

Appendix B

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

Product Name: Bluetooth Speaker

Trade Mark: Origaudio

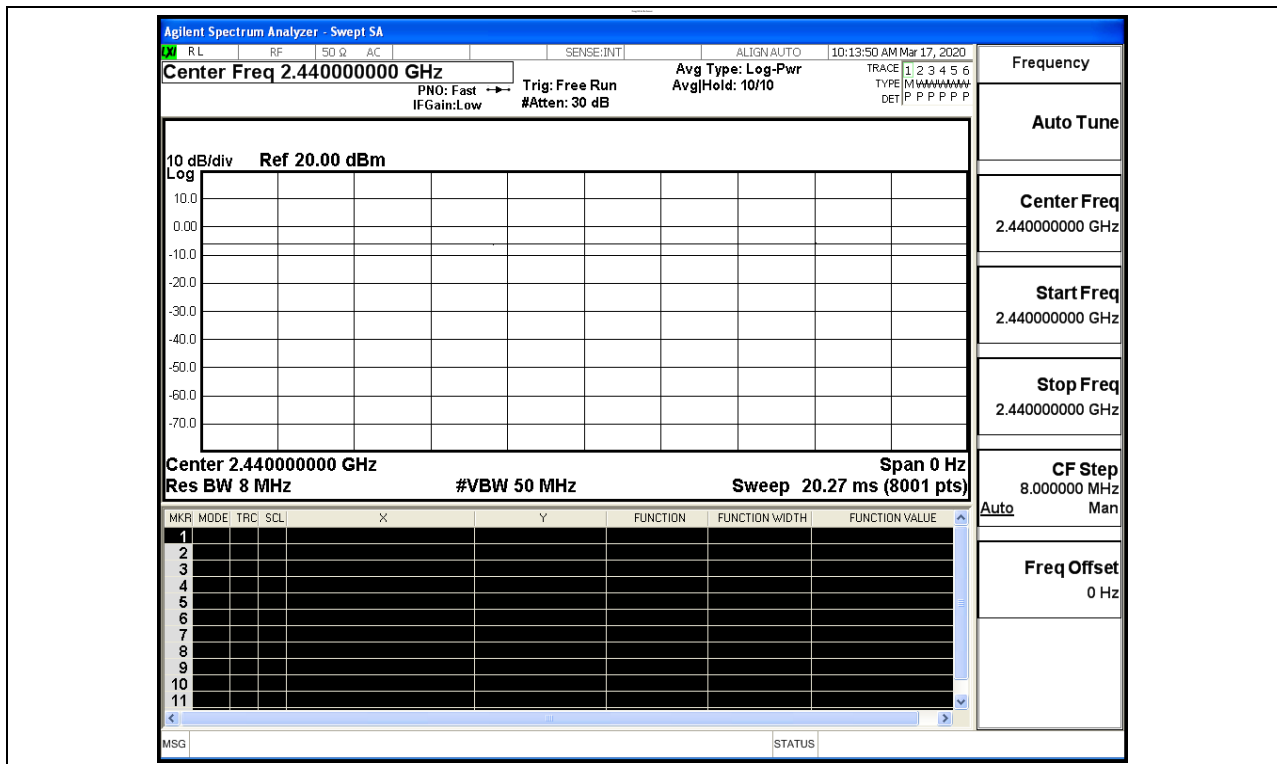
Test Model: CHYRP

Environmental Conditions

Temperature:	23.3 ° C
Relative Humidity:	53.8%
ATM Pressure:	100.0 kPa
Test Engineer:	Qu Xin
Supervised by:	Wang Chuang

