

Appendix B

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

Product Name: Dockin D Fine Bluetooth Speaker

Trade Mark: Dockin

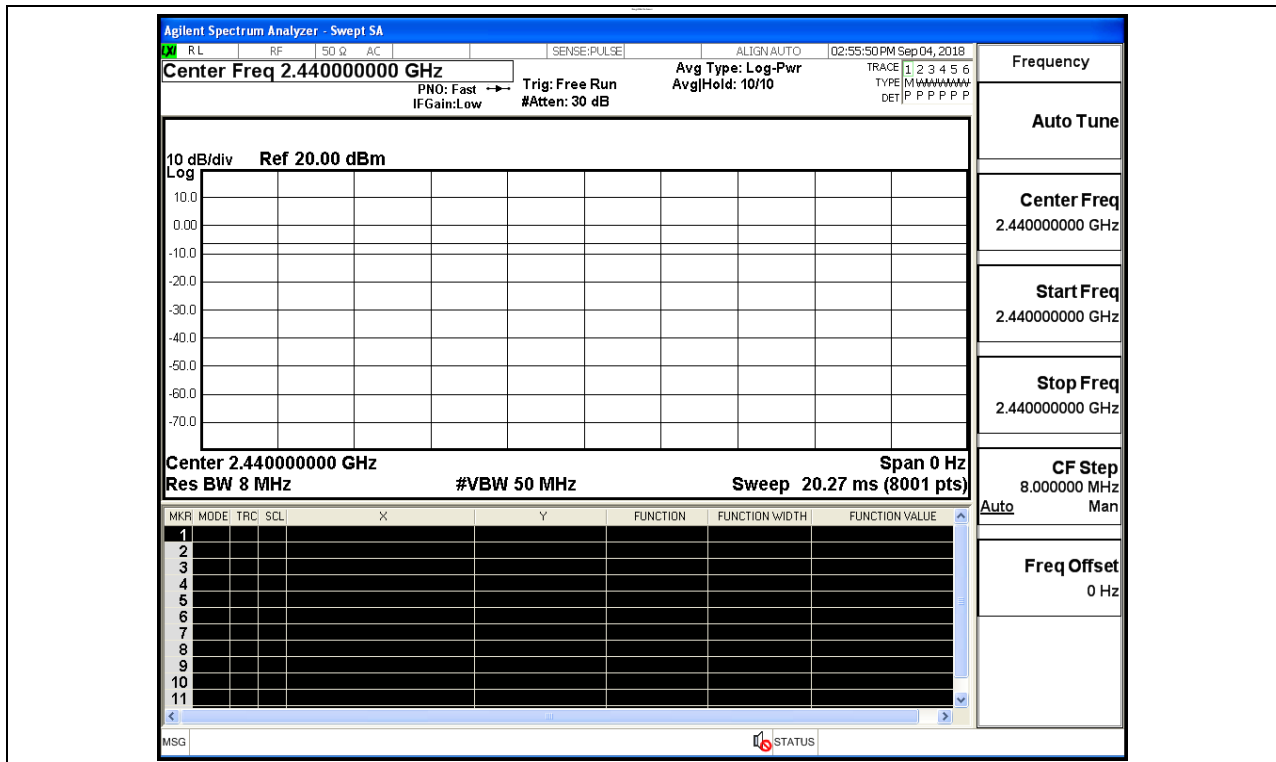
Test Model: 15231

Environmental Conditions

Temperature:	24.5 °C
Relative Humidity:	54.2%
ATM Pressure:	100.0 kPa
Test Engineer:	Mina Xu
Supervised by:	Jayden.Zhuo

