APPENDIX REPORT

Project No.	SHT2207080705EW	Radio Specification	WIFI 2.4G
Test sample No.	YPHT22060506003	Model No.	B8U
Start test date	2022-07-28	Finish date	2022-07-28
Temperature	26.2℃	Humidity	32%
Test Engineer	Xiaoxiao Li	Auditor	Xiaodong Zhao

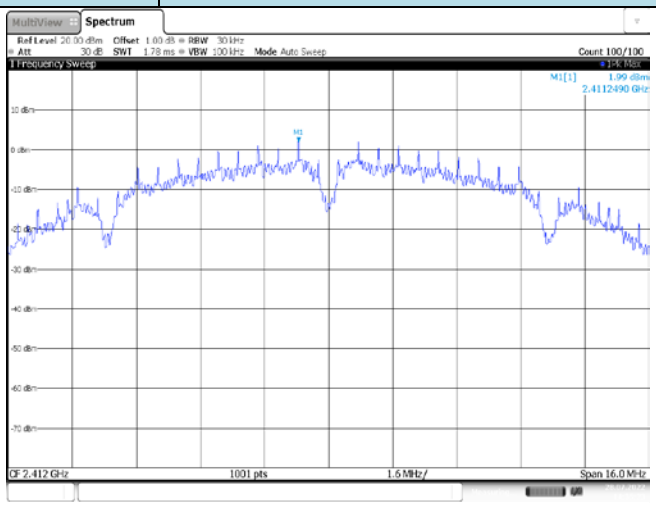
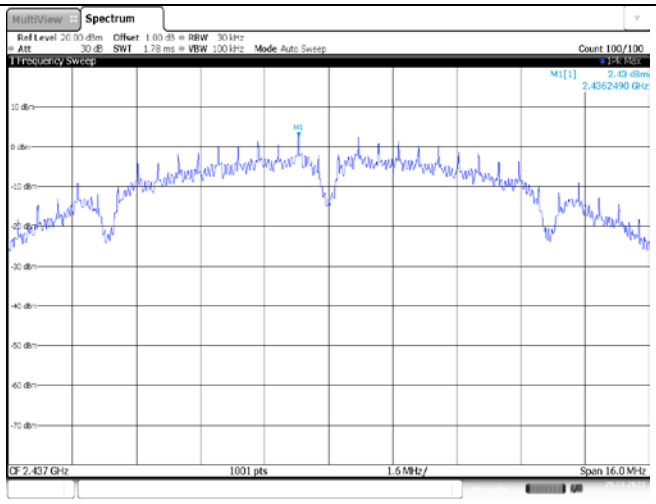
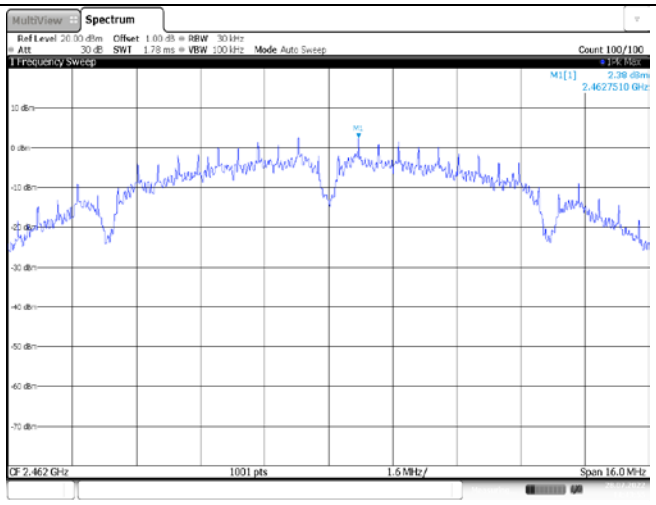
Appendix clause	Test item	Result
A	Conducted Peak Output Power	PASS
B	Power Spectral Density	PASS
C	6 dB Bandwidth	PASS
D	99% Occupied Bandwidth	PASS
E	Duty Cycle	PASS
F	Band edge and Spurious Emissions(coducted)	PASS

Appendix A：Conducted Peak Output Power

Type	Channel	Peak Output power (dBm)			Average Output power (dBm)			Limit (dBm)	Result
		Antenna 0	Antenna 1	Total	Antenna 0	Antenna 1	Total		
802.11b	01	15.18	14.81	-	12.74	12.46	-	≤30.00	Pass
	06	15.80	15.57	-	13.45	13.57	-		
	11	15.34	15.03	-	12.88	12.72	-		
802.11g	01	15.67	15.55	-	12.98	12.90	-	≤30.00	Pass
	06	16.07	15.97	-	13.40	13.25	-		
	11	15.81	15.75	-	13.33	13.14	-		
802.11n (HT20)	01	15.63	16.01	18.81	12.73	14.71	16.84	≤30.00	Pass
	06	16.00	16.28	19.16	13.09	15.02	17.17		
	11	15.83	16.18	19.01	12.94	15.04	17.13		
802.11n (HT40)	03	15.77	15.91	18.86	12.82	14.23	16.59	≤30.00	Pass
	06	15.99	16.06	19.06	13.01	14.41	16.78		
	09	15.88	16.12	19.01	13.12	14.42	16.83		

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	1.99	1.96	-	≤7.86	Pass
	06	2.43	2.41	-		
	11	2.38	2.15	-		
802.11g	01	-8.96	-8.60	-	≤7.86	Pass
	06	-8.08	-7.83	-		
	11	-8.23	-8.35	-		
802.11n(HT20)	01	-6.98	-7.04	-4.00	≤7.86	Pass
	06	-6.78	-6.77	-3.76		
	11	-8.52	-7.50	-4.97		
802.11n(HT40)	03	-11.54	-11.01	-8.26	≤7.86	Pass
	06	-10.39	-10.58	-7.47		
	09	-12.09	-12.18	-9.12		

802.11 b	Antenna 0
CH01	
CH06	
CH11	

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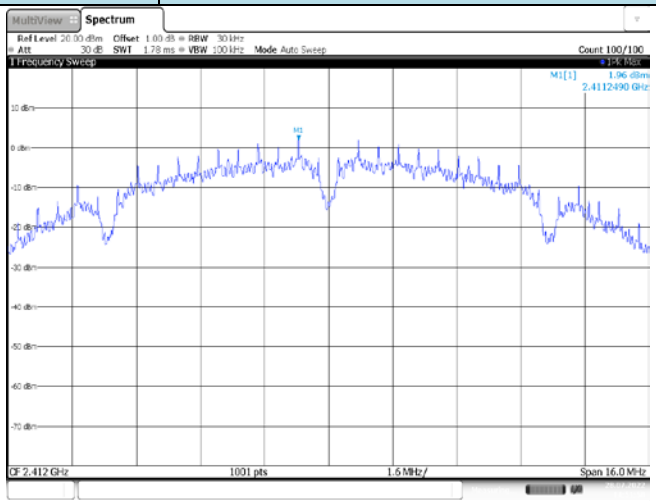
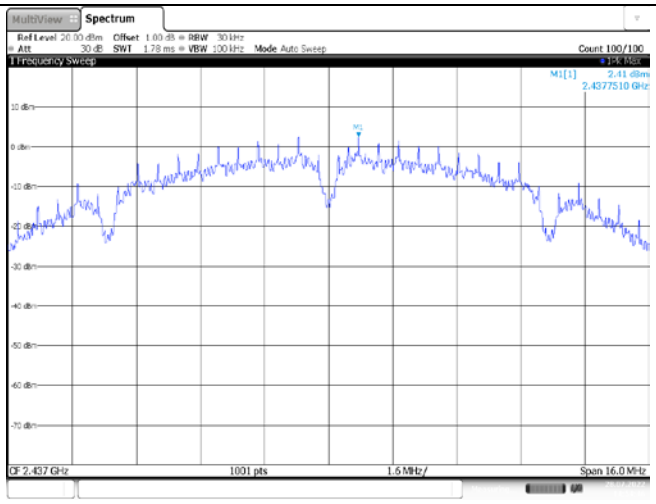
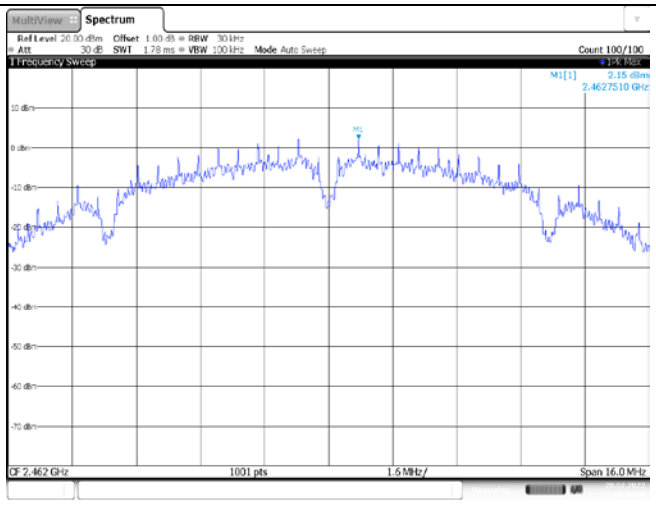
CH01	
CH06	
CH11	

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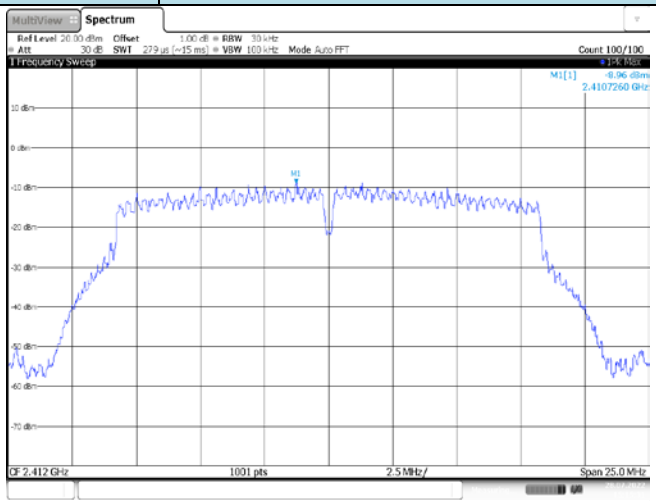
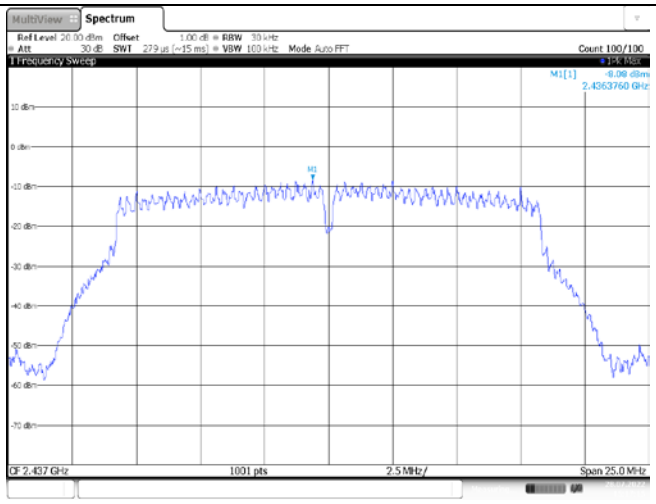
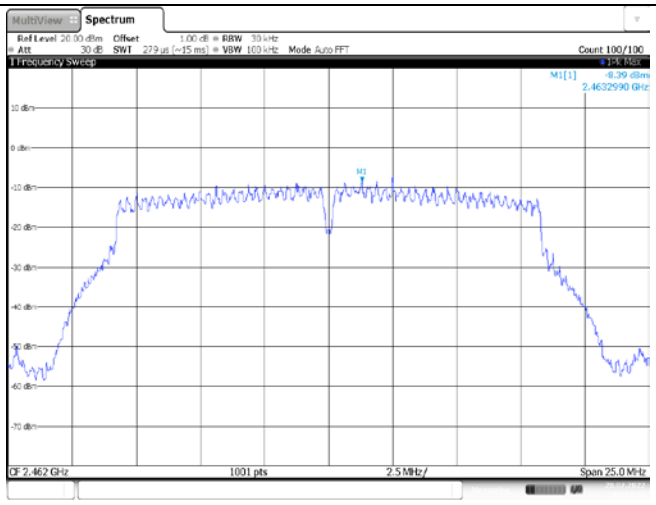
CH01	 Date: 28.JUL.2022 15:15:31
CH06	 Date: 28.JUL.2022 15:17:15
CH11	 Date: 28.JUL.2022 15:19:16

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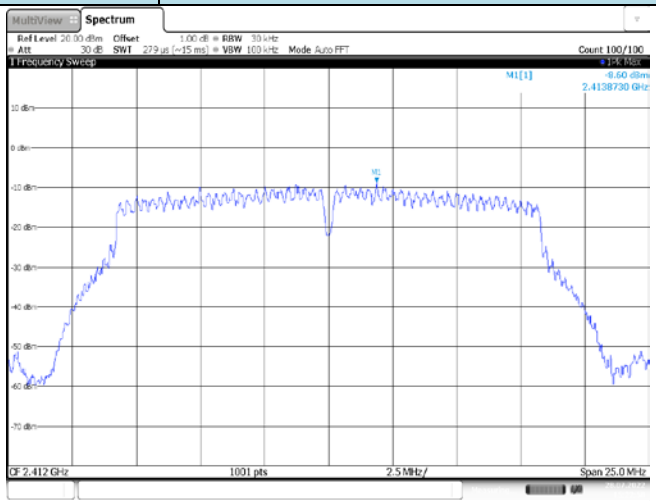
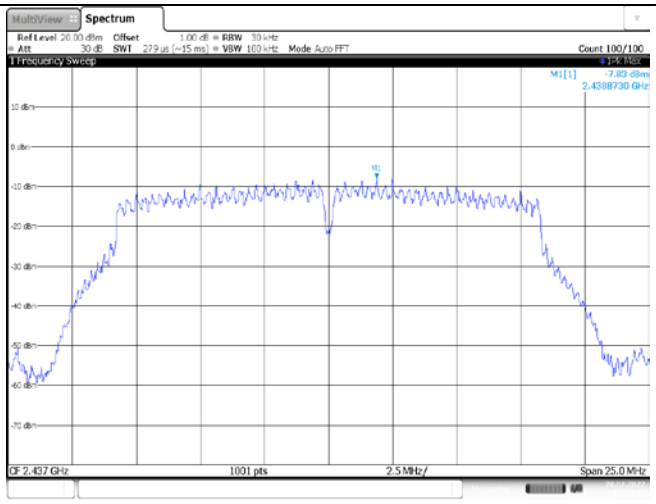
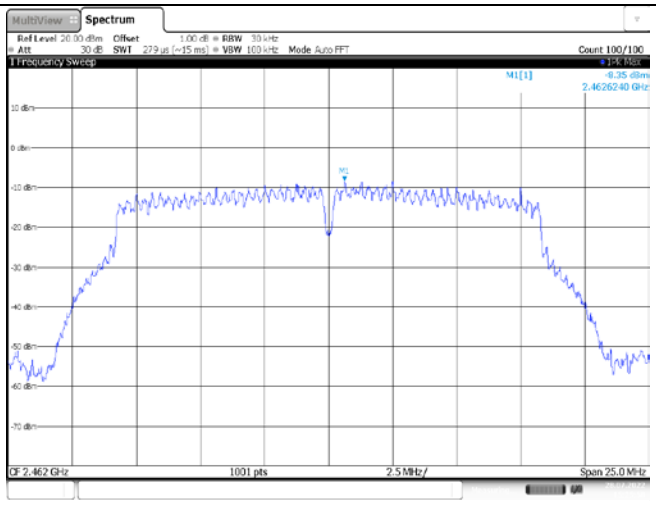
CH01	 Date: 28.JUL.2022 15:22:50
CH06	 Date: 28.JUL.2022 15:24:37
CH11	 Date: 28.JUL.2022 15:25:58

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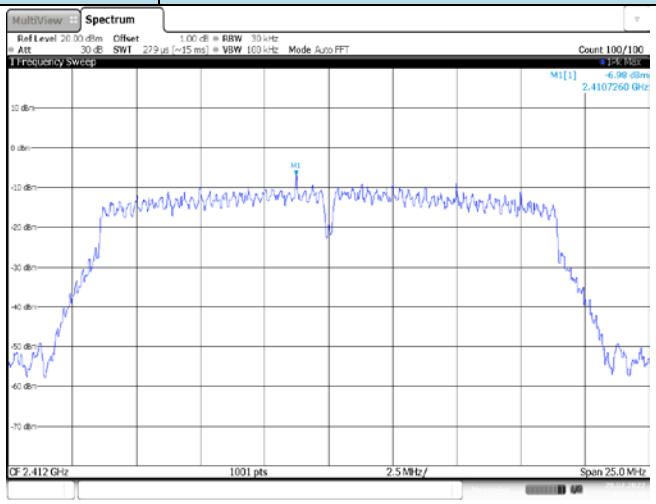
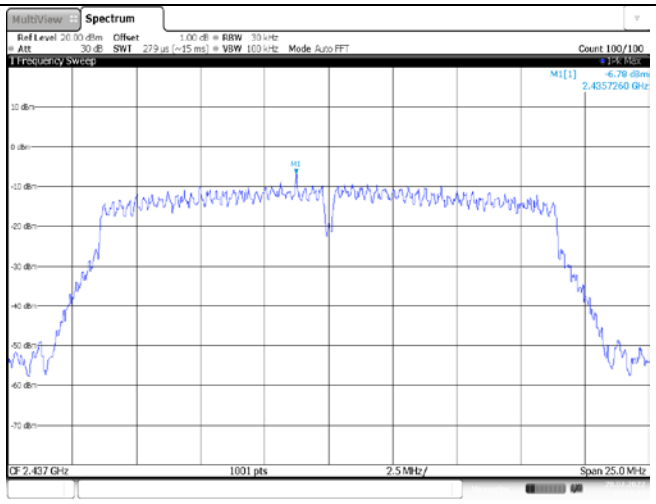
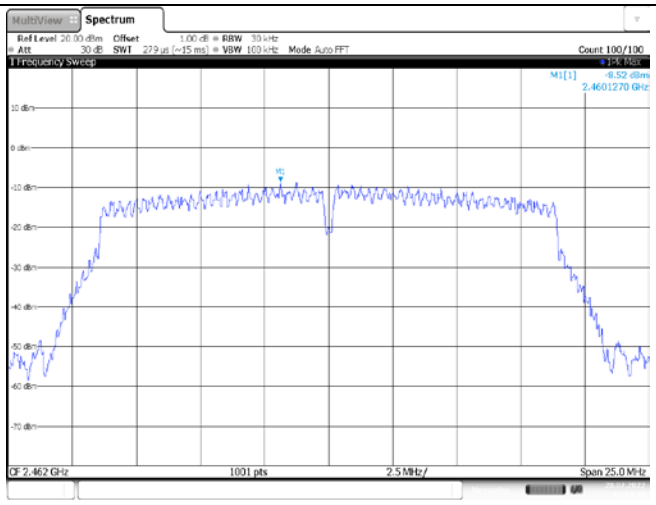
CH01	 Date:28.JUL.2022 15:48:48
CH06	 Date:28.JUL.2022 15:42:46
CH11	 Date:28.JUL.2022 15:44:49

