APPENDIX REPORT

Project No.	SHT2105113201EW	Radio Specification	WIFI 2.4G
Test sample No.	YPHT21051132002	Model No.	SC400
Start test date	2021-06-30	Finish date	2021-06-30
Temperature	26.4°C	Humidity	38%
Test Engineer	Hailey Chen	Auditor	Xiaodong Zhao

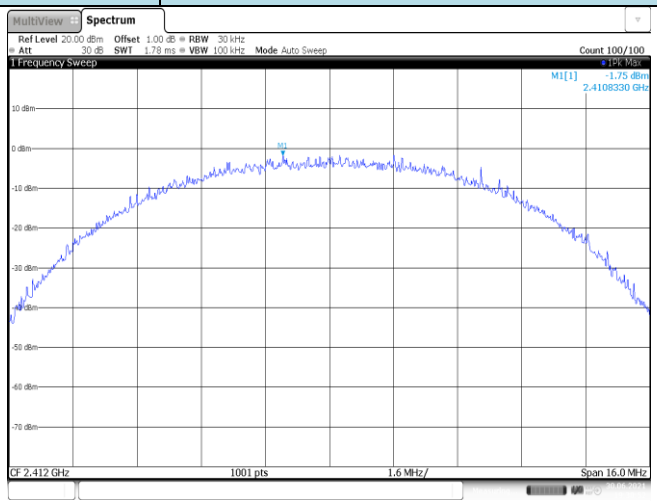
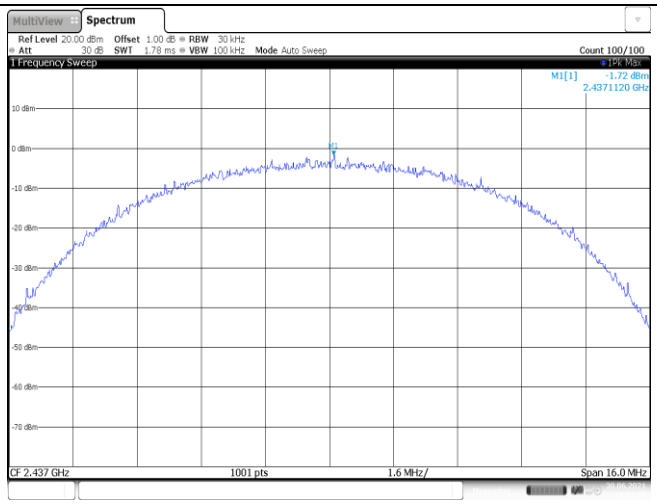
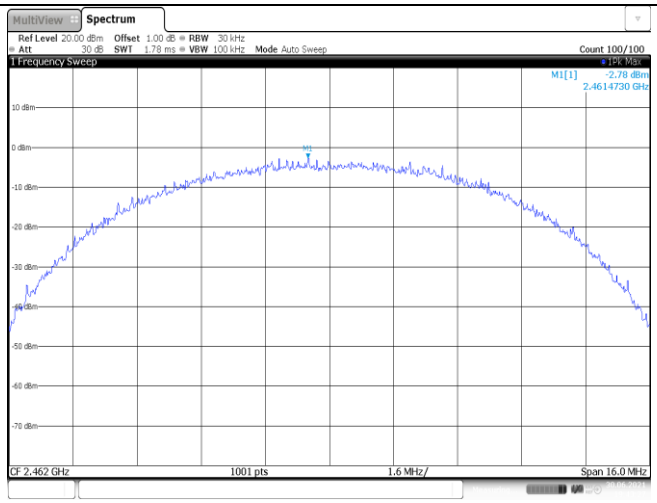
Appendix clause	Test item	Result
A	Conducted Peak Output Power	PASS
B	Power Spectral Density	PASS
C	6 dB Bandwidth	PASS
D	99% Occupied Bandwidth	PASS
E	Duty Cycle	PASS
F	Band edge and Spurious Emissions (conducted)	PASS

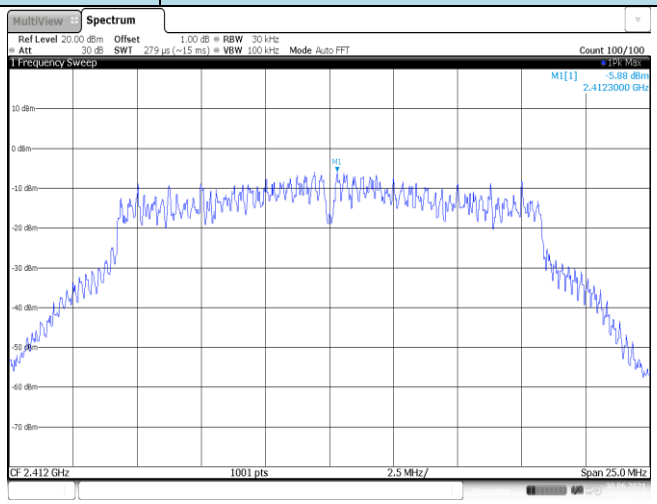
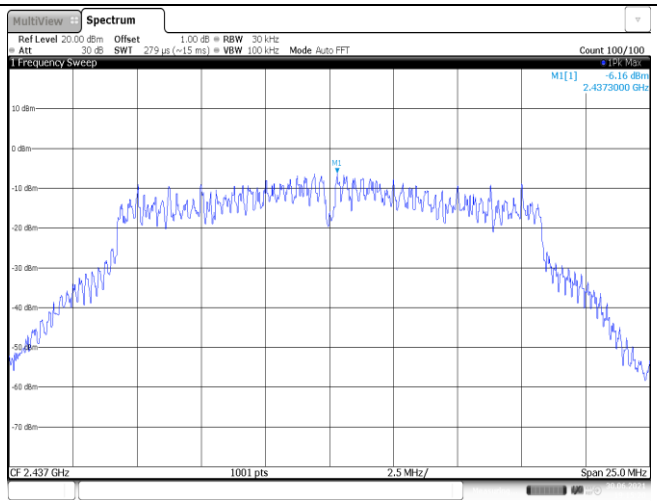
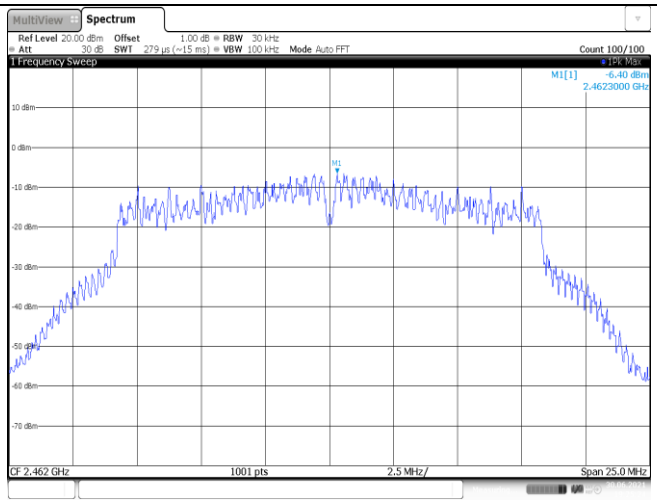
Appendix A：Conducted Peak Output Power

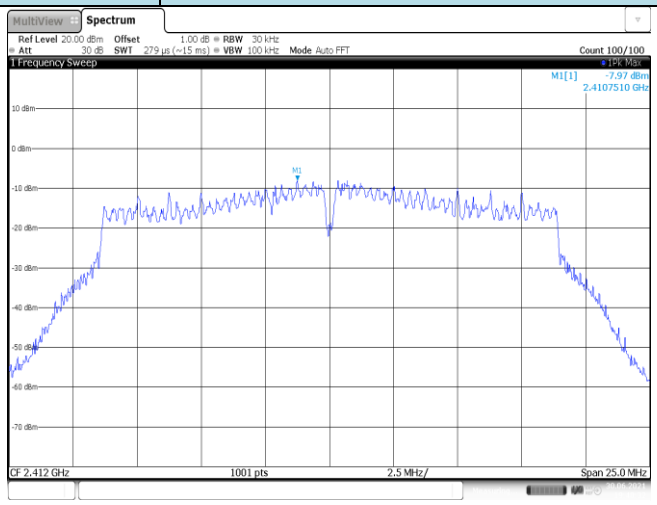
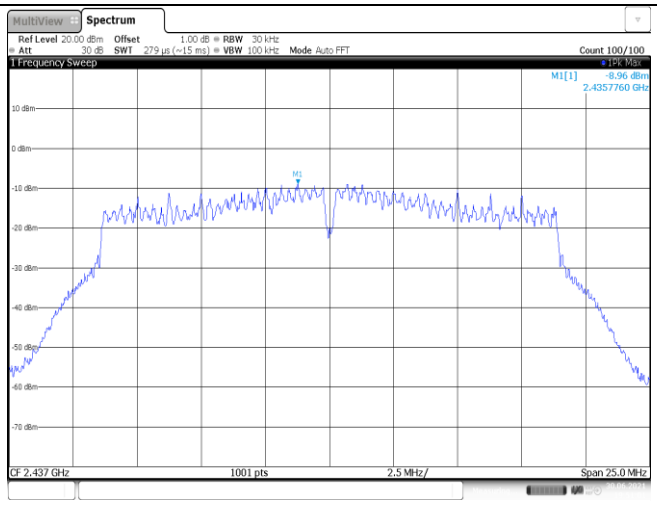
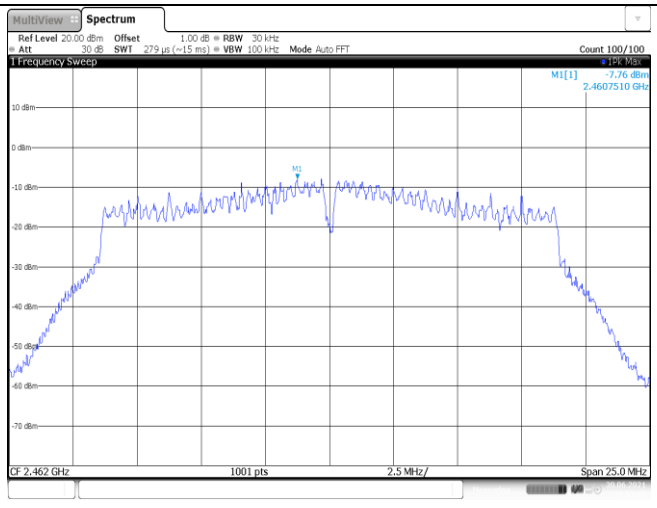
Type	Channel	Peak Output power (dBm)	Average Output power (dBm)	Limit (dBm)	Result
802.11b	01	16.62	15.23	≤ 30.00	Pass
	06	15.34	13.81		
	11	15.26	13.70		
802.11g	01	16.96	14.71	≤ 30.00	Pass
	06	16.60	14.13		
	11	16.50	14.31		
802.11n (HT20)	01	15.55	13.06	≤ 30.00	Pass
	06	14.87	12.72		
	11	15.16	12.85		

