

Declaration of Compliance for RF Exposure Evaluation

To whom it may concern,

As to the product **RRU3249 (LTE Band12)** made by Huawei Technologies Co., Ltd. as the applicant and Huawei Technologies Co., Ltd. as the manufacturer, we declare that it complies with the following standards(s):

- 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 .
- 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	= 729 to 746 MHz
	$S_{Limit,i}$	= 729/150 = 4.86 W/m ²

	$P, G_{(\theta, \phi)}$	☒ $P \times G_{(\theta, \phi)}$: $P^{(*)} = \underline{75.86} \text{ W } (= \underline{47.8} + 1 = \underline{48.8} \text{ dBm, per port})$ $\underline{151.72} \text{ W (calculated, two ports)}$ $G_{(\theta, \phi)} = \underline{50.119} (= \underline{17} \text{ dBi})$ $(*)$: 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: _____ % (for mode: _____).
	θ, ϕ	= The worst condition is considered, i.e. the max G is used.
	S_i	= $\frac{P \times G_{(\theta, \phi)}}{4 \times \pi} / R^2 = \underline{605.11} / R^2 \text{ W/m}^2$
	$\frac{S_i}{S_{Limit, i}}$	= $\underline{110.95} / R^2$
Whole Product	Calculation for Whole Product	
Whole Product	$\frac{S}{S_{Limit}}$	= $\underline{124.51} / R^2 \leq 1$
	R	$\geq \underline{11.16} \text{ m (the minimum Safe Distance)}$
	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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