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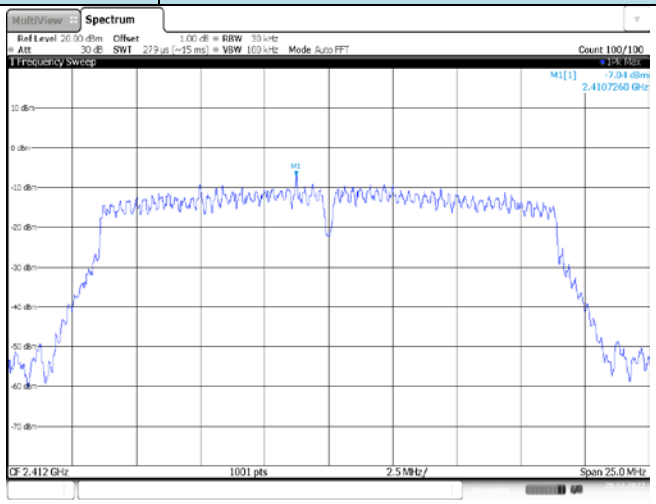
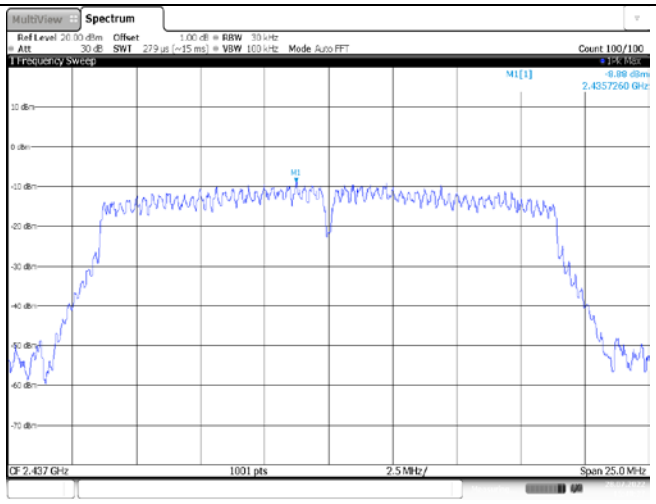
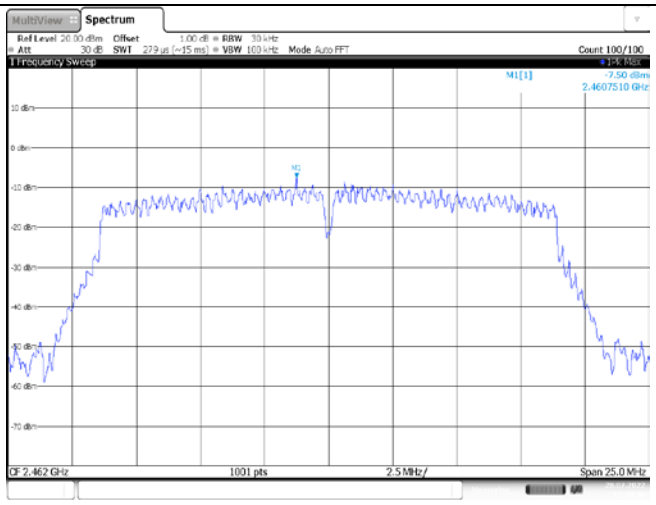
CH01	
CH06	
CH11	

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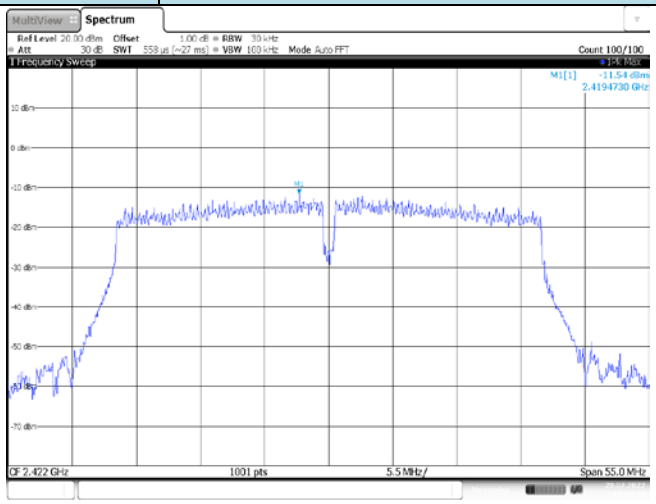
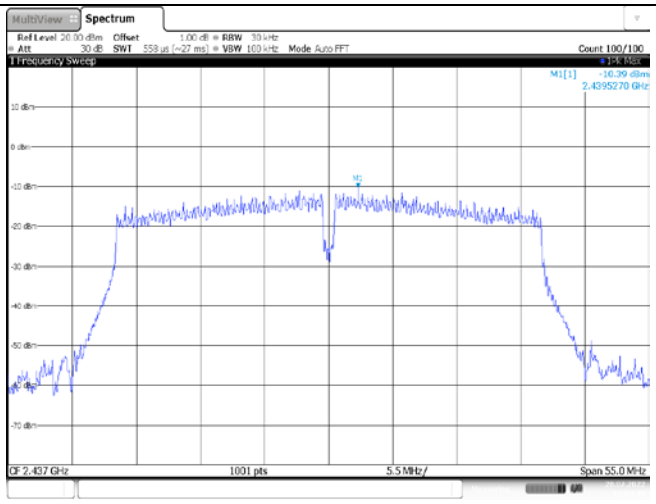
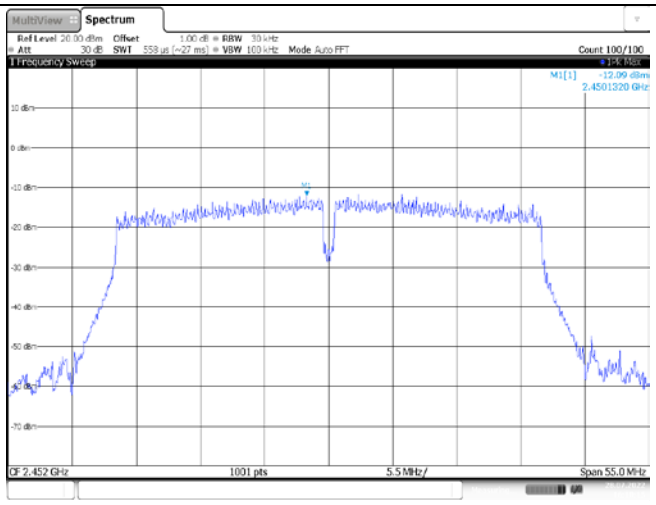
CH03	
CH06	
CH09	

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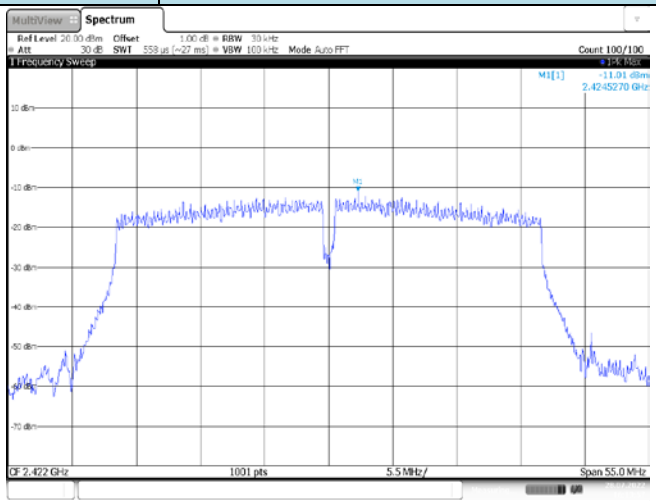
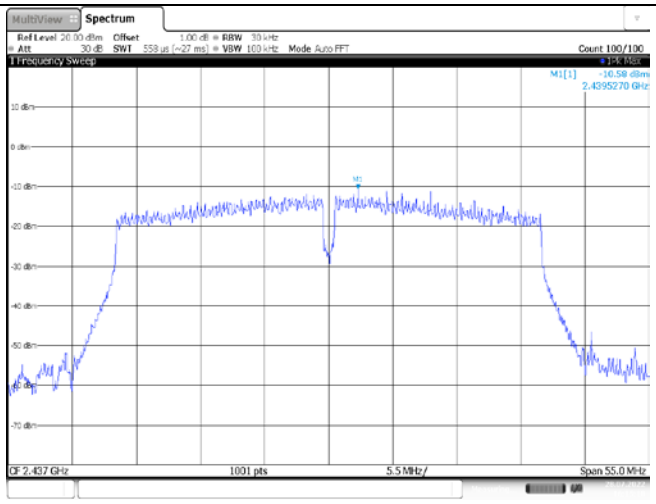
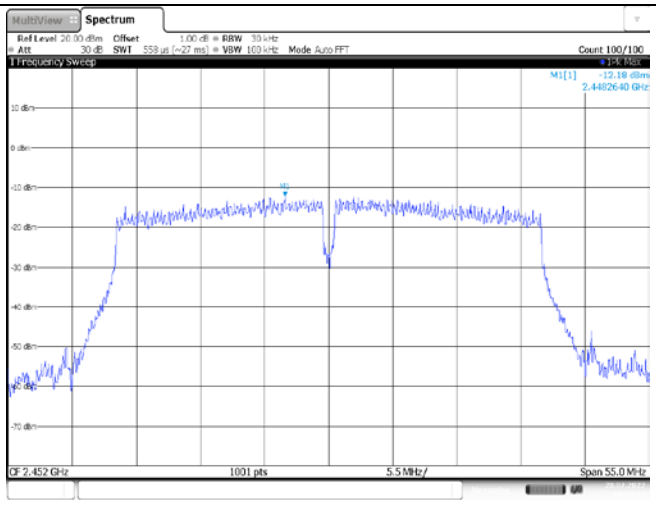
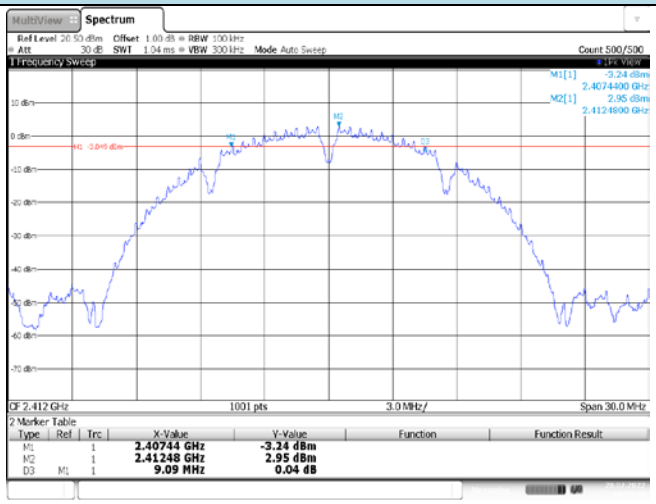
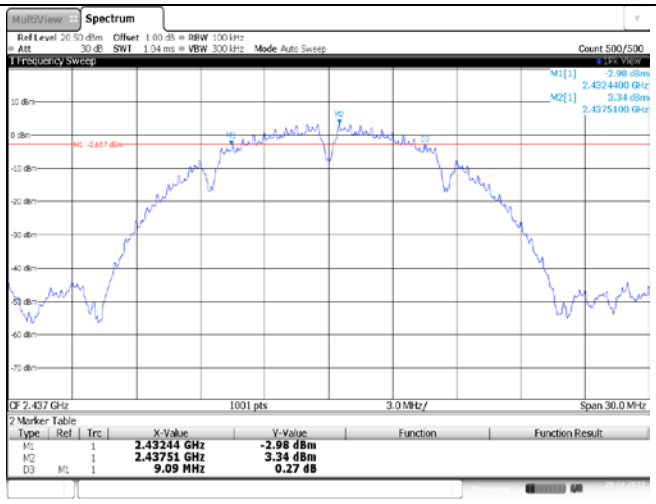
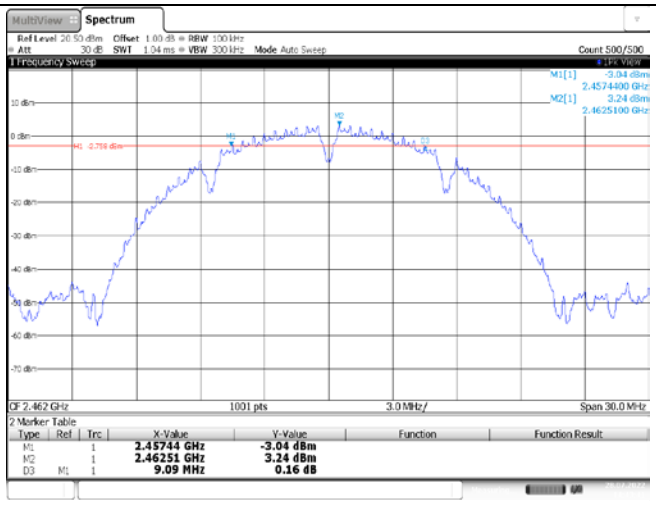
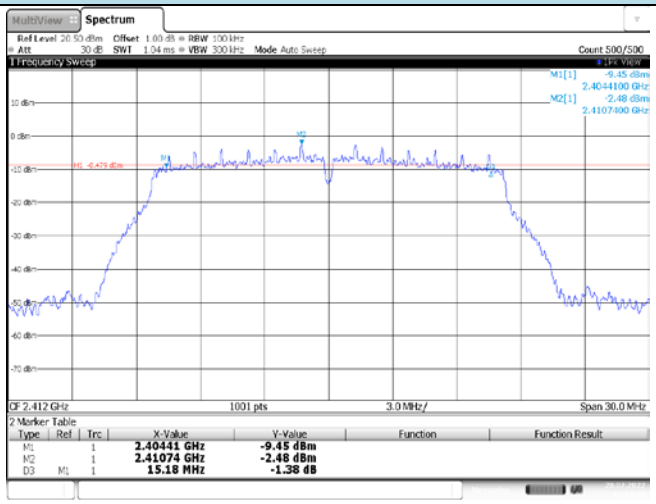
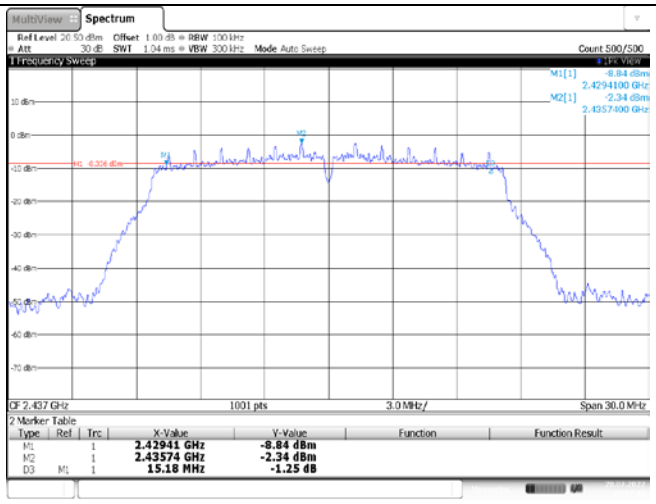
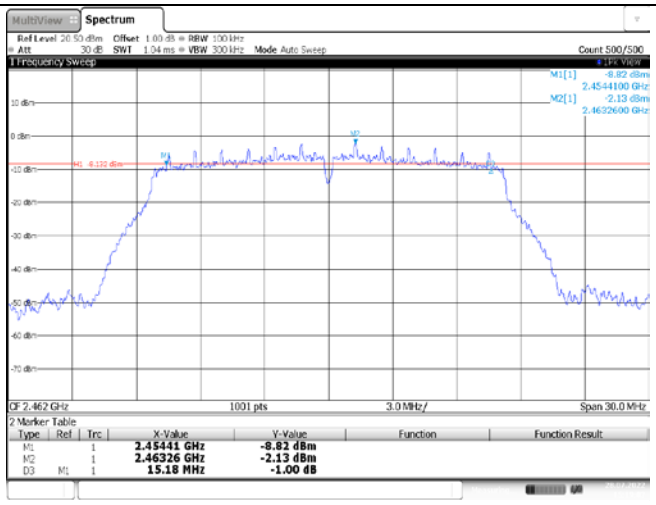
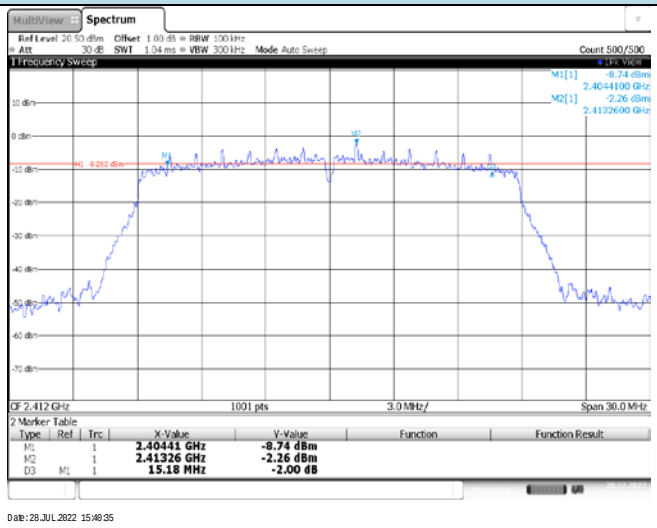
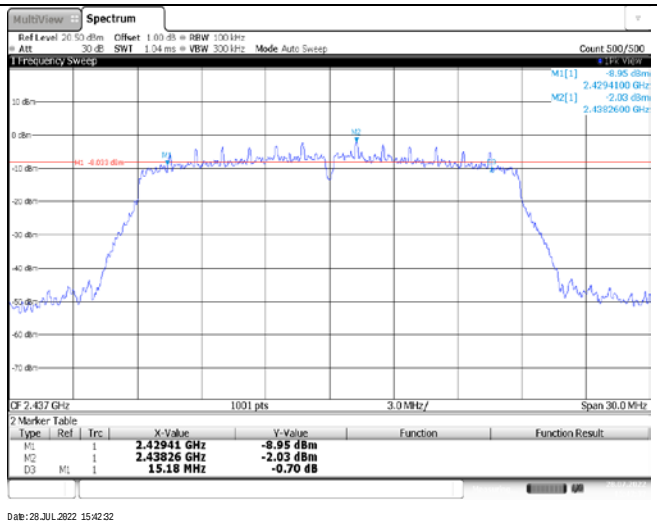
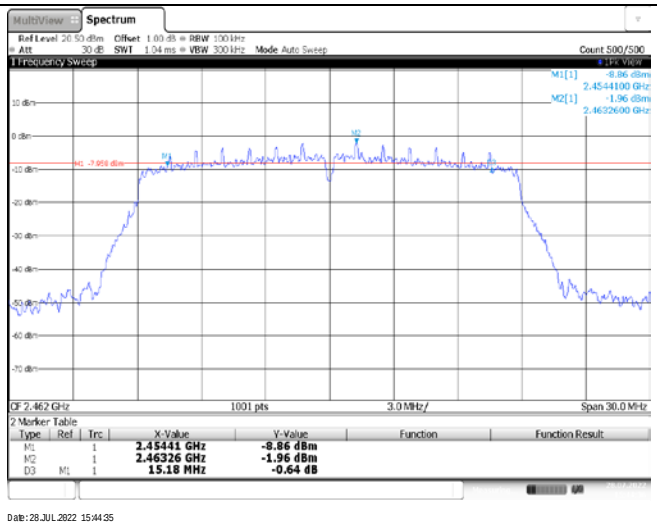
CH03	
CH06	
CH09	

Appendix C：6dB Bandwidth

Type	Channel	6dB Bandwidth (MHz)	Limit (kHz)	Result
802.11b	01	9.09	≥500	Pass
	06	9.09		
	11	9.09		
802.11g	01	15.18	≥500	Pass
	06	15.18		
	11	15.18		
802.11n(HT20)	01	15.18	≥500	Pass
	06	15.18		
	11	15.18		
802.11n(HT40)	03	35.28	≥500	Pass
	06	35.22		
	09	35.28		

