

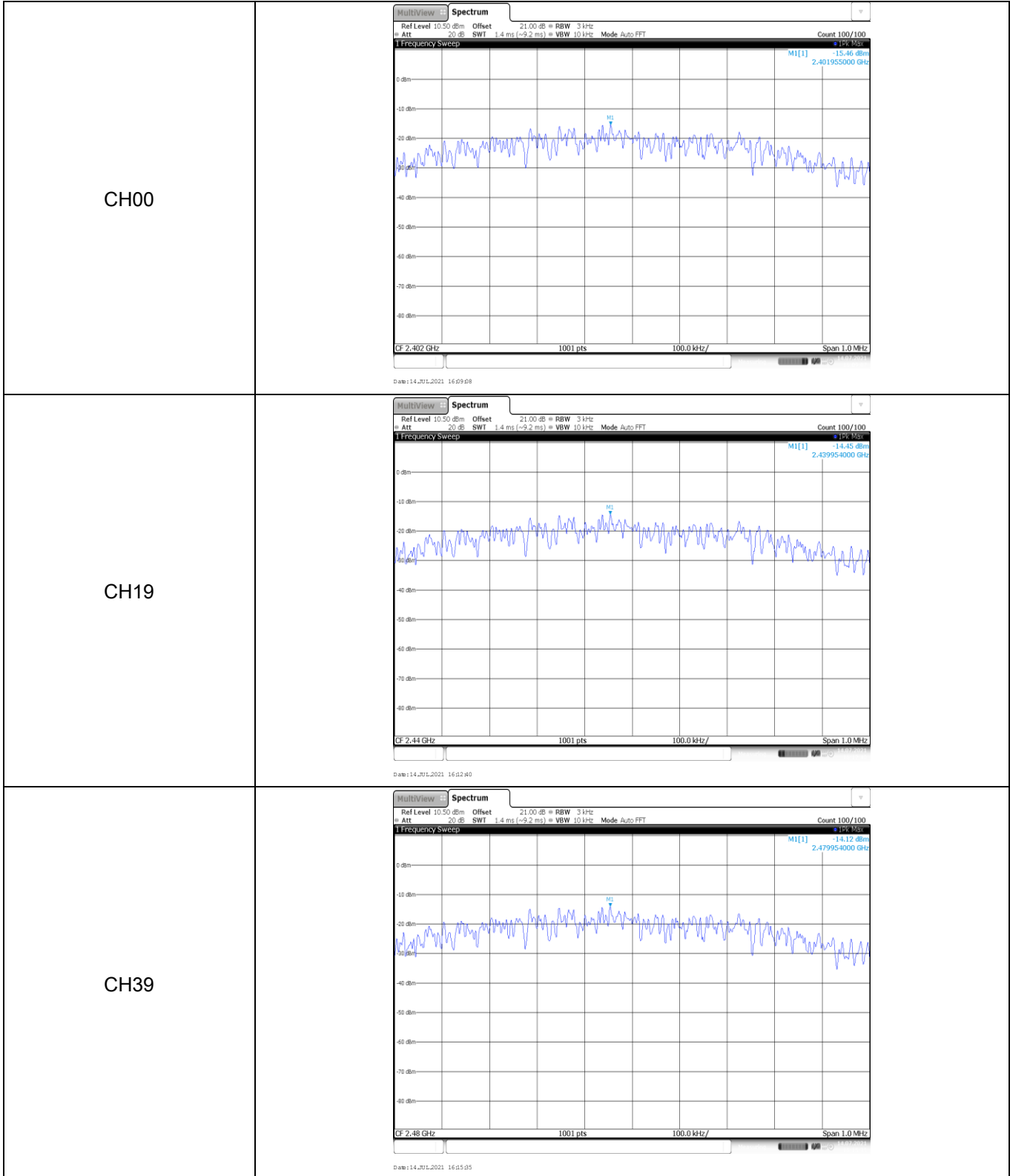
APPENDIX REPORT

Project No.	SHT2105044137EW	Radio Specification	Bluetooth BLE
Test sample No.	YPHT21050441034	Model No.	ABX00050
Start test date	2021-07-14	Finish date	2021-07-14
Temperature	25.5°C	Humidity	33%
Test Engineer	Hailey Chen	Auditor	Xiaodong Zhuo

