

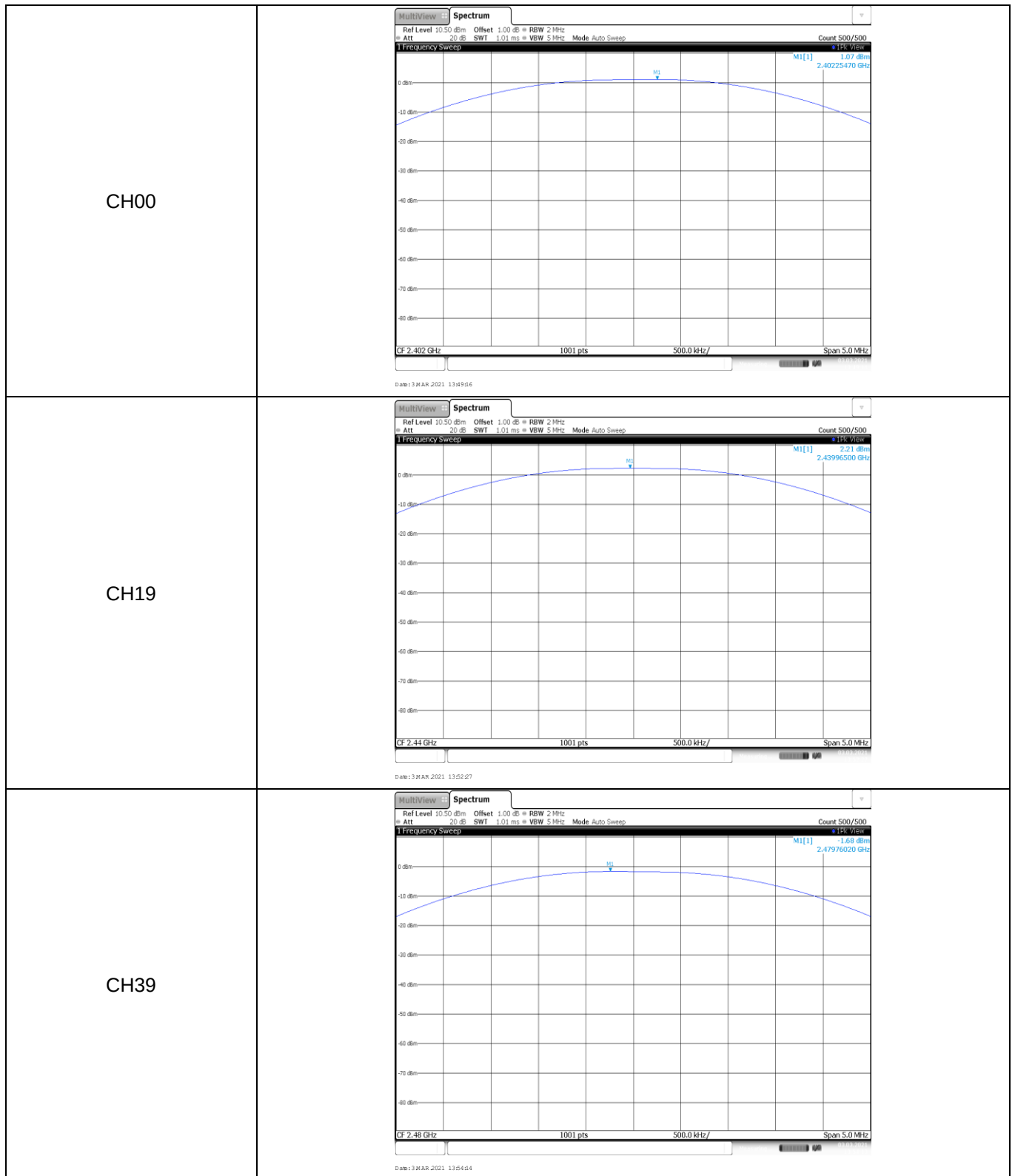
APPENDIX REPORT

Project No.	SHT2102033002EW	Radio Specification	Bluetooth BLE
Test sample No.	YPHT21020330003	Model No.	VT980
Start test date	2021-03-03	Finish date	2021-03-03
Temperature	23.2°C	Humidity	54%
Test Engineer	Hailey Chen	Auditor	Xiaodong Zhu

