

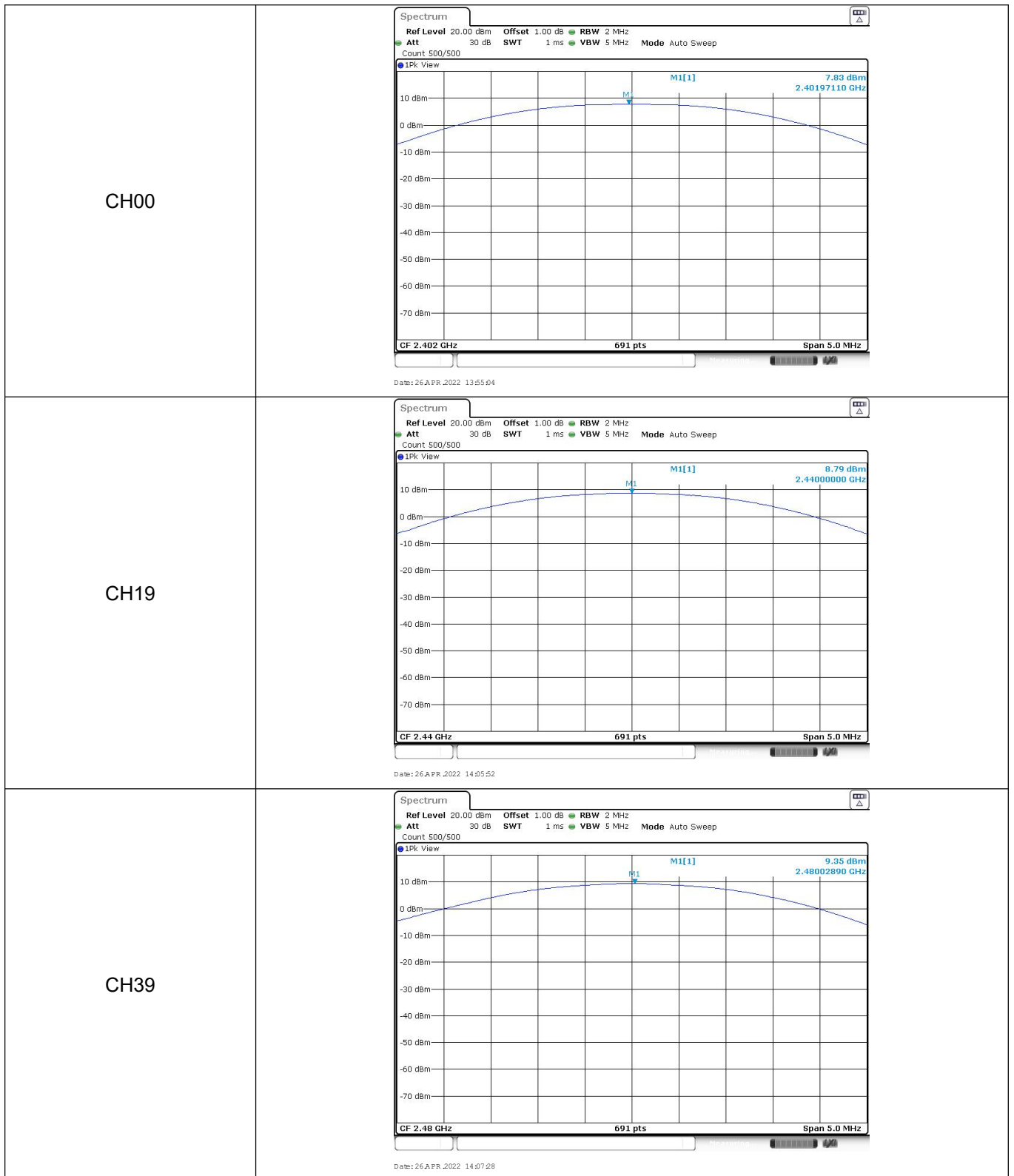
APPENDIX REPORT

Project No.	SHT2202072102EW	Radio Specification	Bluetooth BLE
Test sample No.	YPHT22020721001	Model No.	ABX00049
Start test date	2022-04-26	Finish date	2022-04-26
Temperature	24.4℃	Humidity	37%
Test Engineer	<i>Casper Chen</i>	Auditor	<i>Xiaodong Zhao</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

