APPENDIX REPORT

Project No.	SHT2202058401EW	Radio Specification	WIFI 2.4G
Test sample No.	YPHT22020584001	Model No.	U55
Start test date	2022-03-09	Finish date	2022-03-09
Temperature	24.0℃	Humidity	28%
Test Engineer	Xiaoqin Li	Auditor	Xiaodong Zhao

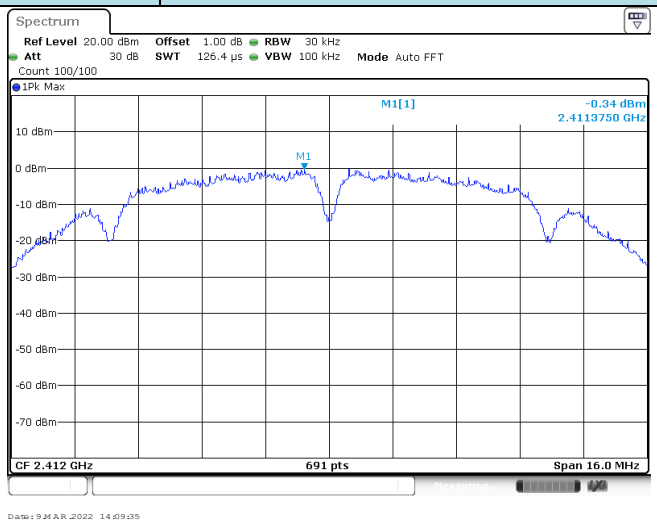
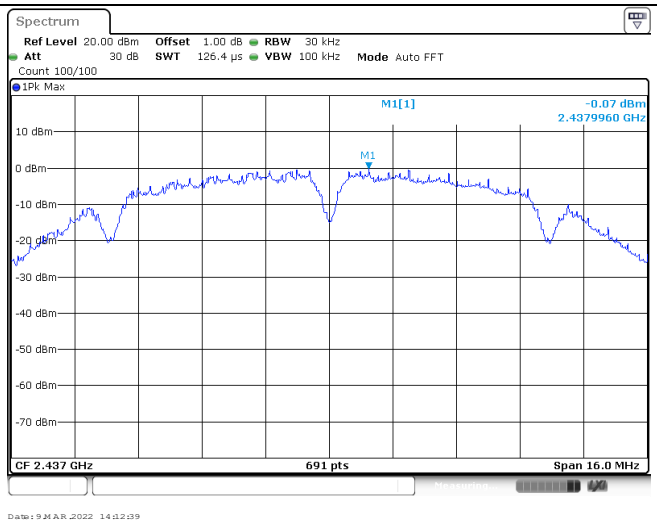
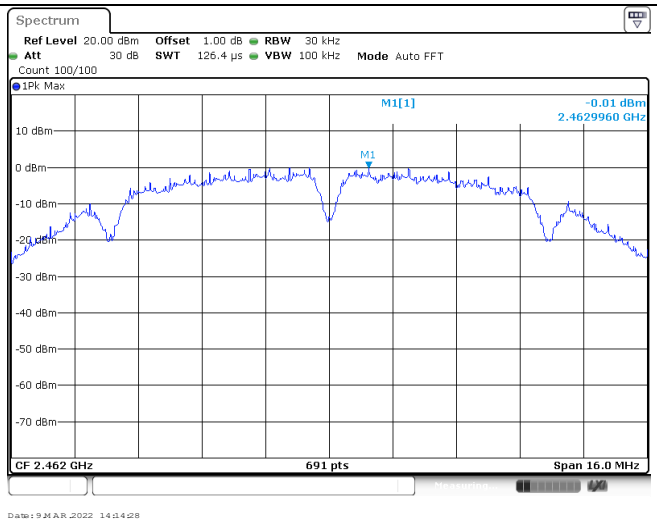
Appendix clause	Test item	Result
A	Conducted Peak Output Power	PASS
B	Power Spectral Density	PASS
C	6 dB Bandwidth	PASS
D	99% Occupied Bandwidth	PASS
E	Duty Cycle	PASS
F	Band edge and Spurious Emissions (conducted)	PASS

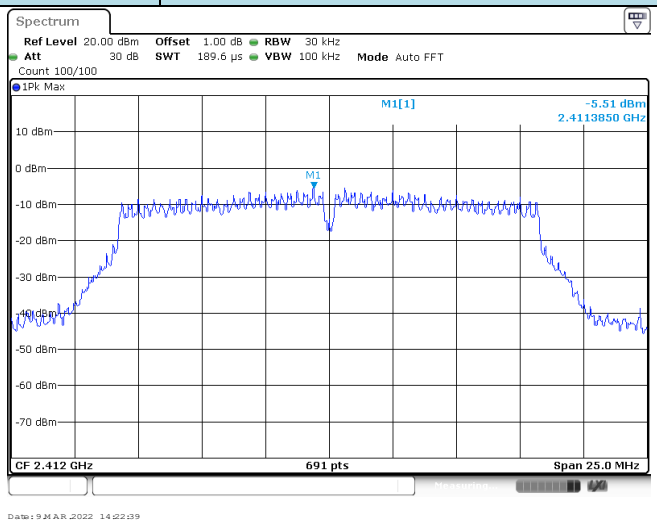
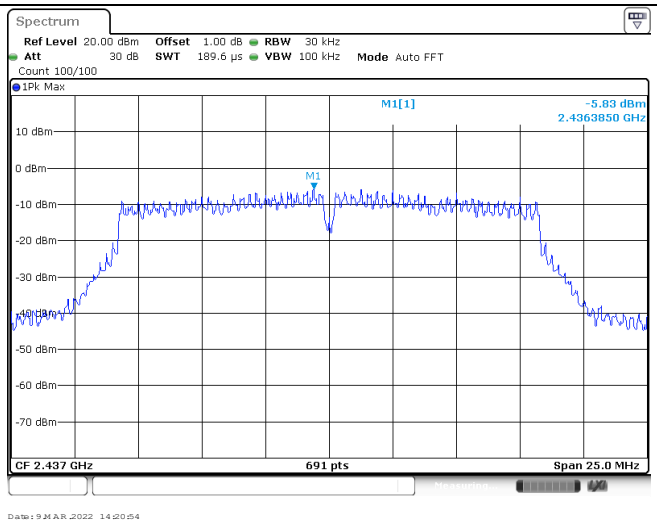
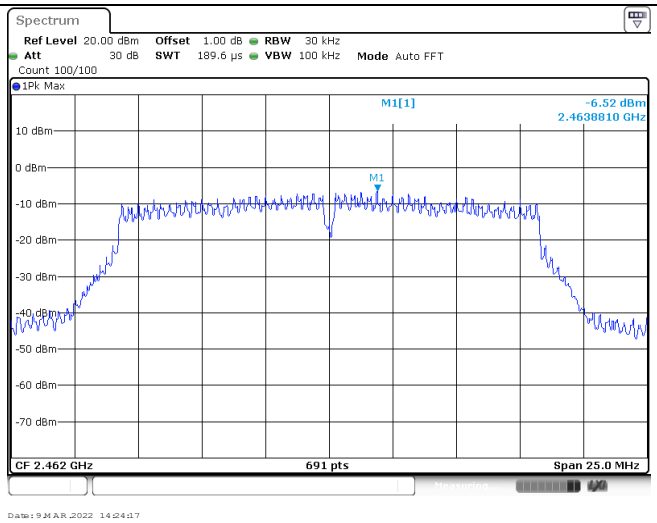
Appendix A：Conducted Peak Output Power

