

APPENDIX REPORT

Project No.	SHT2202018603EW	Radio Specification	WIFI 2.4G
Test sample No.	YPHT22020186003	Model No.	EyeOn-12WC
Start test date	2022-02-26	Finish date	2022-02-26
Temperature	21.4℃	Humidity	54%
Test Engineer	Xiaoqin Li	Auditor	Xiaodong Zhu

Appendix clause	Test item	Result
A	Conducted 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

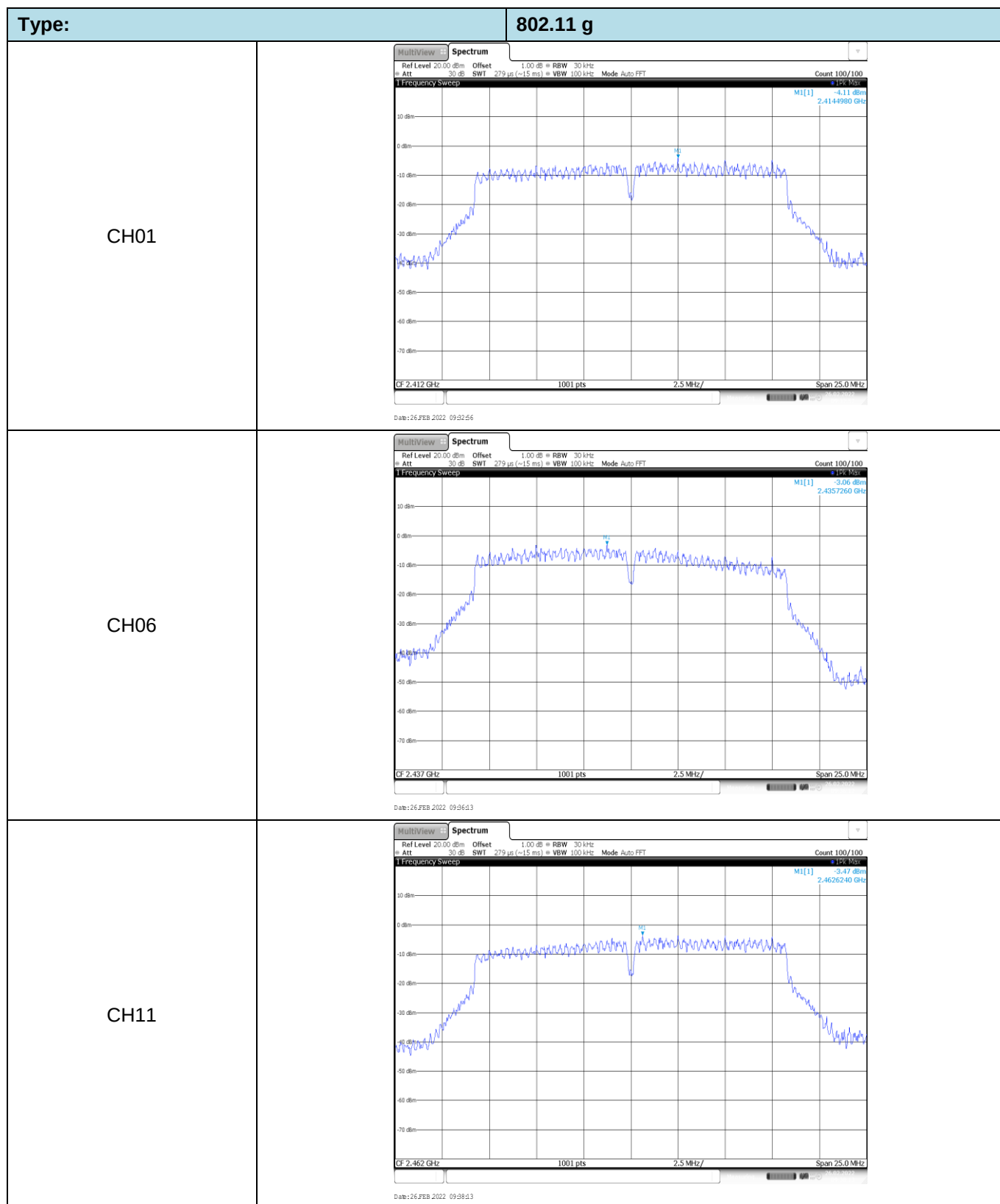
Appendix A: Conducted Peak Output Power

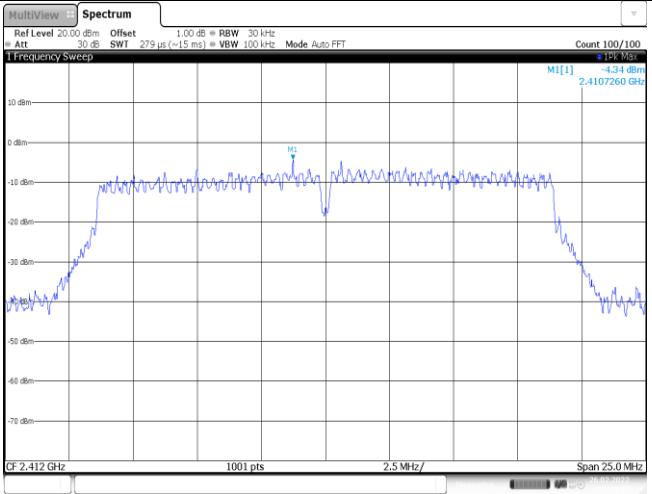
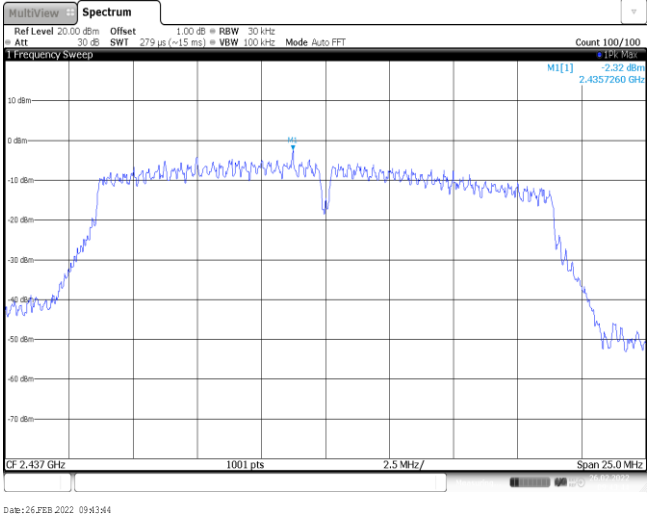
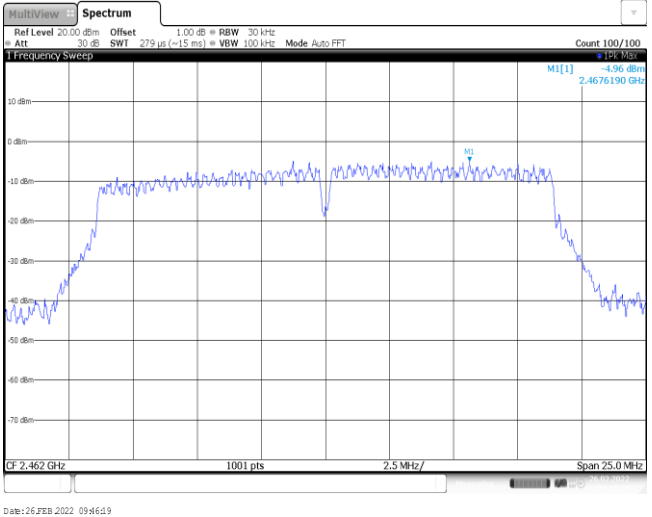
Type	Channel	Peak Output power (dBm)	Average Output power (dBm)	Limit (dBm)	Result
802.11b	01	14.61	12.40	≤ 30.00	Pass
	06	15.69	13.26		
	11	15.31	12.87		
802.11g	01	19.77	16.90	≤ 30.00	Pass
	06	20.78	17.90		
	11	20.41	17.58		
802.11n (HT20)	01	19.33	16.42	≤ 30.00	Pass
	06	20.26	17.38		
	11	19.98	17.06		
802.11n(HT40)	03	20.19	17.48	≤ 30.00	Pass
	06	20.46	17.60		
	09	20.02	17.20		

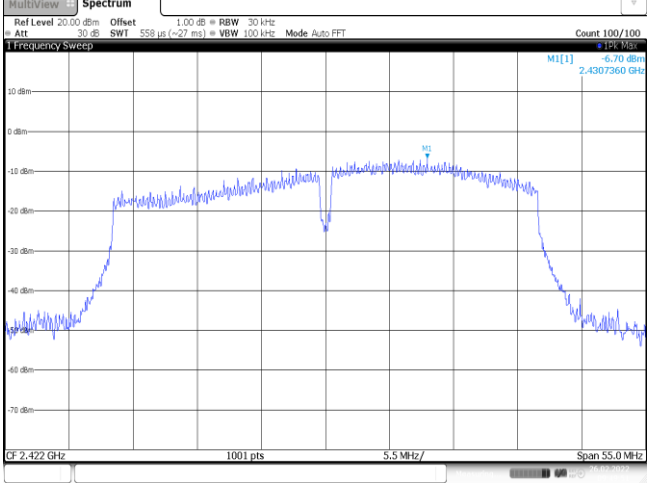
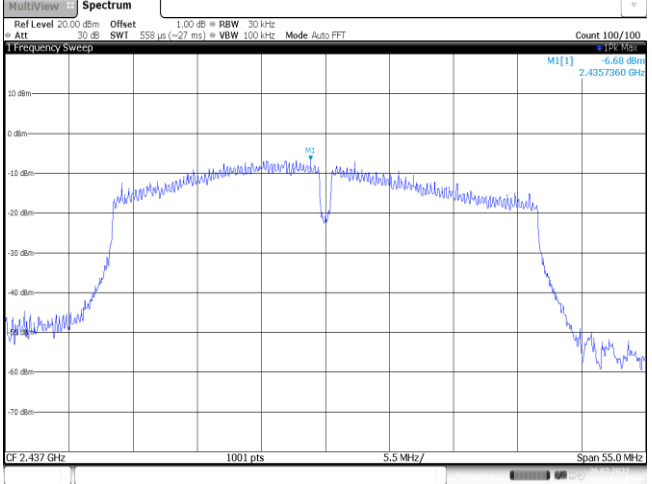
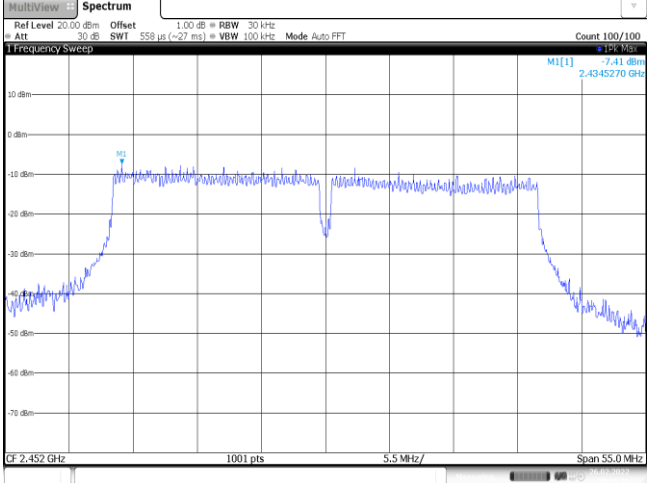
Appendix B: Power Spectral Density

Type	Channel	Power Spectral Density (dBm/30KHz)	Limit (dBm/3KHz)	Result
802.11b	01	-2.95	≤8.00	Pass
	06	-1.29		
	11	-1.47		
802.11g	01	-4.11	≤8.00	Pass
	06	-3.06		
	11	-3.47		
802.11n(HT20)	01	-4.34	≤8.00	Pass
	06	-2.32		
	11	-4.96		
802.11n(HT40)	03	-6.70	≤8.00	Pass
	06	-6.68		
	09	-7.41		

Type:	802.11 b
CH01	Spectrum plot for CH01. The plot shows a signal at 2.4127990 GHz with a level of -2.95 dBm. The plot is titled "Spectrum" and includes parameters: Ref Level 20.00 dBm, Offset 1.00 dB, RBW 30 kHz, Att 30 dB, SWI 1.78 ms, VBW 100 kHz, Mode Auto Sweep, Count 100/100. The plot shows a signal at 2.4127990 GHz with a level of -2.95 dBm. The plot is titled "Spectrum" and includes parameters: Ref Level 20.00 dBm, Offset 1.00 dB, RBW 30 kHz, Att 30 dB, SWI 1.78 ms, VBW 100 kHz, Mode Auto Sweep, Count 100/100.
CH06	Spectrum plot for CH06. The plot shows a signal at 2.4362810 GHz with a level of -1.29 dBm. The plot is titled "Spectrum" and includes parameters: Ref Level 20.00 dBm, Offset 1.00 dB, RBW 30 kHz, Att 30 dB, SWI 1.78 ms, VBW 100 kHz, Mode Auto Sweep, Count 100/100. The plot shows a signal at 2.4362810 GHz with a level of -1.29 dBm. The plot is titled "Spectrum" and includes parameters: Ref Level 20.00 dBm, Offset 1.00 dB, RBW 30 kHz, Att 30 dB, SWI 1.78 ms, VBW 100 kHz, Mode Auto Sweep, Count 100/100.
CH11	Spectrum plot for CH11. The plot shows a signal at 2.4627030 GHz with a level of -1.47 dBm. The plot is titled "Spectrum" and includes parameters: Ref Level 20.00 dBm, Offset 1.00 dB, RBW 30 kHz, Att 30 dB, SWI 1.78 ms, VBW 100 kHz, Mode Auto Sweep, Count 100/100. The plot shows a signal at 2.4627030 GHz with a level of -1.47 dBm. The plot is titled "Spectrum" and includes parameters: Ref Level 20.00 dBm, Offset 1.00 dB, RBW 30 kHz, Att 30 dB, SWI 1.78 ms, VBW 100 kHz, Mode Auto Sweep, Count 100/100.



