

Appendix B

RF Test Data for BT V4.0 (BDR/EDR) (Conducted Measurement)

Product Name: TABLET PC

Trade Mark: FUSION5

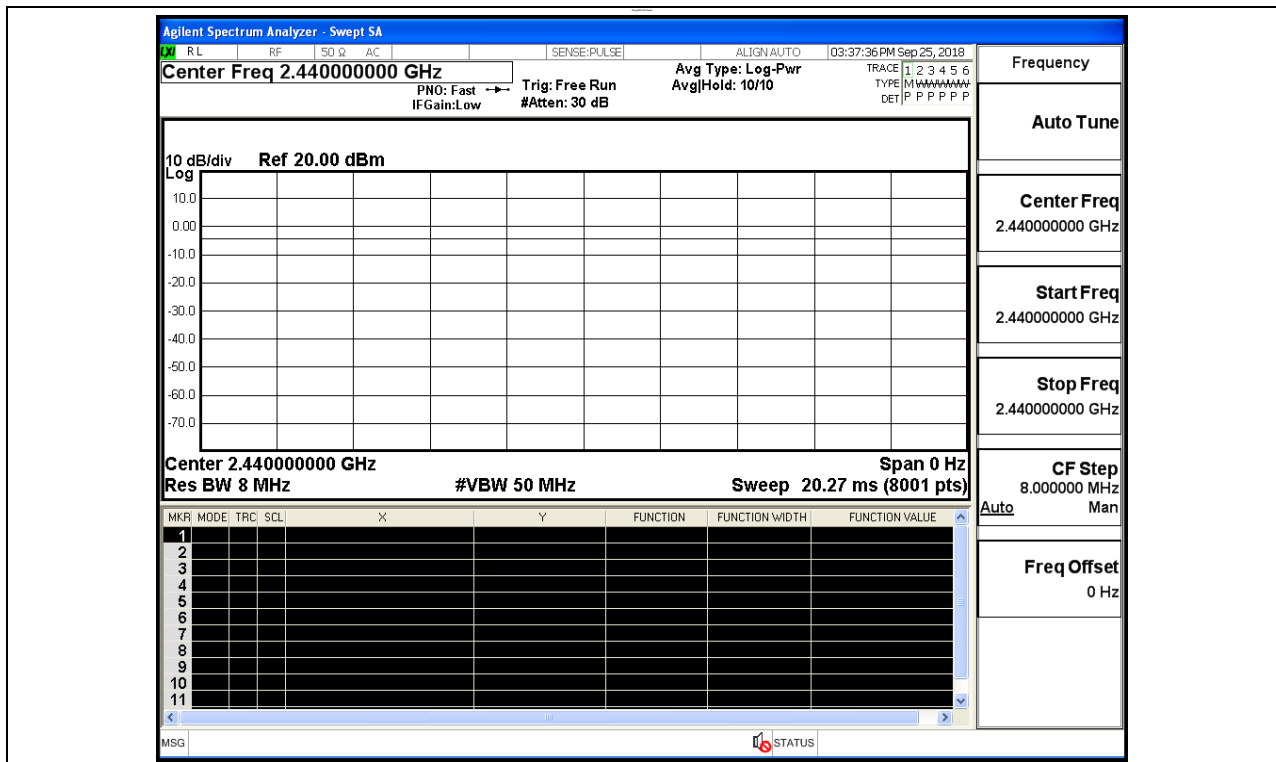
Test Model: FWIN232

Environmental Conditions

Temperature:	24.3 ° C
Relative Humidity:	53.4%
ATM Pressure:	100.0 kPa
Test Engineer:	Tom.Liu
Supervised by:	Jayden.Zhuo