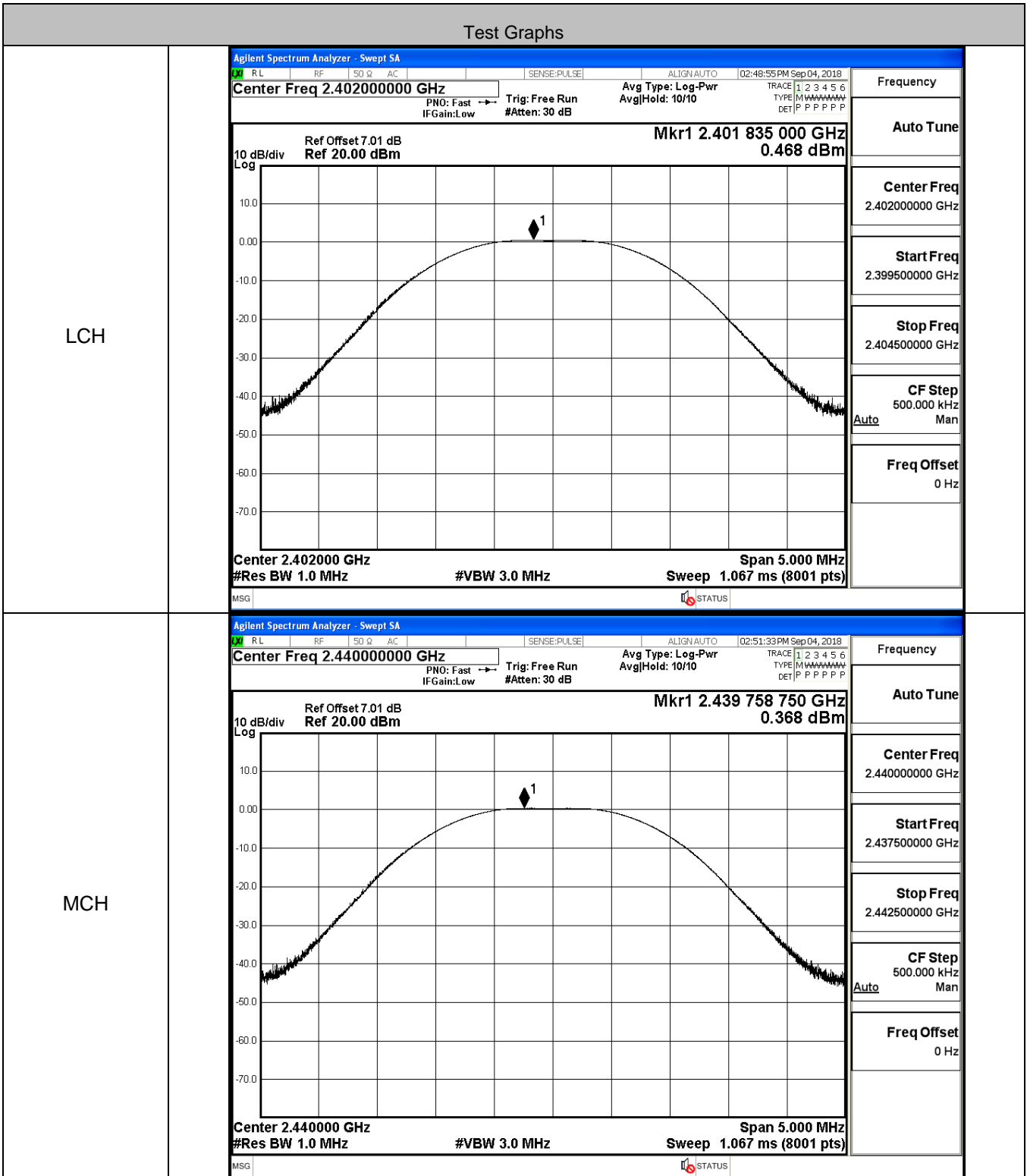
B.1 Duty Cycle

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

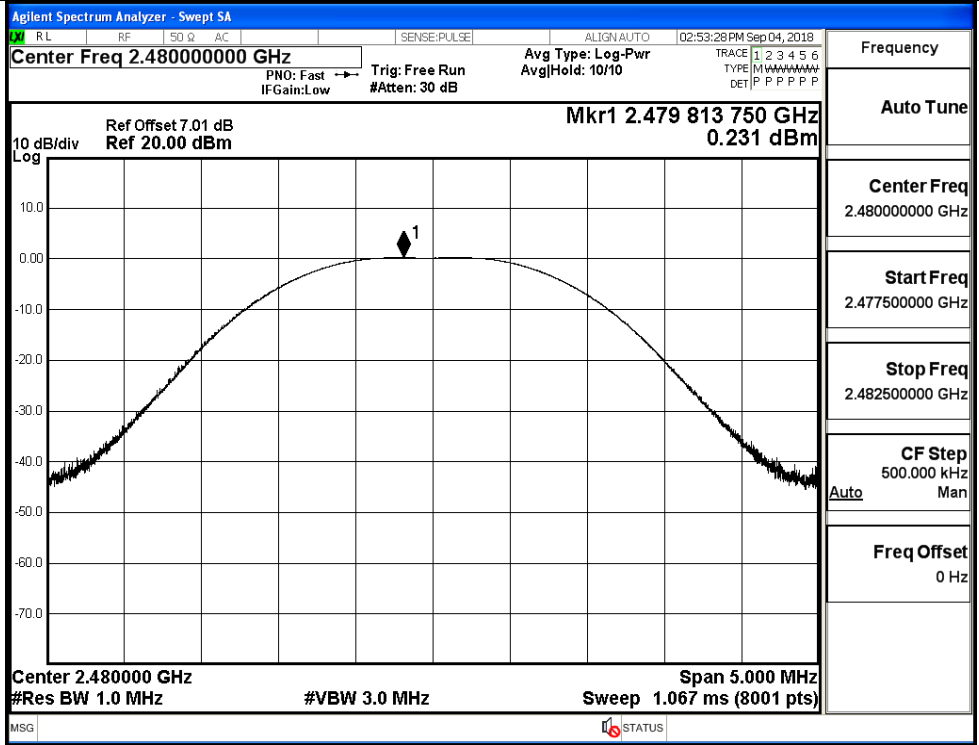


B.2 Maximum Conducted Peak Output Power

Mode	Channel	Conduct Peak Power[dBm]	Limit [dBm]	Verdict
BT LE	LCH	0.468	30	PASS
BT LE	MCH	0.368	30	PASS
BT LE	HCH	0.231	30	PASS



