APPENDIX REPORT

Project No.	SHT1911051203EW	Radio Specification	WIFI 5G
Test sample No.	YPHT19110512009	Model No.	iData K1S
Start test date	2019/12/20	Finish date	2019/12/20
Temperature	25°C	Humidity	50%
Test Engineer	Ximing.Huang	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	Frequency stability	PASS

Appendix A：Maximum Conducted Output Power

Band	Bandwidth (MHz)	Type	Channel	Conducted Output Power (dBm)	Limit (dBm)	Result
I	20	802.11ac	CH_L	19.69	24.00	Pass
			CH_M	19.50		
			CH_H	19.72		
		802.11n	CH_L	20.11	24.00	Pass
			CH_M	19.54		
			CH_H	19.70		
		802.11a	CH_L	19.89	24.00	Pass
			CH_M	19.61		
			CH_H	19.81		
	40	802.11ac	CH_L	19.76	24.00	Pass
			CH_H	20.02		
		802.11n	CH_L	20.17	24.00	Pass
			CH_H	20.00		
	80	802.11ac	CH_M	19.58	24.00	Pass
II	20	802.11ac	CH_L	19.05	24.00	Pass
			CH_M	18.72		
			CH_H	18.65		
		802.11n	CH_L	18.95	24.00	Pass
			CH_M	18.68		
			CH_H	18.66		
		802.11a	CH_L	19.32	24.00	Pass
			CH_M	18.89		
			CH_H	18.71		
	40	802.11ac	CH_L	19.11	24.00	Pass
			CH_H	18.53		
		802.11n	CH_L	19.05	24.00	Pass
			CH_H	18.46		
	80	802.11ac	CH_M	19.07	24.00	Pass

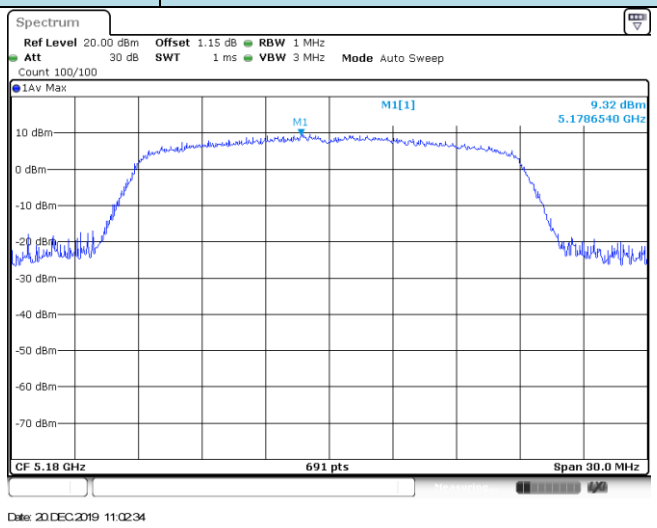
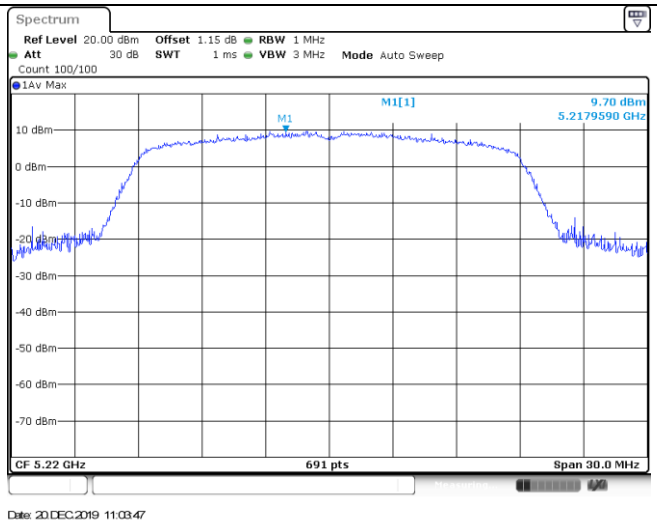
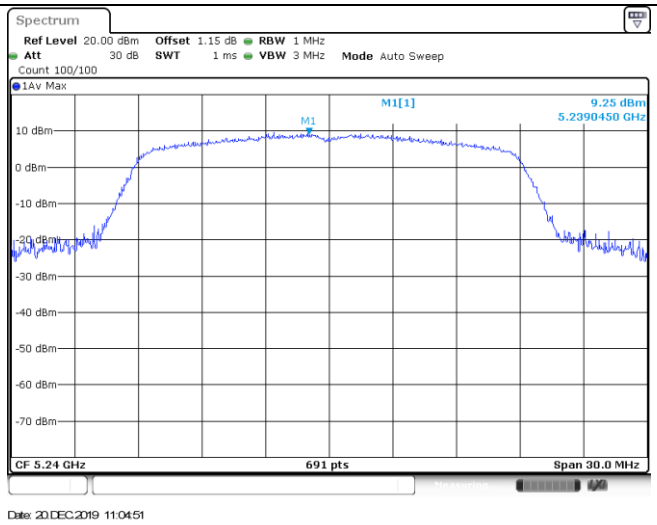
Band	Bandwidth (MHz)	Type	Channel	Conducted Output Power (dBm)	Limit (dBm)	Result
III	20	802.11ac	CH_L	17.71	24.00	Pass
			CH_M	17.45		
			CH_H	17.51		
		802.11n	CH_L	18.43	24.00	Pass
			CH_M	17.53		
			CH_H	18.00		
		802.11a	CH_L	18.35	24.00	Pass
			CH_M	17.81		
			CH_H	18.05		
	40	802.11ac	CH_L	17.98	24.00	Pass
			CH_M	17.43		
			CH_H	18.03		
		802.11n	CH_L	18.08	24.00	Pass
			CH_M	17.57		
			CH_H	17.29		
	80	802.11ac	CH_L	17.80	24.00	Pass
			CH_M	17.93		
			CH_H	18.17		
IV	20	802.11ac	CH_L	17.58	30.00	Pass
			CH_M	17.34		
			CH_H	17.49		
		802.11n	CH_L	17.87	30.00	Pass
			CH_M	17.58		
			CH_H	17.63		
		802.11a	CH_L	17.50	30.00	Pass
			CH_M	17.62		
			CH_H	17.93		
	40	802.11ac	CH_L	17.62	30.00	Pass
			CH_H	17.57		
		802.11n	CH_L	17.69	30.00	Pass
			CH_H	17.65		
	80	802.11ac	CH_M	18.09	30.00	Pass

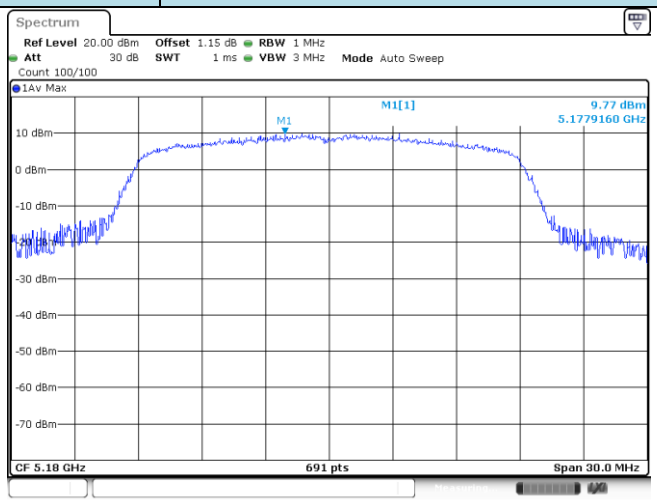
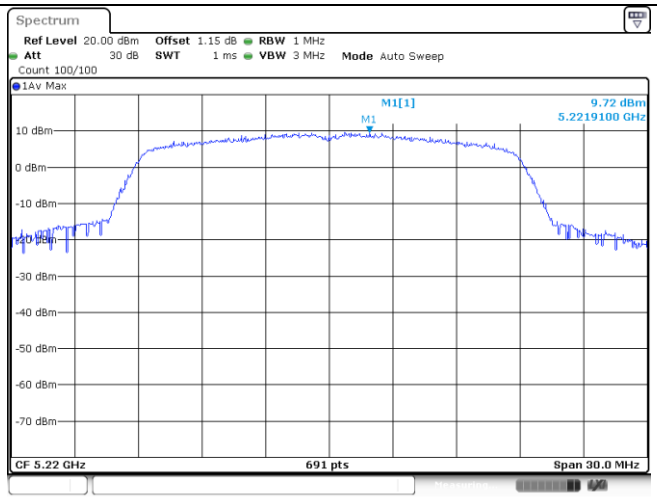
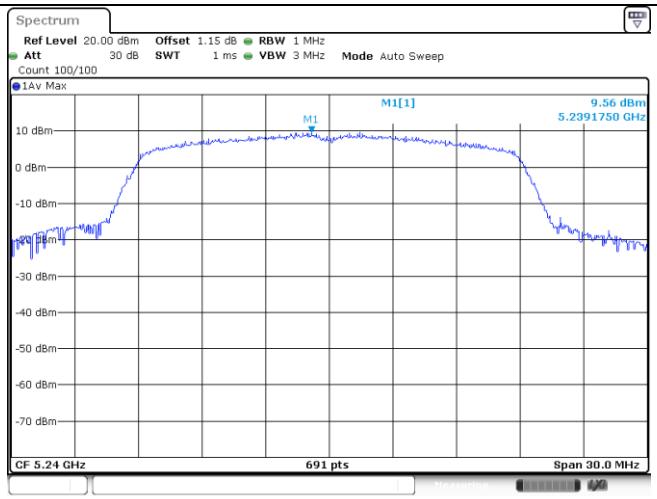
Appendix B：Maximum Power Spectral Density

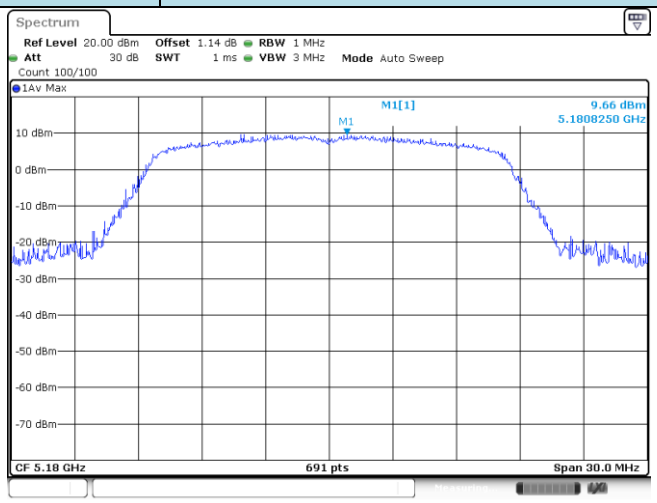
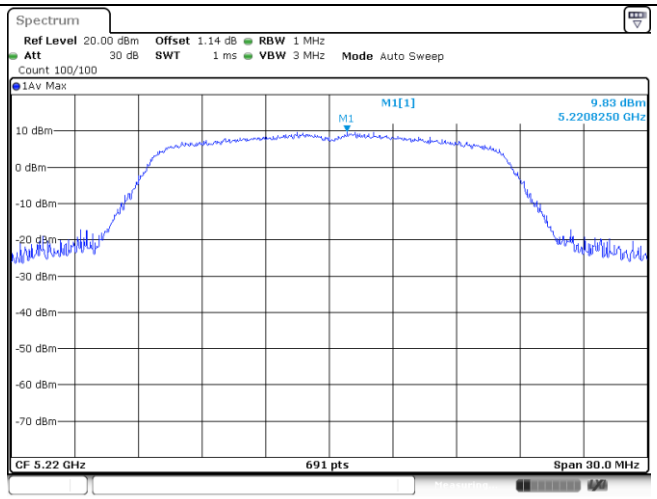
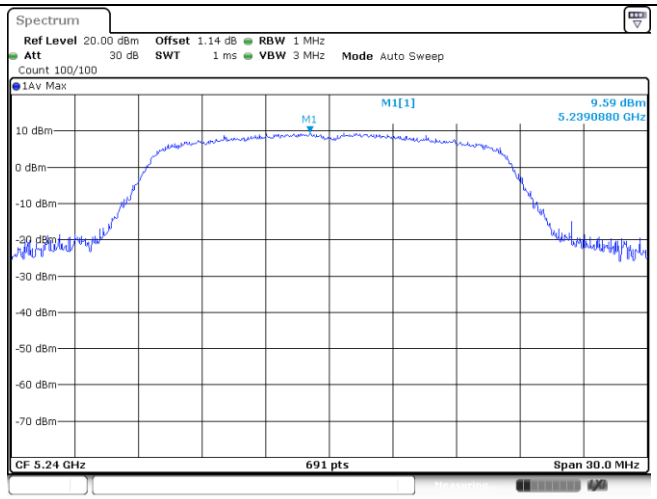
Band	Bandwidth (MHz)	Type	Channel	Power Spectral Density (dBm/MHz)	Limit (dBm/MHz)	Result
I	20	802.11ac	CH_L	9.32	11.00	Pass
			CH_M	9.70		
			CH_H	9.25		
		802.11n	CH_L	9.77	11.00	Pass
			CH_M	9.72		
			CH_H	9.56		
		802.11a	CH_L	9.66	11.00	Pass
			CH_M	9.83		
			CH_H	9.59		
	40	802.11ac	CH_L	6.57	11.00	Pass
			CH_H	7.26		
		802.11n	CH_L	6.87	11.00	Pass
			CH_H	6.62		
	80	802.11ac	CH_M	3.72	11.00	Pass
II	20	802.11ac	CH_L	8.78	11.00	Pass
			CH_M	8.40		
			CH_H	8.14		
		802.11n	CH_L	9.13	11.00	Pass
			CH_M	8.83		
			CH_H	8.71		
		802.11a	CH_L	9.19	11.00	Pass
			CH_M	8.50		
			CH_H	8.48		
	40	802.11ac	CH_L	6.48	11.00	Pass
			CH_H	5.65		
		802.11n	CH_L	5.82	11.00	Pass
			CH_H	5.27		
	80	802.11ac	CH_M	3.21	11.00	Pass

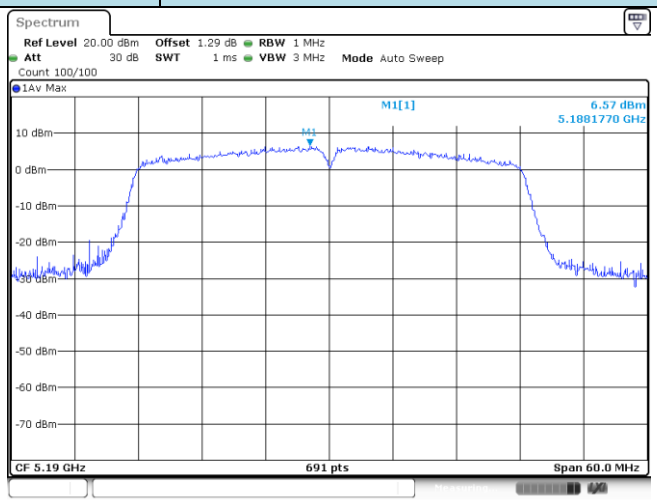
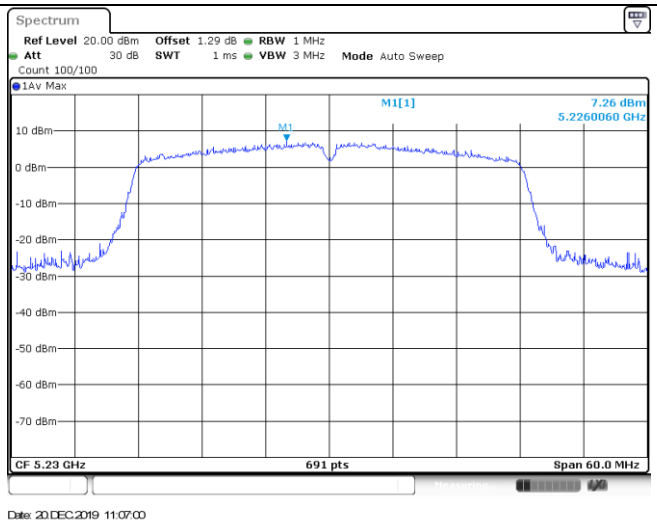
Band	Bandwidth (MHz)	Type	Channel	Power Spectral Density (dBm/MHz)	Limit (dBm/MHz)	Result
III	20	802.11ac	CH_L	7.39	11.00	Pass
			CH_M	7.43		
			CH_H	7.09		
		802.11n	CH_L	8.31	11.00	Pass
			CH_M	7.90		
			CH_H	8.04		
		802.11a	CH_L	8.46	11.00	Pass
			CH_M	7.81		
			CH_H	8.54		
	40	802.11ac	CH_L	5.36	11.00	Pass
			CH_M	4.33		
			CH_H	4.80		
		802.11n	CH_L	5.37	11.00	Pass
			CH_M	4.81		
			CH_H	5.54		
	80	802.11ac	CH_L	1.89	11.00	Pass
			CH_M	1.46		
			CH_H	2.50		
Band	Bandwidth (MHz)	Type	Channel	Power Spectral Density (dBm/500kHz)	Limit (dBm/500KHz)	Result
IV	20	802.11ac	CH_L	6.28	30.00	Pass
			CH_M	5.61		
			CH_H	6.39		
		802.11n	CH_L	6.66	30.00	Pass
			CH_M	6.30		
			CH_H	6.00		
		802.11a	CH_L	6.88	30.00	Pass
			CH_M	6.23		
			CH_H	7.25		
	40	802.11ac	CH_L	3.05	30.00	Pass
			CH_H	3.06		
		802.11n	CH_L	3.52	30.00	Pass
			CH_H	3.03		
	80	802.11ac	CH_M	0.45	30.00	Pass

