

# APPENDIX REPORT

Project No.	SHT2005026001EW	Radio Specification	WIFI 2.4G
Test sample No.	YPHT20050260006	Model No.	SC100
Start test date	2020/5/27	Finish date	2020/5/27
Temperature	25°C	Humidity	50%
Test Engineer	JiongSheng.Feng	Auditor	<i>William.wang</i>

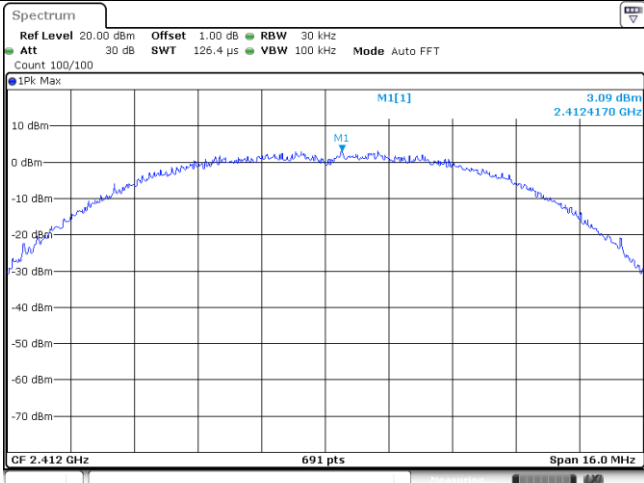
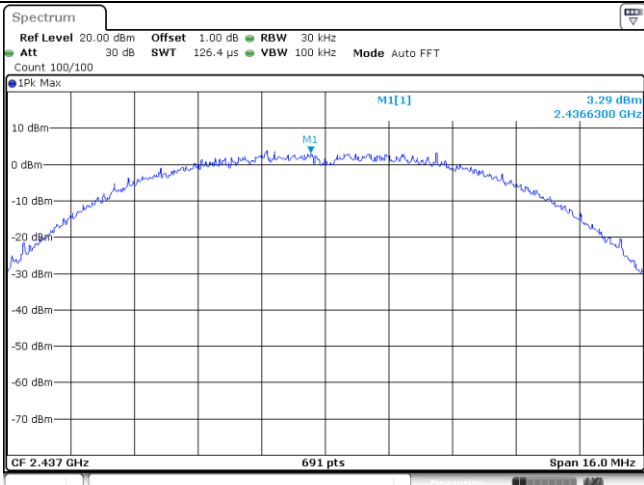
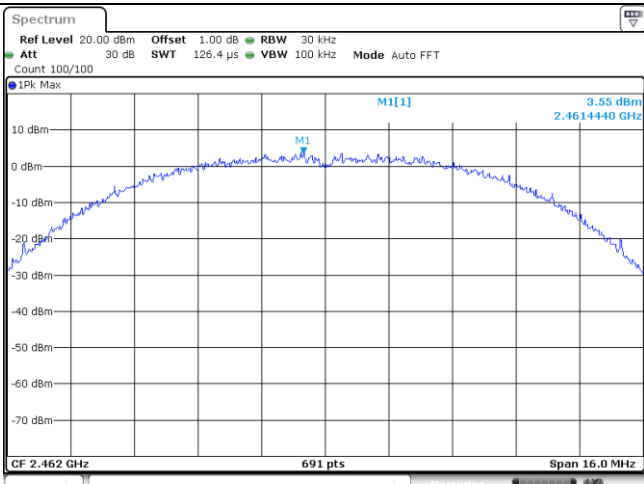
Appendix clause	Test item	Result
A	Conducted Peak Output Power	PASS
B	Power Spectral Density	PASS
C	6 dB Bandwidth	PASS
D	99% Occupied Bandwidth	PASS
E	Duty Cycle	PASS
F	Band edge and Spurious Emissions (conducted)	PASS

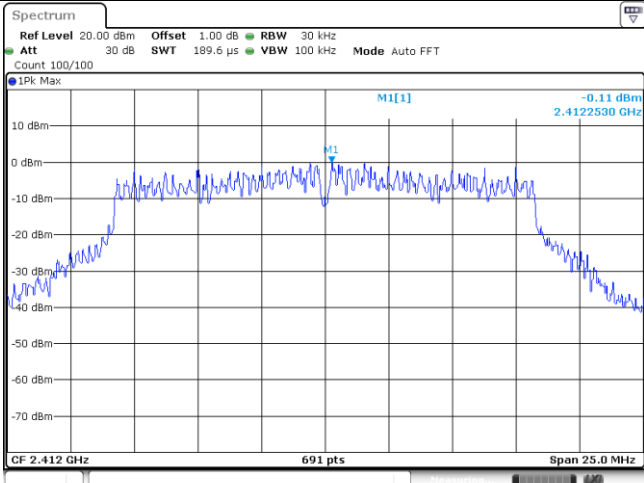
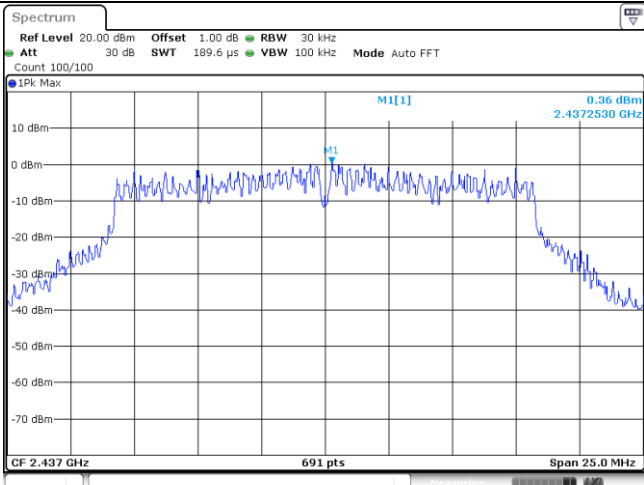
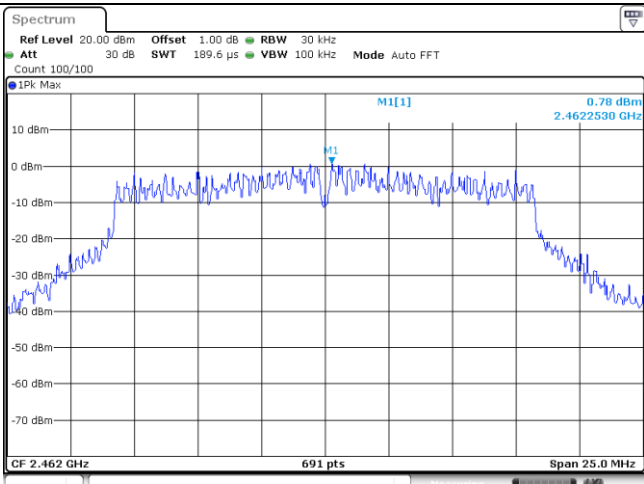
**Appendix A: Conducted Peak Output Power**

Type	Channel	Peak Output power (dBm)	Average Output power (dBm)	Limit (dBm)	Result
802.11b	01	22.88	20.32	≤30.00	Pass
	06	23.40	20.97		
	11	23.41	21.19		
802.11g	01	23.88	20.37	≤30.00	Pass
	06	24.27	20.77		
	11	24.65	21.15		
802.11n(HT20)	01	22.98	19.69	≤30.00	Pass
	06	23.70	20.16		
	11	24.07	20.65		
802.11n(HT40)	03	23.19	19.71	≤30.00	Pass
	06	23.58	20.15		
	09	23.63	19.97		

**Appendix B: Power Spectral Density**

Type	Channel	Power Spectral Density (dBm/30KHz)	Limit (dBm/3KHz)	Result
802.11b	01	3.09	≤8.00	Pass
	06	3.29		
	11	3.55		
802.11g	01	-0.11	≤8.00	Pass
	06	0.36		
	11	0.78		
802.11n(HT20)	01	1.19	≤8.00	Pass
	06	0.23		
	11	1.90		
802.11n(HT40)	03	-2.59	≤8.00	Pass
	06	-3.81		
	09	-3.17		

Type:		802.11 b
CH01	 <p>Spectrum</p> <p>Ref Level 20.00 dBm    Offset 1.00 dB    RBW 30 kHz Att 30 dB    SWT 126.4 μs    VBW 100 kHz    Mode Auto FFT Count 100/100</p> <p>IPK Max</p> <p>9.09 dBm 2.4124170 GHz</p> <p>M1</p> <p>CF 2.412 GHz    691 pts    Span 16.0 MHz</p> <p>Date: 27 MAY 2020 16:20:26</p>	
CH06	 <p>Spectrum</p> <p>Ref Level 20.00 dBm    Offset 1.00 dB    RBW 30 kHz Att 30 dB    SWT 126.4 μs    VBW 100 kHz    Mode Auto FFT Count 100/100</p> <p>IPK Max</p> <p>9.29 dBm 2.4366300 GHz</p> <p>M1</p> <p>CF 2.437 GHz    691 pts    Span 16.0 MHz</p> <p>Date: 27 MAY 2020 16:24:22</p>	
CH11	 <p>Spectrum</p> <p>Ref Level 20.00 dBm    Offset 1.00 dB    RBW 30 kHz Att 30 dB    SWT 126.4 μs    VBW 100 kHz    Mode Auto FFT Count 100/100</p> <p>IPK Max</p> <p>9.55 dBm 2.4614440 GHz</p> <p>M1</p> <p>CF 2.462 GHz    691 pts    Span 16.0 MHz</p> <p>Date: 27 MAY 2020 16:26:39</p>	

Type:		802.11 g
CH01		
CH06		
CH11		

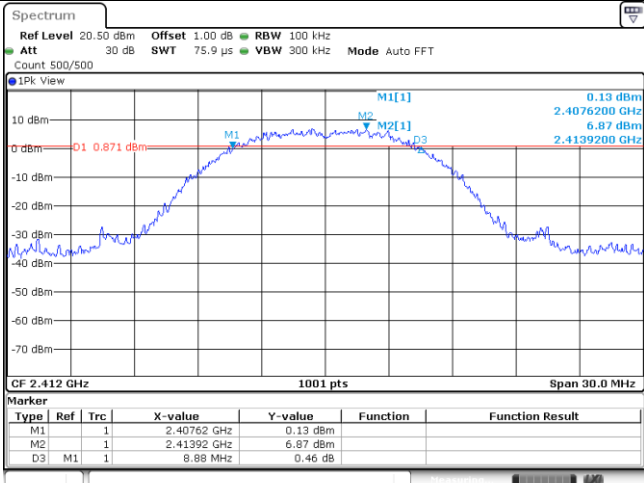
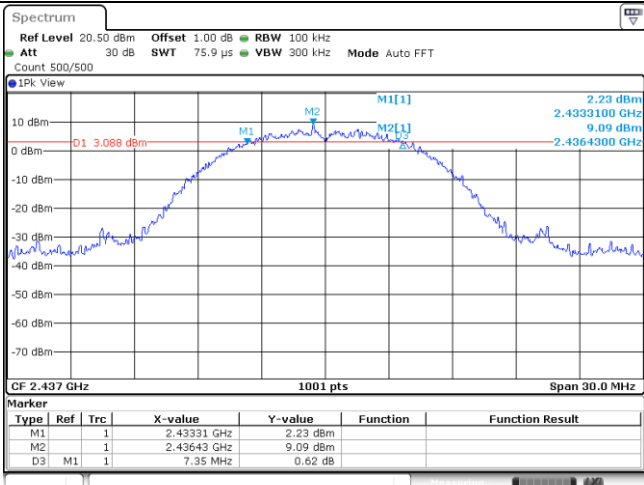
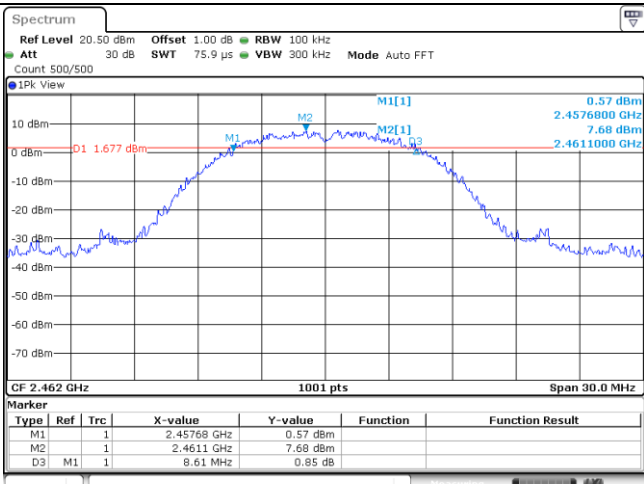
Type:		802.11n(HT20)
CH01	<p>1.19 dBm 2.4116740 GHz</p> <p>CF 2.412 GHz 691 pts Span 25.0 MHz</p> <p>Date: 27 MAY 2020 16:37:34</p>	
CH06	<p>0.23 dBm 2.4366020 GHz</p> <p>CF 2.437 GHz 691 pts Span 25.0 MHz</p> <p>Date: 27 MAY 2020 16:40:16</p>	
CH11	<p>1.90 dBm 2.4616740 GHz</p> <p>CF 2.462 GHz 691 pts Span 25.0 MHz</p> <p>Date: 27 MAY 2020 16:42:23</p>	

