

APPENDIX REPORT

Project No.	SHT2307037601EW	Radio Specification	ZIGBEE
Test sample No.	YPHT23070376001	Model No.	E18-MS1PA2-IPX
Start test date	2023/07/21	Finish date	2023/07/21
Temperature	23.8°C	Humidity	62%
Test Engineer	kongyongshu	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	Peak Output power (dBm)	Average Output power (dBm)	Limit (dBm)	Result
ZIGBEE	00	4.06	4.00	≤30.00	Pass
	07	4.74	4.69		
	15	4.65	4.61		

Appendix B: Power Spectral Density

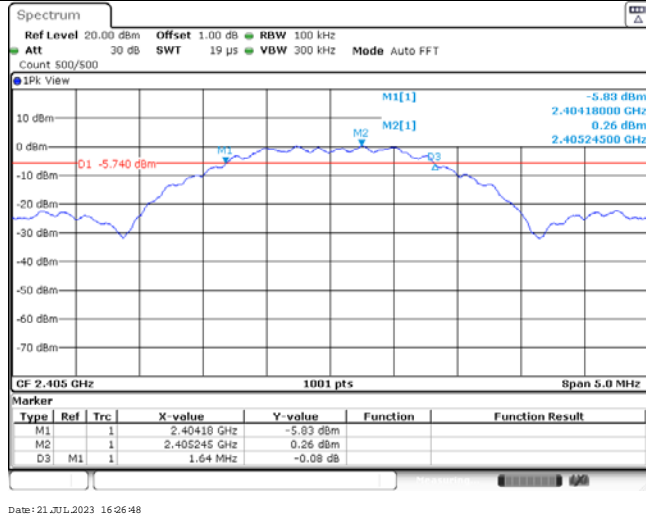
Type	Channel	Power Spectral Density(dBm/3KHz)	Limit (dBm/3KHz)	Result
ZIGBEE	00	-10.98	≤8.00	Pass
	07	-9.86		
	15	-10.23		

<p>CH00</p>	<p>Date: 21 JUL 2023 16:27:23</p>
<p>CH07</p>	<p>Date: 21 JUL 2023 16:29:47</p>
<p>CH15</p>	<p>Date: 21 JUL 2023 16:31:26</p>

Appendix C: 6dB bandwidth

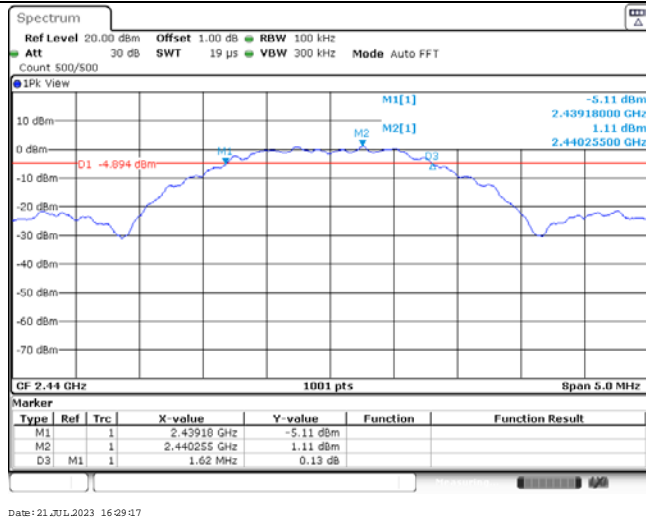
Type	Channel	6dB Bandwidth(kHz)	Limit (kHz)	Result
ZIGBEE	00	1640.00	≥500	Pass
	07	1620.00		
	15	1615.00		

