

## Appendix B

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

Product Name: Urbanista London

Trade Mark: Urbanista

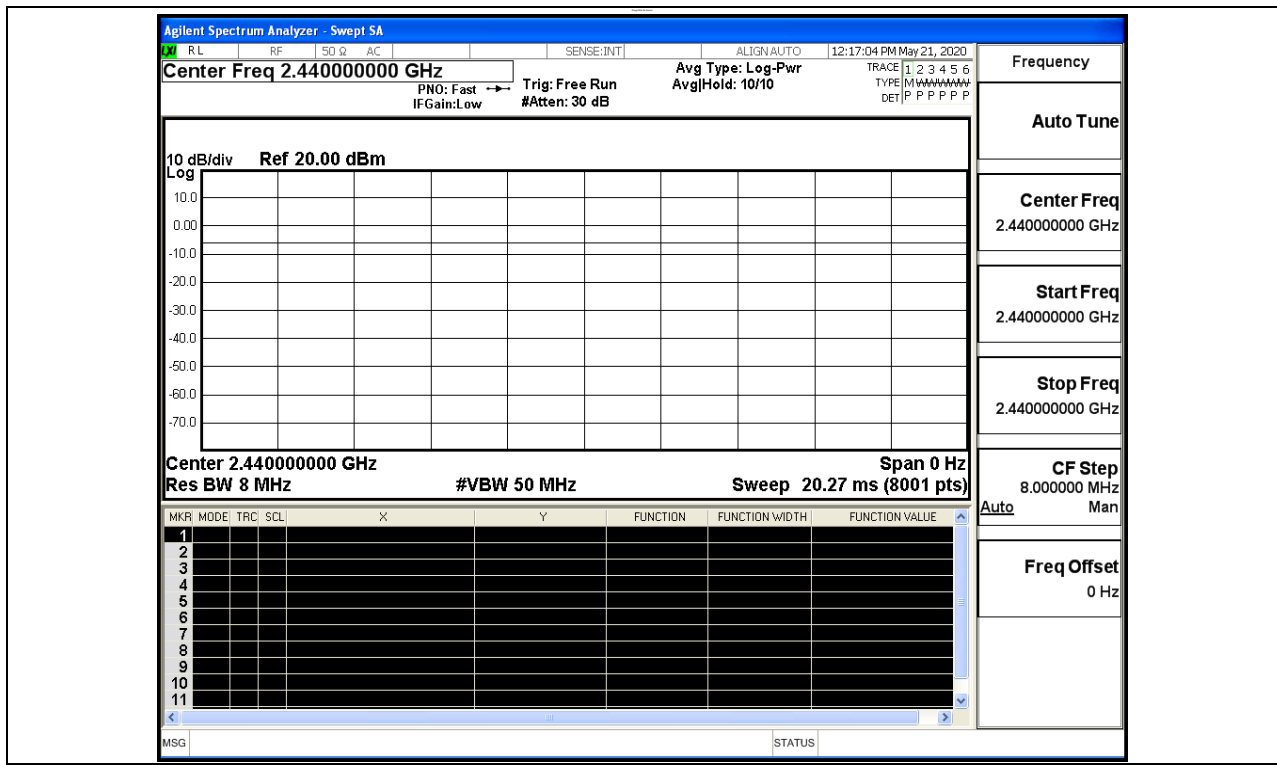
Test Model: Urbanista London

#### Environmental Conditions

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

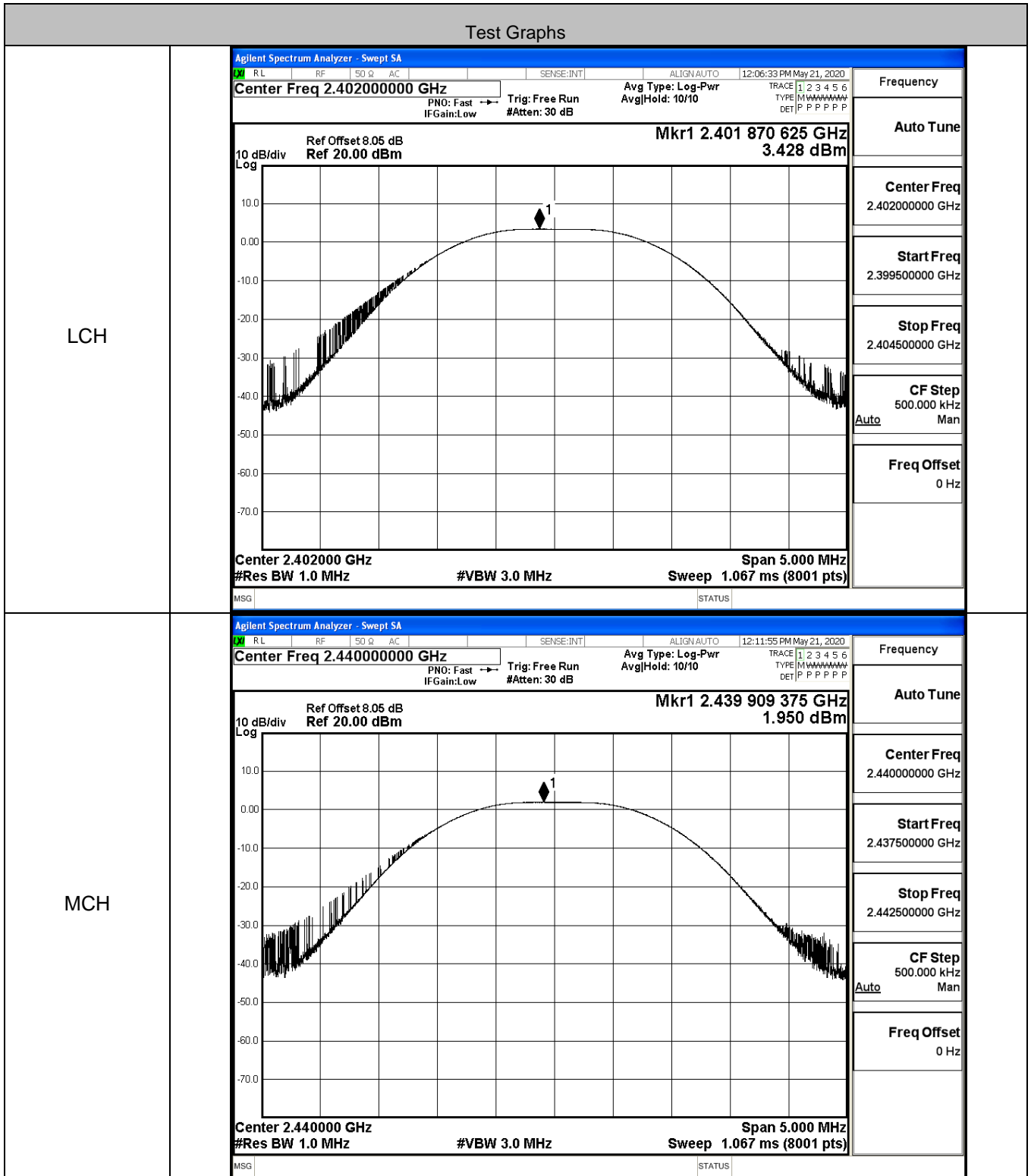
