

Appendix B

RF Test Data for BT V5.0 (BT LE) (Conducted Measurement)

Product Name: WIRELESS EARBUDS W/MIC

Trade Mark: N/A

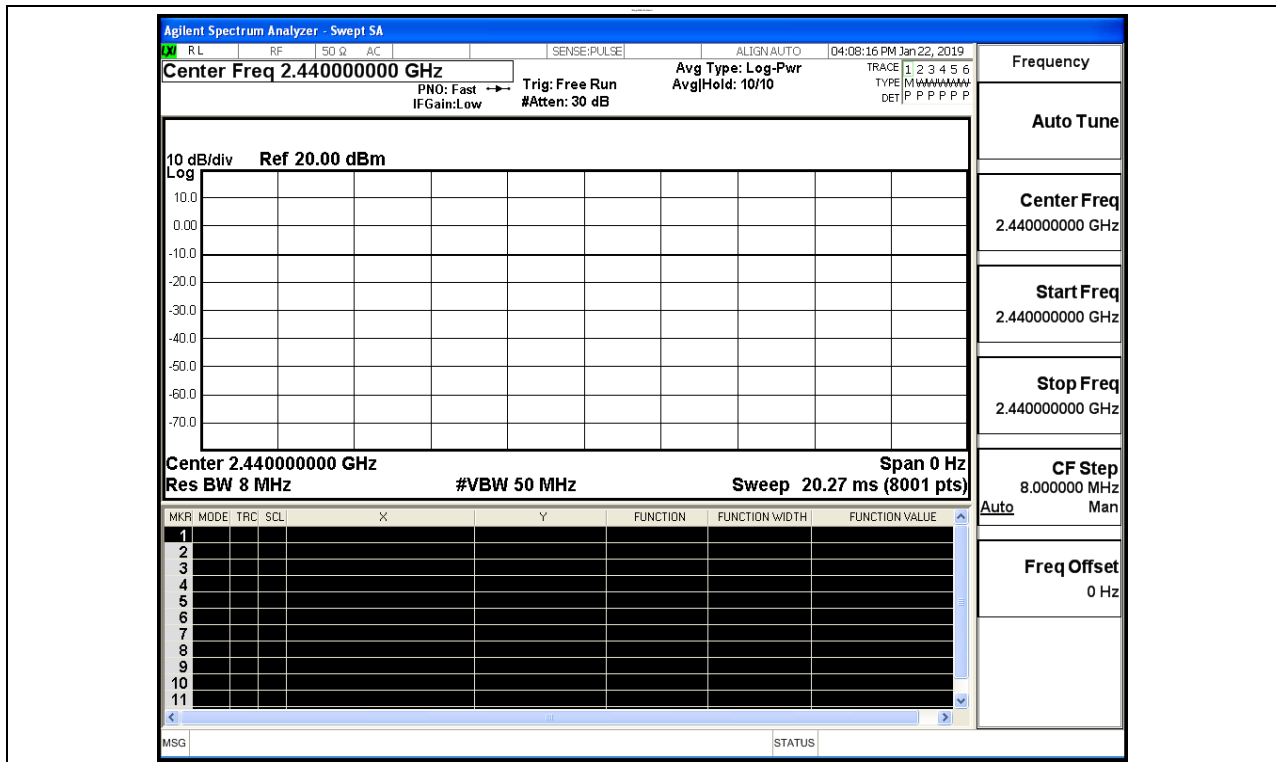
Test Model: K20-BT

Environmental Conditions

Temperature:	24.2 ° C
Relative Humidity:	54.1%
ATM Pressure:	100.0 kPa
Test Engineer:	David.Luo
Supervised by:	Jayden.Zhuo

