APPENDIX REPORT

Project No.	SHT2002002907EW	Radio Specification	WIFI 2.4G
Test sample No.	YPHT20020029058	Model No.	AW2L
Start test date	2020/3/9	Finish date	2020/3/9
Temperature	25°C	Humidity	50%
Test Engineer	Jinyue.Yan	Auditor	

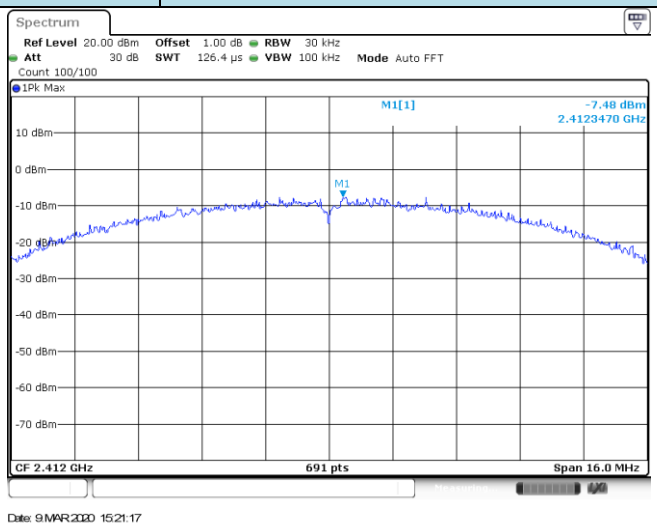
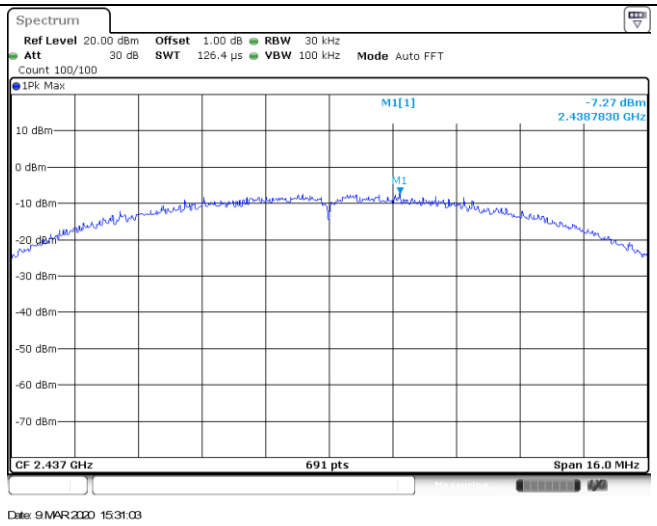
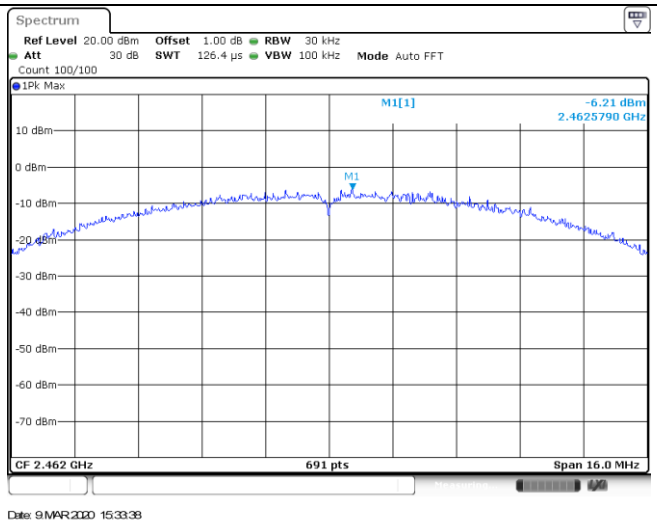
Appendix clause	Test item	Result
A	Conducted Peak Output Power	PASS
B	Power Spectral Density	PASS
C	6 dB Bandwidth	PASS
D	99% Bandwidth	PASS
E	Band edge and Spurious Emissions(coducted)	PASS

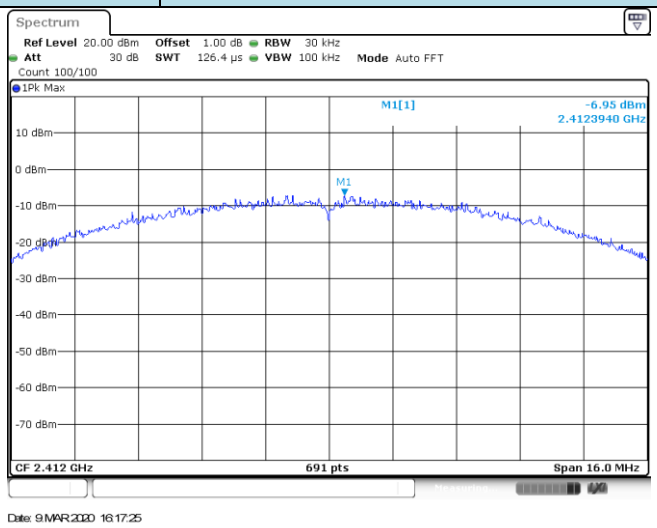
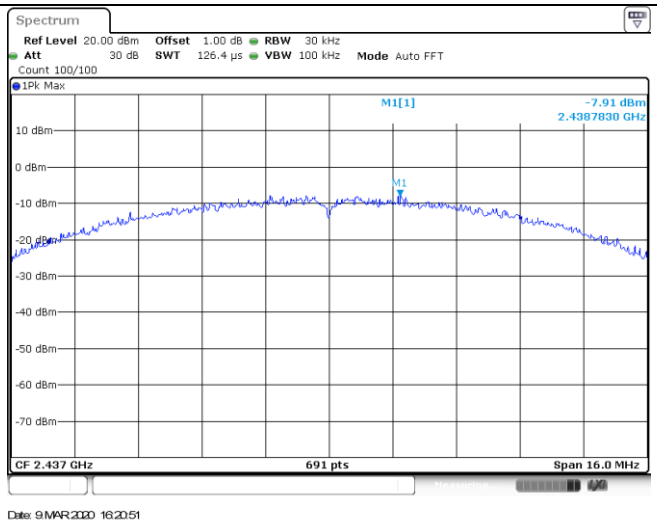
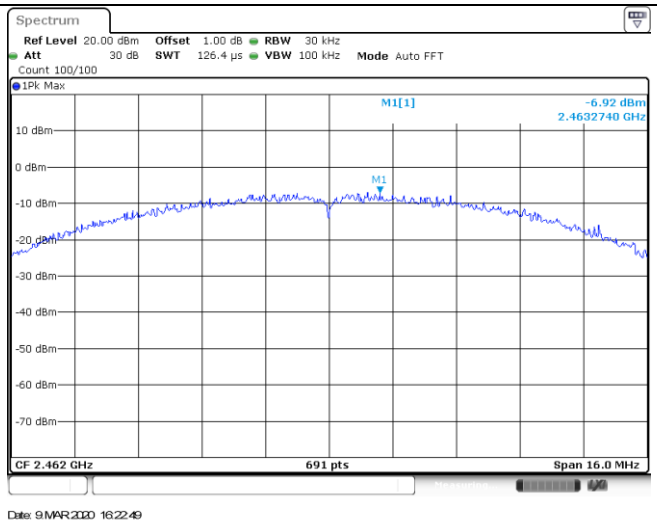
Appendix A：Conducted Peak Output Power

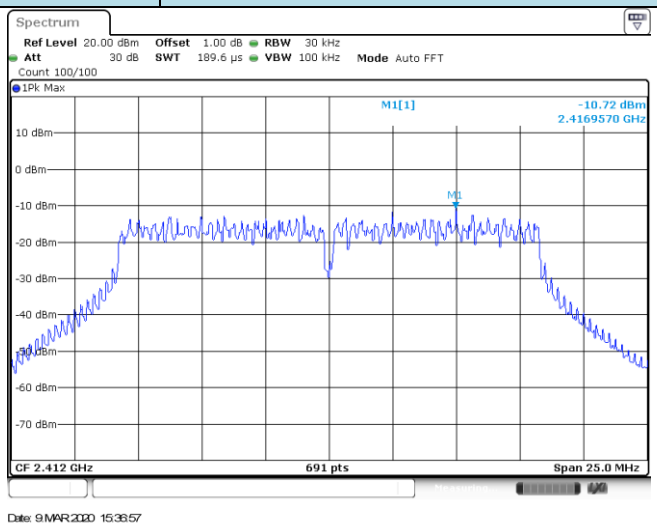
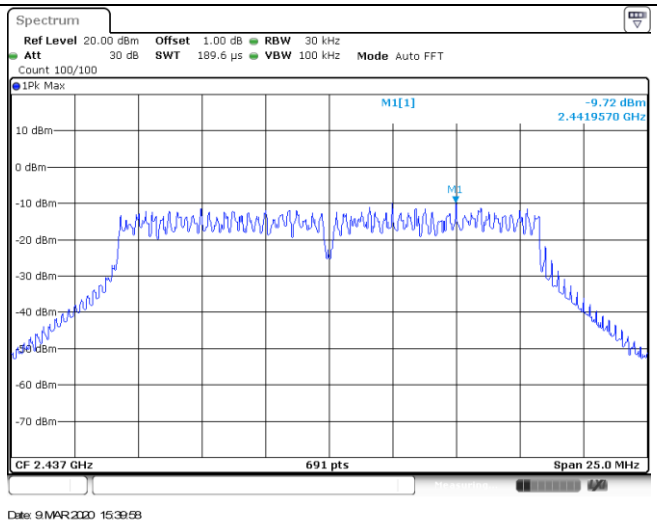
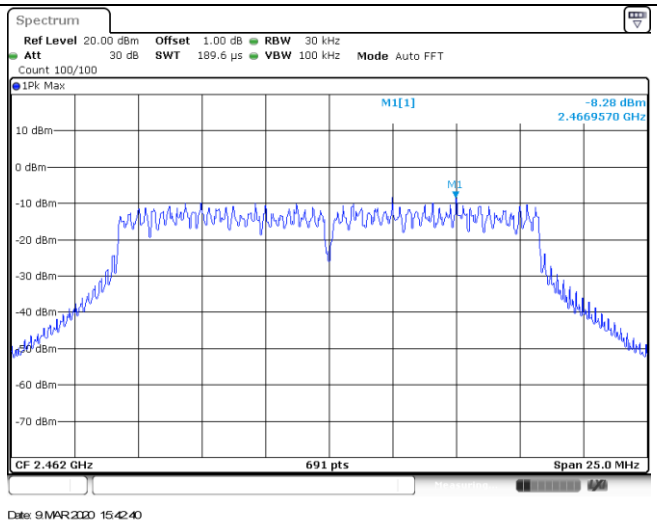
Type	Channel	Output power (dBm)		Total Power (dBm)	Limit (dBm)	Result
		Antenna 0	Antenna 1			
802.11b	01	12.50	12.74	15.61	≤30.00	Pass
	06	13.46	12.66	16.13		
	11	14.01	13.49	16.77		
802.11g	01	12.32	11.78	15.07	≤30.00	Pass
	06	14.14	12.24	16.26		
	11	15.23	13.48	17.44		
802.11n(HT20)	01	11.99	11.09	14.58	≤30.00	Pass
	06	12.66	11.85	15.33		
	11	14.72	12.96	16.94		
802.11n(HT40)	03	13.73	10.80	15.50	≤30.00	Pass
	06	13.11	10.45	15.00		
	09	14.54	12.24	16.51		

