

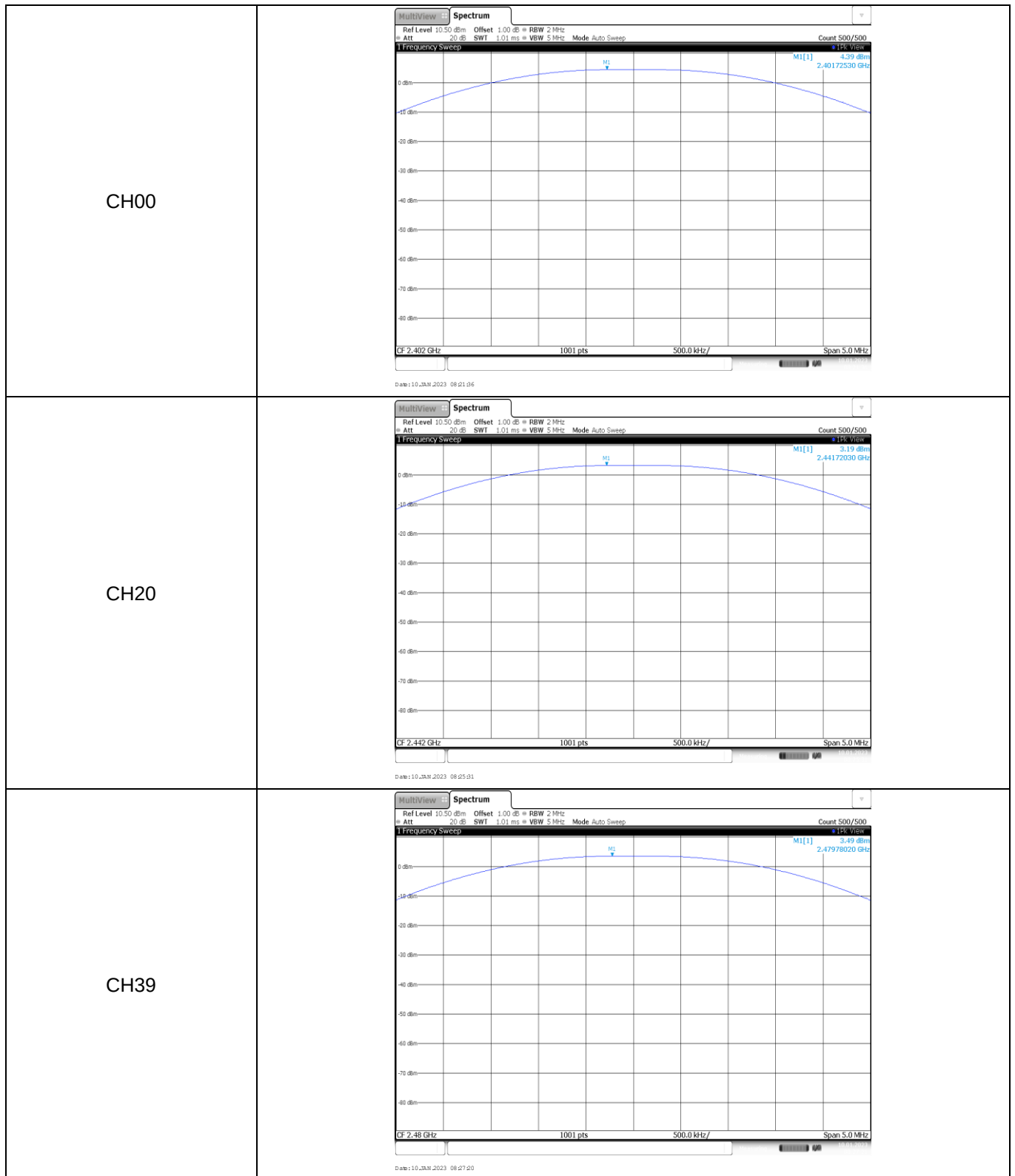
APPENDIX REPORT

Project No.	SHT2301017601EW	Radio Specification	Bluetooth BLE
Test sample No.	YPHT23010176005	Model No.	5010V1
Start test date	2023-01-10	Finish date	2023-01-10
Temperature	22.9℃	Humidity	63%
Test Engineer	Xiaoxiao Li	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