B.1 Duty Cycle

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

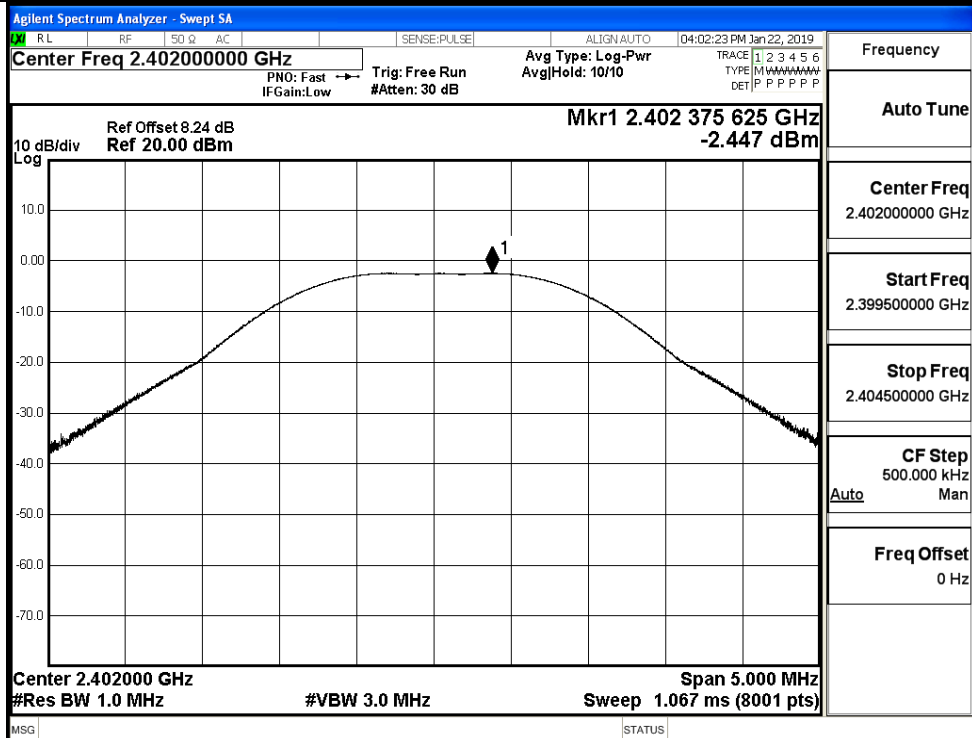


B.2 Maximum Conducted Peak Output Power

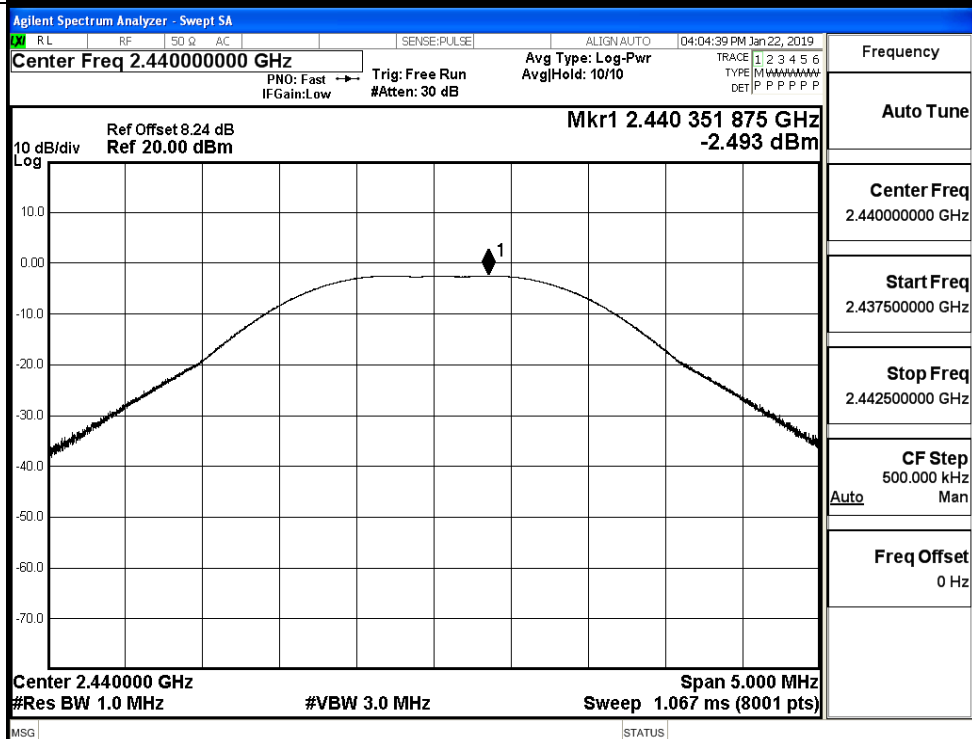
Mode	Channel	Conduct Peak Power[dBm]	Limit [dBm]	Verdict
BT LE	LCH	-2.447	30	PASS
BT LE	MCH	-2.493	30	PASS
BT LE	HCH	-2.23	30	PASS