802.11 b	
CH01	
CH06	
CH11	

802.11 g	
CH01	
CH06	
CH11	

802.11n(HT20)	
CH01	
CH06	
CH11	

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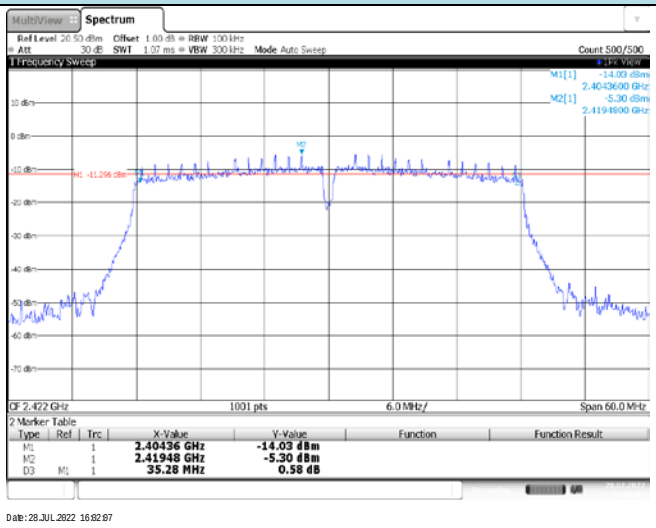
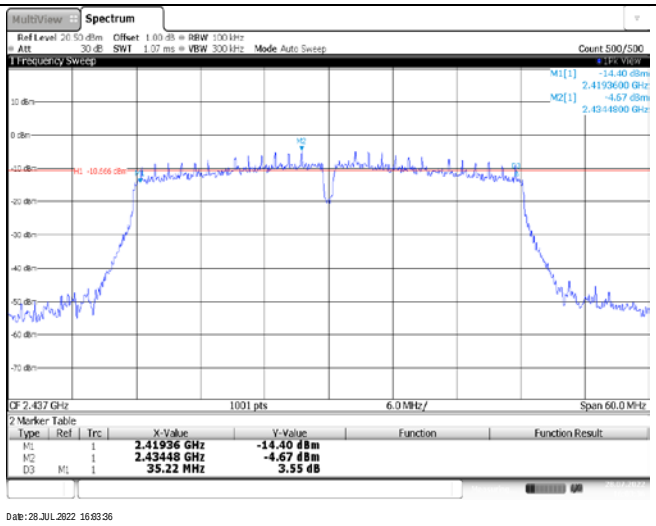
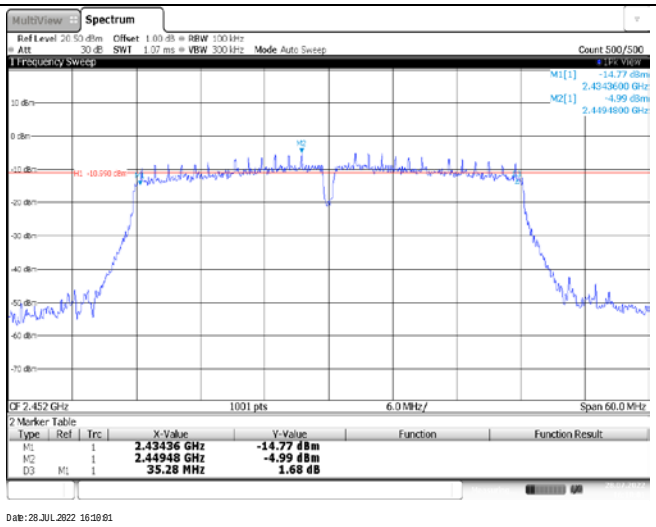
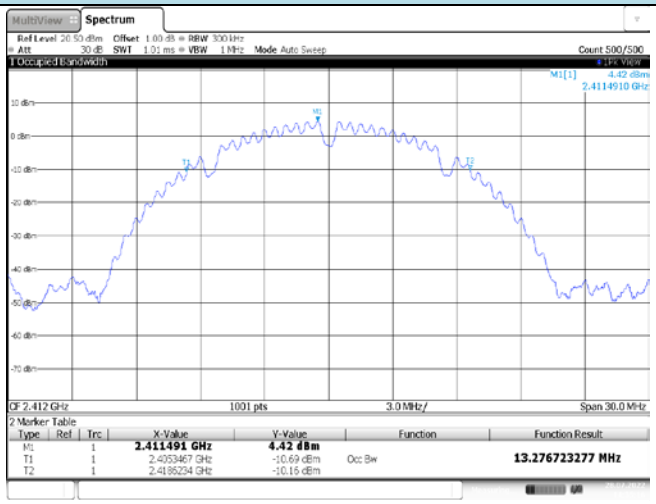
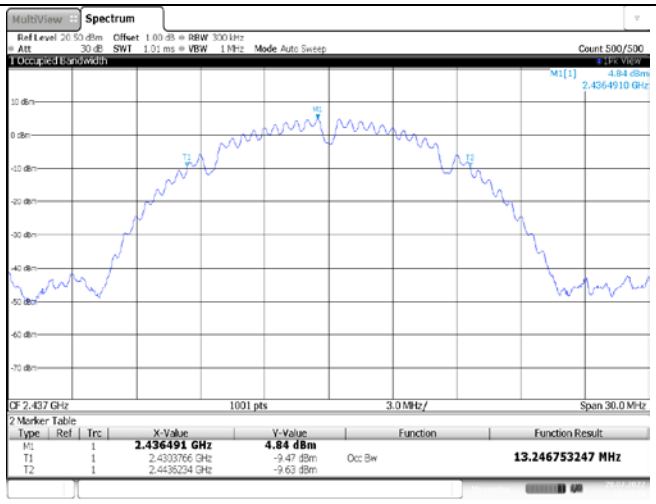
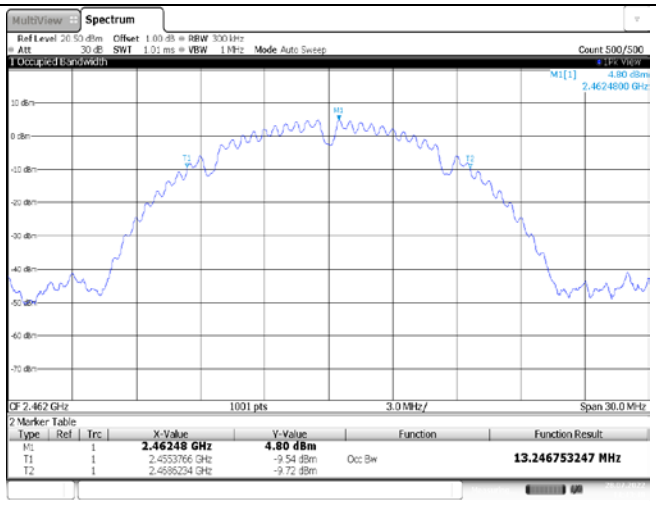
CH03	
CH06	
CH09	

Appendix D：99% Occupied Bandwidth

Type	Channel	99% Bandwidth (MHz)	Limit (kHz)	Result
802.11b	01	13.28	-	Pass
	06	13.25		
	11	13.25		
802.11g	01	16.75	-	Pass
	06	16.78		
	11	16.78		
802.11n(HT20)	01	17.62	-	Pass
	06	17.65		
	11	17.65		
802.11n(HT40)	03	36.14	-	Pass
	06	35.96		
	09	36.08		

802.11 b	
CH01	
CH06	
CH11	

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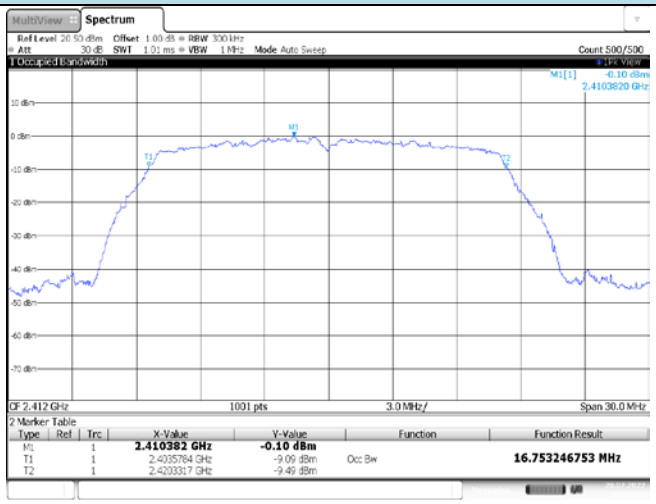
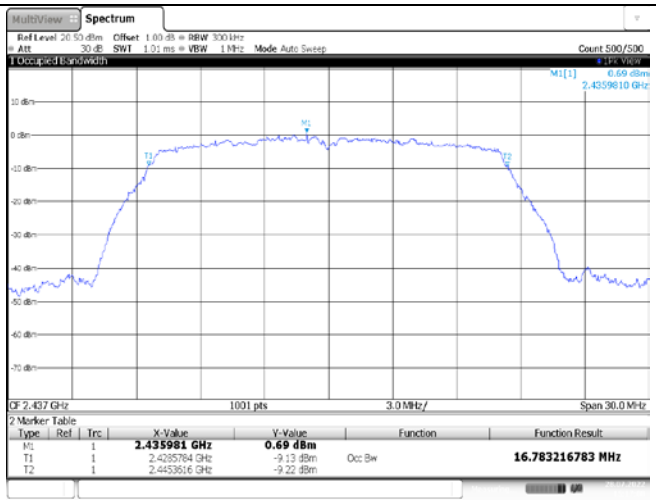
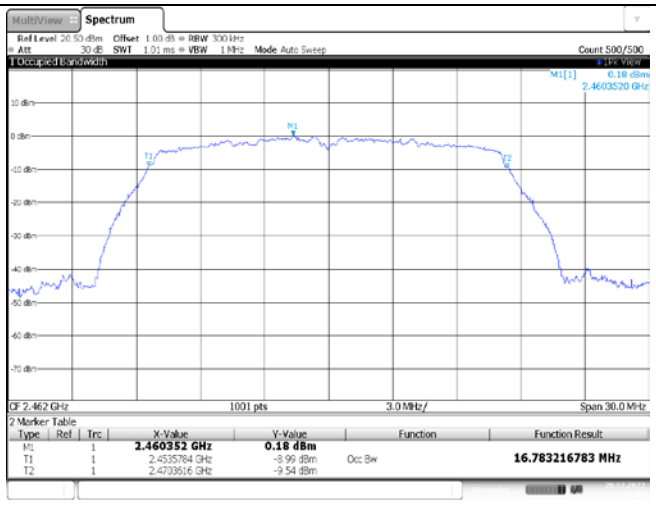
CH01	
CH06	
CH11	

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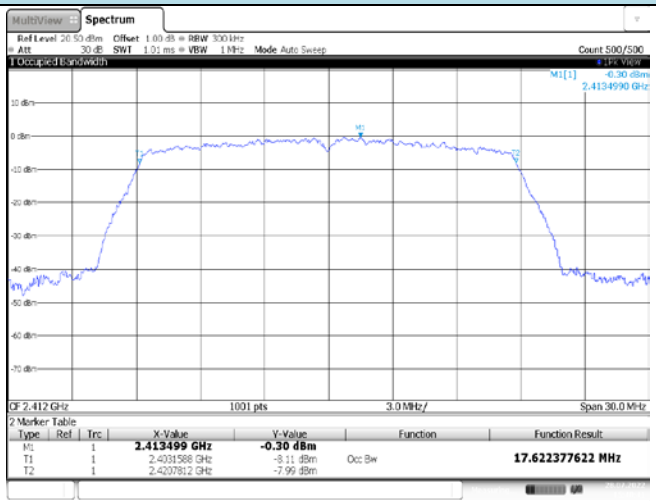
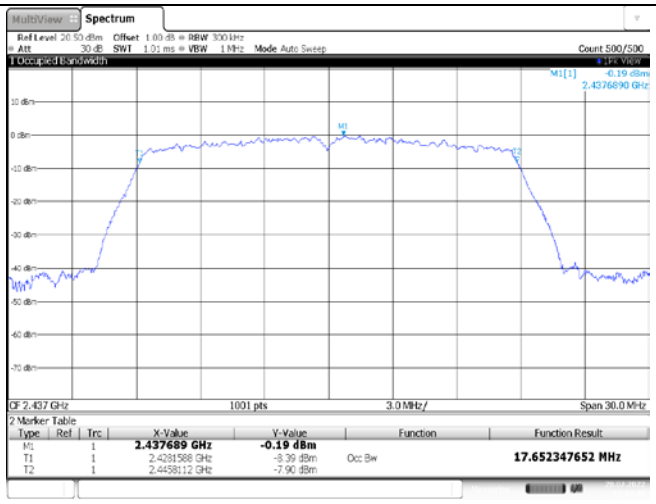
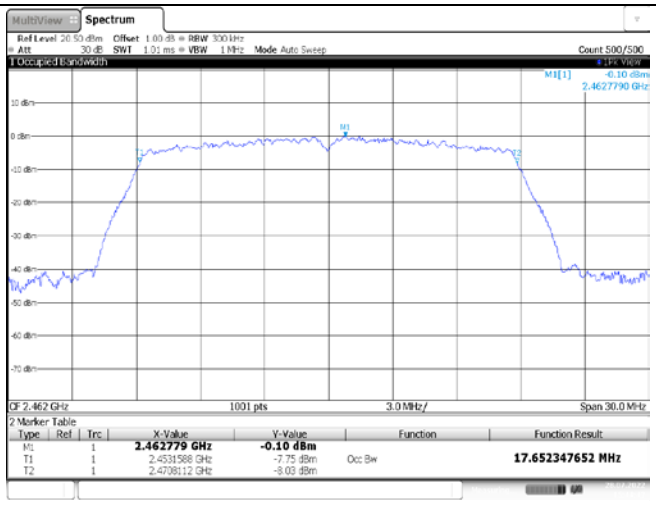
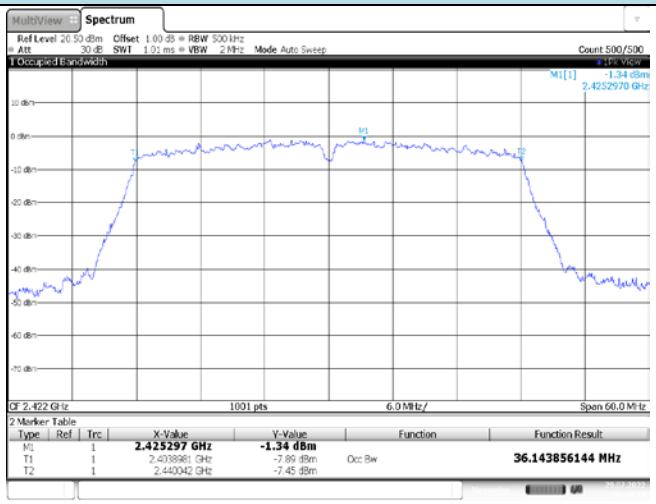
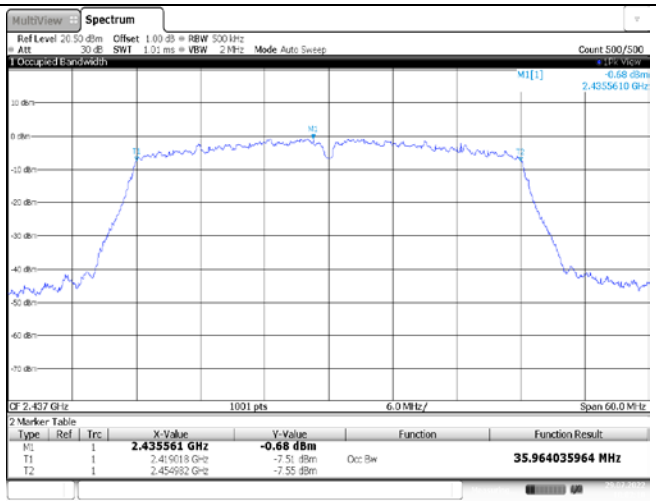
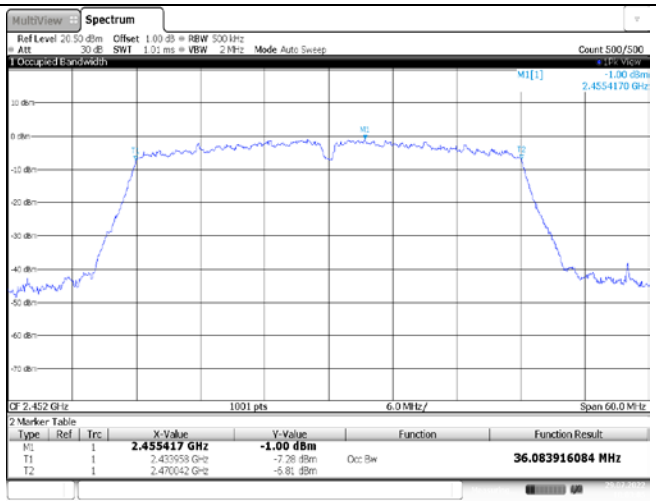
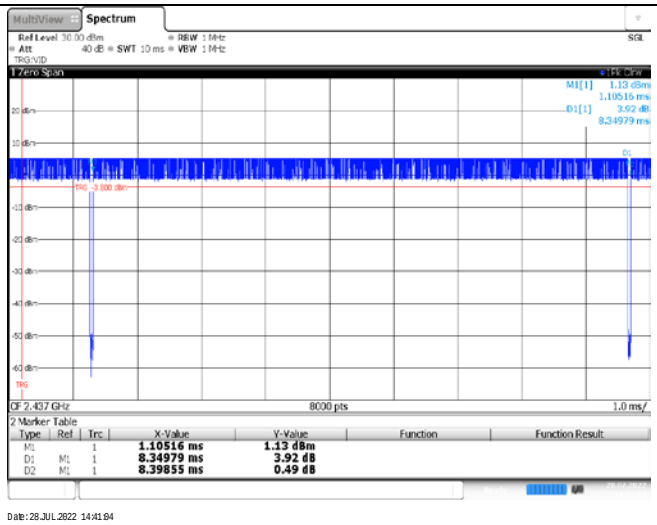
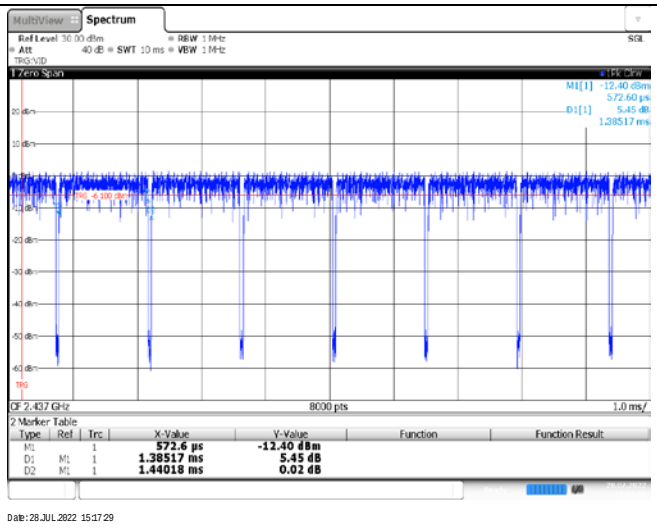
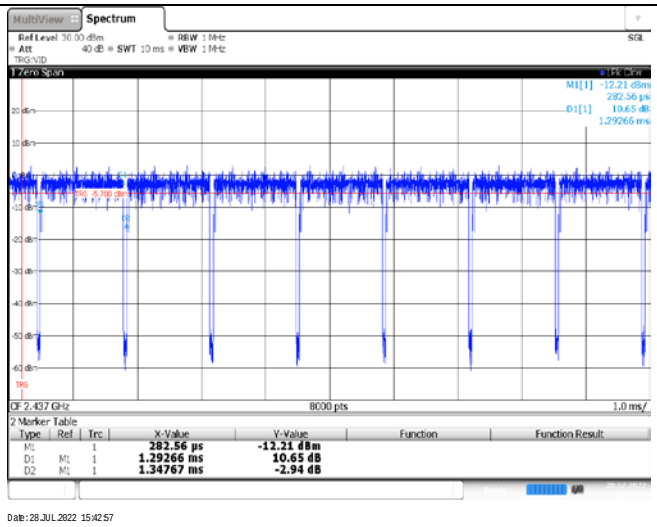
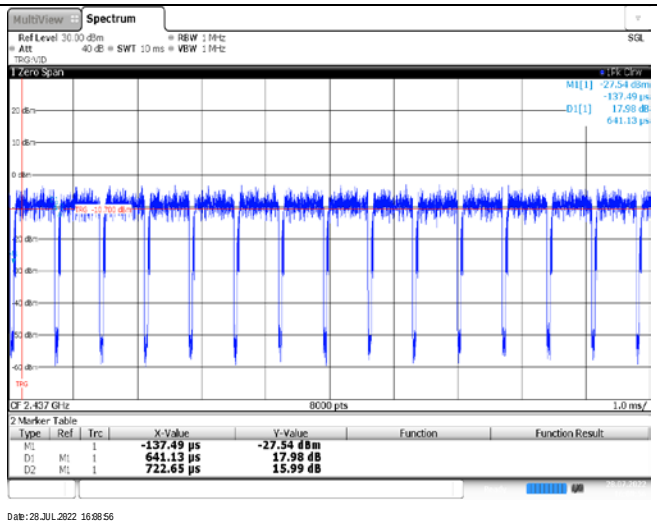
CH01	
CH06	
CH11	

