

# APPENDIX REPORT

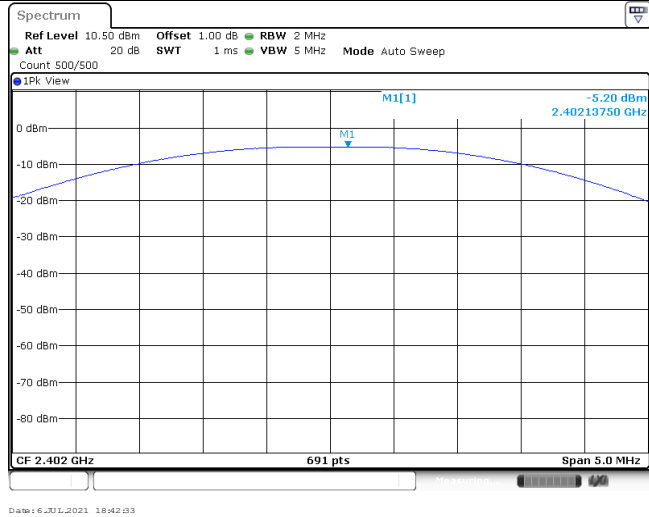
Project No.	SHT2107001003EW	Radio Specification	Bluetooth BLE
Test sample No.	YPHT21070010040	Model No.	E506
Start test date	2021/7/6	Finish date	2021/7/28
Temperature	24.1°C	Humidity	30%
Test Engineer	Jiongsheng.Feng	Auditor	Xiaodong Zheo

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

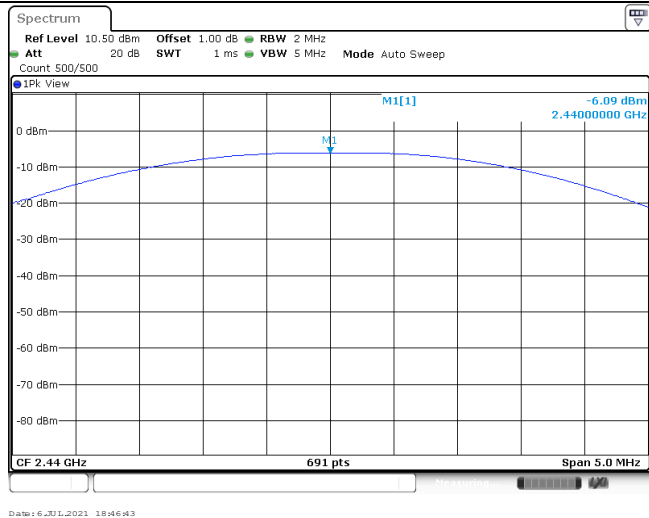
**Appendix A: Peak Output Power**

Type	Channel	Output power (dBm)	Average Output power (dBm)	Limit (dBm)	Result
BT-BLE	00	-5.20	-5.21	≤ 30.00	Pass
	19	-6.09	-6.10		
	39	-5.29	-5.30		

