

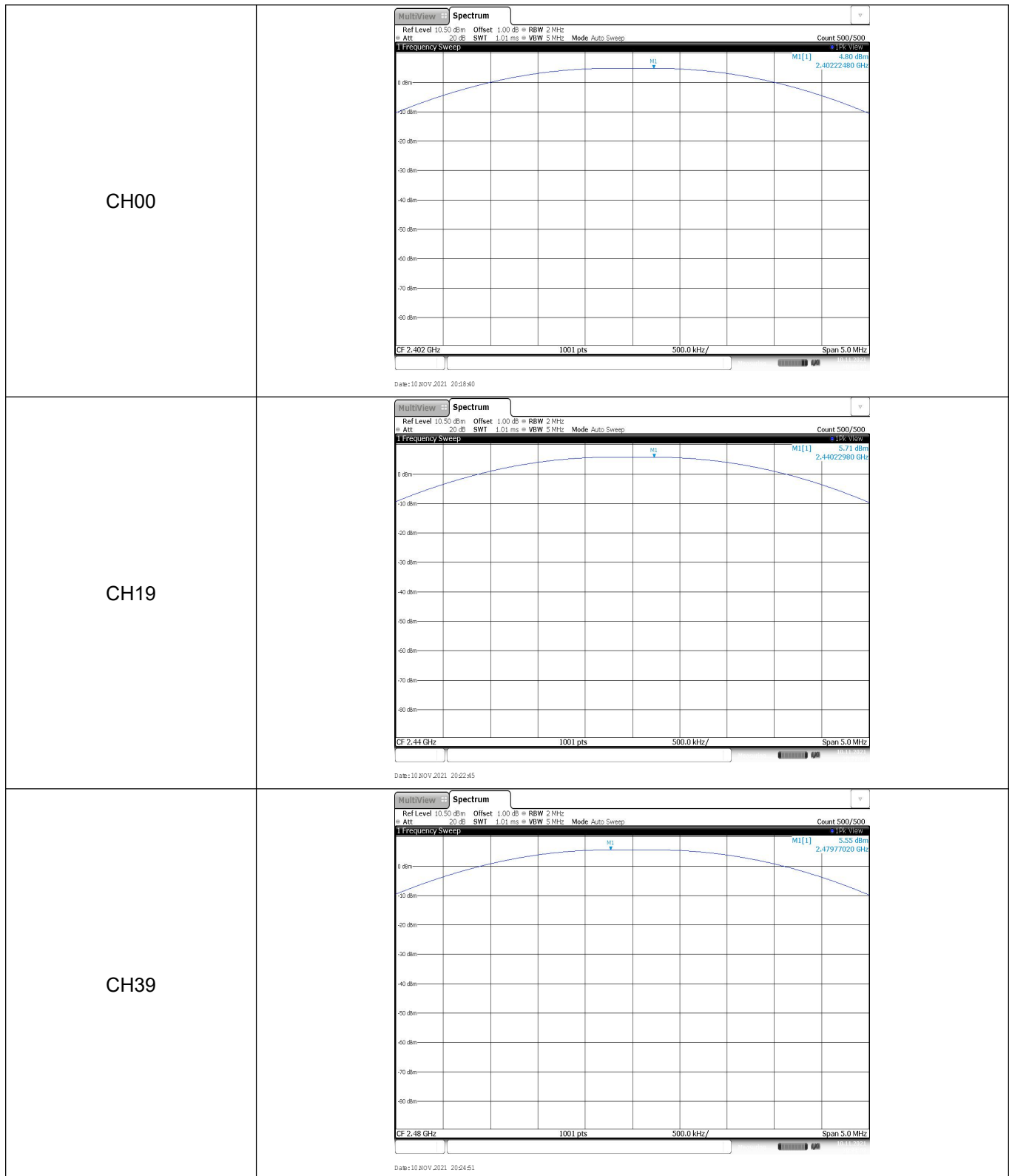
APPENDIX REPORT

Project No.	SHT2111009101EW	Radio Specification	Bluetooth BLE
Test sample No.	YPHT21110091003	Model No.	R4
Start test date	2021-11-10	Finish date	2021-11-11
Temperature	24.7℃	Humidity	26%
Test Engineer	Weiyang Xiang	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