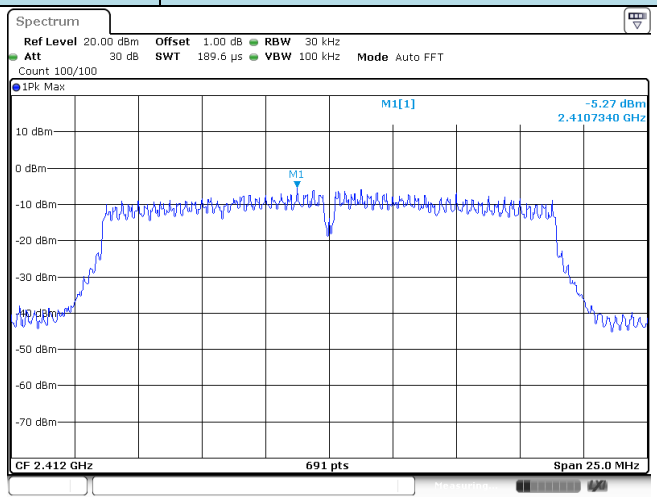
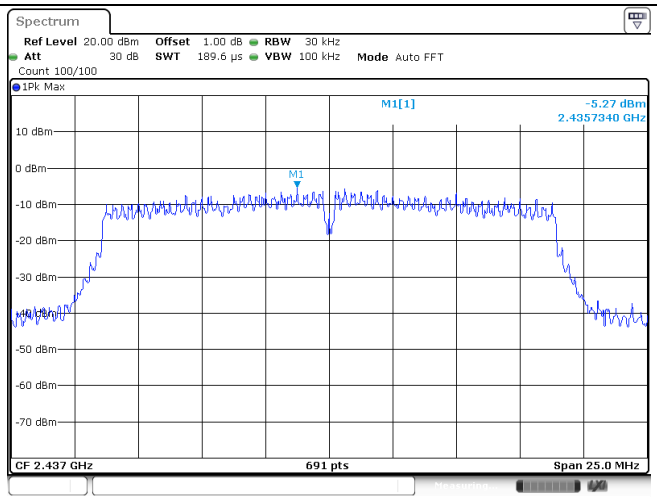
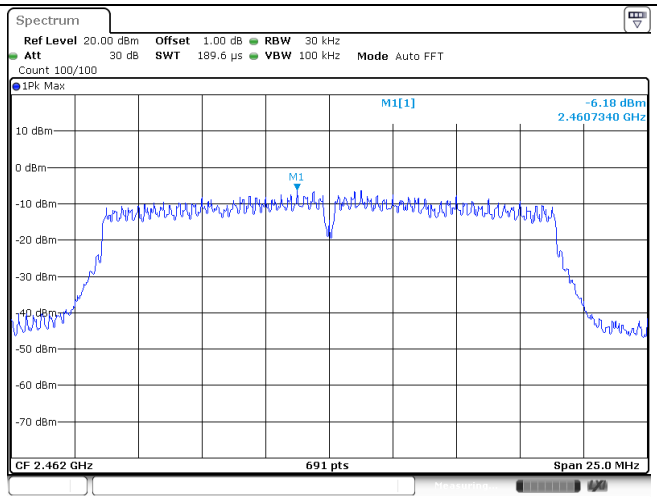
Type	Channel	Peak Output power (dBm)	Average Output power (dBm)	Limit (dBm)	Result
802.11b	01	14.67	12.06	≤ 30.00	Pass
	06	13.84	11.75		
	11	13.96	12.01		
802.11g	01	15.42	12.15	≤ 30.00	Pass
	06	15.41	12.02		
	11	14.76	11.32		
802.11n (HT20)	01	15.26	11.82	≤ 30.00	Pass
	06	15.33	11.90		
	11	14.58	11.22		

Appendix B：Power Spectral Density

Type	Channel	Power Spectral Density (dBm/30KHz)	Limit (dBm/3KHz)	Result
802.11b	01	-0.34	≤8.00	Pass
	06	-0.07		
	11	-0.01		
802.11g	01	-5.51	≤8.00	Pass
	06	-5.83		
	11	-6.52		
802.11n(HT20)	01	-5.27	≤8.00	Pass
	06	-5.27		
	11	-6.18		

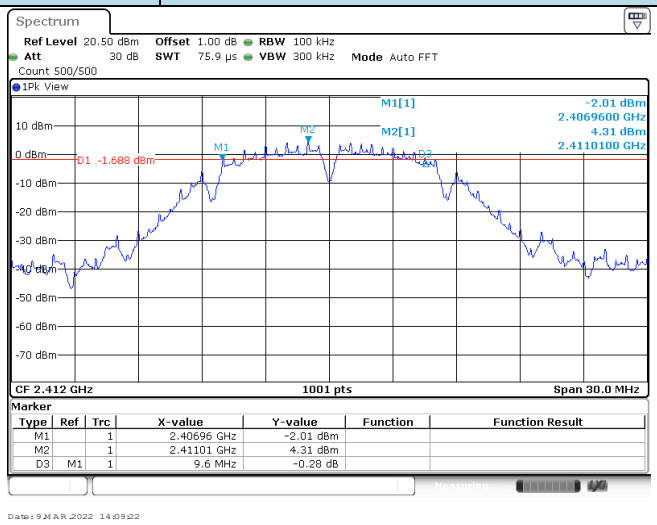
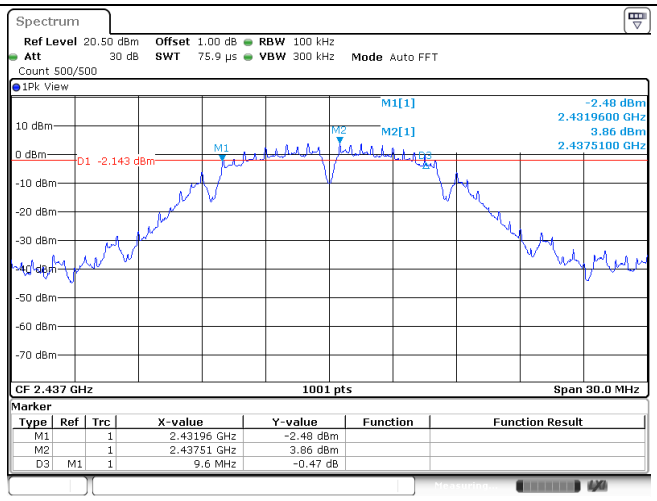
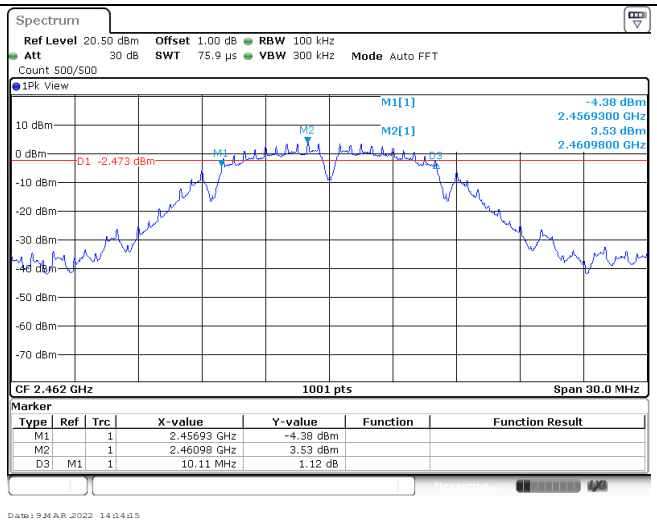
Type:	802.11 b
CH01	
CH06	
CH11	

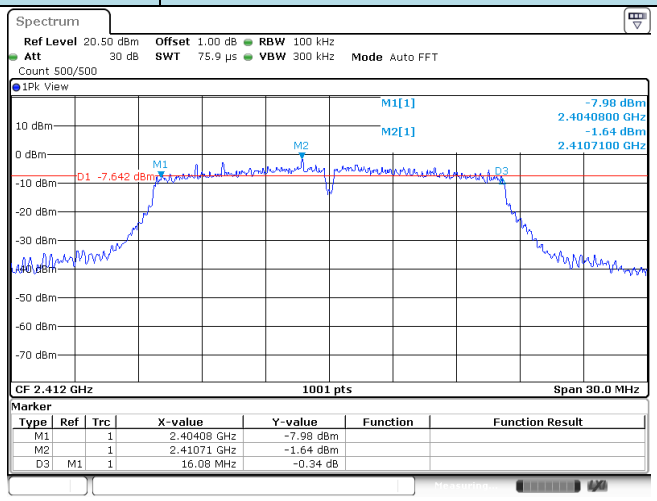
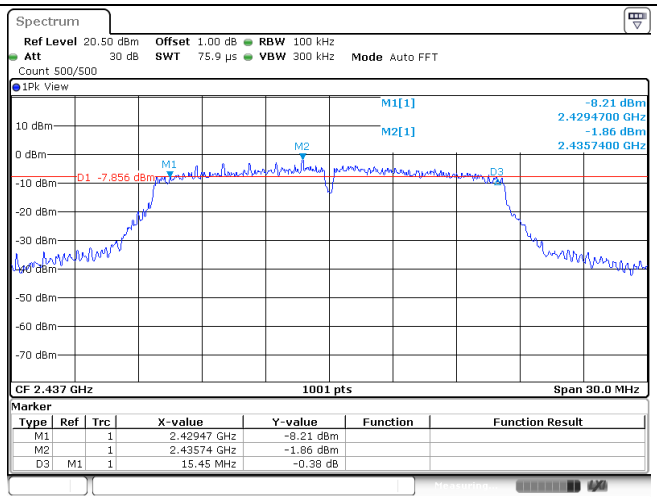
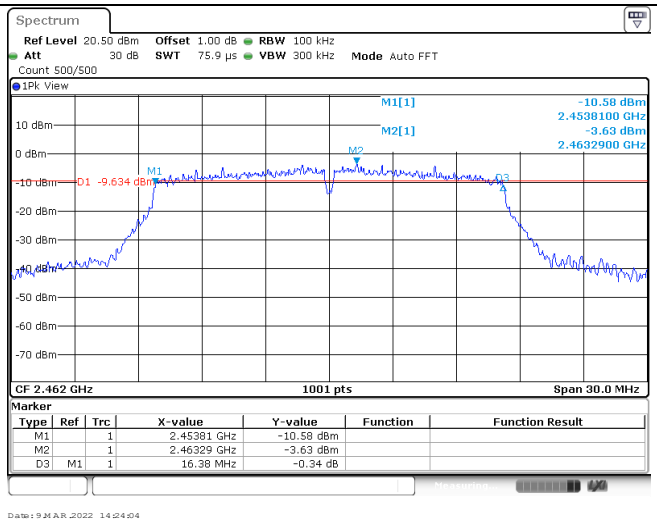
Type:	802.11 g
CH01	
CH06	
CH11	

