

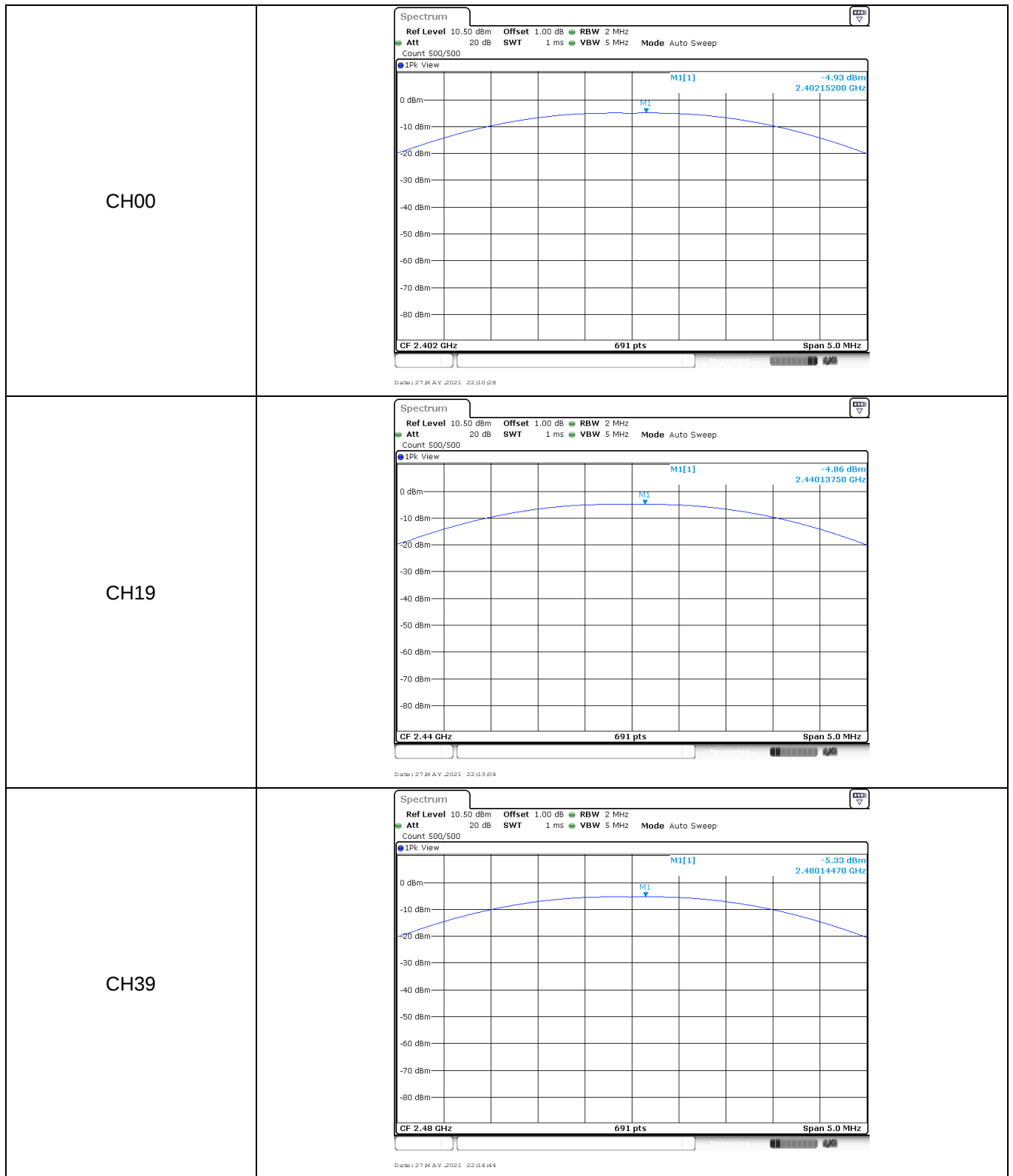
APPENDIX REPORT

Project No.	SHT2105073301EW	Radio Specification	Bluetooth BLE
Test sample No.	YPHT21050733005	Model No.	S1
Start test date	2021-05-27	Finish date	2021-05-27
Temperature	26.5°C	Humidity	65%
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

