



# MPE ESTIMATION

FCC ID: 2BWD9-KDPNL30

1, According to §1.1310, Limit for General Population/ Uncontrolled Exposures

| Frequency        | Power density (mW/ cm <sup>2</sup> ) | Averaging time(minutes) |
|------------------|--------------------------------------|-------------------------|
| 300MHz----1.5GHz | F/1500                               | 30                      |
| 1.5GHz---100GHz  | 1.0                                  | 30                      |

Note: F= Frequency in MHz

## 2, Estimation Result

|     | Max PK Output<br>power(dBm) | Tune Up<br>Power(dBm) | Max Tune Up<br>power(mW) | Antenna<br>Gain(dBi) | Antenna Gain<br>(numerical) | MPE<br>(mW/cm <sup>2</sup> ) | Limit<br>(mW/cm <sup>2</sup> ) |
|-----|-----------------------------|-----------------------|--------------------------|----------------------|-----------------------------|------------------------------|--------------------------------|
| EDR | -13.82                      | -14±1(-13)            | 0.050                    | -1.78                | 0.66                        | 0.00001                      | 1.0                            |

$$Pd = \frac{P_{out} * G}{4\pi r^2} ;$$

Note:

Note: The estimation distance is 20cm

Note:

PK Output power= conducted power in 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 in cm

Conducted power see the test report **DLE-260812003R**, antenna gain=-1.78dBi.

When the minimum test separation distance is >20 cm, a distance of 20 cm is applied to determine RF Exposure test exclusion. The test exclusion threshold is 0.00001mW/cm<sup>2</sup> which is< 1.0 mW/cm<sup>2</sup>, RF Exposure testing is not required.

-----The End-----