APPENDIX REPORT

Project No.	SHT2107001007EW	Radio Specification	WIFI 2.4G
Test sample No.	YPHT21070010004	Model No.	L506
Start test date	2021-07-08	Finish date	2021-07-08
Temperature	26.2°C	Humidity	29%
Test Engineer	Weiyang Xiang	Auditor	Xiaodong Zhao

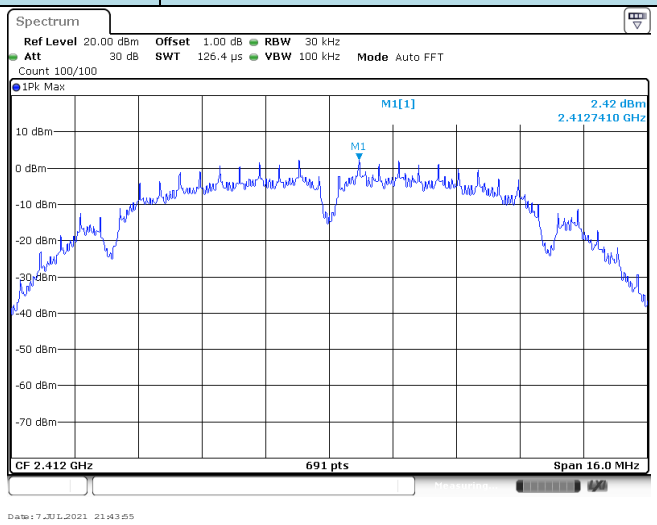
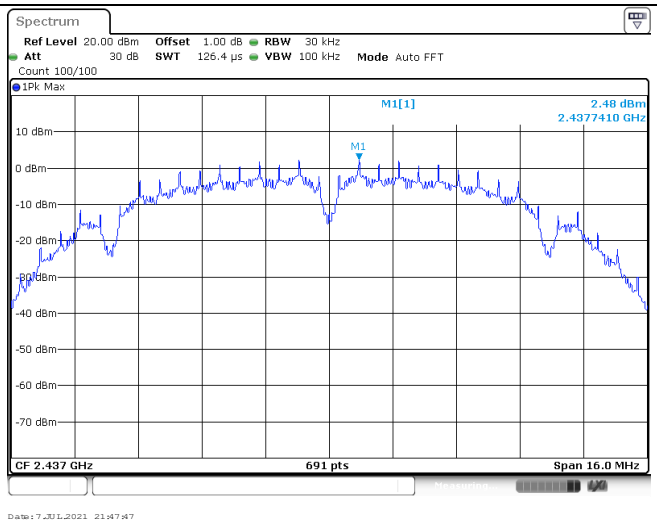
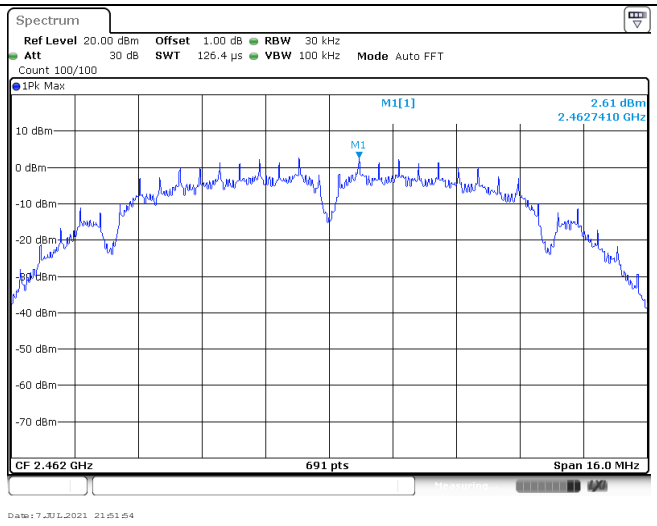
Appendix clause	Test item	Result
A	Conducted Peak Output Power	PASS
B	Power Spectral Density	PASS
C	6 dB Bandwidth	PASS
D	99% Occupied Bandwidth	PASS
E	Duty Cycle	PASS
F	Band edge and Spurious Emissions (conducted)	PASS

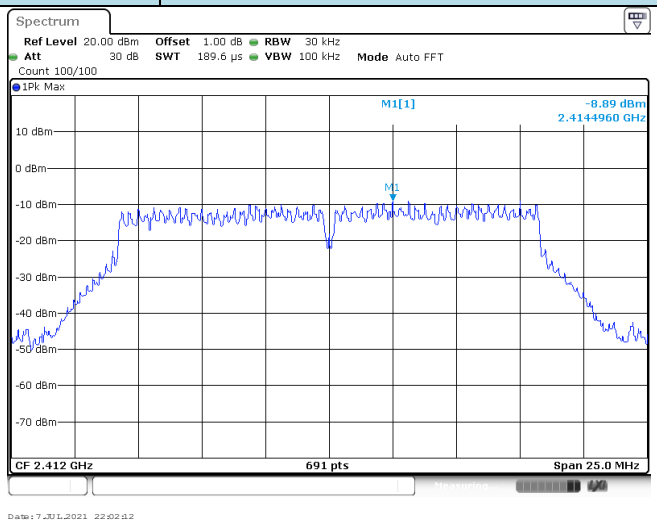
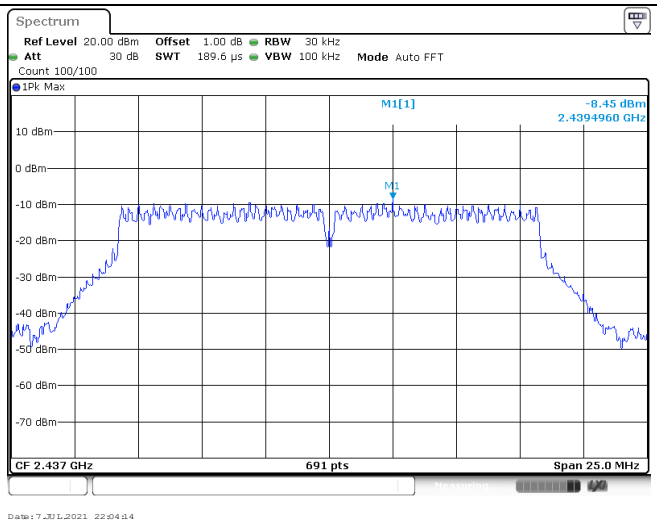
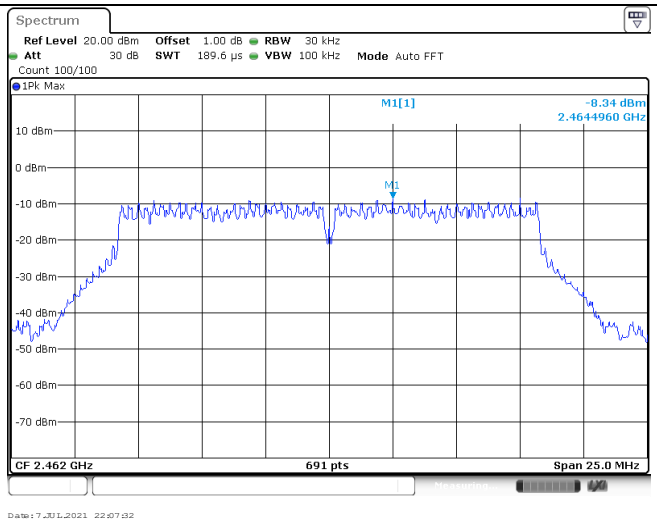
Appendix A：Conducted Peak Output Power

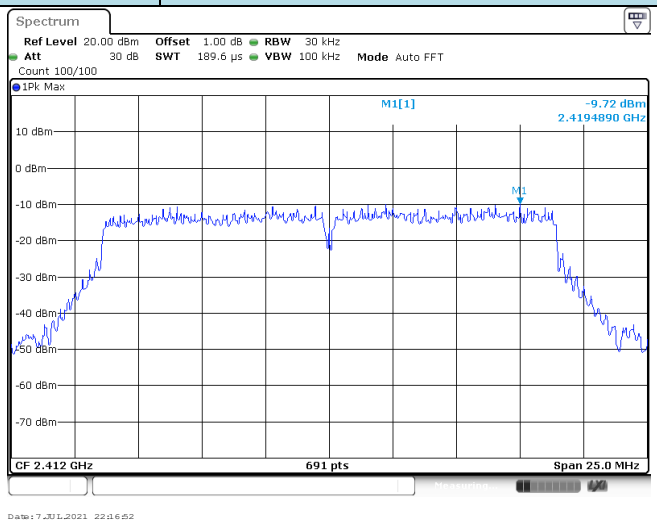
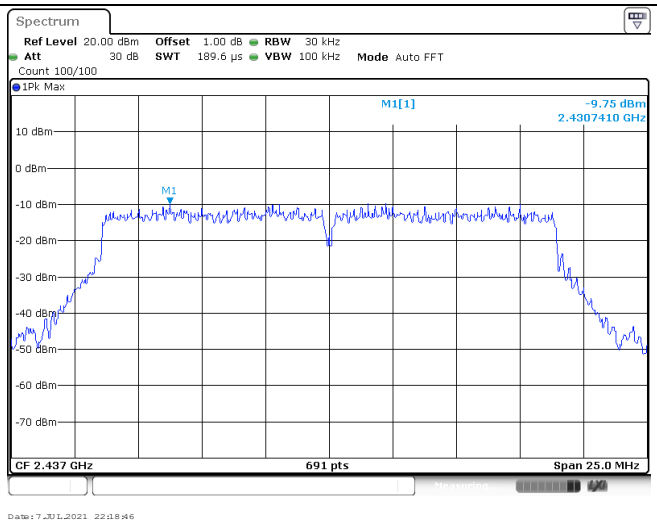
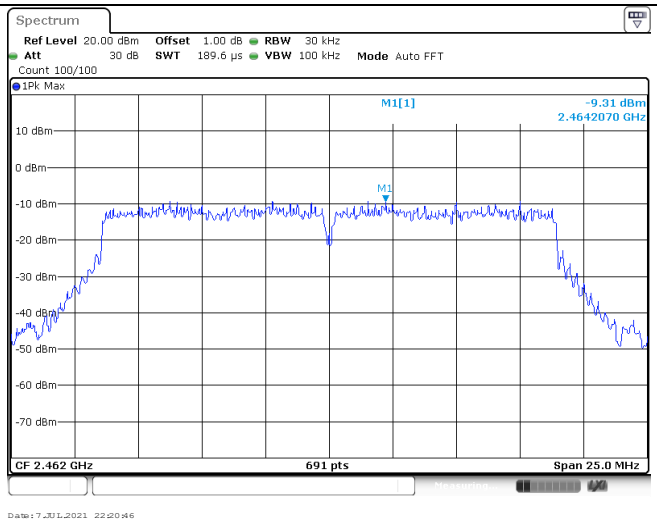
Type	Channel	Peak Output power (dBm)	Average Output power (dBm)	Limit (dBm)	Result
802.11b	01	16.26	14.17	≤ 30.00	Pass
	06	16.38	14.27		
	11	16.75	14.62		
802.11g	01	15.44	11.77	≤ 30.00	Pass
	06	15.66	12.10		
	11	16.34	12.67		
802.11n (HT20)	01	15.57	12.50	≤ 30.00	Pass
	06	15.99	12.90		
	11	16.68	13.60		

