

## RF EXPOSURE REPORT

**REPORT NO.:** SA130604C07

**MODEL NO.:** 1592

FCC ID: C3K1592

**RECEIVED:** May 17, 2013

**TESTED:** May 23 ~ May 25, 2013

**ISSUED:** Jun. 07, 2013

**APPLICANT:** Microsoft Corporation

ADDRESS: One Microsoft Way, Redmond WA 98052-6399,

U.S.A.

**ISSUED BY:** Bureau Veritas Consumer Products Services

(H.K.) Ltd., Taoyuan Branch

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# **TABLE OF CONTENTS**

RELEA	RELEASE CONTROL RECORD					
	CERTIFICATION					
2.	EVALUATION RESULT	5				
3	SAR TEST EXCLUSION THRESHOLDS	6				



## **RELEASE CONTROL RECORD**

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
SA130604C07	Original release.	Jun. 07, 2013



#### 1. CERTIFICATION

**PRODUCT:** Wireless Mouse

**MODEL:** 1592

**BRAND:** Microsoft

**APPLICANT:** Microsoft Corporation

**TESTED:** May 23 ~ May 25, 2013

TEST SAMPLE: ENGINEERING SAMPLE

STANDARDS: FCC Part 2 (Section 2.1091)

FCC OET Bulletin 65, Supplement C (01-01)

**IEEE C95.1** 

The above equipment (Model: 1592) 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.

Pettie Chen / Senior Specialist

Ken Liu / Senior Manager



#### 2. EVALUATION RESULT

#### Following FCC KDB 447498 D01 "General SAR test exclusion 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: [(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] ·[√f(GHz)] ≤ 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR,16 where
  - f(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.</p>
- 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:
  - a) [Threshold at 50 mm in step 1) + (test separation distance 50mm)·( f(MHz)/150)] mW, at 100MHz to 1500 MHz
  - b) [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.
  - a) The threshold at the corresponding test separation distance at 100 MHz in step 2) is multiplied by [1 + log(100/f(MHz))] for test separation distances > 50 mm and < 200 mm.
  - b) The threshold determined by the equation in a) for 50 mm and 100 MHz is multiplied by  $\frac{1}{2}$  for test separation distances  $\leq$  50 mm.
  - c) 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.



## 3. SAR TEST EXCLUSION THRESHOLDS

Maximum measured transmitter power:

Frequency (GHz)	Max. Power (mW)	Min. test separation distance (mm)	SAR test exclusion calculation value <sup>(NOTE 2)</sup>	1\$-g extremity SAR test exclusion thresholds	Result
2.402 ~ 2.480	1.140	5	0.353	7.5	Pass

**NOTE:** 1. The antenna type is monopole antenna with 1.96dBi gain.

2. Calculate SAR test exclusion thresholds from condition "1" formulas.