

APPENDIX REPORT

Project No.	SHT2111020903EW	Radio Specification	WIFI 5G
Test sample No.	YPHT21061170008	Model No.	BX6100
Start test date	2021-11-19	Finish date	2021-11-19
Temperature	24.9℃	Humidity	43%
Test Engineer	Xiaoqin Li	Auditor	Xiaodong Zhao

Appendix clause	Test item	Result
A	Maximum Conducted Output Power	PASS
B	Maximum Power Spectral Density	PASS
C	26 dB Bandwidth	PASS
D	99% Occupy bandwidth	PASS
E	6 dB Bandwidth	PASS
F	Frequency stability	PASS

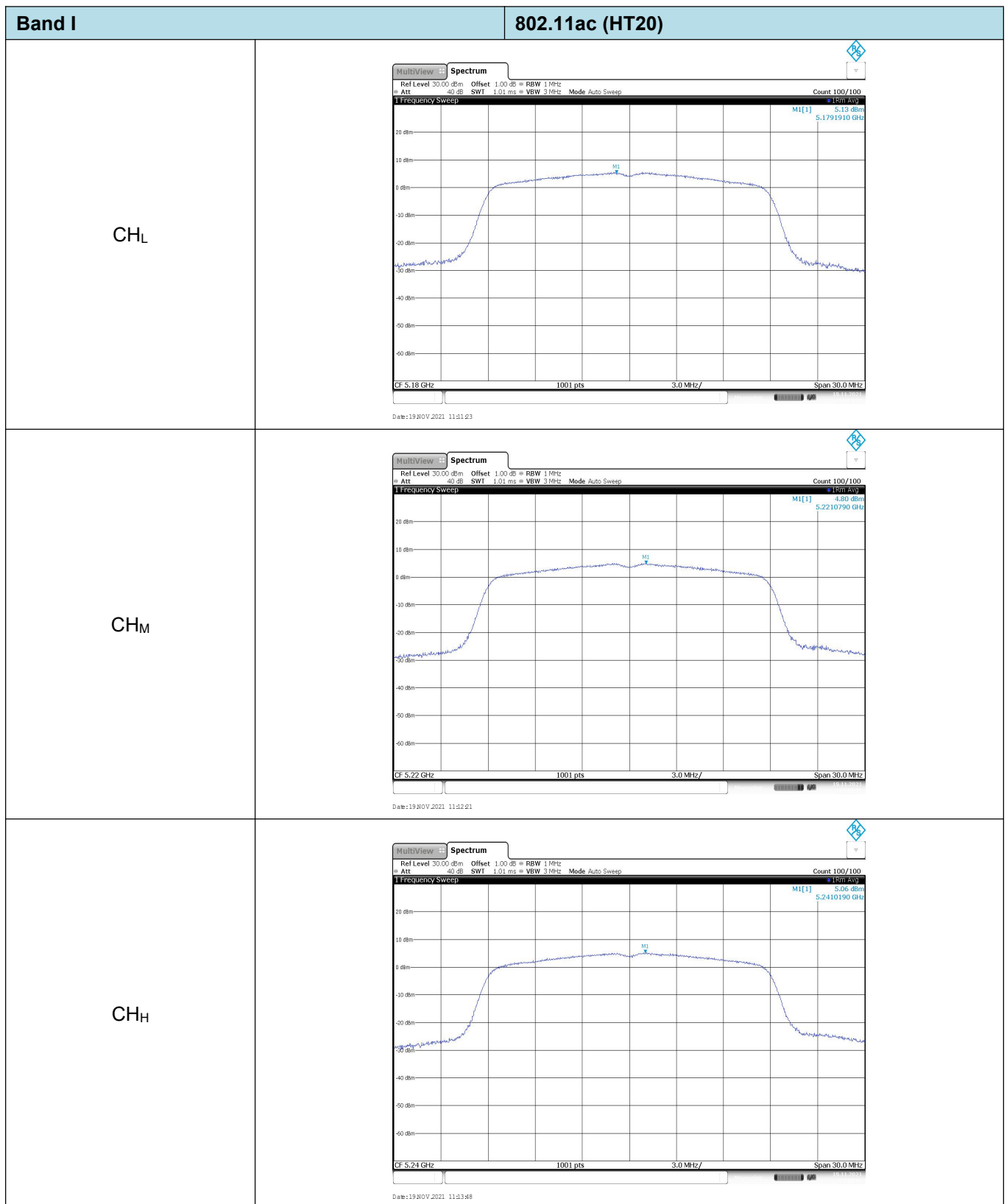
Appendix A: Maximum Conducted Output Power