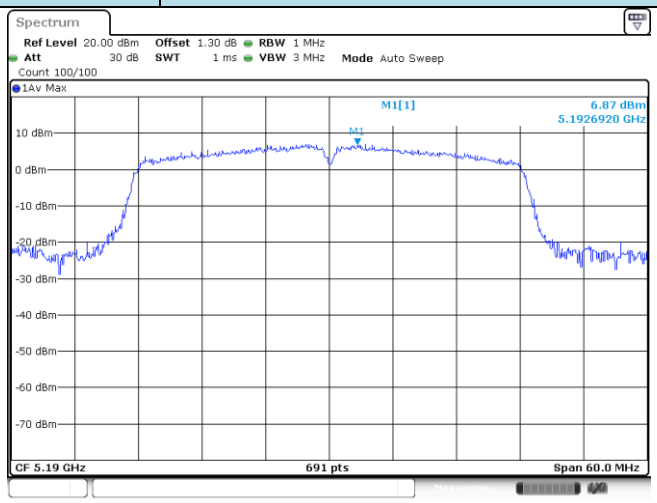
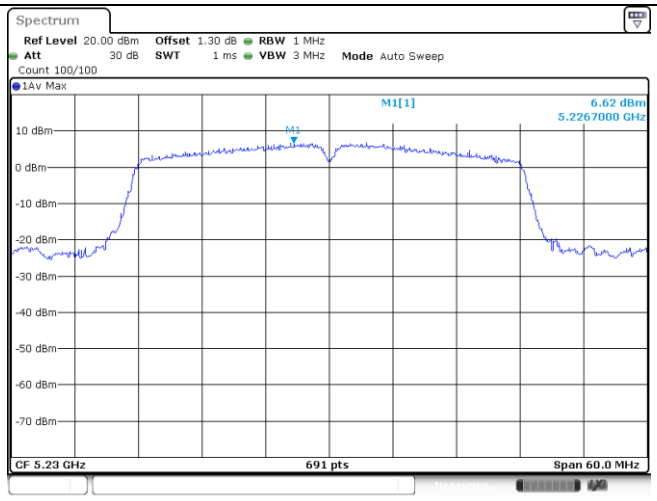
Test plot as follows:

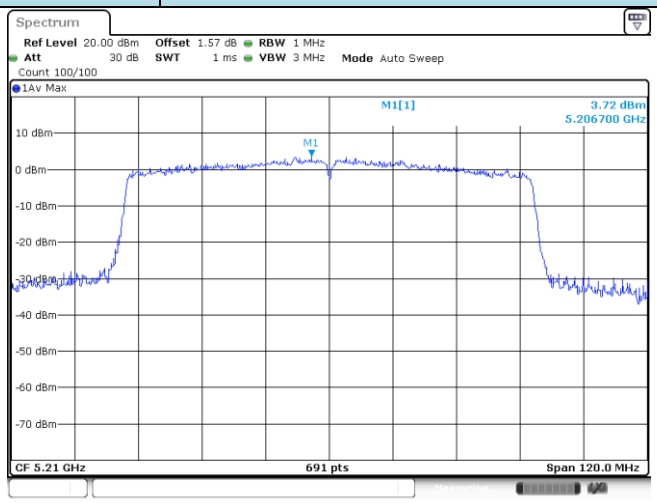
Band I	**802.11ac (HT20)**
CH_L	
CH_M	
CH_H	

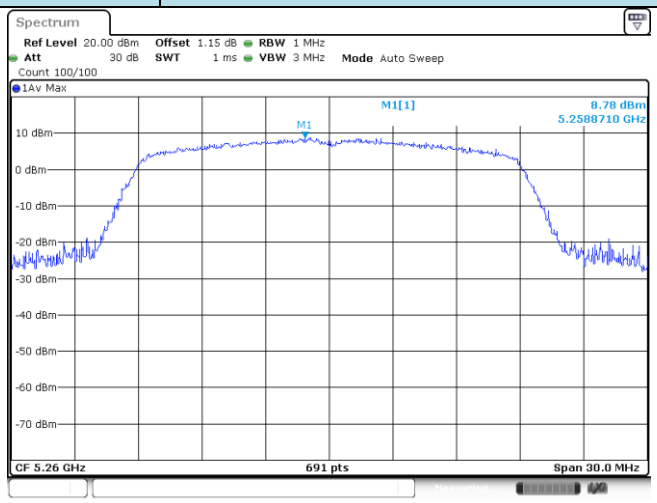
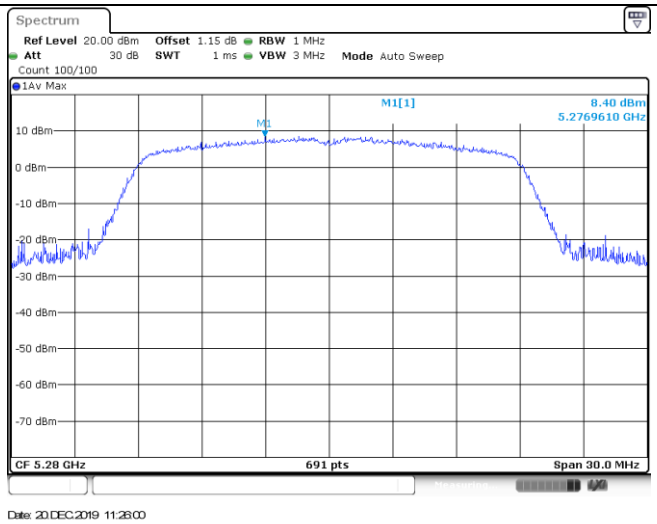
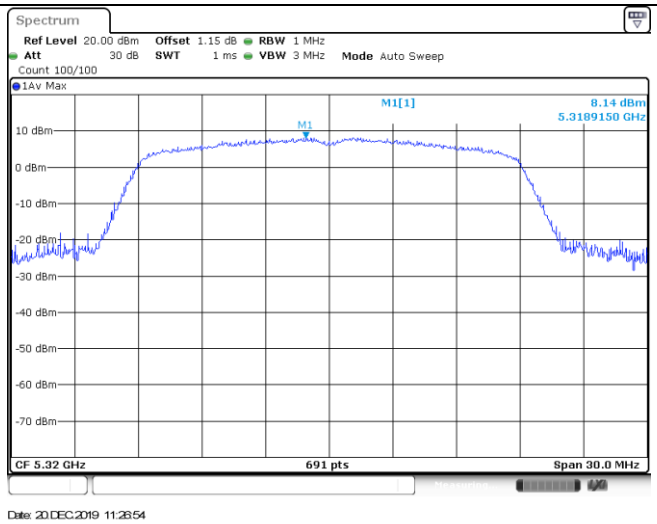
Band I	802.11n (HT20)
CH_L	
CH_M	
CH_H	

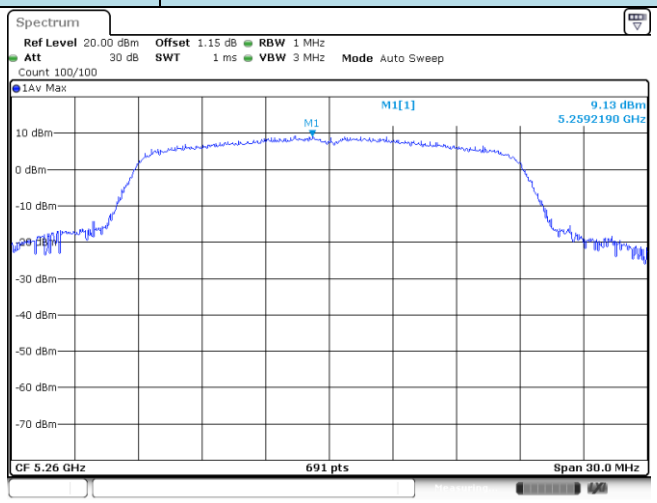
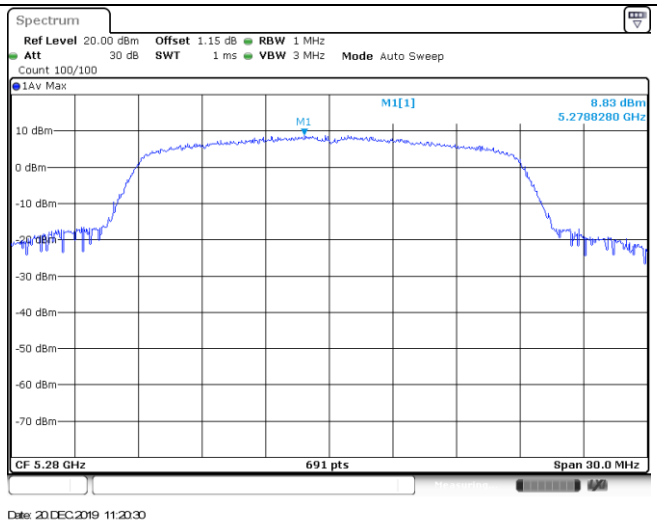
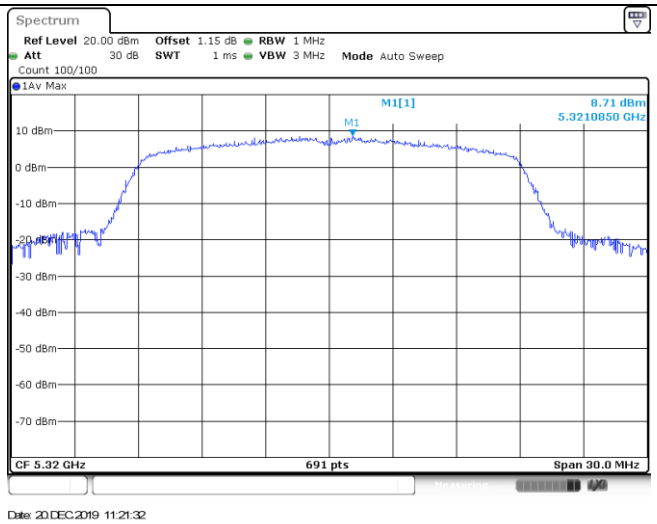
Band I	802.11a
CH_L	
CH_M	
CH_H	

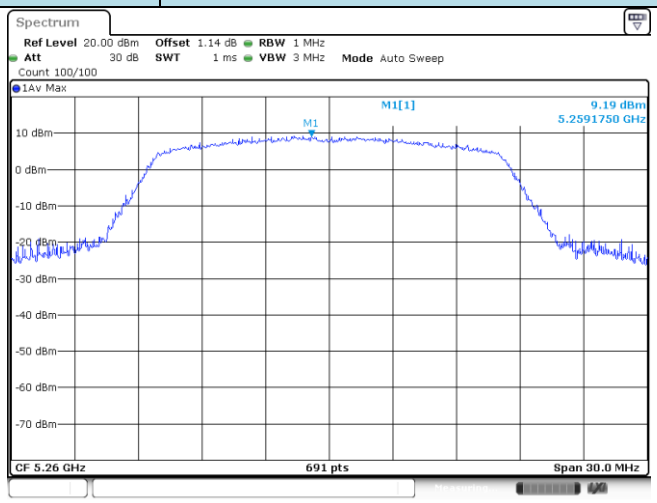
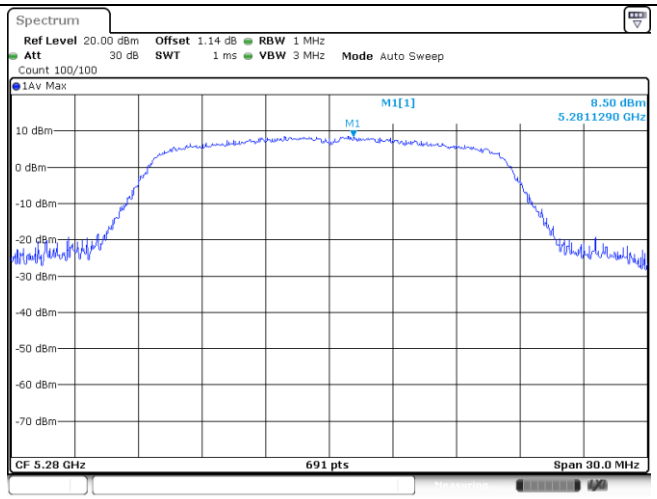
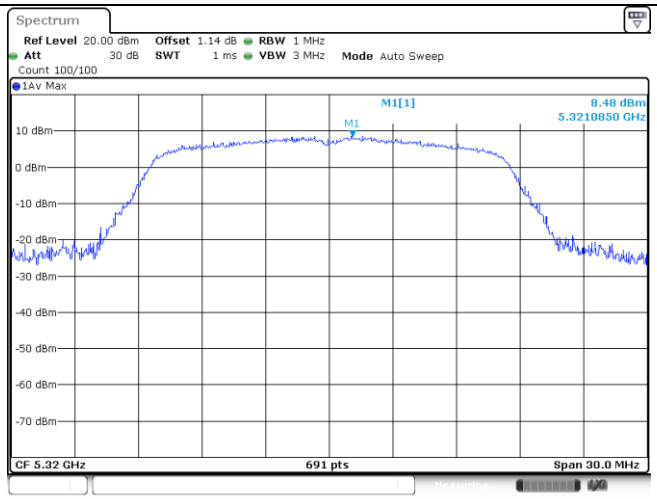
Band I	802.11ac (HT40)
CH_L	
CH_H	

