

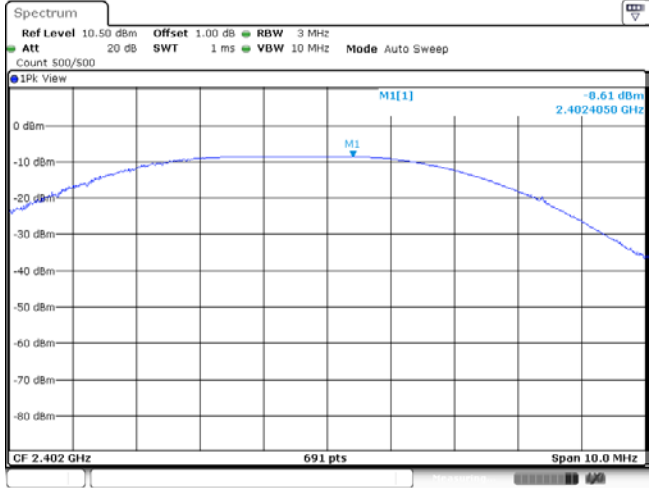
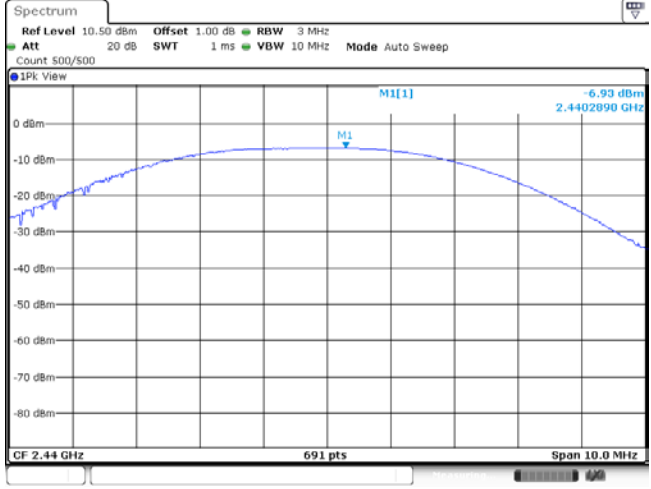
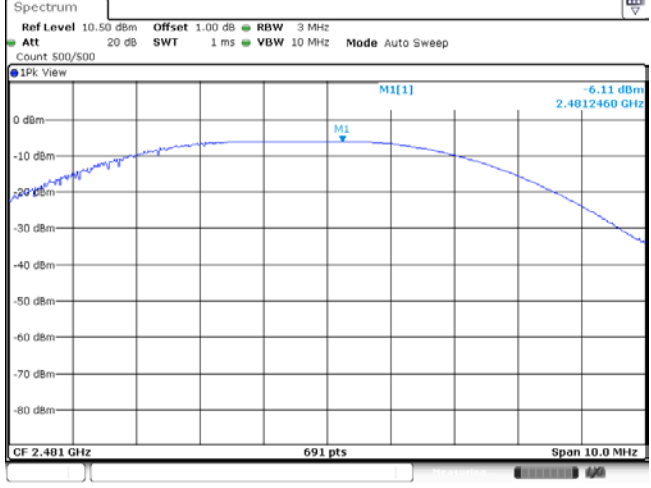
APPENDIX REPORT

Project No.	SHT2204077914EW		
Test sample No.	YPHT22040779017	Model No.	SM9113 main unit
Start test date	2023-05-12	Finish date	2023-05-12
Temperature	24.4℃	Humidity	48%
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

