

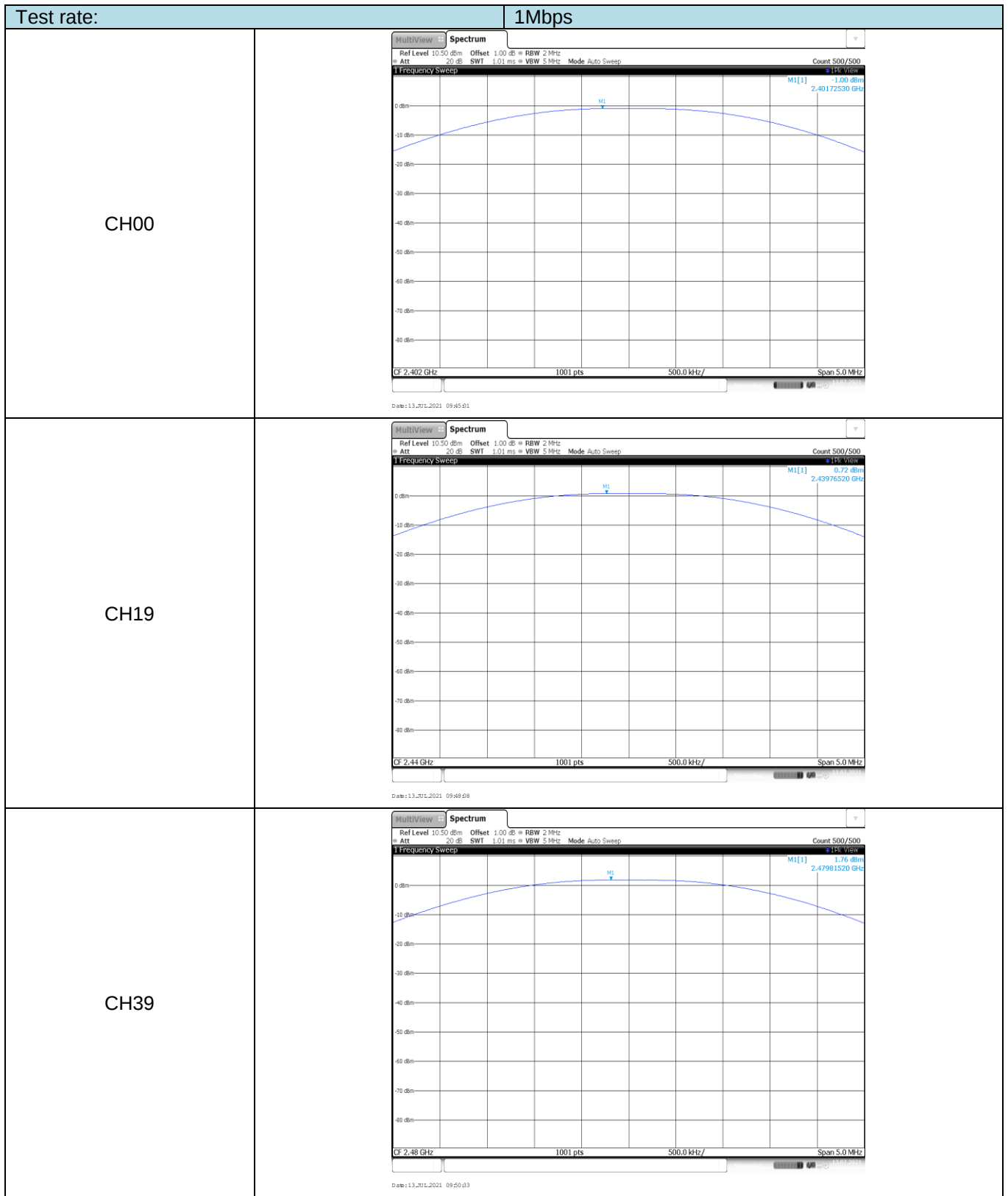
APPENDIX REPORT

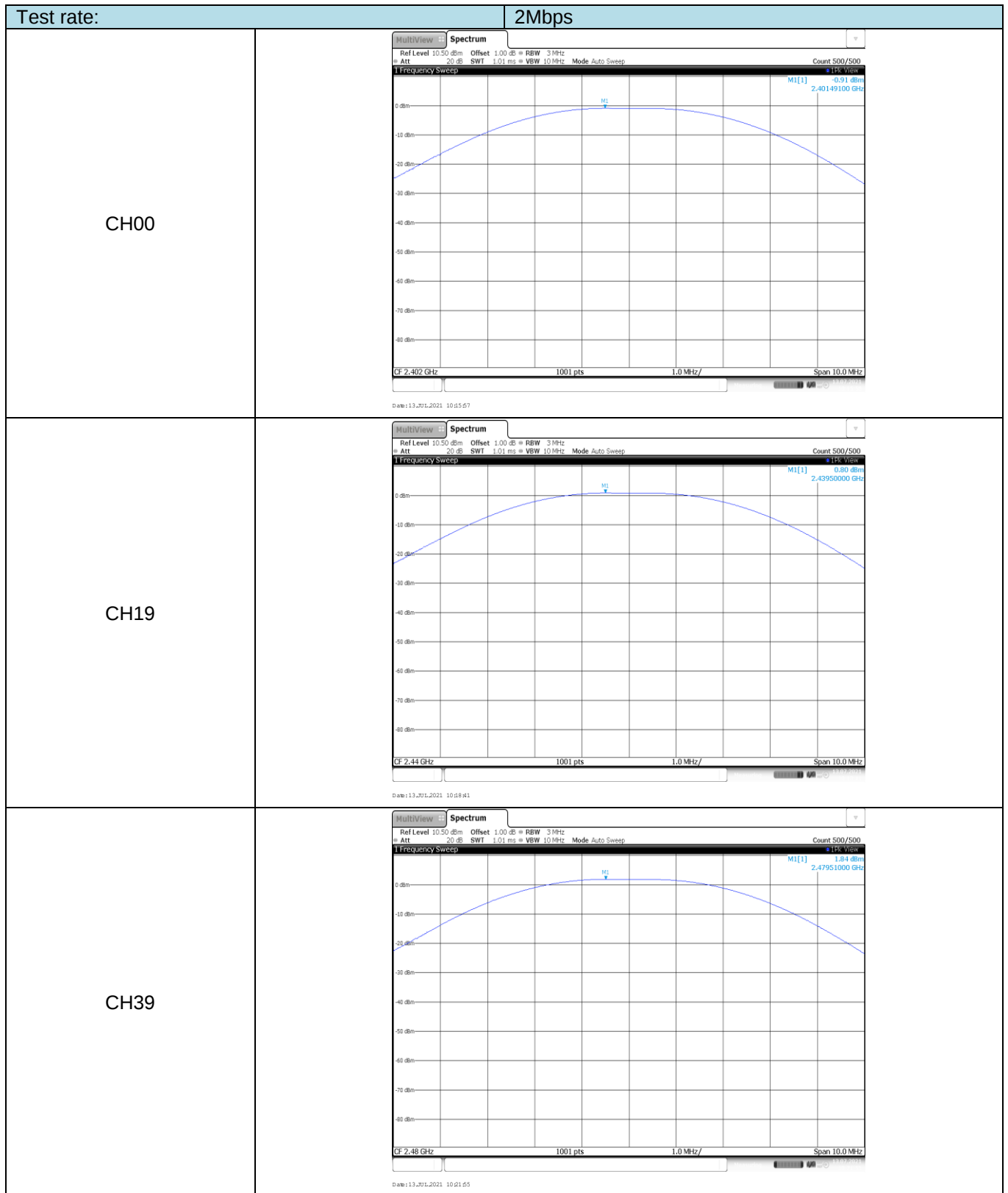
Project No.	SHT2105113201EW	Radio Specification	Bluetooth BLE
Test sample No.	YPHT21051132002	Model No.	SC400
Start test date	2021-07-13	Finish date	2021-07-13
Temperature	25.6°C	Humidity	33%
Test Engineer	Hailey Chen	Auditor	Xiaodong Zhao

