

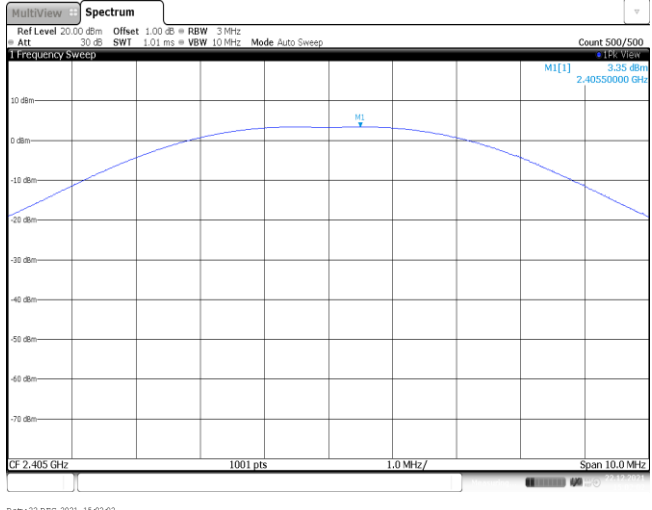
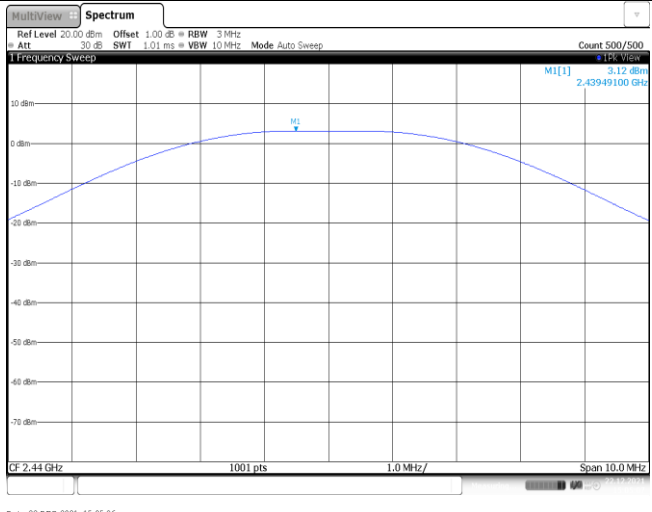
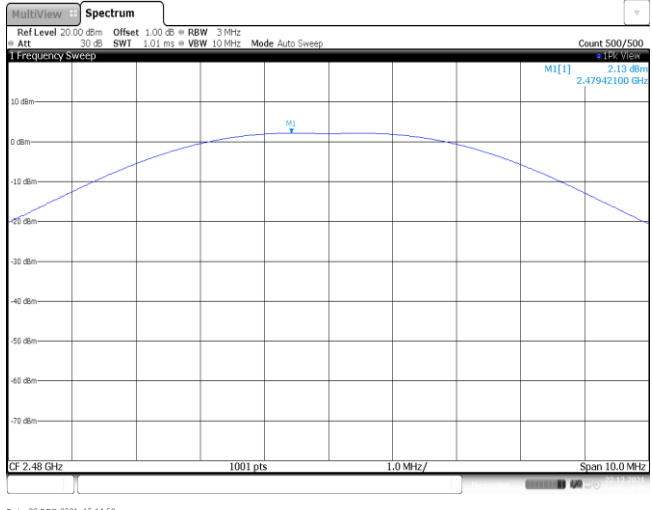
APPENDIX REPORT

Project No.	SHT2112078201EW	Radio Specification	2.4GHz Device
Test sample No.	YPHT21120782002	Model No.	ZL700
Start test date	2021-12-22	Finish date	2021-12-22
Temperature	23.9°C	Humidity	40%
Test Engineer	Xiaoqin Li	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

