

Appendix B

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

Product Name: 4G Smartphones

Trade Mark: Kenxinda, Ken mobile, KXD, E&L, EL

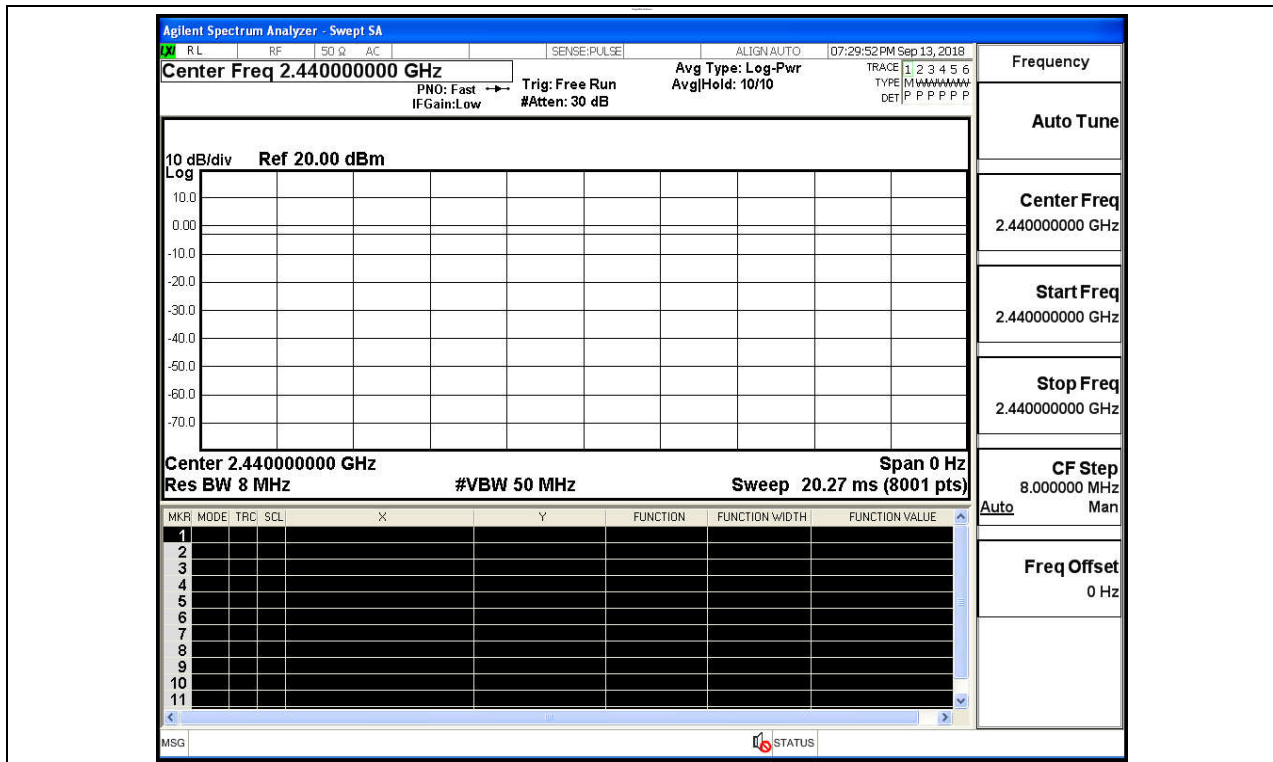
Test Model: Y50

Environmental Conditions

Temperature:	23.6 ° C
Relative Humidity:	53.8%
ATM Pressure:	100.0 kPa
Test Engineer:	Mina.Xu
Supervised by:	Jayden.Zhuo