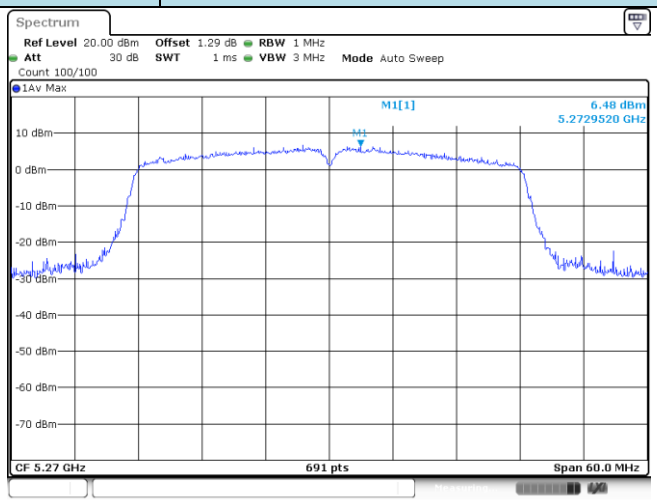
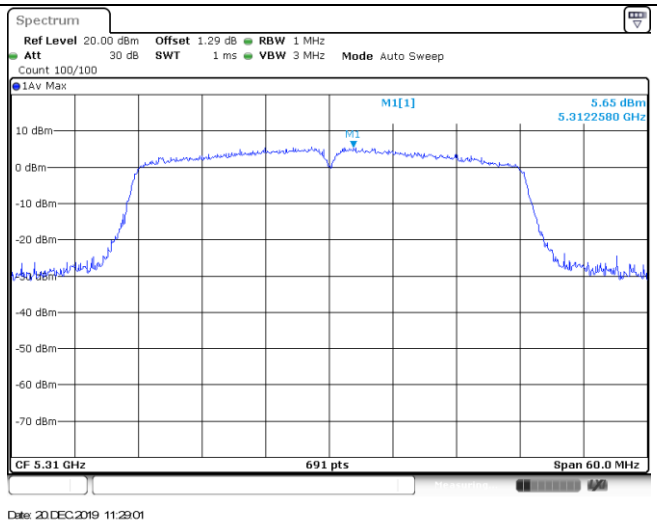
Band I	802.11n (HT40)
CH_L	
CH_H	

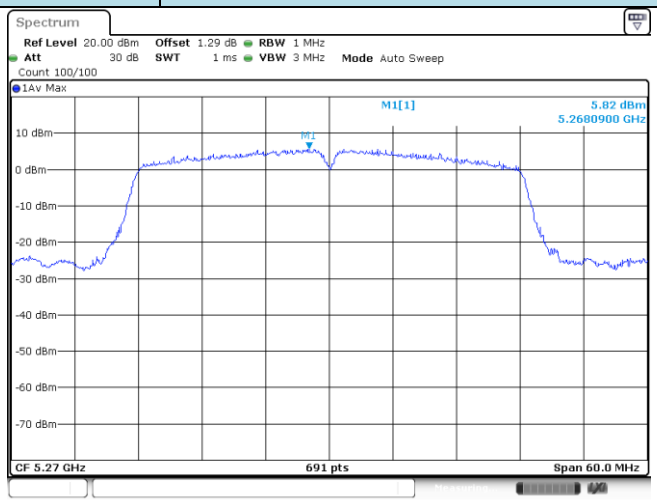
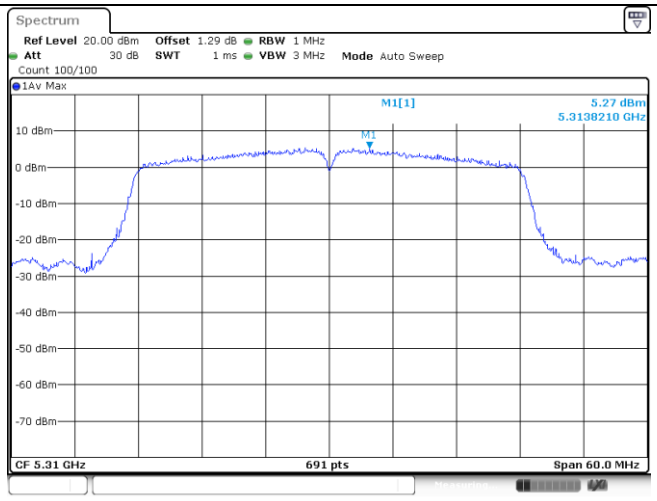
Band I	802.11ac (HT80)
CH_M	

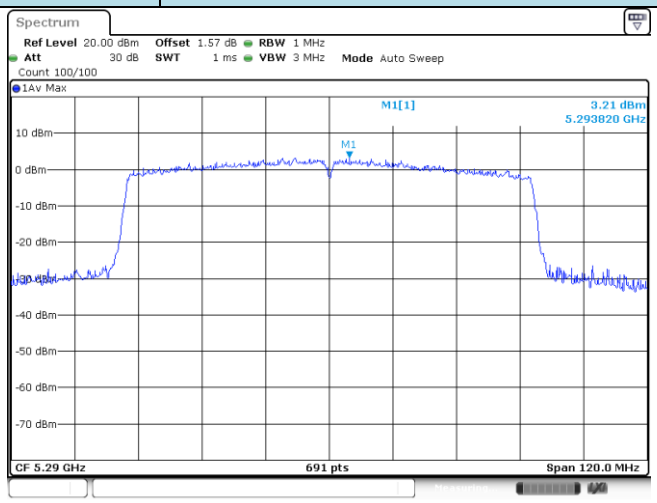
Band II	802.11ac (HT20)
CH_L	
CH_M	
CH_H	

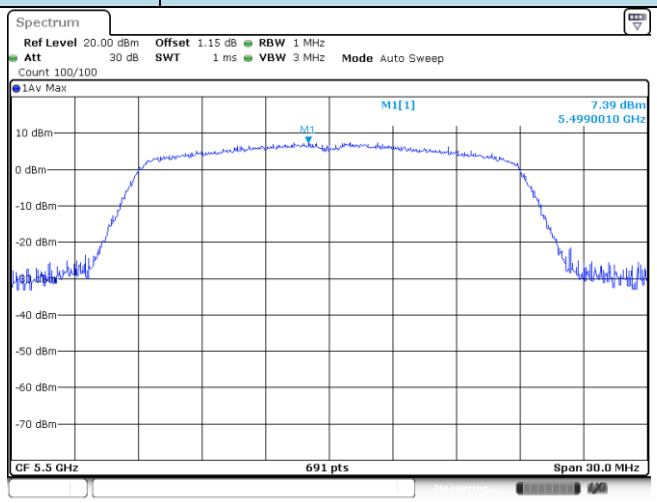
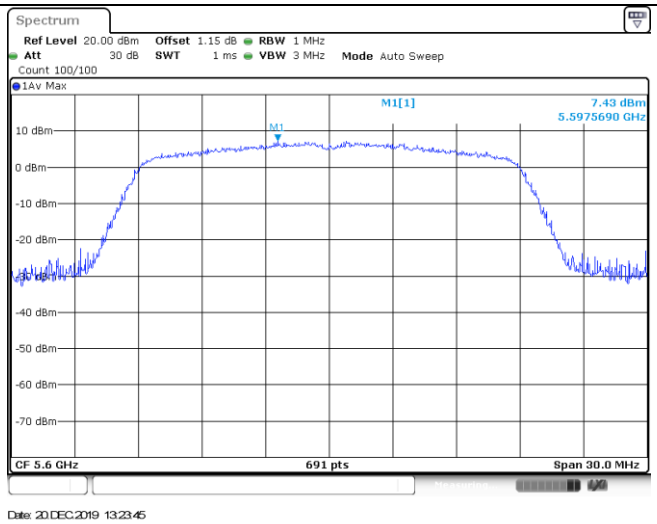
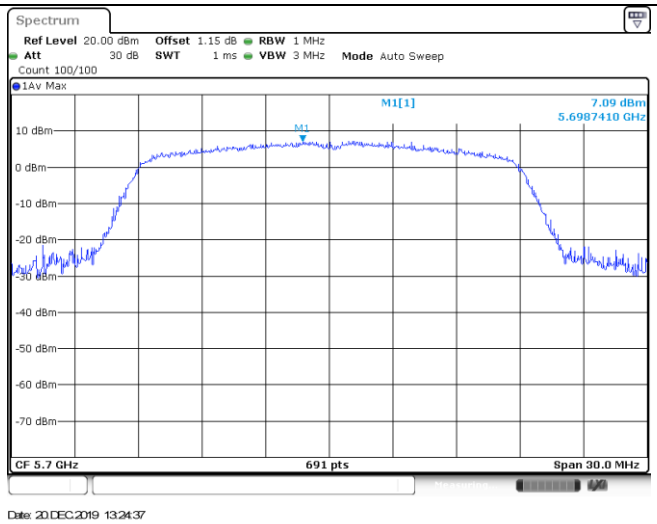
Band II	802.11n (HT20)
CH_L	
CH_M	
CH_H	

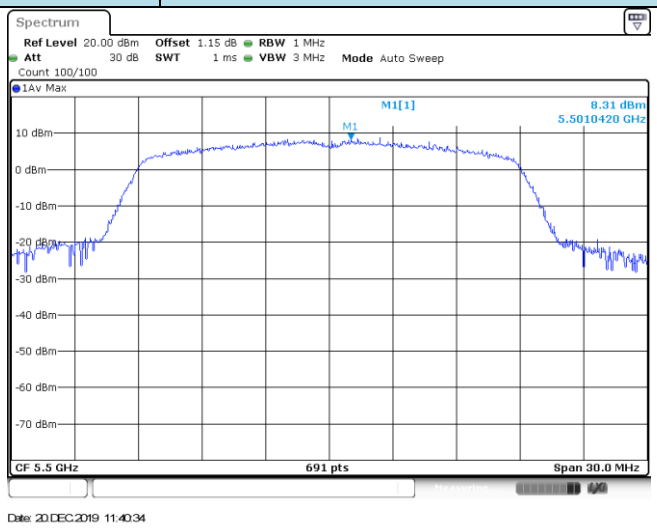
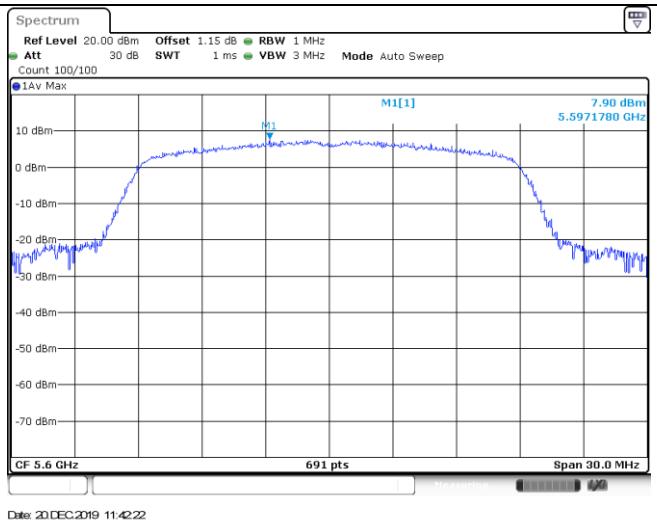
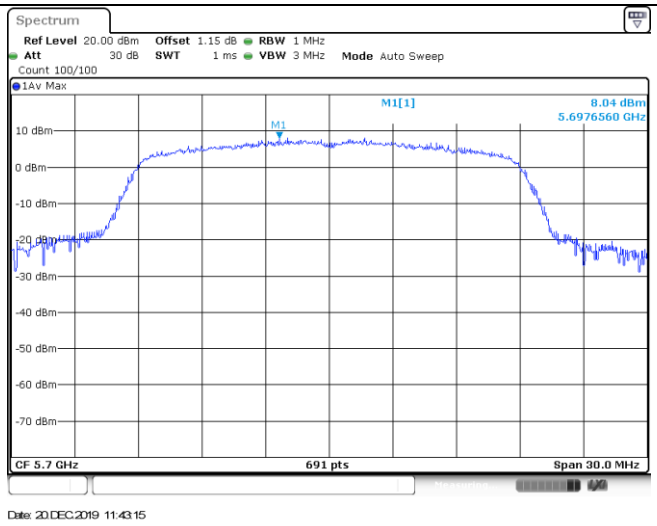
Band II	802.11a
CH_L	
CH_M	
CH_H	

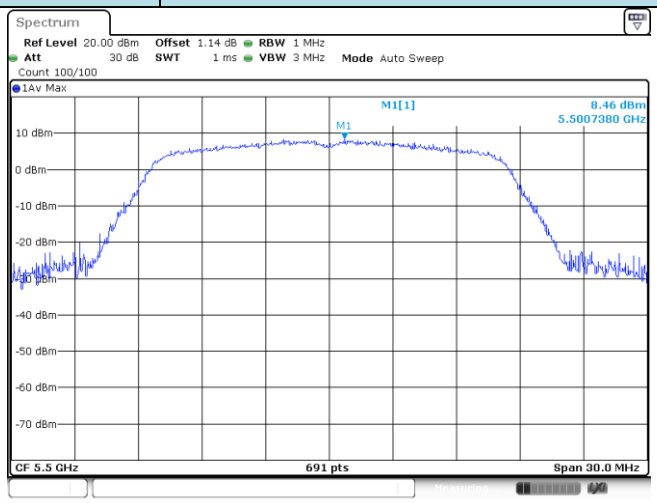
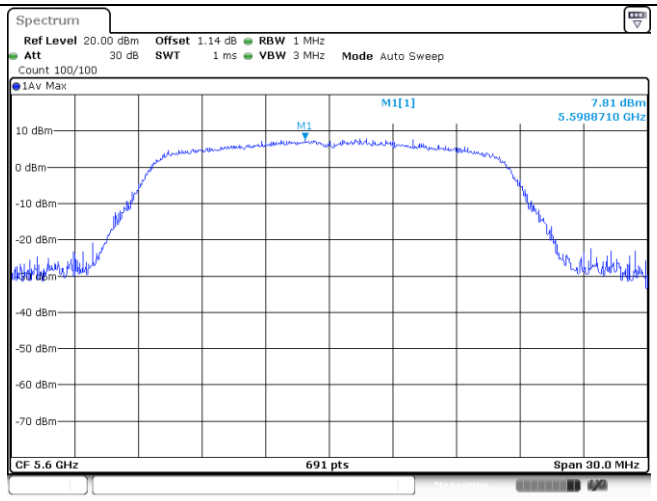
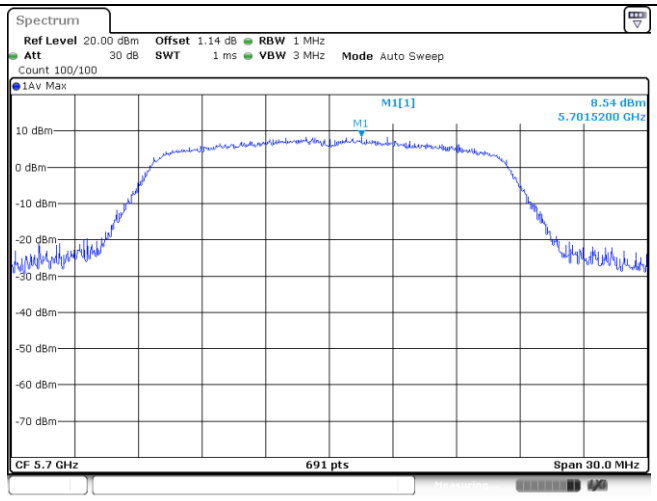
Band II	802.11ac (HT40)
CH_L	
CH_H	

