

APPENDIX REPORT

Project No.	SHT2106014501EW	Radio Specification	WIFI 2.4G
Test sample No.	YPHT21060145004	Model No.	T650m
Start test date	2021-06-22	Finish date	2021-06-22
Temperature	26.2°C	Humidity	55%
Test Engineer	Hailey Chen	Auditor	Xiaodong Zhu

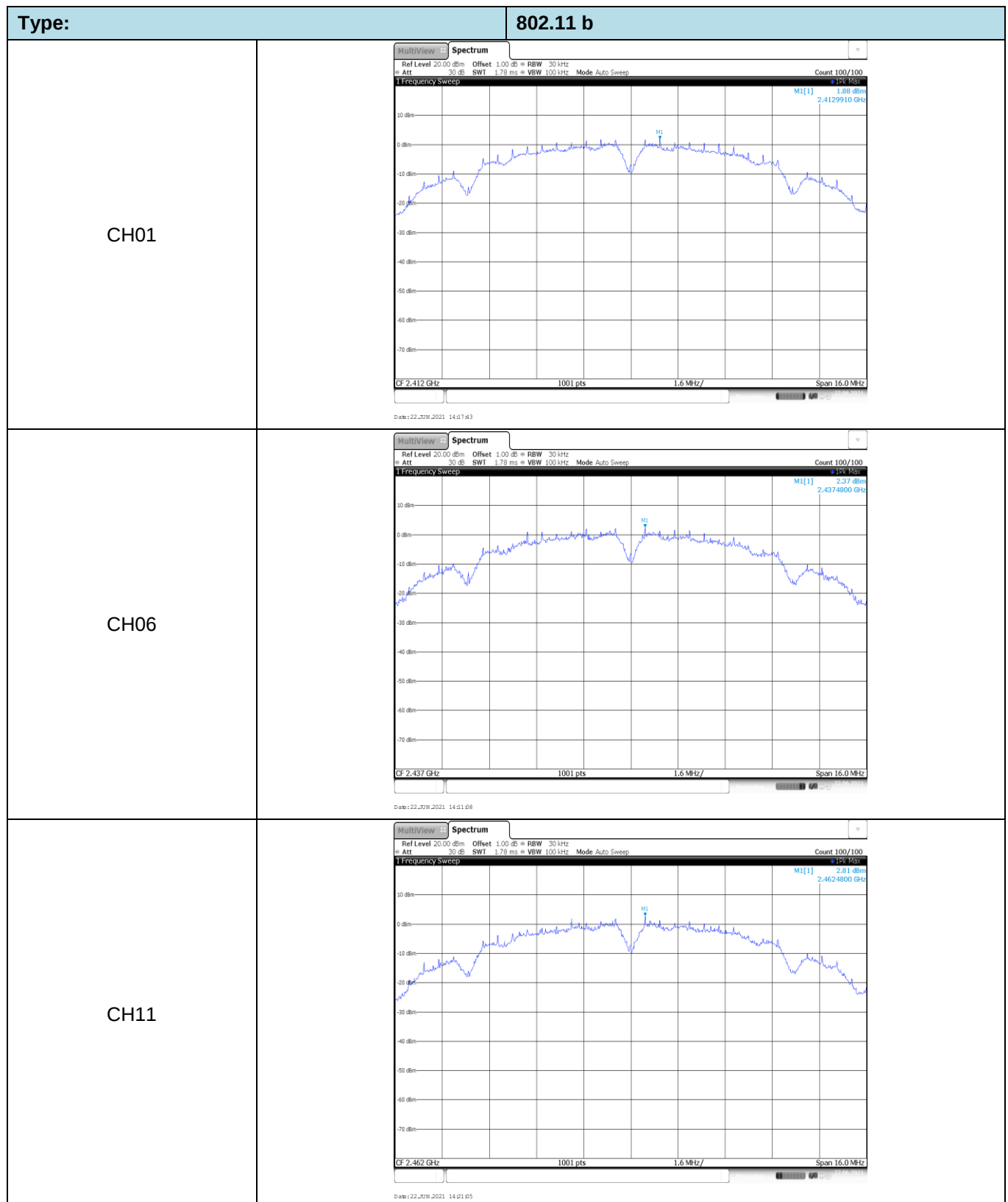
Appendix clause	Test item	Result
A	Conducted Peak Output Power	PASS
B	Power Spectral Density	PASS
C	6 dB Bandwidth	PASS
D	99% Occupied Bandwidth	PASS
E	Duty Cycle	PASS
F	Band edge and Spurious Emissions (conducted)	PASS