Appendix clause	Test item	Result
A	Power Spectral Density	PASS
B	6 dB Bandwidth	PASS
C	99% Occupied Bandwidth	PASS
D	Duty cycle	PASS
E	Band edge and Spurious Emissions (conducted)	PASS

Appendix A: Power Spectral Density

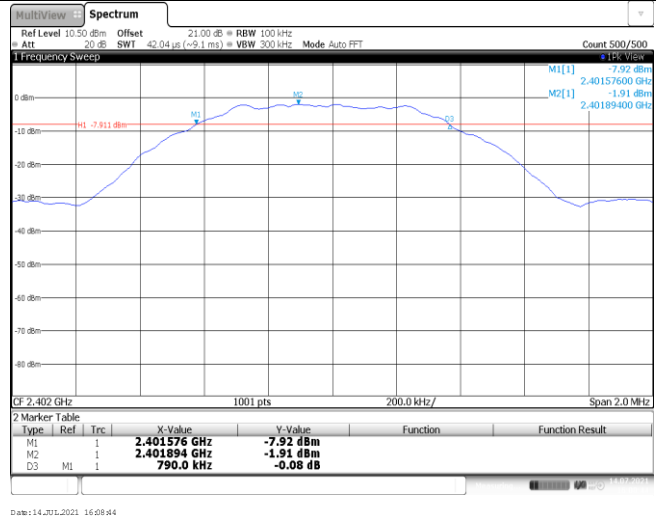
Type	Channel	Power Spectral Density(dBm/3KHz)	Limit (dBm/3KHz)	Result
BT-BLE	00	-15.46	≤8.00	Pass
	19	-14.45		
	39	-14.12		



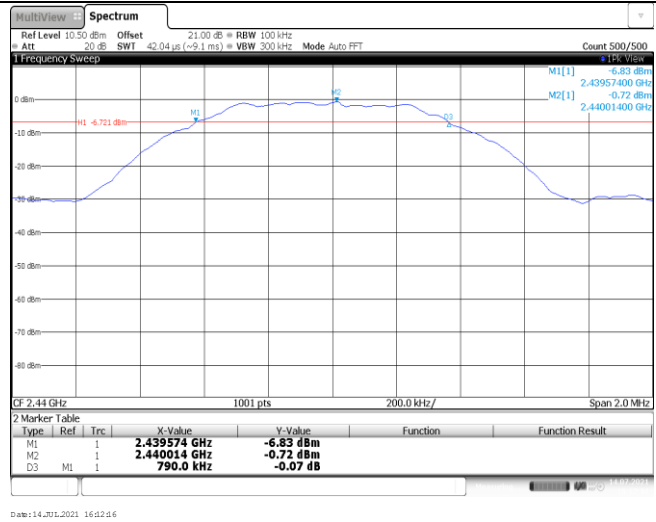
Appendix B: 6dB bandwidth

Type	Channel	6dB Bandwidth(kHz)	Limit (kHz)	Result
BT-BLE	00	790.00	≥500	Pass
	19	790.00		
	39	790.00		

