APPENDIX REPORT

Project No.	SHT2101044701EW	Radio Specification	WIFI 2.4G
Test sample No.	YPHT202101447001	Model No.	ARC80
Start test date	2021-01-28	Finish date	2021-01-28
Temperature	23.9°C	Humidity	33%
Test Engineer	Hailey Chen	Auditor	Xiaodong Zhao

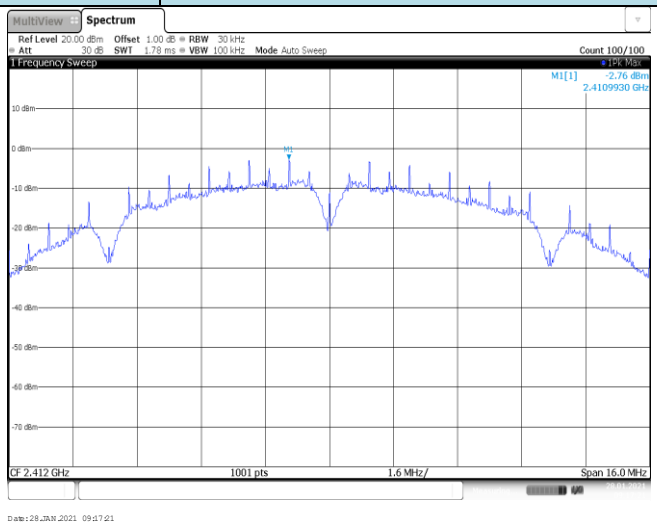
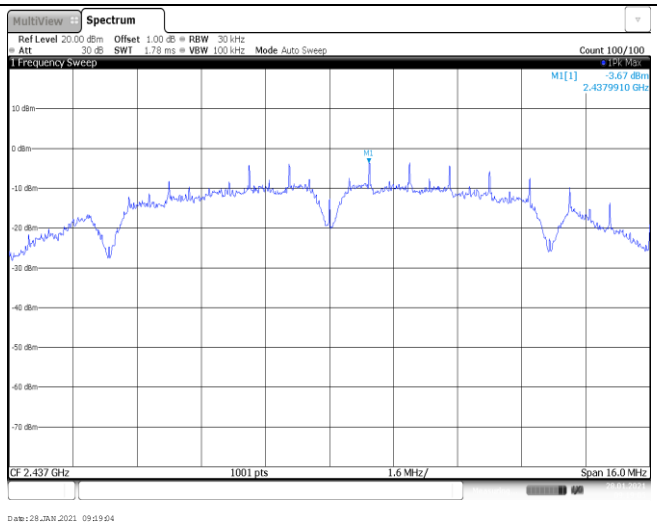
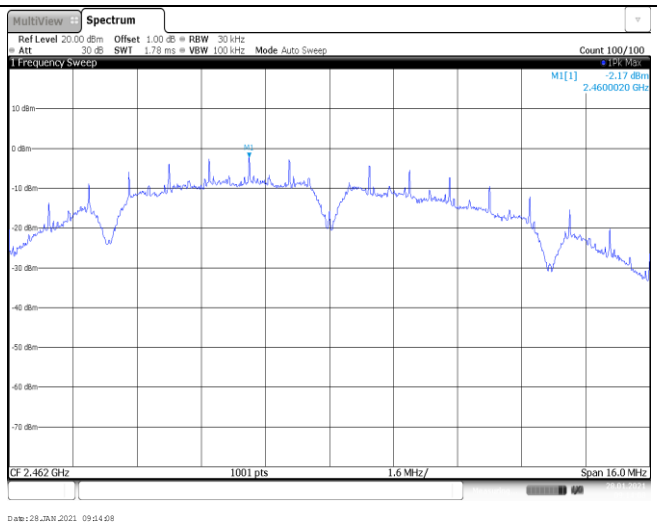
Appendix clause	Test item	Result
A	Conducted Peak Output Power	PASS
B	Power Spectral Density	PASS
C	6 dB Bandwidth	PASS
D	99% Occupied Bandwidth	PASS
E	Duty Cycle	PASS
F	Band edge and Spurious Emissions (conducted)	PASS

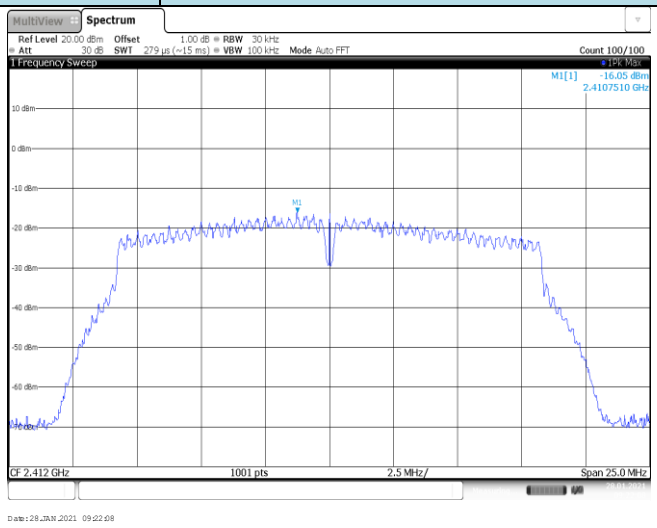
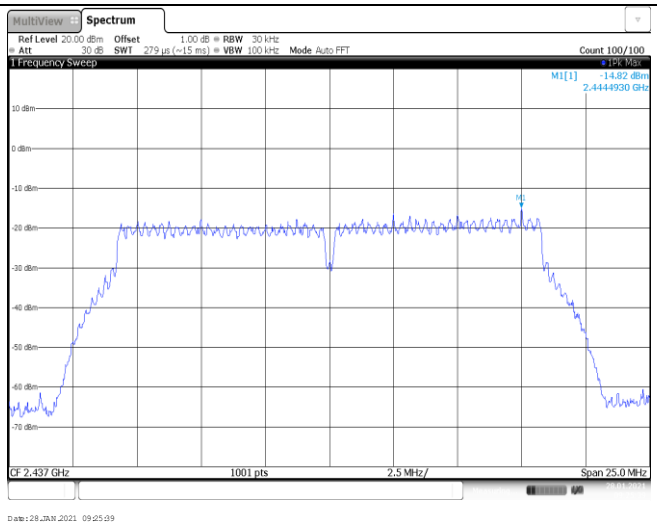
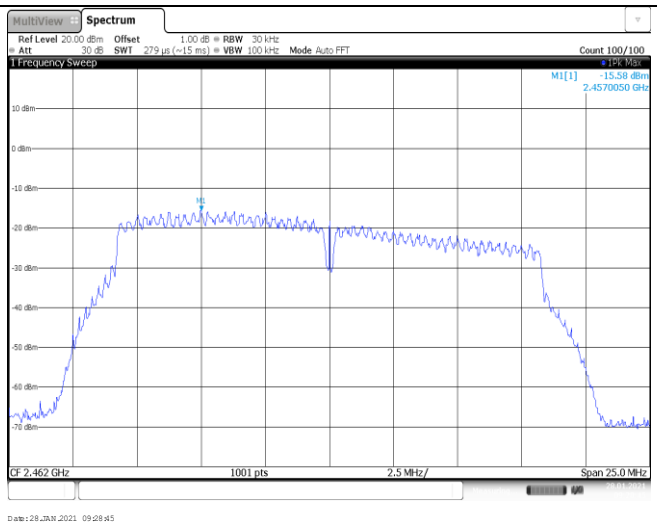
Appendix A: Conducted Peak Output Power

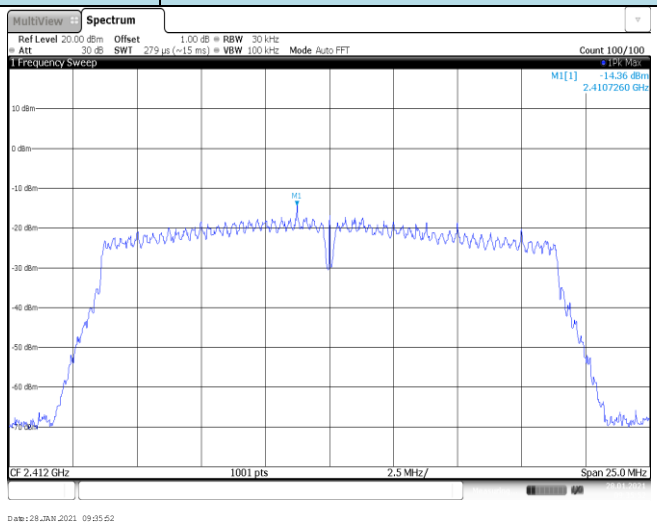
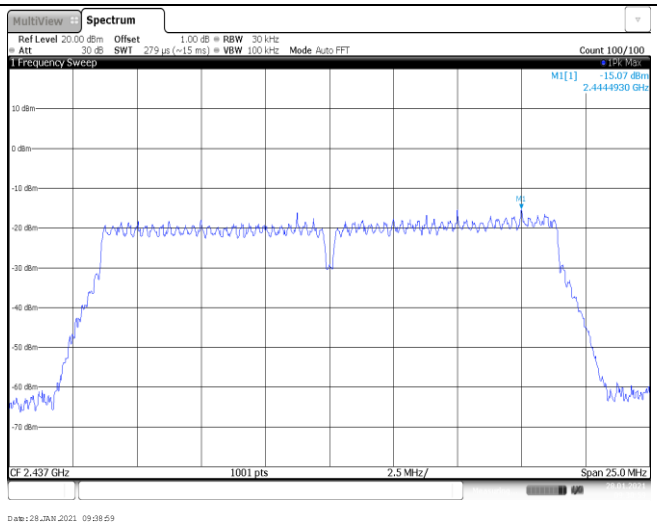
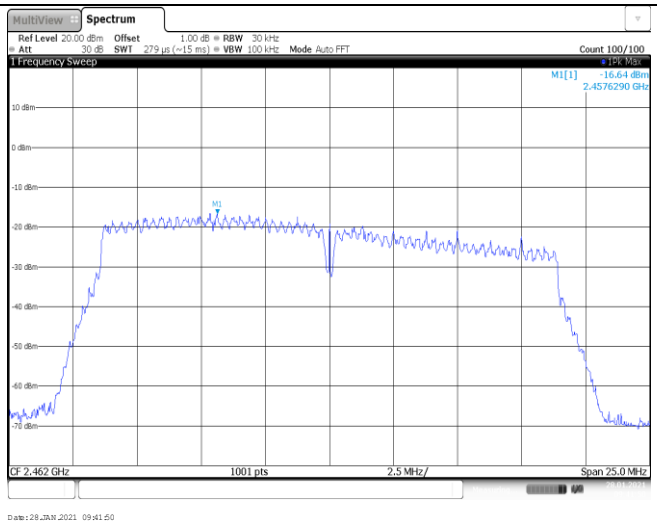
Type	Channel	Peak Output power (dBm)	Average Output power (dBm)	Limit (dBm)	Result
802.11b	01	8.01	5.80	≤ 30.00	Pass
	06	8.52	6.13		
	11	8.39	5.92		
802.11g	01	8.07	5.58	≤ 30.00	Pass
	06	8.75	6.45		
	11	8.17	5.66		
802.11n (HT20)	01	8.07	5.59	≤ 30.00	Pass
	06	8.62	6.02		
	11	8.09	5.47		
802.11n(HT40)	03	8.15	5.69	≤ 30.00	Pass
	06	8.49	6.17		
	09	8.21	5.78		

