APPENDIX REPORT

Project No.	SHT2107001001EW	Radio Specification	WIFI 2.4G
Test sample No.	YPHT21070010027	Model No.	E485
Start test date	2021-07-07	Finish date	202-07-07
Temperature	26.4°C	Humidity	35%
Test Engineer	Qizhi Zhang	Auditor	Xiaodong Zhao

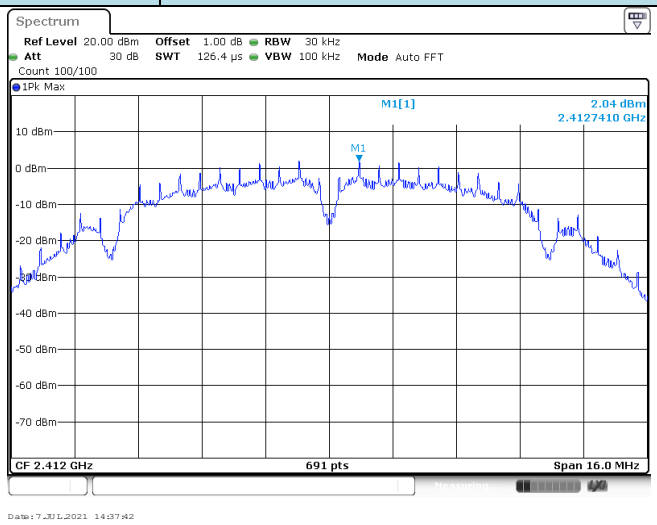
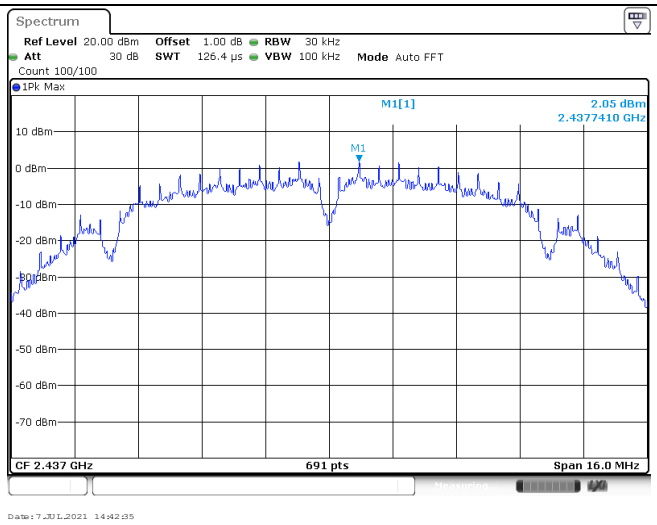
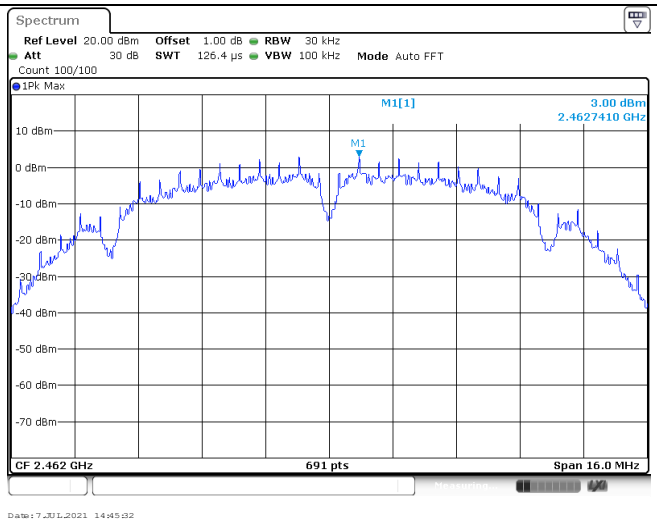
Appendix clause	Test item	Result
A	Conducted Peak Output Power	PASS
B	Power Spectral Density	PASS
C	6 dB Bandwidth	PASS
D	99% Occupied Bandwidth	PASS
E	Duty Cycle	PASS
F	Band edge and Spurious Emissions (conducted)	PASS

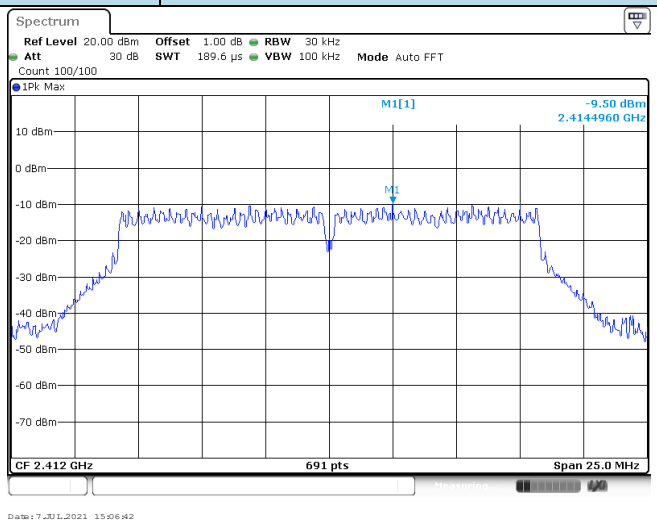
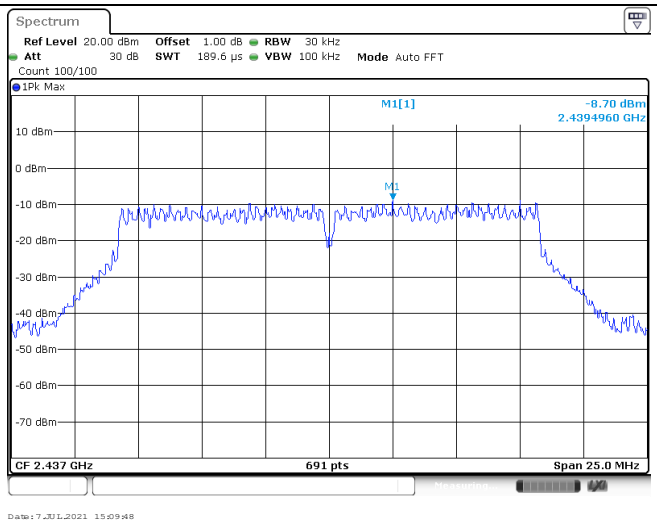
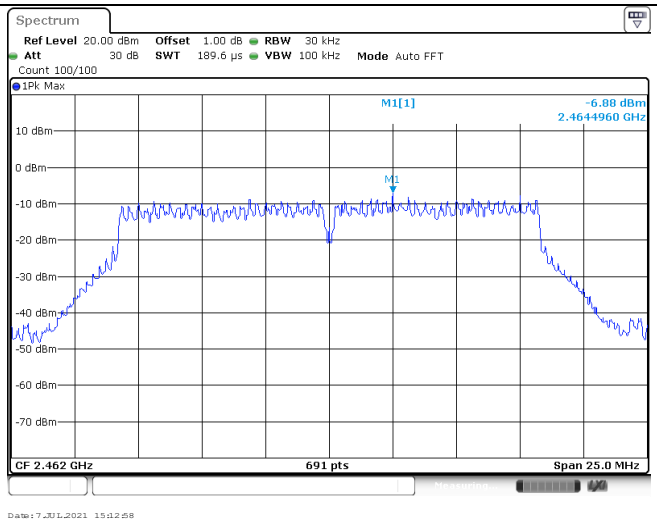
Appendix A：Conducted Peak Output Power

