

Appendix B

RF Test Data for BT LE (Conducted Measurement)

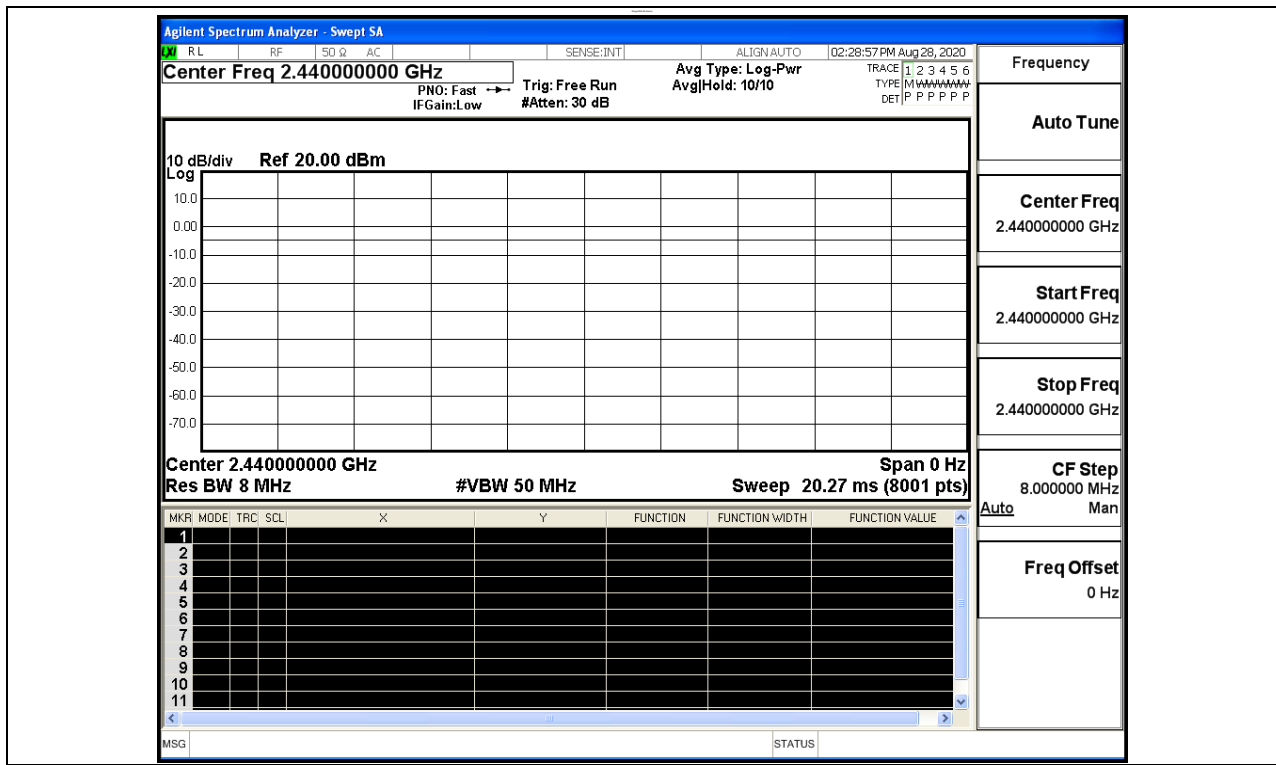
Product Name: Tablet
Trade Mark: LAVA & XOLO
Test Model: T101