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

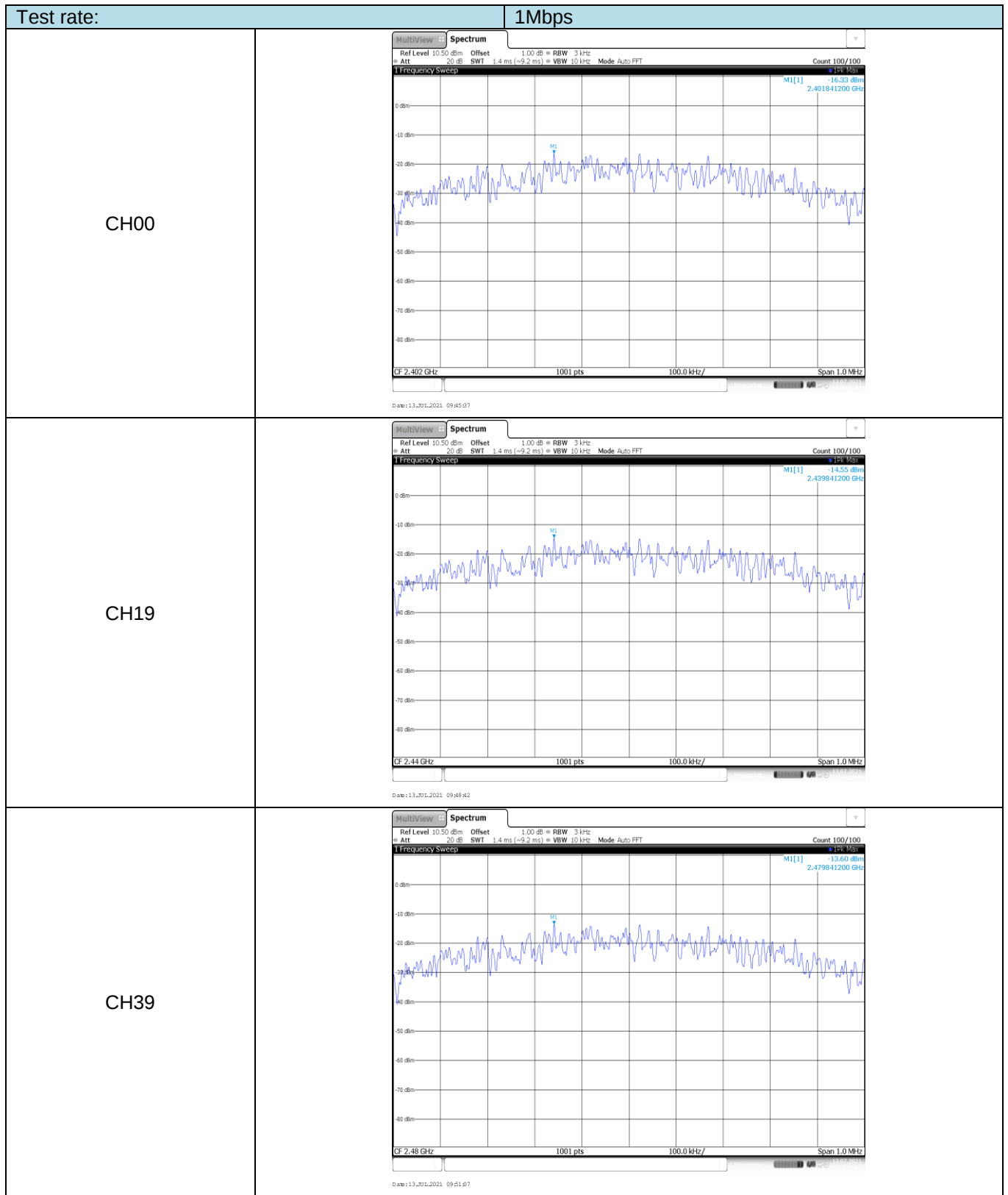
Test rate	Channel	Output power (dBm)	Average Output power (dBm)	Limit (dBm)	Result
1Mbps	00	-1.00	-1.05	≤ 30.00	Pass
	19	0.72	0.67		
	39	1.76	1.73		
2Mbps	00	-0.91	-1.00	≤ 30.00	Pass
	19	0.80	0.72		
	39	1.84	1.72		