Appendix B：Power Spectral Density

Type	Channel	Power Spectral Density (dBm/30KHz)	Limit (dBm/3KHz)	Result
802.11b	01	-1.75	≤8.00	Pass
	06	-1.72		
	11	-2.78		
802.11g	01	-5.88	≤8.00	Pass
	06	-6.16		
	11	-6.40		
802.11n(HT20)	01	-7.97	≤8.00	Pass
	06	-8.96		
	11	-7.76		

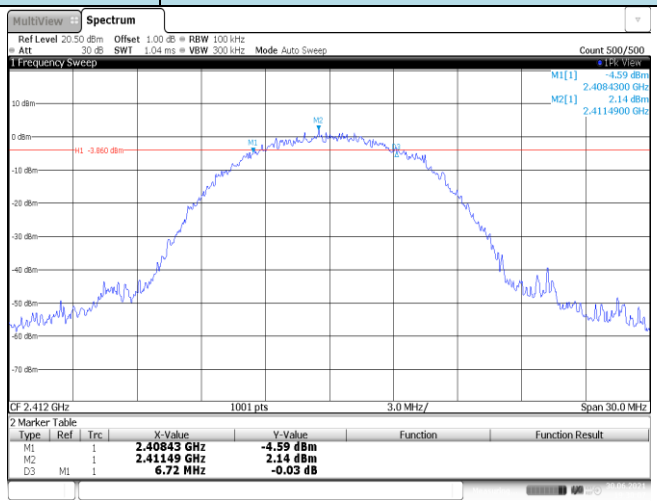
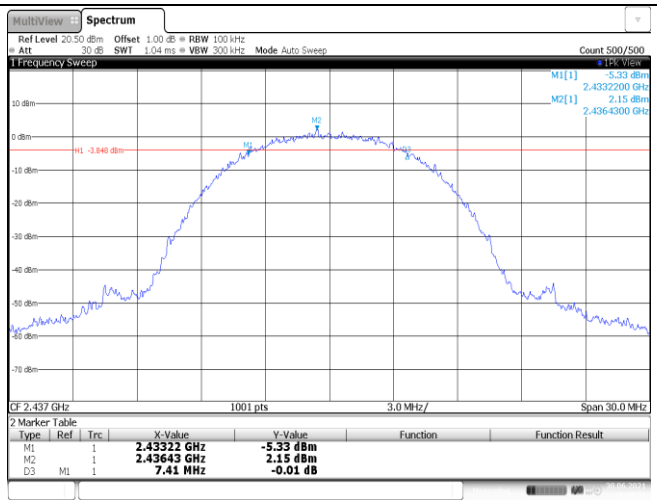
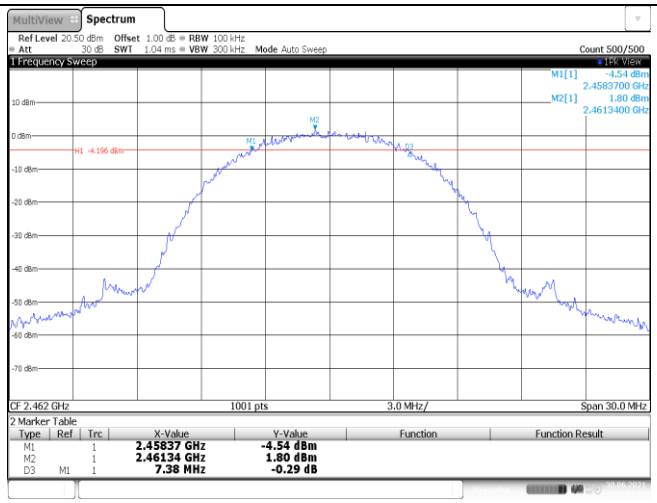
Type:	802.11 b
CH01	
CH06	
CH11	

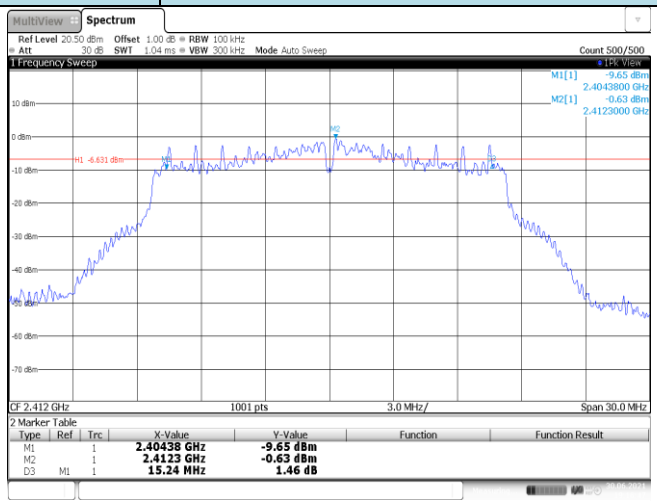
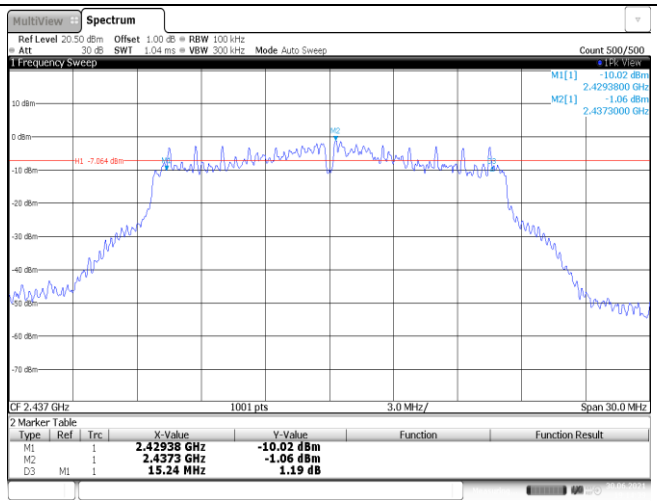
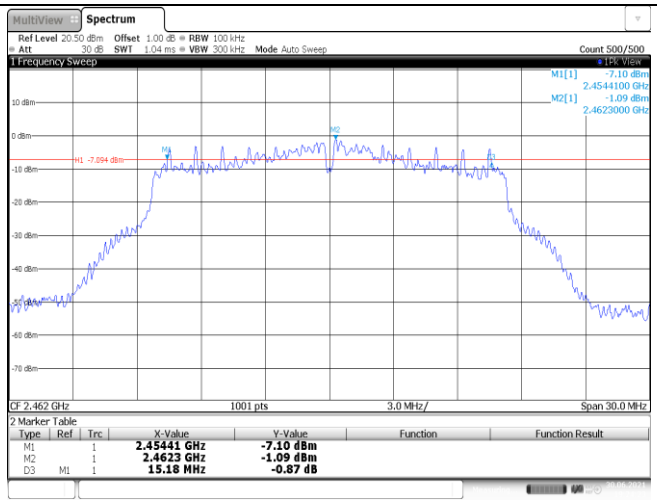
Type:	802.11 g
CH01	
CH06	
CH11	

