

# RF EXPOSURE REPORT

**REPORT NO.:** SA110211E04

MODEL NO.: AL-AP48H-15SO,

AL-AP48H-23SO

FCC ID: V8IETC- ALAP48X

**ACCORDING:** FCC Guidelines for Human Exposure

**IEEE C95.1** 

**APPLICANT:** Emitech Corporation

ADDRESS: NO.156-5A, Chenggong 1st St., Jhubei City,

Hsinchu County 302, Taiwan (R.O.C)

ISSUED BY: Bureau Veritas Consumer Products Services (H.K.)

Ltd., Taoyuan Branch Hsin Chu Laboratory

LAB ADDRESS: No. 81-1, Lu Liao Keng, 9th Ling, Wu Lung Tsuen,

Chiung Lin Hsiang, Hsin Chu Hsien 307, Taiwan

Report No.: SA110211E04 Report Format Version 4.0.0.



# **RELEASE CONTROL RECORD**

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
SA110211E04	Original release	June 22, 2011

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#### 1.CERTIFICATION

PRODUCT: 500mW Hi Power 5 GHz 11a AP/CPE

**BRAND NAME:** N/A

> MODEL NO.: AL-AP48H-15SO, AL-AP48H-23SO

**TEST SAMPLE:** MASS-PRODUCTION

APPLICANT: Emitech Corporation

STANDARDS: IEEE C95.1

The above equipment (Model: AL-AP48H-15SO) 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: Midol- Per, DATE: June 22, 2011

(Midoli Peng, Specialist)

APPROVED BY

( May Chen, Deputy Manager )



# 2.RF Exposure Limit

### LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

FREQUENCY RANGE (MHz)	ELECTRIC FIELD STRENGTH (V/m)	MAGNETIC FIELD STRENGTH (A/m)	POWER DENSITY AVERAGE TIME (mW/cm²) (minutes)			
LIMITS FOR GENERAL POPULATION / UNCONTROLLED EXPOSURE						
300-1500			F/1500	30		
1500-100,000			1.0	30		

F = Frequency in MHz

## 3.MPE calculation Formula

Pd = (Pout\*G) / (4\*pi\*r2)

where

Pd = power density in mW/cm2

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

### 4. Classification

The antenna of this product, under normal use condition, is at least 50cm away from the body of the user. So, this device is classified as **Mobile Device**.

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# 5. Calculation result of maximum conducted power

#### **Normal mode**

FREQUENCY BAND (MHz)	MAX POWER (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/ cm <sup>2</sup> )	LIMIT (mW/cm²)
5.745 - 5.825	660.7	1.6	50	0.837	1.00

#### **Turbo mode**

FREQUENCY BAND (MHz)	MAX POWER (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/ cm²)	LIMIT (mW/cm²)
5.745 - 5.825	645.7	1.6	50	0.818	1.00

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