

APPENDIX REPORT

Project No.	SHT2005010401EW	Radio Specification	WIFI 5G
Test sample No.	YPHT20050104002	Model No.	A2169
Start test date	2020/5/29	Finish date	2020/5/29
Temperature	25°C	Humidity	50%
Test Engineer	JiongSheng.Feng	Auditor	<i>William.wang</i>

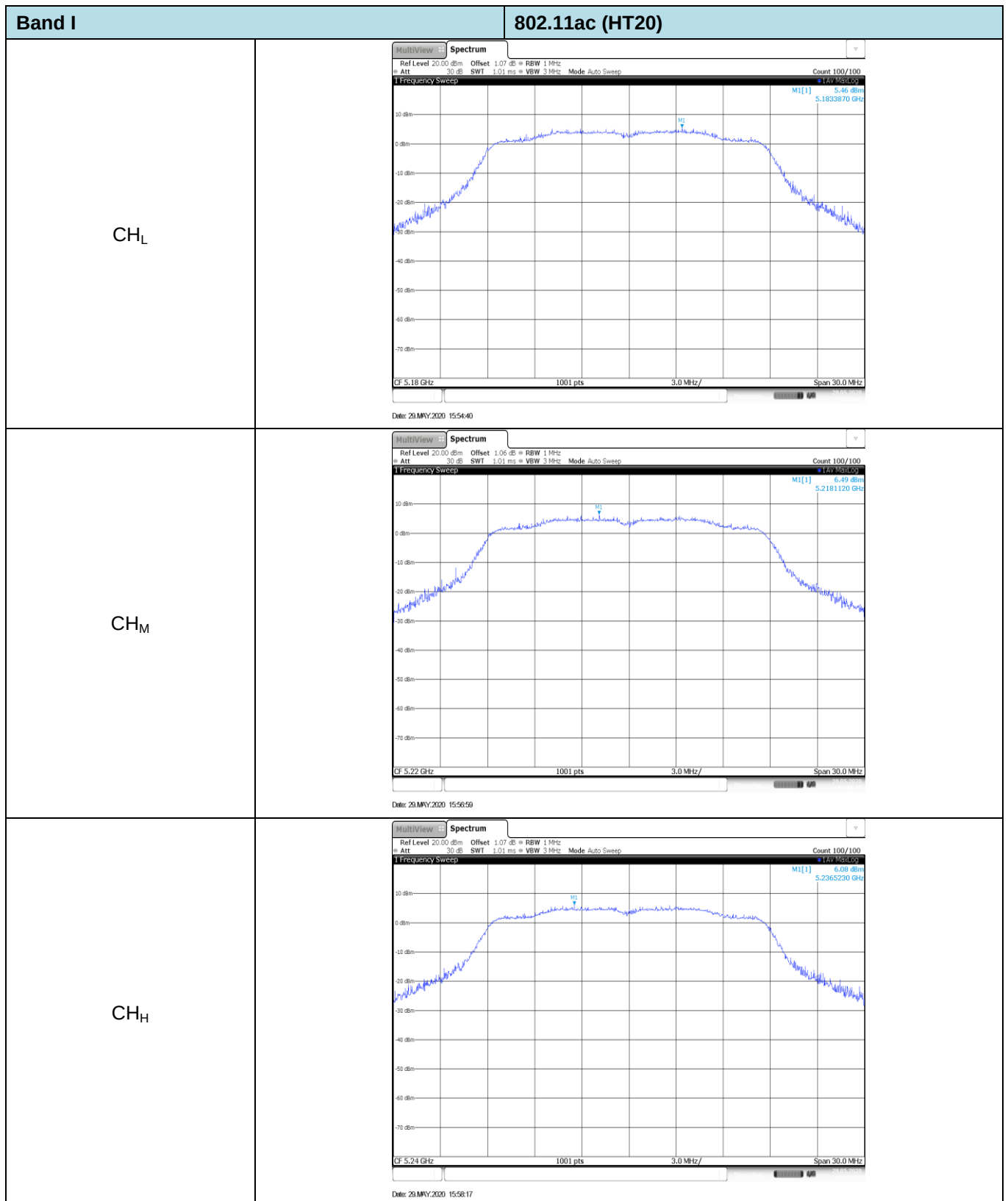
Appendix clause	Test item	Result
A	Maximum Conducted Output Power	PASS
B	Maximum Power Spectral Density	PASS
C	26 dB Bandwidth	PASS
D	99% Occupy bandwidth	PASS
E	6 dB Bandwidth	PASS
F	Band Edge	PASS
G	Frequency stability	PASS

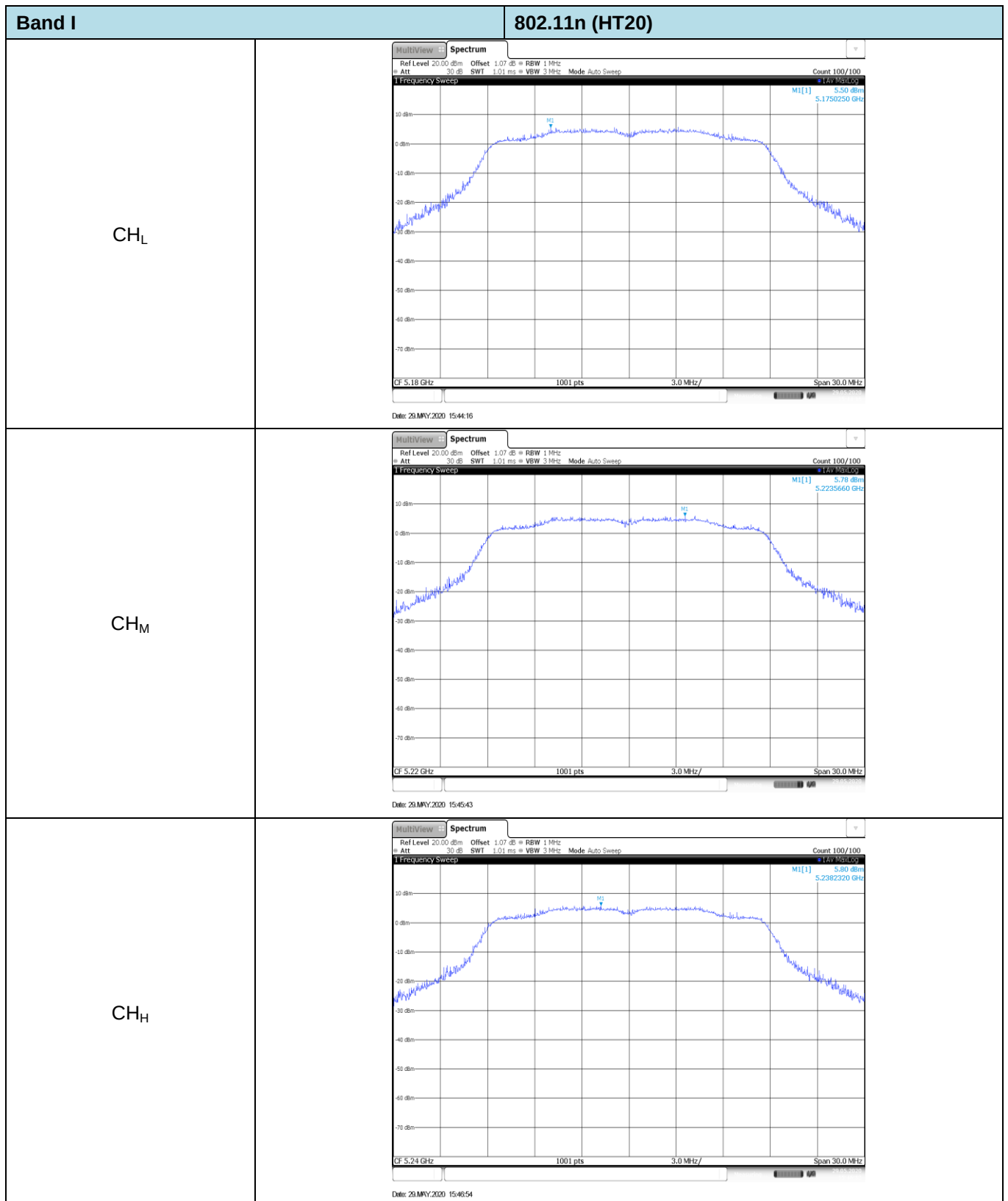
Appendix A: Maximum Conducted Output Power

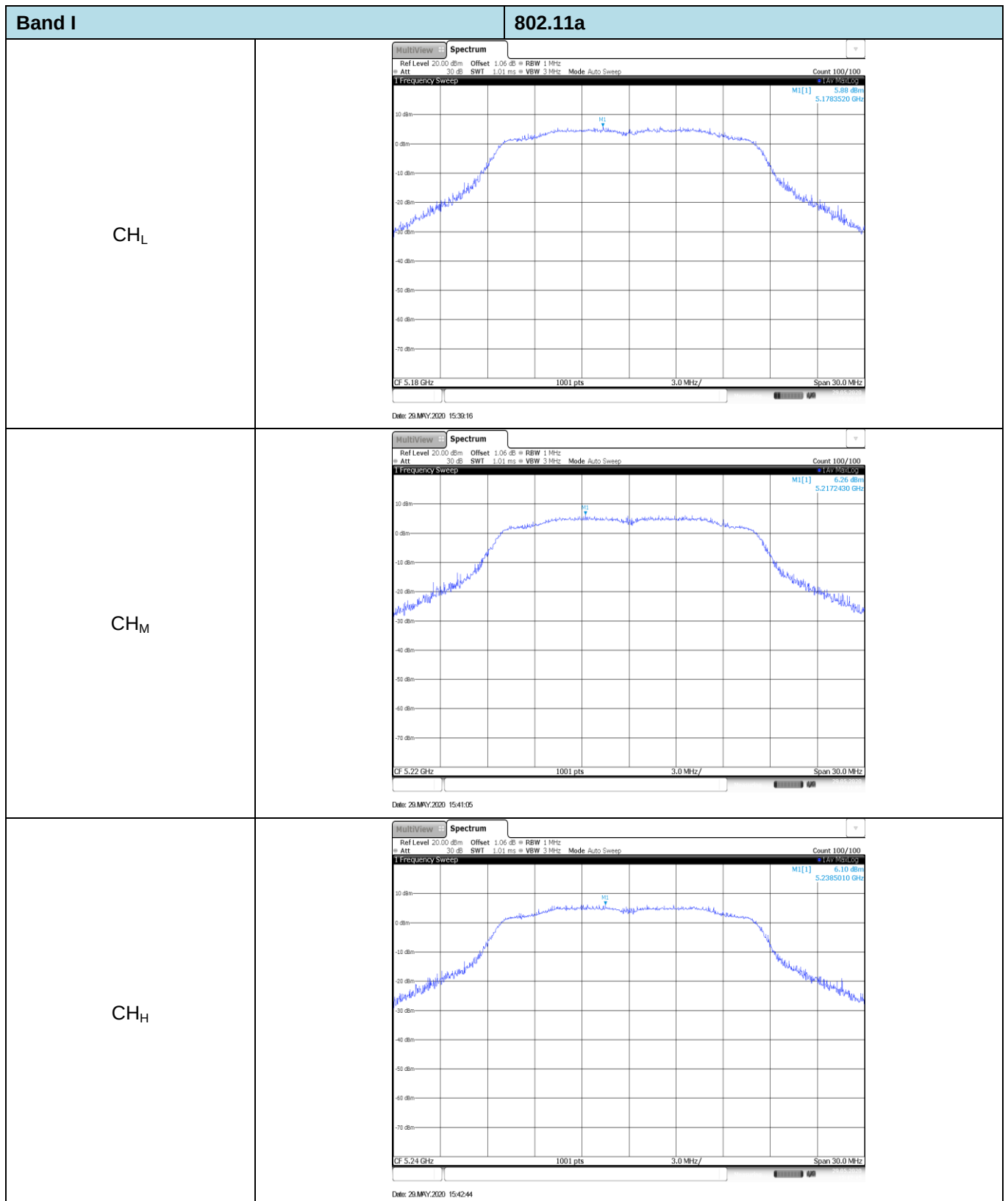
Band	Bandwidth (MHz)	Type	Channel	Conducted Output Power (dBm)	Limit (dBm)	Result
I	20	802.11ac	CH _L	15.33	24.00	Pass
			CH _M	15.81		
			CH _H	15.87		
		802.11n	CH _L	15.32	24.00	Pass
			CH _M	15.79		
			CH _H	15.85		
		802.11a	CH _L	15.36	24.00	Pass
			CH _M	15.94		
			CH _H	15.96		
	40	802.11ac	CH _L	15.58	24.00	Pass
			CH _H	15.98		
		802.11n	CH _L	15.39	24.00	Pass
			CH _H	15.79		
	80	802.11ac	CH _M	15.31	24.00	Pass
IV	20	802.11ac	CH _L	15.87	30.00	Pass
			CH _M	15.15		
			CH _H	14.47		
		802.11n	CH _L	15.87	30.00	Pass
			CH _M	15.08		
			CH _H	14.52		
		802.11a	CH _L	15.96	30.00	Pass
			CH _M	15.17		
			CH _H	14.59		
	40	802.11ac	CH _L	15.79	30.00	Pass
			CH _H	15.09		
		802.11n	CH _L	15.63	30.00	Pass
			CH _H	14.87		
	80	802.11ac	CH _M	15.01	30.00	Pass

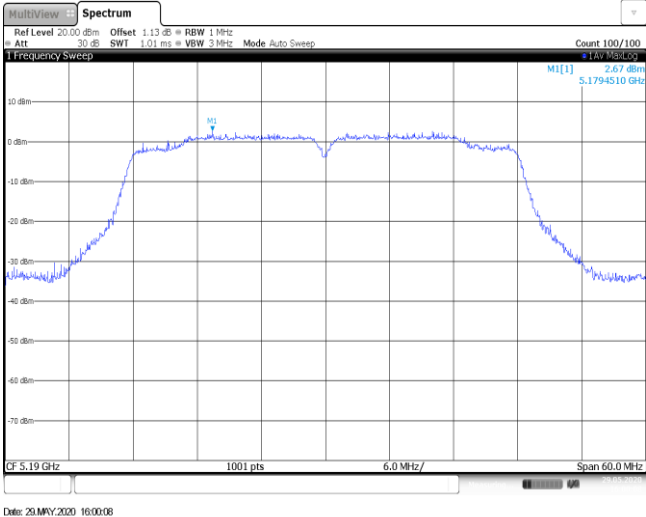
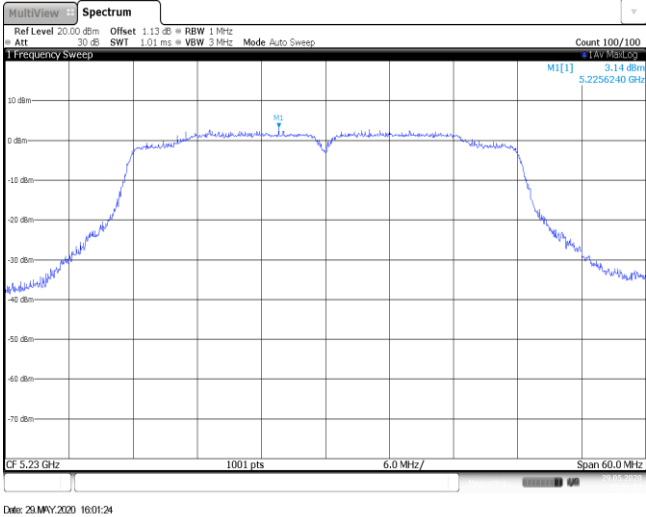
Appendix B: Maximum Power Spectral Density

Band	Bandwidth (MHz)	Type	Channel	Power Spectral Density (dBm/MHz)	Limit (dBm/MHz)	Result
I	20	802.11ac	CH _L	5.46	11.00	Pass
			CH _M	6.49		
			CH _H	6.08		
		802.11n	CH _L	5.50	11.00	Pass
			CH _M	5.78		
			CH _H	5.80		
		802.11a	CH _L	5.88	11.00	Pass
			CH _M	6.26		
			CH _H	6.10		
	40	802.11ac	CH _L	2.67	11.00	Pass
			CH _H	3.14		
		802.11n	CH _L	2.07	11.00	Pass
			CH _H	2.66		
	80	802.11ac	CH _M	-0.82	11.00	Pass
Band	Bandwidth (MHz)	Type	Channel	Power Spectral Density (dBm/500kHz)	Limit (dBm/500KHz)	Result
IV	20	802.11ac	CH _L	4.31	30.00	Pass
			CH _M	3.08		
			CH _H	2.97		
		802.11n	CH _L	4.43	30.00	Pass
			CH _M	3.39		
			CH _H	2.99		
		802.11a	CH _L	4.25	30.00	Pass
			CH _M	3.56		
			CH _H	3.34		
	40	802.11ac	CH _L	0.71	30.00	Pass
			CH _H	-0.22		
		802.11n	CH _L	0.49	30.00	Pass
			CH _H	-0.26		
	80	802.11ac	CH _M	-3.05	30.00	Pass



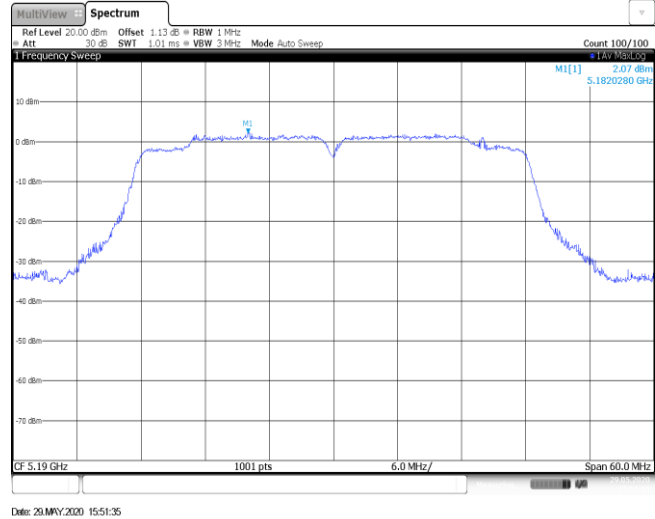
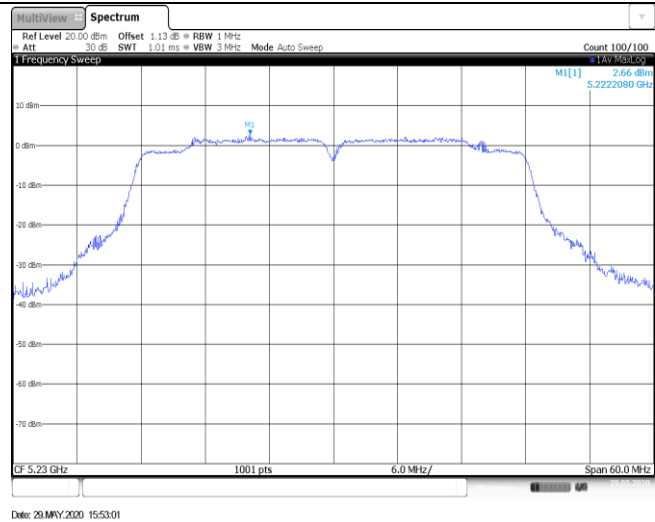