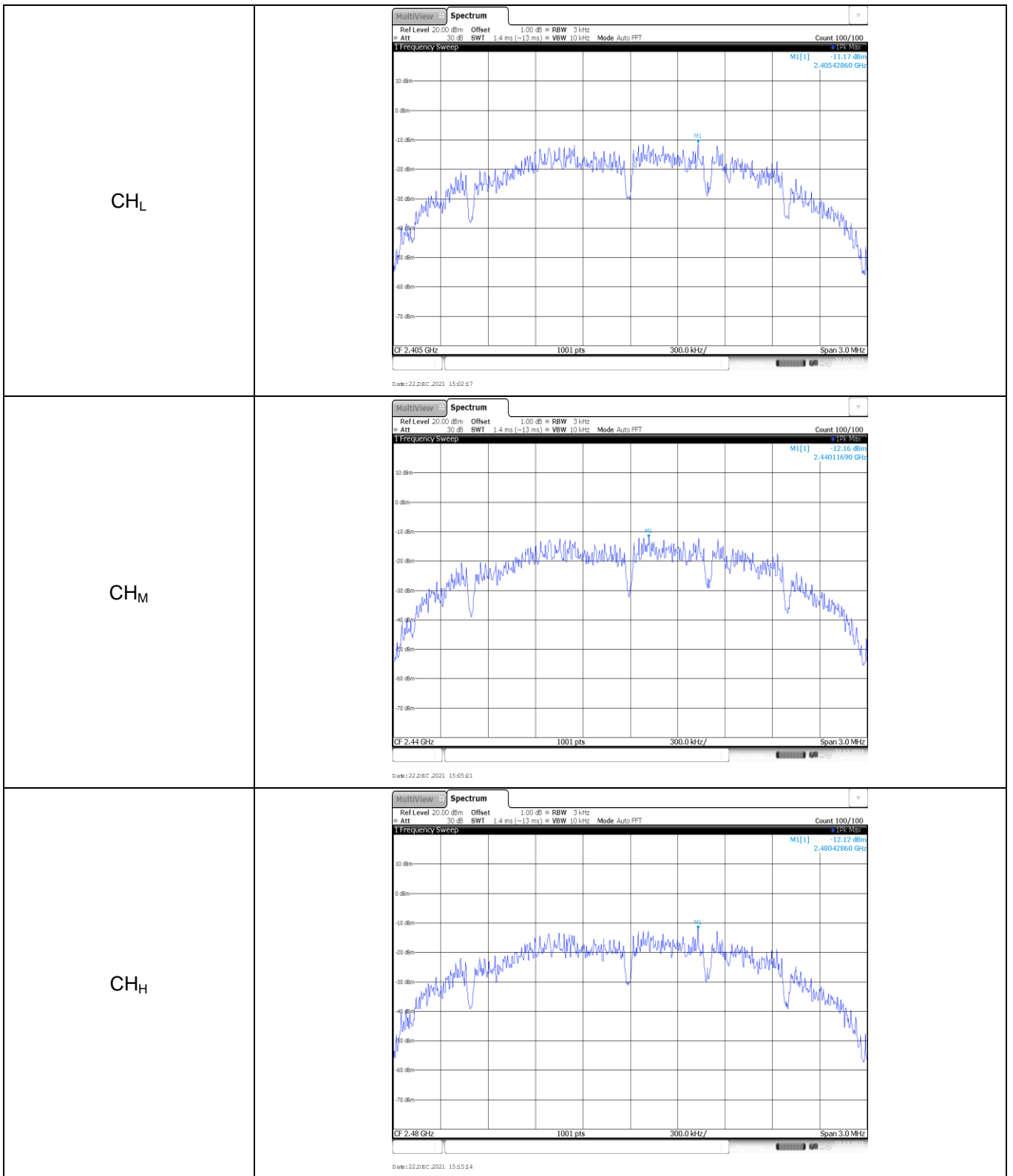
Appendix A: Peak Output Power

Channel	Peak Output power (dBm)	Average Output power (dBm)	Limit (dBm)	Result
CH _L	3.35	3.28	≤ 30.00	Pass
CH _M	3.12	3.07		
CH _H	2.13	2.08		

<p>CH_L</p>	 <p>Ref Level 20.00 dBm Offset 1.00 dB RBW 3 MHz Att 30 dB SWI 1.01 ms VBW 10 MHz Mode Auto Sweep Count 500/500 M1[1] 3.35 dBm 2.40550000 GHz CF 2.405 GHz 1001 pts 1.0 MHz/ Span 10.0 MHz Date: 22.DEC.2021 15:02:02</p>
<p>CH_M</p>	 <p>Ref Level 20.00 dBm Offset 1.00 dB RBW 3 MHz Att 30 dB SWI 1.01 ms VBW 10 MHz Mode Auto Sweep Count 500/500 M1[1] 3.12 dBm 2.43949100 GHz CF 2.44 GHz 1001 pts 1.0 MHz/ Span 10.0 MHz Date: 22.DEC.2021 15:05:06</p>
<p>CH_H</p>	 <p>Ref Level 20.00 dBm Offset 1.00 dB RBW 3 MHz Att 30 dB SWI 1.01 ms VBW 10 MHz Mode Auto Sweep Count 500/500 M1[1] 2.13 dBm 2.47942100 GHz CF 2.48 GHz 1001 pts 1.0 MHz/ Span 10.0 MHz Date: 22.DEC.2021 15:04:09</p>

