

APPENDIX REPORT

Project No.	SHT2008120601EW	Radio Specification	Bluetooth BLE
Test sample No.	YPHT20081206002	Model No.	CT9T48
Start test date	2020/9/14	Finish date	2020/9/14
Temperature	25°C	Humidity	50%
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

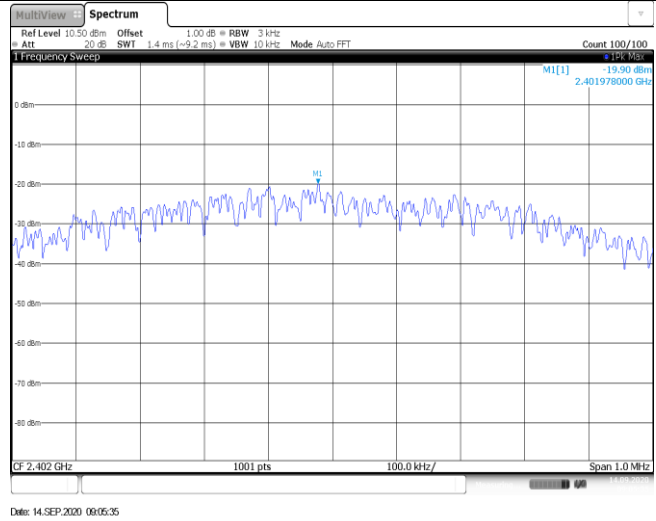
Appendix A: Peak Output Power

Type	Channel	Output power (dBm)	Average Output power (dBm)	Limit (dBm)	Result
BT-BLE	00	-5.19	-5.20	≤ 30.00	Pass
	19	-4.50	-4.53		
	39	-4.68	-4.70		

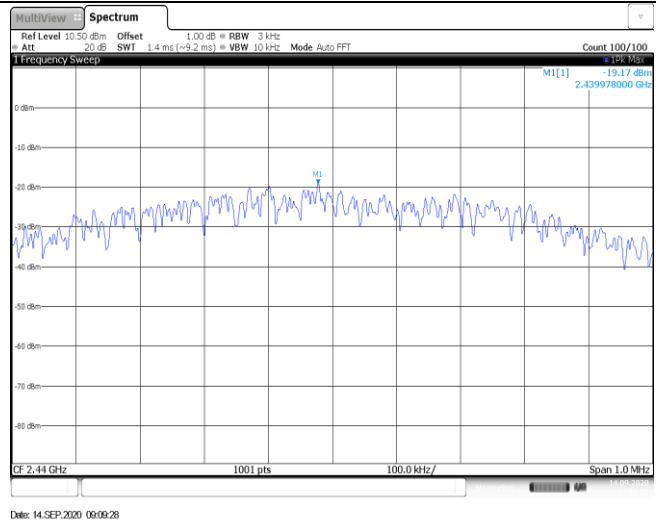
Appendix B: Power Spectral Density

Type	Channel	Power Spectral Density(dBm/3KHz)	Limit (dBm/3KHz)	Result
BT-BLE	00	-19.90	≤8.00	Pass
	19	-19.17		
	39	-19.39		

