

APPENDIX REPORT

Project No.	SHT2009005903EW	Radio Specification	Bluetooth BLE
Test sample No.	YPHT20090059002	Model No.	AX754
Start test date	2020/9/4	Finish date	2020/9/4
Temperature	25°C	Humidity	50%
Test Engineer	Jiongsheng.Feng	Auditor	Xiaodong Zheo

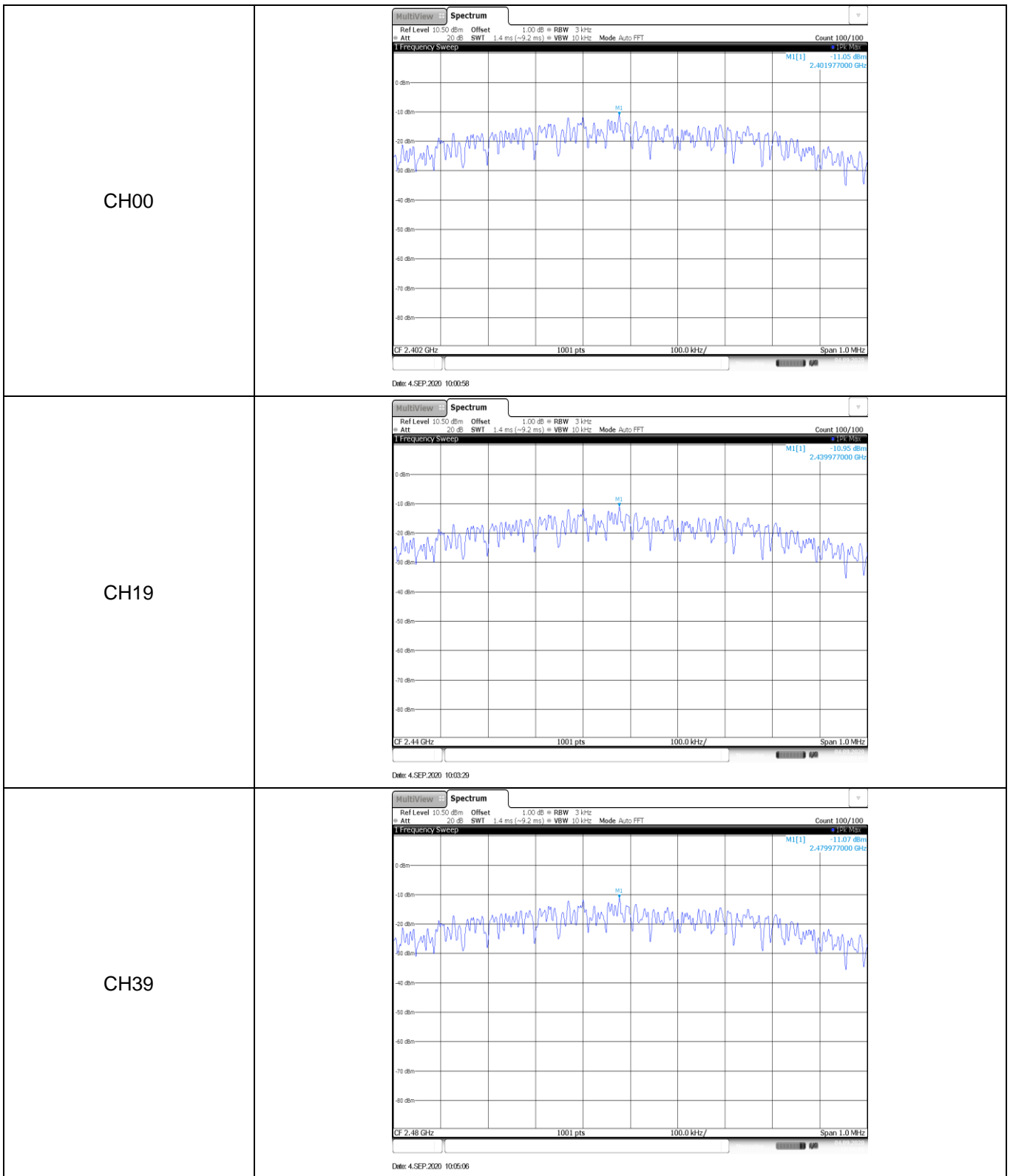
Appendix clause	Test item	Result
A	Peak Output Power	PASS
B	Power Spectral Density	PASS
C	6 dB Bandwidth	PASS
D	99% Occupied Bandwidth	PASS
E	Duty cycle	PASS
F	Band edge and Spurious Emissions (conducted)	PASS