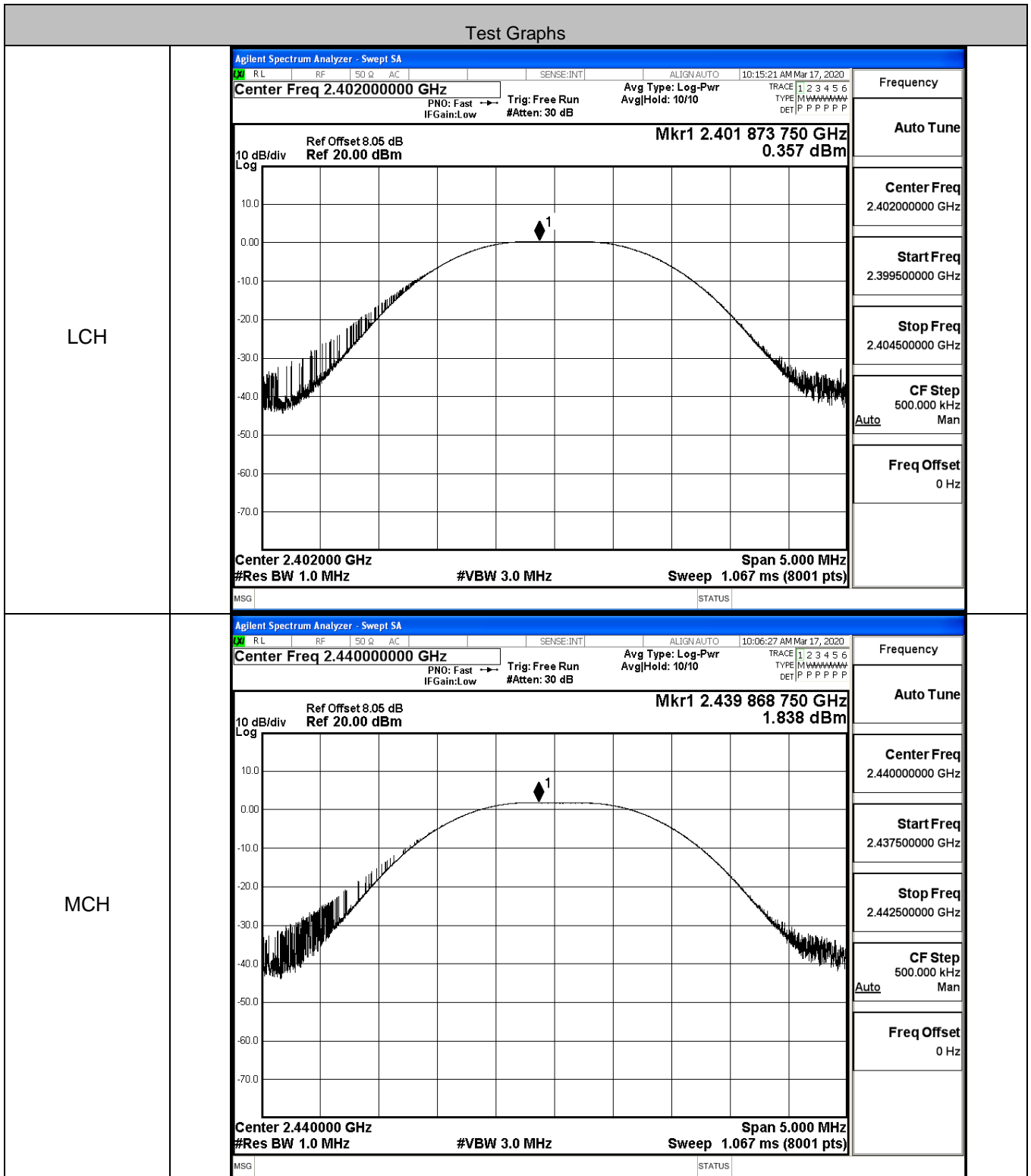
B.1 Duty Cycle

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

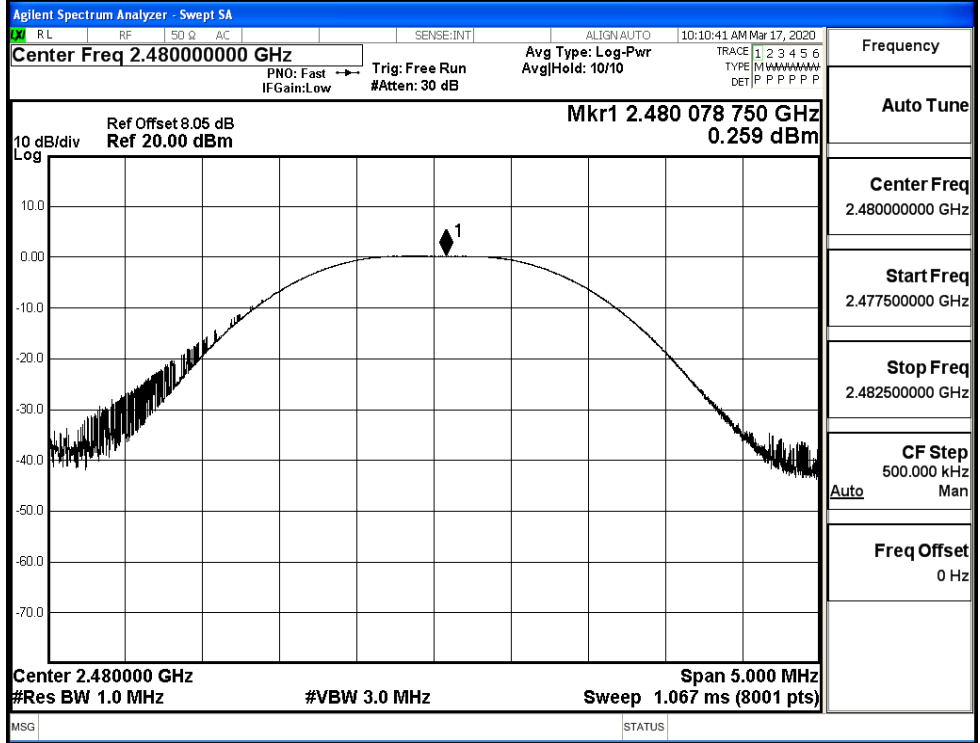


B.2 Maximum Conducted Peak Output Power

Mode	Channel	Conduct Peak Power[dBm]	Limit [dBm]	Verdict
BT LE	LCH	0.357	30	PASS
BT LE	MCH	1.838	30	PASS
BT LE	HCH	0.259	30	PASS



