



## Statement of compliance to Maximum Permissible Exposure (MPE)

Applicant : Aruba Networks, Inc.  
1322 Crossman Ave., Sunnyvale CA 94089 USA

Type/Model : MSR4K43N3XXX (Where X=A to Z, Blank or  
Symbol for marketing purpose)

**According to §2.1091, §2.1093 and §1.1307(b), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.**

The  $S = PG / (4\pi R^2)$

Where S = power density in mW/cm<sup>2</sup>

P = transmit power in mW

G = numeric gain of transmit antenna

R = distance (cm)

As we can see from the test reports SH12020032-001 and SH12020032-002:

1) If the antennas Ap-ANT-80D with gain of 8dBi & Ap-ANT-86 with gain of 9dBi are applied, the maximum P of single RF card = 25.89dBm = 388.150mW

If the four RF cards work simultaneously, the total conducted power=388.150\*4= 1552.600mW

G = 9dBi = 7.903

R is chosen to be 40cm,

$S = PG / (4\pi R^2) = 1552.600 * 7.903 / (4 * 3.14 * 40 * 40) = 0.61\text{mW/cm}^2$

2) If the antennas Ap-ANT-2\*2-5614 with gain of 14dBi & Ap-ANT-85 with gain of 15dBi are applied, the maximum P of single RF card = 20.96dBm = 124.738mW

If the four RF cards work simultaneously, the total conducted power =124.738\*4= 498.952mW

G = 15dBi = 31.623

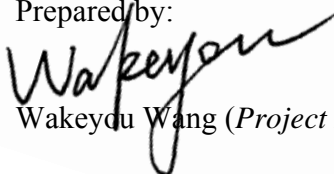
R is chosen to be 40m,

$S = PG / (4\pi R^2) = 498.952 * 31.623 / (4 * 3.14 * 40 * 40) = 0.79\text{mW/cm}^2$

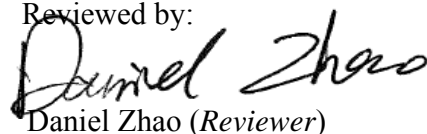
This level is below the 1 mW/cm<sup>2</sup> MPE for General Population / Uncontrolled Exposure as stated in OET BULLETIN 65 Edition 97-01.

Date of issue: Sep 16, 2012

Prepared by:

  
Wakeyou Wang (Project Engineer)

Reviewed by:

  
Daniel Zhao (Reviewer)



**FCC ID: Q9DMSR4000AC**  
**IC: 4675A-MSR4000AC**

## **Appendix I**

**Definition below must be outlined in the User Manual:**

To satisfy FCC RF exposure requirements, a separation distance of 40 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.