

## Appendix B

### RF Test Data for BT V5.0(BDR/EDR) (Conducted Measurement)

Product Name: Bluetooth Speaker

Trade Mark: N/A

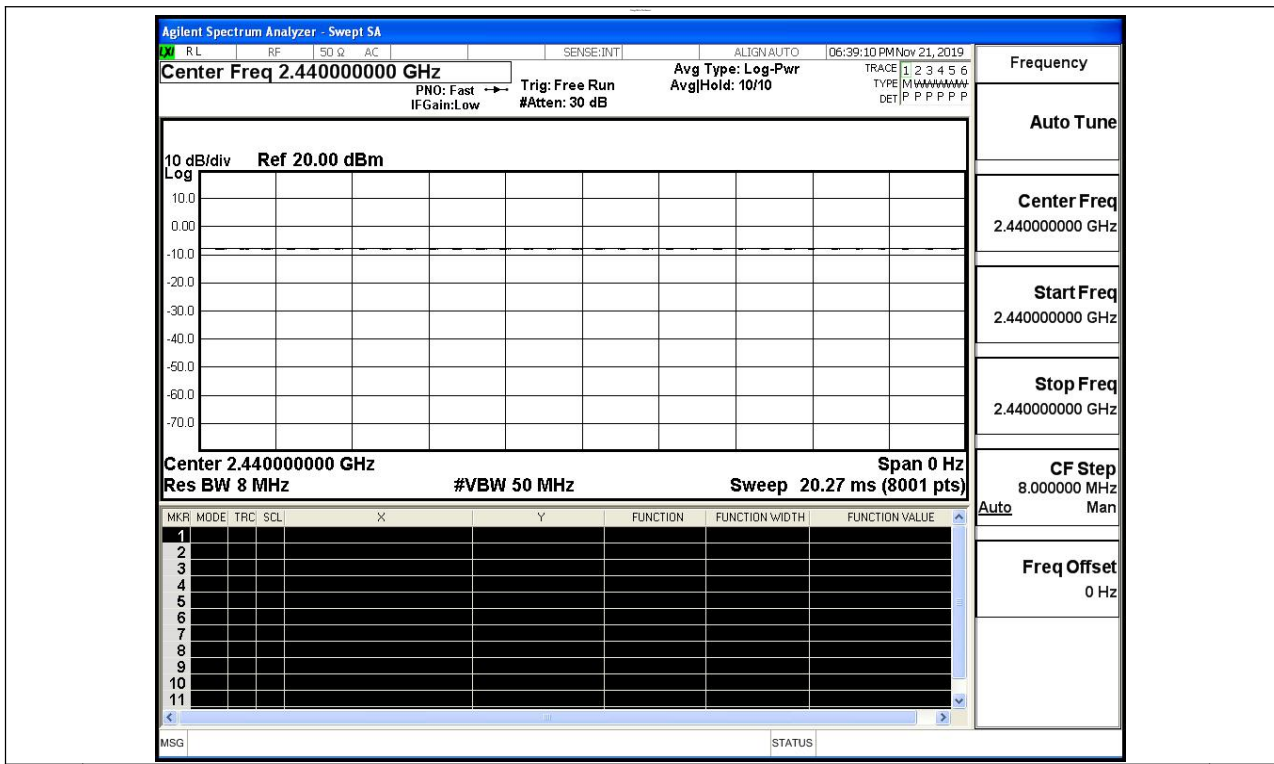
Test Model: BT-1906

#### Environmental Conditions

Temperature:	23.6 ° C
Relative Humidity:	52.9%
ATM Pressure:	100.0 kPa
Test Engineer:	Qu Xin
Supervised by:	Tom.Liu