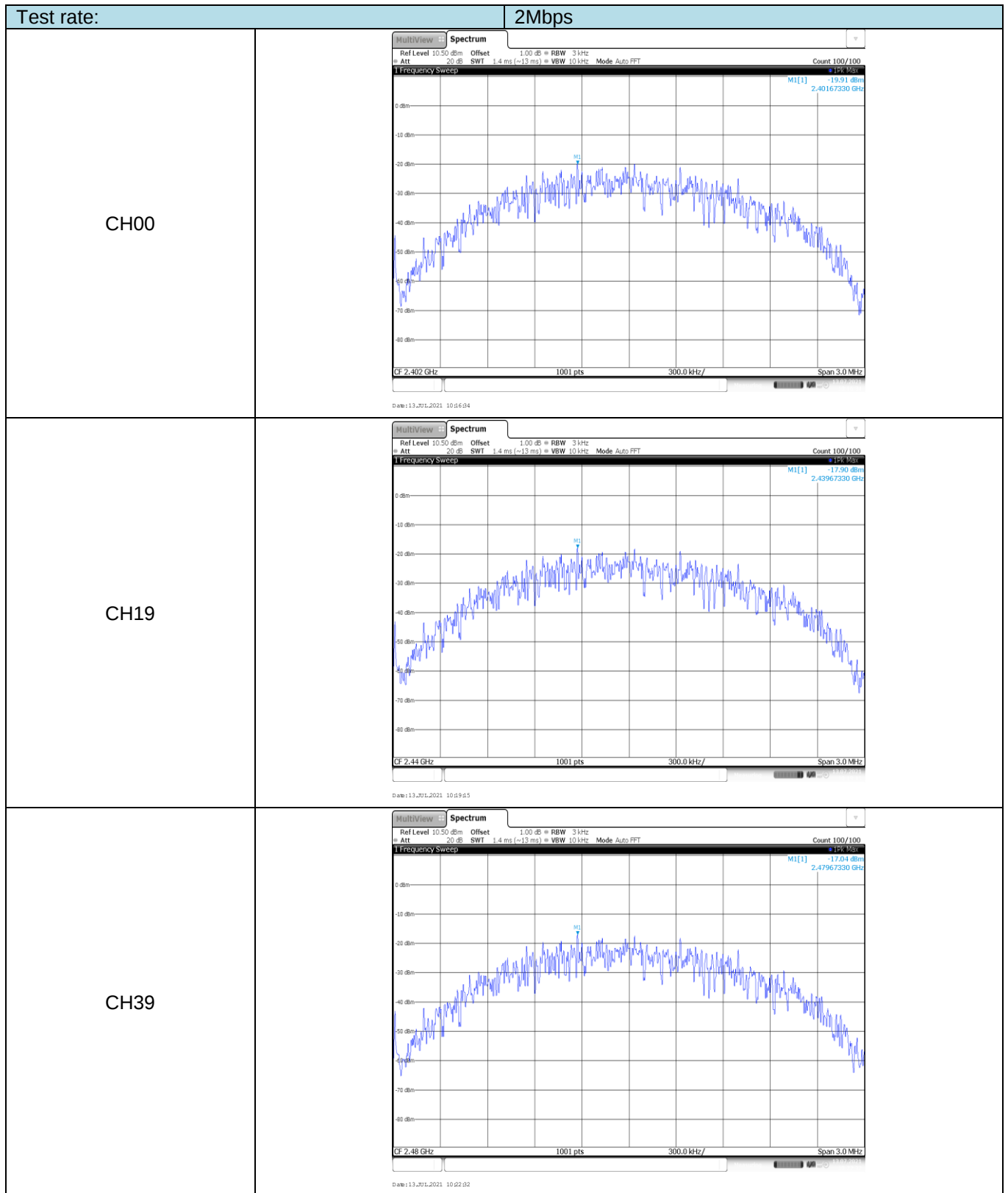




Appendix B: Power Spectral Density

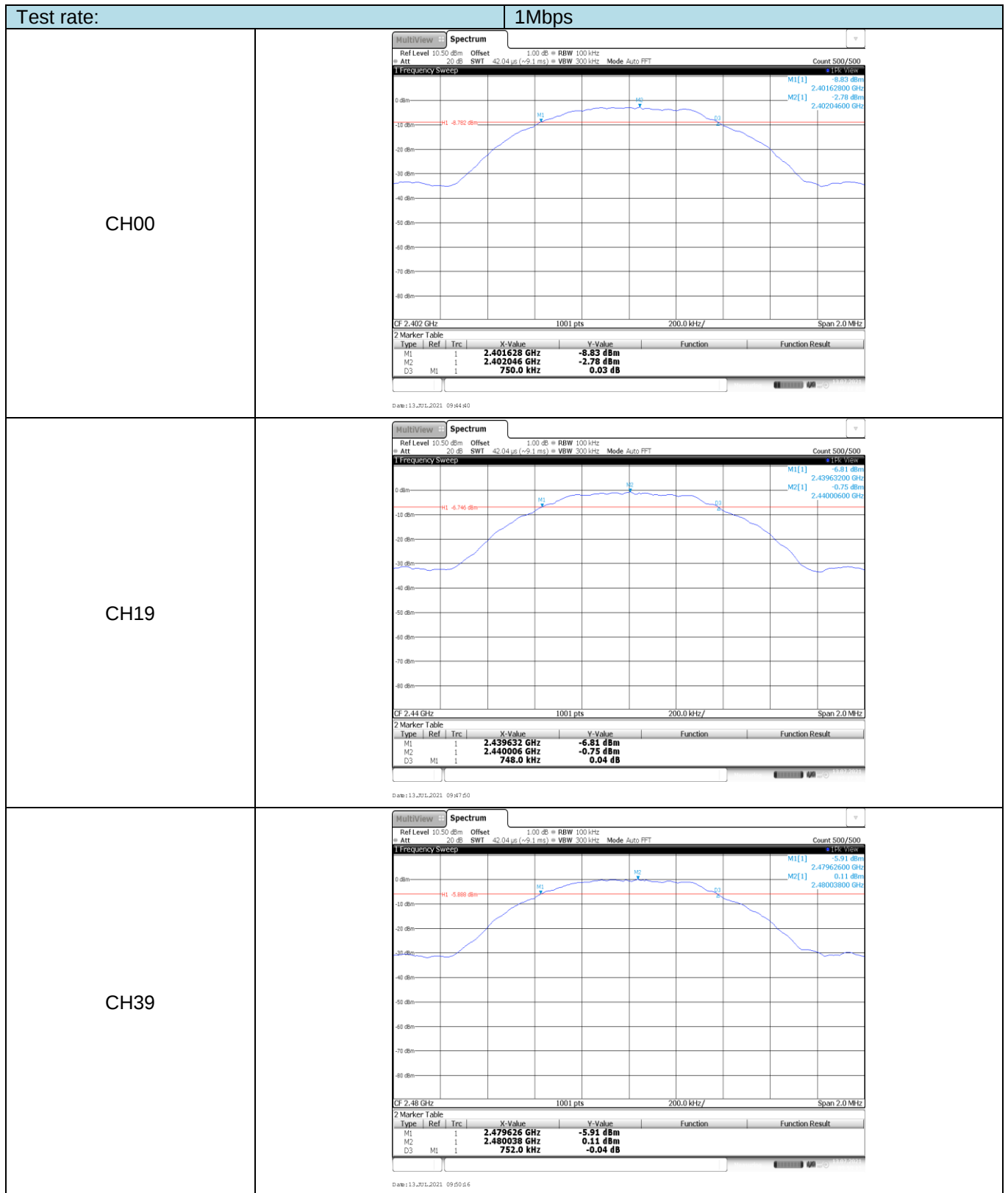
Test rate	Channel	Power Spectral Density(dBm/3KHz)	Limit (dBm/3KHz)	Result
1Mbps	00	-16.33	≤8.00	Pass
	19	-14.55		
	39	-13.60		
2Mbps	00	-19.90	≤8.00	Pass
	19	-17.90		
	39	-17.04		