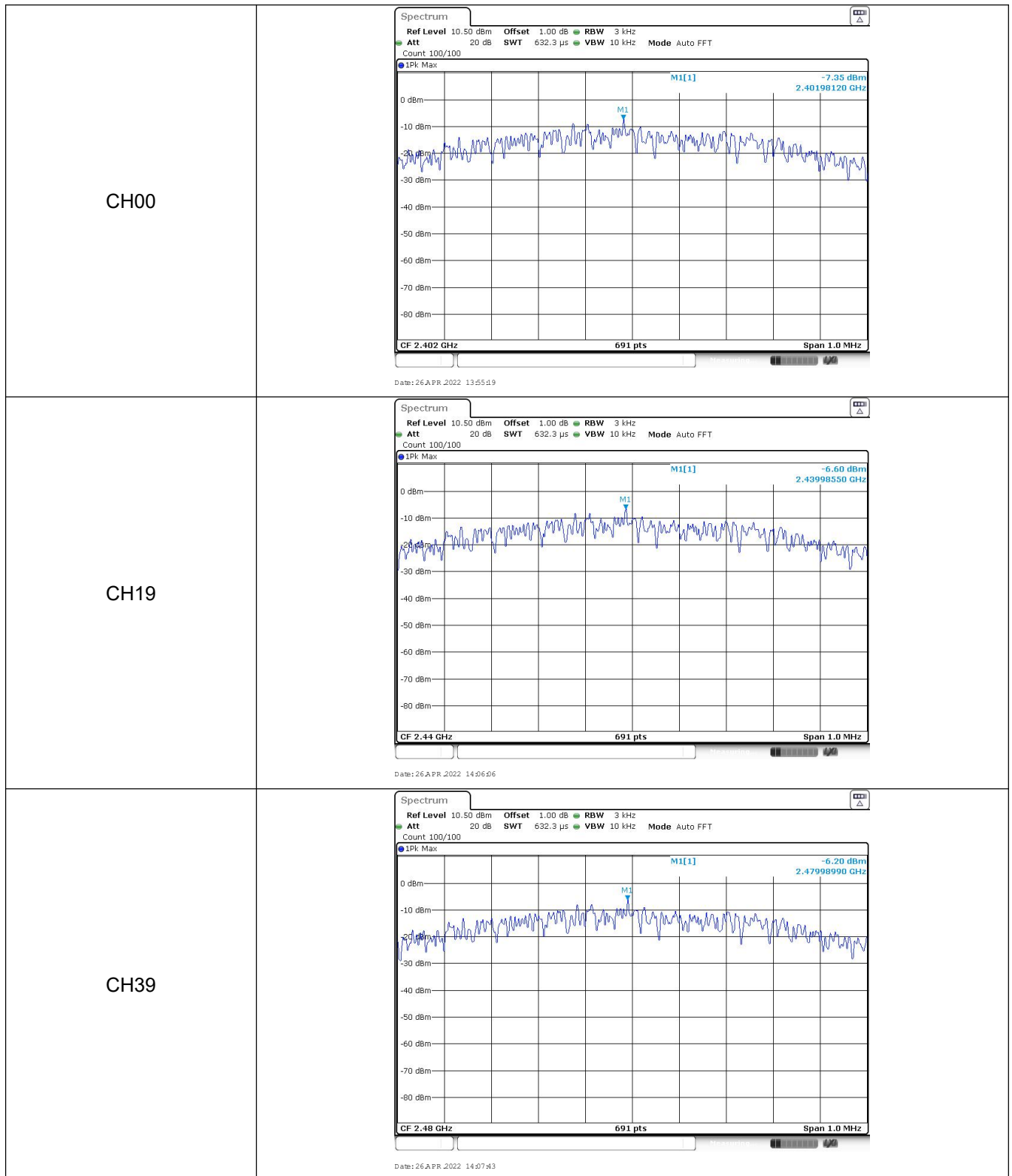
Appendix A: Peak Output Power

Type	Channel	Peak Output power (dBm)	Average Output power (dBm)	Limit (dBm)	Result
BT-BLE	00	7.83	7.81	≤ 30.00	Pass
	19	8.79	8.78		
	39	9.35	9.33		