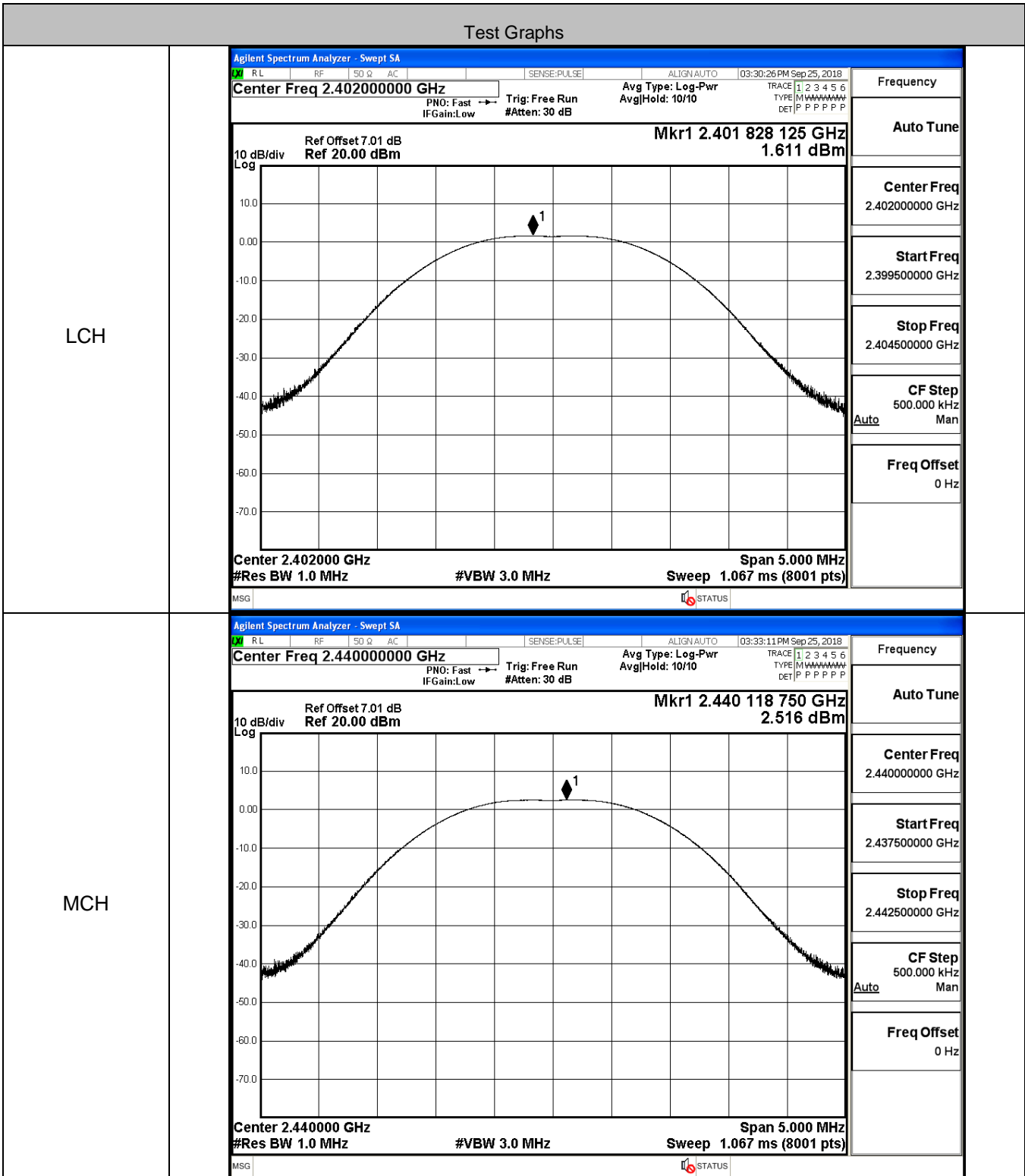
B.1 Duty Cycle

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



B.2 Maximum Conducted Peak Output Power

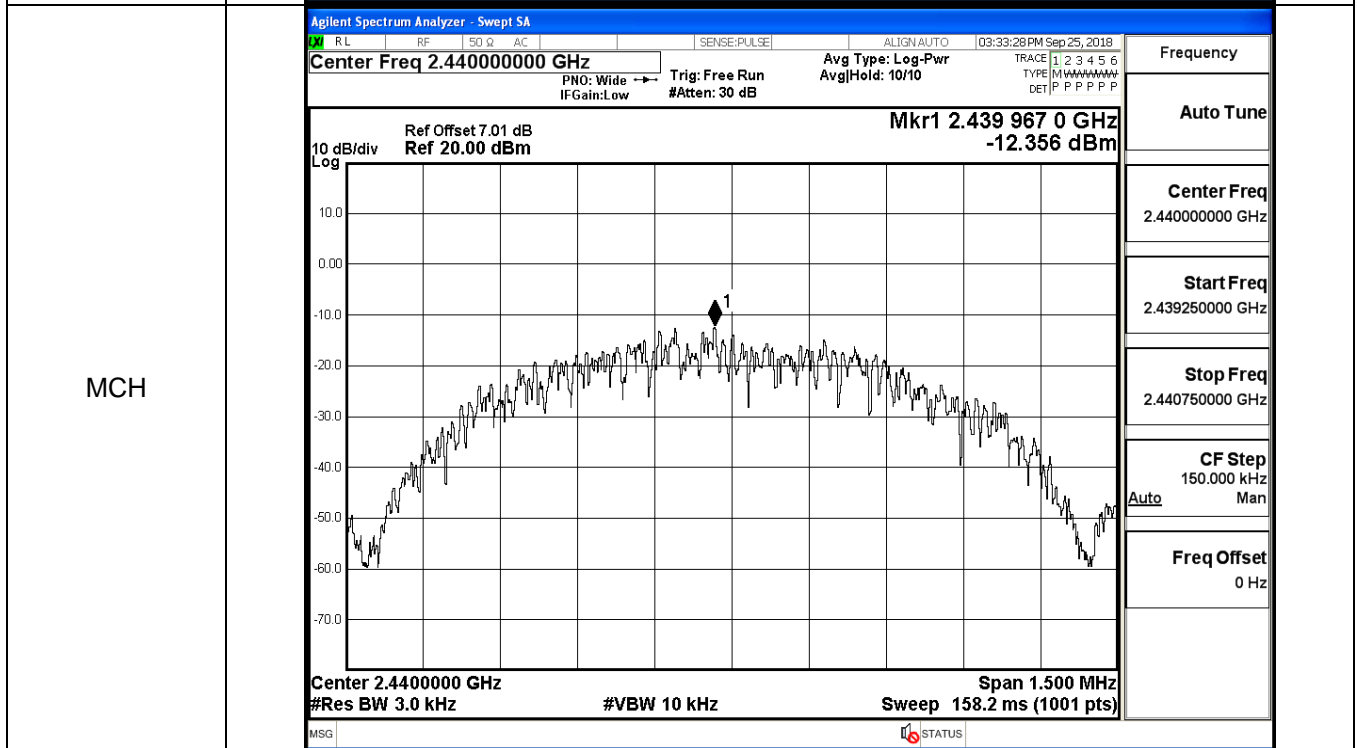
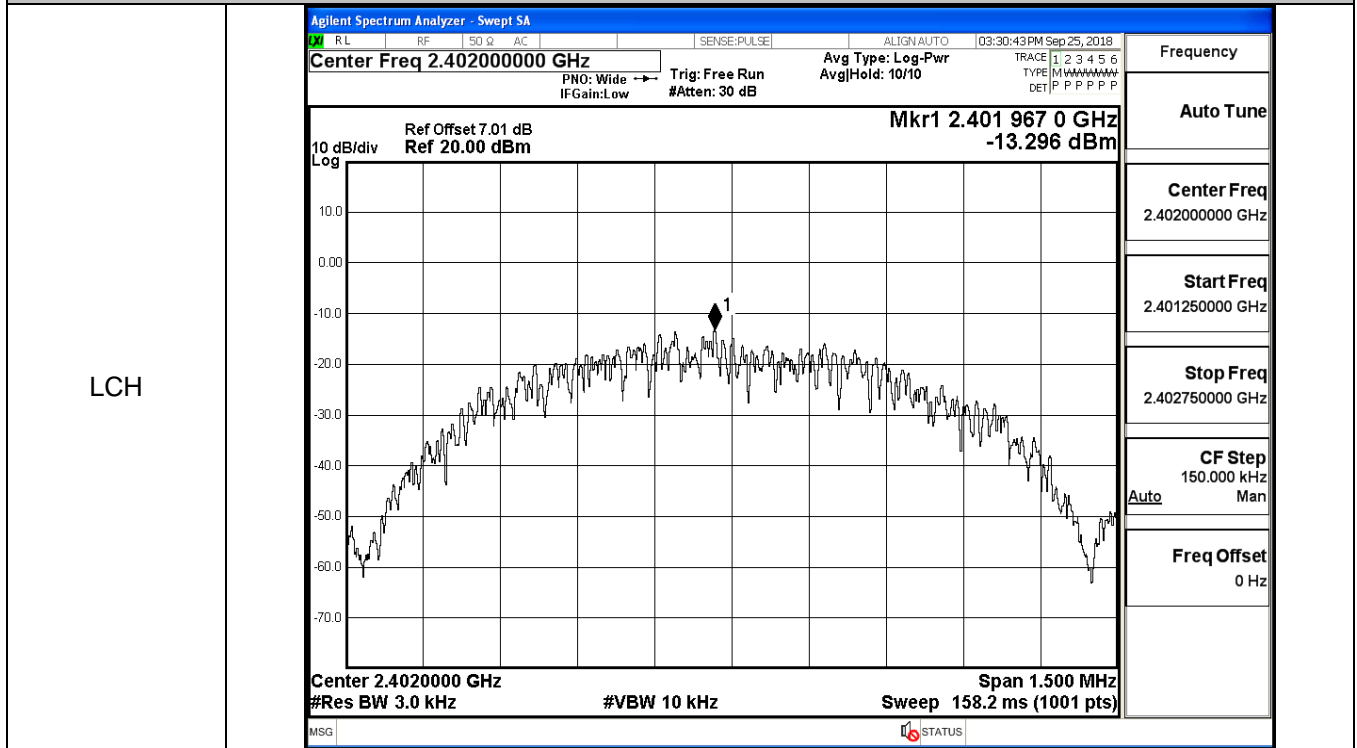
Mode	Channel	Conduct Peak Power[dBm]	Limit [dBm]	Verdict
BT LE	LCH	1.611	30	PASS
BT LE	MCH	2.516	30	PASS
BT LE	HCH	2.822	30	PASS