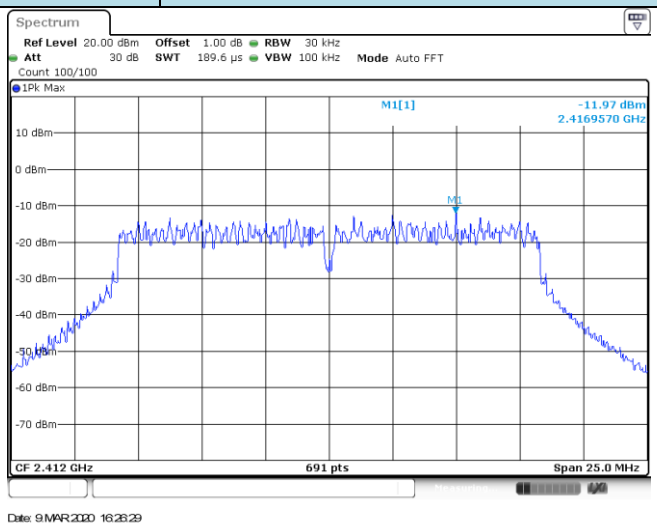
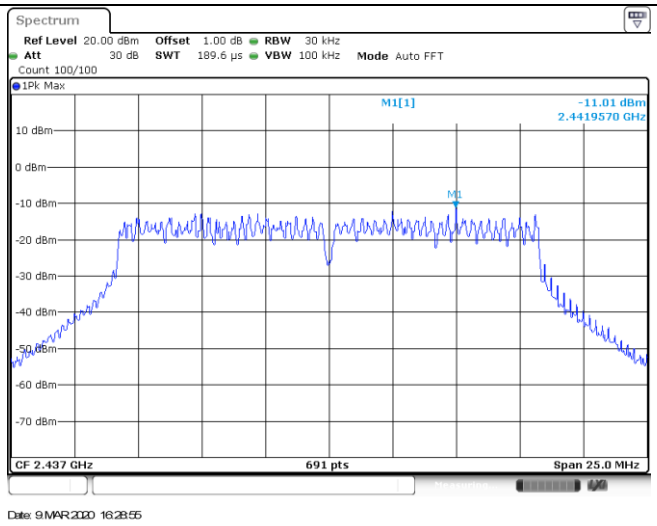
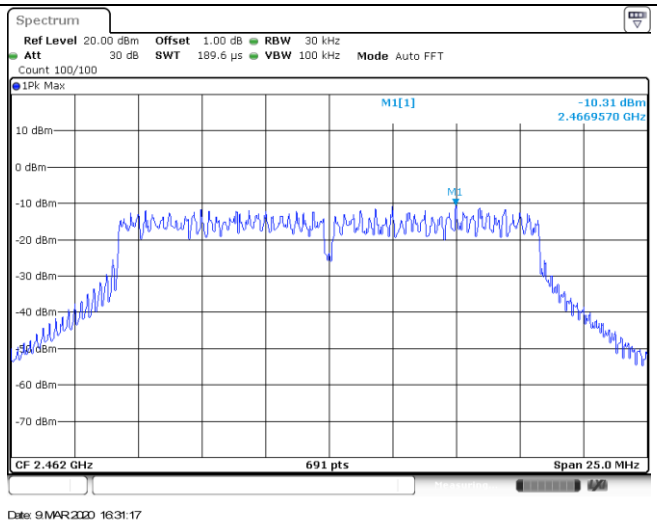
Appendix B：Power Spectral Density

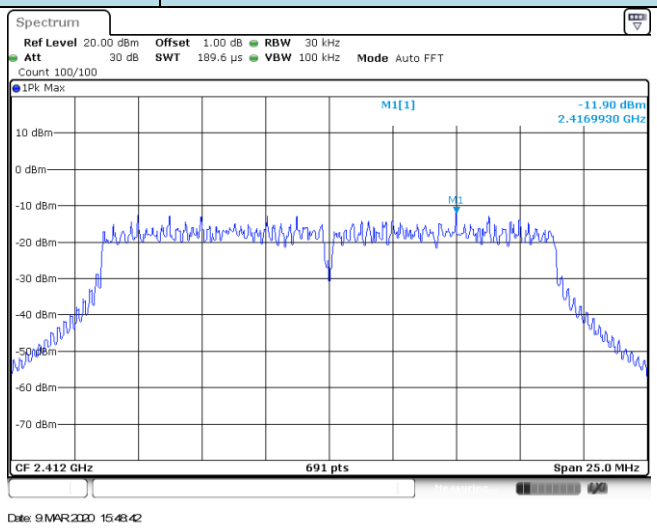
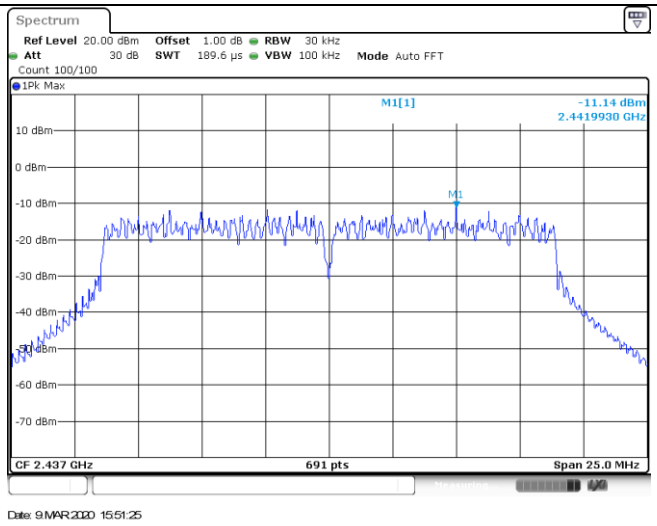
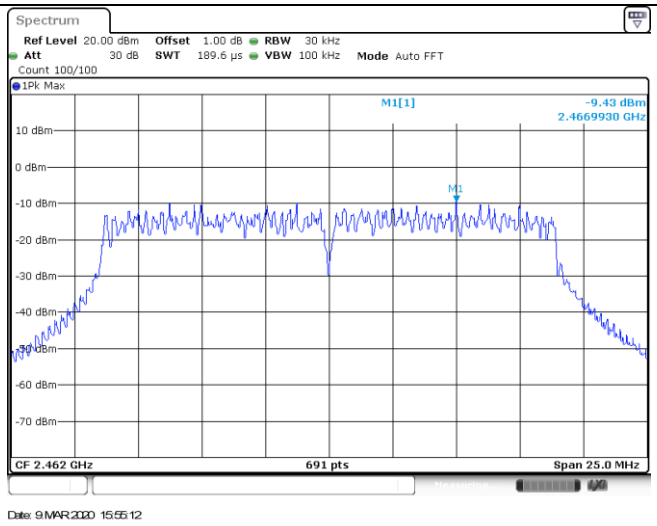
Type	Channel	Power Spectral Density (dBm/30KHz)		Total Power Spectral Density (dBm/30KHz)	Limit (dBm/ 3KHz)	Result
		Antenna 0	Antenna 1			
802.11b	01	-7.48	-6.95	-4.20	≤8.00	Pass
	06	-7.27	-7.91	-4.57		
	11	-6.21	-6.92	-3.54		
802.11g	01	-10.72	-11.97	-8.29	≤8.00	Pass
	06	-9.72	-11.01	-7.31		
	11	-8.28	-10.31	-6.17		
802.11n(HT20)	01	-11.90	-12.61	-9.23	≤8.00	Pass
	06	-11.14	-12.12	-8.59		
	11	-9.43	-10.81	-7.06		
802.11n(HT40)	03	-13.19	-16.45	-11.51	≤8.00	Pass
	06	-14.11	-16.65	-12.19		
	09	-12.50	-15.03	-10.57		

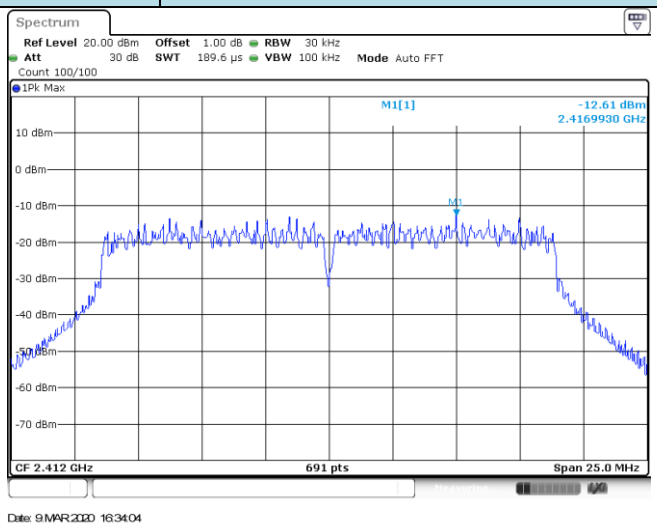
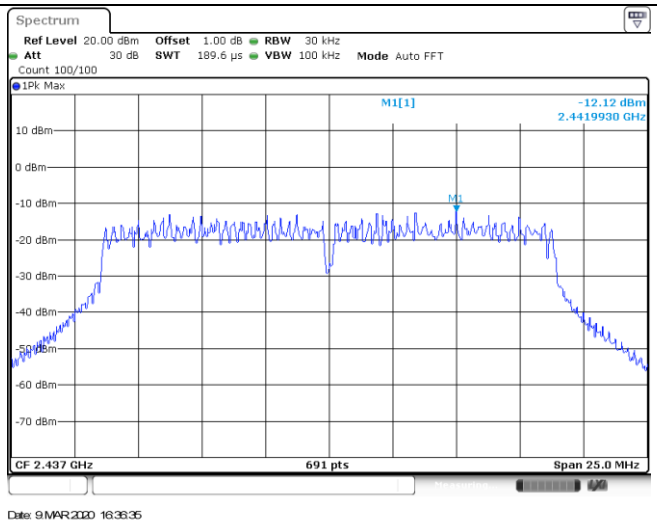
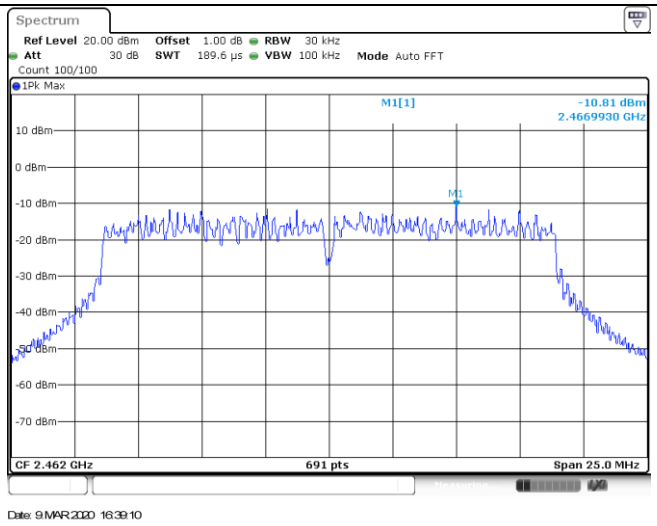
802.11 b	Antenna 0
CH01	
CH06	
CH11	

