

Appendix B

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

Product Name: Wireless earbuds

Trade Mark: Origaudio

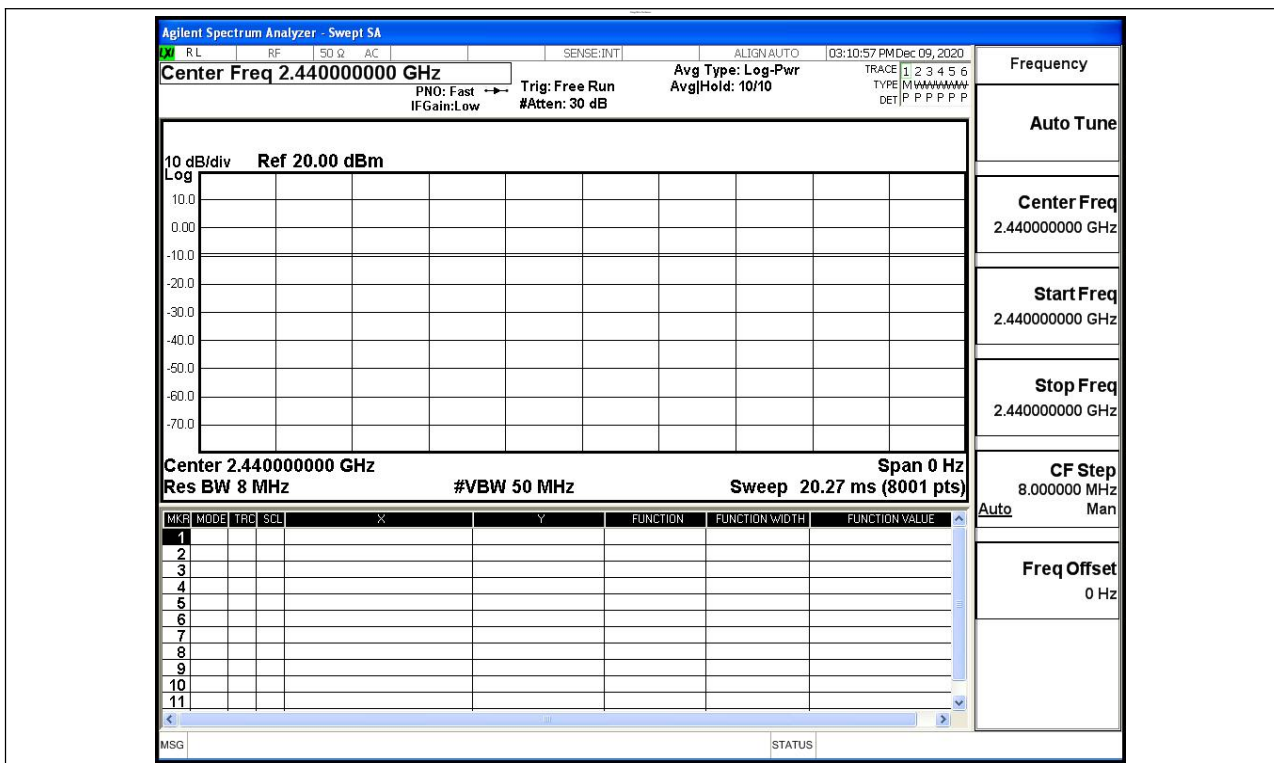
Test Model: Kronies

Environmental Conditions

Temperature:	22.3 ° C
Relative Humidity:	53.2%
ATM Pressure:	100.0 kPa
Test Engineer:	Ken He
Supervised by:	Li Huan

