

APPENDIX REPORT

Project No.	SHT1911060702EW	Radio Specification	Bluetooth BLE
Test sample No.	YPHT19110607028	Model No.	TE300
Start test date	2020/1/2	Finish date	2020/1/2
Temperature	25°C	Humidity	50%
Test Engineer	Ximing.Huang	Auditor	<i>William.wang</i>

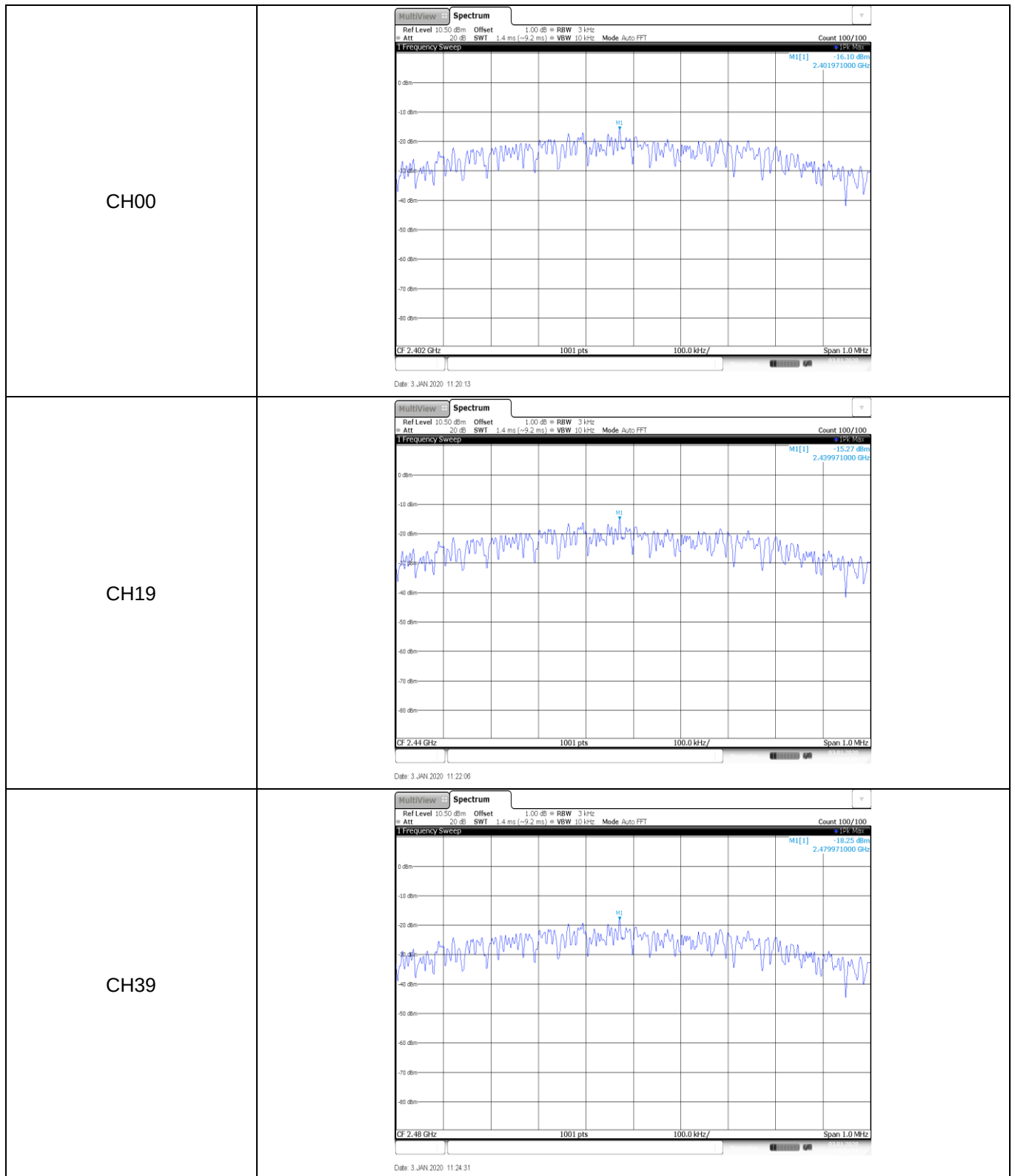
Appendix clause	Test item	Result
A	Peak Output Power	PASS
B	Power Spectral Density	PASS
C	6 dB Bandwidth	PASS
D	99% Occupied Bandwidth	PASS
E	Duty cycle	PASS
F	Band edge and Spurious Emissions (conducted)	PASS

