



# RF EXPOSURE REPORT

**REPORT NO.:** SA121126E13A

**MODEL NO.:** WM524

**FCC ID:** JNZWM524

**RECEIVED:** Nov. 26, 2012

**TESTED:** Nov. 29, 2012

**ISSUED:** Dec. 11, 2012

**APPLICANT:** LOGITECH FAR EAST LTD.

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**ISSUED BY:** Bureau Veritas Consumer Products Services  
(H.K.) Ltd., Taoyuan Branch Hsin Chu Laboratory

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## RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
SA121126E13A	Original release	Dec. 11, 2012



## 1. CERTIFICATION

**PRODUCT:** Bluetooth Mouse  
**BRAND NAME:** DELL  
**MODEL NO.:** WM524  
**TEST SAMPLE:** ENGINEERING SAMPLE  
**APPLICANT:** LOGITECH FAR EAST LTD.  
**TESTED DATE:** Nov. 29, 2012  
**STANDARDS:** FCC Part 2 (Section 2.1091)  
FCC OET Bulletin 65, Supplement C (01-01)  
IEEE C95.1

The above equipment (Model: WM524) 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** : Phoenix Huang, **DATE:** Dec. 11, 2012  
( Phoenix Huang, Specialist )

**APPROVED BY** : May Chen, **DATE:** Dec. 11, 2012  
( May Chen, Deputy 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  $\leq 50$  mm are determined by:  
[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)]  $\cdot \sqrt{f(\text{GHz})} \leq 3.0$  for 1-g SAR and  $\leq 7.5$  for 10-g extremity SAR, 16 where
  - Ø  $f(\text{GHz})$  is the RF channel transmit frequency in GHz
  - Ø Power and distance are rounded to the nearest mW and mm before calculation
  - Ø The result is rounded to one decimal place for comparisonThe test exclusions are applicable only when the minimum test separation distance is  $\leq 50$  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:
  - a) [Threshold at 50 mm in step 1) + (test separation distance - 50 mm)  $\cdot (f(\text{MHz})/150)$ ] mW, at 100MHz to 1500 MHz
  - b) [Threshold at 50 mm in step 1) + (test separation distance - 50 mm)  $\cdot 10$ ] mW at  $> 1500$  MHz and  $\leq 6$  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  $[1 + \log(100/f(\text{MHz}))]$  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.

## SAR Test Exclusion Thresholds

Frequency (GHz)	Max. Power (mW)	Min. test separation distance (mm)	SAR test exclusion calculation value <sup>*1</sup>	10-g extremity SAR test exclusion thresholds	Result
2.402 ~ 2.480	1.297	5	0.4019	7.5	Pass

\*1 Calculate SAR test exclusion thresholds from “ 1)” formulas.

## Conclusion

Since Source-base time average power is below SAR test exclusion power thresholds, the SAR evaluation is not required.

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