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

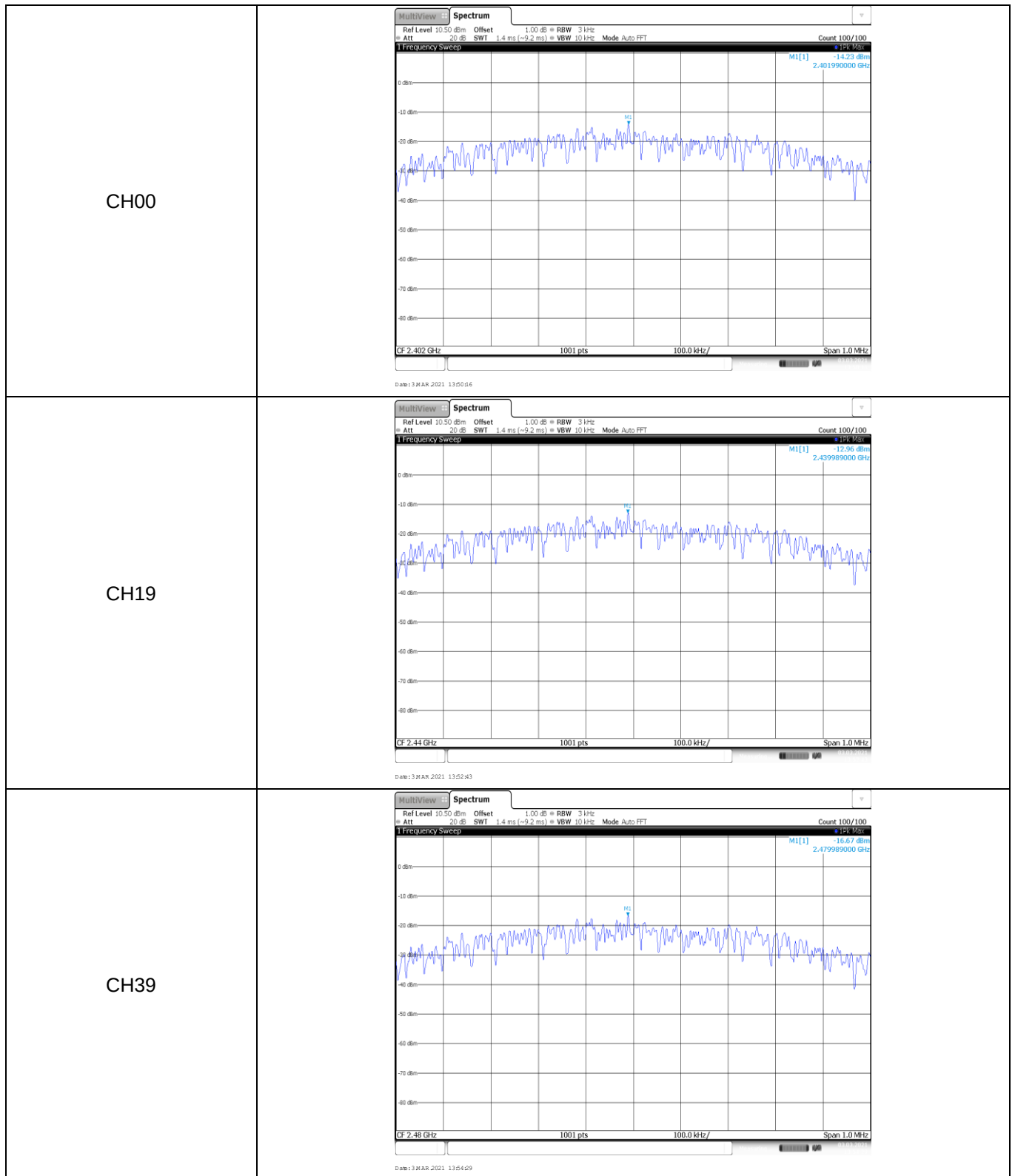
Appendix A: Peak Output Power

Type	Channel	Output power (dBm)	Average Output power (dBm)	Limit (dBm)	Result
BT-BLE	00	1.07	1.05	≤ 30.00	Pass
	19	2.21	2.20		
	39	-1.68	-1.69		



Appendix B: Power Spectral Density