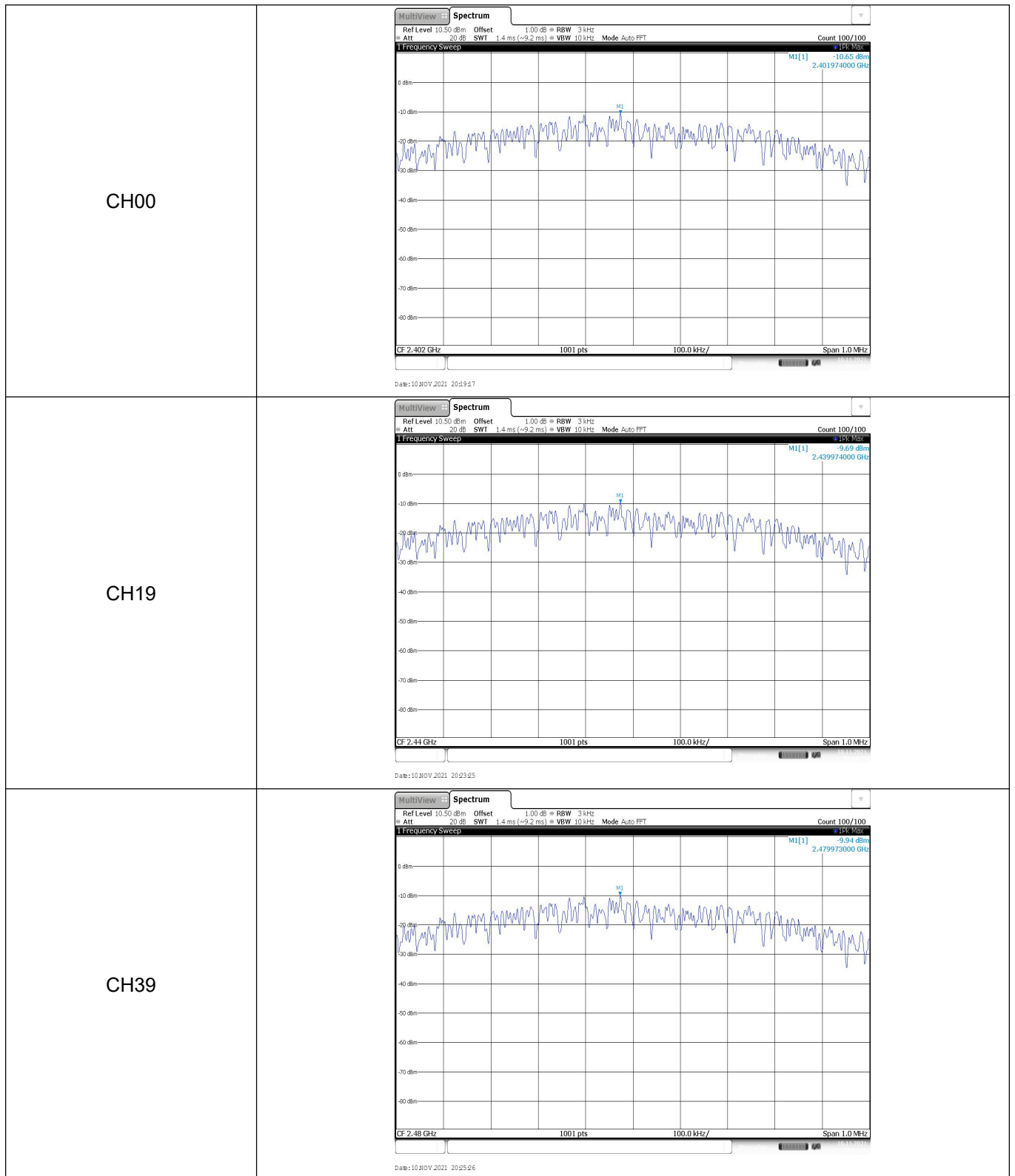
Appendix A: Peak Output Power

Type	Channel	Peak Output power (dBm)	Average Output power (dBm)	Limit (dBm)	Result
BT-BLE	00	4.80	4.71	≤ 30.00	Pass
	19	5.71	5.57		
	39	5.55	5.41		