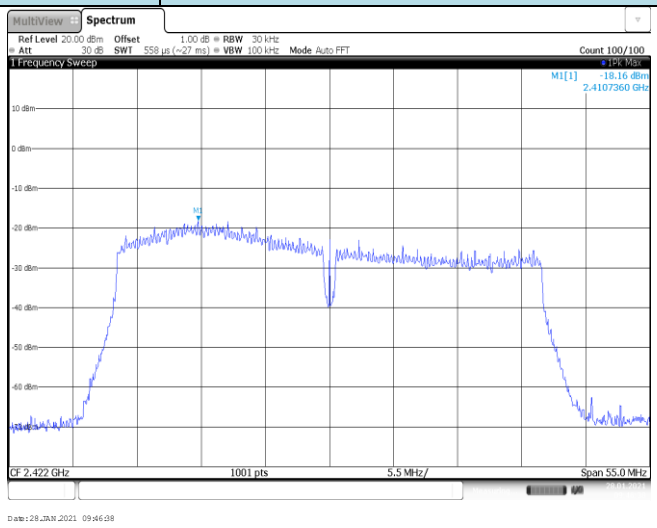
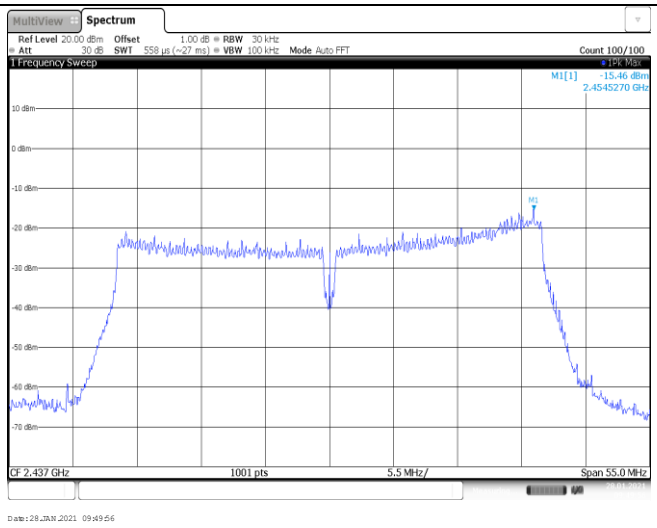
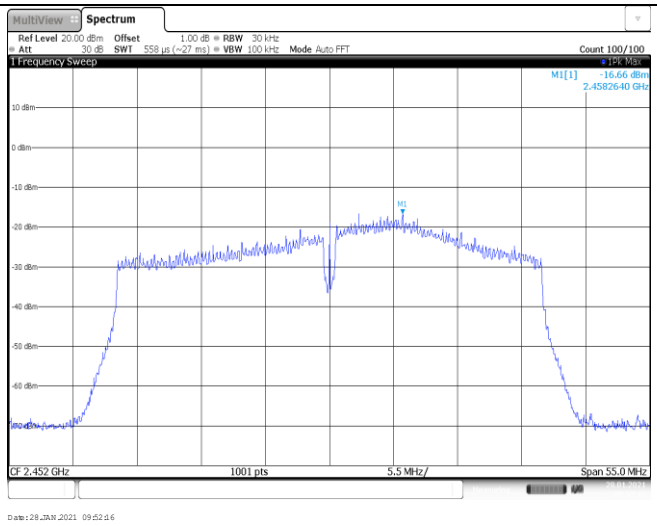
Appendix B：Power Spectral Density

Type	Channel	Power Spectral Density (dBm/30KHz)	Limit (dBm/3KHz)	Result
802.11b	01	-2.76	≤8.00	Pass
	06	-3.67		
	11	-2.17		
802.11g	01	-16.05	≤8.00	Pass
	06	-14.82		
	11	-15.58		
802.11n(HT20)	01	-14.36	≤8.00	Pass
	06	-15.07		
	11	-16.64		
802.11n(HT40)	03	-18.16	≤8.00	Pass
	06	-15.46		
	09	-16.66		

Type:	802.11 b
CH01	
CH06	
CH11	

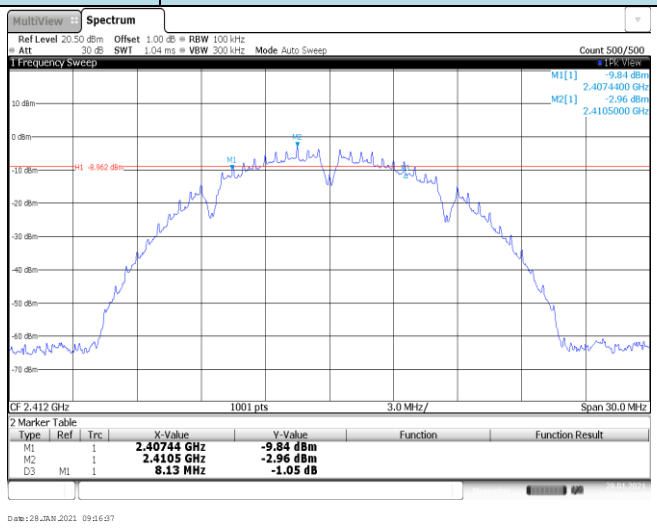
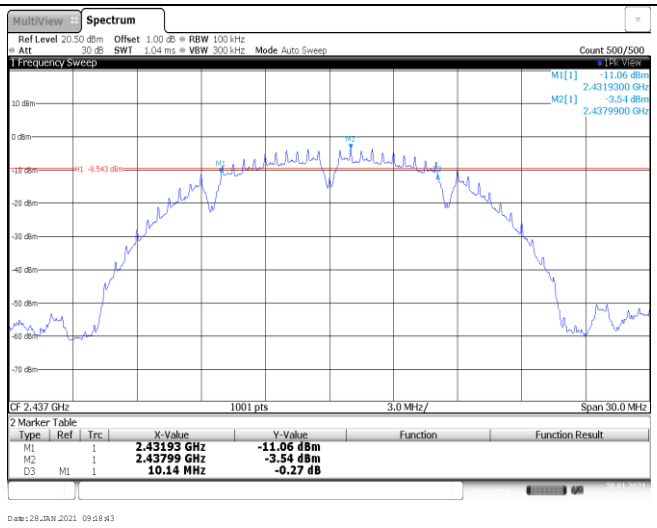
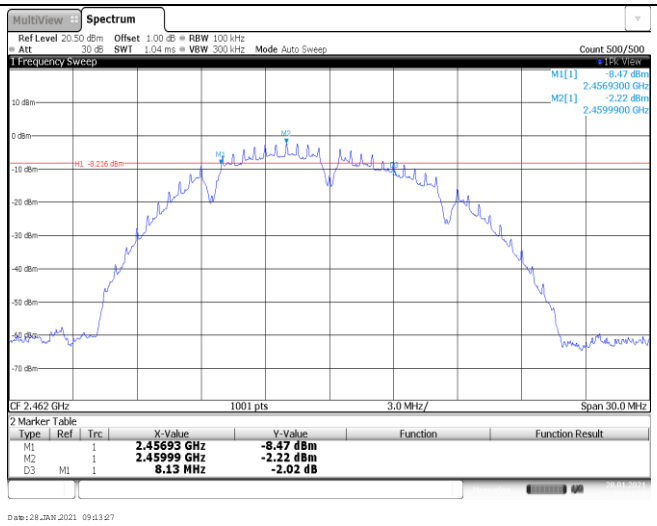
Type:	802.11 g
CH01	
CH06	
CH11	

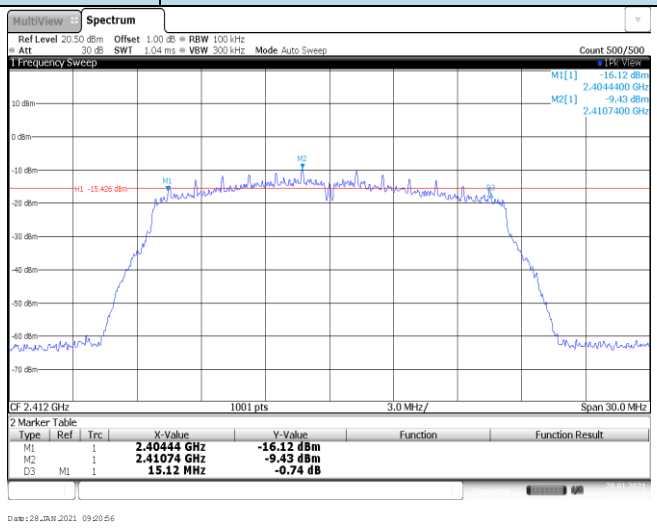
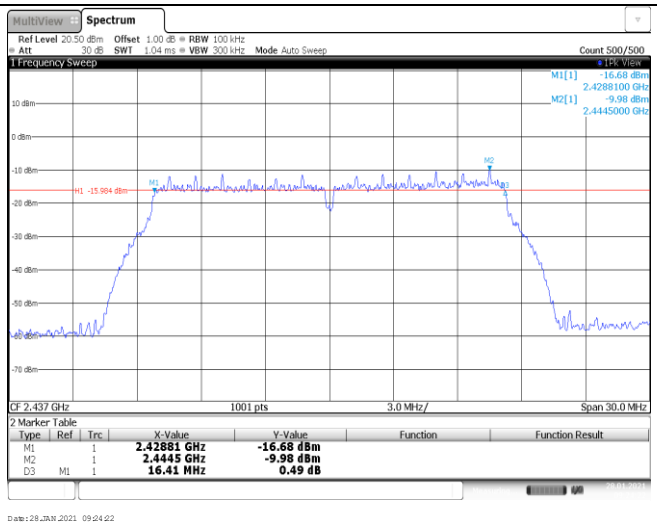
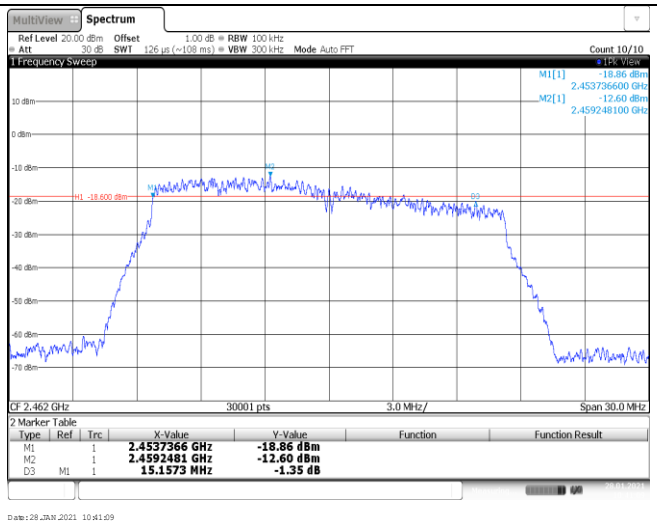
Type:	802.11n(HT20)
CH01	
CH06	
CH11	

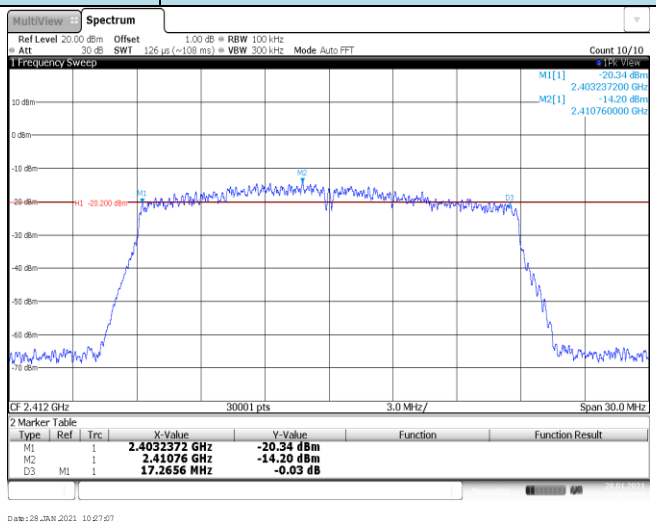
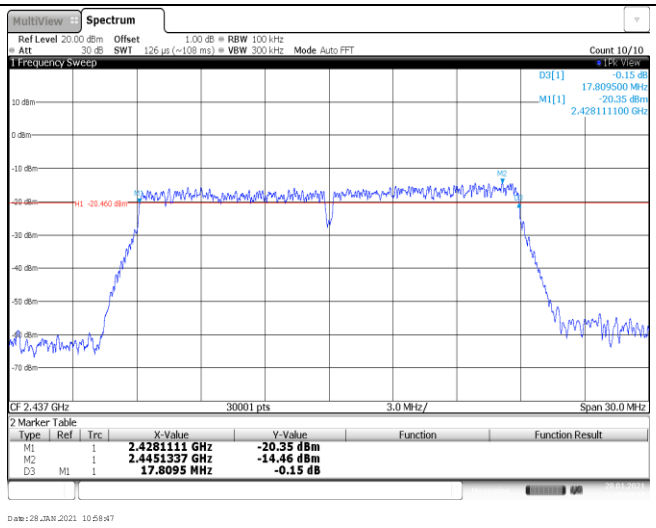
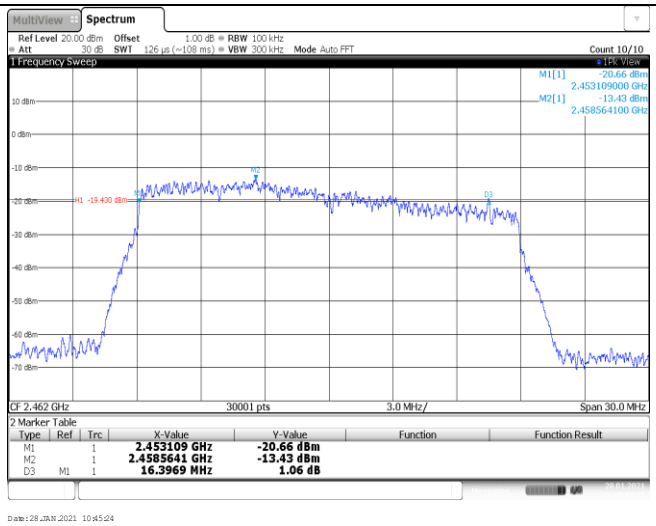
Type:	802.11n(HT40)
CH03	
CH06	
CH09	

