

Appendix B

RF Test Data for BT LE V4.2 (Conducted Measurement)

Product Name: Tablet PC

Trade Mark: **HYUNDAI**

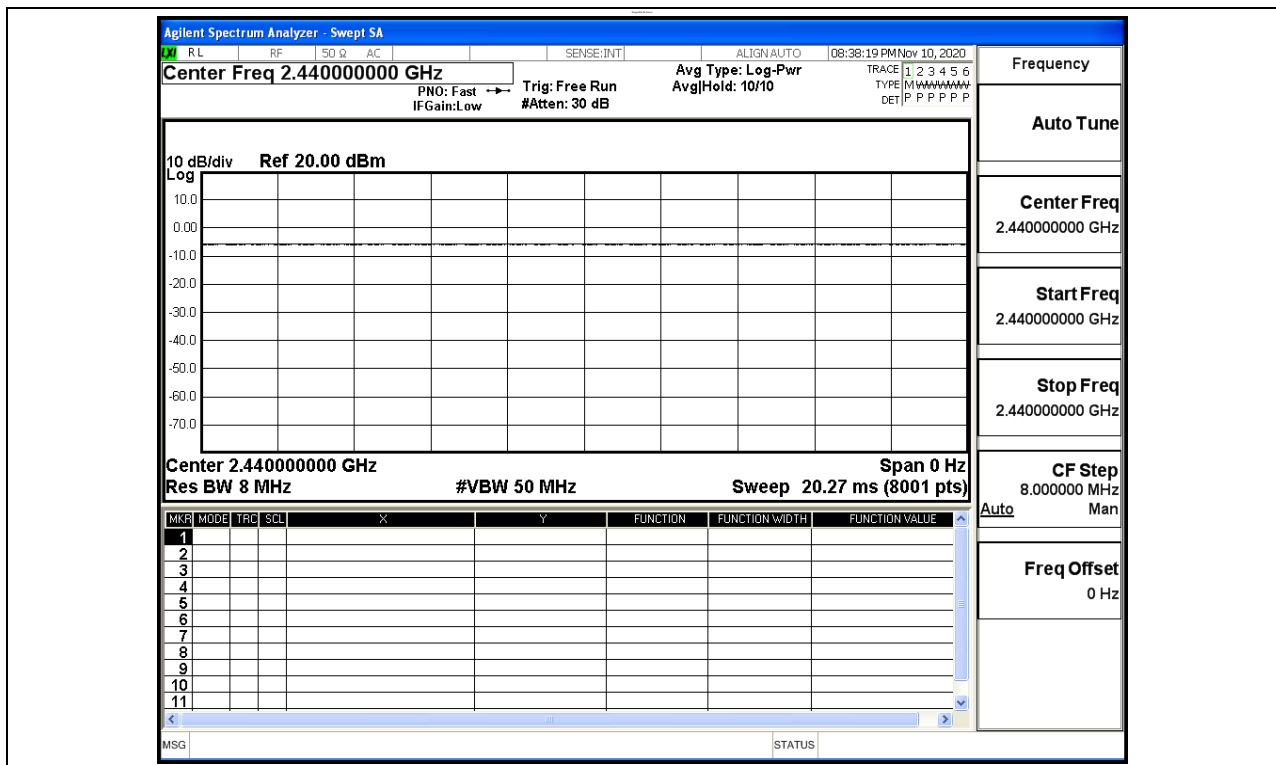
Test Model: 10LC1

Environmental Conditions

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

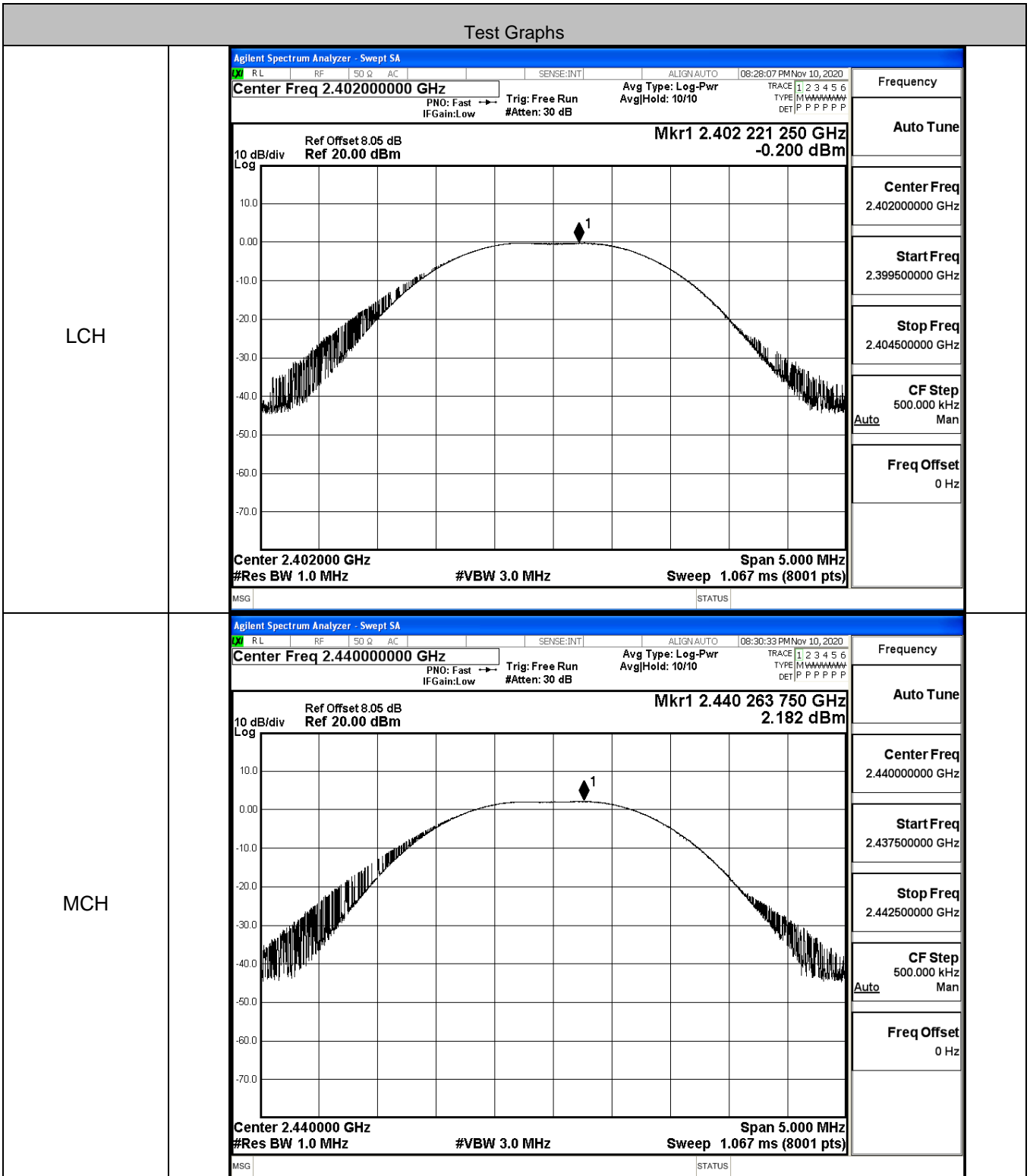
