APPENDIX REPORT

Project No.	SHT2005026001EW	Radio Specification	WIFI 5G
Test sample No.	YPHT20050260006	Model No.	SC100
Start test date	2020/5/28	Finish date	2020/5/28
Temperature	25°C	Humidity	50%
Test Engineer	Jiongsheng.Feng	Auditor	William . wang

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

Appendix A: Maximum Conducted Output Power

Band	Bandwidth (MHz)	Type	Channel	duty cycle (%)	duty cycle factor (dB)	Conducted Output Power (dBm)	Limit (dBm)	Result
I	20	802.11ac	CH_L	77	1.14	16.79	24.00	Pass
			CH_M	77	1.14	17.27		
			CH_H	77	1.14	17.10		
		802.11n	CH_L	61	2.15	16.14	24.00	Pass
			CH_M	61	2.15	16.50		
			CH_H	61	2.15	16.77		
		802.11a	CH_L	63	2.01	16.81	24.00	Pass
			CH_M	63	2.01	16.22		
			CH_H	63	2.01	16.52		
	40	802.11ac	CH_L	67	1.74	16.38	24.00	Pass
			CH_H	67	1.74	16.69		
		802.11n	CH_L	70	1.55	16.81	24.00	Pass
			CH_H	70	1.55	17.16		
	80	802.11ac	CH_M	38	4.20	17.00	24.00	Pass
II	20	802.11ac	CH_L	78	1.08	17.04	24.00	Pass
			CH_M	78	1.08	16.84		
			CH_H	78	1.08	16.85		
		802.11n	CH_L	60	2.22	18.18	24.00	Pass
			CH_M	60	2.22	18.04		
			CH_H	60	2.22	17.86		
		802.11a	CH_L	62	2.08	19.17	24.00	Pass
			CH_M	62	2.08	18.81		
			CH_H	62	2.08	18.83		
	40	802.11ac	CH_L	66	1.80	16.31	24.00	Pass
			CH_H	66	1.80	16.23		
		802.11n	CH_L	69	1.61	17.11	24.00	Pass
			CH_H	69	1.61	17.08		
	80	802.11ac	CH_M	38	4.20	16.55	24.00	Pass

Band	Bandwidth (MHz)	Type	Channel	duty cycle (%)	duty cycle factor （dB）	Conducted Output Power (dBm)	Limit (dBm)	Result
III	20	802.11ac	CH_L	77	1.14	17.03	24.00	Pass
			CH_M	77	1.14	16.02		
			CH_H	77	1.14	17.36		
		802.11n	CH_L	61	2.15	18.19	24.00	Pass
			CH_M	61	2.15	17.26		
			CH_H	61	2.15	18.40		
		802.11a	CH_L	63	2.01	19.47	24.00	Pass
			CH_M	63	2.01	18.42		
			CH_H	63	2.01	19.76		
	40	802.11ac	CH_L	70	1.55	16.88	24.00	Pass
			CH_M	70	1.55	15.49		
			CH_H	70	1.55	16.42		
		802.11n	CH_L	77	1.14	17.43	24.00	Pass
			CH_M	77	1.14	16.48		
			CH_H	77	1.14	17.28		
	80	802.11ac	CH_L	37	4.32	16.37	24.00	Pass
			CH_M	37	4.32	16.60		
			CH_H	37	4.32	17.48		
IV	20	802.11ac	CH_L	62	2.08	17.21	30.00	Pass
			CH_M	62	2.08	17.32		
			CH_H	62	2.08	16.62		
		802.11n	CH_L	63	2.01	18.30	30.00	Pass
			CH_M	63	2.01	18.36		
			CH_H	63	2.01	17.91		
		802.11a	CH_L	65	1.87	19.46	30.00	Pass
			CH_M	65	1.87	19.24		
			CH_H	65	1.87	18.62		
	40	802.11ac	CH_L	70	1.55	16.99	30.00	Pass
			CH_H	70	1.55	16.61		
		802.11n	CH_L	70	1.55	17.51	30.00	Pass
			CH_H	70	1.55	17.29		
	80	802.11ac	CH_M	37	4.32	17.43	30.00	Pass

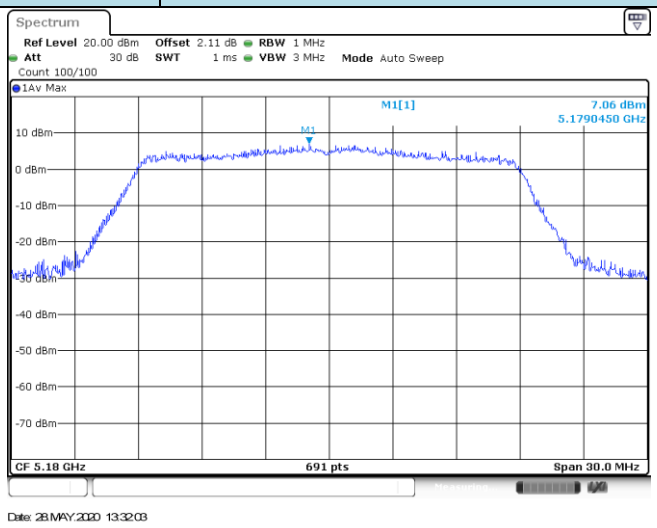
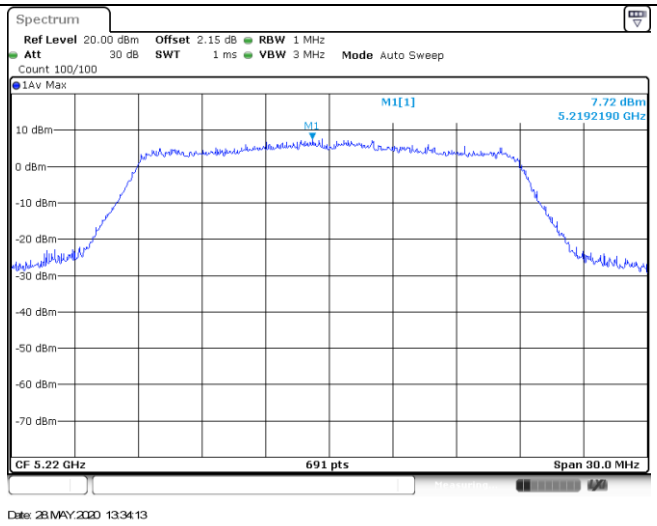
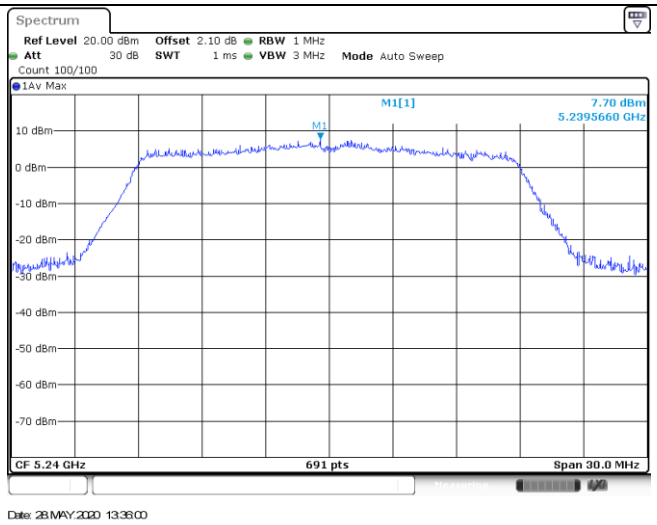
NOTE: duty cycle factor =10LOG(1/ duty cycle)

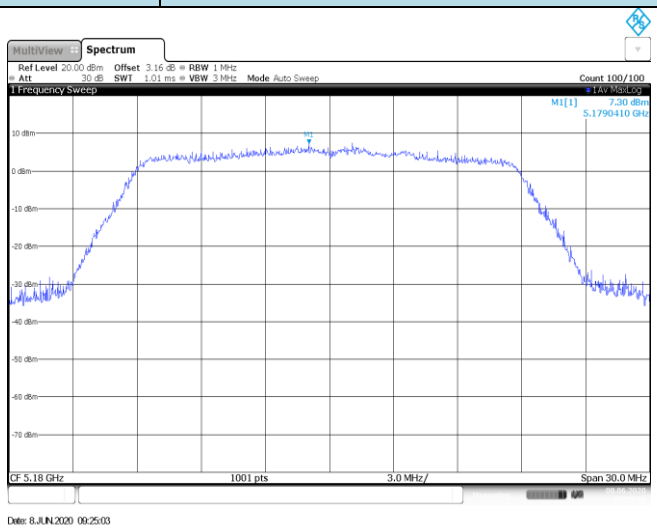
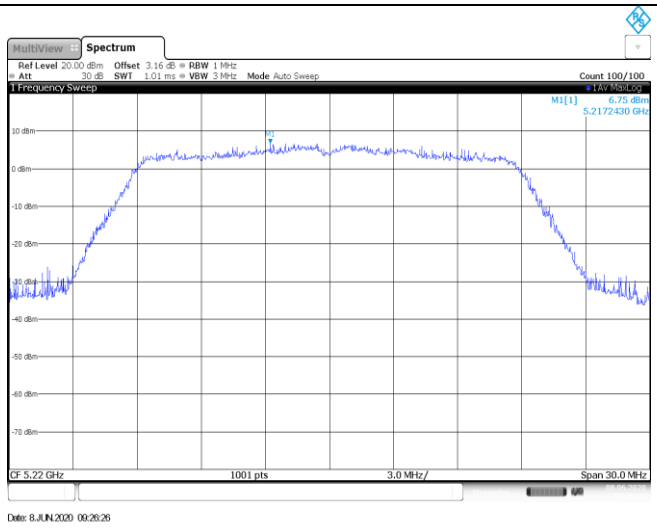
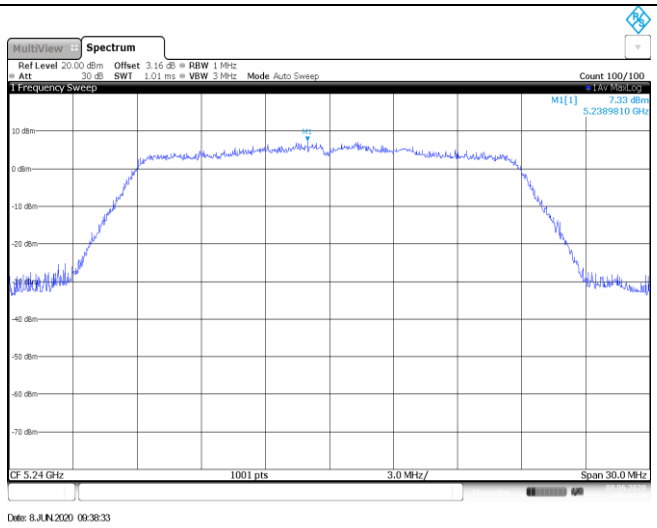
Appendix B：Maximum Power Spectral Density

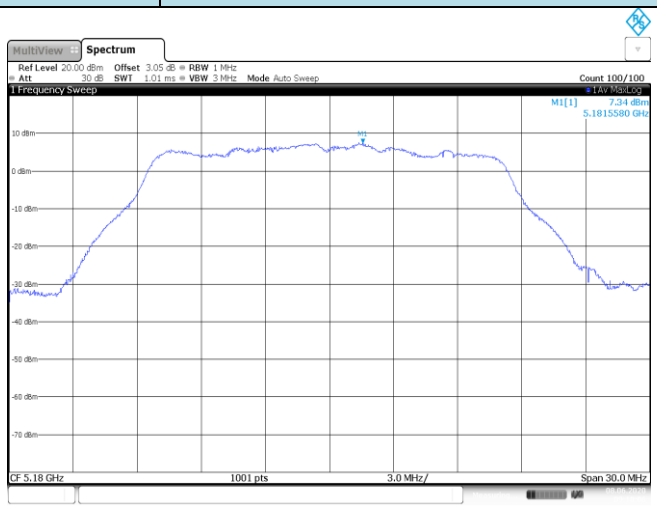
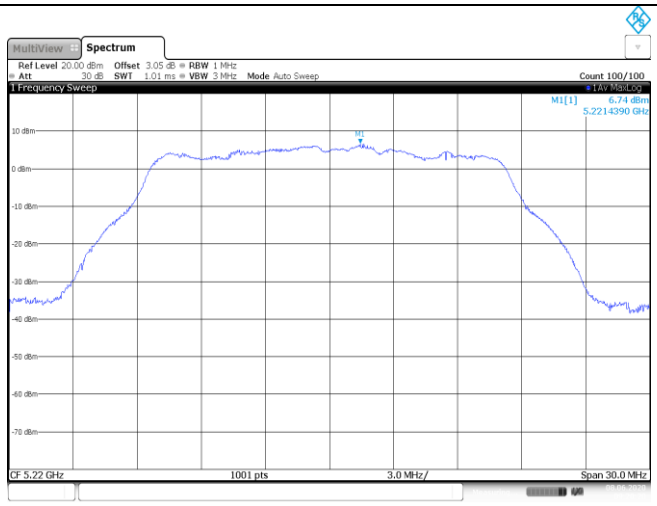
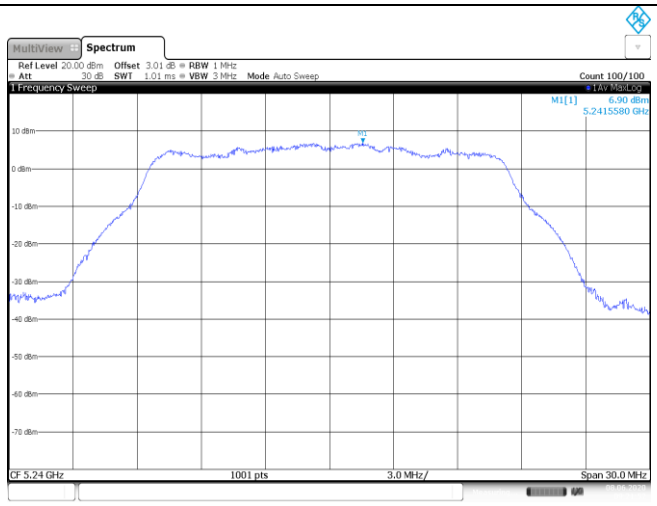
Band	Bandwidth (MHz)	Type	Channel	Power Spectral Density (dBm/MHz)	Limit (dBm/MHz)	Result
I	20	802.11ac	CH_L	7.06	11.00	Pass
			CH_M	7.72		
			CH_H	7.70		
		802.11n	CH_L	7.30	11.00	Pass
			CH_M	6.75		
			CH_H	7.33		
		802.11a	CH_L	7.34	11.00	Pass
			CH_M	6.74		
			CH_H	6.90		
	40	802.11ac	CH_L	5.13	11.00	Pass
			CH_H	4.70		
		802.11n	CH_L	4.86	11.00	Pass
			CH_H	5.18		
	80	802.11ac	CH_M	1.47	11.00	Pass
II	20	802.11ac	CH_L	7.58	11.00	Pass
			CH_M	6.54		
			CH_H	6.88		
		802.11n	CH_L	8.22	11.00	Pass
			CH_M	8.05		
			CH_H	8.11		
		802.11a	CH_L	9.13	11.00	Pass
			CH_M	8.77		
			CH_H	9.35		
	40	802.11ac	CH_L	3.73	11.00	Pass
			CH_H	4.05		
		802.11n	CH_L	4.27	11.00	Pass
			CH_H	3.73		
	80	802.11ac	CH_M	1.29	11.00	Pass