CH00



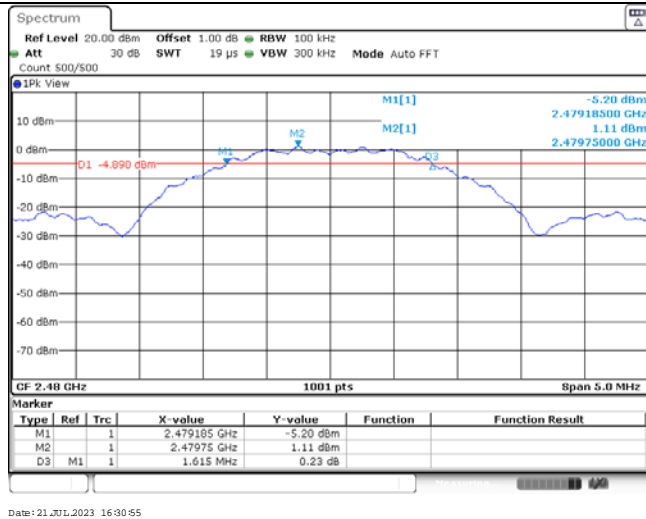
Date: 21 JUL 2023 16:26:48

CH07



Date: 21 JUL 2023 16:29:47

CH15



Date: 21 JUL 2023 16:30:55

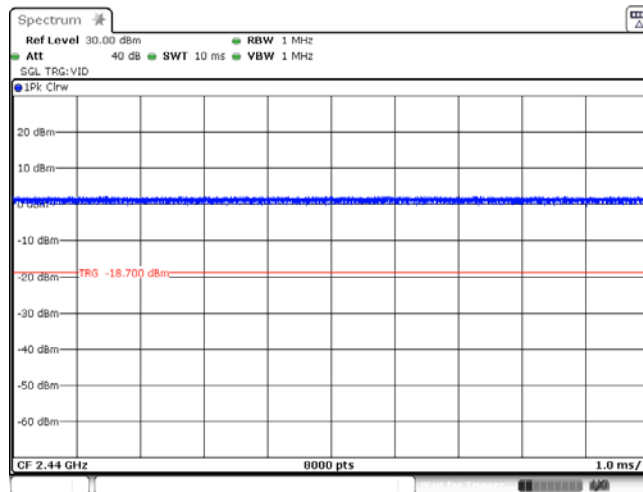
Appendix D: 99% Occupied Bandwidth

Type	Channel	99% Occupied Bandwidth(MHz)	Limit (kHz)	Result
ZIGBEE	00	2.58	-	Pass
	07	2.58		
	15	2.59		

<p>CH00</p>	<p>Date: 21 JUL 2023 16:26:57</p>
<p>CH07</p>	<p>Date: 21 JUL 2023 16:29:24</p>
<p>CH15</p>	<p>Date: 21 JUL 2023 16:31:03</p>

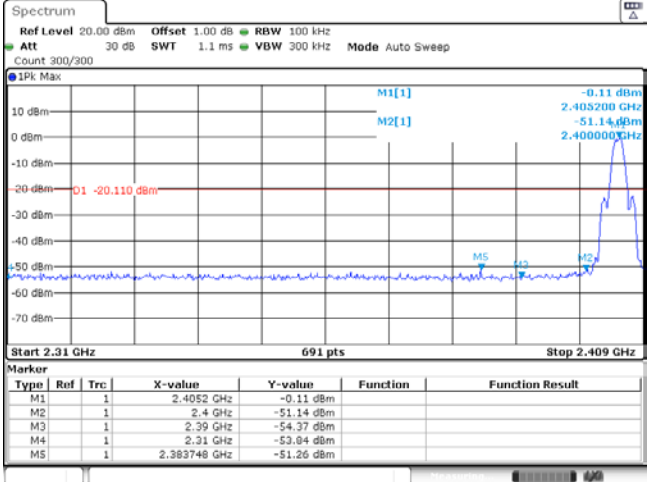
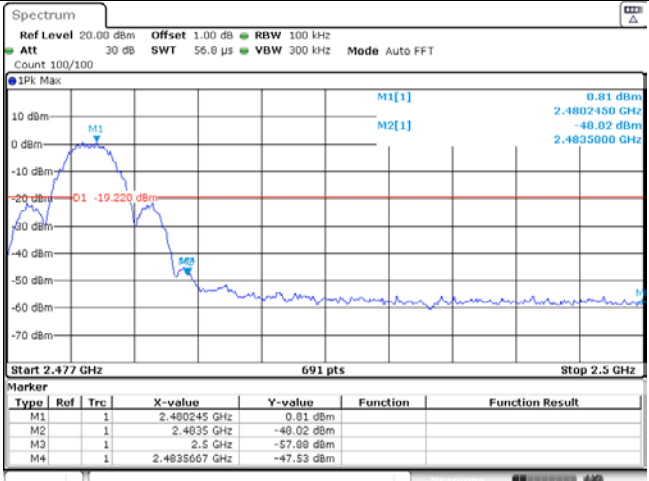
Appendix E: Duty cycle