B.1 Duty Cycle

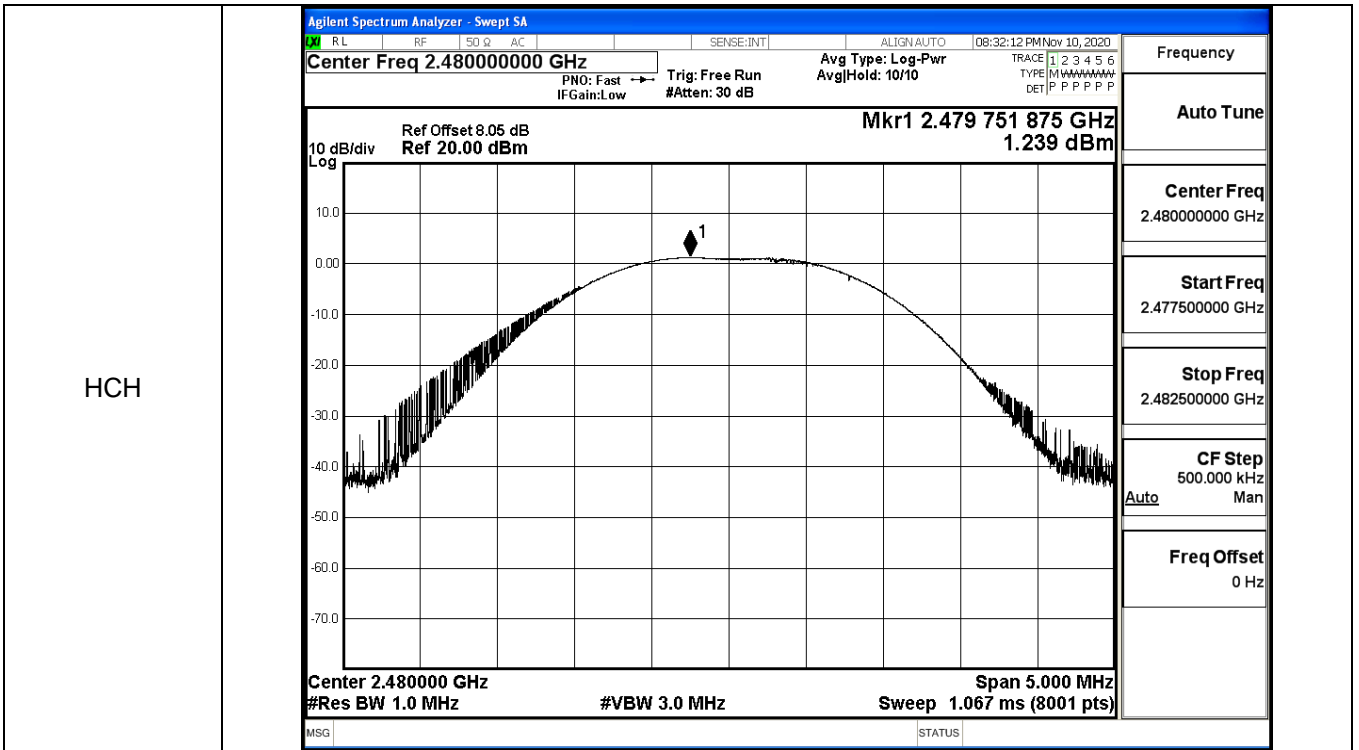
Test Mode	Test Channel	Ant	Duty Cycle[%]	Verdict
BT LE	2440	Ant1	100	PASS



B.2 Maximum Conducted Peak Output Power

Mode	Channel	Conduct Peak Power[dBm]	Limit [dBm]	Verdict
BT LE	LCH	-0.2	30	PASS
BT LE	MCH	2.182	30	PASS
BT LE	HCH	1.239	30	PASS