Appendix B：Power Spectral Density

Type	Channel	Power Spectral Density (dBm/30KHz)	Limit (dBm/3KHz)	Result
802.11b	01	2.42	≤8.00	Pass
	06	2.48		
	11	2.61		
802.11g	01	-8.89	≤8.00	Pass
	06	-8.45		
	11	-8.34		
802.11n(HT20)	01	-9.72	≤8.00	Pass
	06	-9.75		
	11	-9.31		

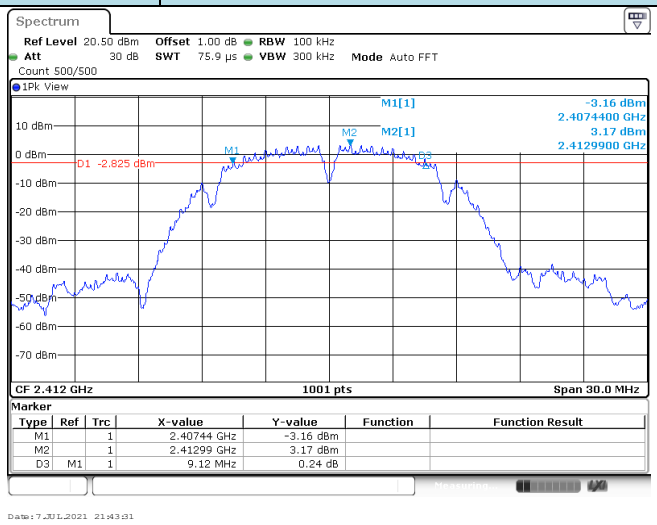
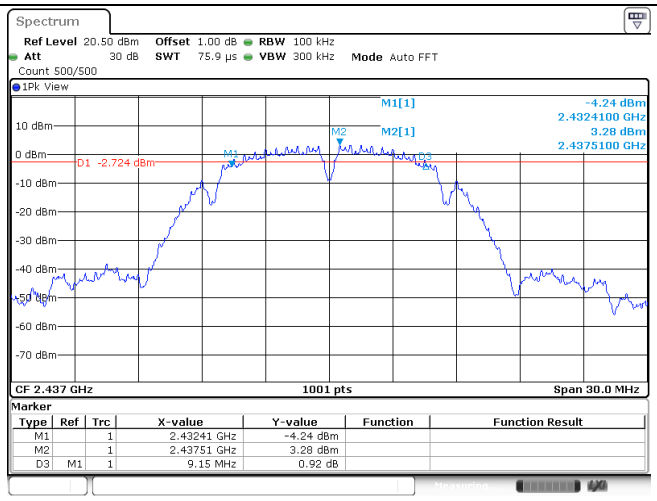
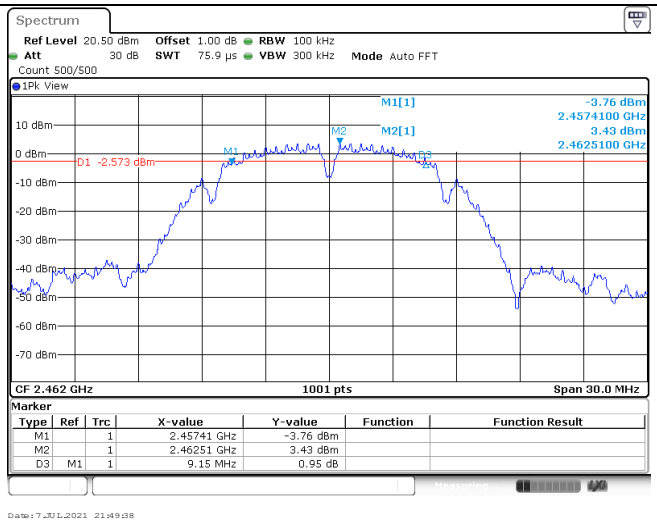
Type:	802.11 b
CH01	
CH06	
CH11	

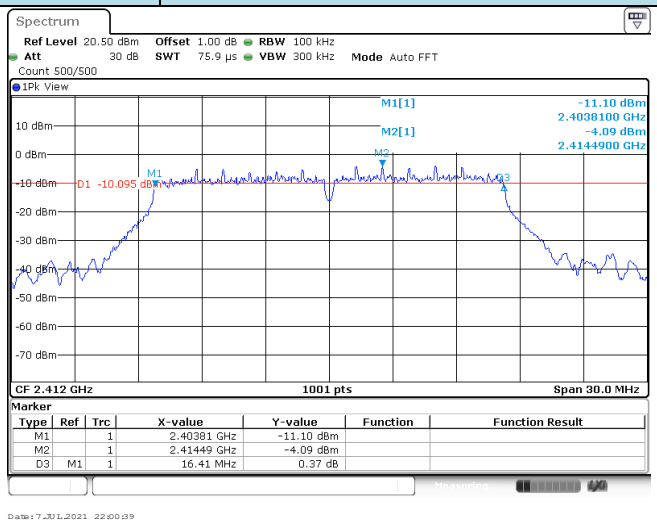
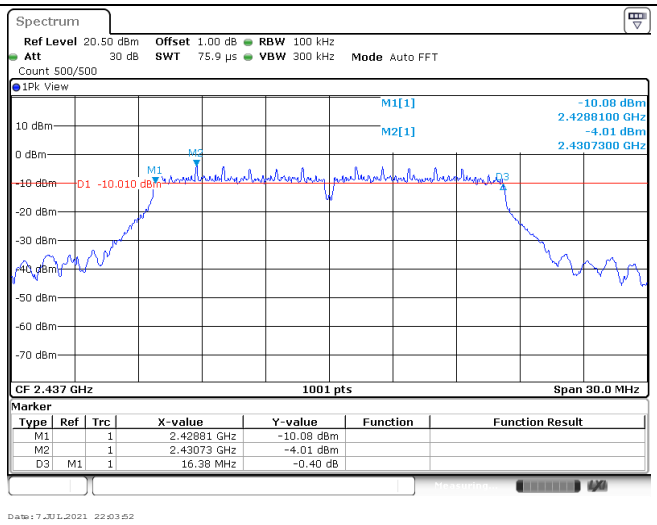
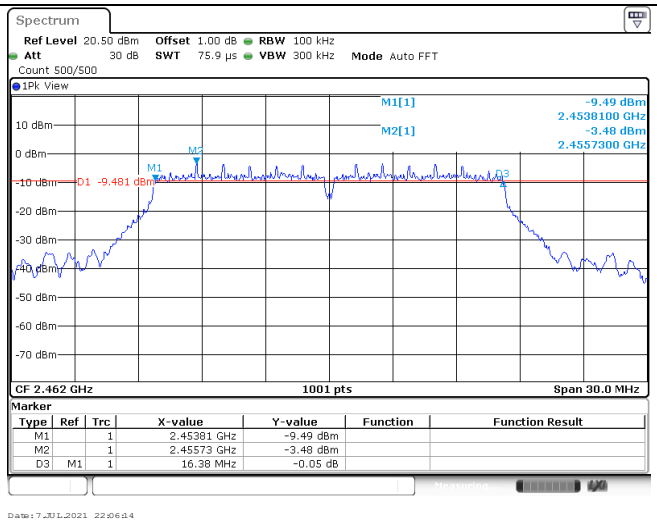
Type:	802.11 g
CH01	
CH06	
CH11	

