

TEST REPORT

Application No.: KSEM2107001086CR
Applicant: Corning Optical Communications LLC
Address of Applicant: 6 Concord Road, Shrewsbury, MA 01545 United States
Manufacturer: Corning Optical Communications LLC
Address of Manufacturer: 6 Concord Road, Shrewsbury, MA 01545 United States
Factory: Sunwave Communications Co., Ltd
Address of Factory: 581 Houju Avenue, Binjiang District, Hangzhou, China
Equipment Under Test (EUT):
EUT Name: Remote Unit N2RU-I-8-DC
Model No.: E62-N2
Trade mark: CORNING
FCC ID: OJFE62-N2-25
Standard(s) : FCC Rules 47 CFR §2.1091
 KDB447498 D01 General RF Exposure Guidance v06
Date of Receipt: 2021-03-08
Date of Test: 2021-03-10 to 2021-04-12
Date of Issue: 2021-07-12

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

Eric Lin
Laboratory Manager

The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of SGS International Electrical Approvals or testing done by SGS International Electrical Approvals in connection with, distribution or use of the product described in this report must be approved by SGS International Electrical Approvals in writing.



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Revision Record			
Version	Description	Date	Remark
00	Original	2021-07-12	/

Authorized for issue by:			
		<i>Damon Zhou</i>	
		Damon Zhou / Project Engineer	
		<i>Eric Lin</i>	
		Eric Lin / Reviewer	



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3 General Information

3.1 Details of E.U.T.

Product Name:	Remote Unit N2RU-I-8-DC
Model No.:	E62-N2
Trade Mark:	CORNING
	DC 48V by Adapter
	Adapter: GST160A48
Power Supply:	Input: 100-240V AC 50/60Hz 100W
	Output: DC 48V/3.34A 160W MAX
Test Voltage	AC 120V/60Hz
Max Power Consumption:	100W
Serial Number:	SWR7820938C
Firmware version:	iDAS_DRRU_E62-N2_V1.6_4300_20210308
Type of Modulation	LTE
Frequency Band:	Band 41: Downlink 2496MHz to 2690MHz
Normal Output Power:	20 ± 2dBm (downlink)
System Gain:	20 ± 3dB
Power Control Method:	ALC
Antenna Type:	External / Internal Antenna
Antenna Gain:	Max Antenna Gain 3dBi(Provided by 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.

No.10 Weiye Rd, Innovation park, Eco&Tec, Development Zone, Kunshan City, Jiangsu, China.

Tel: +86 512 5735 5888 Fax: +86 512 5737 0818

No tests were sub-contracted.

3.3 Test Facility

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

- **CNAS (No. CNAS L4354)**

CNAS has accredited Compliance Certification Services (Kunshan) Inc. to ISO/IEC 17025:2017 General Requirements for the Competence of Testing and Calibration Laboratories (CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence in the field of testing.

- **A2LA (Certificate No. 2541.01)**

Compliance Certification Services (Kunshan) Inc. is accredited by the American Association for Laboratory Accreditation (A2LA). Certificate No. 2541.01.

- **FCC (Designation Number: CN1172)**

Compliance Certification Services Inc. has been recognized as an accredited testing laboratory.

Designation Number: CN1172.

- **ISED (CAB Identifier: CN0072)**

Compliance Certification Services (Kunshan) Inc. has been recognized by Innovation, Science and Economic Development (ISED) Canada as an accredited testing laboratory.

CAB Identifier: CN0072.

- **VCCI (Member No.: 1938)**

The 3m and 10m Semi-anechoic chamber and Shielded Room of Compliance Certification Services (Kunshan) Inc. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-20134, C-11707, T-11499, G-10216 respectively.

3.4 Deviation from Standards

None

3.5 Abnormalities from Standard Conditions

None



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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 KSEM210700108601.

Band Information	Antenna Gain (dBi)	Max E.I.R.P (dBm)	Max E.I.R.P (mW)
LTE Band 41	3	29.76	946.24

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 41 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 41	2496 - 2690	3	28	50	0.0401	0.497	Pass

According to the KDB447498 section 7.2 determine the device is exclusion from SAR test.

--End of the Report--



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