Test Graphs

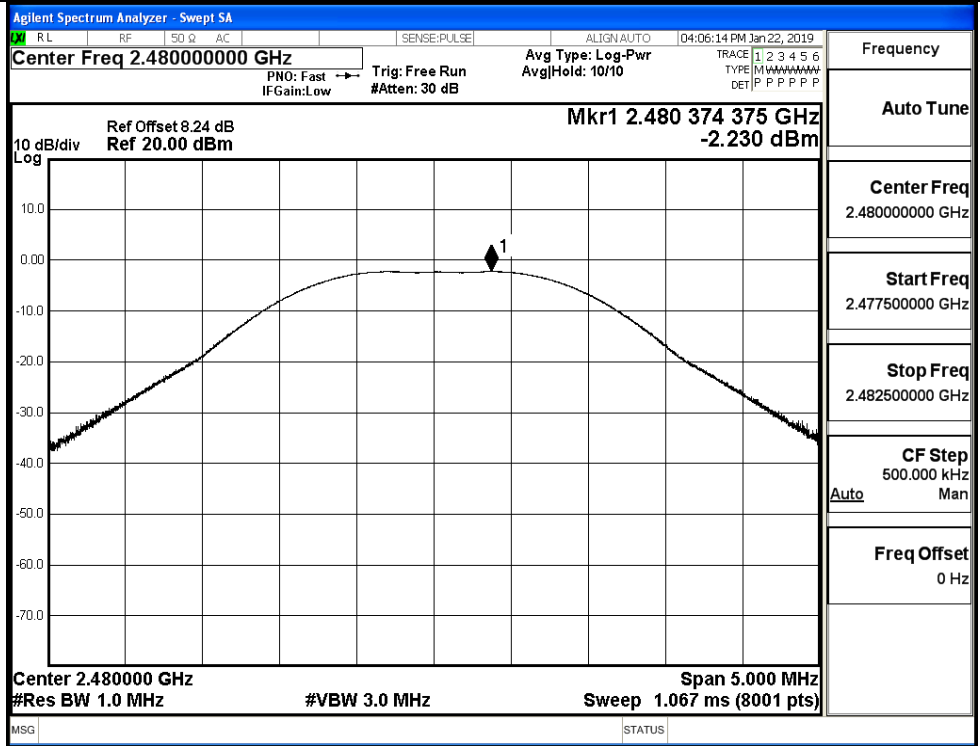
LCH



MCH

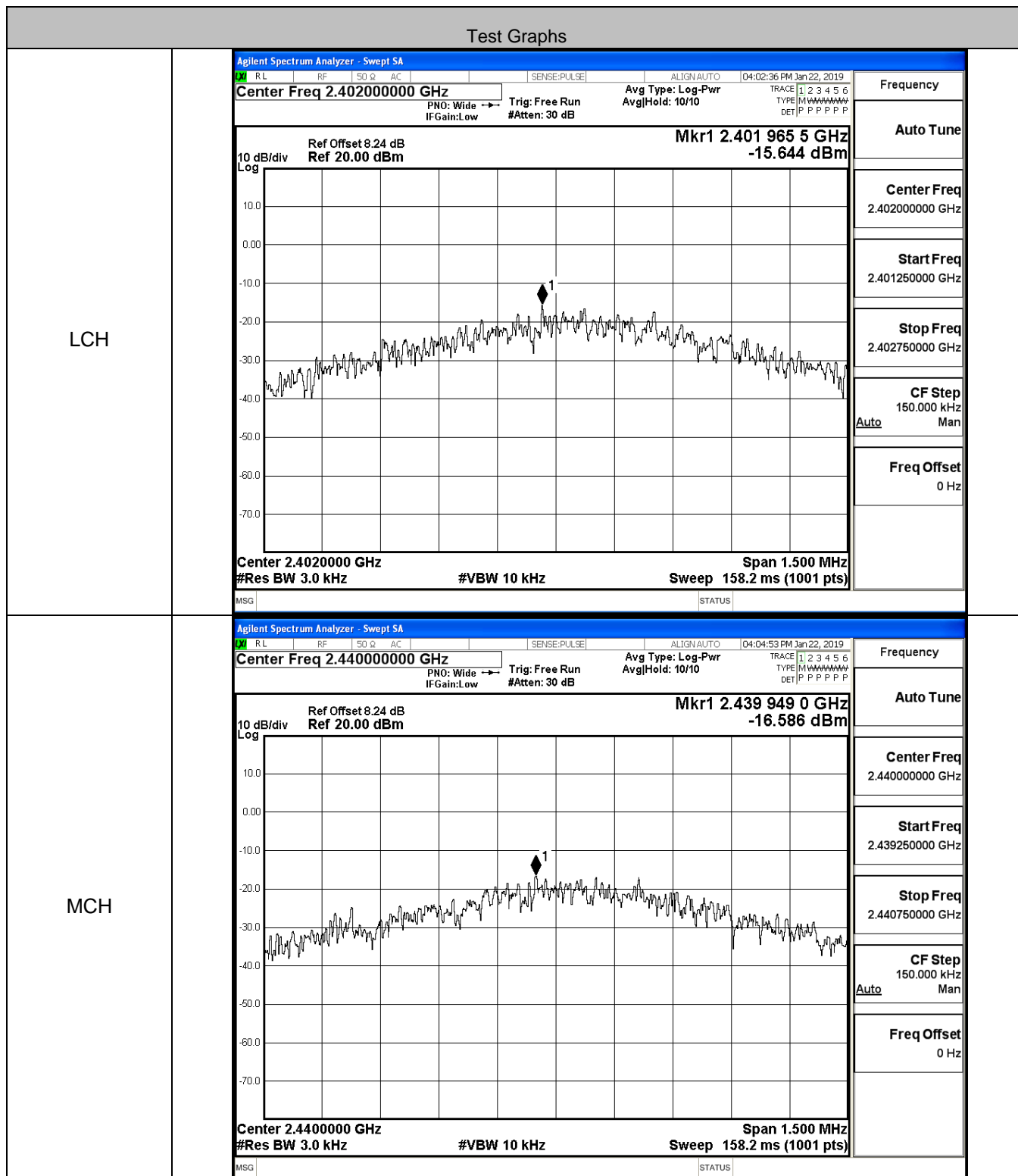


HCH

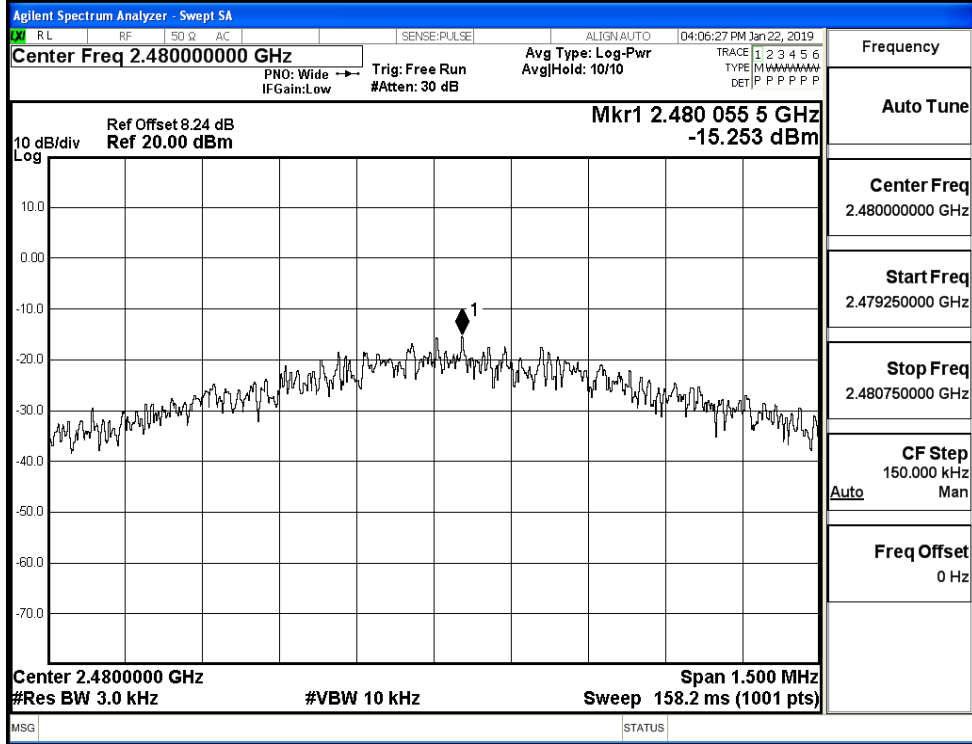


B.3 Maximum Power Spectral Density

Mode	Channel	PSD [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
BT LE	LCH	-15.644	8	PASS
BT LE	MCH	-16.586	8	PASS
BT LE	HCH	-15.253	8	PASS