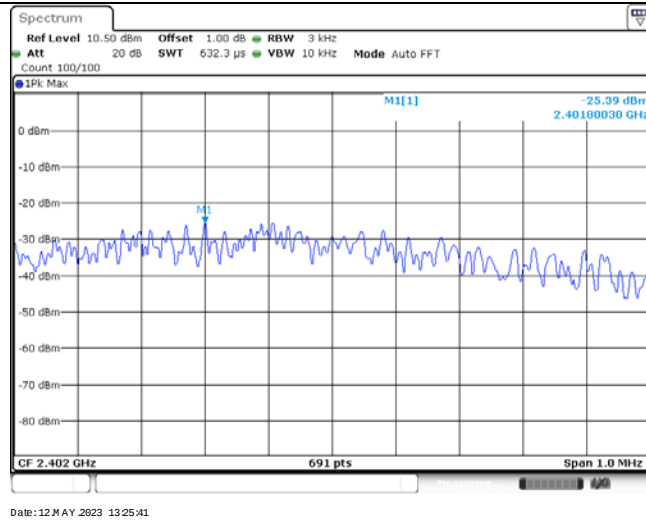
Type	Channel	Peak Output power (dBm)	Average Output power (dBm)	Limit (dBm)	Result
FSK	00	-8.61	-8.65	≤ 30.00	Pass
	38	-6.93	-6.97		
	79	-6.11	-6.13		

CH00	 Spectrum Ref Level 10.50 dBm Offset 1.00 dB RBW 3 MHz Att 20 dB SWT 1 ms VBW 10 MHz Mode Auto Sweep Count 500/500 IPk View M1 M1[1] -6.61 dBm 2.4024050 GHz CF 2.402 GHz 691 pts Span 10.0 MHz Date: 12 MAY 2023 13:25:26
CH38	 Spectrum Ref Level 10.50 dBm Offset 1.00 dB RBW 3 MHz Att 20 dB SWT 1 ms VBW 10 MHz Mode Auto Sweep Count 500/500 IPk View M1 M1[1] -6.93 dBm 2.4402090 GHz CF 2.44 GHz 691 pts Span 10.0 MHz Date: 12 MAY 2023 13:28:27
CH79	 Spectrum Ref Level 10.50 dBm Offset 1.00 dB RBW 3 MHz Att 20 dB SWT 1 ms VBW 10 MHz Mode Auto Sweep Count 500/500 IPk View M1 M1[1] -6.11 dBm 2.4012460 GHz CF 2.401 GHz 691 pts Span 10.0 MHz Date: 12 MAY 2023 13:30:39

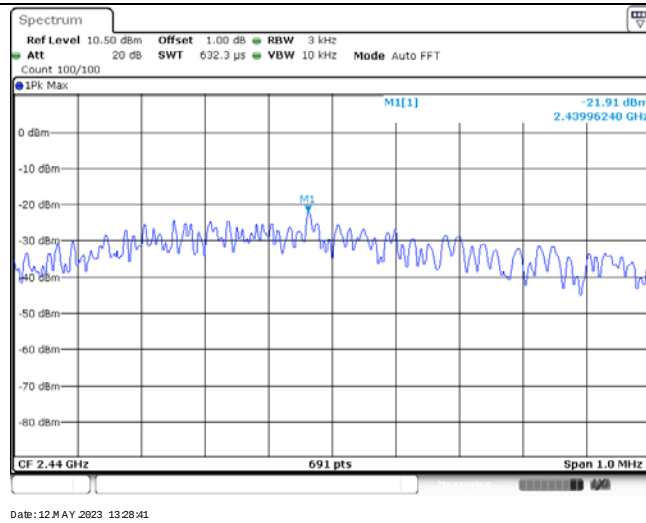
Appendix B: Power Spectral Density

Type	Channel	Power Spectral Density(dBm/3KHz)	Limit (dBm/3KHz)	Result
FSK	00	-25.39	≤8.00	Pass
	38	-21.91		
	79	-22.23		

