

## Appendix B

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

Product Name: Tablet pc

Trade Mark: Touch+

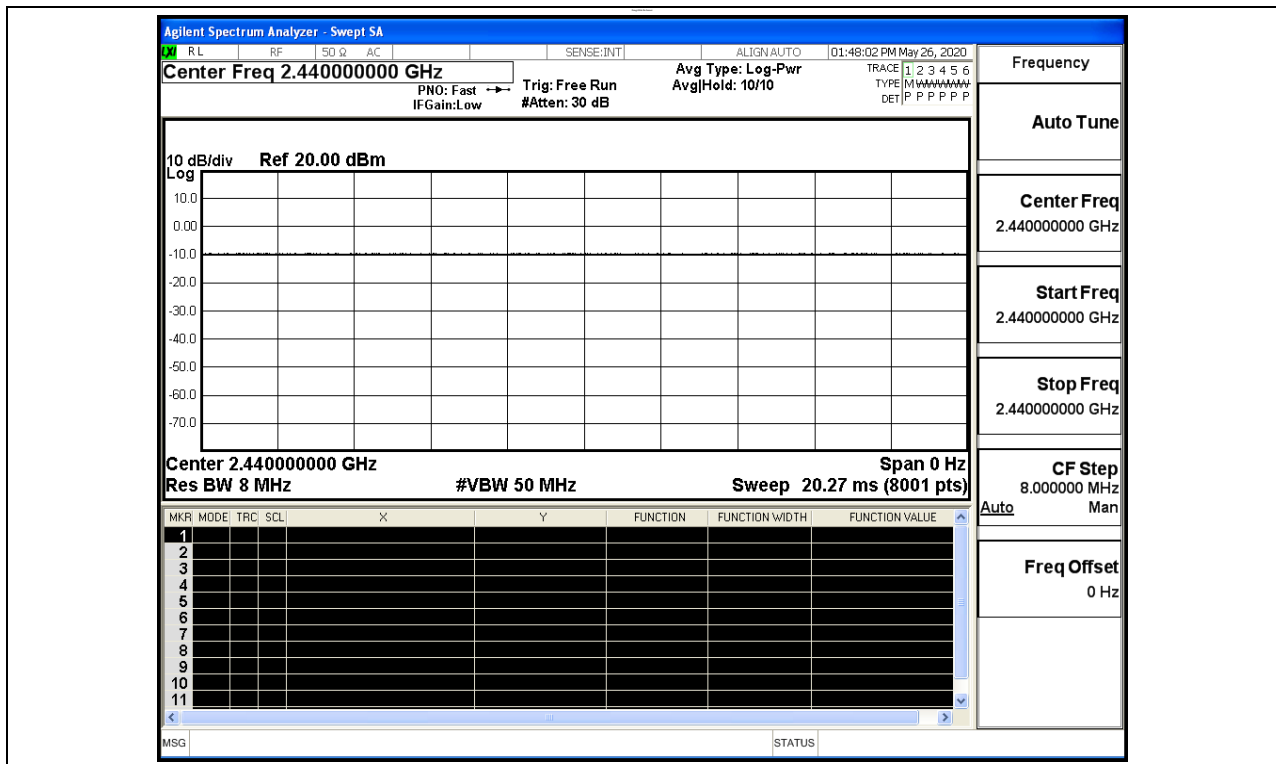
Test Model: 1100AS

#### Environmental Conditions

Temperature:	24.5°C
Relative Humidity:	53.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Diamond Lu
Supervised by:	Li Huan

