

APPENDIX REPORT

Project No.	SHT2403050101W	Radio Specification	WIFI 2.4G
Test sample No.	YPHT24030501001_01	Model No.	wAPG-5HaxD2HaxD
Start test date	2024-04-17	Finish date	2024-08-29
Temperature	24.5℃	Humidity	52%
Test Engineer	Xiangyu Wei	Auditor	Xiaodong Zheo

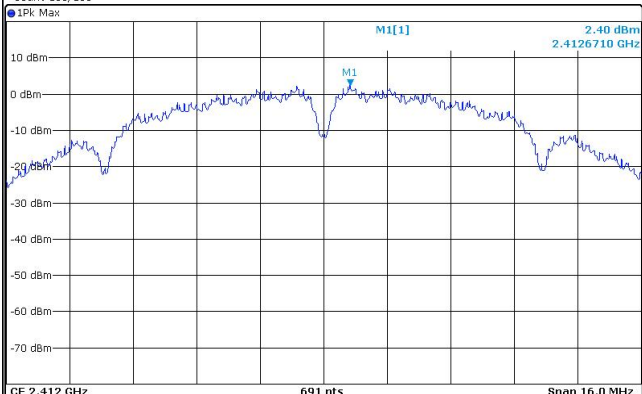
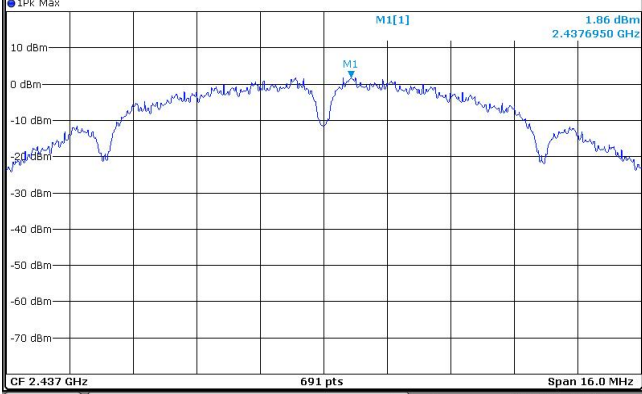
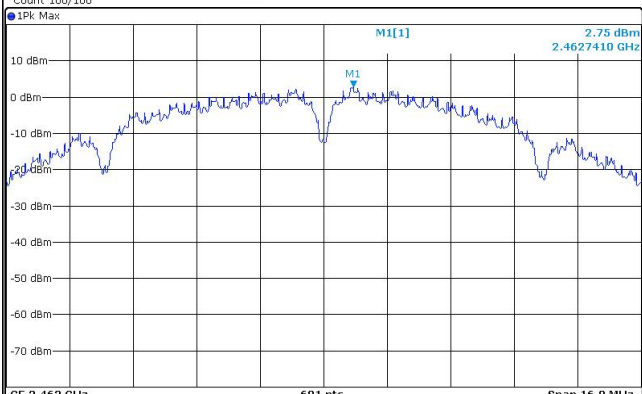
Appendix clause	Test item	Result
A	Conducted Peak Output Power	PASS
B	Power Spectral Density	PASS
C	6 dB Bandwidth	PASS
D	99% Occupied Bandwidth	PASS
E	Duty Cycle	PASS
F	Band edge and Spurious Emissions(coducted)	PASS

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	19.05	19.05	-	19.01	18.83	-	≤29.10	Pass
	06	19.17	19.19	-	19.06	19.11	-		
	11	19.28	19.15	-	19.22	19.05	-		
802.11g	01	23.14	23.13	-	23.02	23.01	-	≤29.10	Pass
	06	23.19	23.03	-	23.11	22.89	-		
	11	23.41	22.96	-	23.31	22.76	-		
802.11n (HT20)	01	20.25	21.28	23.81	20.15	21.07	23.64	≤29.10	Pass
	06	23.50	22.85	26.22	23.36	22.71	26.06		
	11	20.11	21.00	23.59	20.01	20.85	23.46		
802.11n (ax20)	01	23.70	23.23	26.48	23.55	22.12	25.90	≤29.10	Pass
	06	23.94	23.95	26.96	23.74	22.83	26.32		
	11	23.93	23.17	26.58	23.73	22.07	25.99		
802.11n (HT40)	03	23.83	23.53	26.66	23.83	23.33	26.60	≤29.10	Pass
	06	23.90	23.37	26.67	23.73	23.16	26.46		
	09	23.98	23.36	26.72	23.77	23.21	26.51		
802.11n (ax40)	03	23.54	23.10	26.34	22.36	22.89	25.64	≤29.10	Pass
	06	23.70	23.76	26.74	22.55	22.55	25.56		
	09	23.76	23.94	26.86	22.65	22.71	25.69		

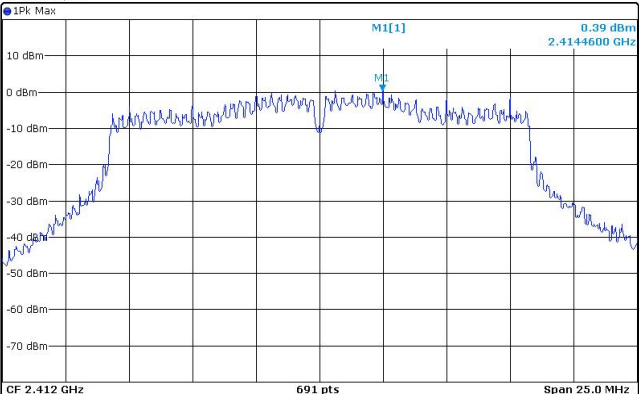
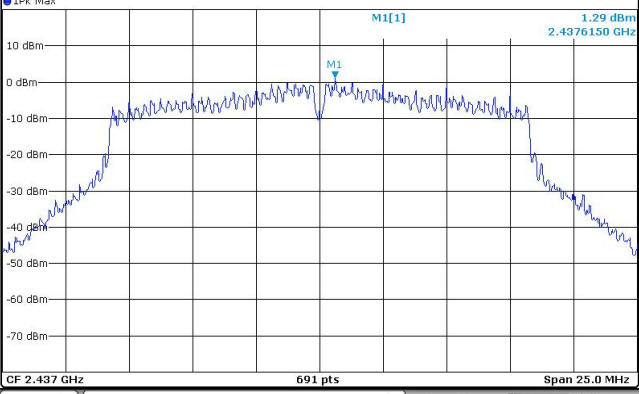
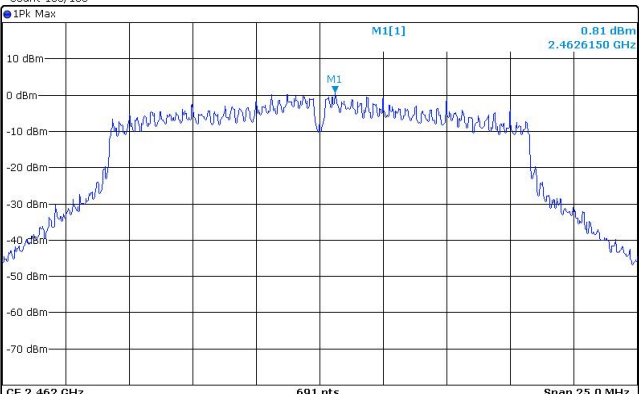
Appendix B: Power Spectral Density