Appendix A: Peak Output Power

Type	Channel	Output power (dBm)	Average Output power (dBm)	Limit (dBm)	Result
BT-BLE	00	4.21	4.20	≤ 30.00	Pass
	19	4.21	4.20		
	39	4.14	4.11		

Appendix B: Power Spectral Density

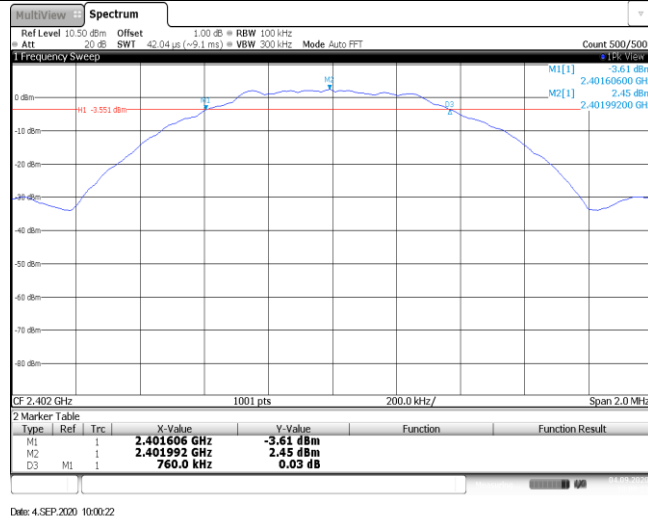
Type	Channel	Power Spectral Density(dBm/3KHz)	Limit (dBm/3KHz)	Result
BT-BLE	00	-11.05	≤8.00	Pass
	19	-10.95		
	39	-11.07		



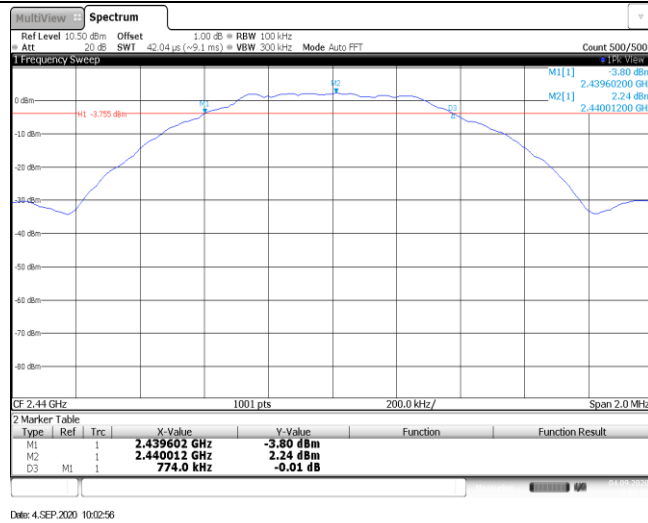
Appendix C: 6dB bandwidth

Type	Channel	6dB Bandwidth(kHz)	Limit (kHz)	Result
BT-BLE	00	760.00	≥500	Pass
	19	774.00		
	39	766.00		

