

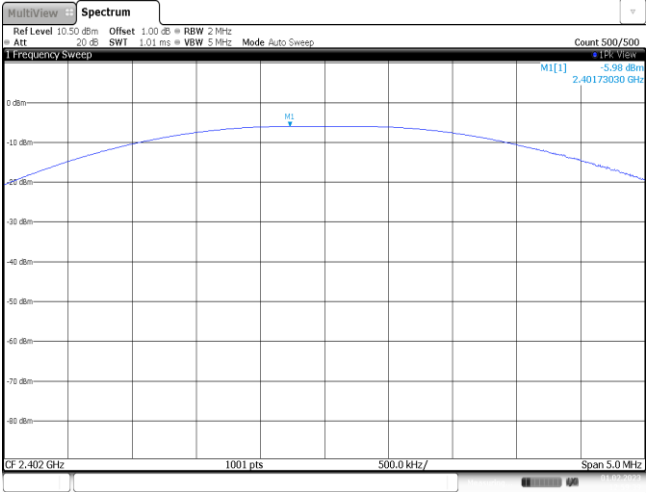
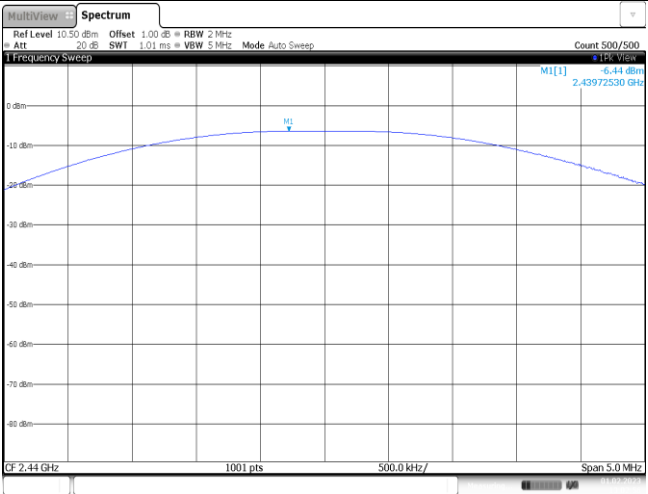
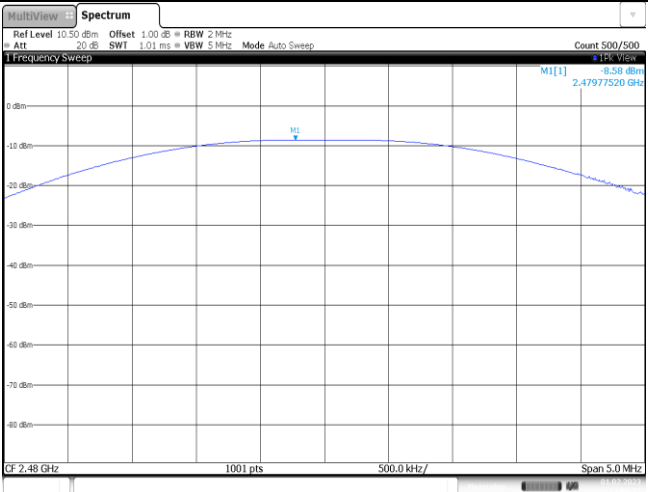
APPENDIX REPORT

Project No.	SHT2211046601EW	Radio Specification	Bluetooth BLE
Test sample No.	YPHT22110466001	Model No.	DQAPT
Start test date	2023-02-01	Finish date	2023-02-01
Temperature	24.2℃	Humidity	49%
Test Engineer	Xiaoqin 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