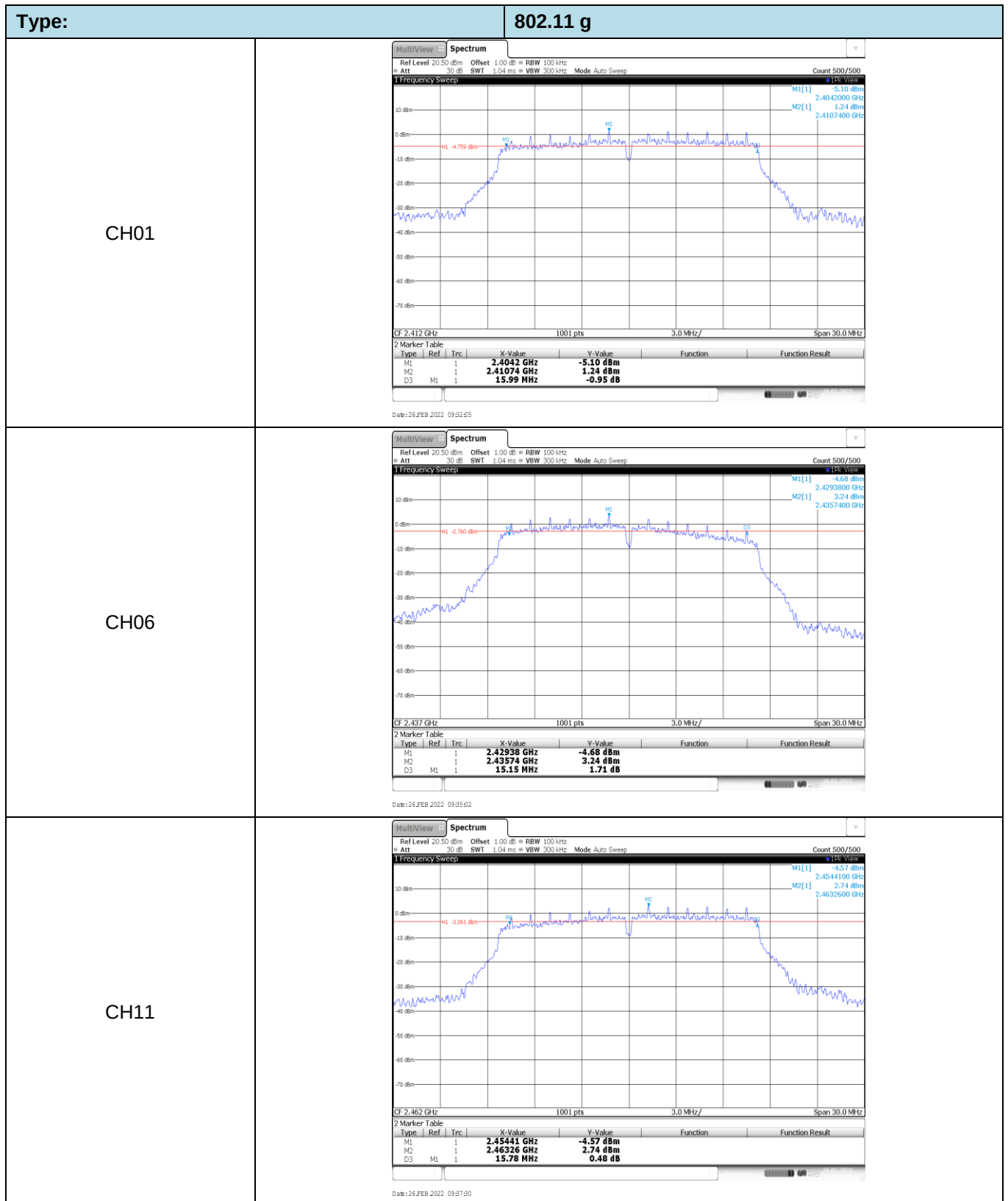
Type:	802.11n(HT20)
CH01	 Ref Level 20.00 dBm Offset 30 dB BW 1.00 MHz RBW 30 kHz SWI 279 us (~1.5 ms) VBW 100 kHz Mode Auto FFT Count 100/100 MI[1] -4.34 dBm 2.4107260 GHz CF 2.412 GHz 1001 pts 2.5 MHz/ Span 25.0 MHz Date: 26.FEB.2022 09:40:37
CH06	 Ref Level 20.00 dBm Offset 30 dB BW 1.00 MHz RBW 30 kHz SWI 279 us (~1.5 ms) VBW 100 kHz Mode Auto FFT Count 100/100 MI[1] -2.32 dBm 2.4357260 GHz CF 2.437 GHz 1001 pts 2.5 MHz/ Span 25.0 MHz Date: 26.FEB.2022 09:43:44
CH11	 Ref Level 20.00 dBm Offset 30 dB BW 1.00 MHz RBW 30 kHz SWI 279 us (~1.5 ms) VBW 100 kHz Mode Auto FFT Count 100/100 MI[1] -4.96 dBm 2.4676190 GHz CF 2.462 GHz 1001 pts 2.5 MHz/ Span 25.0 MHz Date: 26.FEB.2022 09:46:19

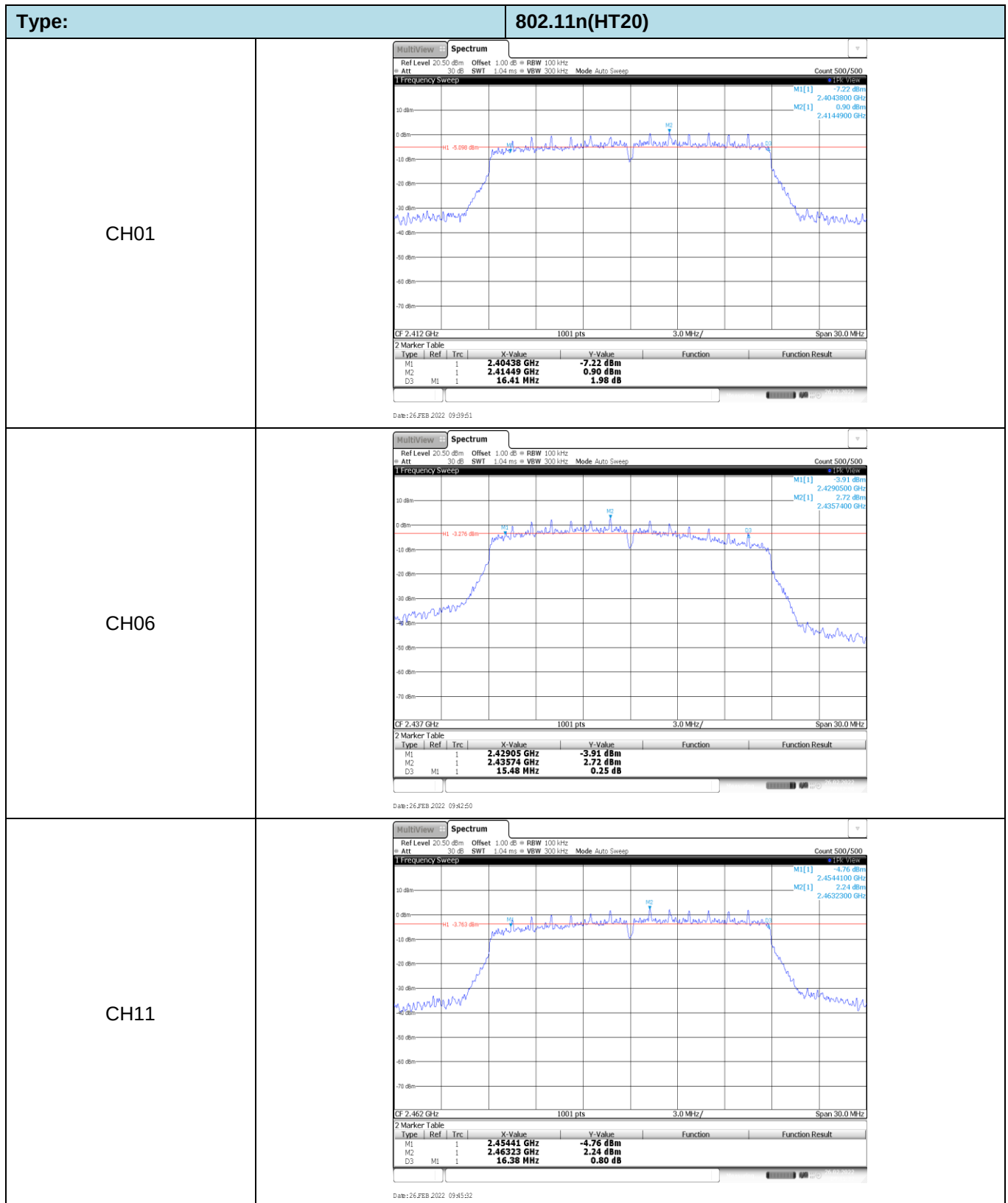
Type:	802.11n(HT40)
CH03	 MultiView Spectrum Ref Level 20.00 dBm Offset 1.00 dB BW 30 kHz Att 30 dB SWI 558 us (~27 ms) VBW 100 kHz Mode Auto FFT Count 100/100 MI[1] -6.70 dBm 2.4307360 GHz Frequency Sweep CF 2.422 GHz 1001 pts 5.5 MHz/ Span 55.0 MHz Date: 26.FEB.2022 09:49:51
CH06	 MultiView Spectrum Ref Level 20.00 dBm Offset 1.00 dB BW 30 kHz Att 30 dB SWI 558 us (~27 ms) VBW 100 kHz Mode Auto FFT Count 100/100 MI[1] -6.68 dBm 2.4357360 GHz Frequency Sweep CF 2.437 GHz 1001 pts 5.5 MHz/ Span 55.0 MHz Date: 26.FEB.2022 09:54:07
CH09	 MultiView Spectrum Ref Level 20.00 dBm Offset 1.00 dB BW 30 kHz Att 30 dB SWI 558 us (~27 ms) VBW 100 kHz Mode Auto FFT Count 100/100 MI[1] -7.41 dBm 2.45270 GHz Frequency Sweep CF 2.452 GHz 1001 pts 5.5 MHz/ Span 55.0 MHz Date: 26.FEB.2022 09:56:26