Appendix B: Power Spectral Density

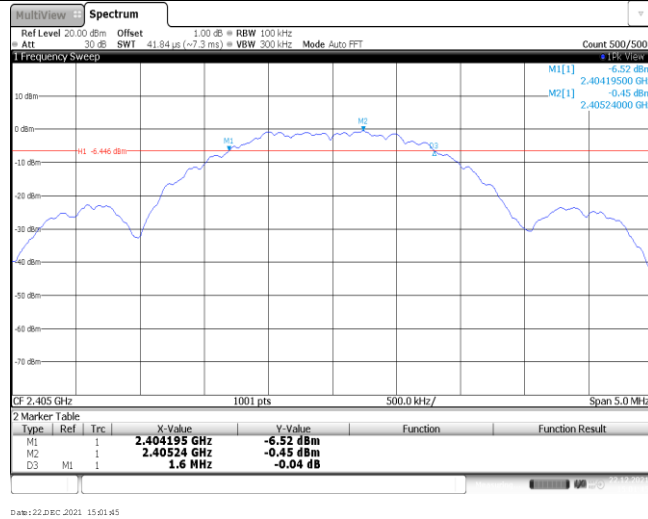
Channel	Power Spectral Density(dBm/3KHz)	Limit (dBm/3KHz)	Result
CH _L	-11.17	≤8.00	Pass
CH _M	-12.16		
CH _H	-12.12		



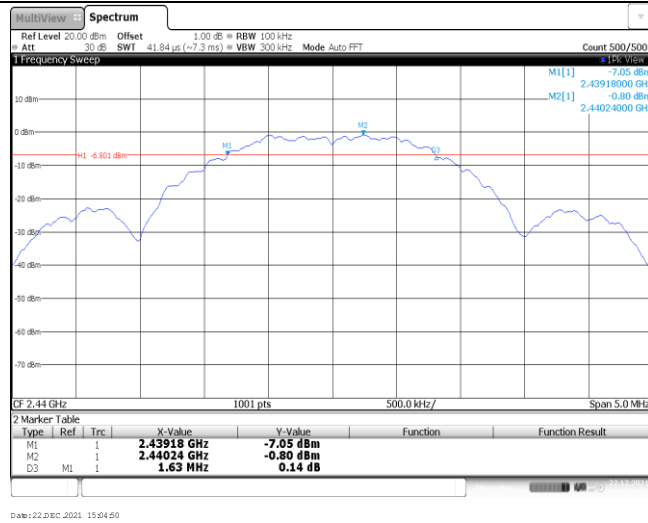
Appendix C: 6dB bandwidth

Channel	6dB Bandwidth(kHz)	Limit (kHz)	Result
CH _L	1600.00	≥500	Pass
CH _M	1630.00		
CH _H	1600.00		

