



Report No.: C140429Z02-T

### 7.6 PEAK EXCURSION

#### 7.6.1 LIMIT

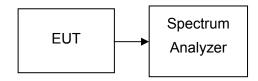
According to §15.407(a)(6), the ratio of the peak excursion of the modulation envelope (measured using a peak hold function) to the maximum conducted output power (measured as specified above) shall not exceed 13 dB across any 1 MHz bandwidth or the emission bandwidth whichever is less.

### 7.6.2 MEASUREMENT EQUIPMENT USED

Name of Equipment	Manufacturer	Model	Serial Number	Last Calibration	Due Calibration
Spectrum Analyzer	Agilent	E4446A	US44300399	03/01/2014	03/01/2015

Remark: Each piece of equipment is scheduled for calibration once a year.

#### 7.6.3 TEST CONFIGURATION



### 7.6.4 TEST PROCEDURE

The test is performed in accordance with <FCC Public Notice: APPENDIX A Guidelines for Assessing Unlicensed National Information Infrastructure (U-NII) Devices> – Part 15, Subpart E, August 2002.

- 1. Place the EUT on the table and set it in transmitting mode.
- 2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to spectrum.
- 3. Trace A, Set RBW =1MHz, VBW = 3MHz, Span >26dB Bandwidth, Max. hold.
- 4. Delta Mark trace A Maximum frequency and trace B same frequency.
- 5. Repeat the above procedure until measurements for all frequencies were complete.

### 7.6.5 TEST RESULTS

No non-compliance noted



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**Test Data** 

Test mode: IEEE 802.11a mode / 5180 ~ 5240MHz

Channel	Frequency (MHz)	· (0B)		Limit (dB)	Maı (d	Result	
	(12)	Antenna 0	Antenna 1	(6.5)	Antenna 0	Antenna 1	
Low	5180	7.401	8.358		-5.599	-4.642	PASS
Mid	5220	8.279	8.090	13	-4.721	-4.910	PASS
High	5240	8.066	8.282		-4.934	-4.718	PASS

Test mode: IEEE 802.11a mode / 5260 ~ 5320MHz

Channel	Frequency (MHz)	Pek Excursion (dB)		Limit (dB)	Maı (d	Result	
	(12)	Antenna 0	Antenna 1	(4.5)	Antenna 0	Antenna 1	
Low	5260	7.170	7.482		-5.830	-5.518	PASS
Mid	5280	8.422	6.511	13	-4.578	-6.489	PASS
High	5320	7.534	7.694		-5.466	-5.306	PASS

Test mode: IEEE 802.11a mode / 5500 ~ 5700MHz

Channel	Frequency (dB)			Limit (dB)	Margin (dB)		Result	
	(11112)	Antenna 0	Antenna 1	(42)	Antenna 0	Antenna 1		
Low	5500	6.860	7.072		-6.140	-5.928	PASS	
Mid	5580	7.098	7.548	13	-5.902	-5.452	PASS	
High	5700	7.304	7.097		-5.696	-5.903	PASS	

Test mode: IEEE 802.11a mode / 5745 ~ 5805MHz

Channel	Frequency (MHz)	Pek Excursion (dB)		Limit (dB)	Maı (d	Result	
	(12)	Antenna 0	Antenna 1	(42)	Antenna 0	Antenna 1	
Low	5745	8.066	6.934		-4.934	-6.066	PASS
Mid	5785	7.610	7.376	13	-5.390	-5.624	PASS
High	5805	7.249	7.766		-5.751	-5.234	PASS

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### Test mode: IEEE 802.11n HT 20 MHz mode / 5180 ~ 5240MHz

Channel Frequency (MHz)		Pek Excursion (dB)		Limit (dB)	Maı (d	Result	
	(11112)	Antenna 0	Antenna 1	(ub)	Antenna 0	Antenna 1	
Low	5180	6.917	8.587		-6.083	-4.413	PASS
Mid	5220	7.971	7.259	13	-5.029	-5.741	PASS
High	5240	7.263	8.485		-5.737	-4.515	PASS

### Test mode: IEEE 802.11n HT 20 MHz mode / 5260 ~ 5320MHz

Channel	Frequency (MHz)	Pek Excursion (dB)		Limit (dB)	Maı (d	Result	
	(11112)	Antenna 0	Antenna 1	(45)	Antenna 0	Antenna 1	
Low	5260	7.400	8.037		-5.600	-4.963	PASS
Mid	5280	8.212	7.369	13	-4.788	-5.631	PASS
High	5320	7.090	8.048		-5.910	-4.952	PASS

#### Test mode: IEEE 802.11n HT 20 MHz mode / 5500 ~ 5700MHz

Channel	Frequency (MHz)	Pek Excursion (dB)		Limit (dB)	Maı (d	Result	
	(12)	Antenna 0	Antenna 1	(42)	Antenna 0	Antenna 1	
Low	5500	7.059	8.196		-5.941	-4.804	PASS
Mid	5580	10.000	8.398	13	-3.000	-4.602	PASS
High	5700	8.507	8.646		-4.493	-4.354	PASS

### Test mode: IEEE 802.11n HT 20 MHz mode / 5745 ~ 5805MHz

Channel	Frequency (dl		l limit		Maı (d	Result	
	(12)	Antenna 0	Antenna 1	(42)	Antenna 0	Antenna 1	
Low	5745	7.435	8.196		-5.565	-4.804	PASS
Mid	5785	6.980	8.335	13	-6.020	-4.665	PASS
High	5805	7.579	8.738		-5.421	-4.262	PASS