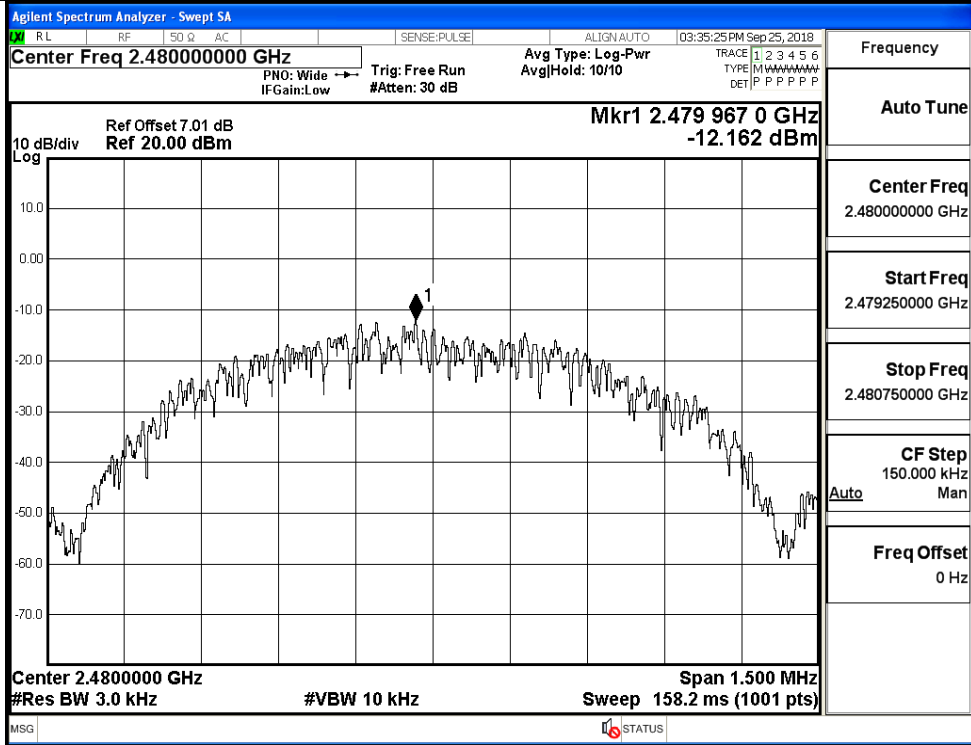
B.3 Maximum Power Spectral Density

Mode	Channel	PSD [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
BT LE	LCH	-13.296	8	PASS
BT LE	MCH	-12.356	8	PASS
BT LE	HCH	-12.162	8	PASS

Test Graphs



HCH



Frequency
Auto Tune
Center Freq 2.480000000 GHz
Start Freq 2.479250000 GHz
Stop Freq 2.480750000 GHz
CF Step 150.000 kHz Auto Man
Freq Offset 0 Hz

B.4 6dB Bandwidth

Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
BT LE	LCH	0.6884	≥0.5	PASS
BT LE	MCH	0.6854	≥0.5	PASS
BT LE	HCH	0.6762	≥0.5	PASS