Environmental Conditions

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

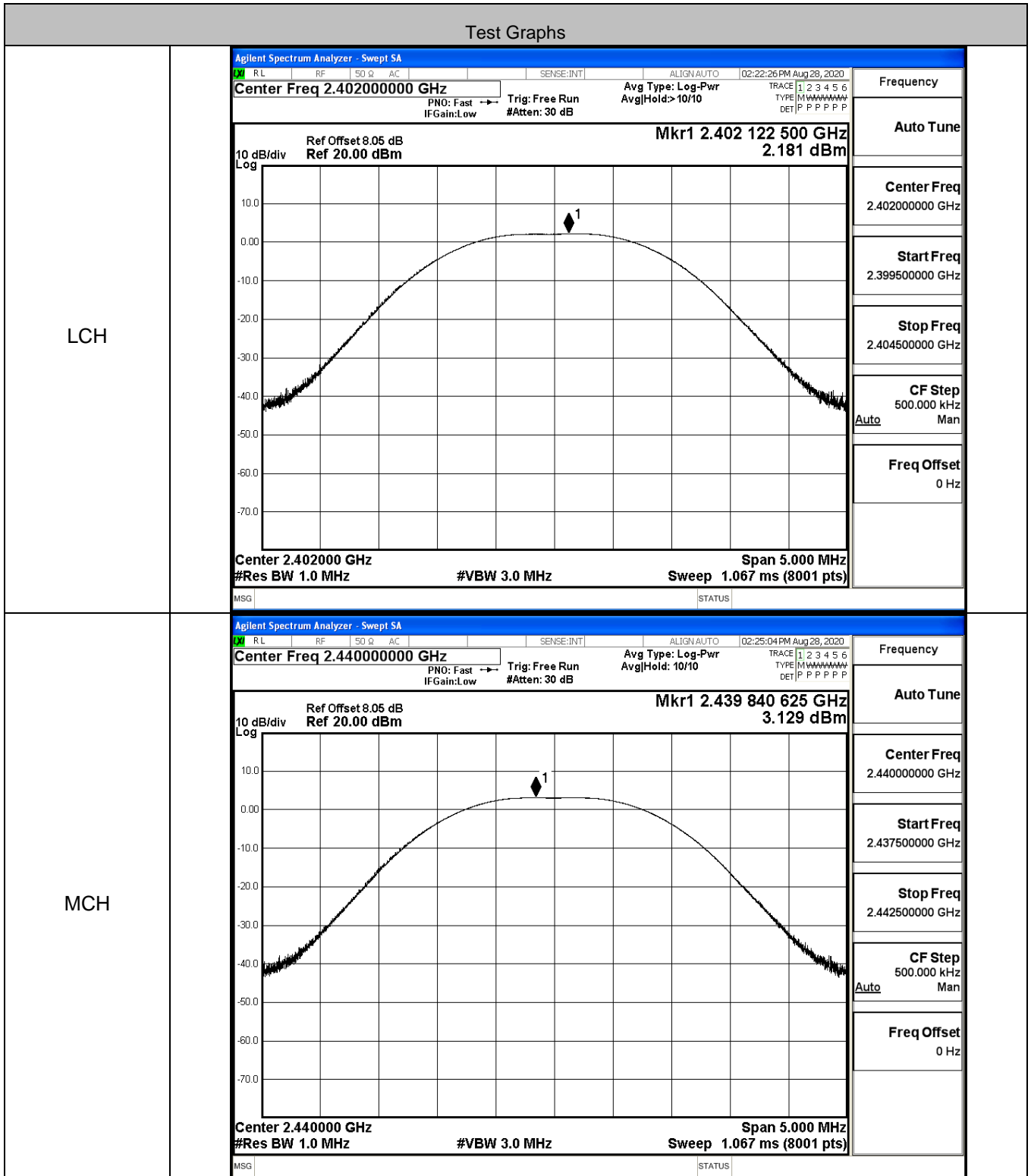
B.1 Duty Cycle

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



B.2 Maximum Conducted Peak Output Power

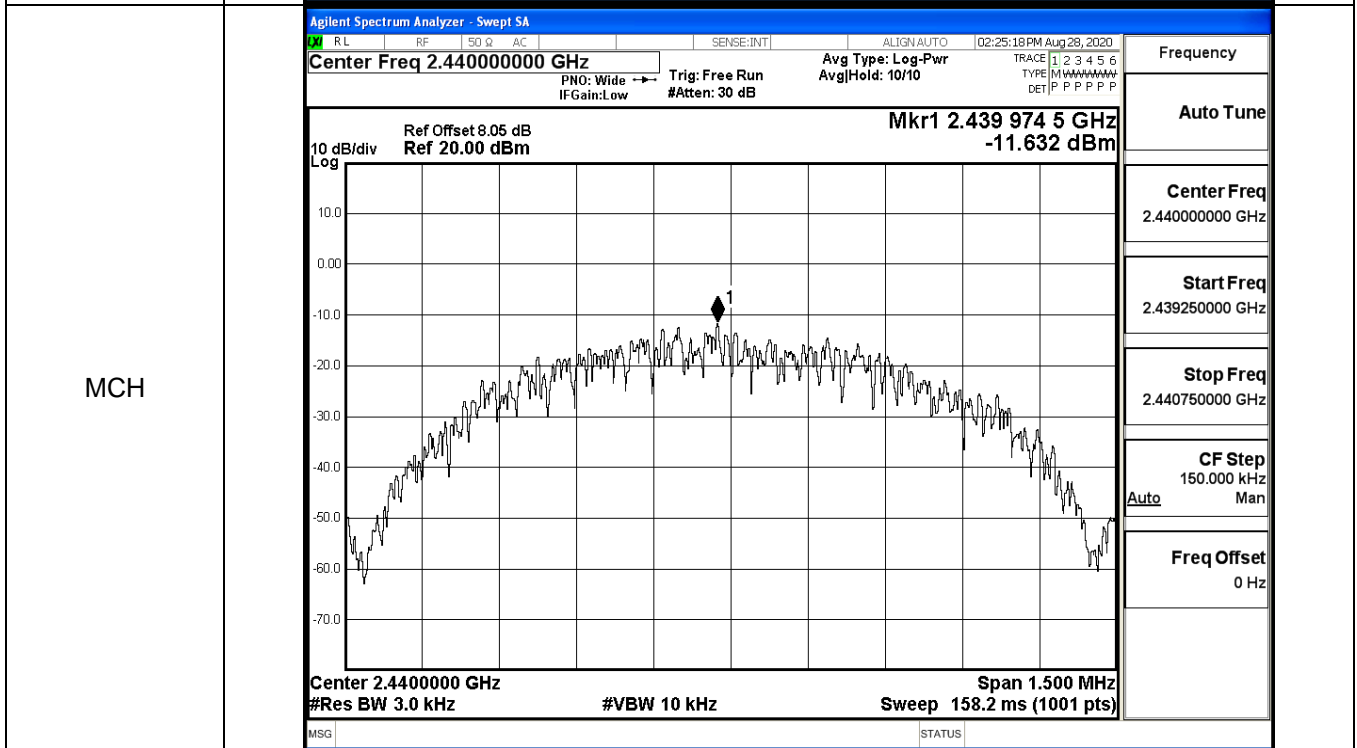
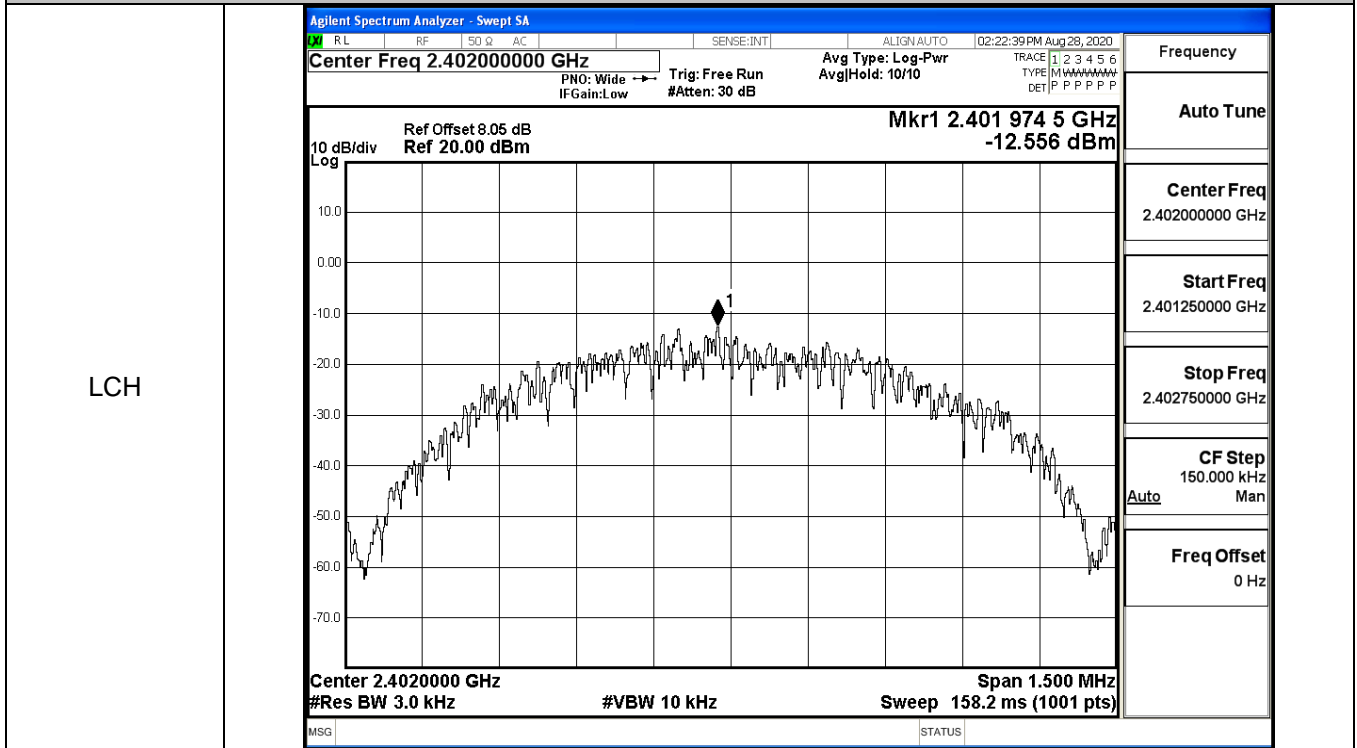
Mode	Channel	Conduct Peak Power[dBm]	Limit [dBm]	Verdict
BT LE	LCH	2.181	30	PASS
BT LE	MCH	3.129	30	PASS
BT LE	HCH	1.931	30	PASS