Appendix C：6dB bandwidth

Type	Channel	6dB Bandwidth (MHz)	Limit (MHz)	Result
802.11b	01	8.13	≥0.5	Pass
	06	10.14		
	11	8.13		
802.11g	01	15.12	≥0.5	Pass
	06	16.41		
	11	15.16		
802.11n(HT20)	01	17.27	≥0.5	Pass
	06	17.81		
	11	16.40		
802.11n(HT40)	03	35.01	≥0.5	Pass
	06	35.80		
	09	30.05		

Type:	802.11 b
CH01	
CH06	
CH11	

Type:	802.11 g
CH01	
CH06	
CH11	

Type:	802.11n(HT20)
CH01	
CH06	
CH11	

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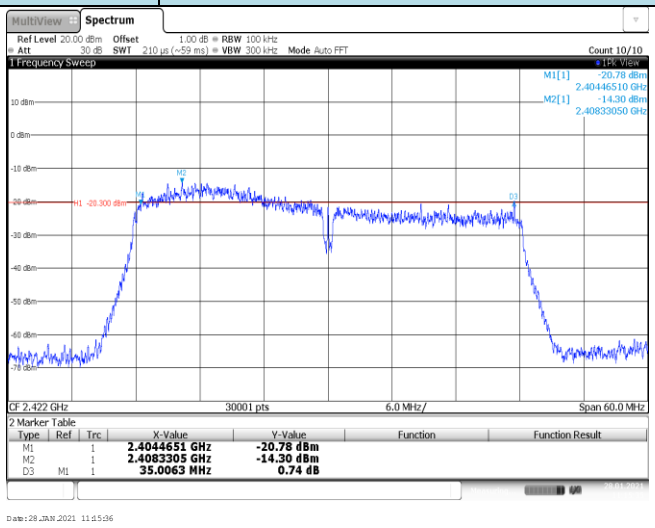
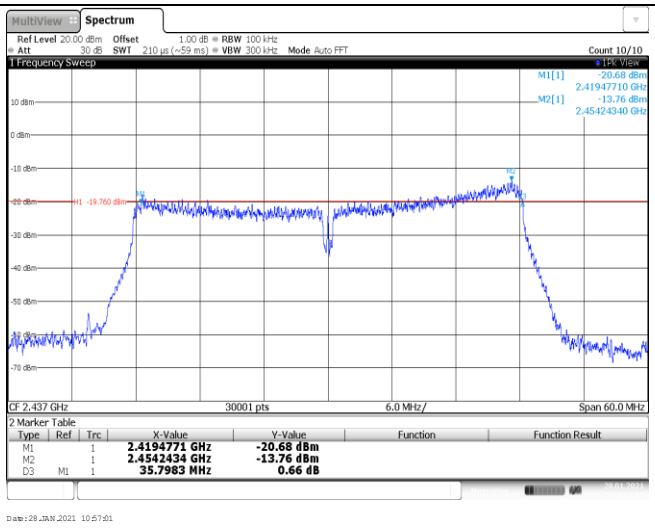
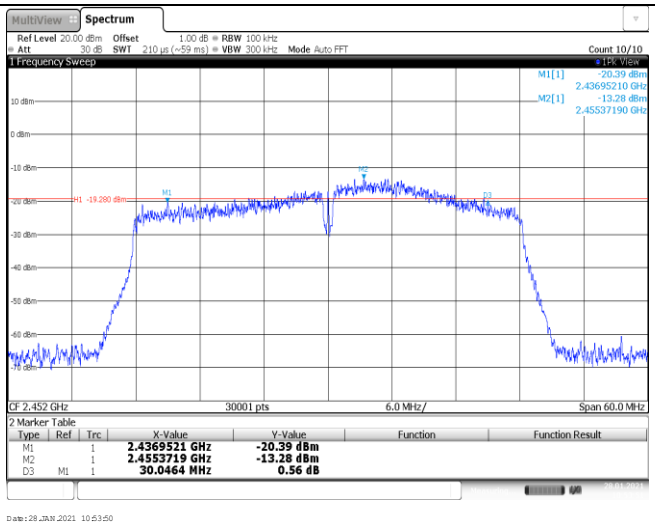
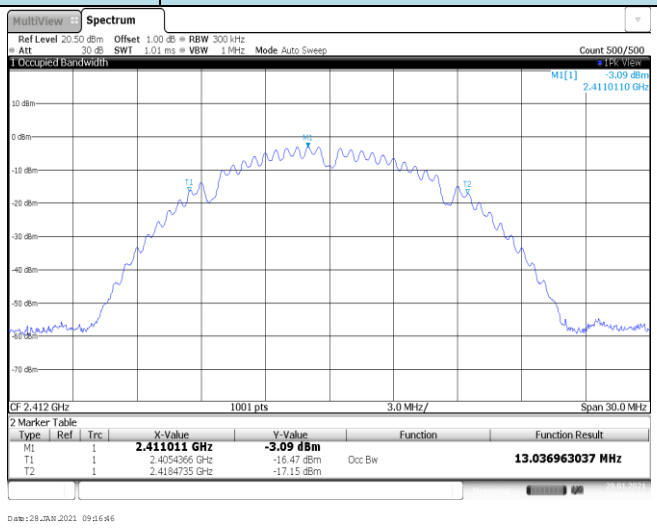
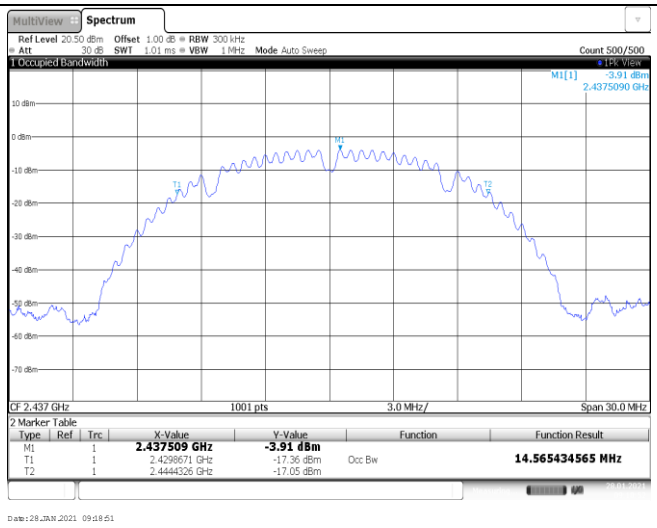
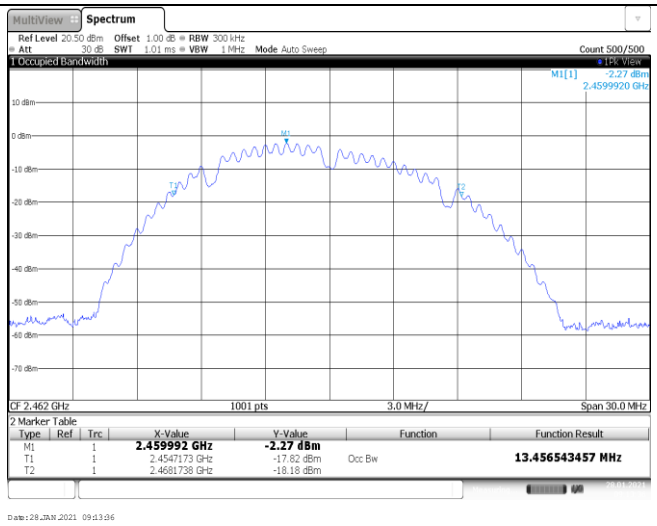
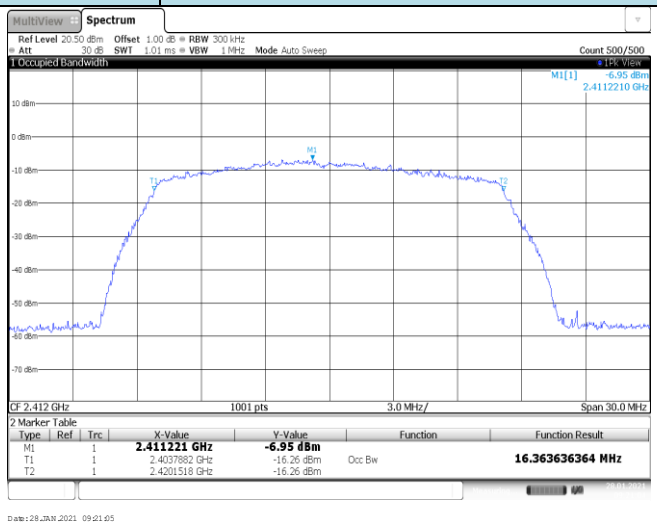
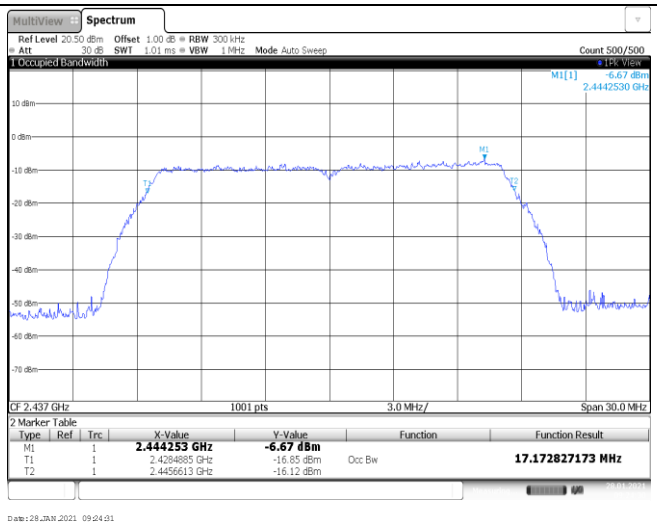
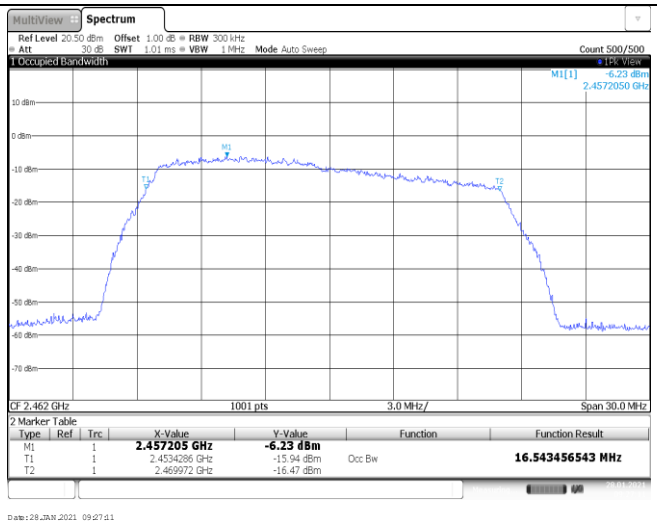
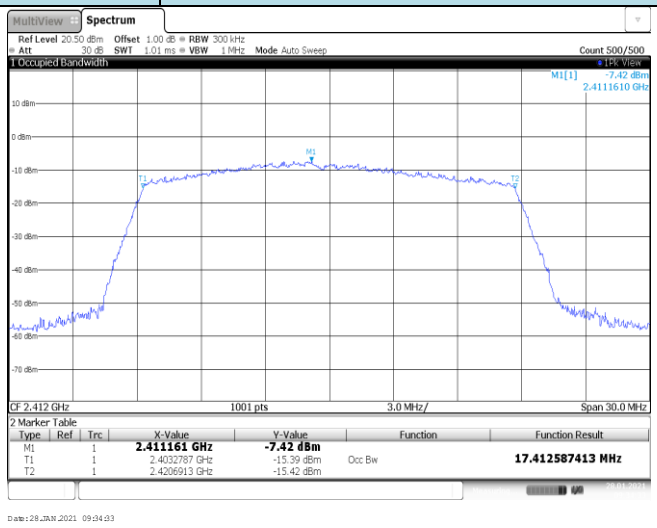
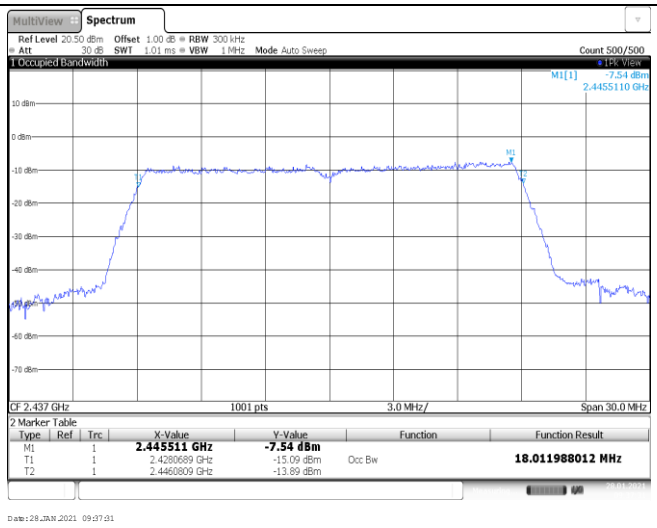
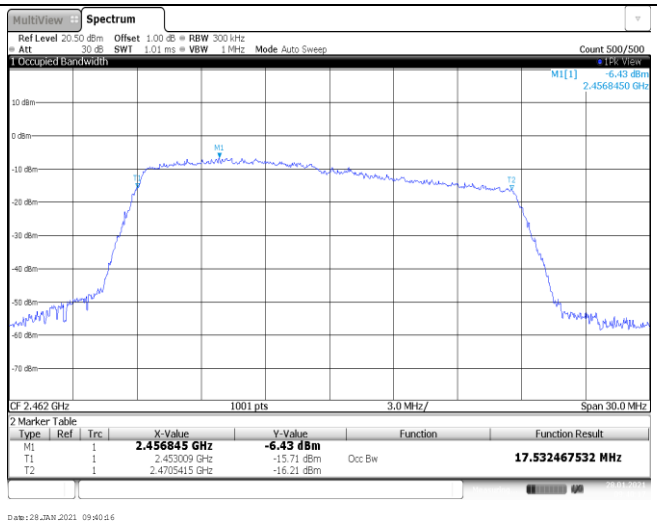
CH03	
CH06	
CH09	