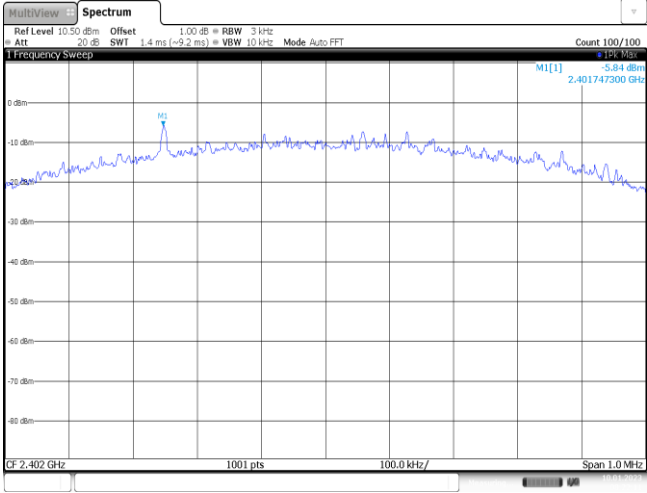
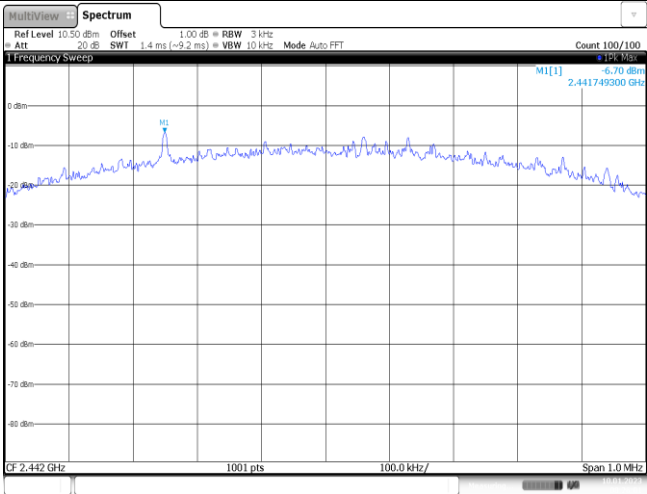
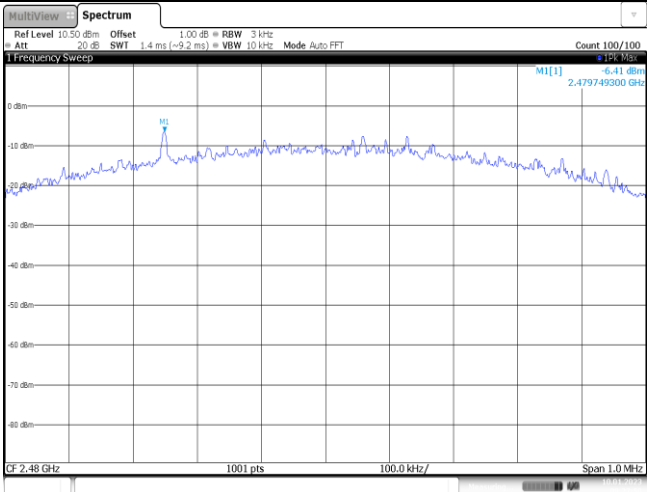
Appendix A: Peak Output Power

Type	Channel	Peak Output power (dBm)	Average Output power (dBm)	Limit (dBm)	Result
BT-BLE	00	4.39	4.38	≤ 30.00	Pass
	20	3.19	3.17		
	39	3.49	3.46		



Appendix B: Power Spectral Density

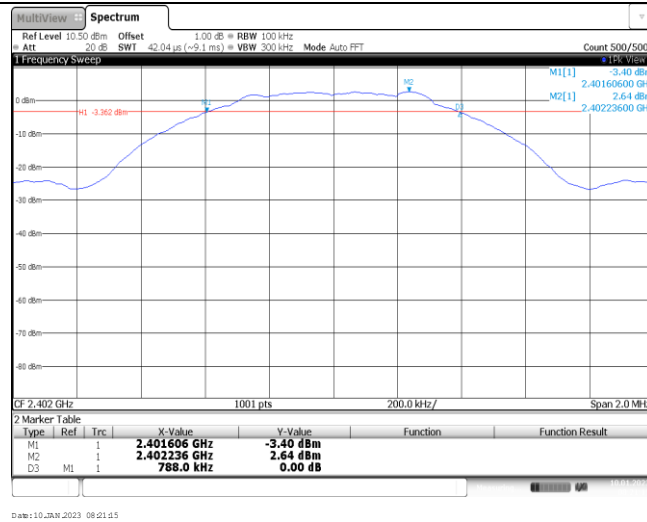
Type	Channel	Power Spectral Density(dBm/3KHz)	Limit (dBm/3KHz)	Result
BT-BLE	00	-5.84	≤8.00	Pass
	20	-6.70		
	39	-6.41		

