

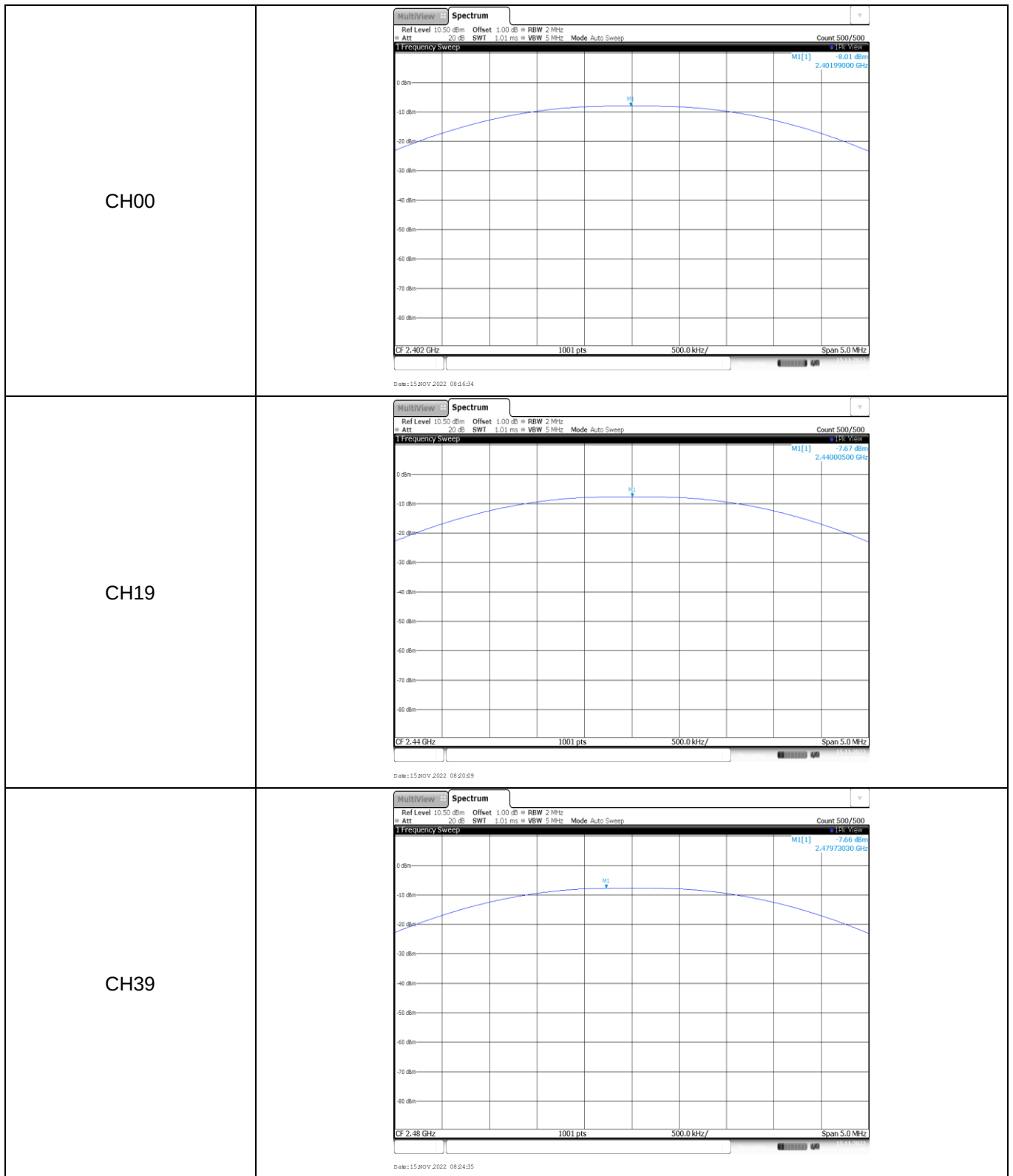
APPENDIX REPORT

Project No.	SHT2210112901EW	Radio Specification	Bluetooth BLE
Test sample No.	YPHT22101129001	Model No.	Stark 8
Start test date	2022-11-15	Finish date	2022-11-15
Temperature	25.6℃	Humidity	35%
Test Engineer	Xiaoxiao Li	Auditor	Xiaodong Zhuo

