

Appendix B

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

Product Name: Infrared Forehead Thermometer

Trade Mark: N/A

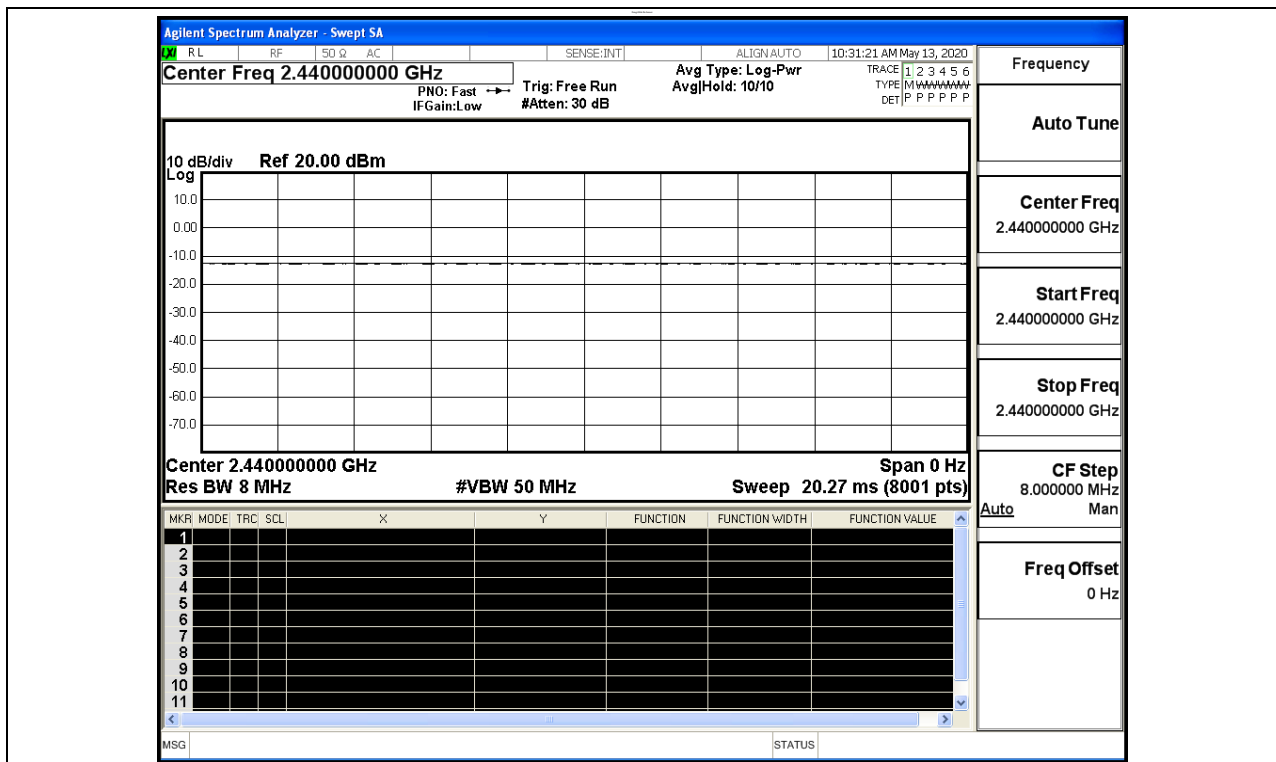
Test Model: TG8818H

Environmental Conditions

Temperature:	23.9°C
Relative Humidity:	52.1%
ATM Pressure:	100.0 kPa
Test Engineer:	David.Luo
Supervised by:	Li Huan

