

APPENDIX REPORT

Project No.	SHT2111009301EW	Radio Specification	WIFI 5G
Test sample No.	YPHT21110093003	Model No.	T60
Start test date	2021-11-22	Finish date	2021-11-22
Temperature	24.2℃	Humidity	41%
Test Engineer	Hailey Chen	Auditor	Xiaodong Zheo

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	802.11n	CH _L	9.33	86.38	0.64	9.97	24.00	Pass
			CH _M	11.17	86.38	0.64	11.81		
			CH _H	11.91	86.38	0.64	12.55		
		802.11a	CH _L	9.33	87.15	0.60	9.93	24.00	Pass
			CH _M	11.41	87.15	0.60	12.01		
			CH _H	11.70	87.15	0.60	12.30		
	40	802.11n	CH _L	8.33	76.02	1.19	9.52	24.00	Pass
			CH _H	10.09	76.02	1.19	11.28		
II	20	802.11n	CH _L	10.08	86.38	0.64	10.72	24.00	Pass
			CH _M	10.55	86.38	0.64	11.19		
			CH _H	11.36	86.38	0.64	12.00		
		802.11a	CH _L	10.07	87.15	0.60	10.67	24.00	Pass
			CH _M	10.52	87.22	0.59	11.11		
			CH _H	11.37	87.23	0.59	11.96		
	40	802.11n	CH _L	9.29	76.02	1.19	10.48	24.00	Pass
			CH _H	10.26	75.94	1.20	11.46		
III	20	802.11n	CH _L	8.95	86.46	0.63	9.58	24.00	Pass
			CH _{M1}	8.65	86.54	0.63	9.28		
			CH _{M2}	7.67	86.47	0.63	8.30		
			CH _H	7.08	86.46	0.63	7.71		
		802.11a	CH _L	8.89	87.15	0.60	9.49	24.00	Pass
			CH _{M1}	8.40	87.23	0.59	8.99		
			CH _{M2}	7.64	87.15	0.60	8.24		
			CH _H	6.85	87.15	0.60	7.45		
	40	802.11n	CH _L	8.46	76.02	1.19	9.65	24.00	Pass
			CH _{M1}	8.36	76.02	1.19	9.55		
			CH _{M2}	7.28	76.02	1.19	8.47		
			CH _H	6.36	75.94	1.20	7.56		
IV	20	802.11n	CH _L	10.75	86.47	0.63	11.38	30.00	Pass
			CH _M	10.62	86.38	0.64	11.26		
			CH _H	9.91	86.38	0.64	10.55		
		802.11a	CH _L	10.51	87.23	0.59	11.10	30.00	Pass
			CH _M	10.63	87.15	0.60	11.23		
			CH _H	9.89	87.15	0.60	10.49		
	40	802.11n	CH _L	10.39	76.02	1.19	11.58	30.00	Pass
			CH _H	10.03	76.02	1.19	11.22		

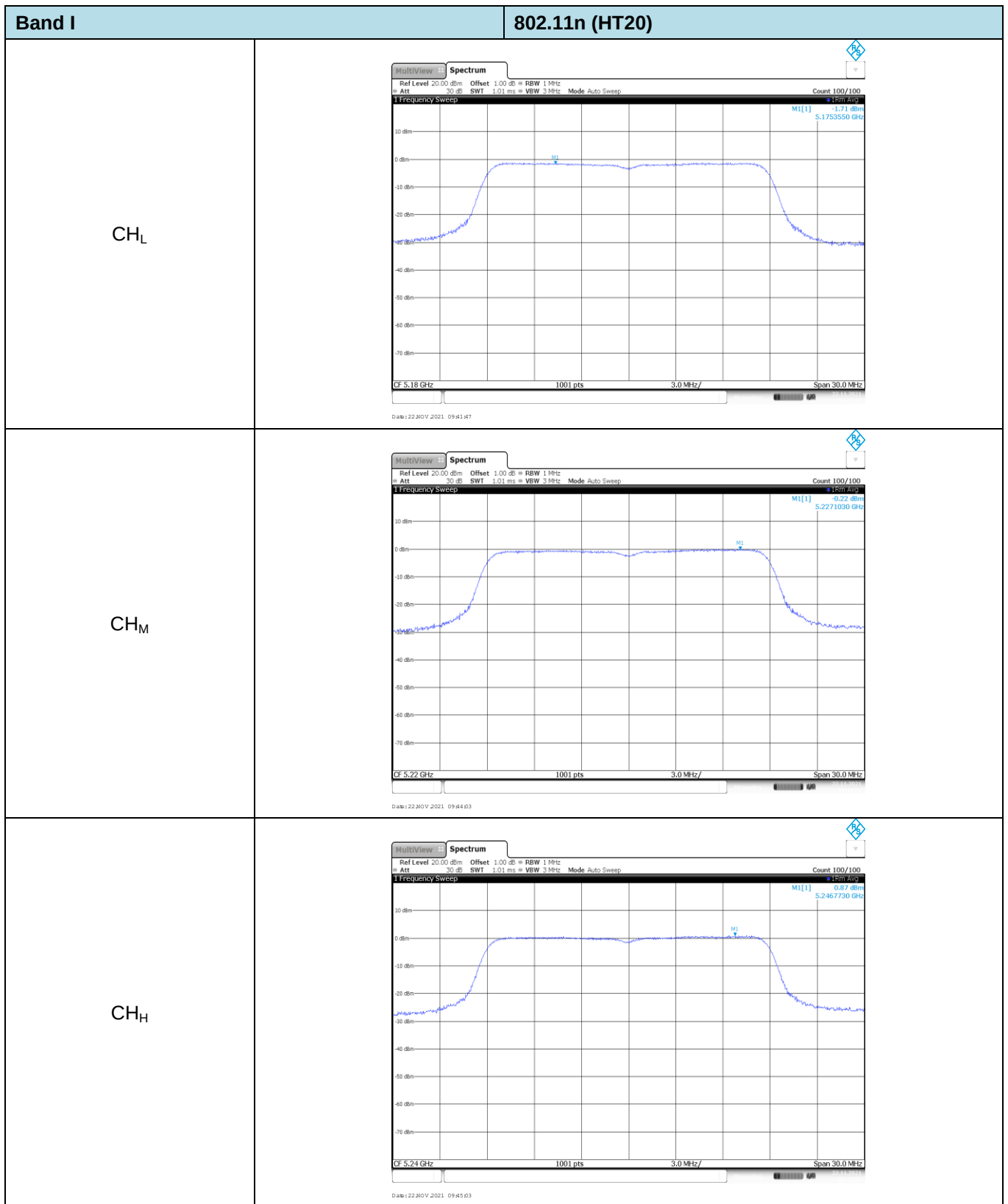
NOTE: duty cycle factor =10LOG(1/ duty cycle)

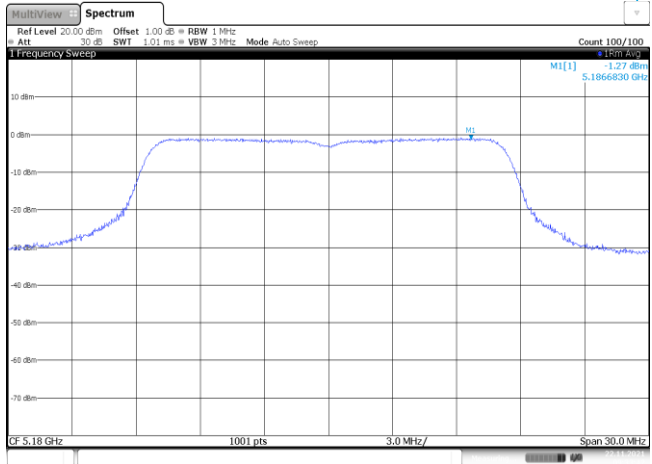
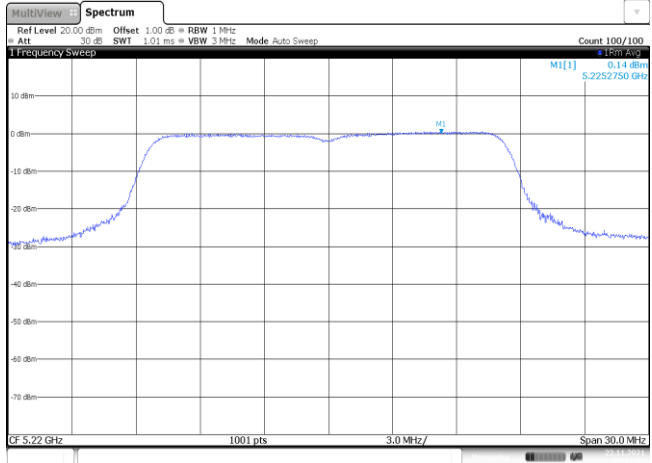
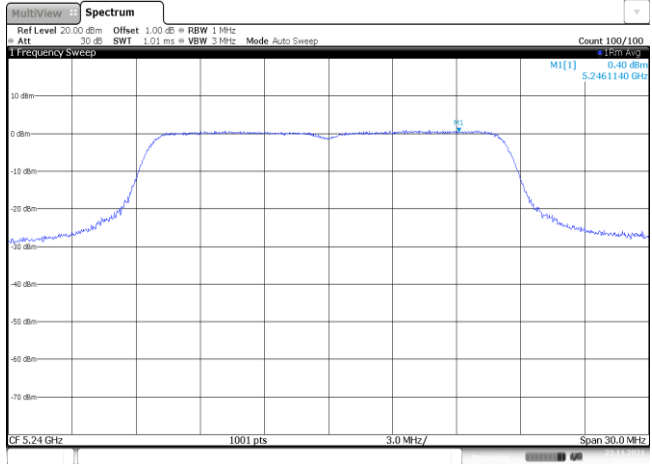
Appendix B: Maximum Power Spectral Density

Band	Bandwidth (MHz)	Type	Channel	Reading (dBm)	Duty cycle (%)	Duty cycle factor (dB)	Power Spectral Density (dBm/MHz)	Limit (dBm/MHz)	Result
I	20	802.11n	CH _L	-1.71	86.38	0.64	-1.07	11.00	Pass
			CH _M	-0.22	86.38	0.64	0.42		
			CH _H	0.87	86.38	0.64	1.51		
		802.11a	CH _L	-1.27	87.15	0.60	-0.67	11.00	Pass
			CH _M	0.14	87.15	0.60	0.74		
			CH _H	0.40	87.15	0.60	1.00		
	40	802.11n	CH _L	-5.68	76.02	1.19	-4.49	11.00	Pass
			CH _H	-4.12	76.02	1.19	-2.93		
II	20	802.11n	CH _L	-0.92	86.38	0.64	-0.28	11.00	Pass
			CH _M	-0.07	86.38	0.64	0.57		
			CH _H	-0.26	86.38	0.64	0.38		
		802.11a	CH _L	-0.65	87.15	0.60	-0.05	11.00	Pass
			CH _M	-0.27	87.22	0.59	0.32		
			CH _H	-0.04	87.23	0.59	0.55		
	40	802.11n	CH _L	-4.79	76.02	1.19	-3.60	11.00	Pass
			CH _H	-3.86	75.94	1.20	-2.66		
III	20	802.11n	CH _L	-2.14	86.46	0.63	-1.51	11.00	Pass
			CH _M	-2.38	86.54	0.63	-1.75		
			CH _H	-3.88	86.46	0.63	-3.25		
		802.11a	CH _L	-2.44	87.15	0.60	-1.84	11.00	Pass
			CH _M	-2.69	87.23	0.59	-2.10		
			CH _H	-4.23	87.15	0.60	-3.63		
	40	802.11n	CH _L	-5.72	76.02	1.19	-4.53	11.00	Pass
			CH _M	-6.52	76.02	1.19	-5.33		
			CH _H	-7.14	75.94	1.20	-5.94		

Band	Bandwidth (MHz)	Type	Channel	Reading (dBm)	Duty cycle (%)	Duty cycle factor (dB)	Power Spectral Density (dBm/500 kHz)	Limit (dBm/500 kHz)	Result
IV	20	802.11n	CH _L	-3.63	86.47	0.63	-3.00	30.00	Pass
			CH _M	-3.52	86.38	0.64	-2.88		
			CH _H	-4.22	86.38	0.64	-3.58		
		802.11a	CH _L	-3.72	87.23	0.59	-3.13	30.00	Pass
			CH _M	-3.81	87.15	0.60	-3.21		
			CH _H	-4.04	87.15	0.60	-3.44		
	40	802.11n	CH _L	-7.21	76.02	1.19	-6.02	30.00	Pass
			CH _H	-6.80	76.02	1.19	-5.61		

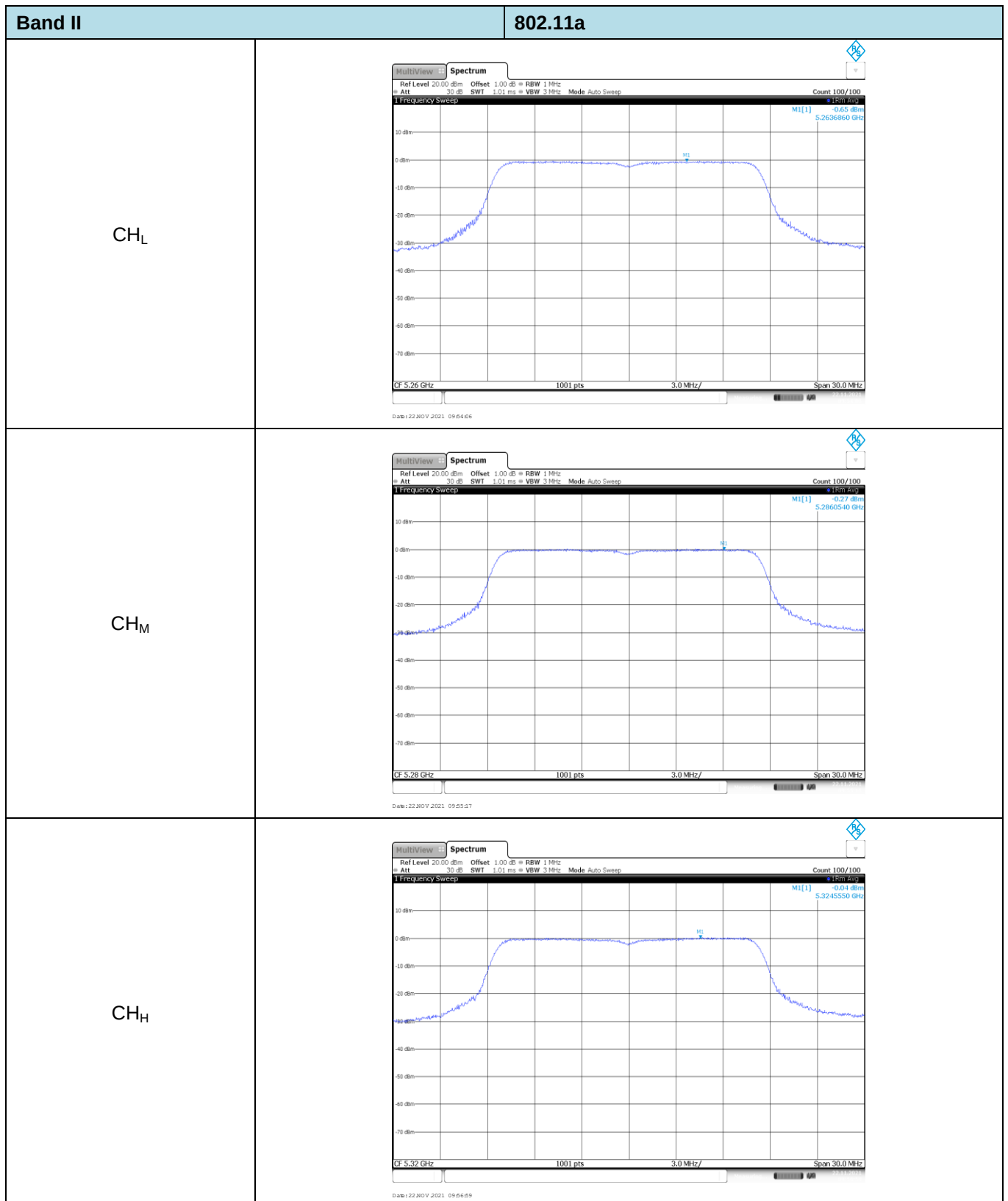
Test plot as follows:



Band I	802.11a
CH _L	 MultiView Spectrum Ref Level 20.00 dBm Offset 1.00 dB RBW 1 MHz Att 30 dB SWI 1.01 ms VBW 3 MHz Mode Auto Sweep Count 100/100 1 Frequency Sweep M1[1] 1.27 dBm 5.1866830 GHz CF 5.18 GHz 1001 pts 3.0 MHz/ Span 30.0 MHz Date: 22 NOV 2021 09:03:42
CH _M	 MultiView Spectrum Ref Level 20.00 dBm Offset 1.00 dB RBW 1 MHz Att 30 dB SWI 1.01 ms VBW 3 MHz Mode Auto Sweep Count 100/100 1 Frequency Sweep M1[1] 0.14 dBm 5.2252750 GHz CF 5.22 GHz 1001 pts 3.0 MHz/ Span 30.0 MHz Date: 22 NOV 2021 09:07:02
CH _H	 MultiView Spectrum Ref Level 20.00 dBm Offset 1.00 dB RBW 1 MHz Att 30 dB SWI 1.01 ms VBW 3 MHz Mode Auto Sweep Count 100/100 1 Frequency Sweep M1[1] 0.40 dBm 5.2461140 GHz CF 5.24 GHz 1001 pts 3.0 MHz/ Span 30.0 MHz Date: 22 NOV 2021 09:08:01

Band I		802.11n (HT40)
CH _L	MultiView Spectrum Ref Level 20.00 dBm Offset 1.00 dB RBW 1 MHz Att 30 dB SWI 1.01 ms VBW 3 MHz Mode Auto Sweep Count 100/100 1 Frequency Sweep 30 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm M1[1] -5.68 dBm 5.2008490 GHz CF 5.19 GHz 1001 pts 6.0 MHz/ Span 60.0 MHz Date: 22.10.V.2021 09:27:10	
CH _H	MultiView Spectrum Ref Level 20.00 dBm Offset 1.00 dB RBW 1 MHz Att 30 dB SWI 1.01 ms VBW 3 MHz Mode Auto Sweep Count 100/100 1 Frequency Sweep 30 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm M1[1] -4.12 dBm 5.2436660 GHz CF 5.23 GHz 1001 pts 6.0 MHz/ Span 60.0 MHz Date: 22.10.V.2021 09:29:03	

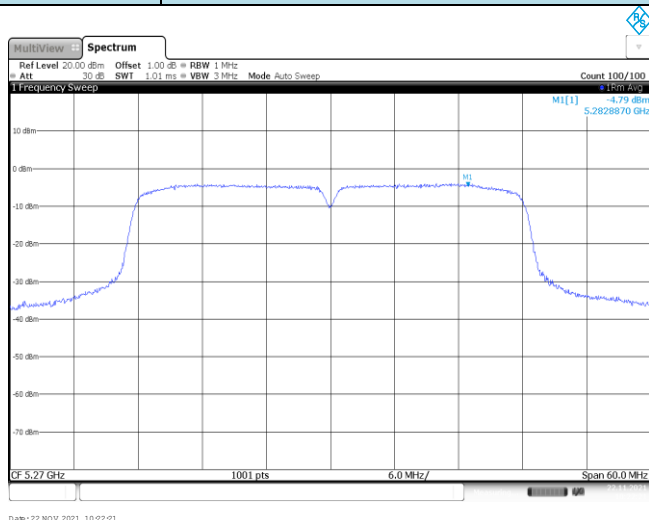
Band II		802.11n (HT20)
CH _L		



Band II

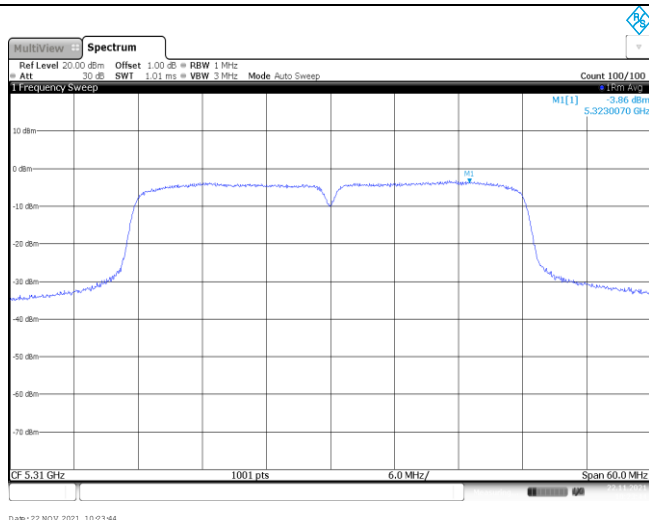
802.11n (HT40)

CH_L



MultiView Spectrum
Ref Level 20.00 dBm Offset 1.00 dB RBW 1 MHz
Att 30 dB SWT 1.01 ms VBW 3 MHz Mode Auto Sweep
Count 100/100
1 Frequency Sweep
M1[1] -4.79 dBm
5.2828870 GHz
OF 5.27 GHz 1001 pts 6.0 MHz/ Span 60.0 MHz
Date: 22 NOV 2021 10:22:21

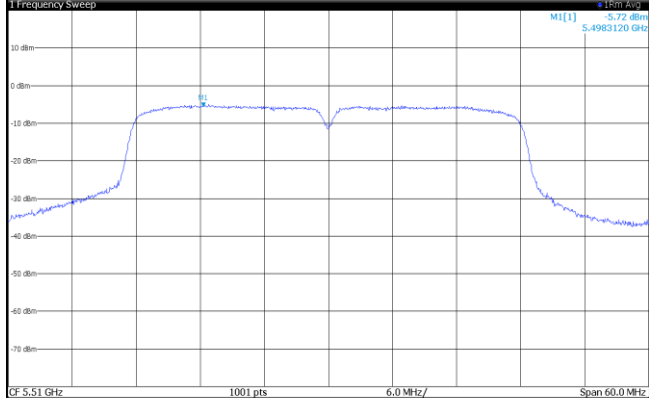
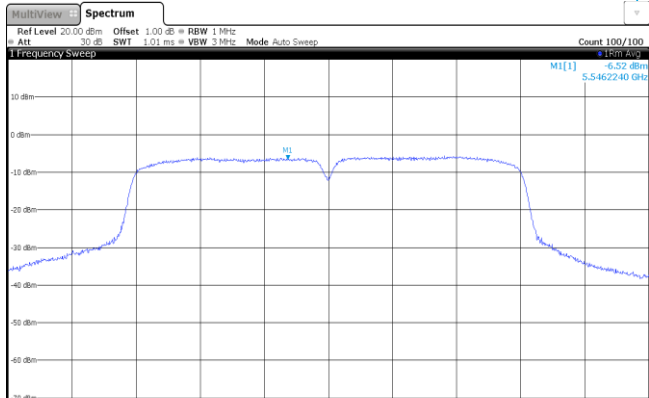
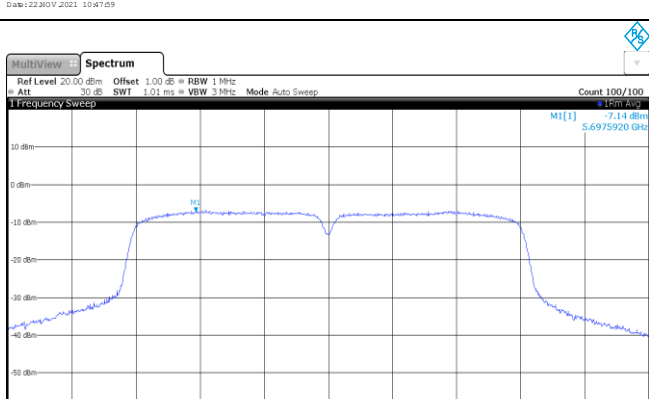
CH_H



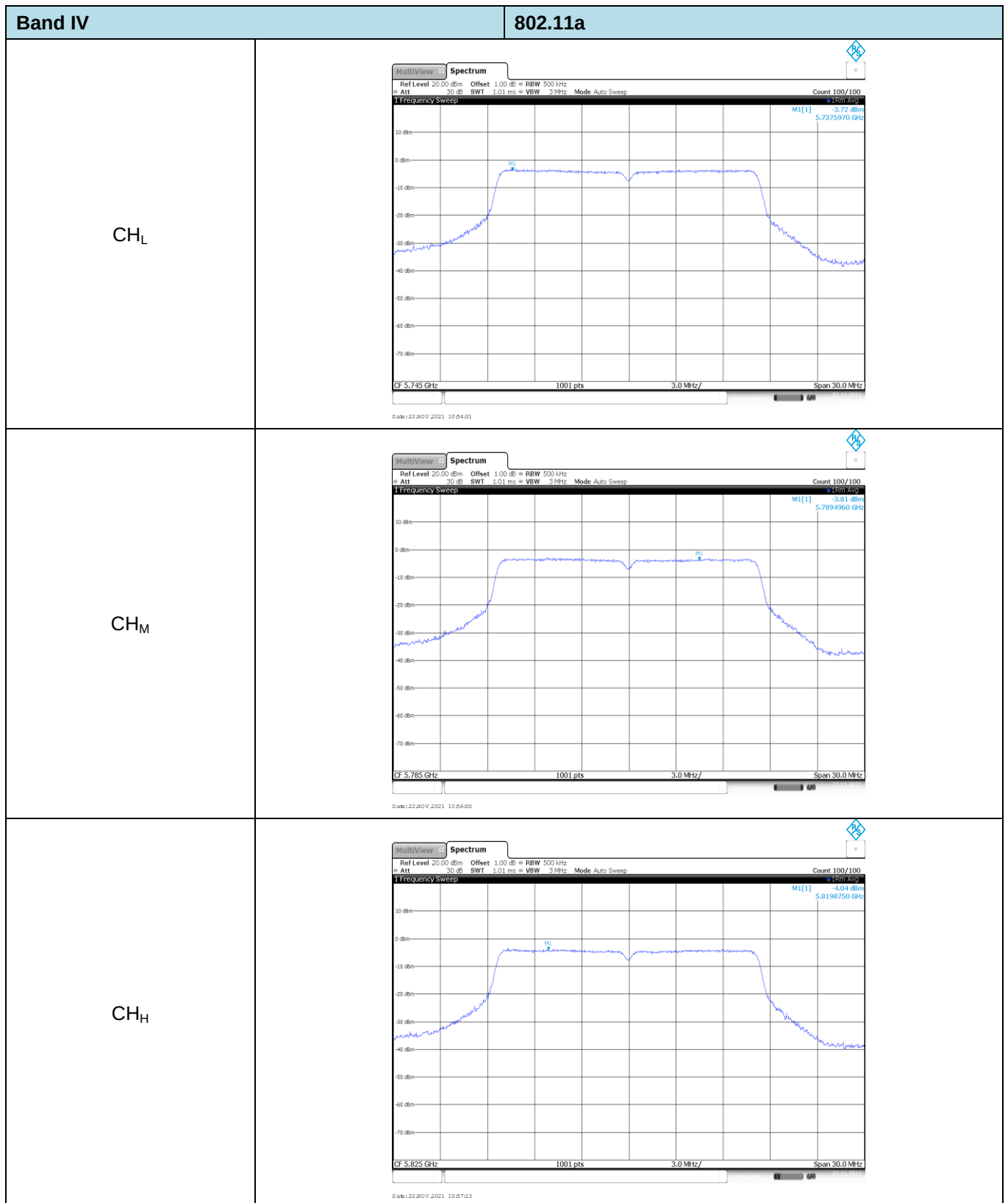
MultiView Spectrum
Ref Level 20.00 dBm Offset 1.00 dB RBW 1 MHz
Att 30 dB SWT 1.01 ms VBW 3 MHz Mode Auto Sweep
Count 100/100
1 Frequency Sweep
M1[1] -3.86 dBm
5.3230070 GHz
OF 5.31 GHz 1001 pts 6.0 MHz/ Span 60.0 MHz
Date: 22 NOV 2021 10:23:44

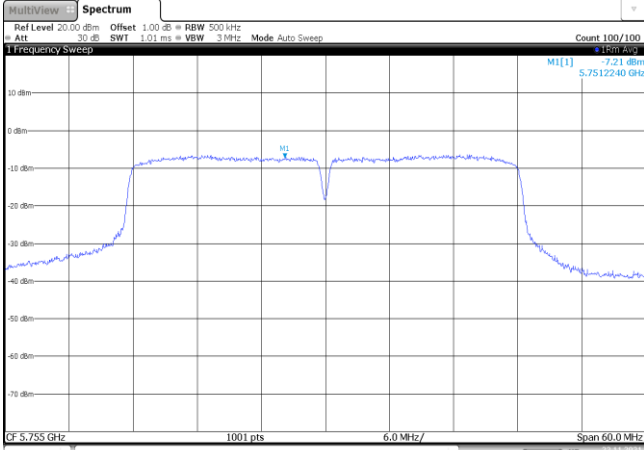
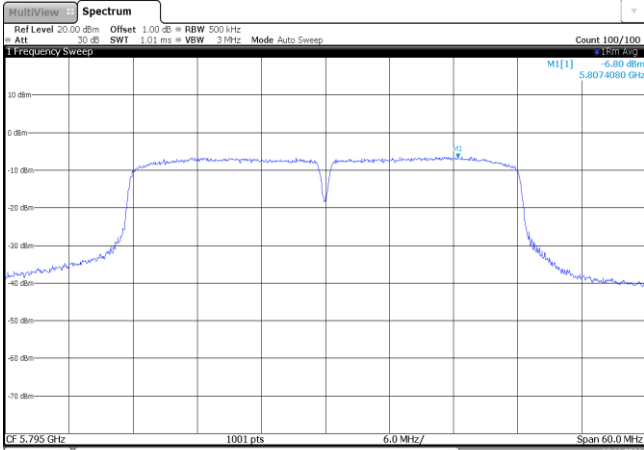
Band III		802.11n (HT20)	
CH _L	MultiView Spectrum Ref Level 20.00 dBm Offset 1.00 dB RBW 1 MHz Att 30 dB SWT 1.01 ms VBW 3 MHz Mode Auto Sweep Count 100/100 1 Frequency Sweep M1 12.14 dBm 5.4927170 GHz 30 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 5.5 GHz 1001 pts 3.0 MHz/ Span 30.0 MHz Date: 22/10/2021 10:06:29		
CH _M	MultiView Spectrum Ref Level 20.00 dBm Offset 1.00 dB RBW 1 MHz Att 30 dB SWT 1.01 ms VBW 3 MHz Mode Auto Sweep Count 100/100 1 Frequency Sweep M1 12.34 dBm 5.5853950 GHz 30 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 5.58 GHz 1001 pts 3.0 MHz/ Span 30.0 MHz Date: 22/10/2021 10:40:41		
CH _H	MultiView Spectrum Ref Level 20.00 dBm Offset 1.00 dB RBW 1 MHz Att 30 dB SWT 1.01 ms VBW 3 MHz Mode Auto Sweep Count 100/100 1 Frequency Sweep M1 13.04 dBm 5.7157740 GHz 30 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 5.72 GHz 1001 pts 3.0 MHz/ Span 30.0 MHz Date: 22/10/2021 10:44:23		