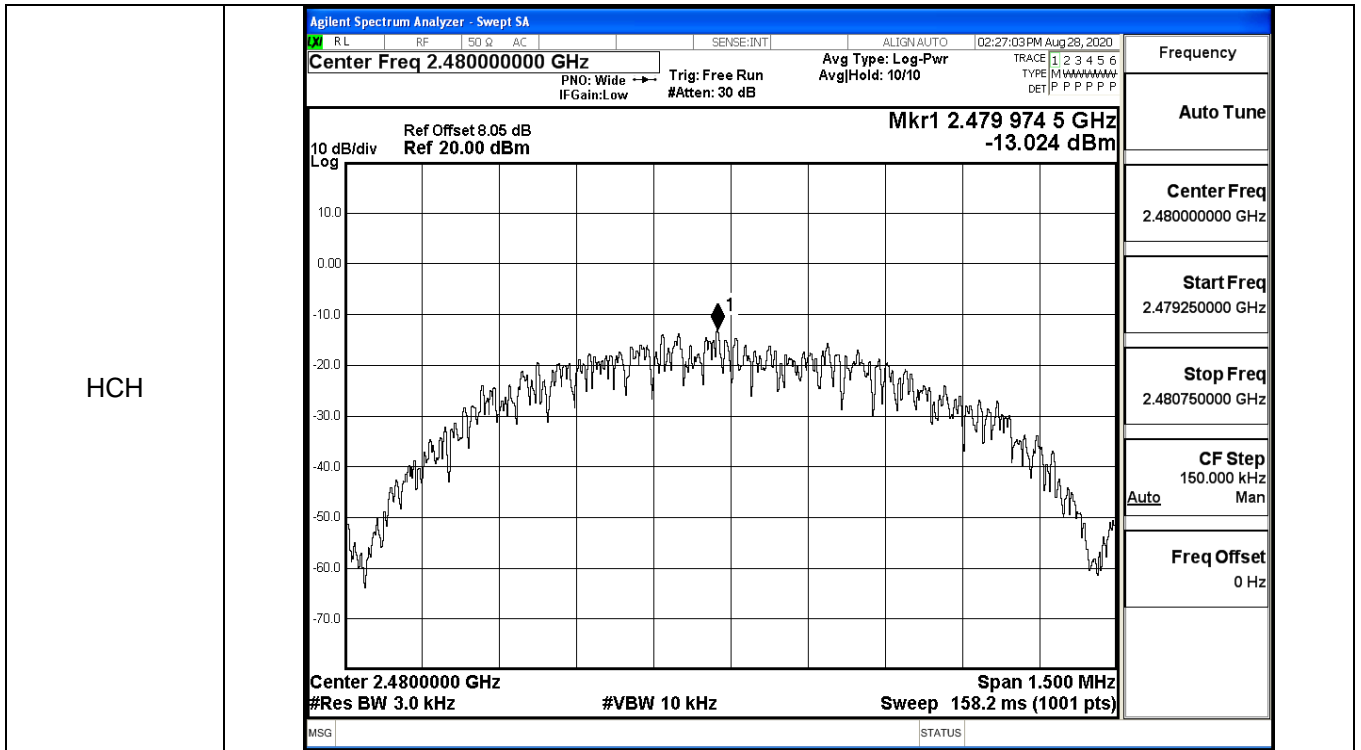


B.3 Maximum Power Spectral Density

Mode	Channel	PSD [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
BT LE	LCH	-12.556	8	PASS
BT LE	MCH	-11.632	8	PASS
BT LE	HCH	-13.024	8	PASS