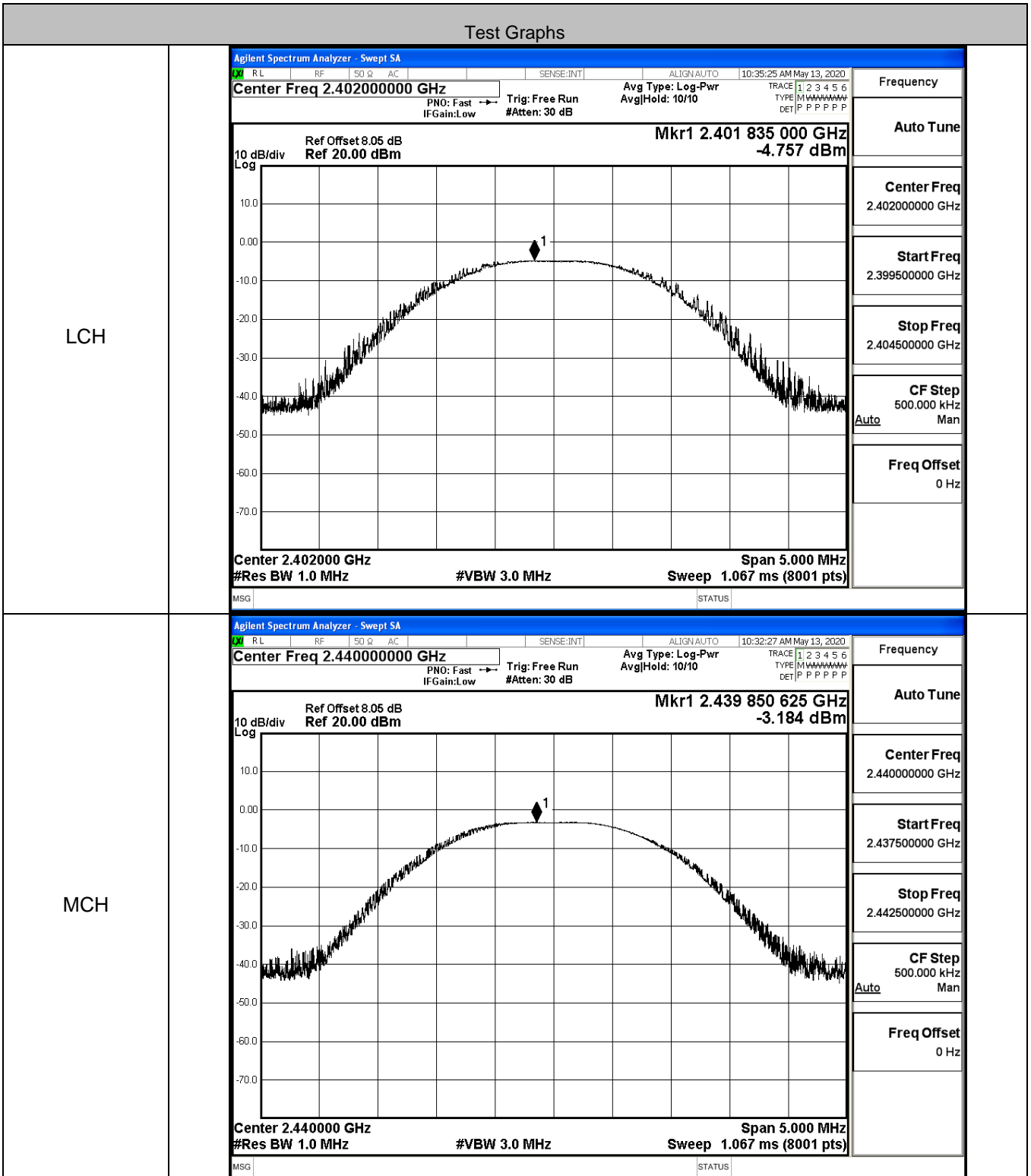
B.1 Duty Cycle

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

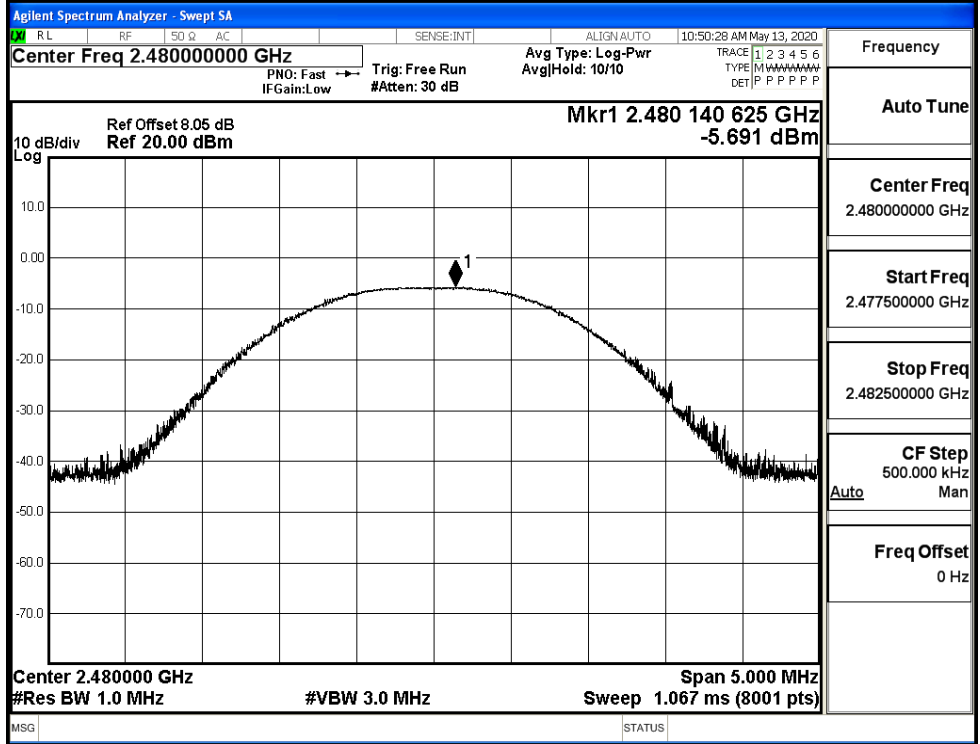


B.2 Maximum Conducted Peak Output Power

Mode	Channel	Conduct Peak Power[dBm]	Limit [dBm]	Verdict
BT LE	LCH	-4.757	30	PASS
BT LE	MCH	-3.184	30	PASS
BT LE	HCH	-5.691	30	PASS