HCH



B.4 6dB Bandwidth

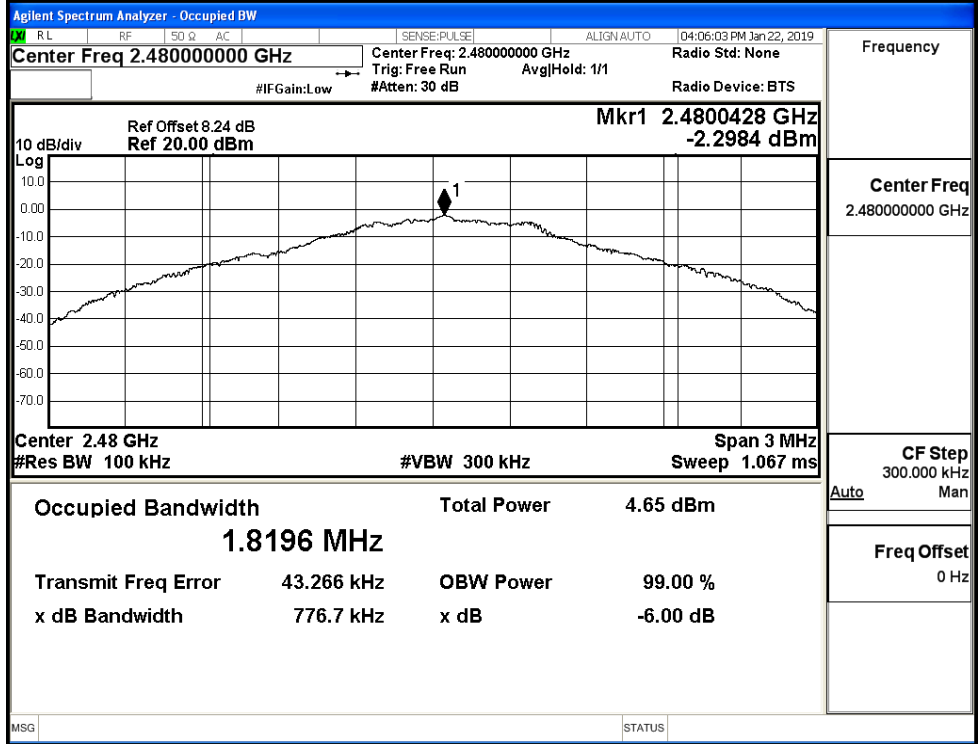
Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
BT LE	LCH	0.7580	≥0.5	PASS
BT LE	MCH	0.8456	≥0.5	PASS
BT LE	HCH	0.7767	≥0.5	PASS

Test Graphs

LCH	<p>Agilent Spectrum Analyzer - Occupied BW Center Freq 2.40200000 GHz Mkr1 2.4020428 GHz -2.5181 dBm Occupied Bandwidth 1.8026 MHz Total Power 4.31 dBm Transmit Freq Error 42.582 kHz OBW Power 99.00 % x dB Bandwidth 758.0 kHz x dB -6.00 dB</p>	<p>Frequency</p> <p>Center Freq 2.40200000 GHz</p> <p>CF Step 300.000 kHz Auto Man</p> <p>Freq Offset 0 Hz</p>
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MCH	<p>Agilent Spectrum Analyzer - Occupied BW Center Freq 2.44000000 GHz Mkr1 2.440042 GHz -2.5708 dBm Occupied Bandwidth 1.9016 MHz Total Power 4.41 dBm Transmit Freq Error 44.555 kHz OBW Power 99.00 % x dB Bandwidth 845.6 kHz x dB -6.00 dB</p>	<p>Frequency</p> <p>Center Freq 2.44000000 GHz</p> <p>CF Step 300.000 kHz Auto Man</p> <p>Freq Offset 0 Hz</p>
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HCH

