

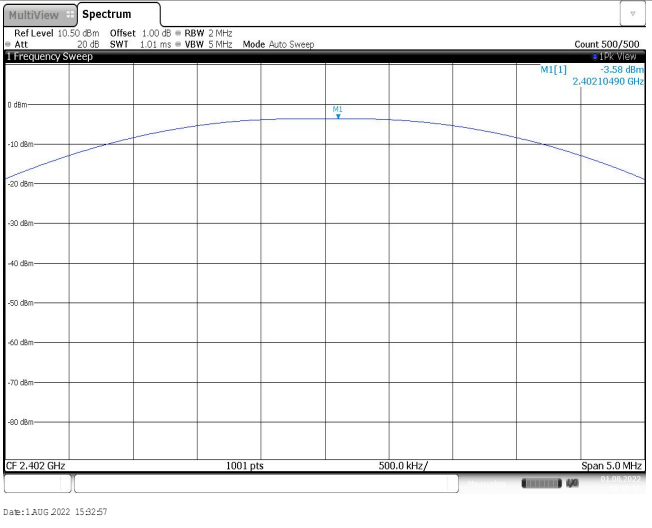
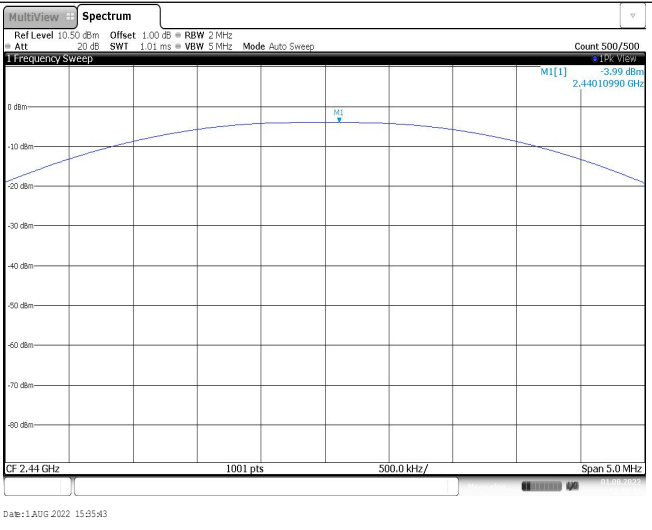
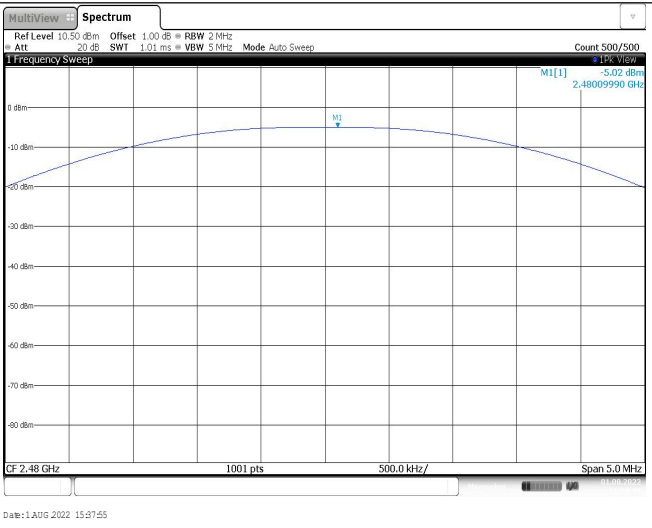
APPENDIX REPORT

Project No.	SHT2207088501EW	Radio Specification	Bluetooth BLE
Test sample No.	YPHT22070885003	Model No.	Smart K
Start test date	2022-08-01	Finish date	2022-08-01
Temperature	26.2°C	Humidity	26%
Test Engineer	Xiaoxiao 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