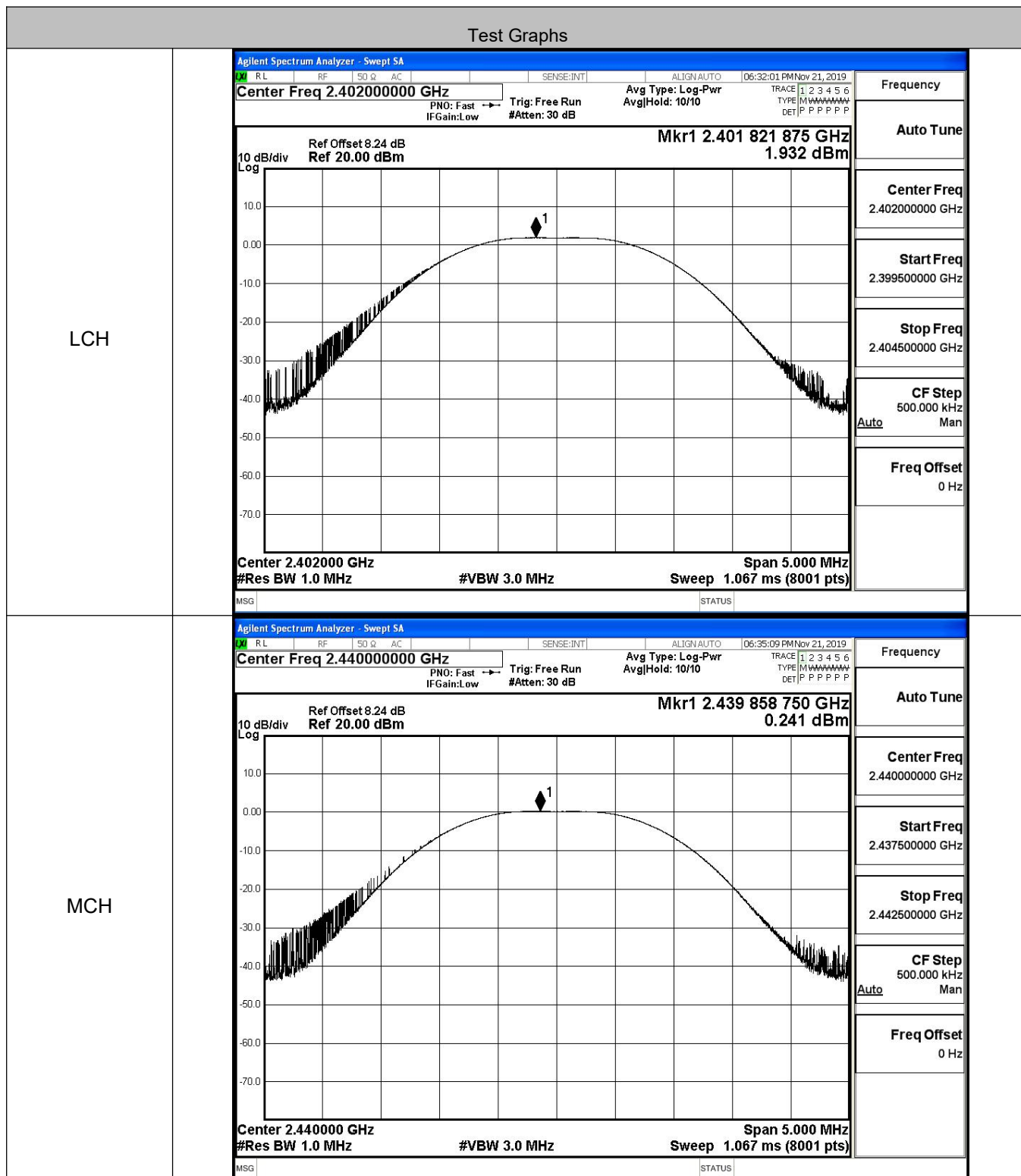
#### B.1 Duty Cycle

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

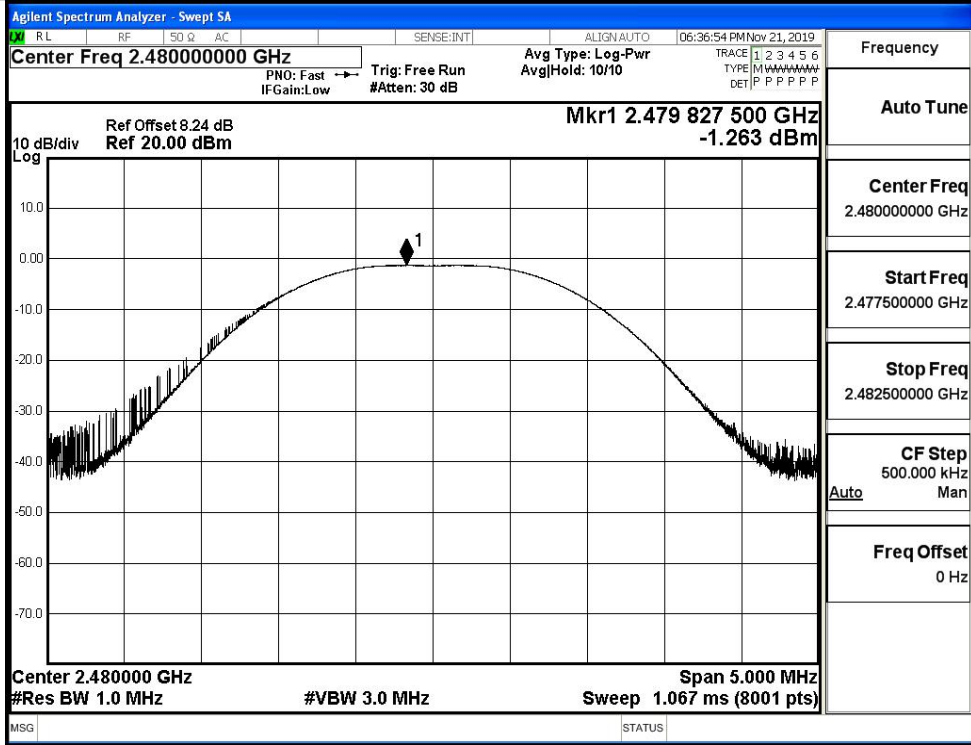


### B.2 Maximum Conducted Peak Output Power

Mode	Channel	Conduct Peak Power[dBm]	Limit [dBm]	Verdict
BT LE	LCH	1.932	30	PASS
BT LE	MCH	0.241	30	PASS
BT LE	HCH	-1.263	30	PASS