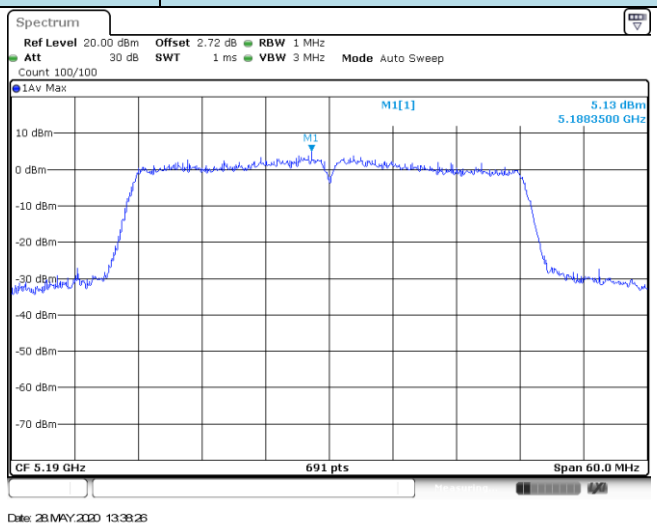
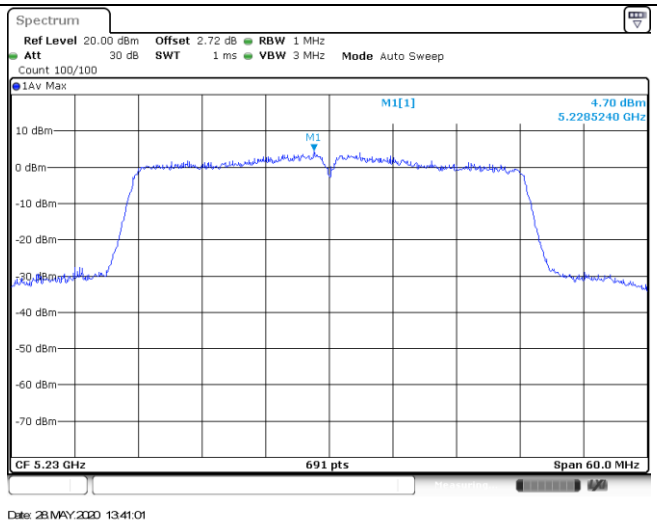
Band	Bandwidth (MHz)	Type	Channel	Power Spectral Density (dBm/MHz)	Limit (dBm/MHz)	Result
III	20	802.11ac	CH_L	7.52	11.00	Pass
			CH_M	6.61		
			CH_H	8.50		
		802.11n	CH_L	8.51	11.00	Pass
			CH_M	7.84		
			CH_H	9.62		
		802.11a	CH_L	9.89	11.00	Pass
			CH_M	9.04		
			CH_H	10.16		
	40	802.11ac	CH_L	3.58	11.00	Pass
			CH_M	3.80		
			CH_H	3.80		
		802.11n	CH_L	5.99	11.00	Pass
			CH_M	4.44		
			CH_H	5.03		
	80	802.11ac	CH_L	0.76	11.00	Pass
			CH_M	1.94		
			CH_H	1.89		
Band	Bandwidth (MHz)	Type	Channel	Power Spectral Density (dBm/500kHz)	Limit (dBm/500KHz)	Result
IV	20	802.11ac	CH_L	5.54	30.00	Pass
			CH_M	6.60		
			CH_H	5.24		
		802.11n	CH_L	7.04	30.00	Pass
			CH_M	7.39		
			CH_H	6.44		
		802.11a	CH_L	7.78	30.00	Pass
			CH_M	8.06		
			CH_H	7.31		
	40	802.11ac	CH_L	3.16	30.00	Pass
			CH_H	2.18		
		802.11n	CH_L	4.24	30.00	Pass
			CH_H	3.46		
	80	802.11ac	CH_M	1.04	30.00	Pass

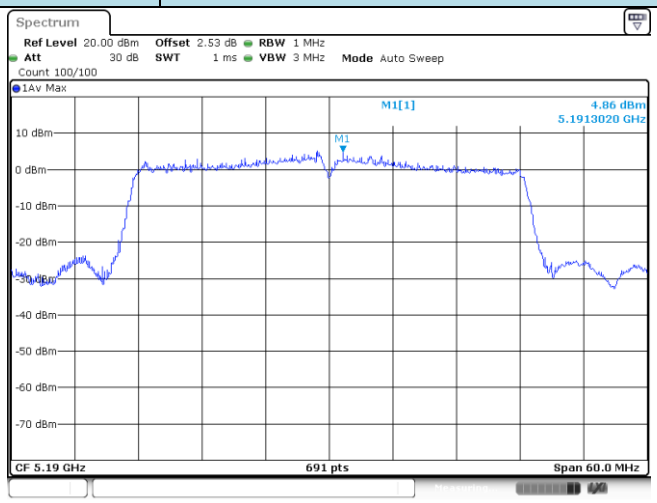
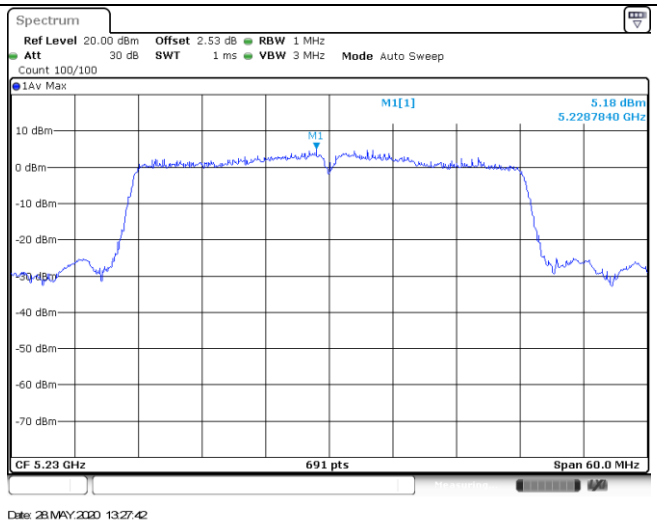
Test plot as follows:

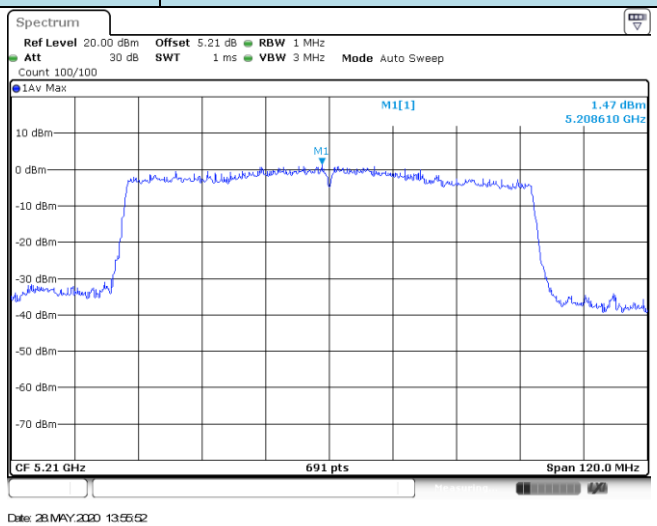
Band I	**802.11ac (HT20)**
CH_L	
CH_M	
CH_H	

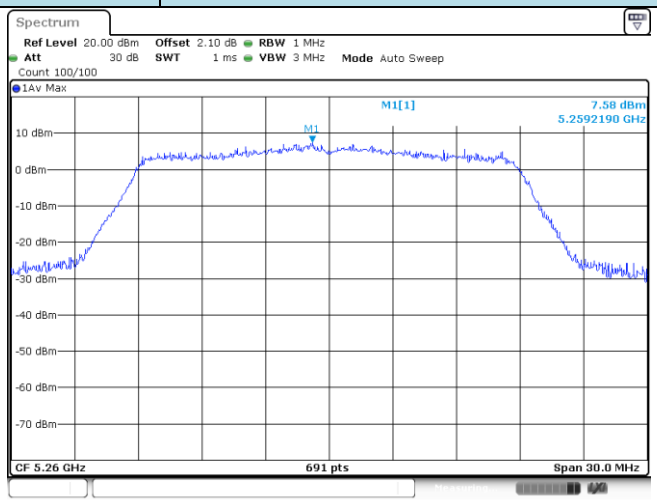
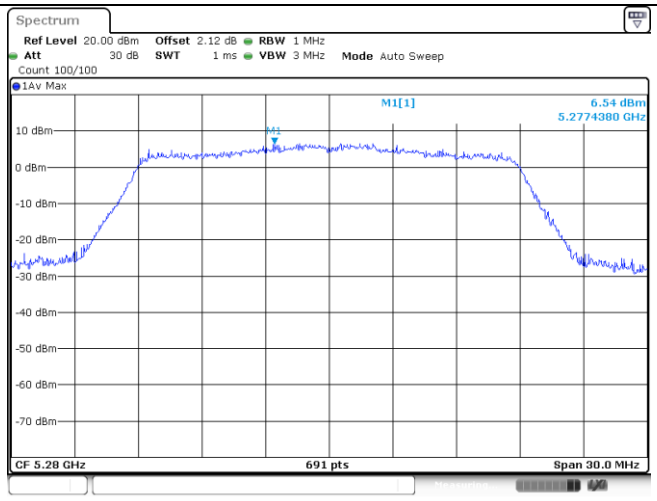
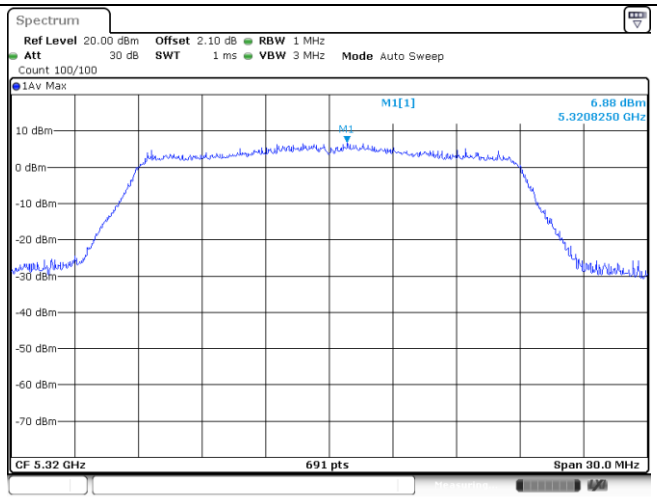
Band I	802.11n (HT20)
CH_L	
CH_M	
CH_H	

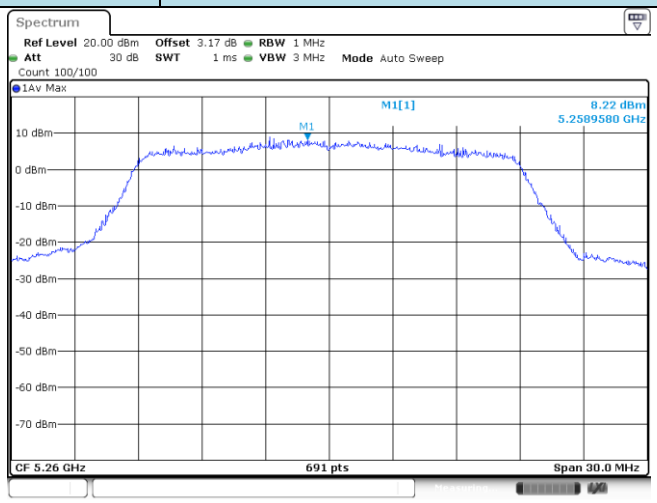
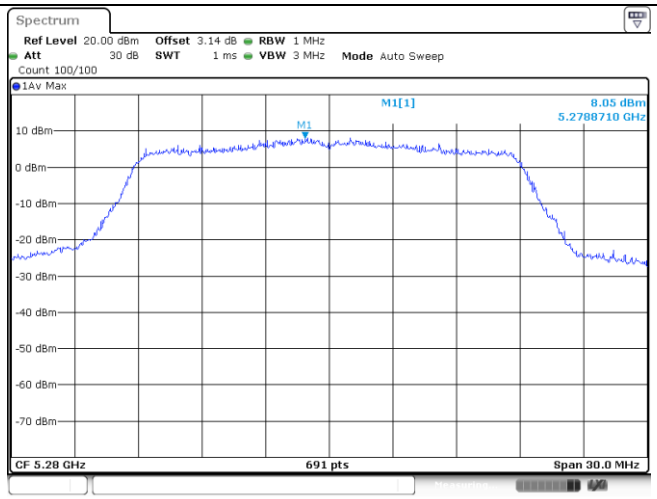
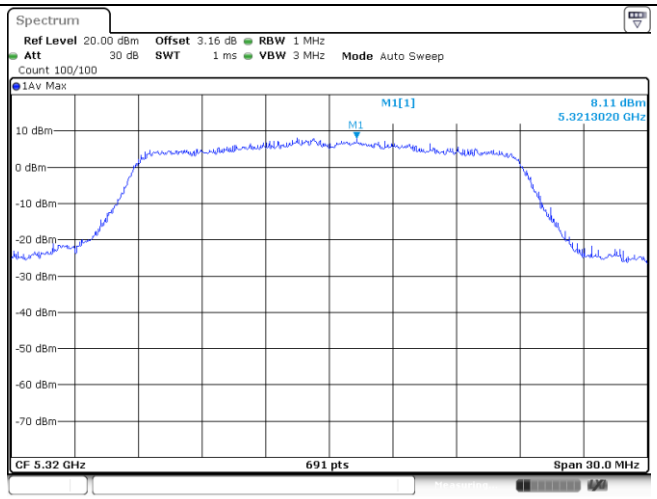
Band I	802.11a
CH_L	
CH_M	
CH_H	