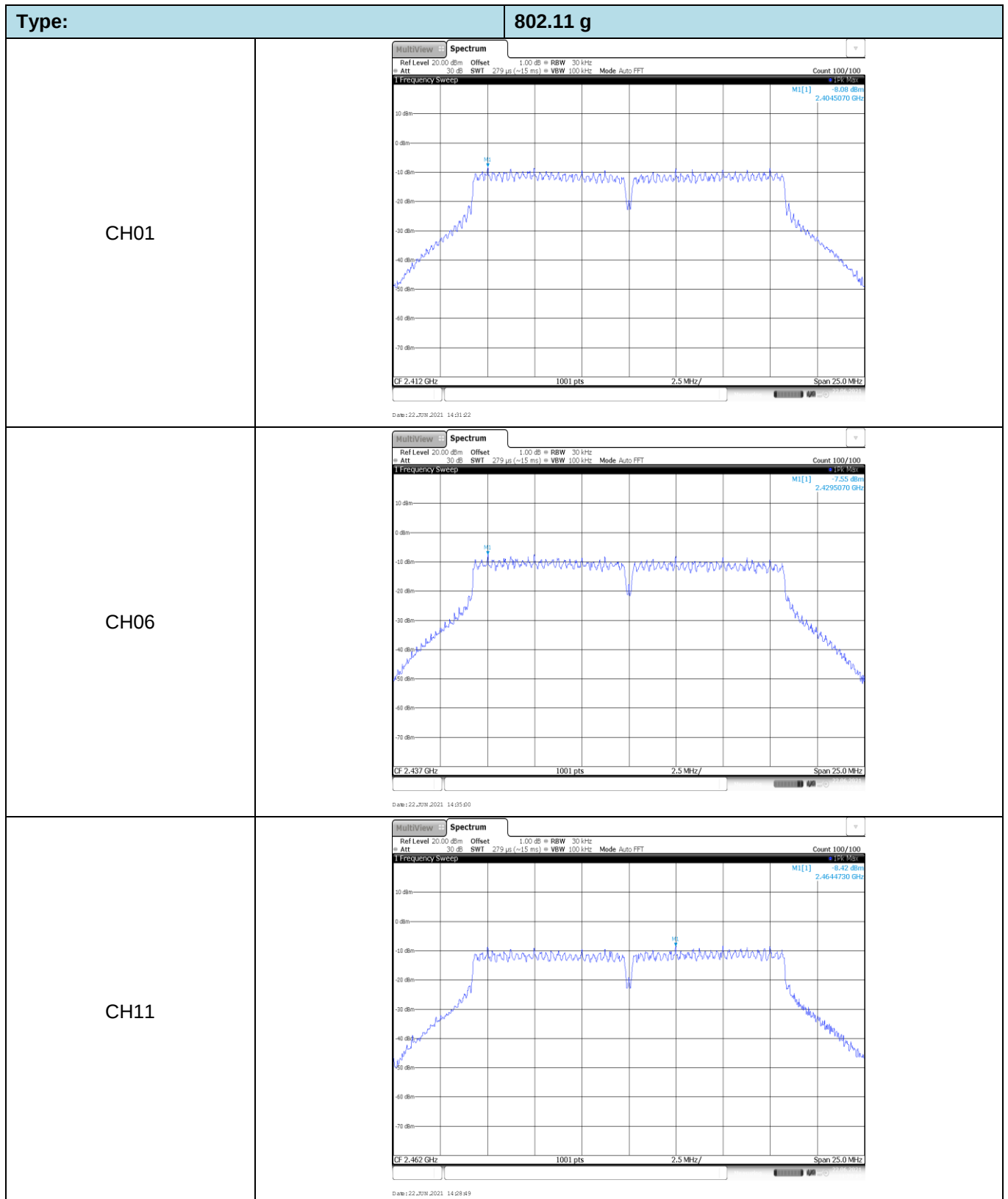
Appendix A: Conducted Peak Output Power

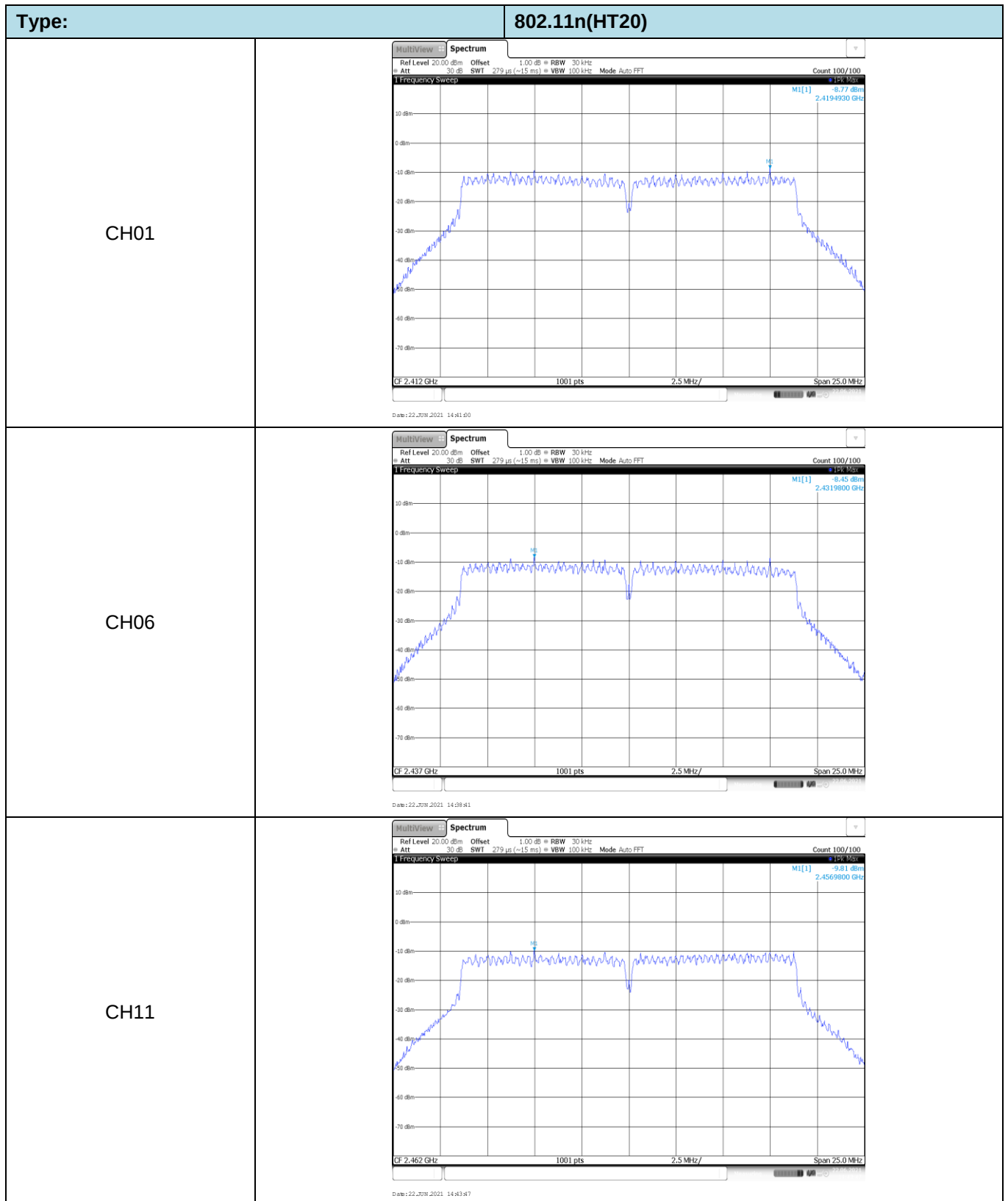
Type	Channel	Peak Output power (dBm)	Average Output power (dBm)	Limit (dBm)	Result
802.11b	01	16.05	13.61	≤ 30.00	Pass
	06	16.71	14.30		
	11	15.74	13.31		
802.11g	01	16.48	13.64	≤ 30.00	Pass
	06	16.96	14.55		
	11	15.91	13.39		
802.11n (HT20)	01	15.55	12.87	≤ 30.00	Pass
	06	16.11	13.45		
	11	14.98	12.34		

Appendix B: Power Spectral Density

Type	Channel	Power Spectral Density (dBm/30KHz)	Limit (dBm/3KHz)	Result
802.11b	01	1.88	≤8.00	Pass
	06	2.37		
	11	2.81		
802.11g	01	-8.08	≤8.00	Pass
	06	-7.55		
	11	-8.42		
802.11n(HT20)	01	-8.77	≤8.00	Pass
	06	-8.45		
	11	-9.81		







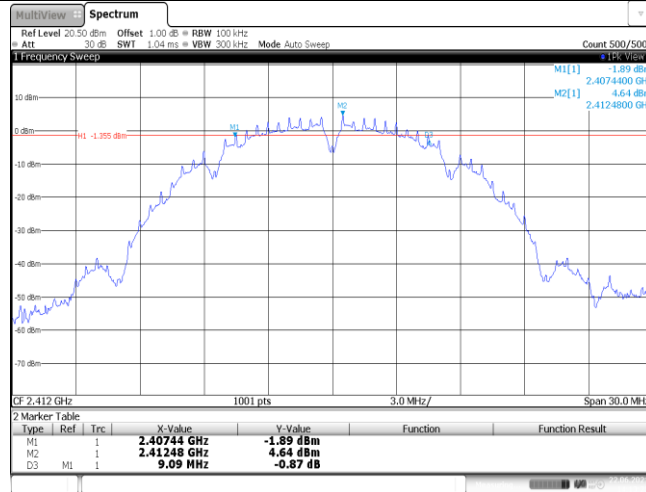
Appendix C: 6dB bandwidth

Type	Channel	6dB Bandwidth (MHz)	Limit (MHz)	Result
802.11b	01	9.09	≥0.5	Pass
	06	9.05		
	11	8.13		
802.11g	01	16.41	≥0.5	Pass
	06	16.41		
	11	16.41		
802.11n(HT20)	01	17.67	≥0.5	Pass
	06	17.40		
	11	17.64		

Type:

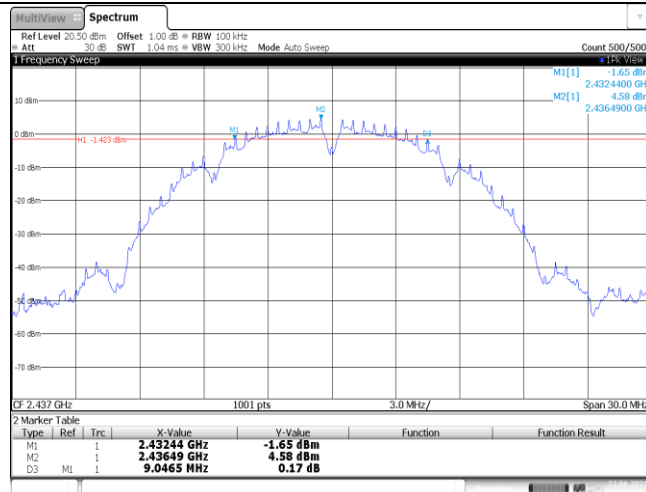
802.11 b

CH01



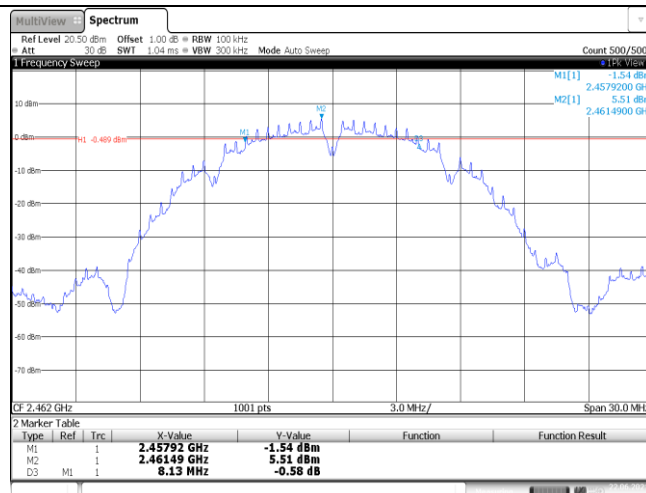
Date: 22_JUN 2021 14:13:24

CH06

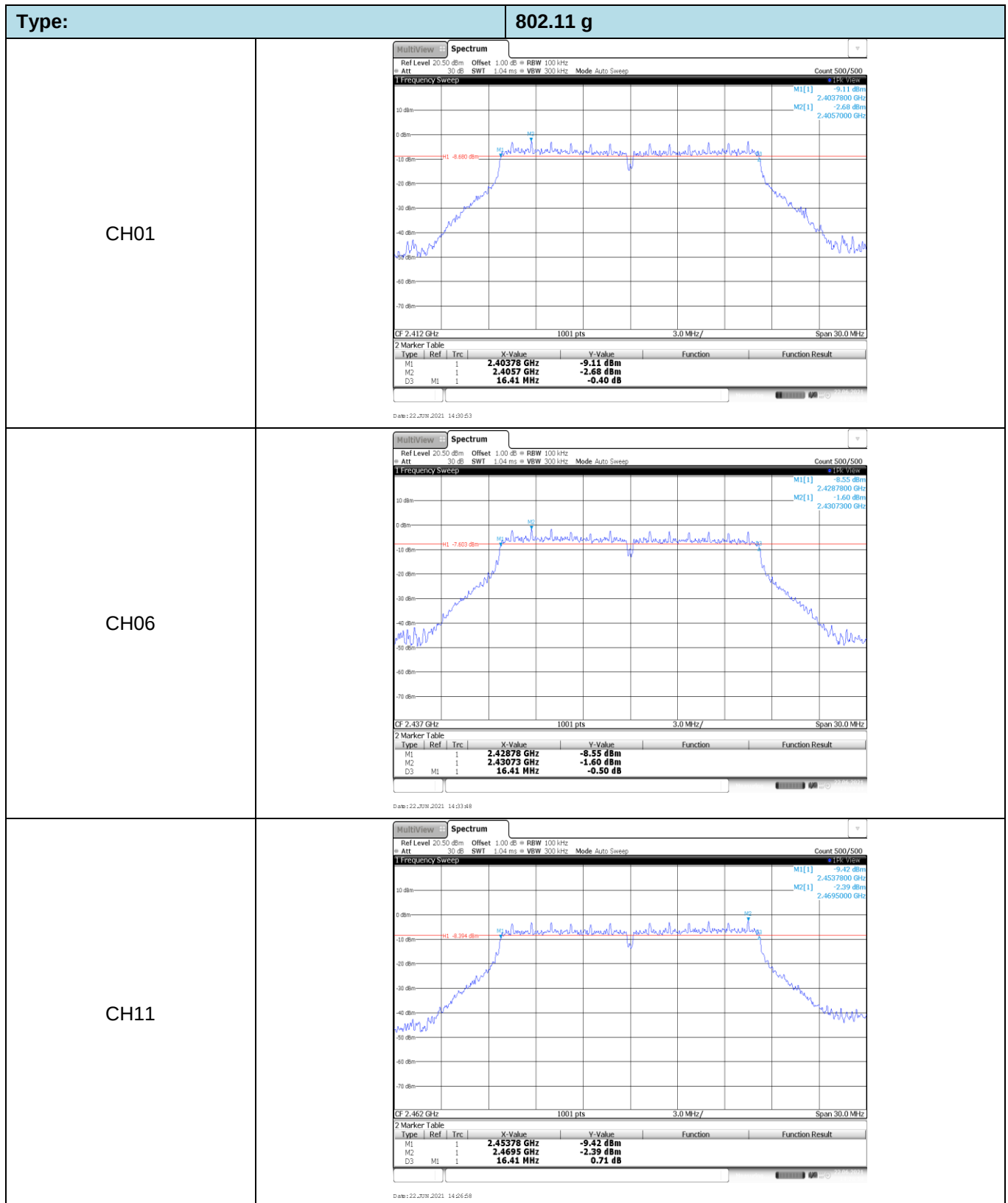


Date: 22_JUN 2021 17:14:50

CH11



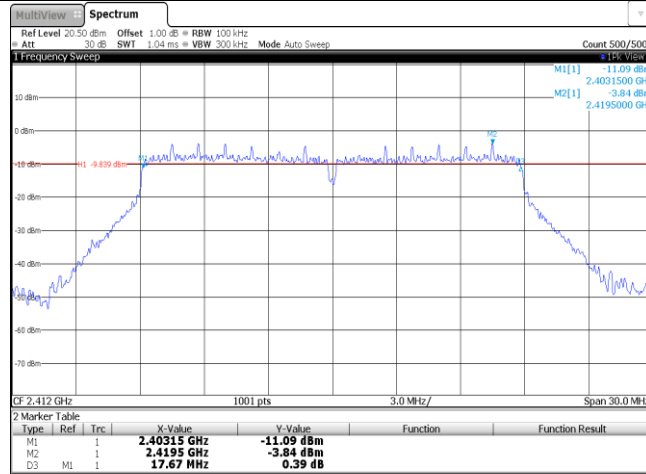
Date: 22_JUN 2021 14:20:20



Type:

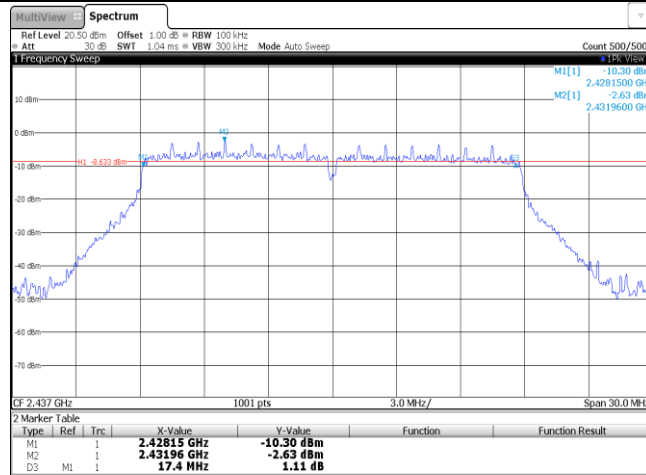
802.11n(HT20)

CH01



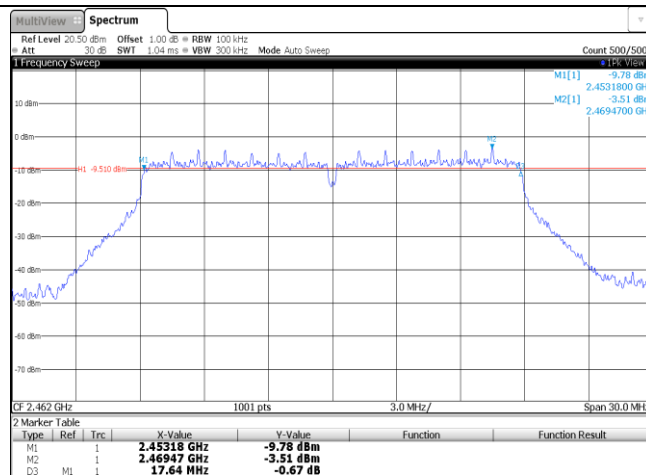
Date: 22_JUN 2021 14:40:07

CH06



Date: 22_JUN 2021 14:07:48

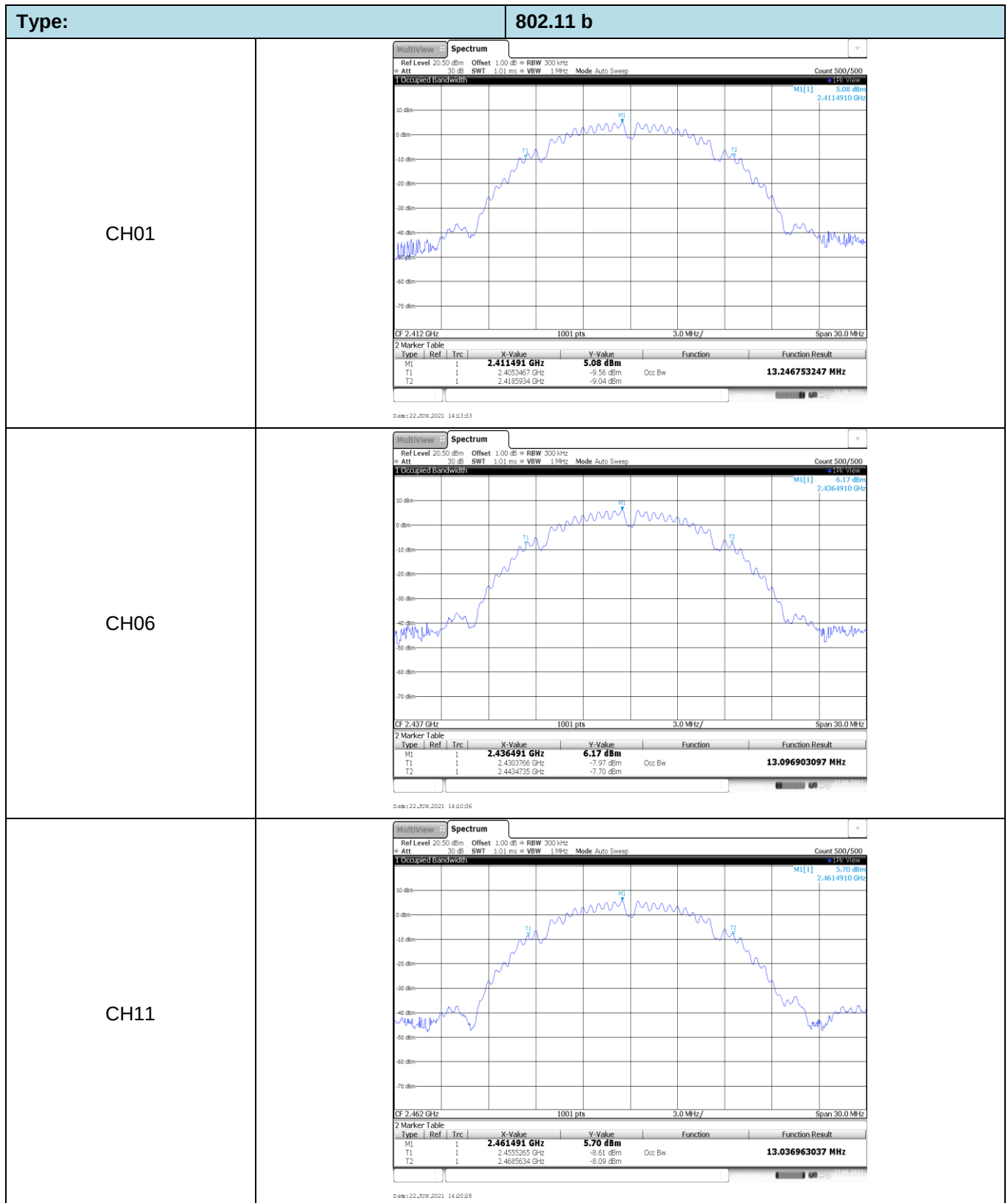
CH11

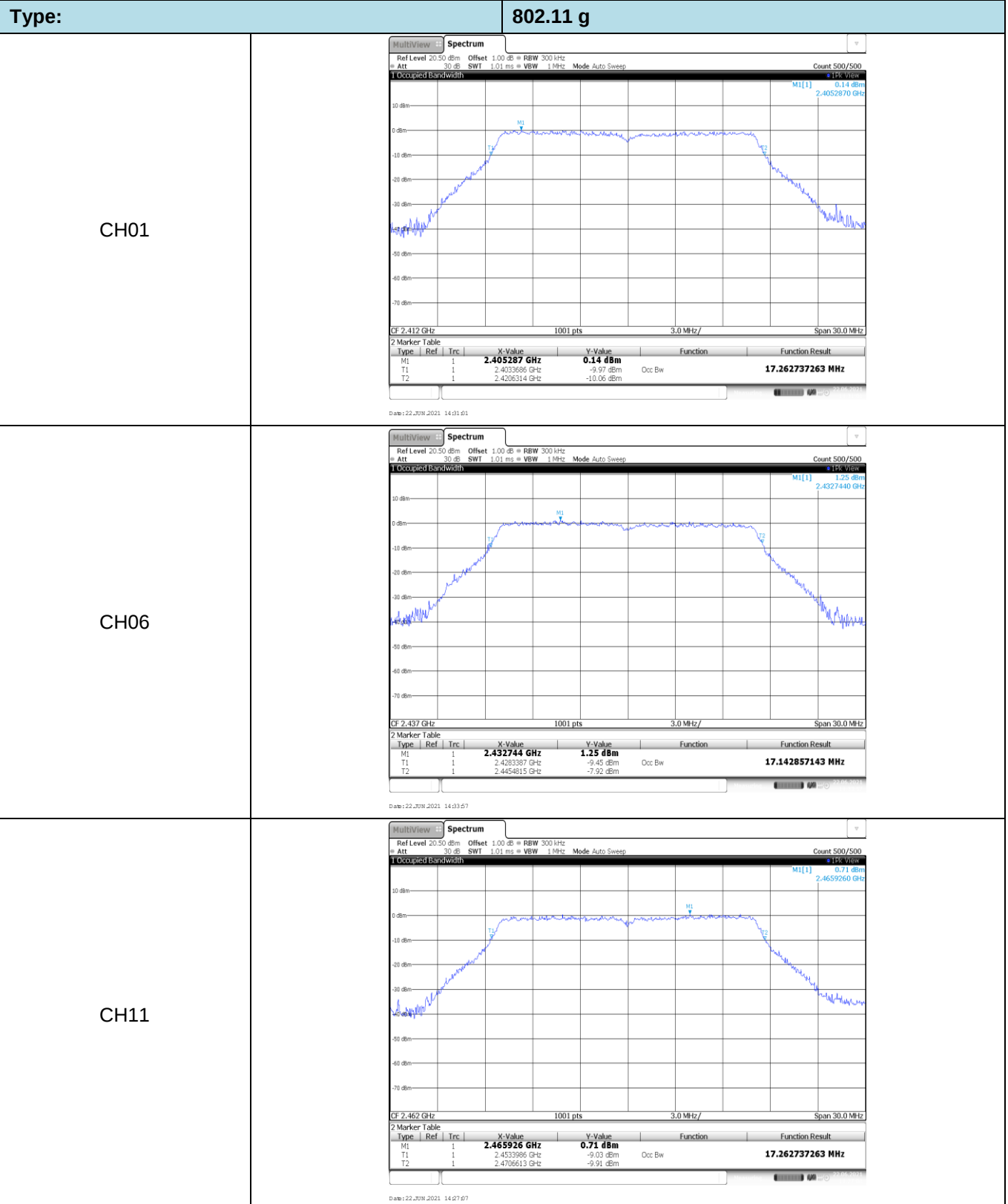


Date: 22_JUN 2021 14:42:54

Appendix D: 99% Occupied Bandwidth

Type	Channel	99% Bandwidth (MHz)	Limit (MHz)	Result
802.11b	01	13.25	-	Pass
	06	13.10		
	11	13.04		
802.11g	01	17.26	-	Pass
	06	17.14		
	11	17.26		
802.11n(HT20)	01	18.19	-	Pass
	06	18.07		
	11	18.19		