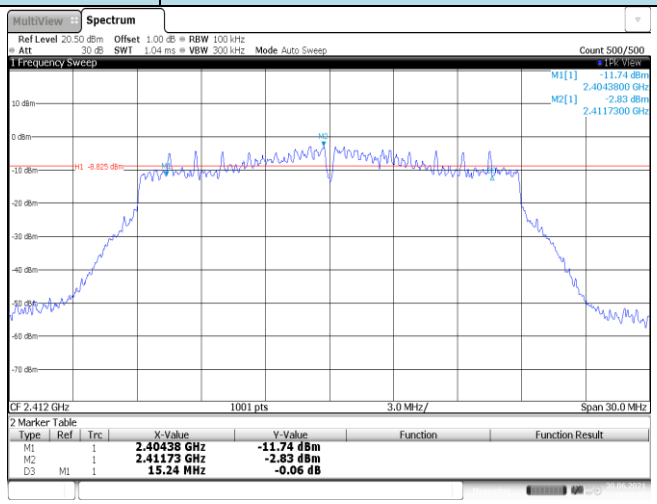
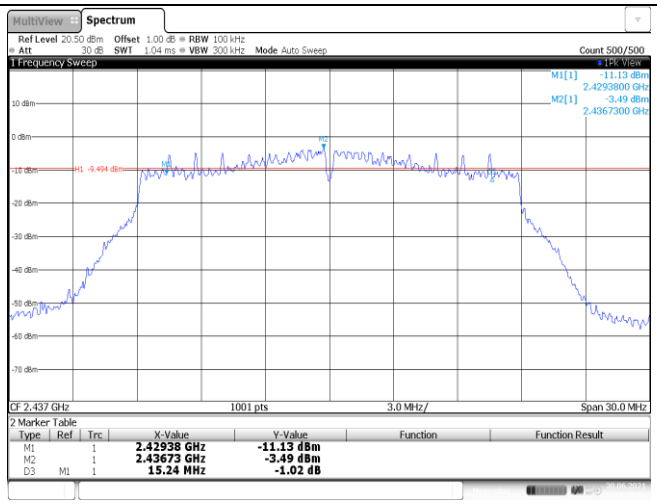
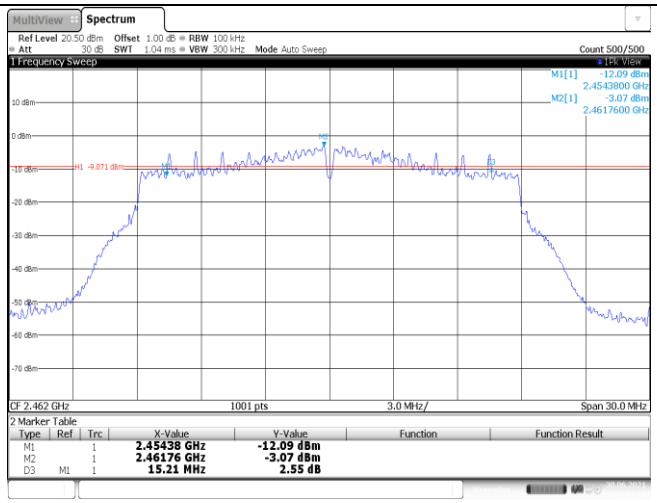
Type:	802.11n(HT20)
CH01	
CH06	
CH11	

Appendix C：6dB bandwidth

Type	Channel	6dB Bandwidth (MHz)	Limit (MHz)	Result
802.11b	01	6.72	≥0.5	Pass
	06	7.41		
	11	7.38		
802.11g	01	15.24	≥0.5	Pass
	06	15.24		
	11	15.18		
802.11n(HT20)	01	15.24	≥0.5	Pass
	06	15.24		
	11	15.21		

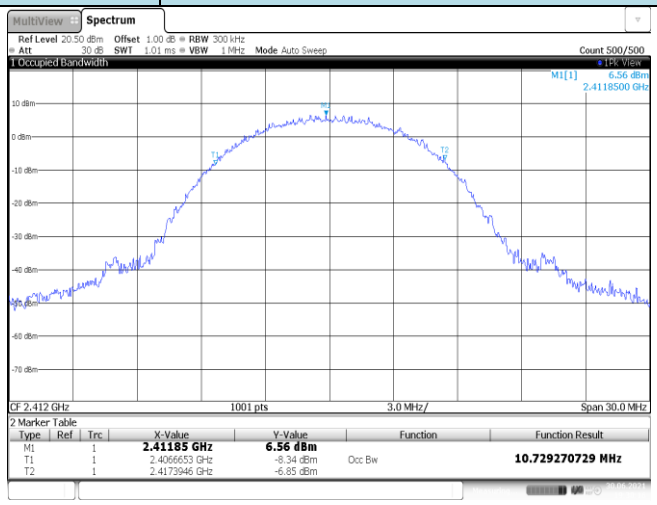
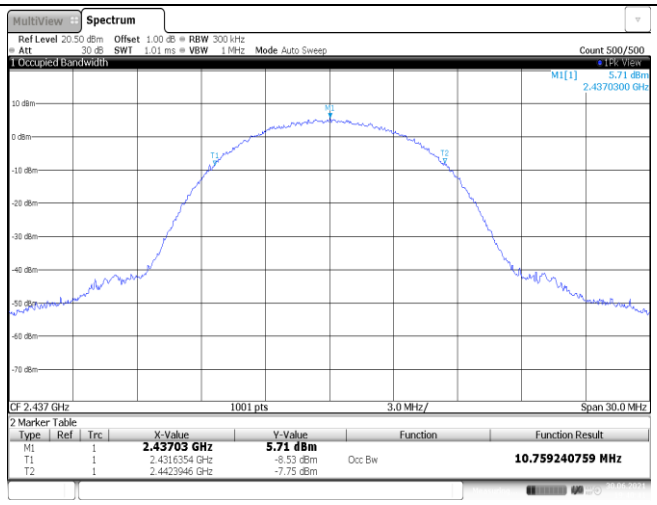
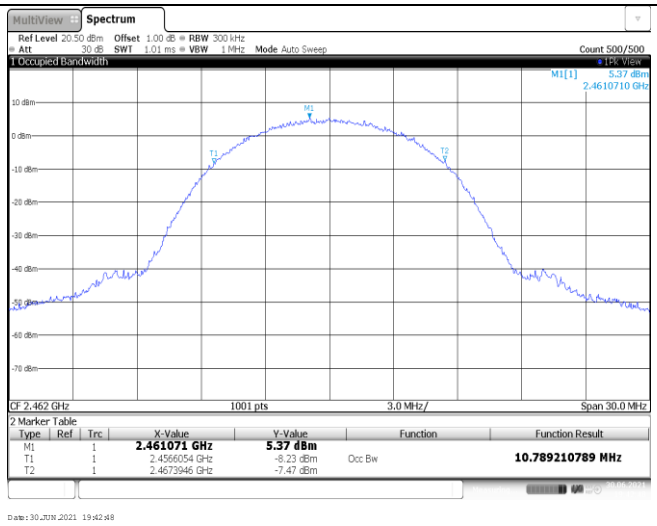
Type:	802.11 b
CH01	
CH06	
CH11	

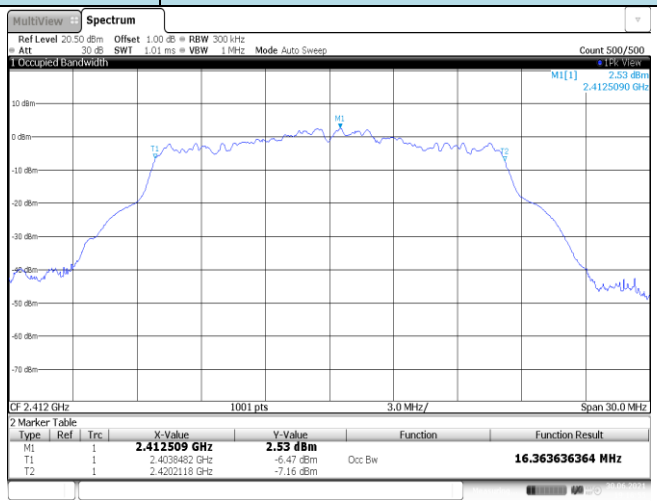
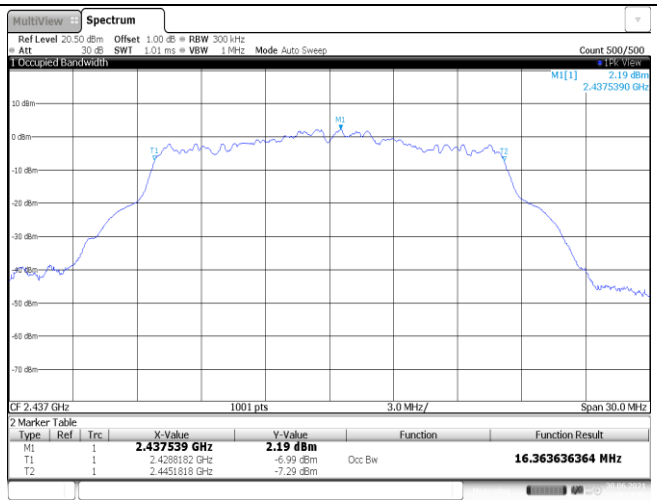
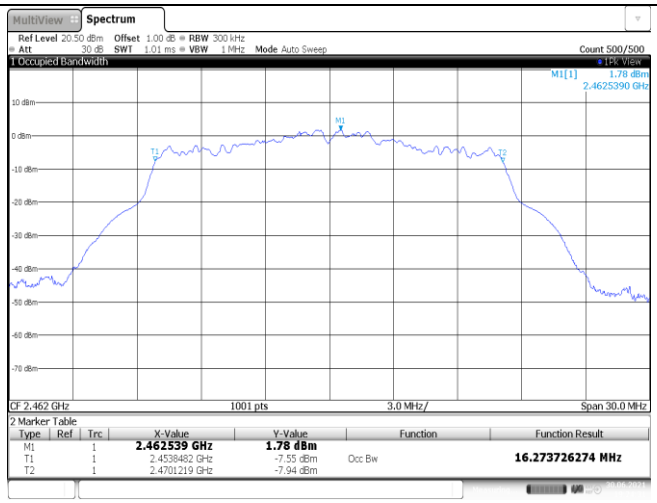
Type:	802.11 g
CH01	
CH06	
CH11	