Appendix B: Power Spectral Density

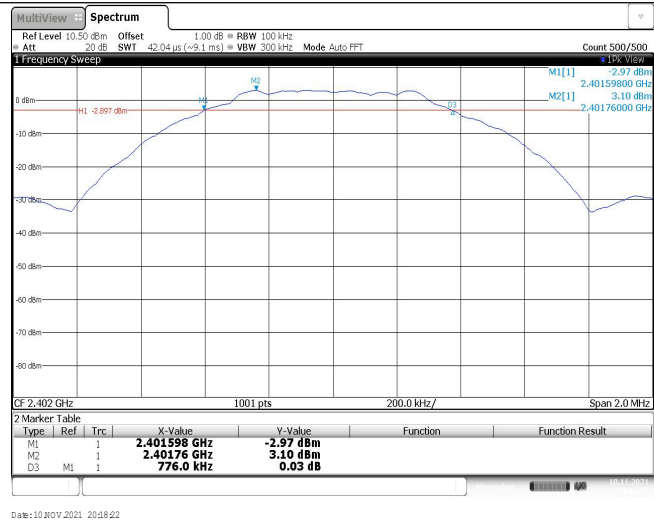
Type	Channel	Power Spectral Density(dBm/3KHz)	Limit (dBm/3KHz)	Result
BT-BLE	00	-10.65	≤8.00	Pass
	19	-9.69		
	39	-9.94		



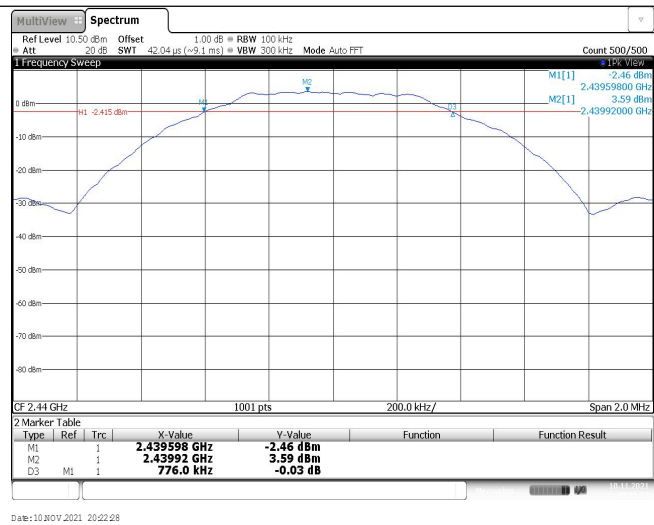
Appendix C: 6dB bandwidth

Type	Channel	6dB Bandwidth(kHz)	Limit (kHz)	Result
BT-BLE	00	776.00	≥500	Pass
	19	776.00		
	39	772.00		