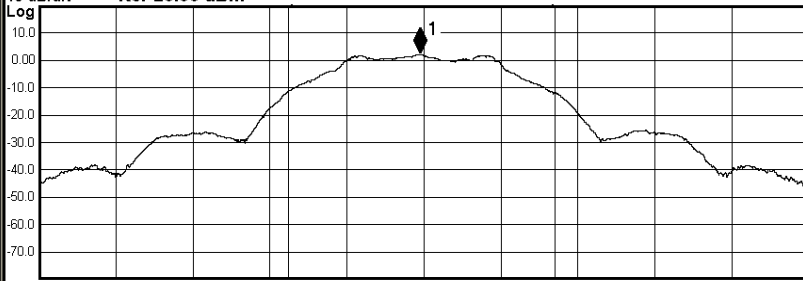
Test Graphs																	
LCH	<div style="border: 1px solid black; padding: 5px;"> <p style="text-align: center; margin: 0;">Agilent Spectrum Analyzer - Occupied BW</p> <p style="font-size: small; margin: 0;">RL RF 50 Ω AC SENSE:PULSE ALIGN:AUTO 03:30:11 PM Sep 25, 2018</p> <p style="margin: 0;">Center 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 7.01 dB Ref 20.00 dBm </div> <div style="text-align: right;"> Mkr1 2.4019846 GHz 0.83525 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">7.89 dBm</td> </tr> <tr> <td colspan="4" style="text-align: center;">1.0390 MHz</td> </tr> <tr> <td>Transmit Freq Error</td> <td>-7.954 kHz</td> <td>OBW Power</td> <td>99.00 %</td> </tr> <tr> <td>x dB Bandwidth</td> <td>688.4 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	7.89 dBm		1.0390 MHz				Transmit Freq Error	-7.954 kHz	OBW Power	99.00 %	x dB Bandwidth	688.4 kHz	x dB	-6.00 dB
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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:PULSE ALIGN:AUTO 03:32:56 PM Sep 25, 2018</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="font-size: x-small;"> 10 dB/div Log Ref Offset 7.01 dB Ref 20.00 dBm </div> <div style="text-align: right;"> Mkr1 2.4399783 GHz 1.7731 dBm </div> </div> <div style="display: flex; justify-content: space-between; font-size: x-small;"> <div>Center 2.44 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">8.84 dBm</td> </tr> <tr> <td colspan="4" style="text-align: center;">1.0361 MHz</td> </tr> <tr> <td>Transmit Freq Error</td> <td>-7.795 kHz</td> <td>OBW Power</td> <td>99.00 %</td> </tr> <tr> <td>x dB Bandwidth</td> <td>685.4 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	8.84 dBm		1.0361 MHz				Transmit Freq Error	-7.795 kHz	OBW Power	99.00 %	x dB Bandwidth	685.4 kHz	x dB	-6.00 dB
Occupied Bandwidth	Total Power	8.84 dBm															
1.0361 MHz																	
Transmit Freq Error	-7.795 kHz	OBW Power	99.00 %														
x dB Bandwidth	685.4 kHz	x dB	-6.00 dB														

HCH

Agilent Spectrum Analyzer - Occupied BW

RL	RF	50 Ω	AC	SENSE:PULSE	ALIGN:AUTO	03:34:53 PM Sep 25, 2018
Center Freq 2.480000000 GHz			Center Freq: 2.480000000 GHz		Radio Std: None	
			Trig: Free Run		AvgHold>1/1	
#IFGain:Low			#Atten: 30 dB		Radio Device: BTS	

10 dB/div	Ref Offset 7.01 dB	Mkr1 2.4799843 GHz
Log	Ref 20.00 dBm	2.0846 dBm



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

Occupied Bandwidth	Total Power	9.10 dBm
1.0361 MHz		
Transmit Freq Error	-8.418 kHz	OBW Power 99.00 %
x dB Bandwidth	676.2 kHz	x dB -6.00 dB

MSG
STATUS

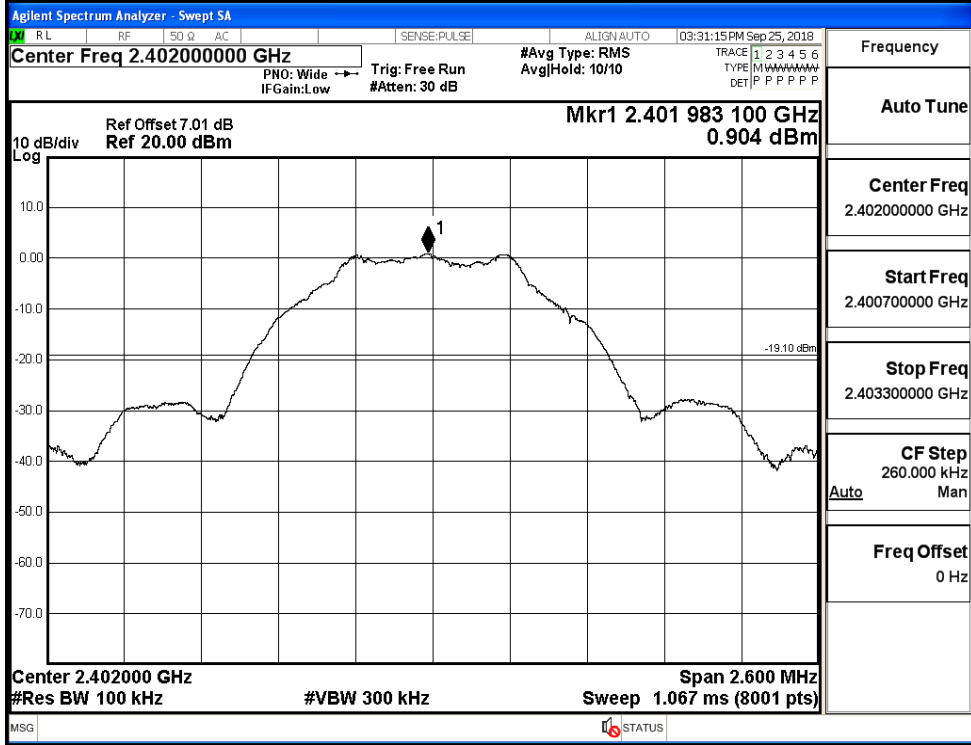
Frequency	2.480000000 GHz
Center Freq	2.480000000 GHz
CF Step	300.000 kHz
Auto	Man
Freq Offset	0 Hz

