

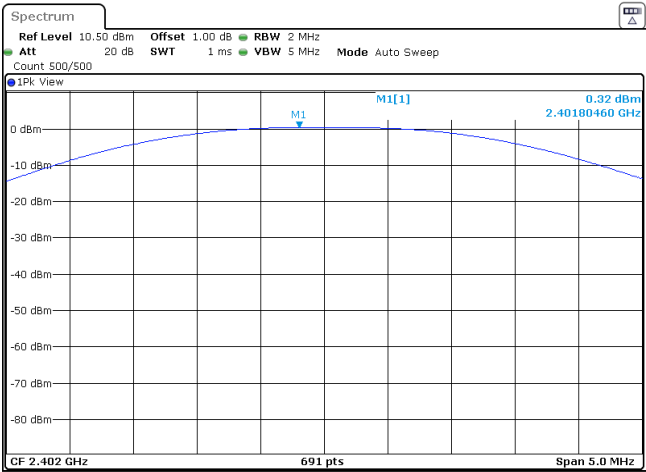
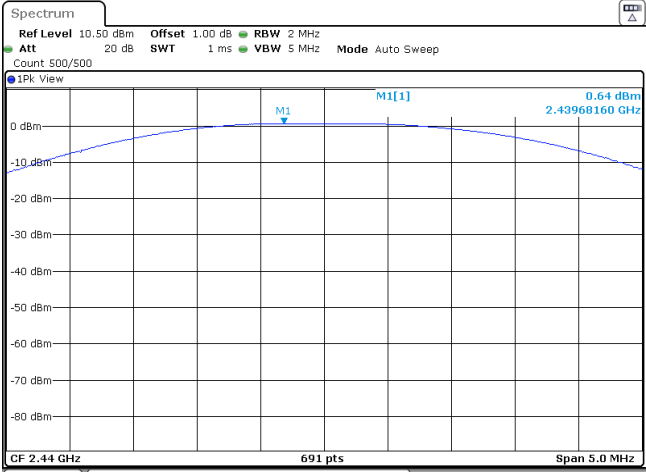
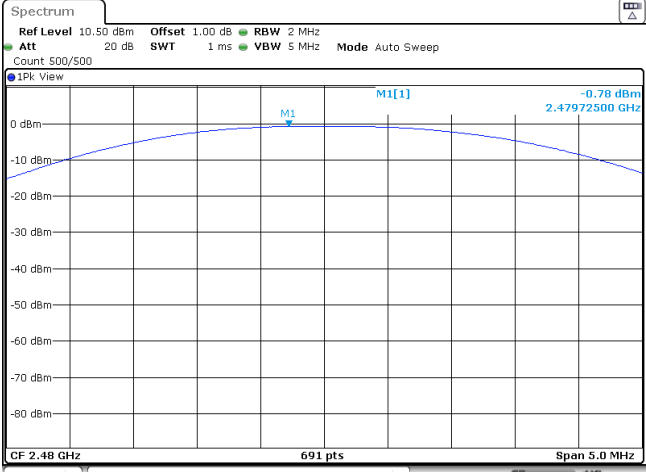
APPENDIX REPORT

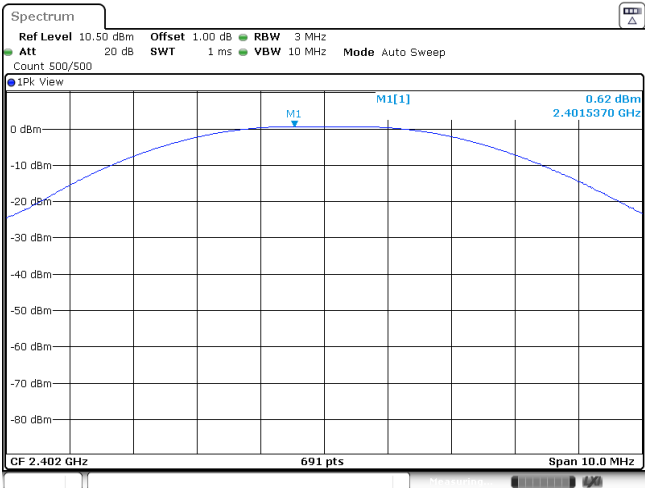
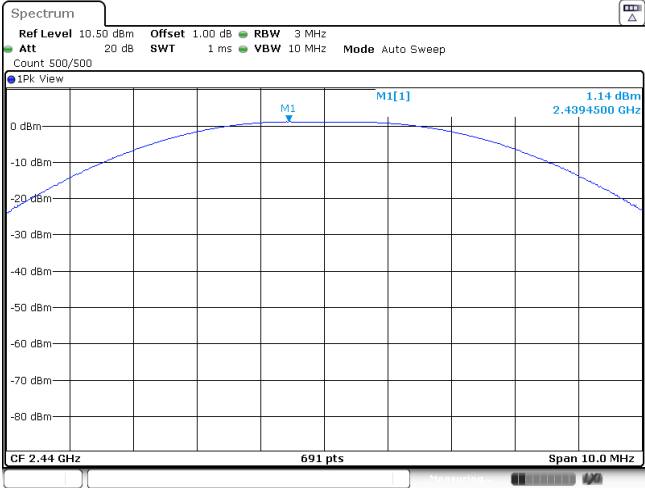
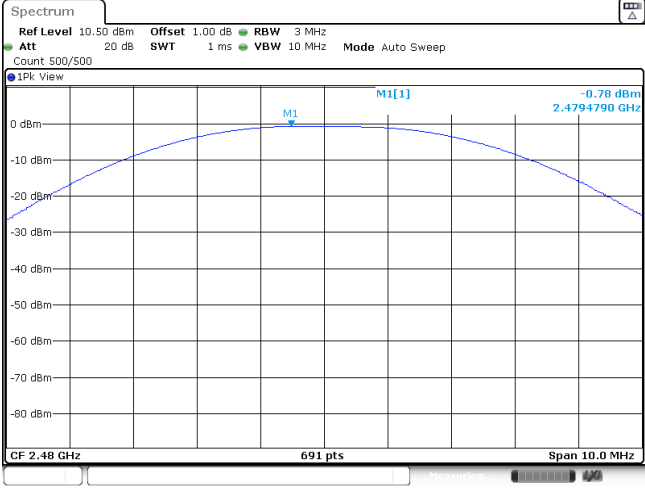
Project No.	SHT2208212701EW	Radio Specification	Bluetooth BLE
Test sample No.	YPHT22082127001	Model No.	主测 AET-F352
Start test date	2023-04-10	Finish date	2023-04-10
Temperature	20.7℃	Humidity	20%
Test Engineer	Xiaoqin Li	Auditor	Xiaodong Zheo

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

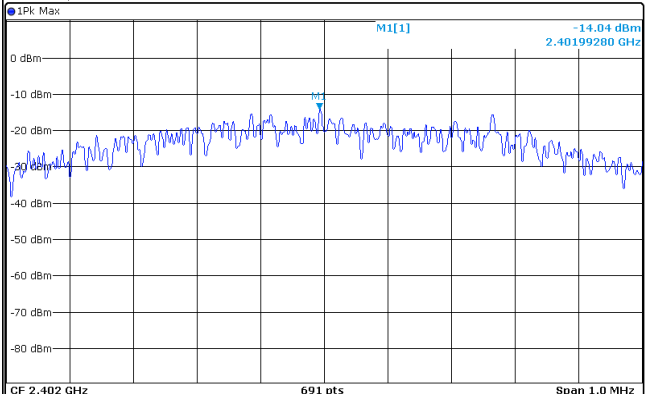
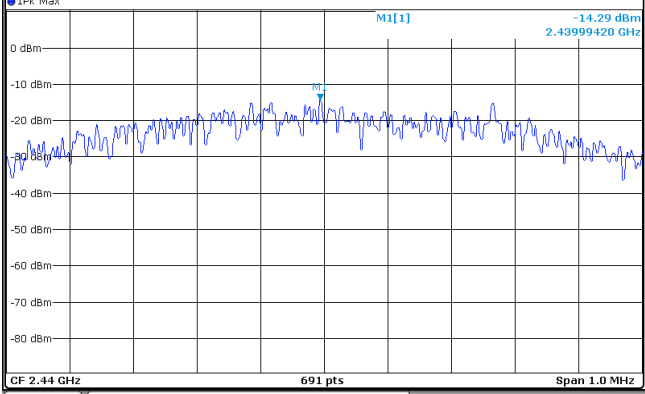
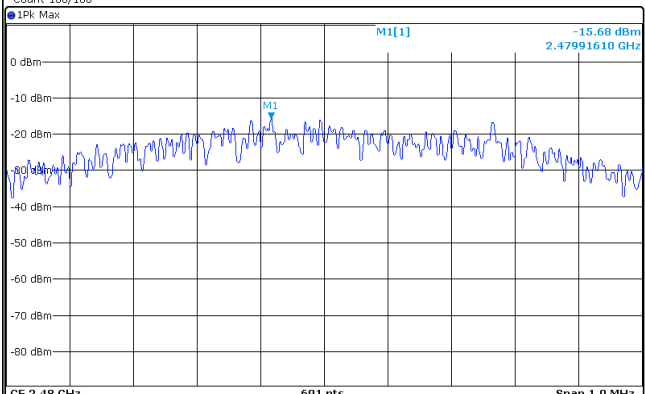
Test rate	Channel	Peak Output power (dBm)	Average Output power (dBm)	Limit (dBm)	Result
1Mbps	00	0.32	0.30	≤ 30.00	Pass
	19	0.64	0.61		
	39	-0.78	-0.80		
2Mbps	00	0.62	0.54	≤ 30.00	Pass
	19	1.14	1.08		
	39	-0.78	-0.86		