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

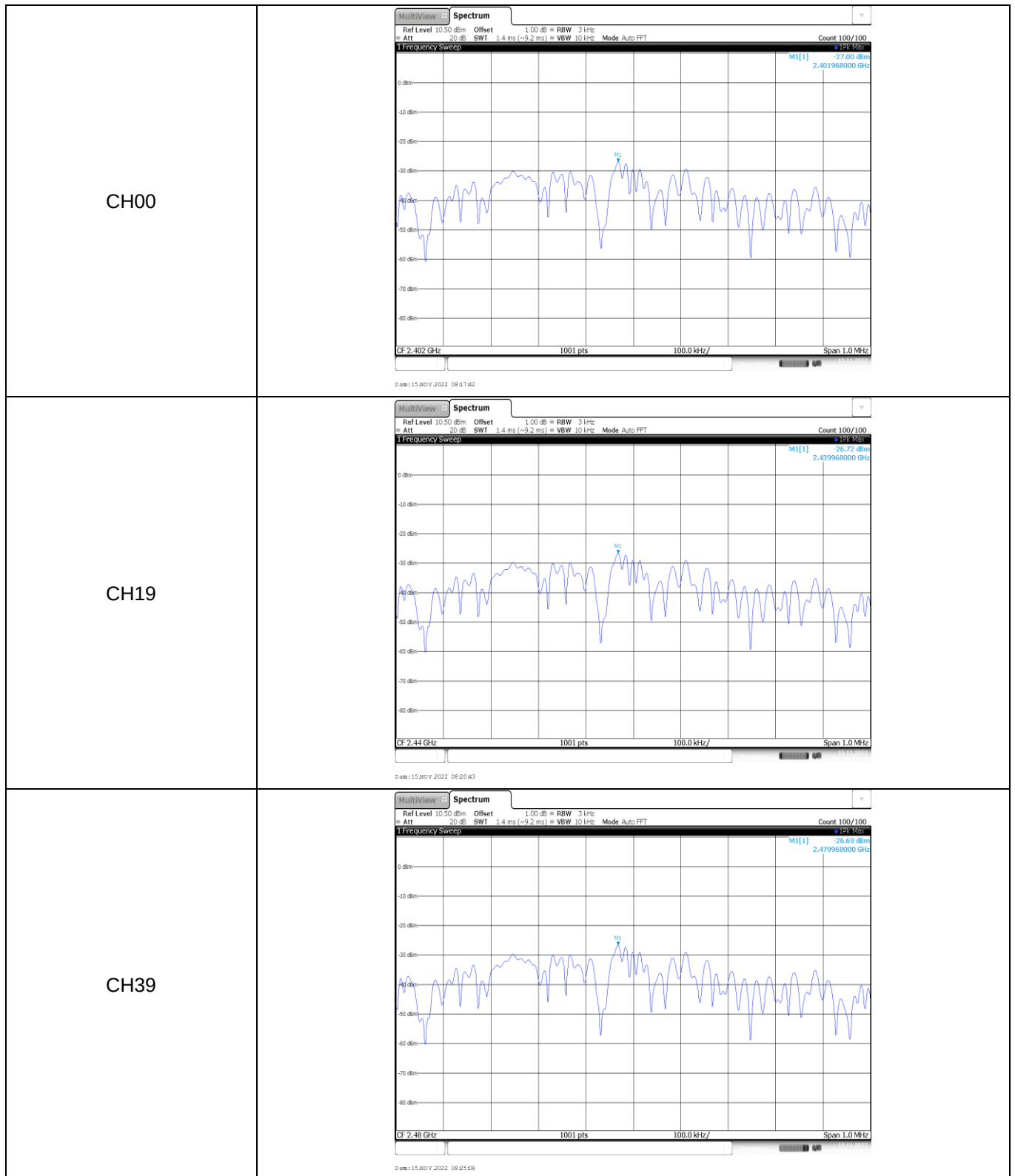
Appendix A: Peak Output Power

Type	Channel	Peak Output power (dBm)	Average Output power (dBm)	Limit (dBm)	Result
BT-BLE	00	-8.01	-8.13	≤ 30.00	Pass
	19	-7.67	-7.78		
	39	-7.66	-7.85		