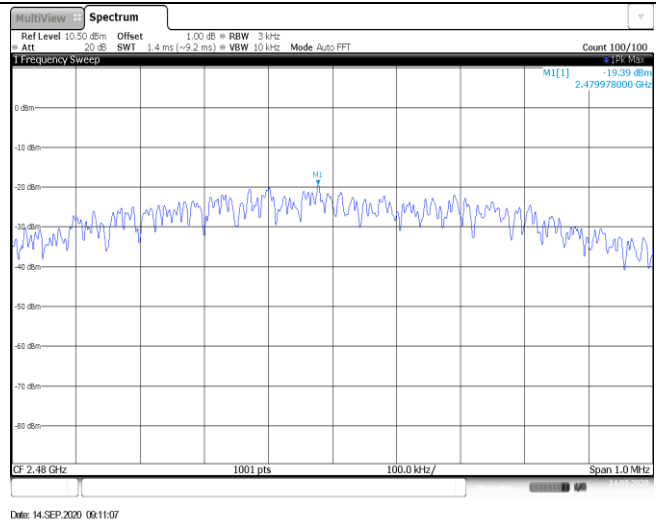
CH00



CH19



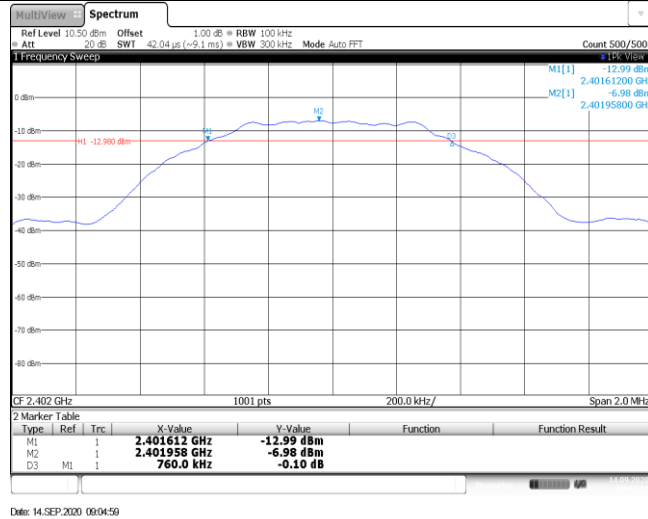
CH39



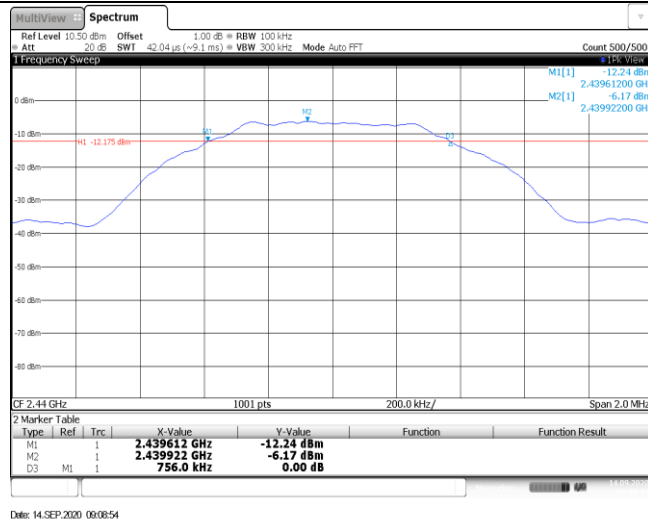
Appendix C: 6dB bandwidth

Type	Channel	6dB Bandwidth(kHz)	Limit (kHz)	Result
BT-BLE	00	760.00	≥500	Pass
	19	756.00		
	39	760.00		

