RF Exposure Report

Report No.: SA140224C17L

FCC ID: ZHV-DTAFA

Test Model: DTAFA

Received Date: Feb. 24, 2014

Test Date: Mar. 13 ~ Mar. 20, 2016 (For 2.4G Band)
Jan. 19 ~ Feb. 02, 2016 (For 5G Band)

Issued Date: Apr. 19, 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
SA140224C17L	Original release	Apr. 19, 2016

1 Certificate of Conformity

Product:	Wireless a/b/g/n/AC Access Point
Brand:	riverbed
Test Model:	DTAFA
Sample Status:	Engineering Sample
Applicant:	Riverbed Technology Inc.
Test Date:	Mar. 13 ~ Mar. 20, 2016 (For 2.4G Band) Jan. 19 ~ Feb. 02, 2016 (For 5G Band)
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 : Celine Chou , **Date:** Apr. 19, 2016

Celine Chou / Specialist

Approved by : Ken Liu , **Date:** Apr. 19, 2016

Ken Liu / Senior Manager

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^2)	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

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

where

Pd = power density in mW/cm^2

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 30cm away from the body of the user. So, this device is classified as **Mobile Device**.

3 Calculation Result Of Maximum Conducted Power

Frequency Band (MHz)	Max Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm^2)	Limit (mW/cm^2)
2412-2462	28.69	8.77	30	0.493	1
5180-5240	27.35	9.77	30	0.456	1
5745-5825	24.94	9.77	30	0.262	1

Note:
2.4GHz Band: Directional gain = 4dBi + 10log(3) = 8.77dBi
5.0GHz Band: Directional gain = 5dBi + 10log(3) = 9.77dBi

CONCULSION:

Both of the WLAN 2.4G & WLAN 5G can transmit simultaneously, the formula of calculated the MPE is:

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

CPD = Calculation power density

LPD = Limit of power density

WLAN 2.4G + WLAN 5.0G = 0.493 + 0.456 = 0.949

Therefore, the maximum calculation of this situation is 0.949, which is less than the “1” limit.

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