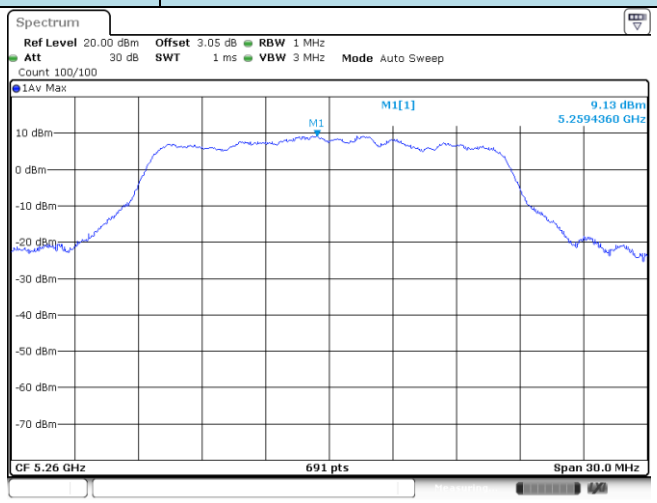
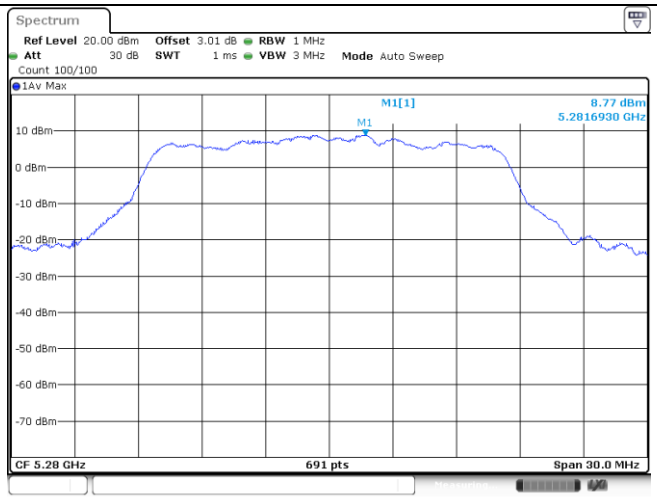
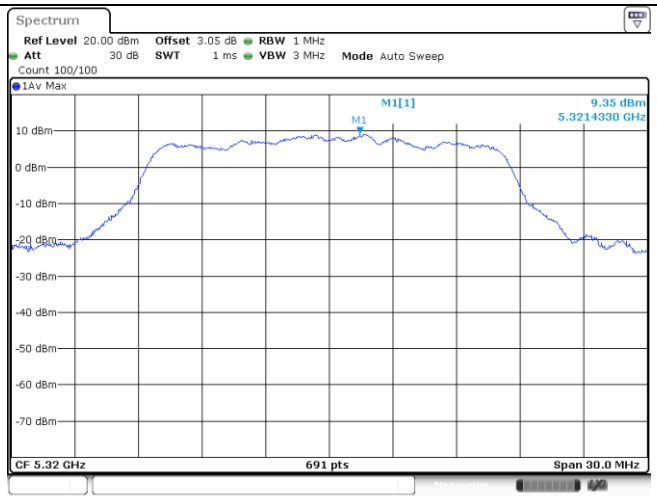
Band I	802.11ac (HT40)
CH_L	
CH_H	

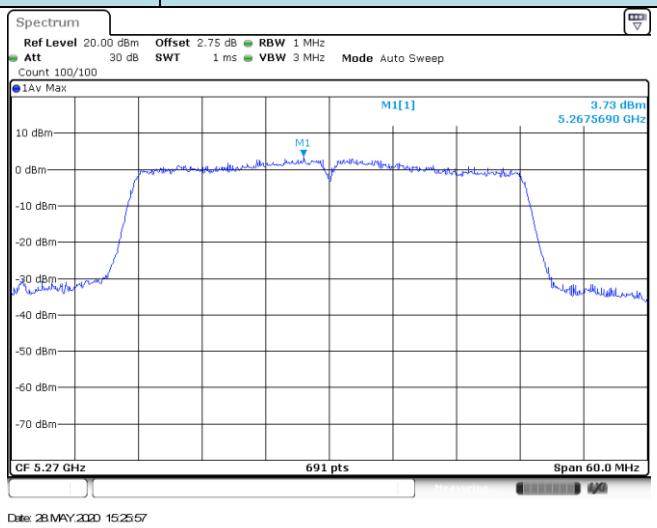
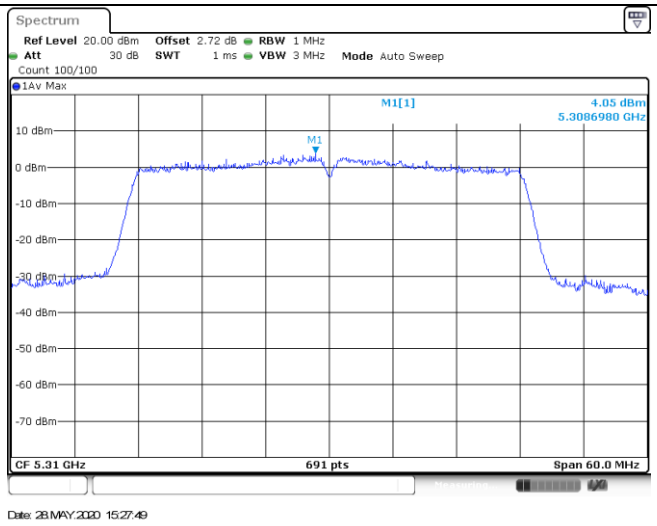
Band I	802.11n (HT40)
CH_L	
CH_H	

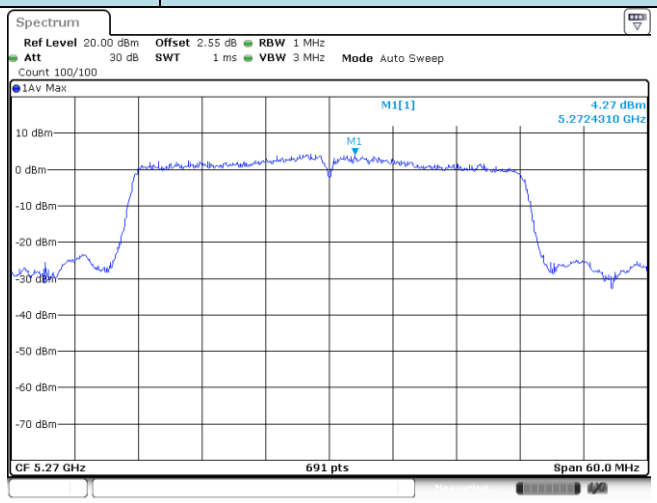
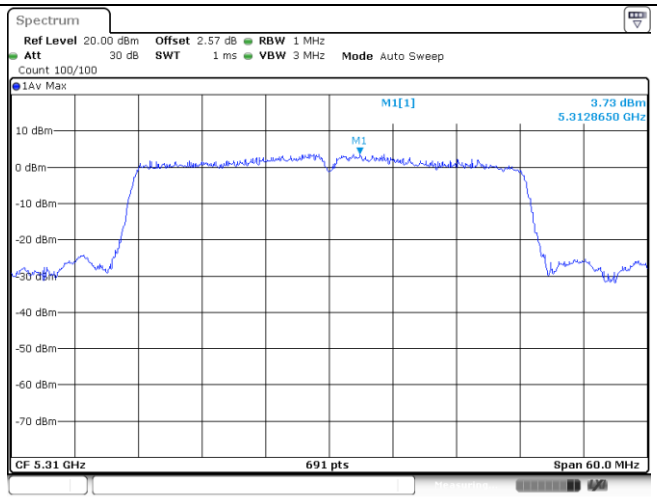
Band I	802.11ac (HT80)
CH_M	

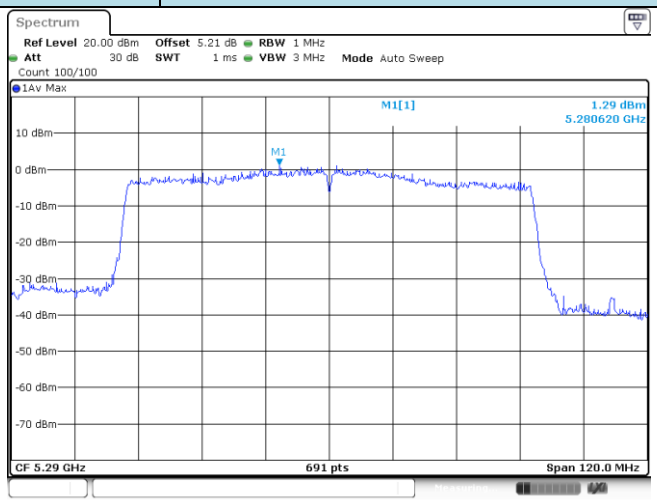
Band II	802.11ac (HT20)
CH_L	
CH_M	
CH_H	

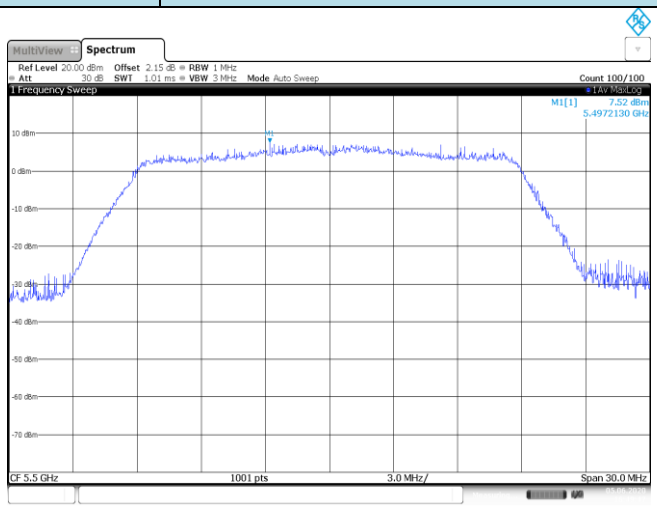
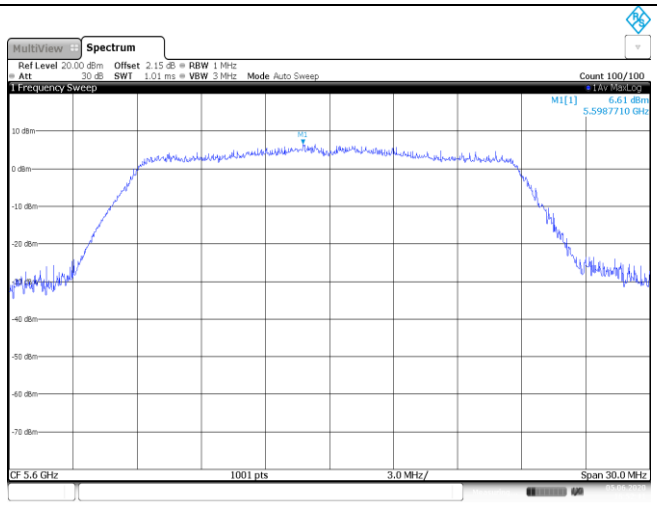
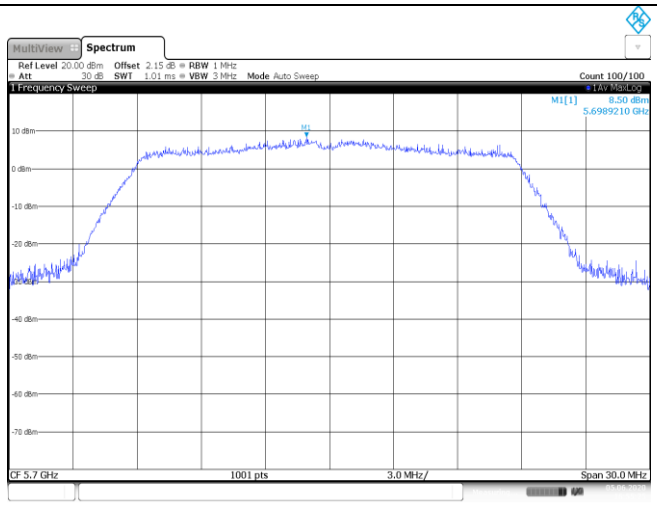
Band II	802.11n (HT20)
CH_L	
CH_M	
CH_H	