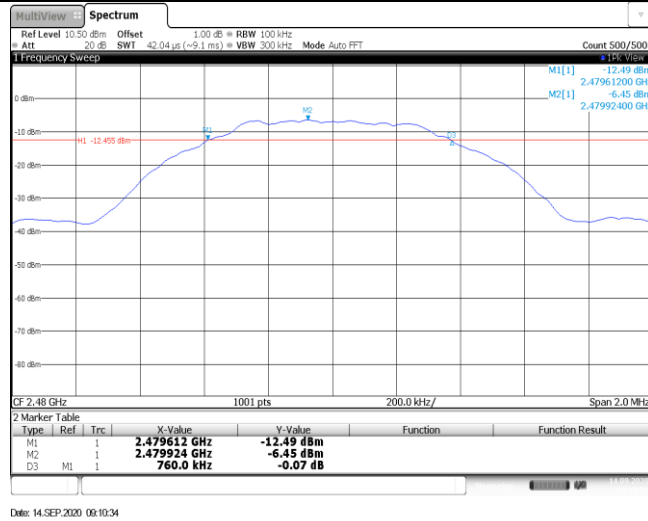
CH00



CH19



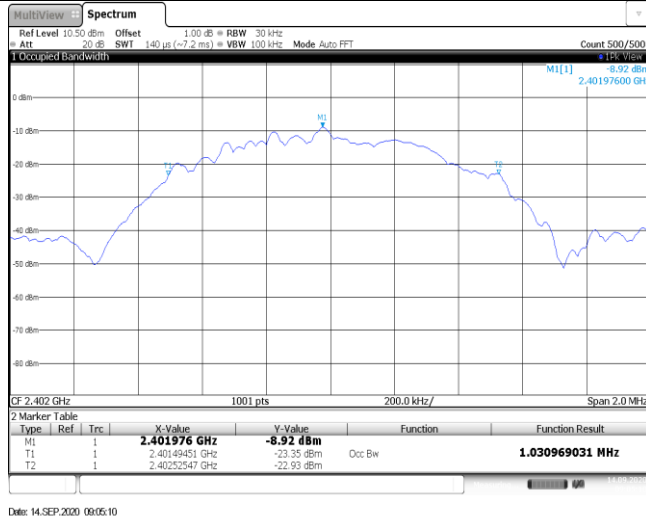
CH39



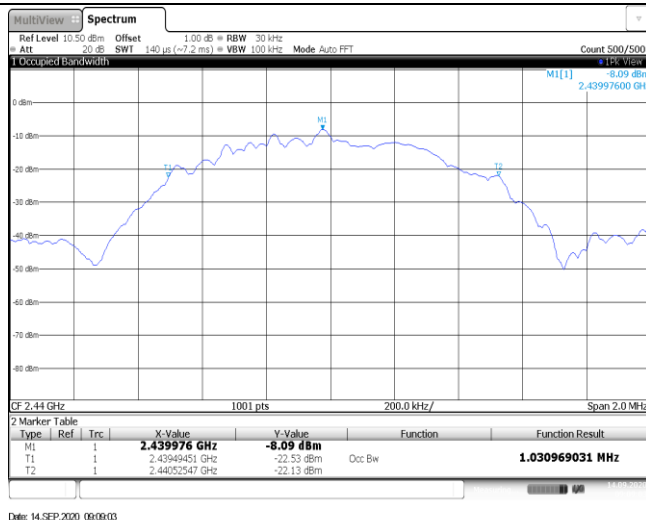
Appendix D: 99% Occupied Bandwidth

Type	Channel	99% Occupied Bandwidth(MHz)	Limit (kHz)	Result
BT-BLE	00	1.03	-	Pass
	19	1.03		
	39	1.03		