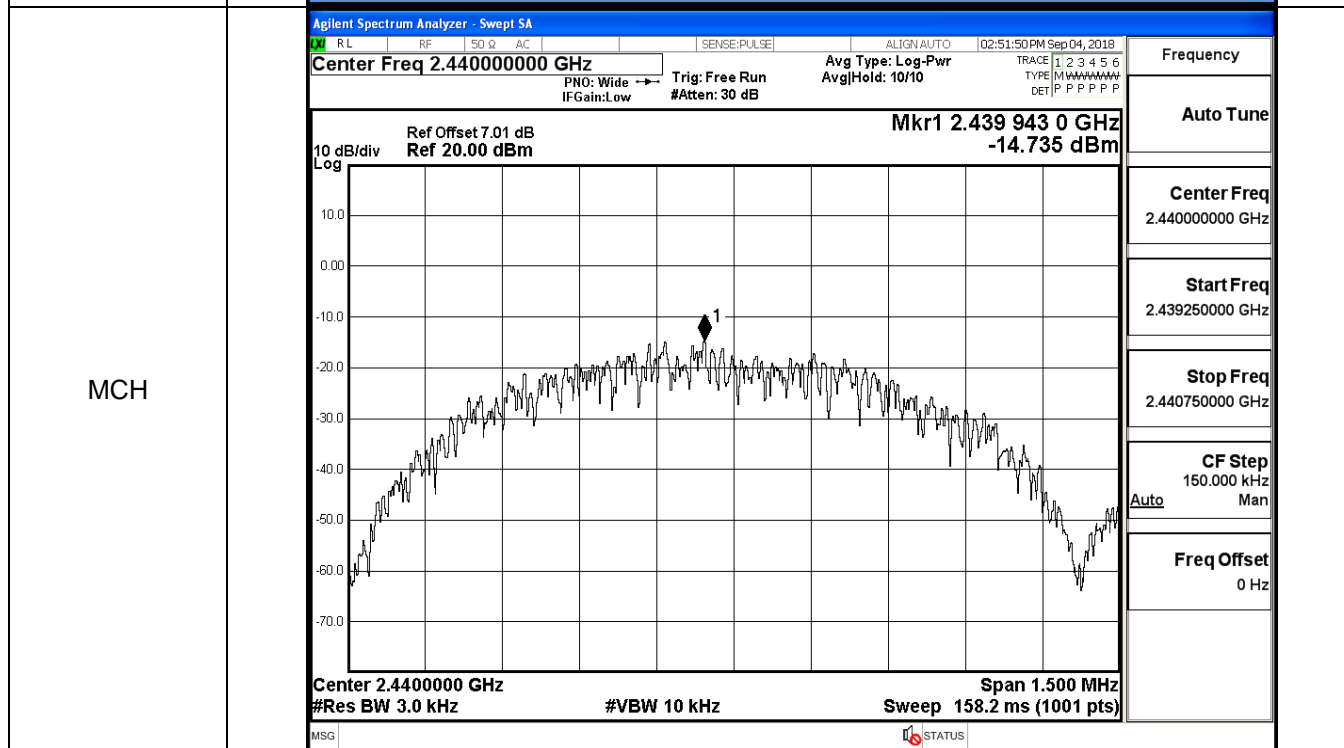
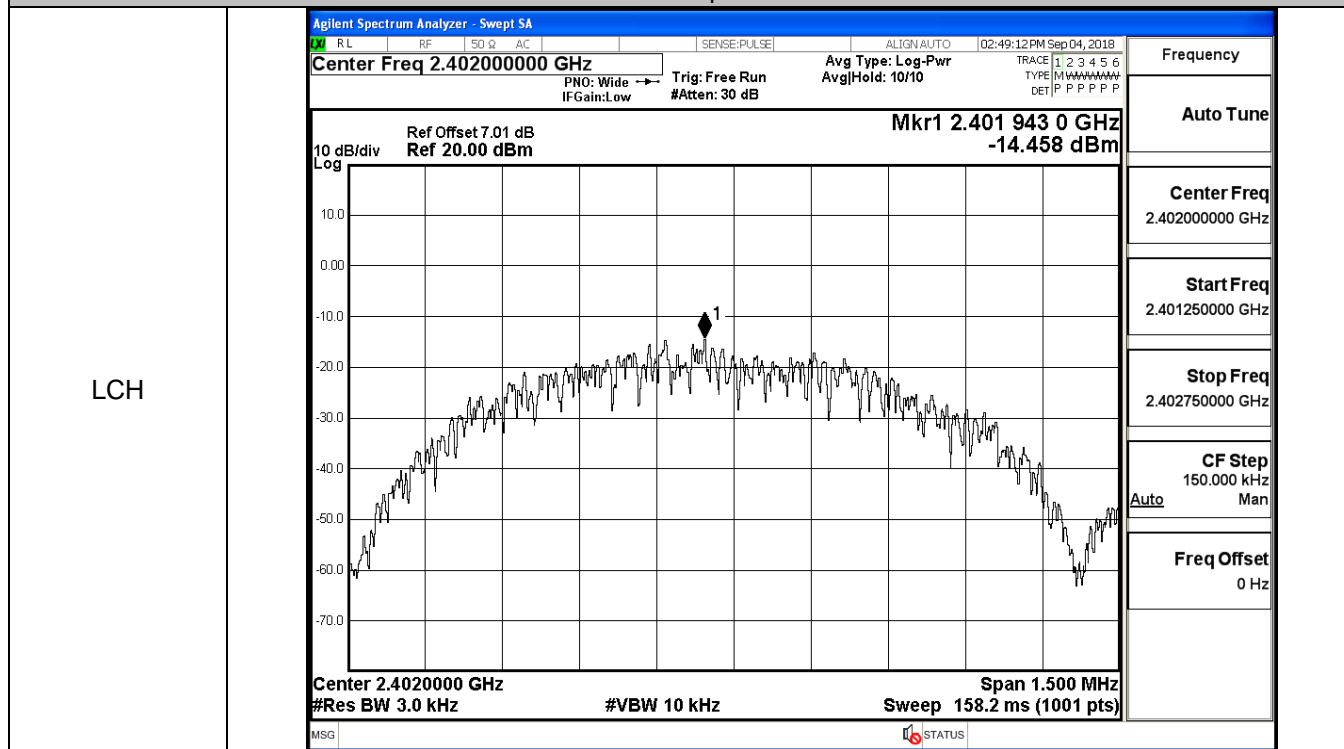
HCH



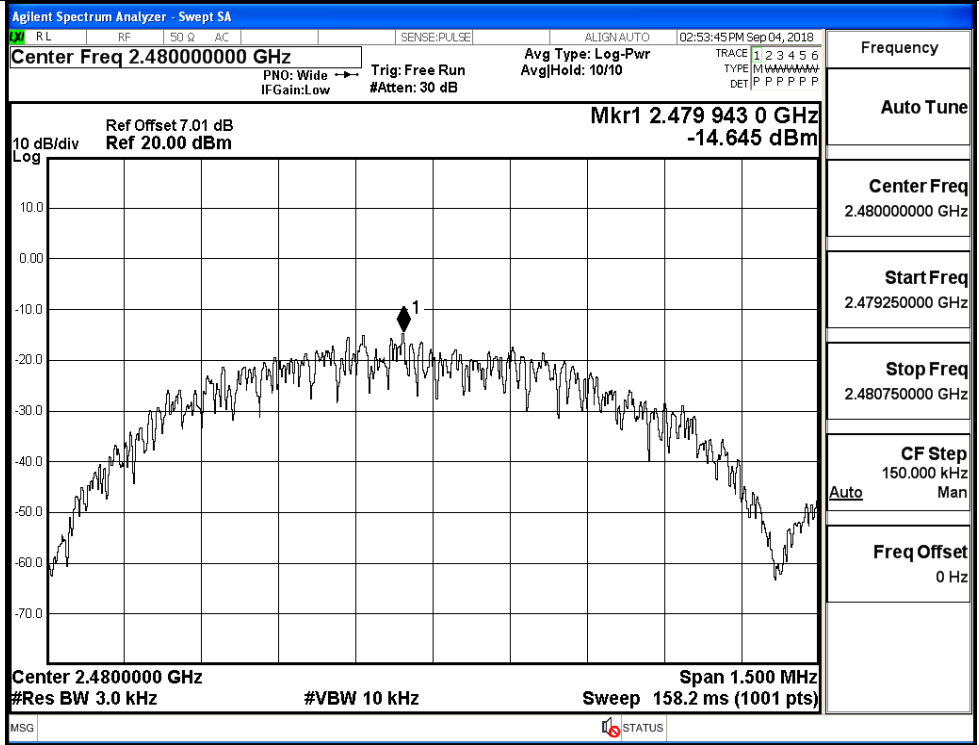
B.3 Maximum Power Spectral Density

Mode	Channel	PSD [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
BT LE	LCH	-14.458	8	PASS
BT LE	MCH	-14.735	8	PASS
BT LE	HCH	-14.645	8	PASS