B.1 Duty Cycle

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

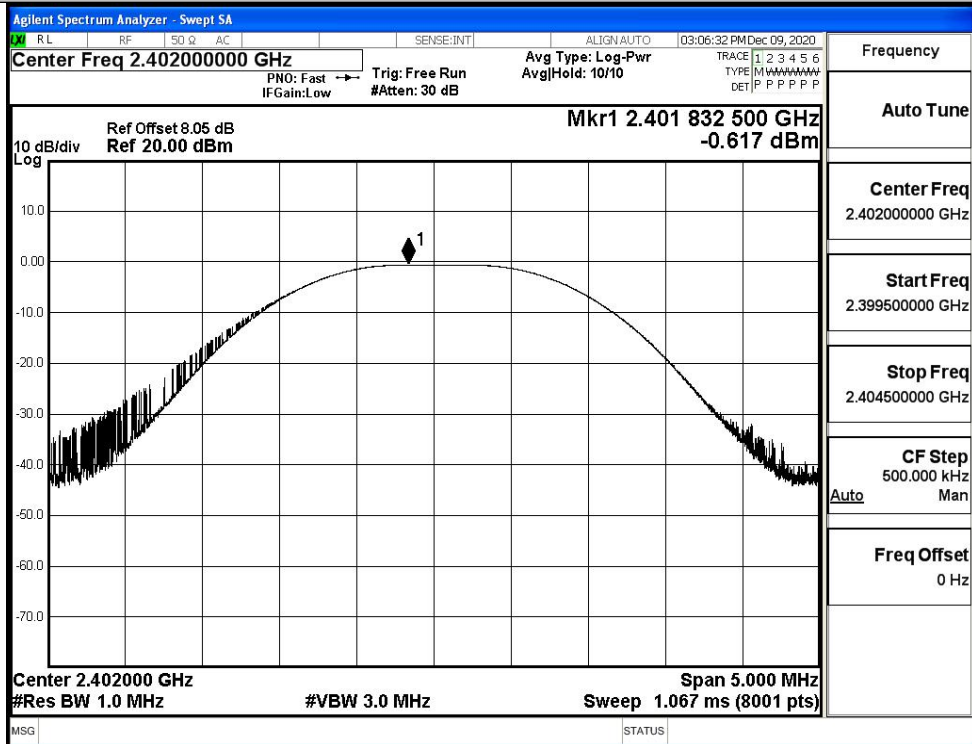


B.2 Maximum Conducted Peak Output Power

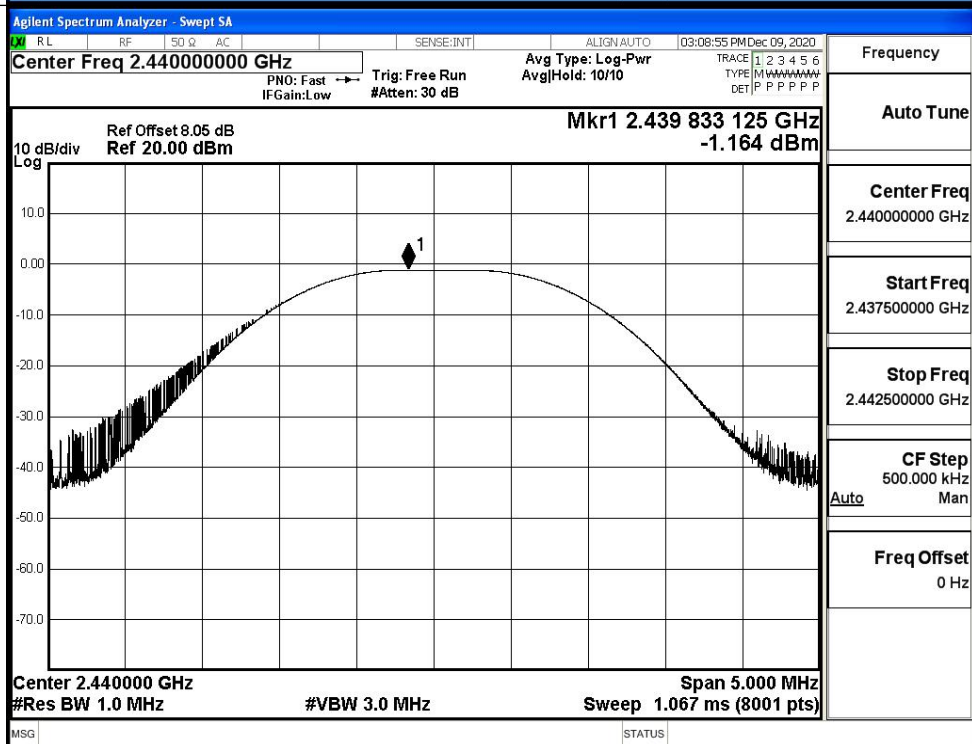
Mode	Channel	Conduct Peak Power[dBm]	Limit [dBm]	Verdict
BT LE	LCH	-0.617	30	PASS
BT LE	MCH	-1.164	30	PASS
BT LE	HCH	-2.708	30	PASS