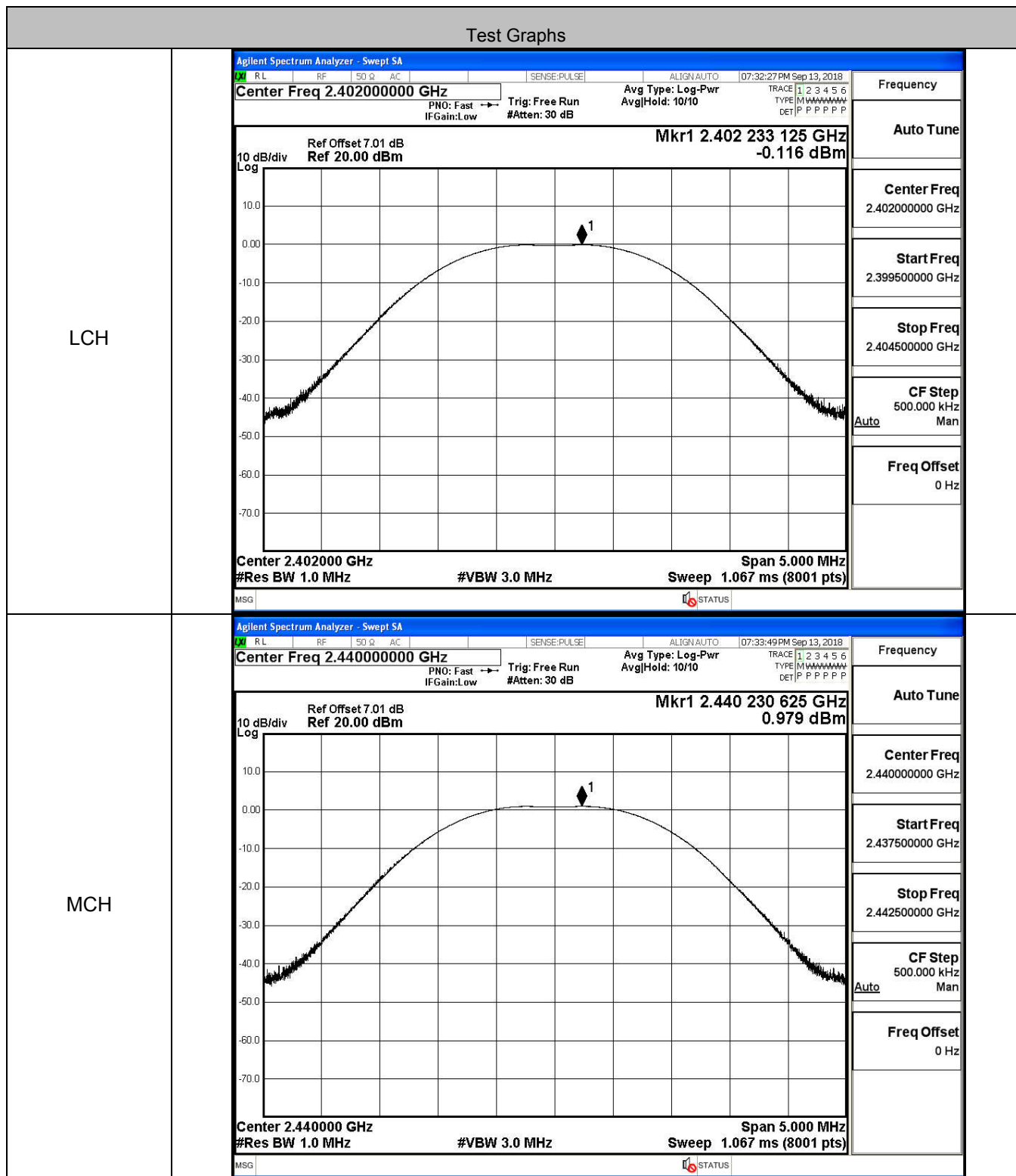
B.1 Duty Cycle

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

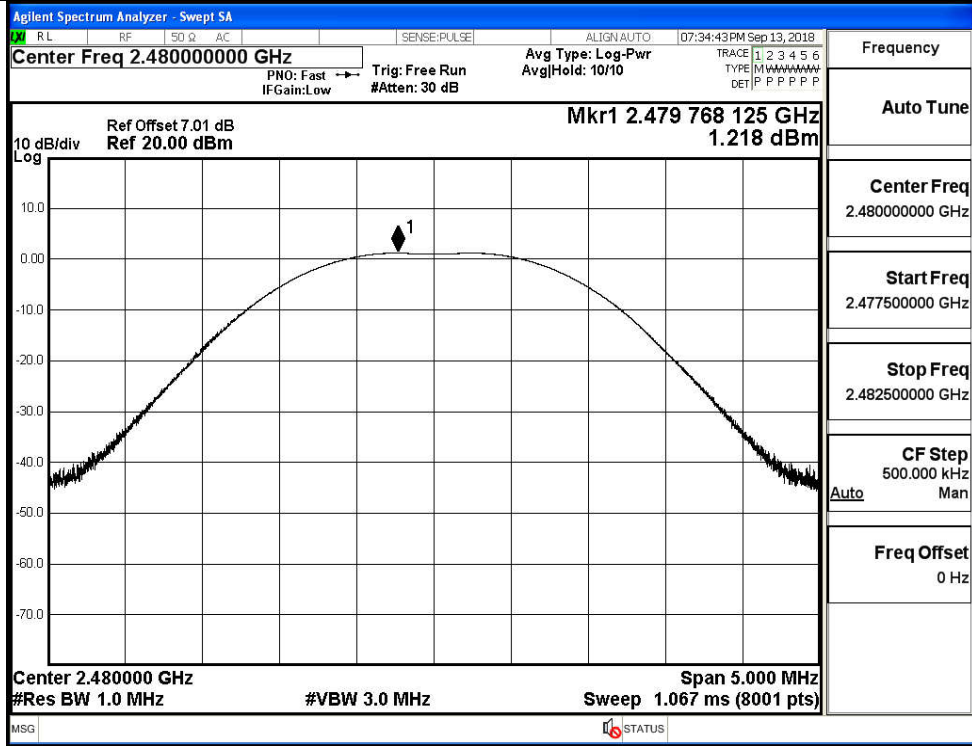


B.2 Maximum Conducted Peak Output Power

Mode	Channel	Conduct Peak Power[dBm]	Limit [dBm]	Verdict
BT LE	LCH	-0.116	30	PASS
BT LE	MCH	0.979	30	PASS
BT LE	HCH	1.218	30	PASS