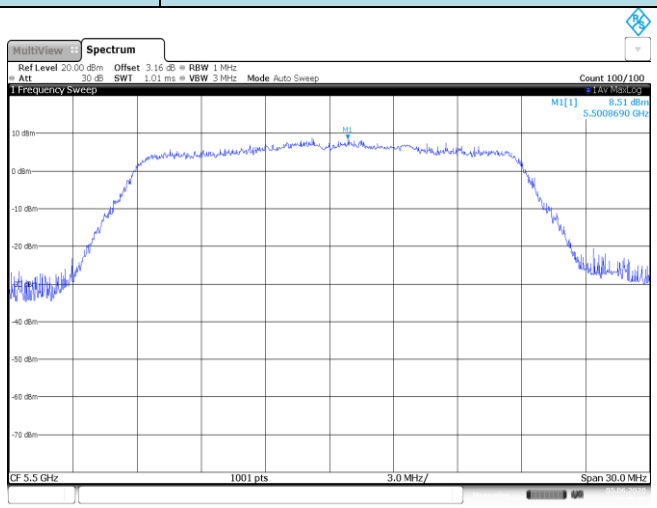
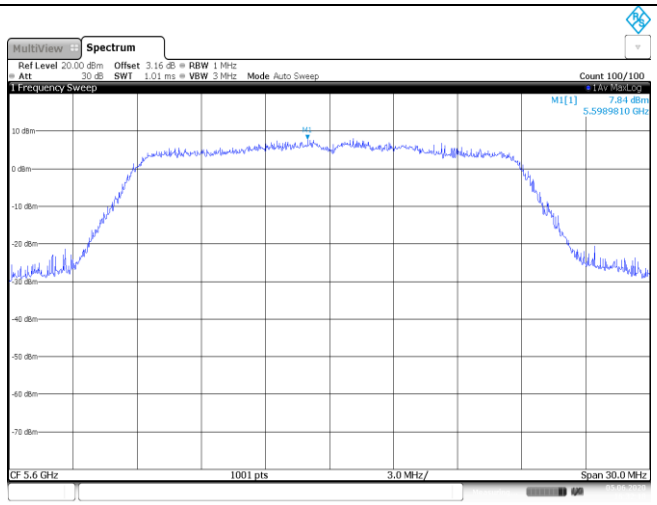
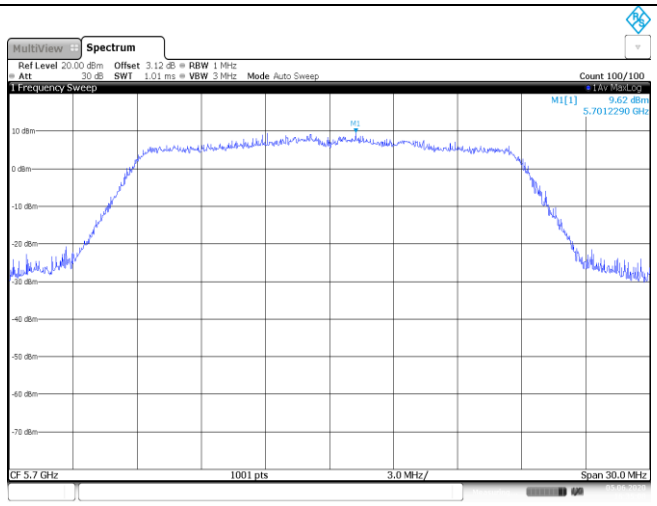
Band II	802.11a
CH_L	
CH_M	
CH_H	

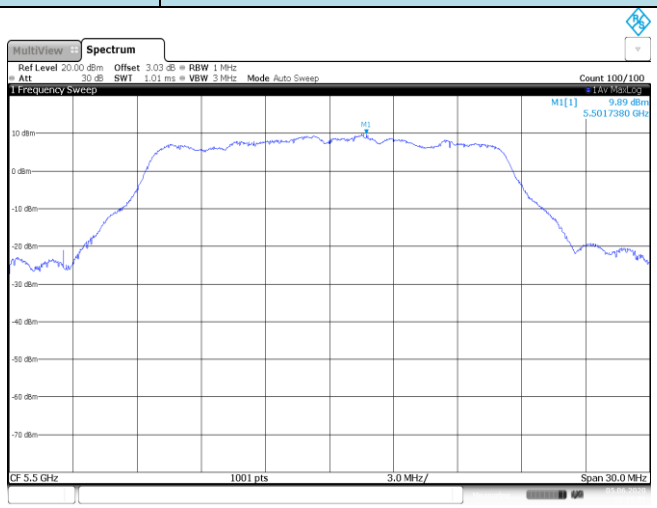
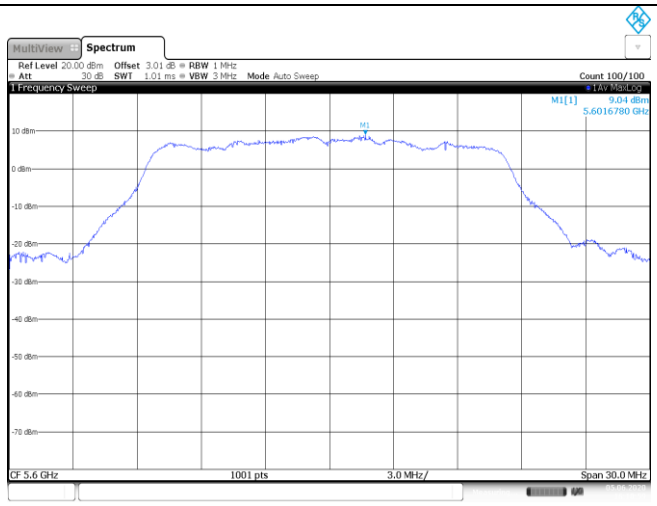
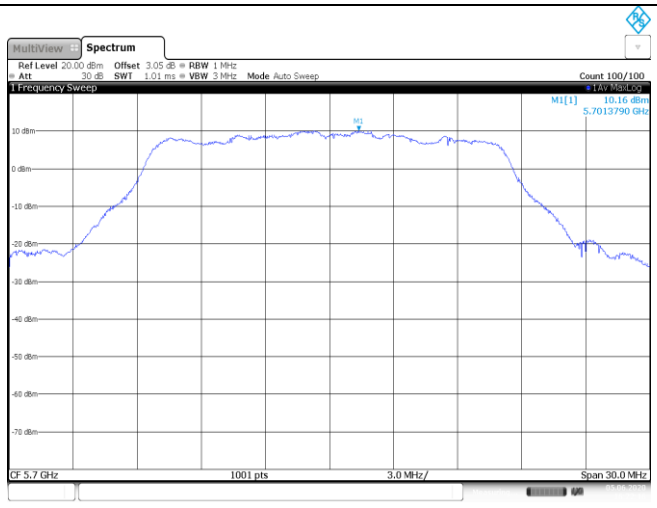
Band II	802.11ac (HT40)
CH_L	
CH_H	

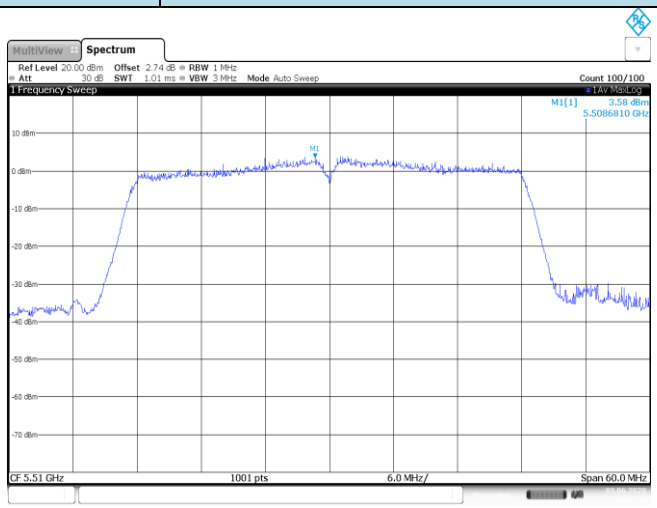
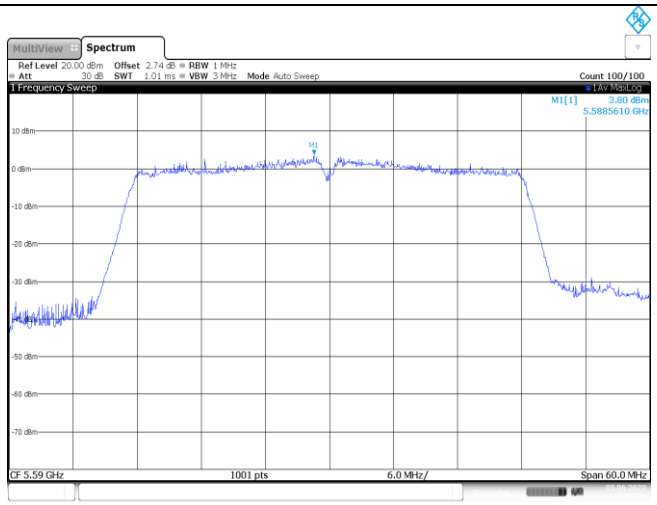
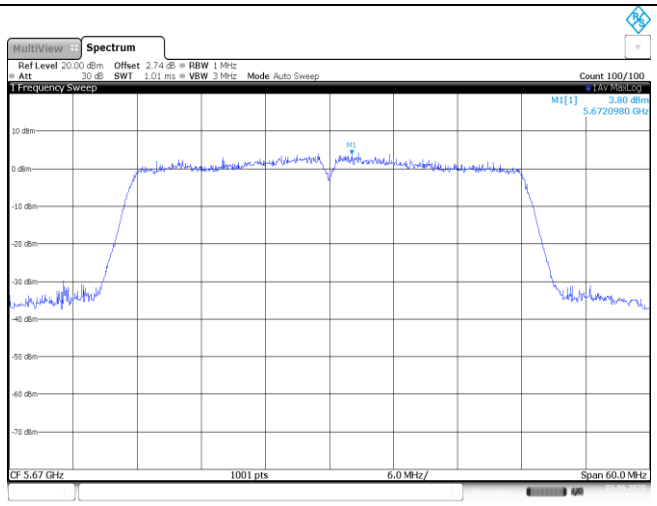
Band II	802.11n (HT40)
CH_L	
CH_H	

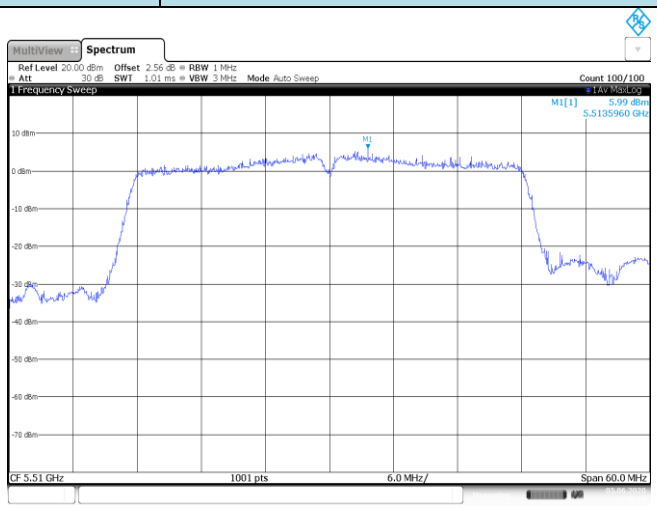
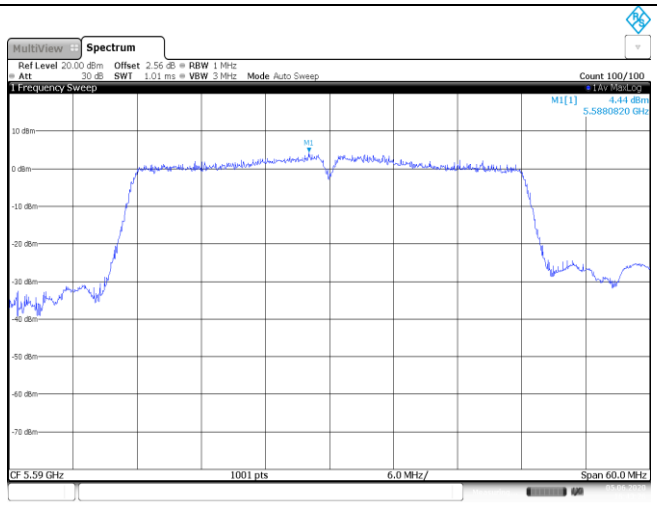
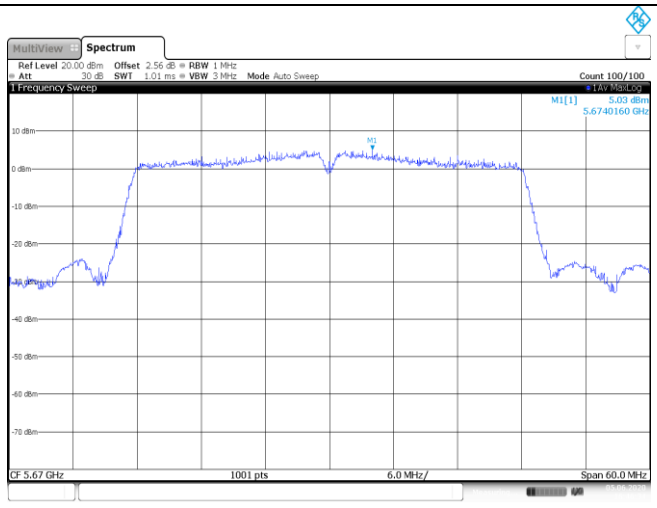
Band II	802.11ac (HT80)
CH_M	