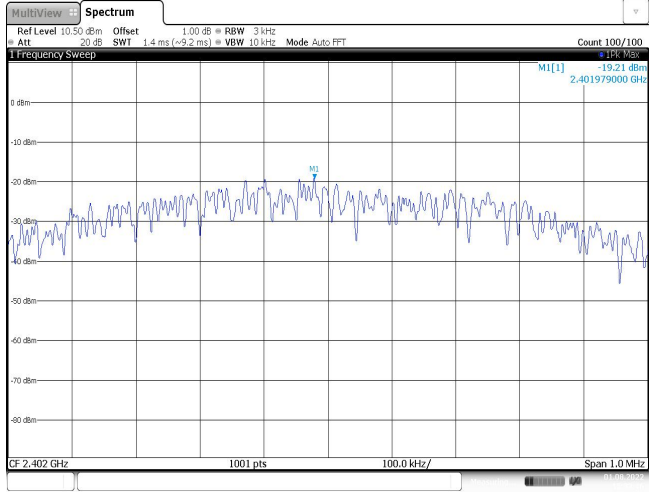
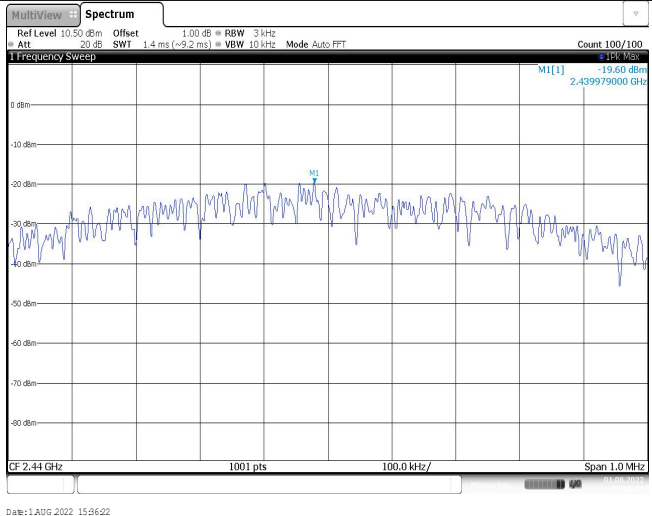
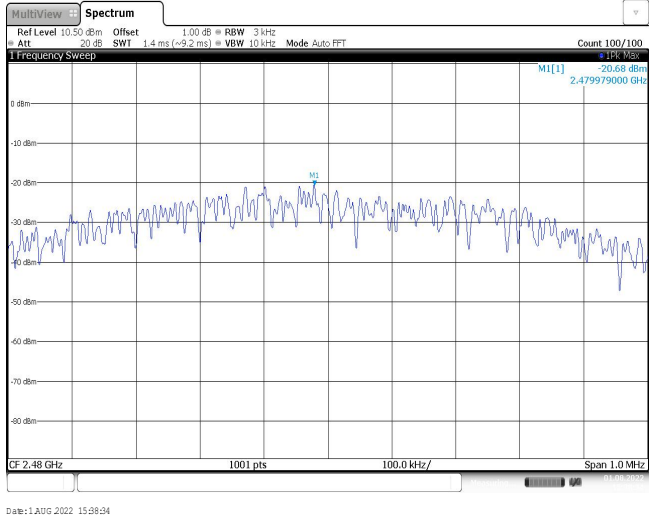
Appendix A: Peak Output Power

Type	Channel	Peak Output power (dBm)	Average Output power (dBm)	Limit (dBm)	Result
BT-BLE	00	-3.58	-3.67	≤ 30.00	Pass
	19	-3.99	-4.08		
	39	-5.02	-5.12		