Appendix B: Power Spectral Density

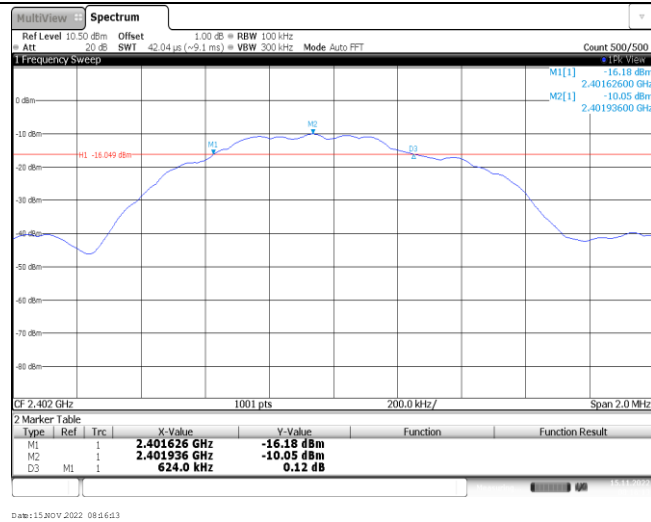
Type	Channel	Power Spectral Density(dBm/3KHz)	Limit (dBm/3KHz)	Result
BT-BLE	00	-27.00	≤8.00	Pass
	19	-26.72		
	39	-26.69		



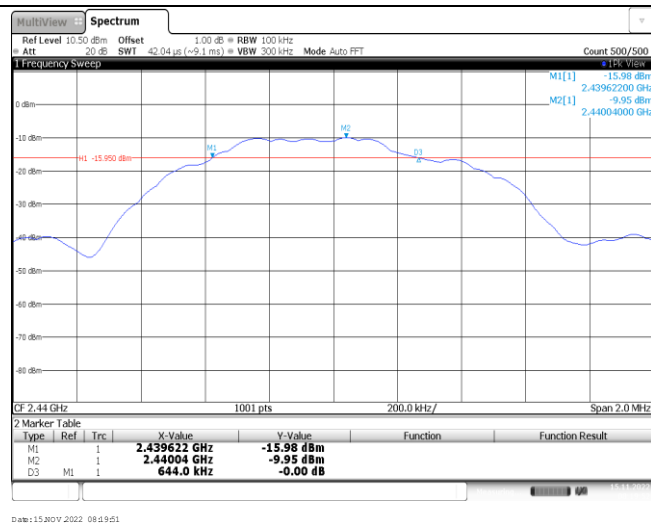
Appendix C: 6dB bandwidth

Type	Channel	6dB Bandwidth(kHz)	Limit (kHz)	Result
BT-BLE	00	624.00	≥500	Pass
	19	644.00		
	39	618.00		