#### B.1 Duty Cycle

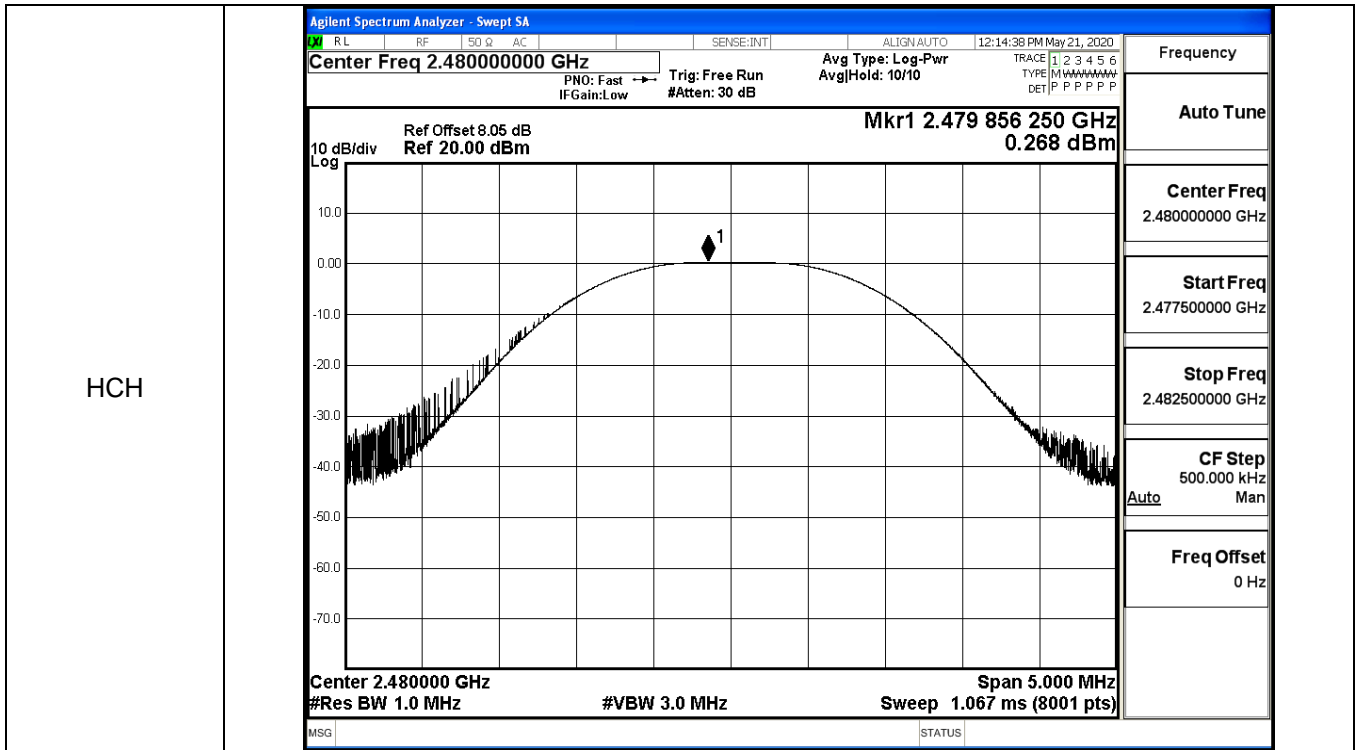
Test Mode	Test Channel	Ant	Duty Cycle[%]	Verdict
BT LE	2440	Ant1	100	PASS



### B.2 Maximum Conducted Peak Output Power

Mode	Channel	Conduct Peak Power[dBm]	Limit [dBm]	Verdict
BT LE	LCH	3.428	30	PASS
BT LE	MCH	1.95	30	PASS
BT LE	HCH	0.268	30	PASS

