



# RF EXPOSURE REPORT

**REPORT NO.:** SA140915C26

**MODEL NO.:** 500

**FCC ID:** X8Y500

**RECEIVED:** Sep. 15, 2014

**TESTED:** Nov. 04 ~ Nov. 18, 2014

**ISSUED:** Nov. 21, 2014

**APPLICANT:** Swiftpoint Limited

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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.   | REASON FOR CHANGE | DATE ISSUED   |
|-------------|-------------------|---------------|
| SA140915C26 | Original release. | Nov. 21, 2014 |



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## 1. CERTIFICATION

**PRODUCT:** Swiftpoint GT computer mouse

**MODEL NO.:** 500

**BRAND:** SWIFTPOINT

**APPLICANT:** Swiftpoint Limited

**TESTED:** Nov. 04 ~ Nov. 18, 2014

**TEST SAMPLE:** ENGINEERING SAMPLE

**STANDARDS:** FCC Part 2 (Section 2.1093)

KDB 447498 D03

IEEE C95.1

The above equipment (model: 500) 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.

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Celine Chou / Specialist

**APPROVED BY :** Ken Liu , **DATE :** Nov. 21, 2014  
Ken Liu / Senior Manager



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## 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:  
$$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0 \text{ for 1-g SAR and } \leq 7.5 \text{ for 10-g extremity SAR, 16}$$
 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  $\leq$  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)  $[\text{Threshold at 50 mm in step 1}] + (\text{test separation distance} - 50\text{mm}) \cdot (f(\text{MHz})/150)]$  mW, at 100MHz to 1500 MHz
  - b)  $[\text{Threshold at 50 mm in step 1}] + (\text{test separation distance} - 50 \text{ mm}) \cdot 10]$  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.



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### 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> | 10-g extremity SAR test exclusion thresholds | Result |
|-----------------|-----------------|------------------------------------|--|--|--------|
| 2.402 ~ 2.480   | 1.694           | 5                                  | 0.525  | 7.5  | Pass   |

**NOTE:** 1. The antenna type is PCB Trace antenna with 2.2dBi gain  
2. Calculate SAR test exclusion thresholds from condition "1" formulas.

### 4. CONCLUSION

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

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