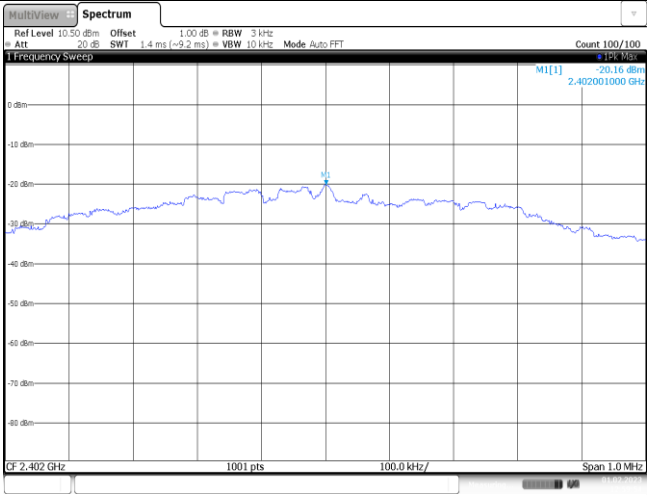
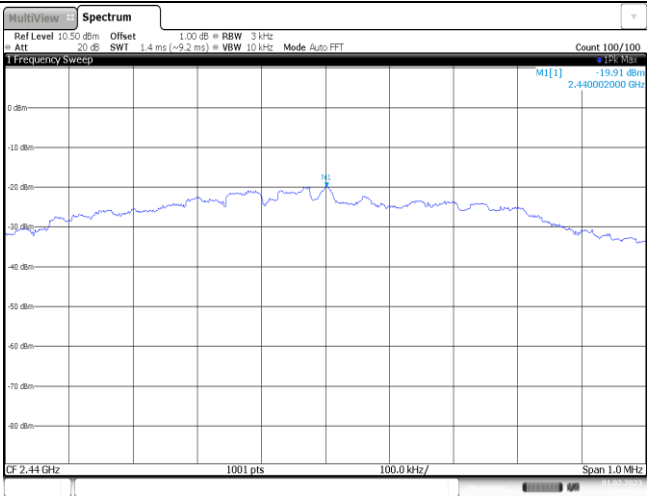
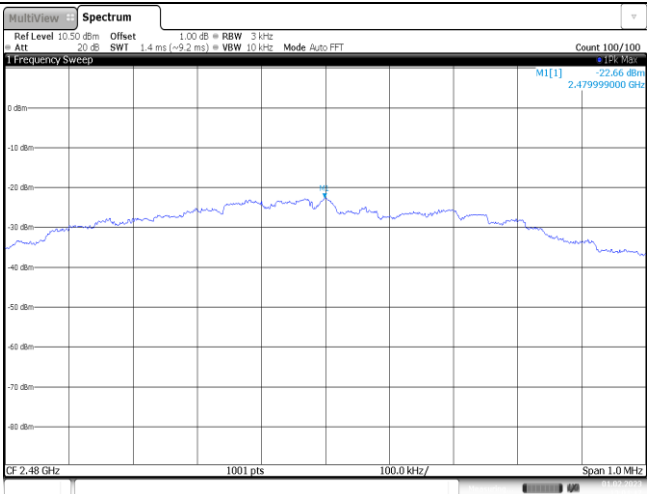
Appendix A: Peak Output Power

Type	Channel	Peak Output power (dBm)	Average Output power (dBm)	Limit (dBm)	Result
BT-BLE	00	-5.98	-6.02	≤ 30.00	Pass
	19	-6.44	-6.46		
	39	-8.58	-8.61		

CH00	 MultiView Spectrum Ref Level 10.50 dBm Offset 1.00 dB RBW 2 MHz Att 20 dB SWF 1.01 ms VBW 5 kHz Mode Auto Sweep Count 500/500 1 Frequency Sweep M1[1] -5.98 dBm 2.40173030 GHz CF 2.402 GHz 1001 pts 500.0 kHz/ Span 5.0 MHz Date: 1.FEB.2023 12:59:08
CH19	 MultiView Spectrum Ref Level 10.50 dBm Offset 1.00 dB RBW 2 MHz Att 20 dB SWF 1.01 ms VBW 5 kHz Mode Auto Sweep Count 500/500 1 Frequency Sweep M1[1] -6.44 dBm 2.43972530 GHz CF 2.44 GHz 1001 pts 500.0 kHz/ Span 5.0 MHz Date: 1.FEB.2023 13:02:55
CH39	 MultiView Spectrum Ref Level 10.50 dBm Offset 1.00 dB RBW 2 MHz Att 20 dB SWF 1.01 ms VBW 5 kHz Mode Auto Sweep Count 500/500 1 Frequency Sweep M1[1] -6.58 dBm 2.47977520 GHz CF 2.48 GHz 1001 pts 500.0 kHz/ Span 5.0 MHz Date: 1.FEB.2023 13:04:02