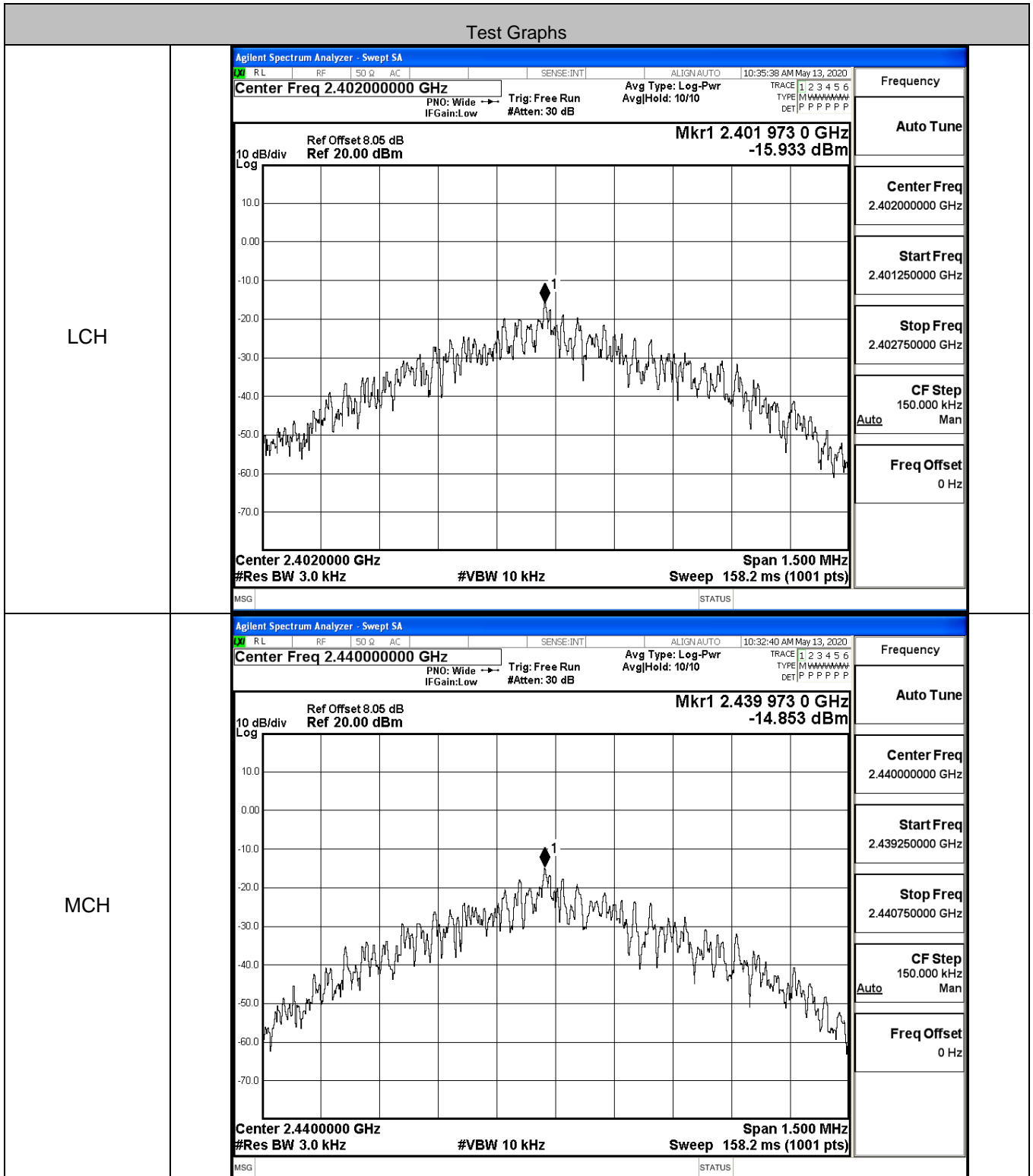


HCH

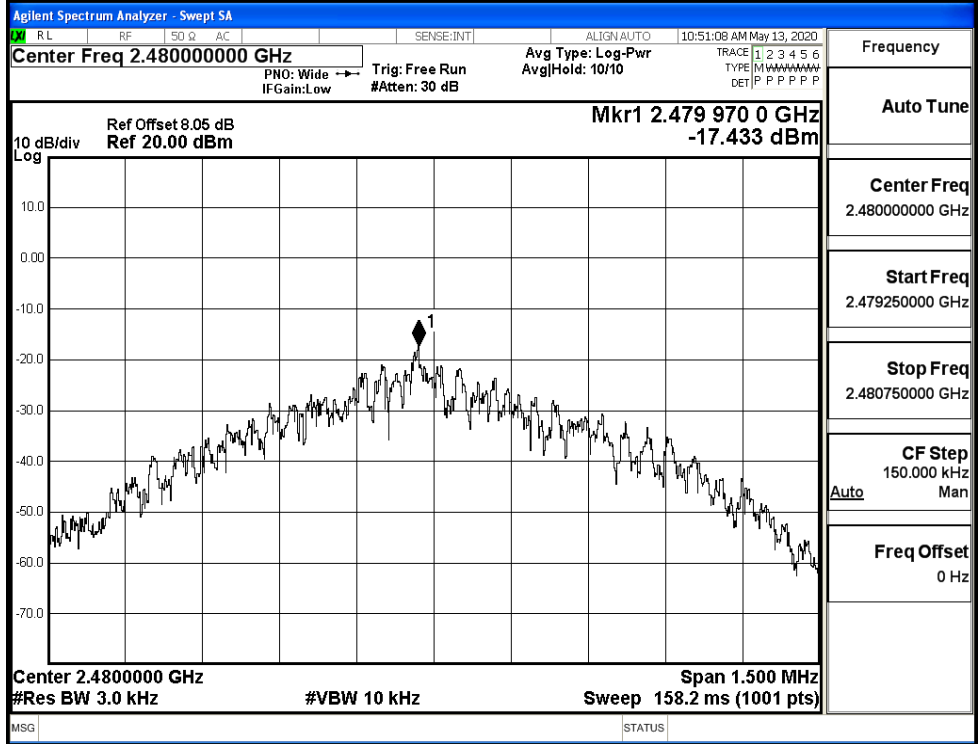


B.3 Maximum Power Spectral Density

Mode	Channel	PSD [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
BT LE	LCH	-15.933	8	PASS
BT LE	MCH	-14.853	8	PASS
BT LE	HCH	-17.433	8	PASS