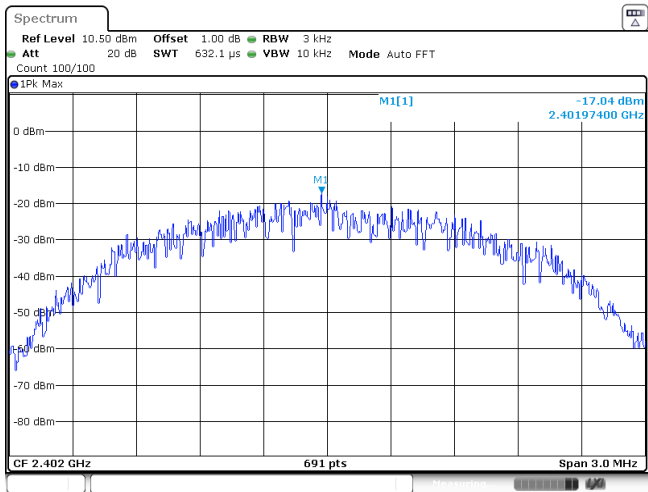
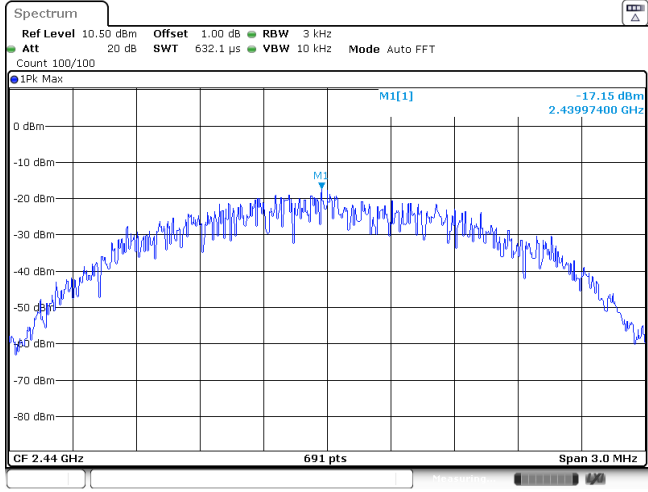
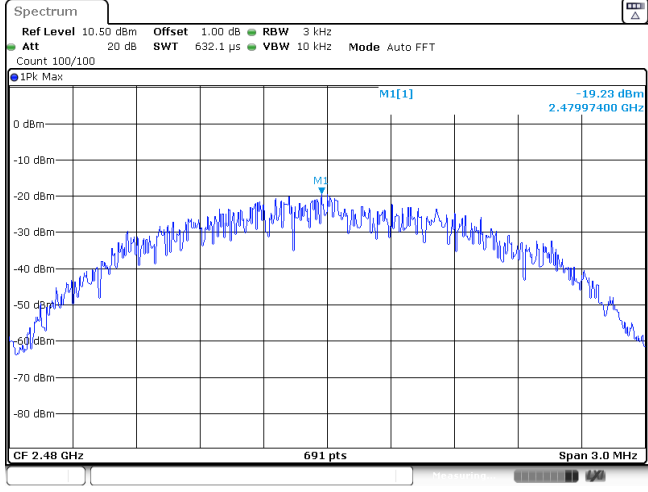
Test rate:		1Mbps
CH00	 Spectrum plot for CH00. The plot shows a signal at 2.40180460 GHz with a power level of 0.32 dBm. The plot includes a grid, a blue curve, and various measurement parameters like Ref Level, Att, Offset, RBW, and Span.	
CH19	 Spectrum plot for CH19. The plot shows a signal at 2.43968160 GHz with a power level of 0.64 dBm. The plot includes a grid, a blue curve, and various measurement parameters like Ref Level, Att, Offset, RBW, and Span.	
CH39	 Spectrum plot for CH39. The plot shows a signal at 2.47972500 GHz with a power level of -0.78 dBm. The plot includes a grid, a blue curve, and various measurement parameters like Ref Level, Att, Offset, RBW, and Span.	

Test rate: 2Mbps	
CH00	 0.62 dBm 2.4015370 GHz
CH19	 1.14 dBm 2.4394500 GHz
CH39	 -0.78 dBm 2.4794790 GHz

Appendix B: Power Spectral Density

Test rate	Channel	Power Spectral Density(dBm/3KHz)	Limit (dBm/3KHz)	Result
1Mbps	00	-14.04	≤8.00	Pass
	19	-14.29		
	39	-15.68		
2Mbps	00	-17.04	≤8.00	Pass
	19	-17.15		
	39	-19.23		

Test rate: 1Mbps	
CH00	Spectrum Ref Level 10.50 dBm Att 20 dB Count 100/100 Offset 1.00 dB SWT 632.3 μs RBW 3 kHz VBW 10 kHz Mode Auto FFT IPk Max M1[1] -14.04 dBm 2.40199280 GHz  CF 2.402 GHz 691 pts Span 1.0 MHz Date: 10-APR-2023 17:48:42
CH19	Spectrum Ref Level 10.50 dBm Att 20 dB Count 100/100 Offset 1.00 dB SWT 632.3 μs RBW 3 kHz VBW 10 kHz Mode Auto FFT IPk Max M1[1] -14.29 dBm 2.43999420 GHz  CF 2.44 GHz 691 pts Span 1.0 MHz Date: 10-APR-2023 17:51:01
CH39	Spectrum Ref Level 10.50 dBm Att 20 dB Count 100/100 Offset 1.00 dB SWT 632.3 μs RBW 3 kHz VBW 10 kHz Mode Auto FFT IPk Max M1[1] -15.68 dBm 2.47991610 GHz  CF 2.48 GHz 691 pts Span 1.0 MHz Date: 10-APR-2023 17:54:04

Test rate: 2Mbps	
CH00	 10.3.2023 17:57:51
CH19	 10.3.2023 17:58:59
CH39	 10.3.2023 18:01:42

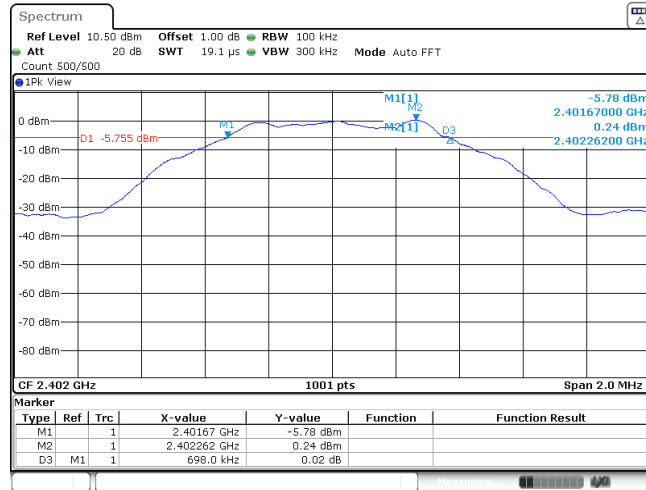
Appendix C: 6dB bandwidth

Type	Channel	6dB Bandwidth(kHz)	Limit (kHz)	Result
1Mbps	00	698.00	≥500	Pass
	19	692.00		
	39	694.00		
2Mbps	00	1180.00	≥500	Pass
	19	1195.00		
	39	1190.00		

