



## Declaration of Electromagnetic Field Health Compliance for HUAWEI TE30

To whom it may concern,

As to the product **HUAWEI TE30** 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 & OET Bulletin 65

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

1. 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.

$\theta, \phi$  = elevation and azimuth angles.

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

2. 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  $i$ .

3. 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.



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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	$f$ = 2400 to 2483.5 MHz
	$S_{Limit,i}$ = 10 W/m <sup>2</sup>
	$P$ = 0.1159 W (= 20.64 dBm, measured max)
	$G_{(\theta,\phi)}$ = 0.63 (= -2 dBi)
	$\theta, \phi$ = The worst condition is considered, i.e. the max $G$ is used.
	$R$ $\geq$ 0.2 m
	$S_i$ $\leq$ $\frac{P \times G_{(\theta,\phi)}}{4 \times \pi \times R^2} = 0.15$ W/m <sup>2</sup>
$\frac{S_i}{S_{Limit,i}}$ $\leq$ 0.015	
RF Source(s) Combination	$\sum_i \frac{S_i}{S_{Limit,i}} \leq 0.015$ (Less than 1, so complied)

Person responsible for making this declaration:

Signature : 

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Position/Title : RF Engineer

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