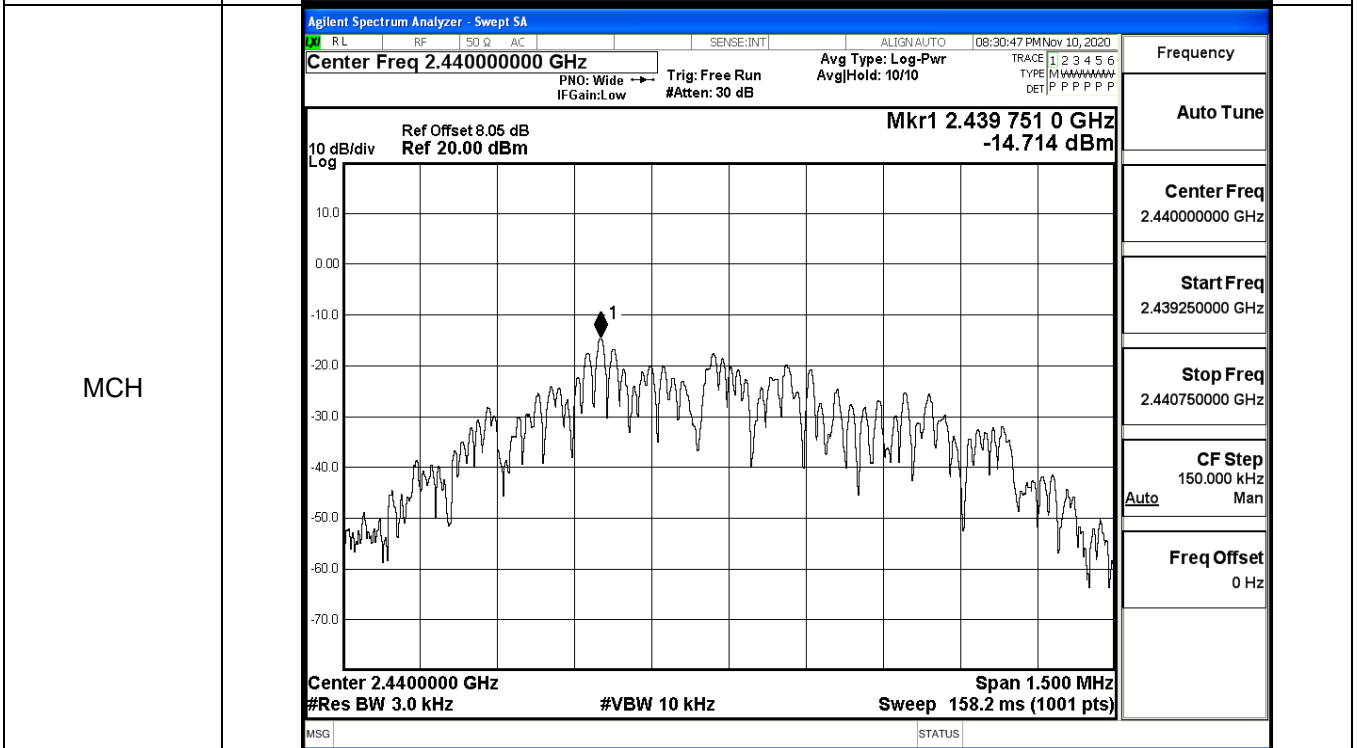
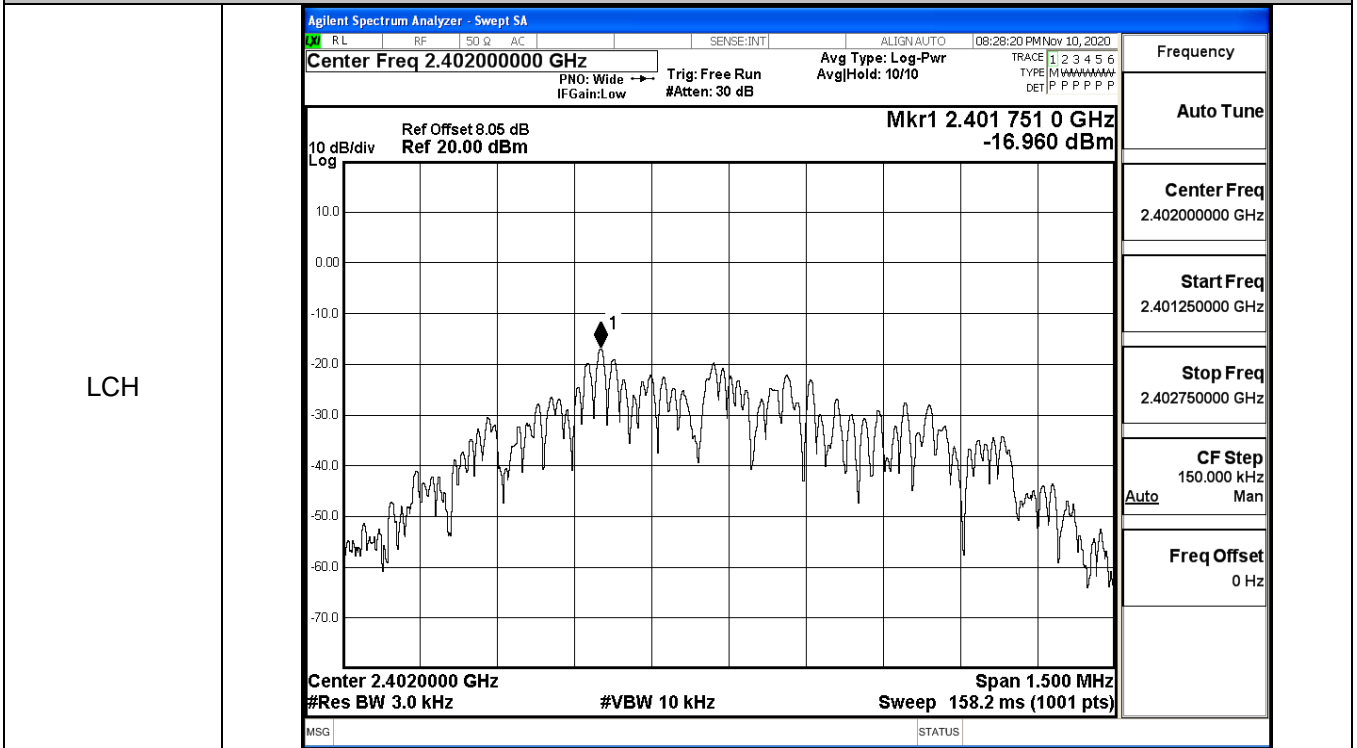