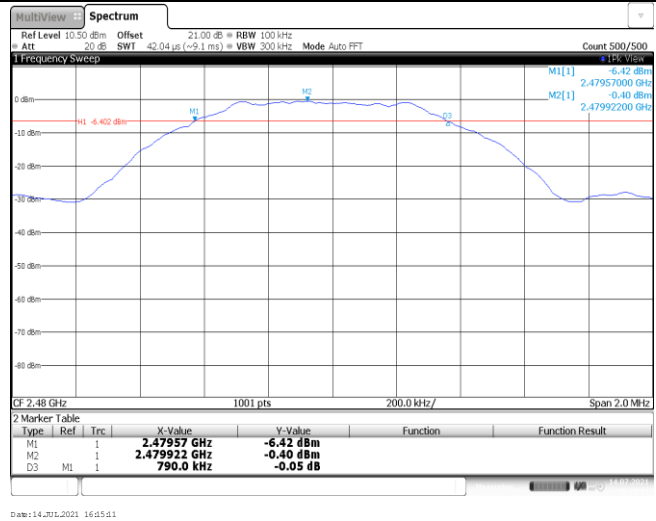
CH00



CH19

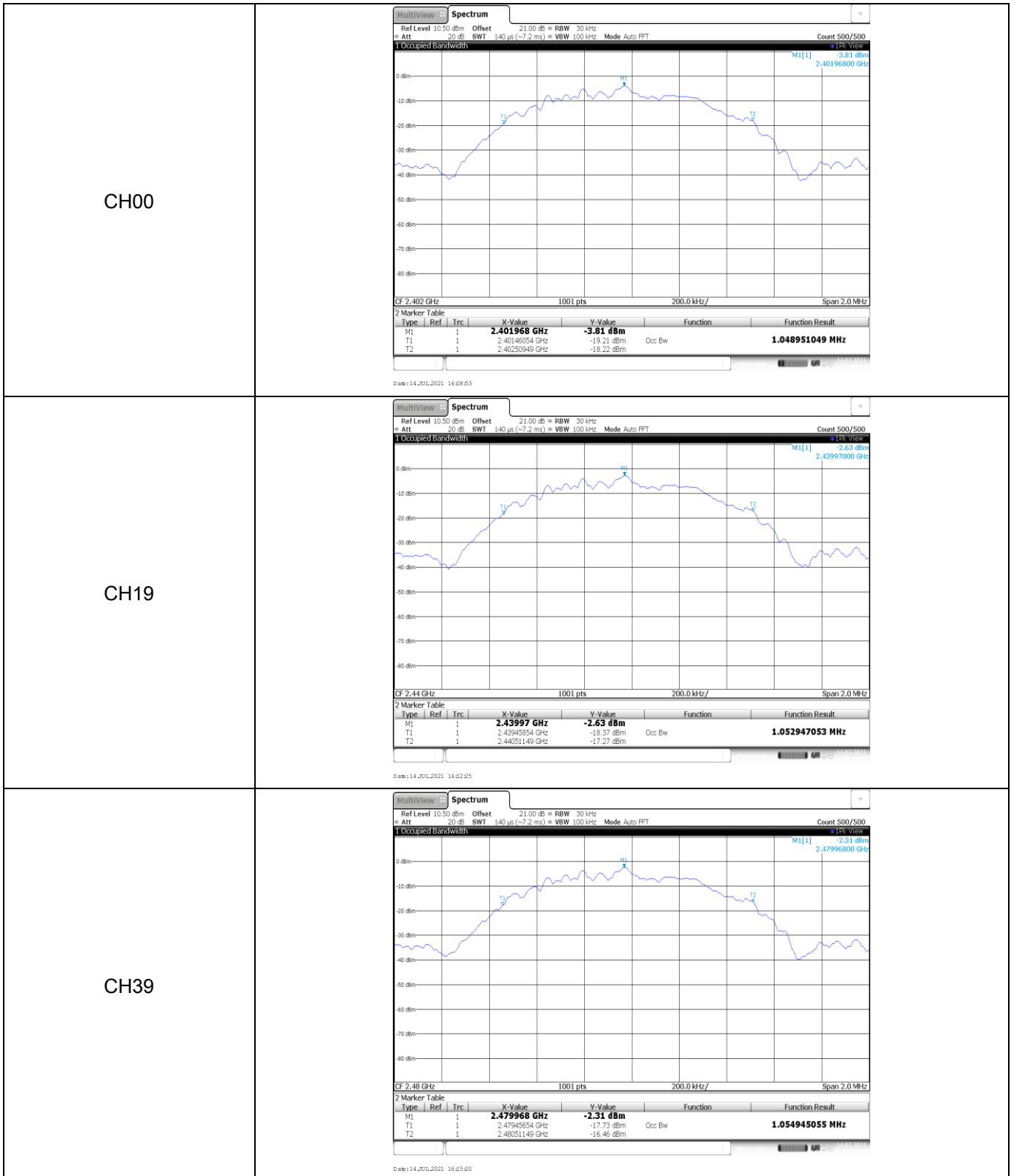


CH39



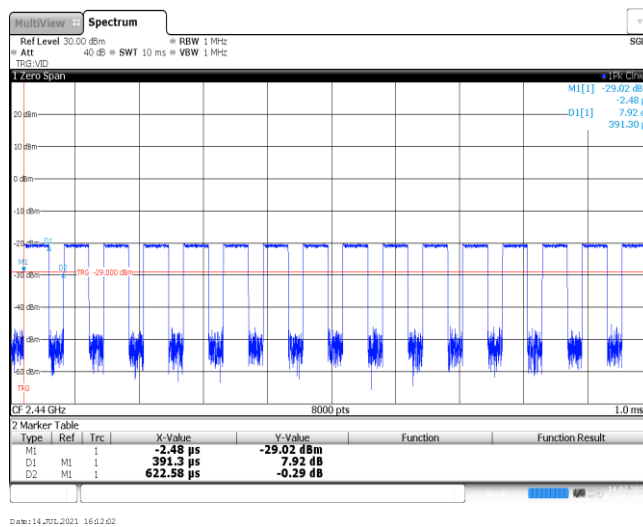
Appendix C: 99% Occupied Bandwidth

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