B.5 RF Conducted Spurious Emissions

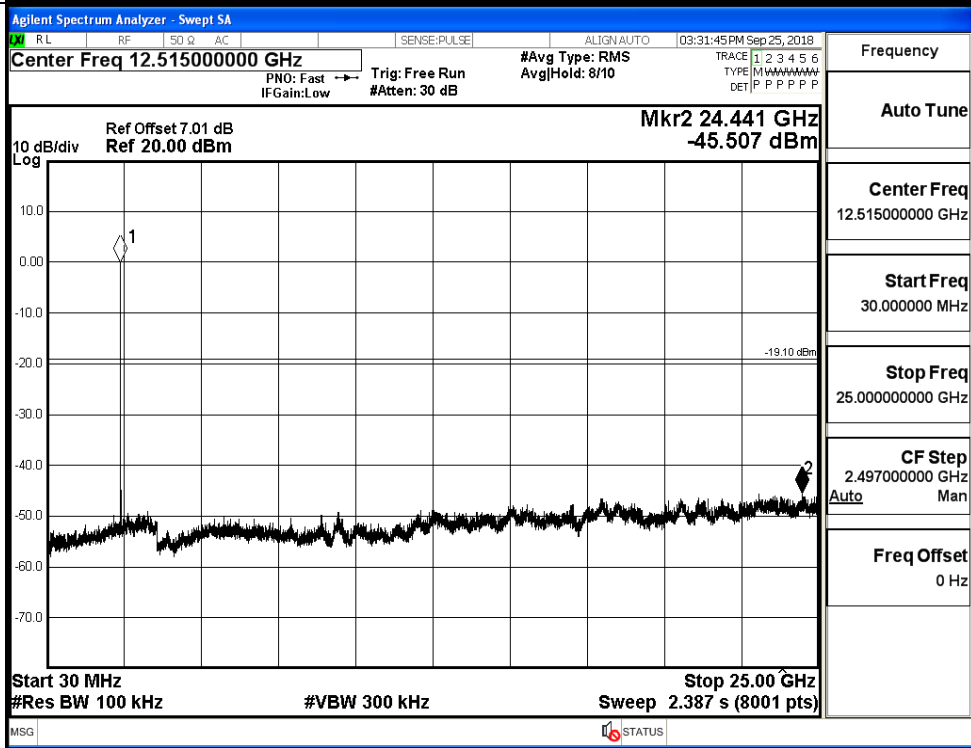
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	0.904	-45.507	-19.096	PASS
BT LE	MCH	1.78	-45.500	-18.220	PASS
BT LE	HCH	2.076	-40.993	-17.924	PASS