Appendix B: Power Spectral Density

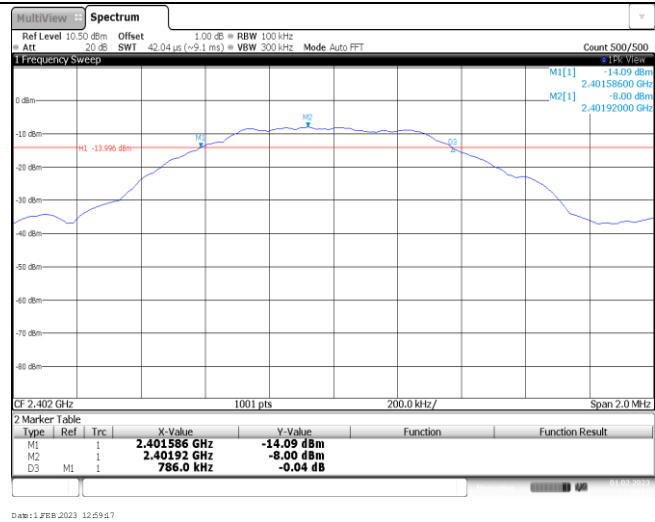
Type	Channel	Power Spectral Density(dBm/3KHz)	Limit (dBm/3KHz)	Result
BT-BLE	00	-20.16	≤8.00	Pass
	19	-19.91		
	39	-22.66		

CH00	 MultiView Spectrum Ref Level 10.50 dBm Offset 1.00 dB RBW 3 kHz Count 100/100 Att 20 dB SWF 1.4 ms (-2.2 ms) VBW 10 kHz Mode Auto FFT 1 Frequency Sweep M1[1] -20.16 dBm 2.402001000 GHz CF 2.402 GHz 1001 pts 100.0 kHz/ Span 1.0 MHz Date: 1.FEB.2023 12:59:53
CH19	 MultiView Spectrum Ref Level 10.50 dBm Offset 1.00 dB RBW 3 kHz Count 100/100 Att 20 dB SWF 1.4 ms (-2.2 ms) VBW 10 kHz Mode Auto FFT 1 Frequency Sweep M1[1] -19.91 dBm 2.440002000 GHz CF 2.44 GHz 1001 pts 100.0 kHz/ Span 1.0 MHz Date: 1.FEB.2023 13:03:10
CH39	 MultiView Spectrum Ref Level 10.50 dBm Offset 1.00 dB RBW 3 kHz Count 100/100 Att 20 dB SWF 1.4 ms (-2.2 ms) VBW 10 kHz Mode Auto FFT 1 Frequency Sweep M1[1] -22.66 dBm 2.479999000 GHz CF 2.48 GHz 1001 pts 100.0 kHz/ Span 1.0 MHz Date: 1.FEB.2023 13:04:47