Appendix A: Peak Output Power

Type	Channel	Output power (dBm)	Average Output power (dBm)	Limit (dBm)	Result
BT-BLE	00	-0.96	-0.97	≤30.00	Pass
	19	-0.20	-0.21		
	39	-3.17	-3.19		

Appendix B: Power Spectral Density

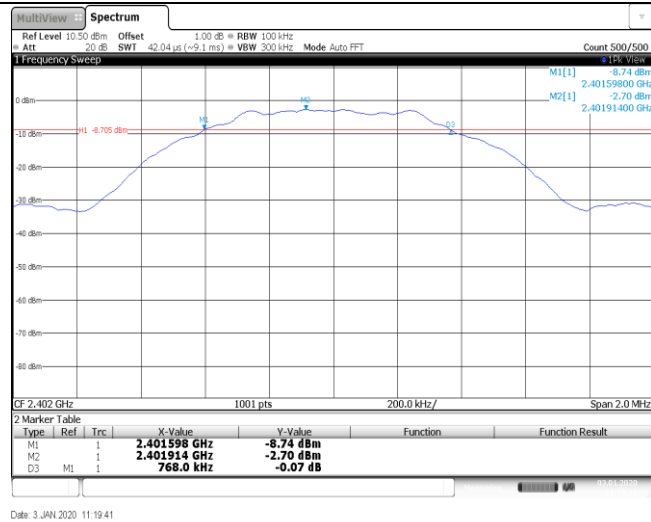
Type	Channel	Power Spectral Density(dBm/3KHz)	Limit (dBm/3KHz)	Result
BT-BLE	00	-16.10	≤8.00	Pass
	19	-15.27		
	39	-18.25		



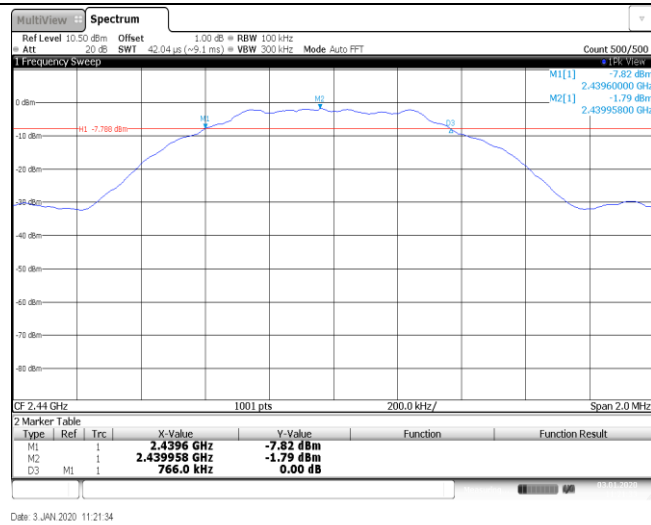
Appendix C: 6dB bandwidth

Type	Channel	6dB Bandwidth(kHz)	Limit (kHz)	Result
BT-BLE	00	768.00	≥500	Pass
	19	766.00		
	39	772.00		

