

**TEST REPORT**

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Manufacturing Site : Same as applicant

Sample Description  
Product : Door Control Unit  
Model No. : MJM  
Electrical Rating : Input: 12V DC

Date Received : 04 Nov.,2014

Date Test Conducted : 05 Nov.,2014 - 06 Dec.,2014

Test standards : EN 62479:2010

Test Result : Pass

Conclusion : The submitted samples complied with the above standard.

Remark : None

\*\*\*\*\*End of Page\*\*\*\*\*

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**TEST RESULTS SUMMARY**

<b>RF Exposure Part for Tx</b>				
<b>Evaluation</b>	<b>Evaluation Requirement</b>	<b>Evaluation Method</b>	<b>Class / Severity</b>	<b>Result</b>
RF Exposure	EN 62479	EN 62479	20 mW (13 dBm)	PASS

**2**

**Results Conclusion**  
(with Justification)

RE: Testing Pursuant to R&TTE Directive 1999/5/EC Performed on the Door Control Unit,  
Model: MJM.

We tested the Door Control Unit, Model: MJM, to determine if it was in compliance with the relevant standards as marked on the Test Results Summary. We found that the unit met the requirement of EN 62479 standard when tested as received. The worst case's test data was presented in this test report.

The production units are required to conform to the initial sample as received when the units are placed on the market.

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**LABORATORY MEASUREMENTS**

**Configuration Information**

Operating Frequency	13.56 MHz
Type of Modulation:	ASK
Number of Channels	1
Antenna Type	Integral
Function:	Door Control Unit with 13.56 MHz as carrier
Power Supply:	12V DC
Support Equipment:	Adaptor: model no.: GFP361DA-1230-1 Input: 100-240V, 50-60Hz, 1.2A Output: 12V DC 3A

**Notes:**

The measurements had been made in the operating mode producing the largest emission in the frequency band being investigated consistent with normal applications.

An attempt had been made to maximize the emission by varying the configuration of the EUT.

## 4 Test Specification in EN 62479

### 4.1 General Description of Applied Standard

EN 62479

Assessment of the compliance of low power electronic and electrical equipment with the basic restrictions related to human exposure to electromagnetic fields (10 MHz to 300 GHz)

### 4.2 RF Exposure Evaluation

#### 4.2.1 Low-power exclusion level

According to **EN 62479 clause 4.2**

Low-power electronic and electrical equipment is deemed to comply with the provisions of this standard if it can be demonstrated using routes B, C or D that the available antenna power and/or the average total radiated power is less than or equal to the applicable low-power exclusion level  $P_{max}$ .

Here:

$P_{max} = 20 \text{ mW}$  (13 dBm) according to ICNIRP guidelines and IEEE Std C95.1-2005 since the EUT is General public used.

Example values of SAR-based  $P_{max}$  for some cases described by ICNIRP, IEEE Std C95.1-1999 and IEEE Std C95.1-2005

Guideline / Standard	SAR limit, SARmax W/kg	Averaging mass, m g	$P_{max}$ mW	Exposure tier (a)	Region of body (a)
ICNIRP [1]	2	10	20	General public	Head and trunk
	4	10	40	General public	Limbs
	10	10	100	Occupational	Head and trunk
	20	10	200	Occupational	Limbs
IEEE Std C95.1-1999 [2]	1,6	1	1,6	Uncontrolled environment	Head, trunk, arms, legs
	4	10	40	Uncontrolled environment	Hands, wrists, feet and ankles
	8	1	8	Controlled environment	Head, trunk, arms, legs
	20	10	200	Controlled environment	Hands, wrists, feet and ankles
IEEE Std C95.1-2005 [3]	2	10	20	Action level	Body except extremities and pinnae
	4	10	40	Action level	Extremities and pinnae
	10	10	100	Controlled environment	Body except extremities and pinnae
	20	10	200	Controlled environment	Extremities and pinnae

(a) Consult the appropriate standard for more information and definitions of terms.

Note:

Routes B The input power level to electrical or electronic components that are capable of radiating electromagnetic energy in the relevant frequency range is so low that the available antenna power and/or the average total radiated power cannot exceed the low-power exclusion

level.

Routes C The available antenna power and/or the average total radiated power are limited by product standards for transmitters to levels below the low-power exclusion level.

Routes D Measurements or calculations show that the available antenna power and/or the average total radiated power are below the low-power exclusion level.

