Declaration of Electromagnetic Field Health Compliance

To whom it may concern,

As to the product **RRU3931E** 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.

 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.

AWS Band:

RF Source	Calculation for Individual Source		
RF Source #1	f	=	2110 to 2155 MHz

	$S_{Limit,i}$	=	10 W/m^2
	P , $G_{(\theta,\phi)}$	=	☐ $EIRP(= P \times G_{(\theta,\phi)})$: $EIRP^{(*)}$ = _____ W (=_____ dBm, all ports) ☒ $P \times G_{(\theta,\phi)}$: $P^{(*)}$ = 12.59 W (=41 dBm) (two ports, total rated power: 40dBm, tolerance: +/-1dB) _____ W (calculated, two ports) $G_{(\theta,\phi)}$ = 15.85 (=12 dBi) _____ $^{(*)}$: The value is from: ☐ measured max (See relevant RF report), ☒ rated + declared tolerance, ☐ max allowed by RF standard. And, the transmission duty cycle is: ☐ ignored, ☒ used, that is: 100 %.
	θ, ϕ	=	The worst condition is considered, i.e. the max G is used.
	S_i	=	$\dfrac{P \times G_{(\theta,\phi)}}{4 \times \pi} / R^2$ = 15.88 $/ R^2$ W/m^2
	$\dfrac{S_i}{S_{Limit,i}}$	=	1.588 / R^2

PCS Band:

RF Source	Calculation for Individual Source		
RF Source #1	f	=	1930 to 1990 MHz
	$S_{Limit,i}$	=	10 W/m^2
	P , $G_{(\theta,\phi)}$	=	☐ $EIRP(= P \times G_{(\theta,\phi)})$: $EIRP^{(*)}$ = _____ W (=_____ dBm, all ports) ☒ $P \times G_{(\theta,\phi)}$: $P^{(*)}$ = 12.59 W (=41 dBm) (two ports, total rated power: 40dBm, tolerance: +/-1dB) _____ W (calculated, two ports) $G_{(\theta,\phi)}$ = 15.85 (=12 dBi) _____ $^{(*)}$: The value is from: ☐ measured max (See relevant RF report), ☒ rated + declared tolerance,

			☐ max allowed by RF standard. And, the transmission duty cycle is: ☐ ignored, ☒ used, that is: <u>100</u> %.
	θ, ϕ	=	The worst condition is considered, i.e. the max G is used.
	S_i	=	$\dfrac{P \times G_{(\theta,\phi)}}{4 \times \pi} / R^2 = \underline{15.88} \ / R^2 \ \text{W/m}^2$
	$\dfrac{S_i}{S_{Limit,i}}$	=	$\underline{1.588} / \ R^2$
Whole Product	Calculation for Whole Product		
Whole Product	$\displaystyle\sum_i \dfrac{S_i}{S_{Limit,i}}$	=	$\underline{3.176} / \ R^2 \leq 1$
	R	$\geq$	$\underline{1.78}$ m (the minimum Safe Distance)
	NOTE:		The result is the worst case of each individual source and simultaneous transmission sources (if applicable).

Note: If the practical maximum antenna gain exceeds the value as described above, the safe distance must be recalculated and estimated.

Beyond the specified distance: 1.78 m

Person responsible for making this declaration:

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