Type	Channel	Power Spectral Density (dBm/30KHz)		Total Power Spectral Density (dBm/30KHz)	Limit (dBm/3KHz)	Result
		Antenna 0	Antenna 1			
802.11b	01	2.40	1.59	-	≤7.10	Pass
	06	1.86	1.74	-		
	11	2.75	2.21	-		
802.11g	01	0.87	0.39	-	≤7.10	Pass
	06	0.60	1.29	-		
	11	1.46	0.81	-		
802.11n(HT20)	01	-2.00	-0.81	1.65	≤4.10	Pass
	06	1.29	0.54	3.94		
	11	-2.01	-0.70	1.70		
802.11n(ax20)	01	0.55	-0.92	2.89	≤4.10	Pass
	06	1.08	-1.29	3.07		
	11	1.25	0.08	3.71		
802.11n(HT40)	03	-1.19	-2.49	1.22	≤4.10	Pass
	06	-1.29	-0.85	1.95		
	09	-1.58	-2.30	1.09		
802.11n(ax40)	03	-4.10	-3.20	-0.62	≤4.10	Pass
	06	-3.70	-4.77	-1.19		
	09	-3.32	-3.66	-0.48		

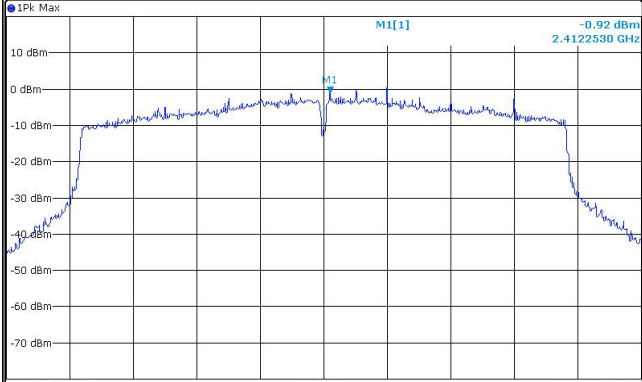
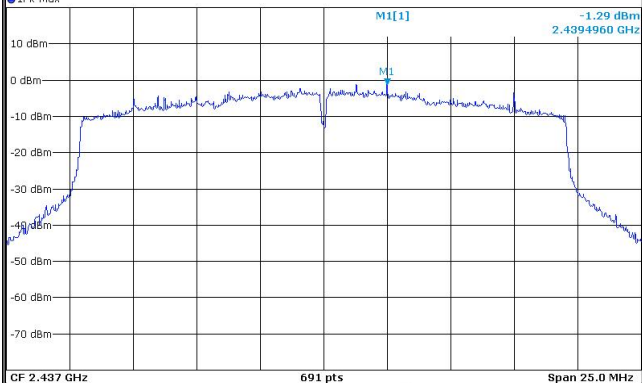
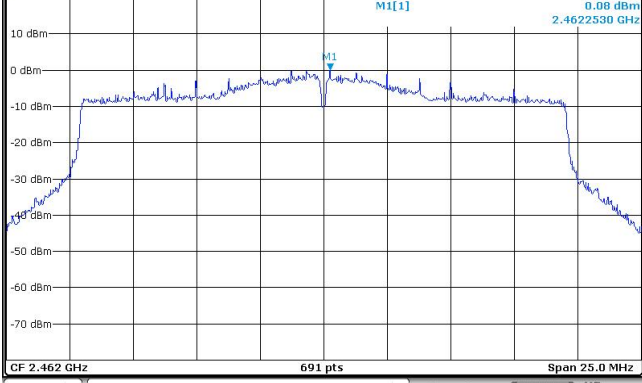
802.11 b		Antenna 0	
CH01	Spectrum Ref Level 20.00 dBm Att 30 dB Count 100/100 Offset 0.50 dB SWT 126.4 μs RBW 30 kHz VBW 100 kHz Mode Auto FFT IPk Max M1[1] 2.40 dBm 2.4126710 GHz  CF 2.412 GHz 691 pts Span 16.0 MHz Date: 23 APR 2024 11:21:56		
	Date: 23 APR 2024 11:21:56		
CH06	Spectrum Ref Level 20.00 dBm Att 30 dB Count 100/100 Offset 0.50 dB SWT 126.4 μs RBW 30 kHz VBW 100 kHz Mode Auto FFT IPk Max M1[1] 1.86 dBm 2.4376950 GHz  CF 2.437 GHz 691 pts Span 16.0 MHz Date: 23 APR 2024 11:23:22		
	Date: 23 APR 2024 11:23:22		
CH11	Spectrum Ref Level 20.00 dBm Att 30 dB Count 100/100 Offset 0.50 dB SWT 126.4 μs RBW 30 kHz VBW 100 kHz Mode Auto FFT IPk Max M1[1] 2.75 dBm 2.4627410 GHz  CF 2.462 GHz 691 pts Span 16.0 MHz Date: 23 APR 2024 11:24:47		
	Date: 23 APR 2024 11:24:47		

802.11 b		Antenna 1
CH01	Spectrum Ref Level 20.00 dBm Att 30 dB Offset 0.50 dB SWT 126.4 μs RBW 30 kHz VBW 100 kHz Mode Auto FFT Count 100/100 1Pk Max 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm M1 M1[1] 1.59 dBm 2.4127180 GHz CF 2.412 GHz 691 pts Span 16.0 MHz Date: 23 APR 2024 11:25:59	
CH06	Spectrum Ref Level 20.00 dBm Att 30 dB Offset 0.50 dB SWT 126.4 μs RBW 30 kHz VBW 100 kHz Mode Auto FFT Count 100/100 1Pk Max 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm M1 M1[1] 1.74 dBm 2.4377640 GHz CF 2.437 GHz 691 pts Span 16.0 MHz Date: 23 APR 2024 11:27:20	
CH11	Spectrum Ref Level 20.00 dBm Att 30 dB Offset 0.50 dB SWT 126.4 μs RBW 30 kHz VBW 100 kHz Mode Auto FFT Count 100/100 1Pk Max 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm M1 M1[1] 2.21 dBm 2.4613750 GHz CF 2.462 GHz 691 pts Span 16.0 MHz Date: 23 APR 2024 11:28:21	

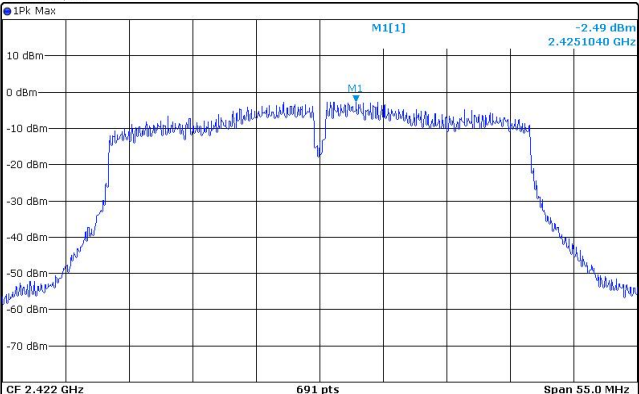
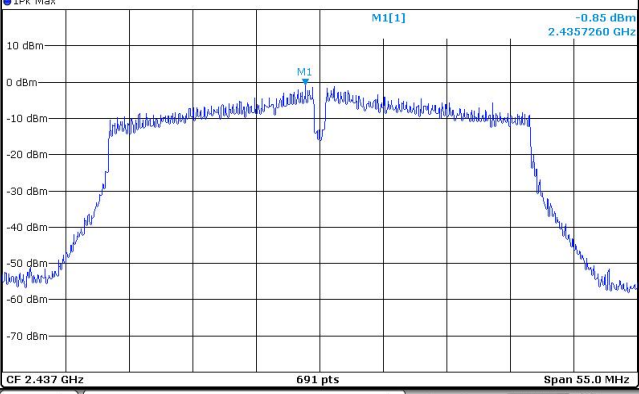
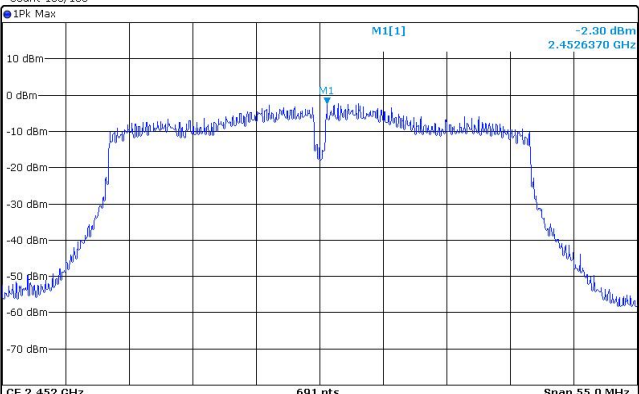
802.11 g		Antenna 0
CH01	Spectrum Ref Level 20.00 dBm Att 30 dB Count 100/100 Offset 0.50 dB SWT 189.6 μs RBW 30 kHz VBW 100 kHz Mode Auto FFT IPk Max M1[1] 0.87 dBm 2.4126150 GHz M1 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 2.412 GHz 691 pts Span 25.0 MHz Date: 22 APR 2024 18:58:22	
CH06	Spectrum Ref Level 20.00 dBm Att 30 dB Count 100/100 Offset 0.50 dB SWT 189.6 μs RBW 30 kHz VBW 100 kHz Mode Auto FFT IPk Max M1[1] 0.60 dBm 2.4351190 GHz M1 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 2.437 GHz 691 pts Span 25.0 MHz Date: 22 APR 2024 18:59:55	
CH11	Spectrum Ref Level 20.00 dBm Att 30 dB Count 100/100 Offset 0.50 dB SWT 189.6 μs RBW 30 kHz VBW 100 kHz Mode Auto FFT IPk Max M1[1] 1.46 dBm 2.4626150 GHz M1 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 2.462 GHz 691 pts Span 25.0 MHz Date: 22 APR 2024 19:01:25	