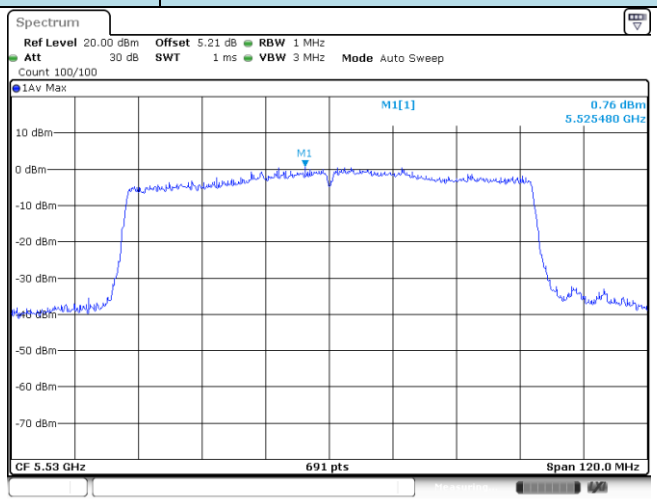
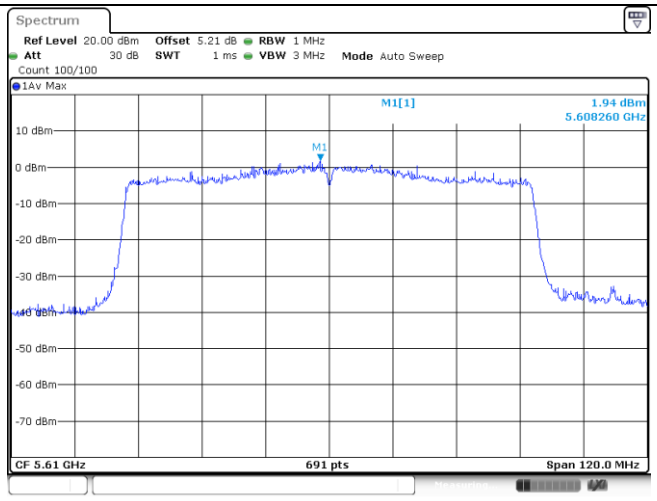
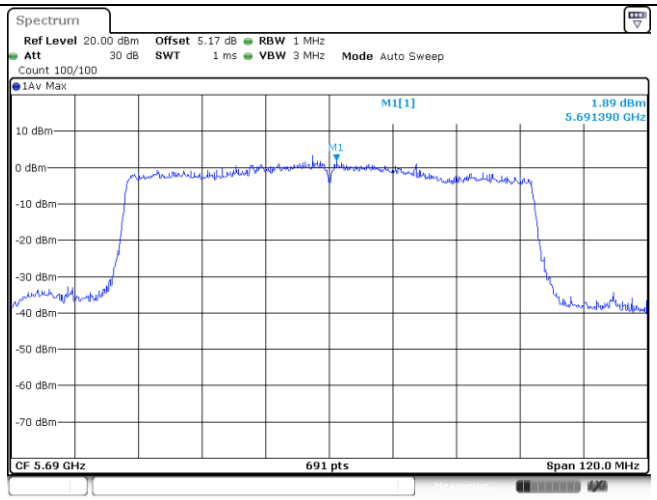
Band III	802.11ac (HT20)
CH_L	
CH_M	
CH_H	

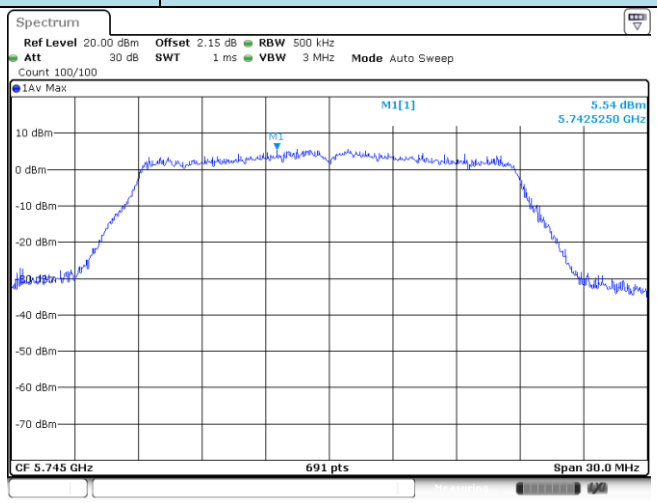
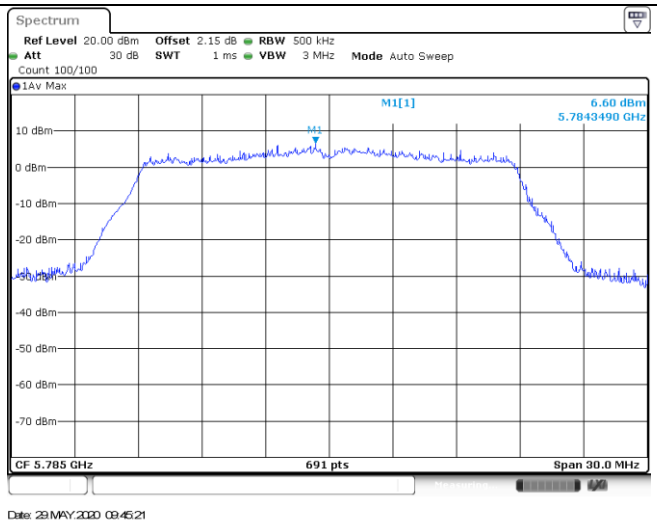
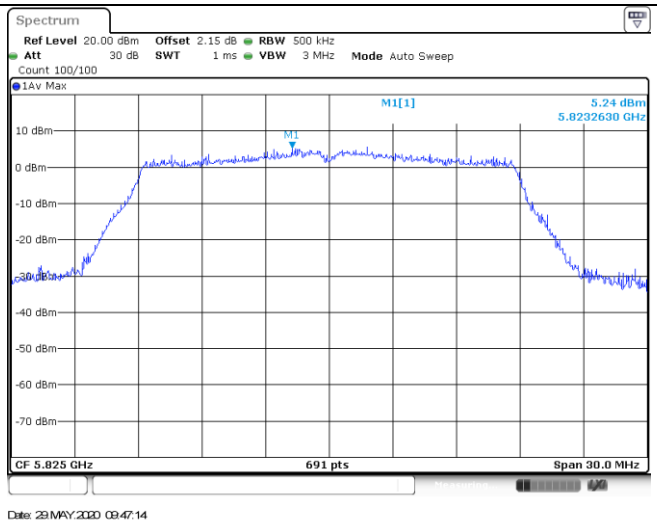
Band III	802.11n (HT20)
CH_L	
CH_M	
CH_H	

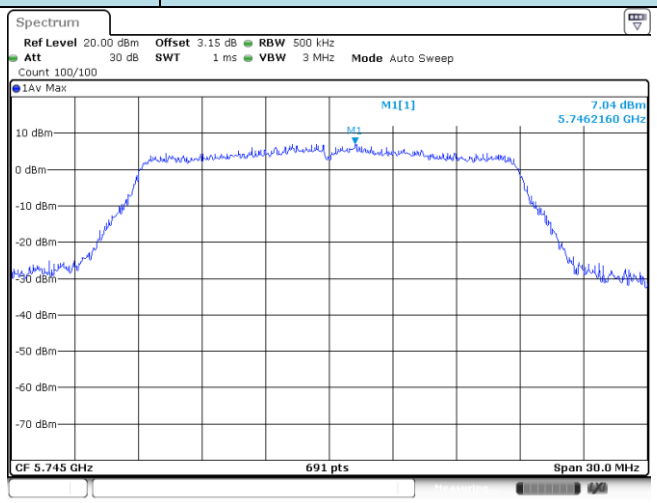
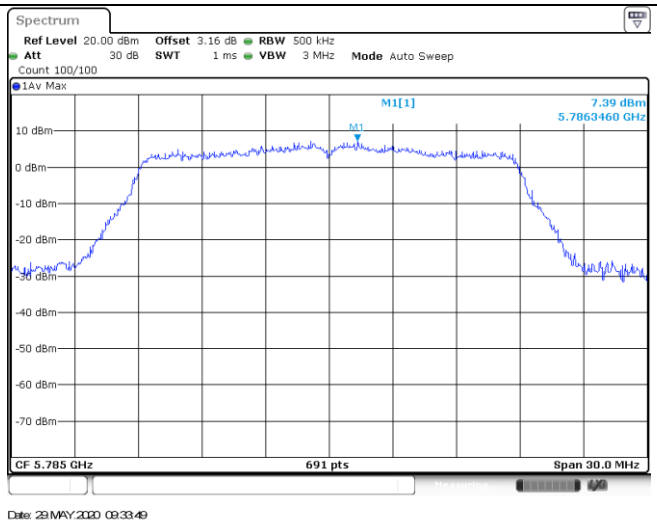
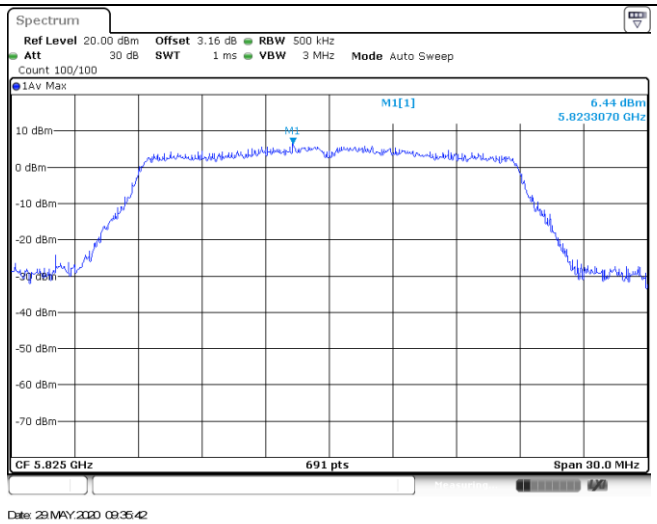
Band III	802.11a
CH_L	
CH_M	
CH_H	

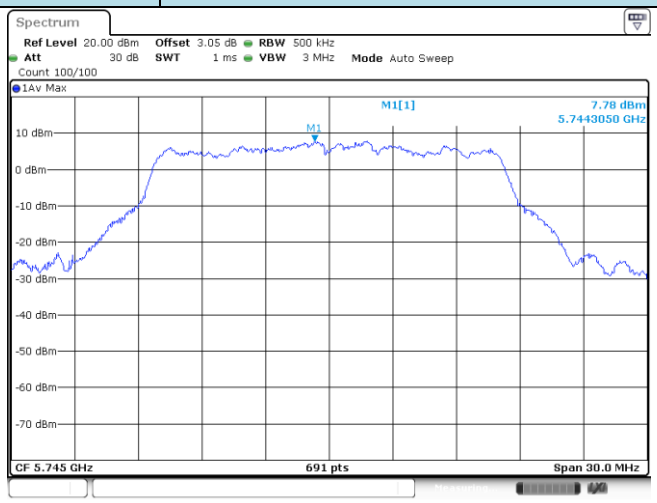
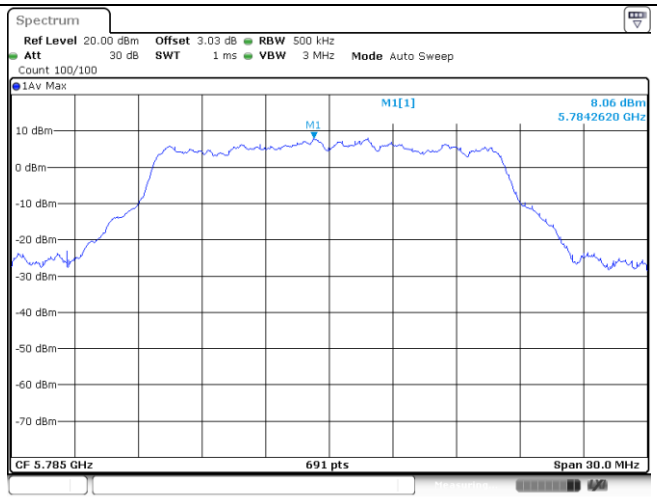
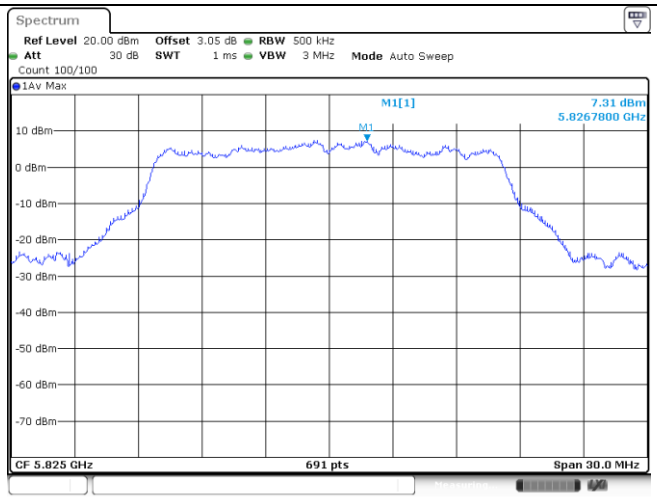
Band III	802.11ac (HT40)
CH_L	
CH_M	
CH_H	