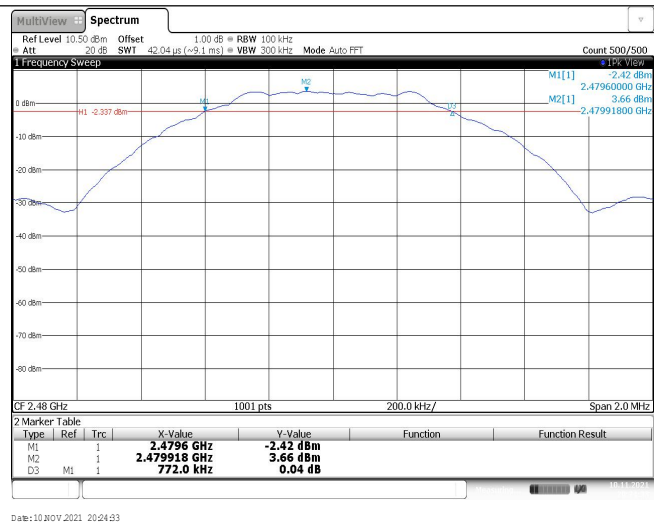
CH00



CH19



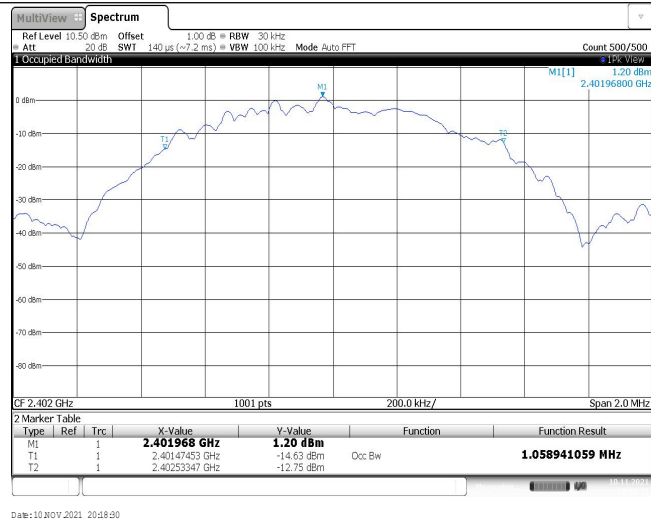
CH39



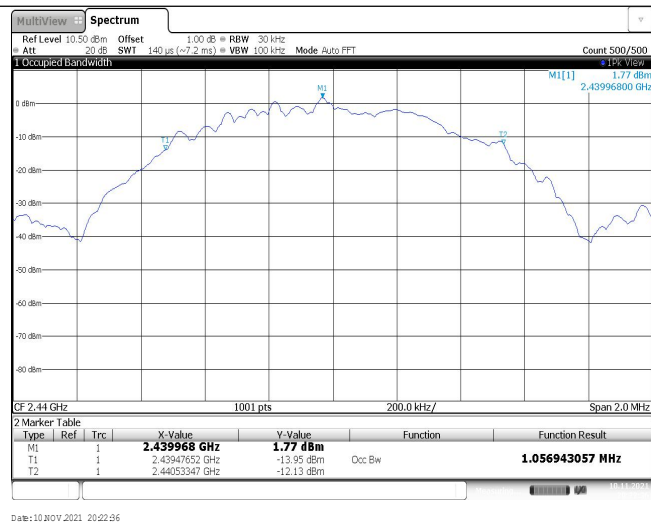
Appendix D: 99% Occupied Bandwidth

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

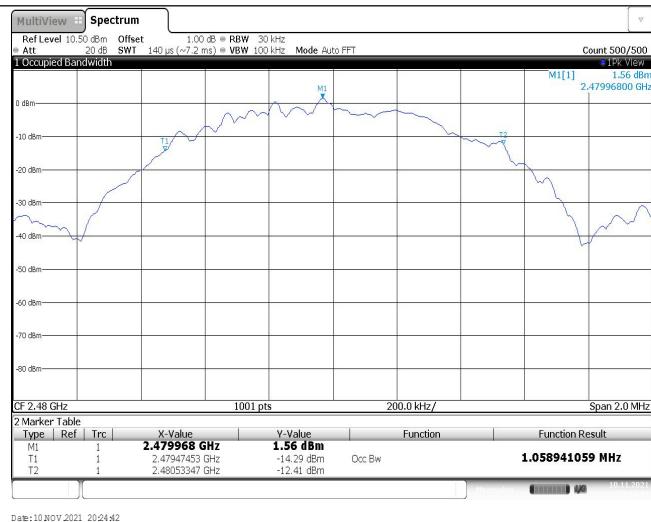
CH00



CH19

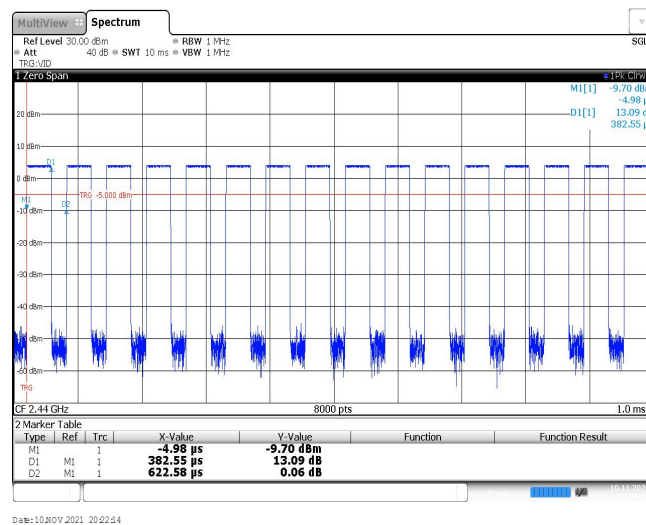