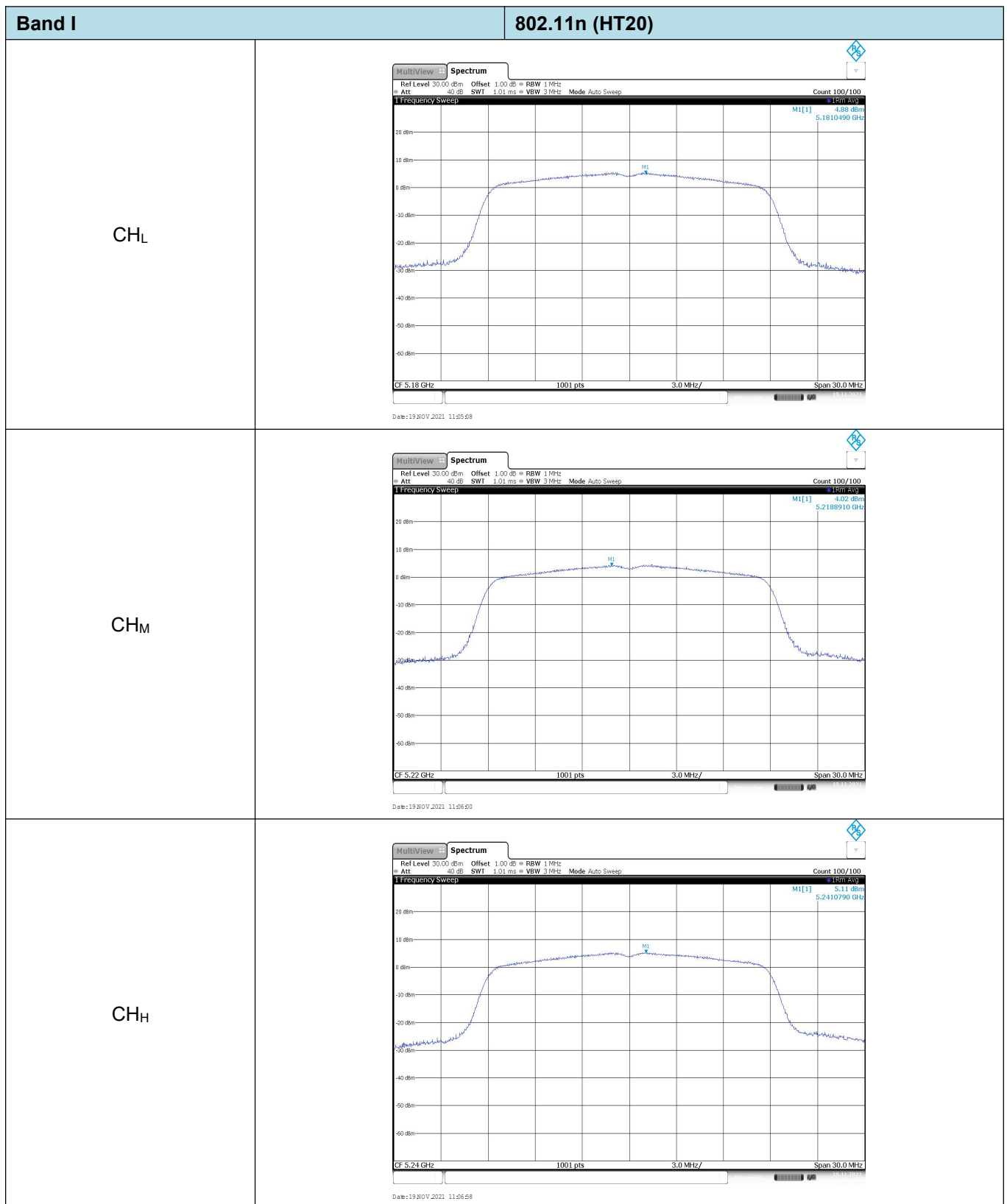
Band	Bandwidth (MHz)	Type	Channel	Reading (dBm)	Duty cycle (%)	Duty cycle factor (dB)	Conducted Output Power (dBm)	Limit (dBm)	Result
I	20	802.11ac	CH _L	15.72	96.57	0.15	15.87	24.00	Pass
			CH _M	15.21	96.48	0.16	15.37		
			CH _H	15.46	96.48	0.16	15.62		
		802.11n	CH _L	15.59	96.55	0.15	15.74	24.00	Pass
			CH _M	14.65	96.46	0.16	14.81		
			CH _H	15.54	96.55	0.15	15.69		
		802.11a	CH _L	16.91	96.77	0.14	17.05	24.00	Pass
			CH _M	16.21	96.77	0.14	16.35		
			CH _H	16.63	96.77	0.14	16.77		
	40	802.11ac	CH _L	15.46	93.48	0.29	15.75	24.00	Pass
			CH _H	15.30	93.48	0.29	15.59		
		802.11n	CH _L	15.57	93.45	0.29	15.86	24.00	Pass
			CH _H	15.36	93.53	0.29	15.65		
	80	802.11ac	CH _M	14.36	87.69	0.57	14.93	24.00	Pass
IV	20	802.11ac	CH _L	9.38	96.58	0.15	9.53	30.00	Pass
			CH _M	9.72	96.58	0.15	9.87		
			CH _H	10.09	96.58	0.15	10.24		
		802.11n	CH _L	9.42	96.55	0.15	9.57	30.00	Pass
			CH _M	9.78	96.46	0.16	9.94		
			CH _H	10.15	96.64	0.15	10.30		
		802.11a	CH _L	9.67	96.77	0.14	9.81	30.00	Pass
			CH _M	10.00	96.77	0.14	10.14		
			CH _H	10.38	96.77	0.14	10.52		
	40	802.11ac	CH _L	9.19	93.48	0.29	9.48	30.00	Pass
			CH _H	9.69	93.48	0.29	9.98		
		802.11n	CH _L	9.27	93.53	0.29	9.56	30.00	Pass
			CH _H	9.64	93.53	0.29	9.93		
	80	802.11ac	CH _M	9.38	87.69	0.57	9.95	30.00	Pass

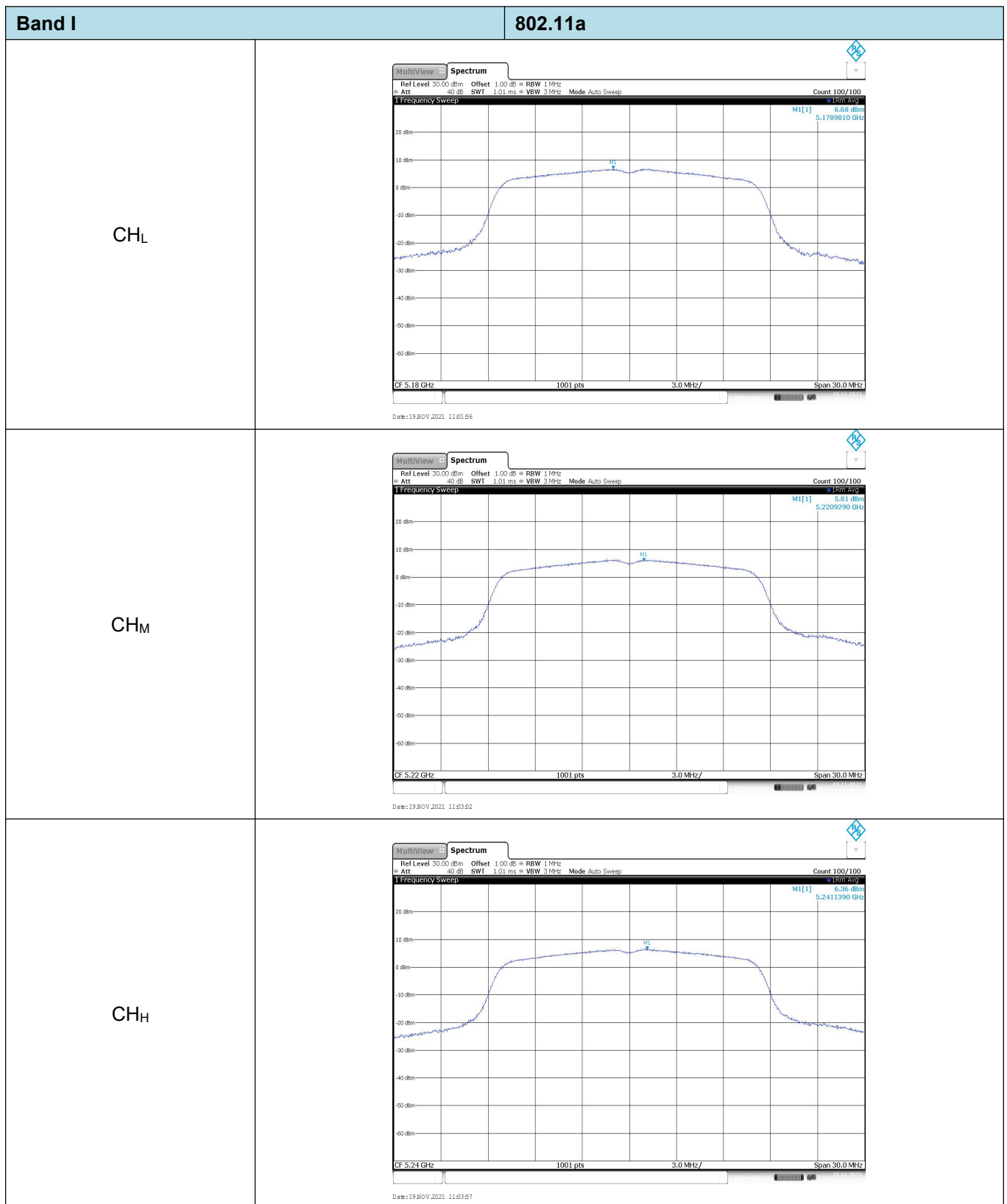
NOTE: duty cycle factor =10LOG(1/ duty cycle)