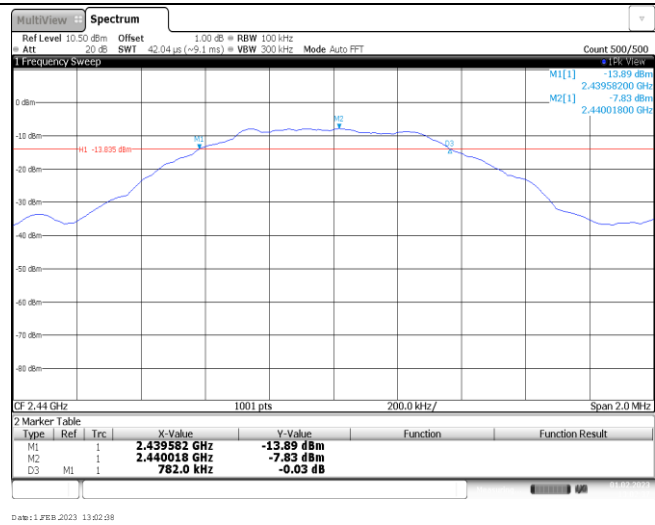
Appendix C: 6dB bandwidth

Type	Channel	6dB Bandwidth(kHz)	Limit (kHz)	Result
BT-BLE	00	786.00	≥500	Pass
	19	782.00		
	39	778.00		