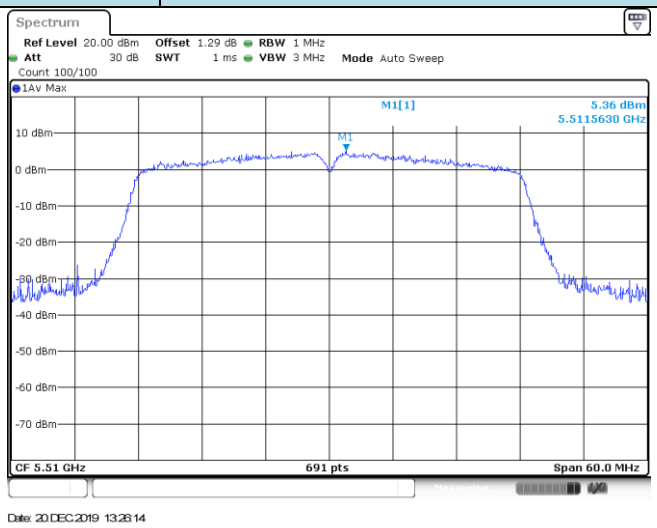
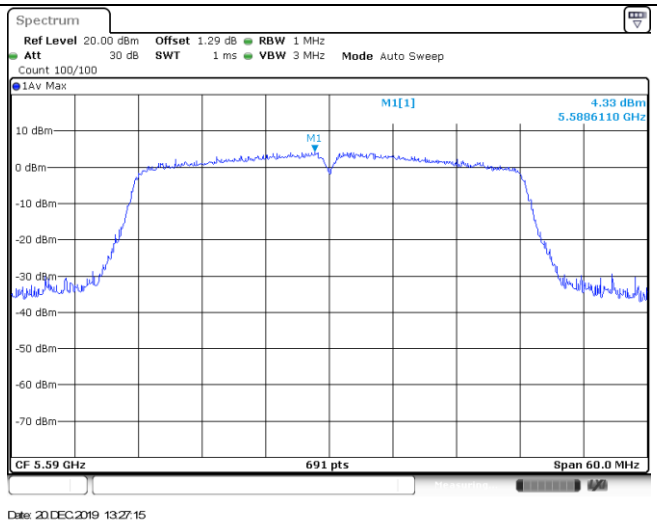
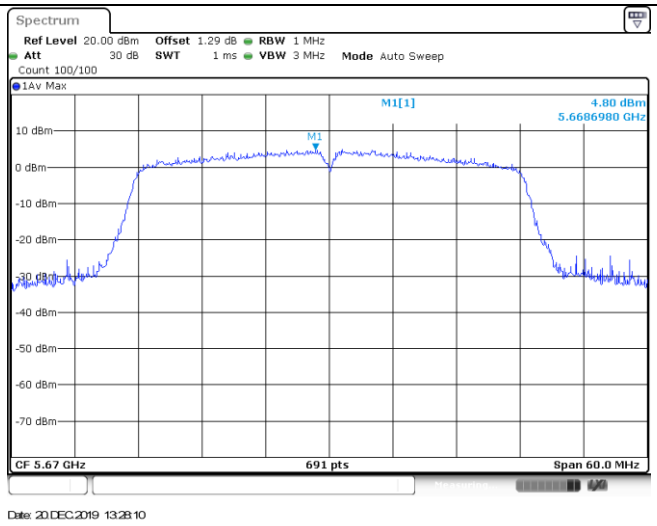
Band II	802.11n (HT40)
CH_L	
CH_H	

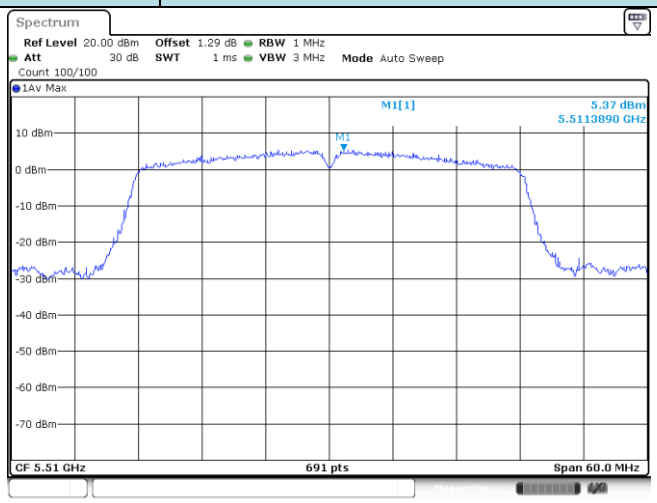
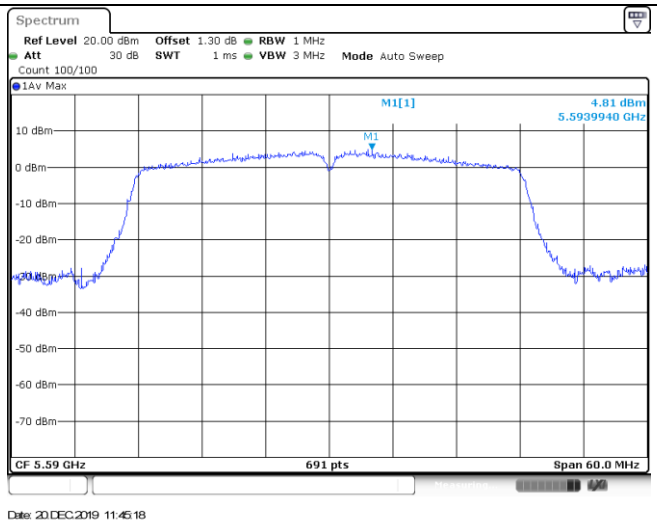
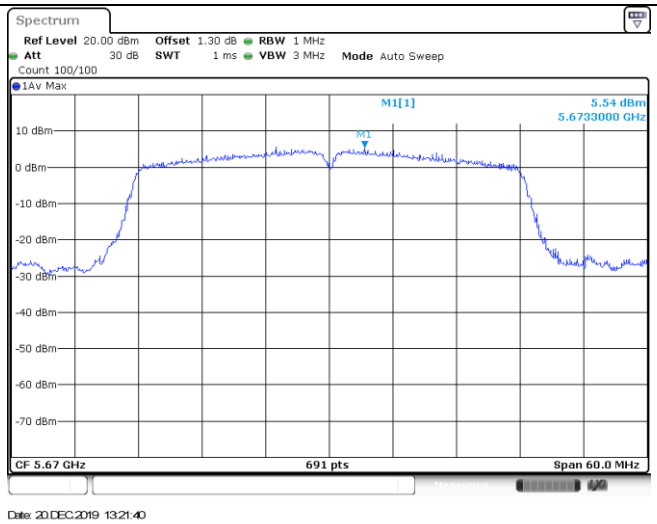
Band II	802.11ac (HT80)
CH_M	

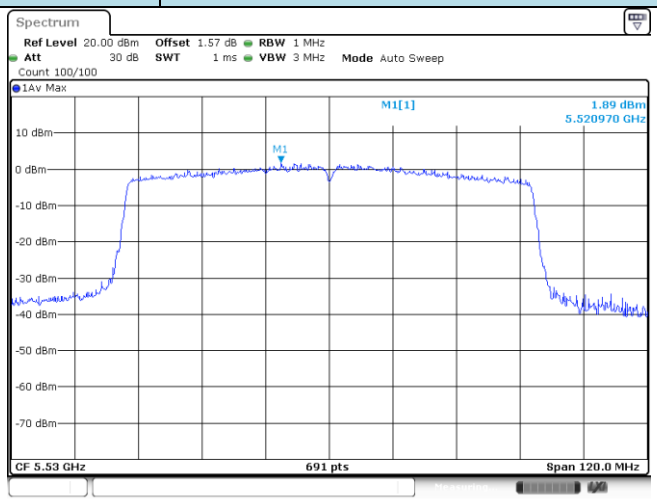
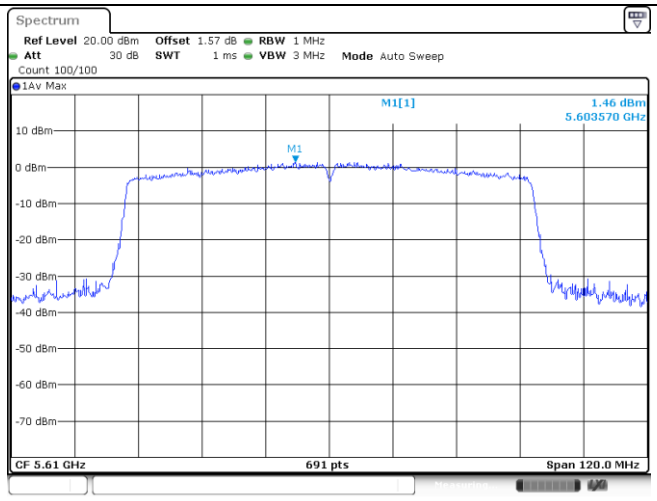
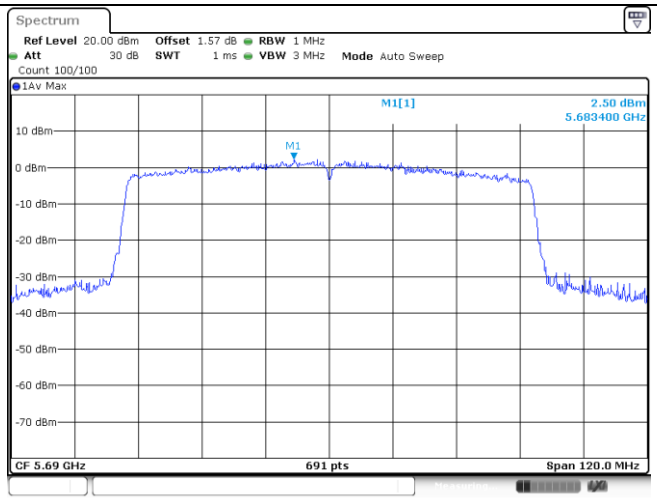
Band III	802.11ac (HT20)
CH_L	
CH_M	
CH_H	

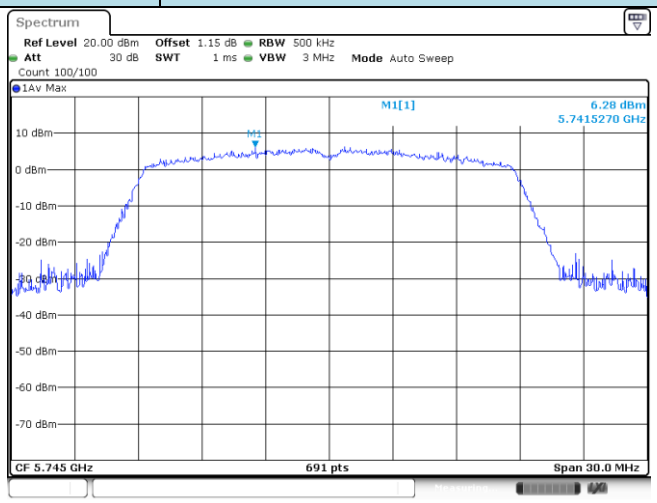
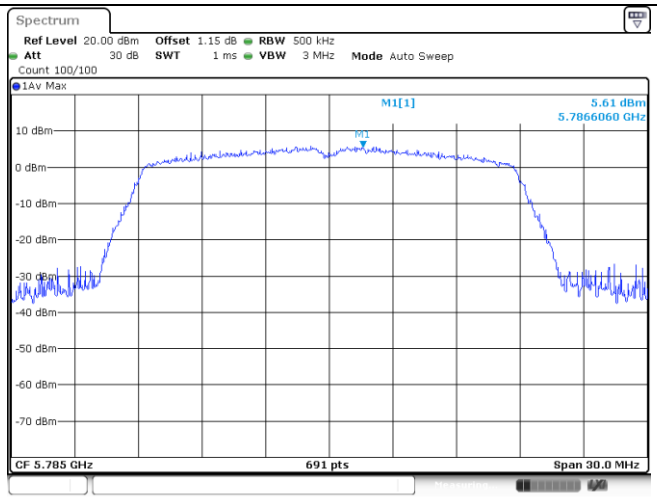
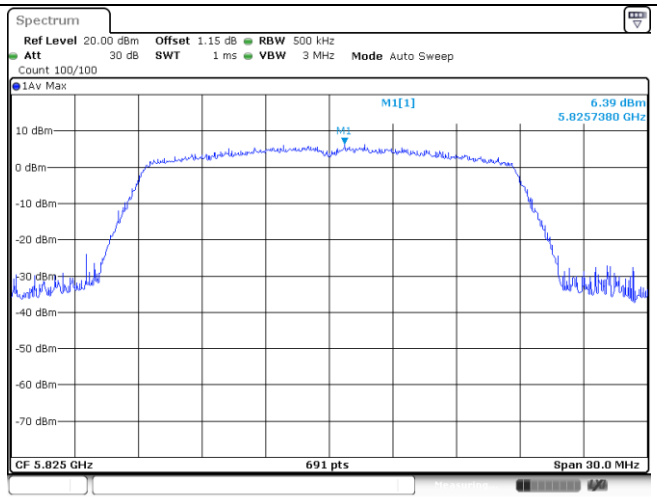
Band III	802.11n (HT20)
CH_L	
CH_M	
CH_H	

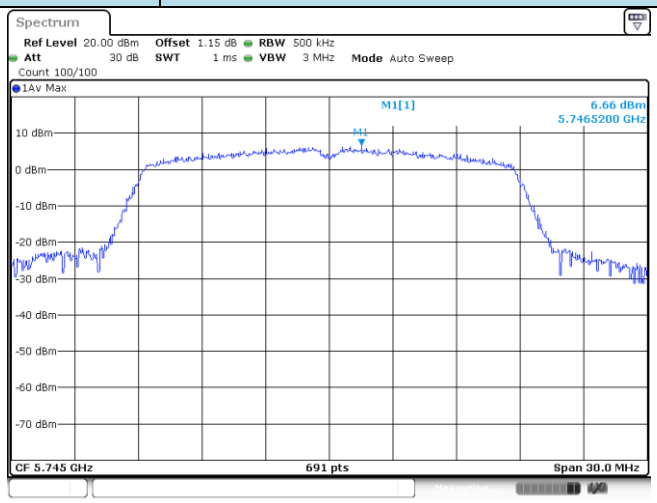
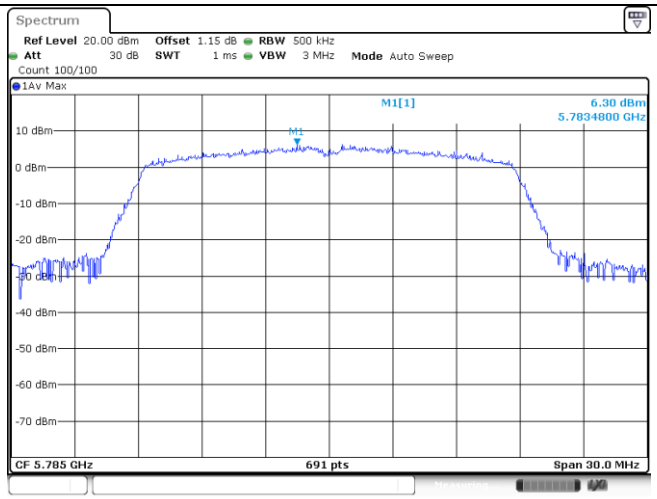
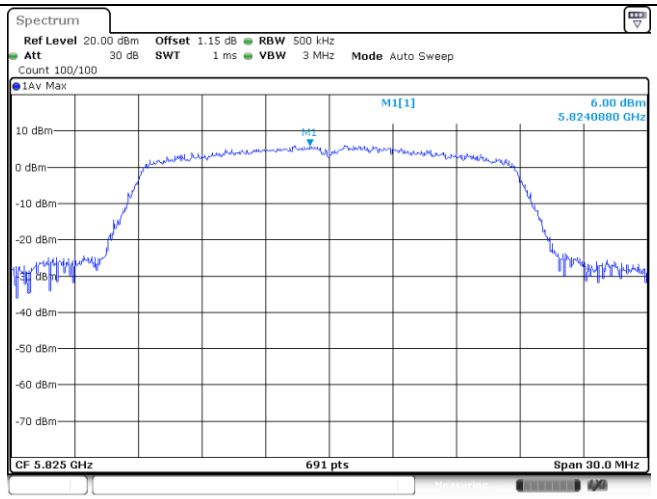
Band III	802.11a
CH_L	
CH_M	
CH_H	