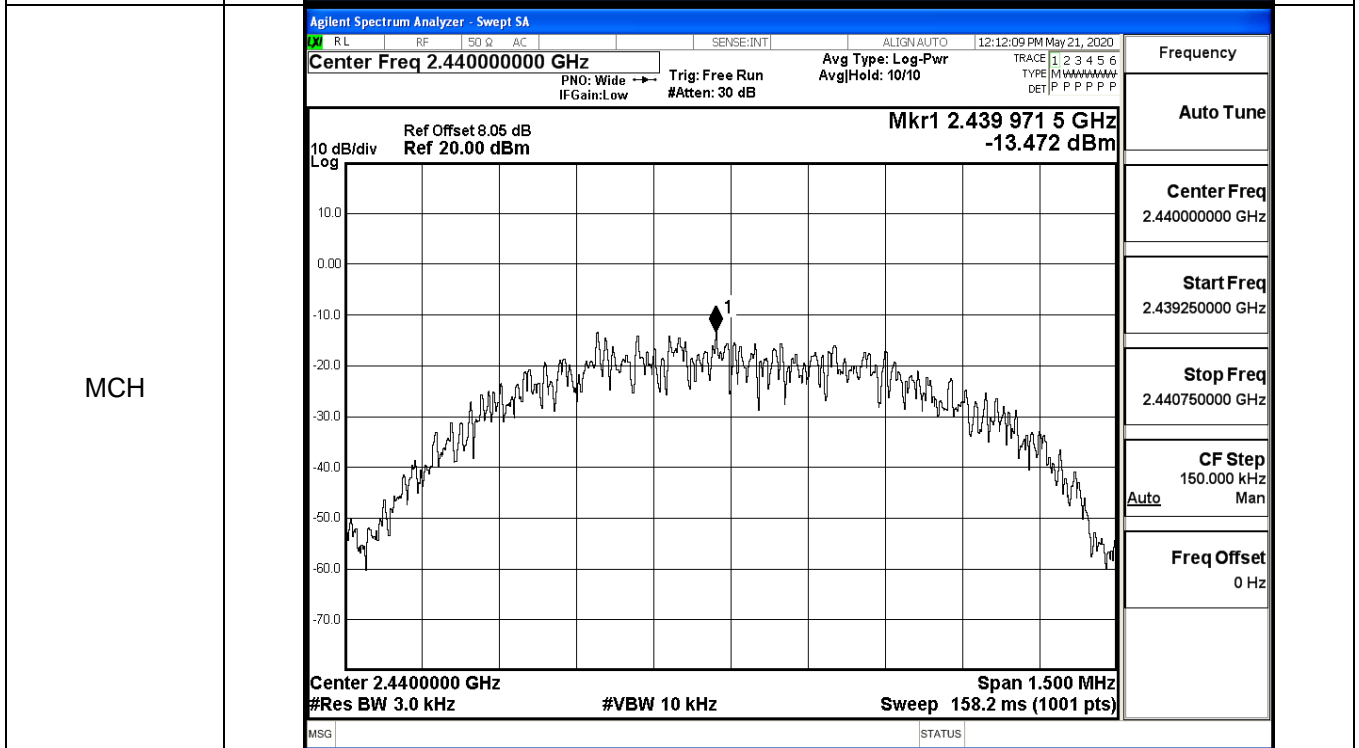
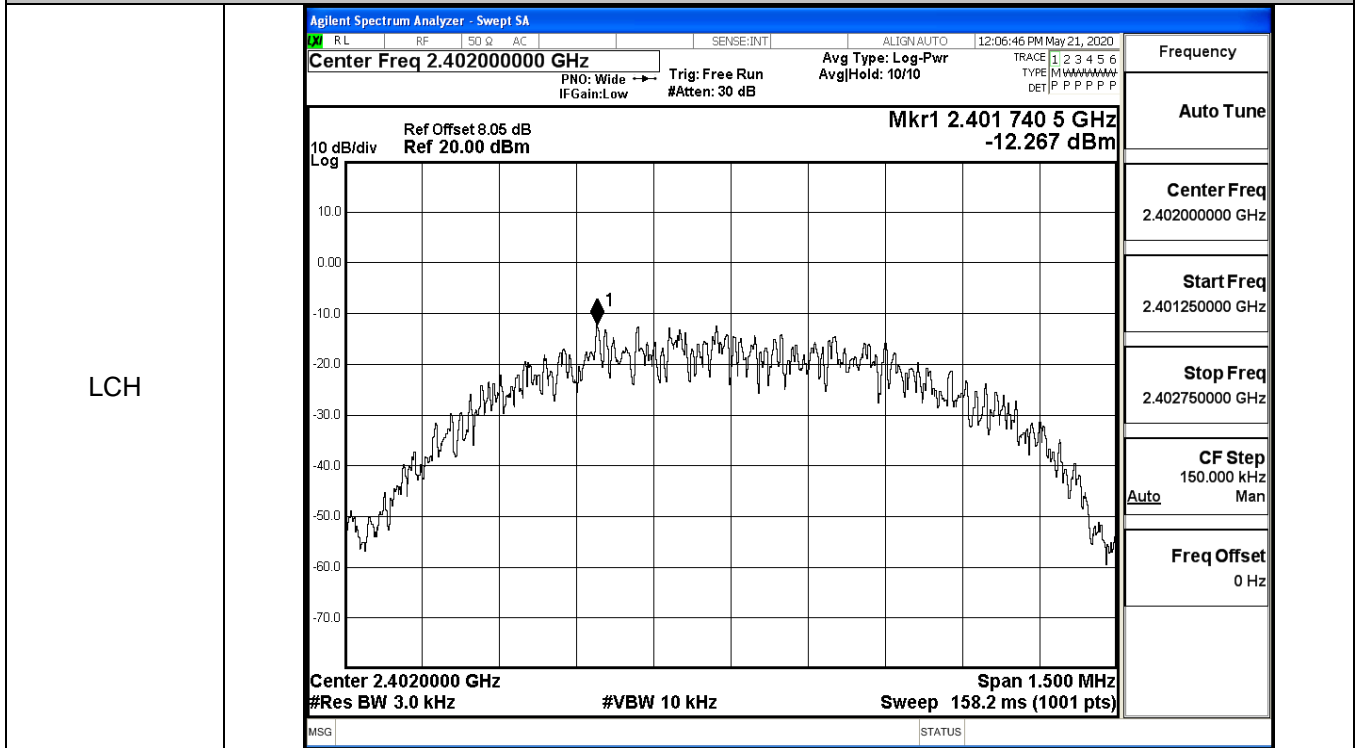




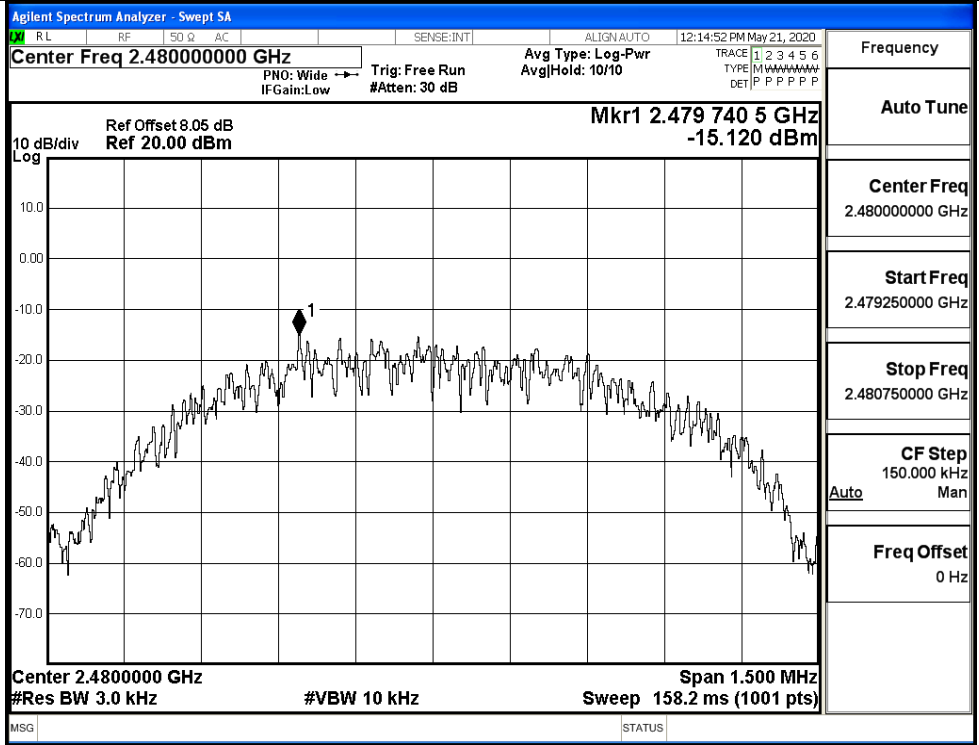
### B.3 Maximum Power Spectral Density

Mode	Channel	PSD [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
BT LE	LCH	-12.267	8	PASS
BT LE	MCH	-13.472	8	PASS
BT LE	HCH	-15.120	8	PASS

