MCH	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.440000000 GHz Center Freq: 2.440000000 GHz Radio Std: None Trig: Free Run AvgHold: >1/1 #IFGain: Low #Atten: 30 dB Radio Device: BTS</p> <p>Center 2.44 GHz Span 3 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 1.067 ms</p> <p>Occupied Bandwidth Total Power 0.59 dBm 933.55 kHz</p> <p>Transmit Freq Error -5.301 kHz OBW Power 99.00 % x dB Bandwidth 646.4 kHz x dB -6.00 dB</p> <p>MSG STATUS</p>
	<p>Frequency</p> <p>Center Freq 2.440000000 GHz</p> <p>CF Step 300.000 kHz Auto Man</p> <p>Freq Offset 0 Hz</p>

HCH



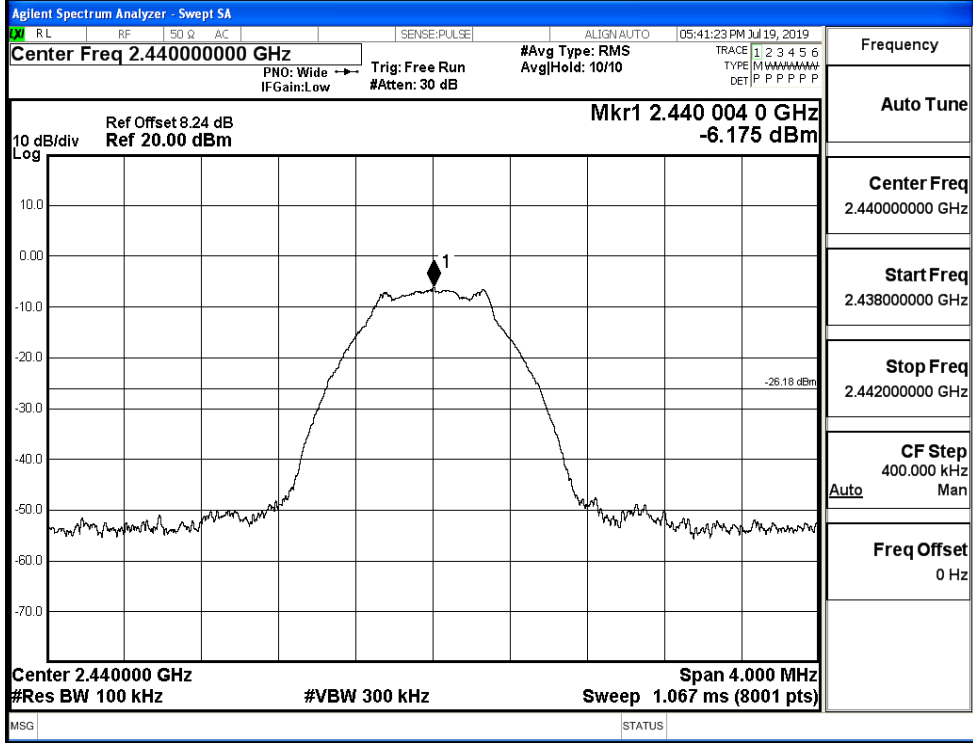
B.5 RF Conducted Spurious Emissions

Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	-6.313	-43.636	-26.313	PASS
BT LE	MCH	-6.175	-44.554	-26.175	PASS
BT LE	HCH	-7.216	-44.088	-27.216	PASS

