APPENDIX REPORT

Project No.	SHT2107079801EW	Radio Specification	WIFI 2.4G
Test sample No.	YPHT21040536002	Model No.	Star8vm
Start test date	2021-05-28	Finish date	2021-05-28
Temperature	25.5°C	Humidity	63%
Test Engineer	Qizhi Zhang	Auditor	Xiaodong Zhao

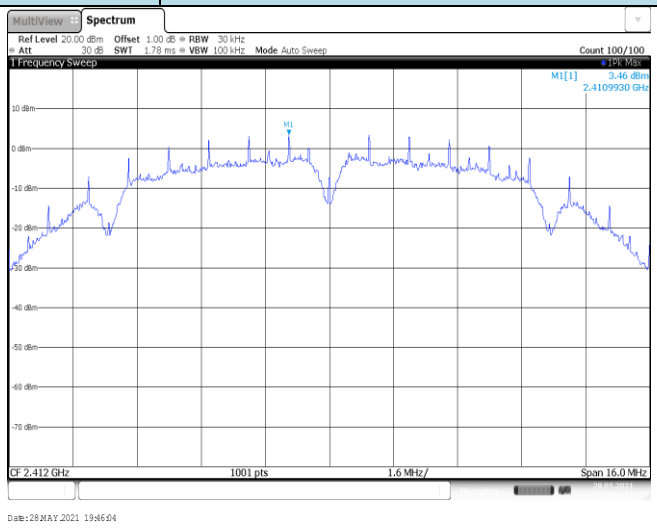
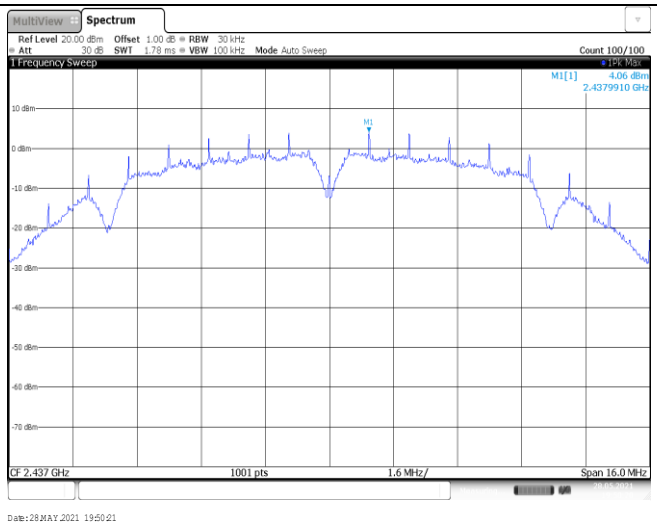
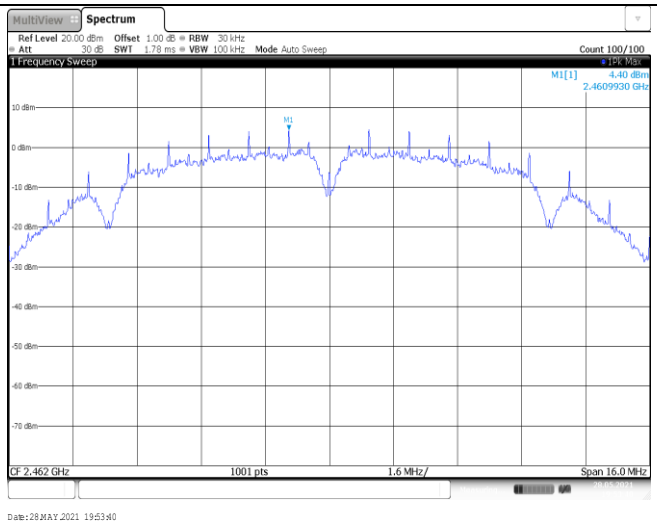
Appendix clause	Test item	Result
A	Conducted Peak Output Power	PASS
B	Power Spectral Density	PASS
C	6 dB Bandwidth	PASS
D	99% Occupied Bandwidth	PASS
E	Duty Cycle	PASS
F	Band edge and Spurious Emissions (conducted)	PASS

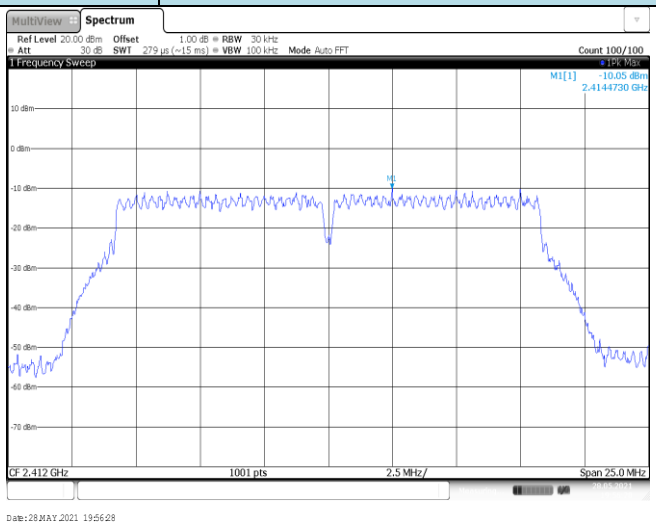
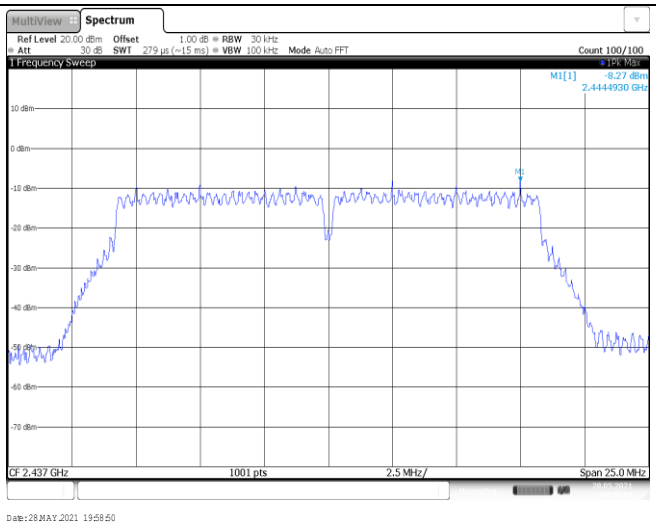
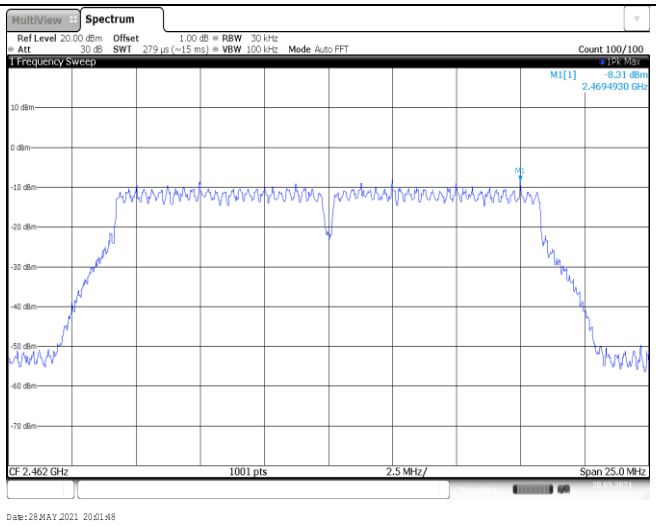
Appendix A：Conducted Peak Output Power

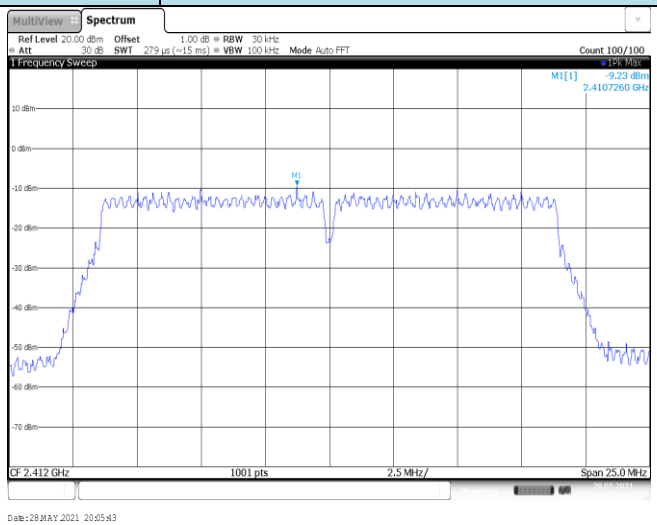
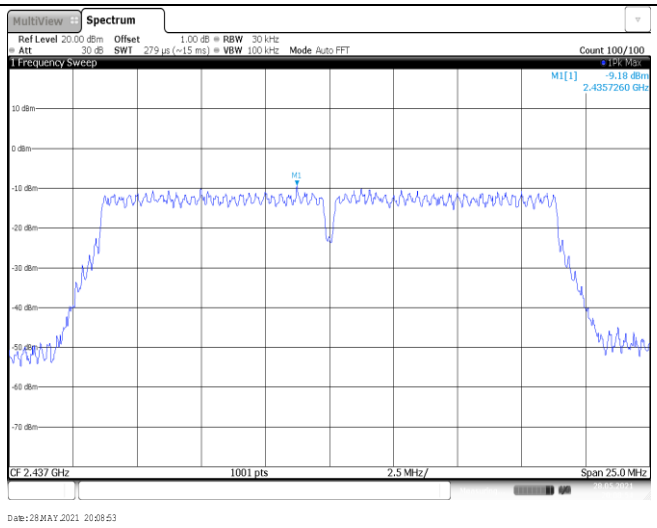
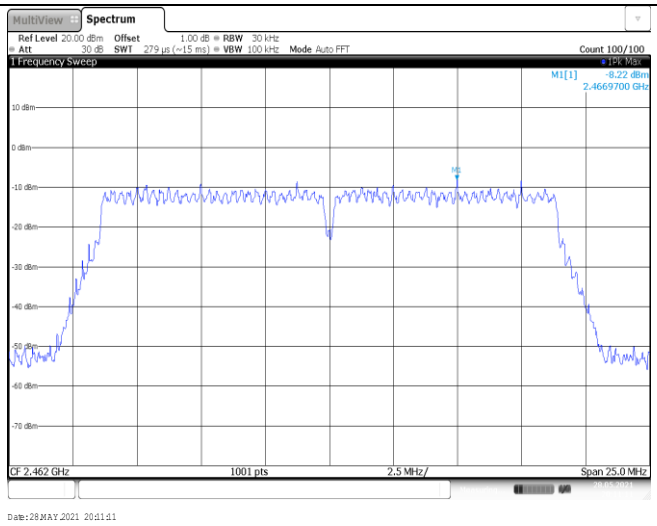
Type	Channel	Peak Output power (dBm)	Average Output power (dBm)	Limit (dBm)	Result
802.11b	01	15.17	12.74	≤ 30.00	Pass
	06	15.59	13.12		
	11	15.42	12.94		
802.11g	01	15.59	12.84	≤ 30.00	Pass
	06	15.96	12.97		
	11	15.69	12.74		
802.11n (HT20)	01	15.52	12.53	≤ 30.00	Pass
	06	16.00	12.99		
	11	15.73	12.77		
802.11n(HT40)	03	14.45	11.62	≤ 30.00	Pass
	06	14.67	11.82		
	09	14.50	11.58		