Test rate:

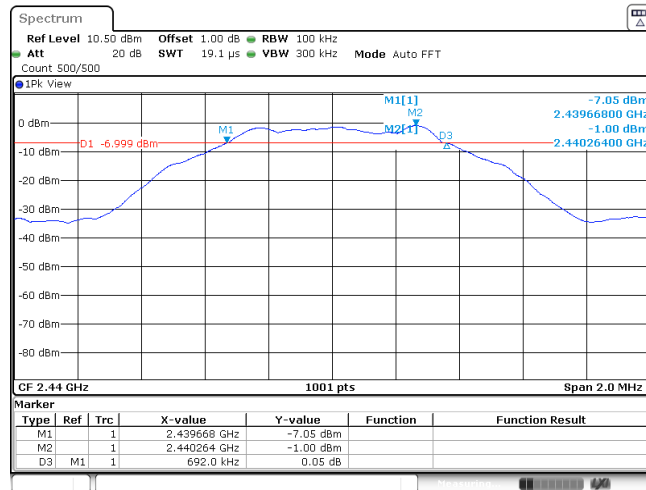
1Mbps

CH00



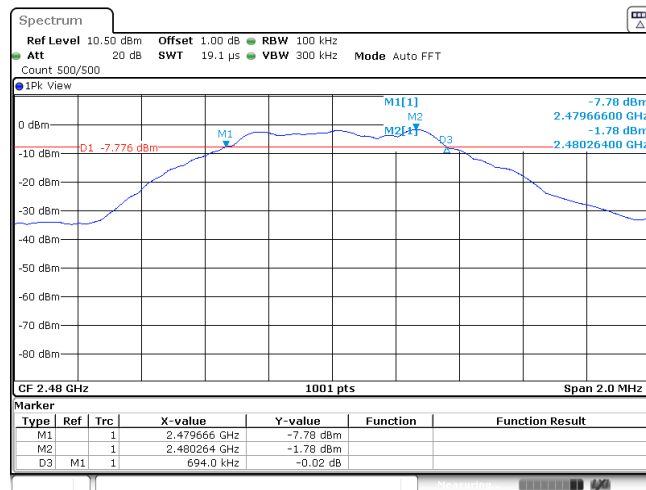
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CH19

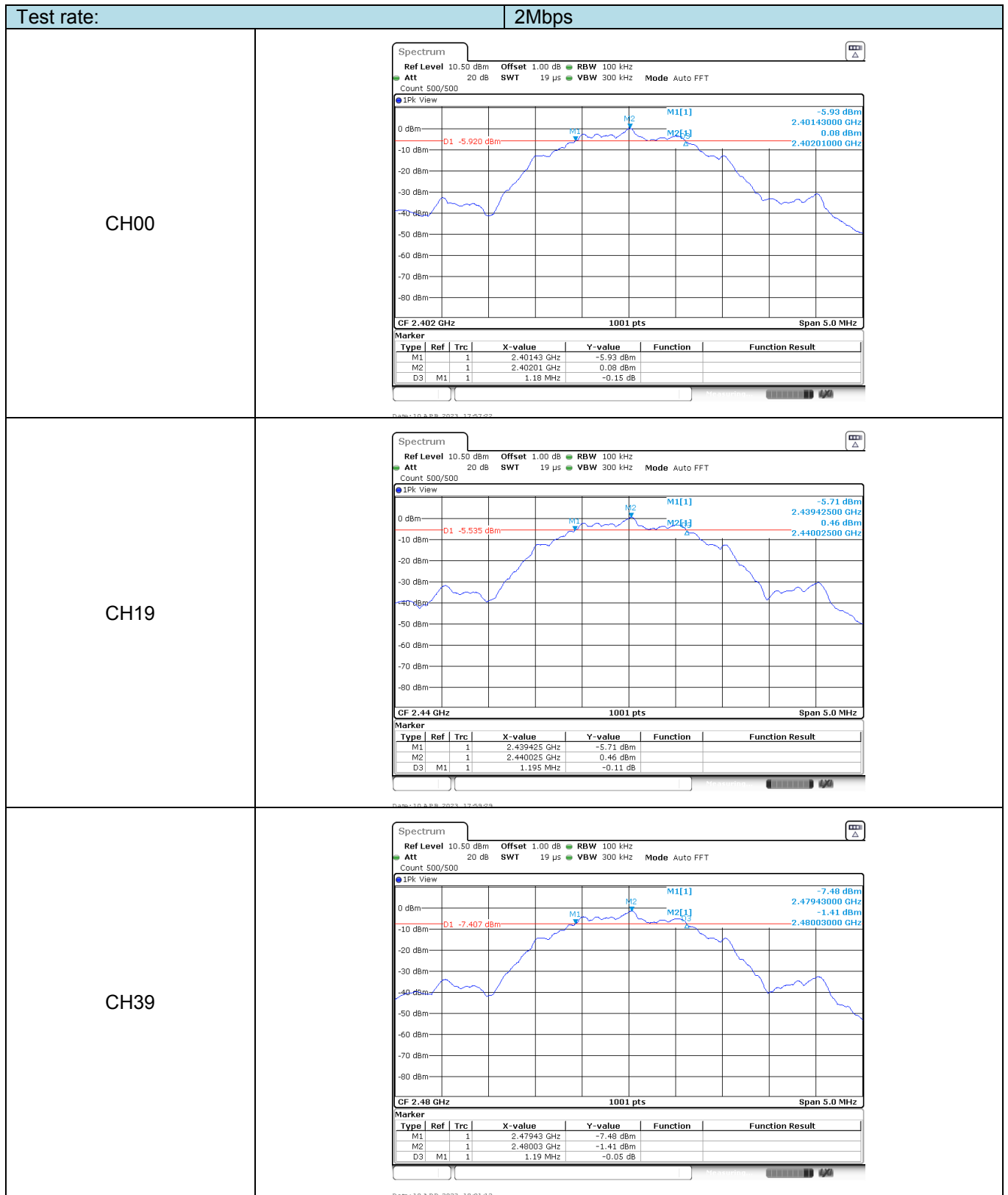


Date: 10 APR 2023 17:50:08

CH39

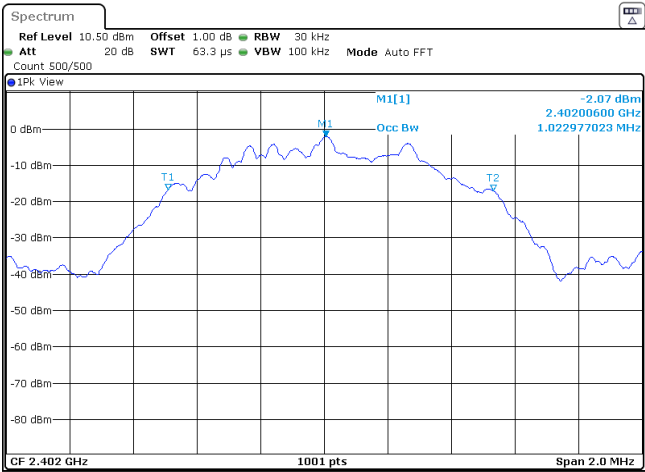
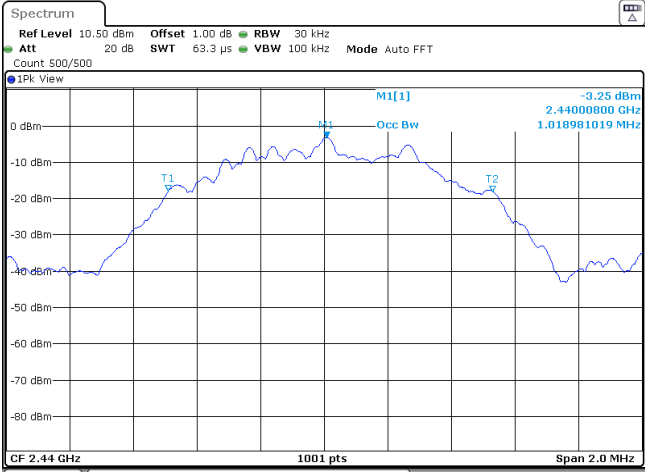
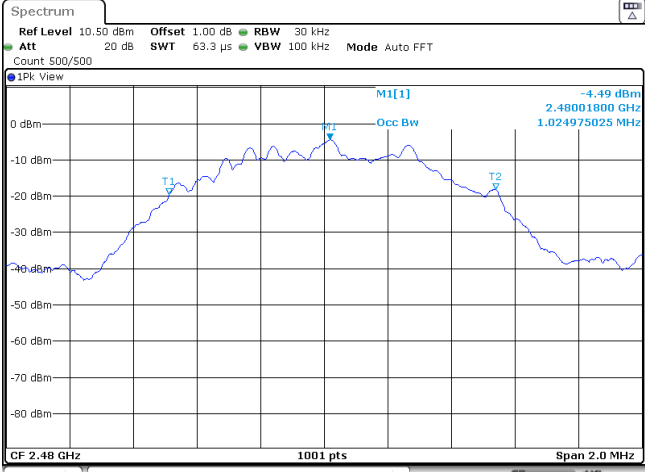