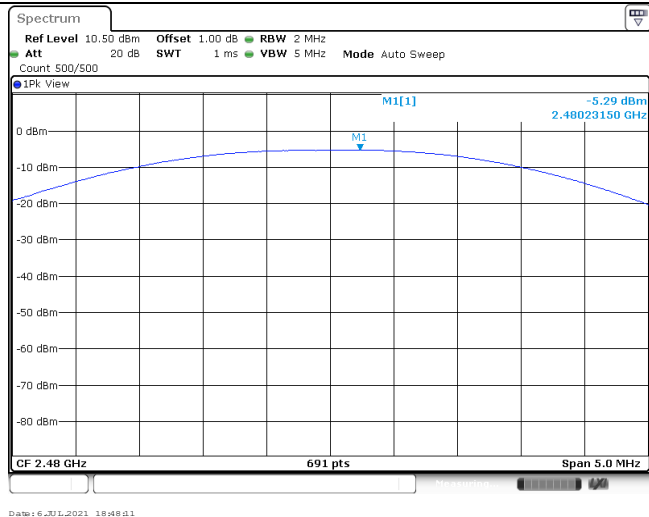
CH00



CH19



CH39



**Appendix B: Power Spectral Density**

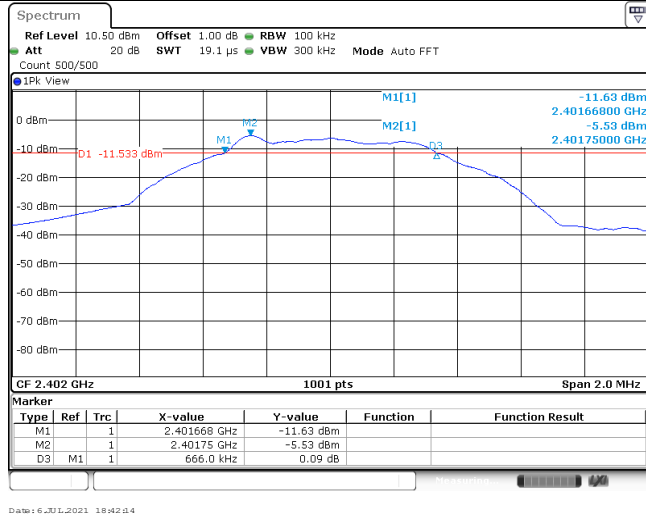
Type	Channel	Power Spectral Density(dBm/3KHz)	Limit (dBm/3KHz)	Result
BT-BLE	00	-20.89	≤8.00	Pass
	19	-21.80		
	39	-20.95		

<p>CH00</p>	<p>Spectrum          Ref Level 10.50 dBm Offset 1.00 dB RBW 3 kHz          Att 20 dB SWT 632.3 μs VBW 10 kHz Mode Auto FFT          Count 100/100          IPK Max          M1[1] -20.89 dBm          2.40174960 GHz          CF 2.402 GHz 691 pts Span 1.0 MHz          Date: 6.JUL.2021 18:42:48</p>
<p>CH19</p>	<p>Spectrum          Ref Level 10.50 dBm Offset 1.00 dB RBW 3 kHz          Att 20 dB SWT 632.3 μs VBW 10 kHz Mode Auto FFT          Count 100/100          IPK Max          M1[1] -21.80 dBm          2.43975250 GHz          CF 2.44 GHz 691 pts Span 1.0 MHz          Date: 6.JUL.2021 18:46:57</p>
<p>CH39</p>	<p>Spectrum          Ref Level 10.50 dBm Offset 1.00 dB RBW 3 kHz          Att 20 dB SWT 632.3 μs VBW 10 kHz Mode Auto FFT          Count 100/100          IPK Max          M1[1] -20.95 dBm          2.47975250 GHz          CF 2.48 GHz 691 pts Span 1.0 MHz          Date: 6.JUL.2021 18:48:26</p>

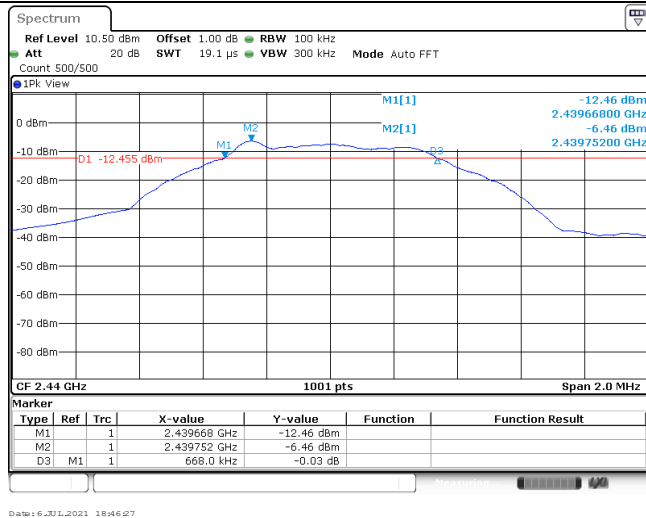
**Appendix C: 6dB bandwidth**

Type	Channel	6dB Bandwidth(kHz)	Limit (kHz)	Result
BT-BLE	00	666.00	≥500	Pass
	19	668.00		
	39	668.00		