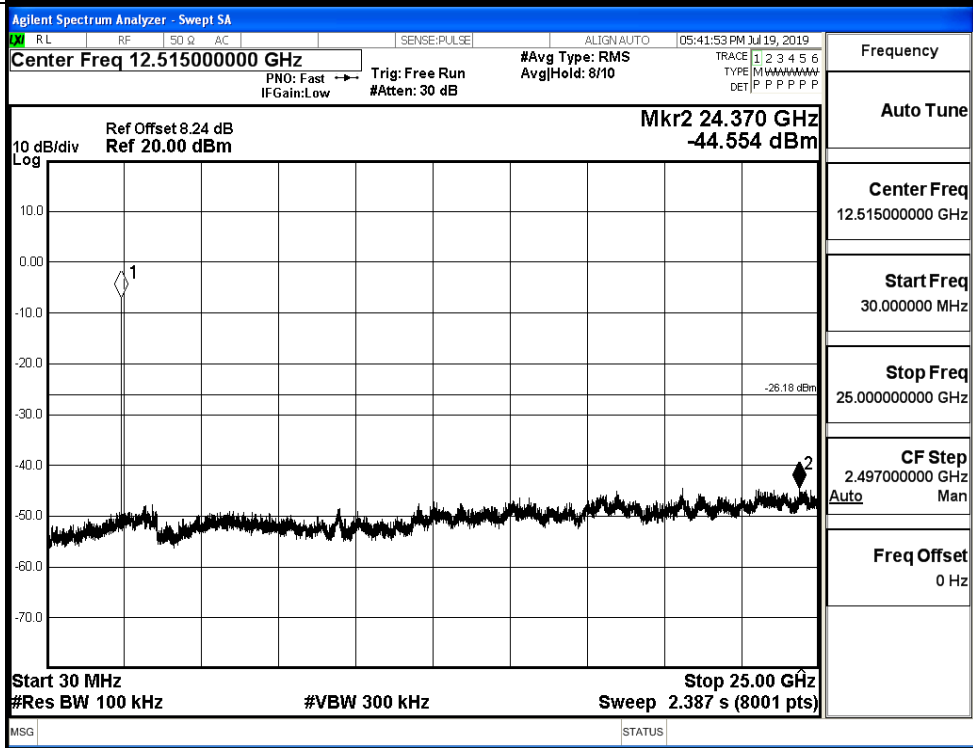


BT LE_MCH_Graphs

Pref/BT LE/MCH

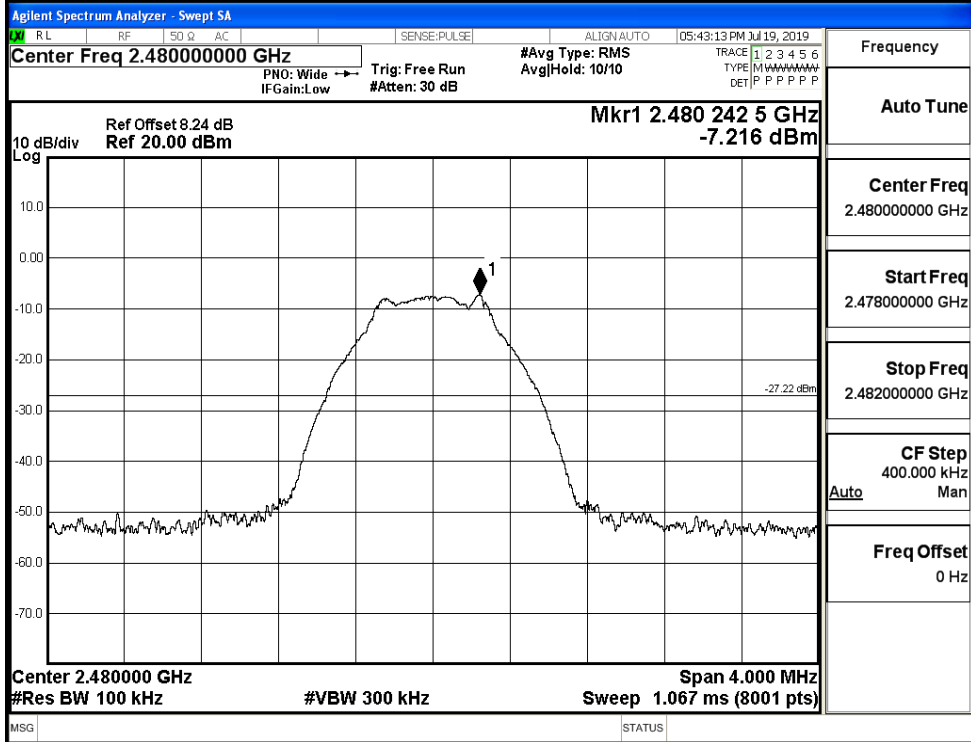


Puw/BT LE/MCH