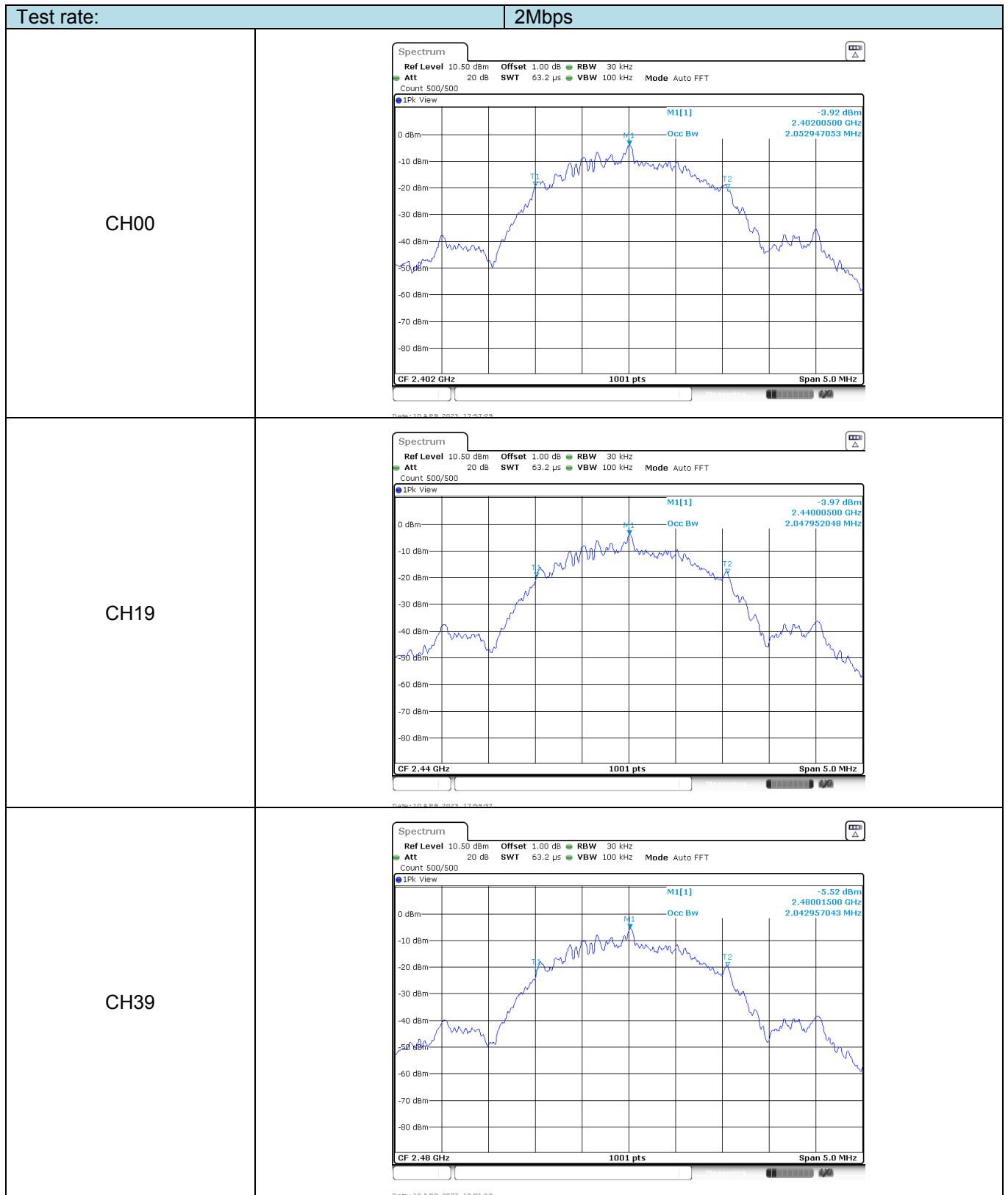
Date: 10 APR 2023 17:52:57



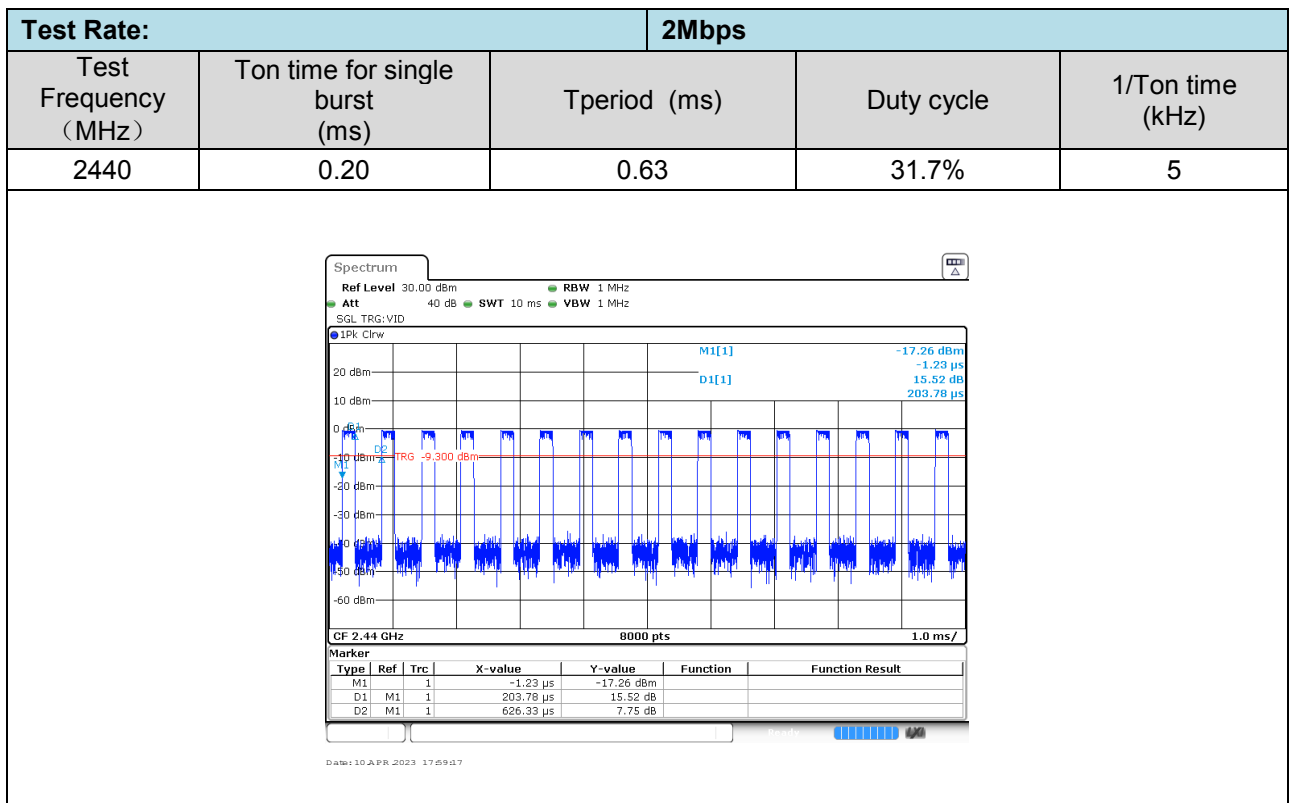
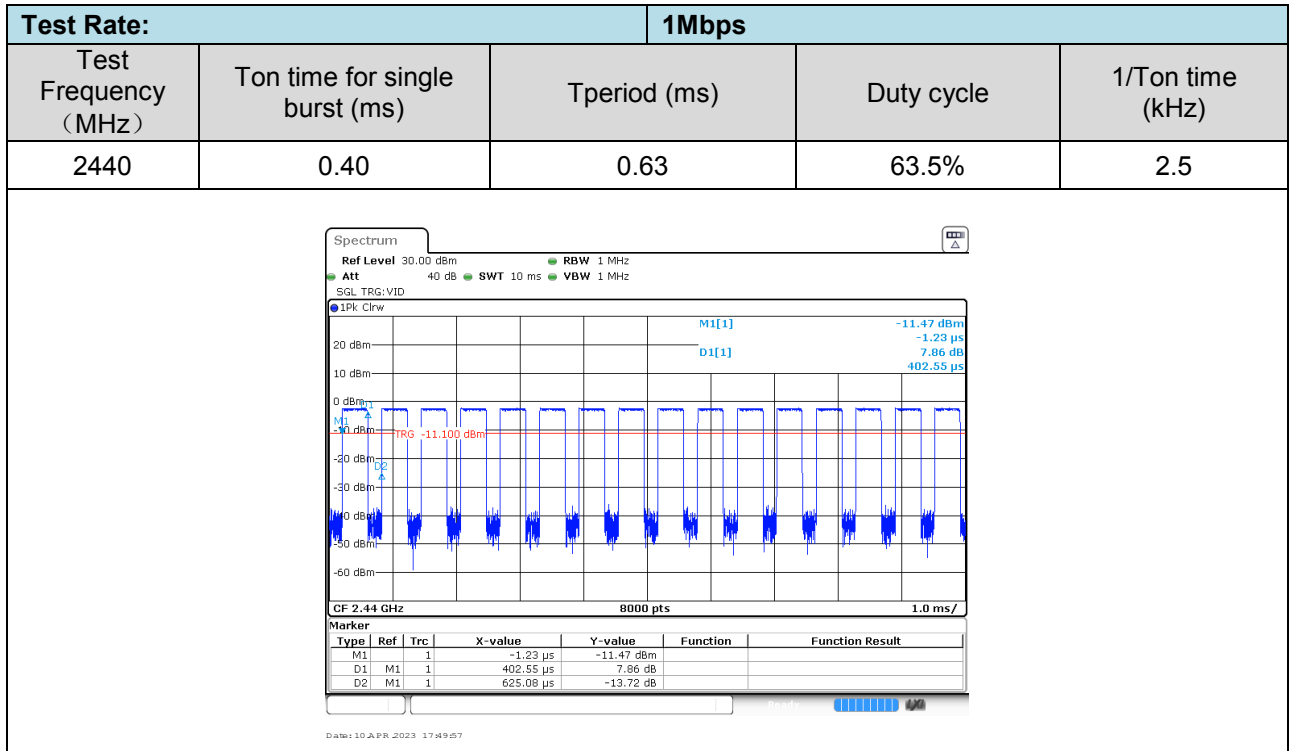
Appendix D: 99% Occupied Bandwidth

Test rate	Channel	99% Occupied Bandwidth(MHz)	Limit (kHz)	Result
1Mbps	00	1.02	-	Pass
	19	1.02		
	39	1.02		
2Mbps	00	2.05	-	Pass
	19	2.05		
	39	2.04		

