AUDIX Technology Corp.
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APPENDIX A

TEST PLOTS

(Model: AEX-AR9590-NI)

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A.1 EMISSION BANDWIDTH MEASUREMENT

Test Date	2016/04/14 ~ 05/20	Temp./Hum.	25 ~ 26℃/54 ~ 60%
Cable Loss	N/A	Test Voltage	DC 3.3V

A.1.1 Emission Bandwidth Result

Modulation Type	UNII Band	Centre Frequency (MHz)	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	Limit
802.11a	I	5180	36.42	18.538	Reference only
		5200	34.79	18.715	
		5240	36.57	18.758	
	II-2A	5260	27.95	16.692	
		5280	28.07	16.683	
		5320	28.84	16.648	
802.11n-HT20	I	5180	22.66	17.818	
		5200	31.56	18.522	
		5240	33.10	18.389	
	II-2A	5260	25.13	17.740	
		5280	23.62	17.707	
		5320	23.40	17.703	
802.11n-HT40	I	5190	57.65	36.392	Reference only
		5230	59.83	36.356	
	II-2A	5270	50.98	36.355	
		5310	40.87	36.147	

Modulation Type	UNII Band	Centre Frequency (MHz)	6dB Bandwidth (MHz)	Limit
802.11a	III	5745	16.35	≥ 500kHz
		5785	16.33	
		5825	16.30	
802.11n-HT20	III	5745	17.07	
		5785	16.08	
		5825	15.80	
802.11n-HT40	III	5755	35.27	
		5795	35.82	

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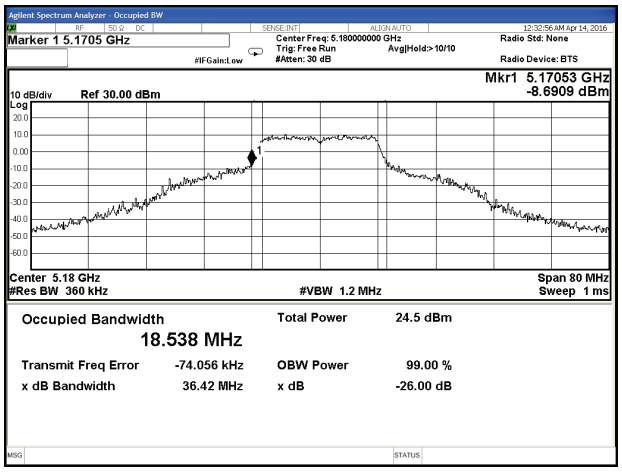
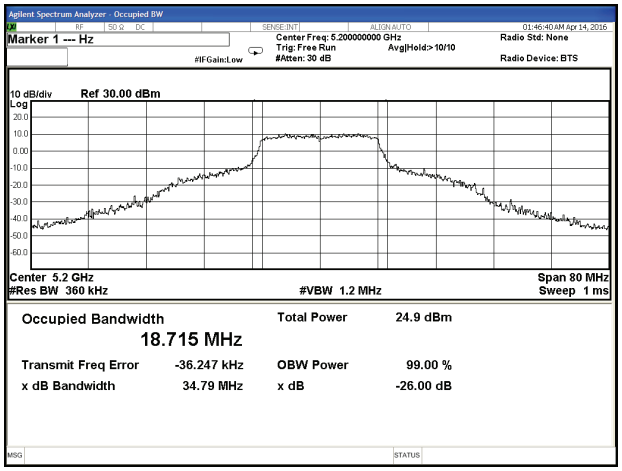
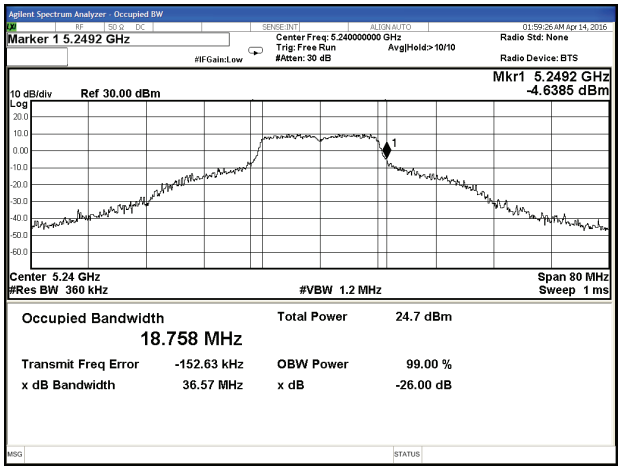
A.1.2 Measurement Plots

