RF Exposure Report

Report No.:	SA170824C11D
FCC ID:	RID-LM513
Test Model:	LM-513H
Received Date:	Oct. 27, 2017
Test Date:	Nov. 01 ~ Dec. 20, 2017
Issued Date:	Feb. 23, 2018
Applicant:	Globalsat Worldcom Corporation
Address:	16F., No.186, Jian 1st Rd., Zhonghe Dist., New Taipei City 235, Taiwan (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 / Designation Number:	788550 / TW0003

Table of Contents

Release Control Record

Issue No.	Description	Date Issued
SA170824C11D	Original release	Feb. 23, 2018

1 Certificate of Conformity

Product:	LoRa Module
Brand:	GlobalSat
Test Model:	LM-513H
Sample Status:	Engineering sample
Applicant:	GlobalSat WorldCom Corporation
Test Date:	Nov. 01 ~ Dec. 20, 2017
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 : Alice Ho , **Date:** Feb. 23, 2018

Alice Ho / Specialist

Approved by : Bruce Chen , **Date:** Feb. 23, 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^2)	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^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.

3 Calculation Result of Maximum Conducted Power

Mode	Max Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm^2)	Limit (mW/cm^2)
Hybrid Mode (125kHz Bandwidth)	19.25	2.95	20	0.033	0.601
Hybrid Mode (500kHz Bandwidth)	19.32	2.95	20	0.034	0.601

Note: 125kHz & 500kHz bandwidth can't transmit simultaneously.

---END---