Test rate:		1Mbps
CH00	 CF 2.402 GHz 1001 pts Span 2.0 MHz	
CH19	 CF 2.44 GHz 1001 pts Span 2.0 MHz	
CH39	 CF 2.48 GHz 1001 pts Span 2.0 MHz	

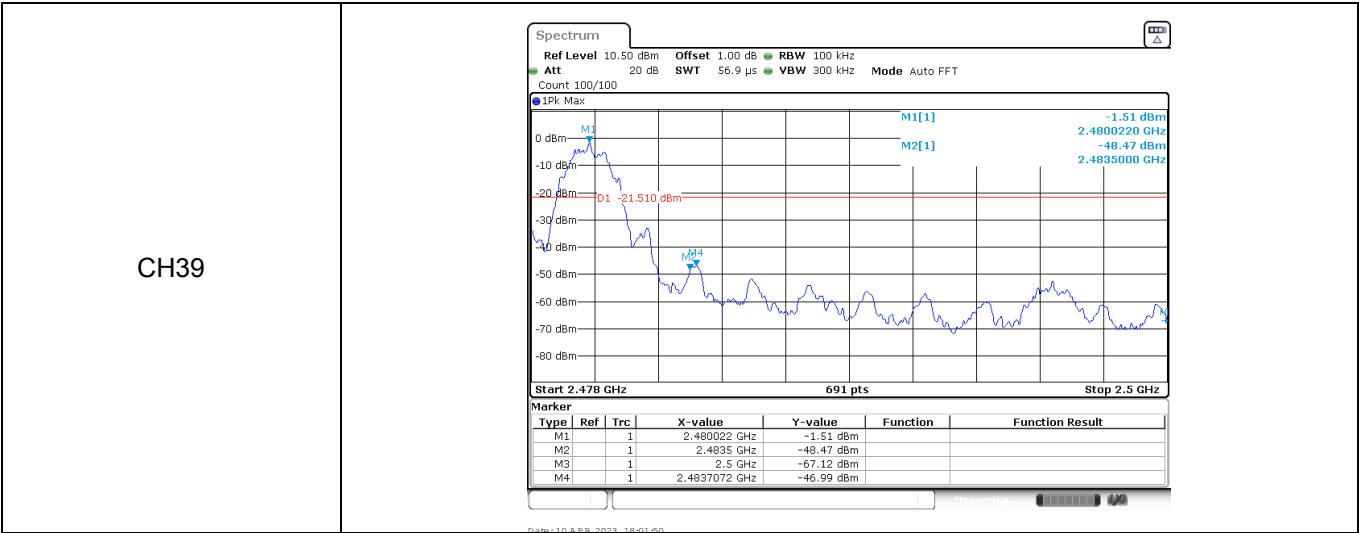


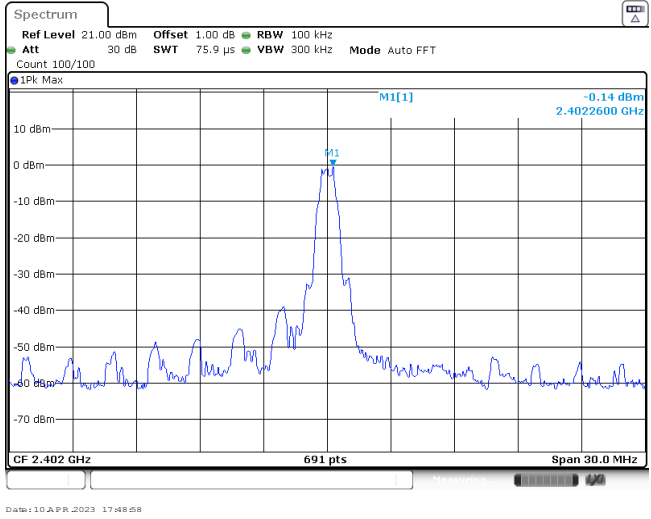
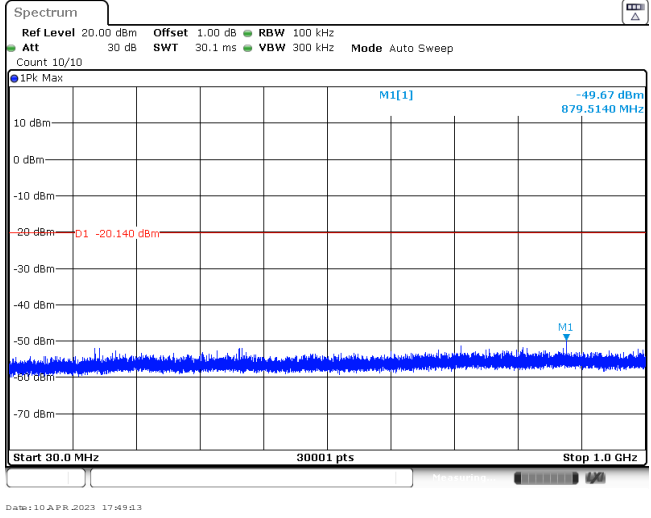
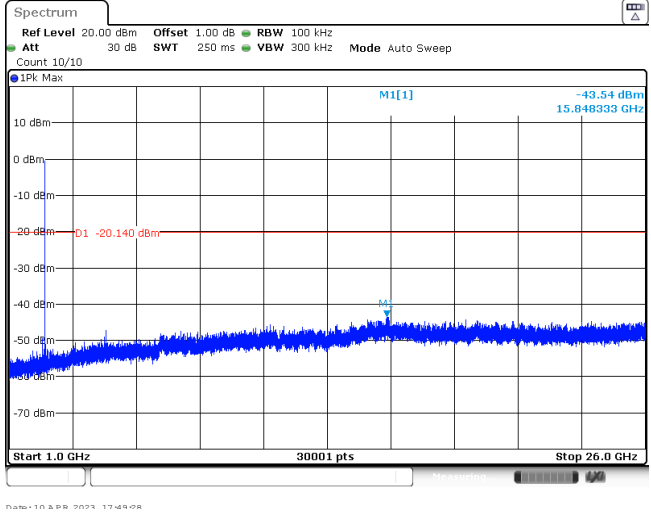
Appendix E: Duty cycle