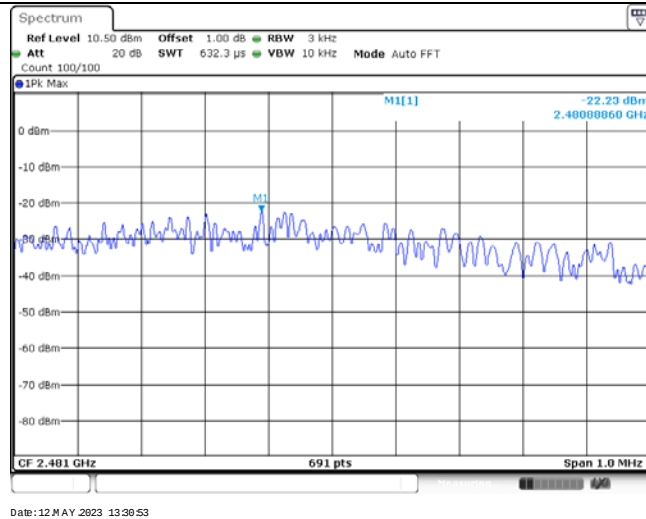
CH00



CH38



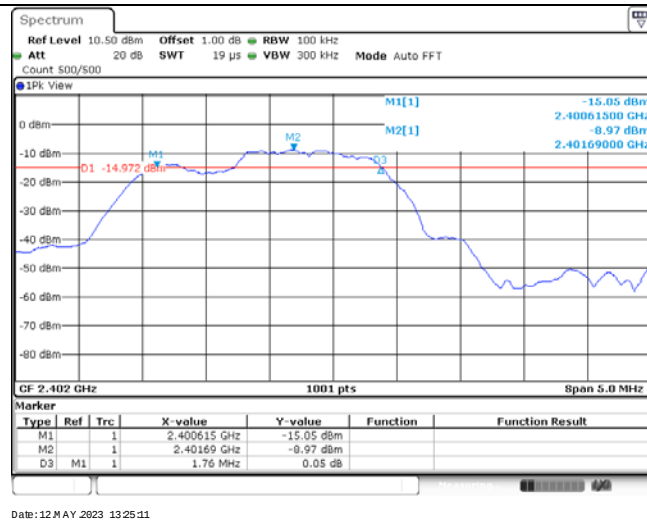
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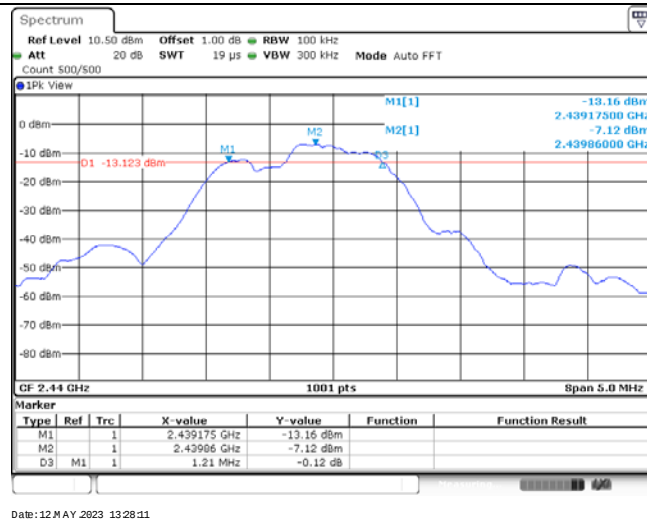
Appendix C: 6dB bandwidth

Type	Channel	6dB Bandwidth(kHz)	Limit (kHz)	Result
FSK	00	1760.00	≥500	Pass
	38	1210.00		
	79	1580.00		