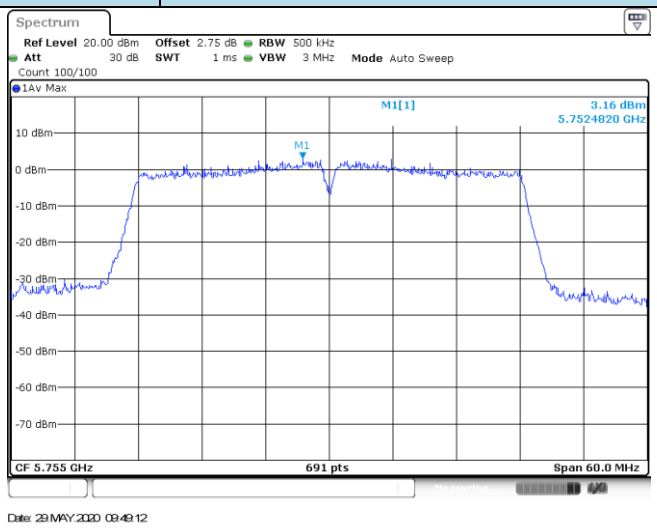
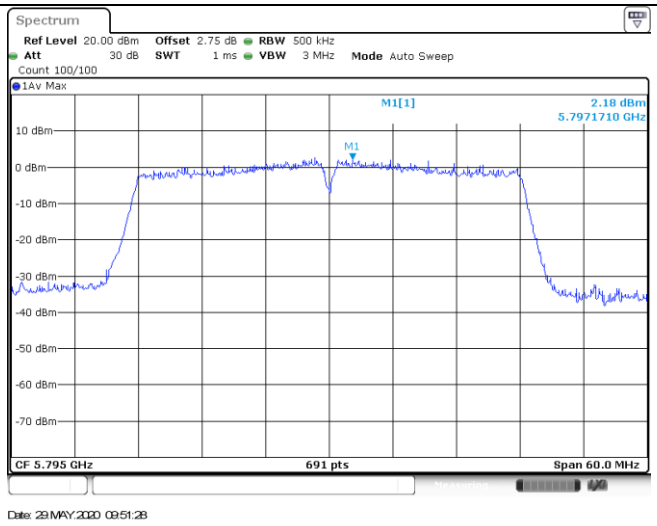
Band III	802.11n (HT40)
CH_L	
CH_M	
CH_H	

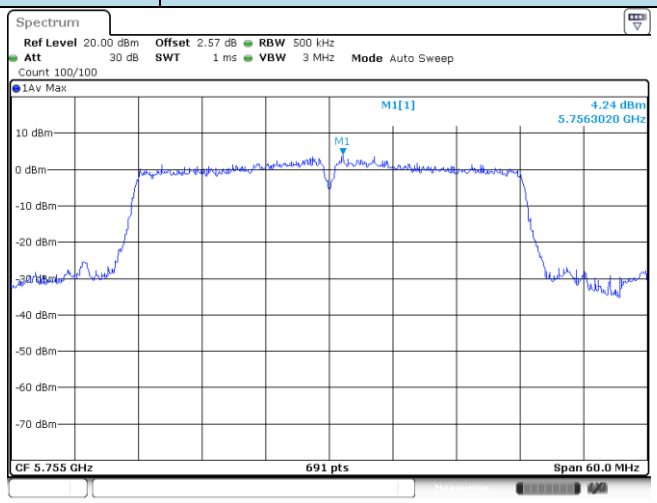
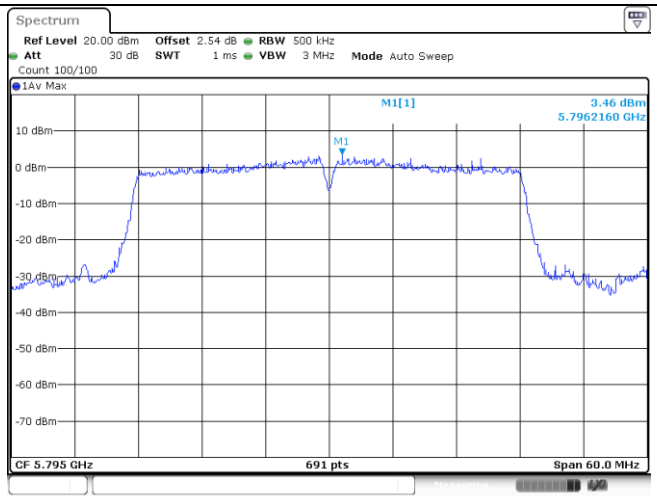
Band III	802.11ac (HT80)
CH_L	
CH_M	
CH_H	

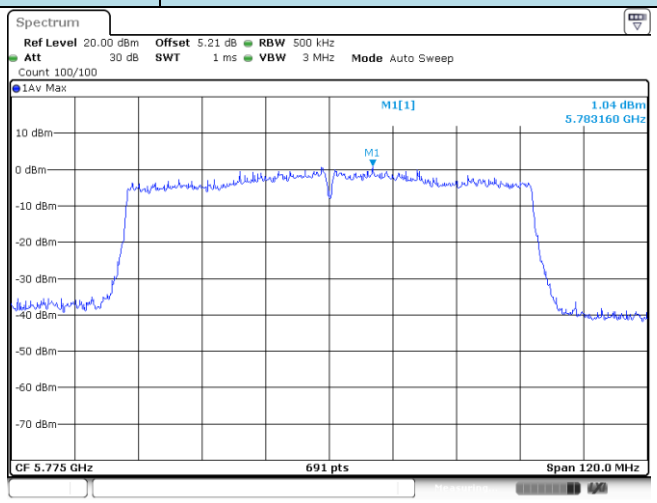
Band IV	802.11ac (HT20)
CH_L	
CH_M	
CH_H	

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	

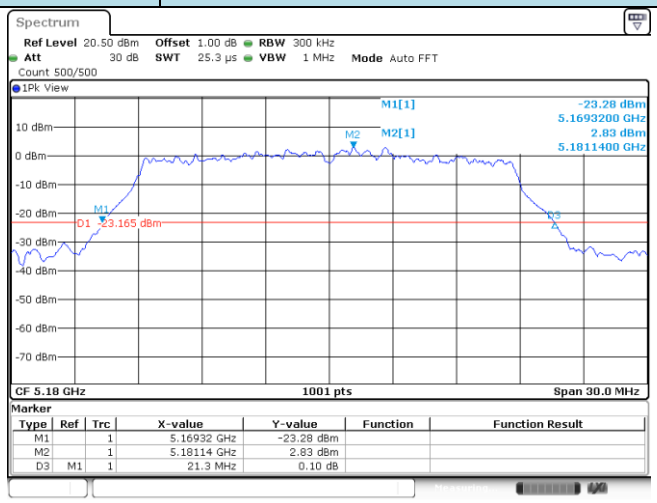
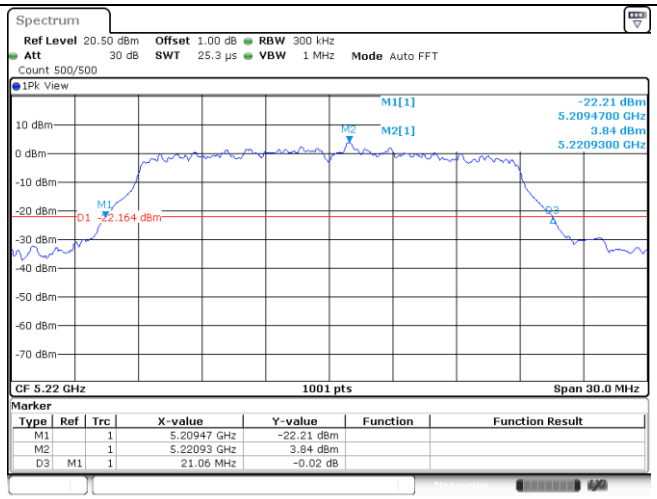
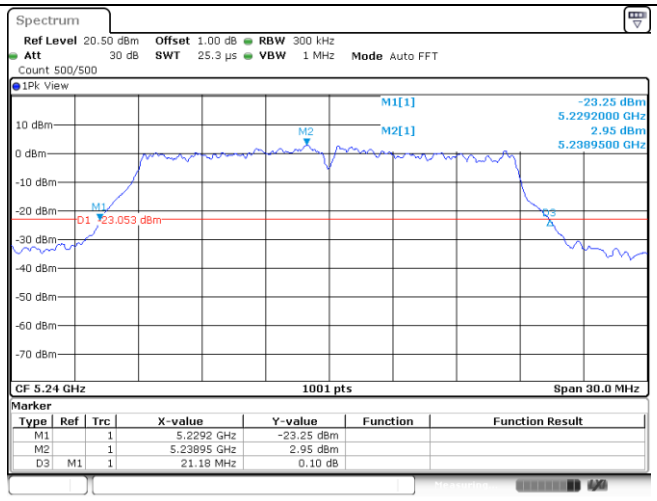
Band IV	802.11n (HT40)
CH_L	
CH_H	

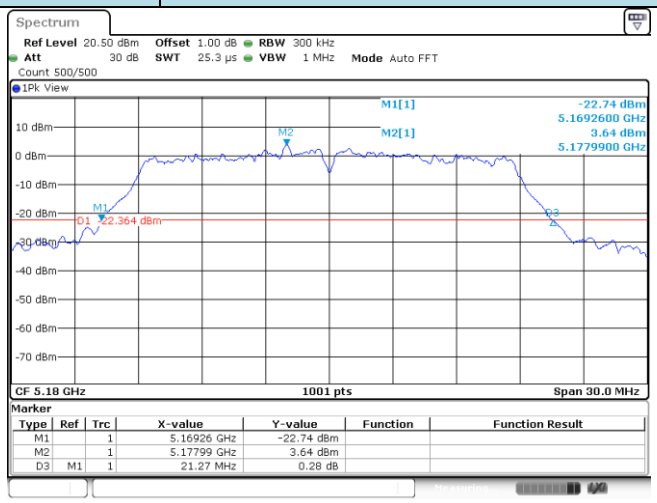
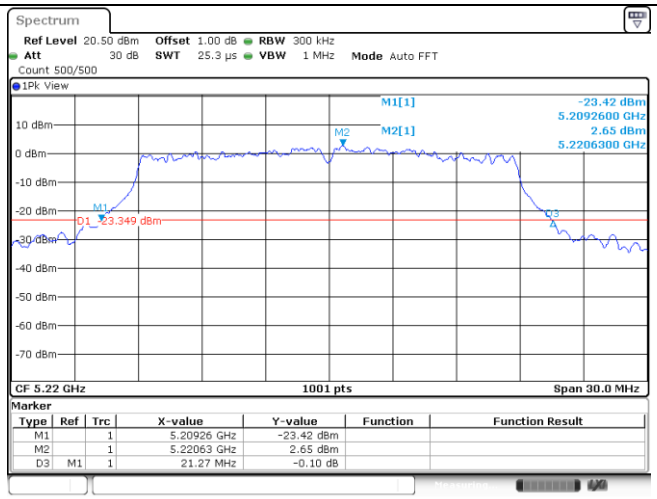
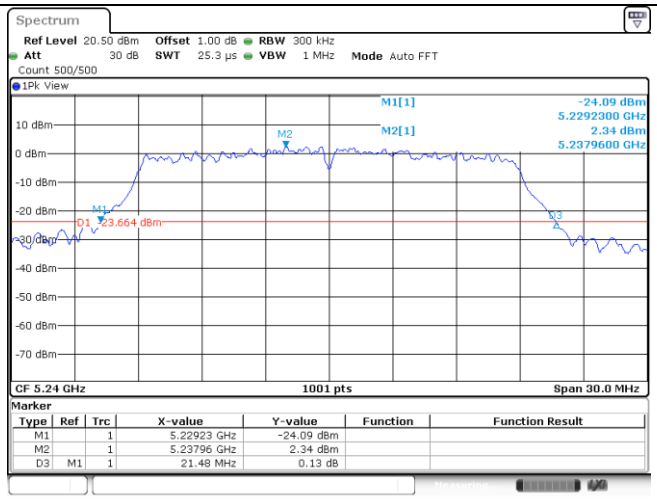
Band IV	802.11ac (HT80)
CH_M	

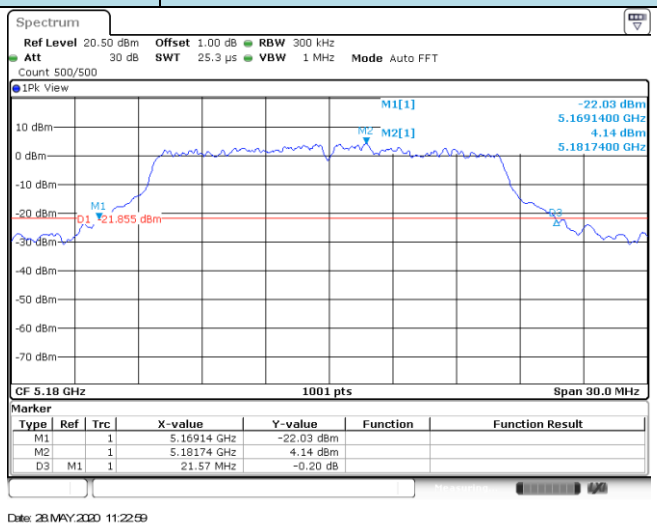
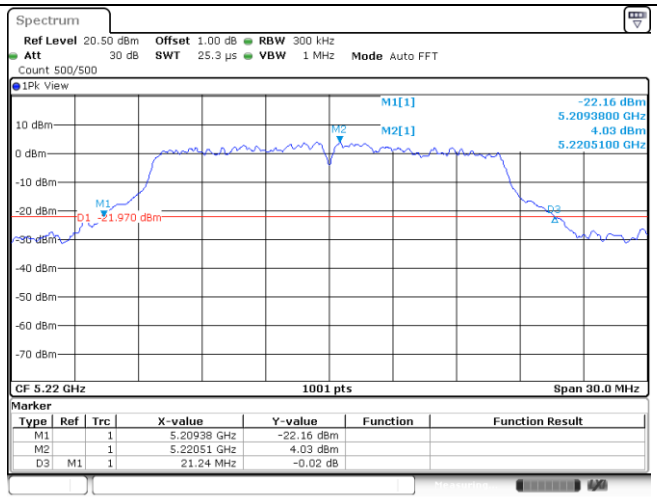
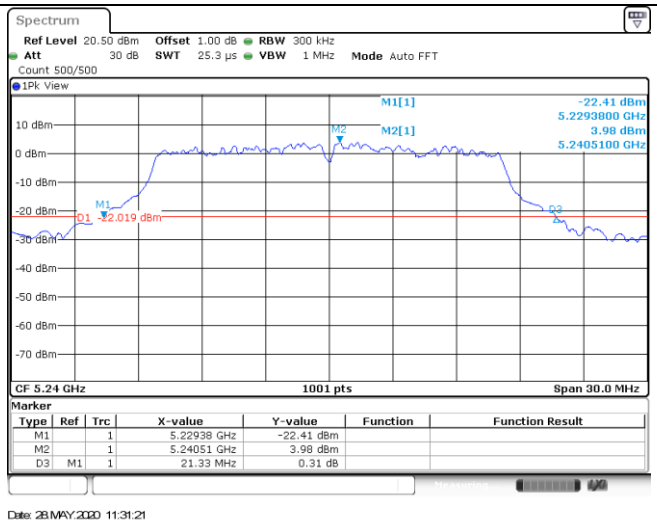
Appendix C：26dB bandwidth