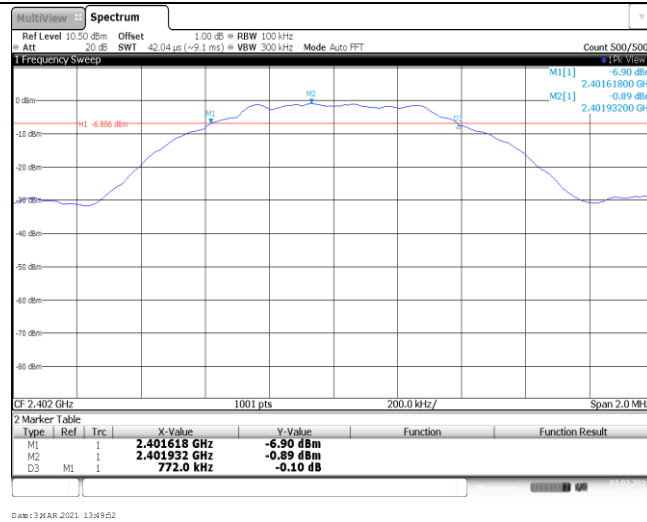
Type	Channel	Power Spectral Density(dBm/3KHz)	Limit (dBm/3KHz)	Result
BT-BLE	00	-14.23	≤8.00	Pass
	19	-12.96		
	39	-16.67		



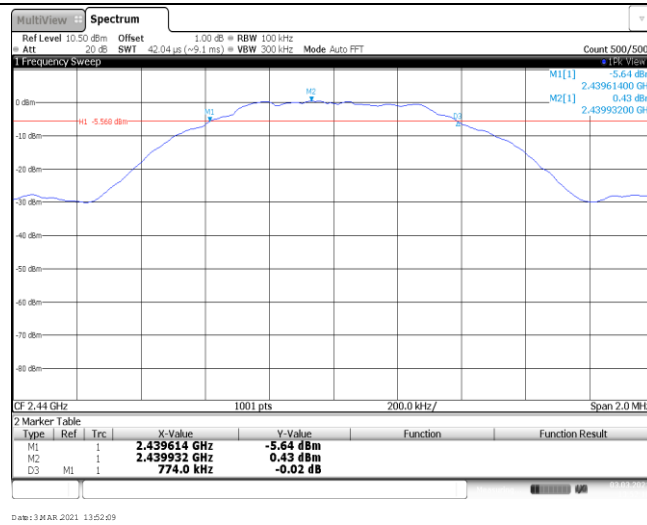
Appendix C: 6dB bandwidth

Type	Channel	6dB Bandwidth(kHz)	Limit (kHz)	Result
BT-BLE	00	772.00	≥500	Pass
	19	774.00		
	39	764.00		

