

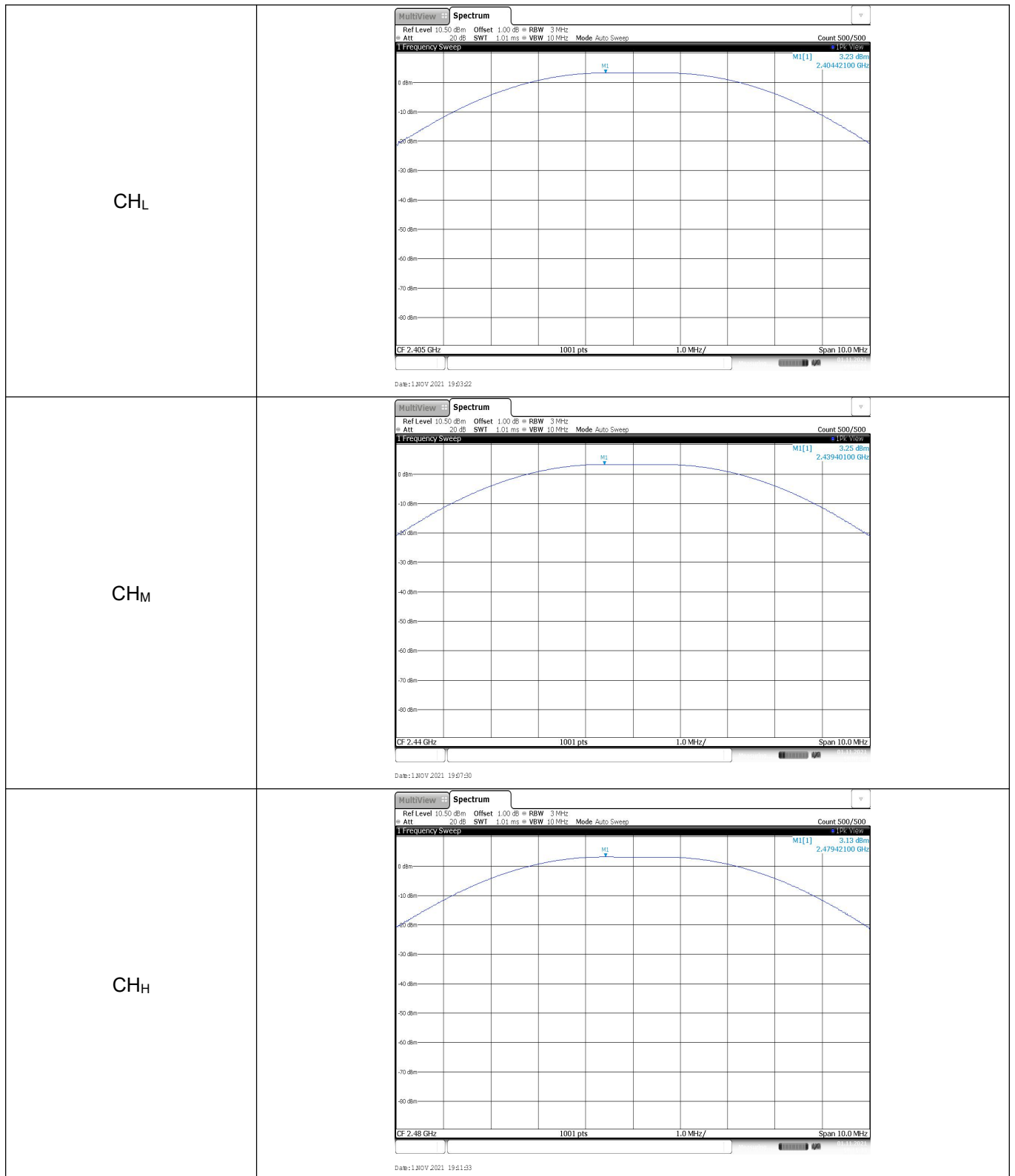
APPENDIX REPORT

Project No.	SHT2108113004EW	Radio Specification	Zigbee
Test sample No.	YPHT21081130002	Model No.	LW-IS-APP-Z
Start test date	2021-11-01	Finish date	2021-11-01
Temperature	25.7℃	Humidity	63%
Test Engineer	Weiyang Xiang	Auditor	Xiaodong Zheo

