

TEST REPORT

Application No.: FYCR2204000107AT(SHCR2204000727AT)
Applicant: Sunwave Communications Co., Ltd
Address of Applicant: 581 Houju Avenue, Binjiang District, Hangzhou, China
Manufacturer: Sunwave Communications Co., Ltd
Address of Manufacturer: 581 Houju Avenue, Binjiang District, Hangzhou, China
Factory: Sunwave Communications Co., Ltd
Address of Factory: 581 Houju Avenue, Binjiang District, Hangzhou, China
Equipment Under Test (EUT):
EUT Name: Remote Unit
Model No.: iDAS-R318
Trade mark: CROSSFIRE
FCC ID: 2AEJ4R31825
Standard(s) : FCC Rules 47 CFR §2.1091
 KDB447498 D04 Interim General RF Exposure Guidance v01
Date of Receipt: 2022-04-22
Date of Test: 2022-04-22 to 2022-05-18
Date of Issue: 2022-05-20

Test Result:	Pass*
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* In the configuration tested, the EUT complied with the standards specified above.





Winkey Wang
EMC Technical Manager



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Revision Record				
Version	Chapter	Date	Modifier	Remark
01		2022-05-20		Original

Authorized for issue by:			
			

		Tree Zhan/Project Engineer	
			

		Winkey Wang/Reviewer	



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3 General Information

3.1 Details of E.U.T.

Power supply:	DC48V
Sample Type:	Fixed production
Support Network:	LTE
Operation Frequency Band:	Band 25: Downlink 1930MHz to 1995MHz
Modulation Type:	QPSK, 16QAM, 64QAM, 256QAM
Rated Input Power Range:	0dBm-15dBm
Output Power	37dBm \pm 2dBm(Total)
Antenna Type:	External antenna
Antenna Gain:	6dBi (Provided by the manufacturer)

Note:

The antenna gain value is provided by the customer. The test lab will not be responsible for wrong test result due to incorrect information about antenna gain values.



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3.2 Test Location

All tests were performed at:

Compliance Certification Services (Kunshan) Inc. Shenzhen branch.

Fuyong lab. Xinlong TechnoPark, Fengtang Road, Fuyong Subdistrict, Bao'an, Shenzhen, China

Tel: +86 755 8866 3988 Fax: +86 755 2671 0594

No tests were sub-contracted.

3.3 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

- **A2LA (Certificate No. 6606.01)**

Compliance Certification Services (Kunshan) Inc. Shenzhen branch is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 6606.01.

- **FCC –Designation Number: CN1322**

Compliance Certification Services (Kunshan) Inc. Shenzhen branch has been recognized as an accredited testing laboratory.

Designation Number: CN1322. Test Firm Registration Number: 718073

- **Innovation, Science and Economic Development Canada**

Compliance Certification Services (Kunshan) Inc. Shenzhen branch has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0129.

IC#: 28189.

3.4 Deviation from Standards

None

3.5 Abnormalities from Standard Conditions

None



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Compliance Certification Services (Kunshan) Inc.
Shenzhen Branch

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4 Test Standards and Limits

4.1 FCC Radiofrequency radiation exposure limits:

According to §1.1310, the limit for general population/uncontrolled exposures

Frequency	Power density(mW/cm ²)	Averaging time(minutes)
300MHz~1.5GHz	f/1500	30
1.5GHz~100GHz	1.0	30



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5 Measurement and Calculation

5.1 Maximum transmit power

The Power Data is based on the RF Test Report FYCR220400010701.

Band Information	Antenna Gain (dBi)	Max E.I.R.P (dBm)	Max E.I.R.P (mW)
LTE Band 25	6	41.52	14190.58

5.2 MPE Calculation

According to the formula $S=P/4\pi R^2$, we can calculate S which is MPE.

Note:

- 1)P (mW)
- 2)R = distance to the center of radiation of antenna (in meter)
- 3)LTE Band 25 MPE limit = 1mW/cm²

Test Mode	Frequency Band (MHz)	Antenna Gain (dBi)	Max Tune-up tolerance power (dBm)	Operation Distance R(cm)	Power Density (mW/cm ²)	Limit of Power Density S(mW/cm ²)	Result
LTE Band 25	1930 - 1995	6	39	100	0.2516	1	Pass

The device is exclusion from SAR test.

--End of the Report--



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