Test Graphs



HCH



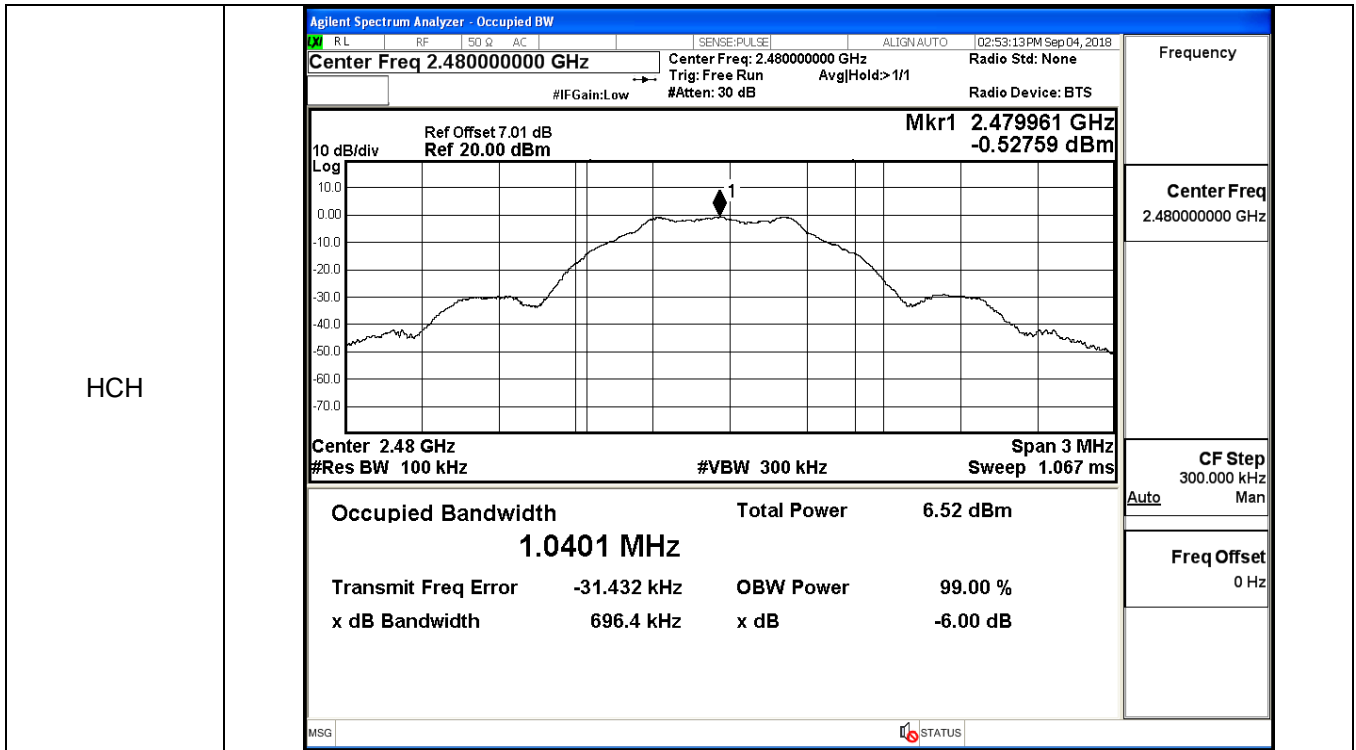
B.4 6dB Bandwidth

Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
BT LE	LCH	0.6827	≥0.5	PASS
BT LE	MCH	0.6773	≥0.5	PASS
BT LE	HCH	0.6964	≥0.5	PASS

Test Graphs

LCH	<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:PULSE ALIGN:AUTO 02:48:40 PM Sep 04, 2018</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: 1/1</p> <p style="font-size: x-small; margin: 0;">#IFGain:Low #Atten: 30 dB Radio Device: BTS</p>	Frequency																	
		Center Freq 2.402000000 GHz																	
	<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>	CF Step 300.000 kHz Auto Man																	
	<table style="width: 100%; font-size: small; border-collapse: collapse;"> <tr> <td style="width: 33%;">Occupied Bandwidth</td> <td style="width: 33%;">Total Power</td> <td style="width: 33%;">6.74 dBm</td> </tr> <tr> <td style="text-align: center;">1.0430 MHz</td> <td></td> <td></td> </tr> <tr> <td>Transmit Freq Error</td> <td>-30.777 kHz</td> <td>OBW Power</td> </tr> <tr> <td>x dB Bandwidth</td> <td>682.7 kHz</td> <td>x dB</td> </tr> <tr> <td></td> <td></td> <td>99.00 %</td> </tr> <tr> <td></td> <td></td> <td>-6.00 dB</td> </tr> </table>	Occupied Bandwidth	Total Power	6.74 dBm	1.0430 MHz			Transmit Freq Error	-30.777 kHz	OBW Power	x dB Bandwidth	682.7 kHz	x dB			99.00 %			-6.00 dB
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		99.00 %																	
		-6.00 dB																	

MCH	<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:PULSE ALIGN:AUTO 02:51:18 PM Sep 04, 2018</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>	Frequency																	
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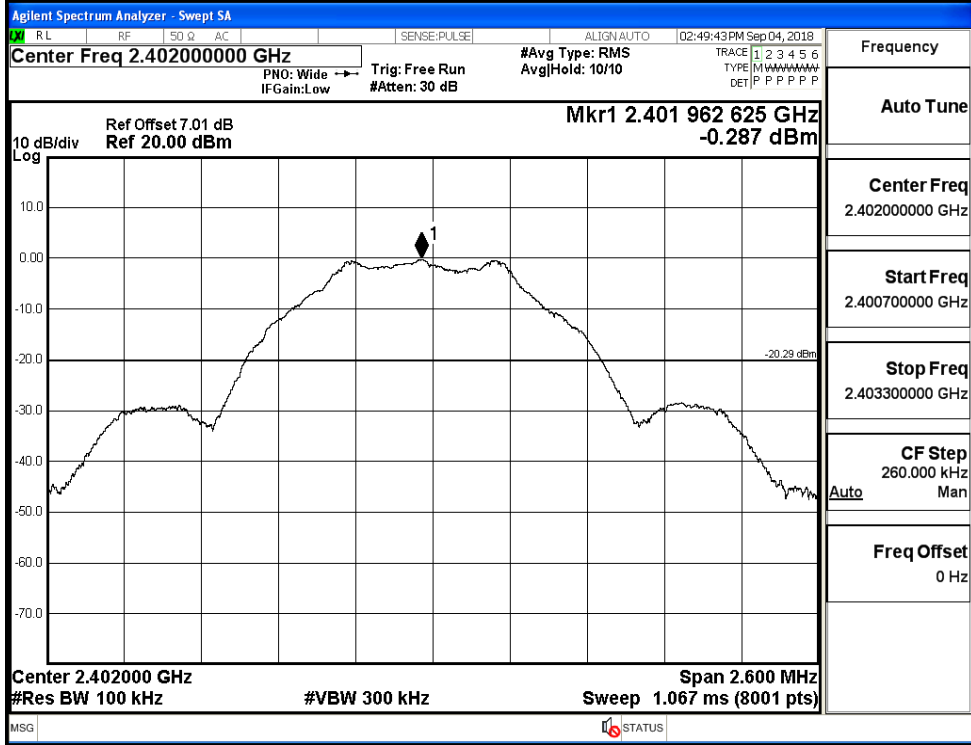