BT LE_LCH_Graphs

Pref/BT LE/LCH

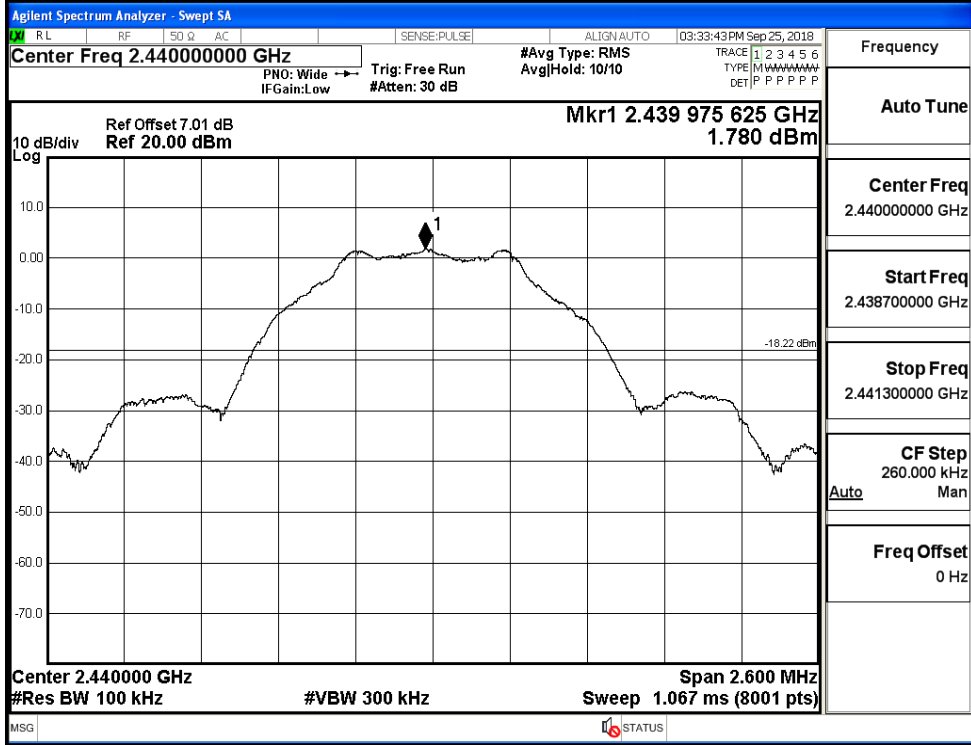


Puw/BT LE/LCH

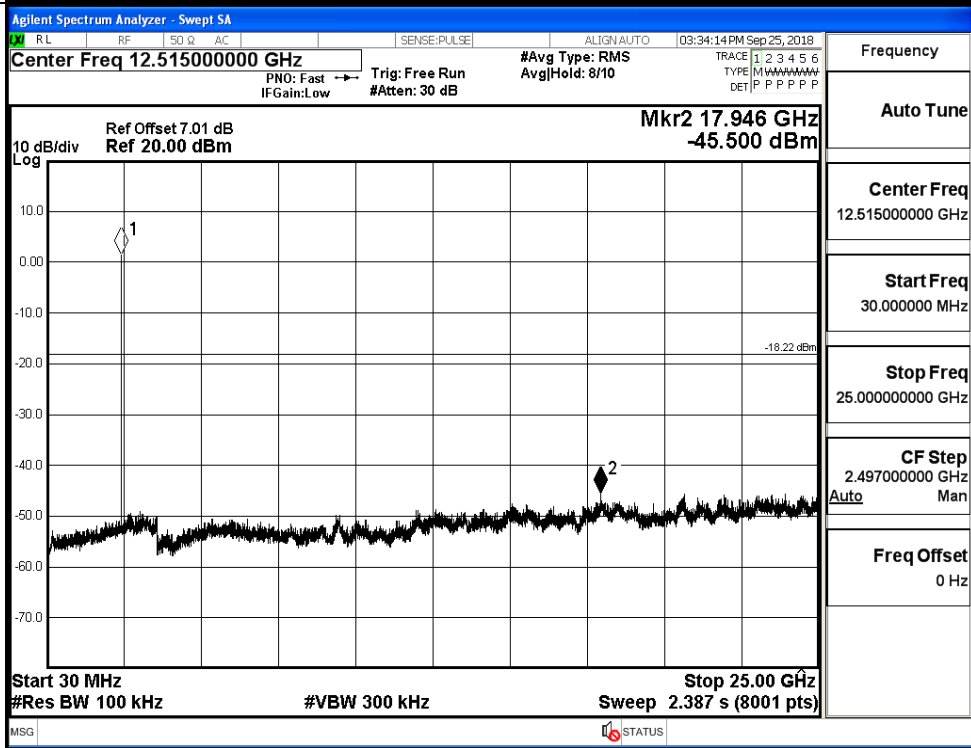


BT LE_MCH_Graphs

Pref/BT LE/MCH

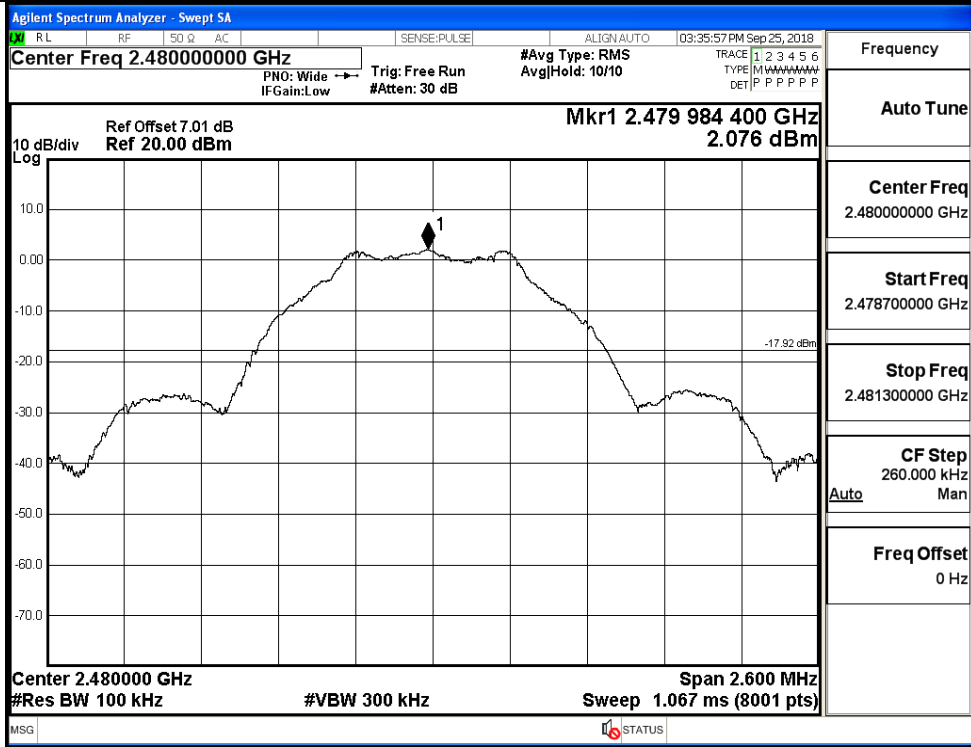


Puw/BT LE/MCH

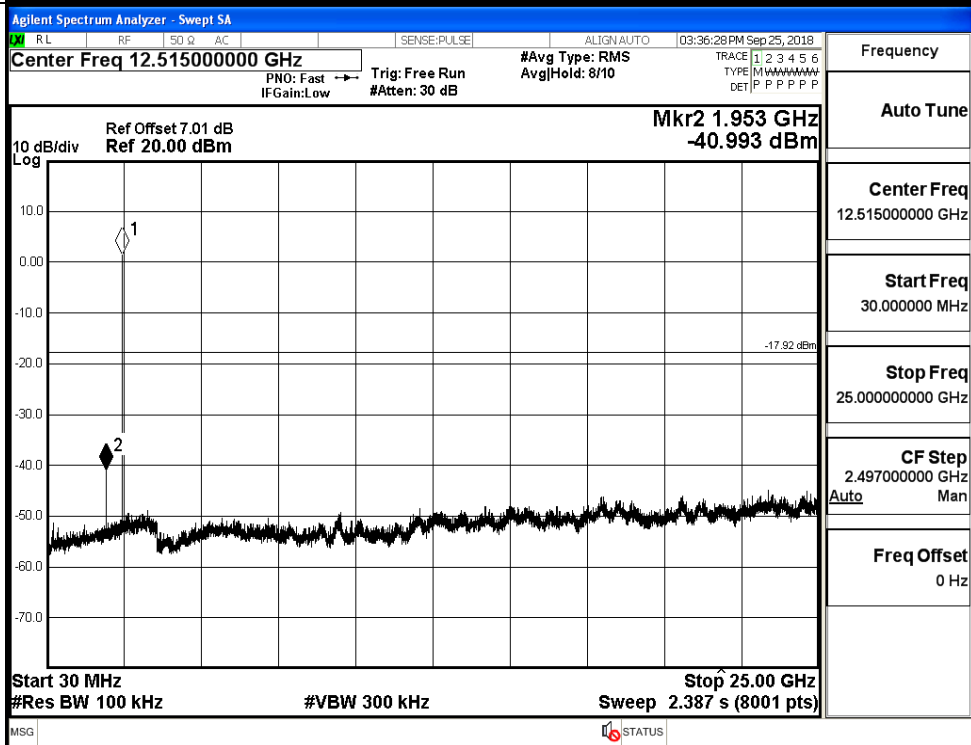


BT LE_HCH_Graphs

Pref/BT LE/HCH



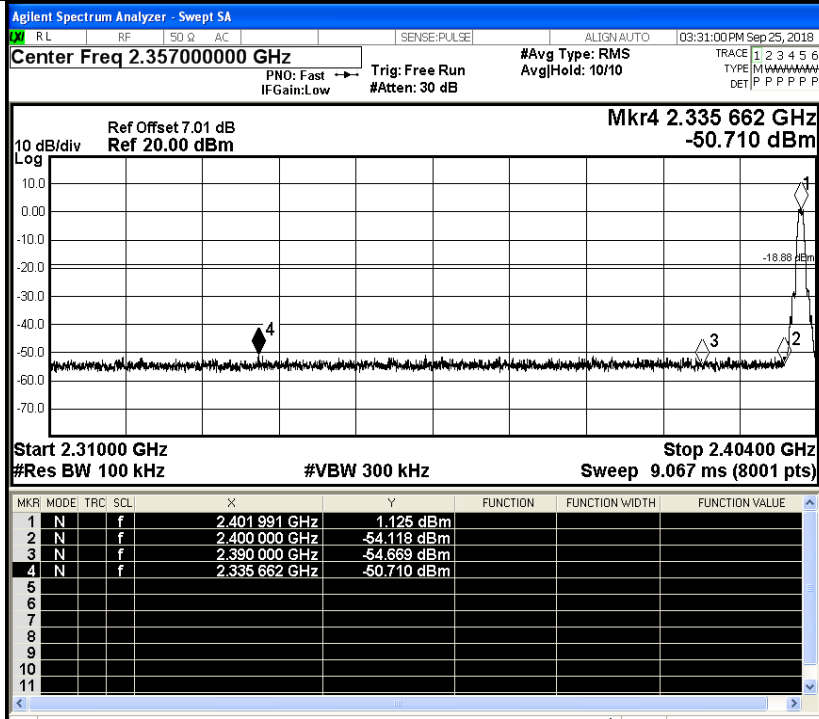
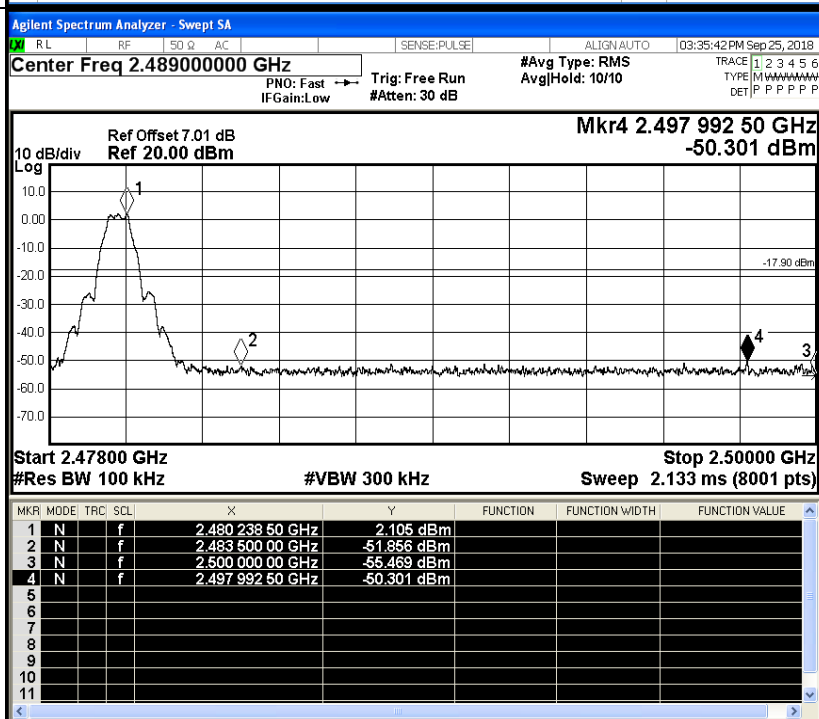
Puw/BT LE/HCH



B.6 Band-edge for RF Conducted Emissions

Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	1.125	-50.710	-18.88	PASS
