APPENDIX REPORT

Project No.	SHT2302000902EW	Radio Specification	WIFI 2.4G
Test sample No.	YPHT23020009001	Model No.	8A.04.9.024.8320
Start test date	2023-2-08	Finish date	2023-2-09
Temperature	22.9℃	Humidity	67%
Test Engineer	Xiaoxiao Li	Auditor	Xiaodong Zhao

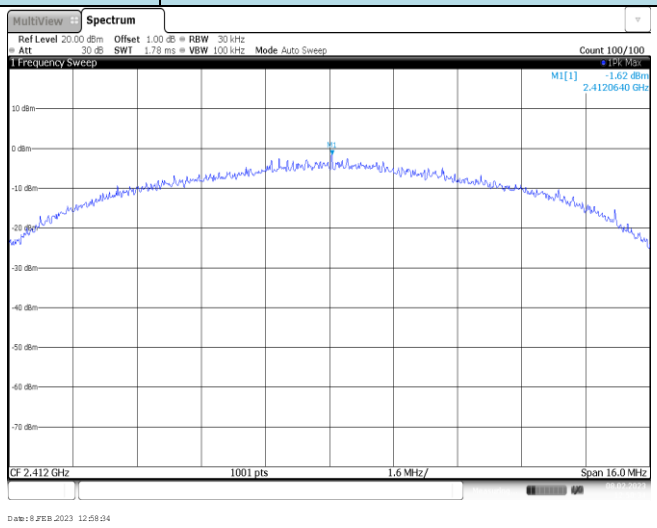
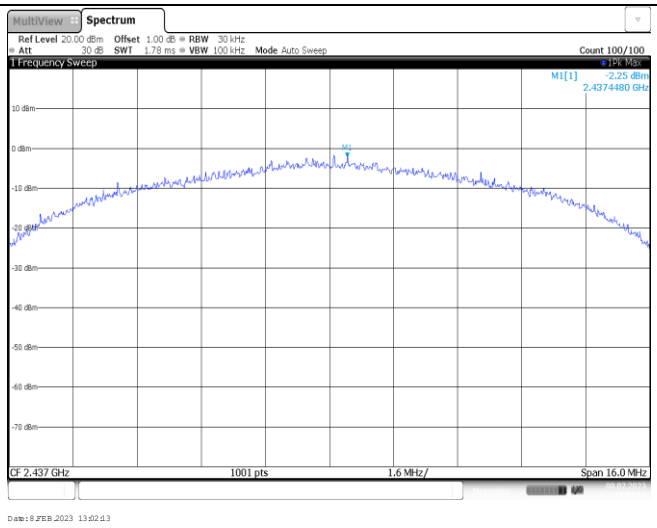
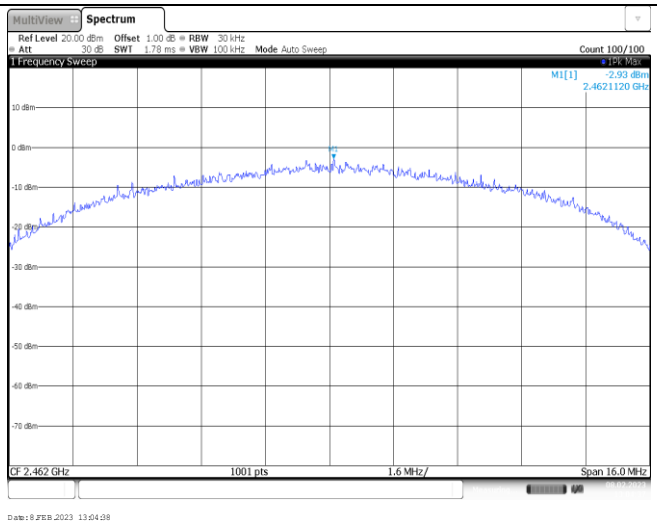
Appendix clause	Test item	Result
A	Conducted Peak Output Power	PASS
B	Power Spectral Density	PASS
C	6 dB Bandwidth	PASS
D	99% Occupied Bandwidth	PASS
E	Duty Cycle	PASS
F	Band edge and Spurious Emissions (conducted)	PASS

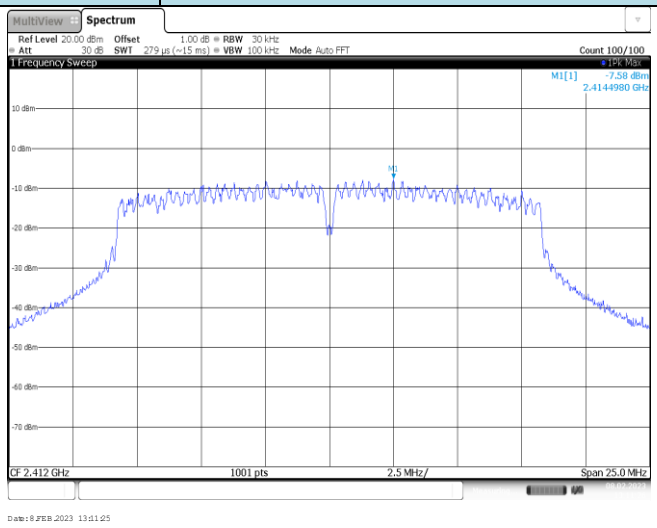
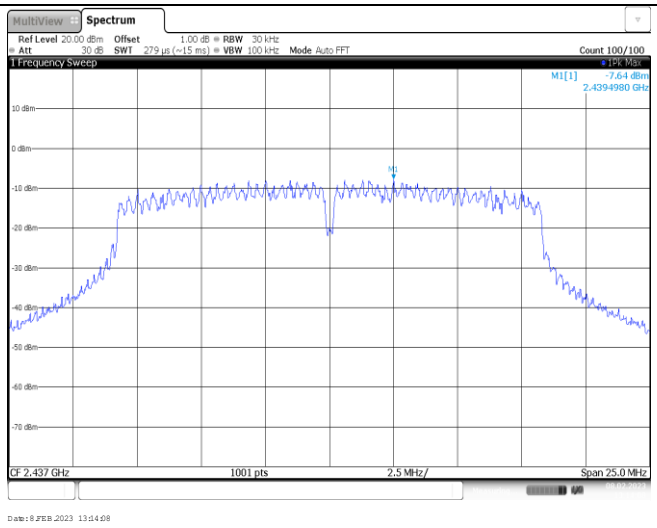
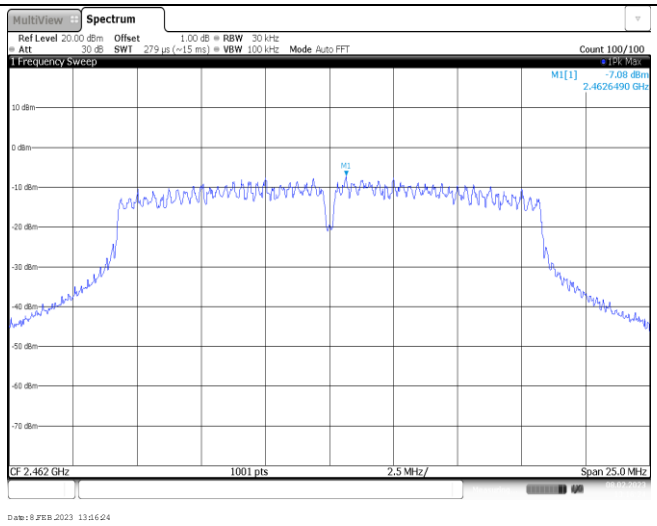
Appendix A：Conducted Peak Output Power

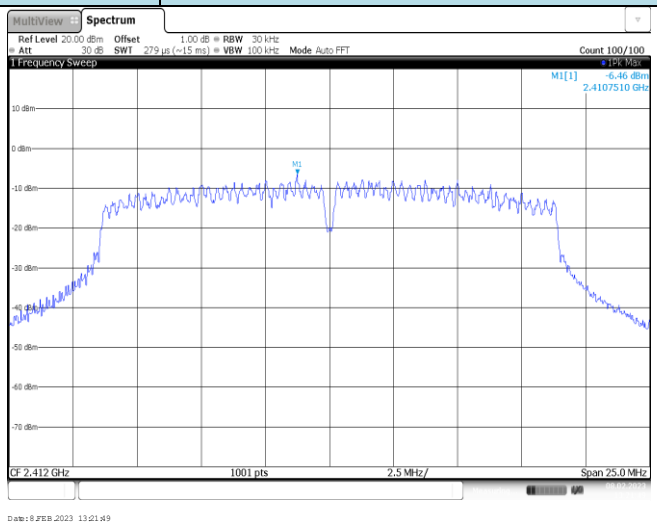
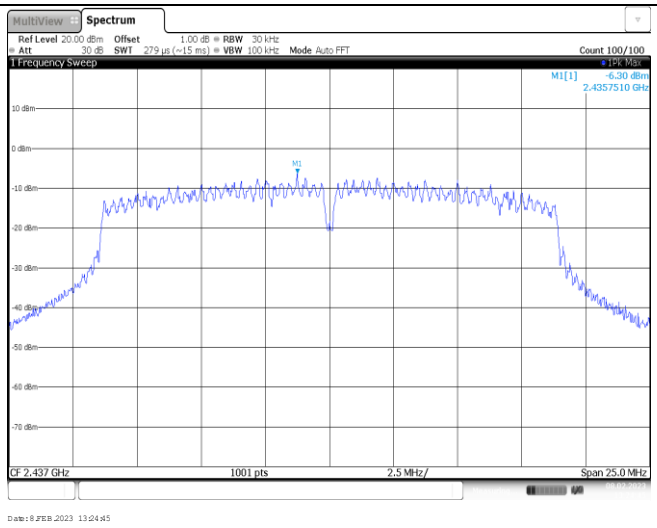
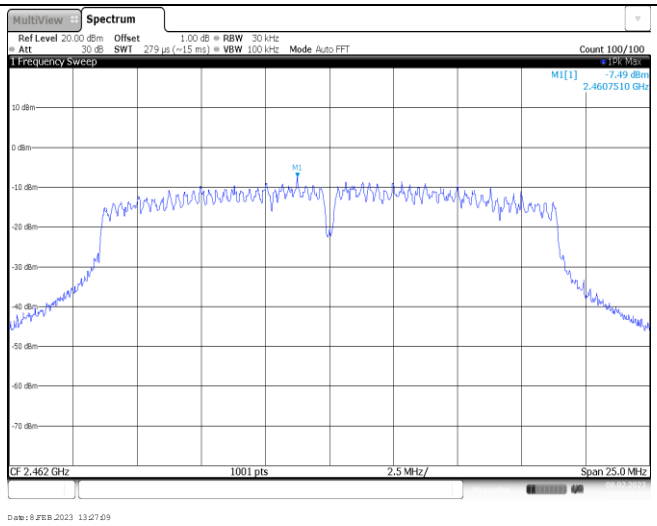
Type	Channel	Peak Output power (dBm)	Average Output power (dBm)	Limit (dBm)	Result
802.11b	01	16.35	14.61	≤ 30.00	Pass
	06	15.76	14.02		
	11	15.86	14.13		
802.11g	01	16.49	14.34	≤ 30.00	Pass
	06	16.38	14.26		
	11	16.68	14.50		
802.11n (HT20)	01	16.18	14.05	≤ 30.00	Pass
	06	16.26	14.08		
	11	16.21	14.14		