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

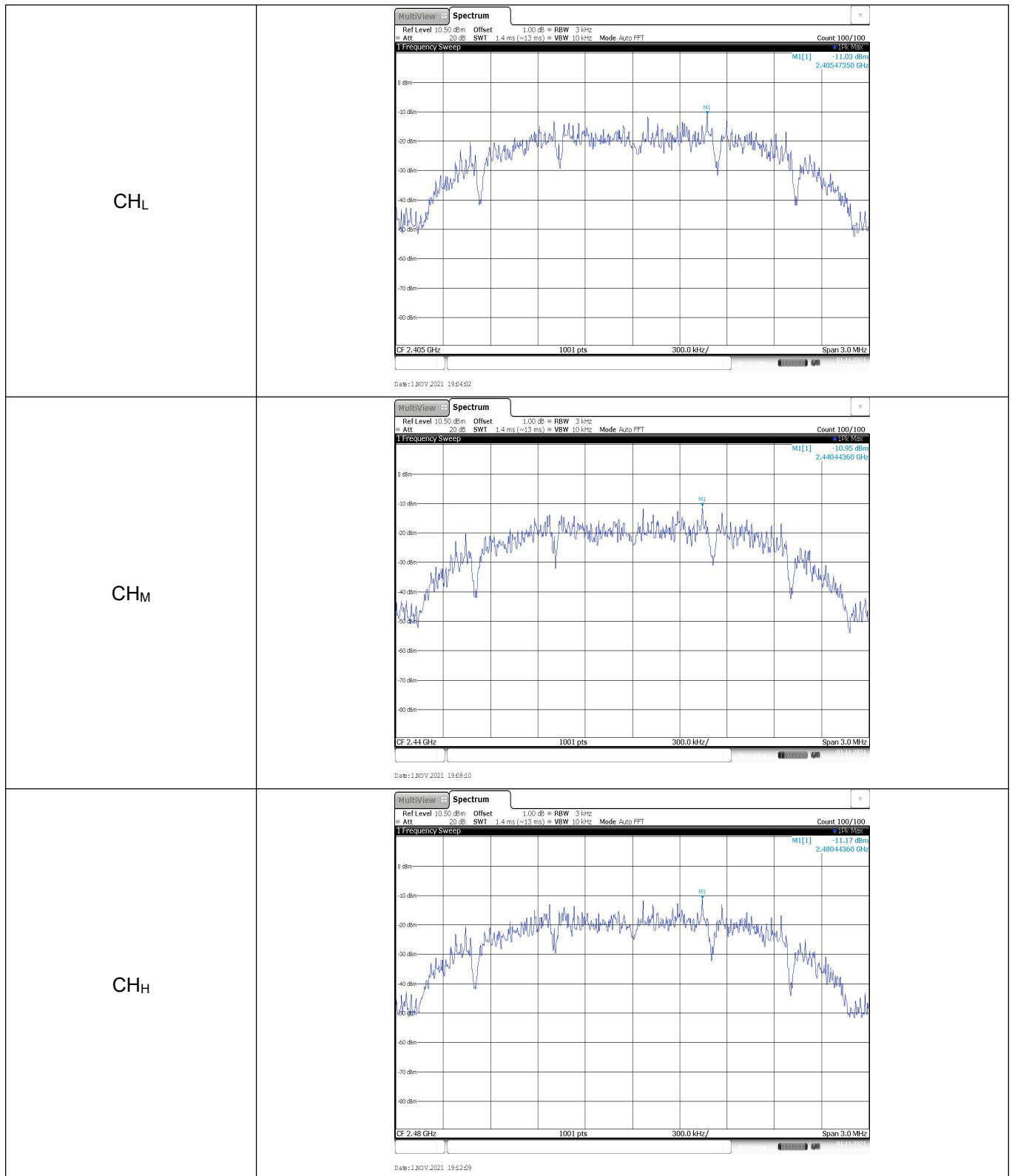
Appendix A: Peak Output Power

Channel	Peak Output power (dBm)	Average Output power (dBm)	Limit (dBm)	Result
CH _L	3.23	3.22	≤ 30.00	Pass
CH _M	3.25	3.24		
CH _H	3.13	3.11		



