APPENDIX REPORT

Project No.	SHT2011064601EW	Radio Specification	WIFI 2.4G
Test sample No.	YPHT20110646003	Model No.	LS140L
Start test date	2020-12-4	Finish date	2020-12-4
Temperature	24.7°C	Humidity	40%
Test Engineer	Qizhi Zhang	Auditor	Xiaodong Zhao

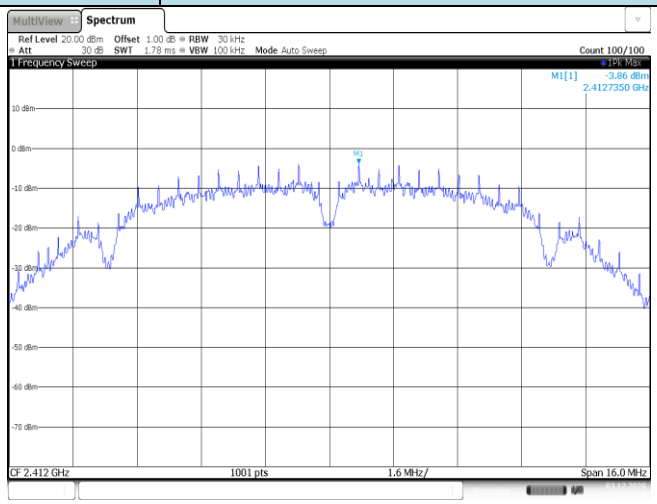
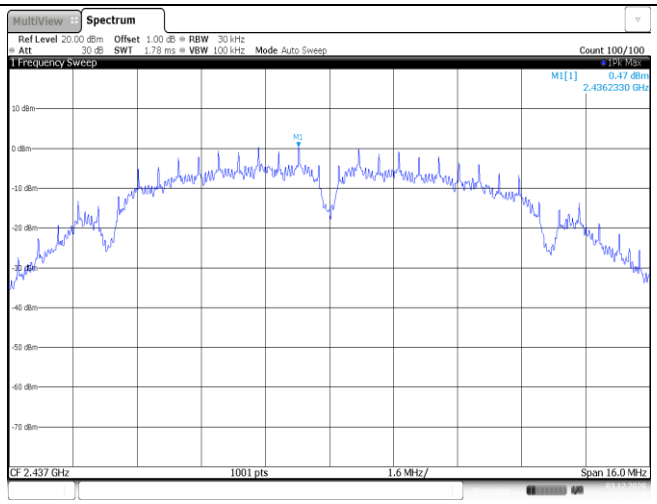
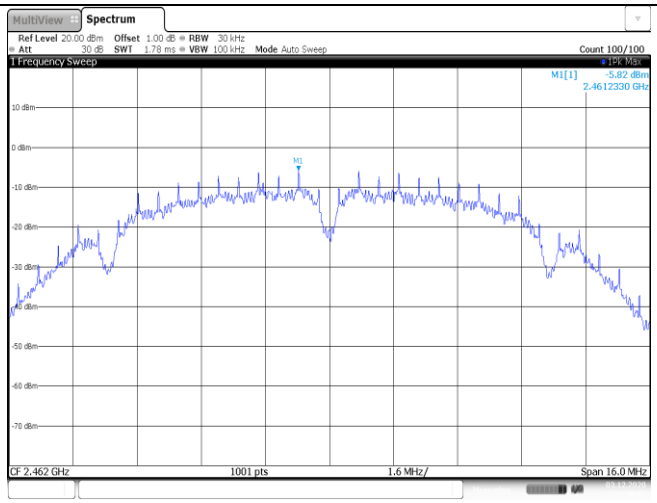
Appendix clause	Test item	Result
A	Conducted Peak Output Power	PASS
B	Power Spectral Density	PASS
C	6 dB Bandwidth	PASS
D	99% Occupied Bandwidth	PASS
E	Duty Cycle	PASS
F	Band edge and Spurious Emissions (conducted)	PASS

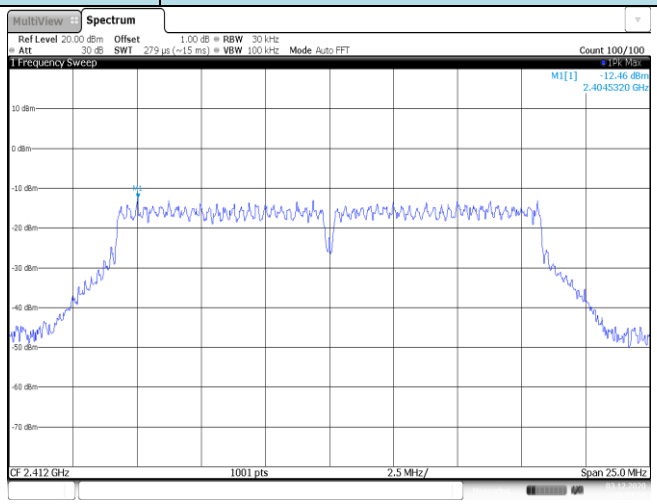
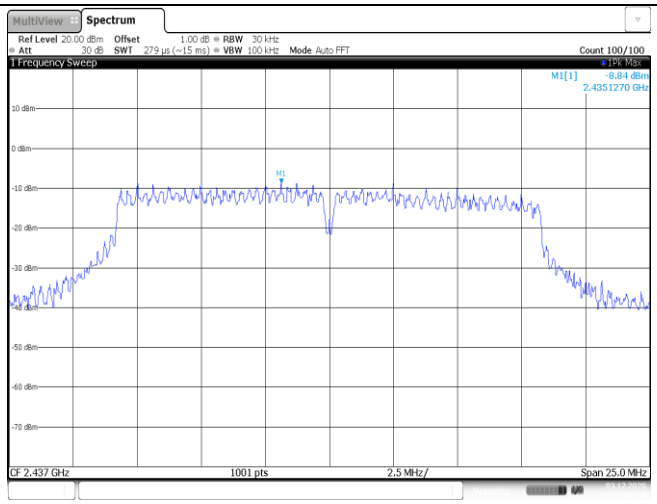
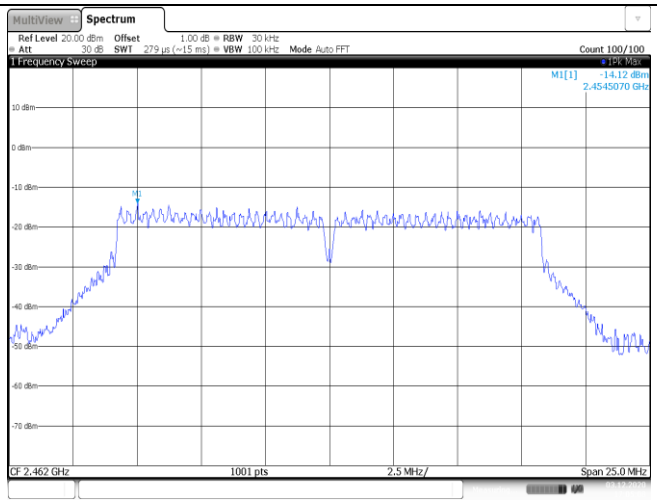
Appendix A：Conducted Peak Output Power

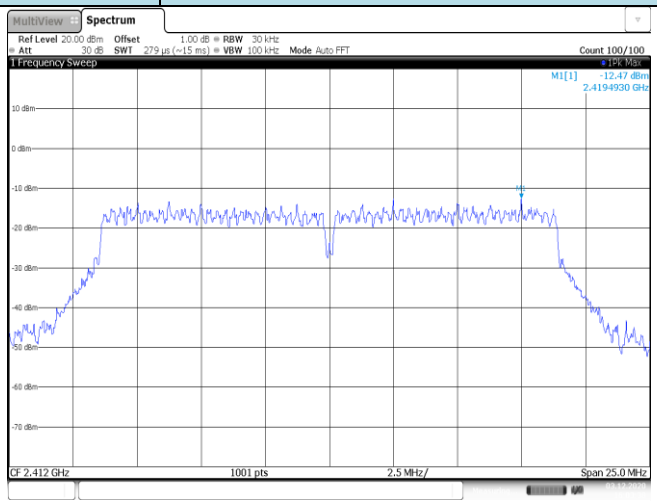
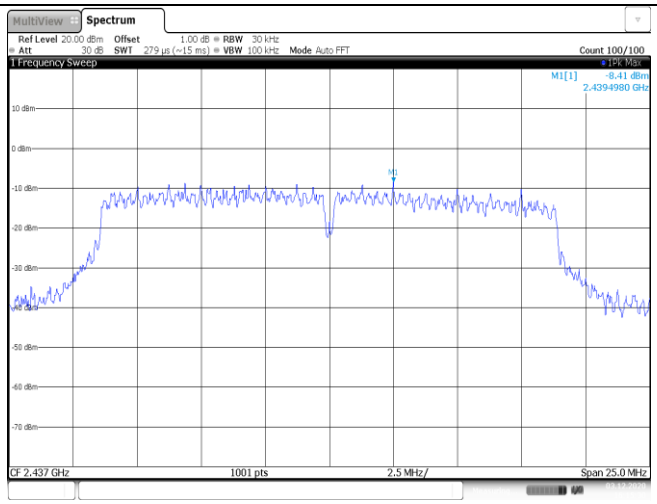
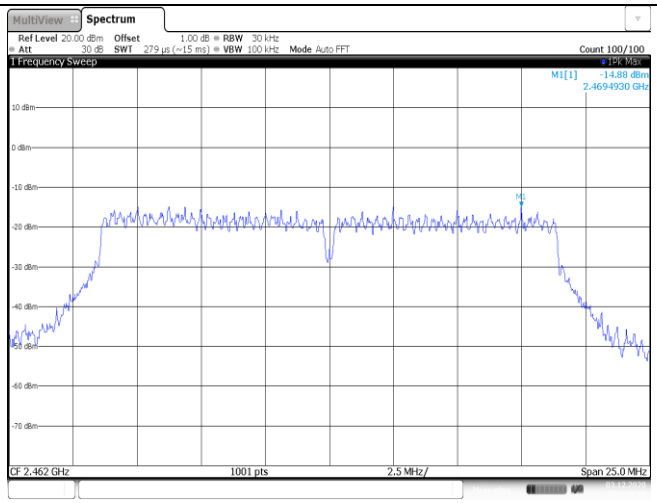
Type	Channel	Peak Output power (dBm)	Average Output power (dBm)	Limit (dBm)	Result
802.11b	01	9.87	7.41	≤ 30.00	Pass
	06	14.02	11.56		
	11	7.79	5.33		
802.11g	01	12.68	9.94	≤ 30.00	Pass
	06	17.01	14.32		
	11	10.49	7.67		
802.11n (HT20)	01	12.28	9.52	≤ 30.00	Pass
	06	16.31	13.52		
	11	10.13	7.23		