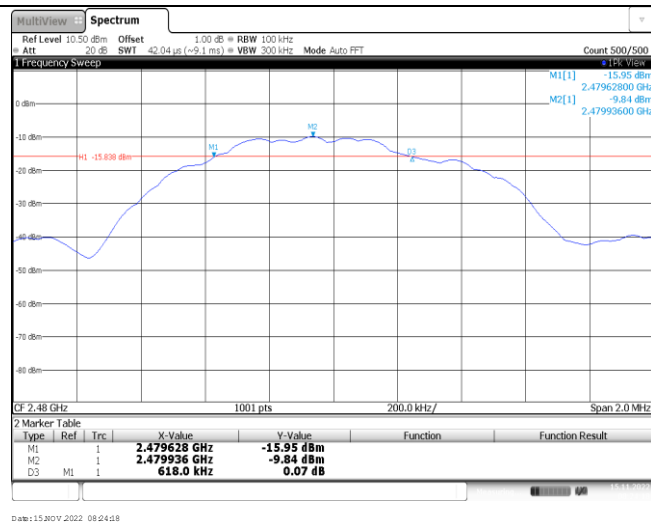
CH00



CH19



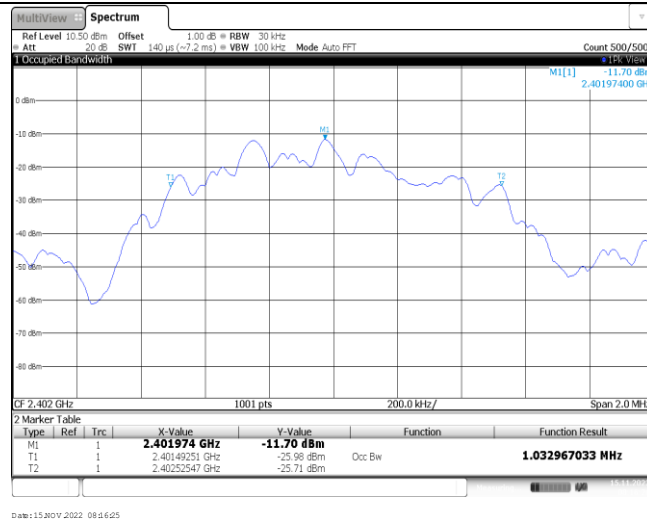
CH39



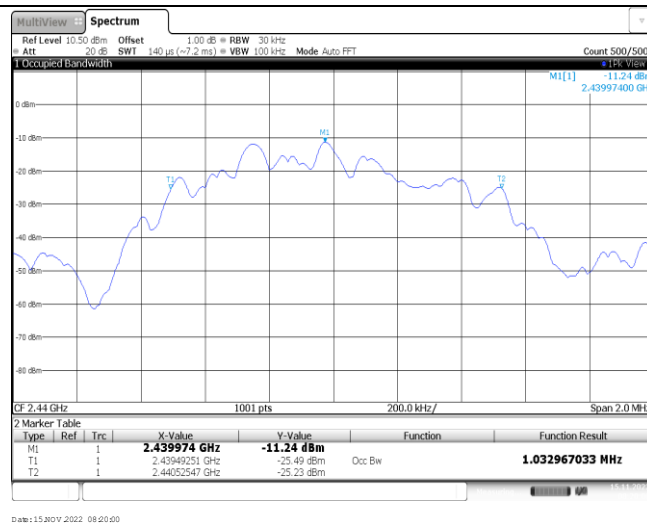
Appendix D: 99% Occupied Bandwidth

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

