

## Appendix B

### RF Test Data for BT V4.1 (BT LE) (Conducted Measurement)

Product Name: WIRELESS HEADPHONE

Trade Mark: PAHP1002-ASST

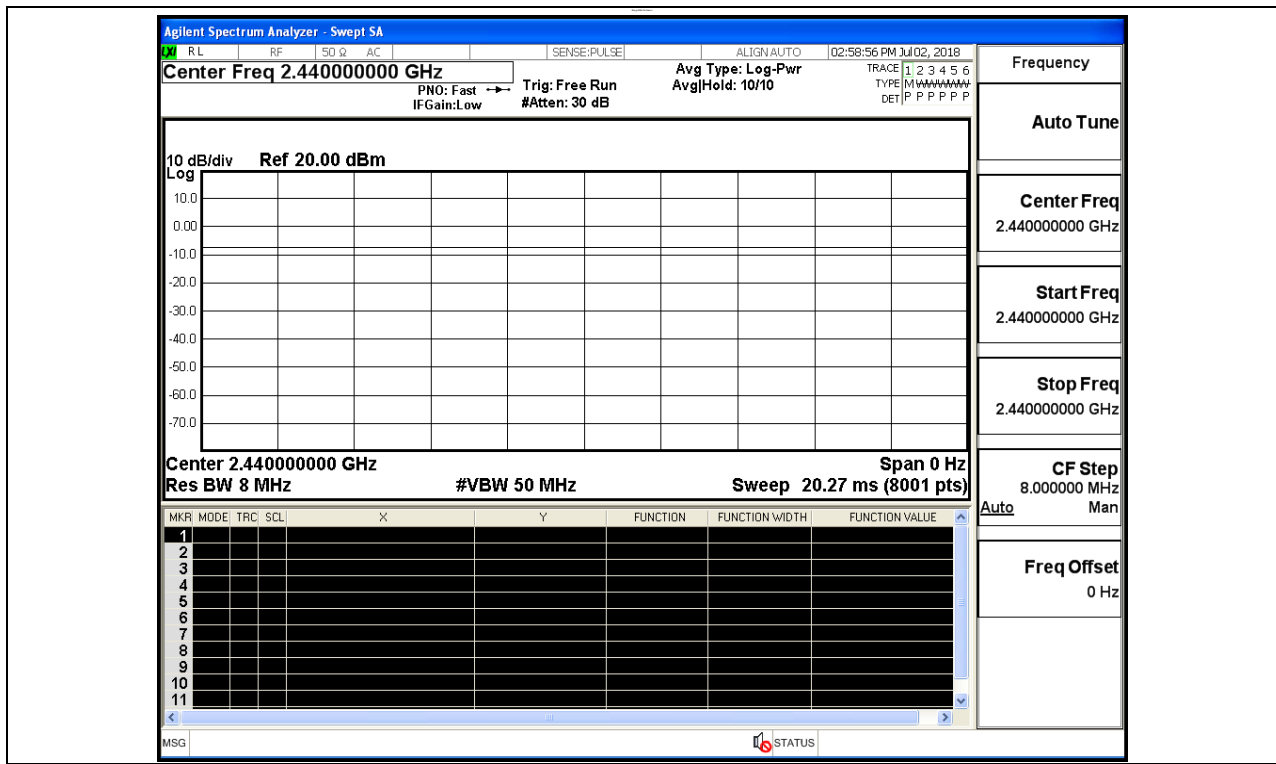
Test Model: PrimeAudio

#### Environmental Conditions

Temperature:	23.2 °C
Relative Humidity:	53.5%
ATM Pressure:	100.0 kPa
Test Engineer:	Ryan.Hu
Supervised by:	Jayden.Zhuo

