

RF Exposure Report

Report No.: SA150713C14

FCC ID: VPYLB1ES

Test Model: LBEQ6ZZ1ES

Received Date: Jul. 13, 2015

Test Date: Jul. 22 ~ Sep. 11, 2015

Issued Date: Sep. 16, 2015

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
SA150713C14	Original release	Sep. 16, 2015



1 Certificate of Conformity

Product: Communication Module
Brand: MURATA
Test Model: LBEQ6ZZ1ES
Sample Status: Engineering sample
Applicant: Murata Manufacturing Co., Ltd.
Test Date: Jul. 22 ~ Sep. 11, 2015
Standards: FCC Part 2 (Section 2.1091)
KDB Publication 447498 D01 General RF Exposure Guidance v06
865664 D02 RF Exposure Reporting v01r02
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:** Sep. 16, 2015
Pettie Chen / Senior Specialist

Approved by :  , **Date:** Sep. 16, 2015
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

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

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)
2412-2462	21.57	2.07	20	0.046	1
5180-5240	13.51	2.43	20	0.008	1
5260-5320	13.17	2.43	20	0.007	1
5500-5700	12.94	2.43	20	0.007	1
5745-5825	13.21	2.43	20	0.007	1
Bluetooth EDR	8.34	2.07	20	0.002	1
Bluetooth LE	8.39	2.07	20	0.002	1

*WIFI and Bluetooth cannot transmit and receive simultaneously

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