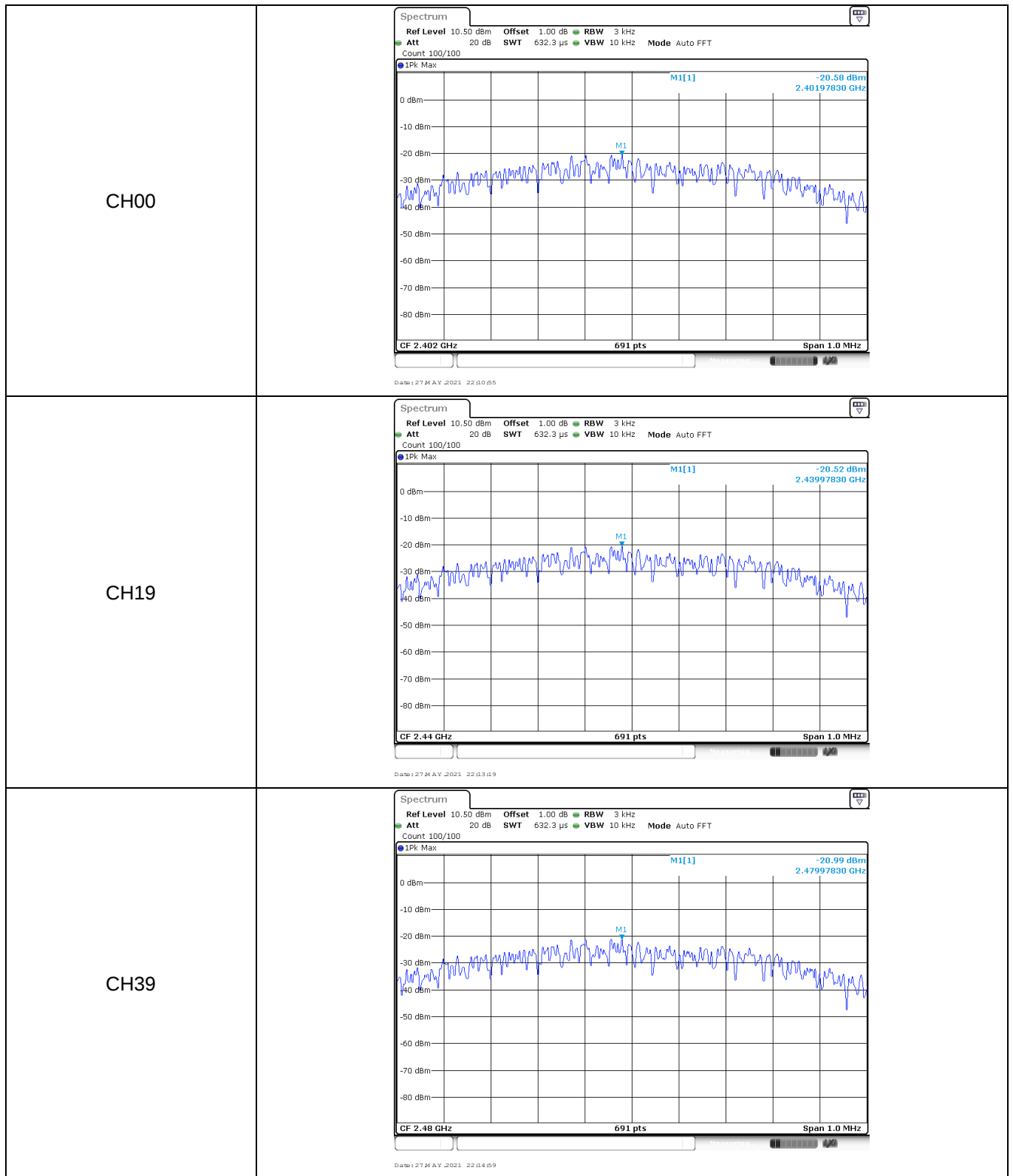
Appendix A: Peak Output Power

Type	Channel	Output power (dBm)	Average Output power (dBm)	Limit (dBm)	Result
BT-BLE	00	-4.93	-4.94	≤ 30.00	Pass
	19	-4.86	-4.87		
	39	-5.33	-5.34		



