

APPENDIX REPORT

Project No.	SHT2010067301EW	Radio Specification	Bluetooth BLE
Test sample No.	YPHT20100673010	Model No.	JZLD01
Start test date	2020-12-14	Finish date	2020-12-14
Temperature	24.4°C	Humidity	55%
Test Engineer	Qizhi Zhang	Auditor	Xiaodong Zhu

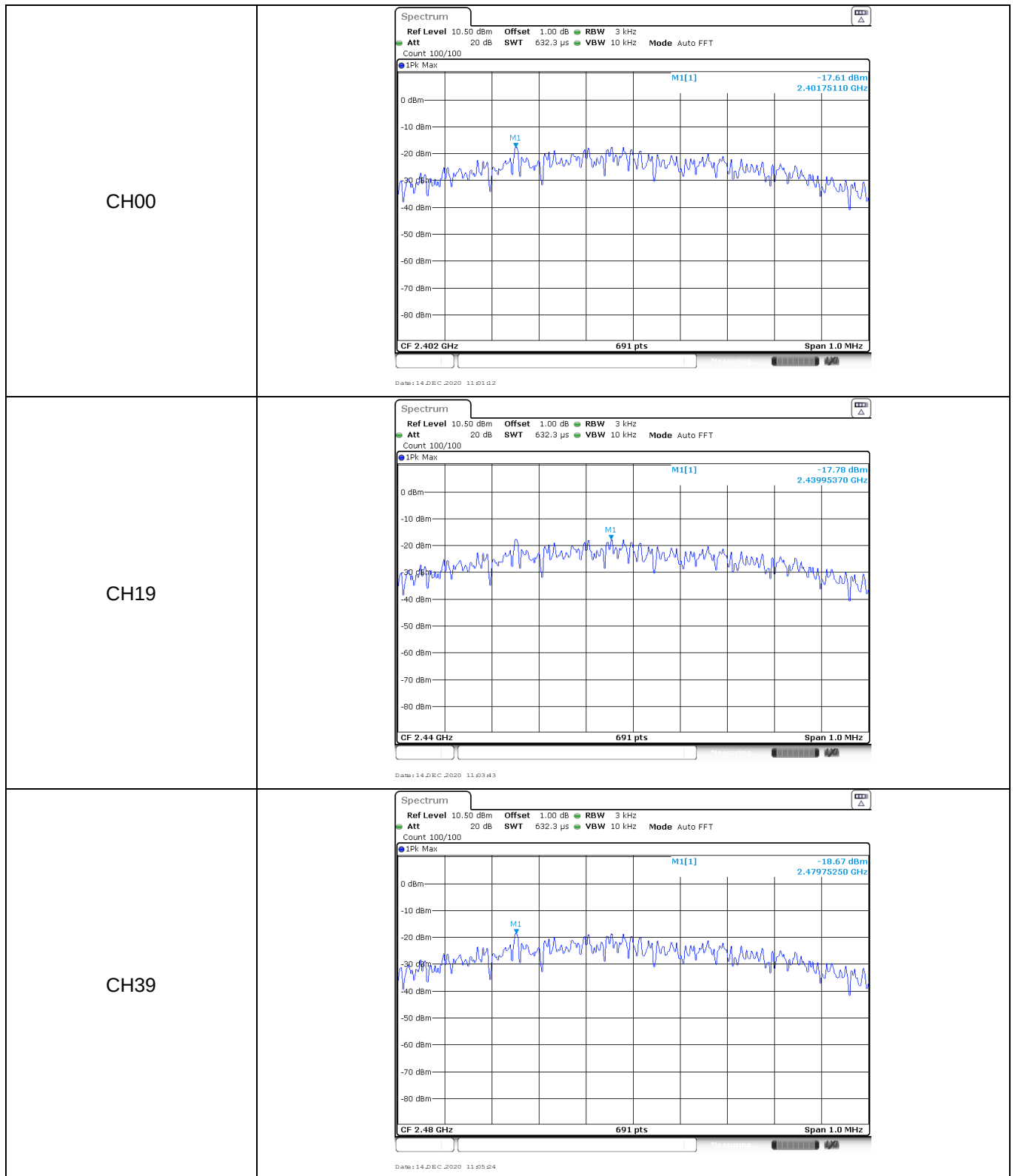
Appendix clause	Test item	Result
A	Peak Output Power	PASS
B	Power Spectral Density	PASS
C	6 dB Bandwidth	PASS
D	99% Occupied Bandwidth	PASS
E	Duty cycle	PASS
F	Band edge and Spurious Emissions (conducted)	PASS