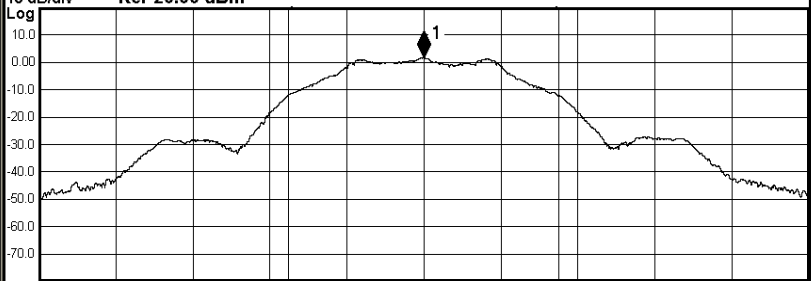

Test Graphs

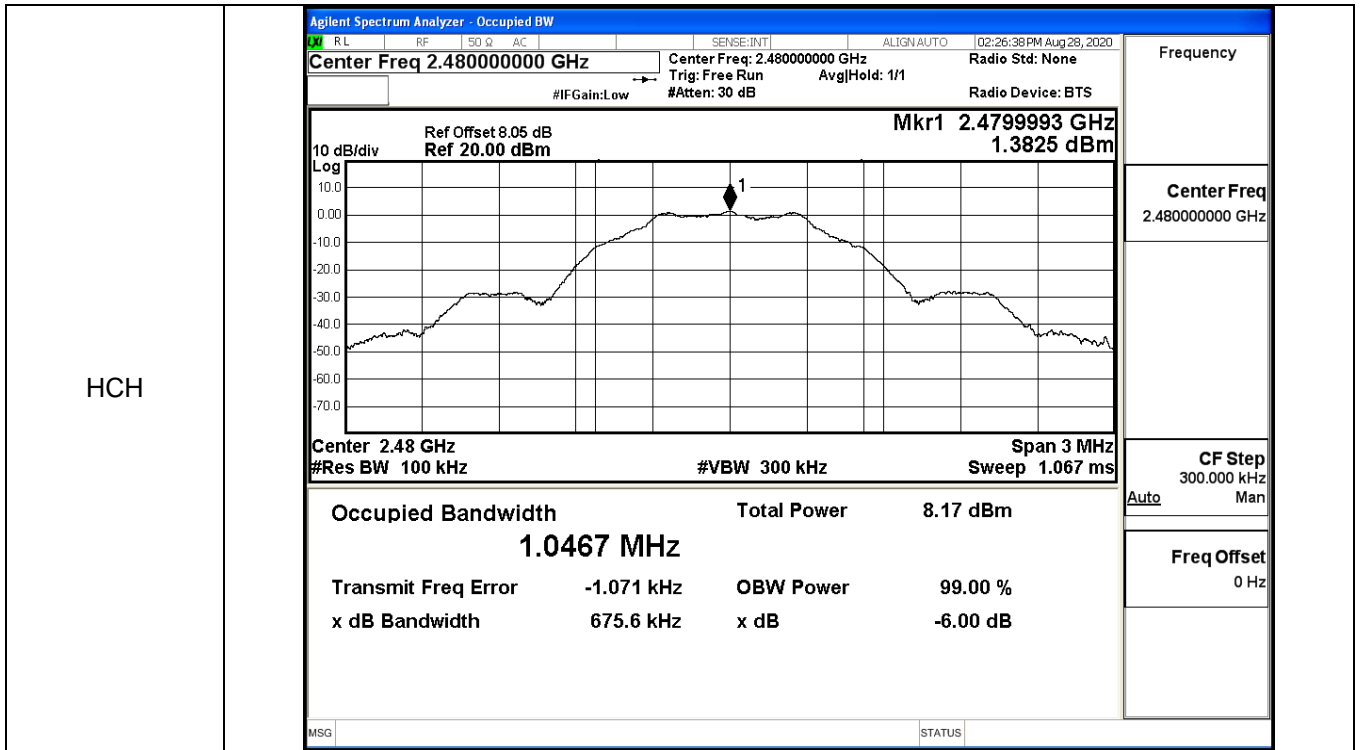




B.4 6dB Bandwidth

Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
BT LE	LCH	0.6702	≥0.5	PASS
BT LE	MCH	0.6683	≥0.5	PASS
BT LE	HCH	0.6756	≥0.5	PASS

