

APPENDIX REPORT

Project No.	SHT2206082505EW	Radio Specification	Bluetooth BLE
Test sample No.	YPHT22060825004	Model No.	AOJ-33B
Start test date	2022-07-05	Finish date	2022-07-05
Temperature	26.1℃	Humidity	41%
Test Engineer	Xiaoqin Li	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	1.82	1.81	≤ 30.00	Pass
	19	1.81	1.79		
	39	1.28	1.26		

CH00	<p>Date: 5.30.2022 09:26:20</p>
CH19	<p>Date: 5.30.2022 09:30:23</p>
CH39	<p>Date: 5.30.2022 09:32:51</p>

Appendix B: Power Spectral Density

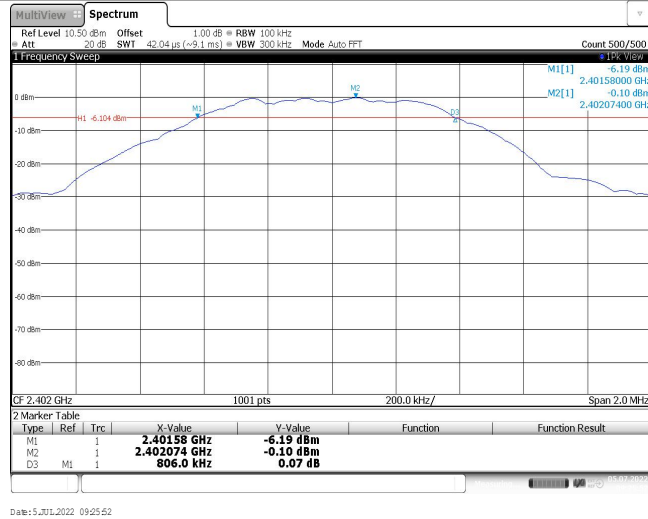
Type	Channel	Power Spectral Density(dBm/3KHz)	Limit (dBm/3KHz)	Result
BT-BLE	00	-14.21	≤8.00	Pass
	19	-14.36		
	39	-14.92		

<p>CH00</p>	<p>Date: 5.30.2022 09:26:41</p>
<p>CH19</p>	<p>Date: 5.30.2022 09:30:42</p>
<p>CH39</p>	<p>Date: 5.30.2022 09:33:12</p>

Appendix C: 6dB bandwidth

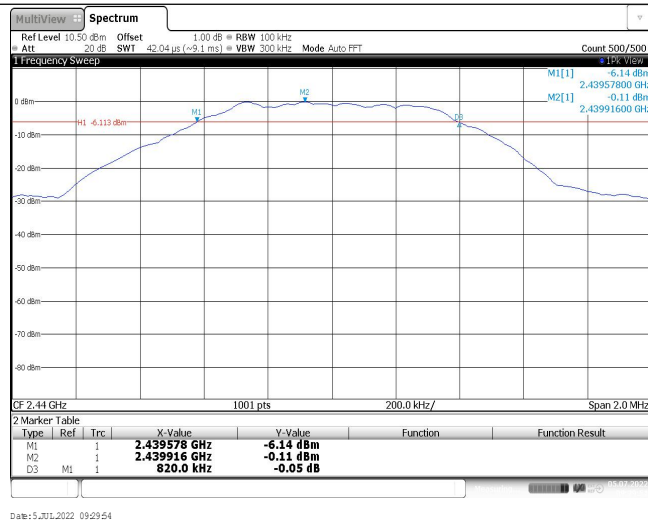
Type	Channel	6dB Bandwidth(kHz)	Limit (kHz)	Result
BT-BLE	00	806.00	≥500	Pass
	19	820.00		
	39	822.00		

