RF Exposure

FCC ID: M7U-500V

1.0 INTRODUCTION

These calculations are based on the highest EIRP possible from the EUT, measured in the radiated mode.
The EIRP from the EUT is 0.32 mW before tune up tolerance.

The peak field strength is 90.3 dBuV/m at 3 meters

1.0 SAR EXCLUSION RESULT

In accordance with FCC KDB Publication 447498 D01 V05R06 Clause 4.3.1 a),
The 1-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

[(max. power, mW)/(min. separation distance, mm)] x [$\sqrt{f_{(GHz)}}$] ≤ 3.0 for 1-g extremity SAR, where
・$f_{(GHz)}$ is the RF channel transmit frequency in GHz

MHz	Max Power dBm	Tune up tolerance dB	Max Ant Gain dBi	Duty Cycle %	EIRP mW	Min Sep mm	SAR Exc Threshold 4.3.1 a)	Limit 1-g	Result
908.9	-4.93	1.0	0	100.0	0.405	5	0.0771	3.0	Exempt
913.3	-5.23	1.0	0	100.0	0.378	5	0.0722	3.0	Exempt
922.9	-6.13	1.0	0	100.0	0.307	5	0.0590	3.0	Exempt

Judgement: The product is exempt from SAR testing

2.0 MPE CALCULATION FROM OET 65 & FCC 1.1310

MHz	Max Power dBm	Tune up Tolerance dB	Max Ant Gain dBi	Duty Cycle %	EIRP mWatts	(S) GP Limit mW/cm^2	Declared Minimum seperation Distance (cm)	EUT power Density mW/cm2	Result
908.9	-4.93	1.0	0	100.0	0.40	0.606	0.50	0.1288	Pass
913.3	-5.23	1.0	0	100.0	0.38	0.609	0.50	0.1202	Pass
922.9	-6.13	1.0	0	100.0	0.31	0.615	0.50	0.0977	Pass

Notes on the above table:
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.