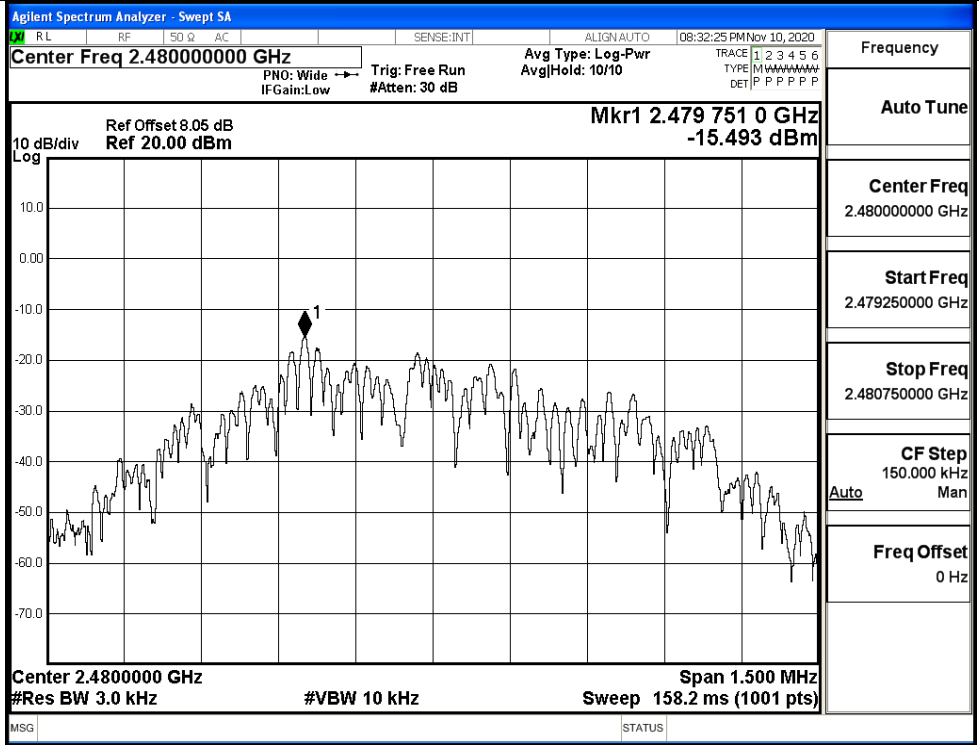
B.3 Maximum Power Spectral Density

Mode	Channel	PSD [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
BT LE	LCH	-16.960	8	PASS
BT LE	MCH	-14.714	8	PASS
BT LE	HCH	-15.493	8	PASS