Appendix B: Power Spectral Density

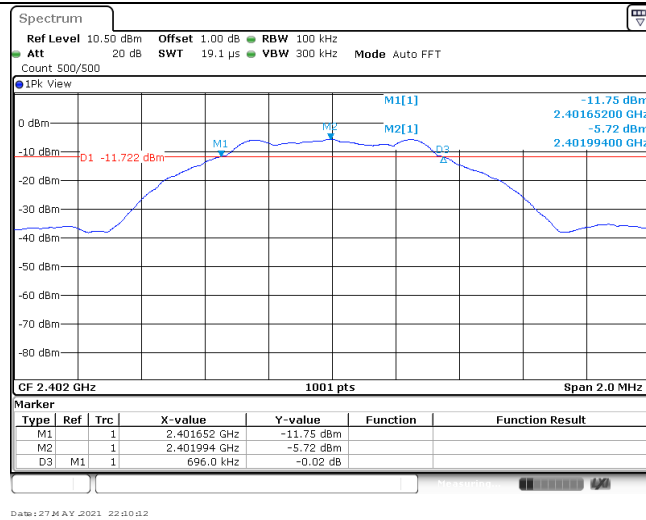
Type	Channel	Power Spectral Density(dBm/3KHz)	Limit (dBm/3KHz)	Result
BT-BLE	00	-20.58	≤8.00	Pass
	19	-20.52		
	39	-20.99		



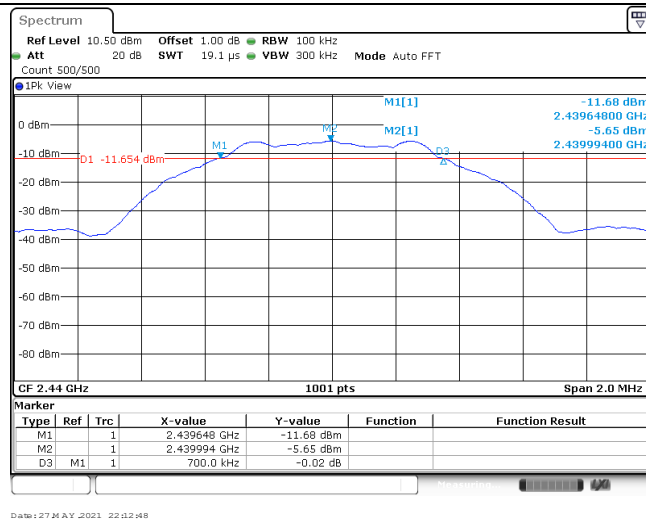
Appendix C: 6dB bandwidth

Type	Channel	6dB Bandwidth(kHz)	Limit (kHz)	Result
BT-BLE	00	696.00	≥500	Pass
	19	700.00		
	39	704.00		