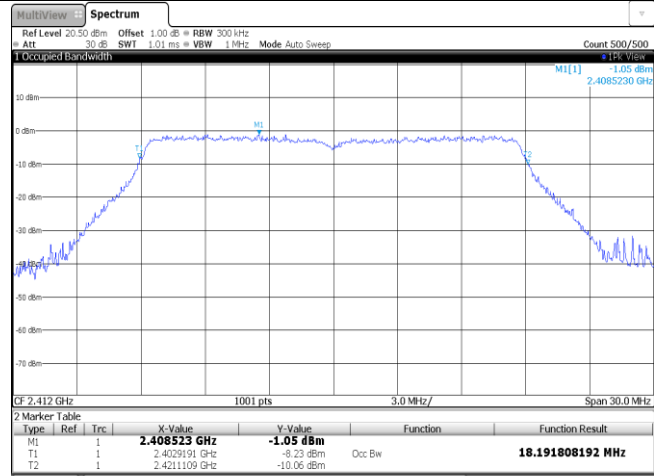




Type:

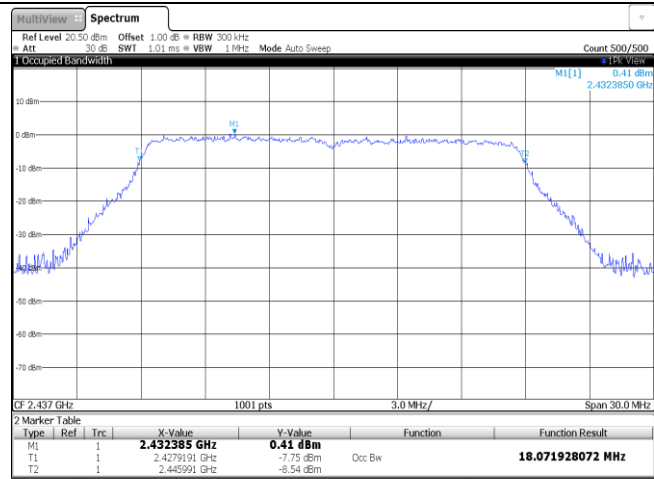
802.11n(HT20)

CH01



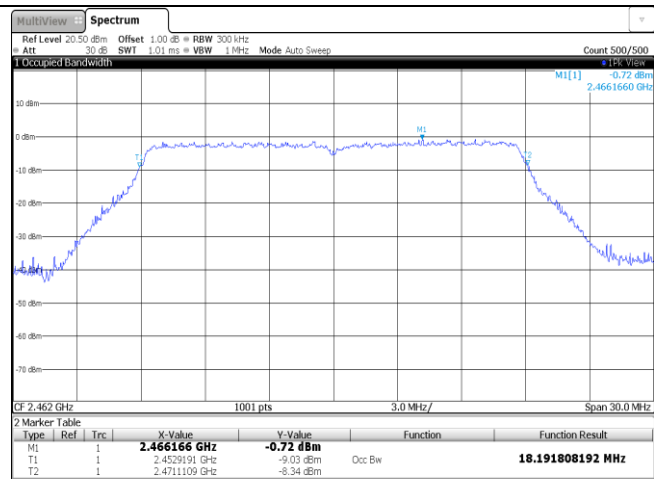
Date: 22_JUN 2021 14:40:55

CH06



Date: 22_JUN 2021 14:07:67

CH11

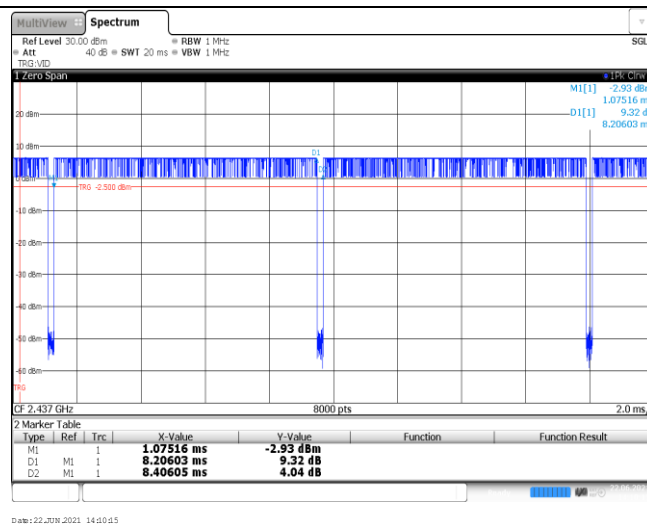


Date: 22_JUN 2021 14:43:03

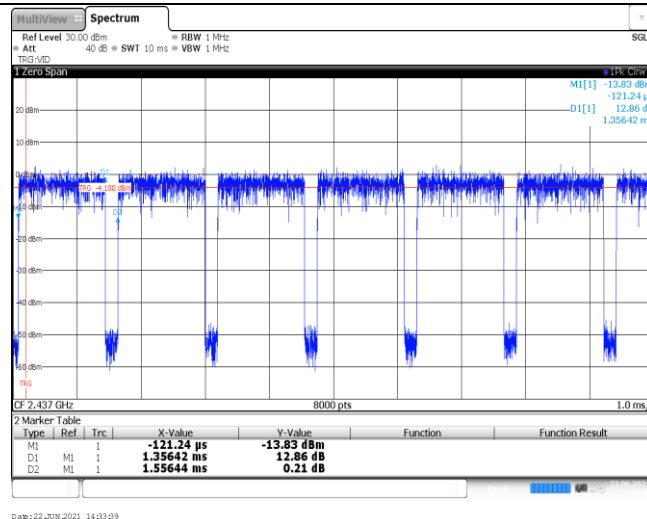
Appendix E: Duty Cycle

Modulation Type	Test Frequency (MHz)	T _{on time} for single burst (ms)	T _{period} (ms)	Duty cycle	1/T _{on time} (kHz)
11b	2437	8.21	8.41	97.6%	0.1
11g	2437	1.36	1.56	87.2%	0.7
11n20	2437	1.27	1.47	86.4%	0.8

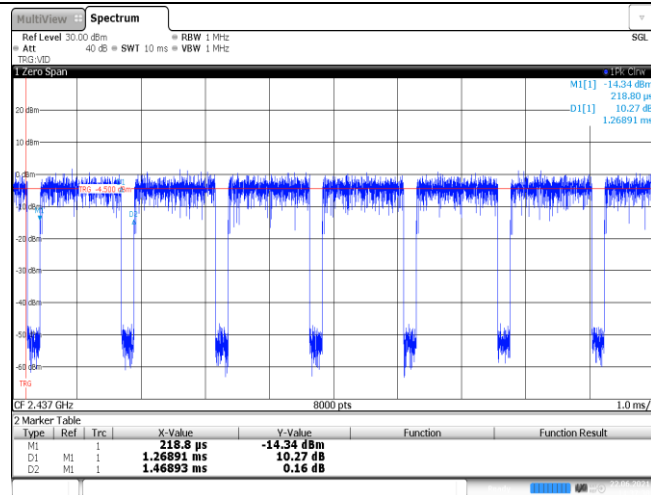
11b



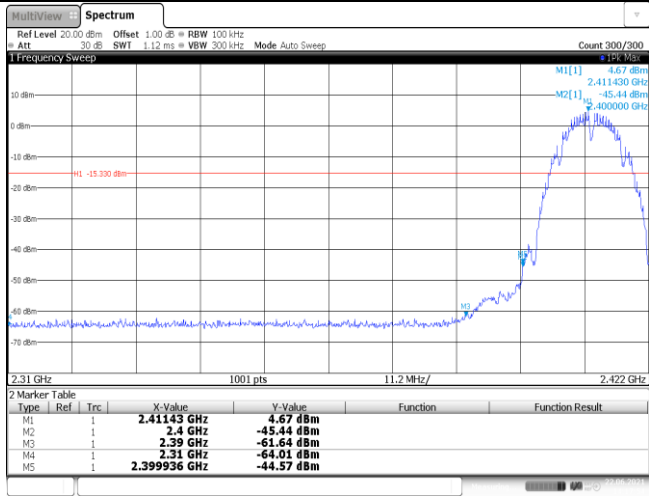
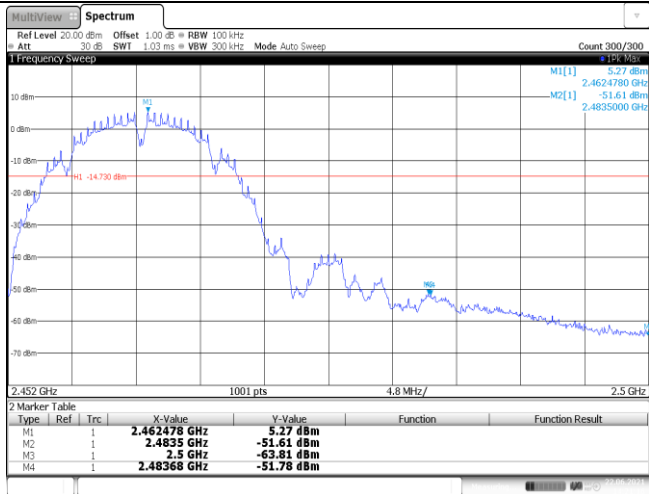
11g