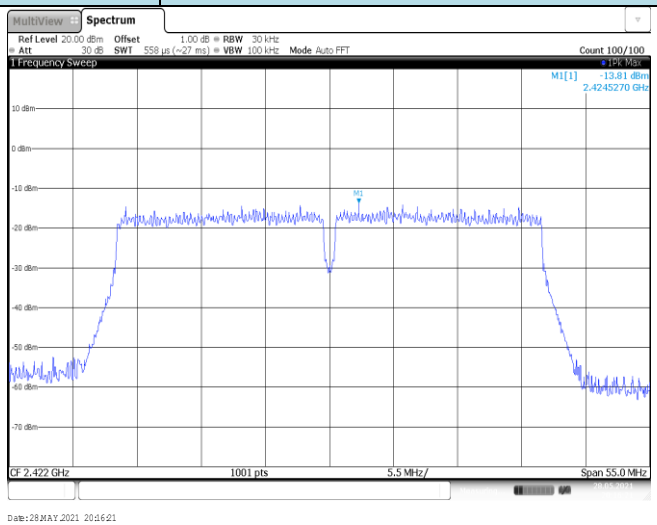
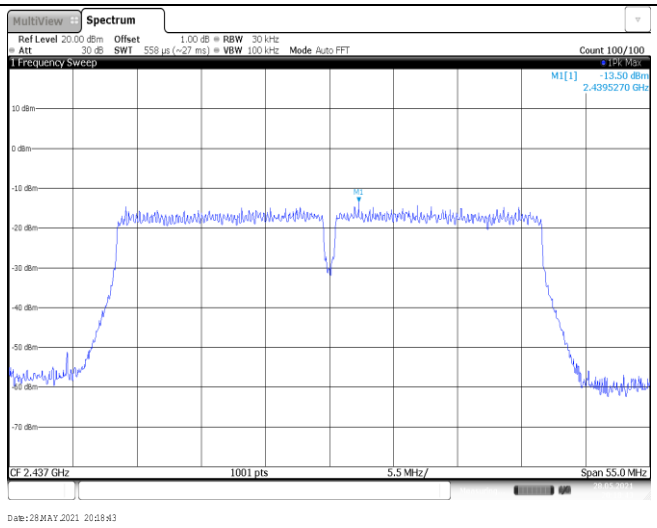
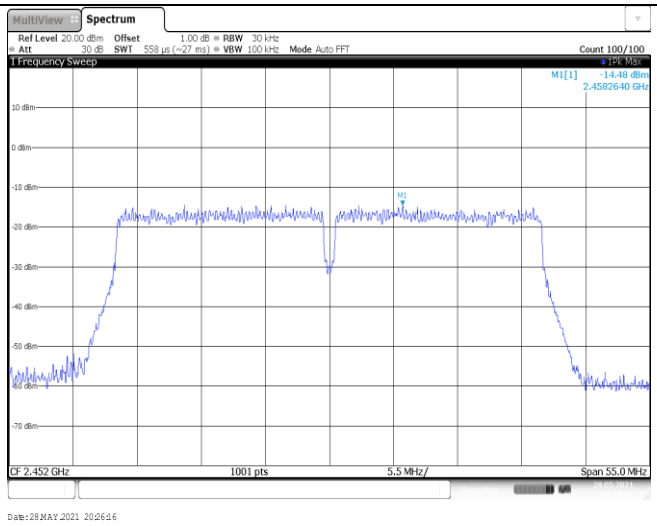
Appendix B：Power Spectral Density

Type	Channel	Power Spectral Density (dBm/30KHz)	Limit (dBm/3KHz)	Result
802.11b	01	3.46	≤8.00	Pass
	06	4.06		
	11	4.40		
802.11g	01	-10.05	≤8.00	Pass
	06	-8.27		
	11	-8.31		
802.11n(HT20)	01	-8.65	≤8.00	Pass
	06	-8.77		
	11	-8.22		
802.11n(HT40)	03	-13.81	≤8.00	Pass
	06	-13.50		
	09	-14.48		

Type:	802.11 b
CH01	
CH06	
CH11	

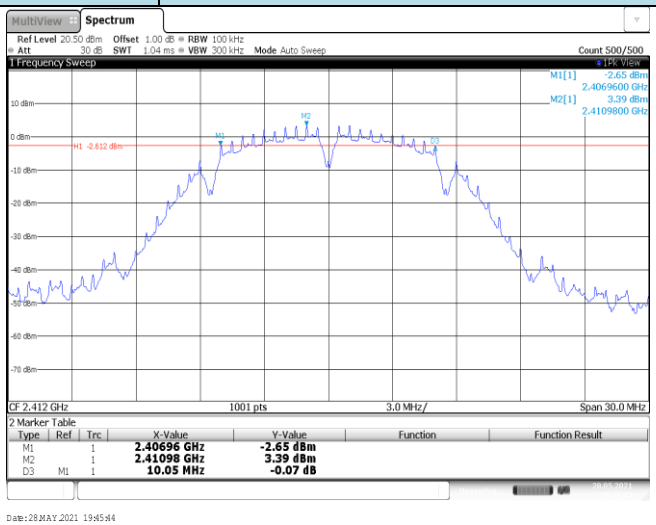
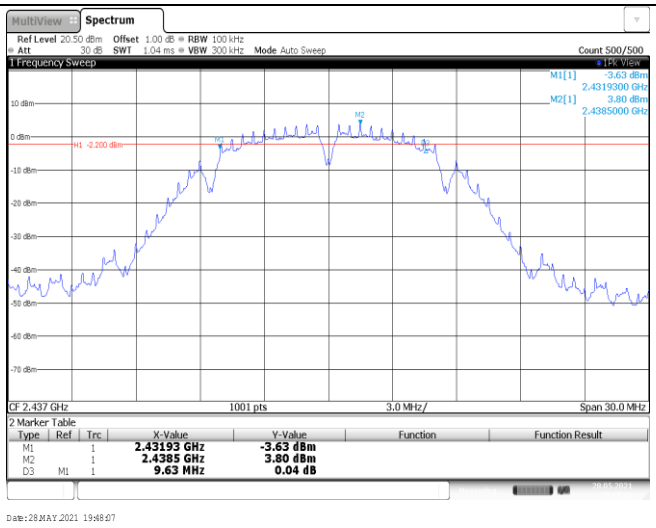
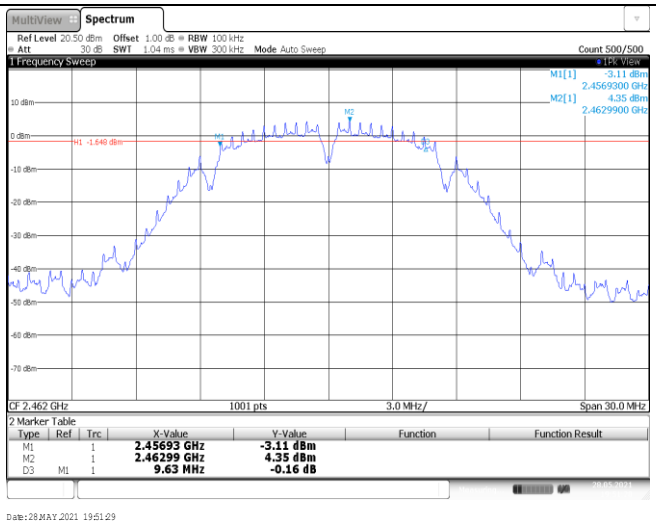
Type:	802.11 g
CH01	
CH06	
CH11	

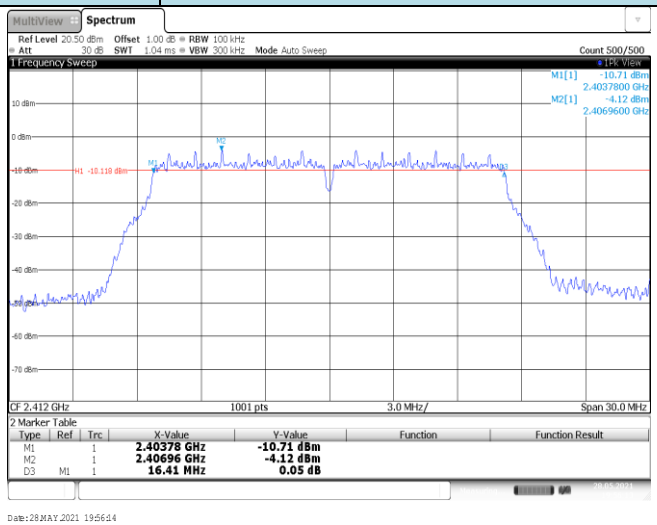
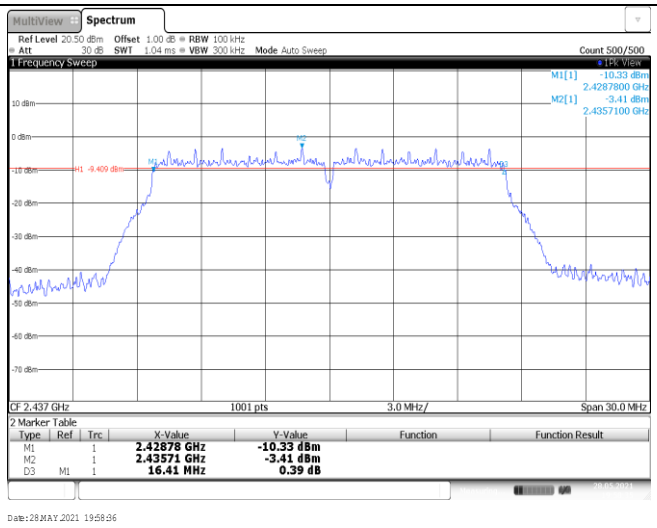
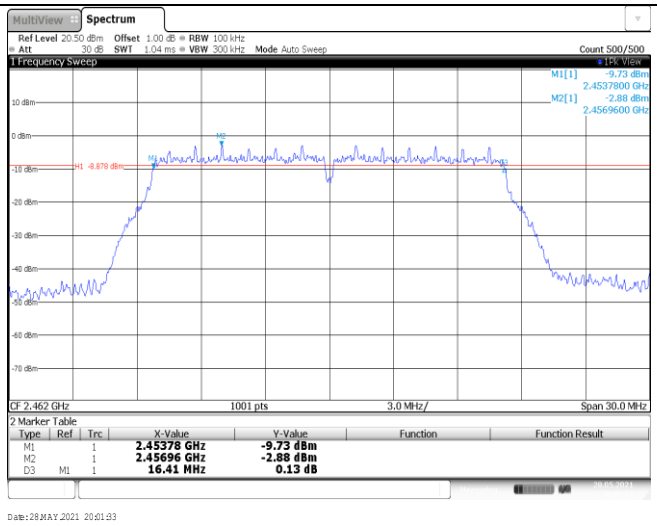
Type:	802.11n(HT20)
CH01	
CH06	
CH11	

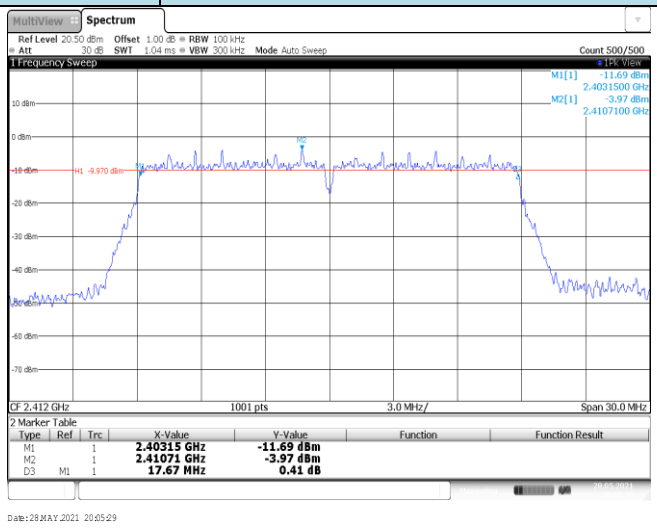
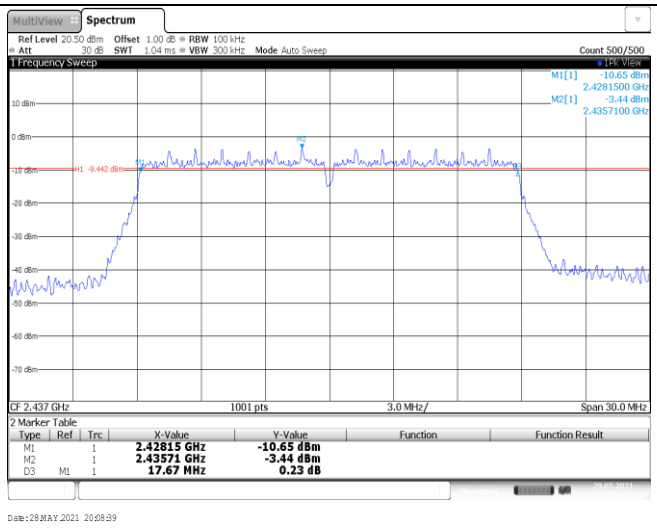
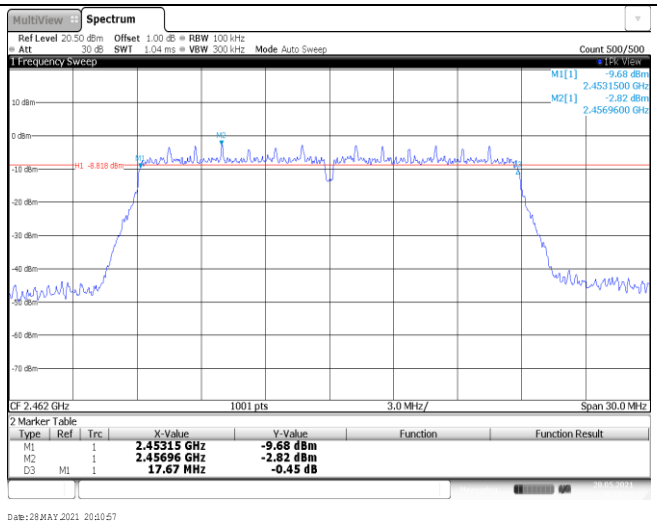
Type:	802.11n(HT40)
CH03	
CH06	
CH09	