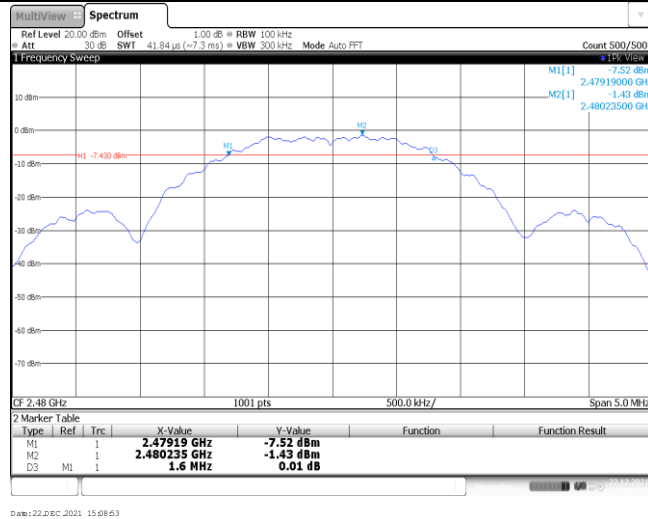
CH_L



CH_M



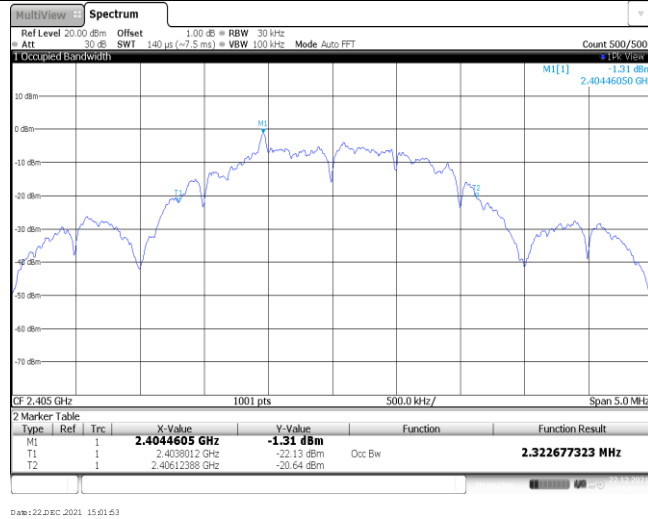
CH_H



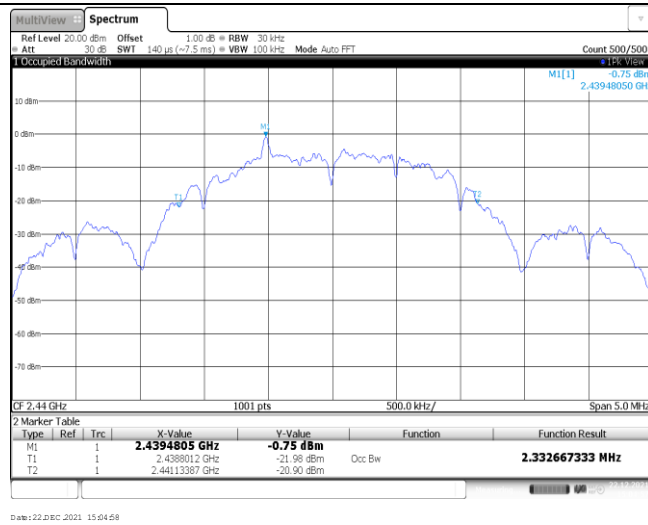
Appendix D: 99% Occupied Bandwidth

Channel	99% Occupied Bandwidth(MHz)	Limit (kHz)	Result
CH _L	2.32	-	Pass
CH _M	2.33		
CH _H	2.33		

