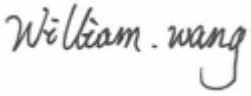
APPENDIX REPORT

Project No.	SHT2006131501EW	Radio Specification	WIFI 2.4G
Test sample No.	YPHT20061315001	Model No.	YYS.2020
Start test date	2020/7/7	Finish date	2020/7/7
Temperature	25°C	Humidity	50%
Test Engineer	Jiongsheng.Feng	Auditor	

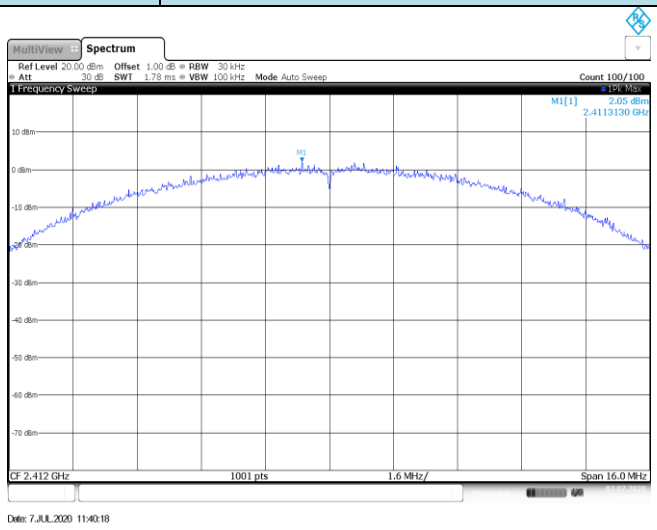
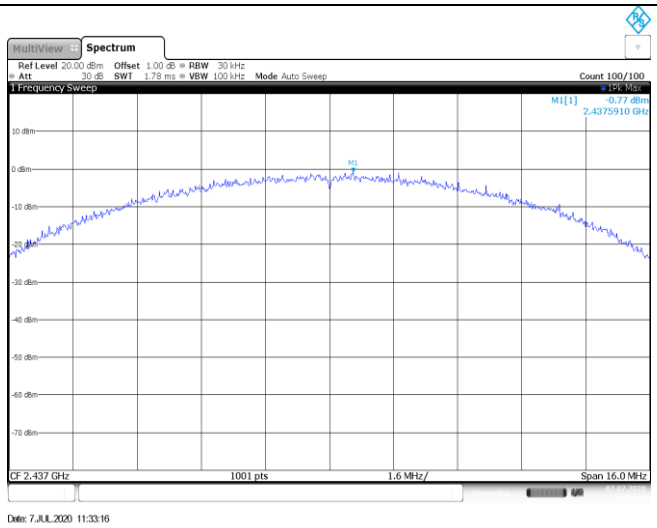
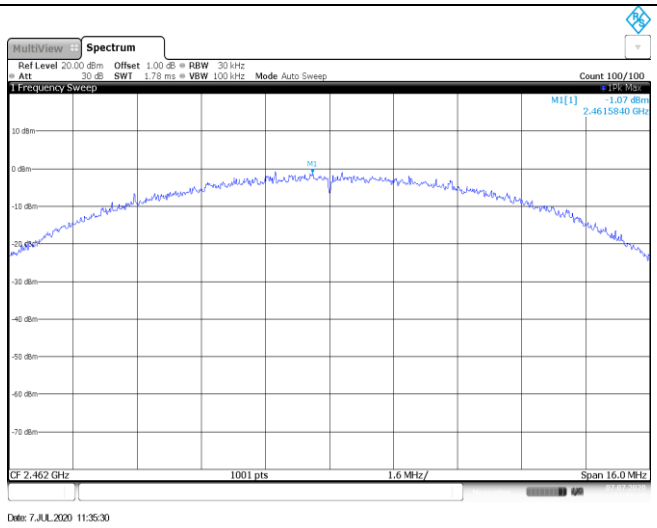
Appendix clause	Test item	Result
A	Conducted Peak Output Power	PASS
B	Power Spectral Density	PASS
C	6 dB Bandwidth	PASS
D	99% Occupied Bandwidth	PASS
E	Duty Cycle	PASS
E	Band edge and Spurious Emissions (conducted)	PASS

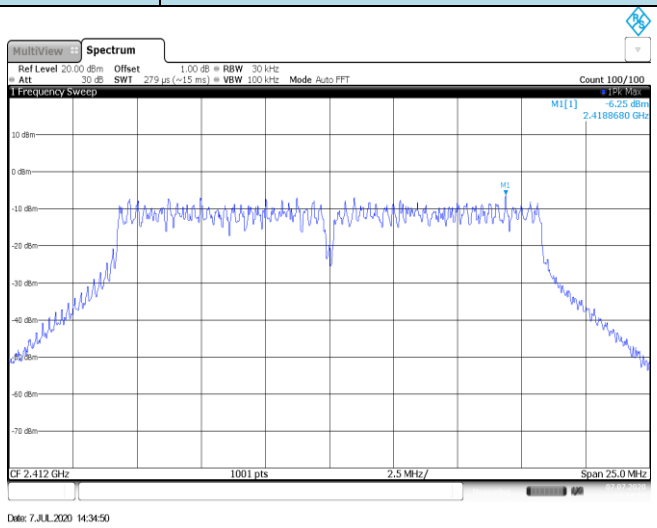
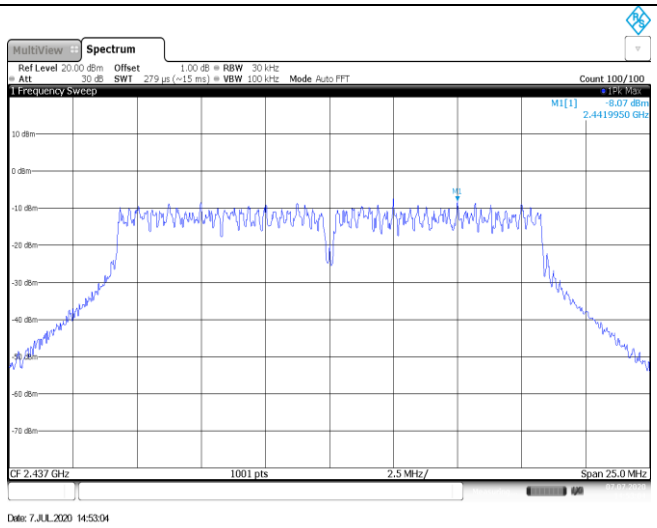
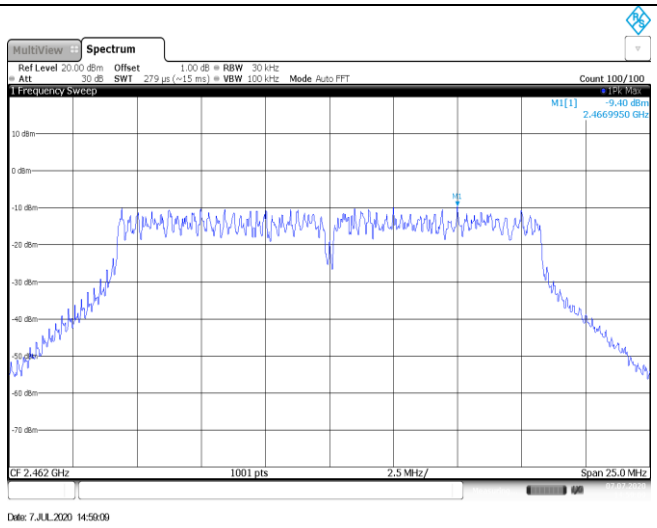
Appendix A: Conducted Peak Output Power

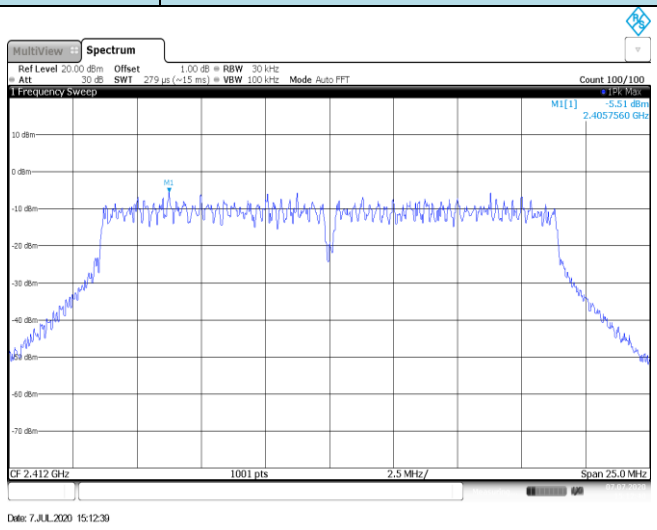
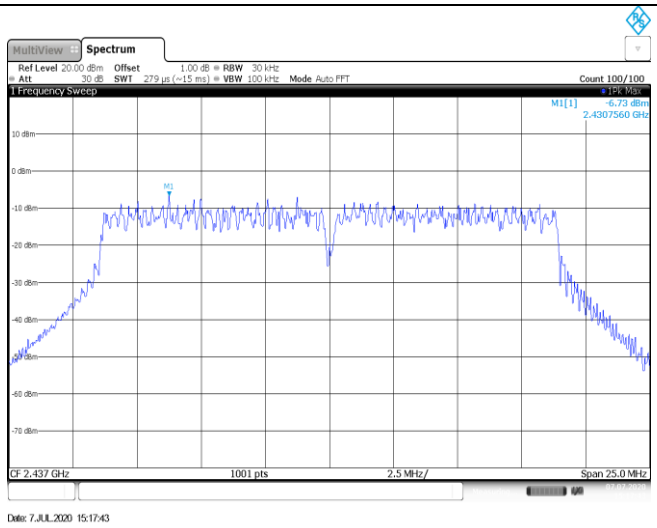
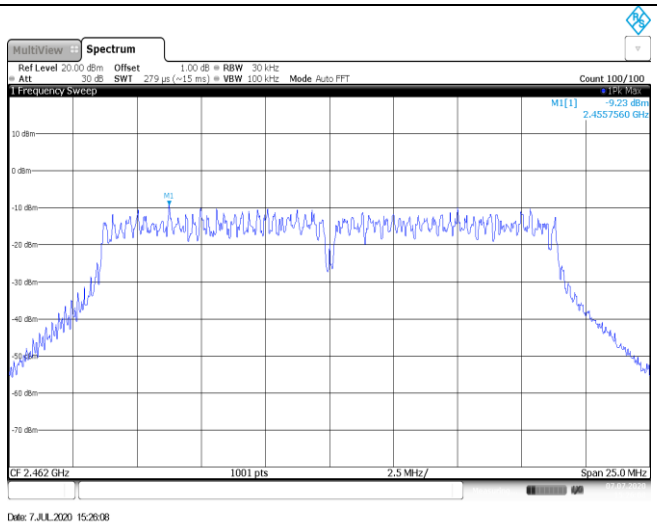
Type	Channel	Peak Output power (dBm)	Average Output power (dBm)	Limit (dBm)	Result
802.11b	01	19.38	18.18	≤ 30.00	Pass
	06	17.13	15.16		
	11	17.00	14.85		
802.11g	01	18.47	16.01	≤ 30.00	Pass
	06	17.54	15.37		
	11	15.34	13.14		
802.11n (HT20)	01	18.72	16.53	≤ 30.00	Pass
	06	18.05	15.64		
	11	15.01	13.03		
802.11n(HT40)	03	17.00	14.86	≤ 30.00	Pass
	06	16.64	14.37		
	09	15.08	13.00		

