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RF EXPOSURE REPORT

REPORT NO.: SA141025E01

MODEL NO.: M-R0052

FCC ID: JNZMR0052

RECEIVED: Oct. 25, 2014

TESTED: Oct. 31, 2014

ISSUED: Nov. 06, 2014

APPLICANT: LOGITECH FAR EAST LTD.

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Hsinchu Taiwan, R.O.C.

ISSUED BY : Bureau Veritas Consumer Products Services
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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
SA141025E01	Original release	Nov. 06, 2014



1. CERTIFICATION

PRODUCT: 2.4GHz Cordless Mouse
BRAND NAME: Logitech
MODEL NO.: M-R0052
TEST SAMPLE: ENGINEERING SAMPLE
APPLICANT: LOGITECH FAR EAST LTD.
TESTED: Oct. 31, 2014
STANDARDS: FCC Part 2 (Section 2.1091)
KDB 447498 D03
IEEE C95.1

The above equipment (Model: M-R0052) 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: m.-d.-l-17, Date: Nov. 06, 2014
(Midoli Peng, Specialist)

Approved by: May Chen, Date: Nov. 06, 2014
(May Chen, Manager)

2. EVALUATION RESULT

2.1 SAR TEST EXCLUSION THRESHOLDS

Following FCC KDB 447498 D01 “General RF Exposure Guidance”

The corresponding SAR Exclusion Threshold condition, listed below:

- 1) The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$ for 1-g SAR and ≤ 7.5 for 10-g extremity SAR where

- $f(\text{GHz})$ is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison

The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.

- 2) At 100 MHz to 6 GHz and for test separation distances > 50 mm, the SAR test exclusion threshold is determined according to the following:

- [Threshold at 50 mm in step 1) + (test separation distance - 50 mm) · ($f(\text{MHz})/150$)] mW, at 100MHz to 1500 MHz
- [Threshold at 50 mm in step 1) + (test separation distance - 50 mm) · 10] mW at > 1500 MHz and ≤ 6 GHz

- 3) At frequencies below 100 MHz, the following may be considered for SAR test exclusion.

- The threshold at the corresponding test separation distance at 100 MHz in step 2) is multiplied by $[1 + \log(100/f(\text{MHz}))]$ for test separation distances > 50 mm and < 200 mm.
- The threshold determined by the equation in a) for 50 mm and 100 MHz is multiplied by $\frac{1}{2}$ for test separation distances ≤ 50 mm.
- SAR measurement procedures are not established below 100 MHz. When SAR test exclusion cannot be applied, a KDB inquiry is required to determine SAR evaluation requirements for any test results to be acceptable.



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Maximum measured transmitter power:

Frequency (GHz)	Max. Power (mW)	Min. test separation distance (mm)	SAR test exclusion calculation value ^(NOTE 2)	10-g SAR test exclusion thresholds	Result
2.402 ~ 2.480	2.061	5	0.649	7.5	Pass

NOTE: 1. The antenna type is PCB printed antenna with 0.08dBi gain.
2. Calculate SAR test exclusion thresholds from condition "1" formulas.

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