

APPENDIX REPORT

Project No.	SHT2303063702EW	Radio Specification	WIFI 5G
Test sample No.	YPHT23030637001	Model No.	EVOLUTION MEDICAL
Start test date	2023-06-02	Finish date	2023-06-06
Temperature	25.5℃	Humidity	57%
Test Engineer	Xiaoqin Li	Auditor	<i>Xiaodong Zheo</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	Frequency stability	PASS

Appendix A: Maximum Conducted Output Power

Band	Bandwidth (MHz)	Type	Channel	Reading (dBm)	Duty cycle (%)	Duty cycle factor (dB)	Conducted Output Power (dBm)	Limit (dBm)	Result
I	20	802.11ac	CH _L	13.97	73.21	1.35	15.32	24.00	Pass
			CH _M	14.23	73.21	1.35	15.58		
			CH _H	14.68	73.21	1.35	16.03		
		802.11n	CH _L	14.10	72.87	1.37	15.47	24.00	Pass
			CH _M	14.03	77.25	1.12	15.15		
			CH _H	14.87	72.87	1.37	16.24		
		802.11a	CH _L	13.83	76.26	1.18	15.01	24.00	Pass
			CH _M	13.78	76.56	1.16	14.94		
			CH _H	14.28	76.34	1.17	15.45		
	40	802.11ac	CH _L	12.51	57.47	2.41	14.92	24.00	Pass
			CH _H	13.05	60.41	2.19	15.24		
		802.11n	CH _L	13.63	66.56	1.77	15.40	24.00	Pass
			CH _H	14.40	63.19	1.99	16.39		
80	802.11ac	CH _M	14.04	57.28	2.42	16.46	24.00	Pass	

Band	Bandwidth (MHz)	Type	Channel	Reading (dBm)	Duty cycle (%)	Duty cycle factor (dB)	Conducted Output Power (dBm)	Limit (dBm)	Result
II	20	802.11ac	CH _L	14.08	75.66	1.21	15.29	24.00	Pass
			CH _M	14.38	75.66	1.21	15.59		
			CH _H	14.82	77.83	1.09	15.91		
		802.11n	CH _L	14.22	72.87	1.37	15.59	24.00	Pass
			CH _M	14.20	75.00	1.25	15.45		
			CH _H	14.83	75.00	1.25	16.08		
		802.11a	CH _L	13.95	74.52	1.28	15.23	24.00	Pass
			CH _M	13.95	74.52	1.28	15.23		
			CH _H	14.44	74.52	1.28	15.72		
	40	802.11ac	CH _L	12.61	60.20	2.20	14.81	24.00	Pass
			CH _H	13.18	60.20	2.20	15.38		
		802.11n	CH _L	13.78	73.29	1.35	15.13	24.00	Pass
			CH _H	14.60	63.32	1.98	16.58		
80	802.11ac	CH _M	14.12	56.44	2.48	16.60	24.00	Pass	

Band	Bandwidth (MHz)	Type	Channel	Reading (dBm)	Duty cycle (%)	Duty cycle factor (dB)	Conducted Output Power (dBm)	Limit (dBm)	Result
III	20	802.11ac	CH _L	14.09	74.88	1.26	15.35	24.00	Pass
			CH _{M1}	14.34	74.88	1.26	15.60		
			CH _{M2}	14.86	74.88	1.26	16.12		
			CH _H	14.59	74.88	1.26	15.85		
		802.11n	CH _L	15.06	75.00	1.25	16.31	24.00	Pass
			CH _{M1}	14.23	77.25	1.12	15.35		
			CH _{M2}	14.15	77.25	1.12	15.27		
			CH _H	14.62	74.52	1.28	15.90		
		802.11a	CH _L	13.96	76.56	1.16	15.12	24.00	Pass
			CH _{M1}	13.90	74.52	1.28	15.18		
			CH _{M2}	14.48	77.85	1.09	15.57		
			CH _H	14.65	77.85	1.09	15.74		
	40	802.11ac	CH _L	12.61	69.72	1.57	14.18	24.00	Pass
			CH _{M1}	13.18	63.44	1.98	15.16		
			CH _{M2}	13.61	63.44	1.98	15.59		
			CH _H	13.73	66.79	1.75	15.48		
		802.11n	CH _L	14.03	73.19	1.36	15.39	24.00	Pass
			CH _{M1}	14.68	70.76	1.50	16.18		
			CH _{M2}	14.22	73.19	1.36	15.58		
			CH _H	15.00	73.19	1.36	16.36		
	80	802.11ac	CH _L	14.65	65.14	1.86	16.51	24.00	Pass
CH _M			14.76	64.74	1.89	16.65			
CH _H			14.16	64.74	1.89	16.05			

Band	Bandwidth (MHz)	Type	Channel	Reading (dBm)	Duty cycle (%)	Duty cycle factor (dB)	Conducted Output Power (dBm)	Limit (dBm)	Result
IV	20	802.11ac	CH _L	14.16	77.45	1.11	15.27	30.00	Pass
			CH _M	14.33	77.45	1.11	15.44		
			CH _H	14.84	77.45	1.11	15.95		
		802.11n	CH _L	14.24	77.25	1.12	15.36	30.00	Pass
			CH _M	14.17	79.65	0.99	15.16		
			CH _H	15.09	77.25	1.12	16.21		
	802.11a	CH _L	13.95	85.96	0.66	14.61	30.00	Pass	
		CH _M	13.89	82.22	0.85	14.74			
		CH _H	13.46	83.40	0.79	14.25			
	40	802.11ac	CH _L	13.21	67.33	1.72	14.93	30.00	Pass
			CH _H	13.44	69.86	1.56	15.00		
		802.11n	CH _L	14.54	65.57	1.83	16.37	30.00	Pass
CH _H			14.27	68.97	1.61	15.88			
80	802.11ac	CH _M	14.73	56.44	2.48	17.21	30.00	Pass	

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

Appendix B: Maximum Power Spectral Density

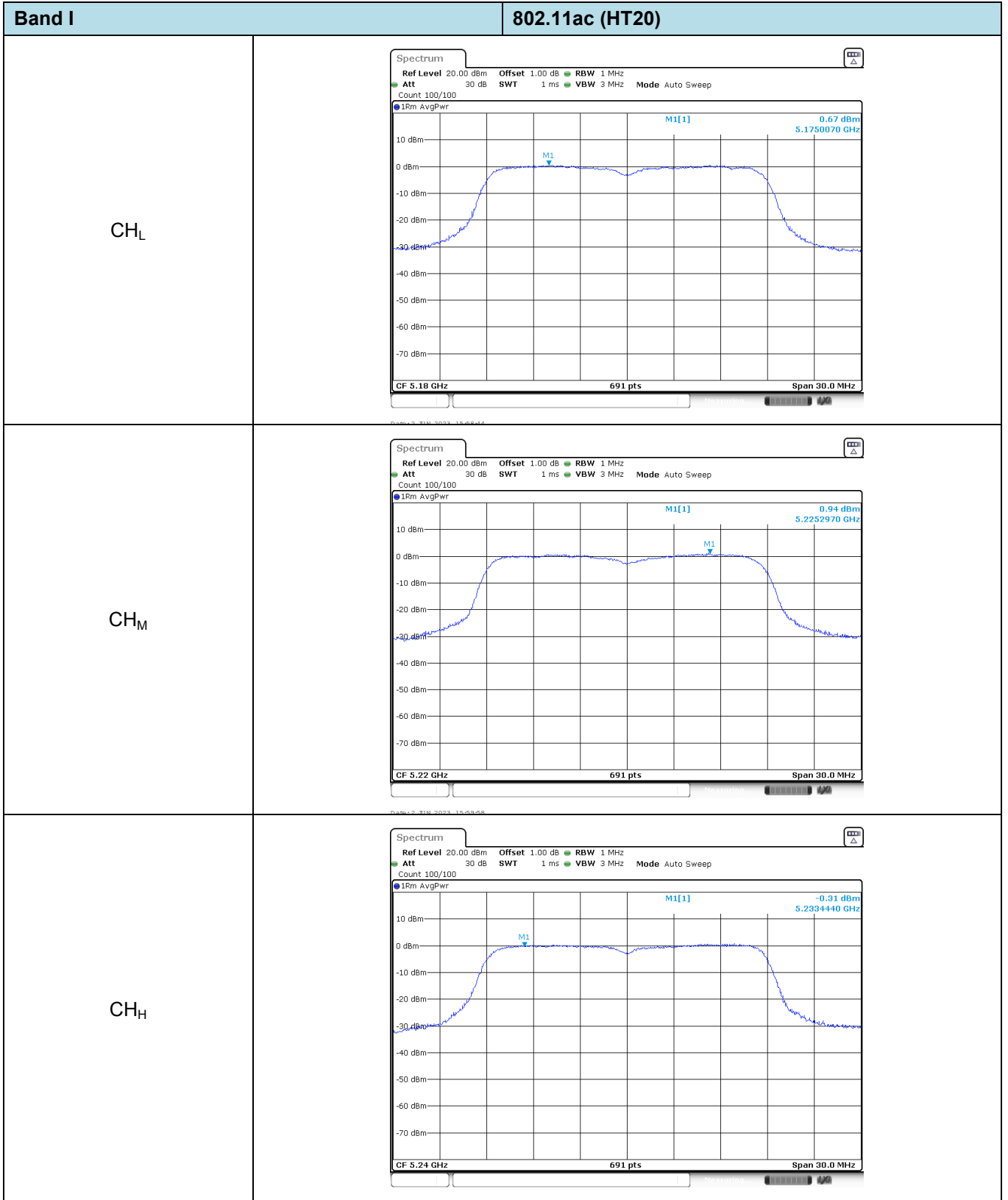
Band	Bandwidth (MHz)	Type	Channel	Reading (dBm)	Duty cycle (%)	Duty cycle factor (dB)	Power Spectral Density (dBm/MHz)	Limit (dBm/MHz)	Result
I	20	802.11ac	CH _L	0.67	73.21	1.35	2.02	11.00	Pass
			CH _M	0.94	73.21	1.35	2.29		
			CH _H	-0.31	73.21	1.35	1.04		
		802.11n	CH _L	2.66	72.87	1.37	4.03	11.00	Pass
			CH _M	2.58	77.25	1.12	3.70		
			CH _H	3.26	72.87	1.37	4.63		
		802.11a	CH _L	2.52	76.26	1.18	3.70	11.00	Pass
			CH _M	3.31	76.56	1.16	4.47		
			CH _H	3.47	76.34	1.17	4.64		
	40	802.11ac	CH _L	-3.08	57.47	2.41	-0.67	11.00	Pass
			CH _H	-3.16	60.41	2.19	-0.97		
		802.11n	CH _L	-3.09	66.56	1.77	-1.32	11.00	Pass
			CH _H	-2.69	63.19	1.99	-0.70		
	80	802.11ac	CH _M	-5.89	57.28	2.42	-3.47	11.00	Pass

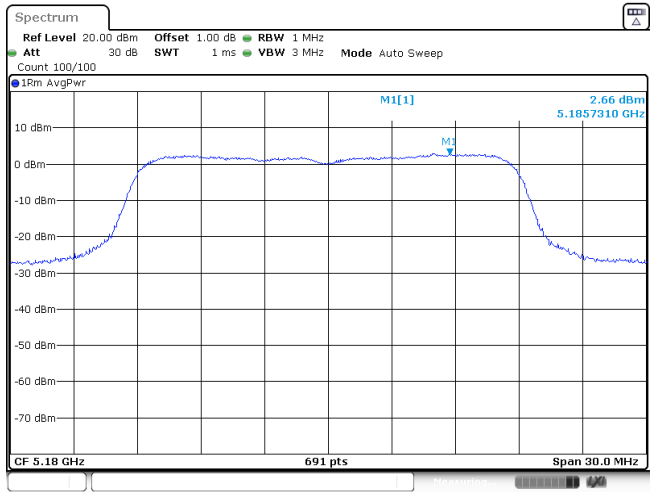
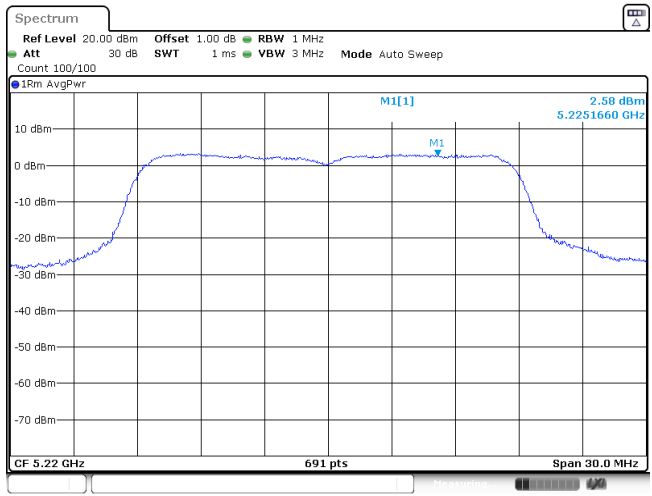
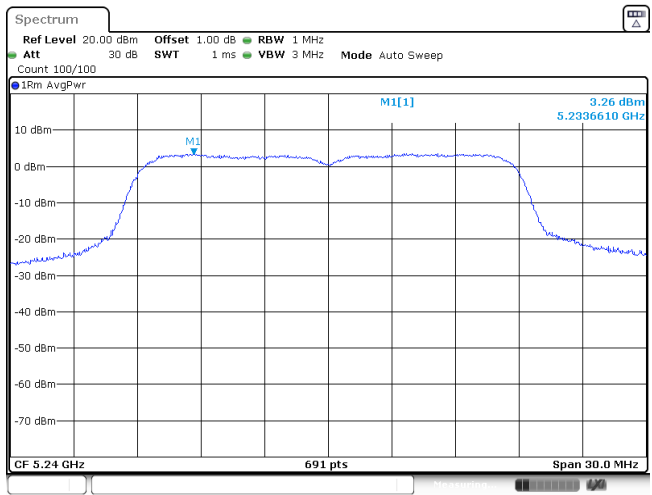
Band	Bandwidth (MHz)	Type	Channel	Reading (dBm)	Duty cycle (%)	Duty cycle factor (dB)	Power Spectral Density (dBm/MHz)	Limit (dBm/MHz)	Result
II	20	802.11ac	CH _L	0.68	75.66	1.21	1.89	11.00	Pass
			CH _M	0.39	75.66	1.21	1.60		
			CH _H	-0.48	77.83	1.09	0.61		
		802.11n	CH _L	0.27	72.87	1.37	1.64	11.00	Pass
			CH _M	0.38	75.00	1.25	1.63		
			CH _H	0.17	75.00	1.25	1.42		
		802.11a	CH _L	0.53	74.52	1.28	1.81	11.00	Pass
			CH _M	0.74	74.52	1.28	2.02		
			CH _H	0.71	74.52	1.28	1.99		
	40	802.11ac	CH _L	-4.53	60.20	2.20	-2.33	11.00	Pass
			CH _H	-4.44	60.20	2.20	-2.24		
		802.11n	CH _L	-3.82	73.29	1.35	-2.47	11.00	Pass
			CH _H	-3.91	63.32	1.98	-1.93		
	80	802.11ac	CH _M	-6.95	56.44	2.48	-4.47	11.00	Pass

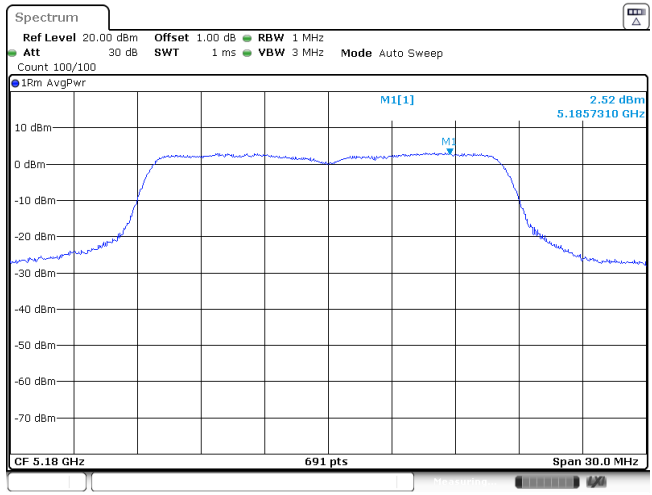
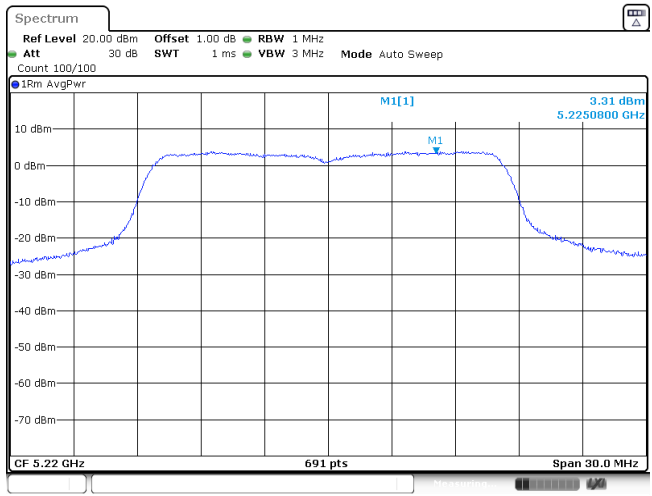
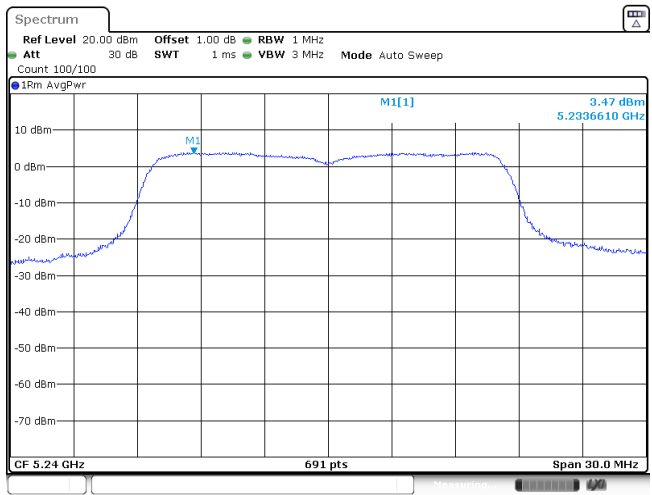
Band	Bandwidth (MHz)	Type	Channel	Reading (dBm)	Duty cycle (%)	Duty cycle factor (dB)	Power Spectral Density (dBm/MHz)	Limit (dBm/MHz)	Result
III	20	802.11ac	CH _L	2.59	74.88	1.26	3.85	11.00	Pass
			CH _M	1.95	74.88	1.26	3.21		
			CH _H	2.60	74.88	1.26	3.86		
		802.11n	CH _L	2.43	75.00	1.25	3.68	11.00	Pass
			CH _M	1.23	77.25	1.12	2.35		
			CH _H	2.07	74.52	1.28	3.35		
		802.11a	CH _L	3.08	76.56	1.16	4.24	11.00	Pass
			CH _M	1.69	74.52	1.28	2.97		
			CH _H	2.96	77.85	1.09	4.05		
	40	802.11ac	CH _L	-2.84	69.72	1.57	-1.27	11.00	Pass
			CH _M	-2.64	63.44	1.98	-0.66		
			CH _H	-2.19	66.79	1.75	-0.44		
		802.11n	CH _L	-2.49	73.19	1.36	-1.13	11.00	Pass
			CH _M	-2.73	70.76	1.50	-1.23		
			CH _H	-2.19	73.19	1.36	-0.83		
80	802.11ac	CH _L	-4.65	65.14	1.86	-2.79	11.00	Pass	
		CH _H	-4.84	64.74	1.89	-2.95			

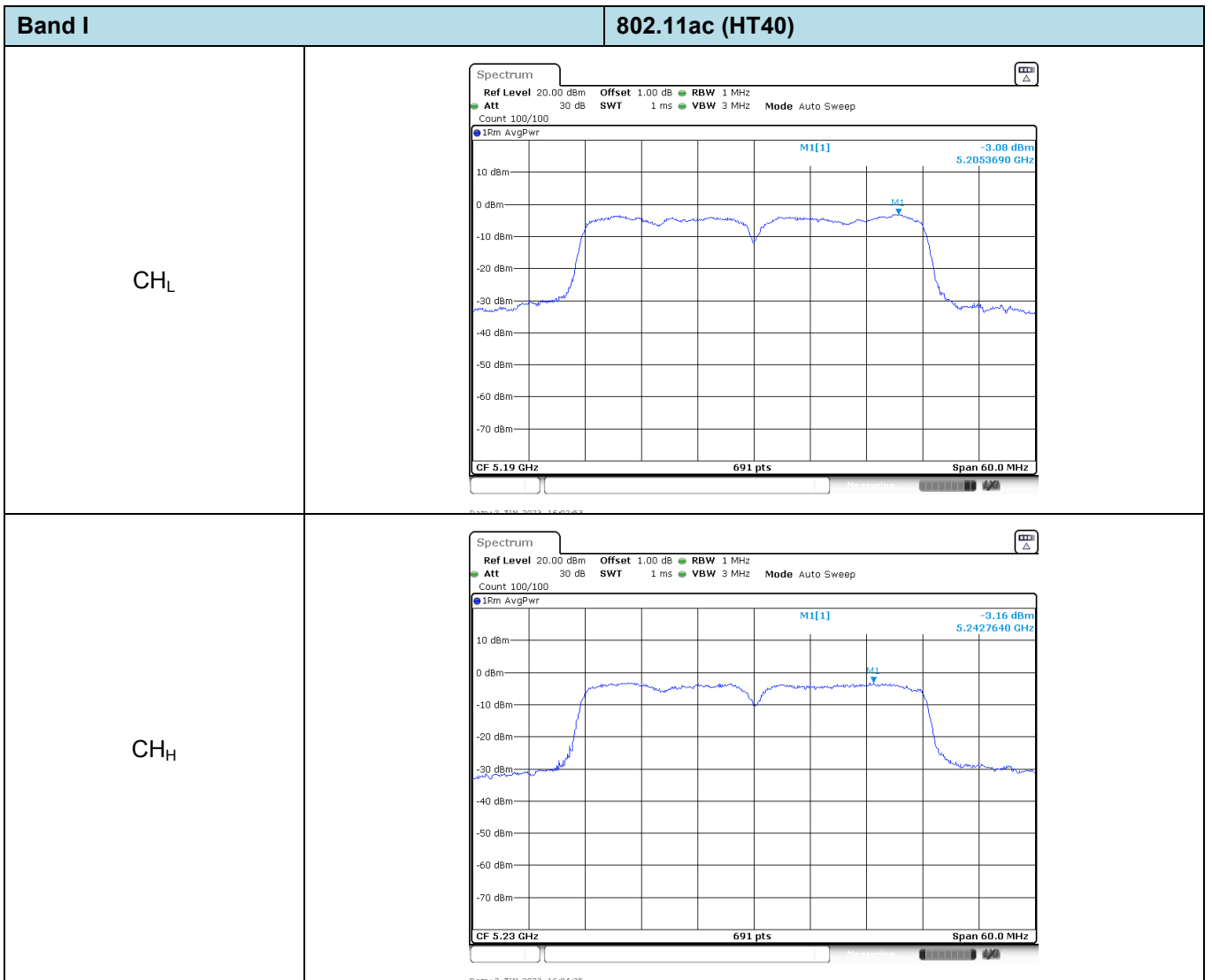
Band	Bandwidth (MHz)	Type	Channel	Reading (dBm)	Duty cycle (%)	Duty cycle factor (dB)	Power Spectral Density (dBm/500kHz)	Limit (dBm/500KHz)	Result
IV	20	802.11ac	CH _L	-1.10	77.45	1.11	0.01	30.00	Pass
			CH _M	-1.39	77.45	1.11	-0.28		
			CH _H	-0.83	77.45	1.11	0.28		
		802.11n	CH _L	-0.19	77.25	1.12	0.93	30.00	Pass
			CH _M	-0.67	79.65	0.99	0.32		
			CH _H	-0.59	77.25	1.12	0.53		
		802.11a	CH _L	-1.33	85.96	0.66	-0.67	30.00	Pass
			CH _M	-0.40	82.22	0.85	0.45		
			CH _H	-1.14	83.40	0.79	-0.35		
	40	802.11ac	CH _L	-3.97	67.33	1.72	-2.25	30.00	Pass
			CH _H	-4.24	69.86	1.56	-2.68		
		802.11n	CH _L	-5.22	65.57	1.83	-3.39	30.00	Pass
			CH _H	-3.99	68.97	1.61	-2.38		
80	802.11ac	CH _M	-6.22	56.44	2.48	-3.74	30.00	Pass	

Test plot as follows:



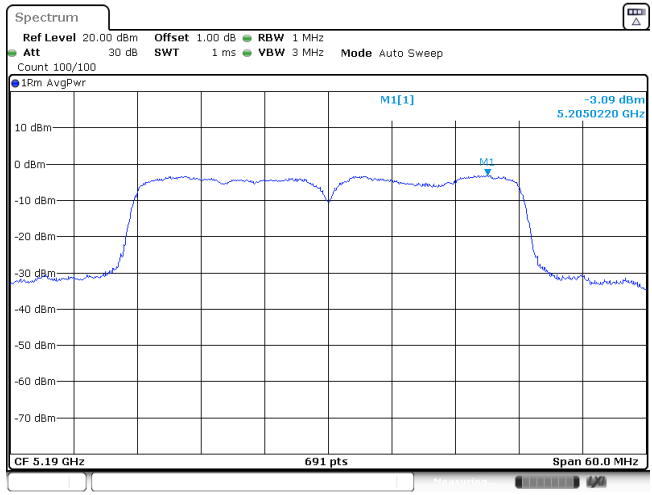
Band I		802.11n (HT20)
CH _L		
CH _M		
CH _H		

Band I		802.11a
CH _L		
CH _M		
CH _H		

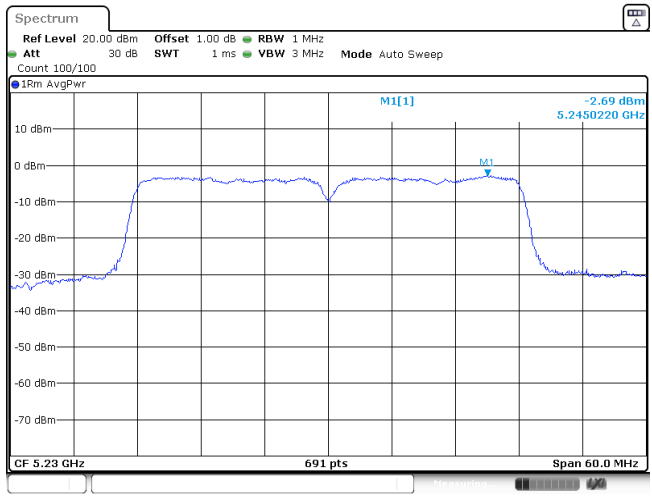


Band I **802.11n (HT40)**

CH_L

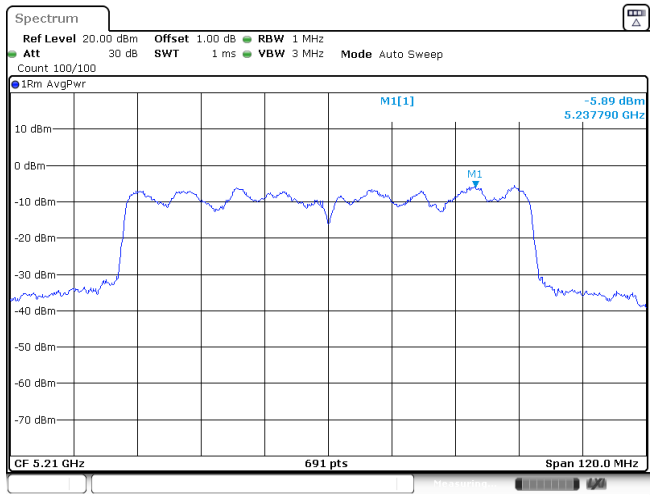


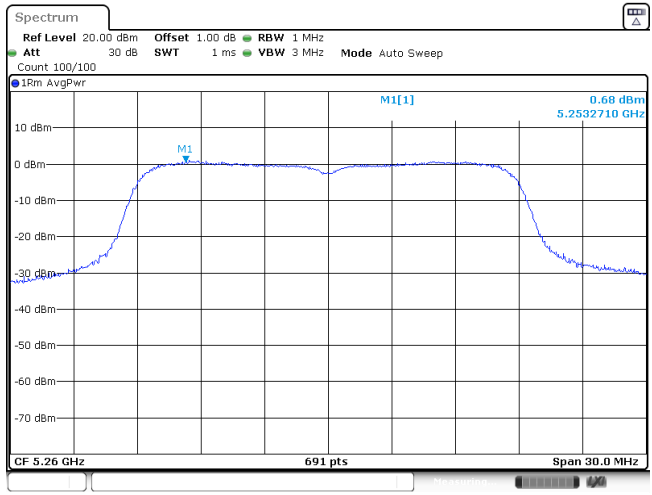
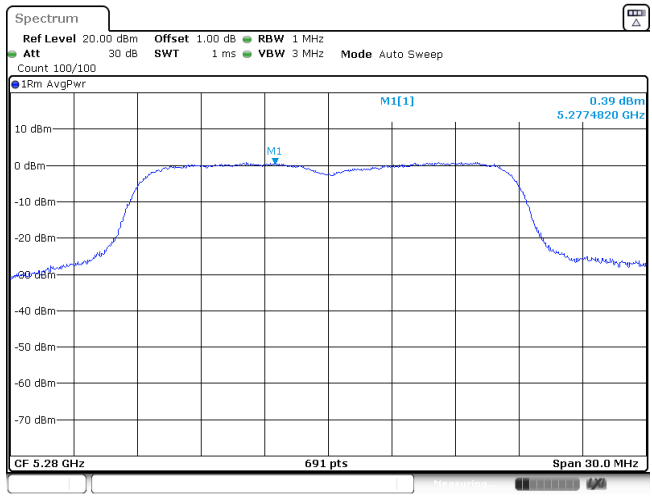
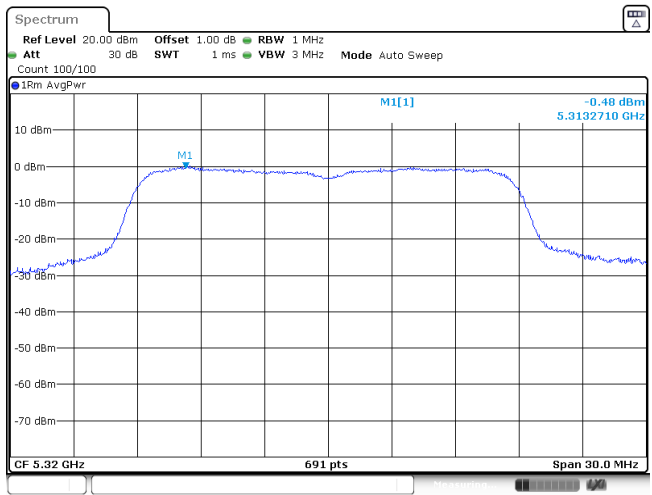
CH_H