CH00	 MultiView Spectrum Ref Level 10.50 dBm Offset 1.00 dB RBW 3 kHz Att 20 dB SWF 1.4 ms (-2.2 ms) VBW 10 kHz Mode Auto FFT Count 100/100 1 Frequency Sweep M1[1] -5.84 dBm 2.401747300 GHz CF 2.402 GHz 1001 pts 100.0 kHz/ Span 1.0 MHz Date: 10_JAN_2023 08:22:11
CH20	 MultiView Spectrum Ref Level 10.50 dBm Offset 1.00 dB RBW 3 kHz Att 20 dB SWF 1.4 ms (-2.2 ms) VBW 10 kHz Mode Auto FFT Count 100/100 1 Frequency Sweep M1[1] -6.70 dBm 2.441749300 GHz CF 2.442 GHz 1001 pts 100.0 kHz/ Span 1.0 MHz Date: 10_JAN_2023 08:26:01
CH39	 MultiView Spectrum Ref Level 10.50 dBm Offset 1.00 dB RBW 3 kHz Att 20 dB SWF 1.4 ms (-2.2 ms) VBW 10 kHz Mode Auto FFT Count 100/100 1 Frequency Sweep M1[1] -6.41 dBm 2.479749300 GHz CF 2.48 GHz 1001 pts 100.0 kHz/ Span 1.0 MHz Date: 10_JAN_2023 08:27:50

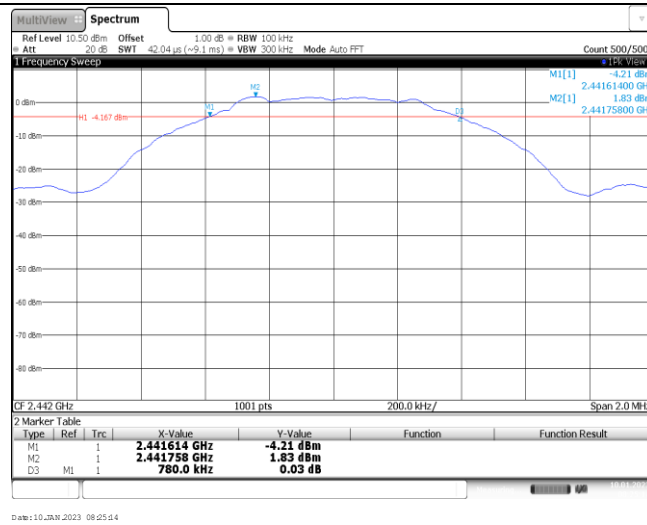
Appendix C: 6dB bandwidth

Type	Channel	6dB Bandwidth(kHz)	Limit (kHz)	Result
BT-BLE	00	788.00	≥500	Pass
	20	780.00		
	39	782.00		