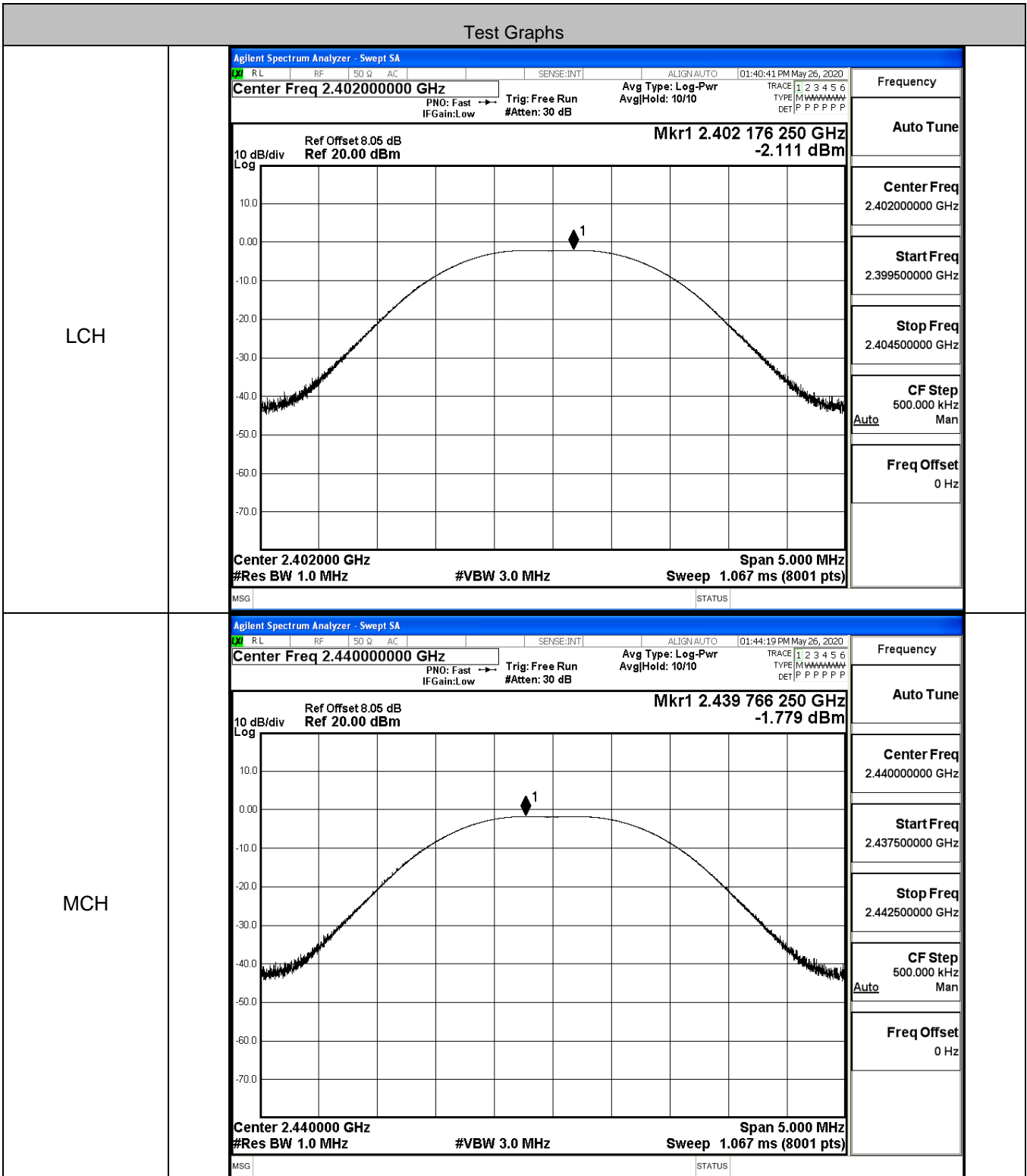
#### B.1 Duty Cycle

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

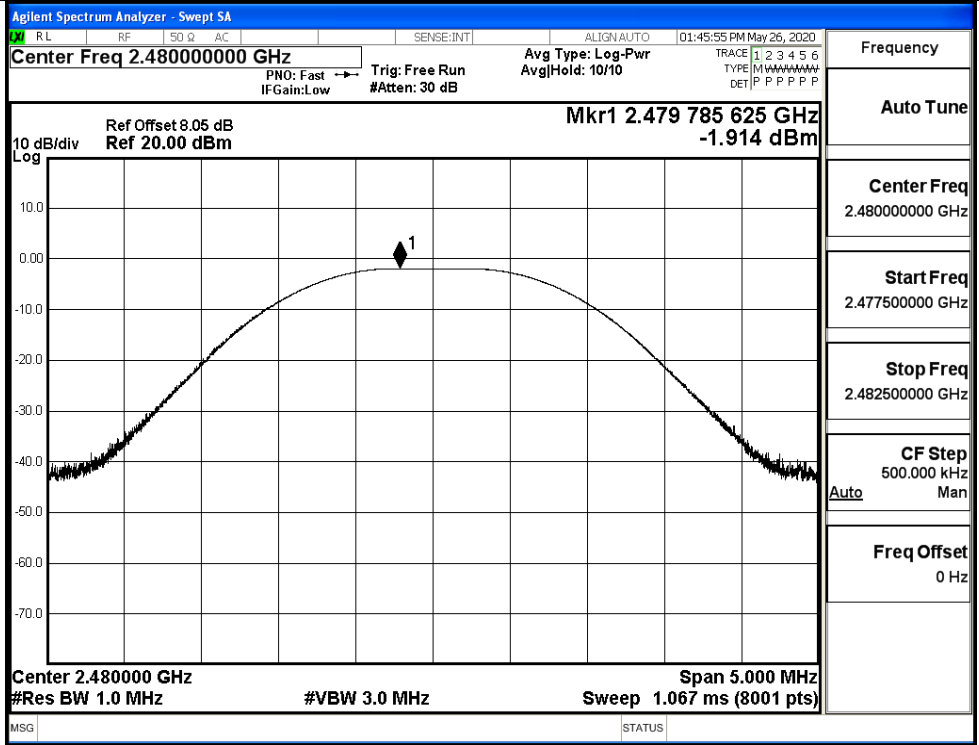


### B.2 Maximum Conducted Peak Output Power

Mode	Channel	Conduct Peak Power[dBm]	Limit [dBm]	Verdict
BT LE	LCH	-2.111	30	PASS
BT LE	MCH	-1.779	30	PASS
BT LE	HCH	-1.914	30	PASS