Appendix B：Power Spectral Density

Type	Channel	Power Spectral Density (dBm/30KHz)	Limit (dBm/3KHz)	Result
802.11b	01	-3.86	≤8.00	Pass
	06	0.47		
	11	-5.82		
802.11g	01	-12.46	≤8.00	Pass
	06	-8.84		
	11	-14.12		
802.11n(HT20)	01	-12.47	≤8.00	Pass
	06	-8.41		
	11	-14.88		

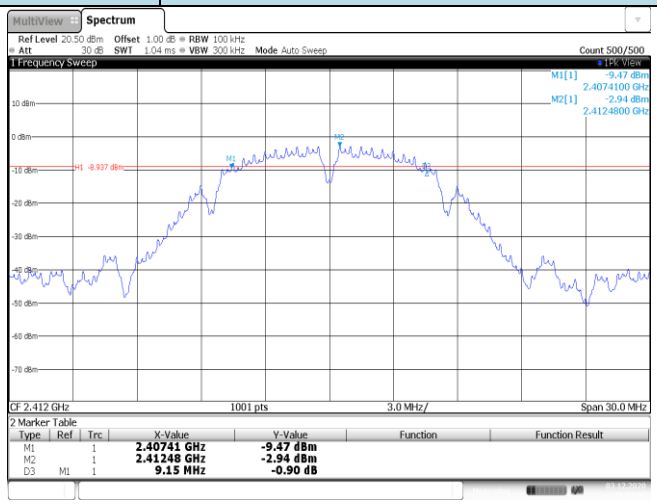
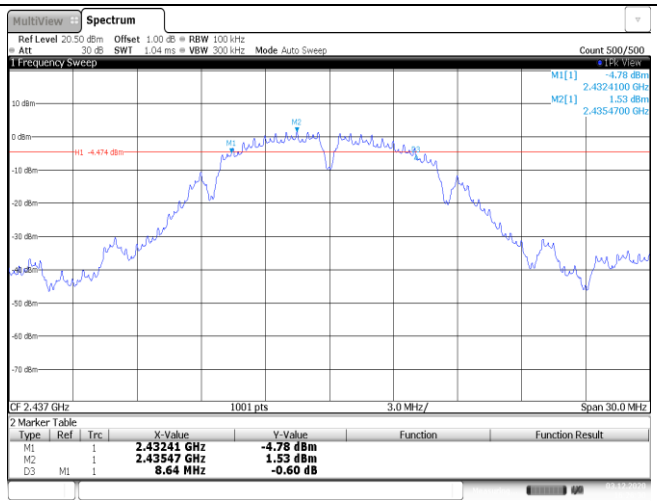
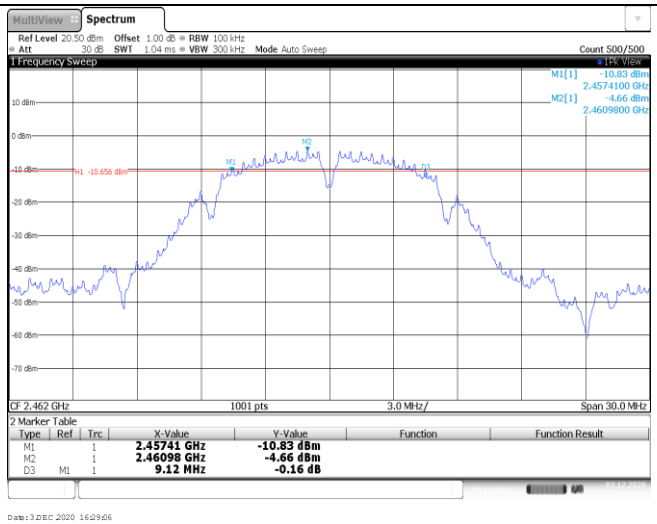
Type:	802.11 b
CH01	
CH06	
CH11	

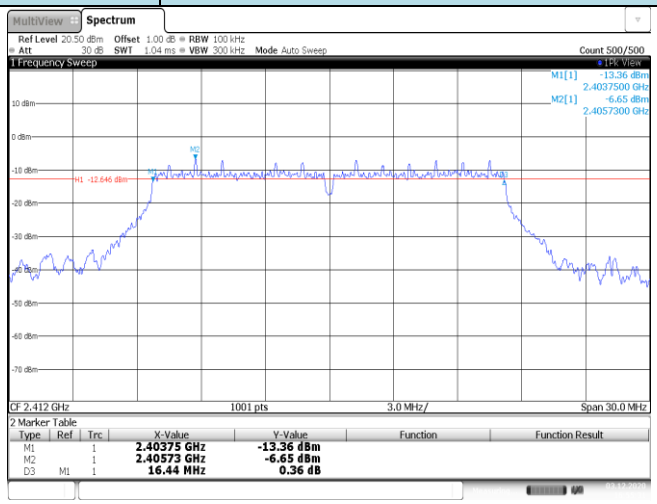
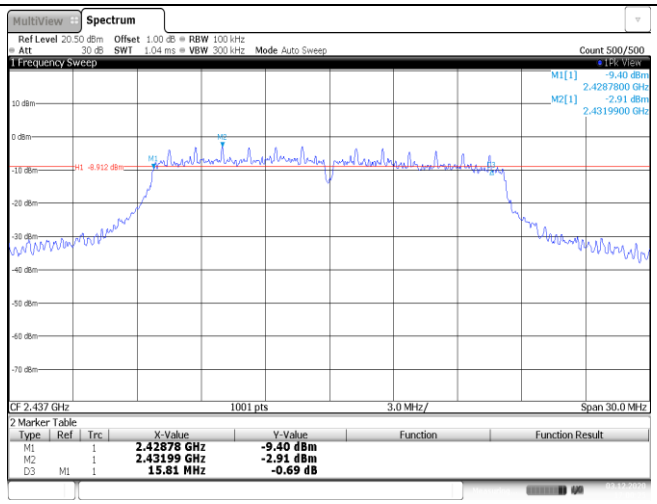
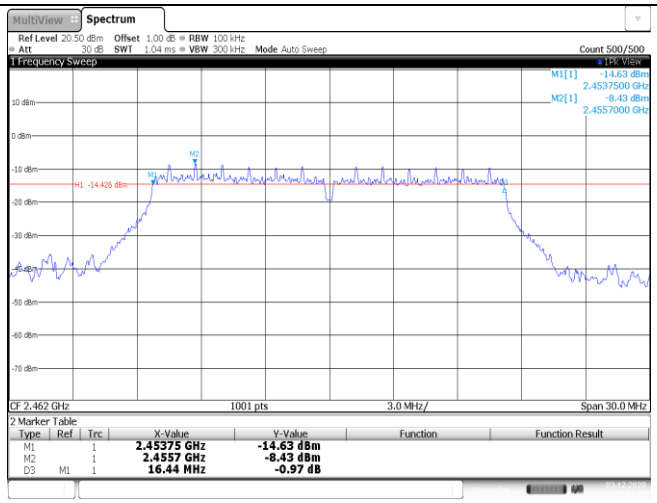
Type:	802.11 g
CH01	
CH06	
CH11	