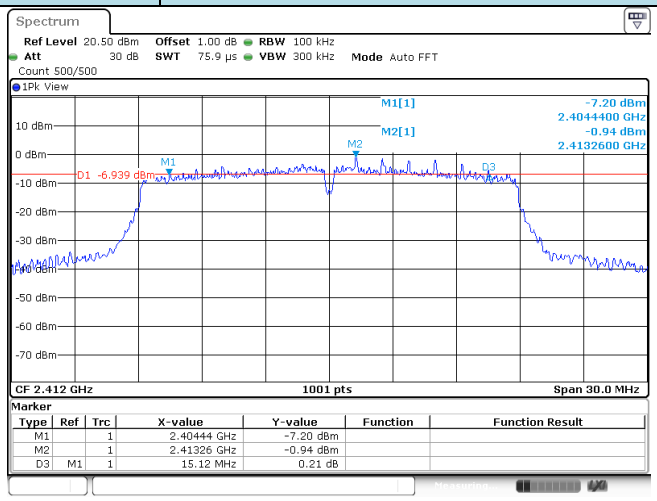
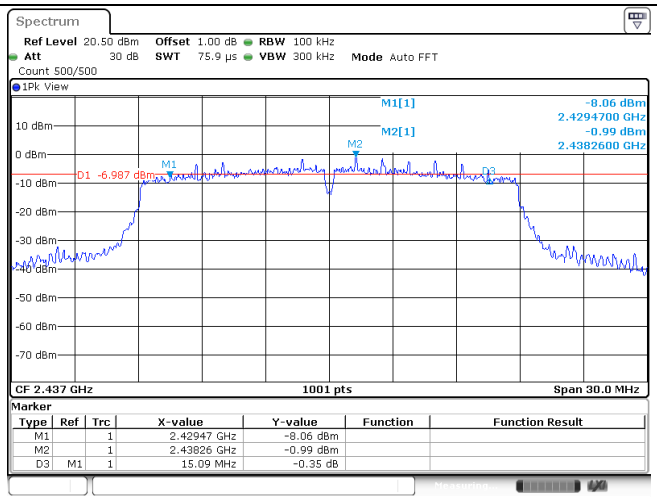
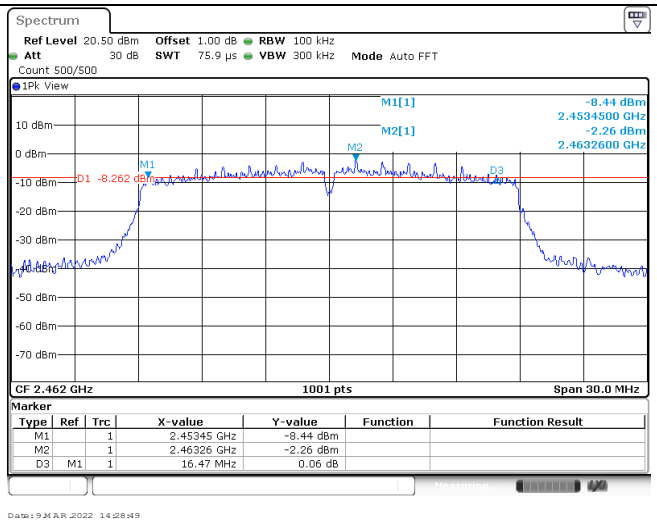
Type:	802.11n(HT20)
CH01	
CH06	
CH11	

Appendix C：6dB bandwidth

Type	Channel	6dB Bandwidth (MHz)	Limit (MHz)	Result
802.11b	01	9.60	≥0.5	Pass
	06	9.60		
	11	10.11		
802.11g	01	16.08	≥0.5	Pass
	06	15.45		
	11	16.38		
802.11n(HT20)	01	15.12	≥0.5	Pass
	06	15.09		
	11	16.47		

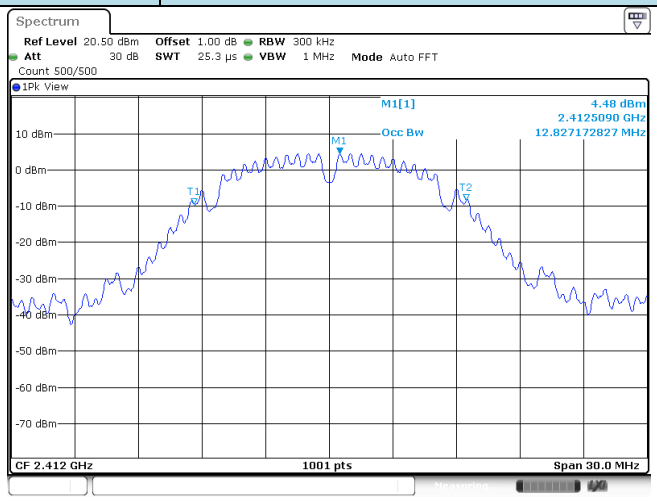
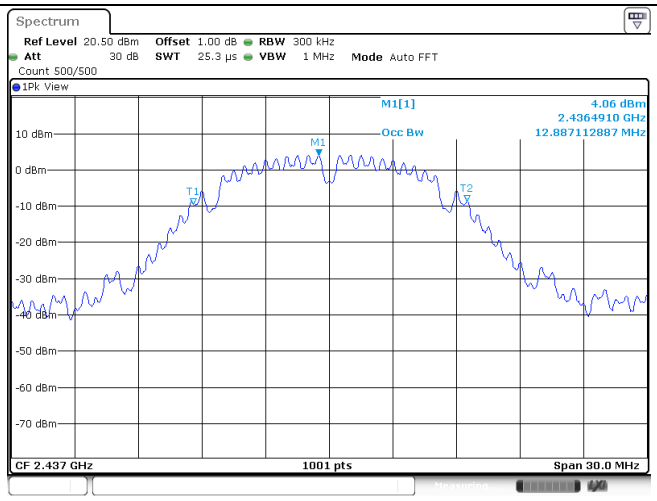
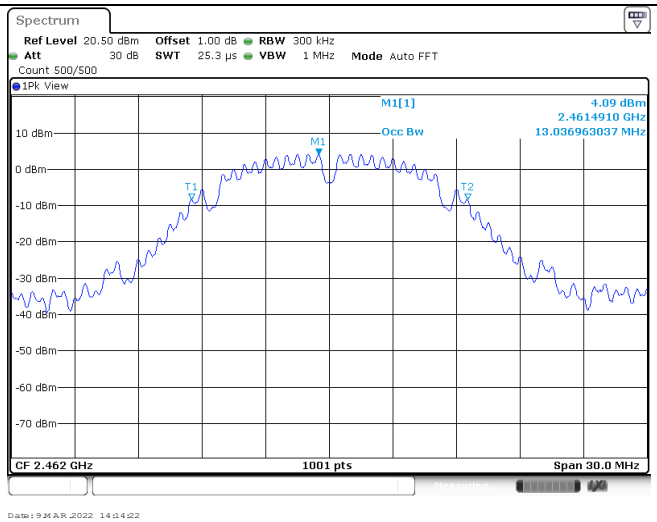
Type:	802.11 b
CH01	
CH06	
CH11	

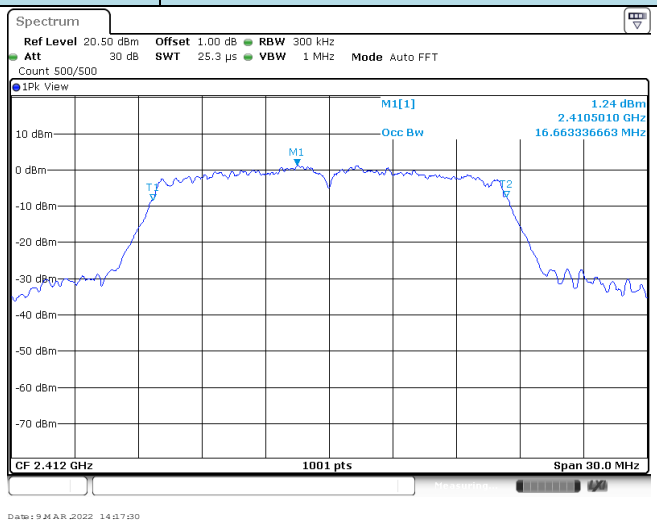
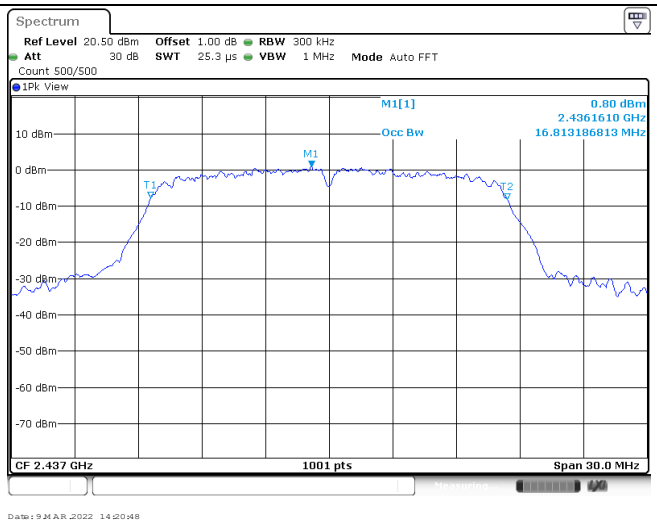
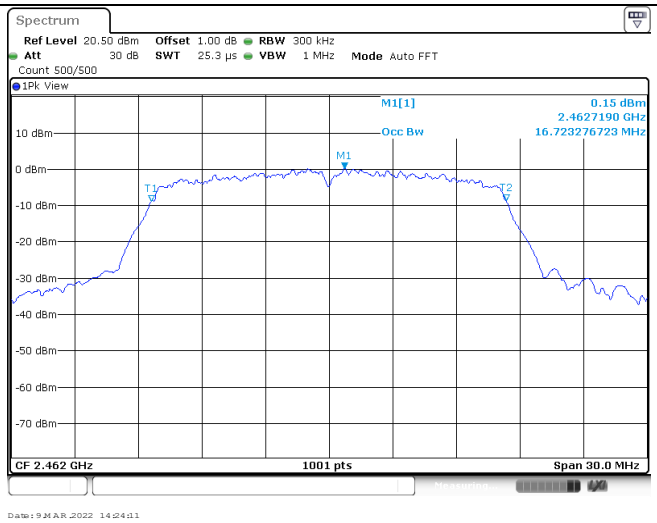
Type:	802.11 g
CH01	
CH06	
CH11	

