

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.

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

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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 , **Date:** Jun. 13, 2016
Polly Chien / Specialist

Approved by : Ken Liu , **Date:** Jun. 13, 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 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/cm²

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

Frequency Band	Max Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm ²)	Limit (mW/cm ²)
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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