Appendix A: Peak Output Power

Type	Channel	Output power (dBm)	Average Output power (dBm)	Limit (dBm)	Result
BT-BLE	00	-4.24	-4.26	≤ 30.00	Pass
	19	-3.54	-3.55		
	39	-3.36	-3.38		

Appendix B: Power Spectral Density

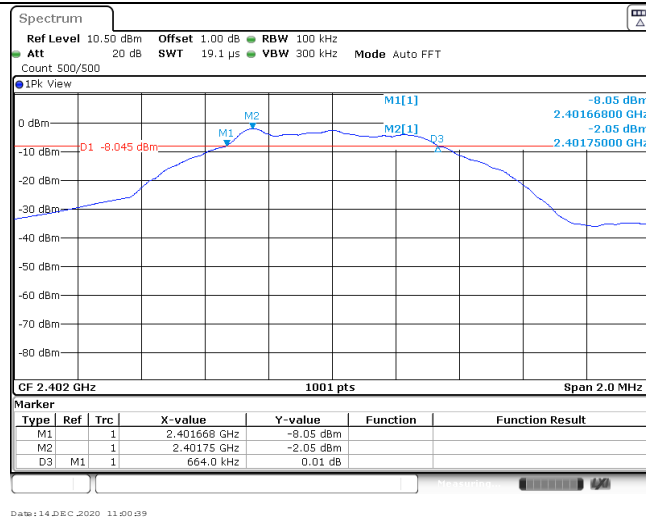
Type	Channel	Power Spectral Density(dBm/3KHz)	Limit (dBm/3KHz)	Result
BT-BLE	00	-17.61	≤8.00	Pass
	19	-17.78		
	39	-18.67		



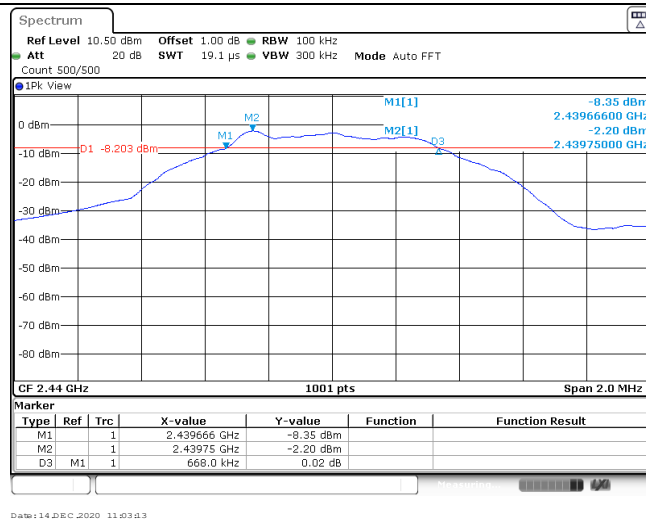
Appendix C: 6dB bandwidth

Type	Channel	6dB Bandwidth(kHz)	Limit (kHz)	Result
BT-BLE	00	664.00	≥500	Pass
	19	668.00		
	39	664.00		