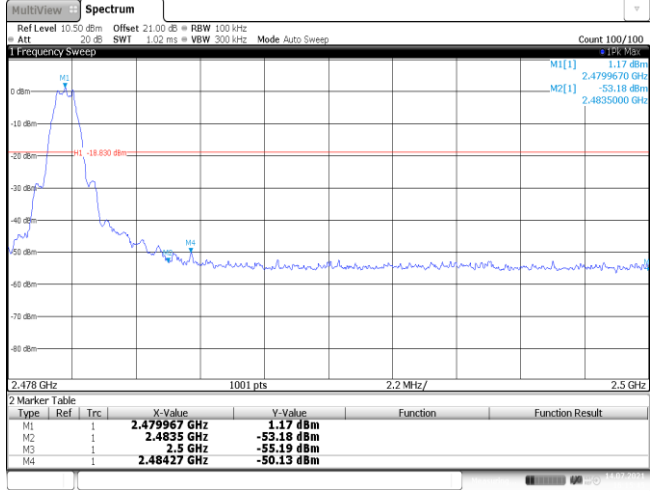


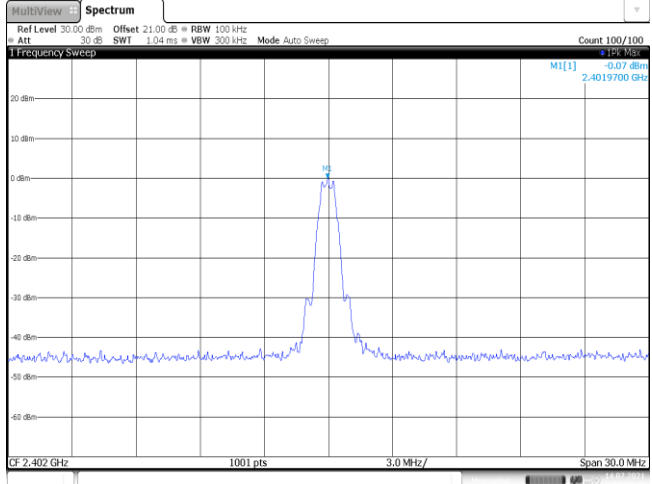
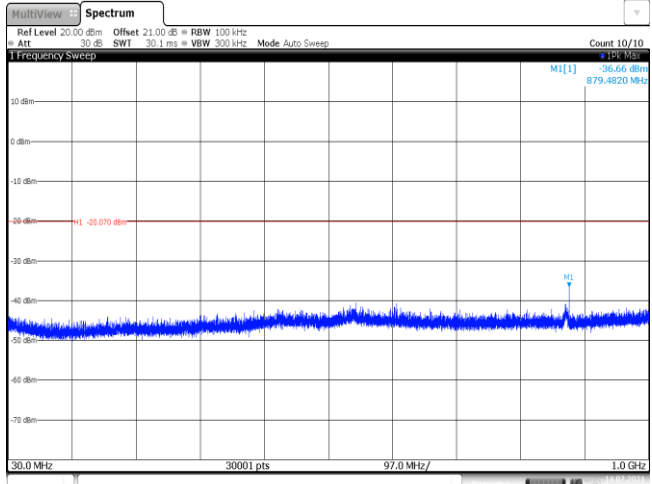
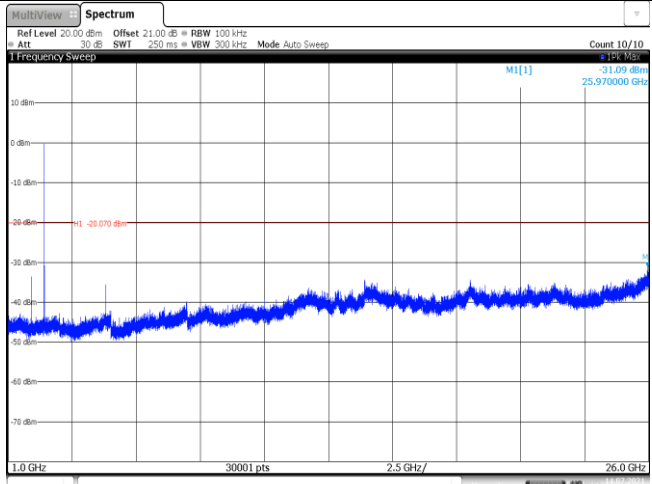
Appendix D: Duty cycle