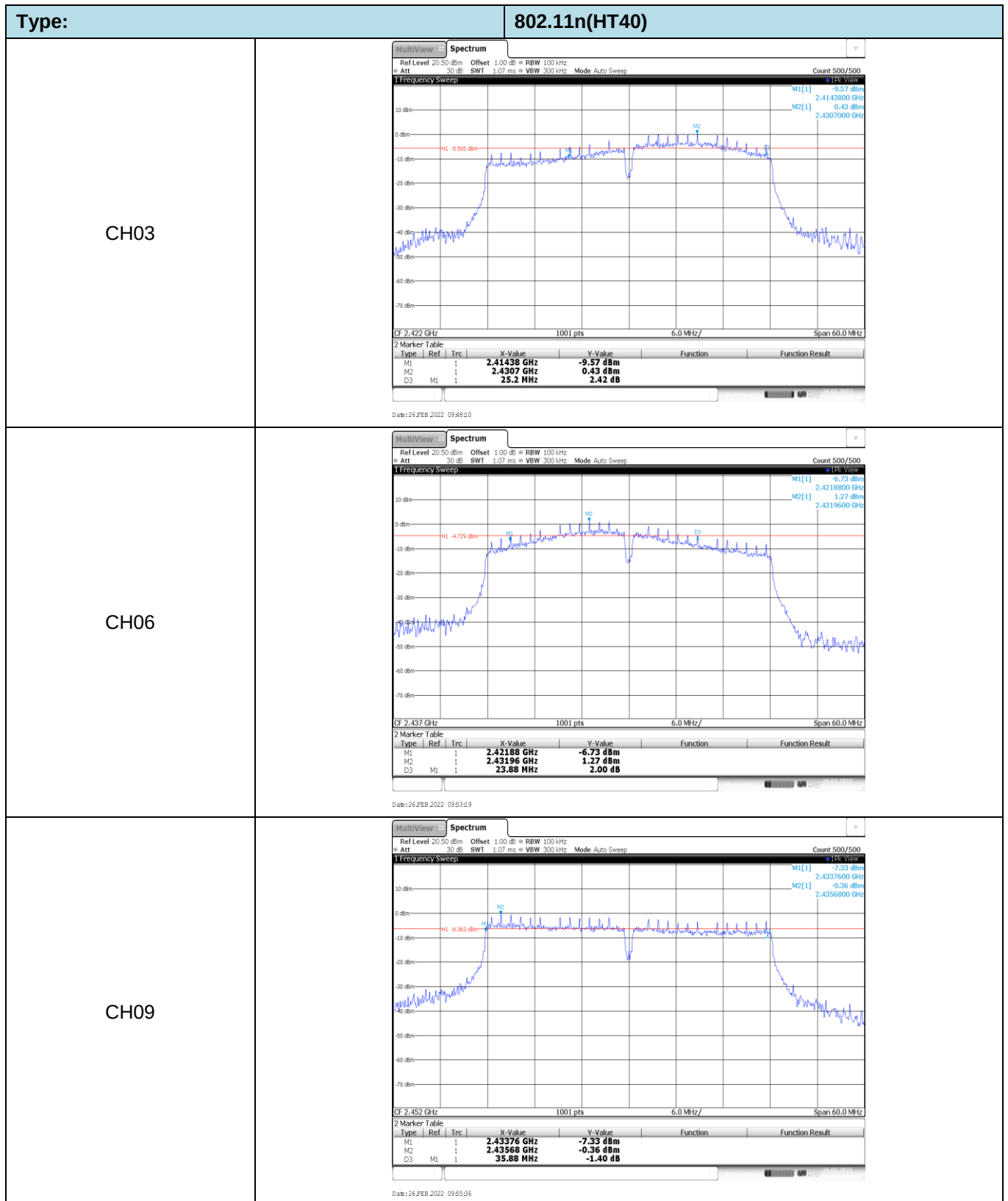
Appendix C: 6dB bandwidth

Type	Channel	6dB Bandwidth (MHz)	Limit (MHz)	Result
802.11b	01	8.64	≥0.5	Pass
	06	7.65		
	11	8.61		
802.11g	01	15.99	≥0.5	Pass
	06	15.15		
	11	15.78		
802.11n(HT20)	01	16.41	≥0.5	Pass
	06	15.48		
	11	16.38		
802.11n(HT40)	03	25.20	≥0.5	Pass
	06	23.88		
	09	35.88		

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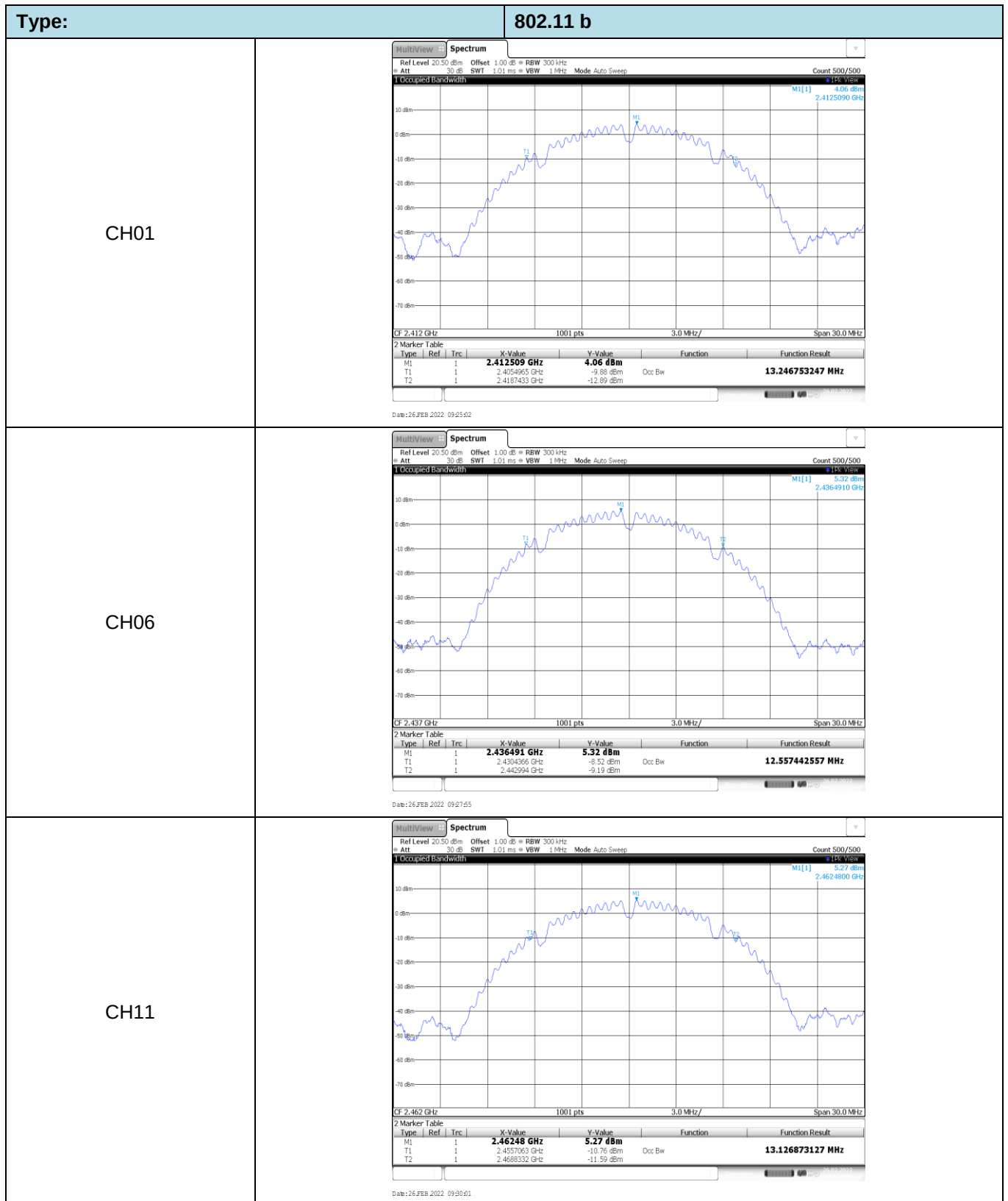