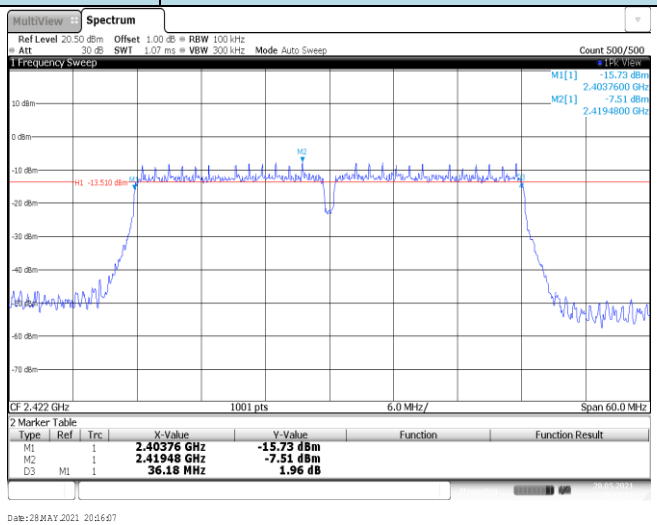
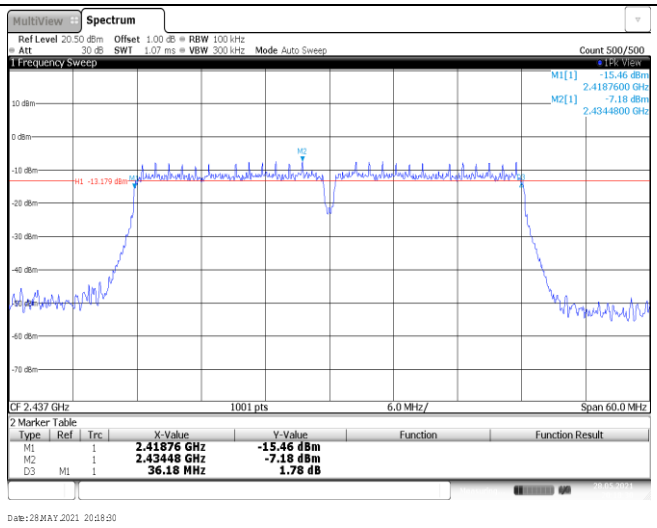
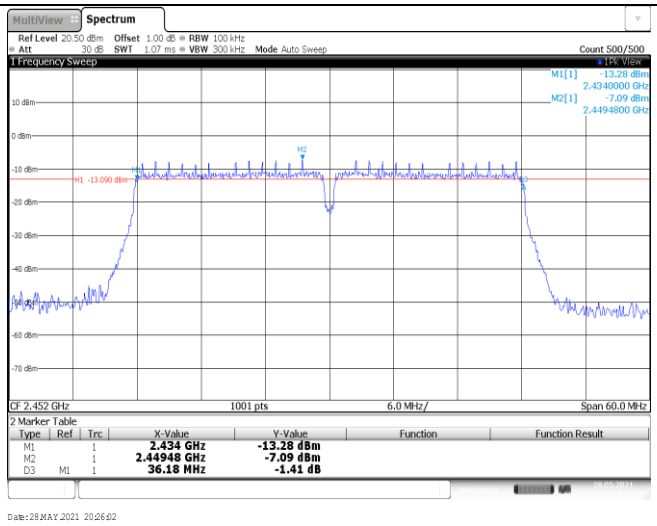
Appendix C：6dB bandwidth

Type	Channel	6dB Bandwidth (MHz)	Limit (MHz)	Result
802.11b	01	10.05	≥0.5	Pass
	06	9.63		
	11	9.63		
802.11g	01	16.41	≥0.5	Pass
	06	16.41		
	11	16.41		
802.11n(HT20)	01	17.67	≥0.5	Pass
	06	17.67		
	11	17.67		
802.11n(HT40)	03	36.18	≥0.5	Pass
	06	36.18		
	09	36.18		

Type:	802.11 b
CH01	
CH06	
CH11	

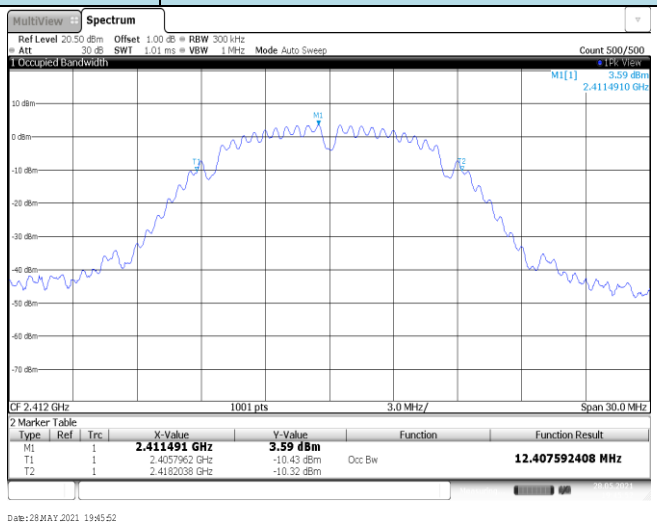
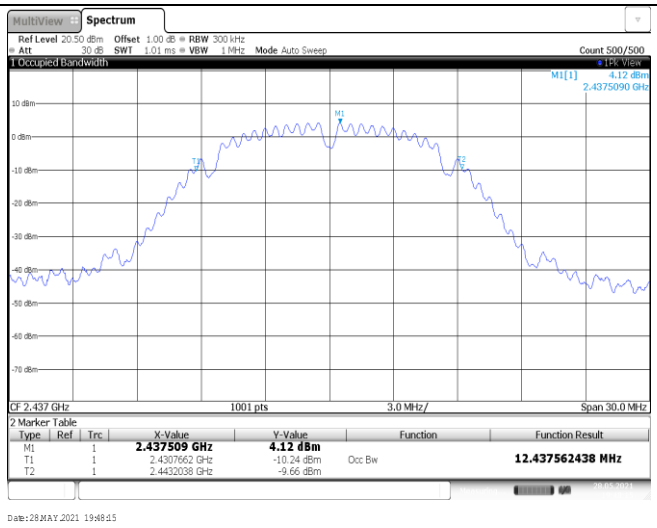
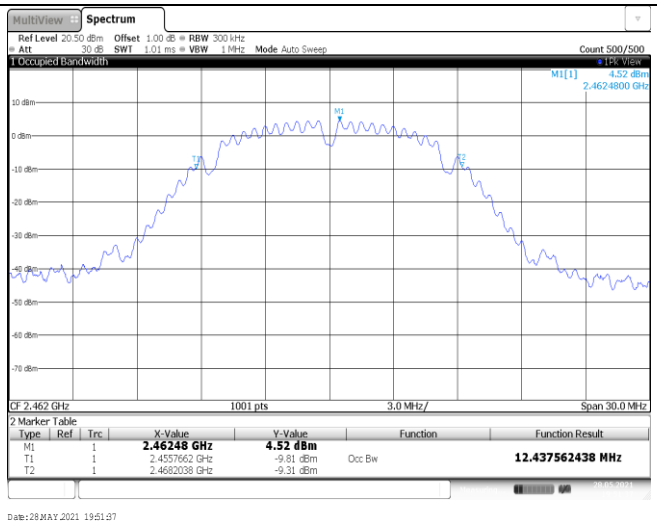
Type:	802.11 g
CH01	
CH06	
CH11	

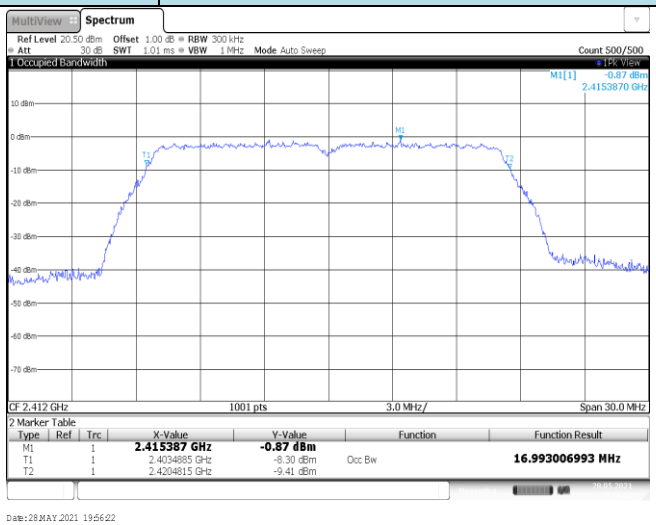
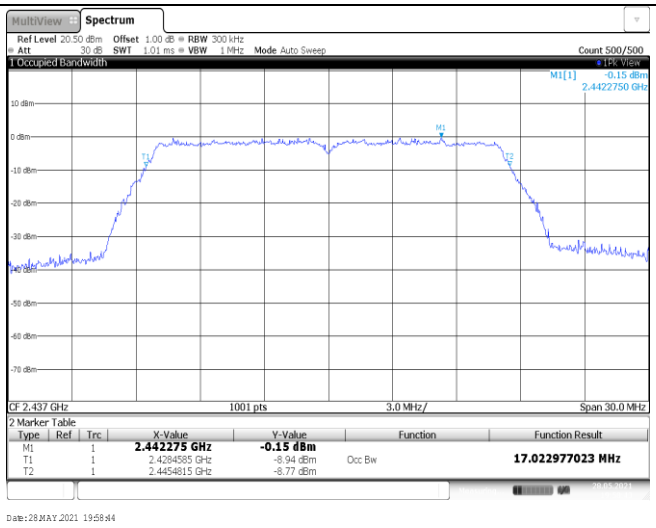
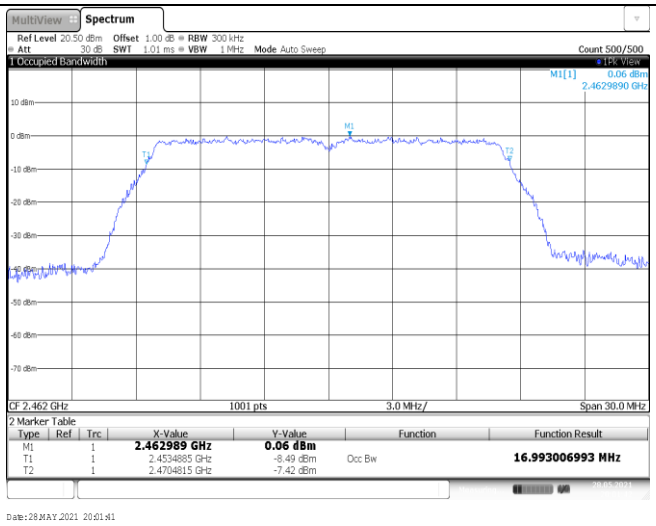
Type:	802.11n(HT20)
CH01	
CH06	
CH11	