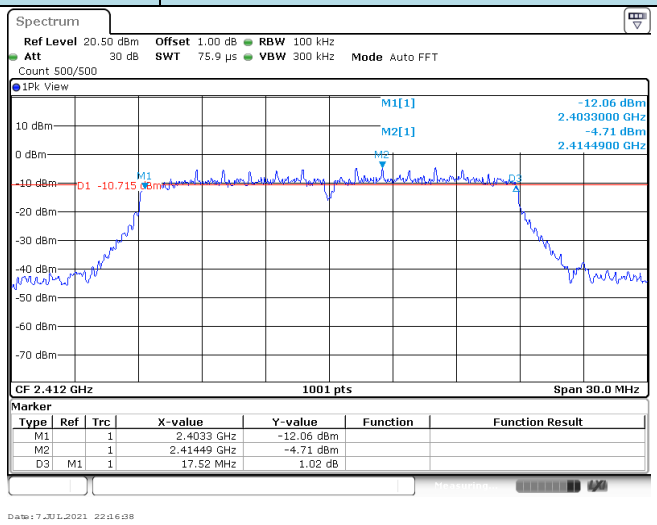
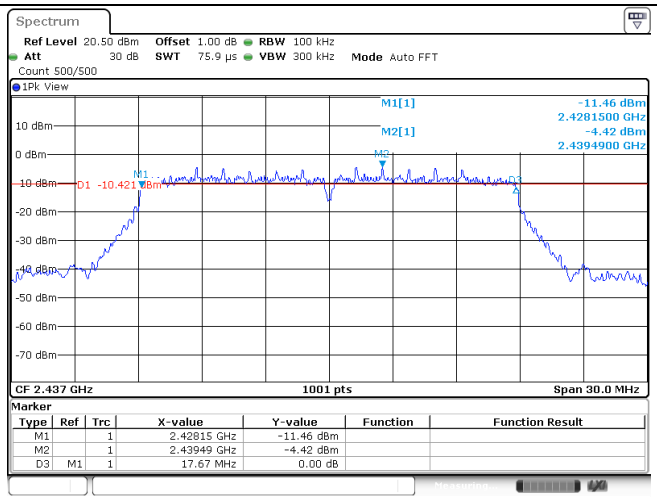
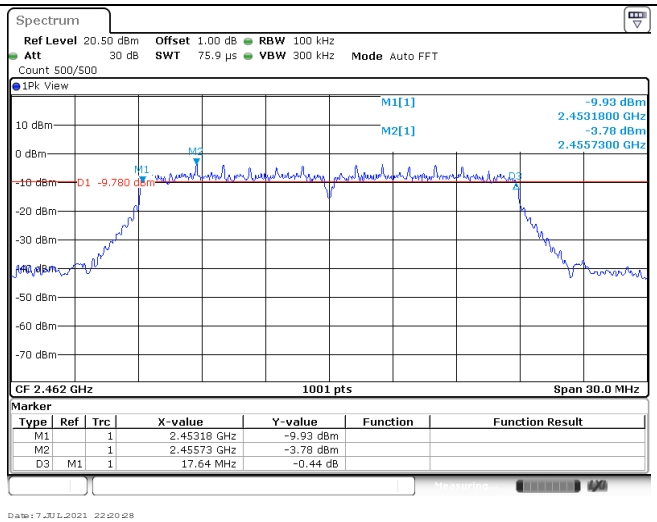
Type:	802.11n(HT20)
CH01	
CH06	
CH11	

Appendix C：6dB bandwidth

Type	Channel	6dB Bandwidth (MHz)	Limit (MHz)	Result
802.11b	01	9.12	≥0.5	Pass
	06	9.15		
	11	9.15		
802.11g	01	16.41	≥0.5	Pass
	06	16.38		
	11	16.38		
802.11n(HT20)	01	17.52	≥0.5	Pass
	06	17.67		
	11	17.64		

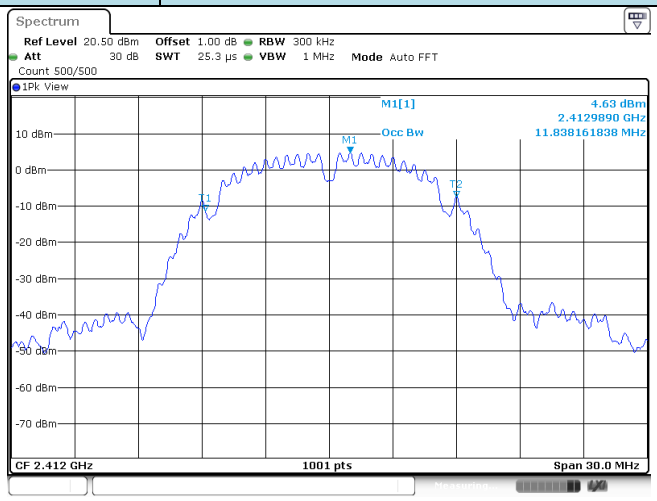
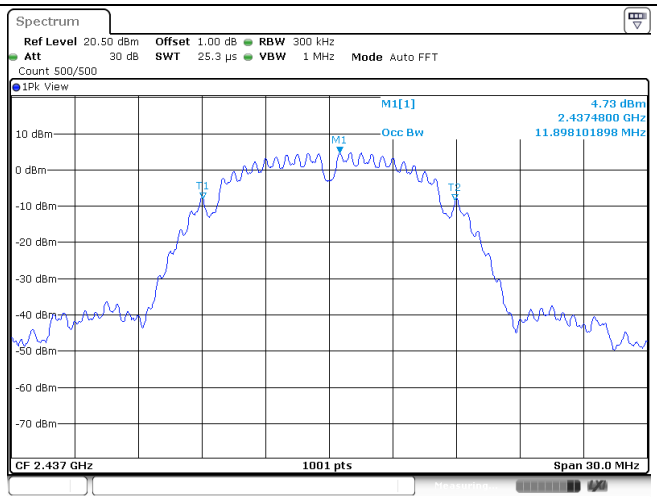
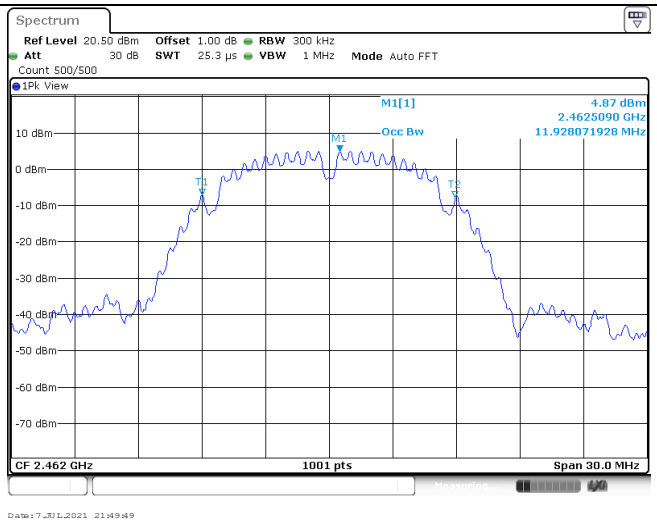
Type:	802.11 b
CH01	
CH06	
CH11	

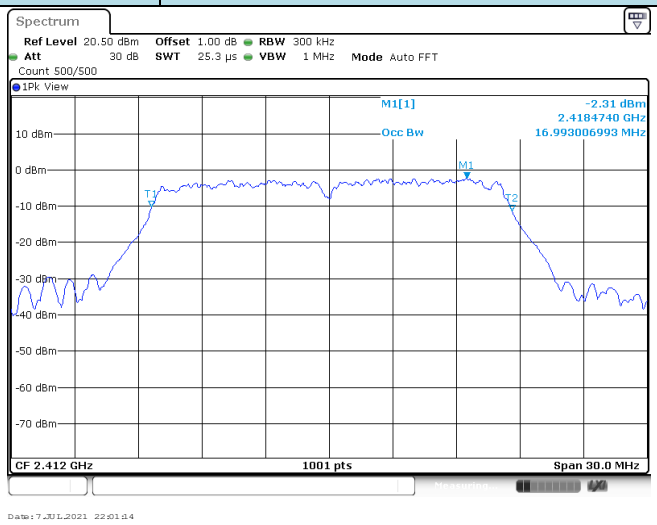
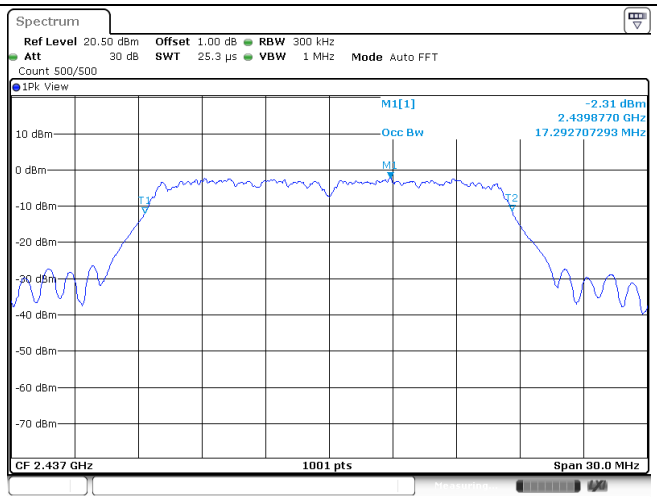
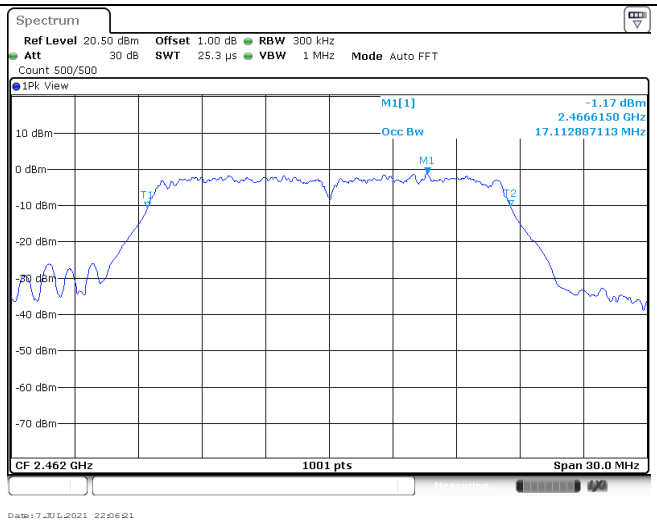
Type:	802.11 g
CH01	
CH06	
CH11	