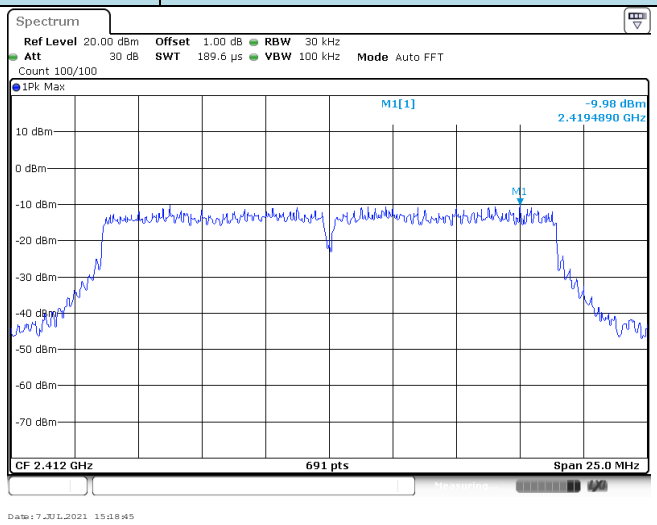
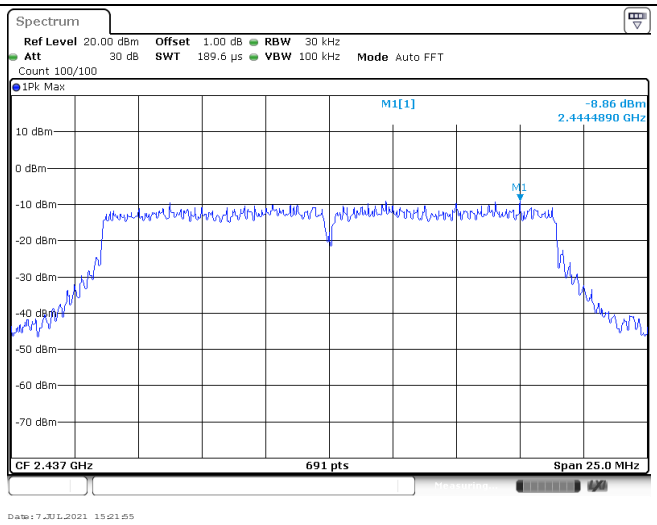
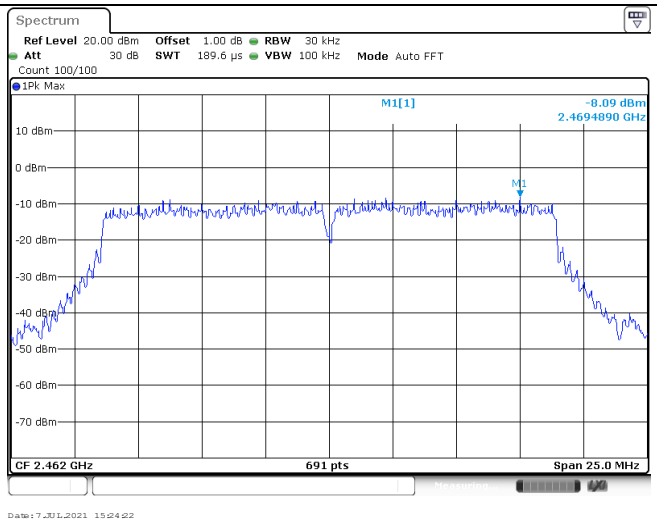
Type	Channel	Peak Output power (dBm)	Average Output power (dBm)	Limit (dBm)	Result
802.11b	01	16.55	13.52	≤ 30.00	Pass
	06	15.92	13.71		
	11	16.99	14.77		
802.11g	01	14.83	10.96	≤ 30.00	Pass
	06	15.98	12.09		
	11	17.07	13.18		
802.11n (HT20)	01	15.60	12.40	≤ 30.00	Pass
	06	16.80	13.28		
	11	17.96	14.23		

Appendix B：Power Spectral Density

Type	Channel	Power Spectral Density (dBm/30KHz)	Limit (dBm/3KHz)	Result
802.11b	01	2.04	≤8.00	Pass
	06	2.05		
	11	3.00		
802.11g	01	-9.44	≤8.00	Pass
	06	-8.14		
	11	-6.88		
802.11n(HT20)	01	-9.98	≤8.00	Pass
	06	-8.86		
	11	-7.83		

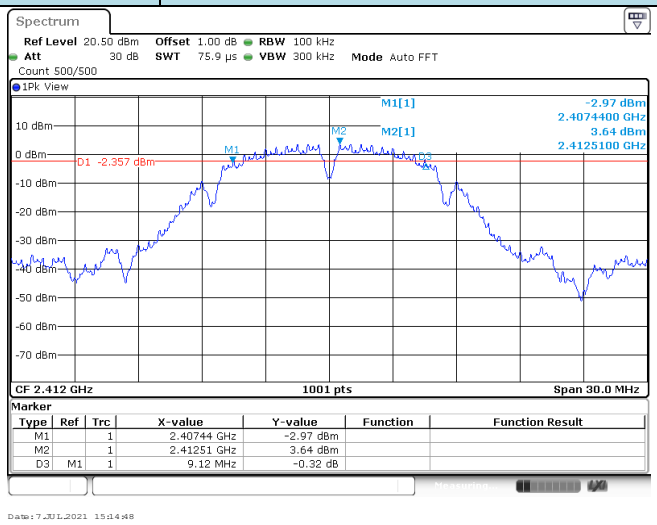
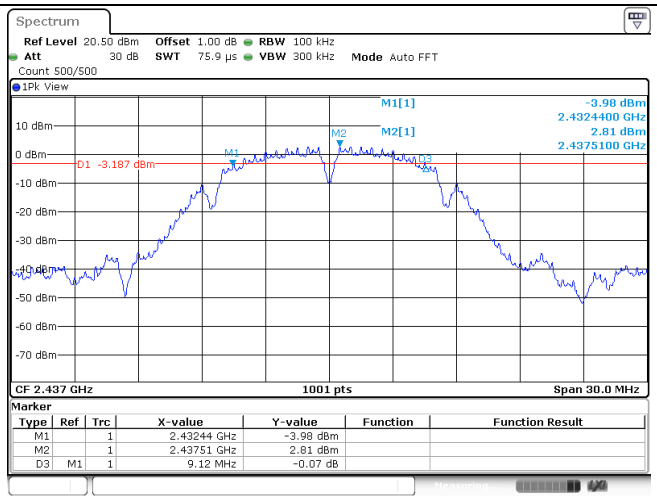
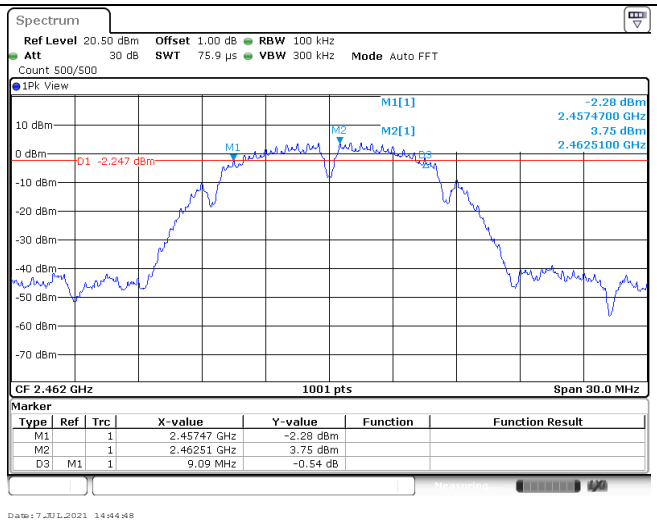
Type:	802.11 b
CH01	
CH06	
CH11	

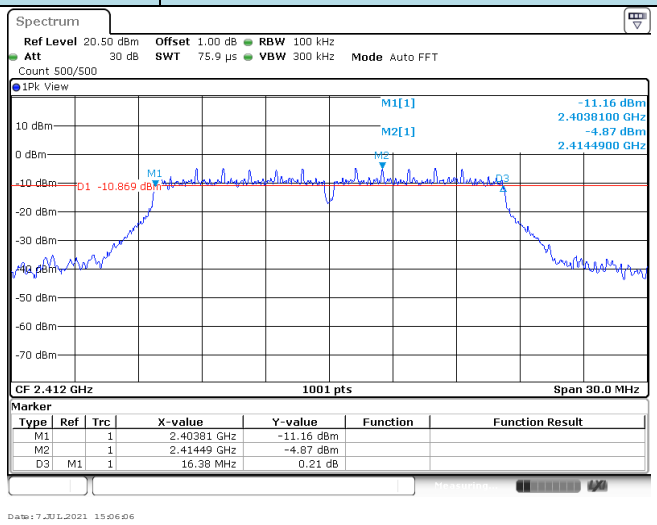
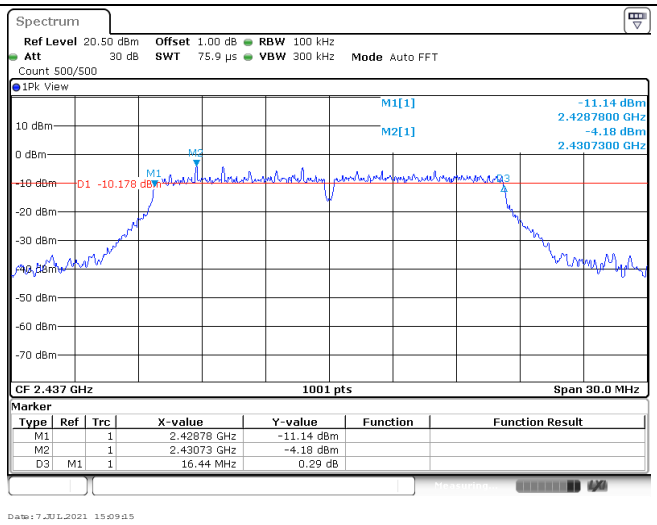
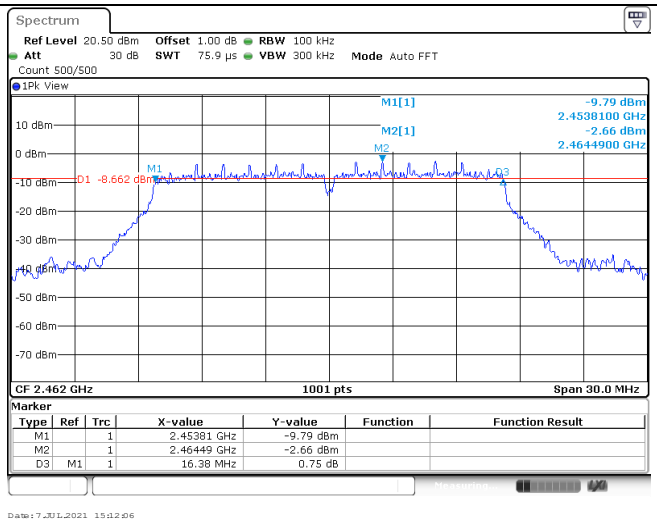
Type:	802.11 g
CH01	
CH06	
CH11	