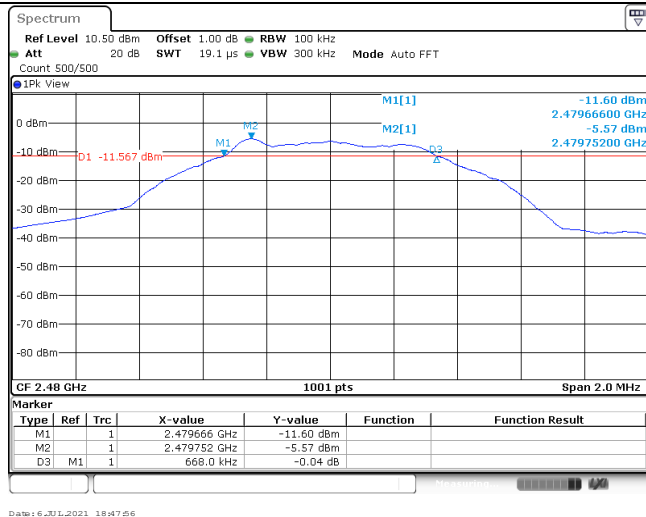
CH00



CH19



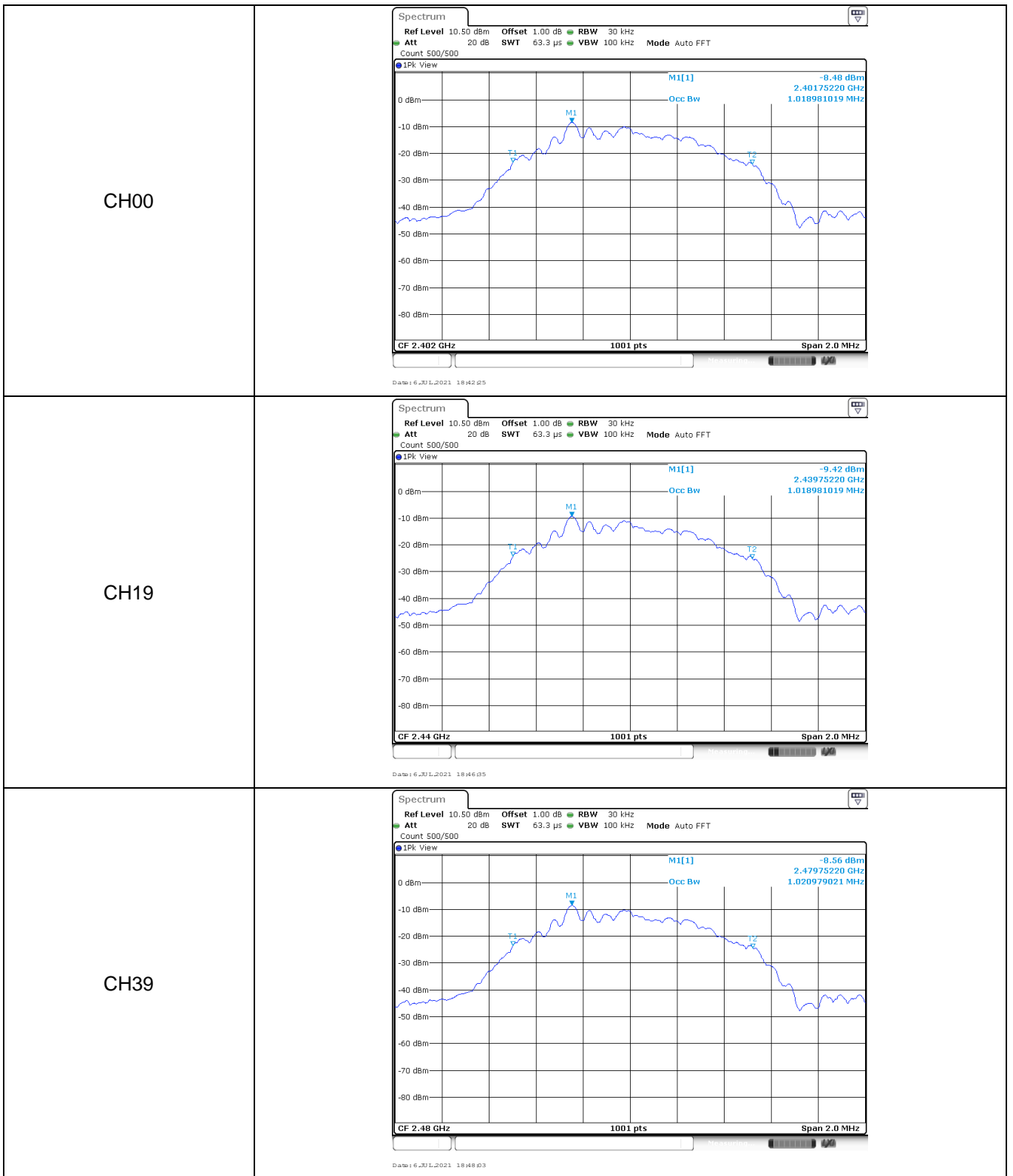
CH39



**Appendix D: 99% Occupied Bandwidth**

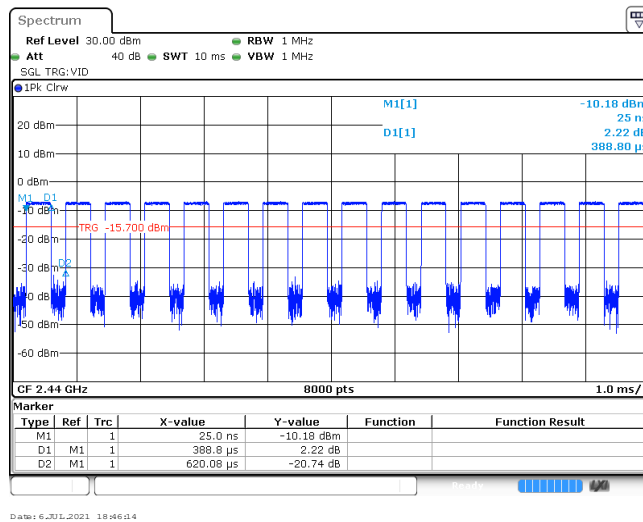