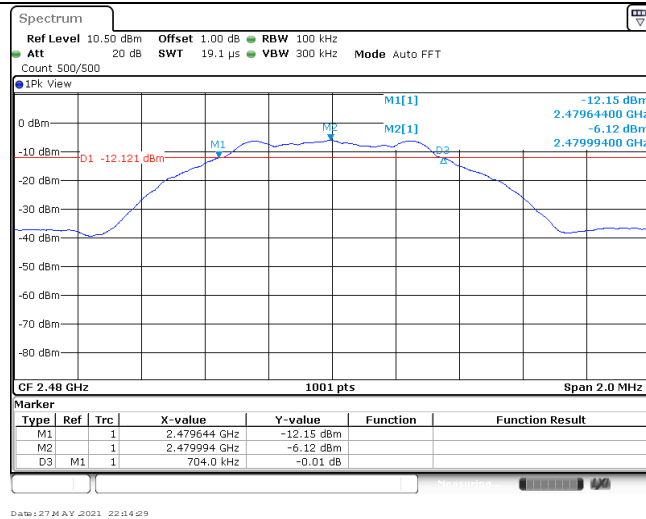
CH00



CH19

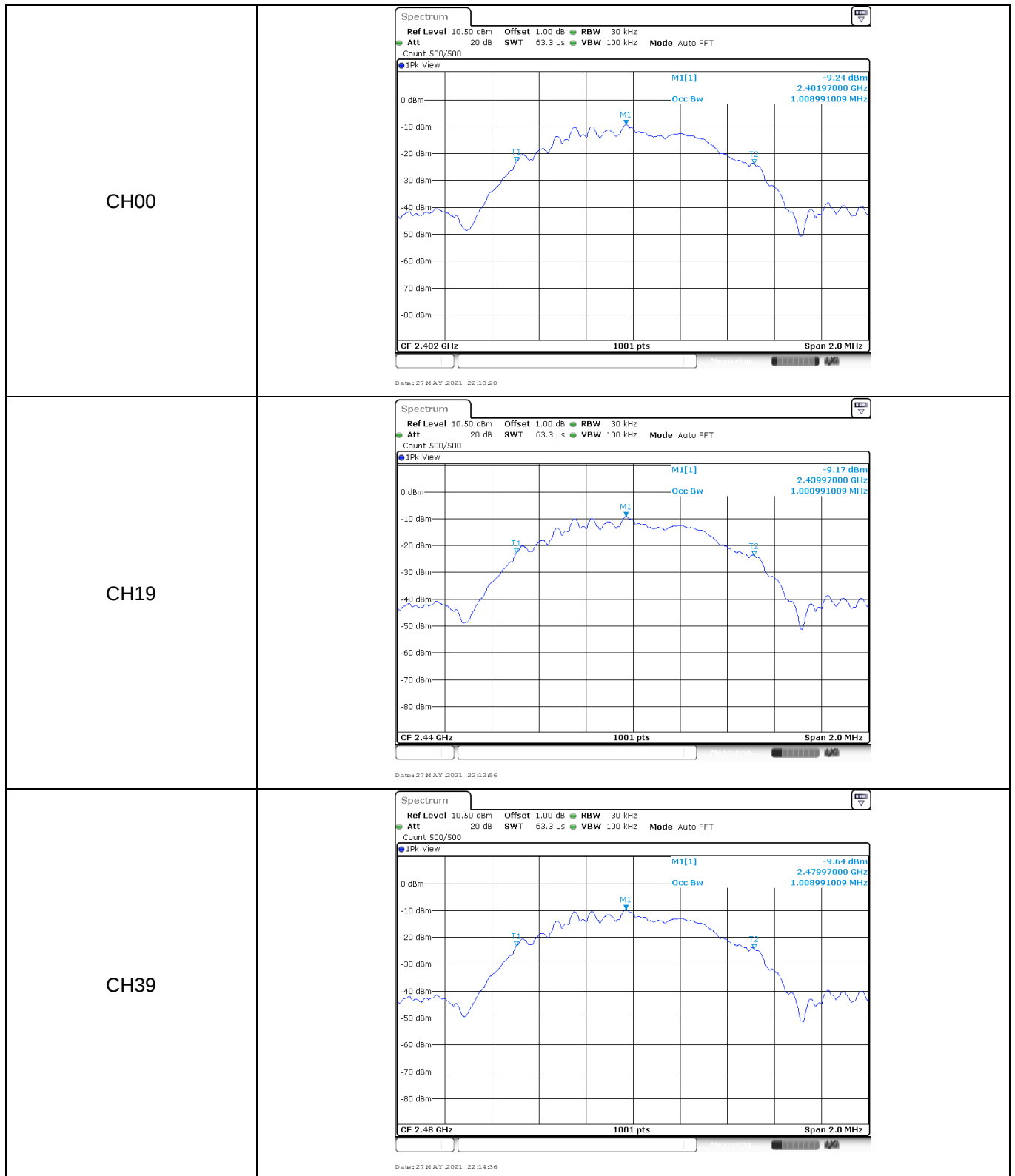


CH39



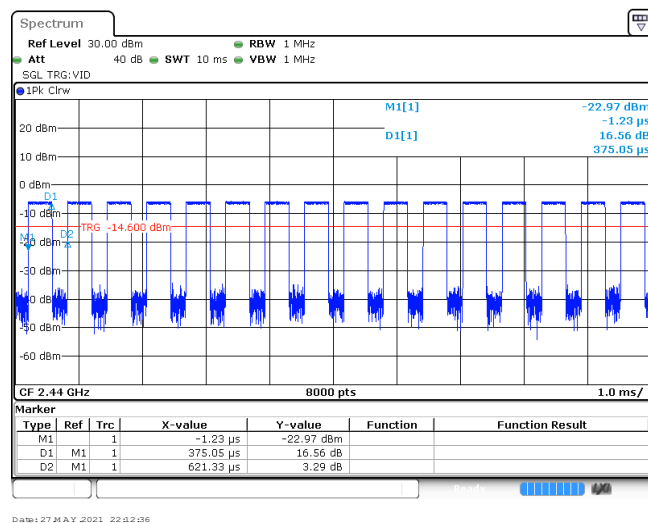
Appendix D: 99% Occupied Bandwidth

Type	Channel	99% Occupied Bandwidth(MHz)	Limit (kHz)	Result