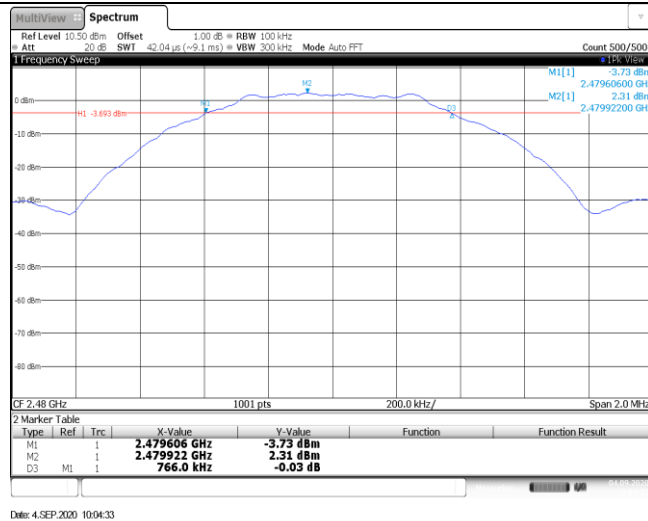
CH00



CH19



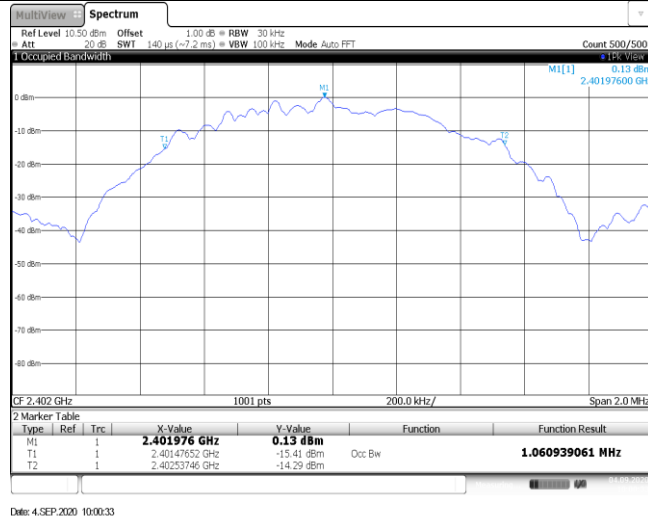
CH39



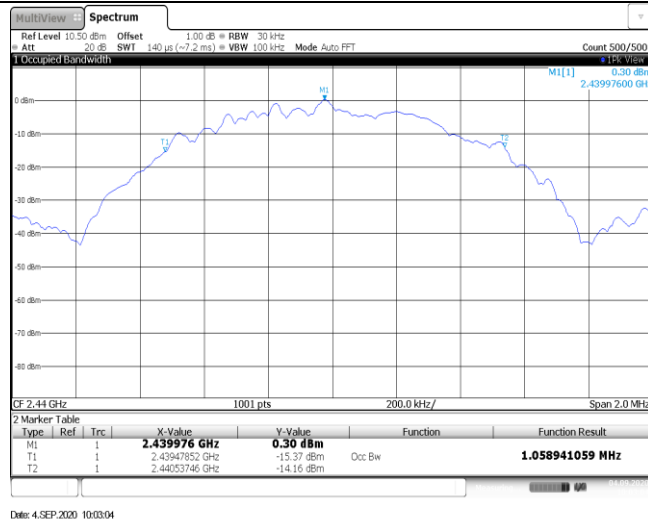
Appendix D: 99% Occupied Bandwidth

Type	Channel	99% Occupied Bandwidth(MHz)	Limit (kHz)	Result
BT-BLE	00	1.06	-	Pass
	19	1.06		
	39	1.06		