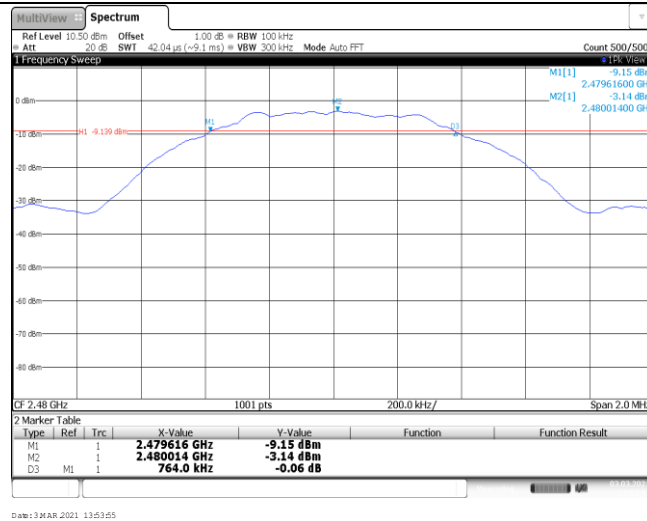
CH00



CH19



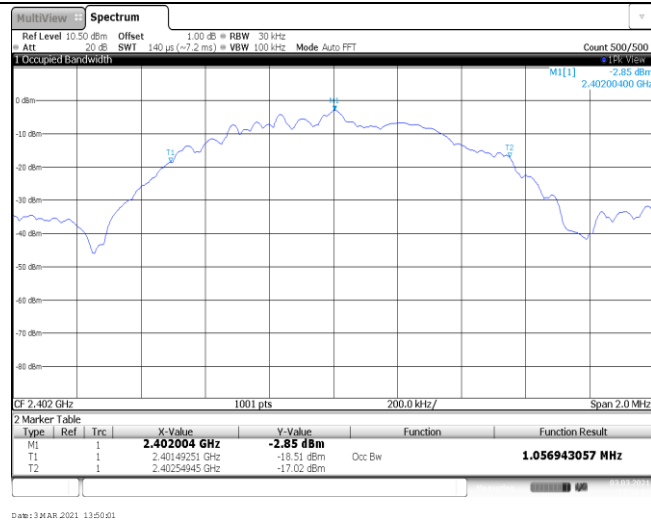
CH39



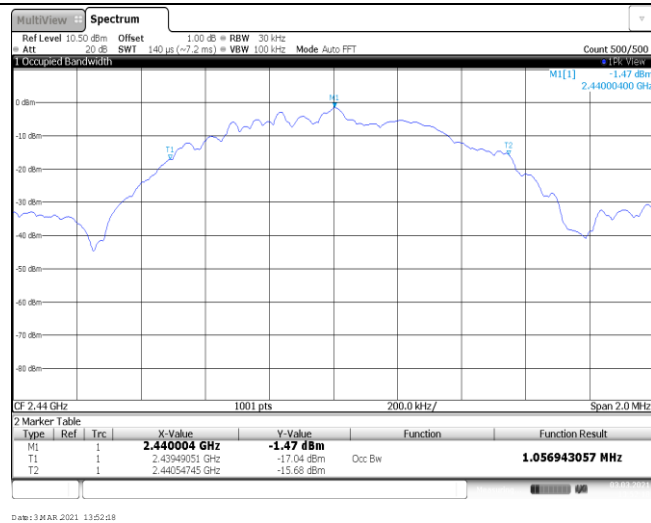
Appendix D: 99% Occupied Bandwidth

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