BT-BLE	00	1.01	-	Pass
	19	1.01		
	39	1.01		



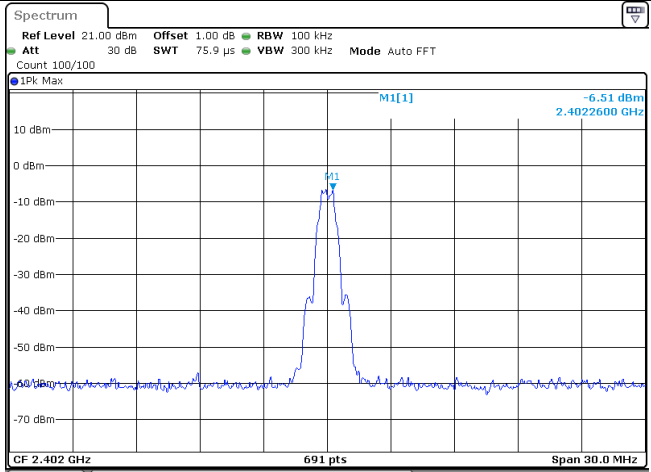
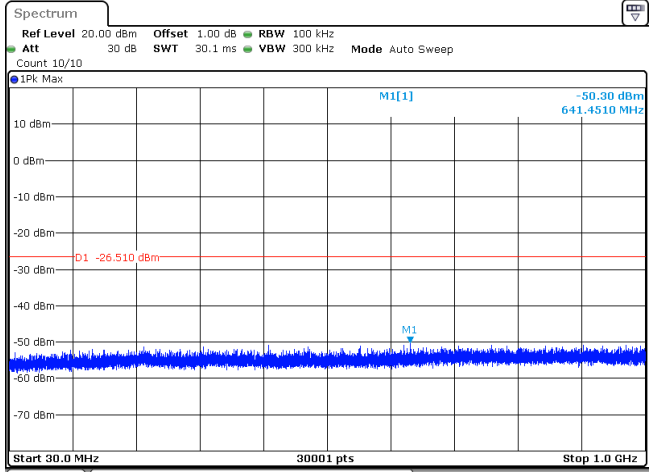
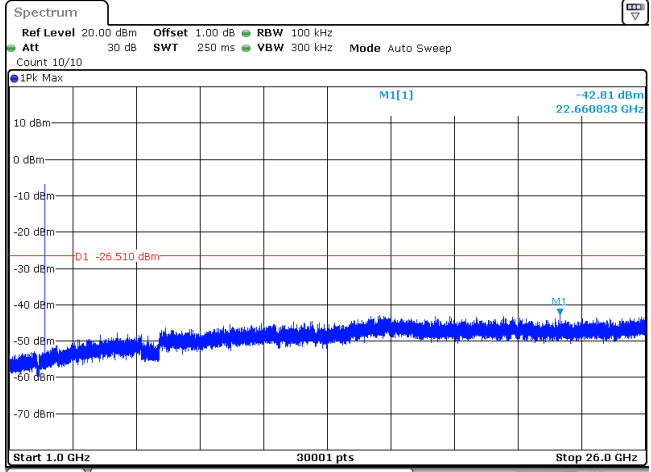
Appendix E: Duty cycle