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#### Test mode: IEEE 802.11n HT 20 MHz SISO mode / 5180 ~ 5240MHz

Channel	Frequency (MHz)	Pek Excursion (dB)		Limit (dB)	Maı (d	Result	
	(12)	Antenna 0	Antenna 1	(4.2)	Antenna 0	Antenna 1	
Low	5180	6.795	7.583		-6.205	-5.417	PASS
Mid	5220	6.724	7.198	13	-6.276	-5.802	PASS
High	5240	7.079	6.619		-5.921	-6.381	PASS

#### Test mode: IEEE 802.11n HT 20 MHz SISO mode / 5260 ~ 5320MHz

Channel	Frequency (MHz)	requency (MHz) Pek Excursion (dB)		Limit (dB)	Margin (dB)		Result
	(12)	Antenna 0	Antenna 1	(42)	Antenna 0	Antenna 1	
Low	5260	7.942	7.909		-5.058	-5.091	PASS
Mid	5280	7.678	6.654	13	-5.322	-6.346	PASS
High	5320	6.765	6.347		-6.235	-6.653	PASS

### Test mode: IEEE 802.11n HT 20 MHz SISO mode / 5500 ~ 5700MHz

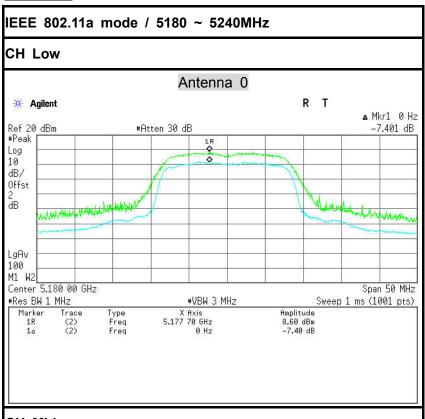
Channel	Frequency	requency (dB)		Limit (dB)	Margin (dB)		Result
	(11112)	Antenna 0	Antenna 1	(GB)	Antenna 0	Antenna 1	
Low	5500	7.744	7.837		-5.256	-5.163	PASS
Mid	5580	7.298	7.156	13	-5.702	-5.844	PASS
High	5700	7.786	7.740		-5.214	-5.260	PASS

#### Test mode: IEEE 802.11n HT 20 MHz SISO mode / 5745 ~ 5805MHz

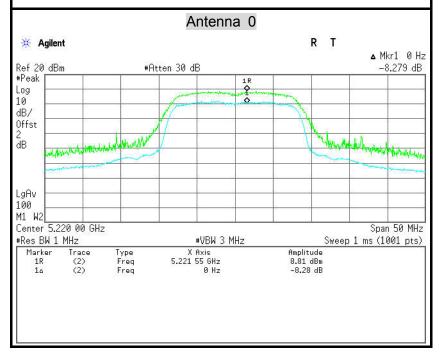
Channel	Frequency (MHz)	Pek Excursion (dB)		Limit (dB)	Margin (dB)		Result
		Antenna 0	Antenna 1	(45)	Antenna 0	Antenna 1	
Low	5745	6.580	8.294	13	-6.420	-4.706	PASS
Mid	5785	7.544	7.680		-5.456	-5.320	PASS
High	5805	7.827	6.347		-5.173	-6.653	PASS

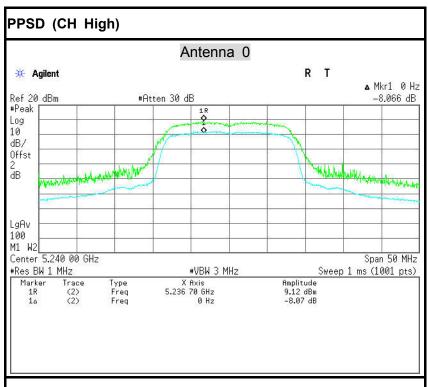
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### **Test Plot**