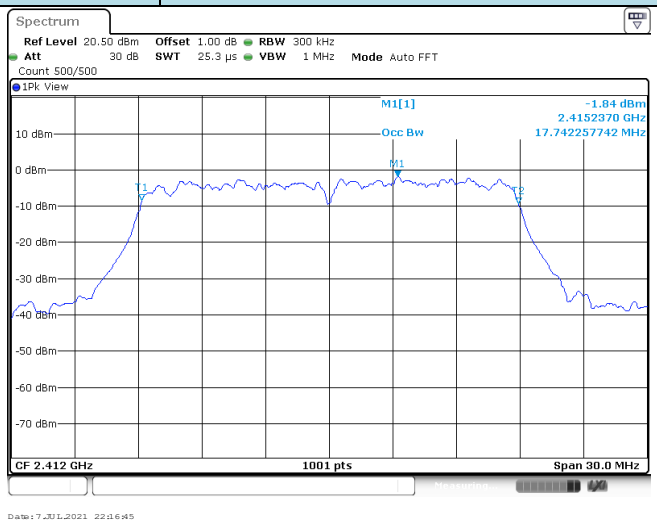
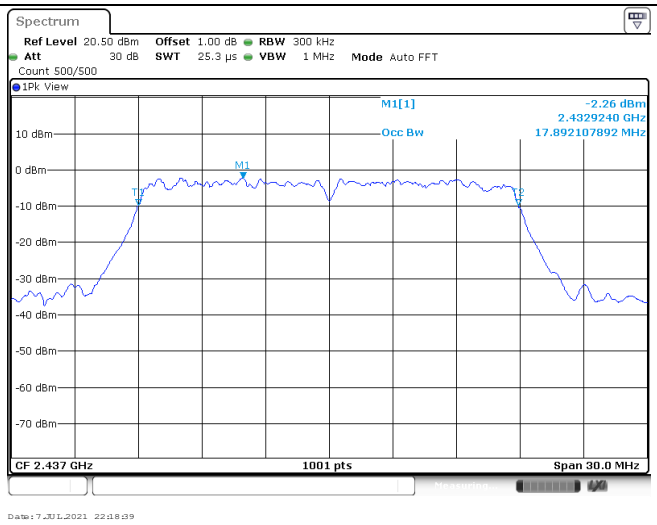
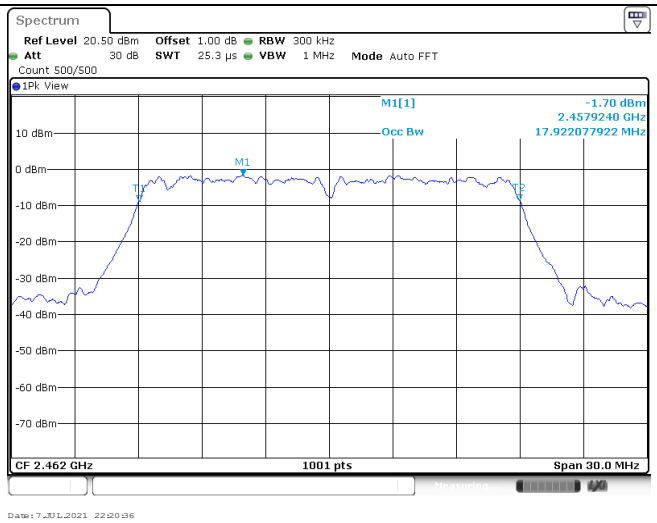
Type:	802.11n(HT20)
CH01	
CH06	
CH11	

Appendix D：99% Occupied Bandwidth

Type	Channel	99% Bandwidth (MHz)	Limit (MHz)	Result
802.11b	01	11.84	-	Pass
	06	11.90		
	11	11.93		
802.11g	01	16.99	-	Pass
	06	17.29		
	11	17.11		
802.11n(HT20)	01	17.74	-	Pass
	06	17.89		
	11	17.92		

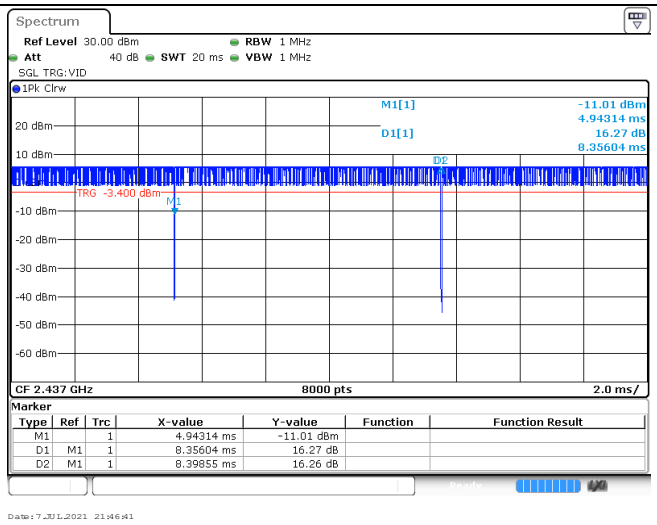
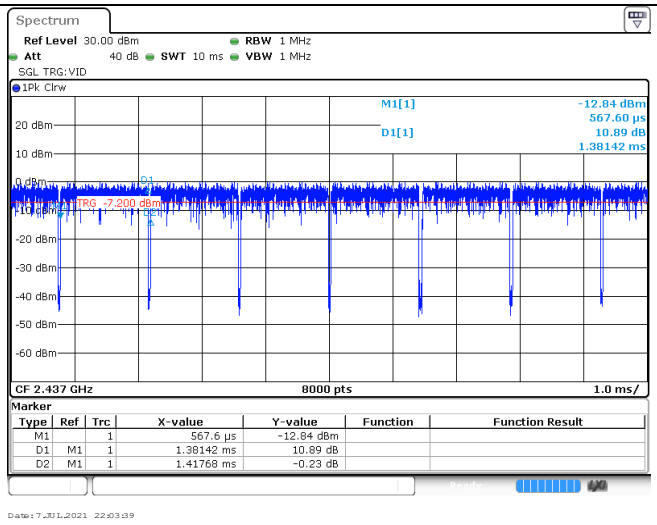
Type:	802.11 b
CH01	
CH06	
CH11	

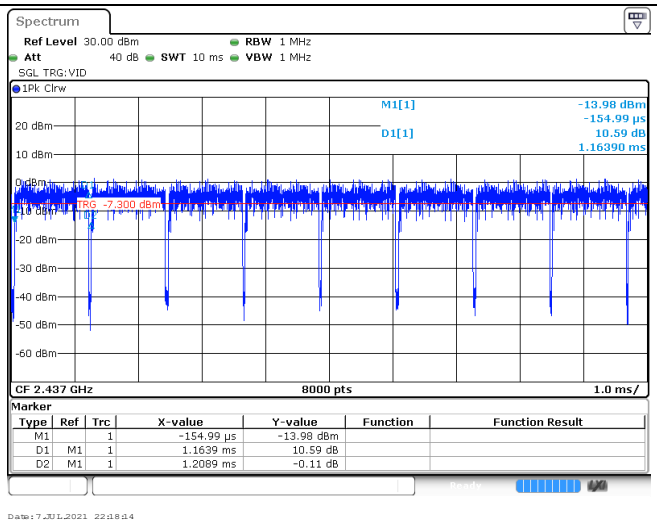
Type:	802.11 g
CH01	
CH06	
CH11	

Type:	802.11n(HT20)
CH01	
CH06	
CH11	

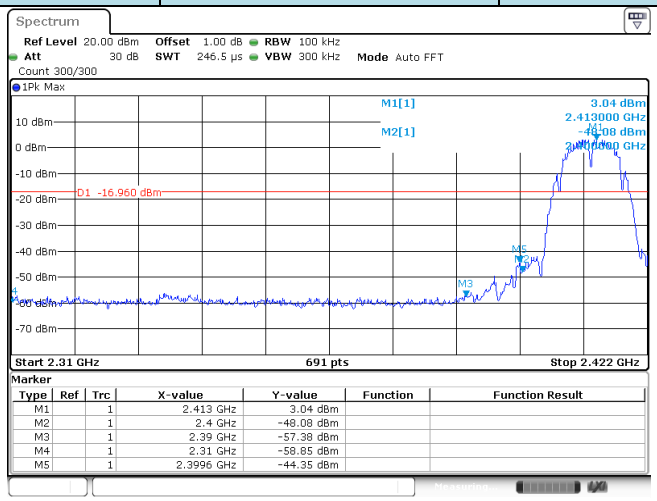
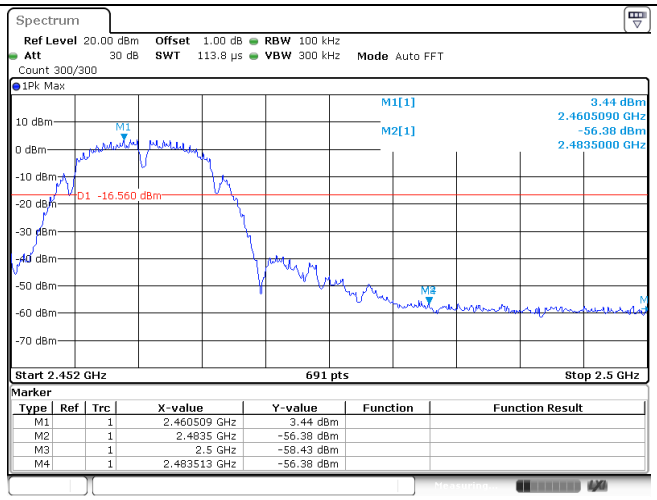
Appendix E：Duty Cycle