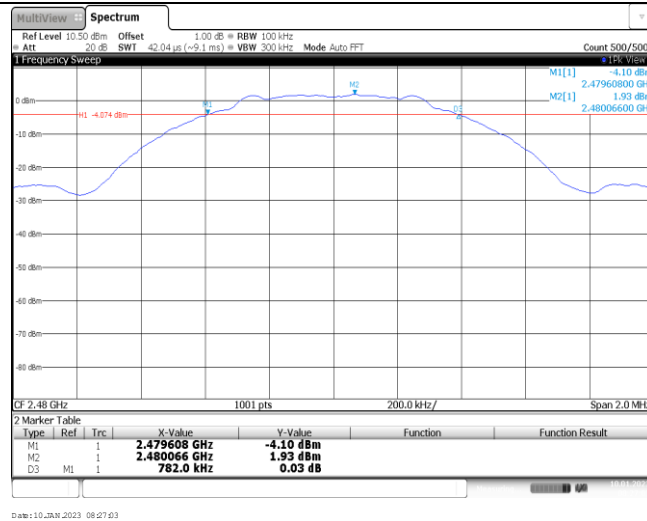
CH00



CH20



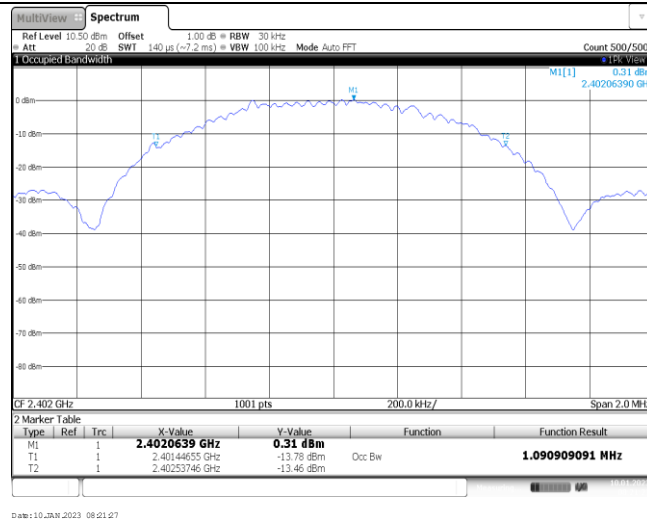
CH39



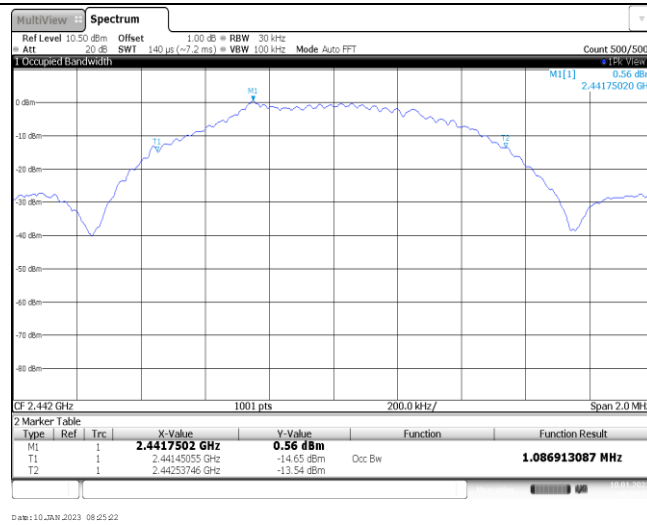
Appendix D: 99% Occupied Bandwidth

Type	Channel	99% Occupied Bandwidth(MHz)	Limit (kHz)	Result
BT-BLE	00	1.09	-	Pass
	20	1.09		
	39	1.08		