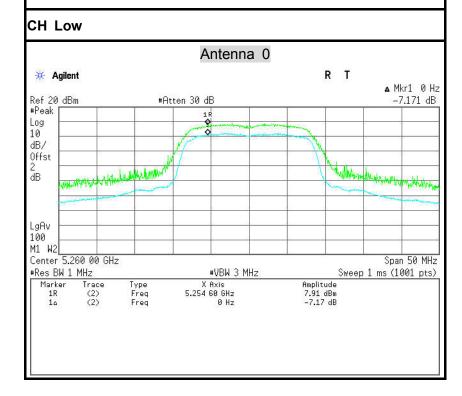


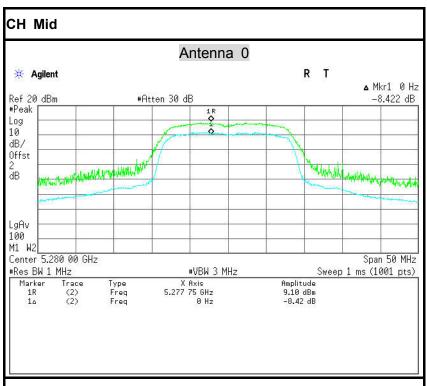
### CH Mid

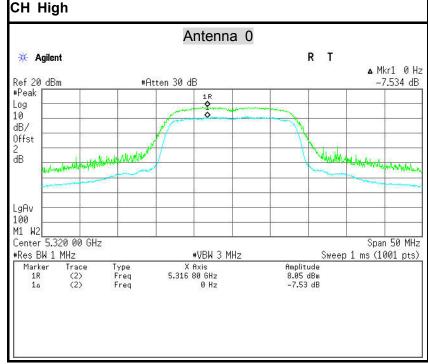


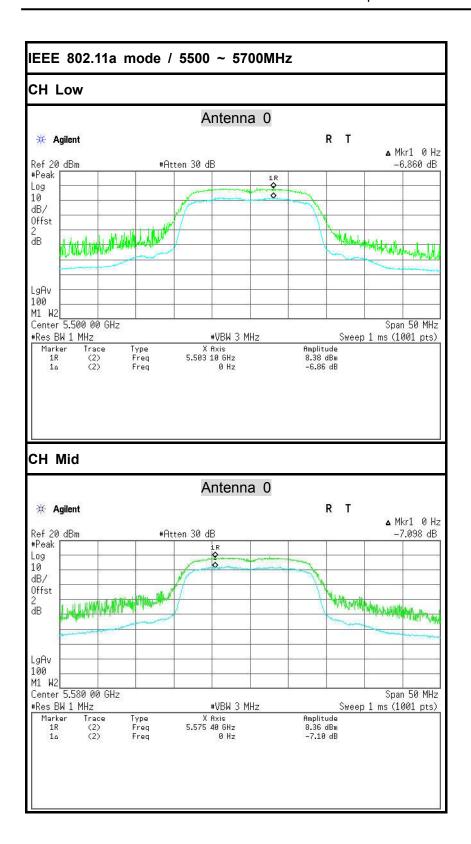


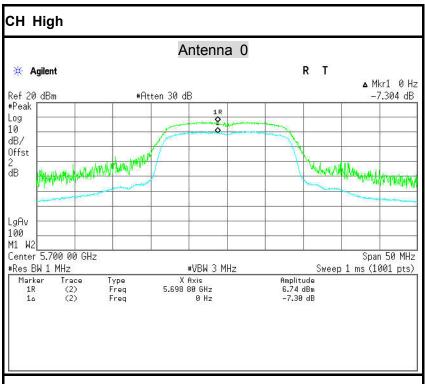
#### IEEE 802.11a mode / 5260 ~ 5320MHz



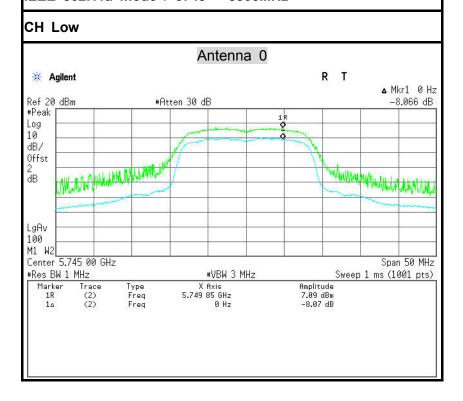