B.5 RF Conducted Spurious Emissions

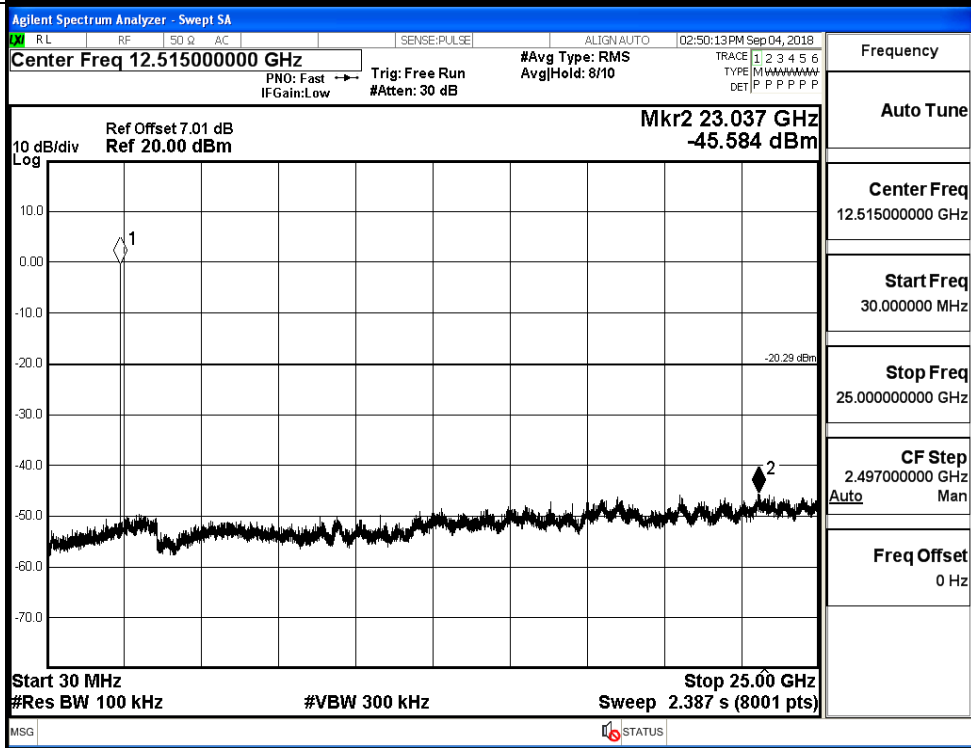
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	-0.287	-45.584	-20.287	PASS
BT LE	MCH	-0.381	-44.986	-20.381	PASS
BT LE	HCH	-0.537	-45.035	-20.537	PASS