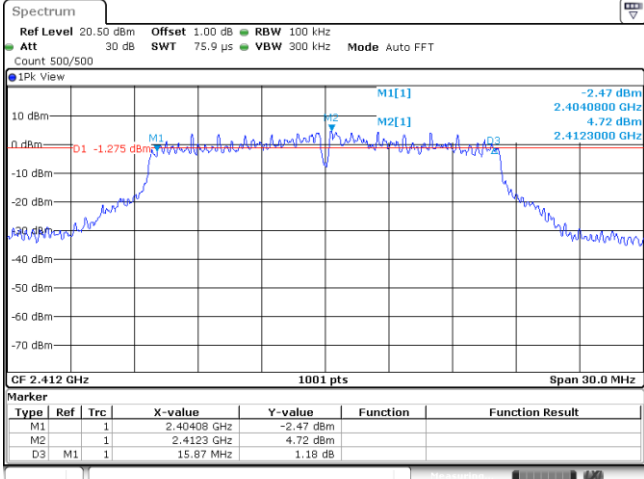
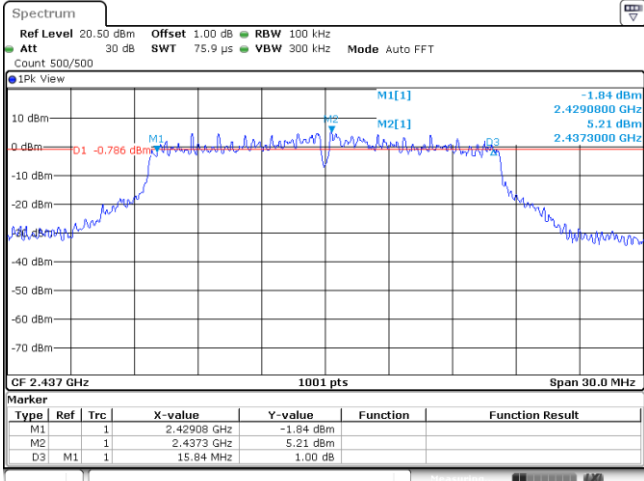
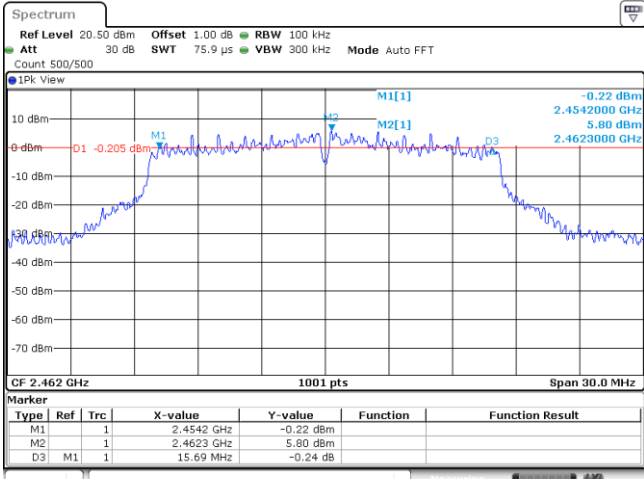
Type:		802.11n(HT40)
CH03		
CH06		
CH09		

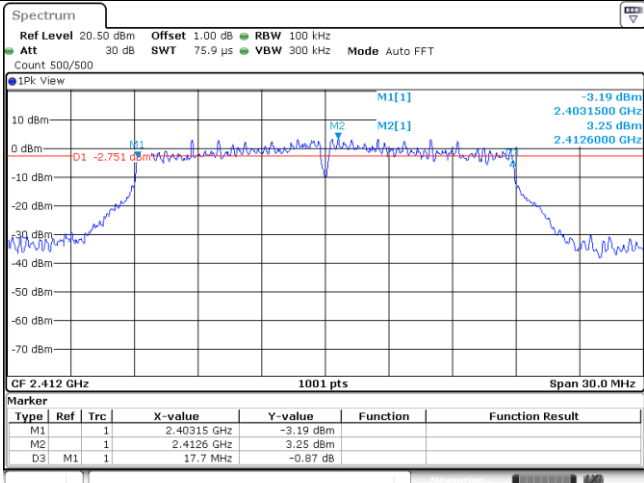
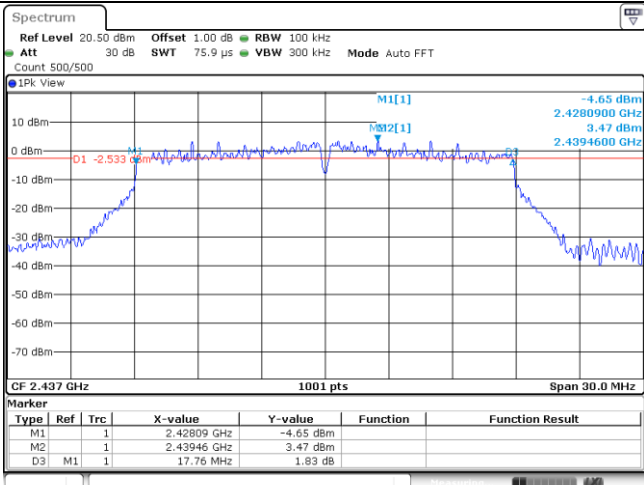
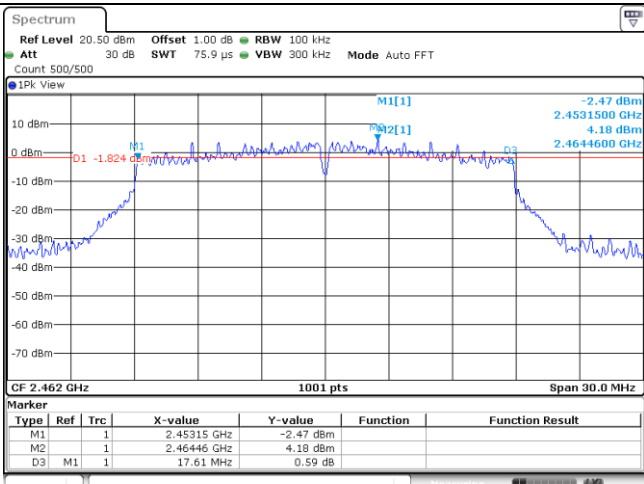
**Appendix C: 6dB bandwidth**

Type	Channel	6dB Bandwidth (MHz)	Limit (MHz)	Result
802.11b	01	8.88	≥0.5	Pass
	06	7.35		
	11	8.61		
802.11g	01	15.87	≥0.5	Pass
	06	15.84		
	11	15.69		
802.11n(HT20)	01	17.70	≥0.5	Pass
	06	17.76		
	11	17.61		
802.11n(HT40)	03	36.12	≥0.5	Pass
	06	36.18		
	09	36.18		



Type:		802.11 b																												
CH01	 <p><b>Spectrum</b>                  Ref Level 20.50 dBm Offset 1.00 dB RBW 100 kHz                  Att 30 dB SWT 75.9 μs VBW 300 kHz Mode Auto FFT                  Count 500/500                  IPK View                  CF 2.412 GHz 1001 pts Span 30.0 MHz</p> <table border="1"> <thead> <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> </thead> <tbody> <tr> <td>M1</td> <td></td> <td>1</td> <td>2.40762 GHz</td> <td>0.13 dBm</td> <td></td> <td></td> </tr> <tr> <td>M2</td> <td></td> <td>1</td> <td>2.41392 GHz</td> <td>6.87 dBm</td> <td></td> <td></td> </tr> <tr> <td>D3</td> <td>M1</td> <td>1</td> <td>8.88 MHz</td> <td>0.46 dB</td> <td></td> <td></td> </tr> </tbody> </table> <p>Date: 27 MAY 2020 16:19:09</p>		Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1		1	2.40762 GHz	0.13 dBm			M2		1	2.41392 GHz	6.87 dBm			D3	M1	1	8.88 MHz	0.46 dB		
Type	Ref	Trc	X-value	Y-value	Function	Function Result																								
M1		1	2.40762 GHz	0.13 dBm																										
M2		1	2.41392 GHz	6.87 dBm																										
D3	M1	1	8.88 MHz	0.46 dB																										
CH06	 <p><b>Spectrum</b>                  Ref Level 20.50 dBm Offset 1.00 dB RBW 100 kHz                  Att 30 dB SWT 75.9 μs VBW 300 kHz Mode Auto FFT                  Count 500/500                  IPK View                  CF 2.437 GHz 1001 pts Span 30.0 MHz</p> <table border="1"> <thead> <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> </thead> <tbody> <tr> <td>M1</td> <td></td> <td>1</td> <td>2.43331 GHz</td> <td>2.23 dBm</td> <td></td> <td></td> </tr> <tr> <td>M2</td> <td></td> <td>1</td> <td>2.43643 GHz</td> <td>9.09 dBm</td> <td></td> <td></td> </tr> <tr> <td>D3</td> <td>M1</td> <td>1</td> <td>7.35 MHz</td> <td>0.62 dB</td> <td></td> <td></td> </tr> </tbody> </table> <p>Date: 27 MAY 2020 16:23:36</p>		Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1		1	2.43331 GHz	2.23 dBm			M2		1	2.43643 GHz	9.09 dBm			D3	M1	1	7.35 MHz	0.62 dB		
Type	Ref	Trc	X-value	Y-value	Function	Function Result																								
M1		1	2.43331 GHz	2.23 dBm																										
M2		1	2.43643 GHz	9.09 dBm																										
D3	M1	1	7.35 MHz	0.62 dB																										
CH11	 <p><b>Spectrum</b>                  Ref Level 20.50 dBm Offset 1.00 dB RBW 100 kHz                  Att 30 dB SWT 75.9 μs VBW 300 kHz Mode Auto FFT                  Count 500/500                  IPK View                  CF 2.462 GHz 1001 pts Span 30.0 MHz</p> <table border="1"> <thead> <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> </thead> <tbody> <tr> <td>M1</td> <td></td> <td>1</td> <td>2.45768 GHz</td> <td>0.57 dBm</td> <td></td> <td></td> </tr> <tr> <td>M2</td> <td></td> <td>1</td> <td>2.4611 GHz</td> <td>7.68 dBm</td> <td></td> <td></td> </tr> <tr> <td>D3</td> <td>M1</td> <td>1</td> <td>8.61 MHz</td> <td>0.85 dB</td> <td></td> <td></td> </tr> </tbody> </table> <p>Date: 27 MAY 2020 16:25:46</p>		Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1		1	2.45768 GHz	0.57 dBm			M2		1	2.4611 GHz	7.68 dBm			D3	M1	1	8.61 MHz	0.85 dB		
Type	Ref	Trc	X-value	Y-value	Function	Function Result																								
M1		1	2.45768 GHz	0.57 dBm																										
M2		1	2.4611 GHz	7.68 dBm																										
D3	M1	1	8.61 MHz	0.85 dB																										