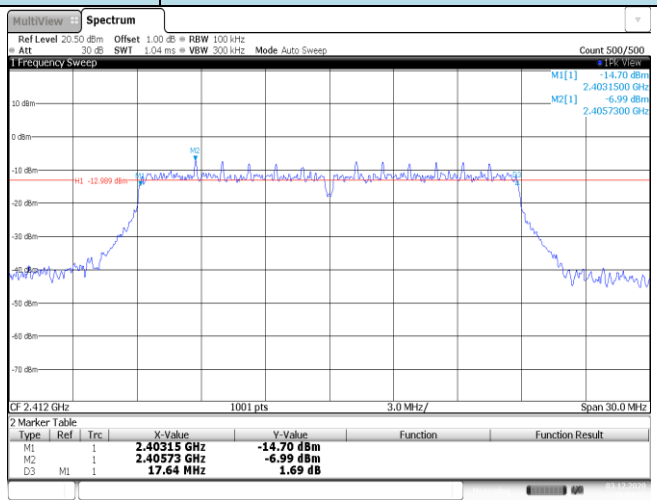
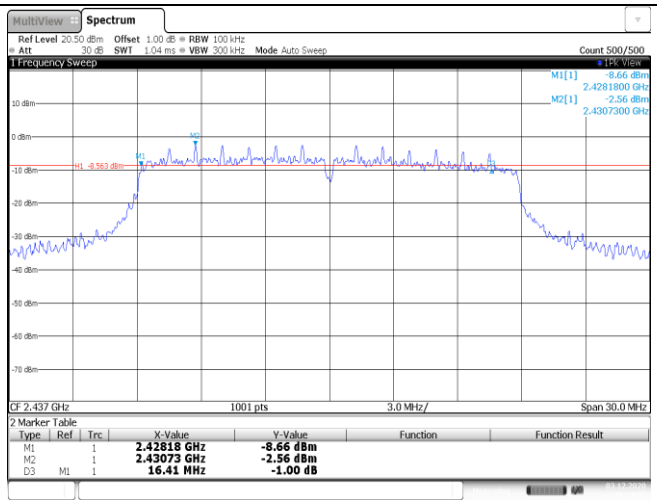
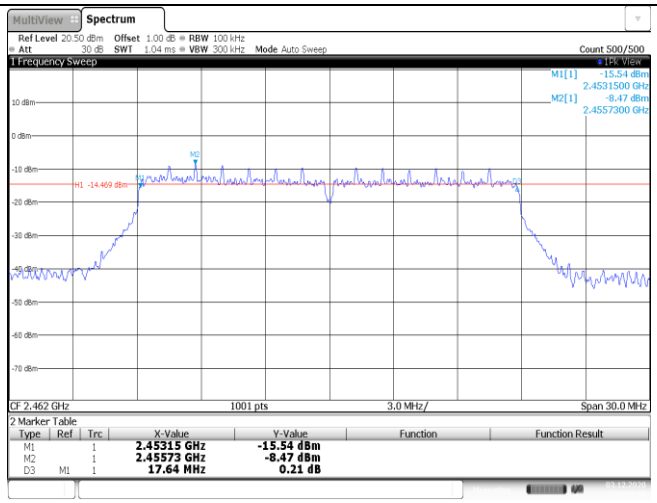
Type:	802.11n(HT20)
CH01	
CH06	
CH11	

Appendix C：6dB bandwidth

Type	Channel	6dB Bandwidth (MHz)	Limit (MHz)	Result
802.11b	01	9.15	≥0.5	Pass
	06	8.64		
	11	9.12		
802.11g	01	16.44	≥0.5	Pass
	06	15.81		
	11	16.44		
802.11n(HT20)	01	17.64	≥0.5	Pass
	06	16.41		
	11	17.64		

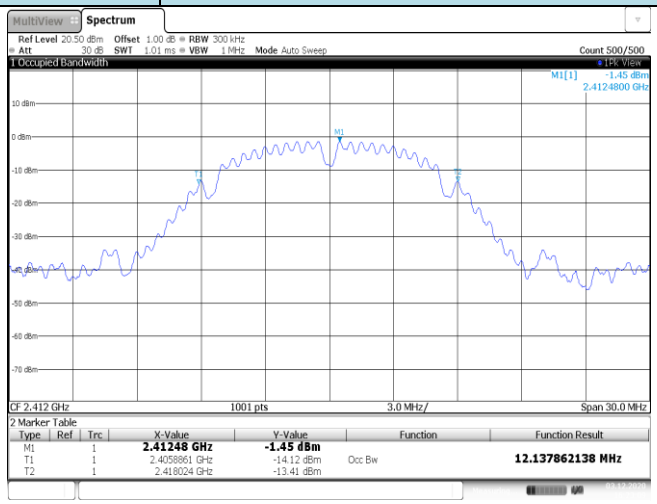
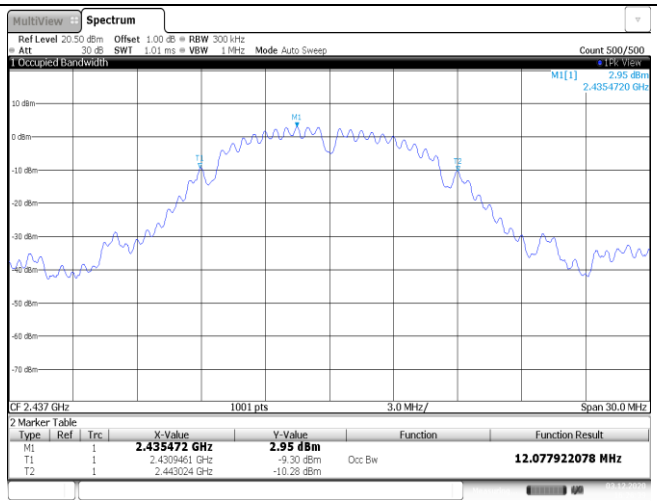
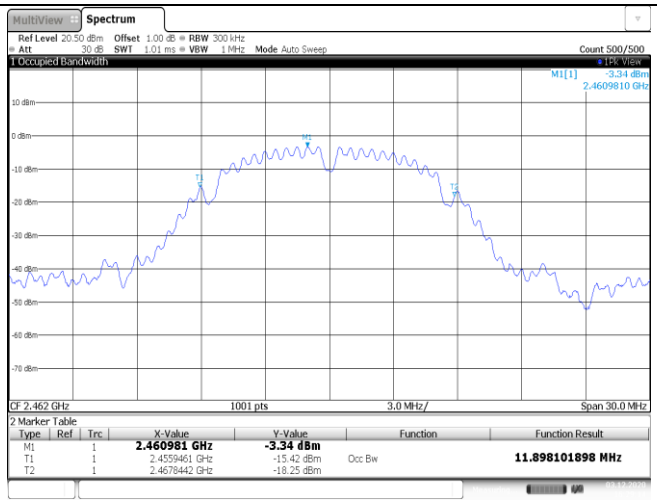
Type:	802.11 b
CH01	
CH06	
CH11	

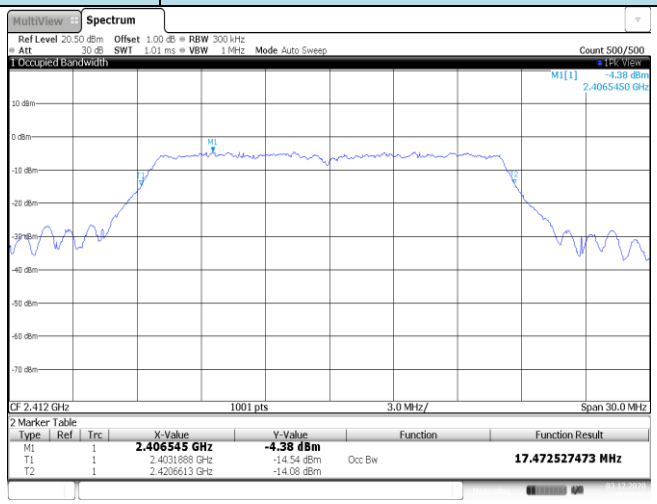
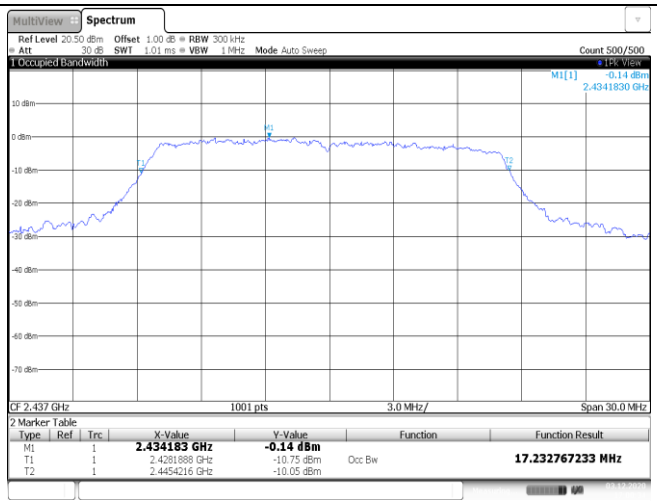
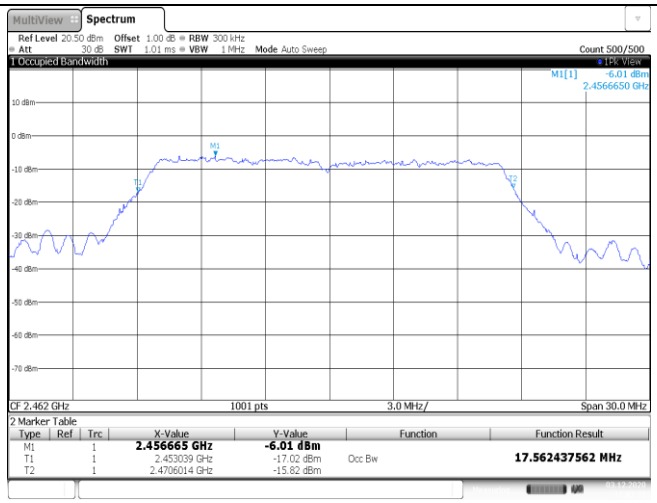
Type:	802.11 g
CH01	
CH06	
CH11	