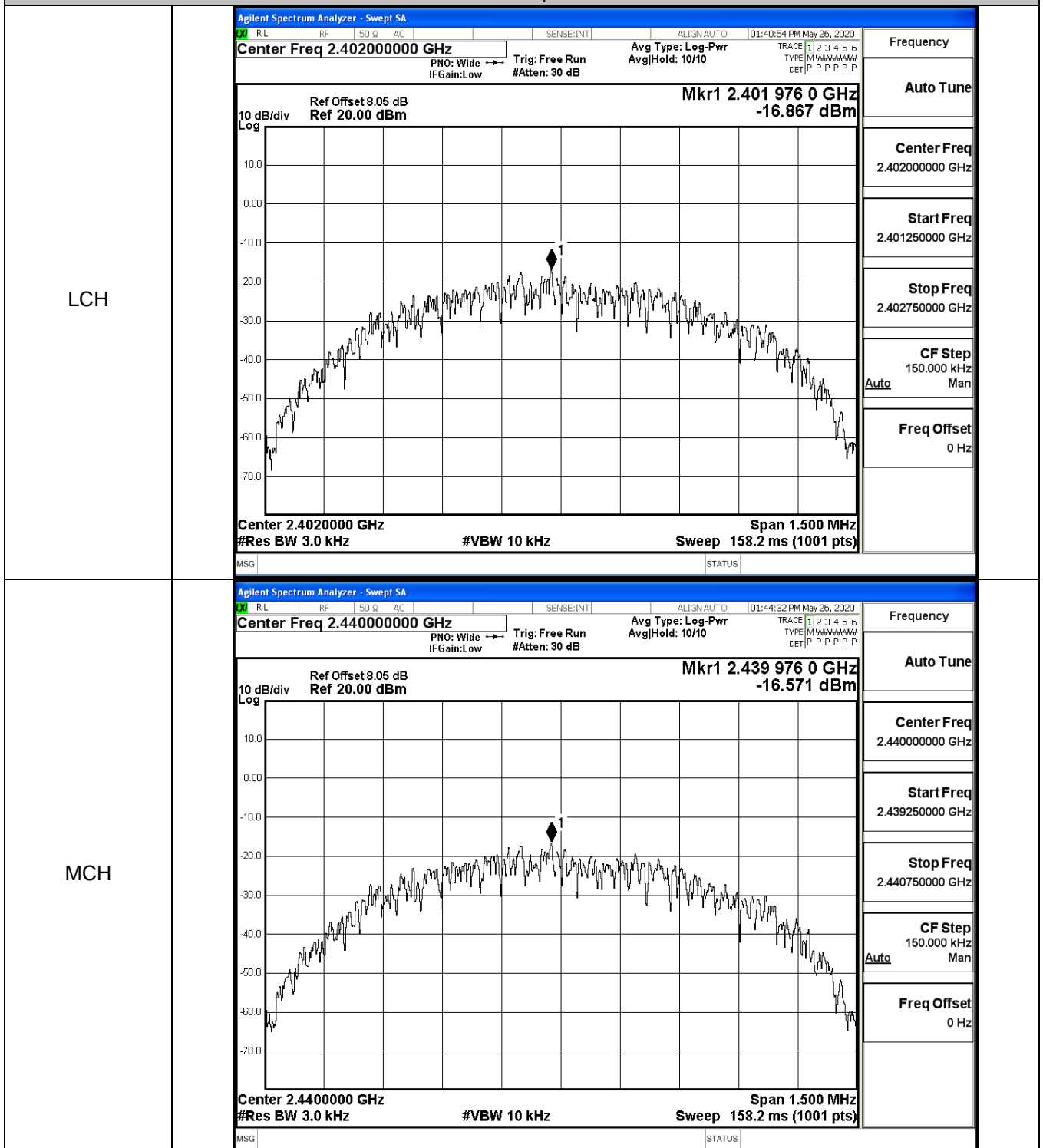
HCH



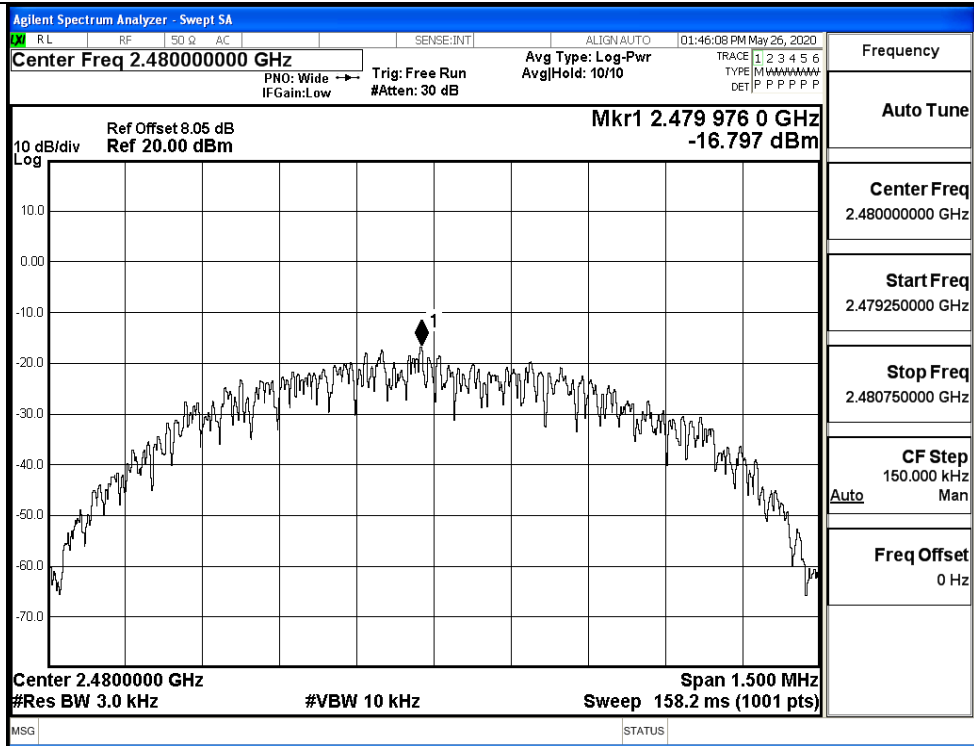
### B.3 Maximum Power Spectral Density

Mode	Channel	PSD [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
BT LE	LCH	-16.867	8	PASS
BT LE	MCH	-16.571	8	PASS
BT LE	HCH	-16.797	8	PASS

#### Test Graphs



HCH



**B.4 6dB Bandwidth**

Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
BT LE	LCH	0.6915	≥0.5	PASS
BT LE	MCH	0.6934	≥0.5	PASS
BT LE	HCH	0.6864	≥0.5	PASS