802.11a

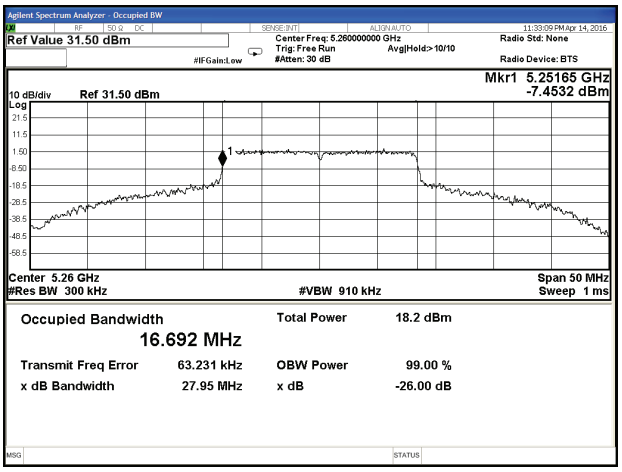
UNII Band I

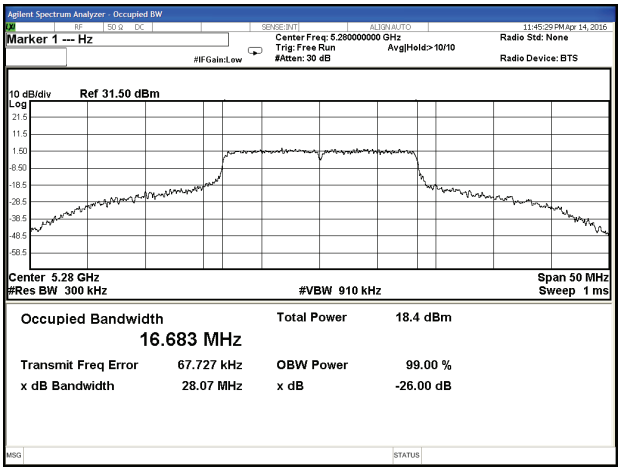


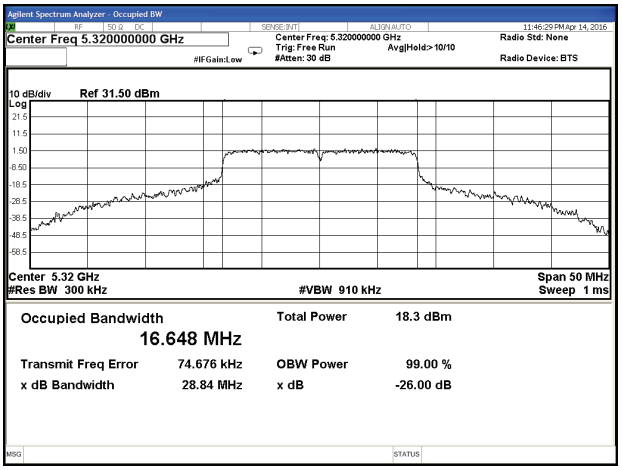




UNII Band II-2A







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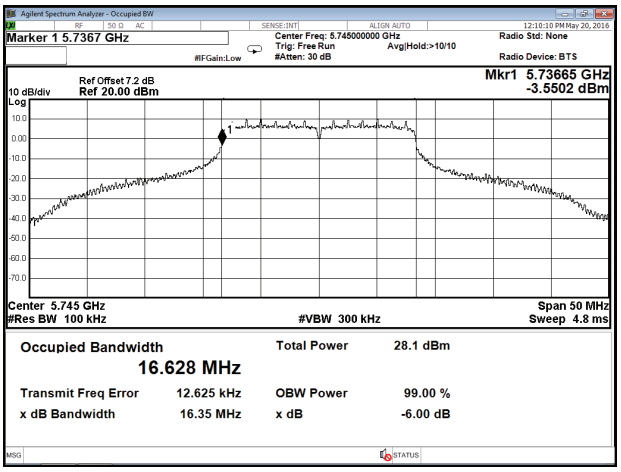