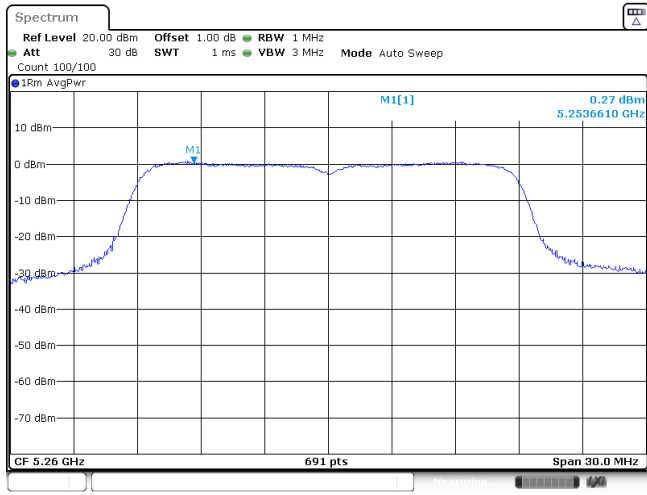
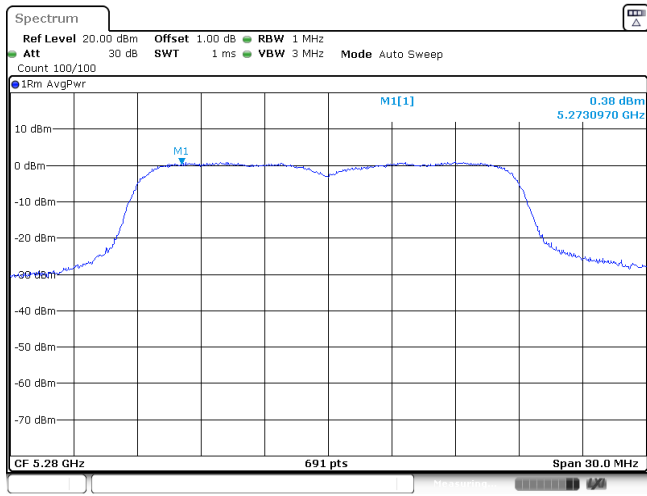
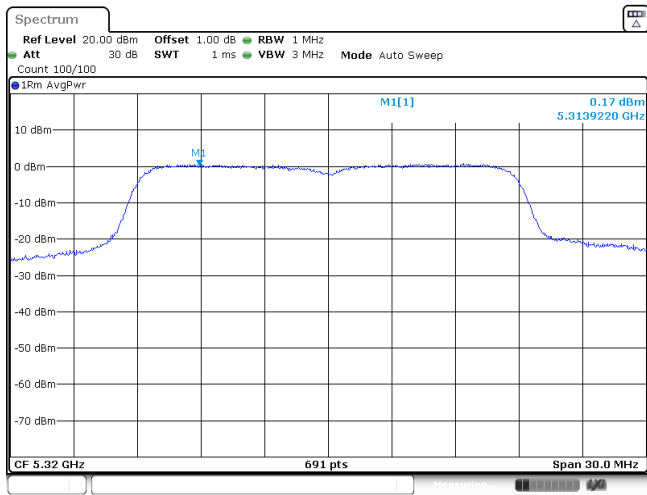


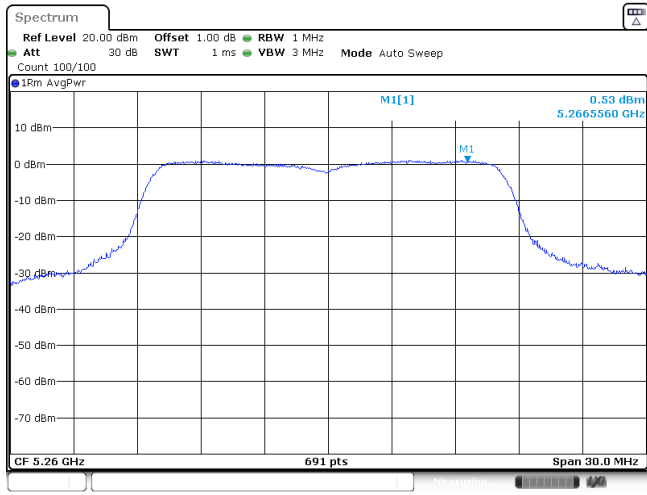
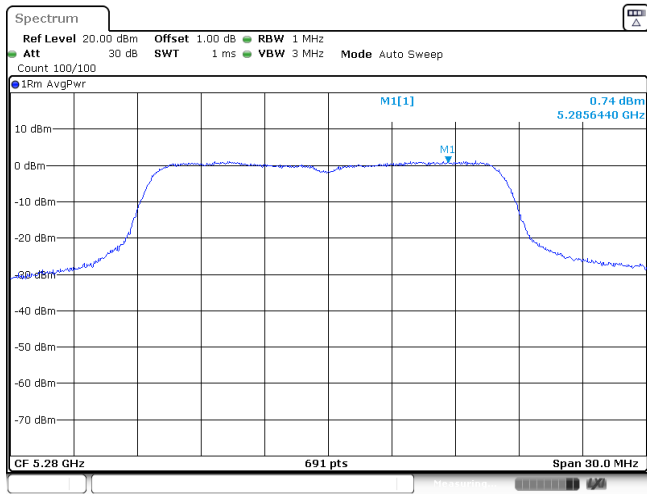
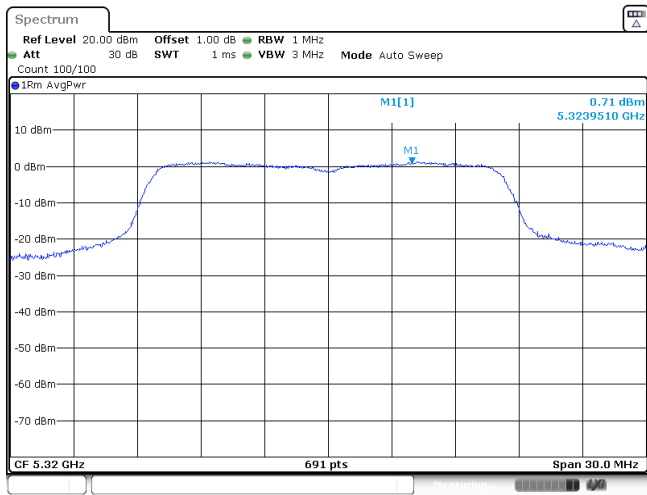
Band I **802.11ac (HT80)**

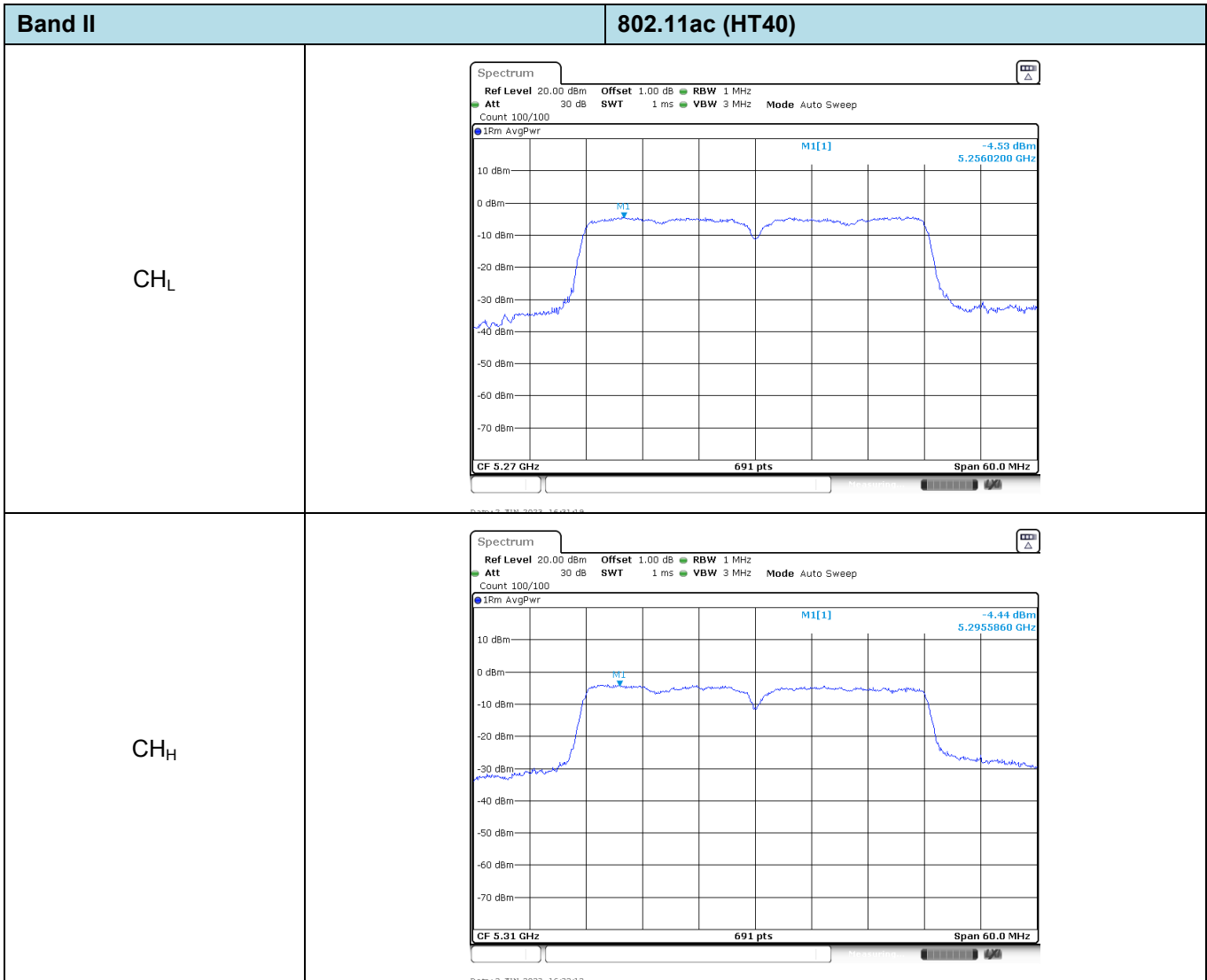
CH_M



Band II		802.11ac (HT20)
CH _L	 <p>Spectrum plot for channel CH_L. The plot shows a signal level of 0.68 dBm at 5.2532710 GHz. The y-axis ranges from -70 dBm to 10 dBm, and the x-axis ranges from 5.26 GHz to 5.30 GHz. The plot includes a peak marker M1[1] and a span of 30.0 MHz.</p>	
CH _M	 <p>Spectrum plot for channel CH_M. The plot shows a signal level of 0.39 dBm at 5.2774820 GHz. The y-axis ranges from -70 dBm to 10 dBm, and the x-axis ranges from 5.28 GHz to 5.32 GHz. The plot includes a peak marker M1[1] and a span of 30.0 MHz.</p>	
CH _H	 <p>Spectrum plot for channel CH_H. The plot shows a signal level of -0.48 dBm at 5.3132710 GHz. The y-axis ranges from -70 dBm to 10 dBm, and the x-axis ranges from 5.32 GHz to 5.36 GHz. The plot includes a peak marker M1[1] and a span of 30.0 MHz.</p>	

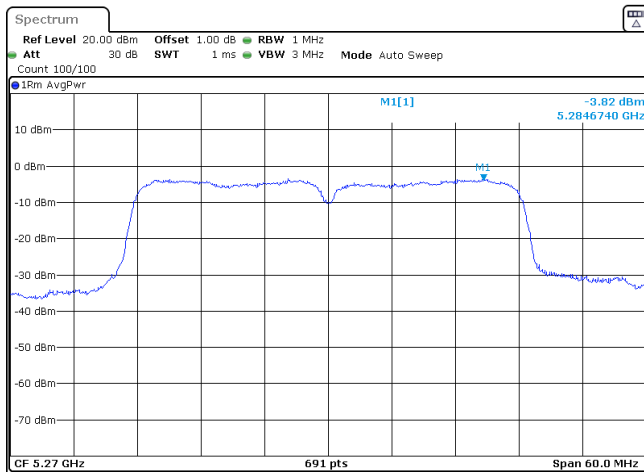
Band II		802.11n (HT20)
CH _L		
CH _M		
CH _H		

Band II		802.11a
CH _L		
CH _M		
CH _H		

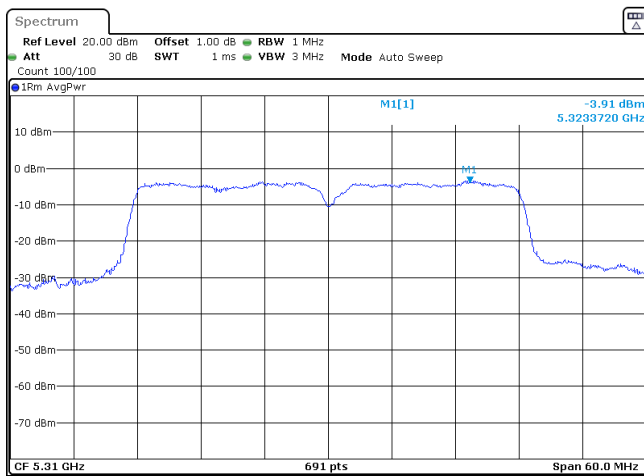


Band II **802.11n (HT40)**

CH_L

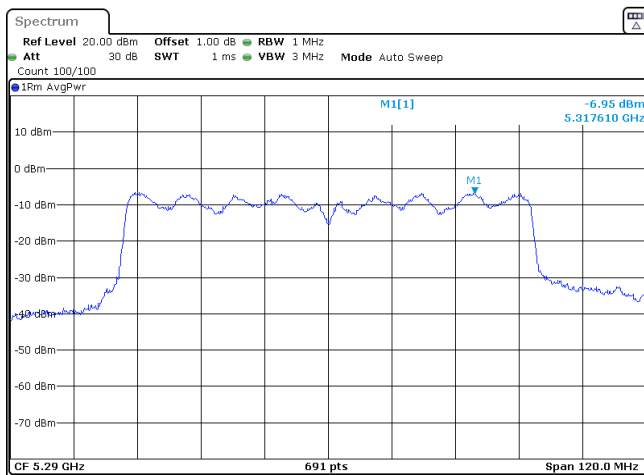


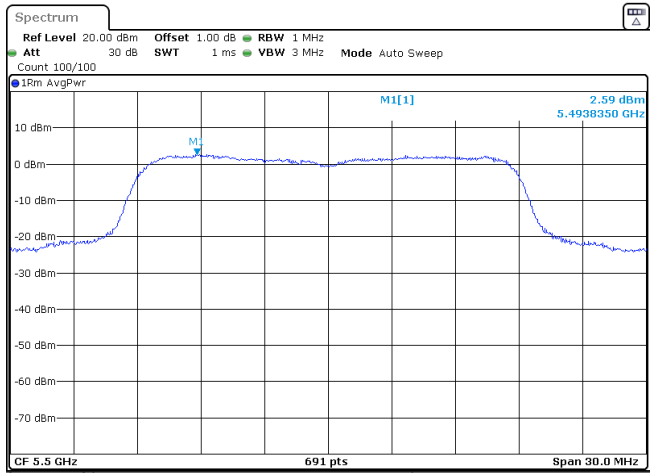
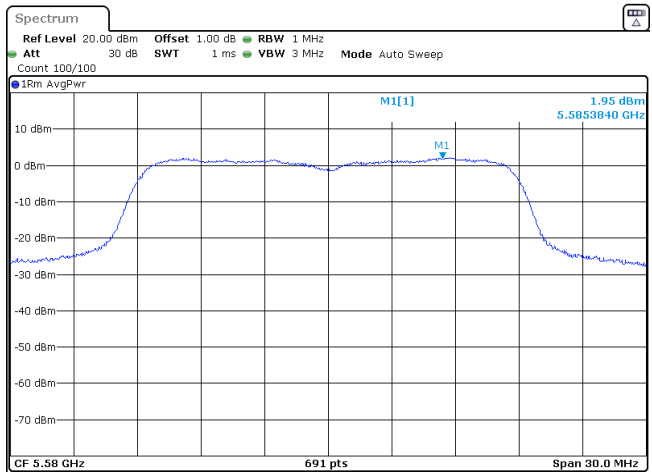
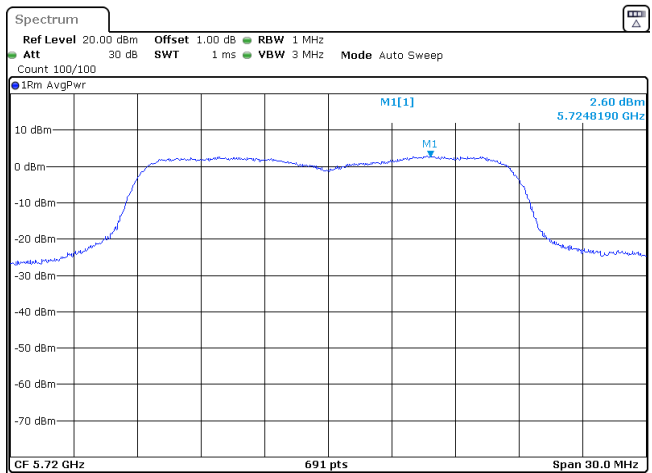
CH_H

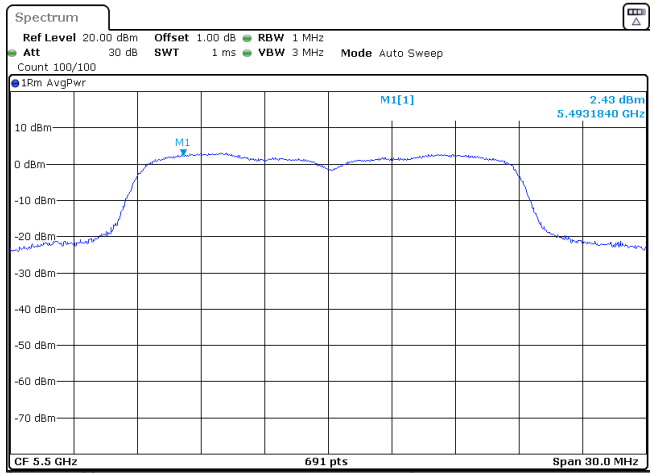
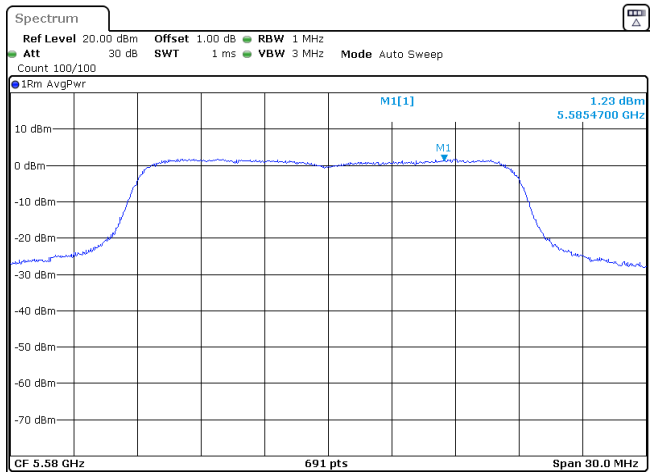
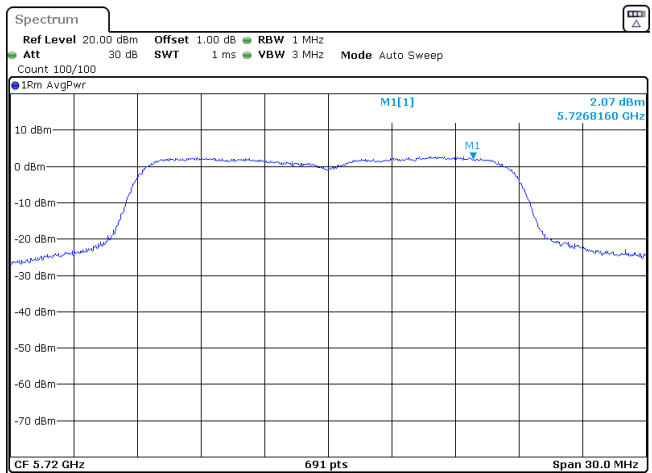


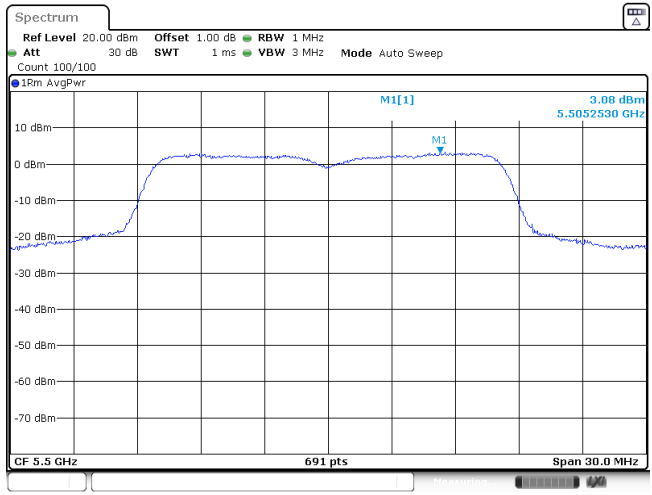
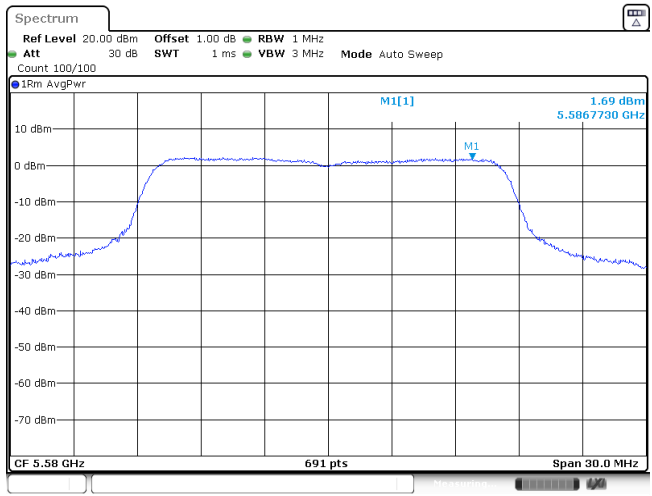
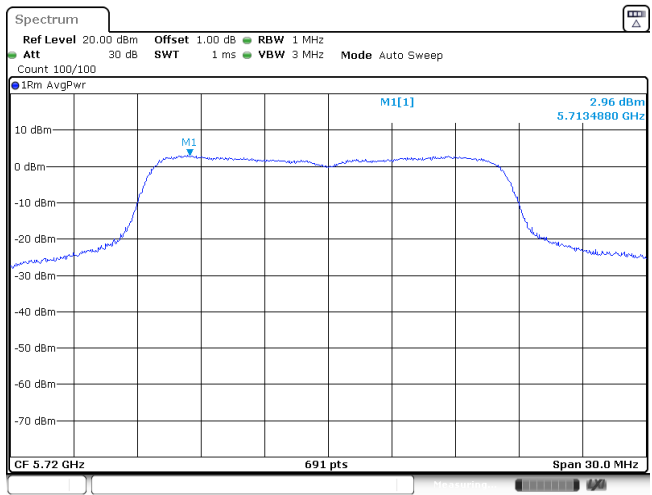
Band II **802.11ac (HT80)**

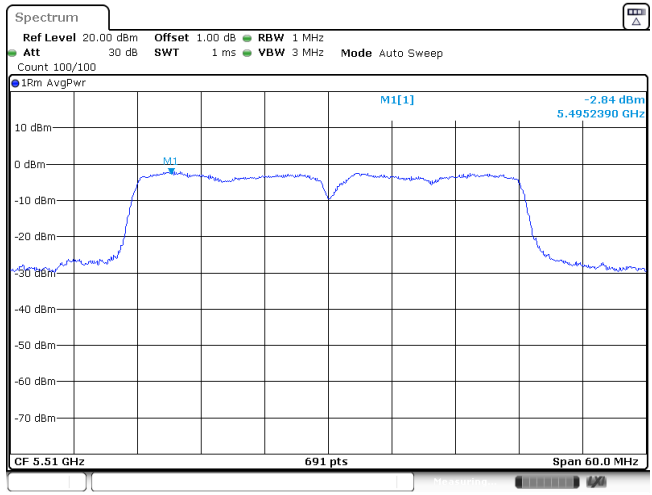
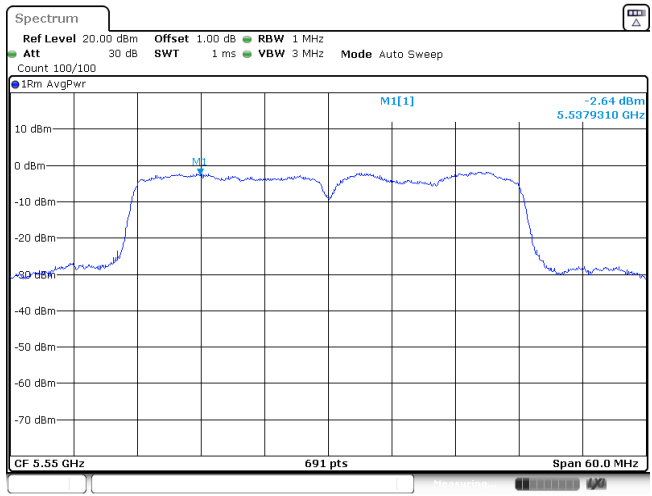
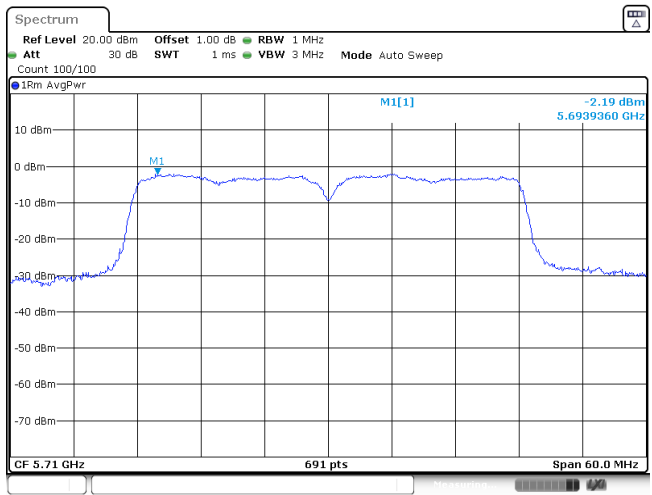
CH_M

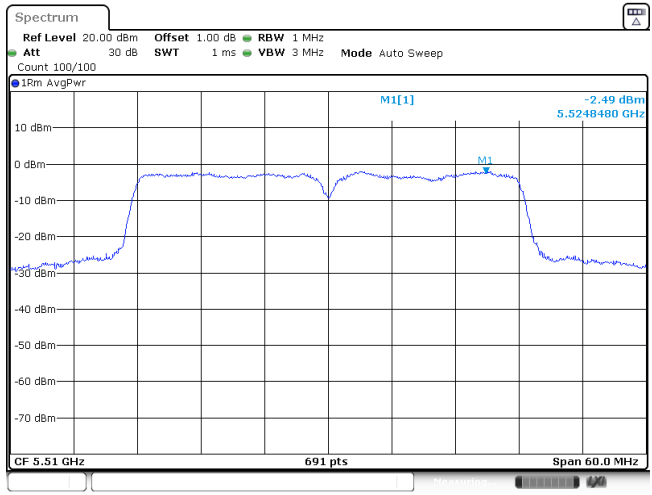
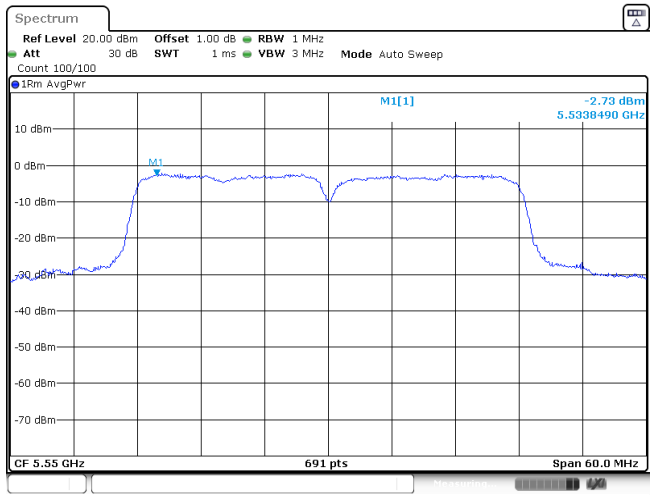
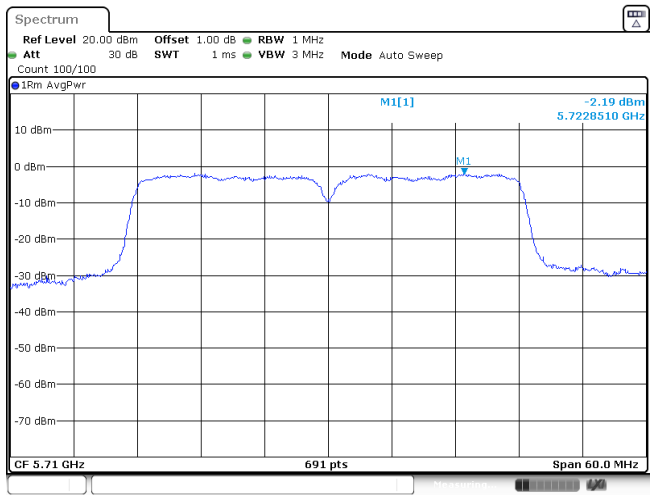