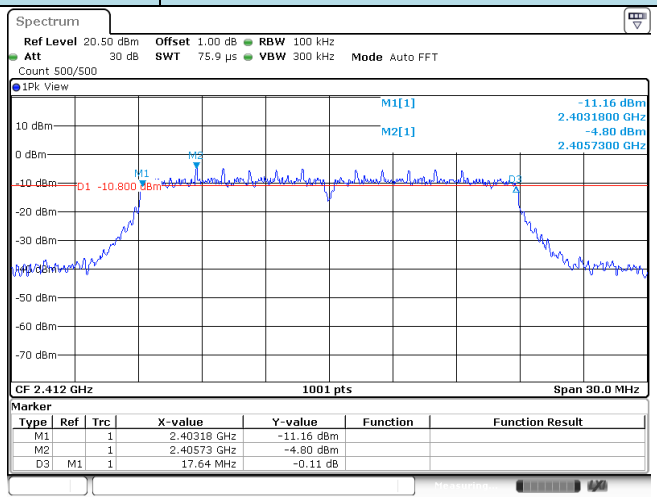
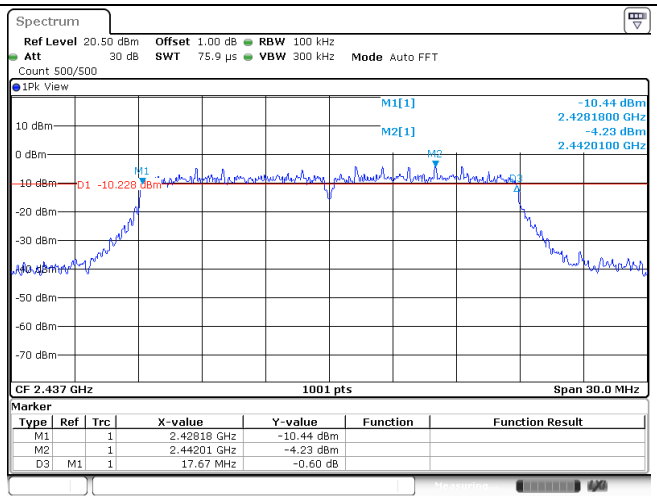
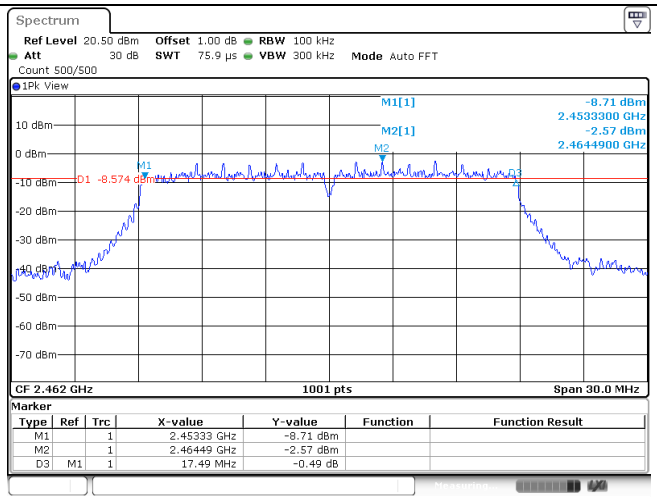
Type:	802.11n(HT20)
CH01	
CH06	
CH11	

Appendix C：6dB bandwidth

Type	Channel	6dB Bandwidth (MHz)	Limit (MHz)	Result
802.11b	01	9.12	≥0.5	Pass
	06	9.12		
	11	9.09		
802.11g	01	16.38	≥0.5	Pass
	06	16.44		
	11	16.38		
802.11n(HT20)	01	17.64	≥0.5	Pass
	06	17.67		
	11	17.49		

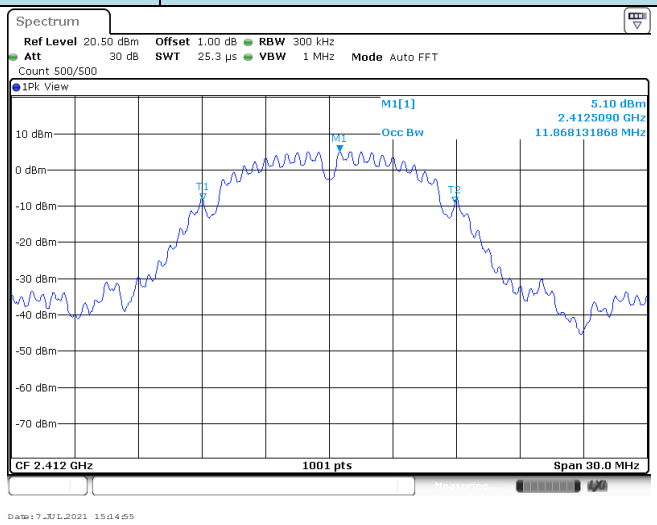
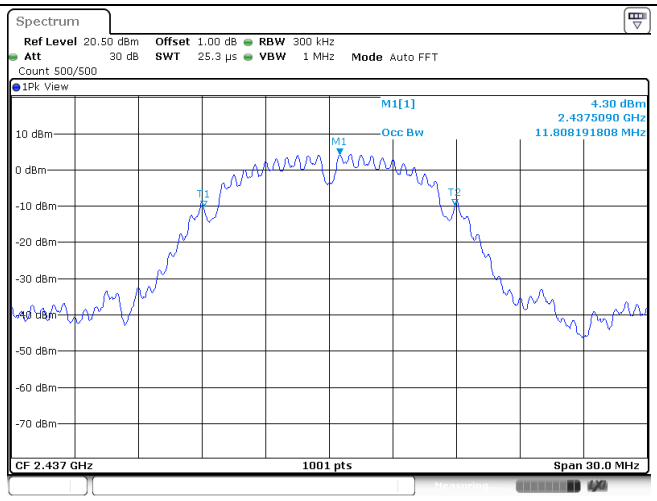
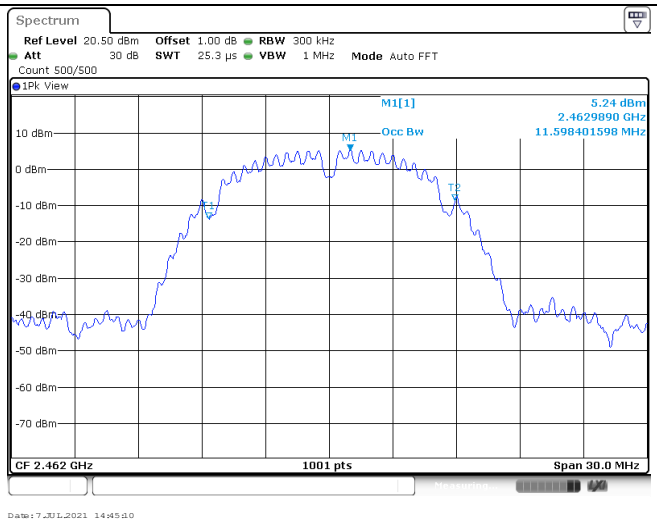
Type:	802.11 b
CH01	
CH06	
CH11	

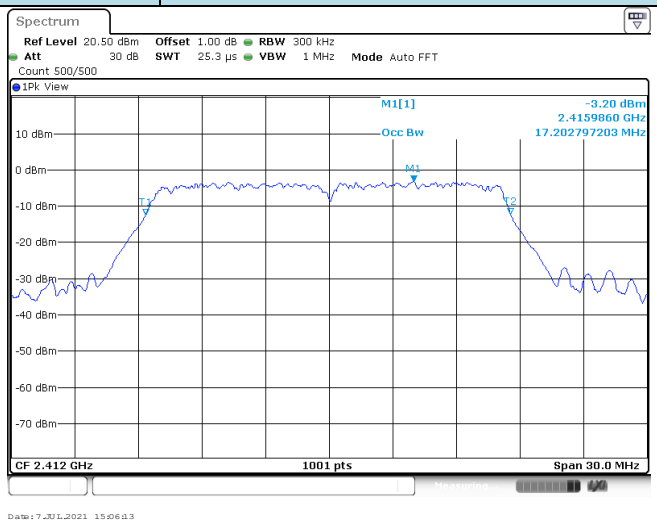
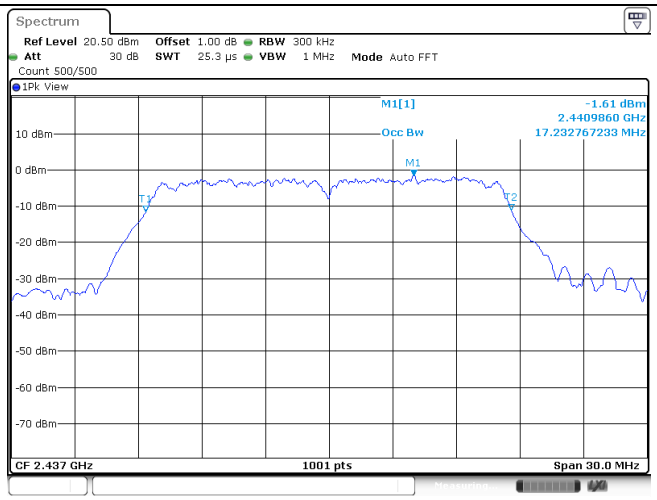
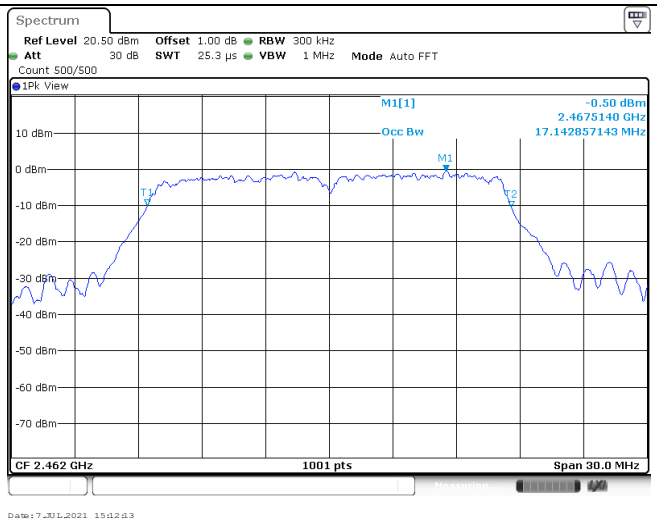
Type:	802.11 g
CH01	
CH06	
CH11	