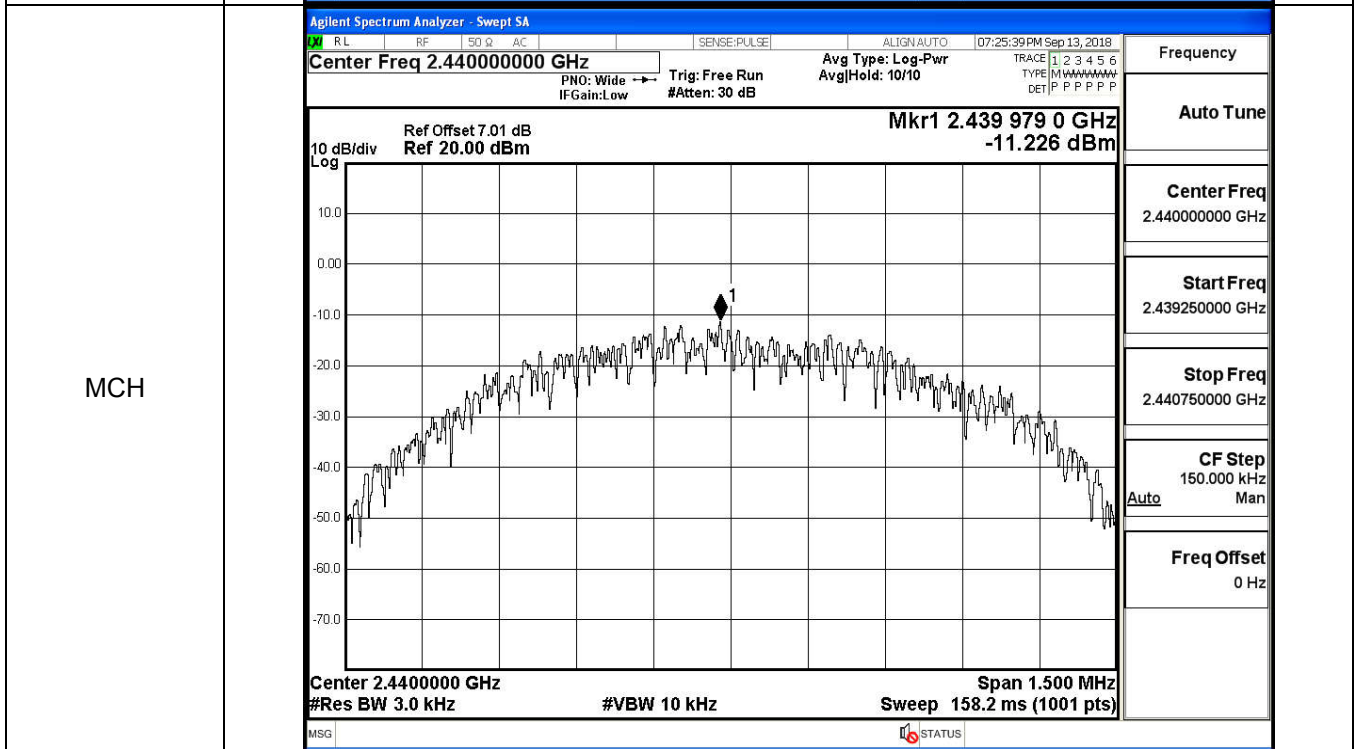
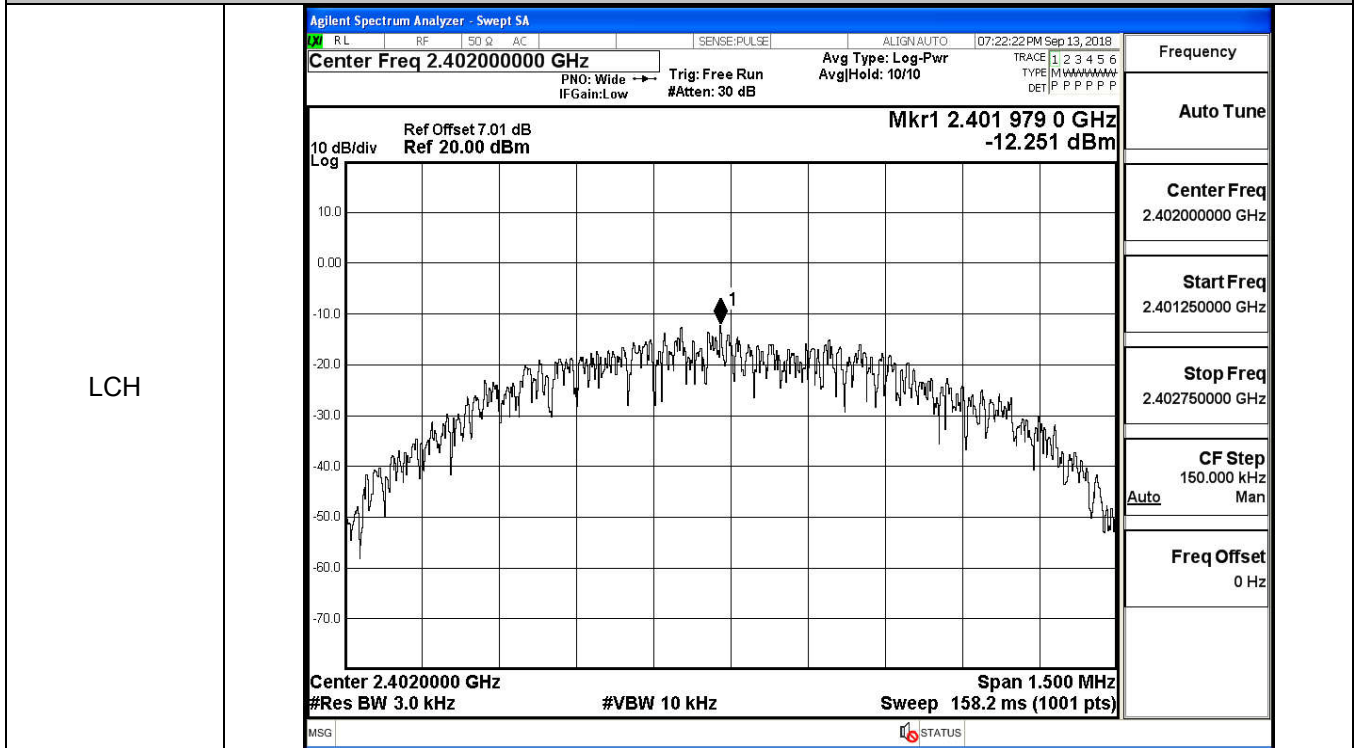
HCH



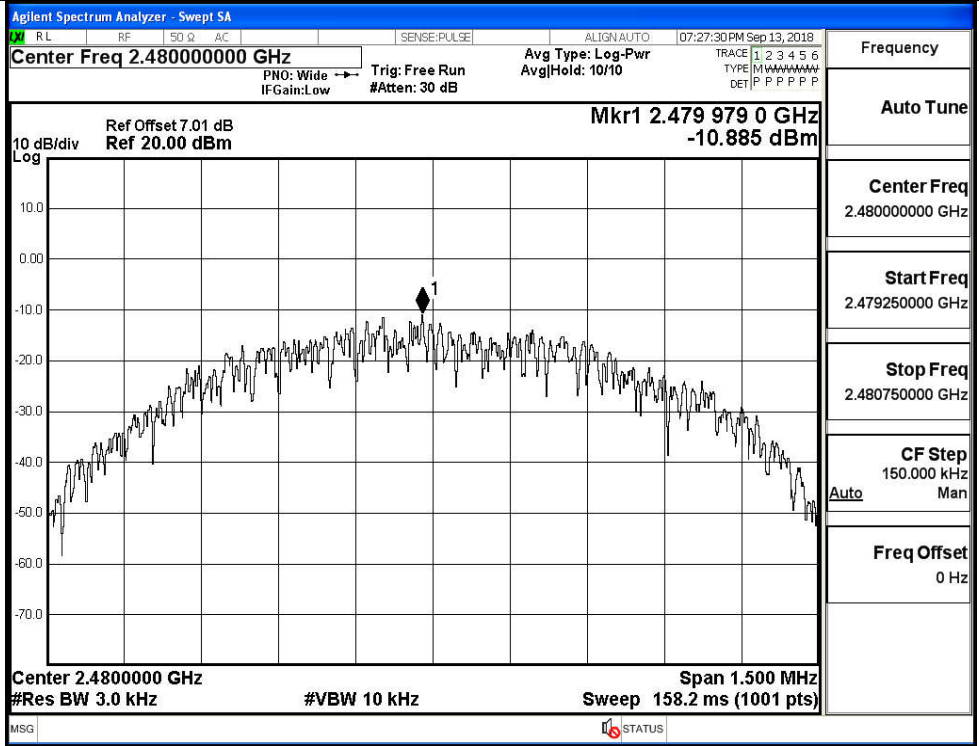
B.3 Maximum Power Spectral Density

Mode	Channel	PSD [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
BT LE	LCH	-12.251	8	PASS
BT LE	MCH	-11.226	8	PASS
BT LE	HCH	-10.885	8	PASS