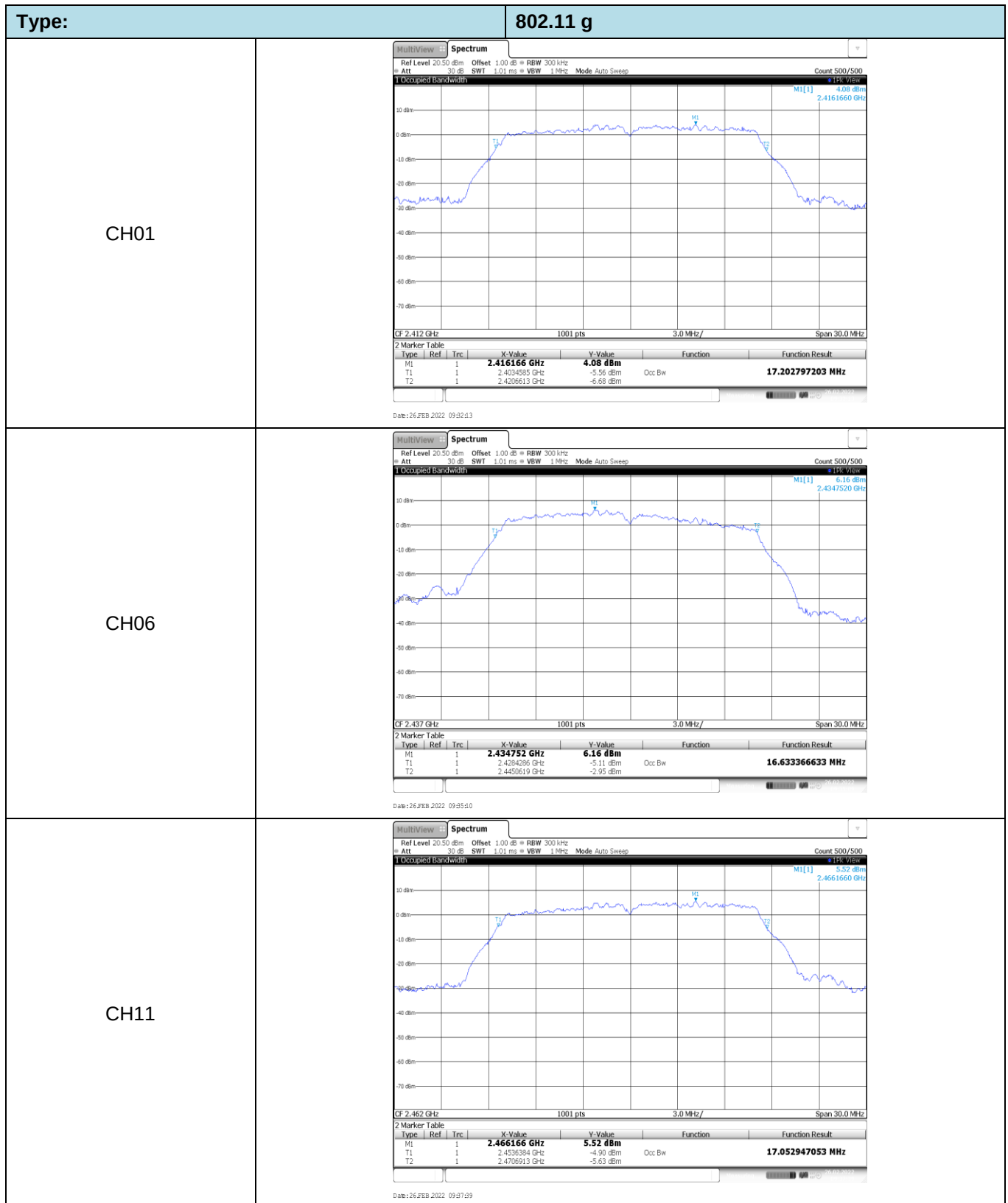


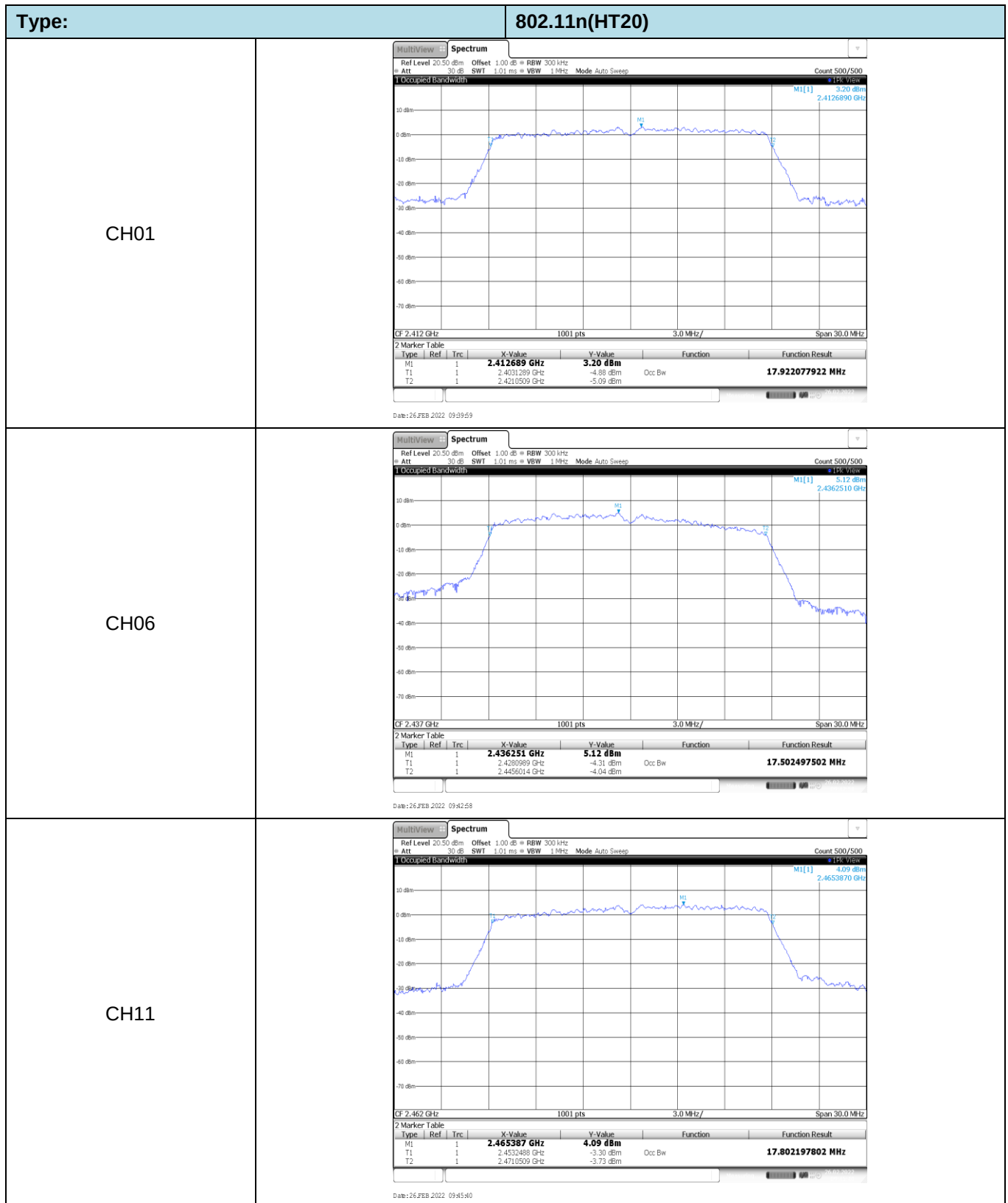


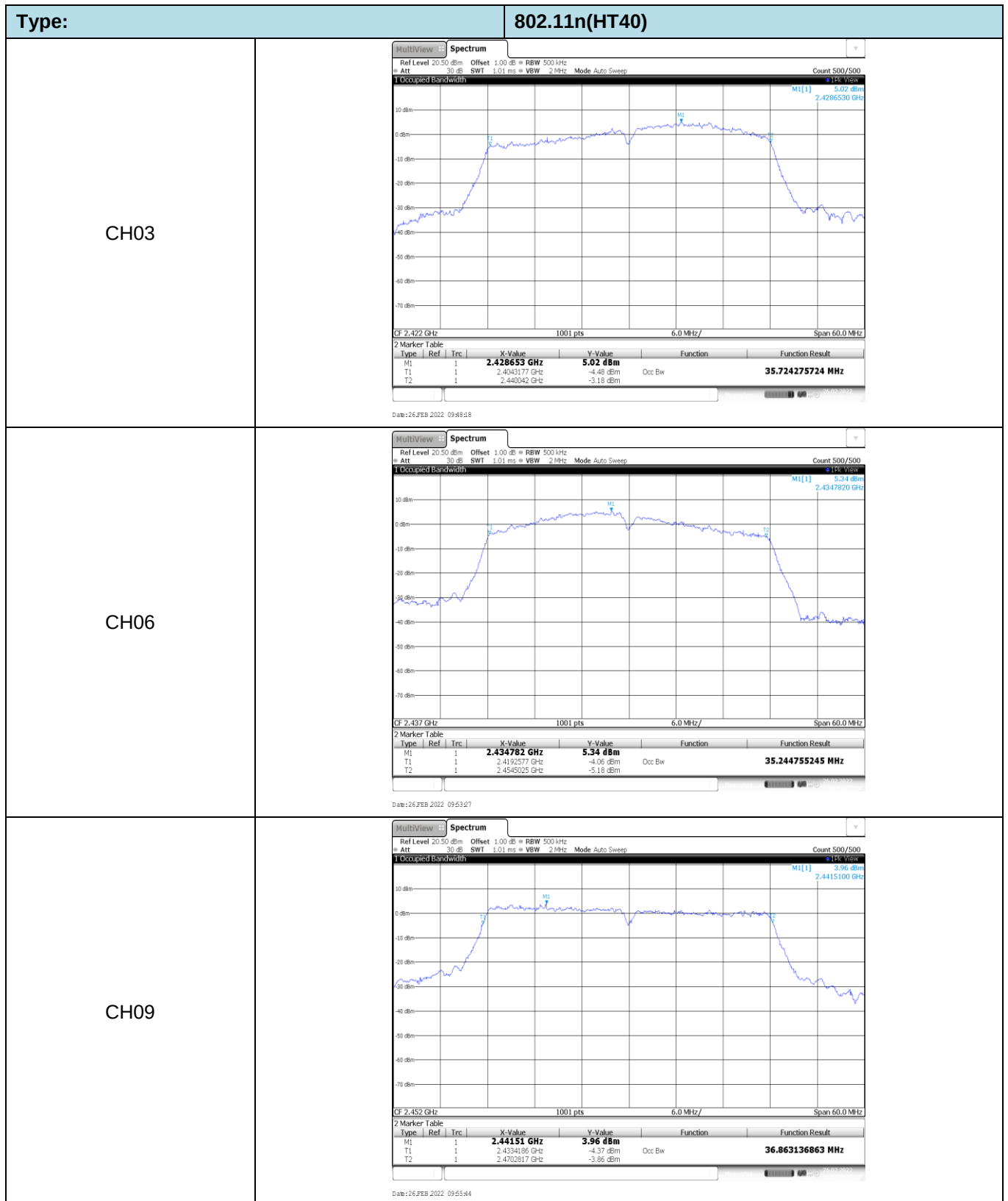
Appendix D: 99% Occupied Bandwidth

Type	Channel	99% Bandwidth (MHz)	Limit (kHz)	Result
802.11b	01	13.25	-	Pass
	06	12.56		
	11	13.13		
802.11g	01	17.20	-	Pass
	06	16.63		
	11	17.05		
802.11n(HT20)	01	17.92	-	Pass
	06	17.50		
	11	17.80		
802.11n(HT40)	03	35.72	-	Pass
	06	35.24		
	09	36.86		





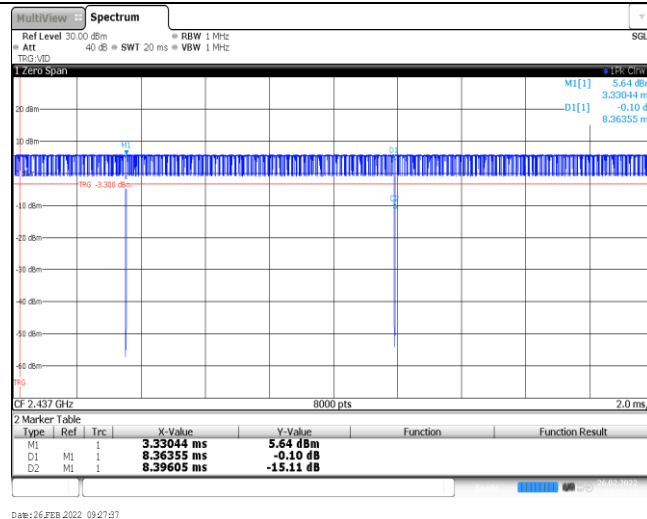




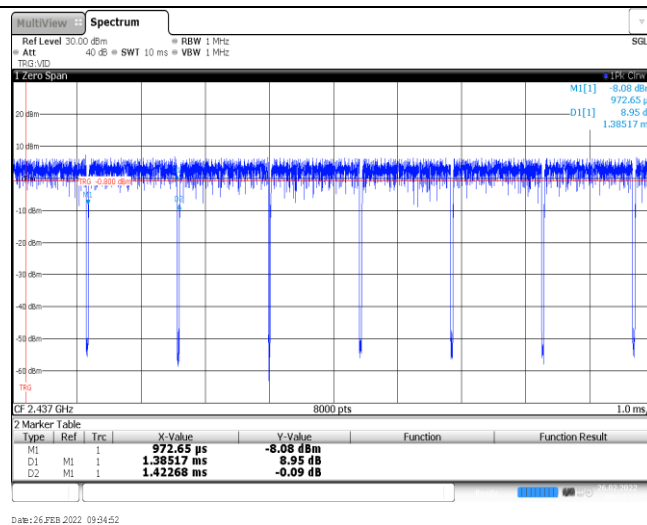
Appendix E: Duty Cycle

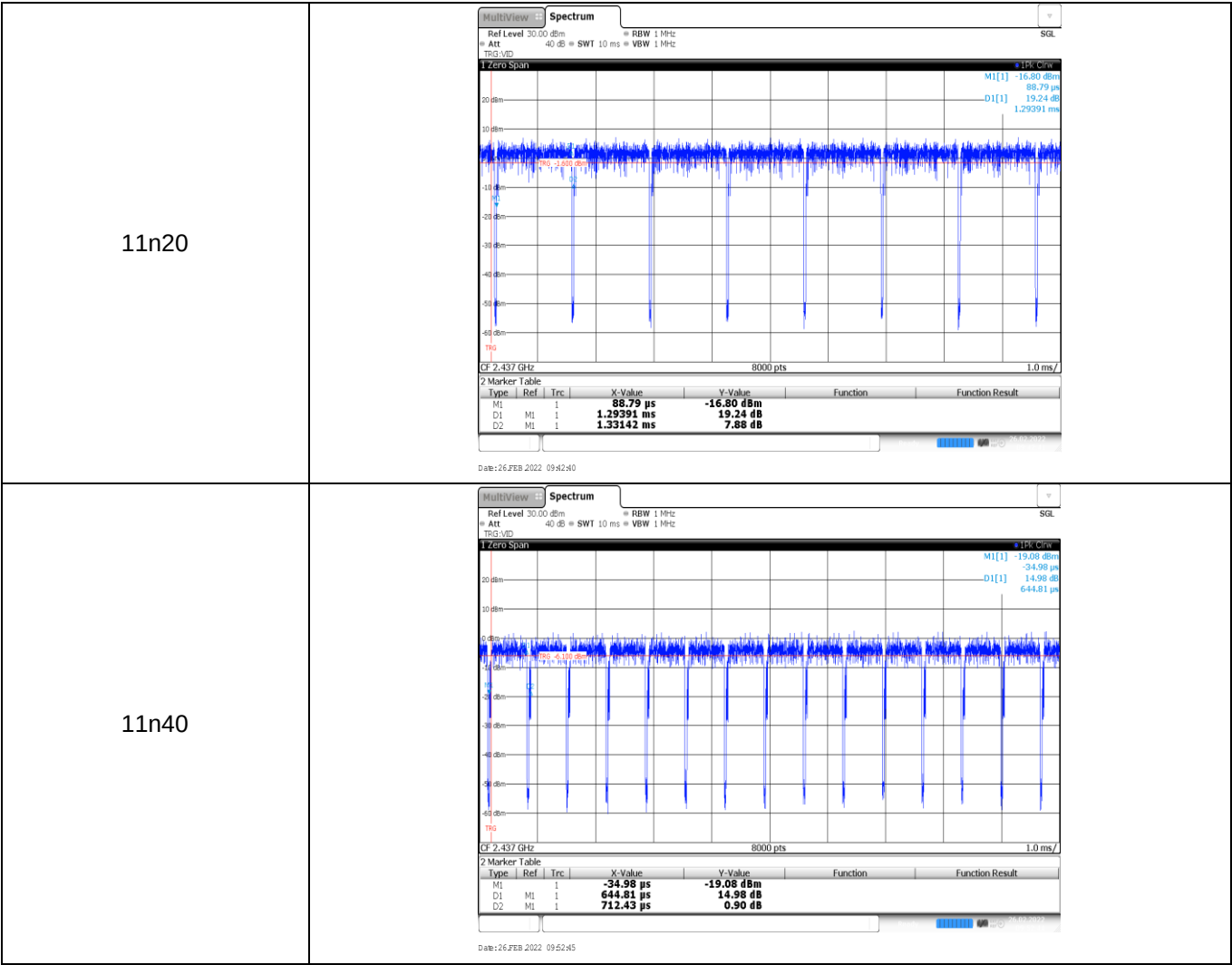
Modulation Type	Test Frequency (MHz)	$T_{on\ time}$ for single burst (ms)	T_{period} (ms)	Duty cycle	$1/T_{on\ time}$ (kHz)
11b	2437	8.36	8.40	99.5%	0.1
11g	2437	1.39	1.42	97.9%	0.7
11n20	2437	1.29	1.33	97.0%	0.8
11n40	2437	0.65	0.71	91.5%	1.5

11b

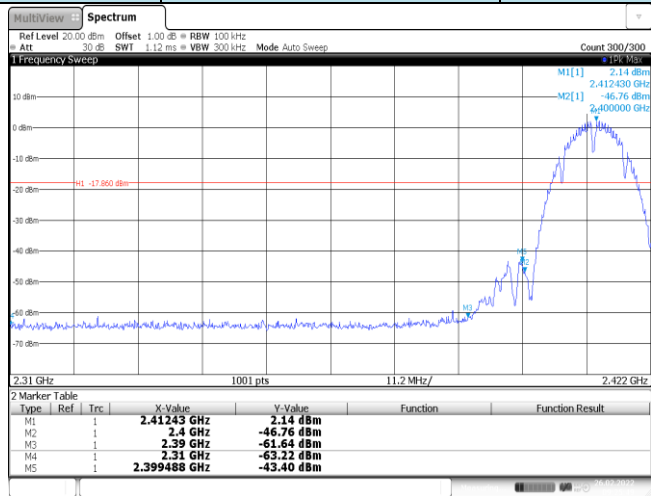
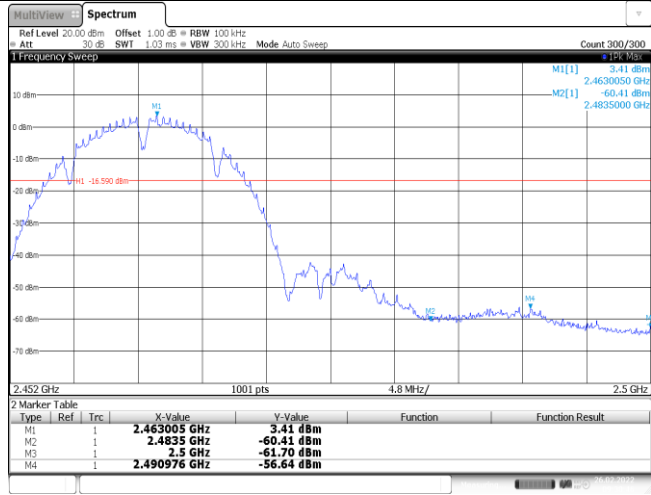