BT LE_LCH_Graphs

Pref/BT LE/LCH

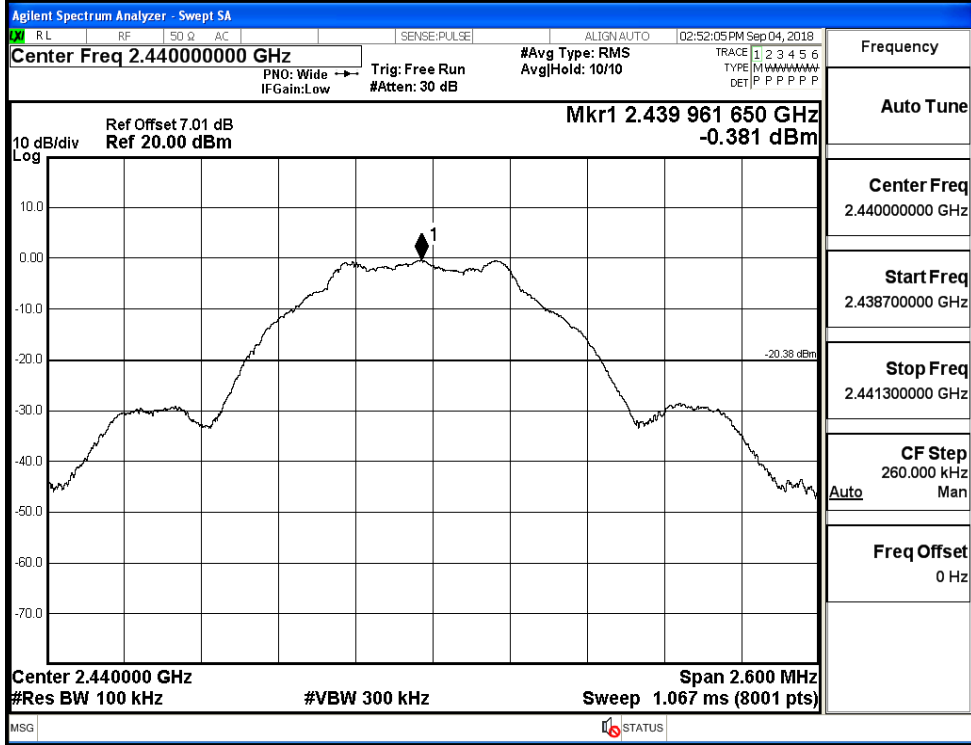


Puw/BT LE/LCH

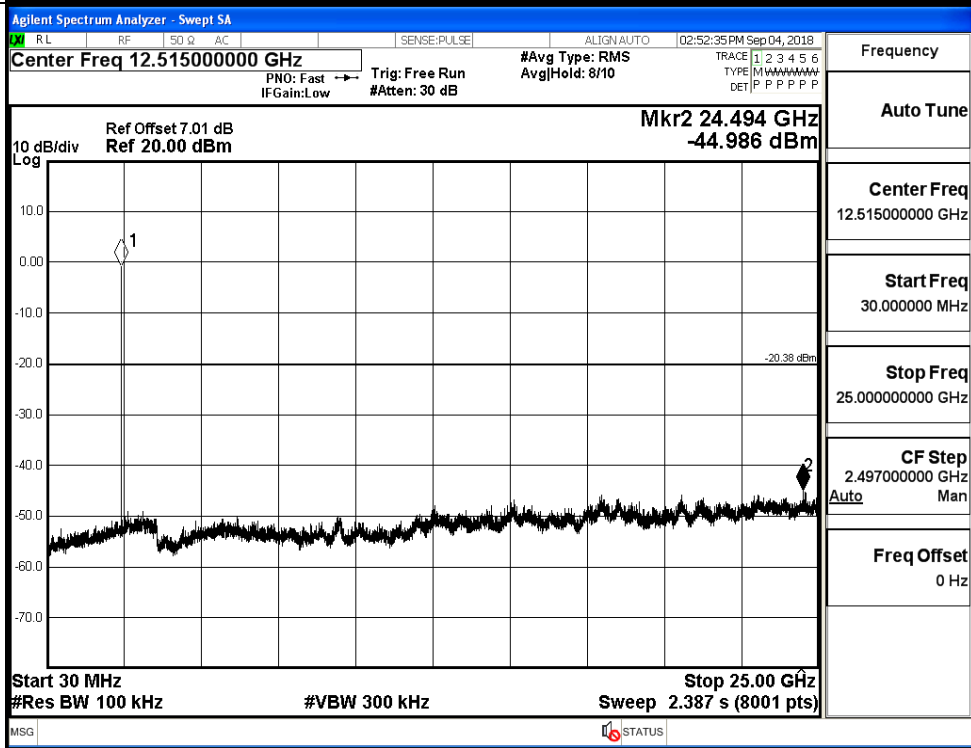


BT LE_MCH_Graphs

Pref/BT LE/MCH

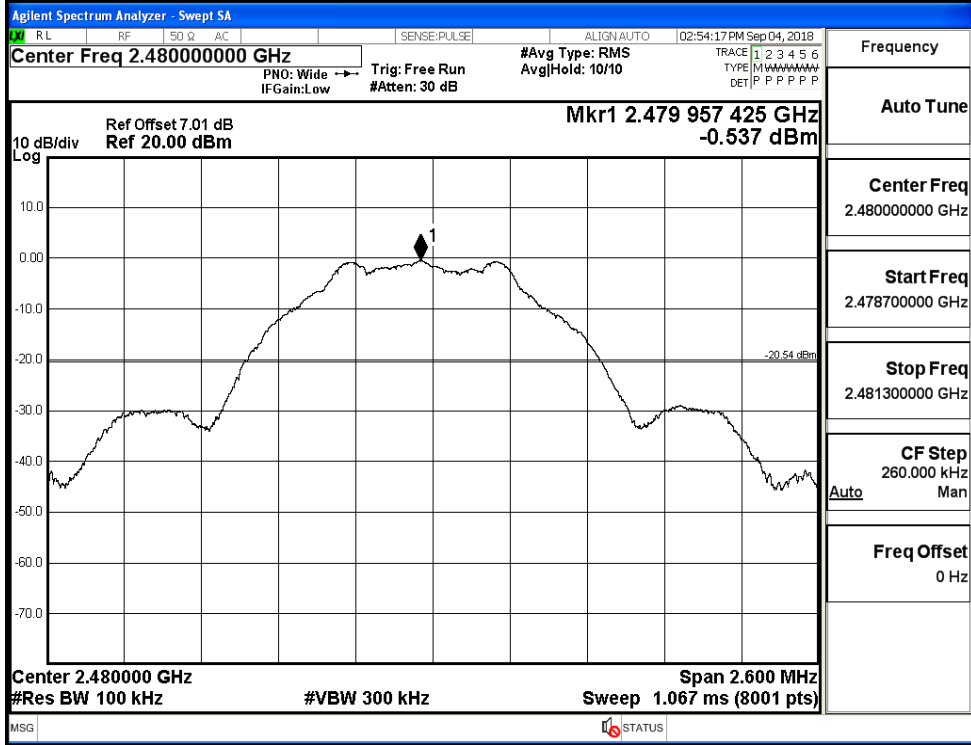


Puw/BT LE/MCH

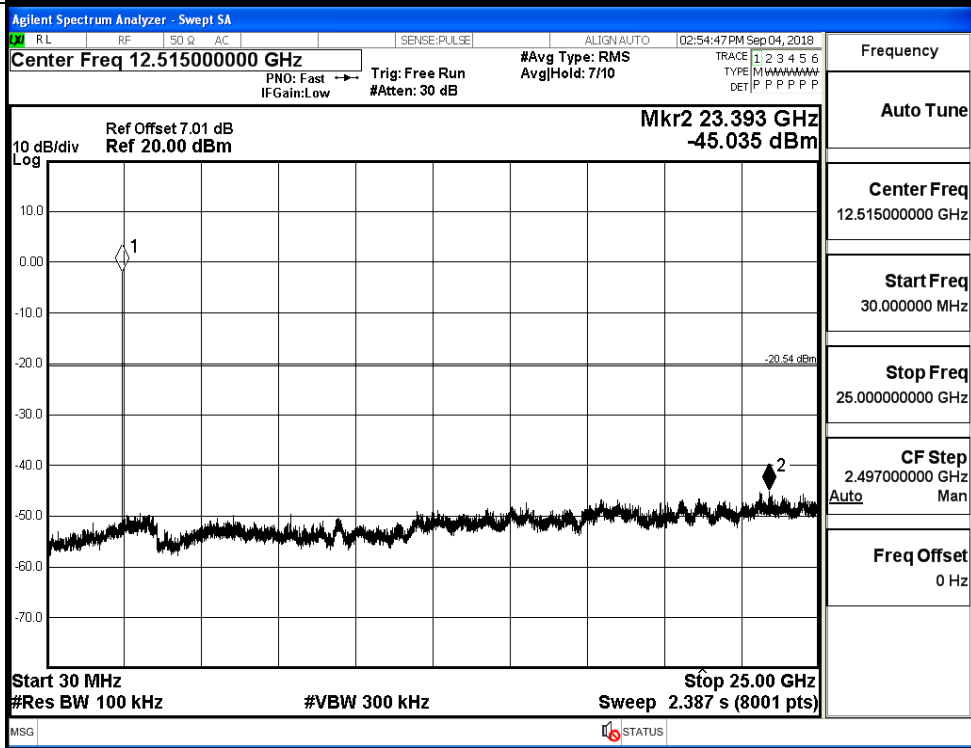


BT LE_HCH_Graphs