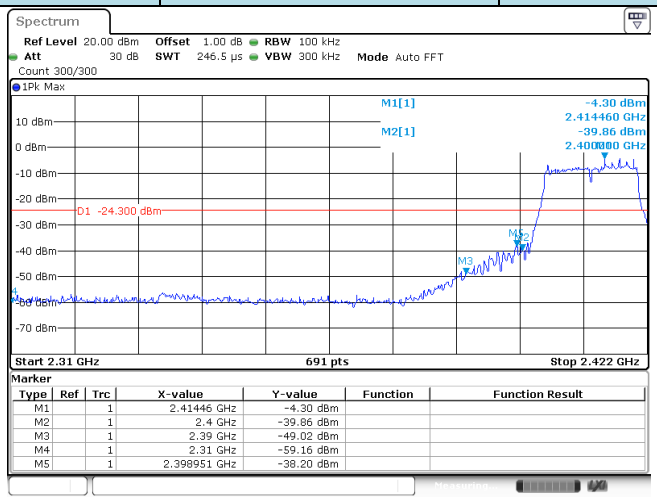
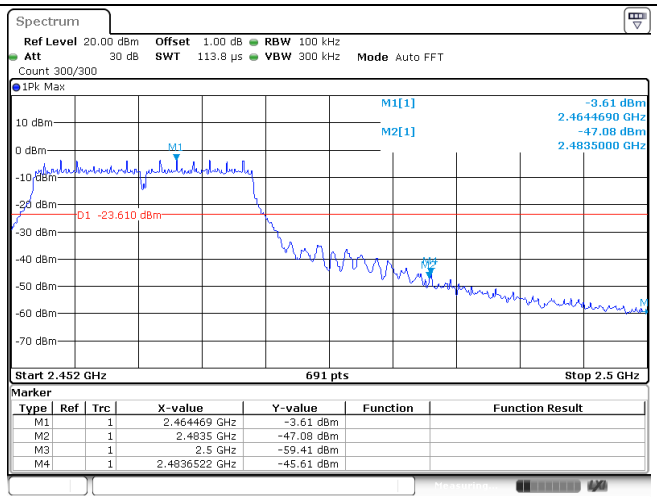
Modulation Type	Test Frequency （MHz）	$T_{on\ time}$ for single burst (ms)	T_{period} (ms)	Duty cycle	$1/T_{on\ time}$ (kHz)
11b	2437	8.36	8.40	99.5%	0.1
11g	2437	1.38	1.42	97.2%	0.7
11n20	2437	1.16	1.21	95.9%	0.9

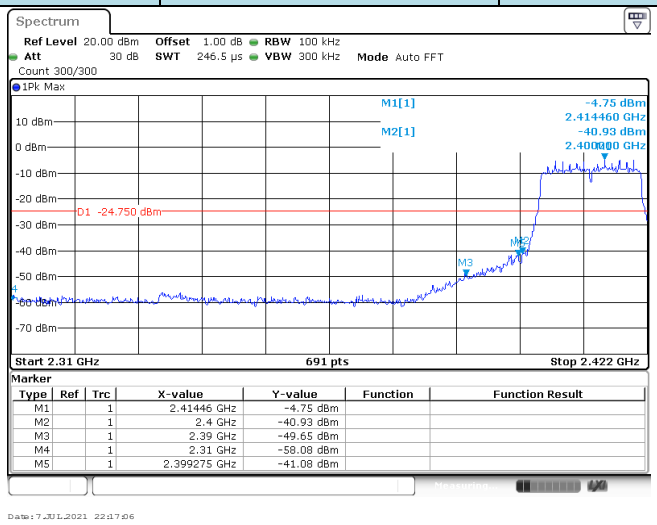
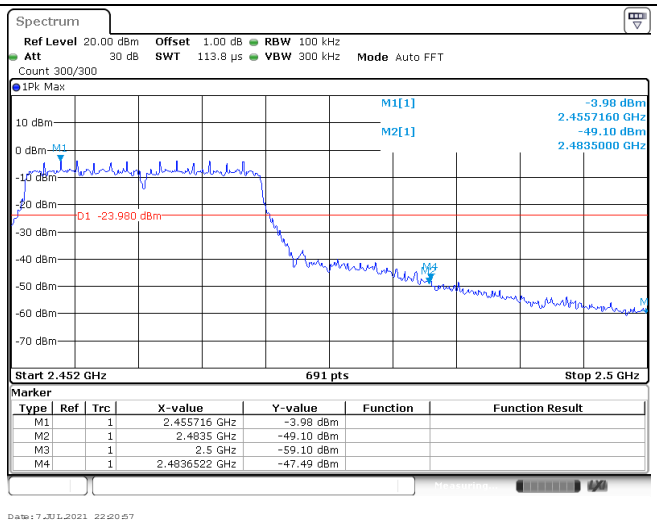
11b	
11g	

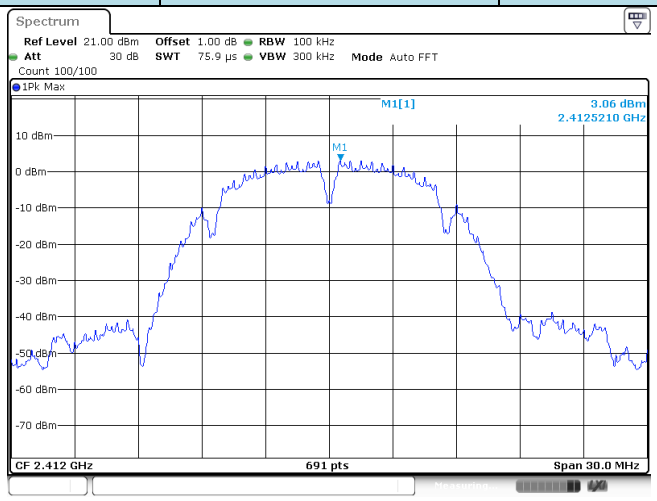
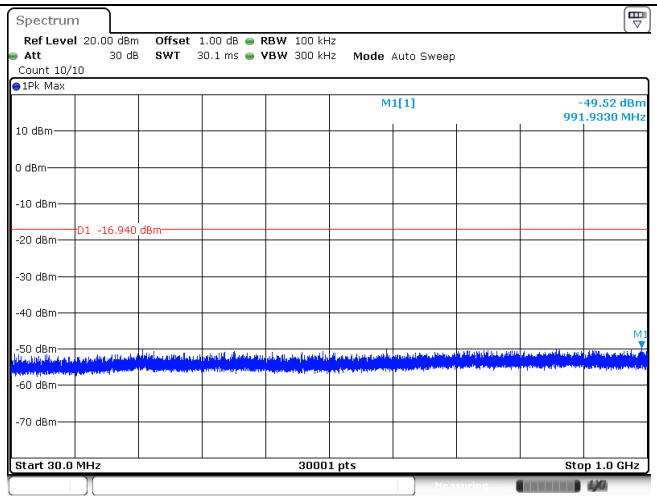
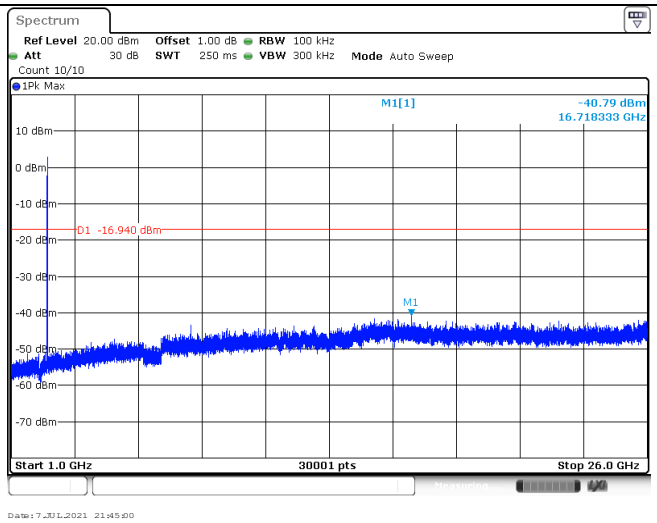
11n20	 Spectrum Ref Level 30.00 dBm RBW 1 MHz Att 40 dB SWT 10 ms VBW 1 MHz SGL TRG:VID 1Pk Clrw M1[1] -13.98 dBm -154.99 µs D1[1] 10.59 dB 1.16390 ms 20 dBm 10 dBm 0 dBm TRG -7.300 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm CF 2.437 GHz 8000 pts 1.0 ms/ Marker Type Ref Trc X-value Y-value Function Function Result M1 1 -154.99 µs -13.98 dBm D1 M1 1 1.1639 ms 10.59 dB D2 M1 1 1.2089 ms -0.11 dB Date:7.JUL.2021 22:18:14