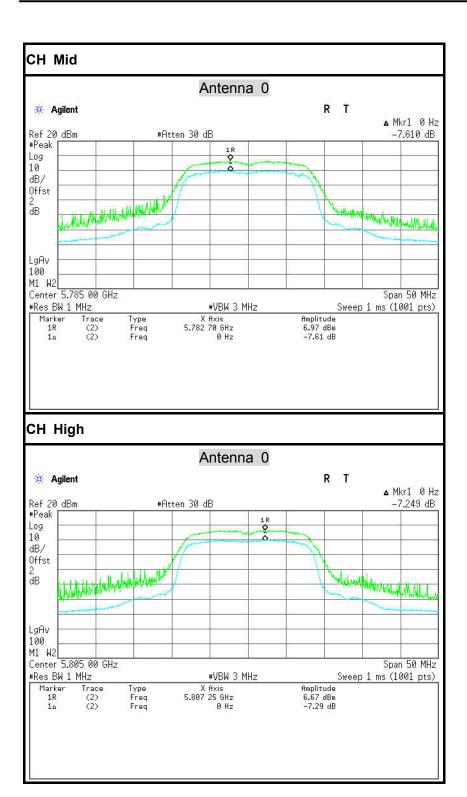


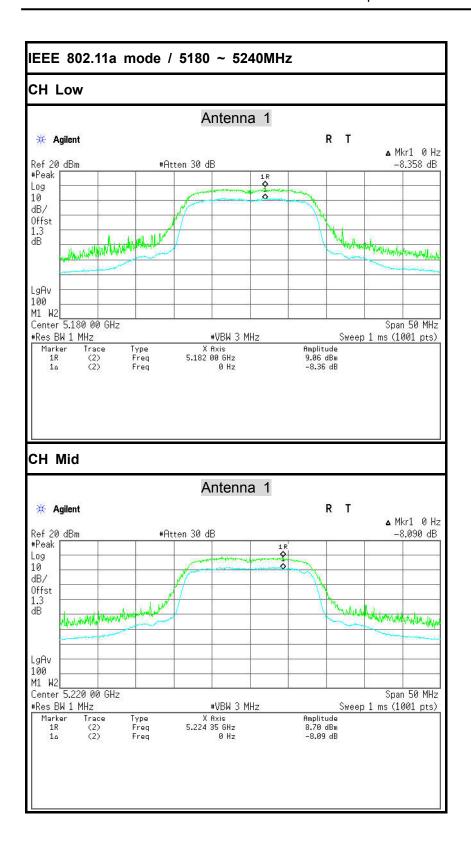


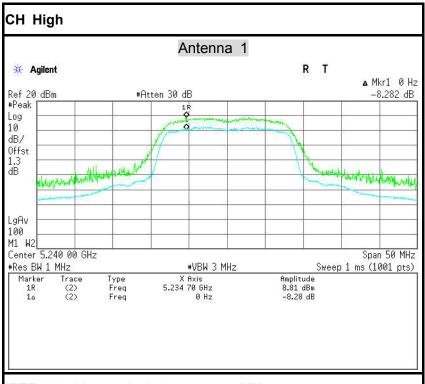


IEEE 802.11a mode / 5745 ~ 5805MHz

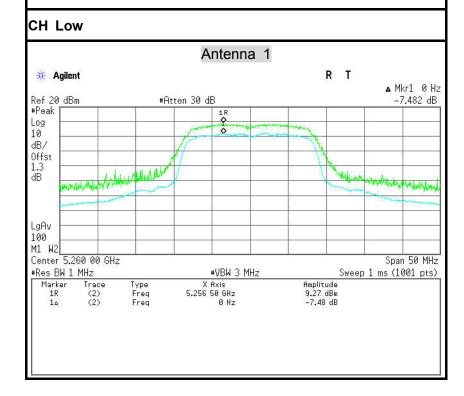


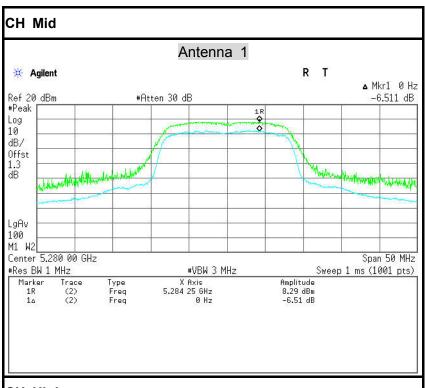


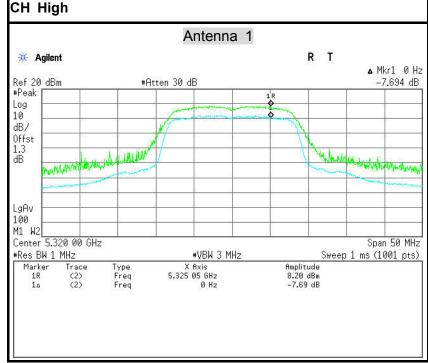