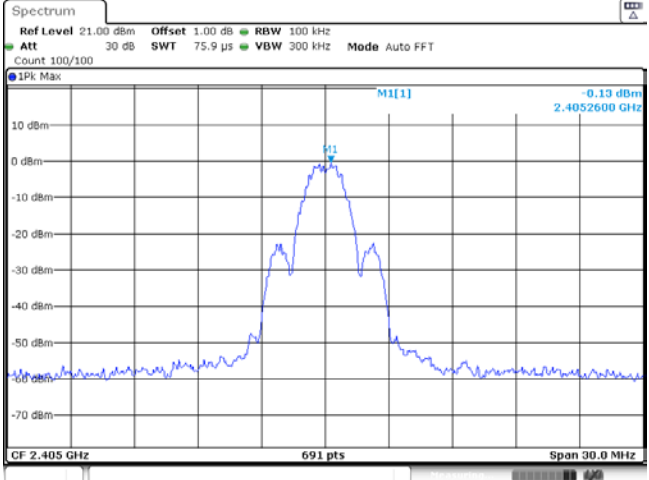
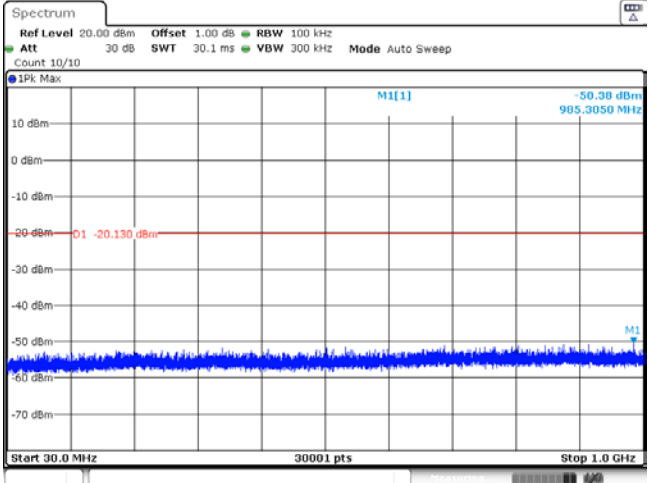
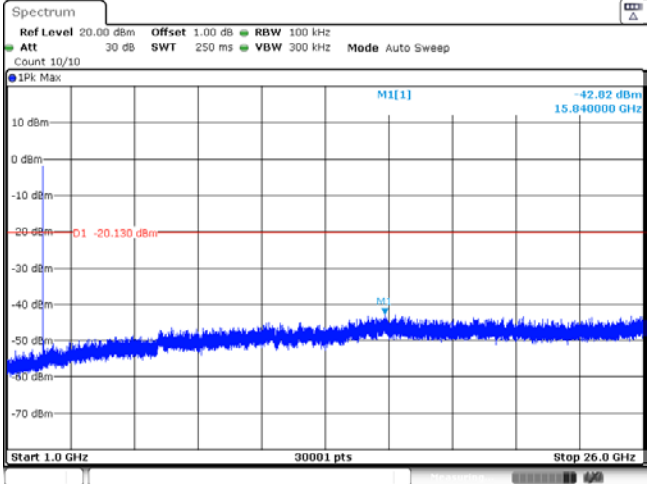
Test Frequency (MHz)	T _{on} time for single burst (ms)	T _{period} (ms)	Duty cycle	1/T _{on} time (kHz)
2440	1.00	1.00	100%	1



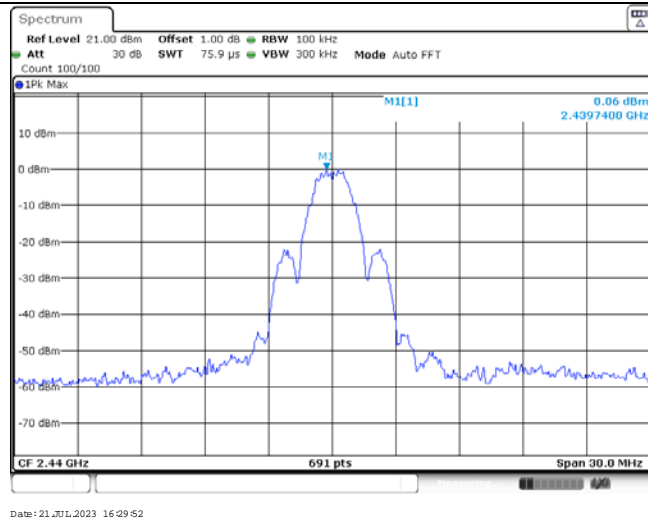
Date: 21 JUL 2023 16:09:04

Appendix F: Band edge and Spurious Emissions (conducted)