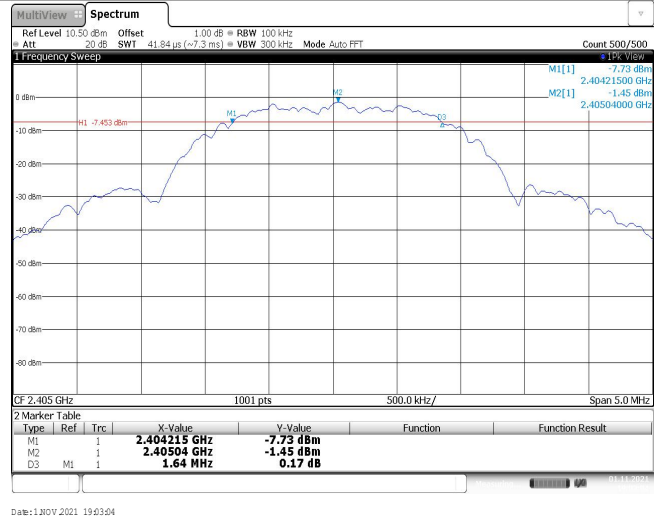
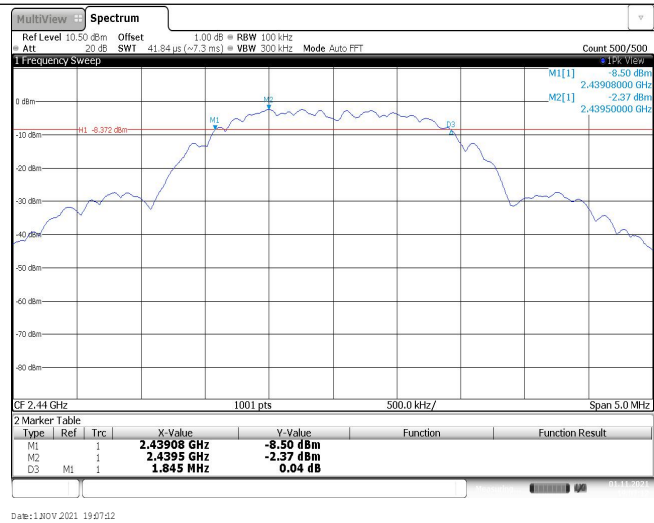
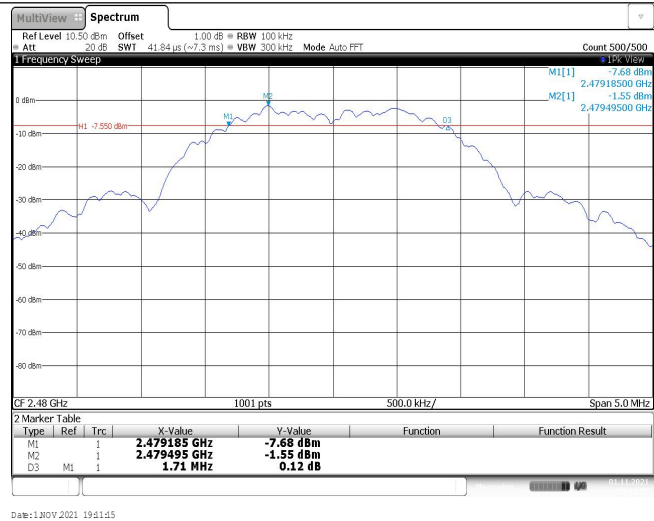
Appendix B: Power Spectral Density

Channel	Power Spectral Density(dBm/3KHz)	Limit (dBm/3KHz)	Result
CH _L	-11.03	≤8.00	Pass
CH _M	-10.95		
CH _H	-11.17		



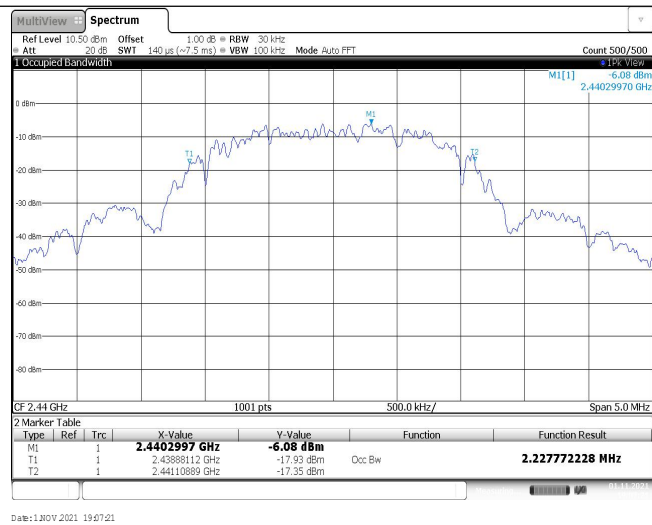
Appendix C: 6dB bandwidth

Channel	6dB Bandwidth(kHz)	Limit (kHz)	Result
CH _L	1640.00	≥500	Pass
CH _M	1845.00		
CH _H	1710.00		