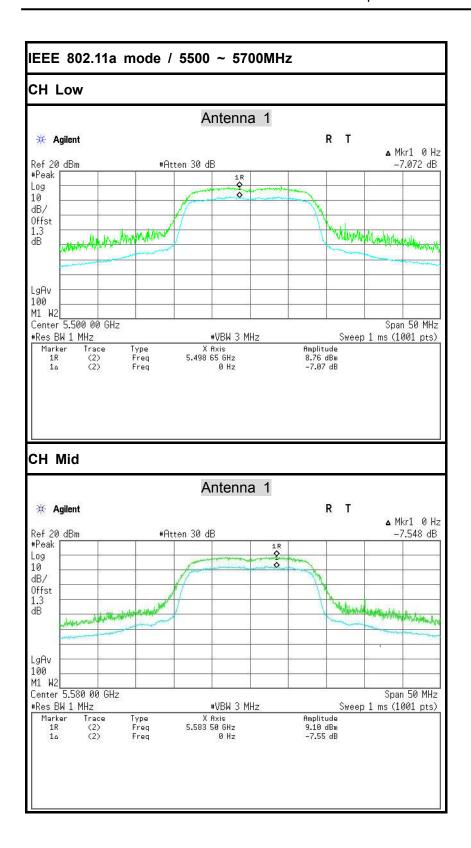


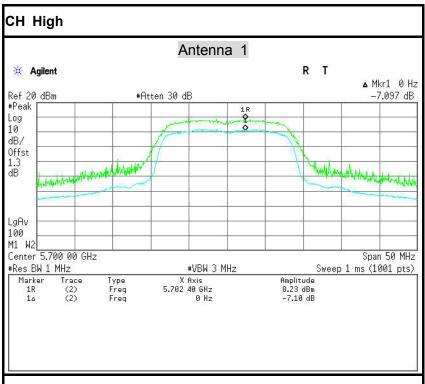
### IEEE 802.11a mode / 5260 ~ 5320MHz



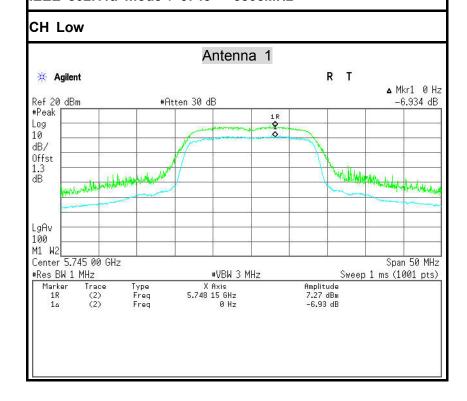


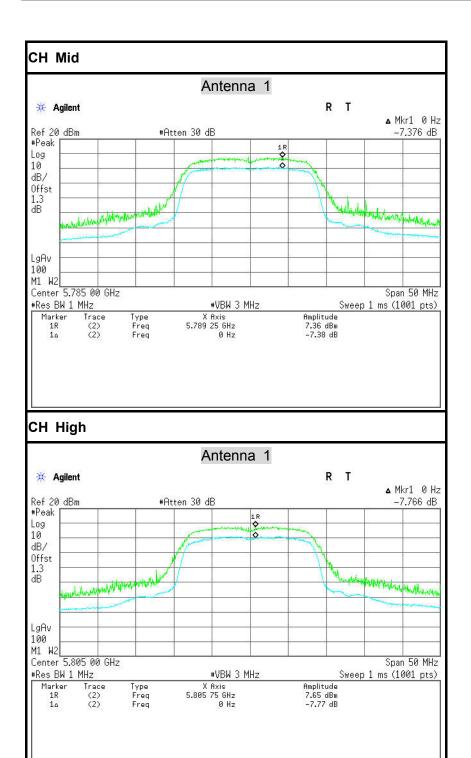


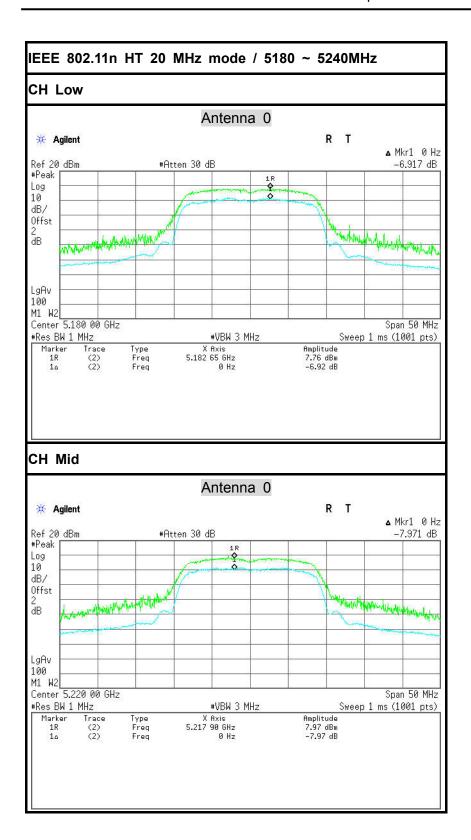


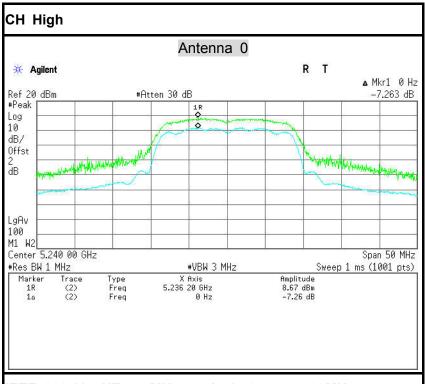