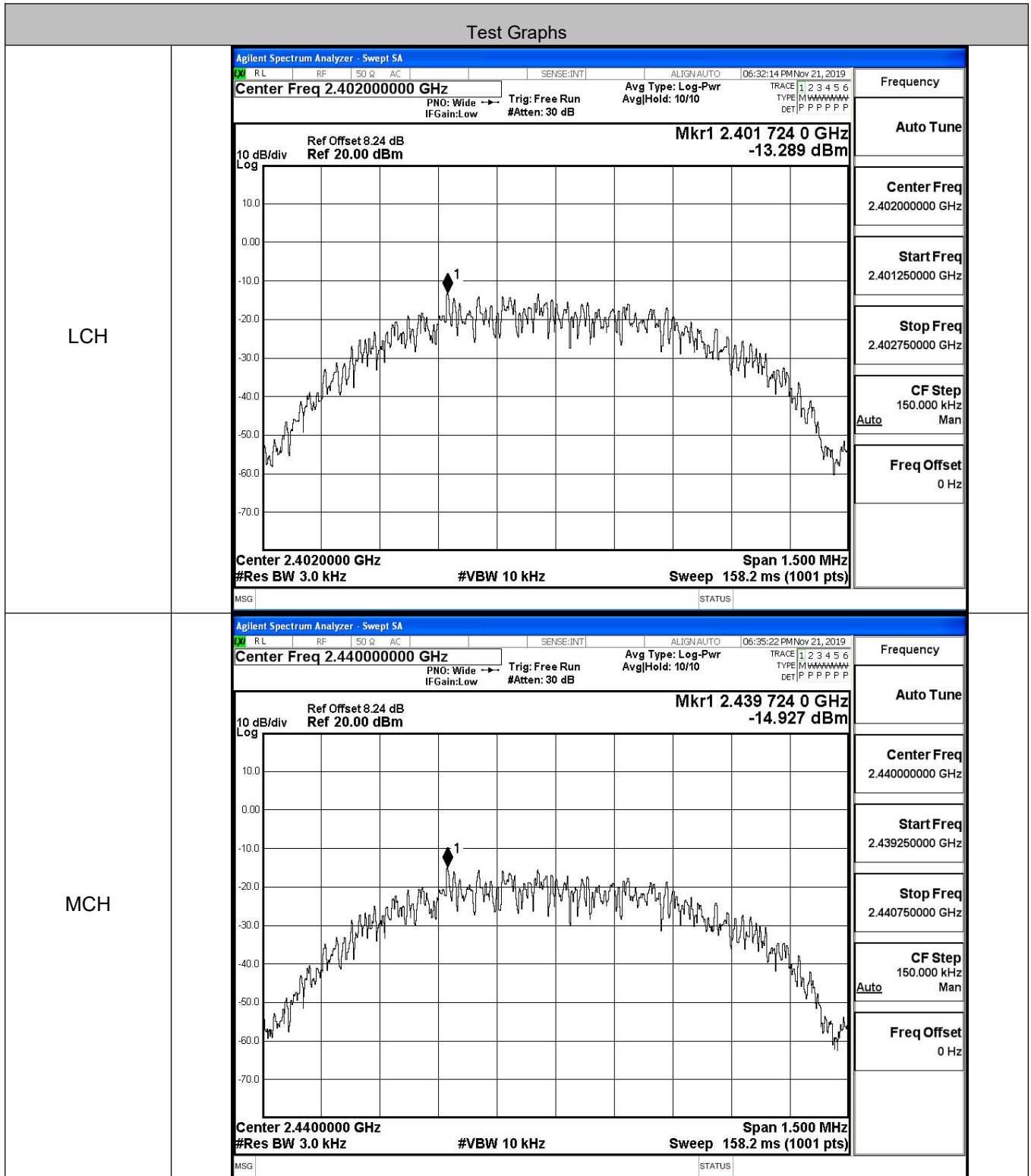
HCH



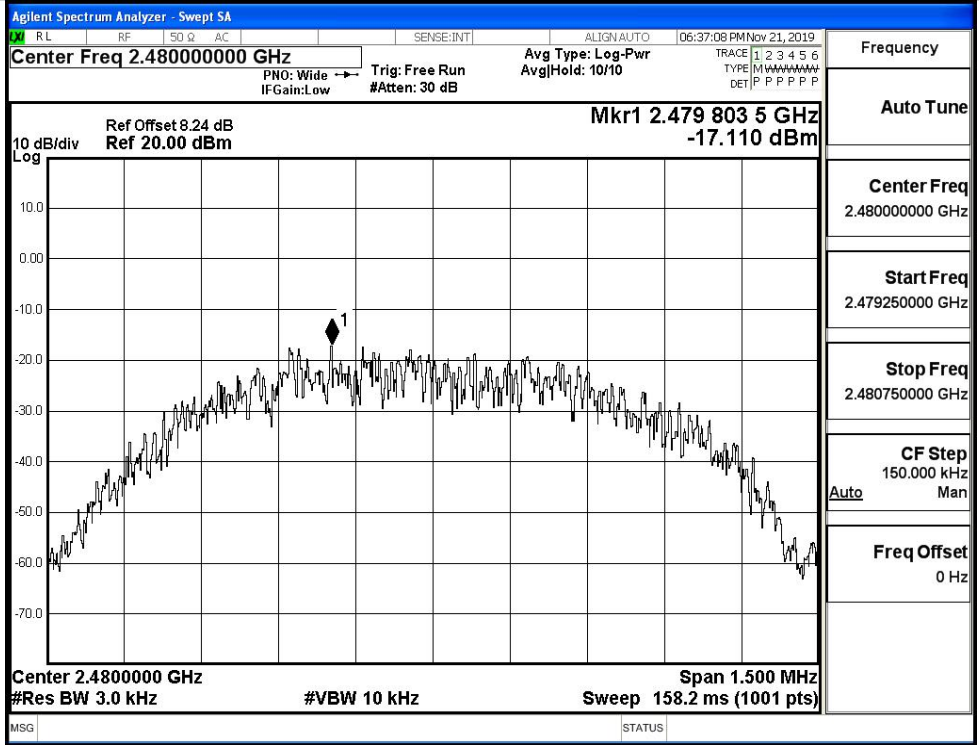
### B.3 Maximum Power Spectral Density

Mode	Channel	PSD [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
BT LE	LCH	-13.289	8	PASS
BT LE	MCH	-14.927	8	PASS
BT LE	HCH	-17.110	8	PASS