Appendix B: Power Spectral Density

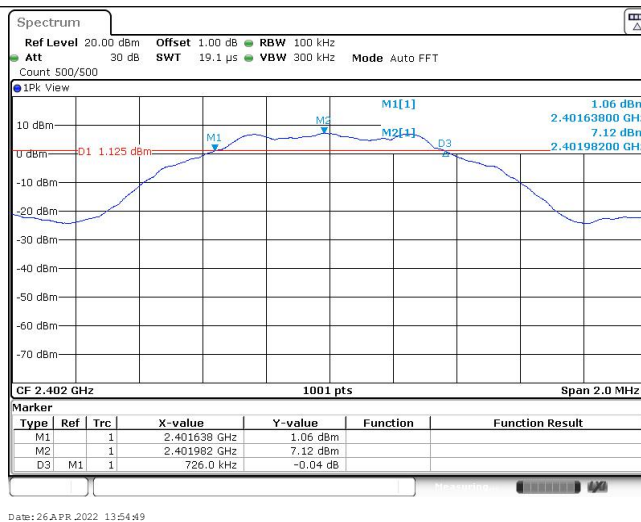
Type	Channel	Power Spectral Density(dBm/3KHz)	Limit (dBm/3KHz)	Result
BT-BLE	00	-7.35	≤8.00	Pass
	19	-6.60		
	39	-6.20		



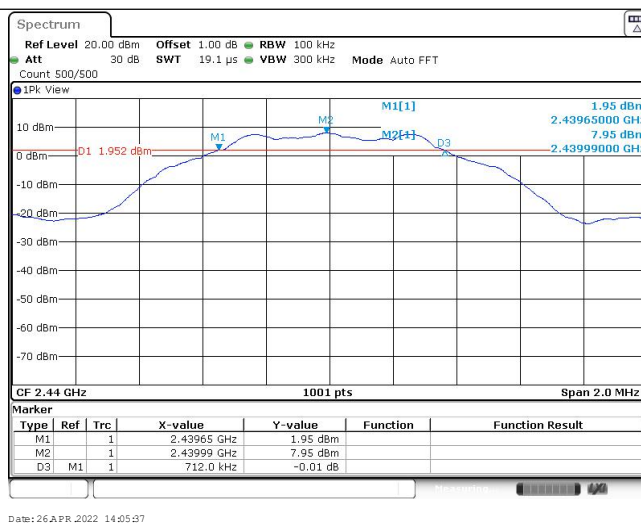
Appendix C: 6dB bandwidth

Type	Channel	6dB Bandwidth(kHz)	Limit (kHz)	Result
BT-BLE	00	726.00	≥500	Pass
	19	712.00		
	39	698.00		