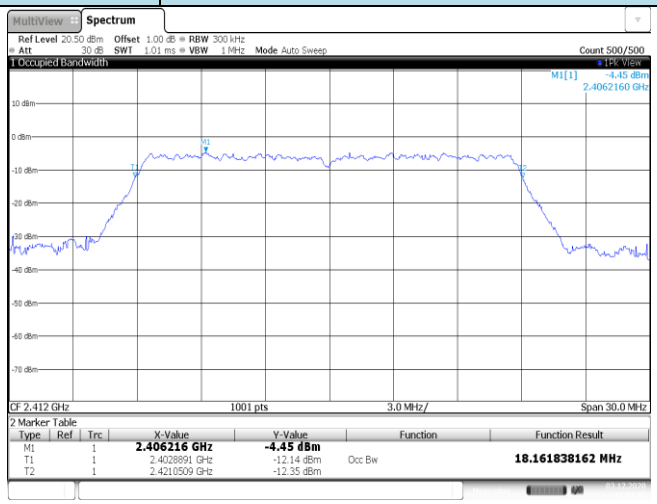
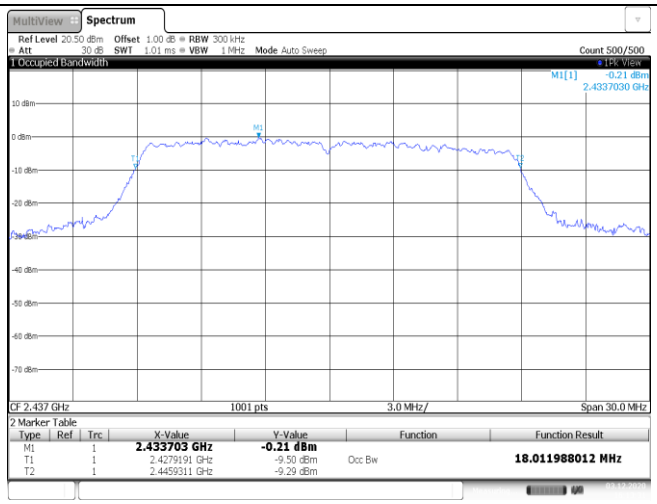
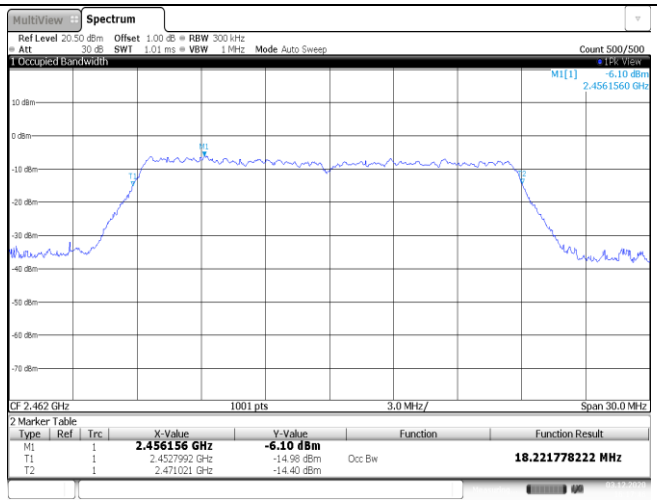
Type:	802.11n(HT20)
CH01	
CH06	
CH11	

Appendix D：99% Occupied Bandwidth

Type	Channel	99% Bandwidth (MHz)	Limit (MHz)	Result
802.11b	01	12.14	-	Pass
	06	12.08		
	11	11.90		
802.11g	01	17.47	-	Pass
	06	17.23		
	11	17.56		
802.11n(HT20)	01	18.16	-	Pass
	06	18.01		
	11	18.22		

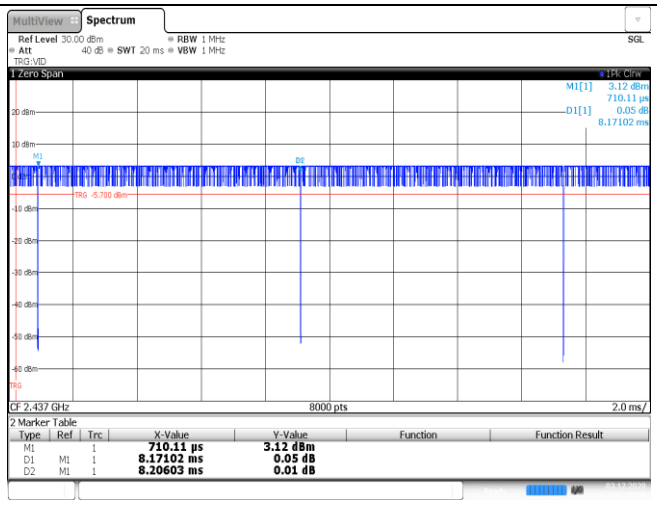
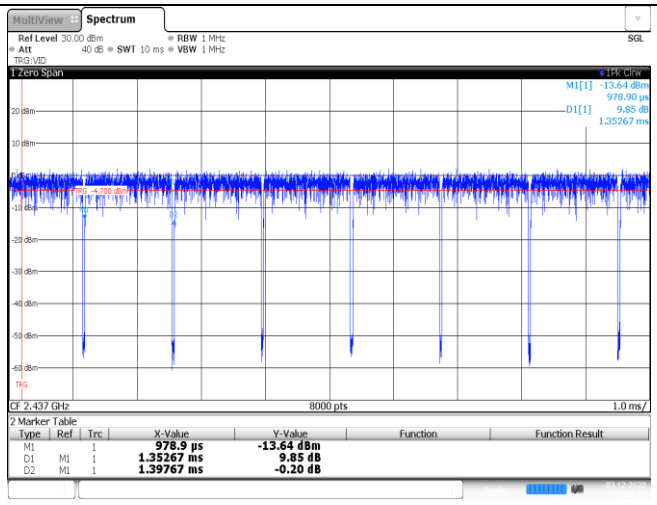
Type:	802.11 b
CH01	
CH06	
CH11	

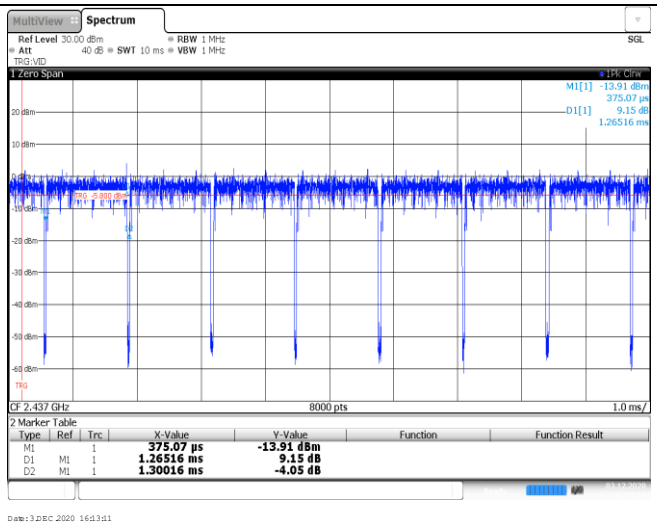
Type:	802.11 g
CH01	
CH06	
CH11	

Type:	802.11n(HT20)
CH01	
CH06	
CH11	

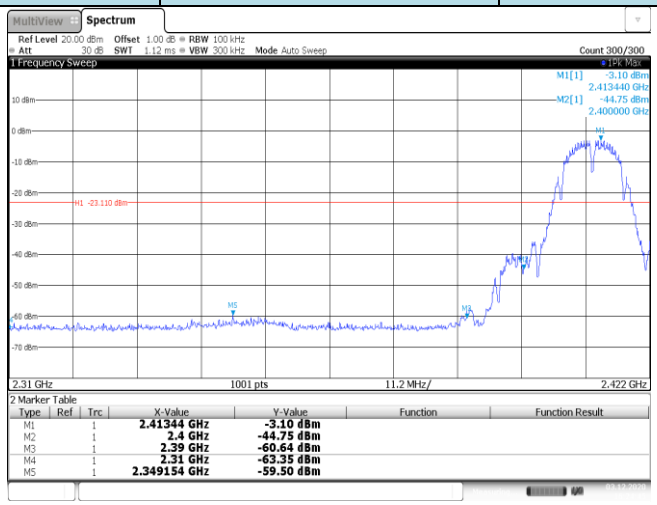
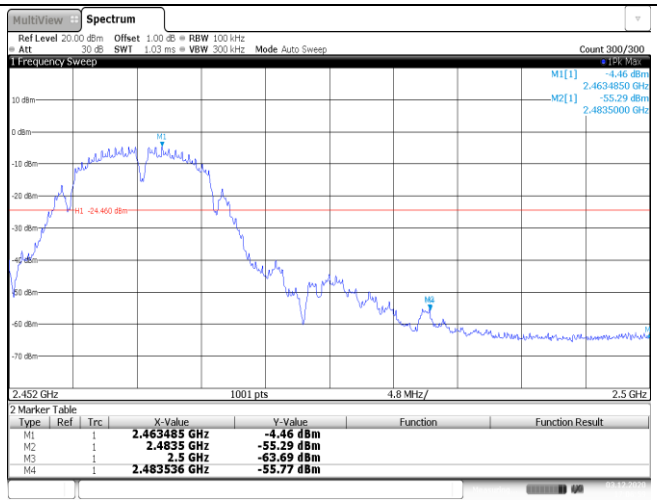
Appendix E：Duty Cycle