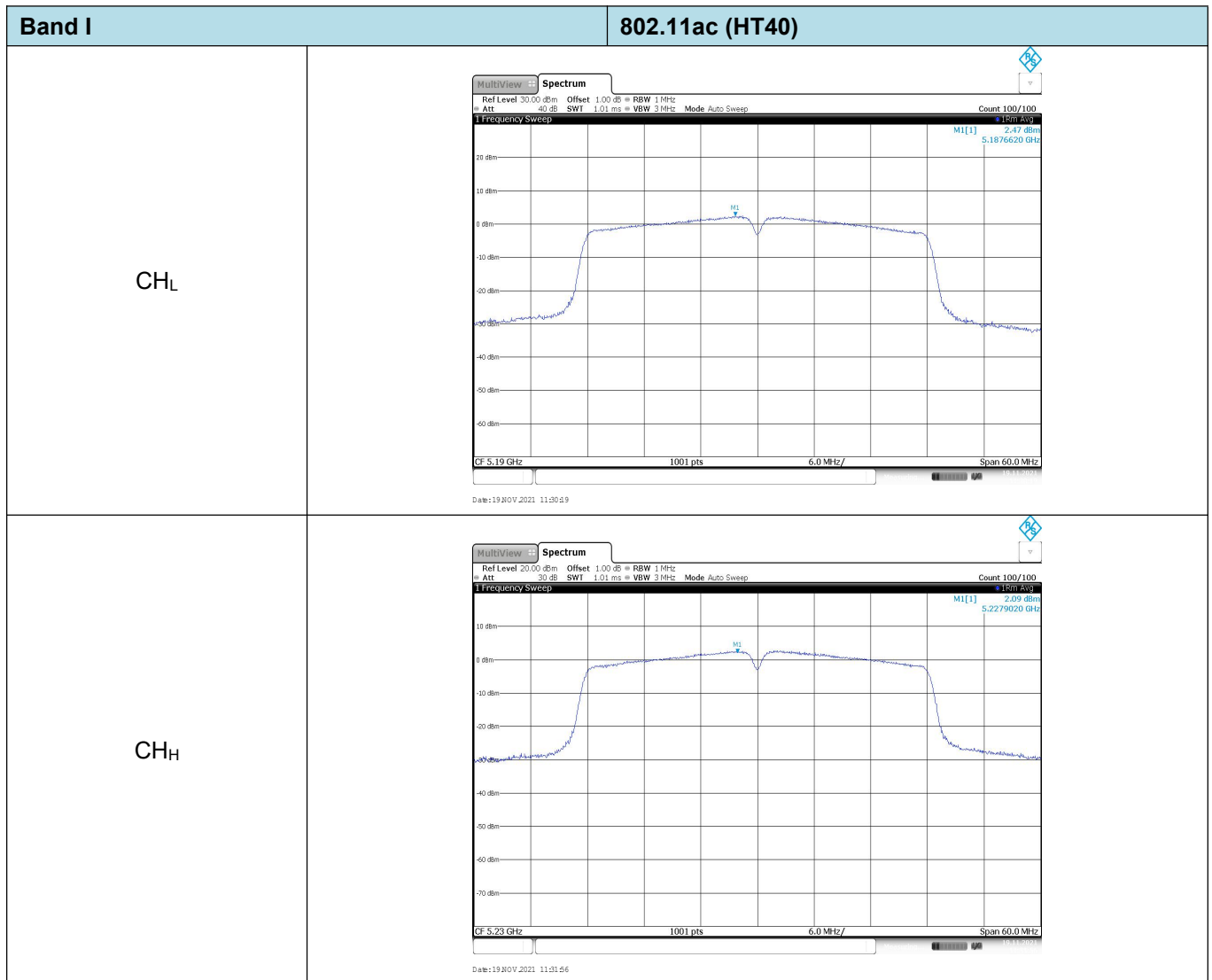
Appendix B: Maximum Power Spectral Density