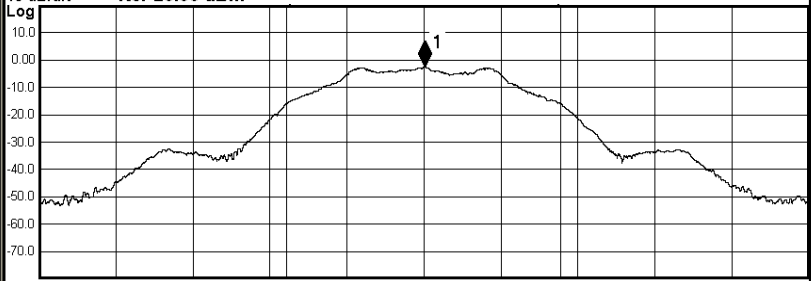
Test Graphs													
LCH	<div style="border: 1px solid black; padding: 5px;"> <p style="font-size: small; margin: 0;">Agilent Spectrum Analyzer - Occupied BW</p> <p style="font-size: x-small; margin: 0;">RL RF 50 Ω AC SENSE:INT ALIGN:AUTO 01:40:30 PM May 26, 2020</p> <p style="font-size: small; margin: 0;">Center Freq 2.402000000 GHz Center Freq: 2.402000000 GHz Radio Std: None</p> <p style="font-size: x-small; margin: 0;">Trig: Free Run AvgHold: &gt;1/1</p> <p style="font-size: x-small; margin: 0;">#IFGain:Low #Atten: 30 dB Radio Device: BTS</p> <div style="border: 1px solid black; padding: 2px;"> <p style="font-size: x-small; margin: 0;">10 dB/div Ref Offset 8.05 dB Mkr1 2.4019903 GHz</p> <p style="font-size: x-small; margin: 0;">Log Ref 20.00 dBm -2.8201 dBm</p> </div> <p style="font-size: x-small; margin: 0;">Center 2.402 GHz Span 3 MHz</p> <p style="font-size: x-small; margin: 0;">#Res BW 100 kHz #VBW 300 kHz Sweep 1.067 ms</p> <table style="width: 100%; font-size: x-small; border-collapse: collapse;"> <tr> <td>Occupied Bandwidth</td> <td>Total Power</td> <td>4.12 dBm</td> </tr> <tr> <td style="text-align: center;"><b>1.0626 MHz</b></td> <td></td> <td></td> </tr> <tr> <td>Transmit Freq Error</td> <td>2.561 kHz</td> <td>OBW Power 99.00 %</td> </tr> <tr> <td>x dB Bandwidth</td> <td>691.5 kHz</td> <td>x dB -6.00 dB</td> </tr> </table> <p style="font-size: x-small; margin: 0;">MSG STATUS</p> </div>	Occupied Bandwidth	Total Power	4.12 dBm	<b>1.0626 MHz</b>			Transmit Freq Error	2.561 kHz	OBW Power 99.00 %	x dB Bandwidth	691.5 kHz	x dB -6.00 dB
Occupied Bandwidth	Total Power	4.12 dBm											
<b>1.0626 MHz</b>													
Transmit Freq Error	2.561 kHz	OBW Power 99.00 %											
x dB Bandwidth	691.5 kHz	x dB -6.00 dB											
MCH	<div style="border: 1px solid black; padding: 5px;"> <p style="font-size: small; margin: 0;">Agilent Spectrum Analyzer - Occupied BW</p> <p style="font-size: x-small; margin: 0;">RL RF 50 Ω AC SENSE:INT ALIGN:AUTO 01:44:08 PM May 26, 2020</p> <p style="font-size: small; margin: 0;">Center Freq 2.440000000 GHz Center Freq: 2.440000000 GHz Radio Std: None</p> <p style="font-size: x-small; margin: 0;">Trig: Free Run AvgHold: 1/1</p> <p style="font-size: x-small; margin: 0;">#IFGain:Low #Atten: 30 dB Radio Device: BTS</p> <div style="border: 1px solid black; padding: 2px;"> <p style="font-size: x-small; margin: 0;">10 dB/div Ref Offset 8.05 dB Mkr1 2.4399993 GHz</p> <p style="font-size: x-small; margin: 0;">Log Ref 20.00 dBm -2.3882 dBm</p> </div> <p style="font-size: x-small; margin: 0;">Center 2.44 GHz Span 3 MHz</p> <p style="font-size: x-small; margin: 0;">#Res BW 100 kHz #VBW 300 kHz Sweep 1.067 ms</p> <table style="width: 100%; font-size: x-small; border-collapse: collapse;"> <tr> <td>Occupied Bandwidth</td> <td>Total Power</td> <td>4.50 dBm</td> </tr> <tr> <td style="text-align: center;"><b>1.0644 MHz</b></td> <td></td> <td></td> </tr> <tr> <td>Transmit Freq Error</td> <td>736 Hz</td> <td>OBW Power 99.00 %</td> </tr> <tr> <td>x dB Bandwidth</td> <td>693.4 kHz</td> <td>x dB -6.00 dB</td> </tr> </table> <p style="font-size: x-small; margin: 0;">MSG STATUS</p> </div>	Occupied Bandwidth	Total Power	4.50 dBm	<b>1.0644 MHz</b>			Transmit Freq Error	736 Hz	OBW Power 99.00 %	x dB Bandwidth	693.4 kHz	x dB -6.00 dB
Occupied Bandwidth	Total Power	4.50 dBm											
<b>1.0644 MHz</b>													
Transmit Freq Error	736 Hz	OBW Power 99.00 %											
x dB Bandwidth	693.4 kHz	x dB -6.00 dB											