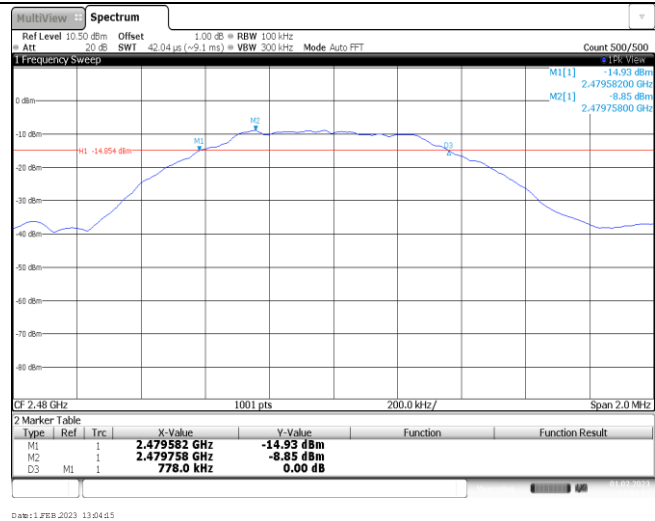
CH00



CH19



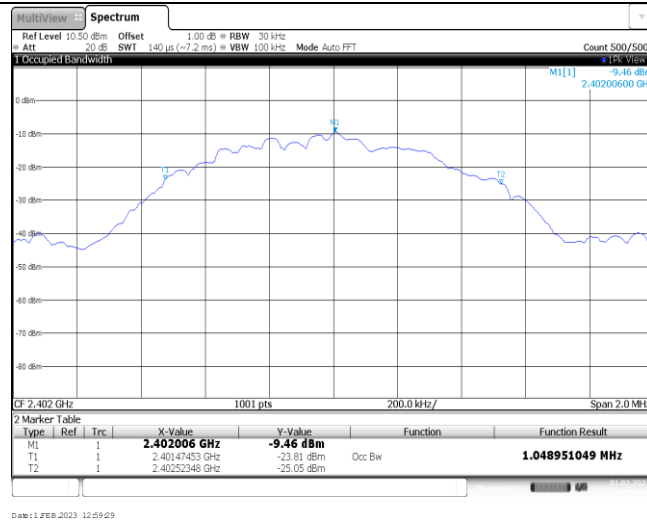
CH39



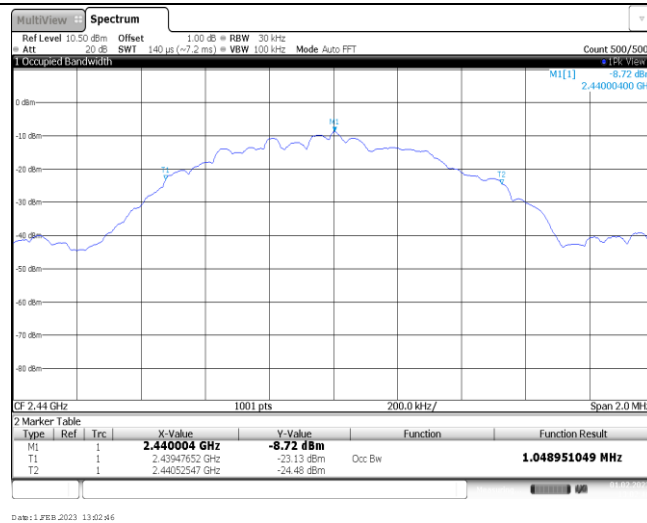
Appendix D: 99% Occupied Bandwidth

Type	Channel	99% Occupied Bandwidth(MHz)	Limit (kHz)	Result
BT-BLE	00	1.05	-	Pass
	19	1.05		
	39	1.05		

CH00



CH19

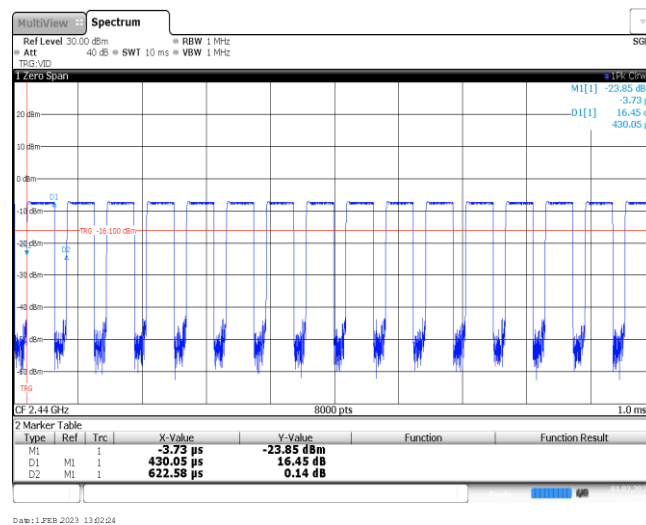


CH39



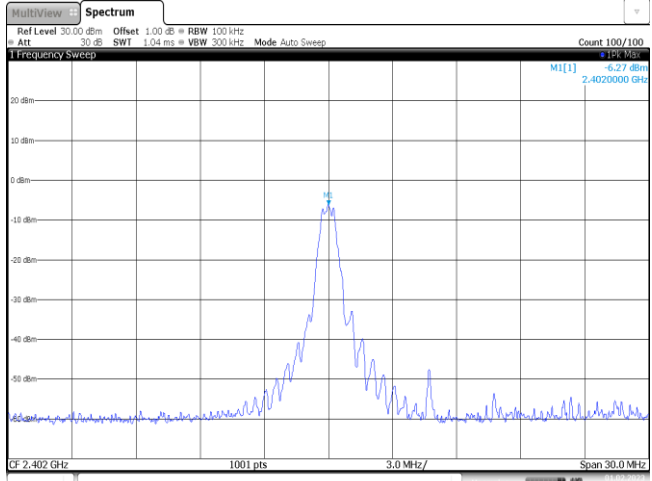
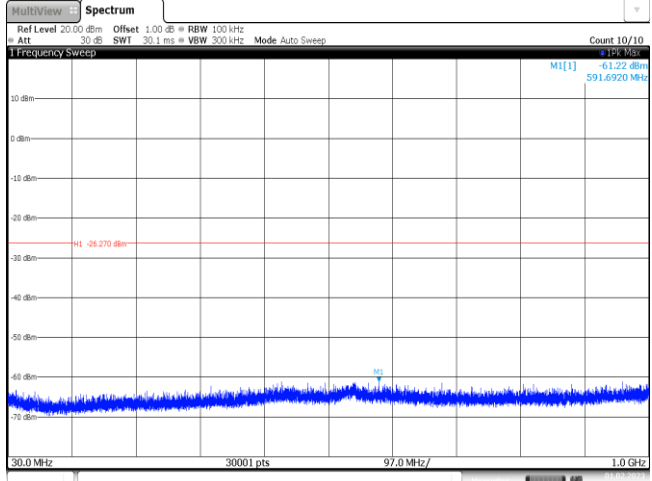
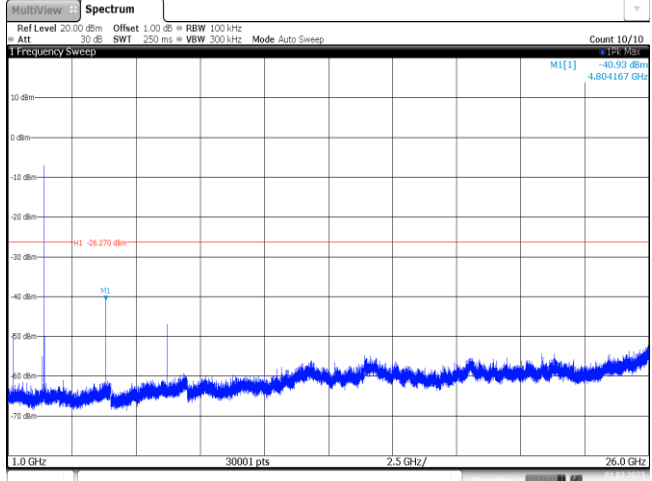
Appendix E: Duty cycle