802.11n(HT40)	
CH03	
CH06	
CH09	

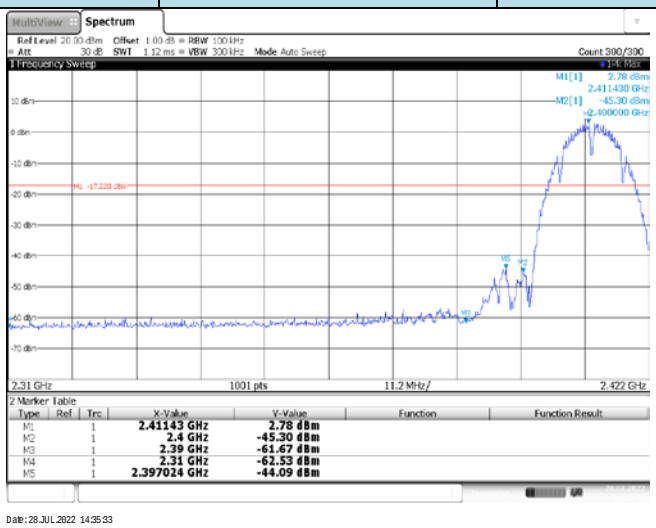
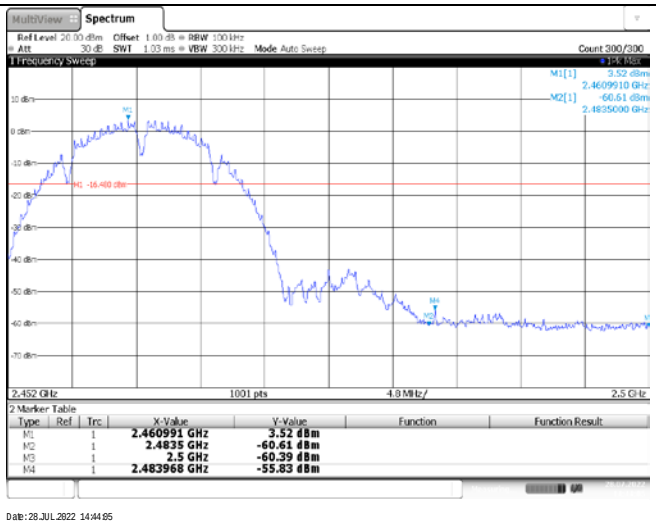
Appendix E：Duty Cycle

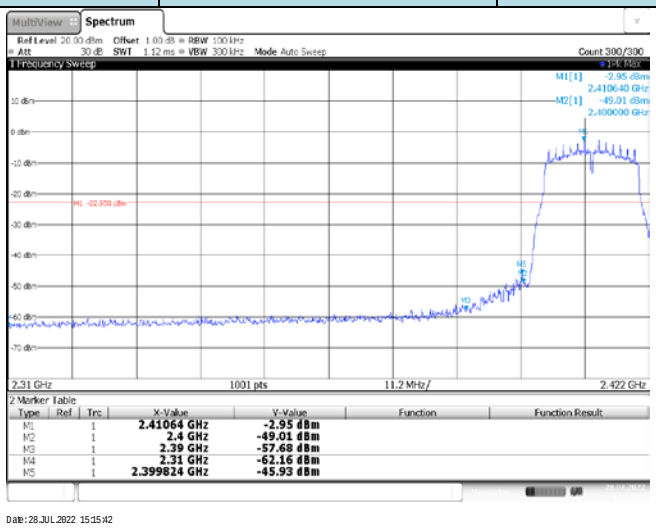
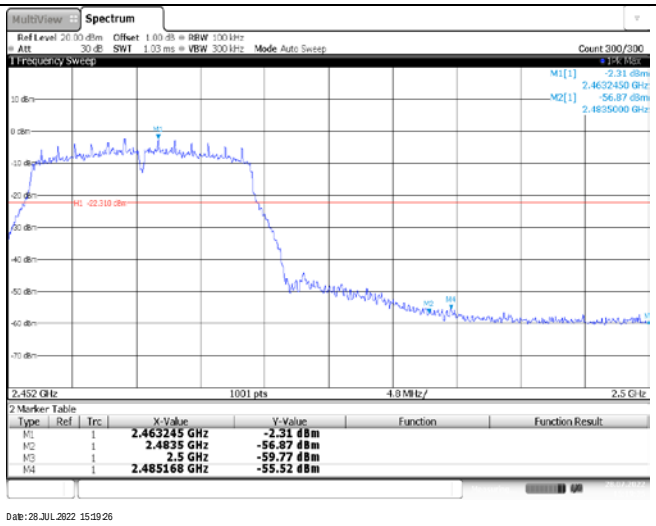
Modulation Type	Test Frequency（MHz）	$T_{on\ time}$ for single burst (ms)	T_{period} (ms)	Duty cycle	$1/T_{on\ time}$ (kHz)
11b	2437	8.35	8.40	99.4%	0.1
11g	2437	1.39	1.44	96.5%	0.7
11n20	2437	1.29	1.35	95.6%	0.8
11n40	2437	0.69	0.72	95.8%	1.4

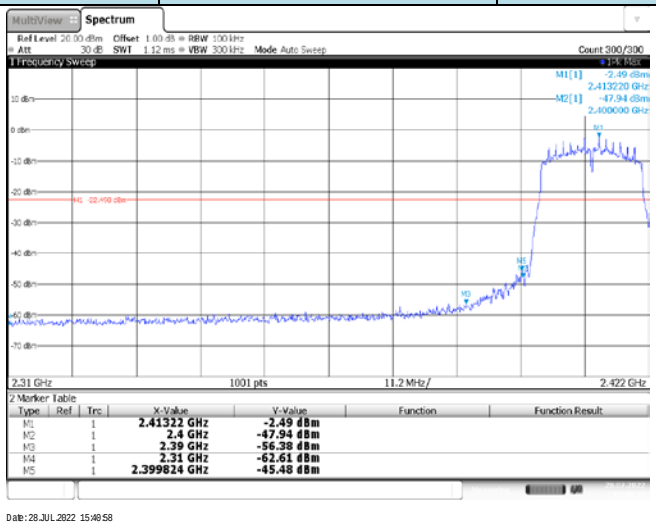
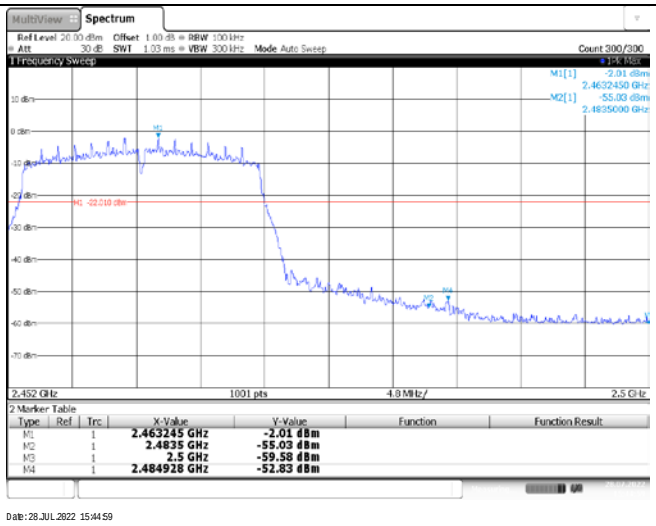
11b	
11g	

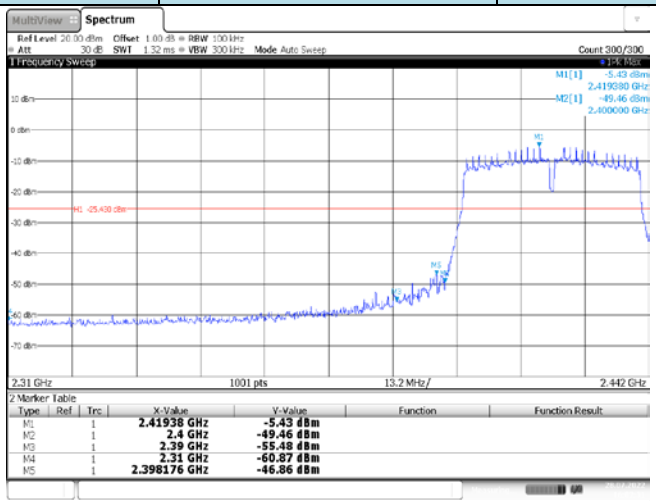
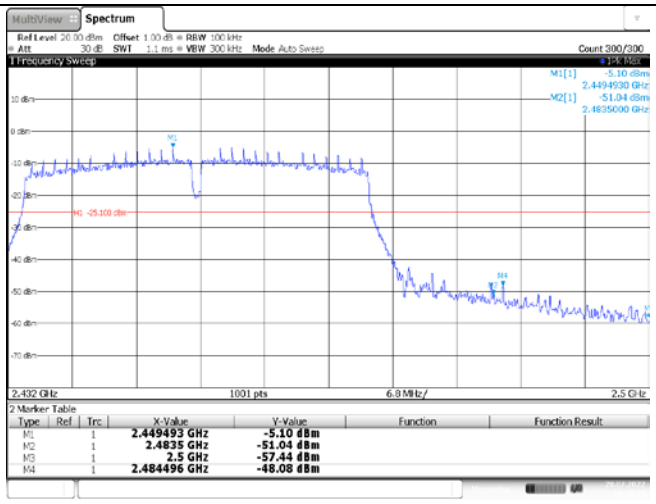
11n20	 MultiView Spectrum Ref Level 30.00 dBm RBW 1 MHz Att 40 dB SWT 10 ms VBW 1 MHz SGL 1 Zero Span PK CLRW M1[1] -12.21 dBm 282.56 µs D1[1] 10.65 dB 1.29266 ms CF 2.437 GHz 8000 pts 1.0 ms/ 2 Marker Table Type Ref Trc X-Value Y-Value Function Function Result M1 1 282.56 µs -12.21 dBm D1 M1 1 1.29266 ms 10.65 dB D2 M1 1 1.34767 ms -2.94 dB Date: 28.JUL.2022 15:42:57
11n40	 MultiView Spectrum Ref Level 30.00 dBm RBW 1 MHz Att 40 dB SWT 10 ms VBW 1 MHz SGL 1 Zero Span PK CLRW M1[1] -27.54 dBm -137.49 µs D1[1] 17.98 dB 641.13 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 -137.49 µs -27.54 dBm D1 M1 1 641.13 µs 17.98 dB D2 M1 1 722.65 µs 15.99 dB Date: 28.JUL.2022 16:08:56

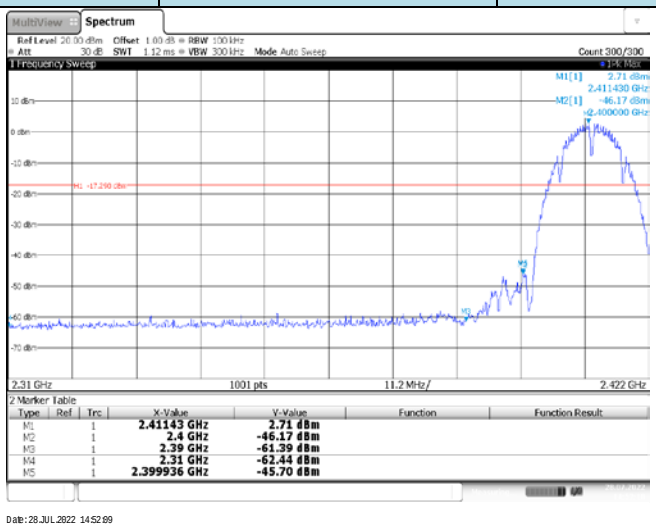
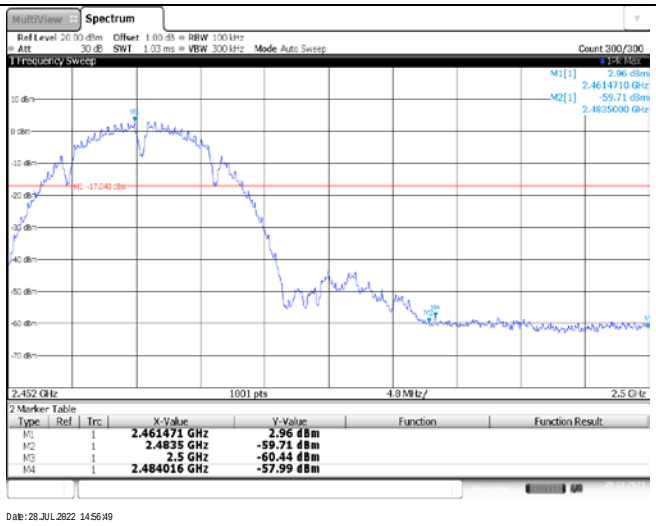
Appendix F：Band Edge and Spurious Emissions (Conducted)

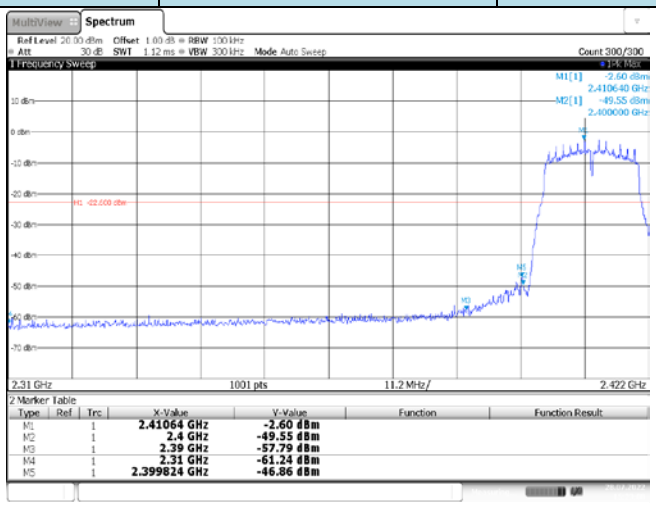
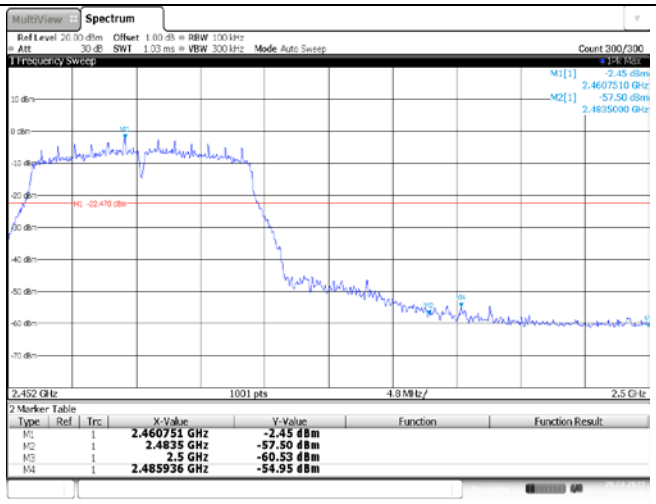
Test Item:	Bandedge	802.11 b	Antenna 0
CH01			
CH11			

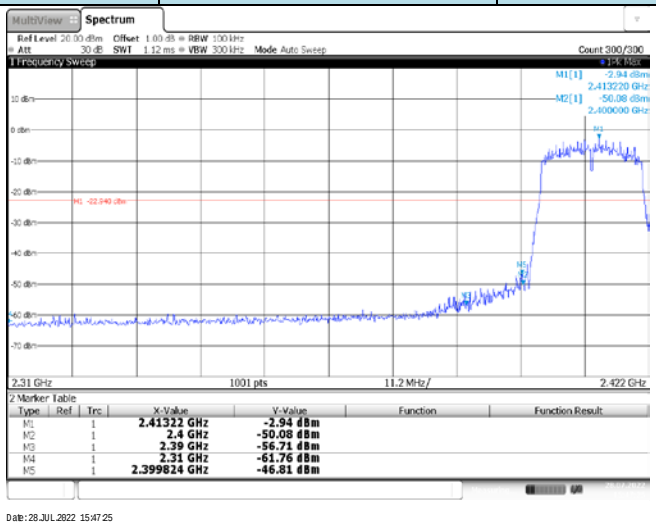
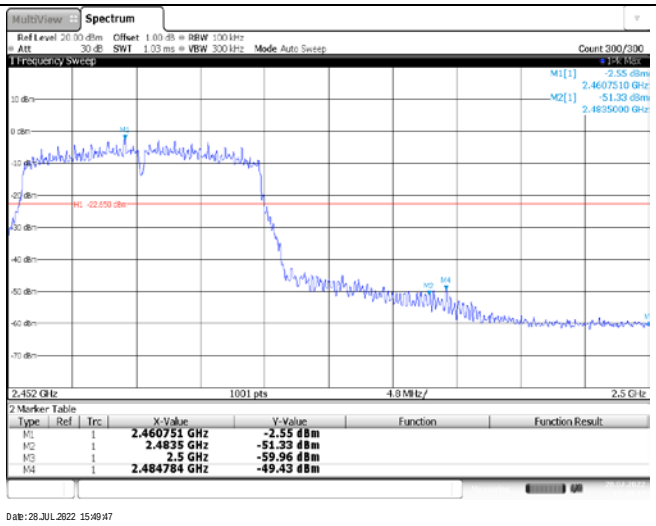
Test Item:	Bandedge	802.11 g	Antenna 0
CH01			
CH11			

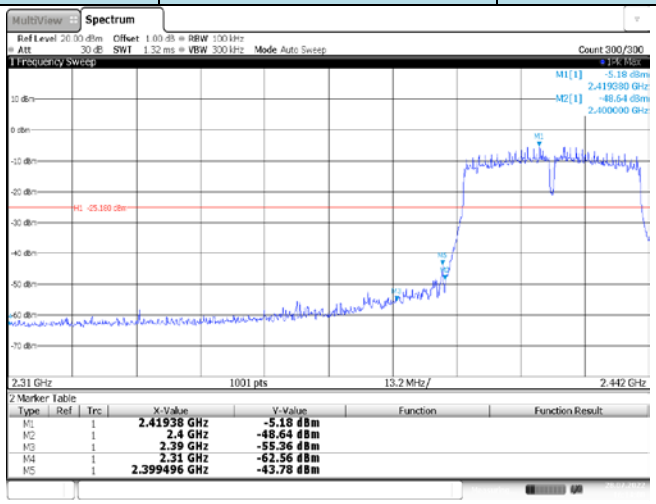
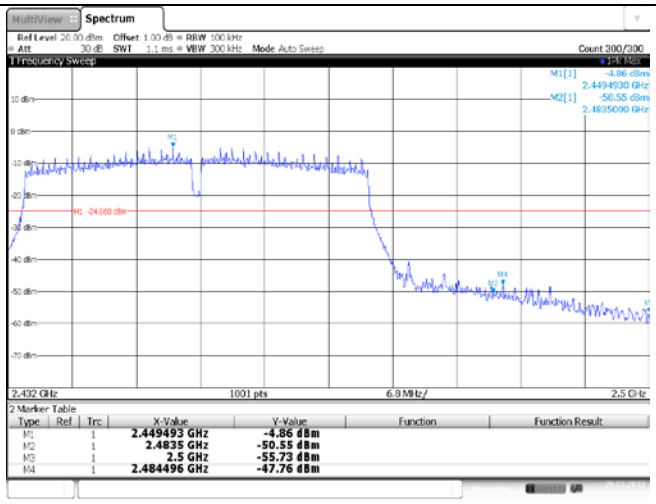
Test Item:	Bandedge	802.11 n(HT20)	Antenna 0
CH01			
CH11			