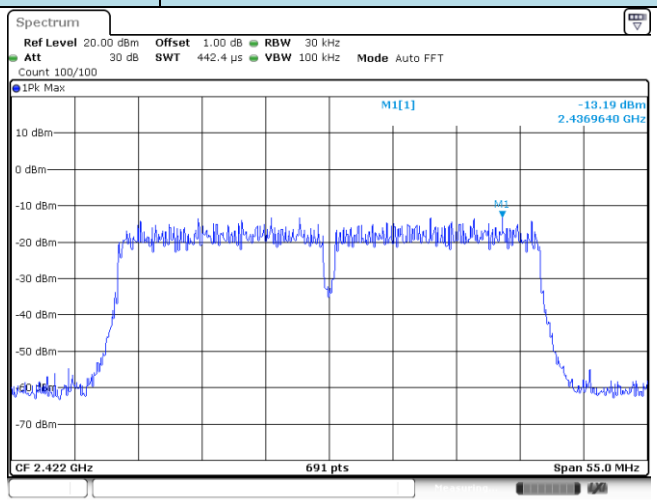
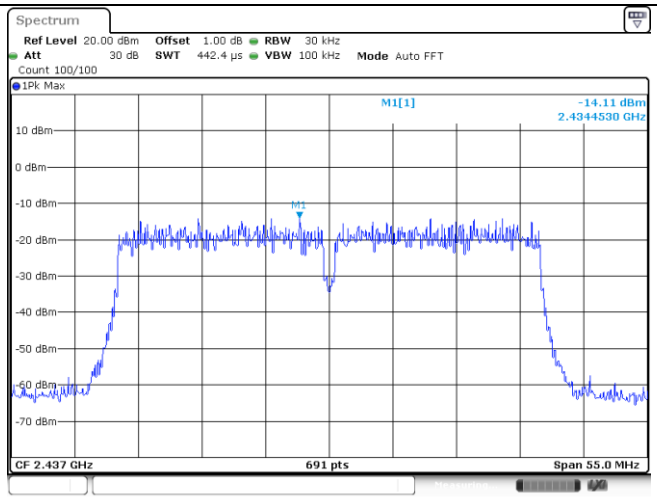
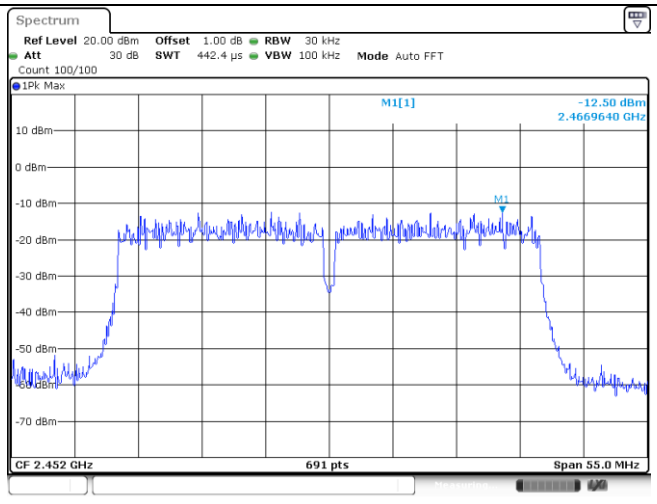
802.11 b	Antenna 1
CH01	
CH06	
CH11	

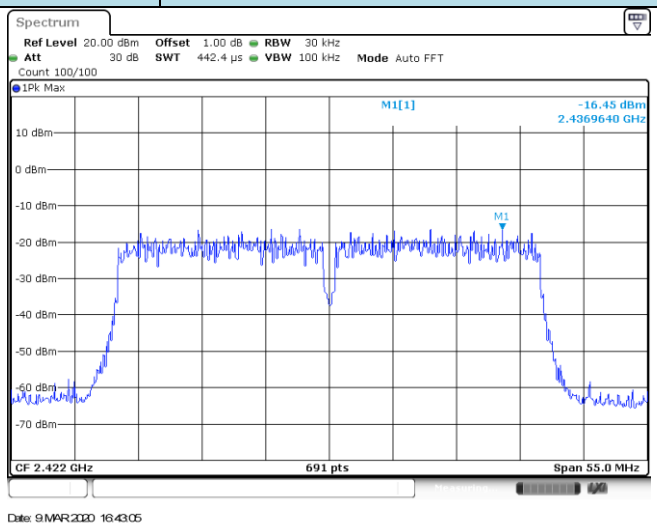
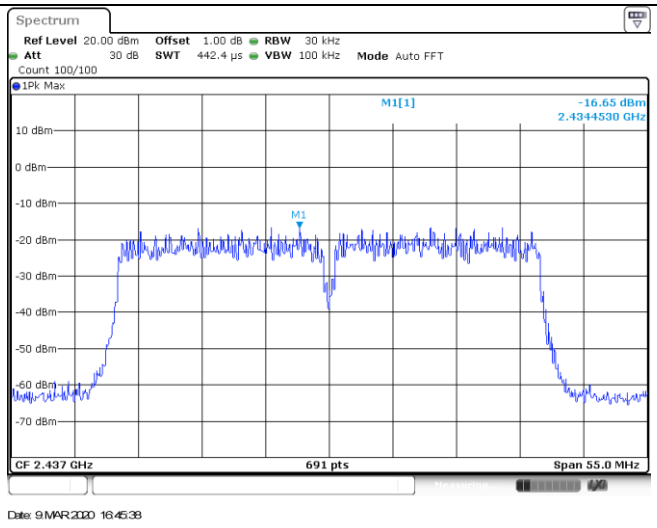
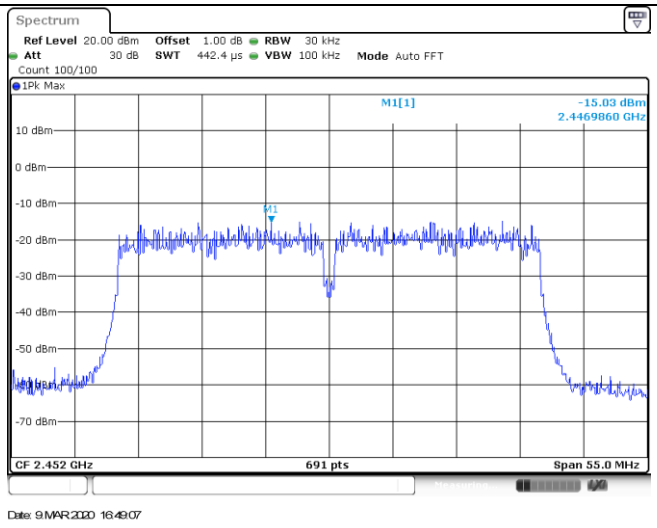
802.11 g	Antenna 0
CH01	
CH06	
CH11	

802.11 g	Antenna 1
CH01	
CH06	
CH11	

802.11 n(H20)	Antenna 0
CH01	
CH06	
CH11	

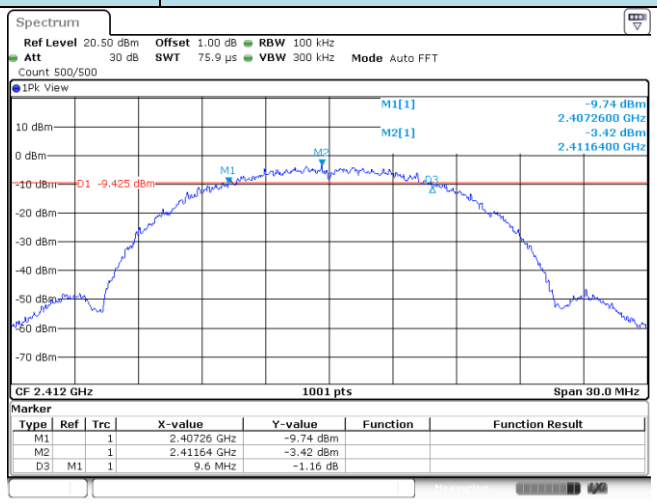
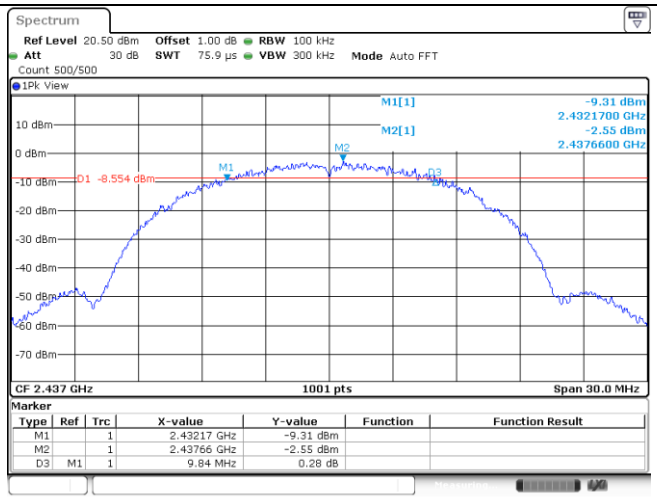
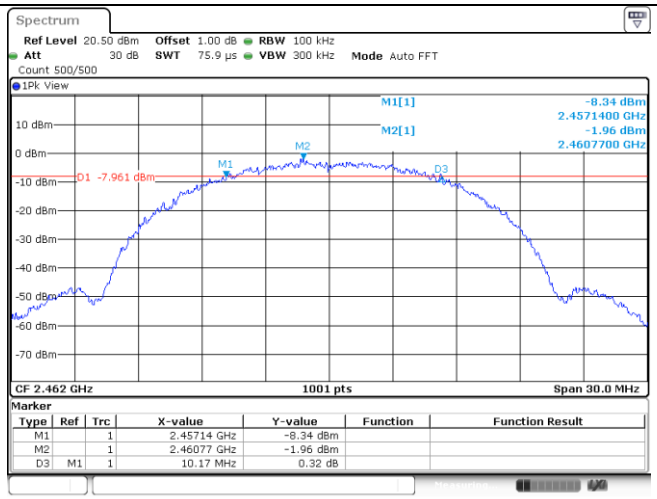
802.11 n(H20)	Antenna 1
CH01	
CH06	
CH11	