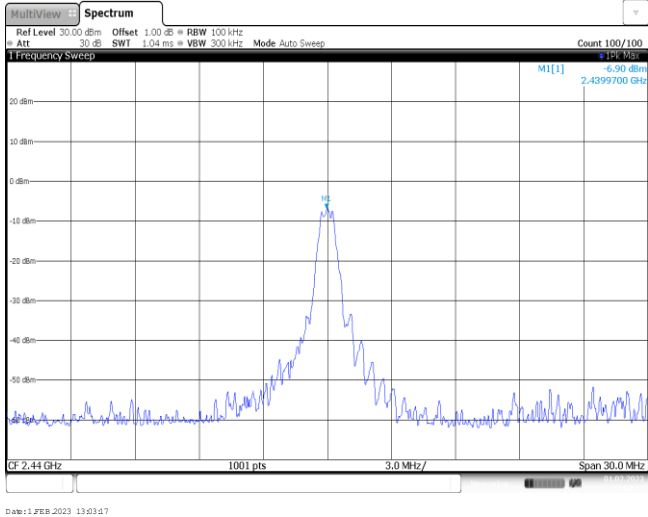
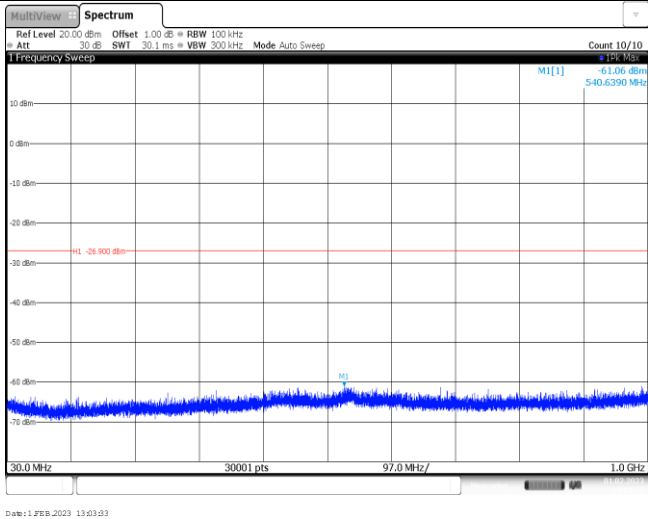
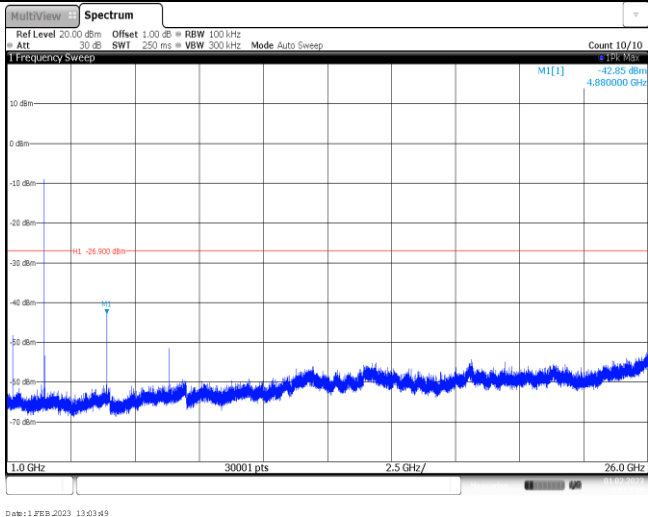
Test Frequency (MHz)	T _{on} time for single burst (ms)	T _{period} (ms)	Duty cycle	1/T _{on} time (kHz)
2440	0.43	0.62	69.4%	2.33