CH39



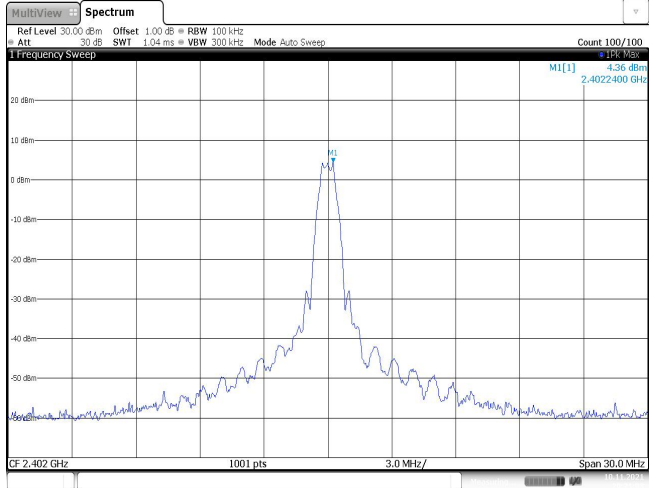
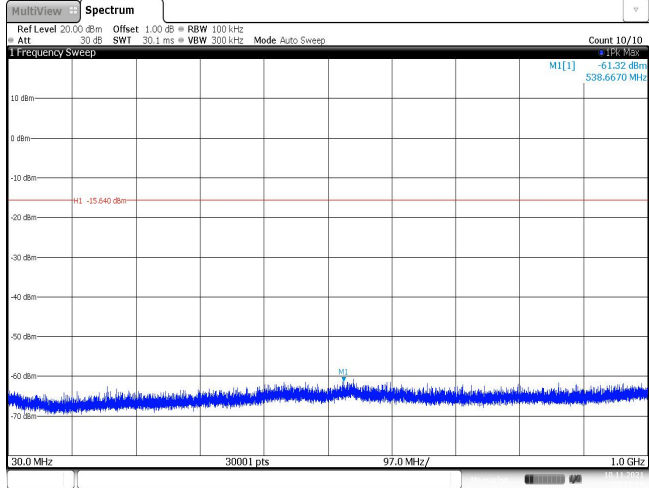
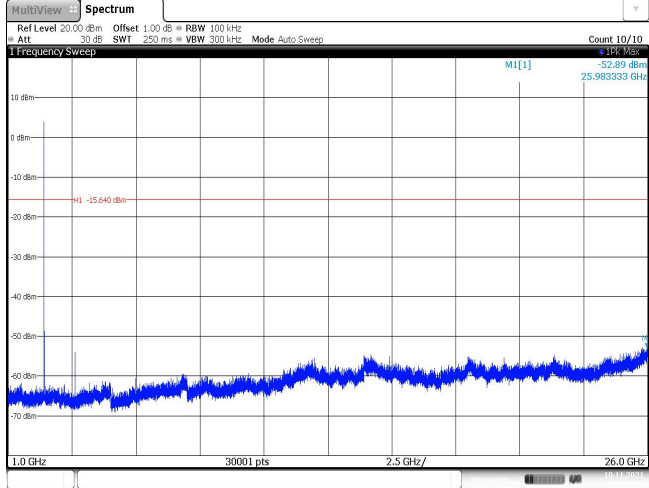
Appendix E: Duty cycle

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

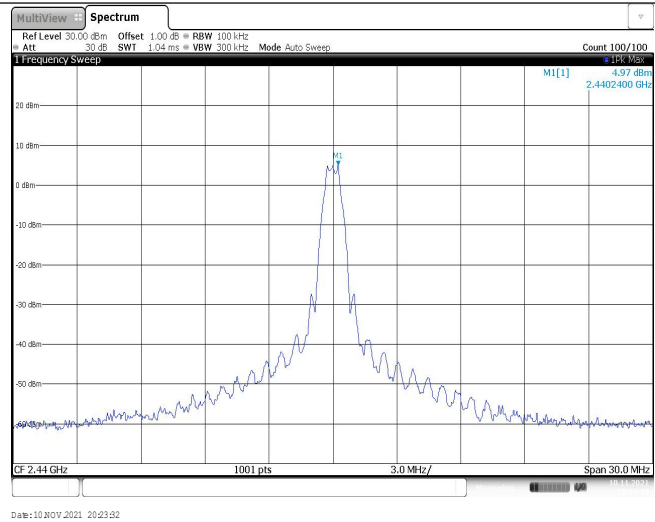


Appendix F: Band edge and Spurious Emissions (conducted)

