

APPENDIX REPORT

Project No.	SHT2311064901EW FCC ID	Radio Specification	WIFI 5G
Test sample No.	YPHT23110649002	Model No.	ATMET2K
Start test date	2024-04-07	Finish date	2024-04-10
Temperature	25℃	Humidity	52%
Test Engineer	Xiangyu Wei	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)		Total Power (dBm)	Limit (dBm)	Result
				Antenna 0	Antenna 1	Antenna 0	Antenna 1	Antenna 0	Antenna 1	Antenna 0	Antenna 1			
I	20	802.11ac	CH _L	11.56	10.87	98.46	98.97	0.07	0.04	11.63	10.91	14.27	24.00	Pass
			CH _M	12.01	11.57	98.97	98.97	0.04	0.04	12.05	11.61	14.87		
			CH _H	12.20	11.62	98.97	98.90	0.04	0.05	12.24	11.67	14.97		
		802.11n	CH _L	11.62	10.85	98.90	98.96	0.05	0.05	11.67	10.90	14.33	24.00	Pass
			CH _M	12.06	11.53	98.90	98.90	0.05	0.05	12.11	11.58	14.87		
			CH _H	12.29	11.60	98.90	98.96	0.05	0.05	12.34	11.65	15.02		
		802.11a	CH _L	14.47	13.15	99.03	99.03	0.04	0.04	14.51	13.19	-	24.00	Pass
			CH _M	14.83	13.77	98.97	99.03	0.04	0.04	14.87	13.81	-		
			CH _H	15.14	14.01	99.03	99.03	0.04	0.04	15.18	14.05	-		
		802.11ax	CH _L	11.46	10.92	98.21	98.21	0.08	0.08	11.54	11.00	14.27	24.00	Pass
			CH _M	11.86	11.55	98.58	98.58	0.06	0.06	11.92	11.61	14.76		
			CH _H	12.06	11.68	98.58	98.66	0.06	0.06	12.12	11.74	14.91		
	40	802.11ac	CH _L	11.47	11.08	98.28	98.70	0.08	0.06	11.55	11.14	14.37	24.00	Pass
			CH _H	11.95	11.42	98.70	98.70	0.06	0.06	12.01	11.48	14.77		
		802.11n	CH _L	11.61	10.93	98.70	98.70	0.06	0.06	11.67	10.99	14.37	24.00	Pass
			CH _H	11.96	11.35	98.70	98.70	0.06	0.06	12.02	11.41	14.72		
		802.11ax	CH _L	11.32	10.68	97.60	97.60	0.11	0.11	11.43	10.79	14.12	24.00	Pass
			CH _H	11.61	11.24	97.60	97.60	0.11	0.11	11.72	11.35	14.56		
	80	802.11ac	CH _M	11.84	11.35	98.94	99.08	0.05	0.04	11.89	11.39	14.67	24.00	Pass
		802.11ax	CH _M	11.83	11.56	98.91	98.88	0.05	0.05	11.88	11.61	14.76	24.00	Pass

Band	Bandwidth (MHz)	Type	Channel	Reading (dBm)		Duty cycle (%)		Duty cycle factor (dB)		Conducted Output Power (dBm)		Total Power (dBm)	Limit (dBm)	Result
				Antenna 0	Antenna 1	Antenna 0	Antenna 1	Antenna 0	Antenna 1	Antenna 0	Antenna 1			
IV	20	802.11ac	CH _L	11.98	8.91	98.97	98.90	0.04	0.05	12.02	8.96	13.76	30.00	Pass
			CH _M	11.42	8.42	98.90	98.90	0.05	0.05	11.47	8.47	13.26		
			CH _H	11.58	8.63	98.90	98.90	0.05	0.05	11.63	8.68	13.40		
		802.11n	CH _L	11.87	8.81	98.90	98.90	0.05	0.05	11.92	8.86	13.66	30.00	Pass
			CH _M	11.42	8.36	98.90	98.90	0.05	0.05	11.47	8.41	13.23		
			CH _H	11.52	8.57	98.90	98.90	0.05	0.05	11.57	8.62	13.36		
		802.11a	CH _L	13.33	9.00	99.03	99.03	0.04	0.04	13.37	9.04	-	30.00	Pass
			CH _M	12.90	8.48	99.03	98.97	0.04	0.04	12.94	8.52	-		
			CH _H	13.17	8.62	99.03	98.97	0.04	0.04	13.21	8.66	-		
		802.11ax	CH _L	11.90	8.63	98.21	98.58	0.08	0.06	11.98	8.69	13.67	30.00	Pass
			CH _M	11.47	8.20	98.58	20.00	0.06	6.99	11.53	15.19	16.74		
			CH _H	11.57	8.37	98.58	98.58	0.06	0.06	11.63	8.43	13.30		
	40	802.11ac	CH _L	11.22	8.87	98.70	98.70	0.06	0.06	11.28	8.93	13.27	30.00	Pass
			CH _H	10.99	8.83	98.66	98.70	0.06	0.06	11.05	8.89	13.15		
		802.11n	CH _L	11.34	8.99	98.70	98.70	0.06	0.06	11.40	9.05	13.41	30.00	Pass
			CH _H	10.96	8.74	98.66	98.70	0.06	0.06	11.02	8.80	13.05		
		802.11ax	CH _L	11.18	8.64	97.16	97.60	0.13	0.11	11.31	8.75	13.24	30.00	Pass
			CH _H	10.91	8.36	97.55	97.60	0.11	0.11	11.02	8.47	12.94		
	80	802.11ac	CH _M	11.32	8.91	99.10	99.10	0.04	0.04	11.36	8.95	13.37	30.00	Pass
		802.11ax	CH _M	11.59	9.03	98.88	98.88	0.05	0.05	11.64	9.08	13.54	30.00	Pass

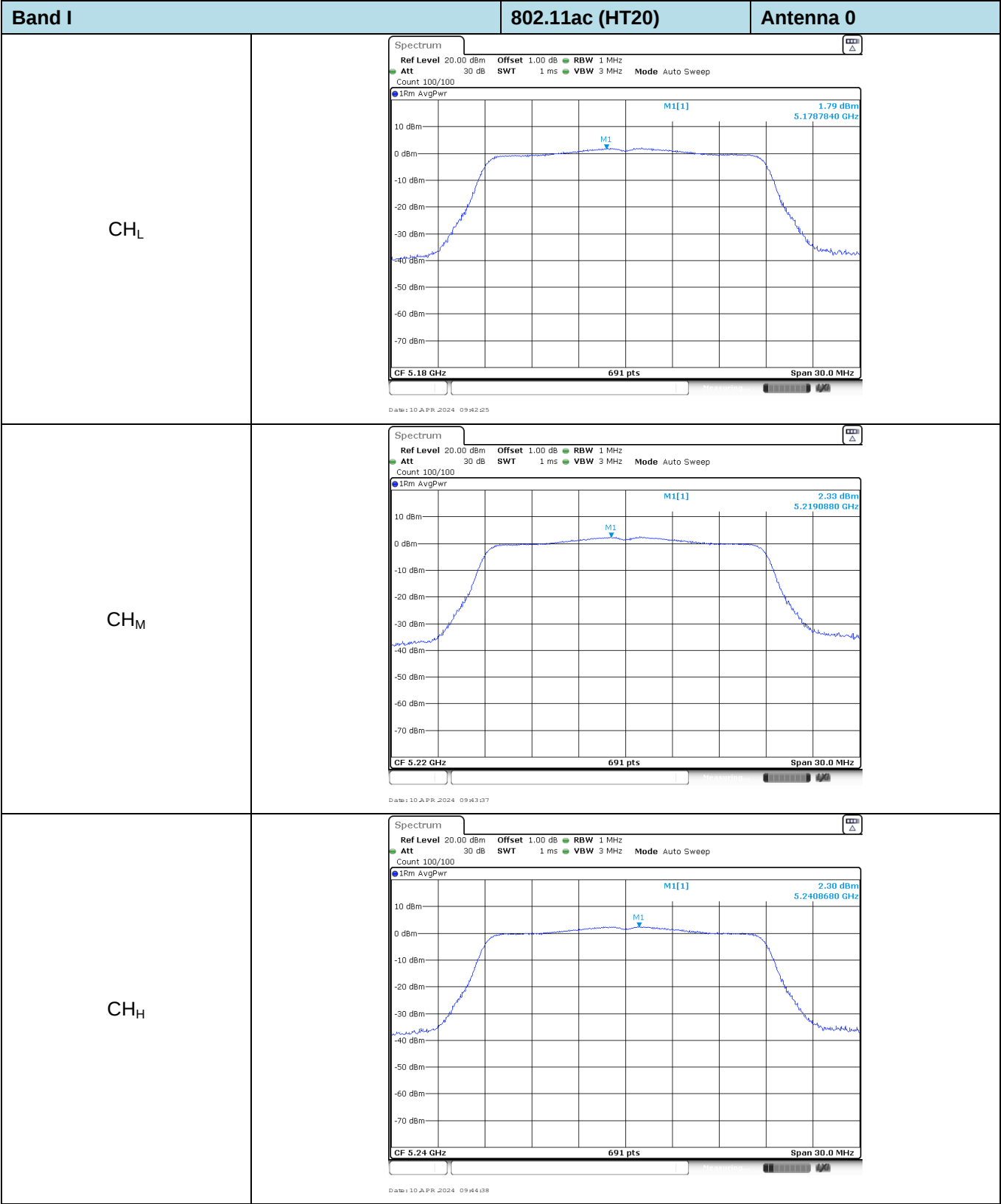
NOTE: duty cycle factor = 10LOG(1/ duty cycle)

Appendix B: Maximum Power Spectral Density

Band	Bandwidth (MHz)	Type	Channel	Reading (dBm)		Duty cycle (%)		Duty cycle factor (dB)		Power Spectral Density (dBm/MHz)		Total PSD (dBm/MHz)	Limit (dBm/MHz)	Result
				Antenna 0	Antenna 1	Antenna 0	Antenna 1	Antenna 0	Antenna 1	Antenna 0	Antenna 1			
I	20	802.11ac	CH _L	1.79	1.11	98.97	98.97	0.04	0.04	1.83	1.15	4.51	8.47	Pass
			CH _M	2.33	1.81	98.97	98.97	0.04	0.04	2.37	1.85	5.13		
			CH _H	2.30	1.87	98.97	98.90	0.04	0.05	2.34	1.92	5.15		
		802.11n	CH _L	2.15	1.33	98.90	98.96	0.05	0.05	2.2	1.38	4.82	8.47	Pass
			CH _M	2.40	1.96	98.90	98.90	0.05	0.05	2.45	2.01	5.25		
			CH _H	2.61	2.00	98.90	98.96	0.05	0.05	2.66	2.05	5.38		
		802.11a	CH _L	4.98	3.71	99.03	99.03	0.04	0.04	5.02	3.75	-	8.47	Pass
			CH _M	5.25	4.13	98.97	99.03	0.04	0.04	5.29	4.17	-		
			CH _H	5.43	4.27	99.03	99.03	0.04	0.04	5.47	4.31	-		
		802.11ax	CH _L	1.67	1.11	98.58	98.66	0.06	0.06	1.73	1.17	4.47	8.47	Pass
			CH _M	2.46	1.81	98.58	98.58	0.06	0.06	2.52	1.87	5.22		
			CH _H	2.59	1.87	98.58	98.66	0.06	0.06	2.65	1.93	5.32		
	40	802.11ac	CH _L	-1.89	-2.35	98.70	98.70	0.06	0.06	-1.83	-2.29	0.96	8.47	Pass
			CH _H	-1.75	-2.71	98.70	98.70	0.06	0.06	-1.69	-2.65	0.87		
		802.11n	CH _L	-1.96	-2.97	98.70	98.70	0.06	0.06	-1.9	-2.91	0.63	8.47	Pass
			CH _H	-1.80	-2.64	98.70	98.70	0.06	0.06	-1.74	-2.58	0.87		
		802.11ax	CH _L	-2.06	-2.59	97.60	97.60	0.11	0.11	-1.95	-2.48	0.80	8.47	Pass
			CH _H	-2.26	-2.40	97.60	97.60	0.11	0.11	-2.15	-2.29	0.79		
	80	802.11ac	CH _M	-5.08	-5.57	99.10	99.08	0.04	0.04	-5.04	-5.53	-2.27	8.47	Pass
		802.11ax	CH _M	-4.83	-5.02	98.91	98.88	0.05	0.05	-4.78	-4.97	-1.86	8.47	Pass

Band	Bandwidth (MHz)	Type	Channel	Reading (dBm)		Duty cycle (%)		Duty cycle factor (dB)		Power Spectral Density (dBm/500kHz)		Total PSD (dBm/MHz)	Limit (dBm/500KHz)	Result
				Antenna 0	Antenna 1	Antenna 0	Antenna 1	Antenna 0	Antenna 1	Antenna 0	Antenna 1			
IV	20	802.11ac	CH _L	-0.70	-3.71	98.97	98.90	0.04	0.05	-0.66	-3.66	1.10	27.47	Pass
			CH _M	-1.31	-4.16	98.90	98.90	0.05	0.05	-1.26	-4.11	0.56		
			CH _H	-0.98	-3.68	98.90	98.90	0.05	0.05	-0.93	-3.63	0.94		
		802.11n	CH _L	-0.95	-3.46	98.90	98.90	0.05	0.05	-0.9	-3.41	1.03	27.47	Pass
			CH _M	-1.14	-4.26	98.90	98.90	0.05	0.05	-1.09	-4.21	0.63		
			CH _H	-0.78	-3.92	98.90	98.90	0.05	0.05	-0.73	-3.87	0.99		
		802.11a	CH _L	1.03	-3.21	99.03	99.03	0.04	0.04	1.07	-3.17	-	27.47	Pass
			CH _M	0.23	-3.96	99.03	98.97	0.04	0.04	0.27	-3.92	-		
			CH _H	0.81	-3.44	99.03	98.97	0.04	0.04	0.85	-3.4	-		
		802.11ax	CH _L	-0.31	-3.72	98.58	98.58	0.06	0.06	-0.25	-3.66	1.38	27.47	Pass
			CH _M	-1.27	-4.55	98.58	20.00	0.06	6.99	-1.21	2.44	4.00		
			CH _H	-0.69	-4.29	98.58	98.58	0.06	0.06	-0.63	-4.23	0.94		
	40	802.11ac	CH _L	-5.74	-7.75	98.70	98.70	0.06	0.06	-5.68	-7.69	-3.56	27.47	Pass
			CH _H	-5.87	-7.79	98.66	98.70	0.06	0.06	-5.81	-7.73	-3.65		
		802.11n	CH _L	-5.23	-8.26	98.70	98.70	0.06	0.06	-5.17	-8.2	-3.42	27.47	Pass
			CH _H	-5.51	-8.00	98.66	98.70	0.06	0.06	-5.45	-7.94	-3.51		
		802.11ax	CH _L	-5.13	-8.08	97.60	97.60	0.11	0.11	-5.02	-7.97	-3.24	27.47	Pass
			CH _H	-5.42	-7.77	97.55	97.60	0.11	0.11	-5.31	-7.66	-3.32		
	80	802.11ac	CH _M	-8.58	-11.13	99.10	99.10	0.04	0.04	-8.54	-11.09	-6.62	27.47	Pass
		802.11ax	CH _M	-8.33	-11.17	98.88	98.88	0.05	0.05	-8.28	-11.12	-6.46	27.47	Pass

Test plot as follows:



Band I	802.11n (HT20)	Antenna 0
CH _L	Spectrum Ref Level 20.00 dBm Att 30 dB Offset 1.00 dB SWT 1 ms RBW 1 MHz VBW 3 MHz Mode Auto Sweep Count 100/100 1Rm AvgPwr M1 M1[1] 2.15 dBm 5.1788710 GHz 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 5.18 GHz 691 pts Span 30.0 MHz Date: 9 APR 2024 20:50:56	
CH _M	Spectrum Ref Level 20.00 dBm Att 30 dB Offset 1.00 dB SWT 1 ms RBW 1 MHz VBW 3 MHz Mode Auto Sweep Count 100/100 1Rm AvgPwr M1 M1[1] 2.40 dBm 5.2189150 GHz 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 5.22 GHz 691 pts Span 30.0 MHz Date: 9 APR 2024 20:51:11	
CH _H	Spectrum Ref Level 20.00 dBm Att 30 dB Offset 1.00 dB SWT 1 ms RBW 1 MHz VBW 3 MHz Mode Auto Sweep Count 100/100 1Rm AvgPwr M1 M1[1] 2.61 dBm 5.2389580 GHz 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 5.24 GHz 691 pts Span 30.0 MHz Date: 9 APR 2024 20:52:11	

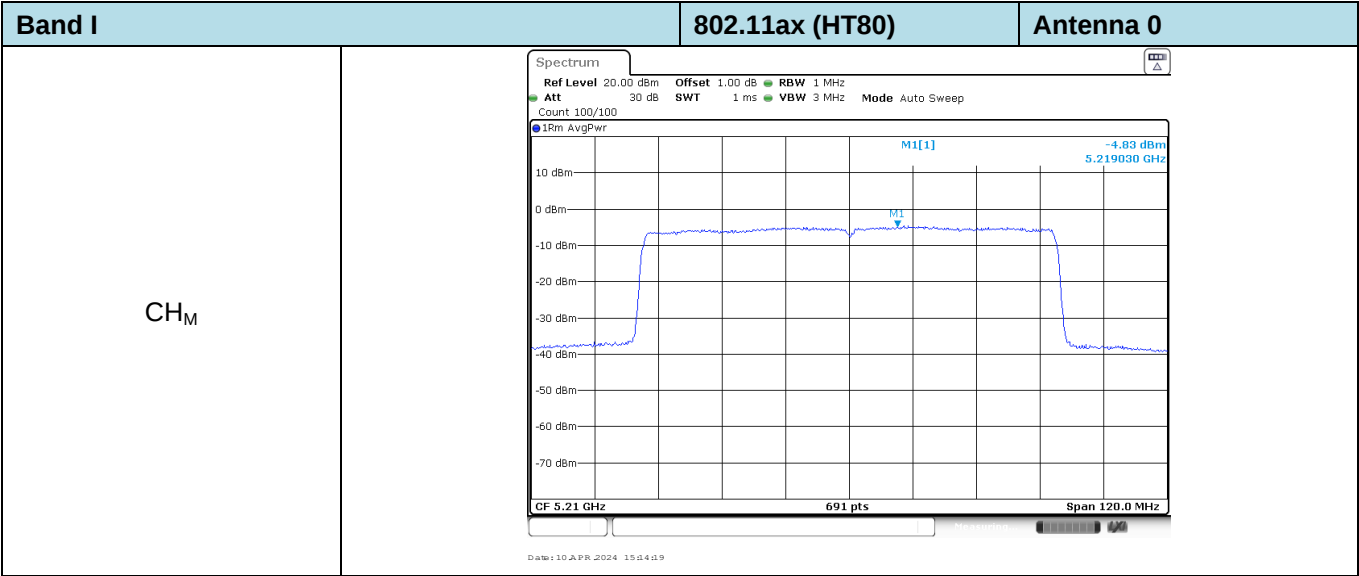
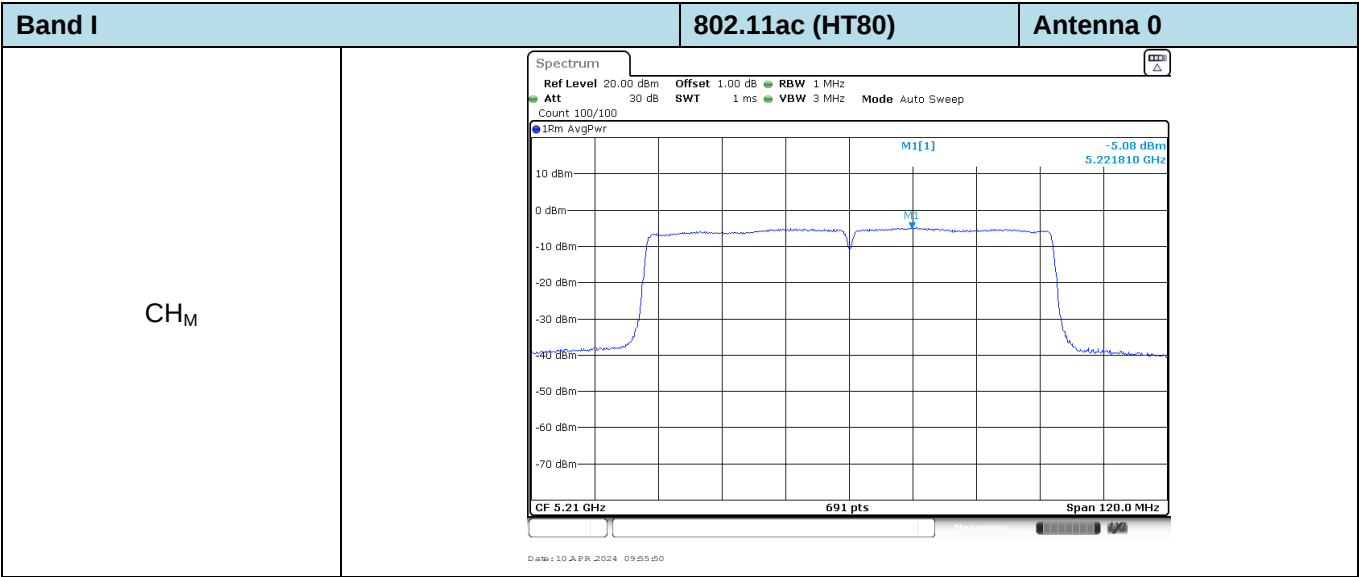
Band I		802.11a	Antenna 0
CH _L	Spectrum Ref Level 20.00 dBm Att 30 dB Offset 1.00 dB SWT 1 ms RBW 1 MHz VBW 3 MHz Mode Auto Sweep Count 100/100 1Rm AvgPwr M1[1] 4.98 dBm 5.1808680 GHz 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 5.18 GHz 691 pts Span 30.0 MHz Date: 9 APR 2024 20:09:55		
CH _M	Spectrum Ref Level 20.00 dBm Att 30 dB Offset 1.00 dB SWT 1 ms RBW 1 MHz VBW 3 MHz Mode Auto Sweep Count 100/100 1Rm AvgPwr M1[1] 5.25 dBm 5.2209120 GHz 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 5.22 GHz 691 pts Span 30.0 MHz Date: 9 APR 2024 20:43:22		
CH _H	Spectrum Ref Level 20.00 dBm Att 30 dB Offset 1.00 dB SWT 1 ms RBW 1 MHz VBW 3 MHz Mode Auto Sweep Count 100/100 1Rm AvgPwr M1[1] 5.43 dBm 5.2392190 GHz 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 5.24 GHz 691 pts Span 30.0 MHz Date: 9 APR 2024 20:45:06		

Band I	802.11ax (HT20)	Antenna 0
CH _L	Spectrum Ref Level 20.00 dBm Att 30 dB Offset 1.00 dB SWT 1 ms RBW 1 MHz VBW 3 MHz Mode Auto Sweep Count 100/100 1Rm AvgPwr M1 M1[1] 1.67 dBm 5.1810850 GHz 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 5.18 GHz 691 pts Span 30.0 MHz Date: 10 APR 2024 14:51:24	
CH _M	Spectrum Ref Level 20.00 dBm Att 30 dB Offset 1.00 dB SWT 1 ms RBW 1 MHz VBW 3 MHz Mode Auto Sweep Count 100/100 1Rm AvgPwr M1 M1[1] 2.46 dBm 5.2190880 GHz 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 5.22 GHz 691 pts Span 30.0 MHz Date: 10 APR 2024 14:52:51	
CH _H	Spectrum Ref Level 20.00 dBm Att 30 dB Offset 1.00 dB SWT 1 ms RBW 1 MHz VBW 3 MHz Mode Auto Sweep Count 100/100 1Rm AvgPwr M1 M1[1] 2.59 dBm 5.2394790 GHz 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 5.24 GHz 691 pts Span 30.0 MHz Date: 10 APR 2024 14:59:25	