CH00	 <p>MultiView Spectrum Ref Level 10.50 dBm Offset 1.00 dB RBW 2 MHz Att -20 dB SWI 1.01 ms VBW 5 kHz Mode Auto Sweep Count 500/500 1 Frequency Sweep M1[1] -3.58 dBm 2,40210490 GHz CF 2.402 GHz 1001 pts 500.0 kHz/ Span 5.0 MHz Date: 1.AUG.2022 15:22:57</p>
CH19	 <p>MultiView Spectrum Ref Level 10.50 dBm Offset 1.00 dB RBW 2 MHz Att -20 dB SWI 1.01 ms VBW 5 kHz Mode Auto Sweep Count 500/500 1 Frequency Sweep M1[1] -3.99 dBm 2,44010990 GHz CF 2.44 GHz 1001 pts 500.0 kHz/ Span 5.0 MHz Date: 1.AUG.2022 15:25:43</p>
CH39	 <p>MultiView Spectrum Ref Level 10.50 dBm Offset 1.00 dB RBW 2 MHz Att -20 dB SWI 1.01 ms VBW 5 kHz Mode Auto Sweep Count 500/500 1 Frequency Sweep M1[1] -5.02 dBm 2,48009990 GHz CF 2.48 GHz 1001 pts 500.0 kHz/ Span 5.0 MHz Date: 1.AUG.2022 15:27:55</p>

Appendix B: Power Spectral Density

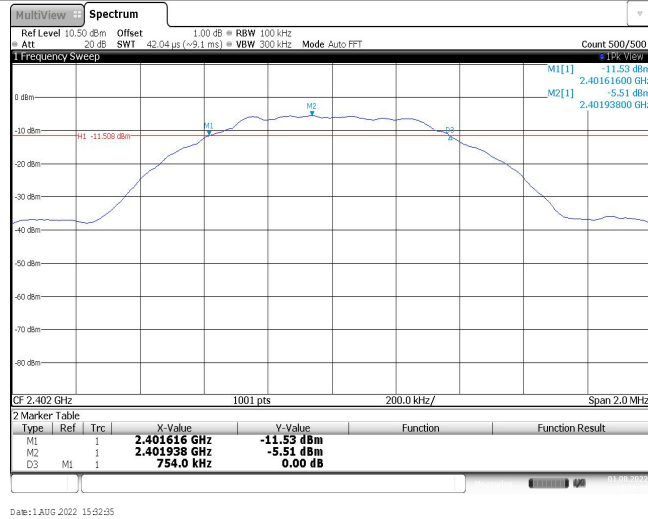
Type	Channel	Power Spectral Density(dBm/3KHz)	Limit (dBm/3KHz)	Result
BT-BLE	00	-19.21	≤8.00	Pass
	19	-19.60		
	39	-20.68		

<p>CH00</p>	 <p>MultiView Spectrum Ref Level 10.50 dBm Offset 1.00 dB RBW 3 kHz Count 100/100 Att 20 dB SWI 1.4 ms (-9.2 ms) VBW 10 kHz Mode Auto FFT 1 Frequency Sweep M1 [1] -19.21 dBm 2.401979000 GHz CF 2.402 GHz 1001 pts 100.0 kHz/ Span 1.0 MHz Date: 1.AUG.2022 15:23:46</p>
<p>CH19</p>	 <p>MultiView Spectrum Ref Level 10.50 dBm Offset 1.00 dB RBW 3 kHz Count 100/100 Att 20 dB SWI 1.4 ms (-9.2 ms) VBW 10 kHz Mode Auto FFT 1 Frequency Sweep M1 [1] -19.60 dBm 2.439979000 GHz CF 2.44 GHz 1001 pts 100.0 kHz/ Span 1.0 MHz Date: 1.AUG.2022 15:26:22</p>
<p>CH39</p>	 <p>MultiView Spectrum Ref Level 10.50 dBm Offset 1.00 dB RBW 3 kHz Count 100/100 Att 20 dB SWI 1.4 ms (-9.2 ms) VBW 10 kHz Mode Auto FFT 1 Frequency Sweep M1 [1] -20.68 dBm 2.479979000 GHz CF 2.48 GHz 1001 pts 100.0 kHz/ Span 1.0 MHz Date: 1.AUG.2022 15:28:04</p>