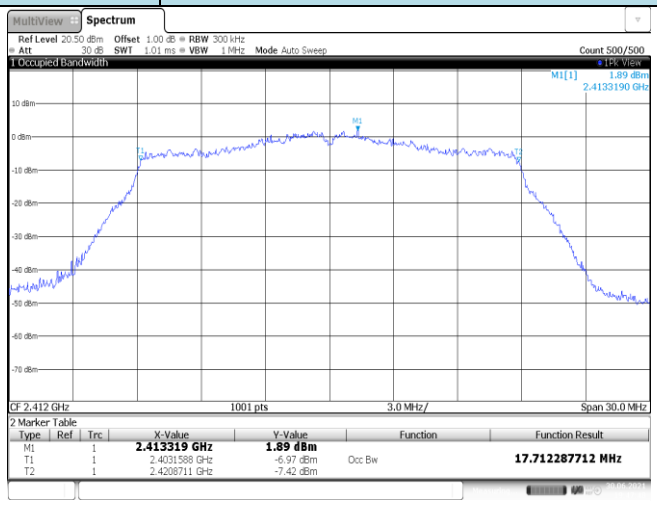
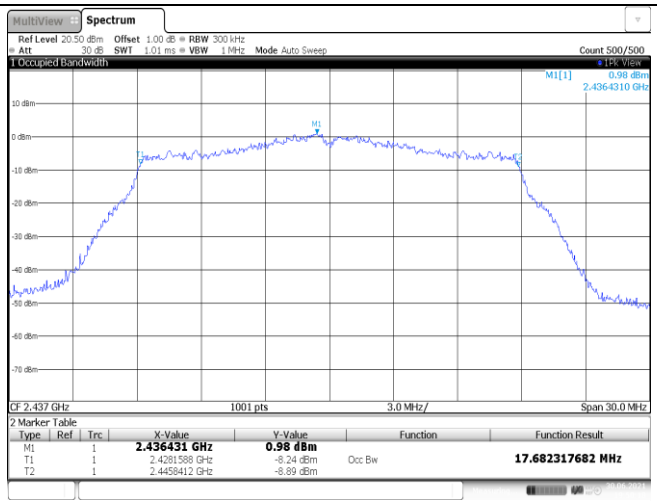
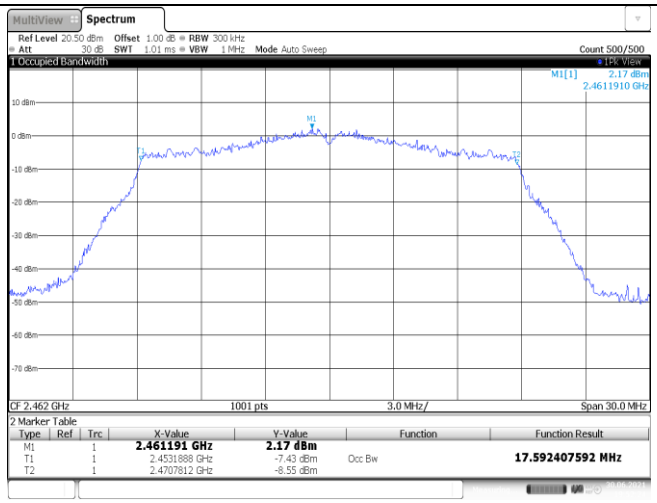
Type:	802.11n(HT20)
CH01	
CH06	
CH11	

Appendix D：99% Occupied Bandwidth

Type	Channel	99% Bandwidth (MHz)	Limit (MHz)	Result
802.11b	01	10.73	-	Pass
	06	10.76		
	11	10.79		
802.11g	01	16.36	-	Pass
	06	16.36		
	11	16.27		
802.11n(HT20)	01	17.71	-	Pass
	06	17.68		
	11	17.59		

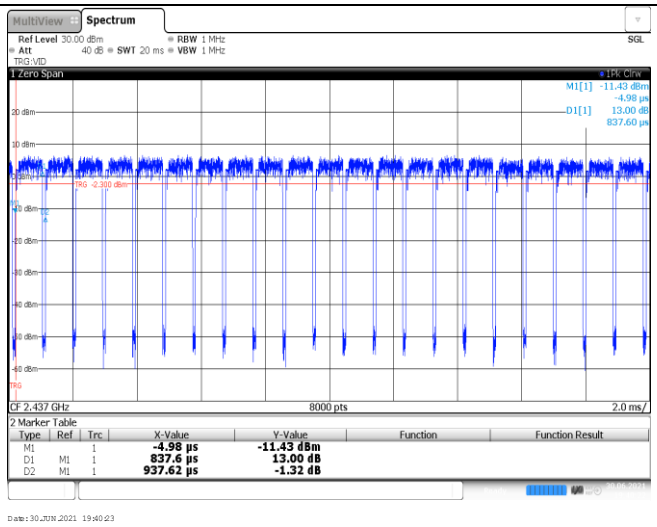
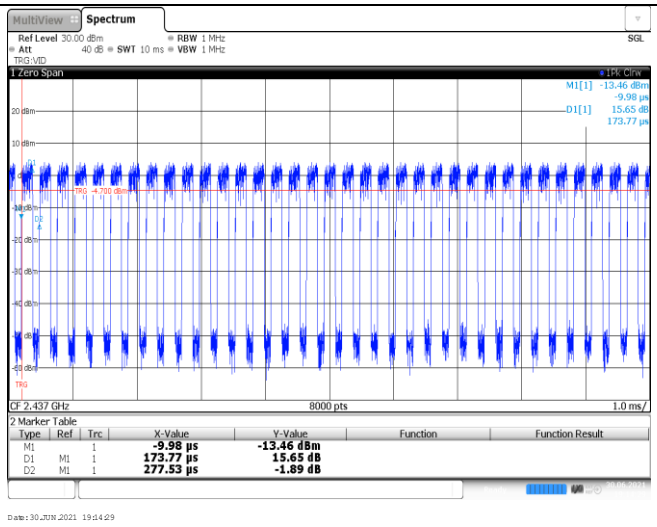
Type:	802.11 b
CH01	
CH06	
CH11	

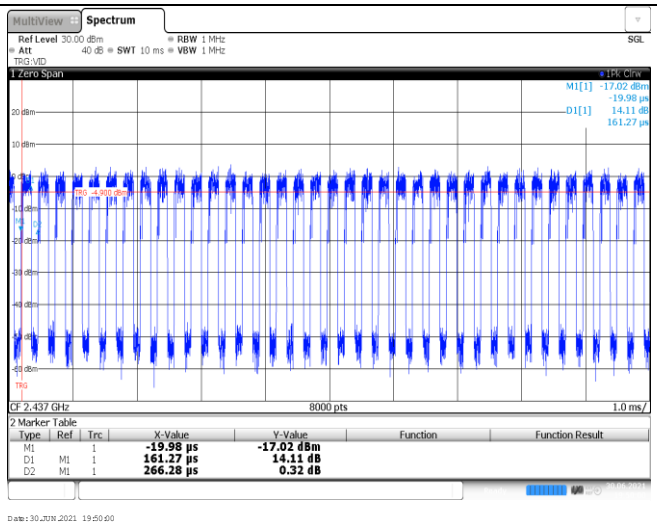
Type:	802.11 g
CH01	
CH06	
CH11	

Type:	802.11n(HT20)
CH01	
CH06	
CH11	

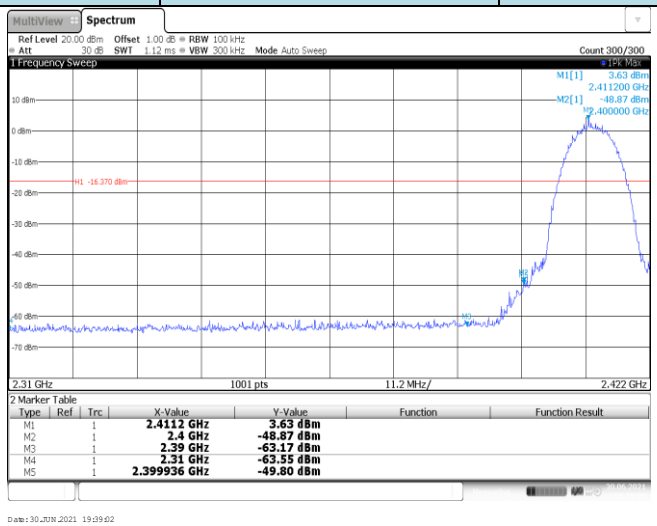
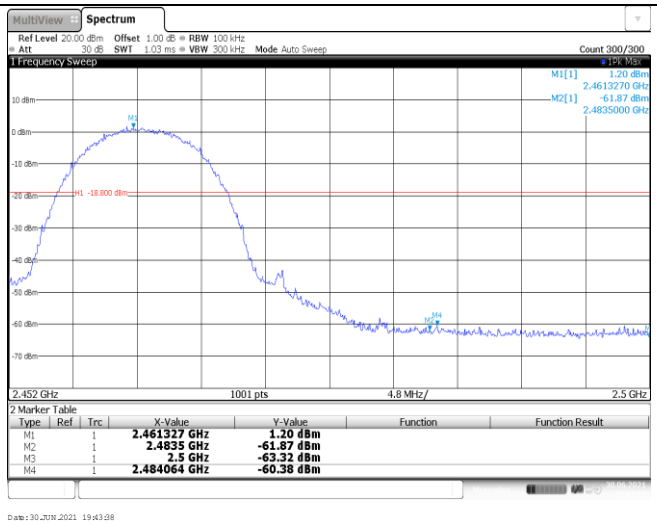
Appendix E：Duty Cycle