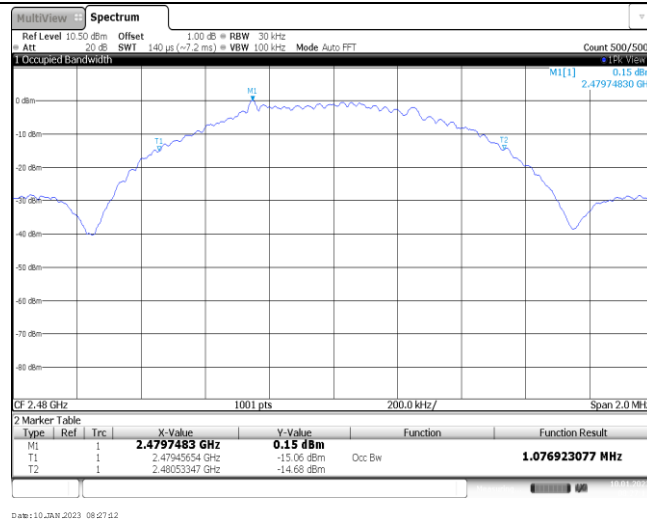
CH00



CH20

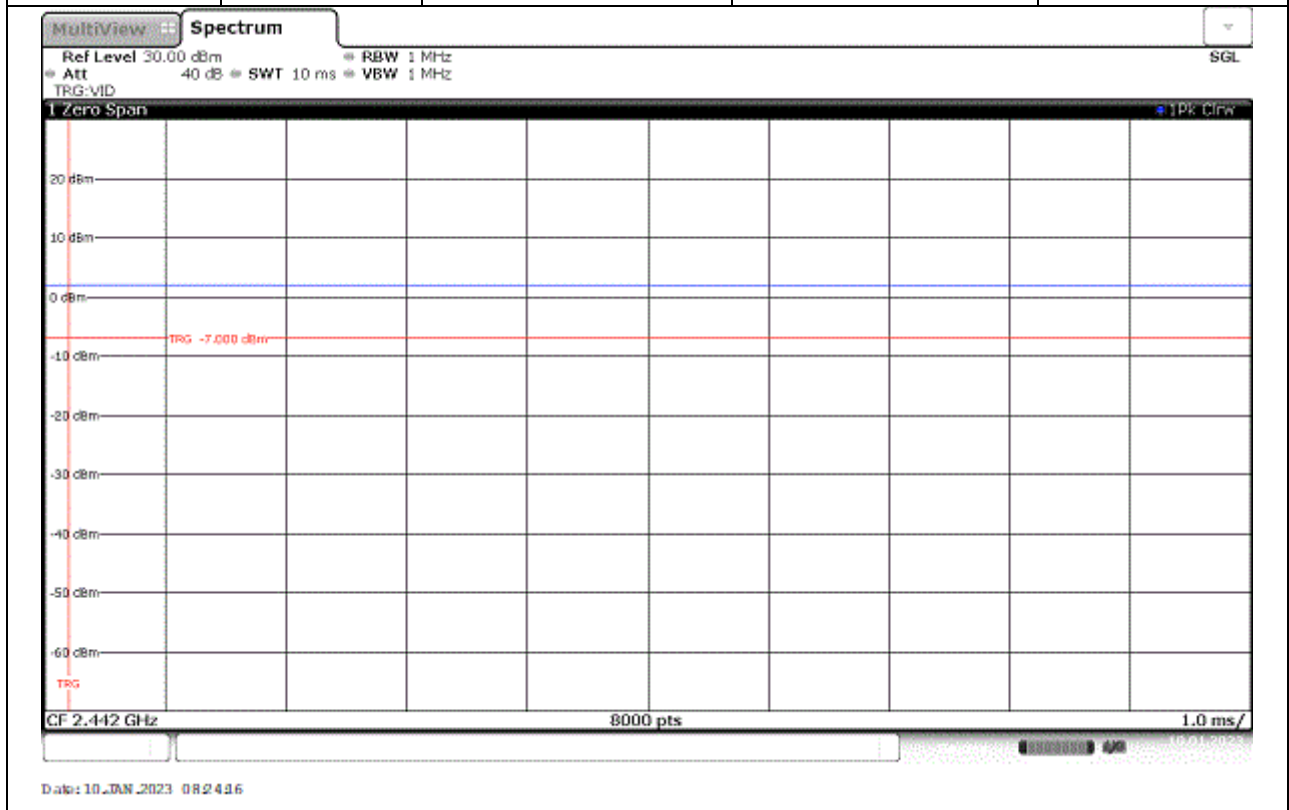


CH39



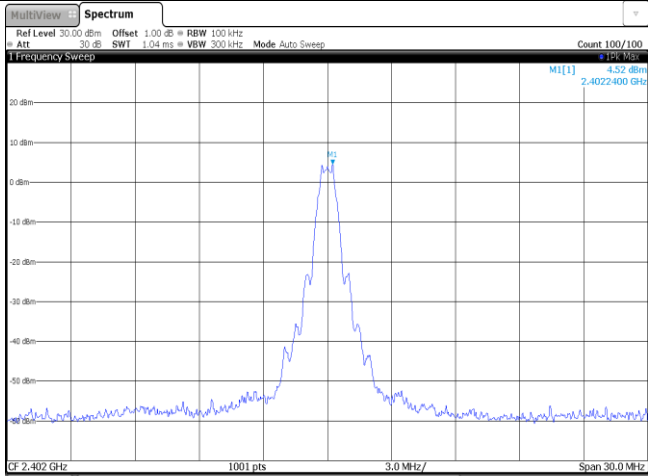
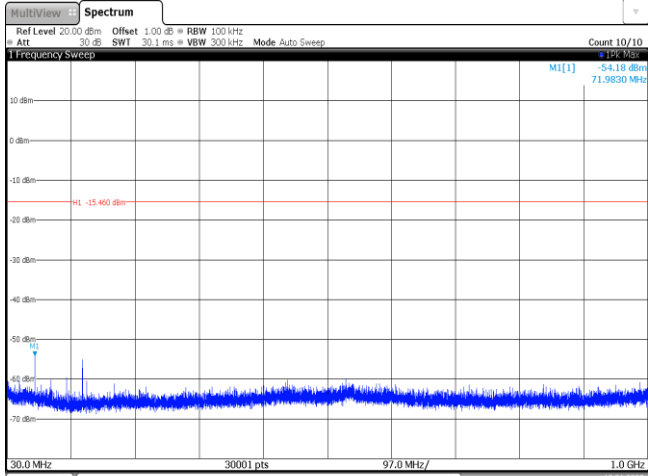
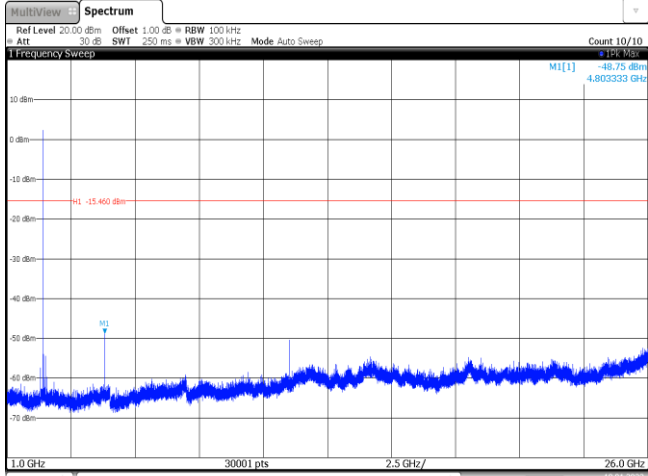
Appendix E: Duty cycle