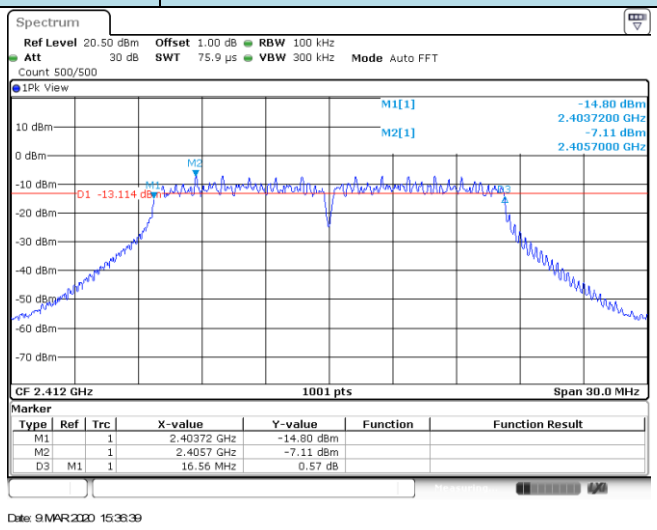
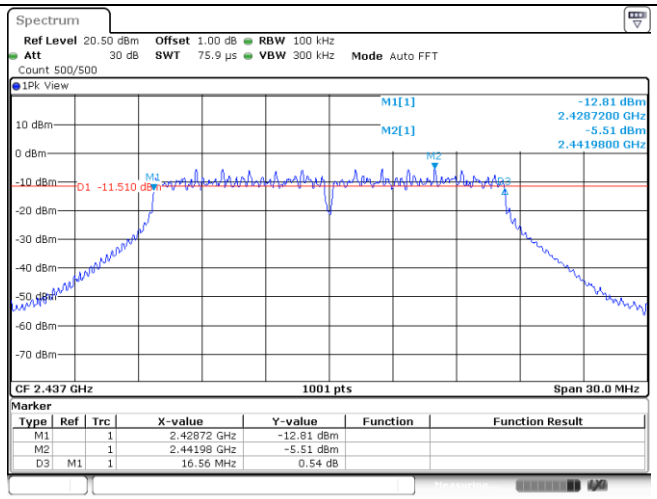
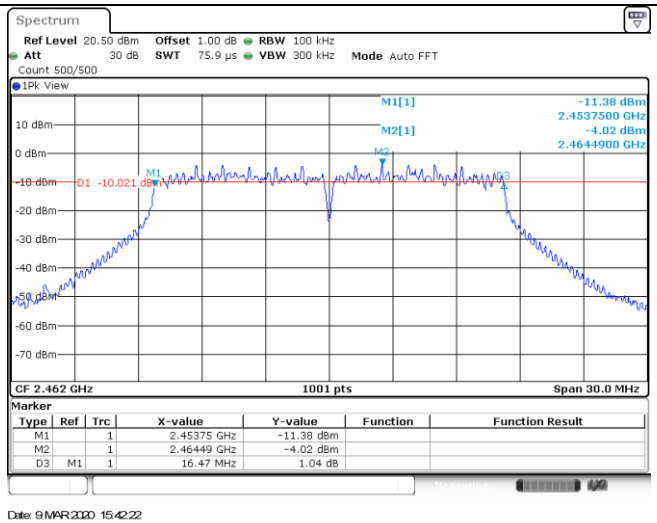
802.11 n(H40)	Antenna 0
CH03	
CH06	
CH09	

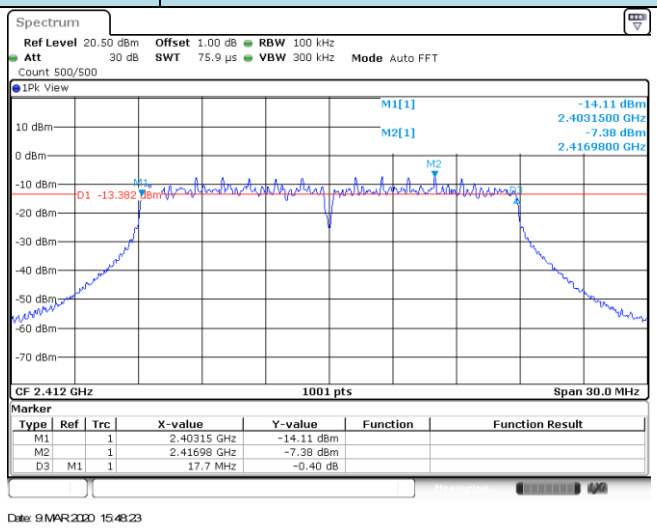
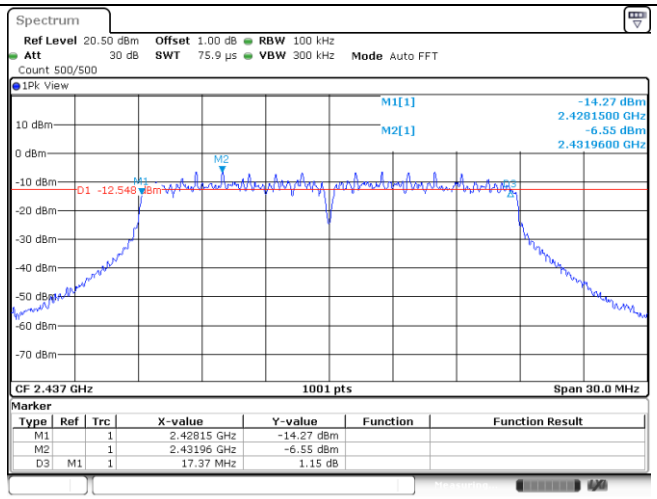
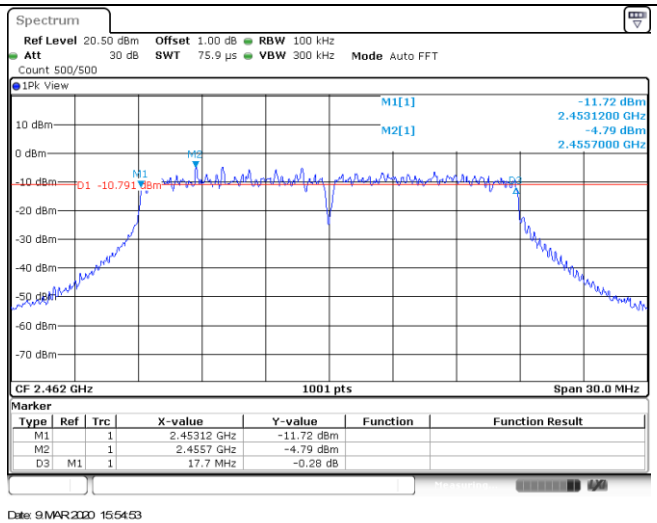
802.11 n(H40)	Antenna 1
CH03	
CH06	
CH09	

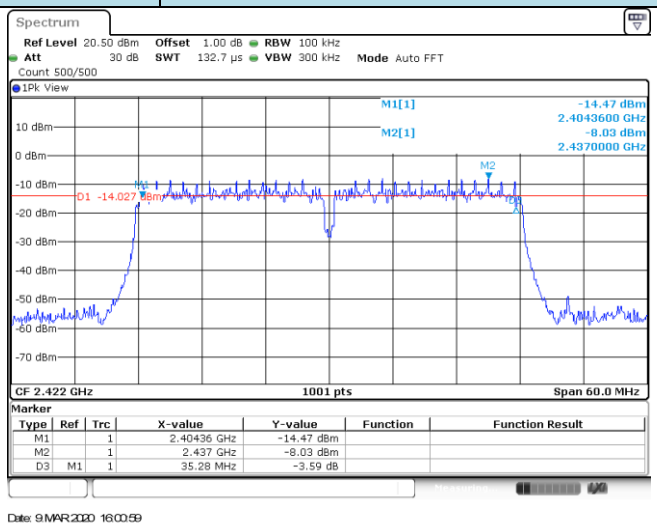
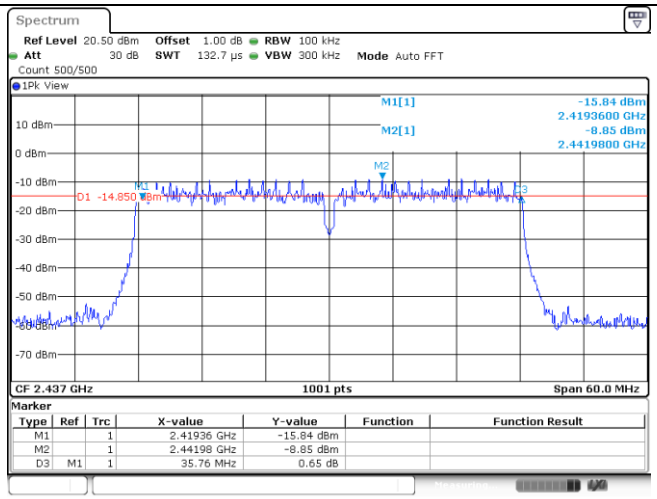
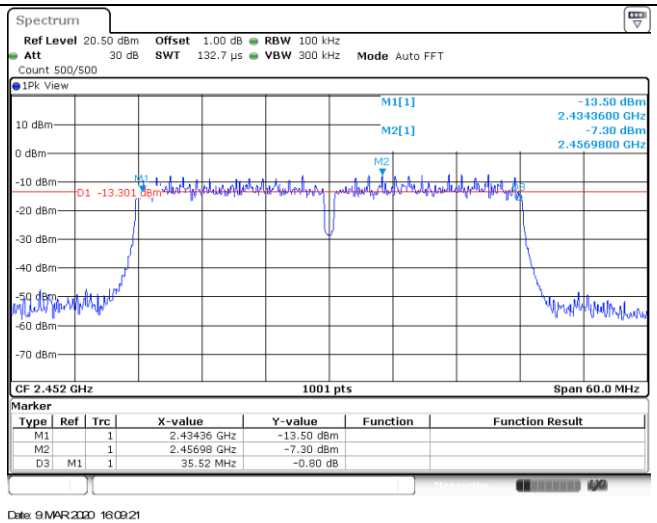
Appendix C：6dB Bandwidth