Band III		802.11a
CH _L	MultiView Spectrum Ref Level 20.00 dBm Offset 1.00 dB RBW 1 MHz Att 30 dB SWT 1.01 ms VBW 3 MHz Mode Auto Sweep Count 100/100 1 Frequency Sweep M1[1] -2.44 dBm 5.4961640 GHz 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 5.5 GHz 1001 pts 3.0 MHz/ Span 30.0 MHz Date: 22 NOV 2021 10:27:20	
CH _M	MultiView Spectrum Ref Level 20.00 dBm Offset 1.00 dB RBW 1 MHz Att 30 dB SWT 1.01 ms VBW 3 MHz Mode Auto Sweep Count 100/100 1 Frequency Sweep M1[1] -2.69 dBm 5.5844960 GHz 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 5.58 GHz 1001 pts 3.0 MHz/ Span 30.0 MHz Date: 22 NOV 2021 10:29:05	
CH _H	MultiView Spectrum Ref Level 20.00 dBm Offset 1.00 dB RBW 1 MHz Att 30 dB SWT 1.01 ms VBW 3 MHz Mode Auto Sweep Count 100/100 1 Frequency Sweep M1[1] -4.33 dBm 5.7138560 GHz 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 5.72 GHz 1001 pts 3.0 MHz/ Span 30.0 MHz Date: 22 NOV 2021 10:34:28	

Band III		802.11n (HT40)
CH _L	MultiView Spectrum Ref Level 20.00 dBm Offset 1.00 dB RBW 1 MHz Att 30 dB SWI 1.01 ms VBW 3 MHz Mode Auto Sweep Count 100/100 Frequency Sweep 30 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm  M1[1] -5.72 dBm 5.4983120 GHz CF 5.51 GHz 1001 pts 6.0 MHz/ Span 60.0 MHz Date: 22 NOV 2021 10:46:09	
CH _M	MultiView Spectrum Ref Level 20.00 dBm Offset 1.00 dB RBW 1 MHz Att 30 dB SWI 1.01 ms VBW 3 MHz Mode Auto Sweep Count 100/100 Frequency Sweep 30 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm  M1[1] -6.32 dBm 5.5462240 GHz CF 5.55 GHz 1001 pts 6.0 MHz/ Span 60.0 MHz Date: 22 NOV 2021 10:47:09	
CH _H	MultiView Spectrum Ref Level 20.00 dBm Offset 1.00 dB RBW 1 MHz Att 30 dB SWI 1.01 ms VBW 3 MHz Mode Auto Sweep Count 100/100 Frequency Sweep 30 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm  M1[1] -7.14 dBm 5.6975920 GHz CF 5.71 GHz 1001 pts 6.0 MHz/ Span 60.0 MHz Date: 22 NOV 2021 10:52:10	

Band IV		802.11n (HT20)
CH _L	MultiView Spectrum Ref Level 20.00 dBm Offset 1.00 dB RBW 500 kHz Att 30 dB SWI 1.01 ms VBW 3 MHz Mode Auto Sweep Count 100/100 Frequency Sweep M1[1] -13.63 dBm 5.7405040 GHz CF 5.745 GHz 1001 pts 3.0 MHz/ Span 30.0 MHz Date: 22/10/2021 10:58:24	
CH _M	MultiView Spectrum Ref Level 20.00 dBm Offset 1.00 dB RBW 500 kHz Att 30 dB SWI 1.01 ms VBW 3 MHz Mode Auto Sweep Count 100/100 Frequency Sweep M1[1] -13.52 dBm 5.7924950 GHz CF 5.785 GHz 1001 pts 3.0 MHz/ Span 30.0 MHz Date: 22/10/2021 10:59:48	
CH _H	MultiView Spectrum Ref Level 20.00 dBm Offset 1.00 dB RBW 500 kHz Att 30 dB SWI 1.01 ms VBW 3 MHz Mode Auto Sweep Count 100/100 Frequency Sweep M1[1] -14.22 dBm 5.8185560 GHz CF 5.825 GHz 1001 pts 3.0 MHz/ Span 30.0 MHz Date: 22/10/2021 11:01:23	



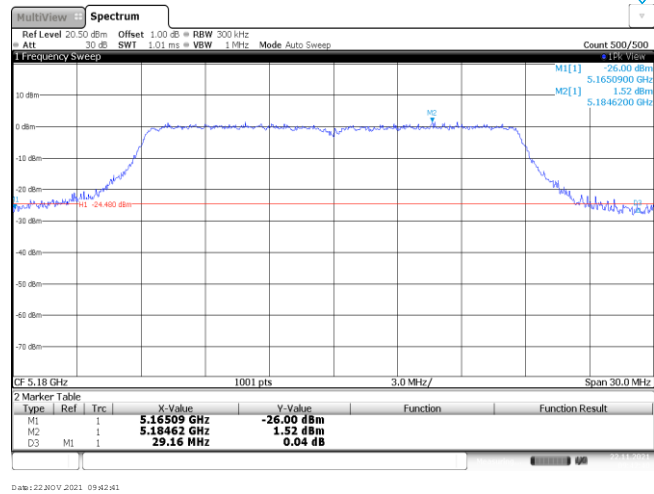
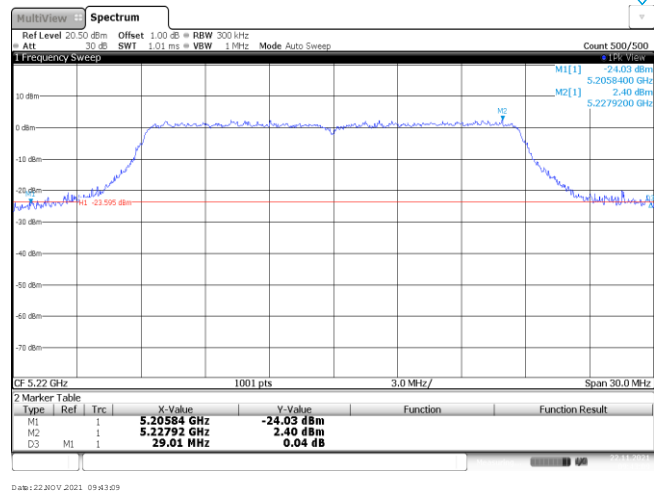
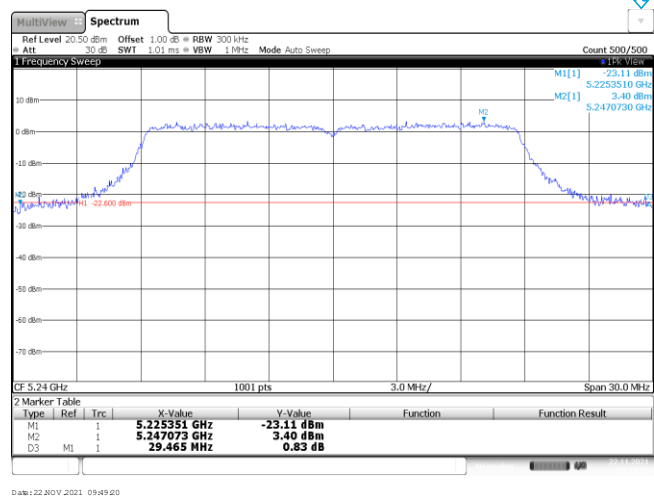
Band IV		802.11n (HT40)	
CH _L	MultiView Spectrum Ref Level 20.00 dBm Offset 1.00 dB RBW 500 kHz Att 30 dB SWT 1.01 ms VBW 3 MHz Mode Auto Sweep Count 100/100 1 Frequency Sweep 17.21 dBm M1[1] 5.7512240 GHz  CF 5.755 GHz1001 pts6.0 MHz/Span 60.0 MHz Date: 22.80V.2021 11:02:38		
CH _H	MultiView Spectrum Ref Level 20.00 dBm Offset 1.00 dB RBW 500 kHz Att 30 dB SWT 1.01 ms VBW 3 MHz Mode Auto Sweep Count 100/100 1 Frequency Sweep 16.90 dBm M1[1] 5.8074090 GHz  CF 5.795 GHz1001 pts6.0 MHz/Span 60.0 MHz Date: 22.80V.2021 11:03:45		

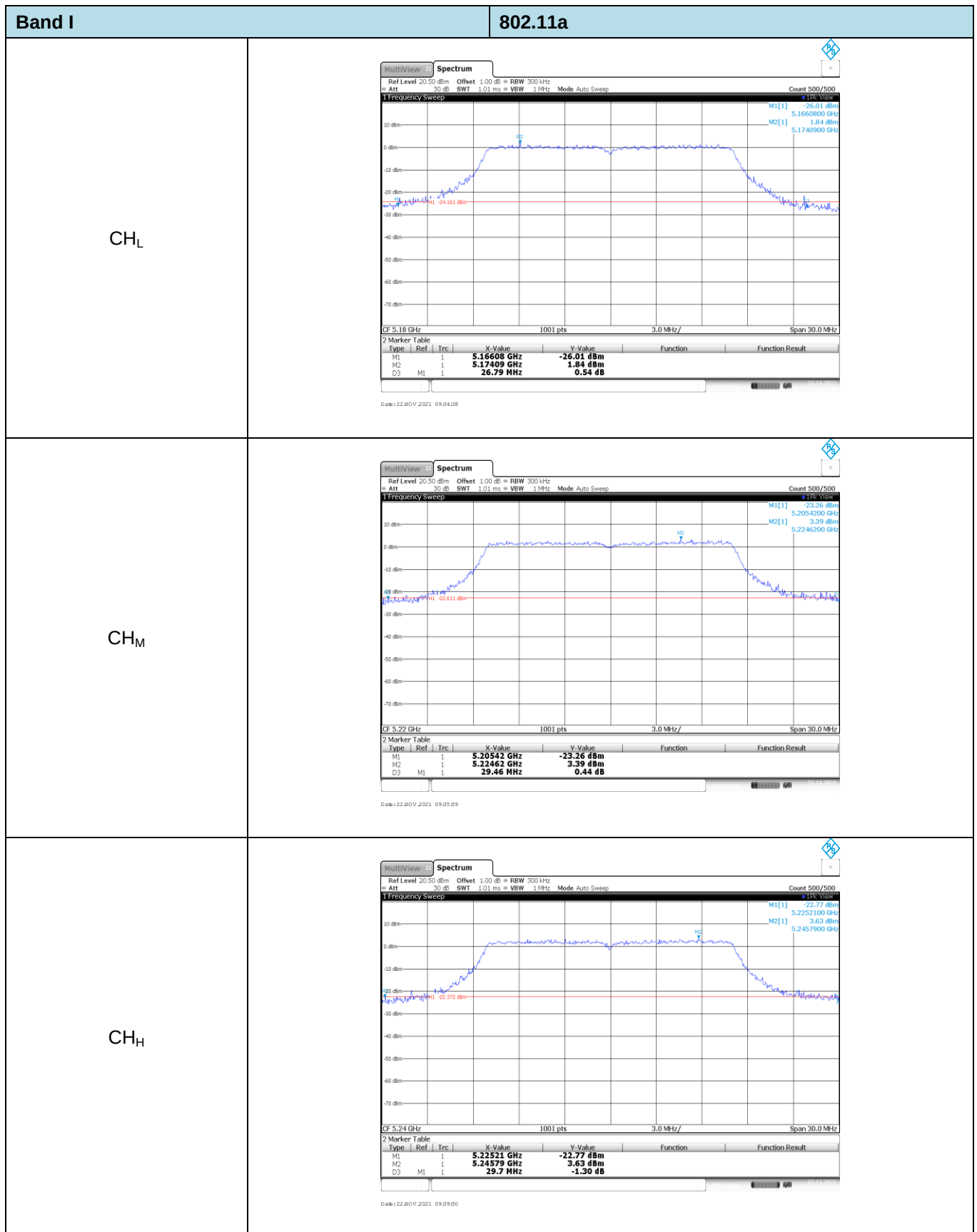
Appendix C: 26dB bandwidth

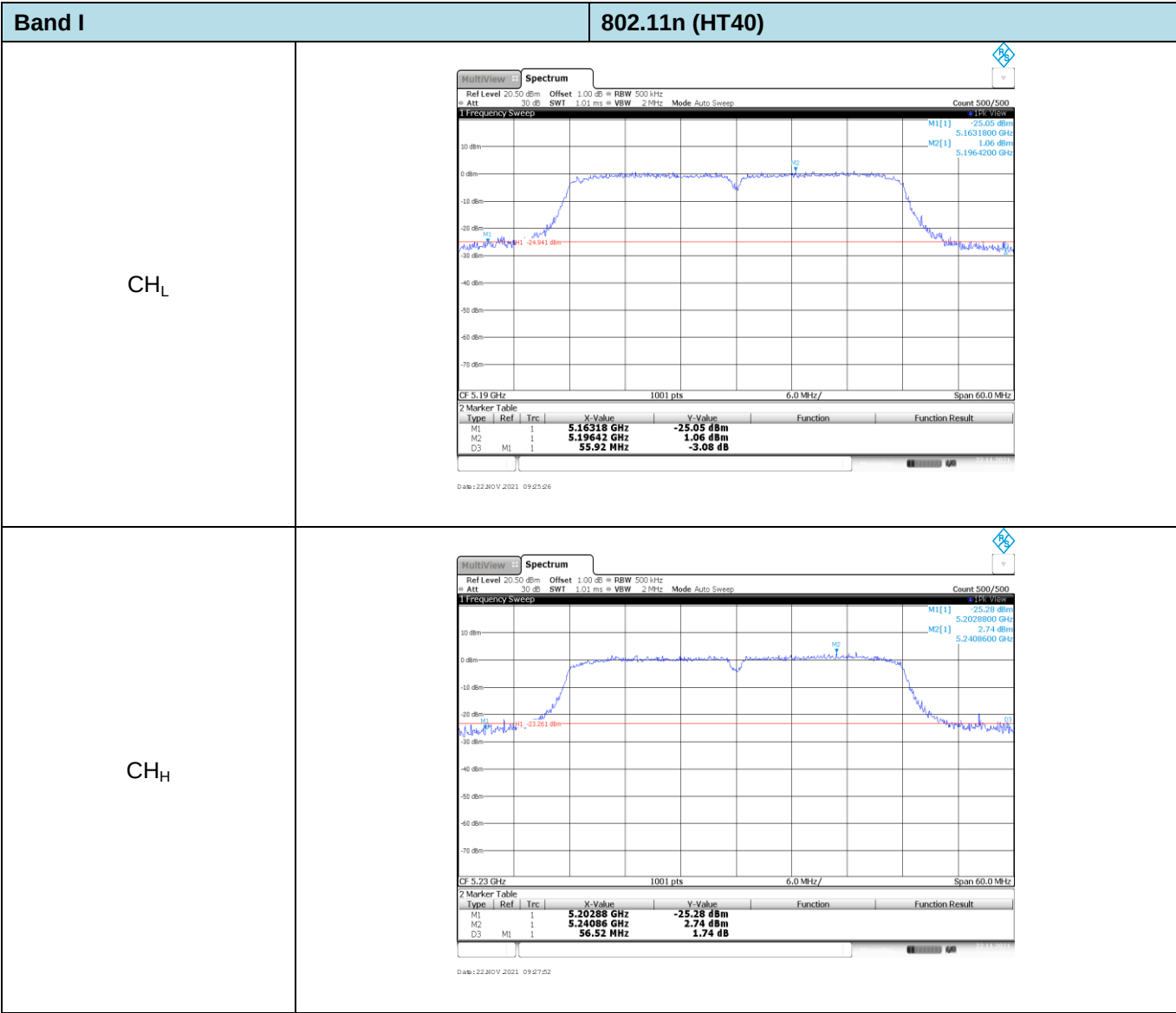
Band	Bandwidth (MHz)	Type	Channel	26dB bandwidth (MHz)	Result
I	20	802.11n	CH _L	29.16	Pass
			CH _M	29.01	
			CH _H	29.47	
		802.11a	CH _L	26.79	Pass
			CH _M	29.46	
			CH _H	29.70	
	40	802.11n	CH _L	55.92	Pass
			CH _H	56.52	
II	20	802.11n	CH _L	29.23	Pass
			CH _M	28.43	
			CH _H	28.68	
		802.11a	CH _L	27.81	Pass
			CH _M	29.76	
			CH _H	29.28	
	40	802.11n	CH _L	53.46	Pass
			CH _H	57.96	
III	20	802.11n	CH _L	28.29	Pass
			CH _M	28.53	
			CH _H	28.17	
		802.11a	CH _L	29.73	Pass
			CH _M	28.88	
			CH _H	27.51	
	40	802.11n	CH _L	58.68	Pass
			CH _M	59.10	
			CH _H	57.12	