CH00



CH19

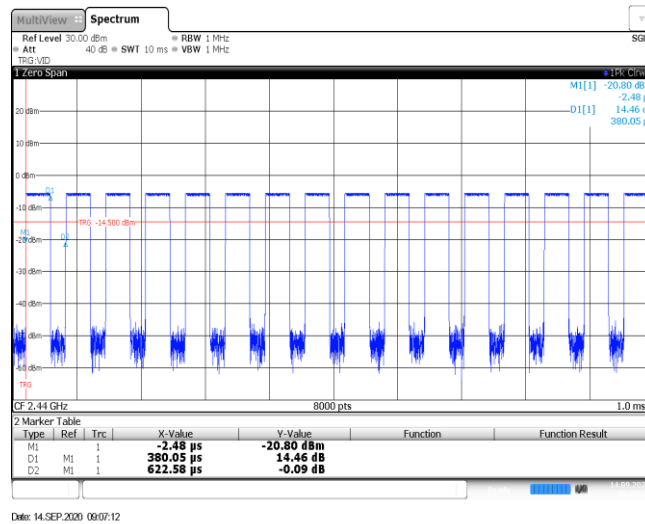


CH39

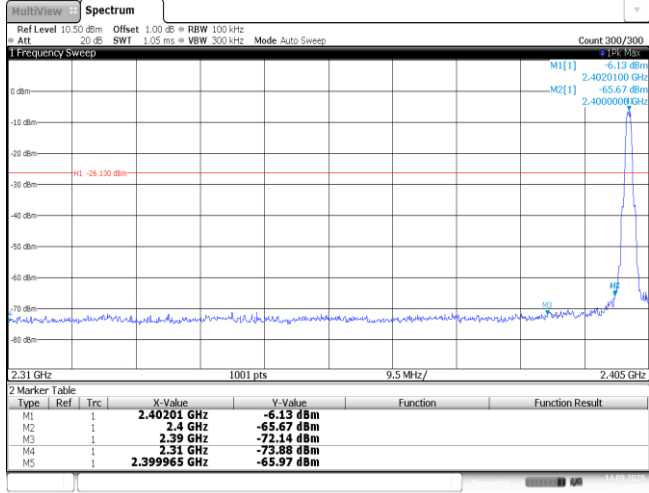
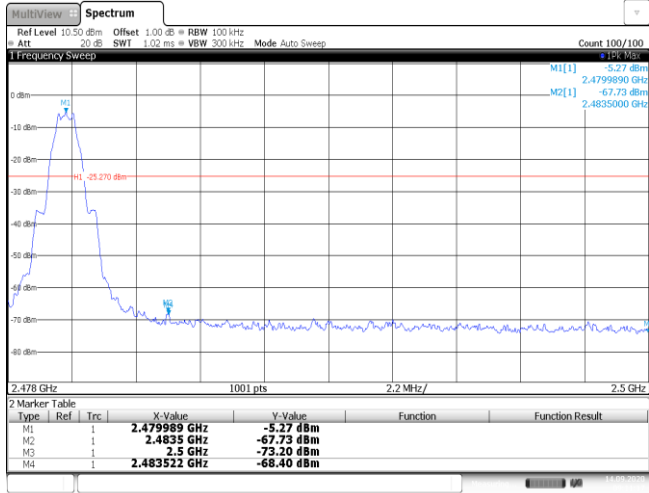


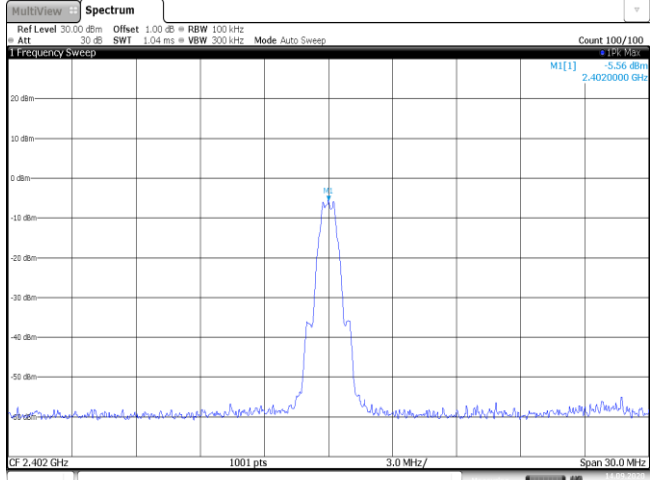
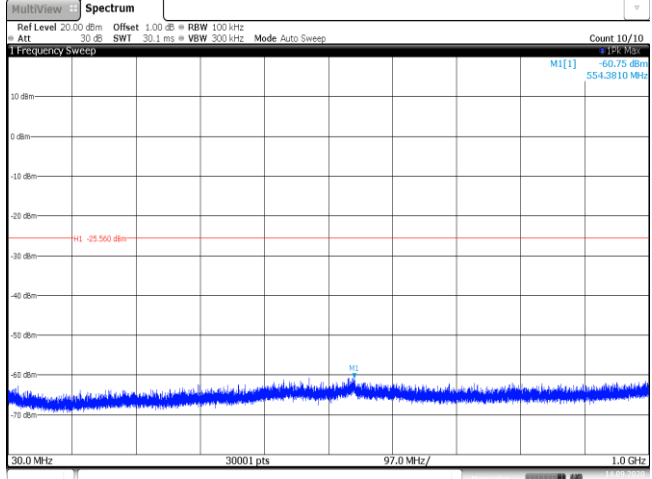
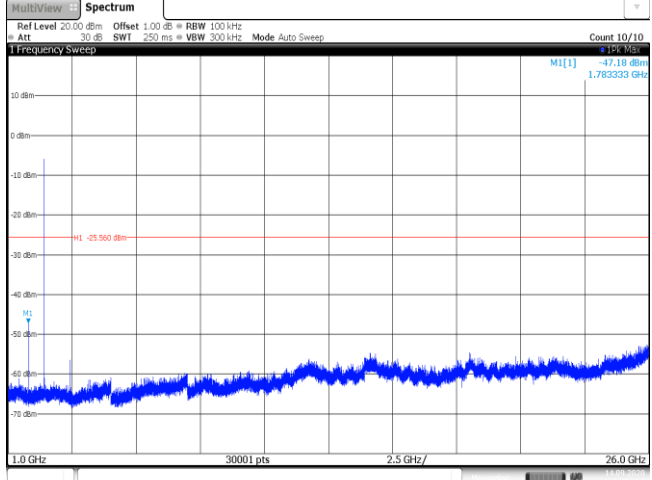
Appendix E: Duty cycle

