

## RF Exposure Report

**Report No.:** SA151228C18B

**FCC ID:** VPYLB1DX

**Test Model:** 1DX

**Series Model:** 1FX (1FX is identical to 1DX except without BT function)

**Received Date:** Dec. 28, 2015

**Test Date:** Jan. 07 ~ Jan. 13, 2016

**Issued Date:** Jun. 13, 2016

**Applicant:** Murata Manufacturing Co., Ltd.

**Address:** 10-1, Higashikotari 1-chome, Nagaokakyo-shi, Kyoto 617-8555, Japan

**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
SA151228C18B	Original release	Jun. 13, 2016

## 1 Certificate of Conformity

**Product:** Communication Module

**Brand:** MURATA

**Test Model:** 1DX

**Series Model:** 1FX (1FX is identical to 1DX except without BT function)

**Sample Status:** Engineering sample

**Applicant:** Murata Manufacturing Co., Ltd.

**Test Date:** Jan. 07 ~ Jan. 13, 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.

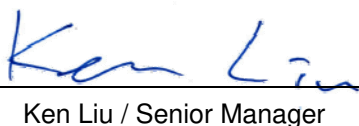
**Prepared by :**

  
Polly Chien / Specialist

**Date:**

Jun. 13, 2016

**Approved by :**

  
Ken Liu / Senior Manager

**Date:**

Jun. 13, 2016

## 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

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

where

$P_d$  = power density in mW/cm<sup>2</sup>

$P_{out}$  = 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

Frequency Band	Max Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
WLAN (2412 ~ 2462MHz)	22.40	1.4	20	0.048	1
Bluetooth EDR (2402 ~ 2480MHz)	9.54	1.4	20	0.002	1
Bluetooth LE (2402 ~ 2480MHz)	8.68	1.4	20	0.002	1

\* WLAN and BT cannot transmit at the same time.

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