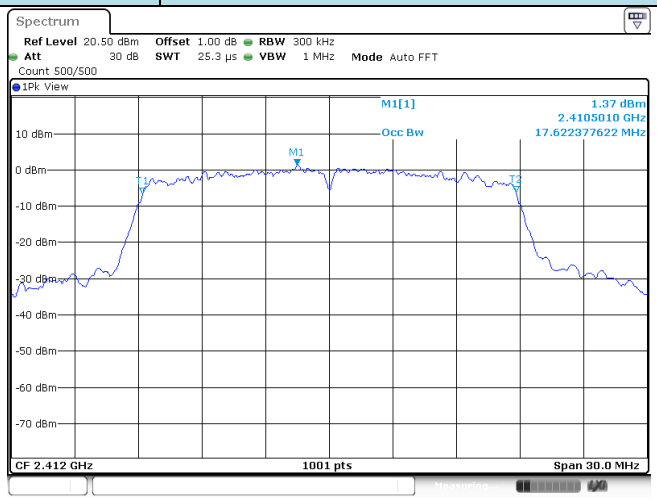
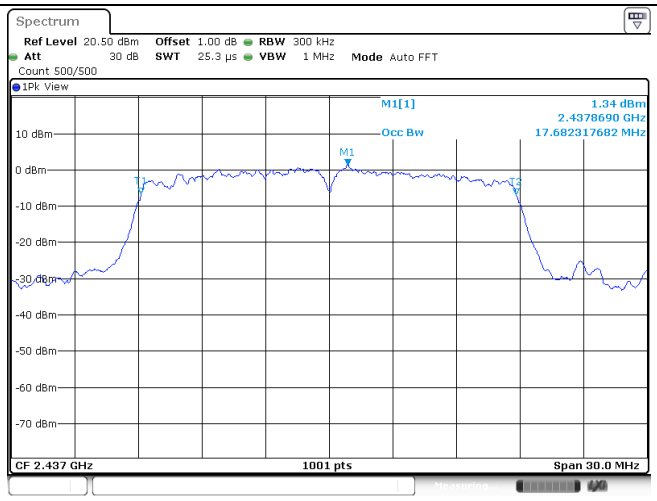
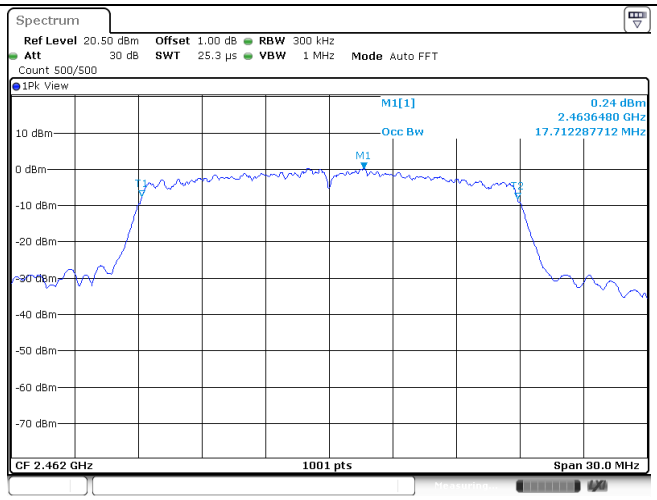
Type:	802.11n(HT20)
CH01	
CH06	
CH11	

Appendix D：99% Occupied Bandwidth

Type	Channel	99% Bandwidth (MHz)	Limit (MHz)	Result
802.11b	01	12.83	-	Pass
	06	12.89		
	11	13.04		
802.11g	01	16.66	-	Pass
	06	16.81		
	11	16.72		
802.11n(HT20)	01	17.62	-	Pass
	06	17.68		
	11	17.71		

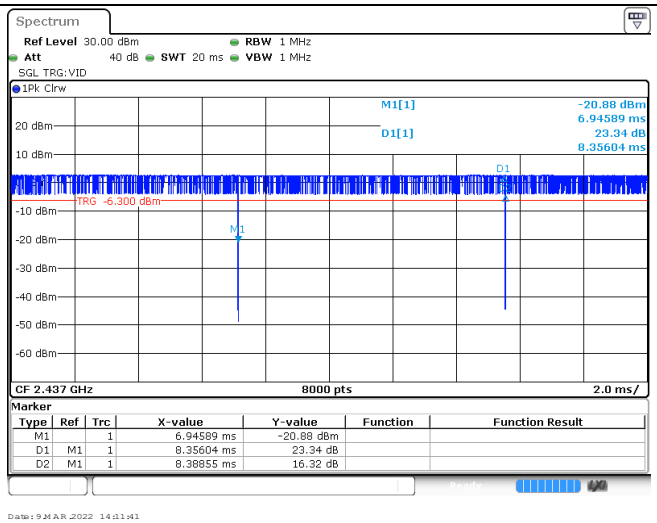
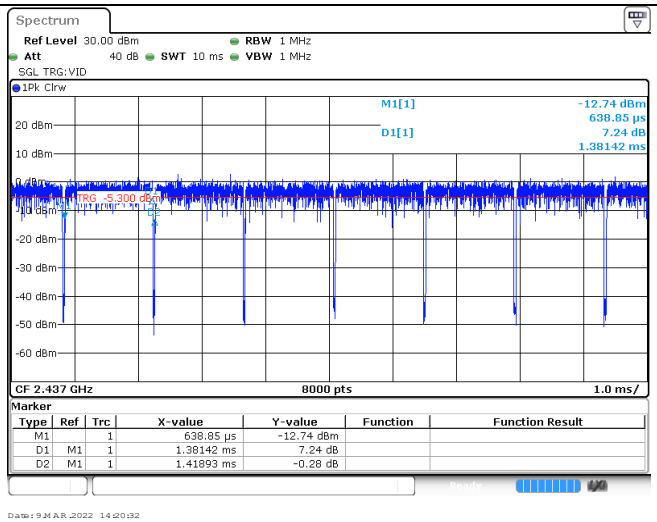
Type:	802.11 b
CH01	
CH06	
CH11	

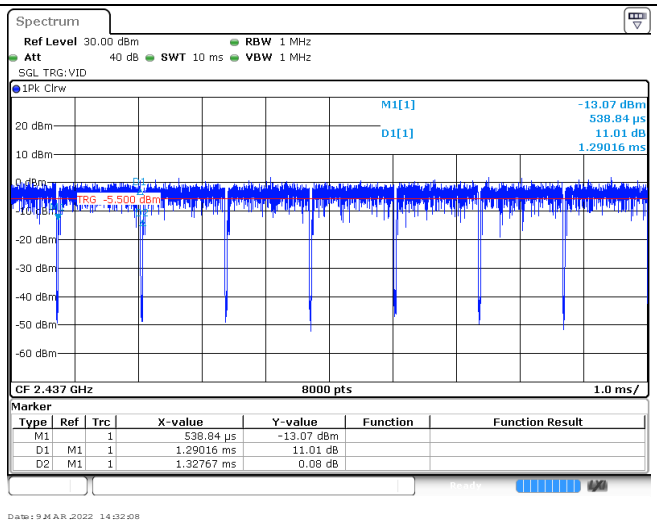
Type:	802.11 g
CH01	
CH06	
CH11	

Type:	802.11n(HT20)
CH01	
CH06	
CH11	

Appendix E：Duty Cycle

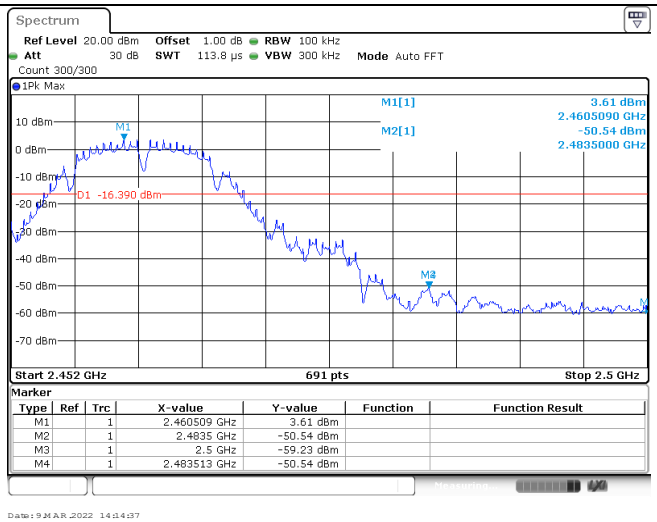
Modulation Type	Test Frequency （MHz）	$T_{on\ time}$ for single burst (ms)	T_{period} (ms)	Duty cycle	$1/T_{on\ time}$ (kHz)
11b	2437	8.36	8.39	99.6%	0.1
11g	2437	1.38	1.42	97.2%	0.7
11n20	2437	1.29	1.33	97.0%	0.8