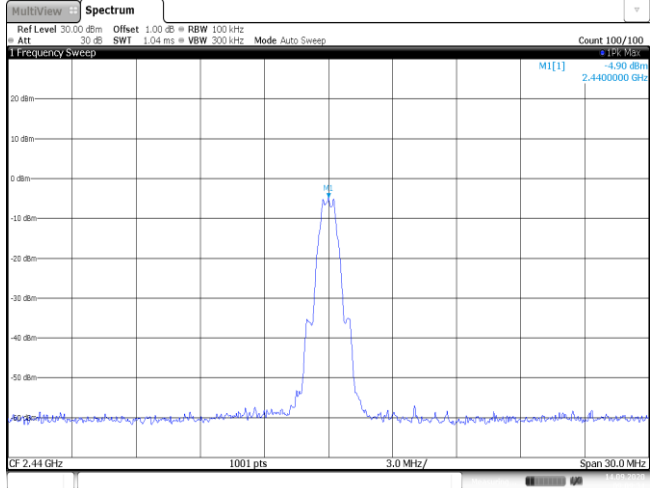
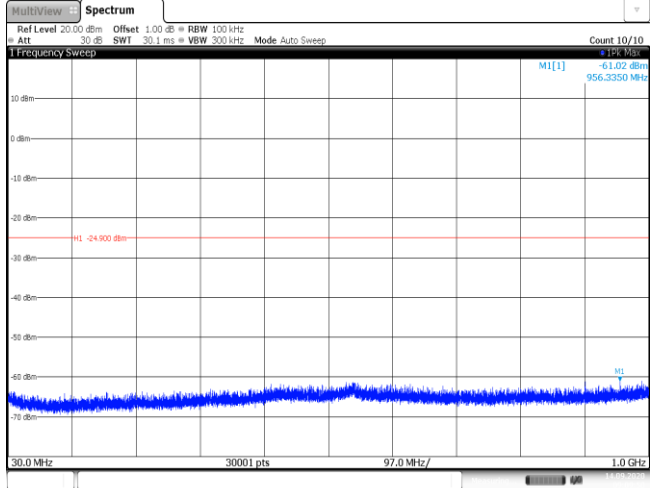
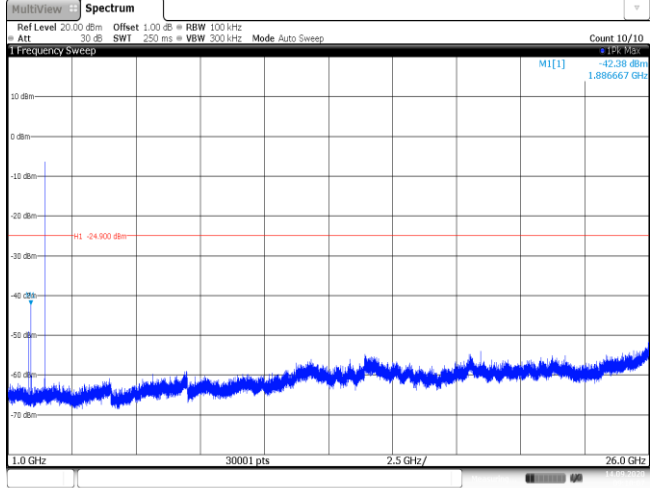
Test Frequency (MHz)	T _{on} time for single burst (ms)	T _{period} (ms)	Duty cycle	1/T _{on} time (kHz)
2440	0.38	0.62	61.3%	2.6