Test Graphs

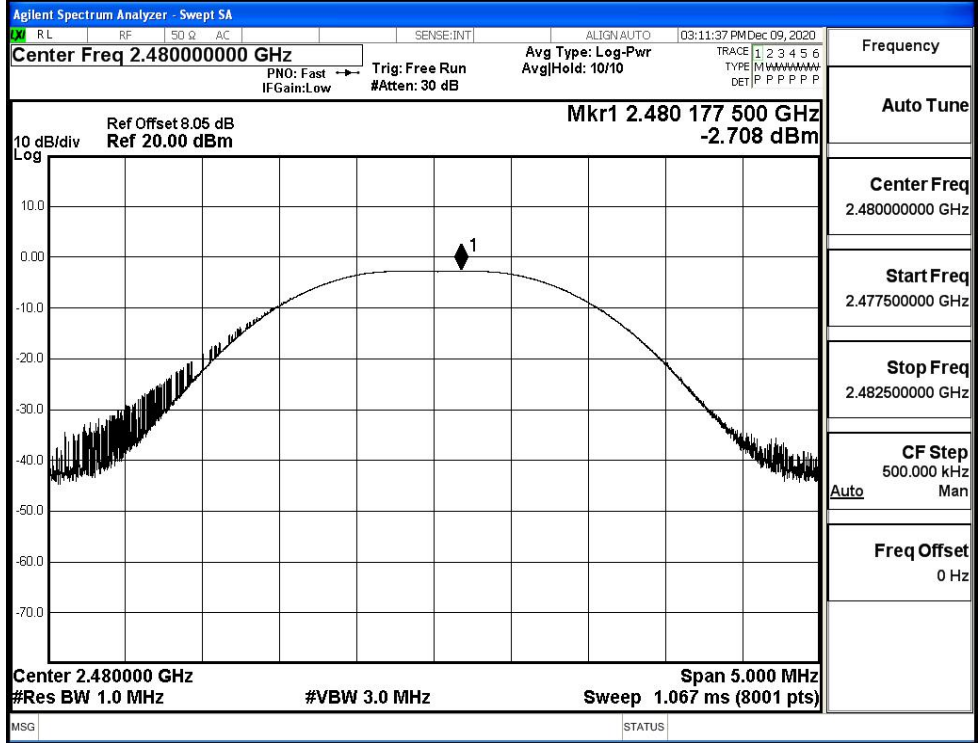
LCH



MCH



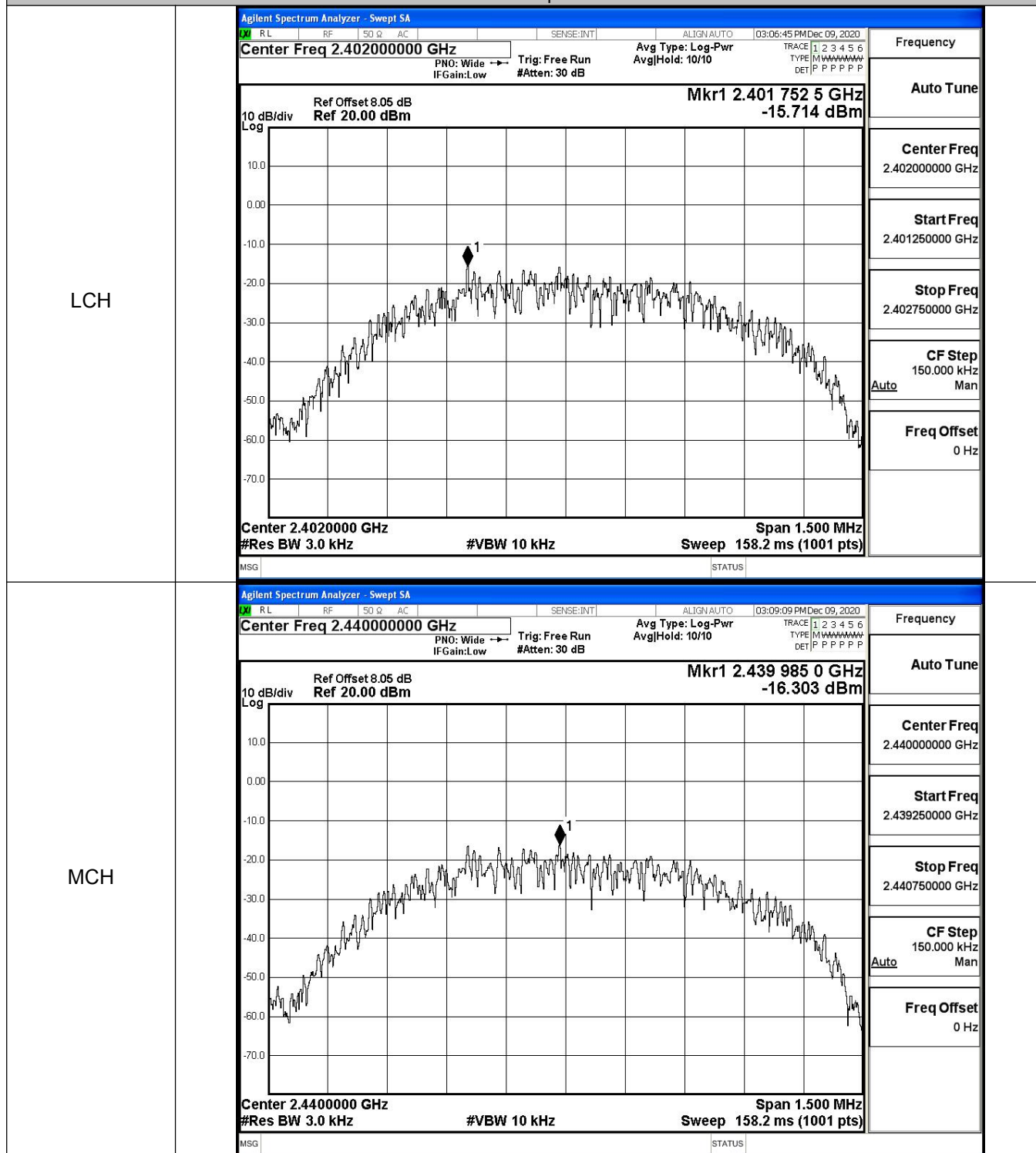
HCH



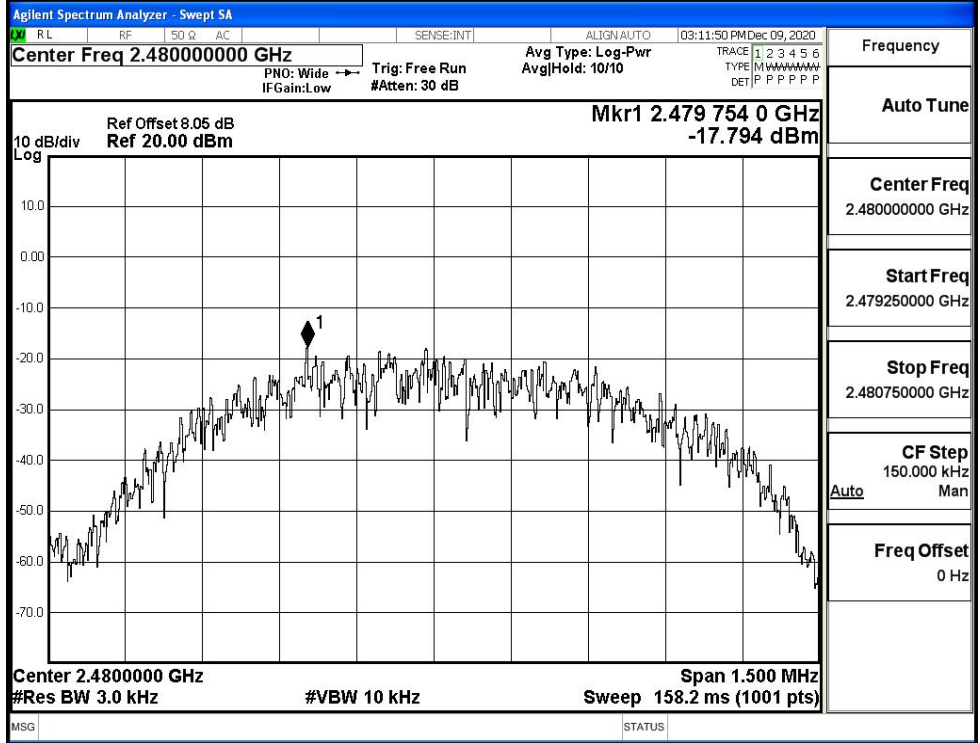
B.3 Maximum Power Spectral Density

Mode	Channel	PSD [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
BT LE	LCH	-15.714	8	PASS
BT LE	MCH	-16.303	8	PASS
BT LE	HCH	-17.794	8	PASS