Band I

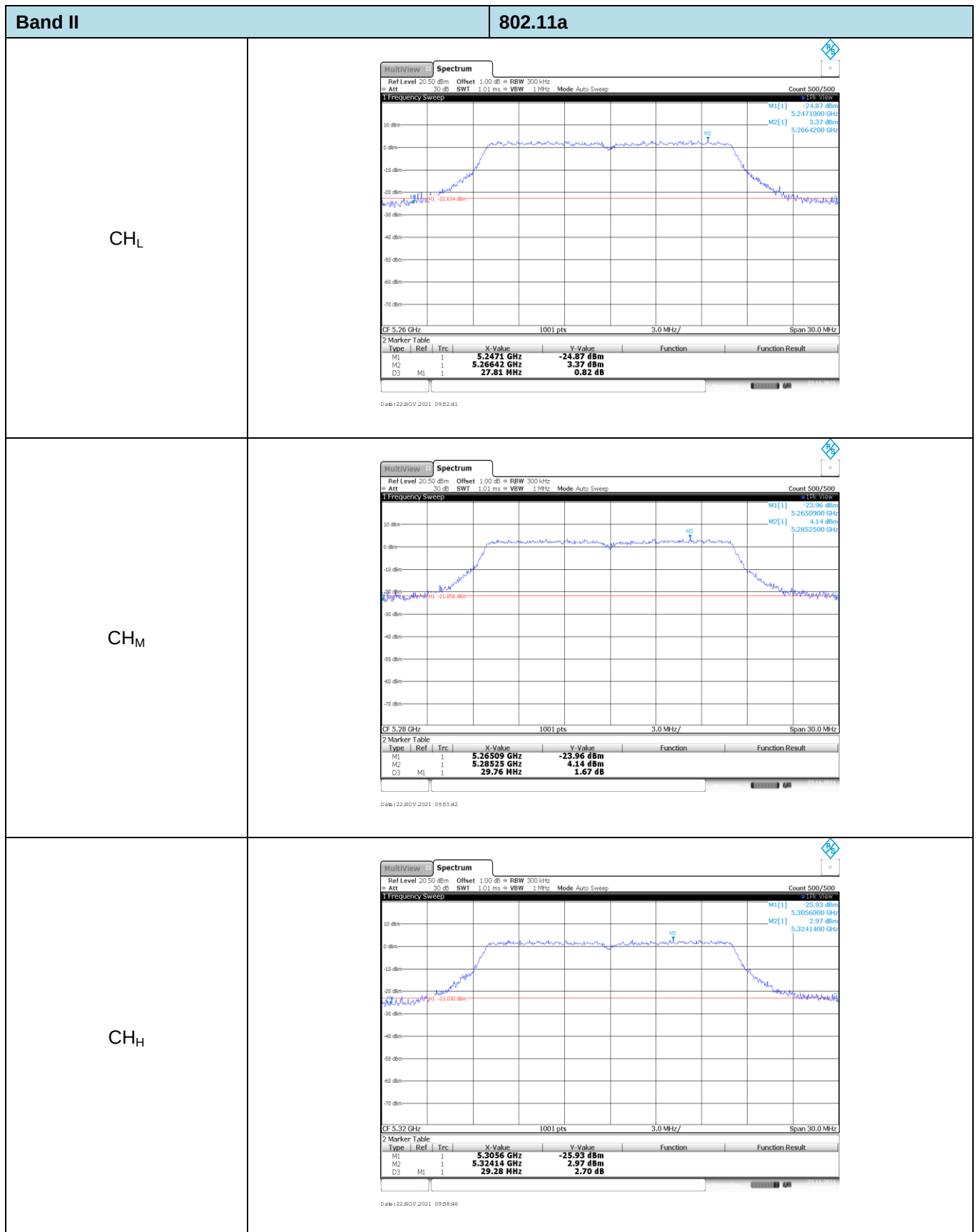
802.11n (HT20)

CH_LCH_MCH_H



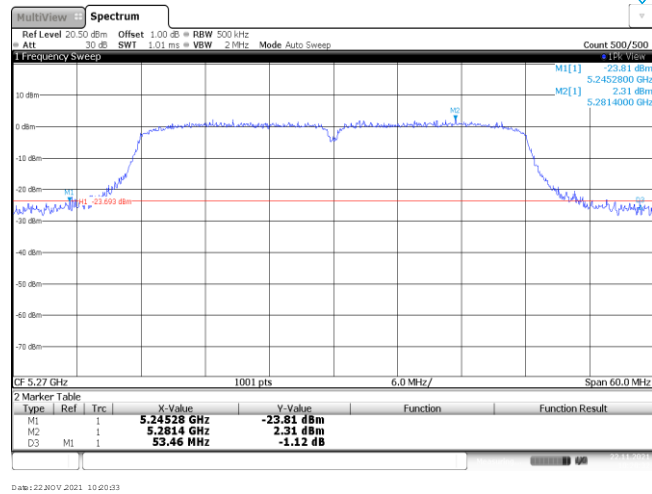
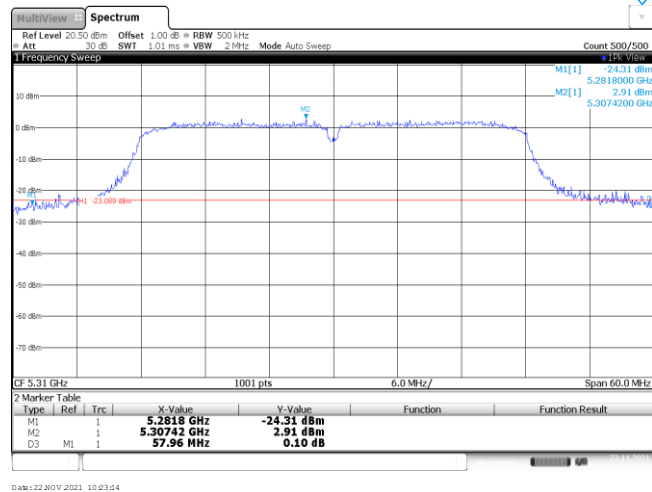


Band II		802.11n (HT20)																											
CH _L	MultiView Spectrum Ref Level 20.50 dBm Offset 1.00 dB RBW 300 kHz Att 30 dB SWT 1.01 ms VBW 1 MHz Mode Auto Sweep Count 500/500 1 Frequency Sweep 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm M1[1] 24.60 dBm 5.2456900 GHz M2[1] 2.93 dBm 5.2547500 GHz CF 5.26 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>5.24569 GHz</td><td>-24.60 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>5.25475 GHz</td><td>2.93 dBm</td><td></td><td></td></tr><tr><td>D3</td><td>M1</td><td>1</td><td>29.23 MHz</td><td>1.81 dB</td><td></td><td></td></tr></table> Date: 22 NOV 2021 10:51:50	Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		5.24569 GHz	-24.60 dBm			M2	1		5.25475 GHz	2.93 dBm			D3	M1	1	29.23 MHz	1.81 dB		
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result																							
M1	1		5.24569 GHz	-24.60 dBm																									
M2	1		5.25475 GHz	2.93 dBm																									
D3	M1	1	29.23 MHz	1.81 dB																									
CH _M	MultiView Spectrum Ref Level 20.50 dBm Offset 1.00 dB RBW 300 kHz Att 30 dB SWT 1.01 ms VBW 1 MHz Mode Auto Sweep Count 500/500 1 Frequency Sweep 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm M2[1] 2.66 dBm 5.2833570 GHz M1[1] -25.71 dBm 5.2664100 GHz CF 5.28 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>5.26641 GHz</td><td>-25.71 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>5.283357 GHz</td><td>2.66 dBm</td><td></td><td></td></tr><tr><td>D3</td><td>M1</td><td>1</td><td>28.428 MHz</td><td>2.78 dB</td><td></td><td></td></tr></table> Date: 22 NOV 2021 10:57:50	Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		5.26641 GHz	-25.71 dBm			M2	1		5.283357 GHz	2.66 dBm			D3	M1	1	28.428 MHz	2.78 dB		
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result																							
M1	1		5.26641 GHz	-25.71 dBm																									
M2	1		5.283357 GHz	2.66 dBm																									
D3	M1	1	28.428 MHz	2.78 dB																									
CH _H	MultiView Spectrum Ref Level 20.50 dBm Offset 1.00 dB RBW 300 kHz Att 30 dB SWT 1.01 ms VBW 1 MHz Mode Auto Sweep Count 500/500 1 Frequency Sweep 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm M1[1] -23.22 dBm 5.3062300 GHz M2[1] 3.53 dBm 5.3170600 GHz CF 5.32 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>5.30623 GHz</td><td>-23.22 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>5.31706 GHz</td><td>3.53 dBm</td><td></td><td></td></tr><tr><td>D3</td><td>M1</td><td>1</td><td>28.682 MHz</td><td>1.57 dB</td><td></td><td></td></tr></table> Date: 22 NOV 2021 10:16:22	Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		5.30623 GHz	-23.22 dBm			M2	1		5.31706 GHz	3.53 dBm			D3	M1	1	28.682 MHz	1.57 dB		
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result																							
M1	1		5.30623 GHz	-23.22 dBm																									
M2	1		5.31706 GHz	3.53 dBm																									
D3	M1	1	28.682 MHz	1.57 dB																									



Band II

802.11n (HT40)

CH_LCH_H

Band III

802.11n (HT20)

CH_L

MultiView Spectrum

Ref Level 20.50 dBm Offset 1.00 dB RBW 300 kHz

1 Frequency Sweep

Count 500/500

M1[1] -25.43 dBm 5.4851800 GHz

M2[1] 0.77 dBm 5.4926500 GHz

CF 5.5 GHz 1001 pts 3.0 MHz/ Span 30.0 MHz

Type	Ref	Trc	X-Value	Y-Value	Function	Function Result
M1	1		5.48518 GHz	-25.43 dBm		
M2	1		5.49265 GHz	0.77 dBm		
D3	M1	1	28.2901 MHz	-0.37 dB		

Date: 22 NOV 2021 10:39:11

CH_M

MultiView Spectrum

Ref Level 20.50 dBm Offset 1.00 dB RBW 300 kHz

1 Frequency Sweep

Count 500/500

M1[1] -24.34 dBm 5.5651800 GHz

M2[1] 1.94 dBm 5.5851900 GHz

CF 5.58 GHz 1001 pts 3.0 MHz/ Span 30.0 MHz

Type	Ref	Trc	X-Value	Y-Value	Function	Function Result
M1	1		5.56518 GHz	-24.34 dBm		
M2	1		5.58519 GHz	1.94 dBm		
D3	M1	1	28.5301 MHz	-1.57 dB		

Date: 22 NOV 2021 10:42:11

CH_H

MultiView Spectrum

Ref Level 20.50 dBm Offset 1.00 dB RBW 300 kHz

1 Frequency Sweep

Count 500/500

M1[1] -27.55 dBm 5.7054500 GHz

M2[1] 0.04 dBm 5.7128300 GHz

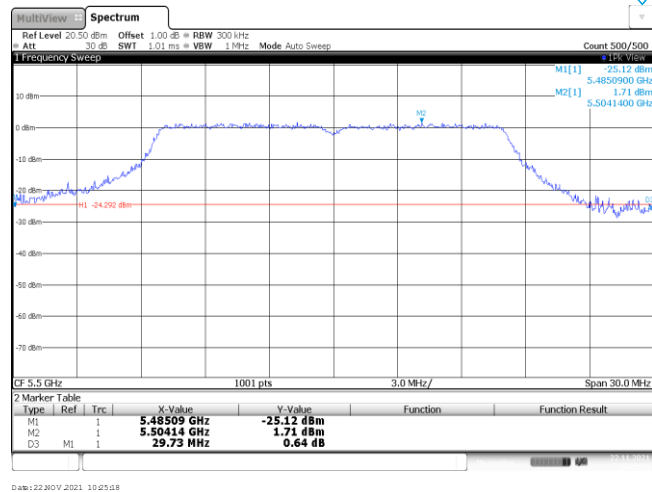
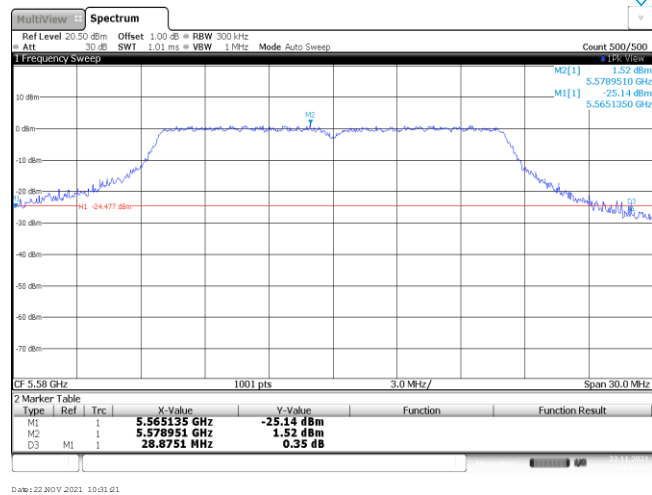
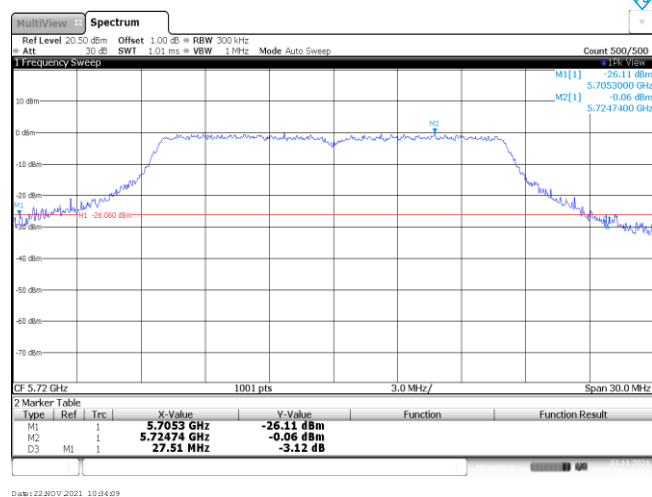
CF 5.72 GHz 1001 pts 3.0 MHz/ Span 30.0 MHz