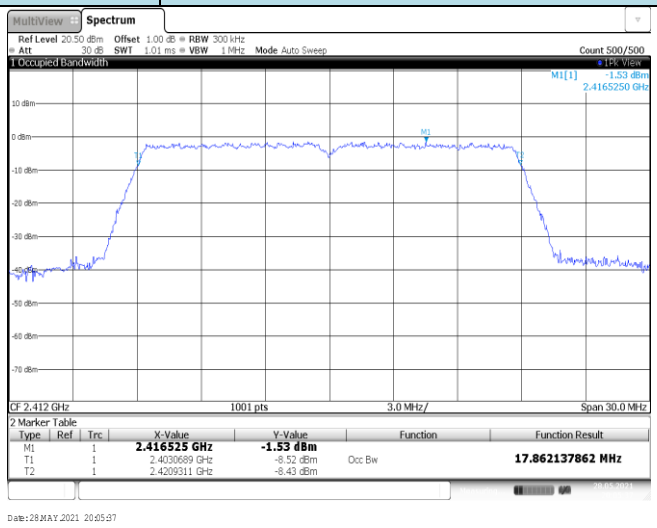
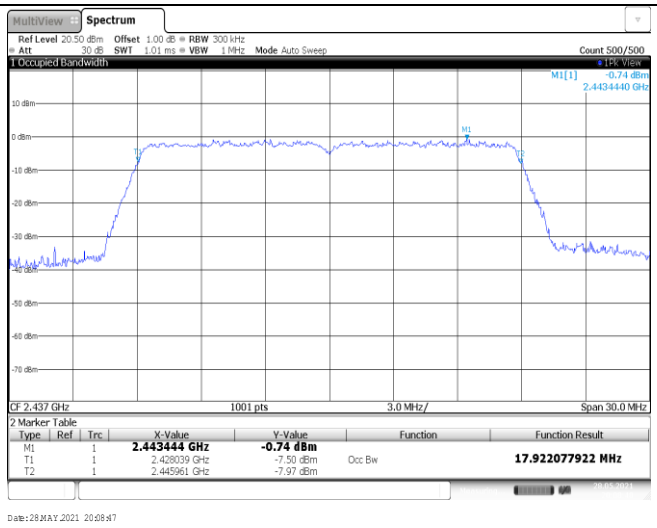
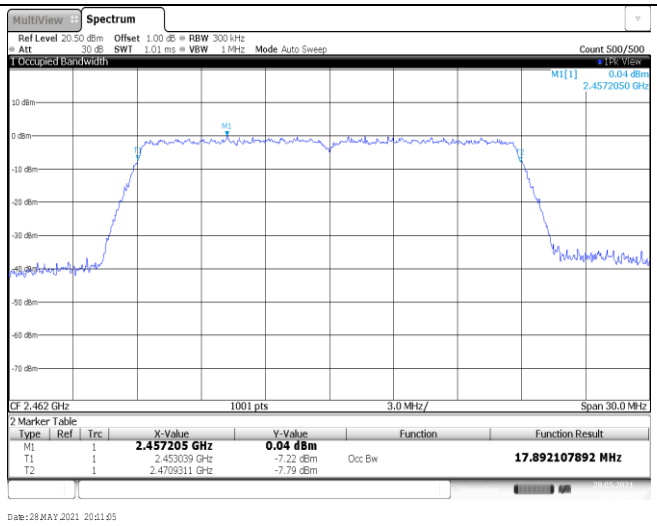
Type:	802.11n(HT40)
CH03	
CH06	
CH09	

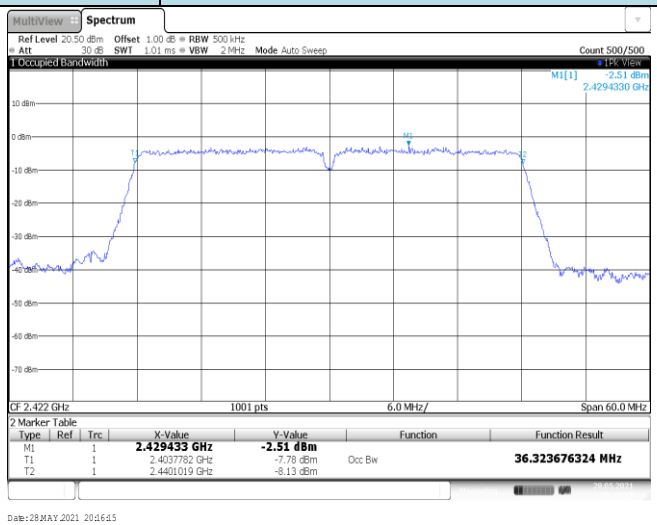
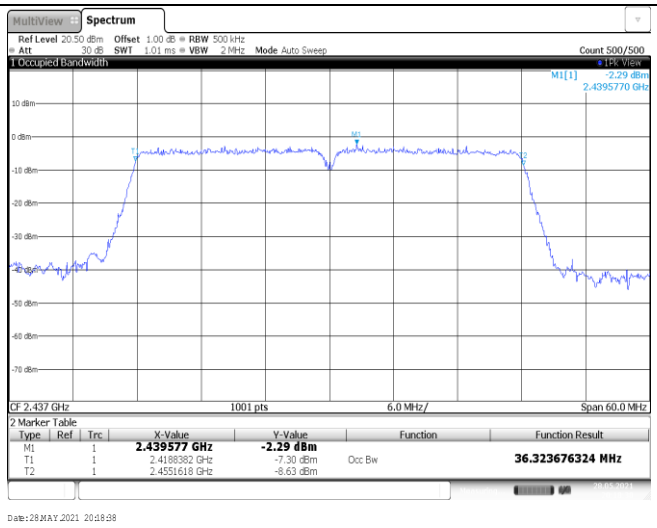
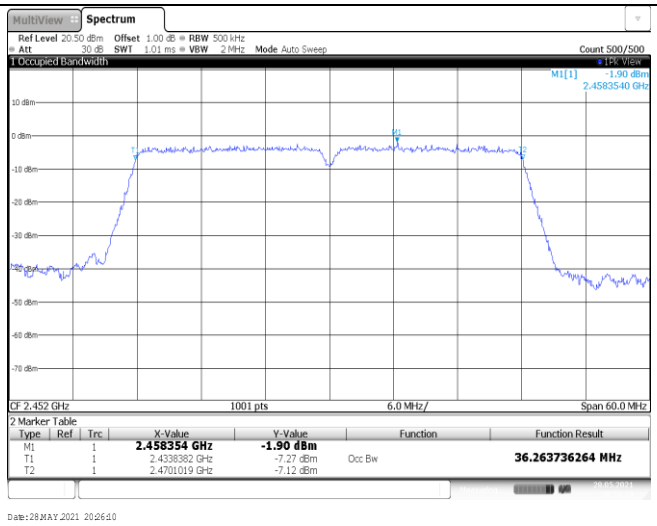
Appendix D：99% Occupied Bandwidth

Type	Channel	99% Bandwidth (MHz)	Limit (kHz)	Result
802.11b	01	12.41	-	Pass
	06	12.44		
	11	12.44		
802.11g	01	16.99	-	Pass
	06	17.02		
	11	16.99		
802.11n(HT20)	01	17.86	-	Pass
	06	17.92		
	11	17.89		
802.11n(HT40)	03	36.32	-	Pass
	06	36.32		
	09	36.26		

Type:	802.11 b
CH01	
CH06	
CH11	

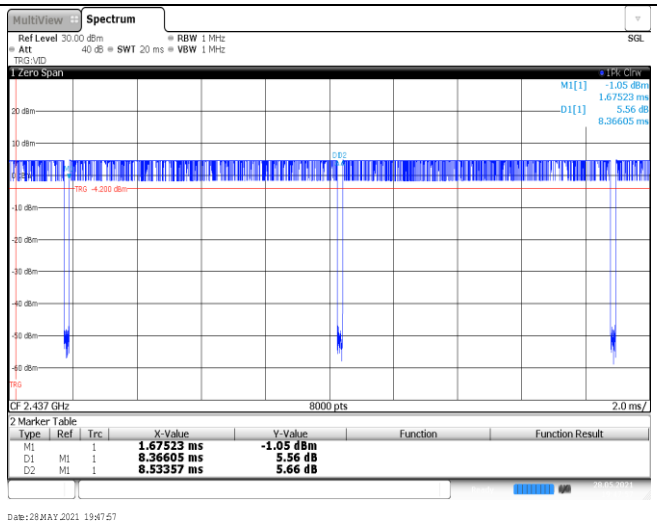
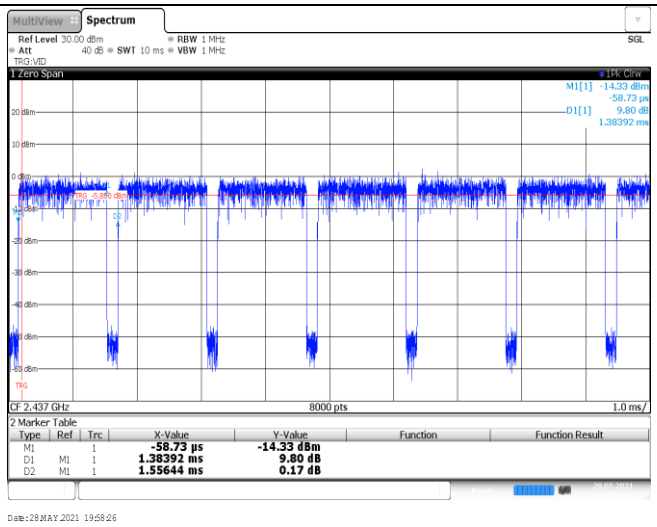
Type:	802.11 g
CH01	
CH06	
CH11	

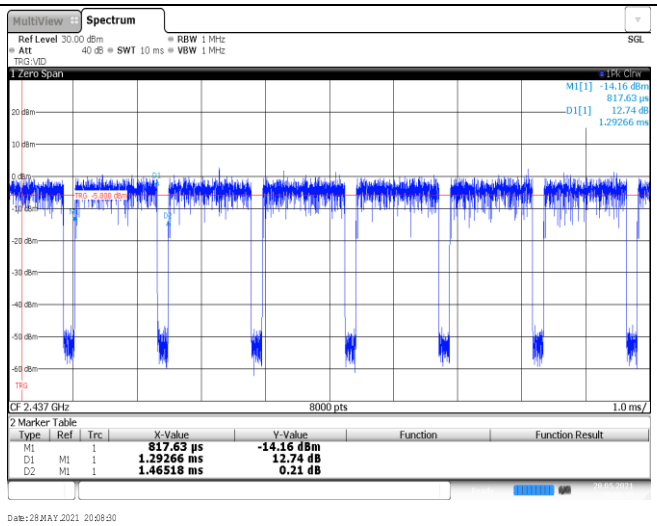
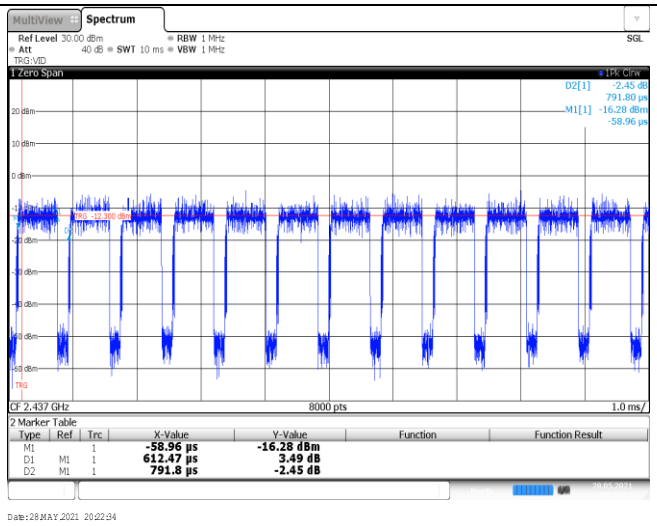
Type:	802.11n(HT20)
CH01	
CH06	
CH11	

Type:	802.11n(HT40)
CH03	
CH06	
CH09	

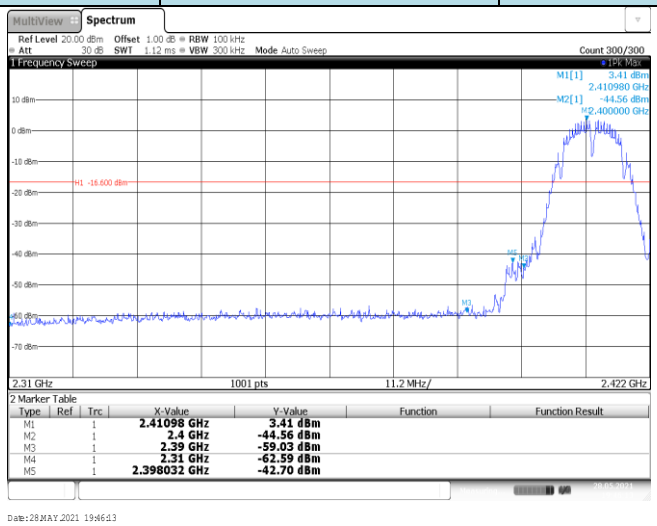
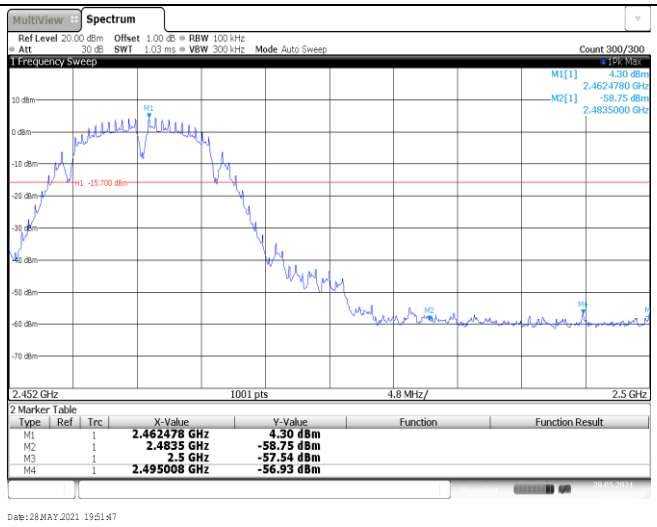
Appendix E：Duty Cycle