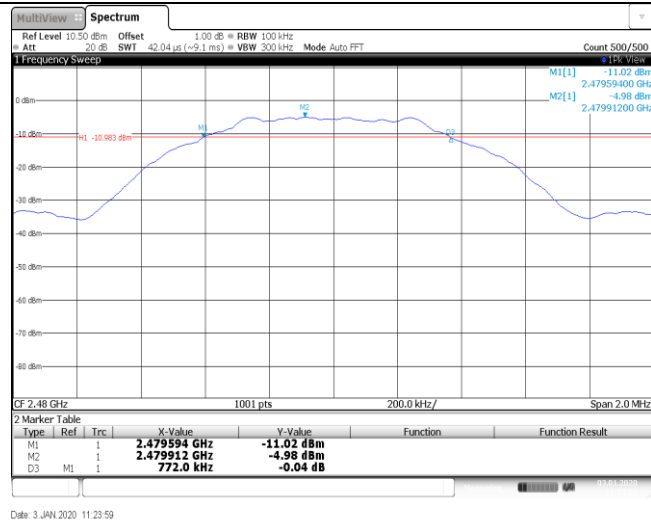
CH00



CH19



CH39



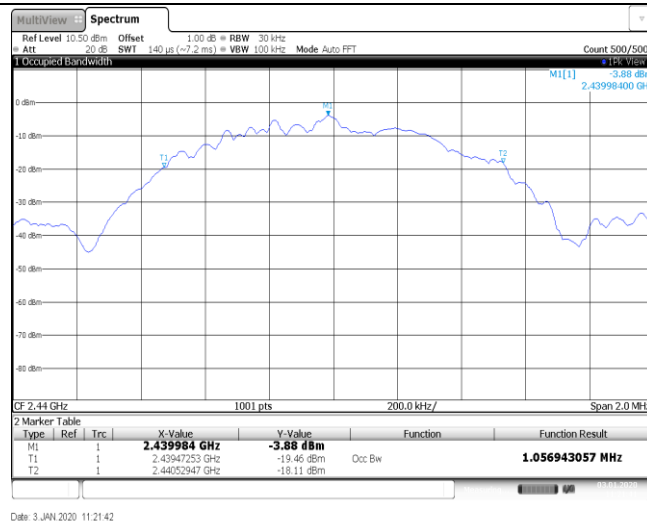
Appendix D: 99% Occupied Bandwidth

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

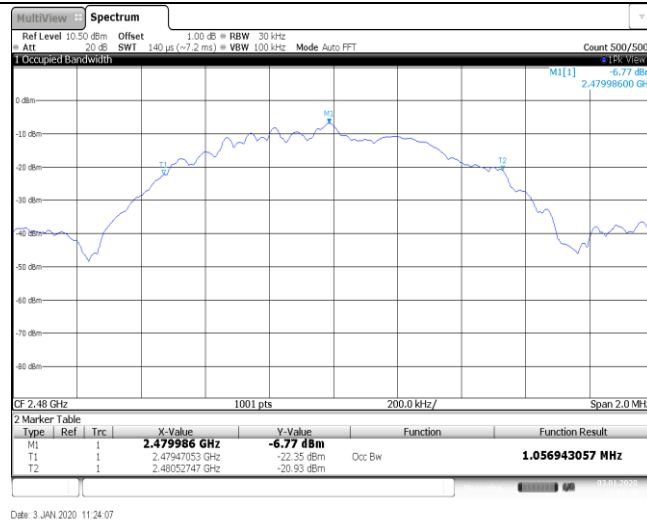
CH00



CH19

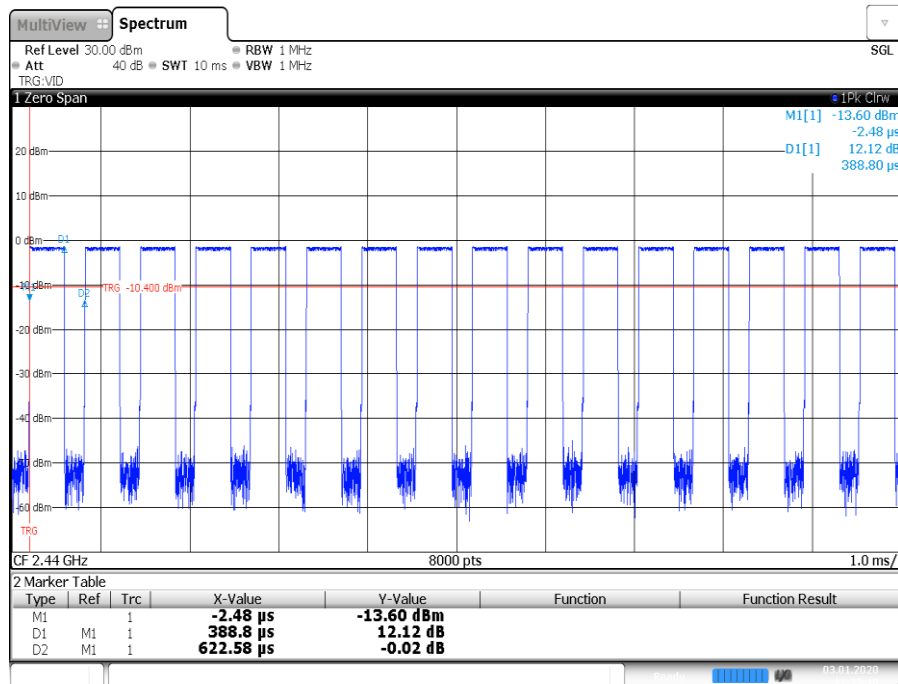