CH_LCH_MCH_H

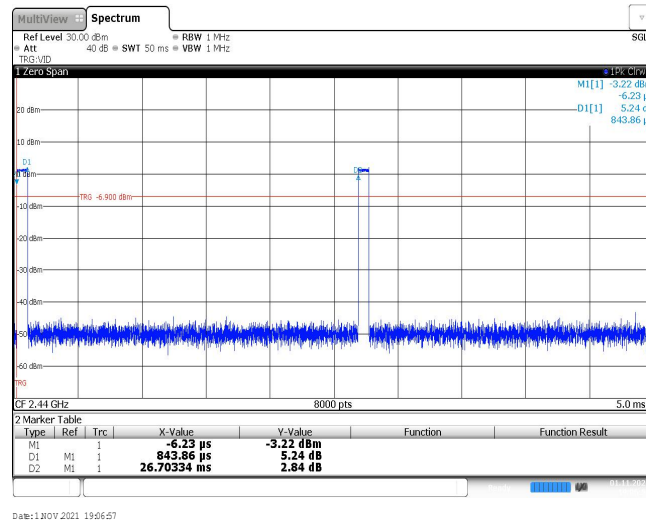
Appendix D: 99% Occupied Bandwidth

Channel	99% Occupied Bandwidth(MHz)	Limit (kHz)	Result
CH _L	2.23	-	Pass
CH _M	2.23		
CH _H	2.24		

CH_LCH_MCH_H

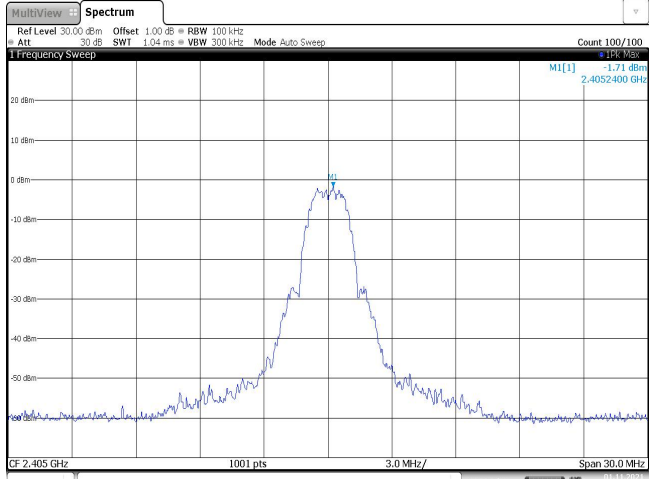
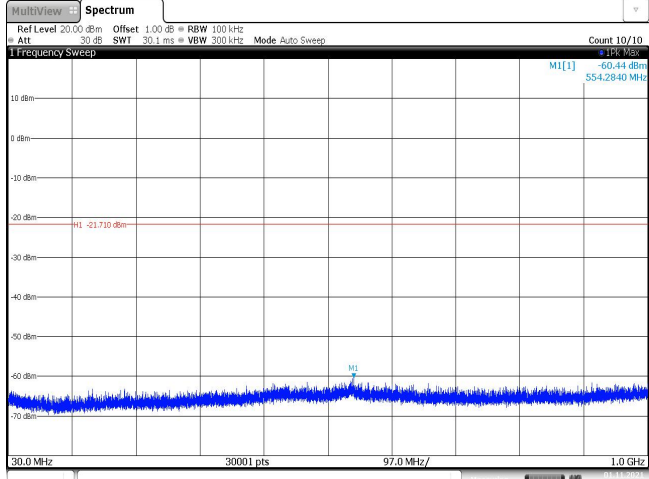
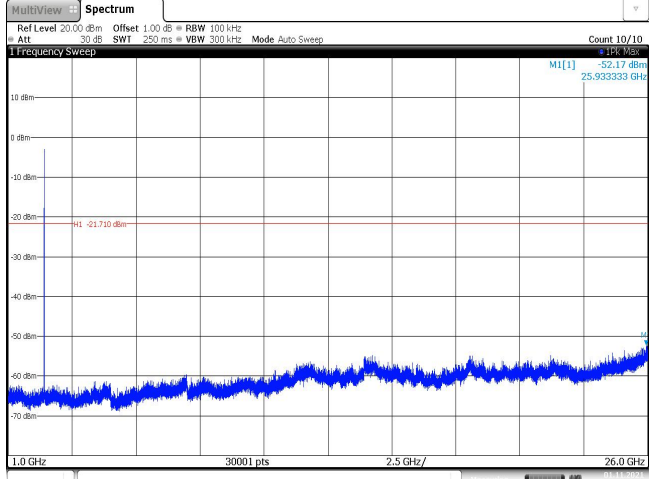
Appendix E: Duty cycle

