

1 Cover Page

RF MPE REPORT

Application No.: KSCR2209001814AT
FCC ID: OJFE62-N3-7LU
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: 2022-09-23
Date of Test: 2022-09-23 to 2022-10-15
Date of Issue: 2022-10-18

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

Eric Lin
EMC Lab Manager



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Revision Record			
Version	Description	Date	Remark
00	Original	2022-10-18	/

Authorized for issue by:			
		<i>cloudpeng</i>	
		Cloud Peng / Project Engineer	
		<i>Eric Lin</i>	
		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:	Booster: 729MHz-746MHz,746MHz-756MHz
Antenna Type:	Internal
Antenna Gain:	2.13 dBi for 729MHz to 746MHz (Provided by manufacturer) 2.43 dBi for 746MHz to 756MHz (Provided by manufacturer)
Modulation Type:	5G NR: CP-OFDM: QPSK, 16QAM, 64QAM, 256QAM LTE: QPSK, 16QAM, 64QAM, 256QAM
MIMO:	4T4R MIMO,2T2R MIMO,SISO
Temperature Range:	-30°C to 50°C

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.

Note:

1.SGS is not responsible for wrong test results due to incorrect information (e.g., max. internal working frequency, antenna gain, cable loss, etc) is provided by the applicant. (If applicable).

2.SGS is not responsible for the authenticity, integrity and the validity of the conclusion based on results of the data provided by applicant. (If applicable).

3.4 Test Facility

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

- **CNAS**

Compliance Certification Services (Kunshan) Inc. is accredited by the China National Accreditation Service for Conformity Assessment (CNAS). Registration No. CNAS L4354

- **A2LA**

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

- **FCC**

Compliance Certification Services (Kunshan) Inc. has been recognized as an accredited testing laboratory. Designation Number: CN1172.

- **ISED**

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**

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/cm ²)	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 ²)	30
30-300	27.5	0.073	0.2	30
300-1500	/	/	f/1500	30
1500-100,000	/	/	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 KSCR220900181402AT

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/cm²

For Booster

Test Mode	Frequency Band (MHz)	Max E.R.P (dBm)	Operation Distance R(cm)	Power Density (mW/cm ²)	Limit of Power Density S(mW/cm ²)	Result
5G NR	729 ~ 746	25	20	0.0629	0.486	Pass
5G NR	746 ~ 756	26	20	0.0792	0.497	Pass

Simultaneous transmission For Booster:

Wireless Configure	Max E.R.P (dBm)	Limit of Power Density (mW/cm ²)	Power Density (mW/cm ²)	Rate	Limit
729 ~ 746	25	0.486	0.0629	0.2887	1
746 ~ 756	26	0.497	0.0792		

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

--End of the Report--



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