Appendix B：Power Spectral Density

Type	Channel	Power Spectral Density (dBm/30KHz)	Limit (dBm/3KHz)	Result
802.11b	01	-1.62	≤8.00	Pass
	06	-2.25		
	11	-2.93		
802.11g	01	-7.58	≤8.00	Pass
	06	-7.64		
	11	-7.08		
802.11n(HT20)	01	-6.46	≤8.00	Pass
	06	-6.30		
	11	-7.49		

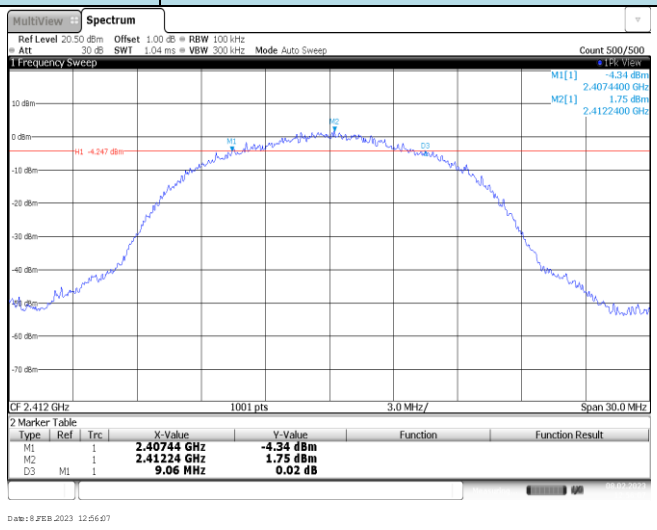
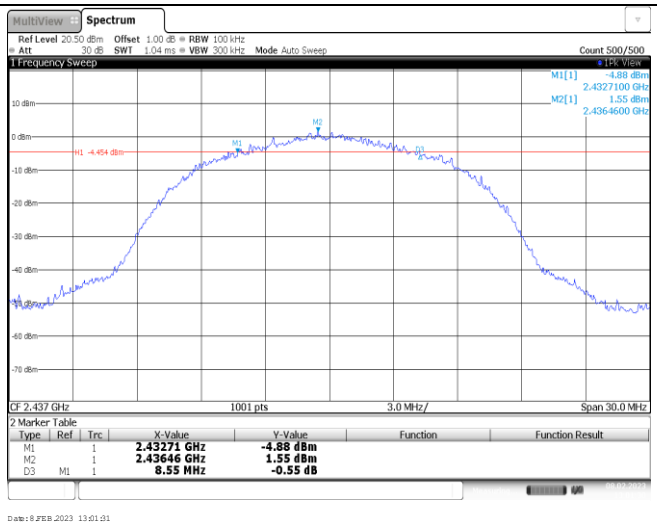
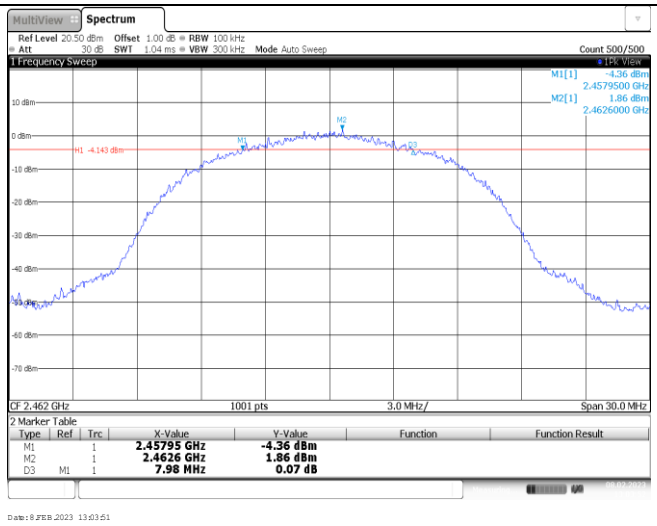
Type:	**802.11 b**
CH01	
CH06	
CH11	

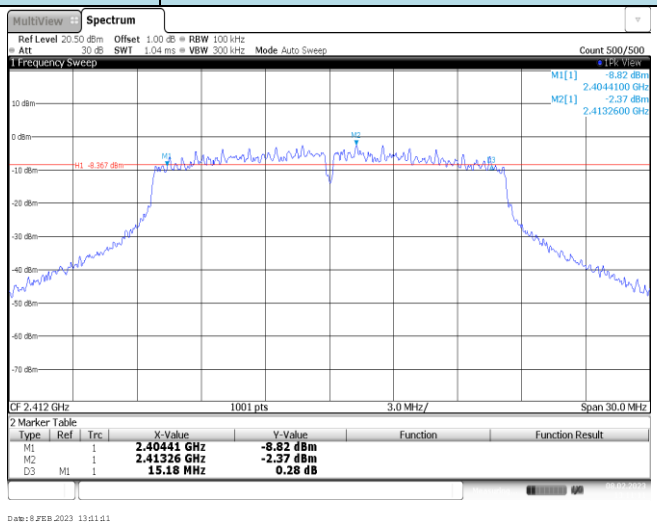
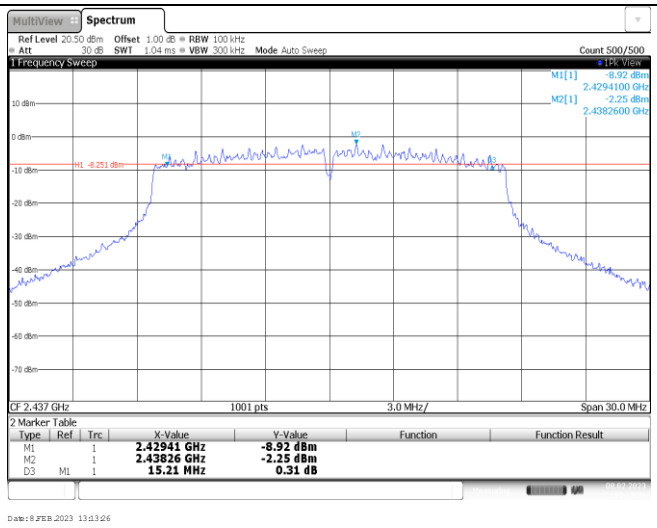
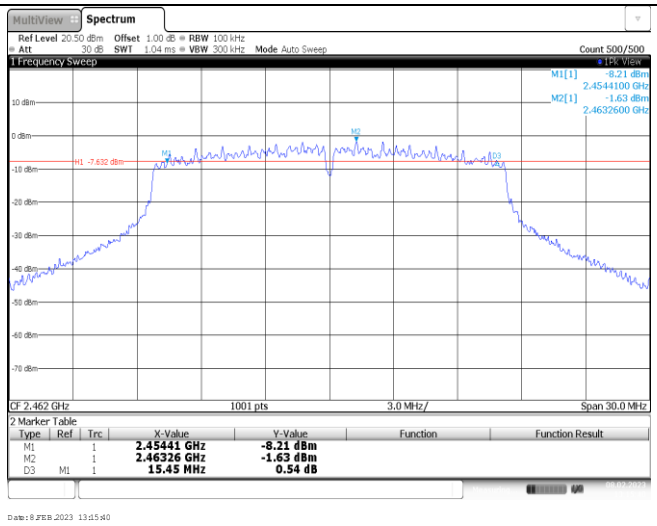
Type:	**802.11 g**
CH01	
CH06	
CH11	