Band I		802.11ac (HT40)	Antenna 0
CH _L	Spectrum Ref Level 20.00 dBm Att 30 dB Offset 1.00 dB SWT 1 ms RBW 1 MHz VBW 3 MHz Mode Auto Sweep Count 100/100 IRm AvgPwr 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm M1[1] -1.89 dBm 5.1962520 GHz CF 5.19 GHz 691 pts Span 60.0 MHz Date: 10 APR 2024 09:48:39		
CH _H	Spectrum Ref Level 20.00 dBm Att 30 dB Offset 1.00 dB SWT 1 ms RBW 1 MHz VBW 3 MHz Mode Auto Sweep Count 100/100 IRm AvgPwr 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm M1[1] -1.75 dBm 5.2361650 GHz CF 5.23 GHz 691 pts Span 60.0 MHz Date: 10 APR 2024 09:50:38		

Band I		802.11n (HT40)	Antenna 0
CH _L	Spectrum Ref Level 20.00 dBm Att 30 dB Offset 1.00 dB SWT 1 ms RBW 1 MHz VBW 3 MHz Mode Auto Sweep Count 100/100 IRm AvgPwr 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm M1[1] -1.96 dBm 5.1960780 GHz CF 5.19 GHz 691 pts Span 60.0 MHz Date: 9 APR 2024 21:10:39		
CH _H	Spectrum Ref Level 20.00 dBm Att 30 dB Offset 1.00 dB SWT 1 ms RBW 1 MHz VBW 3 MHz Mode Auto Sweep Count 100/100 IRm AvgPwr 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm M1[1] -1.80 dBm 5.2379020 GHz CF 5.23 GHz 691 pts Span 60.0 MHz Date: 10 APR 2024 09:09:11		

Band I		802.11ax (HT40)	Antenna 0
CH _L	Spectrum Ref Level 20.00 dBm Offset 1.00 dB RBW 1 MHz Att 30 dB SWT 1 ms VBW 3 MHz Mode Auto Sweep Count 100/100 1Rm AvgPwr 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm M1[1] -2.06 dBm 5.1947760 GHz CF 5.19 GHz 691 pts Span 60.0 MHz Date: 10 APR 2024 15:06:03		
CH _H	Spectrum Ref Level 20.00 dBm Offset 1.00 dB RBW 1 MHz Att 30 dB SWT 1 ms VBW 3 MHz Mode Auto Sweep Count 100/100 1Rm AvgPwr 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm M1[1] -2.26 dBm 5.2444140 GHz CF 5.23 GHz 691 pts Span 60.0 MHz Date: 10 APR 2024 15:09:15		

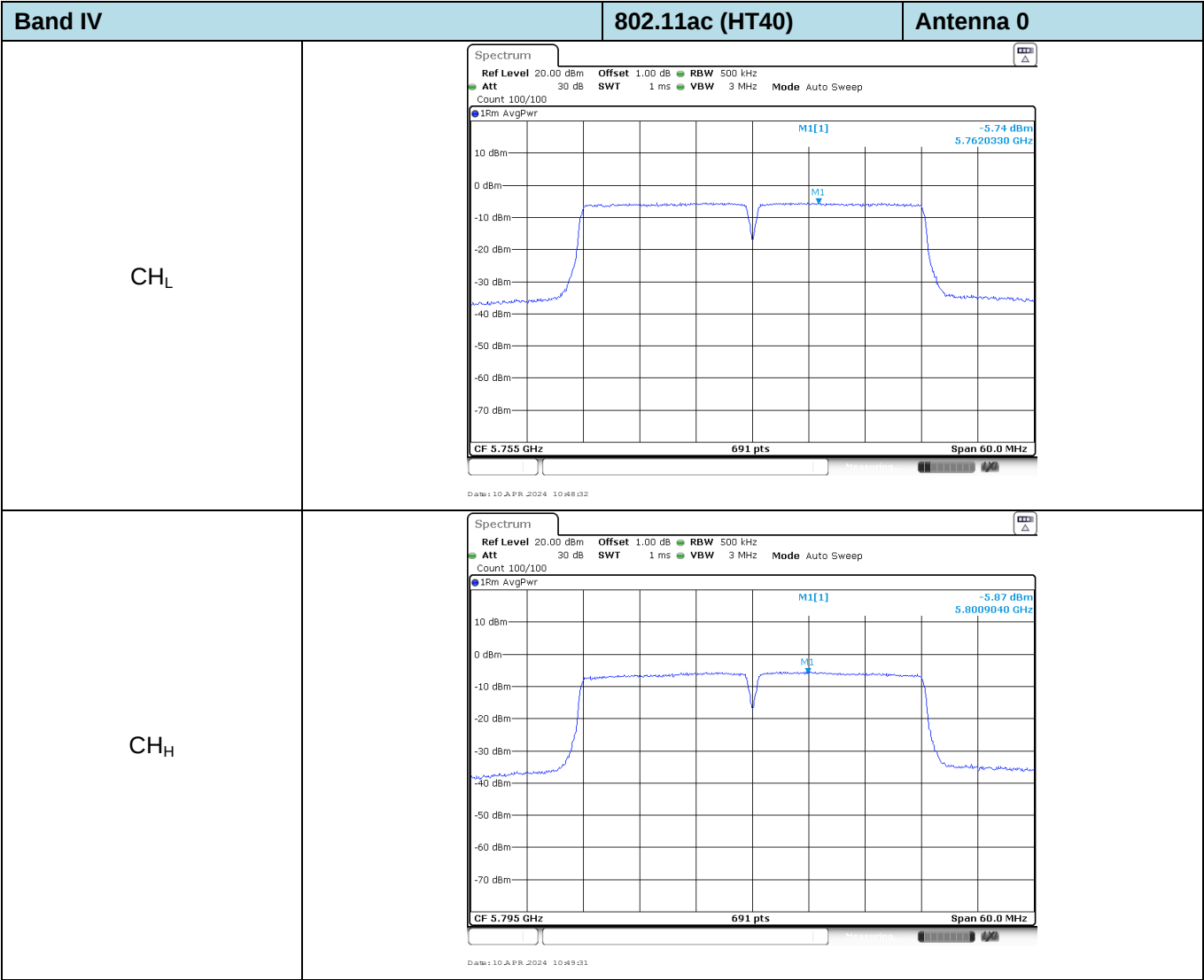


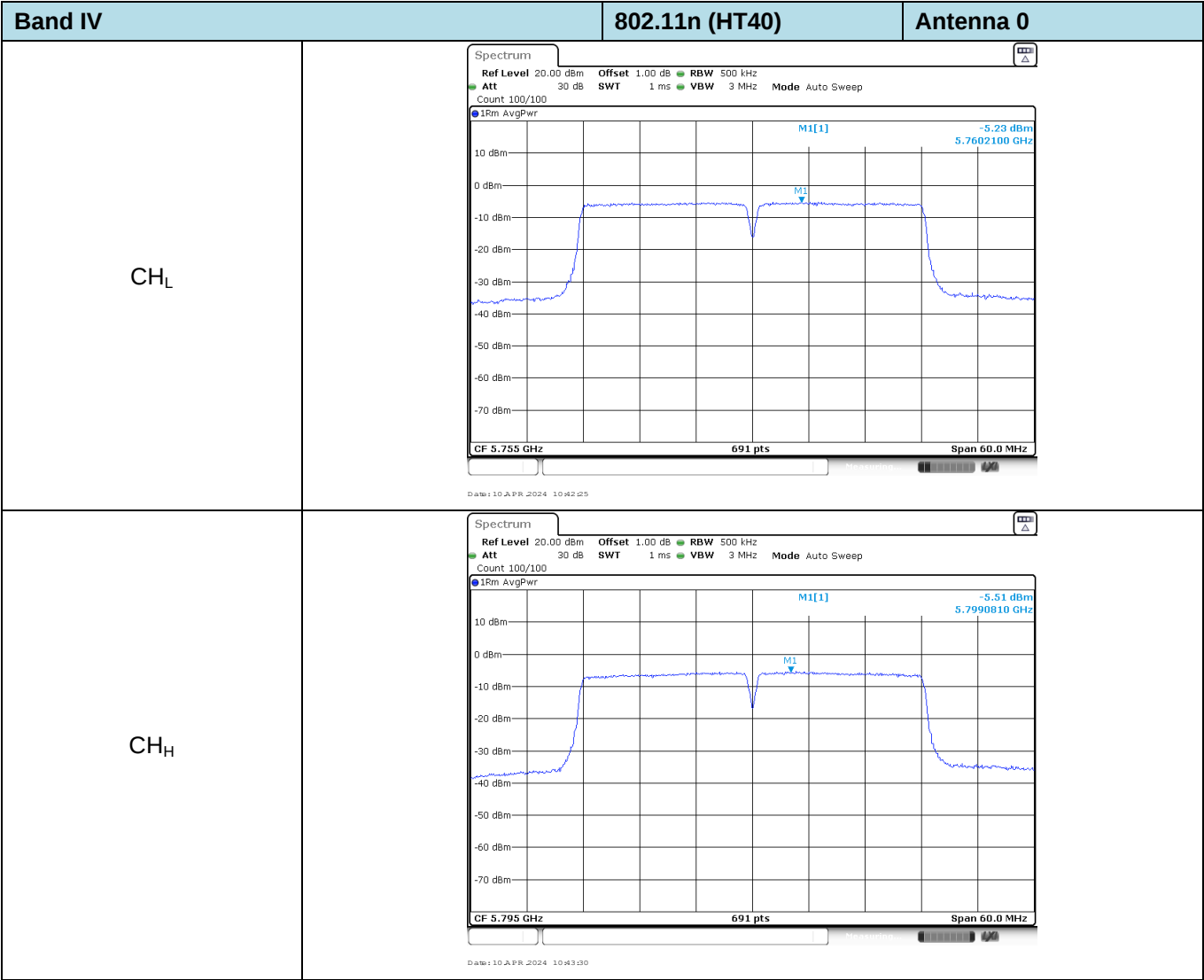
Band IV	802.11ac (HT20)	Antenna 0
CH _L	Spectrum Ref Level 20.00 dBm Offset 1.00 dB RBW 500 kHz Att 30 dB SWT 1 ms VBW 3 MHz Mode Auto Sweep Count 100/100 1Rm AvgPwr M1[1] -0.70 dBm 5.7456510 GHz 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 5.745 GHz 691 pts Span 30.0 MHz Date: 10 APR 2024 10:44:48	
CH _M	Spectrum Ref Level 20.00 dBm Offset 1.00 dB RBW 500 kHz Att 30 dB SWT 1 ms VBW 3 MHz Mode Auto Sweep Count 100/100 1Rm AvgPwr M1[1] -1.31 dBm 5.7843050 GHz 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 5.785 GHz 691 pts Span 30.0 MHz Date: 10 APR 2024 10:45:55	
CH _H	Spectrum Ref Level 20.00 dBm Offset 1.00 dB RBW 500 kHz Att 30 dB SWT 1 ms VBW 3 MHz Mode Auto Sweep Count 100/100 1Rm AvgPwr M1[1] -0.98 dBm 5.8244790 GHz 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 5.825 GHz 691 pts Span 30.0 MHz Date: 10 APR 2024 10:47:04	

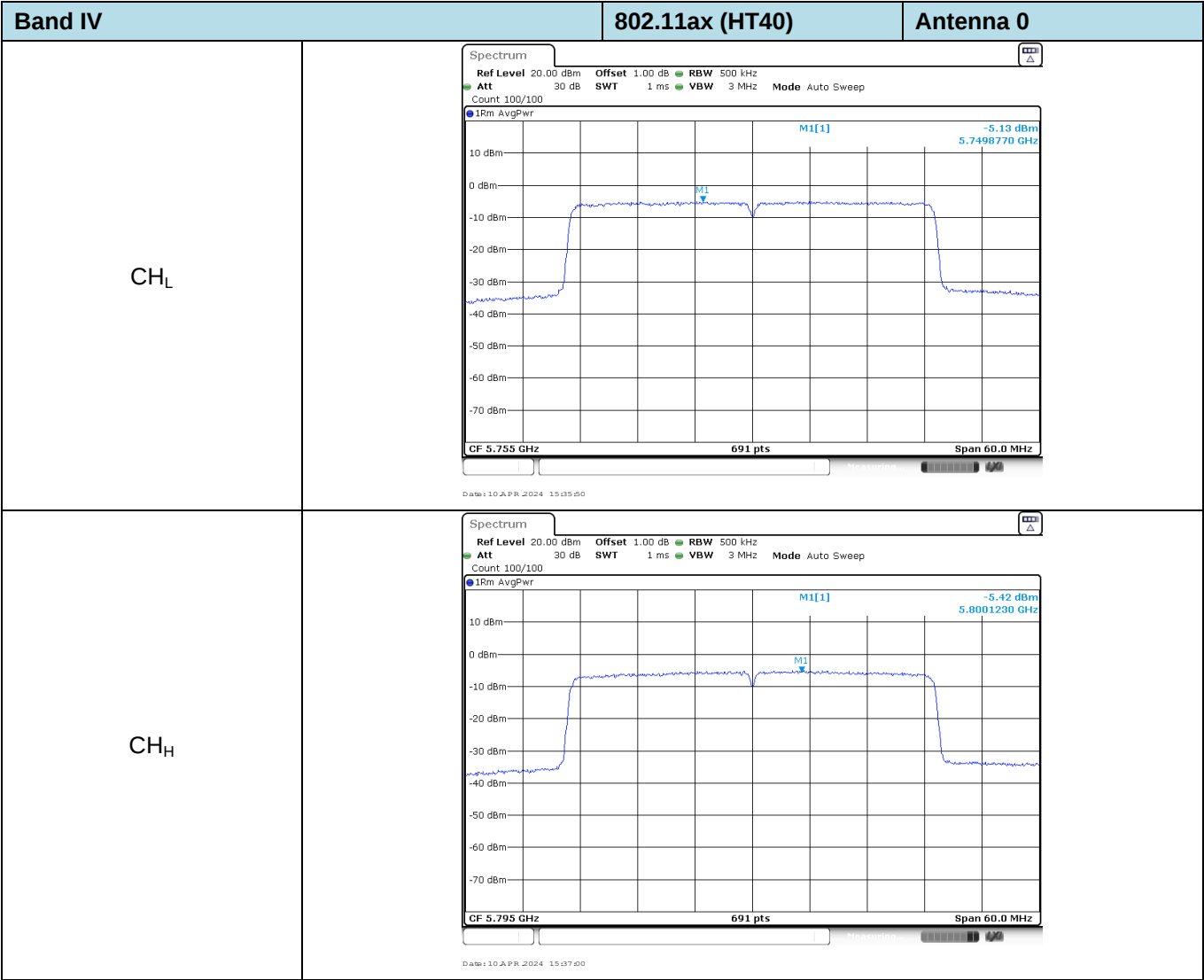
Band IV	802.11n (HT20)	Antenna 0
CH _L	Spectrum Ref Level 20.00 dBm Att 30 dB Offset 1.00 dB SWT 1 ms RBW 500 kHz VBW 3 MHz Mode Auto Sweep Count 100/100 1Rm AvgPwr M1 M1[1] -0.95 dBm 5.7459550 GHz 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 5.745 GHz 691 pts Span 30.0 MHz Date: 10 APR 2024 10:38:54	
CH _M	Spectrum Ref Level 20.00 dBm Att 30 dB Offset 1.00 dB SWT 1 ms RBW 500 kHz VBW 3 MHz Mode Auto Sweep Count 100/100 1Rm AvgPwr M1 M1[1] -1.14 dBm 5.7856510 GHz 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 5.785 GHz 691 pts Span 30.0 MHz Date: 10 APR 2024 10:39:58	
CH _H	Spectrum Ref Level 20.00 dBm Att 30 dB Offset 1.00 dB SWT 1 ms RBW 500 kHz VBW 3 MHz Mode Auto Sweep Count 100/100 1Rm AvgPwr M1 M1[1] -0.78 dBm 5.8243490 GHz 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 5.825 GHz 691 pts Span 30.0 MHz Date: 10 APR 2024 10:41:05	

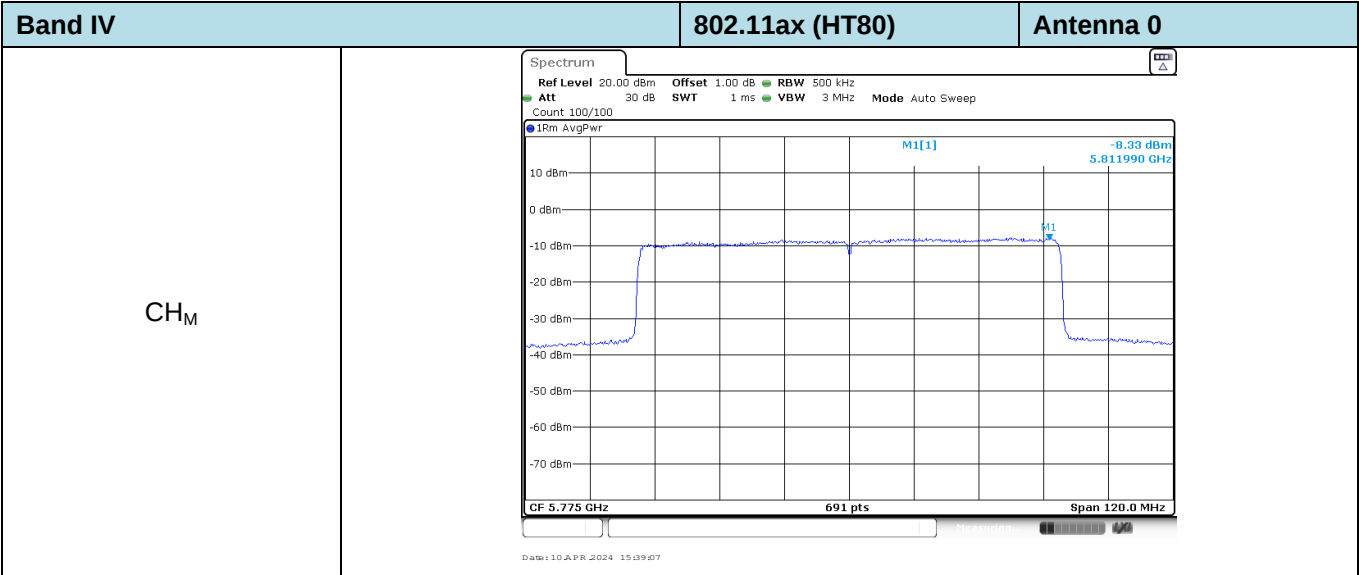
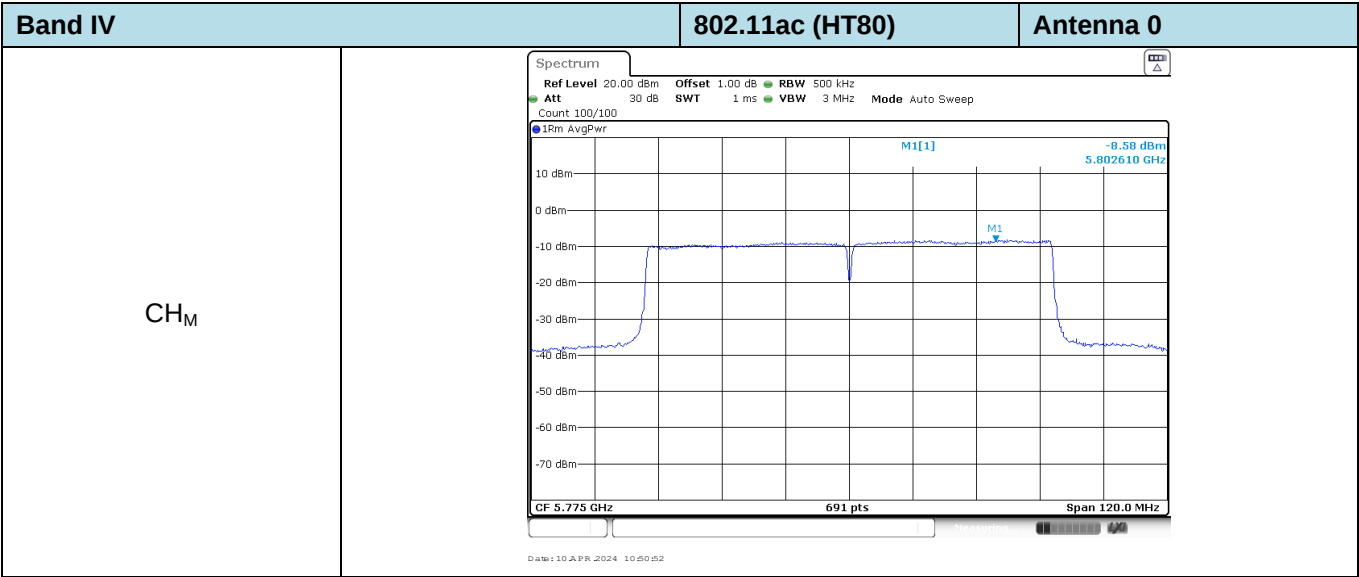
Band IV		802.11a	Antenna 0
CH _L	Spectrum Ref Level 20.00 dBm Att 30 dB Offset 1.00 dB SWT 1 ms RBW 500 kHz VBW 3 MHz Mode Auto Sweep Count 100/100 1Rm AvgPwr M1[1] 1.03 dBm 5.7458250 GHz M1 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 5.745 GHz 691 pts Span 30.0 MHz Date: 10 APR 2024 10:05:18		
CH _M	Spectrum Ref Level 20.00 dBm Att 30 dB Offset 1.00 dB SWT 1 ms RBW 500 kHz VBW 3 MHz Mode Auto Sweep Count 100/100 1Rm AvgPwr M1[1] 0.23 dBm 5.7843050 GHz M1 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 5.785 GHz 691 pts Span 30.0 MHz Date: 10 APR 2024 10:06:19		
CH _H	Spectrum Ref Level 20.00 dBm Att 30 dB Offset 1.00 dB SWT 1 ms RBW 500 kHz VBW 3 MHz Mode Auto Sweep Count 100/100 1Rm AvgPwr M1[1] 0.81 dBm 5.8242620 GHz M1 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 5.825 GHz 691 pts Span 30.0 MHz Date: 10 APR 2024 10:07:23		

Band IV	802.11ax (HT20)	Antenna 0
CH _L	Spectrum Ref Level 20.00 dBm Att 30 dB Offset 1.00 dB SWT 1 ms RBW 500 kHz VBW 3 MHz Mode Auto Sweep Count 100/100 1Rm AvgPwr M1[1] -0.31 dBm 5.7457810 GHz M1 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 5.745 GHz 691 pts Span 30.0 MHz Date: 10 APR 2024 15:00:10	
CH _M	Spectrum Ref Level 20.00 dBm Att 30 dB Offset 1.00 dB SWT 1 ms RBW 500 kHz VBW 3 MHz Mode Auto Sweep Count 100/100 1Rm AvgPwr M1[1] -1.27 dBm 5.7860850 GHz M1 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 5.785 GHz 691 pts Span 30.0 MHz Date: 10 APR 2024 15:01:12	
CH _H	Spectrum Ref Level 20.00 dBm Att 30 dB Offset 1.00 dB SWT 1 ms RBW 500 kHz VBW 3 MHz Mode Auto Sweep Count 100/100 1Rm AvgPwr M1[1] -0.69 dBm 5.8259990 GHz M1 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 5.825 GHz 691 pts Span 30.0 MHz Date: 10 APR 2024 15:02:45	