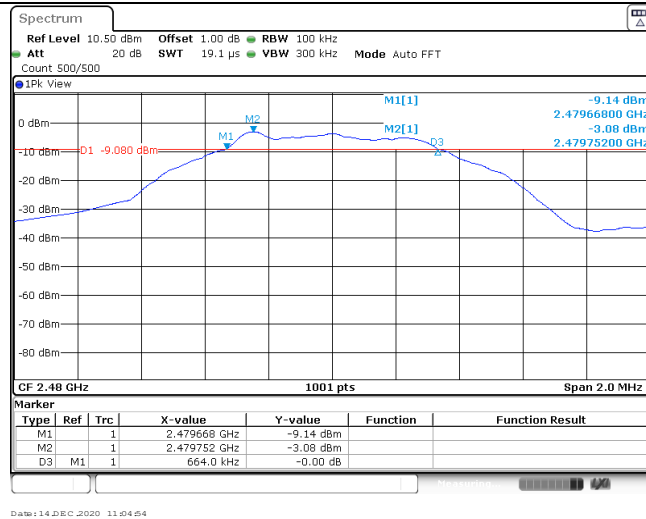
CH00



CH19

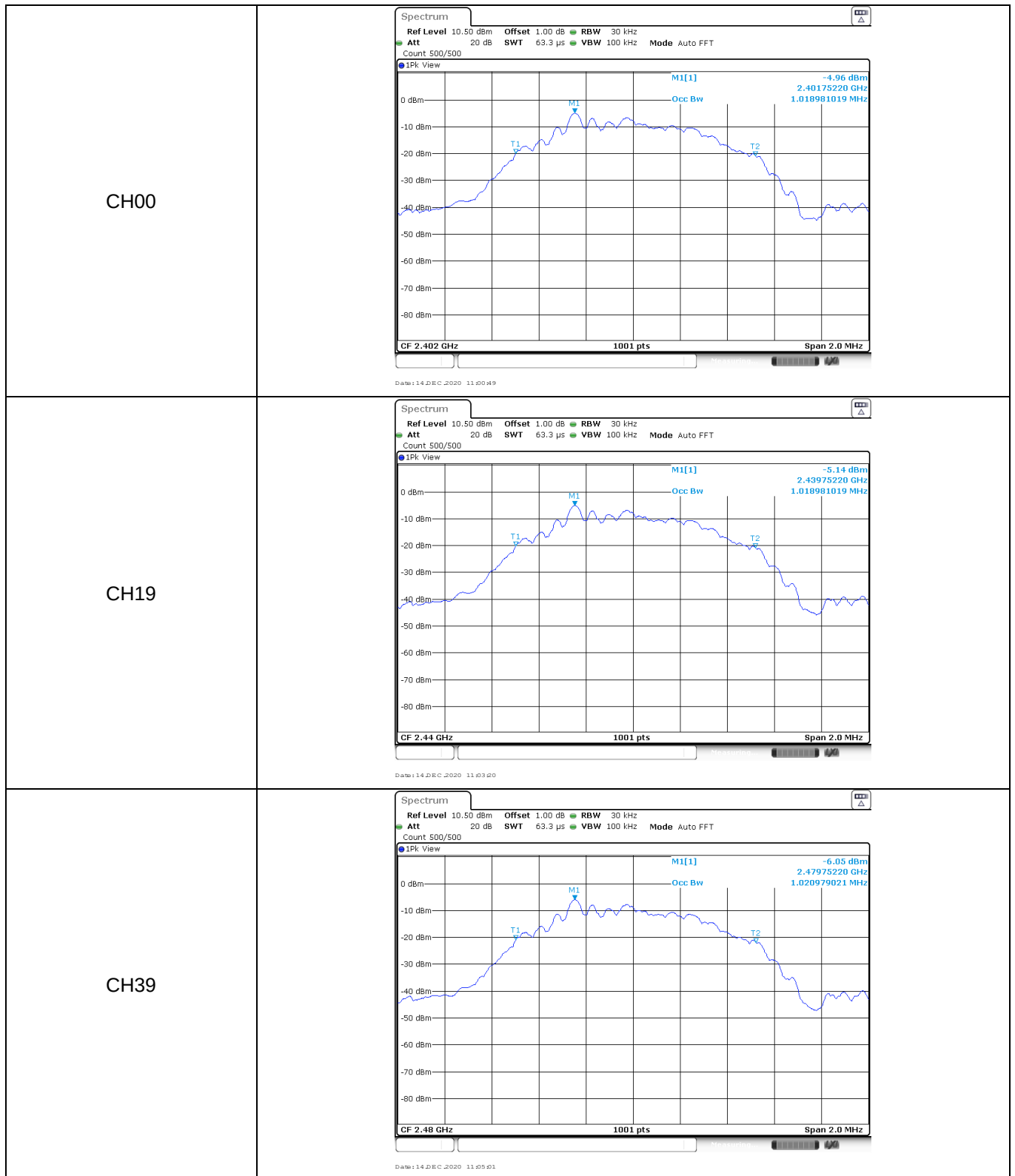


CH39



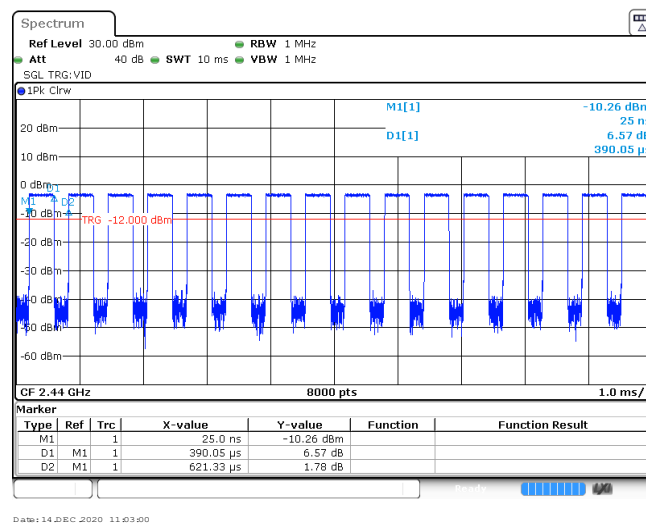
Appendix D: 99% Occupied Bandwidth

Type	Channel	99% Occupied Bandwidth(MHz)	Limit (kHz)	Result
