



Declaration of Electromagnetic Field Health Compliance for eSpace EGW1530A & eSpace EGW1530B

To whom it may concern,

As to the product **eSpace EGW1530A & eSpace EGW1530B** 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 **47CFR §1.1310** 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.
- θ, ϕ = 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.
- 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.



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RF Source	Calculation
RF Source #1	f = 2400 to 2483.5 MHz
	$S_{Limit,i}$ = 10 W/m ²
	P = 0.454 W (= 26.57 dBm, measured max. for a peak value)
	G = 1.58 (= 2 dBi)
	θ, ϕ = The worst condition is considered, i.e. the maximum G is used.
	R > 0.2 m
	S_i < $\frac{P \times G_{(\theta, \phi)}}{4 \times \pi \times R^2} = 1.43$ W/m ²
	$\frac{S_i}{S_{Limit,i}}$ < 0.143
RF Source(s) Combination	$\sum_i \frac{S_i}{S_{Limit,i}} < 0.143$ (Less than 1, so complied)

Person responsible for making this declaration:

Signature : **Hu Wei**

Print Name : Hu Wei

Position/Title : RF Engineer

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