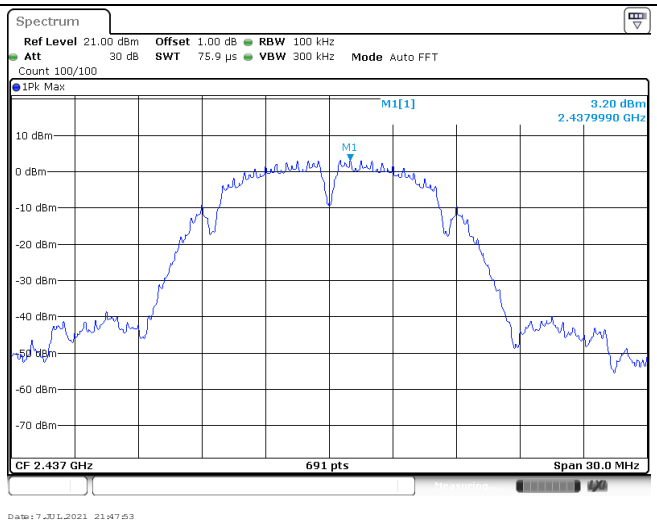
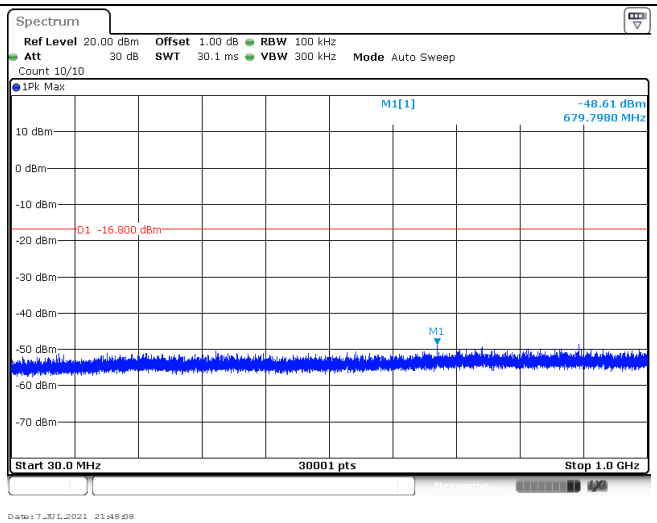
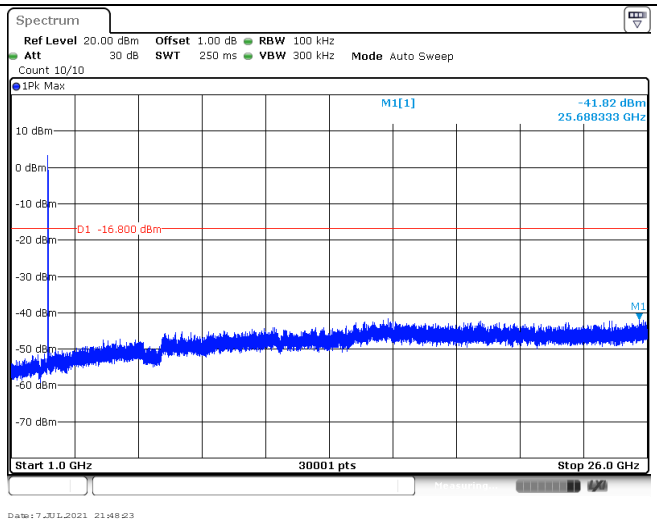
Appendix F：Band edge and Spurious Emissions (conducted)

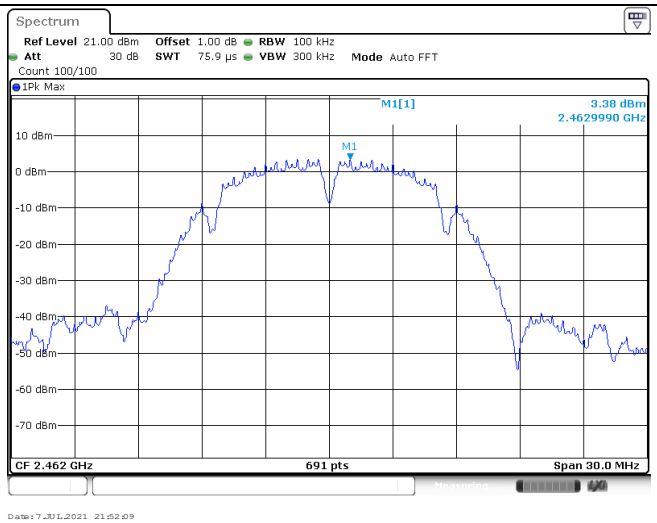
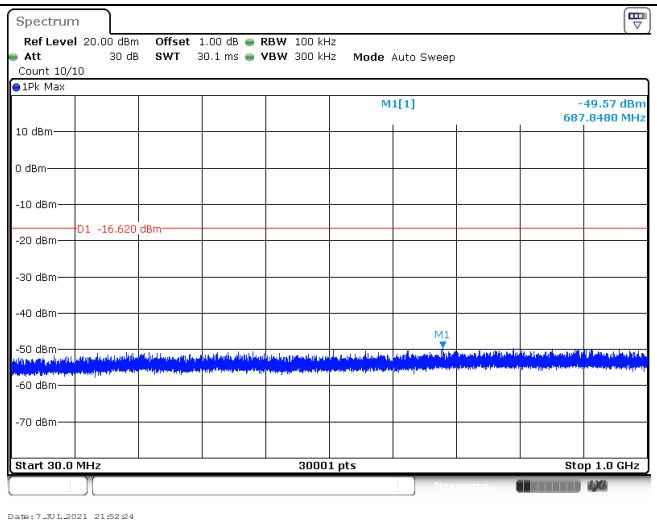
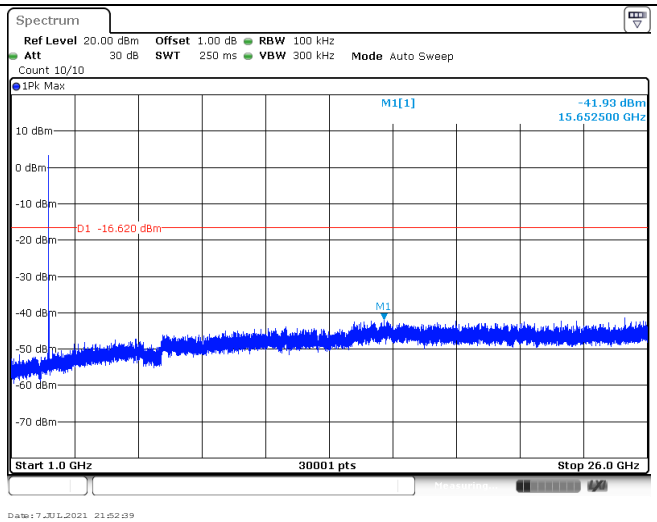
Test Item:	Bandedge	Type:	802.11 b
CH01			
CH11			

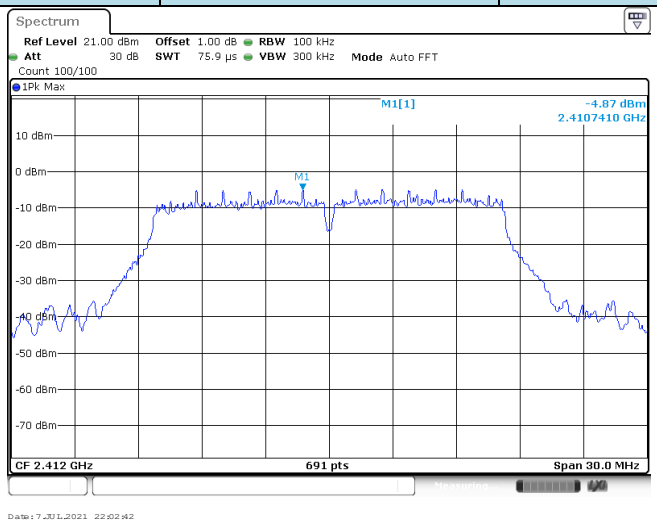
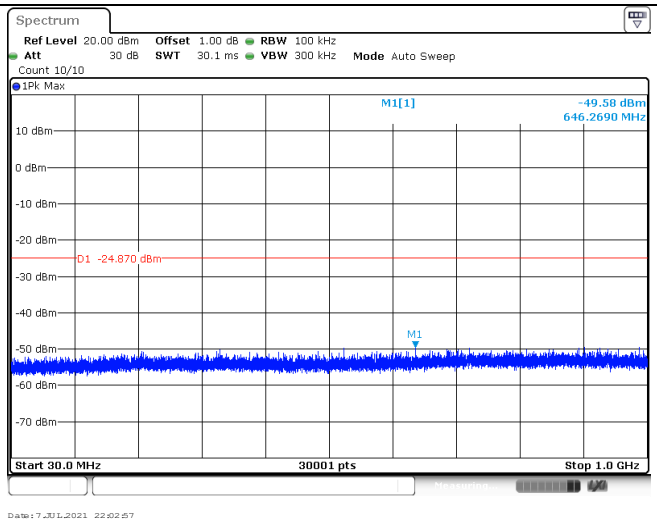
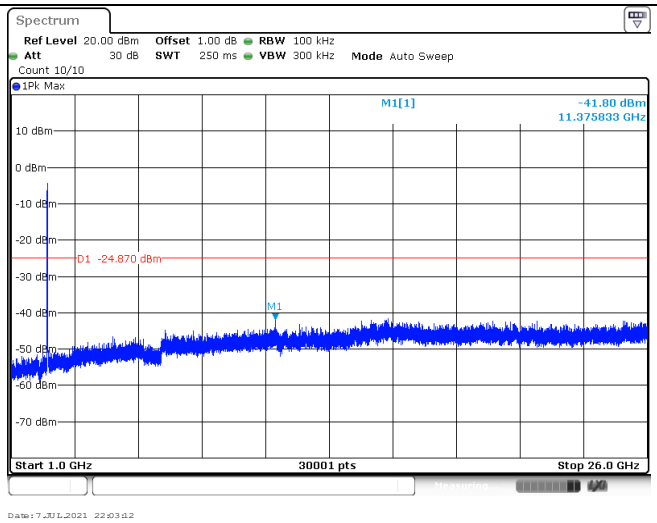
Test Item:	Bandedge	Type:	802.11 g
CH01			
CH11			

