

# **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.

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			
SA160104C01					
Issue No. SA160104C01	Description Original release.	Date Issued 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 :	My Lin / Spe	2m,	Date:	Apr. 21, 2016	-
Approved by :	Ken Liu / Senior	Lin, Manager	Date:	Apr. 21, 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

 $Pd = (Pout^{*}G) / (4^{*}pi^{*}r^{2})$ 

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

 ${\sf R}$  = 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 <sup>2</sup> )	Limit (mW/cm²)
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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