CH00



CH19

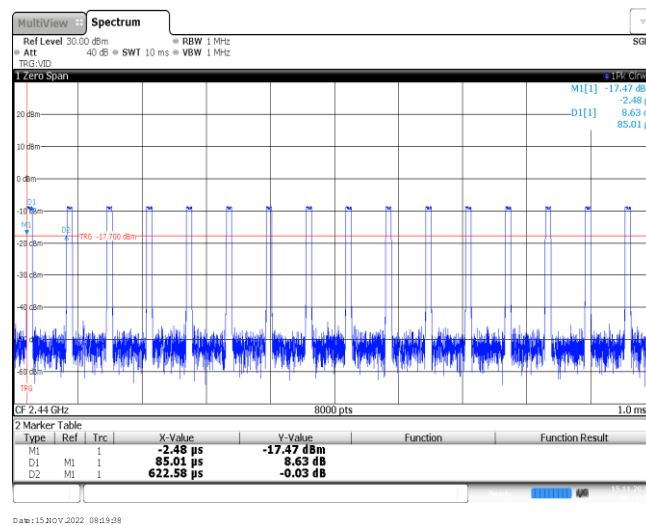


CH39



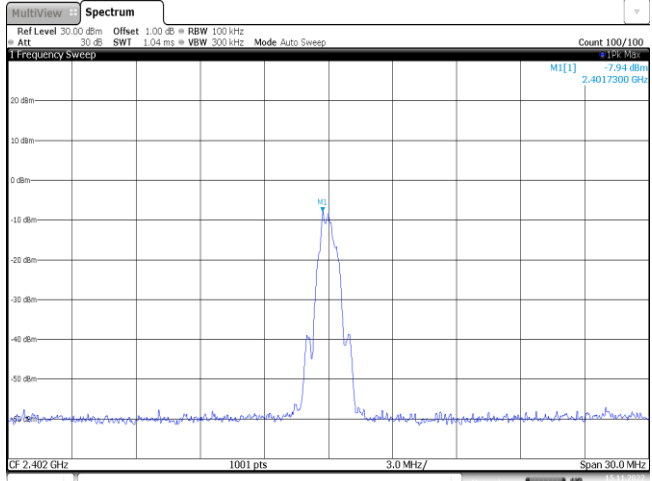
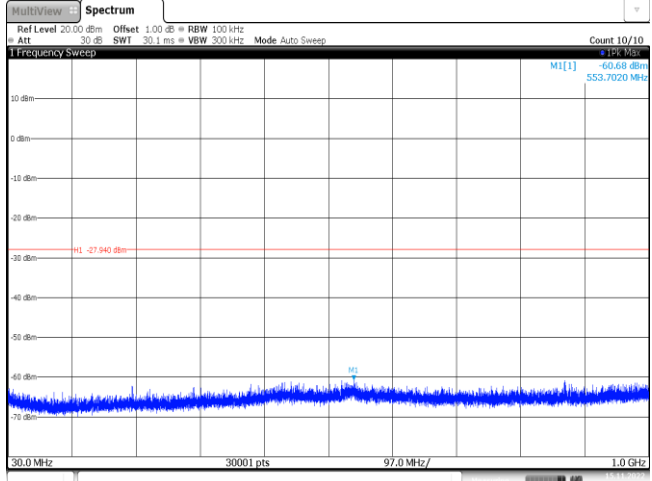
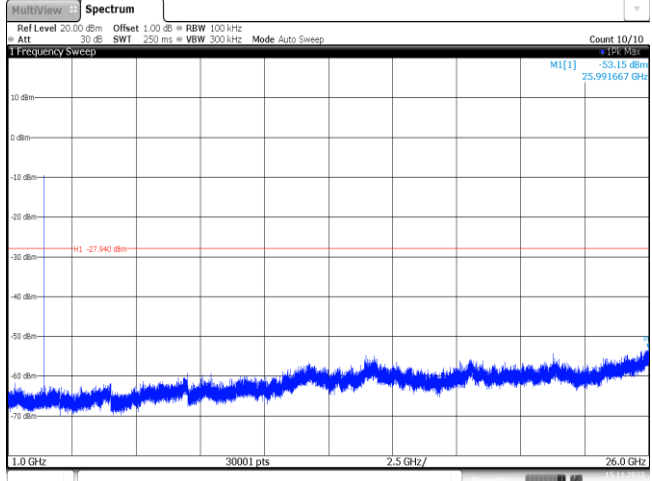
Appendix E: Duty cycle