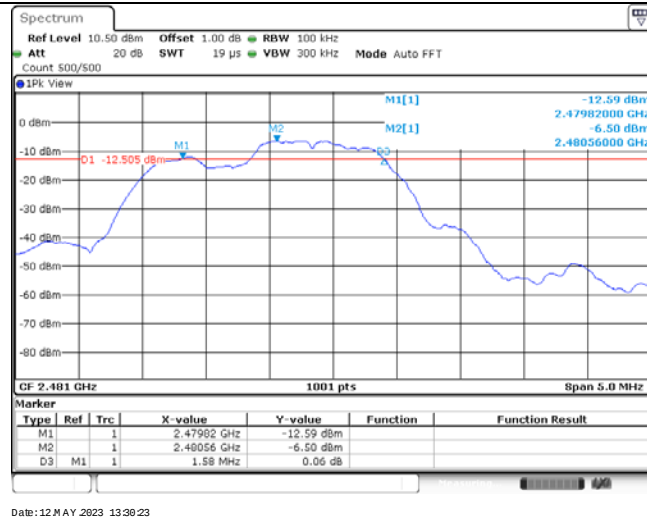
CH00



CH38



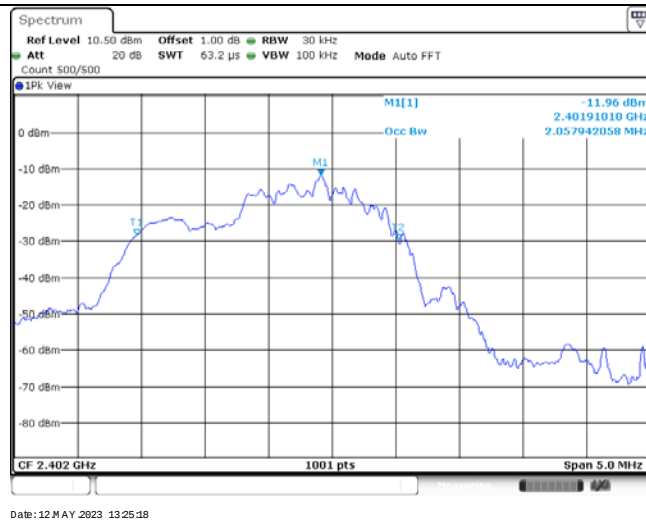
CH79



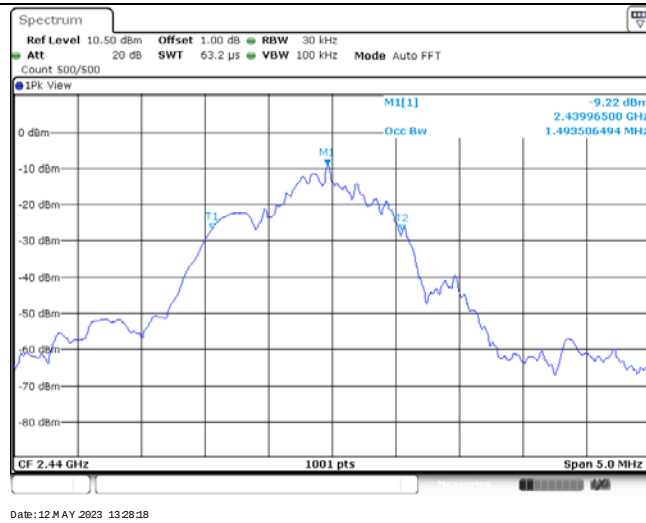
Appendix D: 99% Occupied Bandwidth

Type	Channel	99% Occupied Bandwidth(MHz)	Limit (kHz)	Result
FSK	00	2.06	-	Pass
	38	1.49		
	79	1.94		

