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# IRF EXPOSURE REPORT

**REPORT NO.:** SA130220C14A

**MODEL NO.:** TS890

**FCC ID:** TFJTS890

**RECEIVED:** Jun. 26, 2013

**TESTED:** Jun. 26, 2013

**ISSUED:** Jun. 28, 2013

**APPLICANT:** Uniform Industrial Corp.

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

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**TEST LOCATION:** No. 19, Hwa Ya 2nd Rd, Wen Hwa Tsuen, Kwei  
Shan Hsiang, Taoyuan Hsien 333, Taiwan, R.O.C.

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## RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
SA130220C14A	Original release	Jun. 28, 2013



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## 1. CERTIFICATION

**PRODUCT:** Payment Terminal  
**MODEL NO.:** TS890  
**BRAND:** UIC  
**APPLICANT:** Uniform Industrial Corp.  
**TESTED:** Jun. 26, 2013  
**TEST SAMPLE:** Production Unit  
**STANDARDS:** **FCC Part 2 (Section 2.1091)**  
**FCC OET Bulletin 65, Supplement C (01-01)**  
**IEEE C95.1**

The above equipment (model: TS890) 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 :** Evonne Liu , **DATE :** Jun. 28, 2013  
Evonne Liu / Specialist

**APPROVED BY :** Roy Wu , **DATE :** Jun. 28, 2013  
Roy Wu / Manager

## 2. RF EXPOSURE

### 2.1 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

### 2.2 MPE CALCULATION FORMULA

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

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

### 2.3 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**.

### 2.4 CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

Frequency BAND (MHz)	Operating Mode	Maximum Conducted (dBm)		Gain (dBi)	E.I.R.P. (mW)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
		Burst Avg. power	Time Avg. power				
GSM 850	GPRS 10	32.76	26.76	-1.25	353.95	0.07	0.55
GSM1900	GPRS 10	30.37	24.37	1.30	367.23	0.07	1