Type	Ref	Trc	X-Value	Y-Value	Function	Function Result
M1	1		5.70545 GHz	-27.55 dBm		
M2	1		5.71283 GHz	0.04 dBm		
D3	M1	1	28.17 MHz	-1.09 dB		

Date: 22 NOV 2021 10:43:44

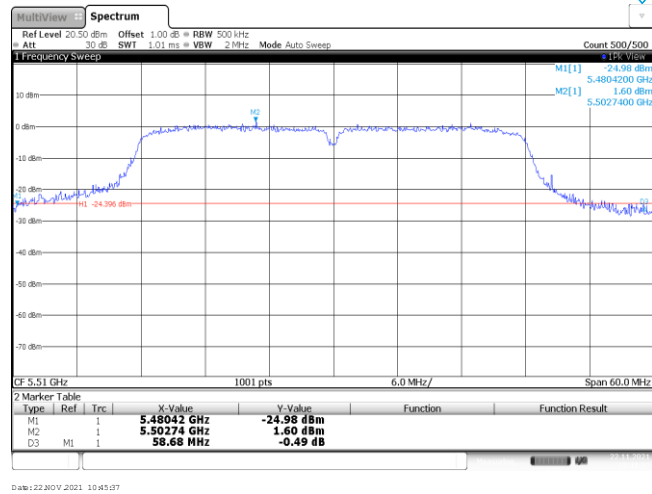
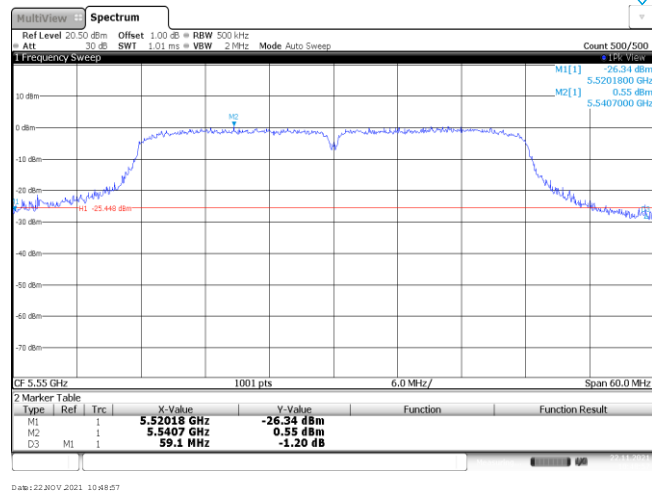
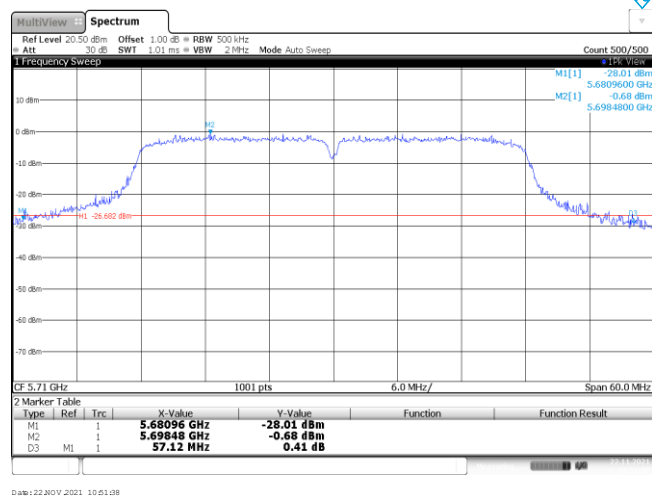
Band III

802.11a

CH_LCH_MCH_H

Band III

802.11n (HT40)

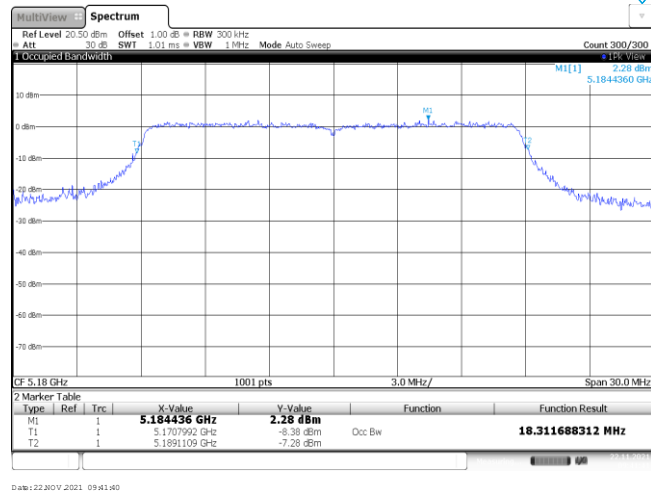
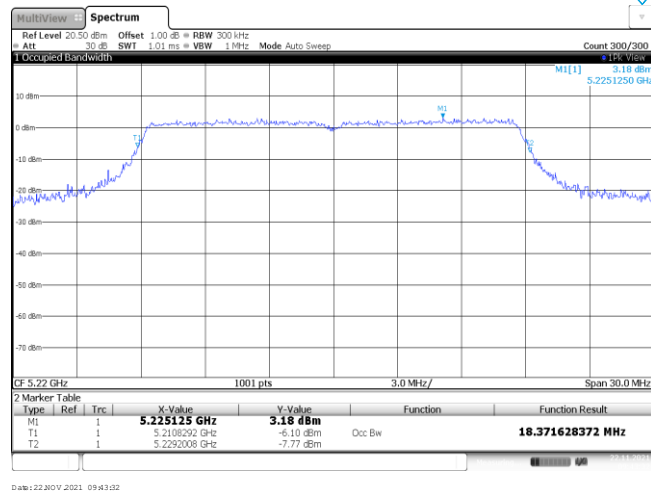
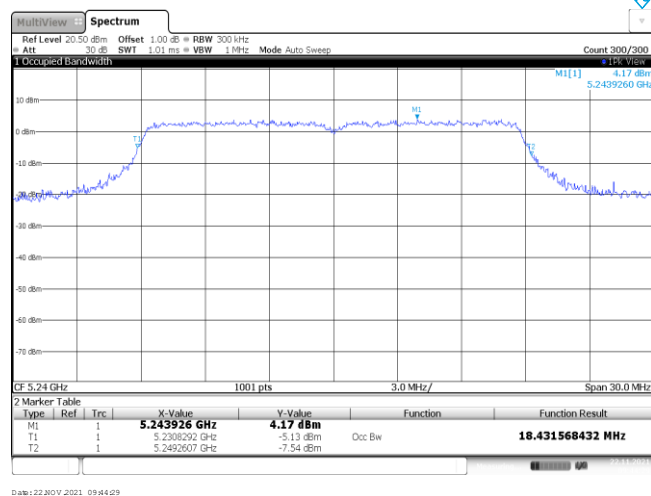
CH_LCH_MCH_H

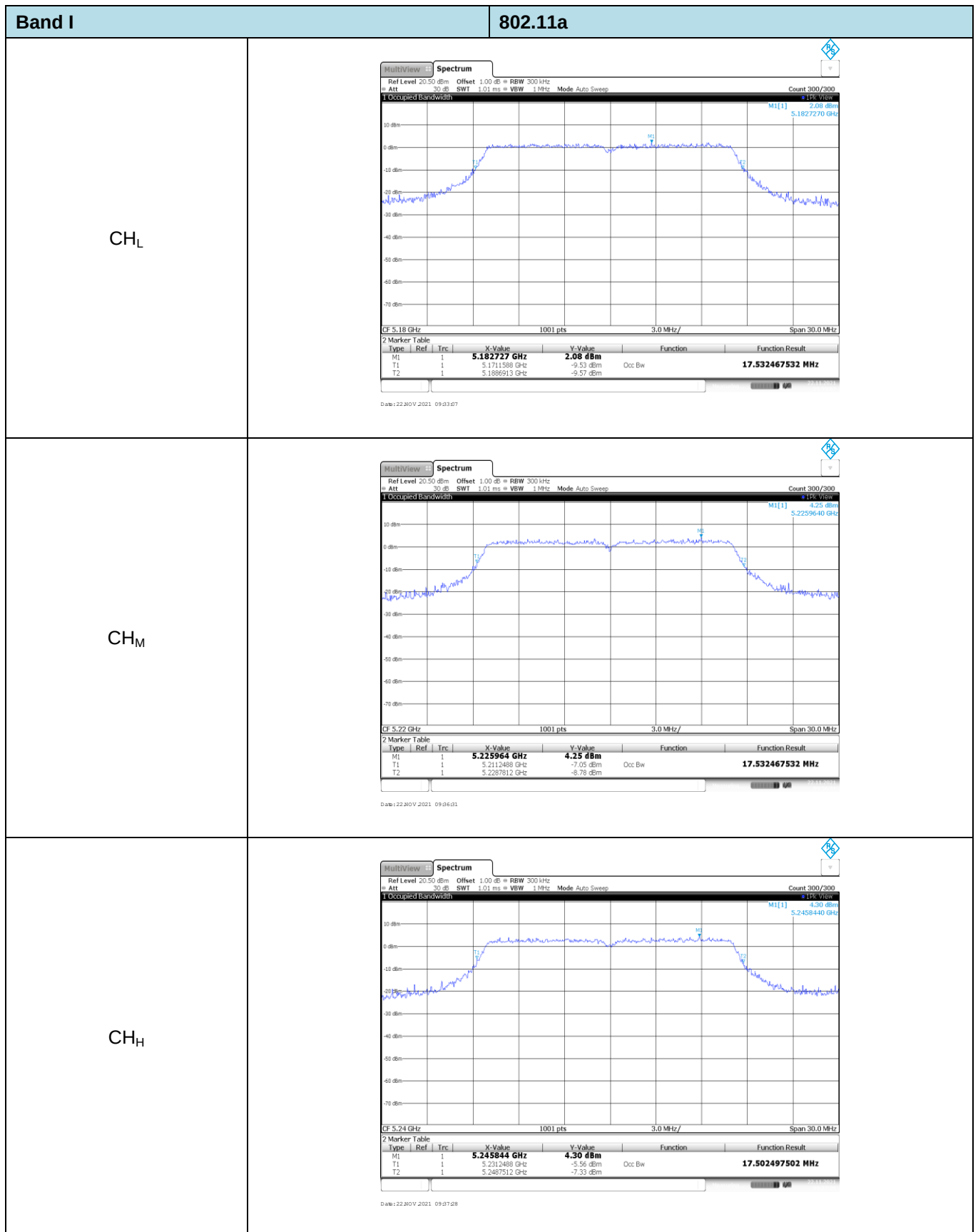
Appendix D: 99% Occupy bandwidth

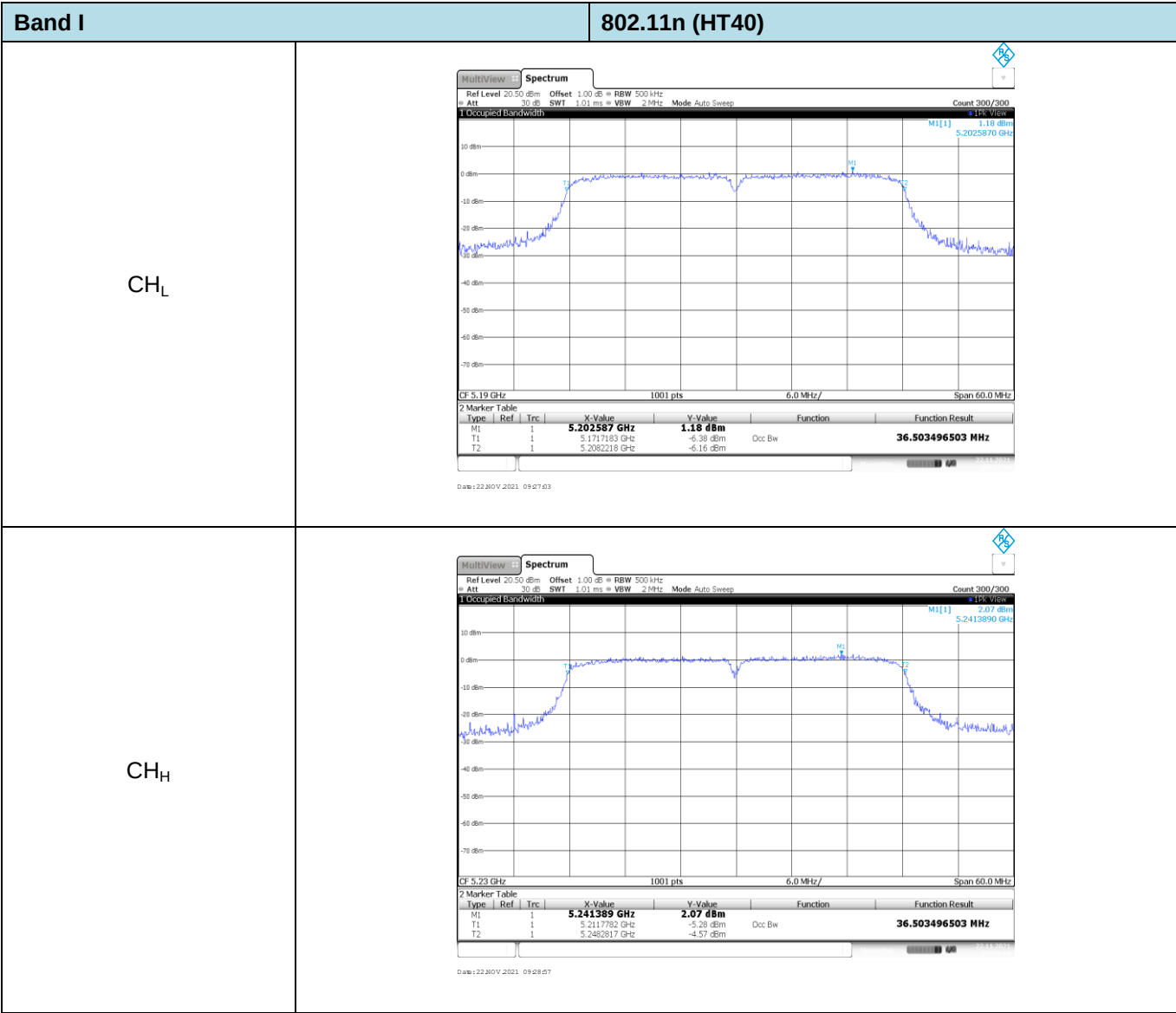
Band	Bandwidth (MHz)	Type	Channel	99% Occupy bandwidth (MHz)	Result
I	20	802.11n	CH _L	18.31	Pass
			CH _M	18.37	
			CH _H	18.43	
		802.11a	CH _L	17.53	Pass
			CH _M	17.53	
			CH _H	17.50	
	40	802.11n	CH _L	36.50	Pass
			CH _H	36.50	
II	20	802.11n	CH _L	18.28	Pass
			CH _M	18.31	
			CH _H	18.40	
		802.11a	CH _L	17.29	Pass
			CH _M	17.44	
			CH _H	17.50	
	40	802.11n	CH _L	36.50	Pass
			CH _H	36.56	
III	20	802.11n	CH _L	18.43	Pass
			CH _M	18.49	
			CH _H	18.28	
		802.11a	CH _L	17.65	Pass
			CH _M	17.74	
			CH _H	17.47	
	40	802.11n	CH _L	36.74	Pass
			CH _M	36.62	
			CH _H	36.68	
IV	20	802.11n	CH _L	18.31	Pass
			CH _M	18.19	
			CH _H	18.25	
		802.11a	CH _L	17.47	Pass
			CH _M	17.38	
			CH _H	17.35	
	40	802.11n	CH _L	36.56	Pass
			CH _H	36.47	