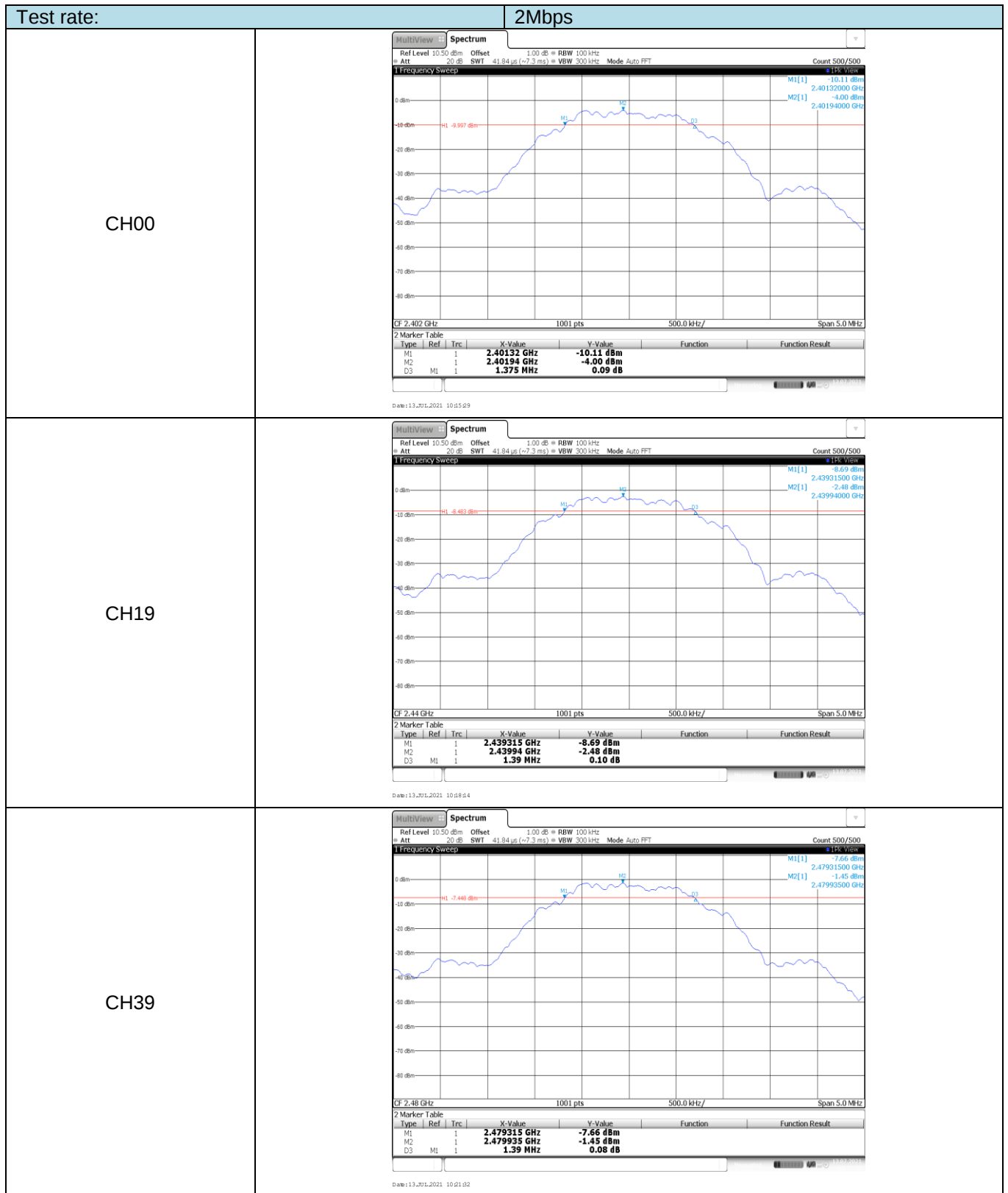




Appendix C: 6dB bandwidth

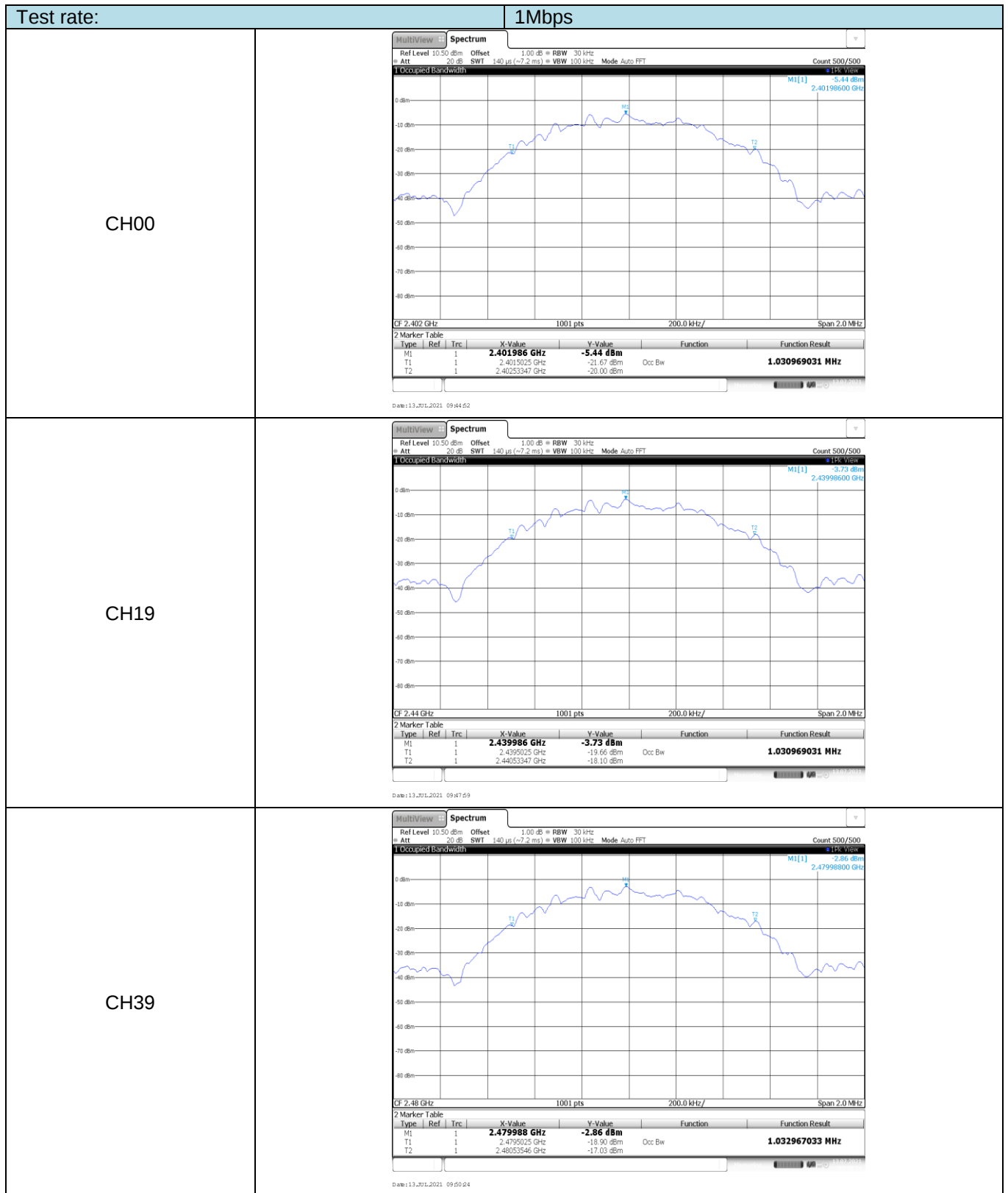
Type	Channel	6dB Bandwidth(kHz)	Limit (kHz)	Result
1Mbps	00	750.00	≥500	Pass
	19	748.00		
	39	752.00		
2Mbps	00	1375.00	≥500	Pass
	19	1390.00		
	39	1390.00		