Test Graphs



HCH



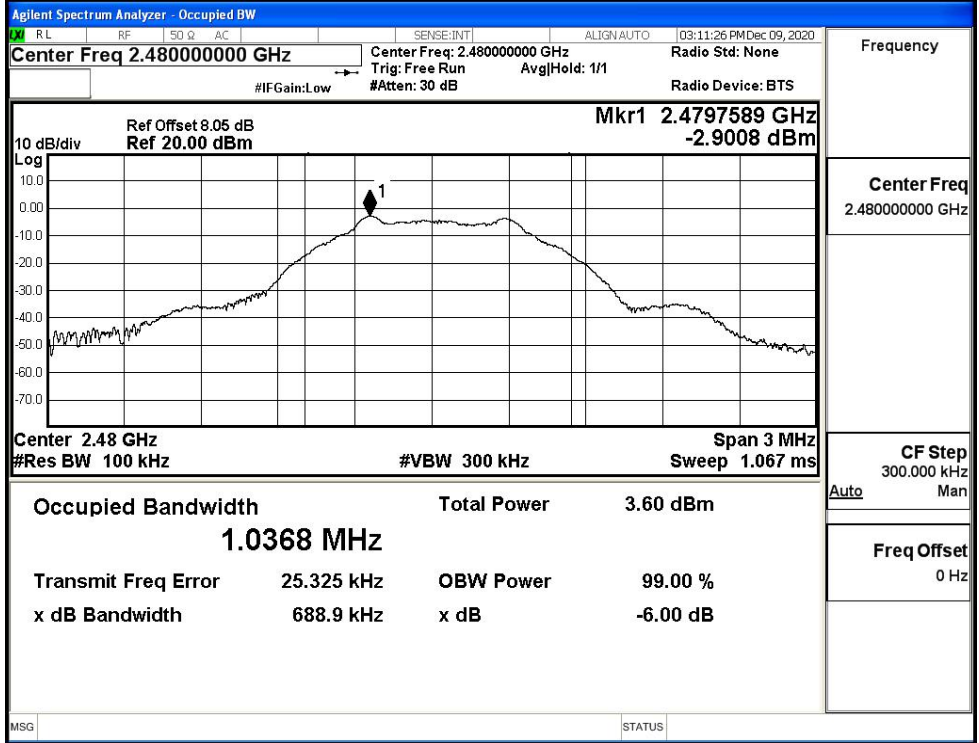
B.4 6dB Bandwidth

Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
BT LE	LCH	0.6936	≥0.5	PASS
BT LE	MCH	0.6925	≥0.5	PASS
BT LE	HCH	0.6889	≥0.5	PASS

Test Graphs

LCH	<p>Agilent Spectrum Analyzer - Occupied BW Center Freq 2.40200000 GHz Mkr1 2.40176 GHz -0.79208 dBm Occupied Bandwidth 1.0354 MHz Total Power 5.68 dBm Transmit Freq Error 24.994 kHz x dB Bandwidth 693.6 kHz</p>	Frequency 2.40200000 GHz CF Step 300.000 kHz Freq Offset 0 Hz
	<p>Agilent Spectrum Analyzer - Occupied BW Center Freq 2.44000000 GHz Mkr1 2.4397596 GHz -1.3161 dBm Occupied Bandwidth 1.0373 MHz Total Power 5.13 dBm Transmit Freq Error 25.575 kHz x dB Bandwidth 692.5 kHz</p>	Frequency 2.44000000 GHz CF Step 300.000 kHz Freq Offset 0 Hz

