RF Exposure Report

Report No.:	FCC_RF_SL20031101-SPC-001_MPE Rev_2.0
FCC ID:	OJFRN510
Test Model:	SCRN-510-28G1
Series Model:	N/A
Issued Date:	10/26/2020
Applicant:	Corning Optical Communication
Address:	475 Sycamore Dr, Milpitas, CA 95035, U.S.A.
Manufacturer:	Corning Optical Communication
Address:	475 Sycamore Dr, Milpitas, CA 95035, U.S.A.
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

ACCREDITED
TESTING CERT # 2742-01

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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

1 Certificate of Conformity

Product:	5G mmWave SmallCell Radio Node
Brand:	COC Wireless
Test Model:	SCRN-510-28G1
Sample Status:	Engineering sample
Applicant:	Corning Optical Communication
Standards:	FCC Part 2 (Section 2.1091) KDB 447498 D01 General RF Exposure Guidance v06 IEEE C95.3 -2002

The above equipment has been tested by **Bureau Veritas Consumer Products Services, Inc., Milpitas Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

Prepared by : _____ , **Date:** 10/26/2020

Deon Dai / Test Engineer

Approved by : _____ , **Date:** 10/26/2020

Shuo Zhang / Engineer Reviewer

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/cm^2

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 Mobile 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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