

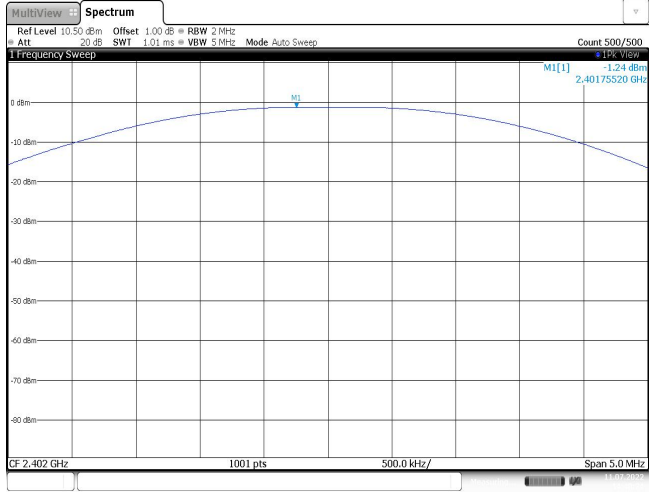
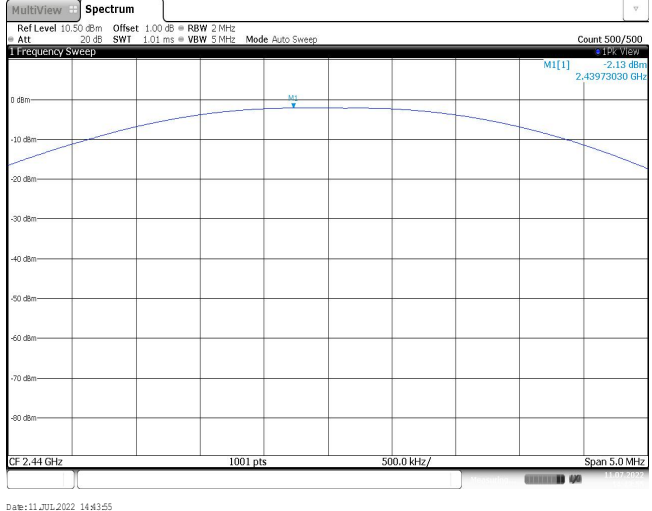
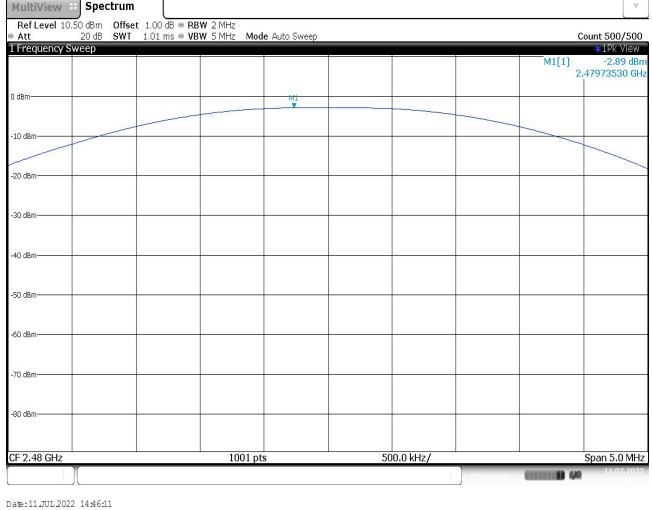
APPENDIX REPORT

Project No.	SHT2206102301EW	Radio Specification	Bluetooth BLE
Test sample No.	YPHT22061023001	Model No.	Star10 3G
Start test date	2022-07-11	Finish date	2022-07-11
Temperature	24.8°C	Humidity	34%
Test Engineer	Hailey Chen	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