BT LE	HCH	2.105	-50.301	-17.9	PASS

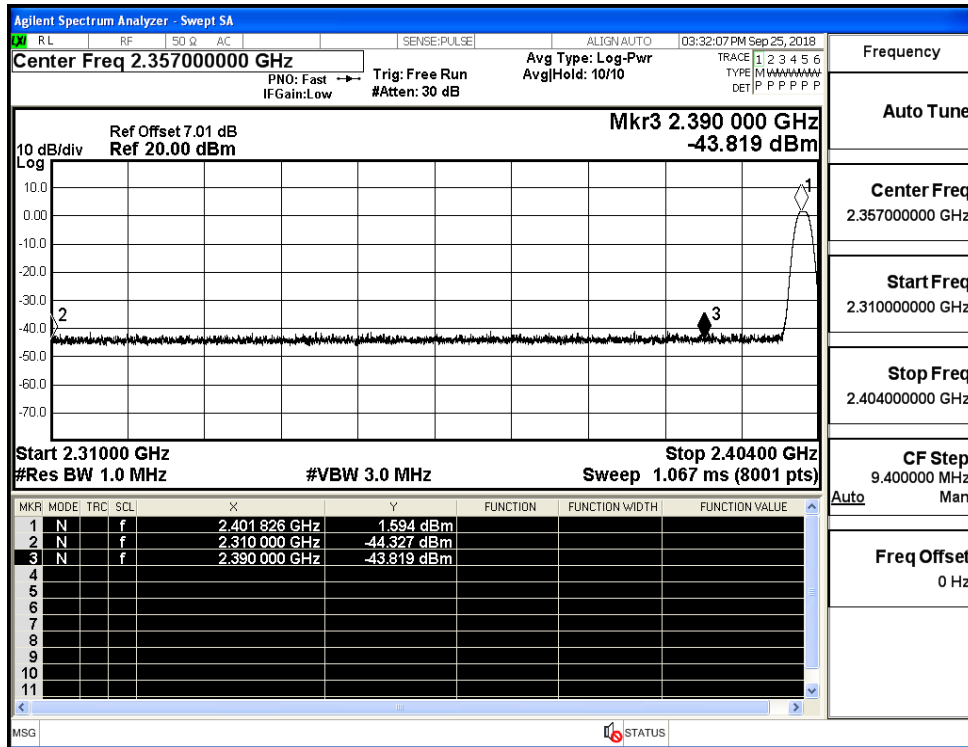
Test Graphs

LCH		<p>Frequency</p> <p>Auto Tune</p> <p>Center Freq 2.35700000 GHz</p> <p>Start Freq 2.31000000 GHz</p> <p>Stop Freq 2.40400000 GHz</p> <p>CF Step 9.400000 MHz</p> <p>Freq Offset 0 Hz</p>
HCH		<p>Frequency</p> <p>Auto Tune</p> <p>Center Freq 2.48900000 GHz</p> <p>Start Freq 2.47800000 GHz</p> <p>Stop Freq 2.50000000 GHz</p> <p>CF Step 2.200000 MHz</p> <p>Freq Offset 0 Hz</p>