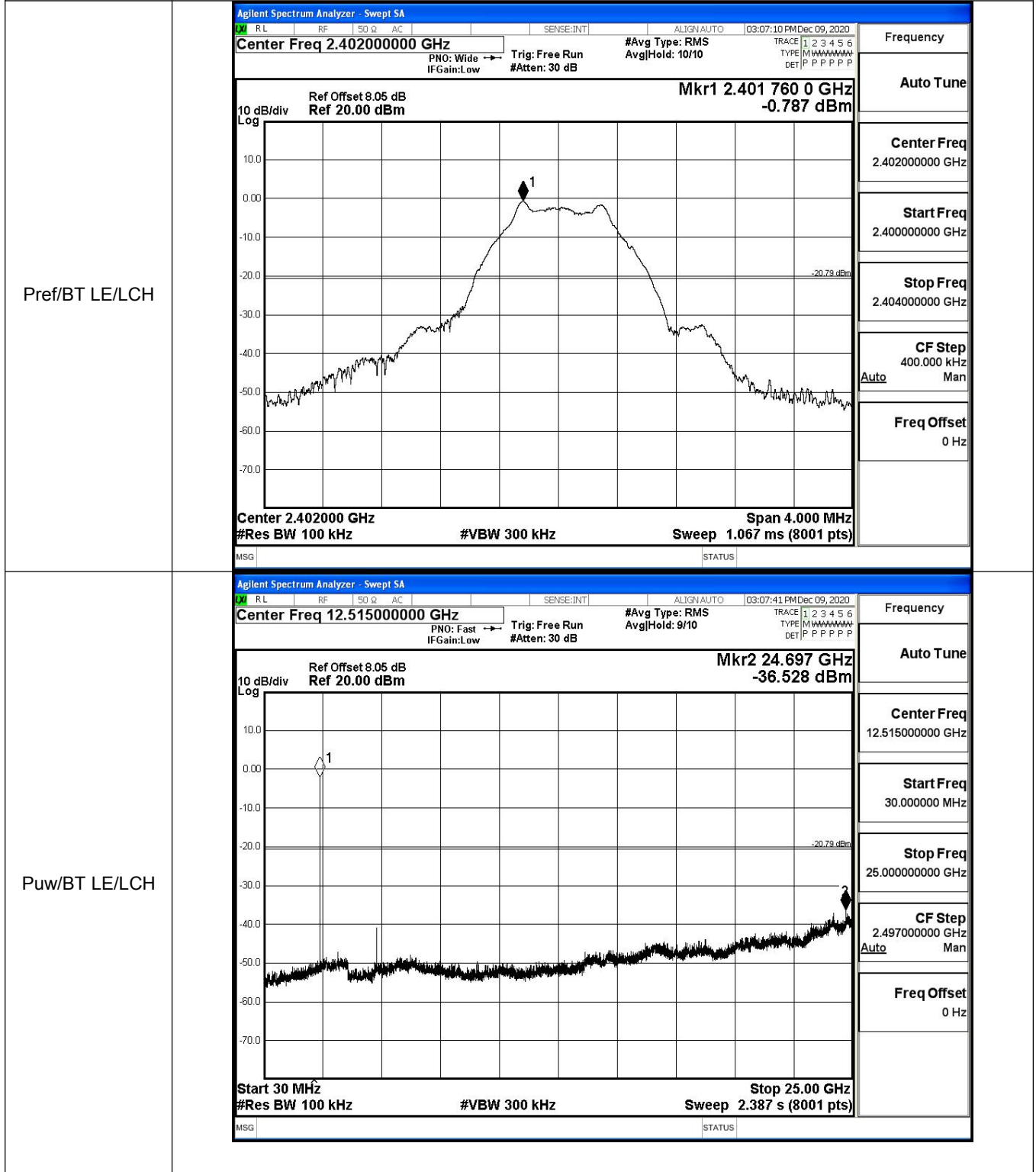
HCH



B.5 RF Conducted Spurious Emissions

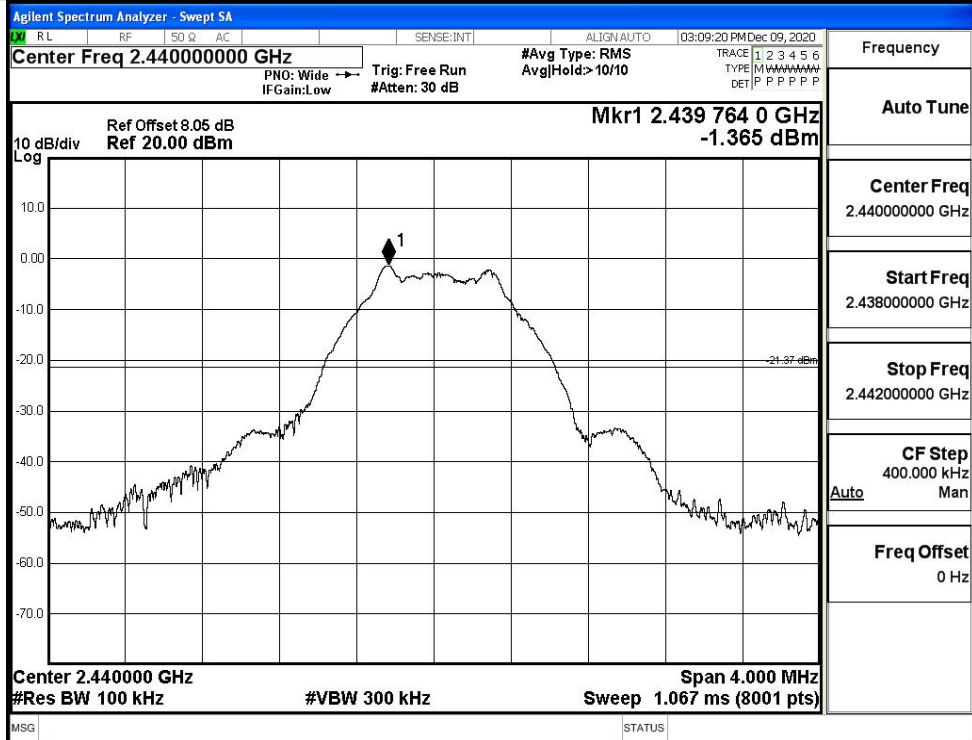
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	-0.787	-36.528	-20.787	PASS
BT LE	MCH	-1.365	-37.695	-21.365	PASS
BT LE	HCH	-2.888	-36.851	-22.888	PASS