Band I		802.11ac (HT40)	
CH _L			
		Date: 29.MAY.2020 16:00:08	
CH _H			
		Date: 29.MAY.2020 16:01:24	

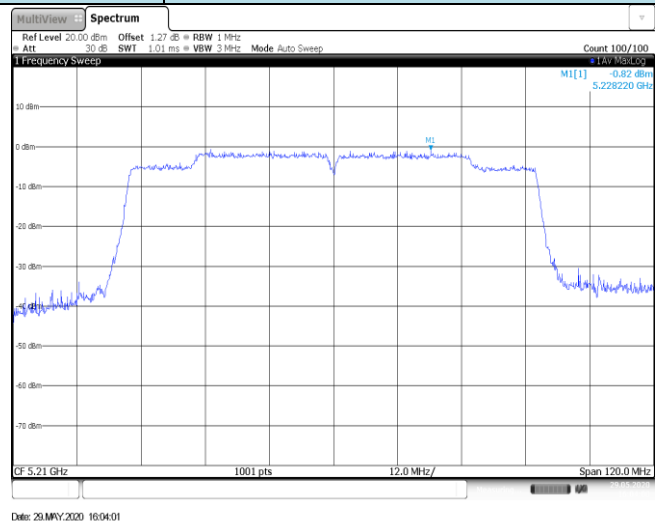
Band I

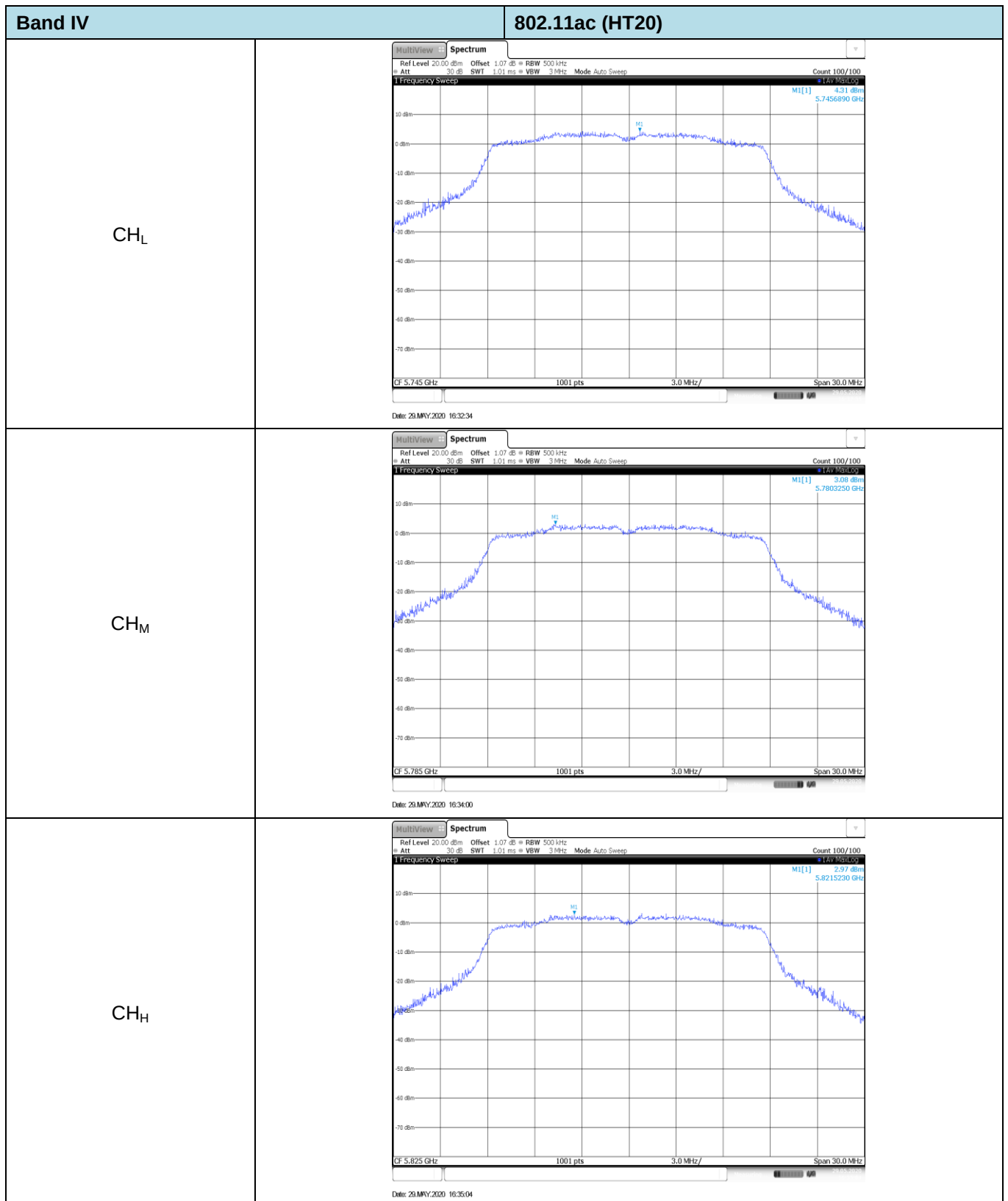
802.11n (HT40)

CH_LCH_H

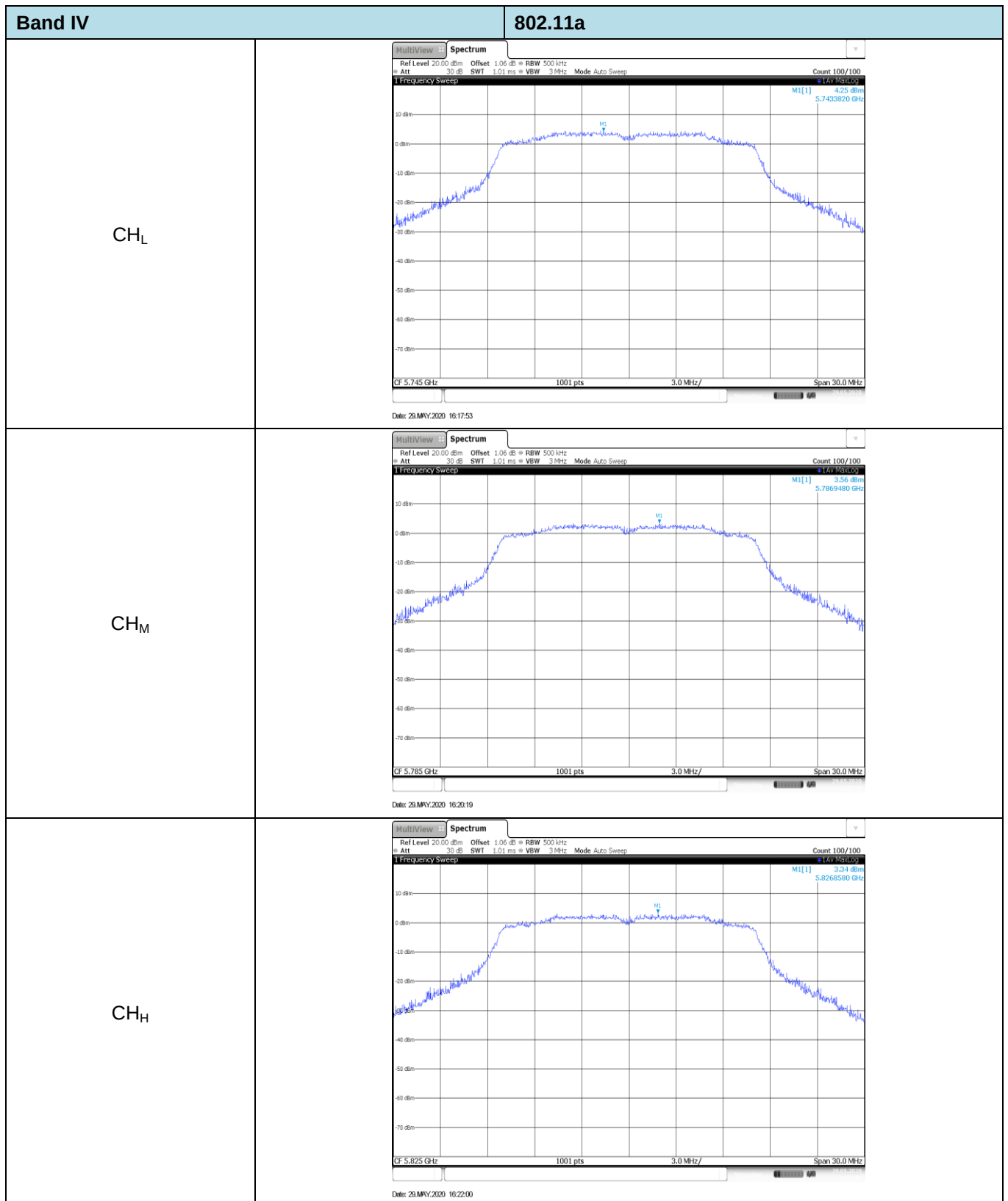
Band I

802.11ac (HT80)

CH_M



Band IV		802.11n (HT20)
CH _L	MultiView Spectrum Ref Level 20.00 dBm Offset 1.07 dB RBW 500 kHz Att 30 dB SWI 1.01 ms VBW 3 MHz Mode Auto Sweep Count 100/100 1 Frequency Sweep MU[1] 4.43 dBm 5.7415230 GHz 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 5.745 GHz 1001 pts 3.0 MHz/ Span 30.0 MHz Date: 29.MAY.2020 16:23:32	
CH _M	MultiView Spectrum Ref Level 20.00 dBm Offset 1.07 dB RBW 500 kHz Att 30 dB SWI 1.01 ms VBW 3 MHz Mode Auto Sweep Count 100/100 1 Frequency Sweep MU[1] 3.39 dBm 5.7801750 GHz 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 5.785 GHz 1001 pts 3.0 MHz/ Span 30.0 MHz Date: 29.MAY.2020 16:24:58	
CH _H	MultiView Spectrum Ref Level 20.00 dBm Offset 1.07 dB RBW 500 kHz Att 30 dB SWI 1.01 ms VBW 3 MHz Mode Auto Sweep Count 100/100 1 Frequency Sweep MU[1] 2.99 dBm 5.8283870 GHz 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 5.825 GHz 1001 pts 3.0 MHz/ Span 30.0 MHz Date: 29.MAY.2020 16:26:11	



Band IV		802.11ac (HT40)
CH _L	MultViewSpectrum Ref Level 20.00 dBm Offset 1.13 dB RBW 500 kHz Att 30 dB SWF 1.01 ms VBW 3 MHz Mode Auto Sweep Count 100/100 #1AV 1637.00 1 Frequency Sweep M1[1] 0.71 dBm 5.7514640 GHz CF 5.755 GHz 1001 pts 6.0 MHz/ Span 60.0 MHz Date: 29.MAY.2020 16:37:12	
CH _H	MultViewSpectrum Ref Level 20.00 dBm Offset 1.13 dB RBW 500 kHz Att 30 dB SWF 1.01 ms VBW 3 MHz Mode Auto Sweep Count 100/100 #1AV 1638.00 1 Frequency Sweep M1[1] -0.22 dBm 5.7877470 GHz CF 5.795 GHz 1001 pts 6.0 MHz/ Span 60.0 MHz Date: 29.MAY.2020 16:38:40	

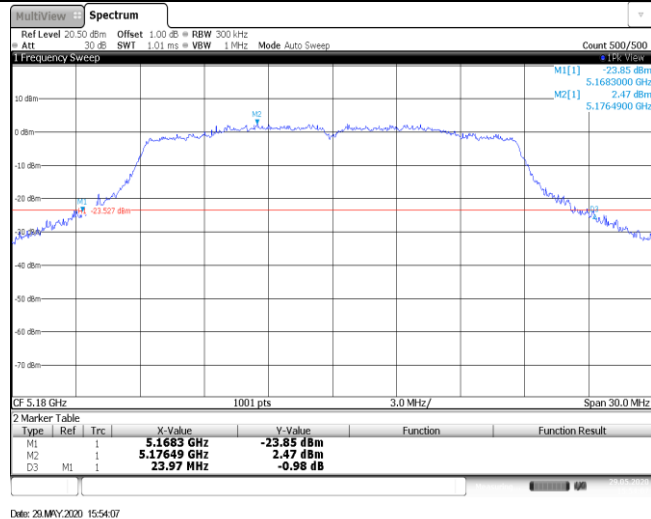
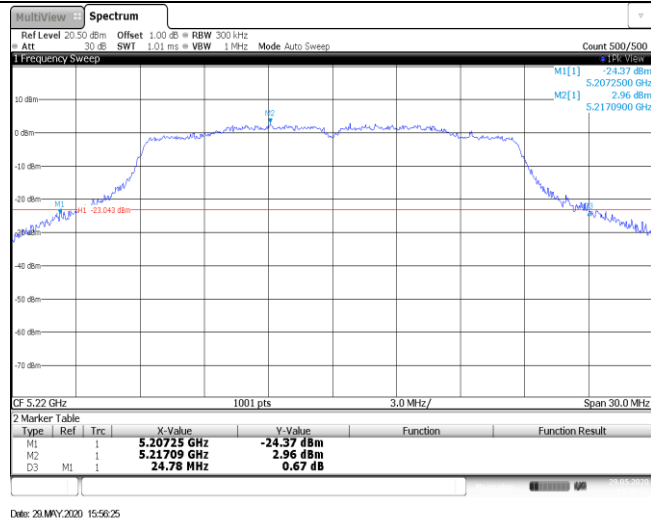
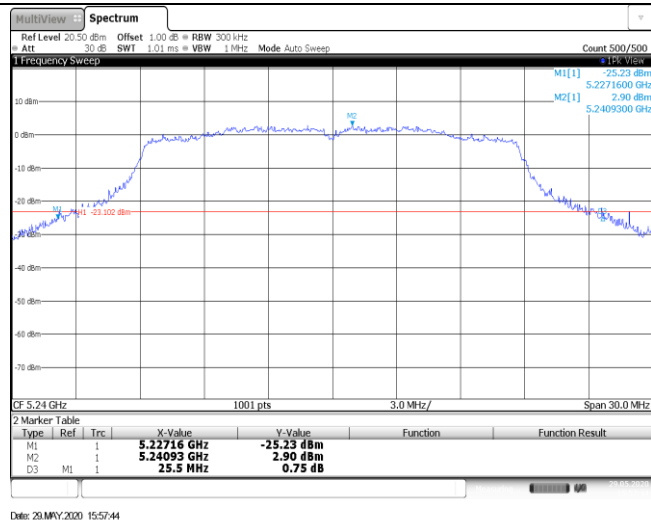
Band IV		802.11n (HT40)
CH _L	The spectrum plot for CH_L shows a signal centered at 5.7441510 GHz. The frequency span is 60.0 MHz, and the resolution bandwidth (RBW) is 500 kHz. The signal level is approximately -10 dBm. The plot includes a frequency sweep and a count of 100/100.	
CH _H	The spectrum plot for CH_H shows a signal centered at 5.8045500 GHz. The frequency span is 60.0 MHz, and the resolution bandwidth (RBW) is 500 kHz. The signal level is approximately -10 dBm. The plot includes a frequency sweep and a count of 100/100.	
Band IV		802.11ac (HT80)
CH _M	The spectrum plot for CH_M shows a signal centered at 5.750190 GHz. The frequency span is 120.0 MHz, and the resolution bandwidth (RBW) is 500 kHz. The signal level is approximately -10 dBm. The plot includes a frequency sweep and a count of 100/100.	

Appendix C: 26dB bandwidth

Band	Bandwidth (MHz)	Type	Channel	26dB bandwidth (MHz)	Result
I	20	802.11ac	CH _L	23.97	Pass
			CH _M	24.78	
			CH _H	25.50	
		802.11n	CH _L	23.91	Pass
			CH _M	23.94	
			CH _H	24.93	
		802.11a	CH _L	23.82	Pass
			CH _M	24.36	
			CH _H	24.78	
	40	802.11ac	CH _L	43.02	Pass
			CH _H	43.74	
		802.11n	CH _L	42.18	Pass
			CH _H	45.30	
	80	802.11ac	CH _M	82.44	Pass

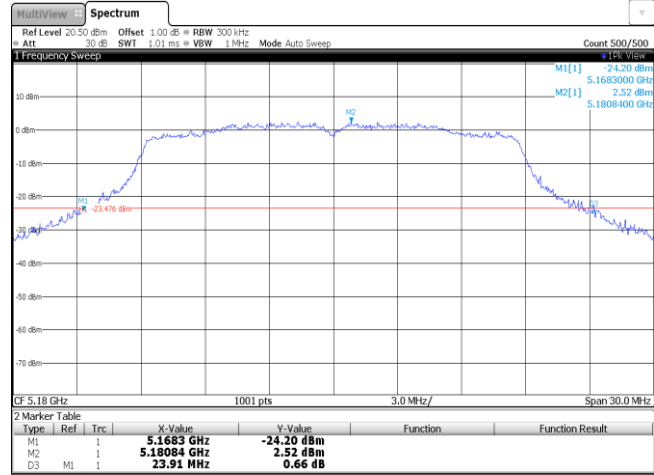
Band I

802.11ac (HT20)

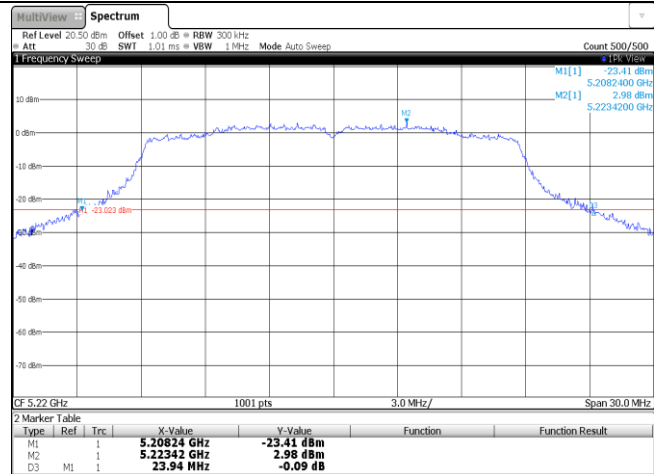
CH_LCH_MCH_H

Band I

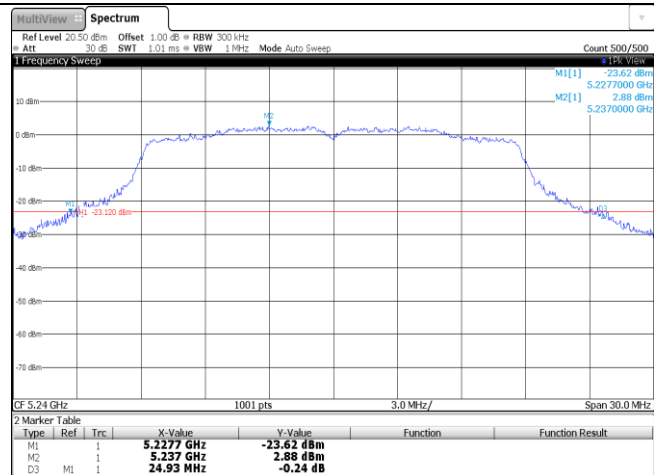
802.11n (HT20)