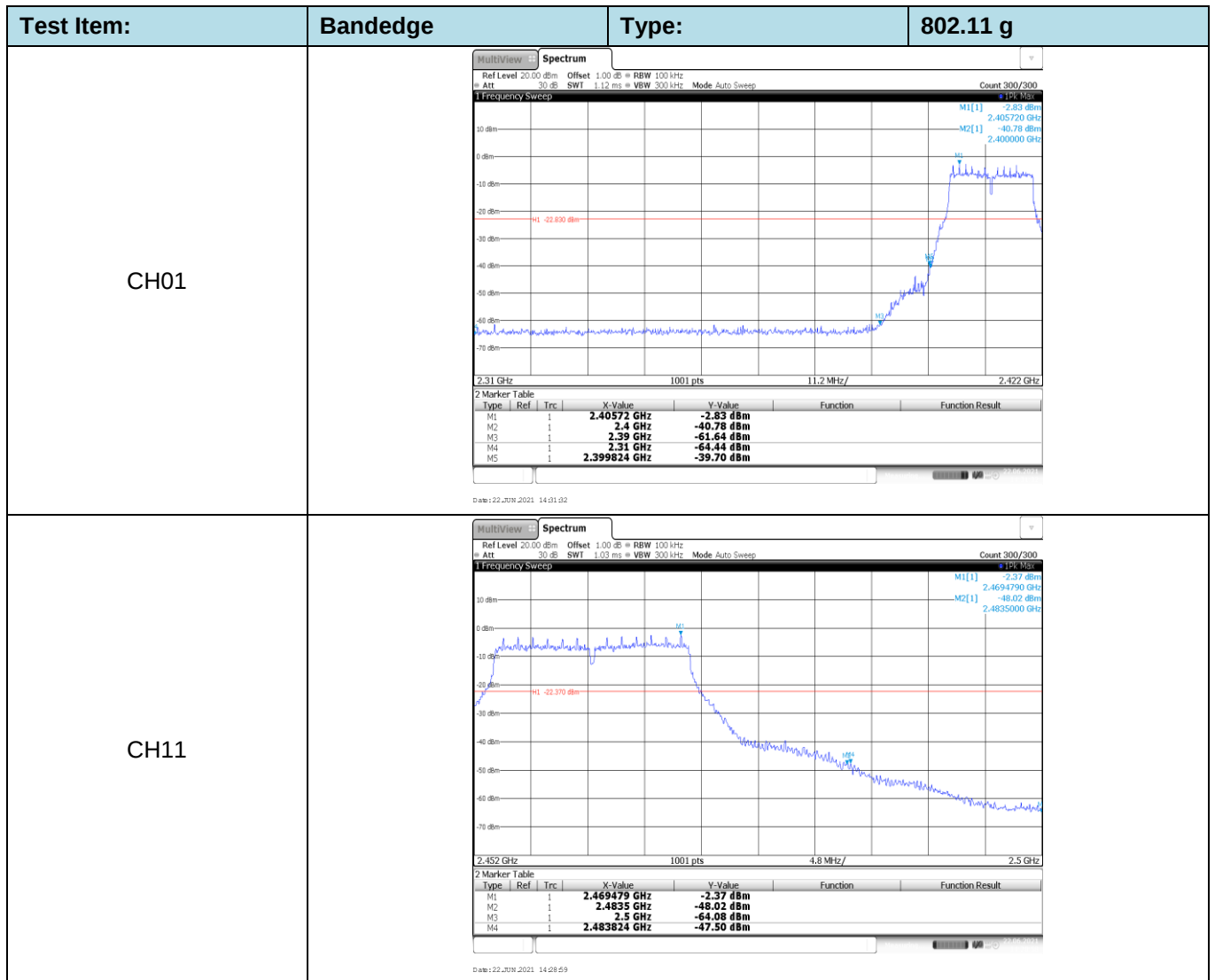


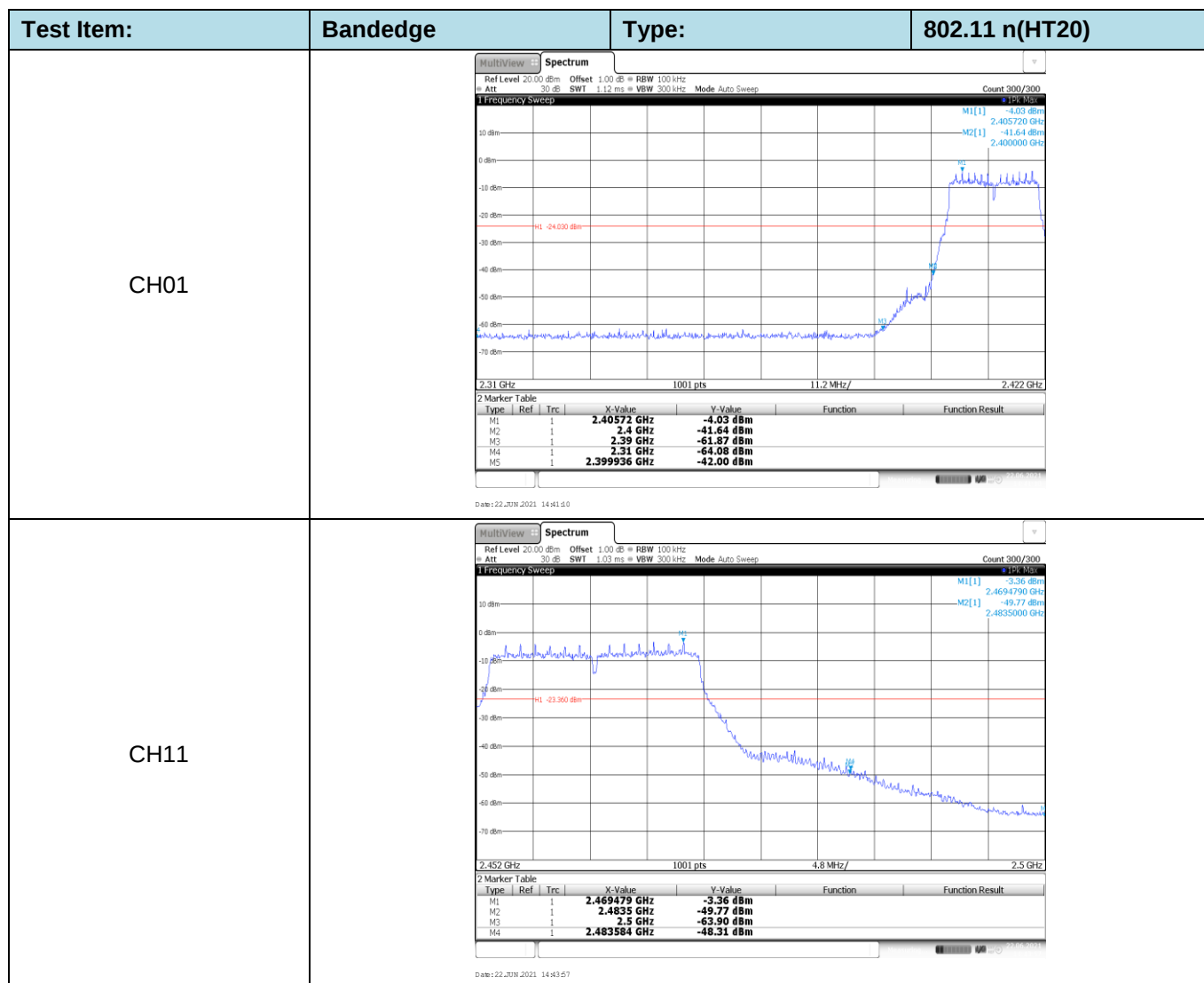
11n20

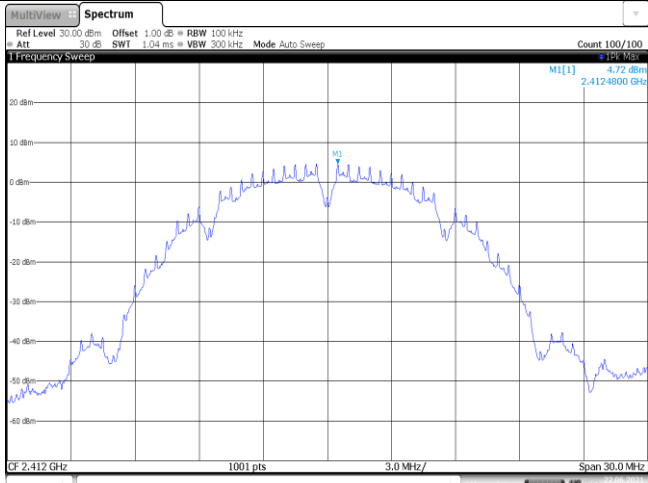
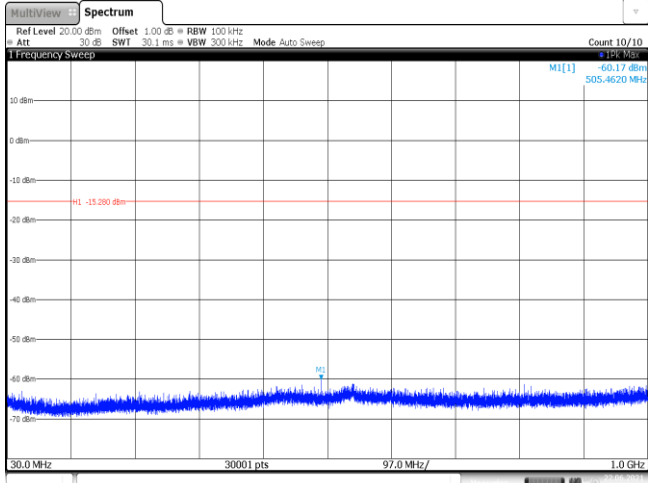
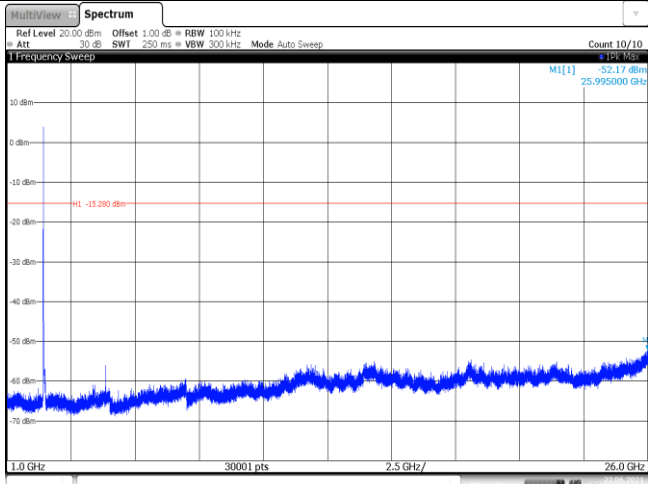