BT LE_LCH_Graphs

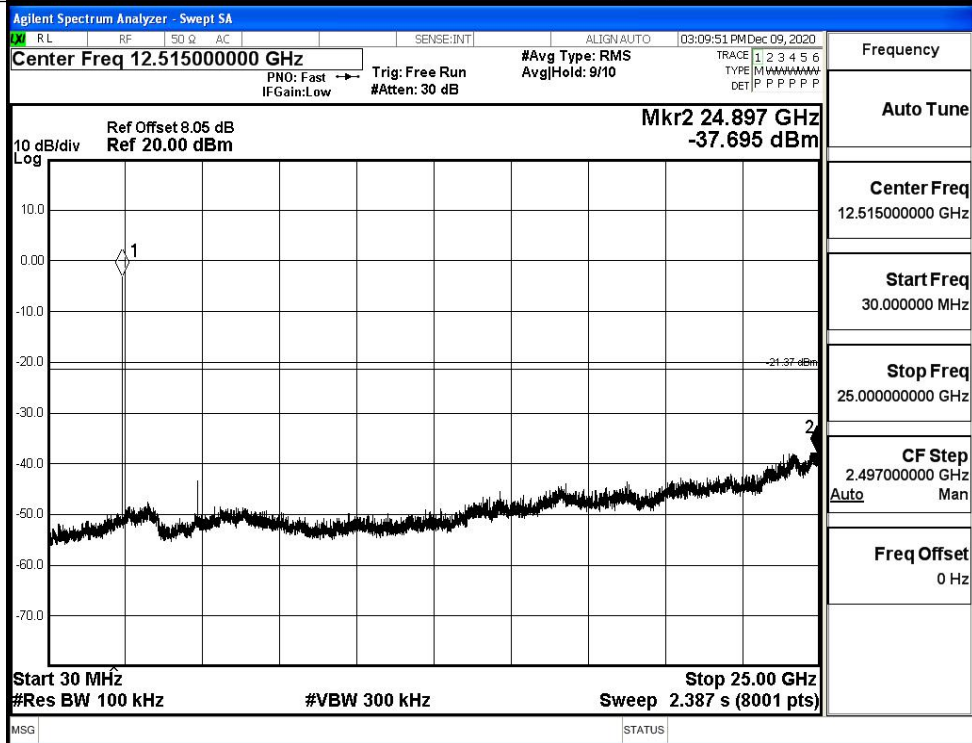


BT LE MCH Graphs

Pref/BT LE/MCH

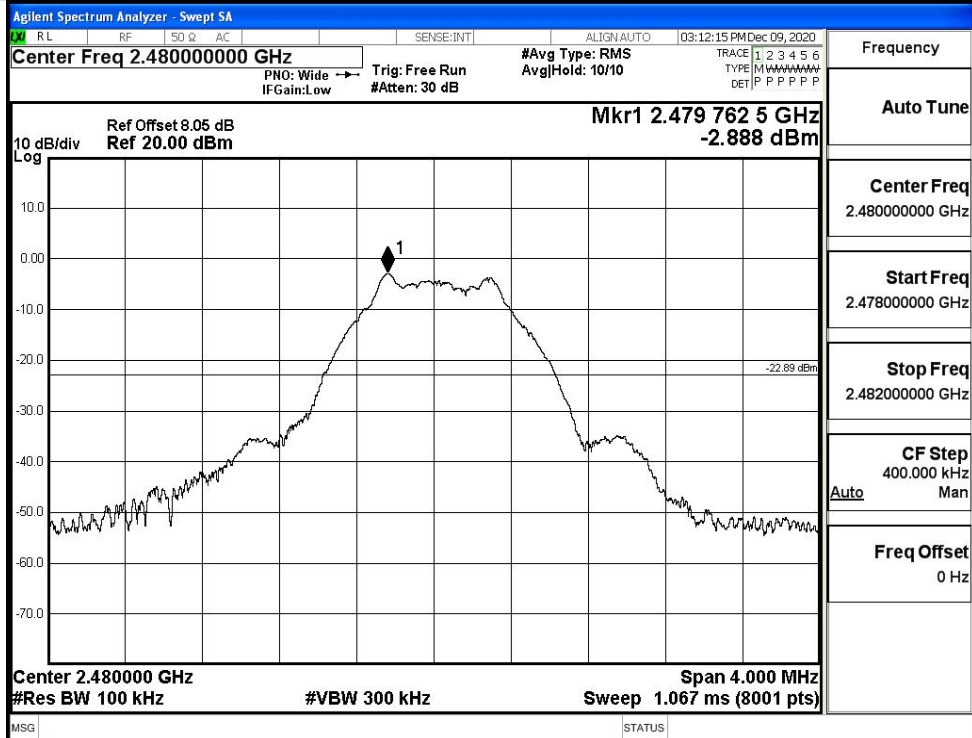


Puw/BT LE/MCH