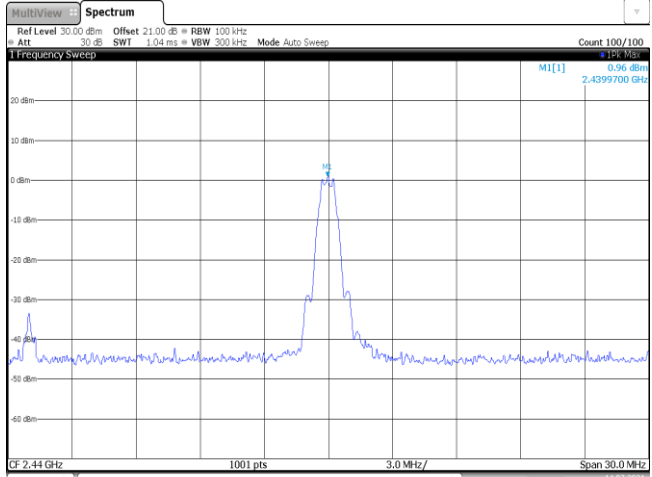
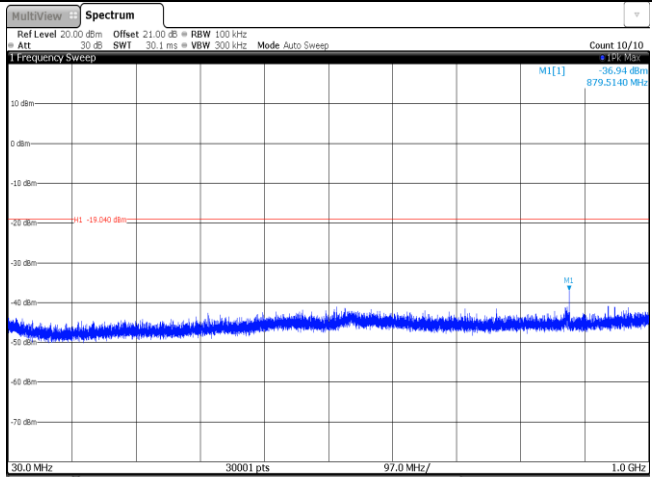
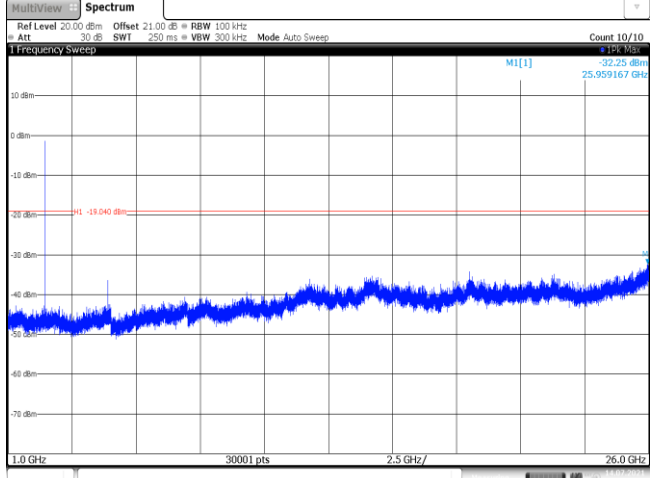
Test Frequency (MHz)	T _{on} time for single burst (ms)	T _{period} (ms)	Duty cycle	1/T _{on} time (kHz)
2440	0.39	0.62	62.9%	2.6