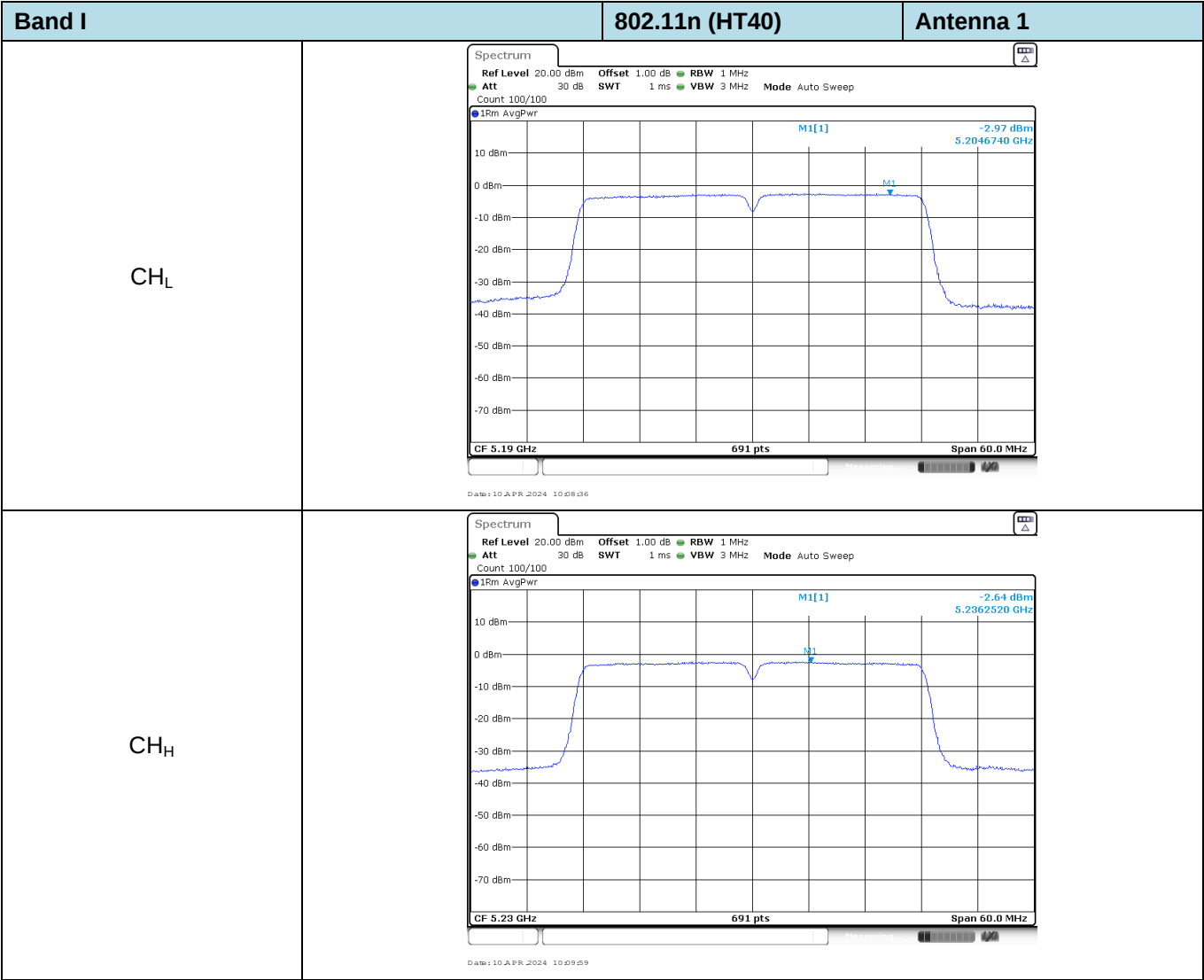
Band I	802.11ac (HT20)	Antenna 1
CH _L	Spectrum Ref Level 20.00 dBm Att 30 dB Offset 1.00 dB SWT 1 ms RBW 1 MHz VBW 3 MHz Mode Auto Sweep Count 100/100 1Rm AvgPwr M1[1] 1.11 dBm 5.1809120 GHz 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 5.18 GHz 691 pts Span 30.0 MHz Date: 10 APR 2024 10:11:33	
CH _M	Spectrum Ref Level 20.00 dBm Att 30 dB Offset 1.00 dB SWT 1 ms RBW 1 MHz VBW 3 MHz Mode Auto Sweep Count 100/100 1Rm AvgPwr M1[1] 1.81 dBm 5.2213460 GHz 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 5.22 GHz 691 pts Span 30.0 MHz Date: 10 APR 2024 10:12:37	
CH _H	Spectrum Ref Level 20.00 dBm Att 30 dB Offset 1.00 dB SWT 1 ms RBW 1 MHz VBW 3 MHz Mode Auto Sweep Count 100/100 1Rm AvgPwr M1[1] 1.87 dBm 5.2390450 GHz 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 5.24 GHz 691 pts Span 30.0 MHz Date: 10 APR 2024 10:13:37	

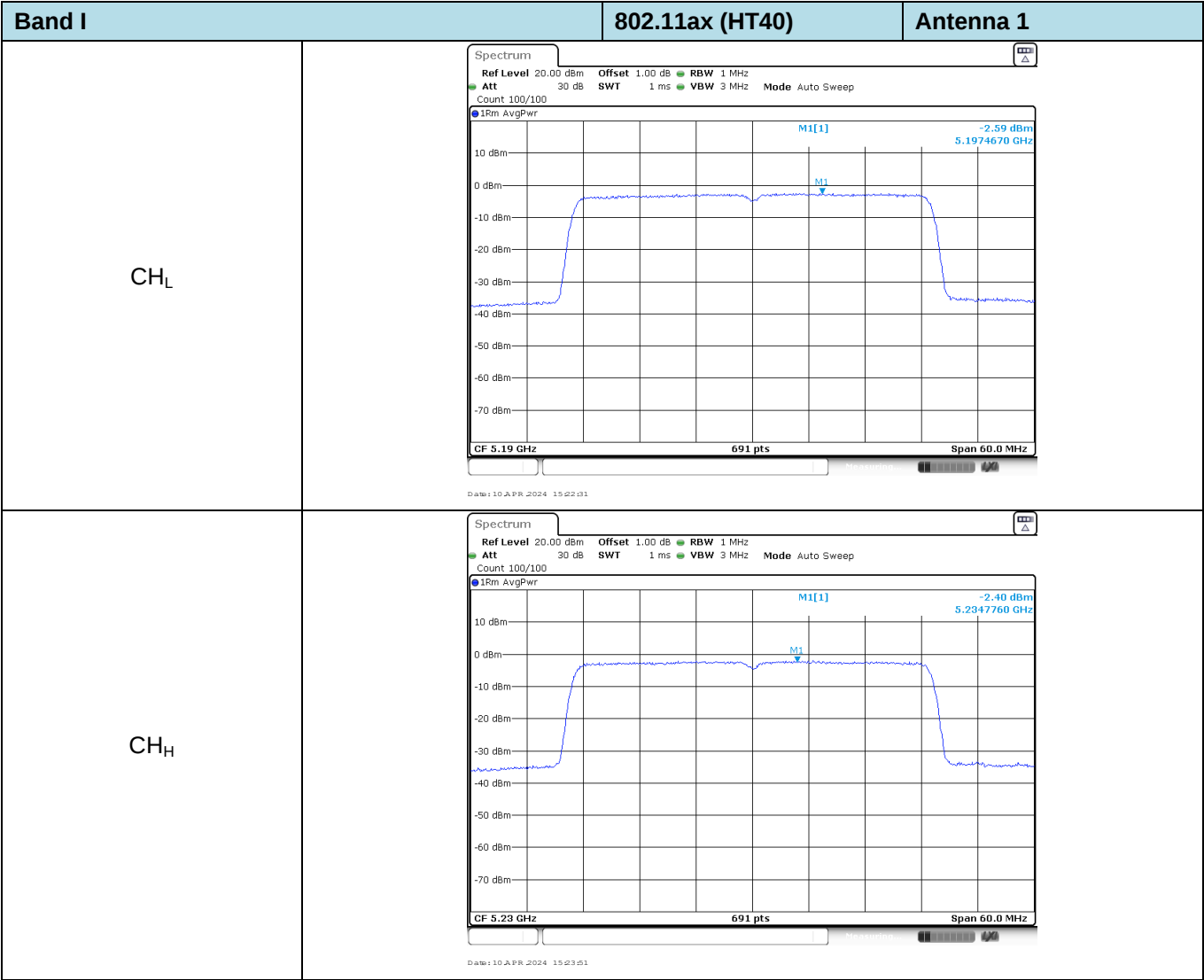
Band I		802.11n (HT20)	Antenna 1
CH _L	Spectrum Ref Level 20.00 dBm Att 30 dB Offset 1.00 dB SWT 1 ms RBW 1 MHz VBW 3 MHz Mode Auto Sweep Count 100/100 1Rm AvgPwr M1[1] 1.33 dBm 5.1808680 GHz 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 5.18 GHz 691 pts Span 30.0 MHz Date: 10 APR 2024 10:04:23		
CH _M	Spectrum Ref Level 20.00 dBm Att 30 dB Offset 1.00 dB SWT 1 ms RBW 1 MHz VBW 3 MHz Mode Auto Sweep Count 100/100 1Rm AvgPwr M1[1] 1.96 dBm 5.2211720 GHz 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 5.22 GHz 691 pts Span 30.0 MHz Date: 10 APR 2024 10:05:37		
CH _H	Spectrum Ref Level 20.00 dBm Att 30 dB Offset 1.00 dB SWT 1 ms RBW 1 MHz VBW 3 MHz Mode Auto Sweep Count 100/100 1Rm AvgPwr M1[1] 2.00 dBm 5.2411720 GHz 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 5.24 GHz 691 pts Span 30.0 MHz Date: 10 APR 2024 10:06:38		

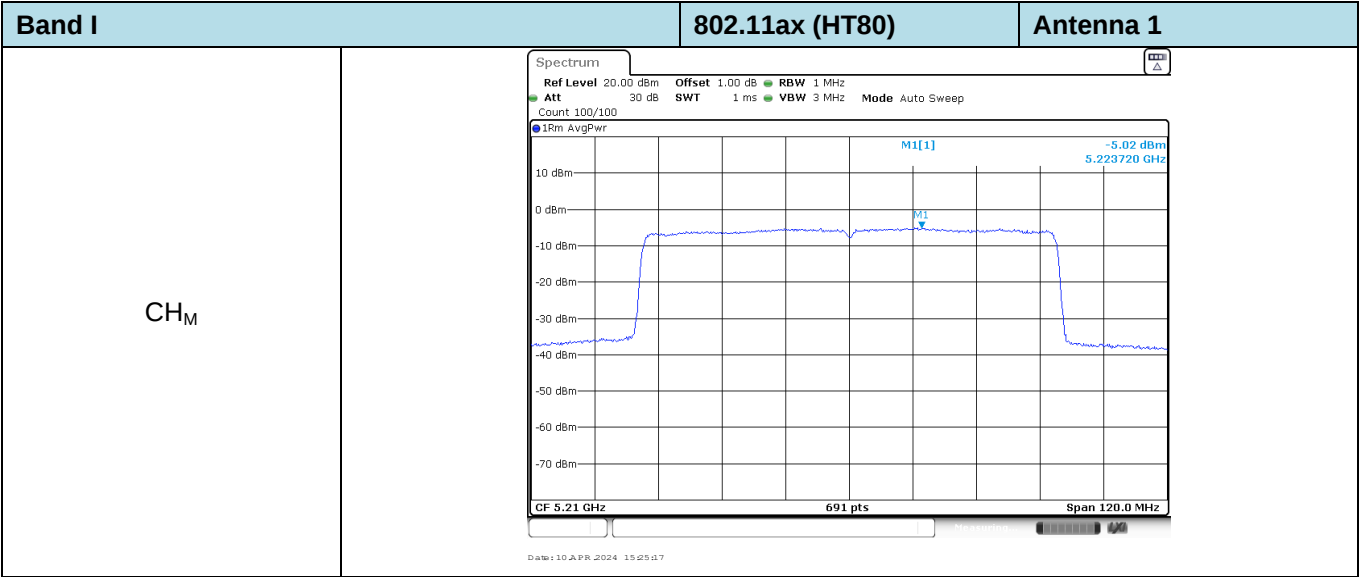
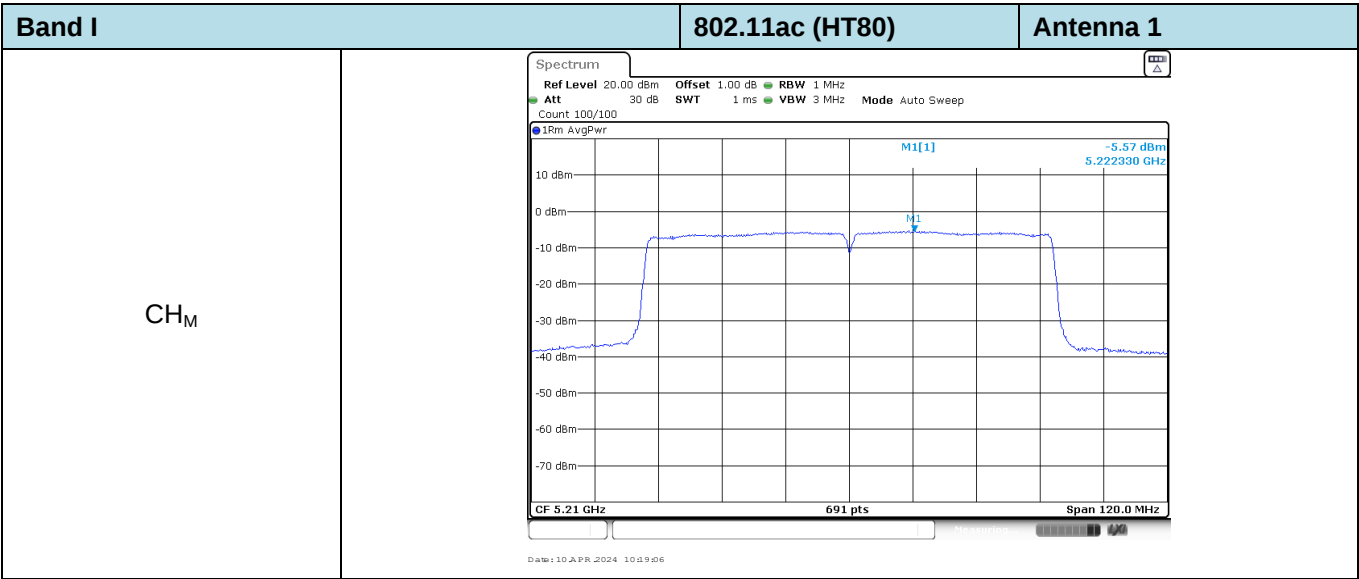
Band I	802.11a	Antenna 1
CH _L	Spectrum Ref Level 20.00 dBm Att 30 dB Offset 1.00 dB SWT 1 ms RBW 1 MHz VBW 3 MHz Mode Auto Sweep Count 100/100 1Rm AvgPwr 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm M1 M1[1] 3.71 dBm 5.1814330 GHz CF 5.18 GHz691 ptsSpan 30.0 MHz Date: 10 APR 2024 09:59:44	
CH _M	Spectrum Ref Level 20.00 dBm Att 30 dB Offset 1.00 dB SWT 1 ms RBW 1 MHz VBW 3 MHz Mode Auto Sweep Count 100/100 1Rm AvgPwr 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm M1 M1[1] 4.13 dBm 5.2207810 GHz CF 5.22 GHz691 ptsSpan 30.0 MHz Date: 10 APR 2024 10:00:46	
CH _H	Spectrum Ref Level 20.00 dBm Att 30 dB Offset 1.00 dB SWT 1 ms RBW 1 MHz VBW 3 MHz Mode Auto Sweep Count 100/100 1Rm AvgPwr 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm M1 M1[1] 4.27 dBm 5.2386110 GHz CF 5.24 GHz691 ptsSpan 30.0 MHz Date: 10 APR 2024 10:02:05	

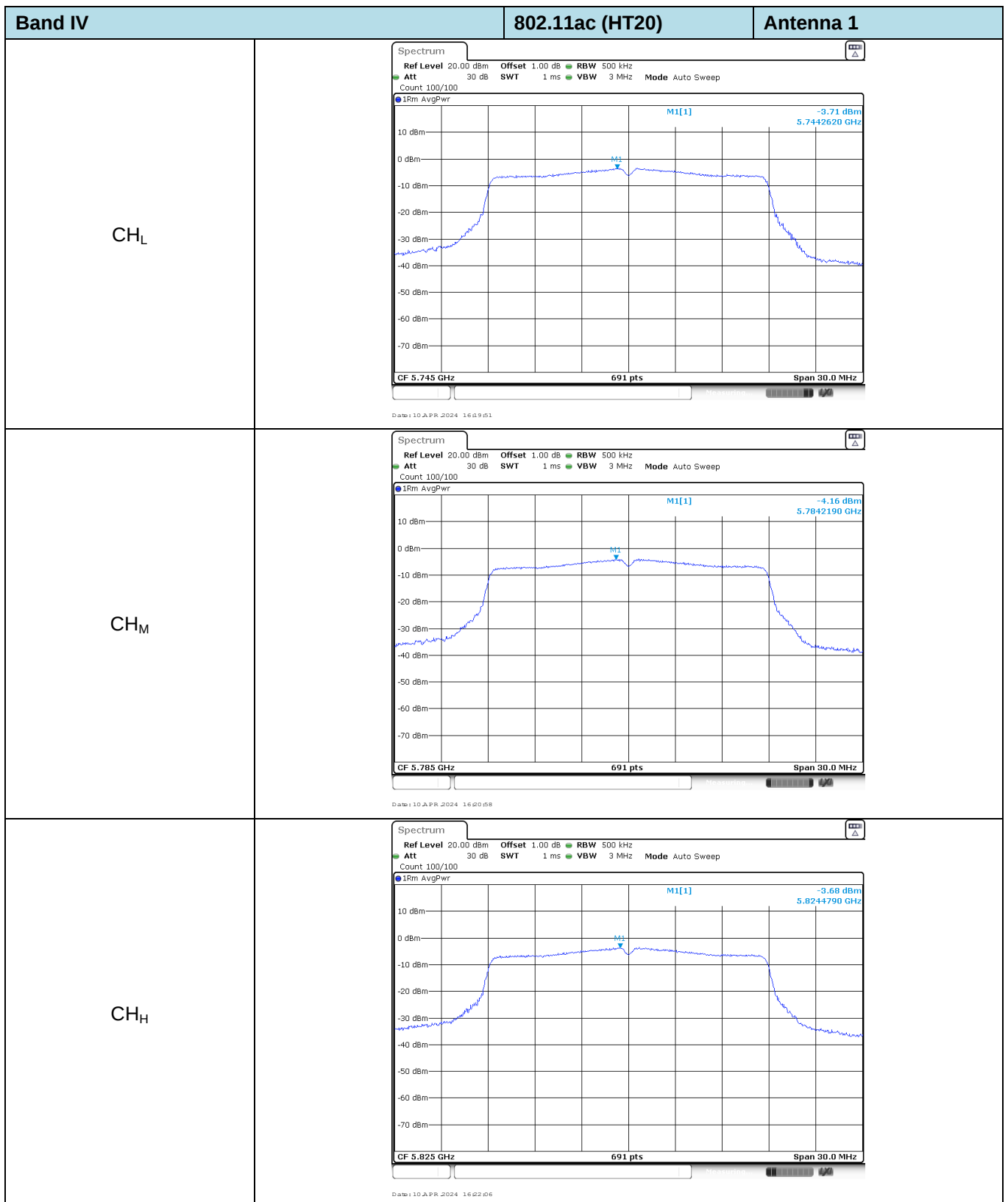
Band I		802.11ax (HT20)		Antenna 1	
CH _L		Spectrum Ref Level 20.00 dBm Offset 1.00 dB RBW 1 MHz Att 30 dB SWT 1 ms VBW 3 MHz Mode Auto Sweep Count 100/100 1Rm AvgPwr M1[1] 1.11 dBm 5.1809120 GHz M1 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 5.18 GHz 691 pts Span 30.0 MHz Date: 10 APR 2024 10:11:33			
CH _M		Spectrum Ref Level 20.00 dBm Offset 1.00 dB RBW 1 MHz Att 30 dB SWT 1 ms VBW 3 MHz Mode Auto Sweep Count 100/100 1Rm AvgPwr M1[1] 1.81 dBm 5.2213460 GHz M1 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 5.22 GHz 691 pts Span 30.0 MHz Date: 10 APR 2024 10:12:37			
CH _H		Spectrum Ref Level 20.00 dBm Offset 1.00 dB RBW 1 MHz Att 30 dB SWT 1 ms VBW 3 MHz Mode Auto Sweep Count 100/100 1Rm AvgPwr M1[1] 1.87 dBm 5.2390450 GHz M1 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 5.24 GHz 691 pts Span 30.0 MHz Date: 10 APR 2024 10:13:37			

Band I		802.11ac (HT40)	Antenna 1
CH _L	Spectrum Ref Level 20.00 dBm Offset 1.00 dB RBW 1 MHz Att 30 dB SWT 1 ms VBW 3 MHz Mode Auto Sweep Count 100/100 IRm AvgPwr 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm M1[1] -2.35 dBm 5.1980750 GHz M1 CF 5.19 GHz 691 pts Span 60.0 MHz Date: 10 APR 2024 10:26:17		
CH _H	Spectrum Ref Level 20.00 dBm Offset 1.00 dB RBW 1 MHz Att 30 dB SWT 1 ms VBW 3 MHz Mode Auto Sweep Count 100/100 IRm AvgPwr 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm M1[1] -2.71 dBm 5.2352970 GHz M1 CF 5.23 GHz 691 pts Span 60.0 MHz Date: 10 APR 2024 10:27:46		





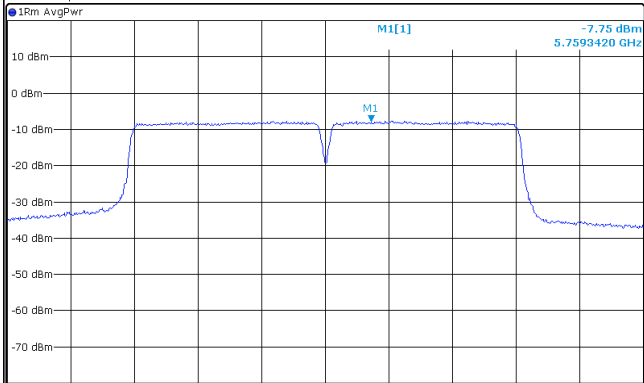
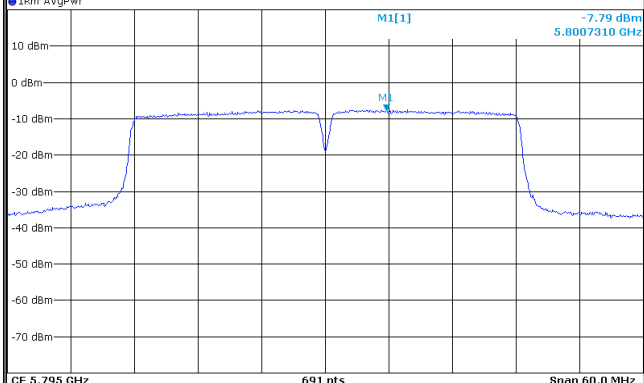