Test Graphs



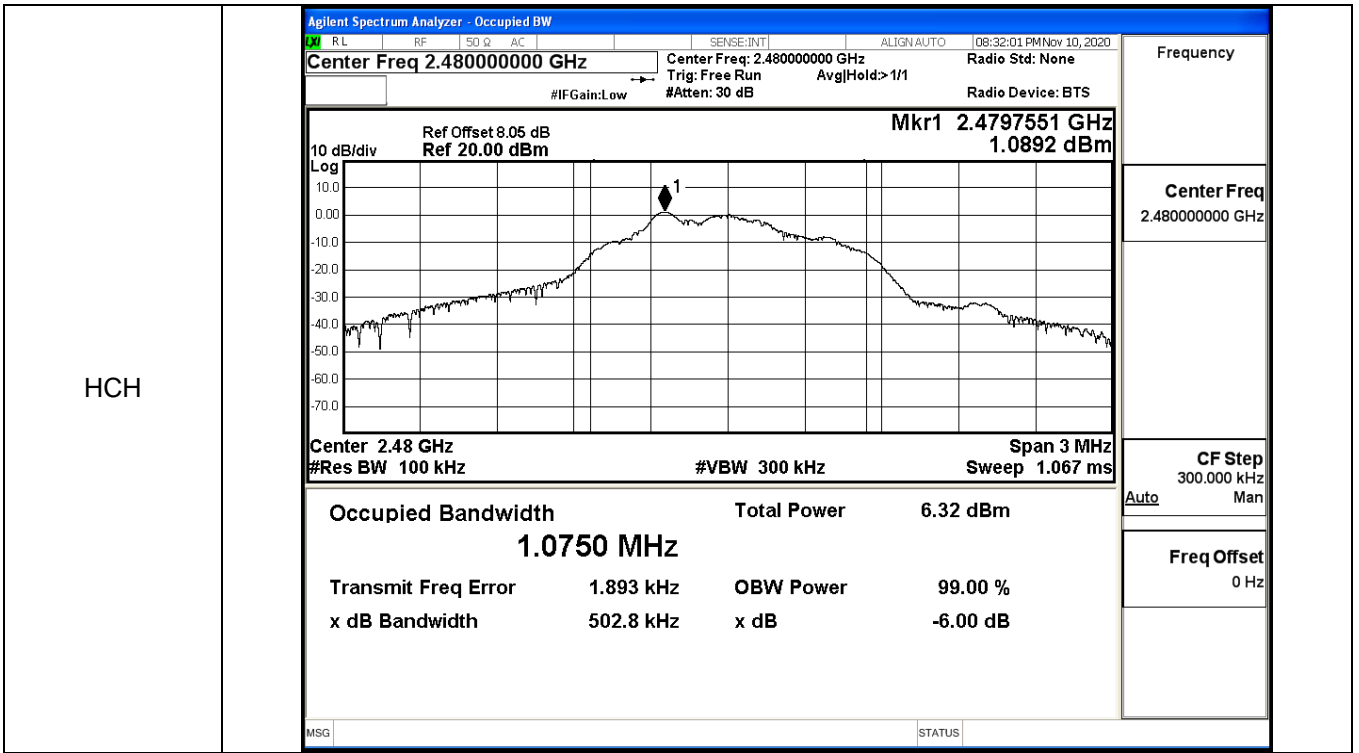
HCH



B.4 6dB Bandwidth

Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
BT LE	LCH	0.5012	≥0.5	PASS
BT LE	MCH	0.5070	≥0.5	PASS
BT LE	HCH	0.5028	≥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 08:27:55 PM Nov 10, 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;"> Mkr1 2.4017529 GHz -0.34370 dBm </div> </div> <div style="display: flex; justify-content: space-between; font-size: x-small;"> <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 style="width: 100%; font-size: x-small; margin-top: 5px;"> <tr> <td>Occupied Bandwidth</td> <td>Total Power</td> <td colspan="2">4.89 dBm</td> </tr> <tr> <td colspan="4" style="text-align: center;">1.0726 MHz</td> </tr> <tr> <td>Transmit Freq Error</td> <td>2.393 kHz</td> <td>OBW Power</td> <td>99.00 %</td> </tr> <tr> <td>x dB Bandwidth</td> <td>501.2 kHz</td> <td>x dB</td> <td>-6.00 dB</td> </tr> </table> <p style="font-size: x-small; margin-top: 5px;">MSG STATUS</p> </div>	Occupied Bandwidth	Total Power	4.89 dBm		1.0726 MHz				Transmit Freq Error	2.393 kHz	OBW Power	99.00 %	x dB Bandwidth	501.2 kHz	x dB	-6.00 dB
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B.5 RF Conducted Spurious Emissions

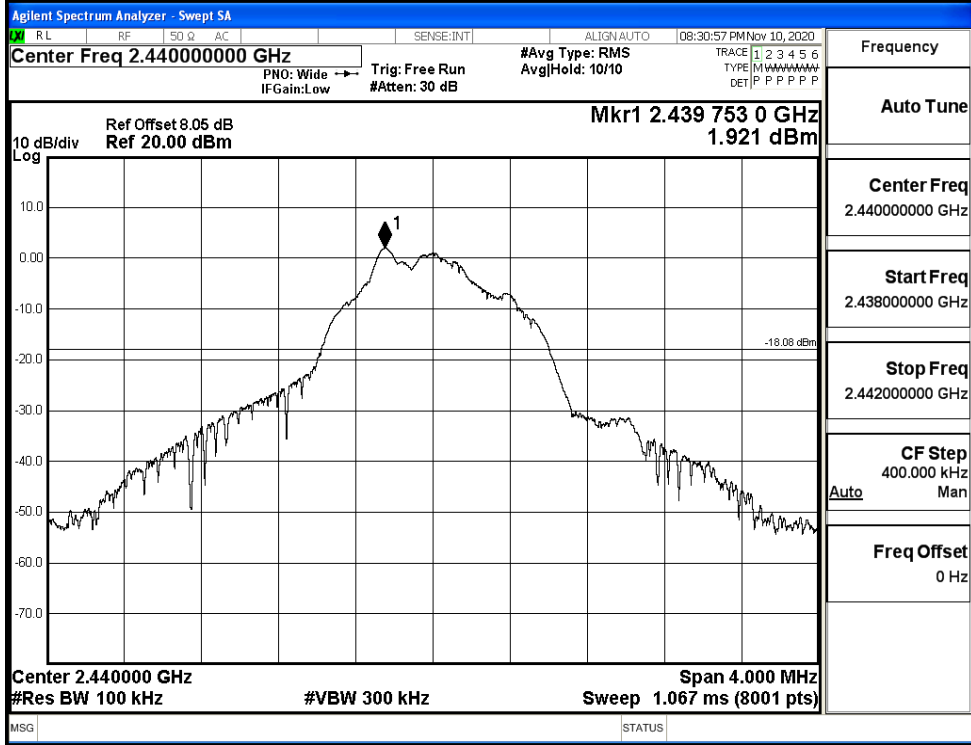
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	-0.376	-36.528	-20.376	PASS
BT LE	MCH	1.921	-37.550	-18.079	PASS
BT LE	HCH	1.132	-37.345	-18.868	PASS

