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RF EXPOSURE REPORT

REPORT NO.: SA111117E01

MODEL NO.: RU-827, RU-827-00X

(X :0~9 , A~Z , CONFIGURATION CODE)

FCC ID: MAD-RU-827

RECEIVED: Nov. 17, 2011

TESTED: Dec. 06, 2011

ISSUED: Dec. 15, 2011

APPLICANT: Microelectronics Technology Inc.

ADDRESS: 1, Innovation Road II, Hsinchu Science-based Industrial Park, Hsinchu, Taiwan, R.O.C.

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

LAB ADDRESS : No. 81-1, Lu Liao Keng, 9th Ling, Wu Lung Tsuen, Chiung Lin Hsiang, Hsin Chu Hsien 307, Taiwan

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
SA111117E01	Original release	Dec. 15, 2011



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1.CERTIFICATION

PRODUCT: RFID UHF 827 SERIES WITH AMS 3992 MODULE

BRAND NAME: MTI

MODEL NO.: RU-827, RU-827-00X

(X :0~9 , A~Z , CONFIGURATION CODE)

TEST SAMPLE: ENGINEERING SAMPLE

TESTED: Dec. 06, 2011

APPLICANT: Microelectronics Technology Inc.

STANDARDS: FCC Part 2 (Section 2.1091)

FCC OET Bulletin 65, Supplement C (01-01)

IEEE C95.1

The above equipment (Model: RU-827) 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. 15, 2011
(Phoenix Huang, Specialist)

APPROVED BY : May Chen , **DATE:** Dec. 15, 2011
(May Chen, Deputy Manager)



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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 ²)	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

$$Pd = (Pout * G) / (4 * \pi * r^2)$$

where

Pd = power density in mW/cm²

Pout = output power to antenna in mW

G = gain of antenna in linear scale

π = 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

1. There is one antenna provided to this EUT, please refer to the following table:

Antenna Type	Gain(dBi) Include cable loss	Frequency range (MHz to MHz)
Reverse- F	-0.51	902~928



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6. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

FREQUENCY BAND (MHz)	MAX POWER (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/ cm ²)	LIMIT (mW/cm ²)
902.75 ~ 927.25	70.8	-0.51	20	0.013	0.6

Note: Limit of Power Density = F/1500

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