Test Frequency (MHz)	T _{on} time for single burst (ms)	T _{period} (ms)	Duty cycle	1/T _{on} time (kHz)
2440	0.38	0.62	61.3%	2.6

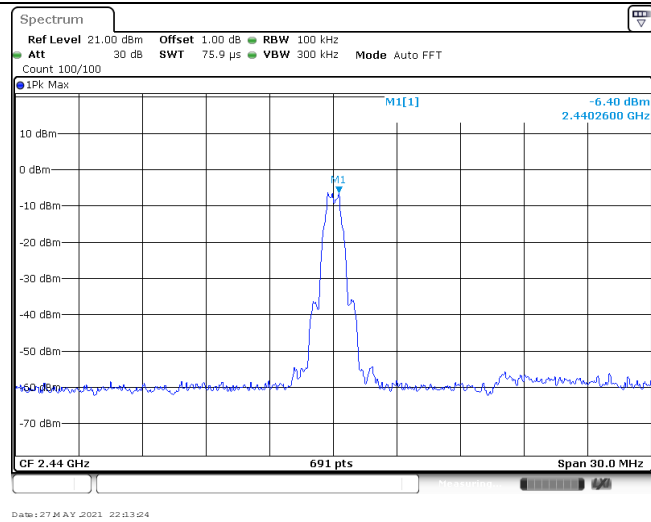


Appendix F: Band edge and Spurious Emissions (conducted)