CH00



CH19

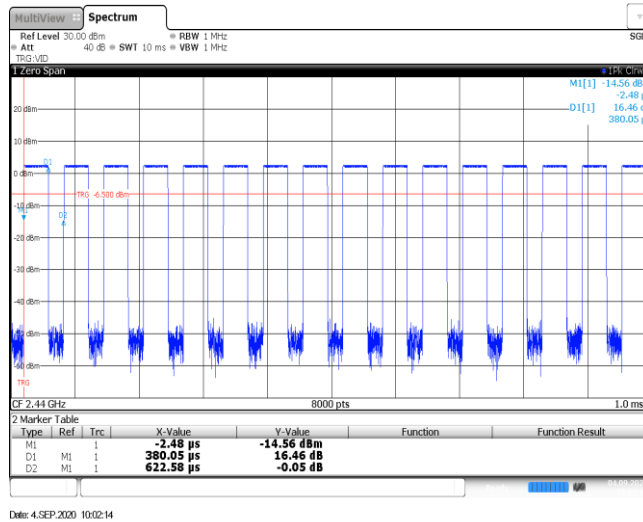


CH39



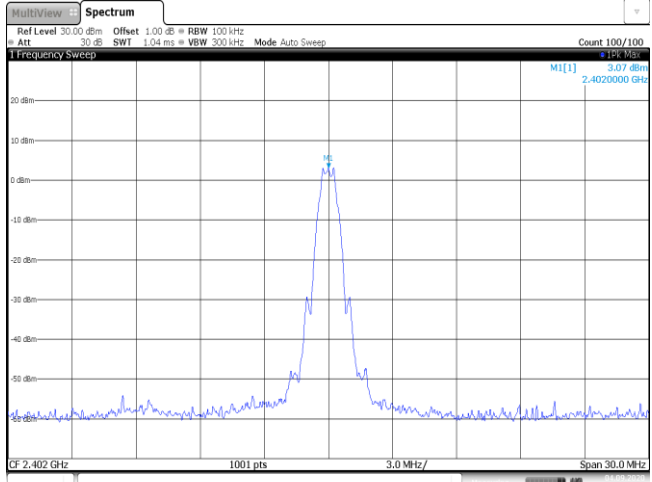
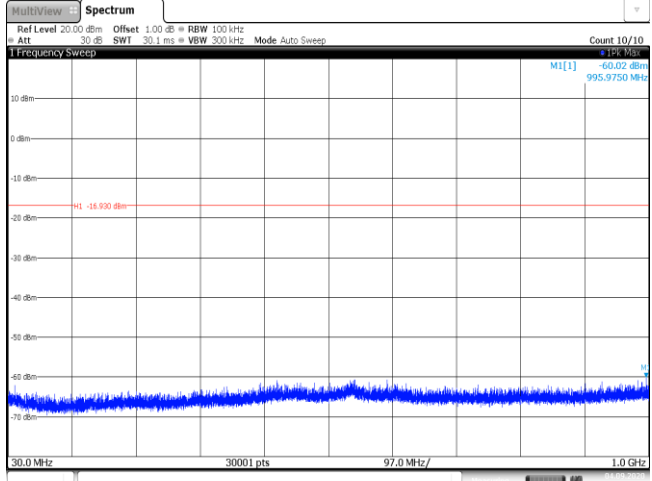
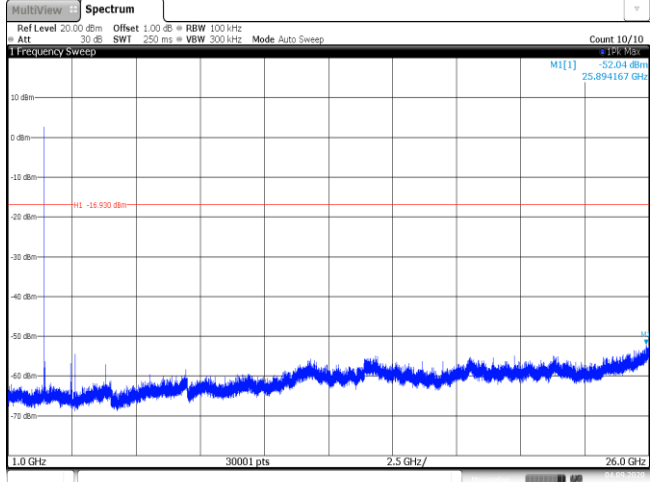
Appendix E: Duty cycle