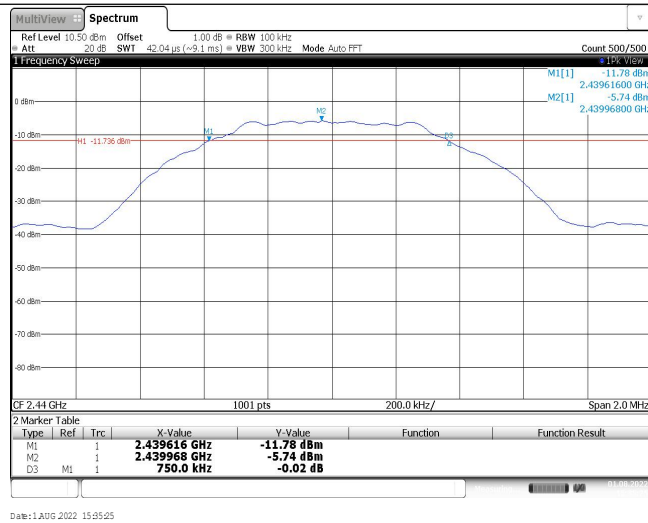
Appendix C: 6dB bandwidth

Type	Channel	6dB Bandwidth(kHz)	Limit (kHz)	Result
BT-BLE	00	754.00	≥500	Pass
	19	750.00		
	39	756.00		

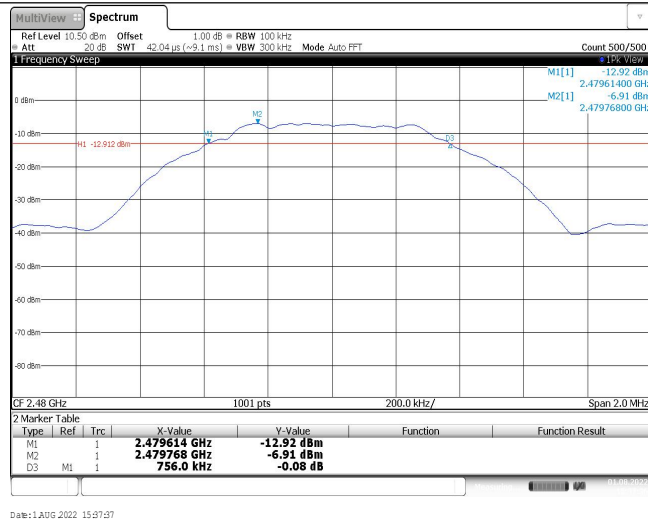
CH00



CH19



CH39



Appendix D: 99% Occupied Bandwidth

Type	Channel	99% Occupied Bandwidth(MHz)	Limit (kHz)	Result
BT-BLE	00	1.01	-	Pass
	19	1.02		
	39	1.02		