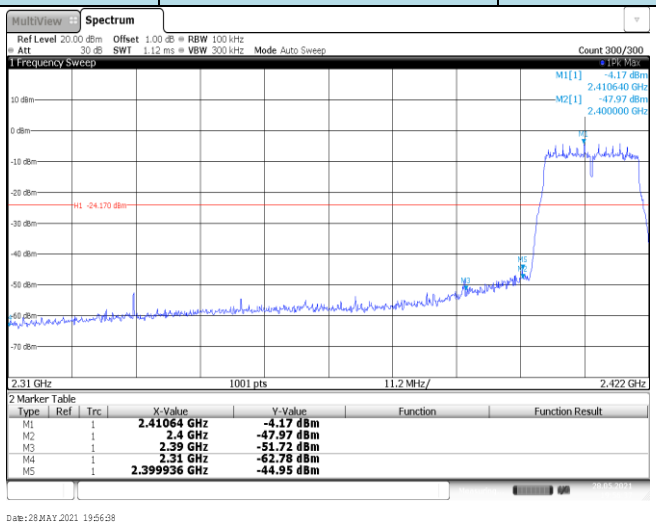
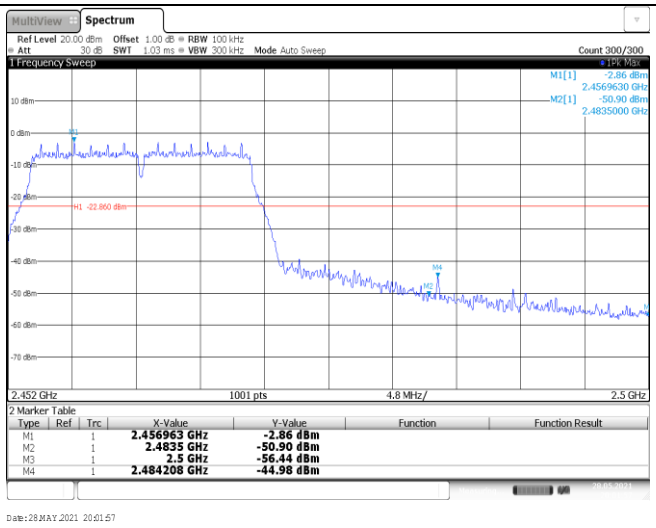
Modulation Type	Test Frequency（MHz）	$T_{on\ time}$ for single burst (ms)	T_{period} (ms)	Duty cycle	$1/T_{on\ time}$ (kHz)
11b	2437	8.37	8.53	98.1%	0.1
11g	2437	1.38	1.56	88.5%	0.7
11n20	2437	1.29	1.47	87.8%	0.8
11n40	2437	0.61	0.79	77.2%	1.6

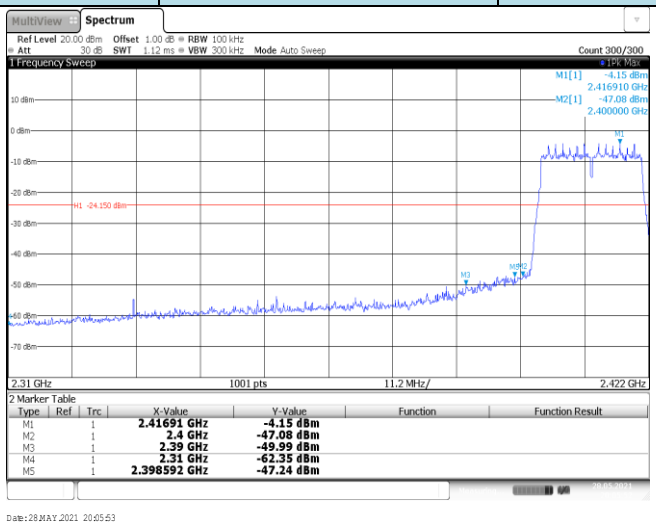
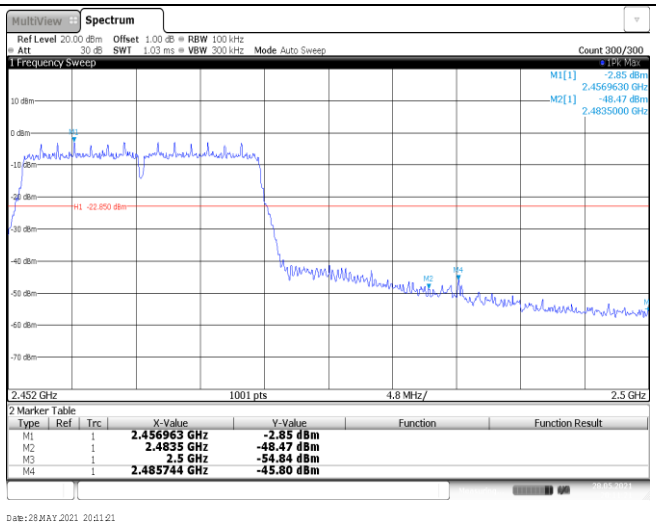
11b	
11g	

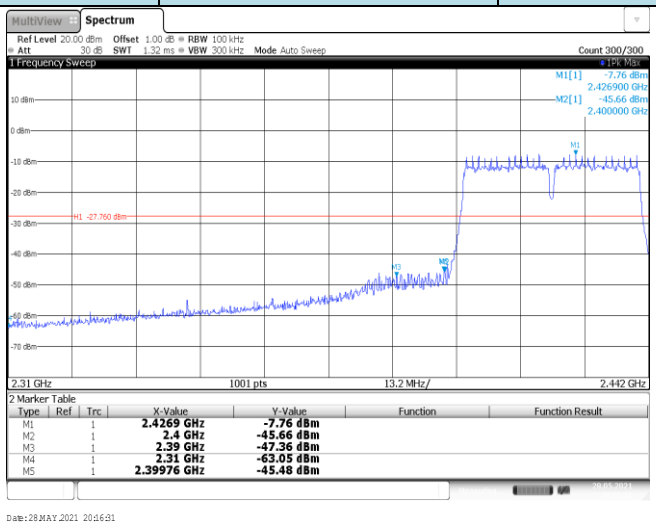
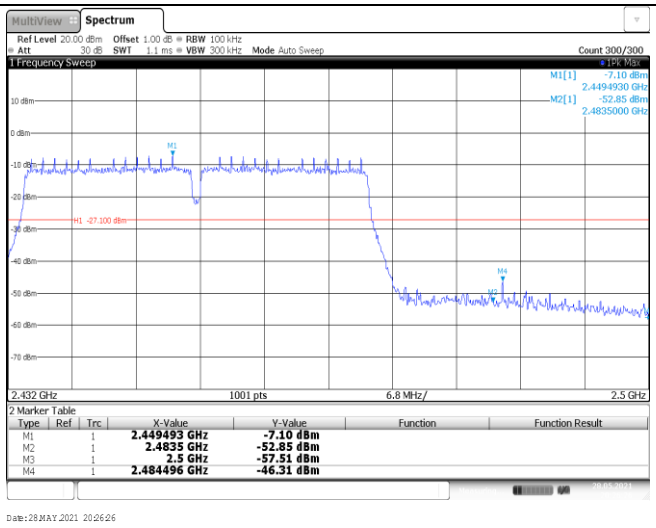
11n20	 MultiView Spectrum Ref Level 30.00 dBm RBW 1 MHz Att 40 dB SWT 10 ms VBW 1 MHz TRG:VID 1 Zero Span 1Pk Clrw M1[1] -14.16 dBm 817.63 µs D1[1] 12.74 dB 1.29266 ms CF 2.437 GHz 8000 pts 1.0 ms/ 2 Marker Table Type Ref Trc X-Value Y-Value Function Function Result M1 1 817.63 µs -14.16 dBm D1 M1 1 1.29266 ms 12.74 dB D2 M1 1 1.46518 ms 0.21 dB Date:28.MAY.2021 20:08:30
11n40	 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 D2[1] -2.45 dB 791.80 µs M1[1] -16.28 dBm -58.96 µs CF 2.437 GHz 8000 pts 1.0 ms/ 2 Marker Table Type Ref Trc X-Value Y-Value Function Function Result M1 1 -58.96 µs -16.28 dBm D1 M1 1 612.47 µs 3.49 dB D2 M1 1 791.8 µs -2.45 dB Date:28.MAY.2021 20:22:34

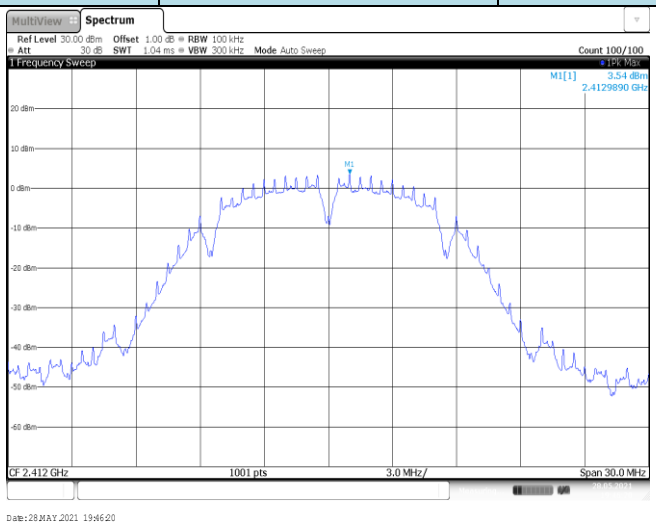
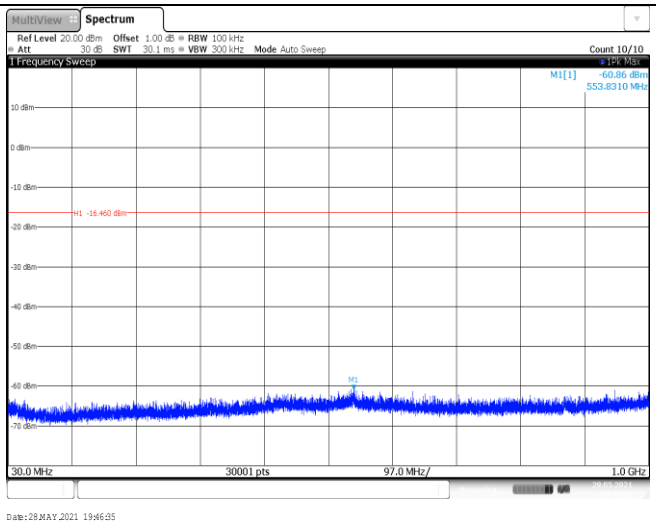
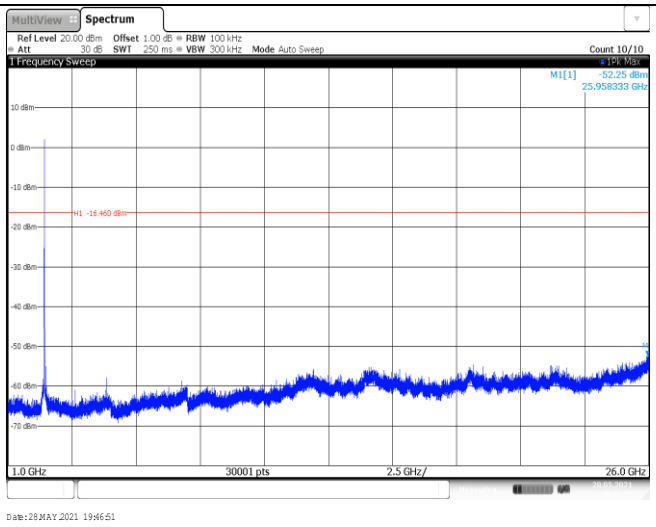
Appendix F：Band edge and Spurious Emissions (conducted)