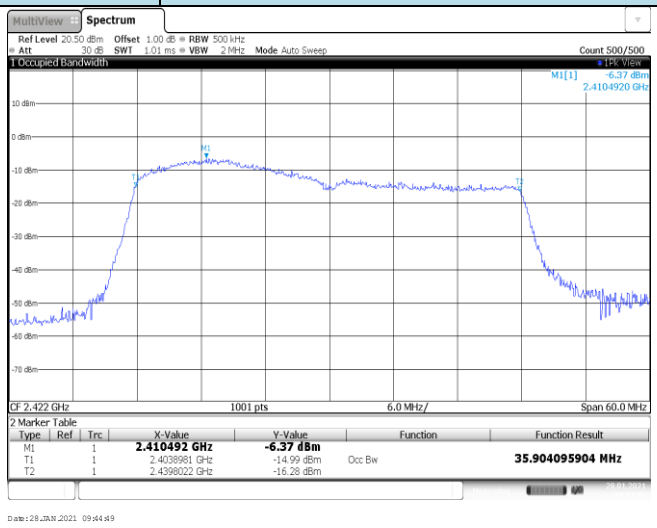
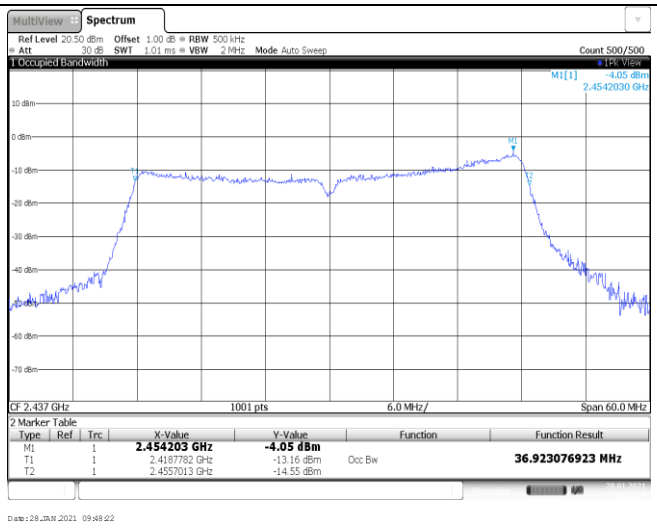
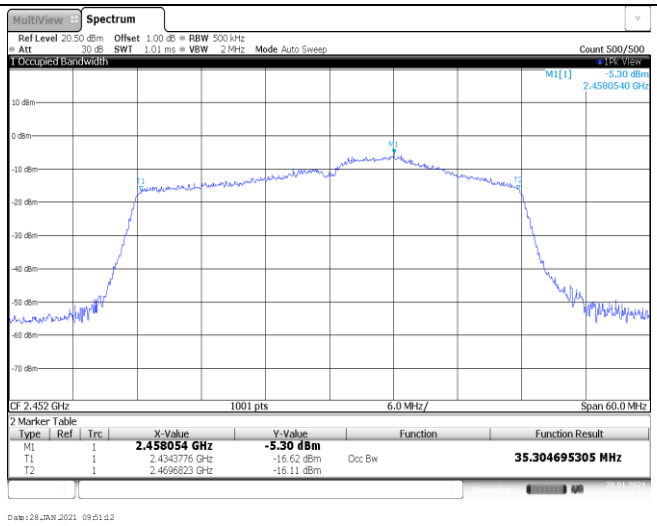
Appendix D：99% Occupied Bandwidth

Type	Channel	99% Bandwidth (MHz)	Limit (kHz)	Result
802.11b	01	13.04	-	Pass
	06	14.57		
	11	13.46		
802.11g	01	16.36	-	Pass
	06	17.17		
	11	16.54		
802.11n(HT20)	01	17.41	-	Pass
	06	18.01		
	11	17.53		
802.11n(HT40)	03	35.90	-	Pass
	06	36.92		
	09	35.30		

Type:	802.11 b
CH01	
CH06	
CH11	

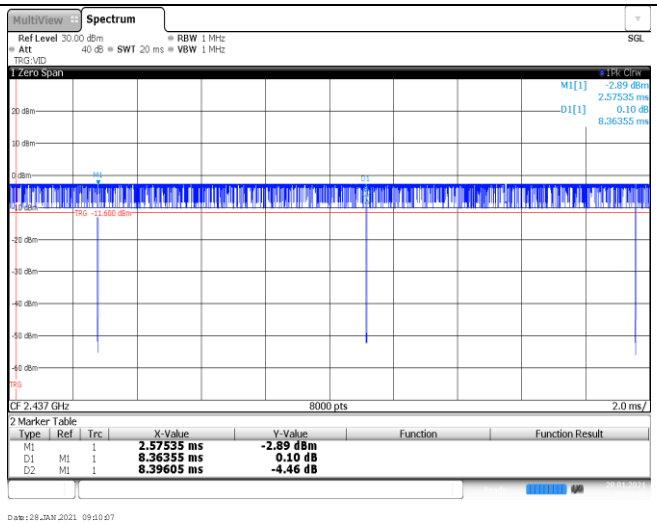
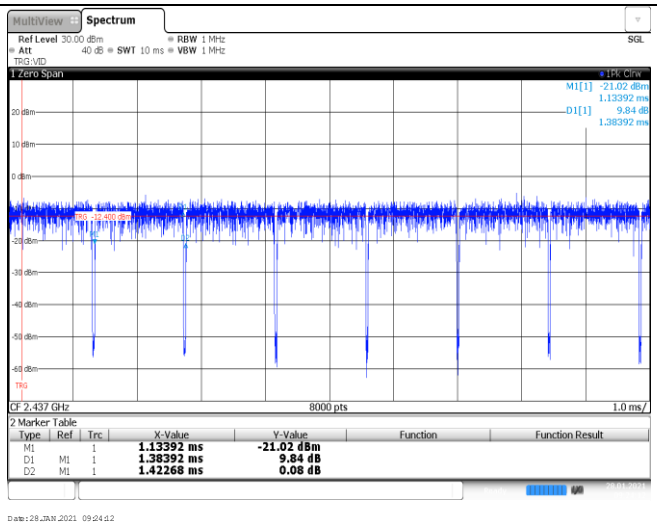
Type:	802.11 g
CH01	
CH06	
CH11	

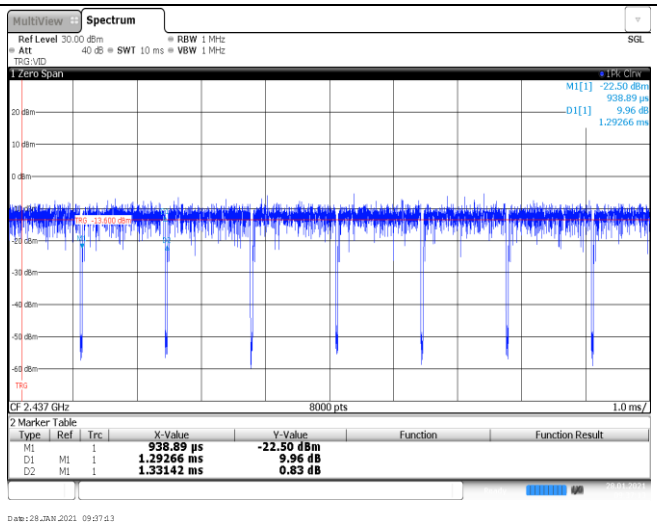
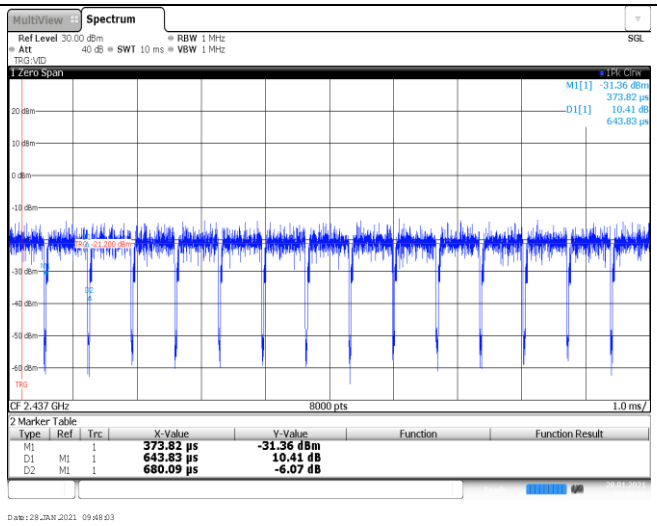
Type:	802.11n(HT20)
CH01	
CH06	
CH11	

Type:	802.11n(HT40)
CH03	
CH06	
CH09	

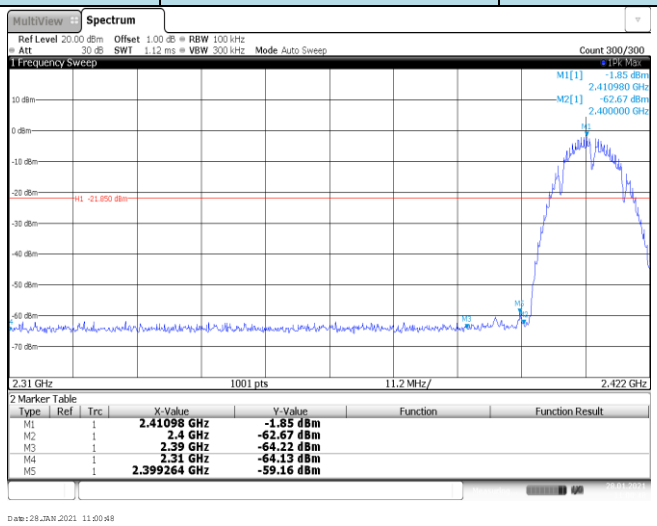
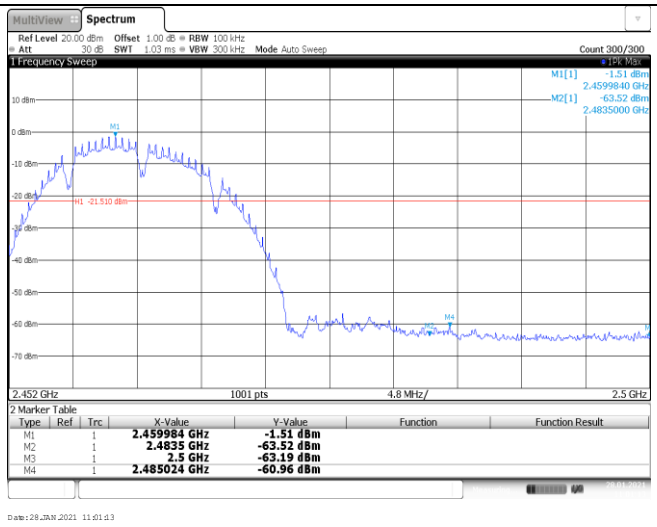
Appendix E：Duty Cycle

