

RF Exposure Report

Report No.: FCC_RF Exposure_LT19092001-CMM-001B12B17 Rev_2.0

FCC ID: QHYRPM-A5A11-B12

Test Model: RPM-A5A11-B12

Host Name: RP5100 Base Band Module

Series Model: N/A

Received Date: 10/03/2019

Test Date: 10/03/2019-10/11/2019

Issued Date: 01/20/2020

Standards: FCC Part 2 (Section 2.1093)

KDB 447498 D01 General RF Exposure Guidance v06

IEEE C95.1-1992

Applicant: CommScope

Address: 900 Chelmsford St, Lowell, MA 01851

Issued By: Bureau Veritas Consumer Products Services, Inc.

Lab Address: 1 Distribution Center Cir #1, Littleton, MA 01460

Test Location (1): 1 Distribution Center Cir #1, Littleton, MA 01460

**FCC Registration /
Designation Number:** 886956/US1028



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Release Control Record

Issue No.	Description	Date Issued
FCC_RF Exposure_LT19092001-CMM-001B12B17	Original Release	12/11/2019
FCC_RF Exposure_LT19092001-CMM-001B12B17 Rev_1.0	Updated Per TCB Review	12/16/2019
FCC_RF Exposure_LT19092001-CMM-001B12B17 Rev_2.0	Updated EUT Information	01/20/2020

1 Certificate of Conformity

Product: OneCell Radio Point

Brand: CommScope

Test Model: RPM-A5A11-B12

Host Name: RP5100 Base Band Module

Series Model: N/A

Sample Status: Sample received in good condition

Applicant: CommScope

Test Date: 10/03/2019-01/16/2019

Standards: FCC Part 2 (Section 2.1093)

KDB 447498 D01 General RF Exposure Guidance v06

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 :  , **Date:** 01/20/2020
Chen Ge / Test Engineer

Approved by :  , **Date:** 01/20/2020
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

$$Pd = (P_{out} * G) / (4 * \pi * r^2)$$

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

2.4 Antenna Gain

The antenna type is External 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	24.86	306	± 1dB	4	20	0.19	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 = 0.19 mW/cm² < 0.491 mW/cm²

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