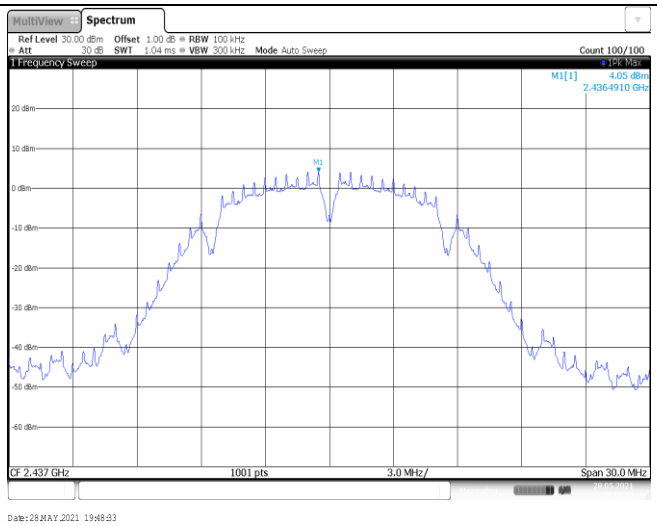
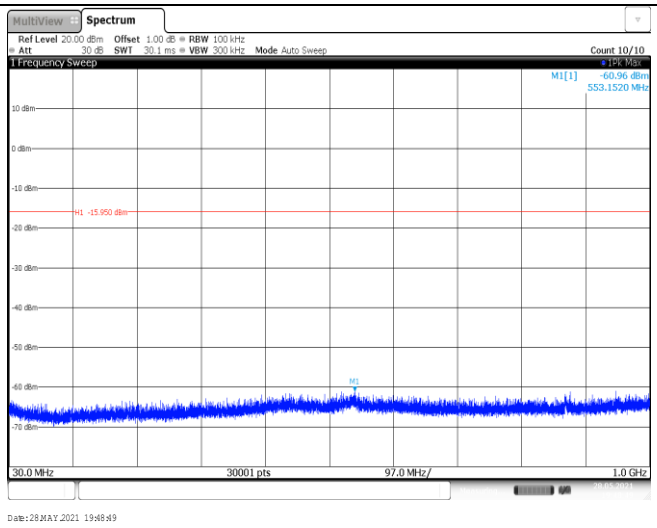
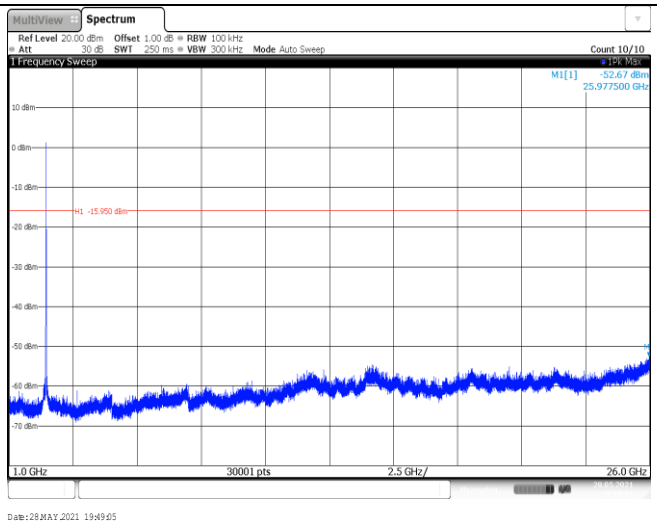
Test Item:	Bandedge	Type:	802.11 b
CH01			
CH11			

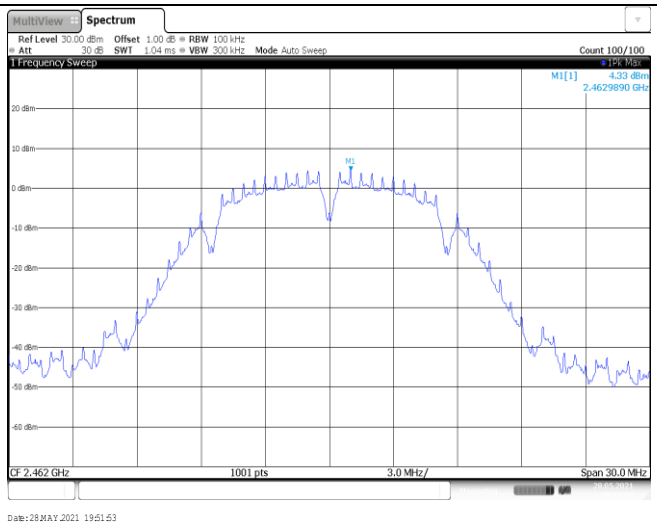
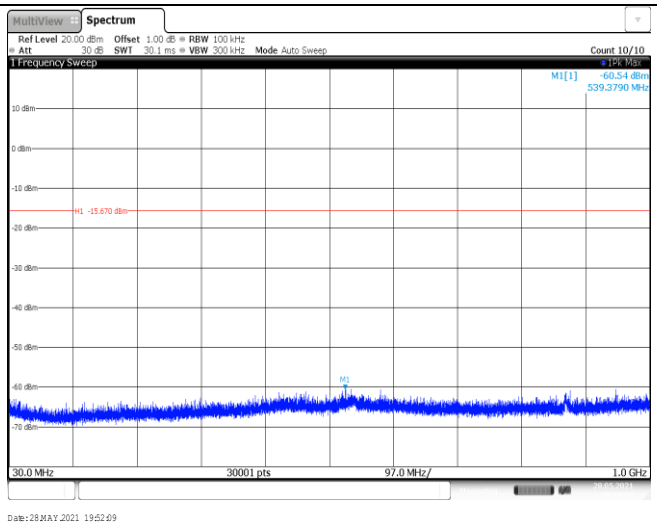
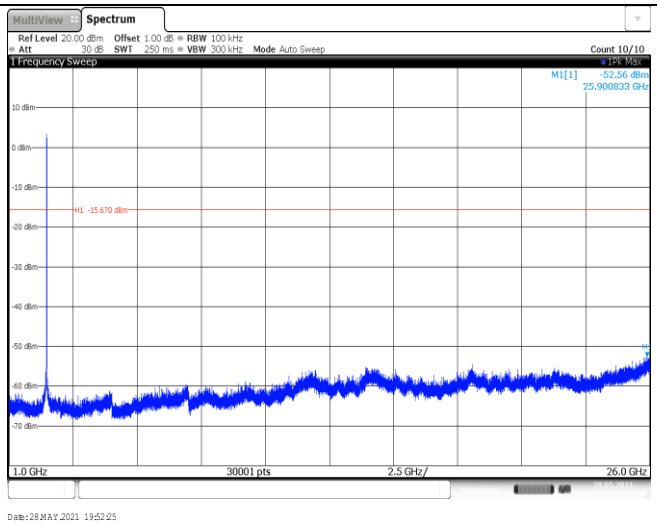
Test Item:	Bandedge	Type:	802.11 g
CH01			
CH11			

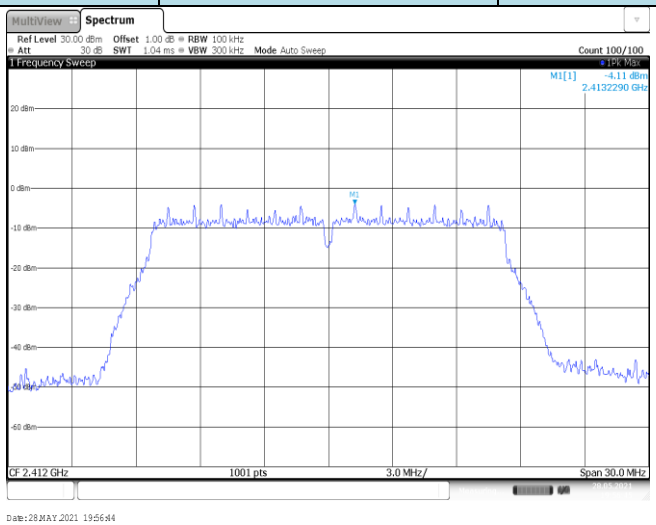
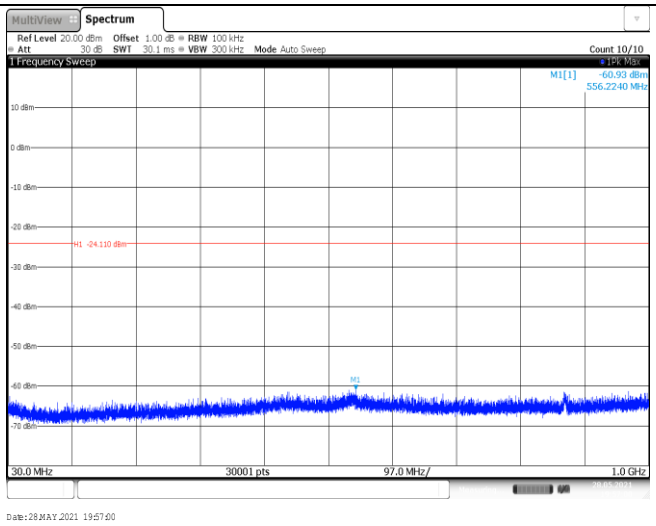
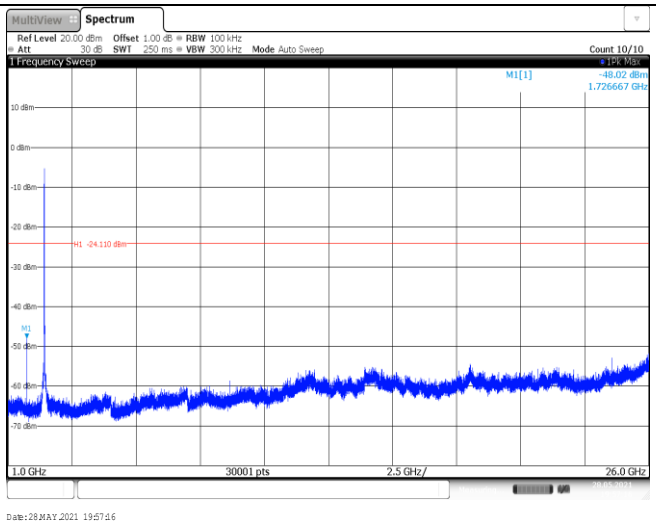
Test Item:	Bandedge	Type:	802.11 n(HT20)
CH01			
CH11			

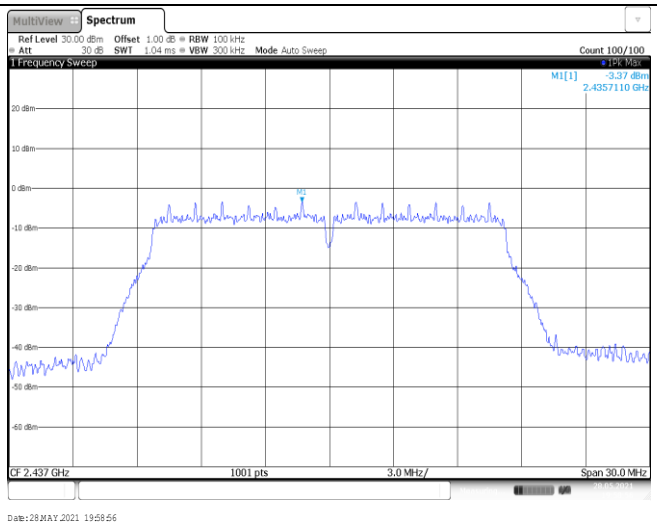
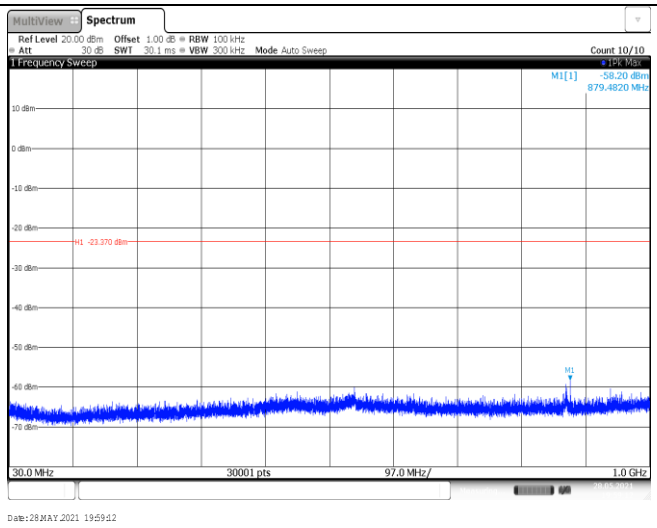
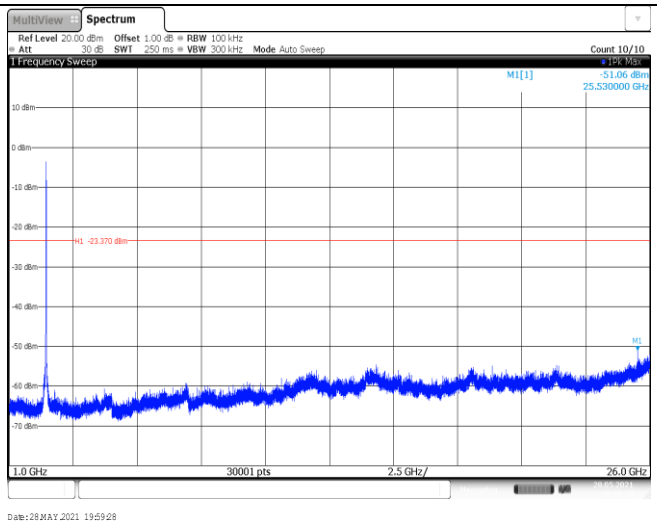
Test Item:	Bandedge	Type:	802.11 n(HT40)
CH03			
CH09			