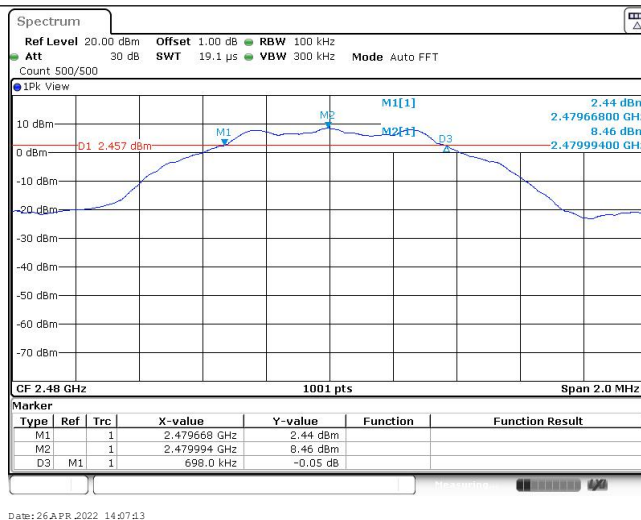
CH00



CH19

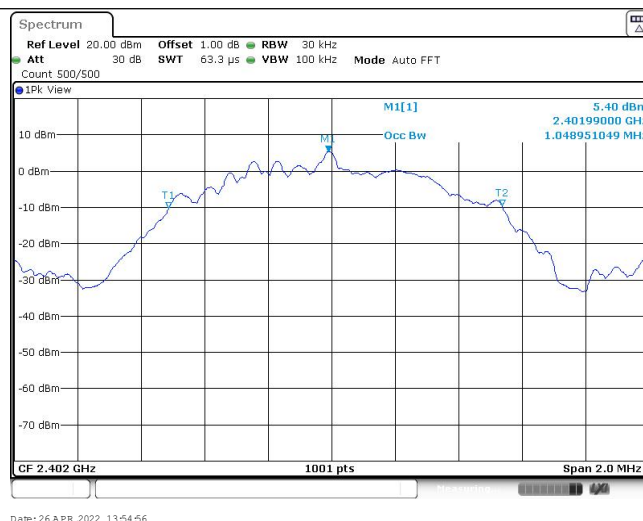


CH39

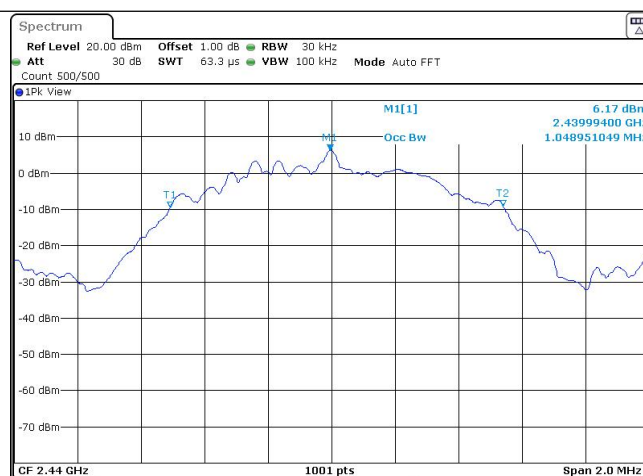


Appendix D: 99% Occupied Bandwidth

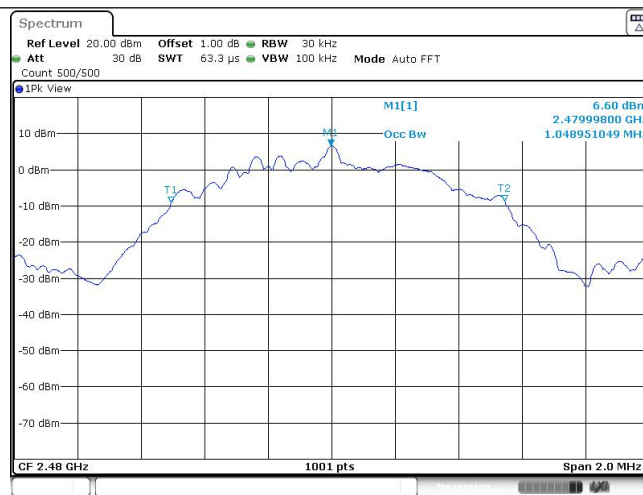
Type	Channel	99% Occupied Bandwidth(MHz)	Limit (kHz)	Result
BT-BLE	00	1.05	-	Pass
	19	1.05		
	39	1.05		



