

## RF Exposure Report

**Report No.:** SA180509C29A

**FCC ID:** RID-LM110H1

**Test Model:** LM-110H1

**Received Date:** Mar. 17, 2016

**Test Date:** May 18 ~ Sep. 08, 2016

**Issued Date:** Jun. 01, 2018

**Applicant:** GlobalSat WorldCom Corporation

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(R.O.C.)

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

**Lab Address:** No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan  
(R.O.C.)

**Test Location:** No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City  
33383, TAIWAN (R.O.C.)

**FCC Registration /** 788550 / TW0003

**Designation Number:**



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### Release Control Record

Issue No.	Description	Date Issued
SA180509C29A	Original release.	Jun. 01, 2018

## 1 Certificate of Conformity

**Product:** LoRa Wireless Module

**Brand:** GlobalSat

**Test Model:** LM-110H1

**Sample Status:** Mass product

**Applicant:** GlobalSat WorldCom Corporation

**Test Date:** May 18 ~ Sep. 08, 2016

**Standards:** FCC Part 2 (Section 2.1091)

KDB 447498 D01 General RF Exposure Guidance v06

IEEE C95.1

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 RF characteristics under the conditions specified in this report.

**Prepared by :** Suntee Liu, **Date:** Jun. 01, 2018

Suntee Liu / Specialist

**Approved by :** Bruce Chen, **Date:** Jun. 01, 2018

Bruce Chen / Project Engineer

## 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 <sup>2</sup> )	Average Time (minutes)
Limits For General Population / Uncontrolled Exposure				
300-1500	...	...	F/1500	30
1500-100,000	...	...	1.0	30

F = Frequency in MHz

### 2.2 MPE Calculation Formula

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

where

Pd = power density in mW/cm<sup>2</sup>

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.

## 3 Calculation Result of Maximum Conducted Power

Max Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
Hybrid Mode (125kHz Bandwidth, 64 channels)				
18.33	2.95	20	0.027	0.601
Hybrid Mode (250kHz Bandwidth, 25 channels)				
18.29	2.95	20	0.026	0.601
Hybrid Mode (500kHz Bandwidth, 25 channels)				
19.24	2.95	20	0.033	0.601
Hybrid Mode (500kHz Bandwidth, 8 channels)				
19.24	2.95	20	0.033	0.601
DTS Mode (500kHz Bandwidth, 25 channels)				
19.24	2.95	20	0.033	0.601

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