Type:	802.11 g																												
CH01	 <p><b>Spectrum</b>          Ref Level 20.50 dBm Offset 1.00 dB RBW 100 kHz          Att 30 dB SWT 75.9 <math>\mu</math>s VBW 300 kHz Mode Auto FFT          Count 500/500</p> <p>CF 2.412 GHz 1001 pts Span 30.0 MHz</p> <table border="1"> <thead> <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> </thead> <tbody> <tr> <td>M1</td> <td></td> <td>1</td> <td>2.40408 GHz</td> <td>-2.47 dBm</td> <td></td> <td></td> </tr> <tr> <td>M2</td> <td></td> <td>1</td> <td>2.4123 GHz</td> <td>4.72 dBm</td> <td></td> <td></td> </tr> <tr> <td>D3</td> <td>M1</td> <td>1</td> <td>15.87 MHz</td> <td>1.18 dB</td> <td></td> <td></td> </tr> </tbody> </table> <p>Date: 27 MAY 2020 16:28:50</p>	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1		1	2.40408 GHz	-2.47 dBm			M2		1	2.4123 GHz	4.72 dBm			D3	M1	1	15.87 MHz	1.18 dB		
Type	Ref	Trc	X-value	Y-value	Function	Function Result																							
M1		1	2.40408 GHz	-2.47 dBm																									
M2		1	2.4123 GHz	4.72 dBm																									
D3	M1	1	15.87 MHz	1.18 dB																									
CH06	 <p><b>Spectrum</b>          Ref Level 20.50 dBm Offset 1.00 dB RBW 100 kHz          Att 30 dB SWT 75.9 <math>\mu</math>s VBW 300 kHz Mode Auto FFT          Count 500/500</p> <p>CF 2.437 GHz 1001 pts Span 30.0 MHz</p> <table border="1"> <thead> <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> </thead> <tbody> <tr> <td>M1</td> <td></td> <td>1</td> <td>2.42908 GHz</td> <td>-1.84 dBm</td> <td></td> <td></td> </tr> <tr> <td>M2</td> <td></td> <td>1</td> <td>2.4373 GHz</td> <td>5.21 dBm</td> <td></td> <td></td> </tr> <tr> <td>D3</td> <td>M1</td> <td>1</td> <td>15.84 MHz</td> <td>1.00 dB</td> <td></td> <td></td> </tr> </tbody> </table> <p>Date: 27 MAY 2020 16:31:34</p>	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1		1	2.42908 GHz	-1.84 dBm			M2		1	2.4373 GHz	5.21 dBm			D3	M1	1	15.84 MHz	1.00 dB		
Type	Ref	Trc	X-value	Y-value	Function	Function Result																							
M1		1	2.42908 GHz	-1.84 dBm																									
M2		1	2.4373 GHz	5.21 dBm																									
D3	M1	1	15.84 MHz	1.00 dB																									
CH11	 <p><b>Spectrum</b>          Ref Level 20.50 dBm Offset 1.00 dB RBW 100 kHz          Att 30 dB SWT 75.9 <math>\mu</math>s VBW 300 kHz Mode Auto FFT          Count 500/500</p> <p>CF 2.462 GHz 1001 pts Span 30.0 MHz</p> <table border="1"> <thead> <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> </thead> <tbody> <tr> <td>M1</td> <td></td> <td>1</td> <td>2.4542 GHz</td> <td>-0.22 dBm</td> <td></td> <td></td> </tr> <tr> <td>M2</td> <td></td> <td>1</td> <td>2.4623 GHz</td> <td>5.80 dBm</td> <td></td> <td></td> </tr> <tr> <td>D3</td> <td>M1</td> <td>1</td> <td>15.69 MHz</td> <td>-0.24 dB</td> <td></td> <td></td> </tr> </tbody> </table> <p>Date: 27 MAY 2020 16:33:37</p>	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1		1	2.4542 GHz	-0.22 dBm			M2		1	2.4623 GHz	5.80 dBm			D3	M1	1	15.69 MHz	-0.24 dB		
Type	Ref	Trc	X-value	Y-value	Function	Function Result																							
M1		1	2.4542 GHz	-0.22 dBm																									
M2		1	2.4623 GHz	5.80 dBm																									
D3	M1	1	15.69 MHz	-0.24 dB																									

Type:		802.11n(HT20)																												
CH01		 <p><b>Spectrum</b>                  Ref Level 20.50 dBm Offset 1.00 dB RBW 100 kHz                  Att 30 dB SWT 75.9 μs VBW 300 kHz Mode Auto FFT                  Count 500/500</p> <p>CF 2.412 GHz 1001 pts Span 30.0 MHz</p> <table border="1"> <thead> <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> </thead> <tbody> <tr> <td>M1</td> <td></td> <td>1</td> <td>2.40315 GHz</td> <td>-3.19 dBm</td> <td></td> <td></td> </tr> <tr> <td>M2</td> <td></td> <td>1</td> <td>2.4126 GHz</td> <td>3.25 dBm</td> <td></td> <td></td> </tr> <tr> <td>D3</td> <td>M1</td> <td>1</td> <td>17.7 MHz</td> <td>-0.87 dB</td> <td></td> <td></td> </tr> </tbody> </table> <p>Date: 27 MAY 2020 16:36:30</p>	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1		1	2.40315 GHz	-3.19 dBm			M2		1	2.4126 GHz	3.25 dBm			D3	M1	1	17.7 MHz	-0.87 dB		
Type	Ref	Trc	X-value	Y-value	Function	Function Result																								
M1		1	2.40315 GHz	-3.19 dBm																										
M2		1	2.4126 GHz	3.25 dBm																										
D3	M1	1	17.7 MHz	-0.87 dB																										
CH06		 <p><b>Spectrum</b>                  Ref Level 20.50 dBm Offset 1.00 dB RBW 100 kHz                  Att 30 dB SWT 75.9 μs VBW 300 kHz Mode Auto FFT                  Count 500/500</p> <p>CF 2.437 GHz 1001 pts Span 30.0 MHz</p> <table border="1"> <thead> <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> </thead> <tbody> <tr> <td>M1</td> <td></td> <td>1</td> <td>2.42809 GHz</td> <td>-4.65 dBm</td> <td></td> <td></td> </tr> <tr> <td>M2</td> <td></td> <td>1</td> <td>2.43946 GHz</td> <td>3.47 dBm</td> <td></td> <td></td> </tr> <tr> <td>D3</td> <td>M1</td> <td>1</td> <td>17.76 MHz</td> <td>1.83 dB</td> <td></td> <td></td> </tr> </tbody> </table> <p>Date: 27 MAY 2020 16:39:21</p>	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1		1	2.42809 GHz	-4.65 dBm			M2		1	2.43946 GHz	3.47 dBm			D3	M1	1	17.76 MHz	1.83 dB		
Type	Ref	Trc	X-value	Y-value	Function	Function Result																								
M1		1	2.42809 GHz	-4.65 dBm																										
M2		1	2.43946 GHz	3.47 dBm																										
D3	M1	1	17.76 MHz	1.83 dB																										
CH11		 <p><b>Spectrum</b>                  Ref Level 20.50 dBm Offset 1.00 dB RBW 100 kHz                  Att 30 dB SWT 75.9 μs VBW 300 kHz Mode Auto FFT                  Count 500/500</p> <p>CF 2.462 GHz 1001 pts Span 30.0 MHz</p> <table border="1"> <thead> <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> </thead> <tbody> <tr> <td>M1</td> <td></td> <td>1</td> <td>2.45315 GHz</td> <td>-2.47 dBm</td> <td></td> <td></td> </tr> <tr> <td>M2</td> <td></td> <td>1</td> <td>2.46446 GHz</td> <td>4.18 dBm</td> <td></td> <td></td> </tr> <tr> <td>D3</td> <td>M1</td> <td>1</td> <td>17.61 MHz</td> <td>0.59 dB</td> <td></td> <td></td> </tr> </tbody> </table> <p>Date: 27 MAY 2020 16:41:30</p>	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1		1	2.45315 GHz	-2.47 dBm			M2		1	2.46446 GHz	4.18 dBm			D3	M1	1	17.61 MHz	0.59 dB		
Type	Ref	Trc	X-value	Y-value	Function	Function Result																								
M1		1	2.45315 GHz	-2.47 dBm																										
M2		1	2.46446 GHz	4.18 dBm																										
D3	M1	1	17.61 MHz	0.59 dB																										

Type:		802.11n(HT40)																												
CH03	<p><b>Spectrum</b>                  Ref Level 20.50 dBm Offset 1.00 dB RBW 100 kHz                  Att 30 dB SWT 132.7 <math>\mu</math>s VBW 300 kHz Mode Auto FFT                  Count 500/500                  IPK View                  M1[1] -6.69 dBm                  2.4040600 GHz                  M2[1] 0.24 dBm                  2.4204400 GHz                  D1 -5.756 dBm                  CF 2.422 GHz 1001 pts Span 60.0 MHz</p> <table border="1"> <thead> <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> </thead> <tbody> <tr> <td>M1</td> <td></td> <td>1</td> <td>2.40406 GHz</td> <td>-6.69 dBm</td> <td></td> <td></td> </tr> <tr> <td>M2</td> <td></td> <td>1</td> <td>2.42044 GHz</td> <td>0.24 dBm</td> <td></td> <td></td> </tr> <tr> <td>D3</td> <td>M1</td> <td>1</td> <td>36.12 MHz</td> <td>0.71 dB</td> <td></td> <td></td> </tr> </tbody> </table> <p>Date: 28 MAY 2020 10:40:59</p>		Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1		1	2.40406 GHz	-6.69 dBm			M2		1	2.42044 GHz	0.24 dBm			D3	M1	1	36.12 MHz	0.71 dB		
Type	Ref	Trc	X-value	Y-value	Function	Function Result																								
M1		1	2.40406 GHz	-6.69 dBm																										
M2		1	2.42044 GHz	0.24 dBm																										
D3	M1	1	36.12 MHz	0.71 dB																										
CH06	<p><b>Spectrum</b>                  Ref Level 20.50 dBm Offset 1.00 dB RBW 100 kHz                  Att 30 dB SWT 132.7 <math>\mu</math>s VBW 300 kHz Mode Auto FFT                  Count 500/500                  IPK View                  M1[1] -5.71 dBm                  2.4190000 GHz                  M2[1] 0.46 dBm                  2.4407200 GHz                  D1 -5.538 dBm                  CF 2.437 GHz 1001 pts Span 60.0 MHz</p> <table border="1"> <thead> <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> </thead> <tbody> <tr> <td>M1</td> <td></td> <td>1</td> <td>2.419 GHz</td> <td>-5.71 dBm</td> <td></td> <td></td> </tr> <tr> <td>M2</td> <td></td> <td>1</td> <td>2.44072 GHz</td> <td>0.46 dBm</td> <td></td> <td></td> </tr> <tr> <td>D3</td> <td>M1</td> <td>1</td> <td>36.18 MHz</td> <td>-0.65 dB</td> <td></td> <td></td> </tr> </tbody> </table> <p>Date: 28 MAY 2020 10:46:23</p>		Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1		1	2.419 GHz	-5.71 dBm			M2		1	2.44072 GHz	0.46 dBm			D3	M1	1	36.18 MHz	-0.65 dB		
Type	Ref	Trc	X-value	Y-value	Function	Function Result																								
M1		1	2.419 GHz	-5.71 dBm																										
M2		1	2.44072 GHz	0.46 dBm																										
D3	M1	1	36.18 MHz	-0.65 dB																										
CH09	<p><b>Spectrum</b>                  Ref Level 20.50 dBm Offset 1.00 dB RBW 100 kHz                  Att 30 dB SWT 132.7 <math>\mu</math>s VBW 300 kHz Mode Auto FFT                  Count 500/500                  IPK View                  M1[1] -6.80 dBm                  2.4340000 GHz                  M2[1] 0.85 dBm                  2.4510400 GHz                  D1 -5.154 dBm                  CF 2.452 GHz 1001 pts Span 60.0 MHz</p> <table border="1"> <thead> <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> </thead> <tbody> <tr> <td>M1</td> <td></td> <td>1</td> <td>2.434 GHz</td> <td>-6.80 dBm</td> <td></td> <td></td> </tr> <tr> <td>M2</td> <td></td> <td>1</td> <td>2.45104 GHz</td> <td>0.85 dBm</td> <td></td> <td></td> </tr> <tr> <td>D3</td> <td>M1</td> <td>1</td> <td>36.18 MHz</td> <td>1.44 dB</td> <td></td> <td></td> </tr> </tbody> </table> <p>Date: 28 MAY 2020 10:49:03</p>		Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1		1	2.434 GHz	-6.80 dBm			M2		1	2.45104 GHz	0.85 dBm			D3	M1	1	36.18 MHz	1.44 dB		
Type	Ref	Trc	X-value	Y-value	Function	Function Result																								
M1		1	2.434 GHz	-6.80 dBm																										
M2		1	2.45104 GHz	0.85 dBm																										
D3	M1	1	36.18 MHz	1.44 dB																										