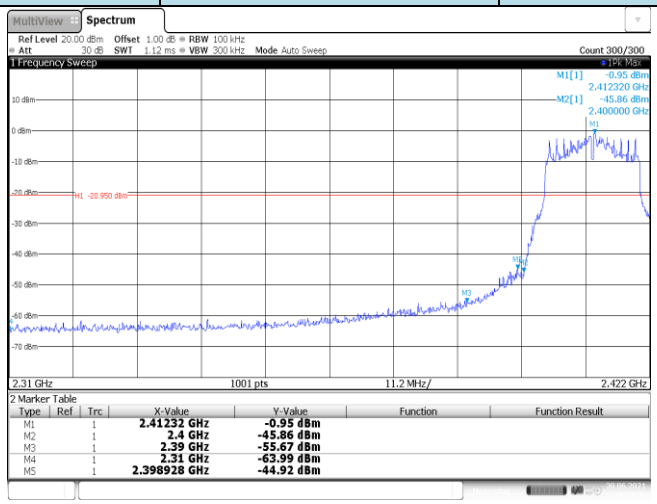
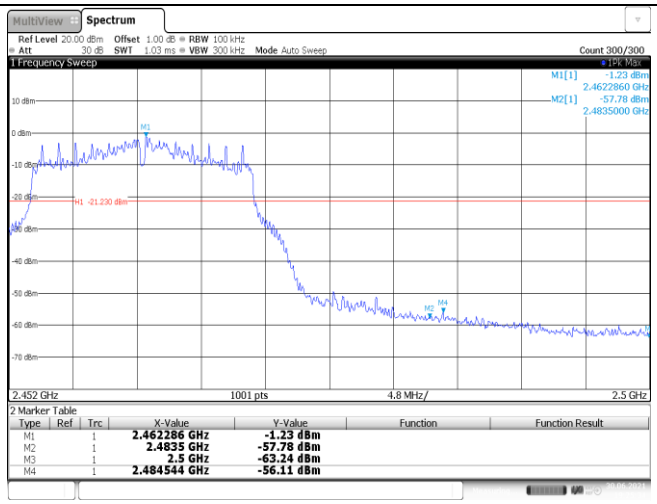
Modulation Type	Test Frequency （MHz）	$T_{on\ time}$ for single burst (ms)	T_{period} (ms)	Duty cycle	$1/T_{on\ time}$ (kHz)
11b	2437	0.84	0.94	89.4%	1.2
11g	2437	0.17	0.28	60.7%	5.9
11n20	2437	0.16	0.27	59.3%	6.3

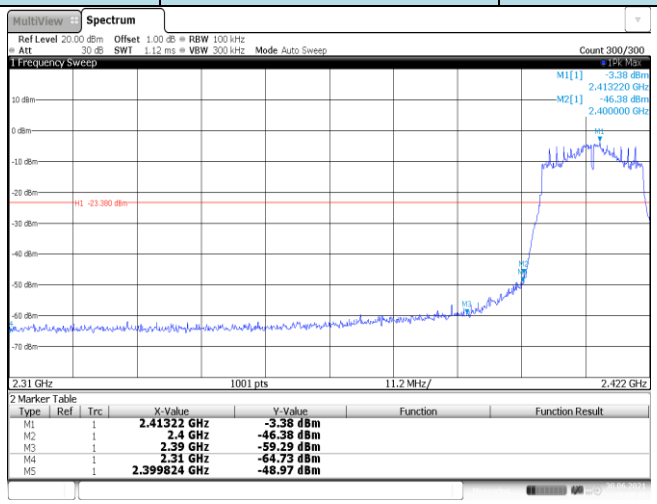
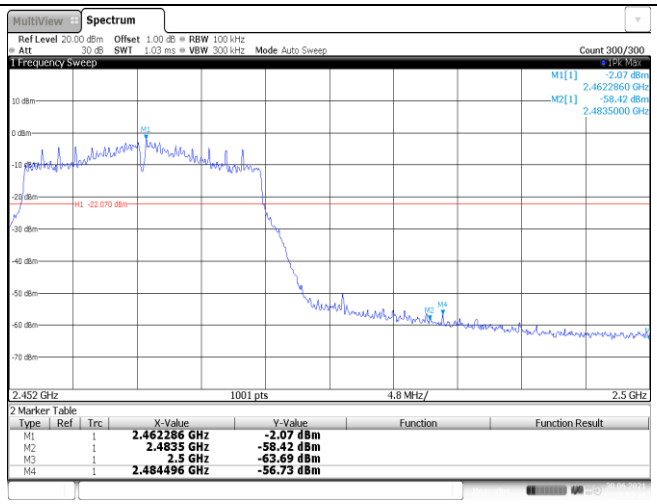
11b	
11g	

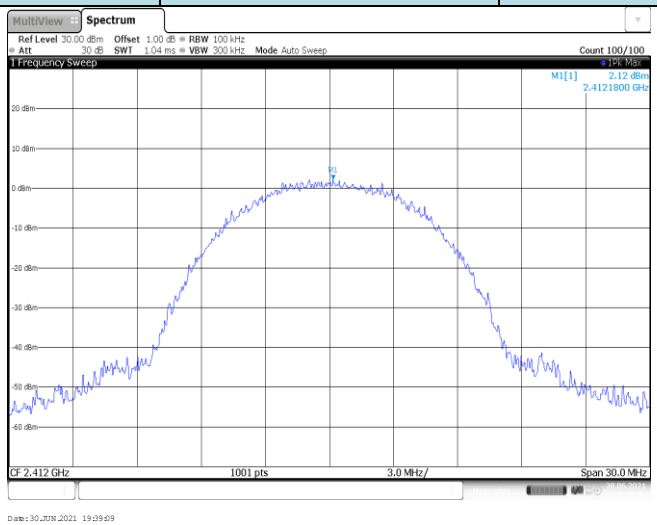
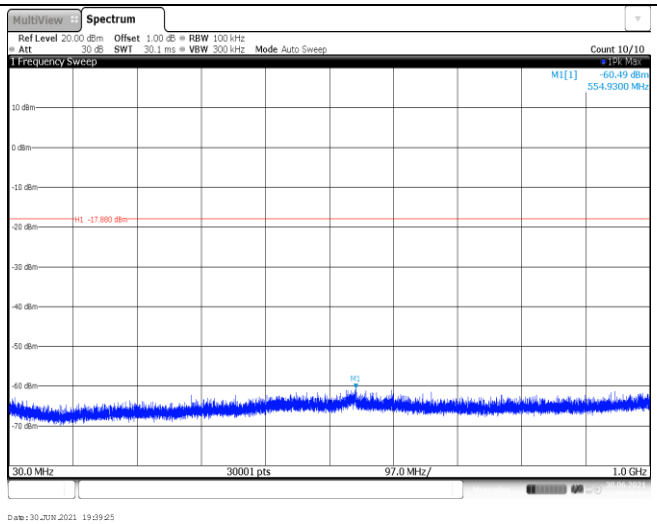
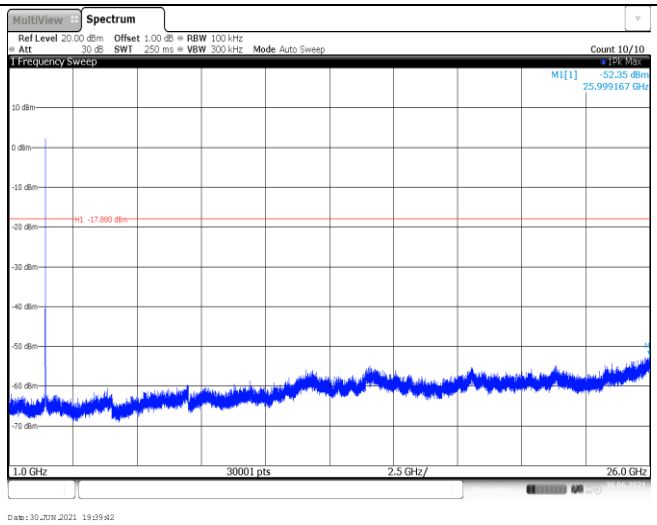
11n20	 MultiView Spectrum Ref Level 30.00 dBm RBW 1 MHz Att 40 dB SWT 10 ms VBW 1 MHz TRG:VID 1 Zero Span 1Pk Clrw M1[1] -17.02 dBm -19.98 µs D1[1] 14.11 dB 161.27 µs 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm TRG CF 2.437 GHz 8000 pts 1.0 ms/ 2 Marker Table Type Ref Trc X-Value Y-Value Function Function Result M1 1 -19.98 µs -17.02 dBm D1 M1 1 161.27 µs 14.11 dB D2 M1 1 266.28 µs 0.32 dB Date: 30.JUN.2021 19:50:00