Pref/BT LE/HCH



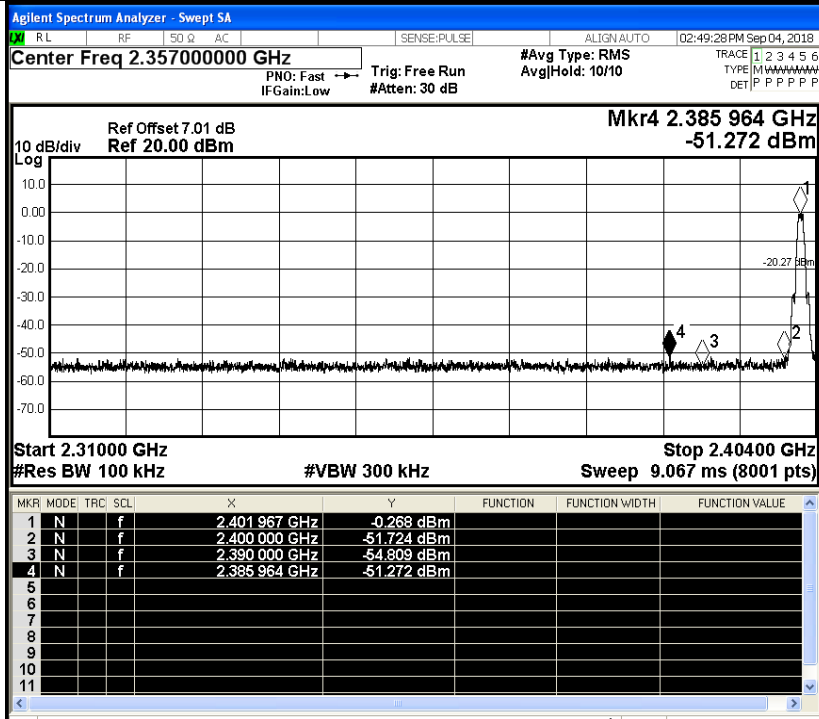
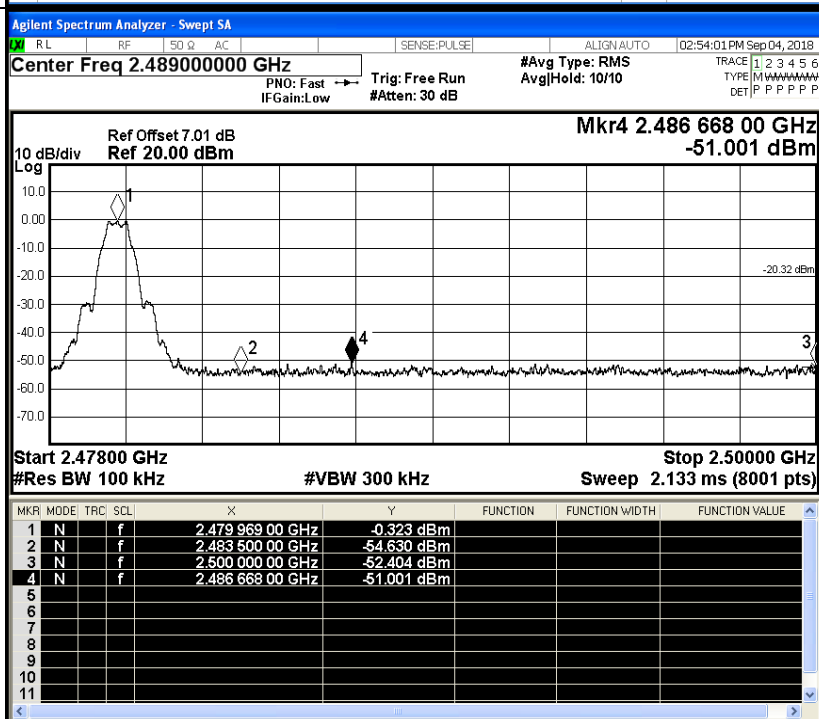
Puw/BT LE/HCH



B.6 Band-edge for RF Conducted Emissions

Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	-0.268	-51.272	-20.27	PASS
BT LE	HCH	-0.323	-51.001	-20.32	PASS