#### Test Graphs



HCH

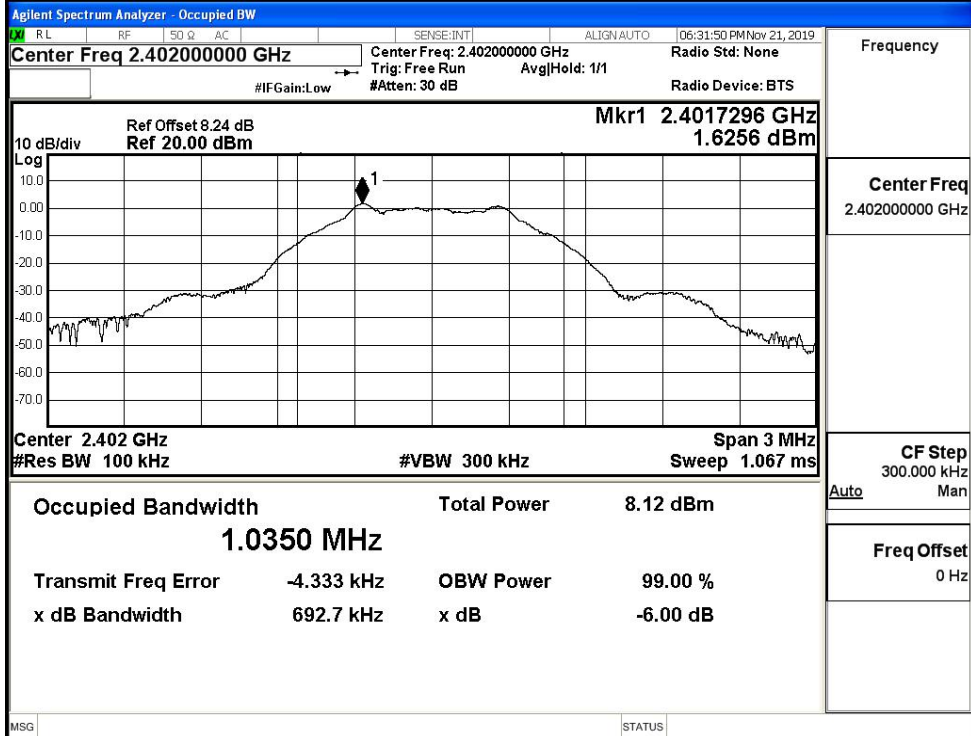


**B.4 6dB Bandwidth**

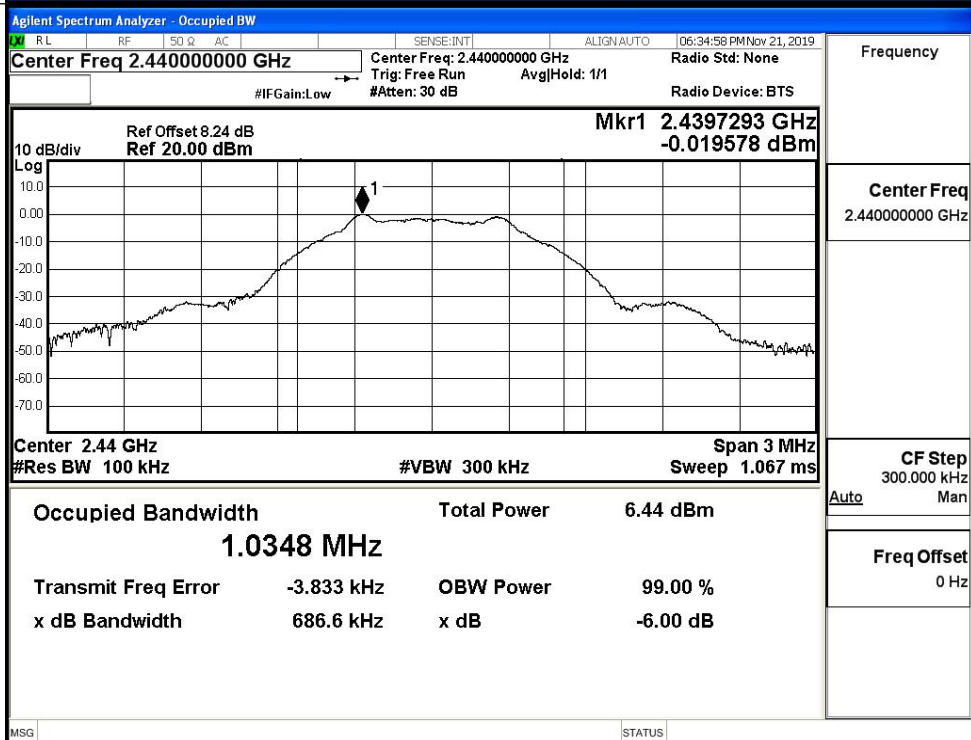
Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
BT LE	LCH	0.6927	≥0.5	PASS
BT LE	MCH	0.6866	≥0.5	PASS
BT LE	HCH	0.6903	≥0.5	PASS

