Date of Report:

Maximum Permissible Exposure Statement

Calculations prepared for:

AvaLAN Wireless Systems, Inc.
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Calculations prepared by:

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FCC ID Number::	
Model Number:	AW5800m
Fundamental Operating Frequency:	5.725 – 5.850 GHz
Maximum Rated Output Power:	24dBm
Measured Output Power:	16.4dBm
Measurement Uncertainty:	
Maximum Antenna Gain:	23dBi

Power Output and Operating Frequency Information used for these calculations were from:
CKC Laboratories, Test Report #

Device and Antenna Operating Configuration:
Device was operating on selectable fixed channels using normal operating mode modulation. Normal operation of the device is either selectable fixed channels or sweeping through the same fixed channels to determine the best channel to use. Device will be utilized with either a 5dBi dipole antenna or a 23dBi panel antenna. The antennas are intended to be connected to the device using a 12 inch custom cable. The device was tested without any enclosure as this device is being Modularly Approved.

Test Procedure:
This equipment is evaluated in accordance with the guidelines set forth in OET Guide 65.

Other Considerations:
The 23dBi antenna is not intended to be utilized in close proximity of people. If the installer intends on using the 23dBi antenna in close proximity of people, the installer must take appropriate measured to ensure the minimum separation distance from antenna to people is met.

MPE Calculations:

MPE Limit in accordance with 1.1310:

Occupational / Controlled Exposure
X General Population / Uncontrolled Exposure

MPE Limit = 1 (mW/cm^2)

Note: Limit is calculated based on the lowest frequency used in the operating frequency range.

$$PowerDensity(mW/cm^2) = \frac{EIRP}{4\pi d^2}$$ Given: **EIRP** in *mW* and **d** in *cm*

EIRP (mW)	Distance (cm)	Power Density (mW/cm^2)	Result
138.0	**20**	**0.027**	**Pass – 5dBi Antenna**
8709.6	**26.33**	**1.0**	**Pass – 23dBi Antenna**

Statement of Compliance:

This device demonstrates compliance under the operating conditions specified in this document. Under normal operating conditions, the antenna is designed to be installed in accordance with the manufacturer's instructions in such a manor to maintain the minimum separation distance. The MPE calculations shown above demonstrate compliance to the provisions of 1.1310 in accordance with the guidelines of OET 65.

As can be seen from the MPE results, this device passes the limits specified in 1.1310 at a distance of 20cm and at a output power of 138.0mW under normal operating conditions with the 5dBi antenna. If the 23dBi antenna is to be used in the proximity of people, a separation distance of 26.33cm is required