Test Item:	Band edge																																										
<p style="text-align: center;">CH00</p>	 <p>Marker Data:</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>2.4052 GHz</td> <td>-0.11 dBm</td> <td></td> <td></td> </tr> <tr> <td>M2</td> <td>1</td> <td></td> <td>2.4 GHz</td> <td>-51.14 dBm</td> <td></td> <td></td> </tr> <tr> <td>M3</td> <td>1</td> <td></td> <td>2.39 GHz</td> <td>-54.37 dBm</td> <td></td> <td></td> </tr> <tr> <td>M4</td> <td>1</td> <td></td> <td>2.31 GHz</td> <td>-53.84 dBm</td> <td></td> <td></td> </tr> <tr> <td>M5</td> <td>1</td> <td></td> <td>2.383746 GHz</td> <td>-51.26 dBm</td> <td></td> <td></td> </tr> </tbody> </table> <p>Date: 21 JUL 2023 16:27:32</p>	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1		2.4052 GHz	-0.11 dBm			M2	1		2.4 GHz	-51.14 dBm			M3	1		2.39 GHz	-54.37 dBm			M4	1		2.31 GHz	-53.84 dBm			M5	1		2.383746 GHz	-51.26 dBm		
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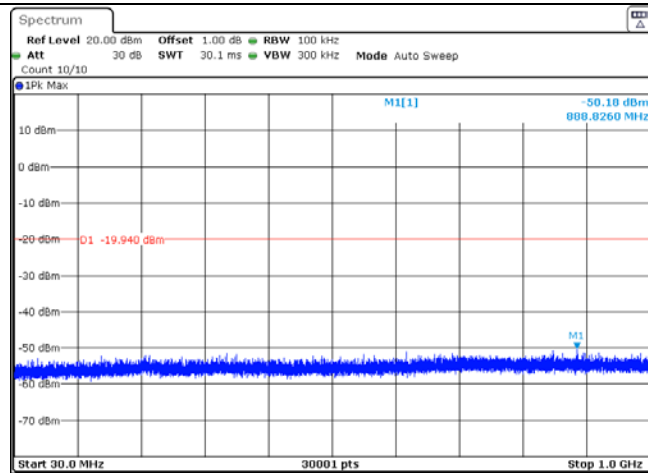
Test Item:	SE
<p>CH00 Reference level</p>	 <p>Date: 21 JUL 2023 16:27:39</p>
<p>CH00 30MHz~1000MHz</p>	 <p>Date: 21 JUL 2023 16:27:54</p>
<p>CH00 1GHz~26GHz</p>	 <p>Date: 21 JUL 2023 16:28:10</p>

CH07
Reference level



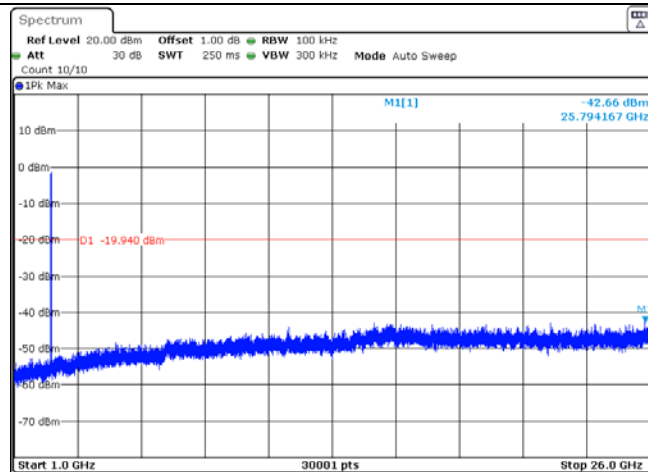
Date: 21 JUL 2023 16:29:52

CH07
30MHz~1000MHz



Date: 21 JUL 2023 16:30:07

CH07
1GHz~26GHz



Date: 21 JUL 2023 16:30:23

<p>CH15 Reference level</p>	<p>Date: 21 JUL 2023 16:31:40</p>
<p>CH15 30MHz~1000MHz</p>	<p>Date: 21 JUL 2023 16:31:56</p>
<p>CH15 1GHz~26GHz</p>	<p>Date: 21 JUL 2023 16:32:11</p>

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