



7.6 PEAK EXCURSION

7.6.1LIMIT

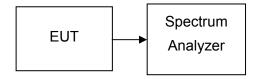
According to §15.407(a)(6), the ratio of the peak excursion of the modulation envelope (measured using a peak hold function) to the maximum conducted output power (measured as specified above) shall not exceed 13 dB across any 1 MHz bandwidth or the emission bandwidth whichever is less.

7.6.2MEASUREMENT 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.

7.6.3TEST CONFIGURATION



7.6.4TEST 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.

7.6.5TEST RESULTS

No non-compliance noted



Test Data

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

Channel	Frequency (MHz)	Pek Ex (d		Limit (dB)	Marı (d	-	Result
(1112)	(11112)	Antenna 0	Antenna 1	(00)	Antenna 0	Antenna 1	
Low	5180	6.802	5.788		-6.198	-7.212	PASS
Mid	5220	6.791	5.136	13	-6.209	-7.864	PASS
High	5240	6.786	4.970		-6.214	-8.030	PASS

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

Channel	Frequency (MHz)	Pek Exc (d		Limit (dB)	Margain (dB)		Result
	(14112)	Antenna 0	Antenna 1		Antenna 0	Antenna 1	
Low	5260	7.654	5.476		-5.346	-7.524	PASS
Mid	5280	7.201	4.867	13	-5.799	-8.133	PASS
High	5320	5.891	4.340		-7.109	-8.660	PASS

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

Channel	Frequency (MHz)	Pek Excursion (dB)		Limit (dB)	Margain (dB)		Result
(1112)	(11112)	Antenna 0	Antenna 1	(ub)	Antenna 0	Antenna 1	
Low	5500	5.799	4.326		-7.201	-8.674	PASS
Mid	5580	6.731	4.682	13	-6.269	-8.318	PASS
High	5700	7.684	4.204		-5.316	-8.796	PASS

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

Channel	Frequency (MHz)	Pek Ex (d		Limit (dB)	Mar (d	0	Result
	()	Antenna 0 Antenna 1	(42)	Antenna 0	Antenna 1		
Low	5745	7.669	5.383		-5.331	-7.617	PASS
Mid	5785	5.017	4.582	13	-7.983	-8.418	PASS
High	5805	6.764	5.642		-6.236	-7.358	PASS



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

Channel Frequency (MHz)	Frequency (MHz)	Pek Exc (d		Limit (dB)	Mar (d	Result	
	(11112)	Antenna 0	Antenna 1	(ab)	Antenna 0	Antenna 1	
Low	5180	5.531	5.832		-7.469	-7.168	PASS
Mid	5220	4.365	4.466	13	-8.635	-8.534	PASS
High	5240	5.676	5.941		-7.324	-7.059	PASS

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

Channel	Channel Frequency (MHz) Pek Excursion Limit (dB) (dB)		-	Mar (d	0	Result	
	(11112)	Antenna 0	Antenna 1	(42)	Antenna 0	Antenna 1	
Low	5260	5.702	5.141		-7.298	-7.859	PASS
Mid	5280	8.911	6.619	13	-4.089	-6.381	PASS
High	5320	6.543	5.366		-6.457	-7.634	PASS

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

Channel Frequency (MHz)	• •	' ' I (dB)		Limit (dB)	Mar (d	Result	
	Antenna 0	Antenna 1	(ub)	Antenna 0	Antenna 1		
Low	5500	6.046	4.617		-6.954	-8.383	PASS
Mid	5580	4.789	5.521	13	-8.211	-7.479	PASS
High	5700	5.624	5.377		-7.376	-7.623	PASS

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

Channel	Frequency (MHz)	- I (0B)		Limit (dB)	Margain (dB)		Result
	()	Antenna 0	Antenna 1	(42)	Antenna 0	Antenna 1	
Low	5745	5.726	5.475		-7.274	-7.525	PASS
Mid	5785	4.723	7.221	13	-8.277	-5.779	PASS
High	5805	5.053	6.094		-7.947	-6.906	PASS



-5.955

-6.926

-6.424

-5.780

-8.520

-6.407

PASS

PASS

PASS

Channel	Frequency (MHz)	Pek Ex (d	cursion B)	Limit (dB)	Margain (dB)		Result			
	(14112)	Antenna 0	Antenna 1		Antenna 0	Antenna 1				
Low	5190	6.511	6.452	13	-6.489	-6.548	PASS			
High	5230	5.180	4.940	15	-7.820	-8.060	PASS			
Test mode	Test mode: IEEE 802.11n HT 40 MHz mode / 5270 ~ 5310MHz									
Channel	Frequency		cursion Limit B) (dB)	Limit (dB)	Margain (dB)		Result			
	(1112)	Antenna 0	Antenna 1	(42)	Antenna 0	Antenna 1				
Low	5270	4.750	5.398	13	-8.250	-7.602	PASS			
High	5310	4.995	7.077	15	-8.005	-5.923	PASS			
Test mode:	IEEE 802.11n	HT 40 MHz	mode / 5510	~ 5670MHz						
Channel	Frequency (MHz)	· · · (dł		Limit (dB)	Margain (dB)		Result			
	(IVIHZ)	Antenna 0	Antenna 1		Antenna 0	Antenna 1				

Test mode: IEEE 802.11n HT 40 MHz mode / 5190 ~ 5230MHz

7.045

6.074

6.576

5510

5550

5670

Low

Mid

High

Test mode:	Test mode: IEEE 802.11n HT 40 MHz mode / 5755 ~ 5795MHz										
Channel	Frequency (MHz)	Pek Excursion (dB)		Limit (dB)	Mar (d	Result					
		Antenna 0	Antenna 1	(42)	Antenna 0	Antenna 1					
Low	5755	5.203	6.218	13	-7.797	-6.782	PASS				
High	5795	4.852	7.015		-8.148	-5.985	PASS				

13

7.220

4.480

6.593



Test Plot