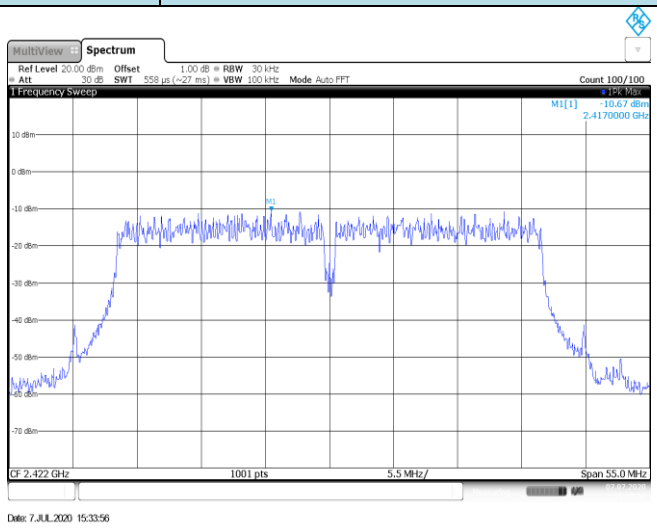
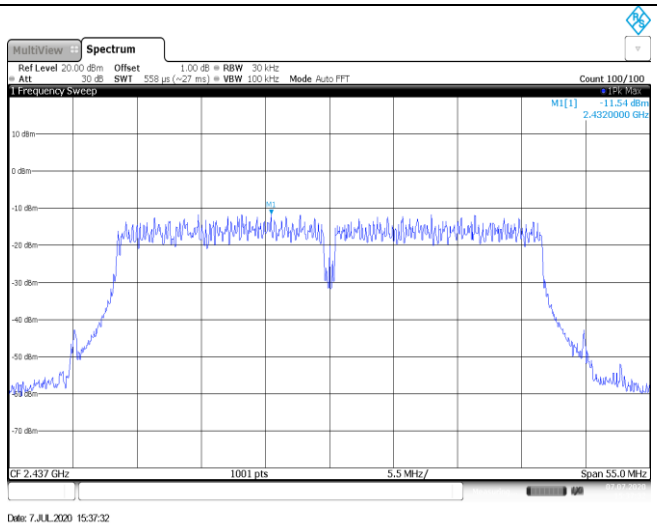
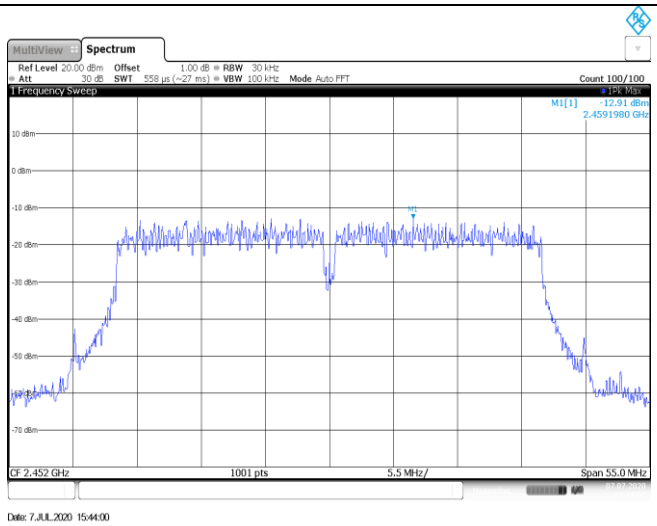
Appendix B：Power Spectral Density

Type	Channel	Power Spectral Density (dBm/30KHz)	Limit (dBm/3KHz)	Result
802.11b	01	2.05	≤8.00	Pass
	06	-0.77		
	11	-1.07		
802.11g	01	-6.25	≤8.00	Pass
	06	-8.07		
	11	-9.40		
802.11n(HT20)	01	-5.51	≤8.00	Pass
	06	-6.73		
	11	-9.23		
802.11n(HT40)	03	-10.67	≤8.00	Pass
	06	-11.54		
	09	-12.91		

Type:	802.11 b
CH01	
CH06	
CH11	

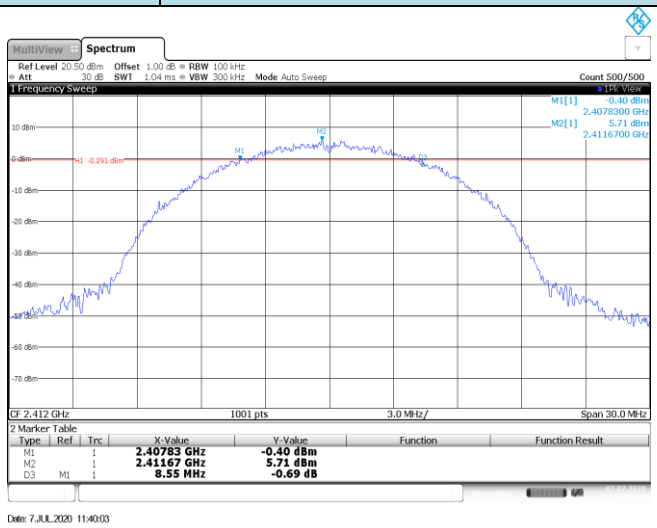
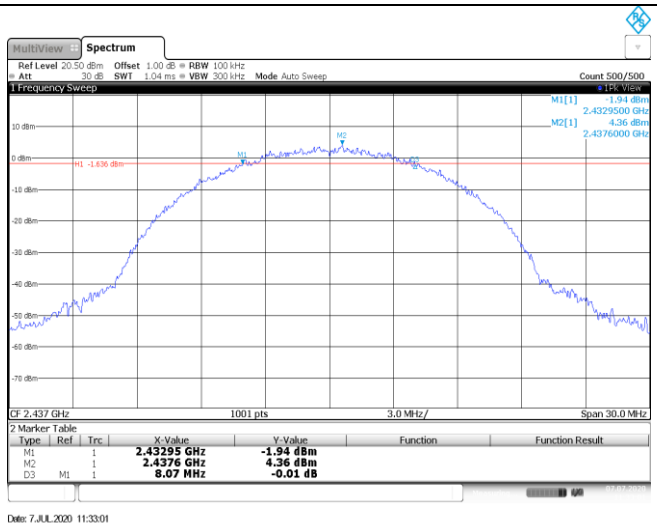
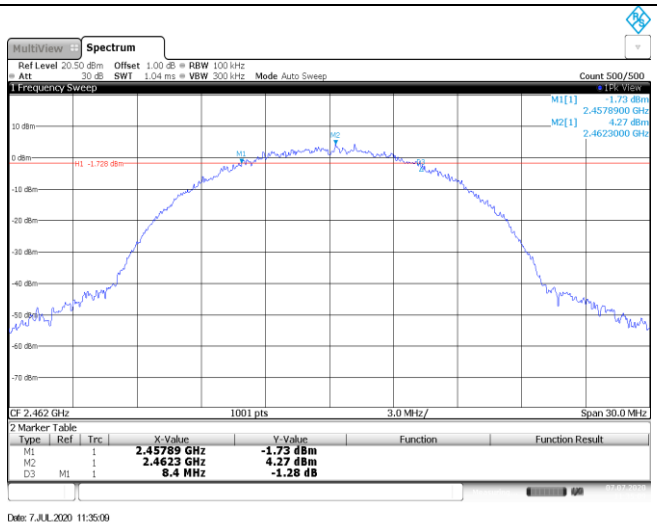
Type:	802.11 g
CH01	
CH06	
CH11	

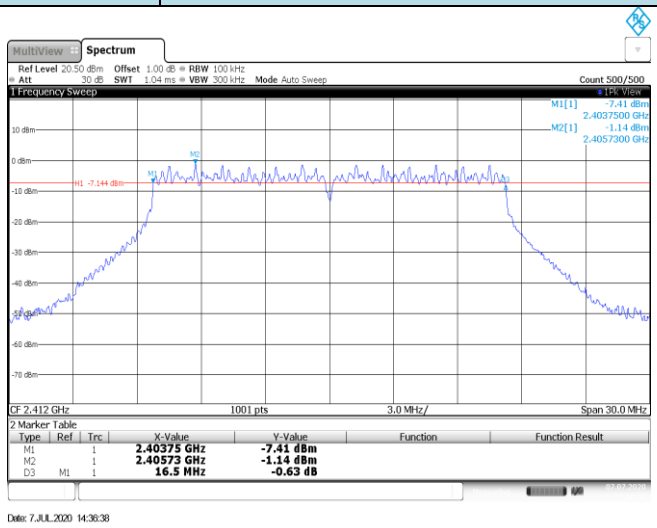
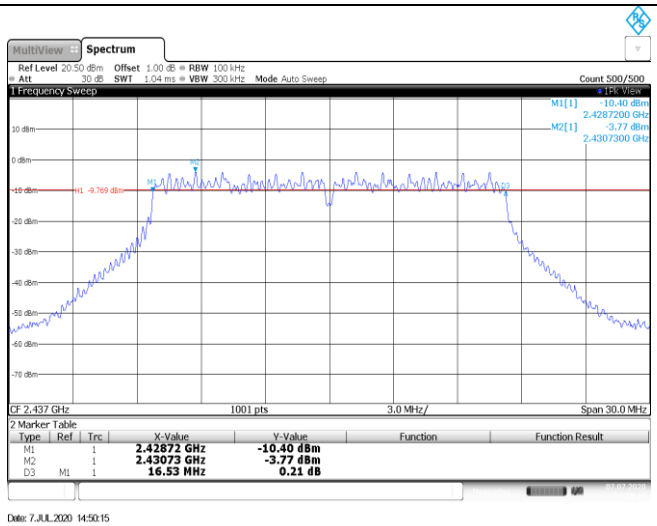
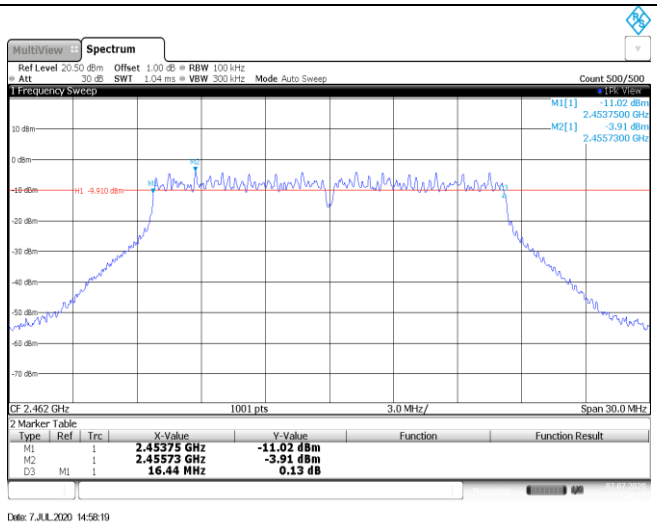
Type:	802.11n(HT20)
CH01	
CH06	
CH11	

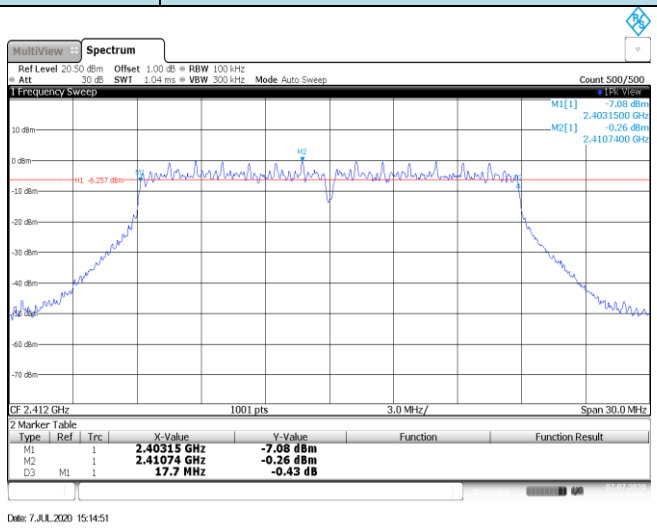
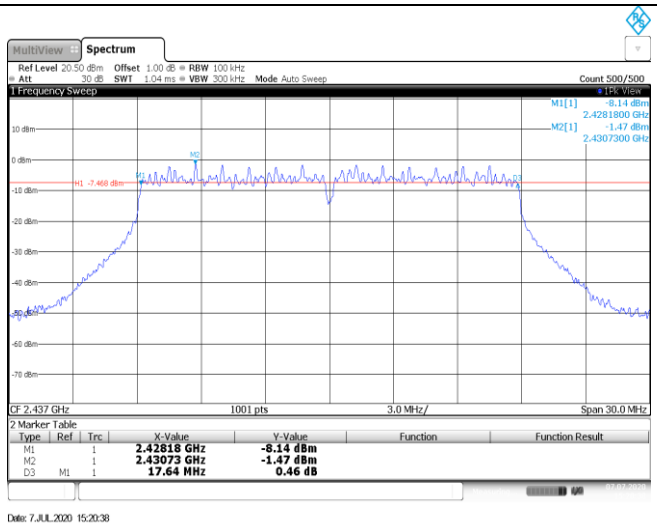
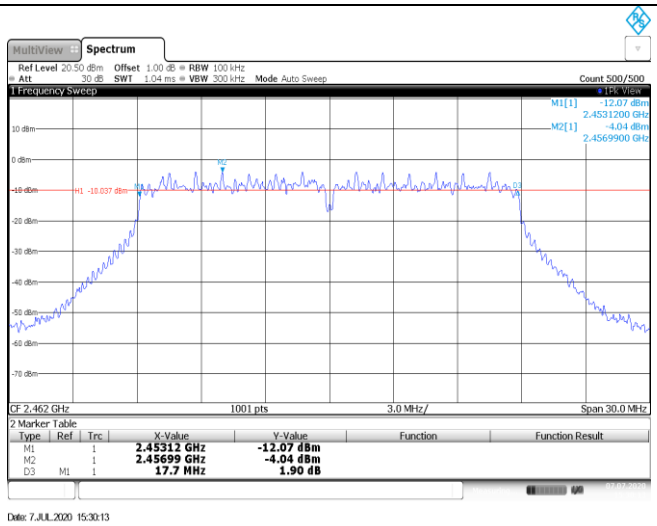
Type:	802.11n(HT40)
CH03	
CH06	
CH09	