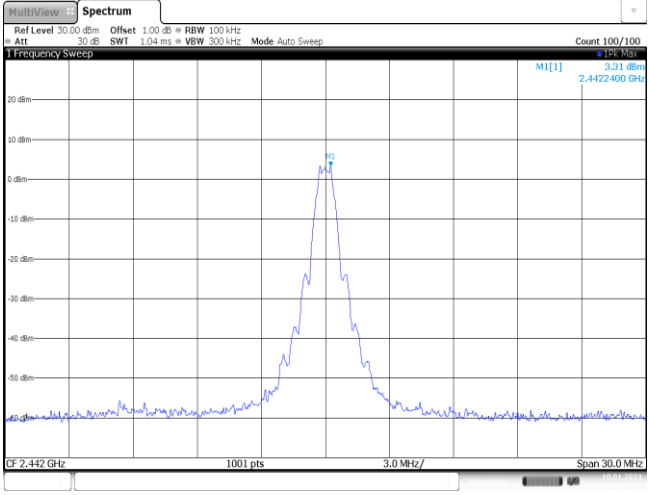
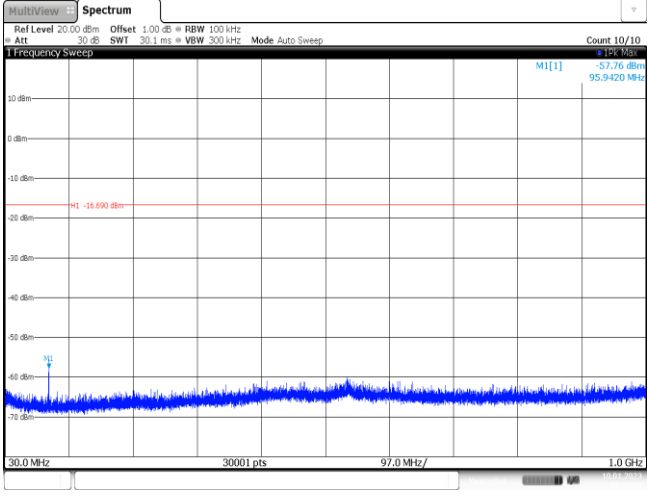
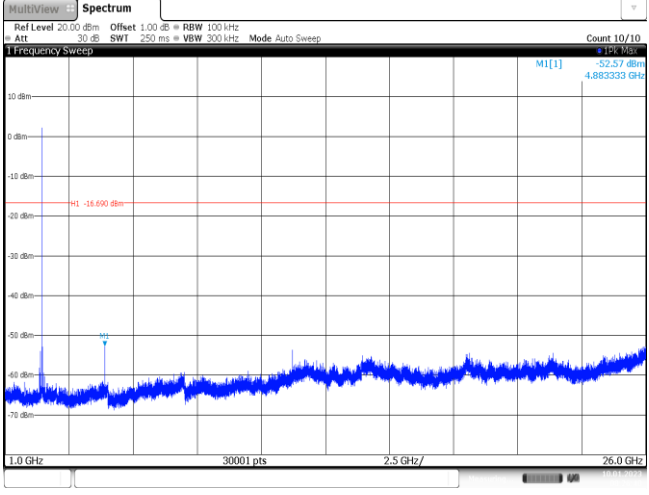
Test Frequency (MHz)	T _{on} time for single burst (ms)	T _{period} (ms)	Duty cycle	1/T _{on} time (kHz)
2442	1.00	1.00	100%	1