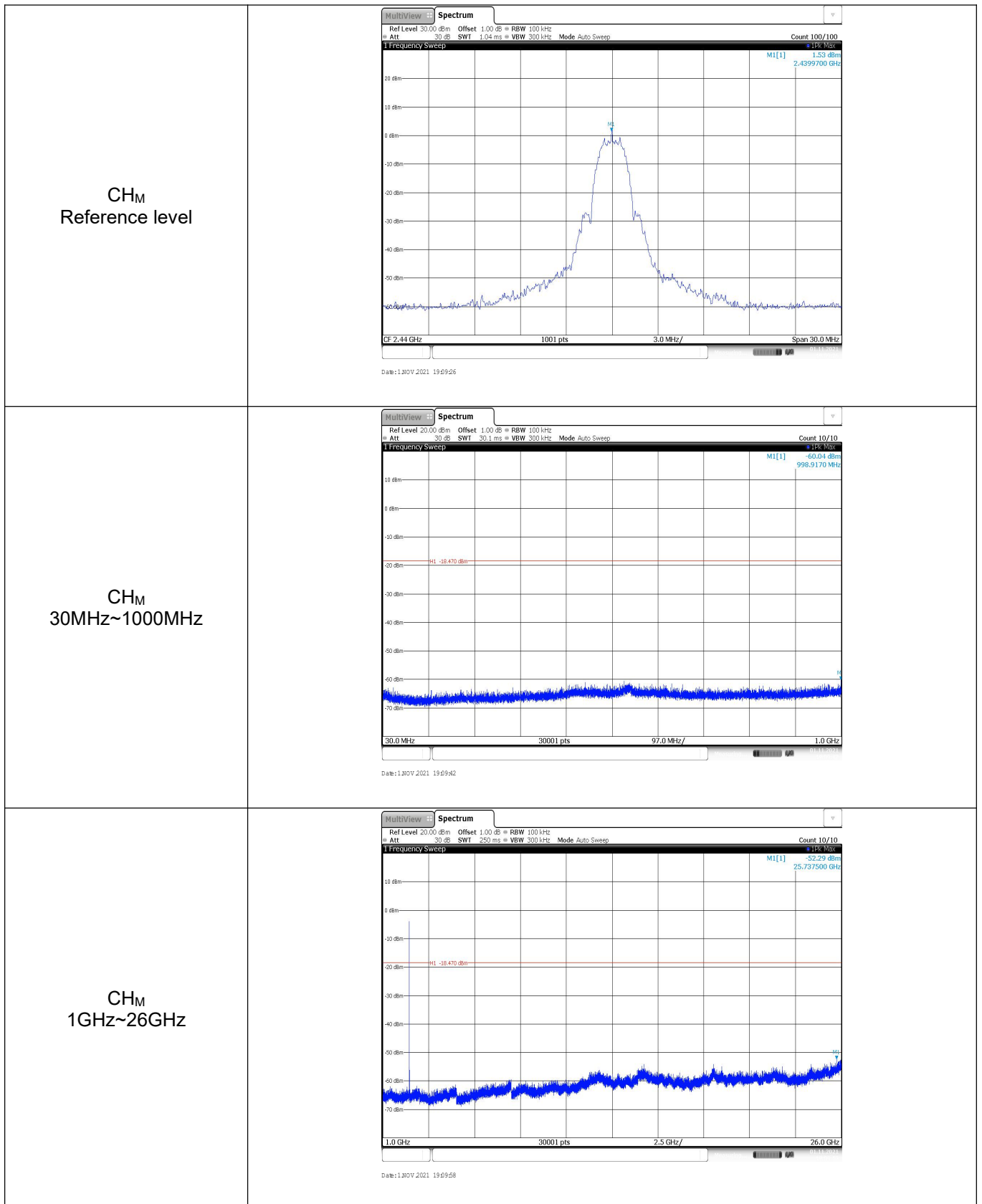
Test Frequency (MHz)	T _{on} time for single burst (ms)	T _{period} (ms)	Duty cycle	1/T _{on} time (kHz)
2440	0.84	26.70	3.1%	1.2