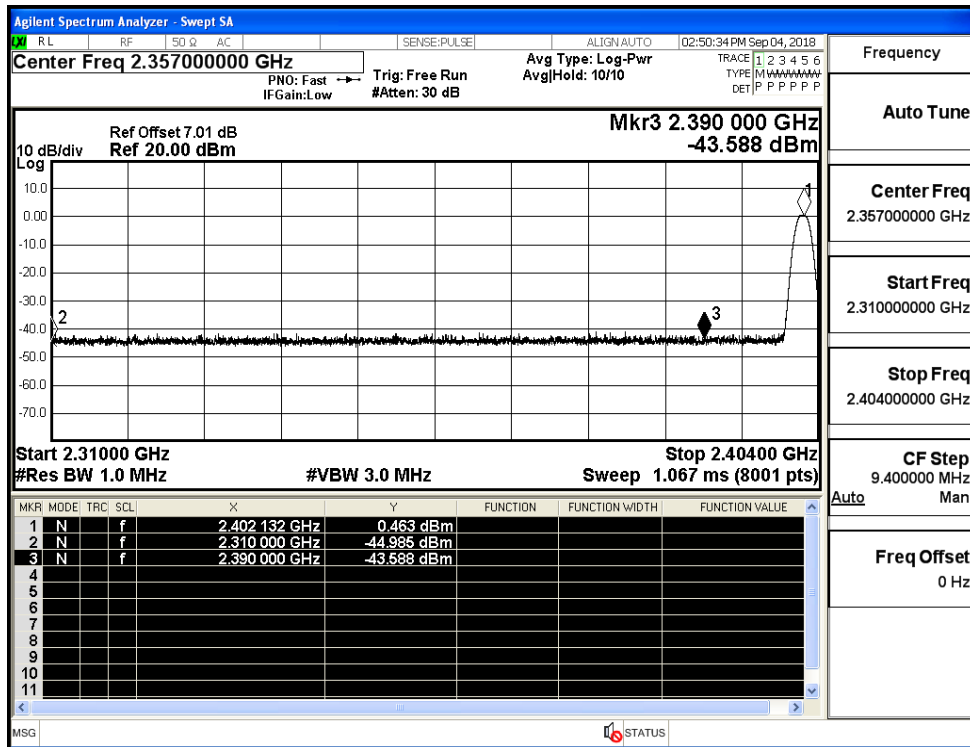
Test Graphs

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>

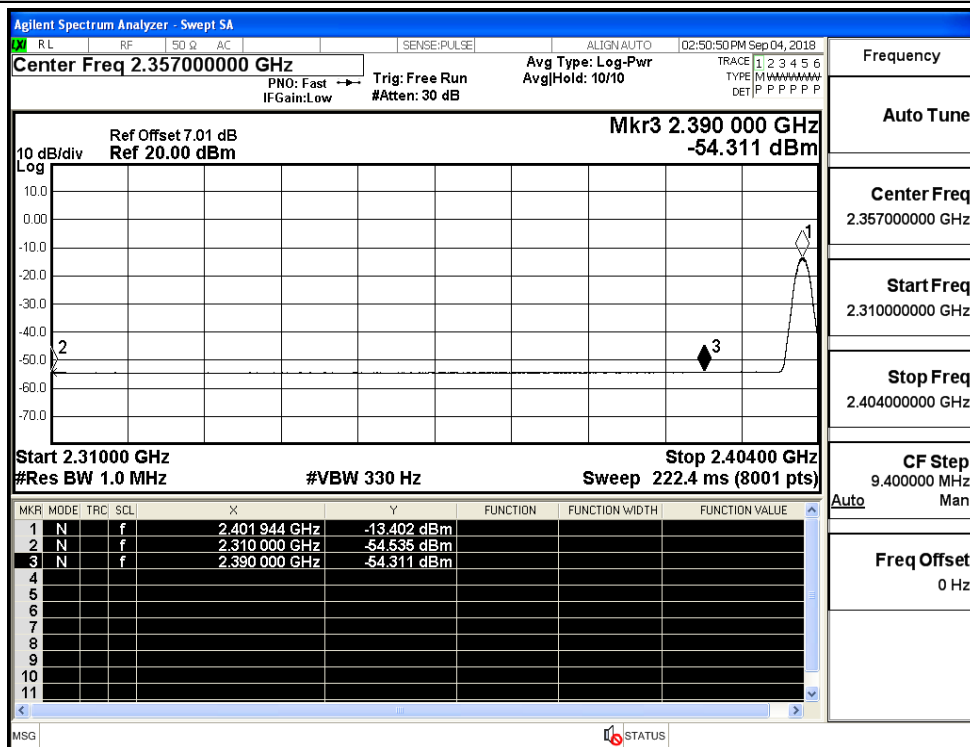
B.7 Restrict-band band-edge measurements

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	-44.99	2.0	0	52.27	PEAK	74	PASS
		Ant1	2310.0	-54.54	2.0	0	42.72	AV	54	PASS
		Ant1	2390.0	-43.59	2.0	0	53.67	PEAK	74	PASS
		Ant1	2390.0	-54.31	2.0	0	42.95	AV	54	PASS
	2480	Ant1	2483.5	-45.28	2.0	0	51.98	PEAK	74	PASS
		Ant1	2483.5	-54.11	2.0	0	43.15	AV	54	PASS
		Ant1	2500.0	-43.51	2.0	0	53.75	PEAK	74	PASS
		Ant1	2500.0	-53.96	2.0	0	43.30	AV	54	PASS

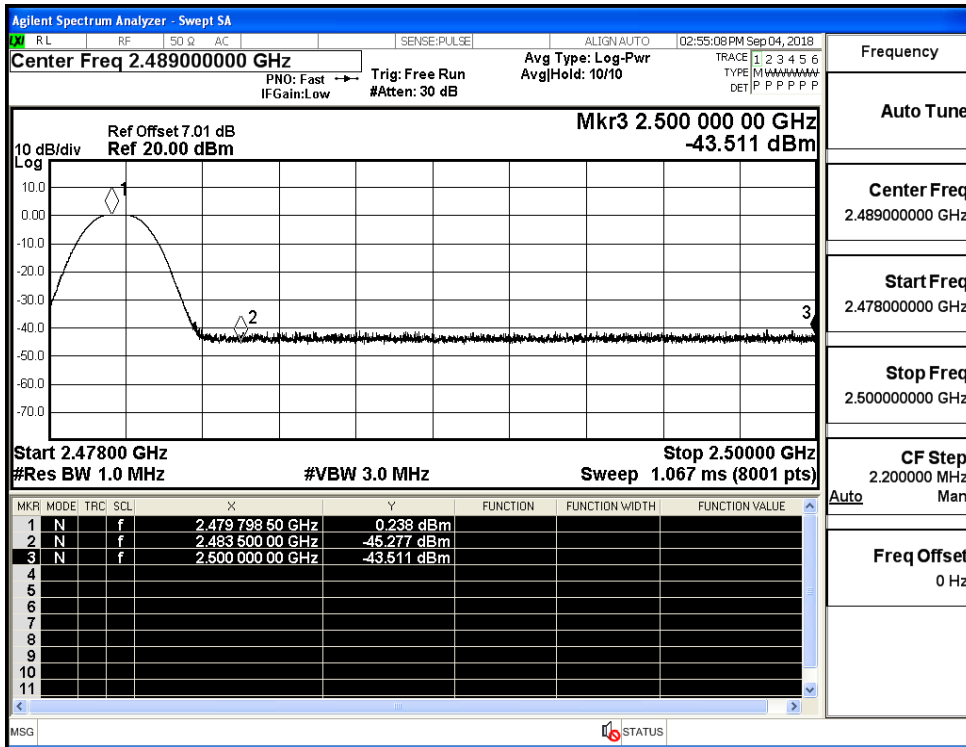
Restrict-band band-edge measurements_BT LE_2402_Ant1_PEAK



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