CH00



CH19

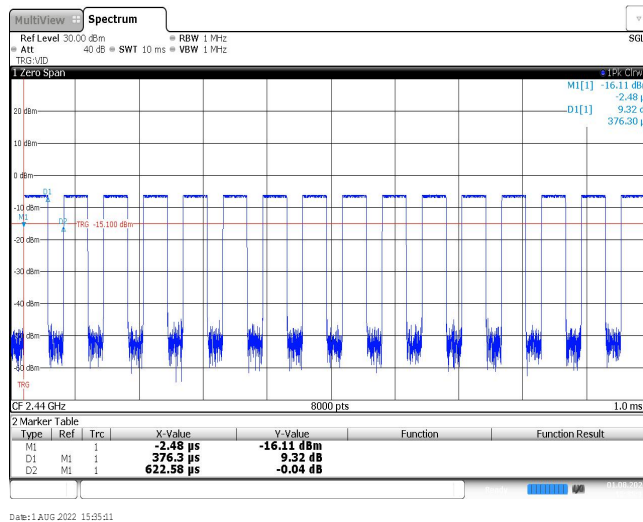


CH39



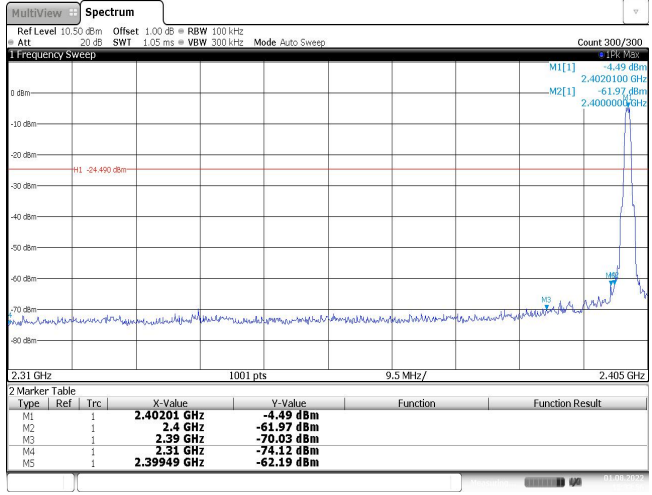
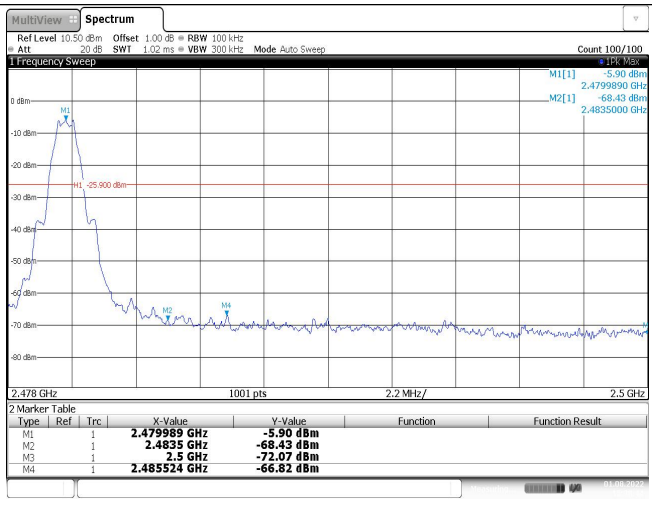
Appendix E: Duty cycle