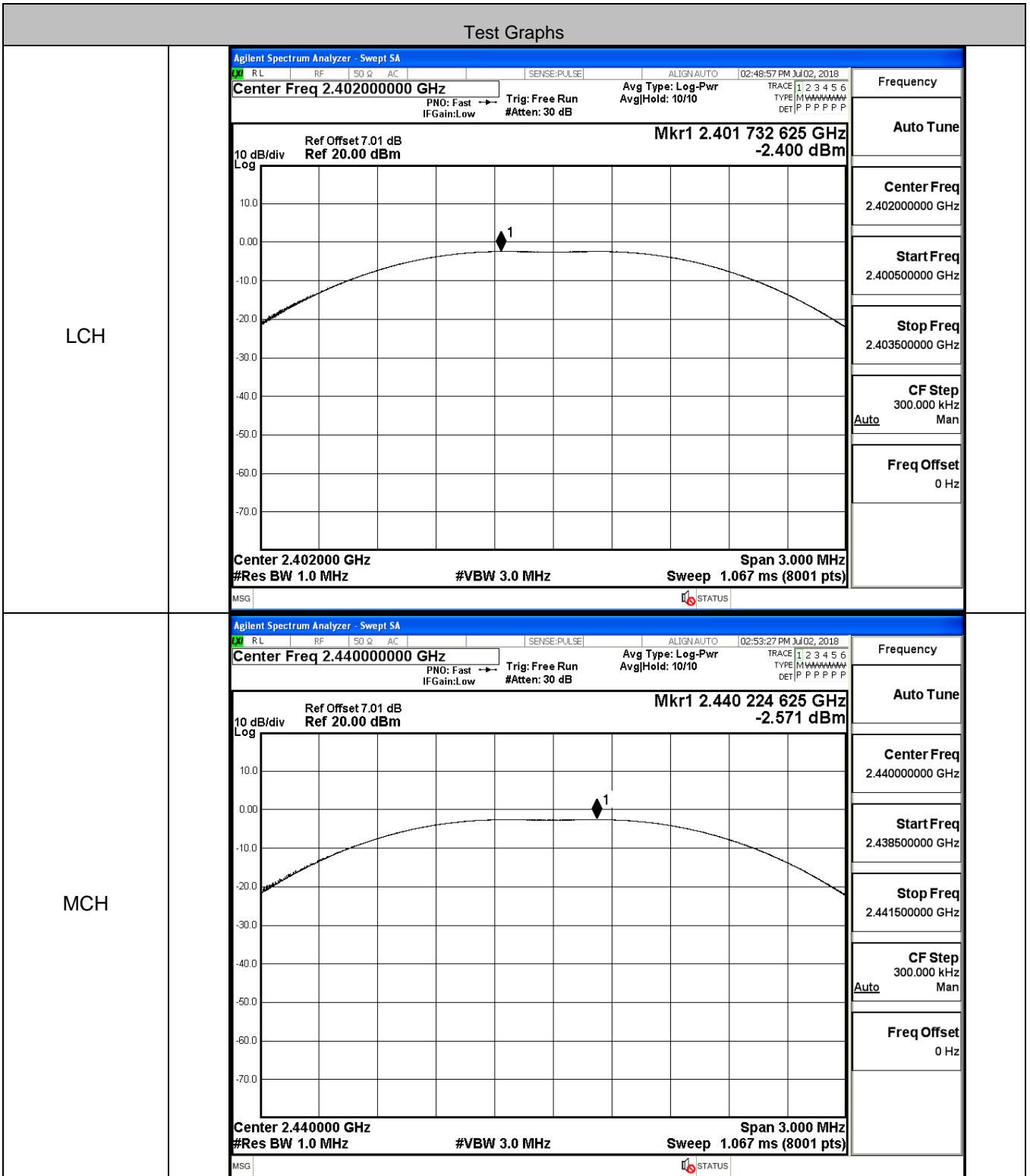
#### B.1 Duty Cycle

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	-2.4	30	PASS
BT LE	MCH	-2.571	30	PASS
BT LE	HCH	-1.912	30	PASS

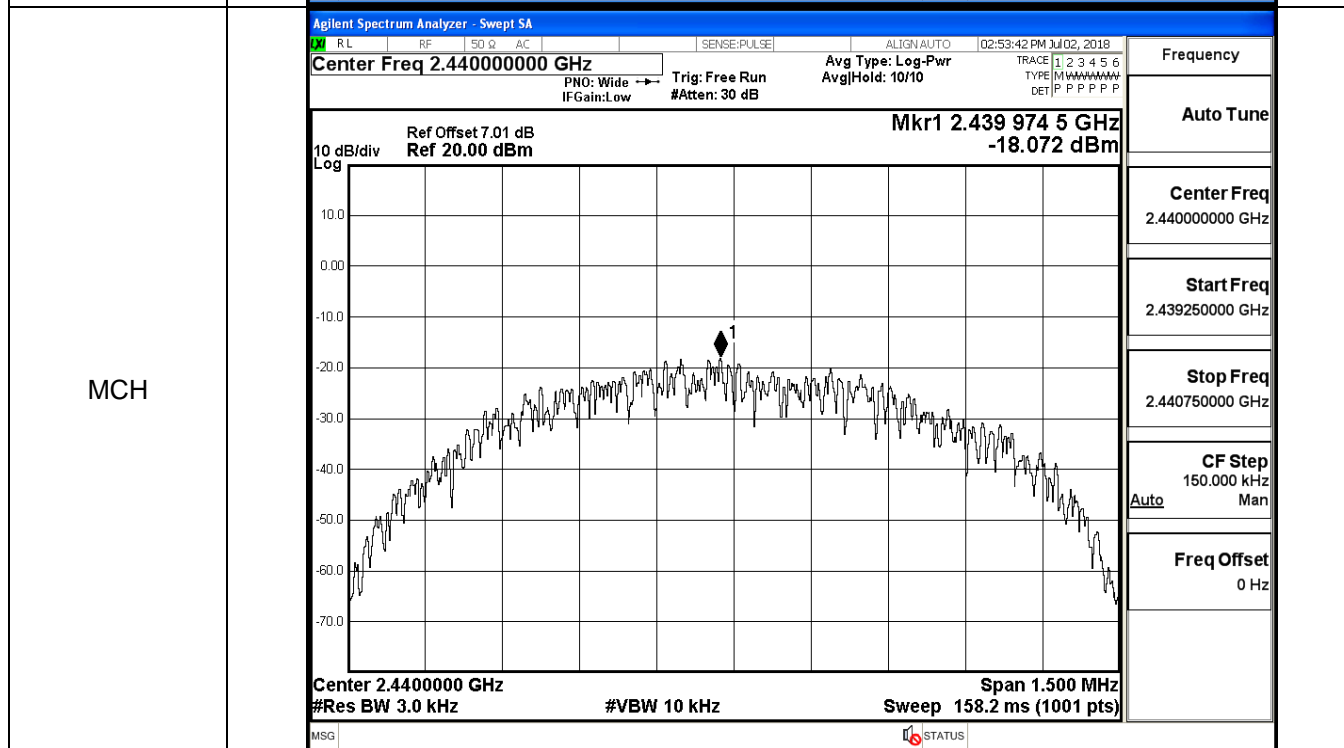
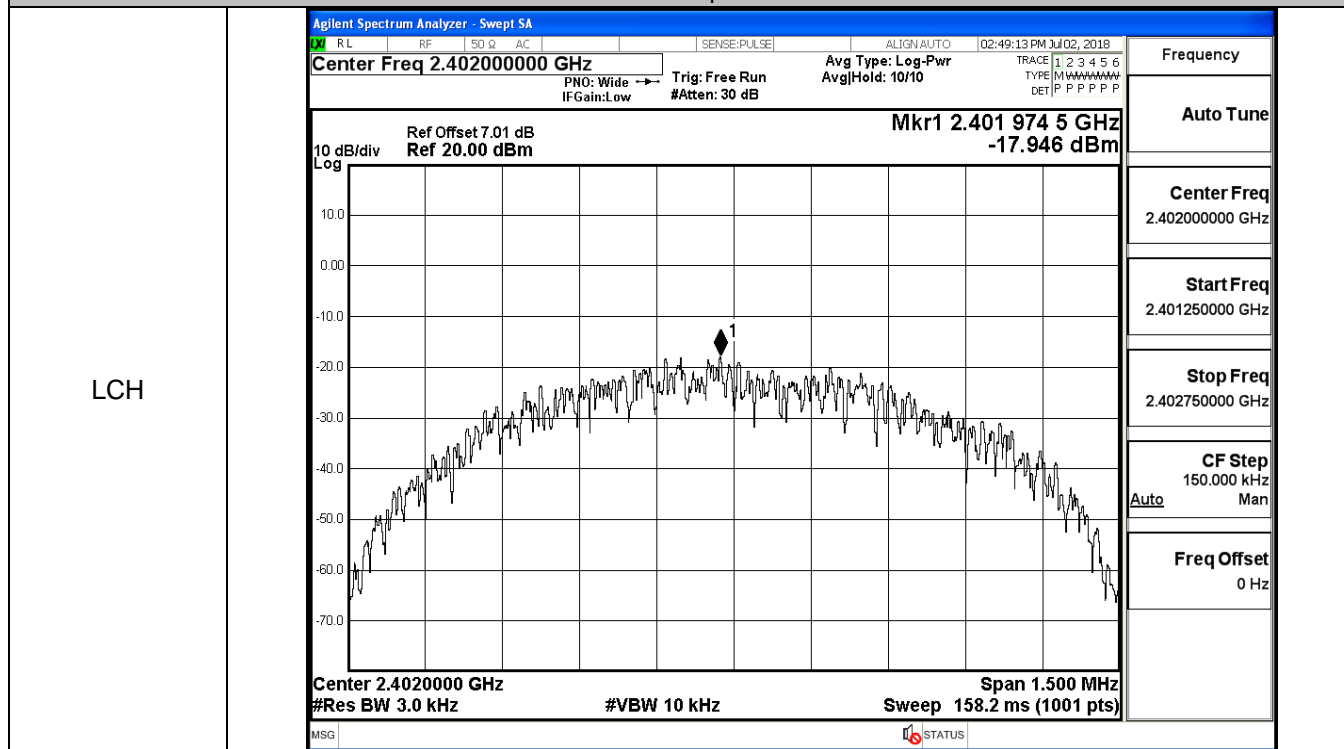