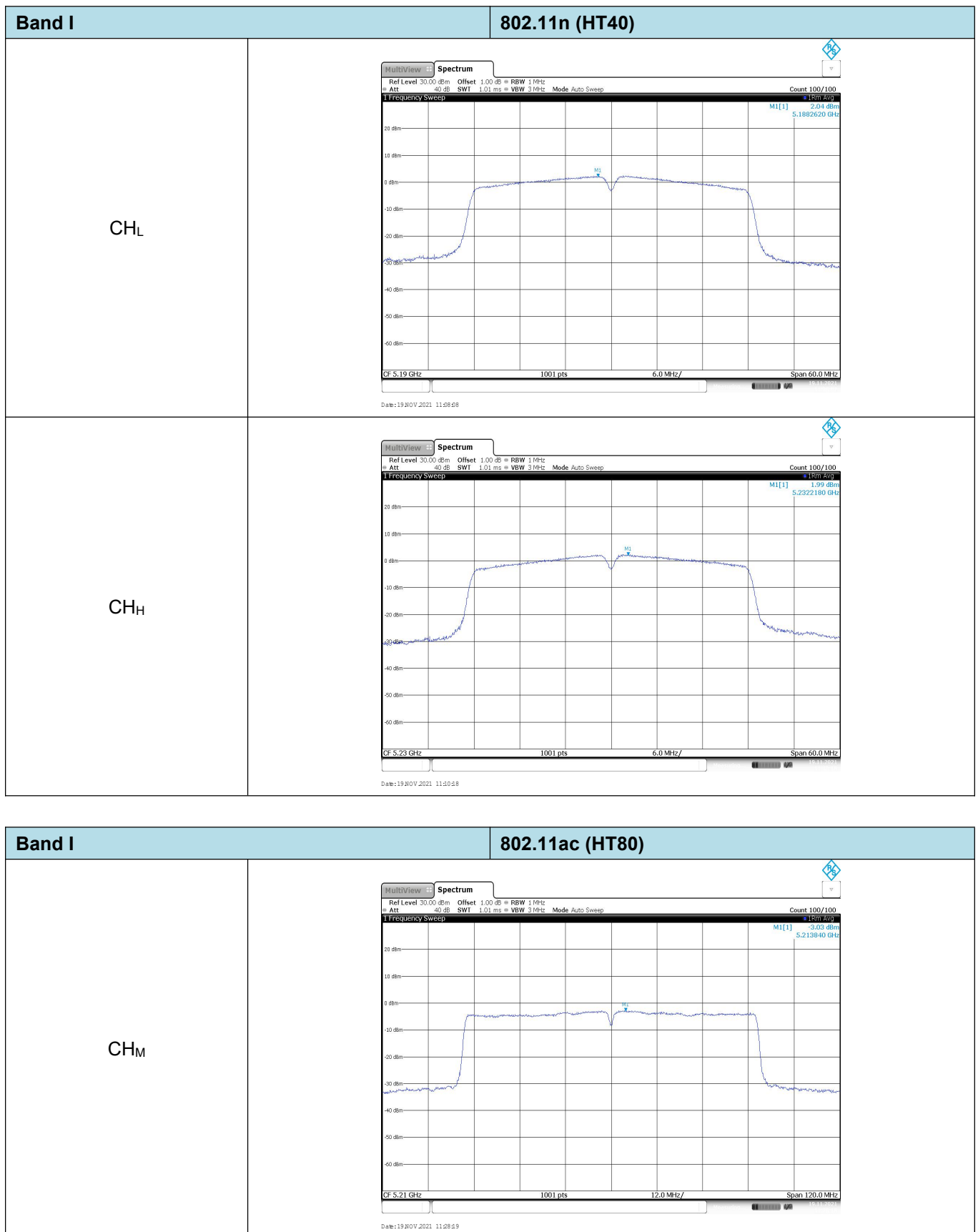
Band	Bandwidth (MHz)	Type	Channel	Reading (dBm)	Duty cycle (%)	Duty cycle factor (dB)	Power Spectral Density (dBm/MHz)	Limit (dBm/MHz)	Result
I	20	802.11ac	CH _L	5.13	96.57	0.15	5.28	11.00	Pass
			CH _M	4.80	96.48	0.16	4.96		
			CH _H	5.06	96.48	0.16	5.22		
		802.11n	CH _L	4.88	96.55	0.15	5.03	11.00	Pass
			CH _M	4.02	96.46	0.16	4.18		
			CH _H	5.11	96.55	0.15	5.26		
		802.11a	CH _L	6.68	96.77	0.14	6.82	11.00	Pass
			CH _M	5.81	96.77	0.14	5.95		
			CH _H	6.36	96.77	0.14	6.50		
	40	802.11ac	CH _L	2.47	93.48	0.29	2.76	11.00	Pass
			CH _H	2.09	93.48	0.29	2.38		
		802.11n	CH _L	2.04	93.45	0.29	2.33	11.00	Pass
			CH _H	1.99	93.53	0.29	2.28		
	80	802.11ac	CH _M	-3.03	87.69	0.57	-2.46	11.00	Pass
Band	Bandwidth (MHz)	Type	Channel	Reading (dBm)	Duty cycle (%)	Duty cycle factor (dB)	Power Spectral Density (dBm/500KHz)	Limit (dBm/500KHz)	Result
IV	20	802.11ac	CH _L	-4.13	96.58	0.15	-3.98	30.00	Pass
			CH _M	-3.56	96.58	0.15	-3.41		
			CH _H	-3.47	96.58	0.15	-3.32		
		802.11n	CH _L	-3.97	96.55	0.15	-3.82	30.00	Pass
			CH _M	-3.53	96.46	0.16	-3.37		
			CH _H	-3.07	96.64	0.15	-2.92		
		802.11a	CH _L	-3.63	96.77	0.14	-3.49	30.00	Pass
			CH _M	-3.56	96.77	0.14	-3.42		
			CH _H	-3.20	96.77	0.14	-3.16		
	40	802.11ac	CH _L	-7.57	93.48	0.29	-7.28	30.00	Pass
			CH _H	-7.25	93.48	0.29	-6.96		
		802.11n	CH _L	-6.74	93.53	0.29	-6.45	30.00	Pass
			CH _H	-6.60	93.53	0.29	-6.31		
	80	802.11ac	CH _M	-10.71	87.69	0.57	-10.14	30.00	Pass