Band III		802.11ac (HT20)
CH _L		
CH _M		
CH _H		

Band III		802.11n (HT20)
CH _L		
CH _M		
CH _H		

Band III		802.11a
CH _L		
CH _M		
CH _H		

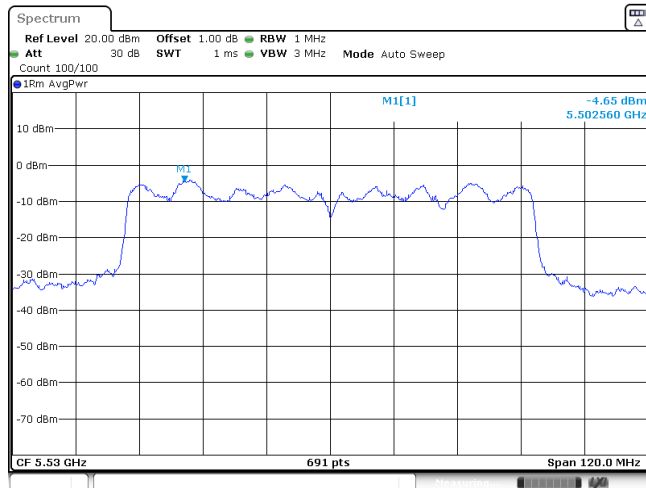
Band III		802.11ac (HT40)
CH _L		
CH _M		
CH _H		

Band III		802.11n (HT40)
CH _L		
CH _M		
CH _H		

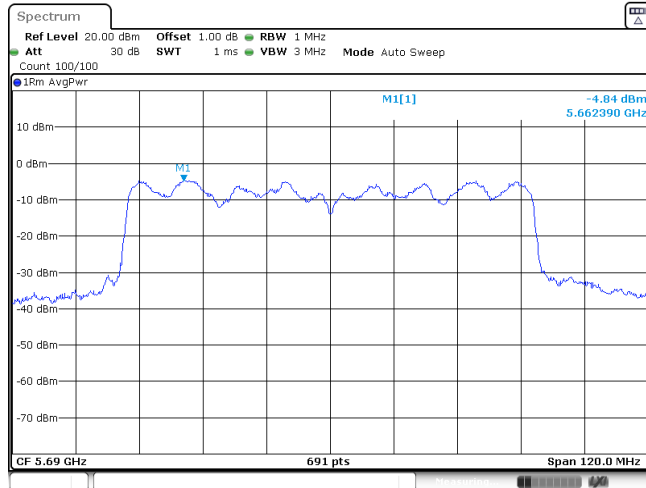
Band III

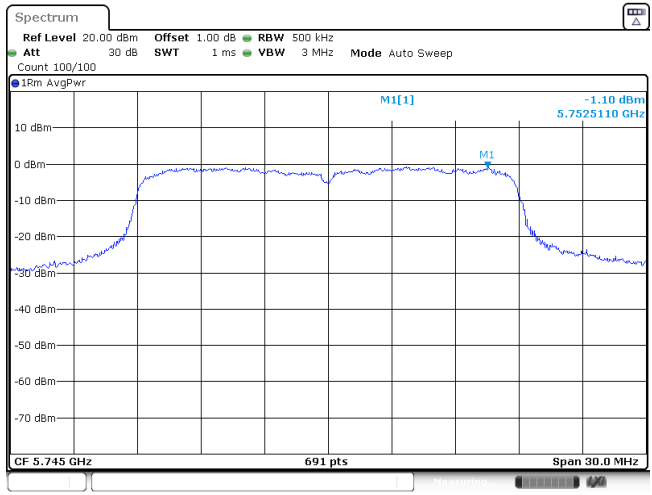
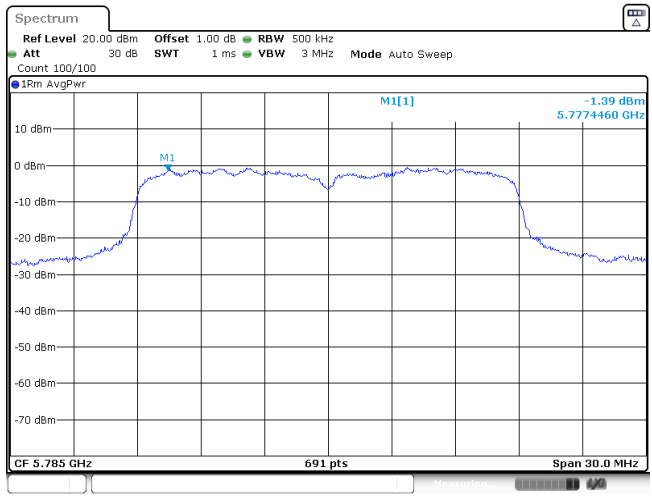
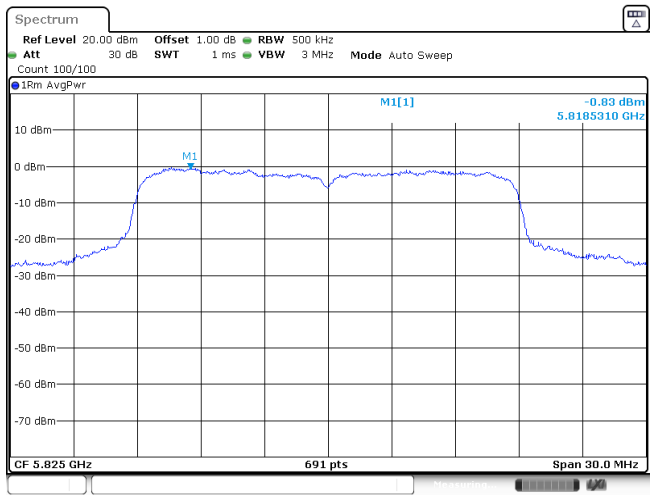
802.11ac (HT80)

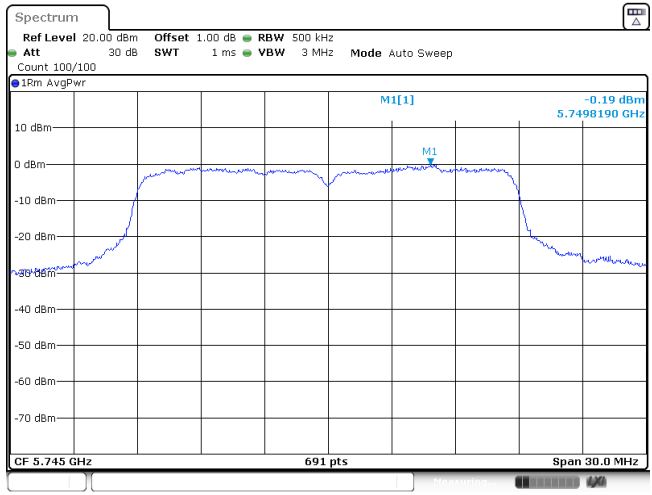
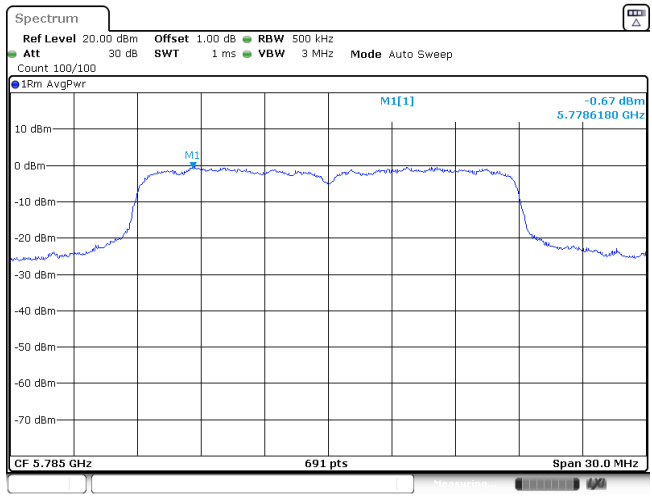
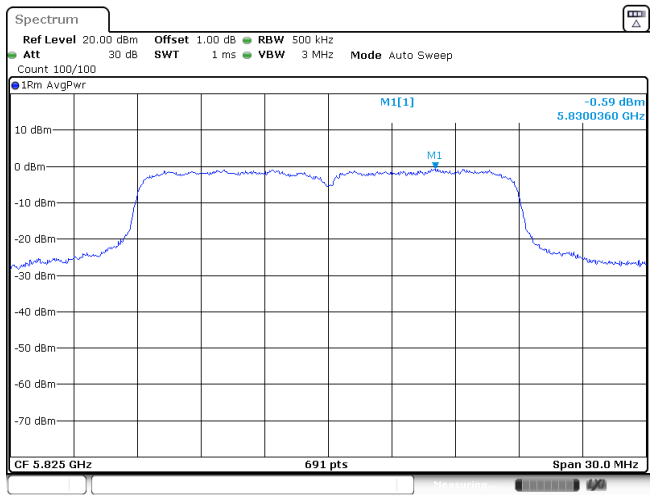
CH_L

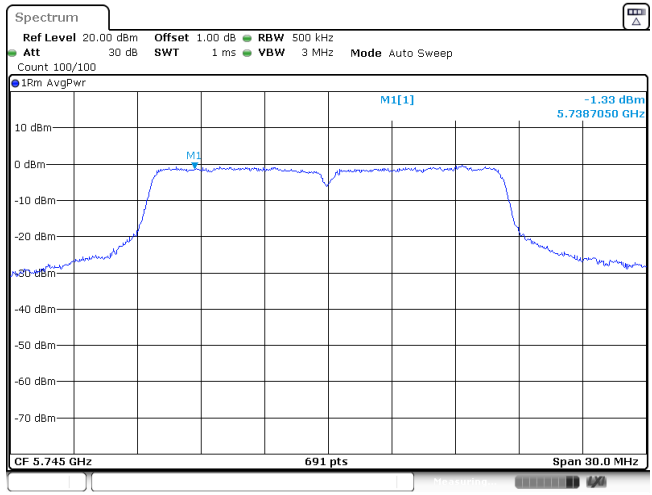
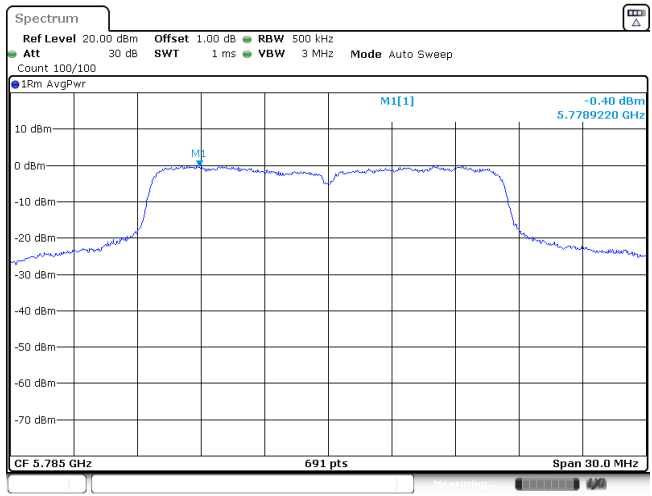
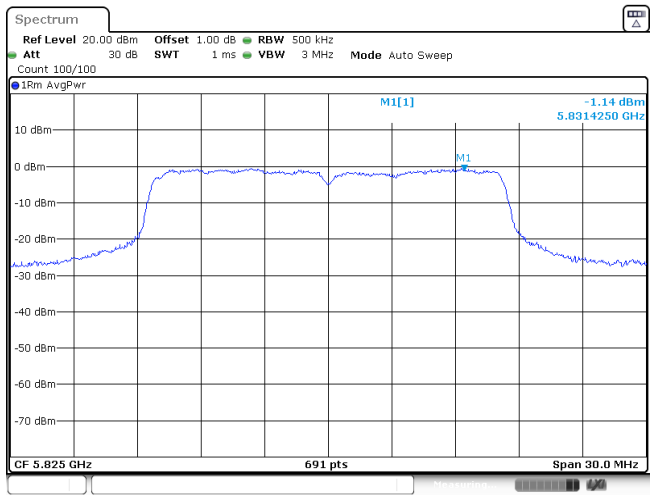


CH_H



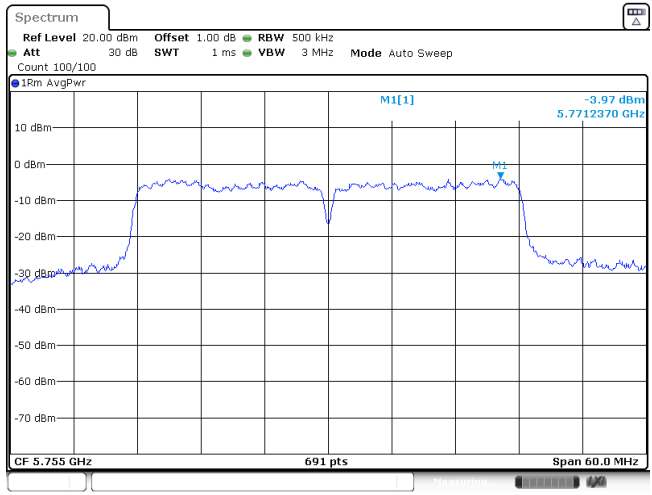
Band IV		802.11ac (HT20)
CH _L	 <p>Spectrum plot for channel CH_L. The plot shows a signal level of -1.10 dBm at 5.7525110 GHz. The y-axis ranges from -70 dBm to 10 dBm, and the x-axis ranges from 5.745 GHz to 5.765 GHz. The plot includes a peak marker M1[1] and a measurement point M1. The signal is centered at 5.7525110 GHz with a span of 30.0 MHz. The plot also shows a reference level of 20.00 dBm, an offset of 1.00 dB, and a resolution bandwidth (RBW) of 500 kHz. The plot is titled 'Spectrum' and includes a legend for '1Rm AvgPwr'.</p>	
CH _M	 <p>Spectrum plot for channel CH_M. The plot shows a signal level of -1.39 dBm at 5.7774460 GHz. The y-axis ranges from -70 dBm to 10 dBm, and the x-axis ranges from 5.785 GHz to 5.805 GHz. The plot includes a peak marker M1[1] and a measurement point M1. The signal is centered at 5.7774460 GHz with a span of 30.0 MHz. The plot also shows a reference level of 20.00 dBm, an offset of 1.00 dB, and a resolution bandwidth (RBW) of 500 kHz. The plot is titled 'Spectrum' and includes a legend for '1Rm AvgPwr'.</p>	
CH _H	 <p>Spectrum plot for channel CH_H. The plot shows a signal level of -0.83 dBm at 5.8185310 GHz. The y-axis ranges from -70 dBm to 10 dBm, and the x-axis ranges from 5.825 GHz to 5.845 GHz. The plot includes a peak marker M1[1] and a measurement point M1. The signal is centered at 5.8185310 GHz with a span of 30.0 MHz. The plot also shows a reference level of 20.00 dBm, an offset of 1.00 dB, and a resolution bandwidth (RBW) of 500 kHz. The plot is titled 'Spectrum' and includes a legend for '1Rm AvgPwr'.</p>	

Band IV		802.11n (HT20)
CH _L	 <p>Spectrum plot for channel CH_L. The plot shows a signal level of -0.19 dBm at 5.7498190 GHz. The y-axis ranges from -70 dBm to 10 dBm, and the x-axis ranges from 5.745 GHz to 5.755 GHz. The plot includes a peak marker M1[1] and a measurement point M1. The signal level is -0.19 dBm at 5.7498190 GHz. The plot also shows a reference level of 20.00 dBm, an attenuation of 30 dB, an offset of 1.00 dB, a resolution bandwidth of 500 kHz, a sweep time of 1 ms, a video bandwidth of 3 MHz, and a mode of Auto Sweep. The plot is titled 'Spectrum' and includes a 'Count 100/100' indicator. The plot also shows a '1Rm AvgPwr' indicator. The plot is titled 'Spectrum' and includes a 'Count 100/100' indicator. The plot also shows a '1Rm AvgPwr' indicator. The plot is titled 'Spectrum' and includes a 'Count 100/100' indicator. The plot also shows a '1Rm AvgPwr' indicator.</p>	
CH _M	 <p>Spectrum plot for channel CH_M. The plot shows a signal level of -0.67 dBm at 5.7786180 GHz. The y-axis ranges from -70 dBm to 10 dBm, and the x-axis ranges from 5.775 GHz to 5.785 GHz. The plot includes a peak marker M1[1] and a measurement point M1. The signal level is -0.67 dBm at 5.7786180 GHz. The plot also shows a reference level of 20.00 dBm, an attenuation of 30 dB, an offset of 1.00 dB, a resolution bandwidth of 500 kHz, a sweep time of 1 ms, a video bandwidth of 3 MHz, and a mode of Auto Sweep. The plot is titled 'Spectrum' and includes a 'Count 100/100' indicator. The plot also shows a '1Rm AvgPwr' indicator. The plot is titled 'Spectrum' and includes a 'Count 100/100' indicator. The plot also shows a '1Rm AvgPwr' indicator.</p>	
CH _H	 <p>Spectrum plot for channel CH_H. The plot shows a signal level of -0.59 dBm at 5.8300360 GHz. The y-axis ranges from -70 dBm to 10 dBm, and the x-axis ranges from 5.825 GHz to 5.835 GHz. The plot includes a peak marker M1[1] and a measurement point M1. The signal level is -0.59 dBm at 5.8300360 GHz. The plot also shows a reference level of 20.00 dBm, an attenuation of 30 dB, an offset of 1.00 dB, a resolution bandwidth of 500 kHz, a sweep time of 1 ms, a video bandwidth of 3 MHz, and a mode of Auto Sweep. The plot is titled 'Spectrum' and includes a 'Count 100/100' indicator. The plot also shows a '1Rm AvgPwr' indicator. The plot is titled 'Spectrum' and includes a 'Count 100/100' indicator. The plot also shows a '1Rm AvgPwr' indicator.</p>	

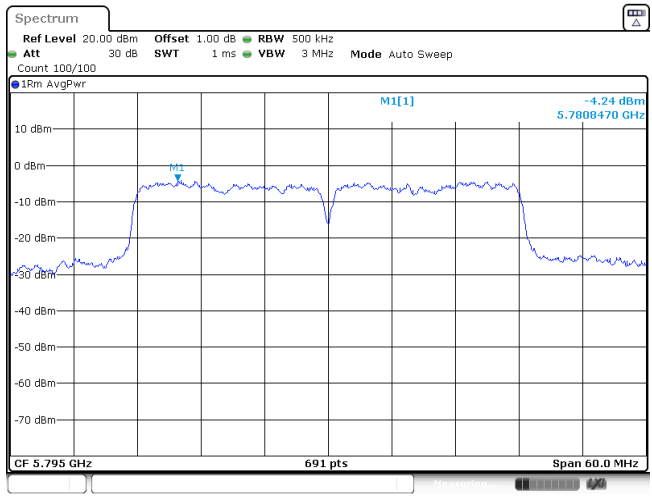
Band IV		802.11a
CH _L		
CH _M		
CH _H		

Band IV **802.11ac (HT40)**

CH_L

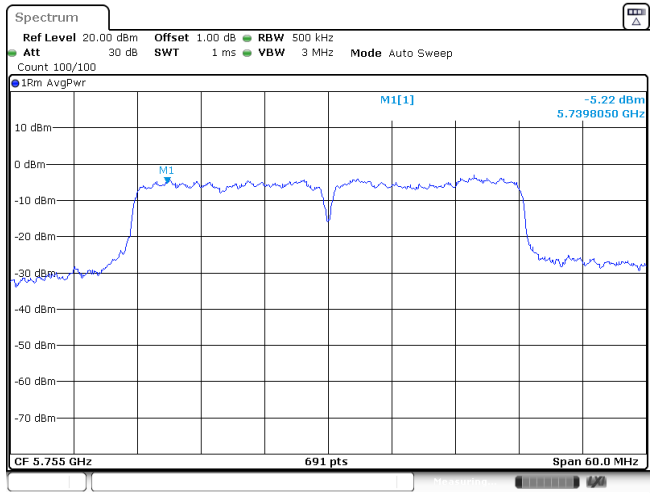


CH_H

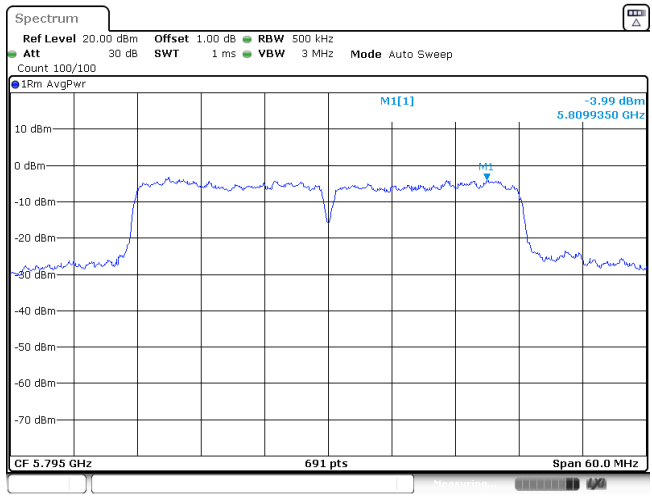


Band IV **802.11n (HT40)**

CH_L

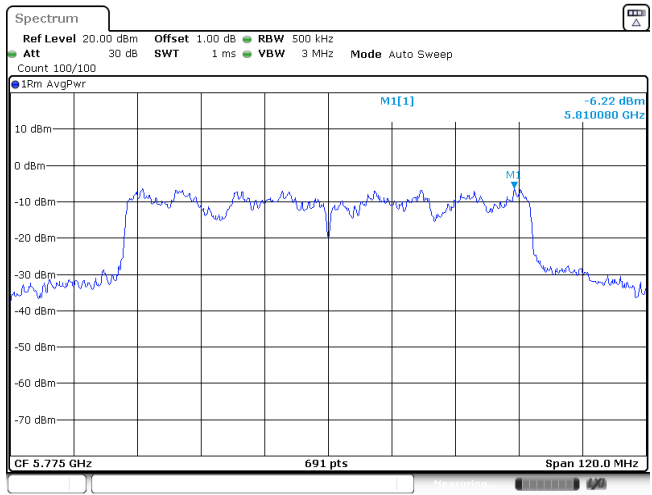


CH_H



Band IV **802.11ac (HT80)**

CH_M



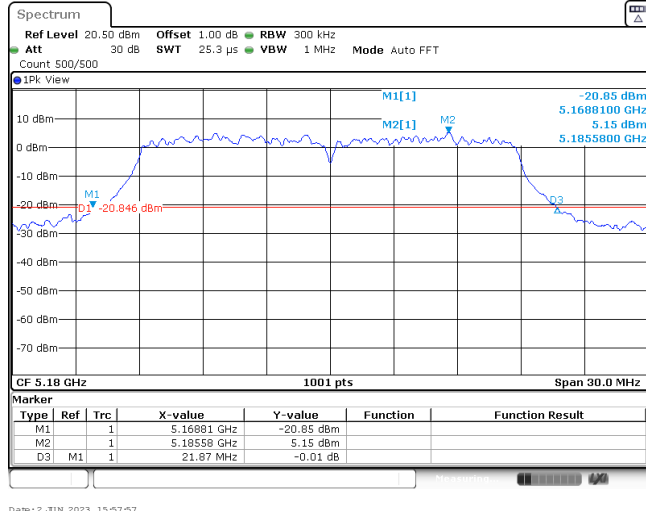
Appendix C: 26dB bandwidth

Band	Bandwidth (MHz)	Type	Channel	26dB bandwidth (MHz)	Result
I	20	802.11ac	CH _L	21.87	Pass
			CH _M	22.68	
			CH _H	22.53	
		802.11n	CH _L	23.76	Pass
			CH _M	23.97	
			CH _H	27.18	
	802.11a	CH _L	23.46	Pass	
		CH _M	25.86		
		CH _H	26.76		
	40	802.11ac	CH _L	58.56	Pass
			CH _H	59.16	
		802.11n	CH _L	54.72	Pass
CH _H			58.56		
80	802.11ac	CH _M	108.48	Pass	
II	20	802.11ac	CH _L	21.84	Pass
			CH _M	24.36	
			CH _H	28.71	
		802.11n	CH _L	24.21	Pass
			CH _M	24.15	
			CH _H	29.79	
	802.11a	CH _L	20.70	Pass	
		CH _M	25.26		
		CH _H	29.49		
	40	802.11ac	CH _L	59.10	Pass
			CH _H	59.94	
		802.11n	CH _L	48.84	Pass
CH _H			59.82		
80	802.11ac	CH _M	106.32	Pass	

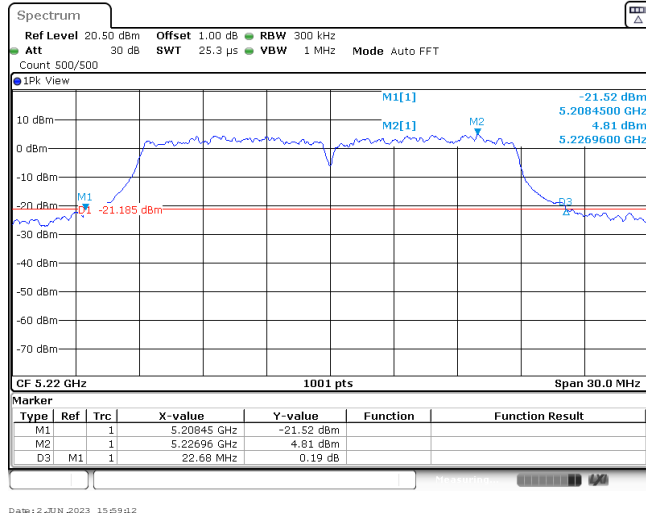
Band	Bandwidth (MHz)	Type	Channel	26dB bandwidth (MHz)	Result
III	20	802.11ac	CH _L	29.76	Pass
			CH _M	24.54	
			CH _H	26.91	
		802.11n	CH _L	29.40	Pass
			CH _M	24.30	
			CH _H	28.89	
		802.11a	CH _L	29.82	Pass
			CH _M	28.17	
			CH _H	26.91	
	40	802.11ac	CH _L	59.94	Pass
			CH _M	57.24	
			CH _H	58.68	
		802.11n	CH _L	59.40	Pass
			CH _M	57.24	
			CH _H	55.50	
80	802.11ac	CH _L	115.56	Pass	
		CH _H	109.68		