BT LE_LCH_Graphs

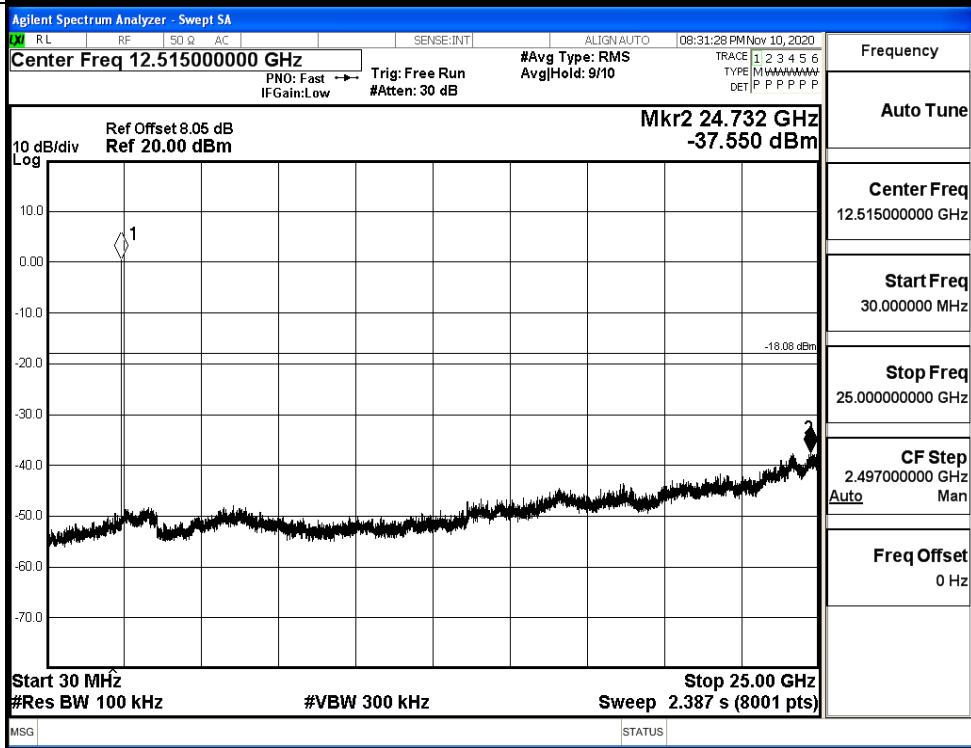
Pref/BT LE/LCH	
Puw/BT LE/LCH	

BT LE_MCH_Graphs

Pref/BT LE/MCH

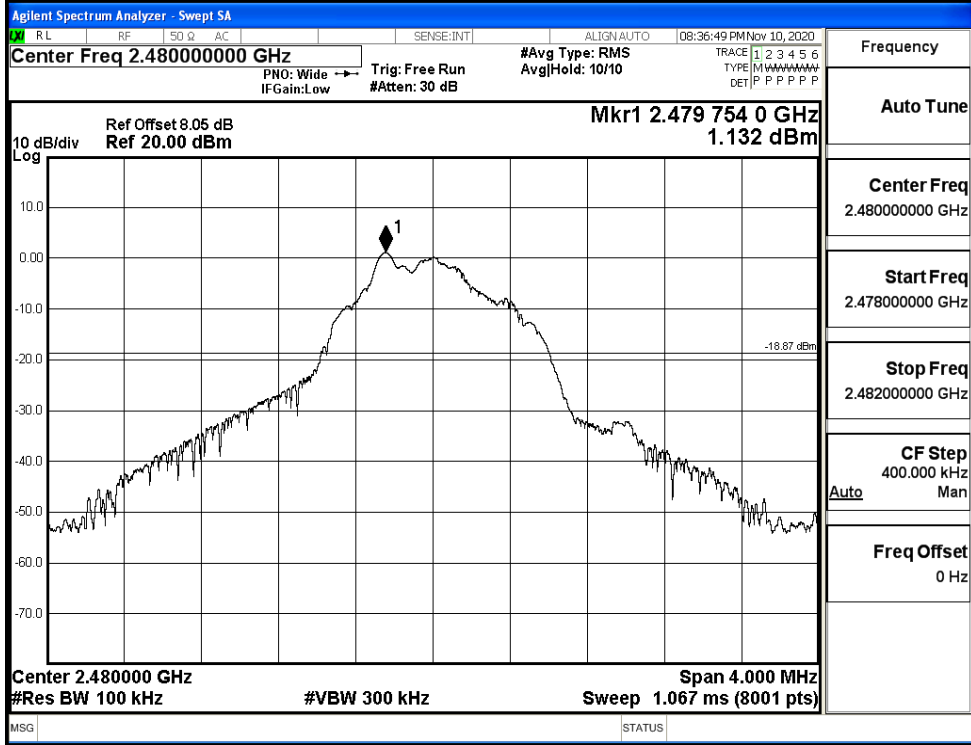


Puw/BT LE/MCH

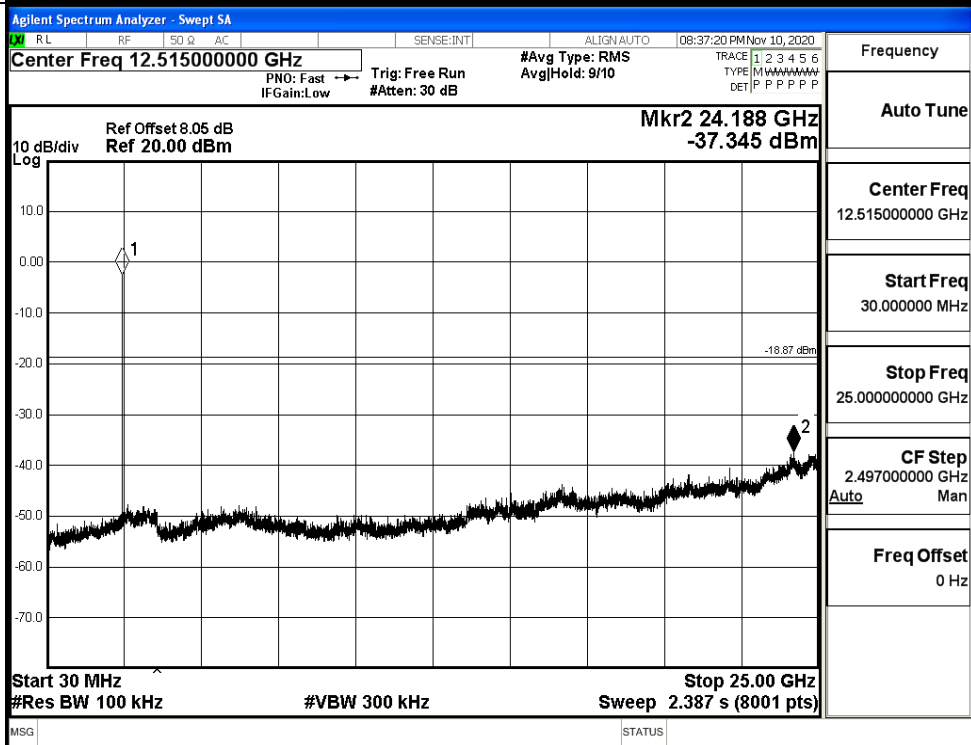


BT LE_HCH_Graphs

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	-0.344	-49.859	-20.34	PASS
BT LE	HCH	1.127	-49.196	-18.87	PASS