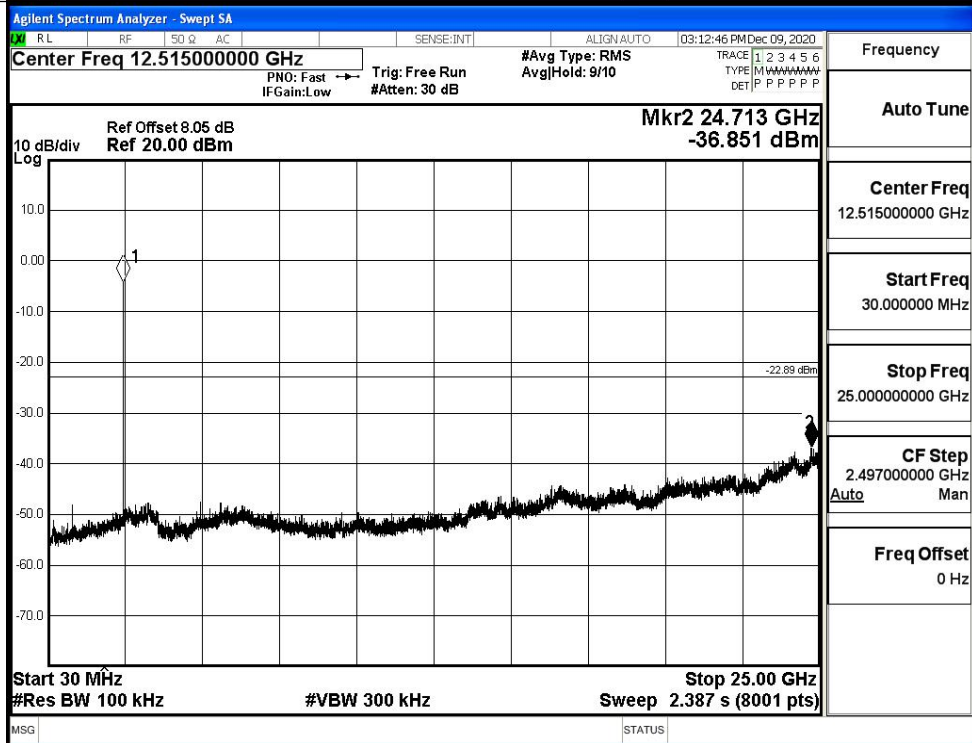


BT LE HCH Graphs

Pref/BT LE/HCH



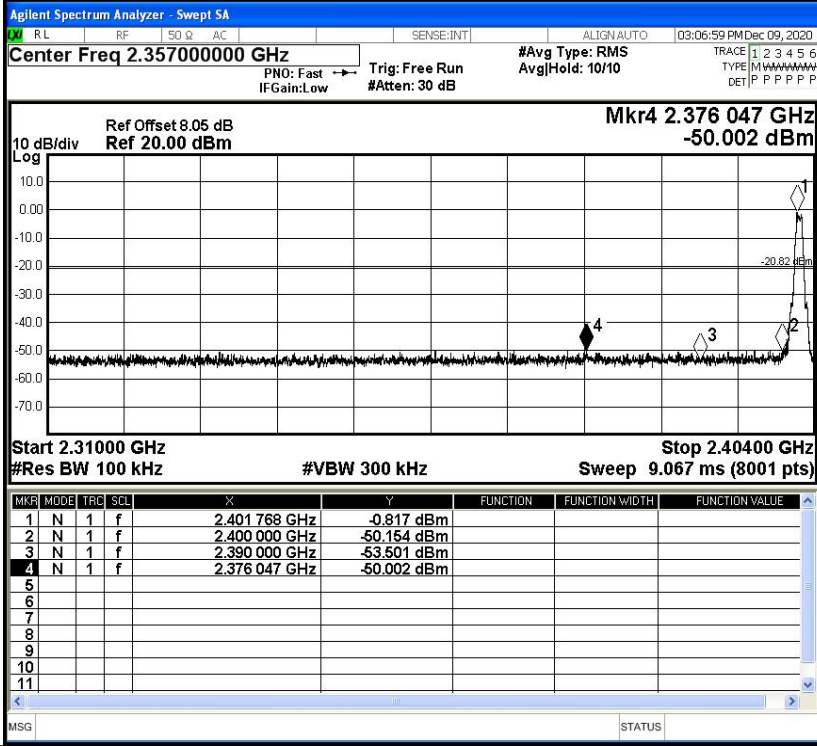
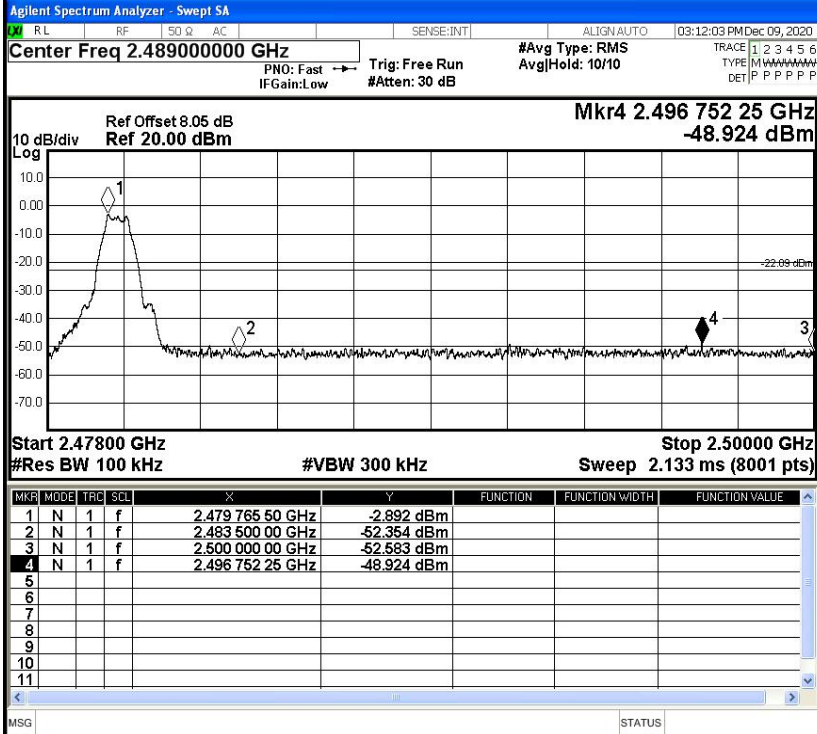
Puw/BT LE/HCH