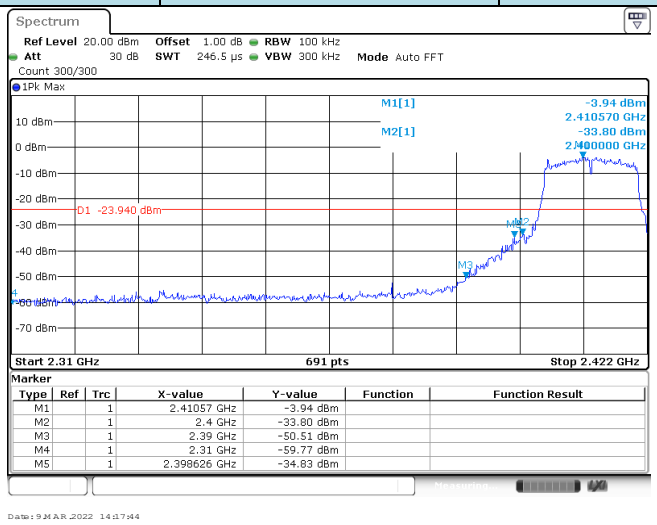
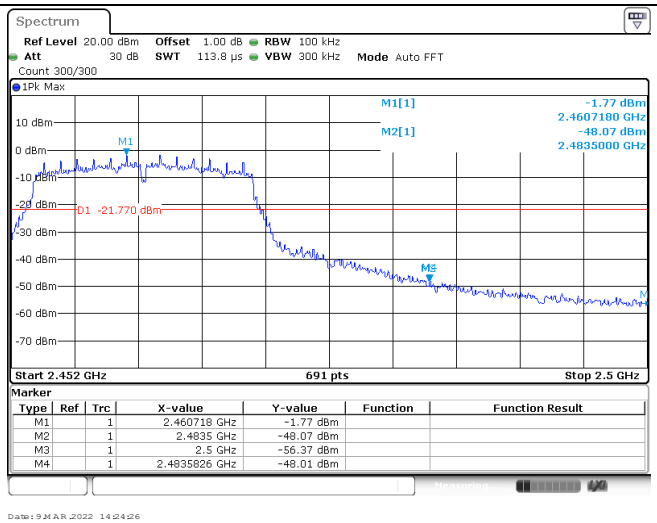
11b	
11g	

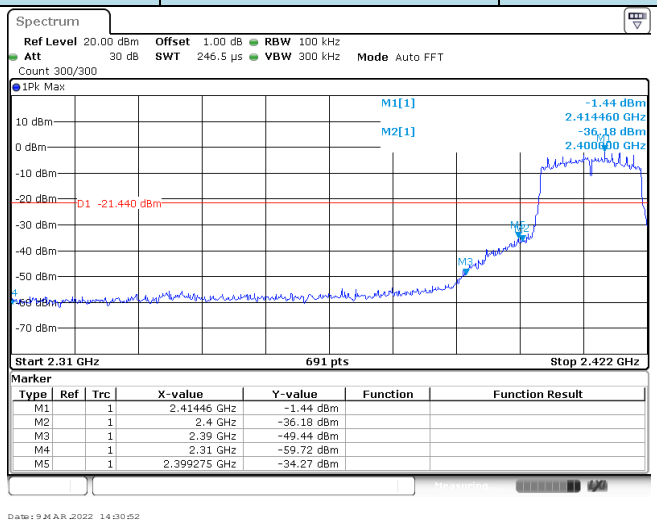
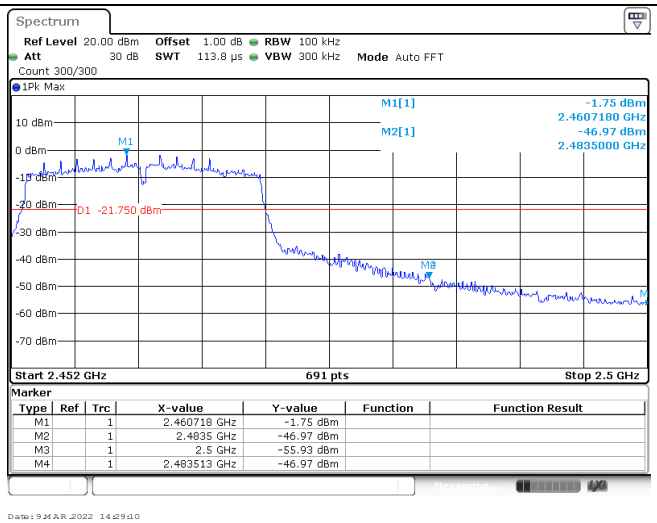
11n20	

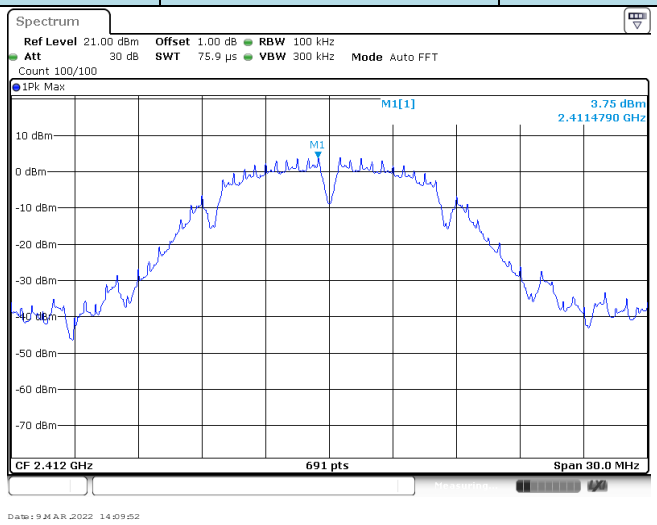
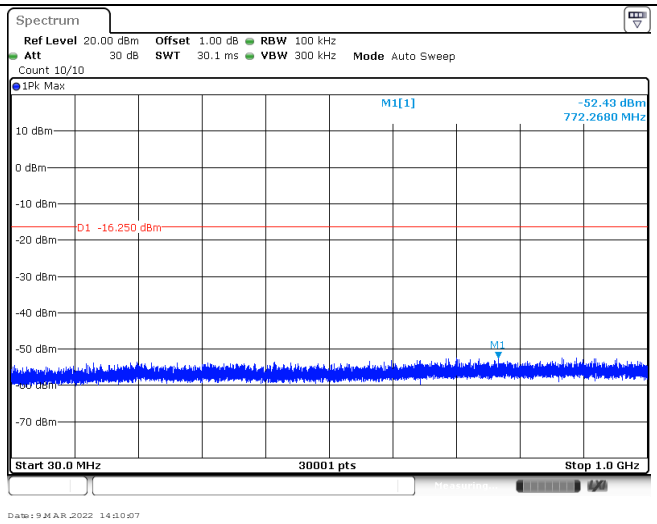
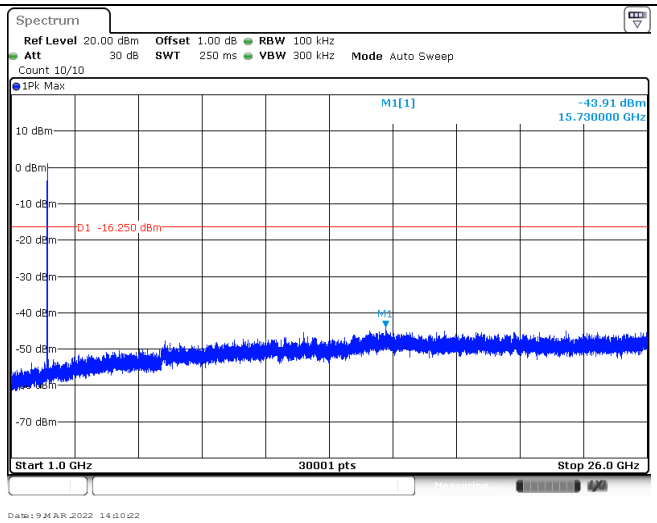
Spectrum
Ref Level 30.00 dBm
RBW 1 MHz
Att 40 dB SWT 10 ms VBW 1 MHz
SGL TRG:VID
1Pk Clrw
M1[1] -13.07 dBm
538.84 µs
D1[1] 11.01 dB
1.29016 ms
20 dBm
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
TRG -5.500 dBm
CF 2.437 GHz
8000 pts
1.0 ms/
Marker
Type Ref Trc X-value Y-value Function Function Result
M1 1 538.84 µs -13.07 dBm
D1 M1 1 1.29016 ms 11.01 dB
D2 M1 1 1.32767 ms 0.08 dB
Date: 9.MAR.2022 14:32:08