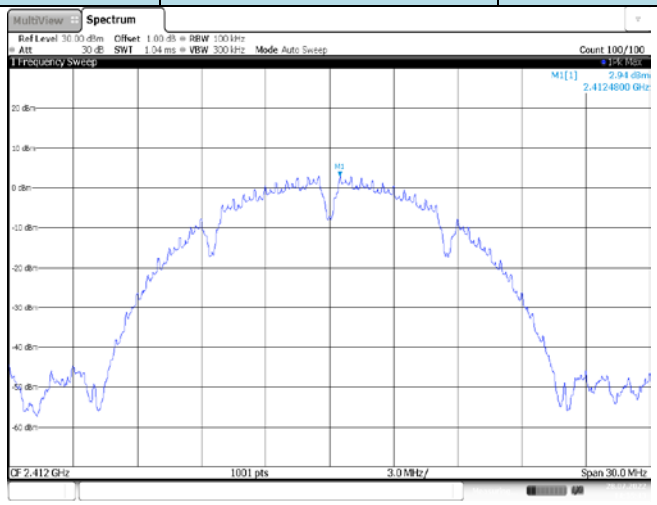
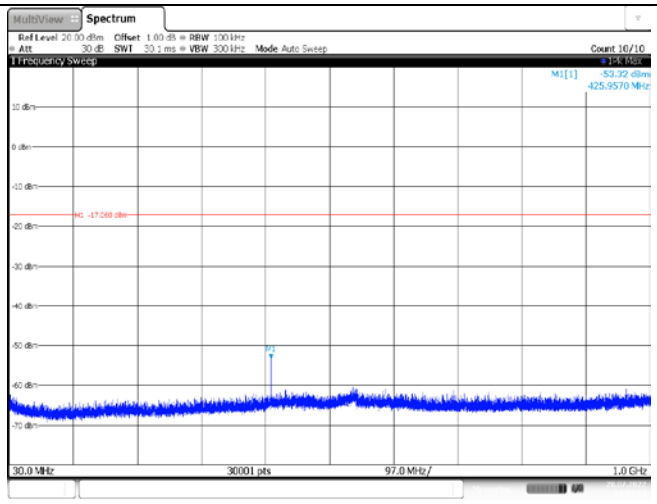
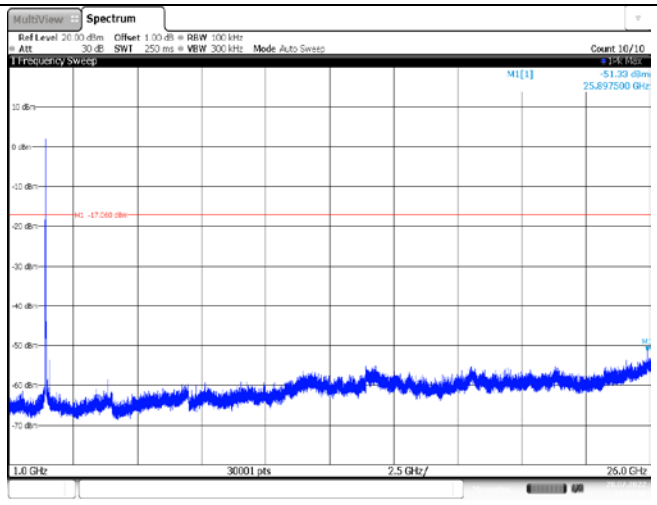
Test Item:	Bandedge	802.11 n(HT40)	Antenna 0
CH03			
CH09			

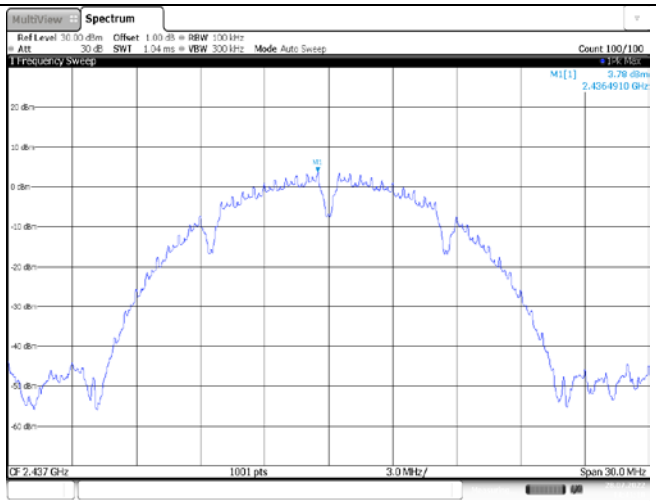
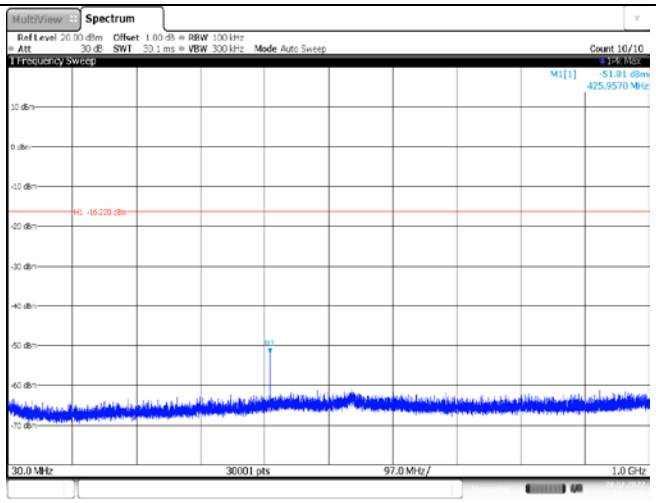
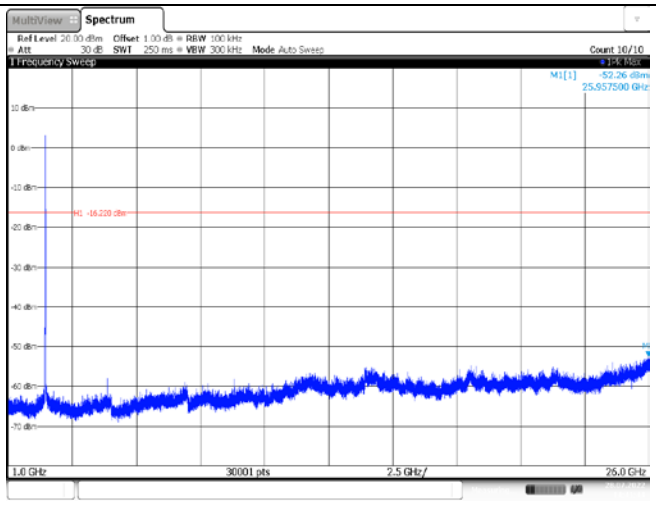
Test Item:	Bandedge	802.11 b	Antenna 1
CH01			
CH11			

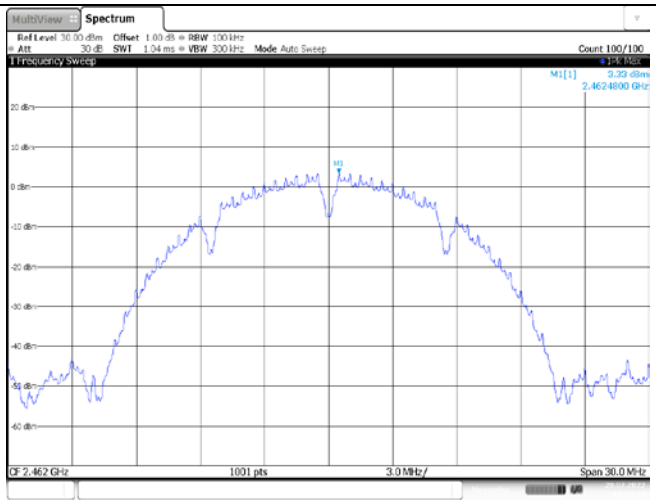
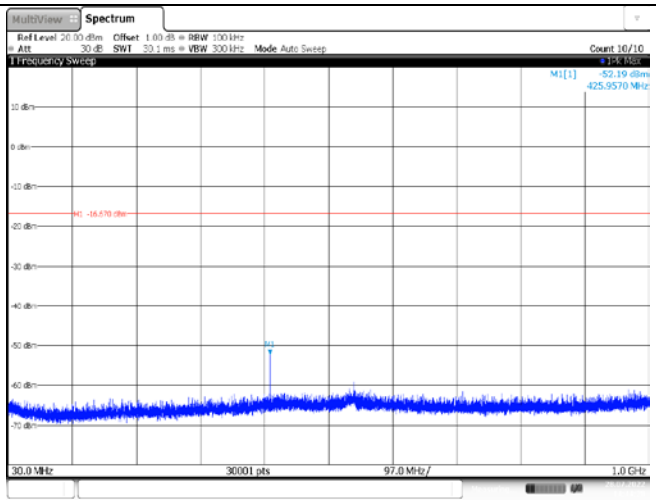
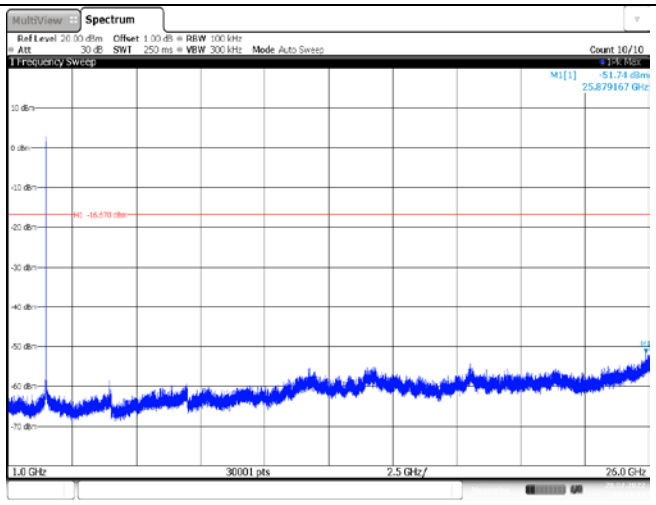
Test Item:	Bandedge	802.11 g	Antenna 1
CH01			
CH11			

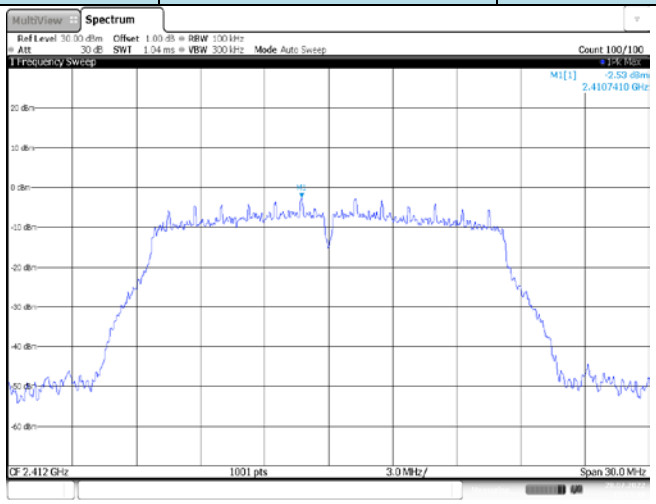
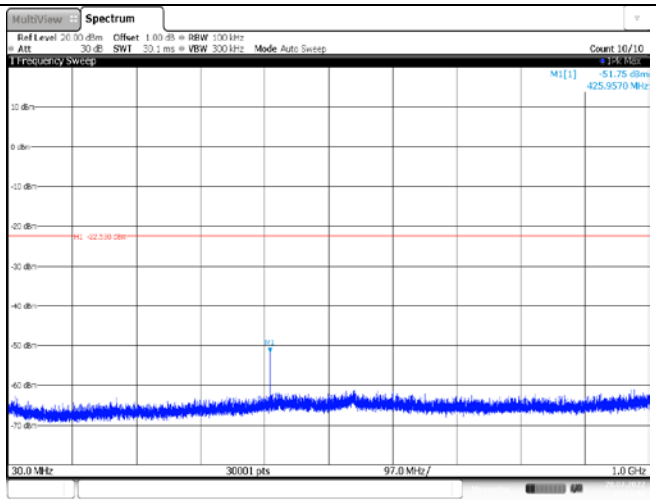
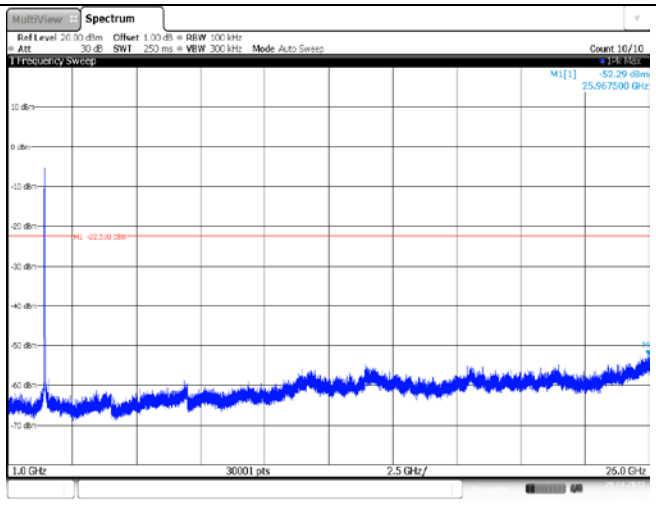
Test Item:	Bandedge	802.11 n(HT20)	Antenna 1
CH01			
CH11			

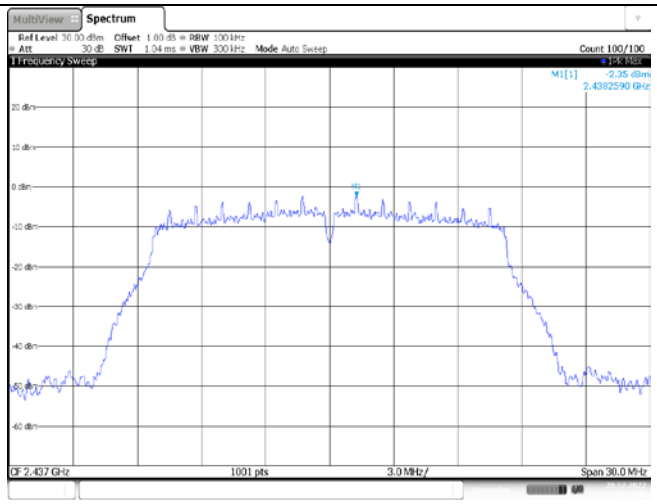
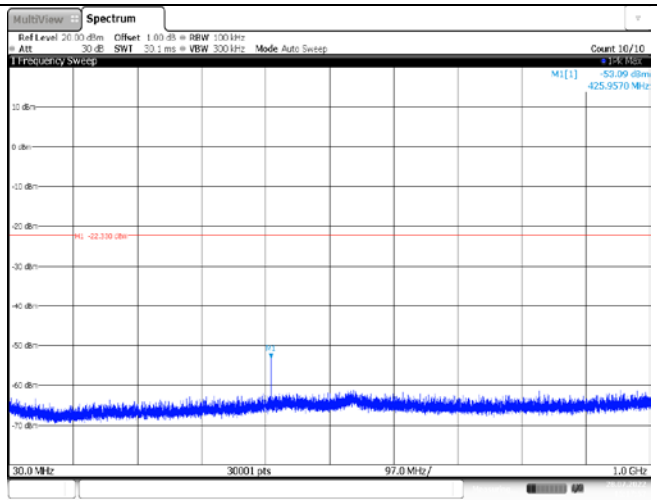
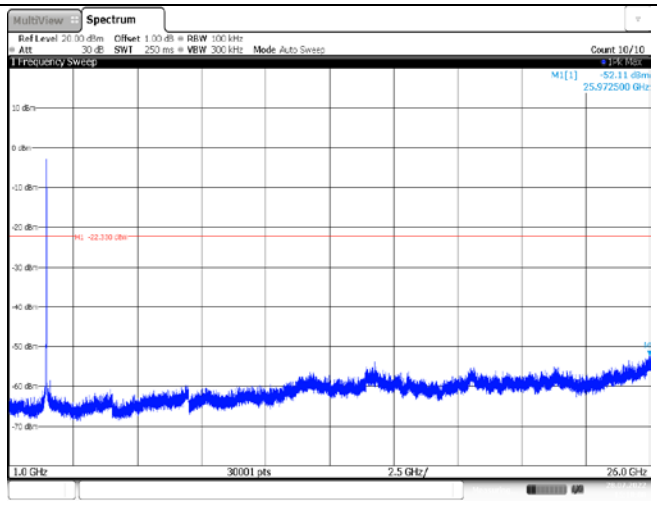
Test Item:	Bandedge	802.11 n(HT40)	Antenna 1
CH03			
CH09			

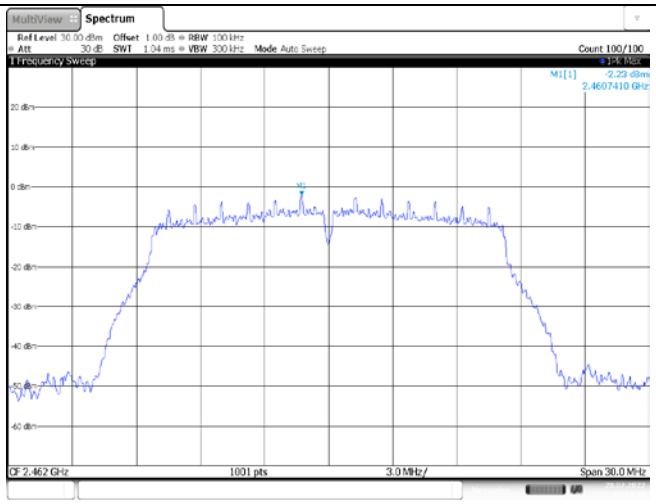
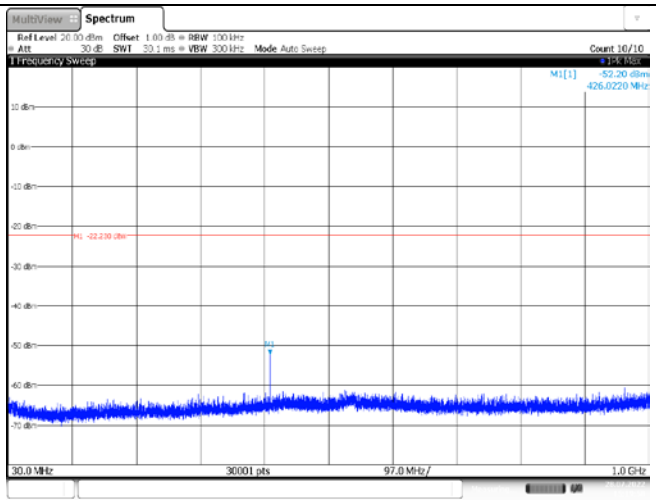
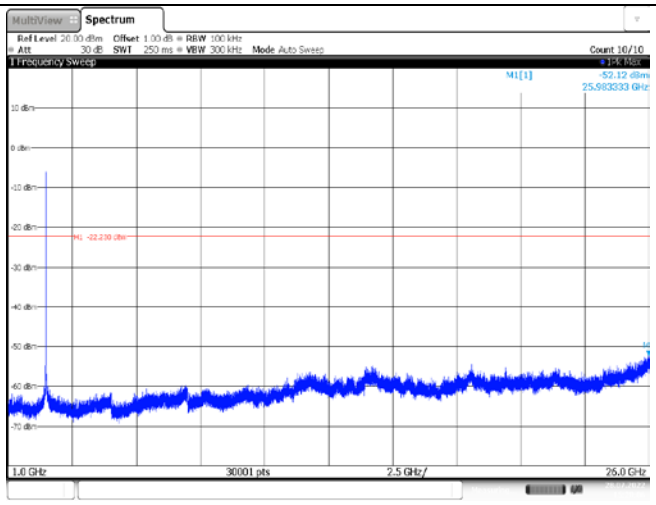
Test Item:	SE	802.11 b	Antenna 0
Reference level CH01			
CH01			
			