Appendix F: Band edge and Spurious Emissions (conducted)

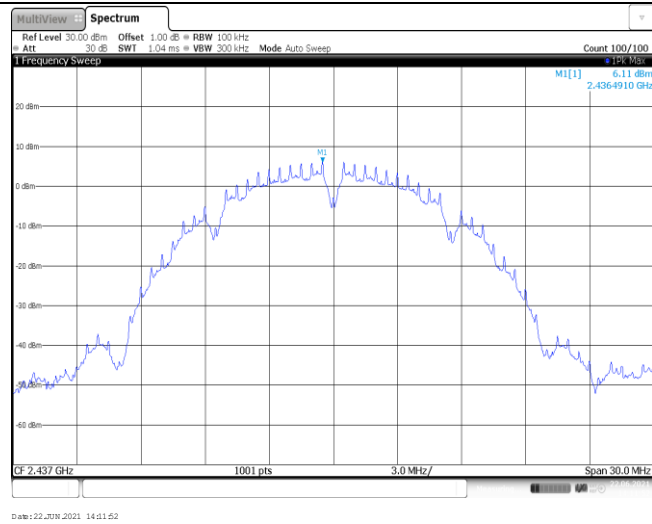
Test Item:	Bandedge	Type:	802.11 b																																										
CH01	MultiViewSpectrum Ref Level 20.00 dBm Offset 1.00 dB BW 100 kHz Att 30 dB SWT 1.12 ms VBW 300 kHz Mode Auto Sweep Count 300/300 1 Frequency Sweep  2 Marker Table <table><tr><th>Type</th><th>Ref</th><th>Trc</th><th>X-Value</th><th>Y-Value</th><th>Function</th><th>Function Result</th></tr><tr><td>M1</td><td>1</td><td></td><td>2.41143 GHz</td><td>-4.67 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>2.4 GHz</td><td>-45.44 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>-64.01 dBm</td><td></td><td></td></tr><tr><td>M5</td><td>1</td><td></td><td>2.399936 GHz</td><td>-44.57 dBm</td><td></td><td></td></tr></table> Date: 22_JUN 2021 14:17:53			Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		2.41143 GHz	-4.67 dBm			M2	1		2.4 GHz	-45.44 dBm			M3	1		2.39 GHz	-61.64 dBm			M4	1		2.31 GHz	-64.01 dBm			M5	1		2.399936 GHz	-44.57 dBm		
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result																																							
M1	1		2.41143 GHz	-4.67 dBm																																									
M2	1		2.4 GHz	-45.44 dBm																																									
M3	1		2.39 GHz	-61.64 dBm																																									
M4	1		2.31 GHz	-64.01 dBm																																									
M5	1		2.399936 GHz	-44.57 dBm																																									
CH11	MultiViewSpectrum Ref Level 20.00 dBm Offset 1.00 dB BW 100 kHz Att 30 dB SWT 1.03 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>2.462478 GHz</td><td>-5.27 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>2.4835 GHz</td><td>-51.61 dBm</td><td></td><td></td></tr><tr><td>M3</td><td>1</td><td></td><td>2.5 GHz</td><td>-63.81 dBm</td><td></td><td></td></tr><tr><td>M4</td><td>1</td><td></td><td>2.48368 GHz</td><td>-51.78 dBm</td><td></td><td></td></tr></table> Date: 22_JUN 2021 14:21:16			Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		2.462478 GHz	-5.27 dBm			M2	1		2.4835 GHz	-51.61 dBm			M3	1		2.5 GHz	-63.81 dBm			M4	1		2.48368 GHz	-51.78 dBm									
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result																																							
M1	1		2.462478 GHz	-5.27 dBm																																									
M2	1		2.4835 GHz	-51.61 dBm																																									
M3	1		2.5 GHz	-63.81 dBm																																									
M4	1		2.48368 GHz	-51.78 dBm																																									



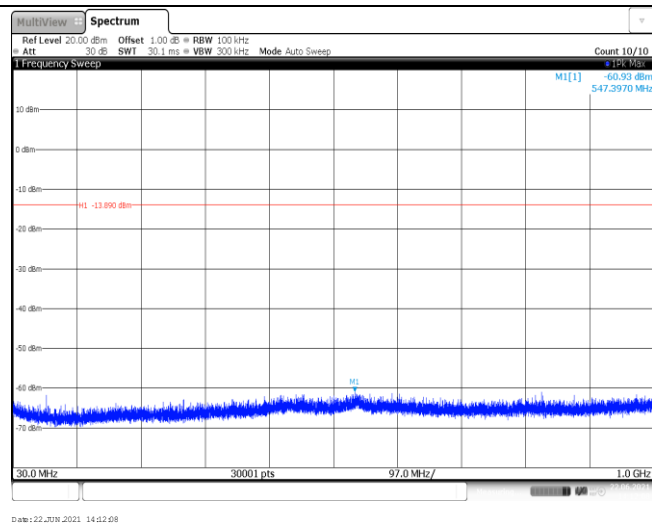


Test Item:	SE	Type:	802.11 b
CH01 Reference level			
CH01 30MHz~1000MHz			
CH01 1GHz~26GHz			