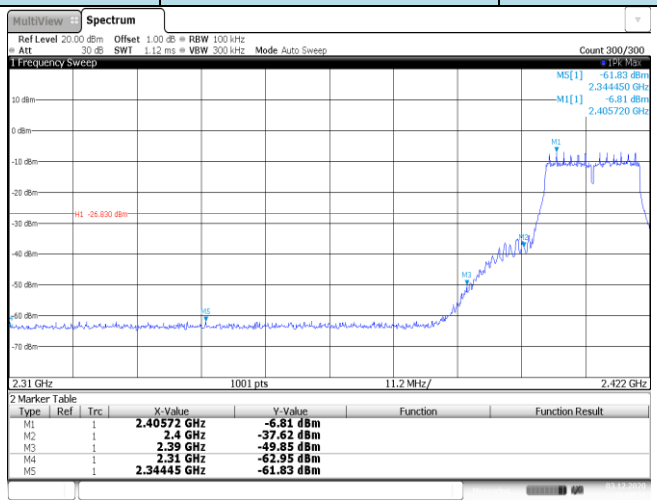
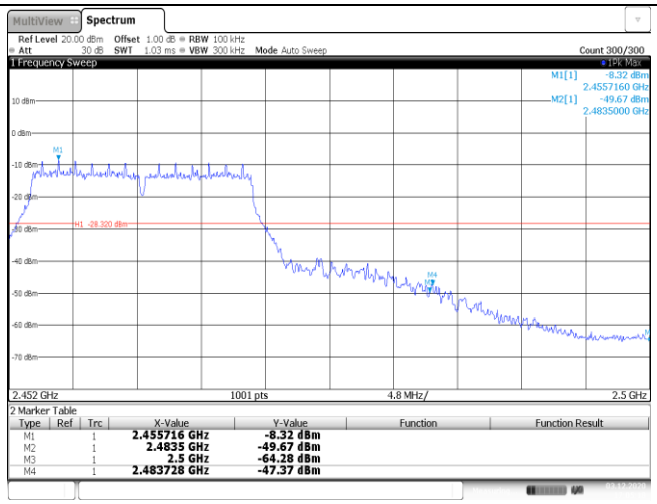
Modulation Type	Test Frequency （MHz）	$T_{on\ time}$ for single burst (ms)	T_{period} (ms)	Duty cycle	$1/T_{on\ time}$ (kHz)
11b	2437	8.17	8.21	99.5%	0.1
11g	2437	1.35	1.40	96.4%	0.7
11n20	2437	1.27	1.30	97.7%	0.8

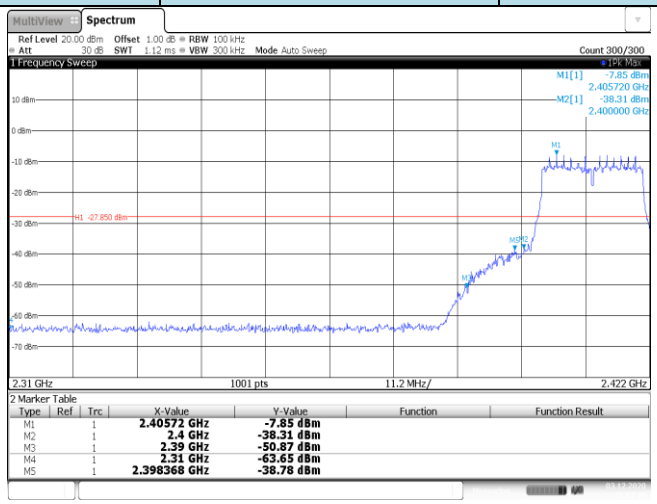
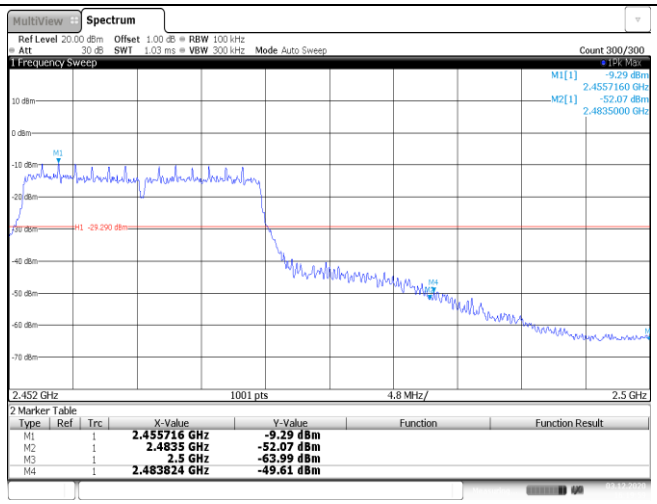
11b	
11g	

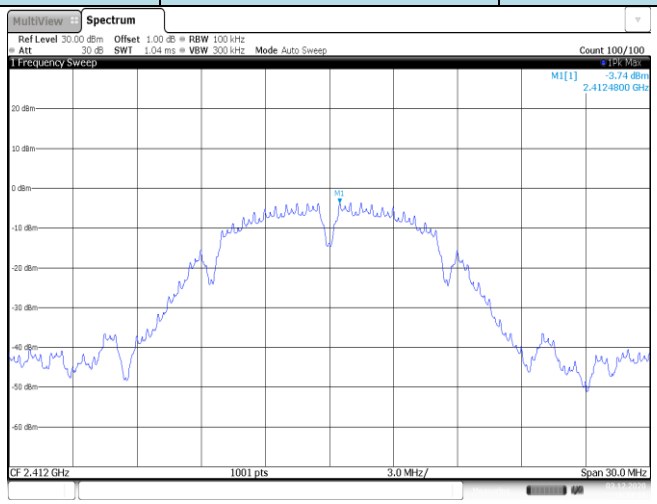
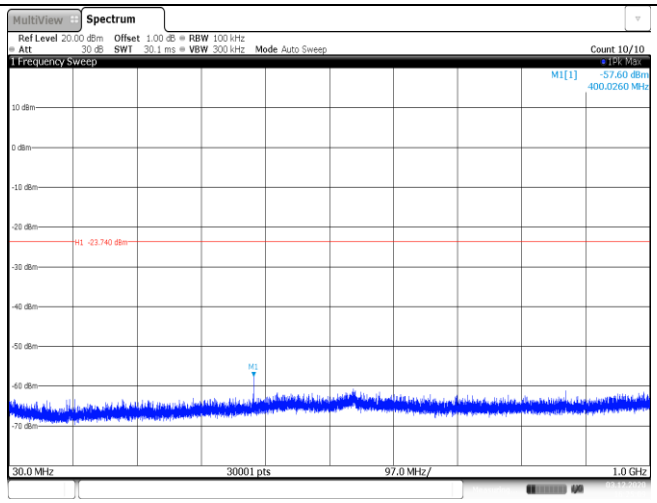
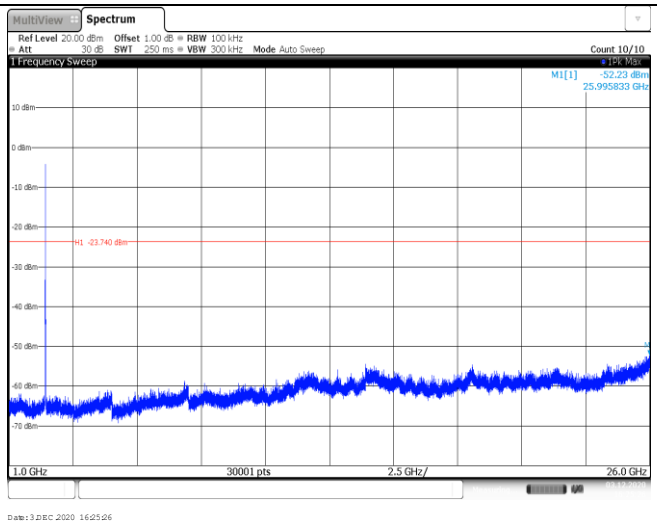
11n20	 MultiView Spectrum Ref Level 30.00 dBm RBW 1 MHz Att 40 dB SWT 10 ms VBW 1 MHz TRG:VID 1 Zero Span 1Pk Clrw M1[1] -13.91 dBm 375.07 µs D1[1] 9.15 dB 1.26516 ms CF 2.437 GHz 8000 pts 1.0 ms/ 2 Marker Table Type Ref Trc X-Value Y-Value Function Function Result M1 1 375.07 µs -13.91 dBm D1 M1 1 1.26516 ms 9.15 dB D2 M1 1 1.30016 ms -4.05 dB Date: 3.DEC.2020 16:13:11