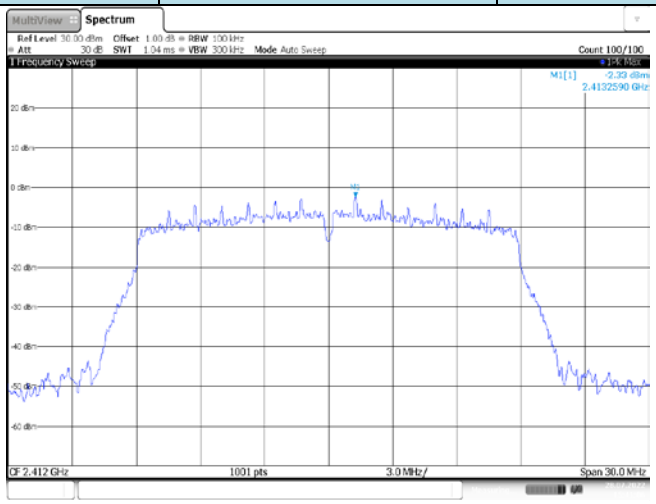
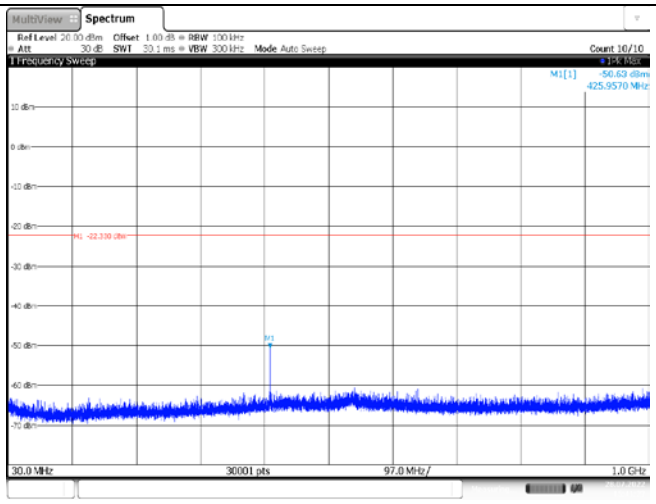
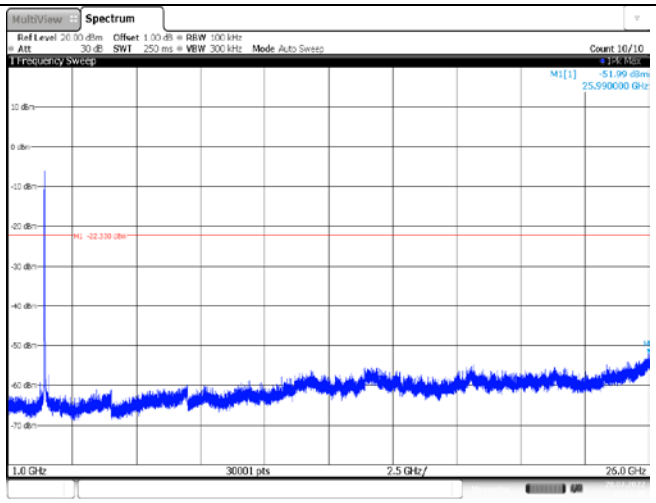
Reference level CH06	
CH06	
	

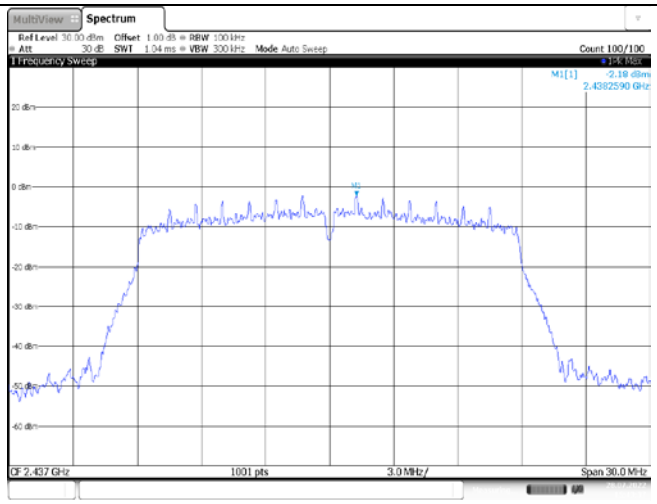
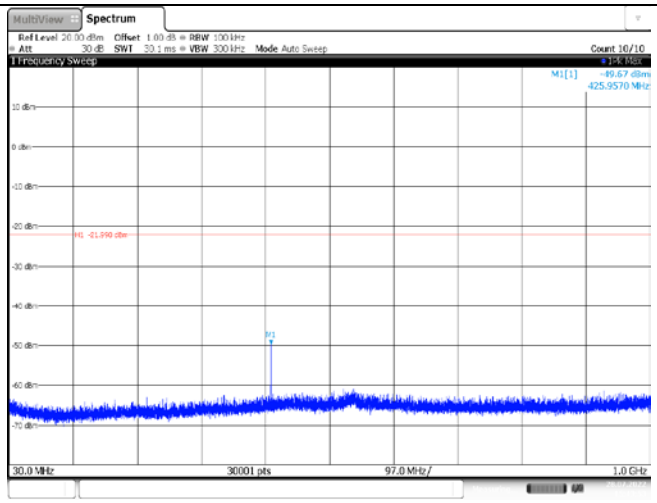
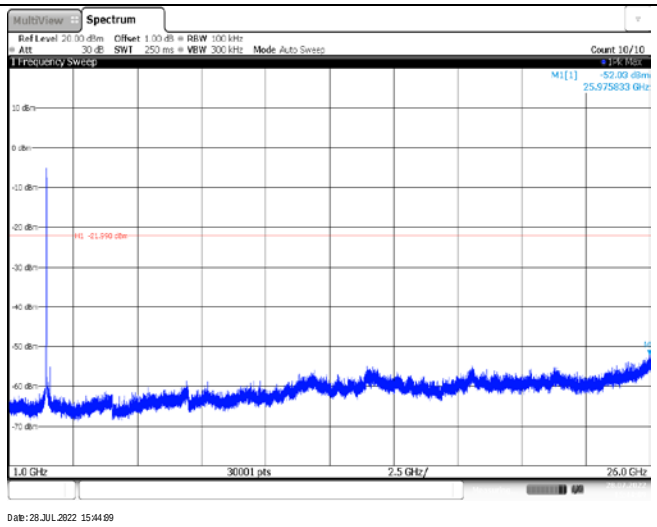
Reference level CH11	
CH11	
	

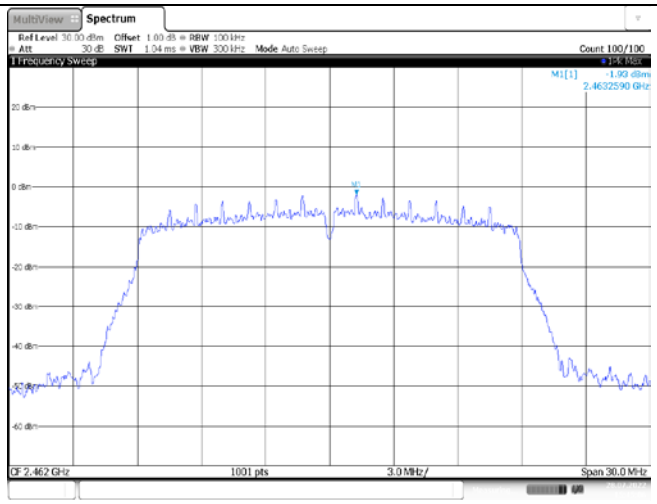
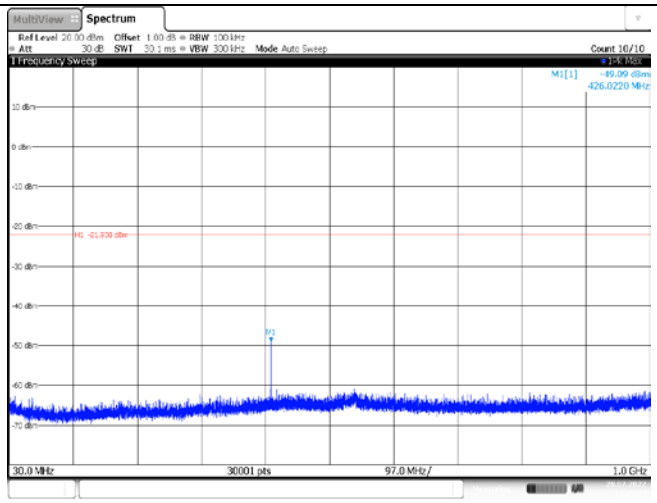
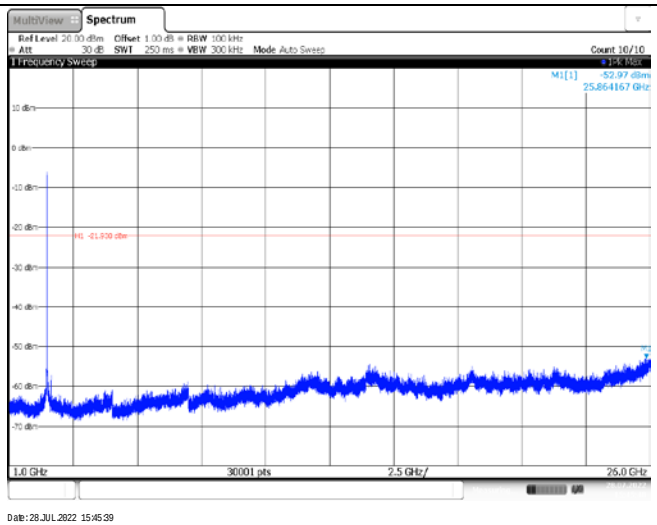
Test Item:	SE	802.11 g	Antenna 0
Reference level CH01	 Date: 28.JUL.2022 15:15:49		
CH01	 Date: 28.JUL.2022 15:16:05		
	 Date: 28.JUL.2022 15:16:22		

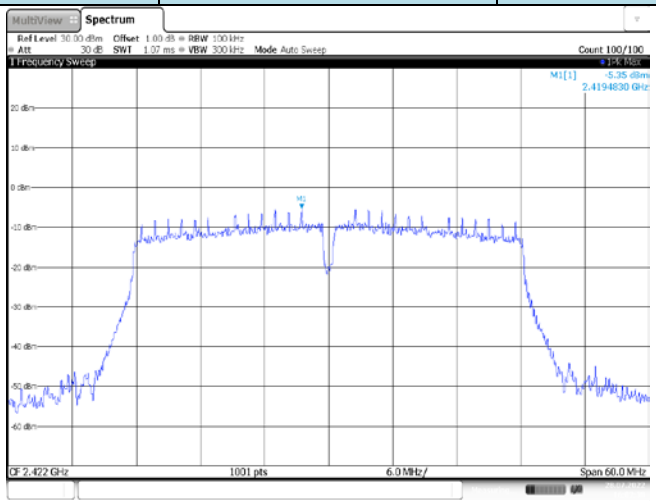
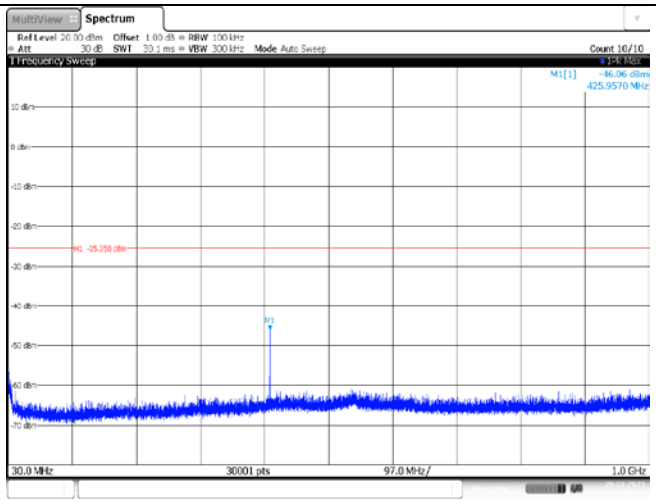
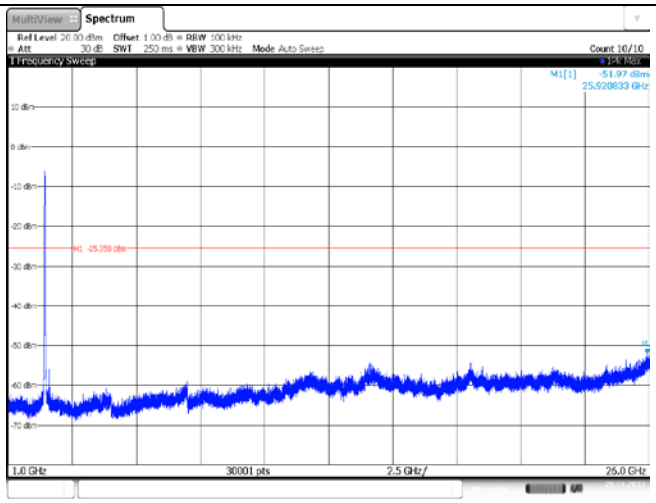
Reference level CH06	
CH06	
	

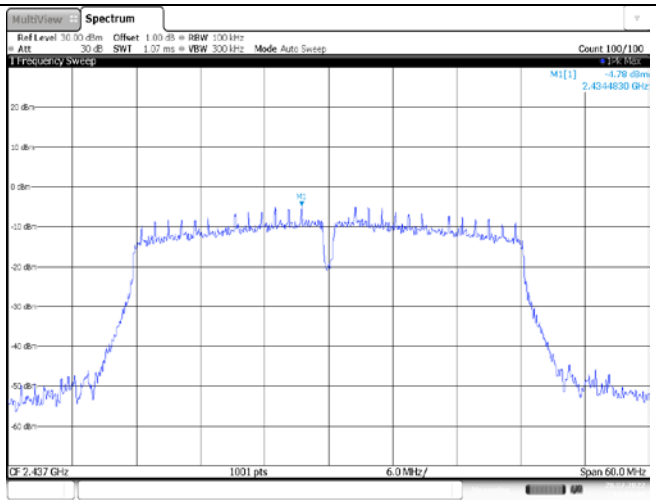
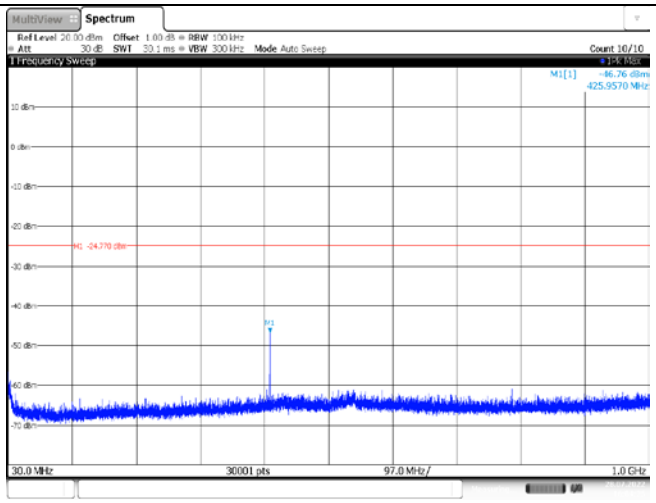
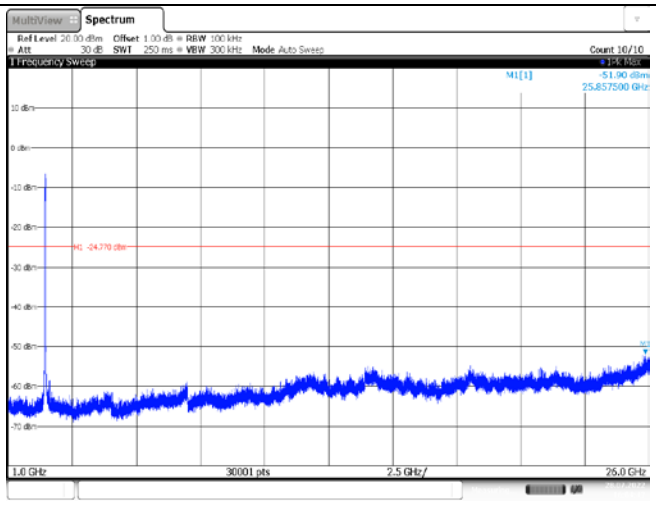
Reference level CH11	
CH11	
	

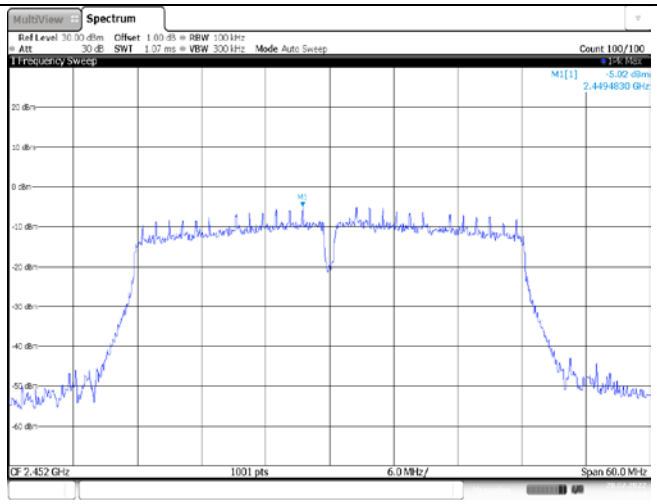
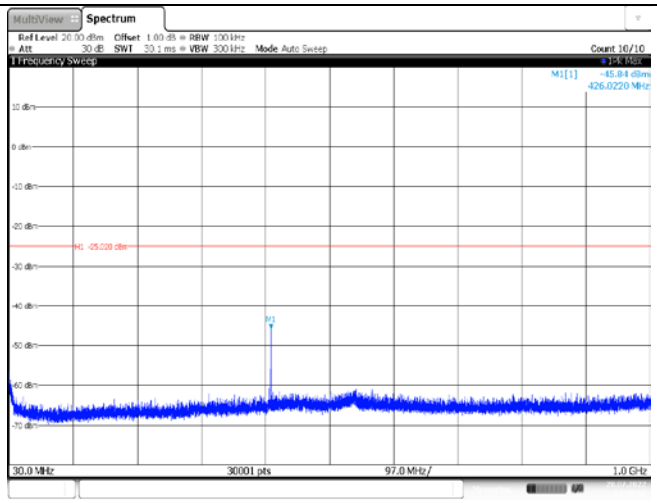
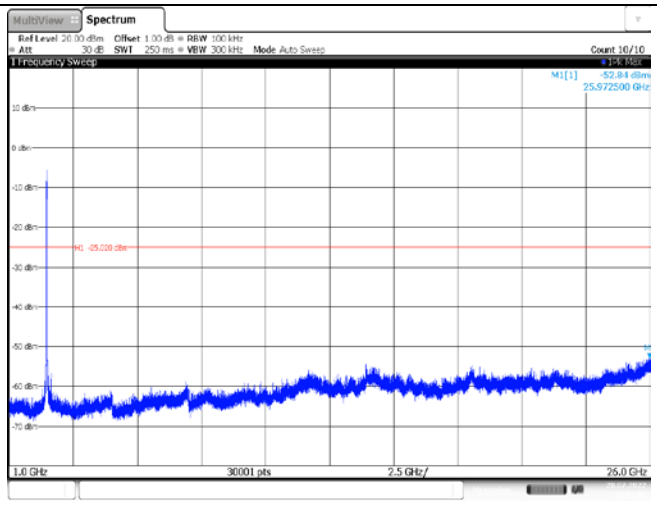
Test Item:	SE	802.11 n(HT20)	Antenna 0
Reference level CH01	 Date: 28.JUL.2022 15:41:05		
CH01	 Date: 28.JUL.2022 15:41:22		
	 Date: 28.JUL.2022 15:41:38		

