

Declaration of Electromagnetic Field Health Compliance

To whom it may concern,

As to the product <u>HUAWEI TE80</u> 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
2	RSS-102 (Issue4, March 2010)

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.

 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:

Document No.: SYBH(R) 01260578EB-1

 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.

RF Source	Calculation		
	f	=	2400 to 2483.5 MHz
RF Source #1	S Limit ,i	=	$10~\mathrm{W/m}^{-2}$
	P	=	0.093 W (=19.70 dBm, measured max peak value in RF report)



RF Source	Calculation		
	$G_{(heta,\phi)}$	=	1.995 (= 3 dBi)
	θ, ϕ	=	The worst condition is considered, i.e. the max G is used.
	R	≥	0.2 m
	S_i	≤	$\frac{P \times G_{(\theta,\phi)}}{4 \times \pi \times R^2} = 0.37 \text{ W/m}^2$
	$\frac{S_i}{S_{Limit,i}}$	≤	0.037
RF Source(s) Combination	$\sum_{i} \frac{S_{i}}{S_{Limit,i}}$	<u>≤</u>	0.037 (Less than 1, so complied)

Person responsible for making this declaration:

Zhang Weimin

RF Engineer, EMC Lab

Reliability Laboratory of Huawei Technologies Co., Ltd.

June 17, 2014

Document No.: SYBH(R) 01260578EB-1