BT-BLE	00	1.02	-	Pass
	19	1.02		
	39	1.02		



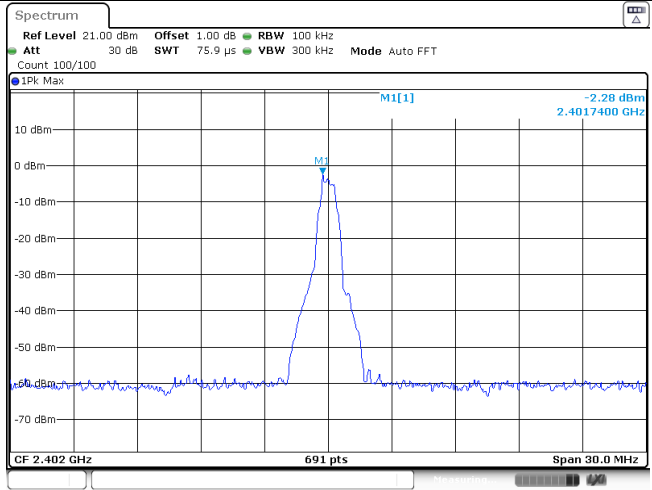
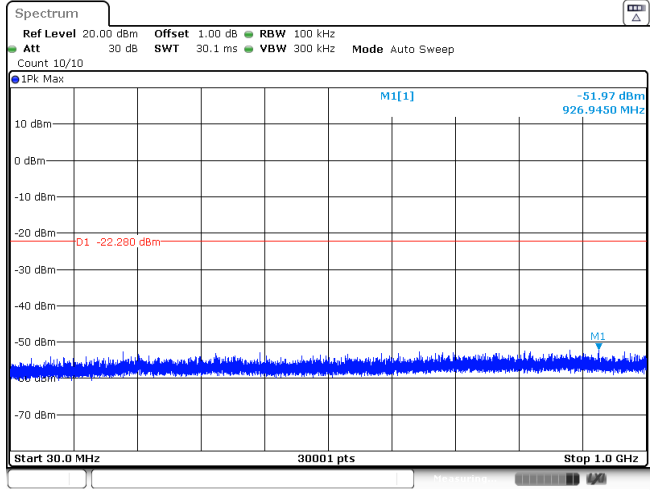
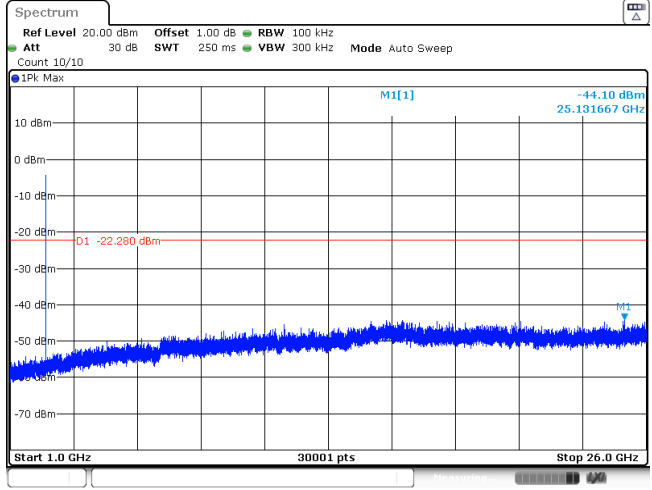
Appendix E: Duty cycle