CH00



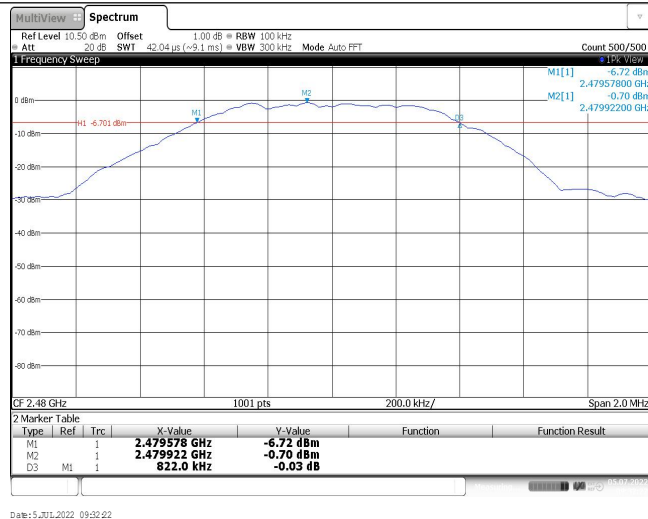
Date: 5.30.2022 09:25:52

CH19



Date: 5.30.2022 09:29:54

CH39

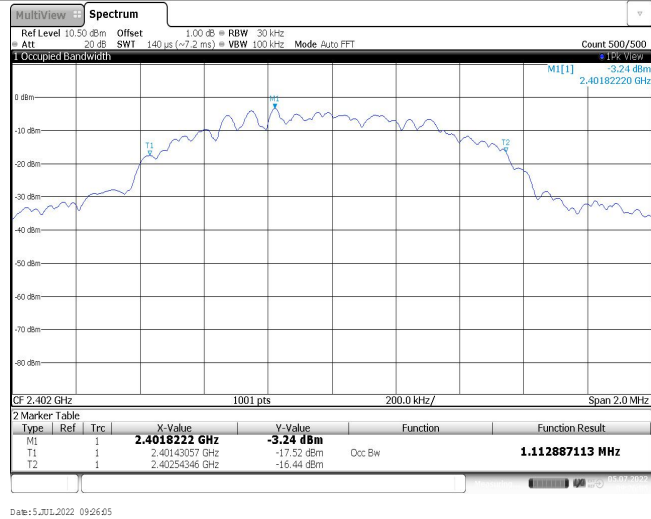


Date: 5.30.2022 09:32:22

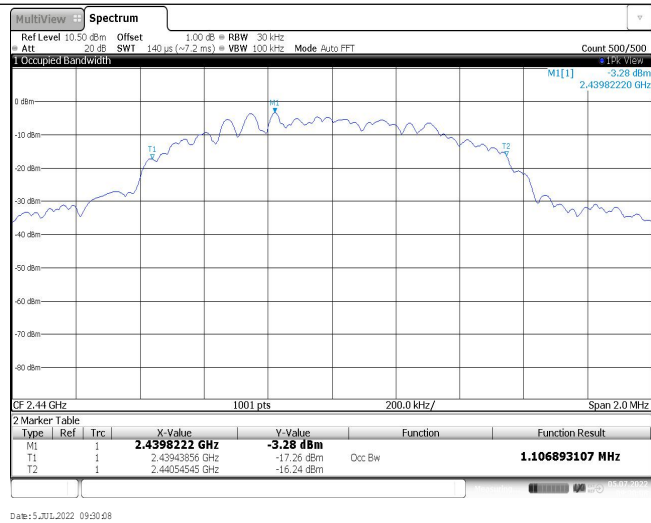
Appendix D: 99% Occupied Bandwidth

Type	Channel	99% Occupied Bandwidth(MHz)	Limit (kHz)	Result
BT-BLE	00	1.11	-	Pass
	19	1.11		
	39	1.10		