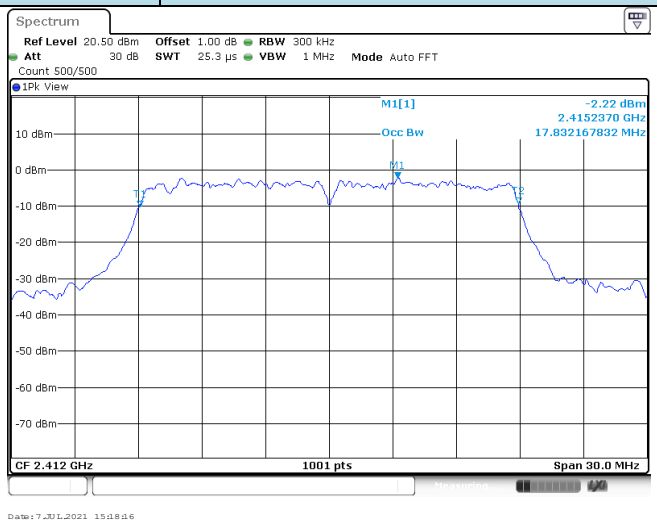
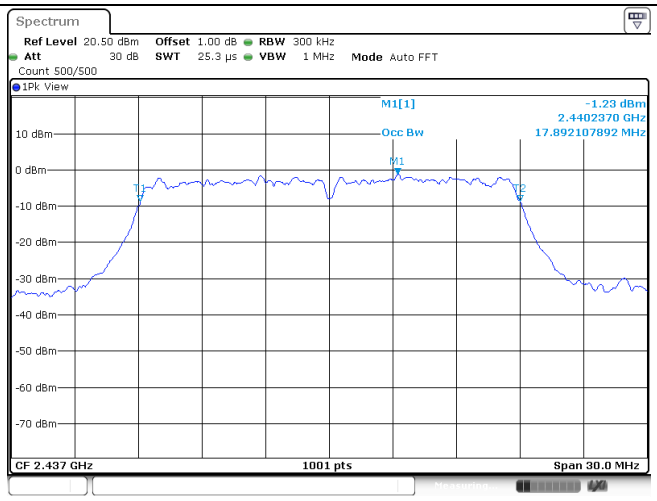
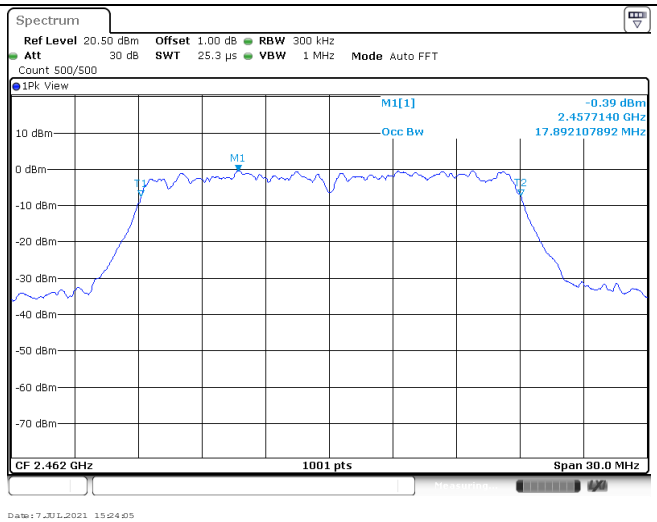
Type:	802.11n(HT20)
CH01	
CH06	
CH11	

Appendix D：99% Occupied Bandwidth

Type	Channel	99% Bandwidth (MHz)	Limit (MHz)	Result
802.11b	01	11.87	-	Pass
	06	11.81		
	11	11.60		
802.11g	01	17.20	-	Pass
	06	17.23		
	11	17.14		
802.11n(HT20)	01	17.83	-	Pass
	06	17.89		
	11	17.89		

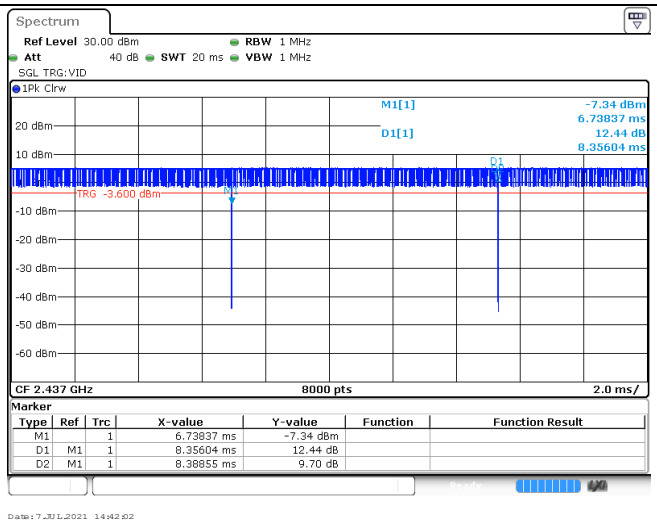
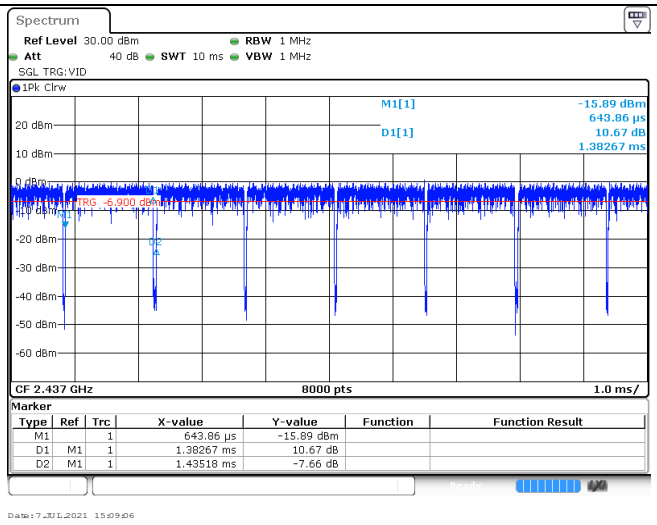
Type:	802.11 b
CH01	
CH06	
CH11	

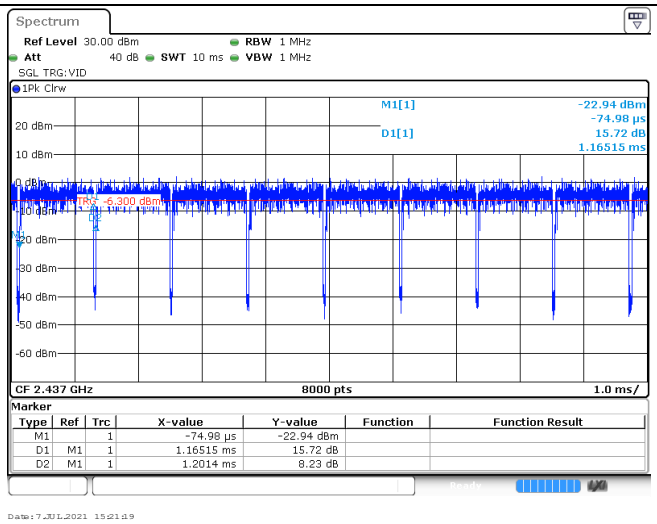
Type:	802.11 g
CH01	
CH06	
CH11	

Type:	802.11n(HT20)
CH01	
CH06	
CH11	

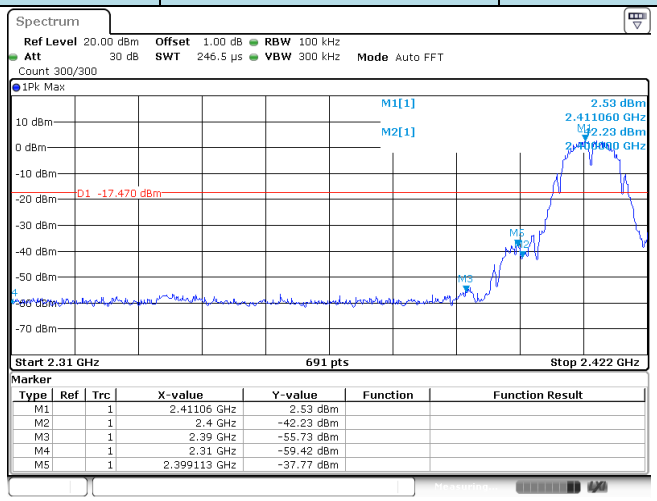
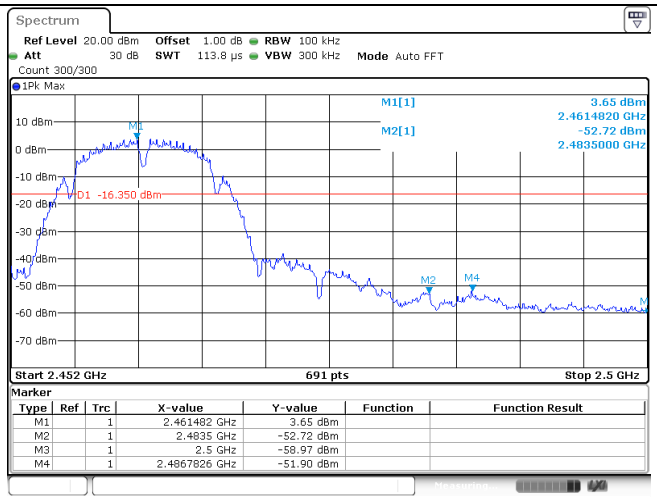
Appendix E：Duty Cycle