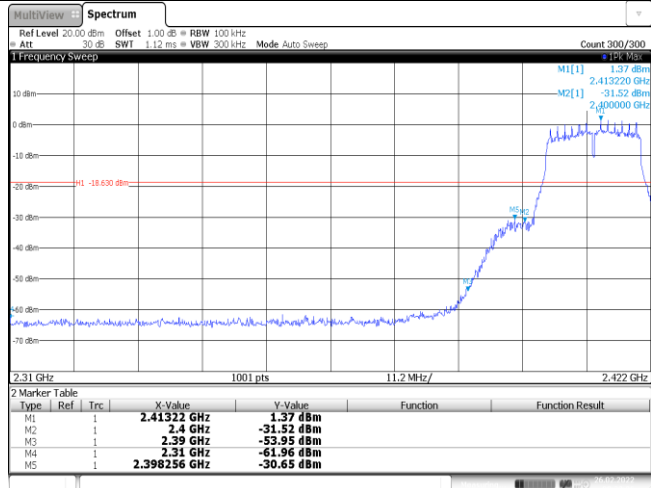
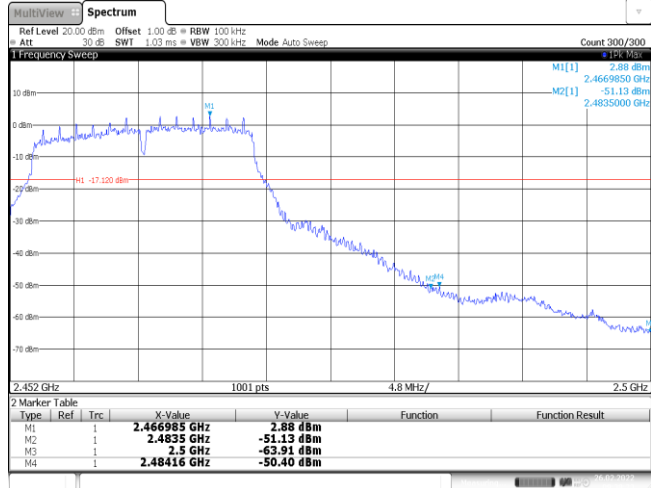
11g



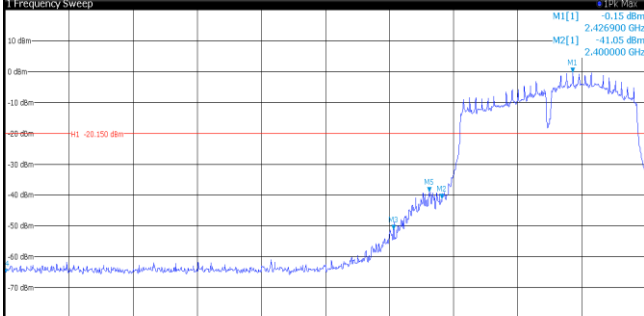
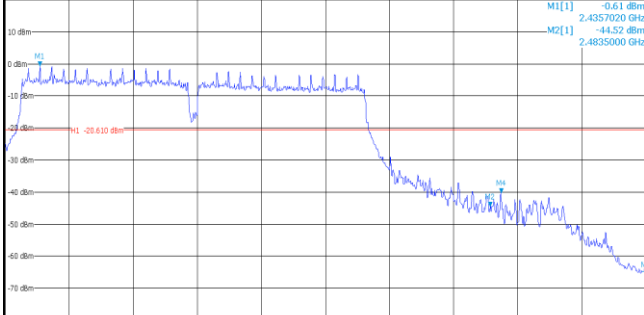


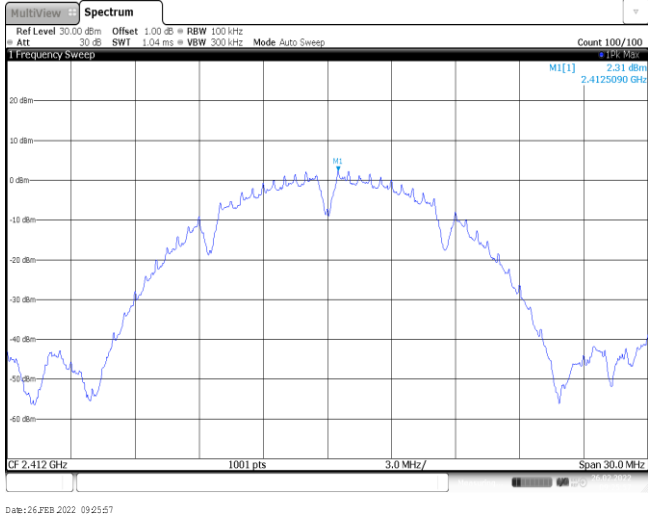
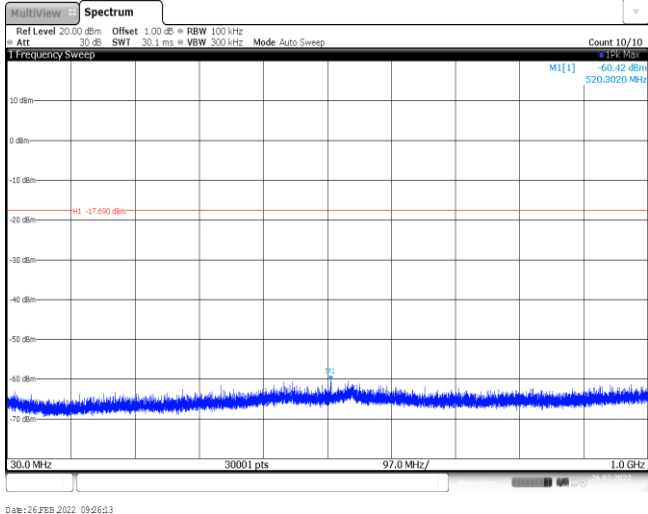
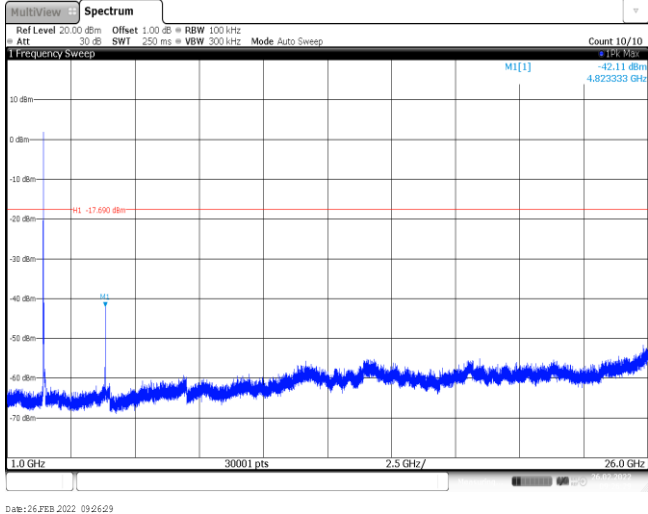
Appendix F: Band edge and Spurious Emissions (conducted)

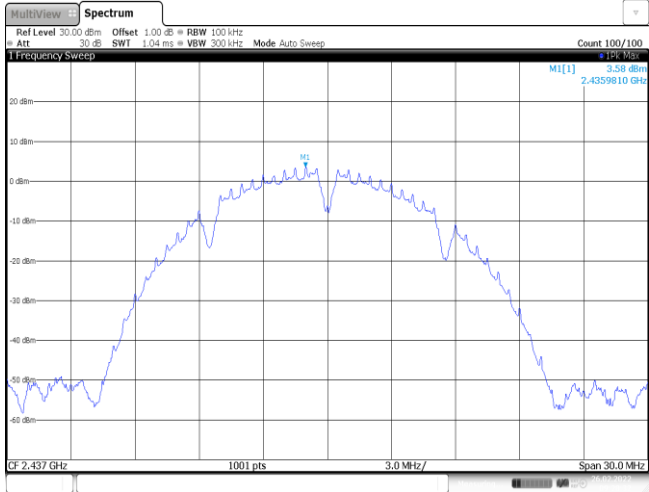
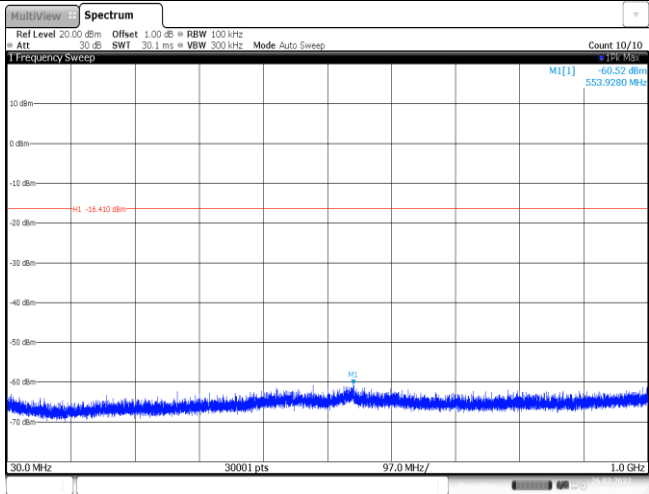
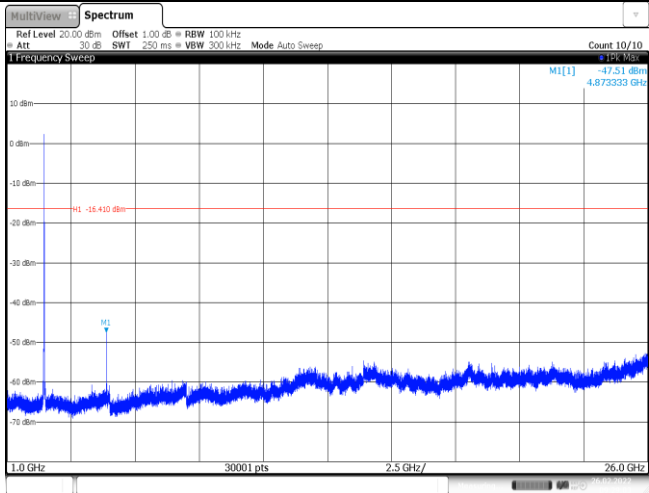
Test Item:	Bandedge	Type:	802.11 b																																										
CH01	MultiviewSpectrum Ref Level 20.00 dBm Offset 1.00 dB RBW 100 kHz Att 30 dB SWI 1.12 ms VBW 300 kHz Mode Auto Sweep Count 300/300 1 Frequency Sweep  2 Marker Table <table><tr><th>Type</th><th>Ref</th><th>Trc</th><th>X-Value</th><th>Y-Value</th><th>Function</th><th>Function Result</th></tr><tr><td>M1</td><td>1</td><td></td><td>2.41243 GHz</td><td>2.14 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>2.4 GHz</td><td>-46.76 dBm</td><td></td><td></td></tr><tr><td>M3</td><td>1</td><td></td><td>2.39 GHz</td><td>-61.64 dBm</td><td></td><td></td></tr><tr><td>M4</td><td>1</td><td></td><td>2.31 GHz</td><td>-63.22 dBm</td><td></td><td></td></tr><tr><td>M5</td><td>1</td><td></td><td>2.399488 GHz</td><td>-43.40 dBm</td><td></td><td></td></tr></table> Date: 26 FEB 2022 09:25:49			Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		2.41243 GHz	2.14 dBm			M2	1		2.4 GHz	-46.76 dBm			M3	1		2.39 GHz	-61.64 dBm			M4	1		2.31 GHz	-63.22 dBm			M5	1		2.399488 GHz	-43.40 dBm		
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Test Item:	Bandedge	Type:	802.11 g																																										
CH01	MultiView Spectrum Ref Level 20.00 dBm Offset 1.00 dB BW 100 kHz Att 30 dB SWI 1.12 ms VBW 300 kHz Mode Auto Sweep Count 300/300 1 Frequency Sweep  2.31 GHz 1001 pts 11.2 MHz/ 2.422 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>2.41322 GHz</td><td>1.37 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>2.4 GHz</td><td>-31.52 dBm</td><td></td><td></td></tr><tr><td>M3</td><td>1</td><td></td><td>2.39 GHz</td><td>-53.95 dBm</td><td></td><td></td></tr><tr><td>M4</td><td>1</td><td></td><td>2.31 GHz</td><td>-61.96 dBm</td><td></td><td></td></tr><tr><td>M5</td><td>1</td><td></td><td>2.398256 GHz</td><td>-30.65 dBm</td><td></td><td></td></tr></table> Date: 26.FEB.2022 09:33:06			Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		2.41322 GHz	1.37 dBm			M2	1		2.4 GHz	-31.52 dBm			M3	1		2.39 GHz	-53.95 dBm			M4	1		2.31 GHz	-61.96 dBm			M5	1		2.398256 GHz	-30.65 dBm		
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CH11	MultiView Spectrum Ref Level 20.00 dBm Offset 1.00 dB BW 100 kHz Att 30 dB SWI 1.03 ms VBW 300 kHz Mode Auto Sweep Count 300/300 1 Frequency Sweep  2.452 GHz 1001 pts 4.8 MHz/ 2.5 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>2.466985 GHz</td><td>2.88 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>2.4835 GHz</td><td>-51.13 dBm</td><td></td><td></td></tr><tr><td>M3</td><td>1</td><td></td><td>2.5 GHz</td><td>-63.91 dBm</td><td></td><td></td></tr><tr><td>M4</td><td>1</td><td></td><td>2.48416 GHz</td><td>-50.40 dBm</td><td></td><td></td></tr></table> Date: 26.FEB.2022 09:38:23			Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		2.466985 GHz	2.88 dBm			M2	1		2.4835 GHz	-51.13 dBm			M3	1		2.5 GHz	-63.91 dBm			M4	1		2.48416 GHz	-50.40 dBm									
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M4	1		2.48416 GHz	-50.40 dBm																																									