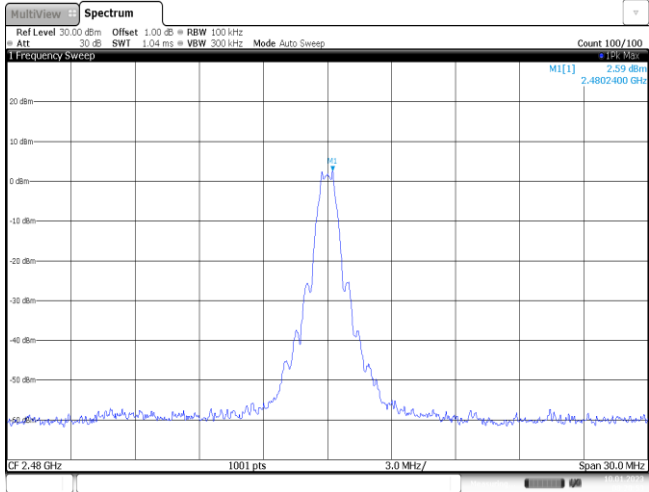
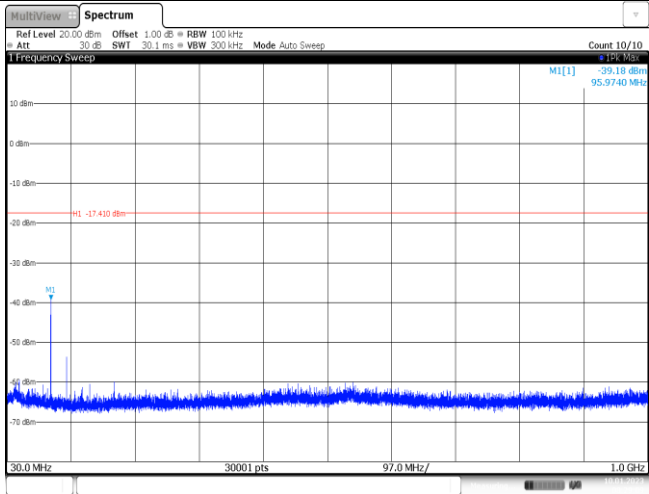
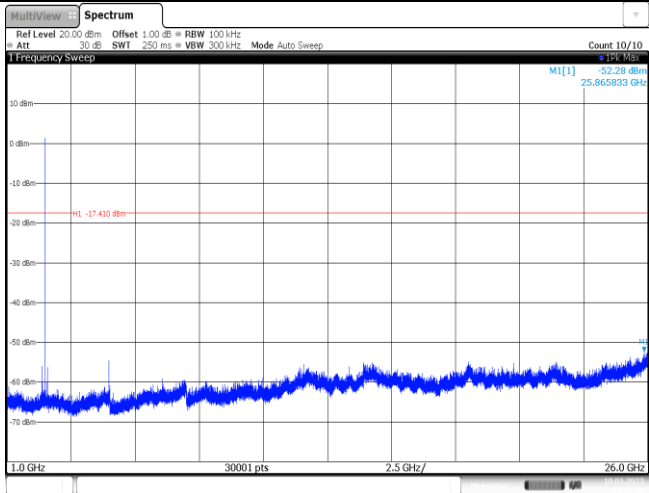


Appendix F: Band edge and Spurious Emissions (conducted)