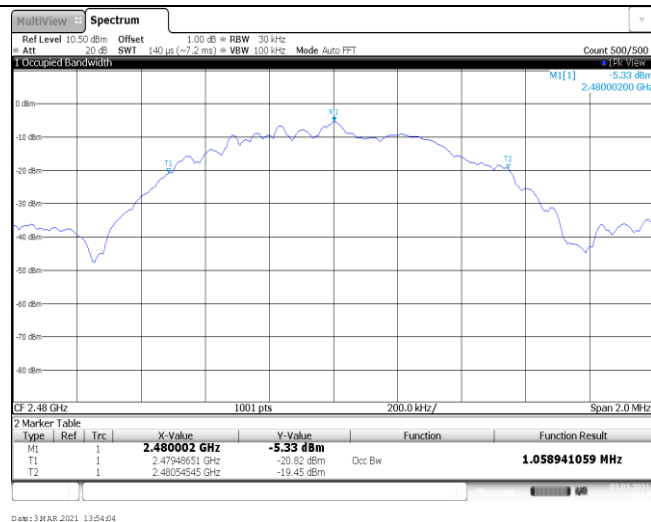
CH00



CH19

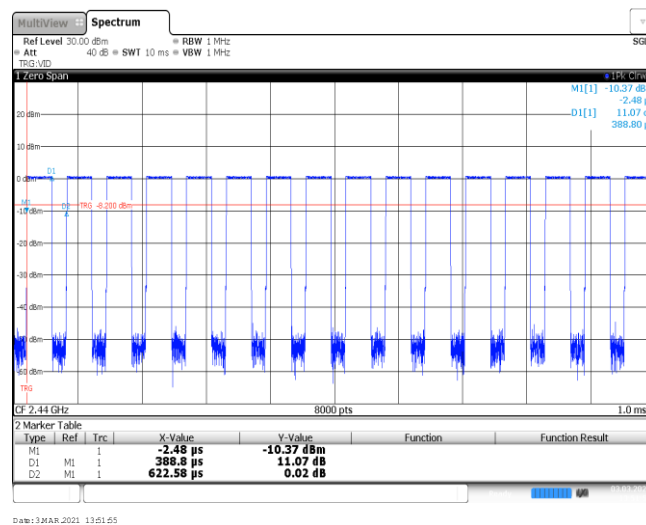


CH39



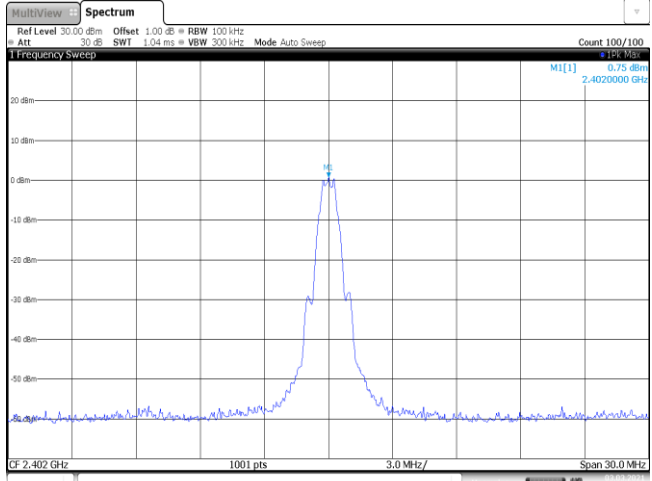
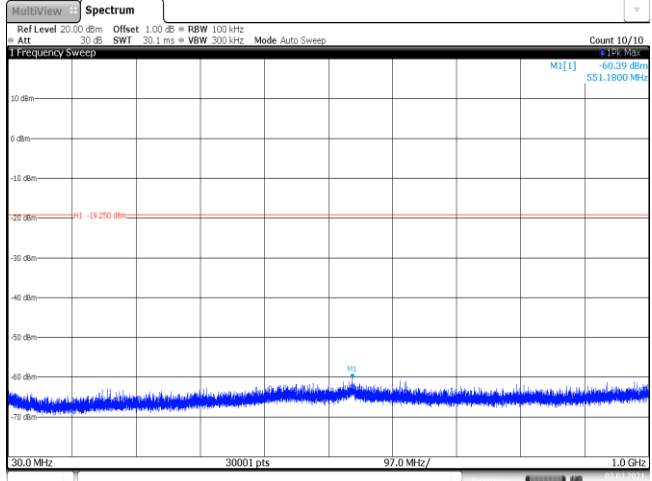
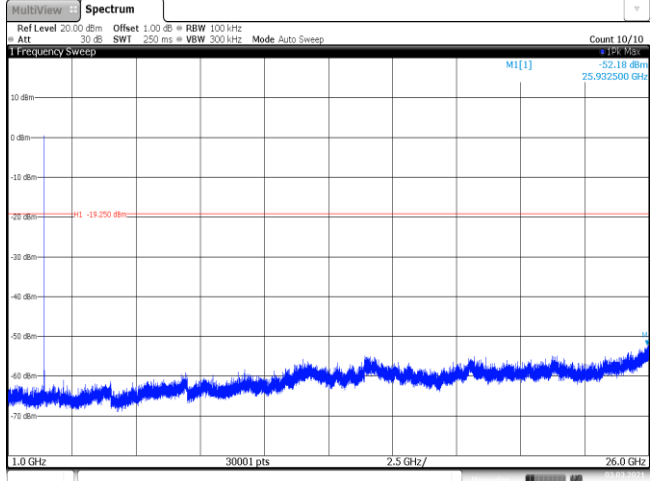
Appendix E: Duty cycle