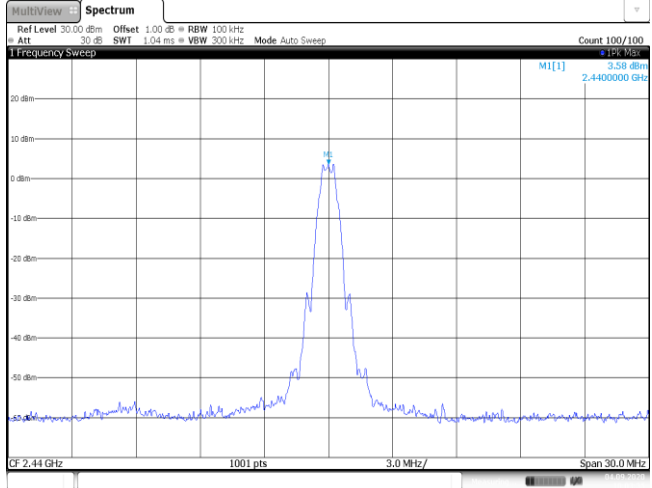
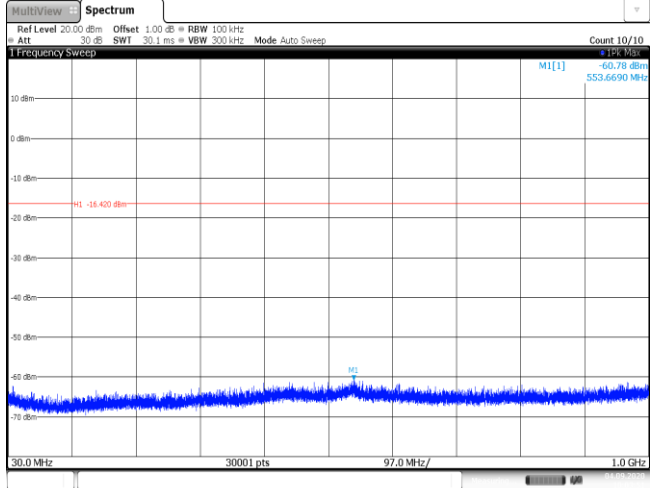
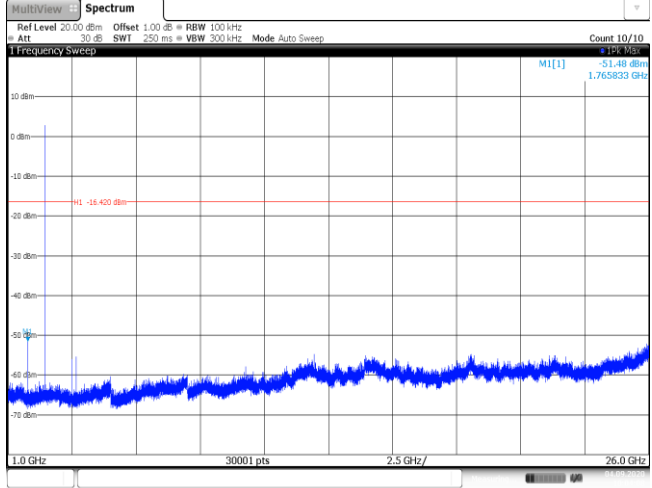
Test Frequency (MHz)	T _{on} time for single burst (ms)	T _{period} (ms)	Duty cycle	1/T _{on} time (kHz)
2440	0.38	0.62	61.3%	2.6