Band I **802.11ac (HT20)**

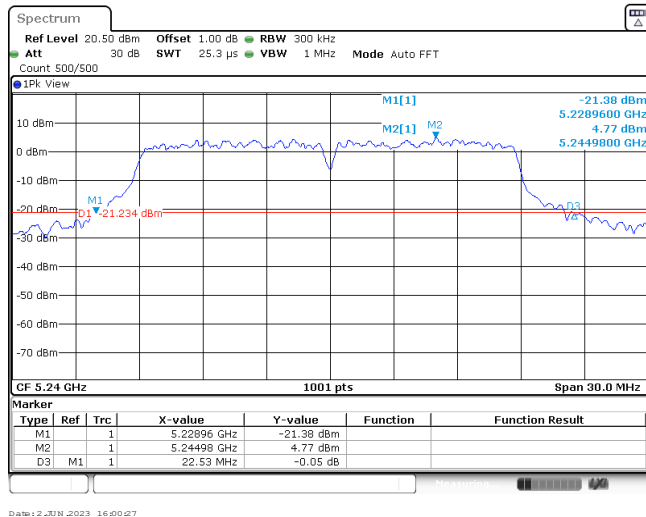
CH_L



CH_M

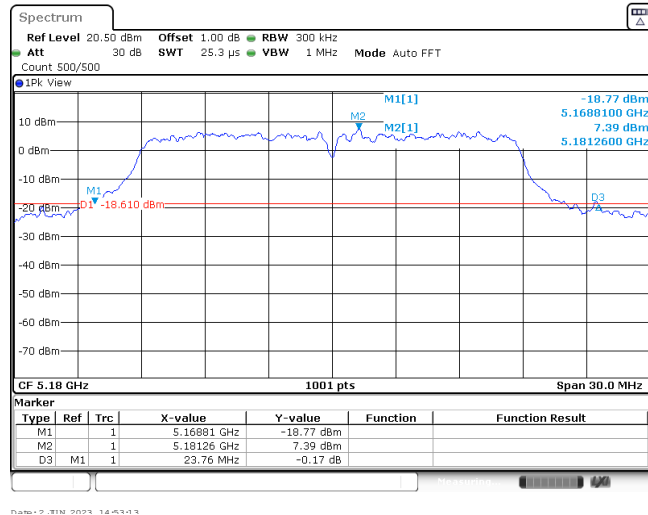


CH_H

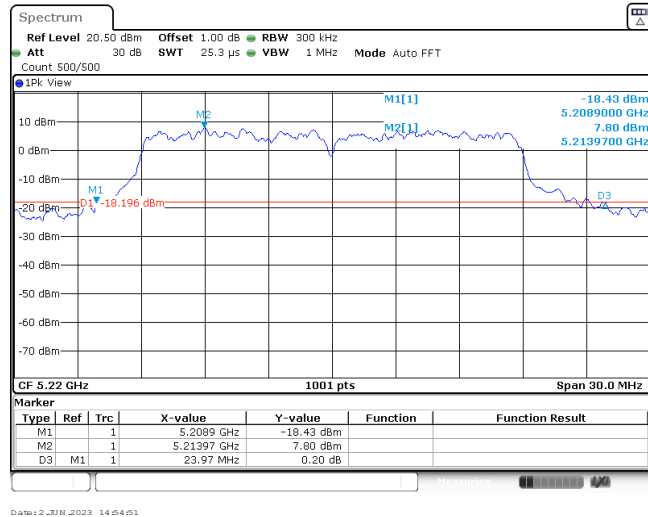


Band I **802.11n (HT20)**

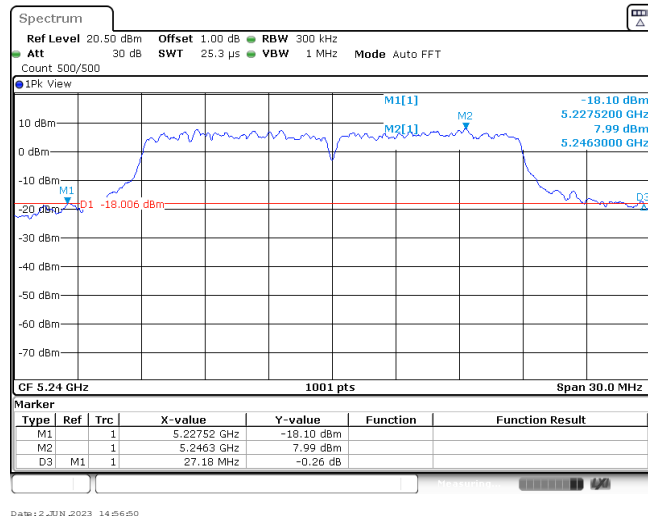
CH_L



CH_M

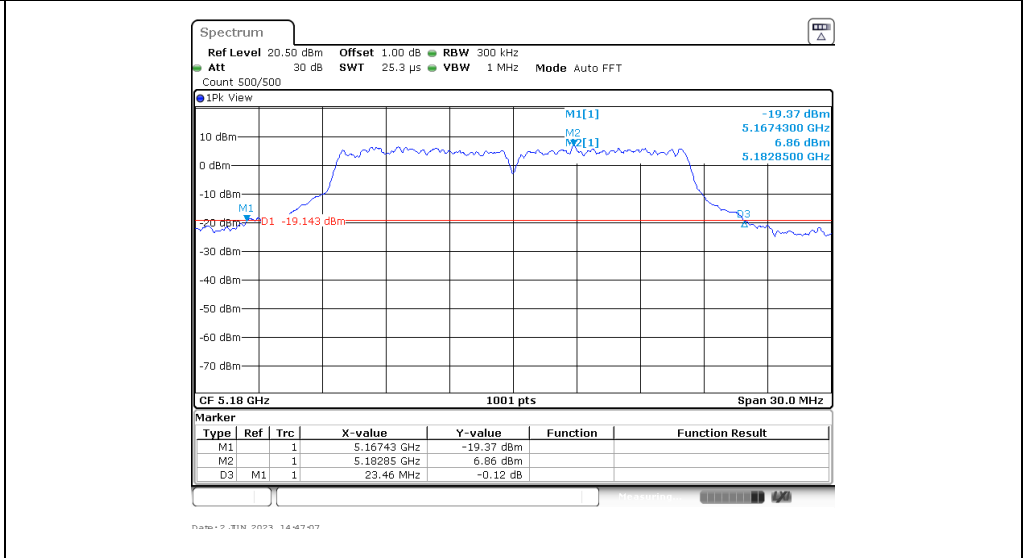


CH_H

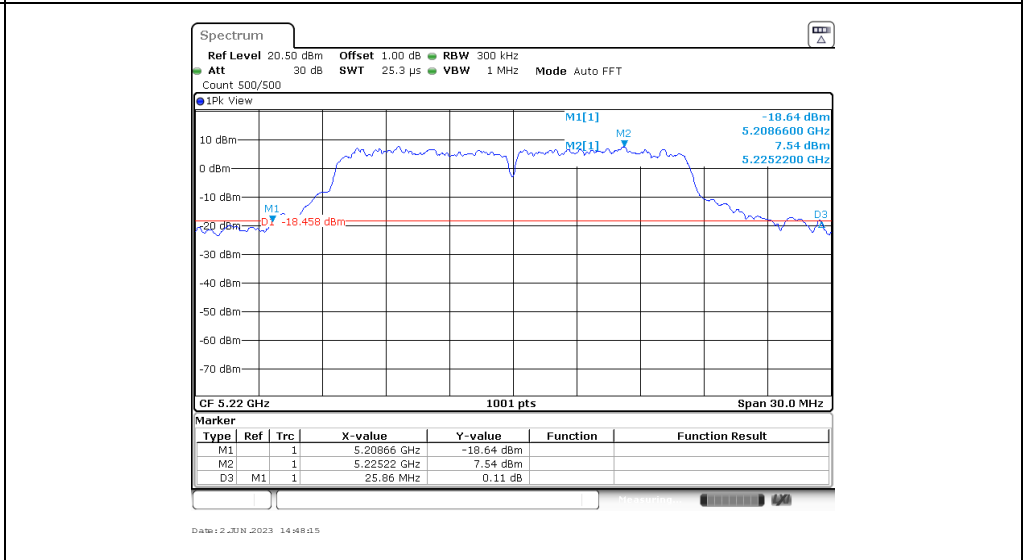


Band I **802.11a**

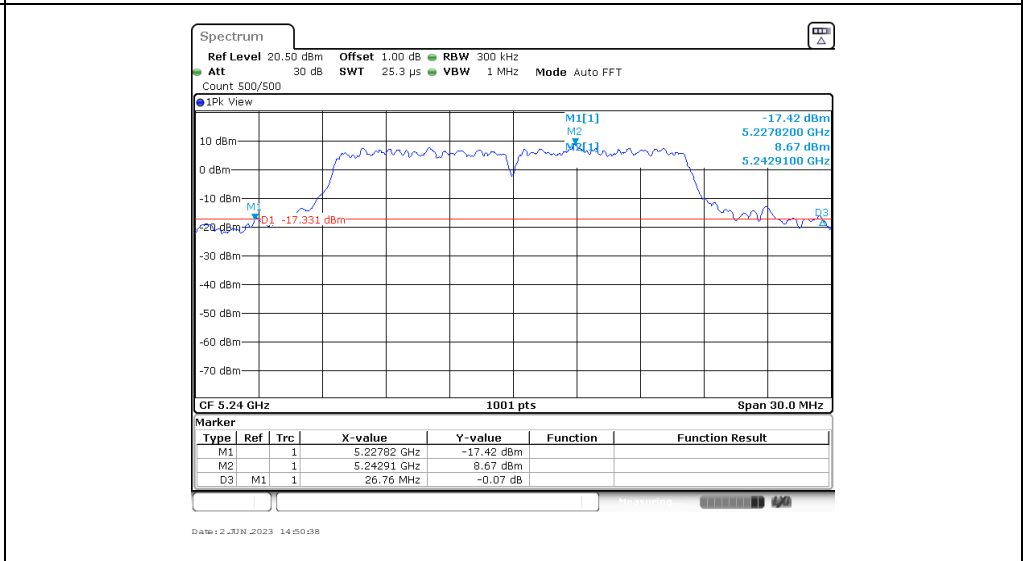
CH_L



CH_M

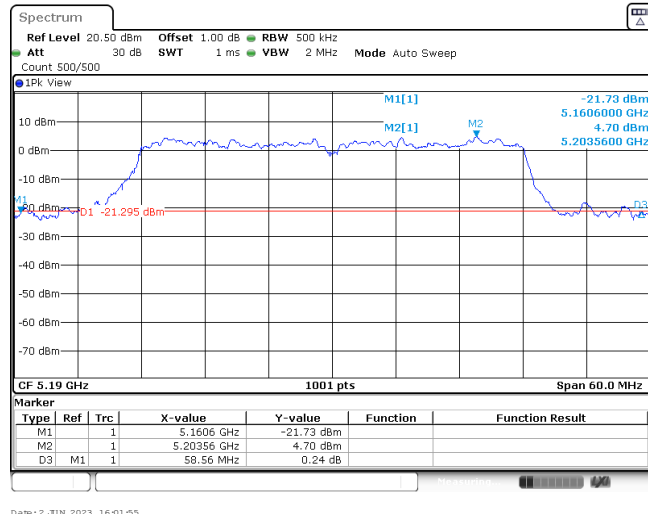


CH_H

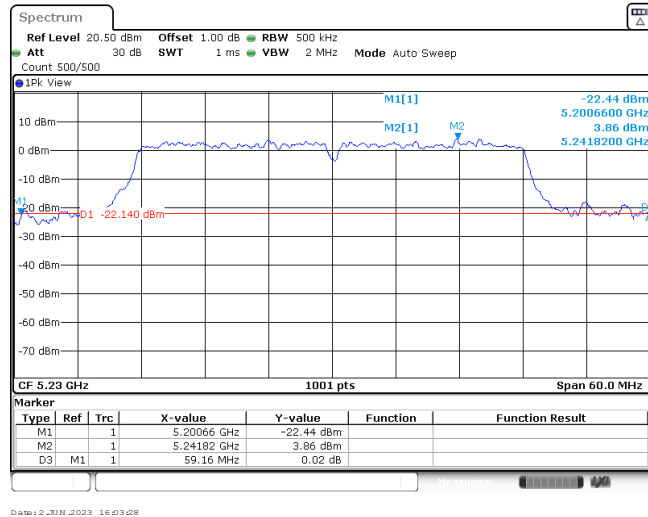


Band I **802.11ac (HT40)**

CH_L

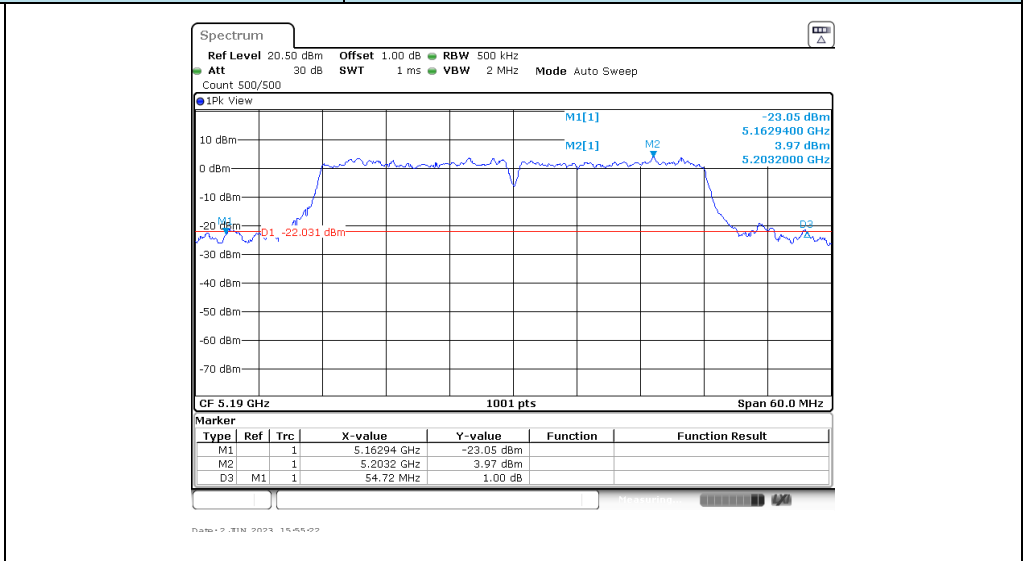


CH_H

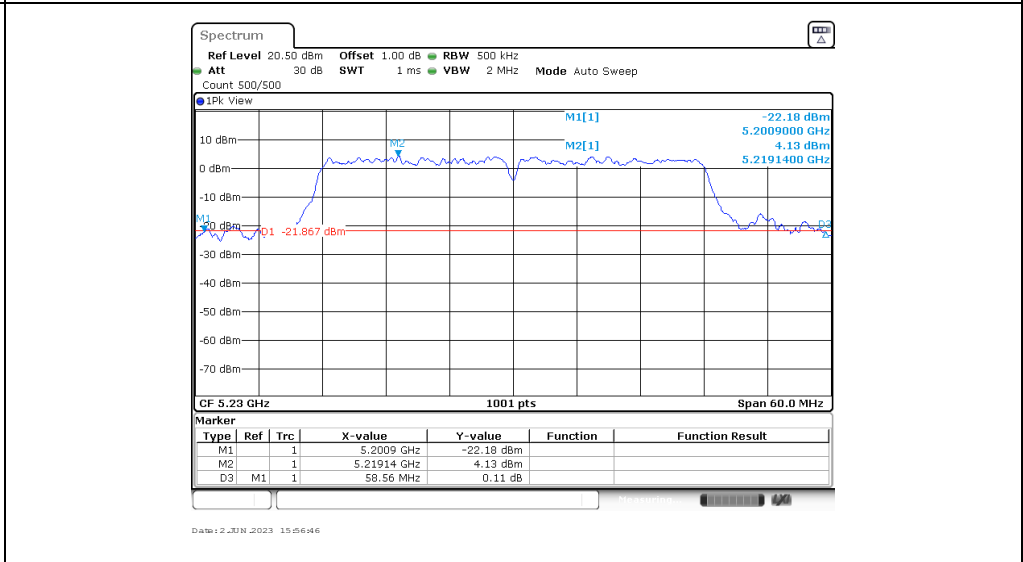


Band I **802.11n (HT40)**

CH_L

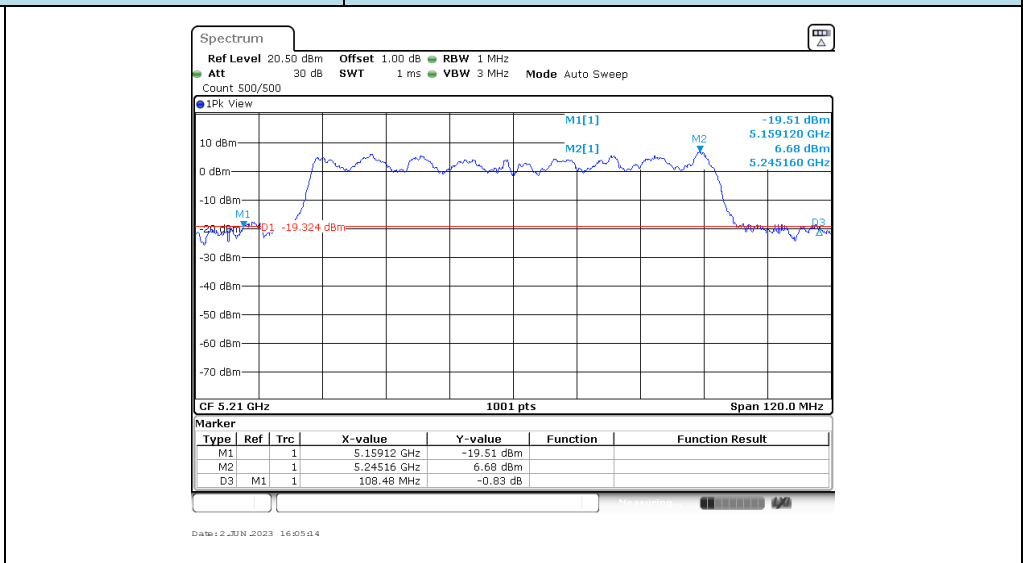


CH_H



Band I **802.11ac (HT80)**

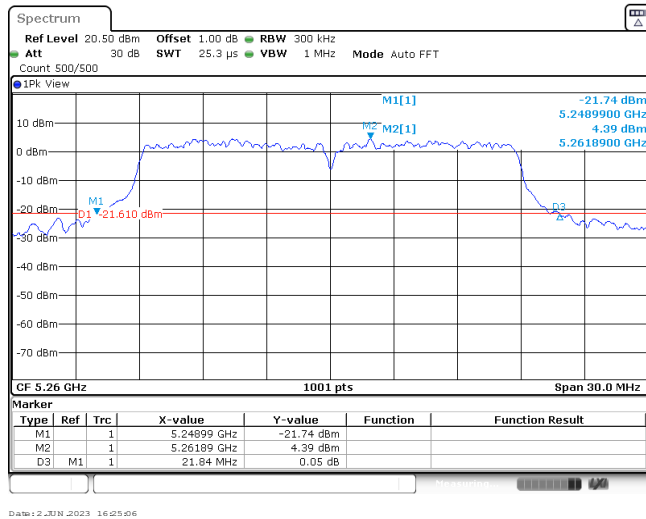
CH_M



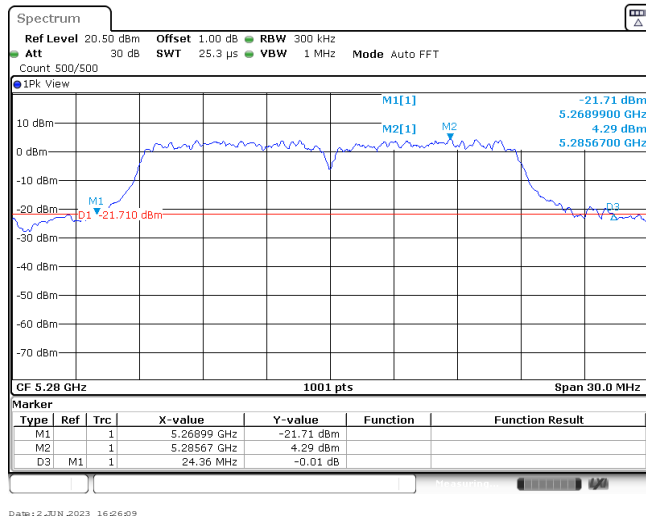
Band II

802.11ac (HT20)

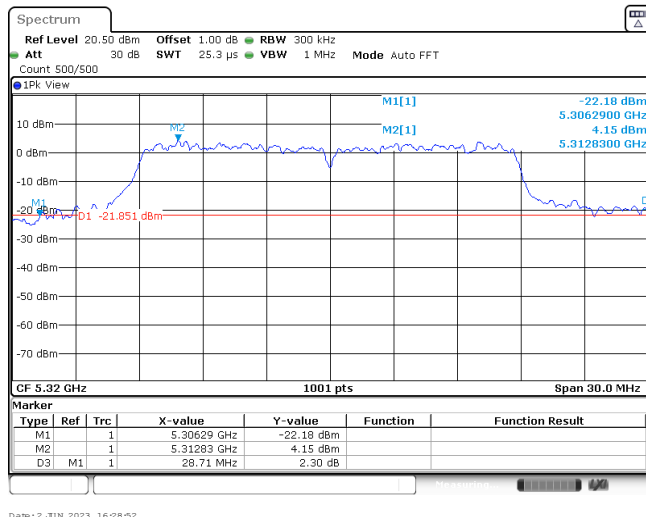
CH_L



CH_M

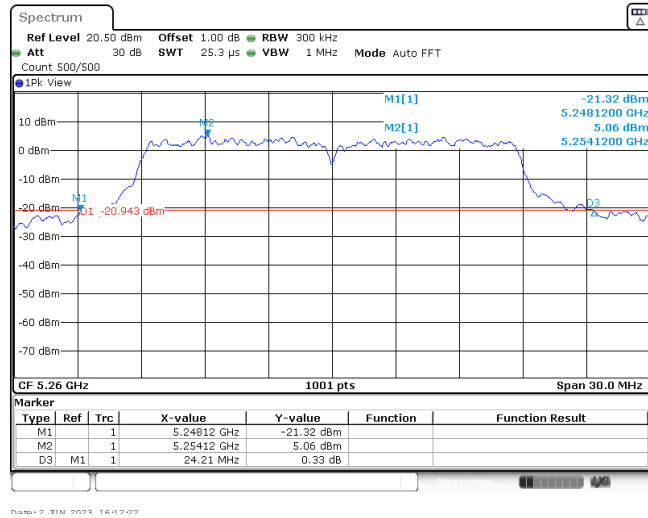


CH_H

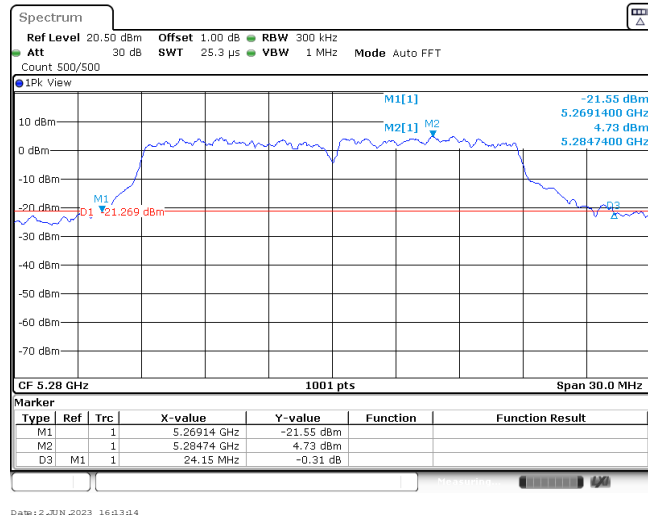


Band II **802.11n (HT20)**

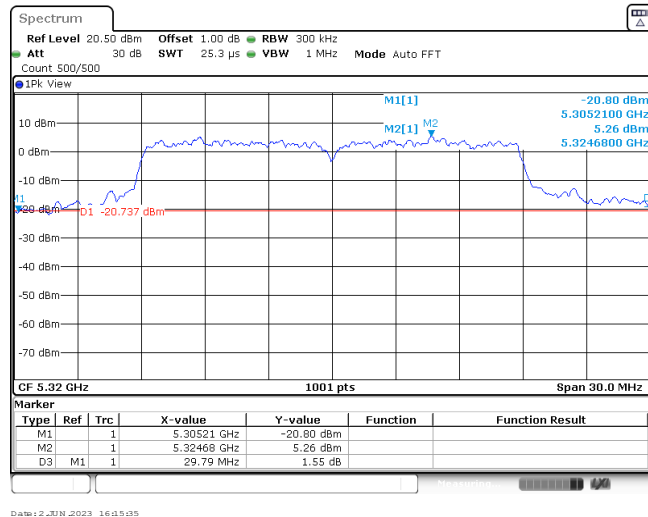
CH_L



CH_M

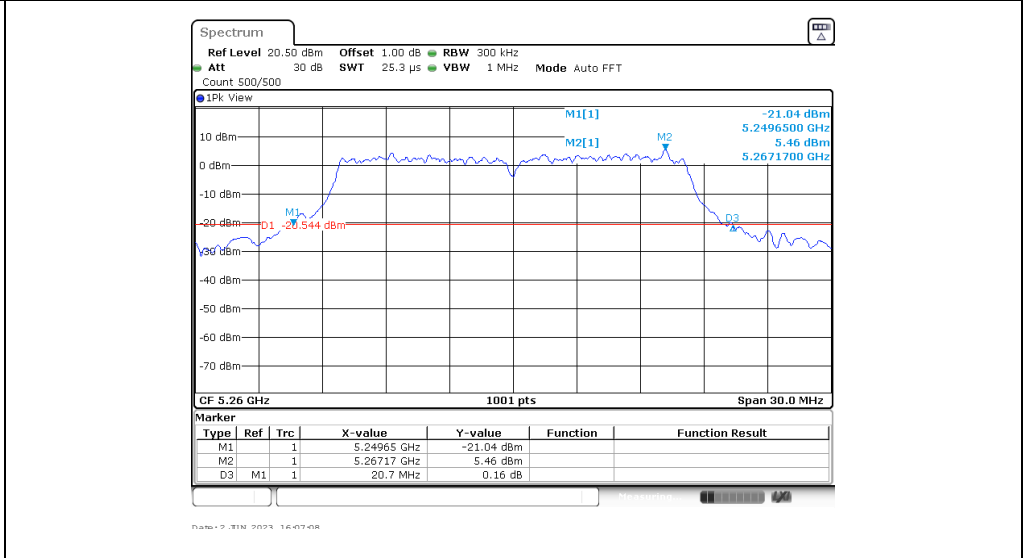


CH_H

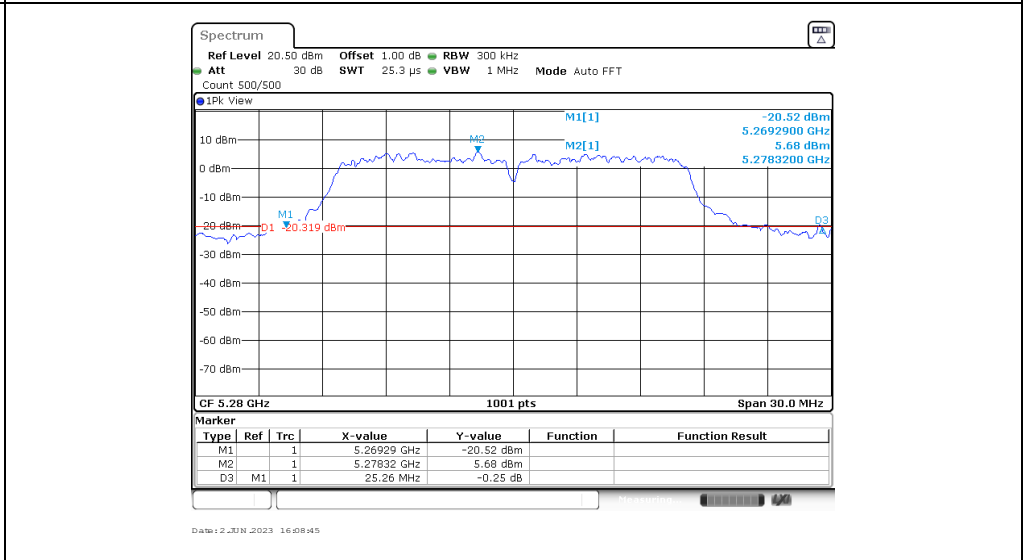


Band II **802.11a**

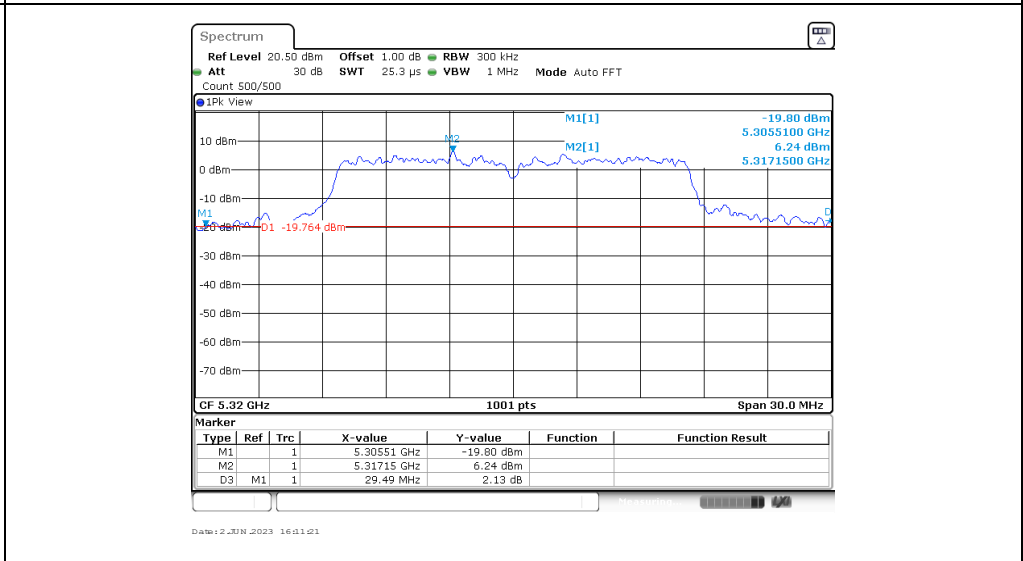
CH_L



CH_M



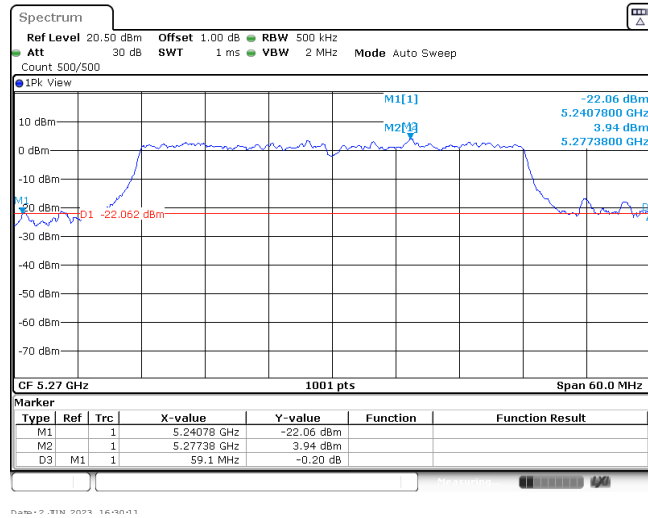
CH_H



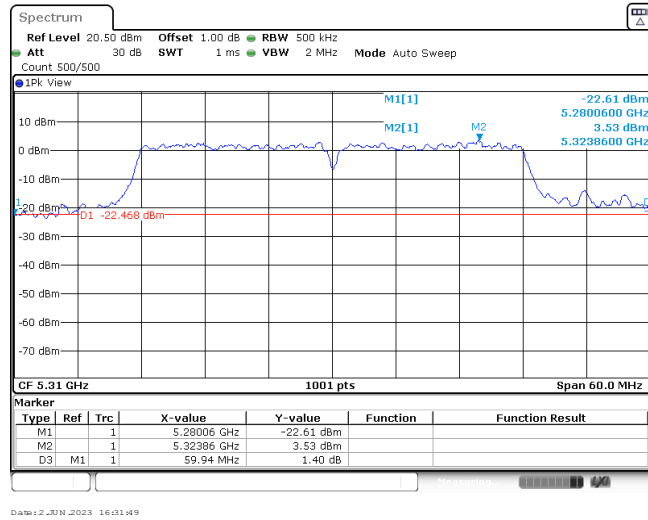
Band II

802.11ac (HT40)

