

RF Exposure Report

Report No.: SA160104C01

FCC ID: VPYLB1GC

Test Model: Type1GC

Received Date: Jan. 04, 2016

Test Date: Feb. 16 ~ Mar. 31, 2016

Issued Date: Apr. 21, 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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Table of Contents

Release Control Record	3
1 Certificate of Conformity	4
2 RF Exposure	5
2.1 Limits for Maximum Permissible Exposure (MPE).....	5
2.2 MPE Calculation Formula	5
2.3 Classification	5
3 Calculation Result of Maximum Conducted Power	5



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Release Control Record

Issue No.	Description	Date Issued
SA160104C01	Original release.	Apr. 21, 2016

1 Certificate of Conformity

Product: Communication Module

Brand: MURATA

Test Model: Type1GC

Sample Status: Engineering sample

Applicant: Murata Manufacturing Co., Ltd.

Test Date: Feb. 16 ~ Mar. 31, 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:** Apr. 21, 2016
Ivy Lin / Specialist

Approved by :  , **Date:** Apr. 21, 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

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

where

P_d = power density in mW/cm²

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

π = 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 (MHz)	Max Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm ²)	Limit (mW/cm ²)
2412-2462MHz	21.21	1.2	20	0.035	1
5180-5240MHz	12.95	2.5	20	0.007	1
5260-5320MHz	13.04	2.5	20	0.007	1
5500-5720MHz	12.92	2.5	20	0.007	1
5745-5825MHz	12.77	2.5	20	0.007	1

* The 2.4GHz and 5GHz cannot transmit simultaneously.

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