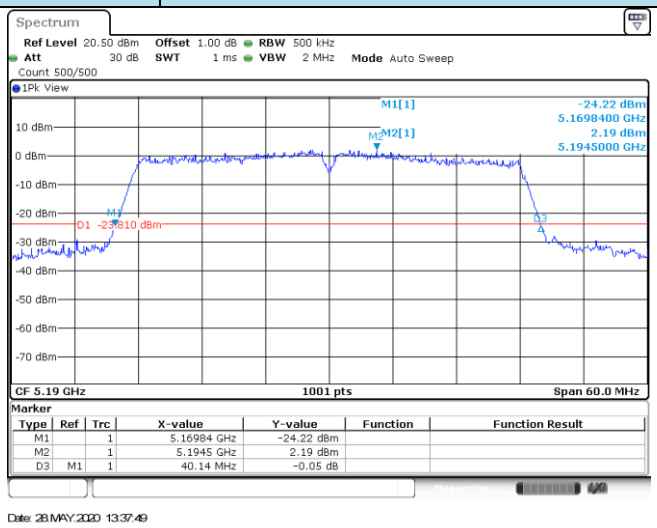
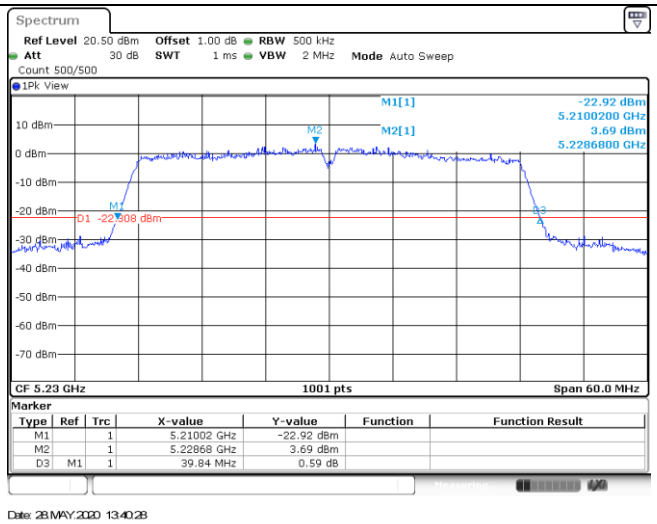
Band	Bandwidth (MHz)	Type	Channel	26dB bandwidth (MHz)	Result
I	20	802.11ac	CH_L	21.30	Pass
			CH_M	21.06	
			CH_H	21.18	
		802.11n	CH_L	21.27	Pass
			CH_M	21.27	
			CH_H	21.48	
		802.11a	CH_L	21.57	Pass
			CH_M	21.24	
			CH_H	21.33	
	40	802.11ac	CH_L	40.14	Pass
			CH_H	39.84	
		802.11n	CH_L	40.02	Pass
			CH_H	39.60	
	80	802.11ac	CH_M	81.12	Pass
II	20	802.11ac	CH_L	21.48	Pass
			CH_M	21.57	
			CH_H	21.33	
		802.11n	CH_L	21.21	Pass
			CH_M	21.15	
			CH_H	21.00	
		802.11a	CH_L	21.24	Pass
			CH_M	21.24	
			CH_H	21.33	
	40	802.11ac	CH_L	39.78	Pass
			CH_H	40.02	
		802.11n	CH_L	39.96	Pass
			CH_H	39.84	
	80	802.11ac	CH_M	81.72	Pass

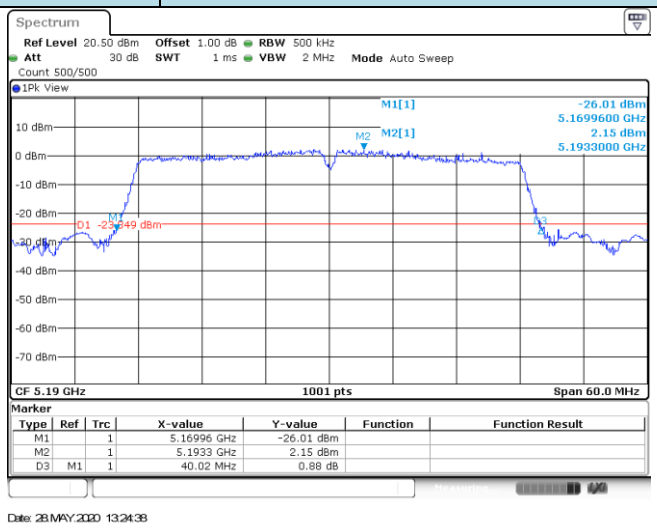
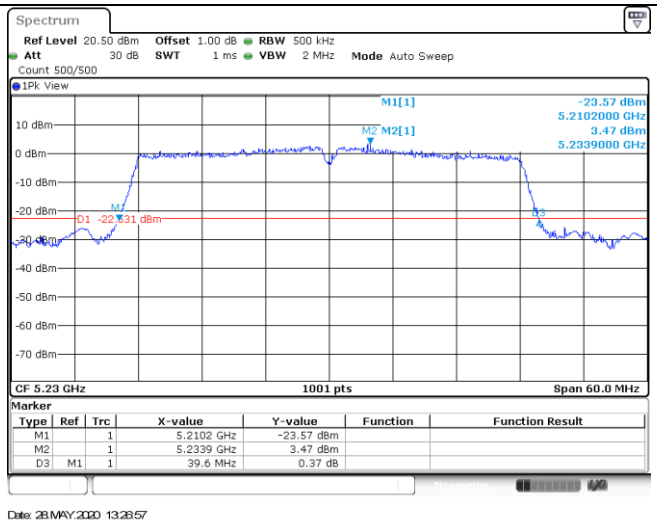
Band	Bandwidth (MHz)	Type	Channel	26dB bandwidth (MHz)	Result
III	20	802.11ac	CH_L	21.33	Pass
			CH_M	21.48	
			CH_H	21.27	
		802.11n	CH_L	21.30	Pass
			CH_M	21.03	
			CH_H	21.51	
		802.11a	CH_L	21.00	Pass
			CH_M	20.85	
			CH_H	20.76	
	40	802.11ac	CH_L	40.14	Pass
			CH_M	40.08	
			CH_H	39.96	
		802.11n	CH_L	39.72	Pass
			CH_M	39.72	
			CH_H	39.72	
	80	802.11ac	CH_L	81.48	Pass
			CH_M	80.64	
			CH_H	81.36	

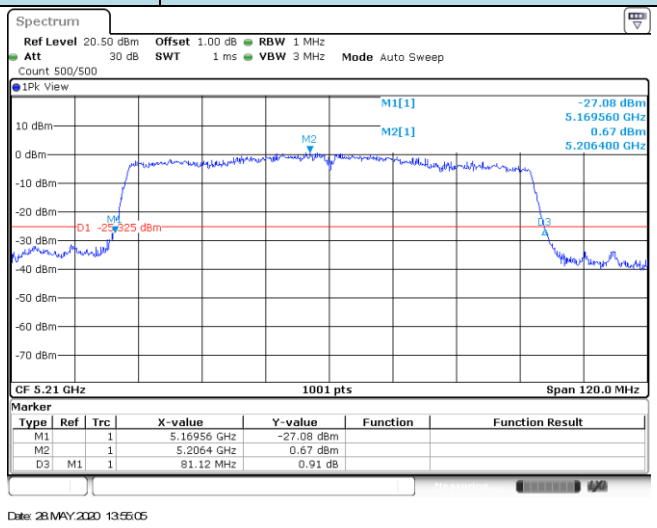
Band I	802.11ac (HT20)
CH_L	
CH_M	
CH_H	

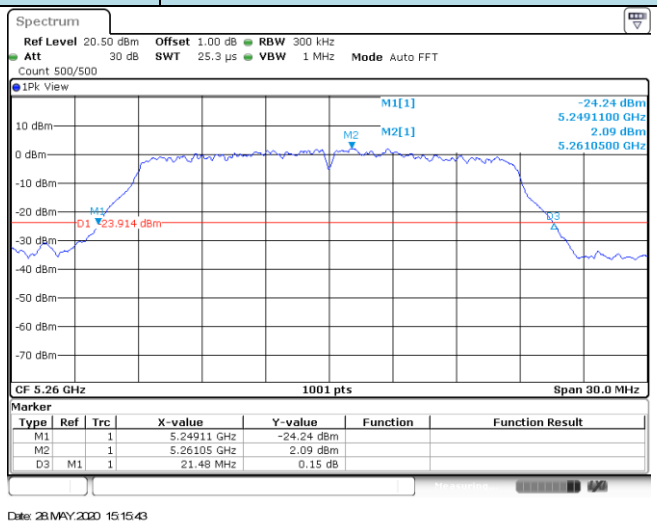
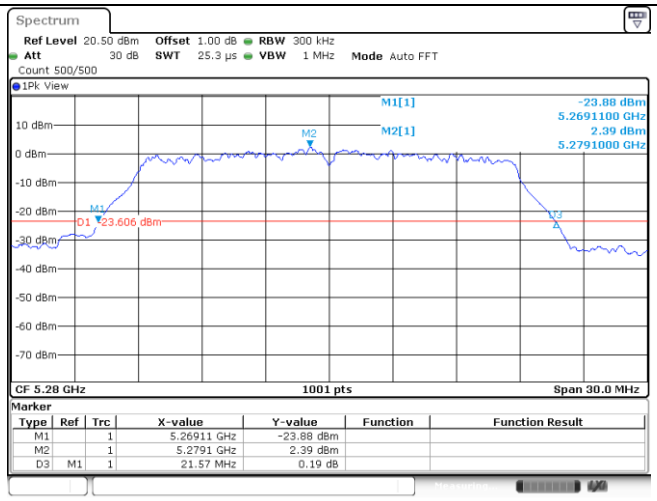
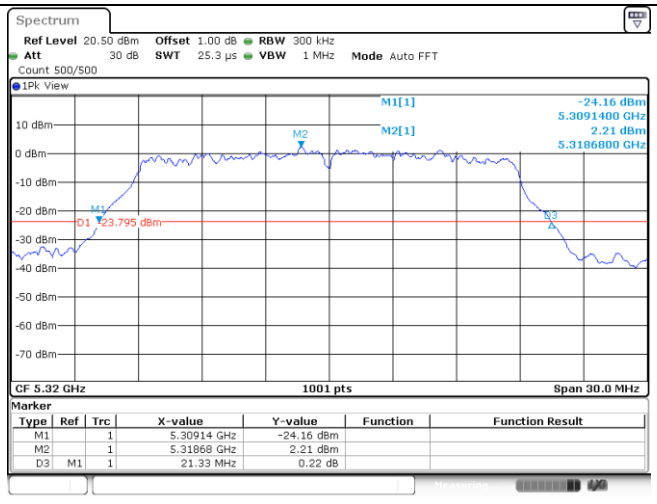
Band I	802.11n (HT20)
CH_L	
CH_M	
CH_H	

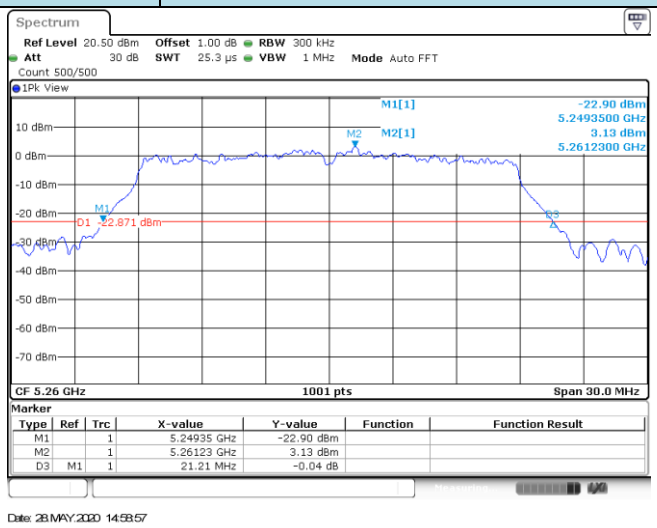
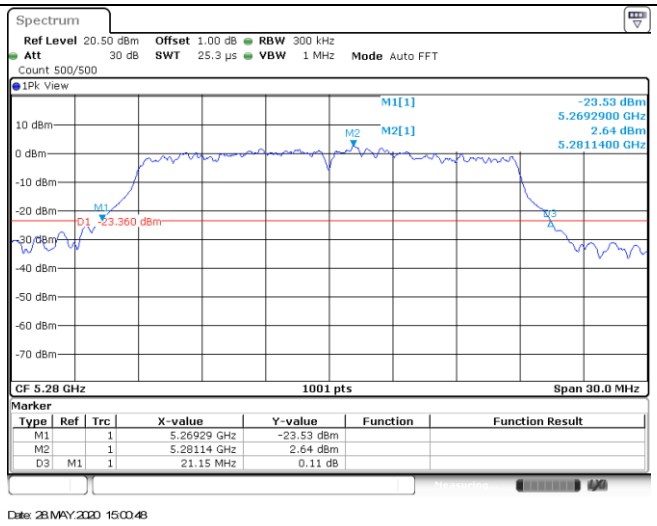
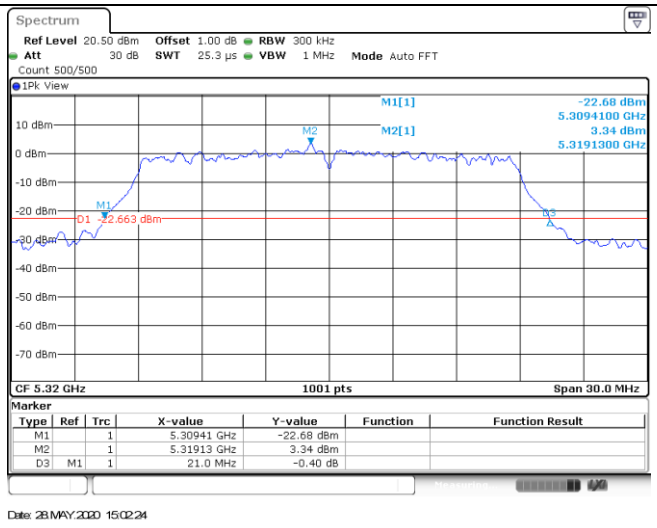
Band I	802.11a
CH_L	
CH_M	
CH_H	