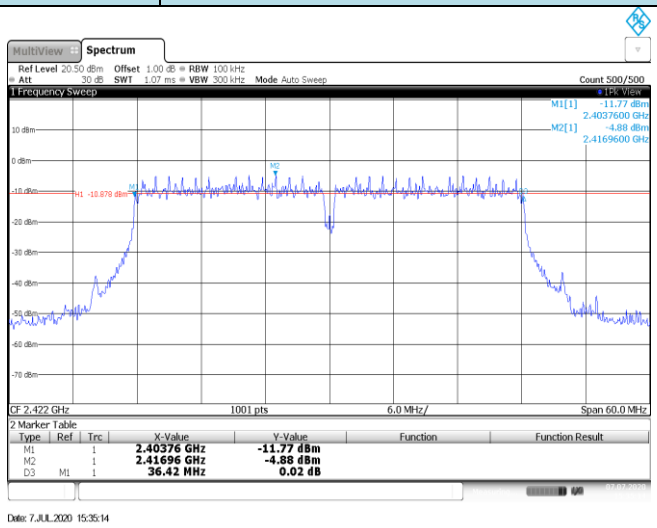
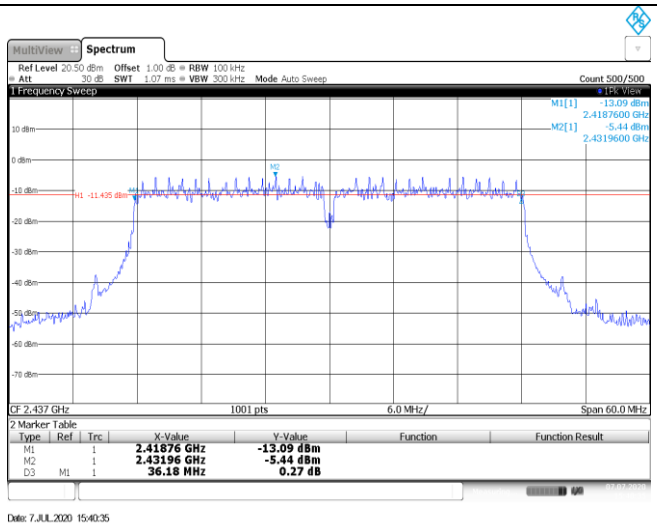
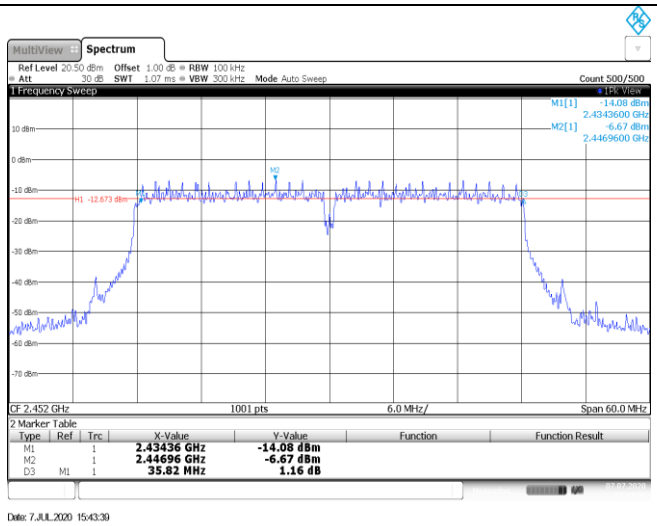
Appendix C：6dB bandwidth

Type	Channel	6dB Bandwidth (MHz)	Limit (MHz)	Result
802.11b	01	8.55	≥0.5	Pass
	06	8.07		
	11	8.40		
802.11g	01	16.50	≥0.5	Pass
	06	16.53		
	11	16.44		
802.11n(HT20)	01	17.70	≥0.5	Pass
	06	17.64		
	11	17.70		
802.11n(HT40)	03	36.42	≥0.5	Pass
	06	36.18		
	09	35.82		

Type:	802.11 b
CH01	
CH06	
CH11	

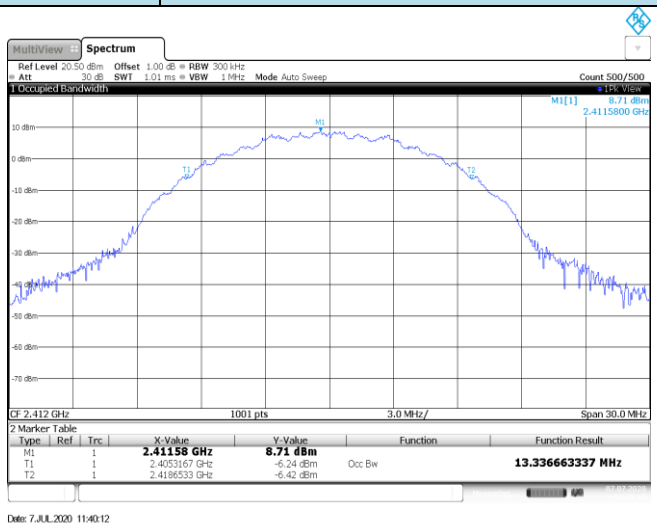
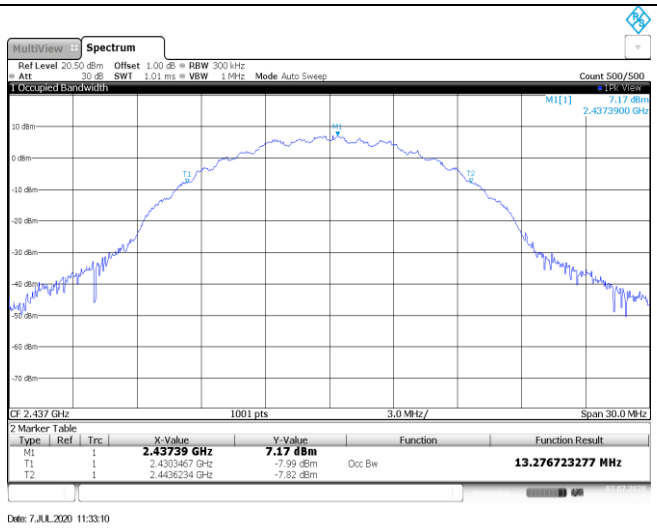
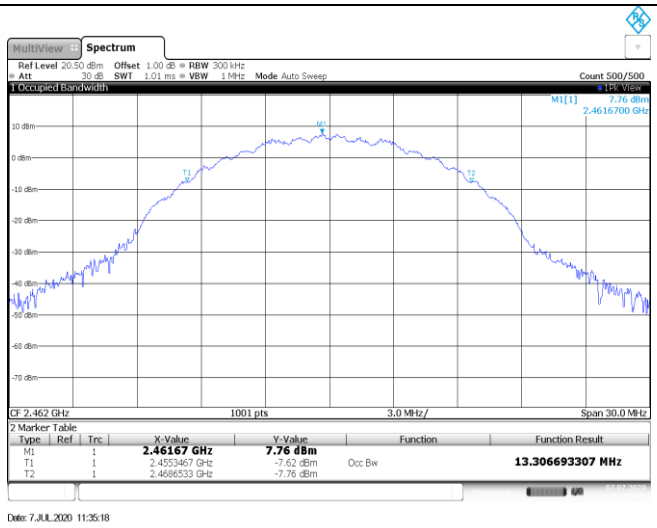
Type:	802.11 g
CH01	
CH06	
CH11	

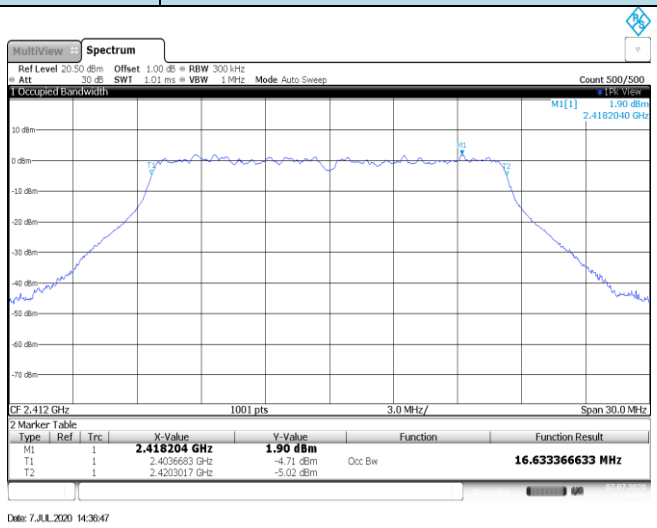
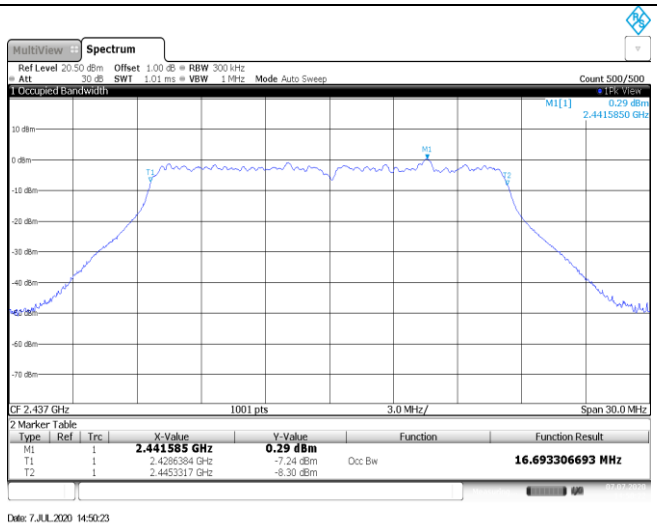
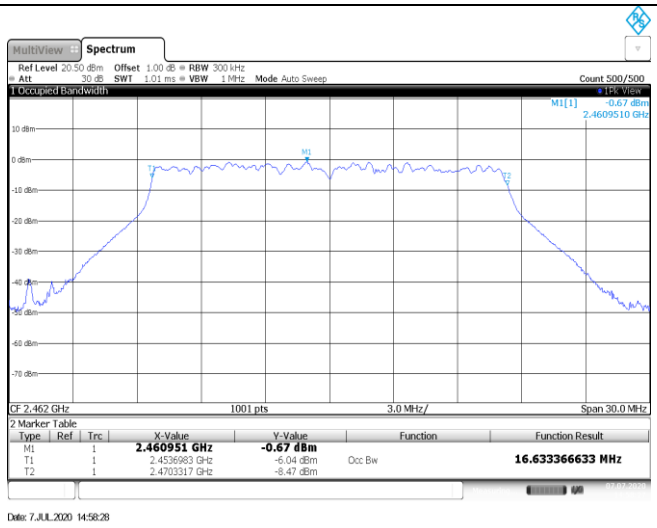
Type:	802.11n(HT20)
CH01	
CH06	
CH11	