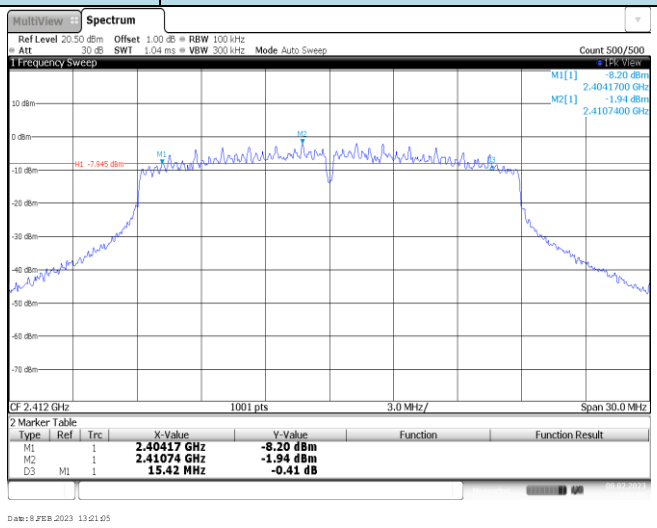
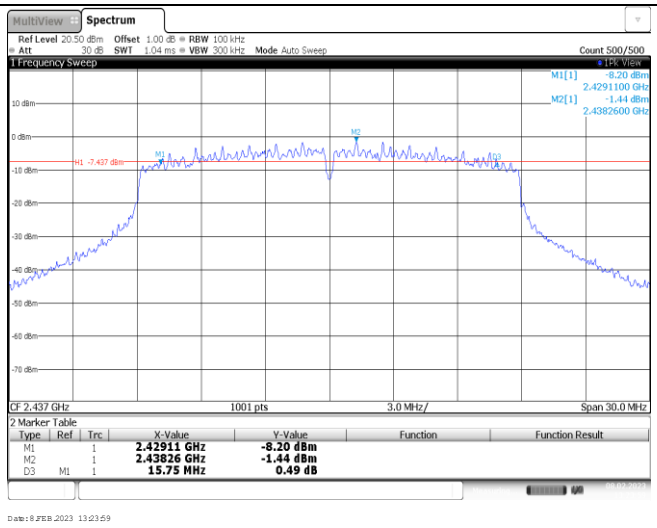
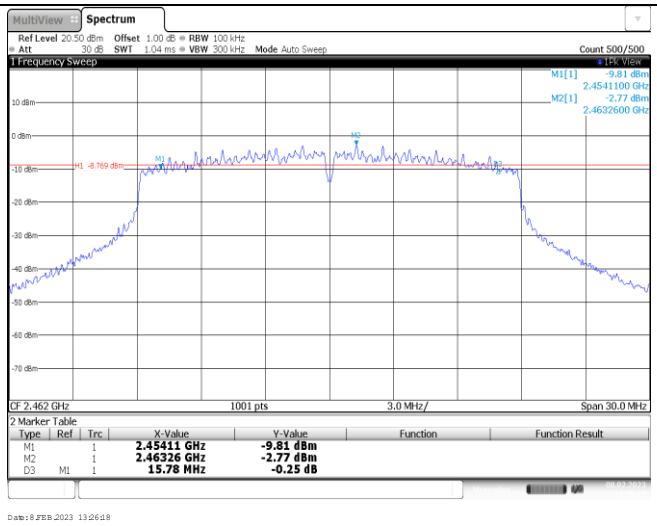
Type:	802.11n(HT20)
CH01	
CH06	
CH11	

Appendix C：6dB bandwidth

Type	Channel	6dB Bandwidth (MHz)	Limit (MHz)	Result
802.11b	01	9.06	≥0.5	Pass
	06	8.55		
	11	7.98		
802.11g	01	15.18	≥0.5	Pass
	06	15.21		
	11	15.45		
802.11n(HT20)	01	15.42	≥0.5	Pass
	06	15.75		
	11	15.78		

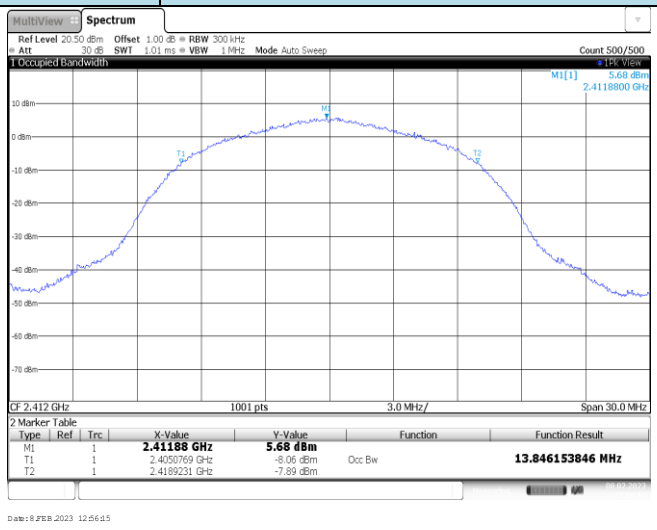
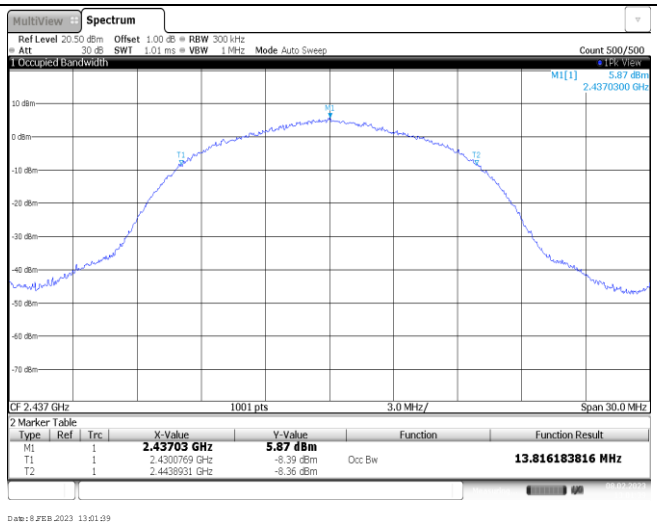
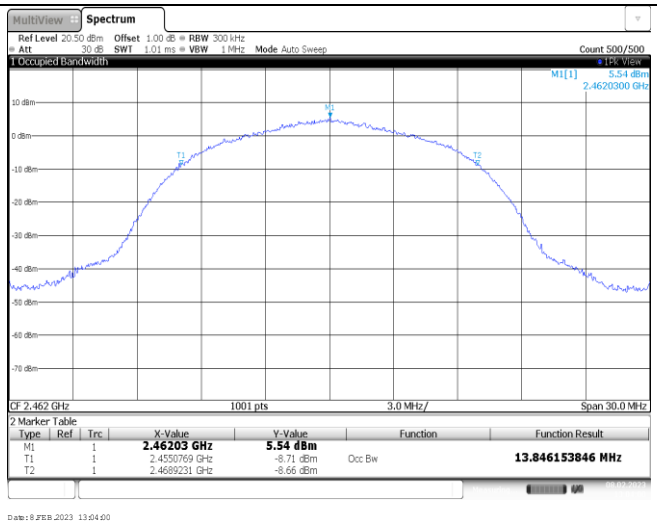
Type:	802.11 b
CH01	
CH06	
CH11	

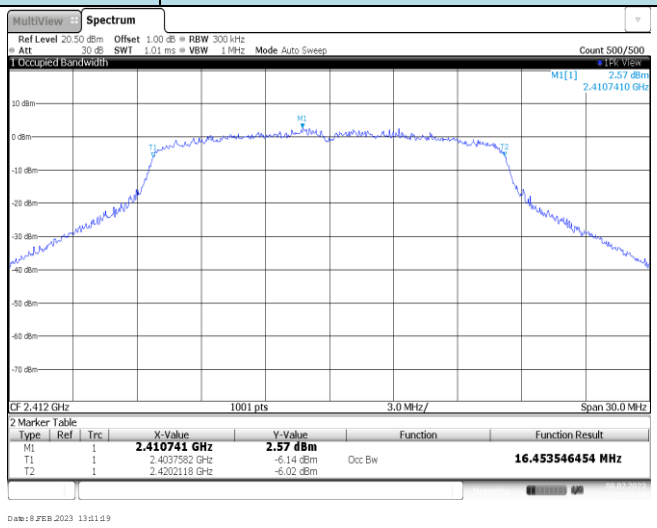
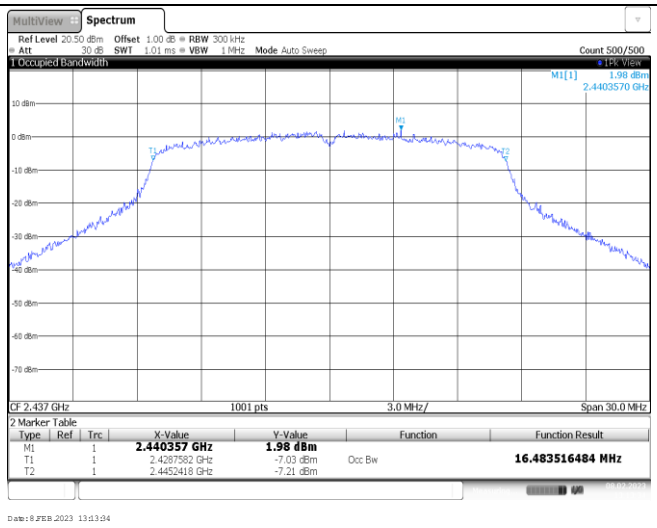
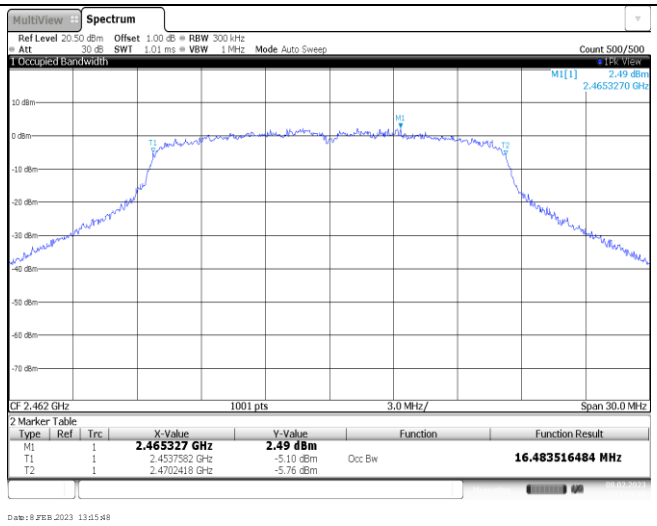
Type:	802.11 g
CH01	
CH06	
CH11	