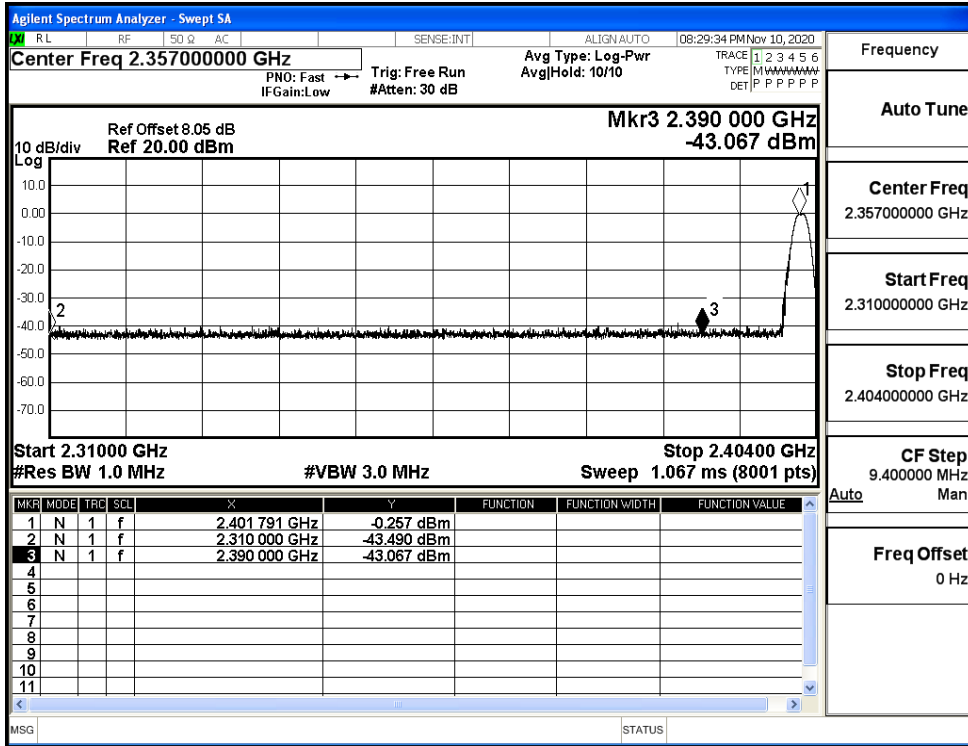
Test Graphs

LCH		<p>Agilent Spectrum Analyzer - Swept SA</p> <p>Center Freq 2.35700000 GHz</p> <p>Mkr4 2.365 437 GHz -49.859 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>2.401 756 GHz</td> <td>-0.344 dBm</td> <td></td> <td></td> <td></td> </tr> <tr> <td>2</td> <td>N</td> <td>1</td> <td>f</td> <td>2.400 000 GHz</td> <td>-52.685 dBm</td> <td></td> <td></td> <td></td> </tr> <tr> <td>3</td> <td>N</td> <td>1</td> <td>f</td> <td>2.390 000 GHz</td> <td>-52.277 dBm</td> <td></td> <td></td> <td></td> </tr> <tr> <td>4</td> <td>N</td> <td>1</td> <td>f</td> <td>2.365 437 GHz</td> <td>-49.859 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	2.401 756 GHz	-0.344 dBm				2	N	1	f	2.400 000 GHz	-52.685 dBm				3	N	1	f	2.390 000 GHz	-52.277 dBm				4	N	1	f	2.365 437 GHz	-49.859 dBm			