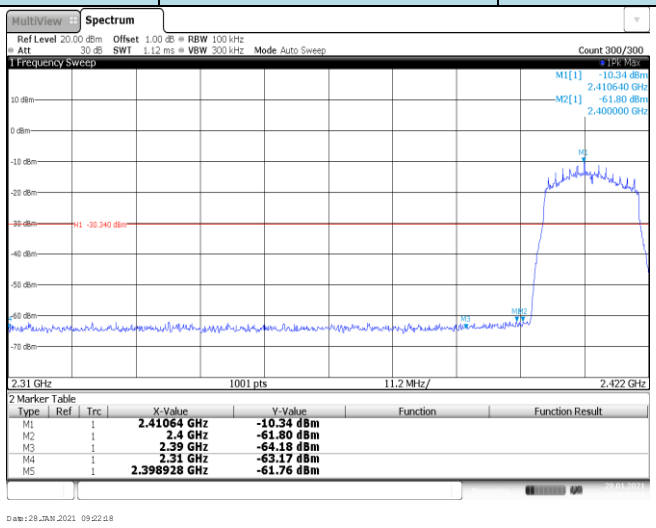
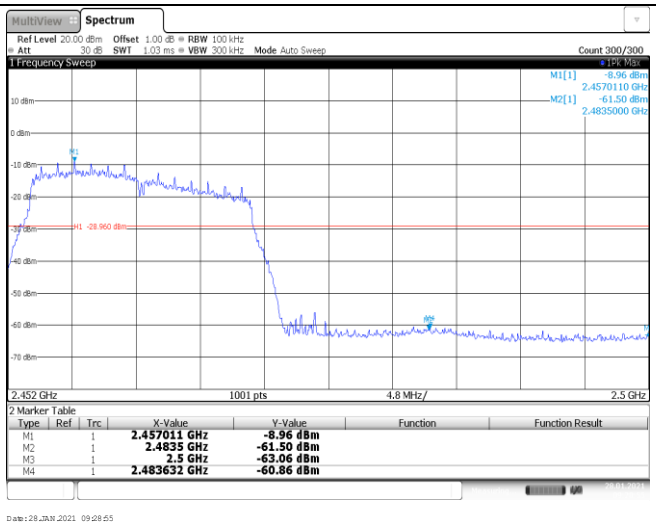
Modulation Type	Test Frequency（MHz）	$T_{on\ time}$ for single burst (ms)	T_{period} (ms)	Duty cycle	$1/T_{on\ time}$ (kHz)
11b	2437	8.36	8.40	99.5%	0.1
11g	2437	1.38	1.42	97.2%	0.7
11n20	2437	1.29	1.33	97.0%	0.8
11n40	2437	0.64	0.68	94.1%	1.6

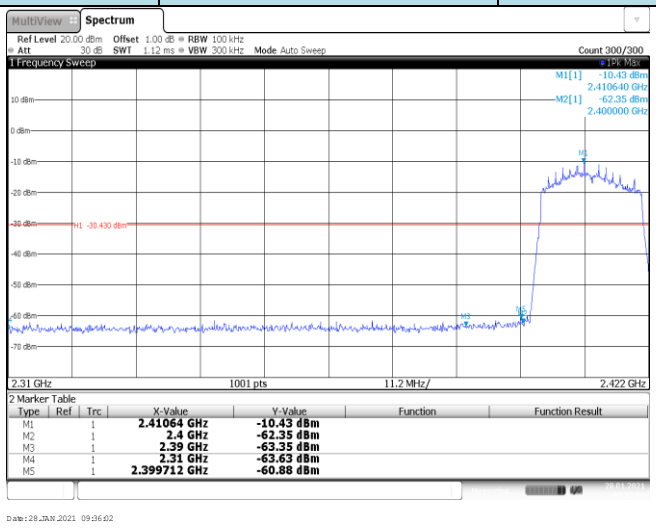
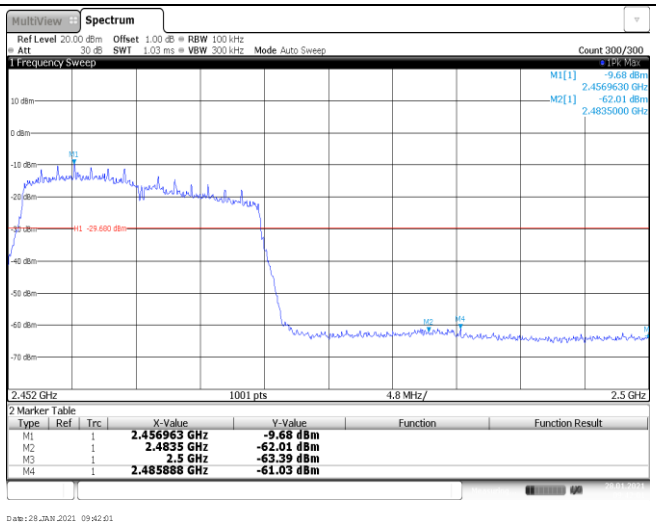
11b	
11g	

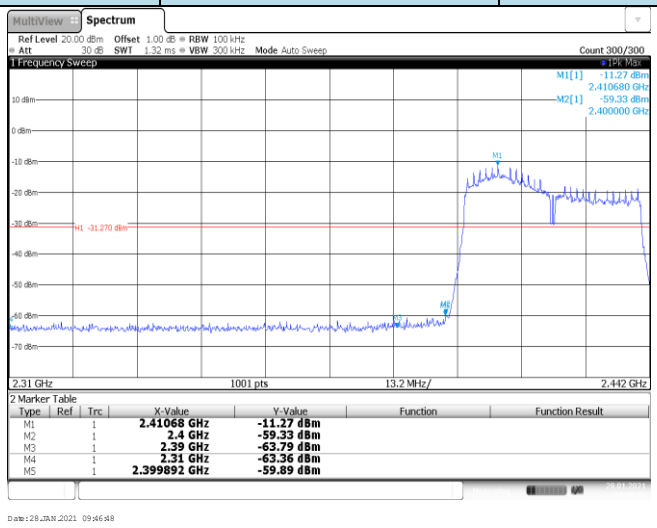
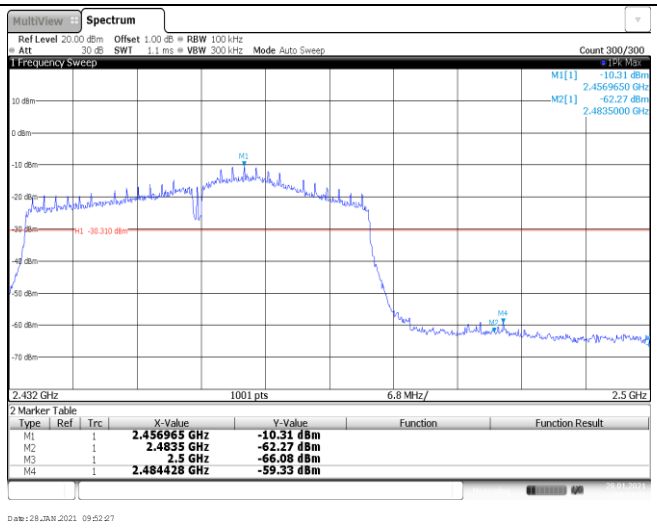
11n20	 MultiView Spectrum Ref Level 30.00 dBm RBW 1 MHz Att 40 dB SWT 10 ms VBW 1 MHz TRG:VID 1 Zero Span 1Pk Clrw M1[1] -22.50 dBm 938.89 µs D1[1] 9.96 dB 1.29266 ms CF 2.437 GHz 8000 pts 1.0 ms/ 2 Marker Table Type Ref Trc X-Value Y-Value Function Function Result M1 1 938.89 µs -22.50 dBm D1 M1 1 1.29266 ms 9.96 dB D2 M1 1 1.33142 ms 0.83 dB Date:28.JAN.2021 09:37:13
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 M1[1] -31.36 dBm 373.82 µs D1[1] 10.41 dB 643.83 µs CF 2.437 GHz 8000 pts 1.0 ms/ 2 Marker Table Type Ref Trc X-Value Y-Value Function Function Result M1 1 373.82 µs -31.36 dBm D1 M1 1 643.83 µs 10.41 dB D2 M1 1 680.09 µs -6.07 dB Date:28.JAN.2021 09:48:03

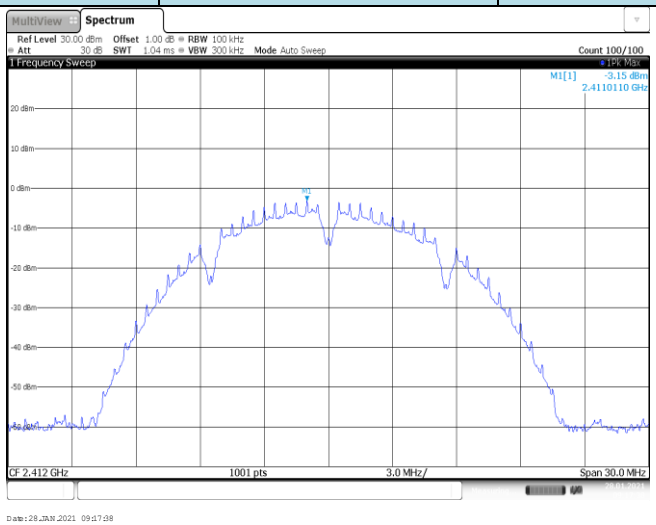
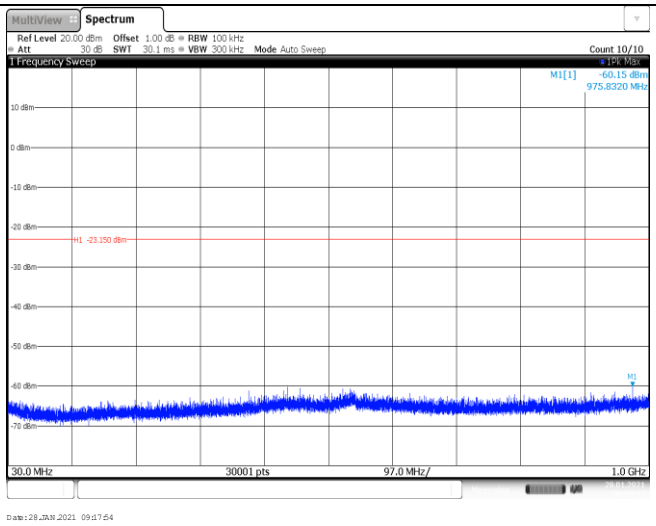
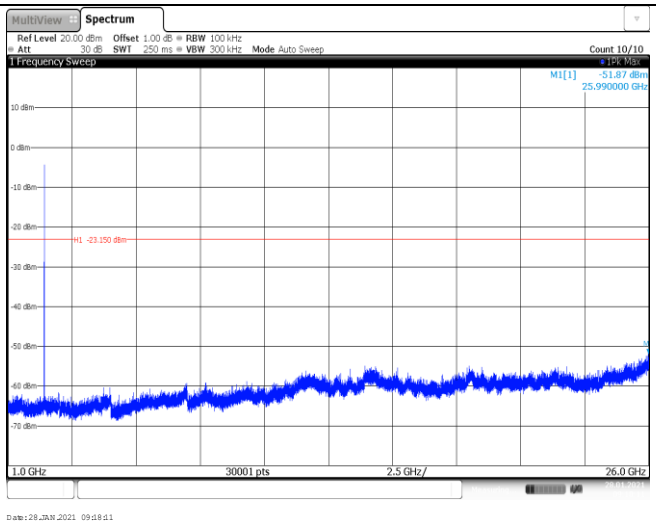
Appendix F：Band edge and Spurious Emissions (conducted)