Test Item:	Band edge																																										
CH00	MultiView Spectrum Ref Level 10.50 dBm Offset 1.00 dB RBW 100 kHz Att 20 dB SWT 1.05 ms VBW 300 kHz Mode Auto Sweep Count 300/300 1 Frequency Sweep 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm -80 dBm M1[1] 2.401726 GHz 4.03 dBm M2[1] 2.400000 GHz -41.50 dBm -15.970 dBm 2.31 GHz 1001 pts 9.5 MHz/ 2.405 GHz 2 Marker Table <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>2.401726 GHz</td><td>4.03 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>2.4 GHz</td><td>-41.50 dBm</td><td></td><td></td></tr><tr><td>M3</td><td>1</td><td></td><td>2.39 GHz</td><td>-67.99 dBm</td><td></td><td></td></tr><tr><td>M4</td><td>1</td><td></td><td>2.31 GHz</td><td>-70.45 dBm</td><td></td><td></td></tr><tr><td>M5</td><td>1</td><td></td><td>2.399965 GHz</td><td>-43.38 dBm</td><td></td><td></td></tr></table> Date: 10_JAN 2023 08:22:21	Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		2.401726 GHz	4.03 dBm			M2	1		2.4 GHz	-41.50 dBm			M3	1		2.39 GHz	-67.99 dBm			M4	1		2.31 GHz	-70.45 dBm			M5	1		2.399965 GHz	-43.38 dBm		
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result																																					
M1	1		2.401726 GHz	4.03 dBm																																							
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M4	1		2.31 GHz	-70.45 dBm																																							
M5	1		2.399965 GHz	-43.38 dBm																																							
CH39	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 M1[1] 2.480253 GHz 3.29 dBm M2[1] 2.4802530 GHz 62.38 dBm -16.710 dBm 2.478 GHz 1001 pts 2.2 MHz/ 2.5 GHz 2 Marker Table <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>2.480253 GHz</td><td>3.29 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>2.4835 GHz</td><td>-62.38 dBm</td><td></td><td></td></tr><tr><td>M3</td><td>1</td><td></td><td>2.5 GHz</td><td>-66.83 dBm</td><td></td><td></td></tr><tr><td>M4</td><td>1</td><td></td><td>2.484644 GHz</td><td>-60.84 dBm</td><td></td><td></td></tr></table> Date: 10_JAN 2023 08:27:59	Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		2.480253 GHz	3.29 dBm			M2	1		2.4835 GHz	-62.38 dBm			M3	1		2.5 GHz	-66.83 dBm			M4	1		2.484644 GHz	-60.84 dBm									
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result																																					
M1	1		2.480253 GHz	3.29 dBm																																							
M2	1		2.4835 GHz	-62.38 dBm																																							
M3	1		2.5 GHz	-66.83 dBm																																							
M4	1		2.484644 GHz	-60.84 dBm																																							

Test Item:	SE
CH00 Reference level	 Ref Level 30.00 dBm Offset 1.00 dB BW 100 kHz Att 30 dB SWI 1.04 ms VBW 300 kHz Mode Auto Sweep Count 100/100 MI[1] 4.52 dBm 2.402400 GHz 1001 pts 3.0 MHz/ Span 30.0 MHz Date: 10 JAN 2023 08:22:29
CH00 30MHz~1000MHz	 Ref Level 20.00 dBm Offset 1.00 dB BW 100 kHz Att 30 dB SWI 30.1 ms VBW 300 kHz Mode Auto Sweep Count 10/10 MI[1] -54.18 dBm 71.9630 MHz 30001 pts 97.0 MHz/ Span 1.0 GHz Date: 10 JAN 2023 08:23:26
CH00 1GHz~26GHz	 Ref Level 20.00 dBm Offset 1.00 dB BW 100 kHz Att 30 dB SWI 250 ms VBW 300 kHz Mode Auto Sweep Count 10/10 MI[1] -48.75 dBm 4.803333 GHz 30001 pts 2.5 GHz/ Span 26.0 GHz Date: 10 JAN 2023 08:23:42

CH20 Reference level	 Ref Level 30.00 dBm Offset 1.00 dB RBW 100 kHz Att -30 dB SWF 1.04 ms VBW 300 kHz Mode Auto Sweep Count 100/100 M1[1] 3.31 dBm 2.4422400 GHz CF 2.442 GHz 1001 pts 3.0 MHz/ Span 30.0 MHz Date: 10 JAN 2023 08:26:08
CH20 30MHz~1000MHz	 Ref Level 20.00 dBm Offset 1.00 dB RBW 100 kHz Att -30 dB SWF 30.1 ms VBW 300 kHz Mode Auto Sweep Count 10/10 M1[1] -57.76 dBm 95.9420 MHz H1 -16.600 dBm 30.0 MHz 30001 pts 97.0 MHz/ 1.0 GHz Date: 10 JAN 2023 08:26:24
CH20 1GHz~26GHz	 Ref Level 20.00 dBm Offset 1.00 dB RBW 100 kHz Att -30 dB SWF 250 ms VBW 300 kHz Mode Auto Sweep Count 10/10 M1[1] -52.57 dBm 4.883333 GHz H1 -16.600 dBm 1.0 GHz 30001 pts 2.5 GHz/ 26.0 GHz Date: 10 JAN 2023 08:26:40

CH39 Reference level	
CH39 30MHz~1000MHz	
CH39 1GHz~26GHz	

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