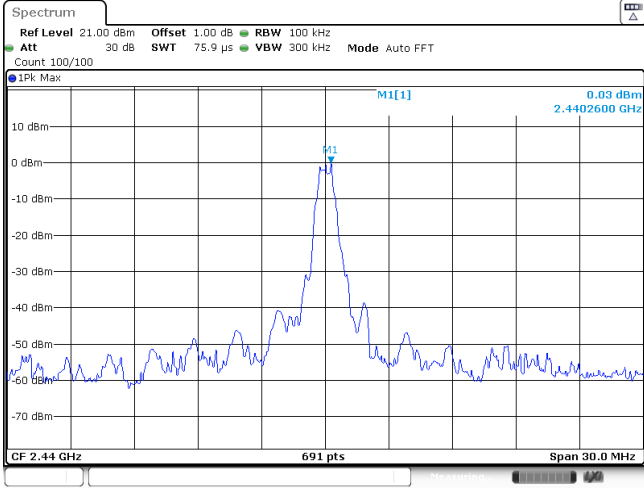
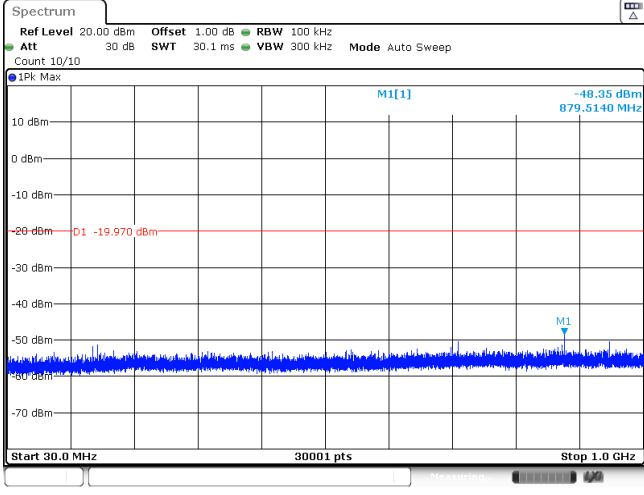
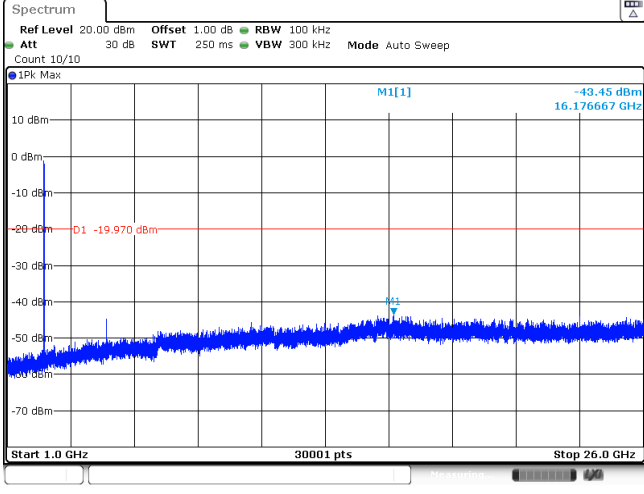


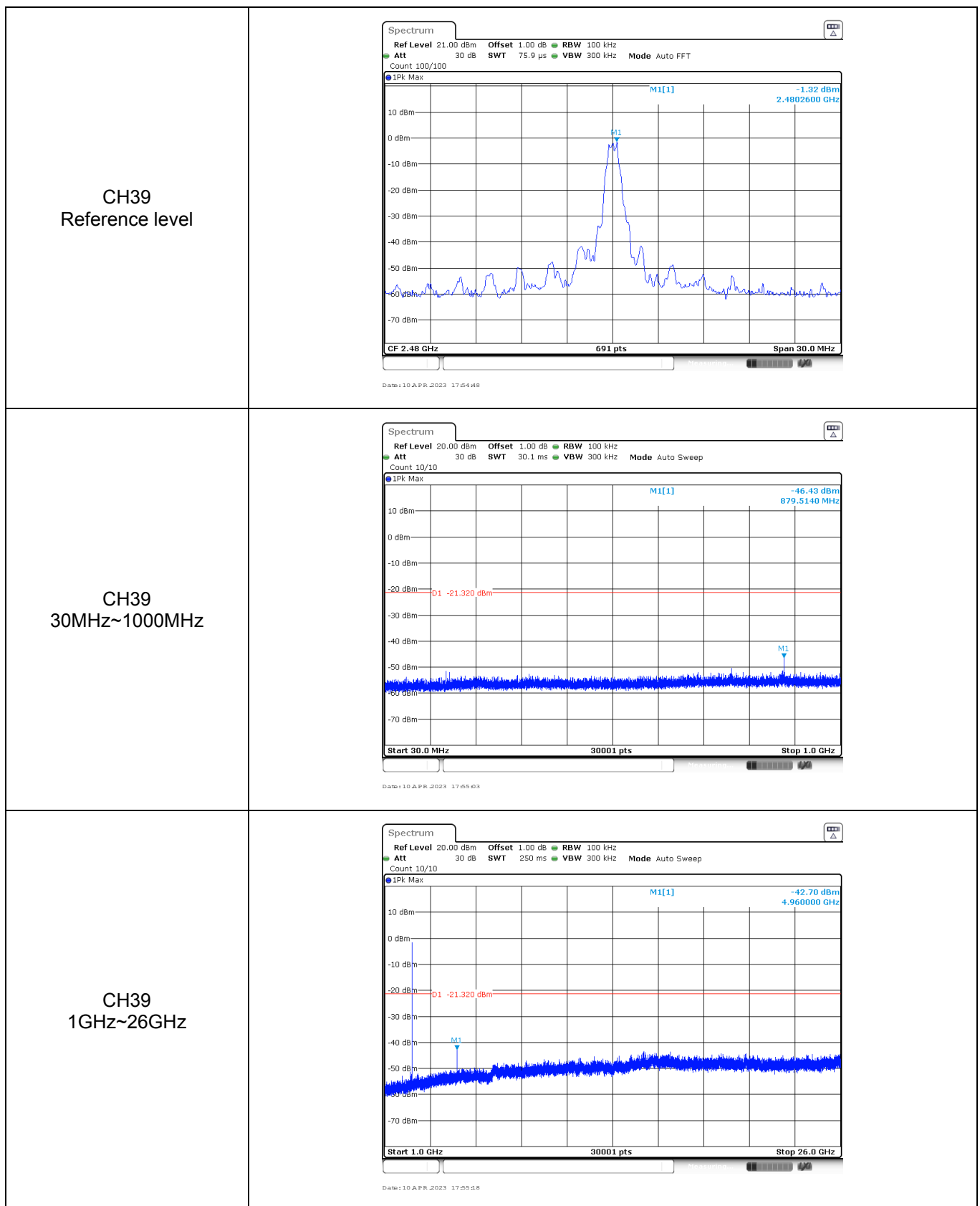
Appendix F: Band edge and Spurious Emissions (conducted)