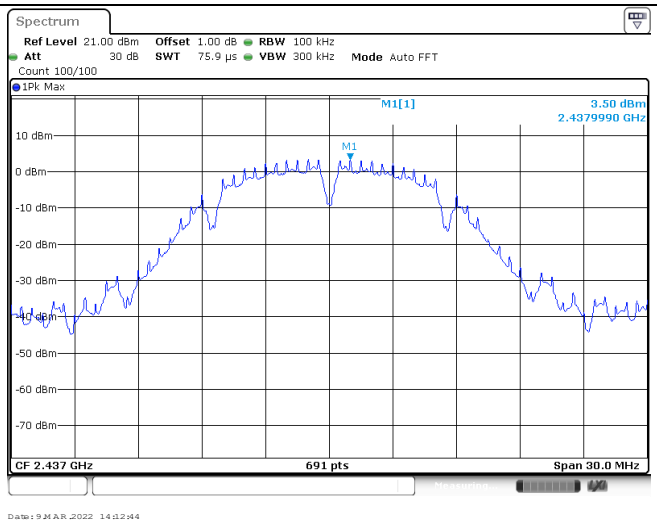
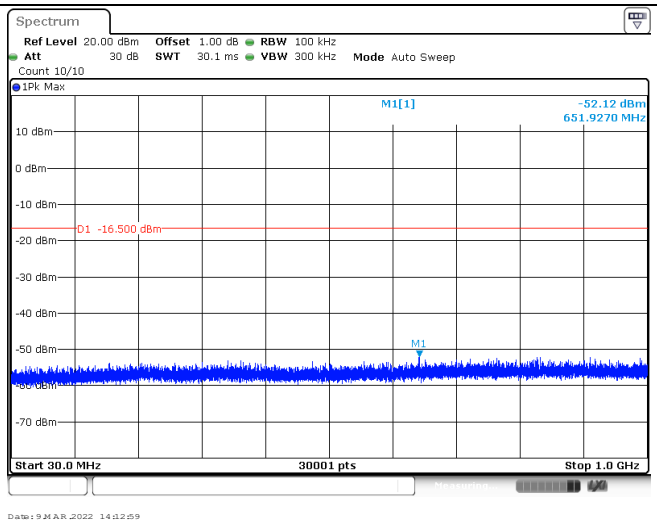
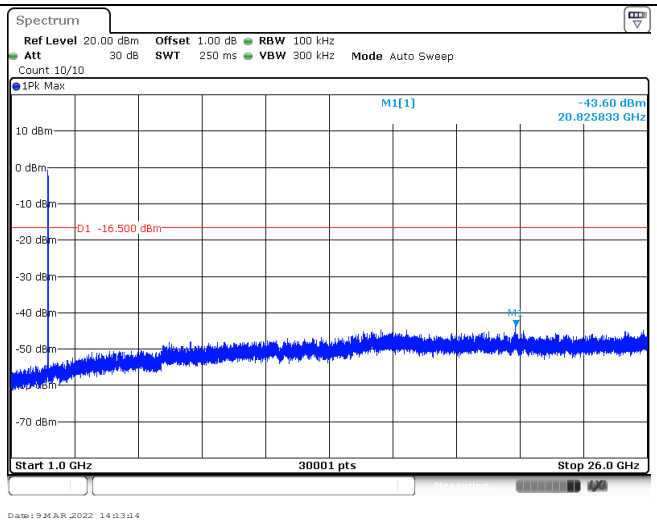
Appendix F：Band edge and Spurious Emissions (conducted)

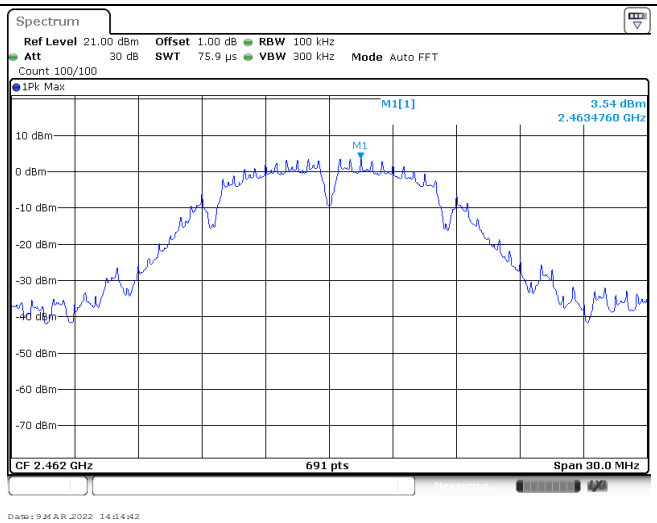
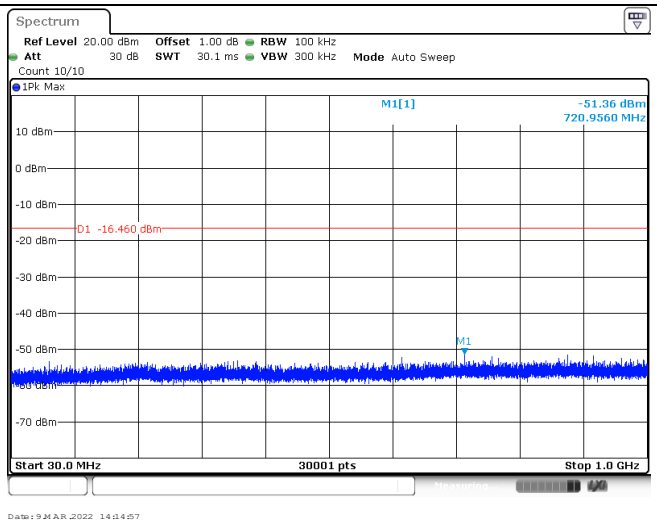
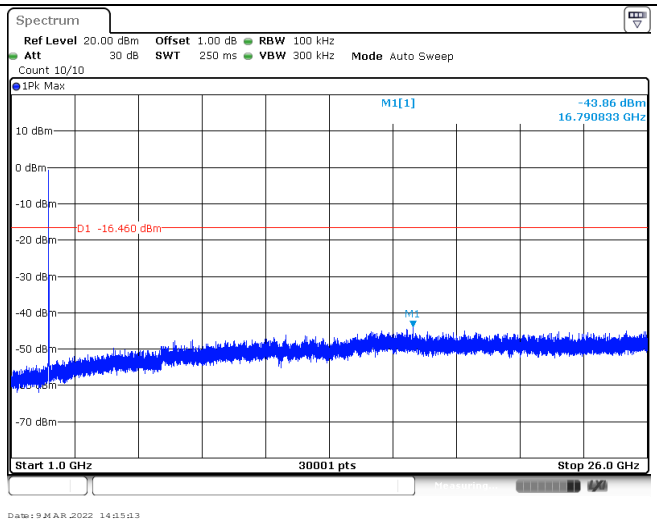
Test Item:	Bandedge	Type:	802.11 b
CH01			
CH11			

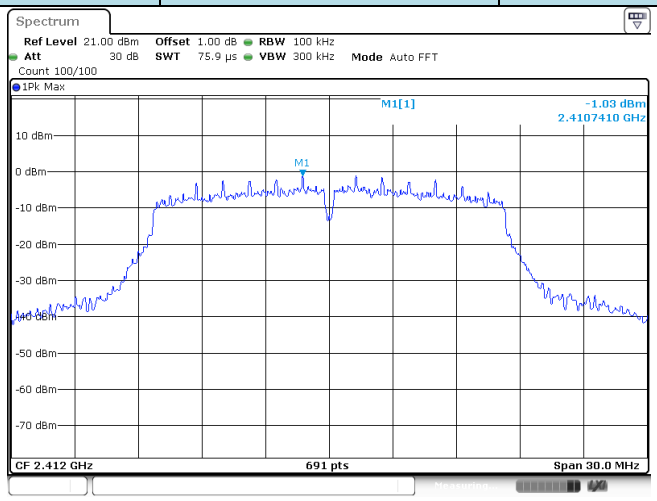
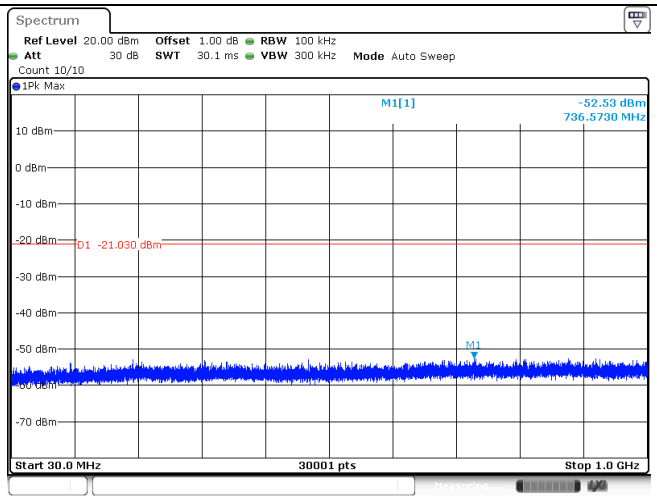
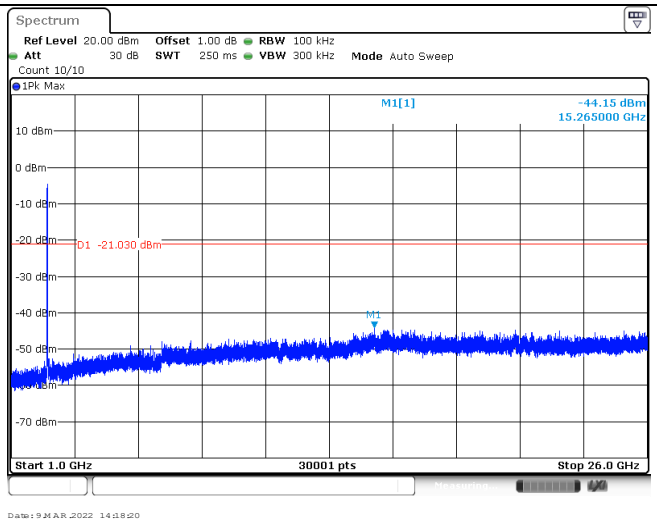
Test Item:	Bandedge	Type:	802.11 g
CH01			
CH11			