HCH

Agilent Spectrum Analyzer - Occupied BW

<input type="checkbox"/> RL	<input type="checkbox"/> RF	<input type="checkbox"/> 50 Ω	<input type="checkbox"/> AC	<input type="checkbox"/> SENSE:INT	<input type="checkbox"/> ALIGN:AUTO	01:45:44 PM May 26, 2020
<b>Center Freq 2.480000000 GHz</b>				Center Freq: 2.480000000 GHz	Radio Std: None	Frequency
				Trig: Free Run	AvgJHold: 1/1	
				#IFGain:Low	#Atten: 30 dB	Radio Device: BTS

Mkr1 2.4800026 GHz  
-2.5415 dBm



10 dB/div  
Log  
Ref Offset 8.05 dB  
Ref 20.00 dBm

Center 2.48 GHz	#VBW 300 kHz	Span 3 MHz
#Res BW 100 kHz	Sweep 1.067 ms	

<b>Occupied Bandwidth</b>	<b>Total Power</b>	<b>4.37 dBm</b>
<b>1.0623 MHz</b>		
Transmit Freq Error	984 Hz	OBW Power
x dB Bandwidth	686.4 kHz	x dB
		99.00 %
		-6.00 dB

MSG
STATUS

Center Freq 2.480000000 GHz
CF Step 300.000 kHz Auto Man
Freq Offset 0 Hz

### B.5 RF Conducted Spurious Emissions

Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	-2.717	-37.248	-22.717	PASS
BT LE	MCH	-2.376	-37.202	-22.376	PASS
BT LE	HCH	-2.523	-36.415	-22.523	PASS

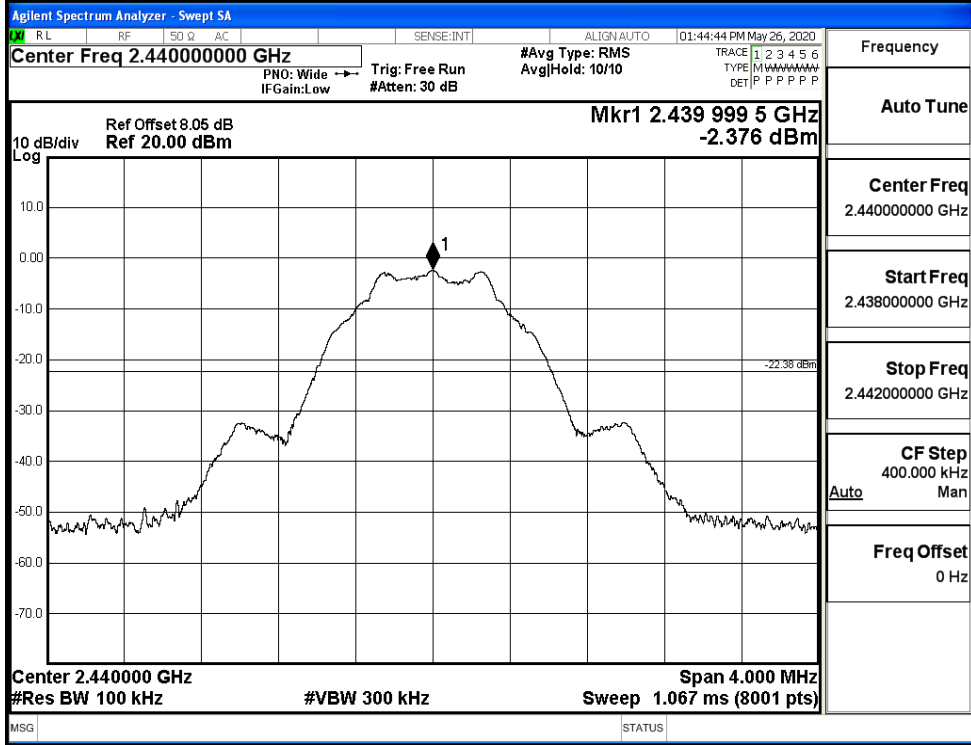
BT LE\_LCH\_Graphs

Pref/BT LE/LCH		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>Frequency</td></tr> <tr><td>Auto Tune</td></tr> <tr><td>Center Freq 2.402000000 GHz</td></tr> <tr><td>Start Freq 2.400000000 GHz</td></tr> <tr><td>Stop Freq 2.404000000 GHz</td></tr> <tr><td>CF Step 400.000 kHz Auto Man</td></tr> <tr><td>Freq Offset 0 Hz</td></tr> </table>	Frequency	Auto Tune	Center Freq 2.402000000 GHz	Start Freq 2.400000000 GHz	Stop Freq 2.404000000 GHz	CF Step 400.000 kHz Auto Man	Freq Offset 0 Hz
Frequency									
Auto Tune									
Center Freq 2.402000000 GHz									
Start Freq 2.400000000 GHz									
Stop Freq 2.404000000 GHz									
CF Step 400.000 kHz Auto Man									
Freq Offset 0 Hz									
Puw/BT LE/LCH		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>Frequency</td></tr> <tr><td>Auto Tune</td></tr> <tr><td>Center Freq 12.515000000 GHz</td></tr> <tr><td>Start Freq 30.0000000 MHz</td></tr> <tr><td>Stop Freq 25.000000000 GHz</td></tr> <tr><td>CF Step 2.497000000 GHz Auto Man</td></tr> <tr><td>Freq Offset 0 Hz</td></tr> </table>	Frequency	Auto Tune	Center Freq 12.515000000 GHz	Start Freq 30.0000000 MHz	Stop Freq 25.000000000 GHz	CF Step 2.497000000 GHz Auto Man	Freq Offset 0 Hz
Frequency									
Auto Tune									
Center Freq 12.515000000 GHz									
Start Freq 30.0000000 MHz									
Stop Freq 25.000000000 GHz									
CF Step 2.497000000 GHz Auto Man									
Freq Offset 0 Hz									