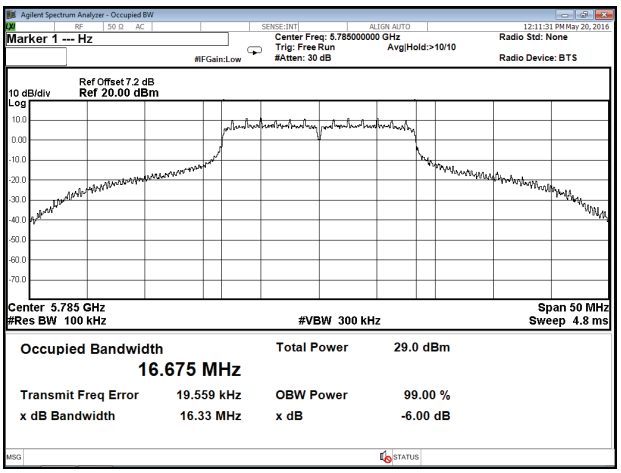
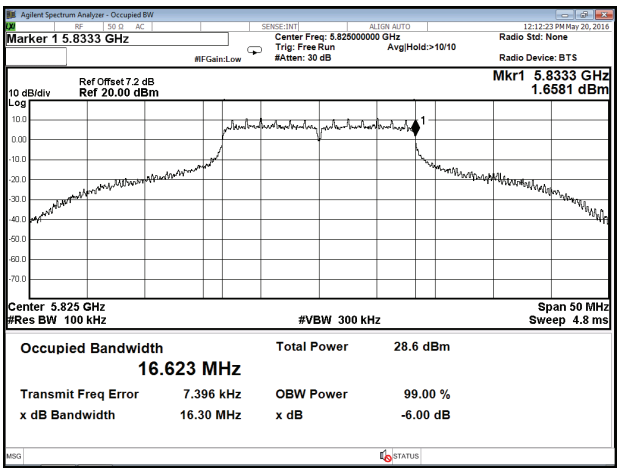
802.11a
UNII Band III







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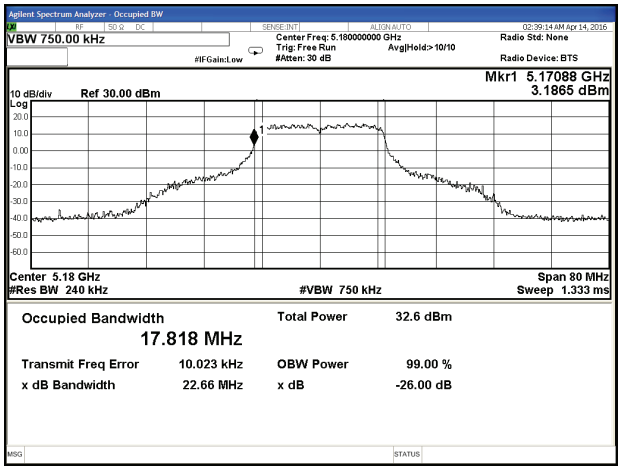
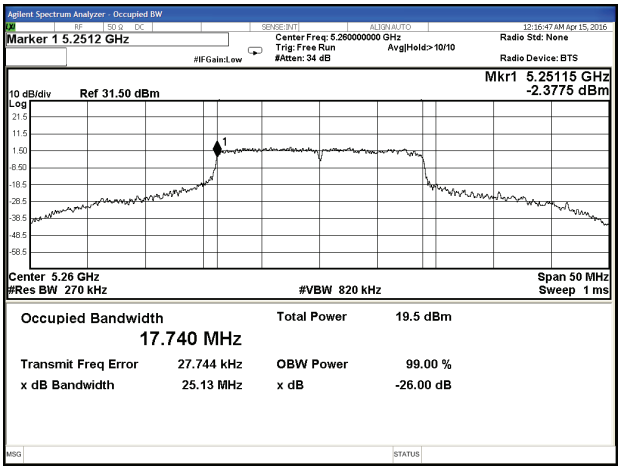
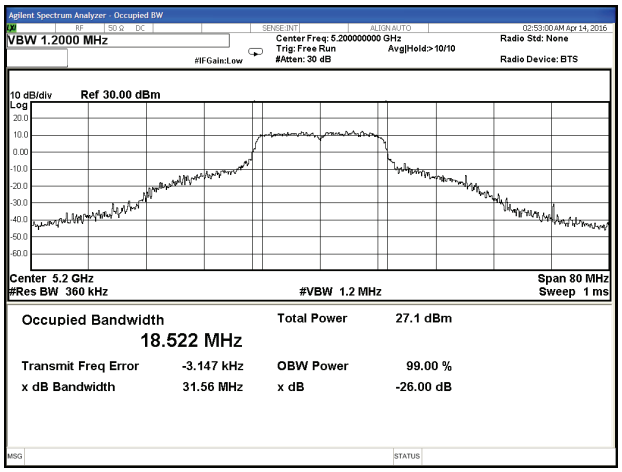
802.11n-HT20

