FCC ID: XCO-HSD81D82UT1
IC: 7756A- HSD81D82UT1

Statement of compliance to Maximum Permissible Exposure (MPE)

Equipment	:	WR200 Wireless Extender
Type/Model	:	W001
Applicant	:	Hansong(Nanjing) Technology Ltd. 8th Kangping Road, Jiangning Economy and Technology Development Zone, Nanjing, China, 211100

Here assuming a worst-case prediction of power density (100% reflection), then
$S = 4P_{EIRP} / (4\pi R^2) = P_{EIRP} / (\pi R^2)$.
Where S = power density in mW/cm^2
P_{EIRP} = EIRP in mW
R = distance (cm)

As we can see from the test report SH10110705-001:
The maximum P_{EIRP} of 2.4GHz transmitter = 15.95dBm + 1.0dBi = 16.95dBm = 49.56mW
The maximum P_{EIRP} of 5.8GHz transmitter = 13.30dBm + 1.0dBi = 14.30dBm = 26.92mW

For the two transmitters work simultaneously, the worst total P_{EIRP} = 49.56 + 26.92 = 76.48mW

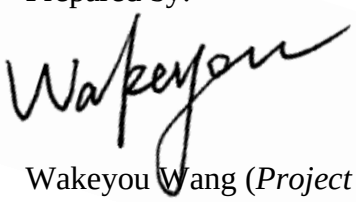
Here R is chosen to be 20cm,

$S = P_{EIRP} / (\pi R^2) = 76.48 / (3.14 * 20 * 20) = 0.06 mW/cm^2$

This level is below the 1 mW/cm^2 MPE for General Population / Uncontrolled Exposure as stated in OET BULLETIN 65 Edition 97-01.
Conclusion: this EUT fulfills 47CFR Part 15.247(i) (2007) with the definition outlined in the User's Manual. (See appendix I)

Date of issue: Aug 29, 2011

Prepared by:



Wakeyou Wang (*Project Engineer*)

Reviewed by:

Daniel Zhao (*Reviewer*)

Appendix I

Definition below must be outlined in the User Manual:

To satisfy FCC RF exposure requirements, a separation distance of 20 cm or more should be maintained between the antenna of this device and persons during device operation.
To ensure compliance, operations at closer than this distance is not recommended.