Test Graphs


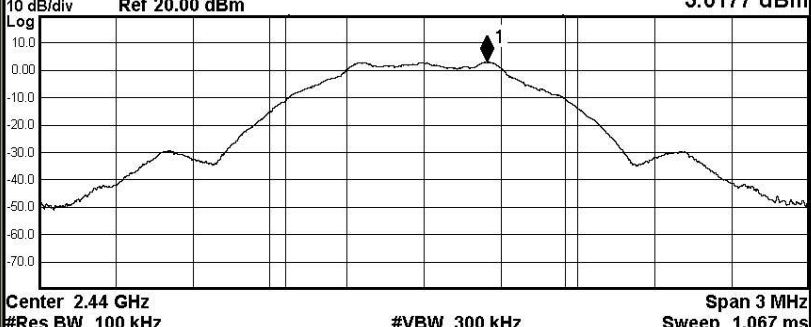


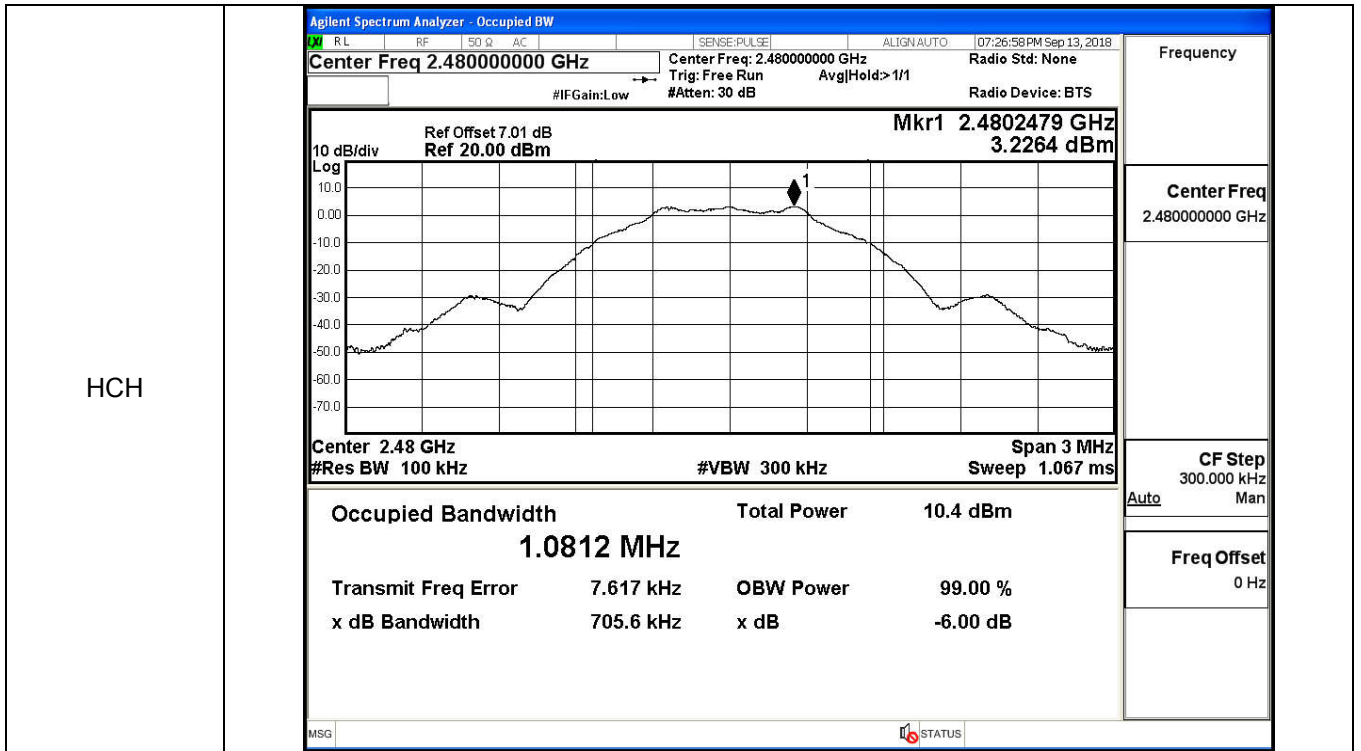
HCH



B.4 6dB Bandwidth

Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
BT LE	LCH	0.7015	≥0.5	PASS
BT LE	MCH	0.7102	≥0.5	PASS
BT LE	HCH	0.7056	≥0.5	PASS