#### Test Graphs



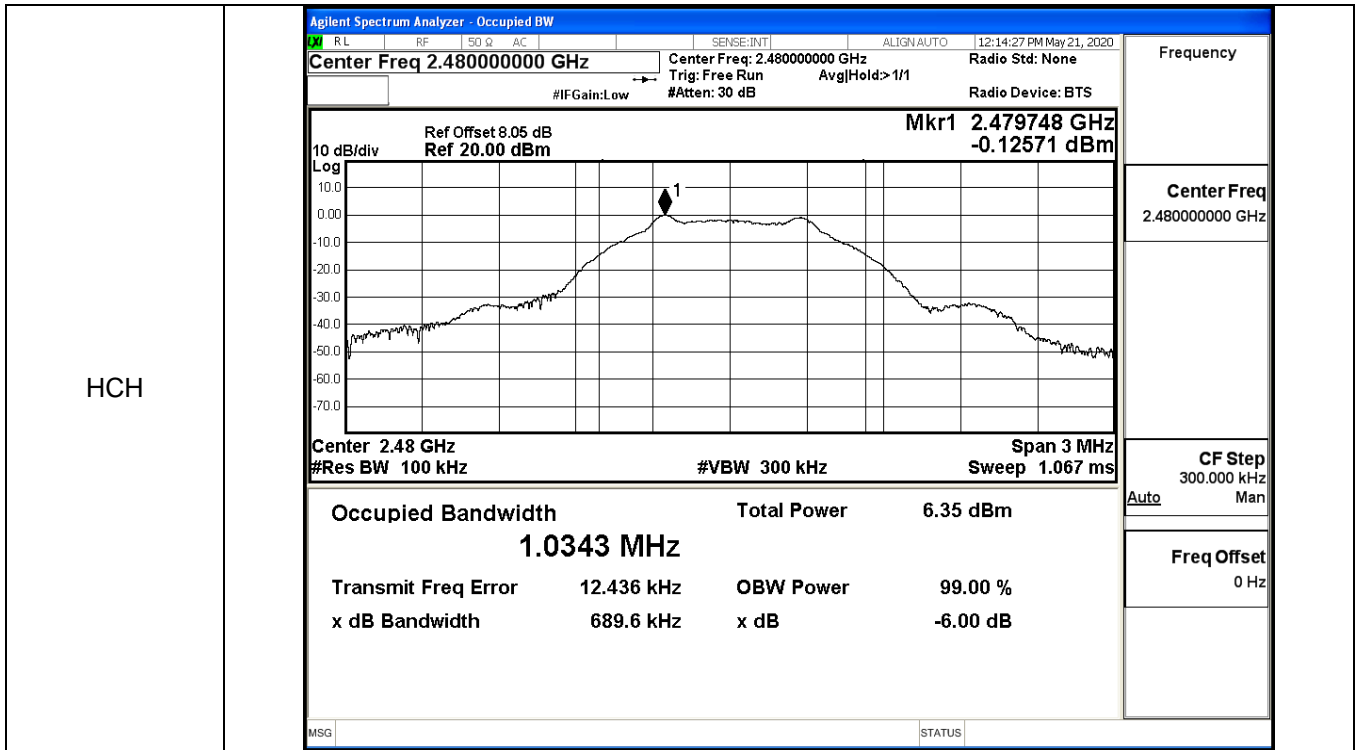
HCH



**B.4 6dB Bandwidth**

Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
BT LE	LCH	0.6987	≥0.5	PASS
BT LE	MCH	0.6958	≥0.5	PASS
BT LE	HCH	0.6896	≥0.5	PASS