Type	Channel	99% Occupied Bandwidth(MHz)	Limit (kHz)	Result
BT-BLE	00	1.02	-	Pass
	19	1.02		
	39	1.02		



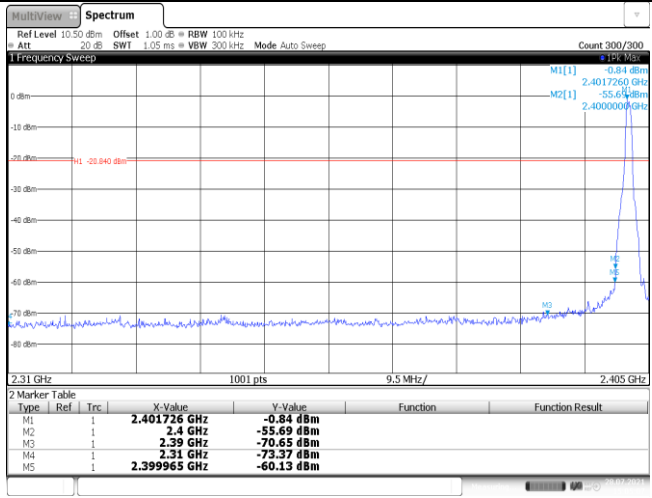
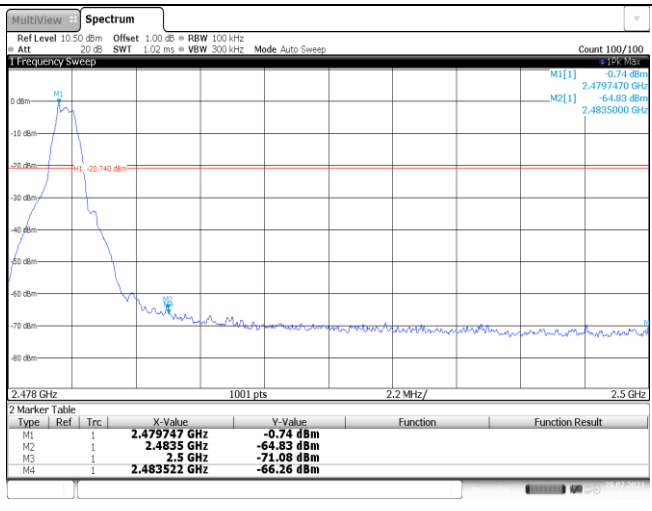