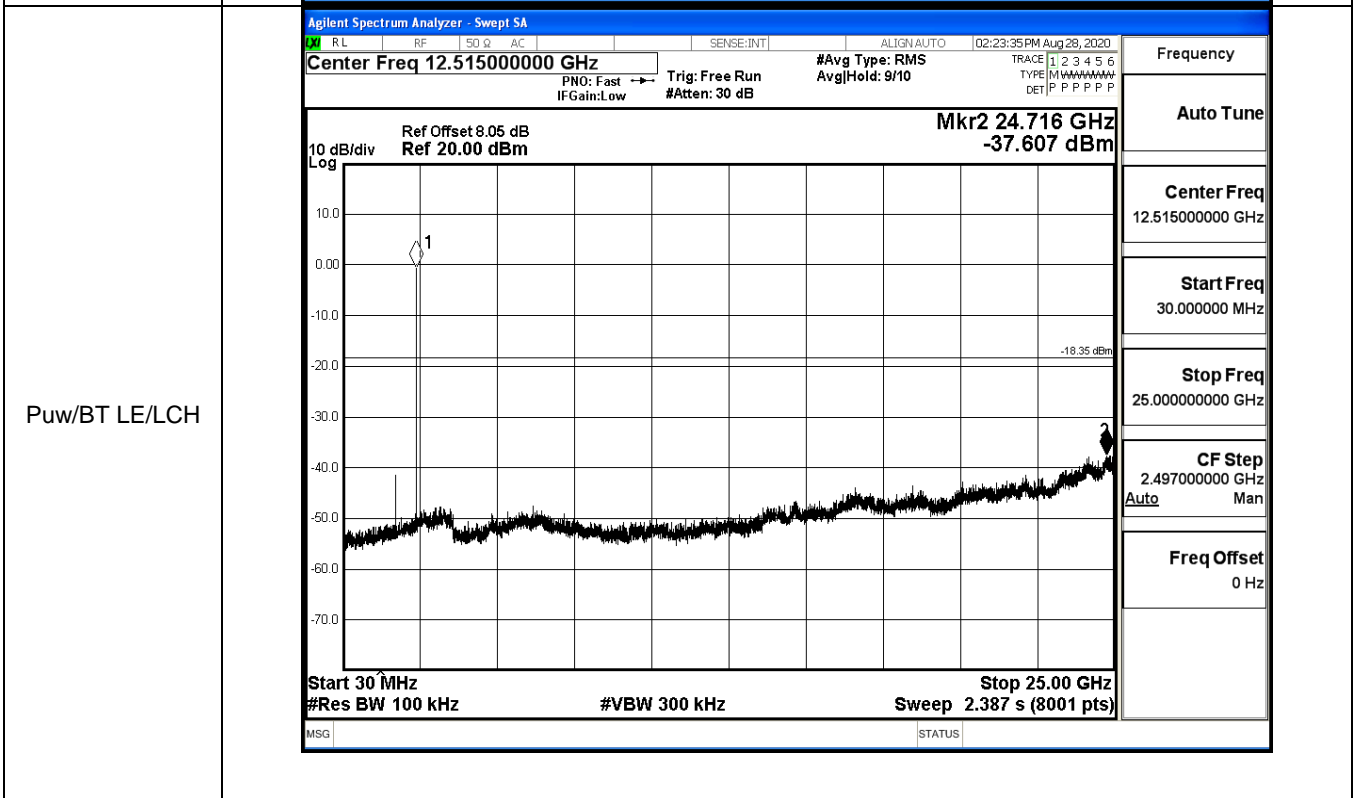
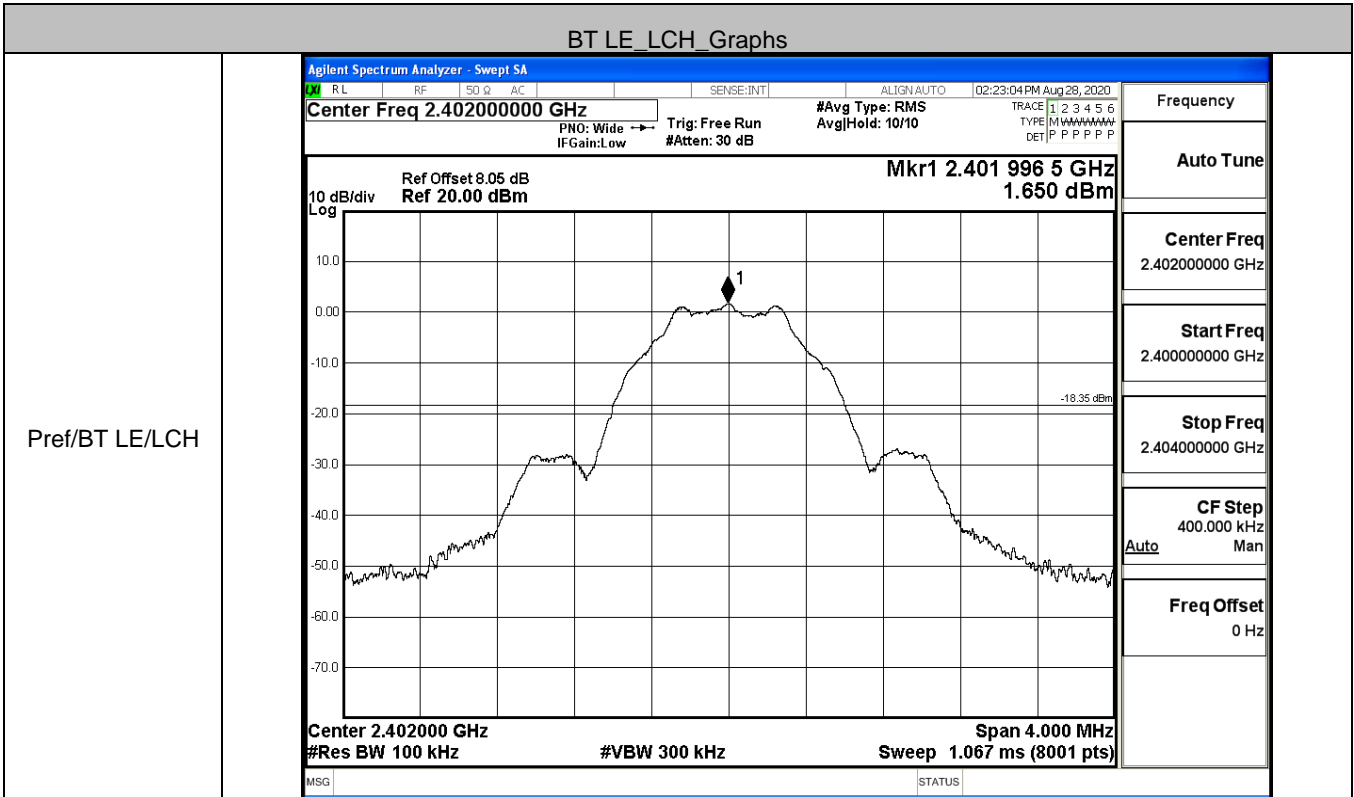
Test Graphs													
LCH	<div style="border: 1px solid black; padding: 5px;"> <p style="text-align: center; margin: 0;">Agilent Spectrum Analyzer - Occupied BW</p> <p style="font-size: small; margin: 0;">RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 02:22:15 PM Aug 28, 2020</p> <p style="margin: 0;">Center 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="width: 60%;"> <p style="font-size: small; margin: 0;">10 dB/div Ref Offset 8.05 dB Mkr1 2.4019989 GHz Log Ref 20.00 dBm 1.6299 dBm</p>  <p style="font-size: small; margin: 0;">Center 2.402 GHz Span 3 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 1.067 ms</p> <table border="1" style="width: 100%; font-size: x-small;"> <tr> <td>Occupied Bandwidth</td> <td>Total Power</td> <td>8.38 dBm</td> </tr> <tr> <td colspan="3" style="text-align: center;">1.0496 MHz</td> </tr> <tr> <td>Transmit Freq Error</td> <td>1.326 kHz</td> <td>OBW Power 99.00 %</td> </tr> <tr> <td>x dB Bandwidth</td> <td>670.2 kHz</td> <td>x dB -6.00 dB</td> </tr> </table> </div> <div style="width: 35%; border-left: 1px solid black; padding-left: 5px;"> <p style="font-size: small; margin: 0;">Frequency</p> <hr/> <p style="font-size: small; margin: 0;">Center Freq 2.402000000 GHz</p> <hr/> <p style="font-size: small; margin: 0;">CF Step 300.000 kHz Auto Man</p> <hr/> <p style="font-size: small; margin: 0;">Freq Offset 0 Hz</p> </div> </div> <p style="font-size: x-small; margin-top: 5px;">MSG STATUS</p> </div>	Occupied Bandwidth	Total Power	8.38 dBm	1.0496 MHz			Transmit Freq Error	1.326 kHz	OBW Power 99.00 %	x dB Bandwidth	670.2 kHz	x dB -6.00 dB
Occupied Bandwidth	Total Power	8.38 dBm											
1.0496 MHz													
Transmit Freq Error	1.326 kHz	OBW Power 99.00 %											
x dB Bandwidth	670.2 kHz	x dB -6.00 dB											
MCH	<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 02:24:53 PM Aug 28, 2020</p> <p style="margin: 0;">Center Freq: 2.440000000 GHz Center Freq: 2.440000000 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="width: 60%;"> <p style="font-size: small; margin: 0;">10 dB/div Ref Offset 8.05 dB Mkr1 2.439997 GHz Log Ref 20.00 dBm 2.6023 dBm</p>  <p style="font-size: small; margin: 0;">Center 2.44 GHz Span 3 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 1.067 ms</p> <table border="1" style="width: 100%; font-size: x-small;"> <tr> <td>Occupied Bandwidth</td> <td>Total Power</td> <td>9.36 dBm</td> </tr> <tr> <td colspan="3" style="text-align: center;">1.0486 MHz</td> </tr> <tr> <td>Transmit Freq Error</td> <td>515 Hz</td> <td>OBW Power 99.00 %</td> </tr> <tr> <td>x dB Bandwidth</td> <td>668.3 kHz</td> <td>x dB -6.00 dB</td> </tr> </table> </div> <div style="width: 35%; border-left: 1px solid black; padding-left: 5px;"> <p style="font-size: small; margin: 0;">Frequency</p> <hr/> <p style="font-size: small; margin: 0;">Center Freq 2.440000000 GHz</p> <hr/> <p style="font-size: small; margin: 0;">CF Step 300.000 kHz Auto Man</p> <hr/> <p style="font-size: small; margin: 0;">Freq Offset 0 Hz</p> </div> </div> <p style="font-size: x-small; margin-top: 5px;">MSG STATUS</p> </div>	Occupied Bandwidth	Total Power	9.36 dBm	1.0486 MHz			Transmit Freq Error	515 Hz	OBW Power 99.00 %	x dB Bandwidth	668.3 kHz	x dB -6.00 dB
Occupied Bandwidth	Total Power	9.36 dBm											
1.0486 MHz													
Transmit Freq Error	515 Hz	OBW Power 99.00 %											
x dB Bandwidth	668.3 kHz	x dB -6.00 dB											