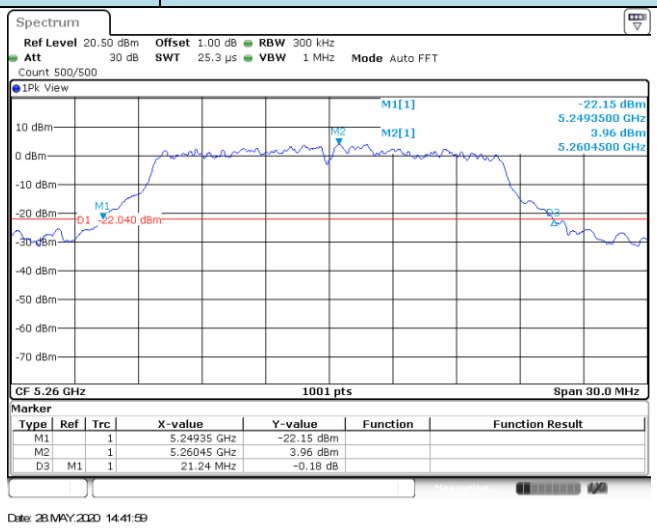
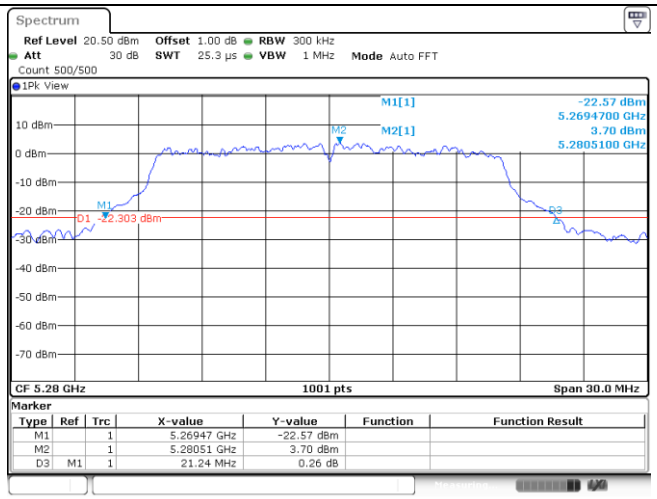
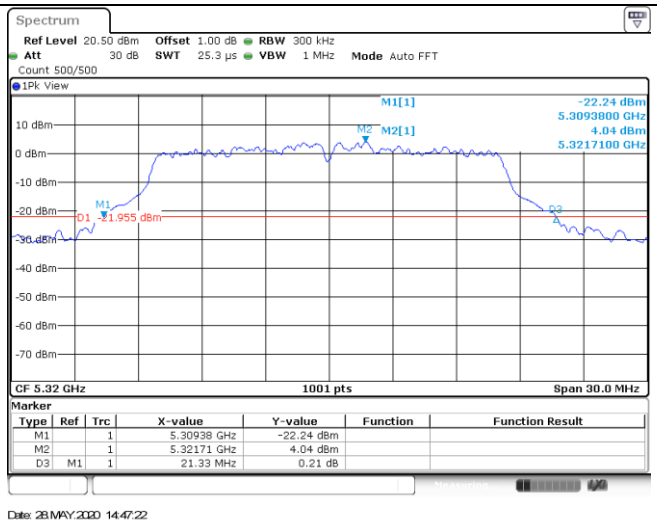
Band I	802.11ac (HT40)
CH_L	
CH_H	

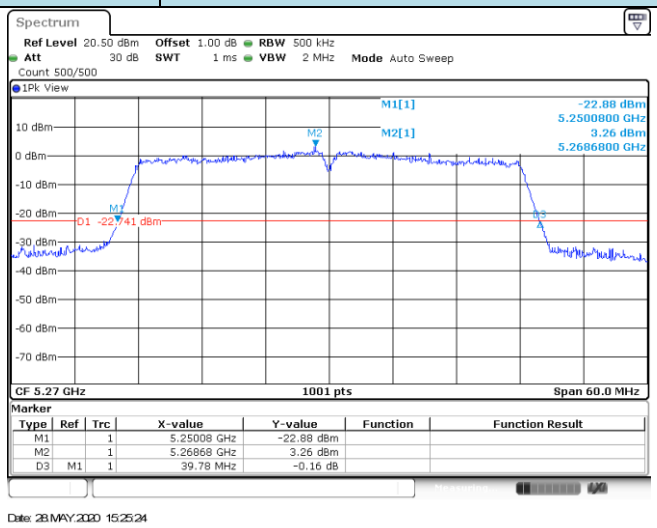
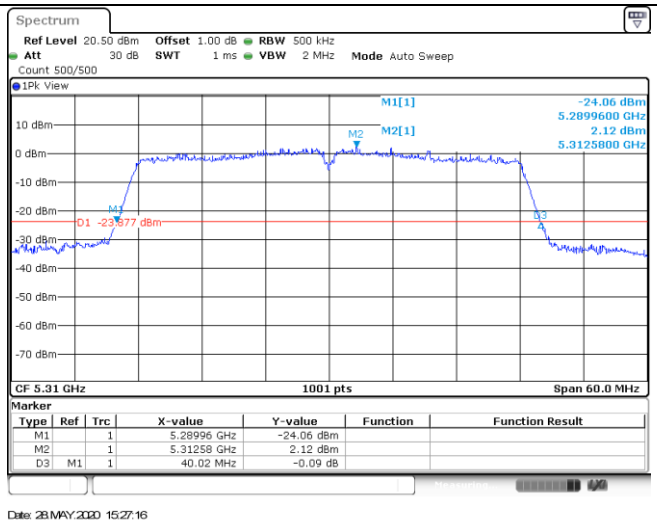
Band I	802.11n (HT40)
CH_L	
CH_H	

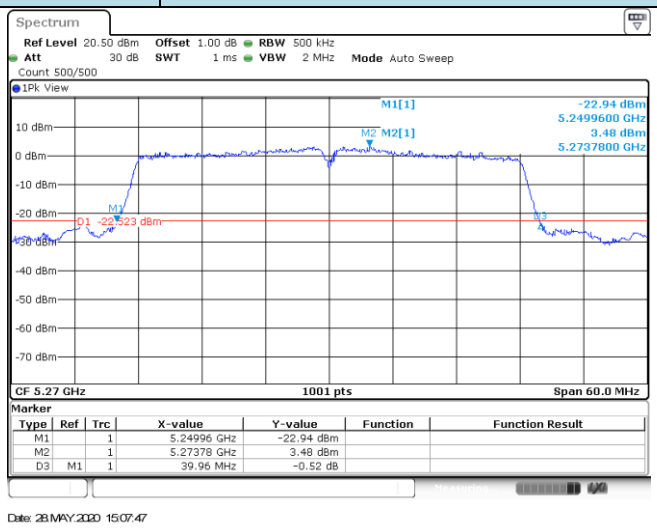
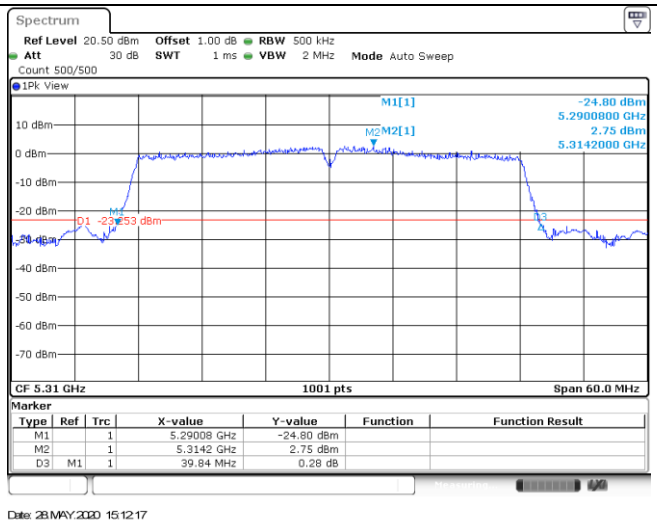
Band I	802.11ac (HT80)
CH_M	

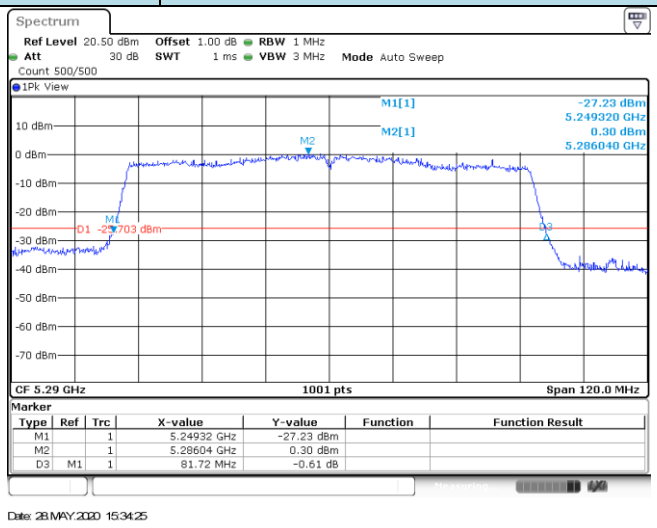
Band II	802.11ac (HT20)
CH_L	
CH_M	
CH_H	

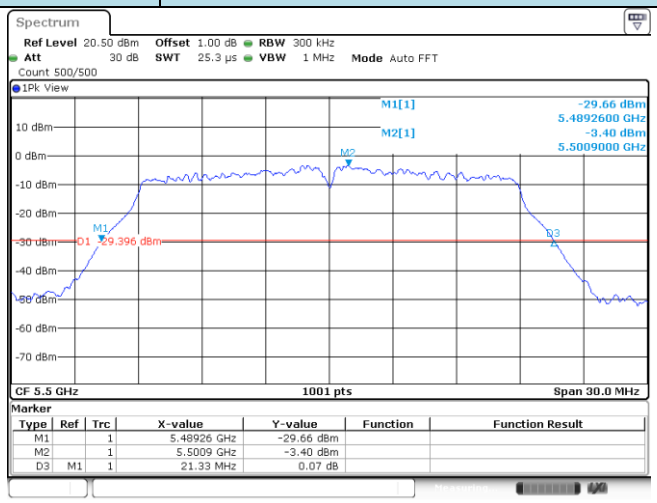
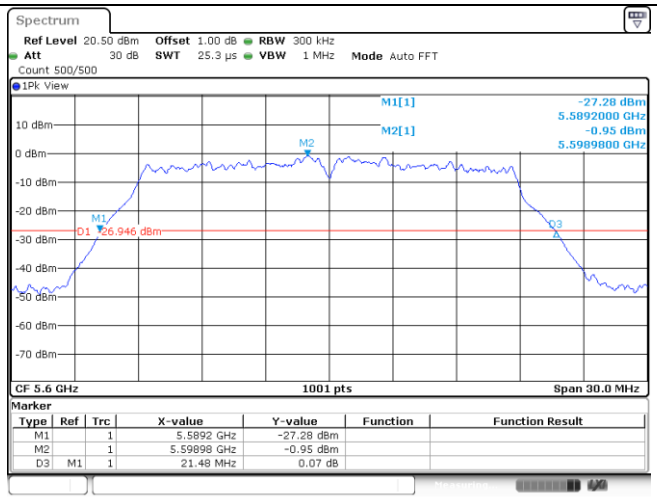
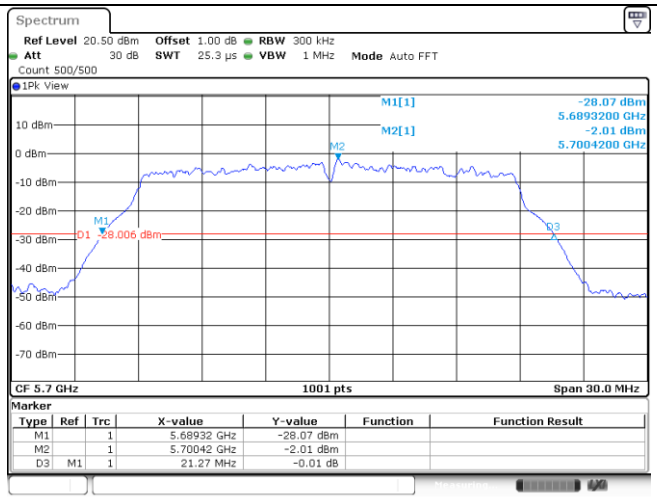
Band II	802.11n (HT20)
CH_L	
CH_M	
CH_H	

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