

# RF EXPOSURE REPORT

**REPORT NO.:** SA140728E05A

**MODEL NO.:** OR8400

**FCC ID:** NKR-OR8400

**RECEIVED:** July 28, 2014

**TESTED:** Aug. 04, 2014

**ISSUED:** Sep. 19, 2014

**APPLICANT:** Wistron NeWeb Corp.

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

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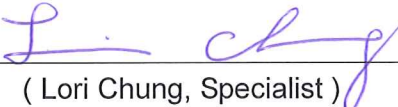
## RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
SA140728E05A	Original release	Sep. 19, 2014

## 1. CERTIFICATION

**PRODUCT:** High End RFID Reader module  
**BRAND NAME:** WNC  
**MODEL NO.:** OR8400  
**TEST SAMPLE:** ENGINEERING SAMPLE  
**APPLICANT:** Wistron NeWeb Corp.  
**TESTED DATE:** Aug. 04, 2014  
**STANDARDS:** FCC Part 2 (Section 2.1091)  
KDB 447498 D03  
IEEE C95.1

The above equipment (Model: OR8400) 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:** Sep. 19, 2014  
( Lori Chung, Specialist )

**APPROVED BY :**  , **DATE:** Sep. 19, 2014  
( May Chen, Manager )

## 2. RF EXPOSURE LIMIT

### LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

FREQUENCY RANGE (MHz)	ELECTRIC FIELD STRENGTH (V/m)	MAGNETIC FIELD STRENGTH (A/m)	POWER DENSITY (mW/cm <sup>2</sup> )	AVERAGE TIME (minutes)
LIMITS FOR GENERAL POPULATION / UNCONTROLLED EXPOSURE				
300-1500	...	...	F/1500	30
1500-100,000	...	...	1.0	30

F = Frequency in MHz

## 3. MPE CALCULATION FORMULA

$$P_d = (P_{out} \cdot G) / (4 \cdot \pi \cdot r^2)$$

where

$P_d$  = power density in mW/cm<sup>2</sup>

$P_{out}$  = output power to antenna in mW

G = gain of antenna in linear scale

$\pi$  = 3.1416

r = distance between observation point and center of the radiator in cm

## 4. CLASSIFICATION

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user. So, this device is classified as **Mobile Device**.

## 5. ANTENNA GAIN

The antenna provided to the EUT, please refer to the following table:

Ant. No.	PCB Chain No.	Brand	Model	Antenna Type	Gain(dBi) (excluding cable loss)	Cable Loss (dB)	Net Gain (dBi)	Frequency range (MHz to MHz)	Cable Length (m)	Antenna Connector
1	1~4	WNC	XRAB-N1	Linear	5.5	1.5	4	902~928	3	RP TNC
2	1~4	WNC	XRAB-N2	Linear	5.0	1.5	3.5	902~928	3	RP TNC
3	1~4	WNC	XRAB-N3	Linear	4.0	1.5	2.5	902~928	3	RP TNC

## 6. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

The maximum conducted power was refer to the radio test report  
(Report No.: RF140728E05).

FREQUENCY BAND (MHz)	CONDUCTED POWER (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/cm <sup>2</sup> )	LIMIT (mW/cm <sup>2</sup> )
902.75 ~ 927.25	931.108	4	20	0.46530	0.6

Note: Limit of Power Density =  $F/1500$

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