B.5 RF Conducted Spurious Emissions

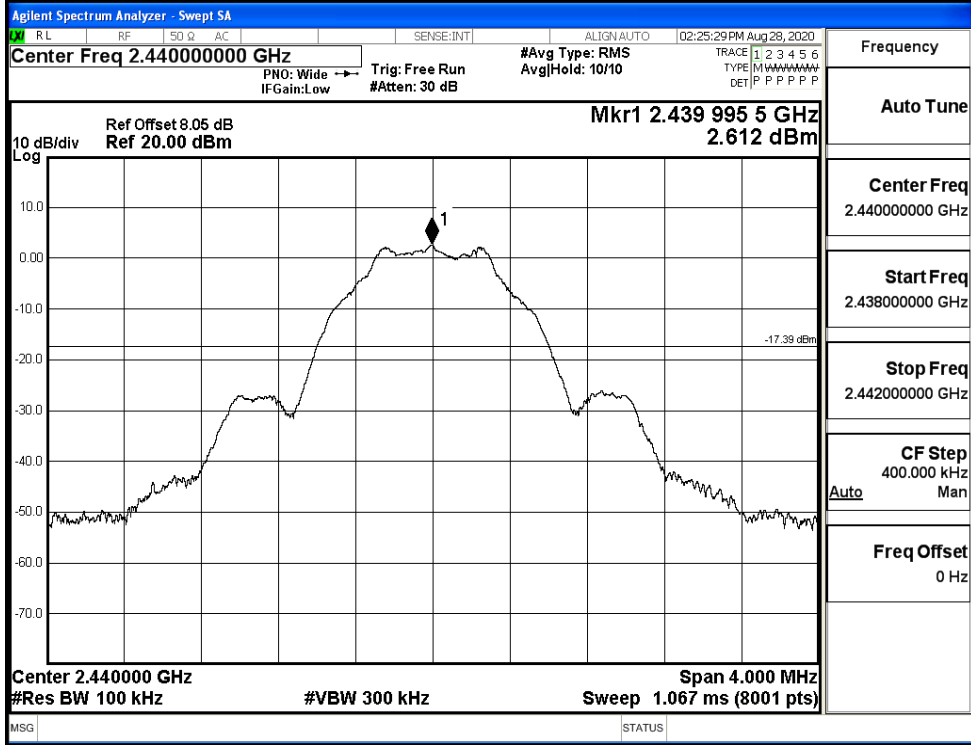
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	1.65	-37.607	-18.350	PASS
BT LE	MCH	2.612	-36.067	-17.388	PASS
BT LE	HCH	1.413	-37.172	-18.587	PASS