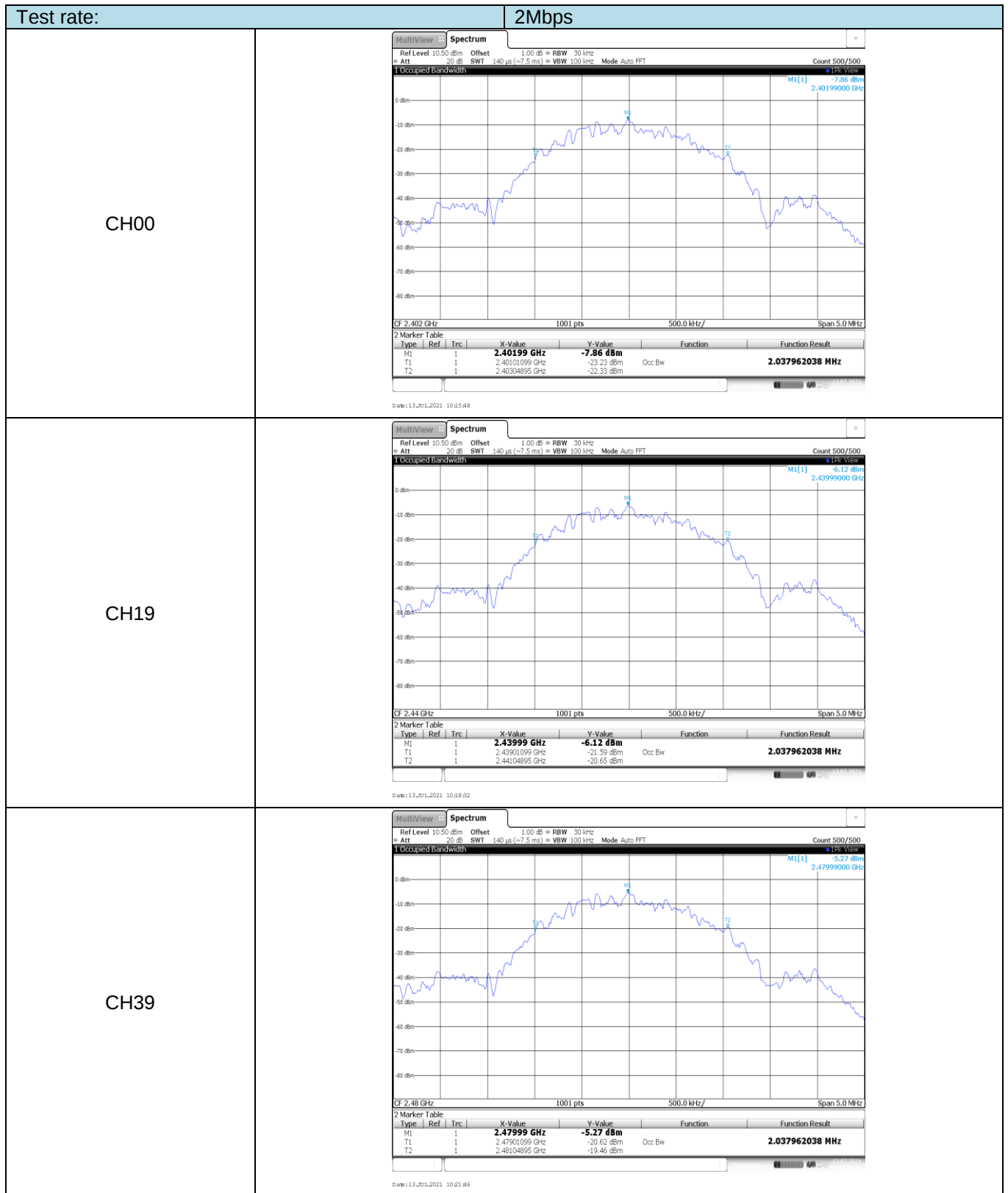




Appendix D: 99% Occupied Bandwidth

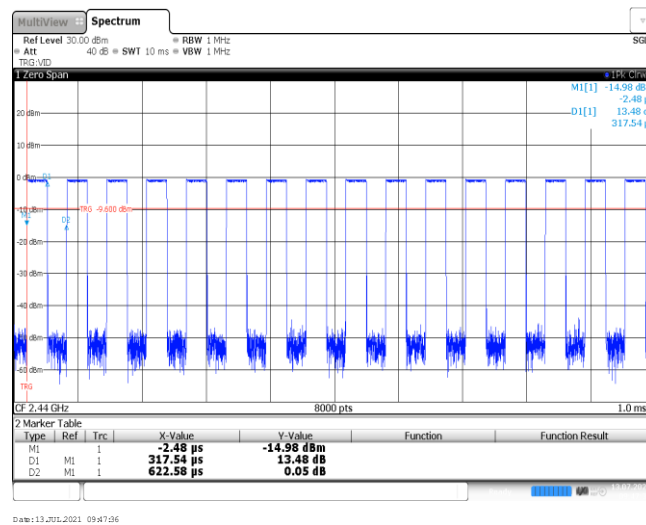
Test rate	Channel	99% Occupied Bandwidth(MHz)	Limit (kHz)	Result
1Mbps	00	1.03	-	Pass
	19	1.03		
	39	1.03		
2Mbps	00	2.04	-	Pass
	19	2.04		
	39	2.04		

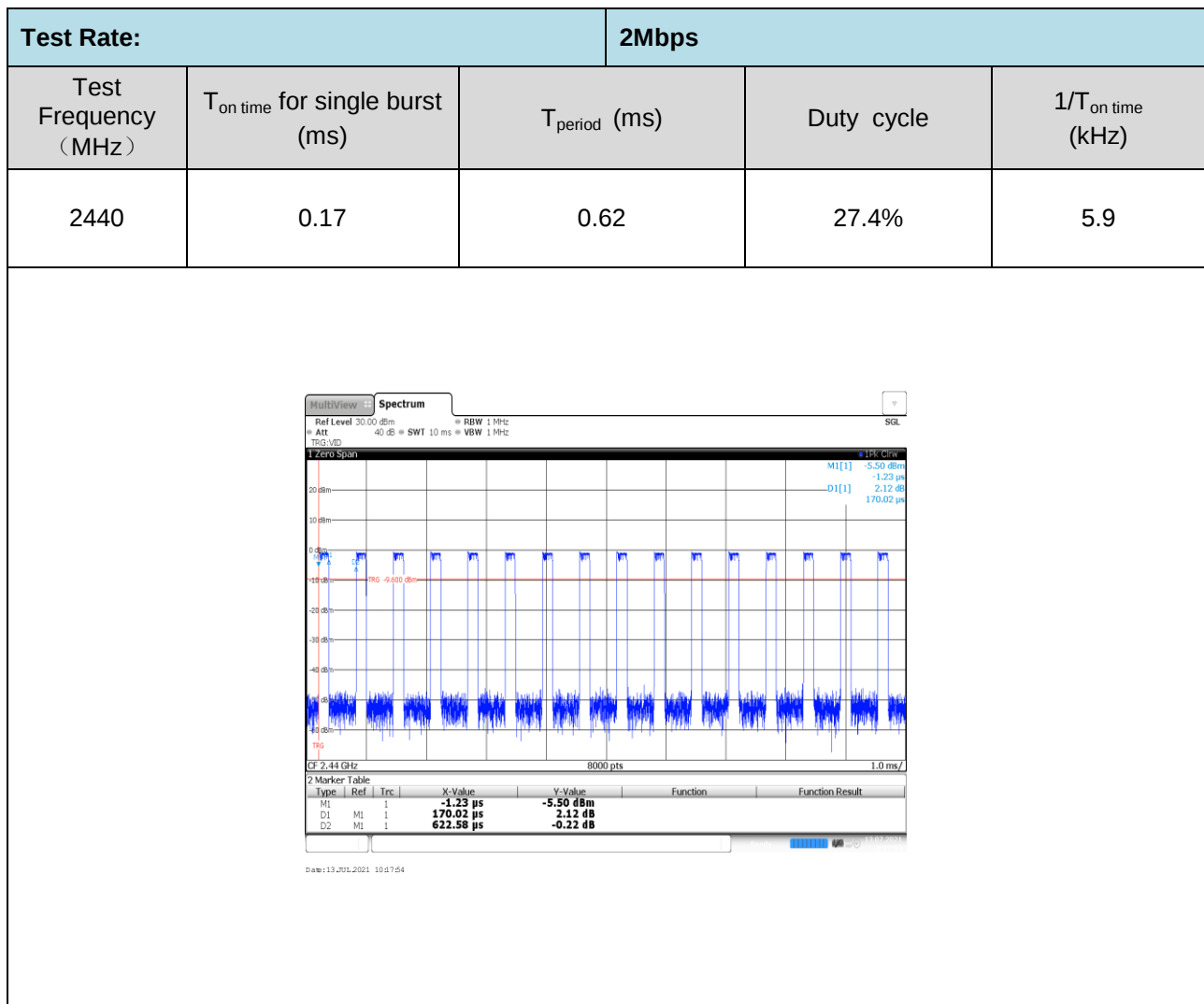




Appendix E: Duty cycle

Test Rate:			1Mbps	
Test Frequency (MHz)	T _{on time} for single burst (ms)	T _{period} (ms)	Duty cycle	1/T _{on time} (kHz)
2440	0.32	0.62	51.6%	3.1

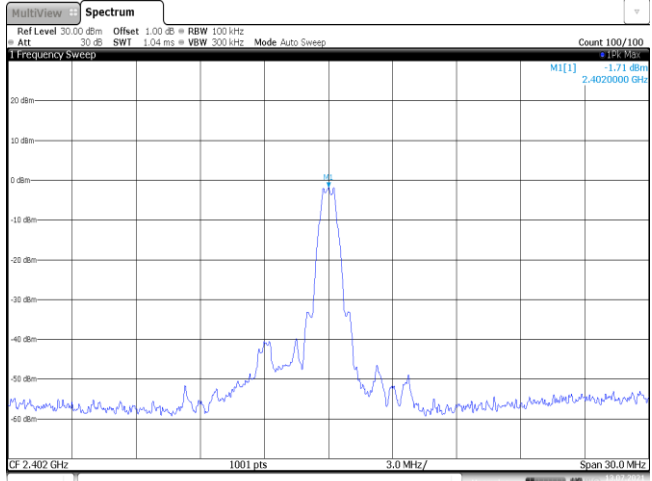
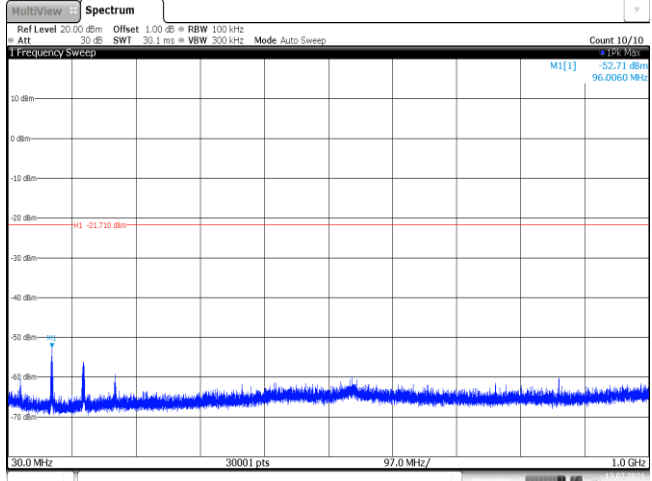
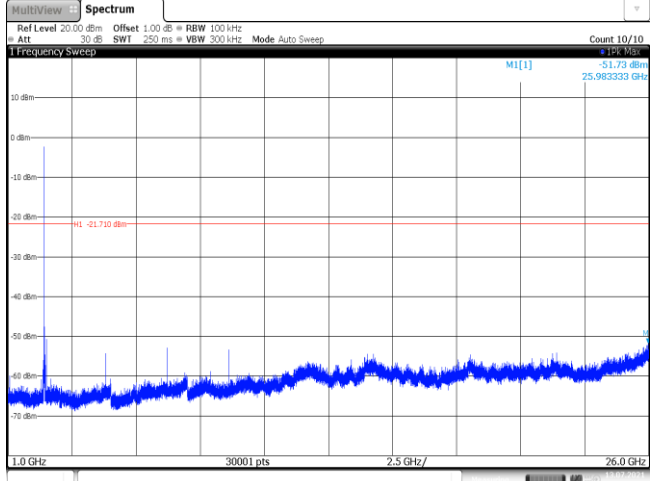


