# RF Exposure Report

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|---|---|
| **Report No.:** | FCC_RF Exposure_SL21030302-CMM-011_B12B17 |
| **FCC ID:** | QHYRPM-A5A11-B12 |
| **Test Model:** | RPM-A5A11-B12 |
| **Host Name:** | RP5200 Base Band Module |
| **Series Model:** | N/A |
| **Received Date:** | 03/16/2021 |
| **Test Date:** | 04/16/2021-04/22/2021 |
| **Issued Date:** | 04/26/2021 |
| **Standards:** | FCC Part 2 (Section 2.1093)<br>KDB 447498 D01 General RF Exposure Guidance v06<br>IEEE C95.1-1992 |
| **Applicant:** | CommScope |
| **Address:** | 900 Chelmsford St, Lowell, MA 01851 |
| **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 |
| **ISED# / CAB identifier:** | 4842D |

ACCREDITED
TESTING CERT # 2742-01

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## Release Control Record

| Issue No. | Description | Date Issued |
|---|---|---|
| FCC_RF Exposure_SL21030302-CMM-011_B12B17 | Orignal Release | 04/26/2021 |
| | | |
| | | |

## 1 Certificate of Conformity

| | |
|---|---|
| **Product:** | OneCell Radio Point |
| **Brand:** | CommScope |
| **Test Model:** | RPM-A5A11-B12 |
| **Host Name:** | RP5200 Base Band Module |
| **Series Model:** | N/A |
| **Sample Status:** | Engineering Sample |
| **Applicant:** | CommScope |
| **Test Date:** | 04/16/2021-04/22/2021 |
| **Standards:** | FCC Part 2 (Section 2.1093)<br>KDB 447498 D01 General RF Exposure Guidance v06<br>IEEE C95.1-1992 |

The above equipment has been tested by **Bureau Veritas Consumer Products Services, Inc., Littleton 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 :** Gary Chou , **Date:** 04/26/2021

Gary Chou / Test Engineer

**Approved by :** Deon , **Date:** 04/26/2021

Deon Dai / 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 20cm away from the body of the user. So, this device is classified as Mobile Device.

### 2.4 Antenna Gain

The antenna type is PCB antenna with 4 dBi gain.

2.5 Calculation Result of Maximum Conducted Power

| Frequency (MHz) | Max Power (dBm) | Max Power (mW) | Turn-Up Tolerance | Antenna Gain (dBi) | Distance (cm) | Power Density ($mW/cm^2$) | Limit ($mW/cm^2$) |
|---|---|---|---|---|---|---|---|
| 737.5 | 24.67 | 293 | ±1dB | 4 | 20 | 0.18 | 0.491 |

Note:

1. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

## 3 Conclusion

**Conclusion:**

MPE = 0.18 mW/cm2 <0.491 mW/cm2

**--- END ---**