

# RF EXPOSURE REPORT

**REPORT NO.:** SA140312C05A R1

**MODEL NO.:** HRM1026B

**FCC ID:** VIYHRM1026B

**IC:** 7305A-HRM1026B

**RECEIVED:** Mar. 12, 2014

**TESTED:** Mar. 15 ~ Mar. 18, 2014

**ISSUED:** May 21, 2014

**APPLICANT:** Hosiden Corporation

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**ISSUED BY:** Bureau Veritas Consumer Products Services  
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## RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
SA140312C05A	Original release	Mar. 19, 2014
SA140312C05A R1	Changed product name	May 21, 2014

## 1. CERTIFICATION

**PRODUCT:** Wireless Low Energy Module  
**MODEL:** HRM1026B  
**BRAND:** Hosiden  
**APPLICANT:** Hosiden Corporation  
**TESTED:** Mar. 15 ~ Mar. 18, 2014  
**TEST SAMPLE:** Production Prototype  
**STANDARDS:** **FCC Part 2 (Section 2.1091)**  
**FCC OET Bulletin 65, Supplement C (01-01)**  
**IEEE C95.1**  
**RSS-102 Issue 4 (2010-12)**

The above equipment (Model: HRM1026B) 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 :** May 21, 2014  
Pettie Chen / Senior Specialist

**APPROVED BY :**  , **DATE :** May 21, 2014  
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  $\leq 50$  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.

### 3. SAR TEST EXCLUSION THRESHOLDS

Maximum measured transmitter power:

**Data Rate 250kbps for 1MHz channel spacing:**

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	3.420	5	1.060	3	Pass

**Data Rate 1Mbps for 2MHz channel spacing:**

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	3.436	5	1.065	3	Pass

**Data Rate 2Mbps for 2MHz channel spacing:**

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	3.436	5	1.065	3	Pass

**NOTE:** 1. The antenna type is  $\lambda/4$  inverted-F antenna with -2.5dBi gain.

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