HCH



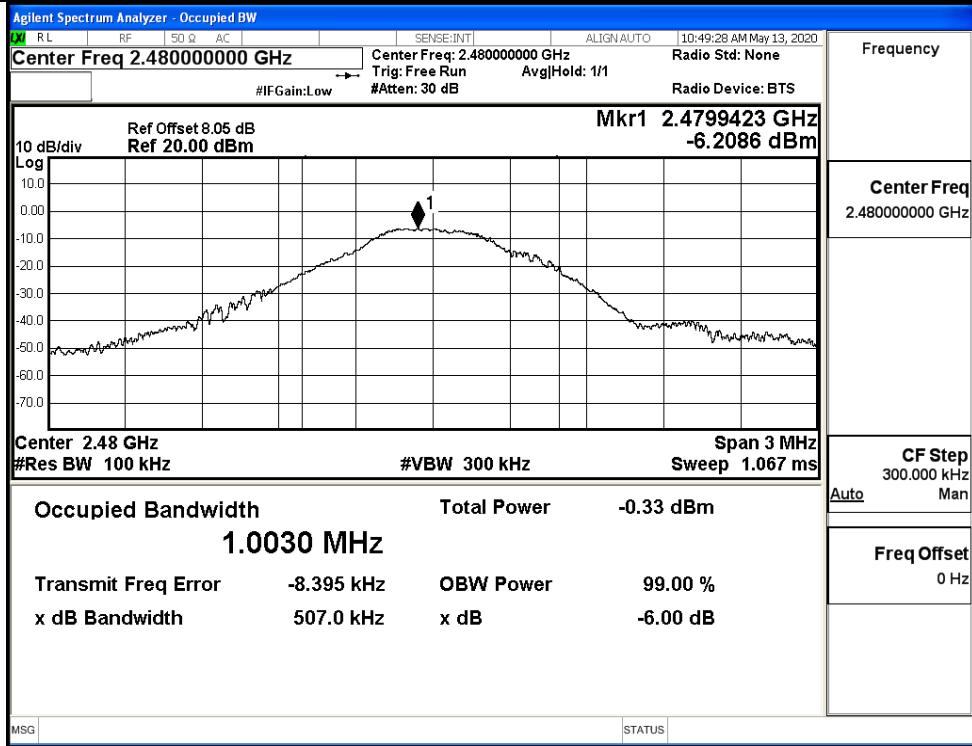
B.4 6dB Bandwidth

Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
BT LE	LCH	0.5554	≥0.5	PASS
BT LE	MCH	0.5043	≥0.5	PASS
BT LE	HCH	0.5070	≥0.5	PASS

Test Graphs

LCH	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.40200000 GHz</p> <p>Center Freq: 2.40200000 GHz</p> <p>Mkr1 2.4019599 GHz</p> <p>10 dB/div</p> <p>Ref Offset 8.05 dB</p> <p>Ref 20.00 dBm</p> <p>Center 2.402 GHz</p> <p>#Res BW 100 kHz</p> <p>#VBW 300 kHz</p> <p>Span 3 MHz</p> <p>Sweep 1.067 ms</p> <p>Occupied Bandwidth 1.0033 MHz</p> <p>Total Power -1.33 dBm</p> <p>Transmit Freq Error -3.371 kHz</p> <p>x dB Bandwidth 555.4 kHz</p> <p>OBW Power 99.00 %</p> <p>x dB -6.00 dB</p>	<p>Frequency</p> <p>Center Freq 2.40200000 GHz</p> <p>CF Step 300.000 kHz</p> <p>Freq Offset 0 Hz</p>
	MCH	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.44000000 GHz</p> <p>Center Freq: 2.44000000 GHz</p> <p>Mkr1 2.4399704 GHz</p> <p>10 dB/div</p> <p>Ref Offset 8.05 dB</p> <p>Ref 20.00 dBm</p> <p>Center 2.44 GHz</p> <p>#Res BW 100 kHz</p> <p>#VBW 300 kHz</p> <p>Span 3 MHz</p> <p>Sweep 1.067 ms</p> <p>Occupied Bandwidth 1.0039 MHz</p> <p>Total Power -0.20 dBm</p> <p>Transmit Freq Error -8.052 kHz</p> <p>x dB Bandwidth 504.3 kHz</p> <p>OBW Power 99.00 %</p> <p>x dB -6.00 dB</p>