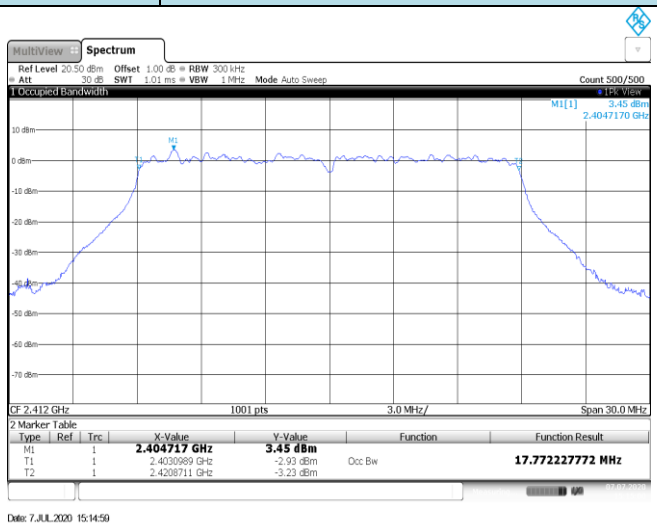
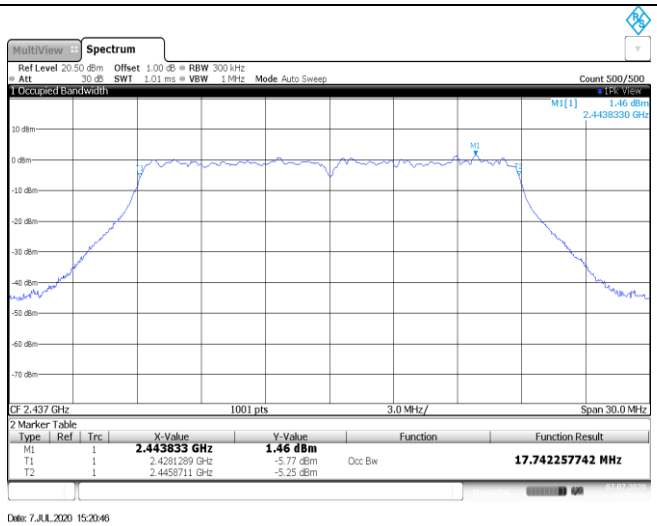
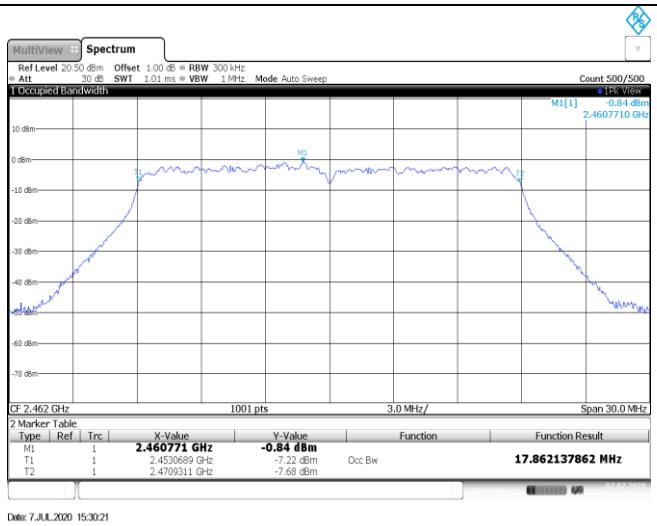
Type:	802.11n(HT40)
CH03	
CH06	
CH09	

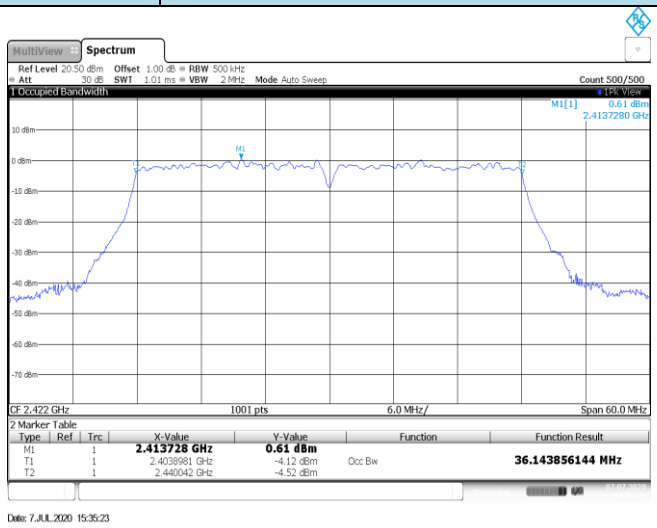
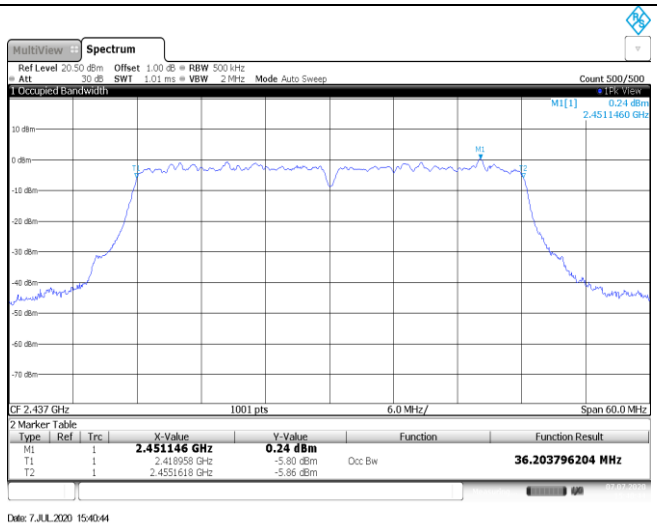
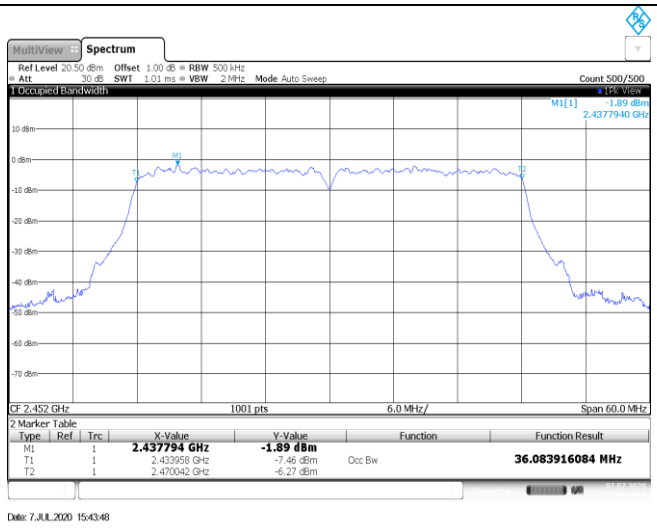
Appendix D：99% Occupied Bandwidth

Type	Channel	99% Bandwidth (MHz)	Limit (kHz)	Result
802.11b	01	13.34	-	Pass
	06	13.28		
	11	13.31		
802.11g	01	16.63	-	Pass
	06	16.69		
	11	16.63		
802.11n(HT20)	01	17.77	-	Pass
	06	17.74		
	11	17.86		
802.11n(HT40)	03	36.14	-	Pass
	06	36.20		
	09	36.08		

Type:	802.11 b
CH01	
CH06	
CH11	

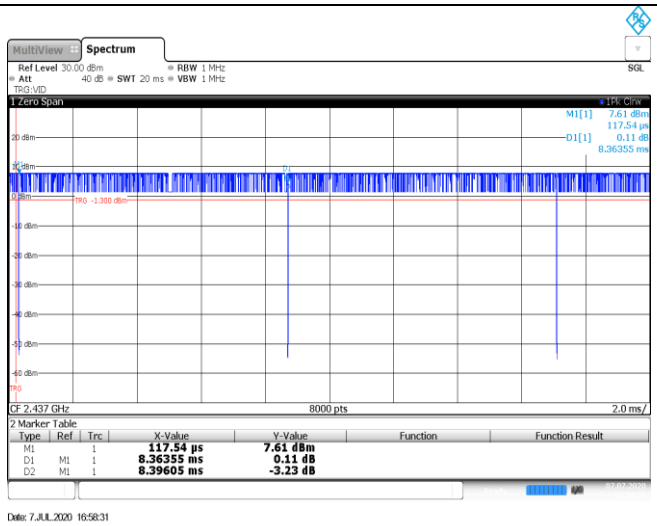
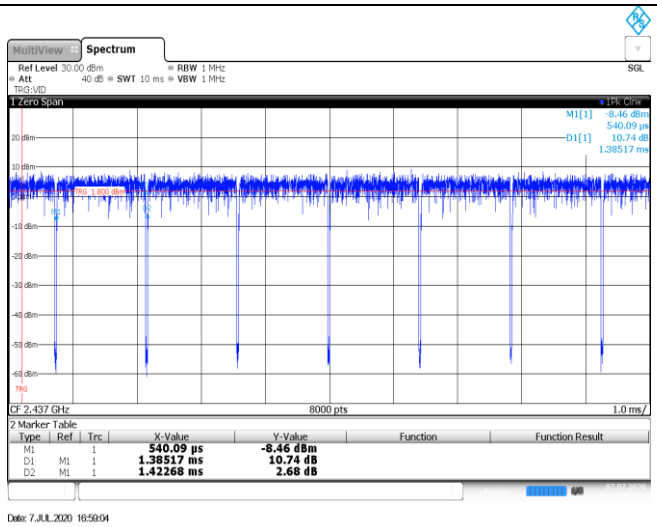
Type:	802.11 g
CH01	
CH06	
CH11	

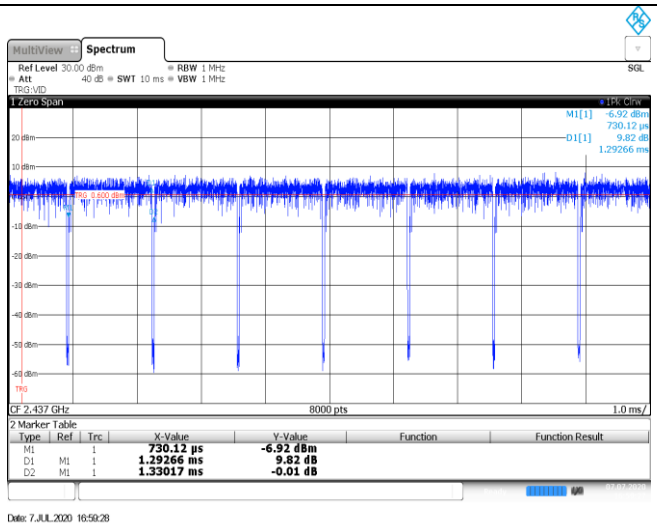
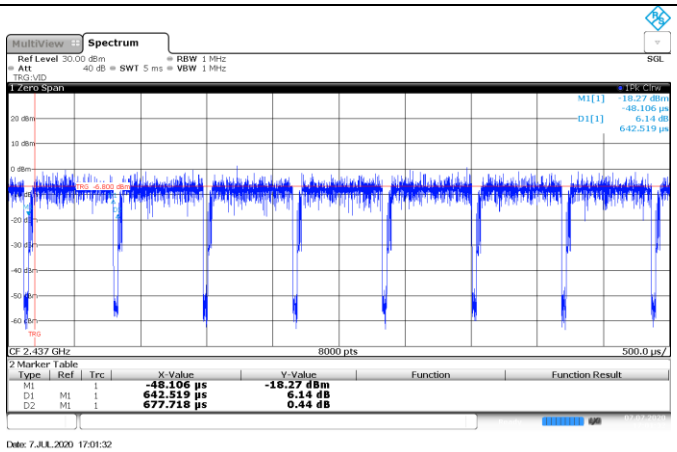
Type:	802.11n(HT20)
CH01	
CH06	
CH11	

Type:	802.11n(HT40)
CH03	
CH06	
CH09	

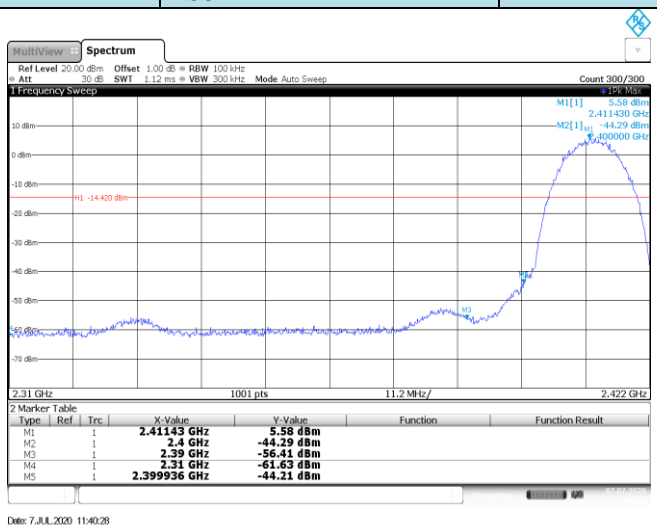
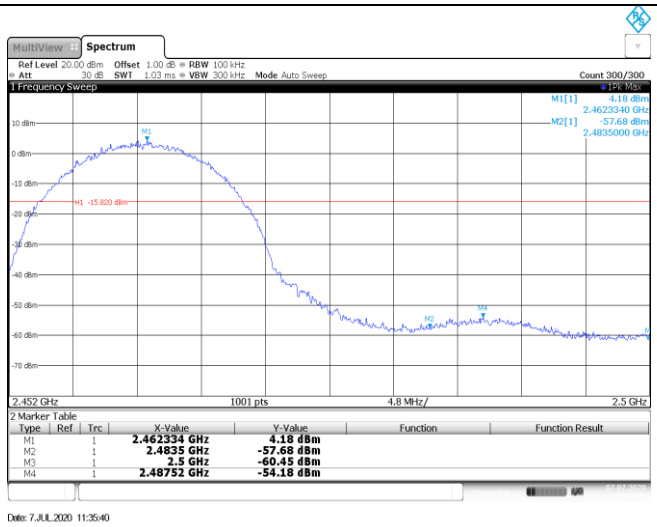
Appendix E：Duty Cycle