Test Frequency (MHz)	T _{on} time for single burst (ms)	T _{period} (ms)	Duty cycle	1/T _{on} time (kHz)
2440	0.39	0.62	62.9%	2.6

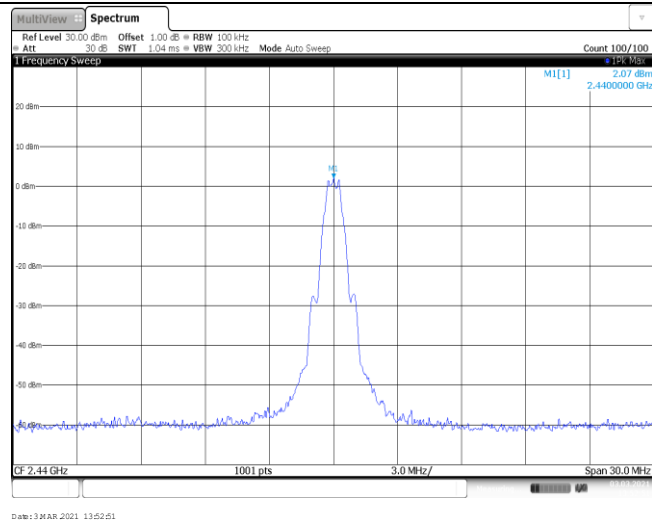


Appendix F: Band edge and Spurious Emissions (conducted)