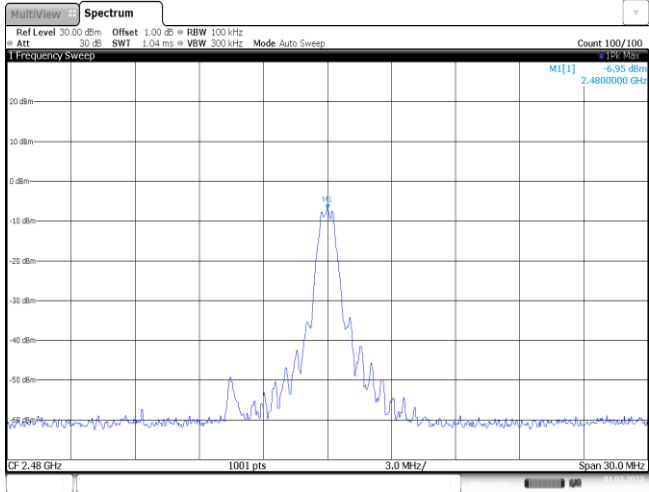
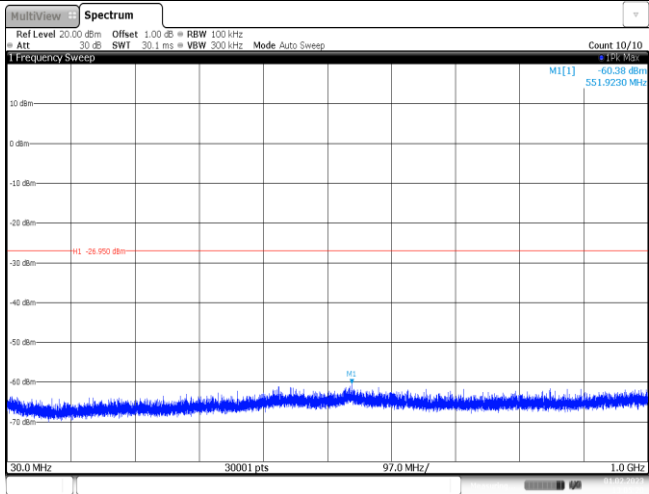
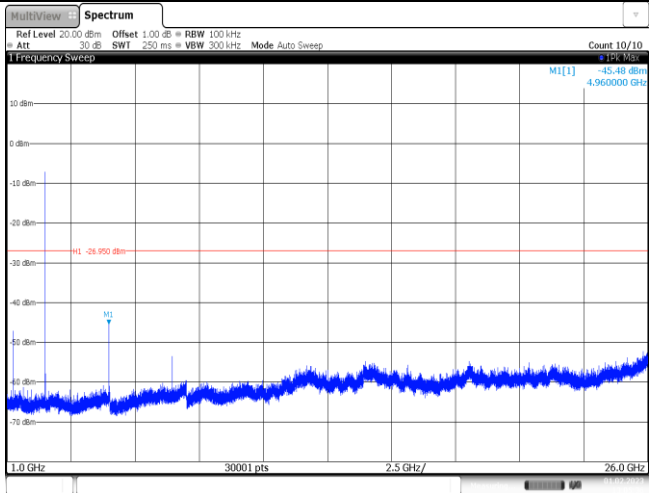