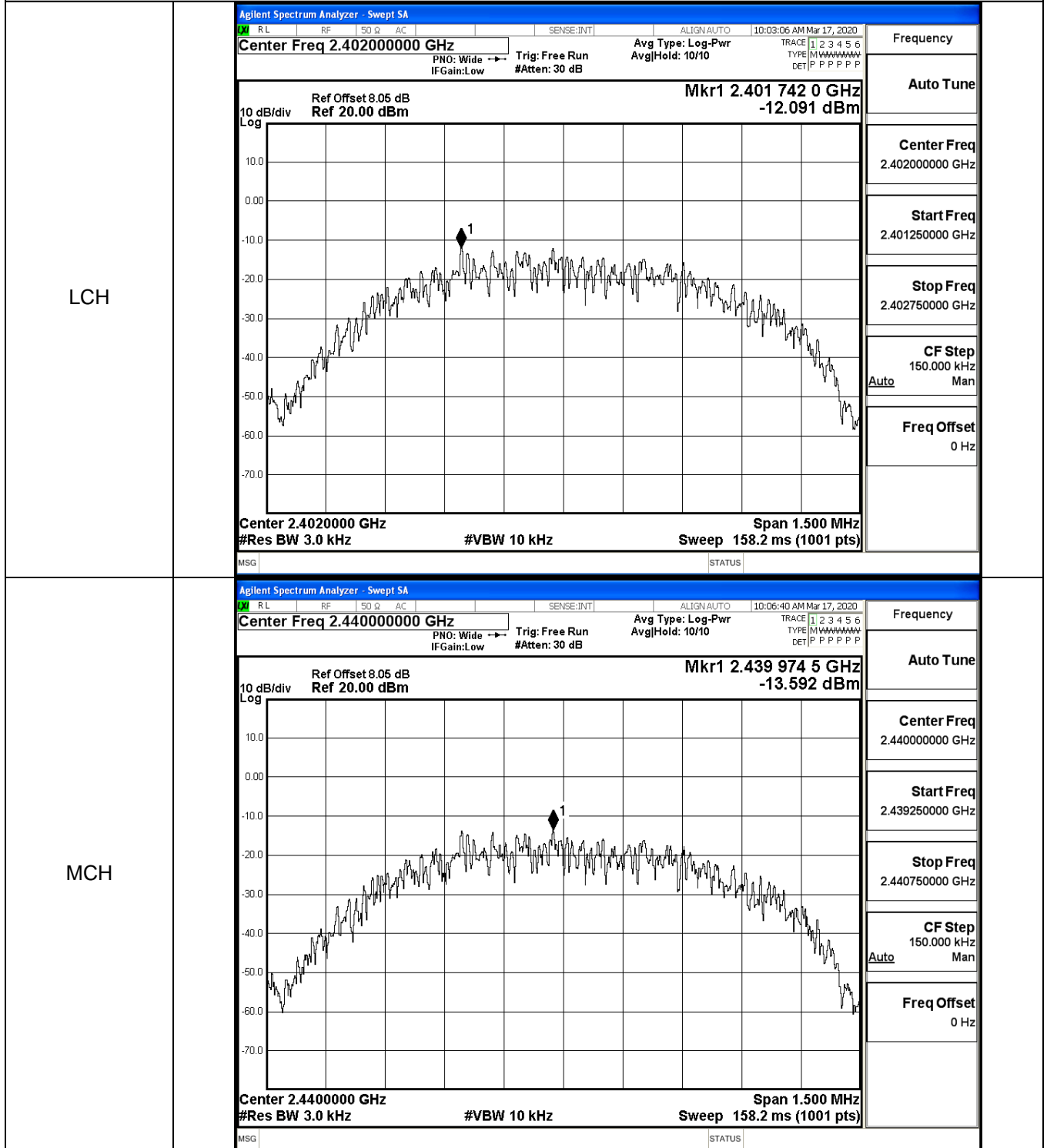
HCH



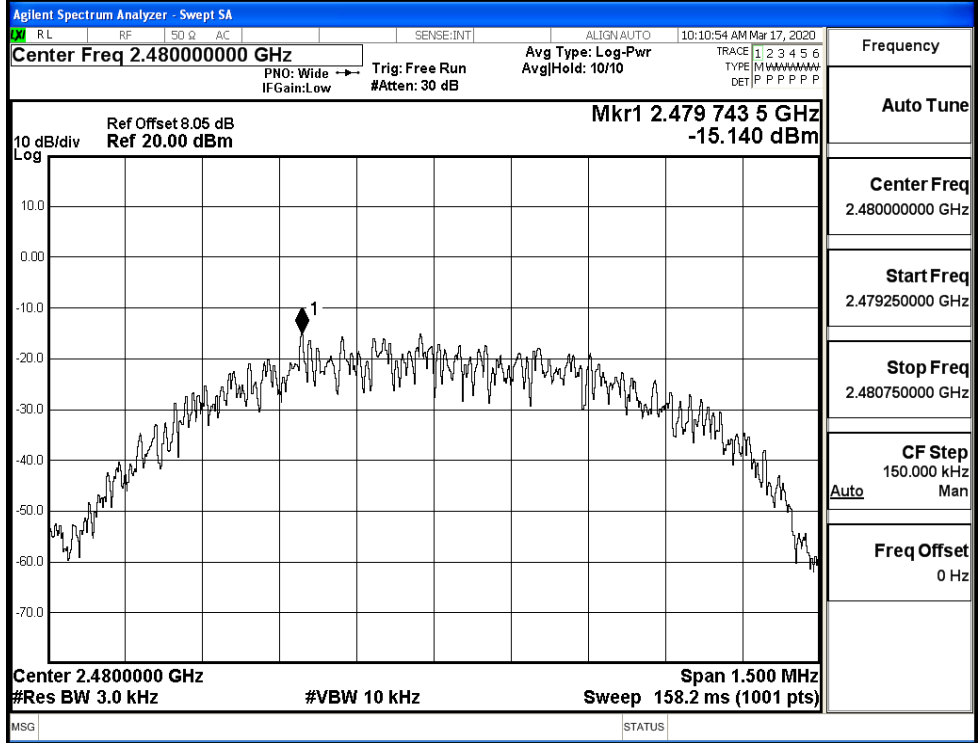
B.3 Maximum Power Spectral Density

Mode	Channel	PSD [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
BT LE	LCH	-12.091	8	PASS
BT LE	MCH	-13.592	8	PASS
BT LE	HCH	-15.140	8	PASS