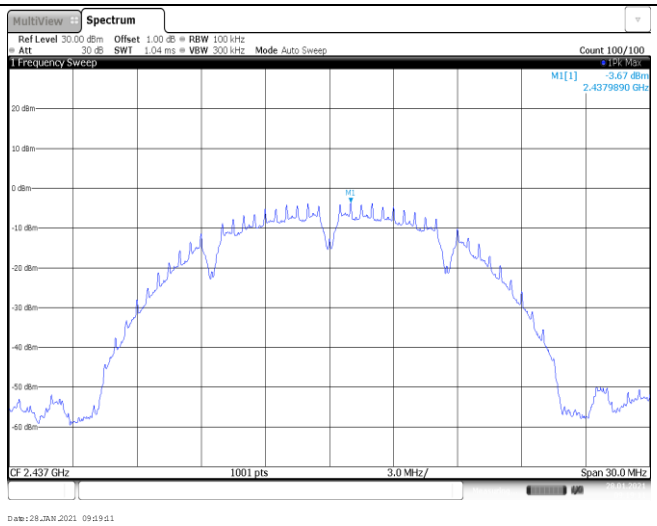
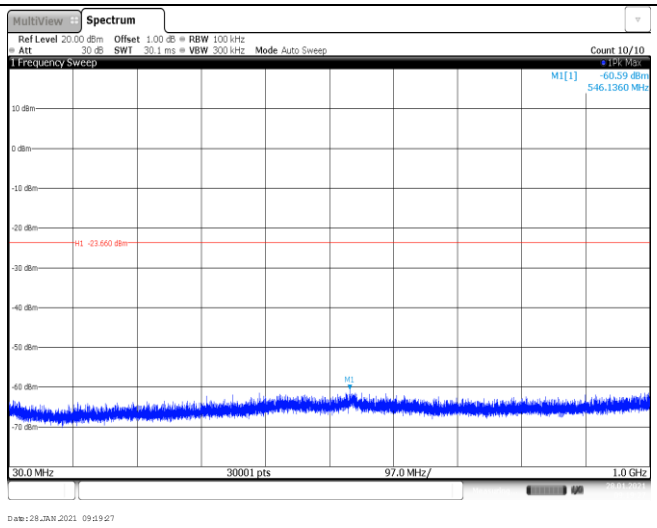
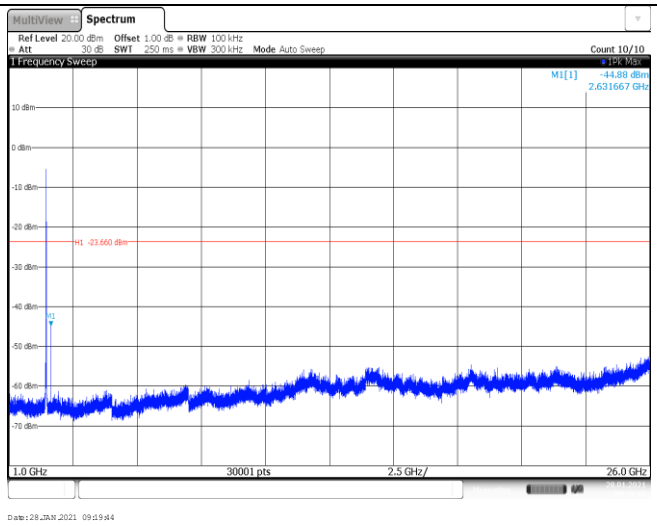
Test Item:	Bandedge	Type:	802.11 b
CH01			
CH11			

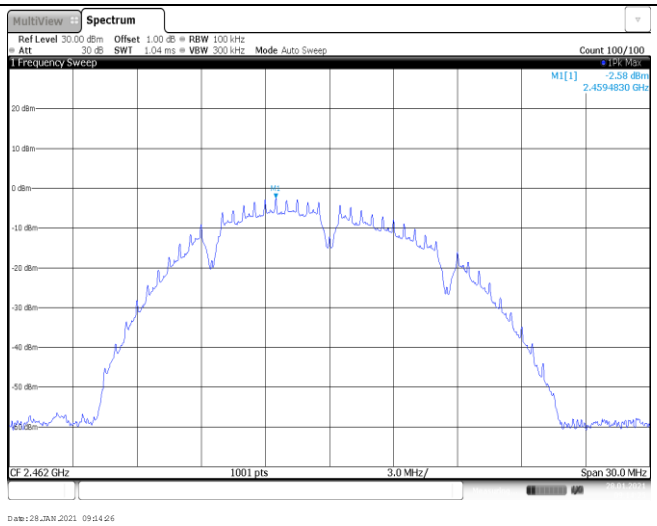
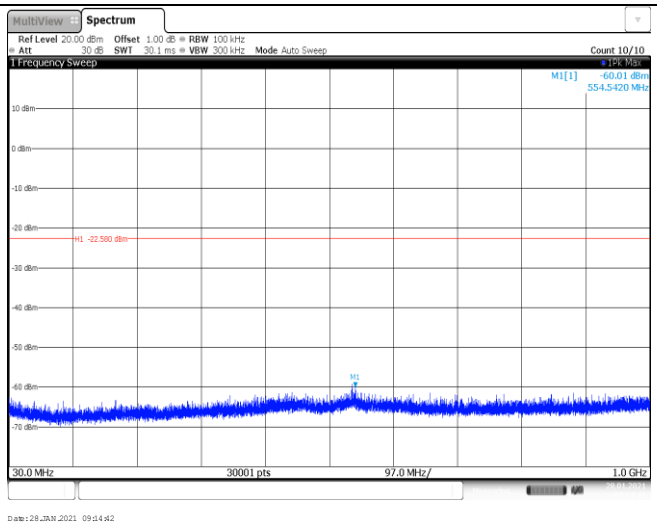
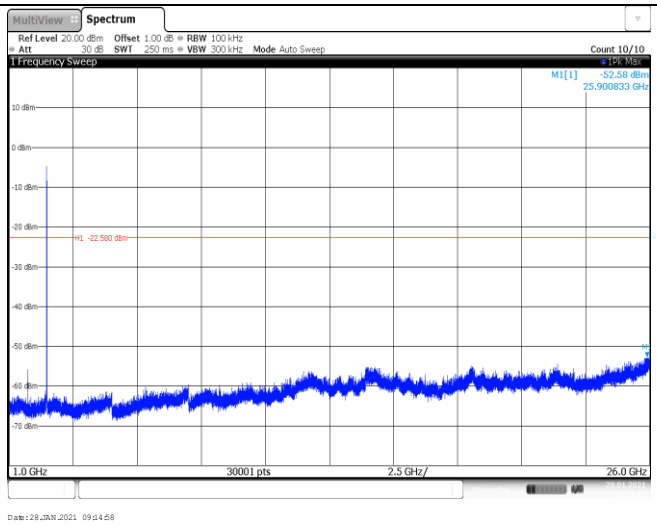
Test Item:	Bandedge	Type:	802.11 g
CH01			
CH11			

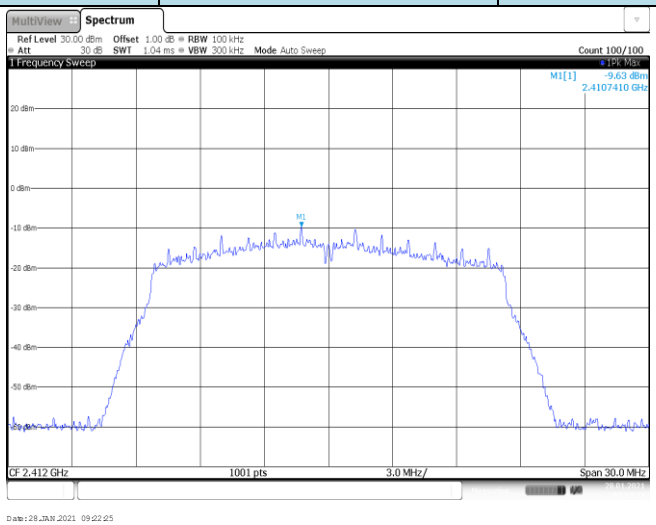
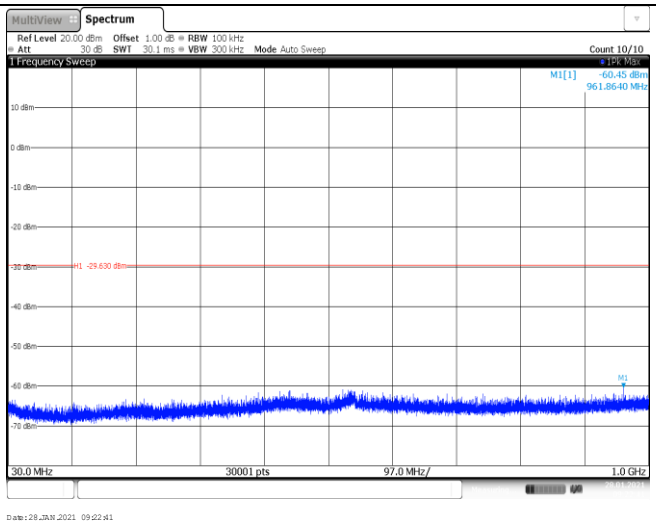
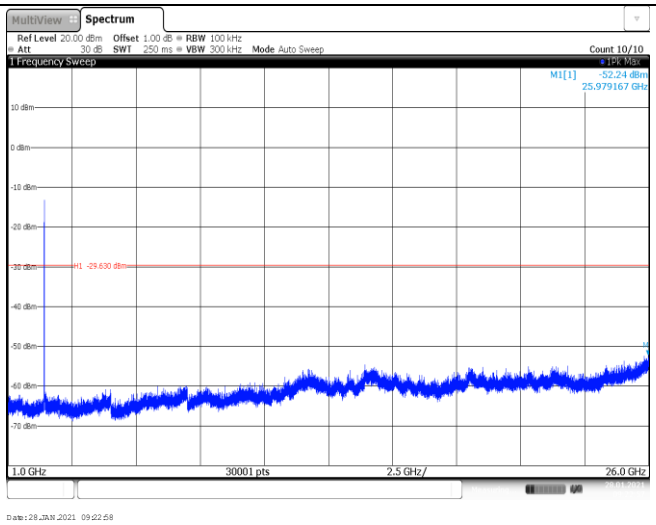
Test Item:	Bandedge	Type:	802.11 n(HT20)
CH01			
CH11			

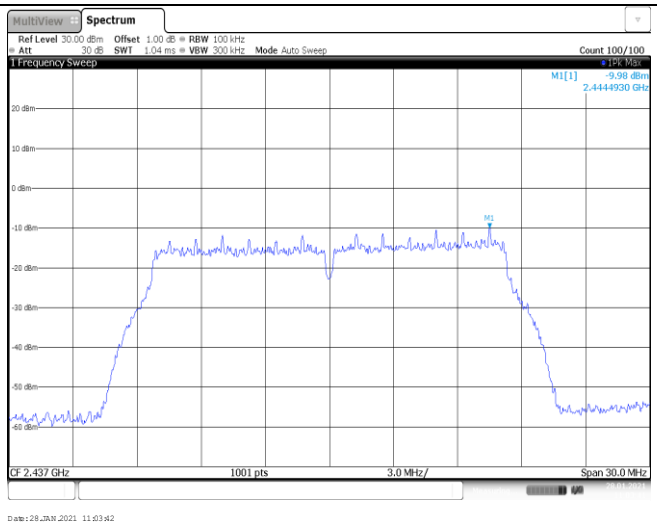
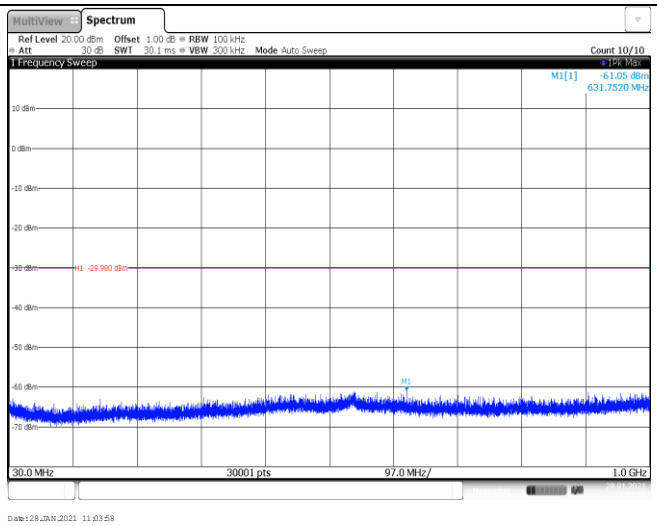
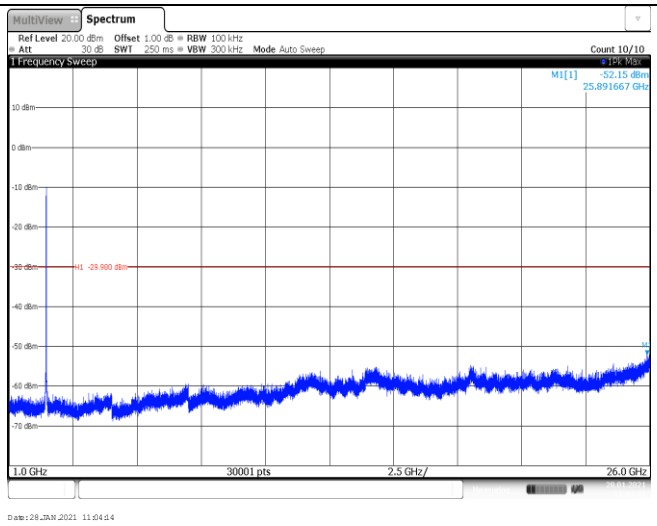
Test Item:	Bandedge	Type:	802.11 n(HT40)
CH03			
CH09			