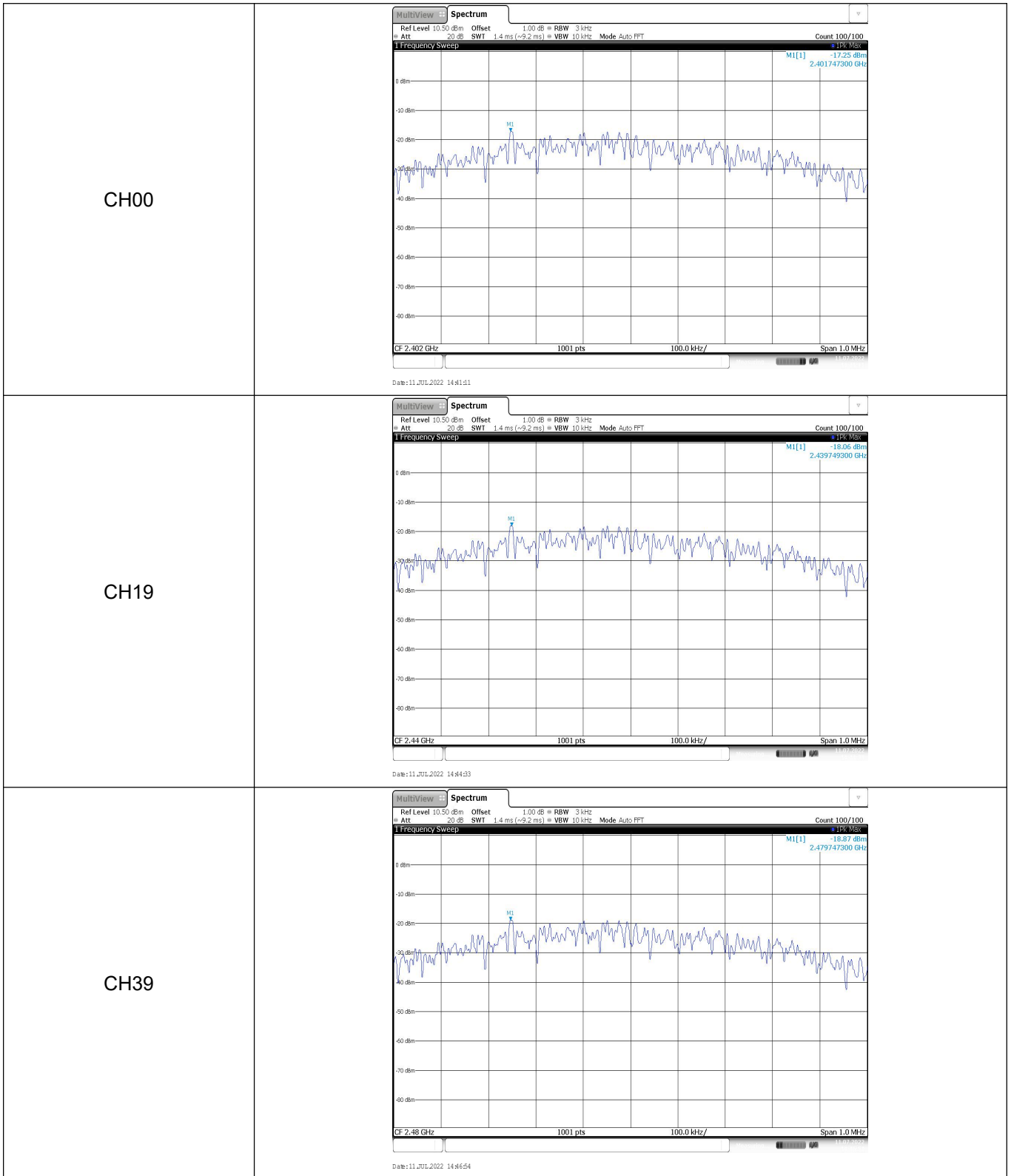
Appendix A: Peak Output Power

Type	Channel	Peak Output power (dBm)	Average Output power (dBm)	Limit (dBm)	Result
BT-BLE	00	-1.24	-1.30	≤ 30.00	Pass
	19	-2.13	-2.18		
	39	-2.89	-2.93		

<p>CH00</p>	 <p>Date: 11 JUL 2022 14:40:25</p>
<p>CH19</p>	 <p>Date: 11 JUL 2022 14:43:55</p>
<p>CH39</p>	 <p>Date: 11 JUL 2022 14:46:11</p>