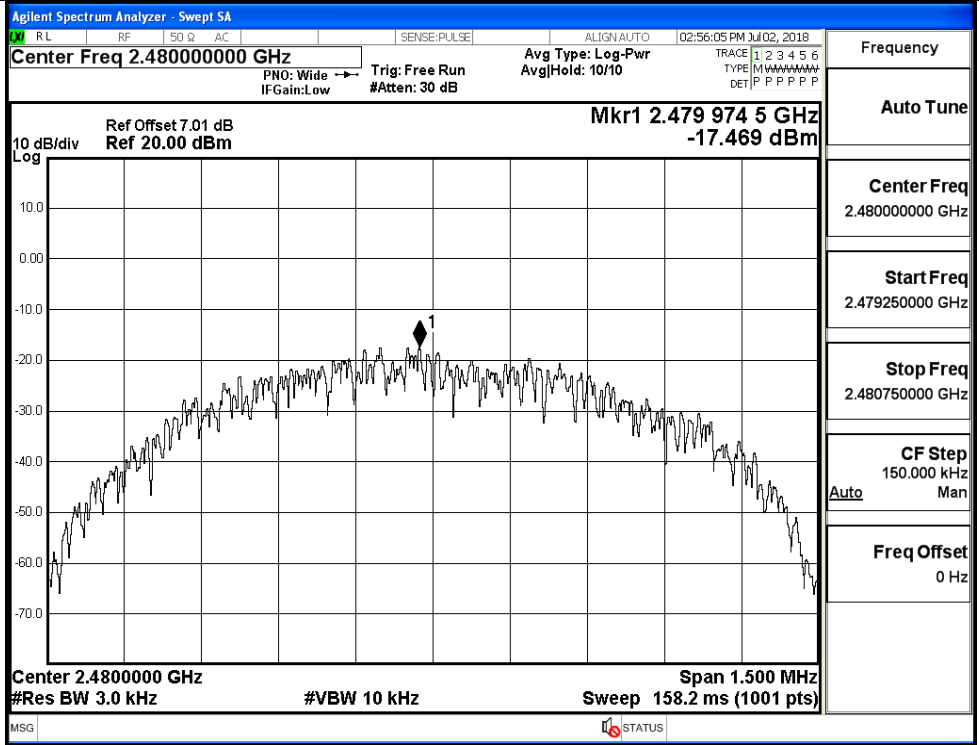
### B.3 Maximum Power Spectral Density

Mode	Channel	PSD [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
BT LE	LCH	-17.946	8	PASS
BT LE	MCH	-18.072	8	PASS
BT LE	HCH	-17.469	8	PASS

