

# TEST REPORT

**Application No.:** KSEM2107001215CR  
**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, Binjinag District, Hangzhou, China  
**Equipment Under Test (EUT):**  
**EUT Name:** Remote Unit E62-M2  
**Model No.:** E62-M2  
**Trade mark:** CORNING  
**FCC ID:** OJFE62-M2-19  
**Standard(s) :** FCC Rules 47 CFR §2.1091  
 KDB447498 D01 General RF Exposure Guidance v06  
**Date of Receipt:** 2021-07-27  
**Date of Test:** 2021-07-28 to 2021-08-17  
**Date of Issue:** 2021-08-20

<b>Test Result:</b>	<b>Pass*</b>
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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	2021-08-20	/

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



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### 3 General Information

#### 3.1 Details of E.U.T.

Product Name:	Remote Unit E62-M2
Model No.:	E62-M2
Trade Mark:	CORNING
Power Supply:	DC 48V
Rated power:	150W
Type of Modulation	LTE
Frequency Band:	Band 25: Downlink 1930MHz to 1995MHz
Normal Output Power:	37 ± 2dBm (downlink)
System Gain:	37 ± 2dB
Power Control Method:	ALC
Antenna Type:	External Antenna
Antenna Gain:	Max Antenna Gain 6dBi(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.

#### 3.2 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
Adapter	MEAN WELL	GST160A48-R78	/



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### 3.3 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.

### 3.4 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.

### 3.5 Deviation from Standards

None

### 3.6 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 range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm <sup>2</sup> )	Averaging time (minutes)
Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*(180/f <sup>2</sup> )	30
30-300	27.5	0.073	0.2	30
300-1500	/	/	f/1500	30
1500-100,000	/	/	1.0	30

Note: LTE B25 is 1mW/cm<sup>2</sup>.



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## 5 Measurement and Calculation

### 5.1 Maximum transmit power

The Power Data is based on the RF Test Report KSEM210700121501.

Band Information	Max Total Output Power (dBm)	Antenna Gain (dBi)	Max E.I.R.P (dBm)	Max E.I.R.P (mW)
LTE Band 25	43.14	6	49.14	82011.74

E.I.R.P (dBm) = Total Output Power (dBm) + Antenna Gain (dBi).

### 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)MPE limit = 1mW/cm<sup>2</sup>

Test Mode	Frequency Band (MHz)	Antenna Gain (dBi)	Max Tune-up tolerance power (dBm)	Limit of Power Density S(mW/cm <sup>2</sup> )	Safety Distance (cm)
LTE Band 25	1930 - 1995	6	45	1	100.09

Max Tune-up E.I.R.P = 45dBm + 6dBi = 51dBm = 125892.54 mW

The Safety Distance of the EUT is  $r = [(Max\ Tune-up\ E.I.R.P)/(4*3.1416*1)]^{1/2}$   
 $= [125892.54\ mW / (4*3.1416*1)]^{1/2}$   
 $= 100.09cm$

--End of the Report--



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