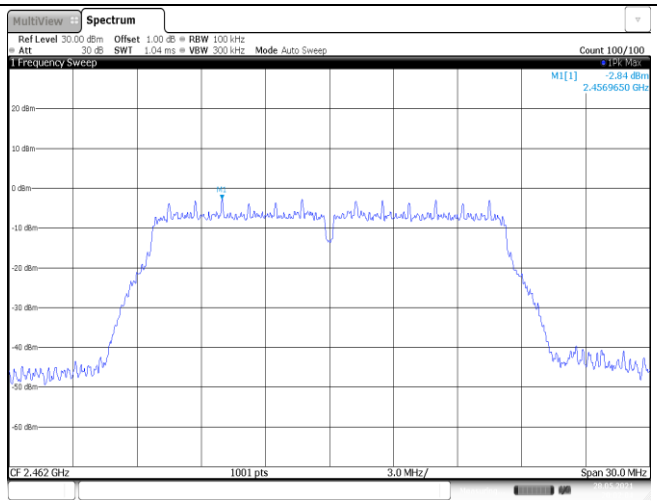
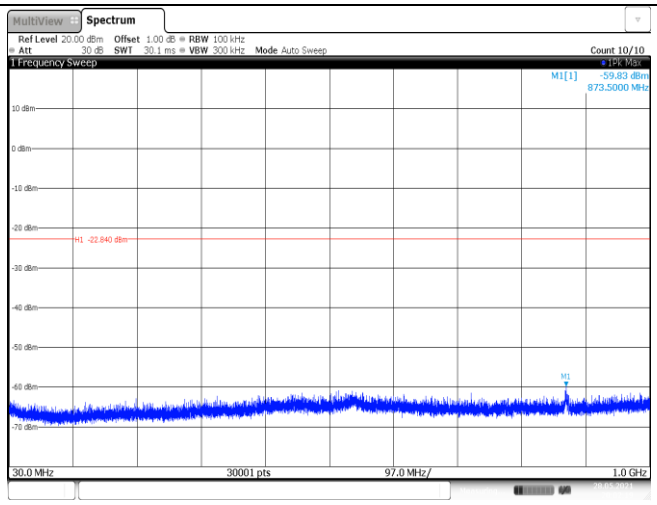
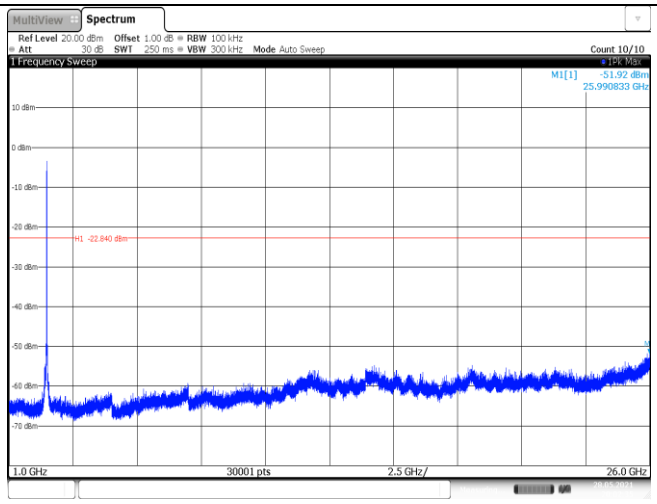
Test Item:	SE	Type:	802.11b
CH01 Reference level	
CH01 30MHz~1000MHz	
CH01 1GHz~26GHz	

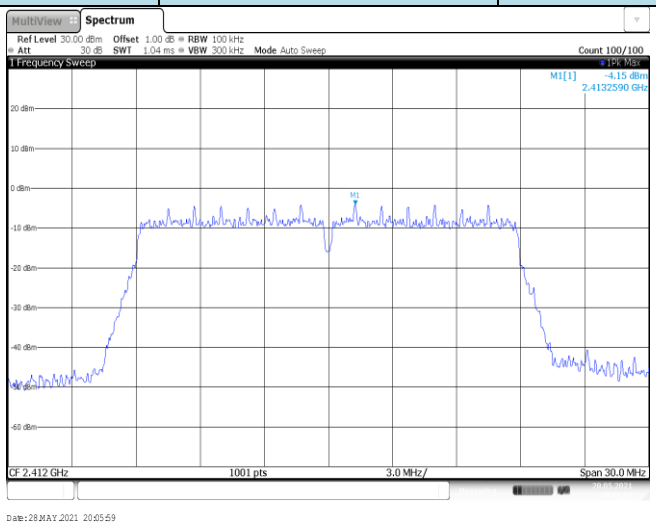
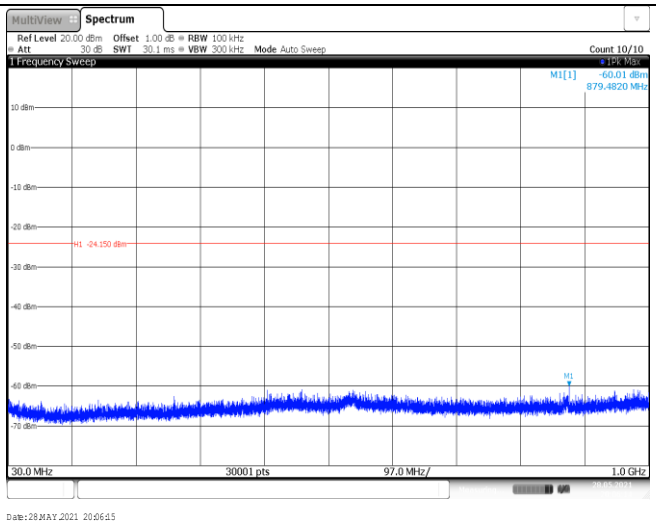
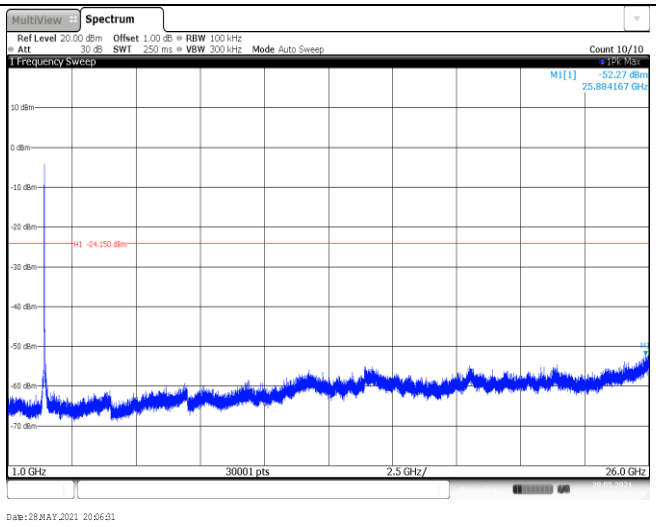
CH06 Reference level	
CH06 30MHz~1000MHz	
CH06 1GHz~26GHz	

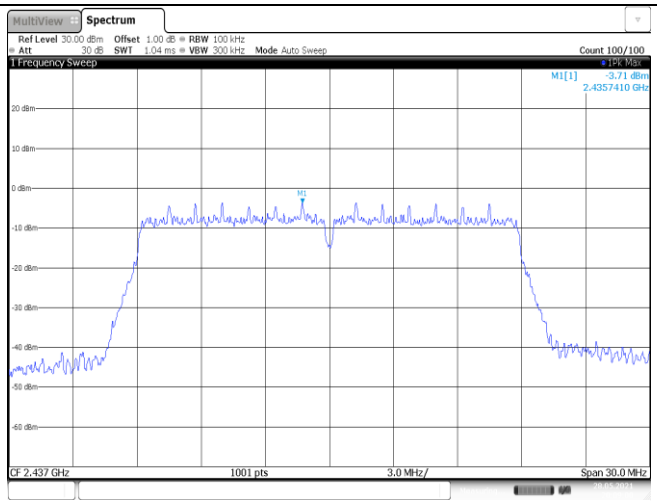
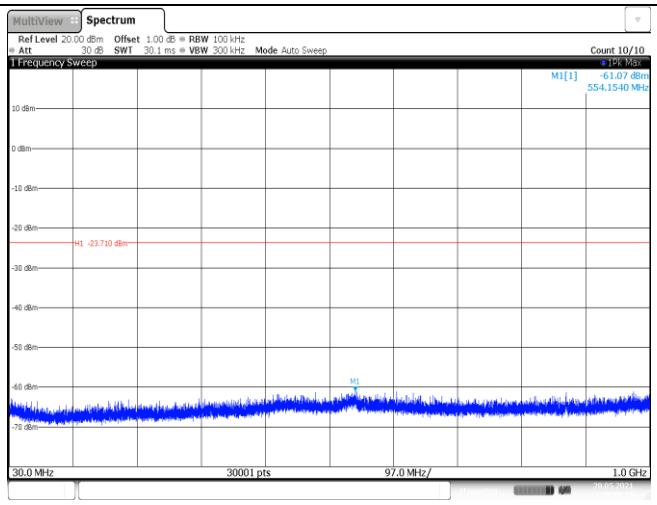
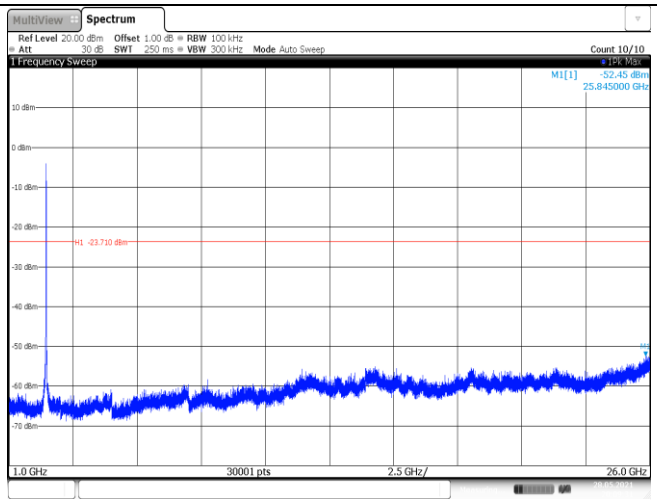
CH11 Reference level	
CH11 30MHz~1000MHz	
CH11 1GHz~26GHz	