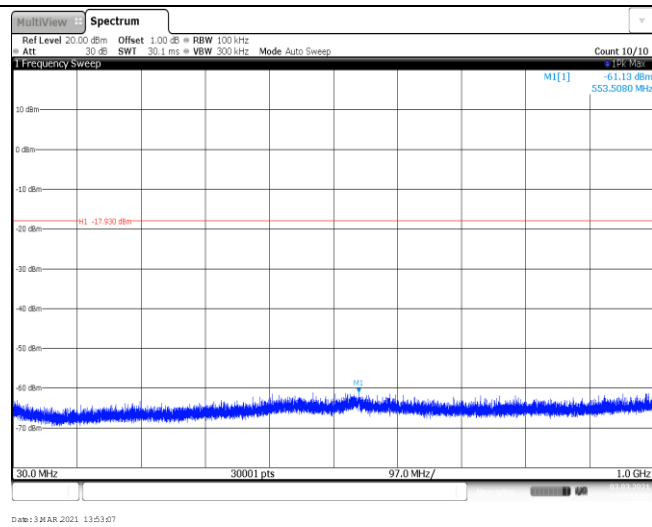
Test Item:	Band edge																																										
CH00	MultiView Spectrum Ref Level 10.50 dBm Offset 1.00 dB RBW 100 kHz Att 20 dB SWT 1.05 ms VBW 300 kHz Mode Auto Sweep Count 300/300 1 Frequency Sweep 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm -80 dBm 2.31 GHz 1001 pts 9.5 MHz/ 2.405 GHz M1[1] 0.66 dBm 2.402010 GHz M2[1] -55.99 dBm 2.400000 GHz 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>2.40201 GHz</td><td>0.66 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>2.4 GHz</td><td>-55.99 dBm</td><td></td><td></td></tr><tr><td>M3</td><td>1</td><td></td><td>2.39 GHz</td><td>-73.47 dBm</td><td></td><td></td></tr><tr><td>M4</td><td>1</td><td></td><td>2.31 GHz</td><td>-74.28 dBm</td><td></td><td></td></tr><tr><td>M5</td><td>1</td><td></td><td>2.399965 GHz</td><td>-56.39 dBm</td><td></td><td></td></tr></table> Date: 3 MAR 2021 13:50:27	Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		2.40201 GHz	0.66 dBm			M2	1		2.4 GHz	-55.99 dBm			M3	1		2.39 GHz	-73.47 dBm			M4	1		2.31 GHz	-74.28 dBm			M5	1		2.399965 GHz	-56.39 dBm		
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M5	1		2.399965 GHz	-56.39 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 1 Frequency Sweep 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 M1[1] 2.62 dBm 2.480011 GHz M2[1] -68.85 dBm 2.483500 GHz 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>2.480011 GHz</td><td>2.59 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>2.4835 GHz</td><td>-68.85 dBm</td><td></td><td></td></tr><tr><td>M3</td><td>1</td><td></td><td>2.5 GHz</td><td>-73.07 dBm</td><td></td><td></td></tr><tr><td>M4</td><td>1</td><td></td><td>2.483654 GHz</td><td>-67.80 dBm</td><td></td><td></td></tr></table> Date: 3 MAR 2021 13:54:09	Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		2.480011 GHz	2.59 dBm			M2	1		2.4835 GHz	-68.85 dBm			M3	1		2.5 GHz	-73.07 dBm			M4	1		2.483654 GHz	-67.80 dBm									
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M3	1		2.5 GHz	-73.07 dBm																																							
M4	1		2.483654 GHz	-67.80 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] 0.75 dBm 2.402000 GHz 2.402 GHz 1001 pts 3.0 MHz/ Span 30.0 MHz Date: 3 MAR 2021 13:50:05
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] -60.39 dBm 551.1800 MHz 30.0 MHz 30001 pts 97.0 MHz/ 1.0 GHz Date: 3 MAR 2021 13:50:02
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] -52.18 dBm 25.932500 GHz 1.0 GHz 30001 pts 2.5 GHz/ 26.0 GHz Date: 3 MAR 2021 13:51:08