IEEE 802.11a mode / 5745 ~ 5805MHz

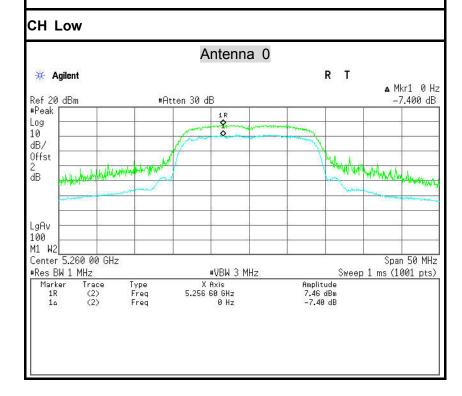


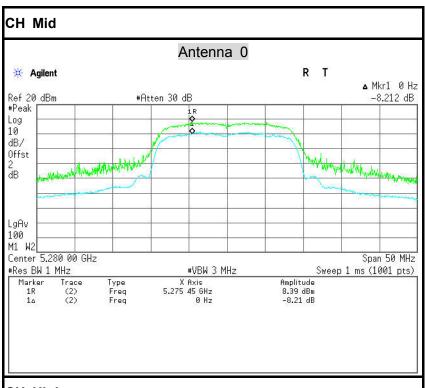


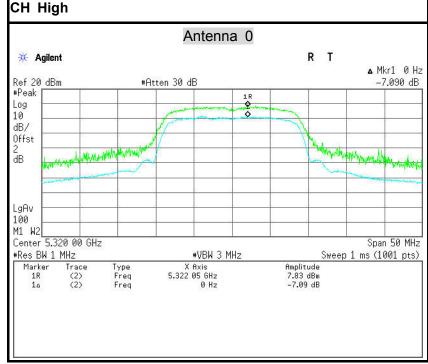


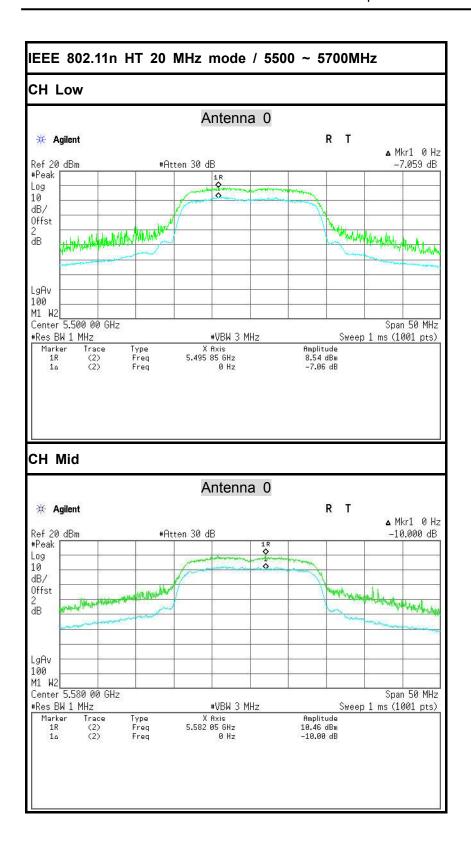


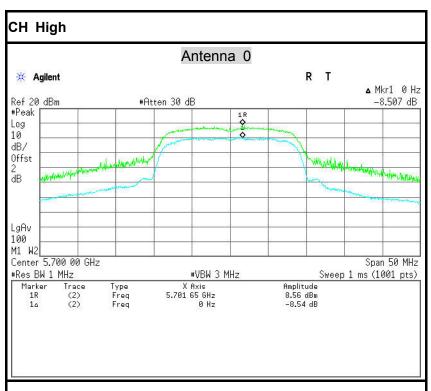
### IEEE 802.11n HT 20 MHz mode / 5260 ~ 5320MHz