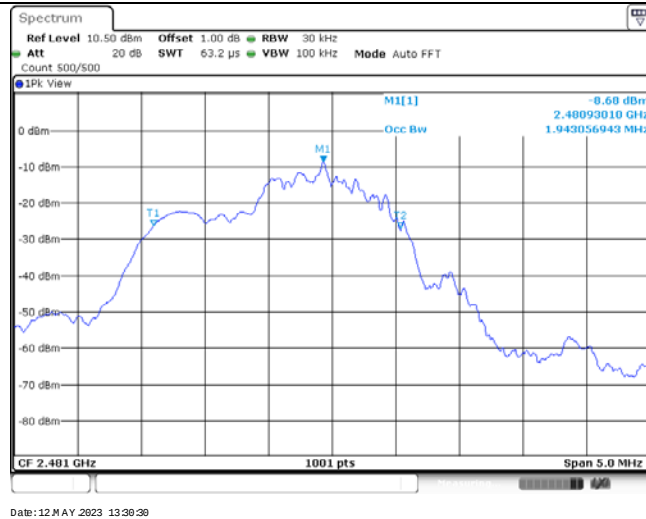
CH00



CH38

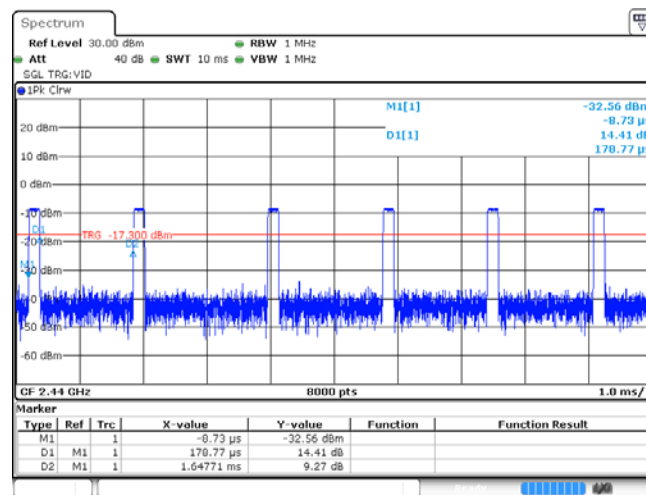


CH79



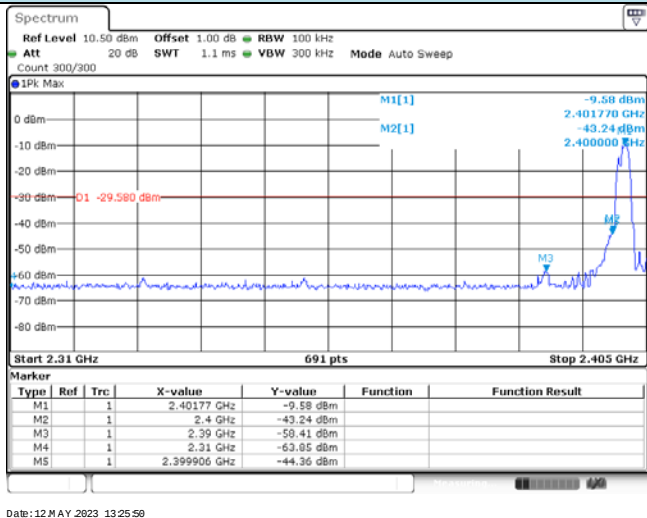
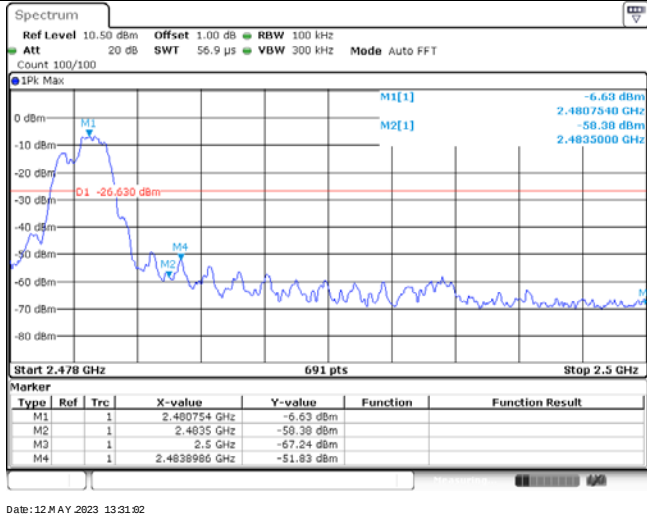
Appendix E: Duty cycle