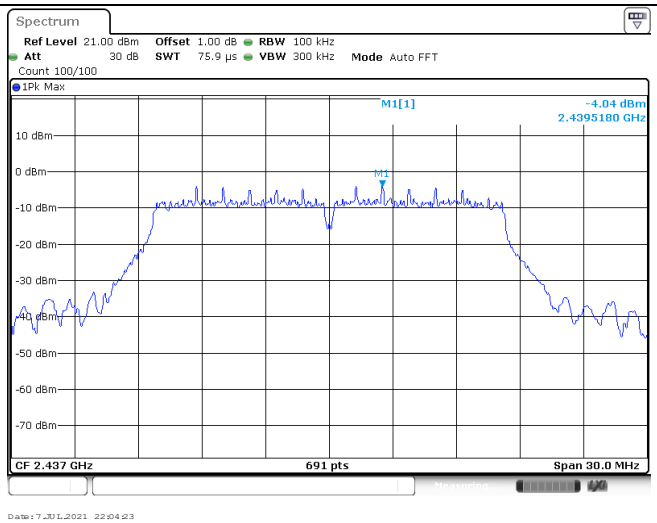
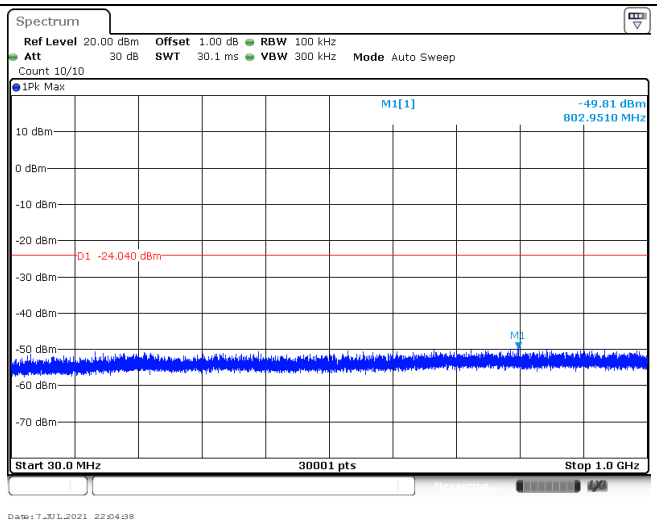
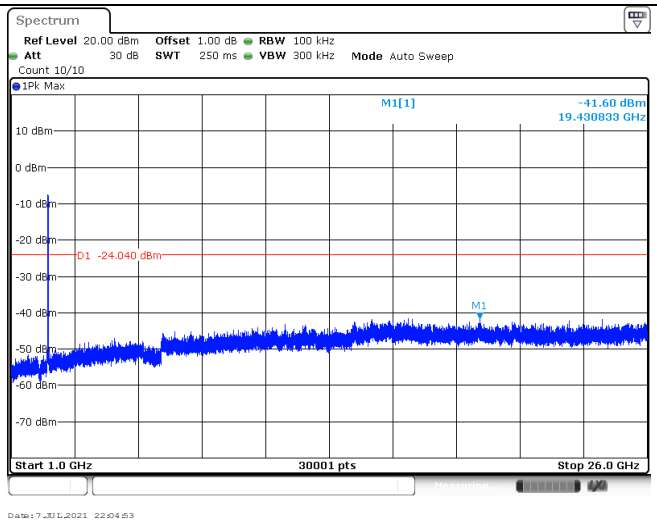
Test Item:	Bandedge	Type:	802.11 n(HT20)
CH01			
CH11			

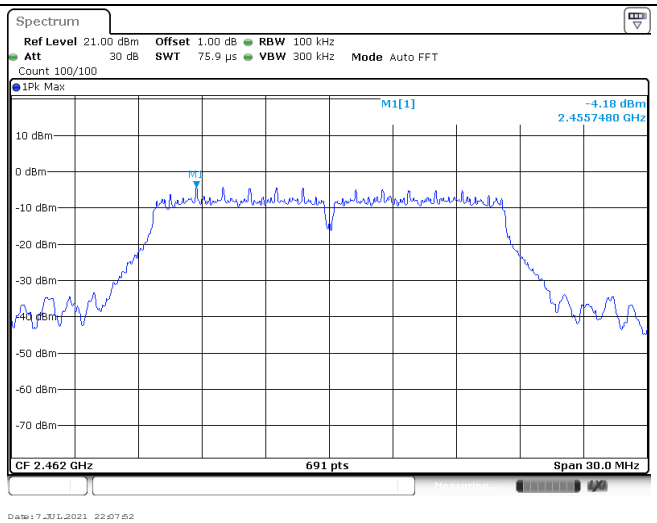
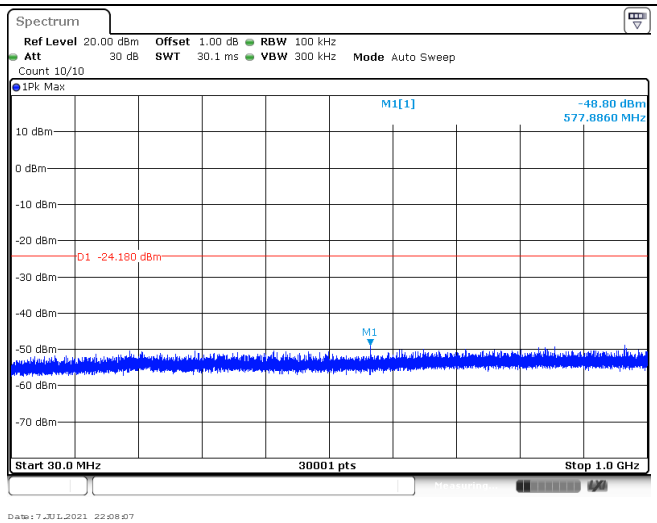
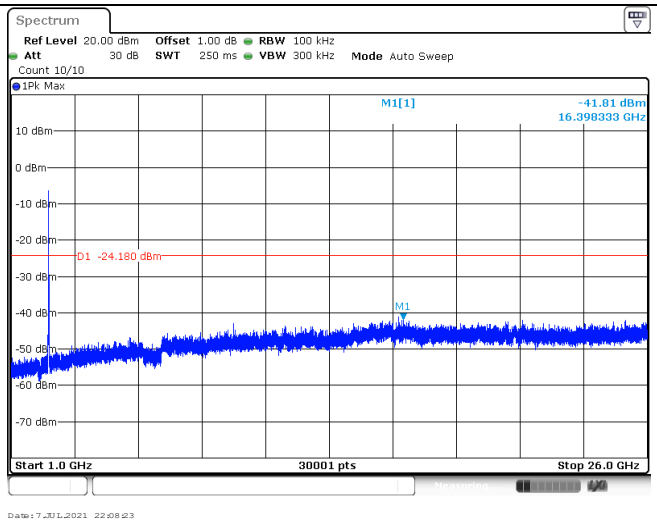
Test Item:	SE	Type:	802.11 b
CH01 Reference level			
CH01 30MHz~1000MHz			
CH01 1GHz~26GHz			