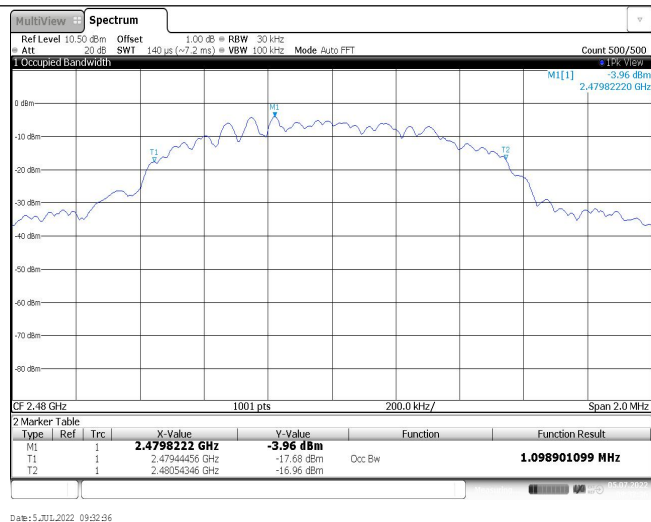
CH00



CH19

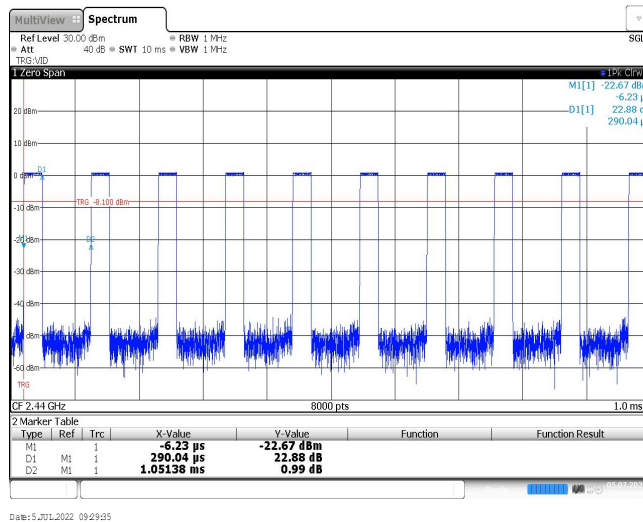


CH39



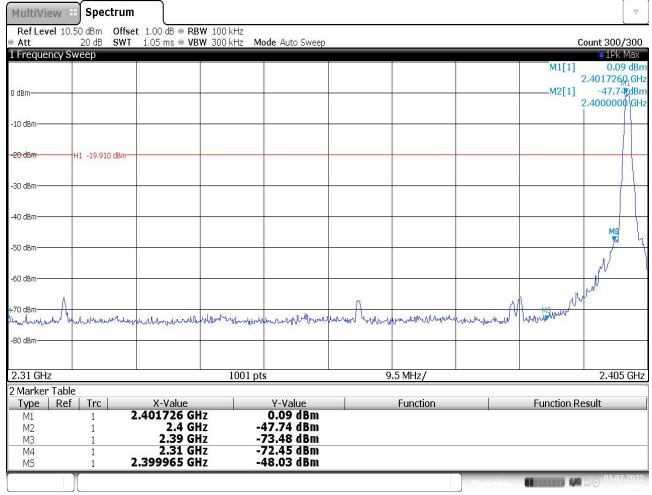
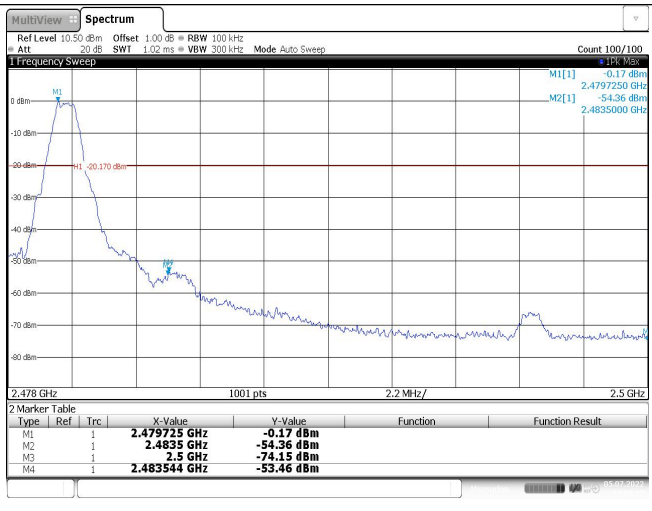
Appendix E: Duty cycle