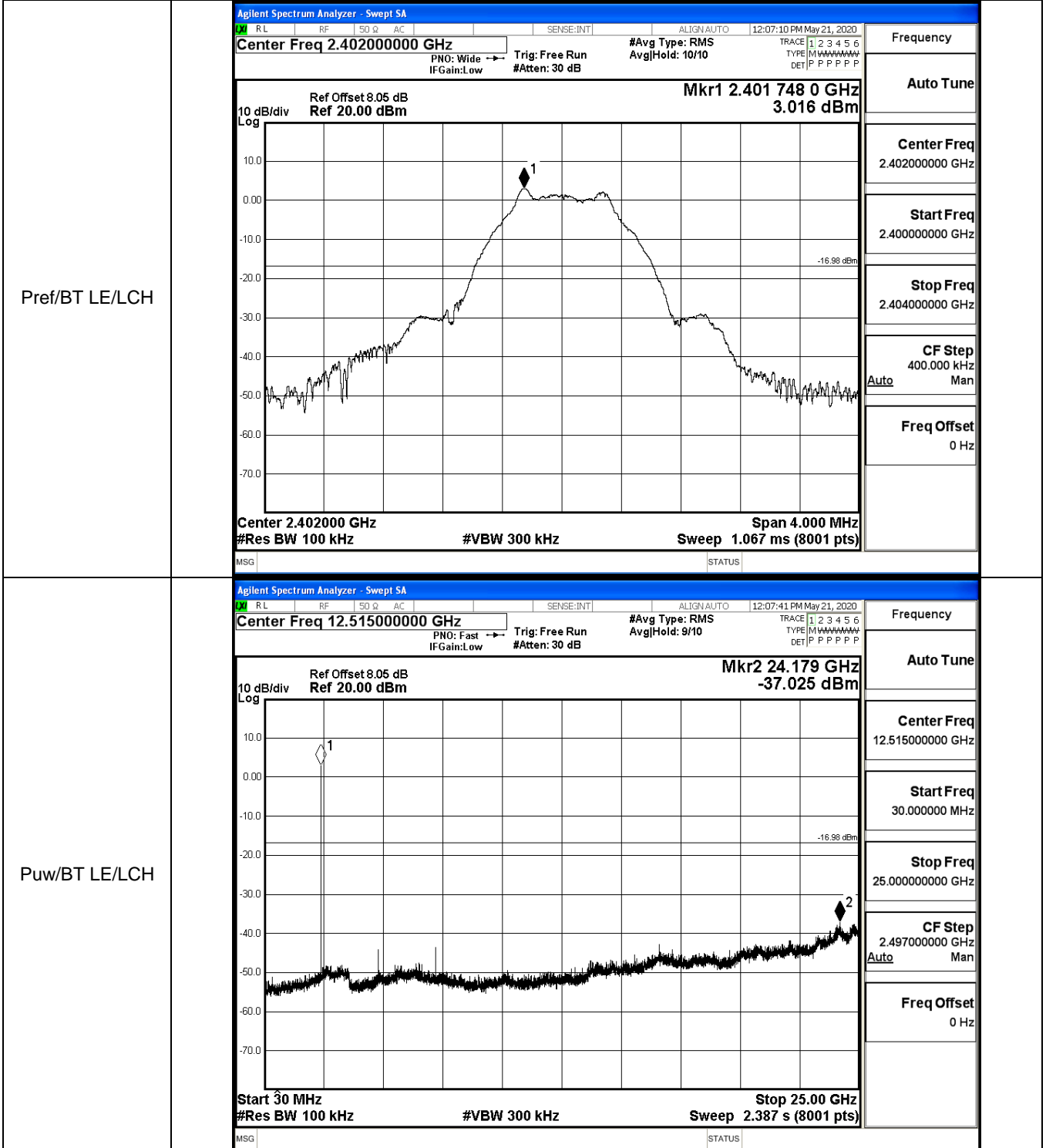
Test Graphs																			
LCH	<div style="border: 1px solid black; padding: 5px;"> <p style="text-align: center; margin: 0;">Agilent Spectrum Analyzer - Occupied BW</p> <p style="font-size: small; margin: 0;">RL RF 50 Ω AC SENSE:INT ALIGN:AUTO 12:06:21 PM May 21, 2020</p> <p style="margin: 0;">Center 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> <div style="display: flex; justify-content: space-between;"> <div style="font-size: x-small;">                         10 dB/div                          Log                          Ref Offset 8.05 dB                          Ref 20.00 dBm                     </div> <div style="text-align: right;"> <b>Mkr1 2.4017465 GHz</b>                          3.0156 dBm                     </div> </div> <div style="display: flex; justify-content: space-between; font-size: x-small; margin-top: 5px;"> <div>Center 2.402 GHz #Res BW 100 kHz</div> <div>#VBW 300 kHz</div> <div>Span 3 MHz Sweep 1.067 ms</div> </div> <table border="0" style="width: 100%; font-size: x-small; margin-top: 5px;"> <tr> <td style="width: 33%;">Occupied Bandwidth</td> <td style="width: 33%;">Total Power</td> <td style="width: 33%;">9.46 dBm</td> </tr> <tr> <td style="text-align: center;"><b>1.0335 MHz</b></td> <td></td> <td></td> </tr> <tr> <td>Transmit Freq Error</td> <td>13.276 kHz</td> <td>OBW Power</td> </tr> <tr> <td>x dB Bandwidth</td> <td>698.7 kHz</td> <td>x dB</td> </tr> <tr> <td></td> <td></td> <td style="text-align: right;">99.00 %</td> </tr> <tr> <td></td> <td></td> <td style="text-align: right;">-6.00 dB</td> </tr> </table> <p style="font-size: x-small; margin-top: 5px;">MSG STATUS</p> </div>	Occupied Bandwidth	Total Power	9.46 dBm	<b>1.0335 MHz</b>			Transmit Freq Error	13.276 kHz	OBW Power	x dB Bandwidth	698.7 kHz	x dB			99.00 %			-6.00 dB
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		99.00 %																	
		-6.00 dB																	



### B.5 RF Conducted Spurious Emissions

Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	3.016	-37.025	-16.984	PASS
BT LE	MCH	1.571	-37.064	-18.429	PASS
BT LE	HCH	-0.108	-37.854	-20.108	PASS

