RF EXPOSURE REPORT

REPORT NO.:	SA140415C27F
MODEL NO.:	PCE4552AH
FCC ID:	KNYPRW5000AB
RECEIVED:	Mar. 07, 2014
TESTED:	Apr. 09 ~ May 30, 2014
ISSUED:	Feb. 16, 2016

APPLICANT:	FreeWave Technologies, Inc.
ADDRESS:	5395 Pearl Pkwy Ste 100, Boulder, CO 80301, U.S.A.

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.)

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
SA140415C27F	Original release.	Feb. 16, 2016

1. CERTIFICATION

PRODUCT:	Wireless 802.11ac/b/g/n access point
MODEL:	PCE4552AH
BRAND:	Freewave
APPLICANT:	FreeWave Technologies, Inc.
TESTED:	Apr. 09 ~ May 30, 2014
TEST SAMPLE:	ENGINEERING SAMPLE
STANDARDS:	**FCC Part 2 (Section 2.1091)**
	KDB 447498 D01 (October 23, 2015)
	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 :** Feb. 16, 2016

Pettie Chen / Senior Specialist

APPROVED BY : _____ **, DATE :** Feb. 16, 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 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
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