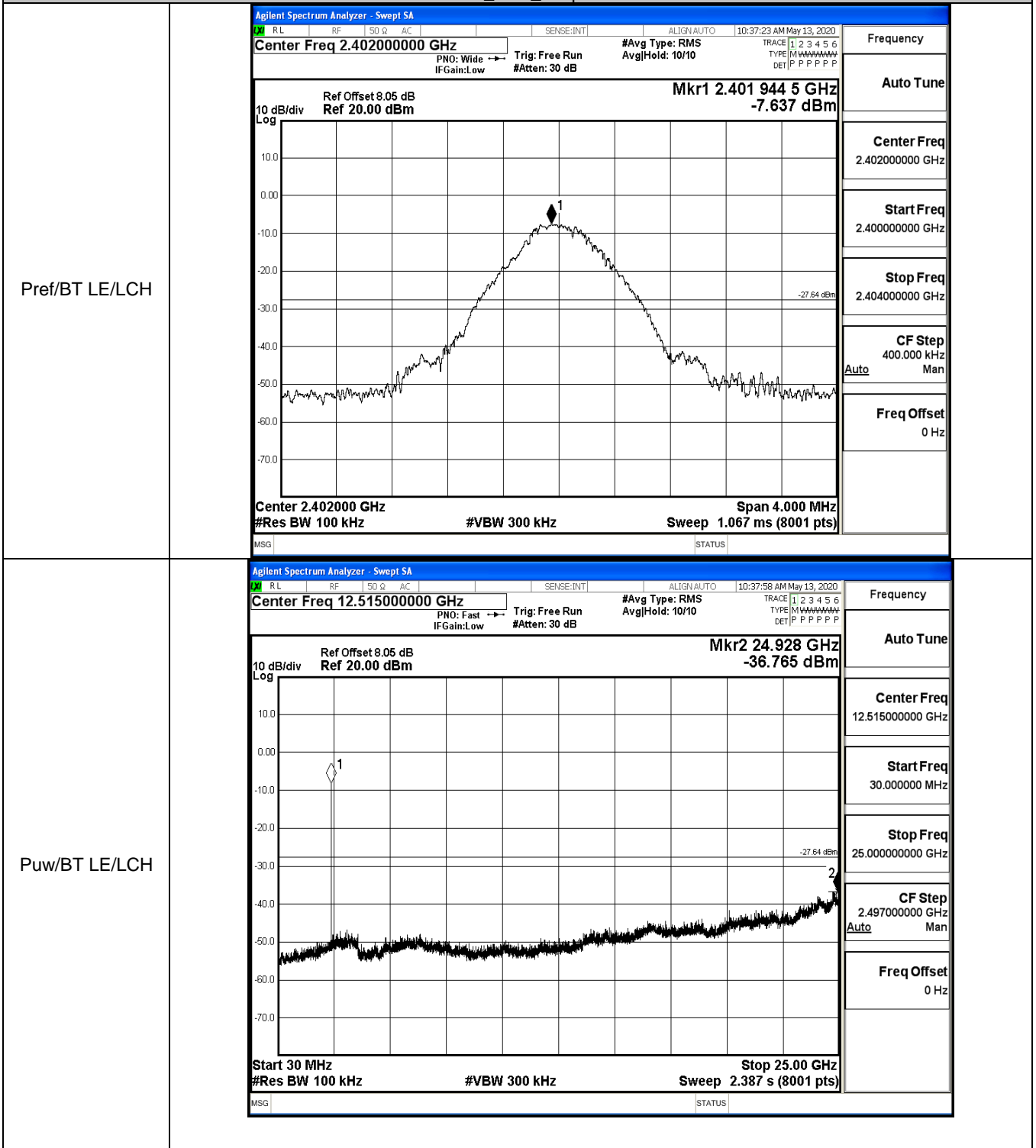
HCH



B.5 RF Conducted Spurious Emissions

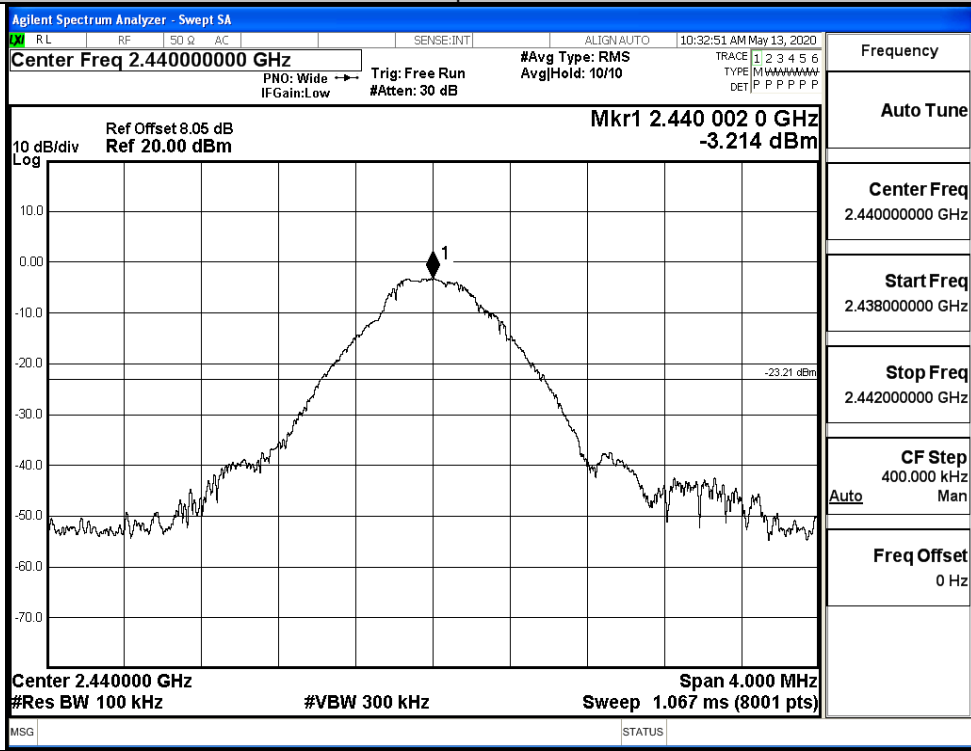
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	-7.637	-36.765	-27.637	PASS
BT LE	MCH	-3.214	-36.536	-23.214	PASS
BT LE	HCH	-6.919	-37.420	-26.919	PASS