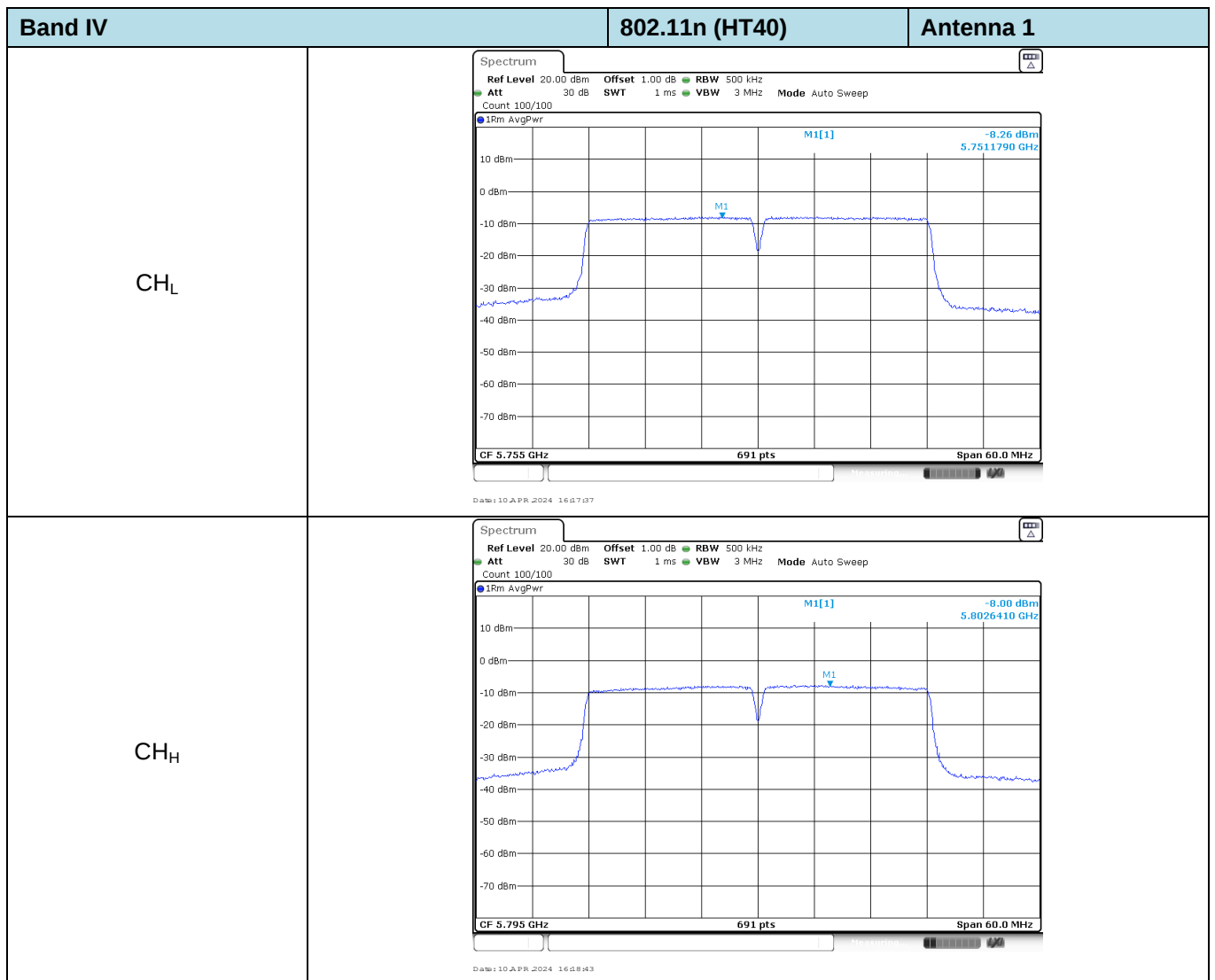


Band IV	802.11n (HT20)	Antenna 1
CH _L	Spectrum Ref Level 20.00 dBm Att 30 dB Offset 1.00 dB SWT 1 ms RBW 500 kHz VBW 3 MHz Mode Auto Sweep Count 100/100 1Rm AvgPwr M1[1] -3.46 dBm 5.7456080 GHz 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 5.745 GHz 691 pts Span 30.0 MHz Date: 10 APR 2024 16:44:15	
CH _M	Spectrum Ref Level 20.00 dBm Att 30 dB Offset 1.00 dB SWT 1 ms RBW 500 kHz VBW 3 MHz Mode Auto Sweep Count 100/100 1Rm AvgPwr M1[1] -4.26 dBm 5.7855640 GHz 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 5.785 GHz 691 pts Span 30.0 MHz Date: 10 APR 2024 16:45:16	
CH _H	Spectrum Ref Level 20.00 dBm Att 30 dB Offset 1.00 dB SWT 1 ms RBW 500 kHz VBW 3 MHz Mode Auto Sweep Count 100/100 1Rm AvgPwr M1[1] -3.92 dBm 5.8256950 GHz 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 5.825 GHz 691 pts Span 30.0 MHz Date: 10 APR 2024 16:46:12	

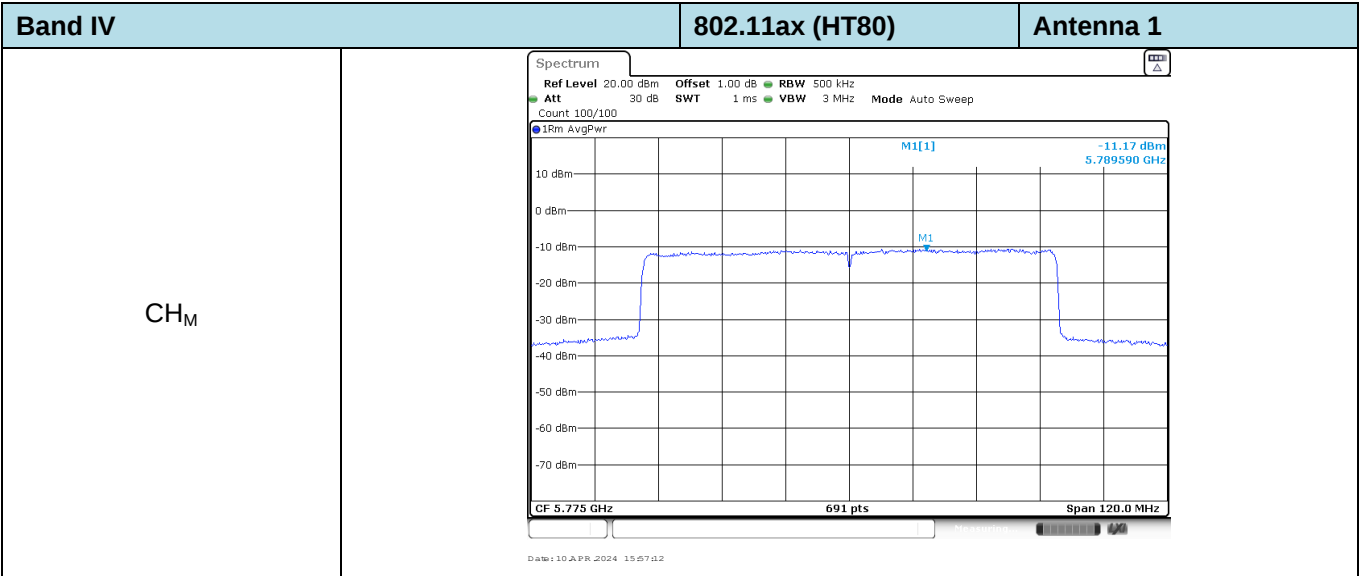
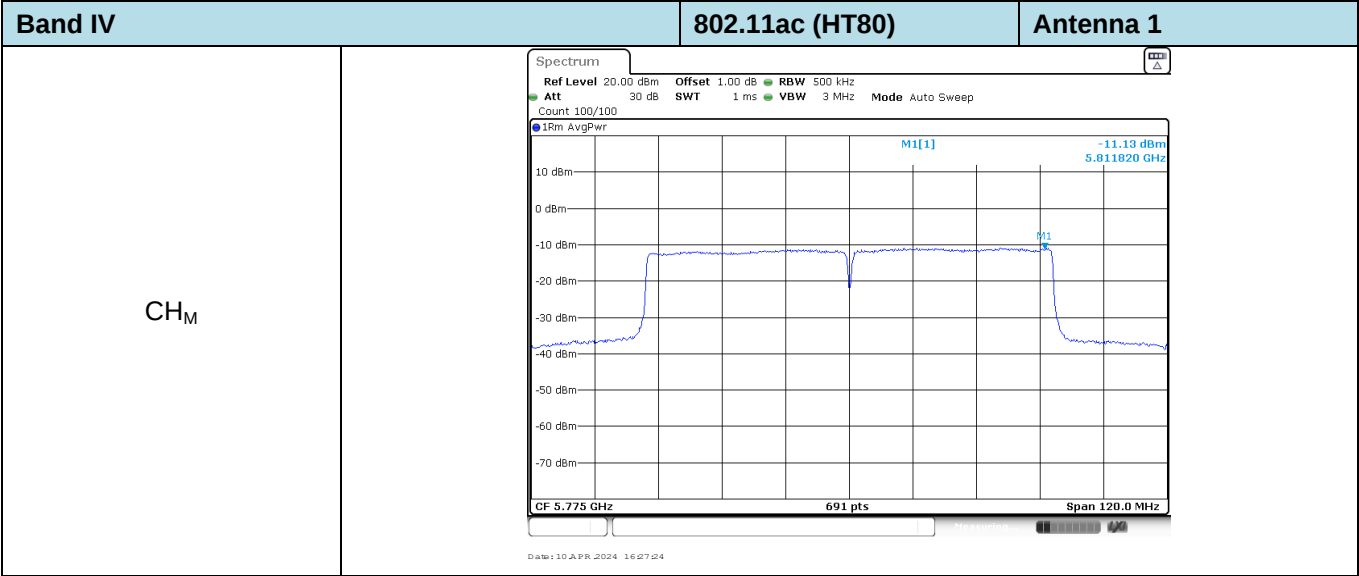
Band IV	802.11a	Antenna 1
CH _L	Spectrum Ref Level 20.00 dBm Att 30 dB Offset 1.00 dB SWT 1 ms RBW 500 kHz VBW 3 MHz Mode Auto Sweep Count 100/100 1Rm AvgPwr M1[1] -3.21 dBm 5.7440450 GHz 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 5.745 GHz 691 pts Span 30.0 MHz Date: 10 APR 2024 16:04:49	
CH _M	Spectrum Ref Level 20.00 dBm Att 30 dB Offset 1.00 dB SWT 1 ms RBW 500 kHz VBW 3 MHz Mode Auto Sweep Count 100/100 1Rm AvgPwr M1[1] -3.96 dBm 5.7858250 GHz 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 5.785 GHz 691 pts Span 30.0 MHz Date: 10 APR 2024 16:20:04	
CH _H	Spectrum Ref Level 20.00 dBm Att 30 dB Offset 1.00 dB SWT 1 ms RBW 500 kHz VBW 3 MHz Mode Auto Sweep Count 100/100 1Rm AvgPwr M1[1] -3.44 dBm 5.8256950 GHz 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 5.825 GHz 691 pts Span 30.0 MHz Date: 10 APR 2024 16:30:09	

Band IV	802.11ax (HT20)	Antenna 1
CH _L	Spectrum Ref Level 20.00 dBm Att 30 dB Offset 1.00 dB SWT 1 ms RBW 500 kHz VBW 3 MHz Mode Auto Sweep Count 100/100 IRm AvgPwr M1[1] -3.72 dBm 5.7456510 GHz 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 5.745 GHz 691 pts Span 30.0 MHz Date: 10 APR 2024 15:50:21	
CH _M	Spectrum Ref Level 20.00 dBm Att 30 dB Offset 1.00 dB SWT 1 ms RBW 500 kHz VBW 3 MHz Mode Auto Sweep Count 100/100 IRm AvgPwr M1[1] -4.55 dBm 5.7860850 GHz 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 5.785 GHz 691 pts Span 30.0 MHz Date: 10 APR 2024 15:51:49	
CH _H	Spectrum Ref Level 20.00 dBm Att 30 dB Offset 1.00 dB SWT 1 ms RBW 500 kHz VBW 3 MHz Mode Auto Sweep Count 100/100 IRm AvgPwr M1[1] -4.29 dBm 5.8262590 GHz 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 5.825 GHz 691 pts Span 30.0 MHz Date: 10 APR 2024 15:53:02	

Band IV		802.11ac (HT40)	Antenna 1
CH _L	Spectrum Ref Level 20.00 dBm Offset 1.00 dB RBW 500 kHz Att 30 dB SWT 1 ms VBW 3 MHz Mode Auto Sweep Count 100/100 IRm AvgPwr M1[1] -7.75 dBm 5.7593420 GHz  CF 5.755 GHz 691 pts Span 60.0 MHz Date: 10 APR 2024 16:23:13		
	CH _H	Spectrum Ref Level 20.00 dBm Offset 1.00 dB RBW 500 kHz Att 30 dB SWT 1 ms VBW 3 MHz Mode Auto Sweep Count 100/100 IRm AvgPwr M1[1] -7.79 dBm 5.8007310 GHz  CF 5.795 GHz 691 pts Span 60.0 MHz Date: 10 APR 2024 16:24:30	



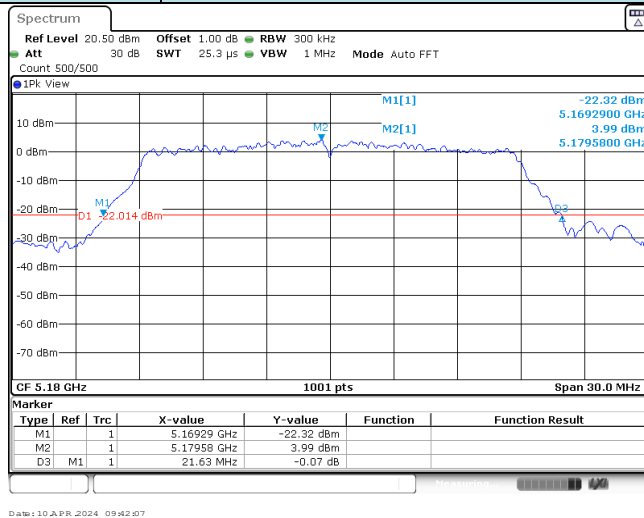
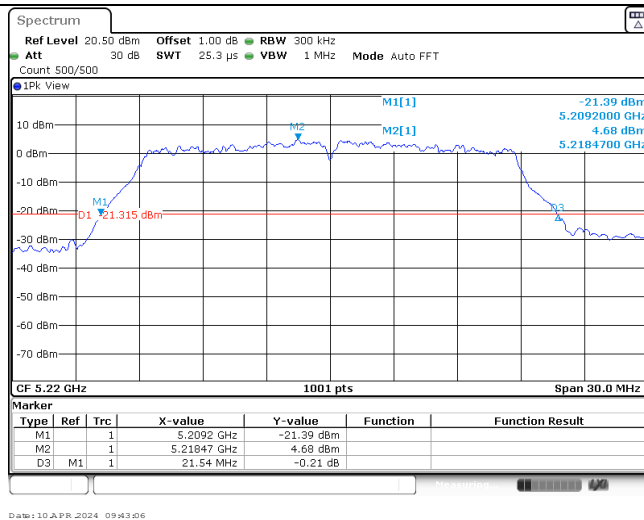
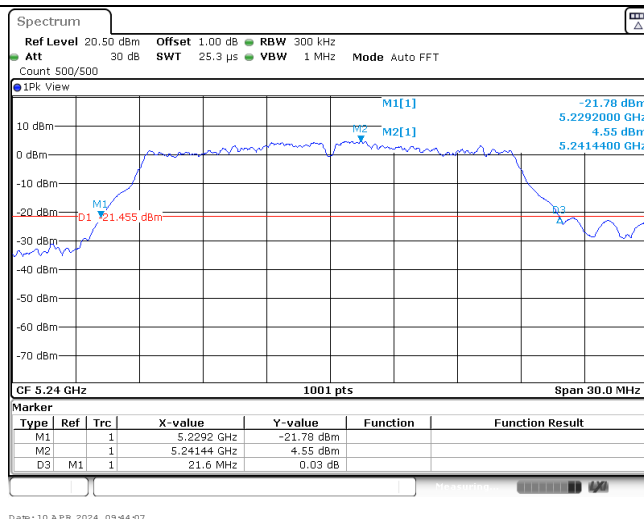
Band IV		802.11ax (HT40)	Antenna 1
CH _L	Spectrum Ref Level 20.00 dBm Att 30 dB Offset 1.00 dB SWT 1 ms RBW 500 kHz VBW 3 MHz Mode Auto Sweep Count 100/100 1Rm AvgPwr 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm M1[1] -9.08 dBm 5.7602970 GHz CF 5.755 GHz 691 pts Span 60.0 MHz Date: 10 APR 2024 15:54:59		
CH _H	Spectrum Ref Level 20.00 dBm Att 30 dB Offset 1.00 dB SWT 1 ms RBW 500 kHz VBW 3 MHz Mode Auto Sweep Count 100/100 1Rm AvgPwr 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm M1[1] -7.77 dBm 5.7885750 GHz CF 5.795 GHz 691 pts Span 60.0 MHz Date: 10 APR 2024 15:56:04		



Appendix C: 26dB bandwidth

Band	Bandwidth (MHz)	Type	Channel	26dB bandwidth (MHz)	Result
I	20	802.11ac	CH _L	21.63	Pass
			CH _M	21.54	
			CH _H	21.60	
		802.11n	CH _L	21.39	Pass
			CH _M	21.69	
			CH _H	21.45	
		802.11a	CH _L	22.05	Pass
			CH _M	24.27	
			CH _H	26.16	
		802.11ax	CH _L	21.27	Pass
			CH _M	21.27	
			CH _H	21.33	
	40	802.11ac	CH _L	46.74	Pass
			CH _H	50.10	
		802.11n	CH _L	48.54	Pass
			CH _H	52.80	
		802.11ax	CH _L	40.44	Pass
			CH _H	40.38	
	80	802.11ac	CH _M	86.28	Pass
		802.11ax	CH _M	82.44	Pass

802.11ac (HT20)

$$\text{CH}_L$$

$$\text{CH}_M$$

$$\text{CH}_H$$


Band I

802.11n (HT20)

CH_L

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 dBm

0 dBm

-10 dBm

-20 dBm

-30 dBm

-40 dBm

-50 dBm

-60 dBm

-70 dBm

M1

M2

M3

D1

D3

M1[1]

M2[1]

-22.01 dBm

5.1693500 GHz

4.29 dBm

5.1789500 GHz

21.709 dBm

CF 5.18 GHz 1001 pts Span 30.0 MHz

Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.16935 GHz	-22.01 dBm		
M2		1	5.17895 GHz	4.29 dBm		
D3	M1	1	21.39 MHz	0.08 dB		

Date: 9 APR 2024 20:49:37

CH_M

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 dBm

0 dBm

-10 dBm

-20 dBm

-30 dBm

-40 dBm

-50 dBm

-60 dBm

-70 dBm

M1

M2

M3

D1

D3

M1[1]

M2[1]

-20.98 dBm

5.2090200 GHz

5.27 dBm

5.2220700 GHz

20.725 dBm

CF 5.22 GHz 1001 pts Span 30.0 MHz

Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.20902 GHz	-20.98 dBm		
M2		1	5.22207 GHz	5.27 dBm		
D3	M1	1	21.69 MHz	0.15 dB		

Date: 9 APR 2024 20:50:43

CH_H

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 dBm

0 dBm

-10 dBm

-20 dBm

-30 dBm

-40 dBm

-50 dBm

-60 dBm

-70 dBm

M1

M2

M3

D1

D3

M1[1]

M2[1]

-20.48 dBm

5.2293500 GHz

5.70 dBm

5.2377200 GHz

20.304 dBm

CF 5.24 GHz 1001 pts Span 30.0 MHz

Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.22935 GHz	-20.48 dBm		
M2		1	5.23772 GHz	5.70 dBm		
D3	M1	1	21.45 MHz	0.03 dB		

Date: 9 APR 2024 20:51:43

Band I

802.11ax (HT20)

CH_L

Spectrum

Ref Level 20.50 dBm

Offset 1.00 dB

RBW 300 kHz

Att 30 dB

SWT 25.3 μs

VBW 1 MHz

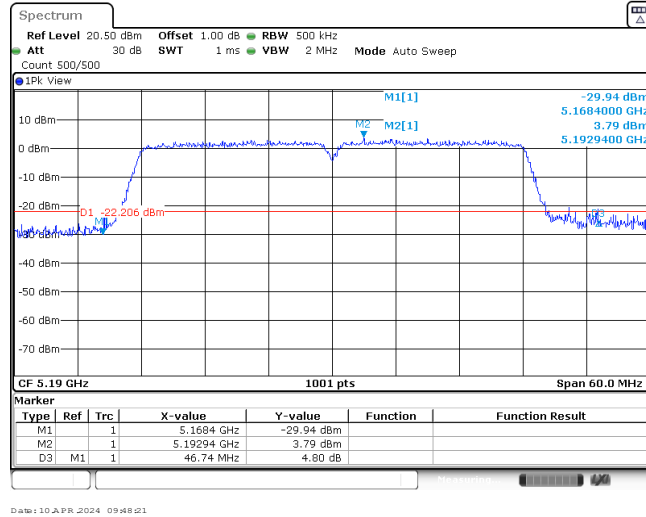
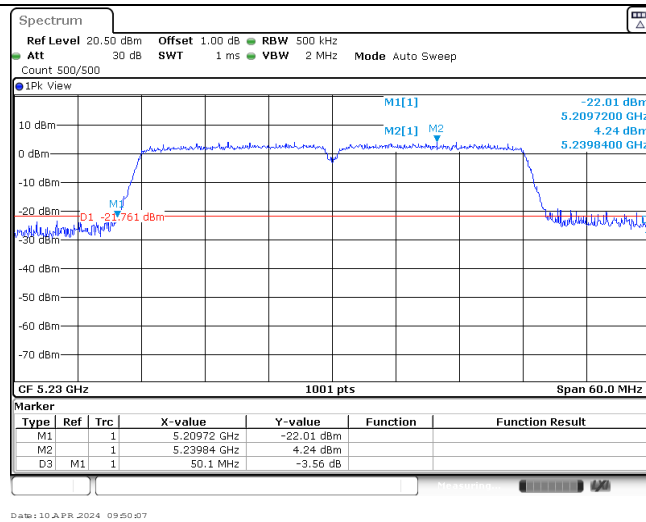
Mode Auto FFT

Count 500/500

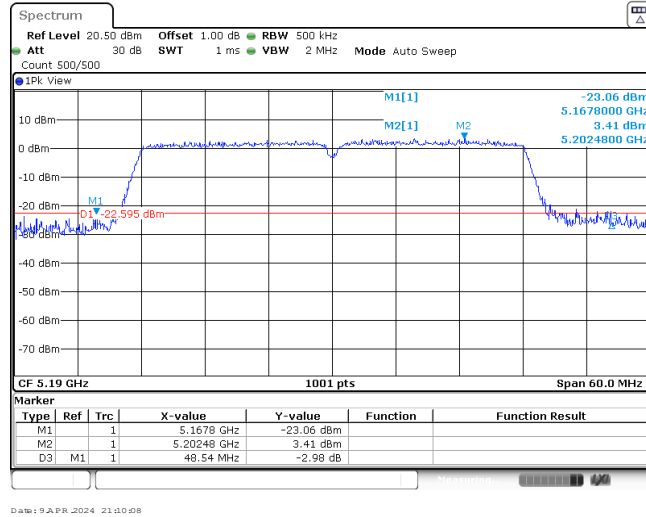
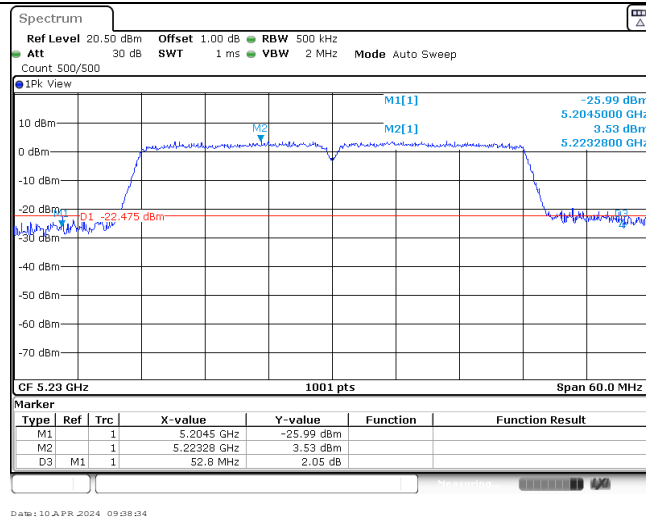
1Pk View