802.11 g		Antenna 1
CH01	Spectrum Ref Level 20.00 dBm Att 30 dB Count 100/100 Offset 0.50 dB SWT 189.6 μs RBW 30 kHz VBW 100 kHz Mode Auto FFT IPk Max M1[1] 0.39 dBm 2.4144600 GHz  CF 2.412 GHz691 ptsSpan 25.0 MHz Date: 22 APR 2024 19:28:26	
CH06	Spectrum Ref Level 20.00 dBm Att 30 dB Count 100/100 Offset 0.50 dB SWT 189.6 μs RBW 30 kHz VBW 100 kHz Mode Auto FFT IPk Max M1[1] 1.29 dBm 2.4376150 GHz  CF 2.437 GHz691 ptsSpan 25.0 MHz Date: 22 APR 2024 19:29:42	
CH11	Spectrum Ref Level 20.00 dBm Att 30 dB Count 100/100 Offset 0.50 dB SWT 189.6 μs RBW 30 kHz VBW 100 kHz Mode Auto FFT IPk Max M1[1] 0.81 dBm 2.4626150 GHz  CF 2.462 GHz691 ptsSpan 25.0 MHz Date: 22 APR 2024 19:30:54	

802.11 (ax20)	Antenna 0
CH01	Spectrum plot for CH01. The plot shows a signal at 2.4144600 GHz with a power of 0.55 dBm. The frequency span is 25.0 MHz, centered at 2.412 GHz. The plot includes a 1Pk Max marker and a 10 dBm reference level. The signal is labeled M1[1]. Ref Level 20.00 dBm Offset 0.50 dB RBW 30 kHz Att 30 dB SWT 189.6 μs VBW 100 kHz Mode Auto FFT Count 100/100 1Pk Max M1[1] 0.55 dBm 2.4144600 GHz CF 2.412 GHz 691 pts Span 25.0 MHz Date: 23 APR 2024 11:39:51
CH06	Spectrum plot for CH06. The plot shows a signal at 2.4382660 GHz with a power of 1.08 dBm. The frequency span is 25.0 MHz, centered at 2.437 GHz. The plot includes a 1Pk Max marker and a 10 dBm reference level. The signal is labeled M1[1]. Ref Level 20.00 dBm Offset 0.50 dB RBW 30 kHz Att 30 dB SWT 189.6 μs VBW 100 kHz Mode Auto FFT Count 100/100 1Pk Max M1[1] 1.08 dBm 2.4382660 GHz CF 2.437 GHz 691 pts Span 25.0 MHz Date: 23 APR 2024 11:41:12
CH11	Spectrum plot for CH11. The plot shows a signal at 2.4632660 GHz with a power of 1.25 dBm. The frequency span is 25.0 MHz, centered at 2.462 GHz. The plot includes a 1Pk Max marker and a 10 dBm reference level. The signal is labeled M1[1]. Ref Level 20.00 dBm Offset 0.50 dB RBW 30 kHz Att 30 dB SWT 189.6 μs VBW 100 kHz Mode Auto FFT Count 100/100 1Pk Max M1[1] 1.25 dBm 2.4632660 GHz CF 2.462 GHz 691 pts Span 25.0 MHz Date: 23 APR 2024 11:42:34

802.11 (ax20)		Antenna 1
CH01	Spectrum Ref Level 20.00 dBm Att 30 dB Count 100/100 Offset 0.50 dB SWT 189.6 μs RBW 30 kHz VBW 100 kHz Mode Auto FFT IPk Max M1[1] -0.92 dBm 2.4122530 GHz  CF 2.412 GHz 691 pts Span 25.0 MHz Date: 23 APR 2024 11:53:49	
CH06	Spectrum Ref Level 20.00 dBm Att 30 dB Count 100/100 Offset 0.50 dB SWT 189.6 μs RBW 30 kHz VBW 100 kHz Mode Auto FFT IPk Max M1[1] -1.29 dBm 2.4394960 GHz  CF 2.437 GHz 691 pts Span 25.0 MHz Date: 23 APR 2024 13:29:51	
CH11	Spectrum Ref Level 20.00 dBm Att 30 dB Count 100/100 Offset 0.50 dB SWT 189.6 μs RBW 30 kHz VBW 100 kHz Mode Auto FFT IPk Max M1[1] 0.08 dBm 2.4622530 GHz  CF 2.462 GHz 691 pts Span 25.0 MHz Date: 23 APR 2024 13:30:55	

802.11 n(H40)		Antenna 0
CH03	Spectrum Ref Level 20.00 dBm Att 30 dB Offset 0.50 dB SWT 442.4 μs RBW 30 kHz VBW 100 kHz Mode Auto FFT Count 100/100 IPk Max M1[1] -1.19 dBm 2.4226370 GHz 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 2.422 GHz 691 pts Span 55.0 MHz Date: 22 APR 2024 19:13:39	
CH06	Spectrum Ref Level 20.00 dBm Att 30 dB Offset 0.50 dB SWT 442.4 μs RBW 30 kHz VBW 100 kHz Mode Auto FFT Count 100/100 IPk Max M1[1] -1.29 dBm 2.4379550 GHz 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 2.437 GHz 691 pts Span 55.0 MHz Date: 22 APR 2024 19:15:24	
CH09	Spectrum Ref Level 20.00 dBm Att 30 dB Offset 0.50 dB SWT 442.4 μs RBW 30 kHz VBW 100 kHz Mode Auto FFT Count 100/100 IPk Max M1[1] -1.58 dBm 2.4507260 GHz 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 2.452 GHz 691 pts Span 55.0 MHz Date: 22 APR 2024 19:16:55	