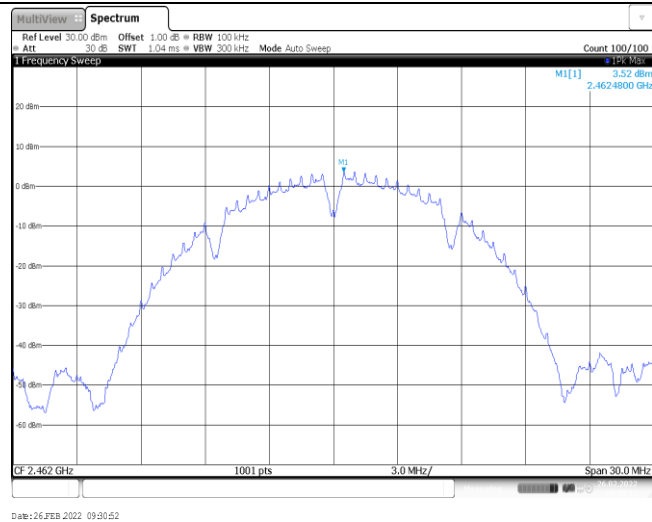
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Test Item:	Bandedge	Type:	802.11 n(HT40)																																										
CH03	MultiViewSpectrum Ref Level 20.00 dBm Offset 1.00 dB BW 100 kHz Att 30 dB SWI 1.32 ms VBW 300 kHz Mode Auto Sweep Count 300/300 1 Frequency Sweep  2.31 GHz 1001 pts 13.2 MHz/ 2.442 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>2.4269 GHz</td><td>-0.15 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>2.4 GHz</td><td>-41.05 dBm</td><td></td><td></td></tr><tr><td>M3</td><td>1</td><td></td><td>2.39 GHz</td><td>-51.20 dBm</td><td></td><td></td></tr><tr><td>M4</td><td>1</td><td></td><td>2.31 GHz</td><td>-64.30 dBm</td><td></td><td></td></tr><tr><td>M5</td><td>1</td><td></td><td>2.397384 GHz</td><td>-38.93 dBm</td><td></td><td></td></tr></table> Date: 26.FEB.2022 09:50:01			Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		2.4269 GHz	-0.15 dBm			M2	1		2.4 GHz	-41.05 dBm			M3	1		2.39 GHz	-51.20 dBm			M4	1		2.31 GHz	-64.30 dBm			M5	1		2.397384 GHz	-38.93 dBm		
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result																																							
M1	1		2.4269 GHz	-0.15 dBm																																									
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M3	1		2.39 GHz	-51.20 dBm																																									
M4	1		2.31 GHz	-64.30 dBm																																									
M5	1		2.397384 GHz	-38.93 dBm																																									
CH09	MultiViewSpectrum Ref Level 20.00 dBm Offset 1.00 dB BW 100 kHz Att 30 dB SWI 1.1 ms VBW 300 kHz Mode Auto Sweep Count 300/300 1 Frequency Sweep  2.432 GHz 1001 pts 6.8 MHz/ 2.5 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>2.435702 GHz</td><td>-0.61 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>2.4835 GHz</td><td>-44.52 dBm</td><td></td><td></td></tr><tr><td>M3</td><td>1</td><td></td><td>2.5 GHz</td><td>-64.75 dBm</td><td></td><td></td></tr><tr><td>M4</td><td>1</td><td></td><td>2.484632 GHz</td><td>-40.32 dBm</td><td></td><td></td></tr></table> Date: 26.FEB.2022 09:56:36			Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		2.435702 GHz	-0.61 dBm			M2	1		2.4835 GHz	-44.52 dBm			M3	1		2.5 GHz	-64.75 dBm			M4	1		2.484632 GHz	-40.32 dBm									
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result																																							
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M4	1		2.484632 GHz	-40.32 dBm																																									

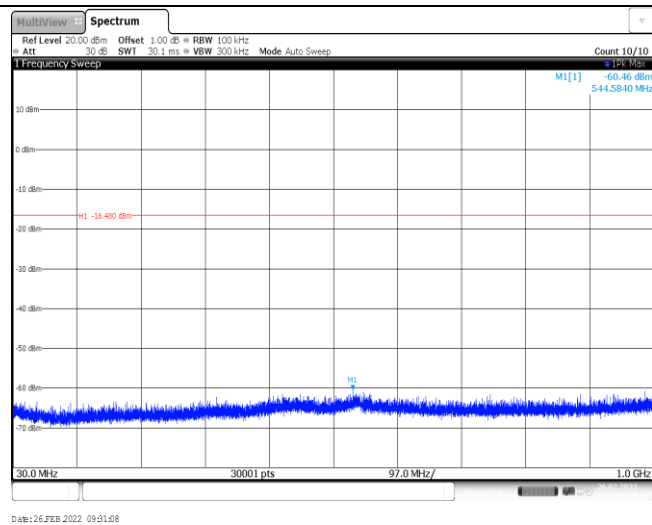
Test Item:	SE	Type:	802.11b
CH01 Reference level			
CH01 30MHz~1000MHz			
CH01 1GHz~26GHz			

CH06 Reference level	
CH06 30MHz~1000MHz	
CH06 1GHz~26GHz	

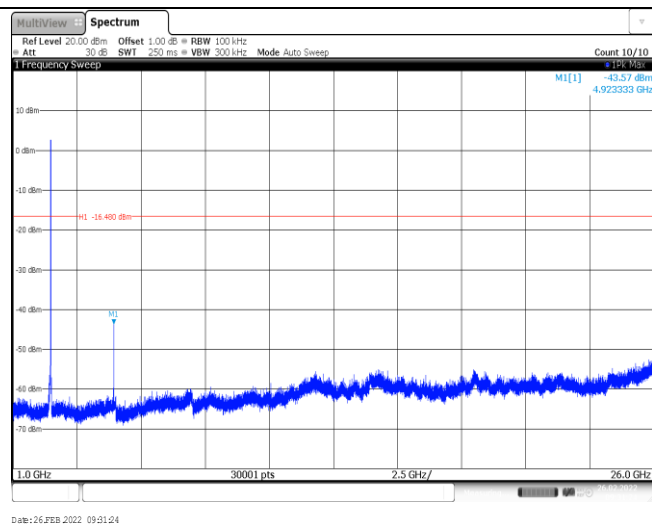
CH11
Reference level

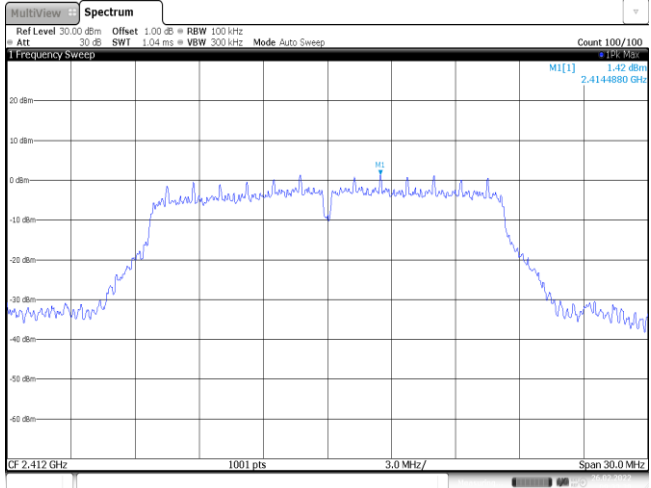
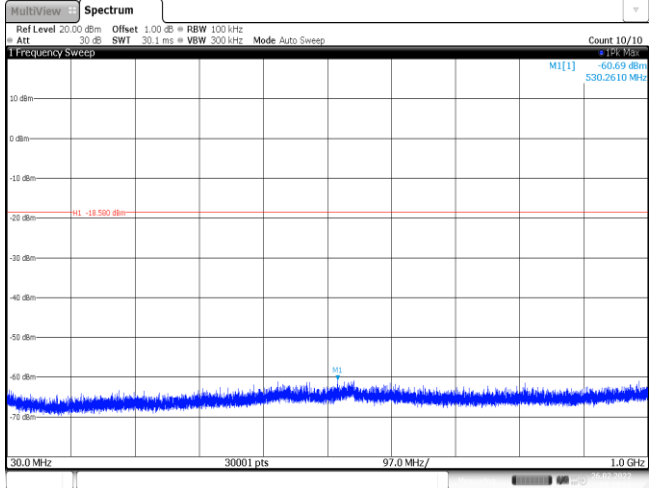
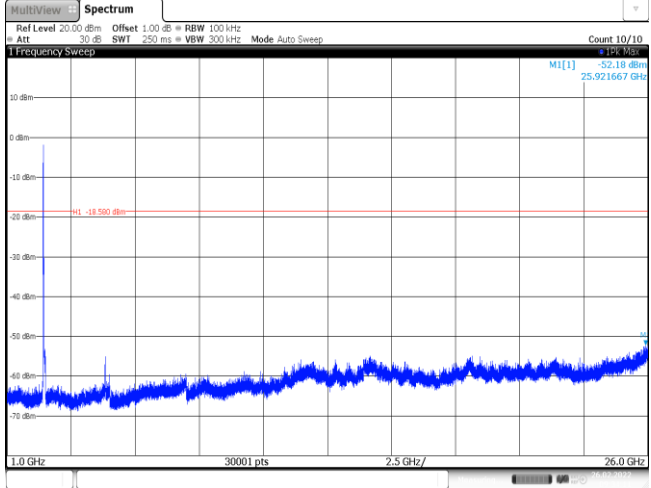


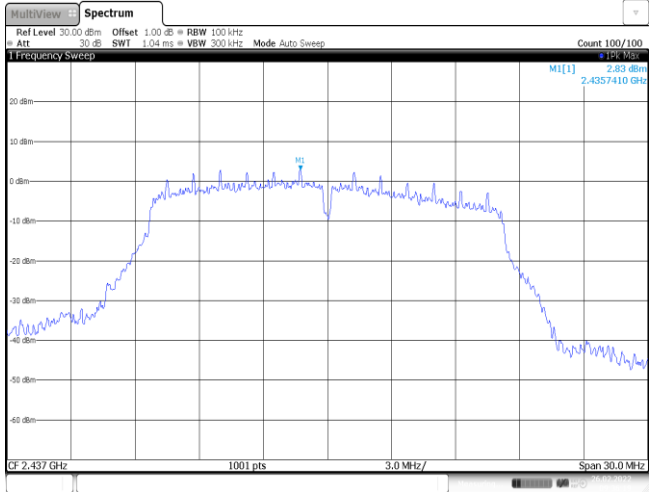
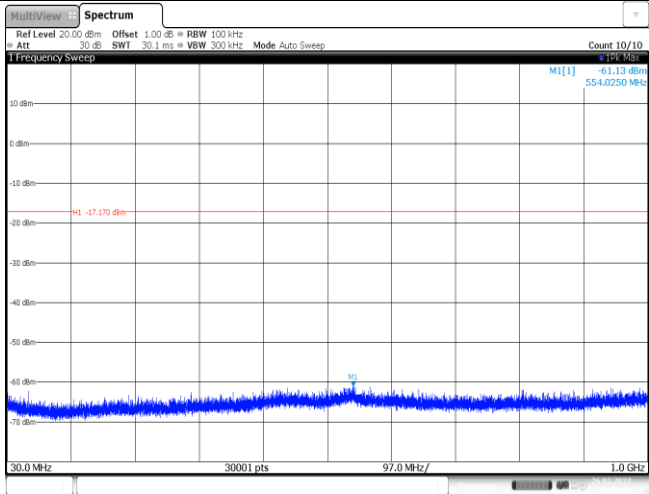
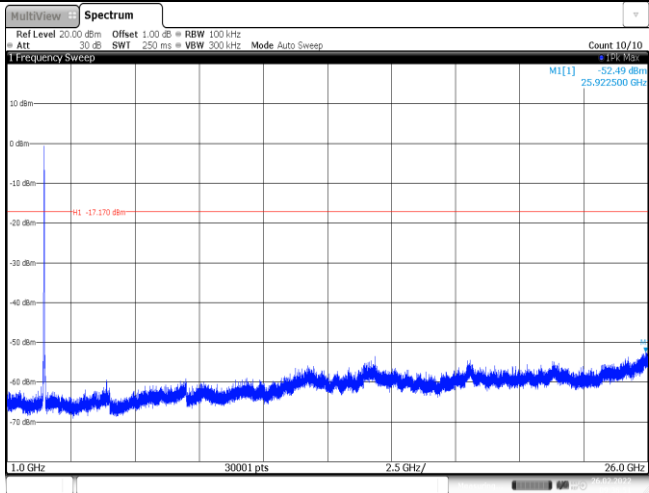
CH11
30MHz~1000MHz