<

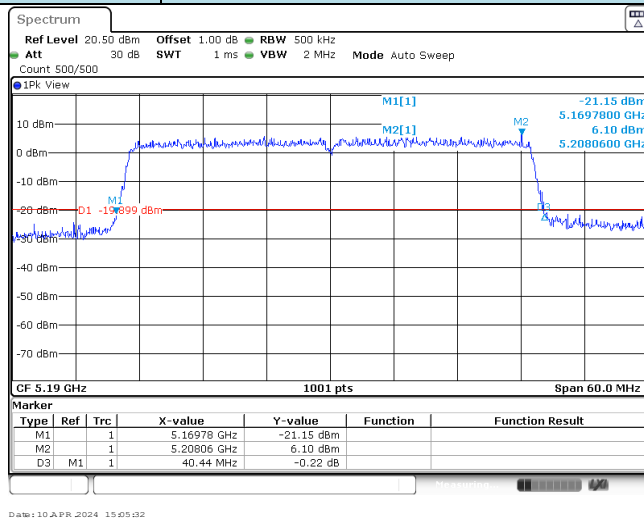
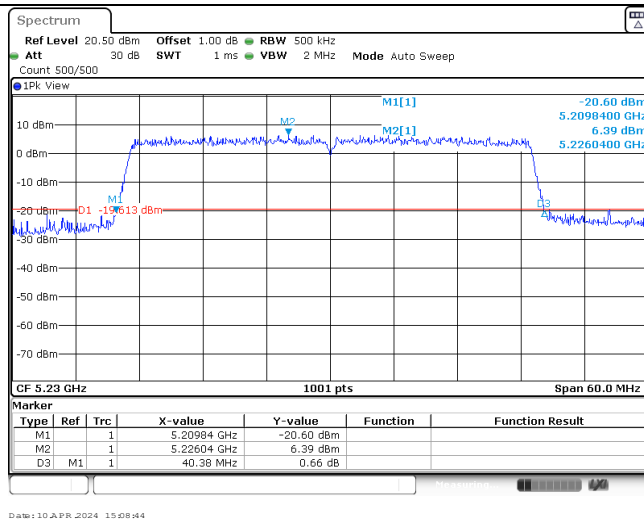
802.11ac (HT40)

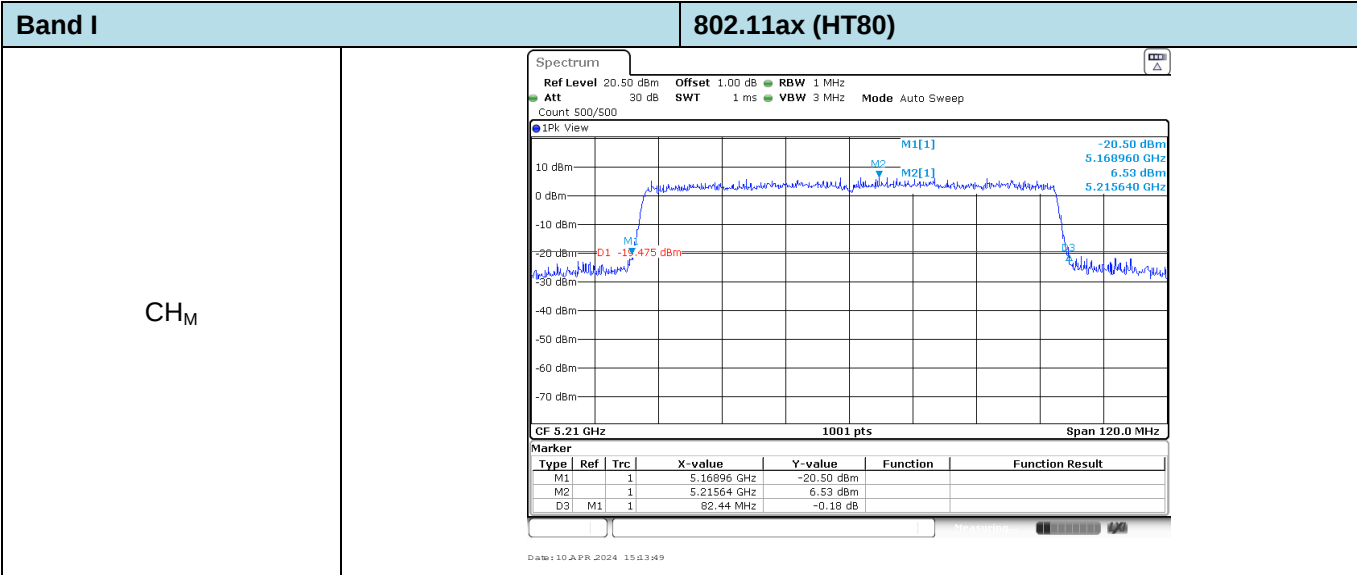
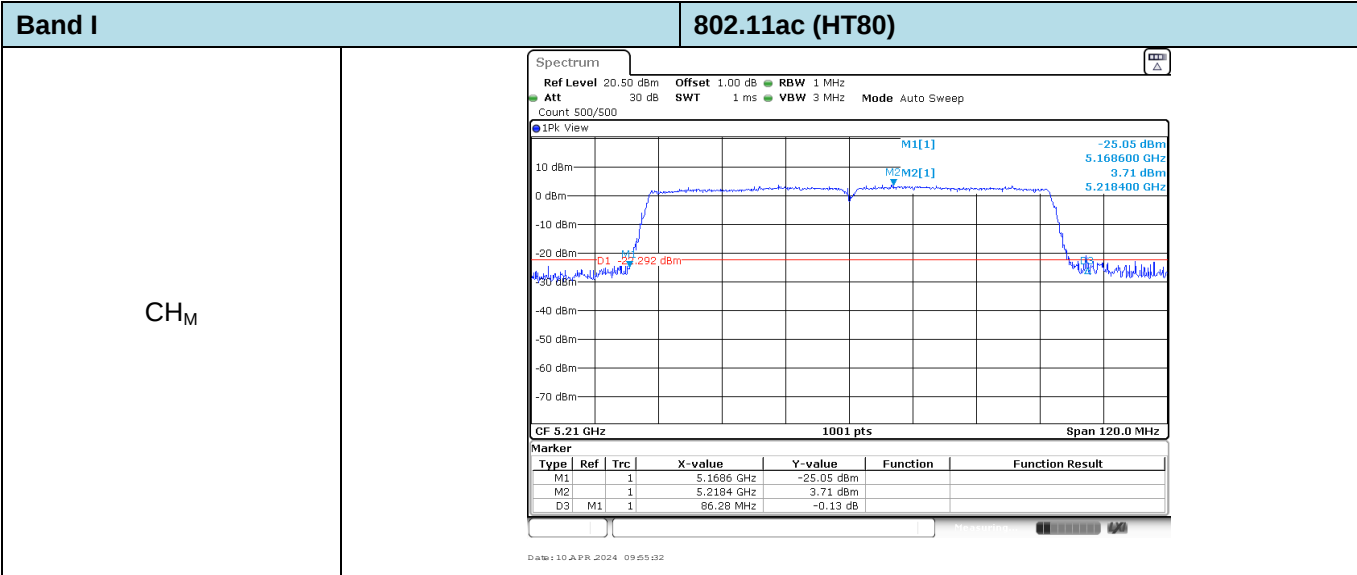
$$\text{CH}_L$$

$$\text{CH}_H$$


802.11n (HT40)

$$\text{CH}_L$$

$$\text{CH}_H$$


802.11ax (HT40)

$$\text{CH}_L$$

$$\text{CH}_H$$


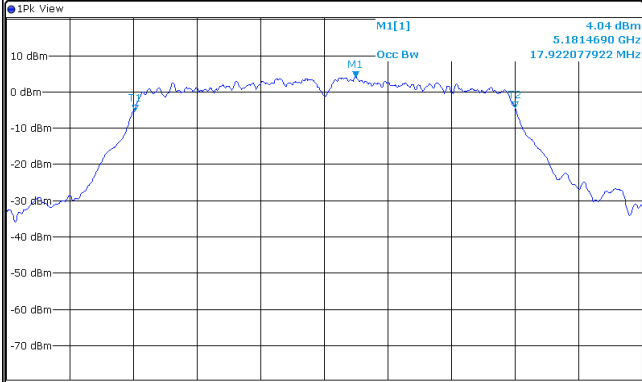
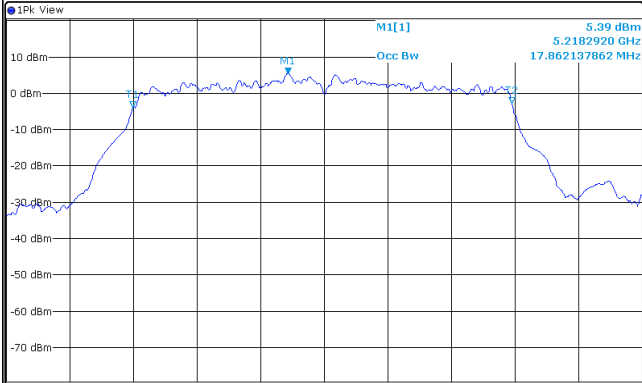
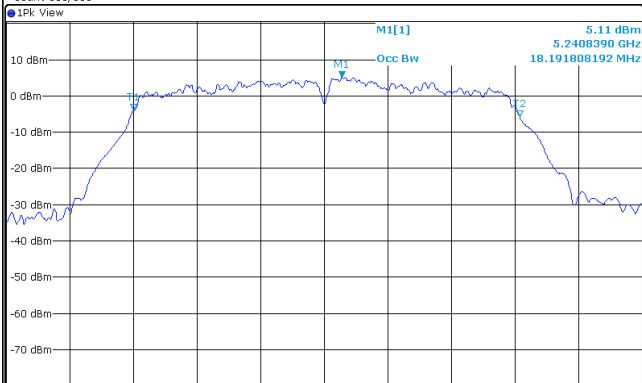


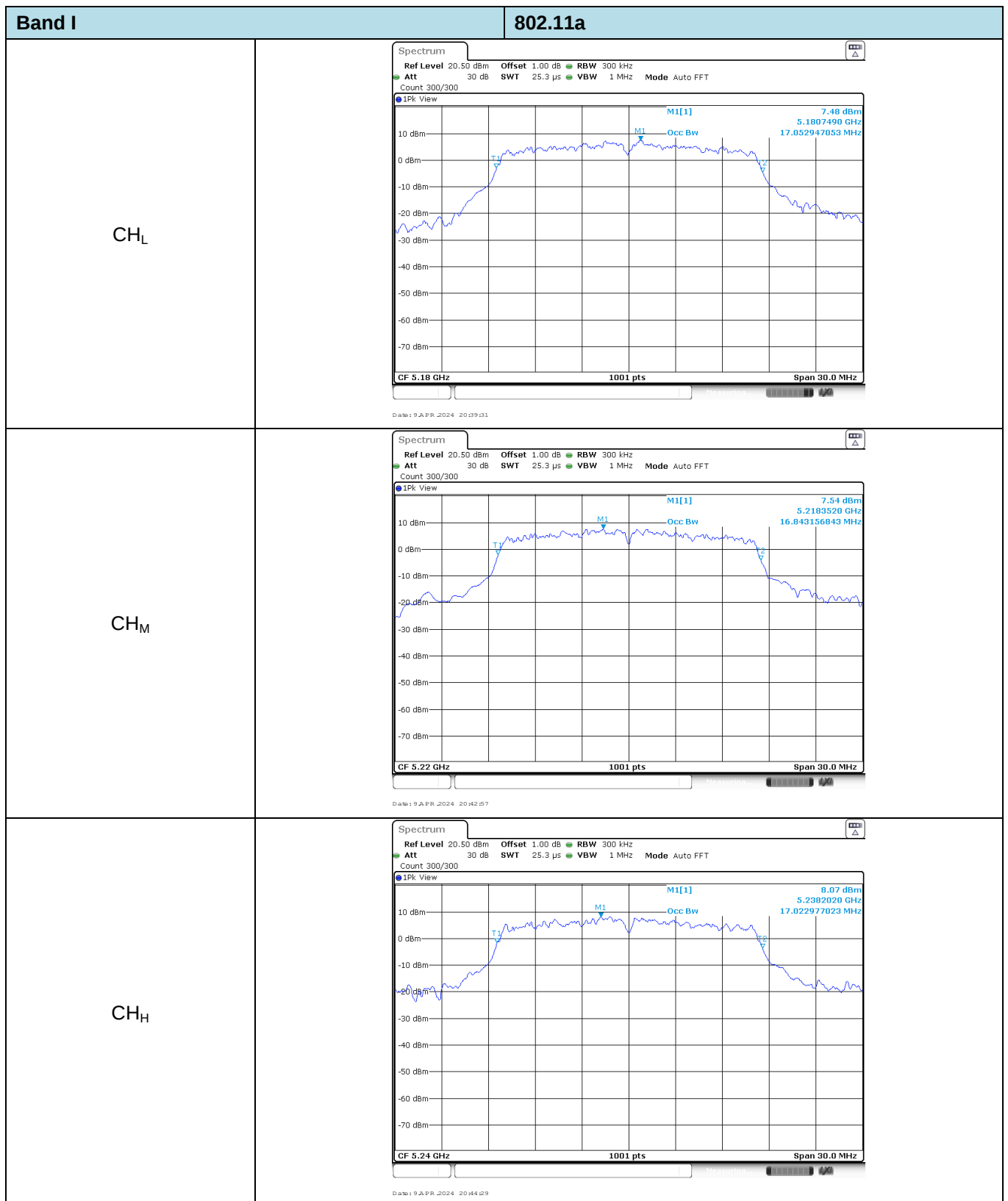
Appendix D: 99% Occupy bandwidth

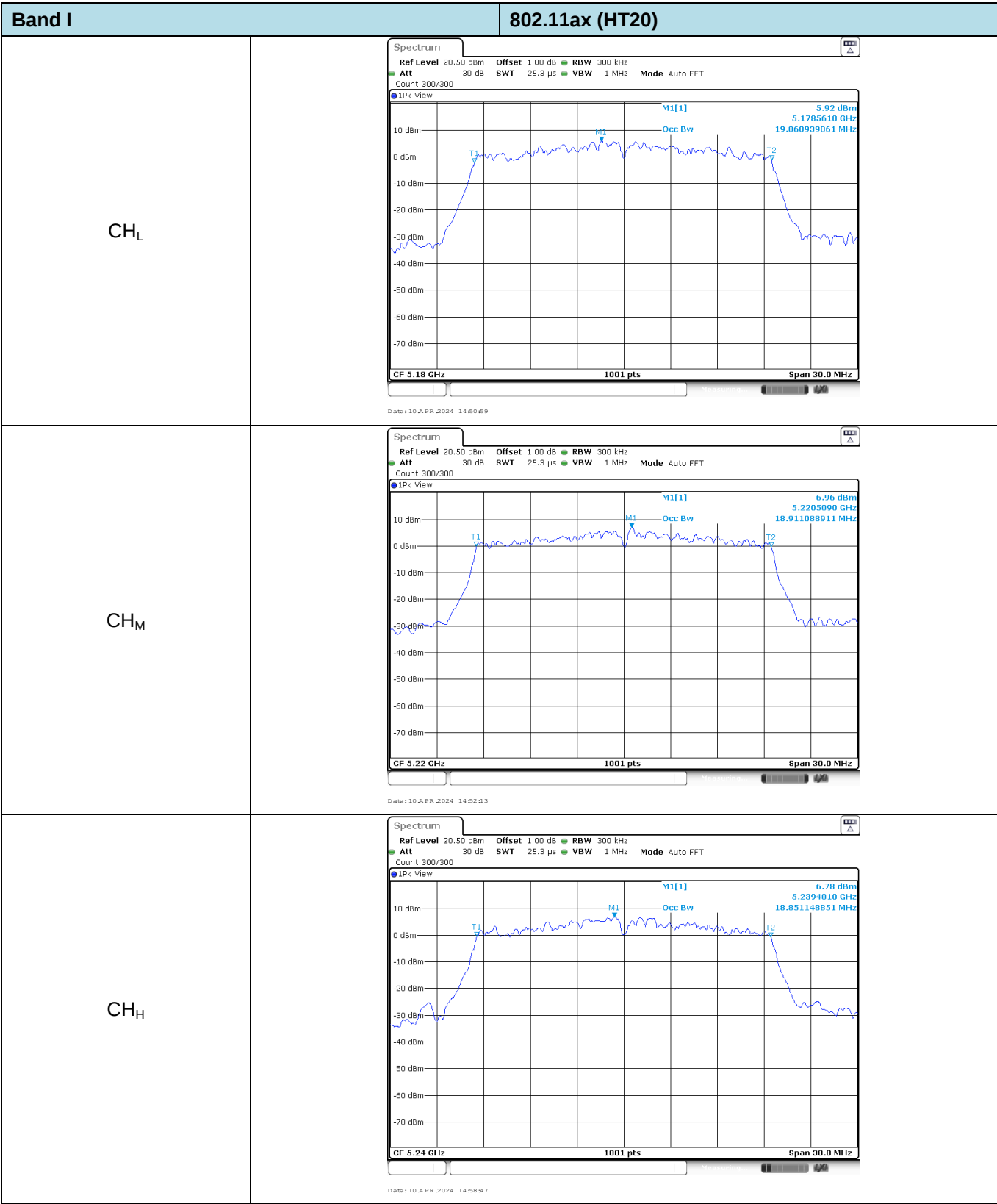
Band	Bandwidth (MHz)	Type	Channel	99% Occupy bandwidth (MHz)	Result
I	20	802.11ac	CH _L	17.89	Pass
			CH _M	17.89	
			CH _H	17.89	
		802.11n	CH _L	17.92	Pass
			CH _M	17.86	
			CH _H	18.19	
		802.11a	CH _L	17.05	Pass
			CH _M	16.84	
			CH _H	17.02	
		802.11ax	CH _L	19.06	Pass
			CH _M	18.91	
			CH _H	18.85	
	40	802.11ac	CH _L	36.50	Pass
			CH _H	36.62	
		802.11n	CH _L	36.56	Pass
			CH _H	36.56	
		802.11ax	CH _L	37.64	Pass
			CH _H	37.70	
	80	802.11ac	CH _M	75.76	Pass
		802.11ax	CH _M	77.20	

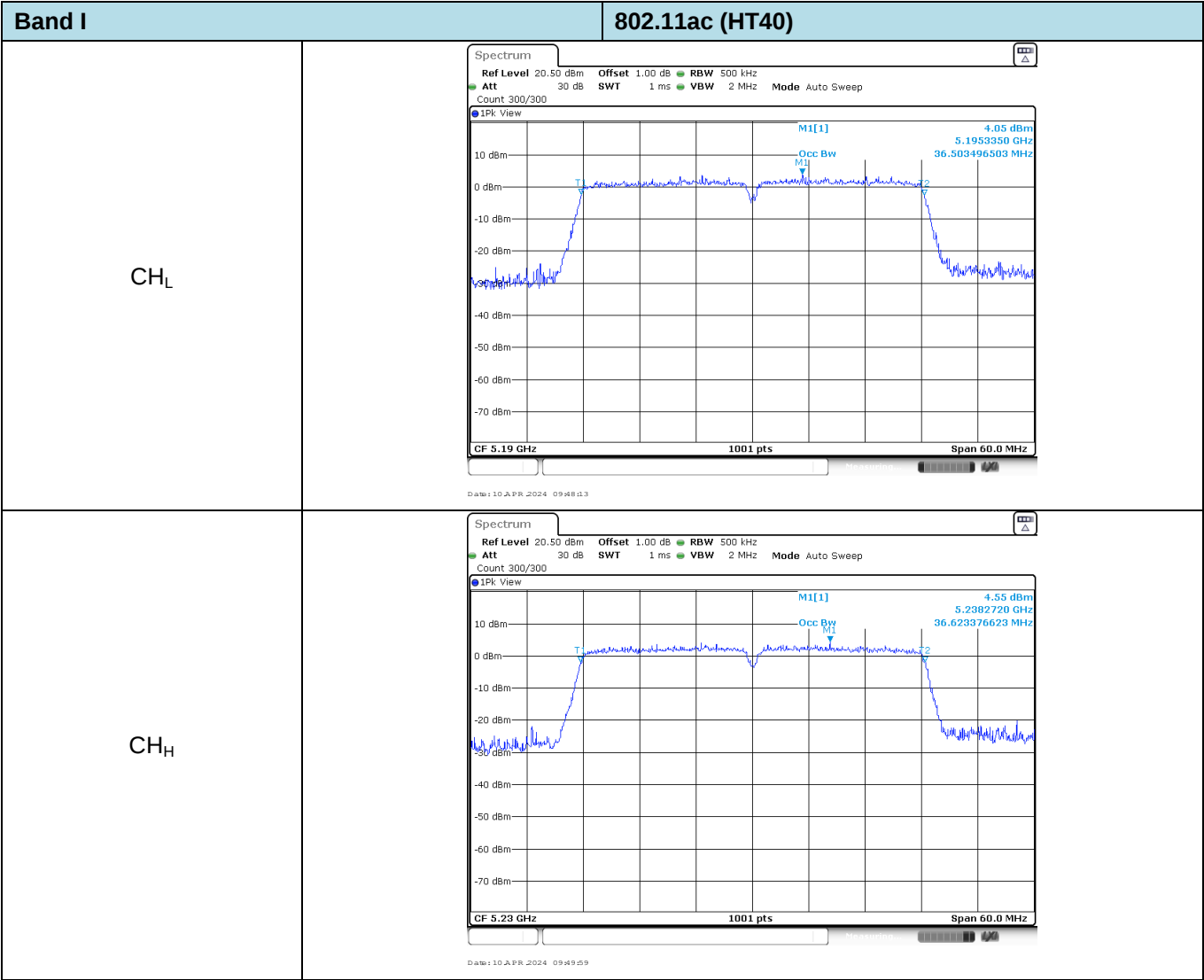
Band	Bandwidth (MHz)	Type	Channel	99% Occupy bandwidth (MHz)	Result
IV	20	802.11ac	CH _L	18.19	Pass
			CH _M	18.04	
			CH _H	18.07	
		802.11n	CH _L	18.16	Pass
			CH _M	17.77	
			CH _H	17.98	
		802.11a	CH _L	17.62	Pass
			CH _M	16.84	
			CH _H	16.96	
		802.11ax	CH _L	18.97	Pass
			CH _M	18.85	
			CH _H	18.88	
	40	802.11ac	CH _L	36.62	Pass
			CH _H	36.56	
		802.11n	CH _L	36.73	Pass
			CH _H	36.64	
		802.11ax	CH _L	37.70	Pass
			CH _H	37.64	
	80	802.11ac	CH _M	76.24	Pass
		802.11ax	CH _M	77.32	Pass