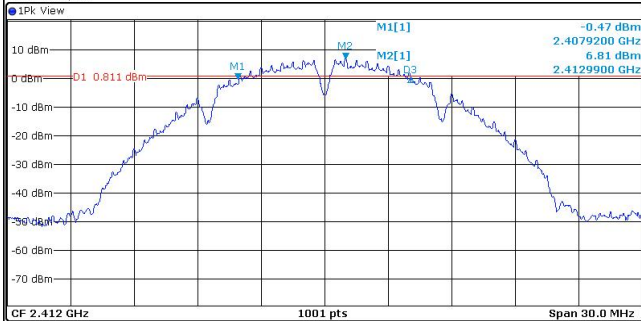
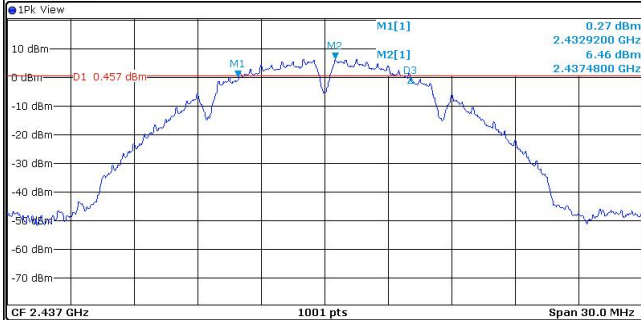
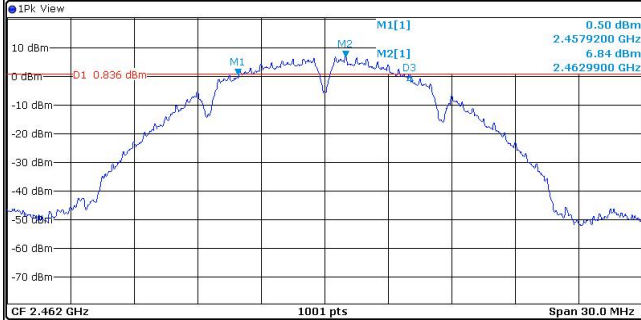
802.11 n(H40)		Antenna 1
CH03	Spectrum Ref Level 20.00 dBm Att 30 dB Count 100/100 Offset 0.50 dB SWT 442.4 μs RBW 30 kHz VBW 100 kHz Mode Auto FFT IPk Max M1[1] -2.49 dBm 2.4251040 GHz  CF 2.422 GHz 691 pts Span 55.0 MHz Date: 22 APR 2024 19:35:59	
CH06	Spectrum Ref Level 20.00 dBm Att 30 dB Count 100/100 Offset 0.50 dB SWT 442.4 μs RBW 30 kHz VBW 100 kHz Mode Auto FFT IPk Max M1[1] -0.85 dBm 2.4357260 GHz  CF 2.437 GHz 691 pts Span 55.0 MHz Date: 22 APR 2024 19:37:10	
CH09	Spectrum Ref Level 20.00 dBm Att 30 dB Count 100/100 Offset 0.50 dB SWT 442.4 μs RBW 30 kHz VBW 100 kHz Mode Auto FFT IPk Max M1[1] -2.30 dBm 2.4526370 GHz  CF 2.452 GHz 691 pts Span 55.0 MHz Date: 22 APR 2024 19:38:32	

802.11 (ax40)		Antenna 0
CH03	Spectrum Ref Level 20.00 dBm Att 30 dB Count 100/100 Offset 0.50 dB SWT 442.4 μs RBW 30 kHz VBW 100 kHz Mode Auto FFT IPk Max M1[1] -4.10 dBm 2.4225570 GHz CF 2.422 GHz 691 pts Span 55.0 MHz Date: 23 APR 2024 11:49:15	
CH06	Spectrum Ref Level 20.00 dBm Att 30 dB Count 100/100 Offset 0.50 dB SWT 442.4 μs RBW 30 kHz VBW 100 kHz Mode Auto FFT IPk Max M1[1] -3.70 dBm 2.4358060 GHz CF 2.437 GHz 691 pts Span 55.0 MHz Date: 23 APR 2024 11:50:36	
CH09	Spectrum Ref Level 20.00 dBm Att 30 dB Count 100/100 Offset 0.50 dB SWT 442.4 μs RBW 30 kHz VBW 100 kHz Mode Auto FFT IPk Max M1[1] -3.32 dBm 2.4508860 GHz CF 2.452 GHz 691 pts Span 55.0 MHz Date: 23 APR 2024 11:52:01	

Appendix C: 6dB Bandwidth

Type	Channel	6dB Bandwidth (MHz)	Limit (kHz)	Result
802.11b	01	8.13	≥500	Pass
	06	8.13		
	11	8.10		
802.11g	01	11.61	≥500	Pass
	06	12.63		
	11	12.63		
802.11n(HT20)	01	12.66	≥500	Pass
	06	14.13		
	11	13.74		
802.11(ax20)	01	9.84	≥500	Pass
	06	13.08		
	11	11.73		
802.11n(HT40)	03	31.50	≥500	Pass
	06	31.44		
	09	27.66		
802.11(ax40)	03	33.96	≥500	Pass
	06	33.36		
	09	26.22		

802.11 b

CH01	Spectrum Ref Level 20.50 dBm Att 30 dB Offset 0.50 dB RBW 100 kHz SWT 75.9 μs VBW 300 kHz Mode Auto FFT Count 500/500 IPk View  CF 2.412 GHz1001 ptsSpan 30.0 MHz <table><tr><th>Type</th><th>Ref</th><th>Trc</th><th>X-value</th><th>Y-value</th><th>Function</th><th>Function Result</th></tr><tr><td>M1</td><td></td><td>1</td><td>2.40792 GHz</td><td>-0.47 dBm</td><td></td><td></td></tr><tr><td>M2</td><td></td><td>1</td><td>2.41299 GHz</td><td>6.81 dBm</td><td></td><td></td></tr><tr><td>D3</td><td>M1</td><td>1</td><td>8.13 MHz</td><td>1.10 dB</td><td></td><td></td></tr></table> Date:23 APR 2024 11:21:38	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1		1	2.40792 GHz	-0.47 dBm			M2		1	2.41299 GHz	6.81 dBm			D3	M1	1	8.13 MHz	1.10 dB		
Type	Ref	Trc	X-value	Y-value	Function	Function Result																							
M1		1	2.40792 GHz	-0.47 dBm																									
M2		1	2.41299 GHz	6.81 dBm																									
D3	M1	1	8.13 MHz	1.10 dB																									
CH06	Spectrum Ref Level 20.50 dBm Att 30 dB Offset 0.50 dB RBW 100 kHz SWT 75.9 μs VBW 300 kHz Mode Auto FFT Count 500/500 IPk View  CF 2.437 GHz1001 ptsSpan 30.0 MHz <table><tr><th>Type</th><th>Ref</th><th>Trc</th><th>X-value</th><th>Y-value</th><th>Function</th><th>Function Result</th></tr><tr><td>M1</td><td></td><td>1</td><td>2.43292 GHz</td><td>0.27 dBm</td><td></td><td></td></tr><tr><td>M2</td><td></td><td>1</td><td>2.43748 GHz</td><td>6.46 dBm</td><td></td><td></td></tr><tr><td>D3</td><td>M1</td><td>1</td><td>8.13 MHz</td><td>-0.26 dB</td><td></td><td></td></tr></table> Date:23 APR 2024 11:23:05	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1		1	2.43292 GHz	0.27 dBm			M2		1	2.43748 GHz	6.46 dBm			D3	M1	1	8.13 MHz	-0.26 dB		
Type	Ref	Trc	X-value	Y-value	Function	Function Result																							
M1		1	2.43292 GHz	0.27 dBm																									
M2		1	2.43748 GHz	6.46 dBm																									
D3	M1	1	8.13 MHz	-0.26 dB																									
CH11	Spectrum Ref Level 20.50 dBm Att 30 dB Offset 0.50 dB RBW 100 kHz SWT 75.9 μs VBW 300 kHz Mode Auto FFT Count 500/500 IPk View  CF 2.462 GHz1001 ptsSpan 30.0 MHz <table><tr><th>Type</th><th>Ref</th><th>Trc</th><th>X-value</th><th>Y-value</th><th>Function</th><th>Function Result</th></tr><tr><td>M1</td><td></td><td>1</td><td>2.45792 GHz</td><td>0.50 dBm</td><td></td><td></td></tr><tr><td>M2</td><td></td><td>1</td><td>2.46299 GHz</td><td>6.84 dBm</td><td></td><td></td></tr><tr><td>D3</td><td>M1</td><td>1</td><td>8.1 MHz</td><td>0.05 dB</td><td></td><td></td></tr></table> Date:23 APR 2024 11:24:31	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1		1	2.45792 GHz	0.50 dBm			M2		1	2.46299 GHz	6.84 dBm			D3	M1	1	8.1 MHz	0.05 dB		
Type	Ref	Trc	X-value	Y-value	Function	Function Result																							
M1		1	2.45792 GHz	0.50 dBm																									
M2		1	2.46299 GHz	6.84 dBm																									
D3	M1	1	8.1 MHz	0.05 dB																									