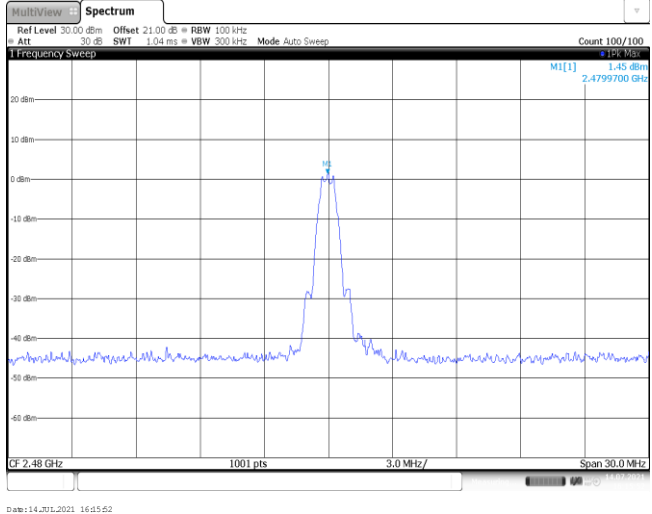
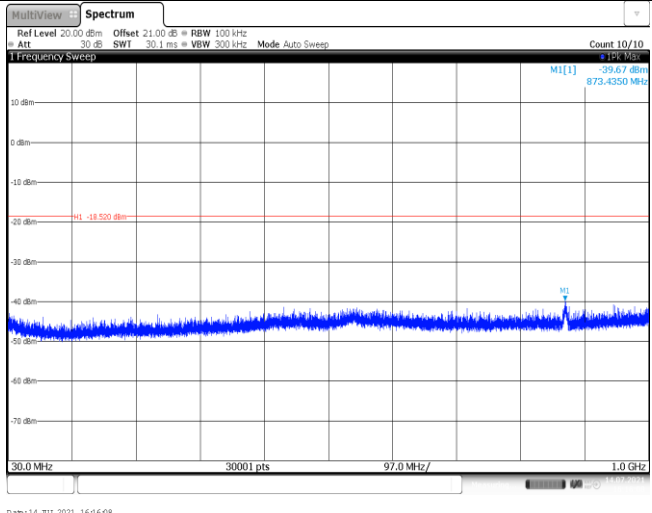
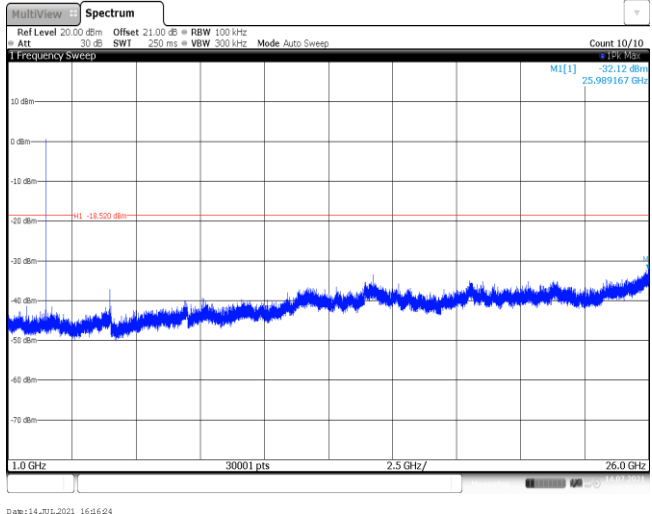