Appendix B: Power Spectral Density

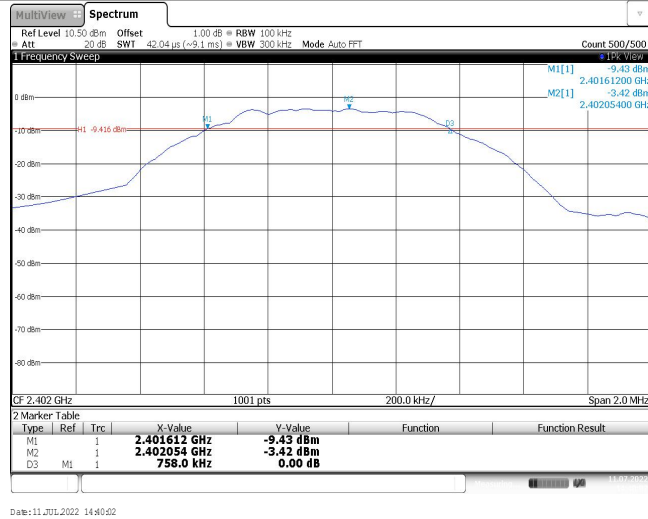
Type	Channel	Power Spectral Density(dBm/3KHz)	Limit (dBm/3KHz)	Result
BT-BLE	00	-17.25	≤8.00	Pass
	19	-18.06		
	39	-18.87		



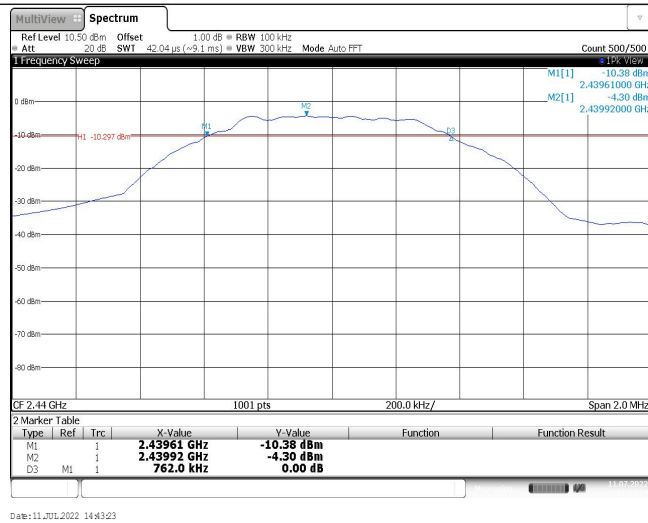
Appendix C: 6dB bandwidth

Type	Channel	6dB Bandwidth(kHz)	Limit (kHz)	Result
BT-BLE	00	758.00	≥500	Pass
	19	762.00		
	39	762.00		

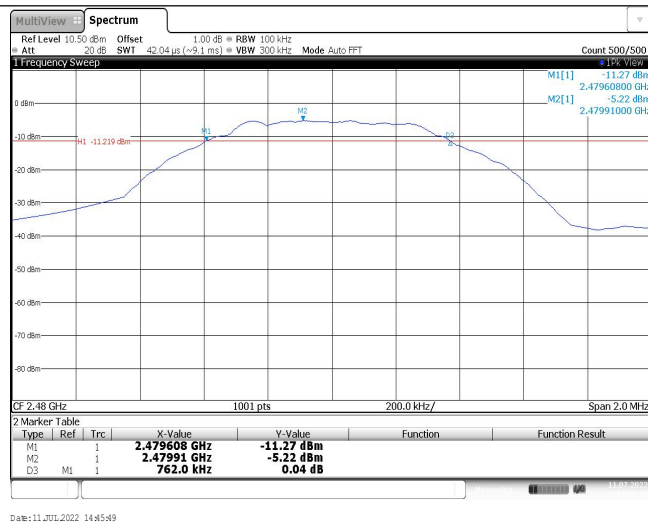
CH00



CH19



CH39



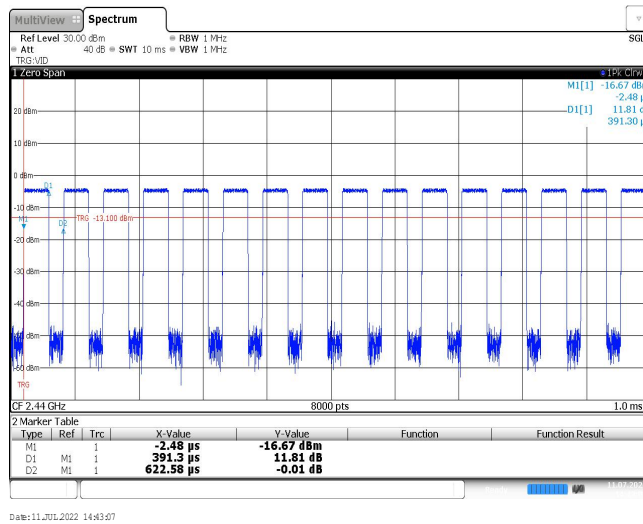
Appendix D: 99% Occupied Bandwidth

Type	Channel	99% Occupied Bandwidth(MHz)	Limit (kHz)	Result
BT-BLE	00	1.02	-	Pass
	19	1.02		
	39	1.02		