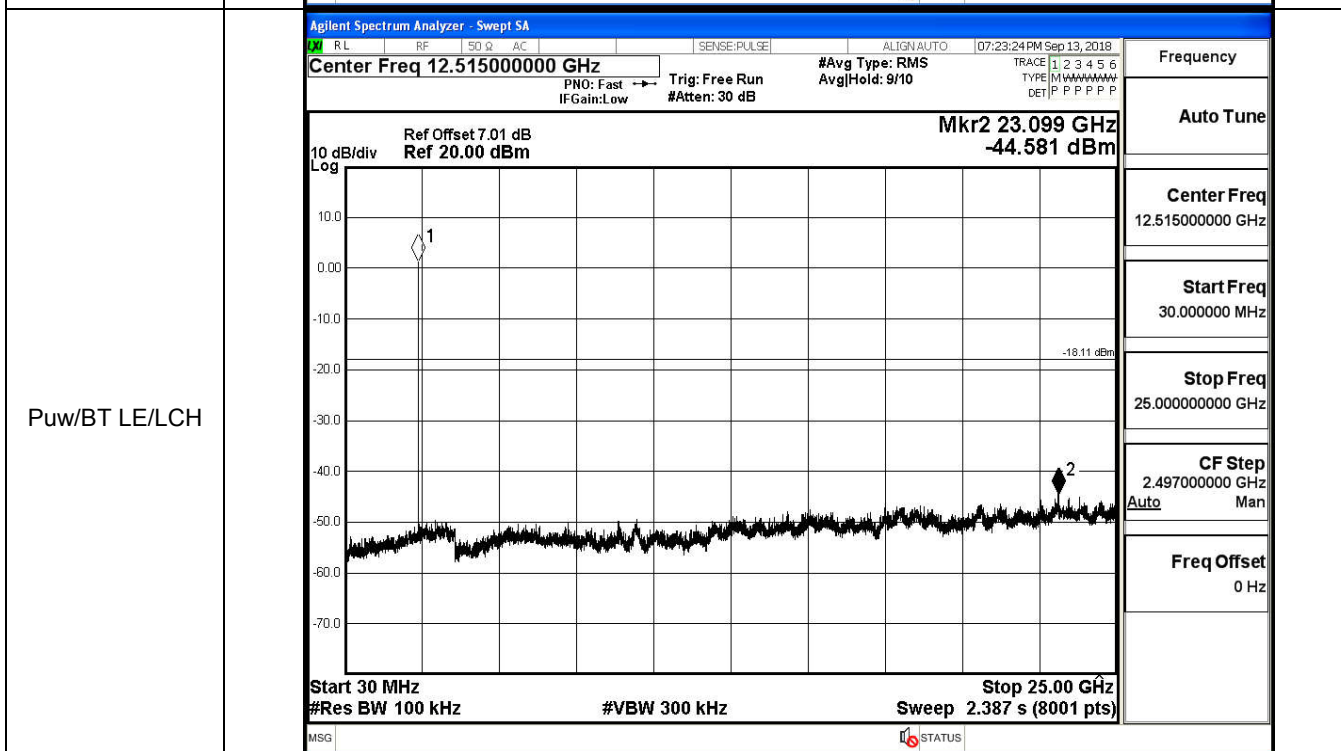
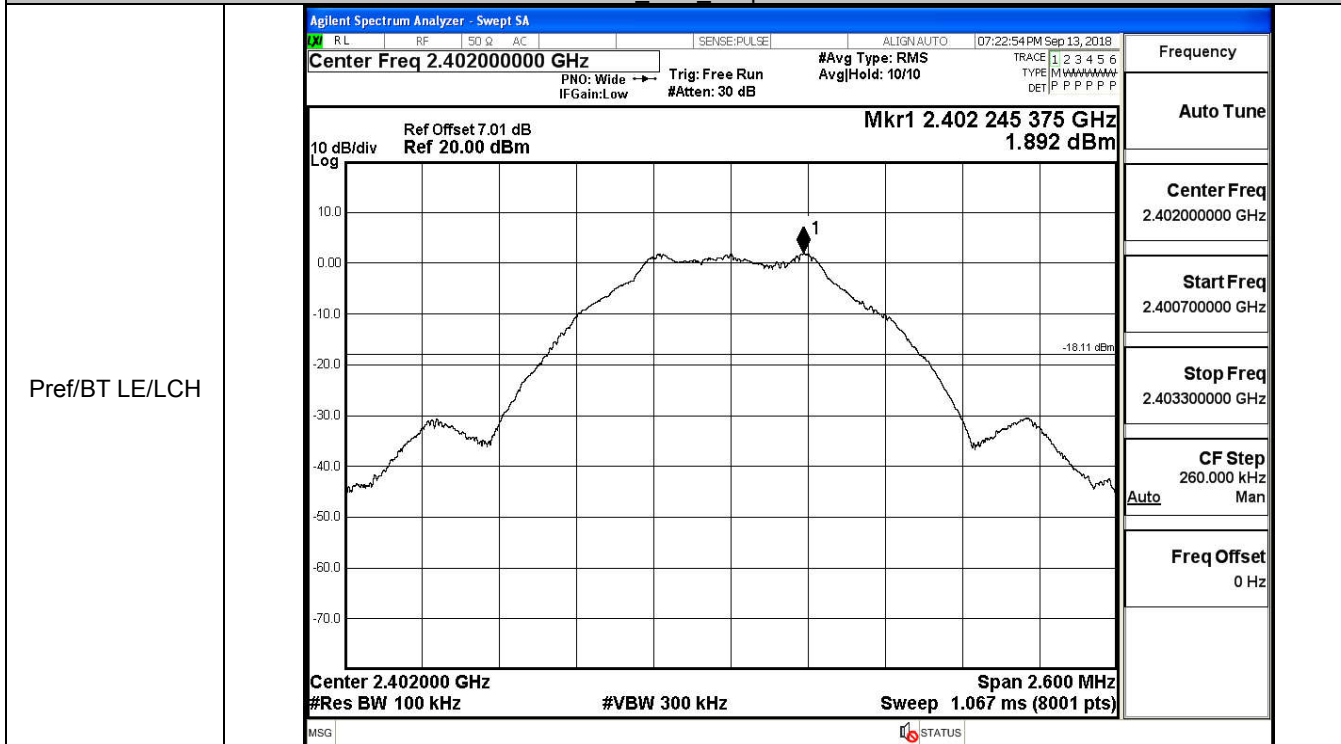
Test Graphs													
LCH	<div style="border: 1px solid black; padding: 5px;"> <p style="text-align: center; margin: 0;">Agilent Spectrum Analyzer - Occupied BW</p> <p style="font-size: small; margin: 0;">RL RF 50 Ω AC SENSE:PULSE ALIGN:AUTO 07:32:12 PM Sep 13, 2018</p> <p style="margin: 0;">Center 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="width: 60%;"> <p style="margin: 0;">10 dB/div Ref Offset 7.01 dB Mkr1 2.4022471 GHz Log Ref 20.00 dBm -1.0221 dBm</p>  <p style="margin: 0;">Center 2.402 GHz Span 3 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 1.067 ms</p> <table style="width: 100%; font-size: small;"> <tr> <td>Occupied Bandwidth</td> <td>Total Power</td> <td>6.12 dBm</td> </tr> <tr> <td colspan="3" style="text-align: center;">1.0854 MHz</td> </tr> <tr> <td>Transmit Freq Error</td> <td>7.254 kHz</td> <td>OBW Power 99.00 %</td> </tr> <tr> <td>x dB Bandwidth</td> <td>701.5 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="margin: 0;">Frequency</p> <hr/> <p style="margin: 0;">Center Freq 2.402000000 GHz</p> <hr/> <p style="margin: 0;">CF Step 300.000 kHz Auto Man</p> <hr/> <p style="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	6.12 dBm	1.0854 MHz			Transmit Freq Error	7.254 kHz	OBW Power 99.00 %	x dB Bandwidth	701.5 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 07:25:07 PM Sep 13, 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="width: 60%;"> <p style="margin: 0;">10 dB/div Ref Offset 7.01 dB Mkr1 2.4402475 GHz Log Ref 20.00 dBm 3.0177 dBm</p>  <p style="margin: 0;">Center 2.44 GHz Span 3 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 1.067 ms</p> <table style="width: 100%; font-size: small;"> <tr> <td>Occupied Bandwidth</td> <td>Total Power</td> <td>10.2 dBm</td> </tr> <tr> <td colspan="3" style="text-align: center;">1.0841 MHz</td> </tr> <tr> <td>Transmit Freq Error</td> <td>7.468 kHz</td> <td>OBW Power 99.00 %</td> </tr> <tr> <td>x dB Bandwidth</td> <td>710.2 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="margin: 0;">Frequency</p> <hr/> <p style="margin: 0;">Center Freq 2.440000000 GHz</p> <hr/> <p style="margin: 0;">CF Step 300.000 kHz Auto Man</p> <hr/> <p style="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	10.2 dBm	1.0841 MHz			Transmit Freq Error	7.468 kHz	OBW Power 99.00 %	x dB Bandwidth	710.2 kHz	x dB -6.00 dB
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1.0841 MHz													
Transmit Freq Error	7.468 kHz	OBW Power 99.00 %											
x dB Bandwidth	710.2 kHz	x dB -6.00 dB											



