

Company: Actiontec Electronics Inc.

Evaluation of: M6240V
To: FCC CFR 47 Part 15 RF Exposure requirements

Report No.: ATEC06-MPE

MPE TEST REPORT



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FROM



Evaluation of: Actiontec Electronics Inc. M6240V
to

To: FCC CFR 47 Part 15 RF Exposure Requirements

Test Report Serial No.: ATEC06-MPE

This report supersedes: NONE

Applicant: Actiontec Electronics Inc.
760 N Mary Avenue
Sunnyvale, 94085
USA

Product Function: Gigabit Wireless Router

Issue Date: 30th July 2015

This Test Report is Issued Under the Authority of:

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1. MAXIMUM PERMISSABLE EXPOSURE

Calculations for Maximum Permissible Exposure Levels

$$\text{Power Density} = P_d (\text{mW/cm}^2) = \text{EIRP} / (4 \cdot \pi \cdot d^2)$$

$$\text{EIRP} = P \cdot G$$

P = Peak output power (mW)

G = Antenna numeric gain (numeric)

d = Separation distance (cm)

$$\text{Numeric Gain} = 10^{(G (\text{dBi})/10)}$$

Because the EUT belongs to the General Population/Uncontrolled Exposure the limit of power density is 1.0 mW/cm^2

The calculations in the table below use the highest conducted power values together with the lowest antenna gain specified for the EUT. These calculations represent worst case in terms of the exposure levels.

Freq. Band (MHz)	Ant Gain (dBi)	Numeric Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Calculated Safe Distance @ 1 mW/cm^2	Calculated Power Density @ 20cm	Minimum Separation Distance (cm)
5150.0 - 5250.0	5.90	3.89	28.35	683.64	14.55	0.53	20.00
5725.0 - 5850.0	5.00	3.16	28.08	642.95	12.72	0.40	20.00
2400.0 - 2483.5	4.00	2.51	29.65	0.923	13.57	0.46	20.00

Note: for mobile or fixed location transmitters the minimum separation distance is 20cm, even if calculations indicate the MPE distance to be less.

Specification

Maximum Permissible Exposure Limits

FCC §1.1310 Limit = $1 \text{ mW} / \text{cm}^2$ from 1.310 Table 1

RSS-Gen §3.2 In addition to RSS-Gen, the requirements in Radio Standards Specification RSS-102 shall be met.



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