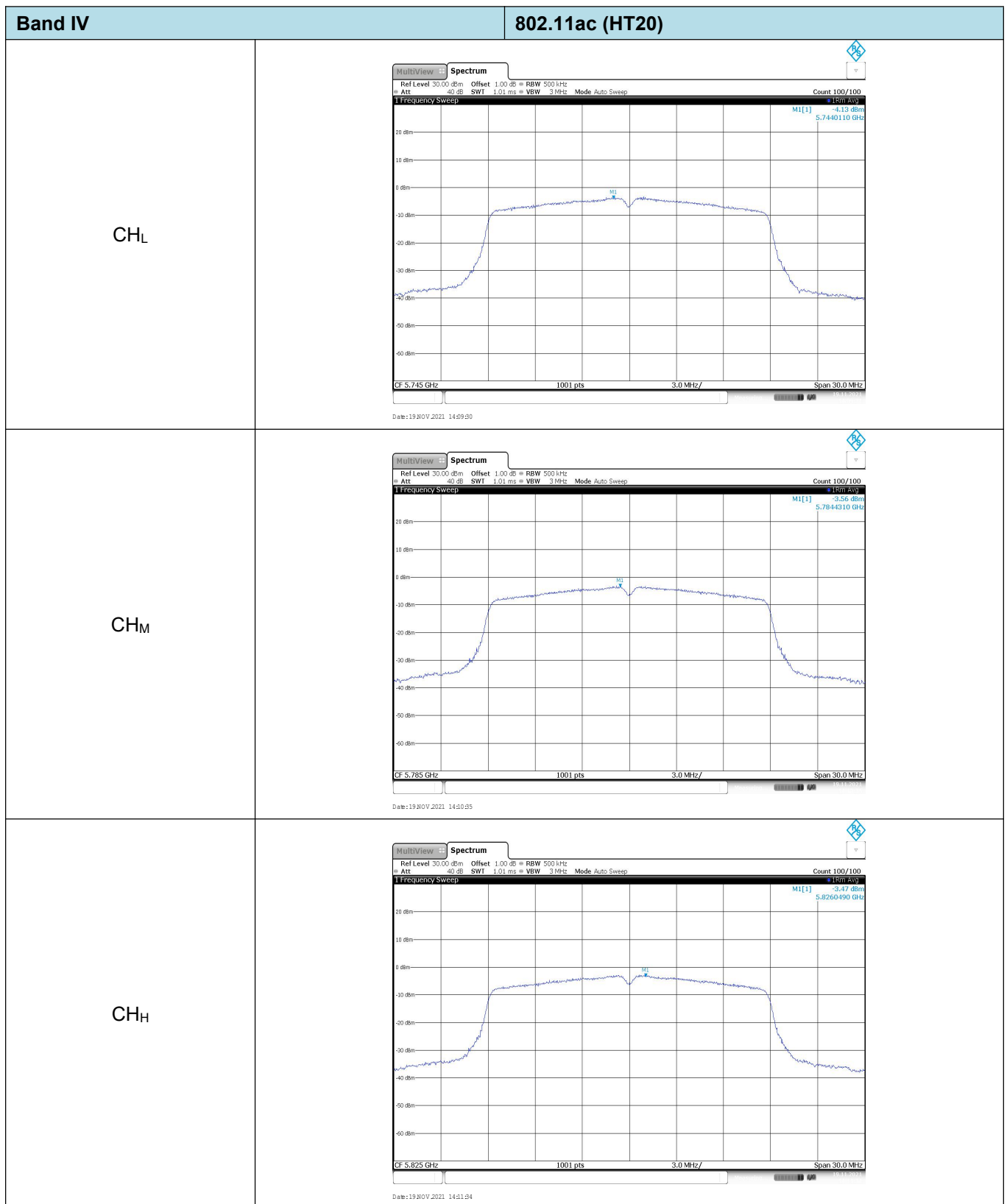


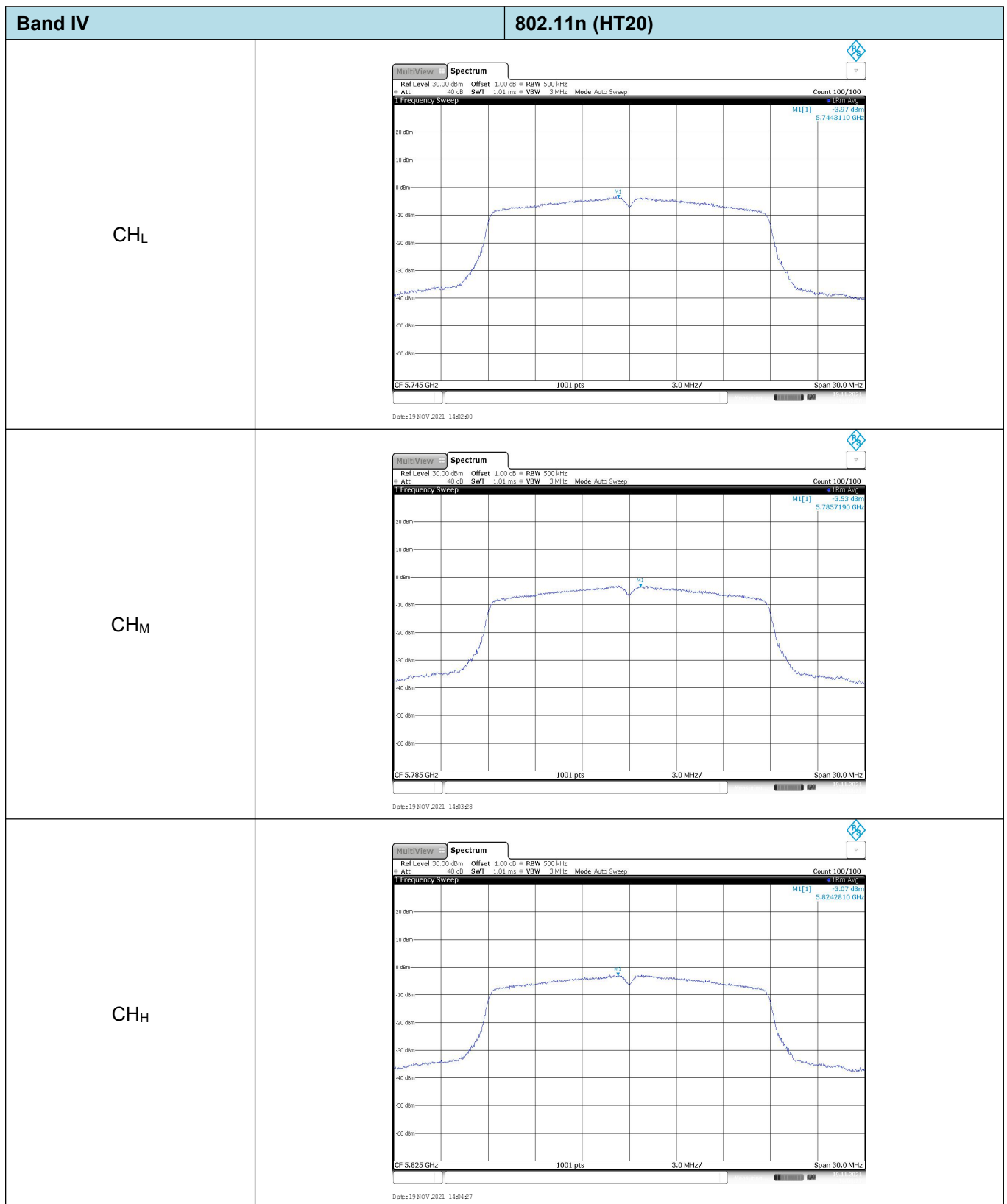


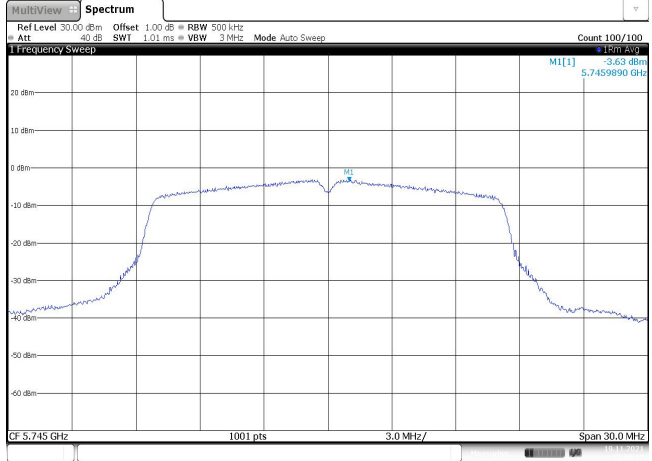
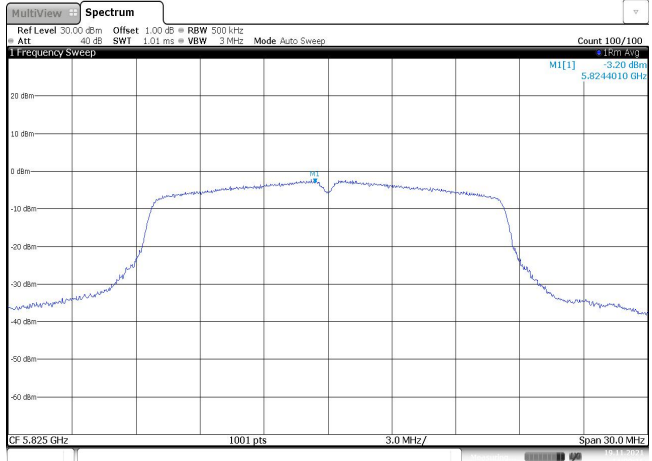