CH39



Appendix E: Duty cycle

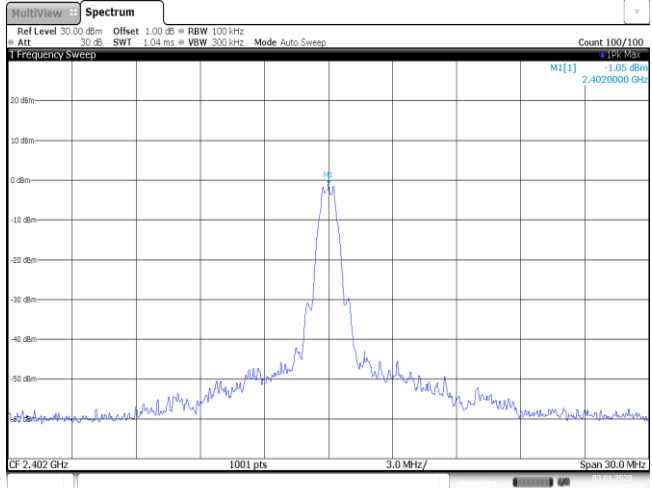
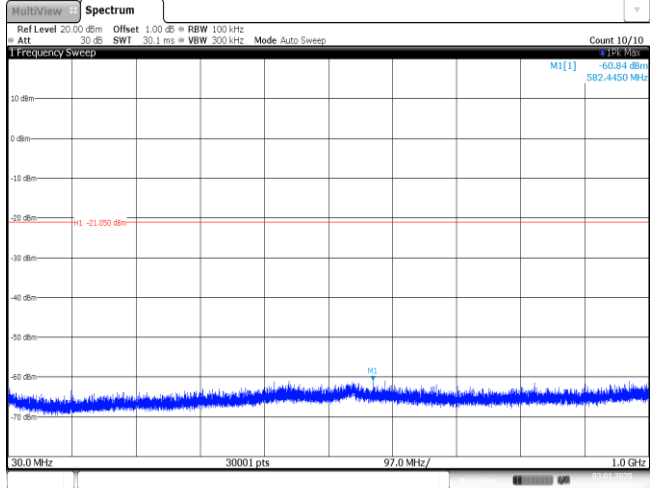
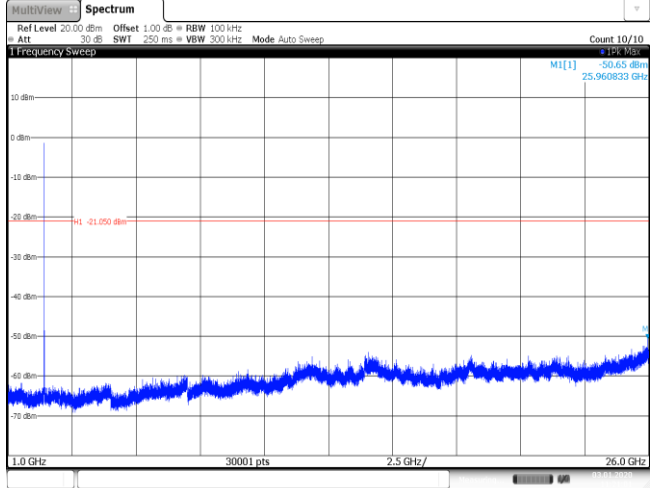
Test Frequency (MHz)	T _{on} time for single burst (ms)	T _{period} (ms)	Duty cycle	1/T _{on} time (kHz)
2440	0.39	0.62	62.9%	2.6