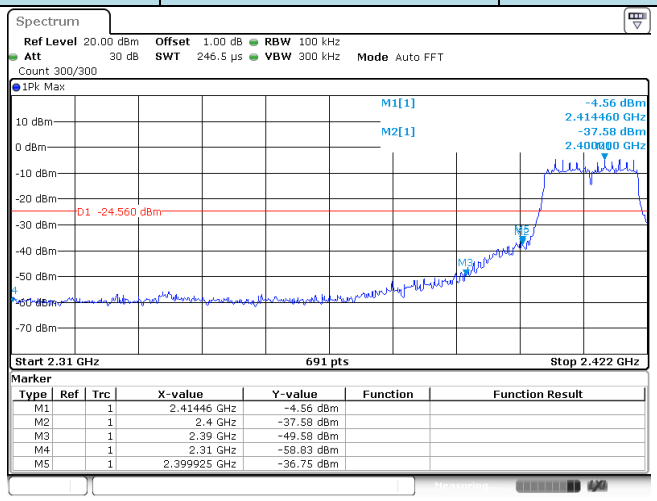
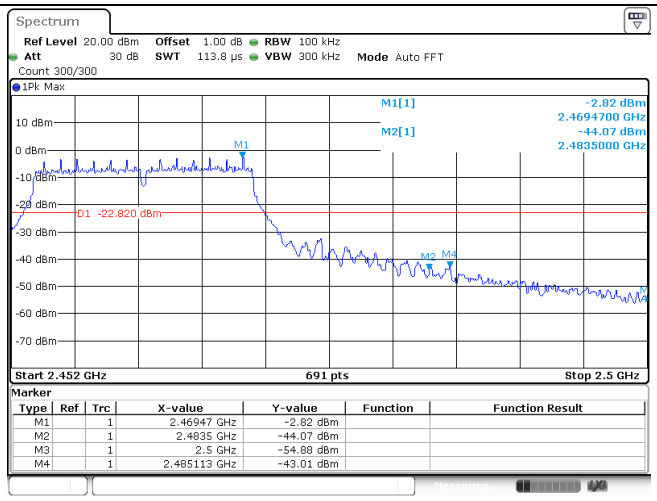
Modulation Type	Test Frequency （MHz）	$T_{on\ time}$ for single burst (ms)	T_{period} (ms)	Duty cycle	$1/T_{on\ time}$ (kHz)
11b	2437	8.36	8.39	99.6%	0.1
11g	2437	1.38	1.44	95.8%	0.7
11n20	2437	1.17	1.20	97.5%	0.9

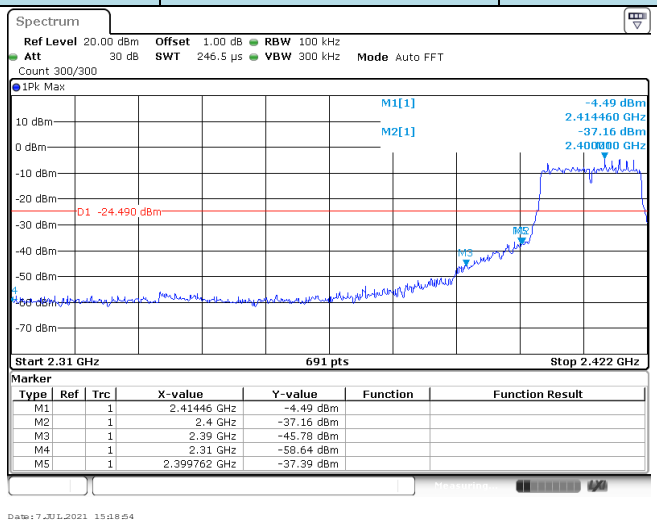
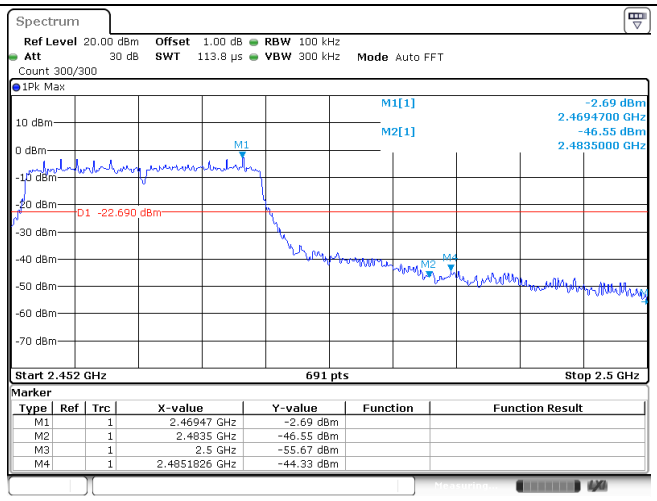
11b	
11g	

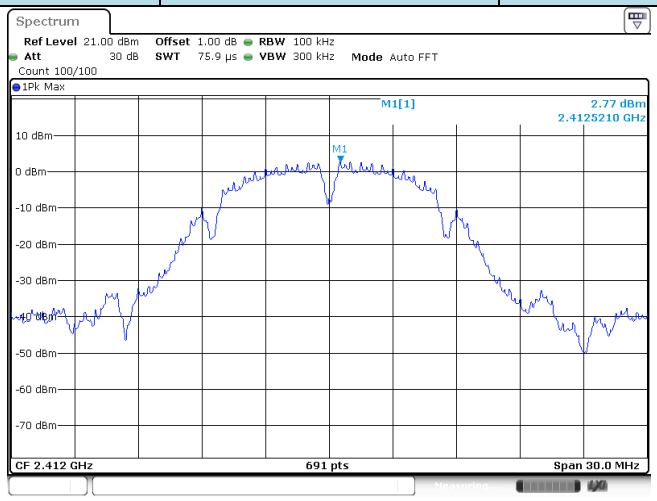
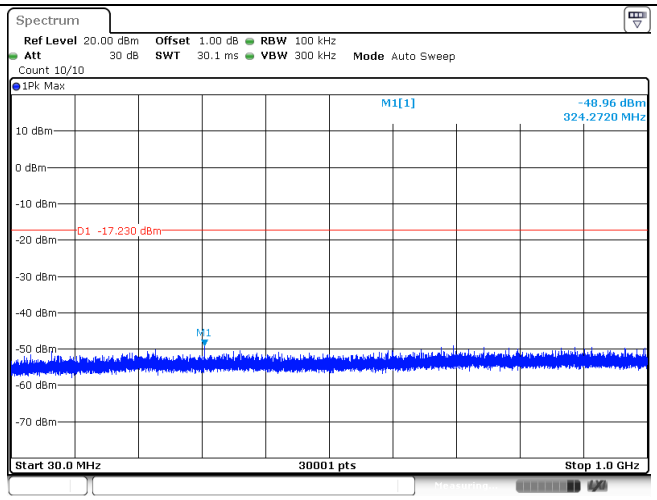
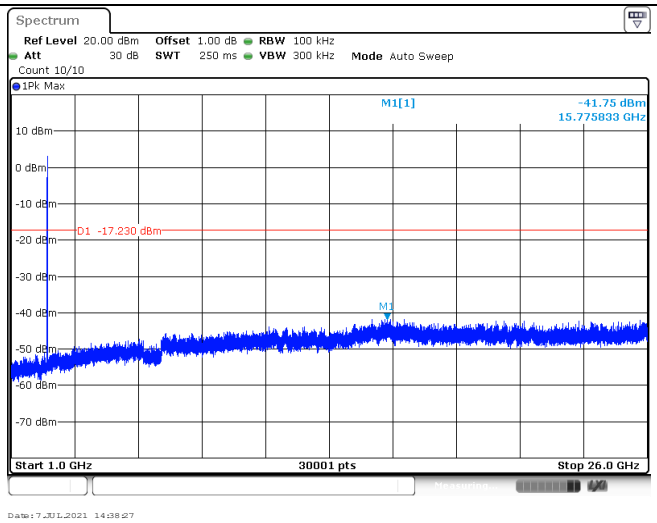
11n20	 Spectrum Ref Level 30.00 dBm RBW 1 MHz Att 40 dB SWT 10 ms VBW 1 MHz SGL TRG:VID 1Pk Clrw M1[1] -22.94 dBm -74.98 µs D1[1] 15.72 dB 1.16515 ms 20 dBm 10 dBm 0 dBm TRG -6.300 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm CF 2.437 GHz 8000 pts 1.0 ms/ Marker Type Ref Trc X-value Y-value Function Function Result M1 1 -74.98 µs -22.94 dBm D1 M1 1 1.16515 ms 15.72 dB D2 M1 1 1.2014 ms 8.23 dB Date:7.JUL.2021 15:21:19