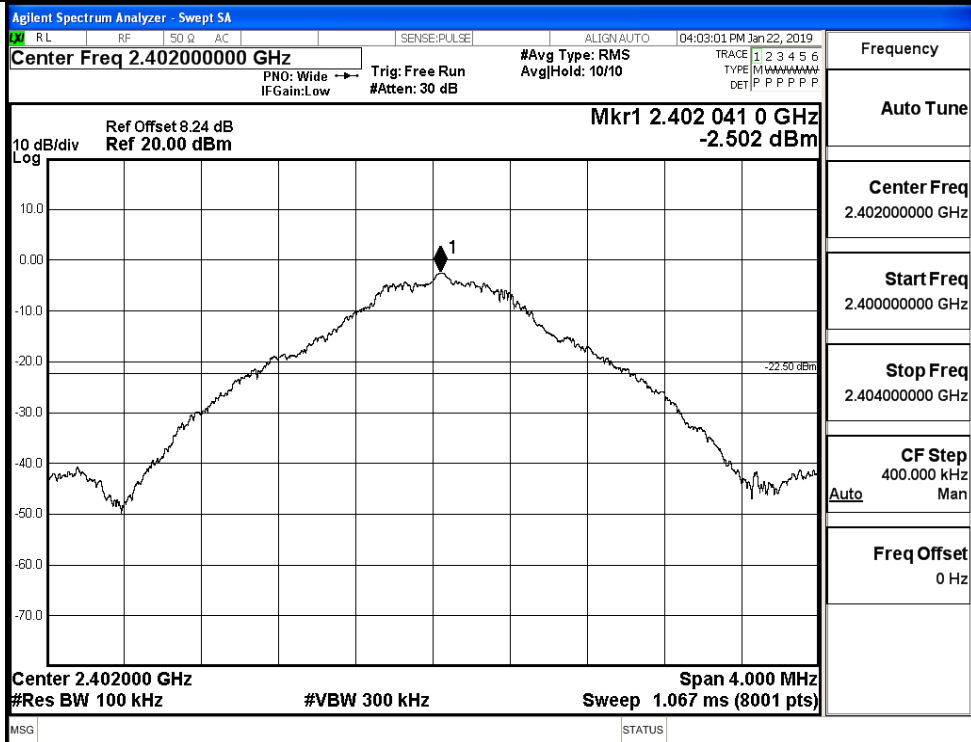


B.5 RF Conducted Spurious Emissions

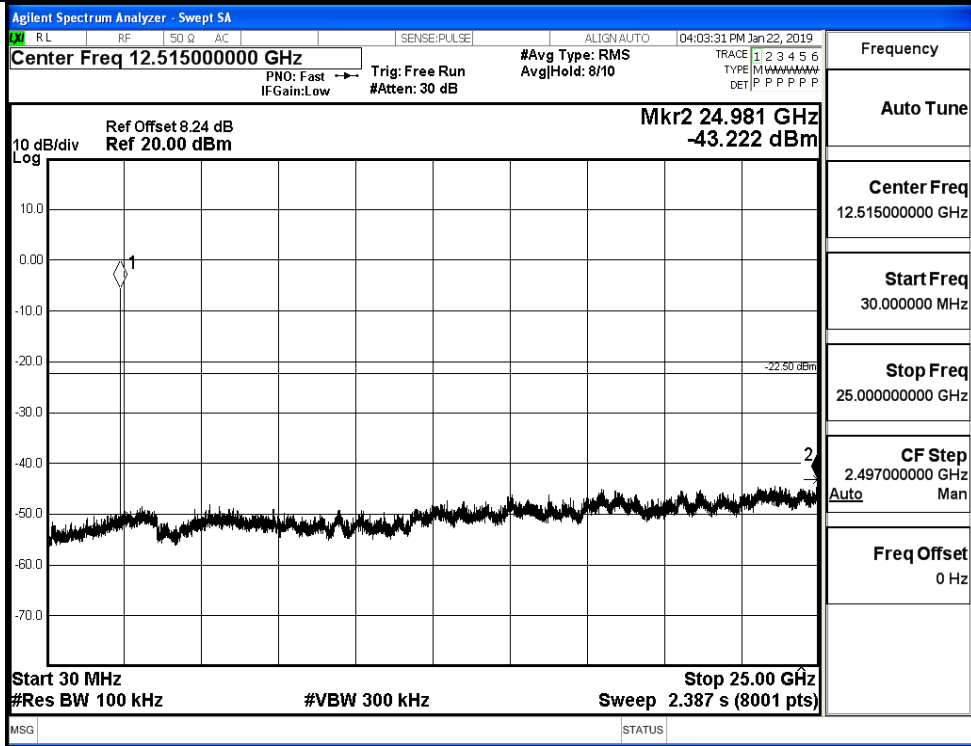
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	-2.502	-43.222	-22.502	PASS
BT LE	MCH	-2.594	-43.944	-22.594	PASS
BT LE	HCH	-2.321	-44.486	-22.321	PASS