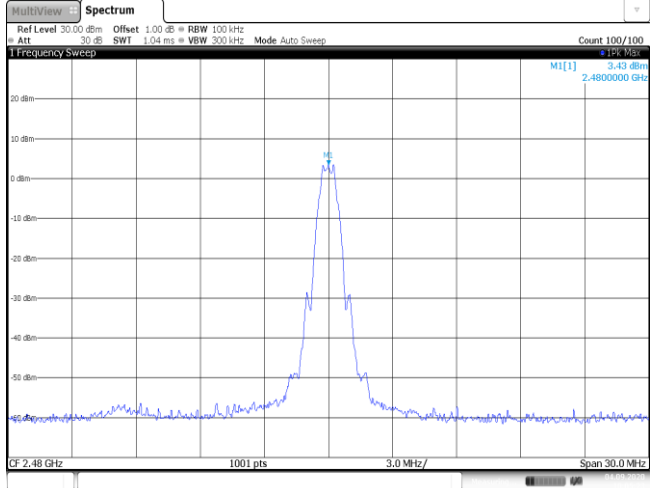
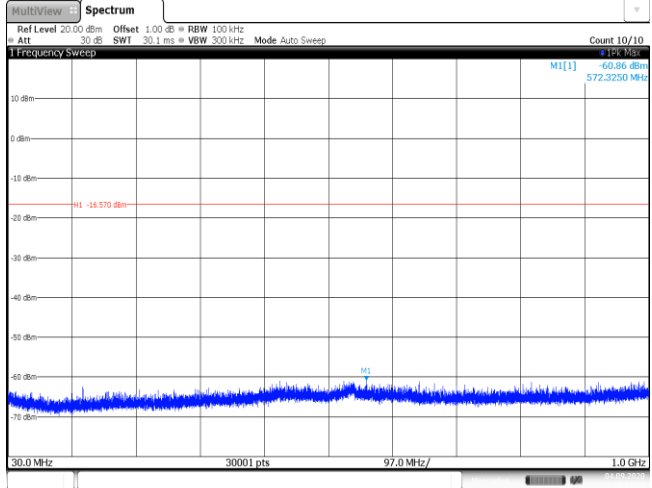
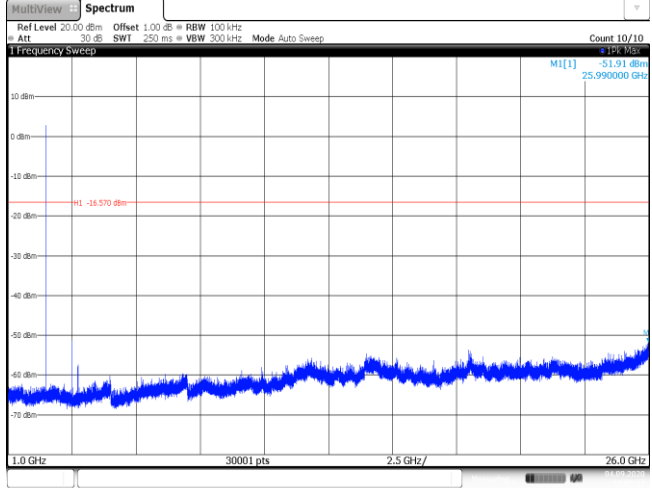


Appendix F: Band edge and Spurious Emissions (conducted)