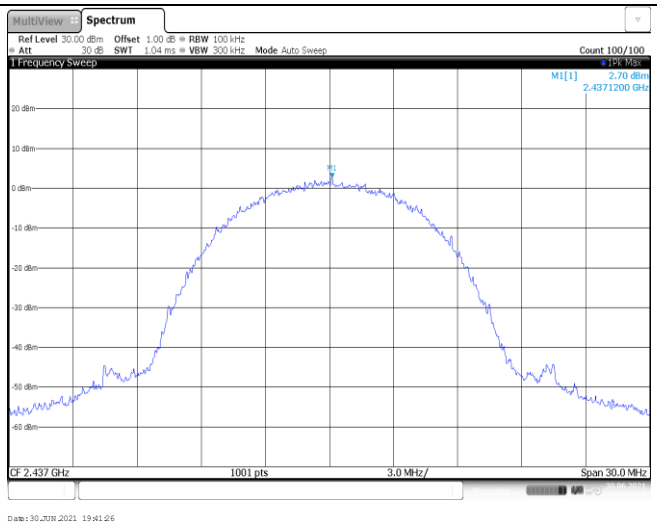
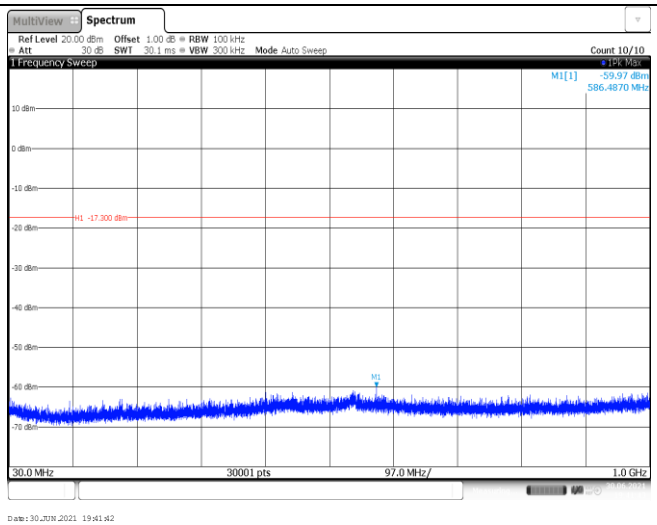
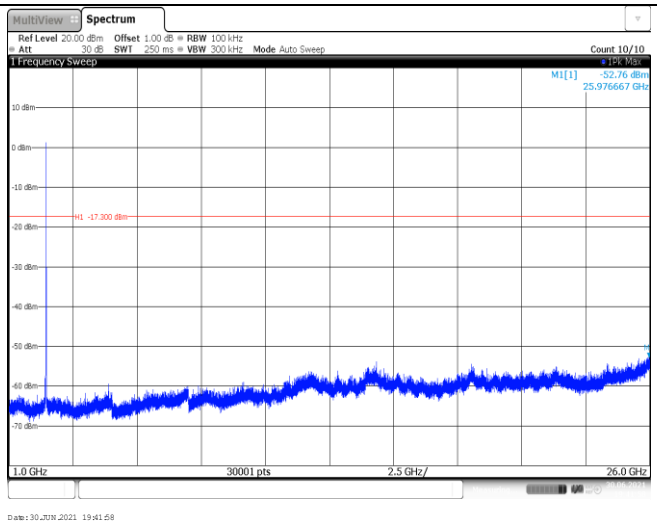
Appendix F：Band edge and Spurious Emissions (conducted)

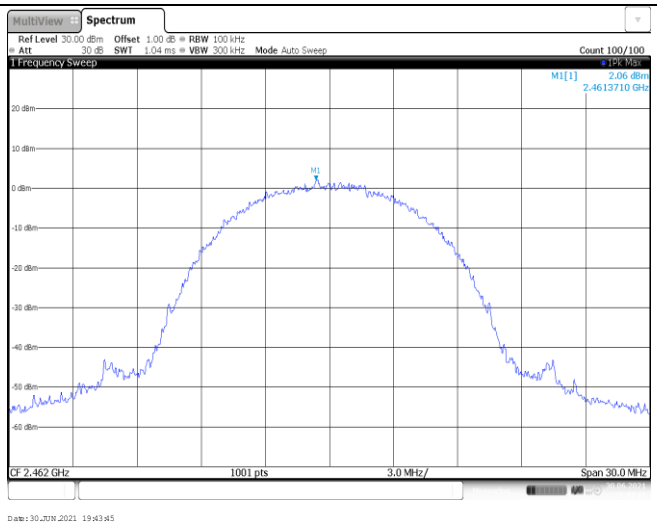
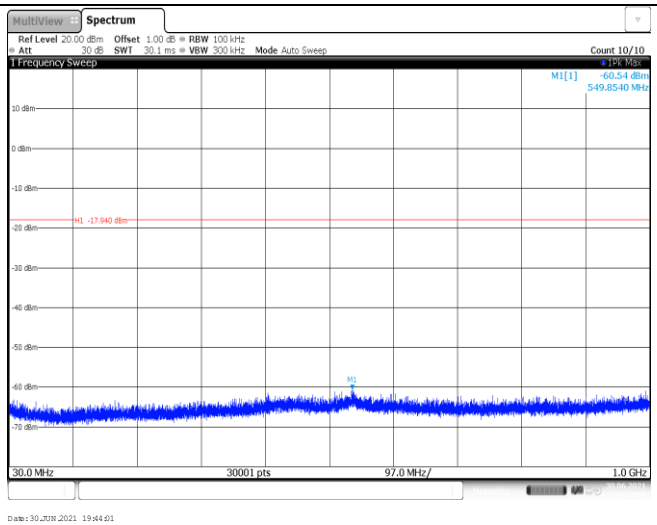
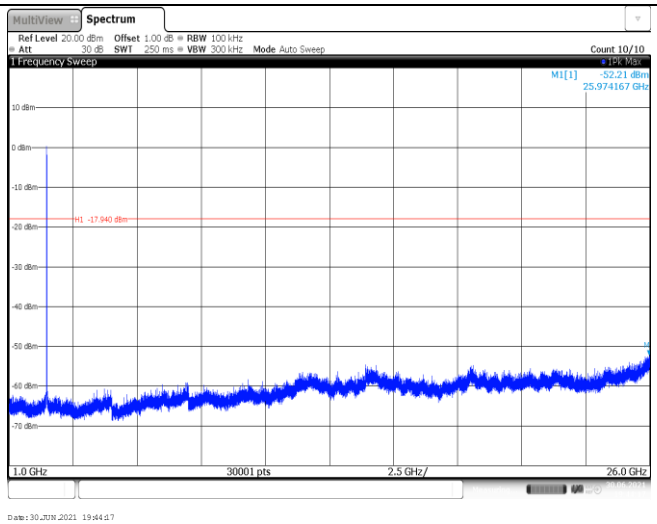
Test Item:	Bandedge	Type:	802.11 b
CH01	
CH11	

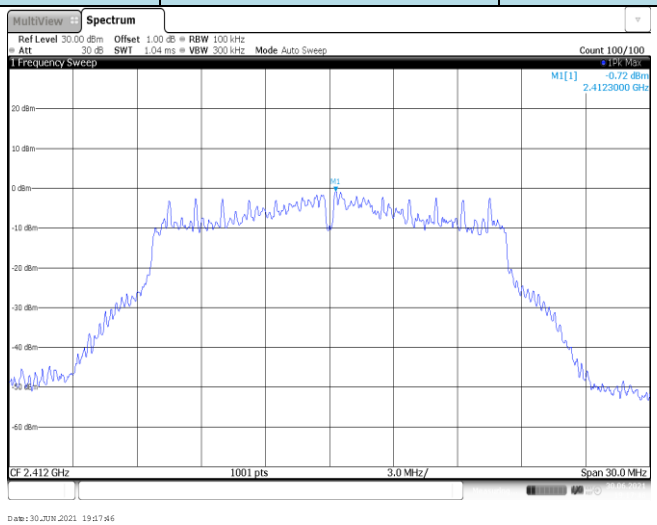
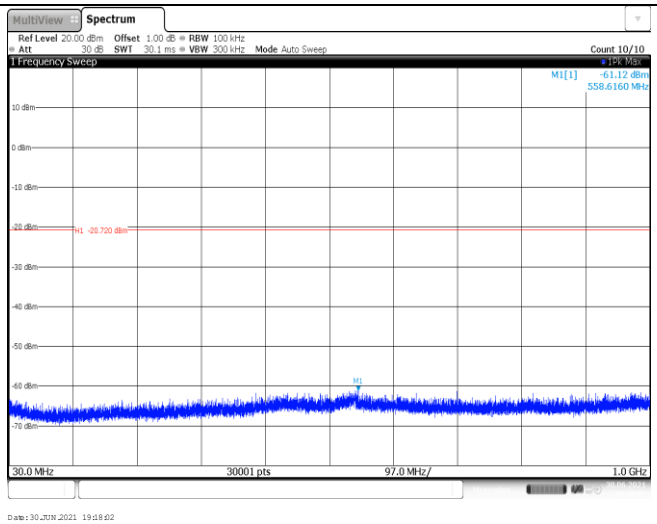
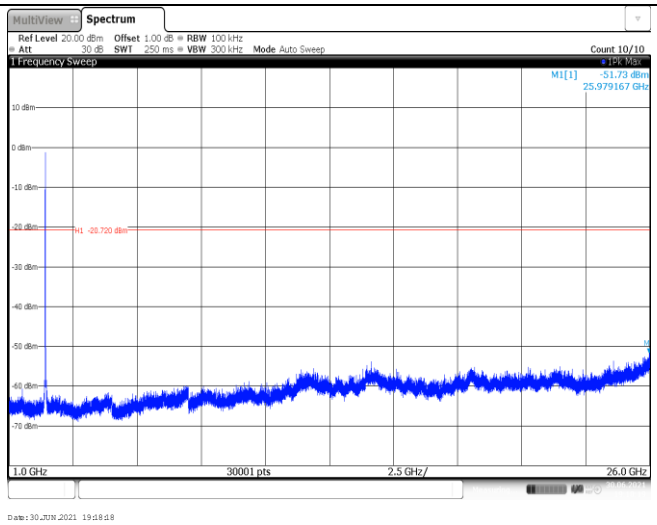
Test Item:	Bandedge	Type:	802.11 g
CH01			
CH11			