**4.2.2 Test Data and Test result**

Frequency (MHz)	Measuring Bandwidth	H-field Level (dBµA/m)	EIRP Level (dBm)	P max (dBm)
13.56	300Hz	-11.40	-44.6	13

**Note:**

The radiated power (EIRP) in Watts is converted from magnetic field strength in dB(µA/m) using the following formula:

$$H = 20 \times \log_{10} \left( \frac{\sqrt{P / 30}}{4\pi d} \right) + 120$$

Where

H = magnetic field strength, in dB(µA/m)

P = EIRP, in Watts;

d = measurement distance, in metres

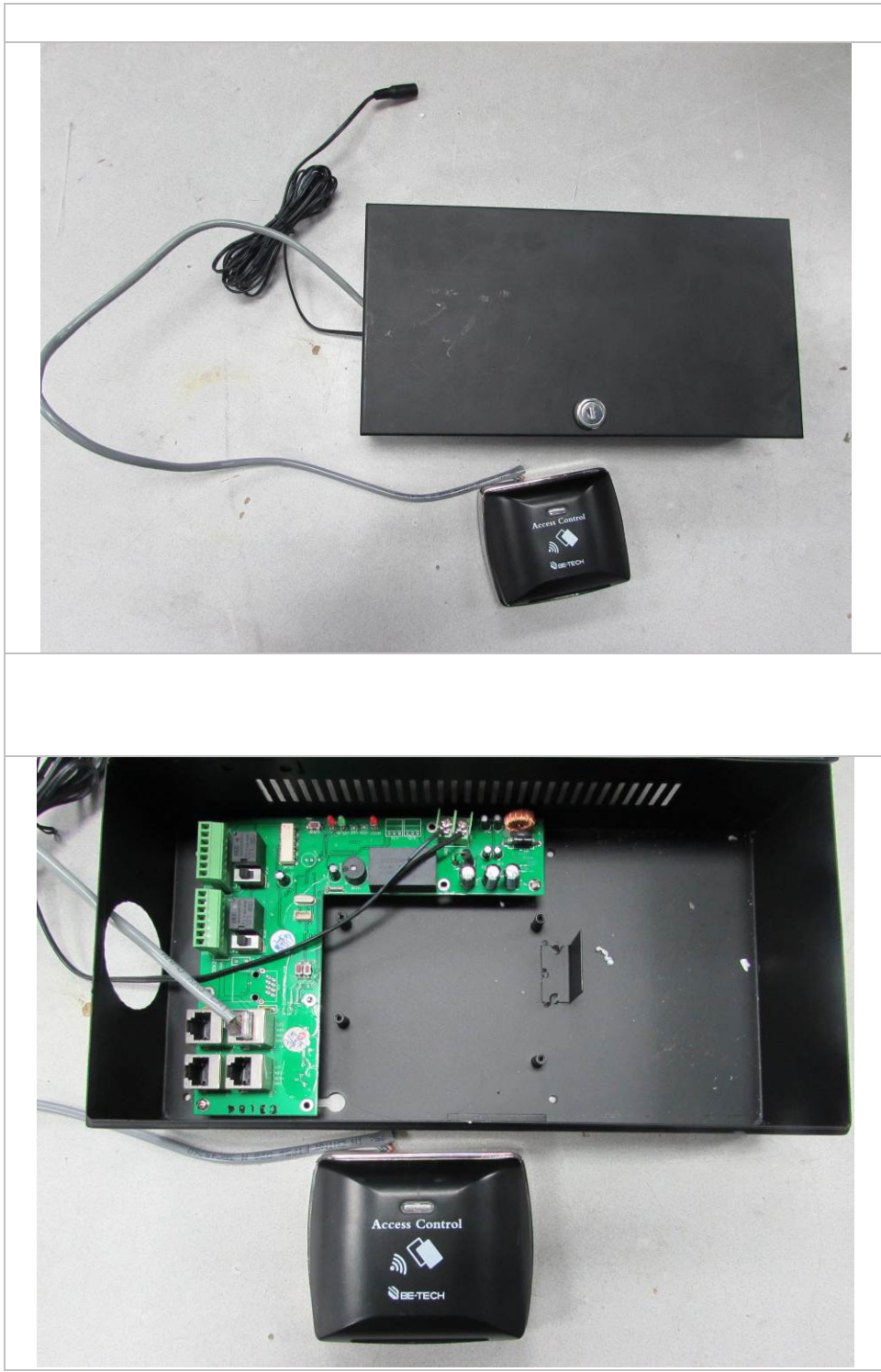
Here

H= -11.40dBµA/m

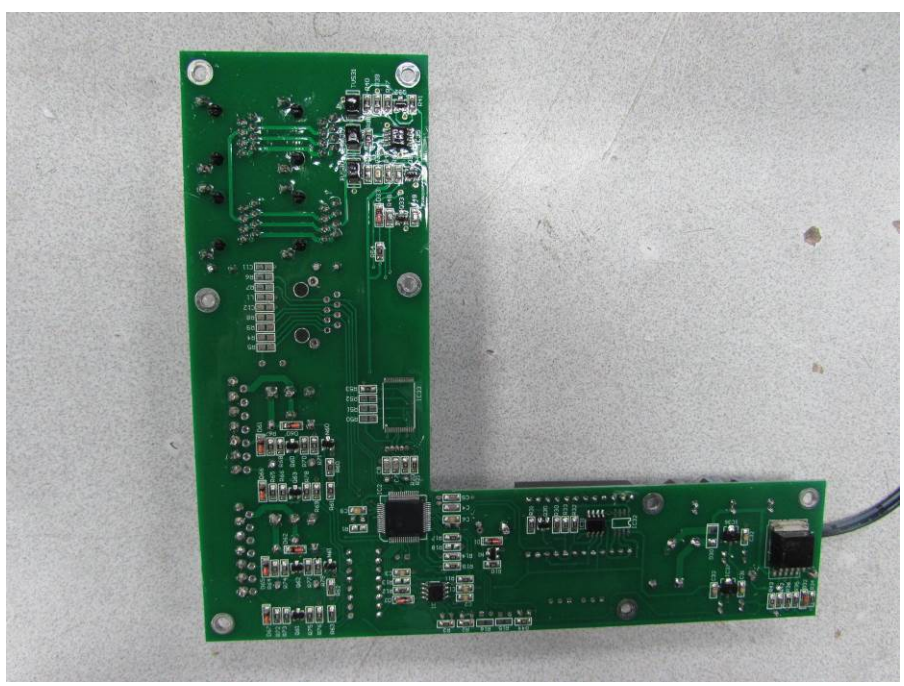
d=10 m

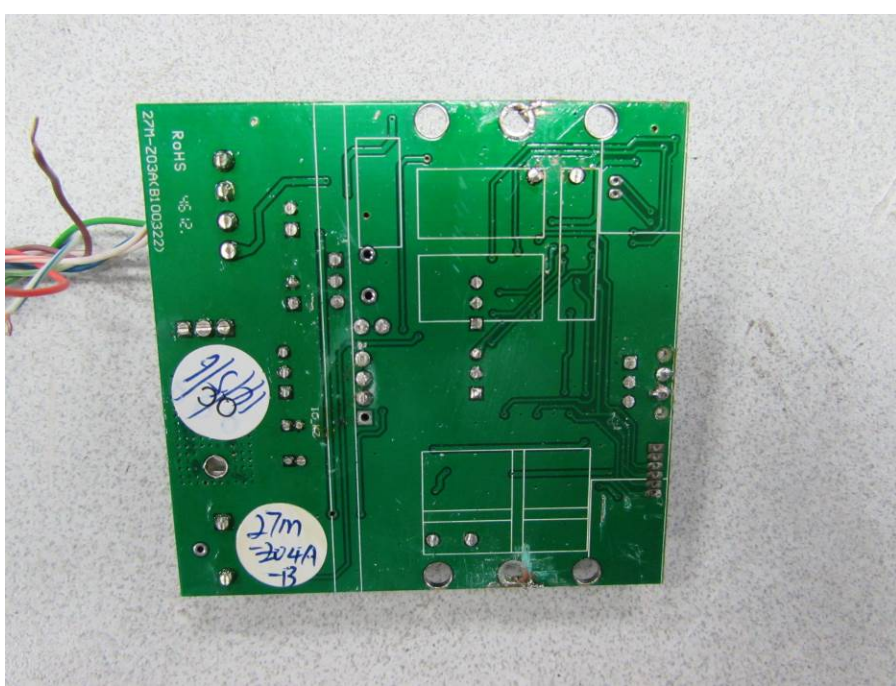
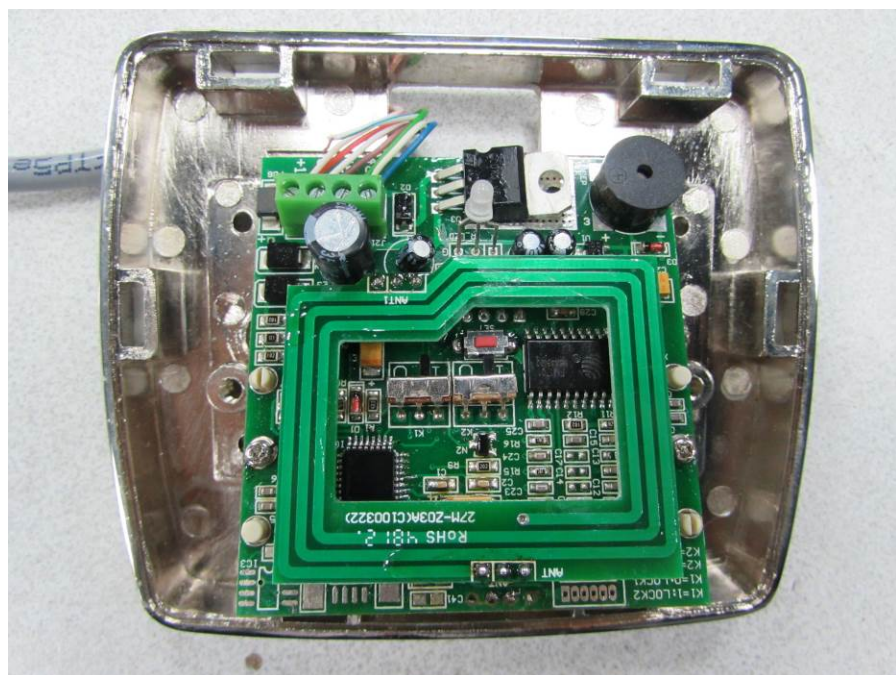
**Based on above test data, we do not need to conduct SAR measurement.**

**5 Appendix I - Photos of EUT**









Support Equipment  
Adaptor