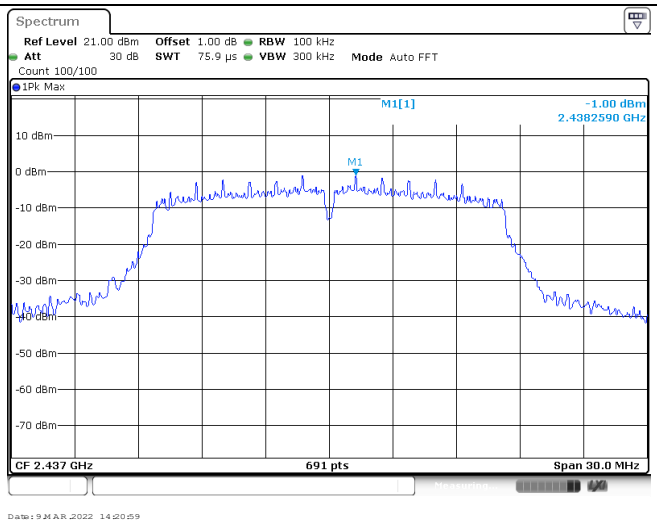
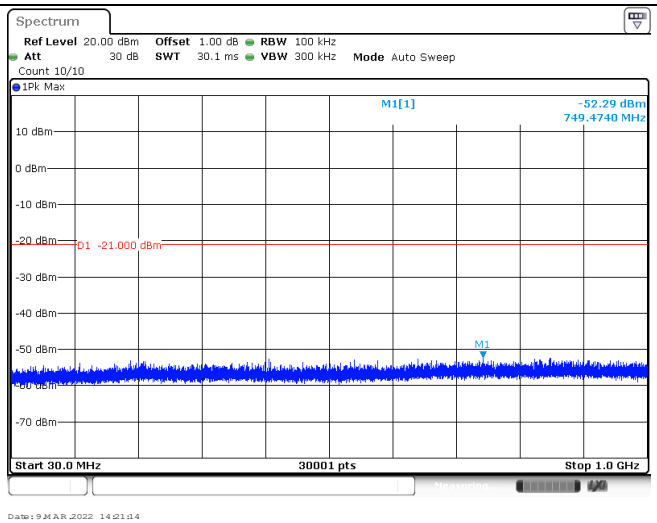
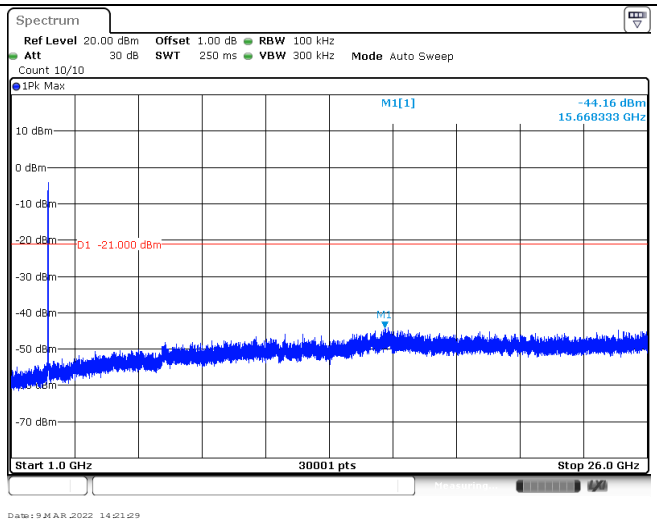
Test Item:	Bandedge	Type:	802.11 n(HT20)
CH01			
CH11			

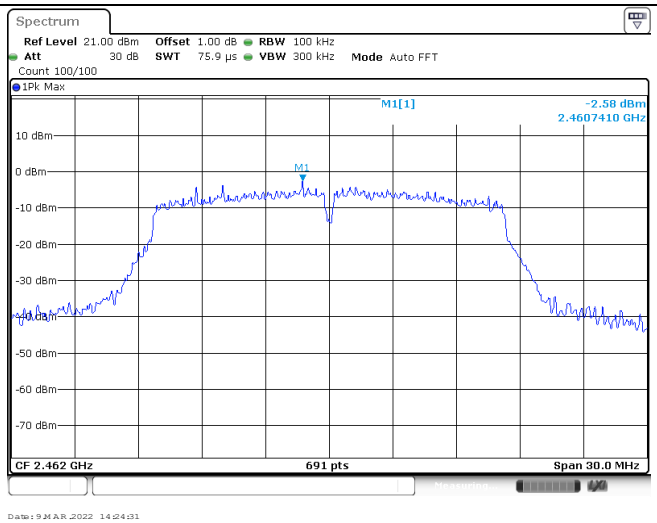
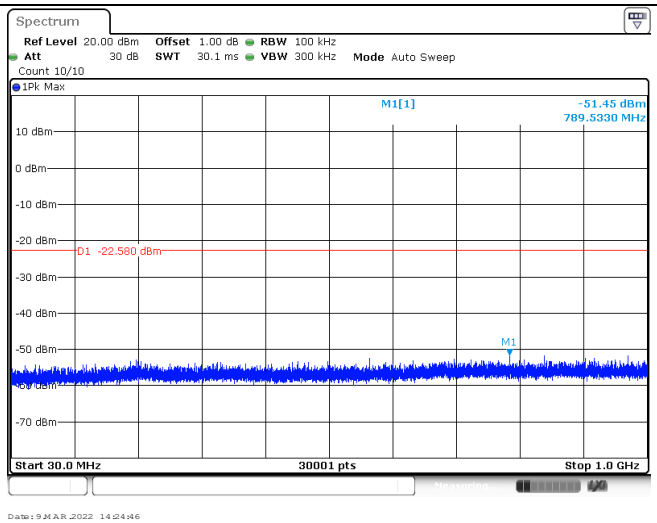
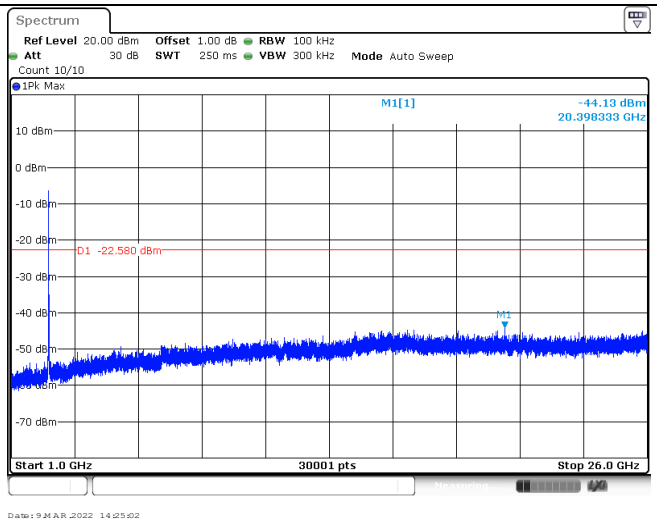
Test Item:	Spurious Emissions	Type:	802.11 b
CH01 Reference level			
CH01 30MHz~1000MHz			
CH01 1GHz~26GHz			