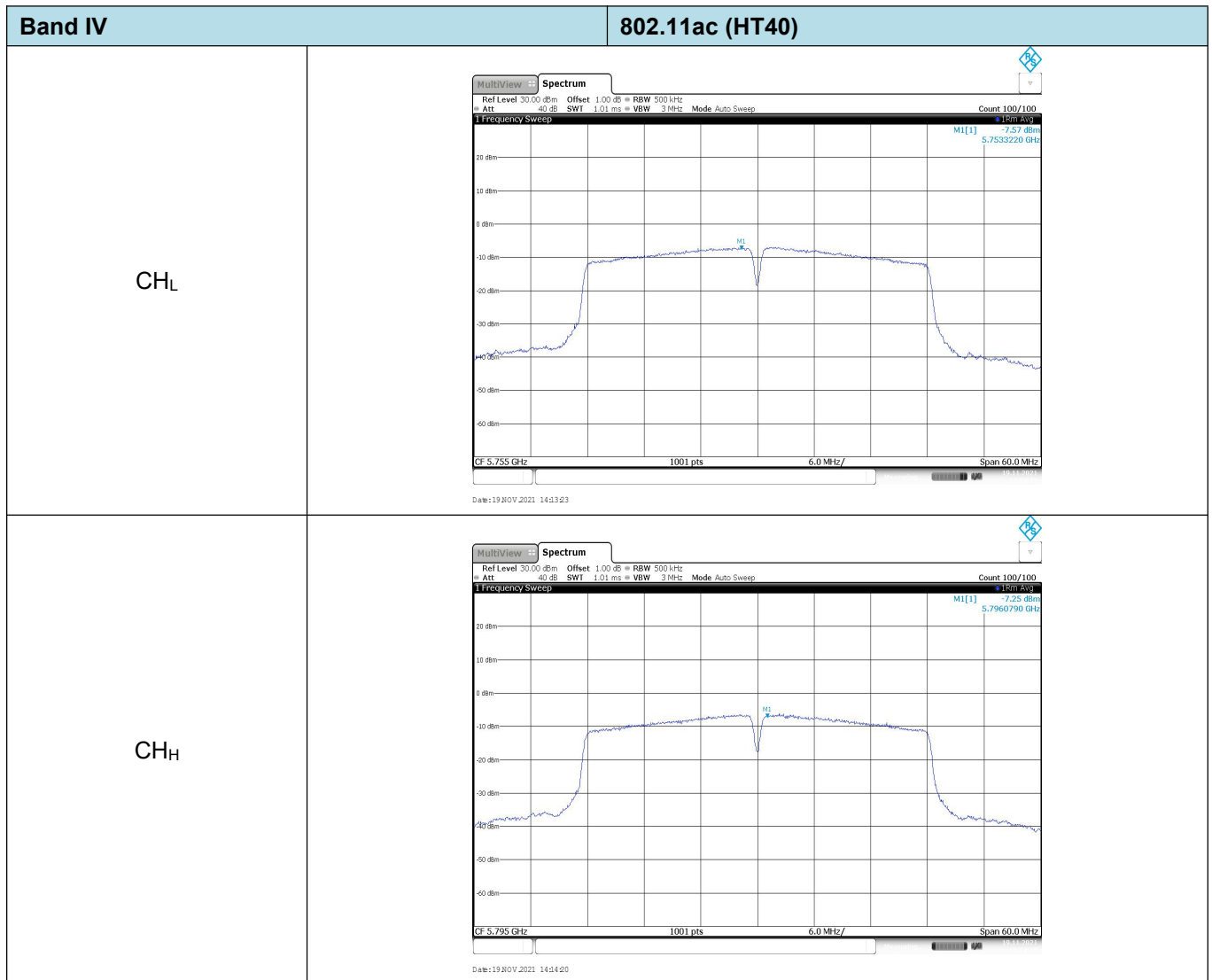


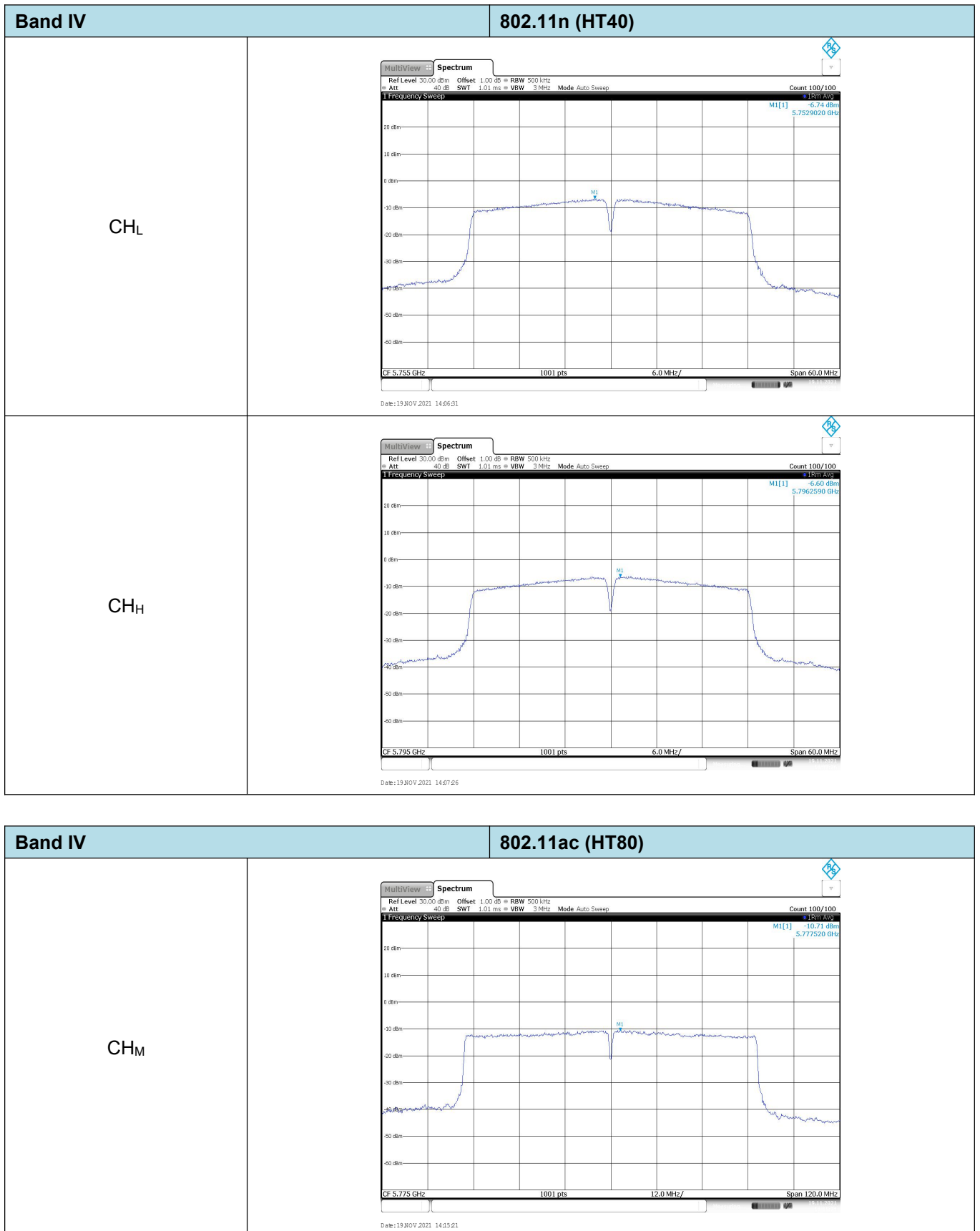






Band IV	802.11a
CH _L	 Ref Level 30.00 dBm Offset 1.00 dB RBW 500 kHz Att 40 dB SWI 1.01 ms VBW 3 MHz Mode Auto Sweep Count 100/100 15m Avg M1[1] -3.63 dBm 5.7456690 GHz CF 5.745 GHz 1001 pts 3.0 MHz/ Span 30.0 MHz Date: 19 NOV 2021 13:58:13
CH _M	 Ref Level 30.00 dBm Offset 1.00 dB RBW 500 kHz Att 40 dB SWI 1.01 ms VBW 3 MHz Mode Auto Sweep Count 100/100 15m Avg M1[1] -3.56 dBm 5.7854690 GHz CF 5.785 GHz 1001 pts 3.0 MHz/ Span 30.0 MHz Date: 19 NOV 2021 13:59:14
CH _H	 Ref Level 30.00 dBm Offset 1.00 dB RBW 500 kHz Att 40 dB SWI 1.01 ms VBW 3 MHz Mode Auto Sweep Count 100/100 15m Avg M1[1] -3.20 dBm 5.8244010 GHz CF 5.825 GHz 1001 pts 3.0 MHz/ Span 30.0 MHz Date: 19 NOV 2021 14:00:16





Appendix C: 26dB bandwidth

Band	Bandwidth (MHz)	Type	Channel	26dB bandwidth (MHz)	Result
I	20	802.11ac	CH _L	21.75	Pass
			CH _M	22.89	
			CH _H	22.92	
		802.11n	CH _L	24.36	Pass
			CH _M	25.11	
			CH _H	25.83	
		802.11a	CH _L	24.51	Pass
			CH _M	25.56	
			CH _H	25.62	
	40	802.11ac	CH _L	51.30	Pass
			CH _H	51.72	
		802.11n	CH _L	53.94	Pass
			CH _H	58.14	
	80	802.11ac	CH _M	100.08	Pass

Band I		802.11ac (HT20)																													
CH _L	MultiView Spectrum Ref Level 20.50 dBm Offset 1.00 dB RBW 300 kHz Att 30 dB SWI 1.01 ms VBW 1 MHz Mode Auto Sweep Count 500/500 1 Frequency Sweep 17.50 dBm 5.1695600 GHz 8.78 dBm 5.1807500 GHz 5.1807500 GHz CF 5.18 GHz 1001 pts 3.0 MHz/ Span 30.0 MHz 2 Marker Table <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>1</td><td></td><td>5.16956 GHz</td><td>-17.90 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>5.18075 GHz</td><td>8.78 dBm</td><td></td><td></td></tr><tr><td>D3</td><td>M1</td><td>1</td><td>21.75 MHz</td><td>0.50 dB</td><td></td><td></td></tr></table> Date: 19 NOV 2021 11:11:52			Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		5.16956 GHz	-17.90 dBm			M2	1		5.18075 GHz	8.78 dBm			D3	M1	1	21.75 MHz	0.50 dB		
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result																									
M1	1		5.16956 GHz	-17.90 dBm																											