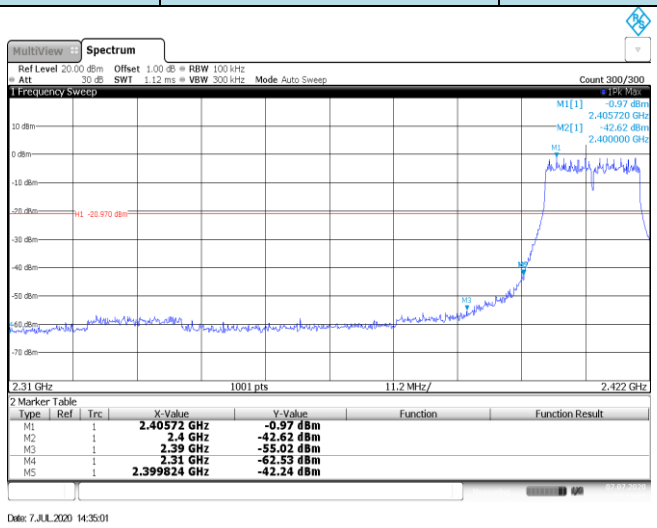
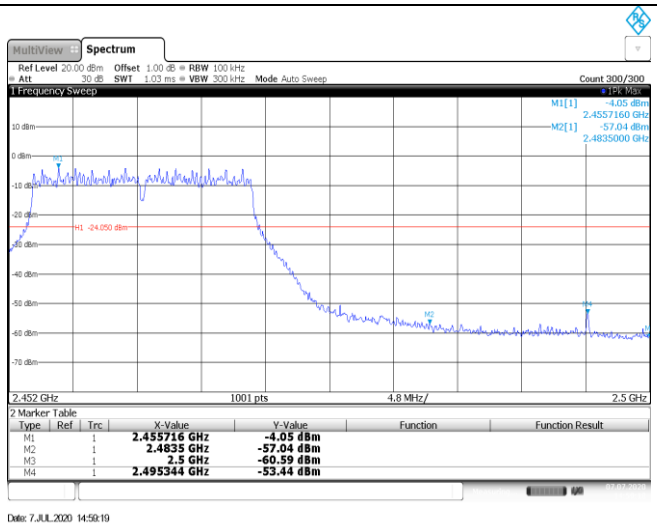
Modulation Type	Test Frequency（MHz）	$T_{on\ time}$ for single burst (ms)	T_{period} (ms)	Duty cycle	$1/T_{on\ time}$ (kHz)
11b	2437	8.36	8.40	99.5%	0.1
11g	2437	1.39	1.42	97.9%	0.7
11n20	2437	1.29	1.33	97.0%	0.8
11n40	2437	0.64	0.68	94.1%	1.6

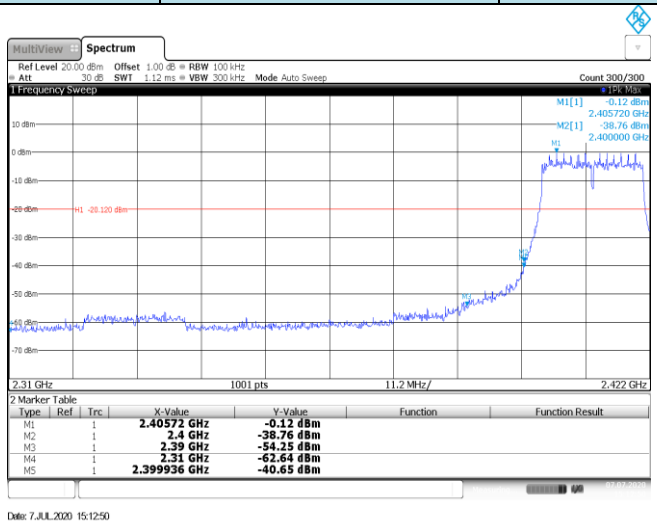
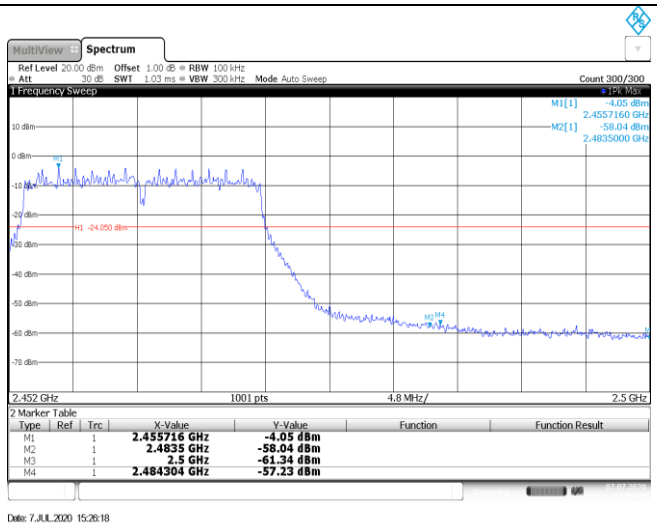
11b	
11g	

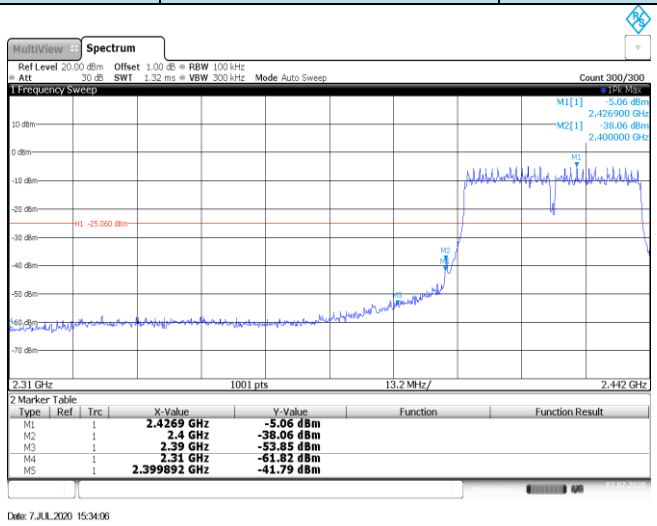
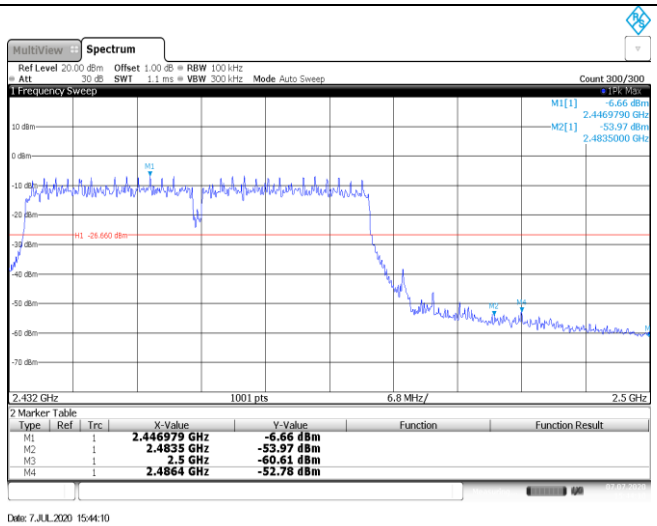
11n20	 MultiView Spectrum Ref Level 30.00 dBm Att 40 dB SWT 10 ms RBW 1 MHz VBW 1 MHz TRG:VID SGL 1 Zero Span 1Pk Clrw M1[1] -6.92 dBm 730.12 µs D1[1] 9.82 dB 1.29266 ms CF 2.437 GHz 8000 pts 1.0 ms/ 2 Marker Table Type Ref Trc X-Value Y-Value Function Function Result M1 1 730.12 µs -6.92 dBm D1 M1 1 1.29266 ms 9.82 dB D2 M1 1 1.33017 ms -0.01 dB Date: 7.JUL.2020 16:59:28
11n40	 MultiView Spectrum Ref Level 30.00 dBm Att 40 dB SWT 5 ms RBW 1 MHz VBW 1 MHz TRG:VID SGL 1 Zero Span 1Pk Clrw M1[1] -18.27 dBm -48.106 µs D1[1] 6.14 dB 642.519 µs CF 2.437 GHz 8000 pts 500.0 µs/ 2 Marker Table Type Ref Trc X-Value Y-Value Function Function Result M1 1 -48.106 µs -18.27 dBm D1 M1 1 642.519 µs 6.14 dB D2 M1 1 677.718 µs 0.44 dB Date: 7.JUL.2020 17:01:32

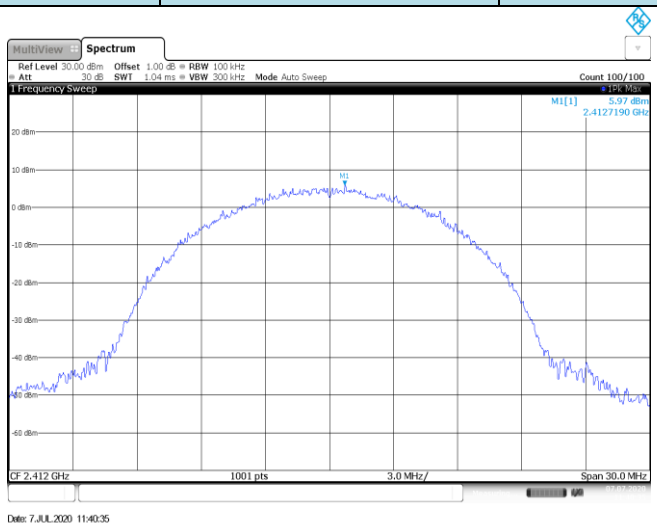
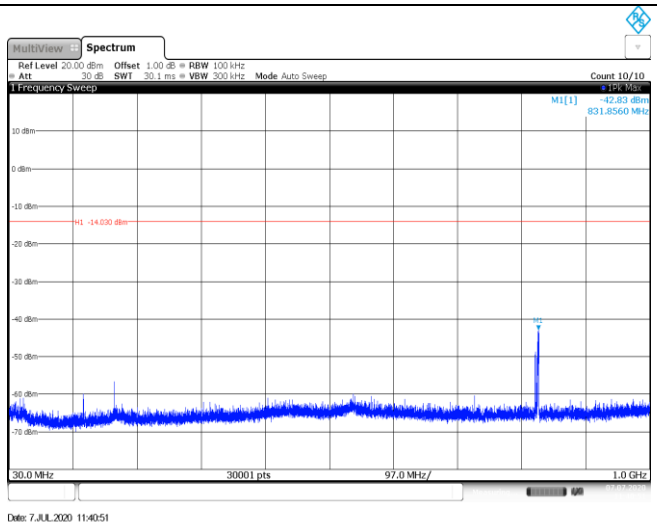
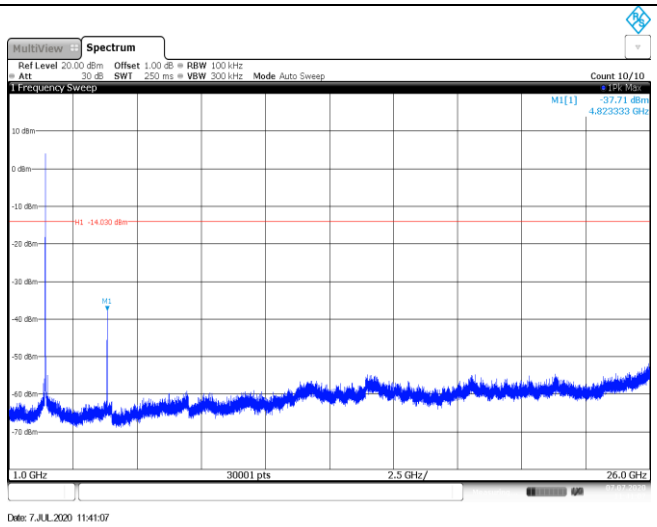
Appendix F：Band edge and Spurious Emissions (conducted)