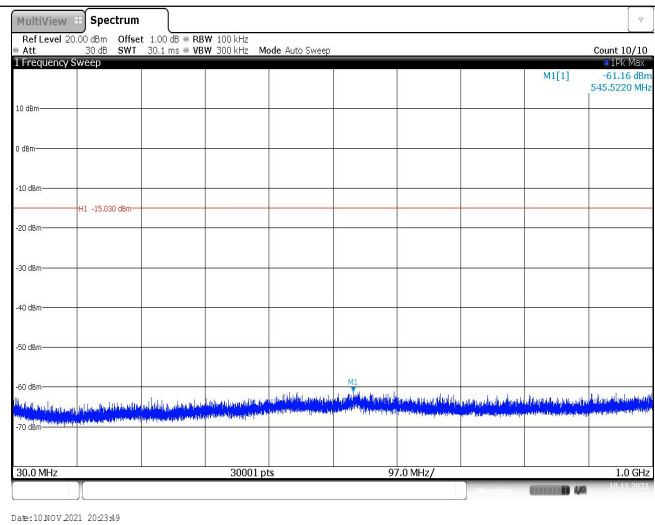
Test Item:	Band edge																																										
CH00	MultiView Spectrum Ref Level 10.50 dBm Offset 1.00 dB RBW 100 kHz Att 20 dB SWT 1.05 ms VBW 300 kHz Mode Auto Sweep Count 300/300 1PK Mhz 1 Frequency Sweep 8 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm -80 dBm M1 -15.940 dBm M2 4.06 dBm M3 -43.77 dBm M4 -66.27 dBm M5 -74.15 dBm M6 -42.11 dBm 2.31 GHz 1001 pts 9.5 MHz/ 2.405 GHz 2 Marker Table <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>4.06 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>2.4 GHz</td><td>-43.77 dBm</td><td></td><td></td></tr><tr><td>M3</td><td>1</td><td></td><td>2.39 GHz</td><td>-66.27 dBm</td><td></td><td></td></tr><tr><td>M4</td><td>1</td><td></td><td>2.31 GHz</td><td>-74.15 dBm</td><td></td><td></td></tr><tr><td>M5</td><td>1</td><td></td><td>2.399775 GHz</td><td>-42.11 dBm</td><td></td><td></td></tr></table> Date: 10 NOV 2021 20:19:27	Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		2.401726 GHz	4.06 dBm			M2	1		2.4 GHz	-43.77 dBm			M3	1		2.39 GHz	-66.27 dBm			M4	1		2.31 GHz	-74.15 dBm			M5	1		2.399775 GHz	-42.11 dBm		
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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 1PK Mhz 1 Frequency Sweep 8 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm -80 dBm M1 -15.480 dBm M2 4.52 dBm M3 -51.70 dBm M4 -47.18 dBm 2.478 GHz 1001 pts 2.2 MHz/ 2.5 GHz 2 Marker Table <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>2.480231 GHz</td><td>4.52 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>2.4835 GHz</td><td>-51.70 dBm</td><td></td><td></td></tr><tr><td>M3</td><td>1</td><td></td><td>2.5 GHz</td><td>-66.44 dBm</td><td></td><td></td></tr><tr><td>M4</td><td>1</td><td></td><td>2.483764 GHz</td><td>-47.18 dBm</td><td></td><td></td></tr></table> Date: 10 NOV 2021 20:25:37	Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		2.480231 GHz	4.52 dBm			M2	1		2.4835 GHz	-51.70 dBm			M3	1		2.5 GHz	-66.44 dBm			M4	1		2.483764 GHz	-47.18 dBm									
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M4	1		2.483764 GHz	-47.18 dBm																																							

Test Item:	SE
CH00 Reference level	 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 M1[1] 4.36 dBm 2.4022400 GHz CF 2.402 GHz 1001 pts 3.0 MHz/ Span 30.0 MHz Date: 10 NOV 2021 20:21:03
CH00 30MHz~1000MHz	 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 M1[1] -61.32 dBm 538.6670 MHz H1 -15.640 dBm 30.0 MHz 30001 pts 97.0 MHz/ 1.0 GHz Date: 10 NOV 2021 20:21:19
CH00 1GHz~26GHz	 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 M1[1] -52.89 dBm 25.983333 GHz H1 -15.640 dBm 1.0 GHz 30001 pts 2.5 GHz/ 26.0 GHz Date: 10 NOV 2021 20:21:36

