Reliability Laboratory of Huawei Technologies Co., Ltd.
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Declaration of Electromagnetic Field Health Compliance for

AP7110DN-AGN

To whom it may concern,

As to the product **AP7110DN-AGN** 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 **(1) 47CFR FCC Part 1 & OET Bulletin 65, and (2) RSS-102**, 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:

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

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	=	0.2679 W (measured max is 24.28 dBm, duty cycle is 100%)
	$G_{(\theta,\phi)}$	=	2 (= 3 dBi)
	θ, ϕ	=	The worst condition is considered, i.e. the max G is used.
	R	≥	0.2 m
	S_i	≤	$\frac{P \times G_{(\theta,\phi)}}{4 \times \pi \times R^2}$ = 1.1 W/m^2
	$\frac{S_i}{S_{Limit,i}}$	≤	0.11
RF Source(s) Combination	$\sum_i \frac{S_i}{S_{Limit,i}}$	≤	0.11 (Less than 1, so complied)

Person responsible for making this declaration:

Signature : 

Print Name : Zhang Weimin

Position/Title : RF Engineer

Date : November 21, 2012