Test Graphs



HCH



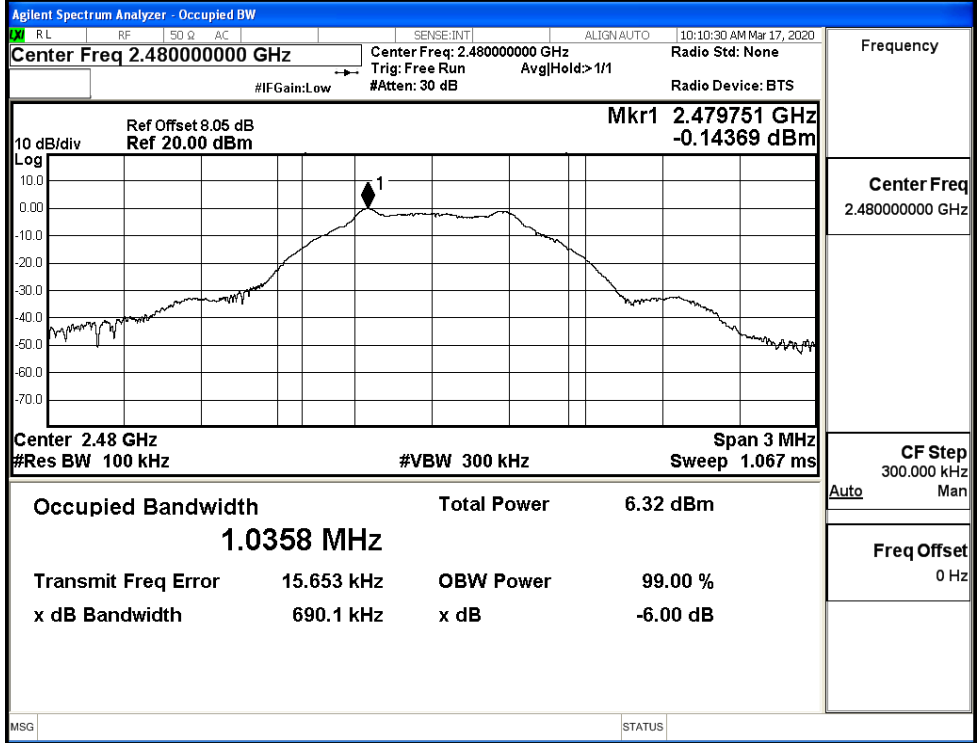
B.4 6dB Bandwidth

Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
BT LE	LCH	0.6856	≥0.5	PASS
BT LE	MCH	0.6885	≥0.5	PASS
BT LE	HCH	0.6901	≥0.5	PASS

Test Graphs

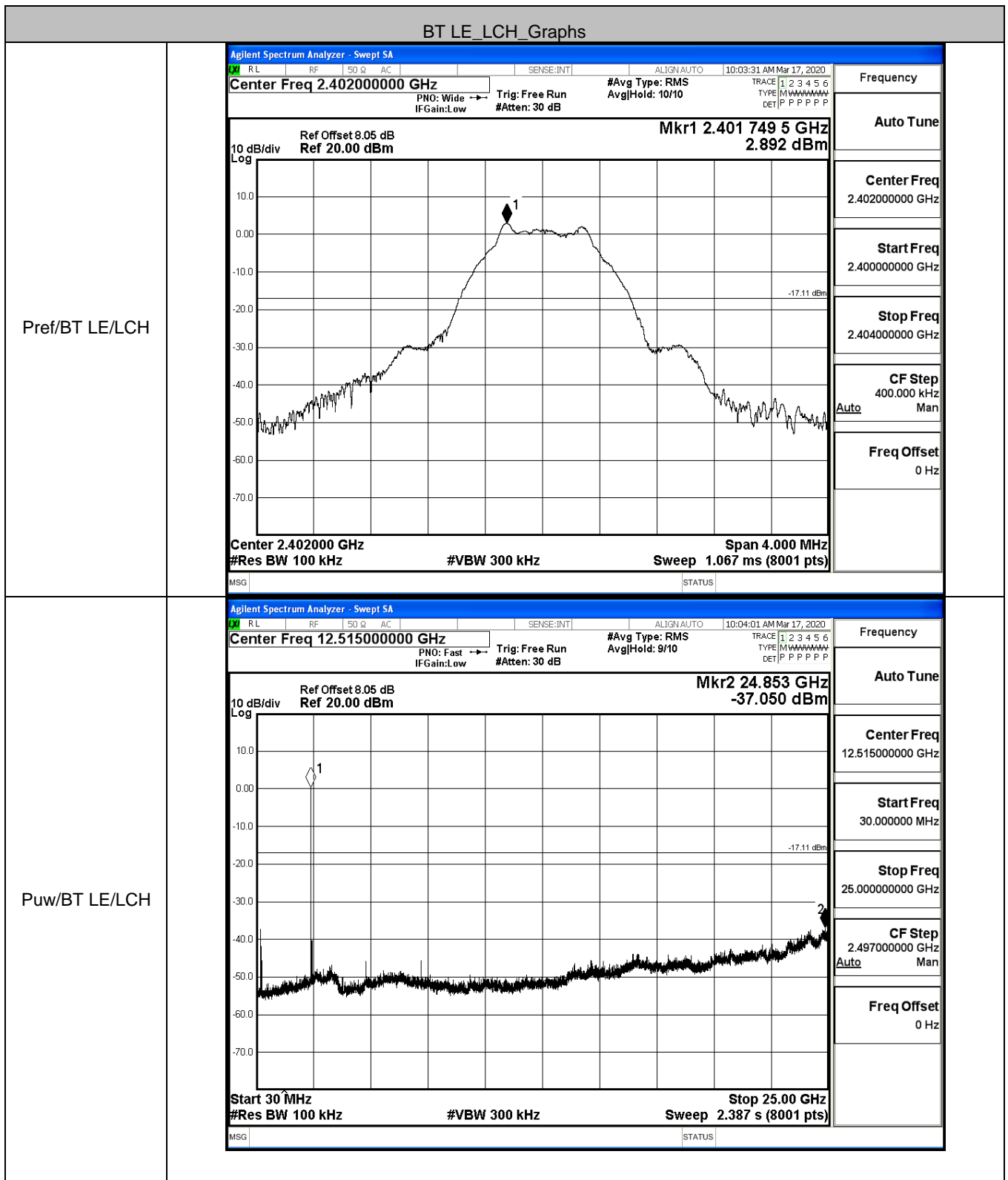
LCH	<p>Agilent Spectrum Analyzer - Occupied BW Center Freq 2.40200000 GHz Mkr1 2.4017495 GHz 2.8851 dBm Occupied Bandwidth 1.0338 MHz Total Power 9.34 dBm Transmit Freq Error 14.631 kHz x dB Bandwidth 685.6 kHz</p>	Frequency Center Freq 2.40200000 GHz CF Step 300.000 kHz Freq Offset 0 Hz
	<p>MSG STATUS</p>	<p>Auto Man</p>
MCH	<p>Agilent Spectrum Analyzer - Occupied BW Center Freq 2.44000000 GHz Mkr1 2.4397491 GHz 1.4249 dBm Occupied Bandwidth 1.0344 MHz Total Power 7.81 dBm Transmit Freq Error 14.677 kHz x dB Bandwidth 688.5 kHz</p>	Frequency Center Freq 2.44000000 GHz CF Step 300.000 kHz Freq Offset 0 Hz
	<p>MSG STATUS</p>	<p>Auto Man</p>