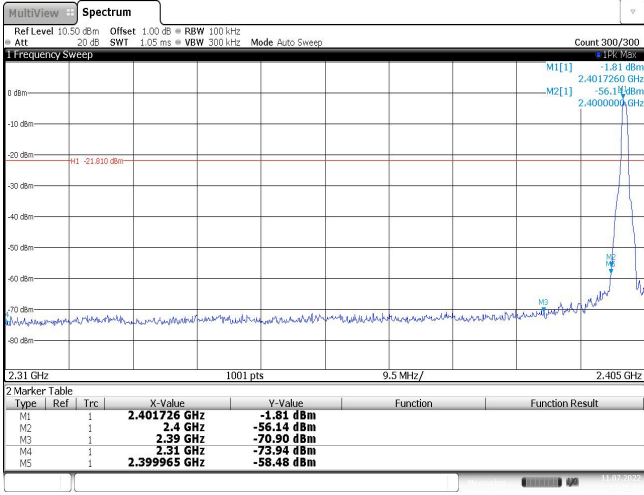
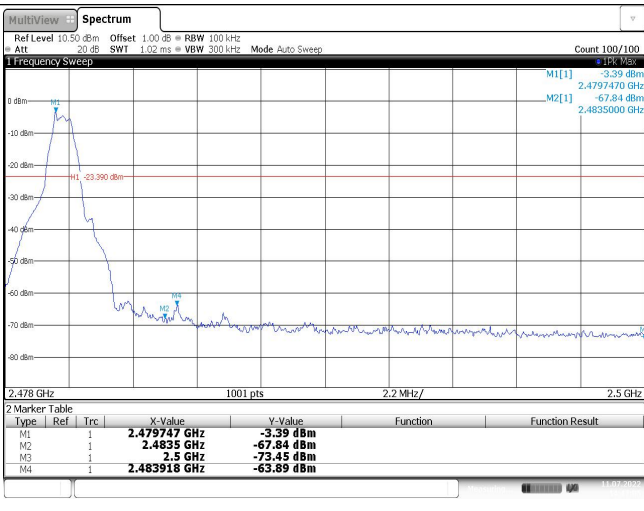
<p>CH00</p>	<p>MultiView Spectrum</p> <p>Ref Level 10.50 dBm Offset 30 dB SWI 140 us (<7.2 ms) VBW 100 kHz Mode Auto FFT Count 500/500</p> <p>1 Occupied Bandwidth</p> <p>CF 2.402 GHz 1001 pts 200.0 kHz/ Span 2.0 MHz</p> <table border="1"> <thead> <tr> <th>Type</th> <th>Ref</th> <th>Trc</th> <th>X-Value</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>2.4017502 GHz</td> <td>-5.98 dBm</td> <td></td> <td></td> </tr> <tr> <td>T1</td> <td>1</td> <td></td> <td>2.4014965 GHz</td> <td>-19.83 dBm</td> <td>Occ Bw</td> <td>1.020979021 MHz</td> </tr> <tr> <td>T2</td> <td>1</td> <td></td> <td>2.40251748 GHz</td> <td>-20.60 dBm</td> <td></td> <td></td> </tr> </tbody> </table> <p>Date: 11 JUL 2022 14:40:15</p>	Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		2.4017502 GHz	-5.98 dBm			T1	1		2.4014965 GHz	-19.83 dBm	Occ Bw	1.020979021 MHz	T2	1		2.40251748 GHz	-20.60 dBm		
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<p>CH19</p>	<p>MultiView Spectrum</p> <p>Ref Level 10.50 dBm Offset 30 dB SWI 140 us (<7.2 ms) VBW 100 kHz Mode Auto FFT Count 500/500</p> <p>1 Occupied Bandwidth</p> <p>CF 2.44 GHz 1001 pts 200.0 kHz/ Span 2.0 MHz</p> <table border="1"> <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>2.4397483 GHz</td> <td>-6.80 dBm</td> <td></td> <td></td> </tr> <tr> <td>T1</td> <td>1</td> <td></td> <td>2.43949451 GHz</td> <td>-20.84 dBm</td> <td>Occ Bw</td> <td>1.024975025 