B.6 Band-edge for RF Conducted Emissions

Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	-0.817	-50.002	-20.82	PASS
BT LE	HCH	-2.892	-48.924	-22.89	PASS

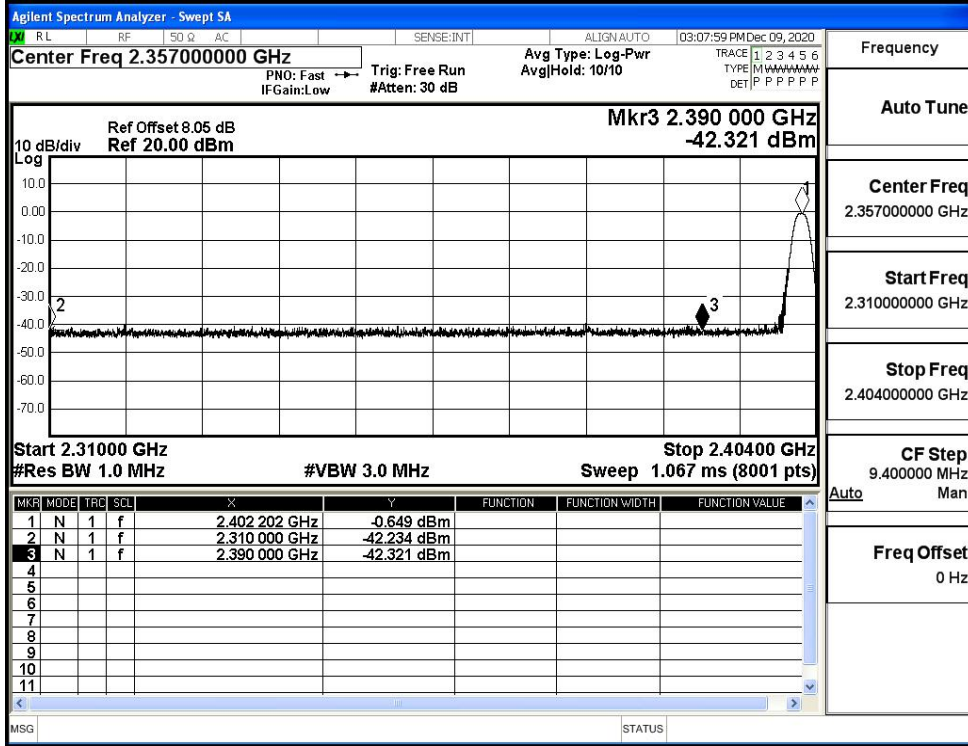
Test Graphs

LCH		<p>Agilent Spectrum Analyzer - Swept SA</p> <p>Center Freq 2.35700000 GHz</p> <p>Mkr4 2.376 047 GHz -50.002 dBm</p> <p>Start 2.31000 GHz Stop 2.40400 GHz</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>1</td> <td>f</td> <td>2.401768 GHz</td> <td>-0.817 dBm</td> <td></td> <td></td> <td></td> </tr> <tr> <td>2</td> <td>N</td> <td>1</td> <td>f</td> <td>2.400000 GHz</td> <td>-50.154 dBm</td> <td></td> <td></td> <td></td> </tr> <tr> <td>3</td> <td>N</td> <td>1</td> <td>f</td> <td>2.390000 GHz</td> <td>-53.501 dBm</td> <td></td> <td></td> <td></td> </tr> <tr> <td>4</td> <td>N</td> <td>1</td> <td>f</td> <td>2.376047 GHz</td> <td>-50.002 dBm</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	1	N	1	f	2.401768 GHz	-0.817 dBm				2	N	1	f	2.400000 GHz	-50.154 dBm				3	N	1	f	2.390000 GHz	-53.501 dBm				4	N	1	f	2.376047 GHz	-50.002 dBm			
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HCH		<p>Agilent Spectrum Analyzer - Swept SA</p> <p>Center Freq 2.48900000 GHz</p> <p>Mkr4 2.496 752 25 GHz -48.924 dBm</p> <p>Start 2.47800 GHz Stop 2.50000 GHz</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>1</td> <td>f</td> <td>2.47976550 GHz</td> <td>-2.892 dBm</td> <td></td> <td></td> <td></td> </tr> <tr> <td>2</td> <td>N</td> <td>1</td> <td>f</td> <td>2.48350000 GHz</td> <td>-52.354 dBm</td> <td></td> <td></td> <td></td> </tr> <tr> <td>3</td> <td>N</td> <td>1</td> <td>f</td> <td>2.50000000 GHz</td> <td>-52.583 dBm</td> <td></td> <td></td> <td></td> </tr> <tr> <td>4</td> <td>N</td> <td>1</td> <td>f</td> <td>2.49675225 GHz</td> <td>-48.924 dBm</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	1	N	1	f	2.47976550 GHz	-2.892 dBm				2	N	1	f	2.48350000 GHz	-52.354 dBm				3	N	1	f	2.50000000 GHz	-52.583 dBm				4	N	1	f	2.49675225 GHz	-48.924 dBm			
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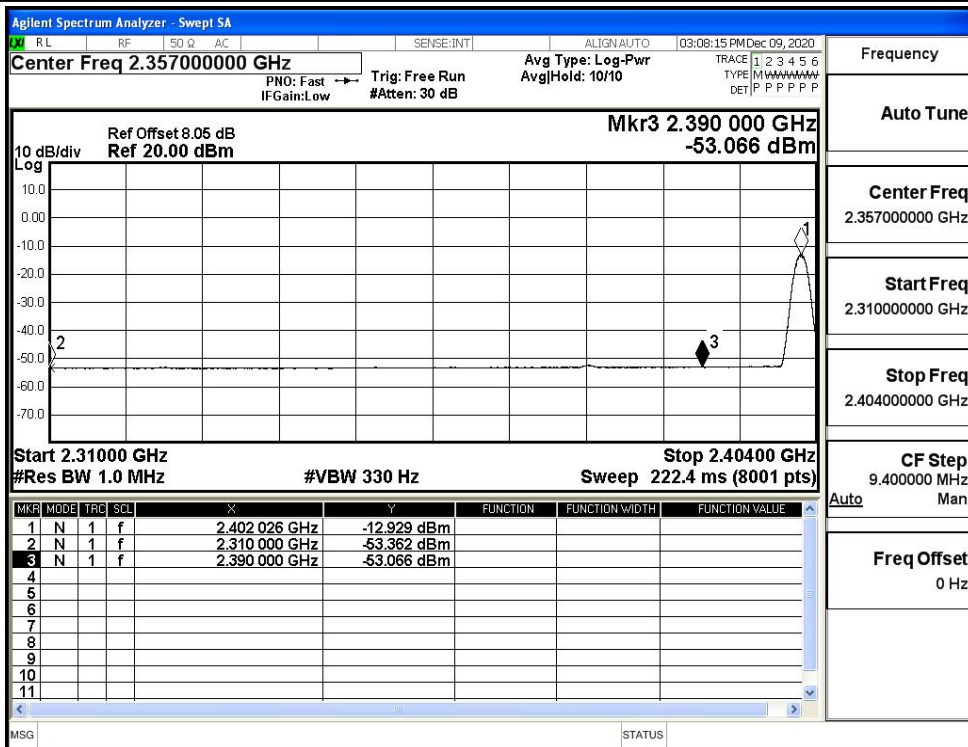
B.7 Restrict-band band-edge measurements

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	-42.23	3.19	0	56.19	PEAK	74	PASS
		Ant1	2310.0	-53.36	3.19	0	45.06	AV	54	PASS
		Ant1	2390.0	-42.32	3.19	0	56.10	PEAK	74	PASS
		Ant1	2390.0	-53.07	3.19	0	45.35	AV	54	PASS
	2480	Ant1	2483.5	-43.37	3.19	0	55.05	PEAK	74	PASS
		Ant1	2483.5	-52.53	3.19	0	45.89	AV	54	PASS
		Ant1	2500.0	-42.21	3.19	0	56.21	PEAK	74	PASS
		Ant1	2500.0	-52.32	3.19	0	46.10	AV	54	PASS

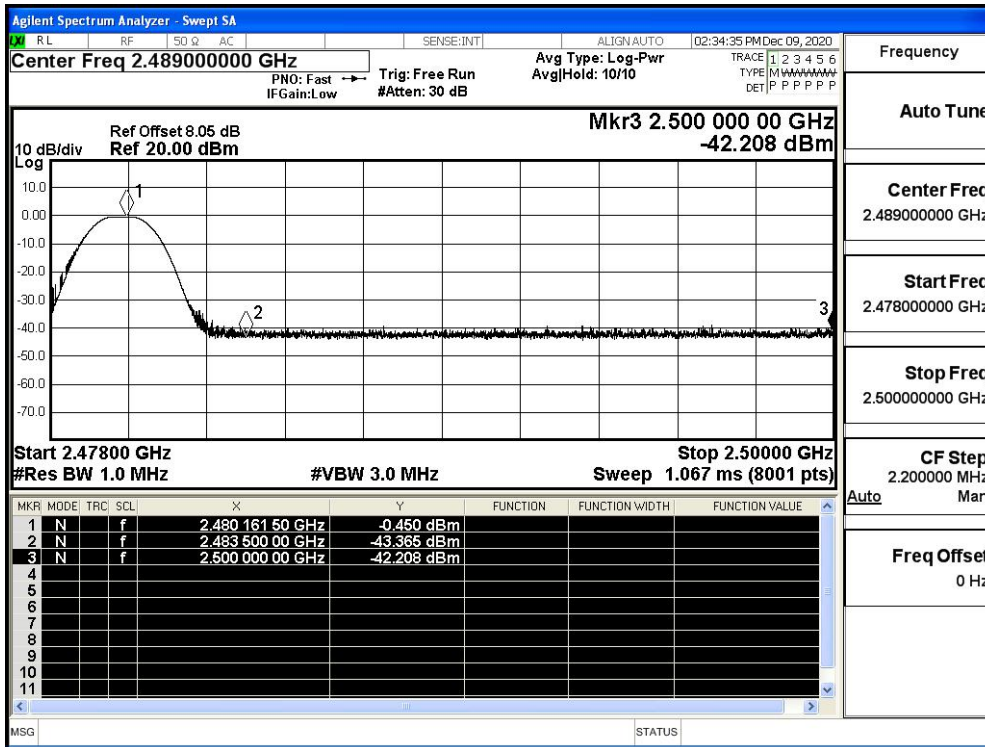
Restrict-band band-edge measurements_BT LE_2402_Ant1_PEAK



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