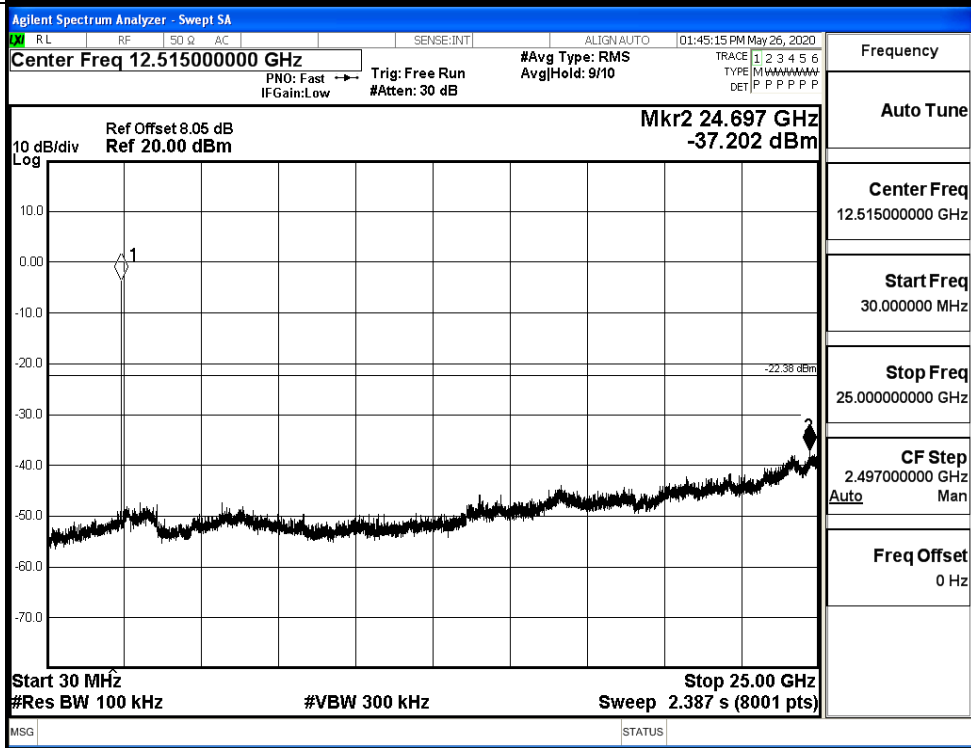


BT LE\_MCH\_Graphs

Pref/BT LE/MCH

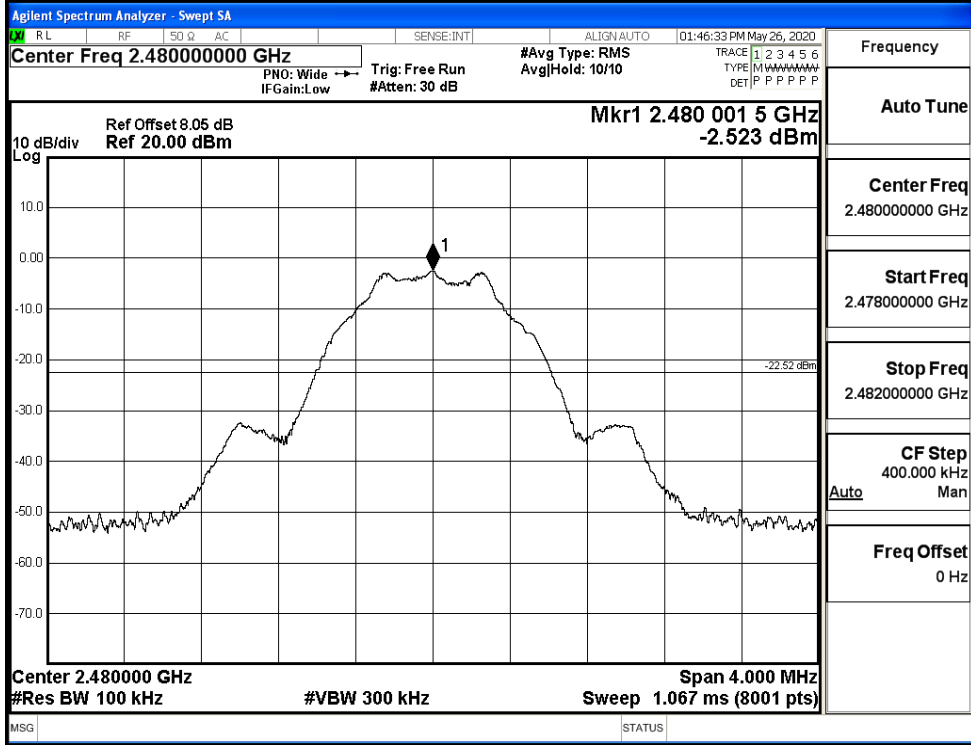


Puw/BT LE/MCH

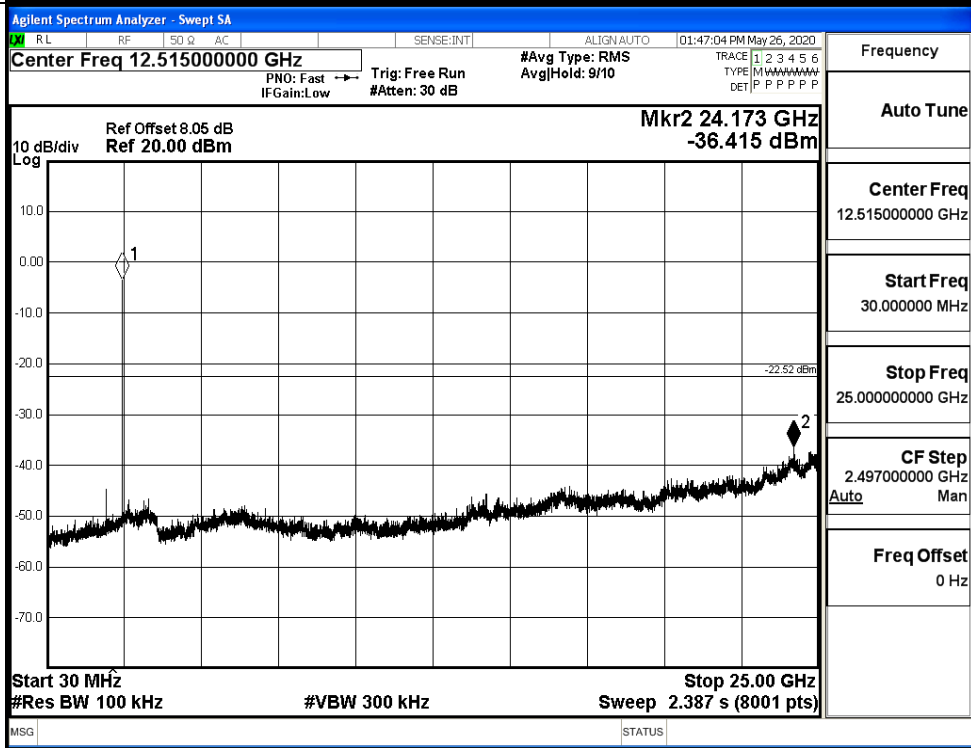


BT LE\_HCH\_Graphs

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	-2.696	-48.367	-22.7	PASS
BT LE	HCH	-2.511	-49.169	-22.51	PASS

Test Graphs

LCH

Agilent Spectrum Analyzer - Swept SA  
 Center Freq 2.35700000 GHz  
 Max Spurious Level -48.367 dBm  
 Mkr4 2.381 370 GHz  
 Start 2.31000 GHz Stop 2.40400 GHz  
 #Res BW 100 kHz #VBW 300 kHz Sweep 9.067 ms (8001 pts)

MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	f		2.402 003 GHz	-2.696 dBm			
2	N	f		2.400 000 GHz	-52.766 dBm			
3	N	f		2.390 000 GHz	-53.840 dBm			
4	N	f		2.381 370 GHz	-48.367 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 -49.169 dBm  
 Mkr4 2.491 785 75 GHz  
 Start 2.47800 GHz Stop 2.50000 GHz  
 #Res BW 100 kHz #VBW 300 kHz Sweep 2.133 ms (8001 pts)

MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	f		2.479 999 25 GHz	-2.511 dBm			
2	N	f		2.483 500 00 GHz	-53.685 dBm			
3	N	f		2.500 000 00 GHz	-50.937 dBm			
4	N	f		2.491 785 75 GHz	-49.169 dBm			