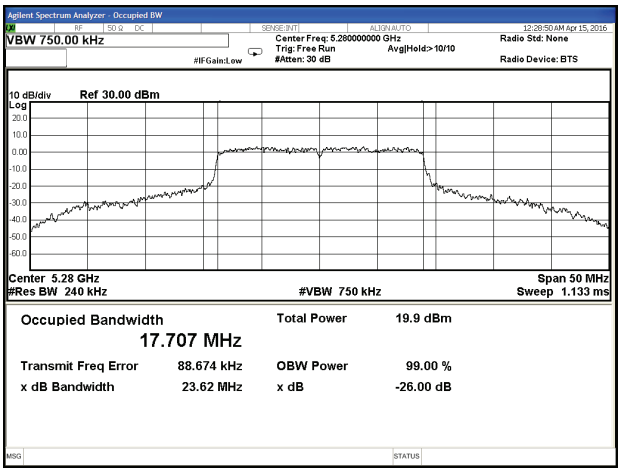
UNII Band I

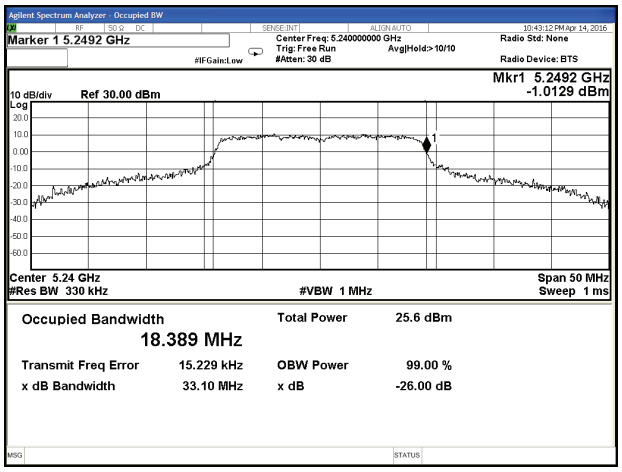


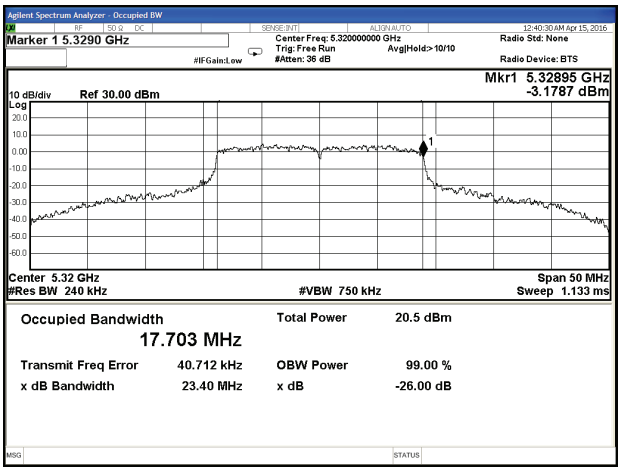
UNII Band II-2A











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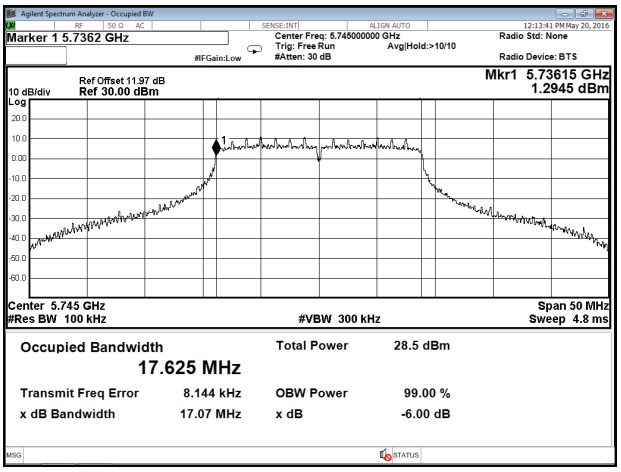
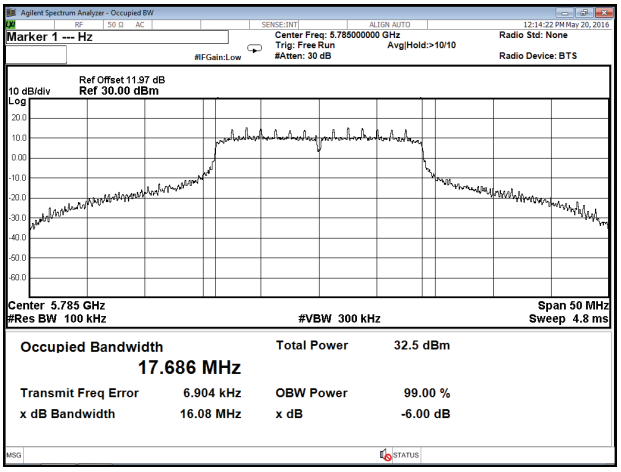
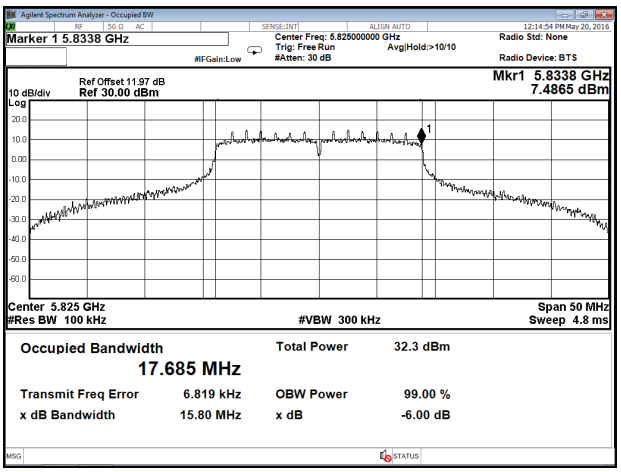
802.11n-HT20