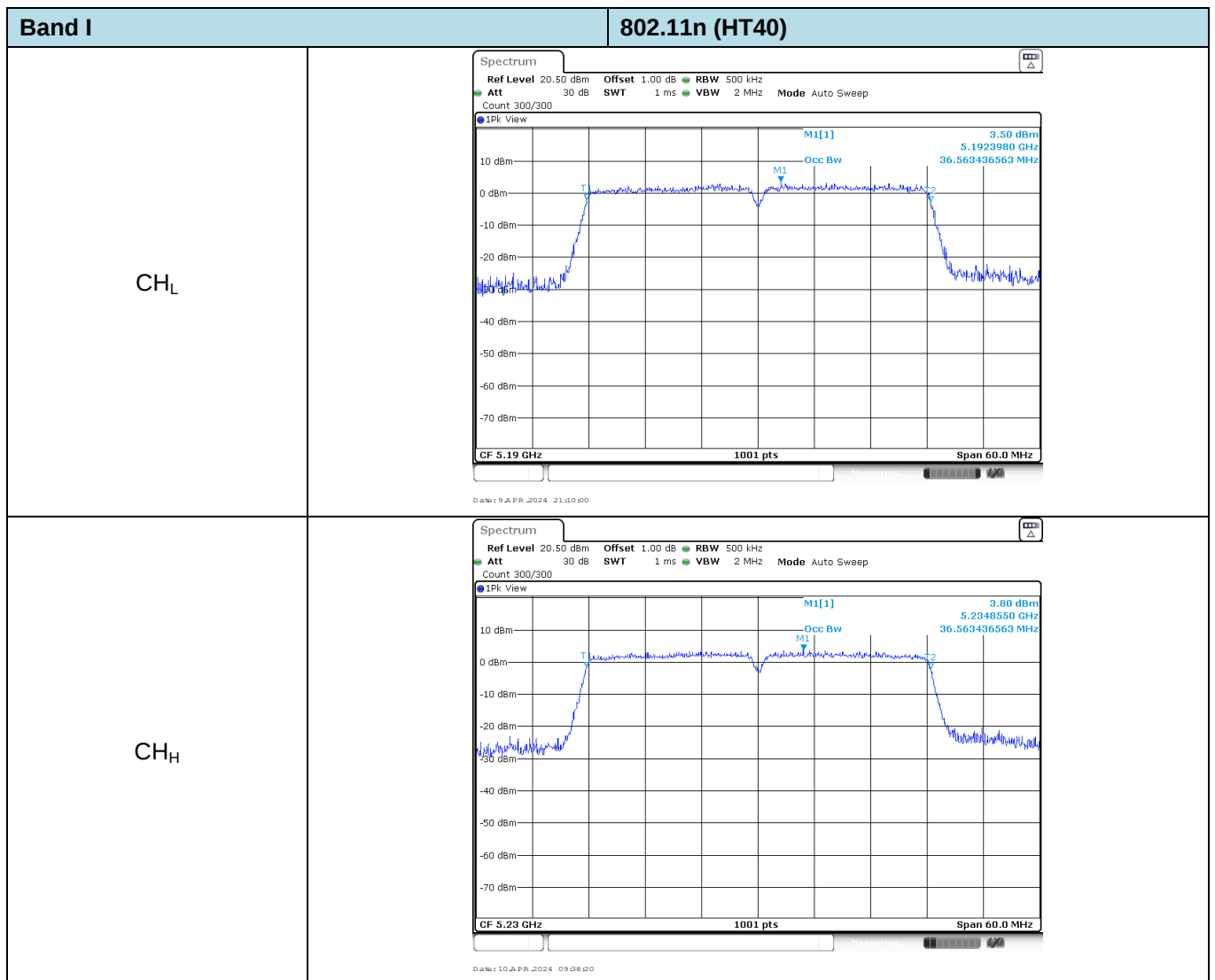
Band I		802.11ac (HT20)
CH _L	Spectrum Ref Level 20.50 dBm Att 30 dB Count 300/300 Offset 1.00 dB SWT 25.3 μs RBW 300 kHz VBW 1 MHz Mode Auto FFT IPk View M1[1] 4.24 dBm 5.1809890 GHz 17.892107892 MHz M1 Occ Bw 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 5.18 GHz 1001 pts Span 30.0 MHz Date: 10 APR 2024 09:42:00	
CH _M	Spectrum Ref Level 20.50 dBm Att 30 dB Count 300/300 Offset 1.00 dB SWT 25.3 μs RBW 300 kHz VBW 1 MHz Mode Auto FFT IPk View M1[1] 4.76 dBm 5.2207190 GHz 17.892107892 MHz M1 Occ Bw 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 5.22 GHz 1001 pts Span 30.0 MHz Date: 10 APR 2024 09:43:00	
CH _H	Spectrum Ref Level 20.50 dBm Att 30 dB Count 300/300 Offset 1.00 dB SWT 25.3 μs RBW 300 kHz VBW 1 MHz Mode Auto FFT IPk View M1[1] 4.28 dBm 5.2409890 GHz 17.892107892 MHz M1 Occ Bw 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 5.24 GHz 1001 pts Span 30.0 MHz Date: 10 APR 2024 09:44:00	

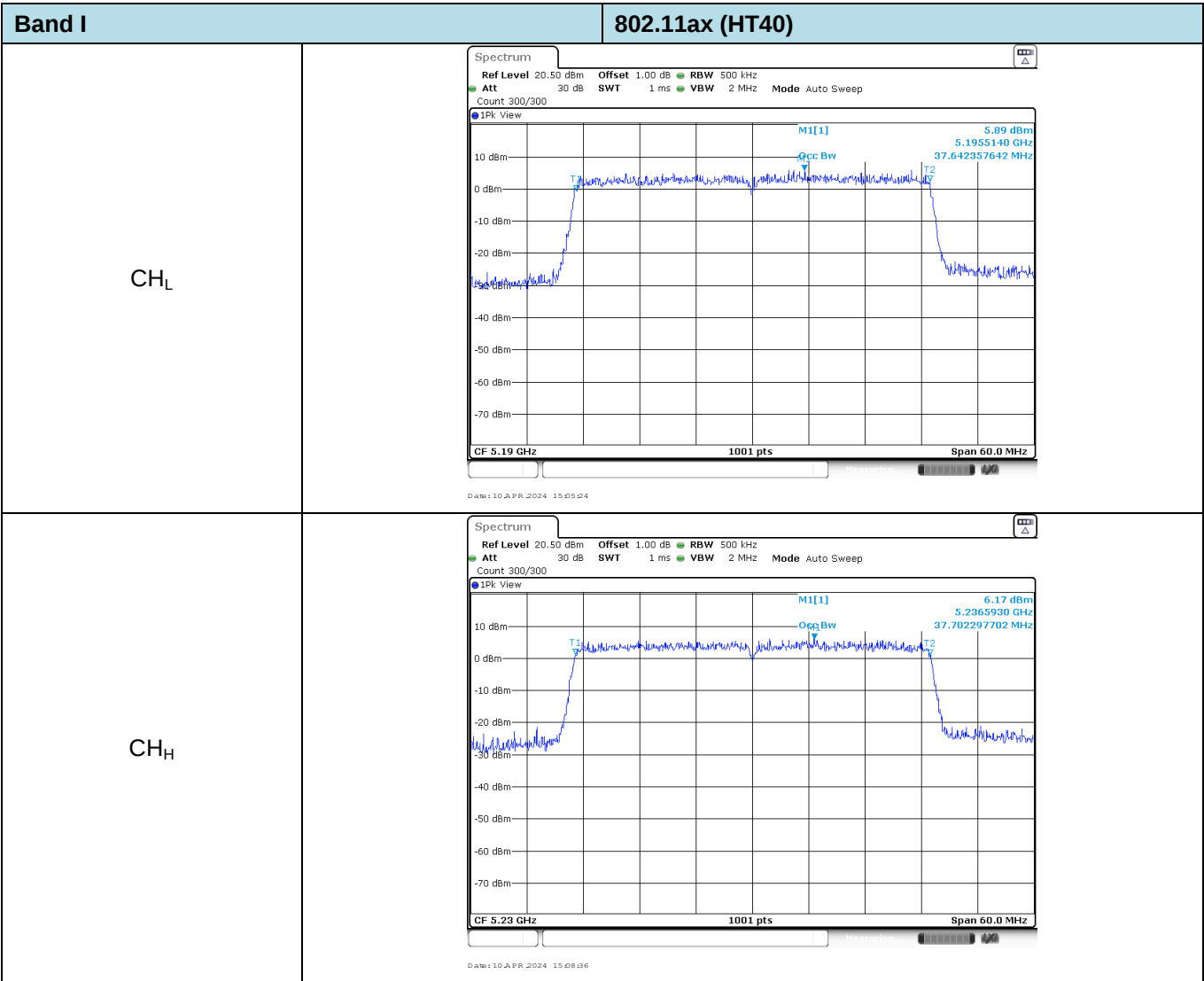
Band I		802.11n (HT20)
CH _L	Spectrum Ref Level 20.50 dBm Att 30 dB Offset 1.00 dB SWT 25.3 μs RBW 300 kHz VBW 1 MHz Mode Auto FFT Count 300/300 IPk View M1[1] 4.04 dBm 5.1814690 GHz 17.922077922 MHz M1 Occ Bw  CF 5.18 GHz1001 ptsSpan 30.0 MHz Date: 9 APR 2024 20:49:30	
CH _M	Spectrum Ref Level 20.50 dBm Att 30 dB Offset 1.00 dB SWT 25.3 μs RBW 300 kHz VBW 1 MHz Mode Auto FFT Count 300/300 IPk View M1[1] 5.39 dBm 5.2182920 GHz 17.862137862 MHz M1 Occ Bw  CF 5.22 GHz1001 ptsSpan 30.0 MHz Date: 9 APR 2024 20:50:37	
CH _H	Spectrum Ref Level 20.50 dBm Att 30 dB Offset 1.00 dB SWT 25.3 μs RBW 300 kHz VBW 1 MHz Mode Auto FFT Count 300/300 IPk View M1[1] 5.11 dBm 5.2408390 GHz 18.191808192 MHz M1 Occ Bw  CF 5.24 GHz1001 ptsSpan 30.0 MHz Date: 9 APR 2024 20:51:37	

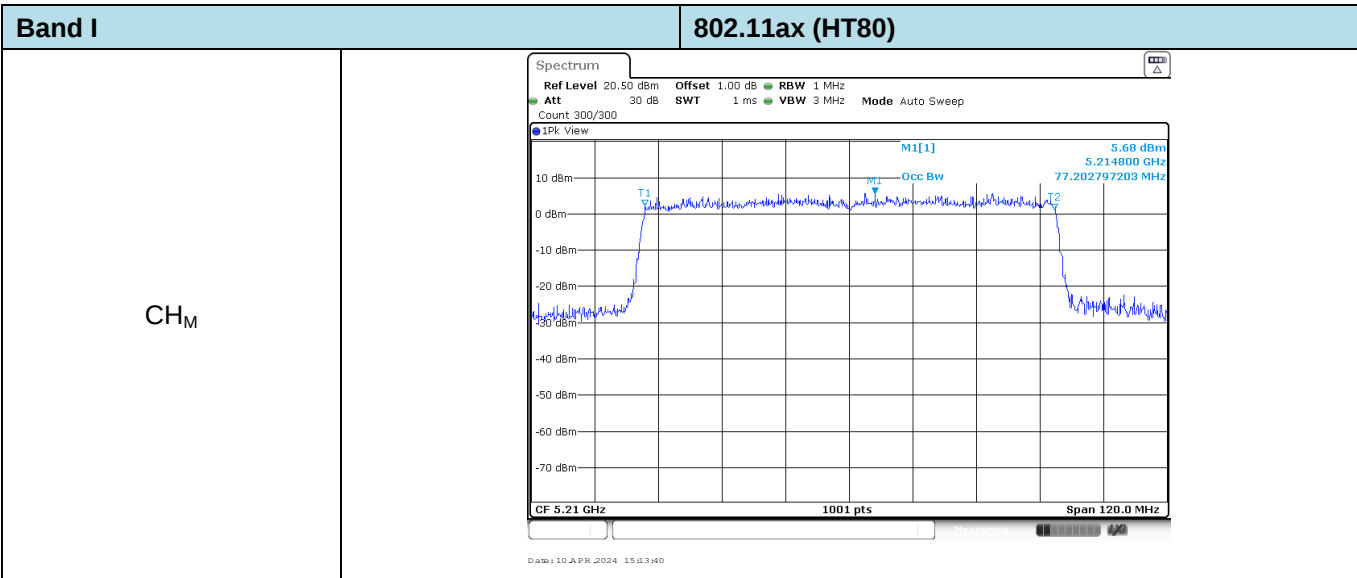
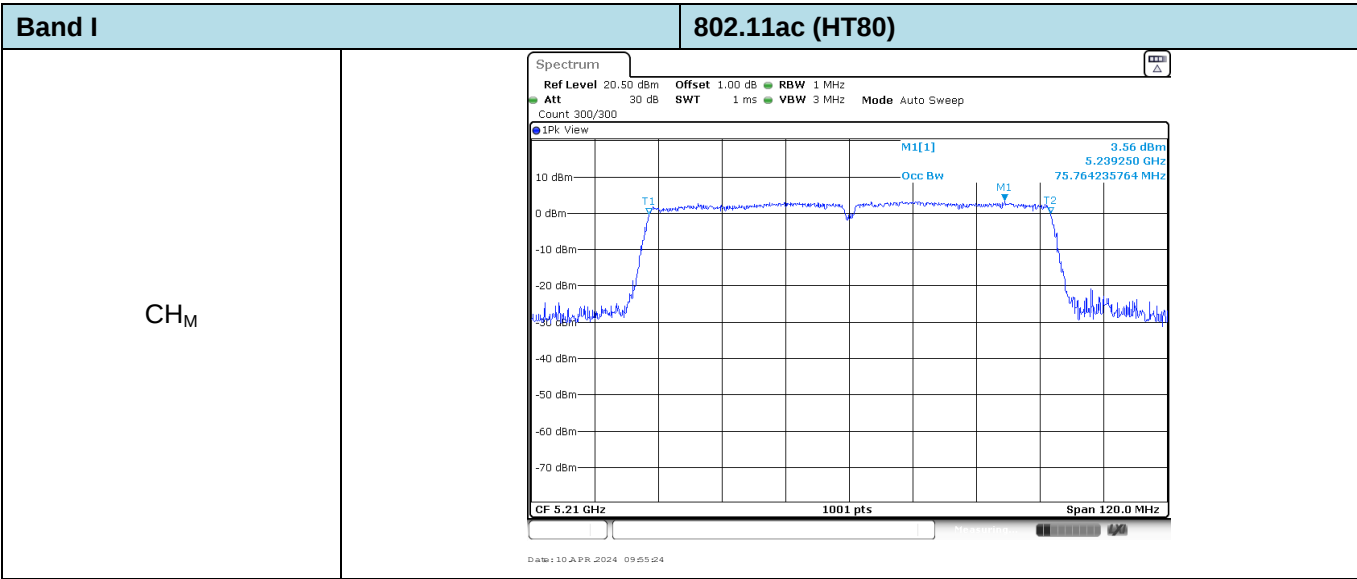