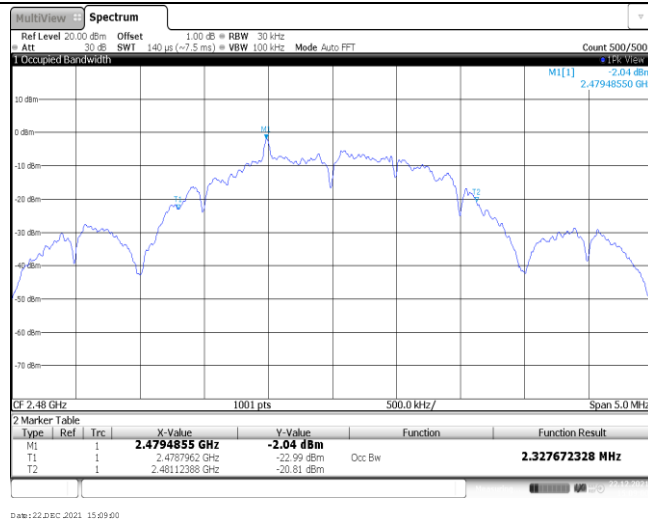
CH_L



CH_M

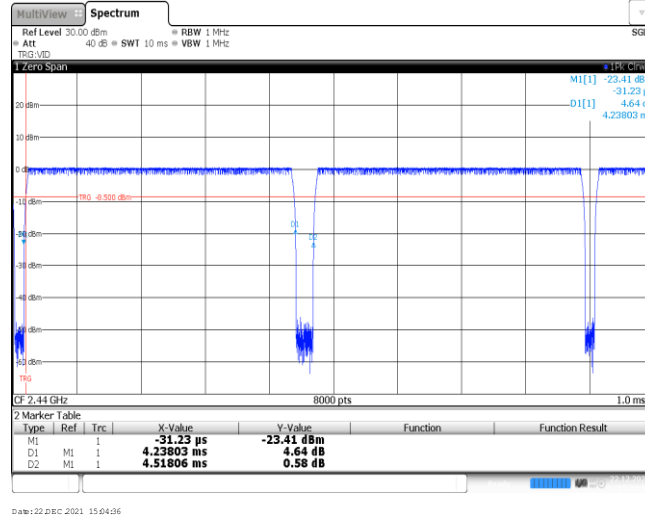


CH_H

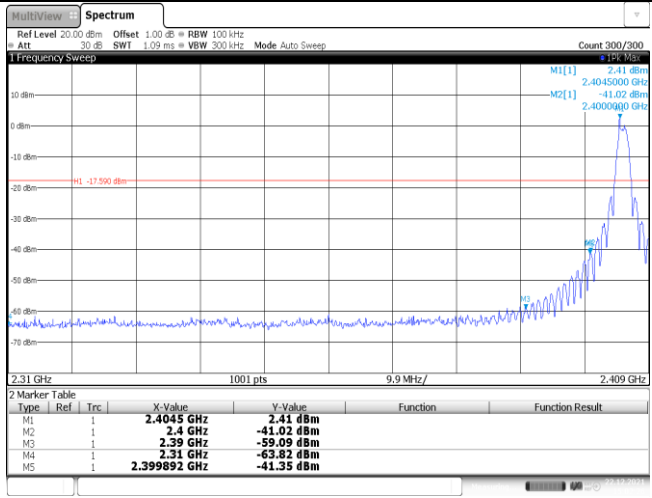
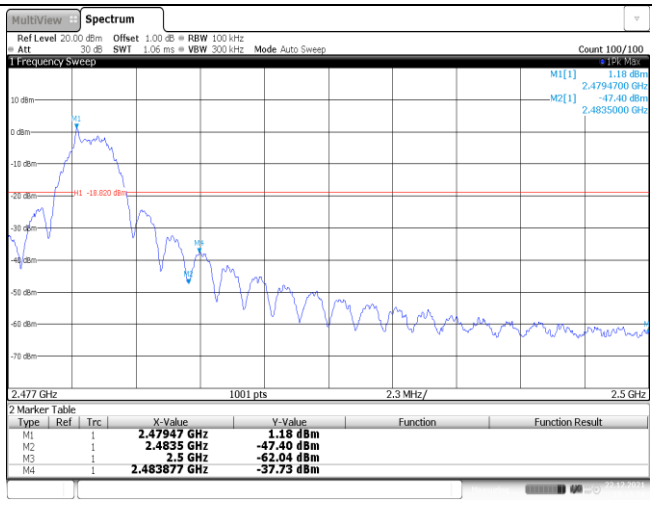