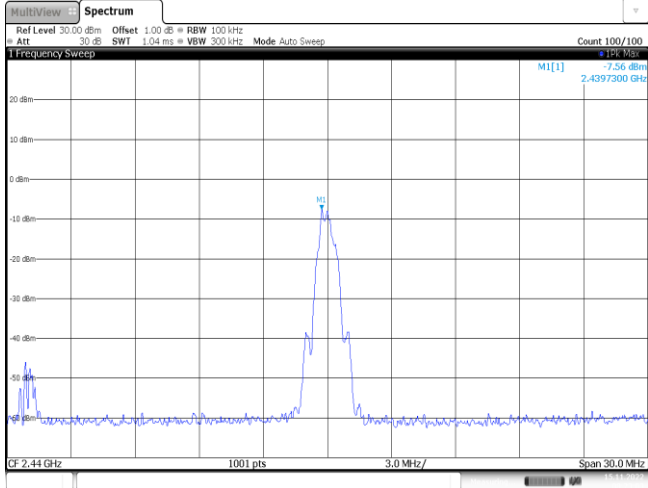
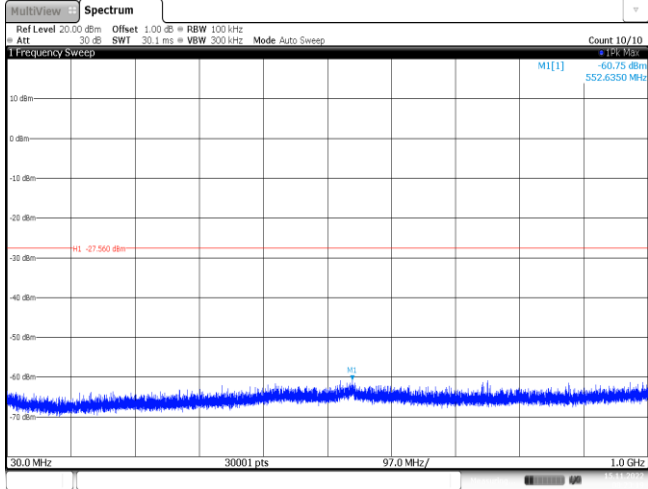
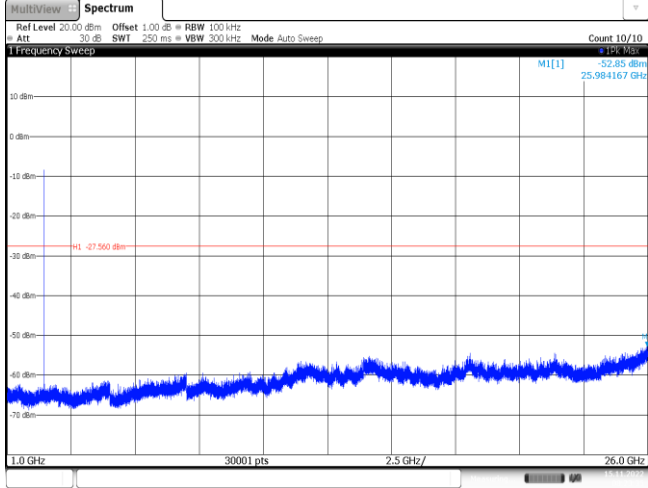
Test Frequency (MHz)	T _{on} time for single burst (ms)	T _{period} (ms)	Duty cycle	1/T _{on} time (kHz)
2440	0.09	0.62	14.5%	11.1