Band I

802.11n (HT20)

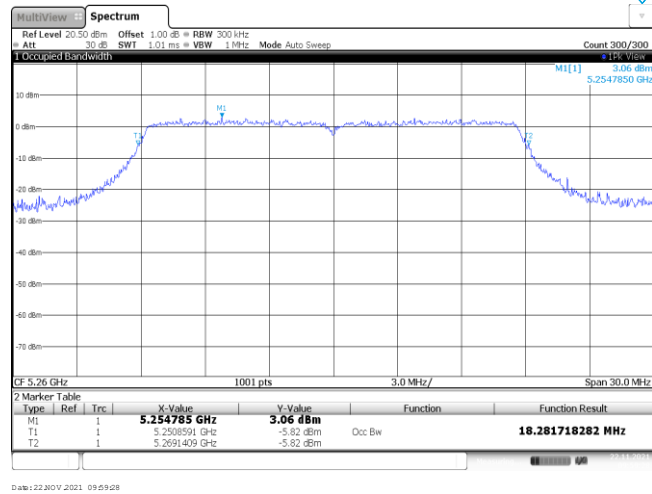
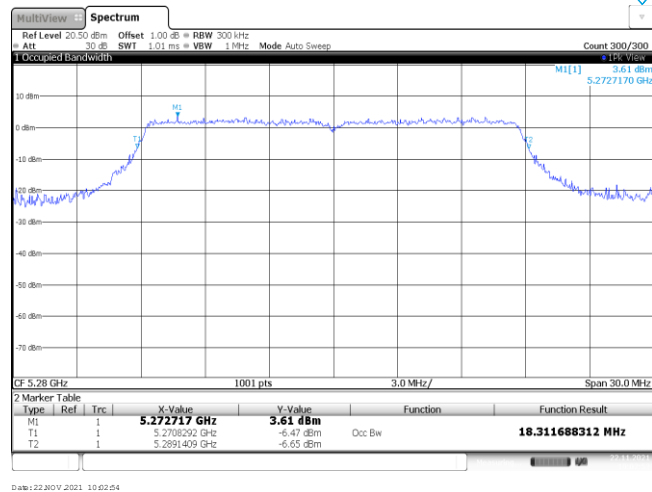
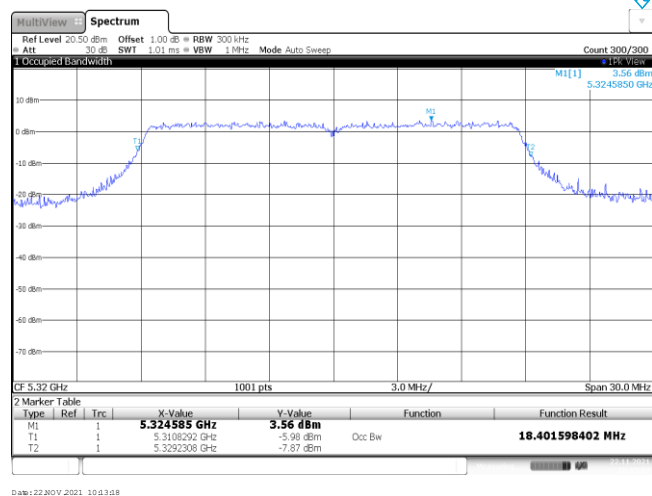
CH_LCH_MCH_H



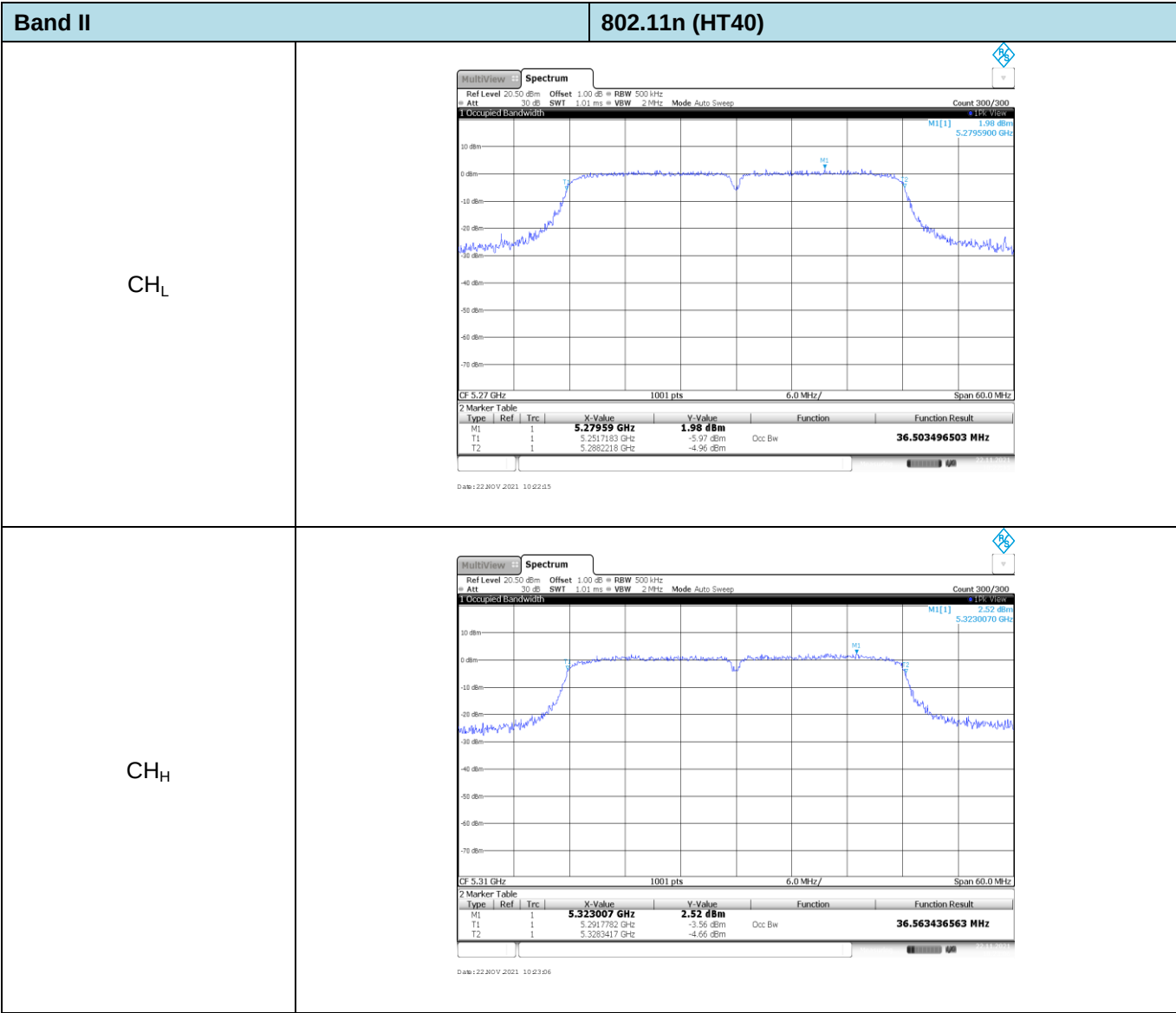


Band II

802.11n (HT20)

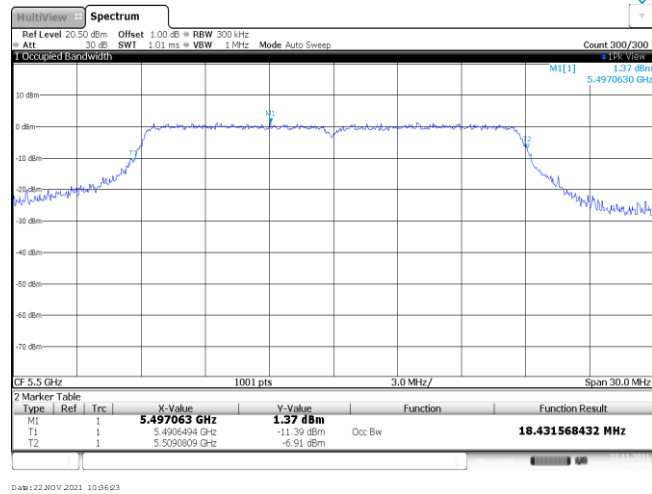
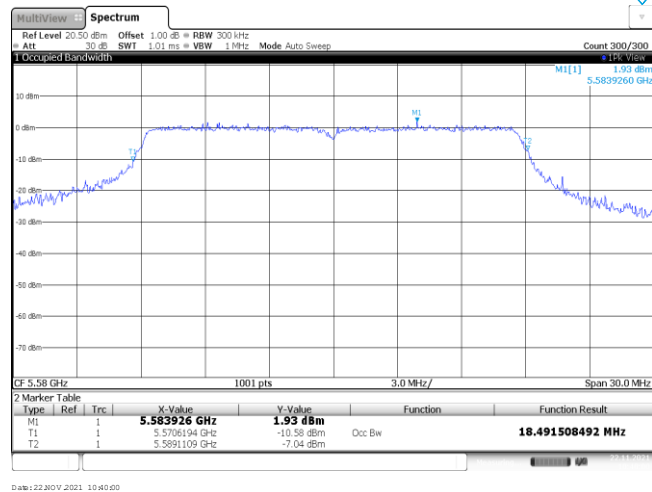
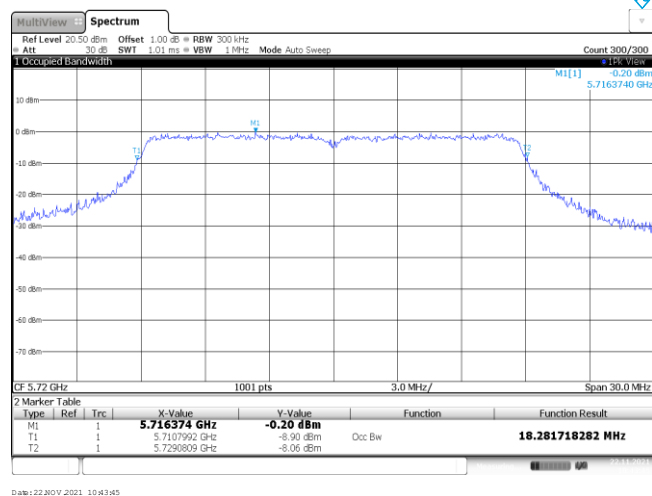
CH_LCH_MCH_H

Band II		802.11a																											
CH _L	MultiView Spectrum Ref Level 20.50 dBm Att 30 dB Offset 1.00 dB RBW 300 kHz SWT 1.01 ms VBW 1 MHz Mode Auto Sweep Count 300/300 1 Occupied Bandwidth M1[1] 2.81 dBm 5.2547250 GHz CF 5.26 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>5.254725 GHz</td><td>2.81 dBm</td><td></td><td></td></tr><tr><td>T1</td><td>1</td><td></td><td>5.2513387 GHz</td><td>-6.98 dBm</td><td>Occ BW</td><td>17.292707293 MHz</td></tr><tr><td>T2</td><td>1</td><td></td><td>5.266314 GHz</td><td>-8.51 dBm</td><td></td><td></td></tr></table> Date: 22.10.2021 09:53:02	Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		5.254725 GHz	2.81 dBm			T1	1		5.2513387 GHz	-6.98 dBm	Occ BW	17.292707293 MHz	T2	1		5.266314 GHz	-8.51 dBm		
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result																							
M1	1		5.254725 GHz	2.81 dBm																									
T1	1		5.2513387 GHz	-6.98 dBm	Occ BW	17.292707293 MHz																							
T2	1		5.266314 GHz	-8.51 dBm																									
CH _M	MultiView Spectrum Ref Level 20.50 dBm Att 30 dB Offset 1.00 dB RBW 300 kHz SWT 1.01 ms VBW 1 MHz Mode Auto Sweep Count 300/300 1 Occupied Bandwidth M1[1] 3.62 dBm 5.2790110 GHz CF 5.28 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>5.279011 GHz</td><td>3.62 dBm</td><td></td><td></td></tr><tr><td>T1</td><td>1</td><td></td><td>5.2712787 GHz</td><td>-8.13 dBm</td><td>Occ BW</td><td>17.442557443 MHz</td></tr><tr><td>T2</td><td>1</td><td></td><td>5.2887213 GHz</td><td>-8.02 dBm</td><td></td><td></td></tr></table> Date: 22.10.2021 09:54:03	Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		5.279011 GHz	3.62 dBm			T1	1		5.2712787 GHz	-8.13 dBm	Occ BW	17.442557443 MHz	T2	1		5.2887213 GHz	-8.02 dBm		
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result																							
M1	1		5.279011 GHz	3.62 dBm																									
T1	1		5.2712787 GHz	-8.13 dBm	Occ BW	17.442557443 MHz																							
T2	1		5.2887213 GHz	-8.02 dBm																									
CH _H	MultiView Spectrum Ref Level 20.50 dBm Att 30 dB Offset 1.00 dB RBW 300 kHz SWT 1.01 ms VBW 1 MHz Mode Auto Sweep Count 300/300 1 Occupied Bandwidth M1[1] 4.15 dBm 5.3146650 GHz CF 5.32 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>5.314665 GHz</td><td>4.15 dBm</td><td></td><td></td></tr><tr><td>T1</td><td>1</td><td></td><td>5.3112787 GHz</td><td>-7.45 dBm</td><td>Occ BW</td><td>17.502497502 MHz</td></tr><tr><td>T2</td><td>1</td><td></td><td>5.3287812 GHz</td><td>-6.72 dBm</td><td></td><td></td></tr></table> Date: 22.10.2021 09:56:16	Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		5.314665 GHz	4.15 dBm			T1	1		5.3112787 GHz	-7.45 dBm	Occ BW	17.502497502 MHz	T2	1		5.3287812 GHz	-6.72 dBm		
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result																							
M1	1		5.314665 GHz	4.15 dBm																									
T1	1		5.3112787 GHz	-7.45 dBm	Occ BW	17.502497502 MHz																							
T2	1		5.3287812 GHz	-6.72 dBm																									