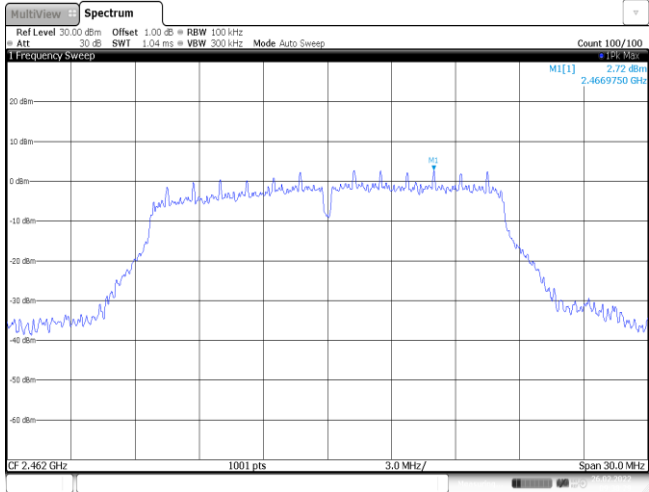
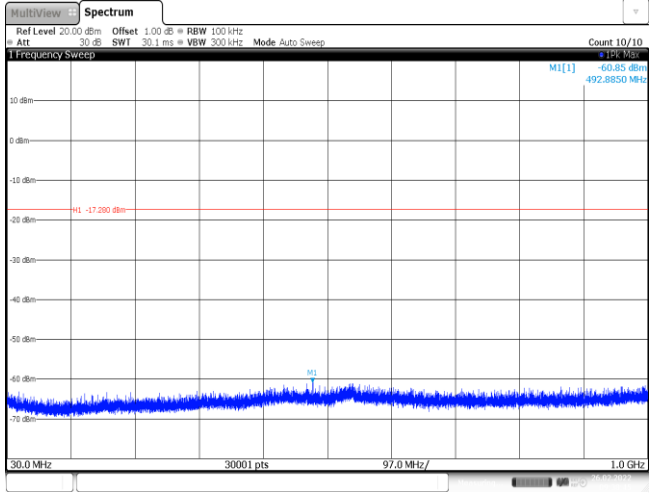
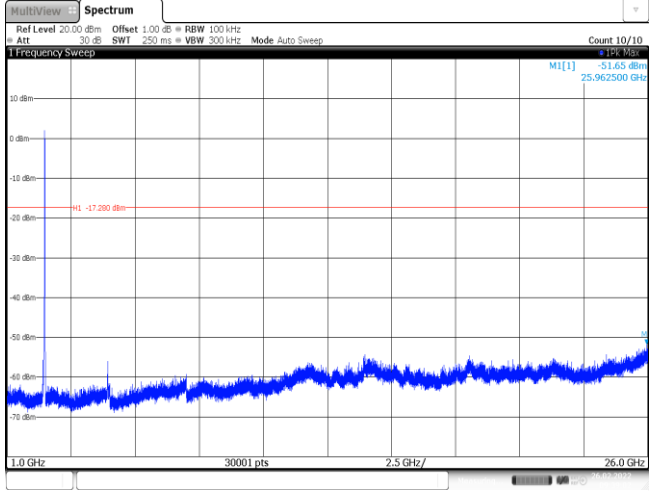


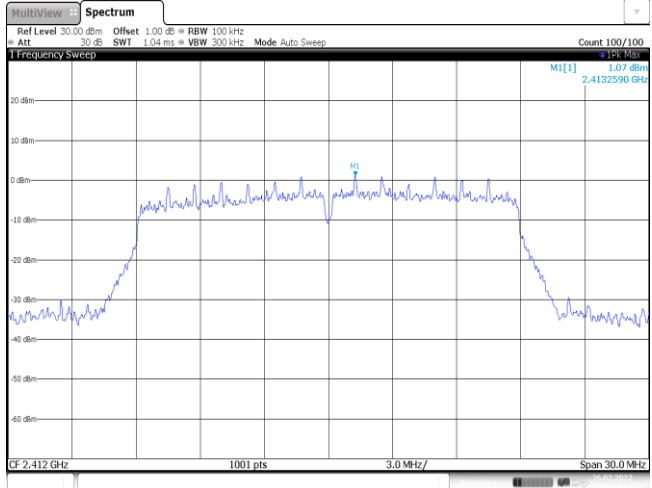
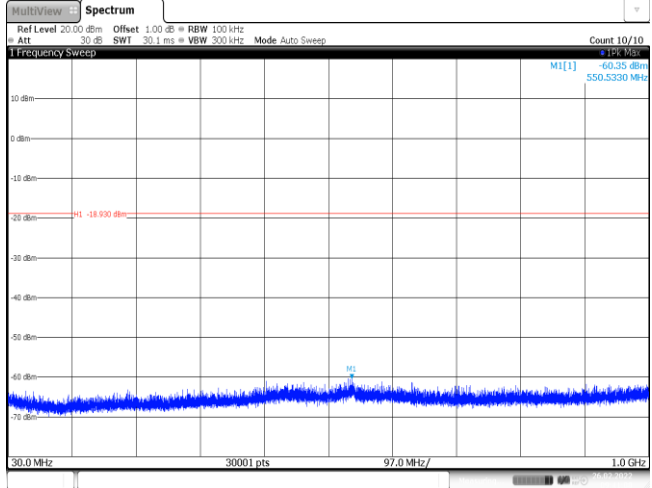
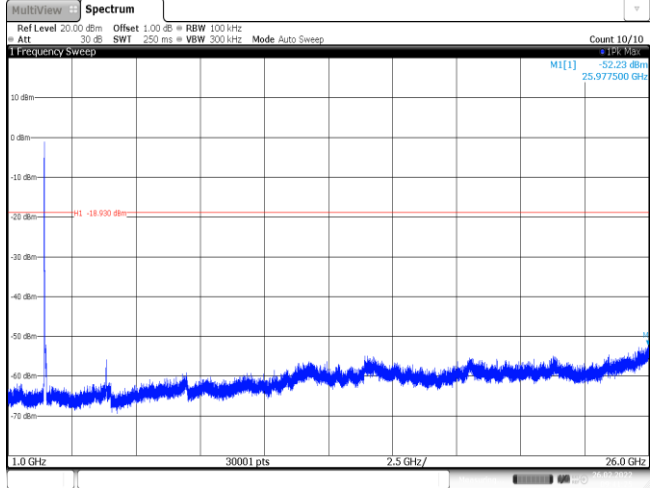
CH11
1GHz~26GHz

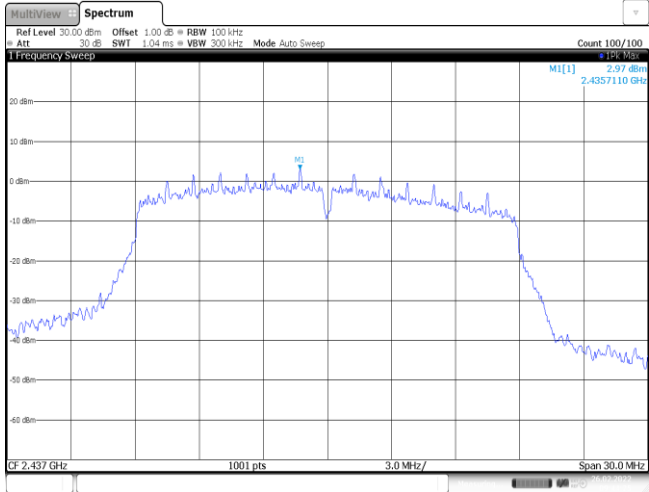
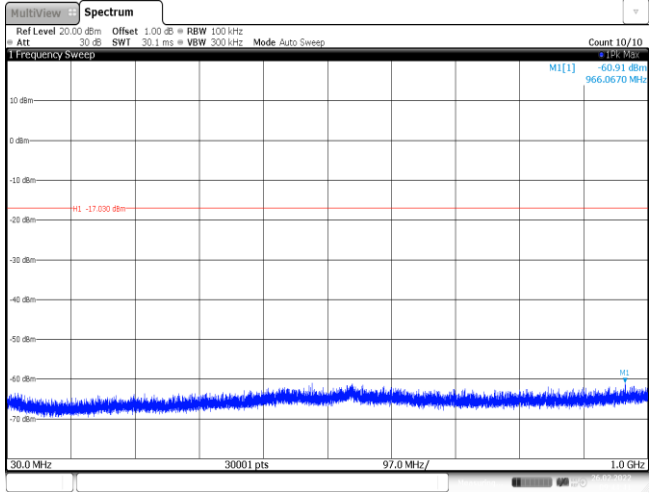
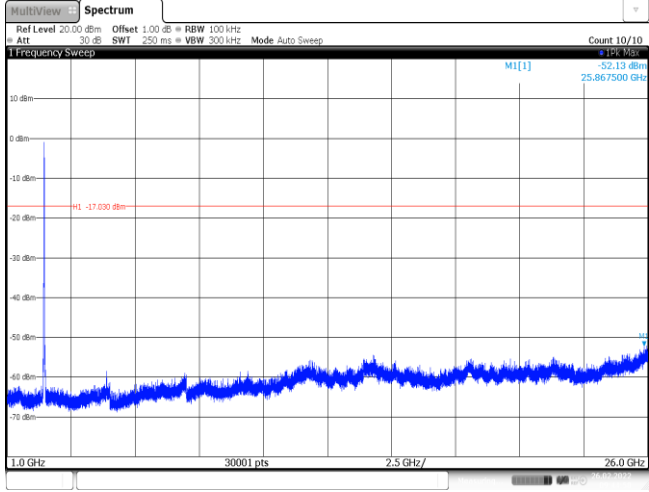


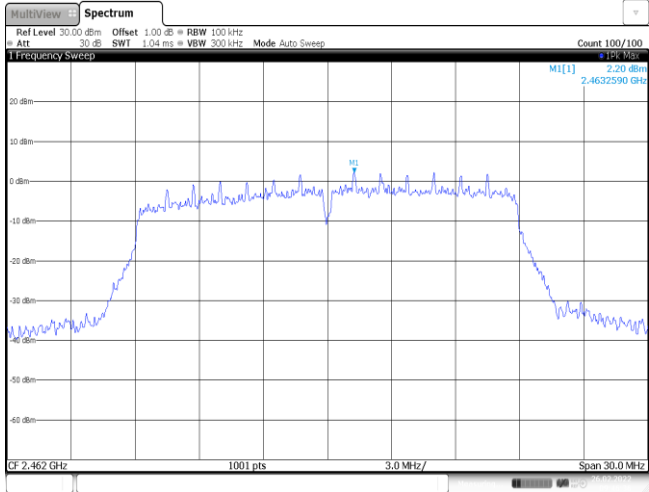
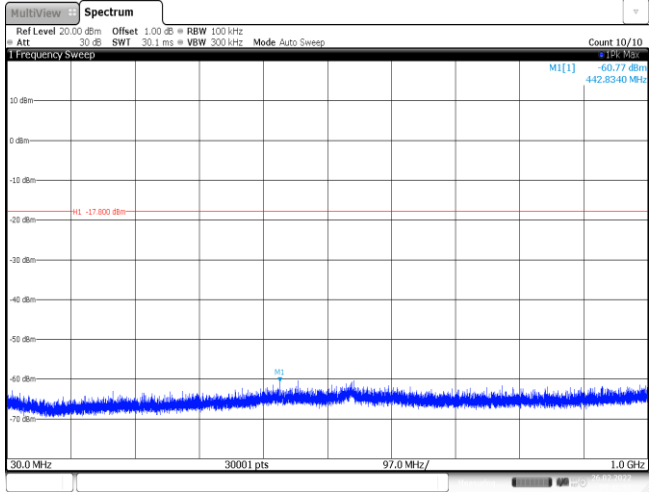
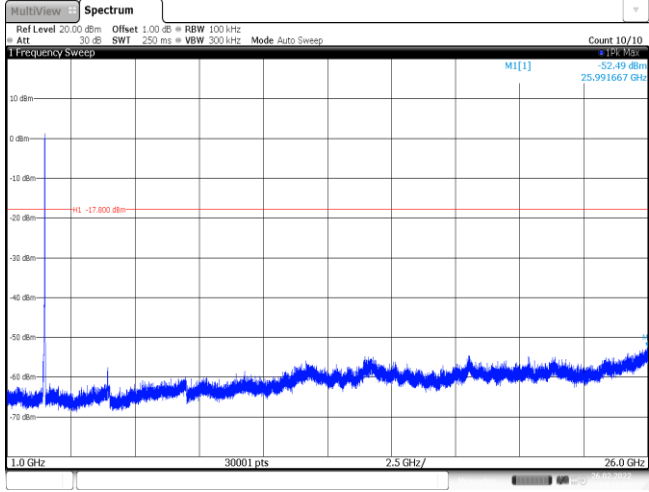
Test Item:	SE	Type:	802.11g
CH01 Reference level	 Date: 26.FEB.2022 09:33:39		
CH01 30MHz~1000MHz	 Date: 26.FEB.2022 09:33:55		
CH01 1GHz~26GHz	 Date: 26.FEB.2022 09:34:11		

