



FCC TEST REPORT

FCC ID: RXF141

Product Name:	Parking barrier
Trademark:	MySpot 500
Model Number:	MySpot 500
Prepared For :	Designated Parking Corp.
Address :	10 Ridge Rd West Orange, NJ07052-4018
Prepared By :	Shenzhen BCTC Technology Co., Ltd.
Address :	A. Floor 3, 44 Building, Tanglang Industrial Park B, Taoyuan Street, Nanshan District, Shenzhen, China
Test Date:	Jan. 08 - Jan. 15, 2015
Date of Report :	Jan. 15, 2015
Report No.:	BCTC-150100224



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TEST REPORT DECLARATION

Applicant : Designated Parking Corp.
Address : 10 Ridge Rd West Orange, NJ07052-4018
EUT Description : **Parking barrier**
Model Number : **MySpot 500**

Test Standards:

FCC Part 15 B: 2013

The EUT described above is tested by US to determine the maximum emission levels emanating from the EUT, the maximum emission levels are compared to the FCC Part 15 B Subpart Class B limits.

The measurement results are contained in this test report and Shenzhen BCTC Technology Co., Ltd. is assumed of full responsibility for the accuracy and completeness of these measurements.

Also, this report shows that the EUT is to be technically compliant with the FCC requirements.

This report applies to above tested sample only and shall not be reproduced in part without written approval of Shenzhen BCTC Technology Co., Ltd.

Date of Test:

Jan. 08 - Jan. 15, 2015

Prepared by(Engineer):

Eric Yang

Reviewer(Quality Manager):

Sophie Lee

Approved & Authorized Signer(Manager):

Casey Wang





1. GENERAL INFORMATION

1.1. Report information

- 1.1.1. This report is not a certificate of quality; it only applies to the sample of the specific product/equipment given at the time of its testing. The results are not used to indicate or imply that they are application to the similar items. In addition, such results must not be used to indicate or imply that BCTC approves recommends or endorses the manufacture, supplier or use of such product/equipment, or that BCTC in any way guarantees the later performance of the product/equipment.
- 1.1.2. The sample/s mentioned in this report is/are supplied by Applicant, BCTC therefore assumes no responsibility for the accuracy of information on the brand name, model number, origin of manufacture or any information supplied.
- 1.1.3. Additional copies of the report are available to the Applicant at an additional fee. No third part can obtain a copy of this report through BCTC, unless the applicant has authorized BCTC in writing to do so.

1.2. Measurement Uncertainty

Available upon request.

1.3. Test Facility

Site Description	
Name of Firm	: Shenzhen BCTC Technology Co., Ltd.
Site Location	: A. Floor 3, 44 Building, Tanglang Industrial Park B, Taoyuan Street, Nanshan District, Shenzhen, China

1.4. Test Uncertainty

Conducted Emission Uncertainty	=	$\pm 2.66\text{dB}$
Radiated Emission Uncertainty	=	$\pm 4.15\text{dB}$



2. PRODUCT DESCRIPTION

2.1.EUT Description

Description : **Parking barrier**

Applicant : **Designated Parking Corp.**
10 Ridge Rd West Orange, NJ07052-4018
West Way Design Co.

Manufacturer : 15# FIRST FLOOR, NO. 7004, SONGBAI ROAD SHANMEN
COMMUNITY SONGGANG TOWN,BAO'AN DISTRICT OF
SHENZHEN

Model Number : **MySpot 500**

Receiver frequency : **433.92MHz(Only receiver)**

2.2.Block Diagram of EUT Configuration



2.3.Test Conditions

Temperature: 20~25℃

Relative Humidity: 35~63 %



3. TEST RESULTS SUMMARY

Table 1 Test Results Summary

Test Items	Test Results
Conducted disturbance	N/A
Radiated disturbance	Pass

Remark: "N/A" means "Not applicable."

The New Battery is used during the measurement.