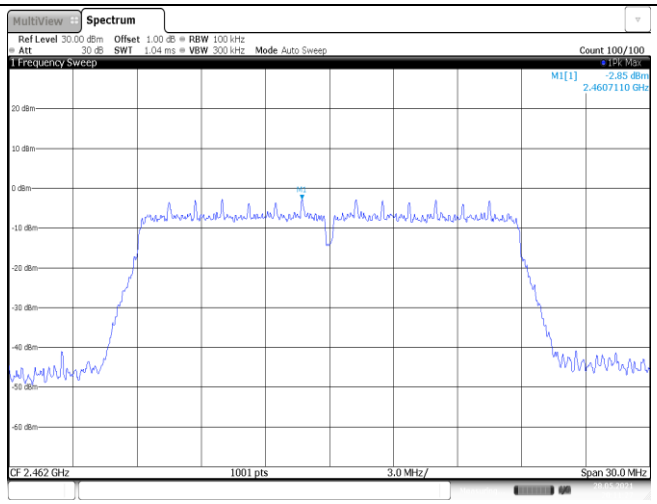
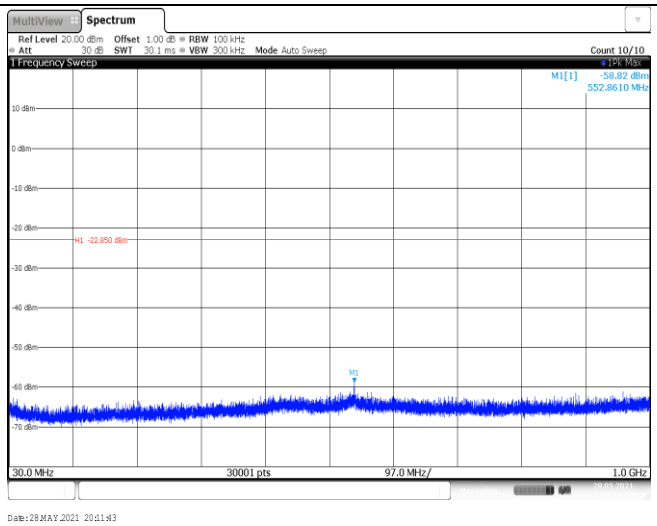
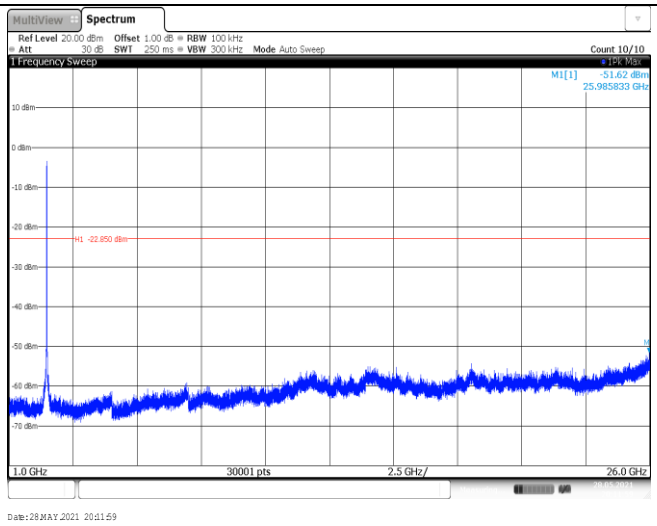
Test Item:	SE	Type:	802.11g
CH01 Reference level			
CH01 30MHz~1000MHz			
CH01 1GHz~26GHz			

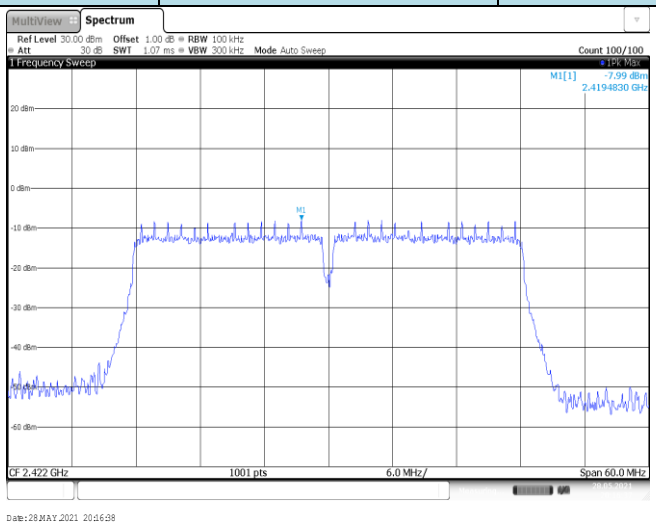
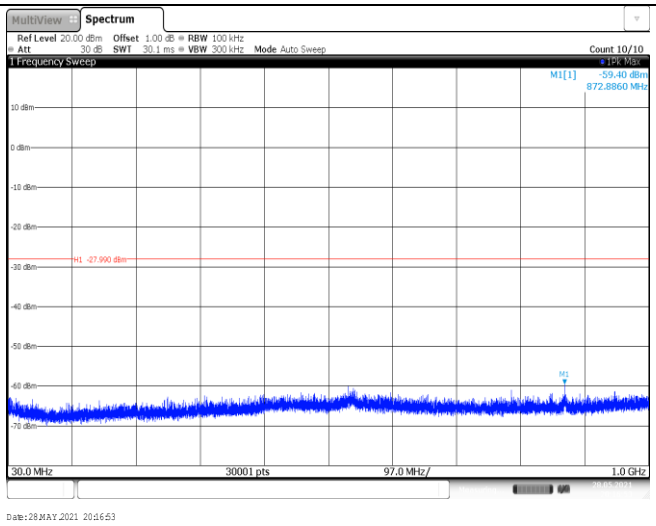
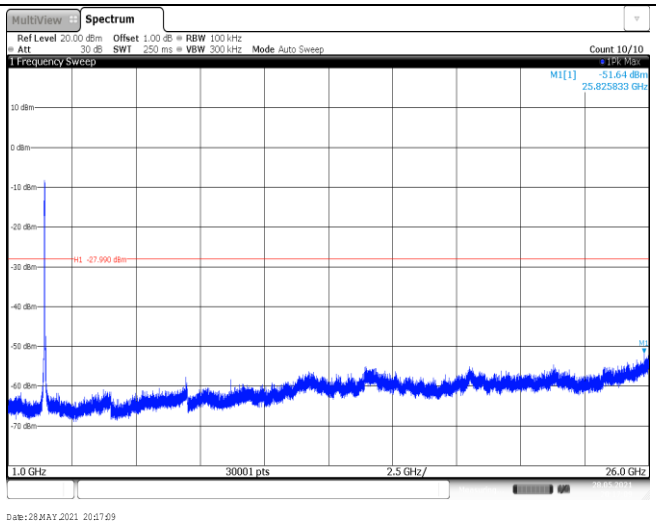
CH06 Reference level	
CH06 30MHz~1000MHz	
CH06 1GHz~26GHz	

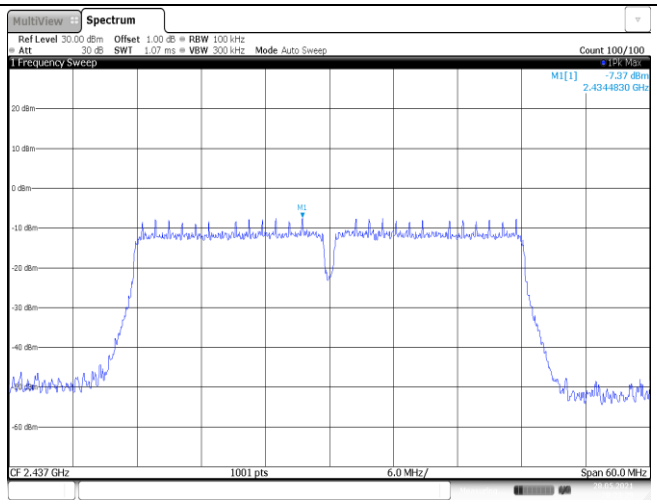
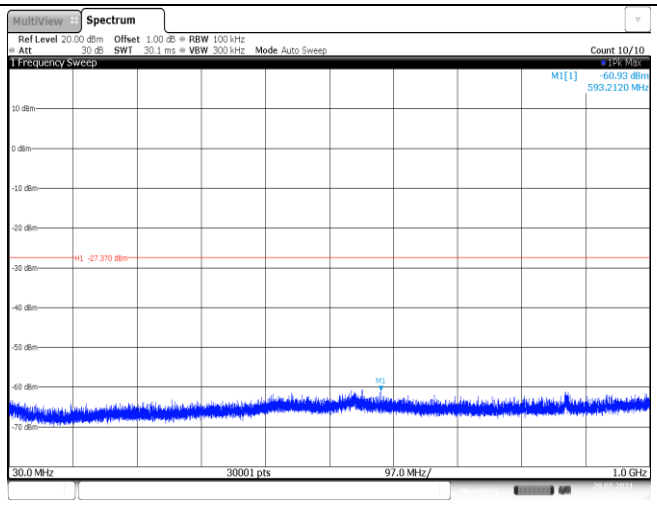
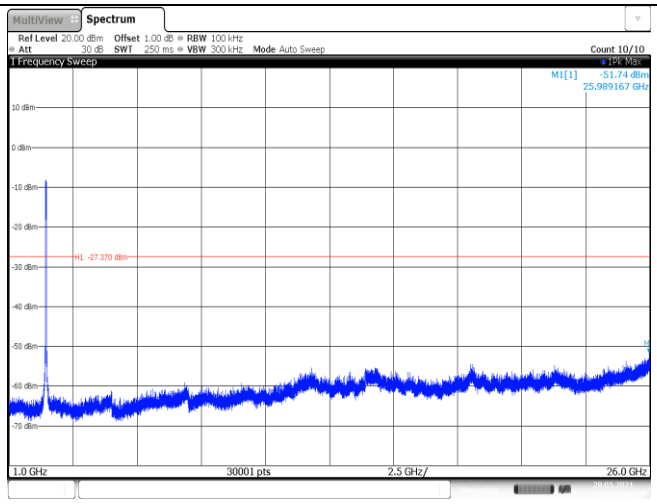
CH11 Reference level	
CH11 30MHz~1000MHz	
CH11 1GHz~26GHz	

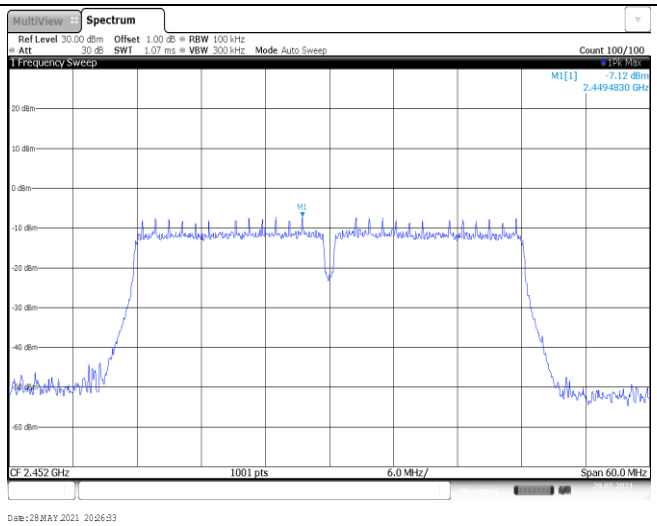
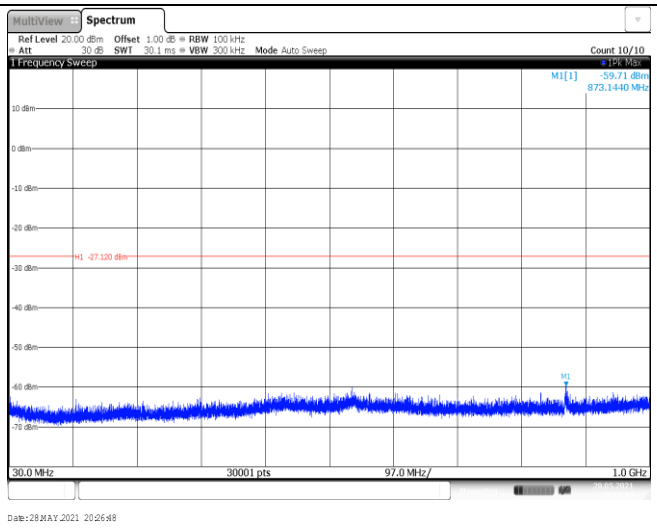
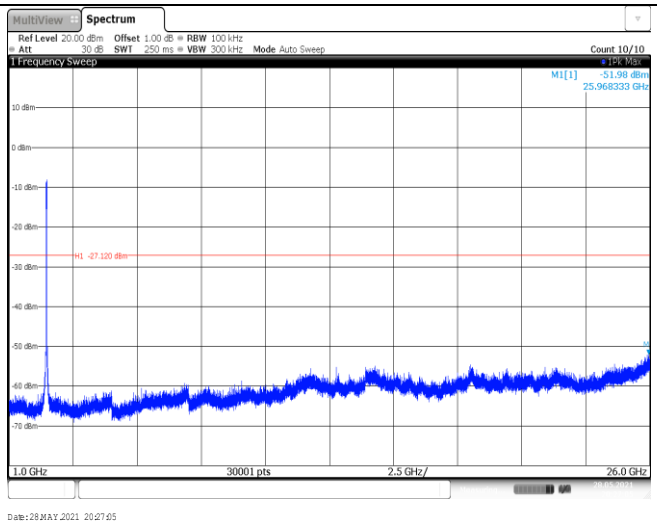
Test Item:	SE	Type:	802.11n(HT20)
CH01 Reference level			
CH01 30MHz~1000MHz			
CH01 1GHz~26GHz			

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

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

Test Item:	SE	Type:	802.11n(HT40)
CH03 Reference level			
CH03 30MHz~1000MHz			
CH03 1GHz~26GHz			

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

CH09 Reference level	
CH09 30MHz~1000MHz	
CH09 1GHz~26GHz	

--------End of Report--------