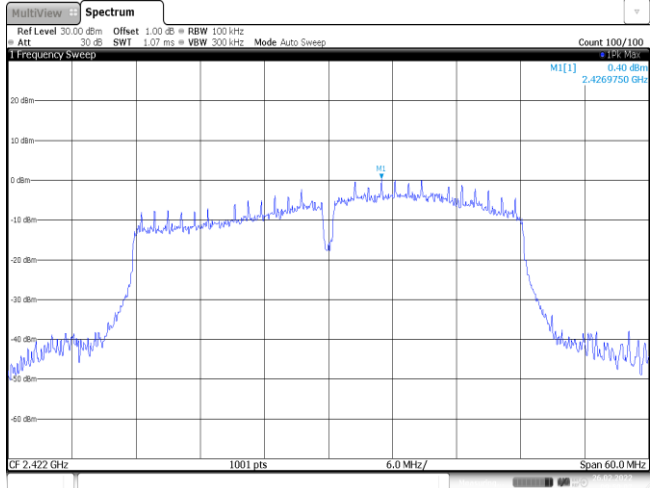
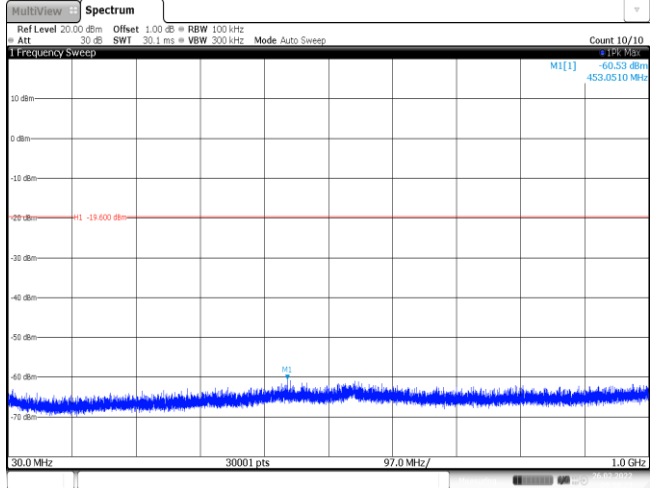
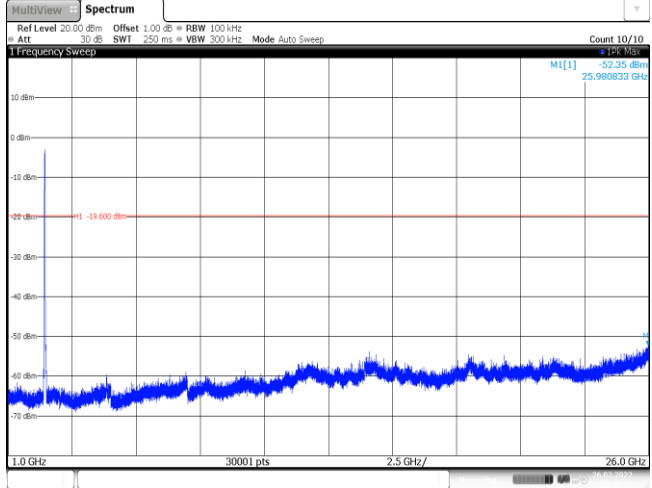
CH06 Reference level	 Ref Level 30.00 dBm Offset 1.00 dB RBW 100 kHz Att 30 dB SWF 1.04 ms VBW 300 kHz Mode Auto Sweep Count 100/100 M1[1] -2.83 dBm 2.4357410 GHz CF 2.437 GHz 1001 pts 3.0 MHz/ Span 30.0 MHz Date: 26 FEB 2022 09:56:19
CH06 30MHz~1000MHz	 Ref Level 20.00 dBm Offset 1.00 dB RBW 100 kHz Att 30 dB SWF 30.1 ms VBW 300 kHz Mode Auto Sweep Count 10/10 M1[1] -61.13 dBm 554.0250 MHz 30.0 MHz 30001 pts 97.0 MHz/ 1.0 GHz Date: 26 FEB 2022 09:56:35
CH06 1GHz~26GHz	 Ref Level 20.00 dBm Offset 1.00 dB RBW 100 kHz Att 30 dB SWF 250 ms VBW 300 kHz Mode Auto Sweep Count 10/10 M1[1] -52.49 dBm 25.922500 GHz 1.0 GHz 30001 pts 2.5 GHz/ 26.0 GHz Date: 26 FEB 2022 09:56:51

CH11 Reference level	 Date: 26 FEB 2022 09:28:20
CH11 30MHz~1000MHz	 Date: 26 FEB 2022 09:28:46
CH11 1GHz~26GHz	 Date: 26 FEB 2022 09:29:02

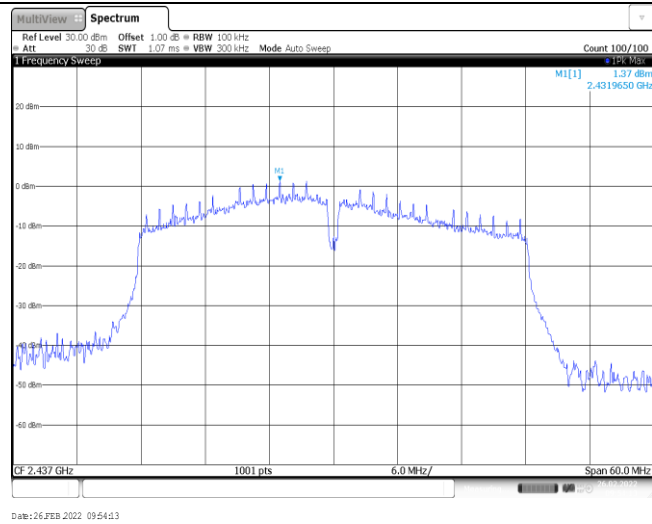
Test Item:	SE	Type:	802.11n(HT20)
CH01 Reference level		 Date: 26.FEB.2022 09:40:53	
CH01 30MHz~1000MHz		 Date: 26.FEB.2022 09:41:09	
CH01 1GHz~26GHz		 Date: 26.FEB.2022 09:41:25	

CH06 Reference level	 Date: 26.FEB.2022 09:44:26
CH06 30MHz~1000MHz	 Date: 26.FEB.2022 09:44:42
CH06 1GHz~26GHz	 Date: 26.FEB.2022 09:44:58

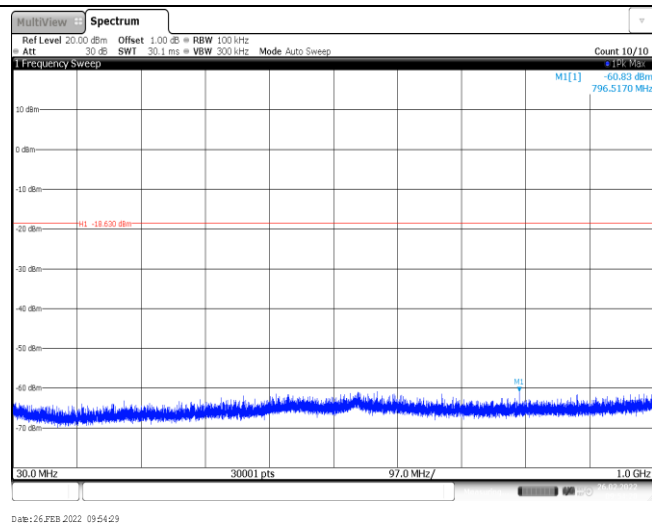
CH11 Reference level	 Date: 26.FEB.2022 09:46:37
CH11 30MHz~1000MHz	 Date: 26.FEB.2022 09:46:52
CH11 1GHz~26GHz	 Date: 26.FEB.2022 09:47:08

Test Item:	SE	Type:	802.11n(HT40)
CH03 Reference level		 CH03 Reference level	
CH03 30MHz~1000MHz		 CH03 30MHz~1000MHz	
CH03 1GHz~26GHz		 CH03 1GHz~26GHz	

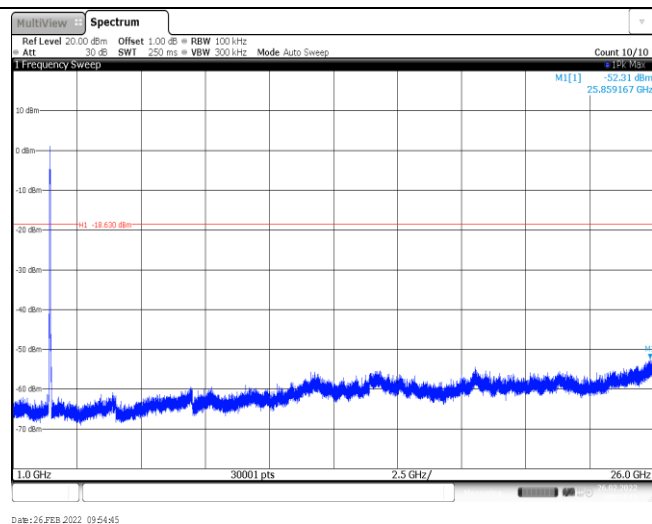
CH06
Reference level

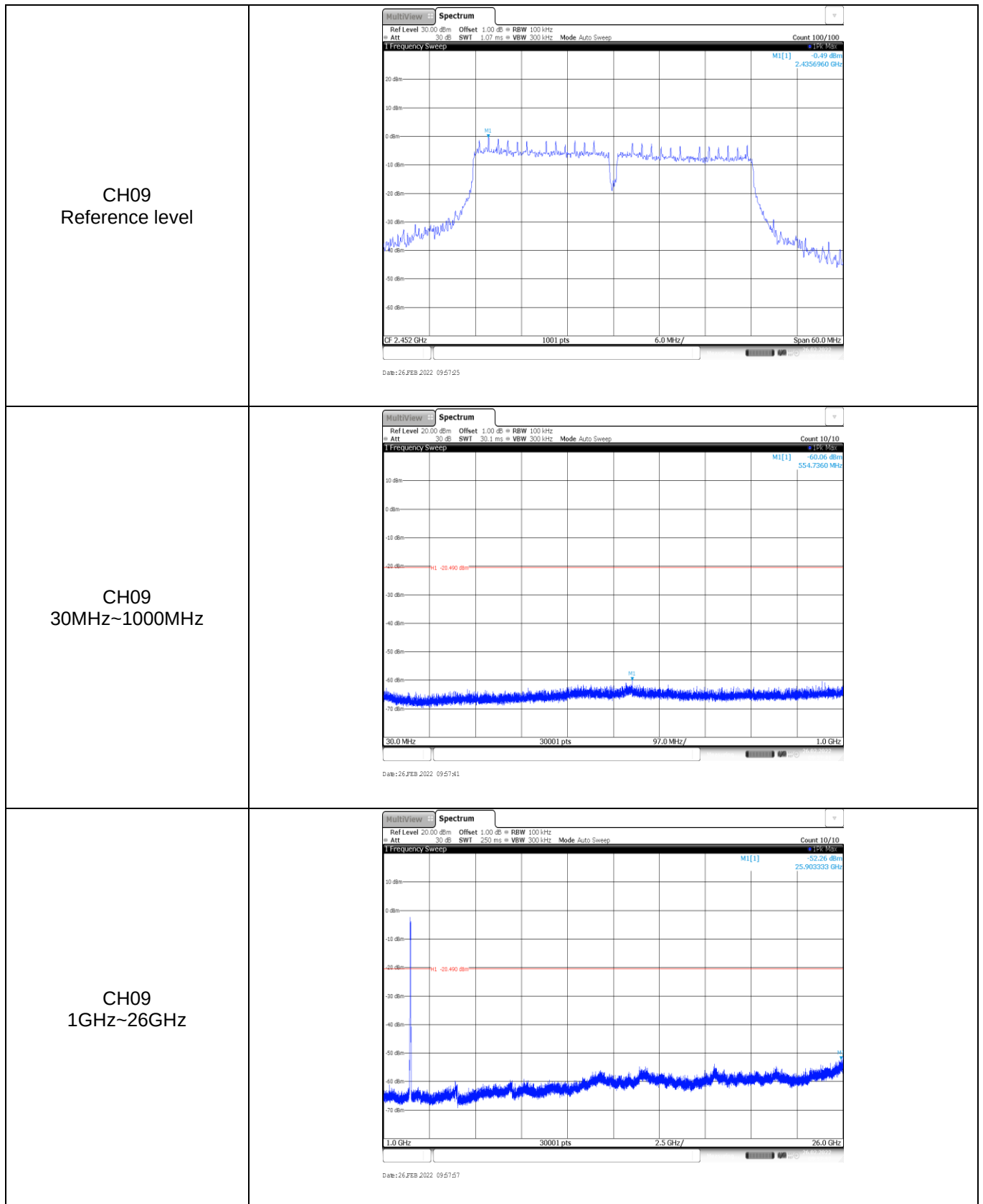


CH06
30MHz~1000MHz



CH06
1GHz~26GHz





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