802.11 g

CH01	Spectrum Ref Level 20.50 dBm Att 30 dB Count 500/500 Offset 0.50 dB SWT 75.9 μs RBW 100 kHz VBW 300 kHz Mode Auto FFT IPk View 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 2.412 GHz 1001 pts Span 30.0 MHz Marker <table><tr><th>Type</th><th>Ref</th><th>Trc</th><th>X-value</th><th>Y-value</th><th>Function</th><th>Function Result</th></tr><tr><td>M1</td><td></td><td>1</td><td>2.40567 GHz</td><td>-0.35 dBm</td><td></td><td></td></tr><tr><td>M2</td><td></td><td>1</td><td>2.41071 GHz</td><td>6.20 dBm</td><td></td><td></td></tr><tr><td>D3</td><td>M1</td><td>1</td><td>11.61 MHz</td><td>-0.34 dB</td><td></td><td></td></tr></table> Date: 22 APR 2024 18:58:05	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1		1	2.40567 GHz	-0.35 dBm			M2		1	2.41071 GHz	6.20 dBm			D3	M1	1	11.61 MHz	-0.34 dB		
Type	Ref	Trc	X-value	Y-value	Function	Function Result																							
M1		1	2.40567 GHz	-0.35 dBm																									
M2		1	2.41071 GHz	6.20 dBm																									
D3	M1	1	11.61 MHz	-0.34 dB																									
CH06	Spectrum Ref Level 20.50 dBm Att 30 dB Count 500/500 Offset 0.50 dB SWT 75.9 μs RBW 100 kHz VBW 300 kHz Mode Auto FFT IPk View 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 2.437 GHz 1001 pts Span 30.0 MHz Marker <table><tr><th>Type</th><th>Ref</th><th>Trc</th><th>X-value</th><th>Y-value</th><th>Function</th><th>Function Result</th></tr><tr><td>M1</td><td></td><td>1</td><td>2.43067 GHz</td><td>0.94 dBm</td><td></td><td></td></tr><tr><td>M2</td><td></td><td>1</td><td>2.43574 GHz</td><td>7.01 dBm</td><td></td><td></td></tr><tr><td>D3</td><td>M1</td><td>1</td><td>12.63 MHz</td><td>-0.36 dB</td><td></td><td></td></tr></table> Date: 22 APR 2024 18:59:38	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1		1	2.43067 GHz	0.94 dBm			M2		1	2.43574 GHz	7.01 dBm			D3	M1	1	12.63 MHz	-0.36 dB		
Type	Ref	Trc	X-value	Y-value	Function	Function Result																							
M1		1	2.43067 GHz	0.94 dBm																									
M2		1	2.43574 GHz	7.01 dBm																									
D3	M1	1	12.63 MHz	-0.36 dB																									
CH11	Spectrum Ref Level 20.50 dBm Att 30 dB Count 500/500 Offset 0.50 dB SWT 75.9 μs RBW 100 kHz VBW 300 kHz Mode Auto FFT IPk View 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 2.462 GHz 1001 pts Span 30.0 MHz Marker <table><tr><th>Type</th><th>Ref</th><th>Trc</th><th>X-value</th><th>Y-value</th><th>Function</th><th>Function Result</th></tr><tr><td>M1</td><td></td><td>1</td><td>2.45567 GHz</td><td>0.18 dBm</td><td></td><td></td></tr><tr><td>M2</td><td></td><td>1</td><td>2.46326 GHz</td><td>7.17 dBm</td><td></td><td></td></tr><tr><td>D3</td><td>M1</td><td>1</td><td>12.63 MHz</td><td>0.49 dB</td><td></td><td></td></tr></table> Date: 22 APR 2024 19:01:09	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1		1	2.45567 GHz	0.18 dBm			M2		1	2.46326 GHz	7.17 dBm			D3	M1	1	12.63 MHz	0.49 dB		
Type	Ref	Trc	X-value	Y-value	Function	Function Result																							
M1		1	2.45567 GHz	0.18 dBm																									
M2		1	2.46326 GHz	7.17 dBm																									
D3	M1	1	12.63 MHz	0.49 dB																									

802.11n(HT20)

CH01

Spectrum

Ref Level 20.50 dBm Offset 0.50 dB RBW 100 kHz
Att 30 dB SWT 75.9 μs VBW 300 kHz Mode Auto FFT
Count 500/500

1Pk View

CF 2.412 GHz 1001 pts Span 30.0 MHz

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	2.40567 GHz	-1.14 dBm		
M2		1	2.41326 GHz	5.75 dBm		
D3	M1	1	12.66 MHz	0.40 dB		

Date: 22 APR 2024 19:08:02

CH06

Spectrum

Ref Level 20.50 dBm Offset 0.50 dB RBW 100 kHz
Att 30 dB SWT 75.9 μs VBW 300 kHz Mode Auto FFT
Count 500/500

1Pk View

CF 2.437 GHz 1001 pts Span 30.0 MHz

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	2.4298 GHz	-3.32 dBm		
M2		1	2.4376 GHz	3.63 dBm		
D3	M1	1	14.13 MHz	-0.30 dB		

Date: 22 APR 2024 19:09:40

CH11

Spectrum

Ref Level 20.50 dBm Offset 0.50 dB RBW 100 kHz
Att 30 dB SWT 75.9 μs VBW 300 kHz Mode Auto FFT
Count 500/500

1Pk View

CF 2.462 GHz 1001 pts Span 30.0 MHz

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	2.45381 GHz	-2.95 dBm		
M2		1	2.46263 GHz	3.73 dBm		
D3	M1	1	13.74 MHz	0.18 dB		

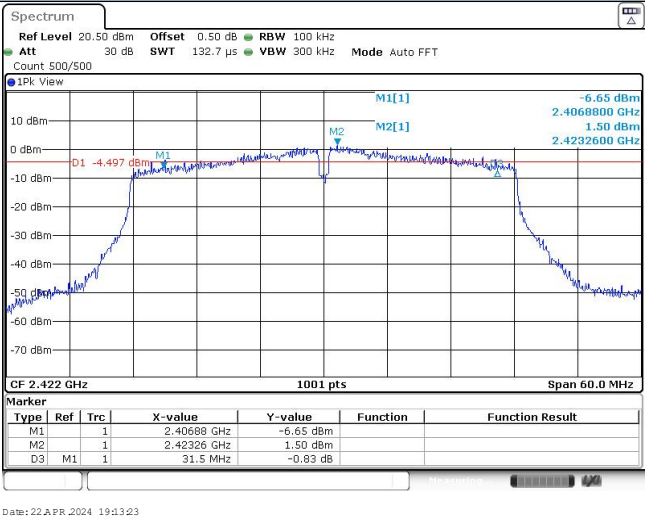
Date: 22 APR 2024 19:11:26

802.11(ax20)