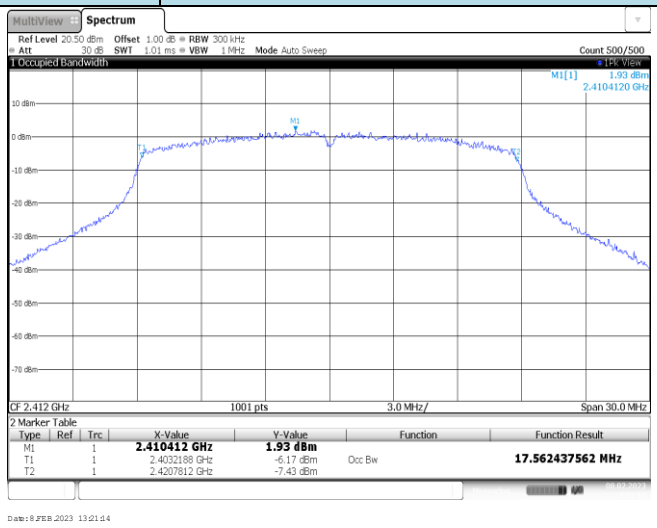
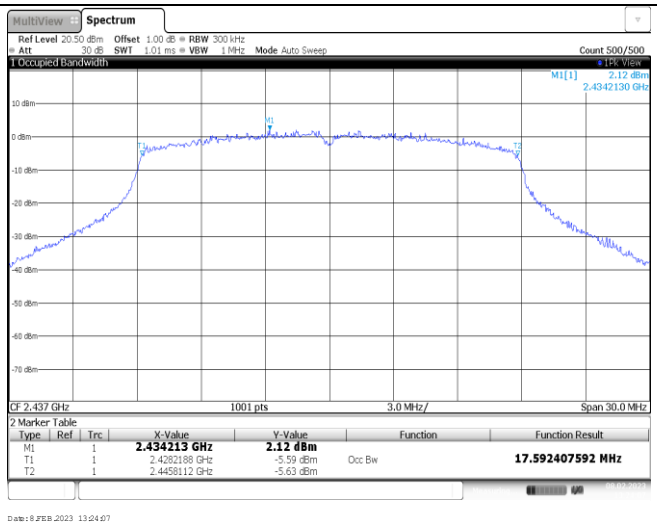
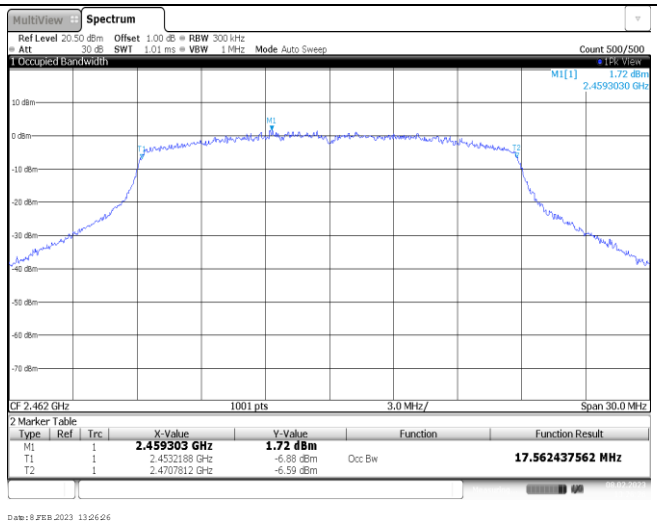
Type:	802.11n(HT20)
CH01	
CH06	
CH11	

Appendix D：99% Occupied Bandwidth

Type	Channel	99% Bandwidth (MHz)	Limit (MHz)	Result
802.11b	01	13.85	-	Pass
	06	13.82		
	11	13.85		
802.11g	01	16.45	-	Pass
	06	16.48		
	11	16.48		
802.11n(HT20)	01	17.56	-	Pass
	06	17.59		
	11	17.56		

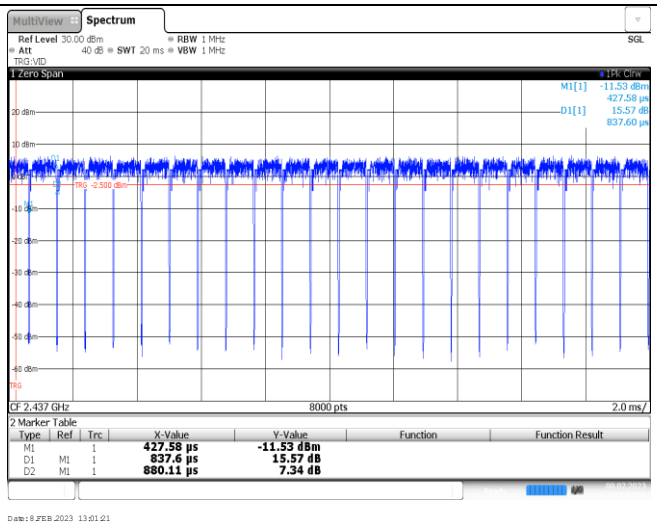
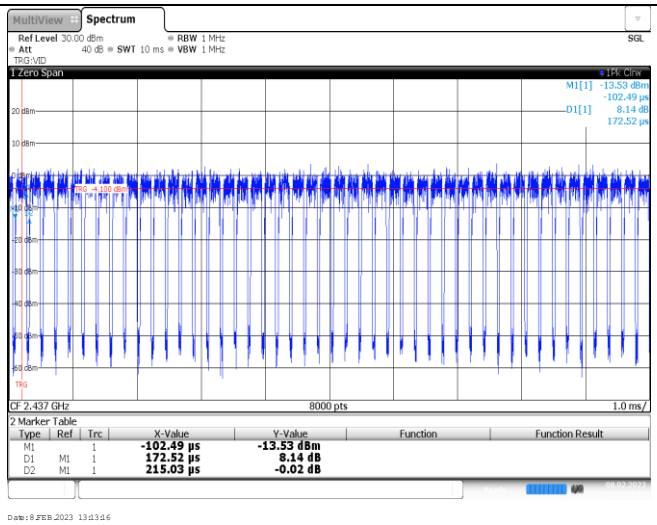
Type:	**802.11 b**
CH01	
CH06	
CH11	

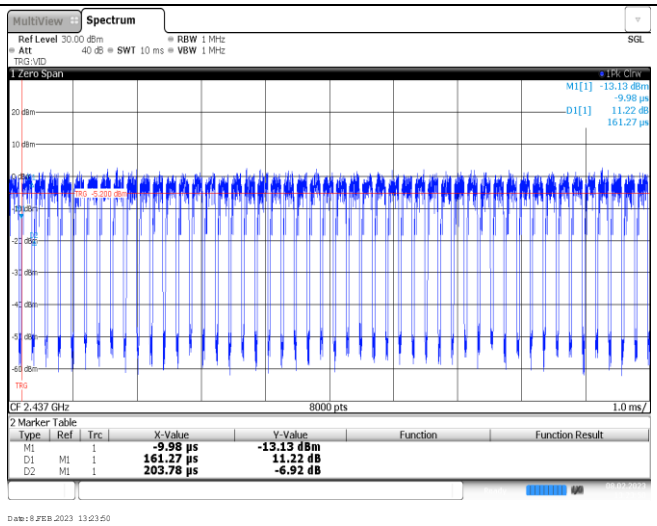
Type:	802.11 g
CH01	
CH06	
CH11	

Type:	802.11n(HT20)
CH01	
CH06	
CH11	

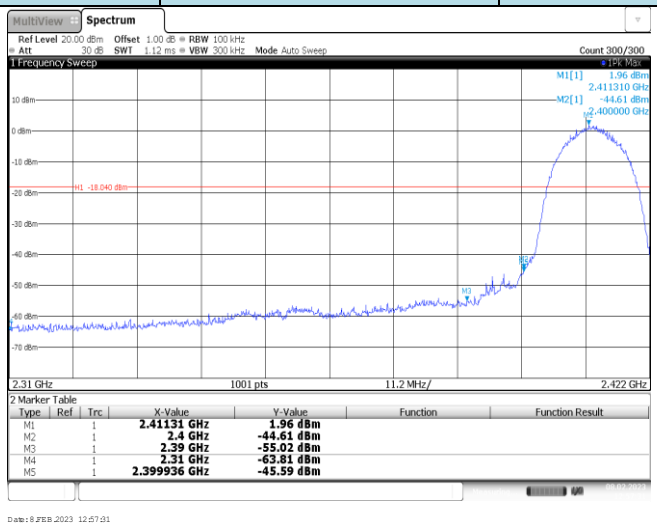
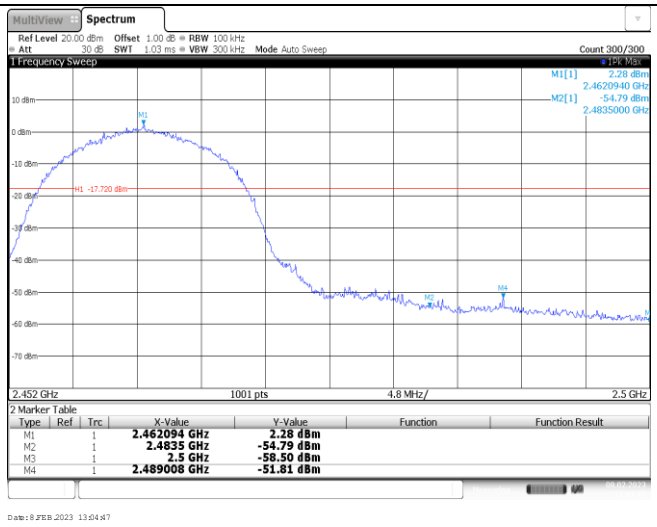
Appendix E：Duty Cycle