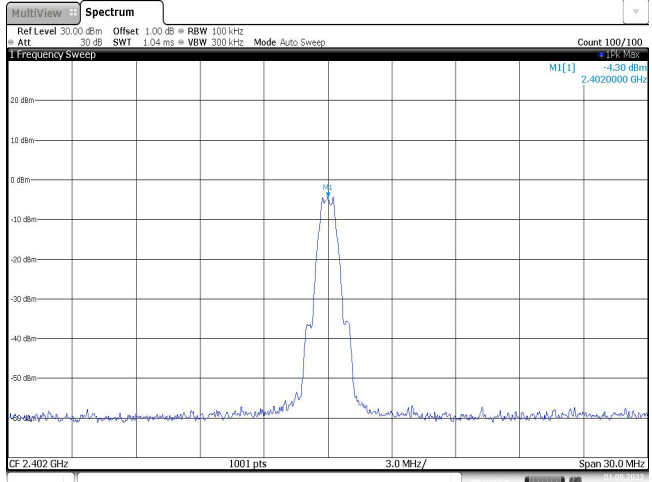
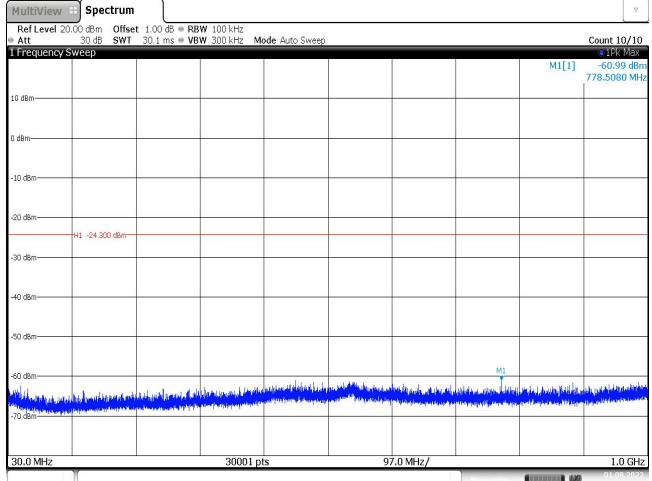
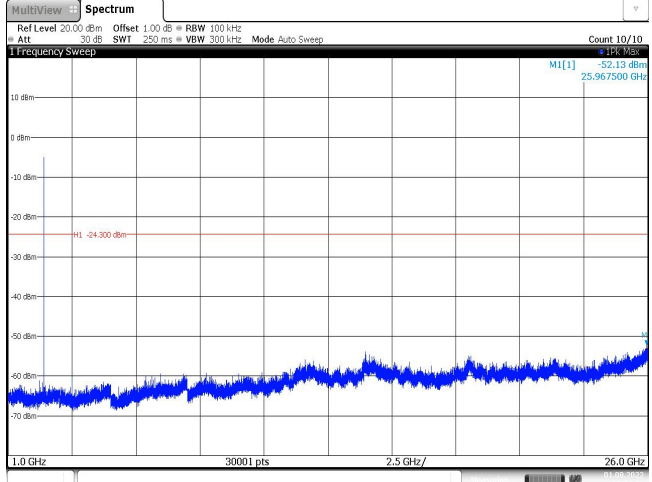
Test Frequency (MHz)	T _{on} time for single burst (ms)	T _{period} (ms)	Duty cycle	1/T _{on} time (kHz)
2440	0.38	0.62	61.3%	2.6

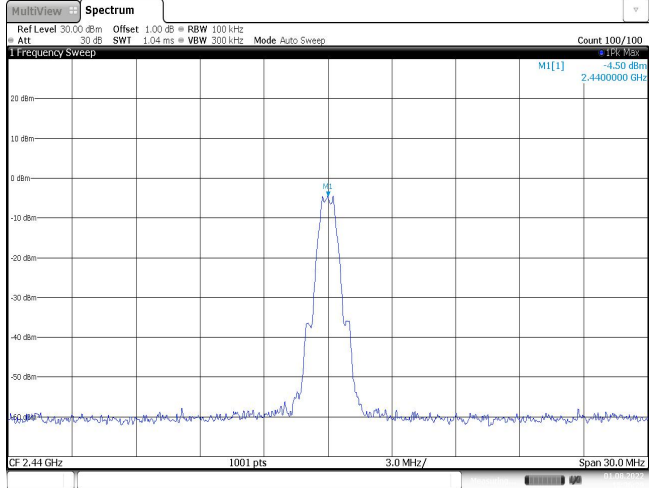
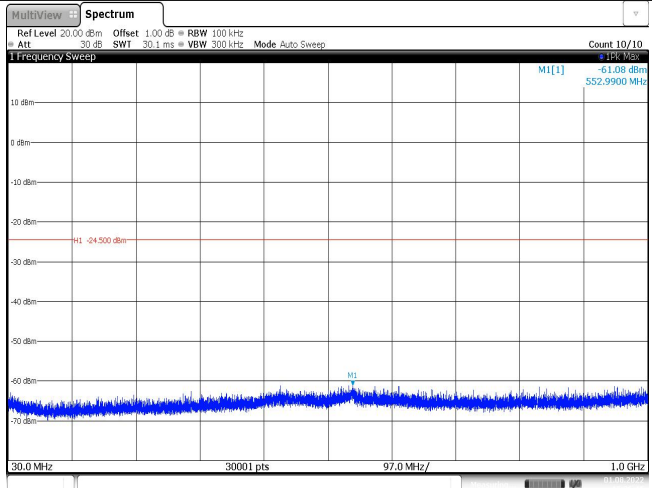
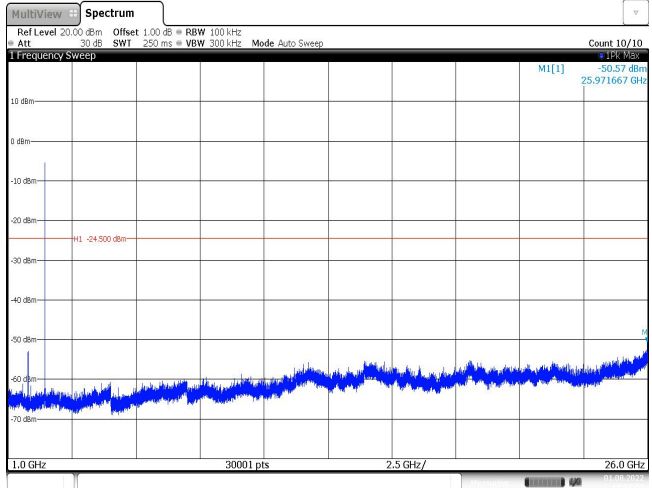