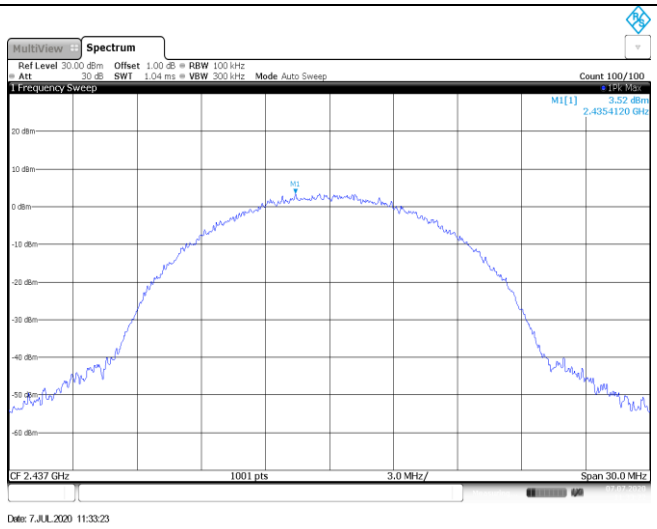
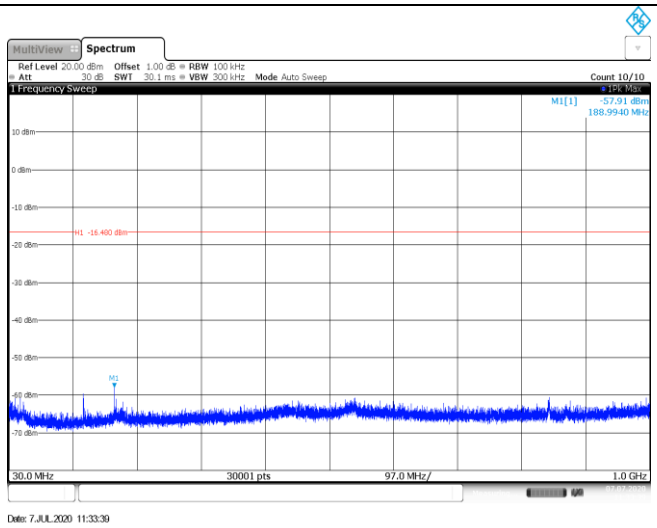
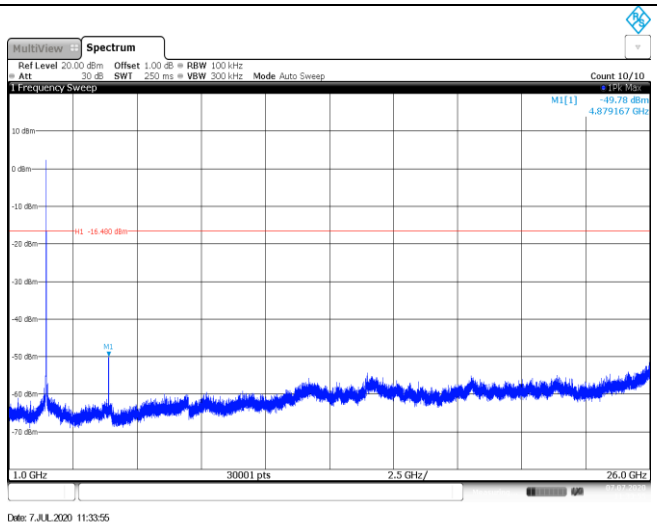
Test Item:	Bandedge	Type:	802.11 b
CH01	
CH11	

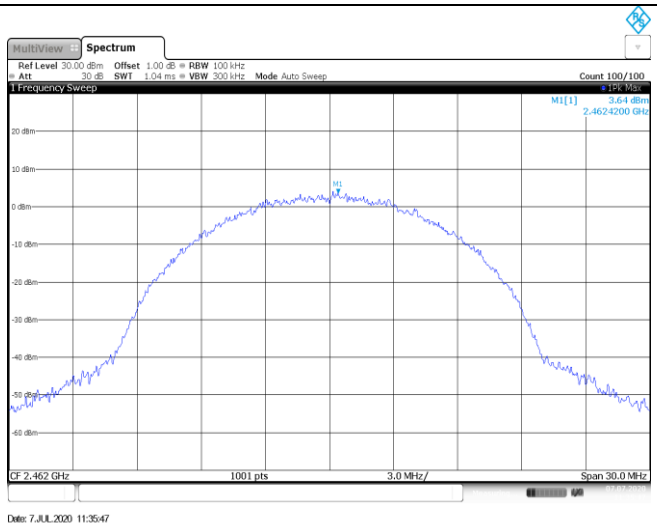
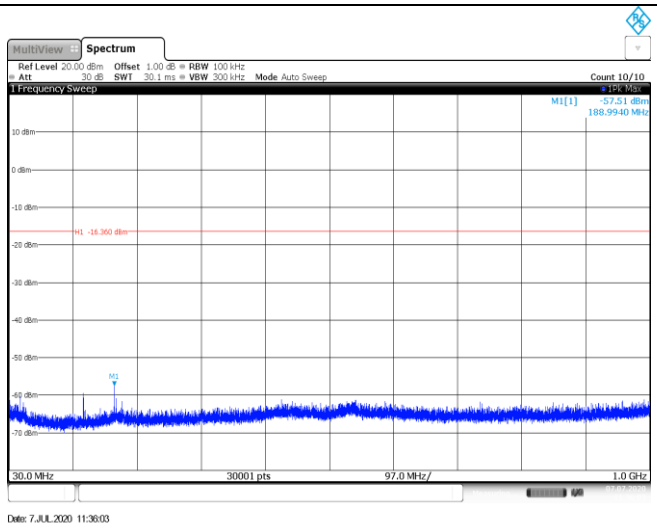
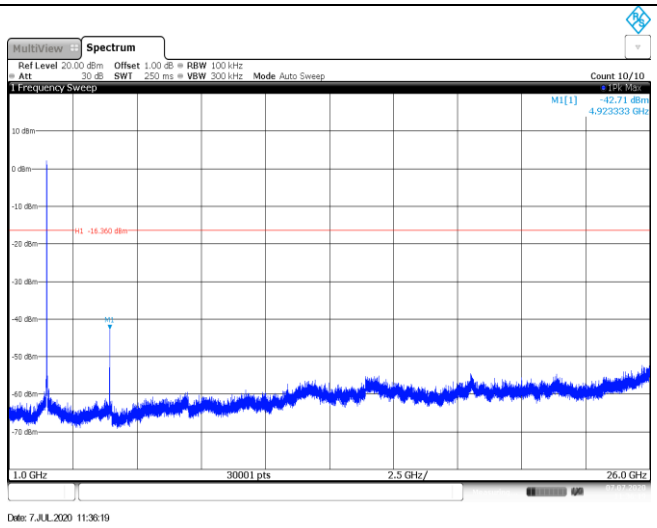
Test Item:	Bandedge	Type:	802.11 g
CH01			
CH11			

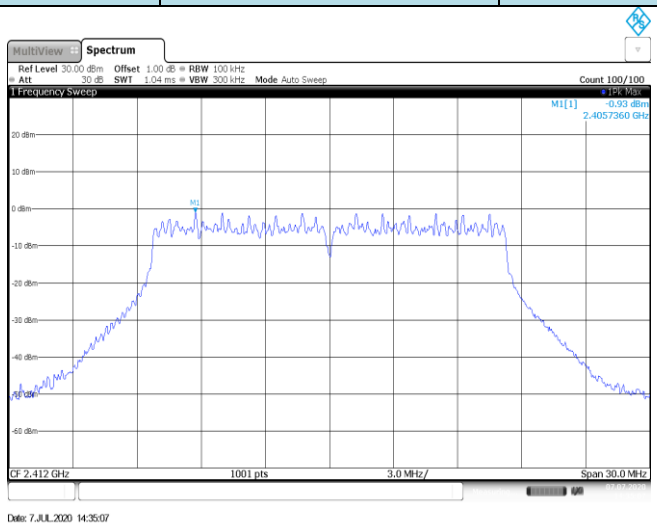
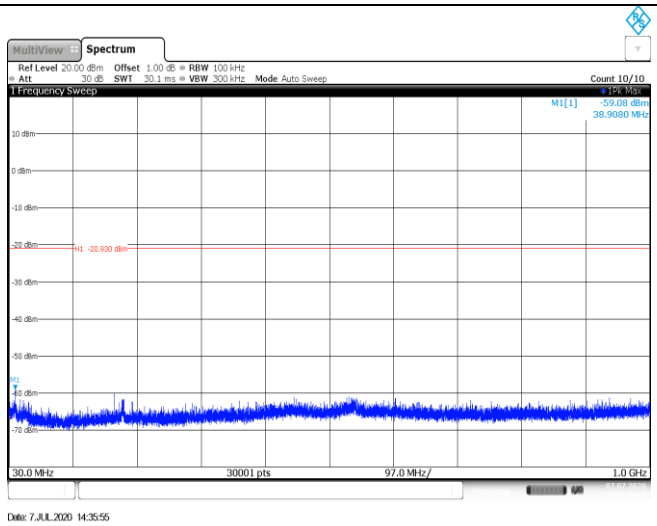
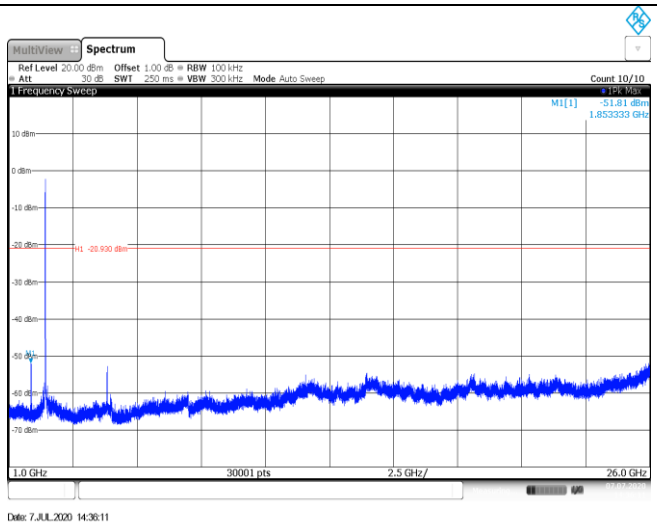
Test Item:	Bandedge	Type:	802.11 n(HT20)
CH01			
CH11			

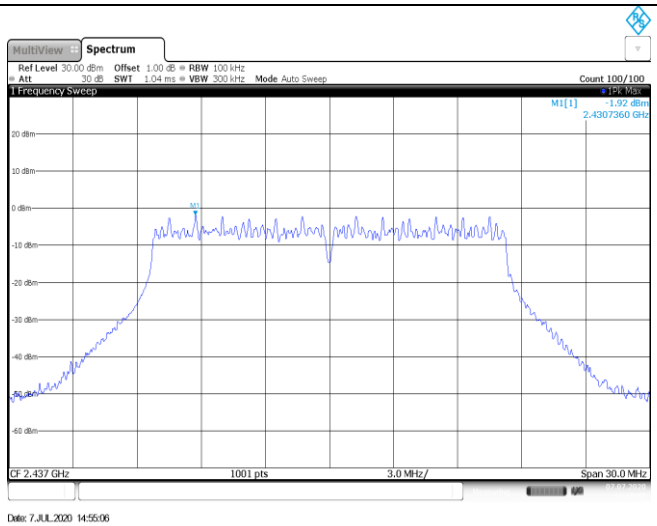
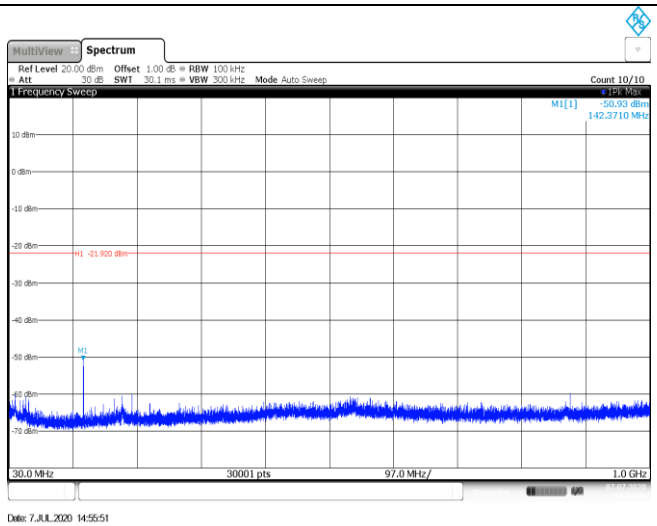
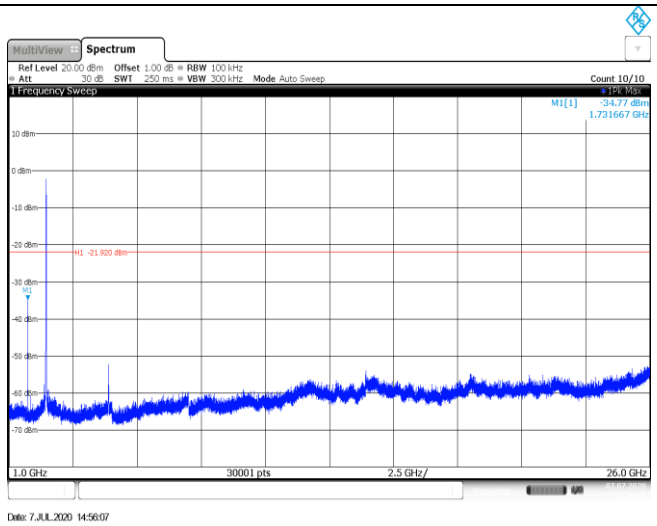
Test Item:	Bandedge	Type:	802.11 n(HT40)
CH03			
CH09			

