

1 Cover Page

RF MPE REPORT

Application No.: SZCR2307002336AT(KSCR2305000808AT)
FCC ID: OJFE62-M3-35
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
Equipment Under Test (EUT):
EUT Name: Remote Unit
Model No.: E62-M3
Standard(s) : FCC Rules 47 CFR §2.1091
KDB447498 D01 General RF Exposure Guidance v06
Date of Receipt: 2023-05-09
Date of Test: 2023-05-09 to 2023-05-31
Date of Issue: 2023-06-02

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

Keny Xu
EMC Laboratory Manager



SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch EMC Laboratory

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SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

SZEMC-TRF-01 Rev. A/0 Aug01,2022

Report No.: SZCR230700233603

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Revision Record				
Version	Chapter	Date	Modifier	Remark
01		2023-06-02		Original

Authorized for issue by:			
			
		Bill Chen /Project Engineer	
			
		Eric Fu/Reviewer	



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3 General Information

3.1 General Description of E.U.T.

Power supply:	DC 48V ± 20% or AC 100-240V~50/60Hz
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3.2 Technical Specifications

Frequency Band:	3450MHz to 3550MHz 3550MHz to 3700MHz 3700MHz to 3980MHz
Antenna Type:	External
Antenna Gain:	6 dBi for 3450MHz to 3550MHz (Provided by manufacturer) 6 dBi for 3550MHz to 3700MHz (Provided by manufacturer) 6 dBi for 3700MHz to 3980MHz (Provided by manufacturer)
Modulation Type:	5G NR: CP-OFDM: QPSK, 16QAM, 64QAM, 256QAM LTE: QPSK, 16QAM, 64QAM, 256QAM
Antenna Delivery:	SISO
Temperature Range:	-40°C to 55°C

Remark: The information in this section is provided by the applicant or manufacturer, SGS is not liable to the accuracy, suitability, reliability or/and integrity of the information.



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3.3 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen Branch

Address 1: No. 1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China. 518057.

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:

- **A2LA (Certificate No. 3816.01)**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 3816.01.

- **VCCI (Member No. 1937)**

The 3m Fully-anechoic chamber for above 1GHz, 10m Semi-anechoic chamber for below 1GHz, Shielded Room for Mains Port Conducted Interference Measurement and Telecommunication Port Conducted Interference Measurement of SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen EMC laboratory have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-20026, R-14188, C-12383 and T-11153 respectively.

- **FCC –Designation Number: CN1336**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized as an accredited testing laboratory.

Designation Number: CN1336. Test Firm Registration Number: 787754.

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

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0006.

IC#: 4620C.



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



5 Measurement and Calculation

5.1 Maximum transmit power

The Power Data is based on the RF Test Report SZCR230700233601AT& SZCR230700233602AT

5.2 MPE Calculation

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

Note:

1)P (mW)

2)R = distance to the center of radiation of antenna (in centimeter)

Frequency Band (MHz)	Max E.I.R.P	Turn up E.I.R.P	Operation Distance	Power Density	Limit of Power Density	Ratio (Power Density/Limit)	Result
	(dBm)	(dBm)	R(cm)	(mW/cm ²)	S(mW/cm ²)		
3450-3550	43.57	45	72	0.4854	1	0.4854	Pass
3550-3700	22.95	24	72	0.0039	1	0.0039	Pass
3700-3980	43.61	45	72	0.4854	1	0.4854	Pass



Simultaneous transmission:

Wireless Configure	Tune Up EIRP (dBm)	Power Density S at R = 72 cm (mW/cm2)	Limit of Power Density S(mW/cm2)	Ratio (Power Density/Limit)	Limit
3450-3550	45	0.4854	1	0.975	1
3550-3700	24	0.0039	1		
3700-3980	45	0.4854	1		

Note:

(1) The EUT can support four band simultaneous transmitted.

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

--End of the Report--



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