BT LE_LCH_Graphs

Pref/BT LE/LCH

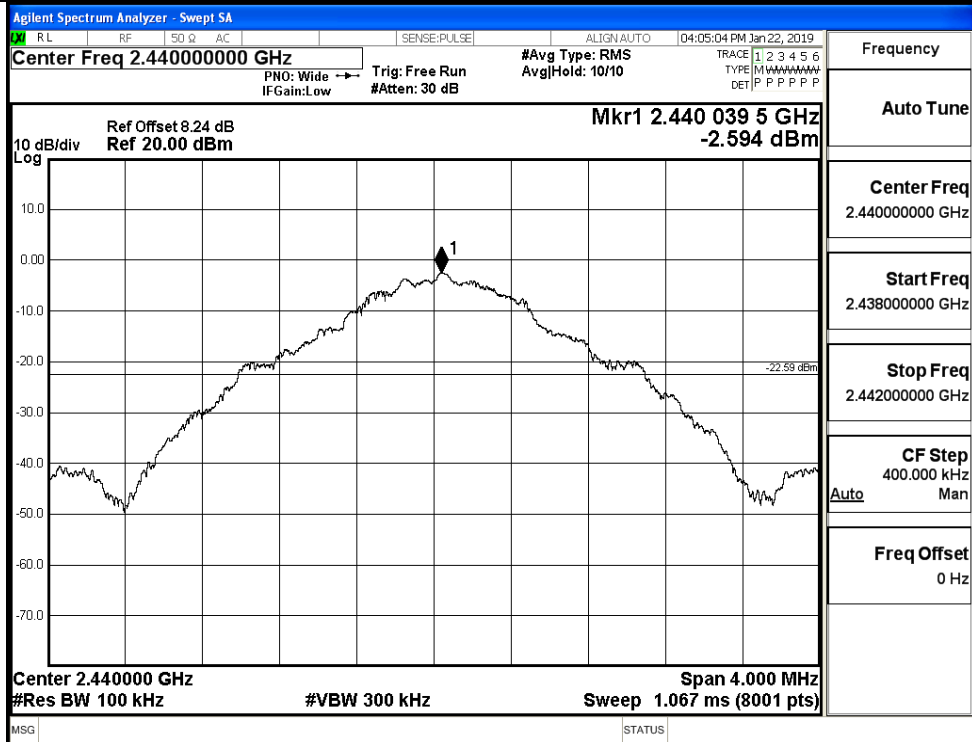


Puw/BT LE/LCH

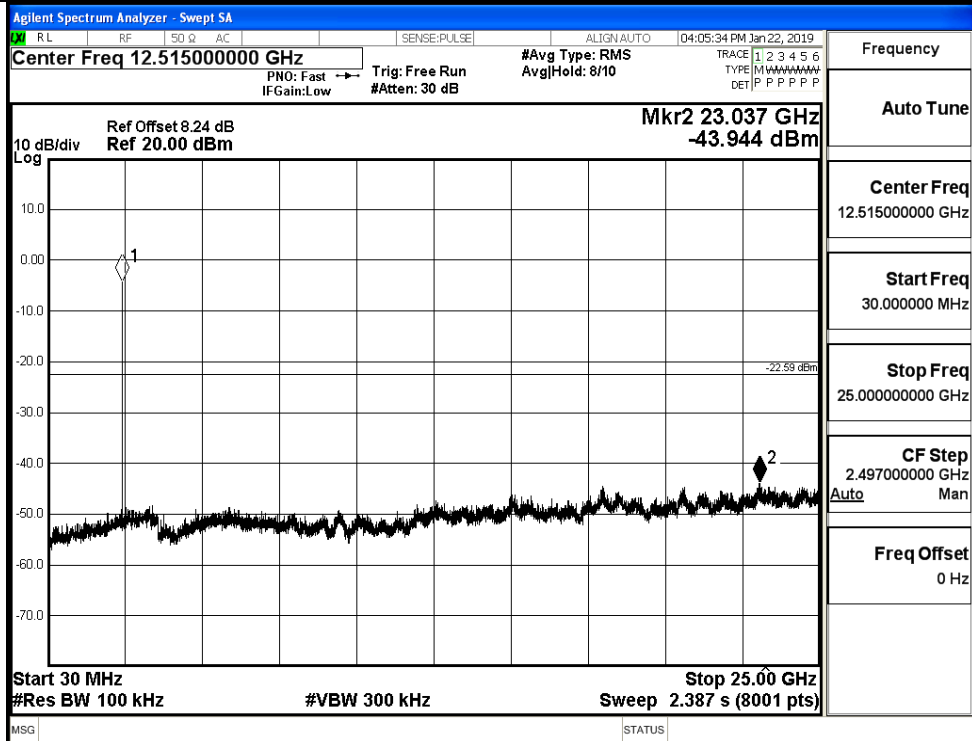


BT LE_MCH_Graphs

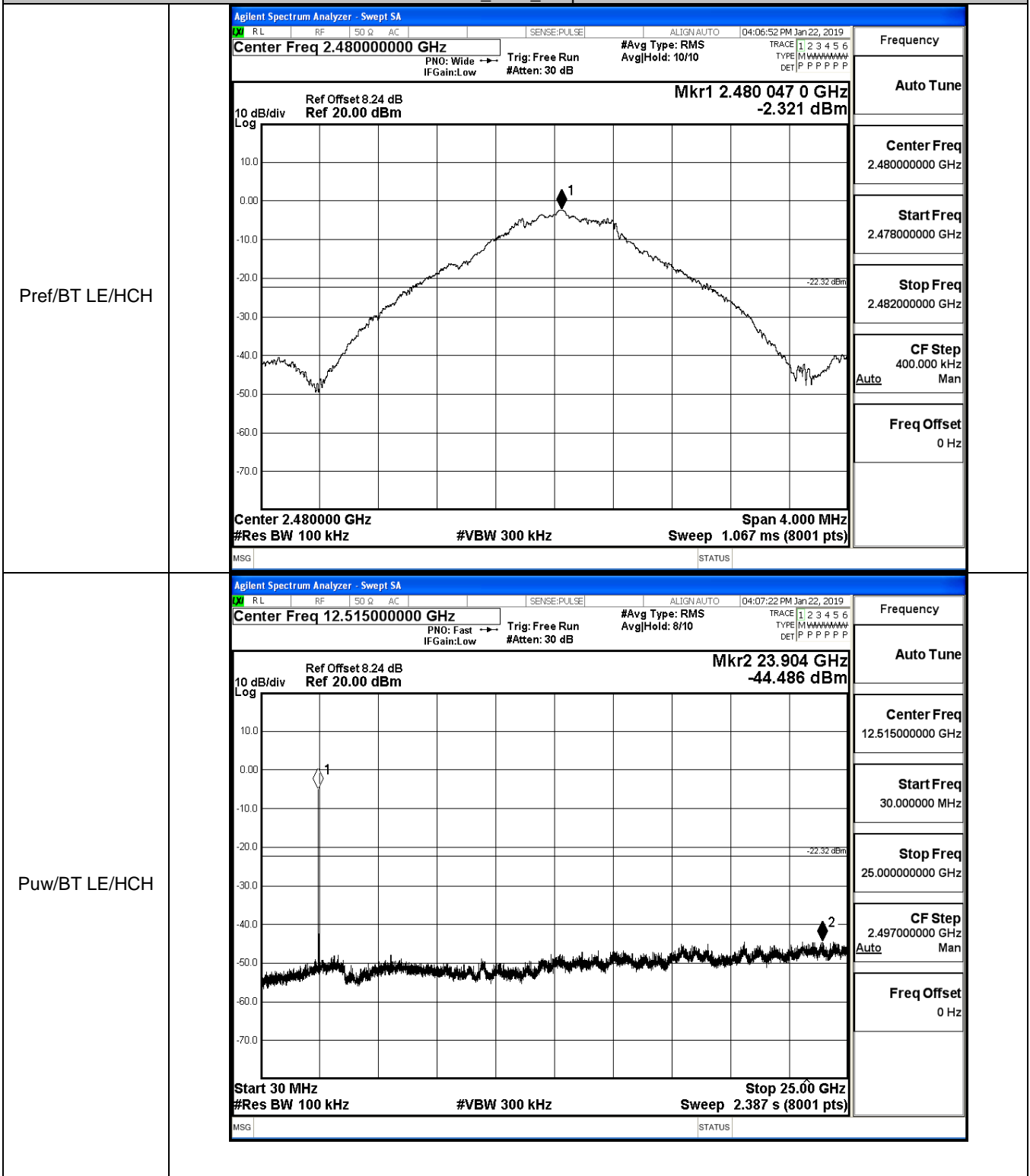
Pref/BT LE/MCH



Puw/BT LE/MCH



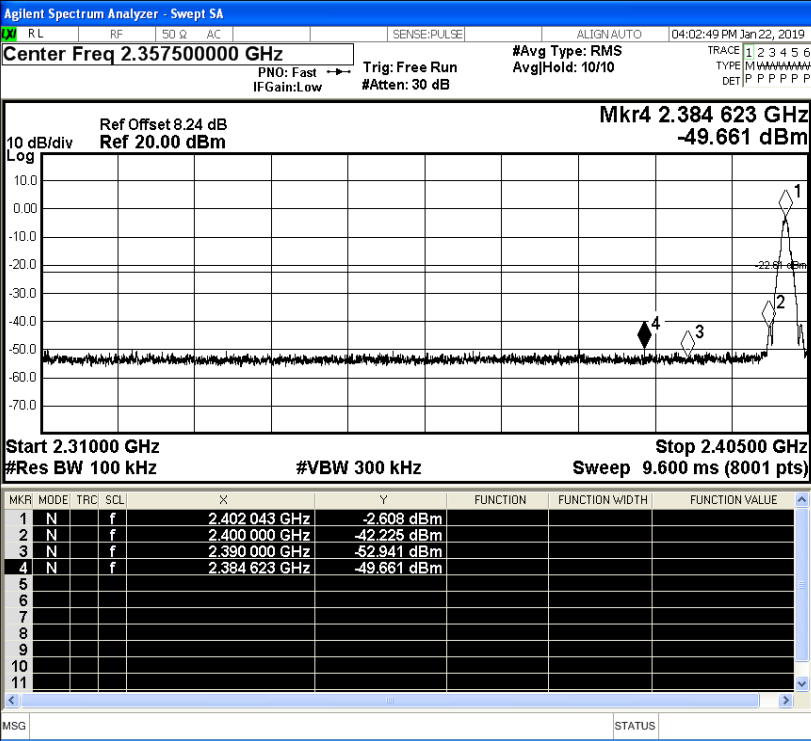
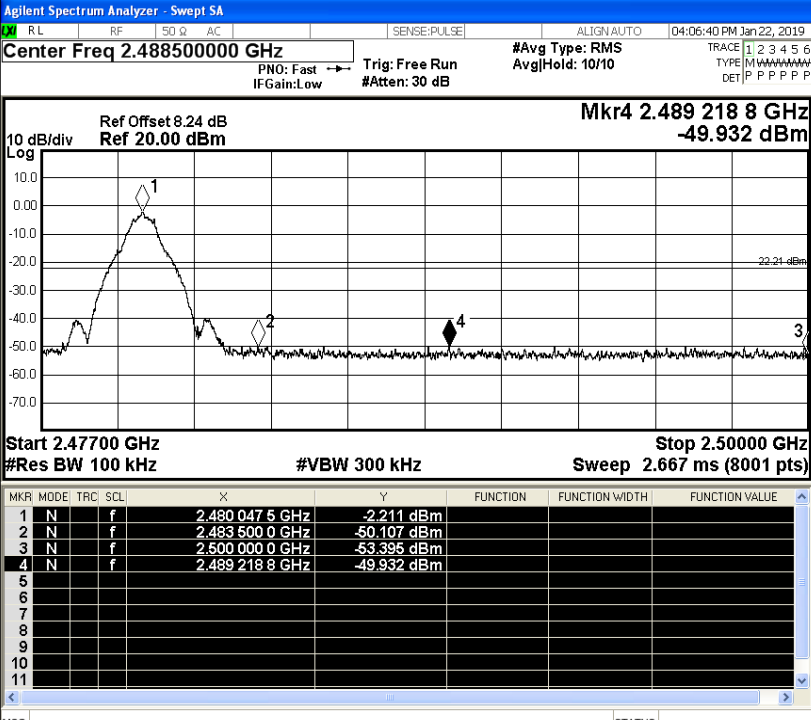
BT LE_HCH_Graphs



B.6 Band-edge for RF Conducted Emissions

Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	-2.608	-49.661	-22.61	PASS
