

## FCC Part 2 Test Report

**Report No.:** SA160629C28

**FCC ID:** LDKIXMLPWA900

**Test Model:** IXM-LPWA-900-16-K9

**Received Date:** Jun. 29, 2016

**Test Date:** Jul. 18 ~ Jul. 28, 2016

**Issued Date:** Jul. 28, 2016

**Applicant:** Cisco Systems Inc

**Address:** 125 West Tasman Drive, San Jose, California, United States

**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

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



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### Release Control Record

Issue No.	Description	Date Issued
SA160629C28	Original release.	Jul. 28, 2016

## 1 Certificate of Conformity

**Product:** Cisco LoRaWAN Interface Module

**Brand:** Cisco Systems, Inc

**Test Model:** IXM-LPWA-900-16-K9

**Sample Status:** Engineering sample

**Applicant:** Cisco Systems Inc

**Test Date:** Jul. 18 ~ Jul. 28, 2016

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

KDB 447498 D01 (October 23, 2015)

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 EMC characteristics under the conditions specified in this report.

**Prepared by :**  \_\_\_\_\_, **Date:** Jul. 28, 2016

Pettie Chen / Senior Specialist

**Approved by :**  \_\_\_\_\_, **Date:** Jul. 28, 2016

Ken Liu / Senior 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 <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 23cm 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> )
29.73	6.22	23	0.592	0.616

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