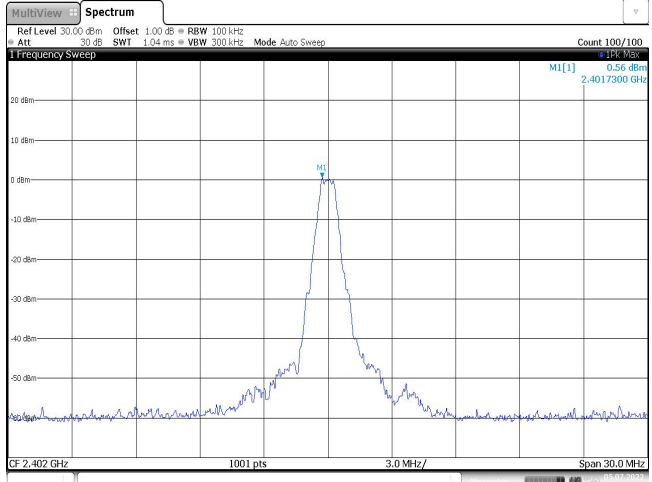
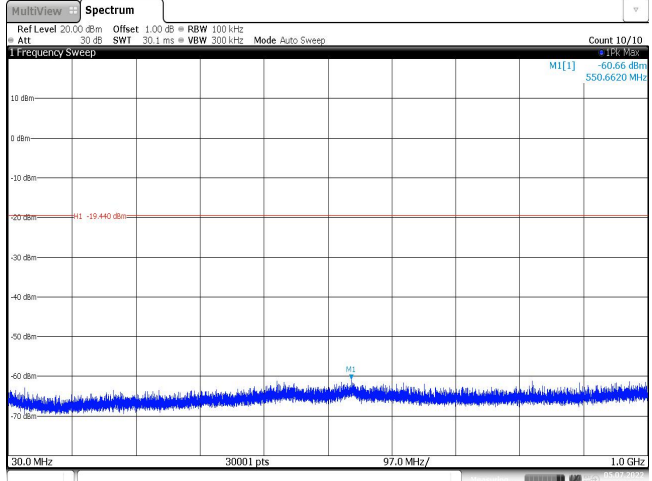
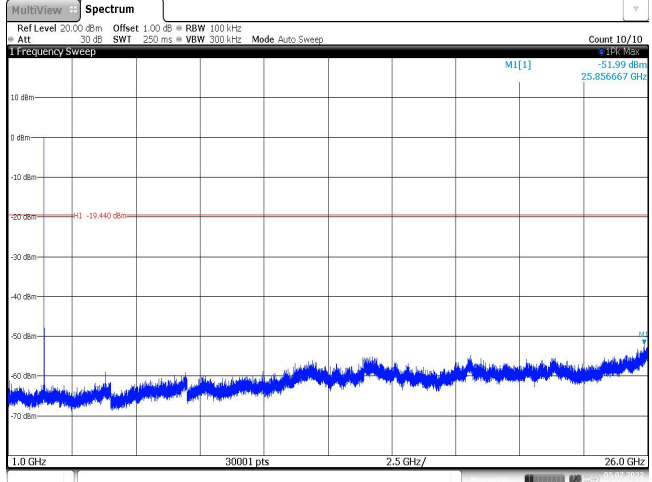
Test Frequency (MHz)	T _{on} time for single burst (ms)	T _{period} (ms)	Duty cycle	1/T _{on} time (kHz)
2440	0.29	1.05	27.6%	3.45