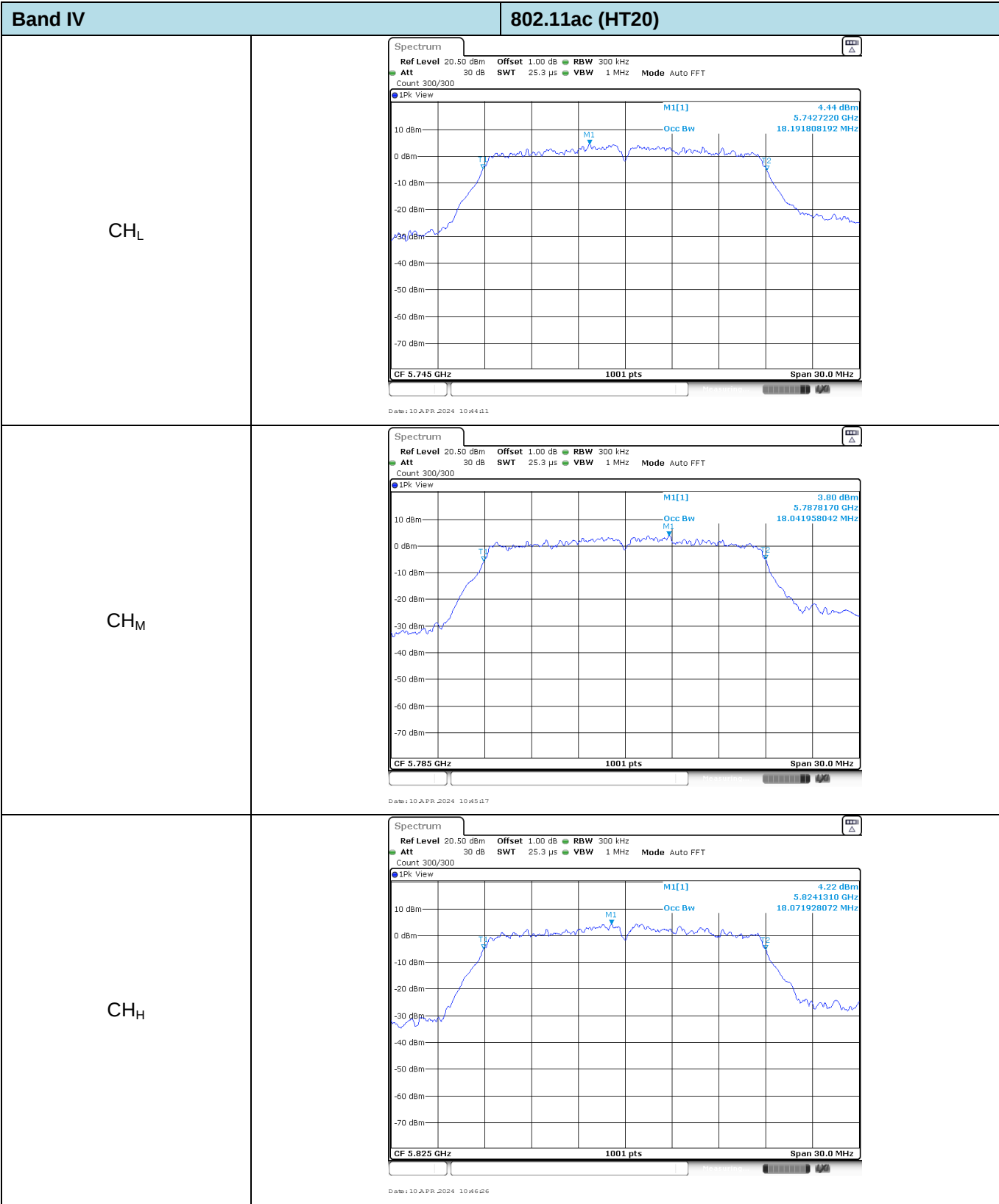




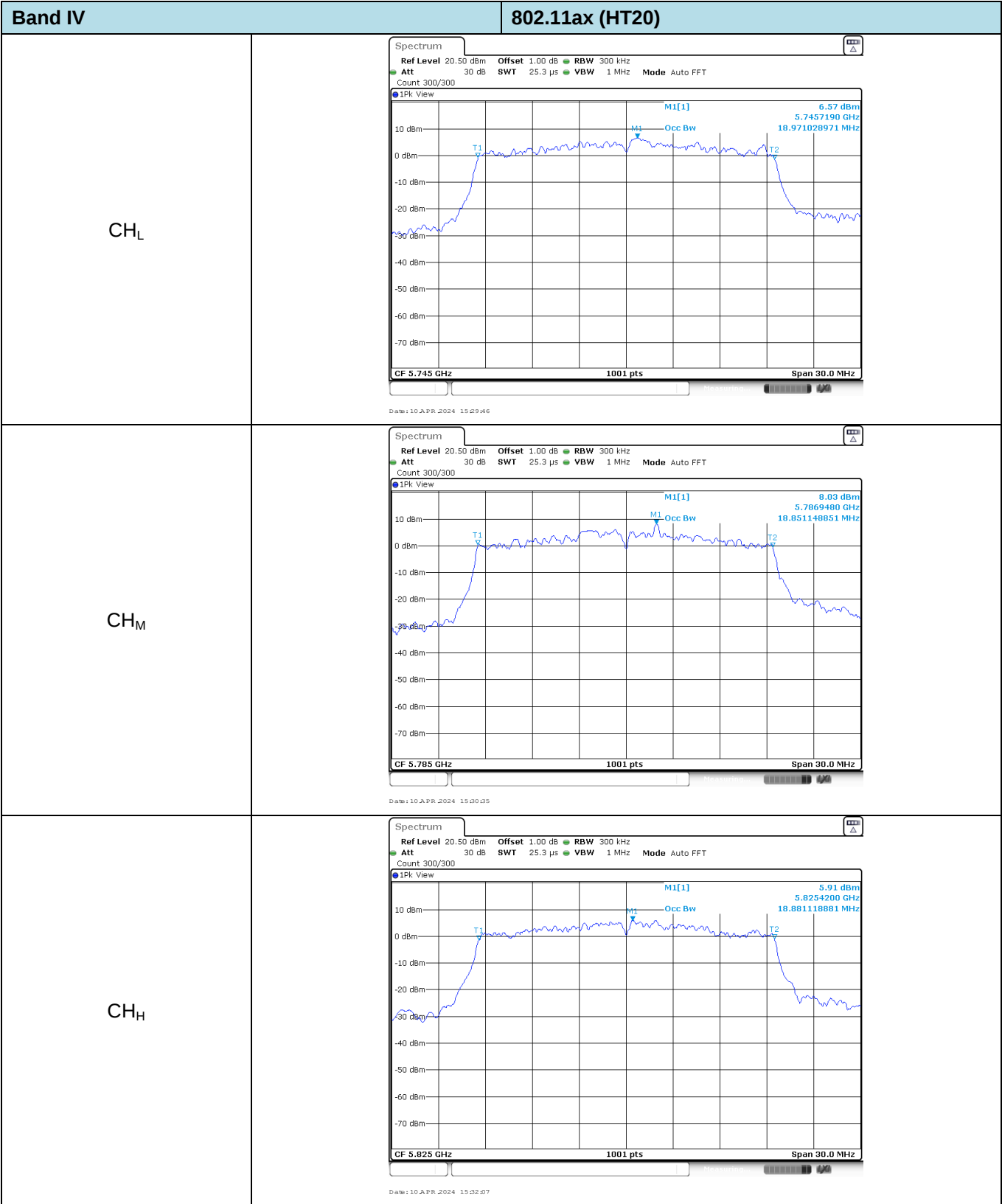


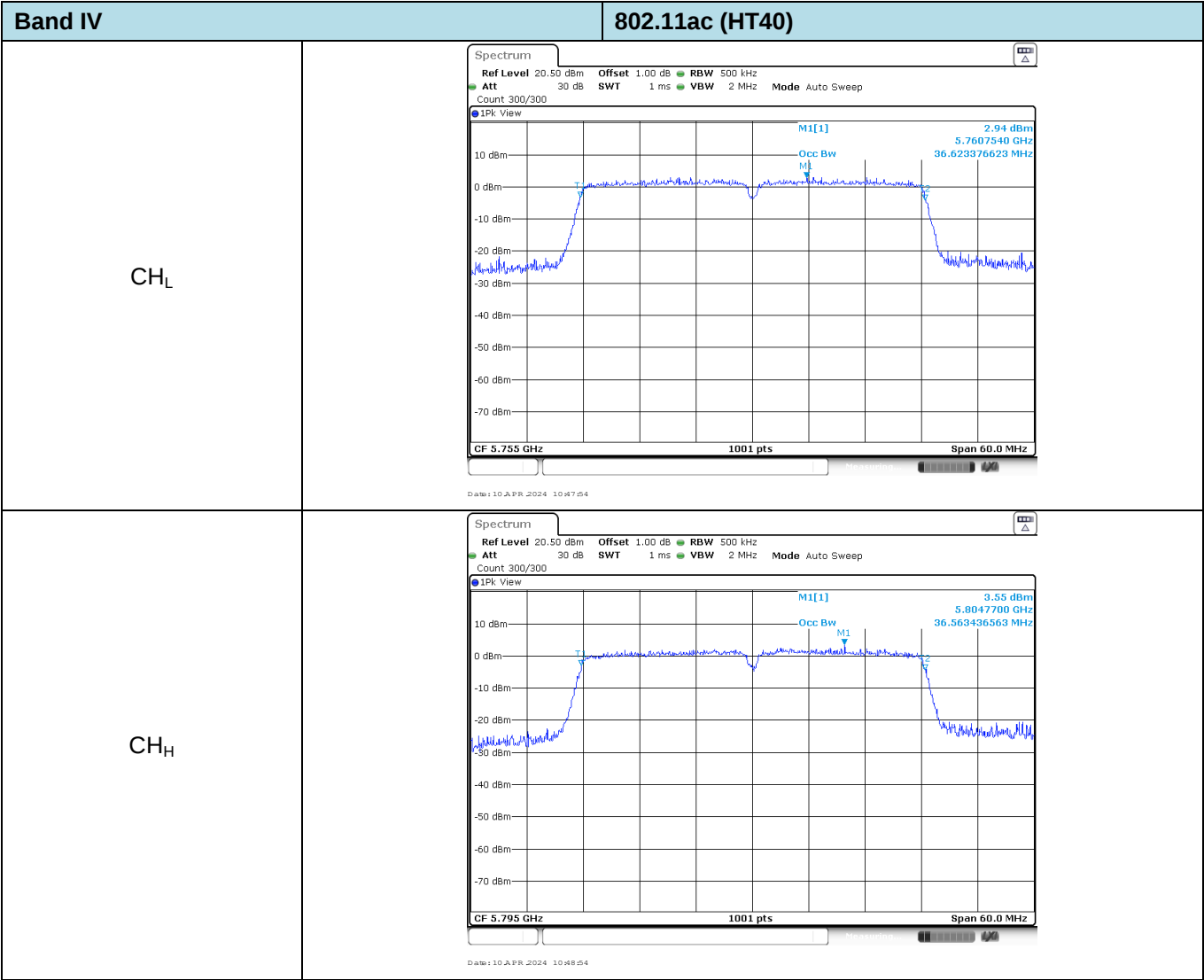


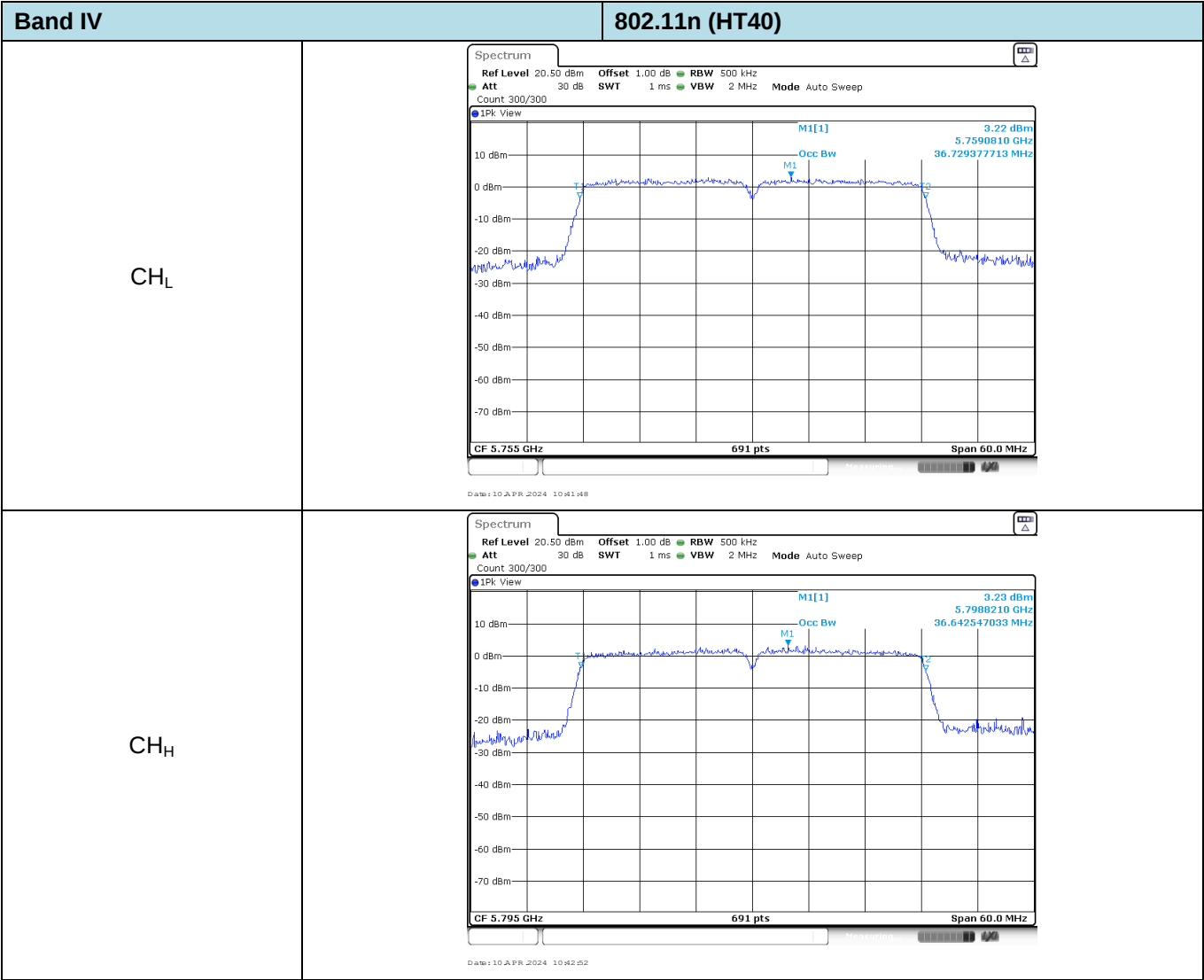


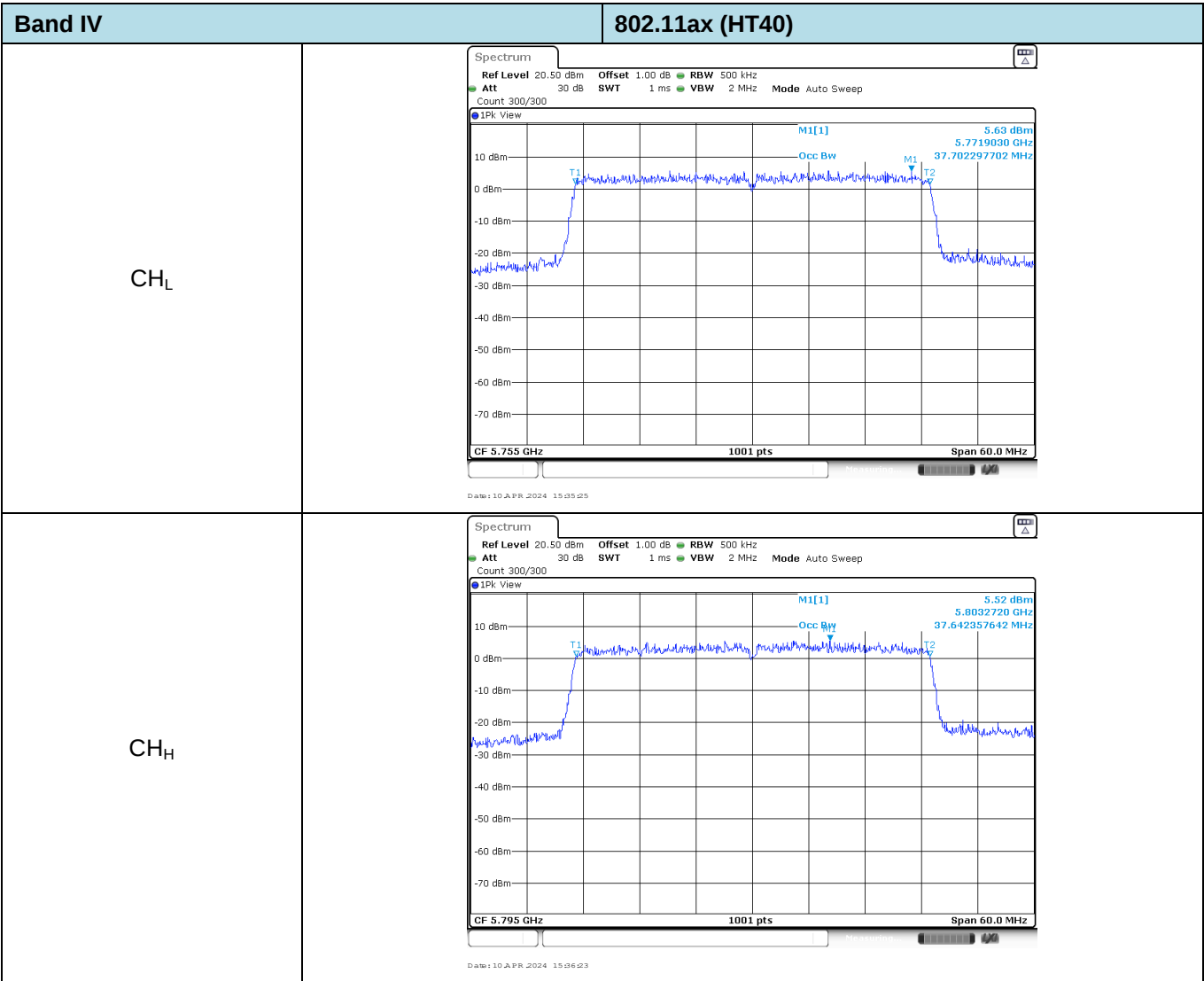


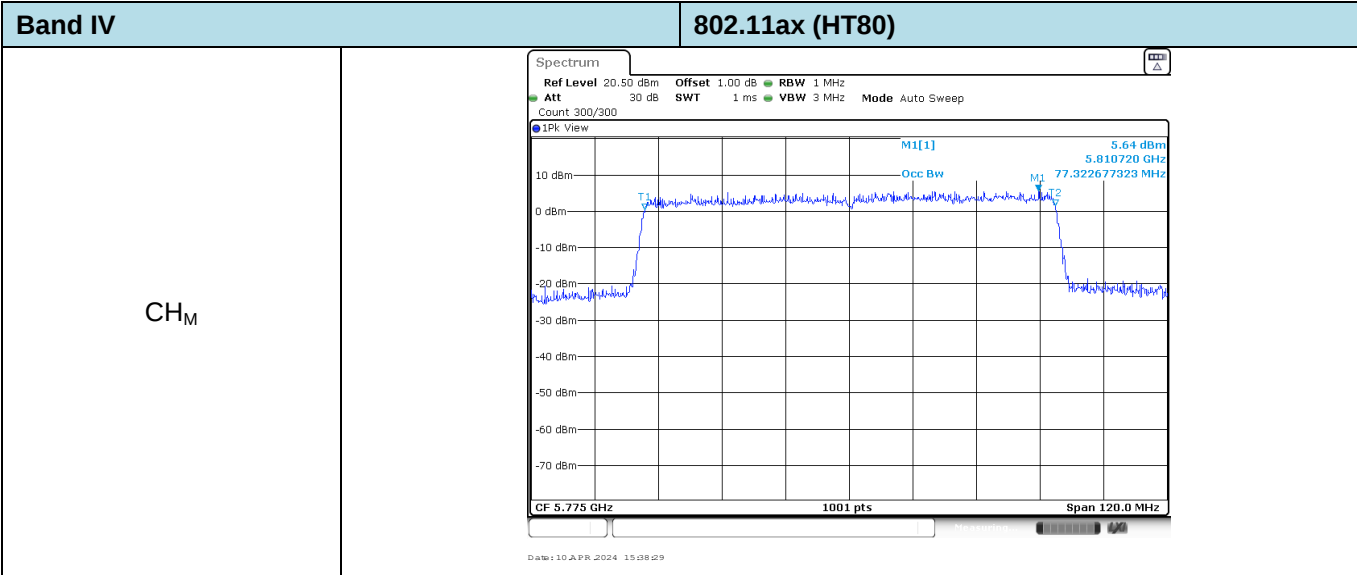
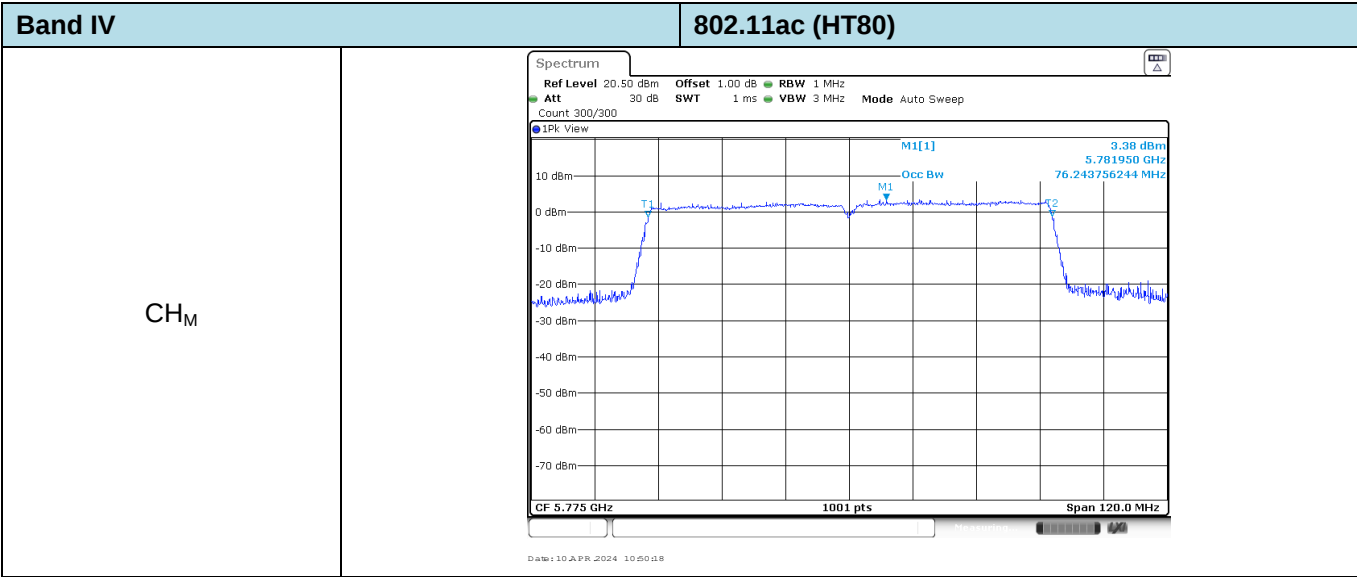
Band IV		802.11n (HT20)	
CH _L	Spectrum Ref Level 20.50 dBm Att 30 dB Offset 1.00 dB SWT 25.3 μs RBW 300 kHz VBW 1 MHz Mode Auto FFT Count 300/300 IPk View M1 M1[1] Occ Bw 4.39 dBm 5.7433520 GHz 18.161838162 MHz 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 5.745 GHz 1001 pts Span 30.0 MHz Date: 10 APR 2024 10:39:18		
CH _M	Spectrum Ref Level 20.50 dBm Att 30 dB Offset 1.00 dB SWT 25.3 μs RBW 300 kHz VBW 1 MHz Mode Auto FFT Count 300/300 IPk View M1 M1[1] Occ Bw 4.14 dBm 5.7822430 GHz 17.772227772 MHz 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 5.785 GHz 1001 pts Span 30.0 MHz Date: 10 APR 2024 10:39:20		
CH _H	Spectrum Ref Level 20.50 dBm Att 30 dB Offset 1.00 dB SWT 25.3 μs RBW 300 kHz VBW 1 MHz Mode Auto FFT Count 300/300 IPk View M1 M1[1] Occ Bw 3.89 dBm 5.8276970 GHz 17.982017982 MHz 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 5.825 GHz 1001 pts Span 30.0 MHz Date: 10 APR 2024 10:40:28		









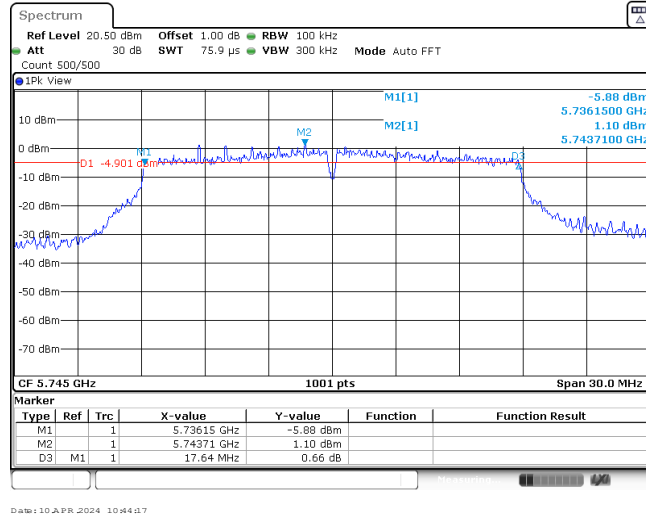
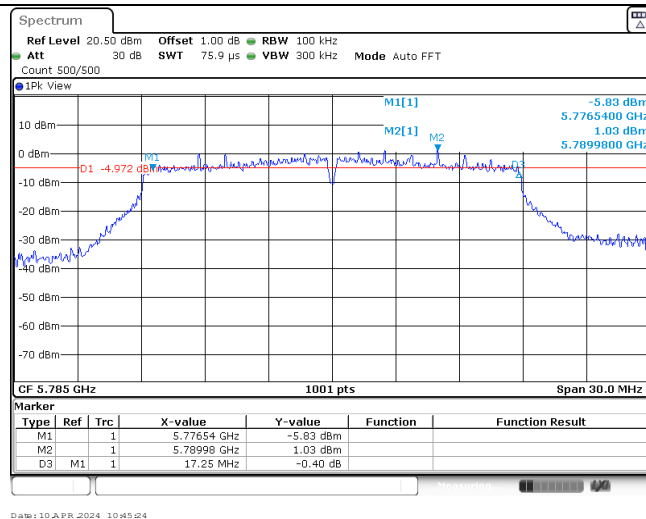
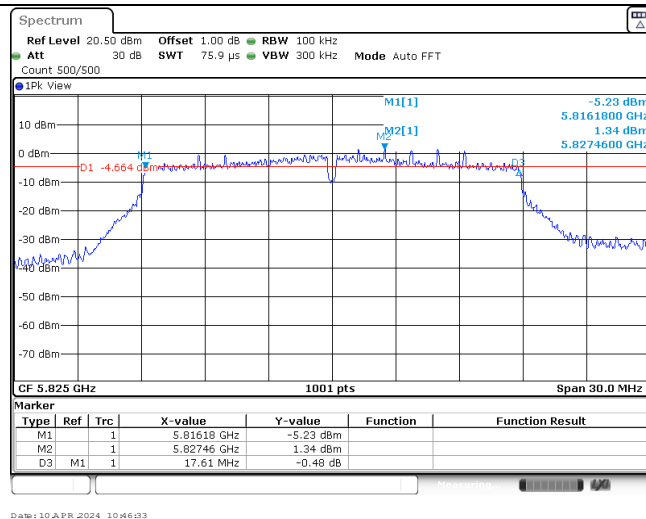


Appendix E: 6dB Bandwidth

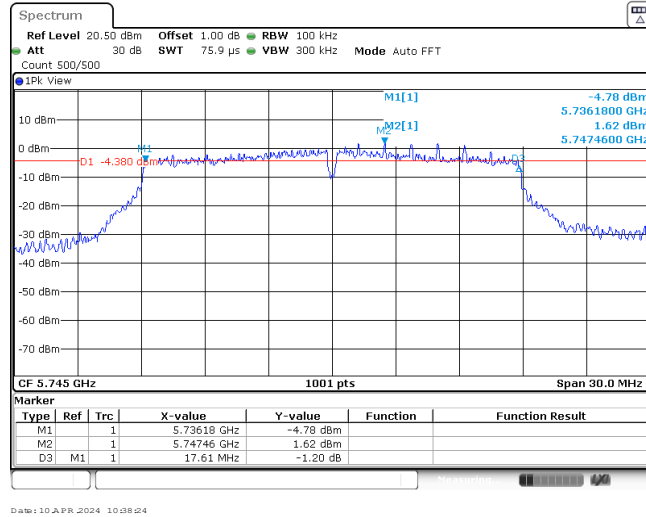
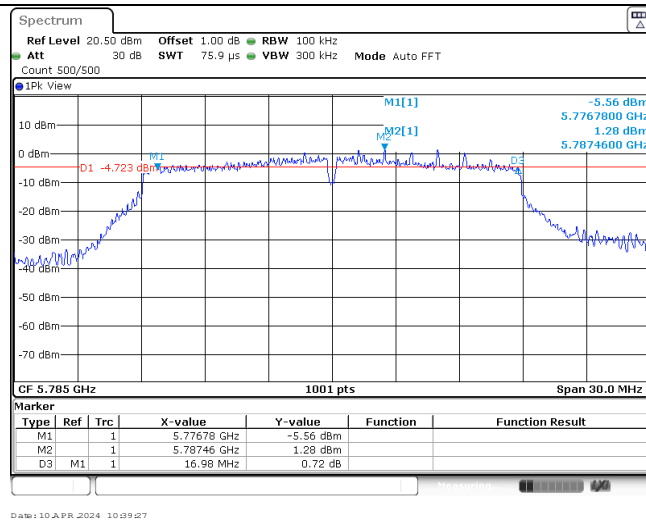
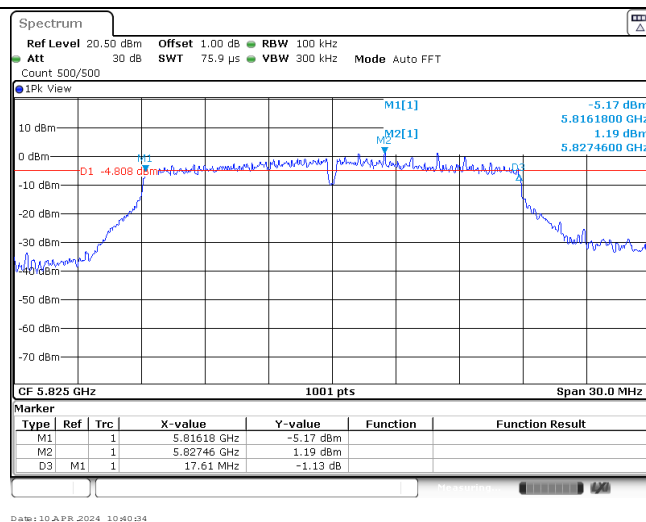
Band	Bandwidth (MHz)	Type	Channel	6dB bandwidth (MHz)	Result
IV	20	802.11ac	CH _L	17.64	Pass
			CH _M	17.25	
			CH _H	17.61	
		802.11n	CH _L	17.61	Pass
			CH _M	16.98	
			CH _H	17.61	
		802.11a	CH _L	16.35	Pass
			CH _M	16.38	
			CH _H	16.38	
		802.11ax	CH _L	16.86	Pass
			CH _M	16.62	
			CH _H	17.88	
	40	802.11ac	CH _L	36.48	Pass
			CH _H	36.48	
		802.11n	CH _L	36.52	Pass
			CH _H	36.17	
		802.11ax	CH _L	37.56	Pass
			CH _H	37.80	
	80	802.11ac	CH _M	76.32	Pass
		802.11ax	CH _M	77.76	Pass