Date: 26 APR 2022 13:54:56



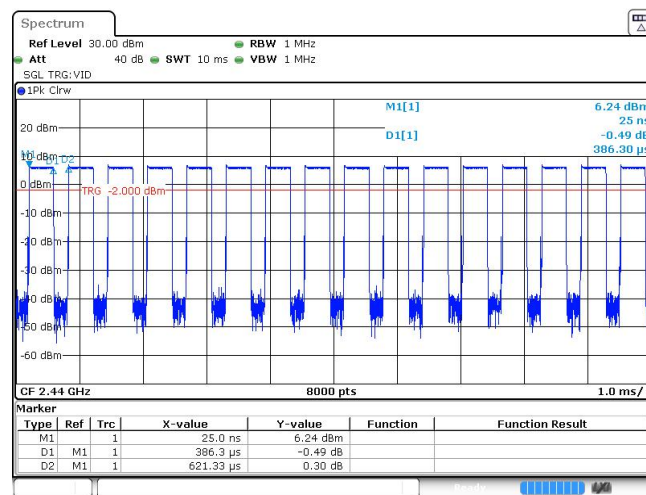
Date: 26 APR 2022 14:05:44



Date: 26 APR 2022 14:07:20

Appendix E: Duty cycle

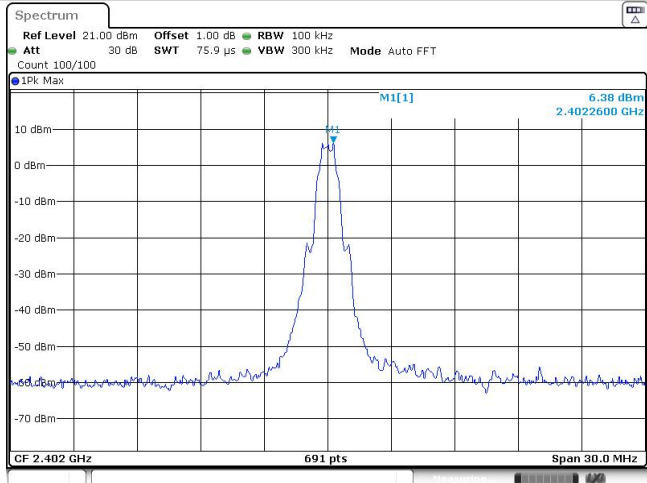
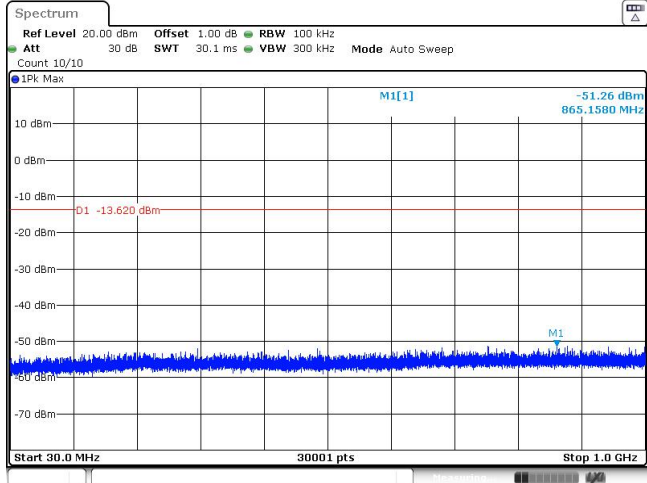
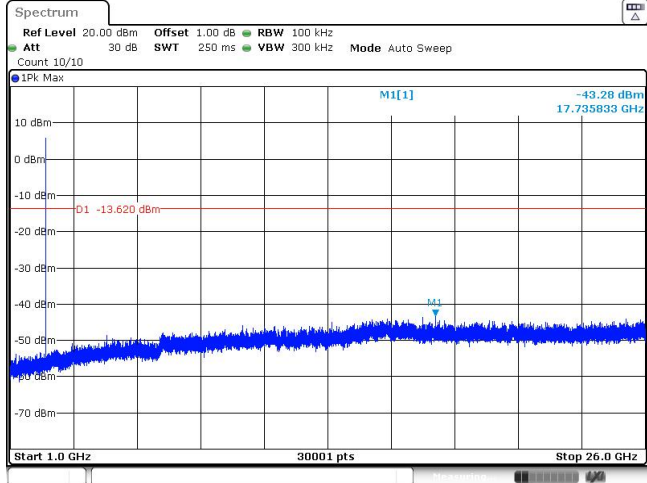
Test Frequency (MHz)	T _{on} time for single burst (ms)	T _{period} (ms)	Duty cycle	1/T _{on} time (kHz)
2440	0.39	0.62	62.9%	2.56