Appendix E: Band edge and Spurious Emissions (conducted)

Test Item:	Band edge																																										
CH00	 <p>MultiView Spectrum</p> <p>Ref Level 10.50 dBm Offset 21.00 dB RBW 100 kHz Att -30 dB SWI 1.05 ms VBW 300 kHz Mode Auto Sweep Count 300/300</p> <p>1 Frequency Sweep</p> <p>M1[1] -0.30 dBm 2.401916 GHz M2[1] -47.62 dBm 2.400000 GHz</p> <p>H1 -20.300 dBm</p> <p>2.31 GHz 1001 pts 9.5 MHz/ 2.405 GHz</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>2.401916 GHz</td> <td>-0.30 dBm</td> <td></td> <td></td> </tr> <tr> <td>M2</td> <td>1</td> <td></td> <td>2.4 GHz</td> <td>-47.62 dBm</td> <td></td> <td></td> </tr> <tr> <td>M3</td> <td>1</td> <td></td> <td>2.39 GHz</td> <td>-54.16 dBm</td> <td></td> <td></td> </tr> <tr> <td>M4</td> <td>1</td> <td></td> <td>2.31 GHz</td> <td>-55.83 dBm</td> <td></td> <td></td> </tr> <tr> <td>M5</td> <td>1</td> <td></td> <td>2.399965 GHz</td> <td>-47.34 dBm</td> <td></td> <td></td> </tr> </tbody> </table> <p>Date: 14.7.2021 16:09:18</p>	Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		2.401916 GHz	-0.30 dBm			M2	1		2.4 GHz	-47.62 dBm			M3	1		2.39 GHz	-54.16 dBm			M4	1		2.31 GHz	-55.83 dBm			M5	1		2.399965 GHz	-47.34 dBm		
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result																																					
M1	1		2.401916 GHz	-0.30 dBm																																							
M2	1		2.4 GHz	-47.62 dBm																																							
M3	1		2.39 GHz	-54.16 dBm																																							
M4	1		2.31 GHz	-55.83 dBm																																							
M5	1		2.399965 GHz	-47.34 dBm																																							
CH39	 <p>MultiView Spectrum</p> <p>Ref Level 10.50 dBm Offset 21.00 dB RBW 100 kHz Att -30 dB SWI 1.02 ms VBW 300 kHz Mode Auto Sweep Count 100/100</p> <p>1 Frequency Sweep</p> <p>M1[1] 1.17 dBm 2.479967 GHz M2[1] -53.18 dBm 2.483500 GHz</p> <p>H1 -18.830 dBm</p> <p>2.478 GHz 1001 pts 2.2 MHz/ 2.5 GHz</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>2.479967 GHz</td> <td>1.17 dBm</td> <td></td> <td></td> </tr> <tr> <td>M2</td> <td>1</td> <td></td> <td>2.4835 GHz</td> <td>-53.18 dBm</td> <td></td> <td></td> </tr> <tr> <td>M3</td> <td>1</td> <td></td> <td>2.5 GHz</td> <td>-55.19 dBm</td> <td></td> <td></td> </tr> <tr> <td>M4</td> <td>1</td> <td></td> <td>2.48427 GHz</td> <td>-50.13 dBm</td> <td></td> <td></td> </tr> </tbody> </table> <p>Date: 14.7.2021 16:15:45</p>	Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		2.479967 GHz	1.17 dBm			M2	1		2.4835 GHz	-53.18 dBm			M3	1		2.5 GHz	-55.19 dBm			M4	1		2.48427 GHz	-50.13 dBm									
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result																																					
M1	1		2.479967 GHz	1.17 dBm																																							
M2	1		2.4835 GHz	-53.18 dBm																																							
M3	1		2.5 GHz	-55.19 dBm																																							
M4	1		2.48427 GHz	-50.13 dBm																																							