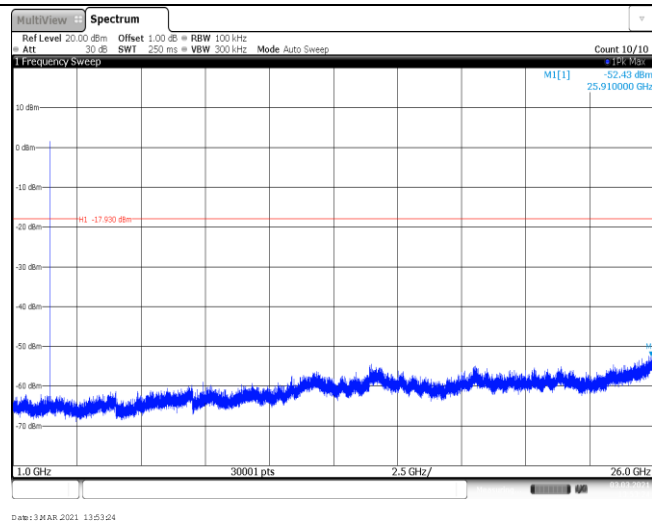
CH19
Reference level

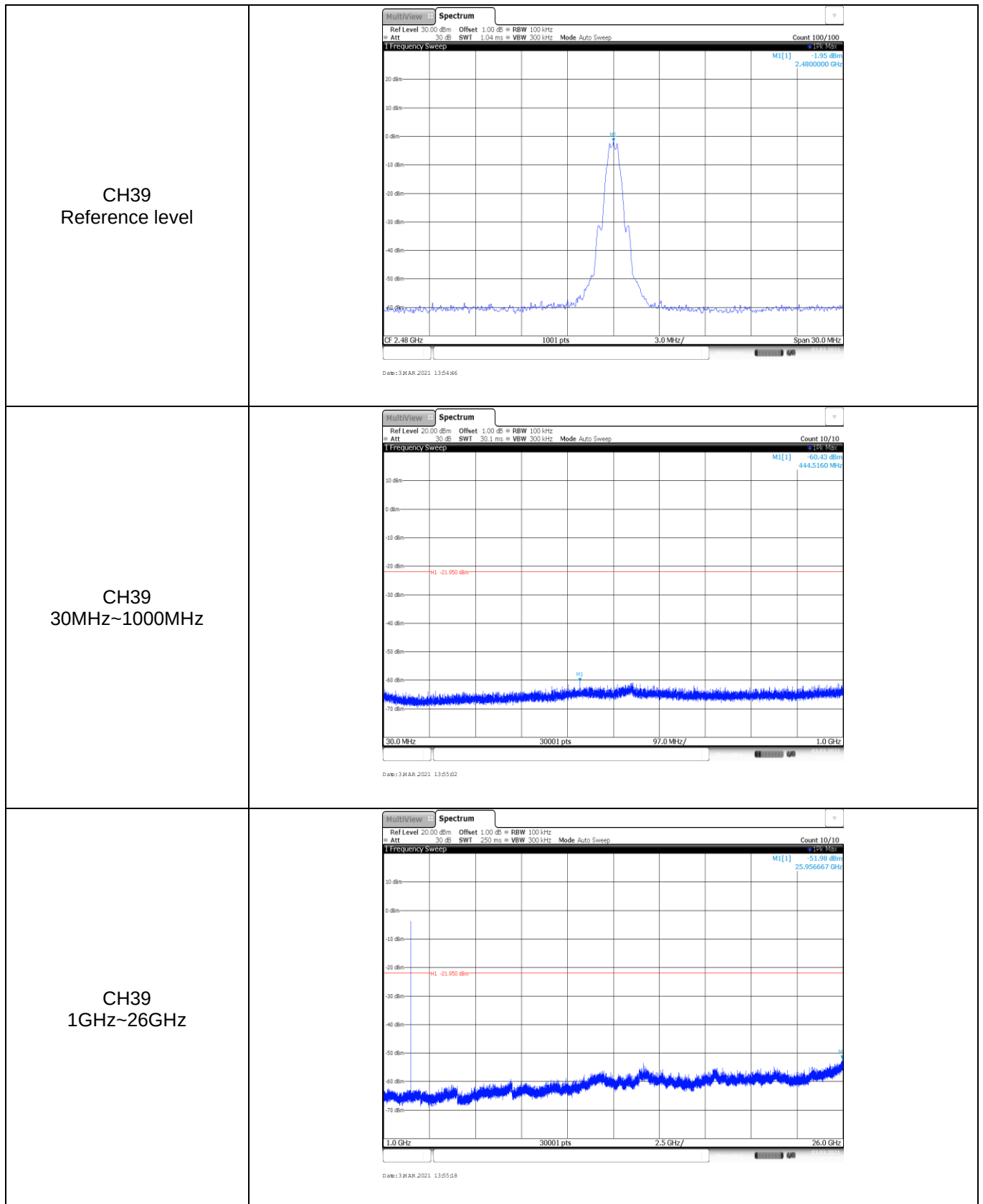


CH19
30MHz~1000MHz



CH19
1GHz~26GHz





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