RF EXPOSURE REPORT

REPORT NO.:	SA140415C27
MODEL NO.:	PCE4552AH
FCC ID:	QXO-57G45
RECEIVED:	Mar. 07, 2014
TESTED:	Apr. 09 ~ May 30, 2014
ISSUED:	Jun. 05, 2014

APPLICANT:	Extreme Networks, Inc.
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ISSUED BY:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
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TEST LOCATION:	No. 19, Hwa Ya 2nd Rd, Wen Hwa Tsuen, Kwei Shan Hsiang, Taoyuan Hsien 333, Taiwan, R.O.C.

This report should not be used by the client to claim product certification, approval, or endorsement by any government agencies.

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
SA140415C27	Original release.	Jun. 05, 2014

1. CERTIFICATION

PRODUCT:	DBDC 3X3 AP
MODEL:	PCE4552AH
BRAND:	Extreme
APPLICANT:	Extreme Networks, Inc.
TESTED:	Apr. 09 ~ May 30, 2014
TEST SAMPLE:	ENGINEERING SAMPLE
STANDARDS:	**FCC Part 2 (Section 2.1091)**
	FCC OET Bulletin 65, Supplement C (01-01)
	IEEE C95.1

The above equipment (Model: PCE4552AH) 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 : _____ **, DATE :** Jun. 05, 2014

Pettie Chen / Senior Specialist

APPROVED BY : _____ **, DATE :** Jun. 05, 2014

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 20cm away or farther depends on the antenna type used as evaluated in following section. So, this device is classified as Mobile Device.

2.4 CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

Ant.	FREQUENCY BAND (MHz)	MAX POWER (dBm)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/cm^2)	LIMIT (mW/cm^2)
1	5745-5825	29.96	9.77	28	0.954	1
2	5745-5825	19.20	26.01	52	0.977	1
3	5745-5825	24.36	16.27	31	0.957	1
4	5745-5825	27.99	12.77	31	0.986	1
5	5745-5825	27.43	6.77	20	0.523	1
6	5745-5825	28.99	11.77	32	0.926	1
6	5180-5240	15.61	11.77	32	0.043	1
7	5745-5825	28.03	11.97	29	0.945	1

NOTE:

Ant. 1: Directional gain = 5dBi + 10log(3) = 9.77dBi

Ant. 2: Directional gain = 23dBi + 10log(2) = 26.01dBi

Ant. 3: Directional gain = 11.5dBi + 10log(3) = 16.27dBi

Ant. 4: Directional gain = 8dBi + 10log(3) = 12.77dBi

Ant. 5: Directional gain = 2dBi + 10log(3) = 6.77dBi

Ant. 6: Directional gain = 7dBi + 10log(3) = 11.77dBi

Ant. 7: Directional gain = 7.2dBi + 10log(3) = 11.97dBi

CONCULSION:

For antenna 6:

Only antenna 6 can suport both 5180~5240MHz and 5745~5825MHz co-transmit, the formula of calculated the MPE is:

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

CPD = Calculation power density

LPD = Limit of power density

1. WLAN 5GHz (5180~5240MHz) Antenna 6 + WLAN 5.0GHz (5745~5825MHz) Antenna 6
   = 0.926 + 0.043 = 0.969

Therefore, the maximum calculation of this situation is 0.969, which is less than the “1” limit.