CH_L

Date: 29.MAY.2020 15:43:43

CH_M

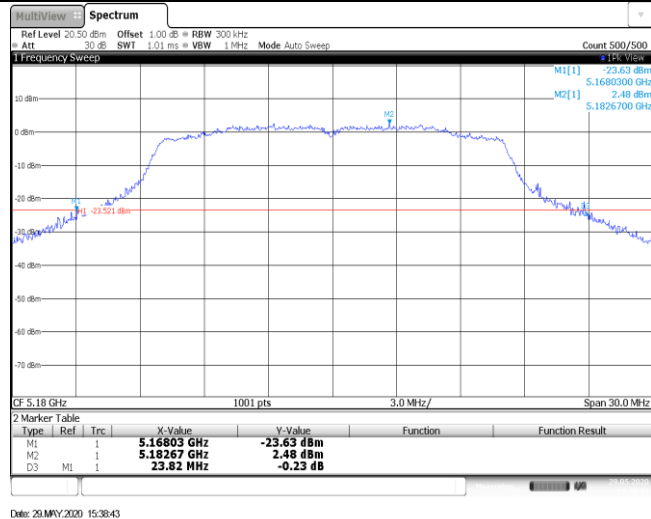
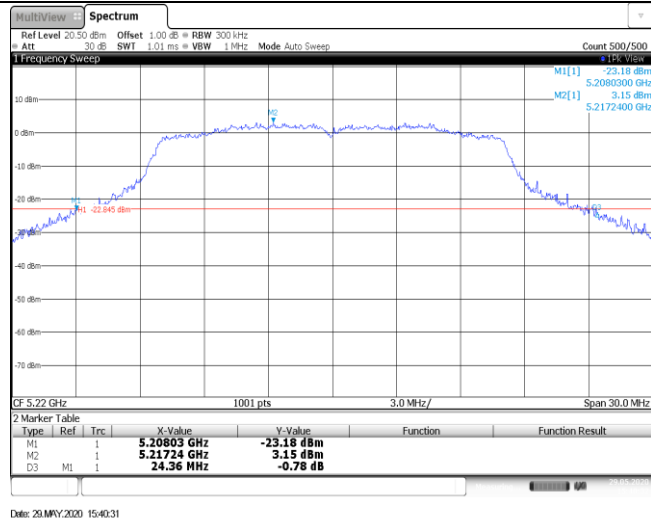
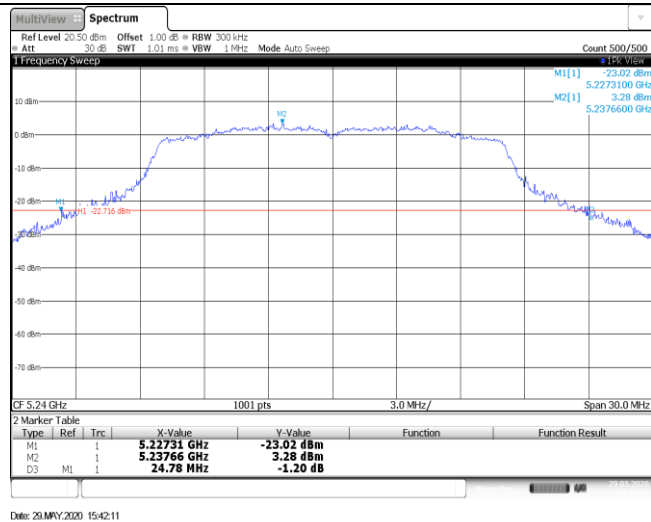
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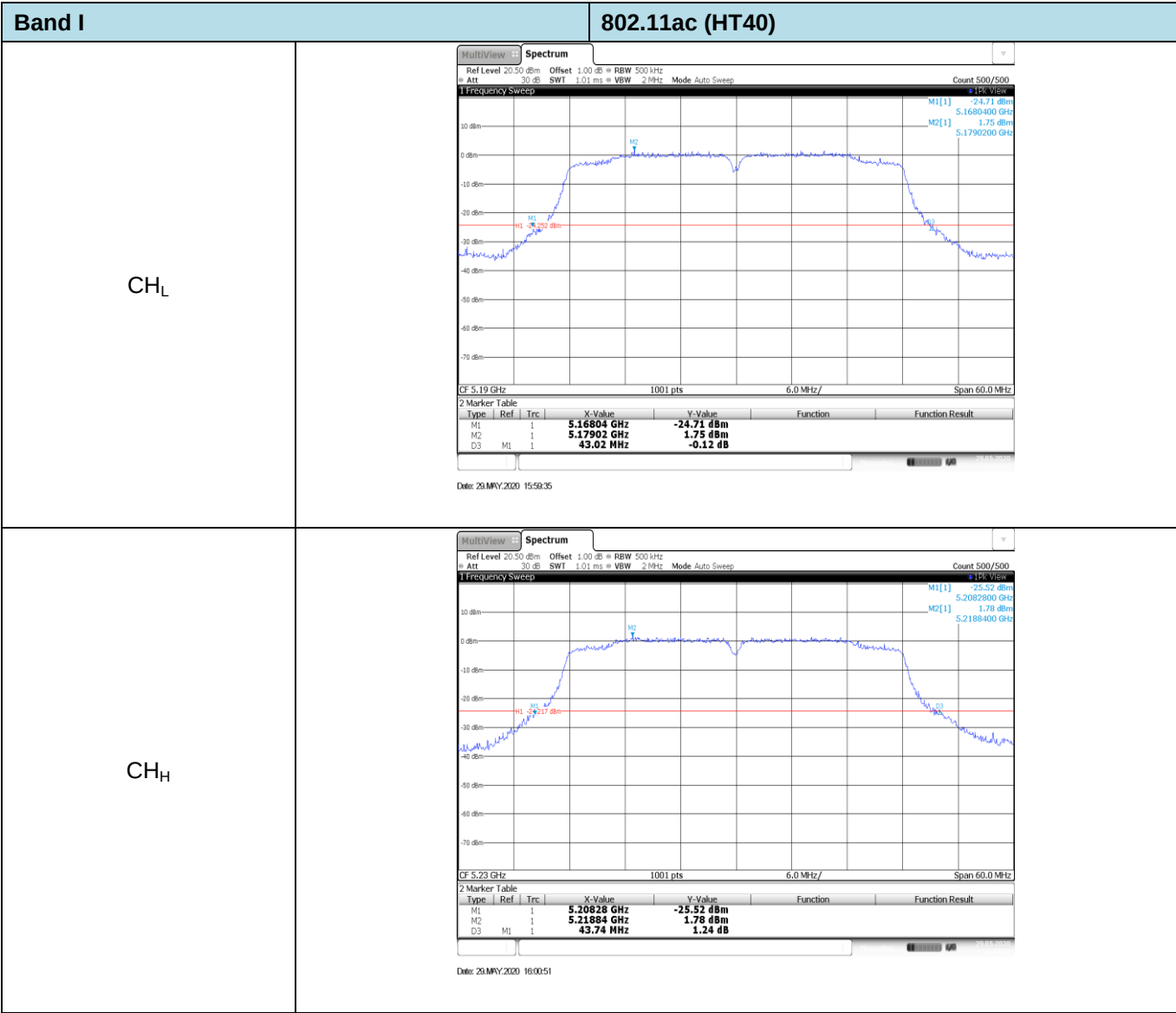
CH_H

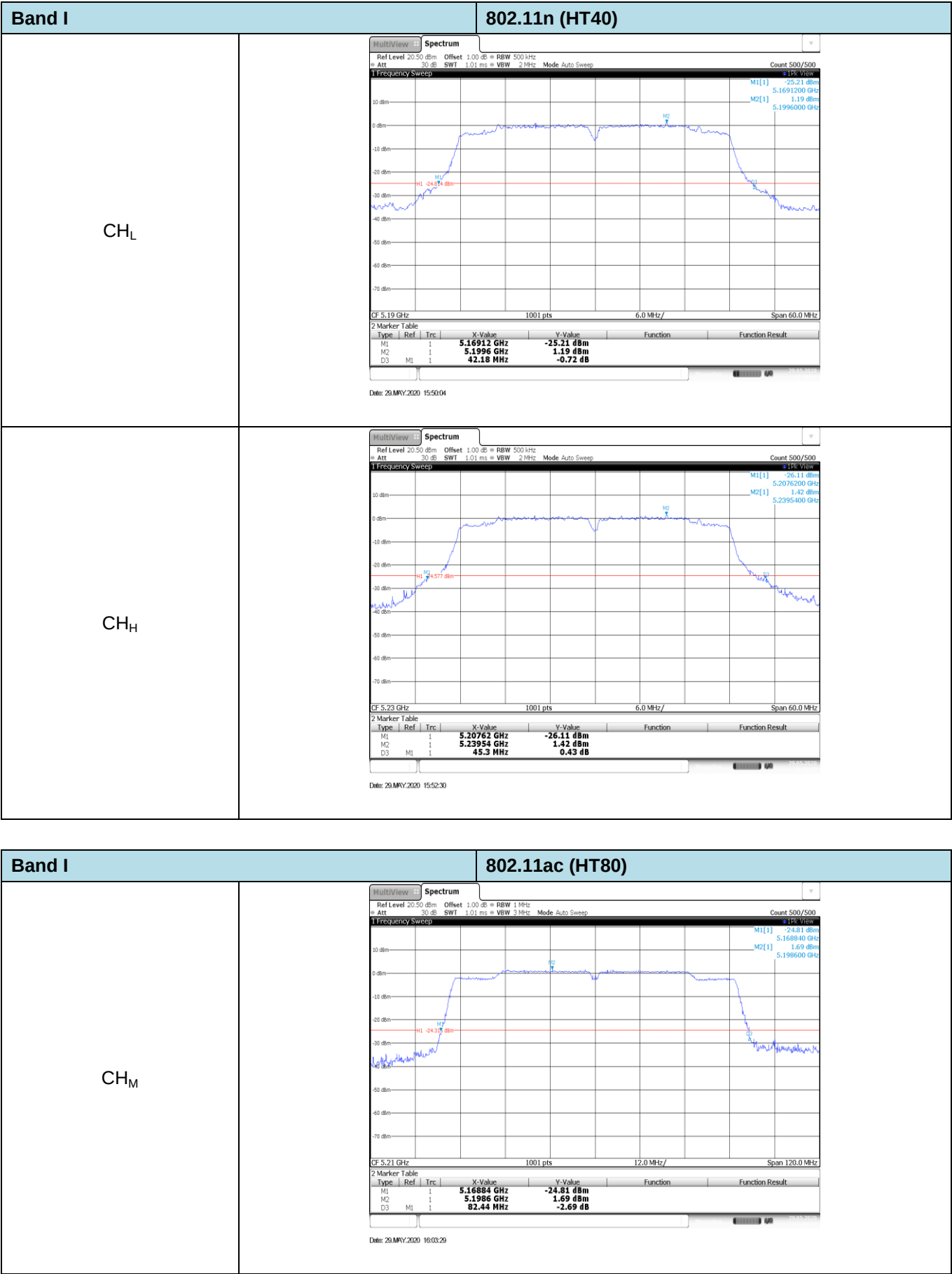
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Band I