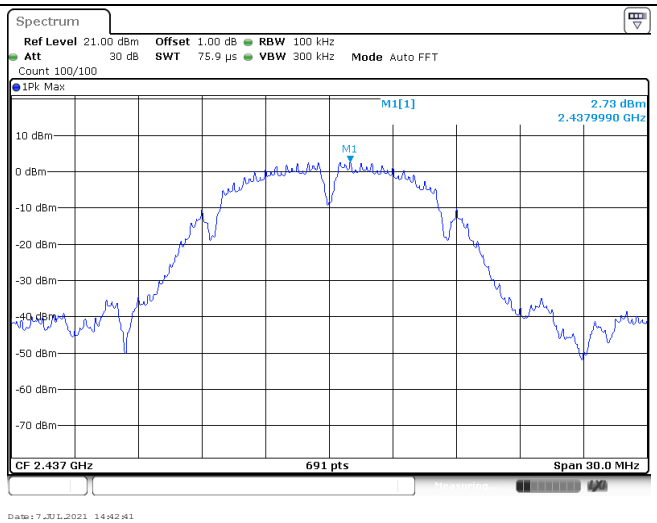
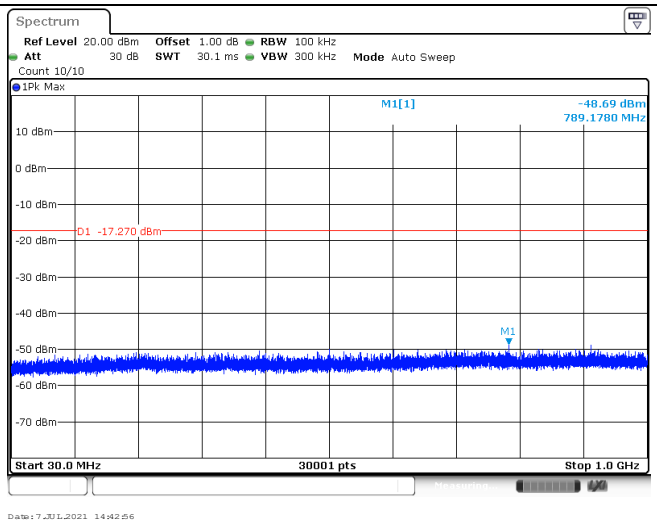
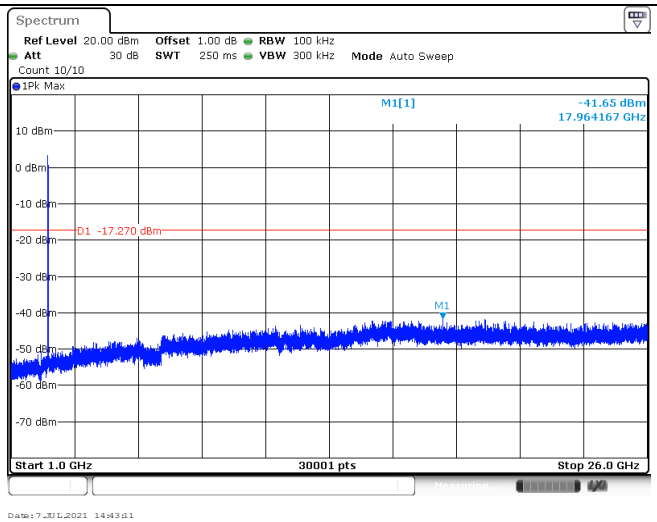
Appendix F：Band edge and Spurious Emissions (conducted)

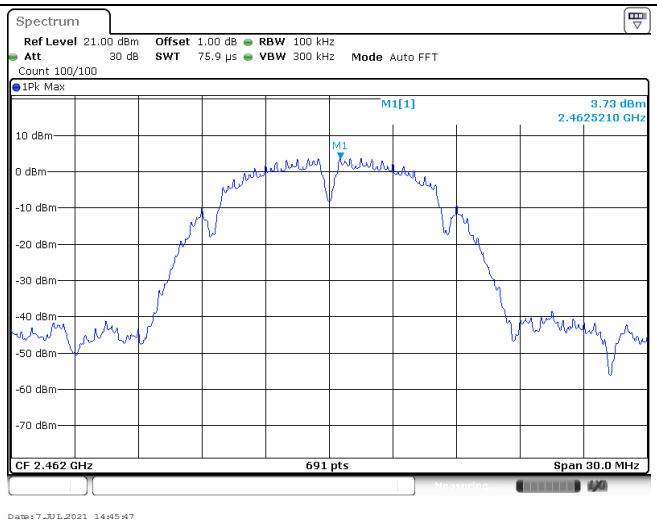
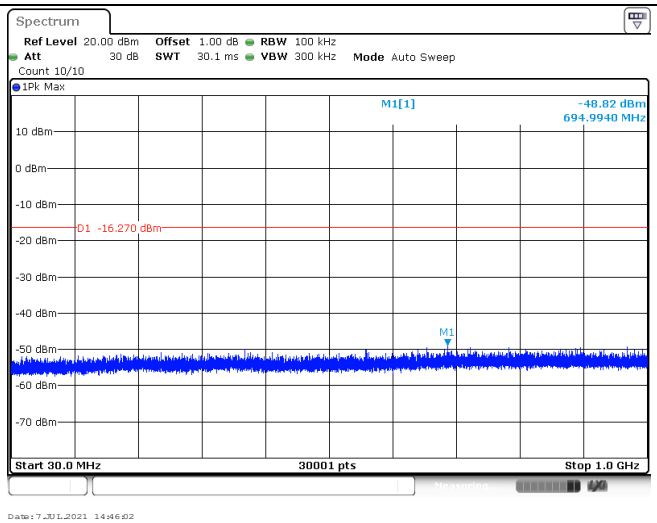
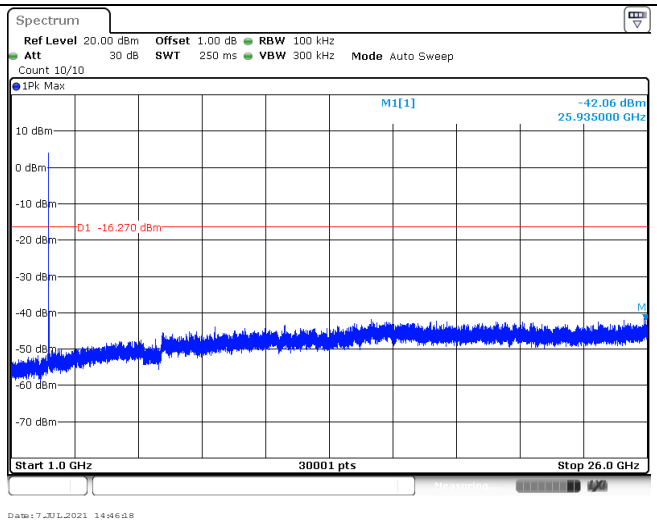
Test Item:	Bandedge	Type:	802.11 b
CH01	
CH11	

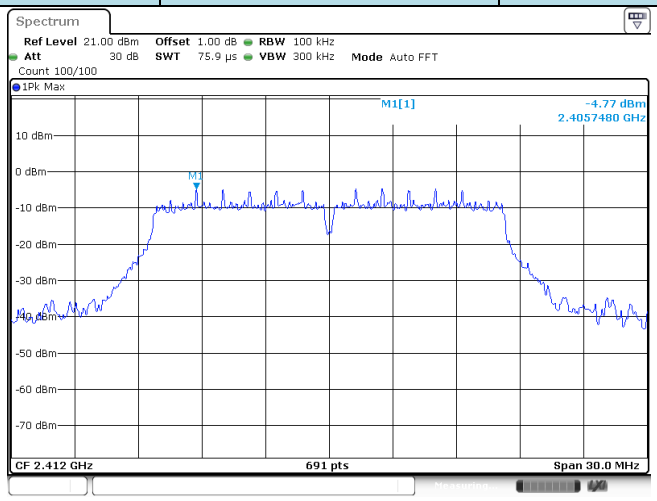
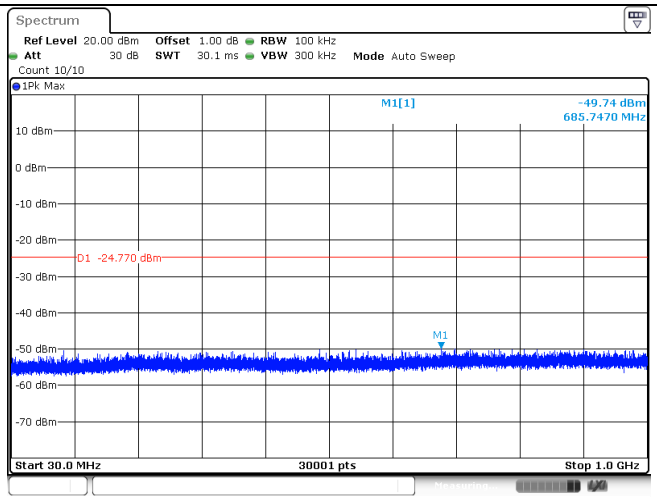
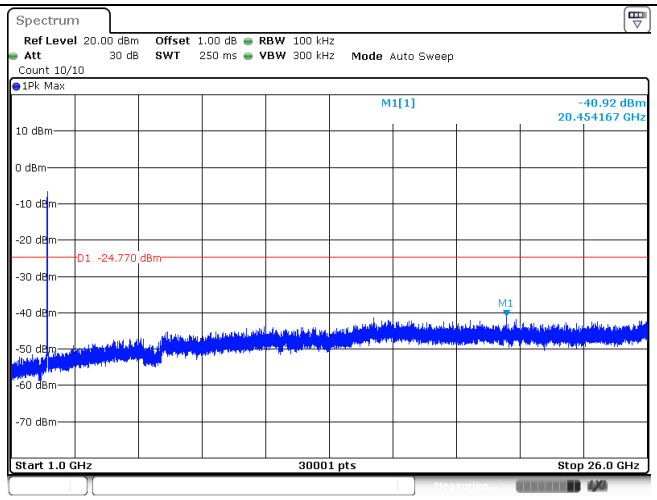
Test Item:	Bandedge	Type:	802.11 g
CH01			
CH11			