HCH



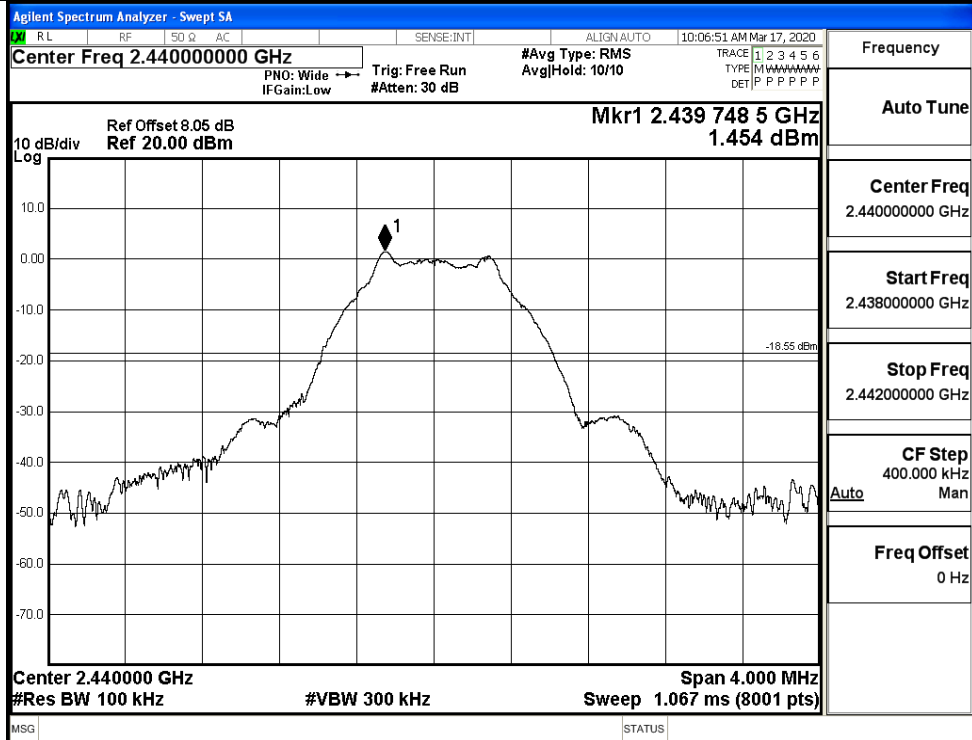
B.5 RF Conducted Spurious Emissions

Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	2.892	-37.050	-17.108	PASS
BT LE	MCH	1.454	-36.964	-18.546	PASS
BT LE	HCH	-0.166	-37.168	-20.166	PASS