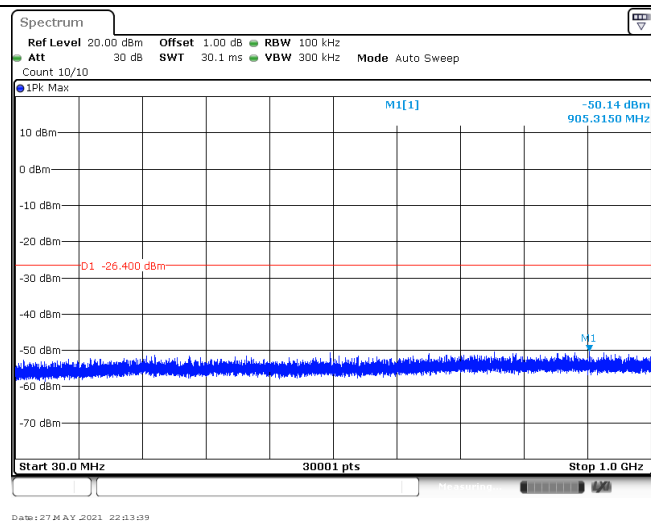
Test Item:	Band edge																																										
CH00	Spectrum Ref Level 10.50 dBm Att 20 dB Count 300/300 Offset 1.00 dB SWT 1.1 ms RBW 100 kHz VBW 300 kHz Mode Auto Sweep 1Pk Max 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm -80 dBm M1[1] M2[1] M3 M4 -5.71 dBm -61.44 dBm -61.44 dBm -60.79 dBm 2.40204 GHz 2.400000 GHz D1 -25.730 dBm 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>2.40204 GHz</td><td>-5.71 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>2.4 GHz</td><td>-61.44 dBm</td><td></td><td></td></tr><tr><td>M3</td><td>1</td><td></td><td>2.39 GHz</td><td>-63.31 dBm</td><td></td><td></td></tr><tr><td>M4</td><td>1</td><td></td><td>2.31 GHz</td><td>-63.61 dBm</td><td></td><td></td></tr><tr><td>M5</td><td>1</td><td></td><td>2.399906 GHz</td><td>-60.79 dBm</td><td></td><td></td></tr></tbody></table> Date: 27 MAY 2021 22:11:04	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1		2.40204 GHz	-5.71 dBm			M2	1		2.4 GHz	-61.44 dBm			M3	1		2.39 GHz	-63.31 dBm			M4	1		2.31 GHz	-63.61 dBm			M5	1		2.399906 GHz	-60.79 dBm		
Type	Ref	Trc	X-value	Y-value	Function	Function Result																																					
M1	1		2.40204 GHz	-5.71 dBm																																							
M2	1		2.4 GHz	-61.44 dBm																																							
M3	1		2.39 GHz	-63.31 dBm																																							
M4	1		2.31 GHz	-63.61 dBm																																							
M5	1		2.399906 GHz	-60.79 dBm																																							
CH39	Spectrum Ref Level 10.50 dBm Att 20 dB Count 100/100 Offset 1.00 dB SWT 56.9 μs RBW 100 kHz VBW 300 kHz Mode Auto FFT 1Pk Max 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm -80 dBm M1 M2 M3 M4 -6.18 dBm -66.63 dBm -67.83 dBm -65.58 dBm 2.479990 GHz 2.483500 GHz 2.5 GHz 2.484313 GHz D1 -26.180 dBm 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>2.47999 GHz</td><td>-6.18 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>2.4835 GHz</td><td>-66.63 dBm</td><td></td><td></td></tr><tr><td>M3</td><td>1</td><td></td><td>2.5 GHz</td><td>-67.83 dBm</td><td></td><td></td></tr><tr><td>M4</td><td>1</td><td></td><td>2.484313 GHz</td><td>-65.58 dBm</td><td></td><td></td></tr></tbody></table> Date: 27 MAY 2021 22:15:08	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1		2.47999 GHz	-6.18 dBm			M2	1		2.4835 GHz	-66.63 dBm			M3	1		2.5 GHz	-67.83 dBm			M4	1		2.484313 GHz	-65.58 dBm									
Type	Ref	Trc	X-value	Y-value	Function	Function Result																																					
M1	1		2.47999 GHz	-6.18 dBm																																							
M2	1		2.4835 GHz	-66.63 dBm																																							
M3	1		2.5 GHz	-67.83 dBm																																							
M4	1		2.484313 GHz	-65.58 dBm																																							

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] -6.51 dBm 2.4022600 GHz CF 2.402 GHz 691 pts Span 30.0 MHz Date: 27 MAY 2021 22:11:09
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] -50.30 dBm 641.4510 MHz D1 -26.510 dBm Start 30.0 MHz 30001 pts Stop 1.0 GHz Date: 27 MAY 2021 22:11:24
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] -42.91 dBm 22.660833 GHz D1 -26.510 dBm Start 1.0 GHz 30001 pts Stop 26.0 GHz Date: 27 MAY 2021 22:11:40