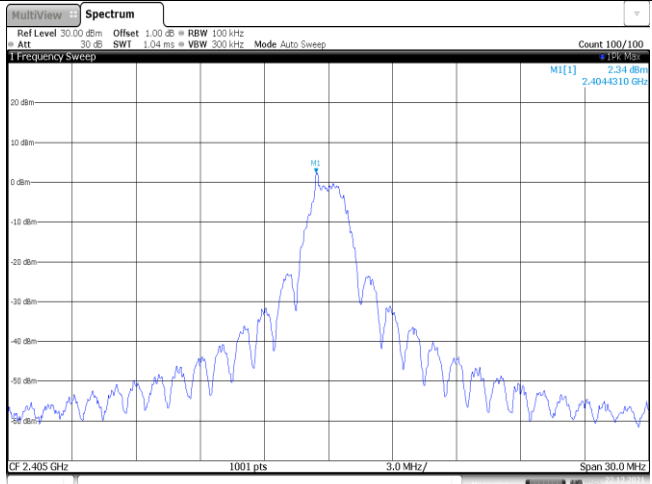
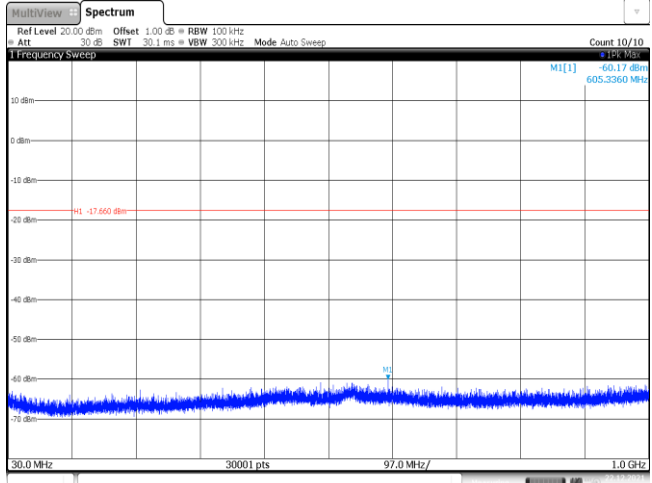
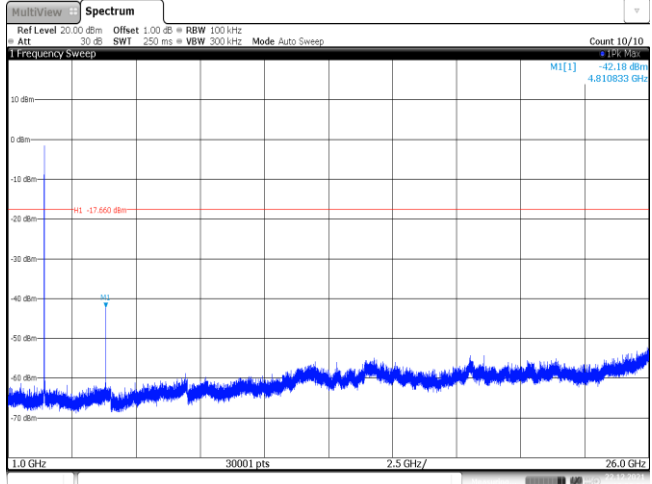
Appendix E: Duty cycle

Test Frequency (MHz)	T _{on} time for single burst (ms)	T _{period} (ms)	Duty cycle	1/T _{on} time (kHz)
2440	4.24	4.52	93.8%	0.24

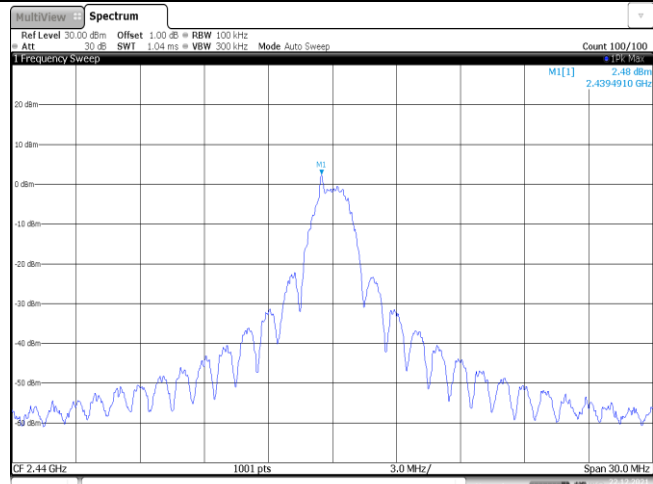


Appendix F: Band edge and Spurious Emissions (conducted)