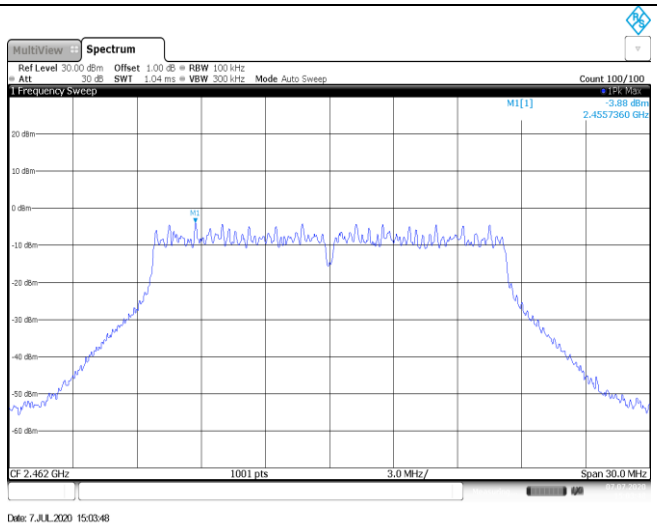
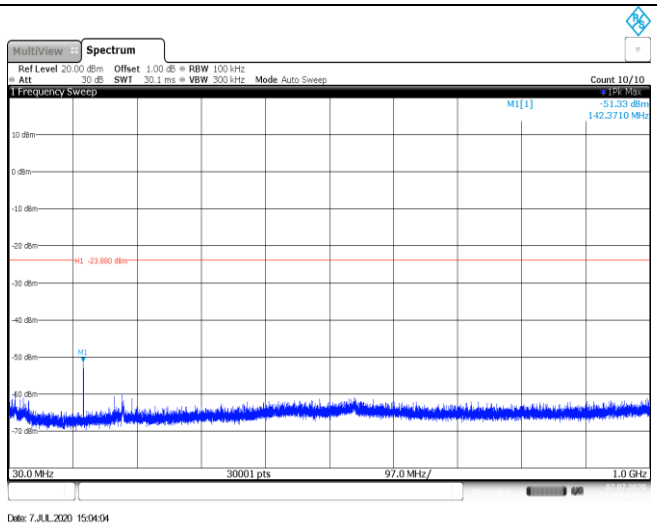
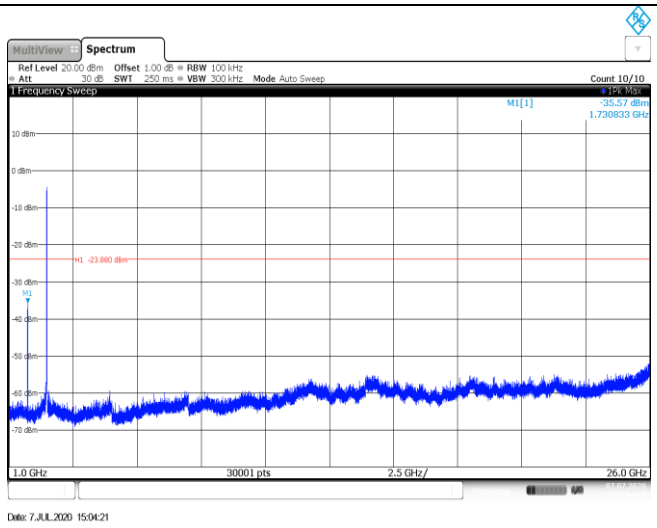
Test Item:	SE	Type:	802.11b
CH01 Reference level			
CH01 30MHz~1000MHz			
CH01 1GHz~26GHz			

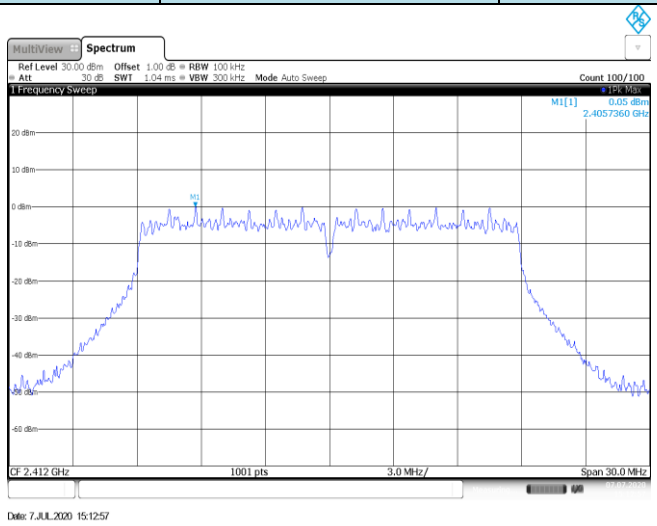
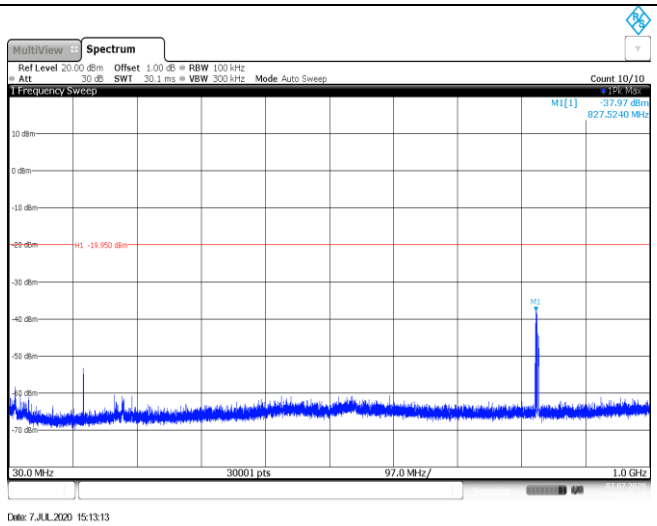
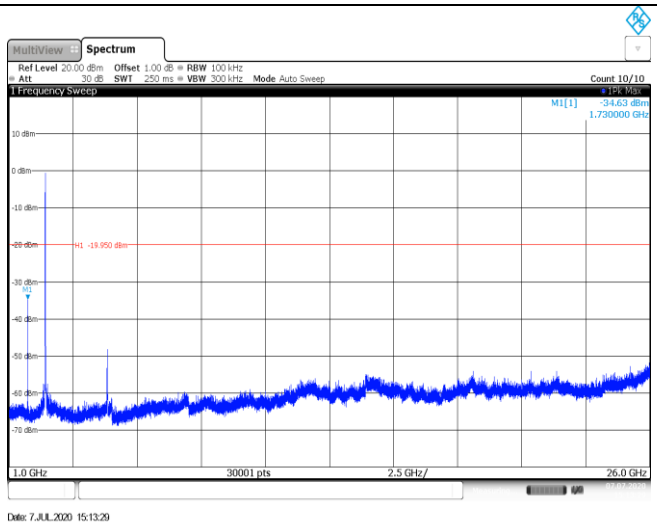
CH06 Reference level	
CH06 30MHz~1000MHz	
CH06 1GHz~26GHz	

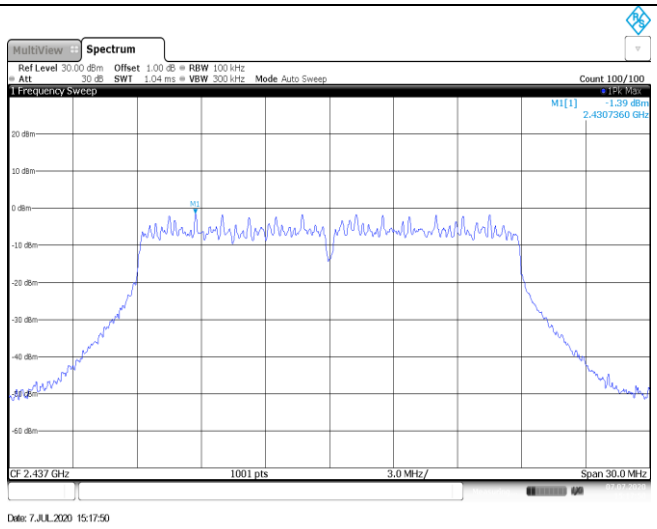
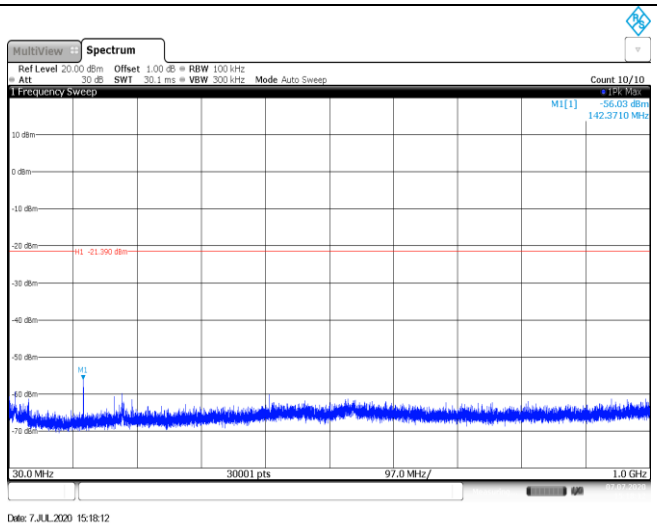
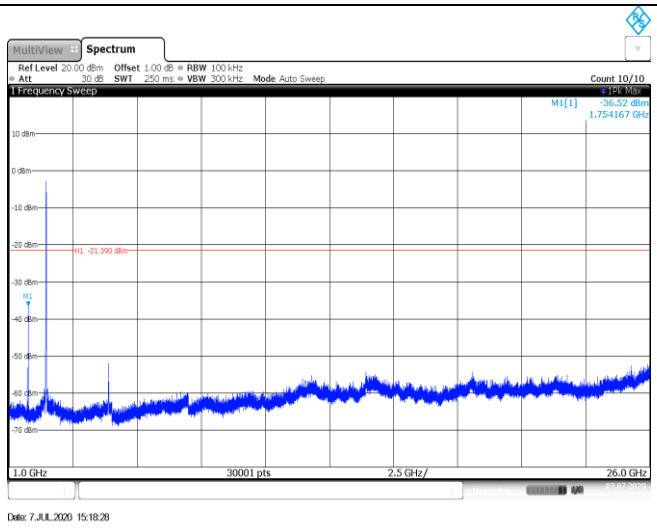
CH11 Reference level	
CH11 30MHz~1000MHz	
CH11 1GHz~26GHz	