BT LE	HCH	-2.211	-49.932	-22.21	PASS

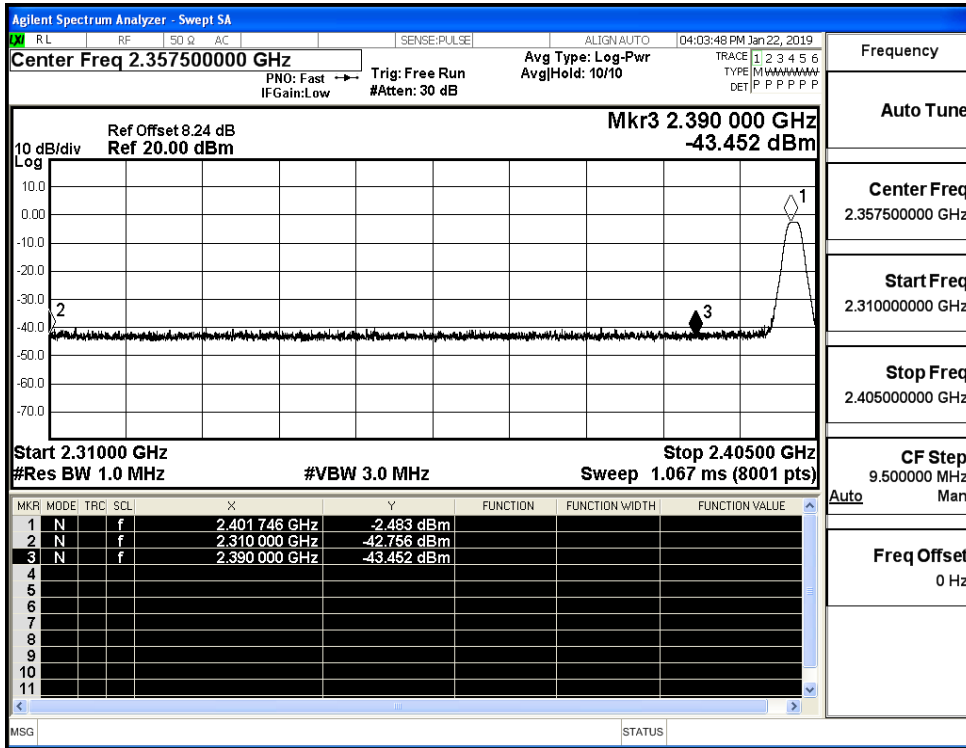
Test Graphs

LCH		<p>Frequency</p> <p>Auto Tune</p> <p>Center Freq 2.357500000 GHz</p> <p>Start Freq 2.310000000 GHz</p> <p>Stop Freq 2.405000000 GHz</p> <p>CF Step 9.500000 MHz</p> <p>Freq Offset 0 Hz</p>
HCH		<p>Frequency</p> <p>Auto Tune</p> <p>Center Freq 2.488500000 GHz</p> <p>Start Freq 2.477000000 GHz</p> <p>Stop Freq 2.500000000 GHz</p> <p>CF Step 2.300000 MHz</p> <p>Freq Offset 0 Hz</p>