#### Test Graphs



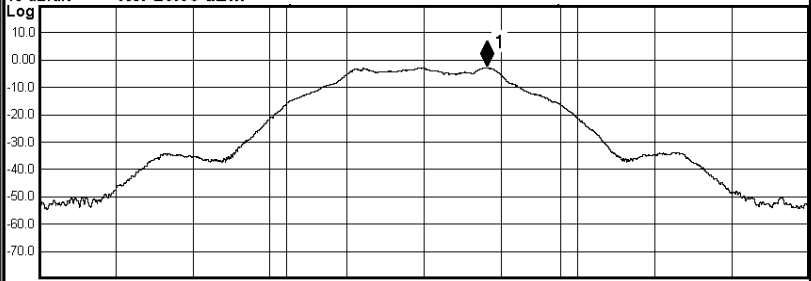
HCH



**B.4 6dB Bandwidth**

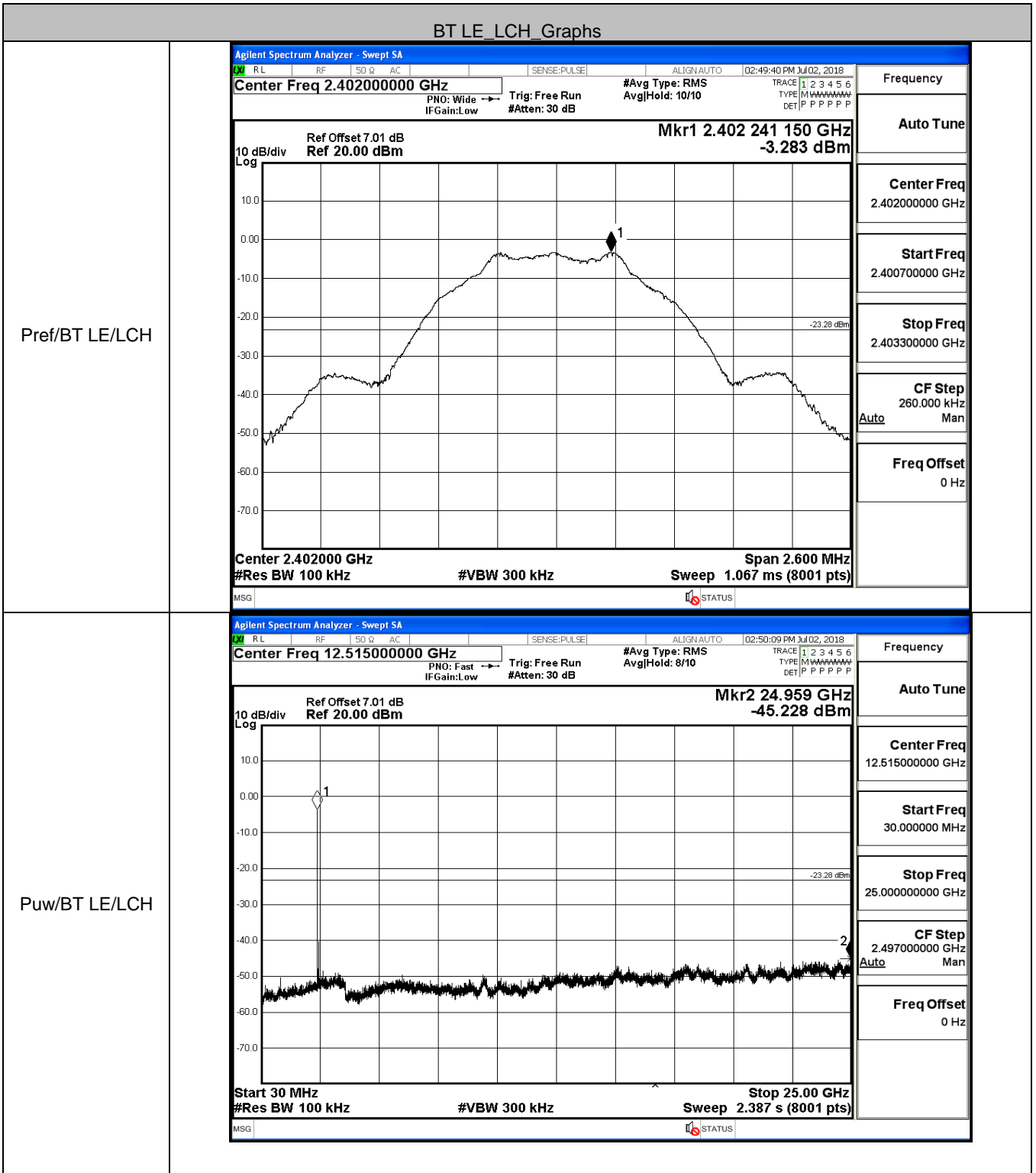
Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
BT LE	LCH	0.7122	≥0.5	PASS
BT LE	MCH	0.7094	≥0.5	PASS
BT LE	HCH	0.7104	≥0.5	PASS