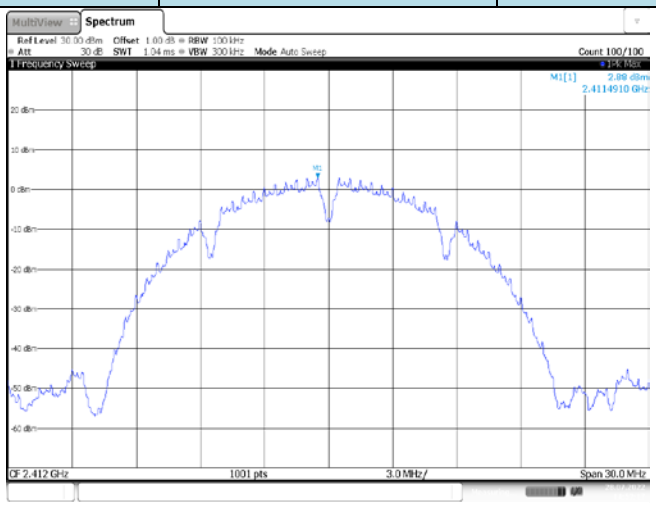
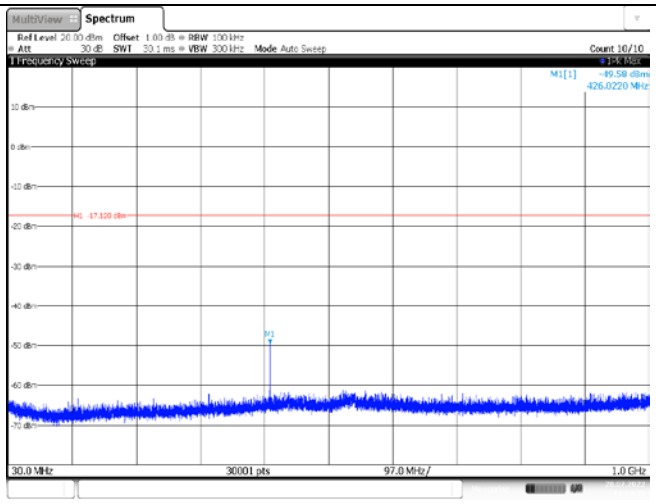
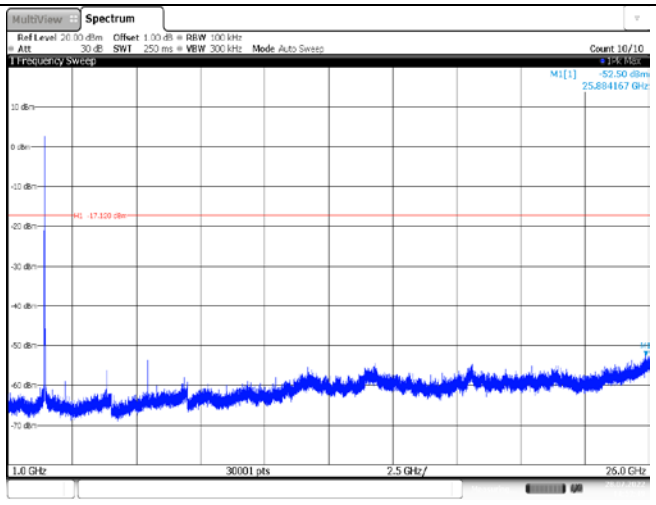
Reference level CH06	
CH06	
	

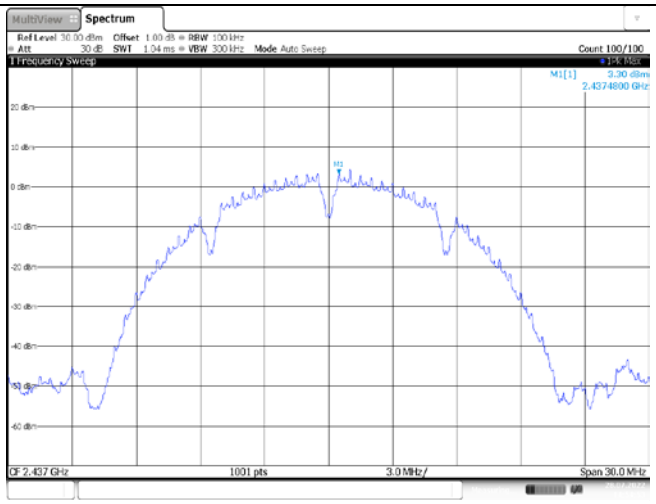
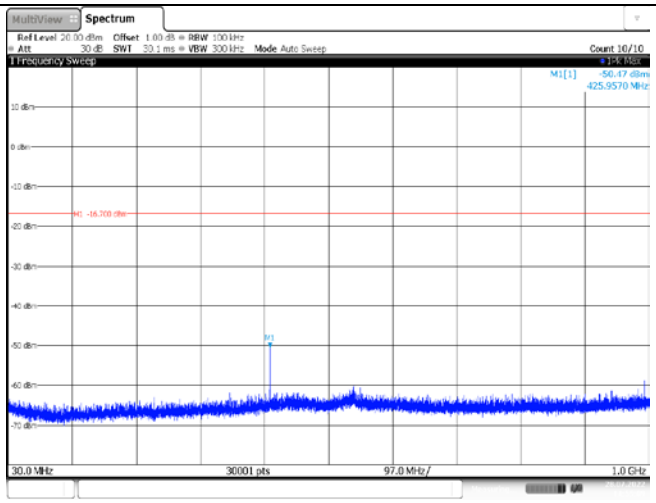
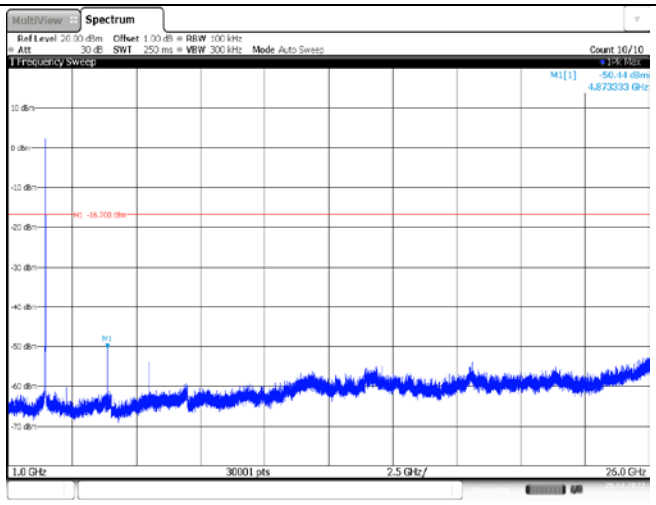
Reference level CH11	
CH11	
	

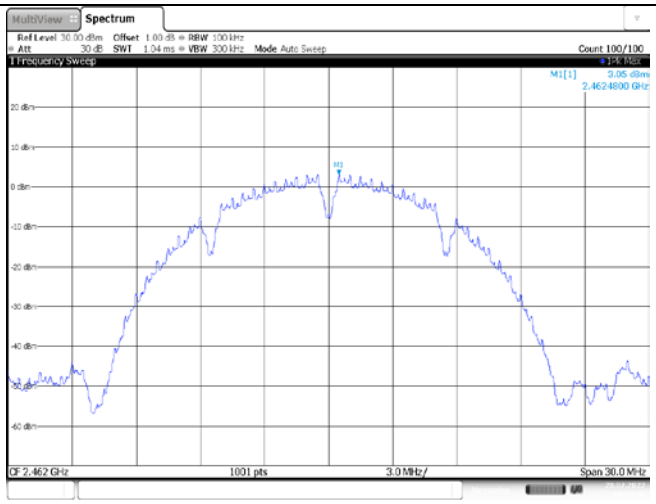
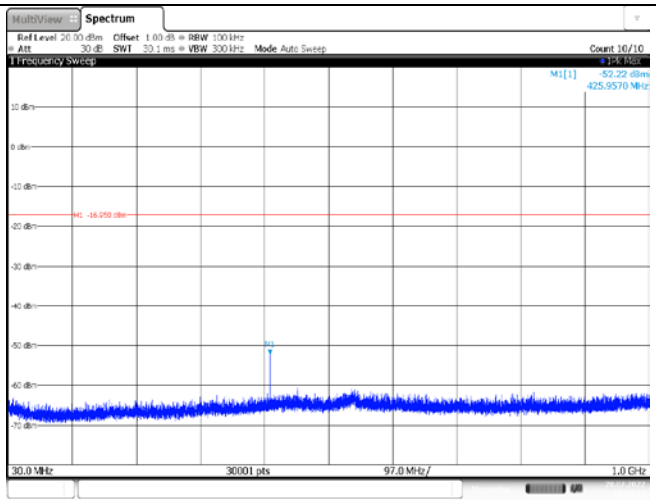
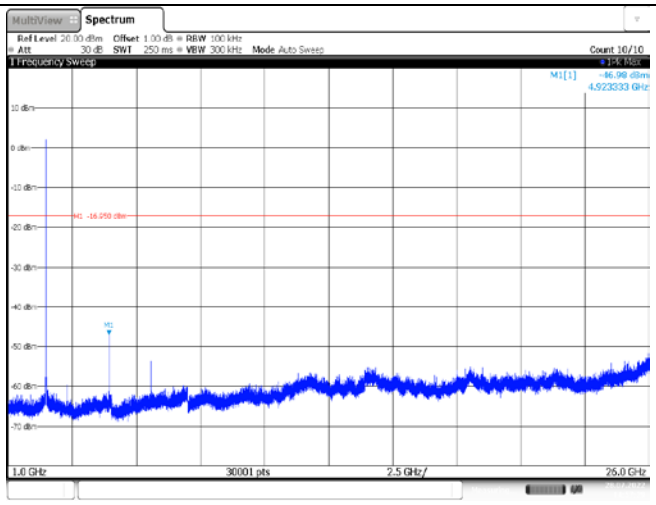
Test Item:	SE	802.11 n(HT40)	Antenna 0
Reference level CH03	 Date: 28.JUL.2022 16:92:38		
CH03	 Date: 28.JUL.2022 16:92:54		
	 Date: 28.JUL.2022 16:93:11		

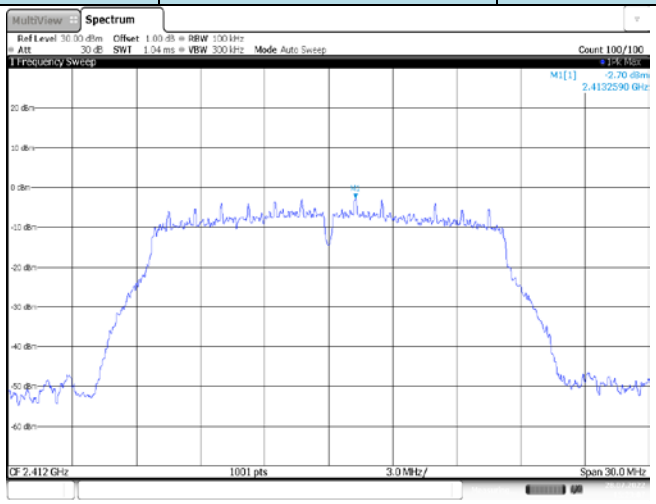
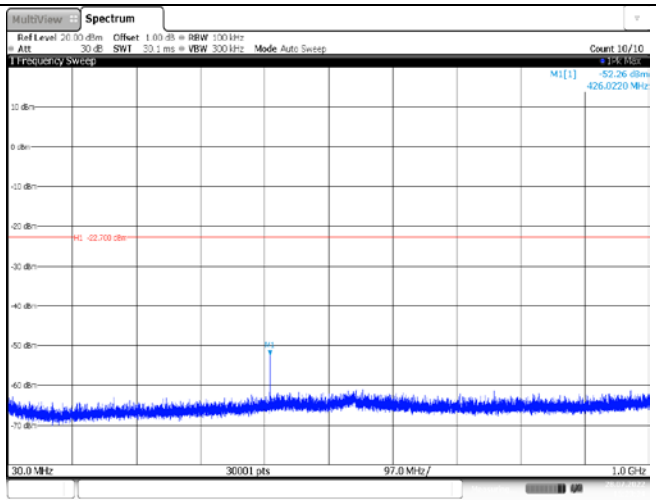
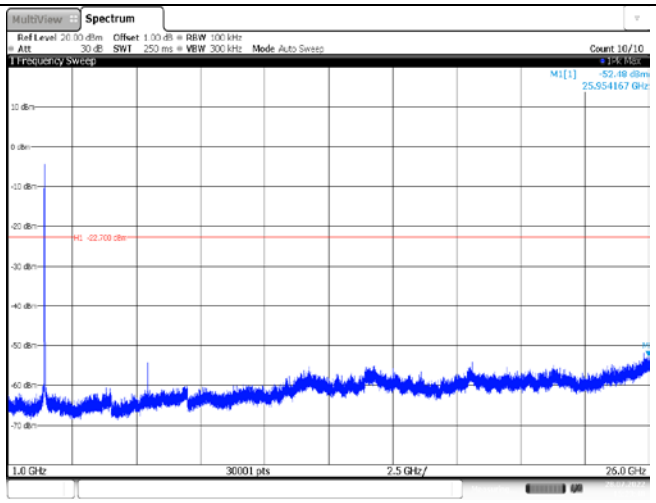
Reference level CH06	
CH06	
	

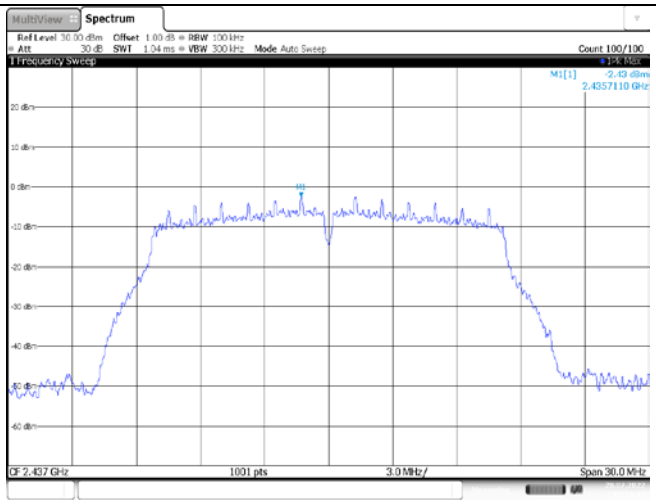
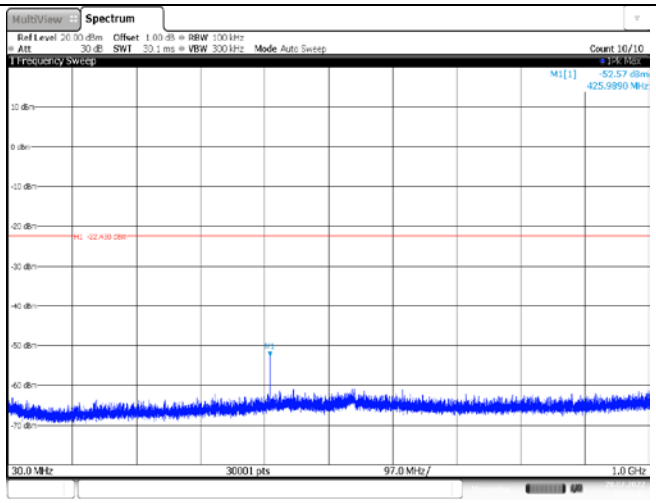
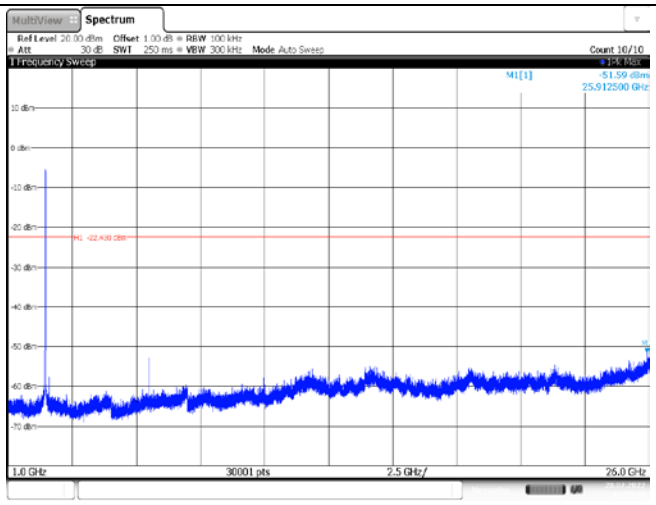
Reference level CH09	
CH09	
	

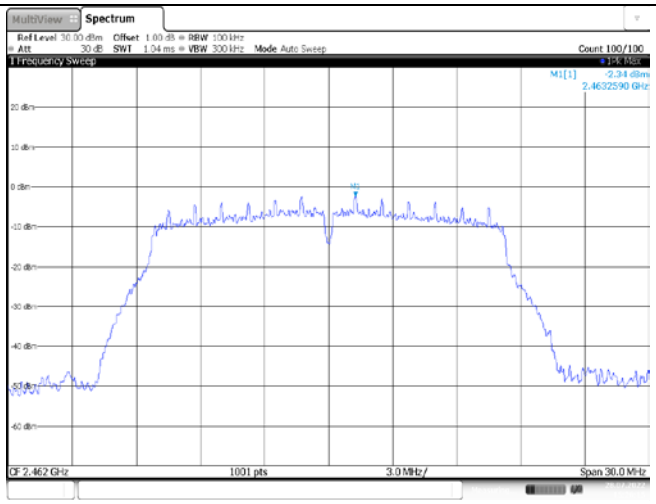
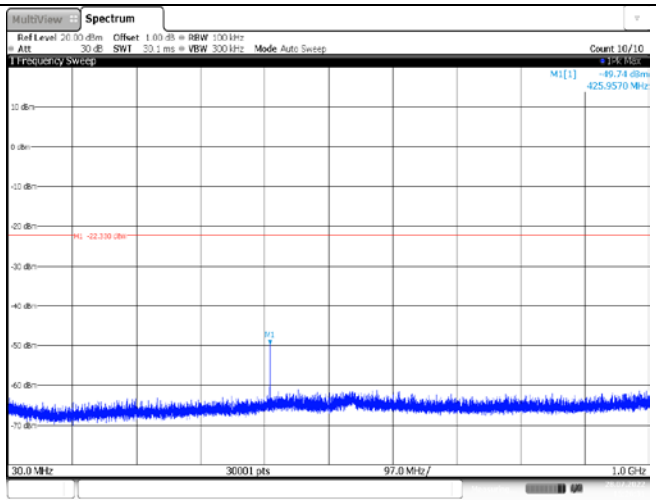
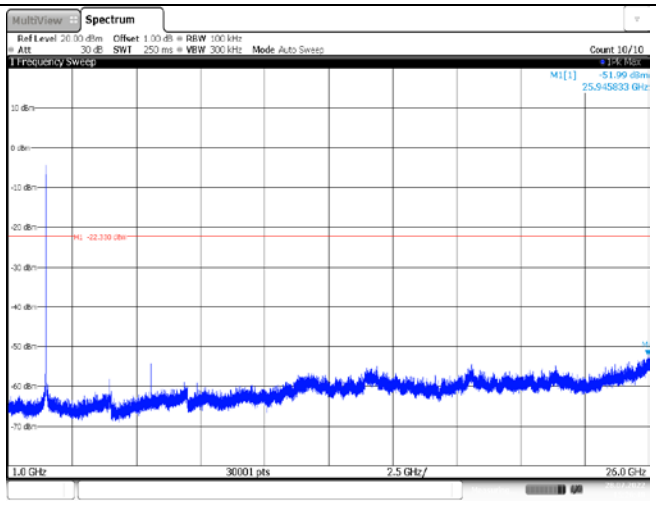
Test Item:	SE	802.11 b	Antenna 1
Reference level CH01	 Date:28.JUL.2022 14:52:16		
CH01	 Date:28.JUL.2022 14:52:33		
	 Date:28.JUL.2022 14:52:58		