4. TEST EQUIPMENT USED

4.1. For Conducted Emission Test

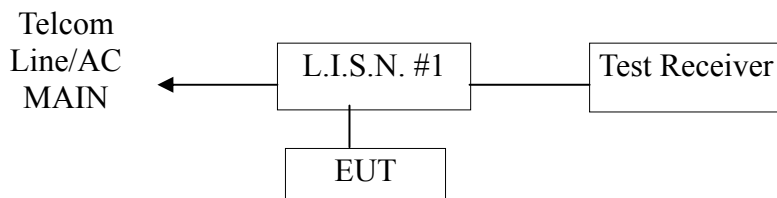
1	Test Receiver	R&S	ESCI	101421	2014.08.25	2015.08.24	1 year
2	LISN	SCHWARZBECK	NSLK8127	812779	2014.08.25	2015.08.24	1 year
3	LISN	EMCO	Feb-16	42990	2014.08.24	2015.08.23	1 year
4	50Ω Coaxial Switch	Anritsu	MP59B	6200264417	2014.06.07	2015.06.06	1 year
5	Passive Voltage Probe	R&S	ESH2-Z3	100196	2014.06.07	2015.06.06	1 year
6	Shielded Room	Chengyu	BCTC8*4*3	--	2014-08-25	2015-08-24	1 year

4.2. For Radiated Emission Measurement

1	Spectrum Analyzer	Agilent	E4407B	MY45109572	2014.08.25	2015.08.24	1 year
2	Test Receiver	R&S	ESPI	101396	2014.08.25	2015.08.24	1 year
3	Bilog Antenna	SCHWARZBECK	VULB9160	VULB9160-3369	2014.08.25	2015.08.24	1 year
4	50Ω Coaxial Switch	Anritsu	MP59B	6200264416	2014.06.07	2015.06.06	1 year
5	Spectrum Analyzer	ADVANTEST	R3132	150900201	2014.06.07	2015.06.06	1 year
6	Horn Antenna	SCHWARZBECK	9120D	9120D-1275	2014.08.25	2015.08.24	1 year
7	Horn Ant	Schwarzbeck	BBHA 9170	9170-181	2014.07.06	2015.07.05	1 year
8	Amplifier	SCHWARZBECK	BBV9718	9718-270	2014.08.25	2015.08.24	1 year
9	Amplifier	SCHWARZBECK	BBV9743	9743-119	2014.08.25	2015.08.24	1 year
10	Loop Antenna	ARA	PLA-1030/B	1029	2014.06.08	2015.06.07	1 year
11	RF cables	R&S	N/A	N/A	2014.07.06	2015.07.05	1 year
12	Anechoic Chamber	Chengyu	BCTC9*6*6	--	2014.08.25	2015.08.24	1 year

5. CONDUCTED EMISSION TEST

5.1. Block Diagram of Test Setup



(EUT: **Parking barrier**)

5.2. Test Standard

FCC Part 15 B: 2013

5.3. Conducted Emission Limit (Class B)

Frequency MHz	Limits dB(μV)	
	Quasi-peak Level	Average Level
0.15 ~ 0.50	66 ~ 56*	56 ~ 46*
0.50 ~ 5.00	56	46
5.00 ~ 30.00	60	50

Notes: 1. *Decreasing linearly with logarithm of frequency.

5.4. EUT Configuration on Test

The following equipments are installed on conducted emission test to meet Part 15 B requirement and operating in a manner, which tends to maximize its emission characteristics in a normal application.

5.4.1. **Parking barrier**

Model Number: **MySpot 500**

5.5. Operating Condition of EUT

5.5.1. Setup the EUT and simulators as shown in Section 5.1.

5.5.2. Turn on the power of all equipments.

5.5.3. Let the EUT work in test modes (EUT Working) and test it.



5.6. Test Procedure

The EUT is put on a table of non-conducting material that is 80cm high. The vertical conducting wall of shielding is located 40cm to the rear of the EUT. The power line of the EUT is connected to the AC mains through a Artificial Mains Network (LISN). A EMI test receiver (R&S Test Receiver ESCI) is used to test the emissions form both sides of AC line. The bandwidth of EMI test receiver is set at 9kHz.

The bandwidth of the test receiver (R&S Test Receiver ESCI) is set at 10KHz.