Frequency

Auto Tune

Center Freq  
2.48900000 GHz

Start Freq  
2.47800000 GHz

Stop Freq  
2.50000000 GHz

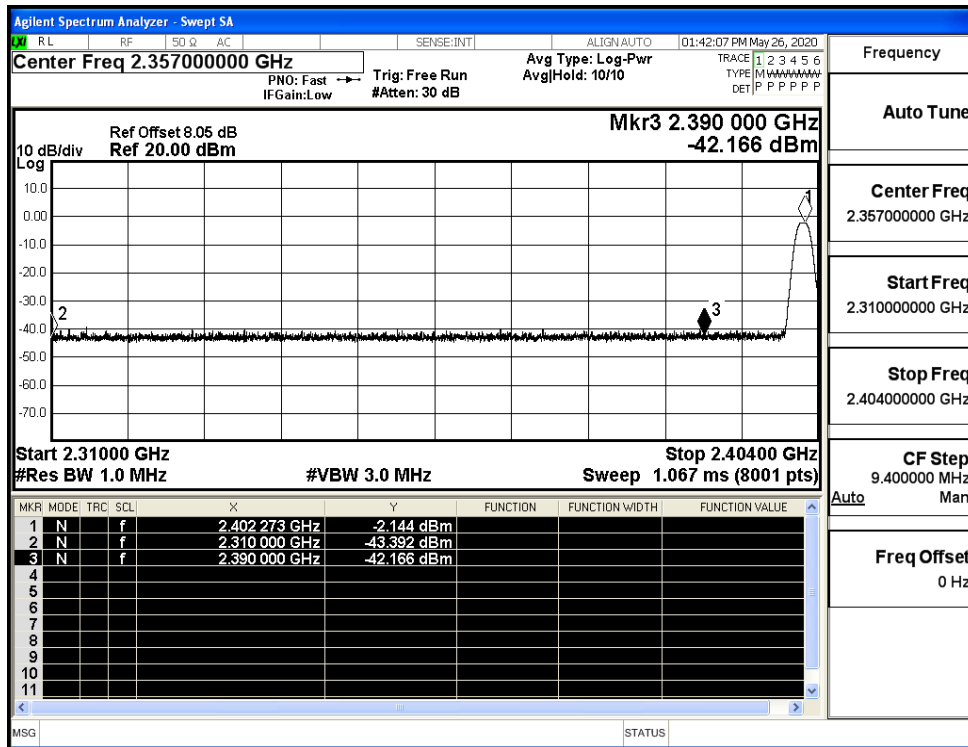
CF Step  
2.200000 MHz

Freq Offset  
0 Hz

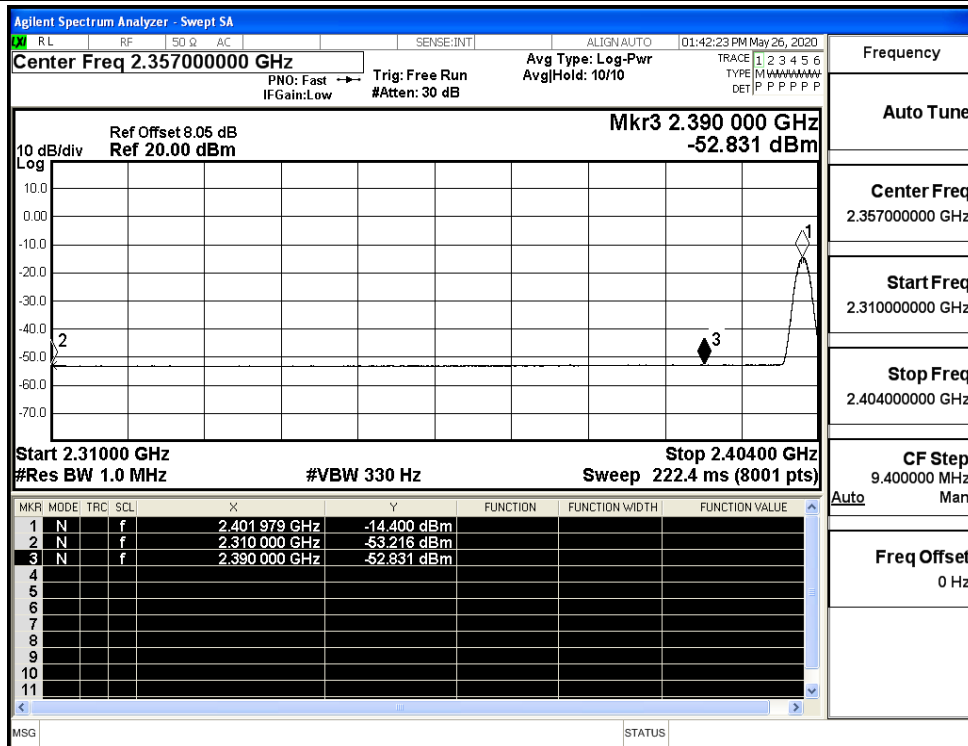
**B.7 Restrict-band band-edge measurements**

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	-43.39	2.0	0	51.87	PEAK	74	PASS
		Ant1	2310.0	-53.22	2.0	0	42.04	AV	54	PASS
		Ant1	2390.0	-42.17	2.0	0	53.09	PEAK	74	PASS
		Ant1	2390.0	-52.83	2.0	0	42.43	AV	54	PASS
	2480	Ant1	2483.5	-41.42	2.0	0	53.84	PEAK	74	PASS
		Ant1	2483.5	-52.53	2.0	0	42.73	AV	54	PASS
		Ant1	2500.0	-42.09	2.0	0	53.16	PEAK	74	PASS
		Ant1	2500.0	-52.17	2.0	0	43.09	AV	54	PASS

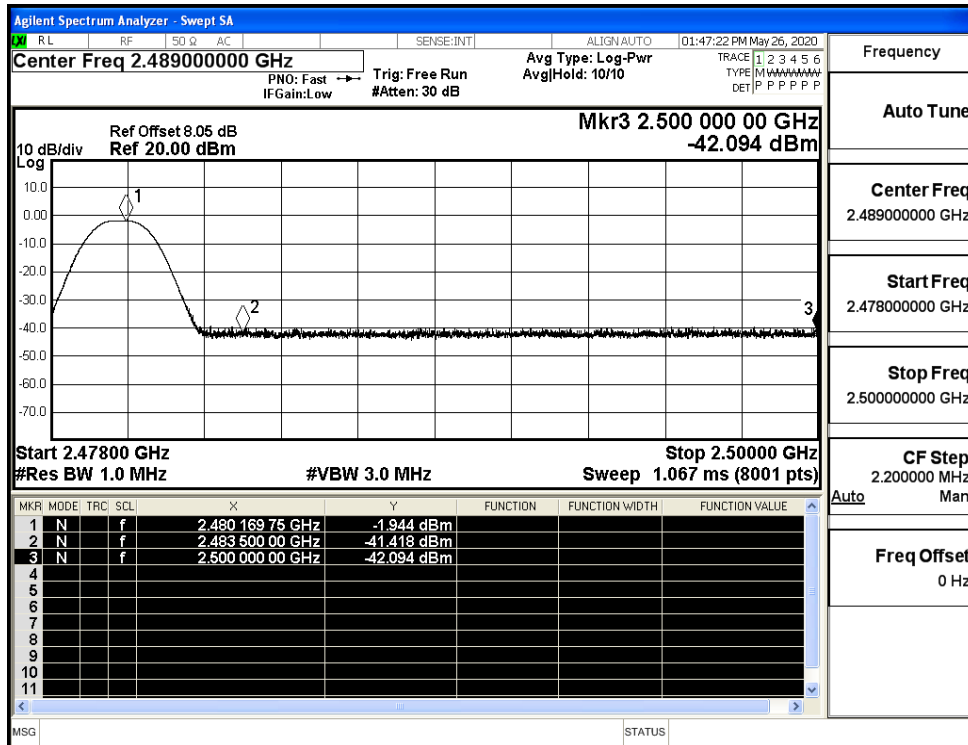
Restrict-band band-edge measurements\_BT LE\_2402\_Ant1\_PEAK



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