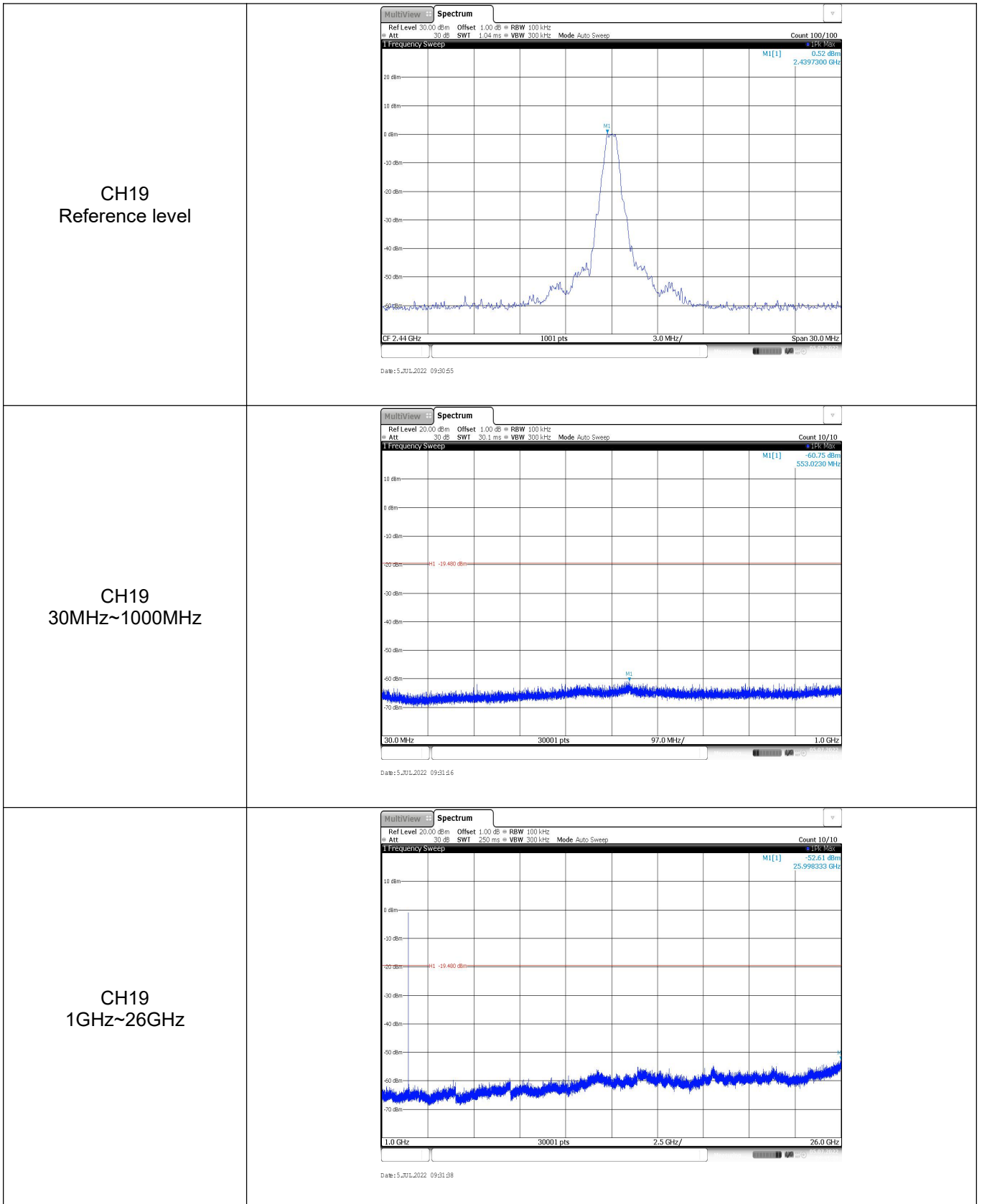


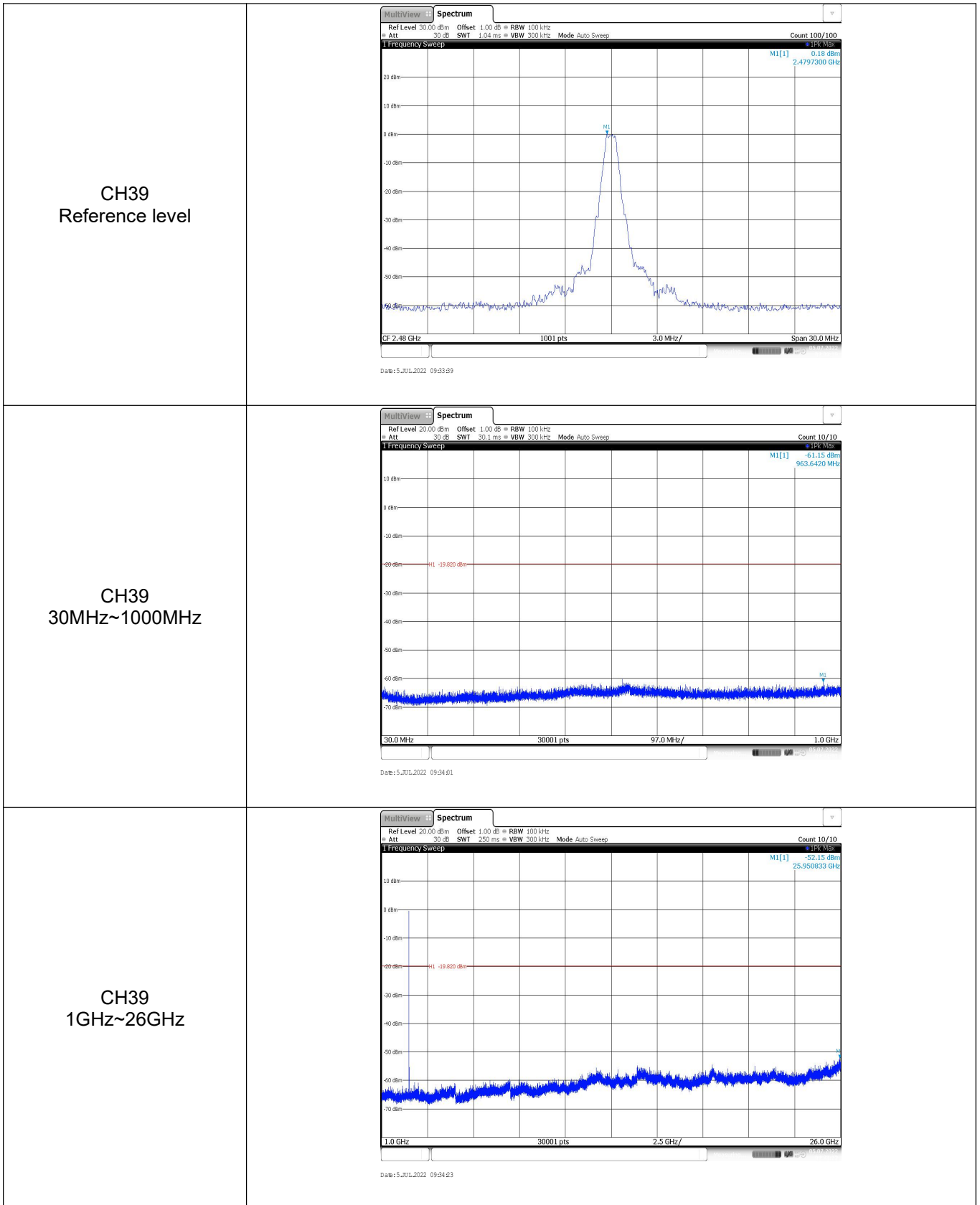
Date: 5/01/2022 09:29:35

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 Att -30 dB SWF 1.05 ms VBW 300 kHz Mode Auto Sweep Count 300/300 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>0.09 dBm</td> <td></td> <td></td> </tr> <tr> <td>M2</td> <td>1</td> <td></td> <td>2.4 GHz</td> <td>-47.74 dBm</td> <td></td> <td></td> </tr> <tr> <td>M3</td> <td>1</td> <td></td> <td>2.39 GHz</td> <td>-75.48 dBm</td> <td></td> <td></td> </tr> <tr> <td>M4</td> <td>1</td> <td></td> <td>2.31 GHz</td> <td>-72.45 dBm</td> <td></td> <td></td> </tr> <tr> <td>M5</td> <td>1</td> <td></td> <td>2.399965 GHz</td> <td>-48.03 dBm</td> <td></td> <td></td> </tr> </tbody> </table> <p>Date: 5 JUL 2022 09:26:56</p>	Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		2.401726 GHz	0.09 dBm			M2	1		2.4 GHz	-47.74 dBm			M3	1		2.39 GHz	-75.48 dBm			M4	1		2.31 GHz	-72.45 dBm			M5	1		2.399965 GHz	-48.03 dBm		
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result																																					
M1	1		2.401726 GHz	0.09 dBm																																							
M2	1		2.4 GHz	-47.74 dBm																																							