5.7. Test Result

This EUT is powered by the battery only, this test item is not applicable.

6. RADIATED EMISSION MEASUREMENT

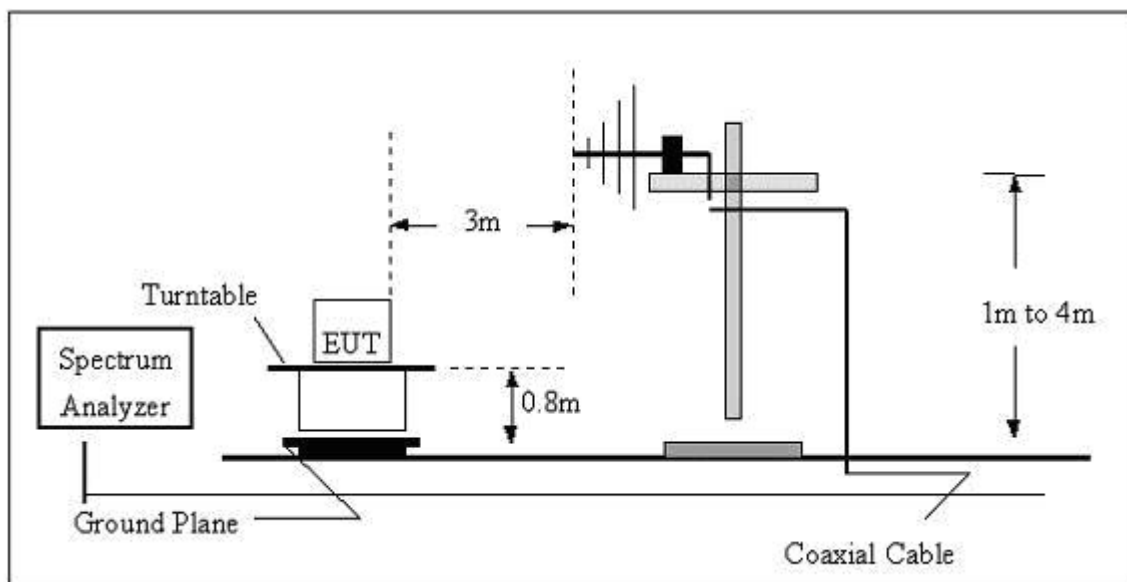
6.1. Block Diagram of Test Setup

6.1.1. Block Diagram of connection between the EUT and the simulators

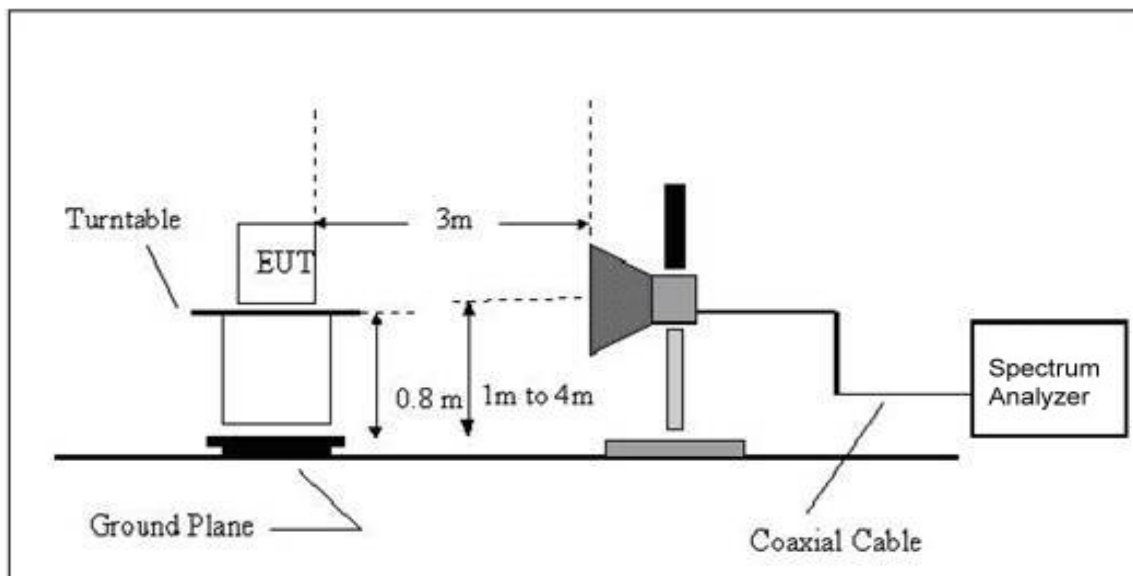


(EUT: **Parking barrier**)