BT LE_LCH_Graphs



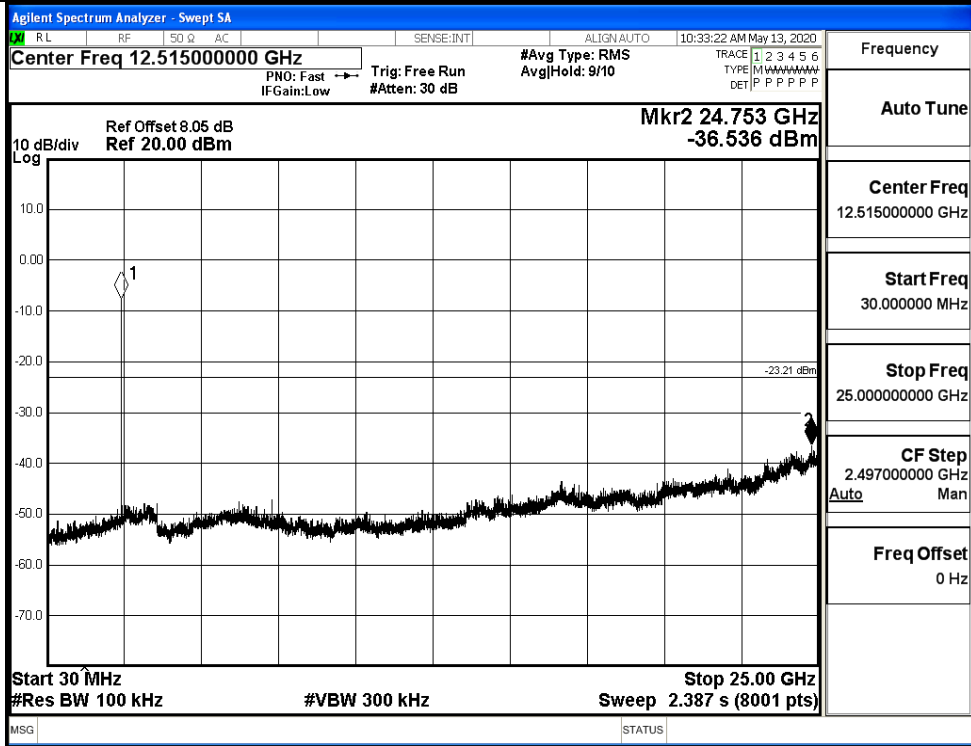
BT LE_MCH_Graphs

Pref/BT LE/MCH



Frequency	
Auto Tune	
Center Freq	2.440000000 GHz
Start Freq	2.438000000 GHz
Stop Freq	2.442000000 GHz
CF Step	400.000 kHz
Auto	Man
Freq Offset	0 Hz