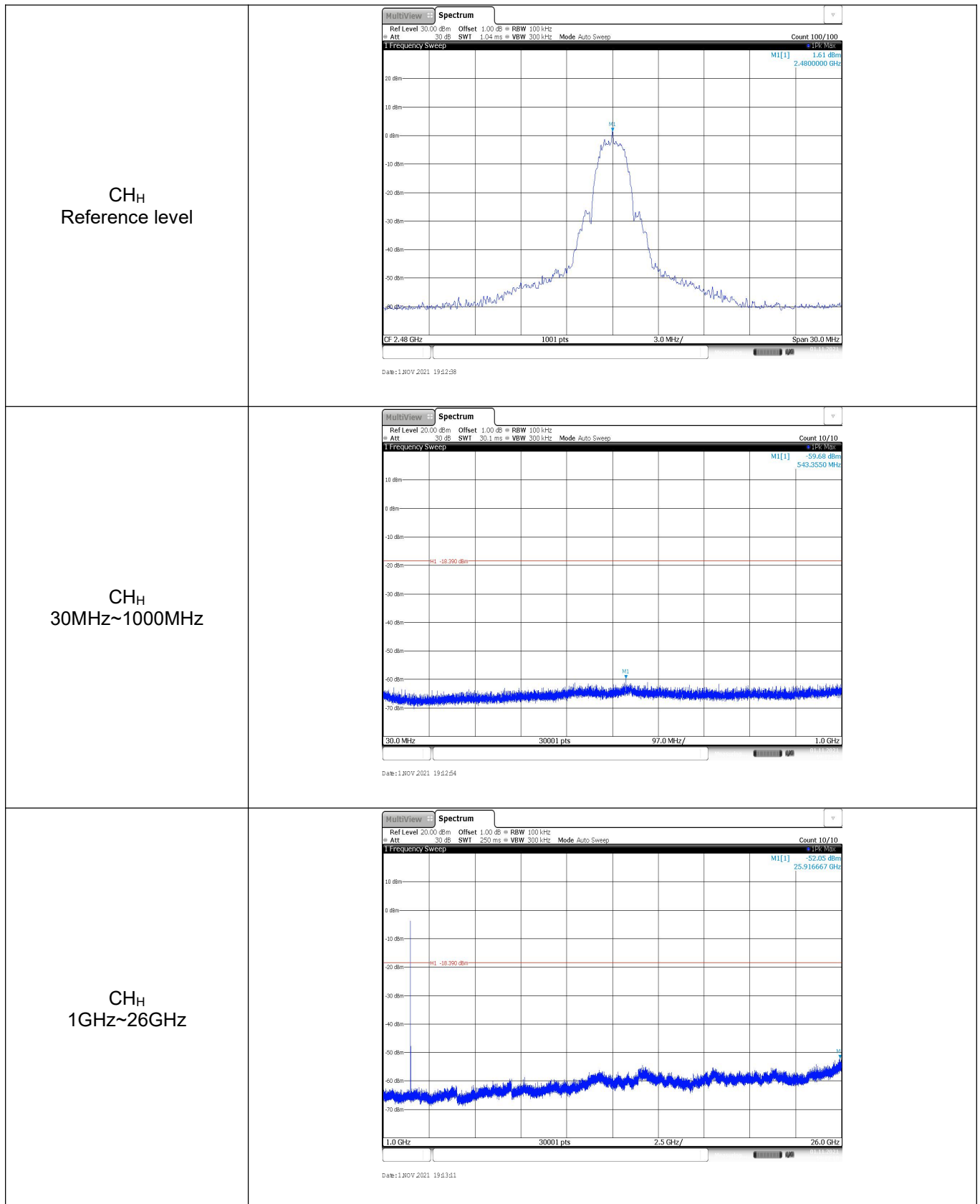


Appendix F: Band edge and Spurious Emissions (conducted)