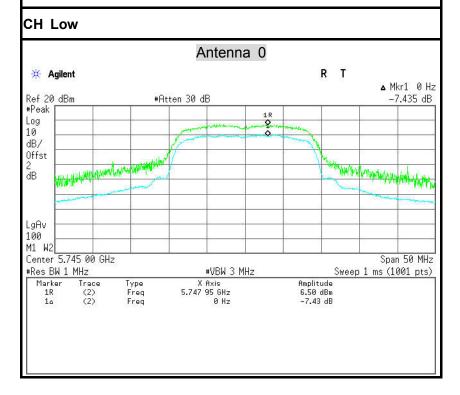


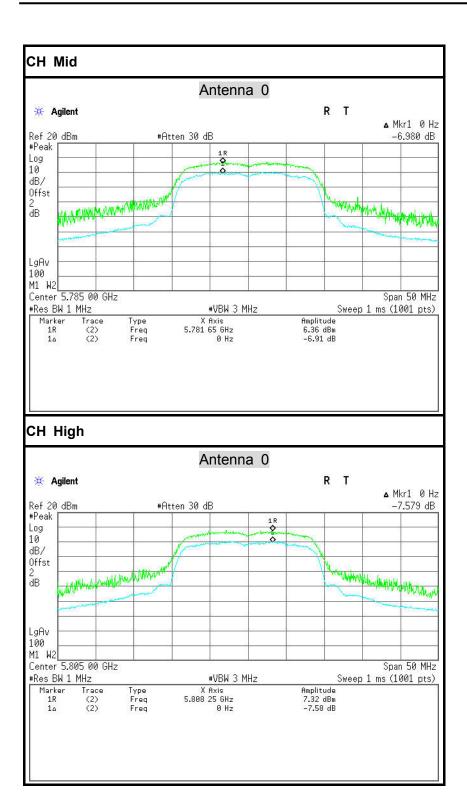


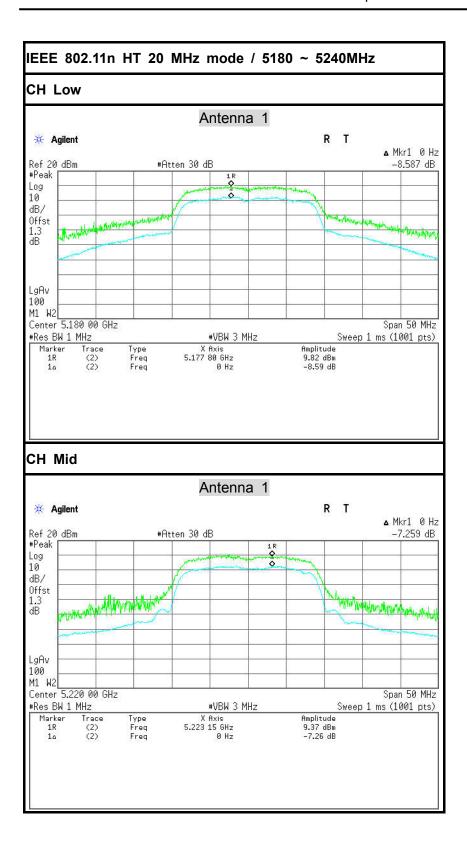


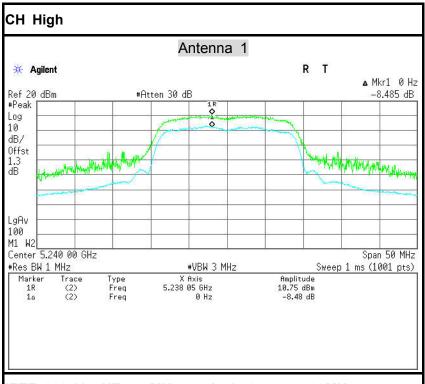


IEEE 802.11n HT 20 MHz mode / 5745 ~ 5805MHz

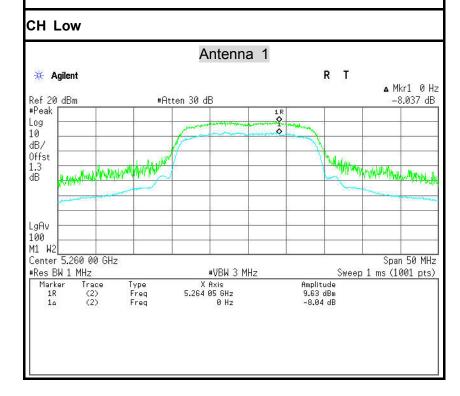


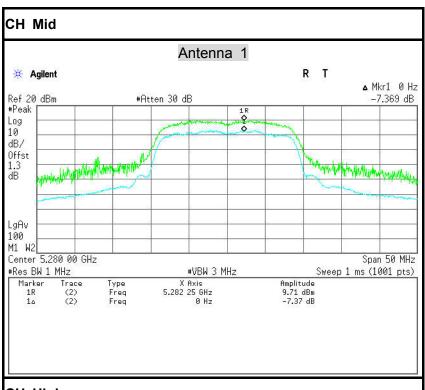


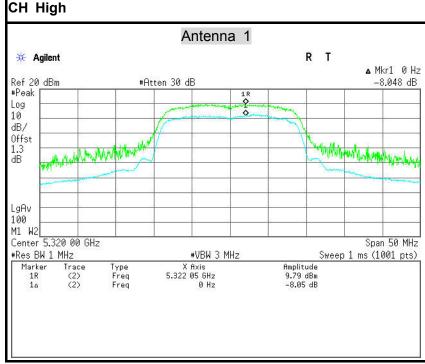


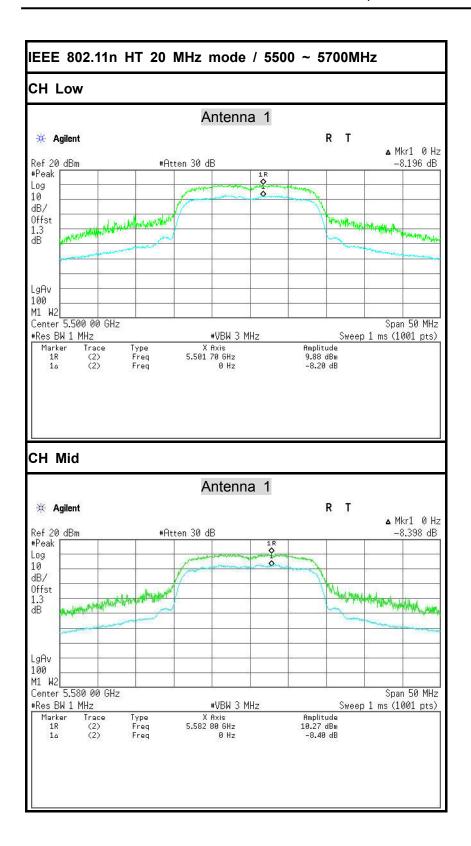


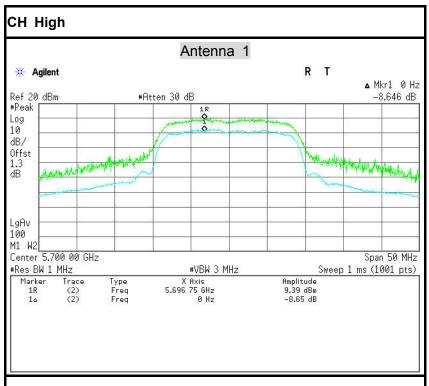
### IEEE 802.11n HT 20 MHz mode / 5260 ~ 5320MHz