Test Graphs																			
LCH	<div style="border: 1px solid black; padding: 5px;"> <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&gt;1/1    Radio Device: BTS</p> <p>Ref Offset 7.01 dB    Mkr1 2.4022456 GHz                      Ref 20.00 dBm    -3.3054 dBm</p> <p>Center 2.402 GHz    Span 3 MHz                      #Res BW 100 kHz    #VBW 300 kHz    Sweep 1.067 ms</p> <table border="1"> <tr> <td>Occupied Bandwidth</td> <td>Total Power</td> <td>3.87 dBm</td> </tr> <tr> <td><b>1.0603 MHz</b></td> <td></td> <td></td> </tr> <tr> <td>Transmit Freq Error</td> <td>694 Hz</td> <td>OBW Power</td> </tr> <tr> <td>x dB Bandwidth</td> <td>712.2 kHz</td> <td>x dB</td> </tr> <tr> <td></td> <td></td> <td>99.00 %</td> </tr> <tr> <td></td> <td></td> <td>-6.00 dB</td> </tr> </table> </div>	Occupied Bandwidth	Total Power	3.87 dBm	<b>1.0603 MHz</b>			Transmit Freq Error	694 Hz	OBW Power	x dB Bandwidth	712.2 kHz	x dB			99.00 %			-6.00 dB
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HCH	Agilent Spectrum Analyzer - Occupied BW	RL RF 50 Ω AC SENSE:PULSE ALIGN:AUTO 02:55:36 PM Jul 02, 2018																		
	Center Freq <b>2.480000000 GHz</b>	Center Freq: 2.480000000 GHz Trig: Free Run AvgHold: 1/1	Radio Std: None Radio Device: BTS																	
	#IFGain:Low	#Atten: 30 dB	Mkr1 <b>2.4802441 GHz</b> <b>-2.8199 dBm</b>																	
	<div style="display: flex; justify-content: space-between; font-size: 8px;"> <span>10 dB/div</span> <span>Ref Offset 7.01 dB</span> <span>Ref 20.00 dBm</span> </div>  <p style="font-size: 8px;">The plot shows a signal spectrum with a peak at 2.4802441 GHz. The y-axis is labeled 'Log' and ranges from -70.0 to 10.0 dBm. The x-axis represents frequency. A marker '1' is placed at the peak of the signal.</p>																			
	Center <b>2.48 GHz</b> #Res BW <b>100 kHz</b>	#VBW <b>300 kHz</b>	Span <b>3 MHz</b> Sweep <b>1.067 ms</b>																	
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;"><b>Occupied Bandwidth</b></td> <td style="width: 33%;"><b>Total Power</b></td> <td style="width: 33%;"><b>4.35 dBm</b></td> </tr> <tr> <td style="text-align: center;"><b>1.0618 MHz</b></td> <td></td> <td></td> </tr> <tr> <td><b>Transmit Freq Error</b></td> <td><b>-142 Hz</b></td> <td><b>OBW Power</b></td> </tr> <tr> <td><b>x dB Bandwidth</b></td> <td><b>710.4 kHz</b></td> <td><b>x dB</b></td> </tr> <tr> <td></td> <td></td> <td><b>99.00 %</b></td> </tr> <tr> <td></td> <td></td> <td><b>-6.00 dB</b></td> </tr> </table>		<b>Occupied Bandwidth</b>	<b>Total Power</b>	<b>4.35 dBm</b>	<b>1.0618 MHz</b>			<b>Transmit Freq Error</b>	<b>-142 Hz</b>	<b>OBW Power</b>	<b>x dB Bandwidth</b>	<b>710.4 kHz</b>	<b>x dB</b>			<b>99.00 %</b>			<b>-6.00 dB</b>	CF Step 300.000 kHz Auto Man
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		<b>-6.00 dB</b>																		
		Freq Offset 0 Hz																		
MSG		STATUS																		

### B.5 RF Conducted Spurious Emissions

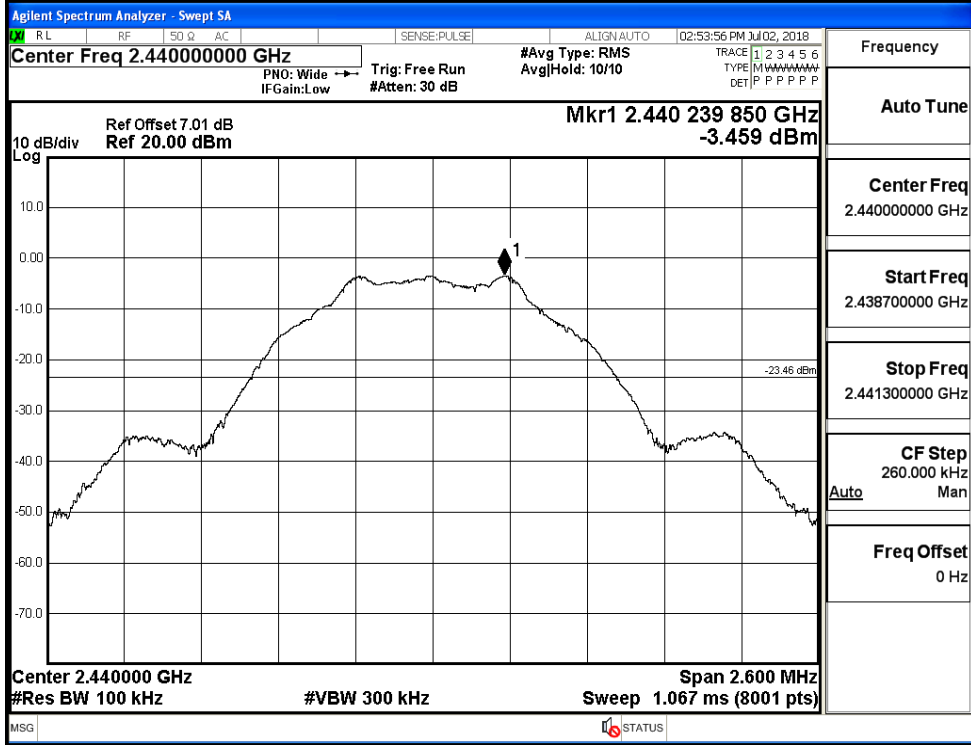
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	-3.283	-45.228	-23.283	PASS
BT LE	MCH	-3.459	-45.084	-23.459	PASS
BT LE	HCH	-2.885	-44.176	-22.885	PASS