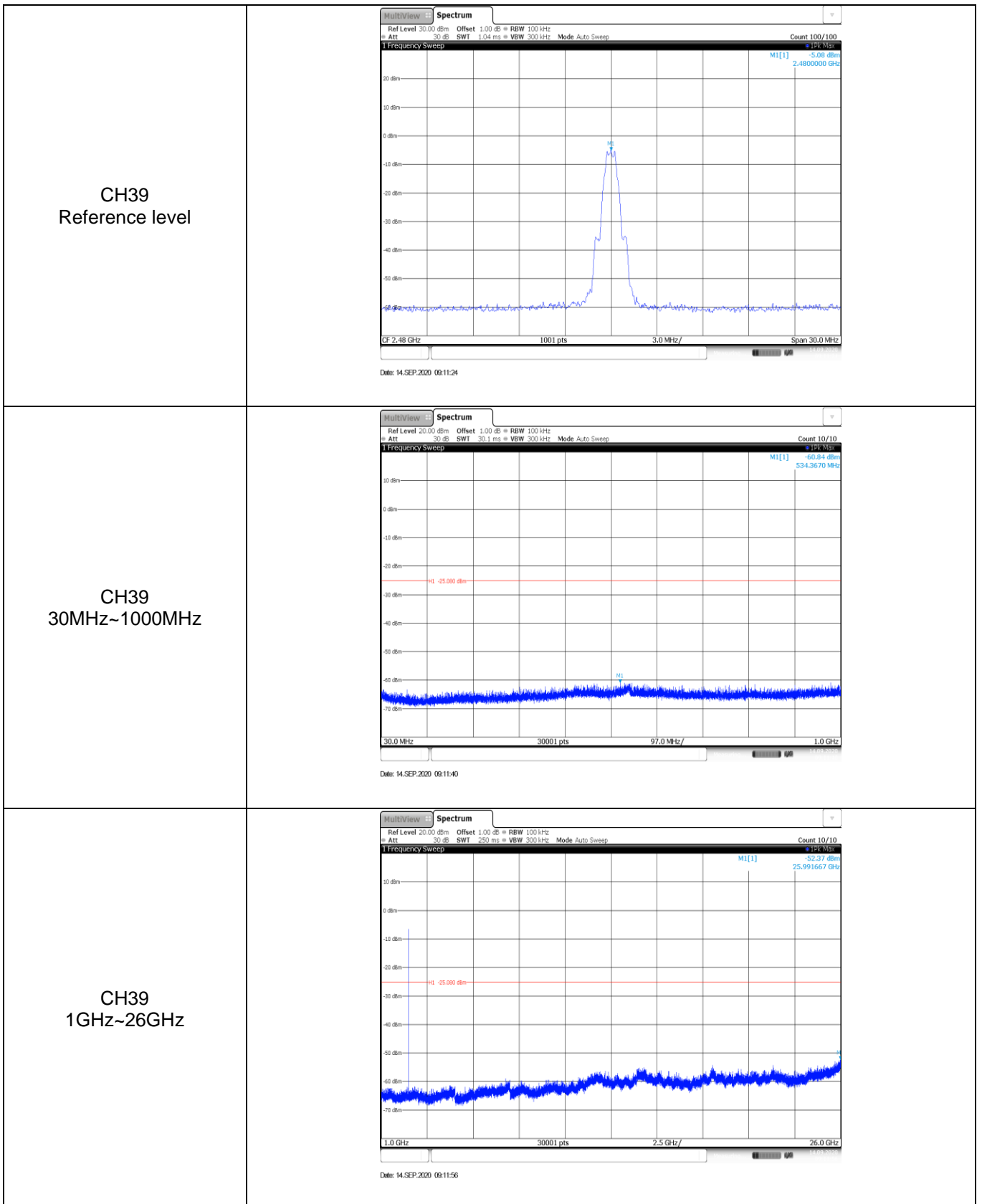


Appendix F: Band edge and Spurious Emissions (conducted)