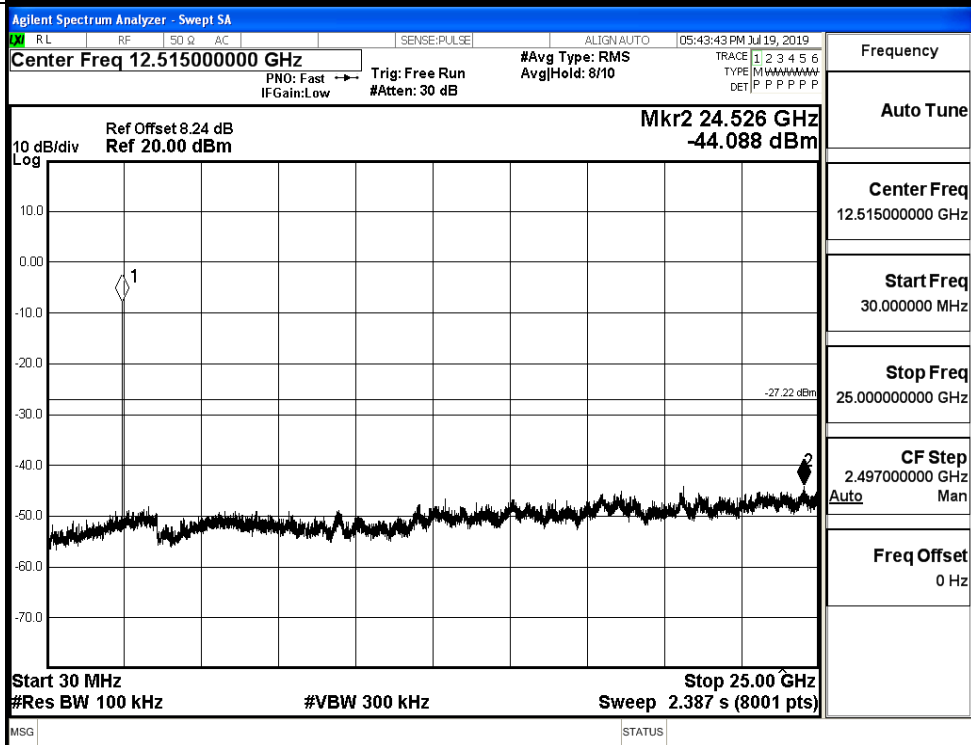


BT LE_HCH_Graphs

Pref/BT LE/HCH



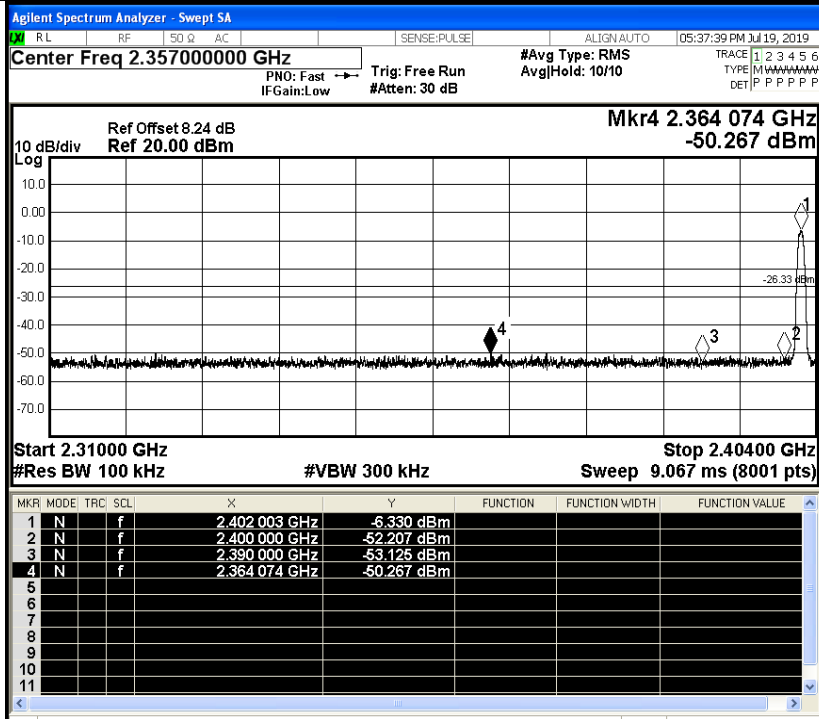
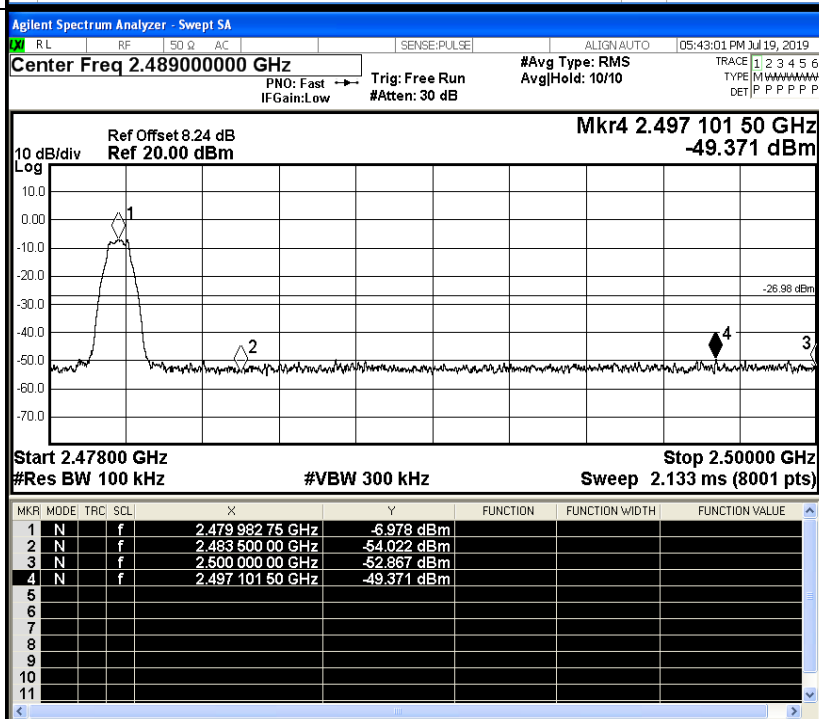
Puw/BT LE/HCH