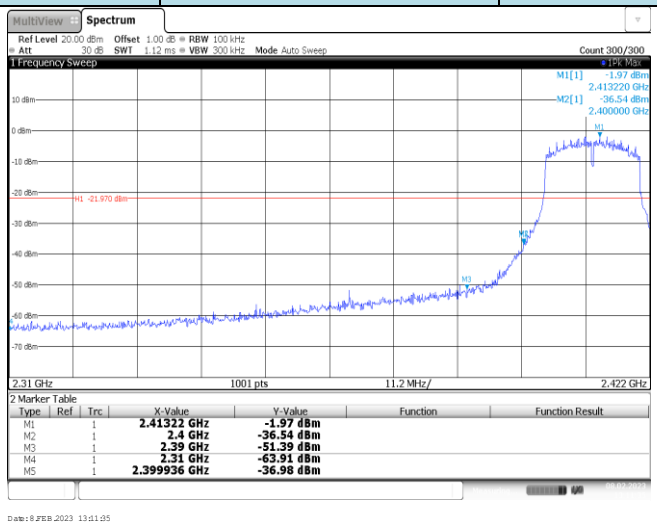
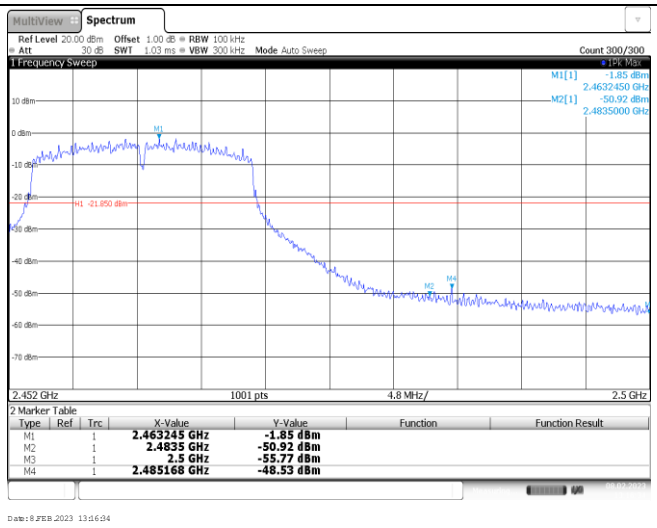
Modulation Type	Test Frequency（MHz）	$T_{on\ time}$ for single burst (ms)	T_{period} (ms)	Duty cycle	$1/T_{on\ time}$ (kHz)
11b	2437	0.84	0.88	95.5%	1.2
11g	2437	0.17	0.22	77.3%	5.9
11n20	2437	0.16	0.20	80.0%	6.3

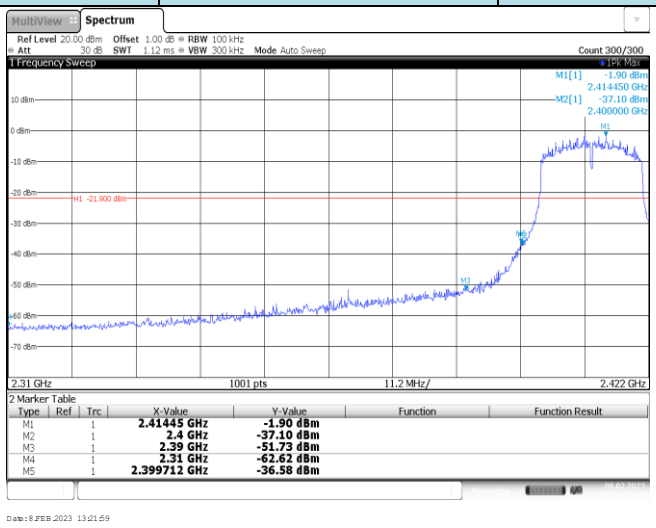
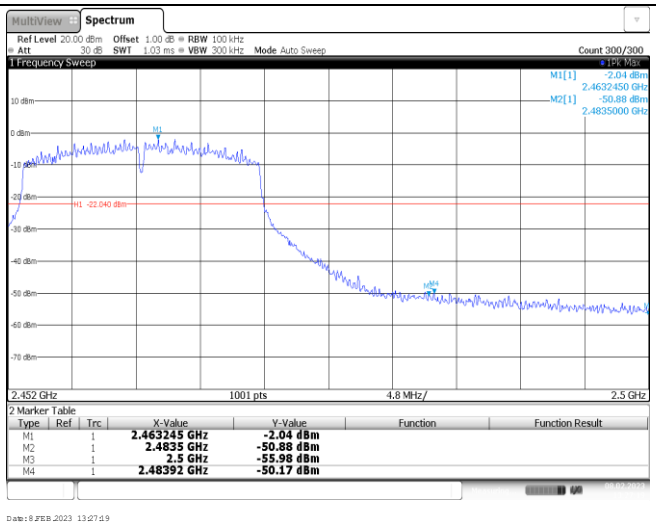
11b	
11g	

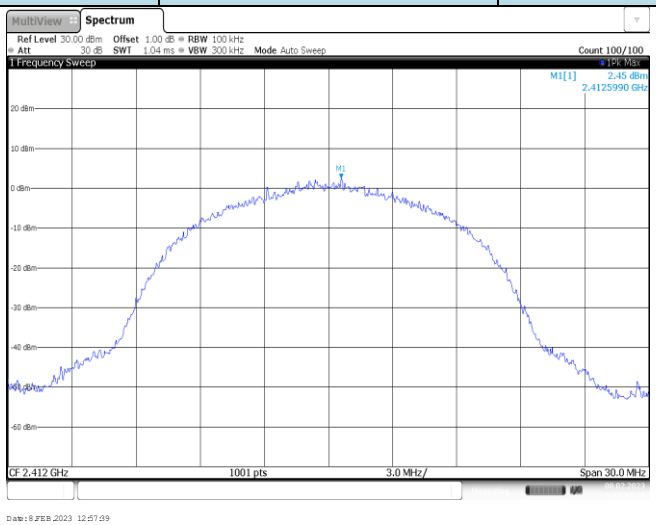
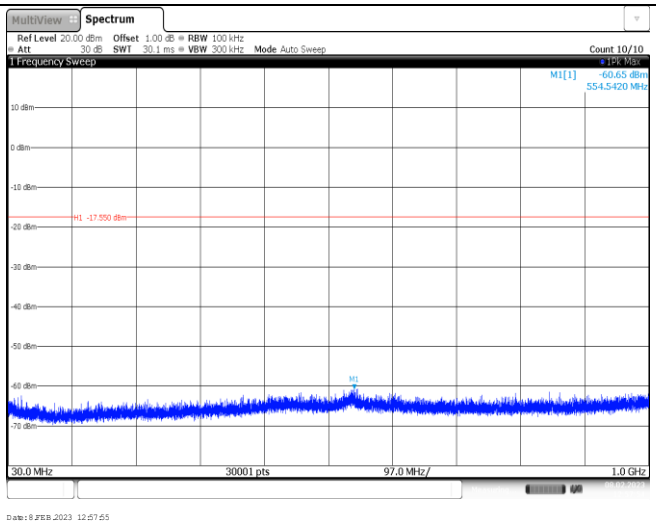
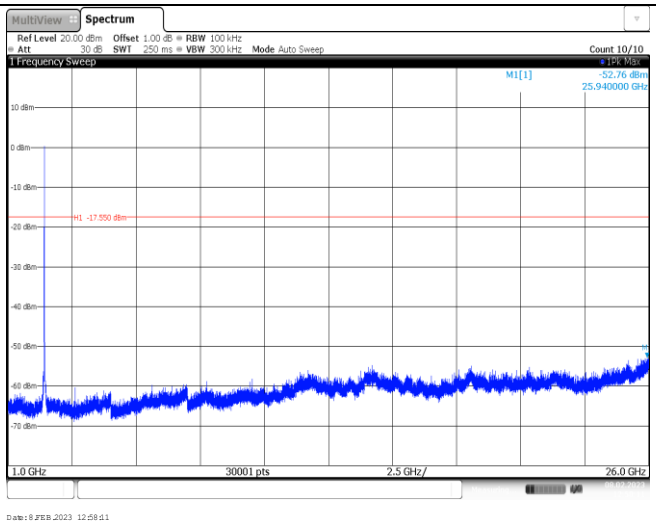
11n20	 MultiView Spectrum Ref Level 30.00 dBm RBW 1 MHz Att 40 dB SWT 10 ms VBW 1 MHz SGL TRG:VID 1 Zero Span 1Pk Clrw M1[1] -13.13 dBm -9.98 µs D1[1] 11.22 dB 161.27 µs 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm TRG CF 2.437 GHz 8000 pts 1.0 ms/ 2 Marker Table Type Ref Trc X-Value Y-Value Function Function Result M1 1 -9.98 µs -13.13 dBm D1 M1 1 161.27 µs 11.22 dB D2 M1 1 203.78 µs -6.92 dB Date: 8.FEB.2023 13:23:50