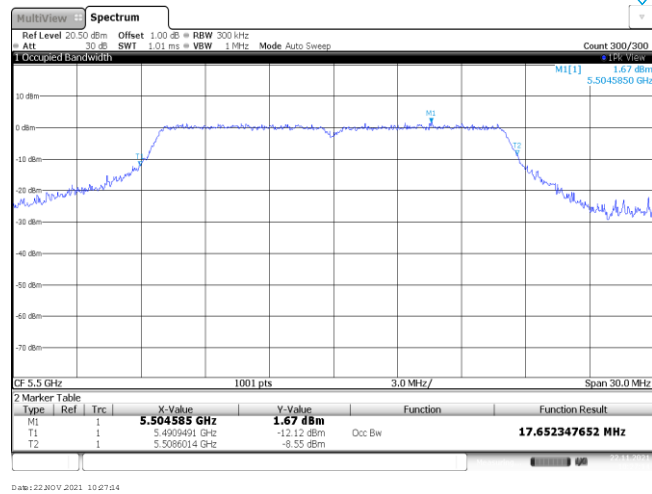
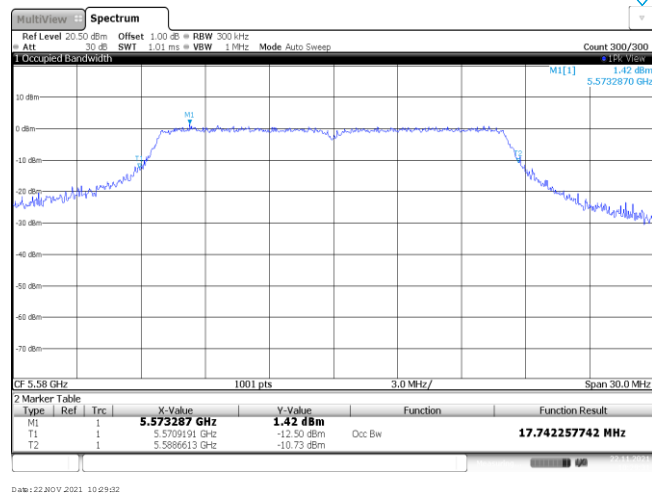
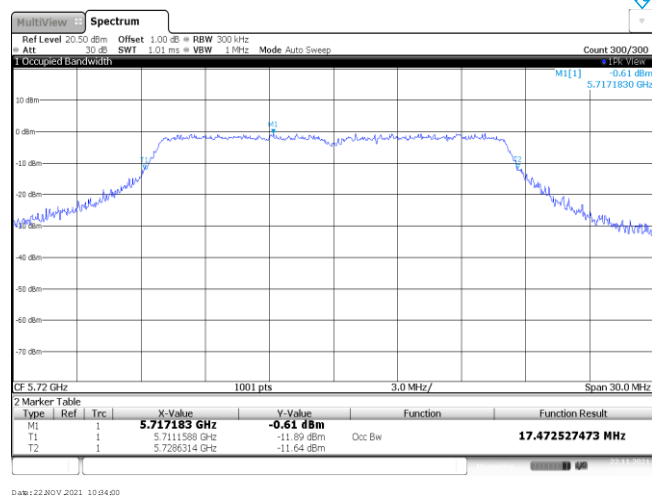
Band III

802.11n (HT20)

CH_LCH_MCH_H

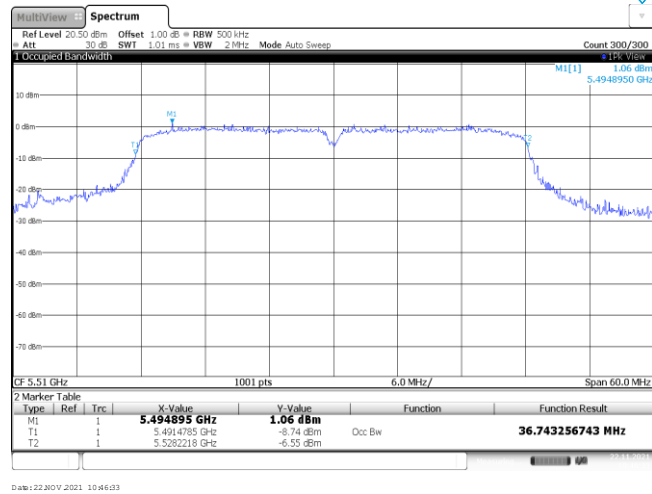
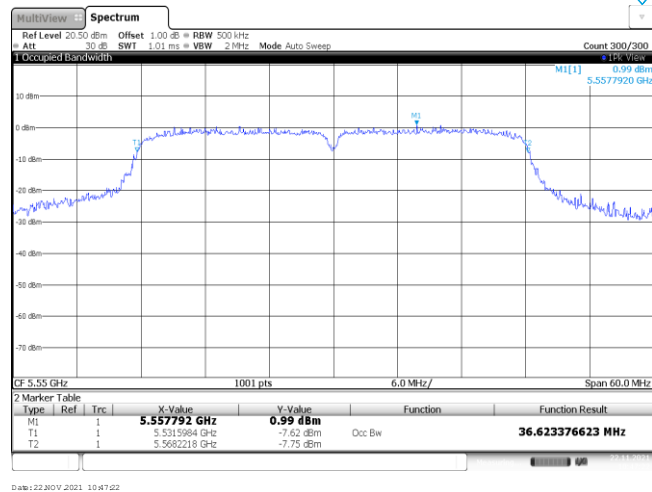
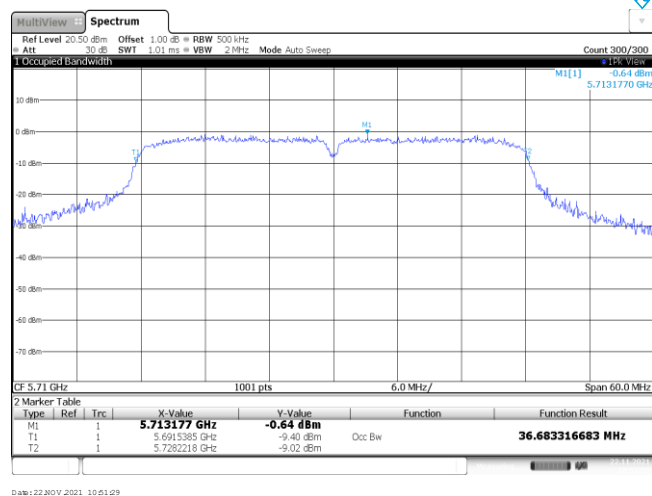
Band III

802.11a

CH_LCH_MCH_H

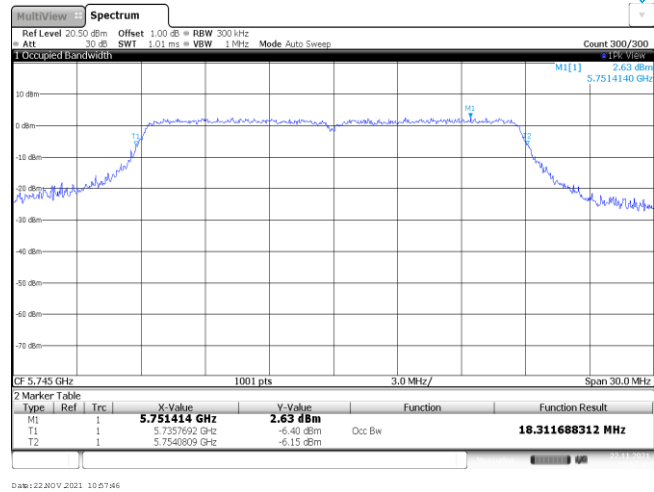
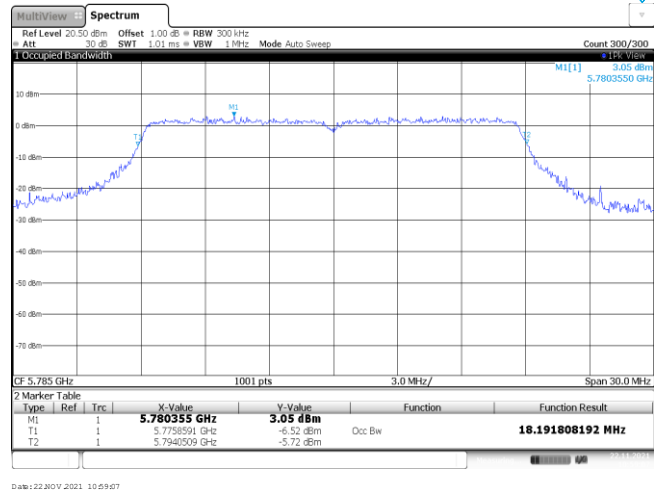
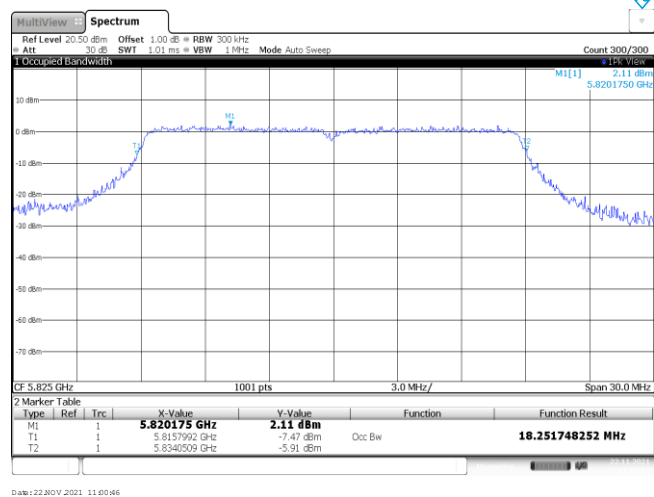
Band III

802.11n (HT40)

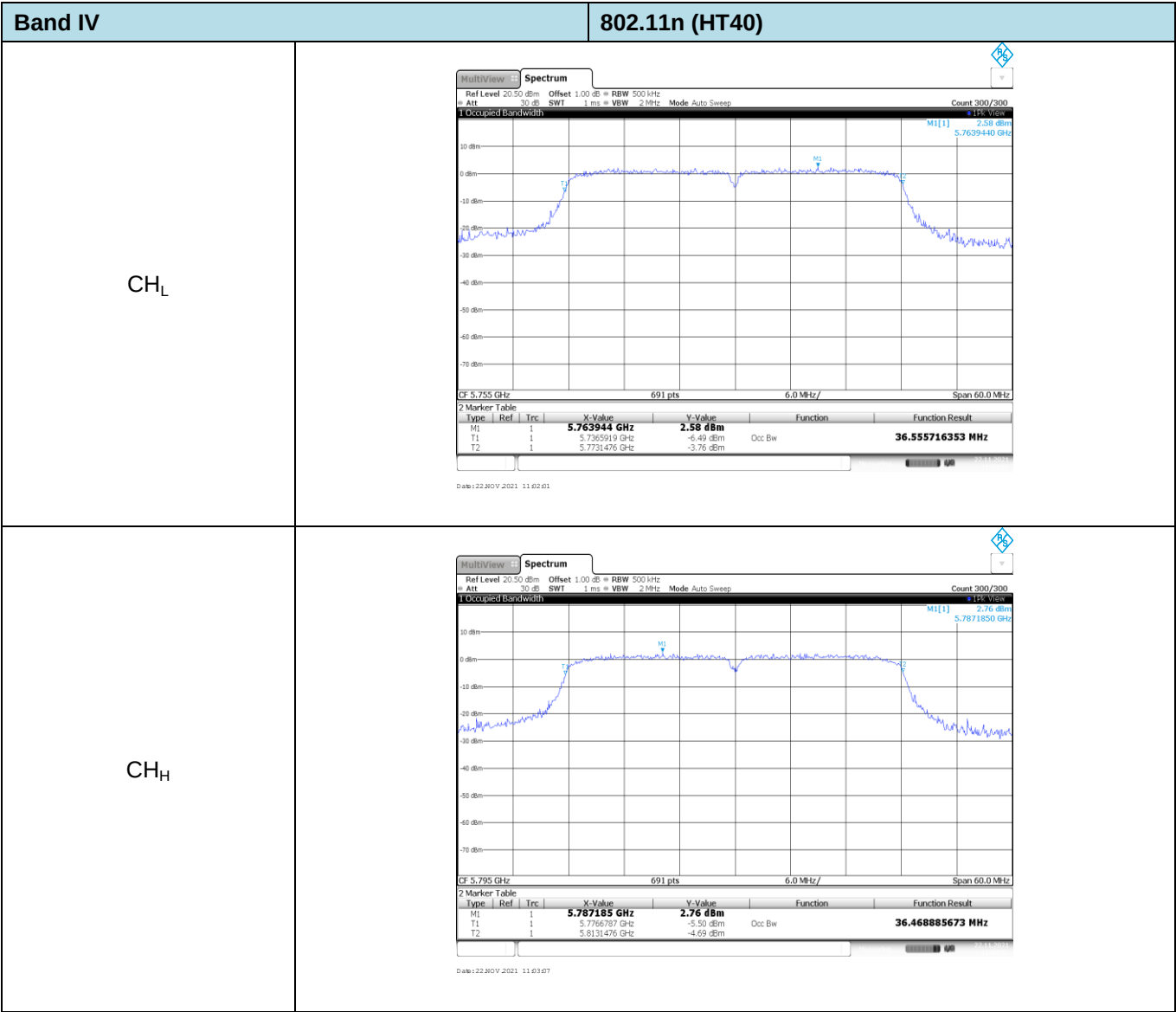
CH_LCH_MCH_H

Band IV

802.11n (HT20)

CH_LCH_MCH_H

Band IV		802.11a																											
CH _L	MultiView Spectrum Ref Level 20.50 dBm Att 30 dB Offset 1.00 dB RBW 300 kHz SWI 1.01 ms VBW 1 MHz Mode Auto Sweep Count 300/300 1 Occupied Bandwidth M1[1] 2.99 dBm 5.7402350 GHz CF 5.745 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>5.740235 GHz</td><td>2.99 dBm</td><td></td><td></td></tr><tr><td>T1</td><td>1</td><td></td><td>5.7361588 GHz</td><td>-7.97 dBm</td><td>Occ Bw</td><td>17.472527473 MHz</td></tr><tr><td>T2</td><td>1</td><td></td><td>5.7536314 GHz</td><td>-6.91 dBm</td><td></td><td></td></tr></table> Date: 22.10.01 10:53:03	Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		5.740235 GHz	2.99 dBm			T1	1		5.7361588 GHz	-7.97 dBm	Occ Bw	17.472527473 MHz	T2	1		5.7536314 GHz	-6.91 dBm		
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result																							
M1	1		5.740235 GHz	2.99 dBm																									
T1	1		5.7361588 GHz	-7.97 dBm	Occ Bw	17.472527473 MHz																							
T2	1		5.7536314 GHz	-6.91 dBm																									
CH _M	MultiView Spectrum Ref Level 20.50 dBm Att 30 dB Offset 1.00 dB RBW 300 kHz SWI 1.01 ms VBW 1 MHz Mode Auto Sweep Count 300/300 1 Occupied Bandwidth M1[1] 3.70 dBm 5.7894960 GHz CF 5.785 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>5.789496 GHz</td><td>3.70 dBm</td><td></td><td></td></tr><tr><td>T1</td><td>1</td><td></td><td>5.7762488 GHz</td><td>-8.08 dBm</td><td>Occ Bw</td><td>17.382617383 MHz</td></tr><tr><td>T2</td><td>1</td><td></td><td>5.7936314 GHz</td><td>-7.65 dBm</td><td></td><td></td></tr></table> Date: 22.10.01 10:55:19	Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		5.789496 GHz	3.70 dBm			T1	1		5.7762488 GHz	-8.08 dBm	Occ Bw	17.382617383 MHz	T2	1		5.7936314 GHz	-7.65 dBm		
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result																							
M1	1		5.789496 GHz	3.70 dBm																									
T1	1		5.7762488 GHz	-8.08 dBm	Occ Bw	17.382617383 MHz																							
T2	1		5.7936314 GHz	-7.65 dBm																									
CH _H	MultiView Spectrum Ref Level 20.50 dBm Att 30 dB Offset 1.00 dB RBW 300 kHz SWI 1.01 ms VBW 1 MHz Mode Auto Sweep Count 300/300 1 Occupied Bandwidth M1[1] 2.37 dBm 5.8219430 GHz CF 5.825 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>5.821943 GHz</td><td>2.37 dBm</td><td></td><td></td></tr><tr><td>T1</td><td>1</td><td></td><td>5.8162188 GHz</td><td>-8.73 dBm</td><td>Occ Bw</td><td>17.352647353 MHz</td></tr><tr><td>T2</td><td>1</td><td></td><td>5.8335714 GHz</td><td>-8.76 dBm</td><td></td><td></td></tr></table> Date: 22.10.01 10:56:32	Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		5.821943 GHz	2.37 dBm			T1	1		5.8162188 GHz	-8.73 dBm	Occ Bw	17.352647353 MHz	T2	1		5.8335714 GHz	-8.76 dBm		
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result																							
M1	1		5.821943 GHz	2.37 dBm																									
T1	1		5.8162188 GHz	-8.73 dBm	Occ Bw	17.352647353 MHz																							
T2	1		5.8335714 GHz	-8.76 dBm																									