Test Frequency (MHz)	T _{on} time for single burst (ms)	T _{period} (ms)	Duty cycle	1/T _{on} time (kHz)
2440	0.39	0.62	62.9%	2.6

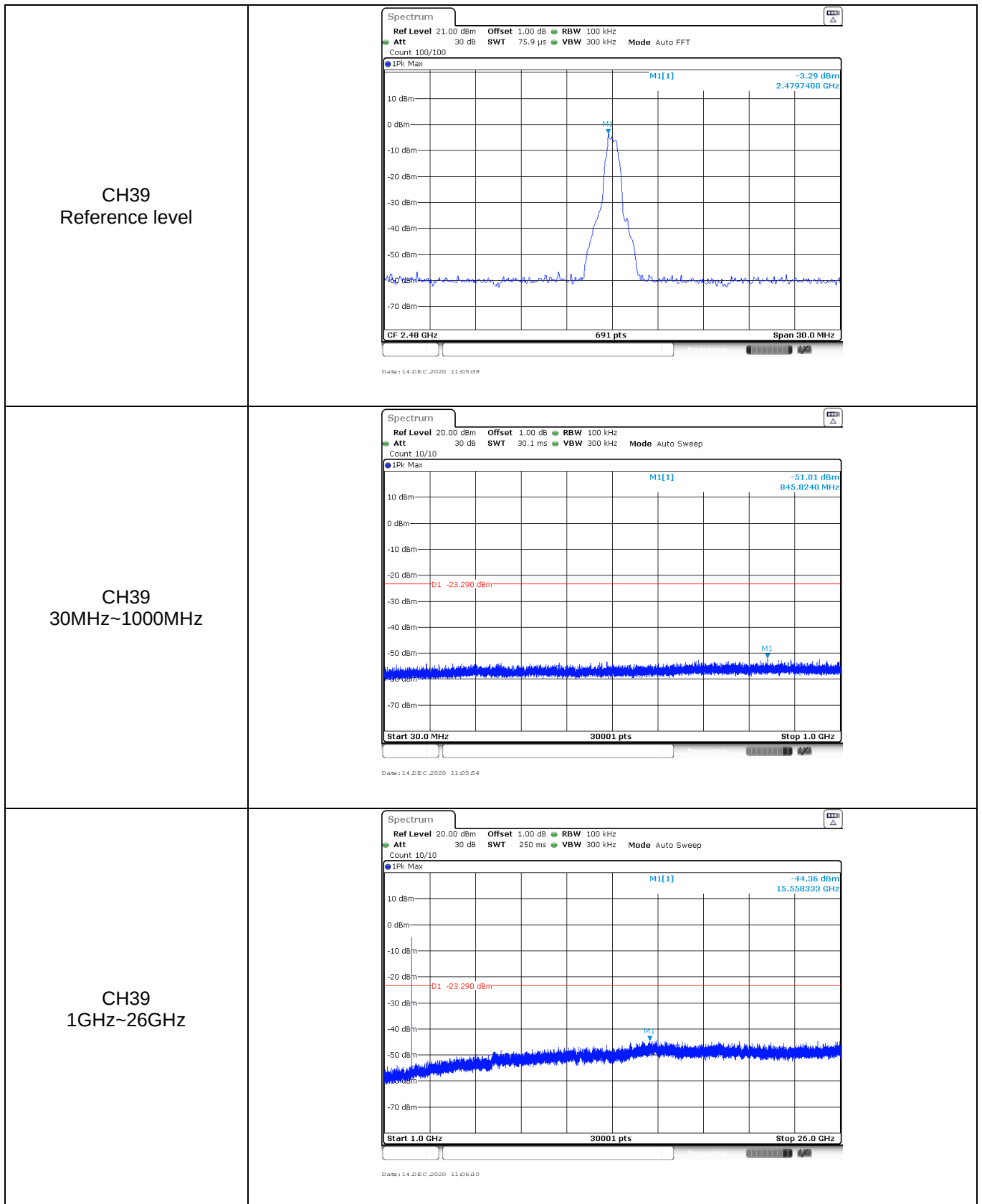


Appendix F: Band edge and Spurious Emissions (conducted)