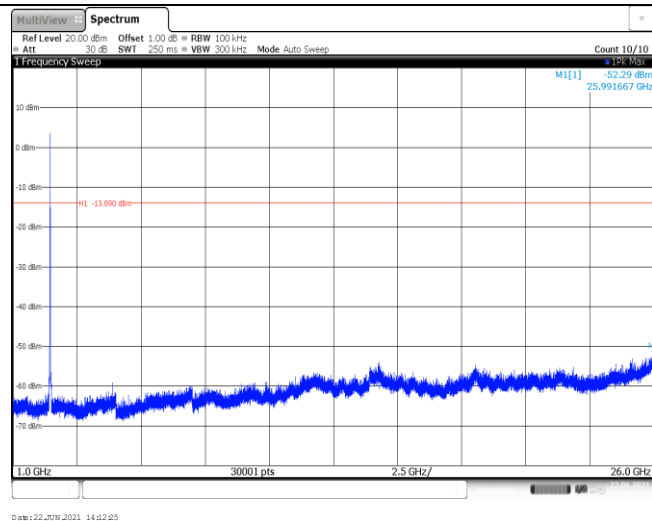
CH06
Reference level



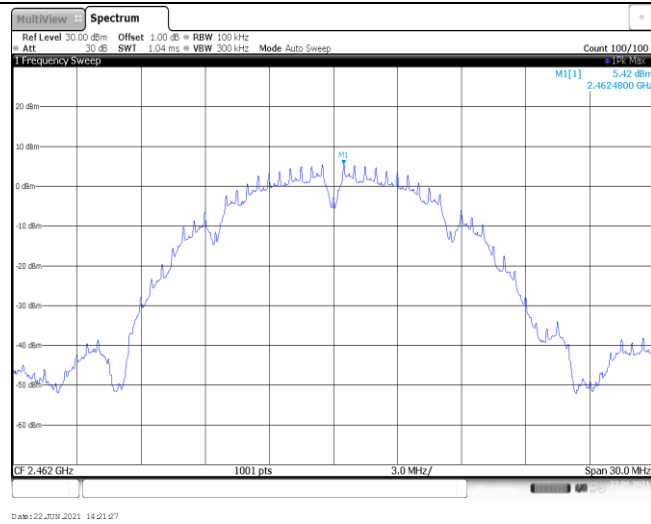
CH06
30MHz~1000MHz



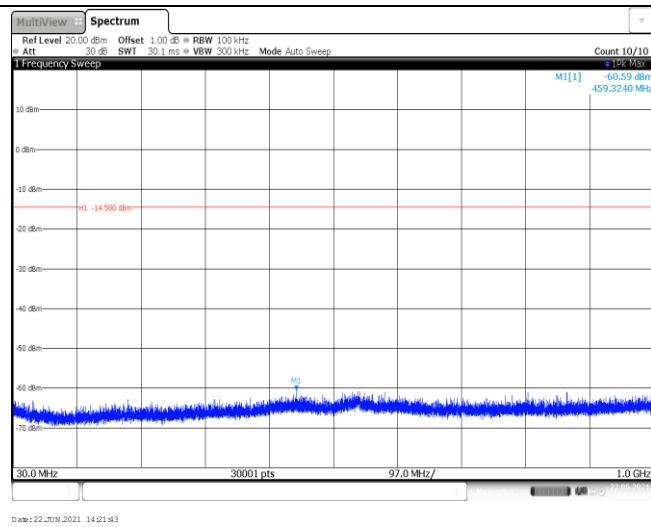
CH06
1GHz~26GHz



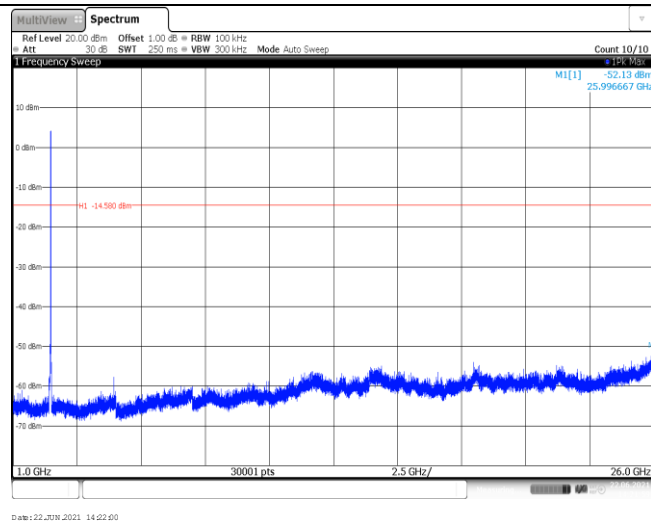
CH11
Reference level

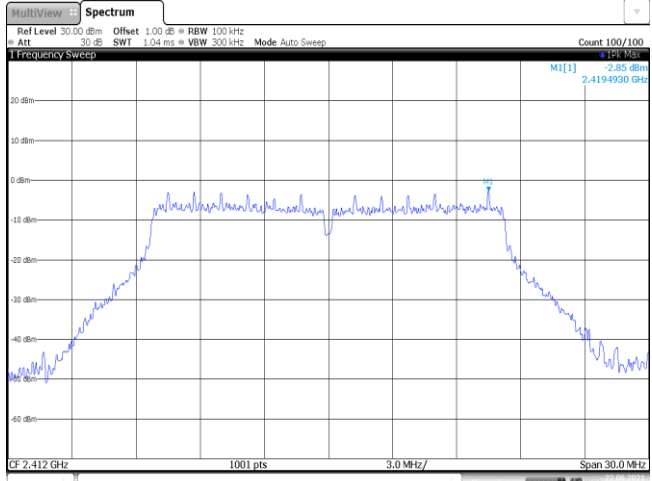
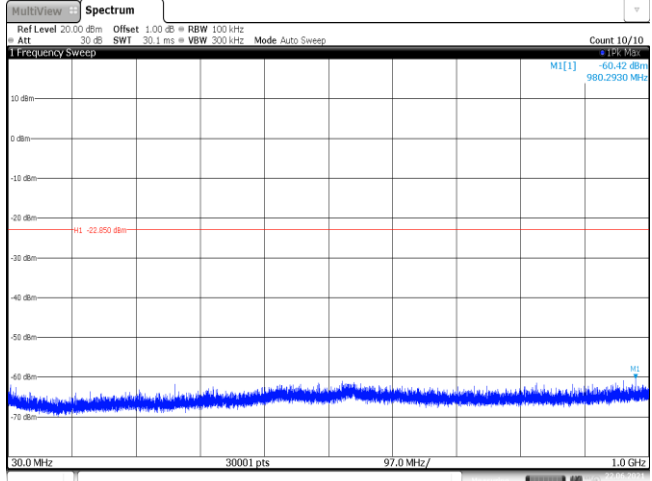
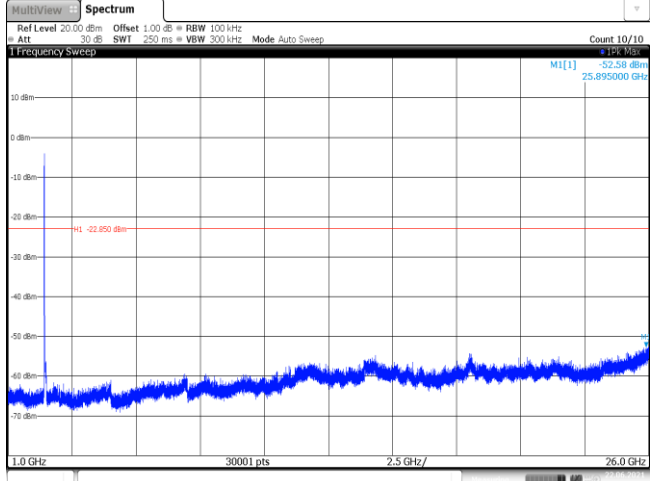


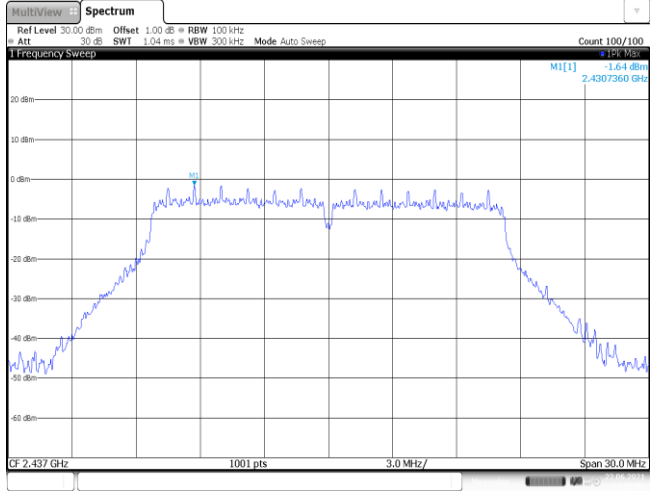
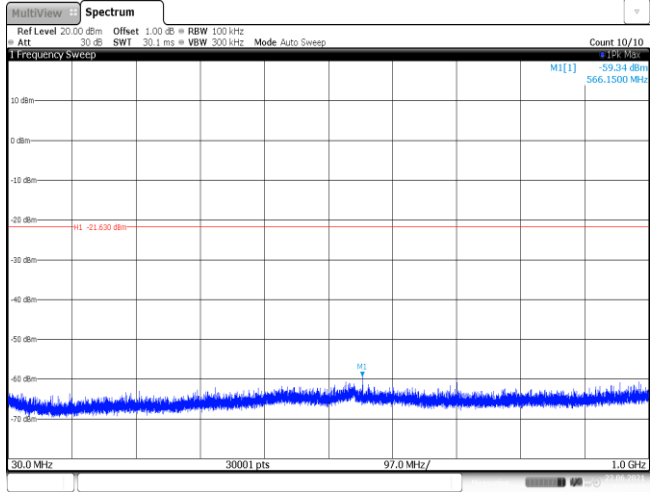
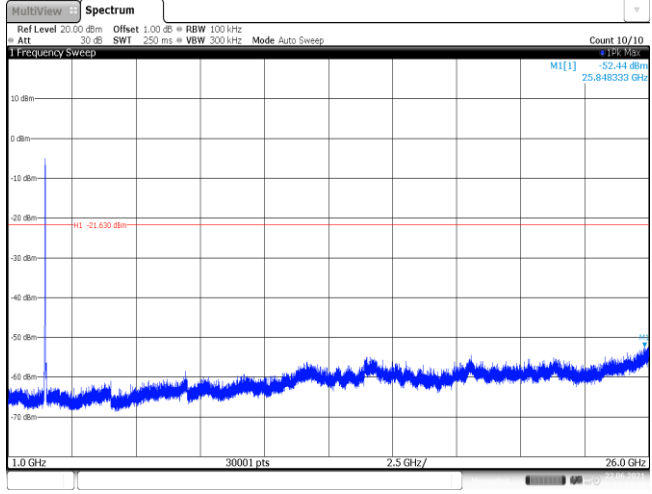
CH11
30MHz~1000MHz



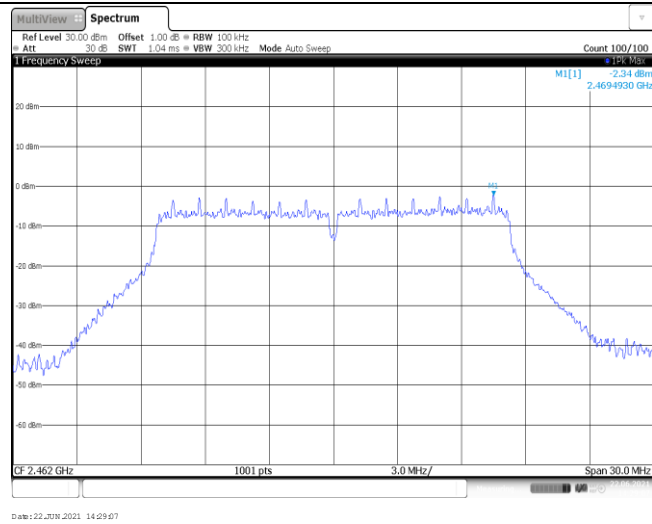
CH11
1GHz~26GHz



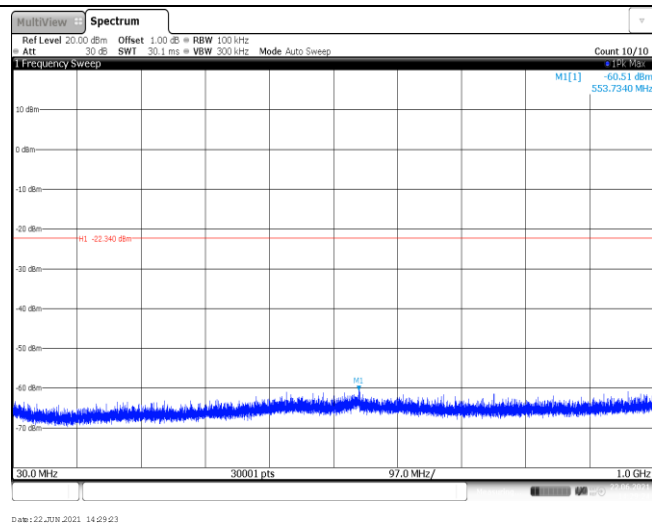
Test Item:	SE	Type:	802.11 g
CH01 Reference level			
CH01 30MHz~1000MHz			
CH01 1GHz~26GHz			