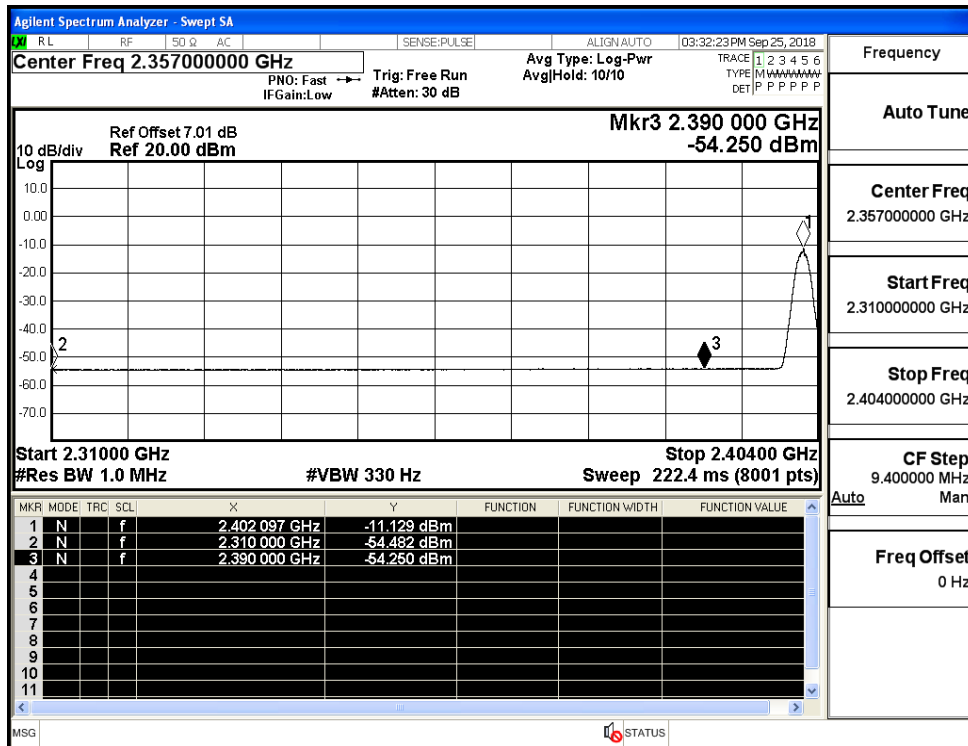
B.7 Restrict-band band-edge measurements

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	-44.33	2.5	0	53.43	PEAK	74	PASS
		Ant1	2310.0	-54.48	2.5	0	43.28	AV	54	PASS
		Ant1	2390.0	-43.82	2.5	0	53.94	PEAK	74	PASS
		Ant1	2390.0	-54.25	2.5	0	43.51	AV	54	PASS
	2480	Ant1	2483.5	-43.30	2.5	0	54.46	PEAK	74	PASS
		Ant1	2483.5	-53.79	2.5	0	43.97	AV	54	PASS
		Ant1	2500.0	-43.92	2.5	0	53.84	PEAK	74	PASS
		Ant1	2500.0	-53.77	2.5	0	43.99	AV	54	PASS

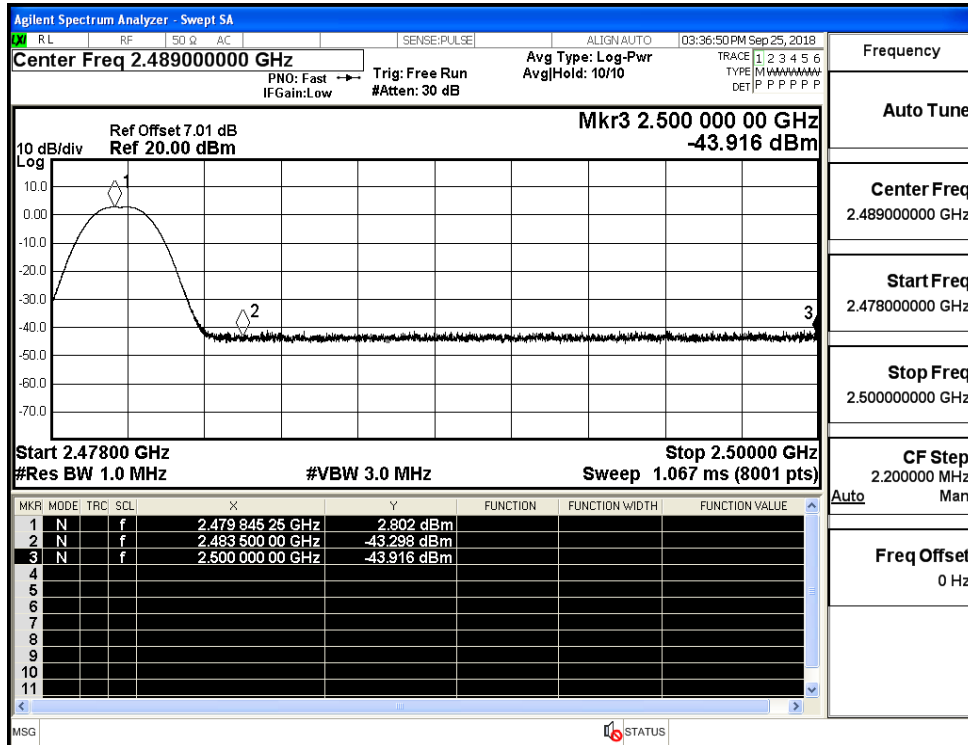
Restrict-band band-edge measurements_BT LE_2402_Ant1_PEAK



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