802.11a

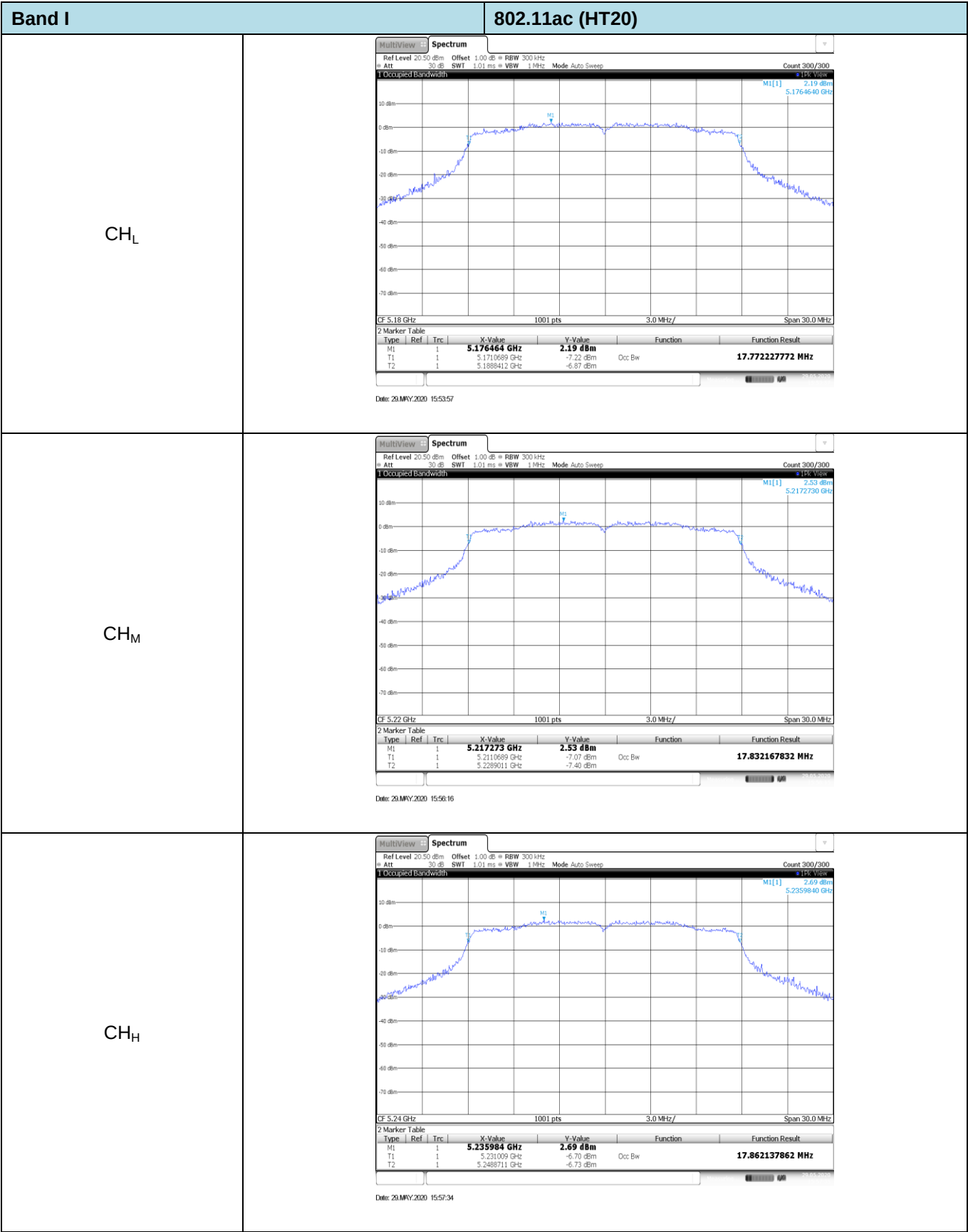
CH_LCH_MCH_H

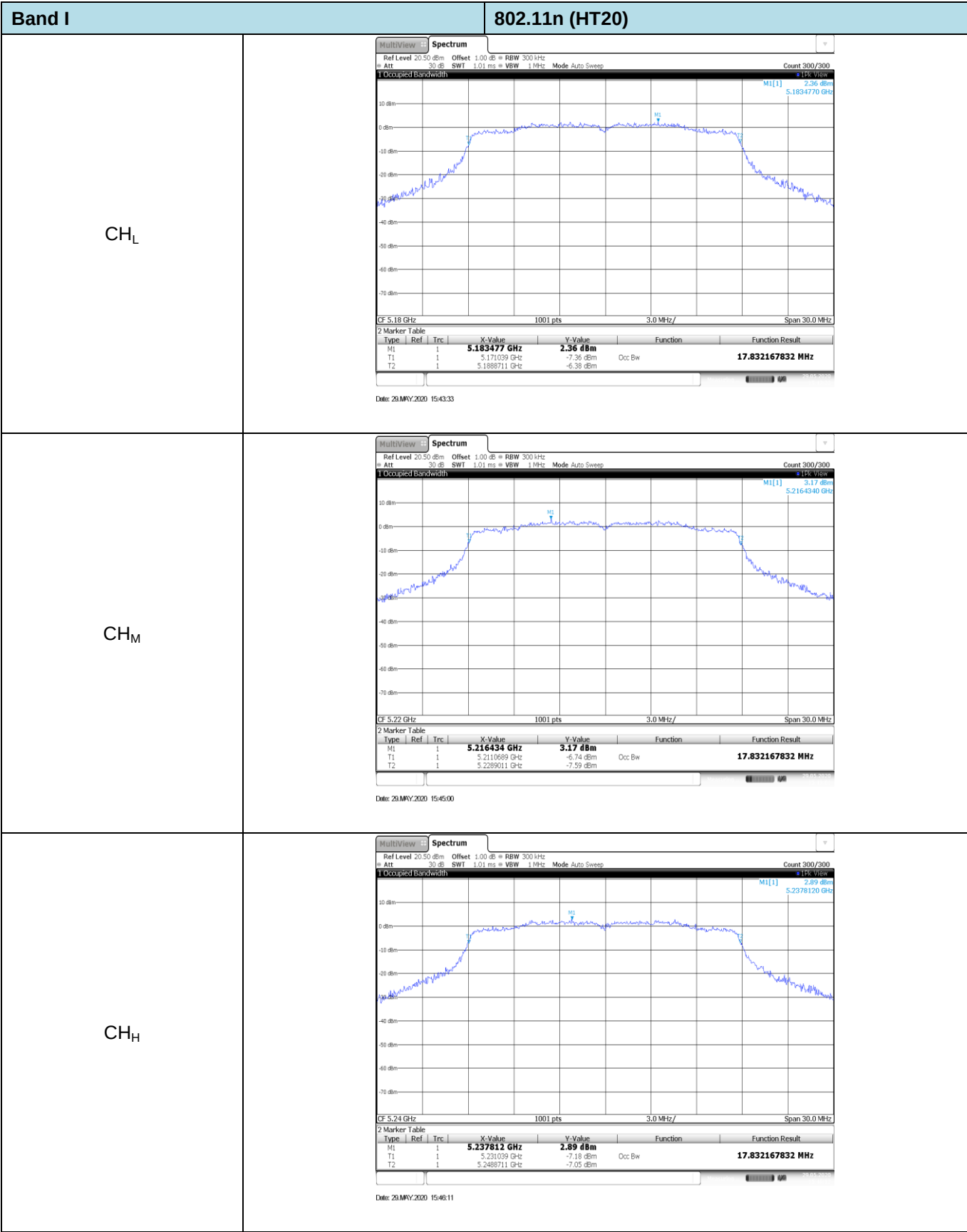


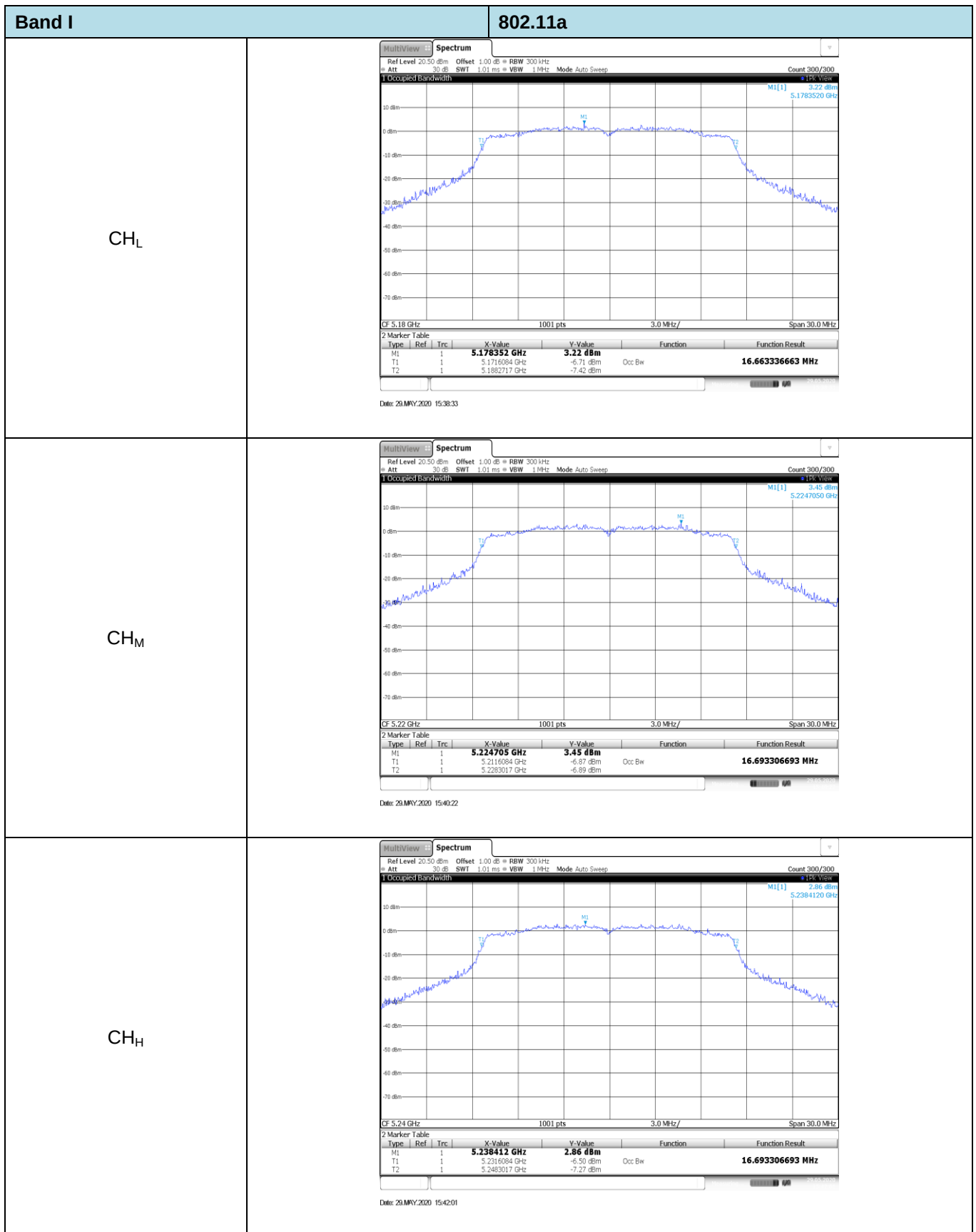


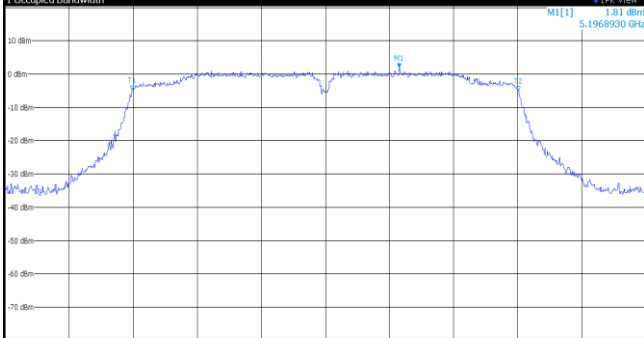
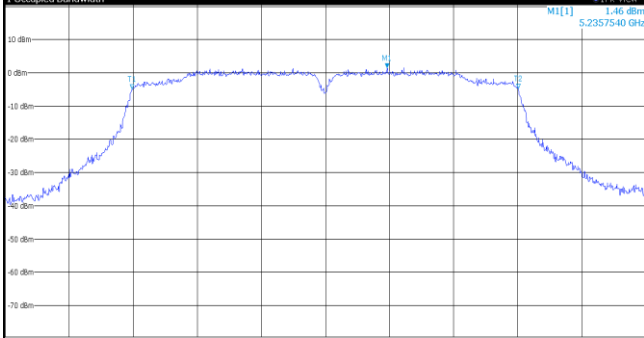
Appendix D: 99% Occupy bandwidth

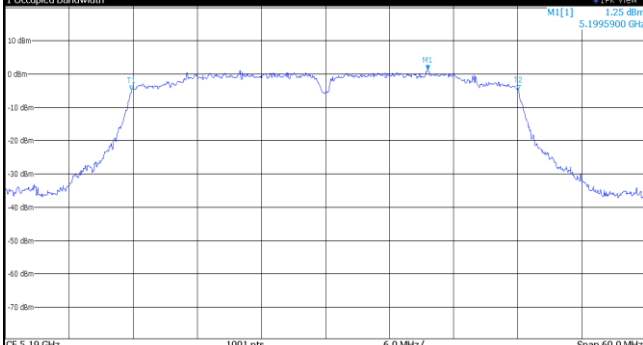
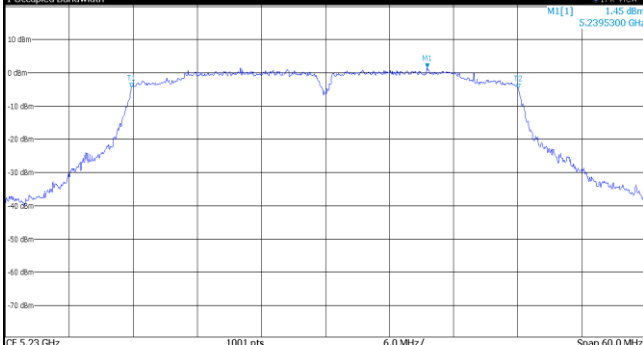
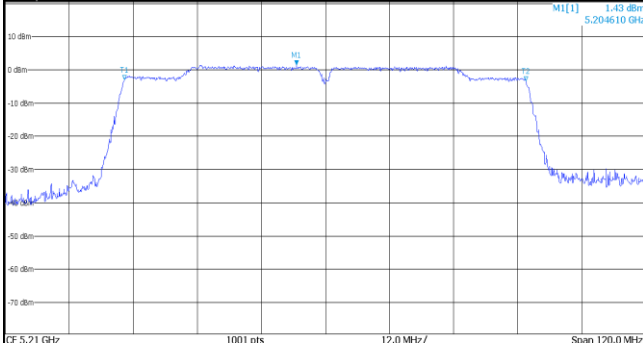
Band	Bandwidth (MHz)	Type	Channel	99% Occupy bandwidth (MHz)	Result
I	20	802.11ac	CH _L	17.77	Pass
			CH _M	17.83	
			CH _H	17.86	
		802.11n	CH _L	17.83	Pass
			CH _M	17.83	
			CH _H	17.83	
		802.11a	CH _L	16.66	Pass
			CH _M	16.69	
			CH _H	16.69	
	40	802.11ac	CH _L	36.14	Pass
			CH _H	36.14	
		802.11n	CH _L	36.20	Pass
			CH _H	36.20	
	80	802.11ac	CH _M	75.17	Pass
IV	20	802.11ac	CH _L	17.89	Pass
			CH _M	17.86	
			CH _H	17.77	
		802.11n	CH _L	17.86	Pass
			CH _M	17.86	
			CH _H	17.80	
		802.11a	CH _L	16.78	Pass
			CH _M	16.72	
			CH _H	16.66	
	40	802.11ac	CH _L	36.20	Pass
			CH _H	36.14	
		802.11n	CH _L	36.21	Pass
			CH _H	36.21	
	80	802.11ac	CH _M	75.52	Pass







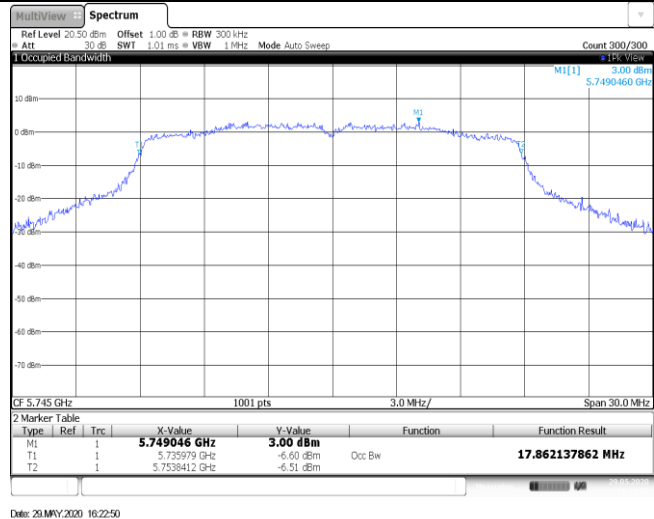
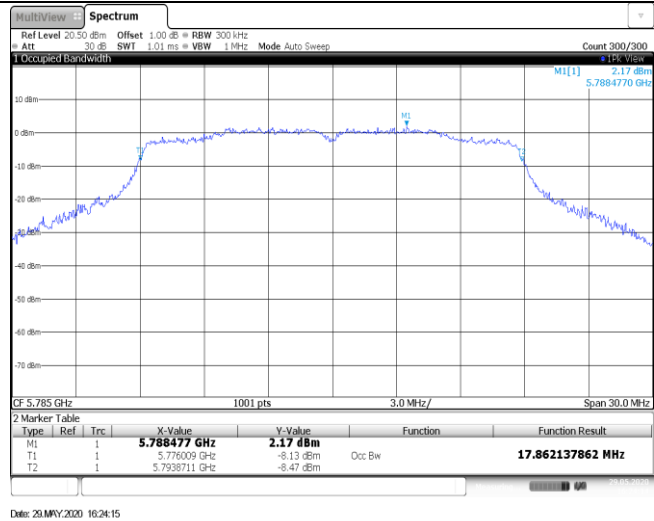
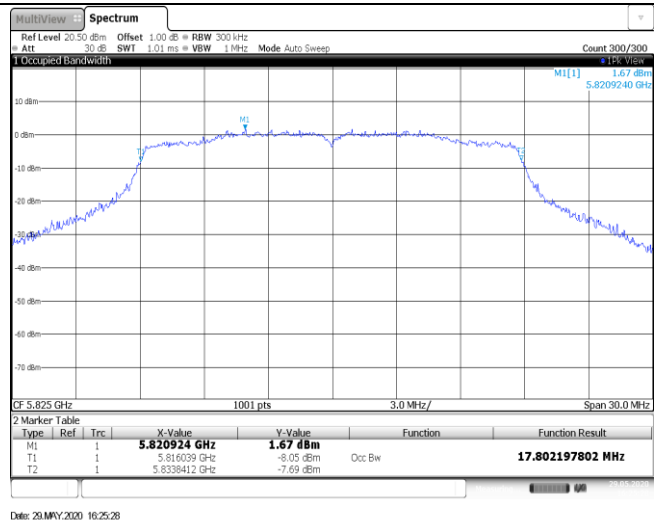
Band I		802.11ac (HT40)																											
CH _L	MultiView Spectrum Ref Level 20.50 dBm Offset 1.00 dB RBW 500 kHz Att 30 dB SWF 1.01 ms VBW 2 MHz Mode Auto Sweep Count 300/300 1 Occupied Bandwidth  CF 5.19 GHz 1001 pts 6.0 MHz/ Span 60.0 MHz <table><tr><th>Type</th><th>Ref</th><th>Trc</th><th>X-Value</th><th>Y-Value</th><th>Function</th><th>Function Result</th></tr><tr><td>M1</td><td>1</td><td></td><td>5.196893 GHz</td><td>1.81 dBm</td><td></td><td></td></tr><tr><td>T1</td><td>1</td><td></td><td>5.1718981 GHz</td><td>-4.74 dBm</td><td>Occ BW</td><td>36.143856144 MHz</td></tr><tr><td>T2</td><td>1</td><td></td><td>5.208042 GHz</td><td>-5.01 dBm</td><td></td><td></td></tr></table> Date: 29.MAY.2020 15:59:26	Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		5.196893 GHz	1.81 dBm			T1	1		5.1718981 GHz	-4.74 dBm	Occ BW	36.143856144 MHz	T2	1		5.208042 GHz	-5.01 dBm		
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result																							
M1	1		5.196893 GHz	1.81 dBm																									
T1	1		5.1718981 GHz	-4.74 dBm	Occ BW	36.143856144 MHz																							
T2	1		5.208042 GHz	-5.01 dBm																									
CH _H	MultiView Spectrum Ref Level 20.50 dBm Offset 1.00 dB RBW 500 kHz Att 30 dB SWF 1.01 ms VBW 2 MHz Mode Auto Sweep Count 300/300 1 Occupied Bandwidth  CF 5.23 GHz 1001 pts 6.0 MHz/ Span 60.0 MHz <table><tr><th>Type</th><th>Ref</th><th>Trc</th><th>X-Value</th><th>Y-Value</th><th>Function</th><th>Function Result</th></tr><tr><td>M1</td><td>1</td><td></td><td>5.235754 GHz</td><td>1.46 dBm</td><td></td><td></td></tr><tr><td>T1</td><td>1</td><td></td><td>5.2118981 GHz</td><td>-4.75 dBm</td><td>Occ BW</td><td>36.143856144 MHz</td></tr><tr><td>T2</td><td>1</td><td></td><td>5.248042 GHz</td><td>-4.58 dBm</td><td></td><td></td></tr></table> Date: 29.MAY.2020 16:00:42	Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		5.235754 GHz	1.46 dBm			T1	1		5.2118981 GHz	-4.75 dBm	Occ BW	36.143856144 MHz	T2	1		5.248042 GHz	-4.58 dBm		
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result																							
M1	1		5.235754 GHz	1.46 dBm																									
T1	1		5.2118981 GHz	-4.75 dBm	Occ BW	36.143856144 MHz																							
T2	1		5.248042 GHz	-4.58 dBm																									

Band I		802.11n (HT40)																											
CH _L	MultiView Spectrum Ref Level 20.50 dBm Offset 1.00 dB RBW 500 kHz Att 30 dB SWT 1.01 ms VBW 2 MHz Mode Auto Sweep Count 300/300 1 Occupied Bandwidth  CF 5.19 GHz1001 pts6.0 MHz/Span 60.0 MHz <table><tr><th>Type</th><th>Ref</th><th>Trc</th><th>X-Value</th><th>Y-Value</th><th>Function</th><th>Function Result</th></tr><tr><td>M1</td><td>1</td><td></td><td>5.1959 GHz</td><td>1.25 dBm</td><td></td><td></td></tr><tr><td>T1</td><td>1</td><td></td><td>5.178382 GHz</td><td>-4.88 dBm</td><td>Occ Bw</td><td>36.203796204 MHz</td></tr><tr><td>T2</td><td>1</td><td></td><td>5.208042 GHz</td><td>-4.60 dBm</td><td></td><td></td></tr></table> Date: 29.MAY.2020 15:49:54	Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		5.1959 GHz	1.25 dBm			T1	1		5.178382 GHz	-4.88 dBm	Occ Bw	36.203796204 MHz	T2	1		5.208042 GHz	-4.60 dBm		
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result																							
M1	1		5.1959 GHz	1.25 dBm																									
T1	1		5.178382 GHz	-4.88 dBm	Occ Bw	36.203796204 MHz																							
T2	1		5.208042 GHz	-4.60 dBm																									
CH _H	MultiView Spectrum Ref Level 20.50 dBm Offset 1.00 dB RBW 500 kHz Att 30 dB SWT 1.01 ms VBW 2 MHz Mode Auto Sweep Count 300/300 1 Occupied Bandwidth  CF 5.23 GHz1001 pts6.0 MHz/Span 60.0 MHz <table><tr><th>Type</th><th>Ref</th><th>Trc</th><th>X-Value</th><th>Y-Value</th><th>Function</th><th>Function Result</th></tr><tr><td>M1</td><td>1</td><td></td><td>5.2395 GHz</td><td>1.45 dBm</td><td></td><td></td></tr><tr><td>T1</td><td>1</td><td></td><td>5.218382 GHz</td><td>-4.47 dBm</td><td>Occ Bw</td><td>36.203796204 MHz</td></tr><tr><td>T2</td><td>1</td><td></td><td>5.248042 GHz</td><td>-4.55 dBm</td><td></td><td></td></tr></table> Date: 29.MAY.2020 15:52:21	Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		5.2395 GHz	1.45 dBm			T1	1		5.218382 GHz	-4.47 dBm	Occ Bw	36.203796204 MHz	T2	1		5.248042 GHz	-4.55 dBm		
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result																							
M1	1		5.2395 GHz	1.45 dBm																									
T1	1		5.218382 GHz	-4.47 dBm	Occ Bw	36.203796204 MHz																							
T2	1		5.248042 GHz	-4.55 dBm																									
Band I		802.11ac (HT80)																											
CH _M	MultiView Spectrum Ref Level 20.50 dBm Offset 1.00 dB RBW 1 MHz Att 30 dB SWT 1.01 ms VBW 3 MHz Mode Auto Sweep Count 300/300 1 Occupied Bandwidth  CF 5.21 GHz1001 pts12.0 MHz/Span 120.0 MHz <table><tr><th>Type</th><th>Ref</th><th>Trc</th><th>X-Value</th><th>Y-Value</th><th>Function</th><th>Function Result</th></tr><tr><td>M1</td><td>1</td><td></td><td>5.2046 GHz</td><td>1.43 dBm</td><td></td><td></td></tr><tr><td>T1</td><td>1</td><td></td><td>5.172359 GHz</td><td>-2.93 dBm</td><td>Occ Bw</td><td>75.164835165 MHz</td></tr><tr><td>T2</td><td>1</td><td></td><td>5.247522 GHz</td><td>-3.37 dBm</td><td></td><td></td></tr></table> Date: 29.MAY.2020 16:03:19	Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		5.2046 GHz	1.43 dBm			T1	1		5.172359 GHz	-2.93 dBm	Occ Bw	75.164835165 MHz	T2	1		5.247522 GHz	-3.37 dBm		
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result																							
M1	1		5.2046 GHz	1.43 dBm																									
T1	1		5.172359 GHz	-2.93 dBm	Occ Bw	75.164835165 MHz																							
T2	1		5.247522 GHz	-3.37 dBm																									