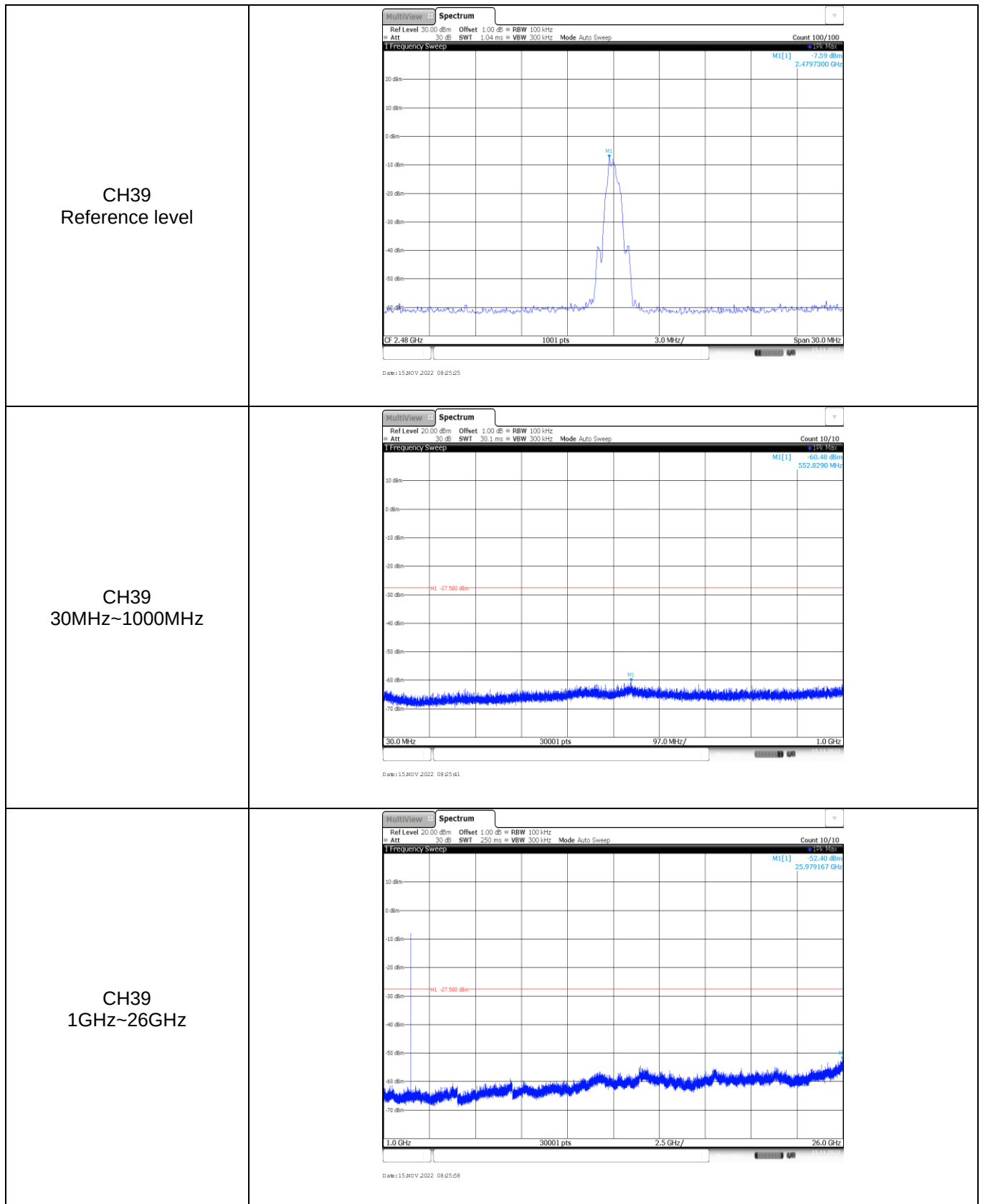


Appendix F: Band edge and Spurious Emissions (conducted)