CH_L

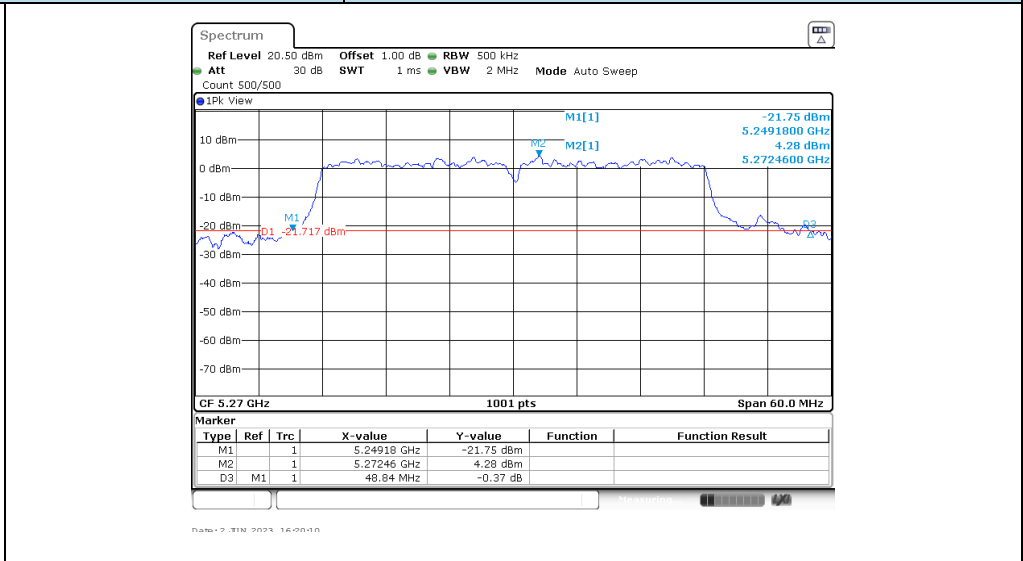


CH_H

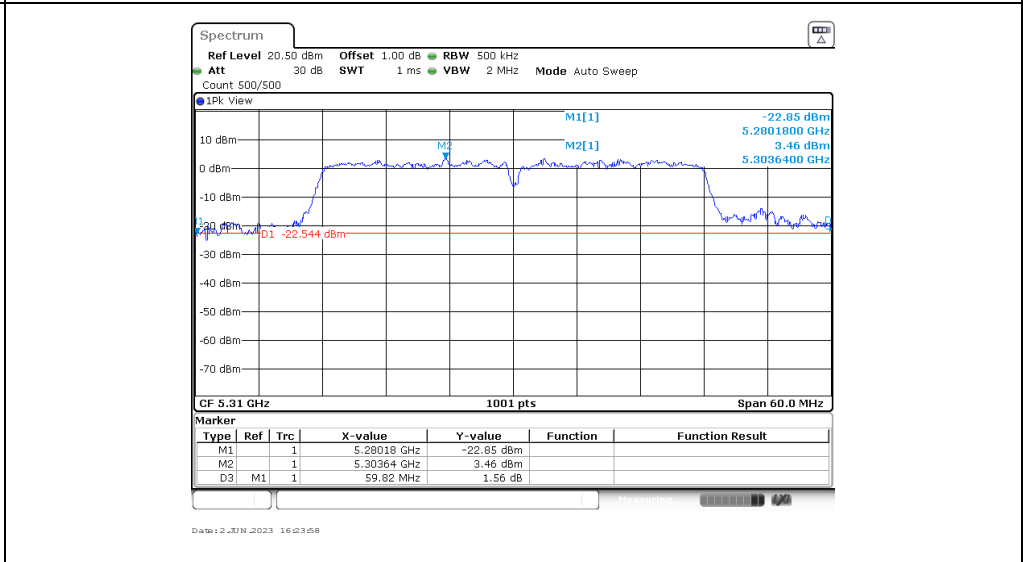


Band II **802.11n (HT40)**

CH_L

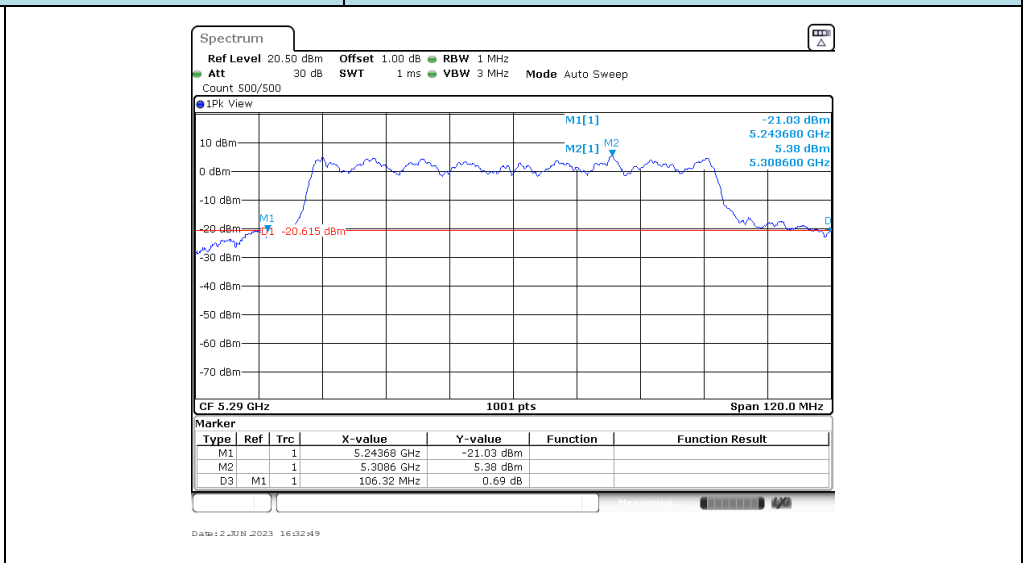


CH_H



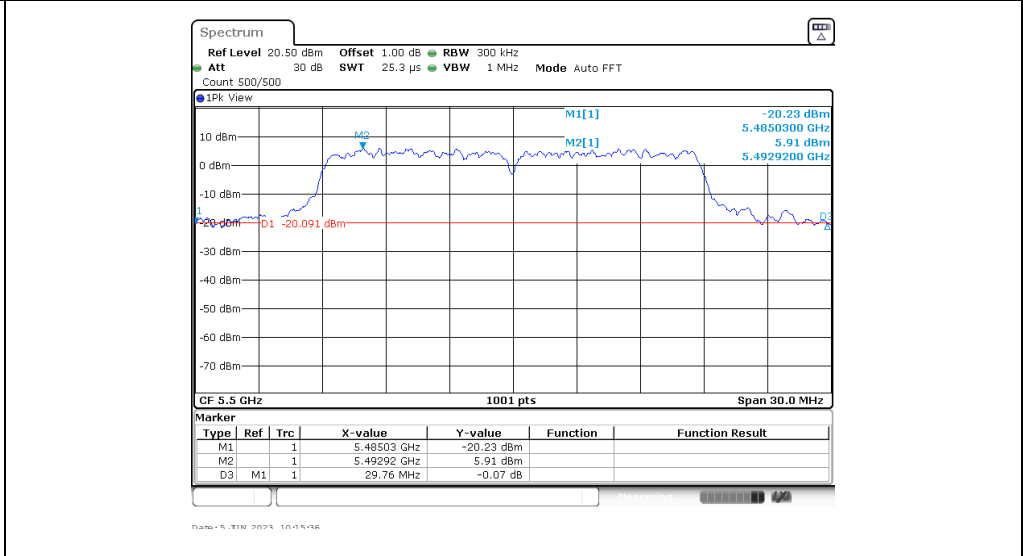
Band II **802.11ac (HT80)**

CH_M

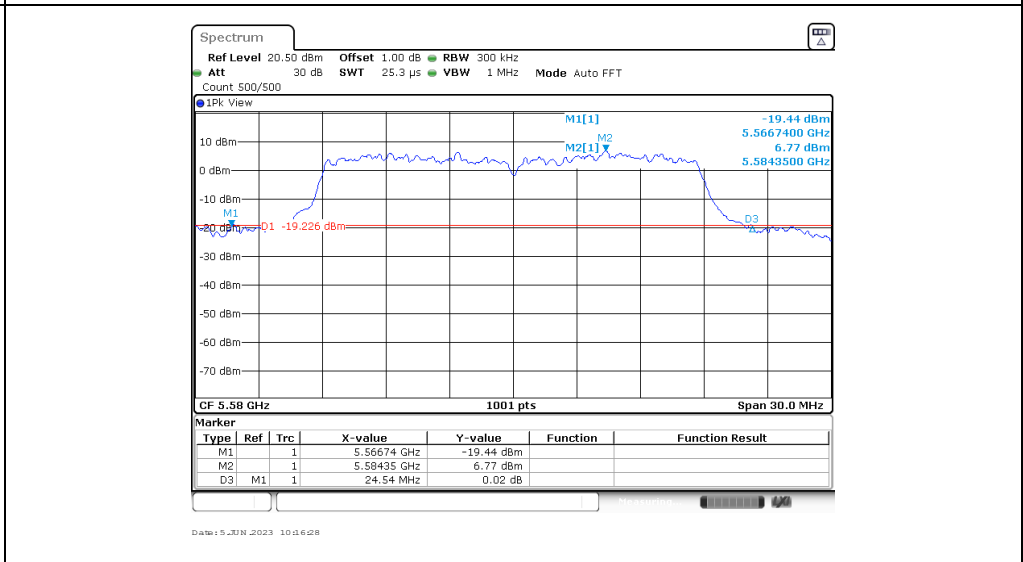


Band III **802.11ac (HT20)**

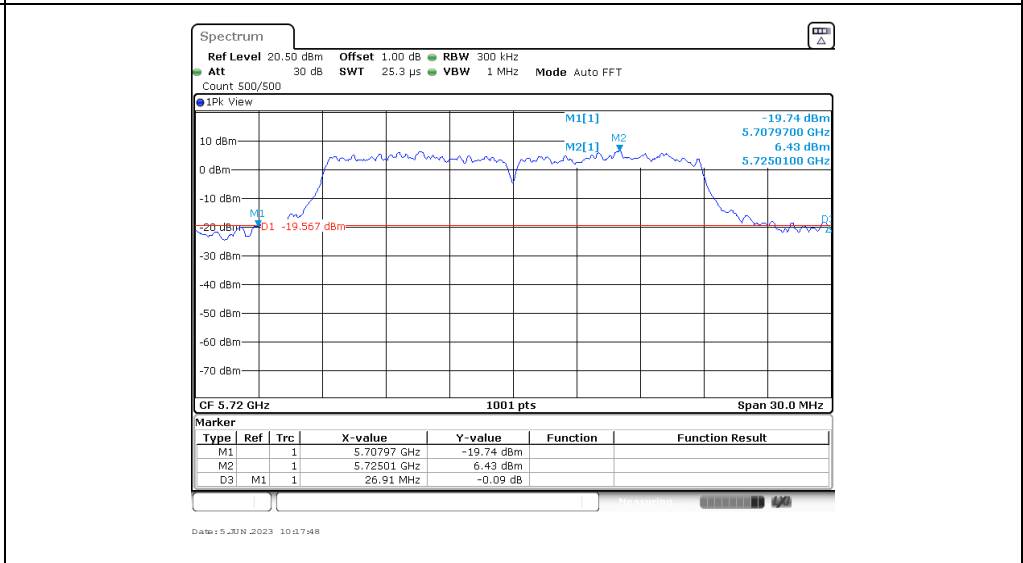
CH_L



CH_M

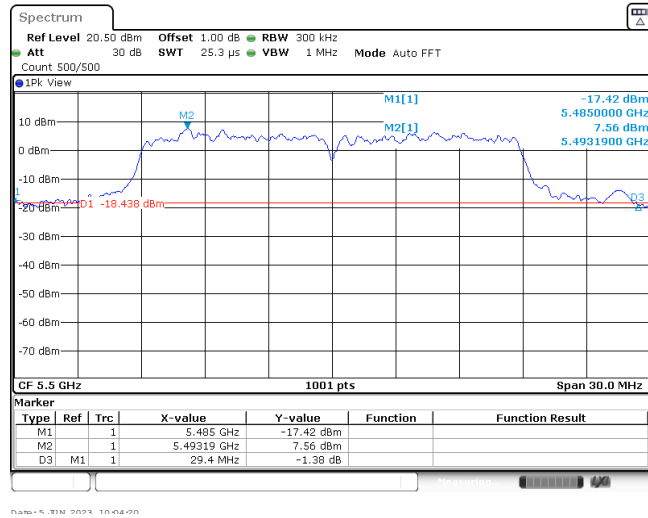


CH_H

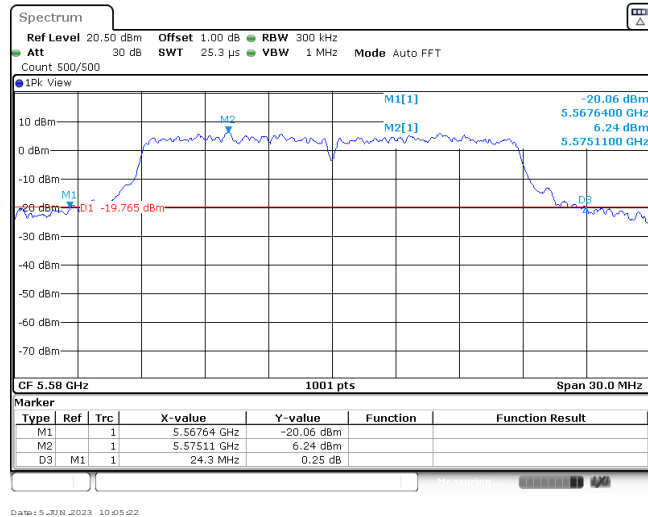


Band III **802.11n (HT20)**

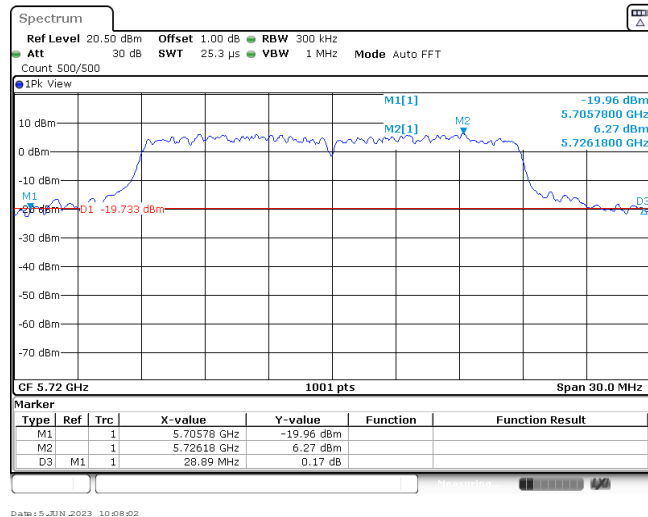
CH_L



CH_M

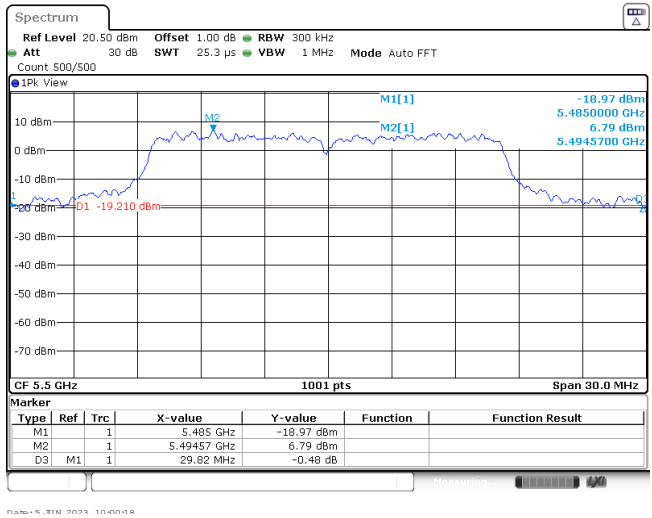


CH_H

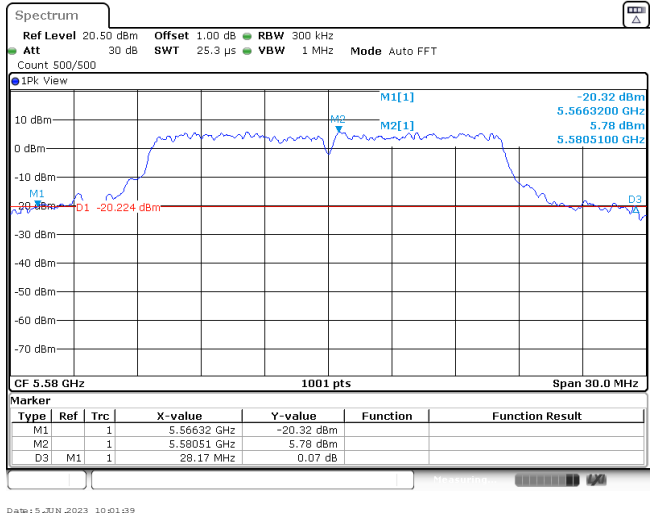


Band III **802.11a**

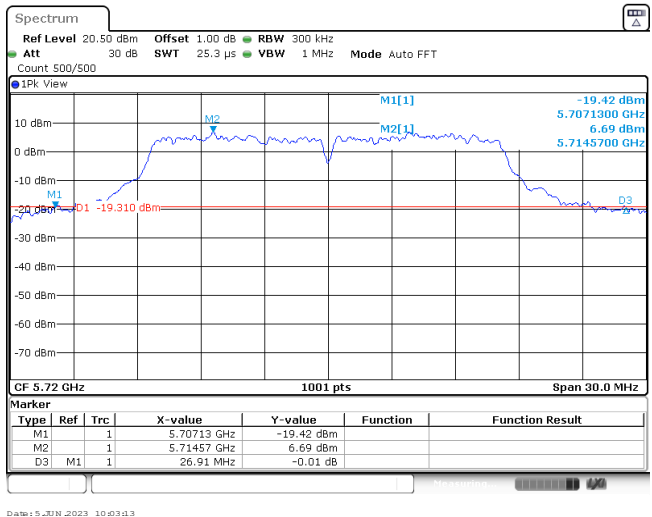
CH_L



CH_M



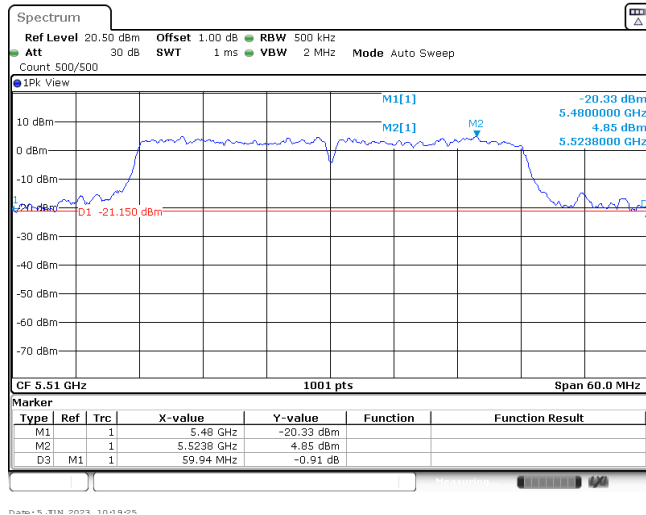
CH_H



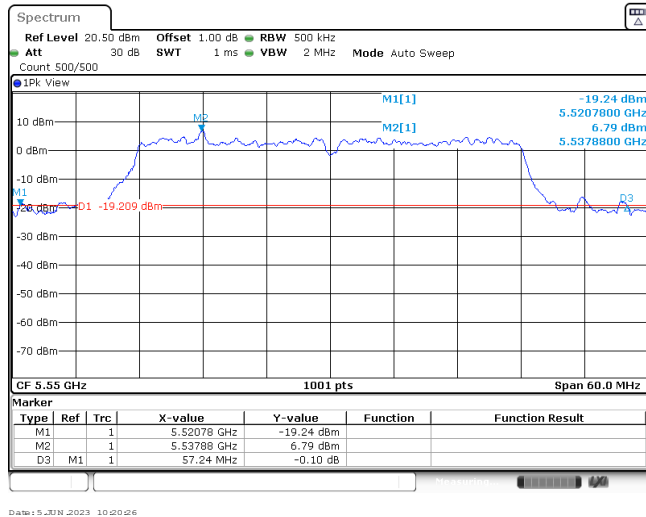
Band III

802.11ac (HT40)

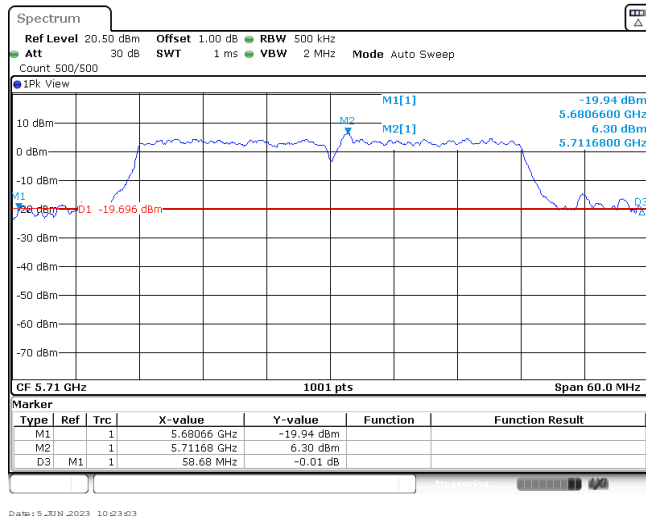
CH_L



CH_M



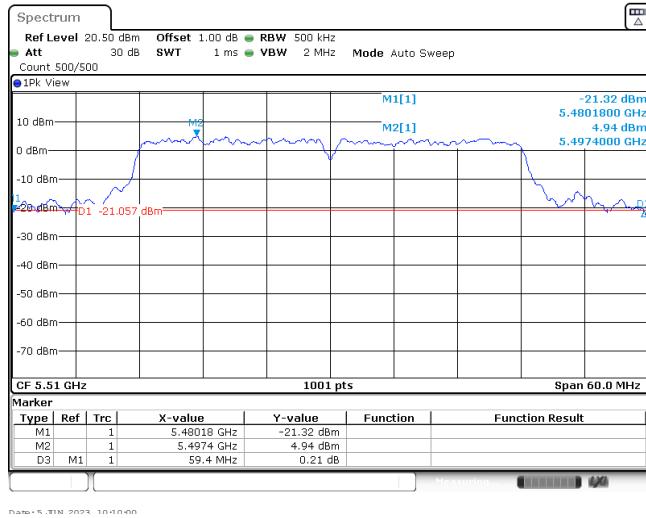
CH_H



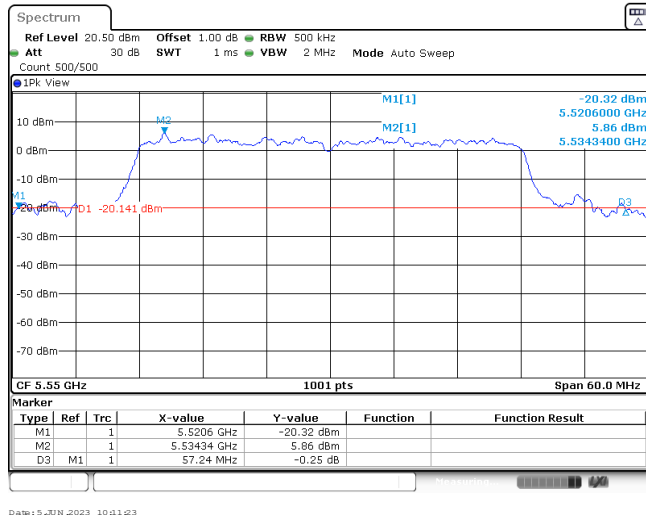
Band III

802.11n (HT40)

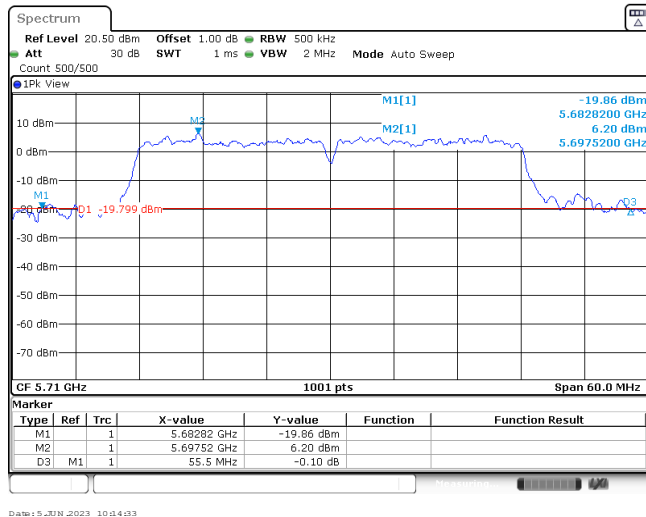
CH_L



CH_M



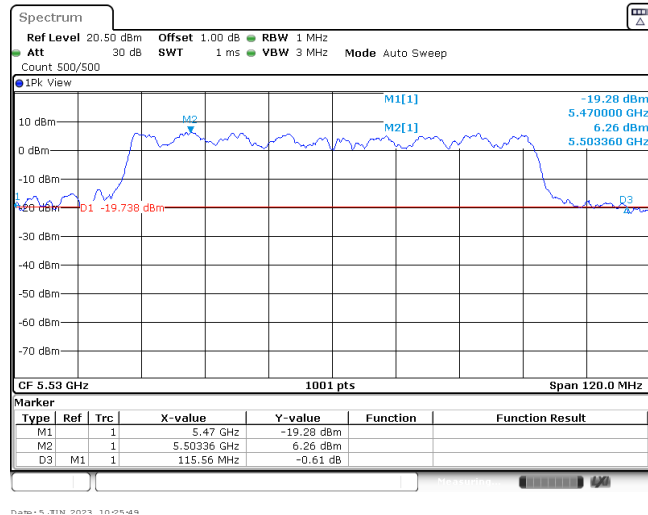
CH_H



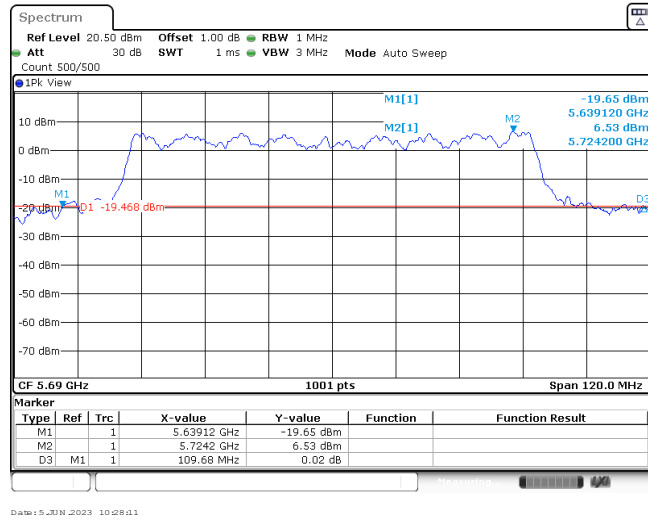
Band III

802.11ac (HT80)

CH_L



CH_H



Appendix D: 99% Occupy bandwidth

Band	Bandwidth (MHz)	Type	Channel	99% Occupy bandwidth (MHz)	Result
I	20	802.11ac	CH _L	17.95	Pass
			CH _M	17.74	
			CH _H	17.77	
		802.11n	CH _L	17.95	Pass
			CH _M	17.98	
			CH _H	17.89	
	802.11a	CH _L	16.84	Pass	
		CH _M	16.72		
		CH _H	16.87		
	40	802.11ac	CH _L	36.62	Pass
			CH _H	36.74	
		802.11n	CH _L	36.56	Pass
CH _H			36.62		
80	802.11ac	CH _M	76.48	Pass	
II	20	802.11ac	CH _L	17.86	Pass
			CH _M	17.95	
			CH _H	18.52	
		802.11n	CH _L	17.86	Pass
			CH _M	18.01	
			CH _H	18.46	
	802.11a	CH _L	16.66	Pass	
		CH _M	16.84		
		CH _H	17.29		
	40	802.11ac	CH _L	36.68	Pass
			CH _H	37.22	
		802.11n	CH _L	36.38	Pass
CH _H			37.04		
80	802.11ac	CH _M	76.72	Pass	

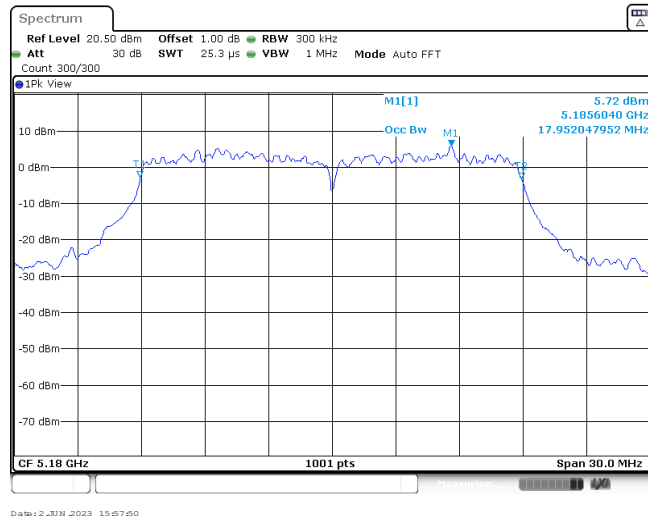
Band	Bandwidth (MHz)	Type	Channel	99% Occupy bandwidth (MHz)	Result
III	20	802.11ac	CH _L	17.92	Pass
			CH _M	17.86	
			CH _H	17.92	
		802.11n	CH _L	18.07	Pass
			CH _M	17.92	
			CH _H	17.95	
		802.11a	CH _L	17.02	Pass
			CH _M	16.87	
			CH _H	17.17	
	40	802.11ac	CH _L	36.80	Pass
			CH _M	36.74	
			CH _H	36.74	
		802.11n	CH _L	36.74	Pass
			CH _M	36.62	
CH _H			36.44		
80	802.11ac	CH _L	76.60	Pass	
		CH _H	76.48		

Band	Bandwidth (MHz)	Type	Channel	99% Occupy bandwidth (MHz)	Result
IV	20	802.11ac	CH _L	18.01	Pass
			CH _M	18.43	
			CH _H	17.92	
		802.11n	CH _L	17.95	Pass
			CH _M	18.10	
			CH _H	17.95	
		802.11a	CH _L	17.05	Pass
			CH _M	17.62	
			CH _H	17.02	
	40	802.11ac	CH _L	37.46	Pass
			CH _H	37.76	
		802.11n	CH _L	37.69	Pass
			CH _H	37.77	
	80	802.11ac	CH _M	77.32	Pass