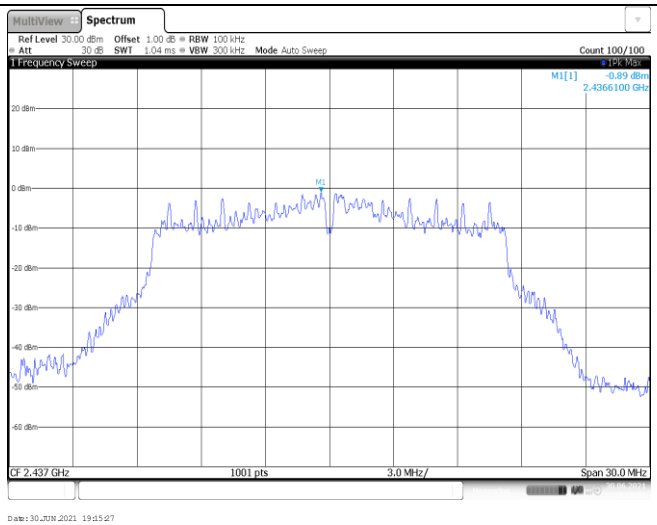
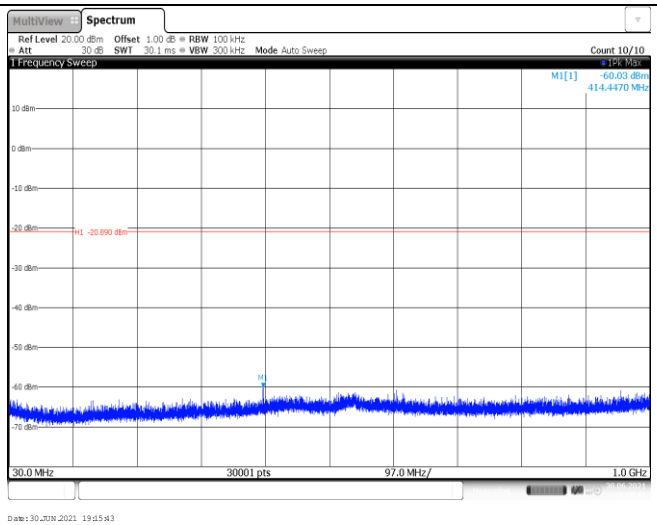
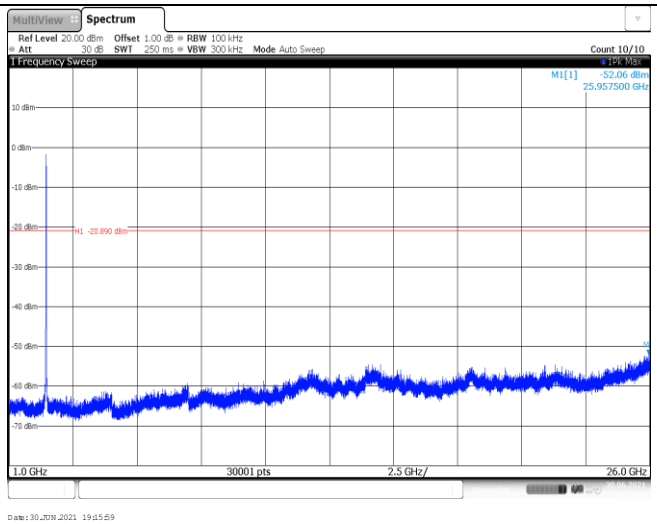
Test Item:	Bandedge	Type:	802.11 n(HT20)
CH01			
CH11			

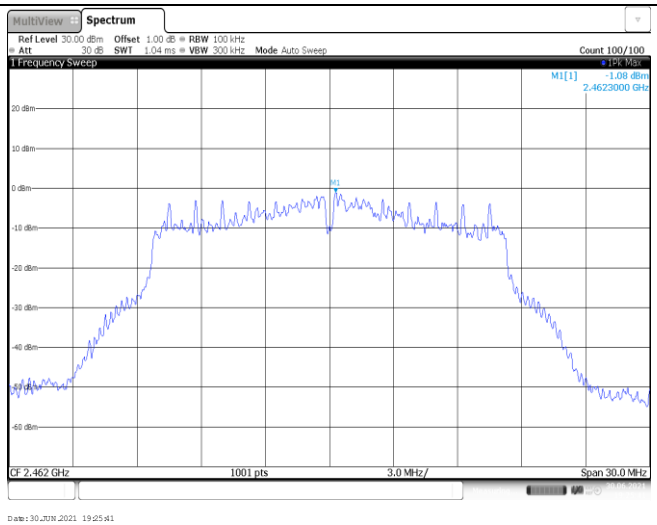
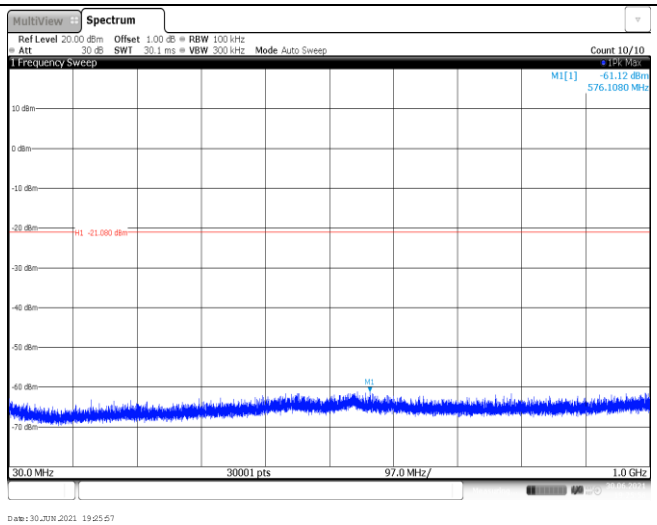
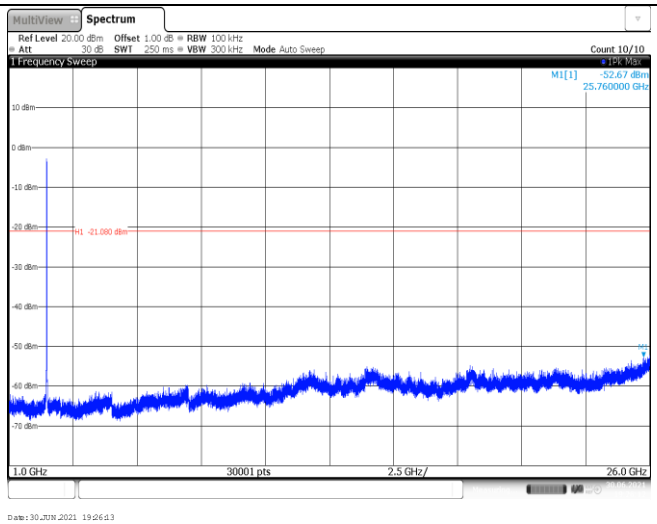
Test Item:	SE	Type:	802.11 b
CH01 Reference level	
CH01 30MHz~1000MHz	
CH01 1GHz~26GHz	