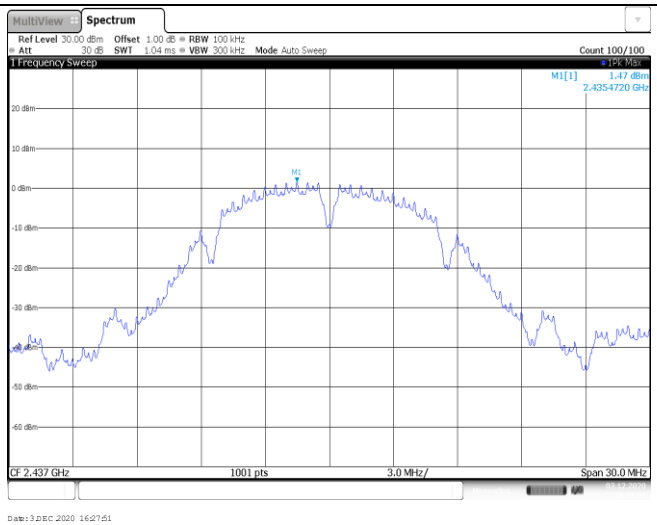
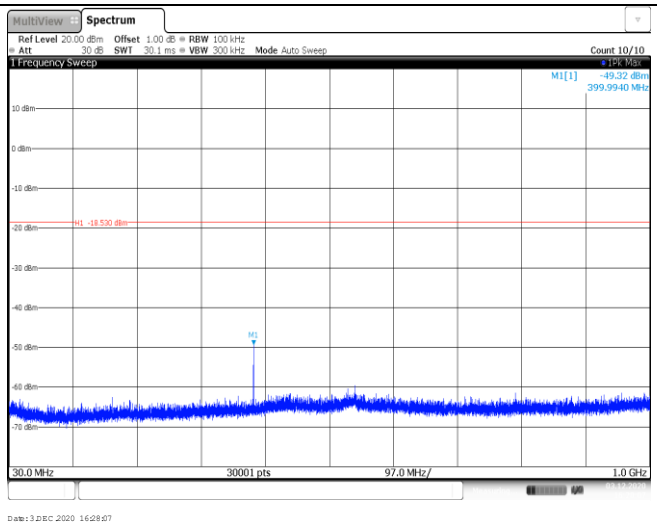
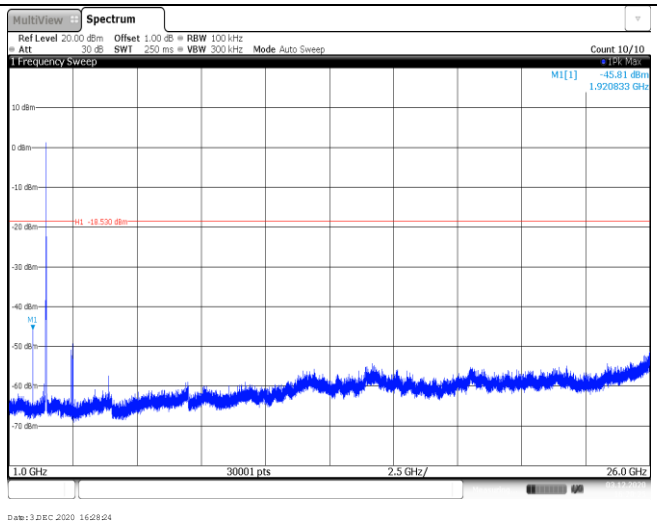
Appendix F：Band edge and Spurious Emissions (conducted)

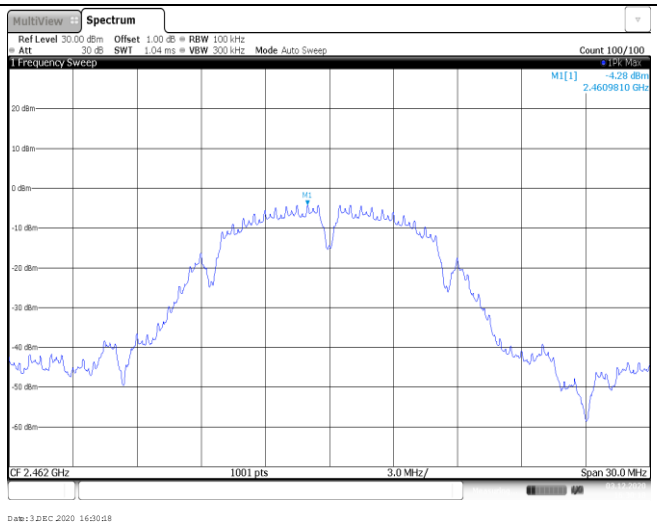
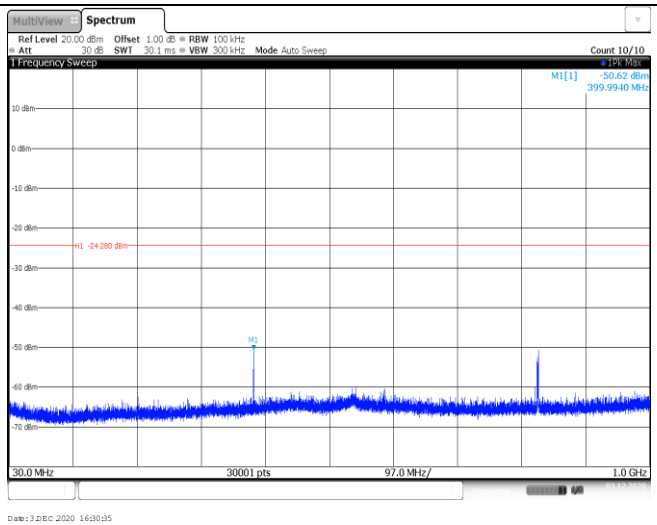
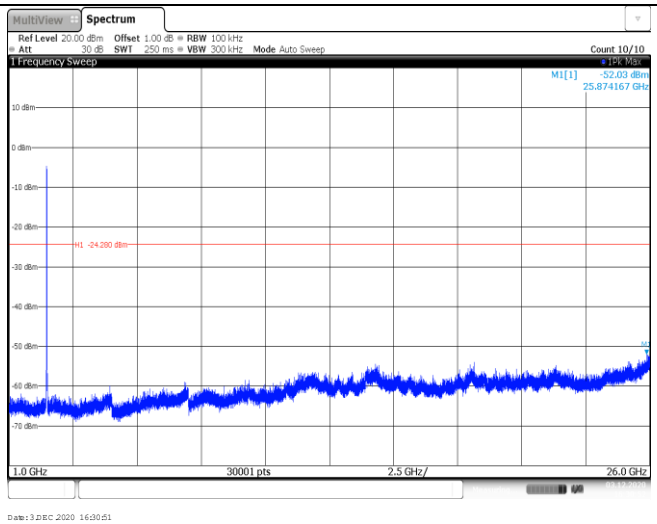
Test Item:	Bandedge	Type:	802.11 b
CH01	
CH11	

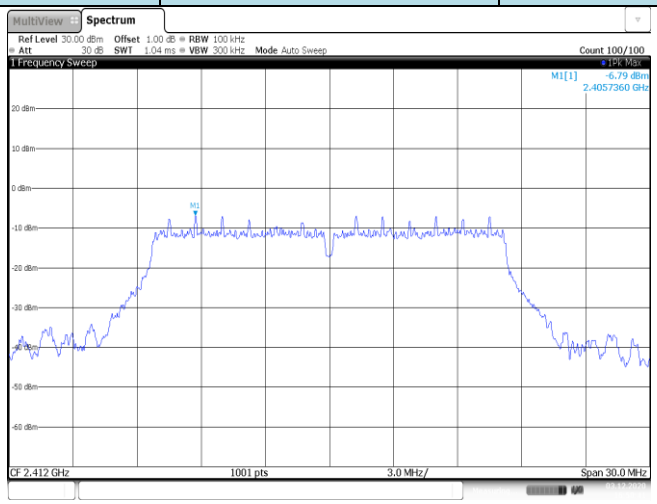
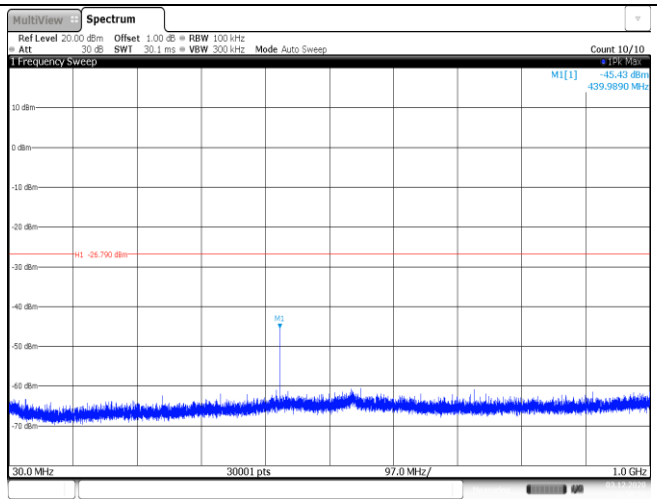
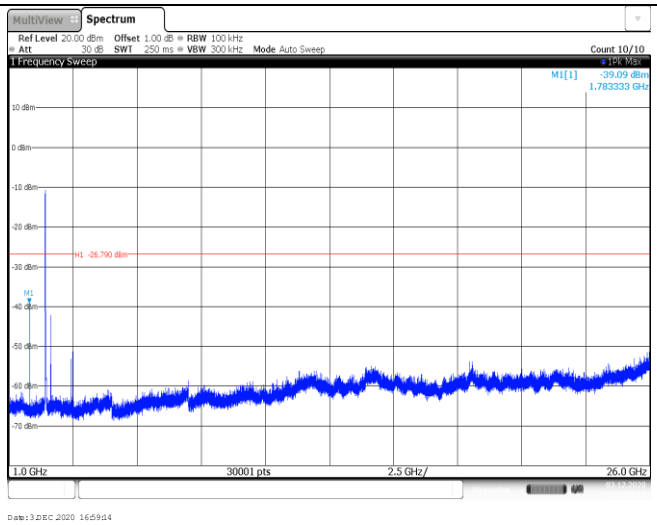
Test Item:	Bandedge	Type:	802.11 g
CH01			
CH11			