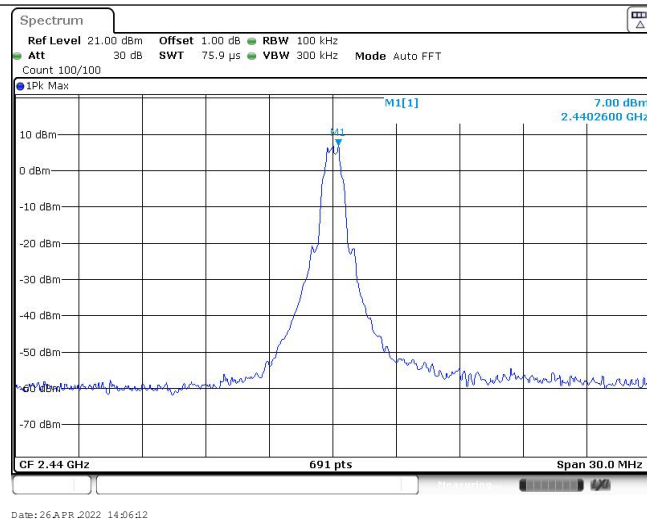
Date: 26 APR 2022 14:05:23

Appendix F: Band edge and Spurious Emissions (conducted)

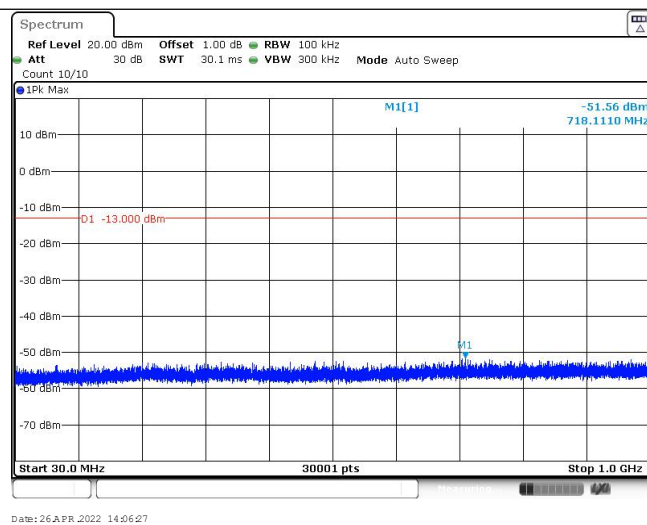
Test Item:	Band edge																																										
CH00	Spectrum Ref Level 20.00 dBm Att 30 dB Count 300/300 Offset 1.00 dB SWT 1.1 ms RBW 100 kHz VBW 300 kHz Mode Auto Sweep 1Pk Max 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm M1[1] M2[1] D1 -14.140 dBm M3 M5 5.86 dBm 2.402040 GHz -51.50 dBm 2.400000 GHz Start 2.31 GHz 691 pts Stop 2.405 GHz Marker <table><thead><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></thead><tbody><tr><td>M1</td><td>1</td><td></td><td>2.40204 GHz</td><td>5.86 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>2.4 GHz</td><td>-51.50 dBm</td><td></td><td></td></tr><tr><td>M3</td><td>1</td><td></td><td>2.39 GHz</td><td>-55.10 dBm</td><td></td><td></td></tr><tr><td>M4</td><td>1</td><td></td><td>2.31 GHz</td><td>-54.71 dBm</td><td></td><td></td></tr><tr><td>M5</td><td>1</td><td></td><td>2.39963 GHz</td><td>-51.02 dBm</td><td></td><td></td></tr></tbody></table> Date: 26 APR 2022 13:55:28	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1		2.40204 GHz	5.86 dBm			M2	1		2.4 GHz	-51.50 dBm			M3	1		2.39 GHz	-55.10 dBm			M4	1		2.31 GHz	-54.71 dBm			M5	1		2.39963 GHz	-51.02 dBm		
Type	Ref	Trc	X-value	Y-value	Function	Function Result																																					
M1	1		2.40204 GHz	5.86 dBm																																							
M2	1		2.4 GHz	-51.50 dBm																																							
M3	1		2.39 GHz	-55.10 dBm																																							
M4	1		2.31 GHz	-54.71 dBm																																							
M5	1		2.39963 GHz	-51.02 dBm																																							
CH39	Spectrum Ref Level 20.00 dBm Att 30 dB Count 100/100 Offset 1.00 dB SWT 56.9 μs RBW 100 kHz VBW 300 kHz Mode Auto FFT 1Pk Max 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm M1 M2[1] D1 -11.620 dBm M3 M4 8.38 dBm 2.4799900 GHz -49.32 dBm 2.4835000 GHz Start 2.478 GHz 691 pts Stop 2.5 GHz Marker <table><thead><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></thead><tbody><tr><td>M1</td><td>1</td><td></td><td>2.47999 GHz</td><td>8.38 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>2.4835 GHz</td><td>-49.32 dBm</td><td></td><td></td></tr><tr><td>M3</td><td>1</td><td></td><td>2.5 GHz</td><td>-59.94 dBm</td><td></td><td></td></tr><tr><td>M4</td><td>1</td><td></td><td>2.4836116 GHz</td><td>-48.69 dBm</td><td></td><td></td></tr></tbody></table> Date: 26 APR 2022 14:07:51	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1		2.47999 GHz	8.38 dBm			M2	1		2.4835 GHz	-49.32 dBm			M3	1		2.5 GHz	-59.94 dBm			M4	1		2.4836116 GHz	-48.69 dBm									
Type	Ref	Trc	X-value	Y-value	Function	Function Result																																					
M1	1		2.47999 GHz	8.38 dBm																																							
M2	1		2.4835 GHz	-49.32 dBm																																							
M3	1		2.5 GHz	-59.94 dBm																																							
M4	1		2.4836116 GHz	-48.69 dBm																																							