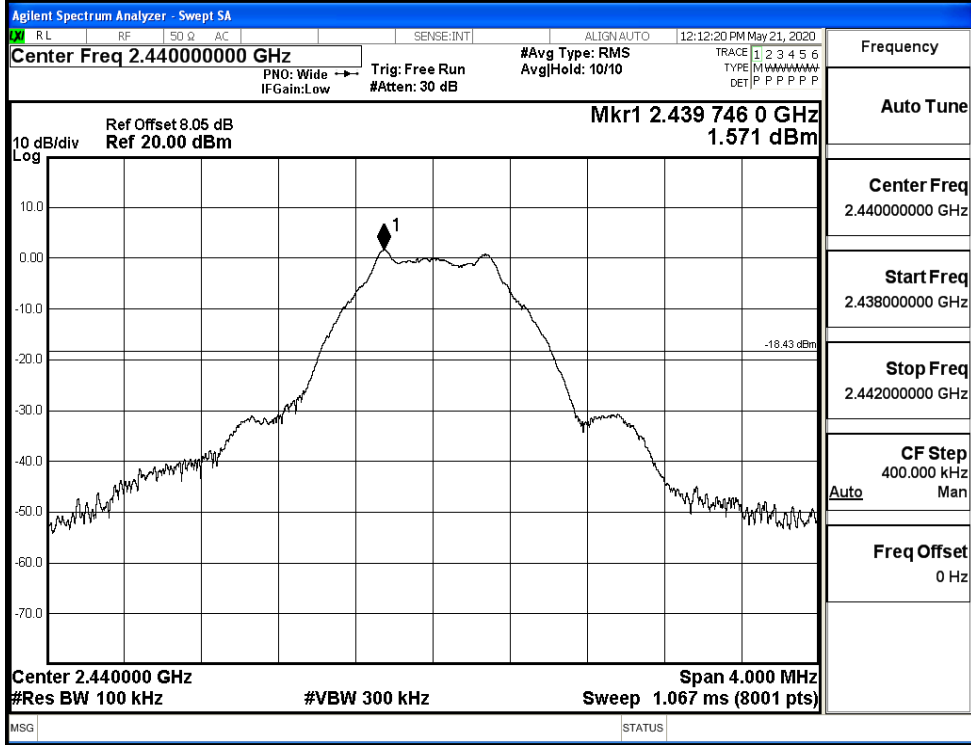
BT LE\_LCH\_Graphs



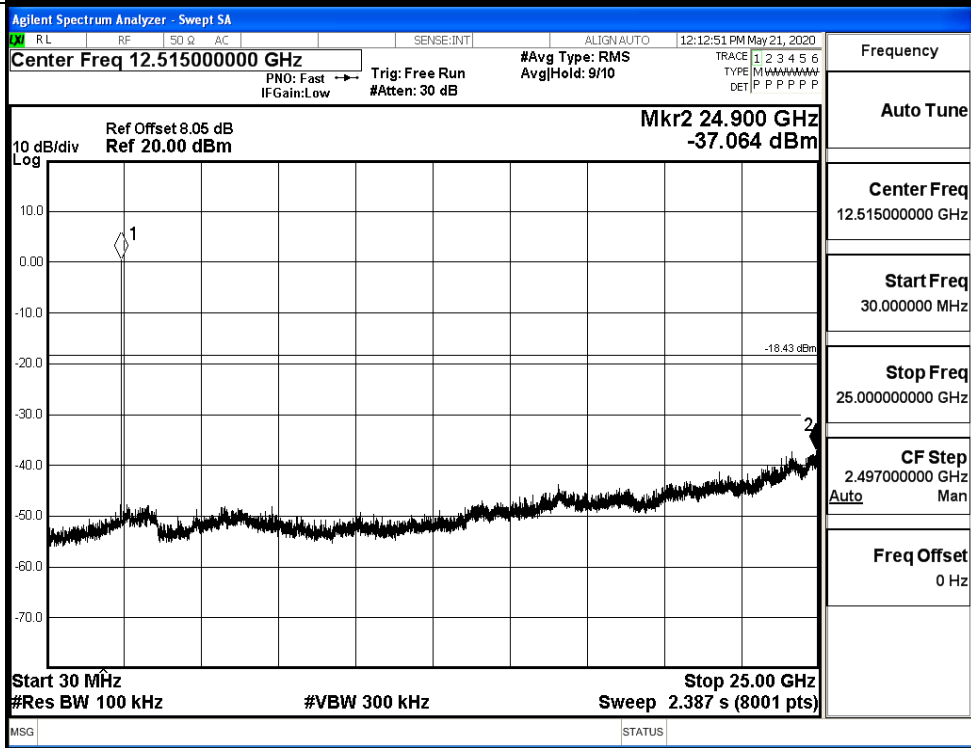


BT LE\_MCH\_Graphs

Pref/BT LE/MCH

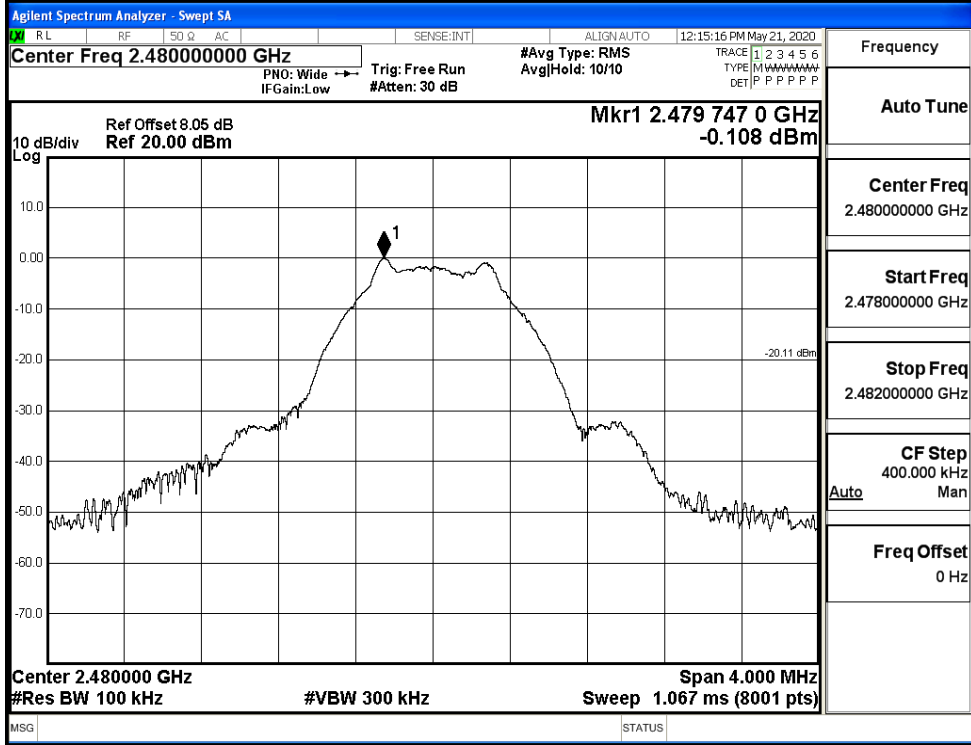


Puw/BT LE/MCH

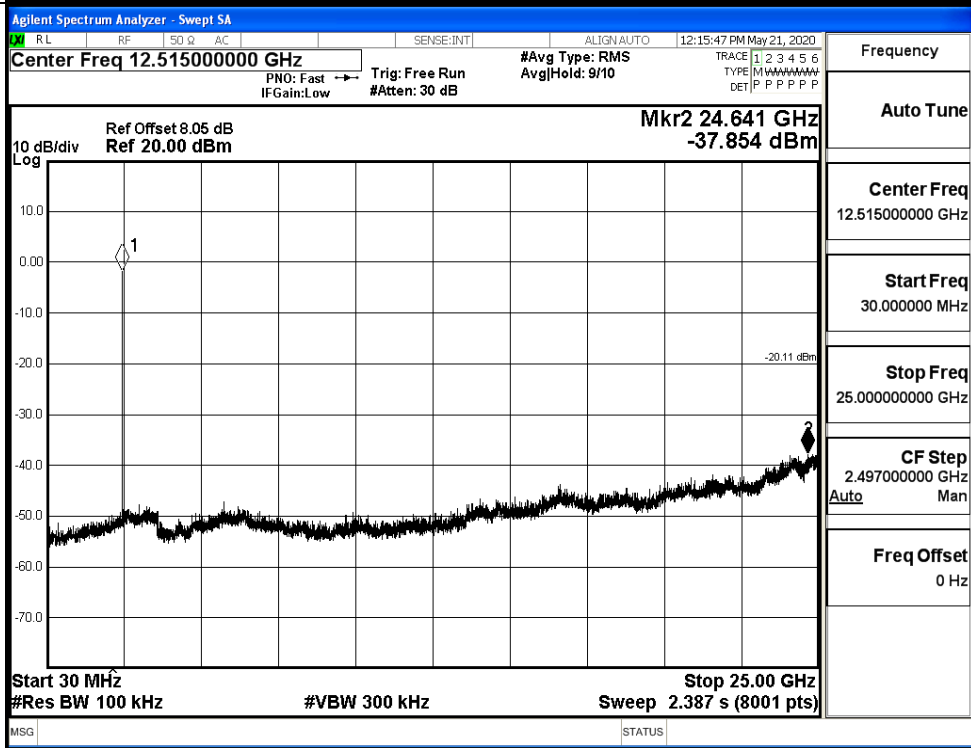


BT LE\_HCH\_Graphs