Test Item:	Band edge	Test Rate:	1Mbps																																										
CH00	Spectrum Ref Level 10.50 dBm Offset 1.00 dB RBW 100 kHz Att 20 dB SWT 1.1 ms VBW 300 kHz Mode Auto Sweep Count 300/300 1Pk Max 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm -80 dBm M1[1] M2[1] D1 -20.390 dBm M3 M4 -0.39 dBm 2.402320 GHz -39.07 dBm 2.400000 GHz Start 2.31 GHz 691 pts Stop 2.405 GHz Marker <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>2.40232 GHz</td><td>-0.39 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>2.4 GHz</td><td>-39.07 dBm</td><td></td><td></td></tr><tr><td>M3</td><td>1</td><td></td><td>2.39 GHz</td><td>-53.10 dBm</td><td></td><td></td></tr><tr><td>M4</td><td>1</td><td></td><td>2.31 GHz</td><td>-65.14 dBm</td><td></td><td></td></tr><tr><td>M5</td><td>1</td><td></td><td>2.399906 GHz</td><td>-39.69 dBm</td><td></td><td></td></tr></table>			Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1		2.40232 GHz	-0.39 dBm			M2	1		2.4 GHz	-39.07 dBm			M3	1		2.39 GHz	-53.10 dBm			M4	1		2.31 GHz	-65.14 dBm			M5	1		2.399906 GHz	-39.69 dBm		
Type	Ref	Trc	X-value	Y-value	Function	Function Result																																							
M1	1		2.40232 GHz	-0.39 dBm																																									
M2	1		2.4 GHz	-39.07 dBm																																									
M3	1		2.39 GHz	-53.10 dBm																																									
M4	1		2.31 GHz	-65.14 dBm																																									
M5	1		2.399906 GHz	-39.69 dBm																																									
CH39	Spectrum Ref Level 10.50 dBm Offset 1.00 dB RBW 100 kHz Att 20 dB SWT 56.9 μs VBW 300 kHz Mode Auto FFT Count 100/100 1Pk Max 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm -80 dBm M1 M2[1] D1 -21.100 dBm M3 M4 -1.10 dBm 2.4802450 GHz -54.22 dBm 2.4835000 GHz Start 2.478 GHz 691 pts Stop 2.5 GHz Marker <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>2.480245 GHz</td><td>-1.10 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>2.4835 GHz</td><td>-54.22 dBm</td><td></td><td></td></tr><tr><td>M3</td><td>1</td><td></td><td>2.5 GHz</td><td>-63.40 dBm</td><td></td><td></td></tr><tr><td>M4</td><td>1</td><td></td><td>2.4838986 GHz</td><td>-47.84 dBm</td><td></td><td></td></tr></table>			Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1		2.480245 GHz	-1.10 dBm			M2	1		2.4835 GHz	-54.22 dBm			M3	1		2.5 GHz	-63.40 dBm			M4	1		2.4838986 GHz	-47.84 dBm									
Type	Ref	Trc	X-value	Y-value	Function	Function Result																																							
M1	1		2.480245 GHz	-1.10 dBm																																									
M2	1		2.4835 GHz	-54.22 dBm																																									
M3	1		2.5 GHz	-63.40 dBm																																									
M4	1		2.4838986 GHz	-47.84 dBm																																									
Test Item:	Band edge	Test Rate:	2Mbps																																										
CH00	Spectrum Ref Level 10.50 dBm Offset 1.00 dB RBW 100 kHz Att 20 dB SWT 1.1 ms VBW 300 kHz Mode Auto Sweep Count 300/300 1Pk Max 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm -80 dBm M1[1] M2[1] D1 -20.500 dBm M3 M4 -0.50 dBm 2.402040 GHz -34.22 dBm 2.400000 GHz Start 2.31 GHz 691 pts Stop 2.405 GHz Marker <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>2.40204 GHz</td><td>-0.50 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>2.4 GHz</td><td>-34.22 dBm</td><td></td><td></td></tr><tr><td>M3</td><td>1</td><td></td><td>2.39 GHz</td><td>-60.91 dBm</td><td></td><td></td></tr><tr><td>M4</td><td>1</td><td></td><td>2.31 GHz</td><td>-64.76 dBm</td><td></td><td></td></tr><tr><td>M5</td><td>1</td><td></td><td>2.39963 GHz</td><td>-38.43 dBm</td><td></td><td></td></tr></table>			Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1		2.40204 GHz	-0.50 dBm			M2	1		2.4 GHz	-34.22 dBm			M3	1		2.39 GHz	-60.91 dBm			M4	1		2.31 GHz	-64.76 dBm			M5	1		2.39963 GHz	-38.43 dBm		
Type	Ref	Trc	X-value	Y-value	Function	Function Result																																							
M1	1		2.40204 GHz	-0.50 dBm																																									
M2	1		2.4 GHz	-34.22 dBm																																									
M3	1		2.39 GHz	-60.91 dBm																																									
M4	1		2.31 GHz	-64.76 dBm																																									
M5	1		2.39963 GHz	-38.43 dBm																																									



Test Item:	SE	Test Rate:	1Mbps
CH00 Reference level			
CH00 30MHz~1000MHz			
CH00 1GHz~26GHz			

CH19 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 IPk Max M1[1] 0.03 dBm 2.4402600 GHz CF 2.44 GHz 691 pts Span 30.0 MHz Date: 10 APR 2023 17:52:50
CH19 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 IPk Max M1[1] -48.35 dBm 879.5140 MHz D1 -19.970 dBm Start 30.0 MHz 30001 pts Stop 1.0 GHz Date: 10 APR 2023 17:52:55
CH19 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 IPk Max M1[1] -43.45 dBm 16.176667 GHz D1 -19.970 dBm Start 1.0 GHz 30001 pts Stop 26.0 GHz Date: 10 APR 2023 17:52:50

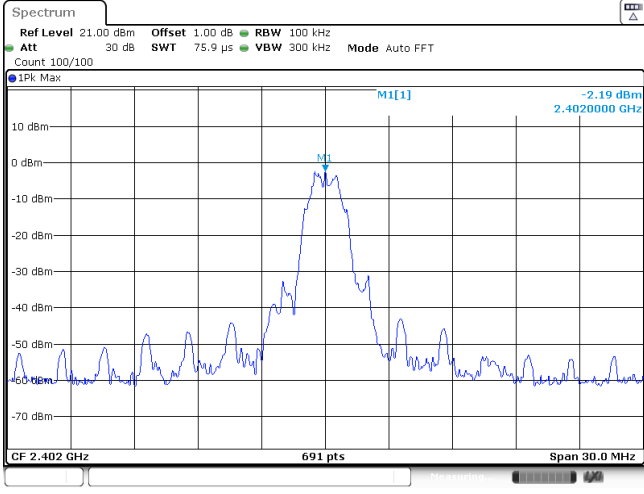
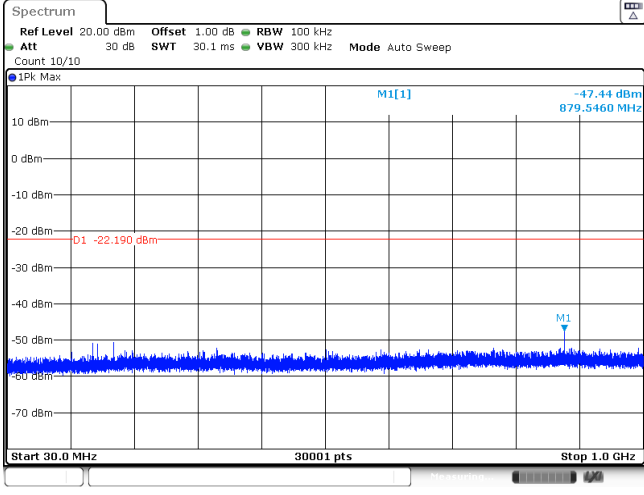
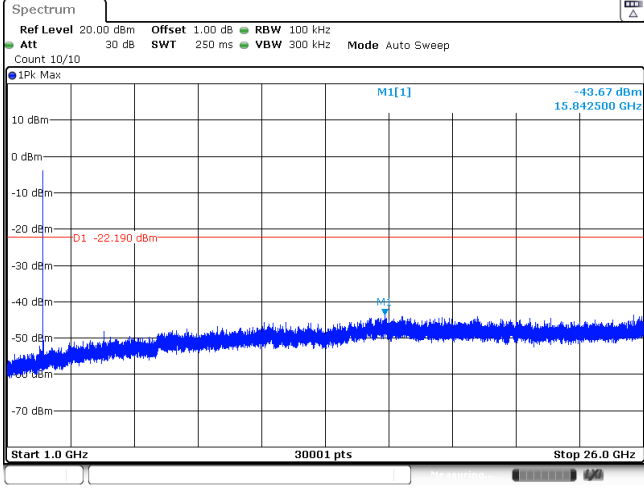