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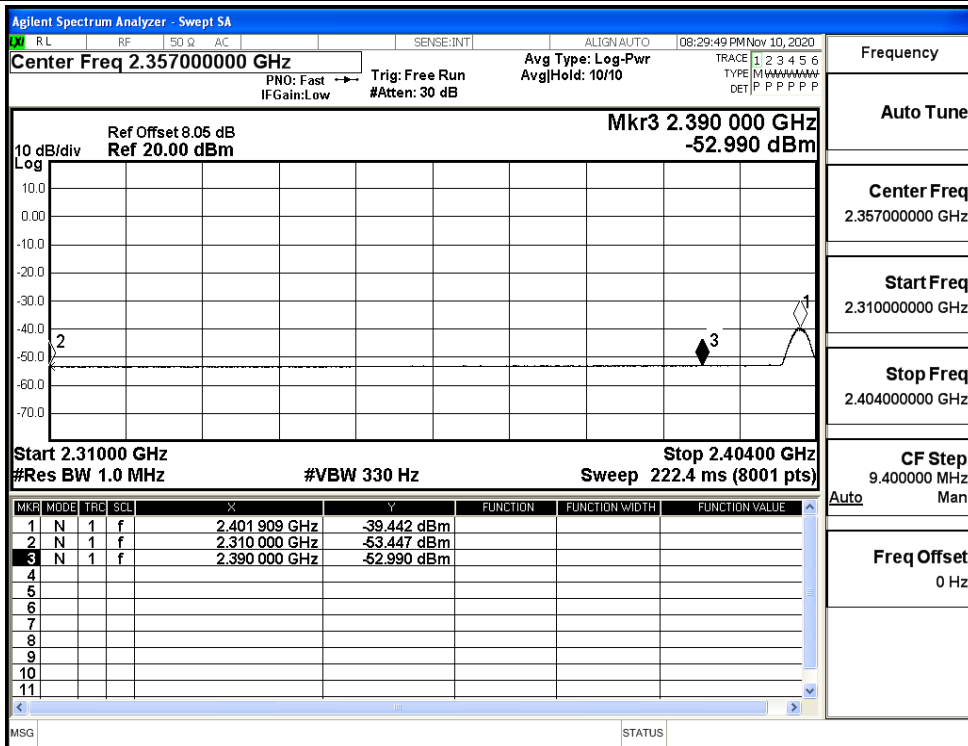
B.7 Restrict-band band-edge measurements

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	-43.49	2.0	0	53.77	PEAK	74	PASS
		Ant1	2310.0	-53.45	2.0	0	43.81	AV	54	PASS
		Ant1	2390.0	-43.07	2.0	0	54.19	PEAK	74	PASS
		Ant1	2390.0	-52.99	2.0	0	44.27	AV	54	PASS
	2480	Ant1	2483.5	-42.84	2.0	0	54.42	PEAK	74	PASS
		Ant1	2483.5	-52.49	2.0	0	44.77	AV	54	PASS
		Ant1	2500.0	-42.47	2.0	0	54.78	PEAK	74	PASS
		Ant1	2500.0	-52.37	2.0	0	44.88	AV	54	PASS

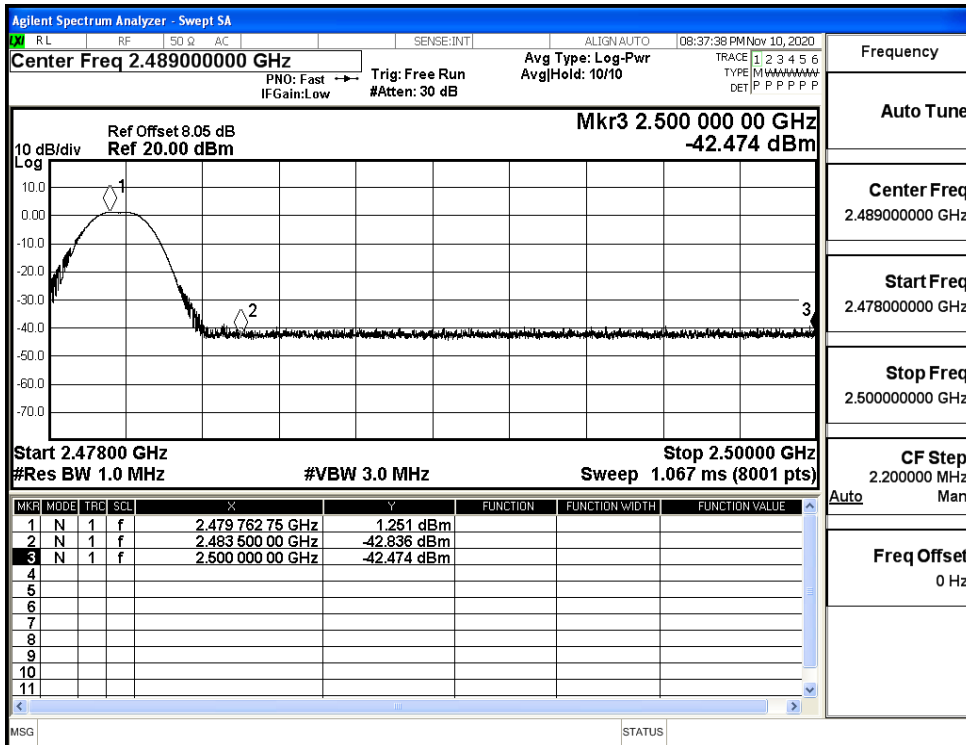
Restrict-band band-edge measurements_BT LE_2402_Ant1_PEAK



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