Test Item:	Band edge																																										
<p style="text-align: center;">CH_L</p>	 <table border="1" data-bbox="683 660 1337 750"> <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>2.4045 GHz</td> <td>2.41 dBm</td> <td></td> <td></td> </tr> <tr> <td>M2</td> <td>1</td> <td></td> <td>2.4 GHz</td> <td>-45.02 dBm</td> <td></td> <td></td> </tr> <tr> <td>M3</td> <td>1</td> <td></td> <td>2.39 GHz</td> <td>-59.09 dBm</td> <td></td> <td></td> </tr> <tr> <td>M4</td> <td>1</td> <td></td> <td>2.31 GHz</td> <td>-63.82 dBm</td> <td></td> <td></td> </tr> <tr> <td>M5</td> <td>1</td> <td></td> <td>2.399892 GHz</td> <td>-41.35 dBm</td> <td></td> <td></td> </tr> </tbody> </table> <p style="font-size: small;">Date: 22.DEC 2021 15:02:27</p>	Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		2.4045 GHz	2.41 dBm			M2	1		2.4 GHz	-45.02 dBm			M3	1		2.39 GHz	-59.09 dBm			M4	1		2.31 GHz	-63.82 dBm			M5	1		2.399892 GHz	-41.35 dBm		
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<p style="text-align: center;">CH_H</p>	 <table border="1" data-bbox="683 1198 1337 1288"> <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>2.47947 GHz</td> <td>1.18 dBm</td> <td></td> <td></td> </tr> <tr> <td>M2</td> <td>1</td> <td></td> <td>2.4835 GHz</td> <td>-47.40 dBm</td> <td></td> <td></td> </tr> <tr> <td>M3</td> <td>1</td> <td></td> <td>2.5 GHz</td> <td>-62.04 dBm</td> <td></td> <td></td> </tr> <tr> <td>M4</td> <td>1</td> <td></td> <td>2.483877 GHz</td> <td>-37.73 dBm</td> <td></td> <td></td> </tr> </tbody> </table> <p style="font-size: small;">Date: 22.DEC 2021 15:05:24</p>	Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		2.47947 GHz	1.18 dBm			M2	1		2.4835 GHz	-47.40 dBm			M3	1		2.5 GHz	-62.04 dBm			M4	1		2.483877 GHz	-37.73 dBm									
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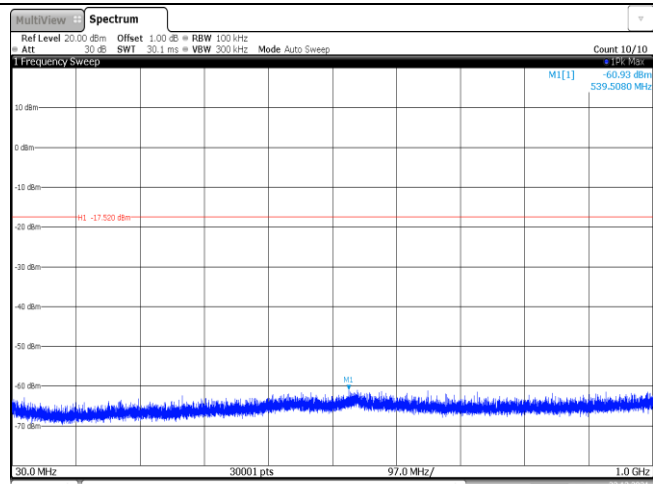
Test Item:	SE
<p>CH_L Reference level</p>	 <p>Ref Level 30.00 dBm Offset 1.00 dB BW 100 kHz Att 30 dB SWI 1.04 ms VBW 300 kHz Mode Auto Sweep Count 100/100 MI[1] 2.34 dBm 2.404310 GHz CF 2.405 GHz 1001 pts 3.0 MHz/ Span 30.0 MHz Date: 22 DEC 2021 15:02:24</p>
<p>CH_L 30MHz~1000MHz</p>	 <p>Ref Level 20.00 dBm Offset 1.00 dB BW 100 kHz Att 30 dB SWI 30.1 ms VBW 300 kHz Mode Auto Sweep Count 10/10 MI[1] -60.17 dBm 605.5360 MHz MI -17.660 dBm 30.0 MHz 30001 pts 97.0 MHz/ 1.0 GHz Date: 22 DEC 2021 15:02:50</p>
<p>CH_L 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 MI[1] -42.18 dBm 4.810633 GHz MI -17.660 dBm 1.0 GHz 30001 pts 2.5 GHz/ 26.0 GHz Date: 22 DEC 2021 15:03:06</p>