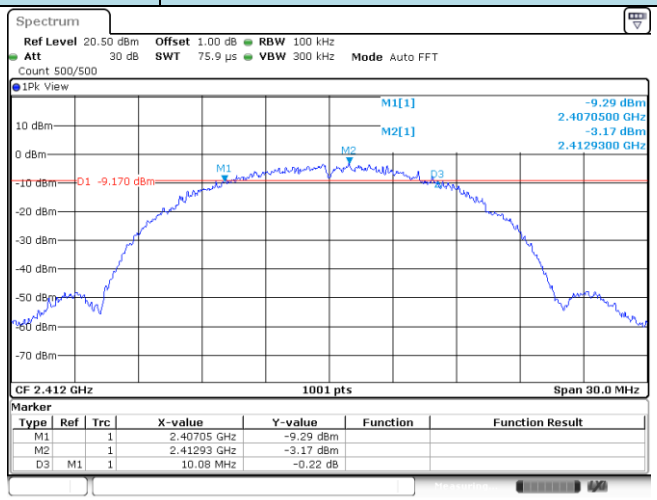
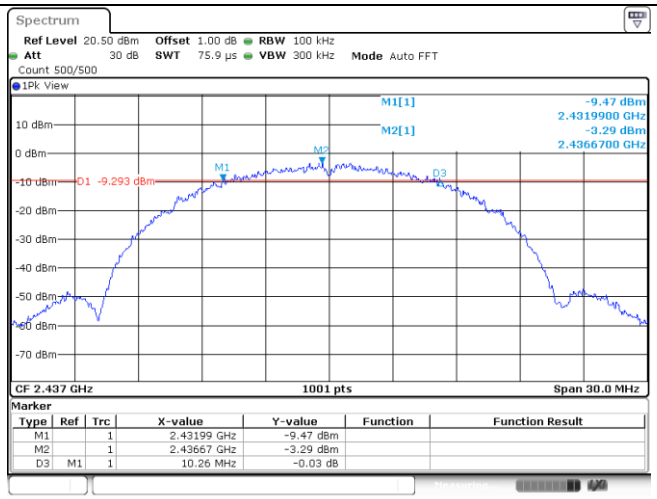
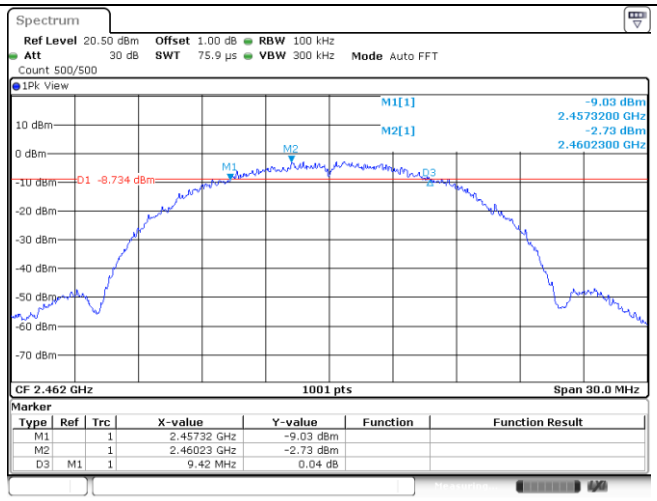
Type	Channel	6dB Bandwidth (MHz)		Limit (kHz)	Result
		Antenna 0	Antenna 1		
802.11b	01	9.60	10.08	≥500	Pass
	06	9.84	10.26		
	11	10.17	9.42		
802.11g	01	16.56	16.44	≥500	Pass
	06	16.56	16.50		
	11	16.47	16.53		
802.11n(HT20)	01	17.70	17.70	≥500	Pass
	06	17.37	17.64		
	11	17.70	17.67		
802.11n(HT40)	03	35.28	35.52	≥500	Pass
	06	35.76	35.52		
	09	35.52	36.06		

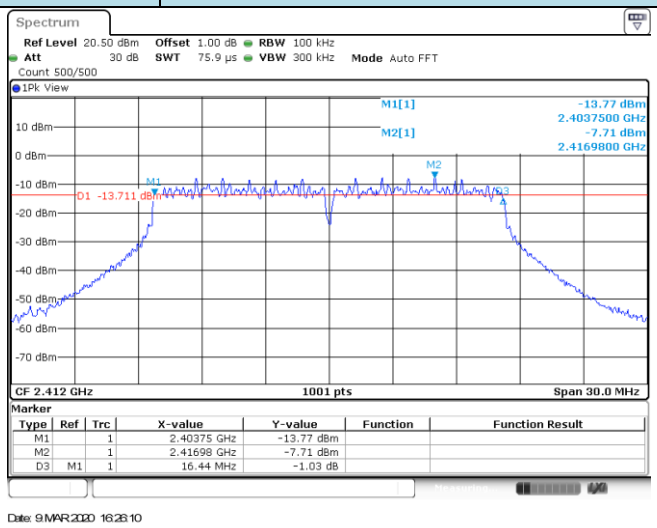
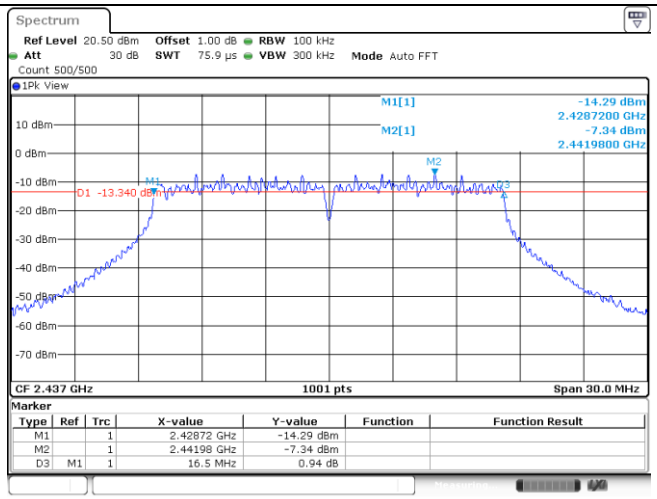
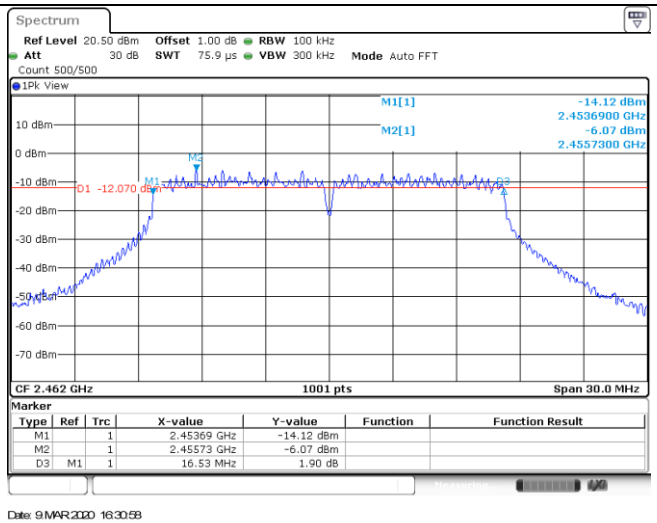
802.11 b	Antenna 0
CH01	
CH06	
CH11	

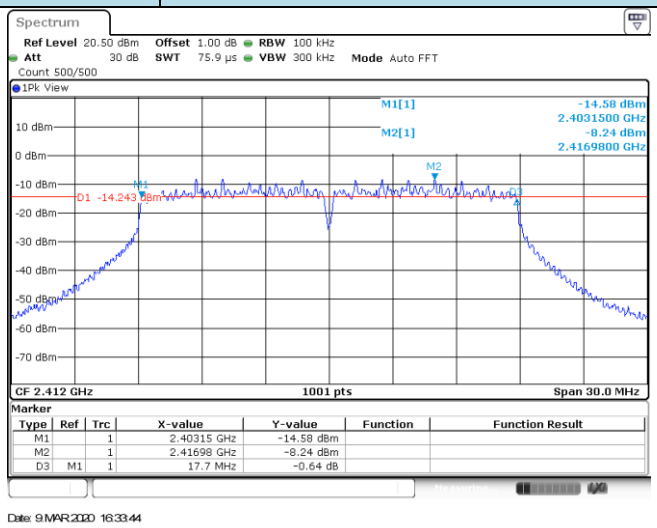
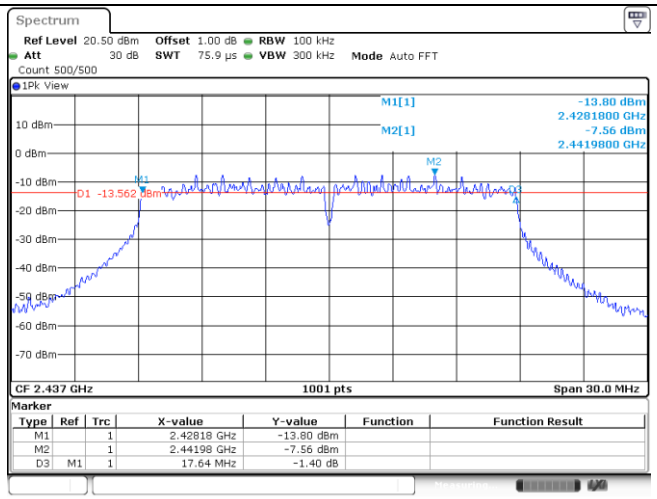
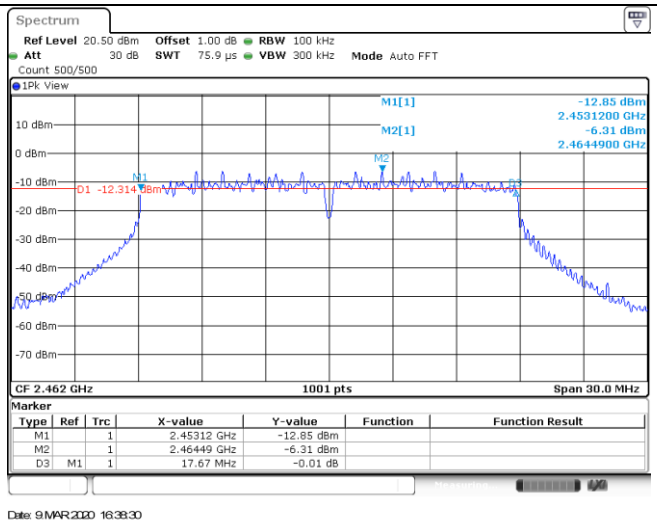
802.11 g	Antenna 0
CH01	
CH06	
CH11	