B.6 Band-edge for RF Conducted Emissions

Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	-6.330	-50.267	-26.33	PASS
BT LE	HCH	-6.978	-49.371	-26.98	PASS

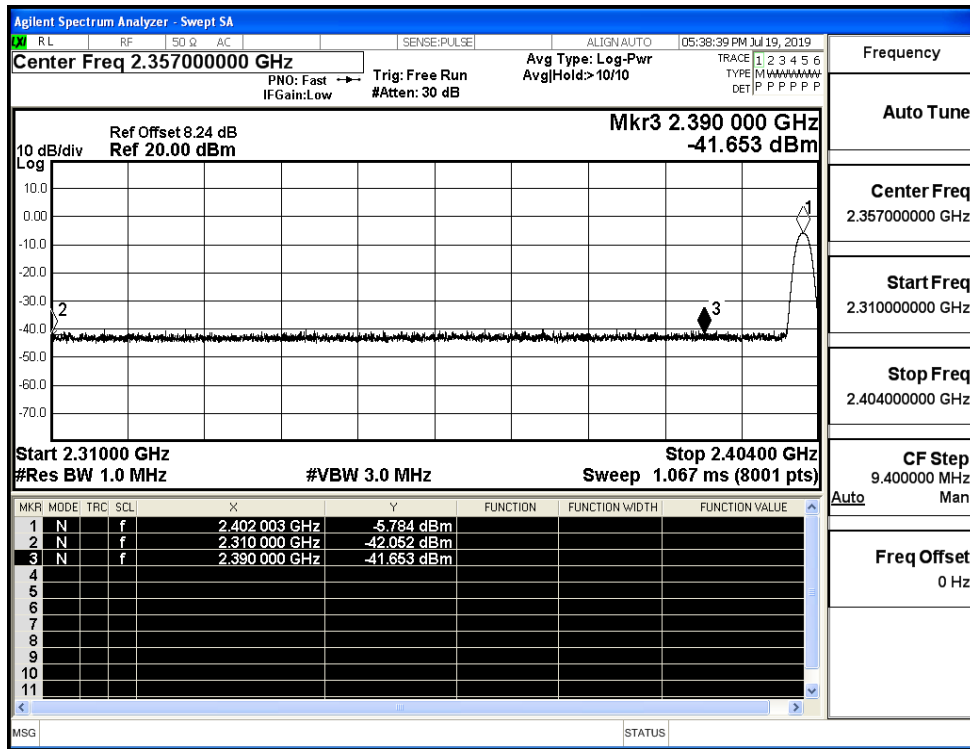
Test Graphs

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>

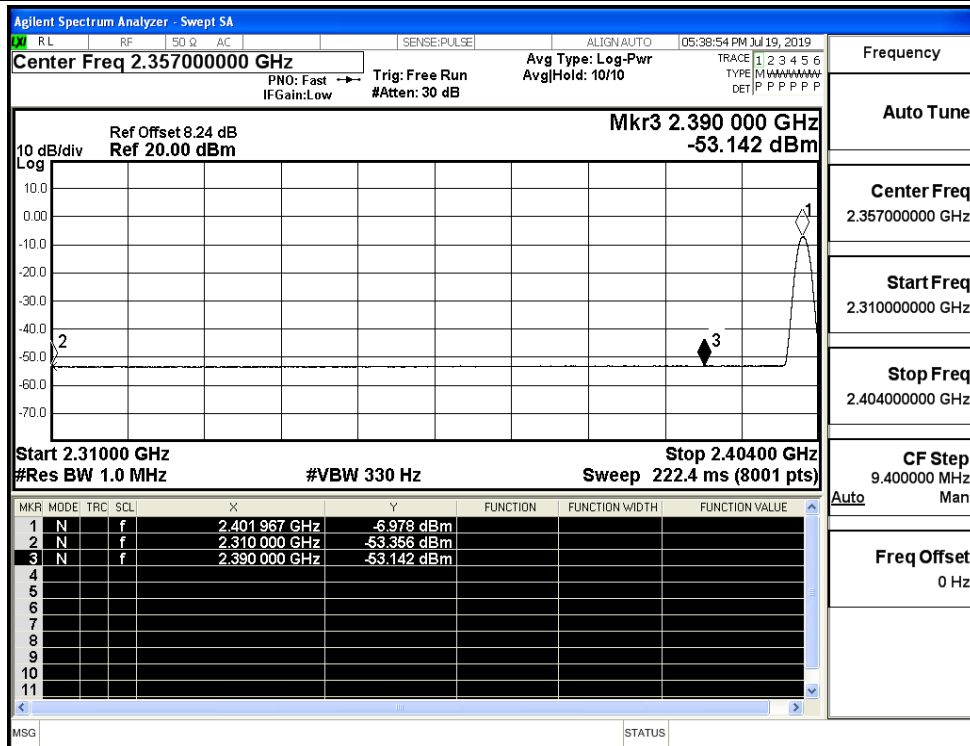
B.7 Restrict-band band-edge measurements

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	-42.05	2.0	0	53.21	PEAK	74	PASS
