



Declaration of Electromagnetic Field Health Compliance for RRU3269 (LTE MBS 700MHz)

To whom it may concern,

As to the product **RRU3269** 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 (10-1-13 Edition) & 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:

- S_i = the power density when the f is i .
- $S_{Limit,i}$ = the reference level requirement for power density when f is i .
- f = operating frequency.

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 for Individual Source	
RF Source #1	f	= <u>729</u> to <u>745</u> MHz & <u>746</u> to <u>756</u> MHz
	$S_{Limit,i}$	= <u>4.86</u> W/m ²
	$P, G_{(\theta,\phi)}$	<input checked="" type="checkbox"/> $P \times G_{(\theta,\phi)}$: $P^{(*)}$ = <u>67.6</u> W (per port) <u>135.2</u> W (calculated, two ports) $G_{(\theta,\phi)}$ = <u>50.119</u> (=17 dBi) (*): The value is from: <input type="checkbox"/> measured max (See relevant RF report), <input checked="" type="checkbox"/> rated + declared tolerance, <input type="checkbox"/> max allowed by RF standard. And, the transmission duty cycle is: <input checked="" type="checkbox"/> ignored, <input type="checkbox"/> used, that is: _____ % (for mode: _____).
	θ, ϕ	= The worst condition is considered, i.e. the max G is used.
	S_i	= $\frac{P \times G_{(\theta,\phi)}}{4 \times \pi} / R^2 = \underline{539.22} / R^2$ W/m ²
	$\frac{S_i}{S_{Limit,i}}$	= <u>110.95</u> / R^2
	RF Sources	Calculation for Simultaneous Transmission Sources
(Not applicable)	(Not applicable)	
Whole Product	Calculation for Whole Product	
Whole Product	$\frac{S}{S_{Limit}}$	= <u>110.95</u> / $R^2 \leq 1$
	R	\geq <u>10.53</u> m (the minimum Safe Distance)
	NOTE:	The result is the worst case of each individual source and simultaneous transmission sources (if applicable).

Person responsible for making this declaration:



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