Band I

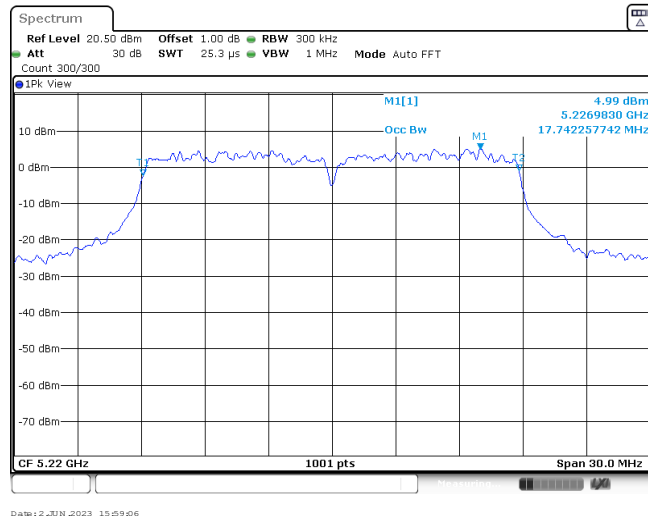
802.11ac (HT20)

CH_L



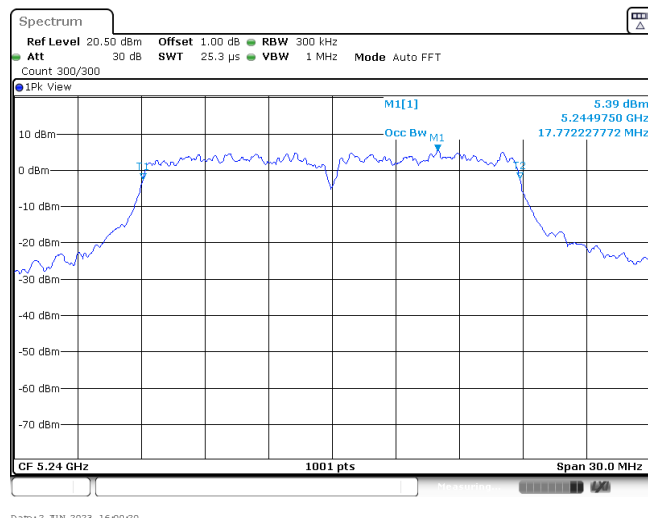
Date: 2 JUN 2023 15:57:50

CH_M



Date: 2 JUN 2023 15:59:06

CH_H

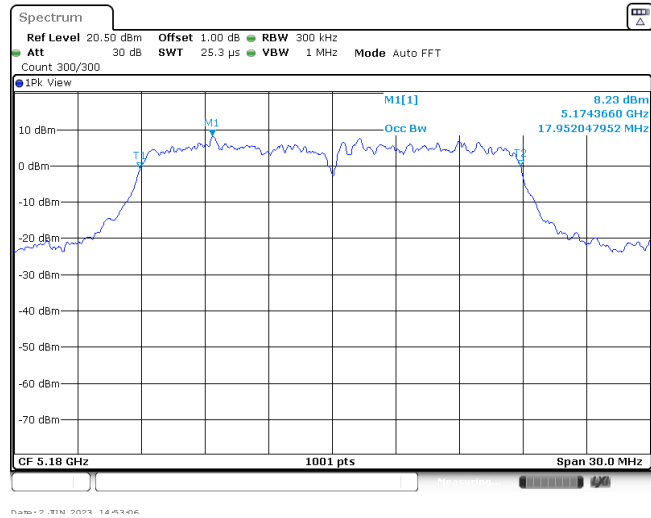


Date: 2 JUN 2023 16:00:00

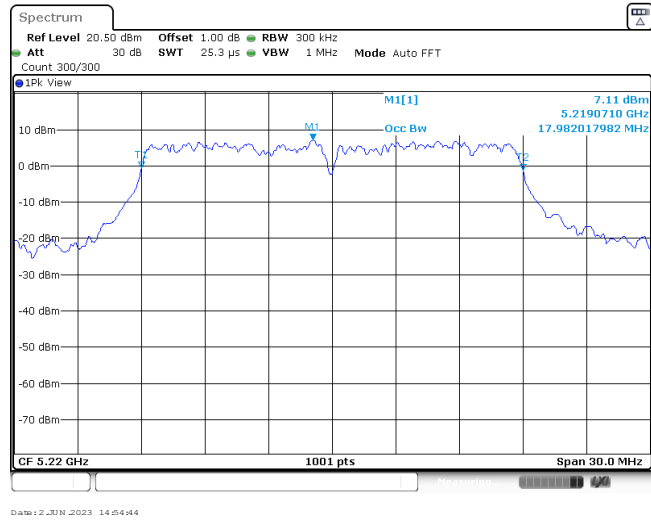
Band I

802.11n (HT20)

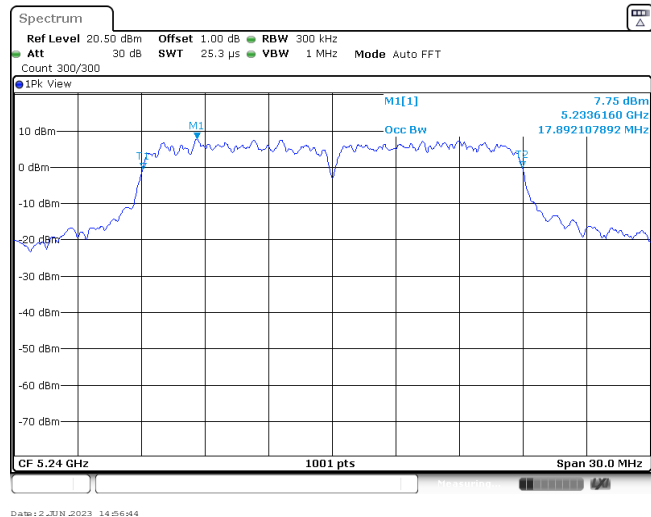
CH_L

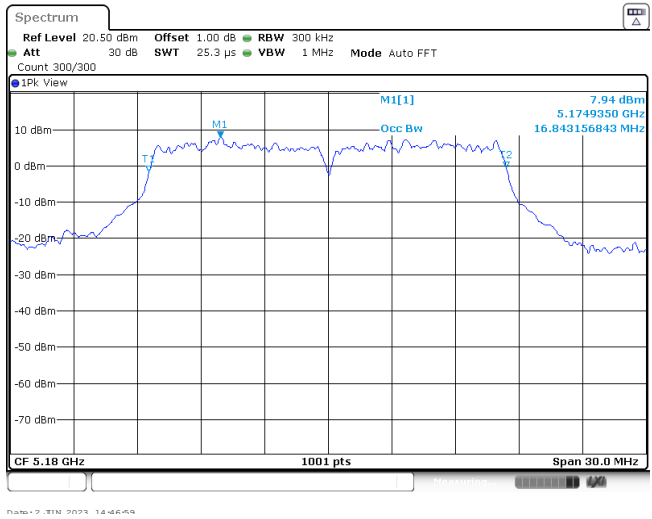
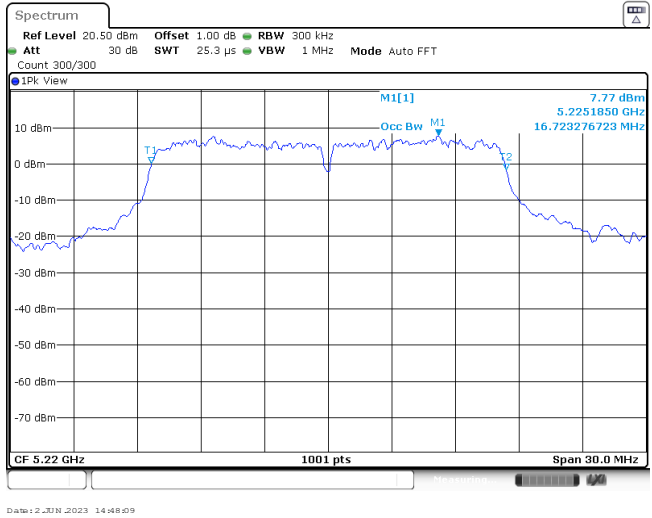
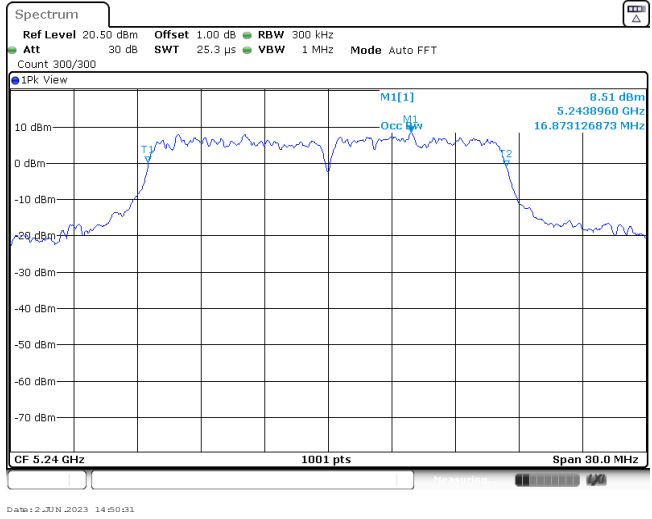


CH_M



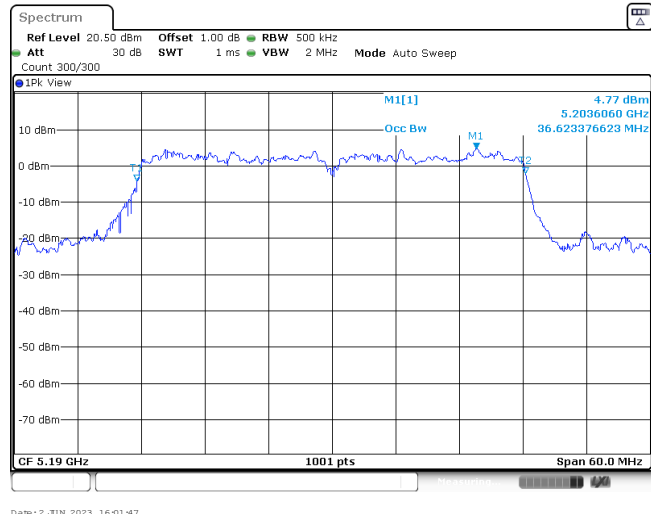
CH_H



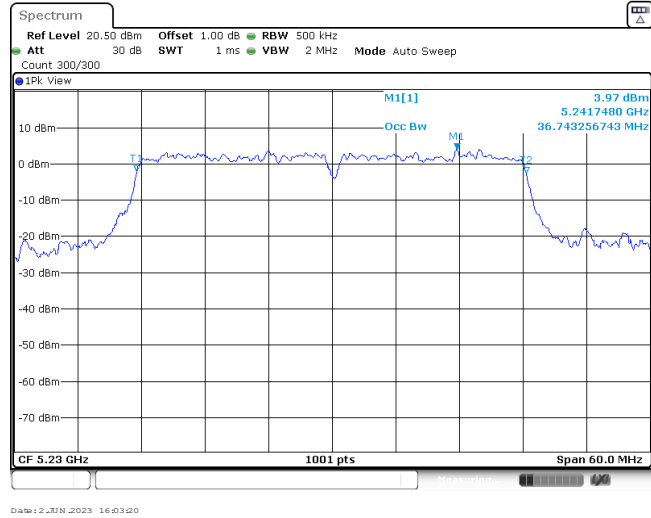
Band I		802.11a
CH _L	 <p>Spectrum Ref Level 20.50 dBm Offset 1.00 dB RBW 300 kHz Att 30 dB SWT 25.3 μs VBW 1 MHz Mode Auto FFT Count 300/300 IPK View M1[1] 7.94 dBm 5.1749350 GHz 16.843156843 MHz Occ Bw CF 5.18 GHz 1001 pts Span 30.0 MHz Date: 2 JUN 2023 14:46:48</p>	
CH _M	 <p>Spectrum Ref Level 20.50 dBm Offset 1.00 dB RBW 300 kHz Att 30 dB SWT 25.3 μs VBW 1 MHz Mode Auto FFT Count 300/300 IPK View M1[1] 7.77 dBm 5.2251850 GHz 16.723276723 MHz Occ Bw CF 5.22 GHz 1001 pts Span 30.0 MHz Date: 2 JUN 2023 14:48:09</p>	
CH _H	 <p>Spectrum Ref Level 20.50 dBm Offset 1.00 dB RBW 300 kHz Att 30 dB SWT 25.3 μs VBW 1 MHz Mode Auto FFT Count 300/300 IPK View M1[1] 8.51 dBm 5.2438960 GHz 16.873126873 MHz Occ Bw CF 5.24 GHz 1001 pts Span 30.0 MHz Date: 2 JUN 2023 14:50:31</p>	

Band I **802.11ac (HT40)**

CH_L



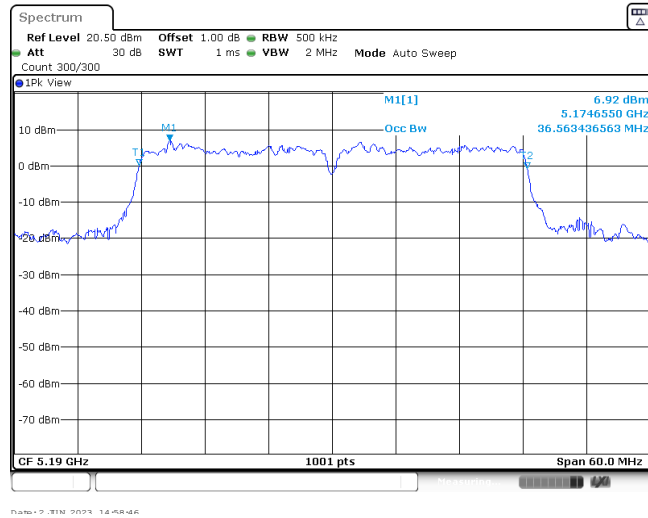
CH_H



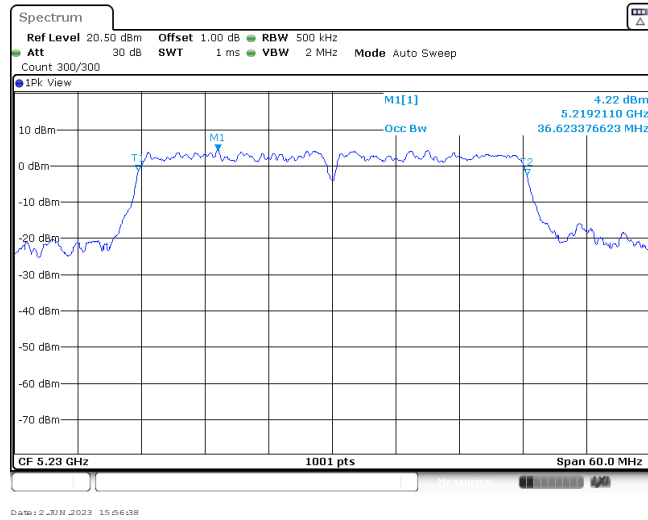
Band I

802.11n (HT40)

CH_L



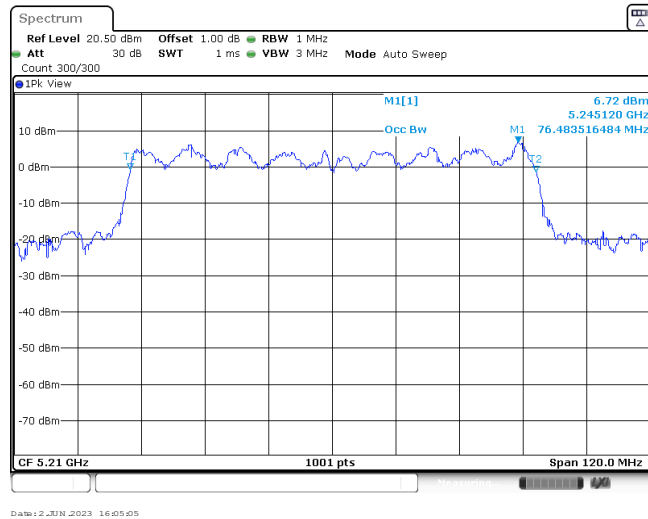
CH_H



Band I

802.11ac (HT80)

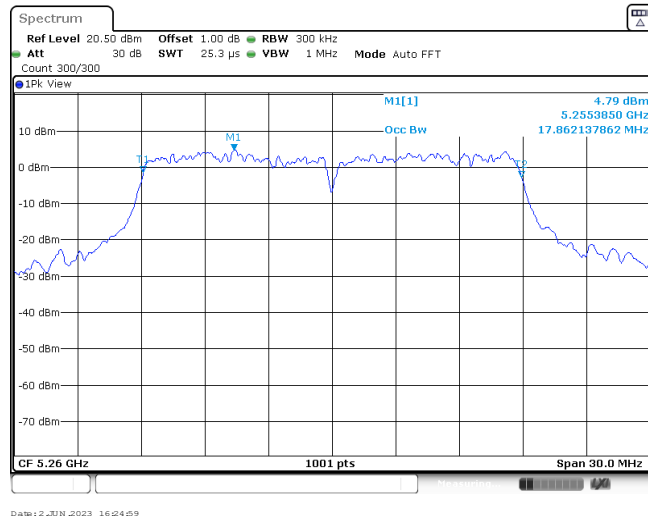
CH_M



Band II

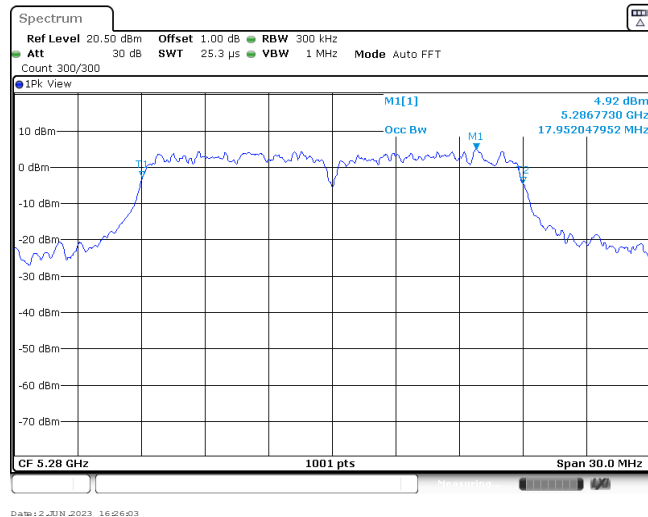
802.11ac (HT20)

CH_L



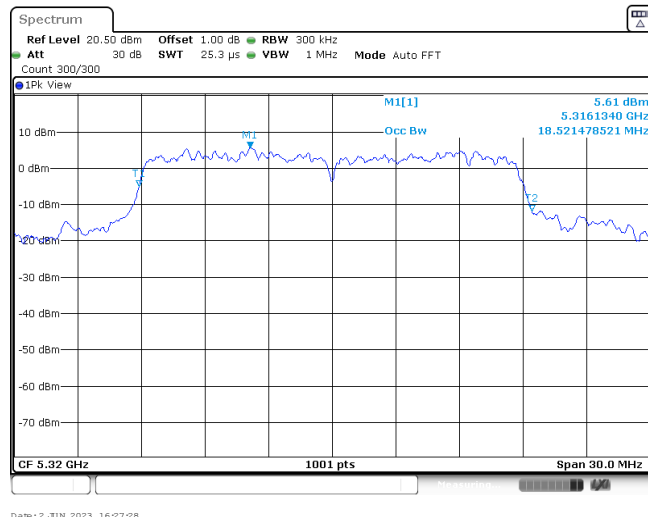
Date: 2 JUN 2023 16:24:59

CH_M



Date: 2 JUN 2023 16:26:03

CH_H

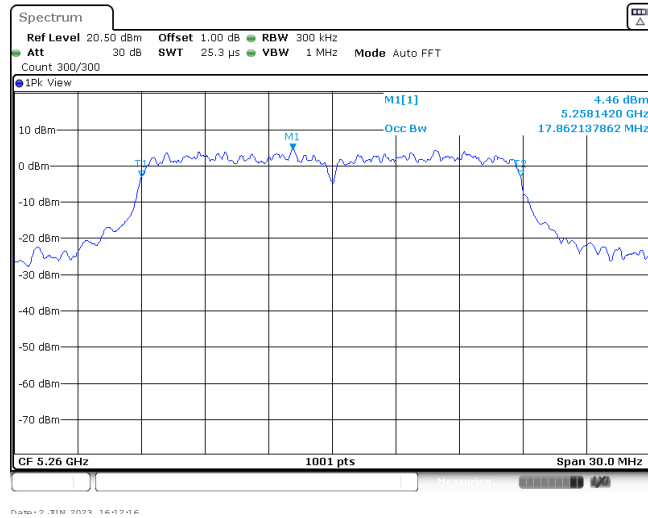


Date: 2 JUN 2023 16:07:08

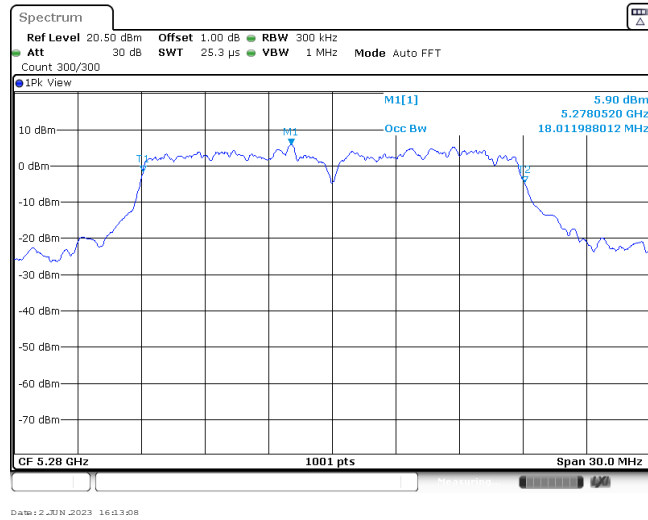
Band II

802.11n (HT20)

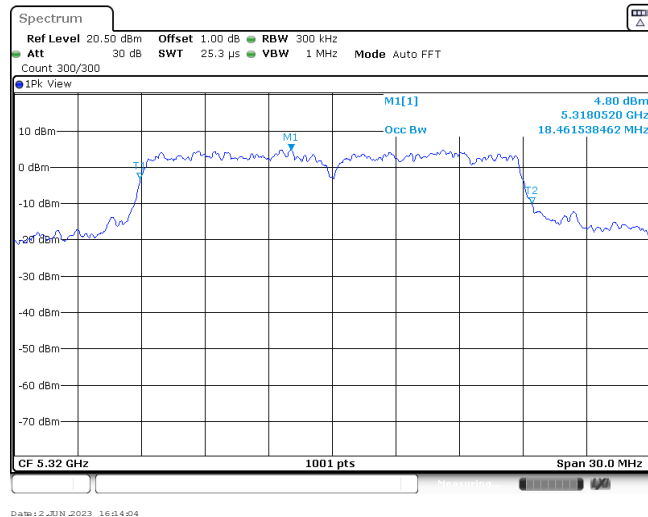
CH_L



CH_M



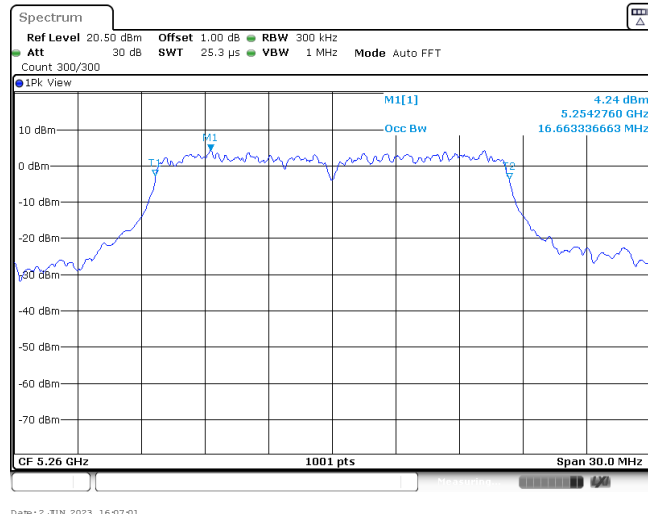
CH_H



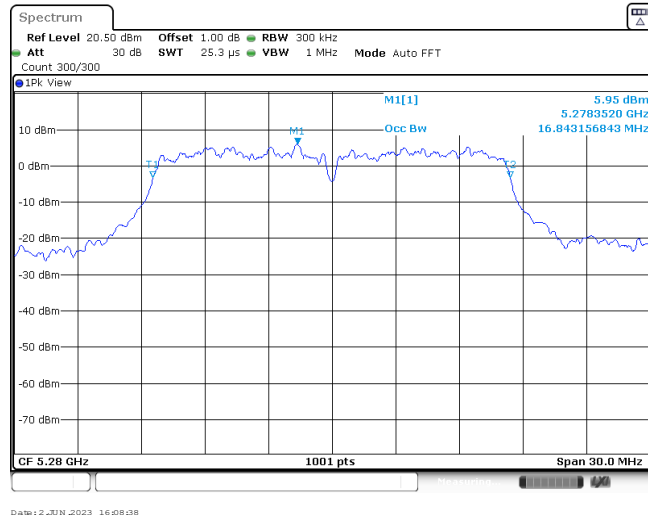
Band II

802.11a

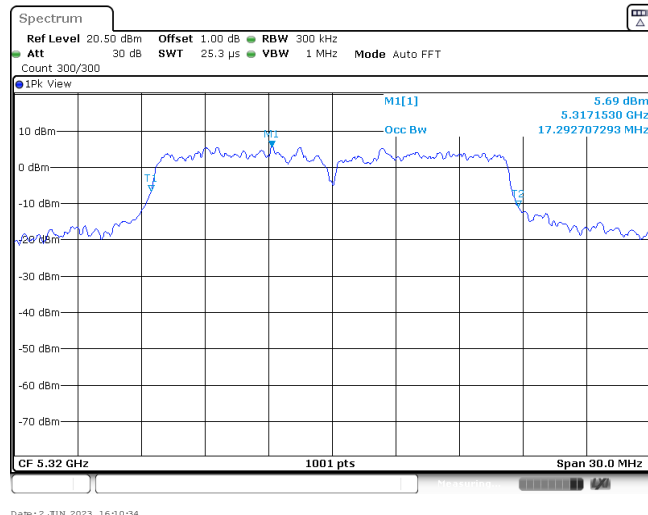
CH_L



CH_M

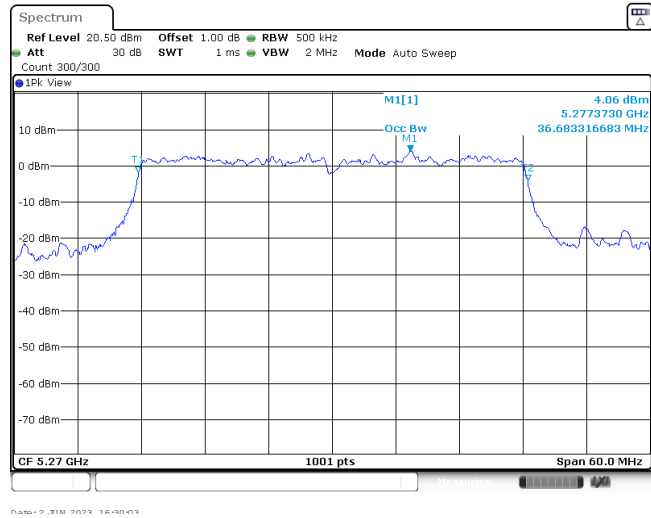


CH_H

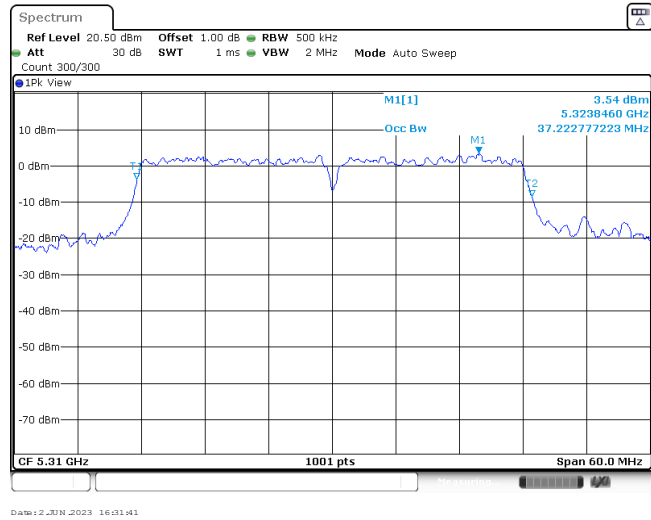


Band II **802.11ac (HT40)**

CH_L

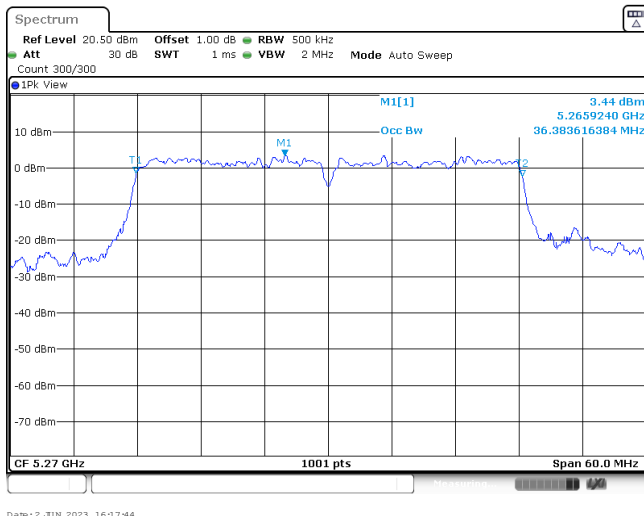


CH_H

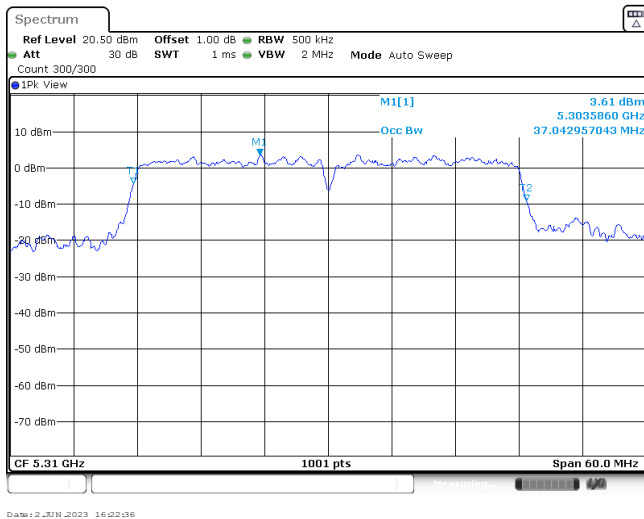


Band II **802.11n (HT40)**

CH_L

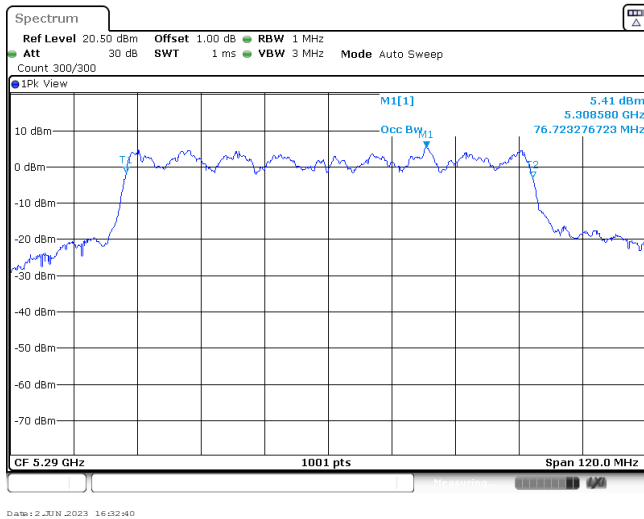


CH_H



Band II **802.11ac (HT80)**

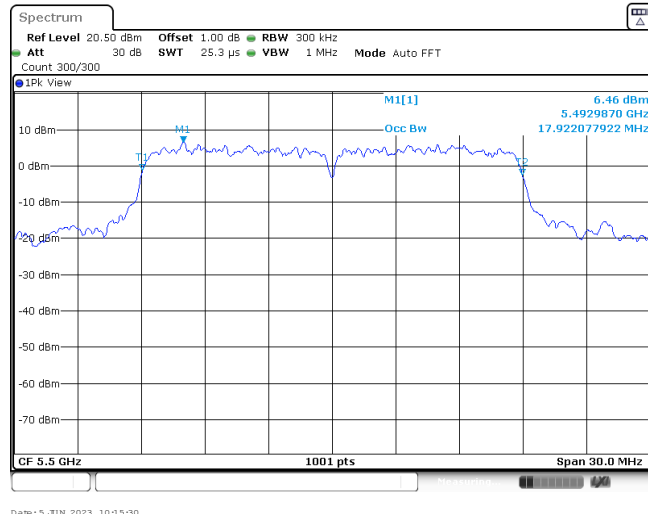
CH_M



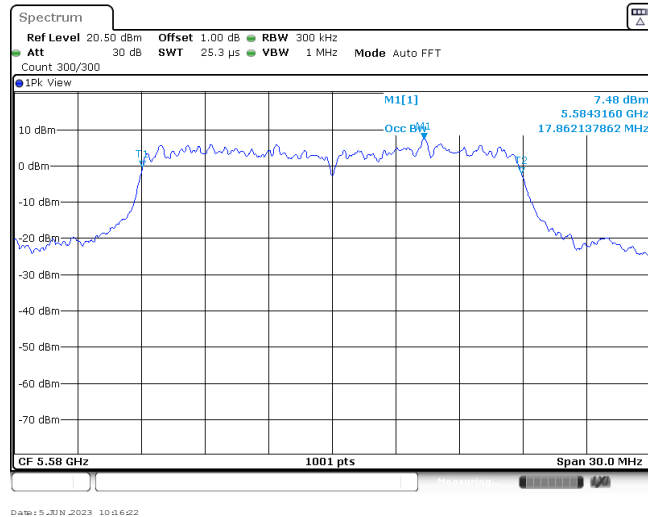
Band III

802.11ac (HT20)