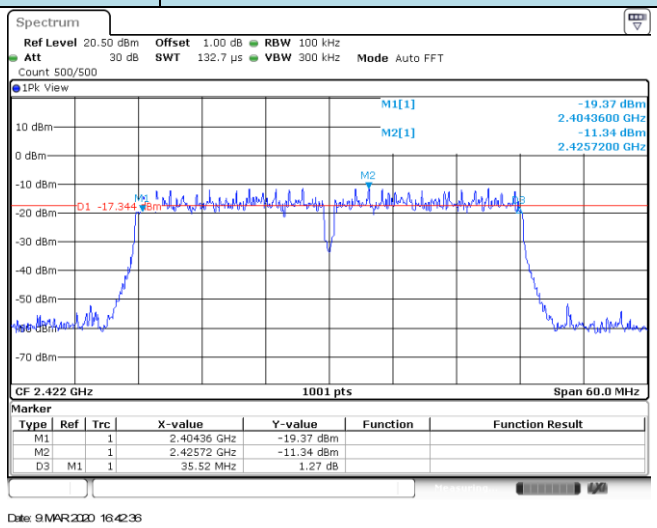
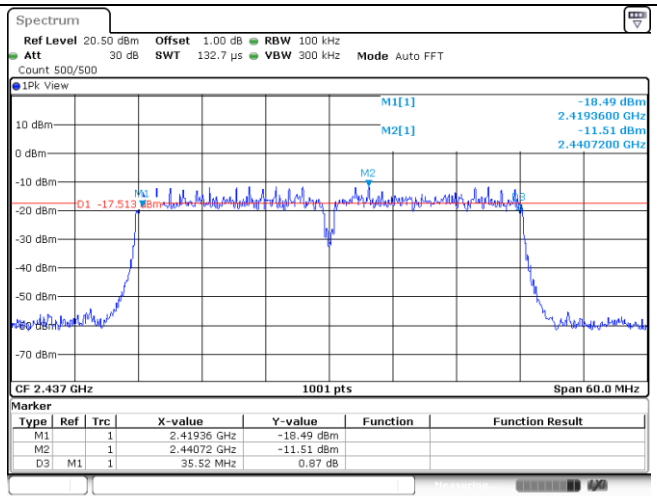
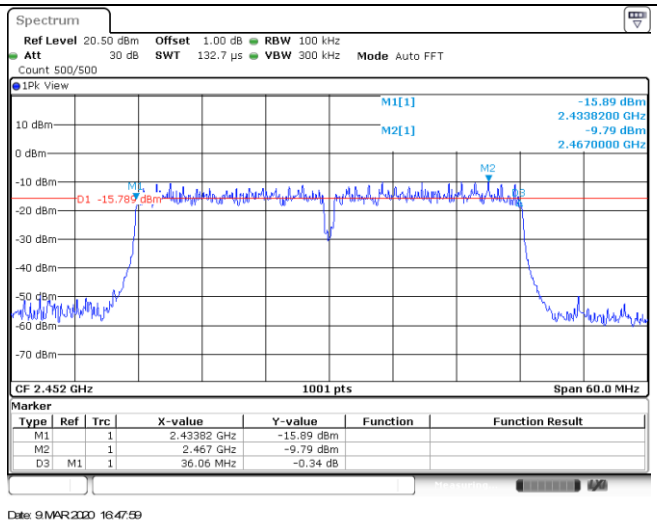
802.11n(HT20)	Antenna 0
CH01	
CH06	
CH11	

802.11n(HT40)	Antenna 0
CH03	
CH06	
CH09	

802.11 b	Antenna 1
CH01	
CH06	
CH11	

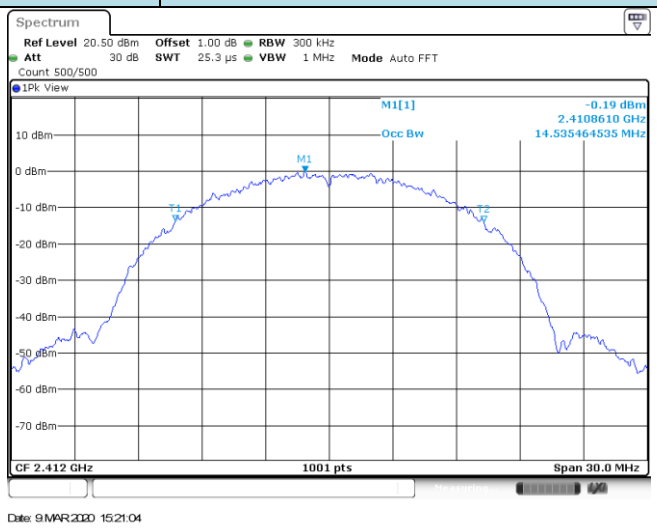
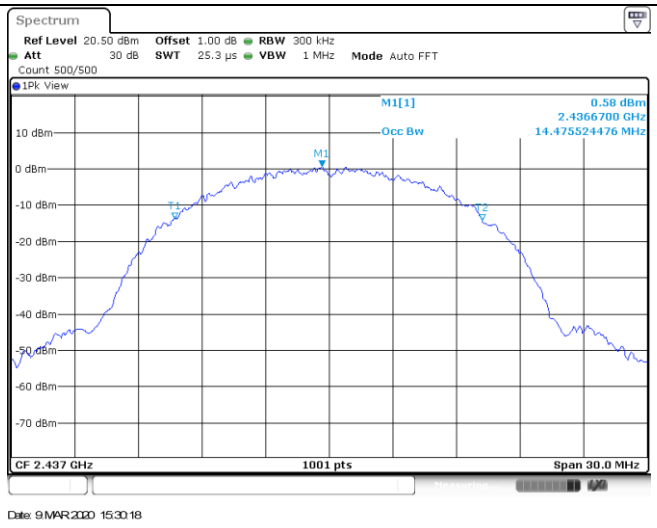
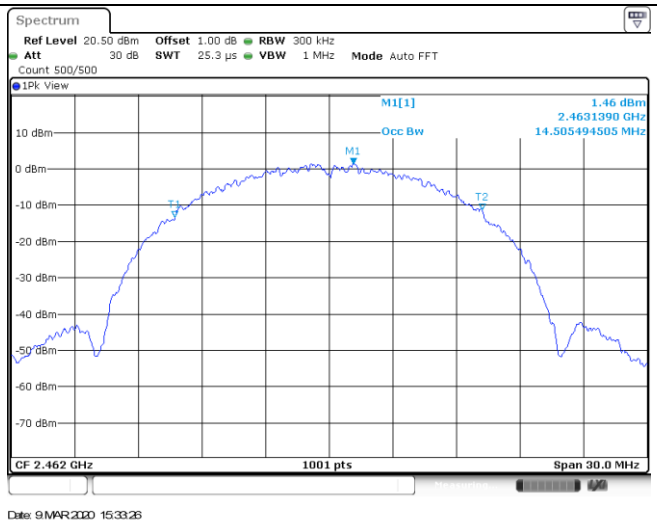
802.11 g	Antenna 1
CH01	
CH06	
CH11	

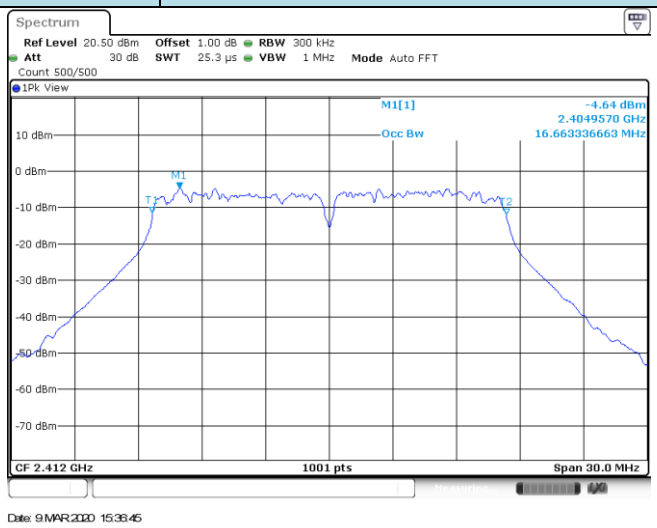
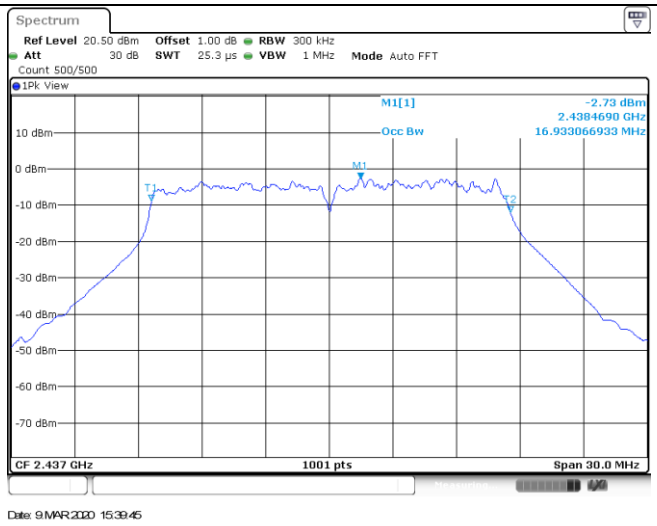
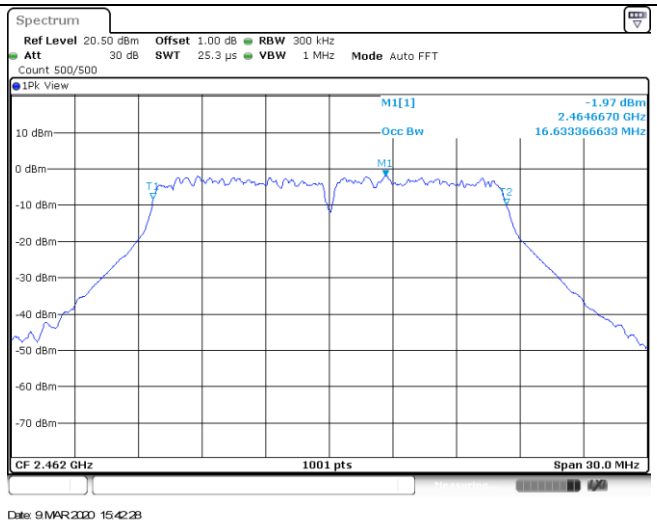
802.11n(HT20)	Antenna 1
CH01	
CH06	
CH11	