M3	1		2.39 GHz	-75.48 dBm																																							
M4	1		2.31 GHz	-72.45 dBm																																							
M5	1		2.399965 GHz	-48.03 dBm																																							
<p style="text-align: center;">CH39</p>	 <p>MultiView Spectrum Ref Level 10.50 dBm Offset 1.00 dB RBW 100 kHz Att -30 dB SWF 1.02 ms VBW 300 kHz Mode Auto Sweep Count 100/100 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>2.479725 GHz</td> <td>-0.17 dBm</td> <td></td> <td></td> </tr> <tr> <td>M2</td> <td>1</td> <td></td> <td>2.4835 GHz</td> <td>-54.36 dBm</td> <td></td> <td></td> </tr> <tr> <td>M3</td> <td>1</td> <td></td> <td>2.5 GHz</td> <td>-74.15 dBm</td> <td></td> <td></td> </tr> <tr> <td>M4</td> <td>1</td> <td></td> <td>2.483544 GHz</td> <td>-53.46 dBm</td> <td></td> <td></td> </tr> </tbody> </table> <p>Date: 5 JUL 2022 09:33:27</p>	Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		2.479725 GHz	-0.17 dBm			M2	1		2.4835 GHz	-54.36 dBm			M3	1		2.5 GHz	-74.15 dBm			M4	1		2.483544 GHz	-53.46 dBm									
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result																																					