Appendix F: Band edge and Spurious Emissions (conducted)

Test Item:	Band edge																																										
CH00	MultiView Spectrum Ref Level 10.50 dBm Offset 1.00 dB RBW 100 kHz Att 20 dB SWI 1.05 ms VBW 300 kHz Mode Auto Sweep Count 300/300 1 Frequency Sweep 0 dB 10 dB 20 dB 30 dB 40 dB 50 dB 60 dB 70 dB 80 dB M1 -26.200 dBm M1 -6.29 dBm M2 -46.16 dBm M2 2.4020100 GHz M3 -66.77 dBm M4 -73.58 dBm M5 -49.08 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>2.40201 GHz</td><td>-6.29 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>2.4 GHz</td><td>-46.16 dBm</td><td></td><td></td></tr><tr><td>M3</td><td>1</td><td></td><td>2.39 GHz</td><td>-66.77 dBm</td><td></td><td></td></tr><tr><td>M4</td><td>1</td><td></td><td>2.31 GHz</td><td>-73.58 dBm</td><td></td><td></td></tr><tr><td>M5</td><td>1</td><td></td><td>2.399965 GHz</td><td>-49.08 dBm</td><td></td><td></td></tr></table> Date: 1.FEB.2023 13:00:40	Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		2.40201 GHz	-6.29 dBm			M2	1		2.4 GHz	-46.16 dBm			M3	1		2.39 GHz	-66.77 dBm			M4	1		2.31 GHz	-73.58 dBm			M5	1		2.399965 GHz	-49.08 dBm		
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result																																					
M1	1		2.40201 GHz	-6.29 dBm																																							
M2	1		2.4 GHz	-46.16 dBm																																							
M3	1		2.39 GHz	-66.77 dBm																																							
M4	1		2.31 GHz	-73.58 dBm																																							
M5	1		2.399965 GHz	-49.08 dBm																																							
CH39	MultiView Spectrum Ref Level 10.50 dBm Offset 1.00 dB RBW 100 kHz Att 20 dB SWI 1.02 ms VBW 300 kHz Mode Auto Sweep Count 100/100 1 Frequency Sweep 0 dB 10 dB 20 dB 30 dB 40 dB 50 dB 60 dB 70 dB 80 dB M1 -8.80 dBm M1 2.4799890 GHz M2 -59.49 dBm M2 2.4835000 GHz M3 -65.41 dBm M4 -58.29 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>2.479989 GHz</td><td>-8.80 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>2.4835 GHz</td><td>-59.49 dBm</td><td></td><td></td></tr><tr><td>M3</td><td>1</td><td></td><td>2.5 GHz</td><td>-65.41 dBm</td><td></td><td></td></tr><tr><td>M4</td><td>1</td><td></td><td>2.483566 GHz</td><td>-58.29 dBm</td><td></td><td></td></tr></table> Date: 1.FEB.2023 13:04:57	Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		2.479989 GHz	-8.80 dBm			M2	1		2.4835 GHz	-59.49 dBm			M3	1		2.5 GHz	-65.41 dBm			M4	1		2.483566 GHz	-58.29 dBm									
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result																																					
M1	1		2.479989 GHz	-8.80 dBm																																							
M2	1		2.4835 GHz	-59.49 dBm																																							
M3	1		2.5 GHz	-65.41 dBm																																							
M4	1		2.483566 GHz	-58.29 dBm																																							

Test Item:	SE
CH00 Reference level	 CH00 Reference level
CH00 30MHz~1000MHz	 CH00 30MHz~1000MHz
CH00 1GHz~26GHz	 CH00 1GHz~26GHz

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

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

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