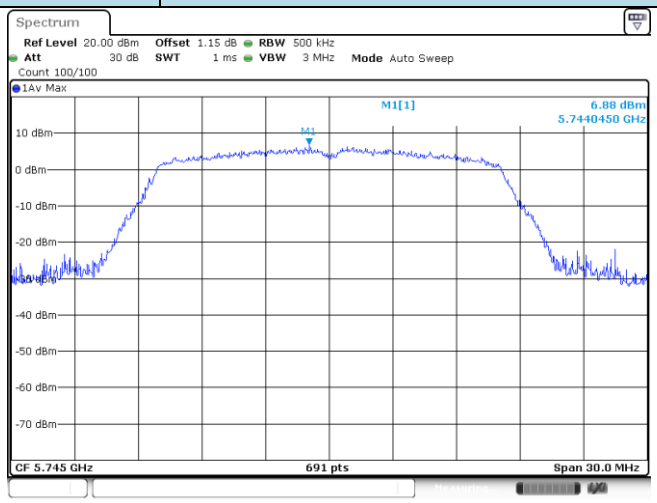
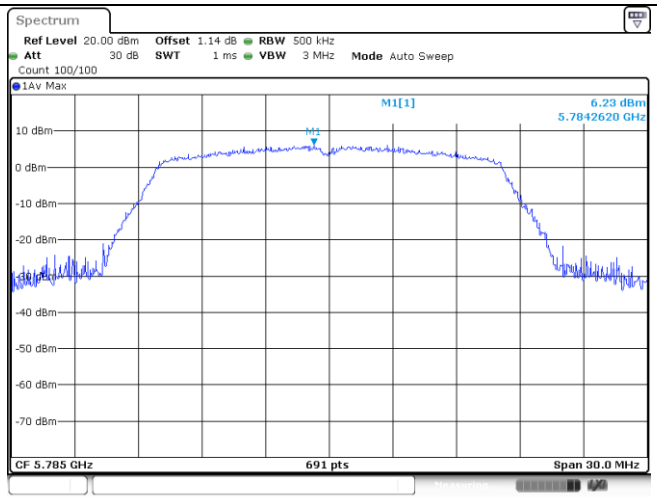
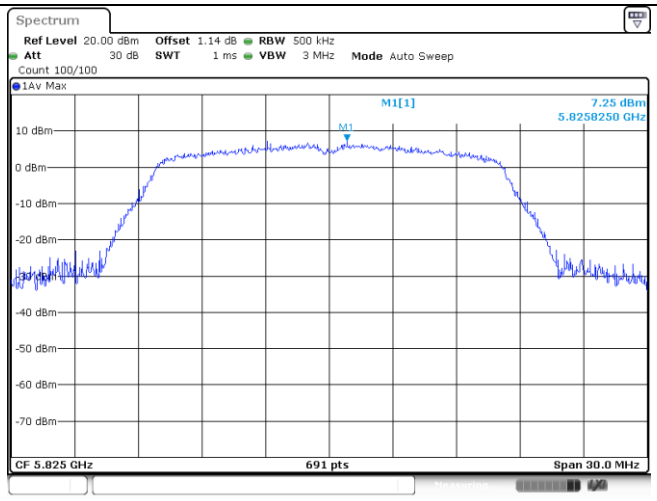
Band III	802.11ac (HT40)
CH_L	
CH_M	
CH_H	

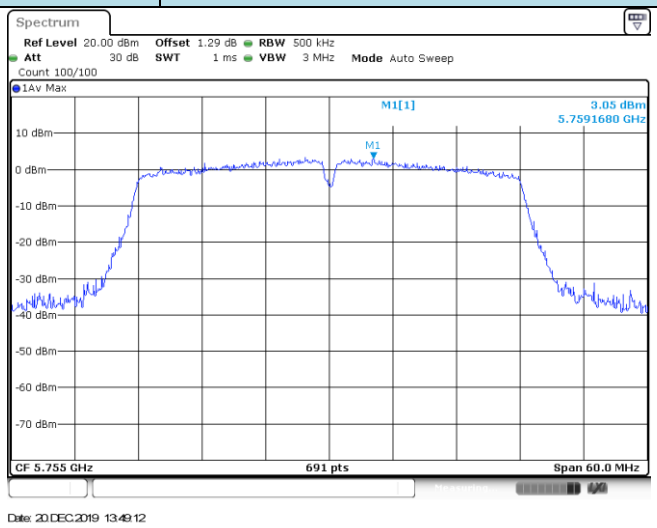
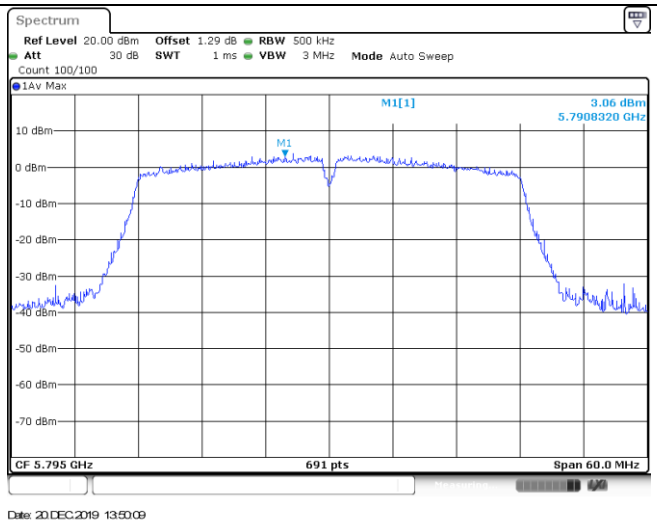
Band III	802.11n (HT40)
CH_L	
CH_M	
CH_H	

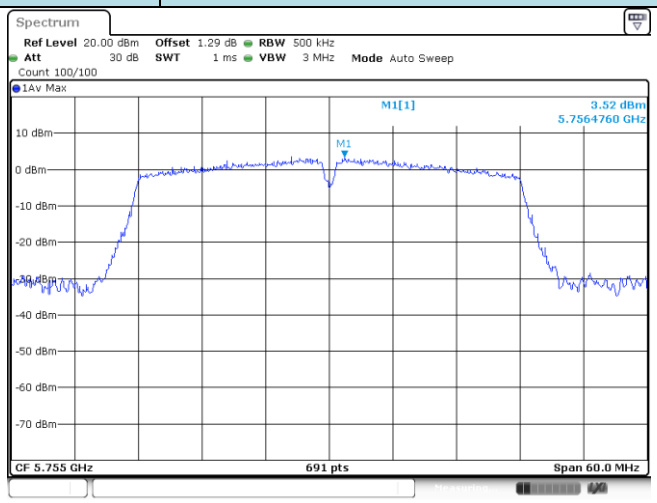
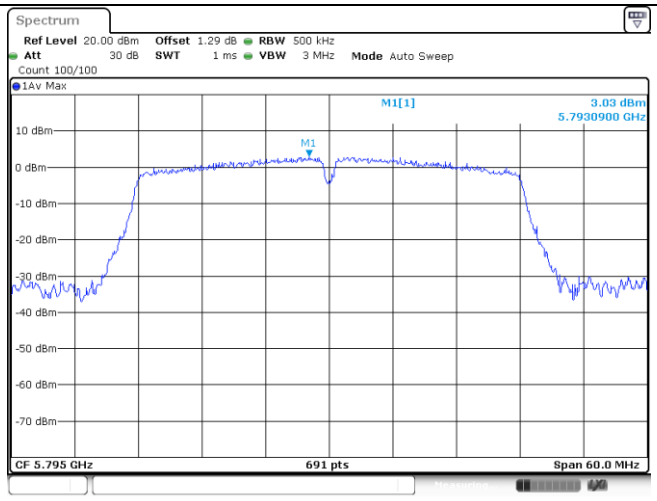
Band III	802.11ac (HT80)
CH_L	
CH_M	
CH_H	

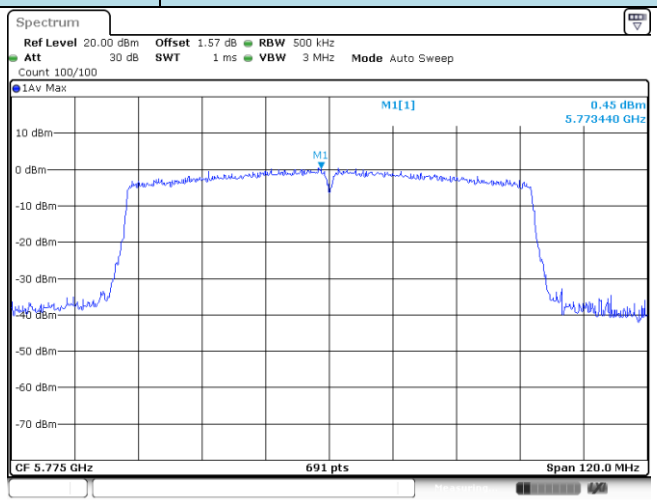
Band IV	802.11ac (HT20)
CH_L	
CH_M	
CH_H	

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	

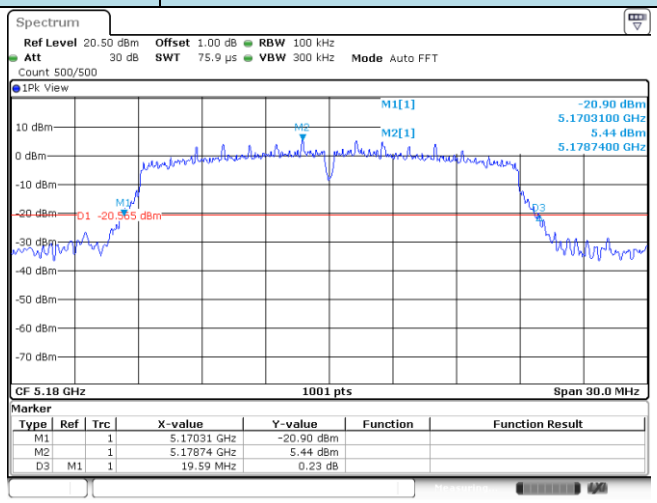
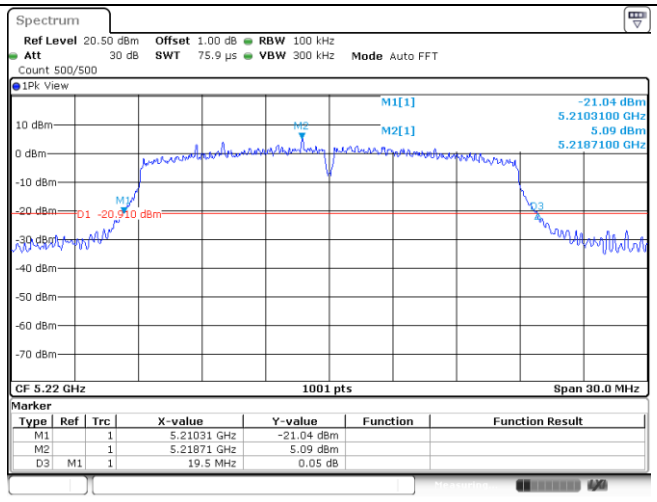
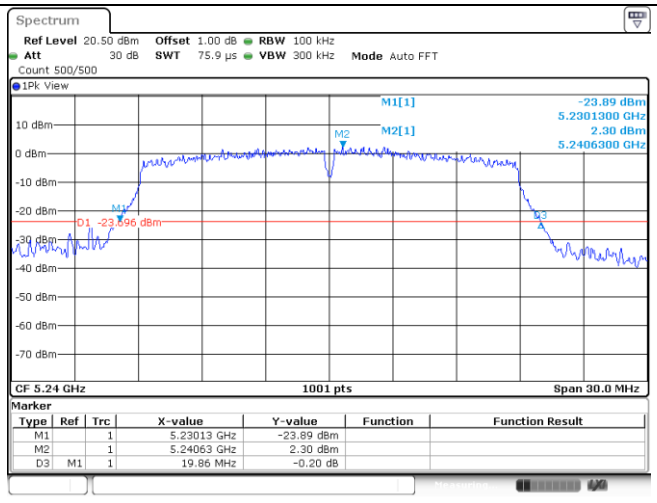
Band IV	802.11n (HT40)
CH_L	
CH_H	

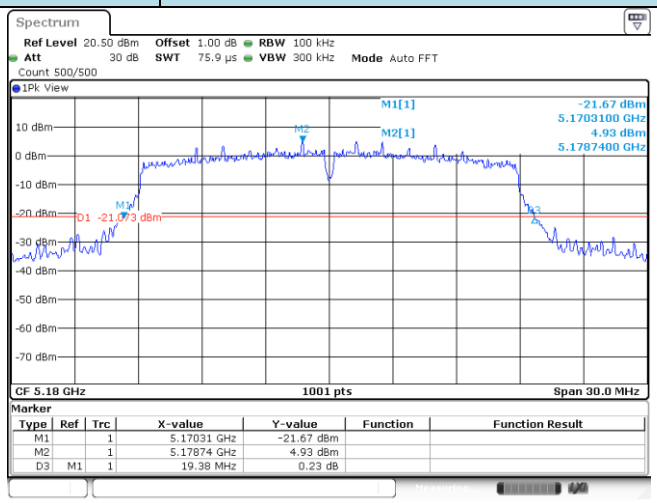
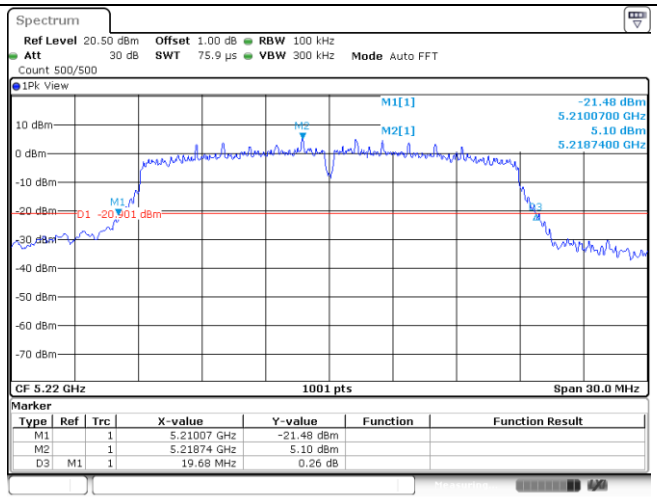
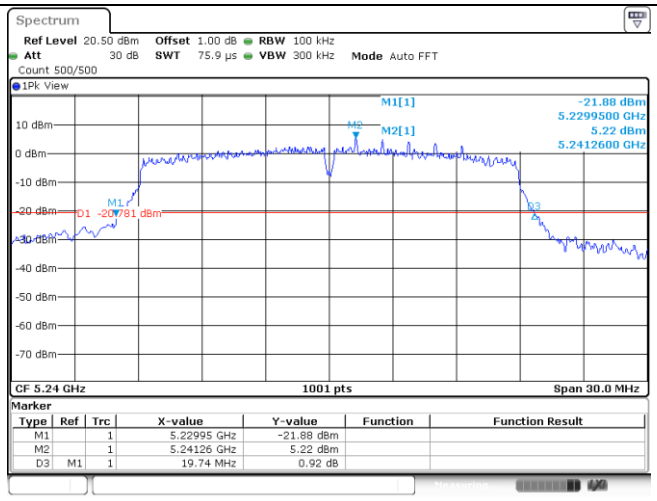
Band IV	802.11ac (HT80)
CH_M	