Test Graphs

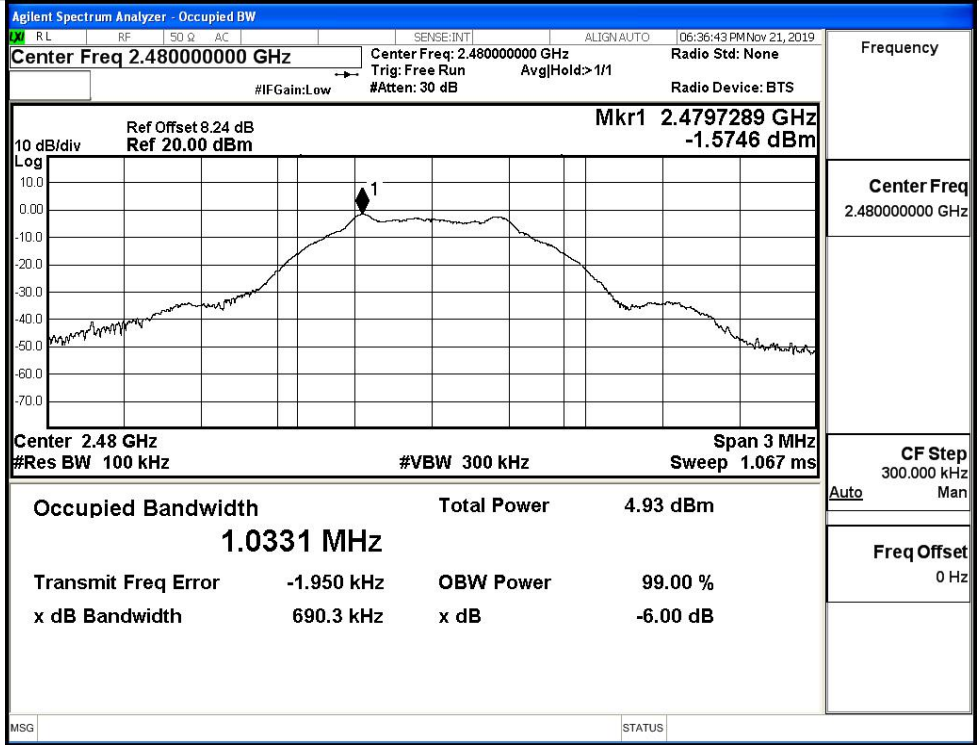
LCH



MCH



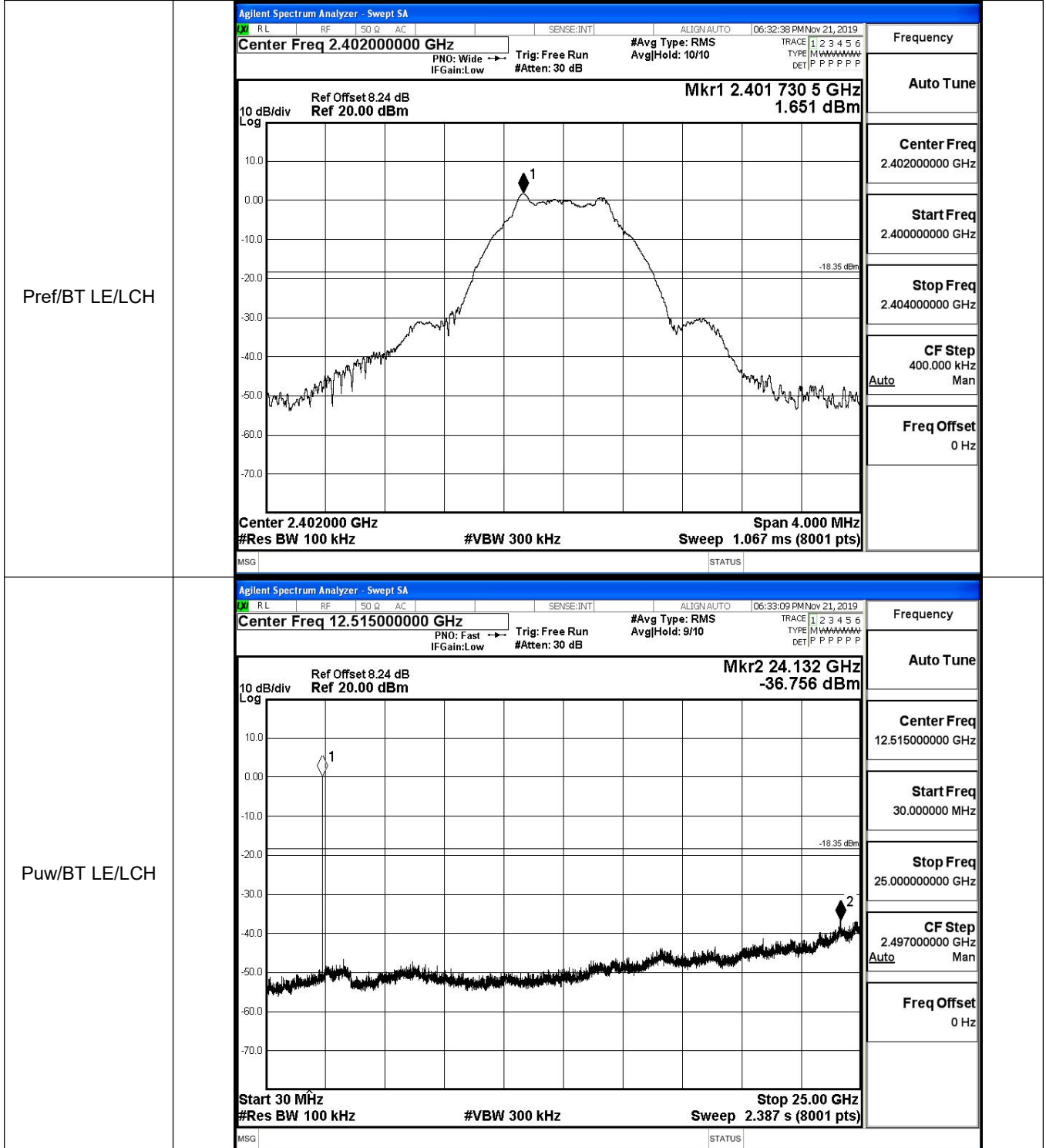
HCH



### B.5 RF Conducted Spurious Emissions

Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	1.651	-36.756	-18.349	PASS
BT LE	MCH	-0.036	-36.248	-20.036	PASS
BT LE	HCH	-1.565	-36.367	-21.565	PASS