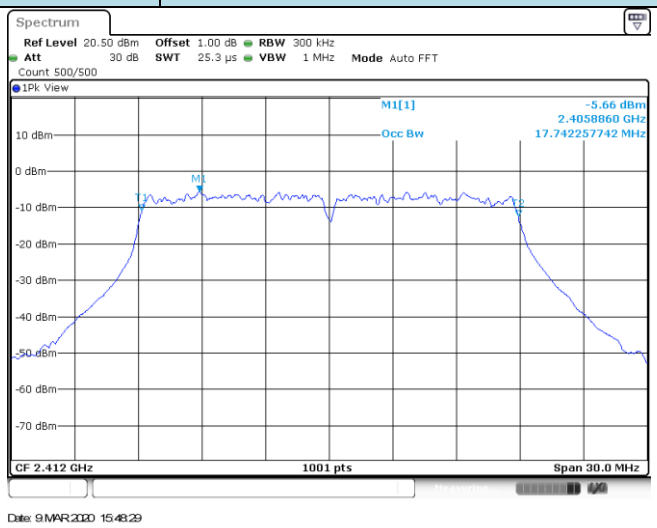
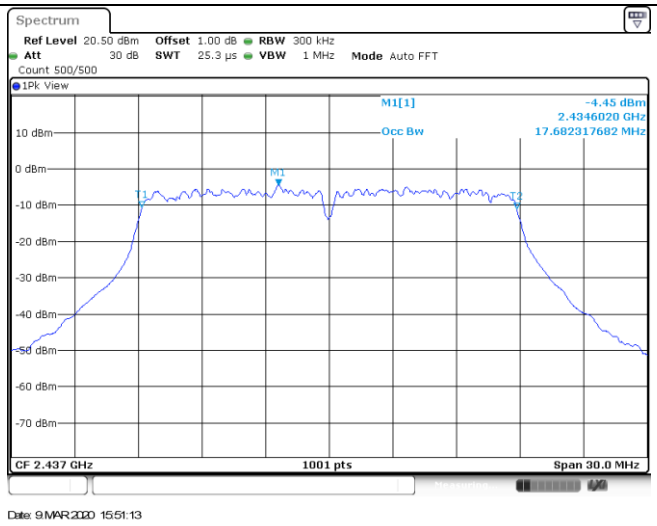
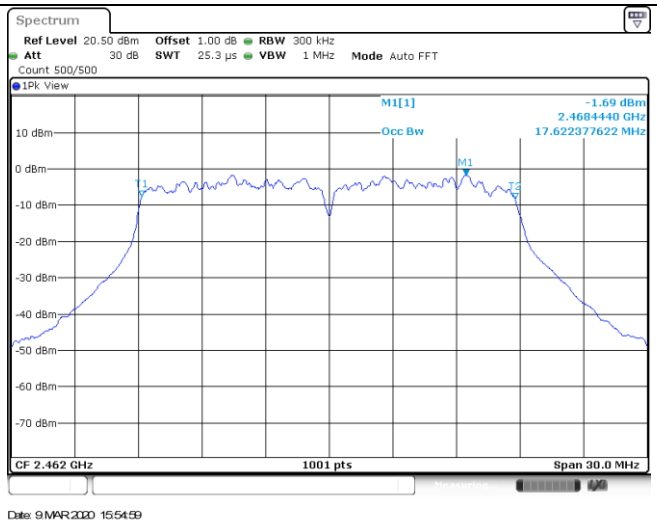
802.11n(HT40)	Antenna 1
CH03	
CH06	
CH09	

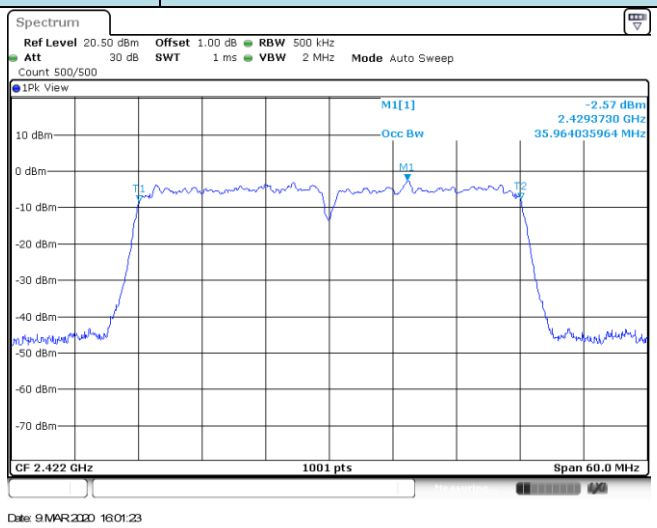
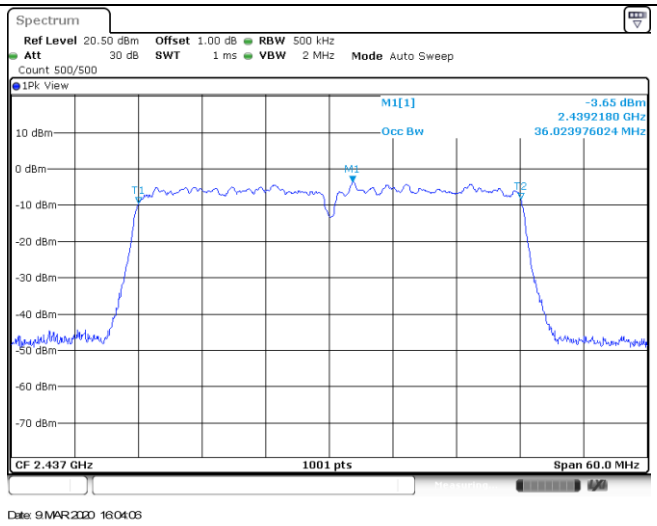
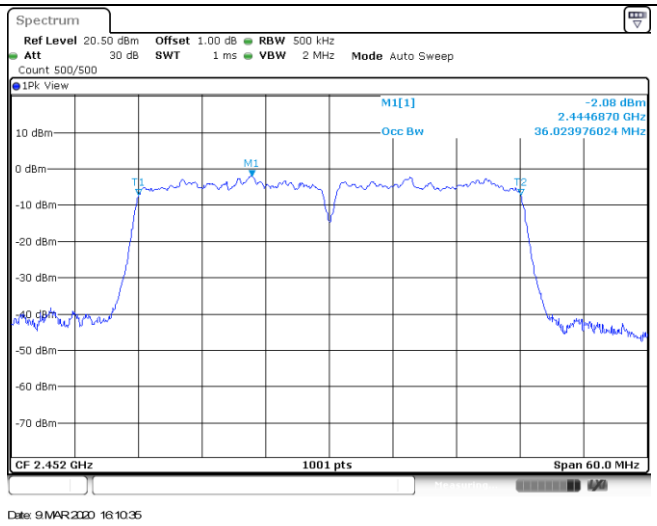
Appendix D：99% Bandwidth

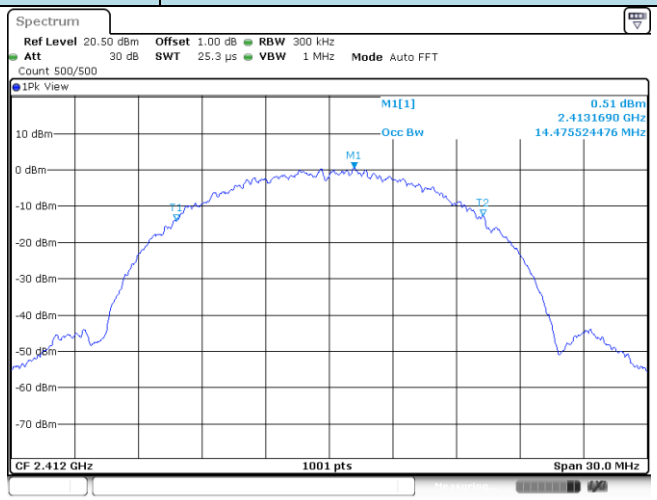
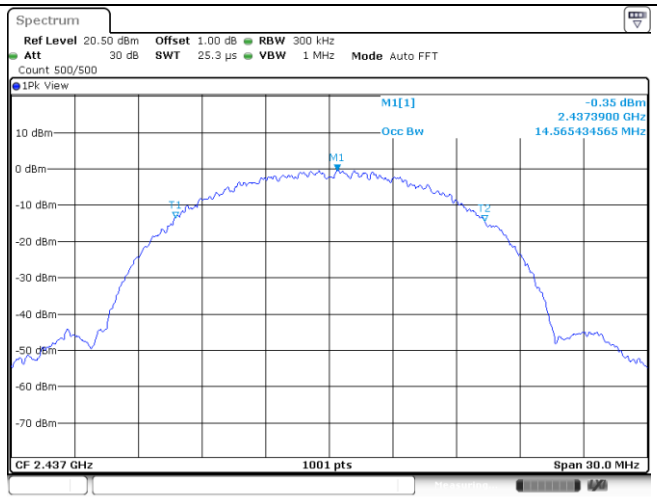
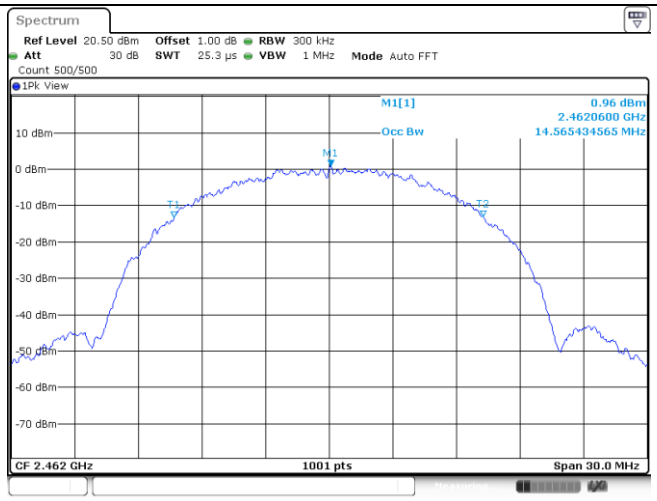
Type	Channel	6dB Bandwidth (MHz)		Limit (kHz)	Result
		Antenna 0	Antenna 1		
802.11b	01	14.54	14.48	≥500	Pass
	06	14.48	14.57		
	11	14.51	14.57		
802.11g	01	16.66	16.63	≥500	Pass
	06	16.93	16.72		
	11	16.63	16.63		
802.11n(HT20)	01	17.74	17.77	≥500	Pass
	06	17.68	17.80		
	11	17.62	17.74		
802.11n(HT40)	03	35.96	36.02	≥500	Pass
	06	36.02	36.02		
	09	36.02	35.96		