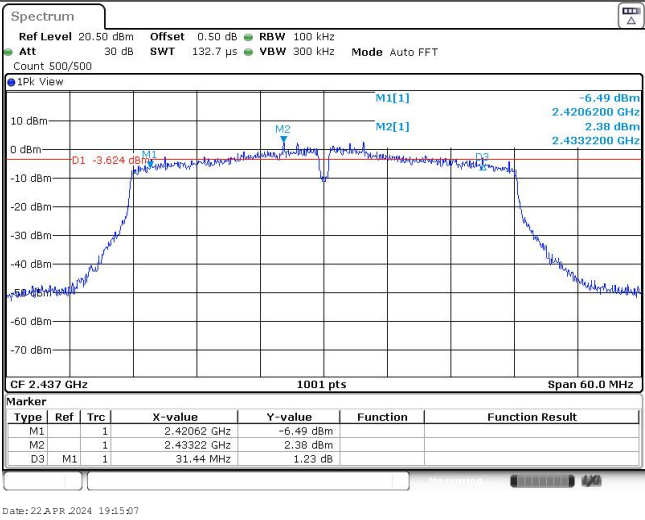
CH01	Spectrum Ref Level 20.50 dBm Att 30 dB Offset 0.50 dB SWT 75.9 μs RBW 100 kHz VBW 300 kHz Mode Auto FFT Count 500/500 IPk View <table><tr><th>Type</th><th>Ref</th><th>Trc</th><th>X-value</th><th>Y-value</th><th>Function</th><th>Function Result</th></tr><tr><td>M1</td><td></td><td>1</td><td>2.40849 GHz</td><td>0.12 dBm</td><td></td><td></td></tr><tr><td>M2</td><td></td><td>1</td><td>2.41323 GHz</td><td>6.26 dBm</td><td></td><td></td></tr><tr><td>D3</td><td>M1</td><td>1</td><td>9.84 MHz</td><td>-1.73 dB</td><td></td><td></td></tr></table> Date:23 APR 2024 11:39:33	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1		1	2.40849 GHz	0.12 dBm			M2		1	2.41323 GHz	6.26 dBm			D3	M1	1	9.84 MHz	-1.73 dB		
Type	Ref	Trc	X-value	Y-value	Function	Function Result																							
M1		1	2.40849 GHz	0.12 dBm																									
M2		1	2.41323 GHz	6.26 dBm																									
D3	M1	1	9.84 MHz	-1.73 dB																									
CH06	Spectrum Ref Level 20.50 dBm Att 30 dB Offset 0.50 dB SWT 75.9 μs RBW 100 kHz VBW 300 kHz Mode Auto FFT Count 500/500 IPk View <table><tr><th>Type</th><th>Ref</th><th>Trc</th><th>X-value</th><th>Y-value</th><th>Function</th><th>Function Result</th></tr><tr><td>M1</td><td></td><td>1</td><td>2.43049 GHz</td><td>-0.92 dBm</td><td></td><td></td></tr><tr><td>M2</td><td></td><td>1</td><td>2.4379 GHz</td><td>5.24 dBm</td><td></td><td></td></tr><tr><td>D3</td><td>M1</td><td>1</td><td>13.08 MHz</td><td>0.15 dB</td><td></td><td></td></tr></table> Date:23 APR 2024 11:40:56	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1		1	2.43049 GHz	-0.92 dBm			M2		1	2.4379 GHz	5.24 dBm			D3	M1	1	13.08 MHz	0.15 dB		
Type	Ref	Trc	X-value	Y-value	Function	Function Result																							
M1		1	2.43049 GHz	-0.92 dBm																									
M2		1	2.4379 GHz	5.24 dBm																									
D3	M1	1	13.08 MHz	0.15 dB																									
CH11	Spectrum Ref Level 20.50 dBm Att 30 dB Offset 0.50 dB SWT 75.9 μs RBW 100 kHz VBW 300 kHz Mode Auto FFT Count 500/500 IPk View <table><tr><th>Type</th><th>Ref</th><th>Trc</th><th>X-value</th><th>Y-value</th><th>Function</th><th>Function Result</th></tr><tr><td>M1</td><td></td><td>1</td><td>2.45528 GHz</td><td>-0.04 dBm</td><td></td><td></td></tr><tr><td>M2</td><td></td><td>1</td><td>2.46071 GHz</td><td>6.17 dBm</td><td></td><td></td></tr><tr><td>D3</td><td>M1</td><td>1</td><td>11.73 MHz</td><td>-0.15 dB</td><td></td><td></td></tr></table> Date:23 APR 2024 11:42:18	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1		1	2.45528 GHz	-0.04 dBm			M2		1	2.46071 GHz	6.17 dBm			D3	M1	1	11.73 MHz	-0.15 dB		
Type	Ref	Trc	X-value	Y-value	Function	Function Result																							
M1		1	2.45528 GHz	-0.04 dBm																									
M2		1	2.46071 GHz	6.17 dBm																									
D3	M1	1	11.73 MHz	-0.15 dB																									

802.11n(HT40)

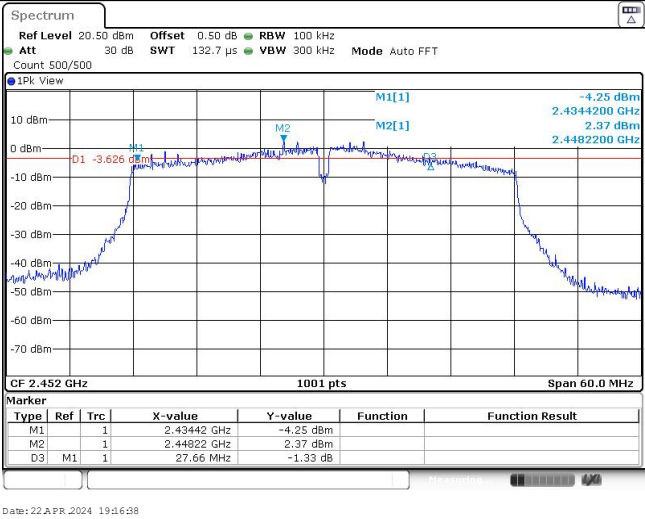
CH03



CH06



CH09



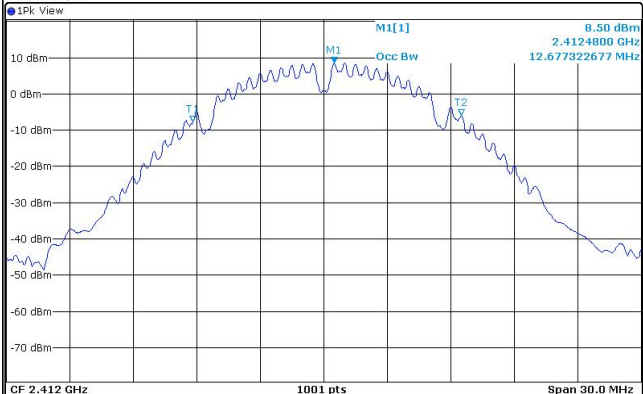
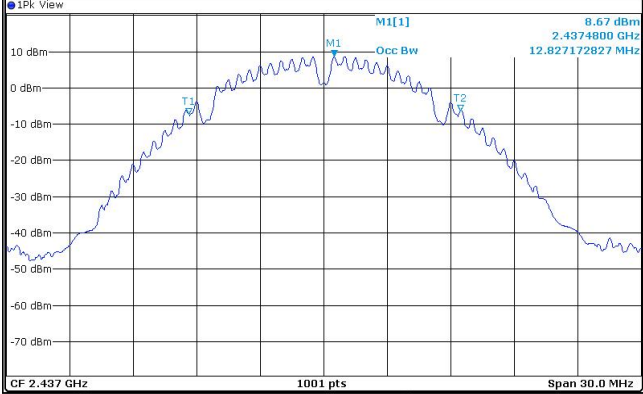
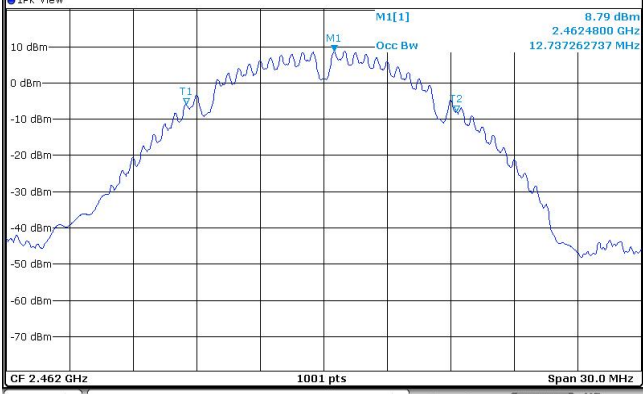
802.11(ax40)