UNII Band III







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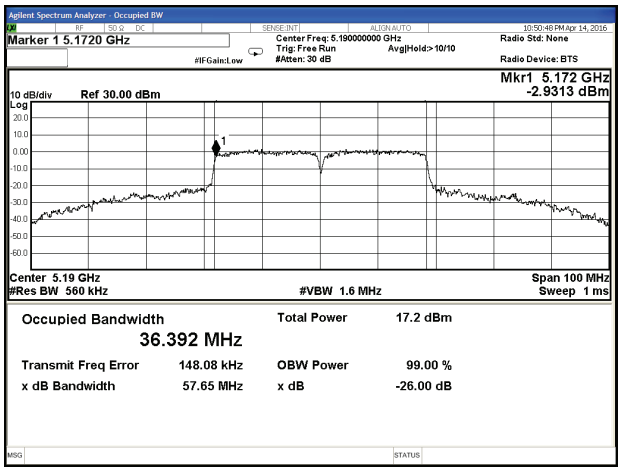
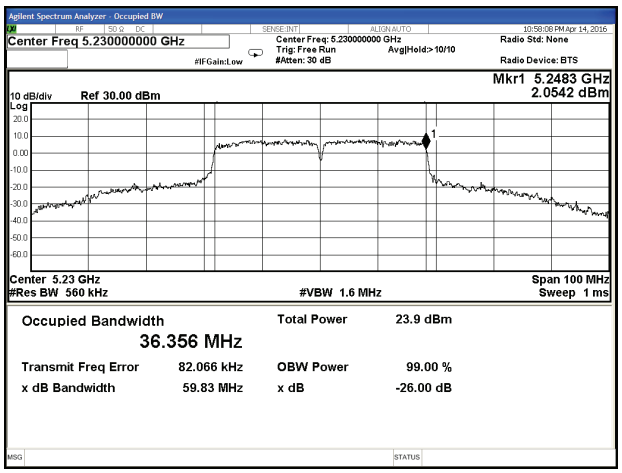
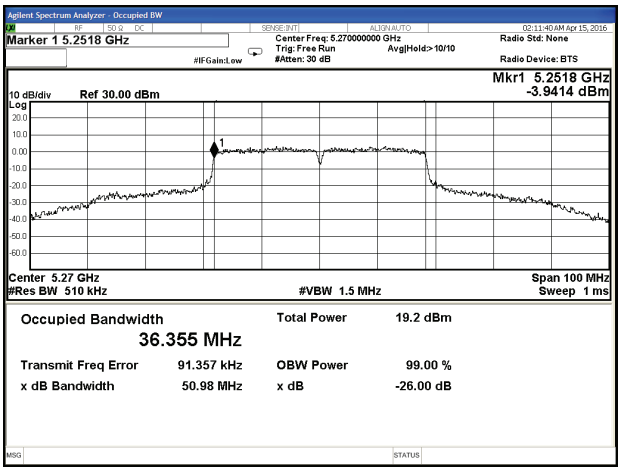
802.11n-HT40