Band IV		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 300/300 1 Occupied Bandwidth M1[1] 2.85 dBm 5.7413740 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>5.741374 GHz</td><td>2.85 dBm</td><td></td><td></td></tr><tr><td>T1</td><td>1</td><td></td><td>5.735979 GHz</td><td>-6.24 dBm</td><td>Occ Bw</td><td>17.892107892 MHz</td></tr><tr><td>T2</td><td>1</td><td></td><td>5.7369711 GHz</td><td>-7.37 dBm</td><td></td><td></td></tr></table> Date: 29.MKY.2020 16:31:51	Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		5.741374 GHz	2.85 dBm			T1	1		5.735979 GHz	-6.24 dBm	Occ Bw	17.892107892 MHz	T2	1		5.7369711 GHz	-7.37 dBm			
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result																								
M1	1		5.741374 GHz	2.85 dBm																										
T1	1		5.735979 GHz	-6.24 dBm	Occ Bw	17.892107892 MHz																								
T2	1		5.7369711 GHz	-7.37 dBm																										
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 300/300 1 Occupied Bandwidth M1[1] 2.03 dBm 5.7872180 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>5.787218 GHz</td><td>2.03 dBm</td><td></td><td></td></tr><tr><td>T1</td><td>1</td><td></td><td>5.776009 GHz</td><td>-7.96 dBm</td><td>Occ Bw</td><td>17.862137862 MHz</td></tr><tr><td>T2</td><td>1</td><td></td><td>5.7939711 GHz</td><td>-7.63 dBm</td><td></td><td></td></tr></table> Date: 29.MKY.2020 16:33:17	Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		5.787218 GHz	2.03 dBm			T1	1		5.776009 GHz	-7.96 dBm	Occ Bw	17.862137862 MHz	T2	1		5.7939711 GHz	-7.63 dBm			
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result																								
M1	1		5.787218 GHz	2.03 dBm																										
T1	1		5.776009 GHz	-7.96 dBm	Occ Bw	17.862137862 MHz																								
T2	1		5.7939711 GHz	-7.63 dBm																										
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 300/300 1 Occupied Bandwidth M1[1] 1.54 dBm 5.8220030 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>5.822003 GHz</td><td>1.54 dBm</td><td></td><td></td></tr><tr><td>T1</td><td>1</td><td></td><td>5.8160689 GHz</td><td>-7.69 dBm</td><td>Occ Bw</td><td>17.772227772 MHz</td></tr><tr><td>T2</td><td>1</td><td></td><td>5.8338412 GHz</td><td>-7.67 dBm</td><td></td><td></td></tr></table> Date: 29.MKY.2020 16:34:21	Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		5.822003 GHz	1.54 dBm			T1	1		5.8160689 GHz	-7.69 dBm	Occ Bw	17.772227772 MHz	T2	1		5.8338412 GHz	-7.67 dBm			
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result																								
M1	1		5.822003 GHz	1.54 dBm																										
T1	1		5.8160689 GHz	-7.69 dBm	Occ Bw	17.772227772 MHz																								
T2	1		5.8338412 GHz	-7.67 dBm																										

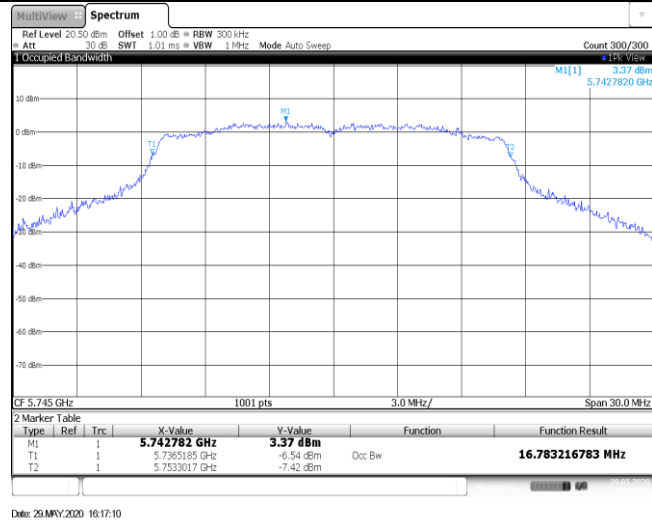
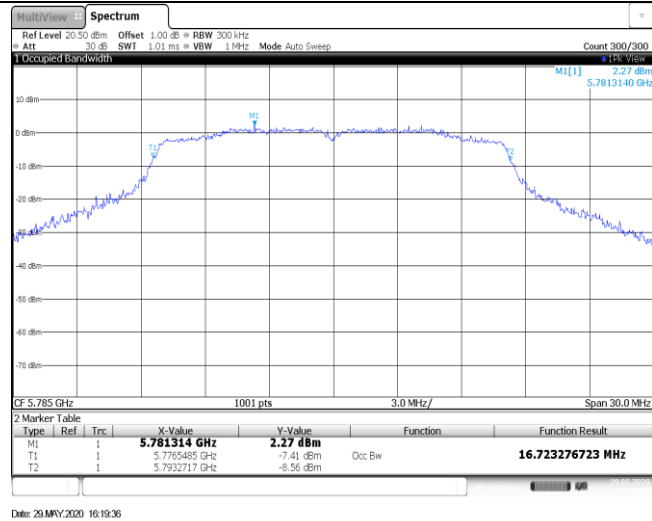
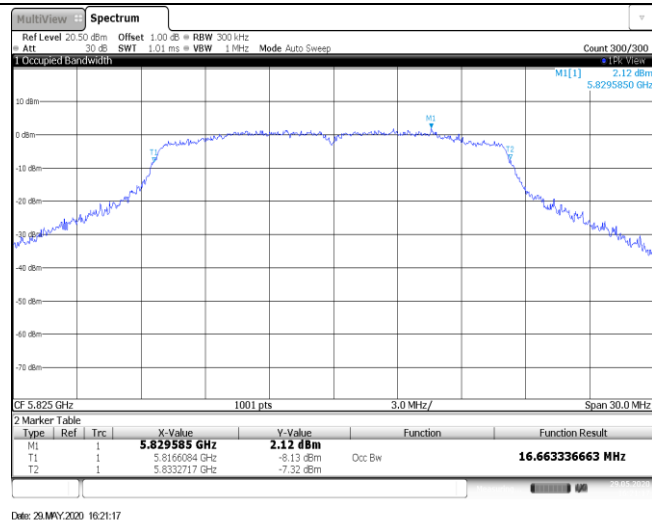
Band IV

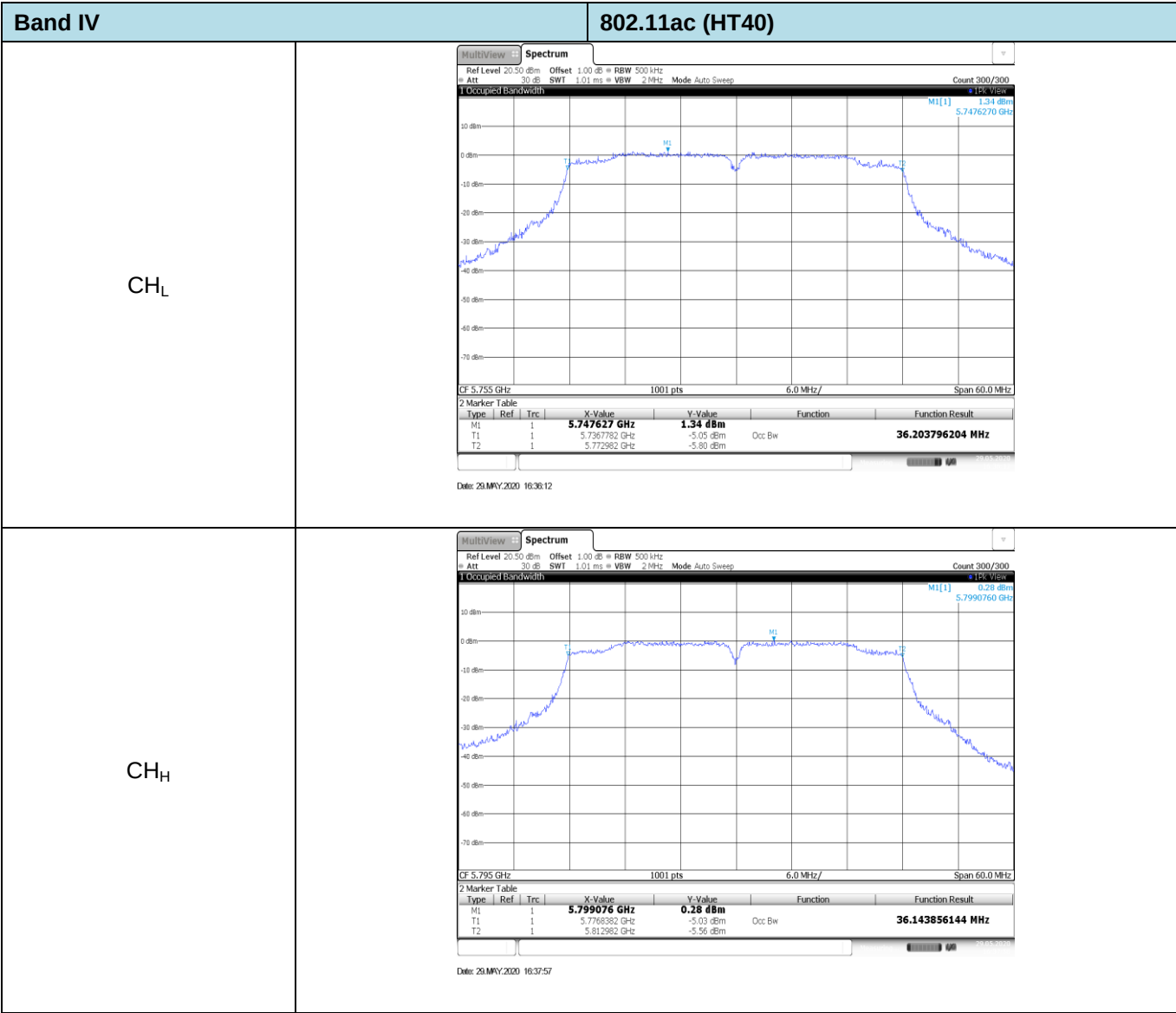
802.11n (HT20)

CH_LCH_MCH_H

Band IV

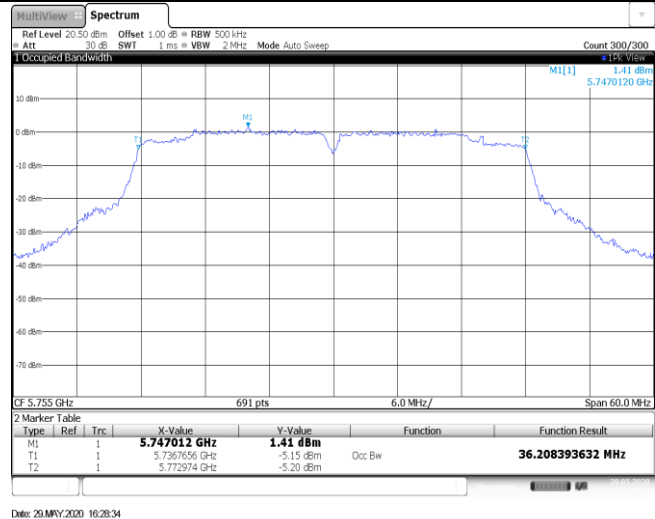
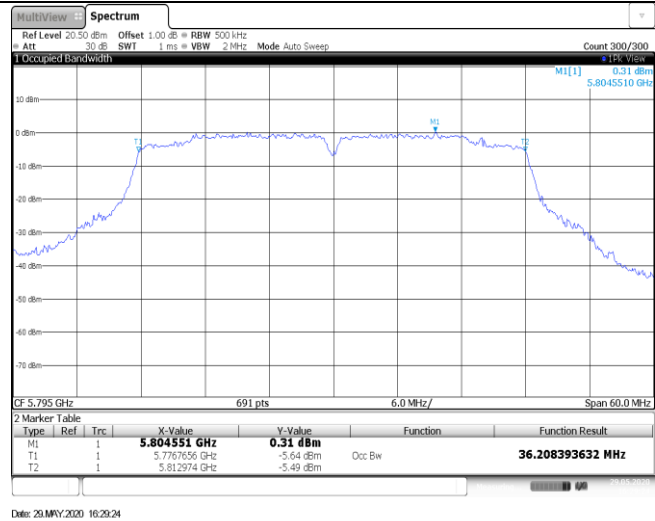
802.11a

CH_LCH_MCH_H



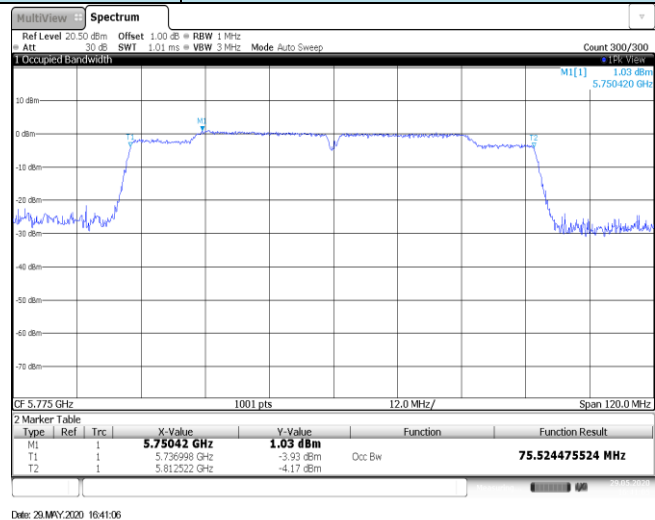
Band IV

802.11n (HT40)

CH_LCH_H

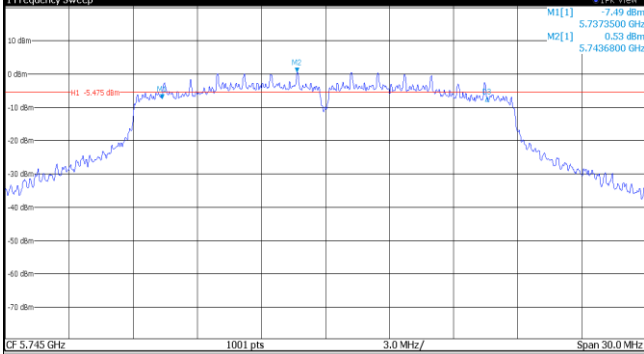
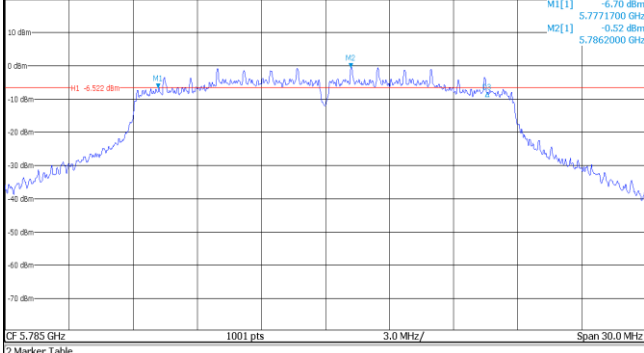
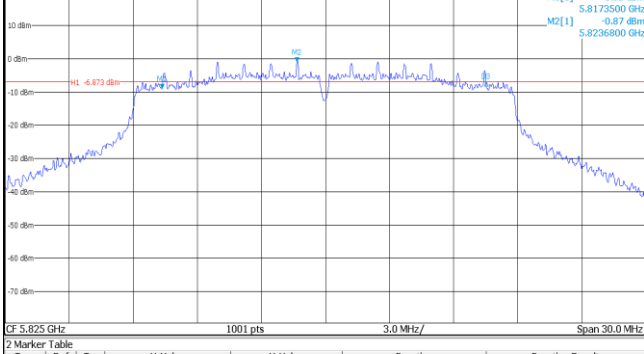
Band IV

802.11ac (HT80)

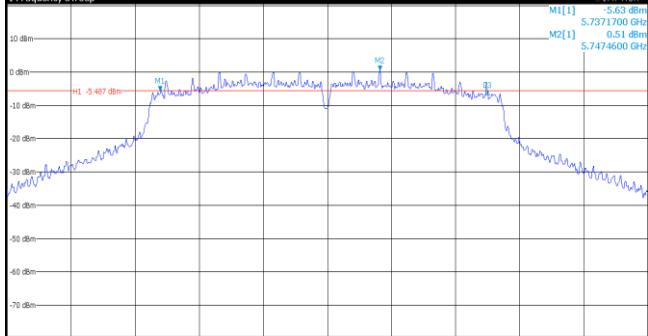
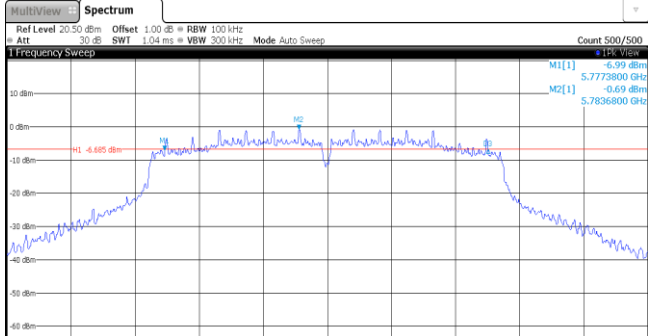
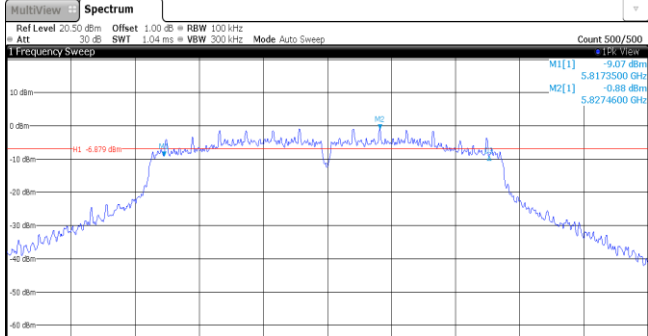
CH_M

