

Declaration of Electromagnetic Field Health Compliance

To whom it may concern,

As to the product **RRU3942-850** made by Huawei Technologies Co., Ltd., we declare that it complies with the Basic restrictions/Reference levels for electric, magnetic and electromagnetic fields as specified in following standards(s):

Nr.	Standard
1	47CFR FCC Part 1 (10-1-12 Edition) & OET Bulletin 65

The compliance is demonstrated based on the following calculation model assessment:

- The power density according to far-field model is:

$$S = \frac{P \times G_{(\theta,\phi)}}{4 \times \pi \times R^2}$$

Where:

P = input power of the antenna.

G = antenna gain relative to an isotropic antenna.

θ, ϕ = elevation and azimuth angles.

R = distance from the antenna to the point of investigation.

- For single or multiple RF sources, the calculated power density should comply with following:

$$\sum_i \frac{S_i}{S_{Limit,i}} \leq 1$$

Where:

S_i = the power density when the f is i .

$S_{Limit,i}$ = the reference level requirement for power density when f is i .

- The calculation of the power density or safe distance is:

NOTE 1: The RF exposure evaluation is base on the far-field and the radiation exposure is over-estimated.

NOTE 2: The maximum output power level is taken into account as a worst case for the purpose of the calculation of power density or safe distance.

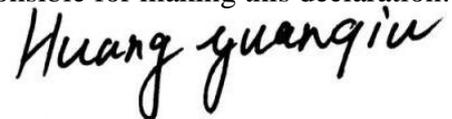
NOTE 3: The minimum antenna feed cable loss (assumed no cable loss) is taken into account as a worst case for the purpose of the calculation of power density or safe distance.

NOTE 4: The maximum antenna radiation exposure orientation and maximum antenna gain is taken into account as a worst case for the purpose of the calculation of power density or safe distance.

RF Source	Calculation
RF Source #1	f = 869 to 894 MHz
	$S_{Limit,i}$ = 869/150= 5.8 W/m ²
	$EIRP = P \times G_{(\theta,\phi)}$ = 820 W

RF Source	Calculation
	θ, ϕ = The worst condition is considered, i.e. the max G is used. $S_i = \frac{P \times G_{(\theta, \phi)}}{4 \times \pi \times R^2} = 65.28 / R^2 \text{ W/m}^2$ $\frac{S_i}{S_{Limit,i}} = 11.25 / R^2$
RF Source(s) Combination	$\sum_i \frac{S_i}{S_{Limit,i}} = 11.25 / R^2 \leq 1$ $R \geq 3.4 \text{ m (the minimum Safe Distance)}$

Person responsible for making this declaration:



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