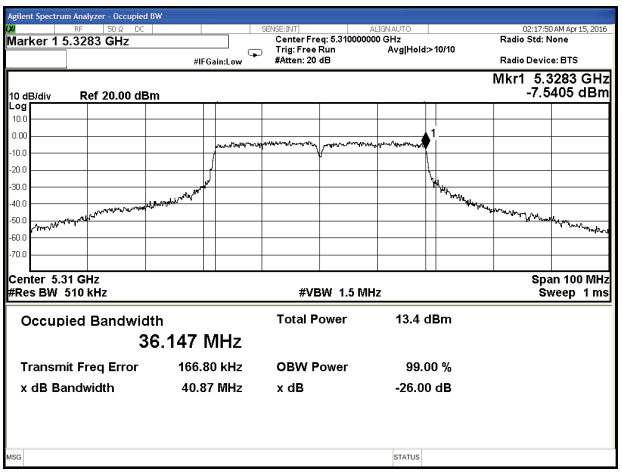
UNII Band I





UNII Band II-2A





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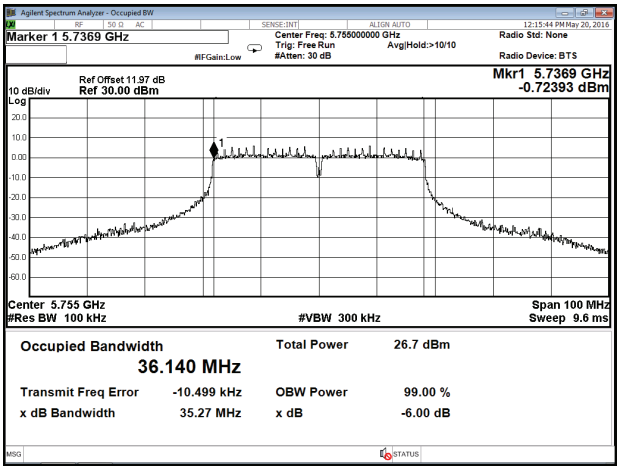
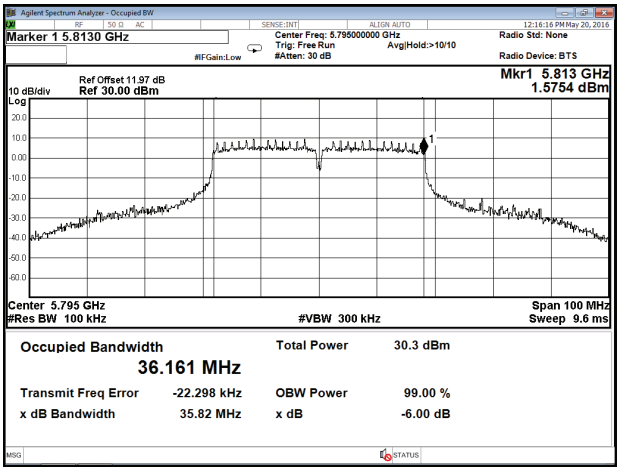
802.11n-HT40
UNII Band III