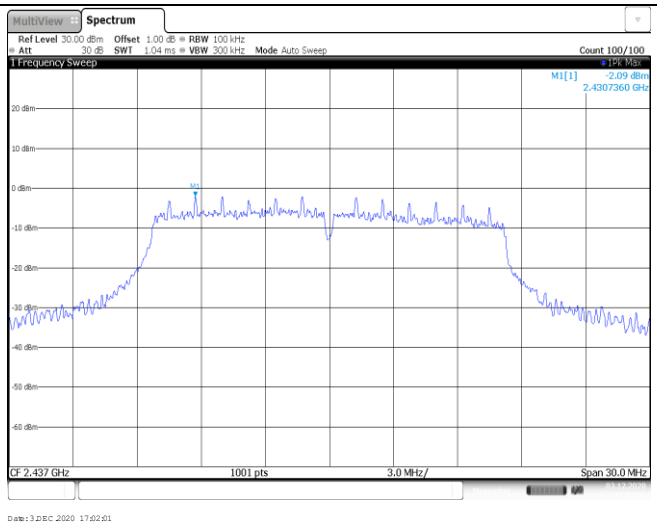
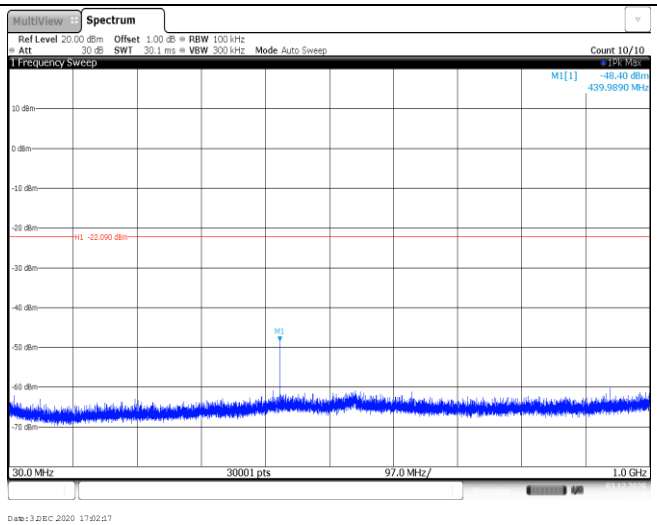
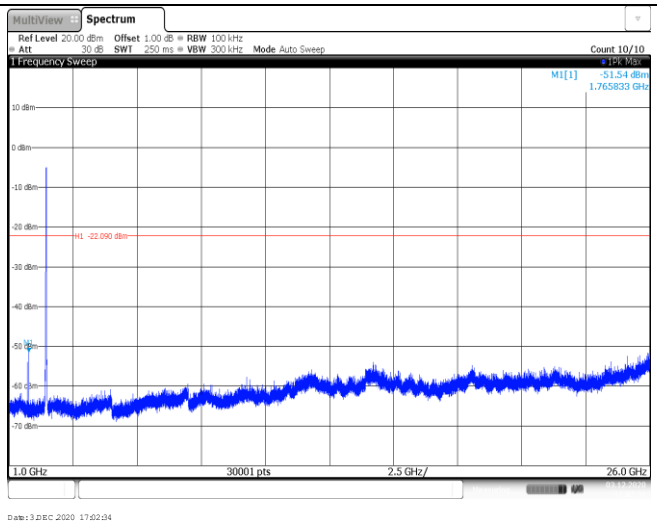
Test Item:	Bandedge	Type:	802.11 n(HT20)
CH01			
CH11			

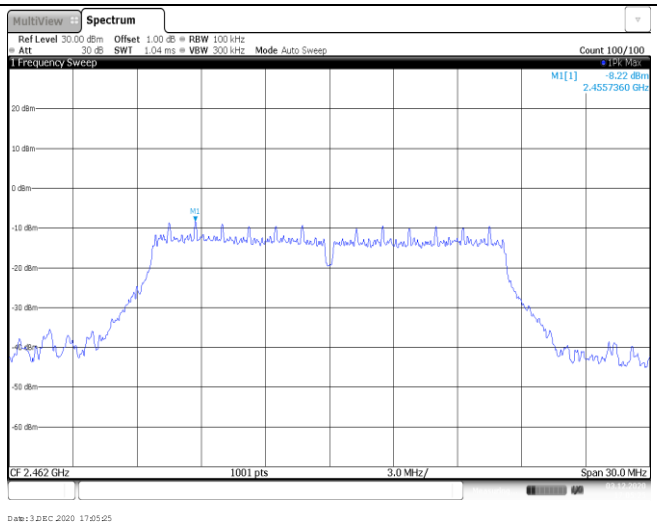
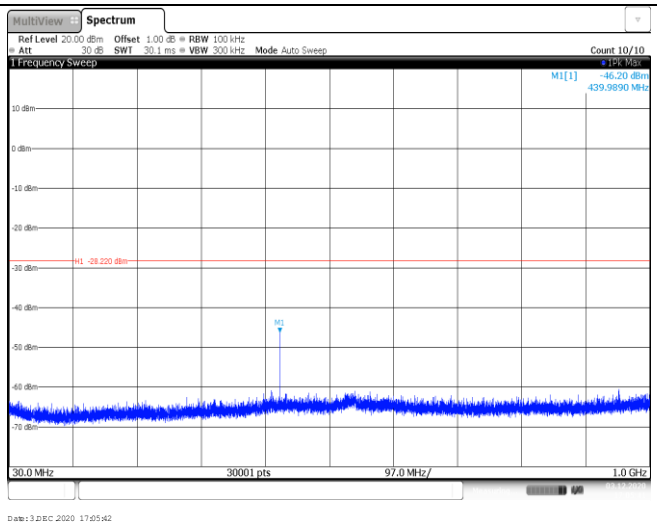
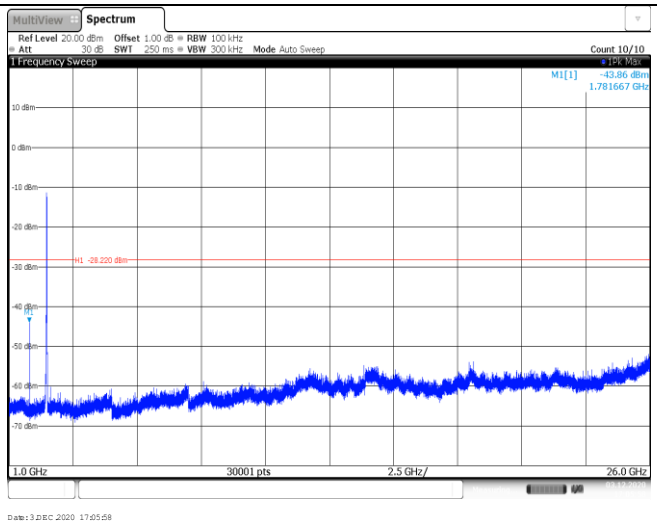
Test Item:	SE	Type:	802.11 b
CH01 Reference level			
CH01 30MHz~1000MHz			
CH01 1GHz~26GHz			