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

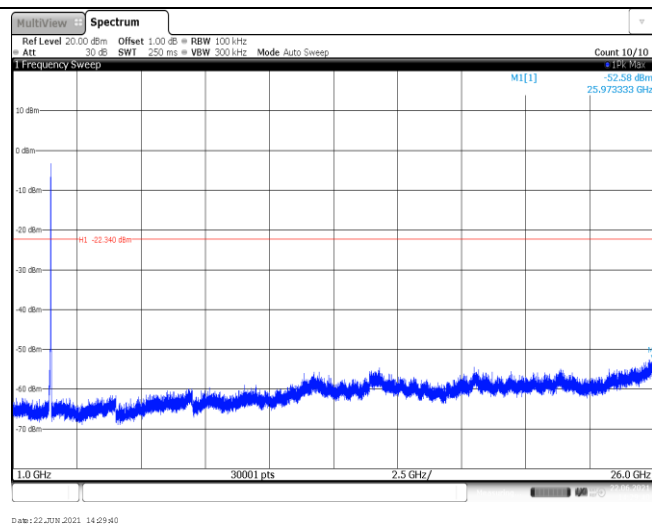
CH11
Reference level

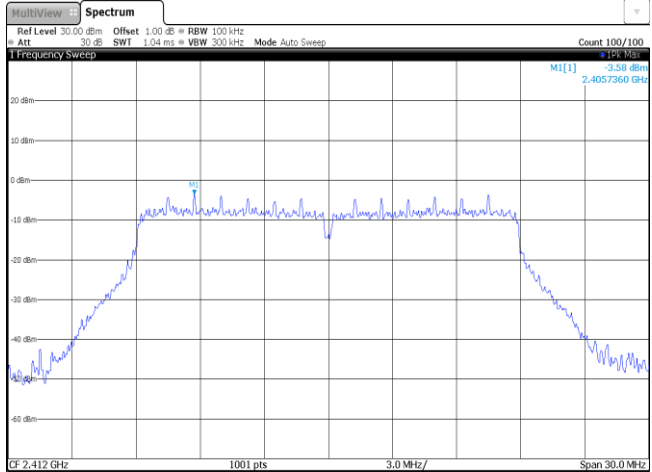
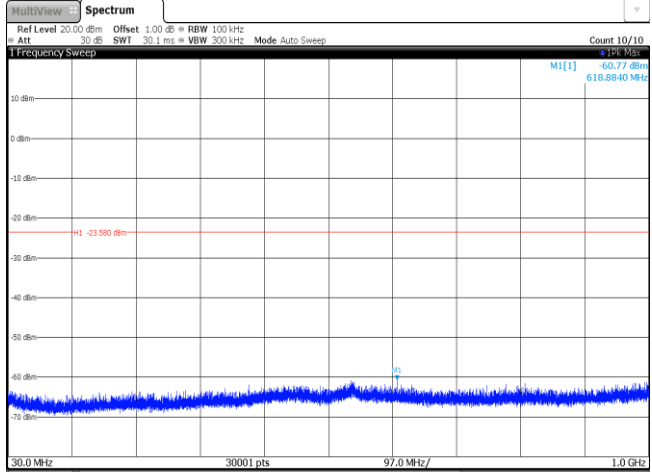
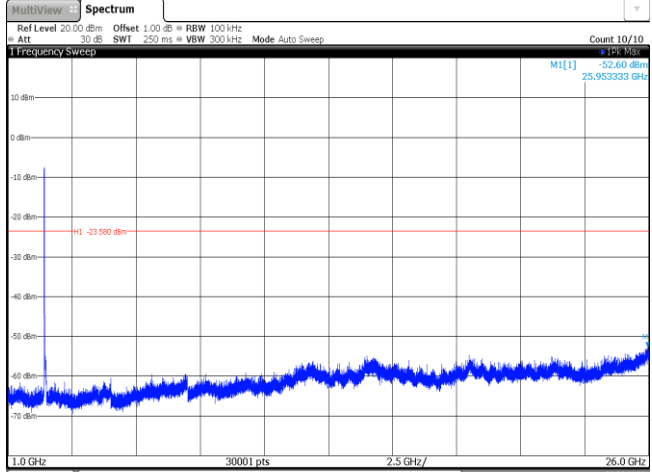


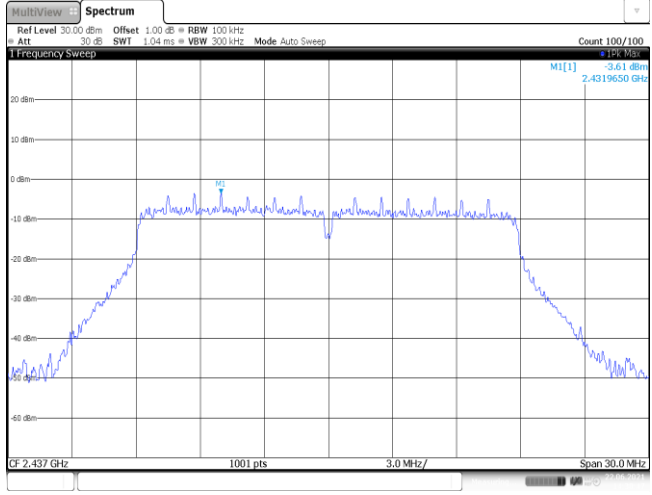
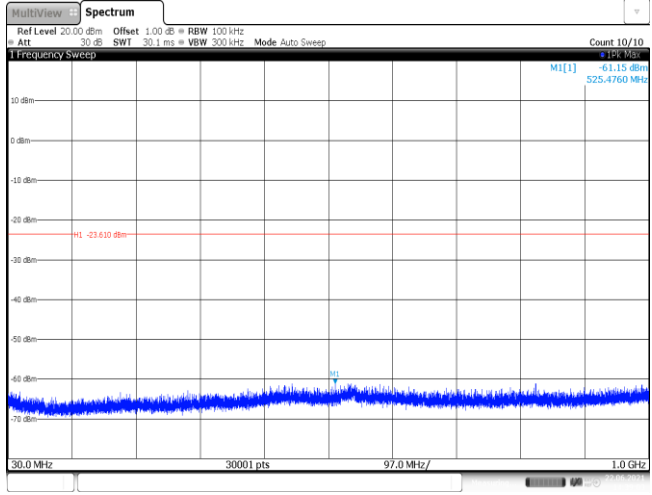
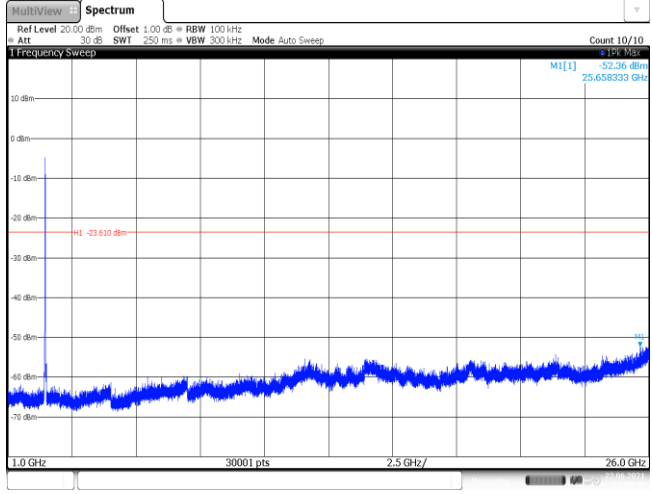
CH11
30MHz~1000MHz



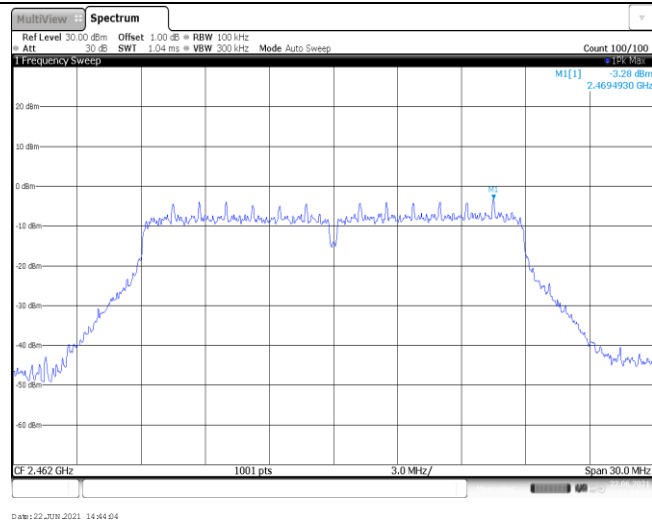
CH11
1GHz~26GHz



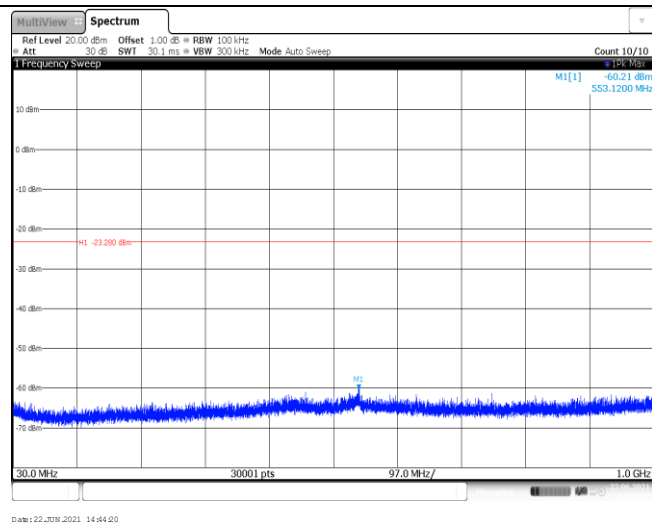
Test Item:	SE	Type:	802.11 n(HT20)
CH01 Reference level		 Ref Level 30.00 dBm Offset 1.00 dB BW 100 kHz Att 30 dB SWI 1.04 ms VBW 300 kHz Mode Auto Sweep Count 100/100 MI[1] 3.58 dBm 2.4057360 GHz 2.412 GHz 1001 pts 3.0 MHz/pt Span 30.0 MHz Date: 22_JUN 2021 14:41:45	
CH01 30MHz~1000MHz		 Ref Level 20.00 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] -60.77 dBm 618.8940 MHz 30.0 MHz 30001 pts 97.0 MHz/pt 1.0 GHz Date: 22_JUN 2021 14:42:01	
CH01 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] -52.60 dBm 25.953333 GHz 1.0 GHz 30001 pts 2.5 GHz/pt 26.0 GHz Date: 22_JUN 2021 14:42:47	

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

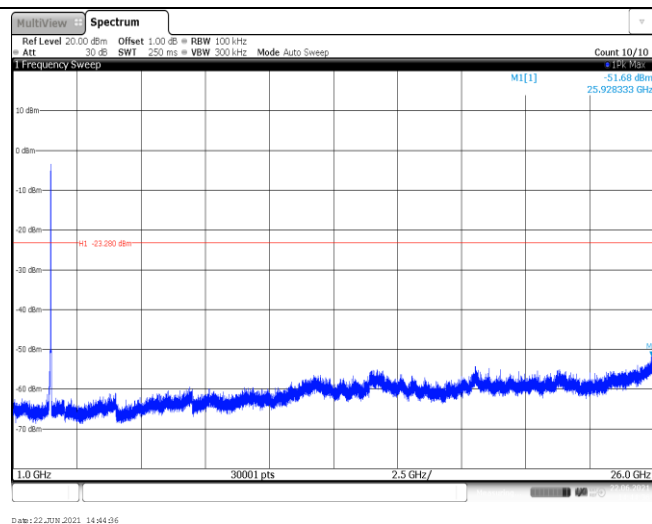
CH11
Reference level



CH11
30MHz~1000MHz



CH11
1GHz~26GHz



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