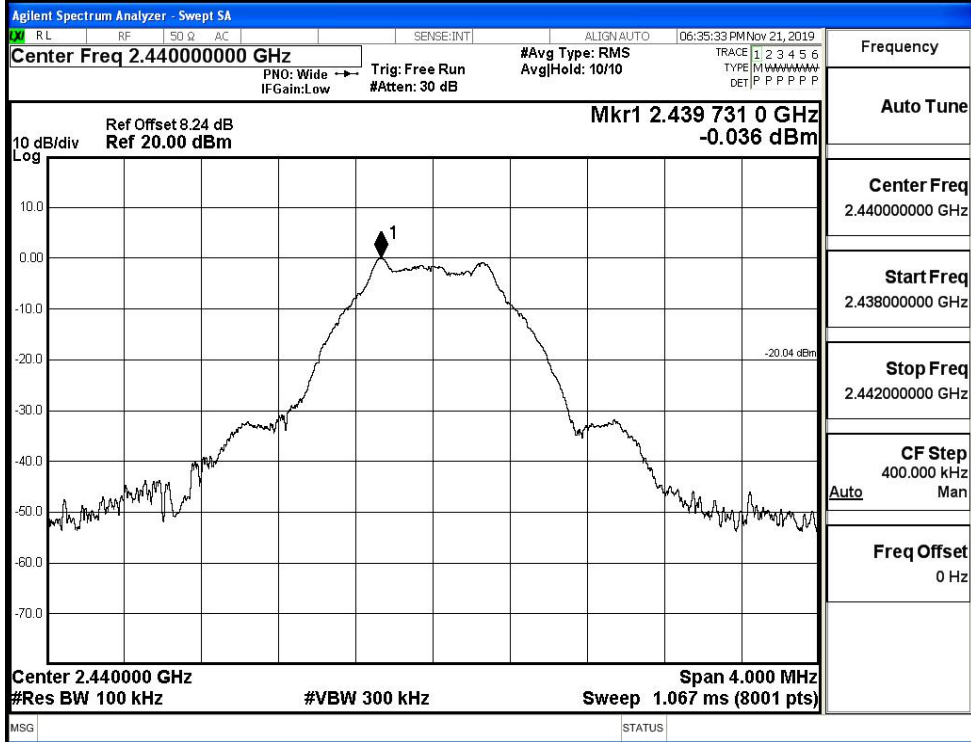
BT LE\_LCH\_Graphs



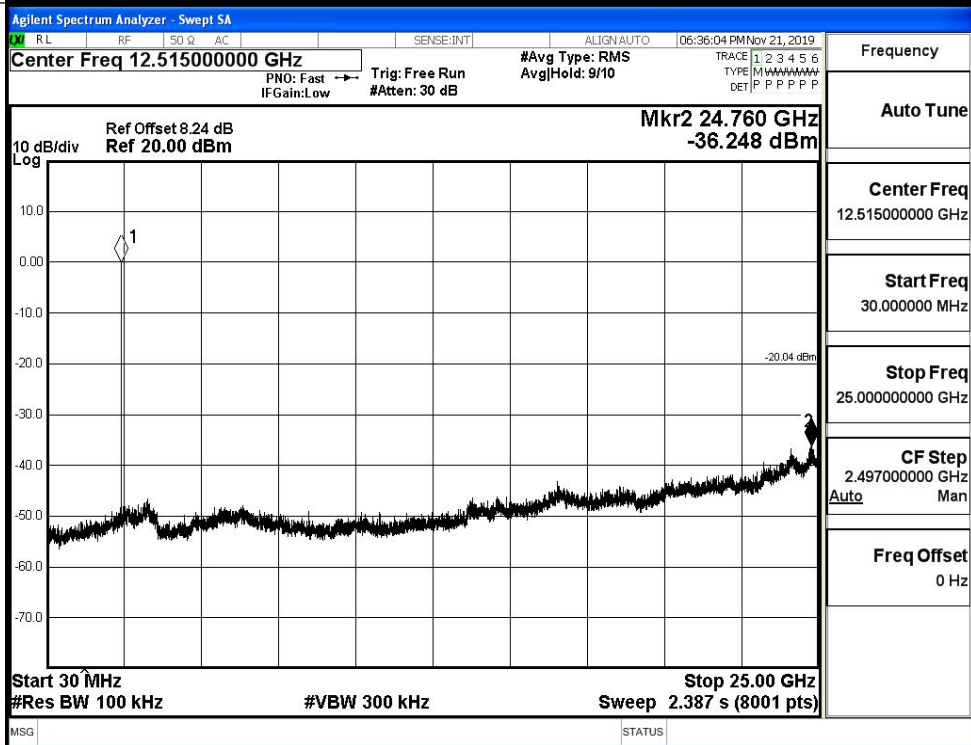


BT LE MCH Graphs

Pref/BT LE/MCH

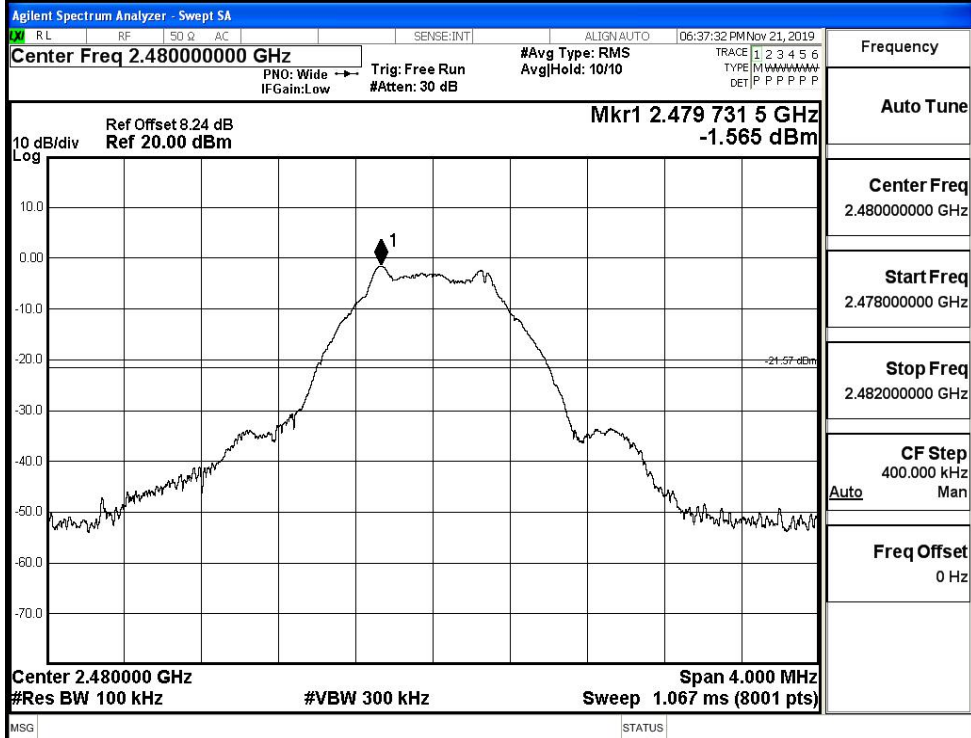


Puw/BT LE/MCH

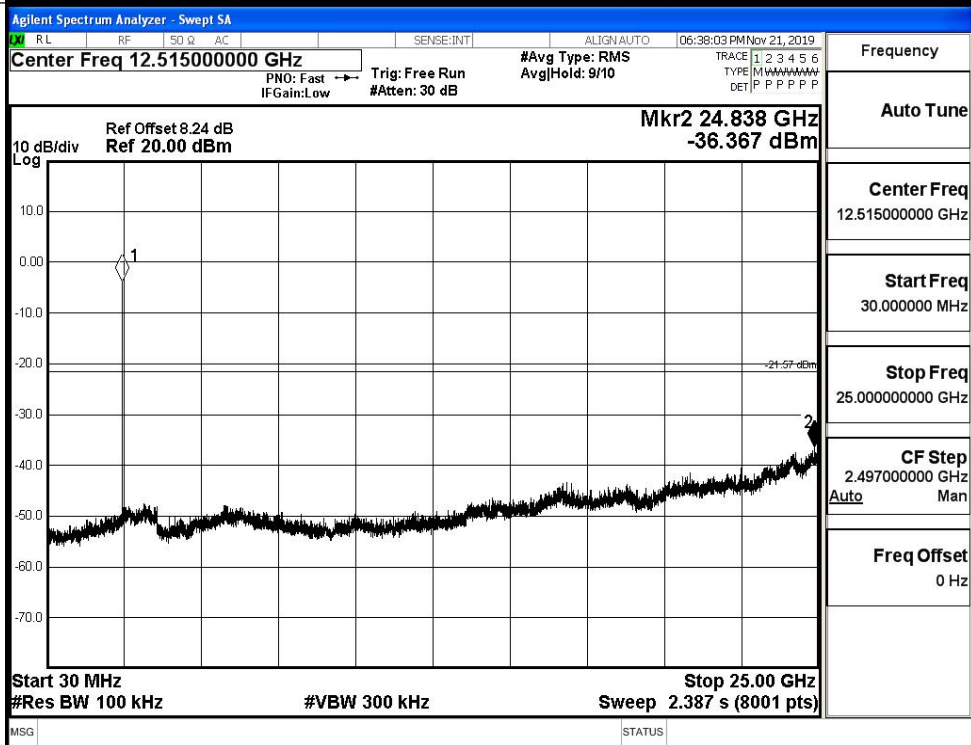


BT LE HCH Graphs

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	1.694	-48.269	-18.31	PASS
BT LE	HCH	-1.577	-49.306	-21.58	PASS