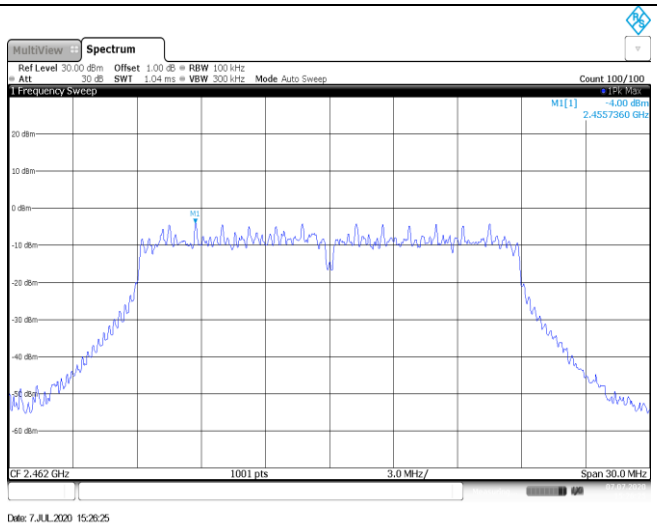
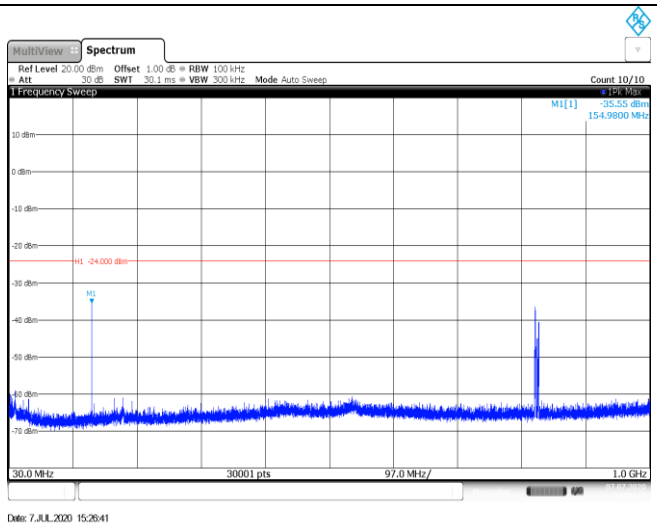
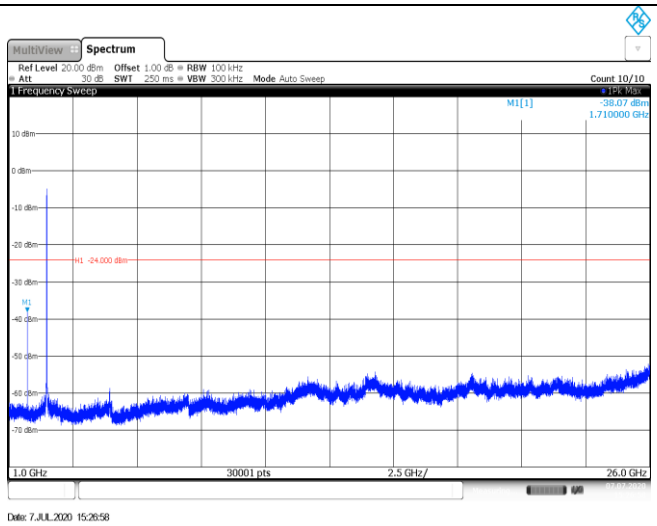
Test Item:	SE	Type:	802.11g
CH01 Reference level	
CH01 30MHz~1000MHz	
CH01 1GHz~26GHz	

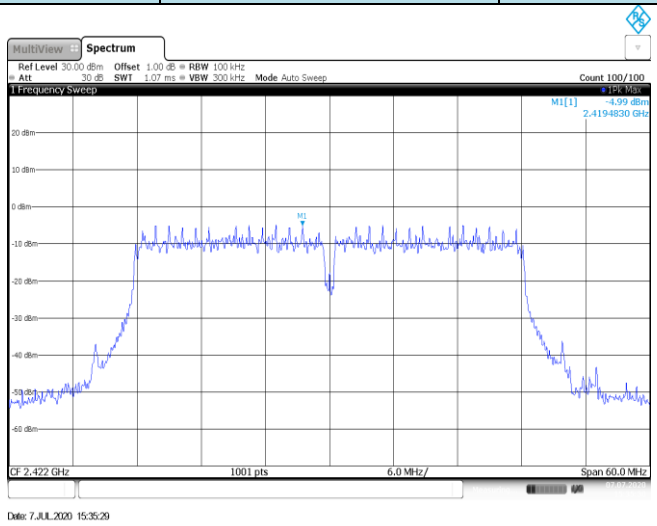
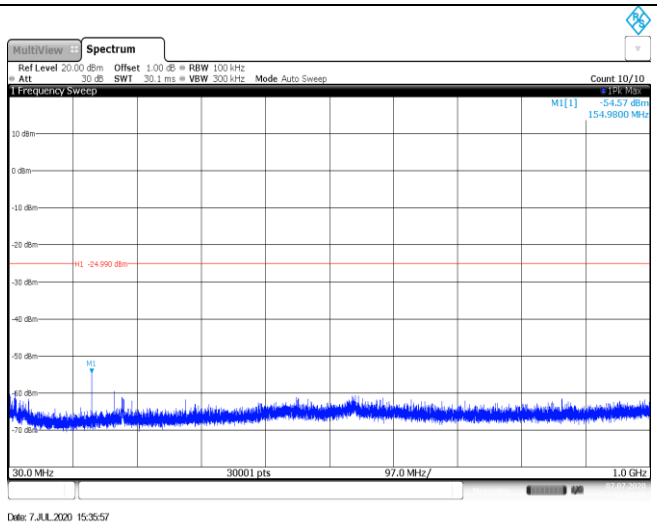
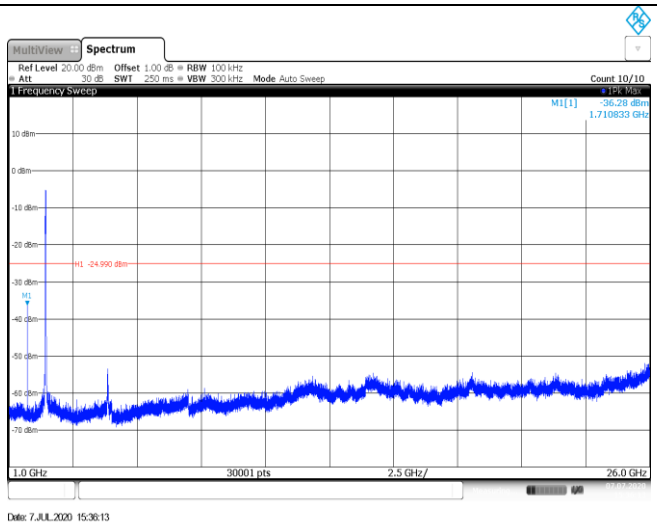
CH06 Reference level	
CH06 30MHz~1000MHz	
CH06 1GHz~26GHz	

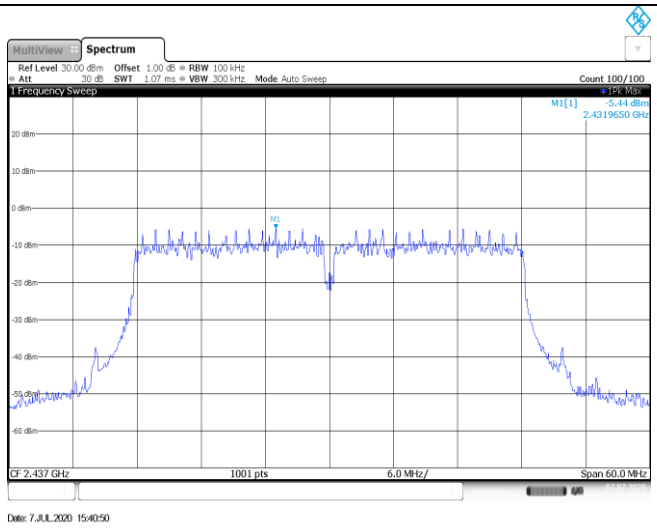
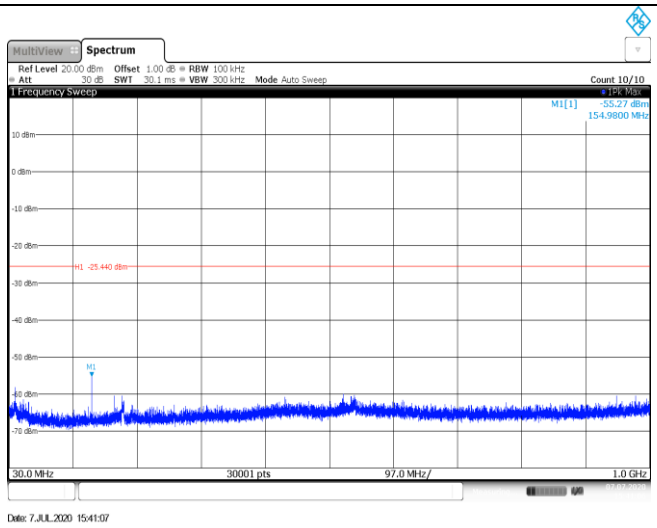
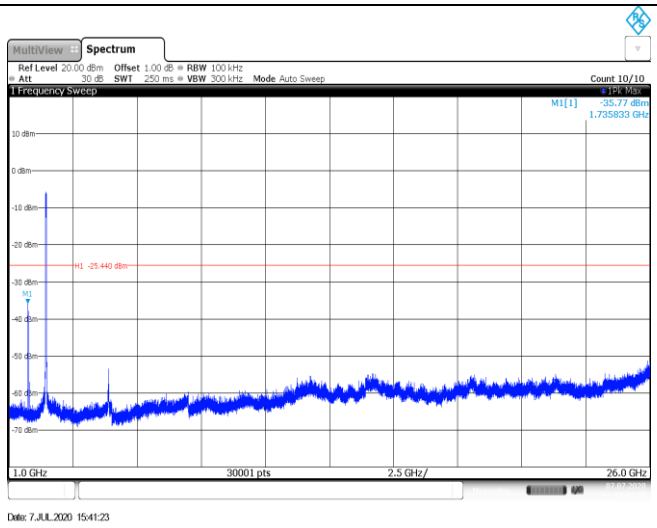
CH11 Reference level	
CH11 30MHz~1000MHz	
CH11 1GHz~26GHz	

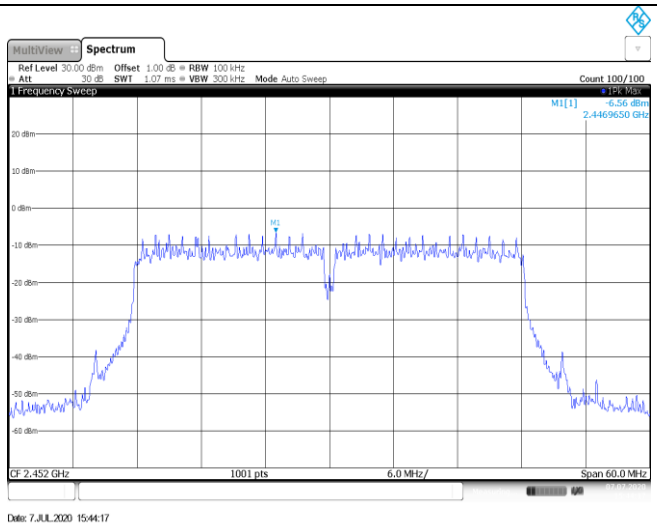
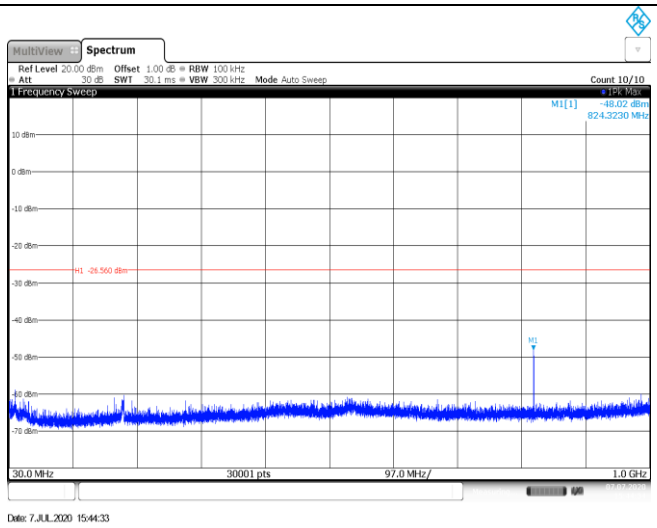
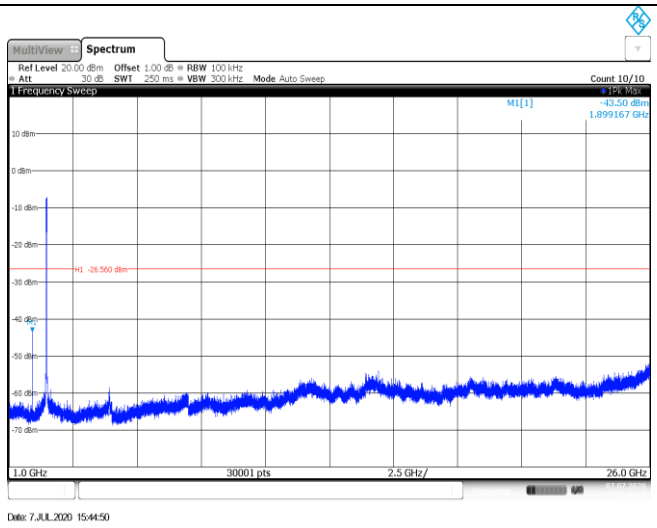
Test Item:	SE	Type:	802.11n(HT20)
CH01 Reference level			
CH01 30MHz~1000MHz			
CH01 1GHz~26GHz			

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--------