Pref/BT LE/HCH



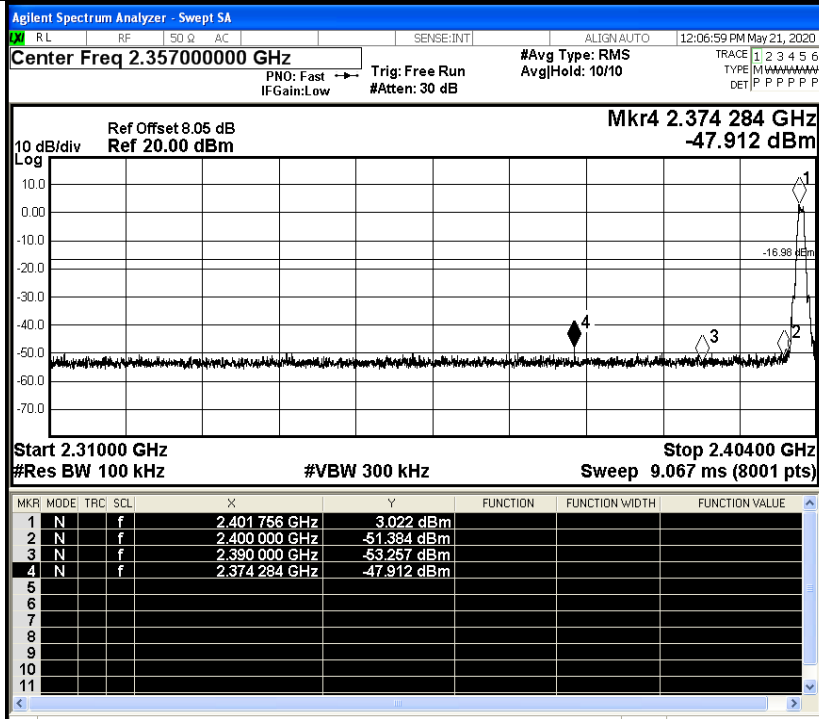
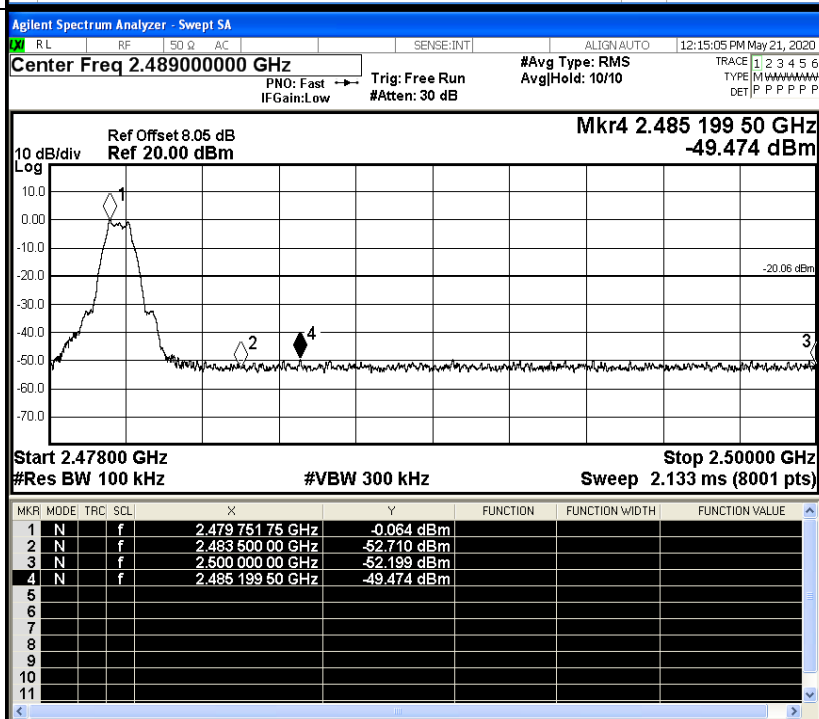
Puw/BT LE/HCH



### B.6 Band-edge for RF Conducted Emissions

Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	3.022	-47.912	-16.98	PASS
BT LE	HCH	-0.064	-49.474	-20.06	PASS