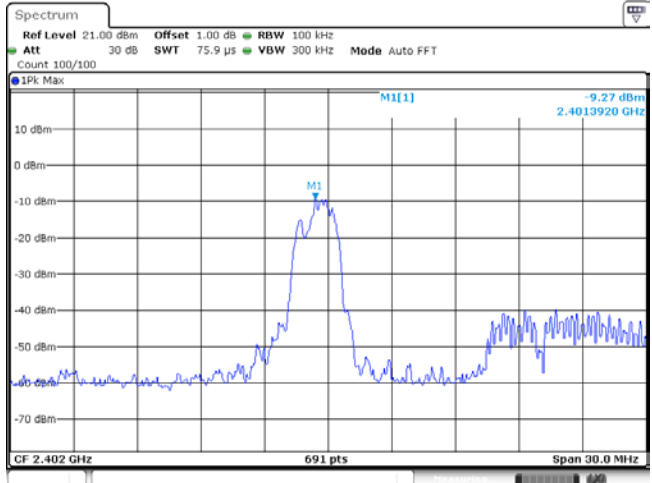
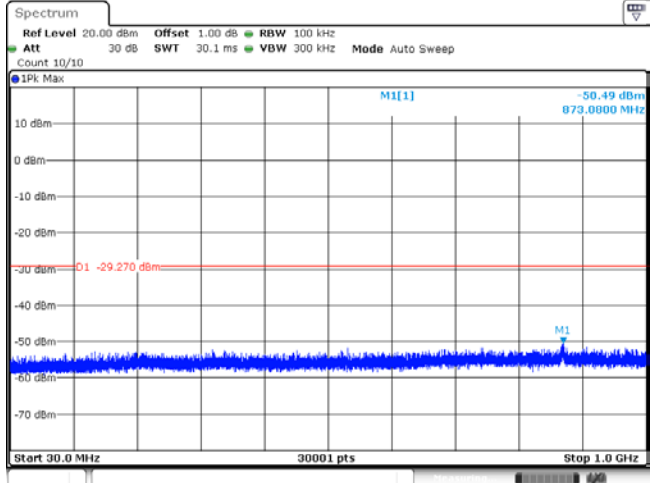
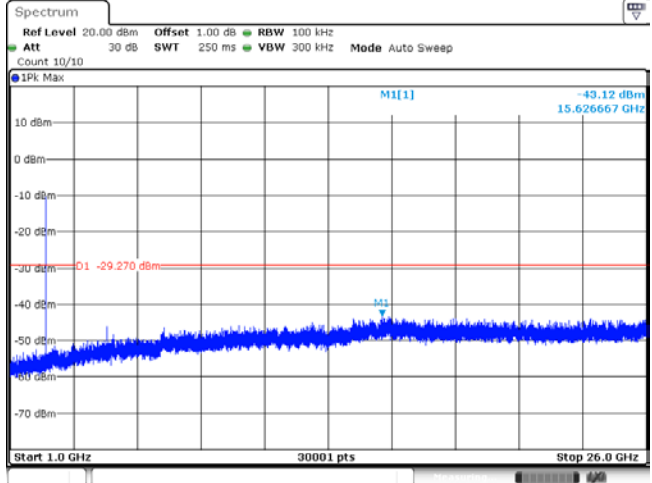
Test Frequency (MHz)	T _{on} time for single burst (ms)	T _{period} (ms)	Duty cycle	1/T _{on} time (kHz)
2440	0.18	1.65	10.9%	5.56

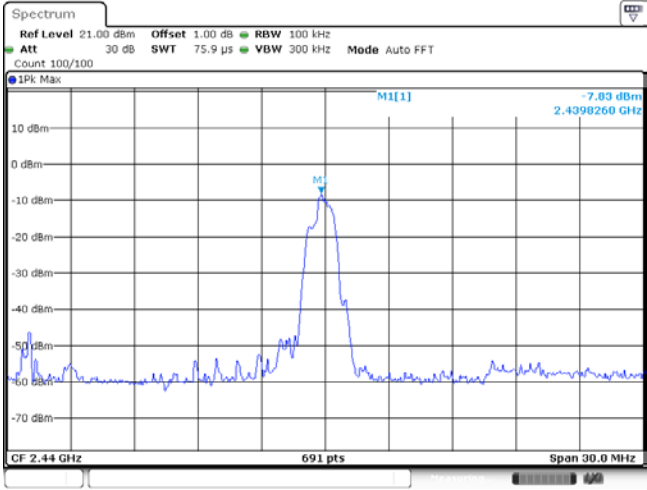
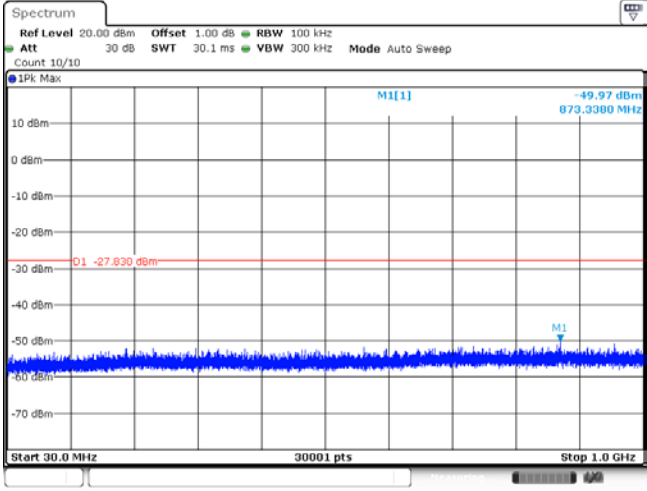
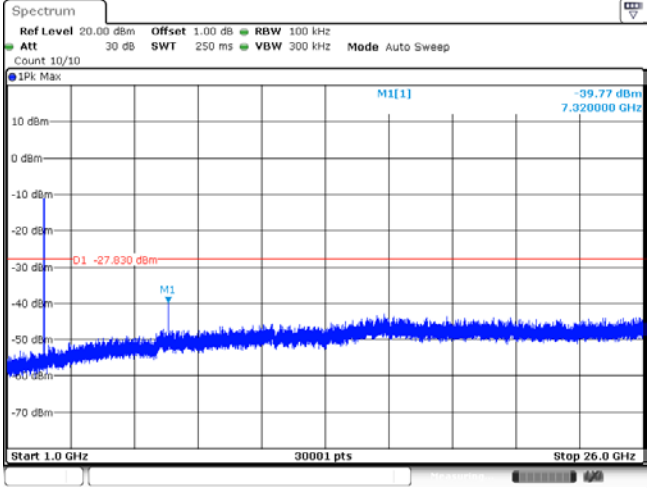