		Ant1	2310.0	-53.36	2.0	0	41.90	AV	54	PASS
		Ant1	2390.0	-41.65	2.0	0	53.60	PEAK	74	PASS
		Ant1	2390.0	-53.14	2.0	0	42.12	AV	54	PASS
	2480	Ant1	2483.5	-43.38	2.0	0	51.88	PEAK	74	PASS
		Ant1	2483.5	-52.96	2.0	0	42.29	AV	54	PASS
		Ant1	2500.0	-42.54	2.0	0	52.72	PEAK	74	PASS
		Ant1	2500.0	-52.85	2.0	0	42.41	AV	54	PASS

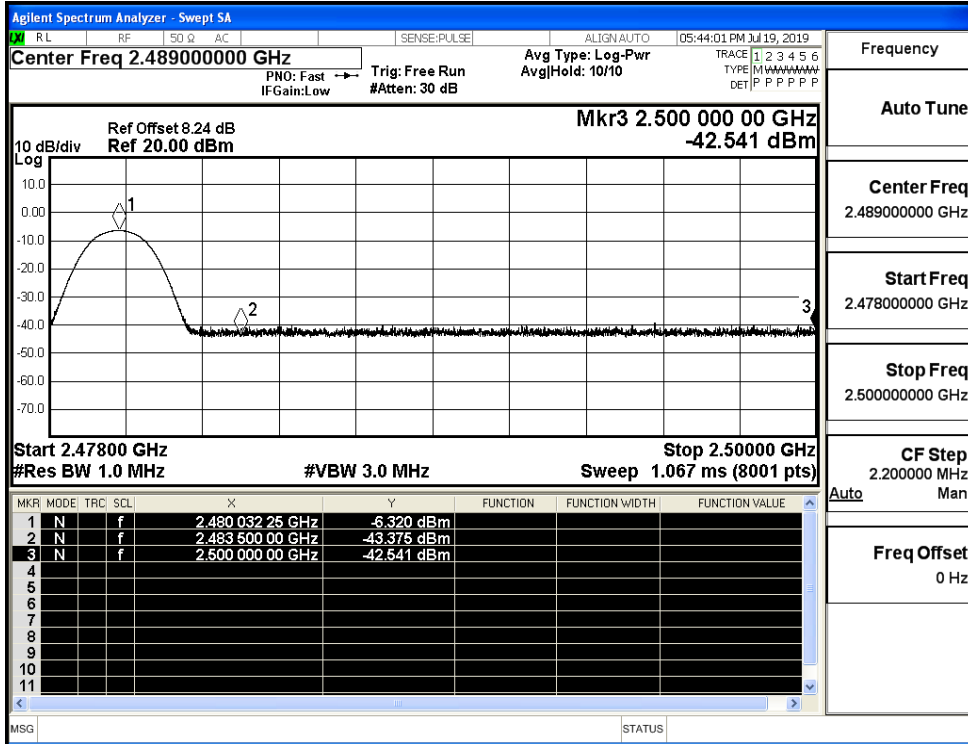
Restrict-band band-edge measurements_BT LE_2402_Ant1_PEAK



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

