

RF Exposure Report

Report No.: SA191008E02

FCC ID: 2ARXKRG1008M

Test Model: RG-1008M

Received Date: Oct. 08, 2019

Test Date: Dec. 06, 2019

Issued Date: Feb. 07, 2020

Applicant: Veea Inc.

Address: 164 E 83rd Street, New York NY, 10028

Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
Hsin Chu Laboratory

Lab Address: E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300,
Taiwan

Test Location: E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300,
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**FCC Registration /
Designation Number:** 723255 / TW2022

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Release Control Record

Issue No.	Description	Date Issued
SA191008E02	Original release.	Feb. 07, 2020

1 Certificate of Conformity

Product: LoRaWAN Gateway module

Brand: Veea

Test Model: RG-1008M

Sample Status: ENGINEERING SAMPLE

Applicant: Veea Inc.

Test Date: Dec. 06, 2019

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 (H.K.) Ltd., Taoyuan 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:** Feb. 07, 2020
Claire Kuan / Specialist

Approved by :  , **Date:** Feb. 07, 2020
Clark Lin / Technical Manager

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

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

where

P_d = power density in mW/cm²

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

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

2.4 Antenna Gain

Antenna No.	Antenna Model	Antenna Gain (dBi)	Frequency Range	Antenna Type	Connector Type	Cable Length(mm)
1	MFB9153	3	902-928 MHz	Dipole	N Female	1169.4(Outdoor) 1014.4(Indoor)
2	MFB9155NF	5	902-928MHz	Dipole	N Female	1169.4(Outdoor) 1014.4(Indoor)
3	MPAMB700MSMA	2	698-960 MHz	Dipole	SMA Male	100
4	ET915NPMR	2.7	902-928 MHz	Dipole	N Male	255

Note: Max. gain was selected for the final test.

2.5 Calculation Result of Maximum Conducted Power

Operation Mode	Evaluation Frequency (MHz)	Max Power (mW)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm ²)	Limit (mW/cm ²)
LoRa	923.3	320.627	5	20	0.20171	0.61553

NOTE:

1. Limit of Power Density = $f/1500$
2. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

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