Appendix E: 6dB Bandwidth

Band	Bandwidth (MHz)	Type	Channel	6dB bandwidth (MHz)	Result
IV	20	802.11ac	CH _L	15.21	Pass
			CH _M	15.39	
			CH _H	15.18	
		802.11n	CH _L	15.21	Pass
			CH _M	15.15	
			CH _H	15.21	
		802.11a	CH _L	15.33	Pass
			CH _M	15.15	
			CH _H	15.21	
	40	802.11ac	CH _L	35.28	Pass
			CH _H	35.28	
		802.11n	CH _L	35.30	Pass
			CH _H	35.30	
	80	802.11ac	CH _M	75.36	Pass

Test channel	802.11ac (HT20)																												
CH _L	Multiview Spectrum Ref Level 20.50 dBm Offset 1.00 dB RBW 100 kHz Att 30 dB SWT 1.04 ms VBW 300 kHz Mode Auto Sweep Count 500/500 1 Frequency Sweep  CF 5.745 GHz1001 pts3.0 MHz/Span 30.0 MHz <table><tr><th>Type</th><th>Ref</th><th>Trc</th><th>X-Value</th><th>Y-Value</th><th>Function</th><th>Function Result</th></tr><tr><td>M1</td><td>1</td><td></td><td>5.73735 GHz</td><td>-7.49 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>5.74368 GHz</td><td>0.53 dBm</td><td></td><td></td></tr><tr><td>D3</td><td>M1</td><td>1</td><td>15.21 MHz</td><td>0.54 dB</td><td></td><td></td></tr></table> Date: 29.MAY.2020 16:32:01	Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		5.73735 GHz	-7.49 dBm			M2	1		5.74368 GHz	0.53 dBm			D3	M1	1	15.21 MHz	0.54 dB		
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result																							
M1	1		5.73735 GHz	-7.49 dBm																									
M2	1		5.74368 GHz	0.53 dBm																									
D3	M1	1	15.21 MHz	0.54 dB																									
CH _M	Multiview Spectrum Ref Level 20.50 dBm Offset 1.00 dB RBW 100 kHz Att 30 dB SWT 1.04 ms VBW 300 kHz Mode Auto Sweep Count 500/500 1 Frequency Sweep  CF 5.785 GHz1001 pts3.0 MHz/Span 30.0 MHz <table><tr><th>Type</th><th>Ref</th><th>Trc</th><th>X-Value</th><th>Y-Value</th><th>Function</th><th>Function Result</th></tr><tr><td>M1</td><td>1</td><td></td><td>5.77717 GHz</td><td>-6.70 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>5.7862 GHz</td><td>-0.52 dBm</td><td></td><td></td></tr><tr><td>D3</td><td>M1</td><td>1</td><td>15.39 MHz</td><td>-1.22 dB</td><td></td><td></td></tr></table> Date: 29.MAY.2020 16:33:26	Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		5.77717 GHz	-6.70 dBm			M2	1		5.7862 GHz	-0.52 dBm			D3	M1	1	15.39 MHz	-1.22 dB		
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result																							
M1	1		5.77717 GHz	-6.70 dBm																									
M2	1		5.7862 GHz	-0.52 dBm																									
D3	M1	1	15.39 MHz	-1.22 dB																									
CH _H	Multiview Spectrum Ref Level 20.50 dBm Offset 1.00 dB RBW 100 kHz Att 30 dB SWT 1.04 ms VBW 300 kHz Mode Auto Sweep Count 500/500 1 Frequency Sweep  CF 5.825 GHz1001 pts3.0 MHz/Span 30.0 MHz <table><tr><th>Type</th><th>Ref</th><th>Trc</th><th>X-Value</th><th>Y-Value</th><th>Function</th><th>Function Result</th></tr><tr><td>M1</td><td>1</td><td></td><td>5.81735 GHz</td><td>-8.93 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>5.82368 GHz</td><td>-0.87 dBm</td><td></td><td></td></tr><tr><td>D3</td><td>M1</td><td>1</td><td>15.18 MHz</td><td>2.05 dB</td><td></td><td></td></tr></table> Date: 29.MAY.2020 16:34:30	Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		5.81735 GHz	-8.93 dBm			M2	1		5.82368 GHz	-0.87 dBm			D3	M1	1	15.18 MHz	2.05 dB		
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result																							
M1	1		5.81735 GHz	-8.93 dBm																									
M2	1		5.82368 GHz	-0.87 dBm																									
D3	M1	1	15.18 MHz	2.05 dB																									

Test channel	802.11n (HT20)																												
CH _L	MultiView Spectrum Ref Level 20.50 dBm Offset 1.00 dB RBW 100 kHz Att 30 dB SWF 1.04 ms VBW 300 kHz 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 -7.40 dBm 5.737350 GHz M2 -0.57 dBm 5.743680 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>5.73735 GHz</td><td>-7.40 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>5.74368 GHz</td><td>0.57 dBm</td><td></td><td></td></tr><tr><td>D3</td><td>M1</td><td>1</td><td>15.21 MHz</td><td>-0.42 dB</td><td></td><td></td></tr></table> Date: 29.MAY.2020 16:22:59	Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		5.73735 GHz	-7.40 dBm			M2	1		5.74368 GHz	0.57 dBm			D3	M1	1	15.21 MHz	-0.42 dB		
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result																							
M1	1		5.73735 GHz	-7.40 dBm																									
M2	1		5.74368 GHz	0.57 dBm																									
D3	M1	1	15.21 MHz	-0.42 dB																									
CH _M	MultiView Spectrum Ref Level 20.50 dBm Offset 1.00 dB RBW 100 kHz Att 30 dB SWF 1.04 ms VBW 300 kHz 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 -8.67 dBm 5.777350 GHz M2 -0.12 dBm 5.783680 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>5.77735 GHz</td><td>-8.67 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>5.78368 GHz</td><td>-0.12 dBm</td><td></td><td></td></tr><tr><td>D3</td><td>M1</td><td>1</td><td>15.15 MHz</td><td>0.72 dB</td><td></td><td></td></tr></table> Date: 29.MAY.2020 16:24:24	Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		5.77735 GHz	-8.67 dBm			M2	1		5.78368 GHz	-0.12 dBm			D3	M1	1	15.15 MHz	0.72 dB		
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result																							
M1	1		5.77735 GHz	-8.67 dBm																									
M2	1		5.78368 GHz	-0.12 dBm																									
D3	M1	1	15.15 MHz	0.72 dB																									
CH _H	MultiView Spectrum Ref Level 20.50 dBm Offset 1.00 dB RBW 100 kHz Att 30 dB SWF 1.04 ms VBW 300 kHz 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 -9.07 dBm 5.817350 GHz M2 -0.82 dBm 5.823680 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>5.81735 GHz</td><td>-9.07 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>5.82368 GHz</td><td>-0.82 dBm</td><td></td><td></td></tr><tr><td>D3</td><td>M1</td><td>1</td><td>15.21 MHz</td><td>0.27 dB</td><td></td><td></td></tr></table> Date: 29.MAY.2020 16:25:37	Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		5.81735 GHz	-9.07 dBm			M2	1		5.82368 GHz	-0.82 dBm			D3	M1	1	15.21 MHz	0.27 dB		
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result																							
M1	1		5.81735 GHz	-9.07 dBm																									
M2	1		5.82368 GHz	-0.82 dBm																									
D3	M1	1	15.21 MHz	0.27 dB																									

Test channel	802.11a																												
CH _L	MultiView Spectrum Ref Level 20.50 dBm Offset 1.00 dB RBW 100 kHz Att 30 dB SWT 1.04 ms VBW 300 kHz Mode Auto Sweep Count 500/500 1 Frequency Sweep  CF 5.745 GHz1001 pts3.0 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>5.73717 GHz</td><td>-5.63 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>5.74746 GHz</td><td>-0.51 dBm</td><td></td><td></td></tr><tr><td>D3</td><td>M1</td><td>1</td><td>15.33 MHz</td><td>0.10 dB</td><td></td><td></td></tr></table> Date: 29.MAY.2020 16:17:20	Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		5.73717 GHz	-5.63 dBm			M2	1		5.74746 GHz	-0.51 dBm			D3	M1	1	15.33 MHz	0.10 dB		
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result																							
M1	1		5.73717 GHz	-5.63 dBm																									
M2	1		5.74746 GHz	-0.51 dBm																									
D3	M1	1	15.33 MHz	0.10 dB																									
CH _M	MultiView Spectrum Ref Level 20.50 dBm Offset 1.00 dB RBW 100 kHz Att 30 dB SWT 1.04 ms VBW 300 kHz Mode Auto Sweep Count 500/500 1 Frequency Sweep  CF 5.785 GHz1001 pts3.0 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>5.77738 GHz</td><td>-6.99 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>5.78368 GHz</td><td>-0.69 dBm</td><td></td><td></td></tr><tr><td>D3</td><td>M1</td><td>1</td><td>15.15 MHz</td><td>0.26 dB</td><td></td><td></td></tr></table> Date: 29.MAY.2020 16:19:45	Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		5.77738 GHz	-6.99 dBm			M2	1		5.78368 GHz	-0.69 dBm			D3	M1	1	15.15 MHz	0.26 dB		
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result																							
M1	1		5.77738 GHz	-6.99 dBm																									
M2	1		5.78368 GHz	-0.69 dBm																									
D3	M1	1	15.15 MHz	0.26 dB																									
CH _H	MultiView Spectrum Ref Level 20.50 dBm Offset 1.00 dB RBW 100 kHz Att 30 dB SWT 1.04 ms VBW 300 kHz Mode Auto Sweep Count 500/500 1 Frequency Sweep  CF 5.825 GHz1001 pts3.0 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>5.81735 GHz</td><td>-9.07 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>5.82746 GHz</td><td>-0.88 dBm</td><td></td><td></td></tr><tr><td>D3</td><td>M1</td><td>1</td><td>15.21 MHz</td><td>-0.12 dB</td><td></td><td></td></tr></table> Date: 29.MAY.2020 16:21:26	Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		5.81735 GHz	-9.07 dBm			M2	1		5.82746 GHz	-0.88 dBm			D3	M1	1	15.21 MHz	-0.12 dB		
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result																							
M1	1		5.81735 GHz	-9.07 dBm																									
M2	1		5.82746 GHz	-0.88 dBm																									
D3	M1	1	15.21 MHz	-0.12 dB																									

Test channel

802.11ac (HT40)

CH_L

Multiview **Spectrum**

Ref Level 20.50 dBm Offset 1.00 dB RBW 100 kHz
Att 30.0 dB SWI 1.07 ms VBW 300 kHz Mode Auto Sweep Count 500/500

1 Frequency Sweep

CF 5.755 GHz 1001 pts 6.0 MHz/ Span 60.0 MHz

2 Marker Table

Type	Ref	Trc	X-Value	Y-Value	Function	Function Result
M1	1		5.7373 GHz	-10.45 dBm		
M2	1		5.74996 GHz	-2.70 dBm		
D3	M1	1	35.28 MHz	-1.27 dB		

Date: 29.MAY.2020 16:36:21

CH_H

Multiview **Spectrum**

Ref Level 20.50 dBm Offset 1.00 dB RBW 100 kHz
Att 30.0 dB SWI 1.07 ms VBW 300 kHz Mode Auto Sweep Count 500/500