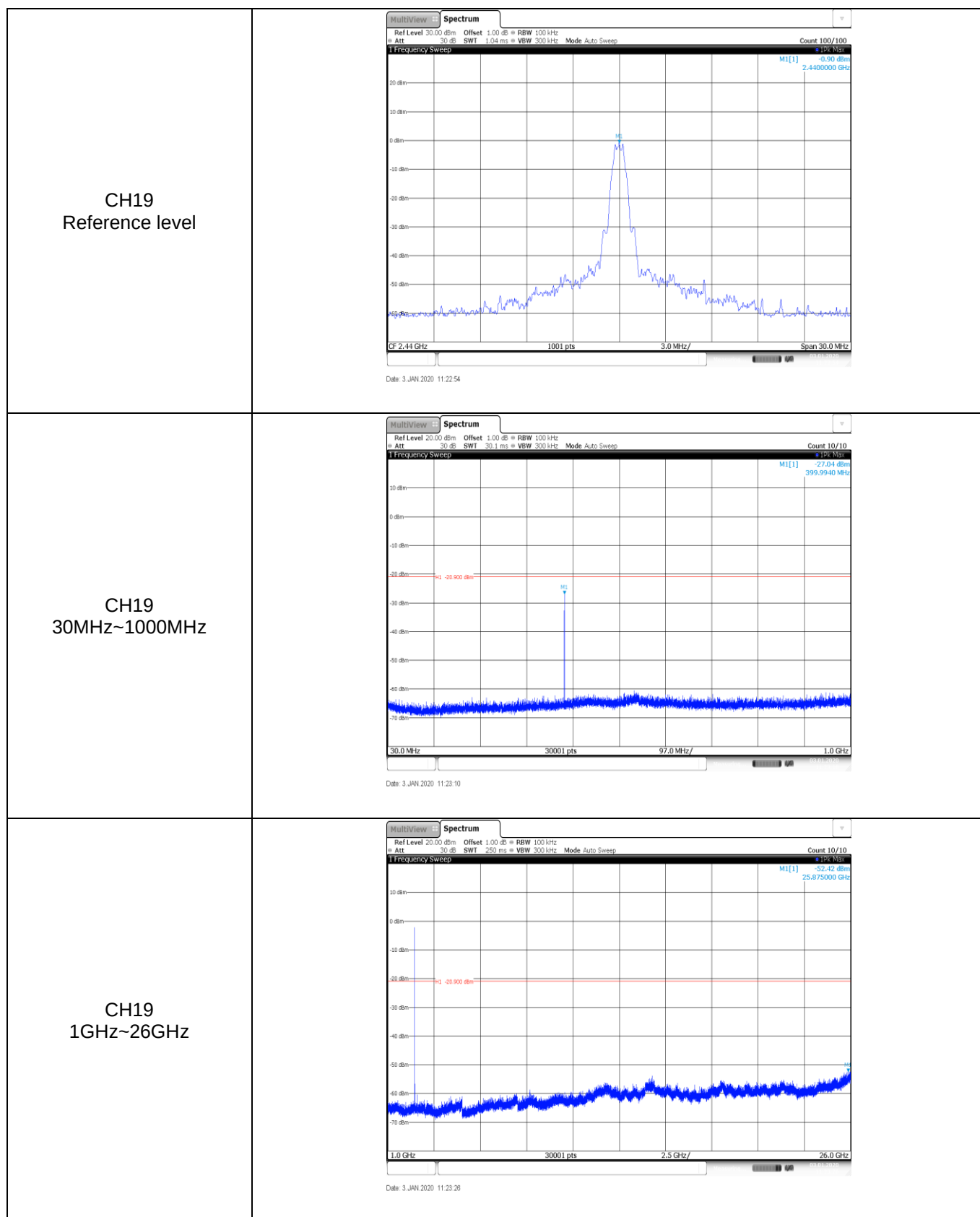


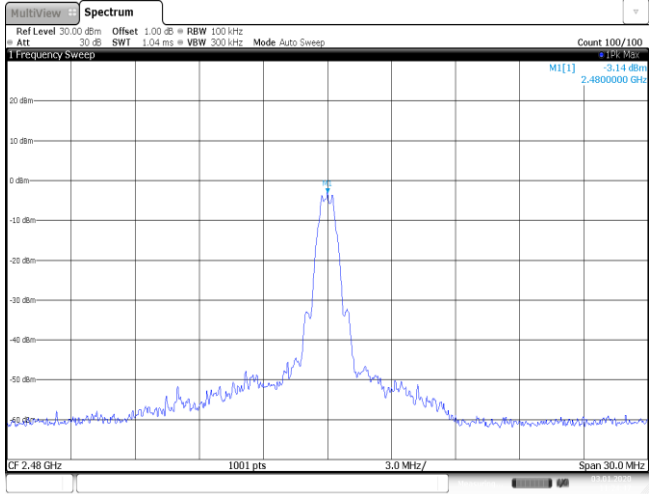