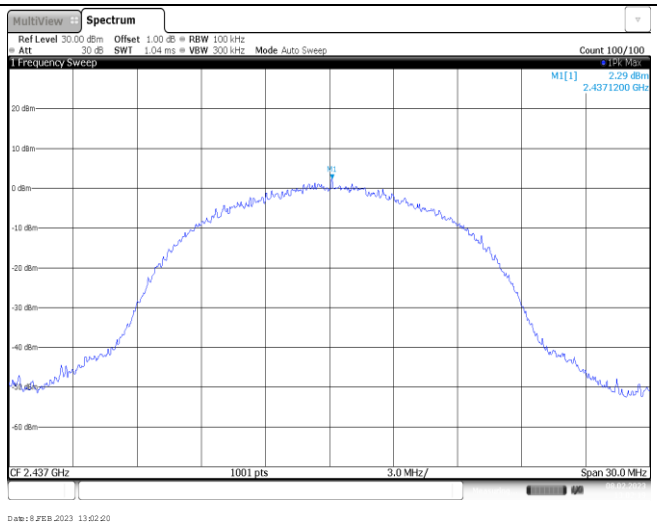
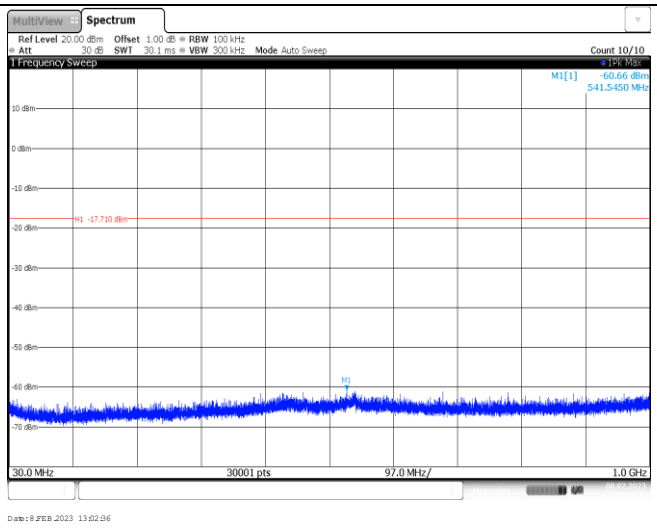
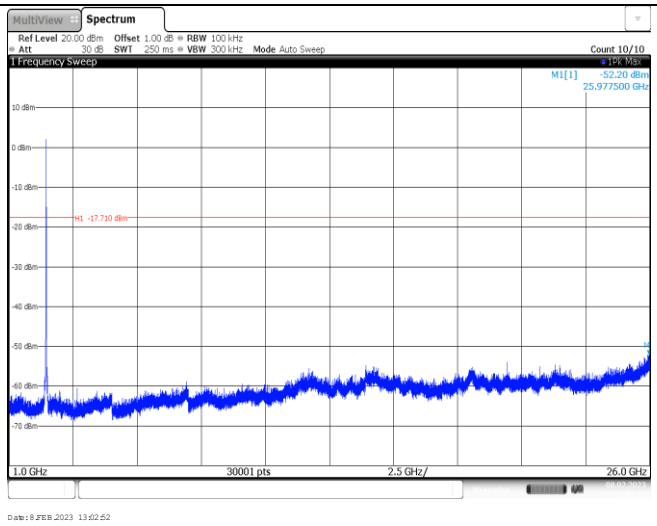
Appendix F：Band edge and Spurious Emissions (conducted)

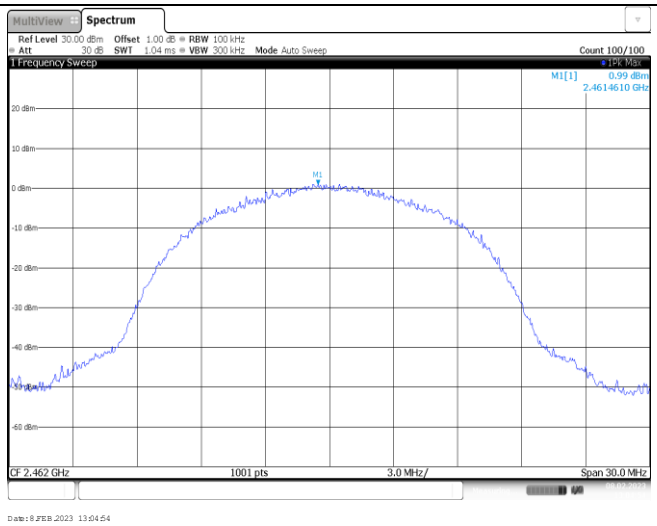
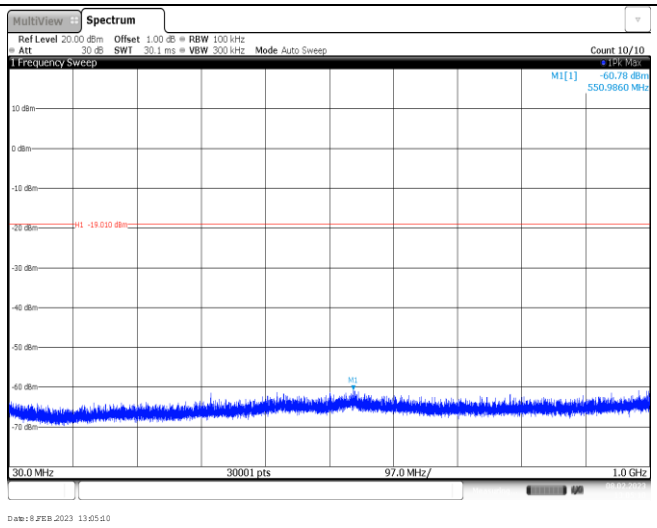
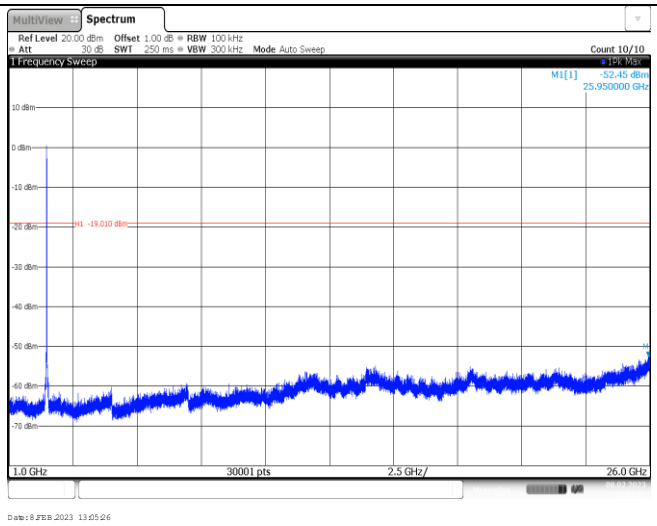
Test Item:	Bandedge	Type:	802.11 b
CH01			
CH11			

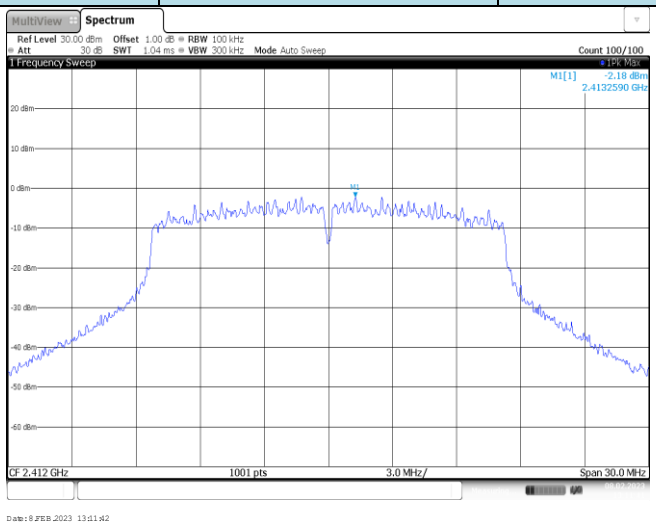
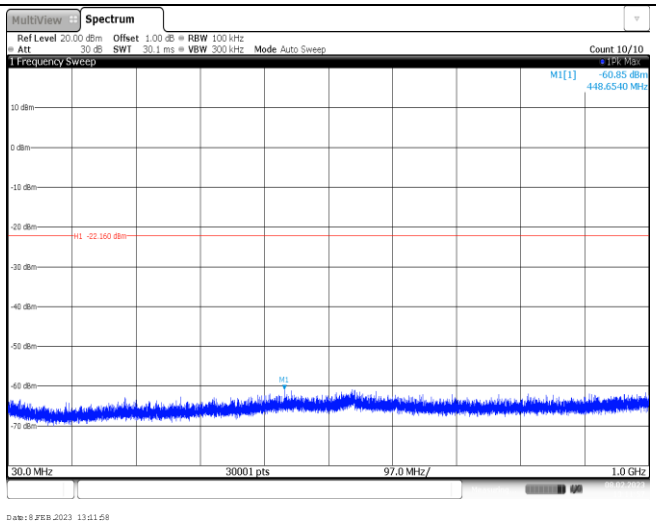
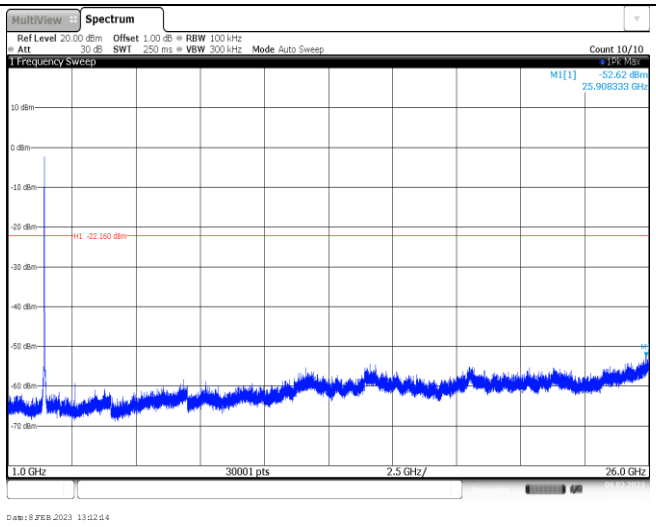
Test Item:	Bandedge	Type:	802.11 g
CH01			
CH11			