B.5 RF Conducted Spurious Emissions

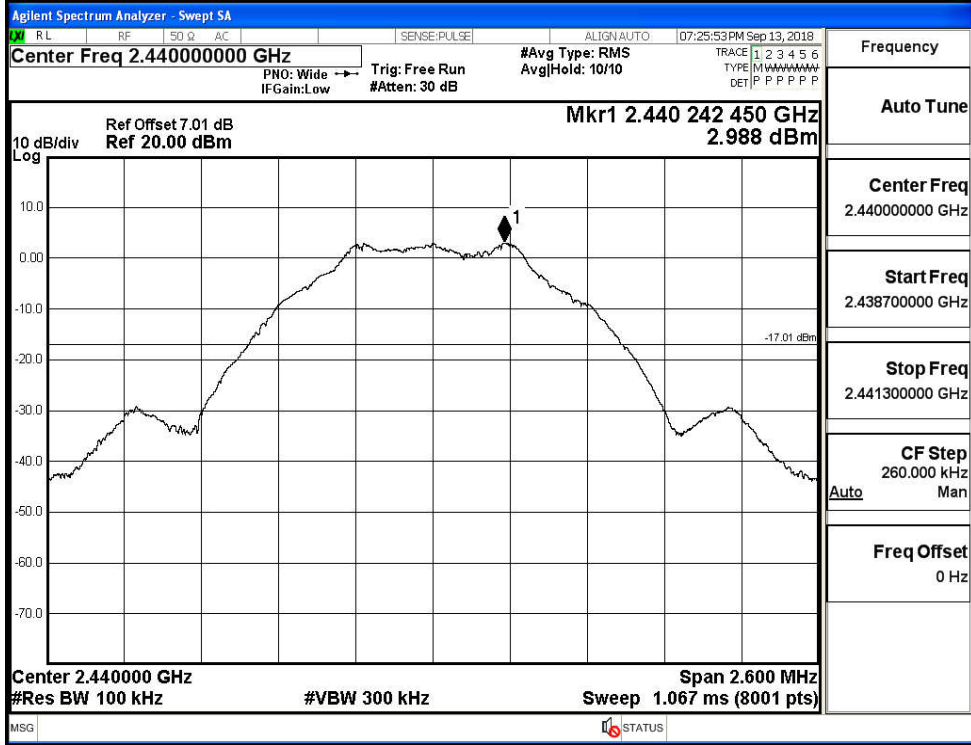
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	1.892	-44.581	-18.108	PASS
BT LE	MCH	2.988	-44.915	-17.012	PASS
BT LE	HCH	3.265	-45.330	-16.735	PASS