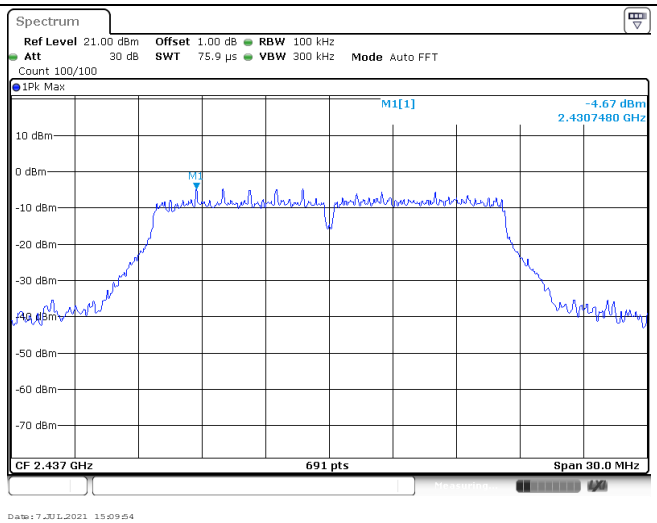
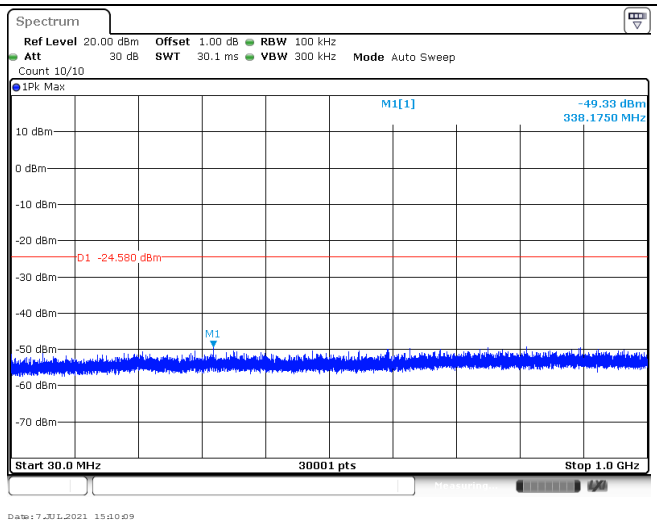
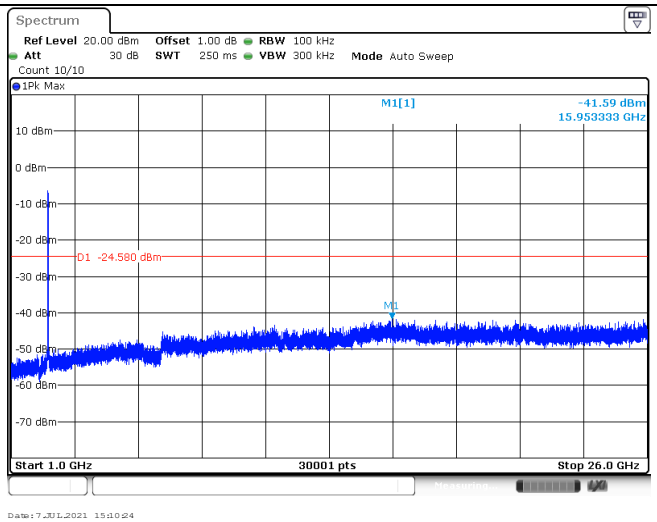
Test Item:	Bandedge	Type:	802.11 n(HT20)
CH01			
CH11			

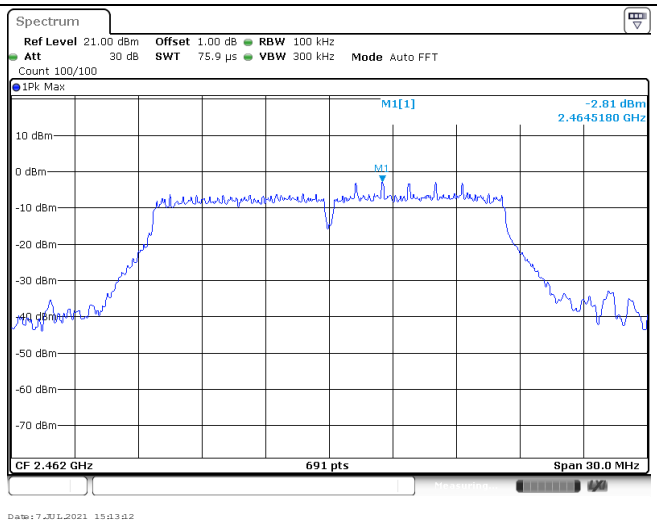
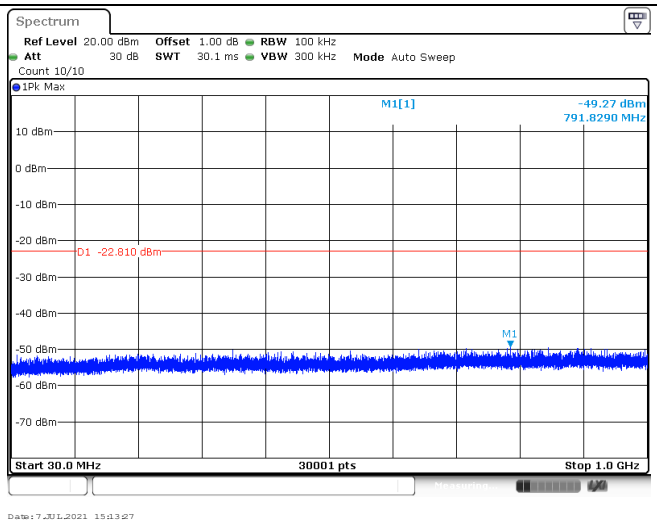
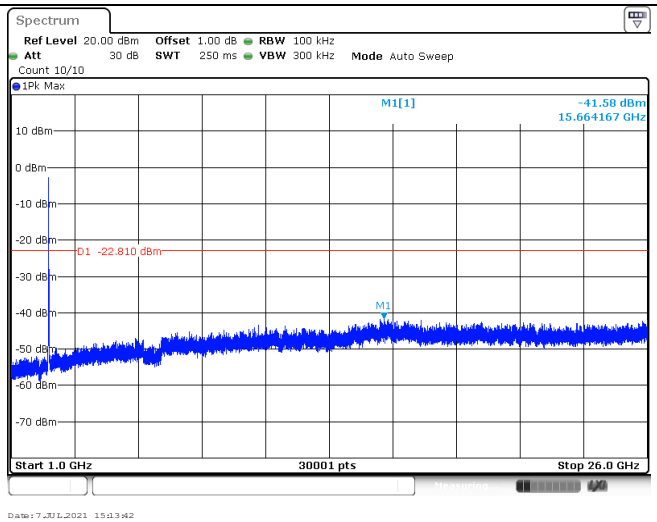
Test Item:	SE	Type:	802.11 b
CH01 Reference level			
CH01 30MHz~1000MHz			
CH01 1GHz~26GHz			