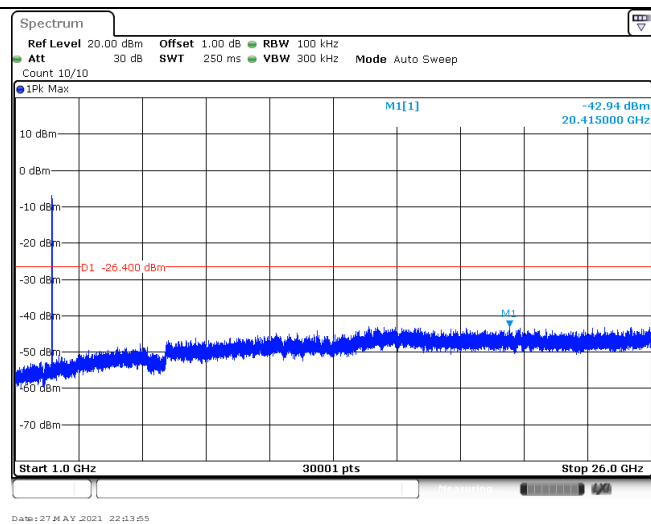
CH19
Reference level



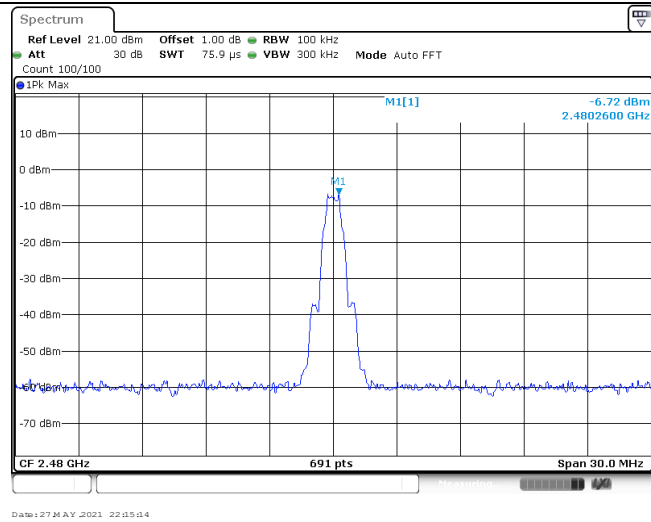
CH19
30MHz~1000MHz



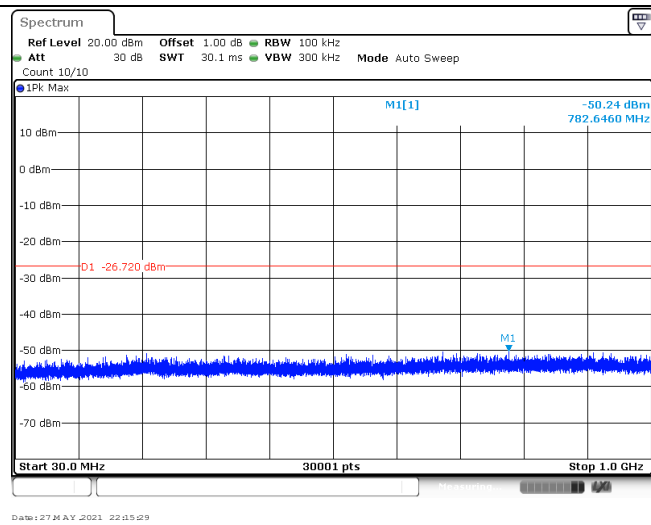
CH19
1GHz~26GHz



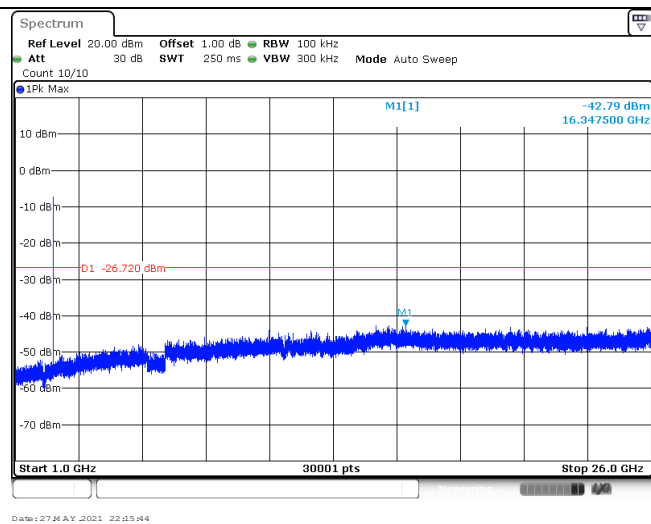
CH39
Reference level



CH39
30MHz~1000MHz



CH39
1GHz~26GHz



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