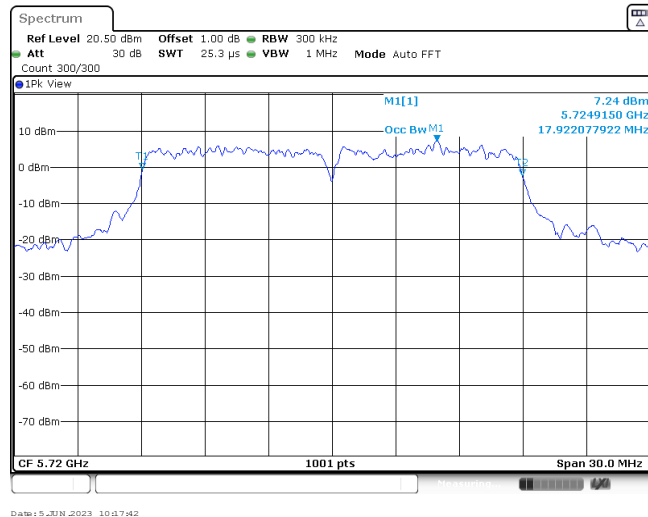
CH_L



CH_M



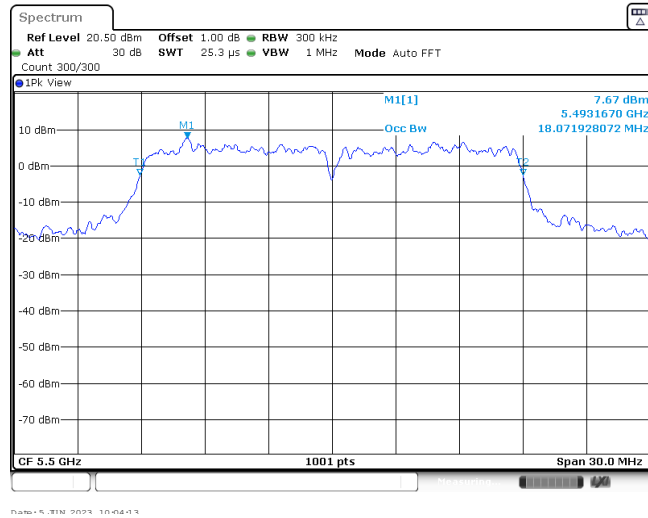
CH_H



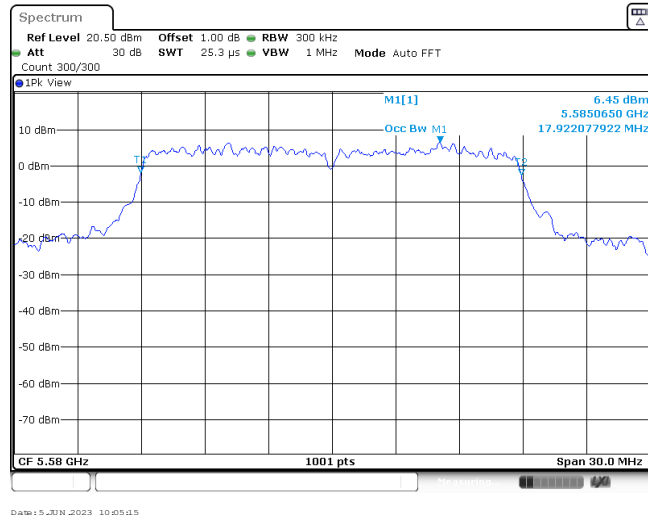
Band III

802.11n (HT20)

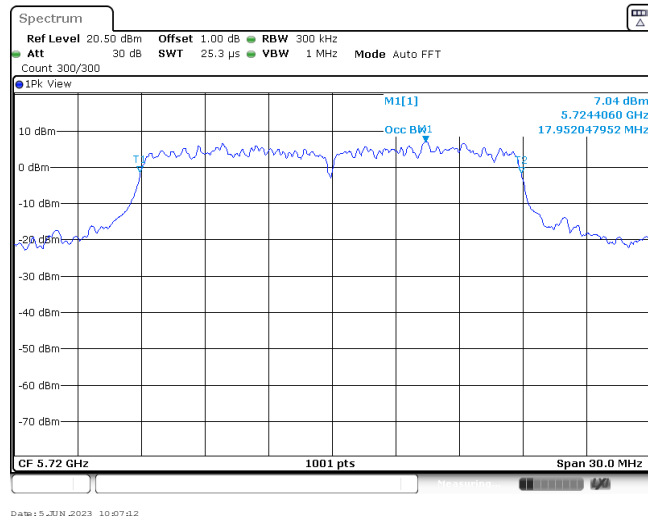
CH_L



CH_M



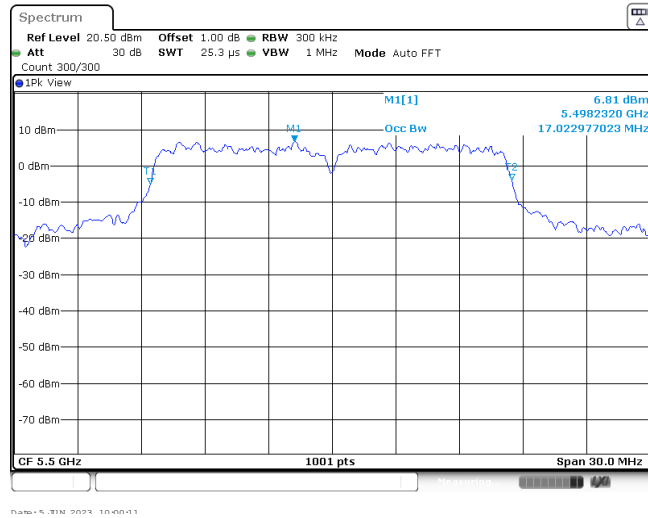
CH_H



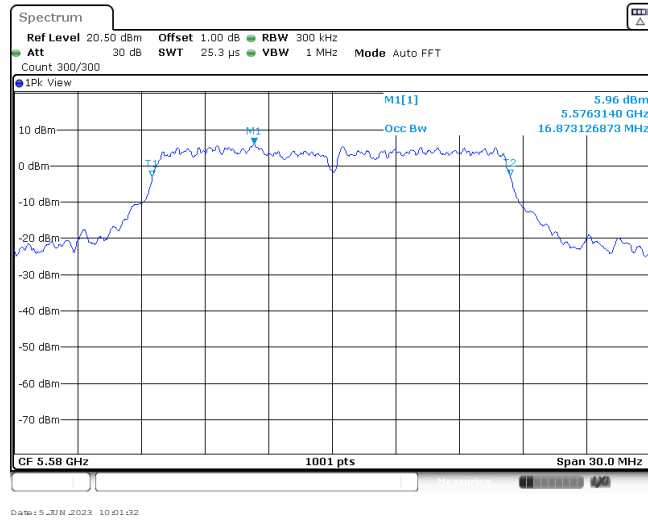
Band III

802.11a

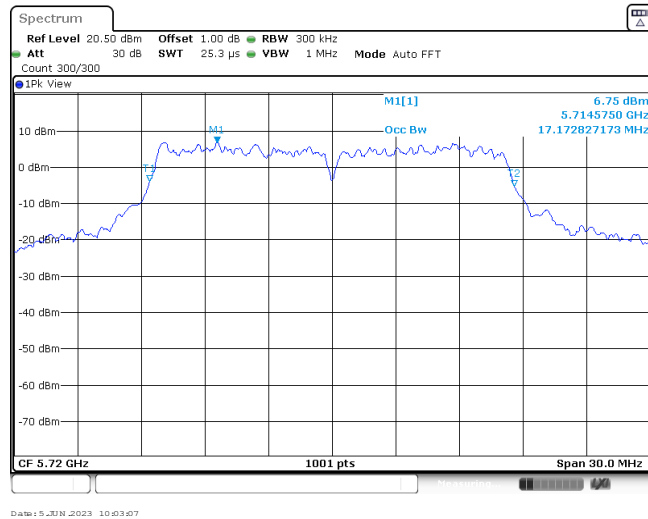
CH_L



CH_M



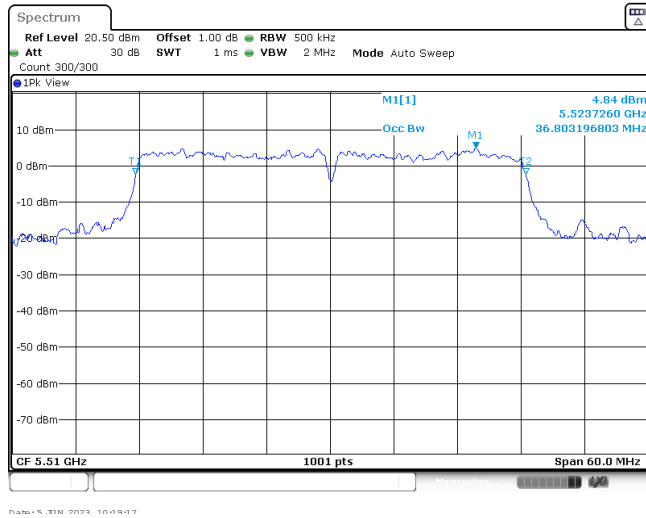
CH_H



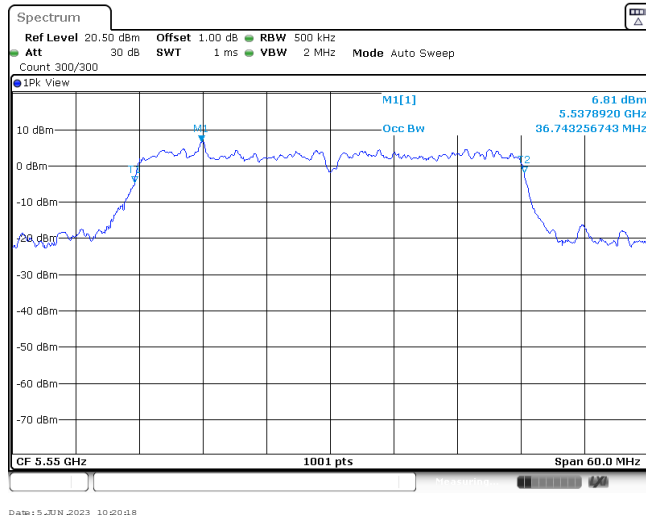
Band III

802.11ac (HT40)

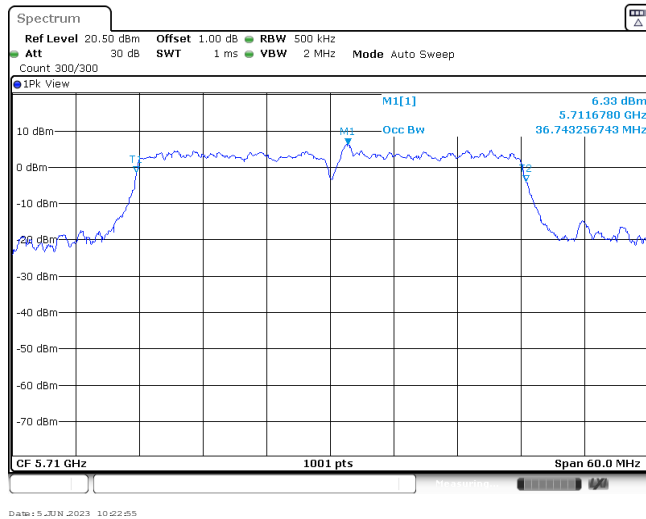
CH_L



CH_M



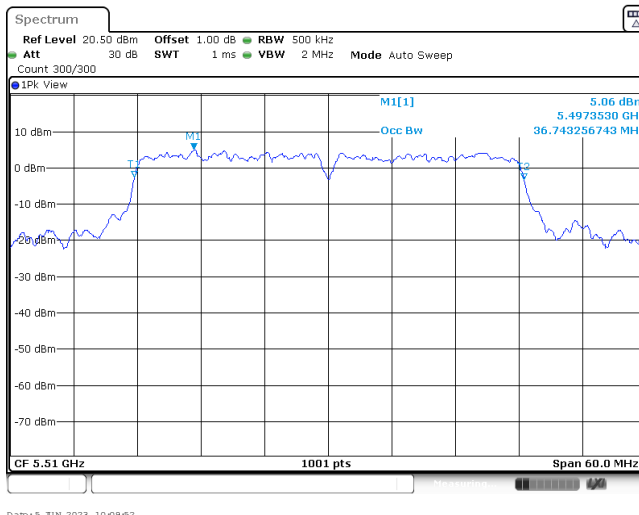
CH_H



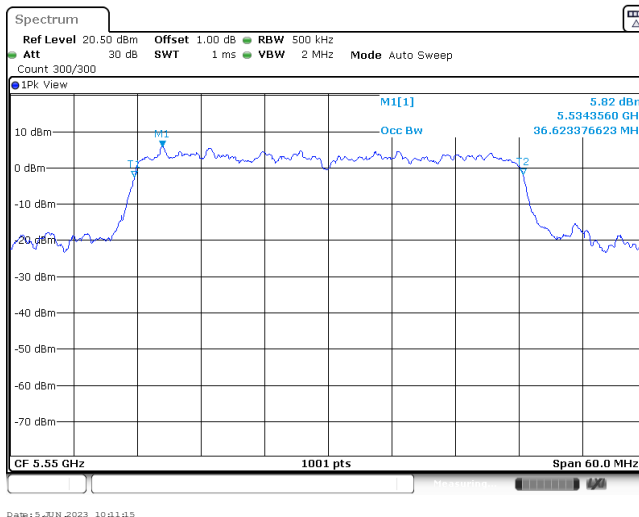
Band III

802.11n (HT40)

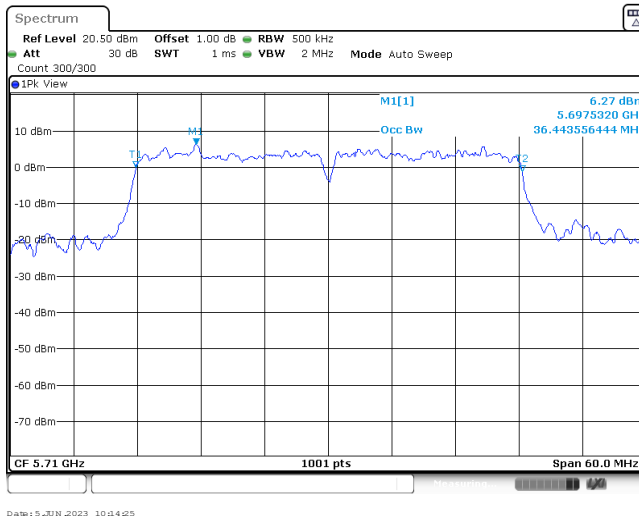
CH_L



CH_M



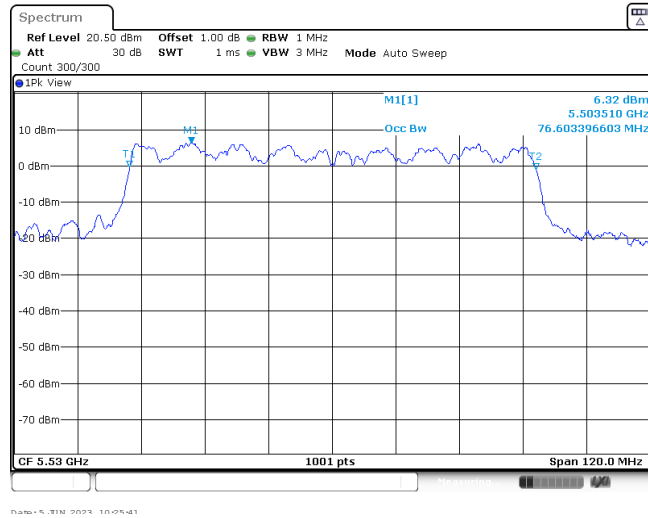
CH_H



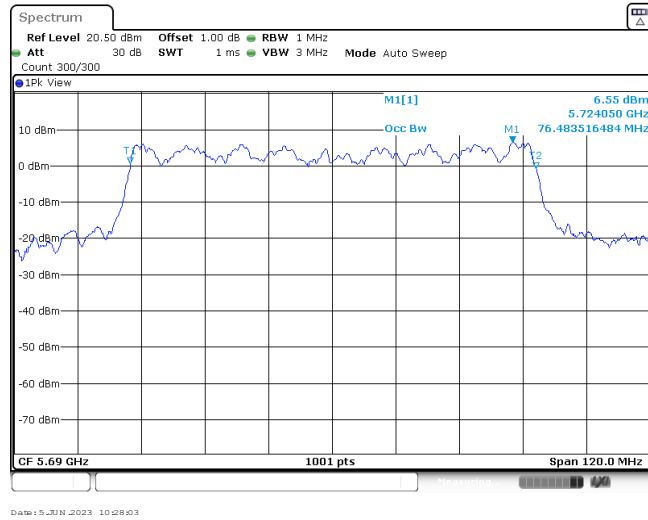
Band III

802.11ac (HT80)

CH_L



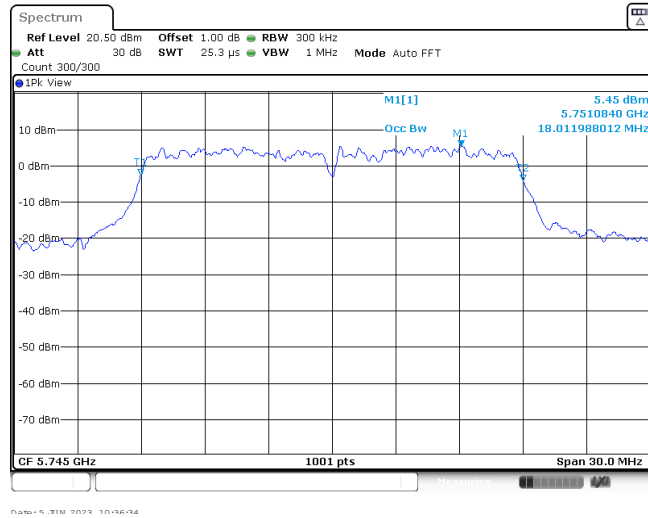
CH_H



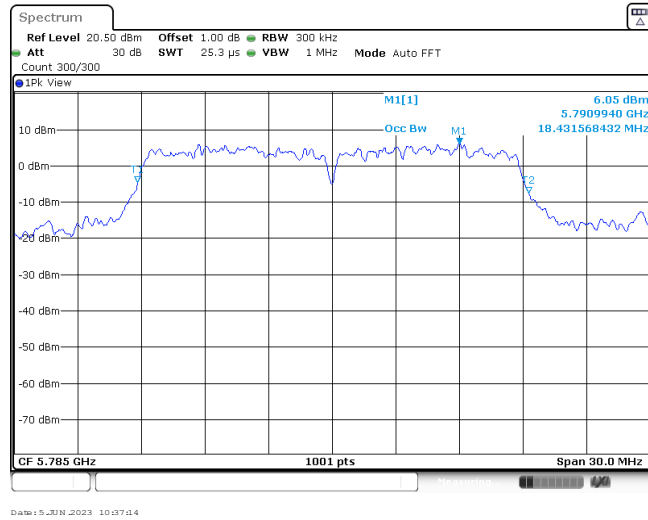
Band IV

802.11ac (HT20)

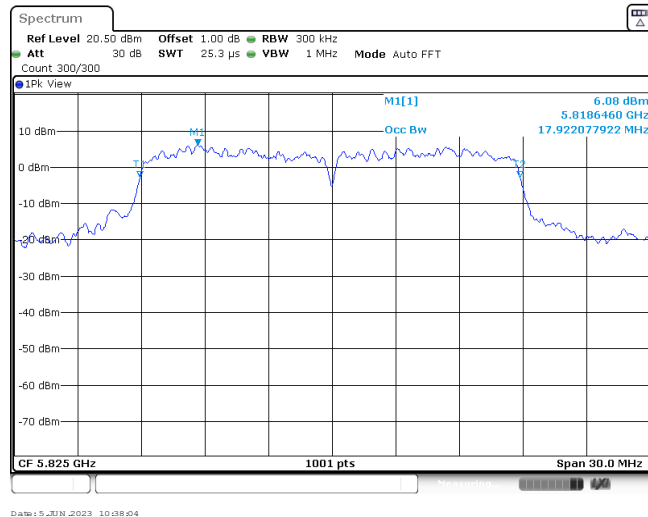
CH_L



CH_M



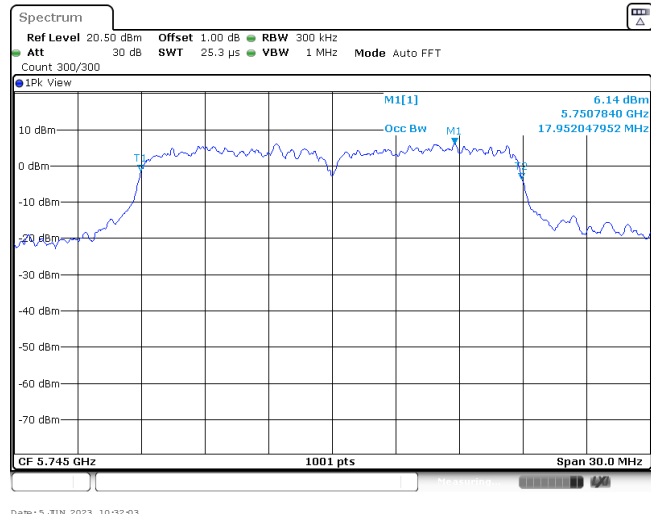
CH_H



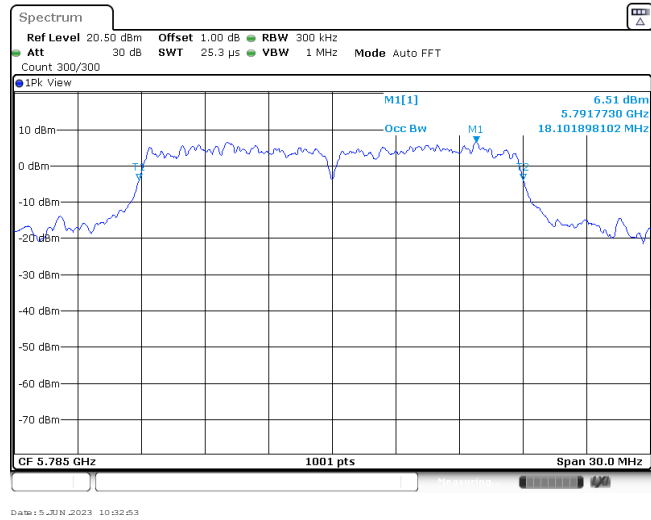
Band IV

802.11n (HT20)

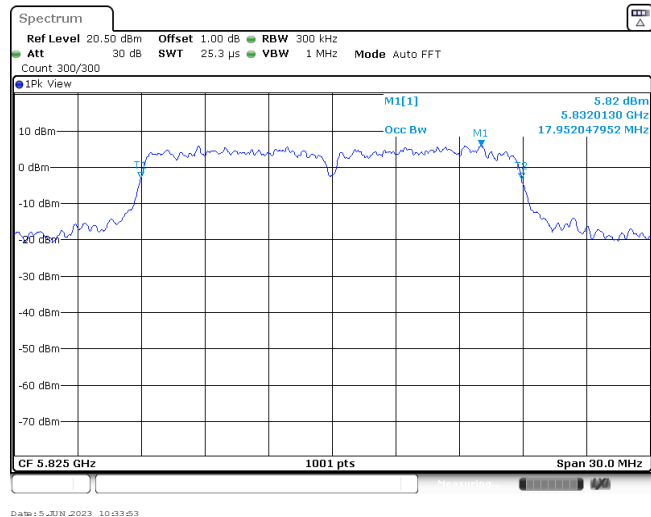
CH_L



CH_M



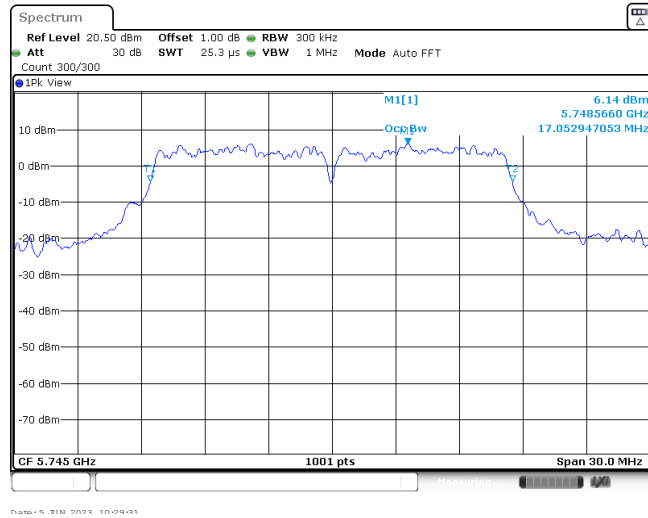
CH_H



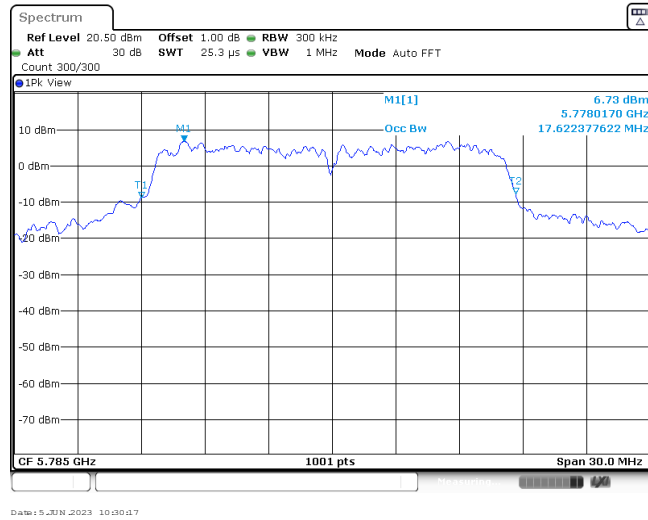
Band IV

802.11a

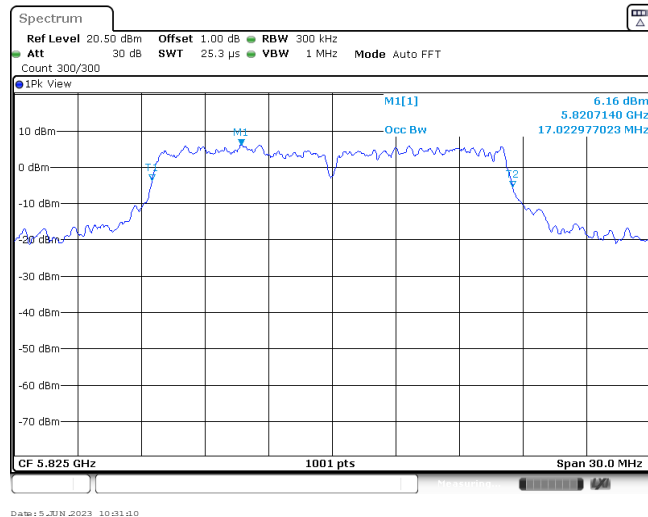
CH_L



CH_M



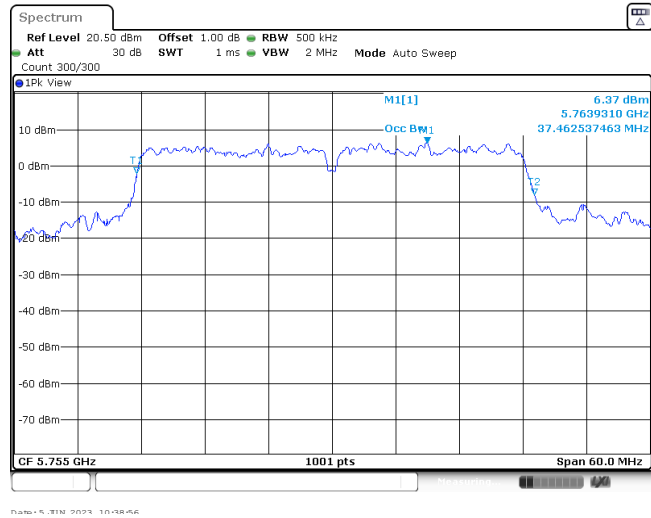
CH_H



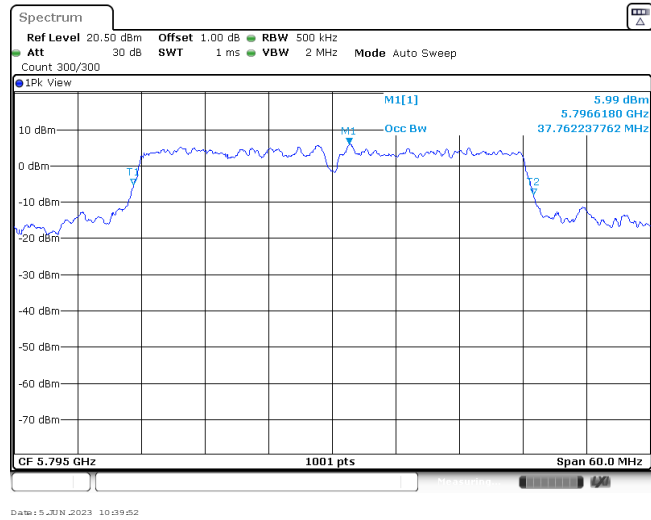
Band IV

802.11ac (HT40)