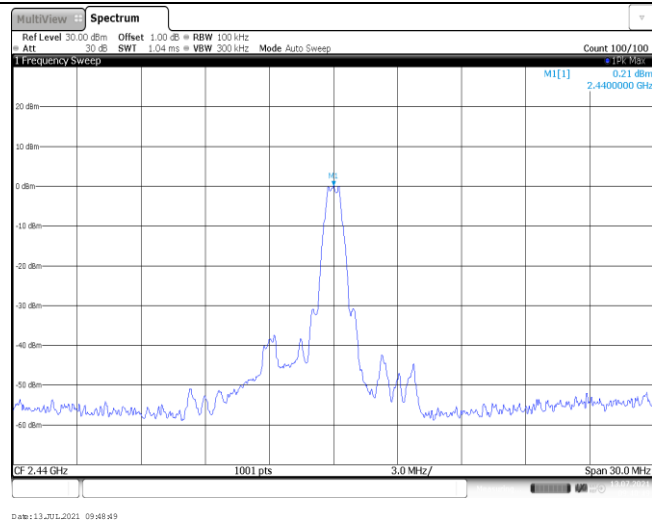
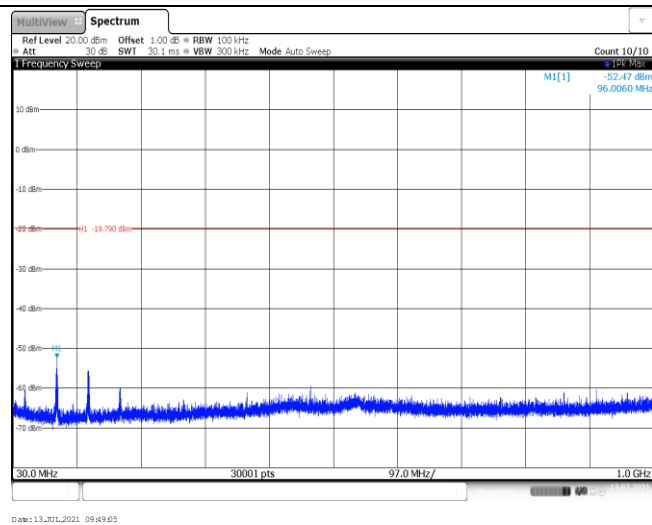
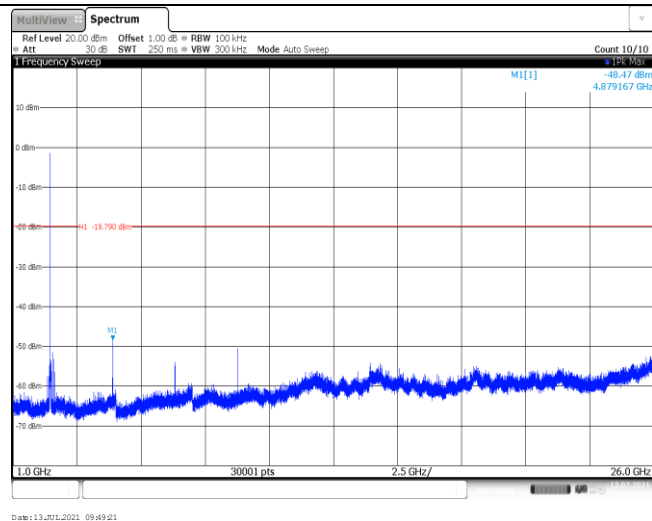


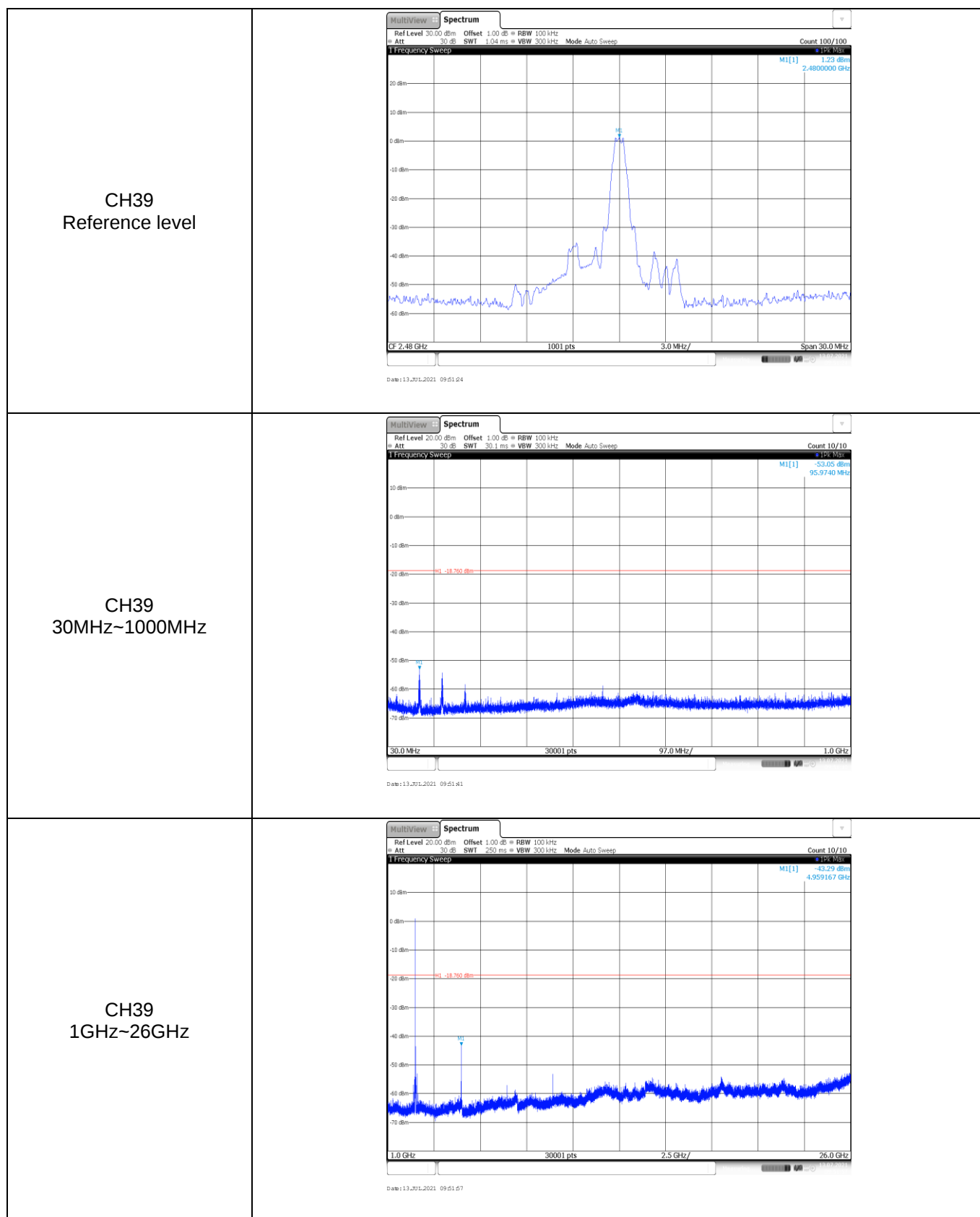
Appendix F: Band edge and Spurious Emissions (conducted)