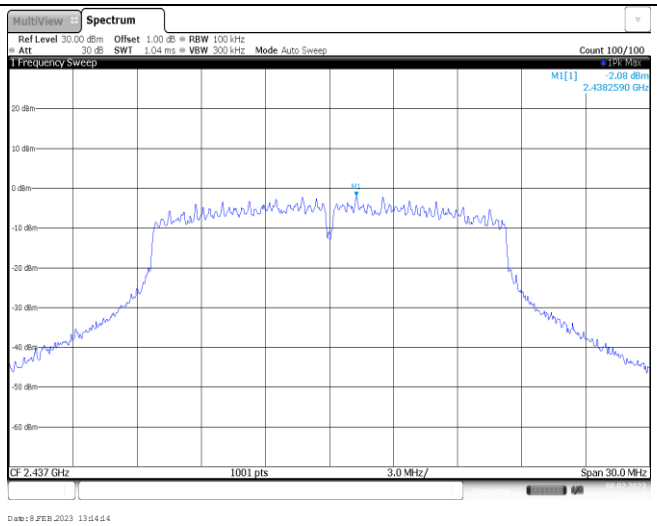
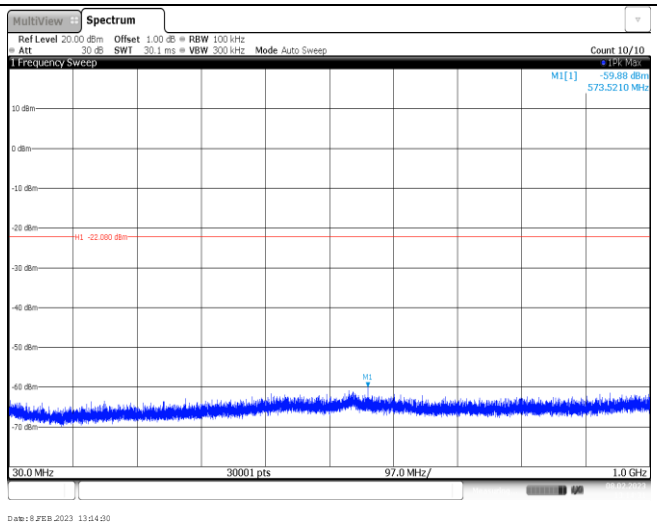
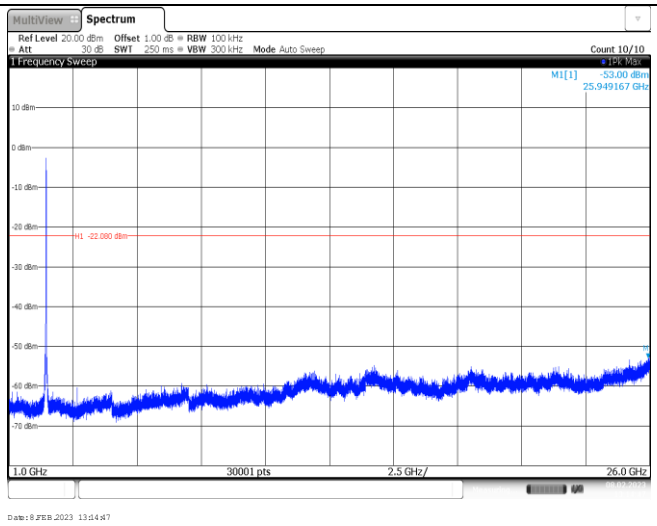
Test Item:	Bandedge	Type:	802.11 n(HT20)
CH01			
CH11			

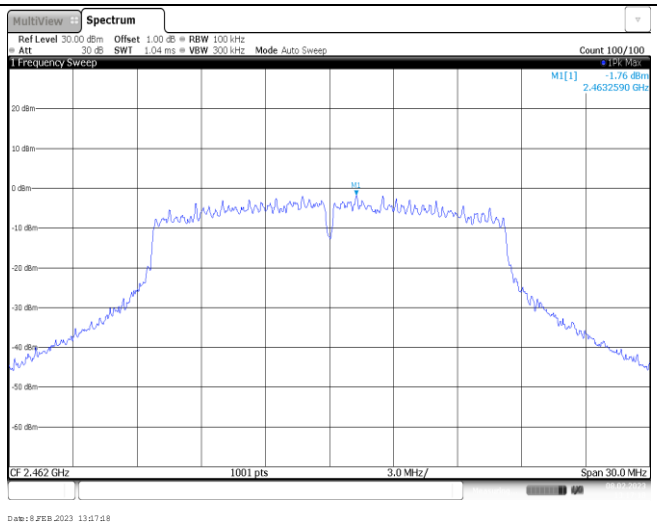
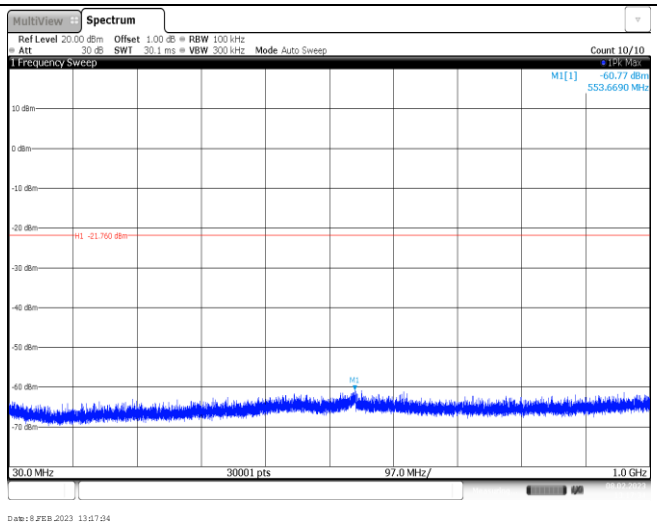
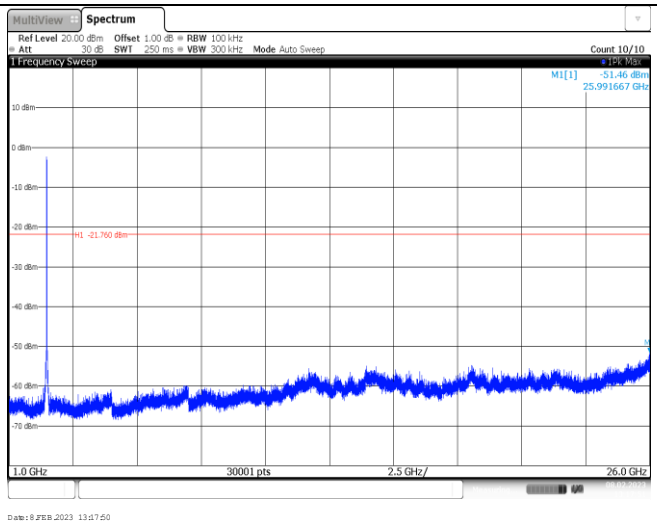
Test Item:	Spurious Emissions	Type:	802.11 b
CH01 Reference level	
CH01 30MHz~1000MHz	
CH01 1GHz~26GHz	