Test Item:	SE
CH00 Reference level	 Spectrum Ref Level 21.00 dBm Offset 1.00 dB RBW 100 kHz Att 30 dB SWT 75.9 μs VBW 300 kHz Mode Auto FFT Count 100/100 1Pk Max 6.38 dBm 2.4022600 GHz CF 2.402 GHz 691 pts Span 30.0 MHz Date: 26 APR. 2022 13:55:33
CH00 30MHz~1000MHz	 Spectrum Ref Level 20.00 dBm Offset 1.00 dB RBW 100 kHz Att 30 dB SWT 30.1 ms VBW 300 kHz Mode Auto Sweep Count 10/10 1Pk Max -51.26 dBm 865.1580 MHz D1 -13.620 dBm Start 30.0 MHz 30001 pts Stop 1.0 GHz Date: 26 APR. 2022 13:55:49
CH00 1GHz~26GHz	 Spectrum Ref Level 20.00 dBm Offset 1.00 dB RBW 100 kHz Att 30 dB SWT 250 ms VBW 300 kHz Mode Auto Sweep Count 10/10 1Pk Max -43.28 dBm 17.735833 GHz D1 -13.620 dBm Start 1.0 GHz 30001 pts Stop 26.0 GHz Date: 26 APR. 2022 13:56:04