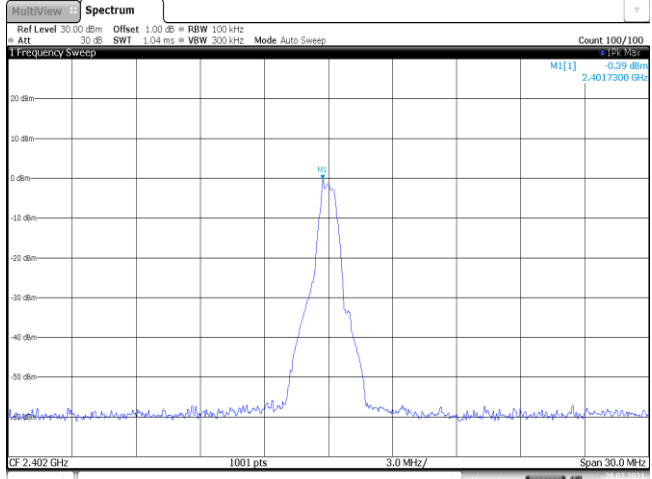
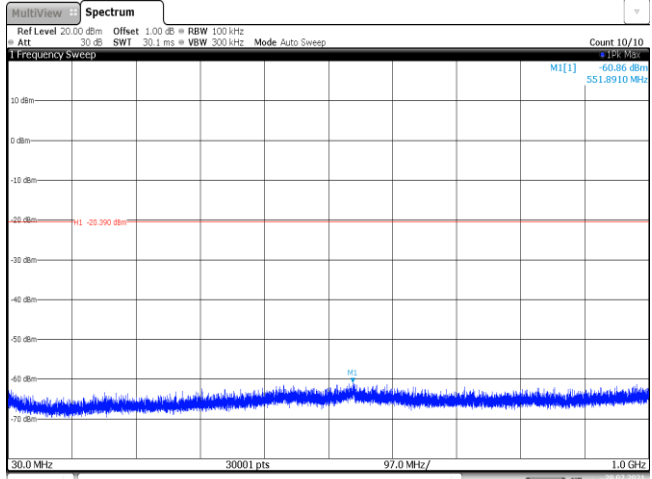
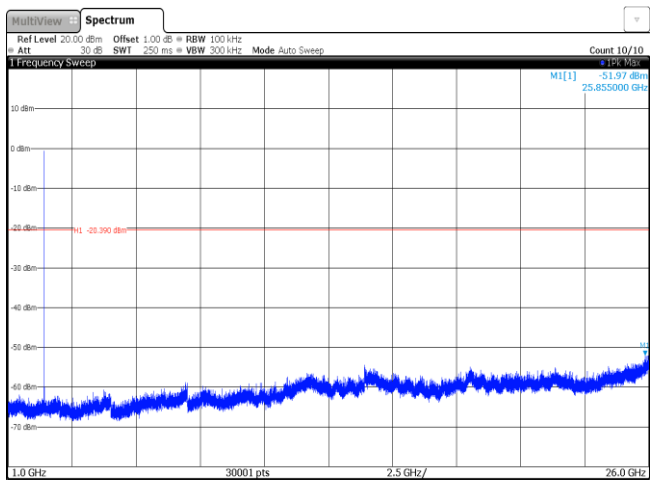
### Appendix E: Duty cycle