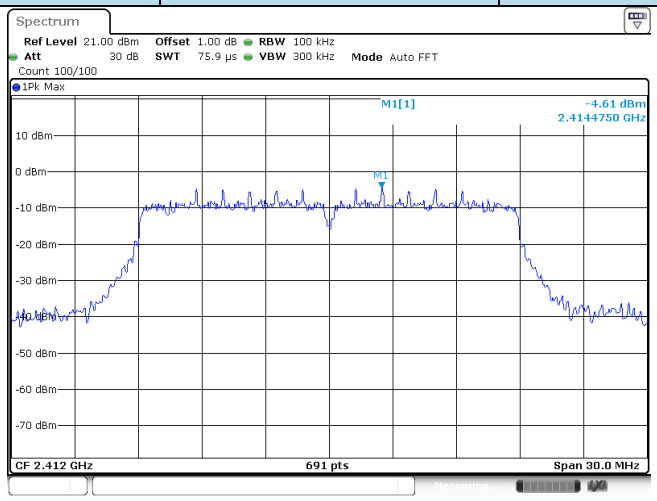
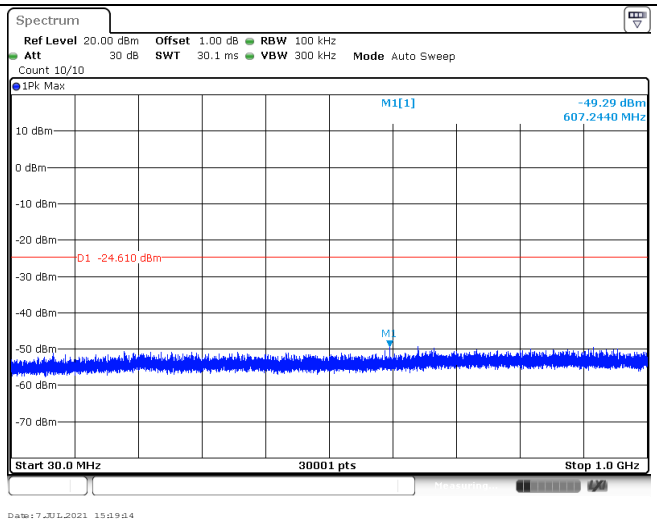
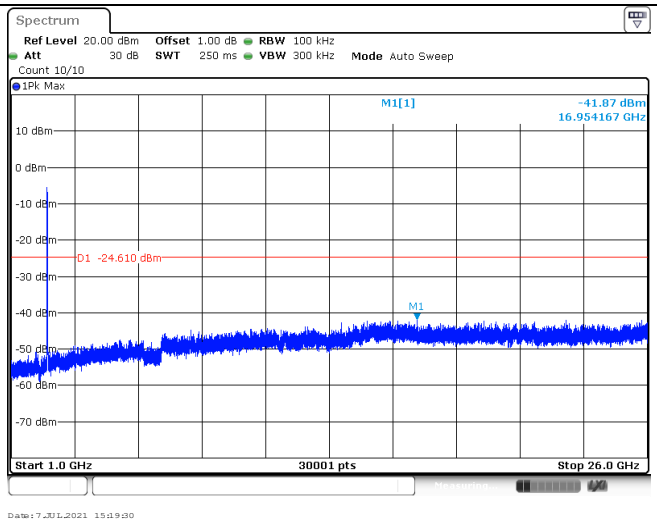
CH06 Reference level	
CH06 30MHz~1000MHz	
CH06 1GHz~26GHz	

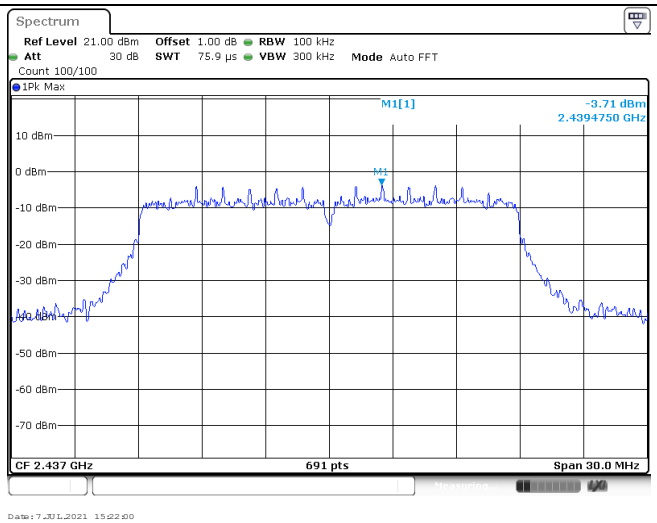
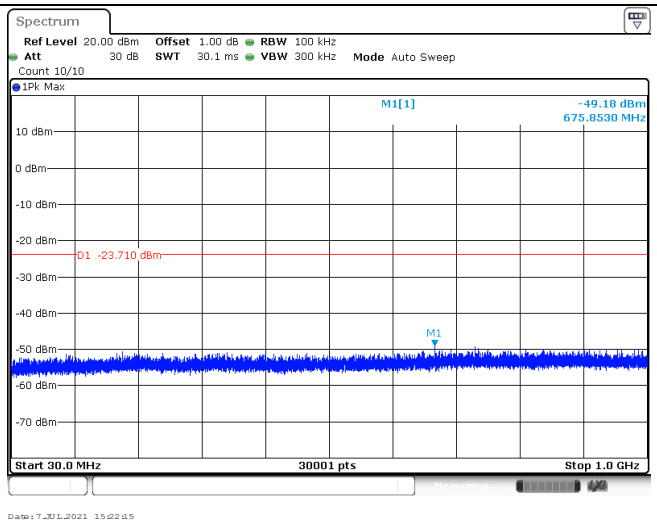
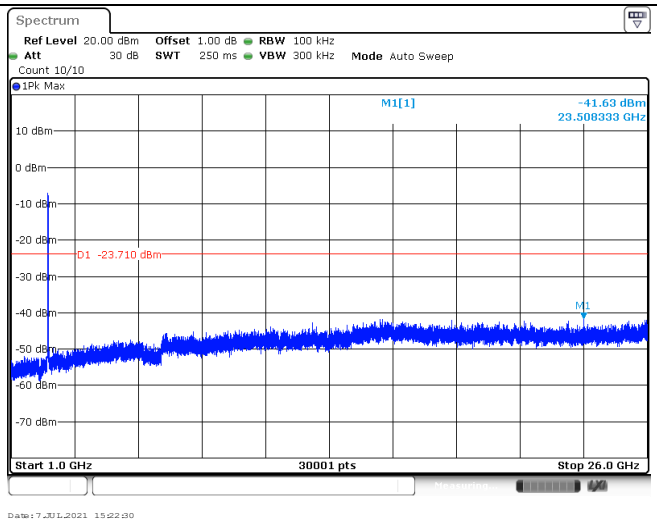
CH11 Reference level	
CH11 30MHz~1000MHz	
CH11 1GHz~26GHz	

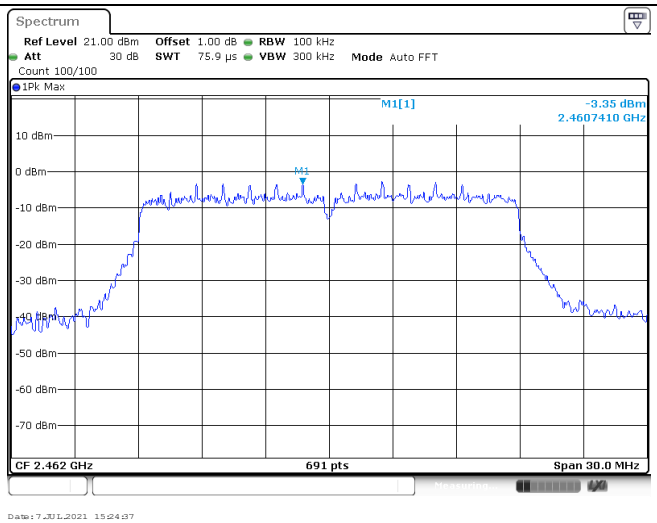
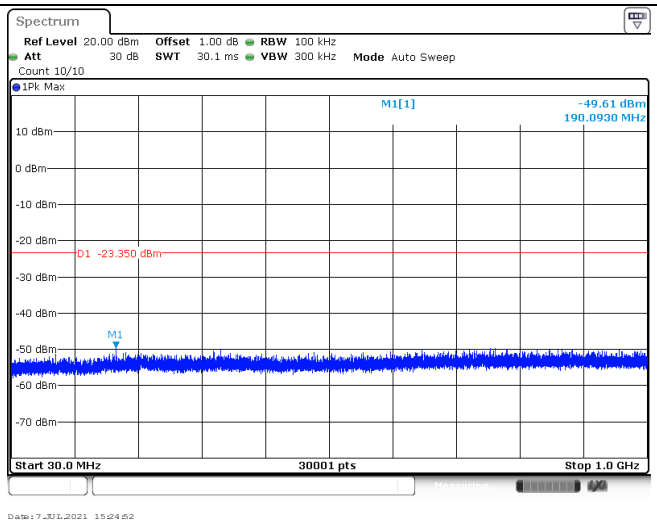
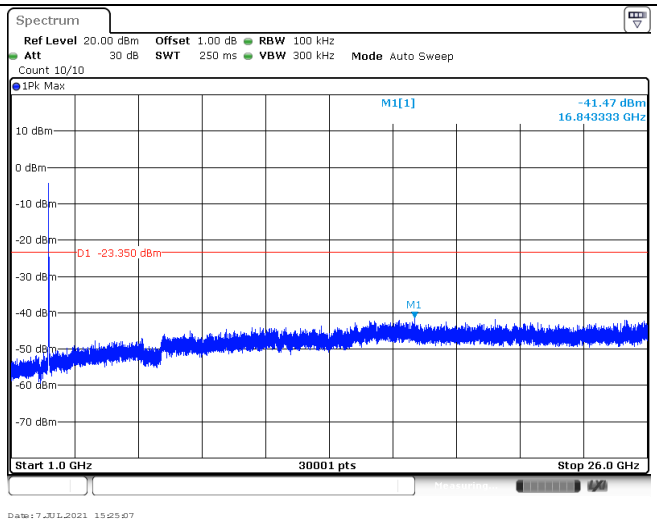
Test Item:	SE	Type:	802.11 g
CH01 Reference level			
CH01 30MHz~1000MHz			
CH01 1GHz~26GHz			

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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