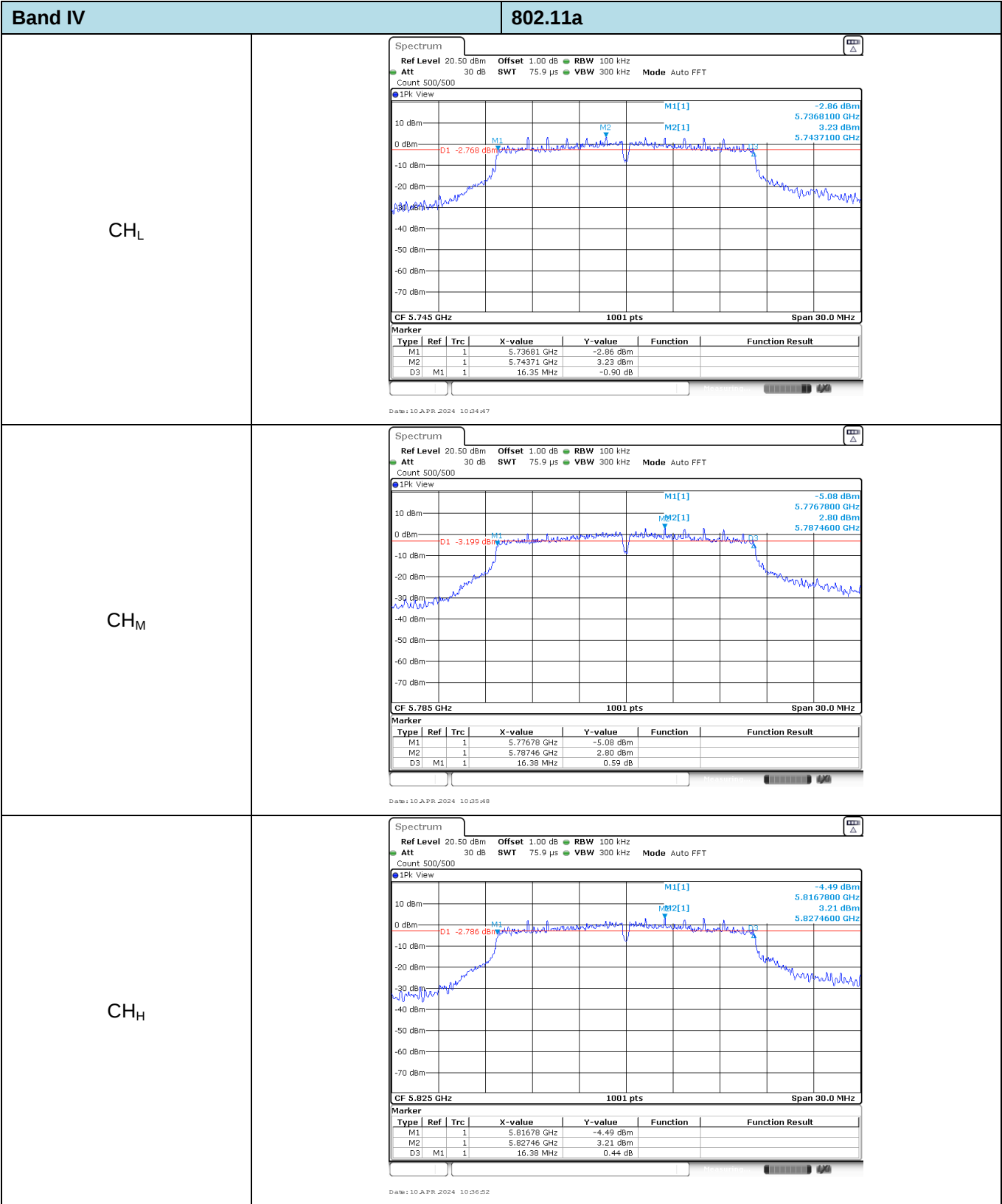
Band IV

802.11ac (HT20)

CH_LCH_MCH_H

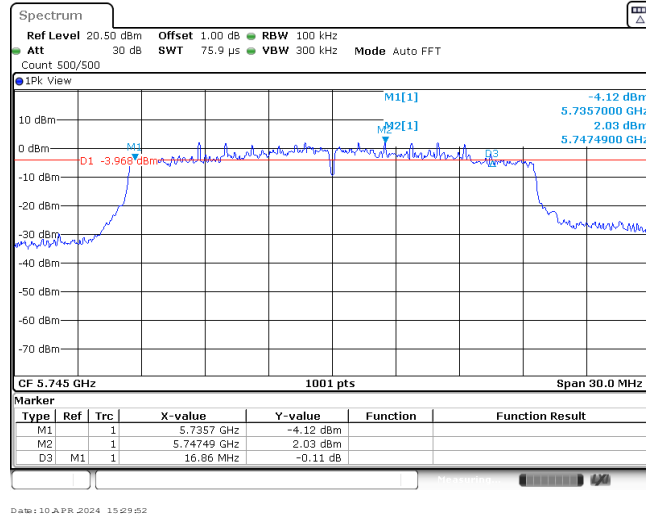
802.11n (HT20)

$$\text{CH}_L$$

$$\text{CH}_M$$

$$\text{CH}_H$$


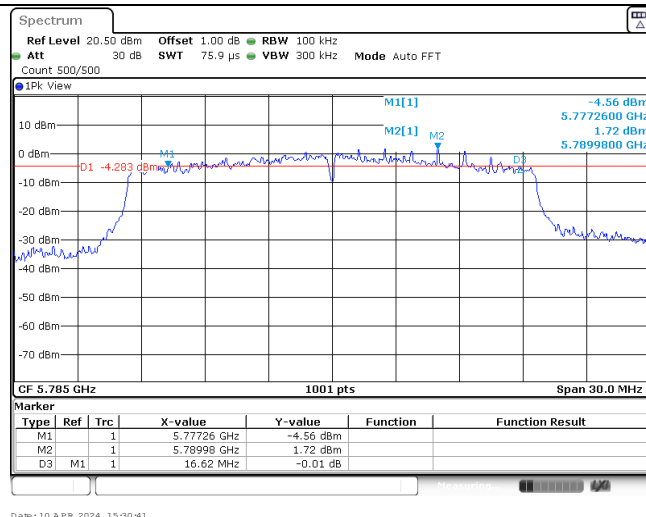


Band IV

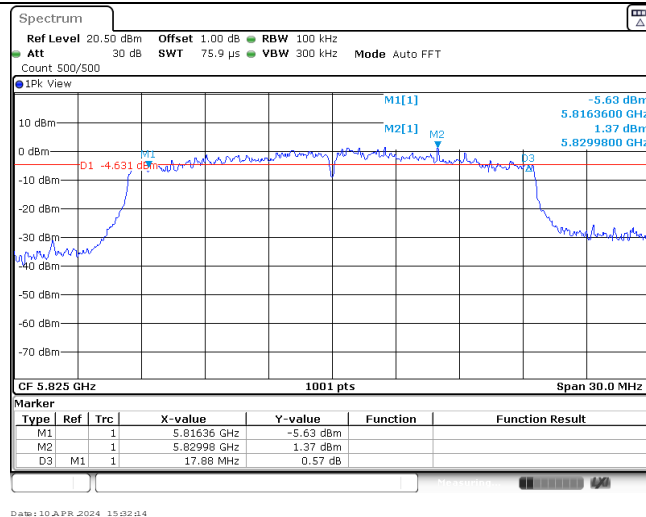
802.11ax (HT20)

$$\text{CH}_L$$


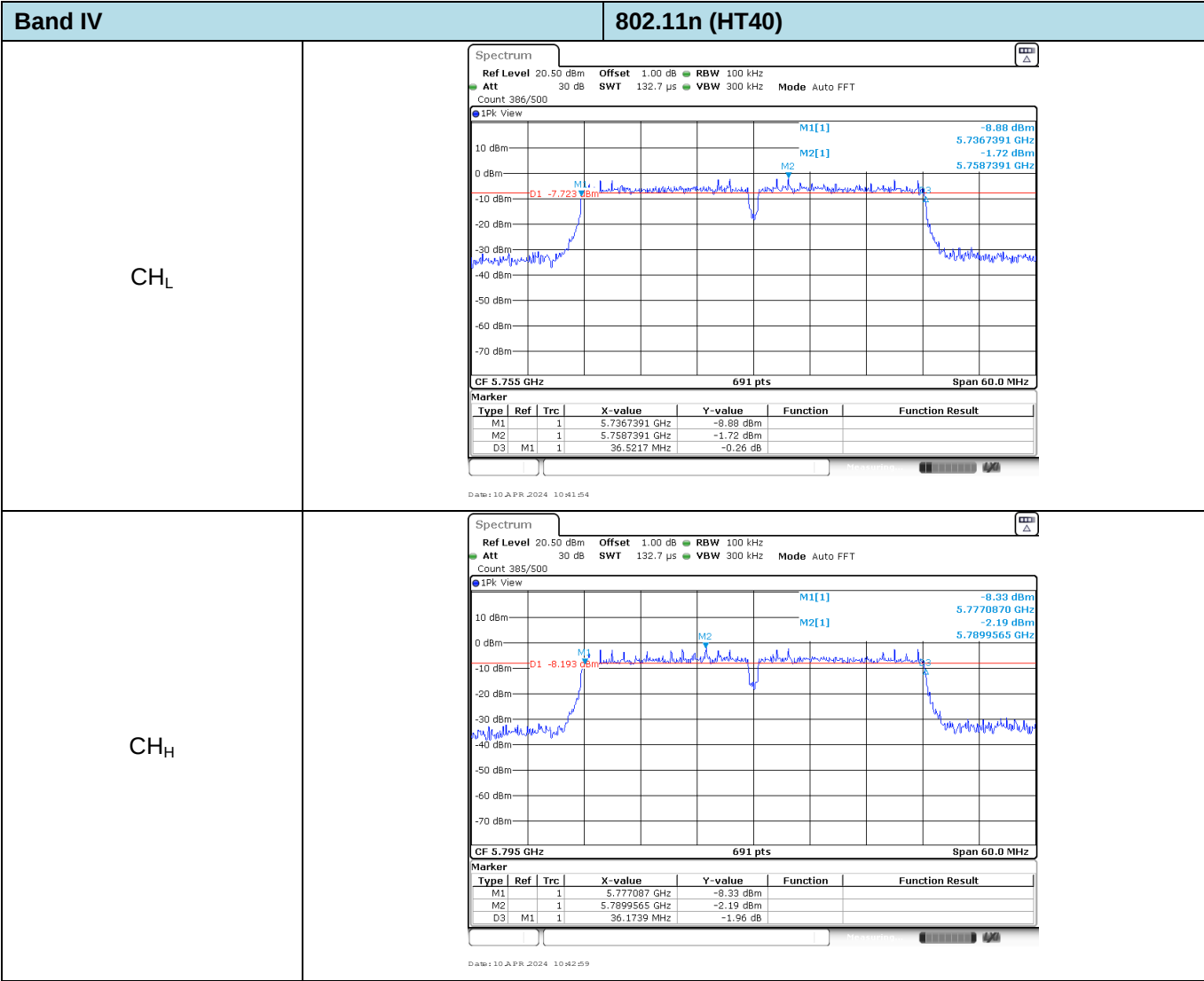
Date: 10 APR 2024 15:29:52

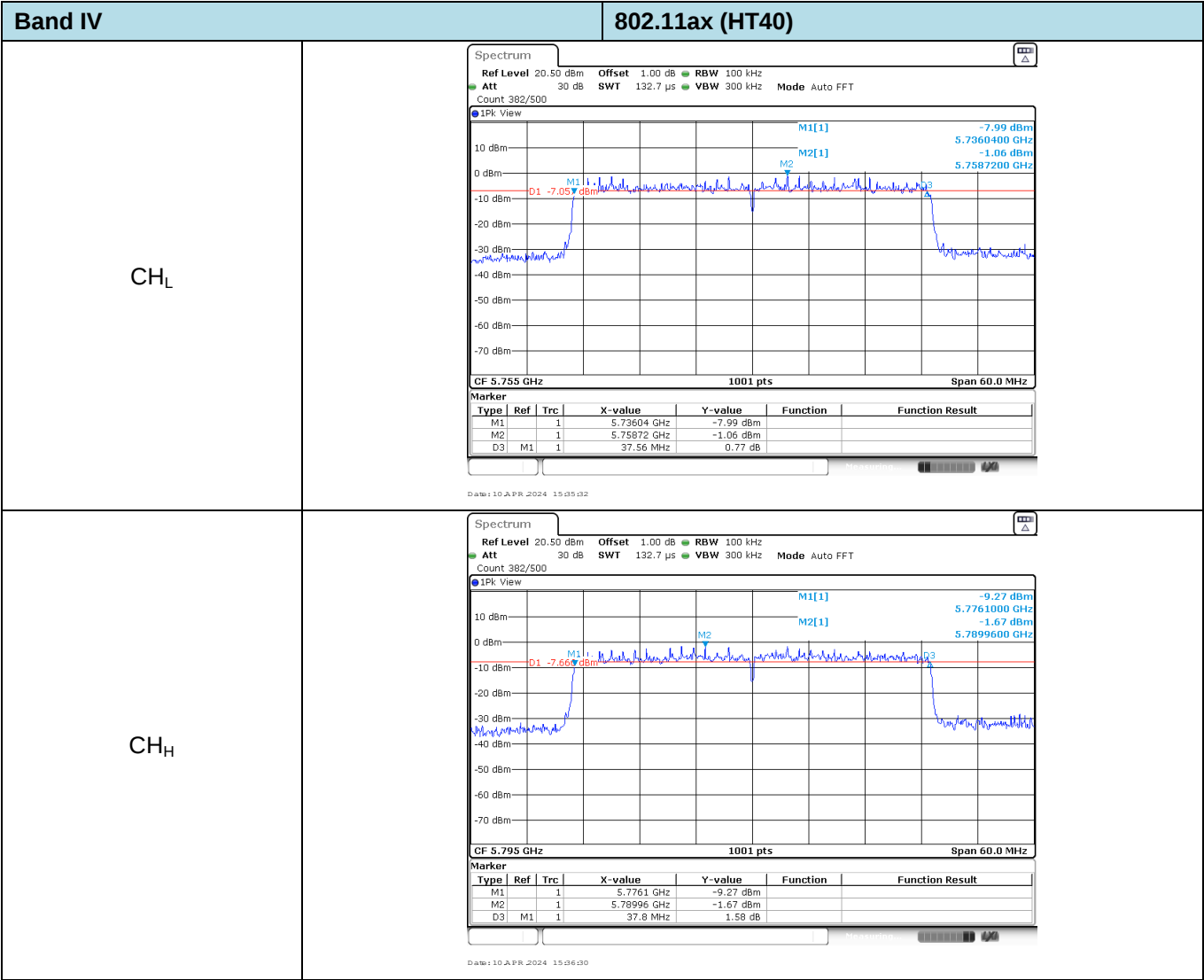
$$\text{CH}_M$$


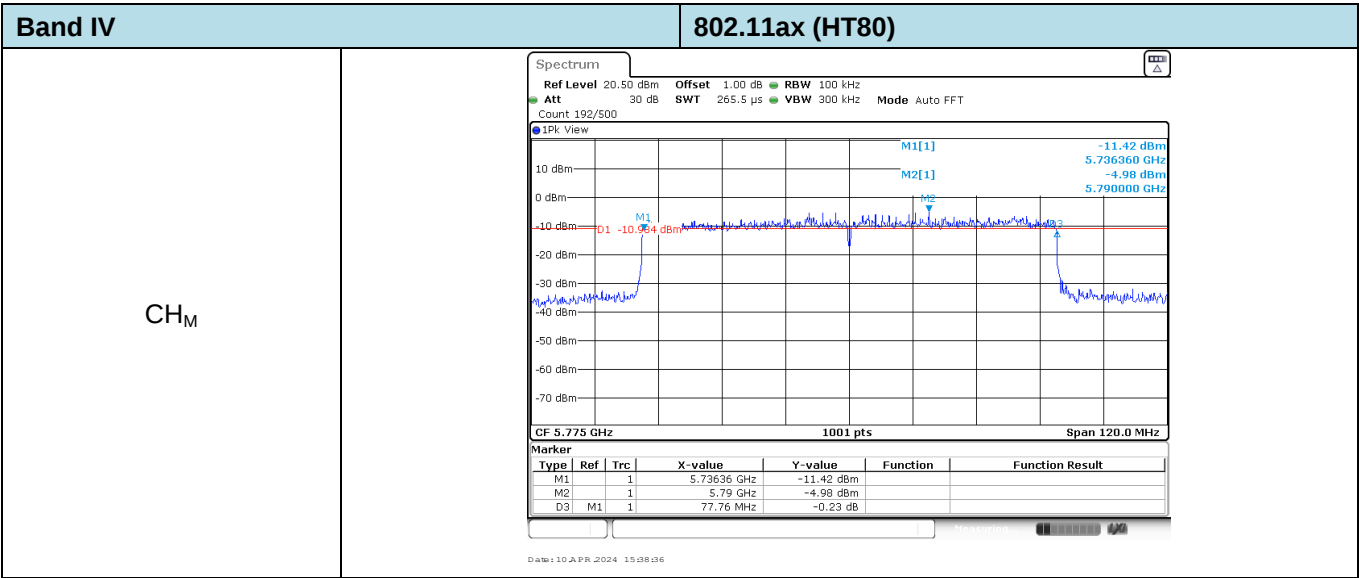
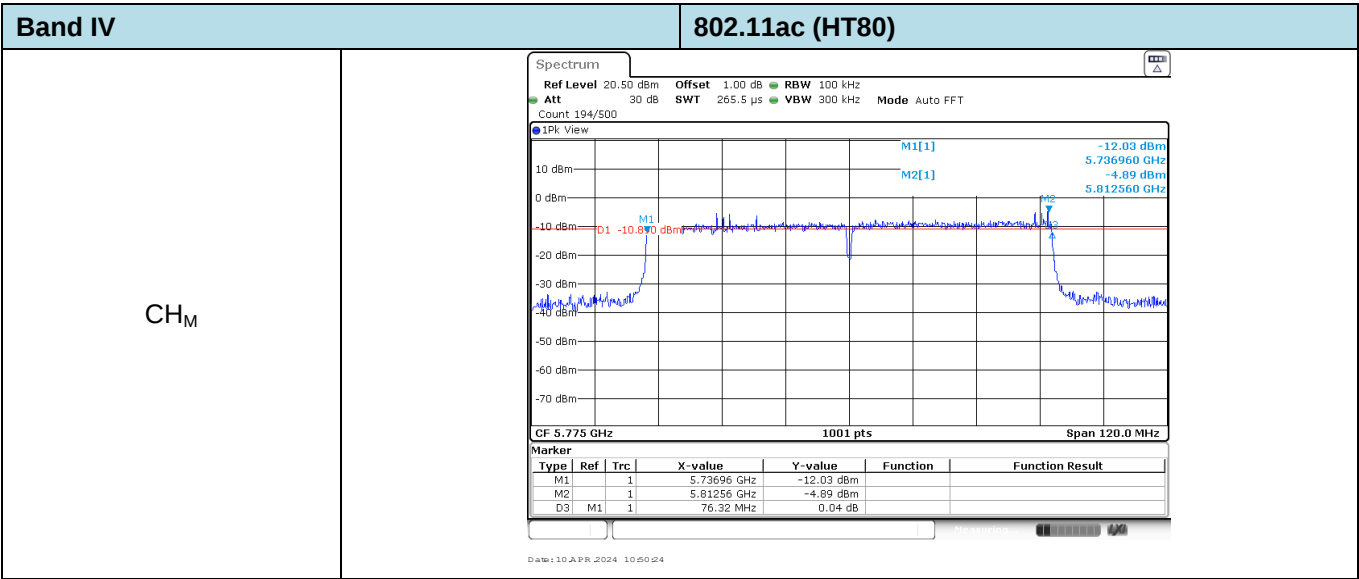
Date: 10 APR 2024 15:30:41

$$\text{CH}_H$$


Date: 10 APR 2024 15:32:14







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
		Antenna 0	Antenna 1	Antenna 0	Antenna 1	
T _N	V _L	-18000.00	-17000.00	-3.47490	-3.28185	PASS
T _N	V _N	-18000.00	-17000.00	-3.47490	-3.28185	PASS
T _N	V _H	-18000.00	-18000.00	-3.47490	-3.47490	PASS

Band: IV				Test Frequency: 5745.00MHz		
Temperature (°C)	Voltage (V)	Frequency Deviation (Hz)		Frequency Deviation (ppm)		Result
		Antenna 0	Antenna 1	Antenna 0	Antenna 1	
T _N	V _L	-9000.00	-21000.00	-1.56658	-3.65535	PASS
T _N	V _N	-1000.00	-21000.00	-0.17406	-3.65535	PASS
T _N	V _H	-13000.00	-22000.00	-2.26284	-3.82942	PASS

Band: I(ax)				Test Frequency: 5180.00MHz		
Temperature (°C)	Voltage (V)	Frequency Deviation (Hz)		Frequency Deviation (ppm)		Result
		Antenna 0	Antenna 1	Antenna 0	Antenna 1	
T _N	V _L	-21000.00	-14000.00	-4.05405	-2.70270	PASS
T _N	V _N	-21000.00	-11000.00	-4.05405	-2.12355	PASS
T _N	V _H	-21000.00	-17000.00	-4.05405	-3.28185	PASS

Band: IV(ax)				Test Frequency: 5745.00MHz		
Temperature (°C)	Voltage (V)	Frequency Deviation (Hz)		Frequency Deviation (ppm)		Result
		Antenna 0	Antenna 1	Antenna 0	Antenna 1	
T _N	V _L	-19000.00	-10000.00	-3.30722	-1.74064	PASS
T _N	V _N	-19000.00	-5000.00	-3.30722	-0.87032	PASS
T _N	V _H	-20000.00	-12000.00	-3.48129	-2.08877	PASS

Temperature VS Frequency stability

Band: I				Test Frequency: 5180.00MHz		
Voltage (V)	Temperature (°C)	Frequency Deviation (Hz)		Frequency Deviation (ppm)		Result
		Antenna 0	Antenna 1	Antenna 0	Antenna 1	
V _N	-20	-17000.00	-17000.00	-3.28185	-3.28185	PASS
V _N	-10	-18000.00	-18000.00	-3.47490	-3.47490	PASS
V _N	0	-18000.00	-18000.00	-3.47490	-3.47490	PASS
V _N	10	-18000.00	-17000.00	-3.47490	-3.28185	PASS
V _N	20	-17000.00	-17000.00	-3.28185	-3.28185	PASS
V _N	30	-18000.00	-17000.00	-3.47490	-3.28185	PASS
V _N	40	-18000.00	-17000.00	-3.47490	-3.28185	PASS
V _N	50	-17000.00	-17000.00	-3.28185	-3.28185	PASS

Band: IV				Test Frequency: 5745.00MHz		
Voltage (V)	Temperature (°C)	Frequency Deviation (Hz)		Frequency Deviation (ppm)		Result
		Antenna 0	Antenna 1	Antenna 0	Antenna 1	
V _N	-20	-18000.00	-22000.00	-3.13316	-3.82942	PASS
V _N	-10	-18000.00	-22000.00	-3.13316	-3.82942	PASS
V _N	0	-19000.00	-22000.00	-3.30722	-3.82942	PASS
V _N	10	-19000.00	-22000.00	-3.30722	-3.82942	PASS
V _N	20	-20000.00	-23000.00	-3.48129	-4.00348	PASS
V _N	30	-21000.00	-22000.00	-3.65535	-3.82942	PASS
V _N	40	-21000.00	-22000.00	-3.65535	-3.82942	PASS
V _N	50	-21000.00	-22000.00	-3.65535	-3.82942	PASS

Band: I(ax)				Test Frequency: 5180.00MHz		
Voltage (V)	Temperature (°C)	Frequency Deviation (Hz)		Frequency Deviation (ppm)		Result
		Antenna 0	Antenna 1	Antenna 0	Antenna 1	
V _N	-20	-22000.00	-19000.00	-4.24710	-3.66795	PASS
V _N	-10	-22000.00	-19000.00	-4.24710	-3.66795	PASS
V _N	0	-22000.00	-20000.00	-4.24710	-3.86100	PASS
V _N	10	-22000.00	-20000.00	-4.24710	-3.86100	PASS
V _N	20	-22000.00	-20000.00	-4.24710	-3.86100	PASS
V _N	30	-22000.00	-20000.00	-4.24710	-3.86100	PASS
V _N	40	-22000.00	-21000.00	-4.24710	-4.05405	PASS
V _N	50	-22000.00	-21000.00	-4.24710	-4.05405	PASS

Band: IV(ax)				Test Frequency: 5745.00MHz		
Voltage (V)	Temperature (°C)	Frequency Deviation (Hz)		Frequency Deviation (ppm)		Result
		Antenna 0	Antenna 1	Antenna 0	Antenna 1	
V _N	-20	-20000.00	-15000.00	-3.48129	-2.61097	PASS
V _N	-10	-20000.00	-16000.00	-3.48129	-2.78503	PASS
V _N	0	-20000.00	-17000.00	-3.48129	-2.95910	PASS
V _N	10	-20000.00	-17000.00	-3.48129	-2.95910	PASS
V _N	20	-20000.00	-18000.00	-3.48129	-3.13316	PASS
V _N	30	-20000.00	-18000.00	-3.48129	-3.13316	PASS
V _N	40	-21000.00	-18000.00	-3.65535	-3.13316	PASS
V _N	50	-21000.00	-19000.00	-3.65535	-3.30722	PASS

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