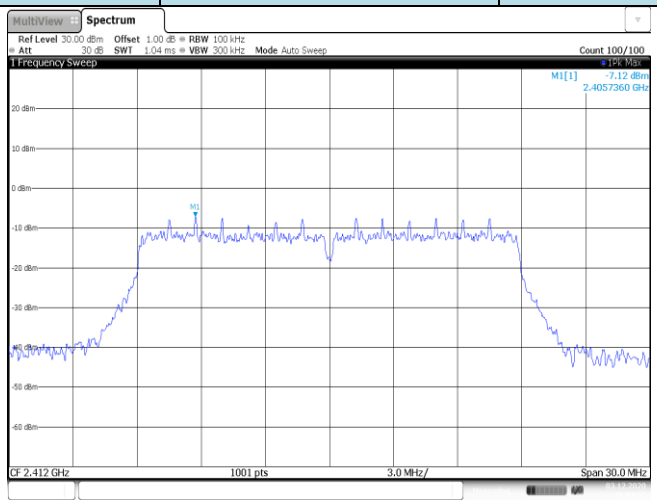
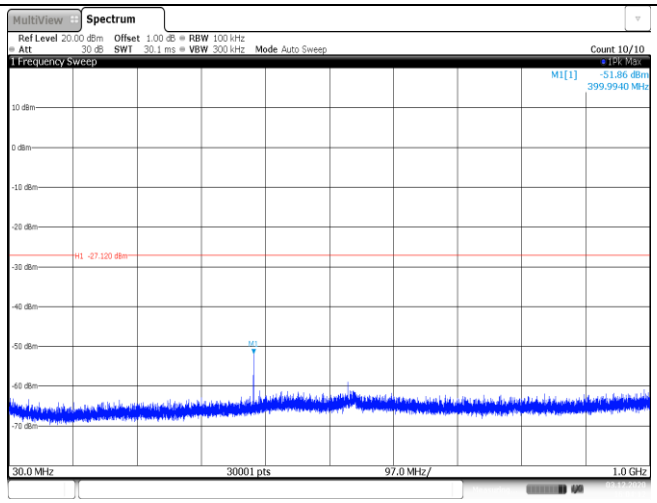
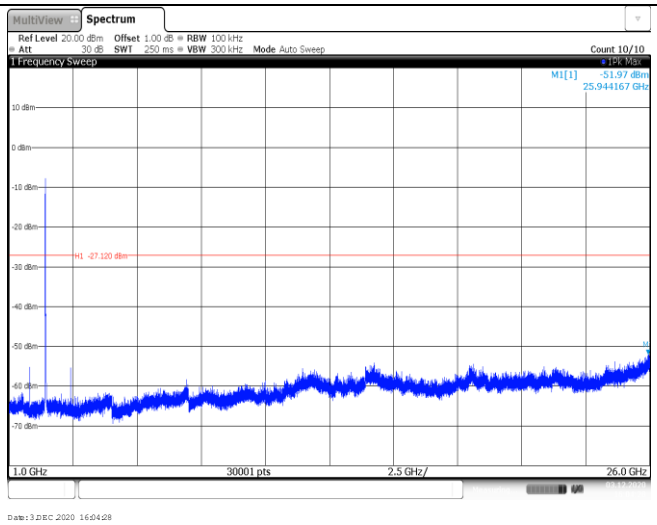
CH06 Reference level	
CH06 30MHz~1000MHz	
CH06 1GHz~26GHz	

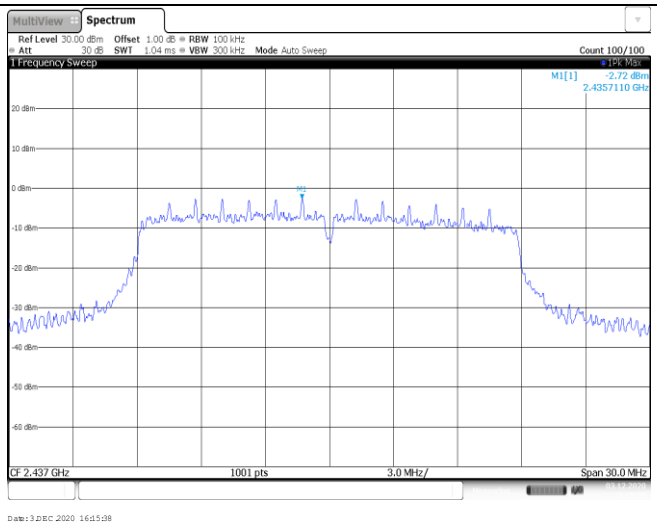
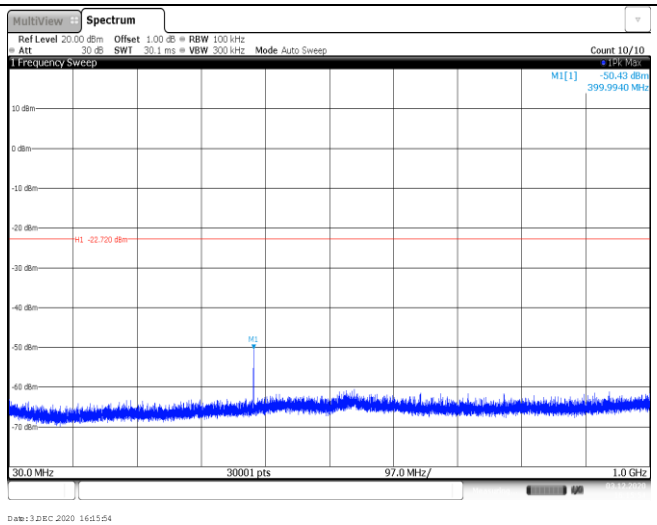
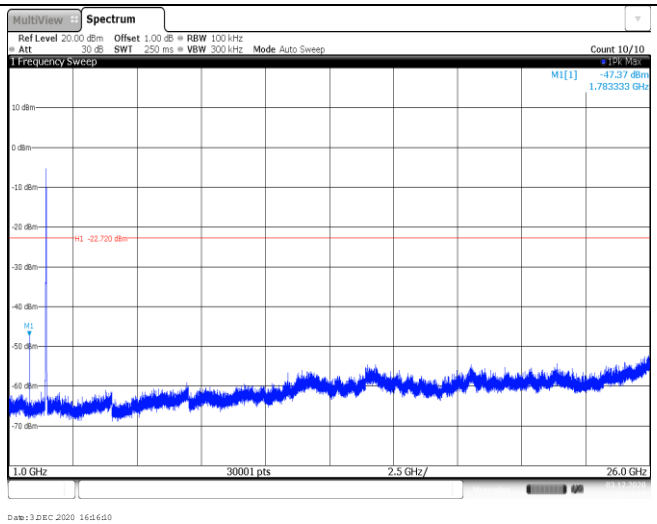
CH11 Reference level	
CH11 30MHz~1000MHz	
CH11 1GHz~26GHz	

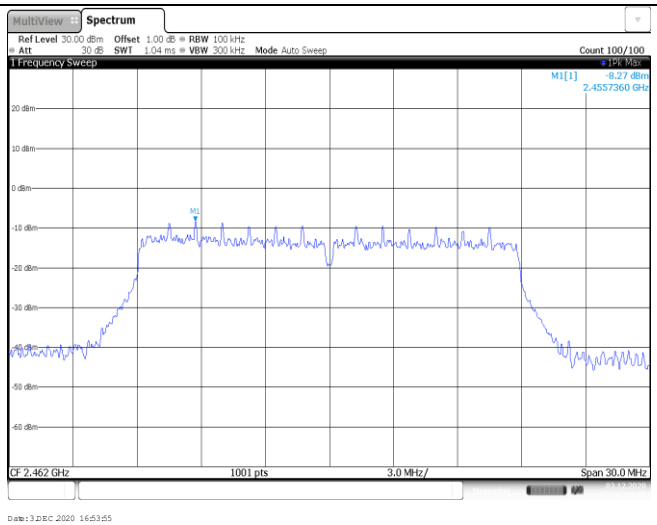
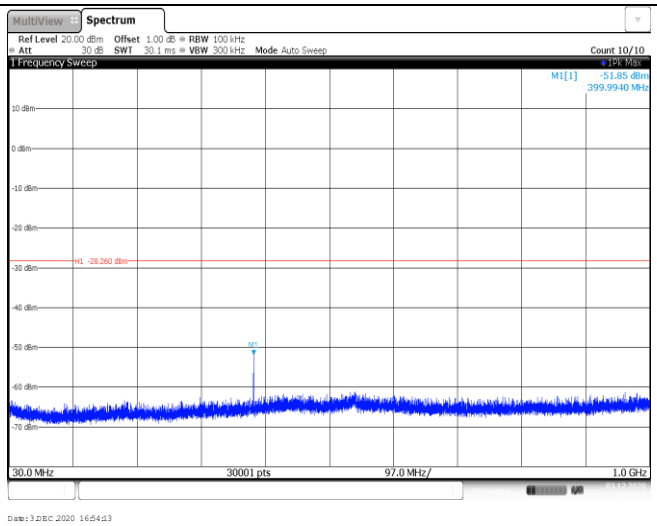
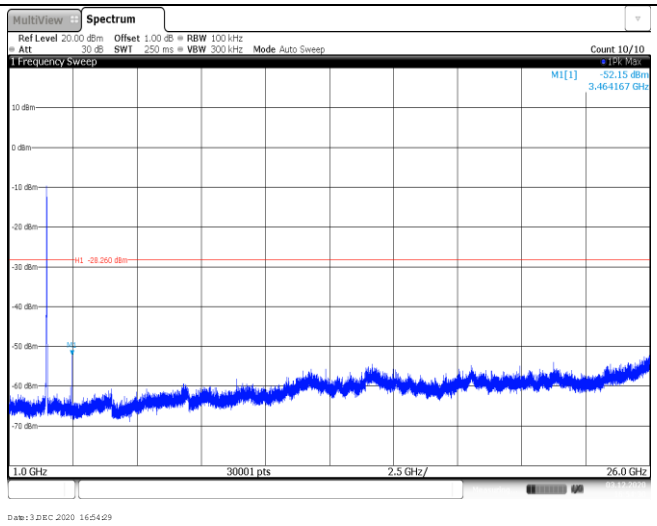
Test Item:	SE	Type:	802.11 g
CH01 Reference level			
CH01 30MHz~1000MHz			
CH01 1GHz~26GHz			

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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