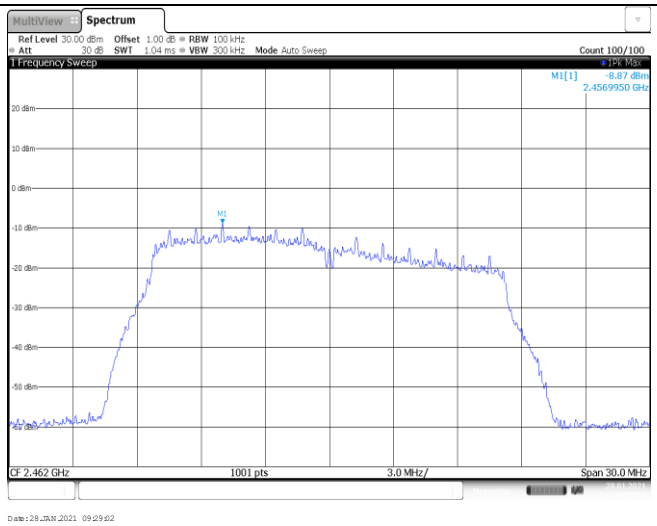
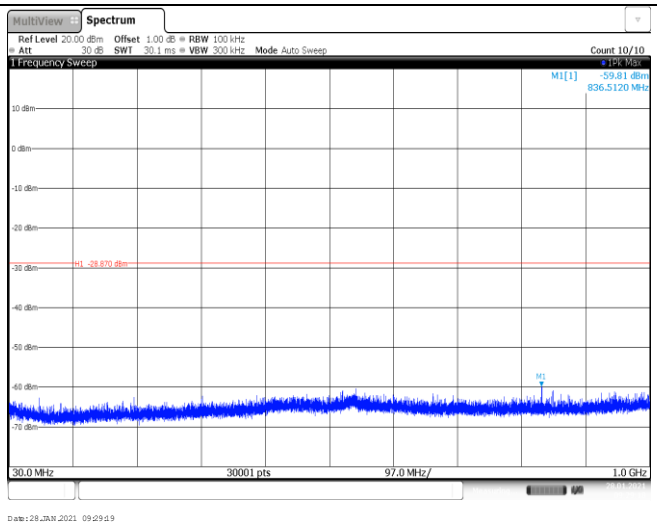
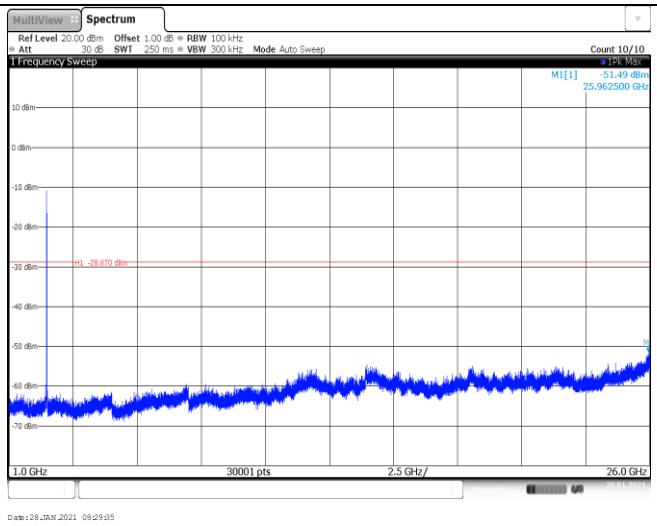
Test Item:	SE	Type:	802.11b
CH01 Reference level	
CH01 30MHz~1000MHz	
CH01 1GHz~26GHz	

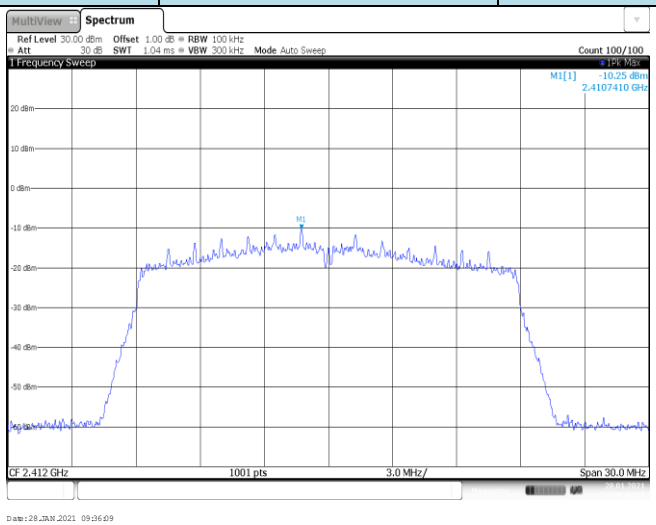
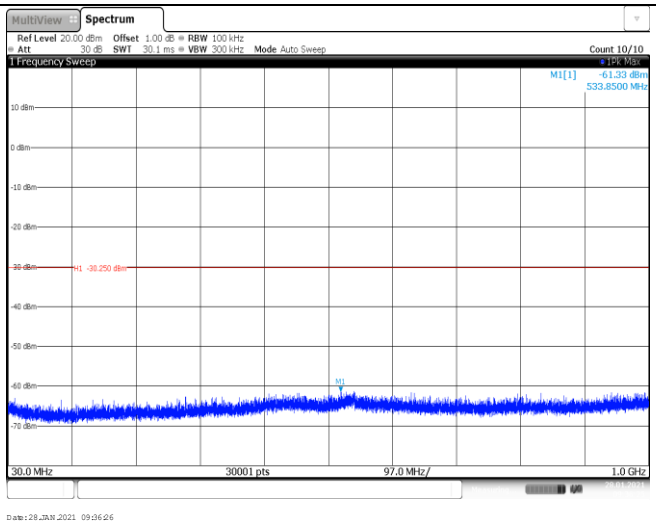
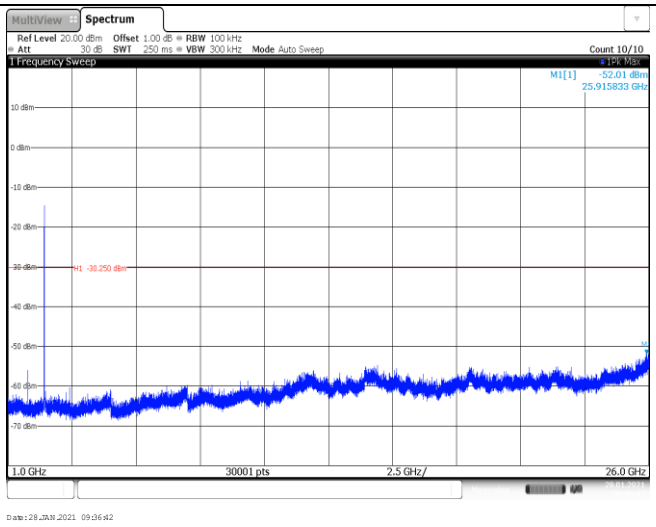
CH06 Reference level	
CH06 30MHz~1000MHz	
CH06 1GHz~26GHz	

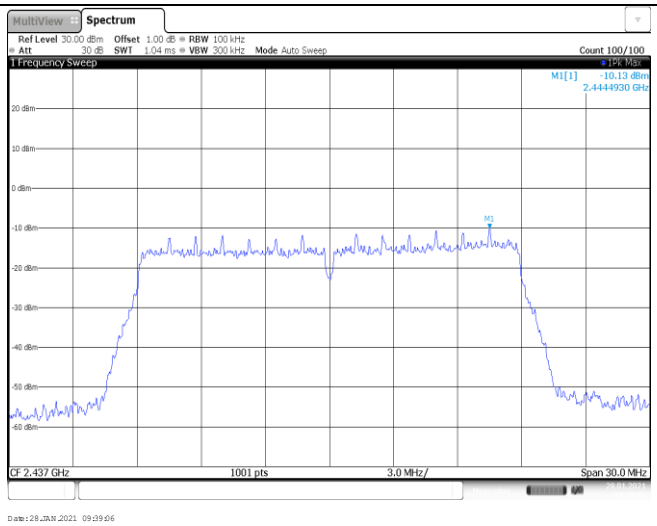
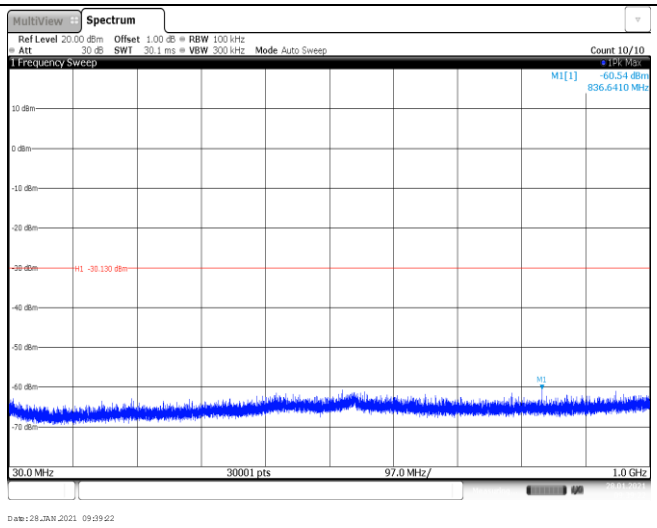
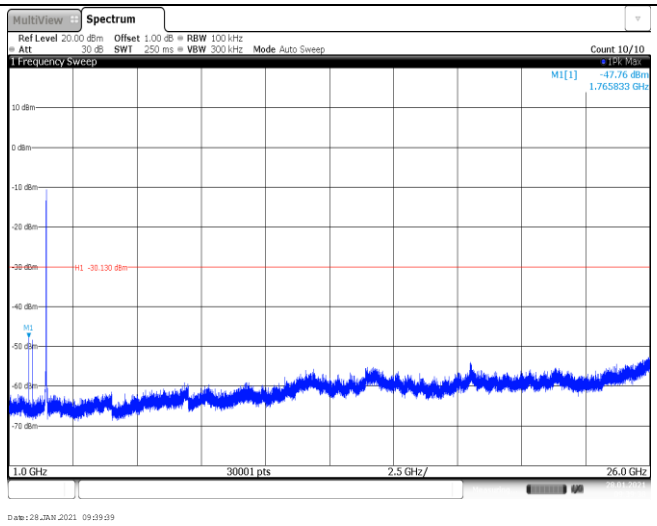
CH11 Reference level	
CH11 30MHz~1000MHz	
CH11 1GHz~26GHz	