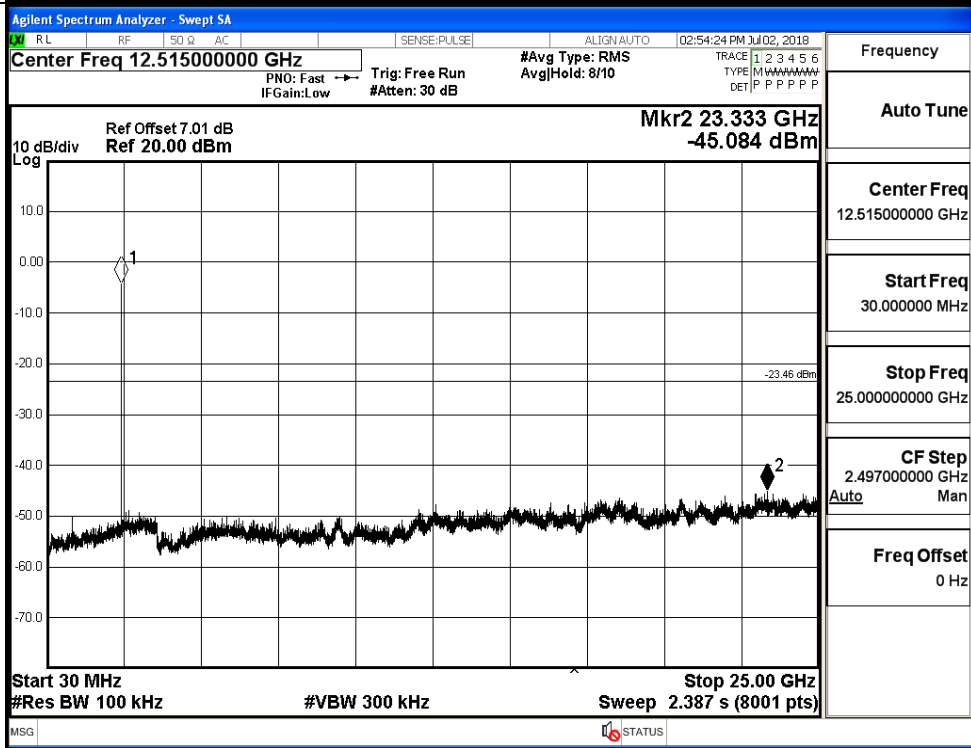


BT LE\_MCH\_Graphs

Pref/BT LE/MCH

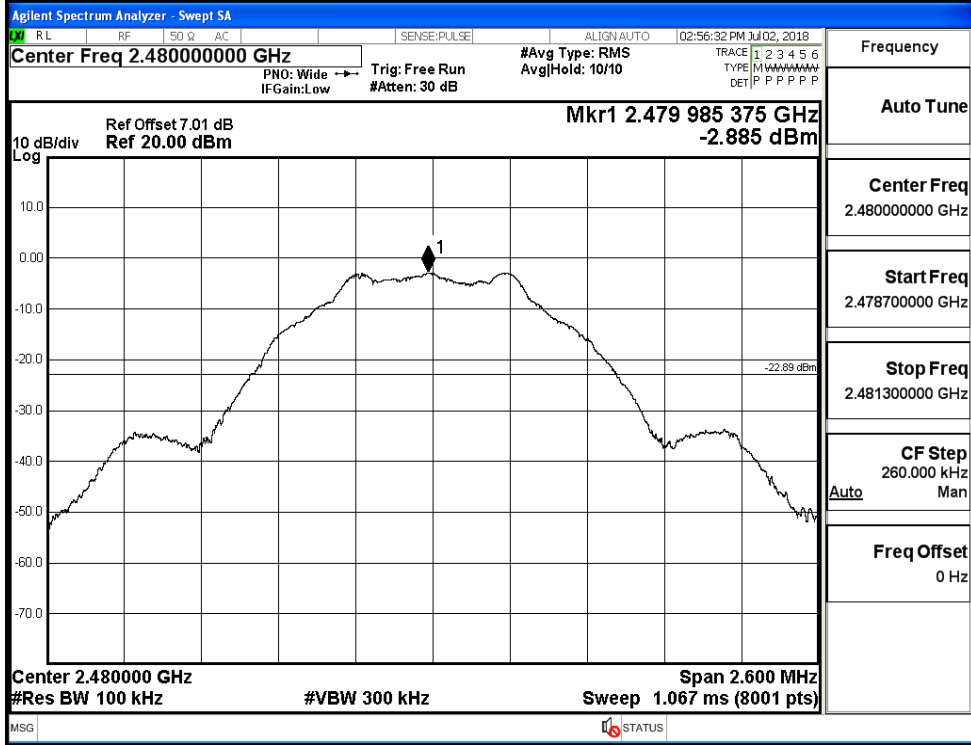


Puw/BT LE/MCH

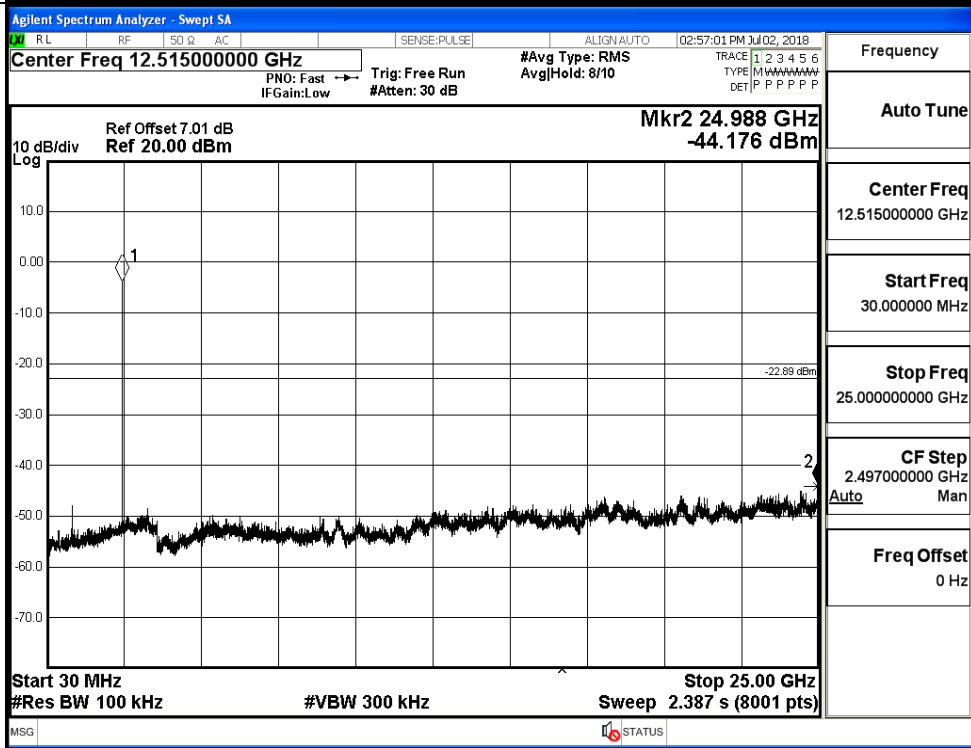


BT LE\_HCH\_Graphs

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	-3.184	-50.578	-23.18	PASS
BT LE	HCH	-2.593	-50.880	-22.59	PASS