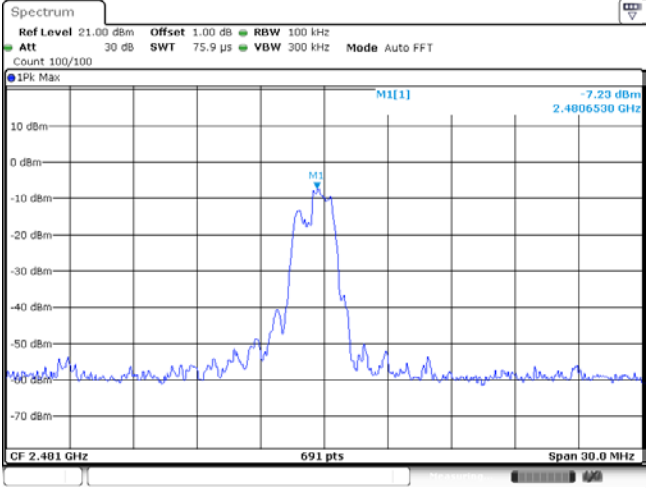
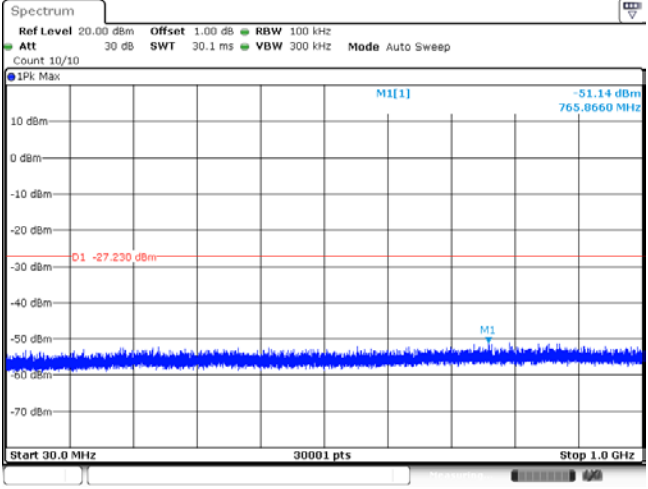
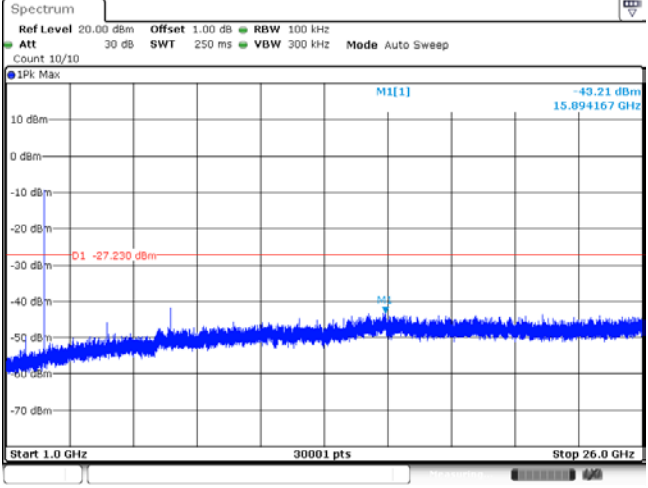
Date: 12 MAY 2023 13:27:58