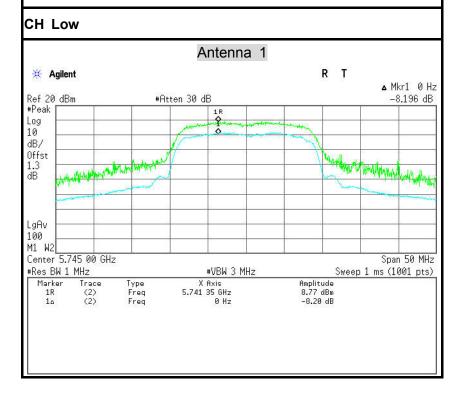


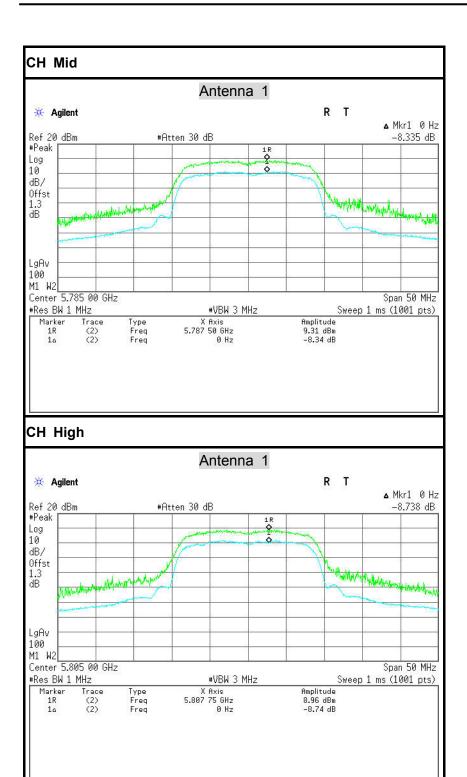


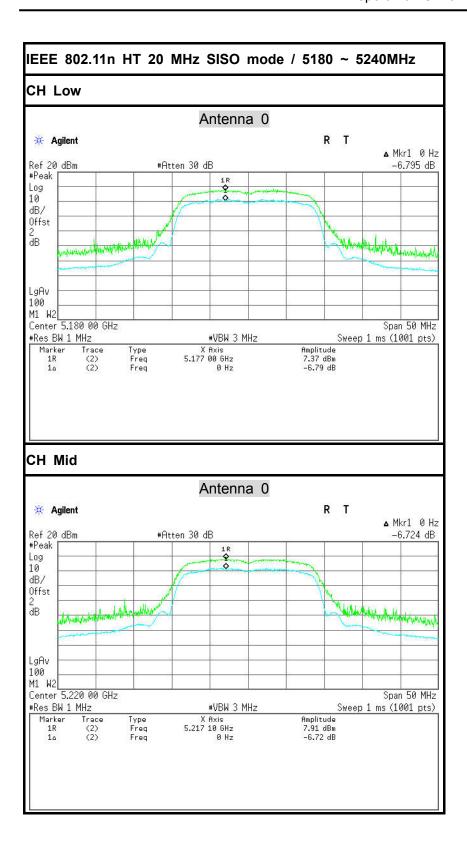


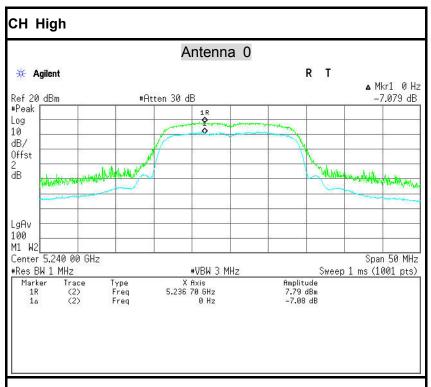


IEEE 802.11n HT 20 MHz mode / 5745 ~ 5805MHz

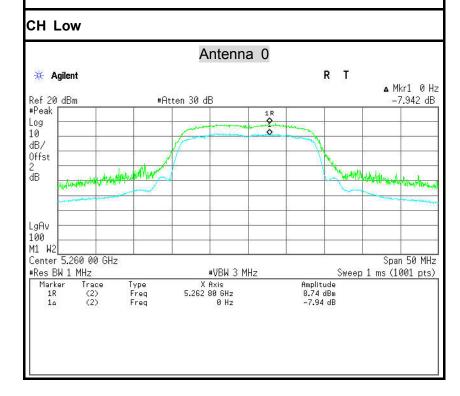


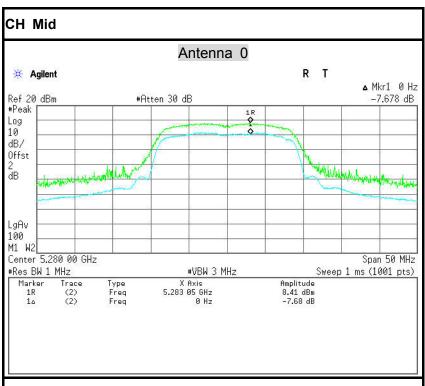


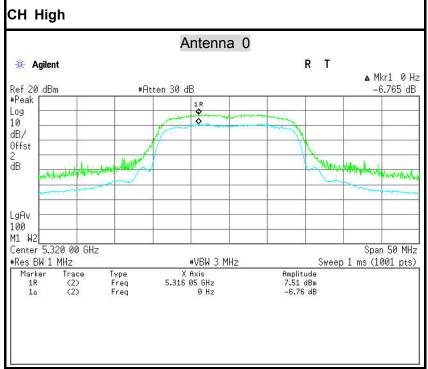


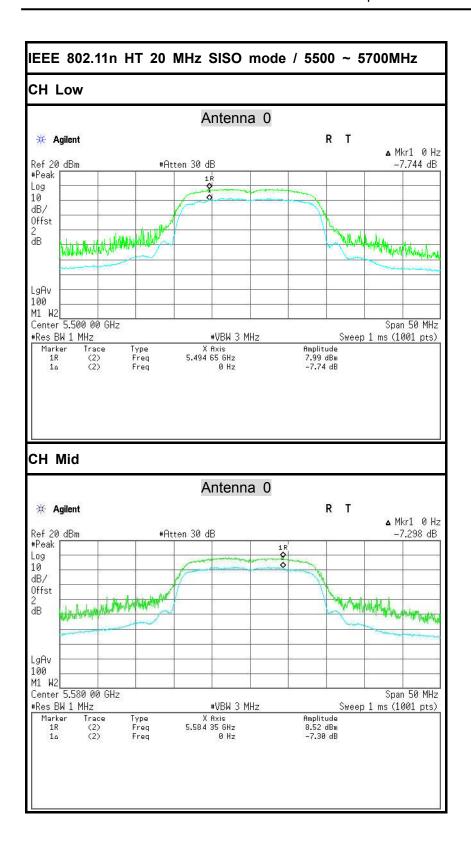


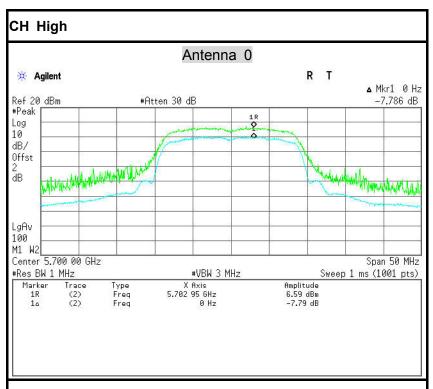
### IEEE 802.11n HT 20 MHz SISO mode / 5260 ~ 5320MHz











IEEE 802.11n HT 20 MHz SISO mode / 5745 ~ 5805MHz