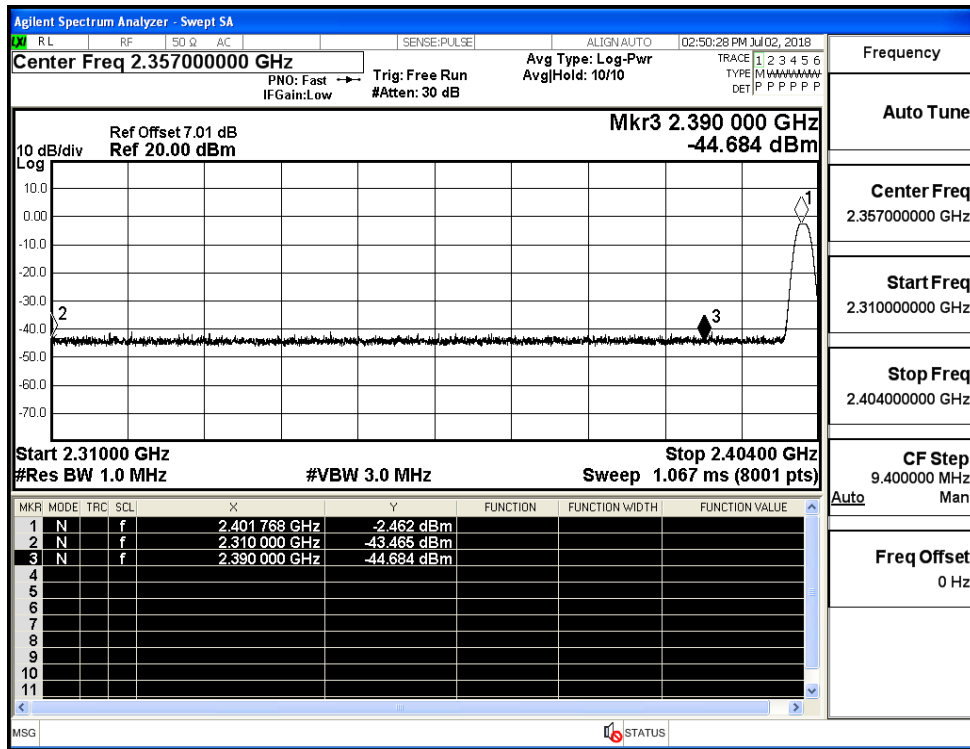
Test Graphs

LCH	<p><b>Agilent Spectrum Analyzer - Swept SA</b>                  Center Freq 2.35700000 GHz                  Mkr4 2.362 511 GHz -50.578 dBm                  Start 2.31000 GHz #Res BW 100 kHz #VBW 300 kHz Sweep 9.067 ms (8001 pts)                  Stop 2.40400 GHz</p> <table border="1" style="font-size: small;"> <thead> <tr> <th>MKR</th> <th>MODE</th> <th>TRC</th> <th>SCL</th> <th>X</th> <th>Y</th> <th>FUNCTION</th> <th>FUNCTION WIDTH</th> <th>FUNCTION VALUE</th> </tr> </thead> <tbody> <tr><td>1</td><td>N</td><td>f</td><td></td><td>2.402 226 GHz</td><td>-3.184 dBm</td><td></td><td></td><td></td></tr> <tr><td>2</td><td>N</td><td>f</td><td></td><td>2.400 000 GHz</td><td>-54.115 dBm</td><td></td><td></td><td></td></tr> <tr><td>3</td><td>N</td><td>f</td><td></td><td>2.390 000 GHz</td><td>-54.168 dBm</td><td></td><td></td><td></td></tr> <tr><td>4</td><td>N</td><td>f</td><td></td><td>2.362 511 GHz</td><td>-50.578 dBm</td><td></td><td></td><td></td></tr> </tbody> </table>	MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	1	N	f		2.402 226 GHz	-3.184 dBm				2	N	f		2.400 000 GHz	-54.115 dBm				3	N	f		2.390 000 GHz	-54.168 dBm				4	N	f		2.362 511 GHz	-50.578 dBm				Frequency Auto Tune Center Freq 2.35700000 GHz Start Freq 2.31000000 GHz Stop Freq 2.40400000 GHz CF Step 9.400000 MHz Freq Offset 0 Hz
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HCH	<p><b>Agilent Spectrum Analyzer - Swept SA</b>                  Center Freq 2.48900000 GHz                  Mkr4 2.487 911 00 GHz -50.880 dBm                  Start 2.47800 GHz #Res BW 100 kHz #VBW 300 kHz Sweep 2.133 ms (8001 pts)                  Stop 2.50000 GHz</p> <table border="1" style="font-size: small;"> <thead> <tr> <th>MKR</th> <th>MODE</th> <th>TRC</th> <th>SCL</th> <th>X</th> <th>Y</th> <th>FUNCTION</th> <th>FUNCTION WIDTH</th> <th>FUNCTION VALUE</th> </tr> </thead> <tbody> <tr><td>1</td><td>N</td><td>f</td><td></td><td>2.480 244 00 GHz</td><td>-2.593 dBm</td><td></td><td></td><td></td></tr> <tr><td>2</td><td>N</td><td>f</td><td></td><td>2.483 500 00 GHz</td><td>-53.395 dBm</td><td></td><td></td><td></td></tr> <tr><td>3</td><td>N</td><td>f</td><td></td><td>2.500 000 00 GHz</td><td>-56.166 dBm</td><td></td><td></td><td></td></tr> <tr><td>4</td><td>N</td><td>f</td><td></td><td>2.487 911 00 GHz</td><td>-50.880 dBm</td><td></td><td></td><td></td></tr> </tbody> </table>	MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	1	N	f		2.480 244 00 GHz	-2.593 dBm				2	N	f		2.483 500 00 GHz	-53.395 dBm				3	N	f		2.500 000 00 GHz	-56.166 dBm				4	N	f		2.487 911 00 GHz	-50.880 dBm				Frequency Auto Tune Center Freq 2.48900000 GHz Start Freq 2.47800000 GHz Stop Freq 2.50000000 GHz CF Step 2.200000 MHz Freq Offset 0 Hz
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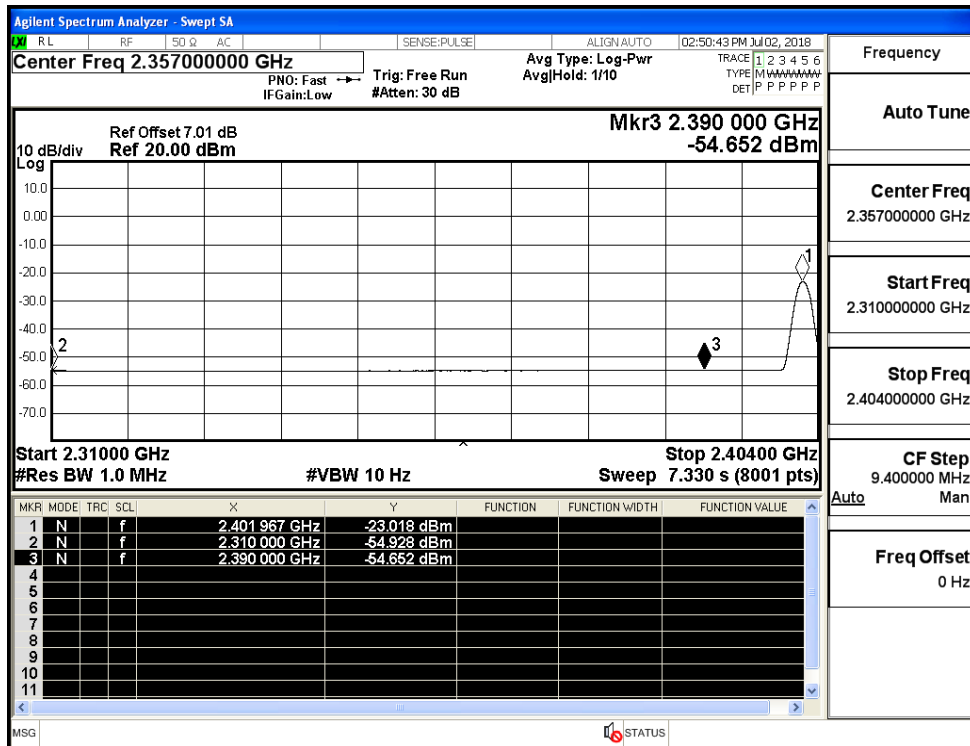
### B.7 Restrict-band band-edge measurements