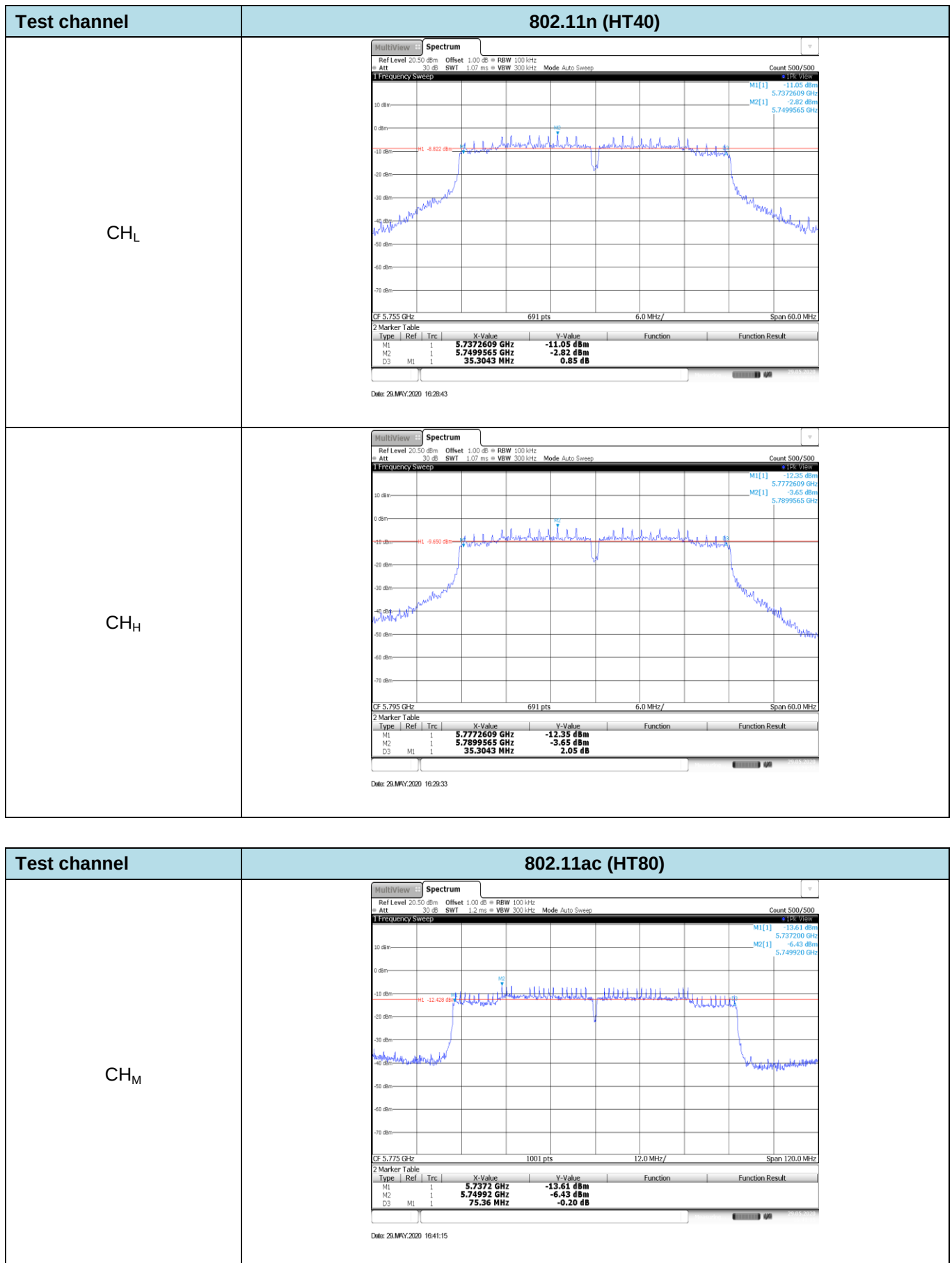
1 Frequency Sweep

CF 5.795 GHz 1001 pts 6.0 MHz/ Span 60.0 MHz

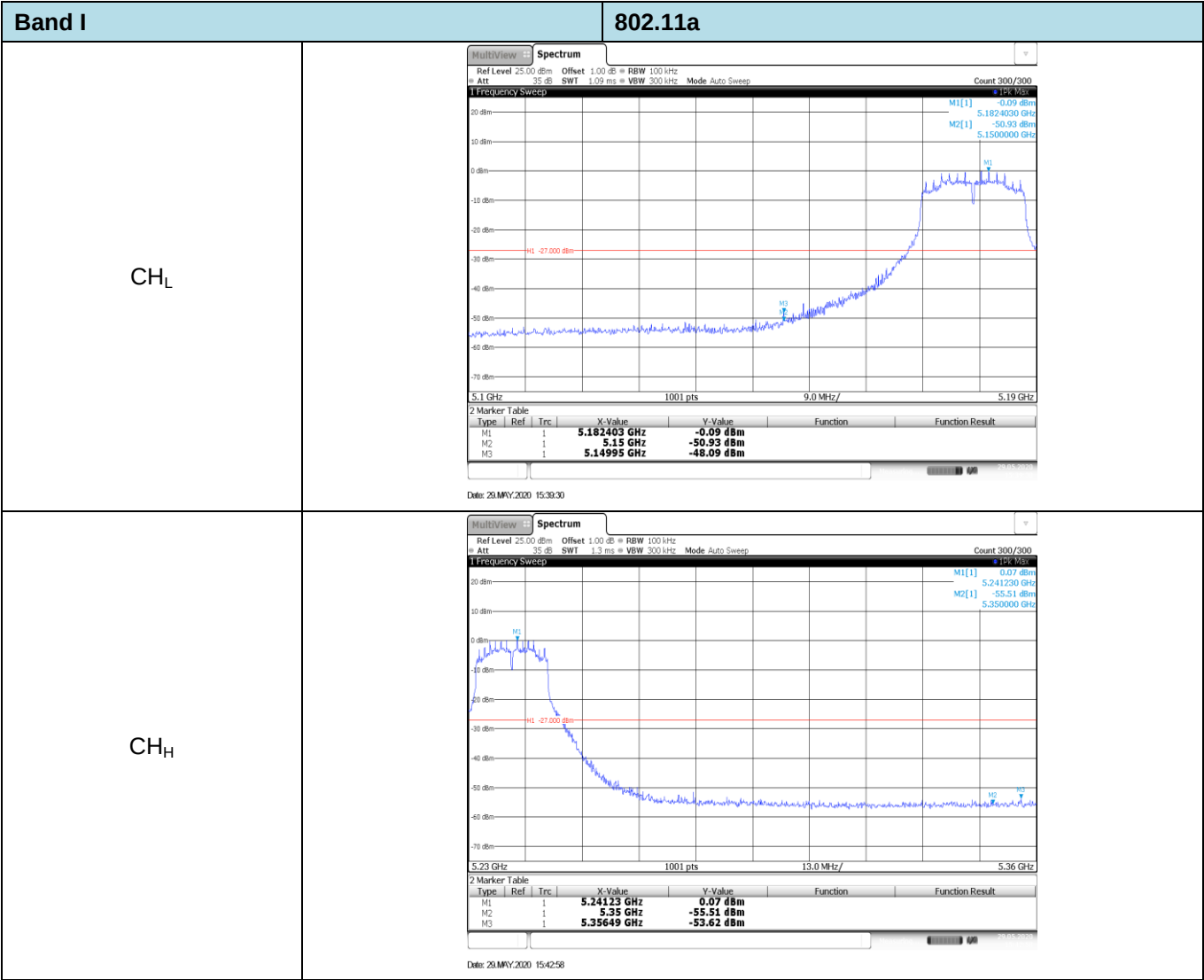
2 Marker Table

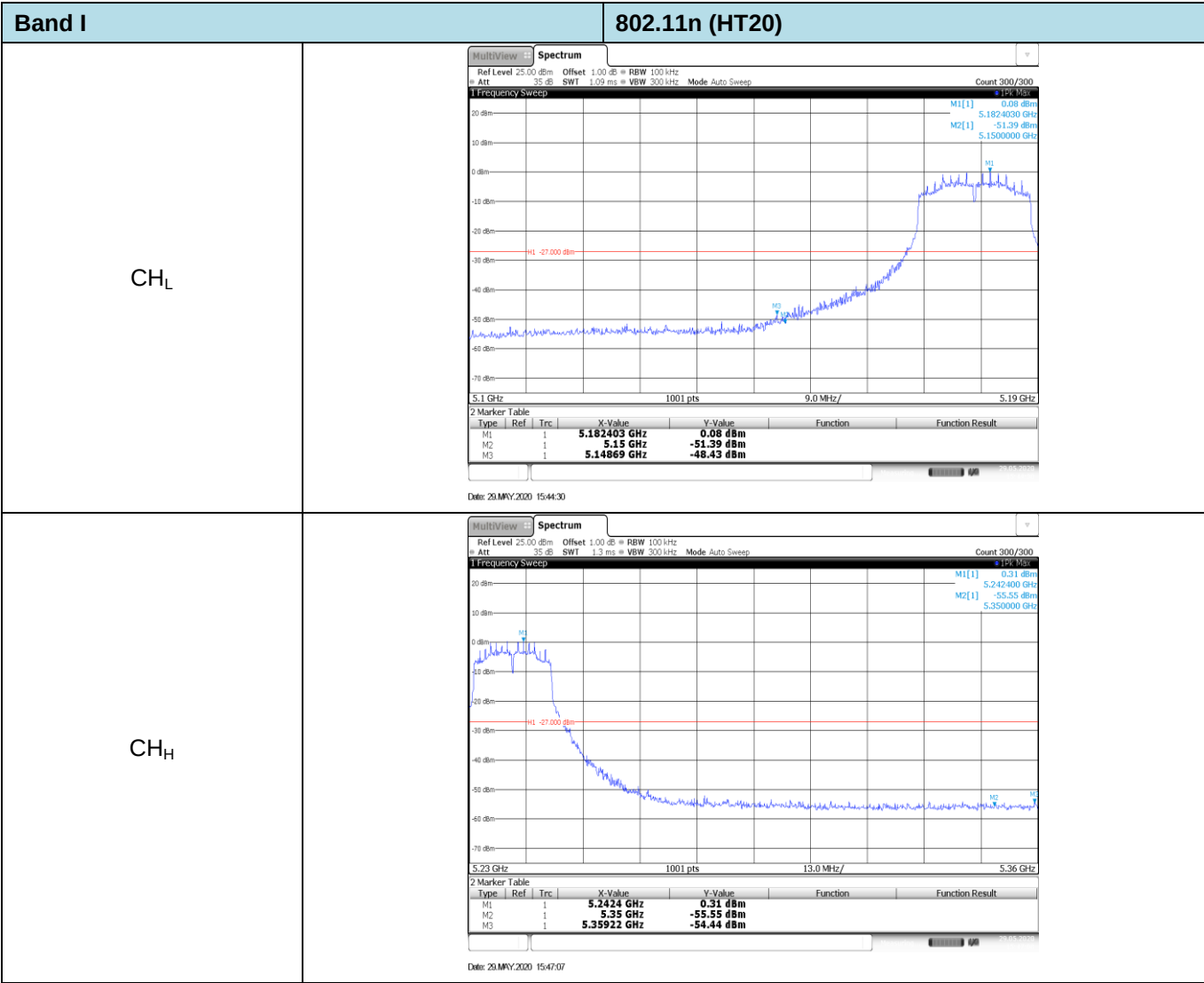
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result
M1	1		5.7773 GHz	-11.63 dBm		
M2	1		5.78996 GHz	-3.64 dBm		
D3	M1	1	35.28 MHz	-0.83 dB		