Test Item:

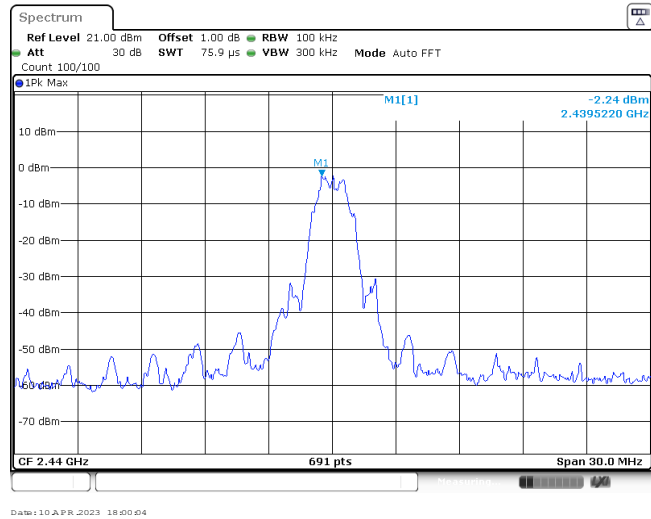
SE

Test Rate:

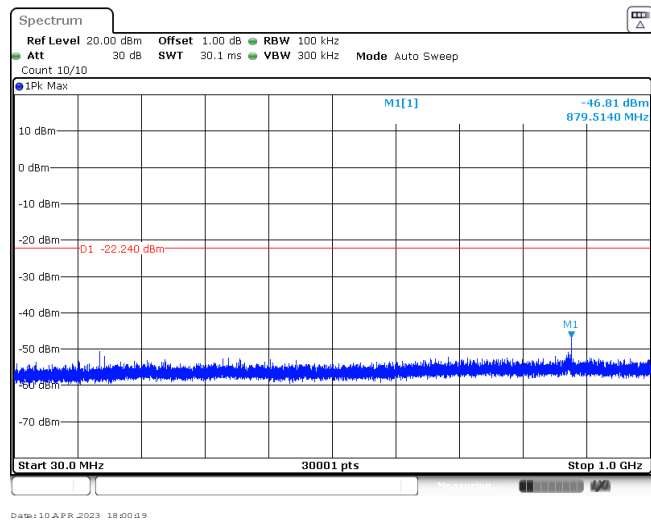
2Mbps

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 IPk Max M1[1] -2.19 dBm 2.402000 GHz CF 2.402 GHz 691 pts Span 30.0 MHz Date: 10 APR 2023 17:58:56
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 IPk Max M1[1] -47.44 dBm 879.5460 MHz D1 -22.190 dBm Start 30.0 MHz 30001 pts Stop 1.0 GHz Date: 10 APR 2023 17:58:21
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 IPk Max M1[1] -43.67 dBm 15.842500 GHz D1 -22.190 dBm Start 1.0 GHz 30001 pts Stop 26.0 GHz Date: 10 APR 2023 17:58:26

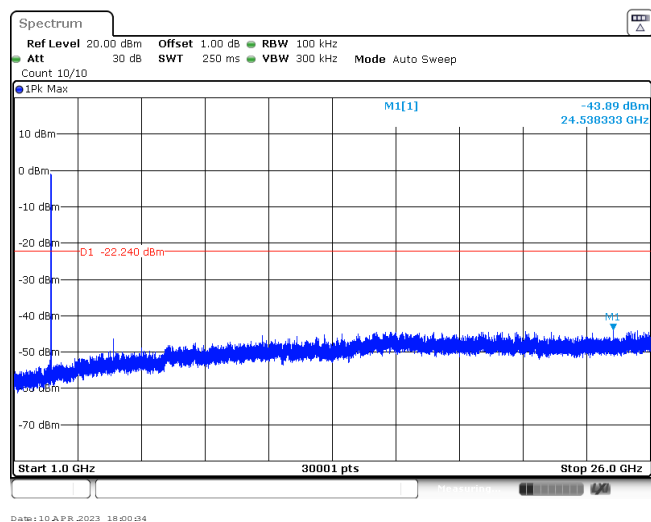
CH19
Reference level



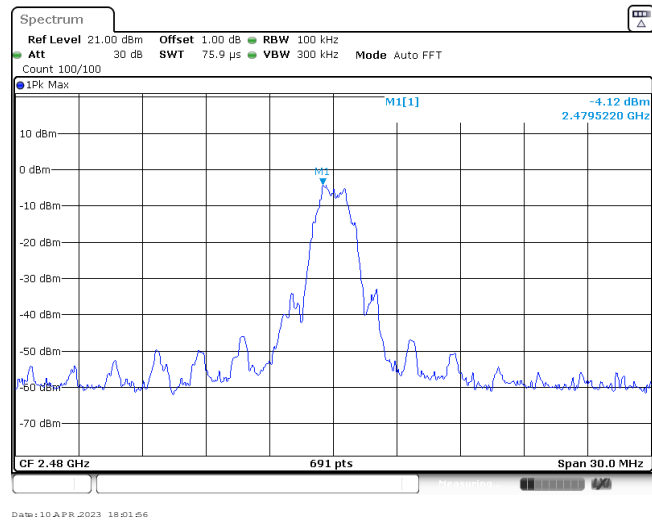
CH19
30MHz~1000MHz



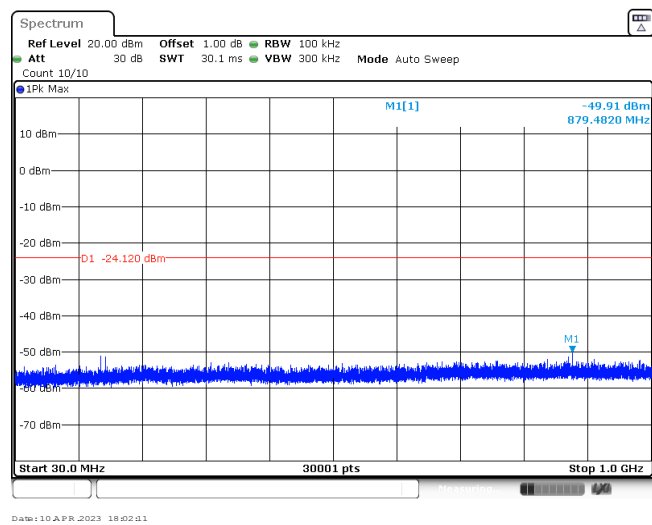
CH19
1GHz~26GHz



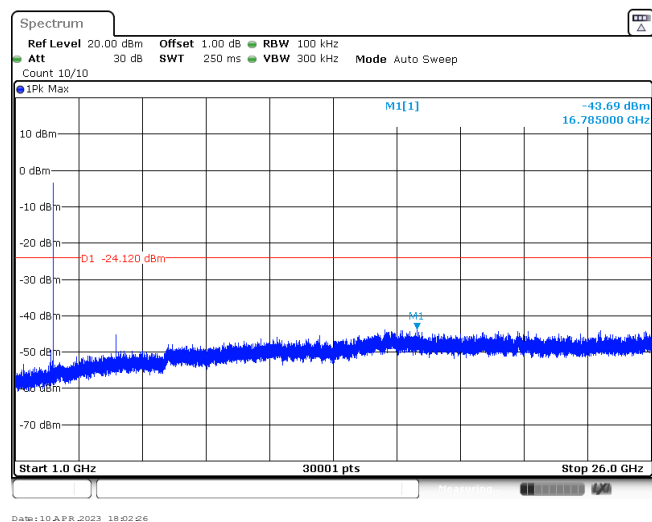
CH39
Reference level



CH39
30MHz~1000MHz



CH39
1GHz~26GHz



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