

RF Exposure Report

Report No.: FCC_RF_SL20031101-SPC-001_MPE Rev_3.0

FCC ID: OJFRN510

Test Model: SCRN-510-28G1

Series Model: N/A

Issued Date: 11/05/2020

Applicant: Corning Optical Communication

Address: 475 Sycamore Dr, Milpitas, CA 95035, U.S.A.

Manufacturer: Corning Optical Communication

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Issued By: Bureau Veritas Consumer Products Services, Inc.

Lab Address: 775 Montague Expressway, Milpitas, CA 95035

Test Location (1): 775 Montague Expressway, Milpitas, CA 95035

**FCC Registration /
Designation Number:** 540430



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Release Control Record

Issue No.	Description	Date Issued
FCC_RF_SL20031101-SPC-001_MPE	Initial Release	10/15/2020
FCC_RF_SL20031101-SPC-001_MPE Rev_1.0	Update Per review	10/19/2020
FCC_RF_SL20031101-SPC-001_MPE Rev_2.0	Update Per review	10/26/2020
FCC_RF_SL20031101-SPC-001_MPE Rev_3.0	Correct device type to fixed and base station	11/05/2020

2 RF Exposure

2.1 Limits for Maximum Permissible Exposure (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (Mw/cm ²)	Average 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

f = Frequency in MHz; *Plane-wave equivalent power density

2.2 MPE Calculation Formula

$$Pd = (Pout * G) / (4 * \pi * r^2)$$

Where

Pd = power density in Mw/cm²

Pout = output power to antenna in Mw

G = gain of antenna in linear scale

Pi = 3.1416

R = distance between observation point and center of the radiator in cm

2.3 Classification

The antenna of this product, under normal use condition, is at least 40cm away from the body of the user.
 So, this device is classified as fixed and base station device.

2.4 Antenna Gain

Ant. No.	Freq. range (MHz)	Ant. Type	Ant. Gain (dBi)	Connector Type
5G NR Antenna	27500~28350	Patch Array	22.5	N/A

2.5 Calculation Result of Maximum Radiated Power

Frequency (GHz)	E.I.R.P (dBm)	Distance (cm)	Power Density (mW/cm ²)	Limit (mW/cm ²)
27.925	42.55	40	0.895	1

Note:

1. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.
2. Calculate SAR test exclusion thresholds from condition "1" formulas.

3 Conclusion

Conclusion:

0.895 < 1

The maximum calculations of above situations are less than the "1" limit.

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