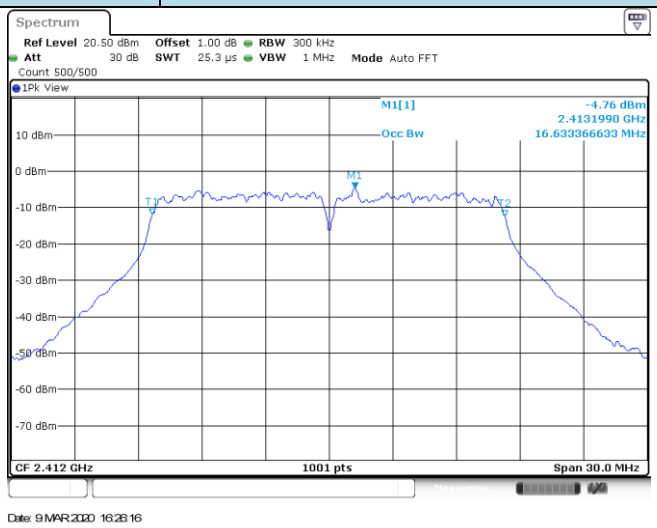
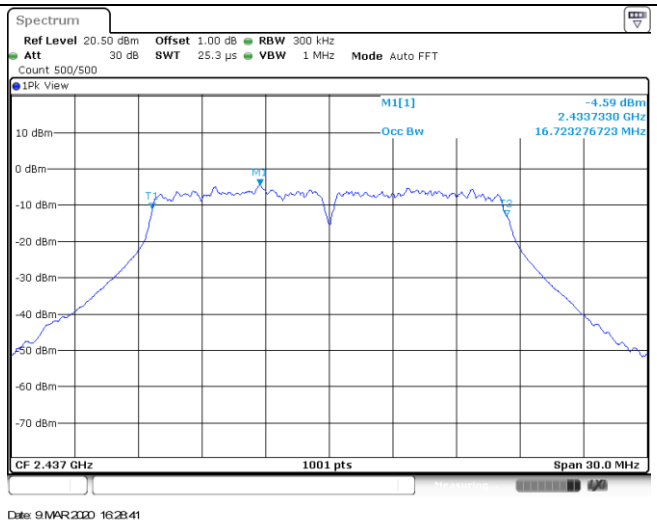
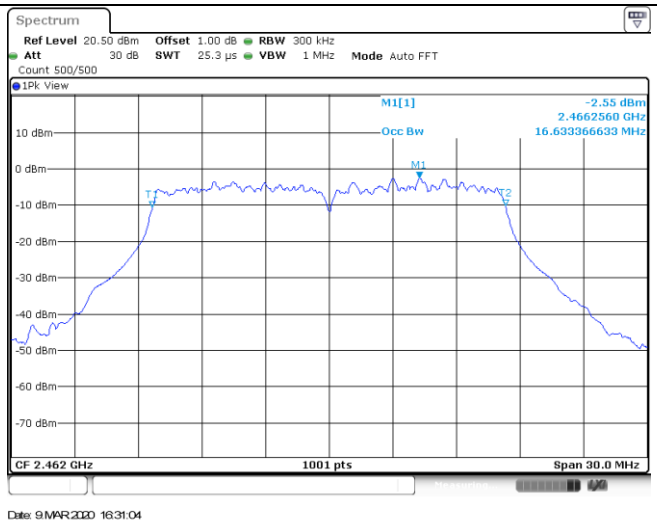
802.11 b	Antenna 0
CH01	
CH06	
CH11	

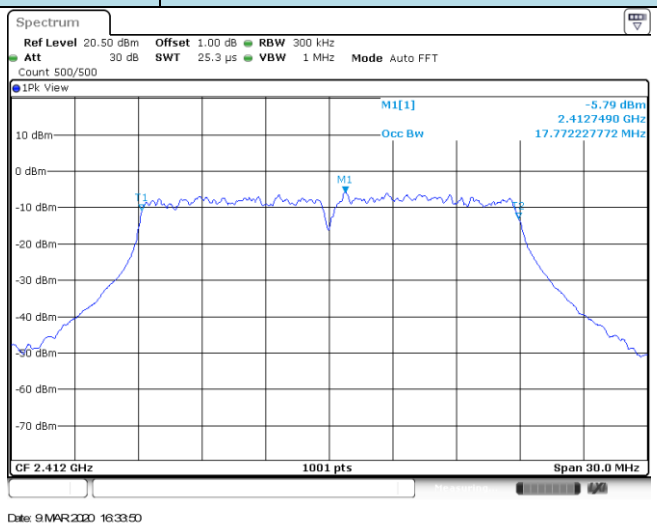
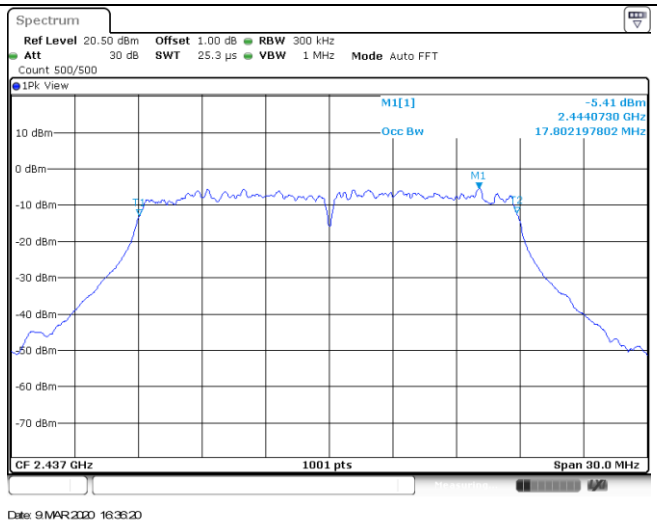
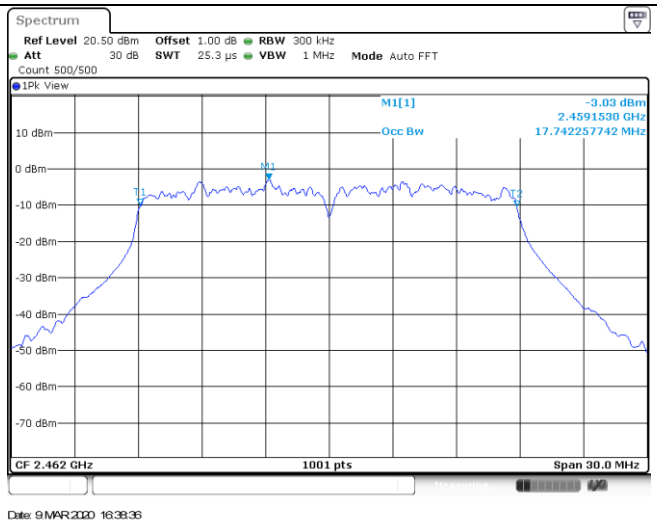
802.11 g	Antenna 0
CH01	
CH06	
CH11	

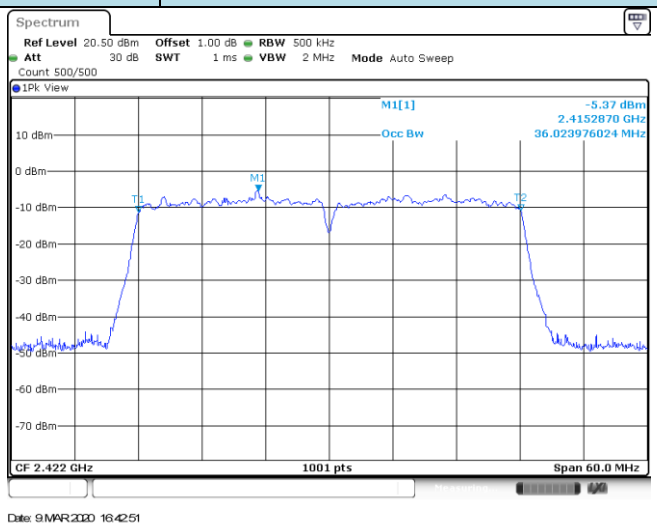
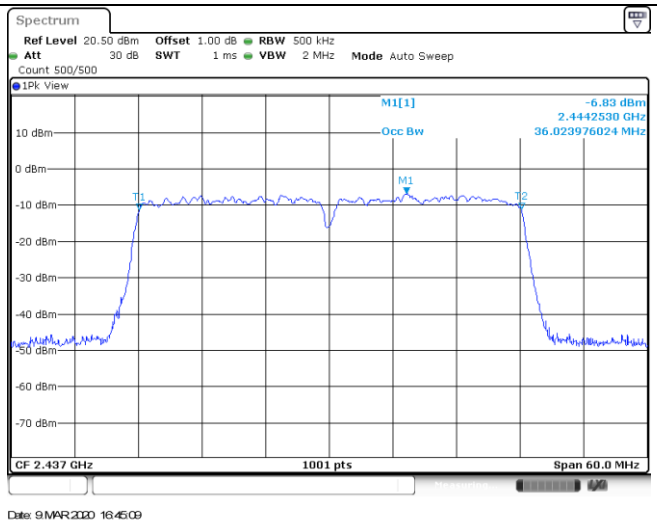
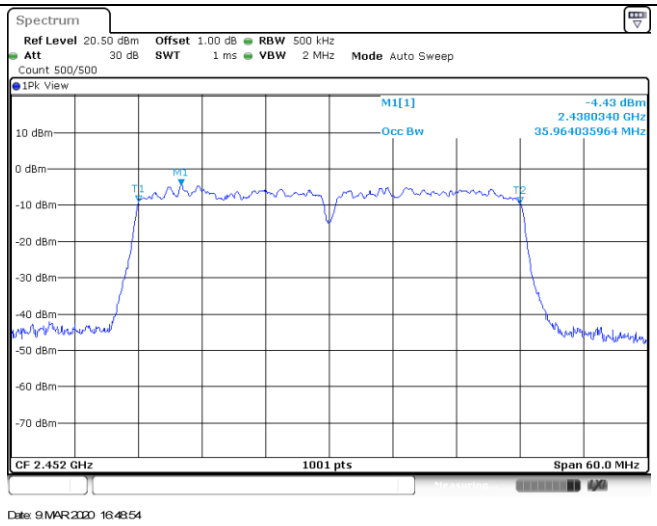
802.11n(HT20)	Antenna 0
CH01	
CH06	
CH11	

802.11n(HT40)	Antenna 0
CH03	
CH06	
CH09	

802.11 b	Antenna 1
CH01	
CH06	
CH11	

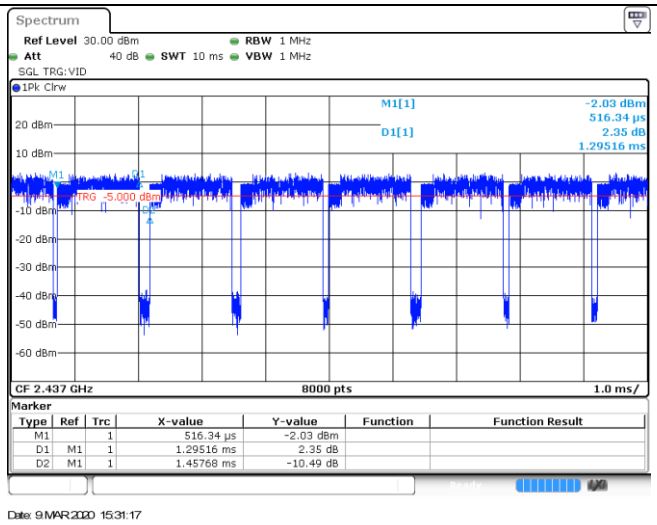
802.11 g	Antenna 1
CH01	
CH06	
CH11	

802.11n(HT20)	Antenna 1
CH01	
CH06	
CH11	

802.11n(HT40)	Antenna 1
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	1.30	1.46	89.0%	0.8
11g	2437	0.24	0.48	50.0%	4.2
11n20	2437	0.23	0.48	47.9%	4.3
11n40	2437	0.13	0.38	34.2%	7.7

11b	
11g