Test Item:	Band edge																																										
<p style="text-align: center;">CH00</p>	 <p>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>2.40201 GHz</td> <td>-6.13 dBm</td> <td></td> <td></td> </tr> <tr> <td>M2</td> <td>1</td> <td></td> <td>2.4 GHz</td> <td>-65.67 dBm</td> <td></td> <td></td> </tr> <tr> <td>M3</td> <td>1</td> <td></td> <td>2.39 GHz</td> <td>-72.14 dBm</td> <td></td> <td></td> </tr> <tr> <td>M4</td> <td>1</td> <td></td> <td>2.31 GHz</td> <td>-73.88 dBm</td> <td></td> <td></td> </tr> <tr> <td>M5</td> <td>1</td> <td></td> <td>2.399965 GHz</td> <td>-65.97 dBm</td> <td></td> <td></td> </tr> </tbody> </table> <p>Date: 14.SEP.2020 11:18:40</p>	Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		2.40201 GHz	-6.13 dBm			M2	1		2.4 GHz	-65.67 dBm			M3	1		2.39 GHz	-72.14 dBm			M4	1		2.31 GHz	-73.88 dBm			M5	1		2.399965 GHz	-65.97 dBm		
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Test Item:	SE
<p>CH00 Reference level</p>	 <p>MultiView Spectrum Ref Level 30.00 dBm Offset 1.00 dB BW 100 kHz Att 30 dB SWI 1.04 ms VBW 300 kHz Mode Auto Sweep Count 100/100 1 Frequency Sweep MI[1] 5.56 dBm 2.402000 GHz CF 2.402 GHz 1001 pts 3.0 MHz/ Span 30.0 MHz Date: 14.SEP.2020 09:05:53</p>
<p>CH00 30MHz~1000MHz</p>	 <p>MultiView Spectrum Ref Level 20.00 dBm Offset 1.00 dB BW 100 kHz Att 30 dB SWI 30.1 ms VBW 300 kHz Mode Auto Sweep Count 10/10 1 Frequency Sweep MI[1] -60.75 dBm 554.3810 MHz H1 -25.50 dBm MI 30.0 MHz 30001 pts 97.0 MHz/ 1.0 GHz Date: 14.SEP.2020 09:06:09</p>
<p>CH00 1GHz~26GHz</p>	 <p>MultiView Spectrum Ref Level 20.00 dBm Offset 1.00 dB BW 100 kHz Att 30 dB SWI 250 ms VBW 300 kHz Mode Auto Sweep Count 10/10 1 Frequency Sweep MI[1] -47.18 dBm 1.785333 GHz H1 -25.50 dBm MI 1.0 GHz 30001 pts 2.5 GHz/ 26.0 GHz Date: 14.SEP.2020 09:06:26</p>

<p>CH19 Reference level</p>	 <p>The plot shows a single sharp peak at 2.44 GHz with a magnitude of -4.90 dBm. The y-axis ranges from -80 dBm to 20 dBm, and the x-axis shows a span of 30.0 MHz centered at 2.44 GHz. Parameters include Ref Level 30.00 dBm, Offset 1.00 dB, RBW 100 kHz, and Date 14.SEP.2020 08:09:34.</p>
<p>CH19 30MHz~1000MHz</p>	 <p>The plot shows a noise floor across the 30 MHz to 1000 MHz range, with a maximum level of -24.900 dBm. The y-axis ranges from -80 dBm to 10 dBm, and the x-axis shows a span of 97.0 MHz. Parameters include Ref Level 20.00 dBm, Offset 1.00 dB, RBW 100 kHz, and Date 14.SEP.2020 08:09:50.</p>
<p>CH19 1GHz~26GHz</p>	 <p>The plot shows a noise floor across the 1 GHz to 26 GHz range, with a maximum level of -24.900 dBm. The y-axis ranges from -80 dBm to 10 dBm, and the x-axis shows a span of 26.0 GHz. Parameters include Ref Level 20.00 dBm, Offset 1.00 dB, RBW 100 kHz, and Date 14.SEP.2020 08:10:06.</p>



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