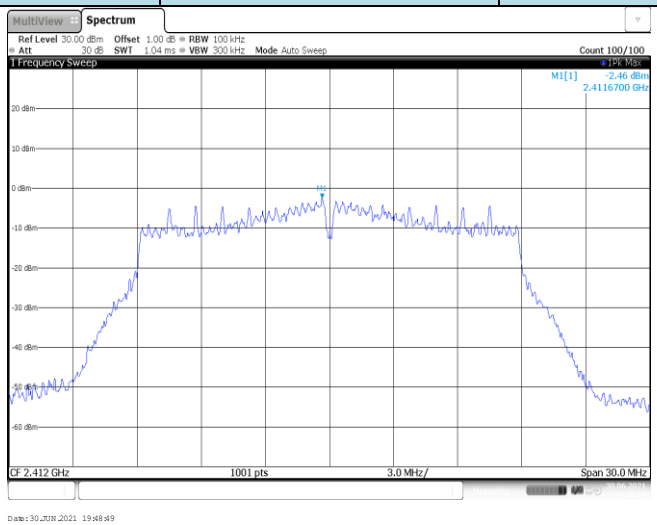
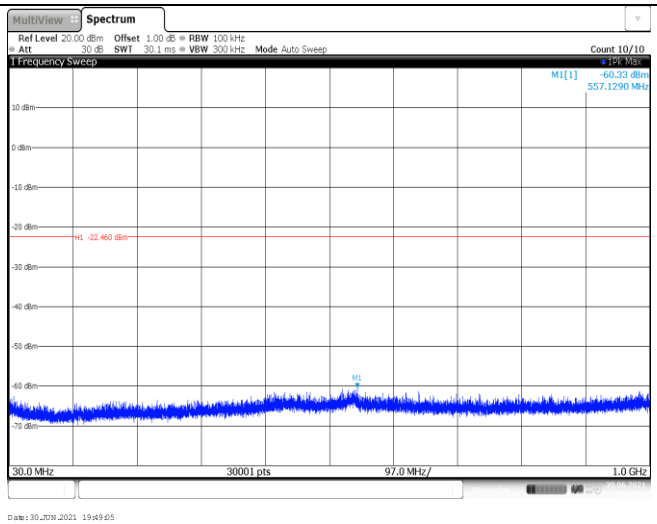
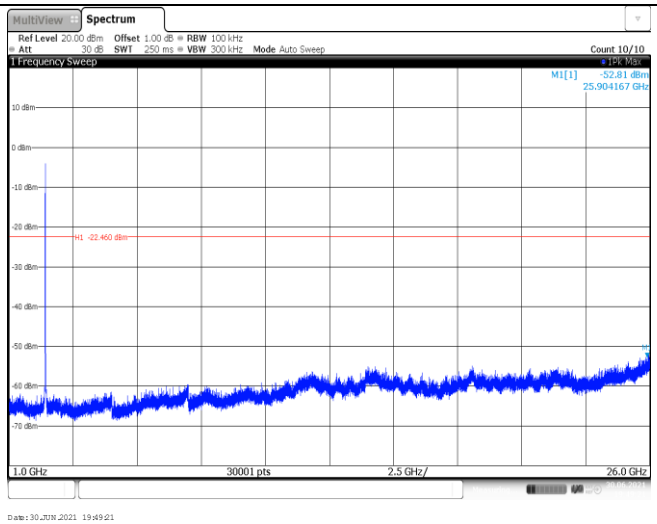
CH06 Reference level	
CH06 30MHz~1000MHz	
CH06 1GHz~26GHz	

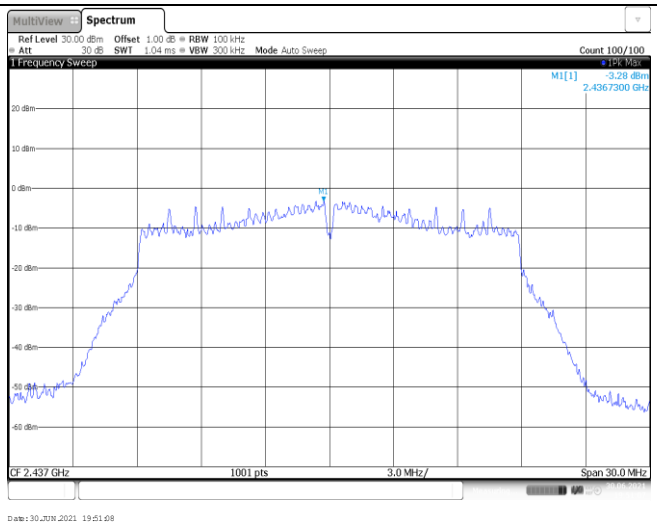
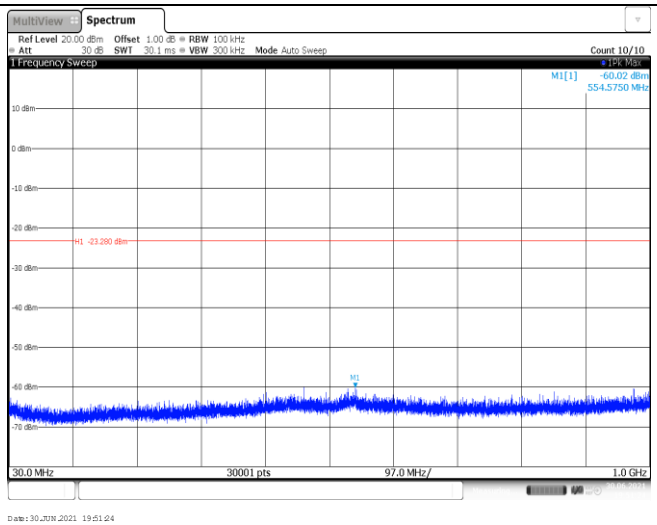
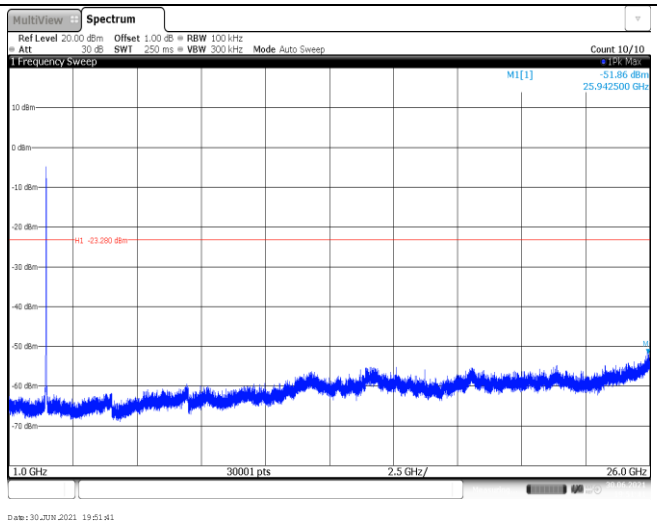
CH11 Reference level	
CH11 30MHz~1000MHz	
CH11 1GHz~26GHz	

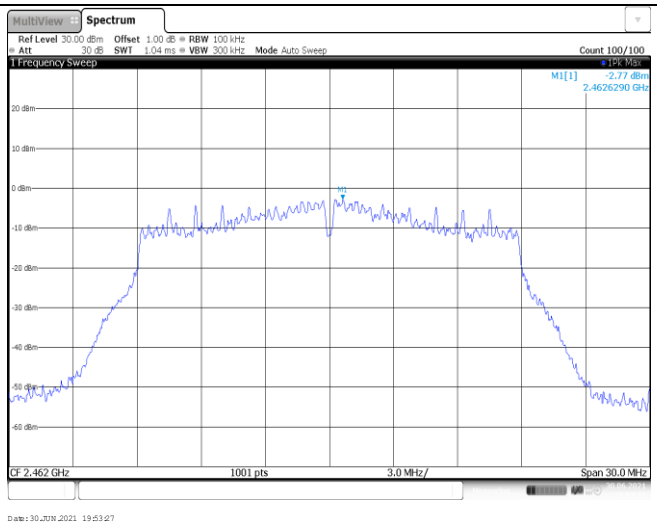
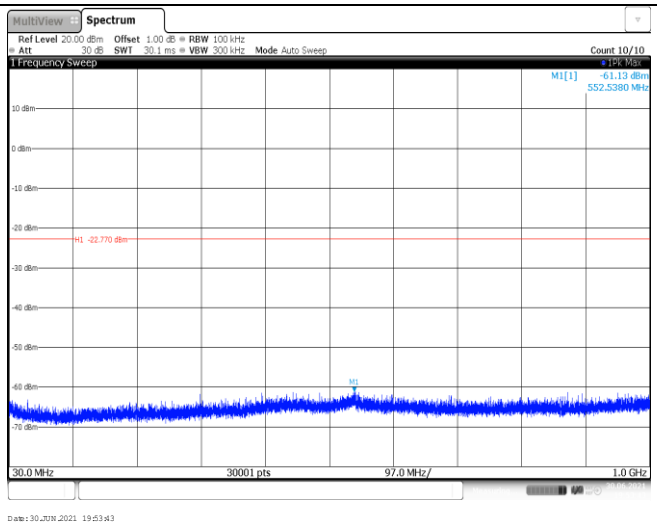
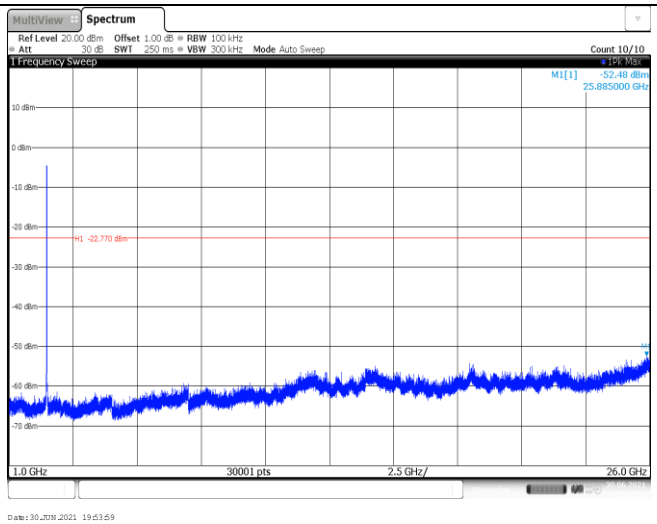
Test Item:	SE	Type:	802.11 g
CH01 Reference level			
CH01 30MHz~1000MHz			
CH01 1GHz~26GHz			

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

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

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

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

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

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