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	-43.47	2.0	0	53.79	PEAK	74	PASS
		Ant1	2310.0	-54.93	2.0	0	42.33	AV	54	PASS
		Ant1	2390.0	-44.68	2.0	0	52.57	PEAK	74	PASS
		Ant1	2390.0	-54.65	2.0	0	42.61	AV	54	PASS
	2480	Ant1	2483.5	-43.81	2.0	0	53.45	PEAK	74	PASS
		Ant1	2483.5	-54.45	2.0	0	42.81	AV	54	PASS
		Ant1	2500.0	-43.94	2.0	0	53.32	PEAK	74	PASS
		Ant1	2500.0	-54.30	2.0	0	42.96	AV	54	PASS

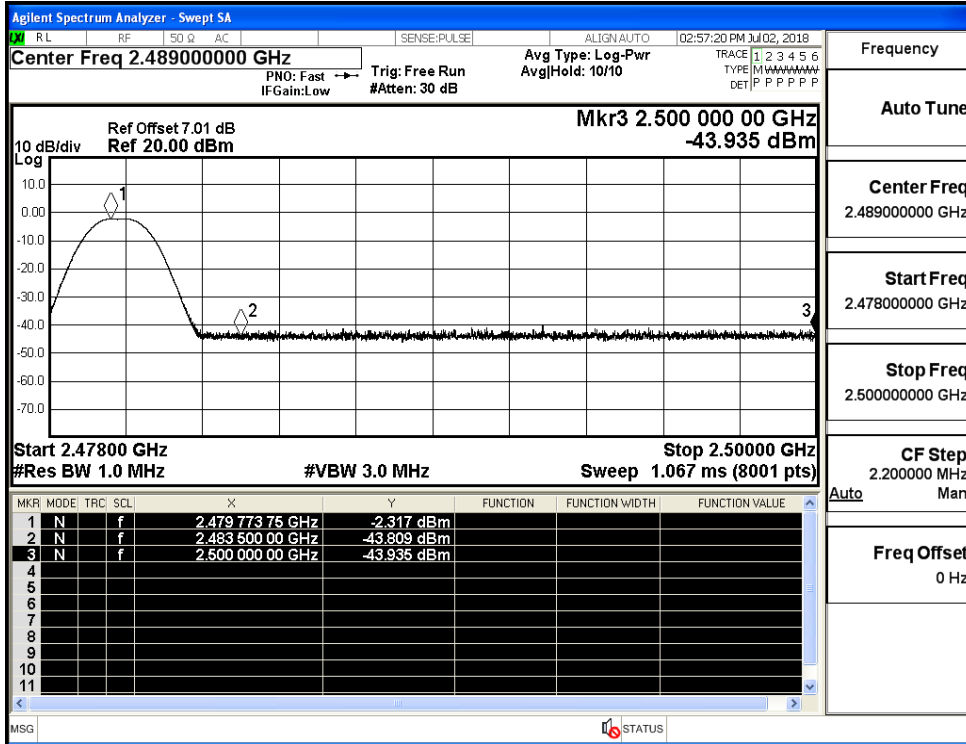
Restrict-band band-edge measurements\_BT LE\_2402\_Ant1\_PEAK



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