BT LE_LCH_Graphs

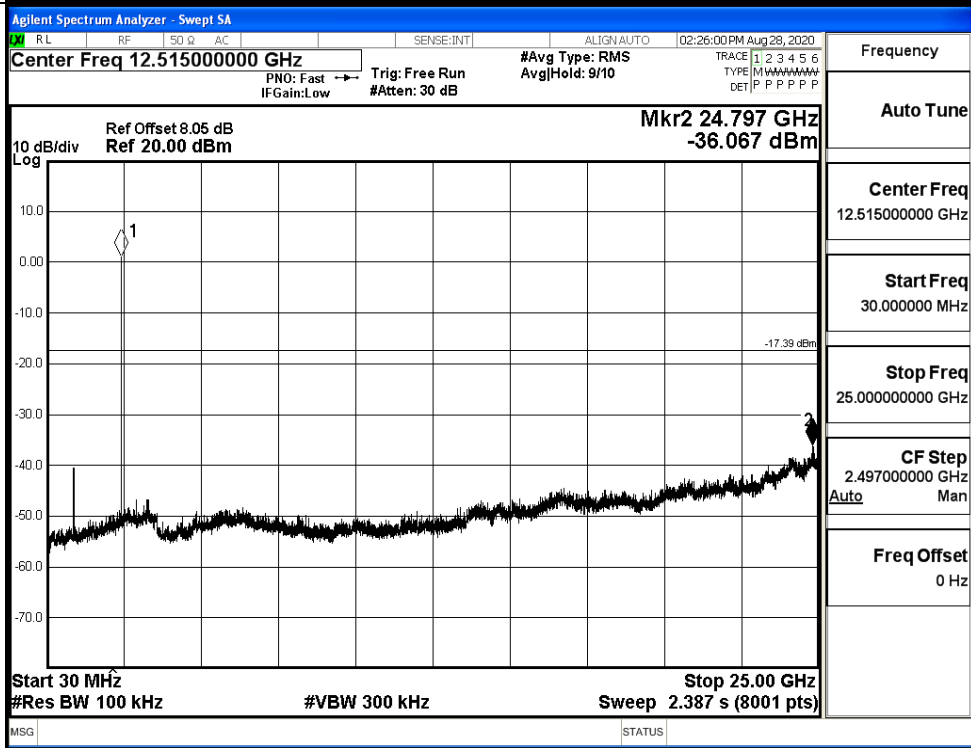


BT LE_MCH_Graphs

Pref/BT LE/MCH

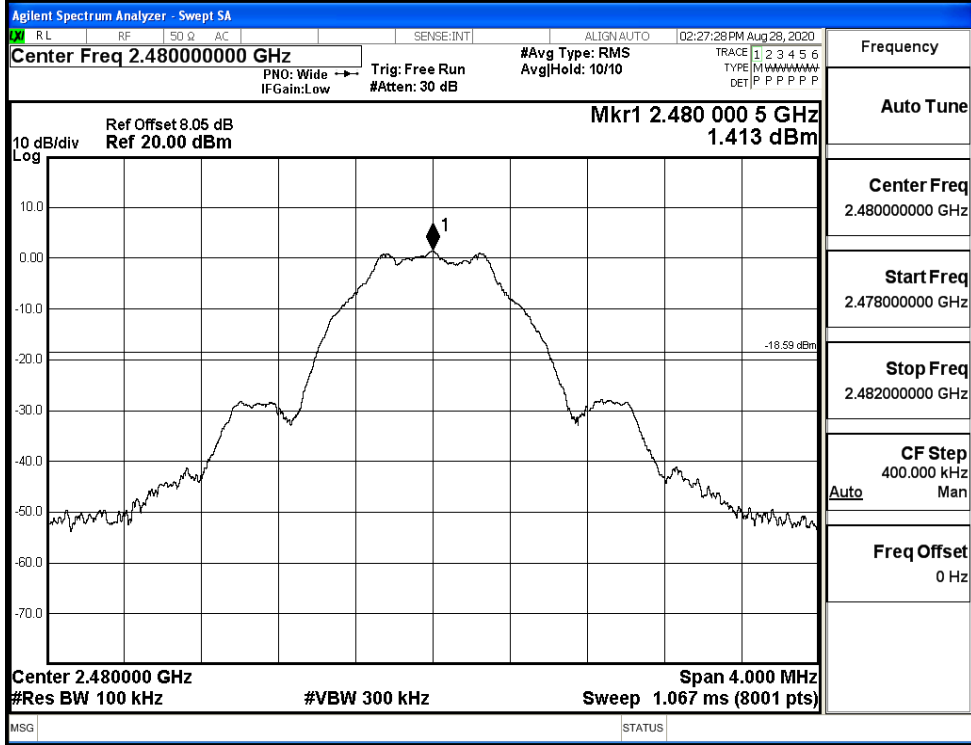


Puw/BT LE/MCH

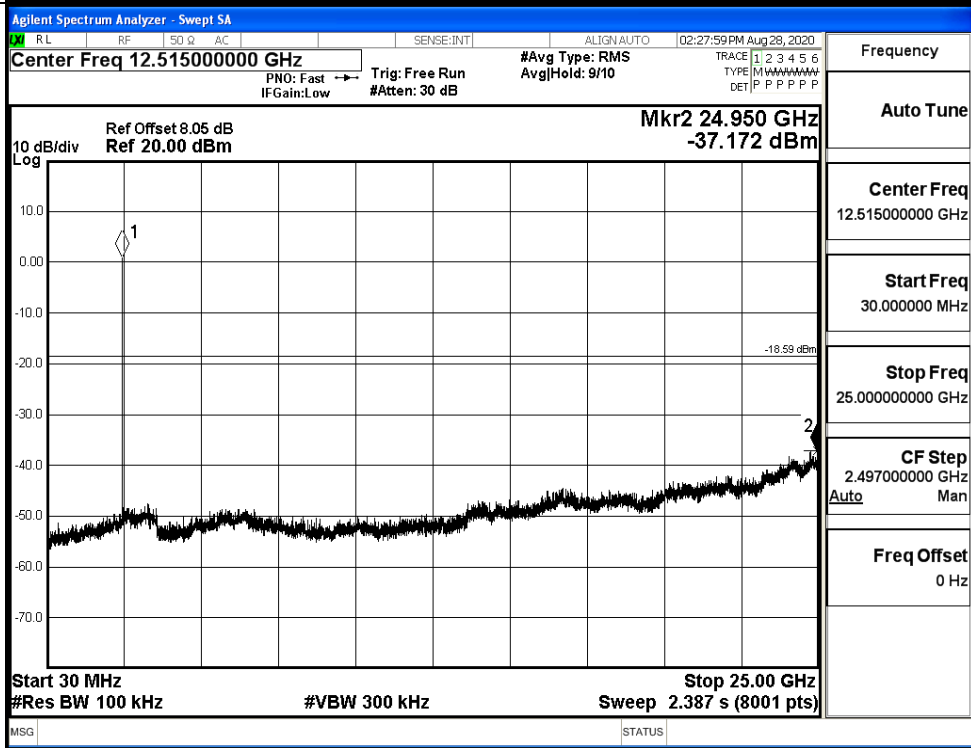


BT LE_HCH_Graphs

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	1.655	-49.596	-18.35	PASS
BT LE	HCH	1.495	-48.783	-18.51	PASS

Test Graphs

LCH

Agilent Spectrum Analyzer - Swept SA
 Center Freq 2.35700000 GHz
 Max Spurious Level -49.596 dBm
 Mkr4 2.344 099 GHz
 Start 2.31000 GHz, Stop 2.40400 GHz

MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	f		2.402 003 GHz	1.655 dBm			
2	N	f		2.400 000 GHz	-52.626 dBm			
3	N	f		2.390 000 GHz	-54.231 dBm			
4	N	f		2.344 099 GHz	-49.596 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

HCH

Agilent Spectrum Analyzer - Swept SA
 Center Freq 2.48900000 GHz
 Max Spurious Level -48.783 dBm
 Mkr4 2.486 866 00 GHz
 Start 2.47800 GHz, Stop 2.50000 GHz

MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	f		2.479 999 25 GHz	1.495 dBm			
2	N	f		2.483 500 00 GHz	-53.274 dBm			
3	N	f		2.500 000 00 GHz	-53.279 dBm			
4	N	f		2.486 866 00 GHz	-48.783 dBm			