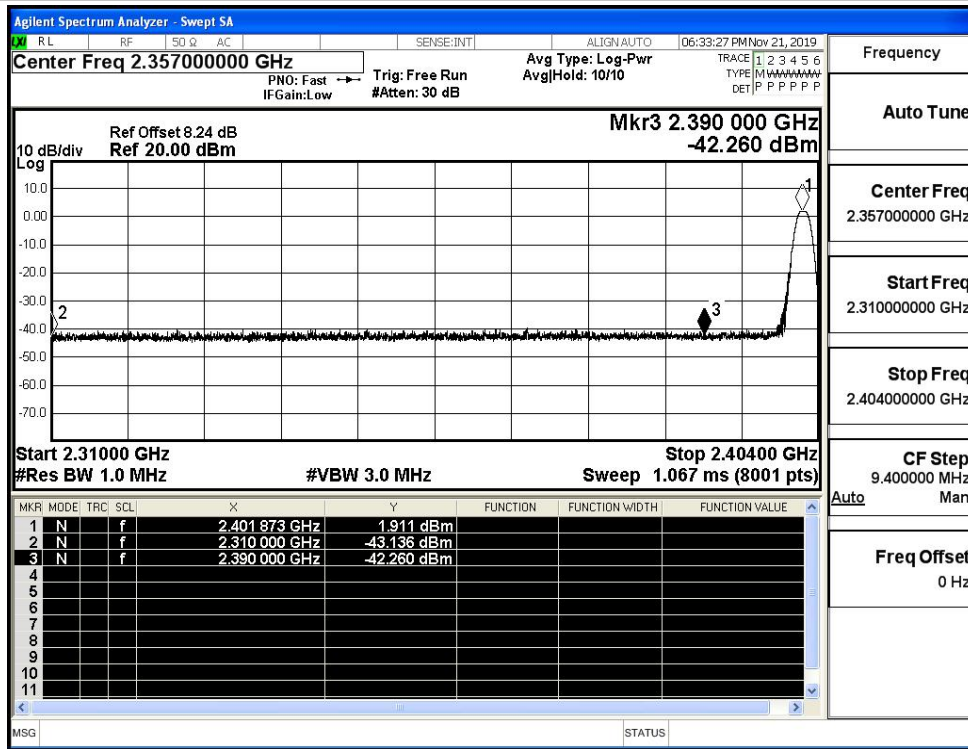
#### Test Graphs

LCH	<p>Agilent Spectrum Analyzer - Swept SA                  Center Freq 2.35700000 GHz                  Ref Offset 8.24 dB                  Ref 20.00 dBm                  Mkr4 2.385 012 GHz                  -48.269 dBm                  Start 2.31000 GHz                  #Res BW 100 kHz                  #VBW 300 kHz                  Stop 2.40400 GHz                  Sweep 9.067 ms (8001 pts)</p> <table border="1"> <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>2.401 732 GHz</td><td>1.694 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>-51.303 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>-50.996 dBm</td><td></td><td></td><td></td></tr> <tr><td>4</td><td>N</td><td>f</td><td></td><td>2.385 012 GHz</td><td>-48.269 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		2.401 732 GHz	1.694 dBm				2	N	f		2.400 000 GHz	-51.303 dBm				3	N	f		2.390 000 GHz	-50.996 dBm				4	N	f		2.385 012 GHz	-48.269 dBm				<p>Frequency</p> <p>Auto Tune</p> <p>Center Freq 2.35700000 GHz</p> <p>Start Freq 2.310000000 GHz</p> <p>Stop Freq 2.404000000 GHz</p> <p>CF Step 9.400000 MHz</p> <p>Freq Offset 0 Hz</p>
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HCH	<p>Agilent Spectrum Analyzer - Swept SA                  Center Freq 2.48900000 GHz                  Ref Offset 8.24 dB                  Ref 20.00 dBm                  Mkr4 2.490 476 75 GHz                  -49.306 dBm                  Start 2.47800 GHz                  #Res BW 100 kHz                  #VBW 300 kHz                  Stop 2.50000 GHz                  Sweep 2.133 ms (8001 pts)</p> <table border="1"> <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>2.479 735 25 GHz</td><td>-1.577 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>-51.772 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>-51.892 dBm</td><td></td><td></td><td></td></tr> <tr><td>4</td><td>N</td><td>f</td><td></td><td>2.490 476 75 GHz</td><td>-49.306 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		2.479 735 25 GHz	-1.577 dBm				2	N	f		2.483 500 00 GHz	-51.772 dBm				3	N	f		2.500 000 00 GHz	-51.892 dBm				4	N	f		2.490 476 75 GHz	-49.306 dBm				<p>Frequency</p> <p>Auto Tune</p> <p>Center Freq 2.489000000 GHz</p> <p>Start Freq 2.478000000 GHz</p> <p>Stop Freq 2.500000000 GHz</p> <p>CF Step 2.200000 MHz</p> <p>Freq Offset 0 Hz</p>
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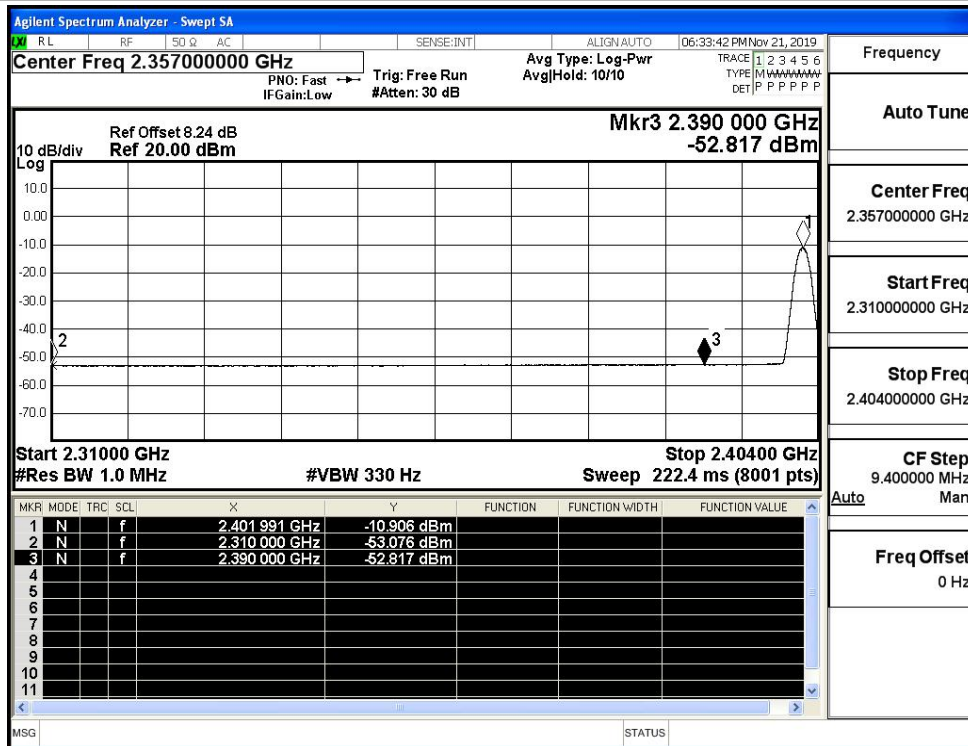
**B.7 Restrict-band band-edge measurements**

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	-43.14	0	0	52.12	PEAK	74	PASS
		Ant1	2310.0	-53.08	0	0	42.18	AV	54	PASS
		Ant1	2390.0	-42.26	0	0	53.00	PEAK	74	PASS
		Ant1	2390.0	-52.82	0	0	42.44	AV	54	PASS
	2480	Ant1	2483.5	-41.70	0	0	53.56	PEAK	74	PASS
		Ant1	2483.5	-52.09	0	0	43.17	AV	54	PASS
		Ant1	2500.0	-41.92	0	0	53.34	PEAK	74	PASS
		Ant1	2500.0	-52.03	0	0	43.23	AV	54	PASS

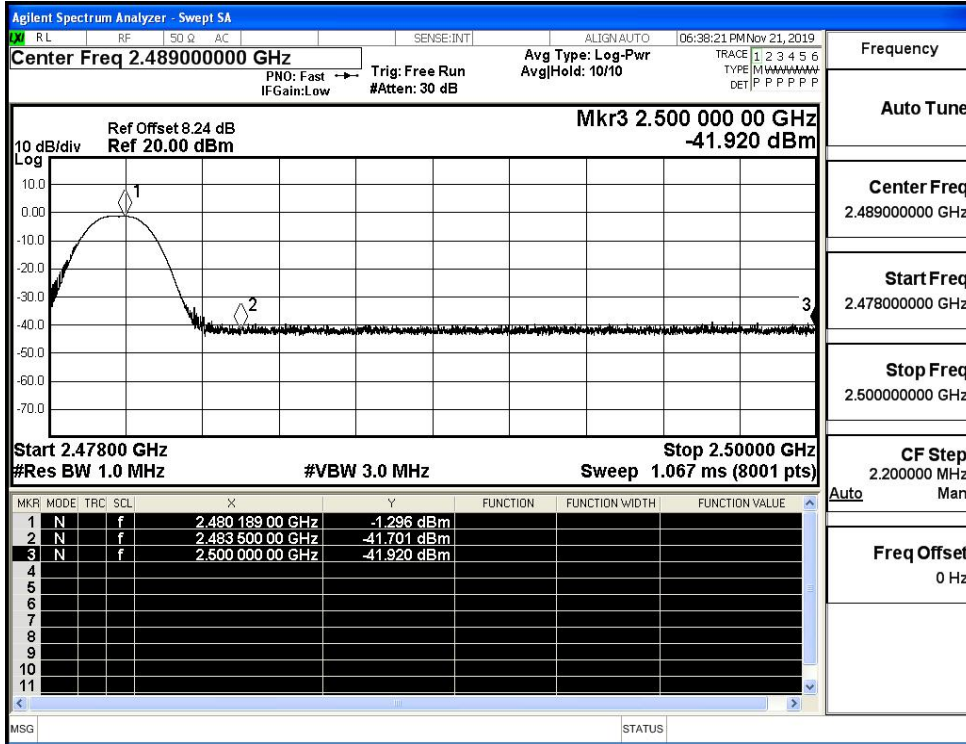
Restrict-band band-edge measurements\_BT LE\_2402\_Ant1\_PEAK



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