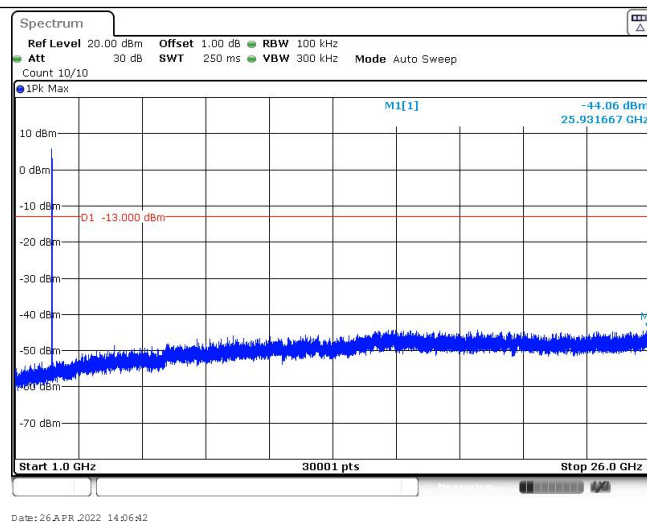
CH19
Reference level



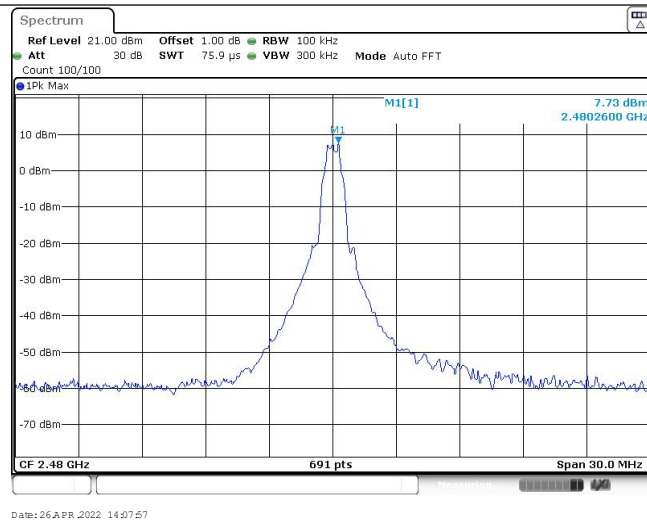
CH19
30MHz~1000MHz



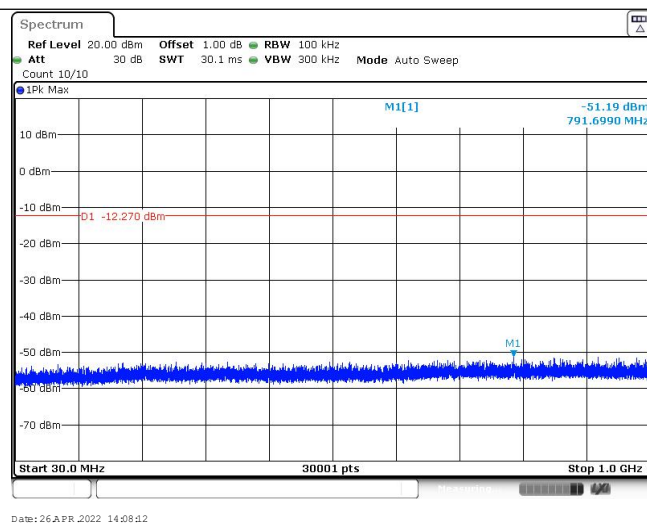
CH19
1GHz~26GHz



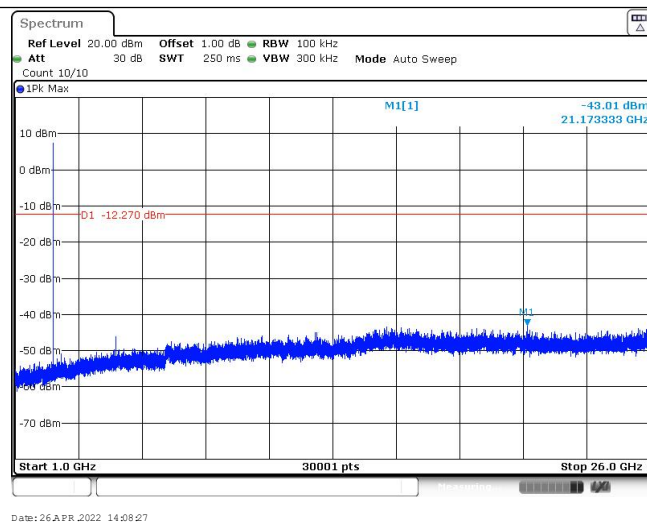
CH39
Reference level



CH39
30MHz~1000MHz



CH39
1GHz~26GHz



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