MHz</td> </tr> <tr> <td>T2</td> <td>1</td> <td></td> <td>2.44051948 GHz</td> <td>-21.60 dBm</td> <td></td> <td></td> </tr> </tbody> </table> <p>Date: 11 JUL 2022 14:43:32</p>	Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		2.4397483 GHz	-6.80 dBm			T1	1		2.43949451 GHz	-20.84 dBm	Occ Bw	1.024975025 MHz	T2	1		2.44051948 GHz	-21.60 dBm		
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T2	1		2.44051948 GHz	-21.60 dBm																									
<p>CH39</p>	<p>MultiView Spectrum</p> <p>Ref Level 10.50 dBm Offset 30 dB SWI 140 us (<7.2 ms) VBW 100 kHz Mode Auto FFT Count 500/500</p> <p>1 Occupied Bandwidth</p> <p>CF 2.48 GHz 1001 pts 200.0 kHz/ Span 2.0 MHz</p> <table border="1"> <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>2.4797483 GHz</td> <td>-7.68 dBm</td> <td></td> <td></td> </tr> <tr> <td>T1</td> <td>1</td> <td></td> <td>2.47949451 GHz</td> <td>-21.56 dBm</td> <td>Occ Bw</td> <td>1.024975025 MHz</td> </tr> <tr> <td>T2</td> <td>1</td> <td></td> <td>2.48051948 GHz</td> <td>-22.45 dBm</td> <td></td> <td></td> </tr> </tbody> </table> <p>Date: 11 JUL 2022 14:46:50</p>	Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		2.4797483 GHz	-7.68 dBm			T1	1		2.47949451 GHz	-21.56 dBm	Occ Bw	1.024975025 MHz	T2	1		2.48051948 GHz	-22.45 dBm		
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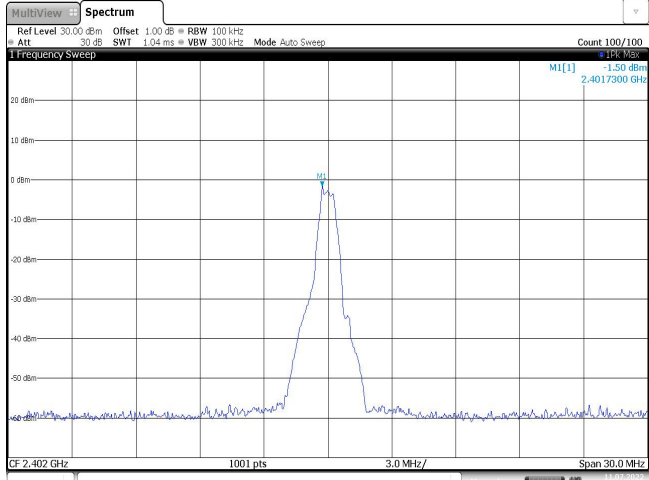
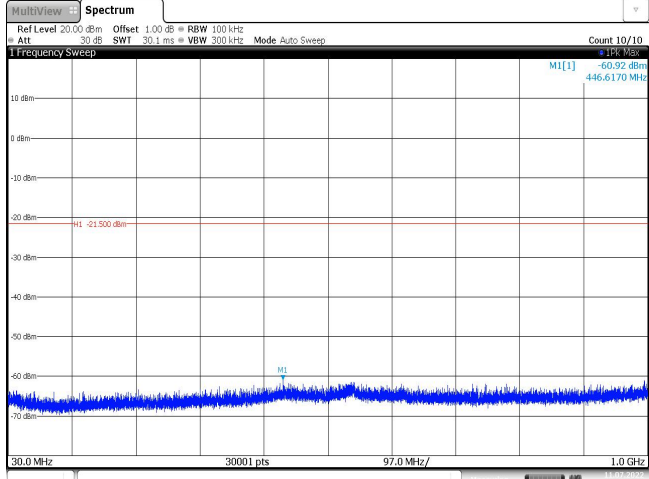
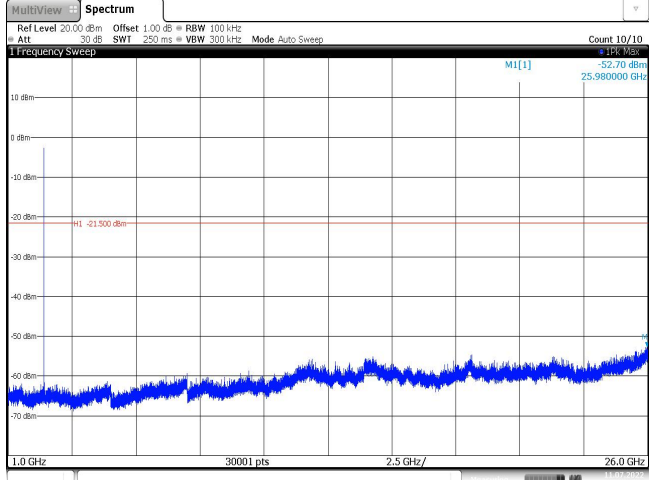
Appendix E: Duty cycle