Appendix F: Band edge and Spurious Emissions (conducted)

Test Item:	Band edge																																										
CH00	Spectrum Ref Level 10.50 dBm Offset 1.00 dB RBW 100 kHz Att 20 dB SWT 1.1 ms VBW 300 kHz Mode Auto Sweep Count 300/300 1Pk Max  Start 2.31 GHz 691 pts Stop 2.405 GHz <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>-9.58 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>2.4 GHz</td><td>-43.24 dBm</td><td></td><td></td></tr><tr><td>M3</td><td>1</td><td></td><td>2.39 GHz</td><td>-58.41 dBm</td><td></td><td></td></tr><tr><td>M4</td><td>1</td><td></td><td>2.31 GHz</td><td>-63.65 dBm</td><td></td><td></td></tr><tr><td>M5</td><td>1</td><td></td><td>2.399906 GHz</td><td>-44.36 dBm</td><td></td><td></td></tr></tbody></table> Date: 12 MAY 2023 13:25:58	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1		2.40177 GHz	-9.58 dBm			M2	1		2.4 GHz	-43.24 dBm			M3	1		2.39 GHz	-58.41 dBm			M4	1		2.31 GHz	-63.65 dBm			M5	1		2.399906 GHz	-44.36 dBm		
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CH79	Spectrum Ref Level 10.50 dBm Offset 1.00 dB RBW 100 kHz Att 20 dB SWT 56.9 μs VBW 300 kHz Mode Auto FFT Count 100/100 1Pk Max  Start 2.478 GHz 691 pts Stop 2.5 GHz <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>2.480754 GHz</td><td>-6.63 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>2.4835 GHz</td><td>-58.38 dBm</td><td></td><td></td></tr><tr><td>M3</td><td>1</td><td></td><td>2.5 GHz</td><td>-67.24 dBm</td><td></td><td></td></tr><tr><td>M4</td><td>1</td><td></td><td>2.4838986 GHz</td><td>-51.83 dBm</td><td></td><td></td></tr></tbody></table> Date: 12 MAY 2023 13:31:82	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1		2.480754 GHz	-6.63 dBm			M2	1		2.4835 GHz	-58.38 dBm			M3	1		2.5 GHz	-67.24 dBm			M4	1		2.4838986 GHz	-51.83 dBm									
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M4	1		2.4838986 GHz	-51.83 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] -9.27 dBm 2.4013920 GHz CF 2.402 GHz 691 pts Span 30.0 MHz Date: 12 MAY 2023 13:25:55
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] -50.49 dBm 873.8880 MHz Start 30.0 MHz 30001 pts Stop 1.0 GHz Date: 12 MAY 2023 13:26:19
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] -43.12 dBm 15.626667 GHz Start 1.0 GHz 30001 pts Stop 26.0 GHz Date: 12 MAY 2023 13:26:26

CH38 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 IPk Max M1[1] -7.83 dBm 2.4398260 GHz CF 2.44 GHz 691 pts Span 30.0 MHz Date: 12 MAY 2023 13:28:46
CH38 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 IPk Max M1[1] -49.97 dBm 873.3380 MHz D1 -27.830 dBm Start 30.0 MHz 30001 pts Stop 1.0 GHz Date: 12 MAY 2023 13:29:01
CH38 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 IPk Max M1[1] -39.77 dBm 7.320000 GHz D1 -27.830 dBm Start 1.0 GHz 30001 pts Stop 26.0 GHz Date: 12 MAY 2023 13:29:16

CH79 Reference level	 Date: 12 MAY 2023 13:31:07
CH79 30MHz~1000MHz	 Date: 12 MAY 2023 13:31:22
CH79 1GHz~26GHz	 Date: 12 MAY 2023 13:31:37

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