BT LE_LCH_Graphs

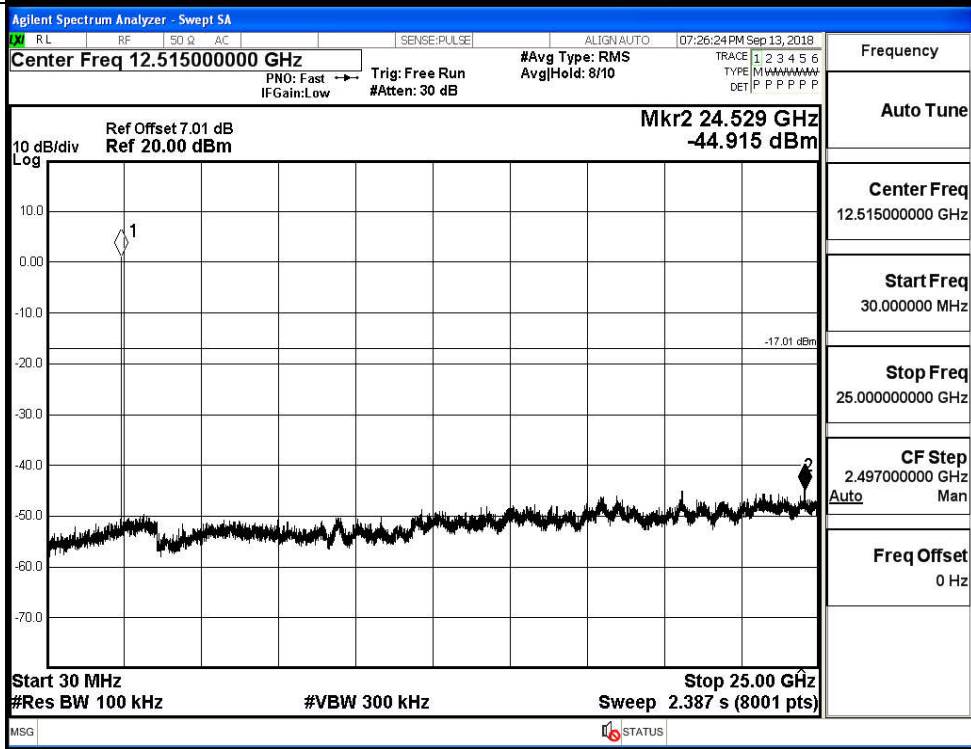


BT LE MCH Graphs

Pref/BT LE/MCH

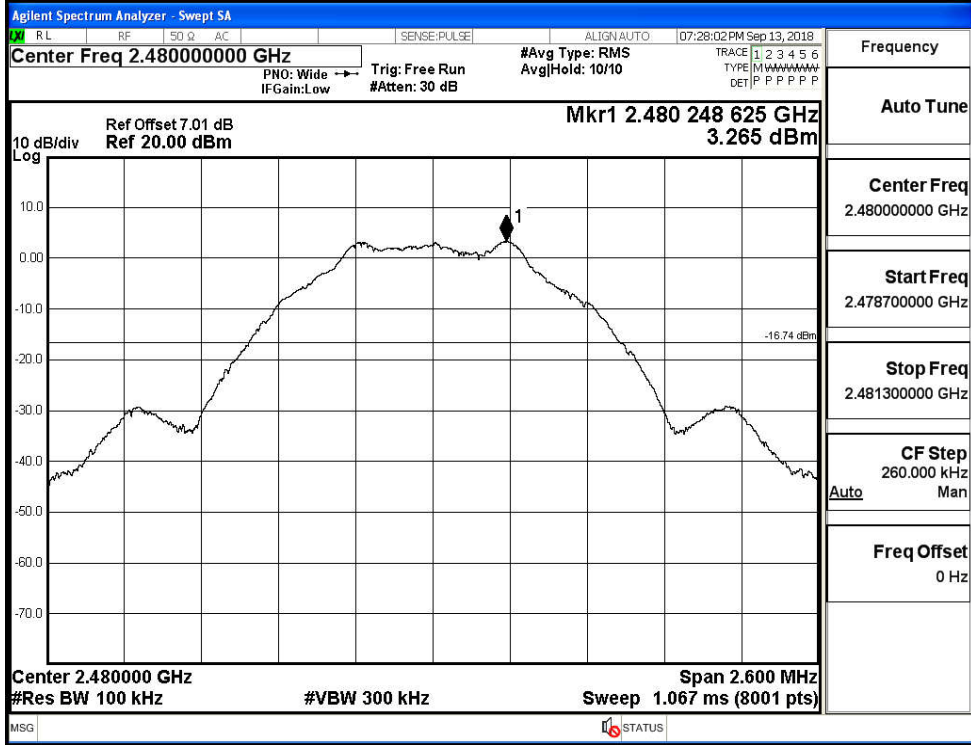


Puw/BT LE/MCH

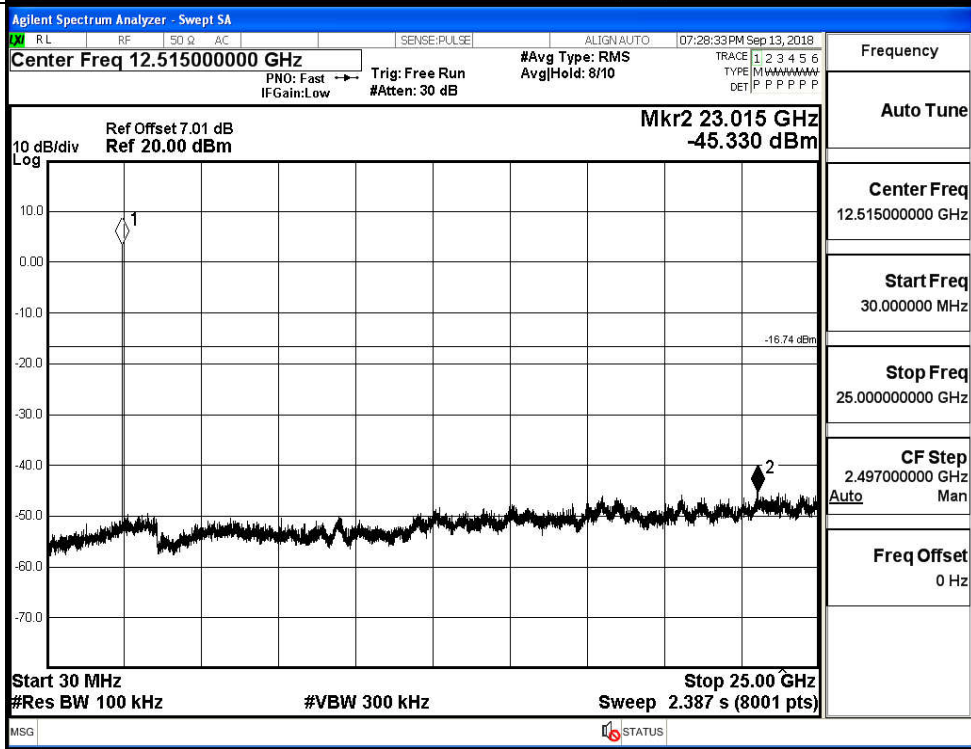


BT LE HCH Graphs

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	2.093	-50.471	-17.91	PASS
BT LE	HCH	3.476	-51.353	-16.52	PASS