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A.2 MAXIMUM OUTPUT POWER MEASUREMENT

A.2.1 Emission Bandwidth Result

Test Date	2016/05/15	Temp./Hum.	26℃/54%
Cable Loss	N/A	Test Voltage	DC 3.3V

Modulation Type	UNII Band	Centre Frequency (MHz)	Output Power (dBm)	10log (1/X)	MAX Output Power (dBm)	MAX Output Power (W)	Limit	Limit without TPC Function
802.11a	I	5180	14.24	0.22	**14.46**	0.028	< 250 mW (24 dBm)	---
		5200	14.20		**14.42**	0.028		
		5240	15.45		**15.67**	0.037		
	II-2A	5260	15.50		**15.72**	0.037	< 250 mW (24 dBm)	< 500mW (26.99dBm)
		5280	14.85		**15.07**	0.032		
		5320	15.11		**15.33**	0.034		
	III	5745	16.65		**16.87**	0.049	< 1 W (30 dBm)	---
		5785	18.03		**18.25**	0.067		
		5825	17.85		**18.07**	0.064		

Note: The results have been included cable loss.

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Modulation Type	UNII Band	Centre Frequency (MHz)	Output Power			10log (1/X)	MAX Output Power		Limit	Limit without TPC Function
			Chain 0	Chain 1	Chain 2		(dBm)	(W)		
802.11n-HT20	I	5180	10.24	10.46	9.62	0.51	**15.40**	0.035	<0.105 W (20.23 dBm) Note 2	---
		5200	10.22	10.29	10.04		**15.46**	0.035		
		5240	10.36	10.43	10.32		**15.65**	0.037		
	II-2A	5260	10.87	11.15	11.02		**16.29**	0.043	<0.105 W (20.23 dBm) Note 2	< 500mW (26.99dBm)
		5280	10.25	10.43	11.37		**15.99**	0.040		
		5320	10.12	10.03	10.58		**15.53**	0.036		
	III	5745	13.23	13.65	13.76		**18.83**	0.076	< 0.420 W (26.23 dBm) Note 3	---
		5785	16.62	17.24	16.82		**22.18**	0.165		
		5825	16.74	17.28	16.84		**22.24**	0.167		
802.11n-HT40	I	5190	9.79	9.83	8.86	0.76	**15.04**	0.032	<0.105 W (20.23 dBm) Note 2	---
		5230	14.91	13.63	13.94		**19.72**	0.094		
	II-2A	5270	14.85	13.63	13.85		**19.67**	0.093	<0.105 W (20.23 dBm) Note 2	< 500mW (26.99dBm)
		5310	9.80	8.67	9.65		**14.93**	0.031		
	III	5755	10.24	11.19	11.40		**16.50**	0.045	< 0.420 W (26.23 dBm) Note 3	---
		5795	14.02	14.17	14.51		**19.77**	0.095		

Note 1: The results have been included cable loss.
Note 2: 802.11n Directional gain is 9.77dBi > 6dBi, the Limit is 24 – (9.77-6) = 20.23 dBm
Note 3: 802.11n Directional gain is 9.77dBi > 6dBi, the Limit is 30 – (9.77-6) = 26.23dBm

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