Test Item:	Band edge																																										
CH00	Spectrum Ref Level 10.50 dBm Att 20 dB Count 300/300 Offset 1.00 dB SWT 1.1 ms Mode Auto Sweep RBW 100 kHz VBW 300 kHz 1Pk Max 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm -80 dBm M1[1] M2[1] D1 -22.310 dBm M3 M4 -2.31 dBm 2.401770 GHz -61.40 dBm 2.400000 GHz Start 2.31 GHz 691 pts Stop 2.405 GHz Marker <table><thead><tr><th>Type</th><th>Ref</th><th>Trc</th><th>X-value</th><th>Y-value</th><th>Function</th><th>Function Result</th></tr></thead><tbody><tr><td>M1</td><td>1</td><td></td><td>2.40177 GHz</td><td>-2.31 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>2.4 GHz</td><td>-61.40 dBm</td><td></td><td></td></tr><tr><td>M3</td><td>1</td><td></td><td>2.39 GHz</td><td>-66.26 dBm</td><td></td><td></td></tr><tr><td>M4</td><td>1</td><td></td><td>2.31 GHz</td><td>-65.53 dBm</td><td></td><td></td></tr><tr><td>M5</td><td>1</td><td></td><td>2.399906 GHz</td><td>-60.26 dBm</td><td></td><td></td></tr></tbody></table> Date: 14 DEC 2020 11:01:22	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1		2.40177 GHz	-2.31 dBm			M2	1		2.4 GHz	-61.40 dBm			M3	1		2.39 GHz	-66.26 dBm			M4	1		2.31 GHz	-65.53 dBm			M5	1		2.399906 GHz	-60.26 dBm		
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CH39	Spectrum Ref Level 10.50 dBm Att 20 dB Count 100/100 Offset 1.00 dB SWT 56.9 μs Mode Auto FFT RBW 100 kHz VBW 300 kHz 1Pk Max 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm -80 dBm M1 M2[1] D1 -23.120 dBm M3 -3.12 dBm 2.4797350 GHz -65.92 dBm 2.4835000 GHz Start 2.478 GHz 691 pts Stop 2.5 GHz Marker <table><thead><tr><th>Type</th><th>Ref</th><th>Trc</th><th>X-value</th><th>Y-value</th><th>Function</th><th>Function Result</th></tr></thead><tbody><tr><td>M1</td><td>1</td><td></td><td>2.479735 GHz</td><td>-3.12 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>2.4835 GHz</td><td>-65.92 dBm</td><td></td><td></td></tr><tr><td>M3</td><td>1</td><td></td><td>2.5 GHz</td><td>-69.81 dBm</td><td></td><td></td></tr><tr><td>M4</td><td>1</td><td></td><td>2.4836116 GHz</td><td>-65.10 dBm</td><td></td><td></td></tr></tbody></table> Date: 14 DEC 2020 11:05:33	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1		2.479735 GHz	-3.12 dBm			M2	1		2.4835 GHz	-65.92 dBm			M3	1		2.5 GHz	-69.81 dBm			M4	1		2.4836116 GHz	-65.10 dBm									
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Test Item:	SE
CH00 Reference level	 Spectrum Ref Level 21.00 dBm Offset 1.00 dB RBW 100 kHz Att 30 dB SWT 75.9 μs VBW 300 kHz Mode Auto FFT Count 100/100 1Pk Max M1[1] -2.28 dBm 2.4017400 GHz CF 2.402 GHz 691 pts Span 30.0 MHz Date: 14 DEC 2020 11:01:29
CH00 30MHz~1000MHz	 Spectrum Ref Level 20.00 dBm Offset 1.00 dB RBW 100 kHz Att 30 dB SWT 30.1 ms VBW 300 kHz Mode Auto Sweep Count 10/10 1Pk Max M1[1] -51.97 dBm 926.9450 MHz D1 -22.280 dBm Start 30.0 MHz 30001 pts Stop 1.0 GHz Date: 14 DEC 2020 11:01:44
CH00 1GHz~26GHz	 Spectrum Ref Level 20.00 dBm Offset 1.00 dB RBW 100 kHz Att 30 dB SWT 250 ms VBW 300 kHz Mode Auto Sweep Count 10/10 1Pk Max M1[1] -44.10 dBm 25.131667 GHz D1 -22.280 dBm Start 1.0 GHz 30001 pts Stop 26.0 GHz Date: 14 DEC 2020 11:02:00

CH19 Reference level	
CH19 30MHz~1000MHz	
CH19 1GHz~26GHz	



-----End of Report-----