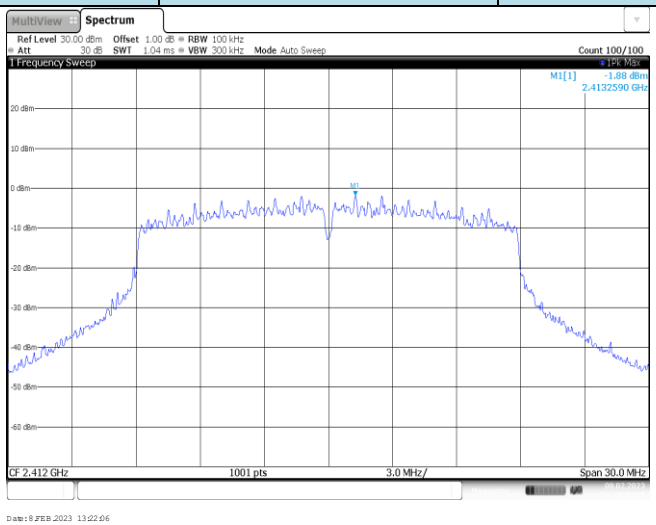
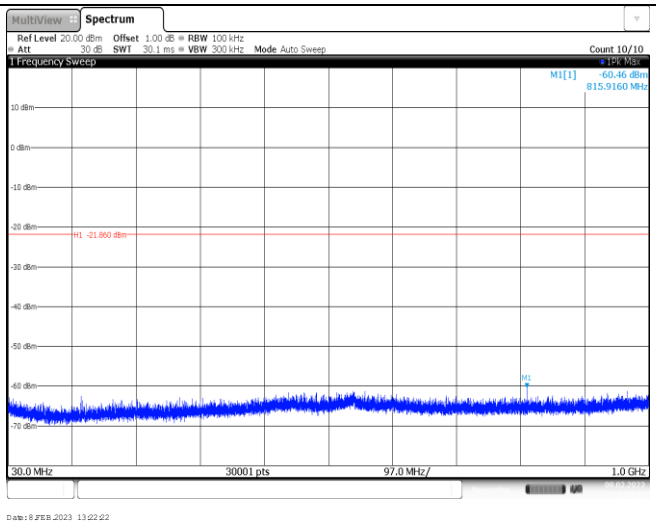
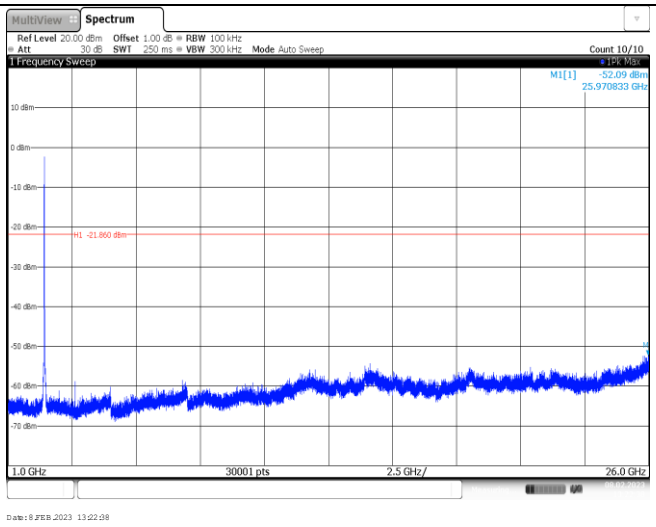
CH06 Reference level	
CH06 30MHz~1000MHz	
CH06 1GHz~26GHz	

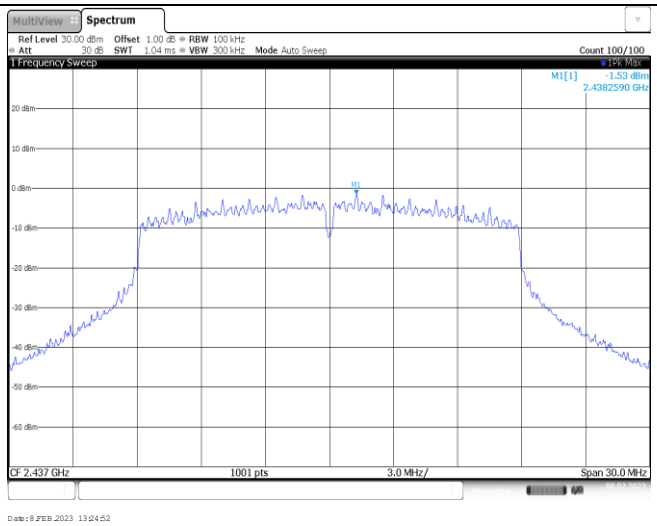
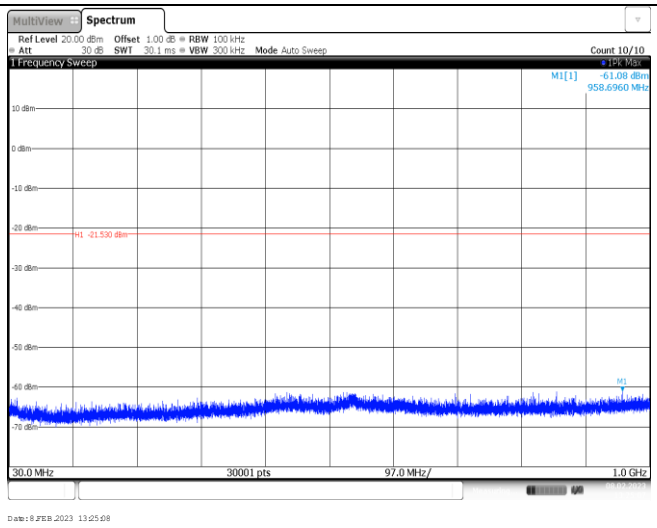
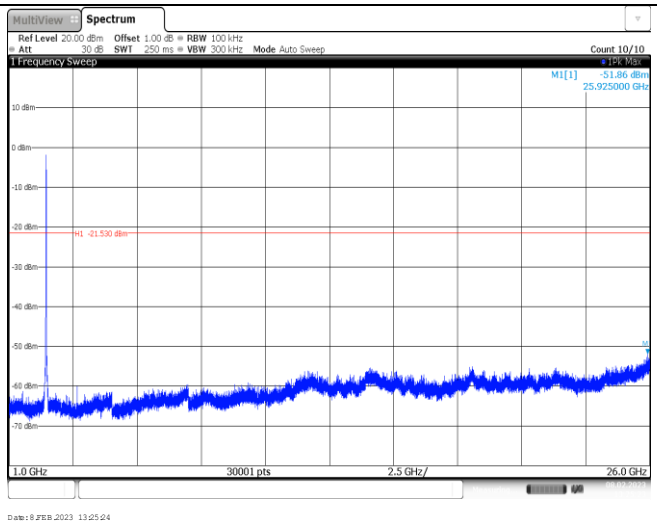
CH11 Reference level	
CH11 30MHz~1000MHz	
CH11 1GHz~26GHz	

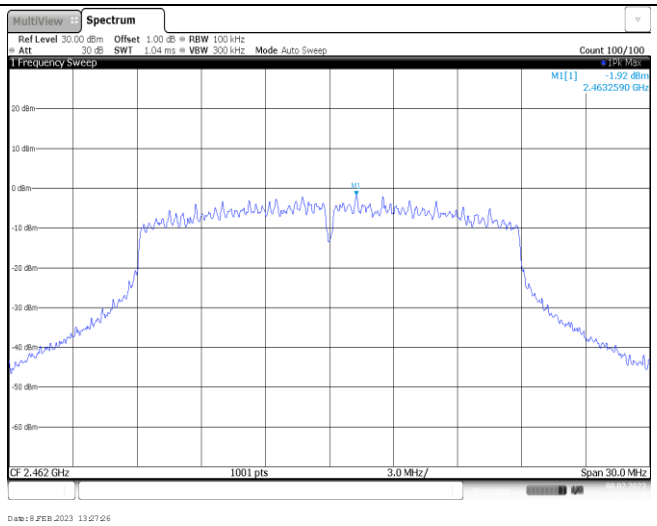
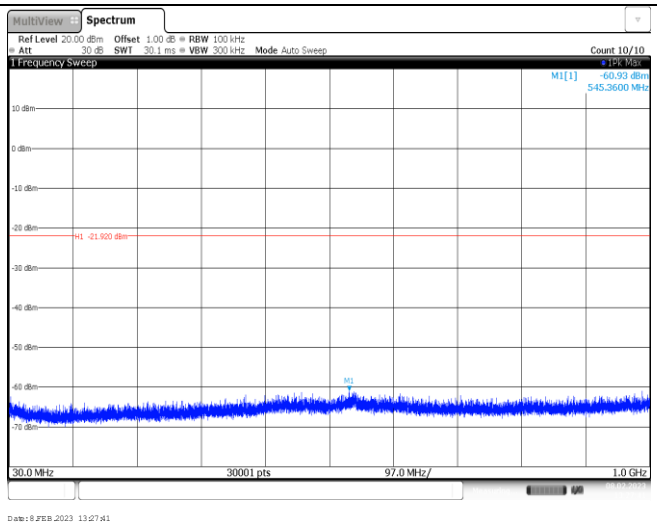
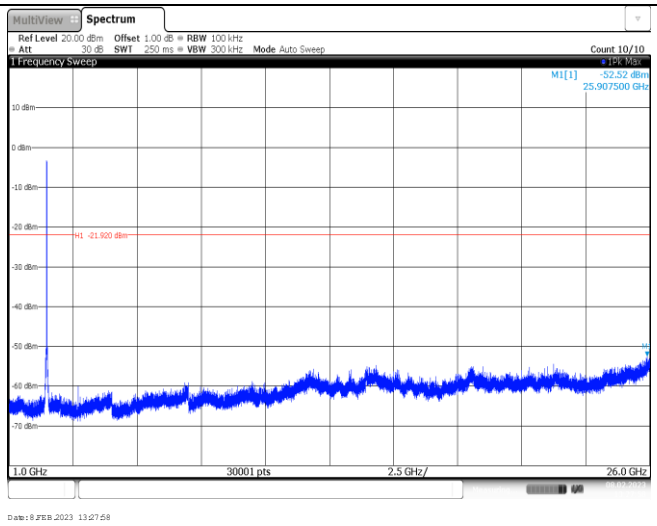
Test Item:	Spurious Emissions	Type:	802.11 g
CH01 Reference level	
CH01 30MHz~1000MHz			
CH01 1GHz~26GHz			

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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