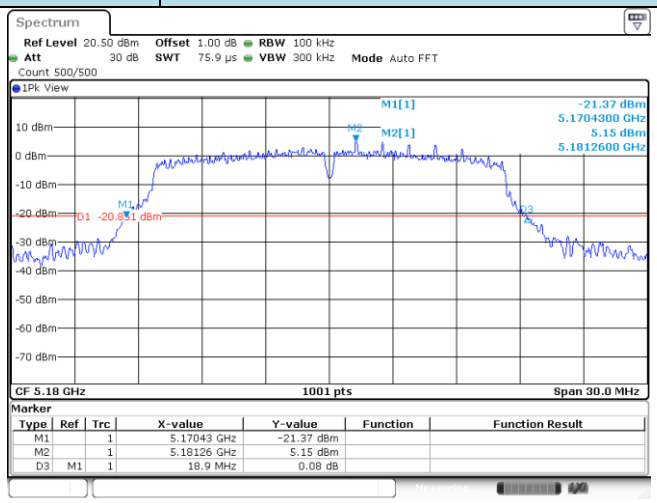
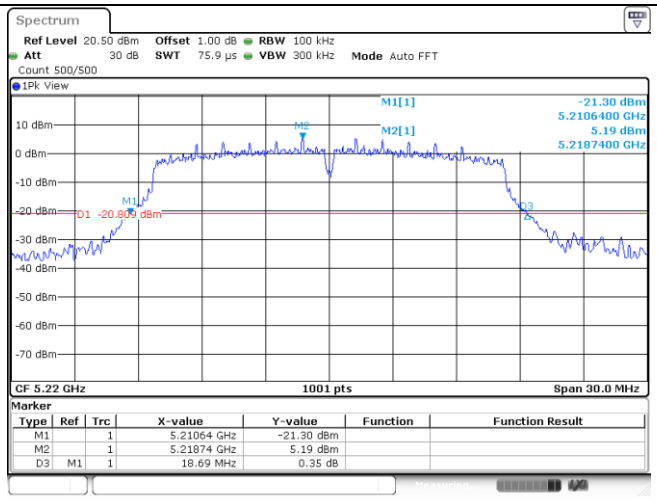
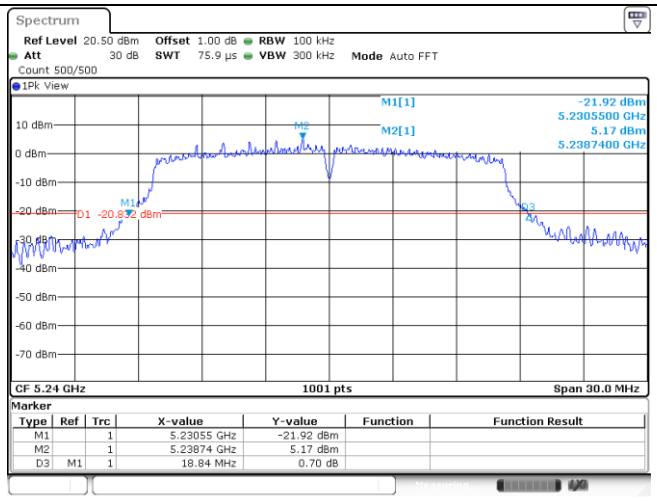
Appendix C：26dB bandwidth

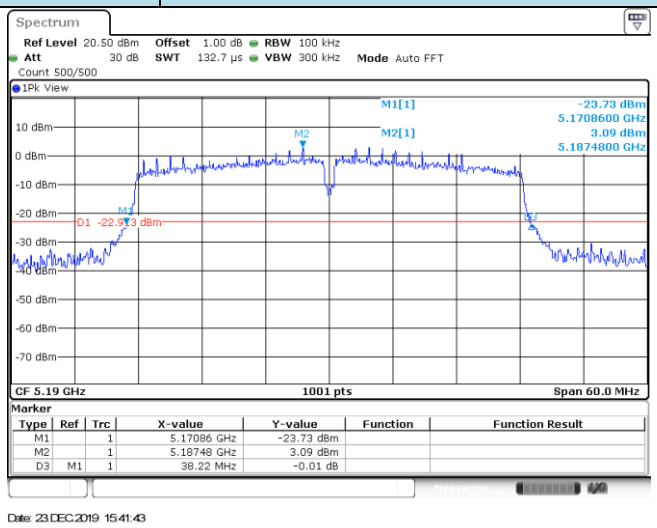
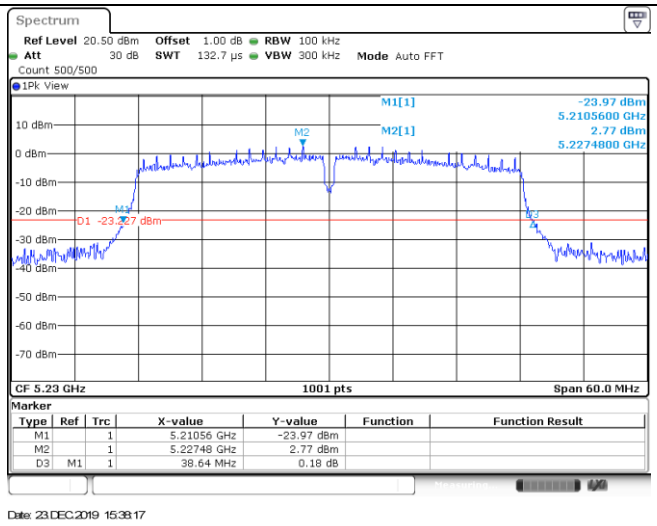
Band	Bandwidth (MHz)	Type	Channel	26dB bandwidth (MHz)	Result
I	20	802.11ac	CH_L	19.59	Pass
			CH_M	19.50	
			CH_H	19.86	
		802.11n	CH_L	19.38	Pass
			CH_M	19.68	
			CH_H	19.74	
		802.11a	CH_L	18.90	Pass
			CH_M	18.69	
			CH_H	18.84	
	40	802.11ac	CH_L	38.22	Pass
			CH_H	38.64	
		802.11n	CH_L	38.40	Pass
			CH_H	38.46	
	80	802.11ac	CH_M	78.12	Pass
II	20	802.11ac	CH_L	20.46	Pass
			CH_M	20.16	
			CH_H	20.46	
		802.11n	CH_L	20.52	Pass
			CH_M	20.40	
			CH_H	20.46	
		802.11a	CH_L	20.16	Pass
			CH_M	20.13	
			CH_H	20.04	
	40	802.11ac	CH_L	42.42	Pass
			CH_H	40.92	
		802.11n	CH_L	41.28	Pass
			CH_H	41.10	
	80	802.11ac	CH_M	81.96	Pass

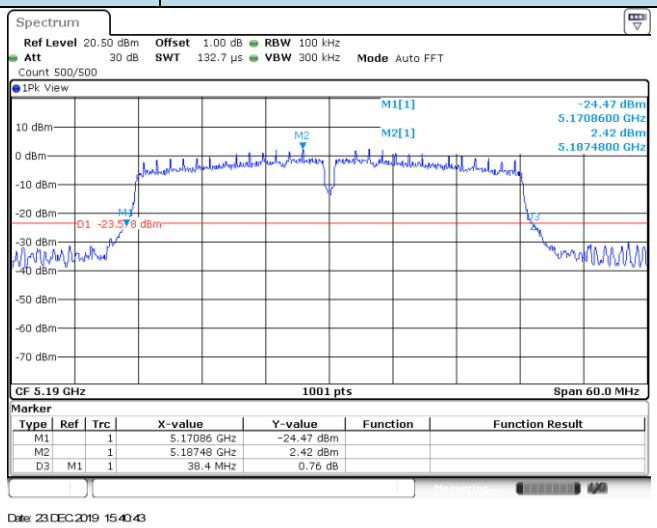
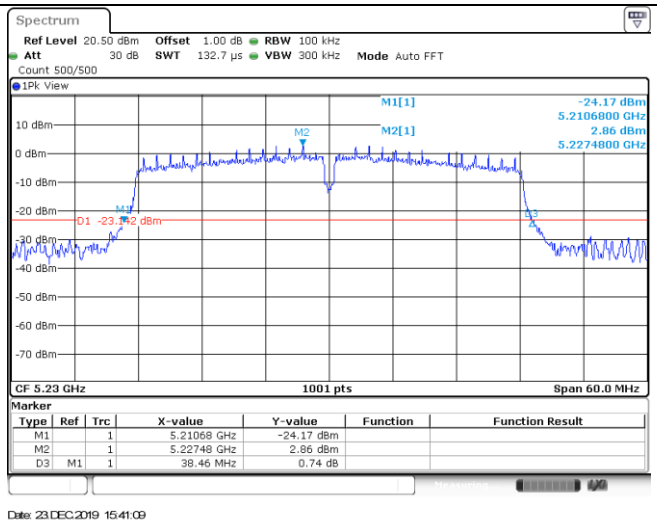
Band	Bandwidth (MHz)	Type	Channel	26dB bandwidth (MHz)	Result
III	20	802.11ac	CH_L	20.40	Pass
			CH_M	20.46	
			CH_H	20.40	
		802.11n	CH_L	20.37	Pass
			CH_M	20.13	
			CH_H	20.28	
		802.11a	CH_L	19.98	Pass
			CH_M	20.07	
			CH_H	19.86	
	40	802.11ac	CH_L	40.92	Pass
			CH_M	41.04	
			CH_H	41.22	
		802.11n	CH_L	41.10	Pass
			CH_M	40.92	
			CH_H	40.92	
	80	802.11ac	CH_L	81.36	Pass
			CH_M	81.60	
			CH_H	81.24	

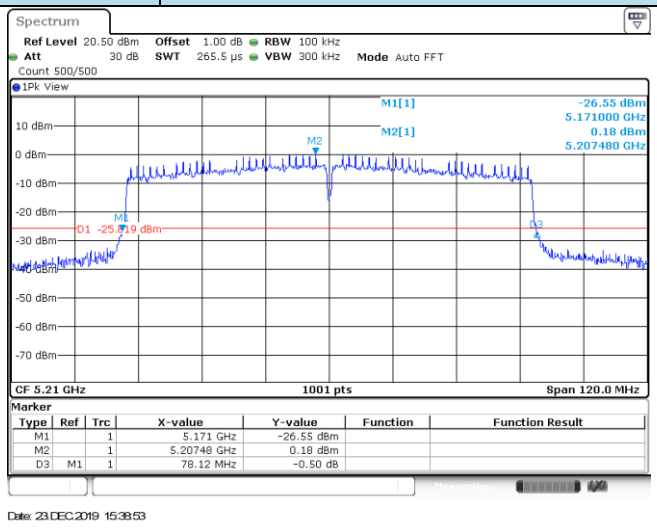
Band I	802.11ac (HT20)
CH_L	
CH_M	
CH_H	

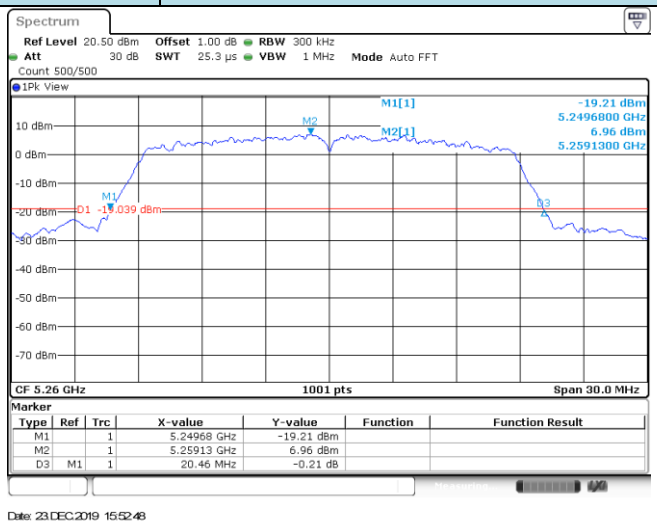
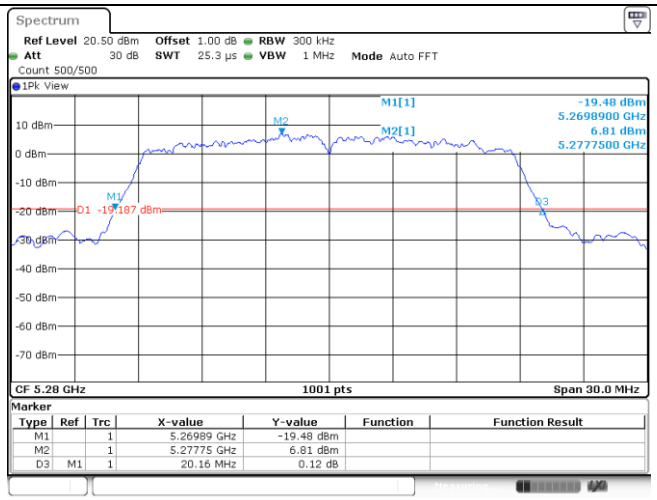
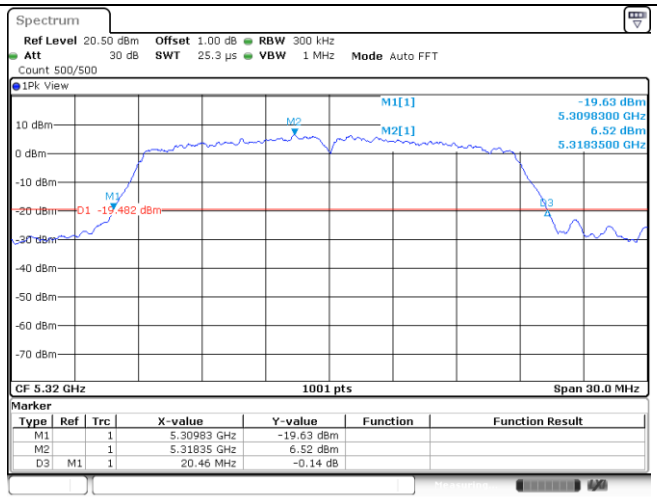
Band I	802.11n (HT20)
CH_L	
CH_M	
CH_H	

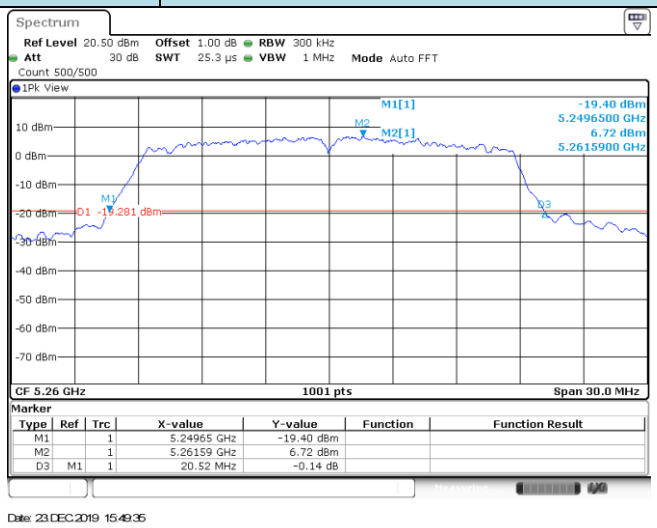
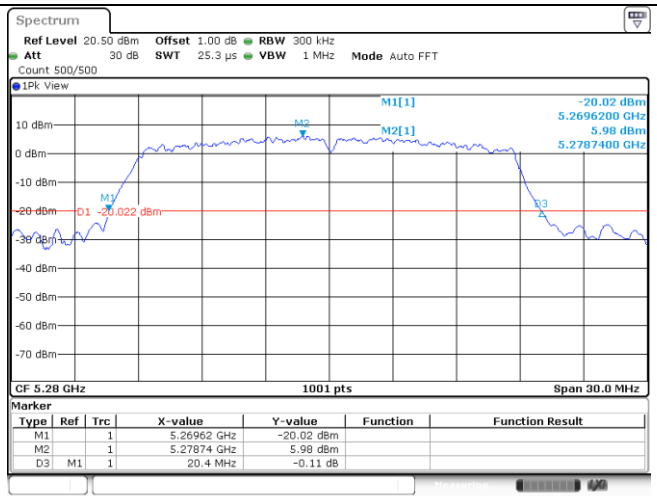
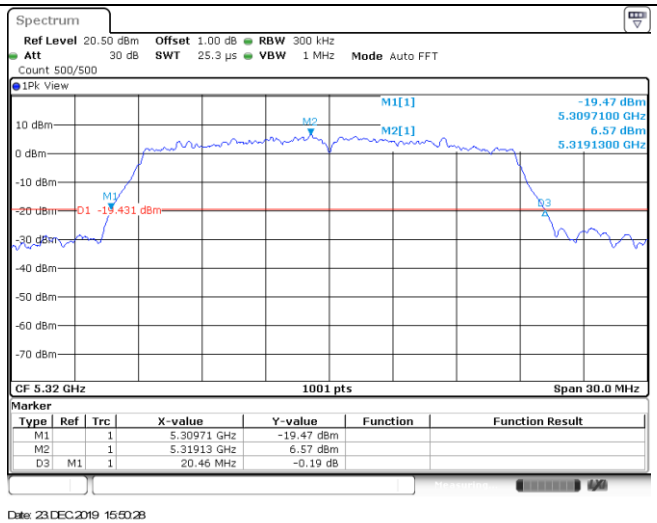
Band I	802.11a
CH_L	
CH_M	
CH_H	