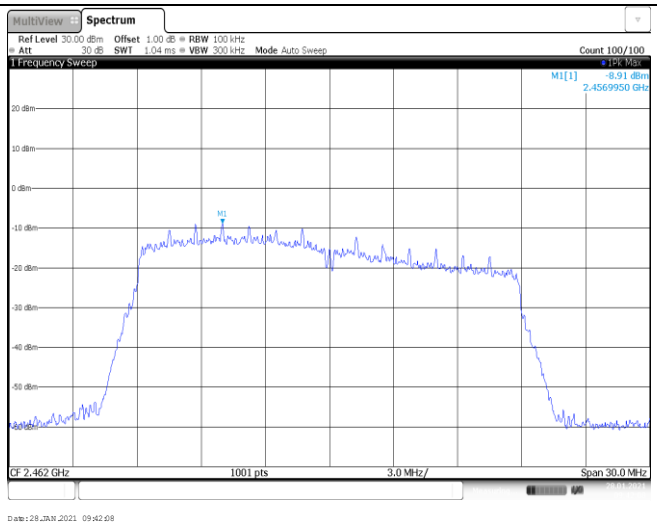
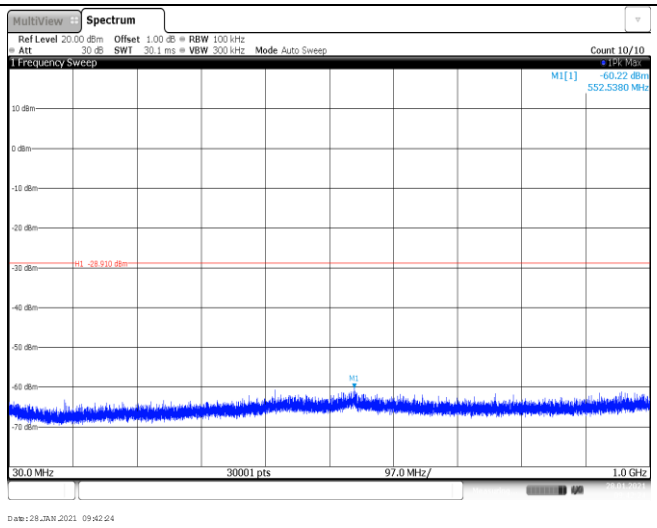
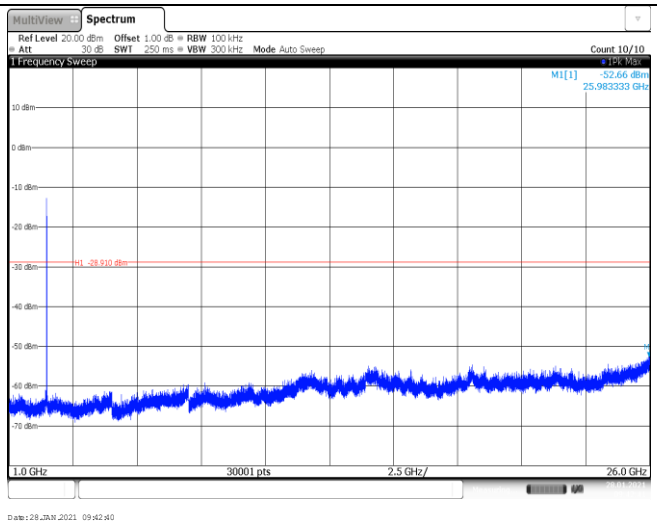
Test Item:	SE	Type:	802.11g
CH01 Reference level	
CH01 30MHz~1000MHz	
CH01 1GHz~26GHz	

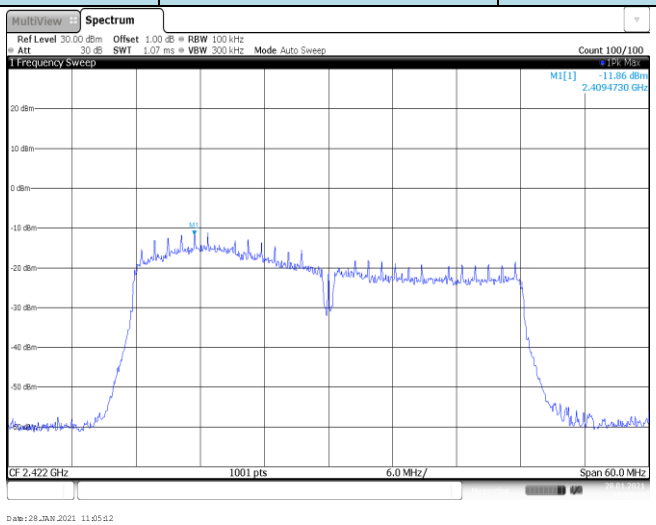
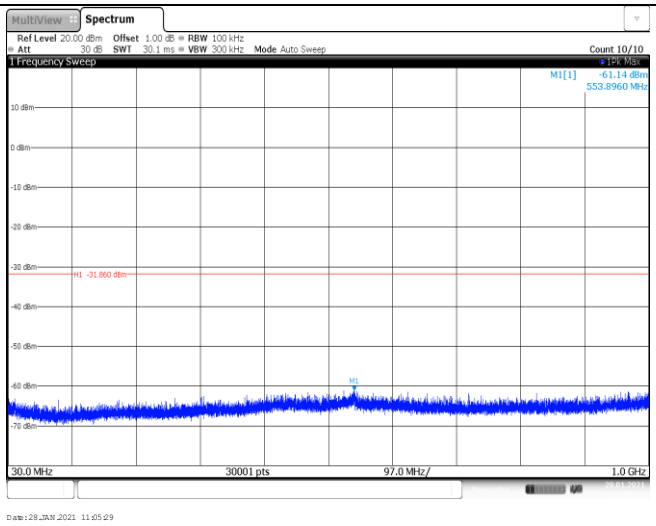
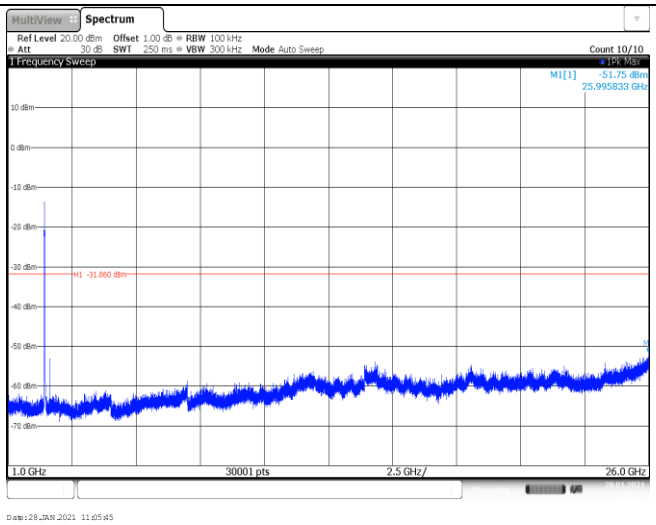
CH06 Reference level	
CH06 30MHz~1000MHz	
CH06 1GHz~26GHz	

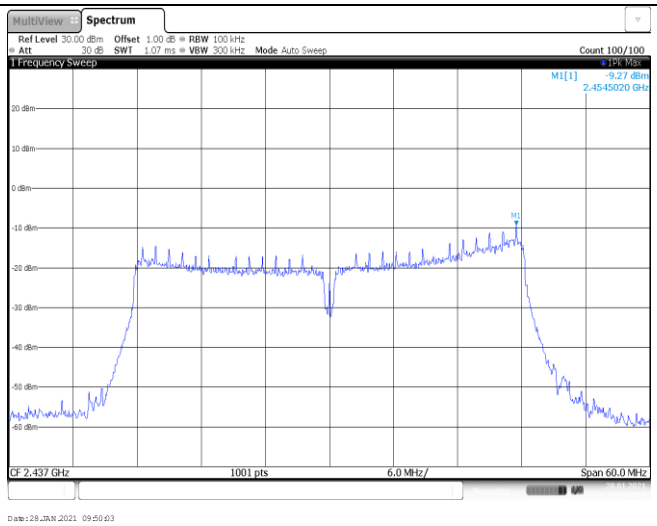
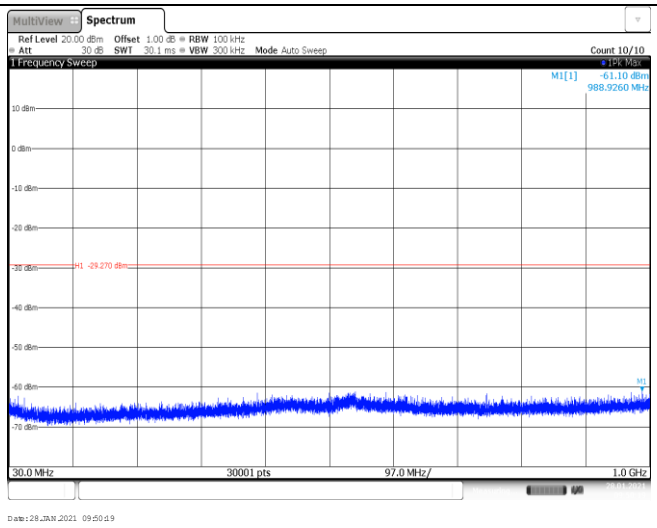
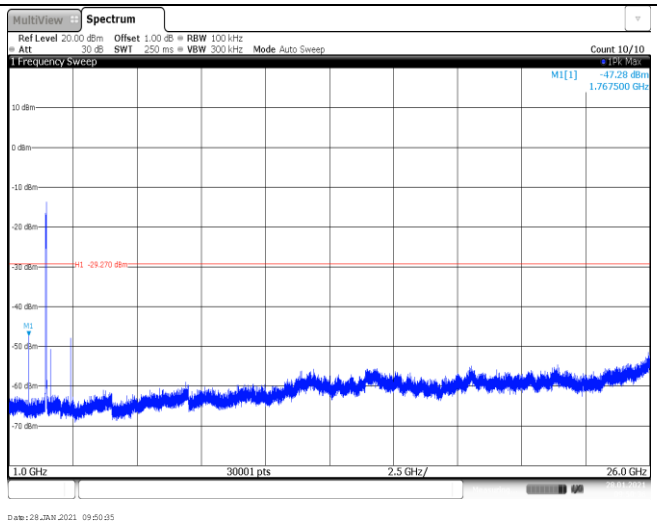
CH11 Reference level	
CH11 30MHz~1000MHz	
CH11 1GHz~26GHz	

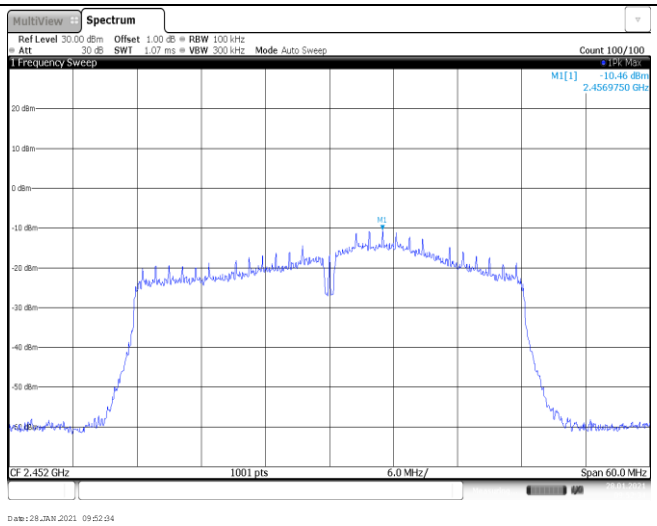
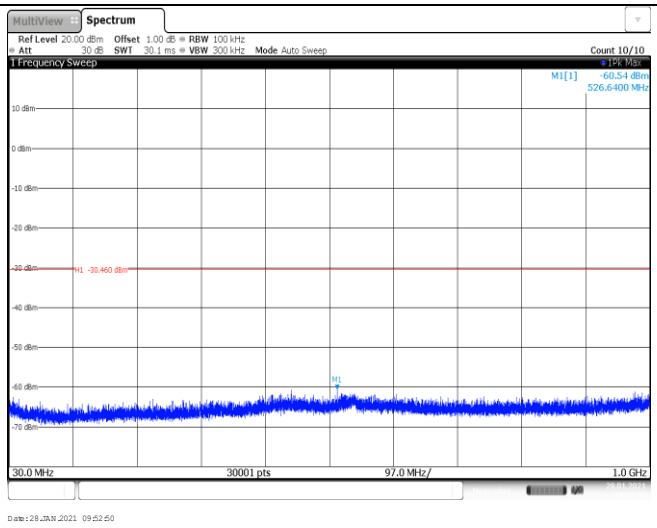
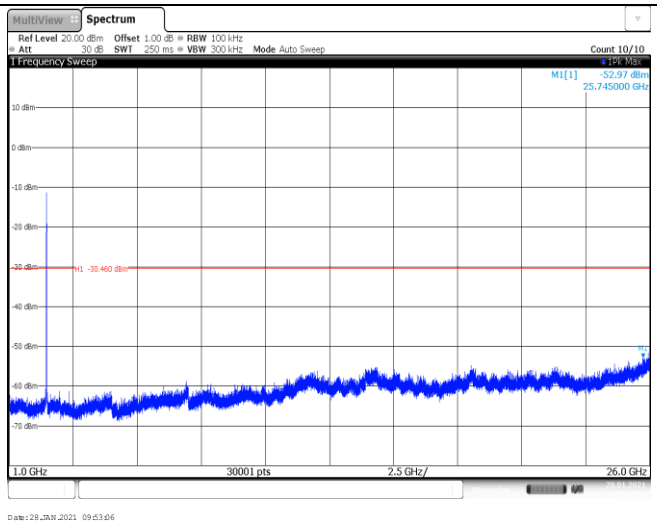
Test Item:	SE	Type:	802.11n(HT20)
CH01 Reference level	
CH01 30MHz~1000MHz	
CH01 1GHz~26GHz	

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--------