RF Exposure Report

Report No.:	SA160104C01C
FCC ID:	VPYLB1GC
Test Model:	Type 1PS
Series Model:	Type 1GC
Received Date:	Sep. 11, 2019
Test Date:	Sep. 19 ~ Oct. 01, 2019
Issued Date:	Oct. 17, 2019
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 Lin Kou Laboratories
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
FCC Registration / Designation Number:	788550 / TW0003

Table of Contents

Release Control Record

Issue No.	Description	Date Issued
SA160104C01C	Original release.	Oct. 17, 2019

1 Certificate of Conformity

Product:	Communication Module
Brand:	MURATA
Test Model:	Type 1PS
Series Model:	Type 1GC
Sample Status:	Engineering sample
Applicant:	Murata Manufacturing Co., Ltd.
Test Date:	Sep. 19 ~ Oct. 01, 2019
Standards:	FCC Part 2 (Section 2.1091) KDB 447498 D01 General RF Exposure Guidance v06 IEEE C95.1-1992

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 RF characteristics under the conditions specified in this report.

Prepared by : _____ , **Date:** Oct. 17, 2019

Polly Chien / Specialist

Approved by : _____ , **Date:** Oct. 17, 2019

Bruce Chen / Senior Project Engineer

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				
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	($180/f^2$)*	30
30-300	27.5	0.073	0.2	30
300-1500	…	…	f/1500	30
1500-100,000	…	…	1.0	30

f = Frequency in MHz; *Plane-wave equivalent power density

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
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)
WLAN 2412~2462	21.21	1.2	20	0.035	1
WLAN 5180~5240	12.07	2.5	20	0.006	1
WLAN 5260~5320	11.97	2.5	20	0.006	1
WLAN 5500~5720	12.12	2.5	20	0.006	1
WLAN 5745~5825	11.91	2.5	20	0.005	1

* The 2.4GHz and 5GHz cannot transmit simultaneously.
Note: Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

---END---