**Appendix D: 99% Occupied Bandwidth**

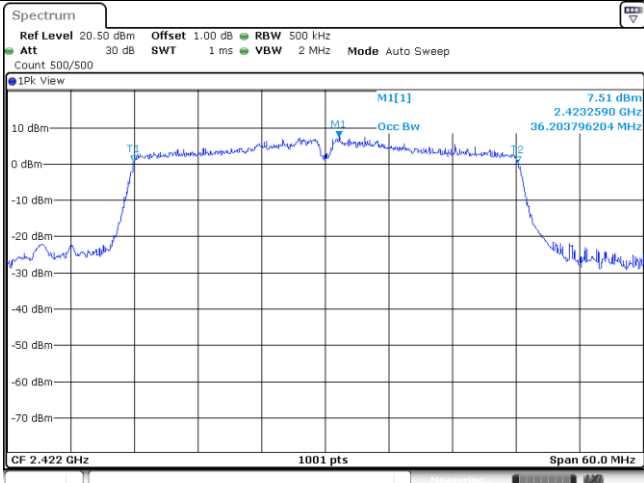
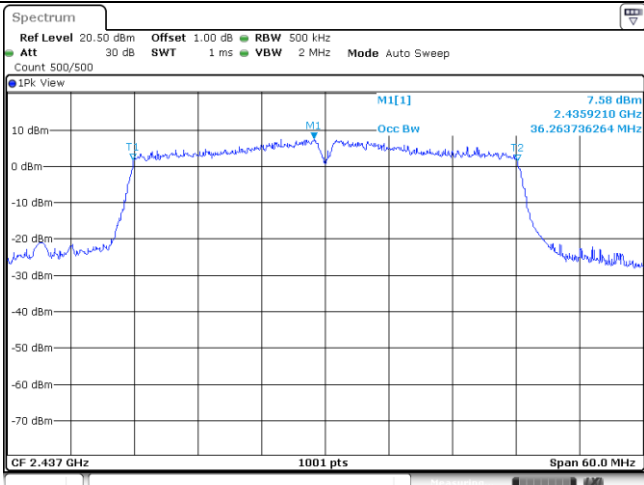
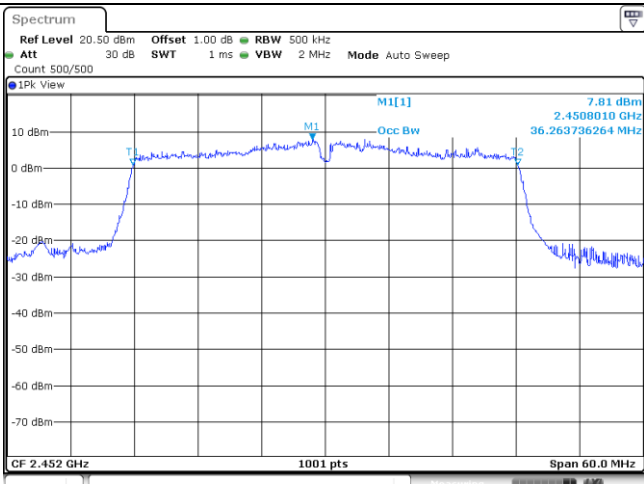
Type	Channel	99% Bandwidth (MHz)	Limit (kHz)	Result
802.11b	01	11.51	-	Pass
	06	11.60		
	11	11.57		
802.11g	01	16.60	-	Pass
	06	16.54		
	11	16.45		
802.11n(HT20)	01	17.83	-	Pass
	06	17.80		
	11	17.71		
802.11n(HT40)	03	36.20	-	Pass
	06	36.26		
	09	36.26		

Type:		802.11 b
CH01	<p>                     Spectrum                      Ref Level 20.50 dBm    Offset 1.00 dB    RBW 300 kHz                      Att 30 dB    SWT 25.3 μs    VBW 1 MHz    Mode Auto FFT                      Count 500/500                      1PK View                      11.11 dBm                      2.4105610 GHz                      11.508491508 MHz                      CF 2.412 GHz    1001 pts    Span 30.0 MHz                      Date: 27 MAY 2020 16:19:17                 </p>	
CH06	<p>                     Spectrum                      Ref Level 20.50 dBm    Offset 1.00 dB    RBW 300 kHz                      Att 30 dB    SWT 25.3 μs    VBW 1 MHz    Mode Auto FFT                      Count 500/500                      1PK View                      10.96 dBm                      2.4377790 GHz                      11.598401598 MHz                      CF 2.437 GHz    1001 pts    Span 30.0 MHz                      Date: 27 MAY 2020 16:23:44                 </p>	
CH11	<p>                     Spectrum                      Ref Level 20.50 dBm    Offset 1.00 dB    RBW 300 kHz                      Att 30 dB    SWT 25.3 μs    VBW 1 MHz    Mode Auto FFT                      Count 500/500                      1PK View                      11.54 dBm                      2.4614610 GHz                      11.568431568 MHz                      CF 2.462 GHz    1001 pts    Span 30.0 MHz                      Date: 27 MAY 2020 16:25:54                 </p>	

Type:		802.11 g
CH01	<p>Ref Level 20.50 dBm    Offset 1.00 dB    RBW 300 kHz            Att 30 dB    SWT 25.3 μs    VBW 1 MHz    Mode Auto FFT            Count 500/500</p> <p>8.24 dBm            2.4124800 GHz            16.603396603 MHz</p> <p>CF 2.412 GHz    1001 pts    Span 30.0 MHz</p> <p>Date: 27 MAY 2020 16:29:12</p>	
CH06	<p>Ref Level 20.50 dBm    Offset 1.00 dB    RBW 300 kHz            Att 30 dB    SWT 25.3 μs    VBW 1 MHz    Mode Auto FFT            Count 500/500</p> <p>8.86 dBm            2.4375090 GHz            16.543456543 MHz</p> <p>CF 2.437 GHz    1001 pts    Span 30.0 MHz</p> <p>Date: 27 MAY 2020 16:31:42</p>	
CH11	<p>Ref Level 20.50 dBm    Offset 1.00 dB    RBW 300 kHz            Att 30 dB    SWT 25.3 μs    VBW 1 MHz    Mode Auto FFT            Count 500/500</p> <p>9.22 dBm            2.4625090 GHz            16.453546454 MHz</p> <p>CF 2.462 GHz    1001 pts    Span 30.0 MHz</p> <p>Date: 27 MAY 2020 16:33:45</p>	

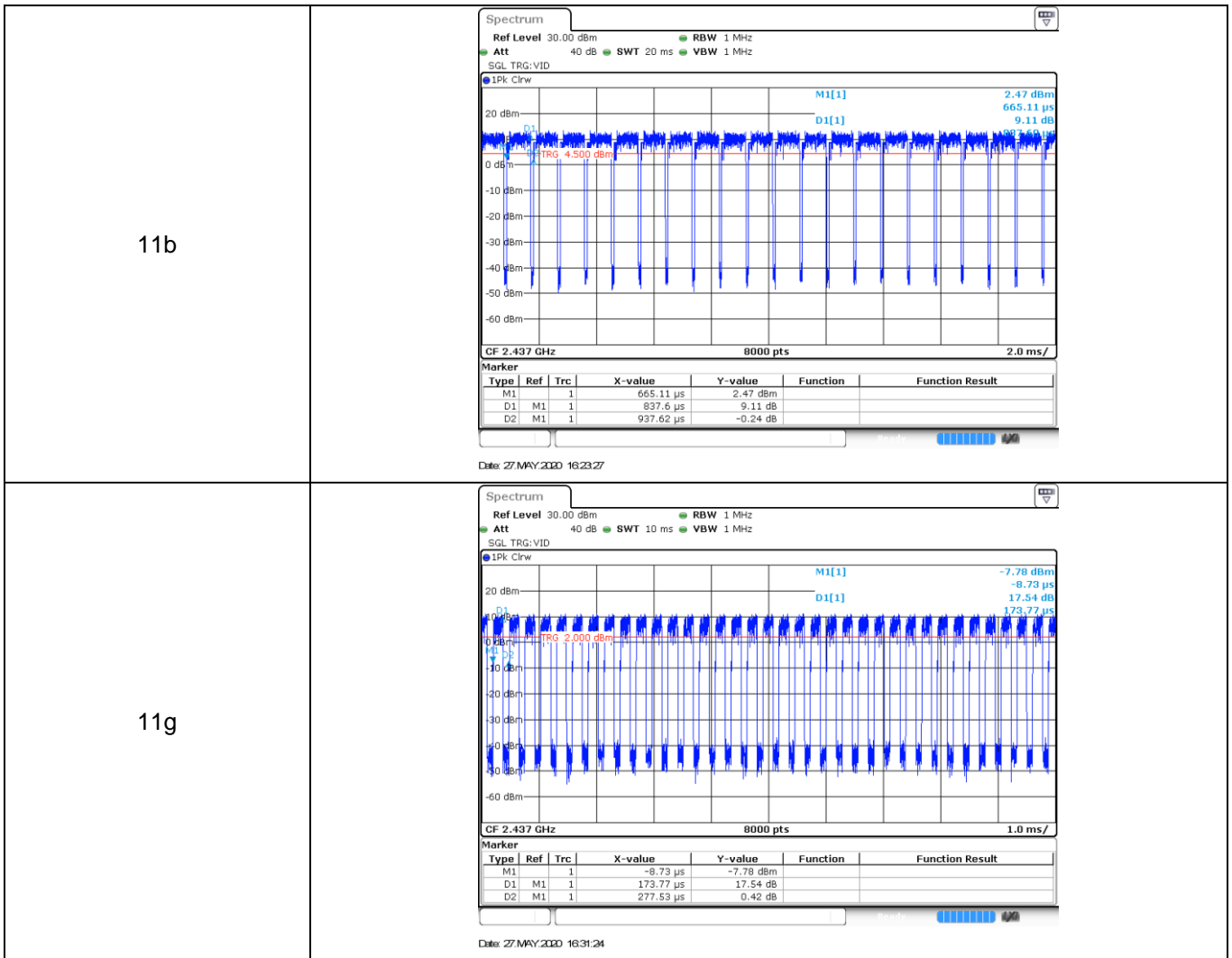
Type:		802.11n(HT20)
CH01	<p>                     Spectrum                      Ref Level 20.50 dBm    Offset 1.00 dB    RBW 300 kHz                      Att 30 dB    SWT 25.3 μs    VBW 1 MHz    Mode Auto FFT                      Count 500/500                      1PK View                      6.87 dBm                      2.4115500 GHz                      17.832167832 MHz                      CF 2.412 GHz    1001 pts    Span 30.0 MHz                      Date: 27 MAY 2020 16:36:47                 </p>	
CH06	<p>                     Spectrum                      Ref Level 20.50 dBm    Offset 1.00 dB    RBW 300 kHz                      Att 30 dB    SWT 25.3 μs    VBW 1 MHz    Mode Auto FFT                      Count 500/500                      1PK View                      7.43 dBm                      2.4362210 GHz                      17.802197802 MHz                      CF 2.437 GHz    1001 pts    Span 30.0 MHz                      Date: 27 MAY 2020 16:36:39                 </p>	
CH11	<p>                     Spectrum                      Ref Level 20.50 dBm    Offset 1.00 dB    RBW 300 kHz                      Att 30 dB    SWT 25.3 μs    VBW 1 MHz    Mode Auto FFT                      Count 500/500                      1PK View                      8.89 dBm                      2.4612210 GHz                      17.712287712 MHz                      CF 2.462 GHz    1001 pts    Span 30.0 MHz                      Date: 27 MAY 2020 16:41:39                 </p>	

