

FCC RF EXPOSURE REPORT

FCC ID: 2AFZI-AVI1010

Project No. : 1609C017
Equipment : Avi-on 1010
**Model : AVI1010, AVI1010UFL, AVI1010WIR,
AVI1010NA, AVI1010VIA**
Applicant : Avi-on Labs, Inc.
**Address : 2750 Rasmussen , Suite 206 Park City, Utah
United States 84098**

**According: : FCC Guidelines for Human Exposure IEEE
C95.1**

B T L I N C .

No.3, Jinshagang 1st Road, Shixia, Dalang Town, Dongguan, China.

TEL: +86-769-8318-3000 FAX: +86-769-8319-6000

MPE CALCULATION METHOD:

Calculation Method of RF Safety Distance:

$$S = \frac{PG}{4\pi^2} = \frac{EIRP}{4\pi^2}$$

where:

S = power density

P = power input to the antenna

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna

Table for Filed Antenna

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	Note
1	N/A	N/A	Dipole	IPEX	2.1	N/A
2	N/A	N/A	Internal	IPEX	5.90	N/A
3	N/A	N/A	Wire Monopole	N/A	3.18	N/A
4	N/A	N/A	PIFA	N/A	2.33	N/A
5	N/A	HG2412P	Large Patch	N/A	12	N/A

Note:

(1) There are 5 options for the antenna of product, only one antenna is used at a time.

(2) Maximum Antenna Gain=12 dBi. So, the output power limit is $30-12+6=25$, the power density limit is $8-12+6=3$.

TEST RESULTS

EUT :	Avi-on 1010	Model Name :	AVI1010
Temperature :	25 °C	Relative Humidity:	55 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	CH00, CH19 , CH39 - 1Mbps		

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
5.9	3.8905	6.2	4.1687	0.00323	1	Complies
5.9	3.8905	7.23	5.2845	0.00409	1	Complies
5.9	3.8905	5.14	3.2659	0.00253	1	Complies

Note: the calculated distance is 20 cm.