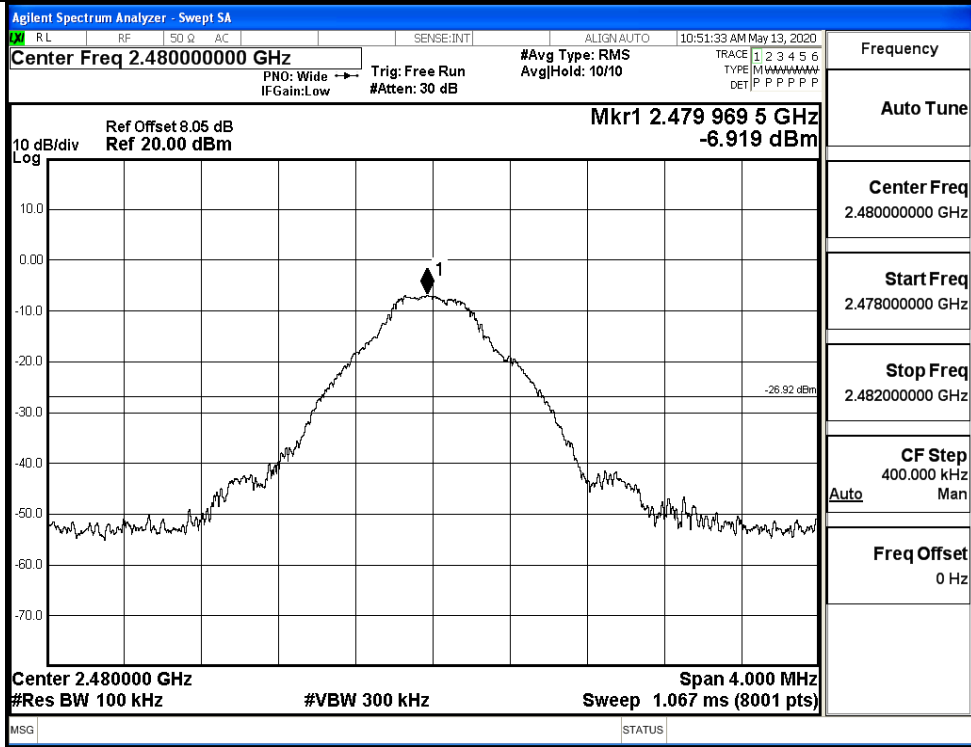
Puw/BT LE/MCH



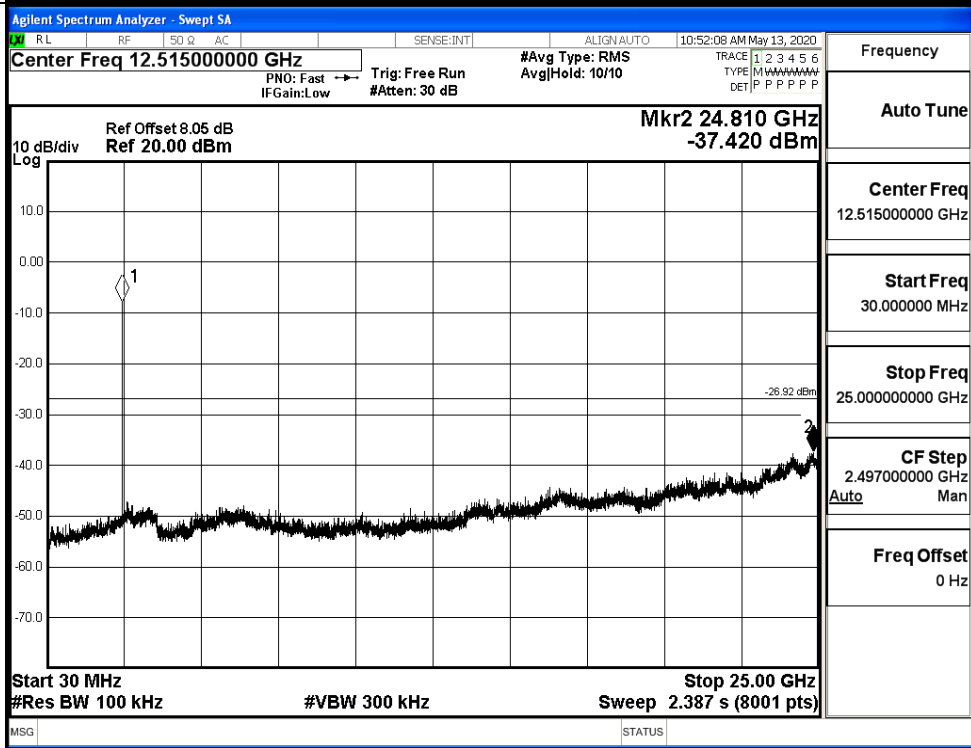
Frequency	
Auto Tune	
Center Freq	12.515000000 GHz
Start Freq	30.000000 MHz
Stop Freq	25.000000000 GHz
CF Step	2.497000000 GHz
Auto	Man
Freq Offset	0 Hz

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	-6.792	-50.345	-26.79	PASS
BT LE	HCH	-6.711	-48.601	-26.71	PASS

Test Graphs

LCH

MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	f		2.402 003 GHz	-6.792 dBm			
2	N	f		2.400 000 GHz	-52.392 dBm			
3	N	f		2.390 000 GHz	-53.212 dBm			
4	N	f		2.324 018 GHz	-50.345 dBm			

Frequency

Auto Tune

Center Freq
2.35700000 GHz

Start Freq
2.31000000 GHz

Stop Freq
2.40400000 GHz

CF Step
9.400000 MHz

Freq Offset
0 Hz

HCH

MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	f		2.479 966 25 GHz	-6.711 dBm			
2	N	f		2.483 500 00 GHz	-51.700 dBm			
3	N	f		2.500 000 00 GHz	-52.169 dBm			
4	N	f		2.496 744 00 GHz	-48.601 dBm			