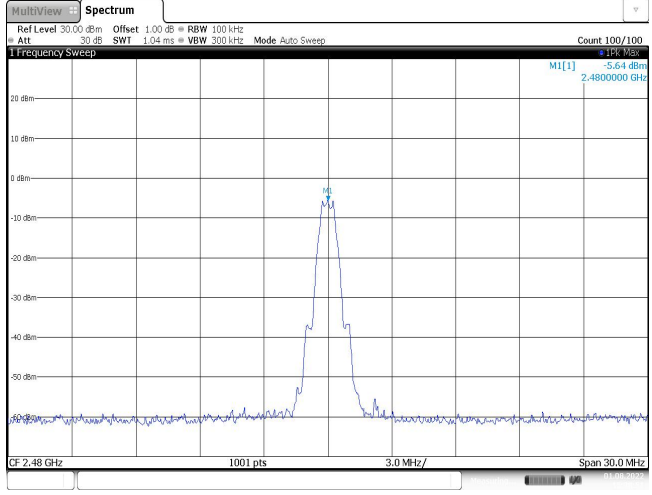
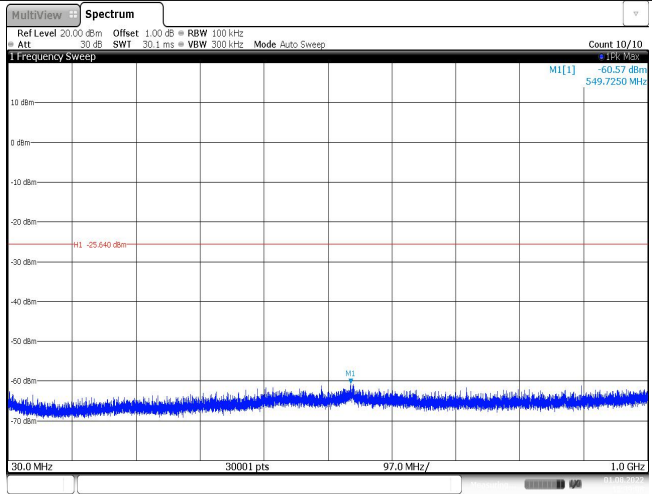
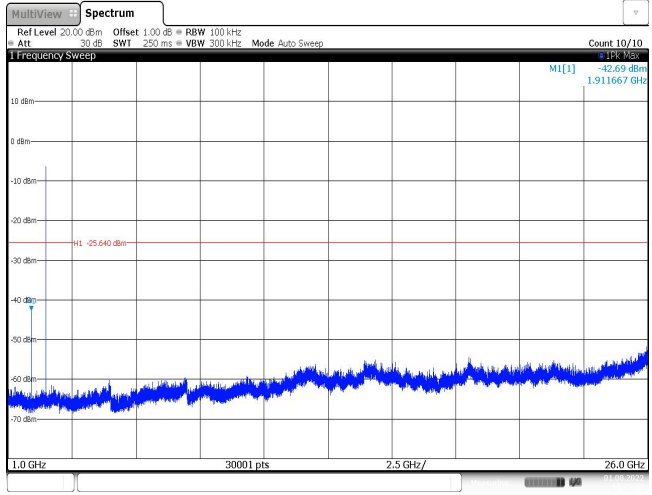
Date: 1 AUG 2022 15:25:41