Test Frequency (MHz)	T _{on} time for single burst (ms)	T _{period} (ms)	Duty cycle	1/T _{on} time (kHz)
2440	0.39	0.62	62.9%	2.6

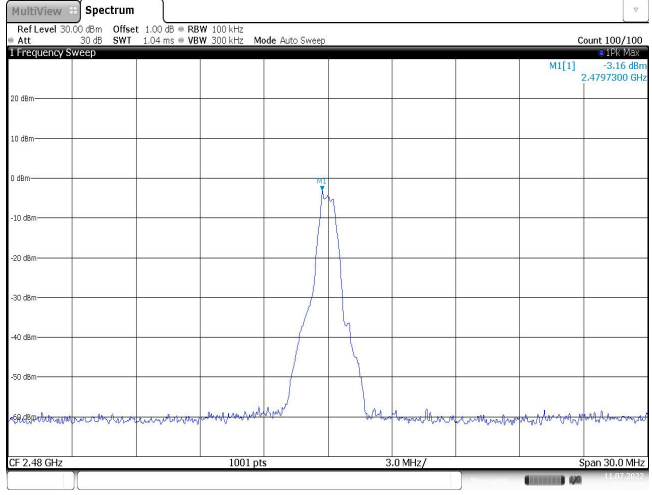
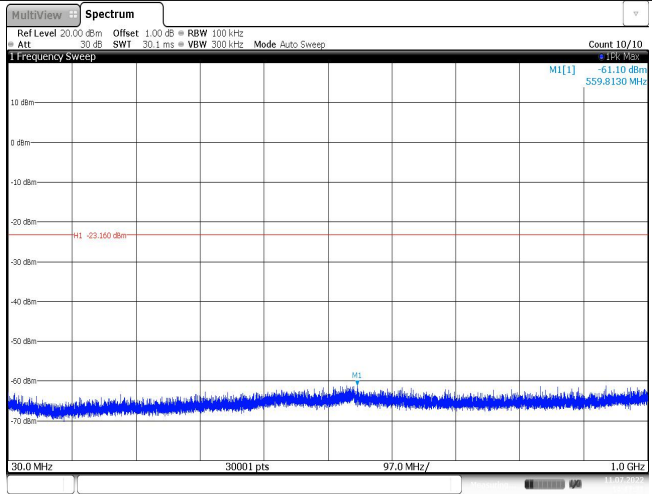
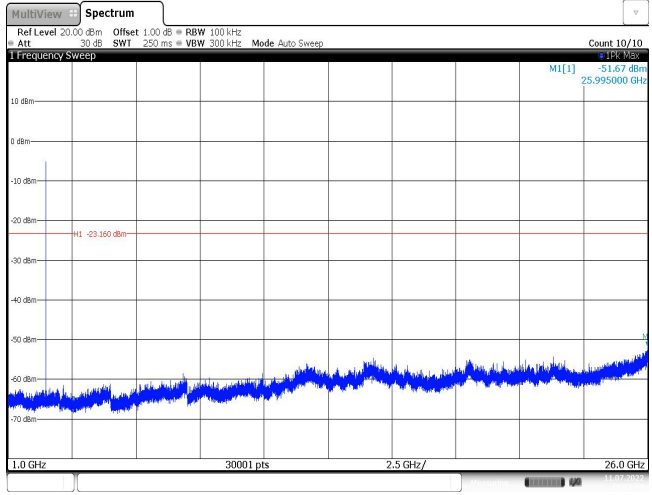


Appendix F: Band edge and Spurious Emissions (conducted)