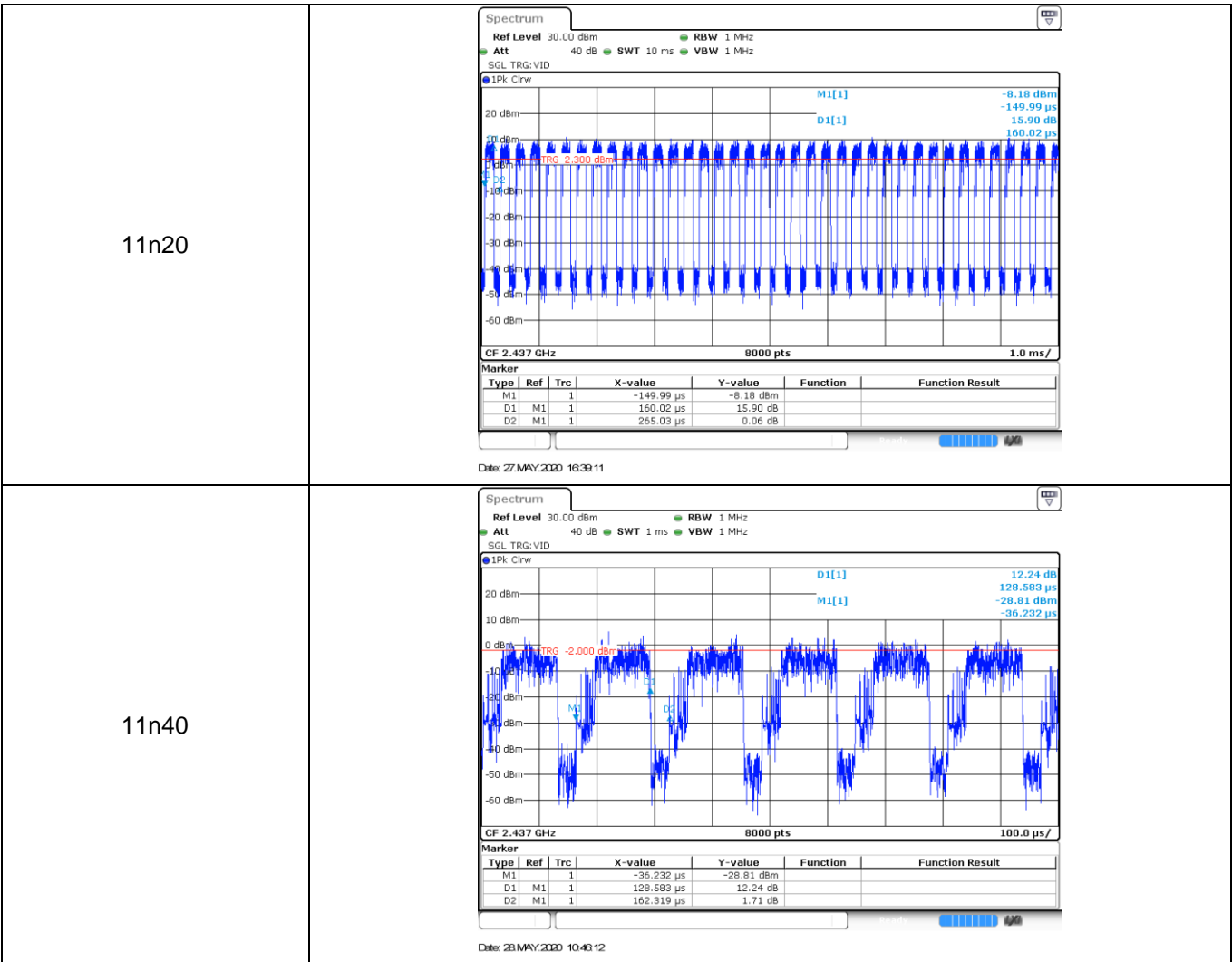


Type:		802.11n(HT40)
CH03	 <p>Spectrum</p> <p>Ref Level 20.50 dBm Offset 1.00 dB RBW 500 kHz Att 30 dB SWT 1 ms VBW 2 MHz Mode Auto Sweep Count 500/500</p> <p>IPK View</p> <p>7.51 dBm 2.4222590 GHz 36.203796204 MHz</p> <p>CF 2.422 GHz 1001 pts Span 60.0 MHz</p> <p>Date: 28 MAY 2020 10:41:09</p>	
CH06	 <p>Spectrum</p> <p>Ref Level 20.50 dBm Offset 1.00 dB RBW 500 kHz Att 30 dB SWT 1 ms VBW 2 MHz Mode Auto Sweep Count 500/500</p> <p>IPK View</p> <p>7.50 dBm 2.4359210 GHz 36.263736264 MHz</p> <p>CF 2.437 GHz 1001 pts Span 60.0 MHz</p> <p>Date: 28 MAY 2020 10:43:31</p>	
CH09	 <p>Spectrum</p> <p>Ref Level 20.50 dBm Offset 1.00 dB RBW 500 kHz Att 30 dB SWT 1 ms VBW 2 MHz Mode Auto Sweep Count 500/500</p> <p>IPK View</p> <p>7.81 dBm 2.4508010 GHz 36.263736264 MHz</p> <p>CF 2.452 GHz 1001 pts Span 60.0 MHz</p> <p>Date: 28 MAY 2020 10:43:12</p>	

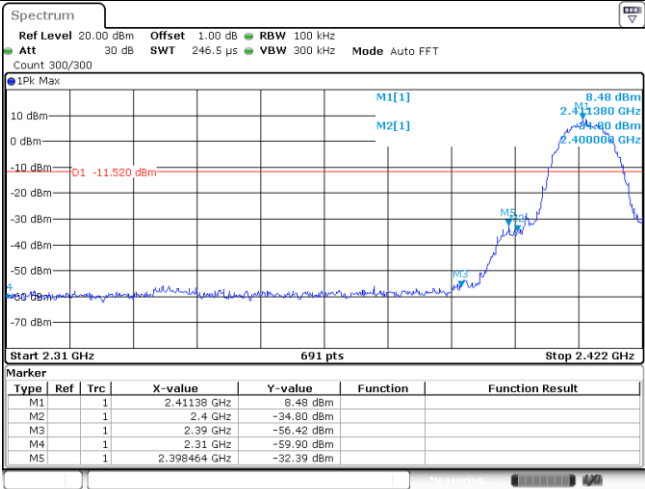

**Appendix E: Duty Cycle**


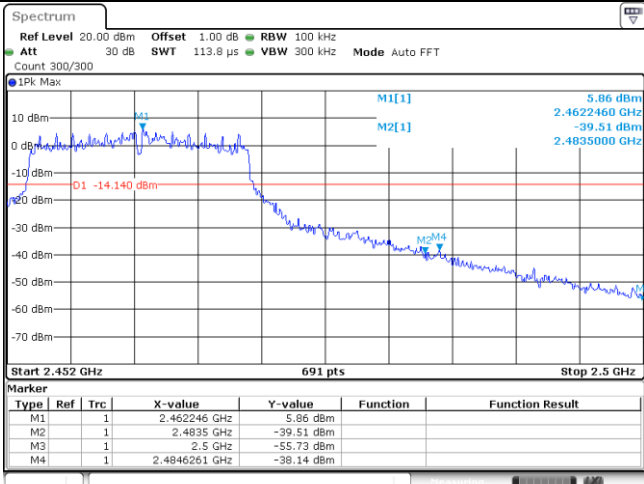
Modulation Type	Test Frequency (MHz)	T <sub>on time</sub> for single burst (ms)	T <sub>period</sub> (ms)	Duty cycle	1/T <sub>on time</sub> (kHz)
11b	2437	0.84	0.94	89.4%	1.2
11g	2437	0.17	0.28	60.7%	5.9
11n20	2437	0.16	0.27	59.3%	6.3
11n40	2437	0.13	0.16	81.3%	7.7

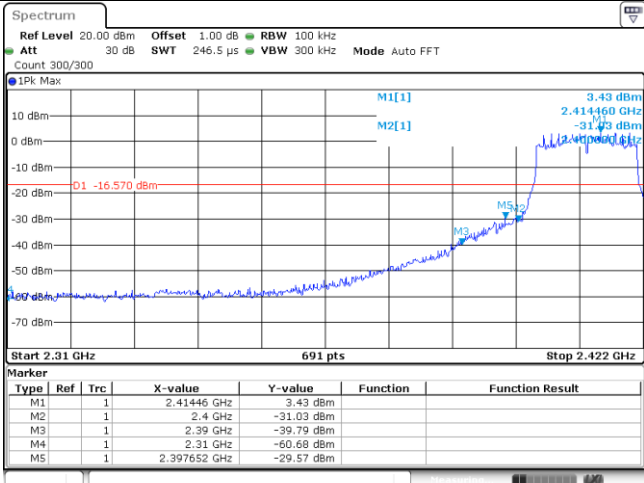
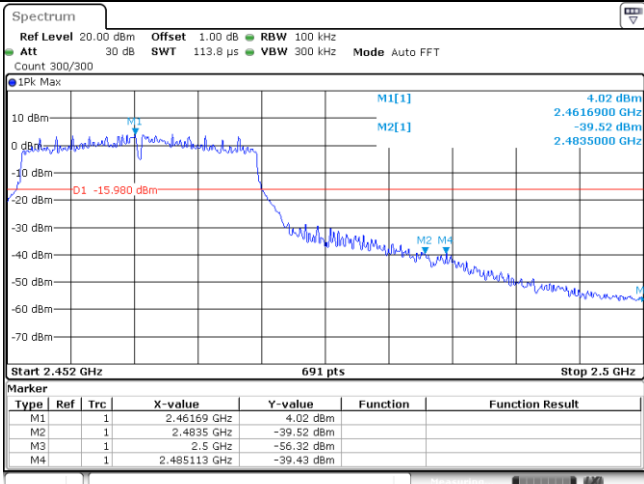




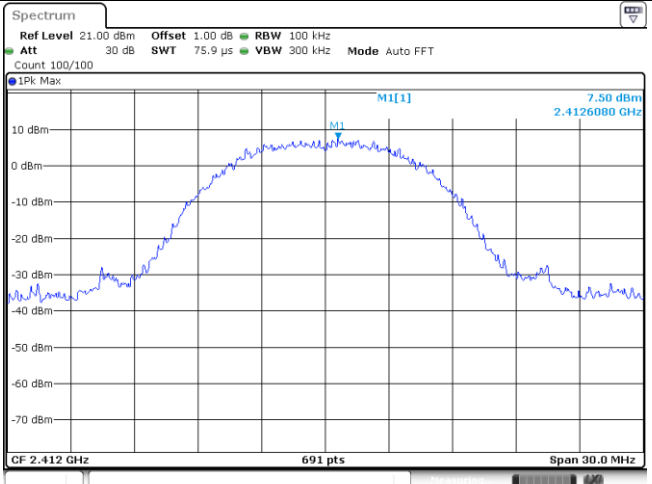
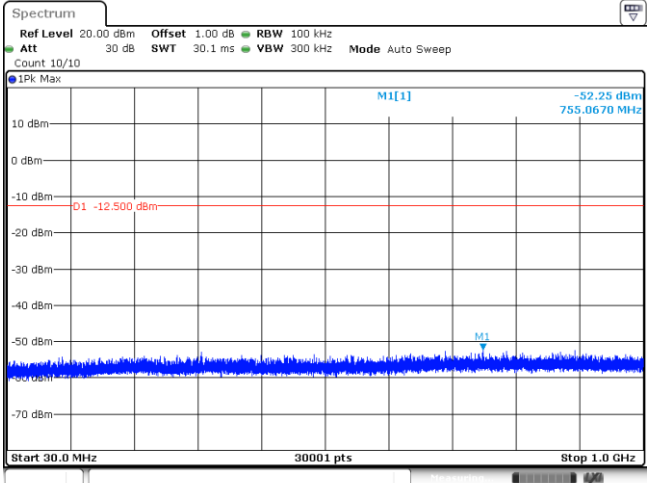
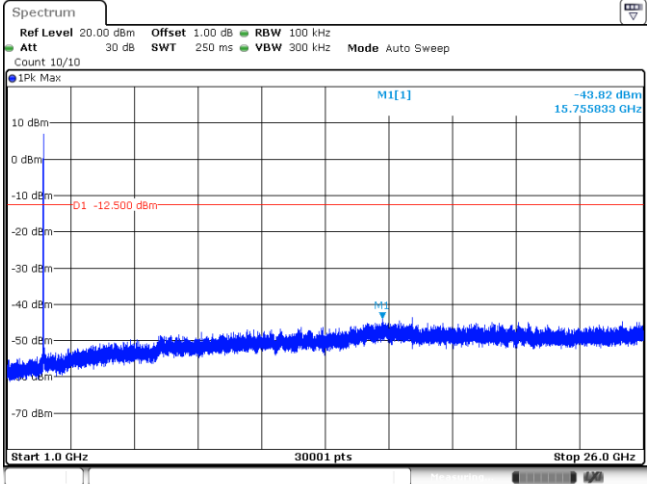
**Appendix F: Band edge and Spurious Emissions (conducted)**

Test Item:	Bandedge	Type:	802.11 b																																																
CH01	 <p><b>Spectrum</b>            Ref Level 20.00 dBm Offset 1.00 dB RBW 100 kHz            Att 30 dB SWT 246.5 μs VBW 300 kHz Mode Auto FFT            Count 300/300            1Pk Max</p> <p>Start 2.31 GHz 691 pts Stop 2.422 GHz</p> <table border="1"> <thead> <tr> <th>Marker</th> <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> </thead> <tbody> <tr> <td>M1</td> <td>1</td> <td></td> <td></td> <td>2.41138 GHz</td> <td>8.48 dBm</td> <td></td> <td></td> </tr> <tr> <td>M2</td> <td>1</td> <td></td> <td></td> <td>2.4 GHz</td> <td>-34.80 dBm</td> <td></td> <td></td> </tr> <tr> <td>M3</td> <td>1</td> <td></td> <td></td> <td>2.39 GHz</td> <td>-56.42 dBm</td> <td></td> <td></td> </tr> <tr> <td>M4</td> <td>1</td> <td></td> <td></td> <td>2.31 GHz</td> <td>-59.90 dBm</td> <td></td> <td></td> </tr> <tr> <td>M5</td> <td>1</td> <td></td> <td></td> <td>2.398464 GHz</td> <td>-32.39 dBm</td> <td></td> <td></td> </tr> </tbody> </table> <p>Date: 27 MAY 2020 16:20:35</p>			Marker	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1			2.41138 GHz	8.48 dBm			M2	1			2.4 GHz	-34.80 dBm			M3	1			2.39 GHz	-56.42 dBm			M4	1			2.31 GHz	-59.90 dBm			M5	1			2.398464 GHz	-32.39 dBm		
Marker	Type	Ref	Trc	X-value	Y-value	Function	Function Result																																												
M1	1			2.41138 GHz	8.48 dBm																																														
M2	1			2.4 GHz	-34.80 dBm																																														
M3	1			2.39 GHz	-56.42 dBm																																														
M4	1			2.31 GHz	-59.90 dBm																																														
M5	1			2.398464 GHz	-32.39 dBm																																														
CH11	 <p><b>Spectrum</b>            Ref Level 20.00 dBm Offset 1.00 dB RBW 100 kHz            Att 30 dB SWT 113.8 μs VBW 300 kHz Mode Auto FFT            Count 300/300            1Pk Max</p> <p>Start 2.452 GHz 691 pts Stop 2.5 GHz</p> <table border="1"> <thead> <tr> <th>Marker</th> <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> </thead> <tbody> <tr> <td>M1</td> <td>1</td> <td></td> <td></td> <td>2.461968 GHz</td> <td>7.61 dBm</td> <td></td> <td></td> </tr> <tr> <td>M2</td> <td>1</td> <td></td> <td></td> <td>2.4835 GHz</td> <td>-49.25 dBm</td> <td></td> <td></td> </tr> <tr> <td>M3</td> <td>1</td> <td></td> <td></td> <td>2.5 GHz</td> <td>-57.30 dBm</td> <td></td> <td></td> </tr> <tr> <td>M4</td> <td>1</td> <td></td> <td></td> <td>2.483513 GHz</td> <td>-49.25 dBm</td> <td></td> <td></td> </tr> </tbody> </table> <p>Date: 27 MAY 2020 16:26:49</p>			Marker	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1			2.461968 GHz	7.61 dBm			M2	1			2.4835 GHz	-49.25 dBm			M3	1			2.5 GHz	-57.30 dBm			M4	1			2.483513 GHz	-49.25 dBm										
Marker	Type	Ref	Trc	X-value	Y-value	Function	Function Result																																												
M1	1			2.461968 GHz	7.61 dBm																																														
M2	1			2.4835 GHz	-49.25 dBm																																														
M3	1			2.5 GHz	-57.30 dBm																																														
M4	1			2.483513 GHz	-49.25 dBm																																														