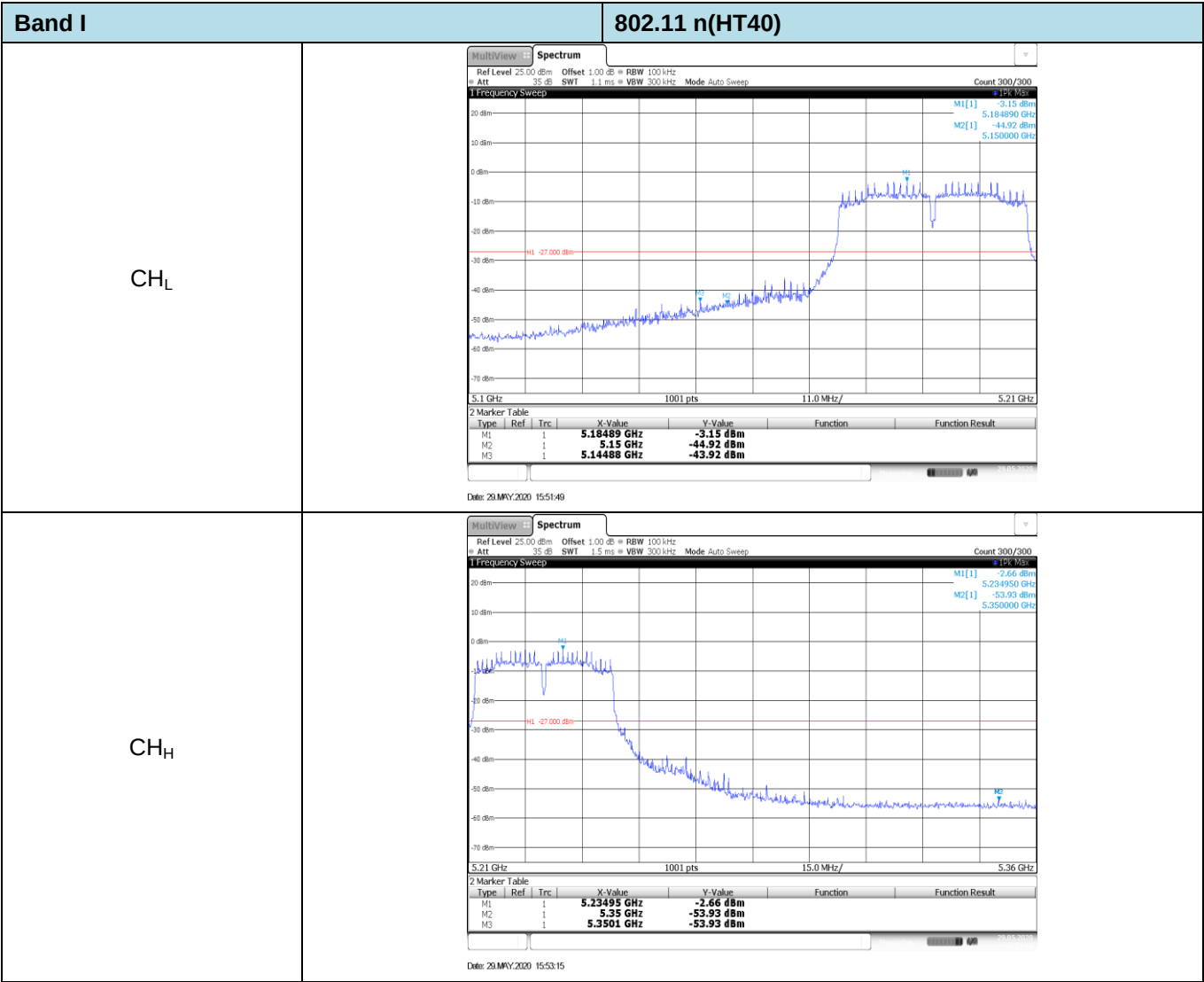
Date: 29.MAY.2020 16:38:06

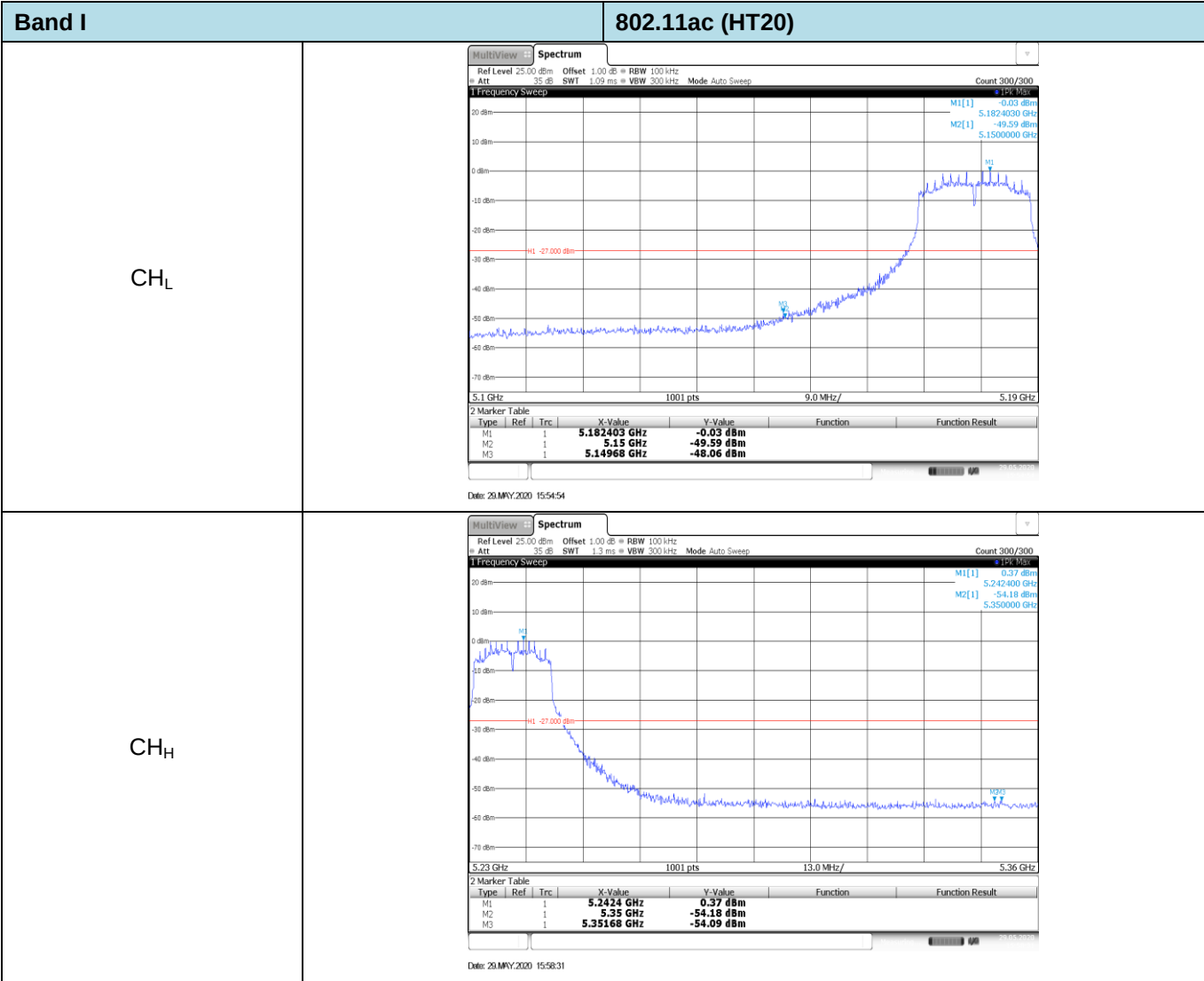


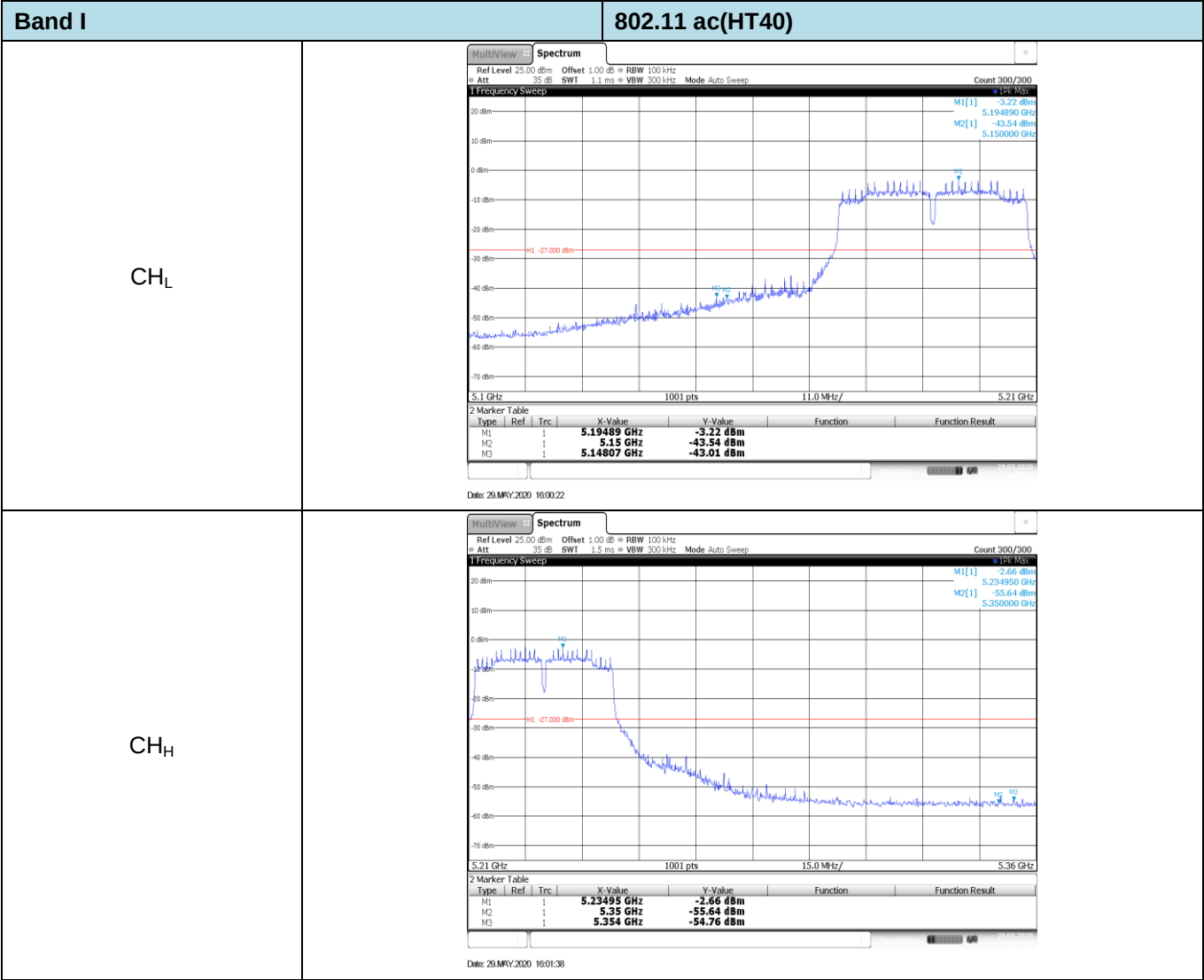
Appendix F: Band edge

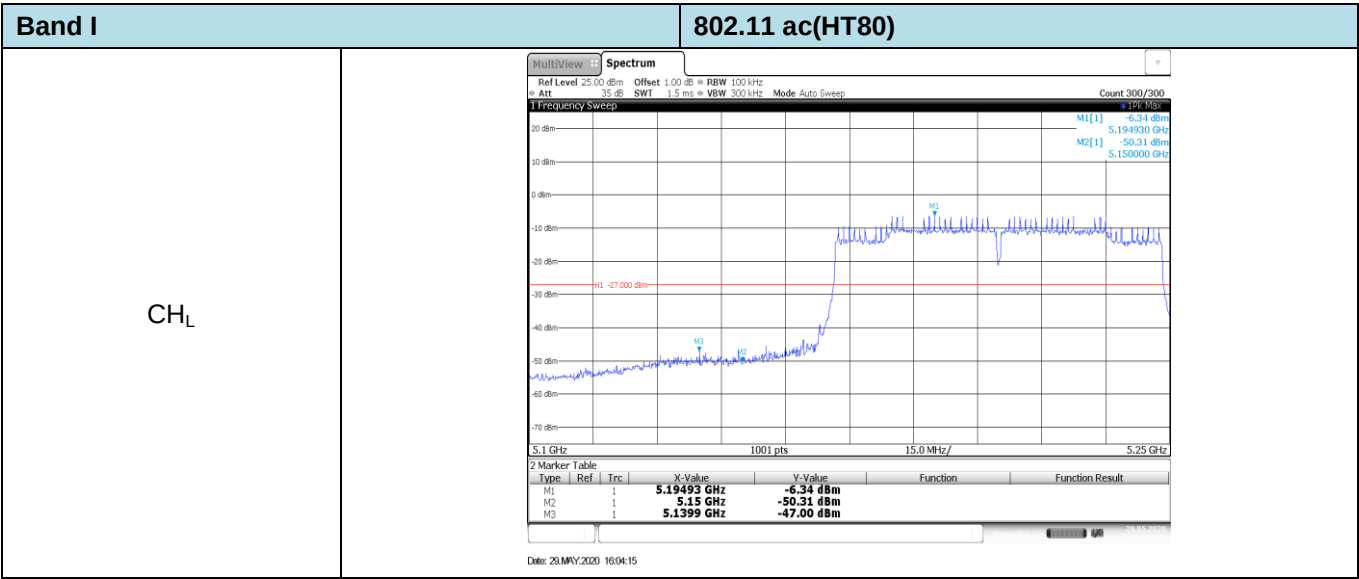


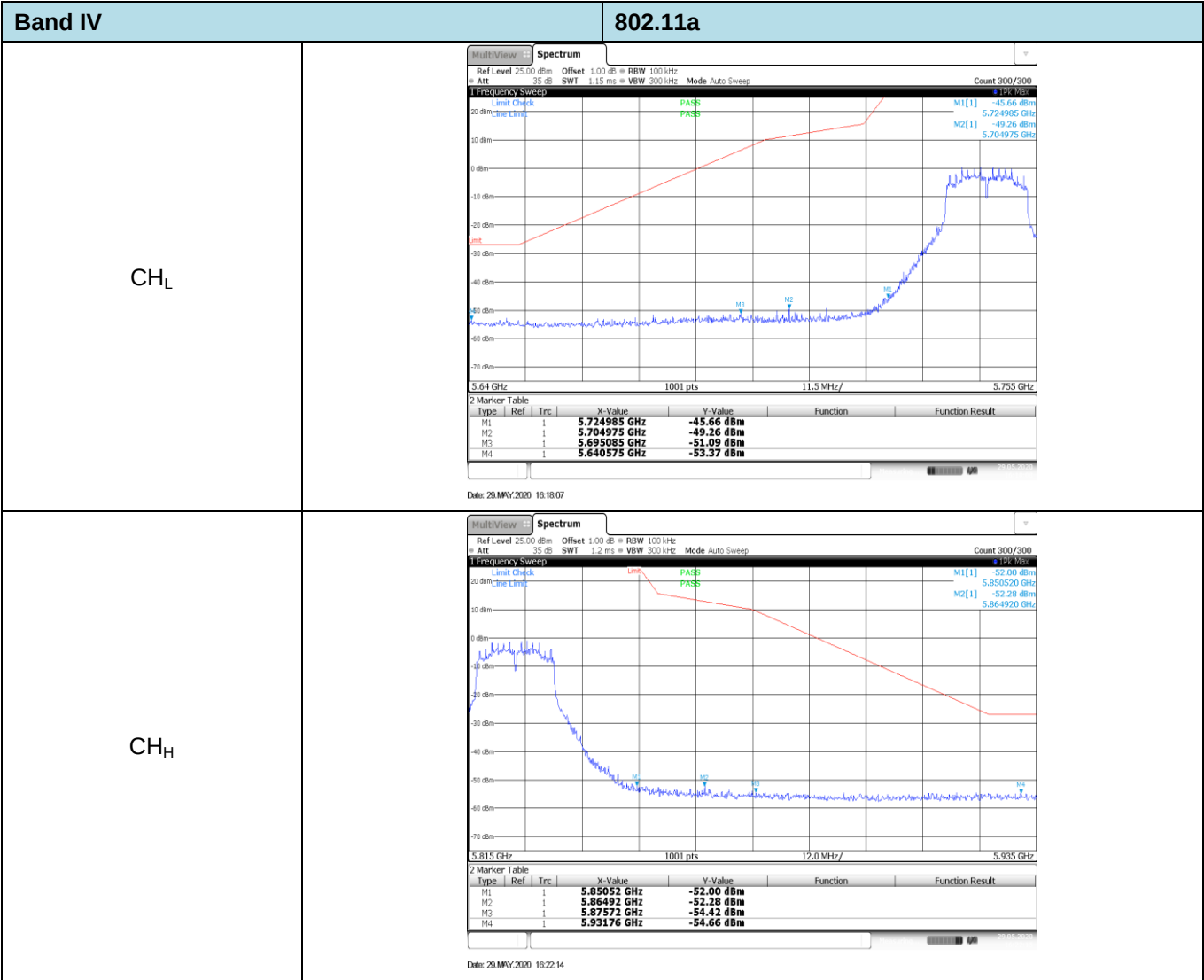


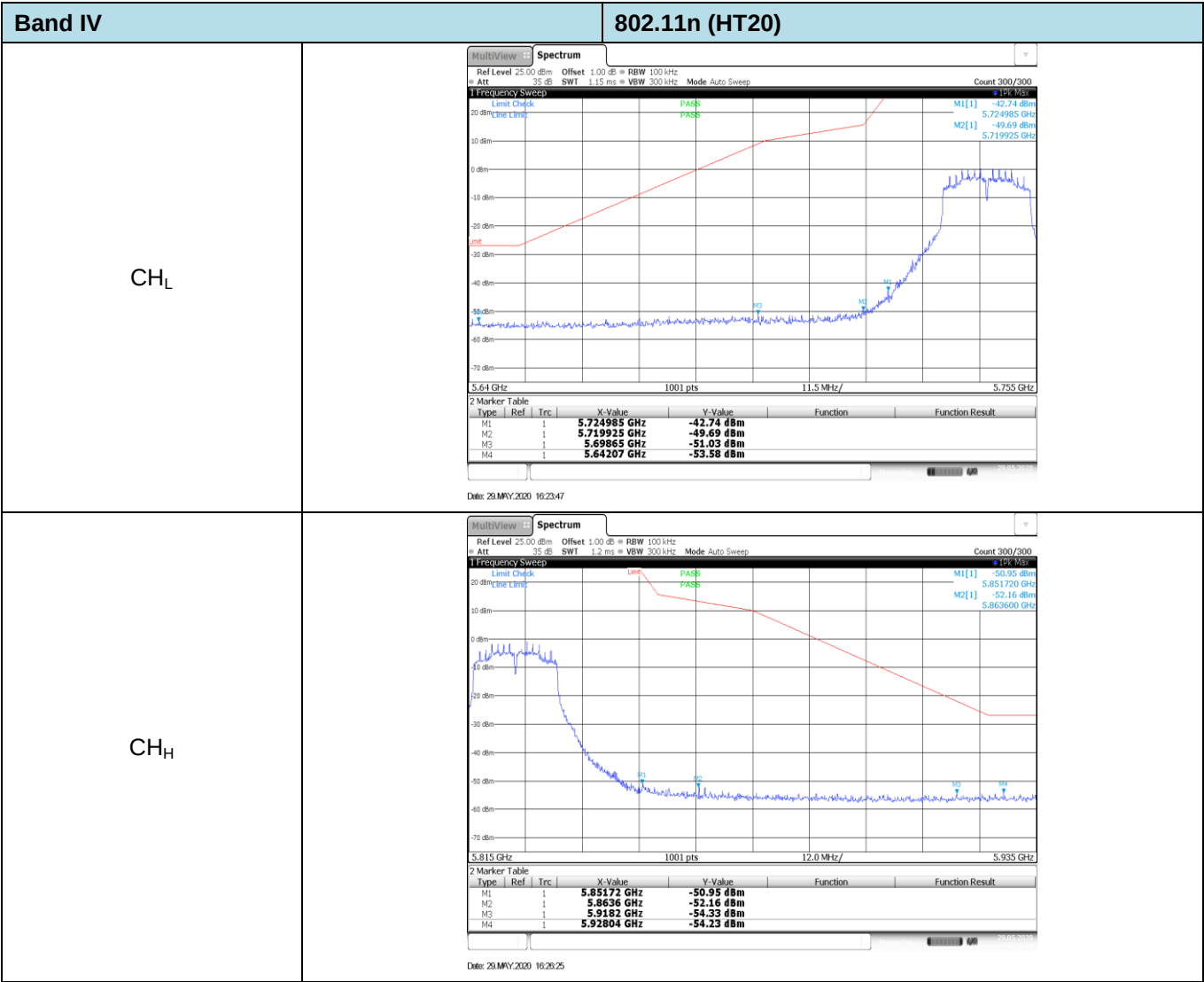


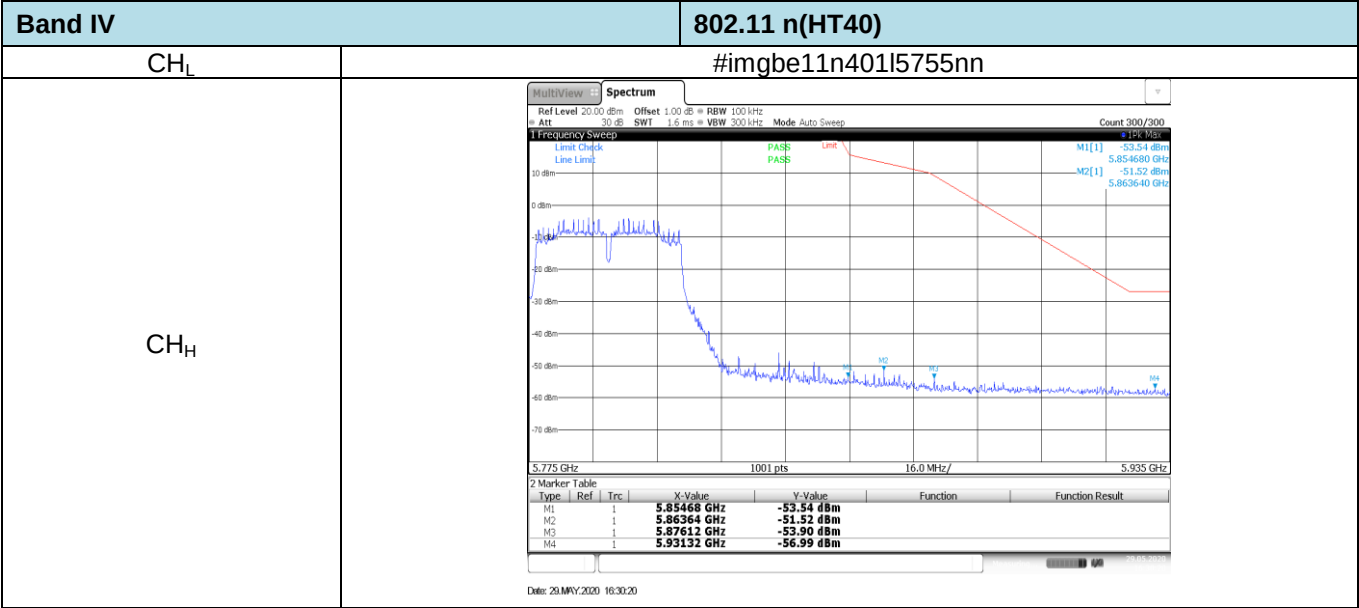


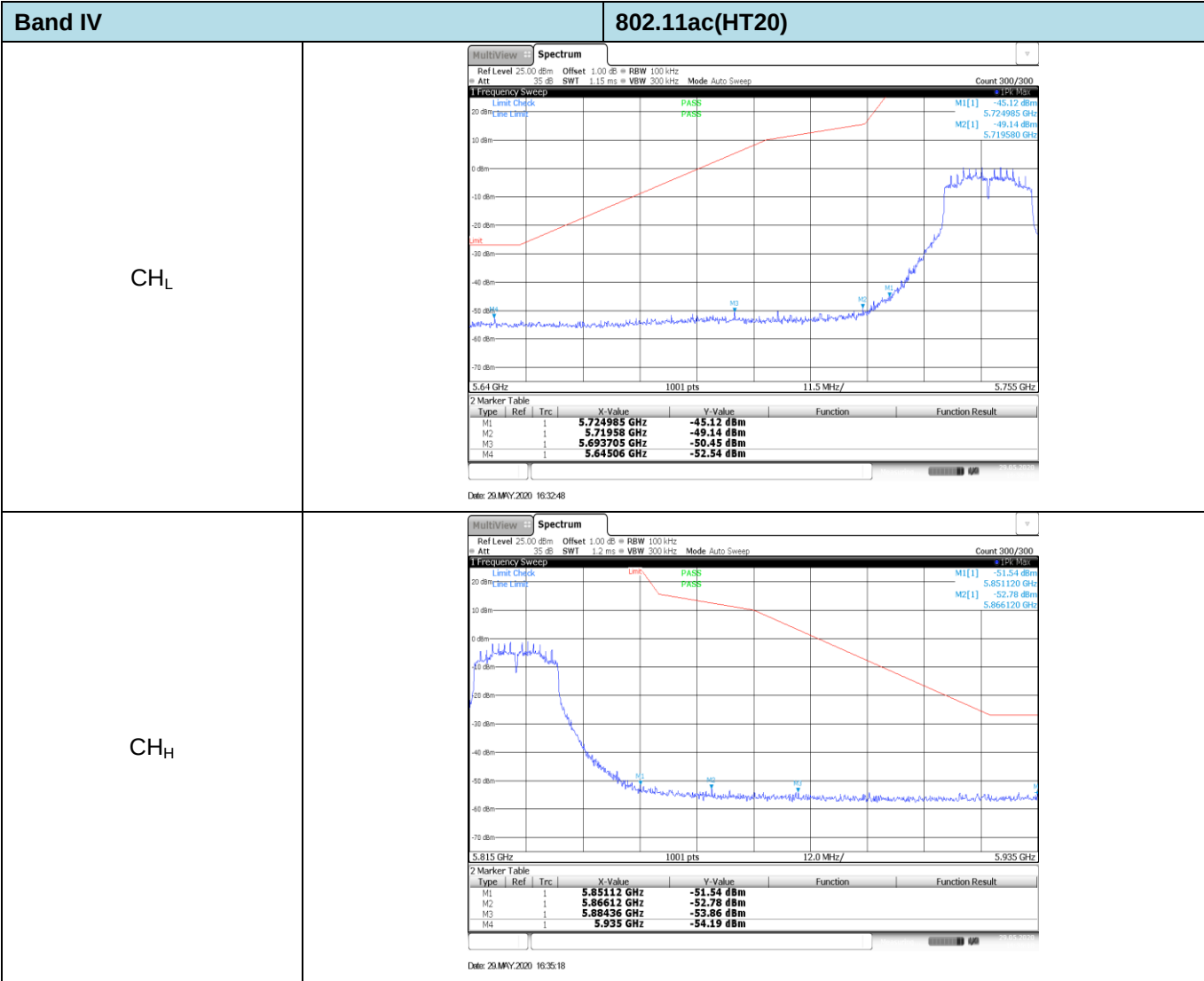


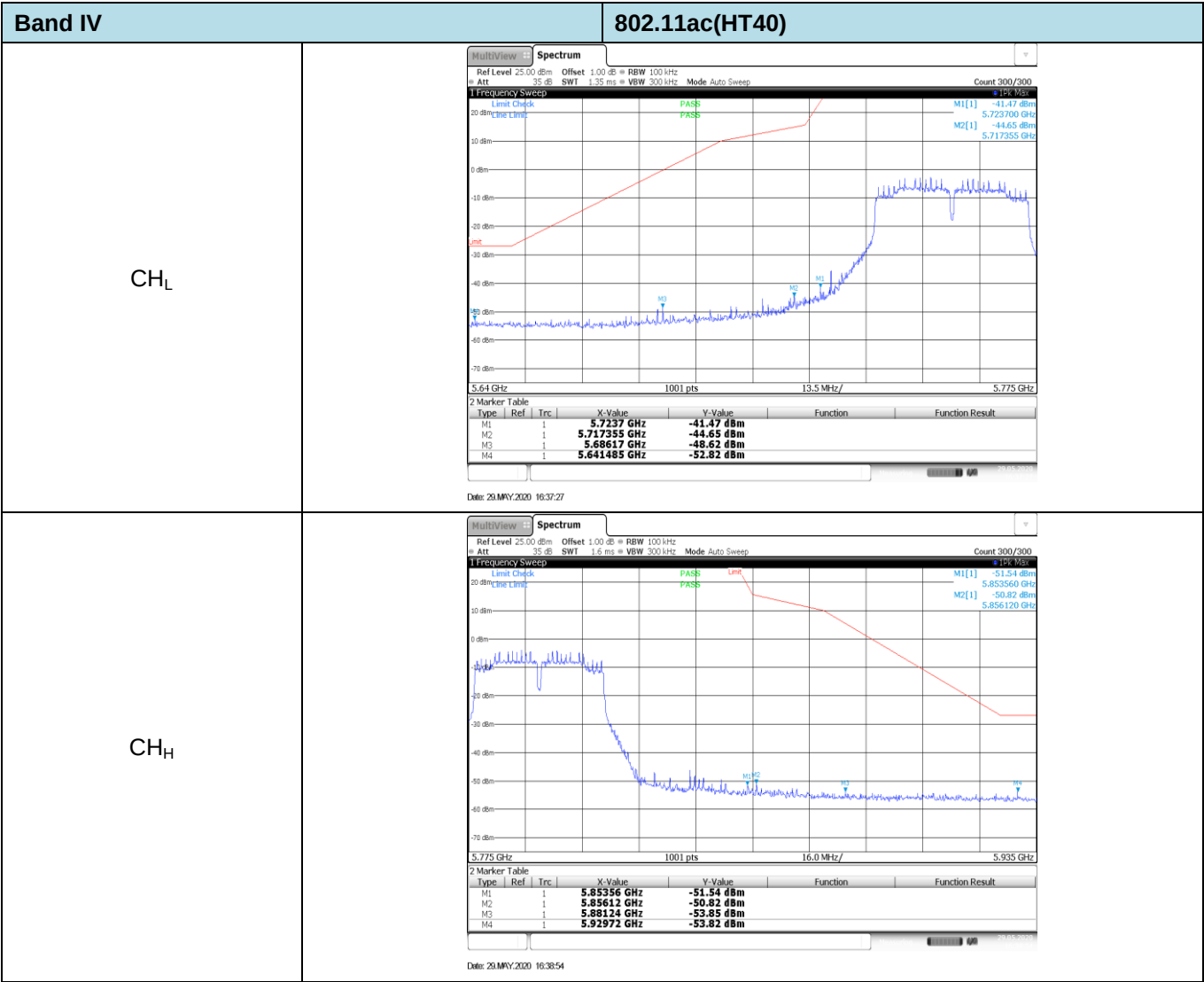












Band IV		802.11ac(HT80)
CH _L		#imgbe11ac801h5775nn

Appendix G: 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	-43000.00	-8.30116	PASS
T _N	V _N	-41000.00	-7.91506	PASS
T _N	V _H	-44000.00	-8.49421	PASS

Band: IV			Test Frequency: 5745.00MHz	
Temperature (°C)	Voltage (V)	Frequency Deviation (Hz)	Frequency Deviation (ppm)	Result
T _N	V _L	-45000.00	-7.83290	PASS
T _N	V _N	-43000.00	-7.48477	PASS
T _N	V _H	-45000.00	-7.83290	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	-45000.00	-8.68726	PASS
V _N	-10	-45000.00	-8.68726	PASS
V _N	0	-45000.00	-8.68726	PASS
V _N	10	-45000.00	-8.68726	PASS
V _N	20	-45000.00	-8.68726	PASS
V _N	30	-45000.00	-8.68726	PASS
V _N	40	-45000.00	-8.68726	PASS
V _N	50	-45000.00	-8.68726	PASS

Band: IV			Test Frequency: 5745.00MHz	
Voltage (V)	Temperature (°C)	Frequency Deviation (Hz)	Frequency Deviation (ppm)	Result
V _N	-20	-45000.00	-7.83290	PASS
V _N	-10	-46000.00	-8.00696	PASS
V _N	0	-46000.00	-8.00696	PASS
V _N	10	-46000.00	-8.00696	PASS
V _N	20	-46000.00	-8.00696	PASS
V _N	30	-46000.00	-8.00696	PASS
V _N	40	-46000.00	-8.00696	PASS
V _N	50	-46000.00	-8.00696	PASS

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