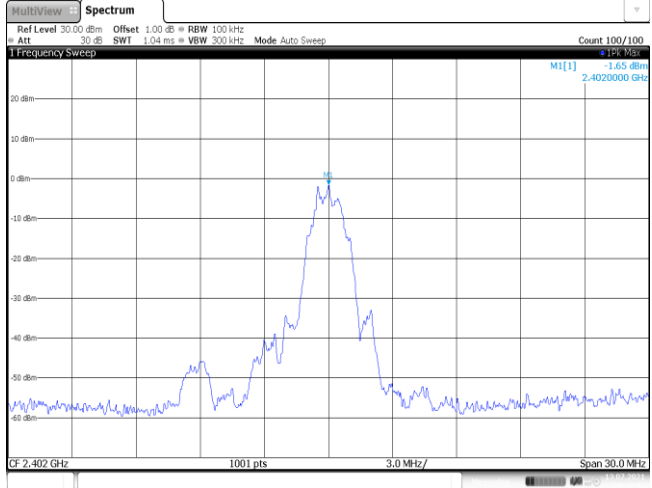
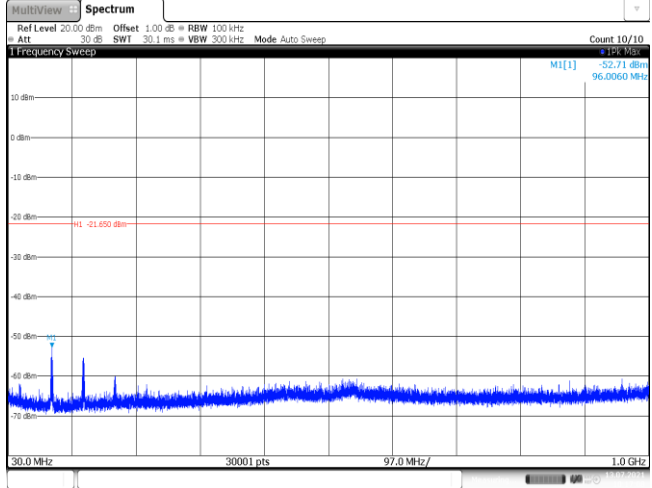
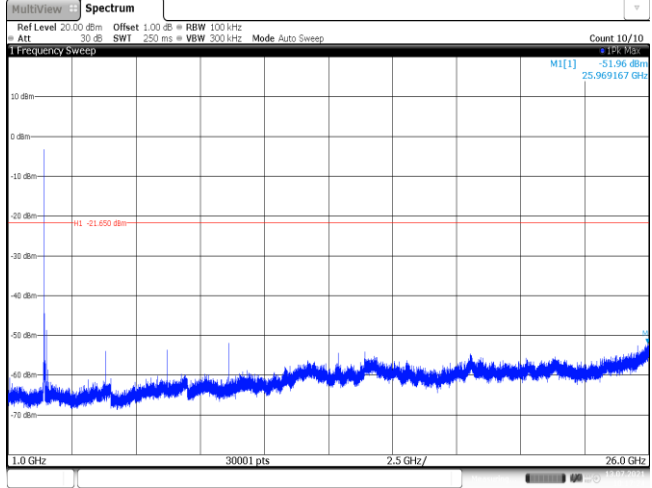
Test Item:	Band edge	Test Rate:	1Mbps																																										
CH00	MultiView Spectrum Ref Level 10.50 dBm Offset 1.00 dB RBW 100 kHz Att 20 dB SWT 1.05 ms VBW 300 kHz Mode Auto Sweep Count 300/300 Frequency Sweep 150 MHz M1[1] -1.69 dBm 2.4020100 GHz M2[1] -46.72 dBm 2.4000000 GHz 0 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 2 Marker Table <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>2.40201 GHz</td><td>-1.69 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>2.4 GHz</td><td>-46.72 dBm</td><td></td><td></td></tr><tr><td>M3</td><td>1</td><td></td><td>2.39 GHz</td><td>-59.44 dBm</td><td></td><td></td></tr><tr><td>M4</td><td>1</td><td></td><td>2.31 GHz</td><td>-71.31 dBm</td><td></td><td></td></tr><tr><td>M5</td><td>1</td><td></td><td>2.3993 GHz</td><td>-40.59 dBm</td><td></td><td></td></tr></tbody></table> Date: 13.JUL.2021 09:45:47			Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		2.40201 GHz	-1.69 dBm			M2	1		2.4 GHz	-46.72 dBm			M3	1		2.39 GHz	-59.44 dBm			M4	1		2.31 GHz	-71.31 dBm			M5	1		2.3993 GHz	-40.59 dBm		
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result																																							
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M5	1		2.3993 GHz	-40.59 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 150 MHz M1[1] 0.98 dBm 2.4800110 GHz M2[1] -45.32 dBm 2.4835000 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 2 Marker Table <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>2.480011 GHz</td><td>0.98 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>2.4835 GHz</td><td>-45.32 dBm</td><td></td><td></td></tr><tr><td>M3</td><td>1</td><td></td><td>2.5 GHz</td><td>-54.62 dBm</td><td></td><td></td></tr><tr><td>M4</td><td>1</td><td></td><td>2.48372 GHz</td><td>-41.10 dBm</td><td></td><td></td></tr></tbody></table> Date: 13.JUL.2021 09:51:48			Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		2.480011 GHz	0.98 dBm			M2	1		2.4835 GHz	-45.32 dBm			M3	1		2.5 GHz	-54.62 dBm			M4	1		2.48372 GHz	-41.10 dBm									
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M3	1		2.5 GHz	-54.62 dBm																																									
M4	1		2.48372 GHz	-41.10 dBm																																									

Test Item:	Band edge	Test Rate:	2Mbps																																										
CH00	MultiViewSpectrum Ref Level 10.50 dBm Offset 1.00 dB RBW 100 kHz Att 20 dB SWI 1.05 ms VBW 300 kHz Mode Auto Sweep Count 300/300 1 Frequency Sweep M1[1] -1.81 dBm 2.4020100 GHz M2[1] -34.55 dBm 2.4000000 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 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>2.40201 GHz</td><td>-1.81 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>2.4 GHz</td><td>-34.55 dBm</td><td></td><td></td></tr><tr><td>M3</td><td>1</td><td></td><td>2.39 GHz</td><td>-59.66 dBm</td><td></td><td></td></tr><tr><td>M4</td><td>1</td><td></td><td>2.31 GHz</td><td>-69.73 dBm</td><td></td><td></td></tr><tr><td>M5</td><td>1</td><td></td><td>2.399965 GHz</td><td>-34.79 dBm</td><td></td><td></td></tr></table> Date: 13-Jul-2021 10:56:45			Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		2.40201 GHz	-1.81 dBm			M2	1		2.4 GHz	-34.55 dBm			M3	1		2.39 GHz	-59.66 dBm			M4	1		2.31 GHz	-69.73 dBm			M5	1		2.399965 GHz	-34.79 dBm		
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Type	Ref	Trc	X-Value	Y-Value	Function	Function Result																																							
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M2	1		2.4835 GHz	-54.65 dBm																																									
M3	1		2.5 GHz	-55.91 dBm																																									
M4	1		2.484424 GHz	-45.10 dBm																																									

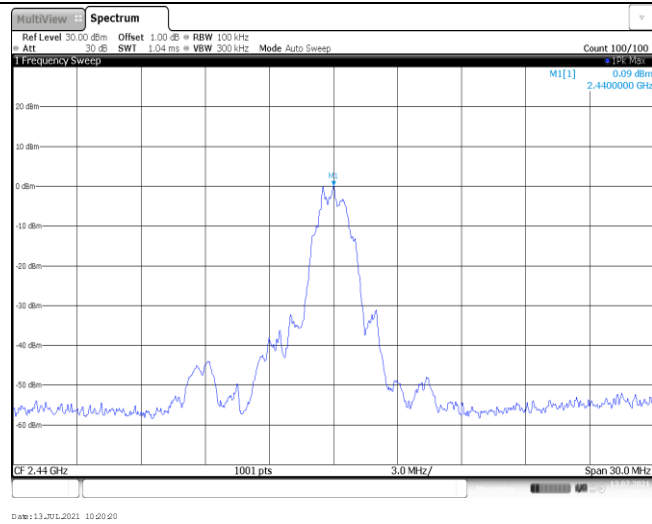
Test Item:	SE	Test Rate:	1Mbps
CH00 Reference level		 Ref Level 30.00 dBm Offset 1.00 dB BW 100 kHz Att 30 dB SWI 1.04 ms VBW 300 kHz Mode Auto Sweep Count 100/100 M1[1] -1.71 dBm 2.402000 GHz 20 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm 2.402 GHz 1001 pts 3.0 MHz/ Span 30.0 MHz Date: 13-Jul-2021 09:45:55	
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 M1[1] -52.71 dBm 96.0060 MHz 20 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm 30.0 MHz 30001 pts 97.0 MHz/ 1.0 GHz Date: 13-Jul-2021 09:46:12	
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 M1[1] -51.73 dBm 25.983333 GHz 20 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm 1.0 GHz 30001 pts 2.5 GHz/ 26.0 GHz Date: 13-Jul-2021 09:46:28	