Test Item:	Band edge																																										
<p style="text-align: center;">CH00</p>	 <p>MultiView Spectrum Ref Level 10.50 dBm Offset 1.00 dB RBW 100 kHz Count 300/300 Att -30 dB SWF 1.05 ms VBW 300 kHz Mode Auto Sweep 1 Frequency Sweep 2.31 GHz 1001 pts 9.5 MHz/ 2.405 GHz 2 Marker Table</p> <table border="1"> <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>2.401726 GHz</td> <td>-1.81 dBm</td> <td></td> <td></td> </tr> <tr> <td>M2</td> <td>1</td> <td></td> <td>2.4 GHz</td> <td>-56.14 dBm</td> <td></td> <td></td> </tr> <tr> <td>M3</td> <td>1</td> <td></td> <td>2.39 GHz</td> <td>-70.90 dBm</td> <td></td> <td></td> </tr> <tr> <td>M4</td> <td>1</td> <td></td> <td>2.31 GHz</td> <td>-73.94 dBm</td> <td></td> <td></td> </tr> <tr> <td>M5</td> <td>1</td> <td></td> <td>2.399965 GHz</td> <td>-58.48 dBm</td> <td></td> <td></td> </tr> </tbody> </table> <p>Date: 11.07.2022 14:41:23</p>	Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		2.401726 GHz	-1.81 dBm			M2	1		2.4 GHz	-56.14 dBm			M3	1		2.39 GHz	-70.90 dBm			M4	1		2.31 GHz	-73.94 dBm			M5	1		2.399965 GHz	-58.48 dBm		
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<p style="text-align: center;">CH39</p>	 <p>MultiView Spectrum Ref Level 10.50 dBm Offset 1.00 dB RBW 100 kHz Count 100/100 Att -30 dB SWF 1.02 ms VBW 300 kHz Mode Auto Sweep 1 Frequency Sweep 2.478 GHz 1001 pts 2.2 MHz/ 2.5 GHz 2 Marker Table</p> <table border="1"> <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>2.479747 GHz</td> <td>-3.39 dBm</td> <td></td> <td></td> </tr> <tr> <td>M2</td> <td>1</td> <td></td> <td>2.4835 GHz</td> <td>-67.84 dBm</td> <td></td> <td></td> </tr> <tr> <td>M3</td> <td>1</td> <td></td> <td>2.5 GHz</td> <td>-73.45 dBm</td> <td></td> <td></td> </tr> <tr> <td>M4</td> <td>1</td> <td></td> <td>2.483918 GHz</td> <td>-63.89 dBm</td> <td></td> <td></td> </tr> </tbody> </table> <p>Date: 11.07.2022 14:47:05</p>	Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		2.479747 GHz	-3.39 dBm			M2	1		2.4835 GHz	-67.84 dBm			M3	1		2.5 GHz	-73.45 dBm			M4	1		2.483918 GHz	-63.89 dBm									
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M3	1		2.5 GHz	-73.45 dBm																																							
M4	1		2.483918 GHz	-63.89 dBm																																							

Test Item:	SE
<p>CH00 Reference level</p>	 <p>Date: 11 JUL 2022 14:42:03</p>
<p>CH00 30MHz~1000MHz</p>	 <p>Date: 11 JUL 2022 14:42:20</p>
<p>CH00 1GHz~26GHz</p>	 <p>Date: 11 JUL 2022 14:42:38</p>

<p>CH19 Reference level</p>	
<p>CH19 30MHz~1000MHz</p>	
<p>CH19 1GHz~26GHz</p>	

<p>CH39 Reference level</p>	 <p>MultiView Spectrum 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 1 Frequency Sweep MI[1] -3.16 dBm 2.4797300 GHz CF 2.48 GHz 1001 pts 3.0 MHz/ Span 30.0 MHz Date: 11.001.2022 14:47:43</p>
<p>CH39 30MHz~1000MHz</p>	 <p>MultiView Spectrum 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 1 Frequency Sweep MI[1] -61.10 dBm 559.8130 MHz MI -23.160 dBm 30.0 MHz 30001 pts 97.0 MHz/ 1.0 GHz Date: 11.001.2022 14:47:51</p>
<p>CH39 1GHz~26GHz</p>	 <p>MultiView Spectrum 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 1 Frequency Sweep MI[1] -51.67 dBm 25.995000 GHz MI -23.160 dBm 1.0 GHz 30001 pts 2.5 GHz/ 26.0 GHz Date: 11.001.2022 14:47:46</p>

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