M1	1		2.479725 GHz	-0.17 dBm																																							
M2	1		2.4835 GHz	-54.36 dBm																																							
M3	1		2.5 GHz	-74.15 dBm																																							
M4	1		2.483544 GHz	-53.46 dBm																																							

Test Item:	SE
<p>CH00 Reference level</p>	 <p>MultiView Spectrum Ref Level 30.00 dBm Offset 1.00 dB RBW 100 kHz Att 30 dB SWI 1.04 ms VBW 300 kHz Mode Auto Sweep Count 100/100 1 Frequency Sweep MI[1] 0.56 dBm 2.4017300 GHz CF 2.402 GHz 1001 pts 3.0 MHz/ Span 30.0 MHz Date: 5 JUL 2022 09:27:09</p>
<p>CH00 30MHz~1000MHz</p>	 <p>MultiView Spectrum Ref Level 20.00 dBm Offset 1.00 dB RBW 100 kHz Att 30 dB SWI 30.1 ms VBW 300 kHz Mode Auto Sweep Count 10/10 1 Frequency Sweep MI[1] -60.66 dBm 550.6620 MHz H1 -19.440 dBm 30.0 MHz 30001 pts 97.0 MHz/ 1.0 GHz Date: 5 JUL 2022 09:27:30</p>
<p>CH00 1GHz~26GHz</p>	 <p>MultiView Spectrum Ref Level 20.00 dBm Offset 1.00 dB RBW 100 kHz Att 30 dB SWI 250 ms VBW 300 kHz Mode Auto Sweep Count 10/10 1 Frequency Sweep MI[1] -51.99 dBm 25.856667 GHz H1 -19.440 dBm 1.0 GHz 30001 pts 2.5 GHz/ 26.0 GHz Date: 5 JUL 2022 09:27:52</p>





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