6.1.2. Anechoic Chamber Test Setup Diagram(30MHz-1GHz)



Radiated Emission Test Set-Up Frequency Above 1GHz





6.2. Test Standard

FCC Part 15 B: 2013

6.3. Radiated Emission Limit(Class B)

FREQUENCY (MHz)	DISTANCE (Meters)	FIELD STRENGTHS LIMITS (dB μ V/m)
30 ~ 88	3	40.0
88 ~ 216	3	43.5
216 ~ 960	3	46.0
960 ~ 1000	3	54.0

Note:(1) The smaller limit shall apply at the edge between two frequency bands.

(2) Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the EUT or system.



6.4.EUT Configuration on Test

The following equipment are installed on Radiated Emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize Its emission characteristics in normal application.

Operating Condition of EUT

6.4.1.Setup the EUT as shown on Section 6.1

6.4.2.Turn on the power of all equipments.

6.4.3.Let the EUT work in test mode(EUT working) and measure it.

6.5.Test Procedure

The EUT is placed on a turn table which is 0.8 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT is set 3 meters away from the receiving antenna which is mounted on a antenna tower. The antenna can move up and down between 1 to 4 meters to find out the maximum emission level. Broadband antenna (calibrated by dipole antenna) are used as a receiving antenna. Both horizontal and vertical polarization of the antenna are set on measurement.

The bandwidth setting on the test receiver is 120 KHz.

The EUT is tested in Anechoic Chamber. The frequency range from 30MHz to 1000MHz is checked. All the test results are listed in Section 6.6.

Both horizontal and vertical antenna polarities were tested and performed pretest to three orthogonal axis. The worst case emissions were reported

6.6.Test Result

PASS

Please refer to the following pages.



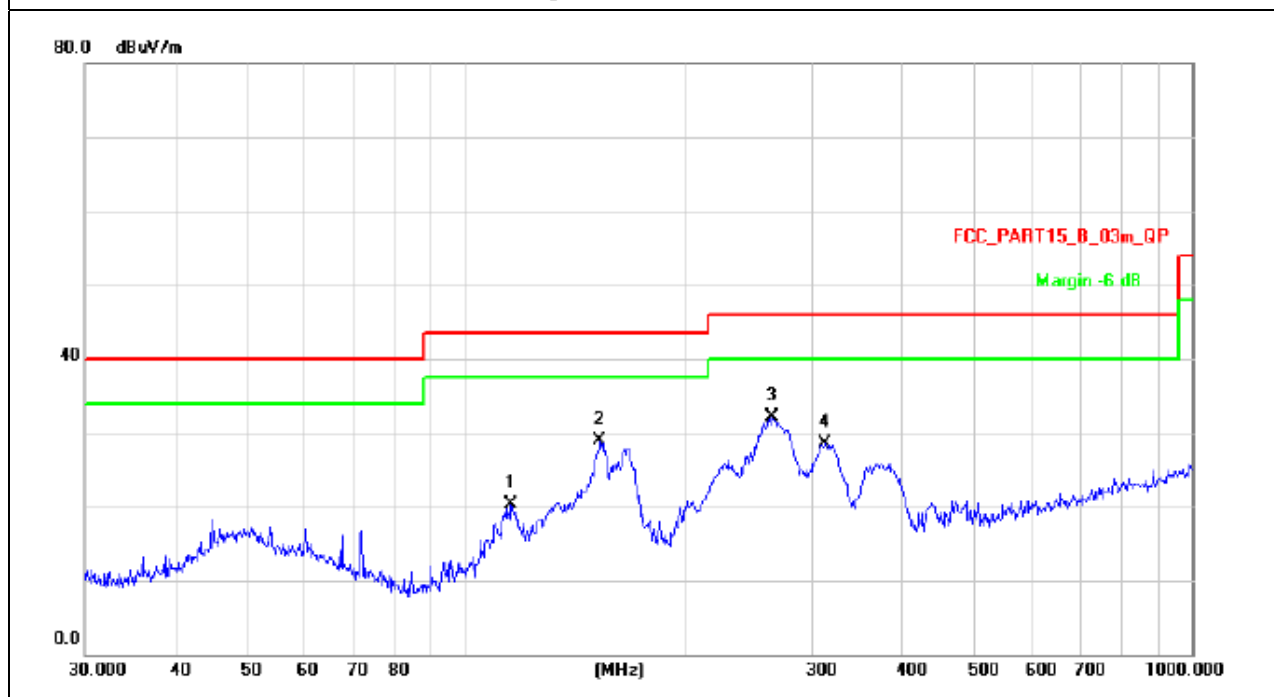
Radiated Emission(30MHz-1GHz):