Frequency

Auto Tune

Center Freq
2.48900000 GHz

Start Freq
2.47800000 GHz

Stop Freq
2.50000000 GHz

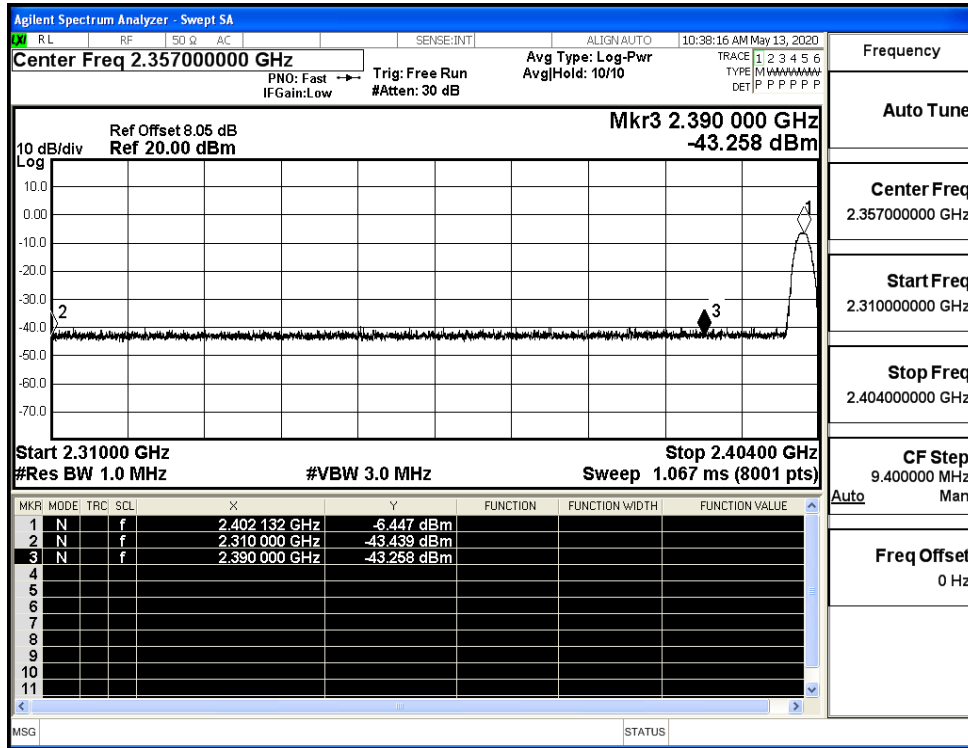
CF Step
2.200000 MHz

Freq Offset
0 Hz

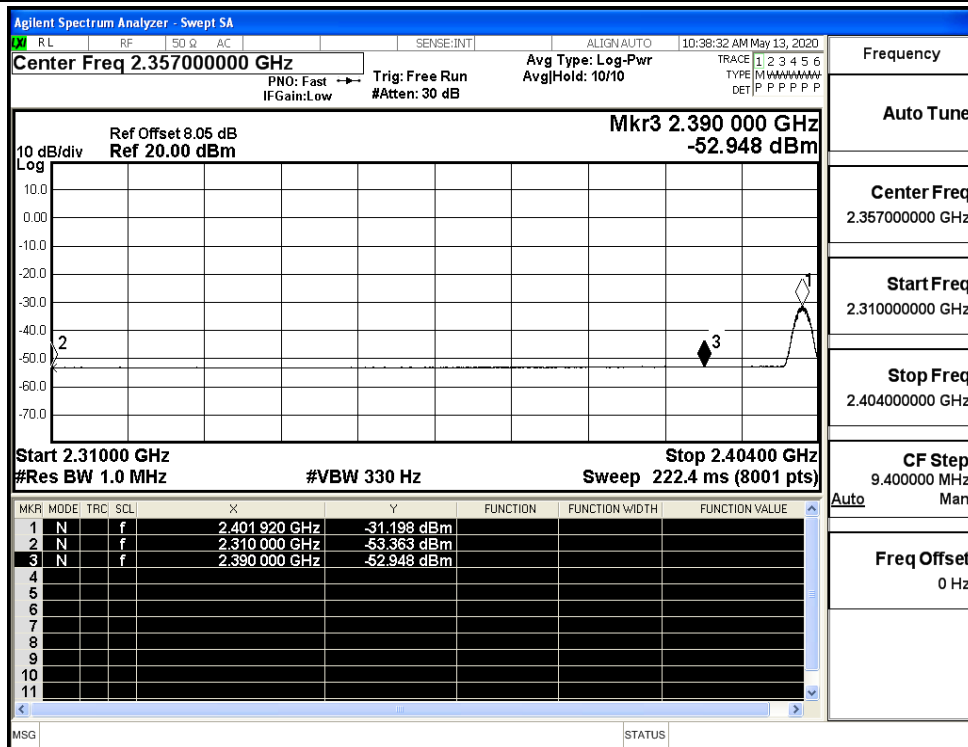
B.7 Restrict-band band-edge measurements

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	-43.44	2.0	0	53.79	PEAK	74	PASS
		Ant1	2310.0	-53.36	2.0	0	43.87	AV	54	PASS
		Ant1	2390.0	-43.26	2.0	0	53.97	PEAK	74	PASS
		Ant1	2390.0	-52.95	2.0	0	44.28	AV	54	PASS
	2480	Ant1	2483.5	-42.95	2.0	0	54.28	PEAK	74	PASS
		Ant1	2483.5	-52.41	2.0	0	44.82	AV	54	PASS
		Ant1	2500.0	-42.56	2.0	0	54.67	PEAK	74	PASS
		Ant1	2500.0	-52.29	2.0	0	44.94	AV	54	PASS

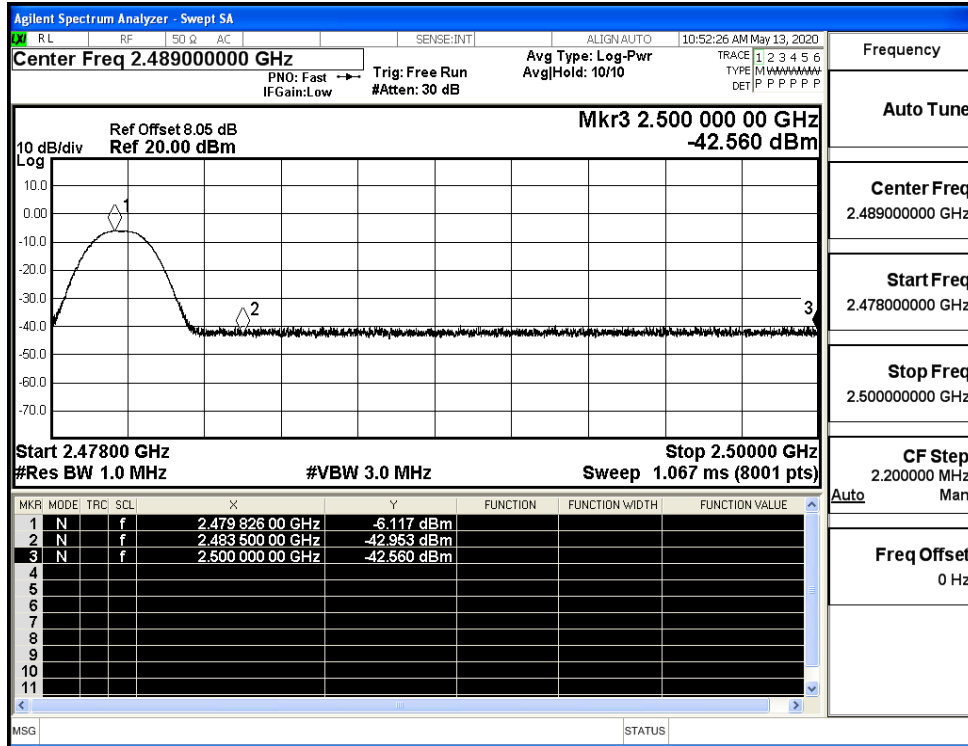
Restrict-band band-edge measurements_BT LE_2402_Ant1_PEAK



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