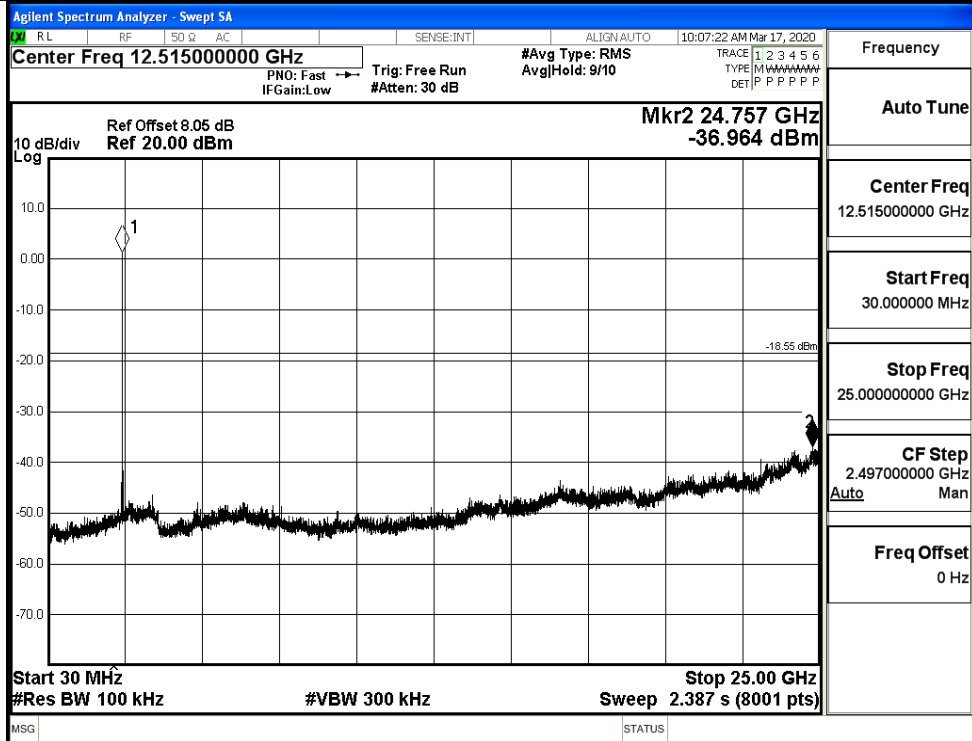


BT LE_MCH_Graphs

Pref/BT LE/MCH

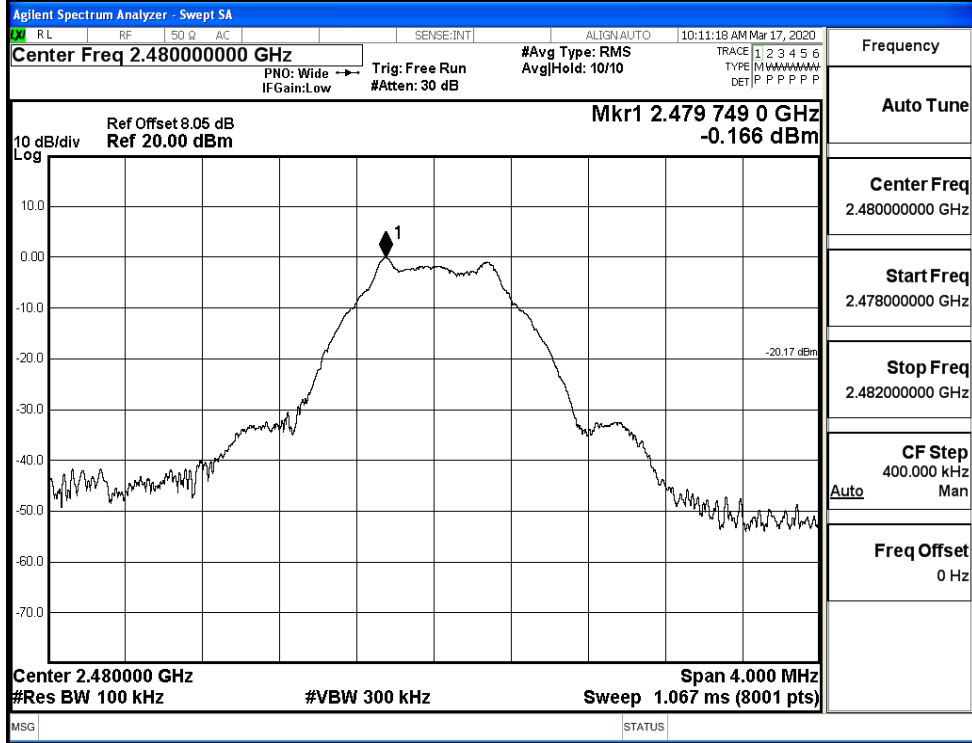


Puw/BT LE/MCH

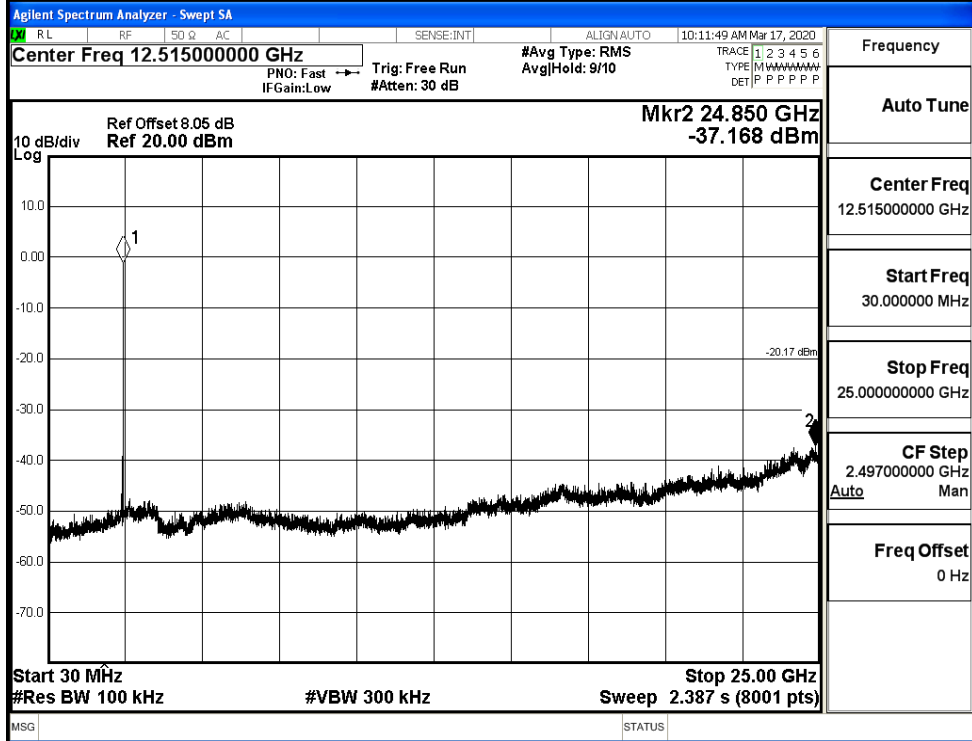


BT LE_HCH_Graphs

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	2.849	-49.257	-17.15	PASS
BT LE	HCH	-0.125	-48.380	-20.13	PASS

Test Graphs

LCH

Agilent Spectrum Analyzer - Swept SA
 Center Freq 2.35700000 GHz
 Ref Offset 8.05 dB, Ref 20.00 dBm
 Mkr4 2.383 191 GHz -49.257 dBm
 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		2.401 756 GHz	2.849 dBm			
2	N	f		2.400 000 GHz	-47.632 dBm			
3	N	f		2.390 000 GHz	-52.864 dBm			
4	N	f		2.383 191 GHz	-49.257 dBm			

Frequency

Auto Tune

Center Freq
2.357000000 GHz

Start Freq
2.310000000 GHz

Stop Freq
2.404000000 GHz

CF Step
9.400000 MHz

Freq Offset
0 Hz

HCH

Agilent Spectrum Analyzer - Swept SA
 Center Freq 2.48900000 GHz
 Ref Offset 8.05 dB, Ref 20.00 dBm
 Mkr4 2.491 794 00 GHz -48.380 dBm
 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		2.479 754 50 GHz	-0.125 dBm			
2	N	f		2.483 500 00 GHz	-52.270 dBm			
3	N	f		2.500 000 00 GHz	-51.332 dBm			
4	N	f		2.491 794 00 GHz	-48.380 dBm			

