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## 1 Cover Page

# RF MPE REPORT

Application No.: KSCR2206001045AT

FCC ID: OJFE62-N3-37

**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 **Model No.:** E62-N3

Standard(s): FCC Rules 47 CFR §2.1091

KDB447498 D01 General RF Exposure Guidance v06

**Date of Receipt:** 2022-06-24

**Date of Test:** 2022-06-26 to 2022-07-15

**Date of Issue:** 2022-07-19

Test Result: Pass\*

Eric Lin EMC Lab Manager

Tom fin



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<sup>\*</sup> In the configuration tested, the EUT complied with the standards specified above.



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Revision Record						
Version	Description	Date	Remark			
00	Original	2022-07-19	/			

Authorized for issue by:		
	Damon zhou	
	Damon Zhou / Project Engineer	
	Eric Li	
	Eric Lin / Reviewer	



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### 3 General Information

### 3.1 General Description of E.U.T.

Power supply:	DC 48V
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### 3.2 Technical Specifications

Frequency Band:	3700MHz to 3980MHz	
Antenna Type:	External&Internal	
Antenna Gain:	3dBi (Provided by manufacturer)	
Modulation Type:	5G NR: CP-OFDM: QPSK, 16QAM, 64QAM, 256QAM	
MIMO:	4T4R MIMO,2T2R MIMO,SISO	
Temperature Range:	-10℃ to 45℃	

#### 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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#### 3.3 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 (Kunshan) 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 Canada (ISED) as an accredited testing laboratory.

Company Number: 2324E

#### 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, R-11600, C-11707, T-11499, G-10216 respectively.



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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/cm²)	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/f2)	30	
30-300	27.5	0.073	0.2	30	
300-1500	/	/	f/1500	30	
1500-100,000	/	/	1.0	30	

Note: 5G N77 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 KSCR220600104501. KSCR220600104502

#### 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 centimeter)

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

#### For Base station

_							
	Test Mode	Frequency Band	Max E.I.R.P	Operation	Power Density	Limit of Power	Result
		(MHz)	(dBm)	Distance	(mW/cm <sup>2</sup> )	Density	
				R(cm)		S(mW/cm <sup>2</sup> )	
	5G NR Band n77	3700 ~ 3980	36	20	0.792	1	Pass

For Repeater

Test Mode	Frequency Band (MHz)	Max E.I.R.P (dBm)	Operation Distance R(cm)	Power Density (mW/cm²)	Limit of Power Density S(mW/cm²)	Result
5G NR Band n77	3700 ~ 3980	27	20	0.100	1	Pass

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

-- End of the Report--



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