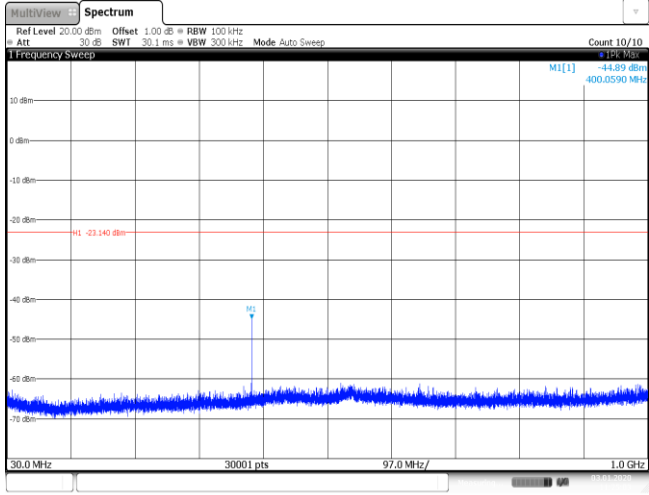
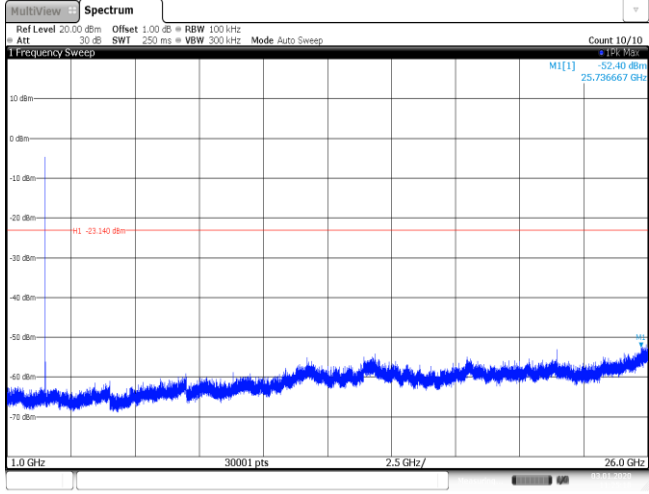
Date: 3 JAN 2020 11:22:41