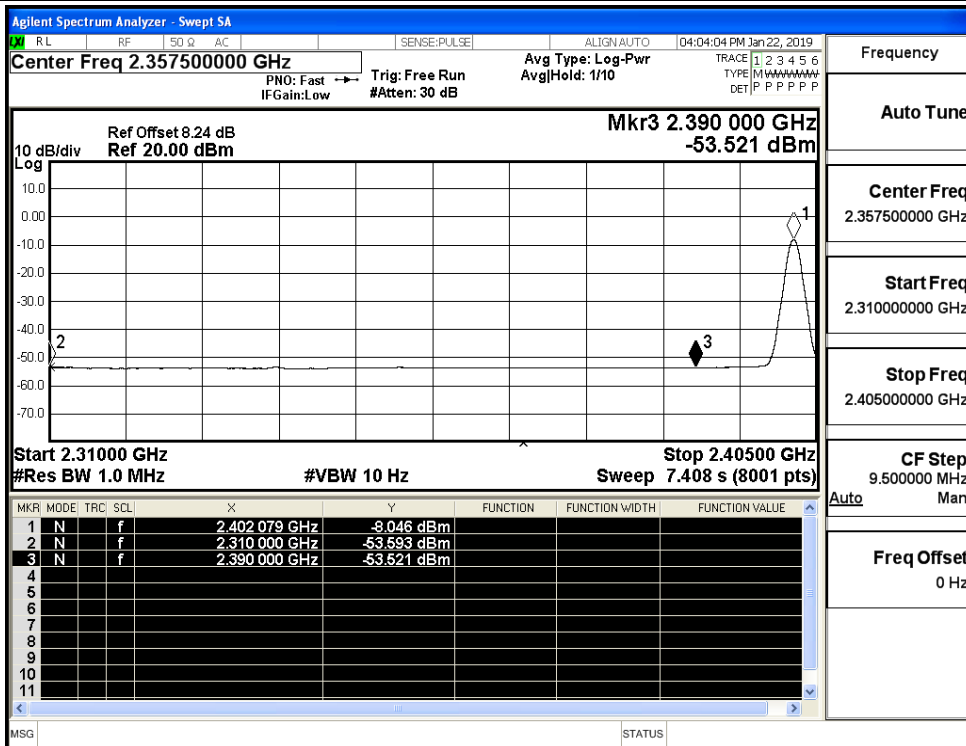
B.7 Restrict-band band-edge measurements

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	-42.76	2.0	0	52.50	PEAK	74	PASS
		Ant1	2310.0	-53.59	2.0	0	41.66	AV	54	PASS
		Ant1	2390.0	-43.45	2.0	0	51.81	PEAK	74	PASS
		Ant1	2390.0	-53.52	2.0	0	41.74	AV	54	PASS
	2480	Ant1	2483.5	-42.79	2.0	0	52.47	PEAK	74	PASS
		Ant1	2483.5	-52.09	2.0	0	43.17	AV	54	PASS
		Ant1	2500.0	-42.99	2.0	0	52.27	PEAK	74	PASS
		Ant1	2500.0	-52.99	2.0	0	42.27	AV	54	PASS

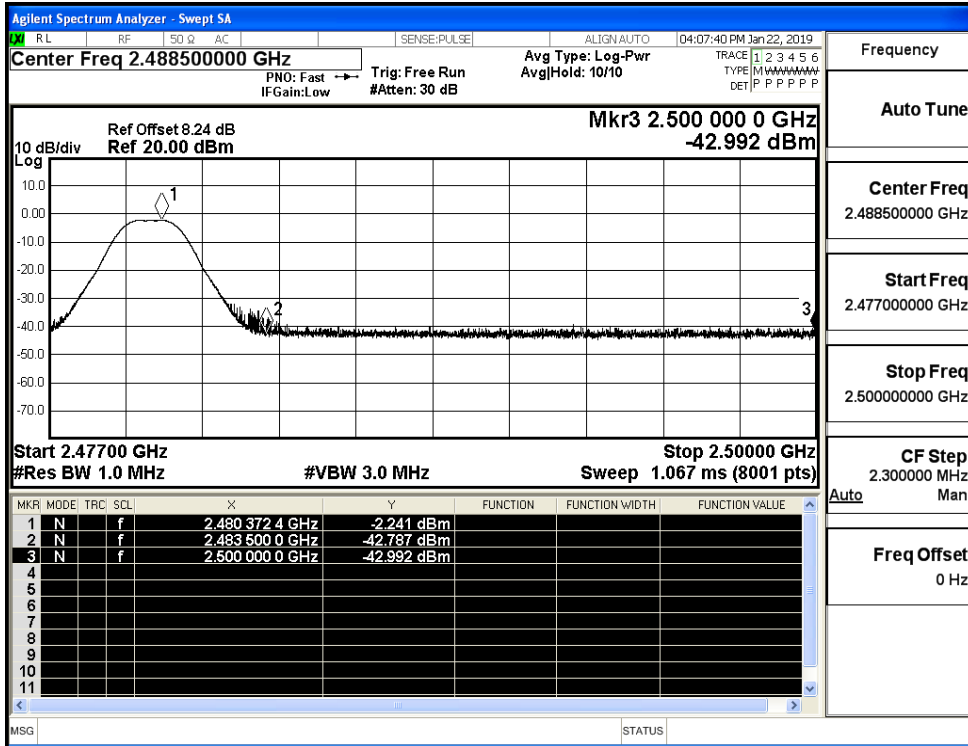
Restrict-band band-edge measurements_BT LE_2402_Ant1_PEAK



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