Test Item:	Band edge																																										
CH00	MultiView Spectrum Ref Level 10.50 dBm Offset 1.00 dB RBW 100 kHz Att 20 dB SWT 1.05 ms VBW 300 kHz Mode Auto Sweep Count 300/300 Frequency Sweep 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm -80 dBm M1 -8.26 dBm 2.4017260 GHz -67.14 dBm 2.4000000 GHz M1 -28.270 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm -80 dBm 2.31 GHz 1001 pts 9.5 MHz/ 2.405 GHz <table><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><tr><td>M1</td><td>1</td><td></td><td>2.401726 GHz</td><td>-8.26 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>2.4 GHz</td><td>-67.14 dBm</td><td></td><td></td></tr><tr><td>M3</td><td>1</td><td></td><td>2.39 GHz</td><td>-73.42 dBm</td><td></td><td></td></tr><tr><td>M4</td><td>1</td><td></td><td>2.31 GHz</td><td>-74.14 dBm</td><td></td><td></td></tr><tr><td>M5</td><td>1</td><td></td><td>2.399965 GHz</td><td>-67.59 dBm</td><td></td><td></td></tr></table> Date: 15.NOV.2022 08:17:52	Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		2.401726 GHz	-8.26 dBm			M2	1		2.4 GHz	-67.14 dBm			M3	1		2.39 GHz	-73.42 dBm			M4	1		2.31 GHz	-74.14 dBm			M5	1		2.399965 GHz	-67.59 dBm		
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result																																					
M1	1		2.401726 GHz	-8.26 dBm																																							
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M5	1		2.399965 GHz	-67.59 dBm																																							
CH39	MultiView Spectrum Ref Level 10.50 dBm Offset 1.00 dB RBW 100 kHz Att 20 dB SWT 1.02 ms VBW 300 kHz Mode Auto Sweep Count 100/100 Frequency Sweep 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm -80 dBm M1 -7.96 dBm 2.4797470 GHz -70.35 dBm 2.4835000 GHz M1 -27.960 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm -80 dBm 2.478 GHz 1001 pts 2.2 MHz/ 2.5 GHz <table><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><tr><td>M1</td><td>1</td><td></td><td>2.479747 GHz</td><td>-7.96 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>2.4835 GHz</td><td>-70.35 dBm</td><td></td><td></td></tr><tr><td>M3</td><td>1</td><td></td><td>2.5 GHz</td><td>-74.53 dBm</td><td></td><td></td></tr><tr><td>M4</td><td>1</td><td></td><td>2.483522 GHz</td><td>-70.13 dBm</td><td></td><td></td></tr></table> Date: 15.NOV.2022 08:25:18	Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		2.479747 GHz	-7.96 dBm			M2	1		2.4835 GHz	-70.35 dBm			M3	1		2.5 GHz	-74.53 dBm			M4	1		2.483522 GHz	-70.13 dBm									
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result																																					
M1	1		2.479747 GHz	-7.96 dBm																																							
M2	1		2.4835 GHz	-70.35 dBm																																							
M3	1		2.5 GHz	-74.53 dBm																																							
M4	1		2.483522 GHz	-70.13 dBm																																							

Test Item:	SE
CH00 Reference level	 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] -27.94 dBm 2.4017300 GHz 2.402 GHz 1001 pts 3.0 MHz/ Span 30.0 MHz Date: 15 NOV 2022 08:18:21
CH00 30MHz~1000MHz	 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] -60.68 dBm 553.7020 MHz 30.0 MHz 30001 pts 97.0 MHz/ 1.0 GHz Date: 15 NOV 2022 08:18:16
CH00 1GHz~26GHz	 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] -53.15 dBm 25.991667 GHz 1.0 GHz 30001 pts 2.5 GHz/ 26.0 GHz Date: 15 NOV 2022 08:18:52

CH19 Reference level	 Ref Level 30.00 dBm Offset 1.00 dB RBW 100 kHz Att -30.0 dB SWF 1.04 ms VBW 300 kHz Mode Auto Sweep Count 100/100 M1[1] -7.56 dBm 2.4397300 GHz CF 2.44 GHz 1001 pts 3.0 MHz/ Span 30.0 MHz Date: 15 NOV 2022 08:23:03
CH19 30MHz~1000MHz	 Ref Level 20.00 dBm Offset 1.00 dB RBW 100 kHz Att -30.0 dB SWF 30.1 ms VBW 300 kHz Mode Auto Sweep Count 10/10 M1[1] -60.75 dBm 552.6350 MHz H1 -27.500 dBm 30.0 MHz 30001 pts 97.0 MHz/ 1.0 GHz Date: 15 NOV 2022 08:23:19
CH19 1GHz~26GHz	 Ref Level 20.00 dBm Offset 1.00 dB RBW 100 kHz Att -30.0 dB SWF 250 ms VBW 300 kHz Mode Auto Sweep Count 10/10 M1[1] -52.85 dBm 25.984167 GHz H1 -27.500 dBm 1.0 GHz 30001 pts 2.5 GHz/ 26.0 GHz Date: 15 NOV 2022 08:23:25



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