M2	1		5.18075 GHz	8.78 dBm																											
D3	M1	1	21.75 MHz	0.50 dB																											
CH _M	MultiView Spectrum Ref Level 20.50 dBm Offset 1.00 dB RBW 300 kHz Att 30 dB SWI 1.01 ms VBW 1 MHz Mode Auto Sweep Count 500/500 1 Frequency Sweep 17.81 dBm 5.2095000 GHz 8.53 dBm 5.2192200 GHz 5.2192200 GHz CF 5.22 GHz 1001 pts 3.0 MHz/ Span 30.0 MHz 2 Marker Table <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>1</td><td></td><td>5.2095 GHz</td><td>-17.81 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>5.21922 GHz</td><td>8.53 dBm</td><td></td><td></td></tr><tr><td>D3</td><td>M1</td><td>1</td><td>22.89 MHz</td><td>-0.20 dB</td><td></td><td></td></tr></table> Date: 19 NOV 2021 11:12:01			Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		5.2095 GHz	-17.81 dBm			M2	1		5.21922 GHz	8.53 dBm			D3	M1	1	22.89 MHz	-0.20 dB		
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result																									
M1	1		5.2095 GHz	-17.81 dBm																											
M2	1		5.21922 GHz	8.53 dBm																											
D3	M1	1	22.89 MHz	-0.20 dB																											
CH _H	MultiView Spectrum Ref Level 20.50 dBm Offset 1.00 dB RBW 300 kHz Att 30 dB SWI 1.01 ms VBW 1 MHz Mode Auto Sweep Count 500/500 1 Frequency Sweep 17.97 dBm 5.2295300 GHz 8.47 dBm 5.2392200 GHz 5.2392200 GHz CF 5.24 GHz 1001 pts 3.0 MHz/ Span 30.0 MHz 2 Marker Table <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>1</td><td></td><td>5.22953 GHz</td><td>-17.97 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>5.23922 GHz</td><td>8.47 dBm</td><td></td><td></td></tr><tr><td>D3</td><td>M1</td><td>1</td><td>22.92 MHz</td><td>-0.60 dB</td><td></td><td></td></tr></table> Date: 19 NOV 2021 11:13:27			Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		5.22953 GHz	-17.97 dBm			M2	1		5.23922 GHz	8.47 dBm			D3	M1	1	22.92 MHz	-0.60 dB		
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result																									
M1	1		5.22953 GHz	-17.97 dBm																											
M2	1		5.23922 GHz	8.47 dBm																											
D3	M1	1	22.92 MHz	-0.60 dB																											