Test Item:	SE
<p>CH00 Reference level</p>	 <p>Date: 14.7.2021 16:29:25</p>
<p>CH00 30MHz~1000MHz</p>	 <p>Date: 14.7.2021 16:29:41</p>
<p>CH00 1GHz~26GHz</p>	 <p>Date: 14.7.2021 16:29:58</p>

<p>CH19 Reference level</p>	 <p>The spectrum plot shows a single sharp peak at 2.4399700 GHz with a peak level of 0.96 dBm. The y-axis ranges from -60 dBm to 20 dBm, and the x-axis shows a span of 30.0 MHz centered at 2.44 GHz. The plot includes technical parameters: Ref Level 30.00 dBm, Att 30 dB, Offset 21.00 dB, RBW 100 kHz, SWI 1.04 ms, VBW 300 kHz, Mode Auto Sweep, Count 100/100, and Date: 14.10.2021 16:12:54.</p>
<p>CH19 30MHz~1000MHz</p>	 <p>The spectrum plot shows a noise floor across the 30 MHz to 1000 MHz range. A red horizontal line is drawn at -19.040 dBm. A peak is visible at 879.5140 MHz with a level of -36.94 dBm. The y-axis ranges from -80 dBm to 10 dBm, and the x-axis shows a span of 97.0 MHz. The plot includes technical parameters: Ref Level 20.00 dBm, Att 30 dB, Offset 21.00 dB, RBW 100 kHz, SWI 20.1 ms, VBW 300 kHz, Mode Auto Sweep, Count 10/10, and Date: 14.10.2021 16:13:10.</p>
<p>CH19 1GHz~26GHz</p>	 <p>The spectrum plot shows a noise floor across the 1 GHz to 26 GHz range. A red horizontal line is drawn at -19.040 dBm. A peak is visible at 25.959167 GHz with a level of -32.25 dBm. The y-axis ranges from -80 dBm to 10 dBm, and the x-axis shows a span of 26.0 GHz. The plot includes technical parameters: Ref Level 20.00 dBm, Att 30 dB, Offset 21.00 dB, RBW 100 kHz, SWI 250 ms, VBW 300 kHz, Mode Auto Sweep, Count 10/10, and Date: 14.10.2021 16:13:28.</p>

<p>CH39 Reference level</p>	 <p>The plot shows a single sharp peak at 2.4799700 GHz with a peak level of 1.45 dBm. The y-axis ranges from -60 dBm to 20 dBm, and the x-axis ranges from 2.48 GHz to 3.0 MHz. Parameters include Ref Level 30.00 dBm, Offset 21.00 dB, RBW 100 kHz, Att 30 dB, SWF 1.04 ms, VBW 300 kHz, and Mode Auto Sweep. The date is 14.10.2021 16:15:52.</p>
<p>CH39 30MHz~1000MHz</p>	 <p>The plot shows a noise floor around -50 dBm with a peak at 873.4350 MHz at -39.67 dBm. A red horizontal line is drawn at -18.500 dBm. The y-axis ranges from -70 dBm to 10 dBm, and the x-axis ranges from 30.0 MHz to 1.0 GHz. Parameters include Ref Level 20.00 dBm, Offset 21.00 dB, RBW 100 kHz, Att 30 dB, SWF 30.1 ms, VBW 300 kHz, and Mode Auto Sweep. The date is 14.10.2021 16:16:08.</p>
<p>CH39 1GHz~26GHz</p>	 <p>The plot shows a noise floor around -50 dBm with a peak at 25.989167 GHz at -32.12 dBm. A red horizontal line is drawn at -18.500 dBm. The y-axis ranges from -70 dBm to 10 dBm, and the x-axis ranges from 1.0 GHz to 26.0 GHz. Parameters include Ref Level 20.00 dBm, Offset 21.00 dB, RBW 100 kHz, Att 30 dB, SWF 250 ms, VBW 300 kHz, and Mode Auto Sweep. The date is 14.10.2021 16:16:24.</p>

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