Test Item:	Bandedge	Type:	802.11 g																																										
CH01	 <p><b>Marker</b></p> <table border="1"> <thead> <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> </thead> <tbody> <tr> <td>M1</td> <td>1</td> <td></td> <td>2.41236 GHz</td> <td>-4.99 dBm</td> <td></td> <td></td> </tr> <tr> <td>M2</td> <td>1</td> <td></td> <td>2.4 GHz</td> <td>-30.62 dBm</td> <td></td> <td></td> </tr> <tr> <td>M3</td> <td>1</td> <td></td> <td>2.39 GHz</td> <td>-39.40 dBm</td> <td></td> <td></td> </tr> <tr> <td>M4</td> <td>1</td> <td></td> <td>2.31 GHz</td> <td>-59.42 dBm</td> <td></td> <td></td> </tr> <tr> <td>M5</td> <td>1</td> <td></td> <td>2.398951 GHz</td> <td>-28.97 dBm</td> <td></td> <td></td> </tr> </tbody> </table> <p>Date: 27/MAY/2020 16:29:52</p>			Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1		2.41236 GHz	-4.99 dBm			M2	1		2.4 GHz	-30.62 dBm			M3	1		2.39 GHz	-39.40 dBm			M4	1		2.31 GHz	-59.42 dBm			M5	1		2.398951 GHz	-28.97 dBm		
Type	Ref	Trc	X-value	Y-value	Function	Function Result																																							
M1	1		2.41236 GHz	-4.99 dBm																																									
M2	1		2.4 GHz	-30.62 dBm																																									
M3	1		2.39 GHz	-39.40 dBm																																									
M4	1		2.31 GHz	-59.42 dBm																																									
M5	1		2.398951 GHz	-28.97 dBm																																									
CH11	 <p><b>Marker</b></p> <table border="1"> <thead> <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> </thead> <tbody> <tr> <td>M1</td> <td>1</td> <td></td> <td>2.462246 GHz</td> <td>5.86 dBm</td> <td></td> <td></td> </tr> <tr> <td>M2</td> <td>1</td> <td></td> <td>2.4835 GHz</td> <td>-39.51 dBm</td> <td></td> <td></td> </tr> <tr> <td>M3</td> <td>1</td> <td></td> <td>2.5 GHz</td> <td>-55.73 dBm</td> <td></td> <td></td> </tr> <tr> <td>M4</td> <td>1</td> <td></td> <td>2.4846261 GHz</td> <td>-38.14 dBm</td> <td></td> <td></td> </tr> </tbody> </table> <p>Date: 27/MAY/2020 16:34:25</p>			Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1		2.462246 GHz	5.86 dBm			M2	1		2.4835 GHz	-39.51 dBm			M3	1		2.5 GHz	-55.73 dBm			M4	1		2.4846261 GHz	-38.14 dBm									
Type	Ref	Trc	X-value	Y-value	Function	Function Result																																							
M1	1		2.462246 GHz	5.86 dBm																																									
M2	1		2.4835 GHz	-39.51 dBm																																									
M3	1		2.5 GHz	-55.73 dBm																																									
M4	1		2.4846261 GHz	-38.14 dBm																																									

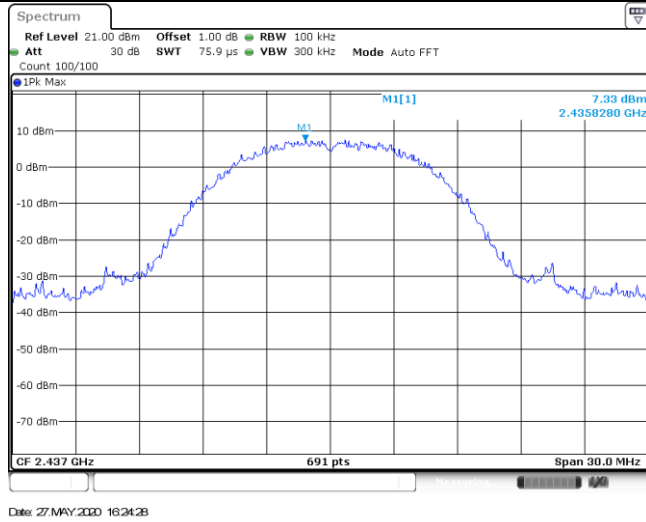
Test Item:	Bandedge	Type:	802.11 n(HT20)																																										
CH01	 <p><b>Marker Table for CH01:</b></p> <table border="1"> <thead> <tr> <th>Type</th> <th>Ref</th> <th>Trc</th> <th>X-value</th> <th>Y-value</th> <th>Function</th> <th>Function Result</th> </tr> </thead> <tbody> <tr> <td>M1</td> <td>1</td> <td></td> <td>2.41446 GHz</td> <td>-31.03 dBm</td> <td></td> <td></td> </tr> <tr> <td>M2</td> <td>1</td> <td></td> <td>2.4 GHz</td> <td>-31.03 dBm</td> <td></td> <td></td> </tr> <tr> <td>M3</td> <td>1</td> <td></td> <td>2.39 GHz</td> <td>-39.79 dBm</td> <td></td> <td></td> </tr> <tr> <td>M4</td> <td>1</td> <td></td> <td>2.31 GHz</td> <td>-60.68 dBm</td> <td></td> <td></td> </tr> <tr> <td>M5</td> <td>1</td> <td></td> <td>2.397652 GHz</td> <td>-29.57 dBm</td> <td></td> <td></td> </tr> </tbody> </table> <p>Date: 27 MAY 2020 16:37:44</p>			Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1		2.41446 GHz	-31.03 dBm			M2	1		2.4 GHz	-31.03 dBm			M3	1		2.39 GHz	-39.79 dBm			M4	1		2.31 GHz	-60.68 dBm			M5	1		2.397652 GHz	-29.57 dBm		
Type	Ref	Trc	X-value	Y-value	Function	Function Result																																							
M1	1		2.41446 GHz	-31.03 dBm																																									
M2	1		2.4 GHz	-31.03 dBm																																									
M3	1		2.39 GHz	-39.79 dBm																																									
M4	1		2.31 GHz	-60.68 dBm																																									
M5	1		2.397652 GHz	-29.57 dBm																																									
CH11	 <p><b>Marker Table for CH11:</b></p> <table border="1"> <thead> <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> </thead> <tbody> <tr> <td>M1</td> <td>1</td> <td></td> <td>2.46169 GHz</td> <td>-4.02 dBm</td> <td></td> <td></td> </tr> <tr> <td>M2</td> <td>1</td> <td></td> <td>2.4835 GHz</td> <td>-39.52 dBm</td> <td></td> <td></td> </tr> <tr> <td>M3</td> <td>1</td> <td></td> <td>2.5 GHz</td> <td>-56.32 dBm</td> <td></td> <td></td> </tr> <tr> <td>M4</td> <td>1</td> <td></td> <td>2.485113 GHz</td> <td>-39.43 dBm</td> <td></td> <td></td> </tr> </tbody> </table> <p>Date: 27 MAY 2020 16:42:32</p>			Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1		2.46169 GHz	-4.02 dBm			M2	1		2.4835 GHz	-39.52 dBm			M3	1		2.5 GHz	-56.32 dBm			M4	1		2.485113 GHz	-39.43 dBm									
Type	Ref	Trc	X-value	Y-value	Function	Function Result																																							
M1	1		2.46169 GHz	-4.02 dBm																																									
M2	1		2.4835 GHz	-39.52 dBm																																									
M3	1		2.5 GHz	-56.32 dBm																																									
M4	1		2.485113 GHz	-39.43 dBm																																									

Test Item:	Bandedge	Type:	802.11 n(HT40)
CH03			<p>802.11 n(HT40)</p>
CH09			<p>802.11 n(HT40)</p>

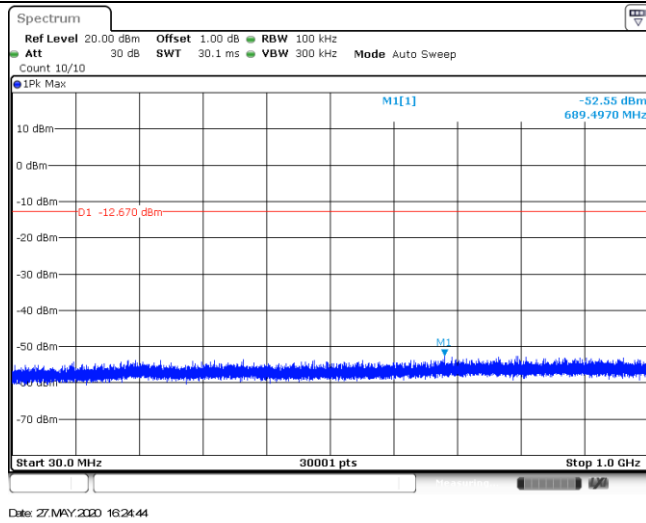
Test Item:	SE	Type:	802.11b
<p>CH01 Reference level</p>		 <p>7.50 dBm 2.4126080 GHz</p> <p>CF 2.412 GHz 691 pts Span 30.0 MHz</p> <p>Date: 27.MAY.2020 16:20:42</p>	
<p>CH01 30MHz~1000MHz</p>		 <p>-12.500 dBm</p> <p>-52.25 dBm 755.0670 MHz</p> <p>Start 30.0 MHz 30001 pts Stop 1.0 GHz</p> <p>Date: 27.MAY.2020 16:20:59</p>	
<p>CH01 1GHz~26GHz</p>		 <p>-12.500 dBm</p> <p>-43.82 dBm 15.755833 GHz</p> <p>Start 1.0 GHz 30001 pts Stop 26.0 GHz</p> <p>Date: 27.MAY.2020 16:21:14</p>	