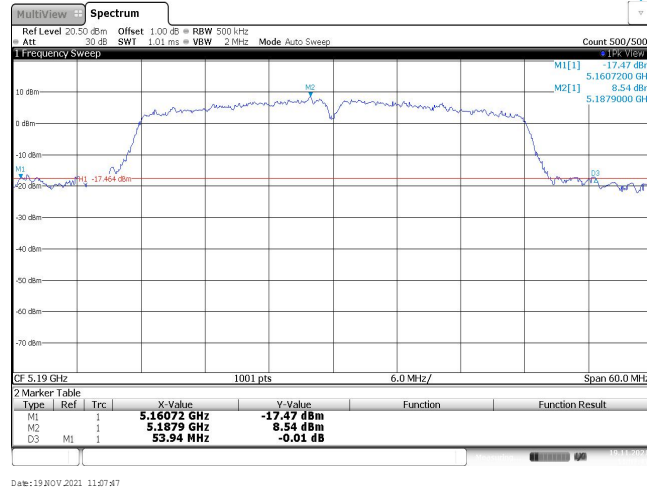
Band I		802.11n (HT20)	
CH _L			

Band I		802.11a	
CH _L			

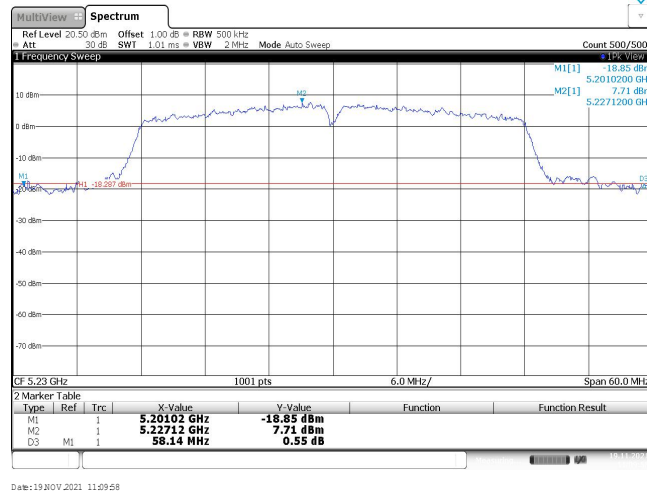


Band I

802.11n (HT40)

CH_L

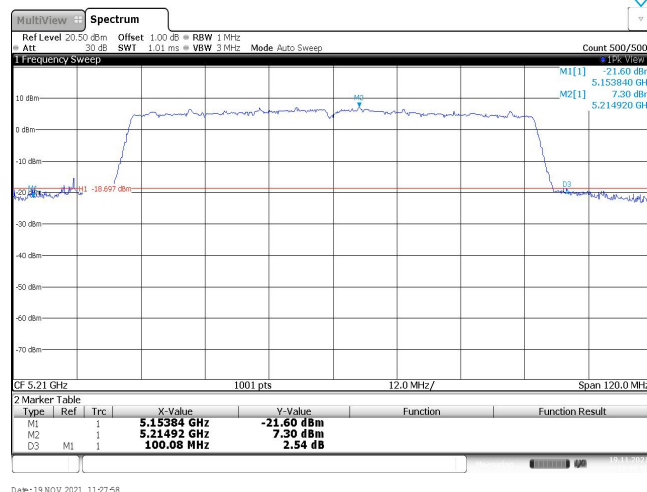
Date: 19 NOV 2021 11:57:47

CH_H

Date: 19 NOV 2021 11:59:58

Band I

802.11ac (HT80)

CH_M

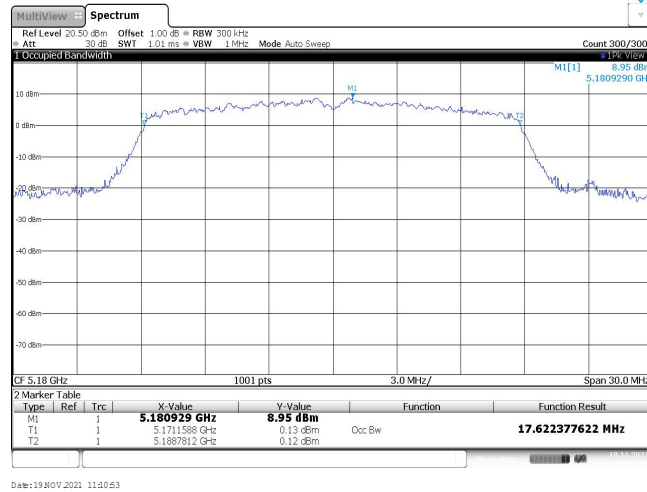
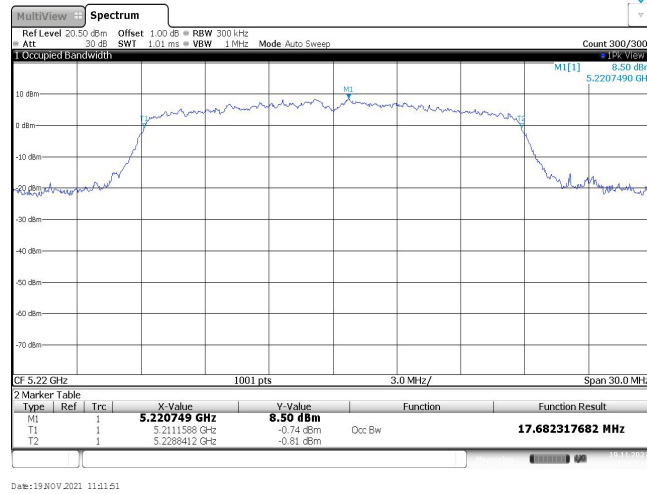
Date: 19 NOV 2021 11:27:58

Appendix D: 99% Occupy bandwidth

Band	Bandwidth (MHz)	Type	Channel	99% Occupy bandwidth (MHz)	Result
I	20	802.11ac	CH _L	17.62	Pass
			CH _M	17.68	
			CH _H	17.71	
		802.11n	CH _L	17.68	Pass
			CH _M	17.71	
			CH _H	17.74	
		802.11a	CH _L	16.87	Pass
			CH _M	16.93	
			CH _H	16.93	
	40	802.11ac	CH _L	36.14	Pass
			CH _H	36.20	
		802.11n	CH _L	36.14	Pass
			CH _H	36.26	
	80	802.11ac	CH _M	75.88	Pass
IV	20	802.11ac	CH _L	17.62	Pass
			CH _M	17.62	
			CH _H	17.71	
		802.11n	CH _L	17.62	Pass
			CH _M	17.65	
			CH _H	17.65	
		802.11a	CH _L	16.87	Pass
			CH _M	16.90	
			CH _H	16.99	
	40	802.11ac	CH _L	36.02	Pass
			CH _H	36.14	
		802.11n	CH _L	36.12	Pass
			CH _H	36.21	
	80	802.11ac	CH _M	75.64	Pass

Band I

802.11ac (HT20)

CH_LCH_MCH_H