CH_M
Reference level



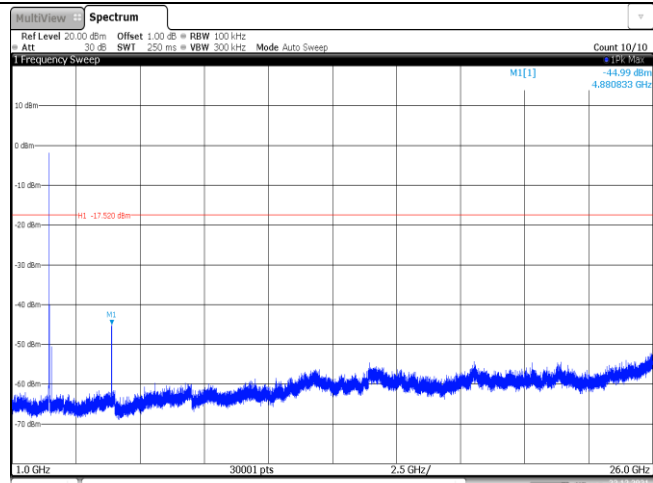
Date: 22 DEC 2021 15:06:15

CH_M
30MHz~1000MHz

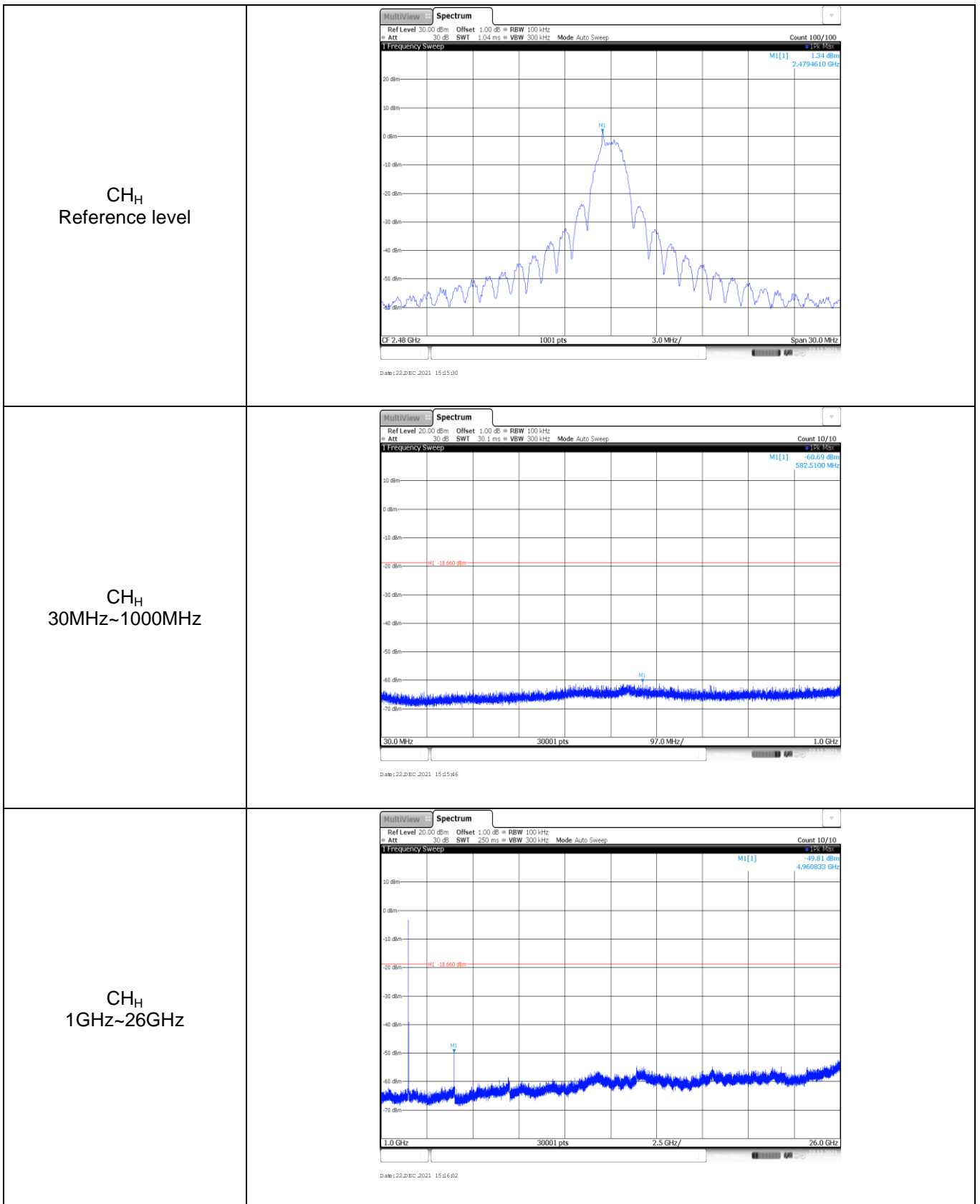


Date: 22 DEC 2021 15:06:31

CH_M
1GHz~26GHz



Date: 22 DEC 2021 15:06:47



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