EUT:	Parking barrier	Model Name :	MySpot 500
Temperature:	22 °C	Relative Humidity:	48%
Pressure:	1010 hPa	Test Voltage :	DC7.5V
Test Mode :	RX	Polarization :	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
115.7256	36.38	16.11	20.27	43.5	-23.23	QP
153.2004	42.73	13.81	28.92	43.5	-14.58	QP
263.8190	46.54	14.49	32.05	46	-13.95	QP
313.2760	41.43	12.85	28.58	46	-17.42	QP

Remark:

Factor = Antenna Factor + Cable Loss – Pre-amplifier.



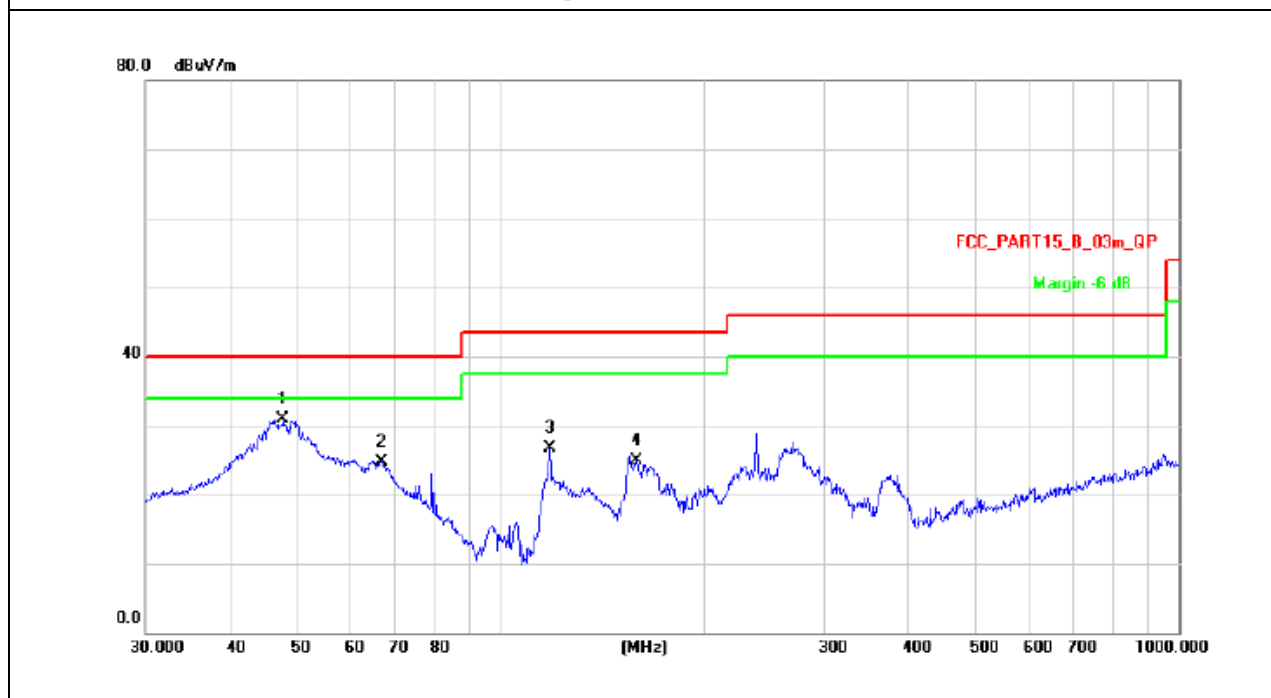


EUT:	Parking barrier	Model Name :	MySpot 500
Temperature:	22 °C	Relative Humidity:	48%
Pressure:	1010 hPa	Test Voltage :	DC7.5V
Test Mode :	RX	Polarization :	Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
47.8260	46.41	15.44	30.97	40	-9.03	QP
66.7325	40.94	16.18	24.76	40	-15.24	QP
118.1862	42.68	15.91	26.77	43.5	-16.73	QP
158.6677	38.78	13.82	24.96	43.5	-18.54	QP

Remark:

Factor = Antenna Factor + Cable Loss – Pre-amplifier.





Radiated Emission(1GHz-6GHz):

EUT:	Parking barrier	Model Name :	MySpot 500
Temperature:	22 °C	Relative Humidity:	48%
Pressure:	1010 hPa	Test Voltage :	DC7.5V
Test Mode :	RX	Polarization :	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
1340.43	50.9	-9.24	41.66	54	-12.34	peak
2010.883	50.64	-6.87	43.77	54	-10.23	peak

Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

EUT:	Parking barrier	Model Name :	MySpot 500
Temperature:	22 °C	Relative Humidity:	48%
Pressure:	1010 hPa	Test Voltage :	DC7.5V
Test Mode :	RX	Polarization :	Vertical

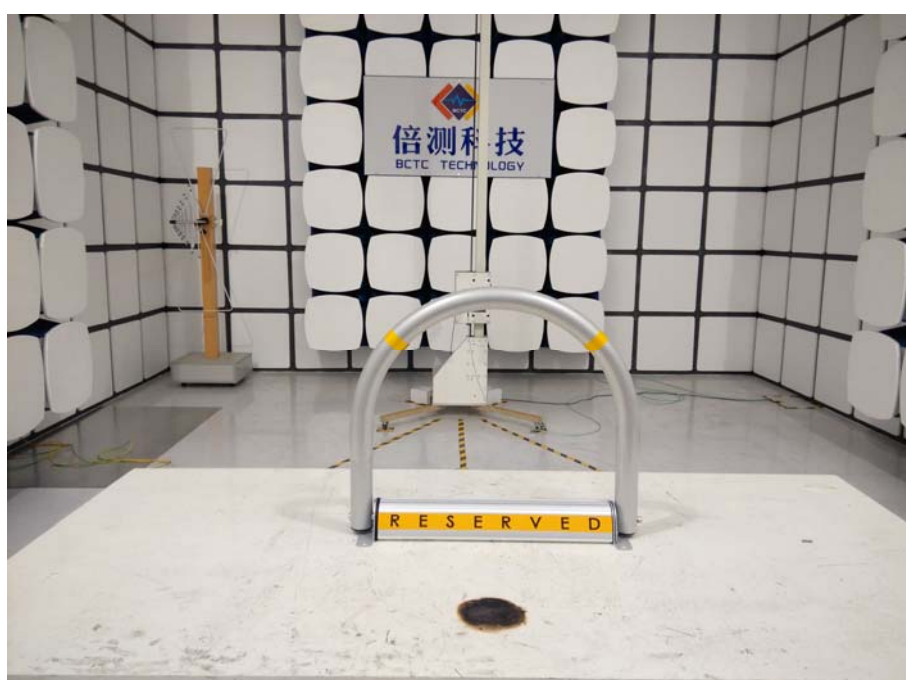
Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
1340.43	52.19	-9.24	42.95	54	-11.05	peak
2010.883	51.46	-6.87	44.59	54	-9.41	peak

Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.



APPENDIX II (TEST PHOTOS OF THE EUT)



***** END OF REPORT *****