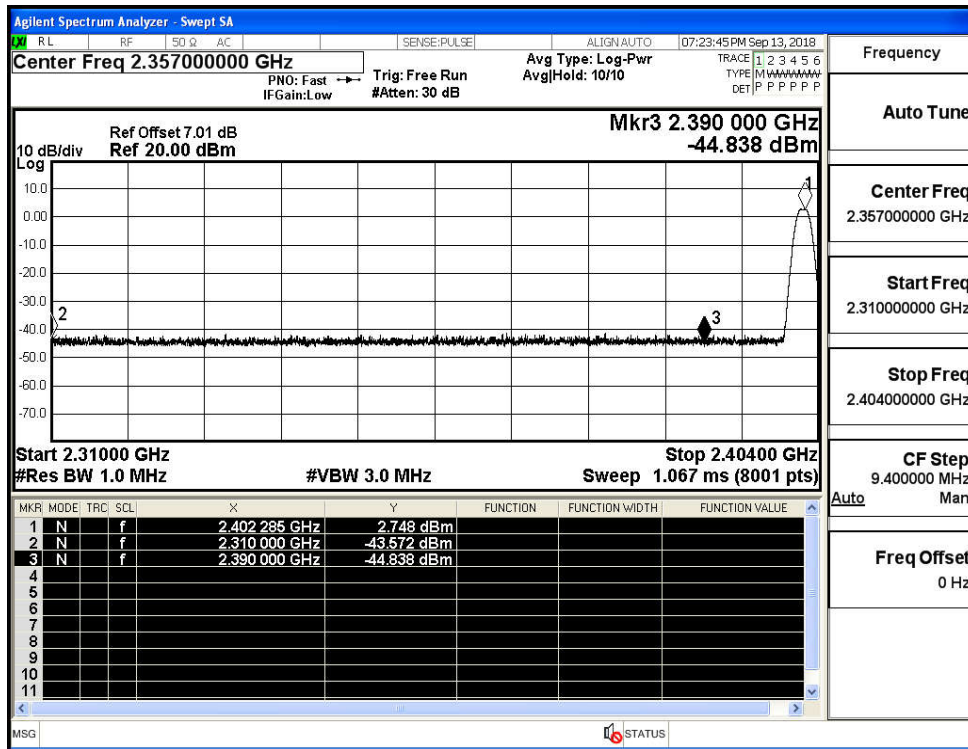
Test Graphs

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>

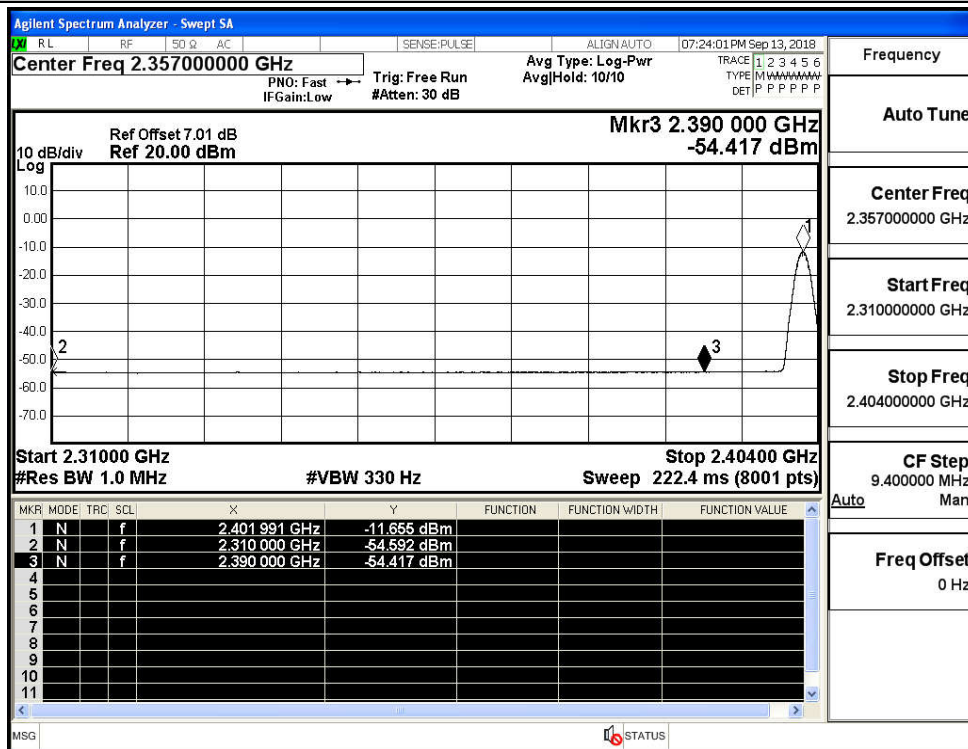
B.7 Restrict-band band-edge measurements

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	-43.57	2.0	0	53.66	PEAK	74	PASS
		Ant1	2310.0	-54.59	2.0	0	42.64	AV	54	PASS
		Ant1	2390.0	-44.84	2.0	0	52.39	PEAK	74	PASS
		Ant1	2390.0	-54.42	2.0	0	42.81	AV	54	PASS
	2480	Ant1	2483.5	-44.33	2.0	0	52.90	PEAK	74	PASS
		Ant1	2483.5	-53.96	2.0	0	43.27	AV	54	PASS
		Ant1	2500.0	-44.52	2.0	0	52.71	PEAK	74	PASS
		Ant1	2500.0	-54.00	2.0	0	43.23	AV	54	PASS

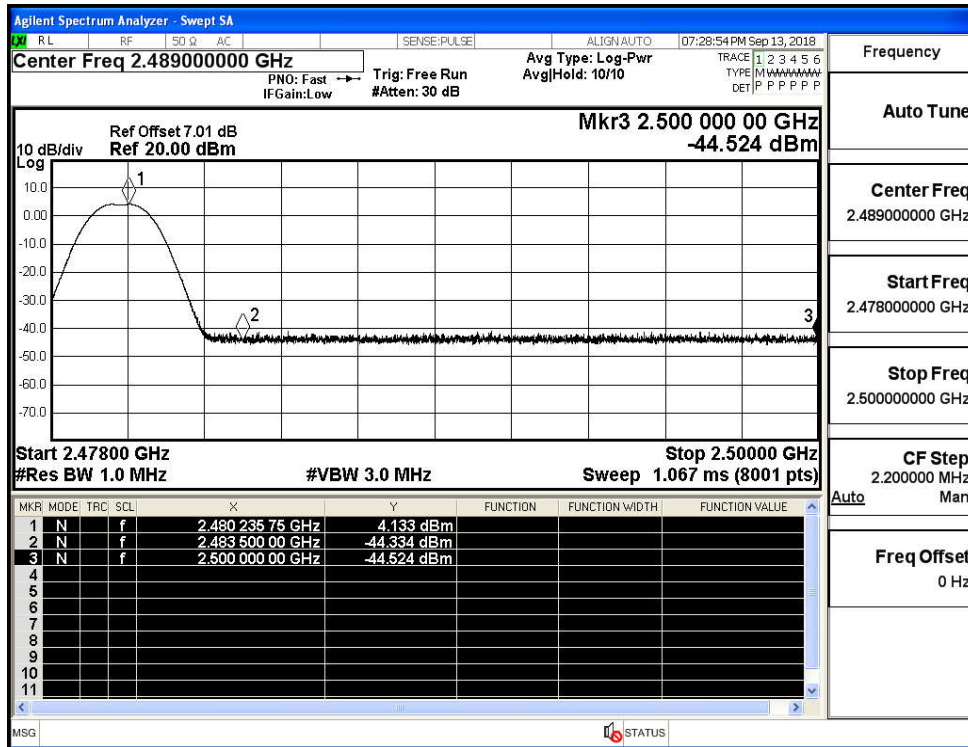
Restrict-band band-edge measurements_BT LE_2402_Ant1_PEAK



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