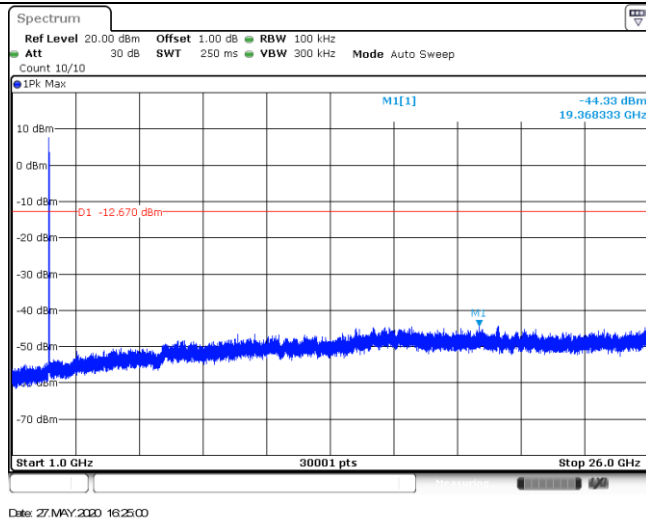
CH06  
Reference level



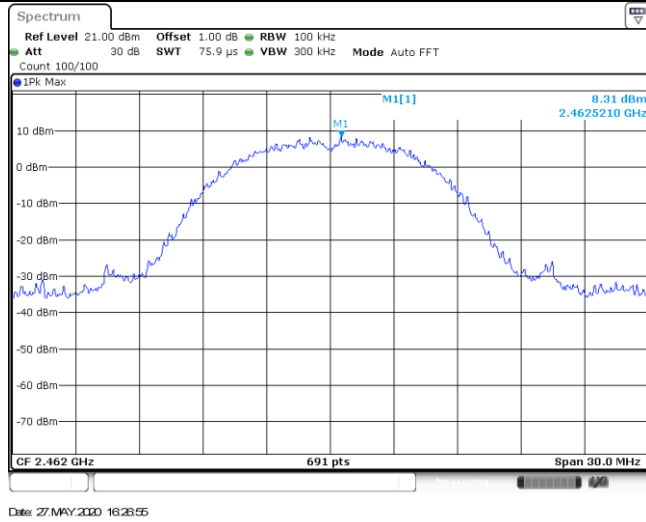
CH06  
30MHz~1000MHz



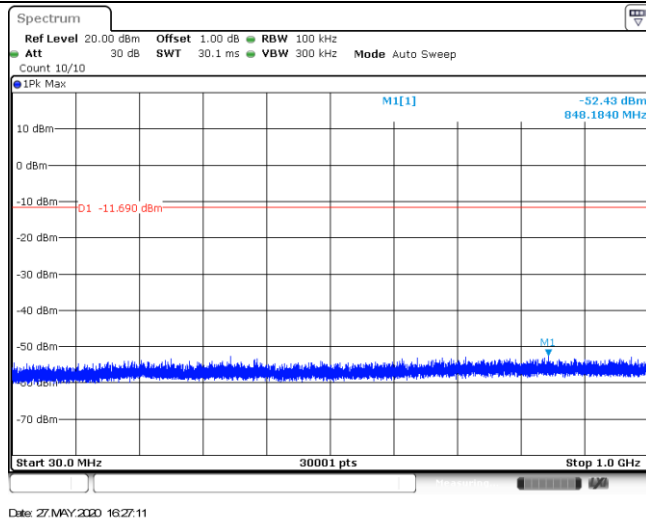
CH06  
1GHz~26GHz



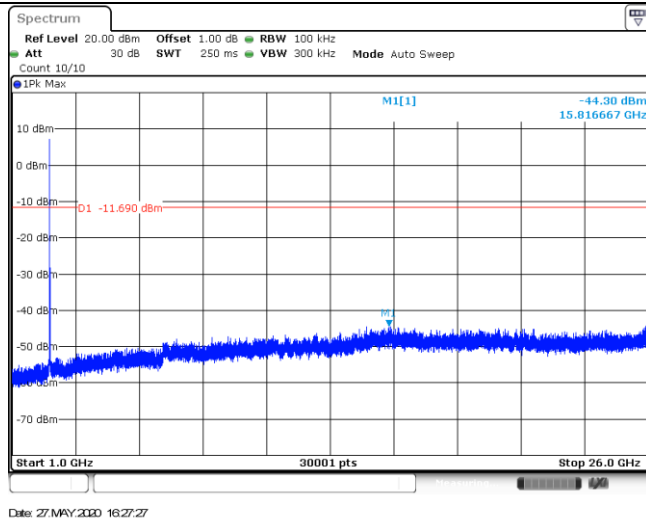
CH11  
Reference level



CH11  
30MHz~1000MHz

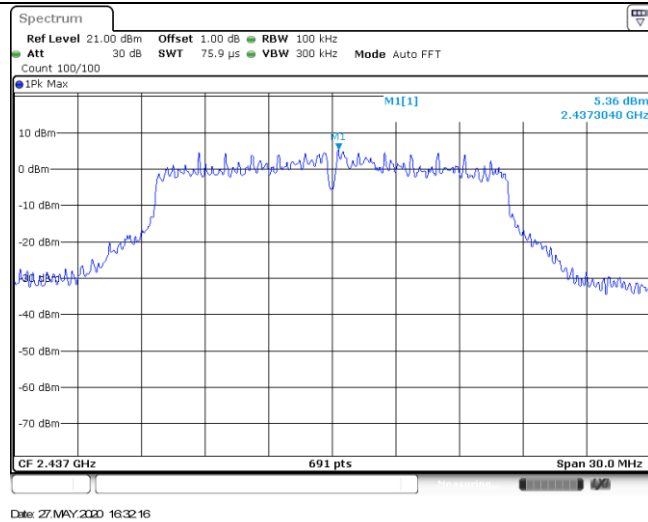


CH11  
1GHz~26GHz

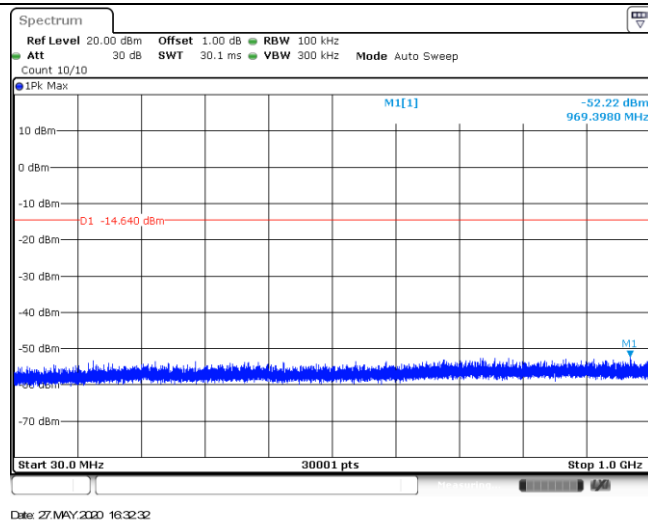


Test Item:	SE	Type:	802.11g
<p>CH01 Reference level</p>		<p>Spectrum</p> <p>Ref Level 21.00 dBm    Offset 1.00 dB    RBW 100 kHz  Att 30 dB    SWT 75.9 <math>\mu</math>s    VBW 300 kHz    Mode Auto FFT  Count 100/100</p> <p>1Pk Max</p> <p>M1[1] 5.02 dBm 2.4122600 GHz</p> <p>CF 2.412 GHz    691 pts    Span 30.0 MHz</p> <p>Date: 27.MAY.2020 16:30:05</p>	
<p>CH01 30MHz~1000MHz</p>		<p>Spectrum</p> <p>Ref Level 20.00 dBm    Offset 1.00 dB    RBW 100 kHz  Att 30 dB    SWT 30.1 ms    VBW 300 kHz    Mode Auto Sweep  Count 10/10</p> <p>1Pk Max</p> <p>M1[1] -52.26 dBm 808.7060 MHz</p> <p>D1 -14.980 dBm</p> <p>Start 30.0 MHz    30001 pts    Stop 1.0 GHz</p> <p>Date: 27.MAY.2020 16:30:21</p>	
<p>CH01 1GHz~26GHz</p>		<p>Spectrum</p> <p>Ref Level 20.00 dBm    Offset 1.00 dB    RBW 100 kHz  Att 30 dB    SWT 250 ms    VBW 300 kHz    Mode Auto Sweep  Count 10/10</p> <p>1Pk Max</p> <p>M1[1] -44.49 dBm 23.944167 GHz</p> <p>D1 -14.980 dBm</p> <p>Start 1.0 GHz    30001 pts    Stop 26.0 GHz</p> <p>Date: 27.MAY.2020 16:30:37</p>	

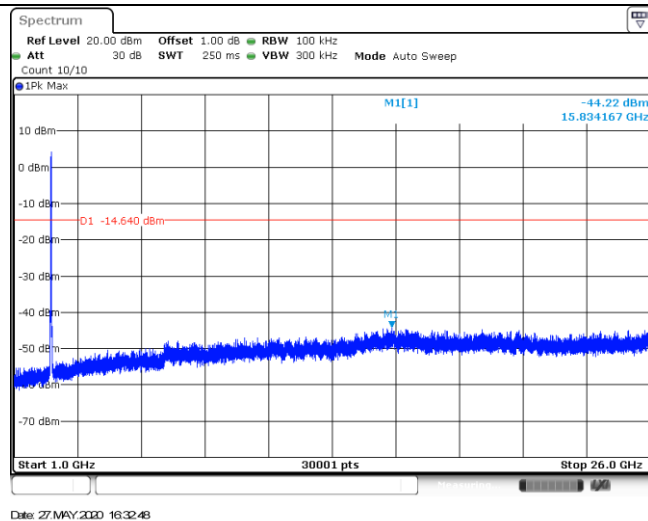
CH06  
Reference level



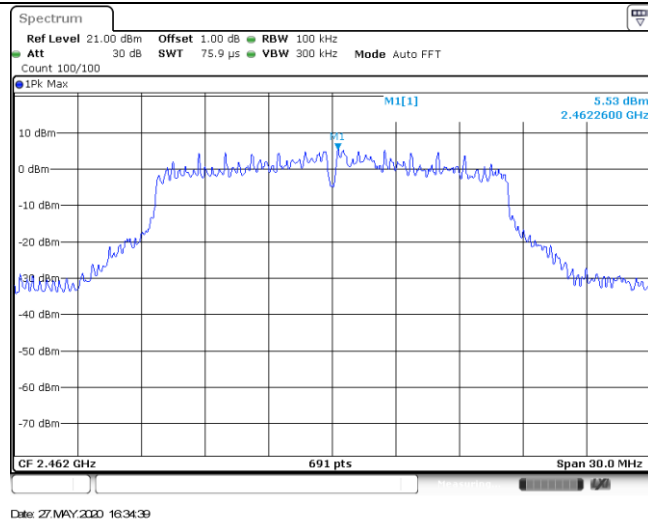
CH06  
30MHz~1000MHz



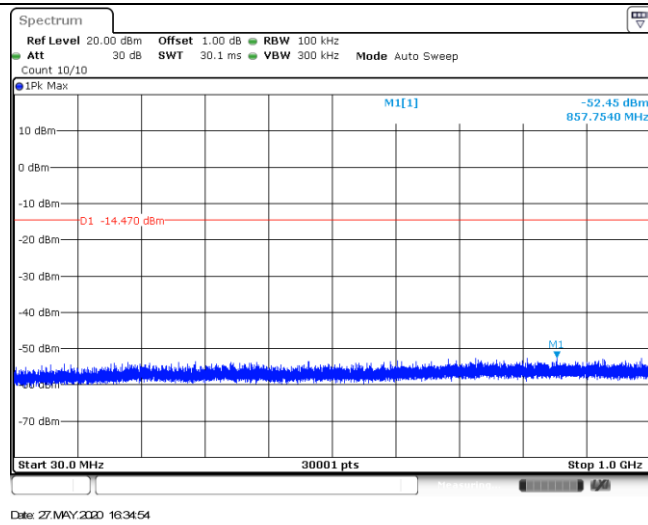
CH06  
1GHz~26GHz



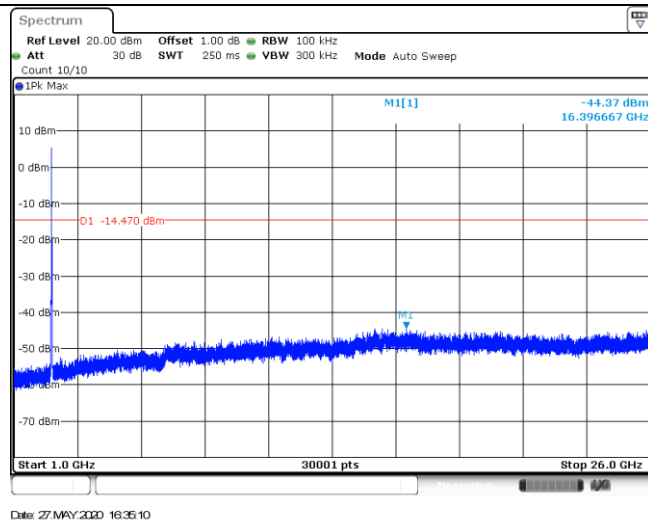
CH11  
Reference level

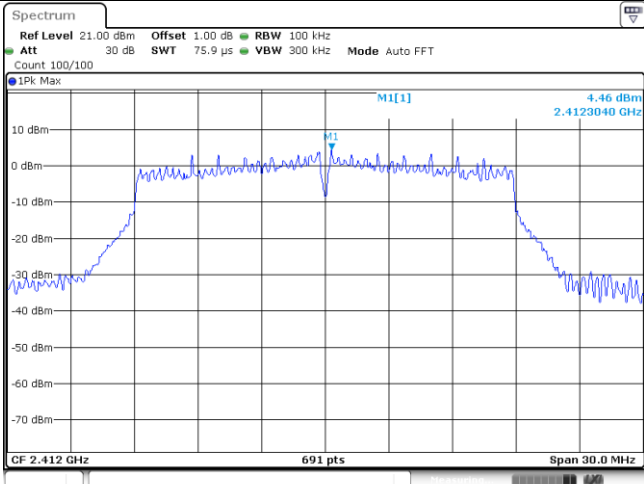
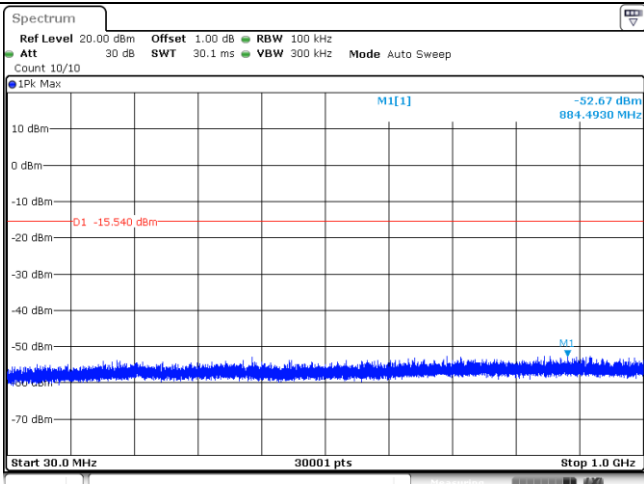
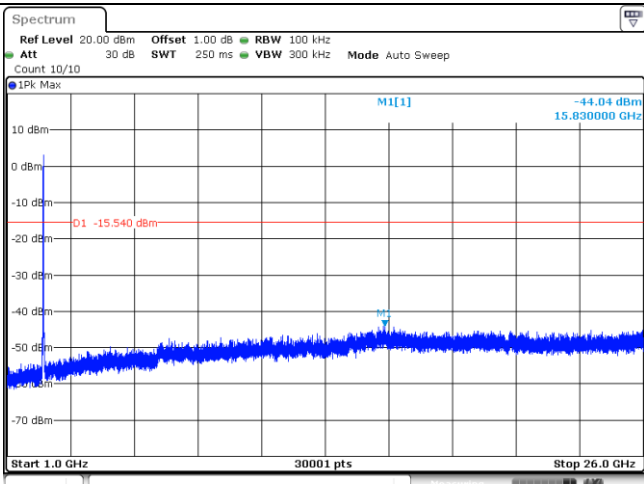


