



RF EXPOSURE EVALUATION REPORT

Applicant: Xiamen Milesight IoT Co., Ltd.

Address: Building C09, Software Park Phase III, Xiamen 361024, Fujian, China

FCC ID: 2AYHY- UR41

Product Name: Mini Industrial Router

Model Number: UR41-L08AF, NA41-L08AF

Standard(s): 47 CFR §1.1307, 47 CFR §2.1091

KDB 447498 D04 Interim General RF Exposure

Guidance v01

The above equipment has been tested and found compliant with the requirement of the relative standards by China Certification ICT Co., Ltd (Dongguan)

Report Number: CR221152488-00B

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Reviewed By: Sun Zhong

Sun 2hong

Title: Manager

Test Laboratory: China Certification ICT Co., Ltd (Dongguan)

No. 113, Pingkang Road, Dalang Town, Dongguan,

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Test Facility

The Test site used by China Certification ICT Co., Ltd (Dongguan) to collect test data is located on the No. 113, Pingkang Road, Dalang Town, Dongguan, Guangdong, China.

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The lab has been recognized as the FCC accredited lab under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No. : 442868, the FCC Designation No. : CN1314.

The lab has been recognized by Innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements, the CAB identifier: CN0123.

Declarations

China Certification ICT Co., Ltd (Dongguan) is not responsible for the authenticity of any test data provided by the applicant. Data included from the applicant that may affect test results are marked with a triangle symbol "\(\Lambda \)". Customer model name, addresses, names, trademarks etc. are not considered data.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

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1.1 Applicable Standard

According to §1.1307(b)(3)(i)

(C) Or using Table 1 and the minimum separation distance (R in meters) from the body of a nearby person for the frequency (f in MHz) at which the source operates, the ERP (watts) is no more than the calculated value prescribed for that frequency. For the exemption in Table 1 to apply, R must be at least $\lambda/2\pi$, where λ is the free-space operating wavelength in meters. If the ERP of a single RF source is not easily obtained, then the available maximum time-averaged power may be used in lieu of ERP if the physical dimensions of the radiating structure(s) do not exceed the electrical length of $\lambda/4$ or if the antenna gain is less than that of a half-wave dipole (1.64 linear value).

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Table 1 to § 1.1307(b)(3)(i)(C) - Single RF Sources Subject to Routine Environmental Evaluation

RF Source frequency (MHz)	Threshold ERP (watts)			
0.3-1.34	1,920 R ² .			
1.34-30	$3,450 \text{ R}^2/\text{f}^2$.			
30-300	3.83 R^2 .			
300-1,500	$0.0128 \text{ R}^2\text{f}.$			
1,500-100,000	19.2R ² .			

1.2 EUT Information ▲:

Operation Modes	Operation Frequency (MHz)	Conducted output power including Tune-up Tolerance (dBm)	Maximum Antenna Gain (dBi)
WCDMA B2	1850-1910	25	1.40
WCDMA B4	1710-1755	25	3.64
WCDMA B5	824-849	25	2.36
LTE B2	1850-1910	25	1.40
LTE B4	1710-1755	25	3.64
LTE B5	824-849	25	2.36
LTE B12	699-716	25	-1.04
LTE B13	777-787	25	2.36
LTE B25	1850-1915	25	1.40
LTE B26	814-849	25	2.36

Note:

1. The Above Parameters were provided by the manufacturer.

1.3 Measurement Result

				Exempt	ion ERP	Maximum			
Operation Modes	Frequency (MHz)	λ/2π (mm)	Distance (mm)	(mW)	(dBm)	Conducted Power including Tune-up Tolerance (dBm)	Antenna Gain (dBi)	ERP (dBm)	MPE- Based Exemption
WCDMA B2	1850-1910	25.82	200	768	28.85	25	1.40	24.25	Compliant
WCDMA B4	1710-1755	27.94	200	768	28.85	25	3.64	26.49	Compliant
WCDMA B5	824-849	57.97	200	422	26.25	25	2.36	25.21	Compliant
LTE B2	1850-1910	25.82	200	768	28.85	25	1.40	24.25	Compliant
LTE B4	1710-1755	27.94	200	768	28.85	25	3.64	26.49	Compliant
LTE B5	824-849	57.97	200	422	26.25	25	2.36	25.21	Compliant
LTE B12	699-716	68.34	200	358	25.54	25	-1.04	21.81	Compliant
LTE B13	777-787	61.48	200	398	26.00	25	2.36	25.21	Compliant
LTE B25	1850-1915	25.82	200	768	28.85	25	1.40	24.25	Compliant
LTE B26	814-849	58.69	200	417	26.20	25	2.36	25.21	Compliant

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Result: The device compliant the Exemption at 20cm distances.

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