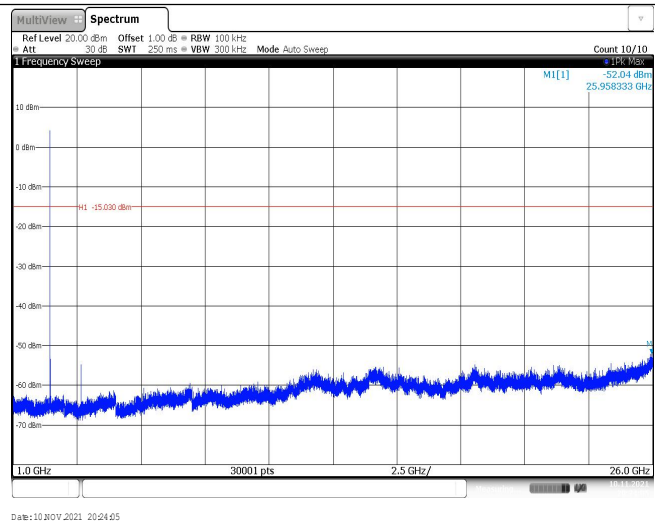
CH19
Reference level



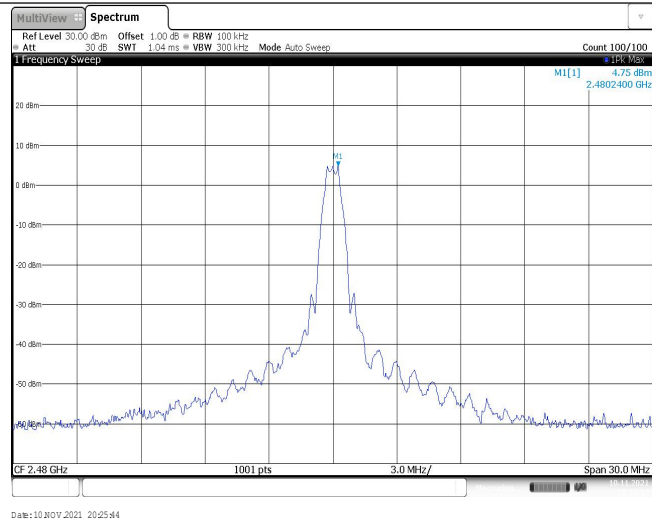
CH19
30MHz~1000MHz



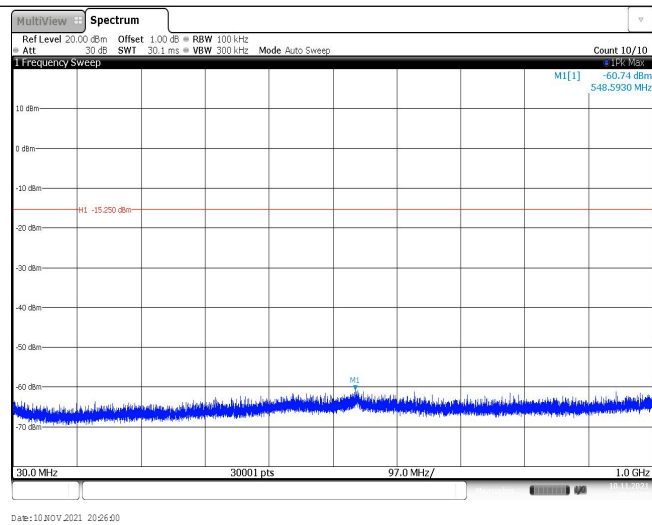
CH19
1GHz~26GHz



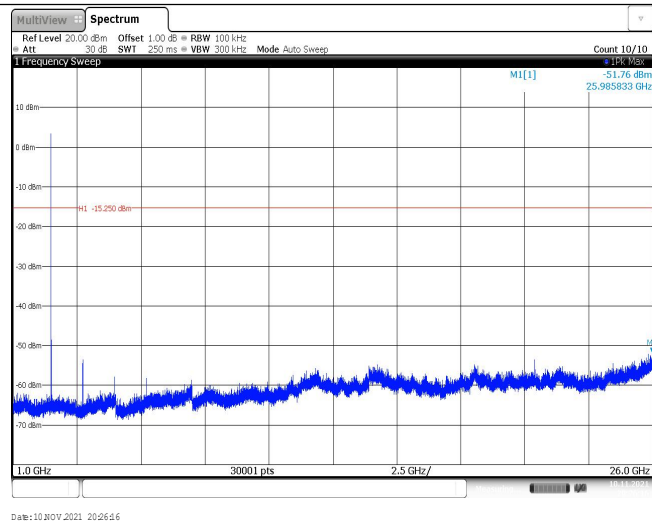
CH39
Reference level



CH39
30MHz~1000MHz



CH39
1GHz~26GHz



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