CH03	Spectrum Ref Level 20.50 dBm Att 30 dB Offset 0.50 dB SWT 132.7 μs RBW 100 kHz VBW 300 kHz Mode Auto FFT Count 500/500 IPk View 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm M1[1] M2 M2[1] D1 -3.999 dBm -7.39 dBm 2.4056200 GHz 2.00 dBm 2.4191200 GHz CF 2.422 GHz 1001 pts Span 60.0 MHz Marker <table><tr><th>Type</th><th>Ref</th><th>Trc</th><th>X-value</th><th>Y-value</th><th>Function</th><th>Function Result</th></tr><tr><td>M1</td><td></td><td>1</td><td>2.40562 GHz</td><td>-7.39 dBm</td><td></td><td></td></tr><tr><td>M2</td><td></td><td>1</td><td>2.41912 GHz</td><td>2.00 dBm</td><td></td><td></td></tr><tr><td>D3</td><td>M1</td><td>1</td><td>33.96 MHz</td><td>1.35 dB</td><td></td><td></td></tr></table> Date:23 APR 2024 11:48:57	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1		1	2.40562 GHz	-7.39 dBm			M2		1	2.41912 GHz	2.00 dBm			D3	M1	1	33.96 MHz	1.35 dB		
Type	Ref	Trc	X-value	Y-value	Function	Function Result																							
M1		1	2.40562 GHz	-7.39 dBm																									
M2		1	2.41912 GHz	2.00 dBm																									
D3	M1	1	33.96 MHz	1.35 dB																									
CH06	Spectrum Ref Level 20.50 dBm Att 30 dB Offset 0.50 dB SWT 132.7 μs RBW 100 kHz VBW 300 kHz Mode Auto FFT Count 500/500 IPk View 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm M1[1] M2 M2[1] D1 -5.163 dBm -7.52 dBm 2.4213400 GHz 0.84 dBm 2.4359800 GHz CF 2.437 GHz 1001 pts Span 60.0 MHz Marker <table><tr><th>Type</th><th>Ref</th><th>Trc</th><th>X-value</th><th>Y-value</th><th>Function</th><th>Function Result</th></tr><tr><td>M1</td><td></td><td>1</td><td>2.42134 GHz</td><td>-7.52 dBm</td><td></td><td></td></tr><tr><td>M2</td><td></td><td>1</td><td>2.43598 GHz</td><td>0.84 dBm</td><td></td><td></td></tr><tr><td>D3</td><td>M1</td><td>1</td><td>33.36 MHz</td><td>2.34 dB</td><td></td><td></td></tr></table> Date:23 APR 2024 11:50:20	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1		1	2.42134 GHz	-7.52 dBm			M2		1	2.43598 GHz	0.84 dBm			D3	M1	1	33.36 MHz	2.34 dB		
Type	Ref	Trc	X-value	Y-value	Function	Function Result																							
M1		1	2.42134 GHz	-7.52 dBm																									
M2		1	2.43598 GHz	0.84 dBm																									
D3	M1	1	33.36 MHz	2.34 dB																									
CH09	Spectrum Ref Level 20.50 dBm Att 30 dB Offset 0.50 dB SWT 132.7 μs RBW 100 kHz VBW 300 kHz Mode Auto FFT Count 500/500 IPk View 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm M1[1] M2 M2[1] D1 -4.851 dBm -6.33 dBm 2.4368800 GHz 1.15 dBm 2.4529600 GHz CF 2.452 GHz 1001 pts Span 60.0 MHz Marker <table><tr><th>Type</th><th>Ref</th><th>Trc</th><th>X-value</th><th>Y-value</th><th>Function</th><th>Function Result</th></tr><tr><td>M1</td><td></td><td>1</td><td>2.43688 GHz</td><td>-6.33 dBm</td><td></td><td></td></tr><tr><td>M2</td><td></td><td>1</td><td>2.45296 GHz</td><td>1.15 dBm</td><td></td><td></td></tr><tr><td>D3</td><td>M1</td><td>1</td><td>26.22 MHz</td><td>1.25 dB</td><td></td><td></td></tr></table> Date:23 APR 2024 11:51:45	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1		1	2.43688 GHz	-6.33 dBm			M2		1	2.45296 GHz	1.15 dBm			D3	M1	1	26.22 MHz	1.25 dB		
Type	Ref	Trc	X-value	Y-value	Function	Function Result																							
M1		1	2.43688 GHz	-6.33 dBm																									
M2		1	2.45296 GHz	1.15 dBm																									
D3	M1	1	26.22 MHz	1.25 dB																									

Appendix D: 99% Occupied Bandwidth

Type	Channel	99% Bandwidth (MHz)	Limit (kHz)	Result
802.11b	01	12.68	-	Pass
	06	12.83		
	11	12.74		
802.11g	01	16.15	-	Pass
	06	16.18		
	11	16.09		
802.11n(HT20)	01	17.32	-	Pass
	06	17.32		
	11	17.29		
802.11(ax20)	01	18.64	-	Pass
	06	18.82		
	11	18.64		
802.11n(HT40)	03	35.31	-	Pass
	06	35.54		
	09	35.42		
802.11(ax40)	03	36.98	-	Pass
	06	37.16		
	09	37.04		

802.11 b

CH01	Spectrum Ref Level 20.50 dBm Att 30 dB Offset 0.50 dB SWT 25.3 μs RBW 300 kHz VBW 1 MHz Mode Auto FFT Count 469/500 IPk View  CF 2.412 GHz1001 ptsSpan 30.0 MHz Date: 23 APR 2024 11:21:45
CH06	Spectrum Ref Level 20.50 dBm Att 30 dB Offset 0.50 dB SWT 25.3 μs RBW 300 kHz VBW 1 MHz Mode Auto FFT Count 463/500 IPk View  CF 2.437 GHz1001 ptsSpan 30.0 MHz Date: 23 APR 2024 11:23:11
CH11	Spectrum Ref Level 20.50 dBm Att 30 dB Offset 0.50 dB SWT 25.3 μs RBW 300 kHz VBW 1 MHz Mode Auto FFT Count 475/500 IPk View  CF 2.462 GHz1001 ptsSpan 30.0 MHz Date: 23 APR 2024 11:24:37

802.11 g

CH01	Spectrum Ref Level 20.50 dBmAtt 30 dBOffset 0.50 dB RBW 300 kHzSWT 25.3 μsVBW 1 MHzMode Auto FFTCount 476/500 IPk View 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm T1 M1 M1[1] Occ Bw T2 8.05 dBm 2.4128390 GHz 16.153846154 MHz CF 2.412 GHz 1001 pts Span 30.0 MHz Date:22 APR 2024 18:58:11
CH06	Spectrum Ref Level 20.50 dBmAtt 30 dBOffset 0.50 dB RBW 300 kHzSWT 25.3 μsVBW 1 MHzMode Auto FFTCount 476/500 IPk View 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm T1 M1 M1[1] Occ Bw T2 9.29 dBm 2.4362510 GHz 16.183816184 MHz CF 2.437 GHz 1001 pts Span 30.0 MHz Date:22 APR 2024 18:59:44
CH11	Spectrum Ref Level 20.50 dBmAtt 30 dBOffset 0.50 dB RBW 300 kHzSWT 25.3 μsVBW 1 MHzMode Auto FFTCount 476/500 IPk View 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm T1 M1 M1[1] Occ Bw T2 8.88 dBm 2.4632890 GHz 16.093906094 MHz CF 2.462 GHz 1001 pts Span 30.0 MHz Date:22 APR 2024 19:01:15