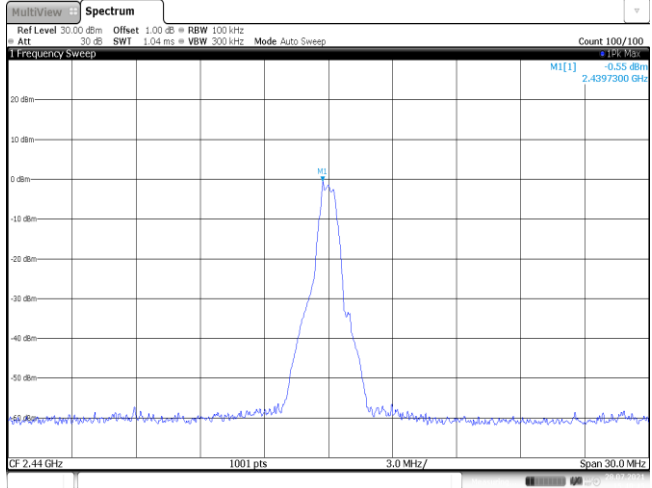
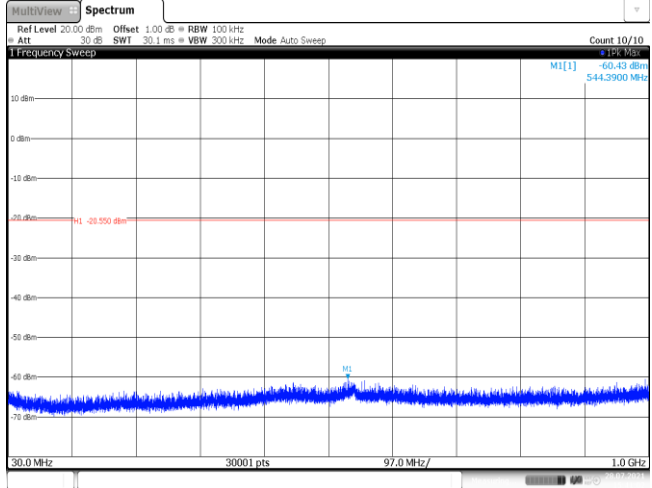
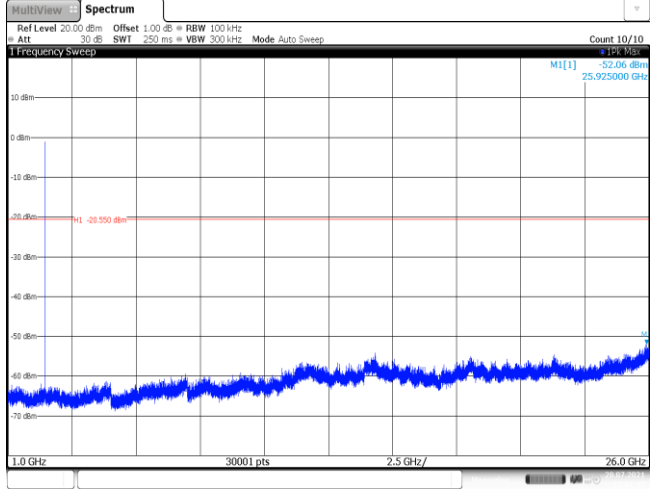
Test Frequency (MHz)	T <sub>on</sub> time for single burst (ms)	T <sub>period</sub> (ms)	Duty cycle	1/T <sub>on</sub> time (kHz)
2440	0.39	0.62	62.9%	2.6