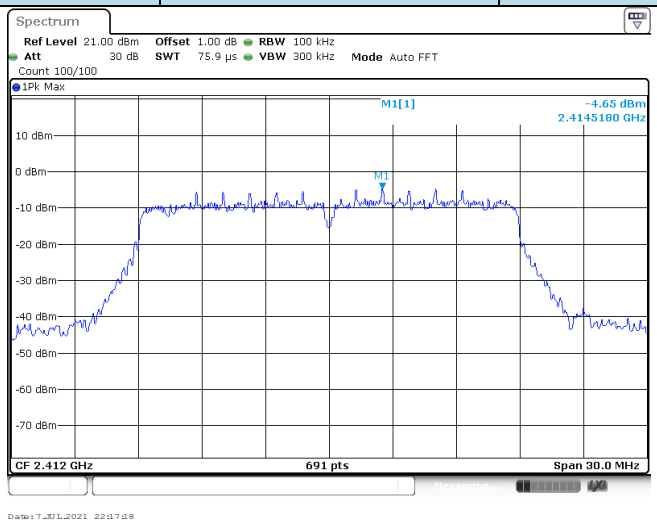
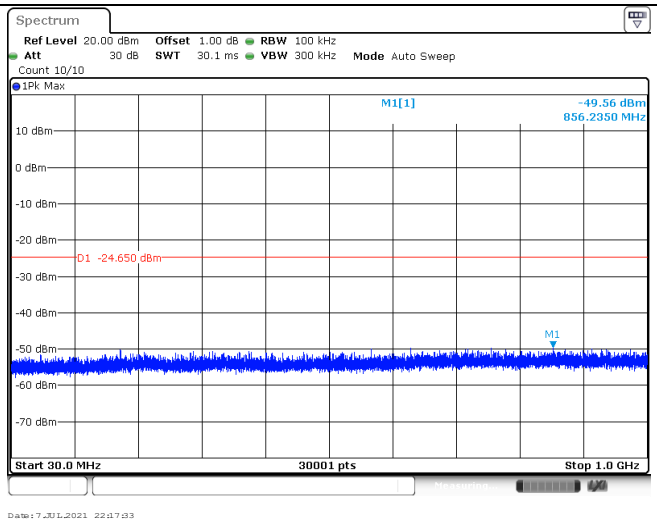
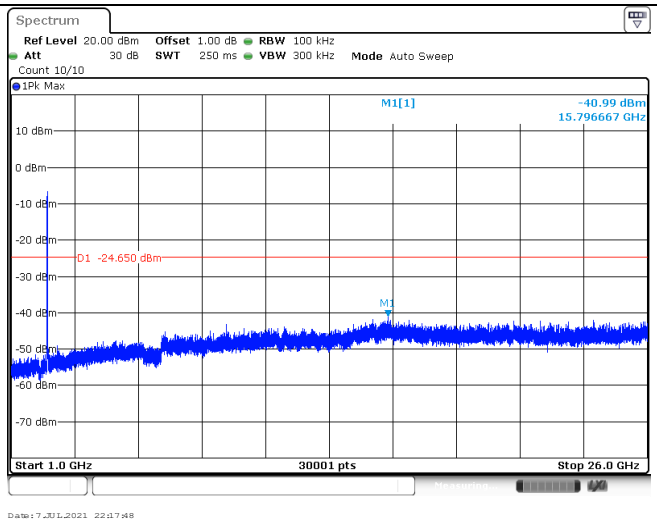
CH06 Reference level	
CH06 30MHz~1000MHz	
CH06 1GHz~26GHz	

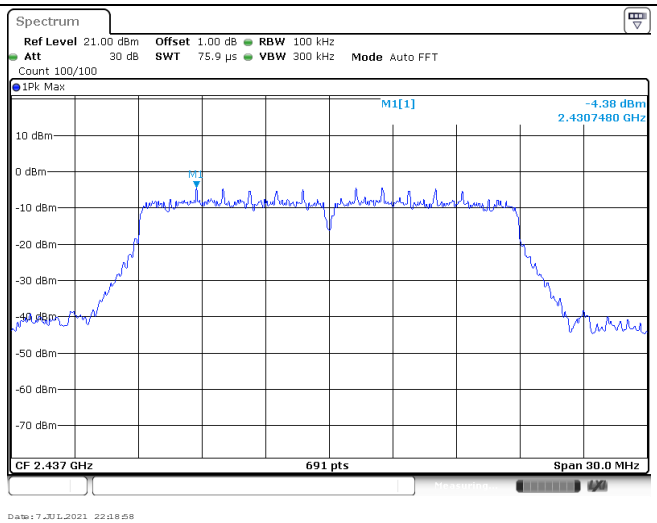
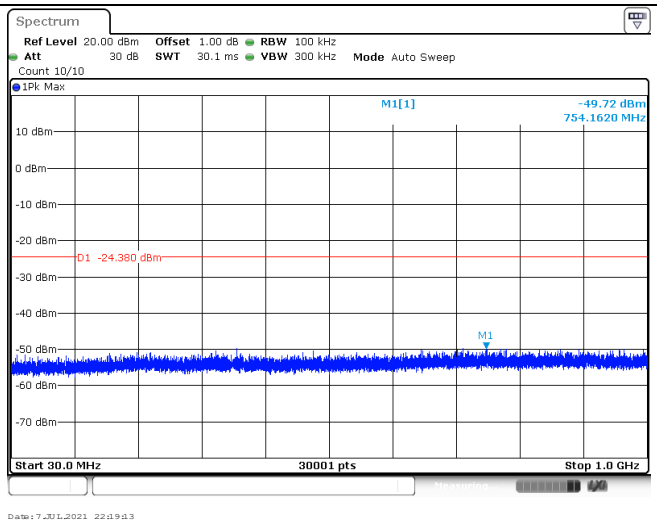
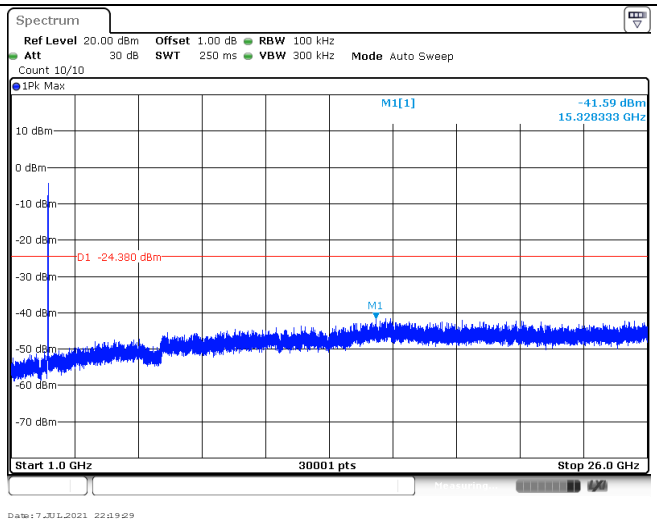
CH11 Reference level	
CH11 30MHz~1000MHz	
CH11 1GHz~26GHz	

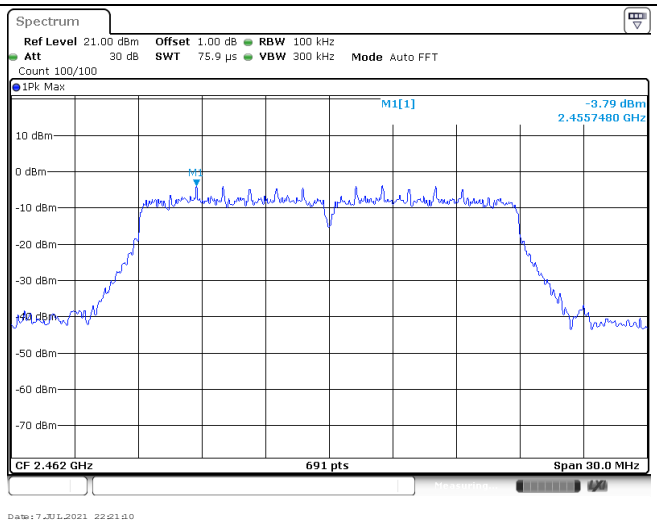
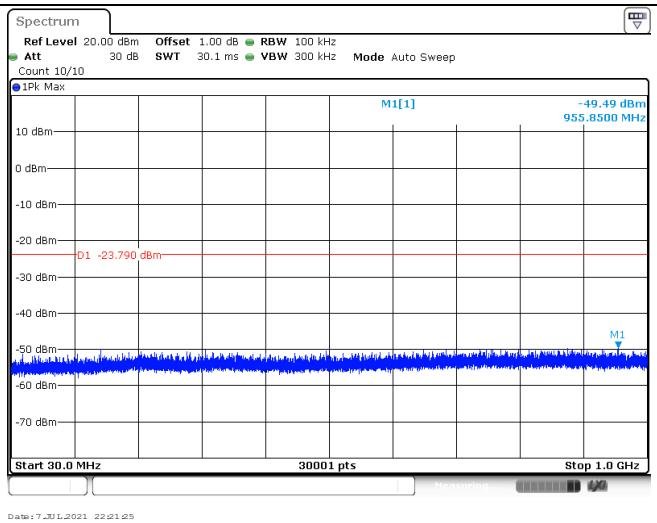
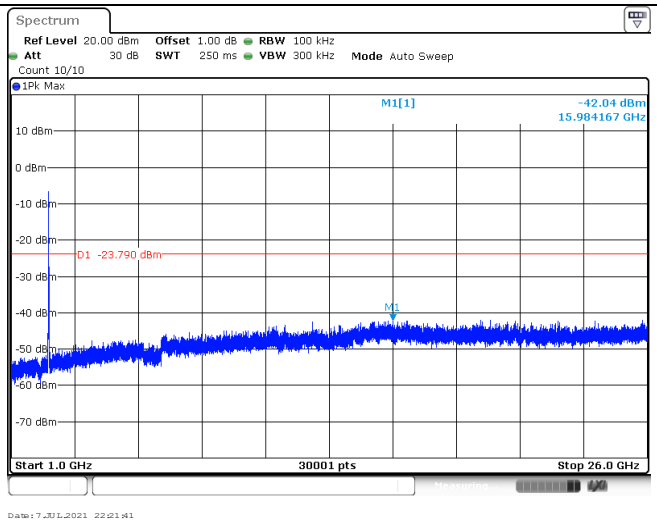
Test Item:	SE	Type:	802.11 g
CH01 Reference level			
CH01 30MHz~1000MHz			
CH01 1GHz~26GHz			

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			
CH01 30MHz~1000MHz			
CH01 1GHz~26GHz			

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

CH11 Reference level	
CH11 30MHz~1000MHz	
CH11 1GHz~26GHz	

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