CH19
Reference levelCH19
30MHz~1000MHzCH19
1GHz~26GHz

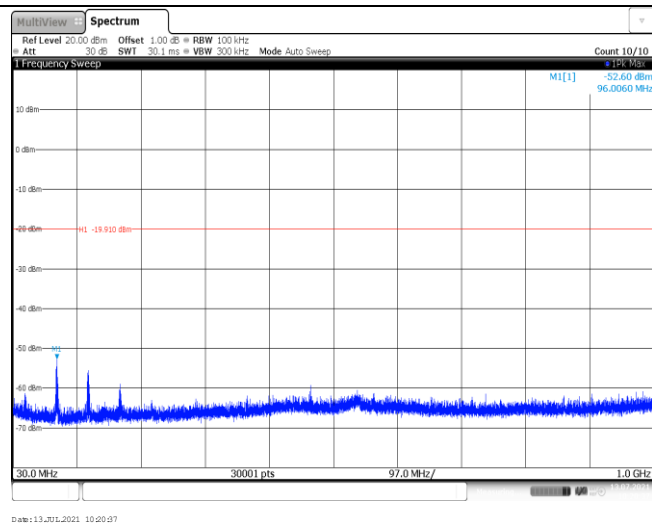


Test Item:	SE	Test Rate:	2Mbps
CH00 Reference level	 Ref Level 30.00 dBm Offset 1.00 dB RBW 100 kHz Att 30 dB SWI 1.04 ms VBW 300 kHz Mode Auto Sweep Count 100/100 M1[1] -1.63 dBm 2.402000 GHz CF 2.402 GHz 1001 pts 3.0 MHz/ Span 30.0 MHz Date:13_Jul_2021 10:16:51		
CH00 30MHz~1000MHz	 Ref Level 20.00 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] -52.71 dBm 96.0060 MHz 30.0 MHz 30001 pts 97.0 MHz/ 1.0 GHz Date:13_Jul_2021 10:17:07		
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] -51.96 dBm 25.969167 GHz 1.0 GHz 30001 pts 2.5 GHz/ 26.0 GHz Date:13_Jul_2021 10:17:24		

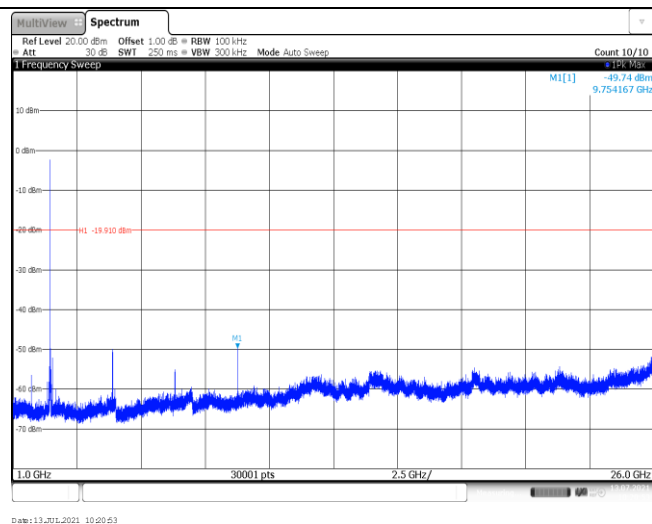
CH19
Reference level

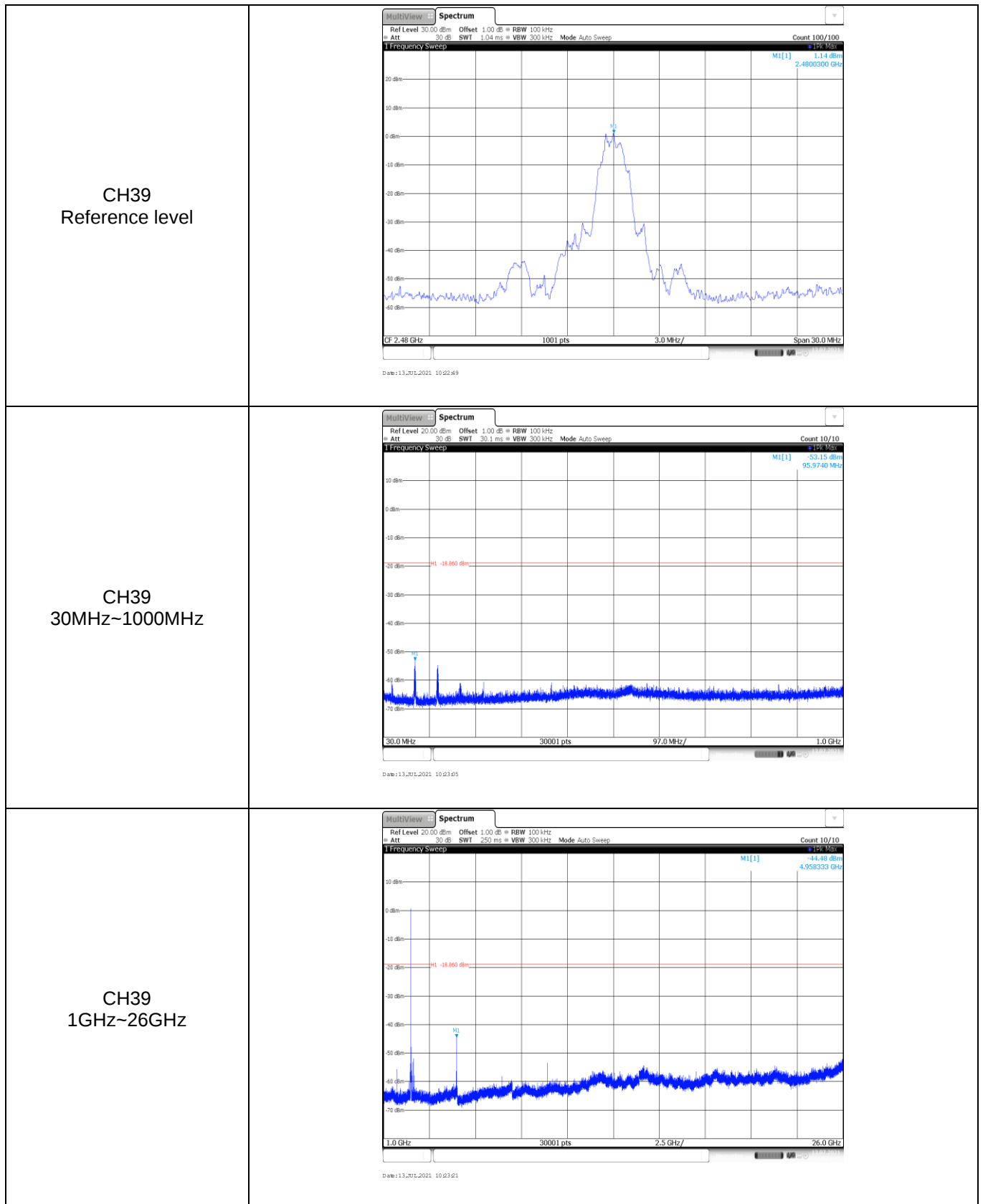


CH19
30MHz~1000MHz



CH19
1GHz~26GHz





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