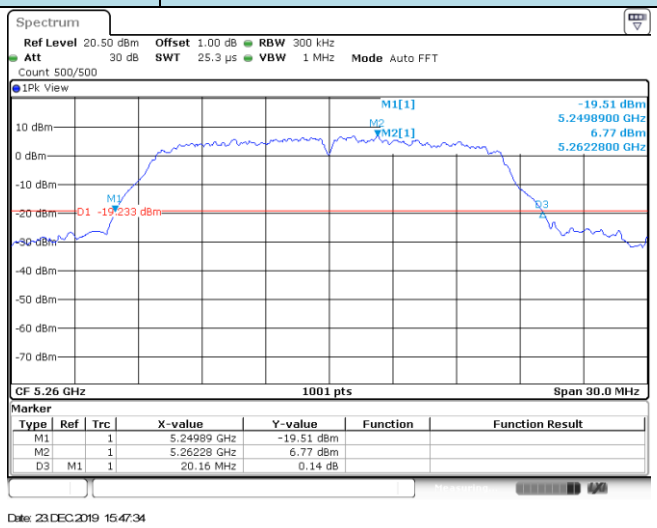
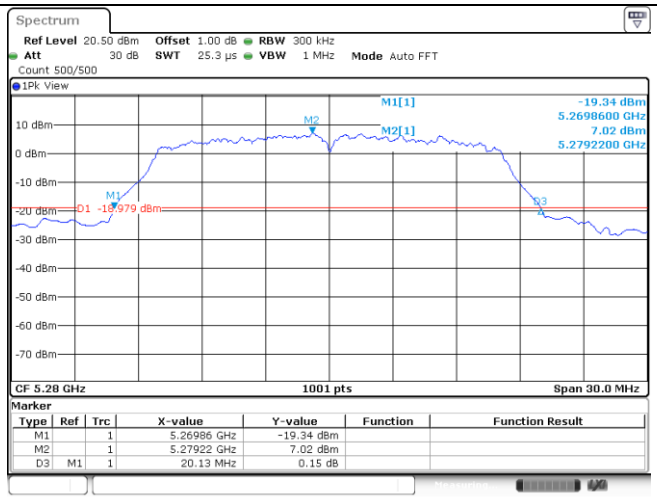
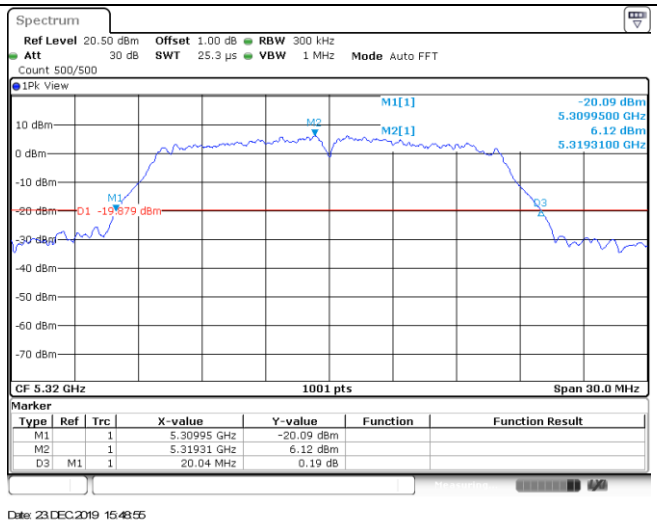
Band I	802.11ac (HT40)
CH_L	
CH_H	

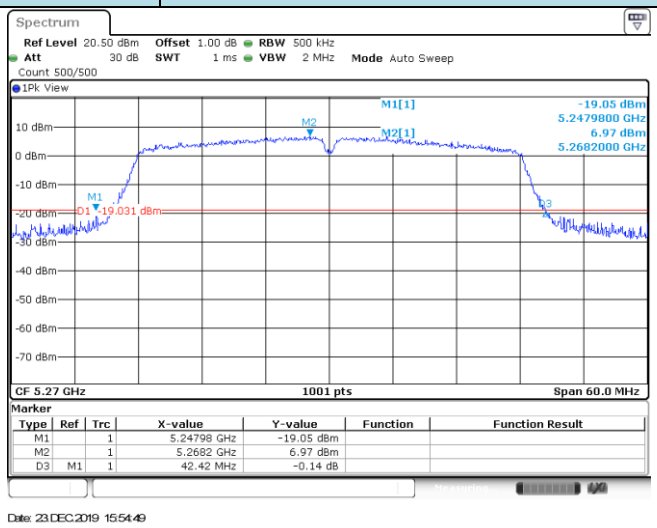
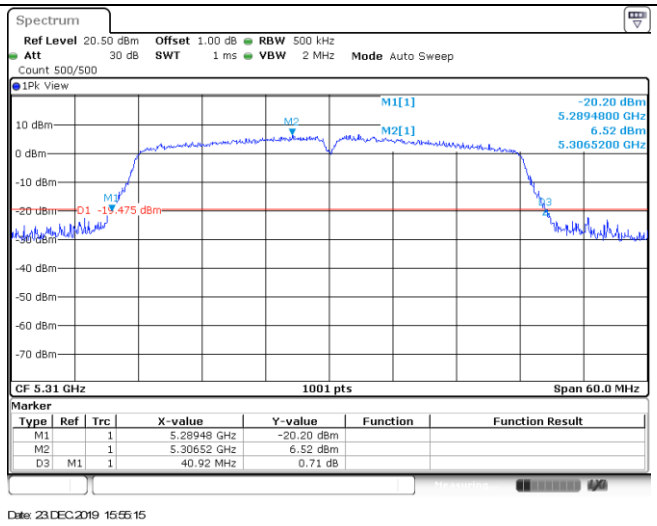
Band I	802.11n (HT40)
CH_L	
CH_H	

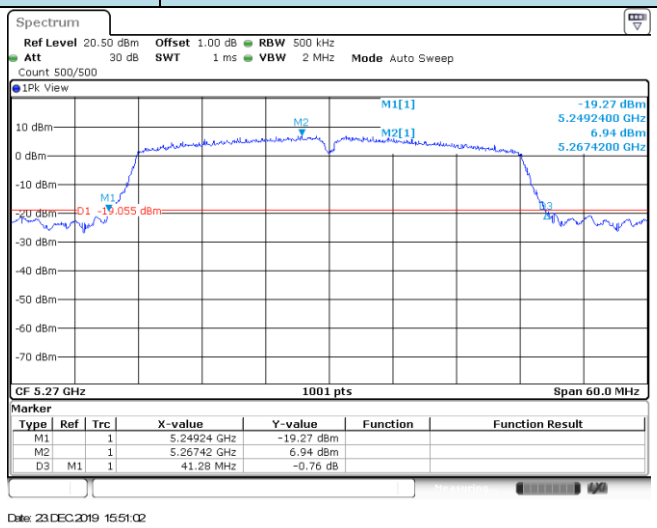
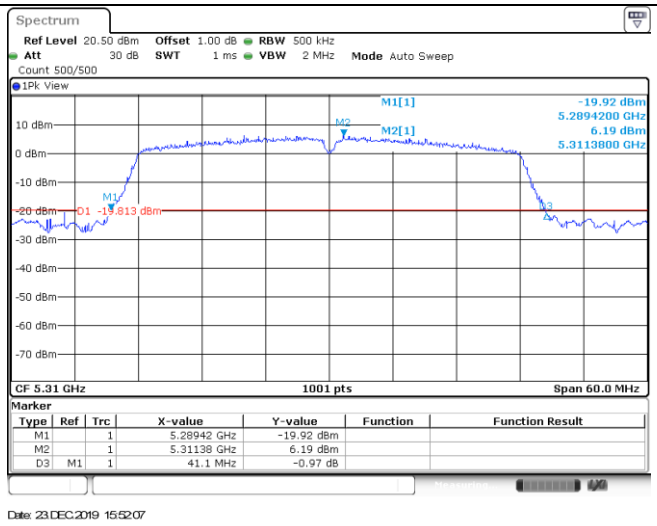
Band I	802.11ac (HT80)
CH_M	

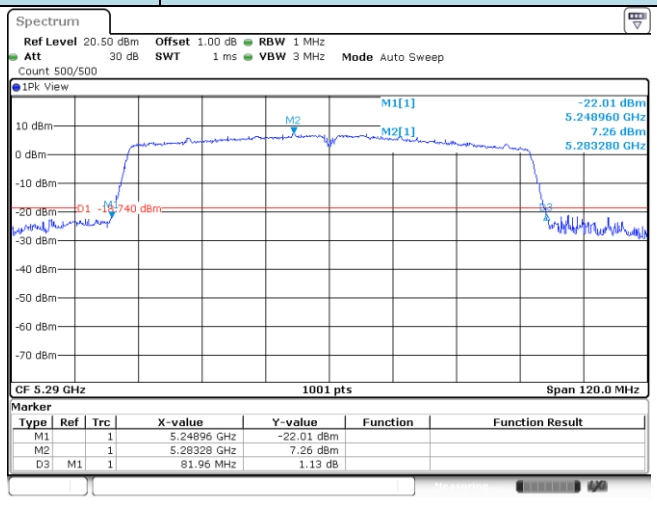
Band II	802.11ac (HT20)
CH_L	
CH_M	
CH_H	

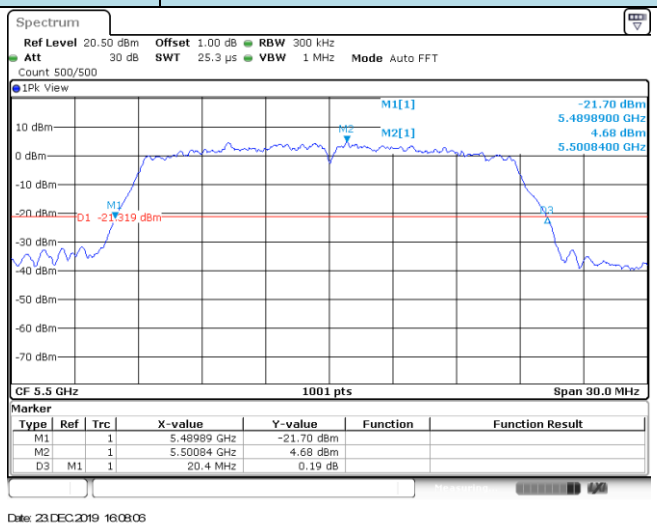
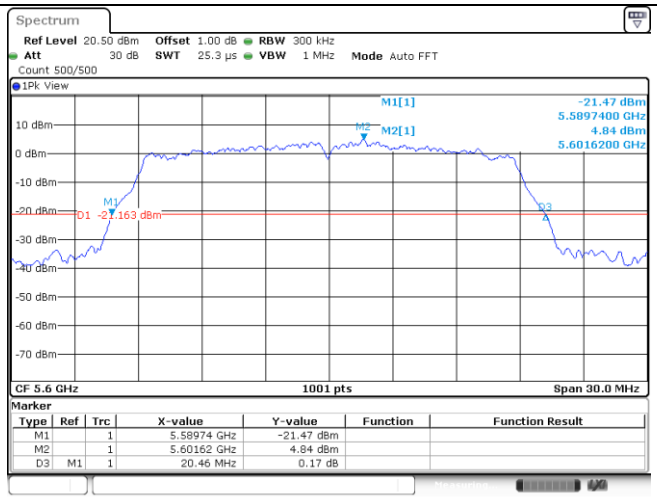
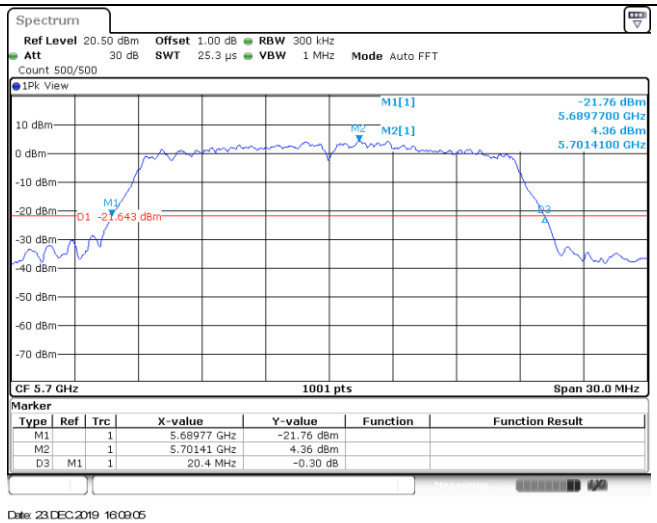
Band II	802.11n (HT20)
CH_L	
CH_M	
CH_H	

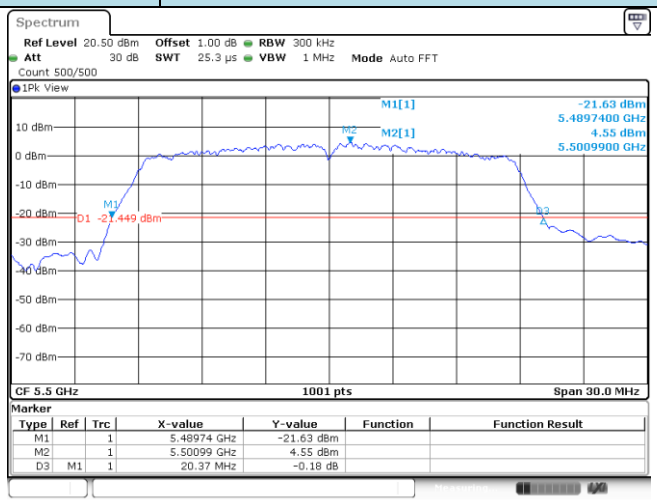
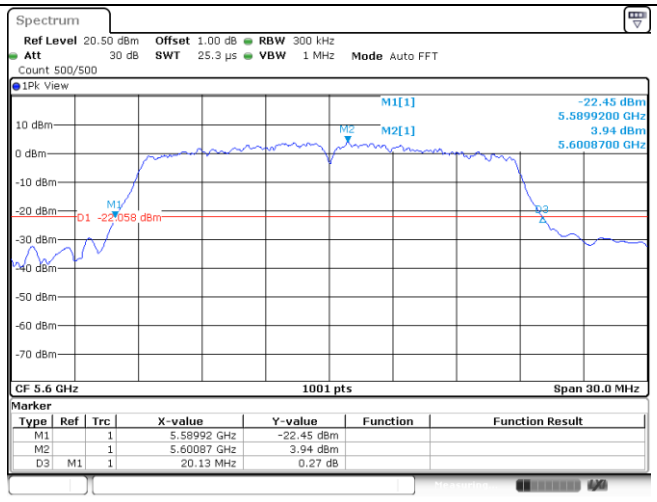
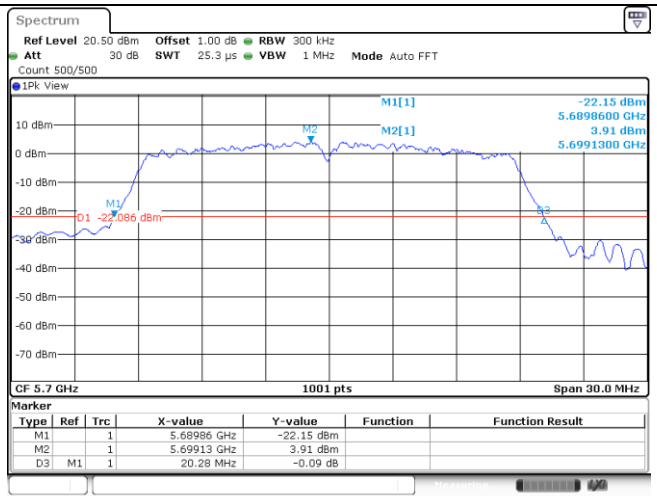
Band II	802.11a
CH_L	
CH_M	
CH_H	