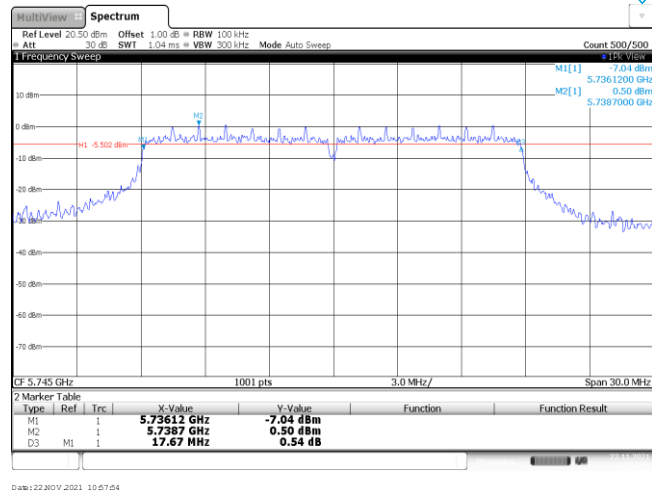
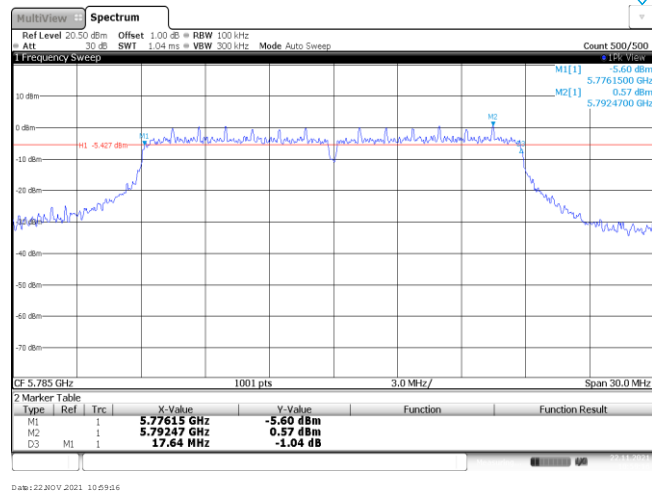
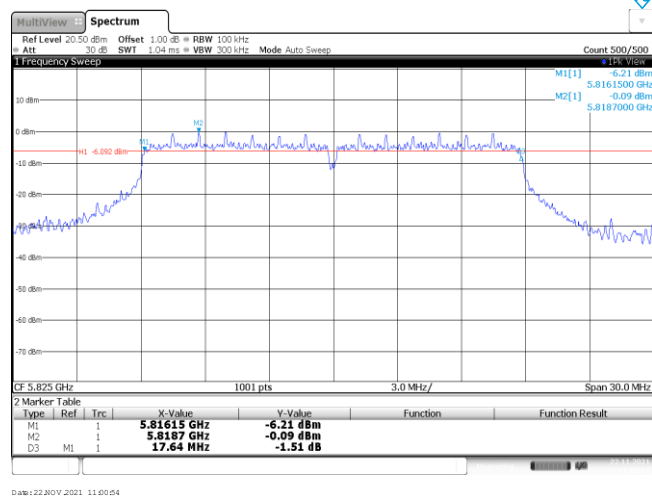


Appendix E: 6dB Bandwidth

Band	Bandwidth (MHz)	Type	Channel	6dB bandwidth (MHz)	Result
IV	20	802.11n	CH _L	17.67	Pass
			CH _M	17.64	
			CH _H	17.64	
		802.11a	CH _L	16.41	Pass
			CH _M	16.41	
			CH _H	16.41	
	40	802.11n	CH _L	35.74	Pass
			CH _H	35.39	

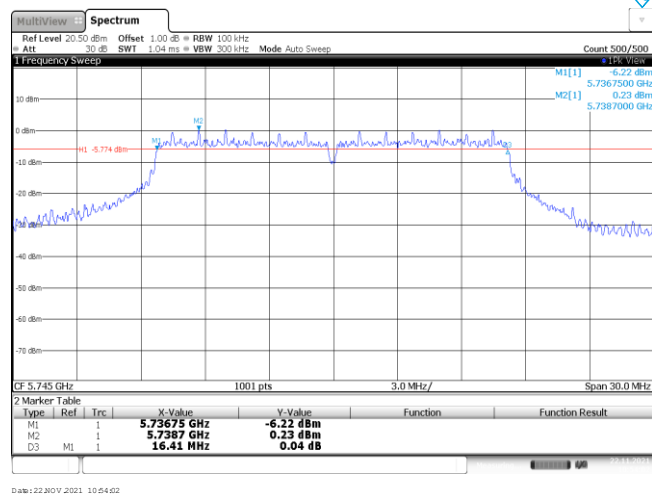
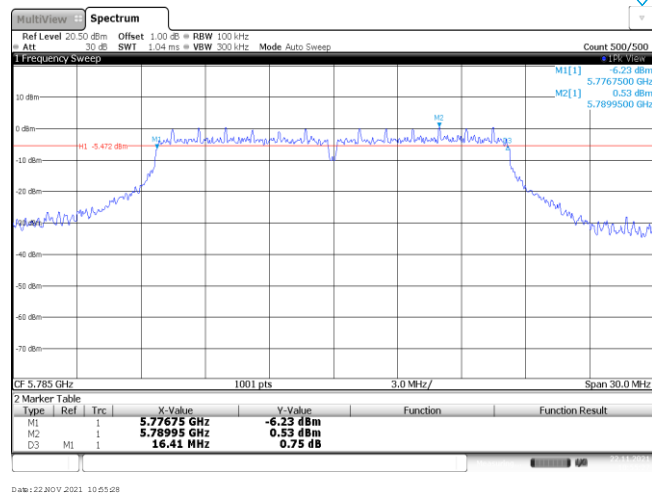
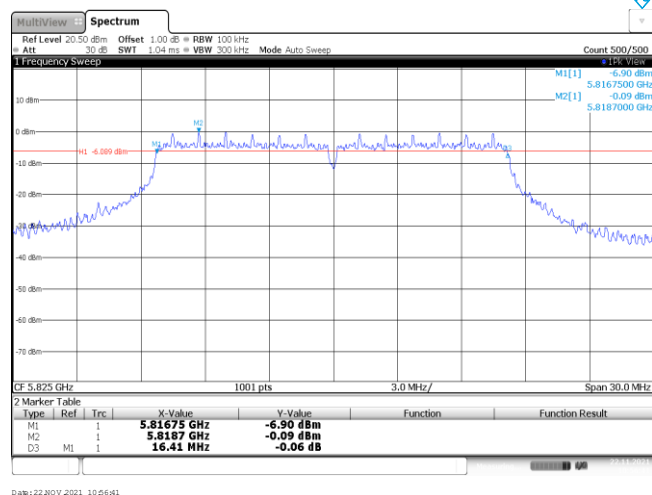
Band IV

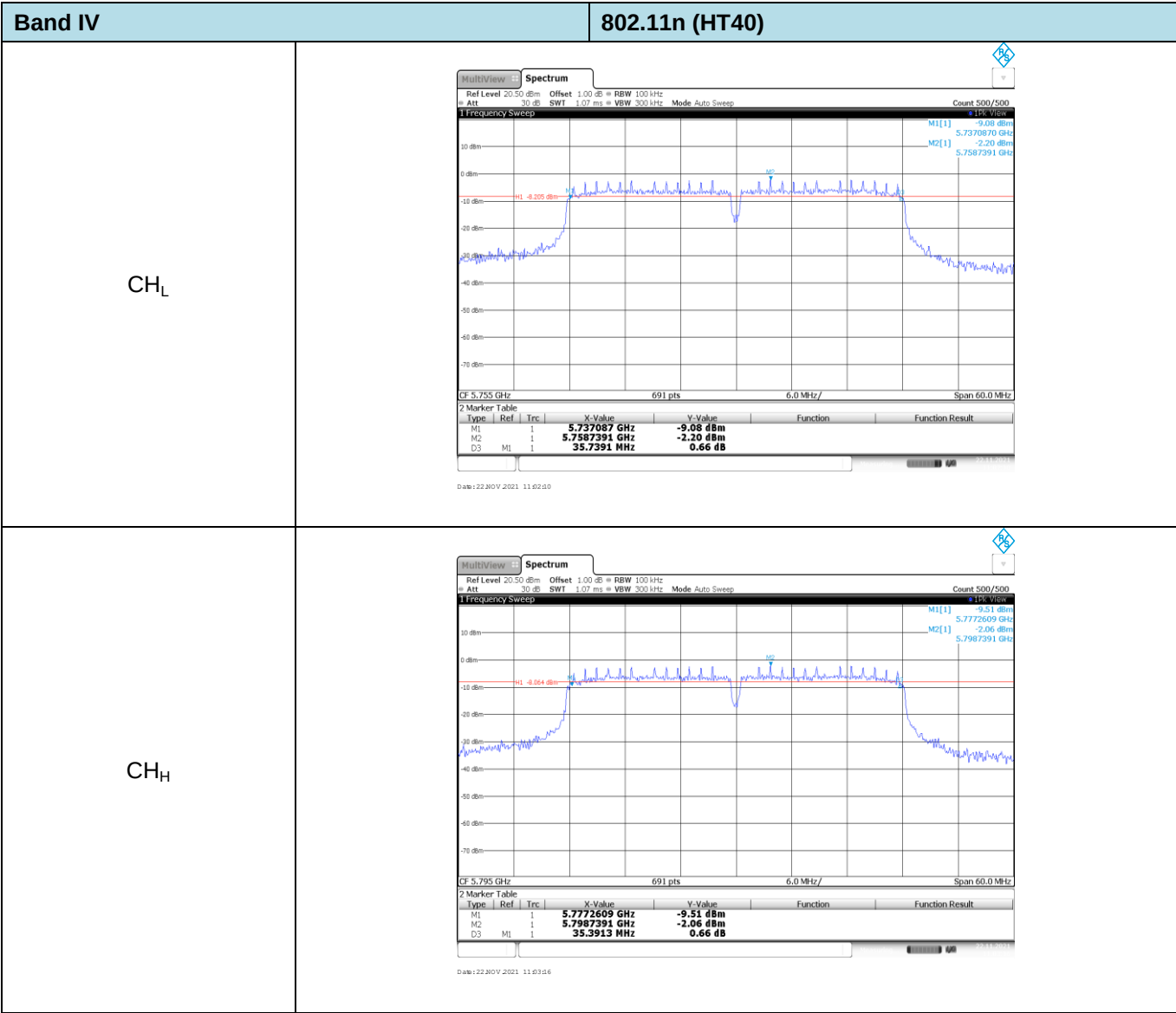
802.11n (HT20)

CH_LCH_MCH_H

Band IV

802.11a

$$\text{CH}_L$$

$$\text{CH}_M$$

$$\text{CH}_H$$




Appendix F: Frequency stability**Voltage VS Frequency stability**

Band: I			Test Frequency: 5180.00MHz	
Temperature (°C)	Voltage (V)	Frequency Deviation (Hz)	Frequency Deviation (ppm)	Result
T_N	V_L	-34000.00	-6.56371	PASS
T_N	V_N	-32000.00	-6.17761	PASS
T_N	V_H	-36000.00	-6.94981	PASS

Band: II			Test Frequency: 5260.00MHz	
Temperature (°C)	Voltage (V)	Frequency Deviation (Hz)	Frequency Deviation (ppm)	Result
T_N	V_L	-38000.00	-7.22434	PASS
T_N	V_N	-36000.00	-6.84411	PASS
T_N	V_H	-39000.00	-7.41445	PASS

Band: III			Test Frequency: 5500.00MHz	
Temperature (°C)	Voltage (V)	Frequency Deviation (Hz)	Frequency Deviation (ppm)	Result
T_N	V_L	-43000.00	-7.81818	PASS
T_N	V_N	-42000.00	-7.63636	PASS
T_N	V_H	-44000.00	-8.00000	PASS

Band: IV			Test Frequency: 5745.00MHz	
Temperature (°C)	Voltage (V)	Frequency Deviation (Hz)	Frequency Deviation (ppm)	Result
T_N	V_L	-48000.00	-8.35509	PASS
T_N	V_N	-46000.00	-8.00696	PASS
T_N	V_H	-48000.00	-8.35509	PASS

Temperature VS Frequency stability

Band: I			Test Frequency: 5180.00MHz	
Voltage (V)	Temperature (°C)	Frequency Deviation (Hz)	Frequency Deviation (ppm)	Result
V _N	-20	-38000.00	-7.33591	PASS
V _N	-10	-38000.00	-7.33591	PASS
V _N	0	-39000.00	-7.52896	PASS
V _N	10	-39000.00	-7.52896	PASS
V _N	20	-40000.00	-7.72201	PASS
V _N	30	-40000.00	-7.72201	PASS
V _N	40	-40000.00	-7.72201	PASS
V _N	50	-40000.00	-7.72201	PASS

Band: II			Test Frequency: 5260.00MHz	
Voltage (V)	Temperature (°C)	Frequency Deviation (Hz)	Frequency Deviation (ppm)	Result
V _N	-20	-40000.00	-7.60456	PASS
V _N	-10	-41000.00	-7.79468	PASS
V _N	0	-41000.00	-7.79468	PASS
V _N	10	-41000.00	-7.79468	PASS
V _N	20	-41000.00	-7.79468	PASS
V _N	30	-41000.00	-7.79468	PASS
V _N	40	-42000.00	-7.98479	PASS
V _N	50	-42000.00	-7.98479	PASS

Band: III			Test Frequency: 5500.00MHz	
Voltage (V)	Temperature (°C)	Frequency Deviation (Hz)	Frequency Deviation (ppm)	Result
V _N	-20	-44000.00	-8.00000	PASS
V _N	-10	-44000.00	-8.00000	PASS
V _N	0	-44000.00	-8.00000	PASS
V _N	10	-44000.00	-8.00000	PASS
V _N	20	-45000.00	-8.18182	PASS
V _N	30	-45000.00	-8.18182	PASS
V _N	40	-45000.00	-8.18182	PASS
V _N	50	-45000.00	-8.18182	PASS

Band: IV			Test Frequency: 5745.00MHz	
Voltage (V)	Temperature (°C)	Frequency Deviation (Hz)	Frequency Deviation (ppm)	Result
V _N	-20	-49000.00	-8.52916	PASS
V _N	-10	-49000.00	-8.52916	PASS
V _N	0	-49000.00	-8.52916	PASS
V _N	10	-50000.00	-8.70322	PASS
V _N	20	-50000.00	-8.70322	PASS
V _N	30	-50000.00	-8.70322	PASS
V _N	40	-50000.00	-8.70322	PASS
V _N	50	-50000.00	-8.70322	PASS

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