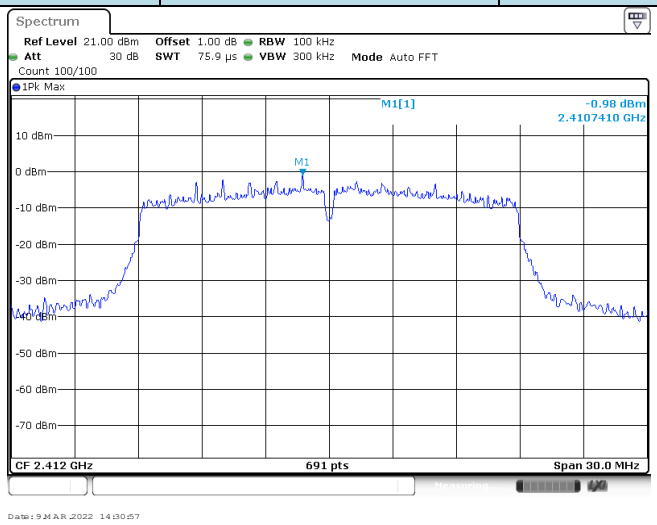
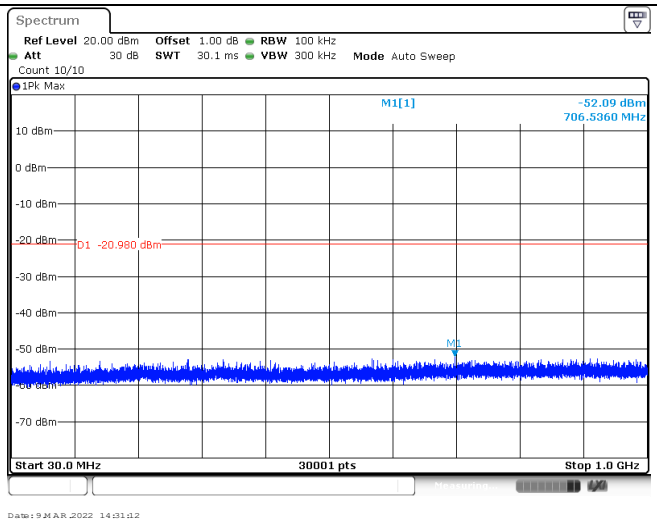
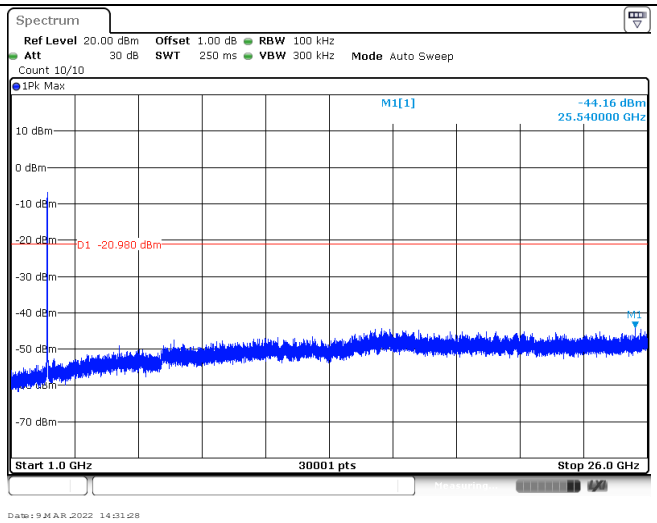
CH06 Reference level	
CH06 30MHz~1000MHz	
CH06 1GHz~26GHz	

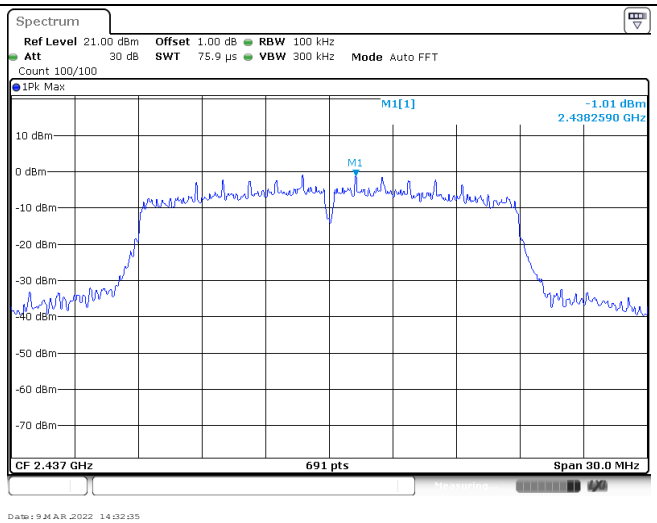
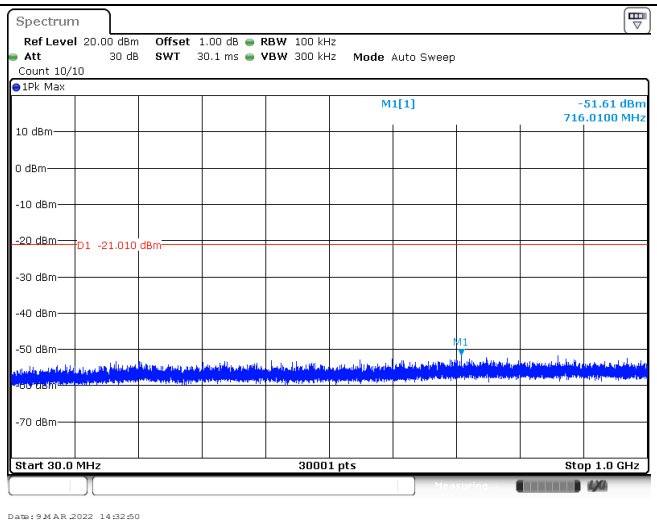
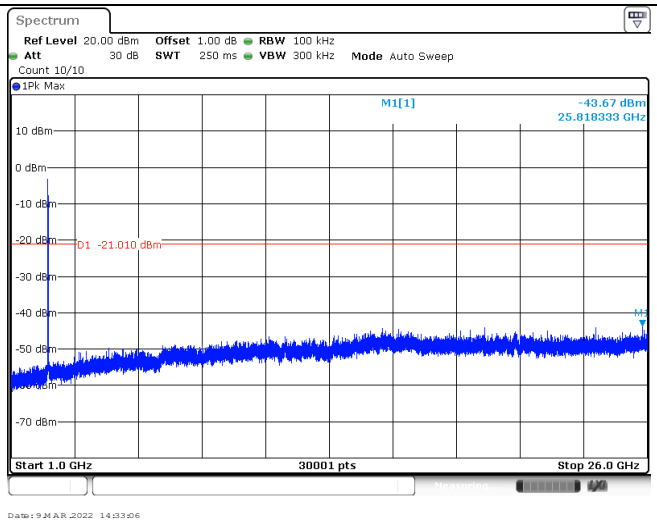
CH11 Reference level	
CH11 30MHz~1000MHz	
CH11 1GHz~26GHz	

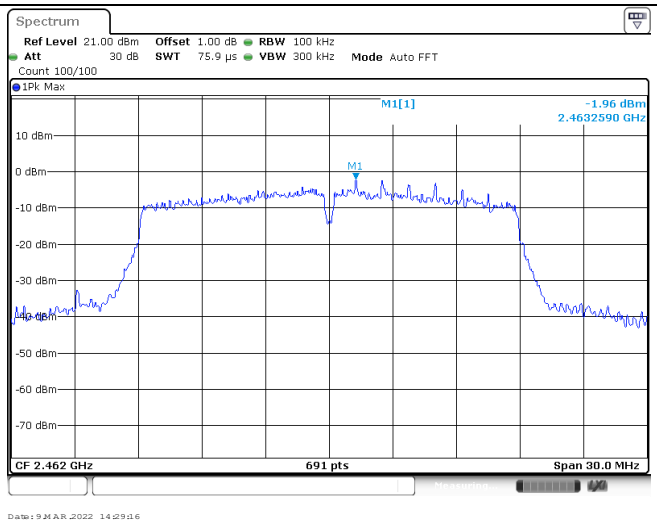
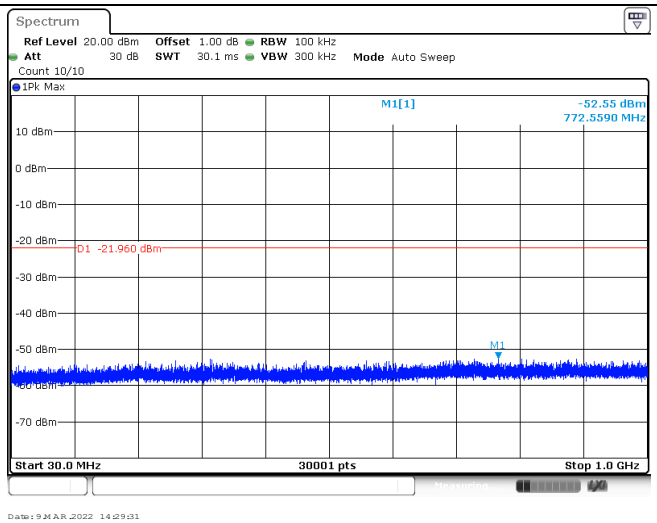
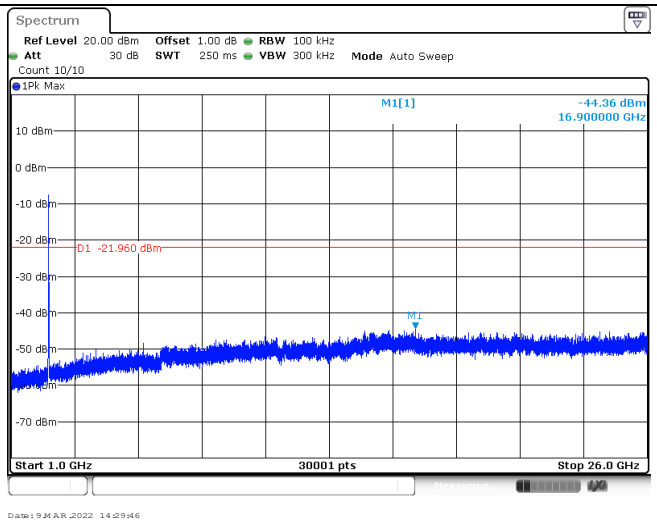
Test Item:	Spurious Emissions	Type:	802.11 g
CH01 Reference level			
CH01 30MHz~1000MHz			
CH01 1GHz~26GHz			

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

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

Test Item:	Spurious Emissions	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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