CH11  
30MHz~1000MHz

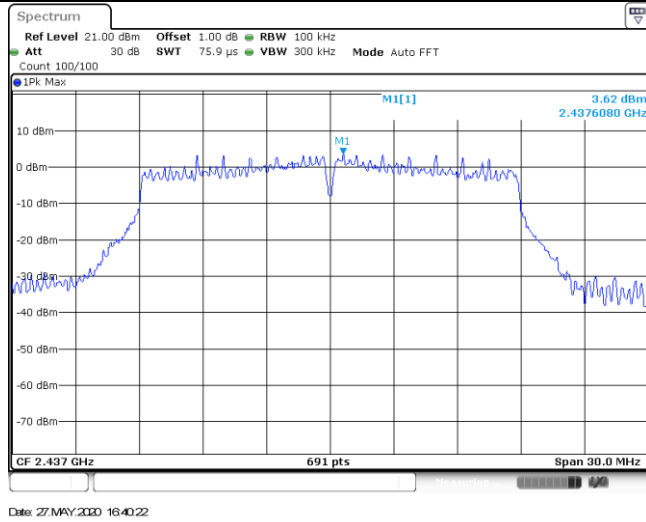


CH11  
1GHz~26GHz

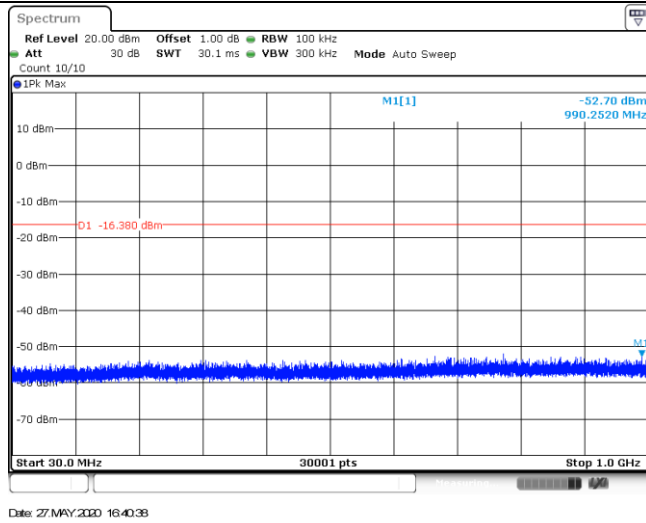


Test Item:	SE	Type:	802.11n(HT20)
<p>CH01 Reference level</p>			
<p>CH01 30MHz~1000MHz</p>			
<p>CH01 1GHz~26GHz</p>			

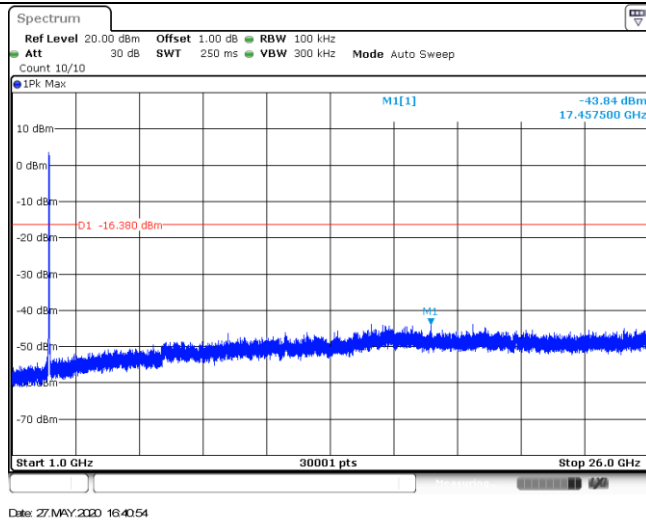
CH06  
Reference level



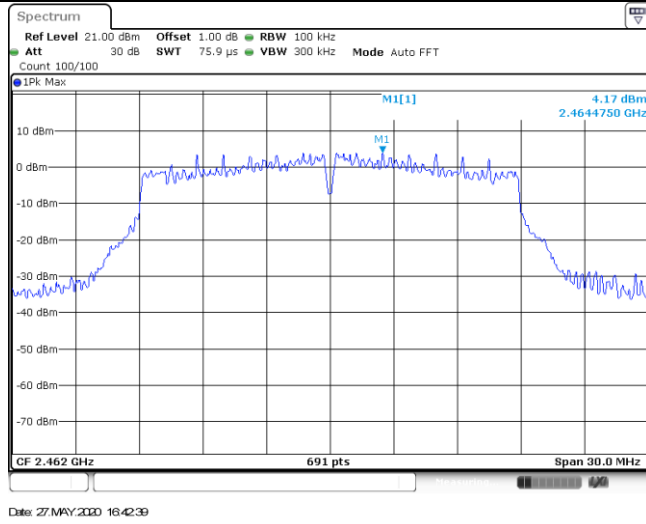
CH06  
30MHz~1000MHz



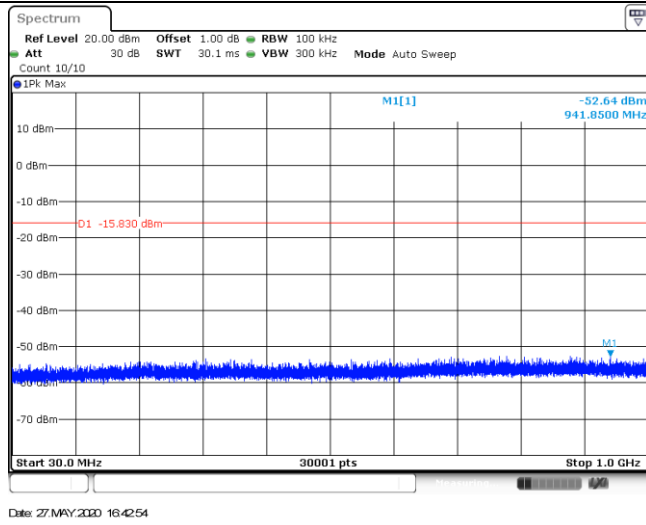
CH06  
1GHz~26GHz



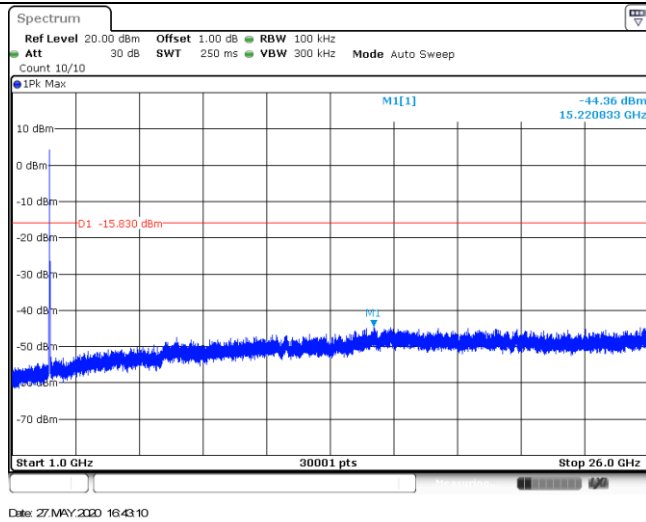
CH11  
Reference level



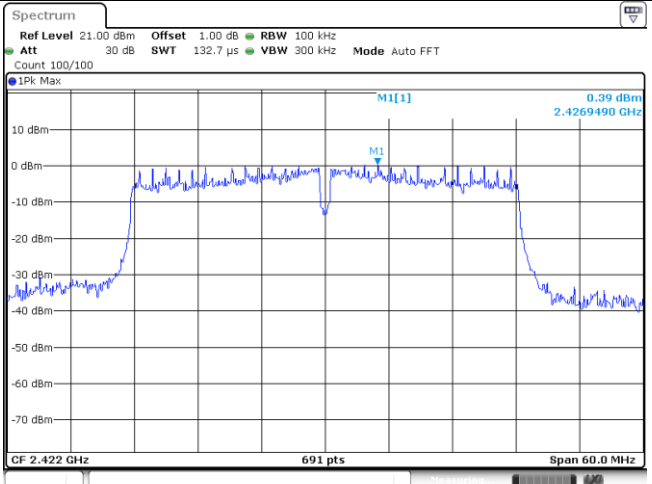
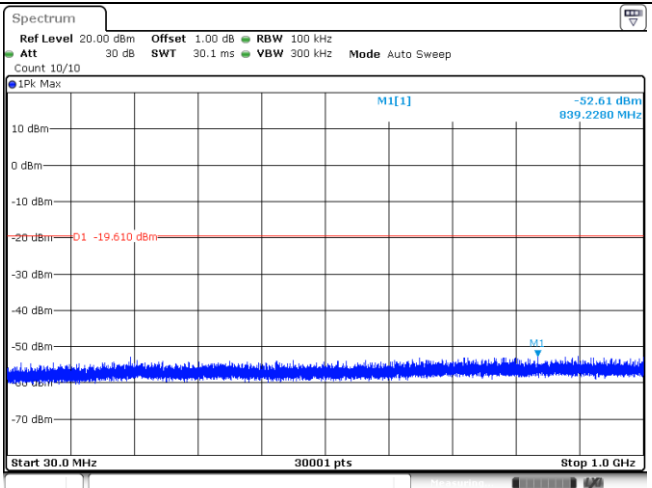
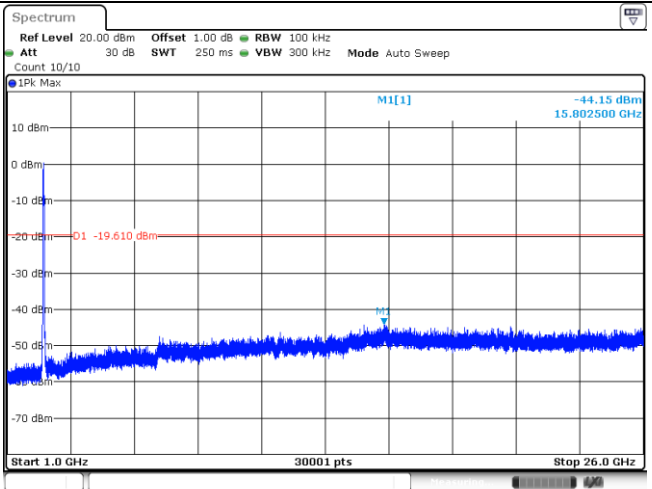
CH11  
30MHz~1000MHz



CH11  
1GHz~26GHz





Test Item:	SE	Type:	802.11n(HT40)
<p>CH03 Reference level</p>		 <p>Date: 28.MAY.2020 10:42:50</p>	
<p>CH03 30MHz~1000MHz</p>		 <p>Date: 28.MAY.2020 10:43:05</p>	
<p>CH03 1GHz~26GHz</p>		 <p>Date: 28.MAY.2020 10:43:22</p>	

<p>CH06 Reference level</p>	
<p>CH06 30MHz~1000MHz</p>	
<p>CH06 1GHz~26GHz</p>	

<p>CH09 Reference level</p>	
<p>CH09 30MHz~1000MHz</p>	
<p>CH09 1GHz~26GHz</p>	

-----End of Report-----