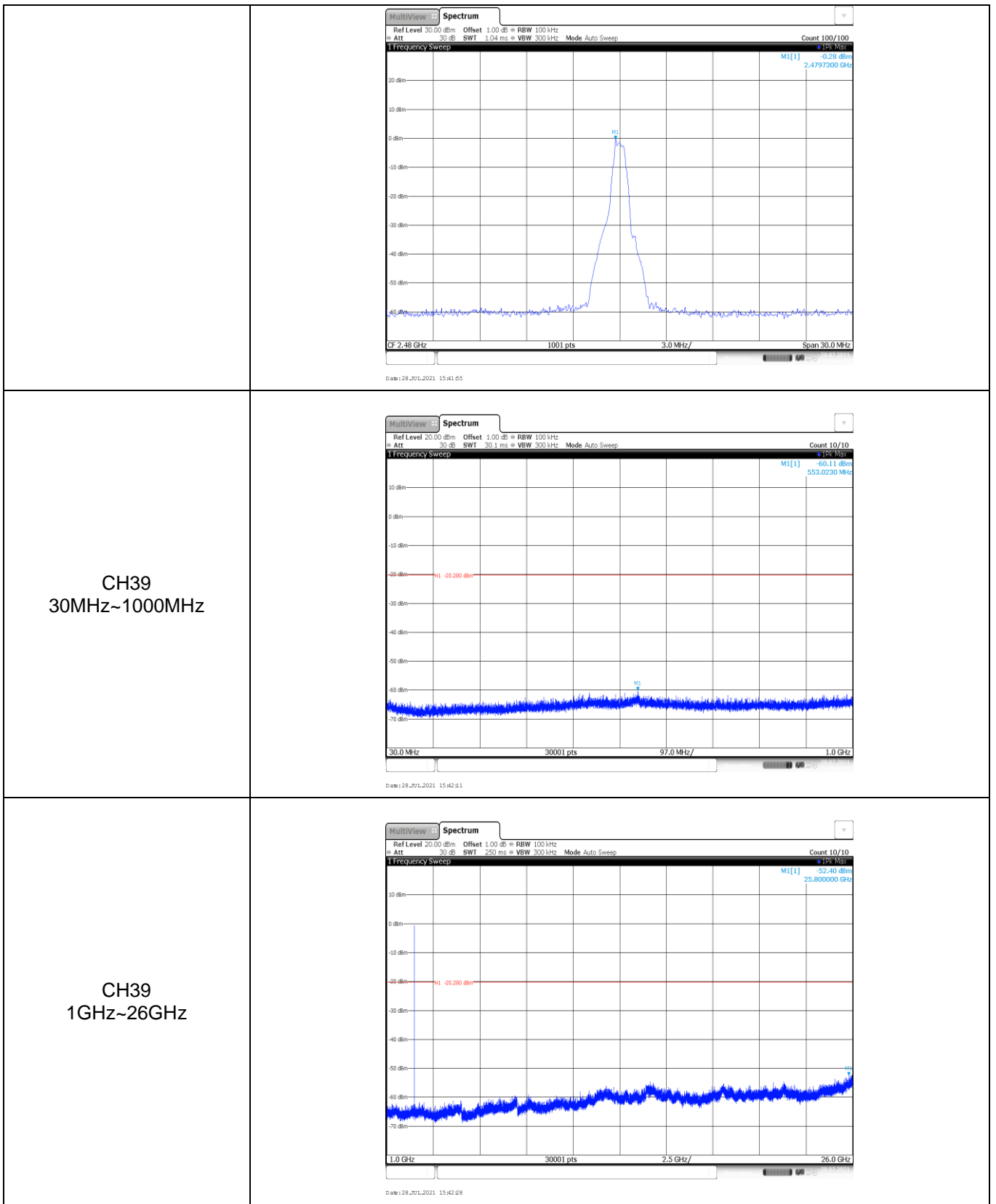


### Appendix F: Band edge and Spurious Emissions (conducted)

Test Item:	Band edge																																										
<p style="text-align: center;">CH00</p>	 <p><b>2 Marker Table</b></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>-0.84 dBm</td> <td></td> <td></td> </tr> <tr> <td>M2</td> <td>1</td> <td></td> <td>2.4 GHz</td> <td>-55.69 dBm</td> <td></td> <td></td> </tr> <tr> <td>M3</td> <td>1</td> <td></td> <td>2.39 GHz</td> <td>-70.65 dBm</td> <td></td> <td></td> </tr> <tr> <td>M4</td> <td>1</td> <td></td> <td>2.31 GHz</td> <td>-73.37 dBm</td> <td></td> <td></td> </tr> <tr> <td>M5</td> <td>1</td> <td></td> <td>2.399965 GHz</td> <td>-60.13 dBm</td> <td></td> <td></td> </tr> </tbody> </table> <p>Date: 28.7.2021 15:25:07</p>	Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		2.401726 GHz	-0.84 dBm			M2	1		2.4 GHz	-55.69 dBm			M3	1		2.39 GHz	-70.65 dBm			M4	1		2.31 GHz	-73.37 dBm			M5	1		2.399965 GHz	-60.13 dBm		
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Test Item:	SE
<p>CH00 Reference level</p>	 <p>The plot shows a single sharp peak at 2.4017300 GHz with a magnitude of 0.39 dBm. The y-axis ranges from -60 dBm to 20 dBm, and the x-axis ranges from 2.402 GHz to 3.0 MHz. Parameters include Ref Level 30.00 dBm, Att 30 dB, Offset 1.00 dB, RBW 100 kHz, SWI 1.04 ms, VBW 300 kHz, and Mode Auto Sweep.</p>
<p>CH00 30MHz~1000MHz</p>	 <p>The plot shows a noise floor across the 30 MHz to 1000 MHz range. A red horizontal line is drawn at -20 dBm, and a blue peak is visible at -60.86 dBm at 551.8910 MHz. 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, Att 30 dB, Offset 1.00 dB, RBW 100 kHz, SWI 30.1 ms, VBW 300 kHz, and Mode Auto Sweep.</p>
<p>CH00 1GHz~26GHz</p>	 <p>The plot shows a noise floor across the 1 GHz to 26 GHz range. A red horizontal line is drawn at -20 dBm, and a blue peak is visible at -51.97 dBm at 25.855000 GHz. 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, Att 30 dB, Offset 1.00 dB, RBW 100 kHz, SWI 250 ms, VBW 300 kHz, and Mode Auto Sweep.</p>
<p>CH19 Reference level</p>	

	 <p>Date: 28.01.2021 15:40:46</p>
<p>CH19 30MHz~1000MHz</p>	 <p>Date: 28.01.2021 15:41:02</p>
<p>CH19 1GHz~26GHz</p>	 <p>Date: 28.01.2021 15:41:18</p>
<p>CH39 Reference level</p>	



CH39  
30MHz~1000MHz

CH39  
1GHz~26GHz

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