Appendix F: Band edge and Spurious Emissions (conducted)

Test Item:	Band edge
<p style="text-align: center;">CH00</p>	 <p style="text-align: right;">Date: 1 AUG 2022 15:33:56</p>
<p style="text-align: center;">CH39</p>	 <p style="text-align: right;">Date: 1 AUG 2022 15:38:34</p>

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] -4.30 dBm 2.4020000 GHz CF 2.402 GHz 1001 pts 3.0 MHz/ Span 30.0 MHz Date:1 AUG 2022 15:24:04</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] -60.99 dBm 778.5080 MHz H1 -24.300 dBm 30.0 MHz 30001 pts 97.0 MHz/ 1.0 GHz Date:1 AUG 2022 15:24:20</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] -52.13 dBm 25.967500 GHz H1 -24.300 dBm 1.0 GHz 30001 pts 2.5 GHz/ 26.0 GHz Date:1 AUG 2022 15:24:27</p>

<p>CH19 Reference level</p>	 <p>The plot shows a single sharp peak at 2.44 GHz with a peak level of -4.50 dBm. The y-axis ranges from -60 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, Att 30 dB, SWF 1.04 ms, RBW 100 kHz, and VSW 300 kHz.</p>
<p>CH19 30MHz~1000MHz</p>	 <p>The plot shows a noise floor across the 30 MHz to 1000 MHz range, with a peak level of -61.08 dBm at 552.9900 MHz. The y-axis ranges from -70 dBm to 10 dBm, and the x-axis shows a span of 97.0 MHz. Parameters include Ref Level 20.00 dBm, Att 30 dB, SWF 30.1 ms, RBW 100 kHz, and VSW 300 kHz.</p>
<p>CH19 1GHz~26GHz</p>	 <p>The plot shows a noise floor across the 1 GHz to 26 GHz range, with a peak level of -50.57 dBm at 25.971667 GHz. The y-axis ranges from -70 dBm to 10 dBm, and the x-axis shows a span of 26.0 GHz. Parameters include Ref Level 20.00 dBm, Att 30 dB, SWF 250 ms, RBW 100 kHz, and VSW 300 kHz.</p>

<p>CH39 Reference level</p>	 <p>The plot shows a single sharp peak at 2.48 GHz with a peak level of -5.64 dBm. The y-axis ranges from -70 dBm to 20 dBm, and the x-axis is centered at 2.48 GHz with a 30 MHz span.</p>
<p>CH39 30MHz~1000MHz</p>	 <p>The plot shows a noise floor across the 30 MHz to 1000 MHz range. A horizontal reference line is at -25.640 dBm. A peak at 549.7250 MHz is marked with a level of -60.57 dBm.</p>
<p>CH39 1GHz~26GHz</p>	 <p>The plot shows a noise floor across the 1 GHz to 26 GHz range. A horizontal reference line is at -25.640 dBm. A peak at 1.911667 GHz is marked with a level of -42.69 dBm.</p>

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