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## RF Exposure Report

**Report No.:** SA120531C10N

**FCC ID:** ZHV-DTAE

**Test Model:** DTAE

**Received Date:** May 09, 2012

**Test Date:** Jul. 16, 2015 ~ Apr. 11, 2016

**Issued Date:** Apr. 18, 2016

**Applicant:** Riverbed Technology Inc.

**Address:** 680 Folsom Street San Francisco, California USA 94107

**Issued By:** Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch

**Lab Address:** No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan (R.O.C.)

**Test Location:** No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City 33383, TAIWAN (R.O.C.)



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### Release Control Record

Issue No.	Description	Date Issued
SA120531C10N	Original release.	Apr. 18, 2016



A P T

## 1 Certificate of Conformity

**Product:** Wireless-N 300Mbps+300Mbps Ceiling Mount Dual Band Concurrent AP

**Brand:** **riverbed**

**Test Model:** DTAEA

**Sample Status:** Engineering sample

**Applicant:** Riverbed Technology Inc.

**Test Date:** Jul. 16, 2015 ~ Apr. 11, 2016

**Standards:** FCC Part 2 (Section 2.1091)

KDB 447498 D01 (October 23, 2015)

IEEE C95.1

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

**Prepared by :** Suntee Liu, **Date:** Apr. 18, 2016

Suntee Liu / Specialist

**Approved by :** Ken Liu, **Date:** Apr. 18, 2016

Ken Liu / Senior Manager



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## 2 RF Exposure

### 2.1 Limits for Maximum Permissible Exposure (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm <sup>2</sup> )	Average Time (minutes)
Limits For General Population / Uncontrolled Exposure				
300-1500	...	...	F/1500	30
1500-100,000	...	...	1.0	30

F = Frequency in MHz

### 2.2 MPE Calculation Formula

$$Pd = (Pout \cdot G) / (4 \cdot \pi \cdot r^2)$$

where

Pd = power density in mW/cm<sup>2</sup>

Pout = output power to antenna in mW

G = gain of antenna in linear scale

Pi = 3.1416

R = distance between observation point and center of the radiator in cm

### 2.3 Classification

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user. So, this device is classified as **Mobile Device**.



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### 3 Calculation Result Of Maximum Conducted Power

Frequency Band (MHz)	Max Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
2412-2462	28.58	5.01	20	0.455	1
5180-5240	27.34	5.01	20	0.342	1
5745-5825	26.47	5.01	20	0.280	1

Note: Directional gain = 2dBi + 10log(2) = 5.01dBi

#### Conclusion:

The formula of calculated the MPE is:

CPD1 / LPD1 + CPD2 / LPD2 + .....etc. < 1

CPD = Calculation power density

LPD = Limit of power density

WLAN 2.4GHz + WLAN 5GHz = 0.455 + 0.342 = 0.797

Therefore all the maximum calculations of above situations are less than the "1" limit.

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