CH_L



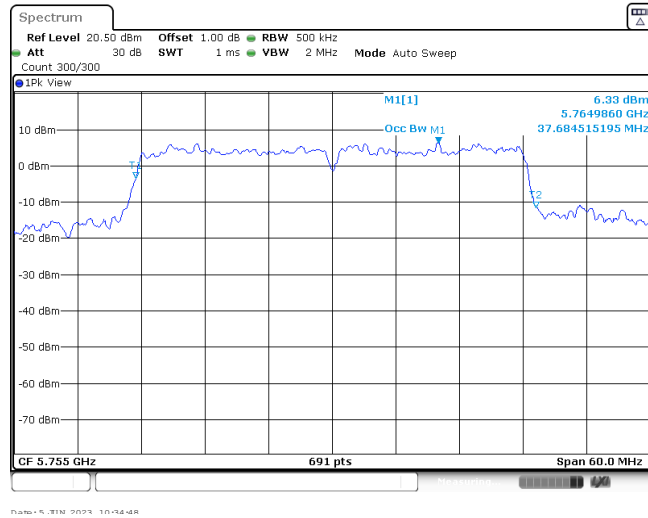
CH_H



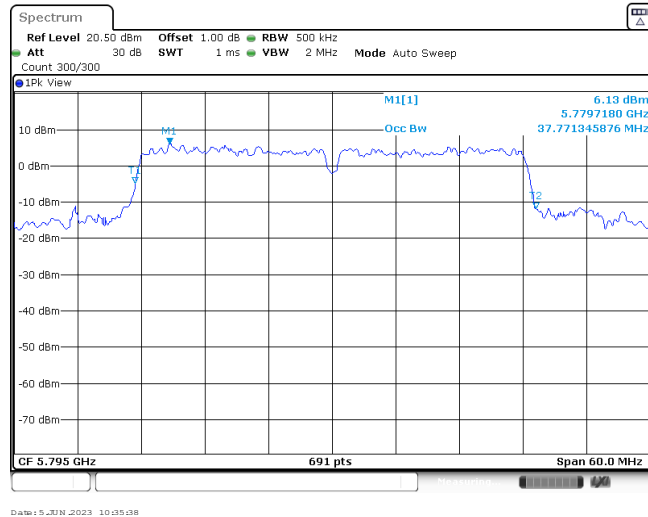
Band IV

802.11n (HT40)

CH_L



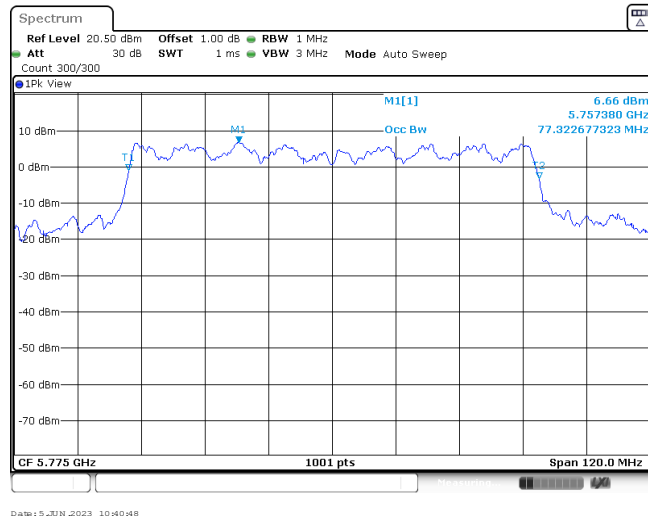
CH_H



Band IV

802.11ac (HT80)

CH_M

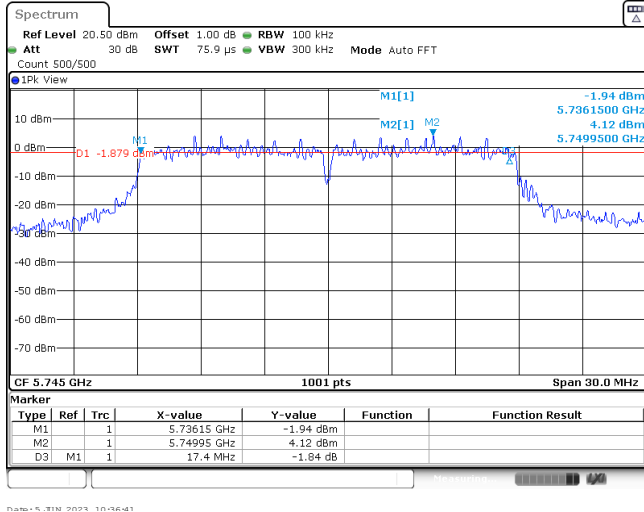


Appendix E: 6dB Bandwidth

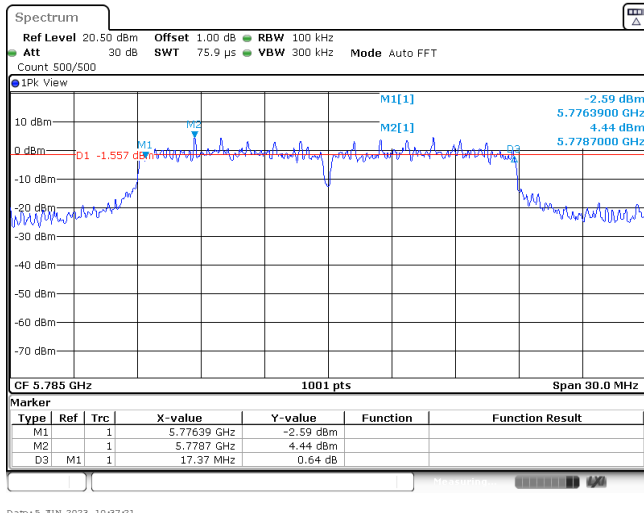
Band	Bandwidth (MHz)	Type	Channel	6dB bandwidth (MHz)	Result
IV	20	802.11ac	CH _L	17.40	Pass
			CH _M	17.37	
			CH _H	16.98	
		802.11n	CH _L	17.16	Pass
			CH _M	17.64	
			CH _H	17.58	
		802.11a	CH _L	16.47	Pass
			CH _M	16.44	
			CH _H	16.41	
	40	802.11ac	CH _L	35.58	Pass
			CH _H	35.88	
		802.11n	CH _L	36.26	Pass
CH _H			36.61		
80	802.11ac	CH _M	75.48	Pass	

Band IV **802.11ac (HT20)**

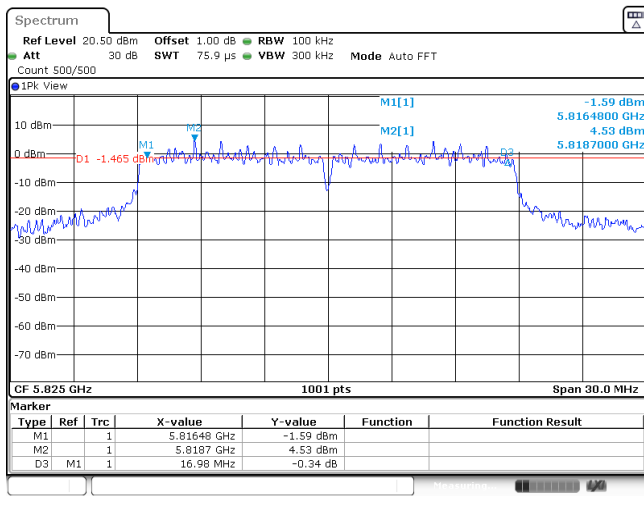
CH_L



CH_M



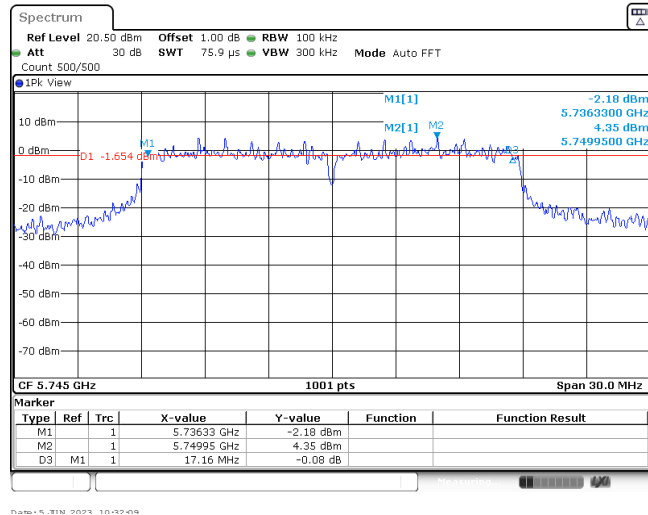
CH_H



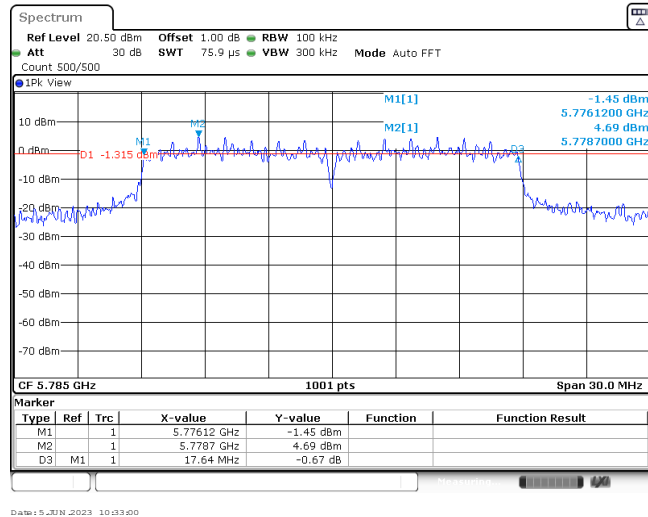
Band IV

802.11n (HT20)

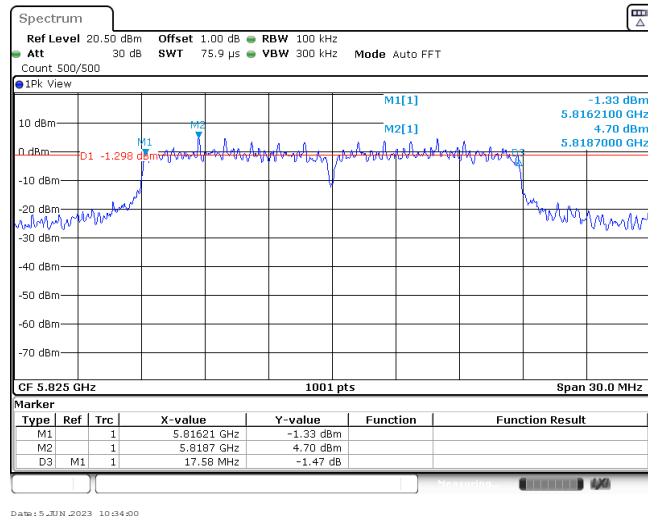
CH_L



CH_M

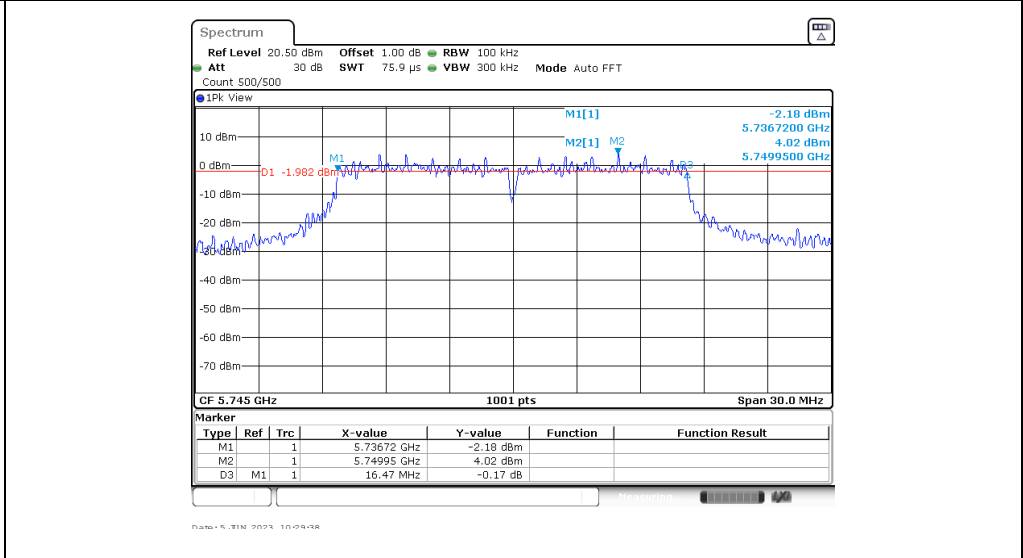


CH_H

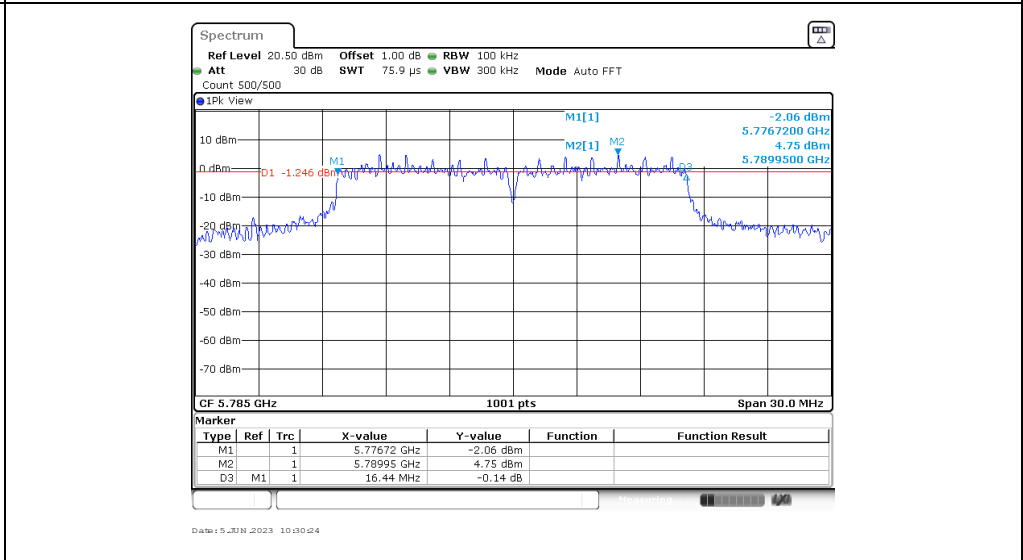


Band IV **802.11a**

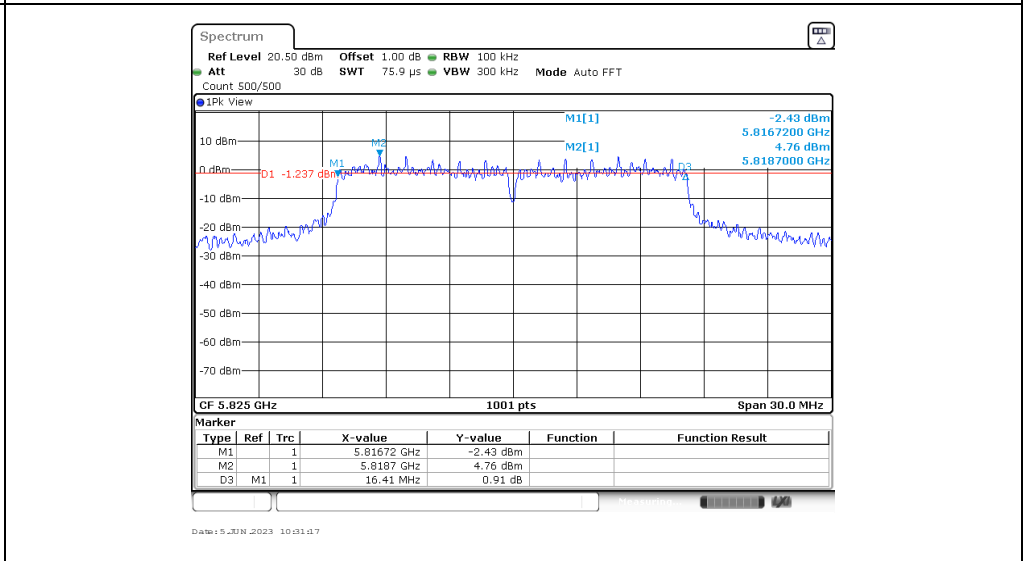
CH_L



CH_M



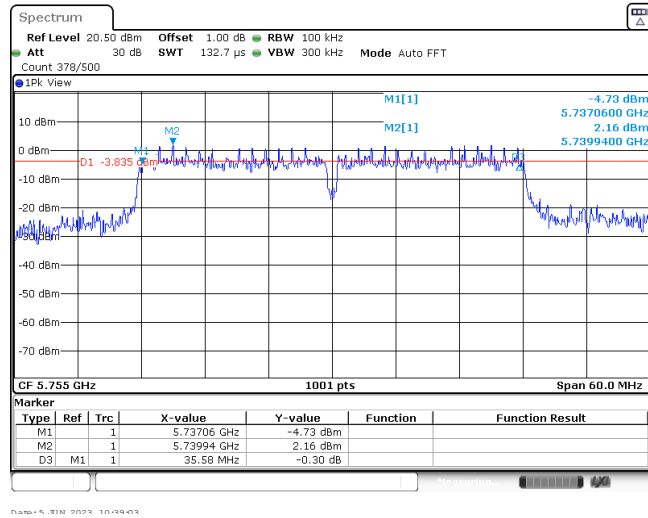
CH_H



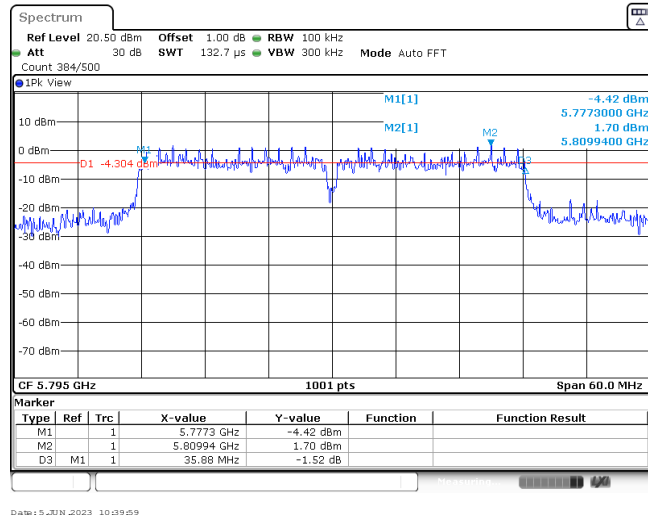
Band IV

802.11ac (HT40)

CH_L

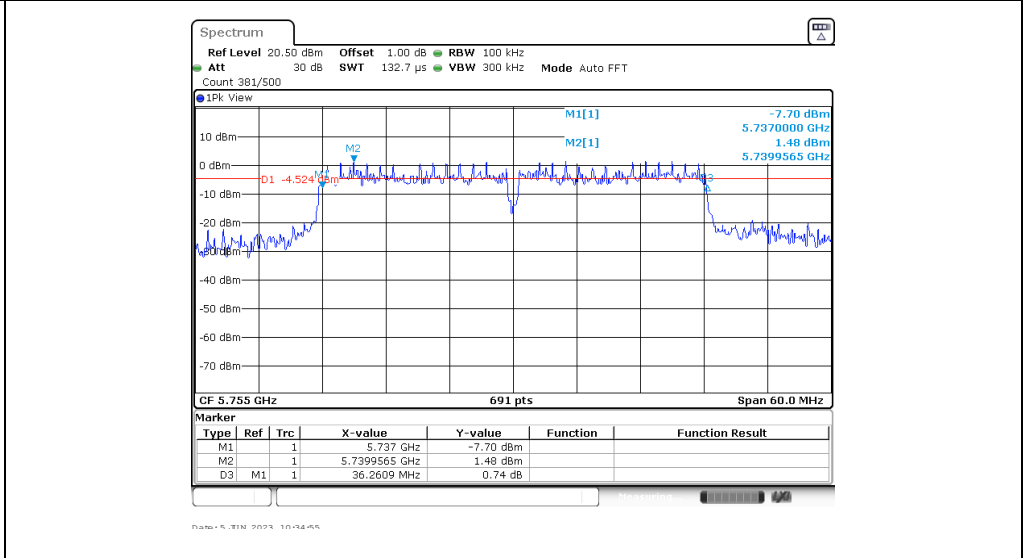


CH_H

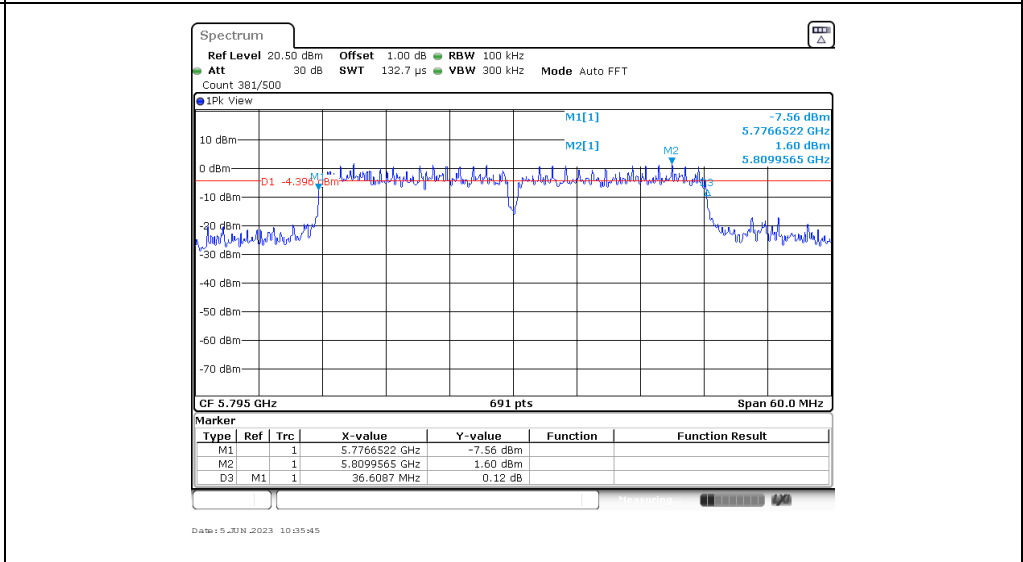


Band IV **802.11n (HT40)**

CH_L

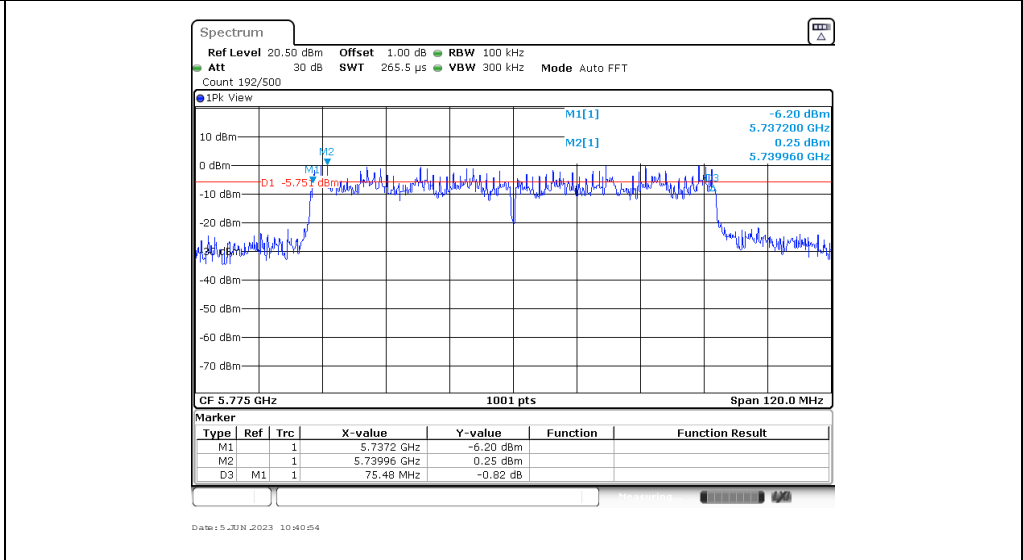


CH_H



Band IV **802.11ac (HT80)**

CH_M



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	-47000.00	-9.07336	PASS
T _N	V _N	-47000.00	-9.07336	PASS
T _N	V _H	-46000.00	-8.88031	PASS

Band: II			Test Frequency: 5260.00MHz	
Temperature (°C)	Voltage (V)	Frequency Deviation (Hz)	Frequency Deviation (ppm)	Result
T _N	V _L	-48000.00	-9.12548	PASS
T _N	V _N	-48000.00	-9.12548	PASS
T _N	V _H	-48000.00	-9.12548	PASS

Band: III			Test Frequency: 5500.00MHz	
Temperature (°C)	Voltage (V)	Frequency Deviation (Hz)	Frequency Deviation (ppm)	Result
T _N	V _L	-50000.00	-9.09091	PASS
T _N	V _N	-50000.00	-9.09091	PASS
T _N	V _H	-50000.00	-9.09091	PASS

Band: IV			Test Frequency: 5745.00MHz	
Temperature (°C)	Voltage (V)	Frequency Deviation (Hz)	Frequency Deviation (ppm)	Result
T _N	V _L	-51900.00	-9.03394	PASS
T _N	V _N	-50900.00	-8.85988	PASS
T _N	V _H	-52900.00	-9.20801	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	-46000.00	-8.88031	PASS
V _N	-10	-46000.00	-8.88031	PASS
V _N	0	-46000.00	-8.88031	PASS
V _N	10	-46000.00	-8.88031	PASS
V _N	20	-46000.00	-8.88031	PASS
V _N	30	-46000.00	-8.88031	PASS
V _N	40	-46000.00	-8.88031	PASS
V _N	50	-46000.00	-8.88031	PASS

Band: II			Test Frequency: 5260.00MHz	
Voltage (V)	Temperature (°C)	Frequency Deviation (Hz)	Frequency Deviation (ppm)	Result
V _N	-20	-48000.00	-9.12548	PASS
V _N	-10	-47000.00	-8.93536	PASS
V _N	0	-47000.00	-8.93536	PASS
V _N	10	-47000.00	-8.93536	PASS
V _N	20	-47000.00	-8.93536	PASS
V _N	30	-47000.00	-8.93536	PASS
V _N	40	-47000.00	-8.93536	PASS
V _N	50	-47000.00	-8.93536	PASS

Band: III			Test Frequency: 5500.00MHz	
Voltage (V)	Temperature (°C)	Frequency Deviation (Hz)	Frequency Deviation (ppm)	Result
V _N	-20	-50000.00	-9.09091	PASS
V _N	-10	-50000.00	-9.09091	PASS
V _N	0	-50000.00	-9.09091	PASS
V _N	10	-50000.00	-9.09091	PASS
V _N	20	-50000.00	-9.09091	PASS
V _N	30	-50000.00	-9.09091	PASS
V _N	40	-50000.00	-9.09091	PASS
V _N	50	-50000.00	-9.09091	PASS

Band: IV			Test Frequency: 5745.00MHz	
Voltage (V)	Temperature (°C)	Frequency Deviation (Hz)	Frequency Deviation (ppm)	Result
V _N	-20	-52900.00	-9.20801	PASS
V _N	-10	-52900.00	-9.20801	PASS
V _N	0	-52900.00	-9.20801	PASS
V _N	10	-52900.00	-9.20801	PASS
V _N	20	-52900.00	-9.20801	PASS
V _N	30	-52900.00	-9.20801	PASS
V _N	40	-52900.00	-9.20801	PASS
V _N	50	-52900.00	-9.20801	PASS

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