RF Exposure

FCC ID: 2ARF2ML-340LR

1.0 INTRODUCTION

These calculations are based on the highest EIRP possible from the EUT considering maximum power and antenna gain. The highest output power of the EUT is 124 mW and the gain of the antenna is 1.6 dBi

The product is exempt from SAR testing since it will not be operated with 20 cm of personnel.

2.0 MPE CALCULATION FROM OET 65 & FCC 1.1310

MHz	Max Power dBm	Max Ant Gain dBi	Duty Cycle %	EIRP Watts	(S) GP Limit mW/cm^2	Declared Minimum seperation Distance (cm)	EUT power Density mW/cm2	Result
902.3	21.0	1.6	100.0	0.1820	0.602	20.000	0.0362	Pass
908.6	20.8	1.6	100.0	0.1738	0.606	20.000	0.0346	Pass
914.9	20.8	1.6	100.0	0.1738	0.610	20.000	0.0346	Pass

Notes on the above table:
The max power of 19 dBm between the two Wi-Fi modules of the 2.4 GHz was applied.
In accordance with OET 65, 97-01, Power Density is calculated by
$S = P*G/(4*\pi*R^2)$
Where
S = power density (mW/cm2)
P = power input to the antenna (mW)
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 (cm)

S is the power density General Population Limit from FCC 1.1310 Table 1
EIRP Power is the Peak Effective Radiated Power.
EIRP = (Average Conducted Power + Antenna gain) * Duty Cycle.

Since the calculated power density is less than the limit, this product fully meets the OET 65 requirements for the general population.