802.11n(HT20)

CH01	Spectrum Ref Level 20.50 dBm Att 30 dB Offset 0.50 dB SWT 25.3 μs RBW 300 kHz VBW 1 MHz Mode Auto FFT Count 475/500 IPk View T1 M1 M1[1] Occ Bw T2 7.76 dBm 2.4132290 GHz 17.322677323 MHz CF 2.412 GHz 1001 pts Span 30.0 MHz Date:22 APR 2024 19:08:08
CH06	Spectrum Ref Level 20.50 dBm Att 30 dB Offset 0.50 dB SWT 25.3 μs RBW 300 kHz VBW 1 MHz Mode Auto FFT Count 472/500 IPk View T1 M1 M1[1] Occ Bw T2 8.11 dBm 2.4364310 GHz 17.322677323 MHz CF 2.437 GHz 1001 pts Span 30.0 MHz Date:22 APR 2024 19:09:46
CH11	Spectrum Ref Level 20.50 dBm Att 30 dB Offset 0.50 dB SWT 25.3 μs RBW 300 kHz VBW 1 MHz Mode Auto FFT Count 477/500 IPk View T1 M1 M1[1] Occ Bw T2 8.40 dBm 2.4627490 GHz 17.292707293 MHz CF 2.462 GHz 1001 pts Span 30.0 MHz Date:22 APR 2024 19:11:31

802.11(ax20)

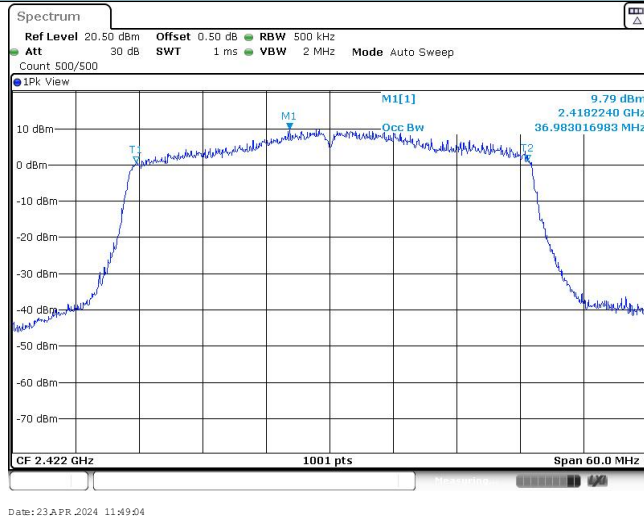
CH01	Spectrum Ref Level 20.50 dBm Att 30 dB Offset 0.50 dB SWT 25.3 μs RBW 300 kHz VBW 1 MHz Mode Auto FFT Count 467/500 IPk View T1 M1 M1[1] Occ Bw T2 8.60 dBm 2.4125690 GHz 18.641358641 MHz CF 2.412 GHz 1001 pts Span 30.0 MHz Date: 23 APR 2024 11:39:40
CH06	Spectrum Ref Level 20.50 dBm Att 30 dB Offset 0.50 dB SWT 25.3 μs RBW 300 kHz VBW 1 MHz Mode Auto FFT Count 475/500 IPk View T1 M1 M1[1] Occ Bw T2 10.34 dBm 2.4378990 GHz 18.821178821 MHz CF 2.437 GHz 1001 pts Span 30.0 MHz Date: 23 APR 2024 11:41:01
CH11	Spectrum Ref Level 20.50 dBm Att 30 dB Offset 0.50 dB SWT 25.3 μs RBW 300 kHz VBW 1 MHz Mode Auto FFT Count 474/500 IPk View T1 M1 M1[1] Occ Bw T2 9.64 dBm 2.4628690 GHz 18.641358641 MHz CF 2.462 GHz 1001 pts Span 30.0 MHz Date: 23 APR 2024 11:42:23

802.11n(HT40)

CH03	Spectrum Ref Level 20.50 dBmOffset 0.50 dB RBW 500 kHzAtt 30 dB SWT 1 ms VBW 2 MHz Mode Auto SweepCount 500/500 IPk View T1 M1 M1[1] T2 8.07 dBm 2.4251170 GHz 35.304695305 MHz 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 2.422 GHz 1001 pts Span 60.0 MHz Date:22 APR 2024 19:22:17
CH06	Spectrum Ref Level 20.50 dBmOffset 0.50 dB RBW 500 kHzAtt 30 dB SWT 1 ms VBW 2 MHz Mode Auto SweepCount 500/500 IPk View T1 M1 M1[1] T2 8.29 dBm 2.4340630 GHz 35.544455544 MHz 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 2.437 GHz 1001 pts Span 60.0 MHz Date:22 APR 2024 19:22:11
CH09	Spectrum Ref Level 20.50 dBmOffset 0.50 dB RBW 500 kHzAtt 30 dB SWT 1 ms VBW 2 MHz Mode Auto SweepCount 500/500 IPk View T1 M1 M1[1] T2 8.37 dBm 2.4491830 GHz 35.424575425 MHz 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 2.452 GHz 1001 pts Span 60.0 MHz Date:22 APR 2024 19:23:02

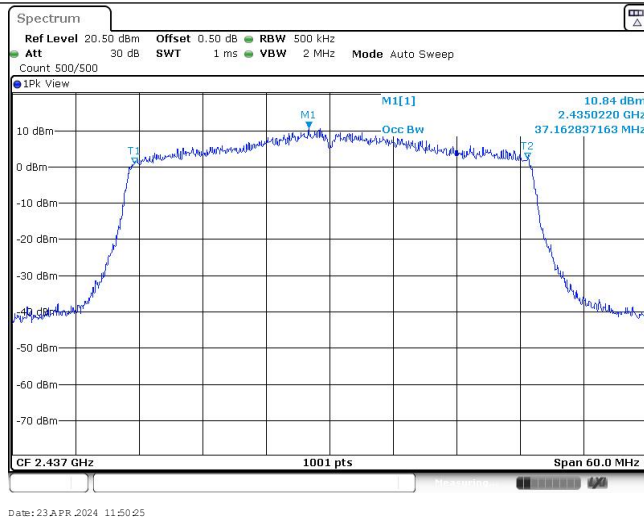
802.11(ax40)

CH03



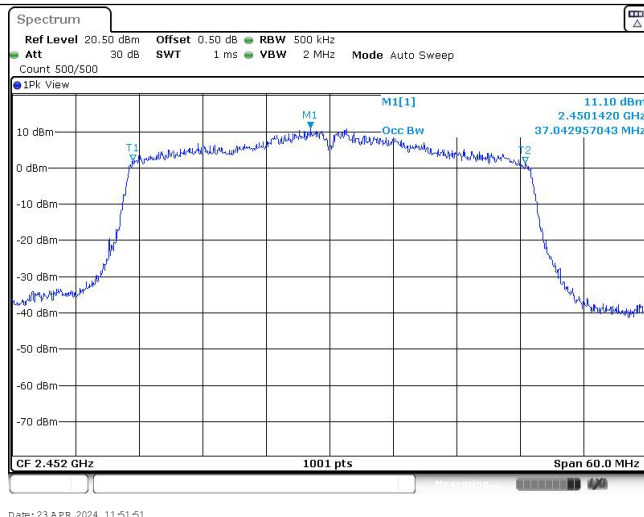
Date: 23 APR 2024 11:49:04

CH06



Date: 23 APR 2024 11:50:25

CH09



Date: 23 APR 2024 11:51:51