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>2.95 dBm</td> <td></td> <td></td> </tr> <tr> <td>M2</td> <td>1</td> <td></td> <td>2.4 GHz</td> <td>-56.70 dBm</td> <td></td> <td></td> </tr> <tr> <td>M3</td> <td>1</td> <td></td> <td>2.39 GHz</td> <td>-71.71 dBm</td> <td></td> <td></td> </tr> <tr> <td>M4</td> <td>1</td> <td></td> <td>2.31 GHz</td> <td>-74.11 dBm</td> <td></td> <td></td> </tr> <tr> <td>M5</td> <td>1</td> <td></td> <td>2.39987 GHz</td> <td>-59.59 dBm</td> <td></td> <td></td> </tr> </tbody> </table> <p>Date: 4.SEP.2020 10:01:08</p>	Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		2.40201 GHz	2.95 dBm			M2	1		2.4 GHz	-56.70 dBm			M3	1		2.39 GHz	-71.71 dBm			M4	1		2.31 GHz	-74.11 dBm			M5	1		2.39987 GHz	-59.59 dBm		
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Test Item:	SE
<p>CH00 Reference level</p>	 <p>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 M1[1] 3.07 dBm 2.4020000 GHz Date: 4.SEP.2020 10:01:16</p>
<p>CH00 30MHz~1000MHz</p>	 <p>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 M1[1] -60.02 dBm 995.9750 MHz HL -16.900 dBm Date: 4.SEP.2020 10:01:32</p>
<p>CH00 1GHz~26GHz</p>	 <p>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 M1[1] -52.04 dBm 25.894167 GHz HL -16.900 dBm Date: 4.SEP.2020 10:01:49</p>

<p>CH19 Reference level</p>	 <p>The plot shows a spectrum with a prominent peak at 2.440000 GHz. The y-axis represents power in dBm, ranging from -80 to 20. The x-axis represents frequency in MHz, with a span of 30.0 MHz. The peak is labeled M1[1] with a value of 0.58 dBm. The plot title is 'Spectrum' and it includes parameters like Ref Level 30.00 dBm, Offset 1.00 dB, and RBW 100 kHz.</p>
<p>CH19 30MHz~1000MHz</p>	 <p>The plot shows a wide frequency range from 30.0 MHz to 1.0 GHz. The y-axis ranges from -70 to 10 dBm. The signal is mostly flat at a noise floor level of approximately -60 dBm. A red horizontal line is drawn at -16.400 dBm. The plot title is 'Spectrum' and it includes parameters like Ref Level 20.00 dBm, Offset 1.00 dB, and RBW 100 kHz.</p>
<p>CH19 1GHz~26GHz</p>	 <p>The plot shows a wide frequency range from 1.0 GHz to 26.0 GHz. The y-axis ranges from -70 to 10 dBm. The signal is mostly flat at a noise floor level of approximately -50 dBm. A red horizontal line is drawn at -16.400 dBm. The plot title is 'Spectrum' and it includes parameters like Ref Level 20.00 dBm, Offset 1.00 dB, and RBW 100 kHz.</p>

<p>CH39 Reference level</p>	 <p>The spectrum plot shows a single sharp peak at 2.48 GHz. The y-axis represents power in dBm, ranging from -80 to 20. The x-axis represents frequency in MHz, with a span of 30.0 MHz. The peak is labeled with a magnitude of 3.43 dBm. The plot includes technical parameters: Ref Level 30.00 dBm, Offset 1.00 dB, RBW 100 kHz, Count 100/100, and Date: 4.SEP.2020 10:05:22.</p>
<p>CH39 30MHz~1000MHz</p>	 <p>The spectrum plot shows a noise floor across the 30 MHz to 1000 MHz range. The y-axis ranges from -70 to 10 dBm. A red horizontal line indicates a noise floor level of -18.570 dBm. A peak at 572.3250 MHz is labeled with a magnitude of -60.86 dBm. The plot includes technical parameters: Ref Level 20.00 dBm, Offset 1.00 dB, RBW 100 kHz, Count 10/10, and Date: 4.SEP.2020 10:05:39.</p>
<p>CH39 1GHz~26GHz</p>	 <p>The spectrum plot shows a noise floor across the 1 GHz to 26 GHz range. The y-axis ranges from -70 to 10 dBm. A red horizontal line indicates a noise floor level of -18.570 dBm. A peak at 25.990000 GHz is labeled with a magnitude of -51.91 dBm. The plot includes technical parameters: Ref Level 20.00 dBm, Offset 1.00 dB, RBW 100 kHz, Count 10/10, and Date: 4.SEP.2020 10:05:55.</p>

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