Frequency

Auto Tune

Center Freq
2.489000000 GHz

Start Freq
2.478000000 GHz

Stop Freq
2.500000000 GHz

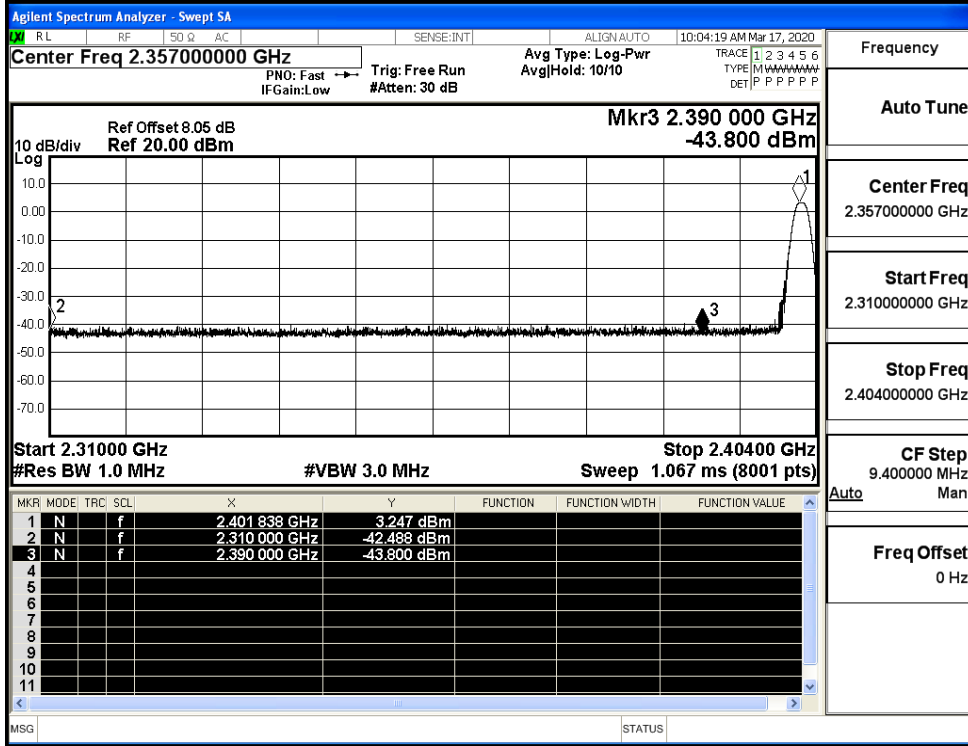
CF Step
2.200000 MHz

Freq Offset
0 Hz

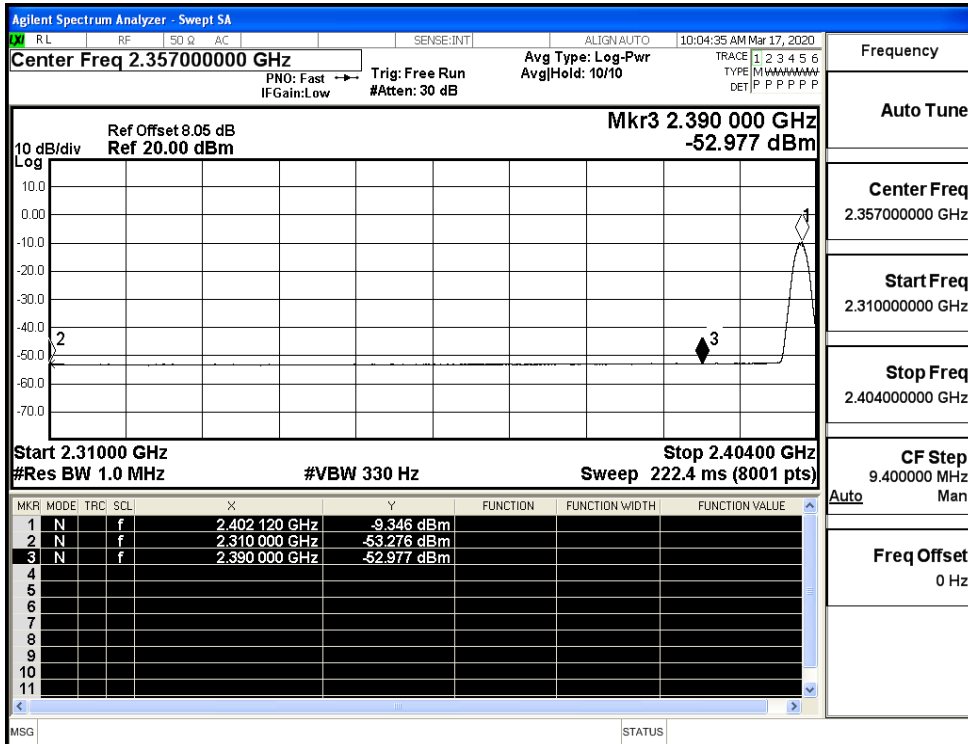
B.7 Restrict-band band-edge measurements

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	-42.49	2.0	0	54.74	PEAK	74	PASS
		Ant1	2310.0	-53.28	2.0	0	43.95	AV	54	PASS
		Ant1	2390.0	-43.80	2.0	0	53.43	PEAK	74	PASS
		Ant1	2390.0	-52.98	2.0	0	44.25	AV	54	PASS
	2480	Ant1	2483.5	-41.72	2.0	0	55.51	PEAK	74	PASS
		Ant1	2483.5	-52.32	2.0	0	44.91	AV	54	PASS
		Ant1	2500.0	-42.51	2.0	0	54.72	PEAK	74	PASS
		Ant1	2500.0	-52.27	2.0	0	44.96	AV	54	PASS

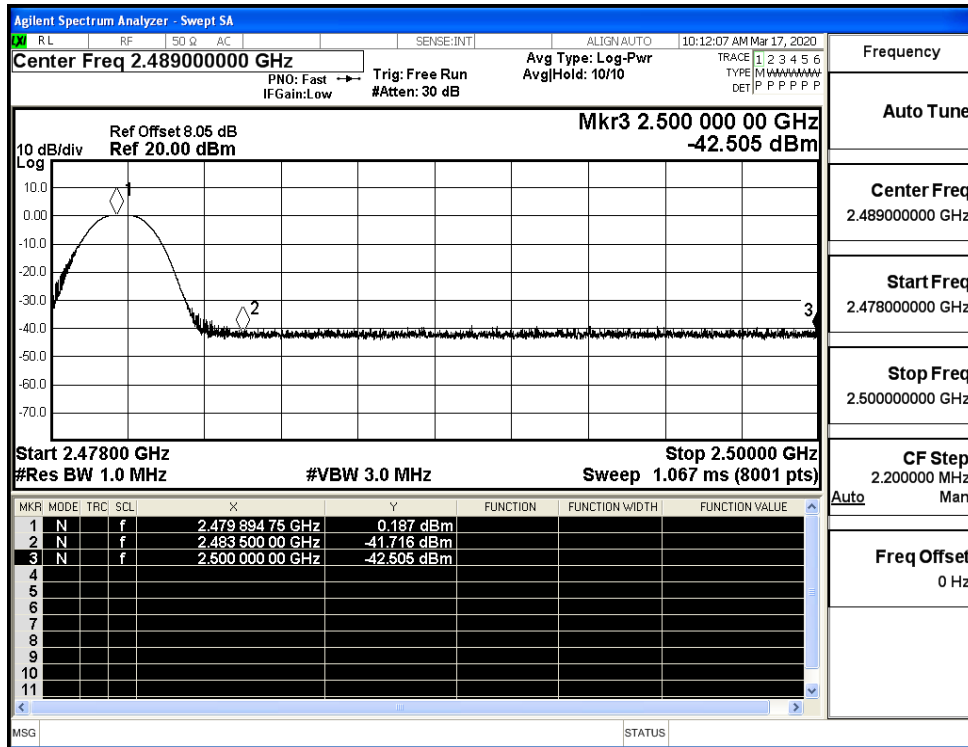
Restrict-band band-edge measurements_BT LE_2402_Ant1_PEAK



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