Test Item:	Band edge																																										
CH _L	MultiView Spectrum Ref Level 10.50 dBm Offset 1.00 dB RBW 100 kHz Att 20 dB SWT 1.07 ms VBW 300 kHz Mode Auto Sweep Count 200/200 1 Frequency Sweep 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm -80 dBm 2.31 GHz 1001 pts 9.7 MHz/ 2.407 GHz M1 [1] -1.21 dBm 2.4045290 GHz M2 [1] -54.48 dBm 2.4000000 MHz <table><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><tr><td>M1</td><td>1</td><td></td><td>2.404529 GHz</td><td>-1.21 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>2.4 GHz</td><td>-54.48 dBm</td><td></td><td></td></tr><tr><td>M3</td><td>1</td><td></td><td>2.39 GHz</td><td>-71.72 dBm</td><td></td><td></td></tr><tr><td>M4</td><td>1</td><td></td><td>2.31 GHz</td><td>-74.46 dBm</td><td></td><td></td></tr><tr><td>M5</td><td>1</td><td></td><td>2.399822 GHz</td><td>-54.79 dBm</td><td></td><td></td></tr></table> Date: 13NOV 2021 19:44:13	Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		2.404529 GHz	-1.21 dBm			M2	1		2.4 GHz	-54.48 dBm			M3	1		2.39 GHz	-71.72 dBm			M4	1		2.31 GHz	-74.46 dBm			M5	1		2.399822 GHz	-54.79 dBm		
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M5	1		2.399822 GHz	-54.79 dBm																																							
CH _H	MultiView Spectrum Ref Level 10.50 dBm Offset 1.00 dB RBW 100 kHz Att 20 dB SWT 1.02 ms VBW 300 kHz Mode Auto Sweep Count 100/100 1 Frequency Sweep 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm -80 dBm 2.478 GHz 1001 pts 2.2 MHz/ 2.5 GHz M1 [1] -0.71 dBm 2.4799890 GHz M2 [1] -49.51 dBm 2.4835000 GHz <table><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><tr><td>M1</td><td>1</td><td></td><td>2.479989 GHz</td><td>-0.71 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>2.4835 GHz</td><td>-49.51 dBm</td><td></td><td></td></tr><tr><td>M3</td><td>1</td><td></td><td>2.5 GHz</td><td>-71.47 dBm</td><td></td><td></td></tr><tr><td>M4</td><td>1</td><td></td><td>2.483918 GHz</td><td>-47.44 dBm</td><td></td><td></td></tr></table> Date: 13NOV 2021 19:42:19	Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		2.479989 GHz	-0.71 dBm			M2	1		2.4835 GHz	-49.51 dBm			M3	1		2.5 GHz	-71.47 dBm			M4	1		2.483918 GHz	-47.44 dBm									
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M4	1		2.483918 GHz	-47.44 dBm																																							

Test Item:	SE
CH _L Reference level	 Ref Level 30.00 dBm Offset 1.00 dB RBW 100 kHz Att 30 dB SWI 1.04 ms VBW 300 kHz Mode Auto Sweep Count 100/100 MI[1] -1.71 dBm 2.4052400 GHz CF 2.405 GHz 1001 pts 3.0 MHz/ Span 30.0 MHz Date: 1 NOV 2021 19:04:30
CH _L 30MHz~1000MHz	 Ref Level 20.00 dBm Offset 1.00 dB RBW 100 kHz Att 30 dB SWI 30.1 ms VBW 300 kHz Mode Auto Sweep Count 10/10 MI[1] -60.44 dBm 554.2840 MHz CF 30.0 MHz 30001 pts 97.0 MHz/ Span 1.0 GHz Date: 1 NOV 2021 19:04:46
CH _L 1GHz~26GHz	 Ref Level 20.00 dBm Offset 1.00 dB RBW 100 kHz Att 30 dB SWI 250 ms VBW 300 kHz Mode Auto Sweep Count 10/10 MI[1] -52.17 dBm 25.935333 GHz CF 1.0 GHz 30001 pts 2.5 GHz/ Span 26.0 GHz Date: 1 NOV 2021 19:05:05





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