Frequency

Auto Tune

Center Freq
2.48900000 GHz

Start Freq
2.47800000 GHz

Stop Freq
2.50000000 GHz

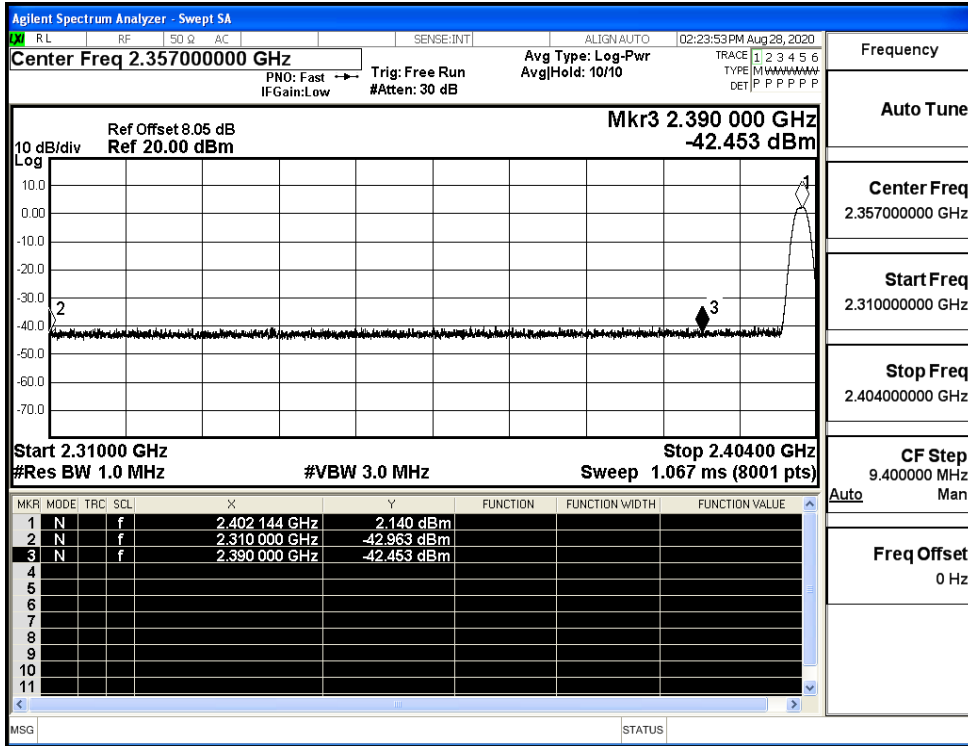
CF Step
2.200000 MHz

Freq Offset
0 Hz

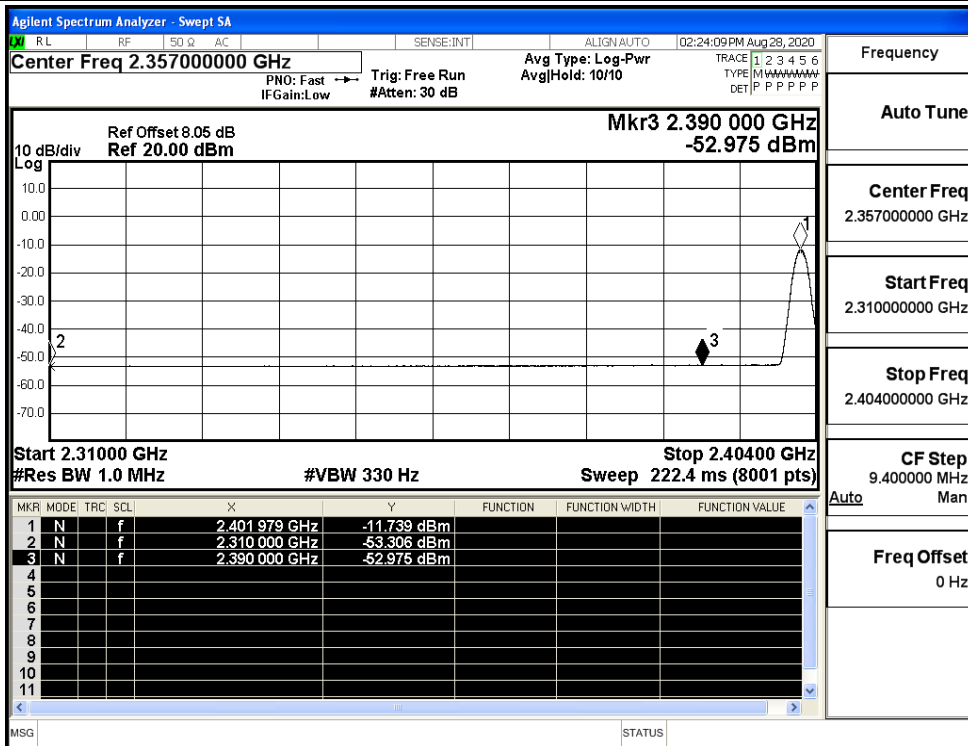
B.7 Restrict-band band-edge measurements

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	-42.96	2.0	0	52.29	PEAK	74	PASS
		Ant1	2310.0	-53.31	2.0	0	41.95	AV	54	PASS
		Ant1	2390.0	-42.45	2.0	0	52.80	PEAK	74	PASS
		Ant1	2390.0	-52.98	2.0	0	42.28	AV	54	PASS
	2480	Ant1	2483.5	-42.86	2.0	0	52.40	PEAK	74	PASS
		Ant1	2483.5	-52.43	2.0	0	42.83	AV	54	PASS
		Ant1	2500.0	-41.91	2.0	0	53.35	PEAK	74	PASS
		Ant1	2500.0	-52.30	2.0	0	42.96	AV	54	PASS

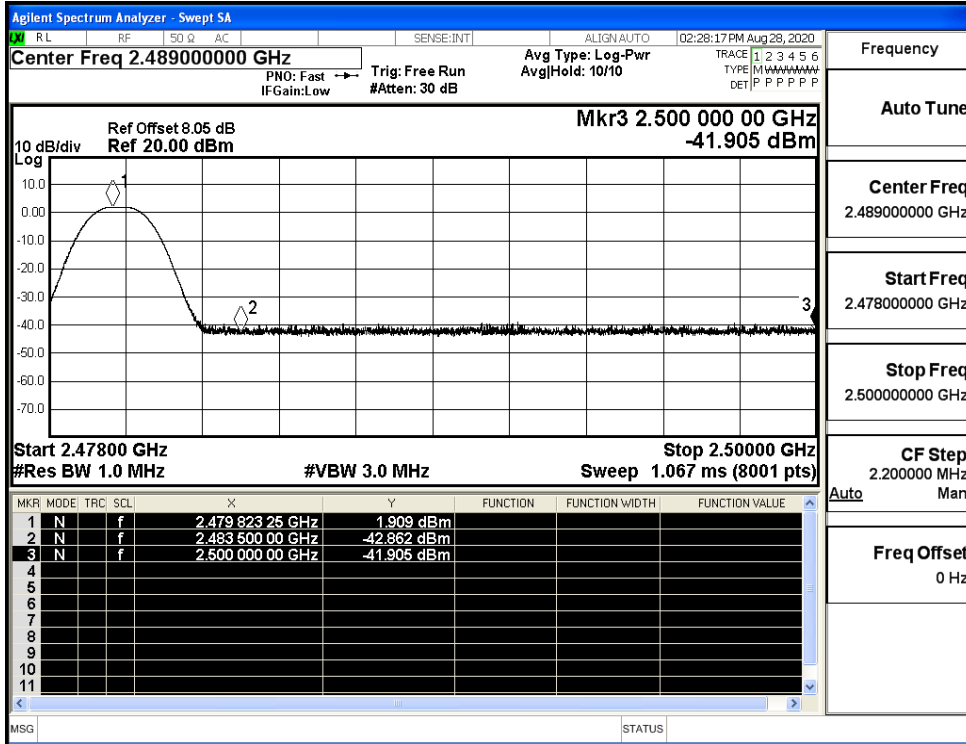
Restrict-band band-edge measurements_BT LE_2402_Ant1_PEAK



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