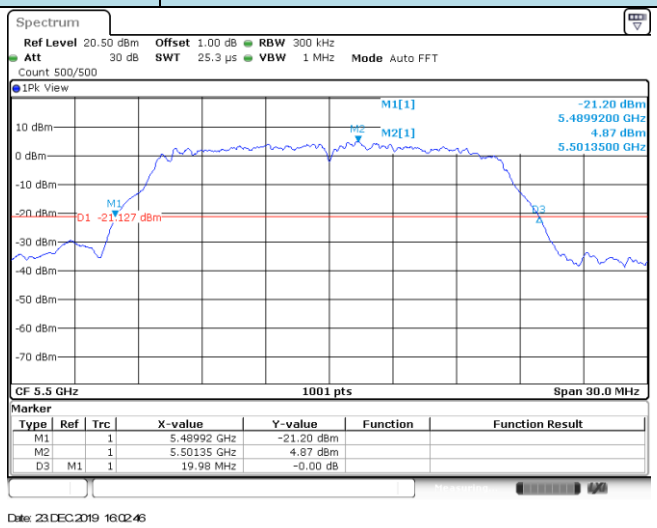
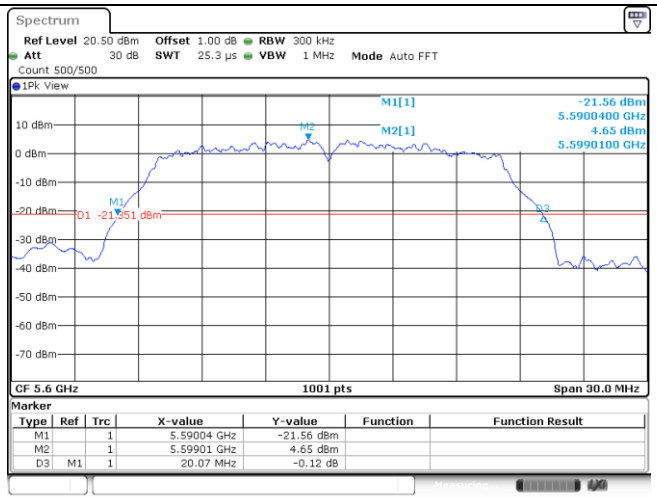
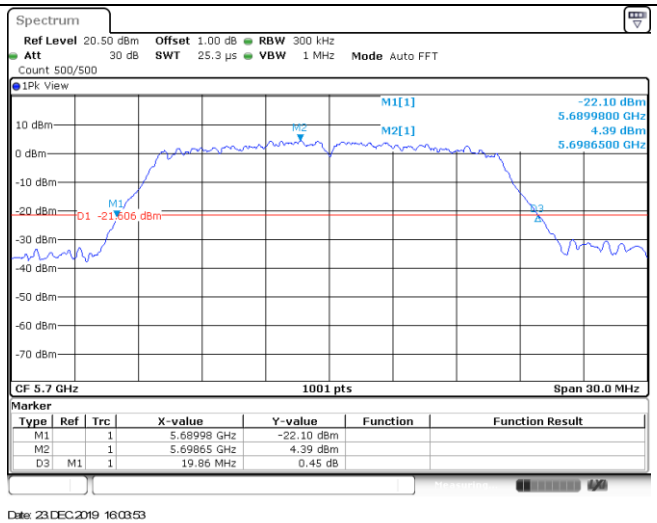
Band II	802.11ac (HT40)
CH_L	
CH_H	

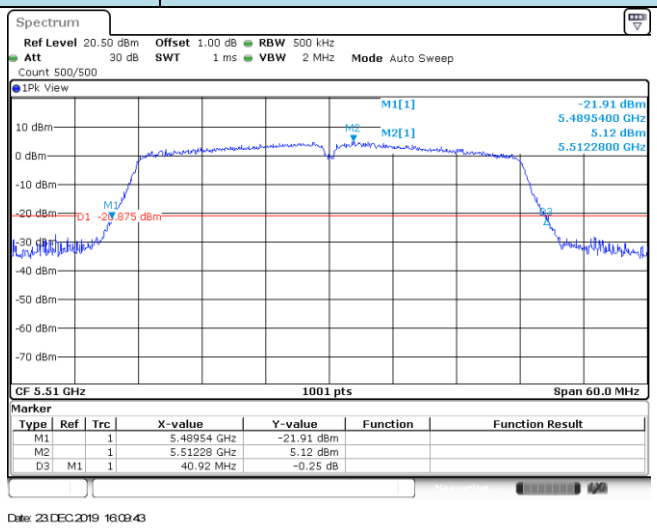
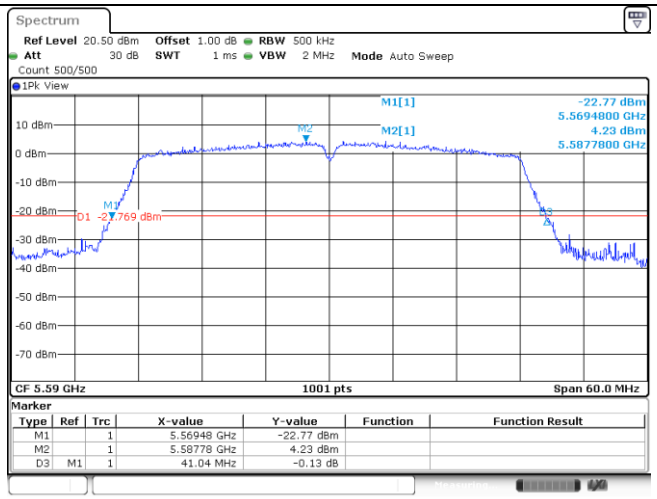
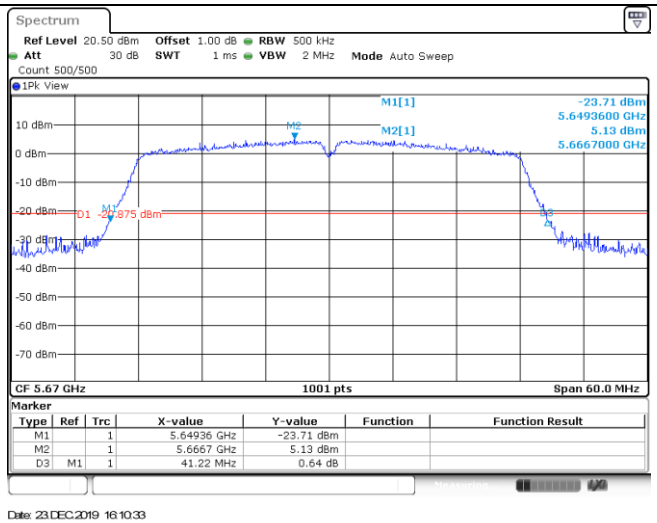
Band II	802.11n (HT40)
CH_L	
CH_H	

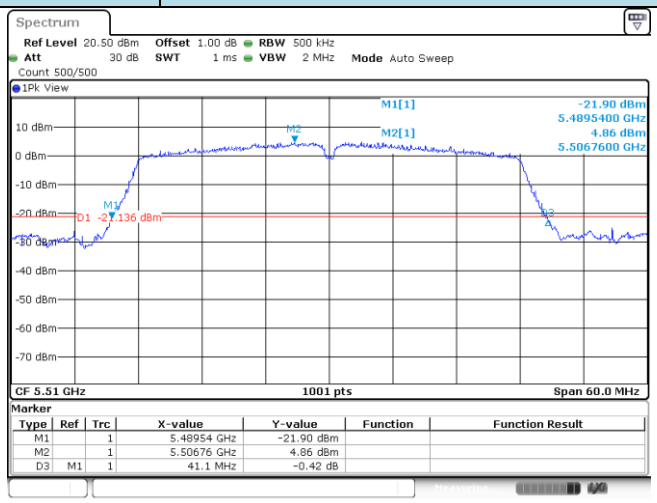
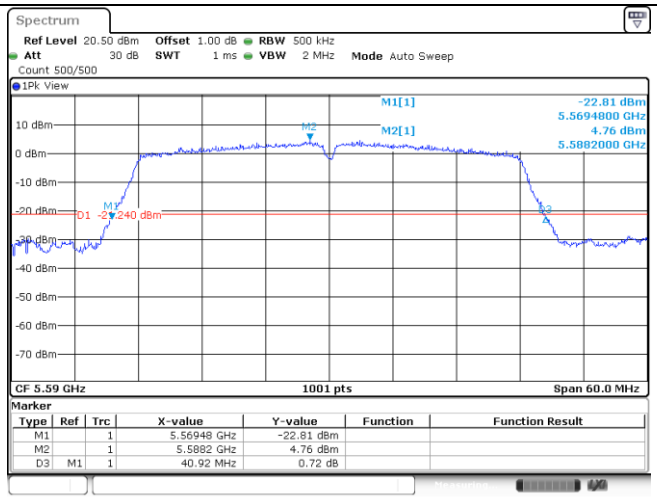
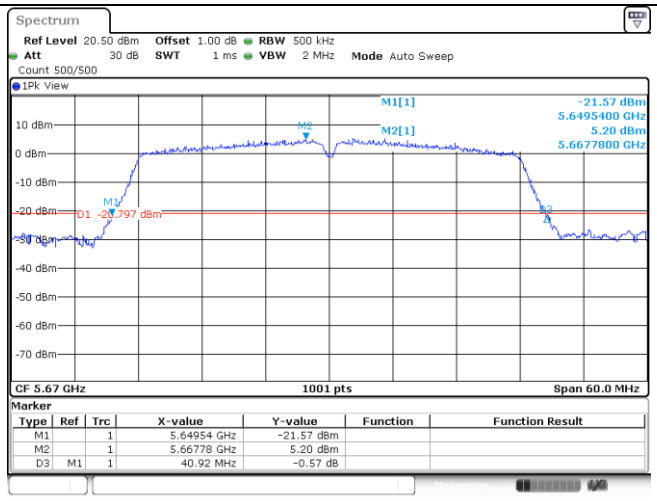
Band II	802.11ac (HT80)
CH_M	

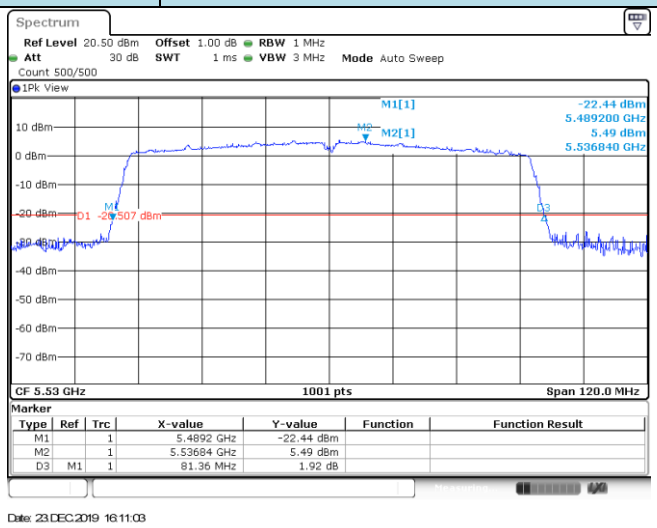
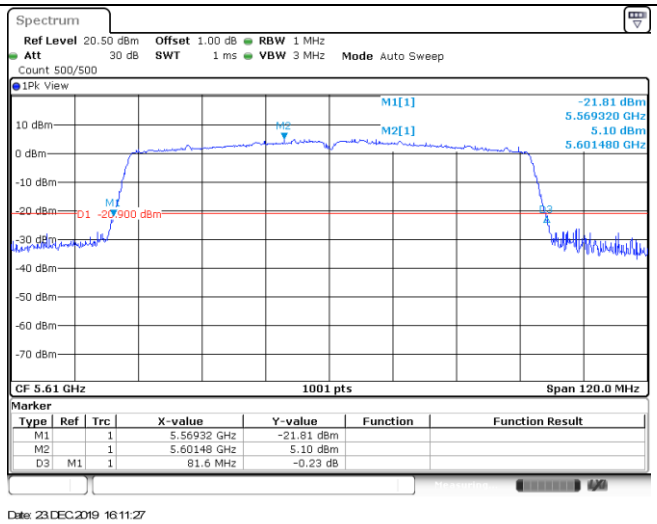
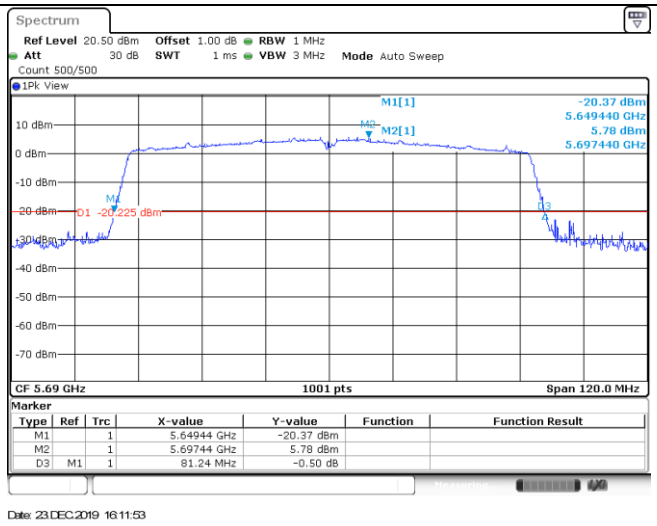
Band III	802.11ac (HT20)
CH_L	
CH_M	
CH_H	

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	

Appendix D：99% Occupy bandwidth

Band	Bandwidth (MHz)	Type	Channel	99% Occupy bandwith (MHz)	Result
I	20	802.11ac	CH_L	17.68	Pass
			CH_M	17.83	
			CH_H	17.56	
		802.11n	CH_L	18.25	Pass
			CH_M	18.04	
			CH_H	18.43	
		802.11a	CH_L	18.01	Pass
			CH_M	17.32	
			CH_H	18.22	
	40	802.11ac	CH_L	36.02	Pass
			CH_H	36.08	
		802.11n	CH_L	36.14	Pass
			CH_H	36.20	
	80	802.11ac	CH_M	75.29	Pass
II	20	802.11ac	CH_L	17.62	Pass
			CH_M	17.62	
			CH_H	17.68	
		802.11n	CH_L	17.80	Pass
			CH_M	17.62	
			CH_H	17.77	
		802.11a	CH_L	16.75	Pass
			CH_M	16.69	
			CH_H	16.75	
	40	802.11ac	CH_L	36.08	Pass
			CH_H	36.08	
		802.11n	CH_L	36.20	Pass
			CH_H	36.20	
	80	802.11ac	CH_M	75.29	Pass

Band	Bandwidth (MHz)	Type	Channel	99% Occupy bandwith (MHz)	Result
III	20	802.11ac	CH_L	17.59	Pass
			CH_M	17.62	
			CH_H	17.59	
		802.11n	CH_L	17.65	Pass
			CH_M	17.77	
			CH_H	17.74	
		802.11a	CH_L	16.63	Pass
			CH_M	16.60	
			CH_H	16.57	
	40	802.11ac	CH_L	36.08	Pass
			CH_M	36.02	
			CH_H	36.08	
		802.11n	CH_L	36.08	Pass
			CH_M	36.14	
			CH_H	36.20	
	80	802.11ac	CH_L	75.05	Pass
			CH_M	75.17	
			CH_H	75.05	

Band	Bandwidth (MHz)	Type	Channel	99% Occupy bandwith (MHz)	Result
IV	20	802.11ac	CH_L	17.59	Pass
			CH_M	17.59	
			CH_H	17.62	
		802.11n	CH_L	17.77	Pass
			CH_M	17.59	
			CH_H	17.65	
		802.11a	CH_L	16.60	Pass
			CH_M	16.51	
			CH_H	16.63	
	40	802.11ac	CH_L	36.14	Pass
			CH_H	36.08	
		802.11n	CH_L	36.12	Pass
			CH_H	36.12	
	80	802.11ac	CH_M	75.17	Pass