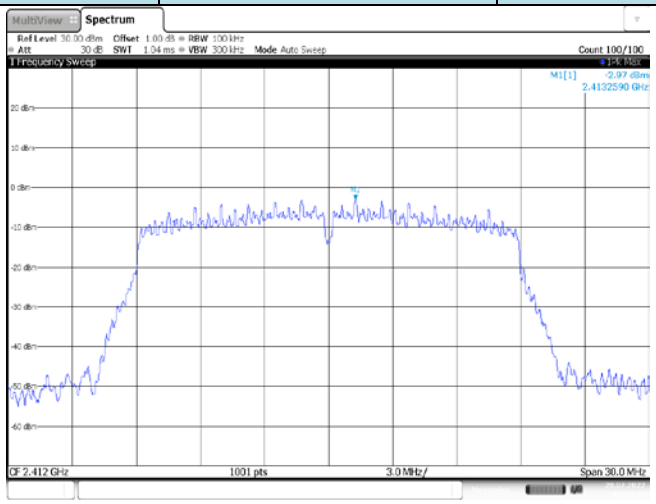
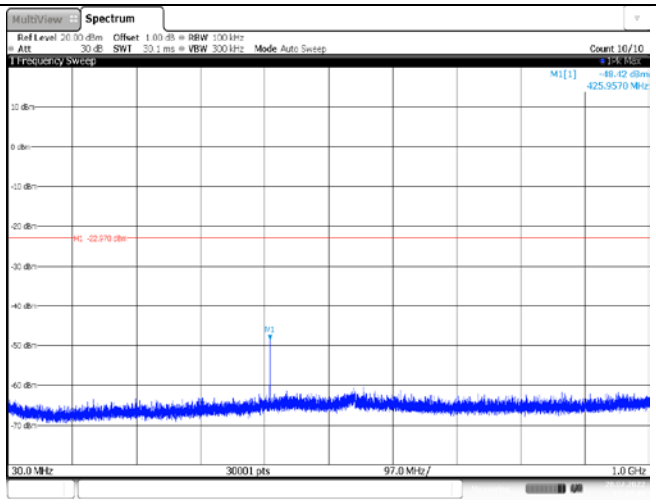
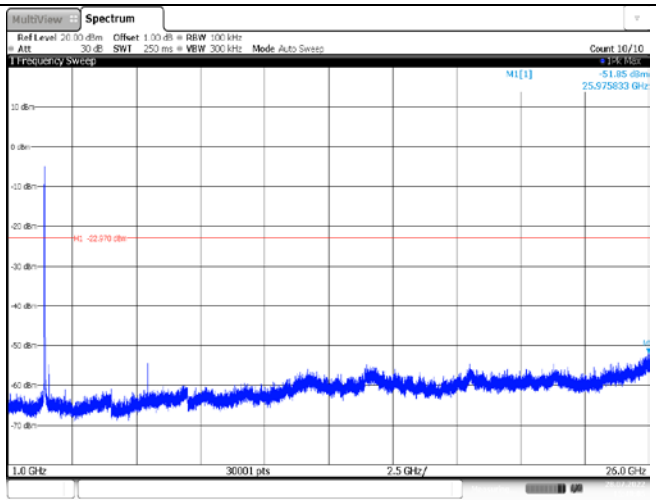
Reference level CH06	
CH06	
	

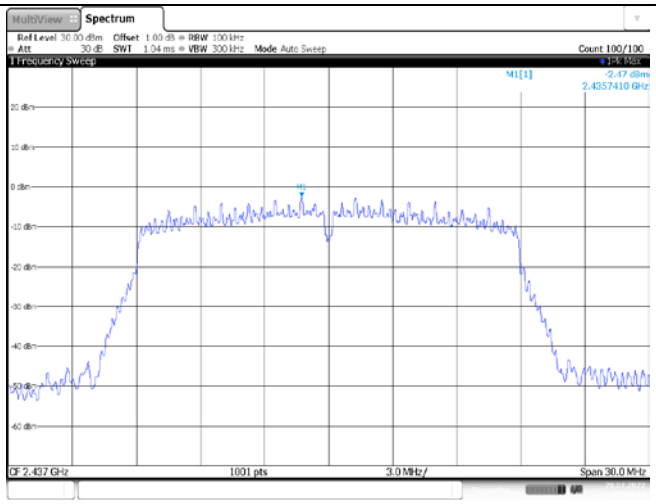
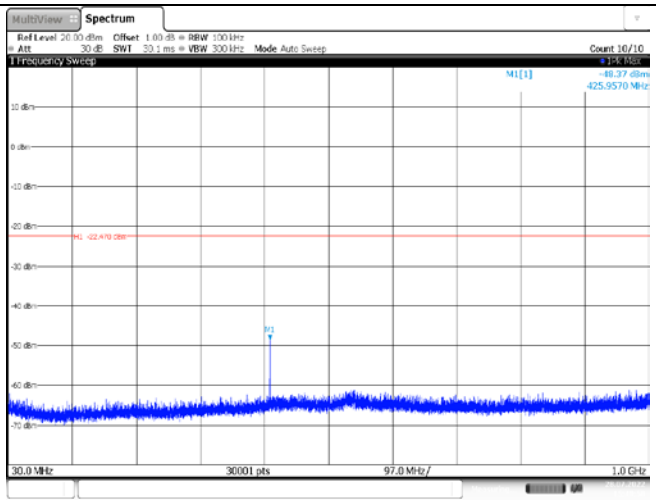
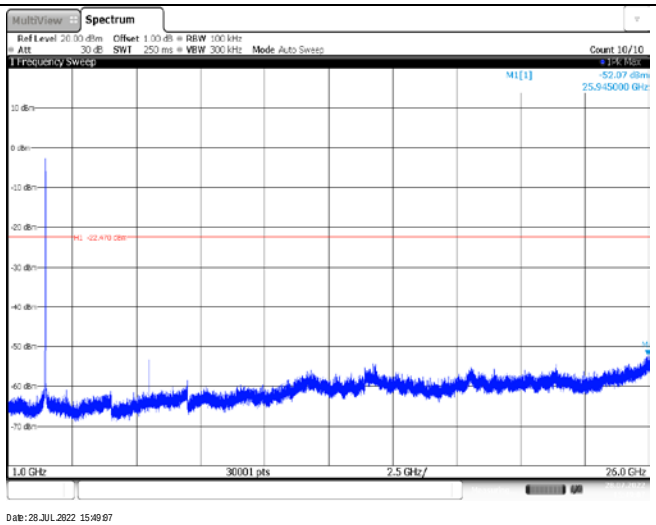
Reference level CH11	
CH11	
	

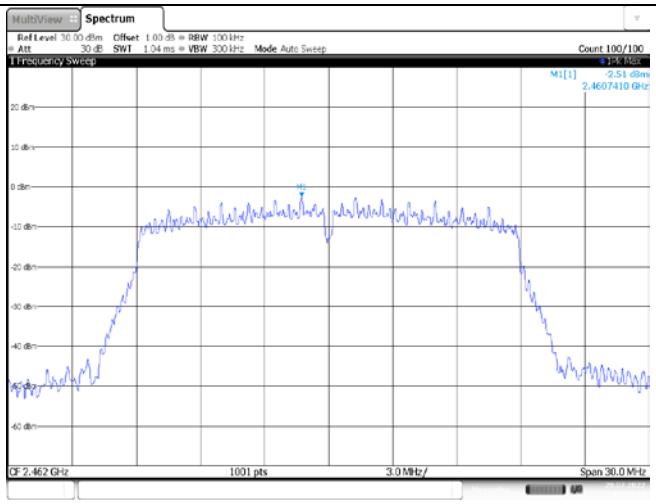
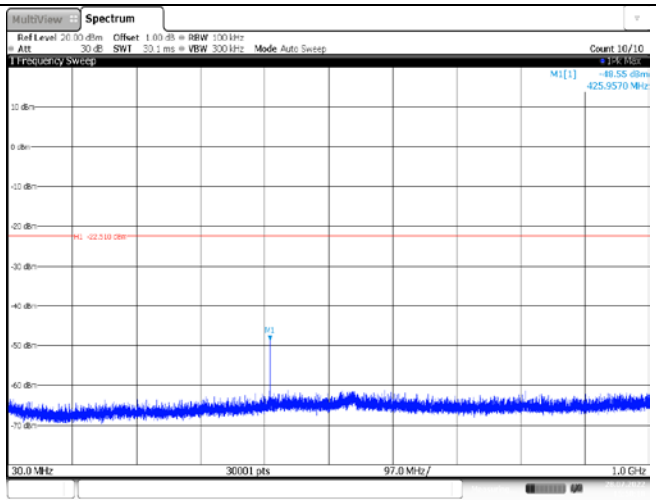
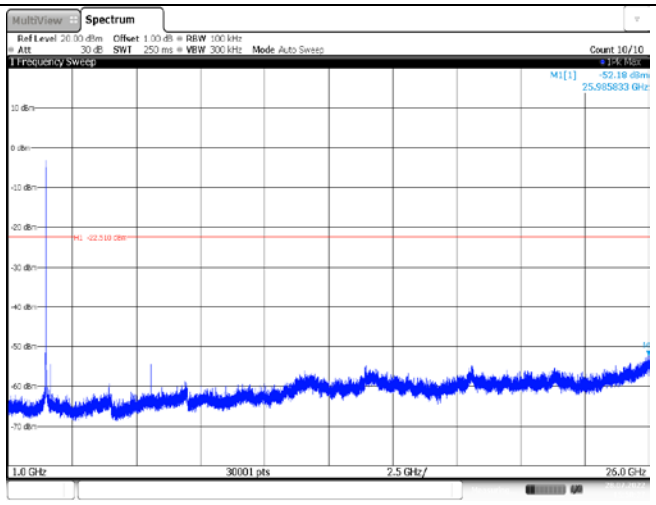
Test Item:	SE	802.11 g	Antenna 1
Reference level CH01	 Date: 28.JUL.2022 15:23:08		
CH01	 Date: 28.JUL.2022 15:23:24		
	 Date: 28.JUL.2022 15:23:48		

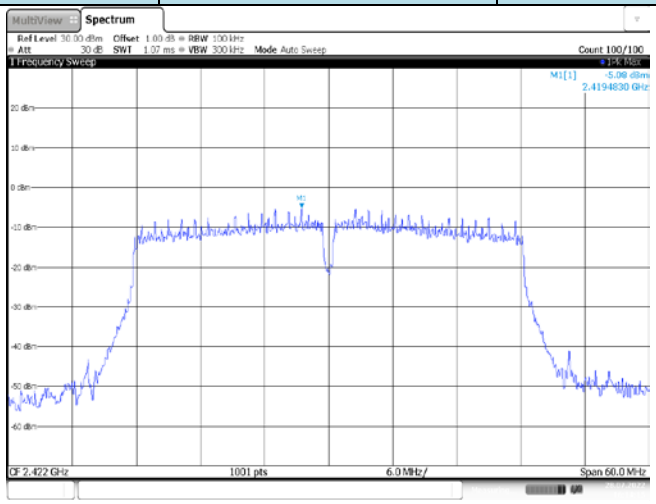
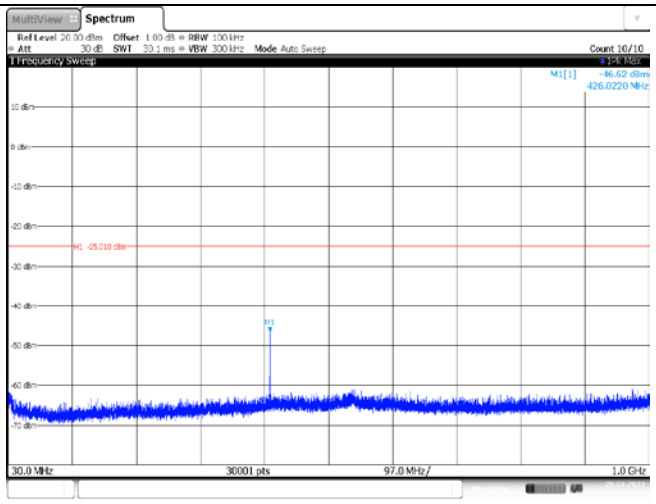
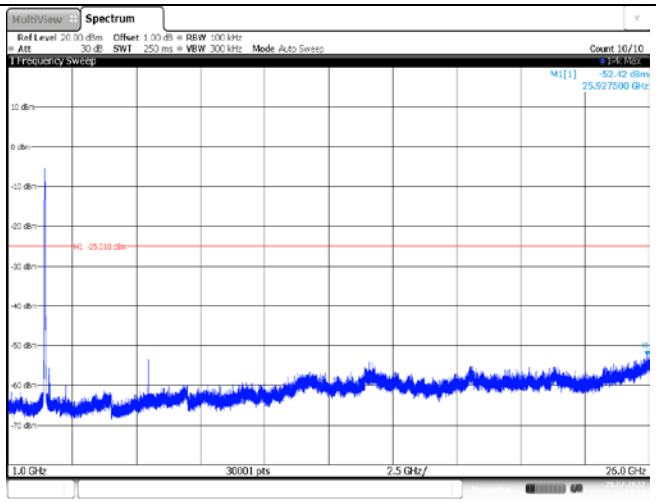
Reference level CH06	
CH06	
	

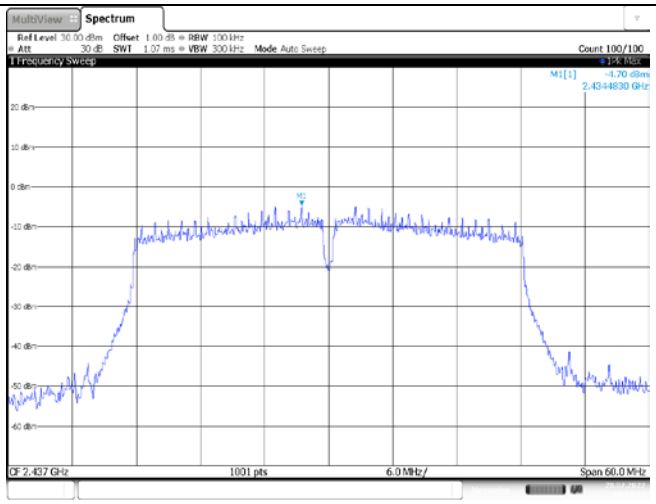
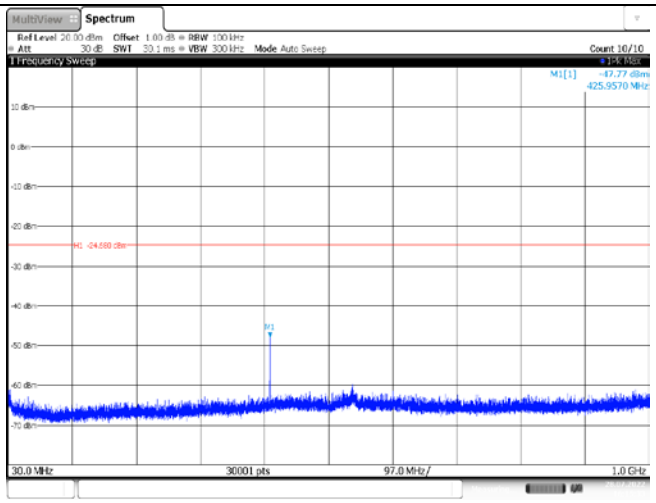
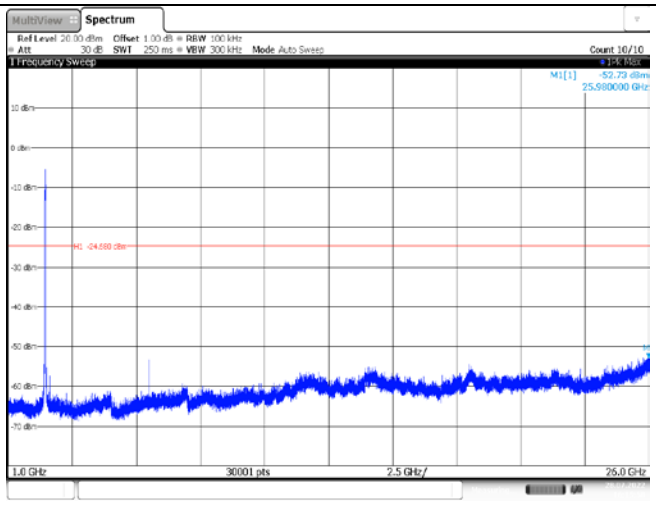
Reference level CH11	
CH11	
	

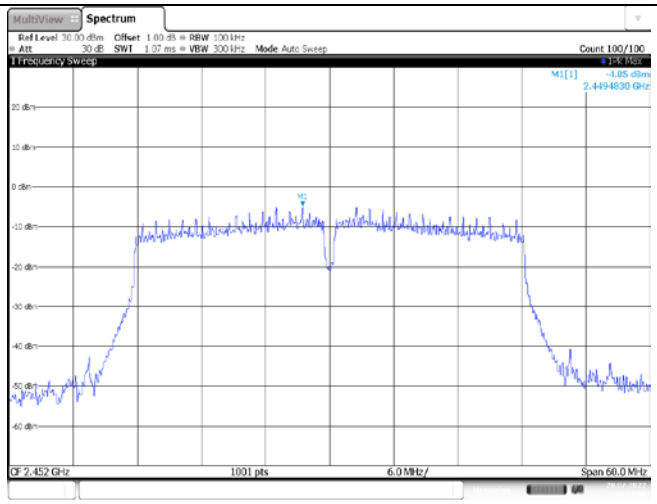
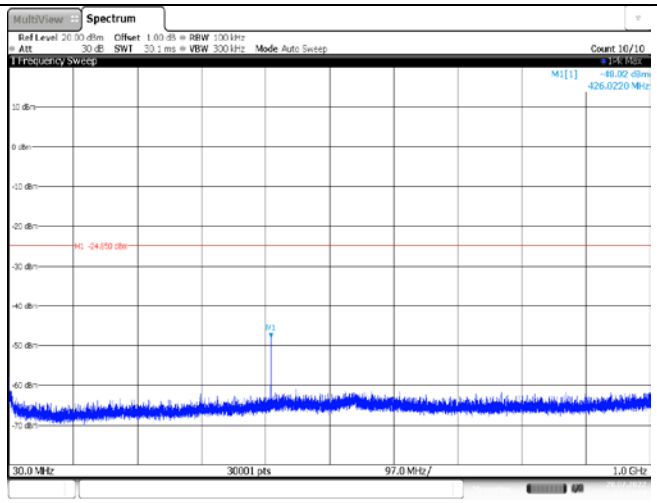
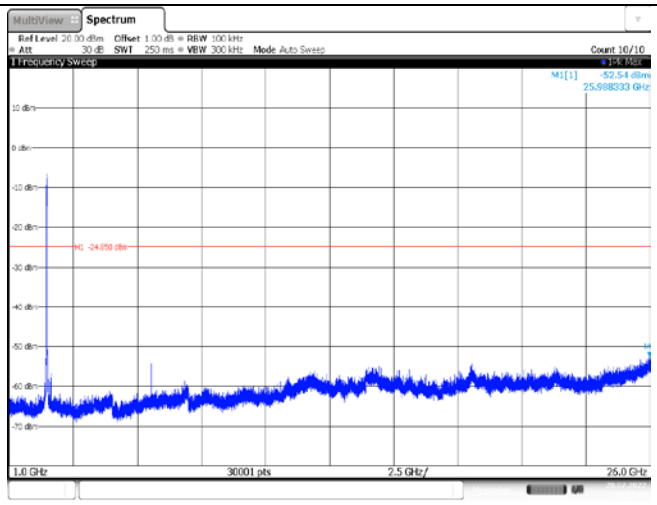
Test Item:	SE	802.11 n(HT20)	Antenna 1
Reference level CH01	 Date: 28.JUL.2022 15:47:32		
CH01	 Date: 28.JUL.2022 15:47:48		
	 Date: 28.JUL.2022 15:48:05		

Reference level CH06	
CH06	
	

Reference level CH11	
CH11	
	

Test Item:	SE	802.11 n(HT40)	Antenna 1
Reference level CH03	 Date:28.JUL.2022 16:14:15		
CH03	 Date:28.JUL.2022 16:14:31		
	 Date:28.JUL.2022 16:14:48		

Reference level CH06	
CH06	
	

Reference level CH09	
CH09	
	

.....End of Report.....