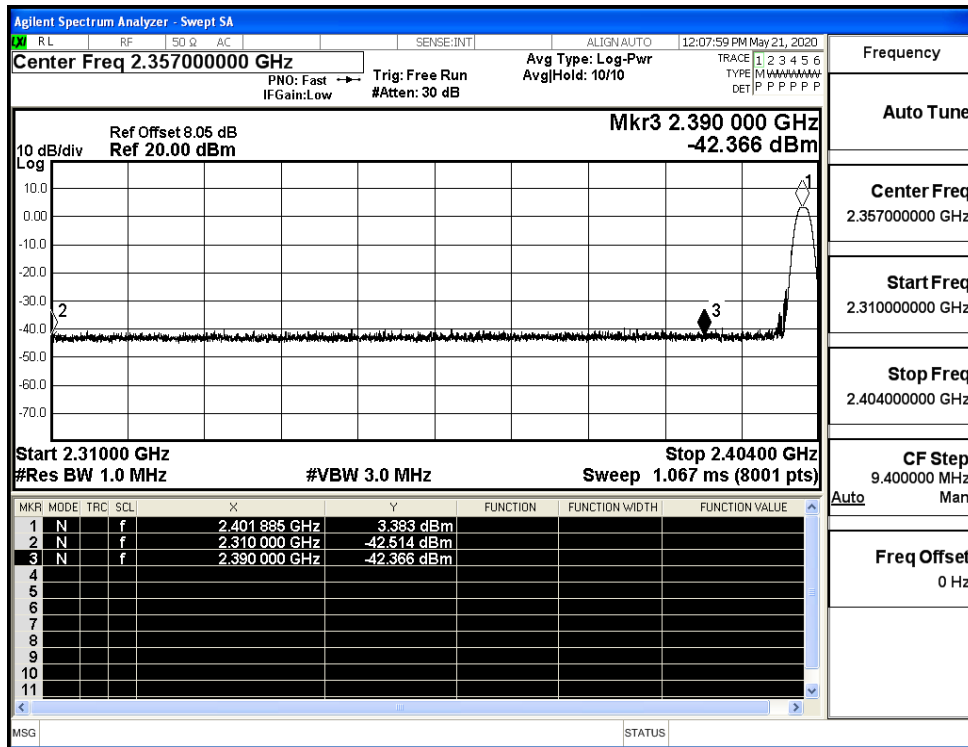
Test Graphs

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>

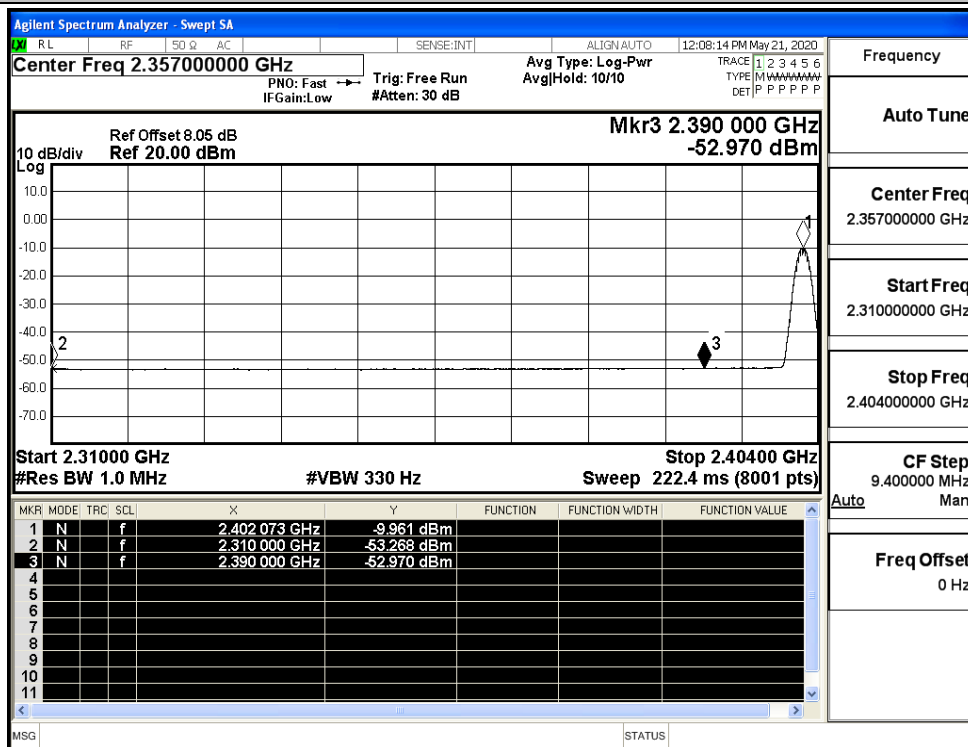
**B.7 Restrict-band band-edge measurements**

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	-42.51	2.0	0	54.72	PEAK	74	PASS
		Ant1	2310.0	-53.27	2.0	0	43.96	AV	54	PASS
		Ant1	2390.0	-42.37	2.0	0	54.86	PEAK	74	PASS
		Ant1	2390.0	-52.97	2.0	0	44.26	AV	54	PASS
	2480	Ant1	2483.5	-43.00	2.0	0	54.23	PEAK	74	PASS
		Ant1	2483.5	-52.42	2.0	0	44.81	AV	54	PASS
		Ant1	2500.0	-41.96	2.0	0	55.27	PEAK	74	PASS
		Ant1	2500.0	-52.29	2.0	0	44.94	AV	54	PASS

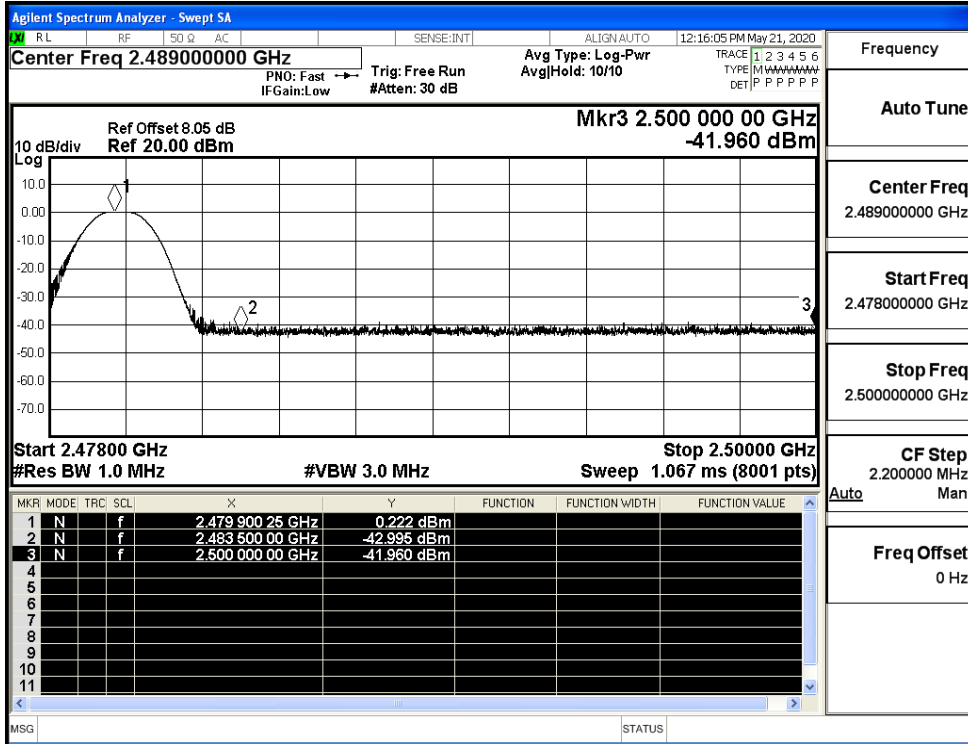
Restrict-band band-edge measurements\_BT LE\_2402\_Ant1\_PEAK



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