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 2.31 GHz 1001 pts 9.5 MHz/ 2.405 GHz M1 -1.19 dBm 2.402010 GHz -44.92 dBm 2.400000 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>-1.19 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>2.4 GHz</td><td>-44.92 dBm</td><td></td><td></td></tr><tr><td>M3</td><td>1</td><td></td><td>2.39 GHz</td><td>-65.65 dBm</td><td></td><td></td></tr><tr><td>M4</td><td>1</td><td></td><td>2.31 GHz</td><td>-73.73 dBm</td><td></td><td></td></tr><tr><td>M5</td><td>1</td><td></td><td>2.39854 GHz</td><td>-46.88 dBm</td><td></td><td></td></tr></table> Date: 3 JAN 2020 11:20:23	Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		2.40201 GHz	-1.19 dBm			M2	1		2.4 GHz	-44.92 dBm			M3	1		2.39 GHz	-65.65 dBm			M4	1		2.31 GHz	-73.73 dBm			M5	1		2.39854 GHz	-46.88 dBm		
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result																																					
M1	1		2.40201 GHz	-1.19 dBm																																							
M2	1		2.4 GHz	-44.92 dBm																																							
M3	1		2.39 GHz	-65.65 dBm																																							
M4	1		2.31 GHz	-73.73 dBm																																							
M5	1		2.39854 GHz	-46.88 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 2.478 GHz 1001 pts 2.2 MHz/ 2.5 GHz M1 -3.46 dBm 2.479989 GHz -51.60 dBm 2.483500 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>2.479989 GHz</td><td>-3.46 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>2.4833 GHz</td><td>-51.60 dBm</td><td></td><td></td></tr><tr><td>M3</td><td>1</td><td></td><td>2.5 GHz</td><td>-73.88 dBm</td><td></td><td></td></tr><tr><td>M4</td><td>1</td><td></td><td>2.48427 GHz</td><td>-51.67 dBm</td><td></td><td></td></tr></table> Date: 3 JAN 2020 11:24:41	Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		2.479989 GHz	-3.46 dBm			M2	1		2.4833 GHz	-51.60 dBm			M3	1		2.5 GHz	-73.88 dBm			M4	1		2.48427 GHz	-51.67 dBm									
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result																																					
M1	1		2.479989 GHz	-3.46 dBm																																							
M2	1		2.4833 GHz	-51.60 dBm																																							
M3	1		2.5 GHz	-73.88 dBm																																							
M4	1		2.48427 GHz	-51.67 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 MI[1] 1.05 dBm 2.402000 GHz 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm CF 2.402 GHz 1001 pts 3.0 MHz/ Span 30.0 MHz Date: 3 JAN 2020 11:20:30
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 MI[1] -60.84 dBm 582.4450 MHz 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm 30.0 MHz 30001 pts 97.0 MHz/ 1.0 GHz Date: 3 JAN 2020 11:20:45
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 MI[1] -50.65 dBm 25.960633 GHz 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm 1.0 GHz 30001 pts 2.5 GHz/ 26.0 GHz Date: 3 JAN 2020 11:21:01



CH39 Reference level	 Ref Level 30.00 dBm Offset 1.00 dB BW 100 kHz Att 30 dB SWF 1.04 ms VBW 300 kHz Mode Auto Sweep Count 100/100 M1[1] -3.14 dBm 2.480000 GHz CF 2.48 GHz 1001 pts 3.0 MHz/ Span 30.0 MHz Date: 3 JAN 2020 11:24:47
CH39 30MHz~1000MHz	 Ref Level 20.00 dBm Offset 1.00 dB BW 100 kHz Att 30 dB SWF 30.1 ms VBW 300 kHz Mode Auto Sweep Count 10/10 M1[1] -44.89 dBm 400.0590 MHz 30.0 MHz 30001 pts 97.0 MHz/ 1.0 GHz Date: 3 JAN 2020 11:25:03
CH39 1GHz~26GHz	 Ref Level 20.00 dBm Offset 1.00 dB BW 100 kHz Att 30 dB SWF 250 ms VBW 300 kHz Mode Auto Sweep Count 10/10 M1[1] -52.40 dBm 25.736667 GHz 1.0 GHz 30001 pts 2.5 GHz/ 26.0 GHz Date: 3 JAN 2020 11:25:19

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