

EMC TEST REPORT  
for  
Smart Zone Technology Limited  
SZ-MSC2009-1 MINI SOLAR CHARGER  
Model No.: SZ-MSC2009-1 MINI SOLAR CHARGER

Prepared for : Smart Zone Technology Limited  
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Report Number : 201009692E  
Date of Test : Sept. 13~19, 2010  
Date of Report : Sept. 20, 2010

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APPENDIX I (Photos of the EUT) (5 pages)

APPENDIX II (CE Label) (1 page)

## TEST REPORT VERIFICATION

Applicant : Smart Zone Technology Limited  
Manufacturer : Smart Zone Technology Limited  
EUT : SZ-MSC2009-1 MINI SOLAR CHARGER  
Model No. : SZ-MSC2009-1 MINI SOLAR CHARGER  
Rated Power Supply : DC 5V  
Trade Mark : N.A.

### Measurement Procedure Used:

EN 61000-6-3: 2007  
EN 61000-6-1: 2007;  
(IEC 61000-4-2: 2008; IEC 61000-4-3:2010)

The device described above is tested by Anbotek Compliance Laboratory Limited to determine the maximum emission levels emanating from the device and the severe levels of the device can endure and its performance criterion. The measurement results are contained in this test report and Anbotek Compliance Laboratory Limited is assumed full of responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT (Equipment Under Test) is technically compliant with the EN 61000-6-3 and EN 61000-6-1 requirements.

This report applies to above tested sample only and shall not be reproduced in part without written approval of Anbotek Compliance Laboratory Limited

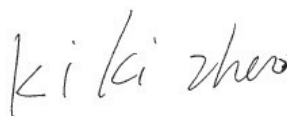
Date of Test :

Sept. 13~19, 2010



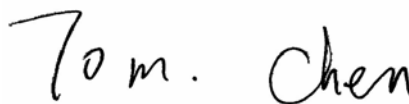
Prepared by :

(Engineer/ David Xie)



Reviewer :

(Project Manager/KiKi Zhao)



Approved & Authorized Signer :

(Manager/Tom Chen )

# 1. GENERAL INFORMATION

## 1.1. Description of Device (EUT)

EUT	: SZ-MSC2009-1 MINI SOLAR CHARGER
Model Number	: SZ-MSC2009-1 MINI SOLAR CHARGER
Test Power Supply	: AC 230V, 50Hz
PC	: Manufacturer: DELL M/N: OPTIPLEX 380 S/N: 1J63X2X CE , FCC: DOC
MONITOR	: Manufacturer: DELL M/N: E170Sc S/N: CN-00V539-64180-055-0UPS CE , FCC: DOC
KEYBOARD	: Manufacturer: DELL M/N: SK-8115 S/N: CN-0DJ313-71616-06C-02XN CE , FCC: DOC
MOUSE	: Manufacturer: DELL M/N: M-UARDEL7 S/N: N/A CE , FCC: DOC
Applicant	: Smart Zone Technology Limited
Address	: Flat 697, 6/F., Winner Mansion, 697 Nathan Road, Mongkok, Kowloon, Hong Kong
Manufacturer	: Smart Zone Technology Limited
Address	: Flat 697, 6/F., Winner Mansion, 697 Nathan Road, Mongkok, Kowloon, Hong Kong
Date of Sample	: Sept. 13, 2010
Date of Test	: Sept. 13~19, 2010

## 1.2. Description of Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

### **CNAS - LAB Code: L3503**

Anbotek Compliance Laboratory Limited., Laboratory has been assessed and in compliance with CNAS/CL01: 2006 accreditation criteria for testing laboratories (identical to ISO/IEC 17025:2005 General Requirements) for the Competence of Testing Laboratories.

### **FCC-Registration No.: 752021**

Anbotek Compliance Laboratory Limited, EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration 752021, August 20, 2010.

### **IC-Registration No.: 8058A-1**

Anbotek Compliance Laboratory Limited., EMC Laboratory has been registered and fully described in a report filed with the (IC) Industry Canada. The acceptance letter from the IC is maintained in our files. Registration 8058A-1, August 30, 2010

### **Test Location**

All Emissions tests were performed at: Anbotek Compliance Laboratory Limited. at 1/F, 1 /Build, SEC Industrial Park, No. 4 Qianhai Road, Nanshan District, Shenzhen, 518054, China

## 1.3. Measurement Uncertainty

Radiation Uncertainty : Ur = 4.3dB

Conduction Uncertainty : Uc = 2.7dB

## 1.4. Test Summary

For the EUT described above. The standards used were EN 61000-6-3 for Emissions & EN 61000-6-1 for Immunity.

Table 1 : Tests Carried Out Under EN 61000-6-3: 2007

Standard	Test Items	Status
EN 61000-6-3: 2007	Power Line Conducted Emission Test (150KHz To 30MHz)	x
EN 61000-6-3 2007	Radiated Emission Test (30MHz To 1000MHz)	√

Table 2 : Tests Carried Out Under  
 EN 61000-3-2: 2006+A1:2009+A2:2009  
 EN 61000-3-3: 2008

Standard	Test Items	Statu
EN 61000-3-2: 2006+A1:2009+A2:2009	Harmonic Current Test	x
EN 61000-3-3: 2008	Voltage Fluctuations and Flicker Test	x

Table 3 : Tests Carried Out Under  
 EN 55024: 1998+A1:2001+A2:2003

Standard	Test Items	Status
EN 61000-6-1: 2007	Electrostatic Discharge immunity Test	√
EN 61000-6-1: 2007	RF Field Strength susceptibility Test	√
EN 61000-6-1: 2007	Electrical Fast Transient/Burst Immunity Test	x
EN 61000-6-1: 2007	Surge Immunity Test	x
EN 61000-6-1: 2007	Injected Currents Susceptibility Test	x
EN 61000-6-1: 2007	Magnetic Field Susceptibility Test	x
EN 61000-6-1: 2007	Voltage Dips and Interruptions Test	x

- √ Indicates that the test is applicable  
 x Indicates that the test is not applicable

## 2. MEASURING DEVICE AND TEST EQUIPMENT

### 2.1. For Radiated Emission Measurement

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	EMI Test Receiver	Rohde & Schwarz	ESCI	100627	Nov. 12, 2009	1 Year
2.	Triple-Loop Antenna(2M)	EVERFINE	LLA-2	905003	May 19, 2010	1 Year
3.	RF Switching Unit	Compliance Direction	RSU-M2	38303	May 19, 2010	1 Year
4.	EMI Test Software	ES-K1	N/A	N/A	N/A	N/A

### 2.2. For Electrostatic Discharge Measurement

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	ESD Simulators	KIKUSUI	KES4021	LJ003477	May 25, 2010	1 Year

### 2.3. RF Strength Susceptibility Measurement

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Signal Generator	IFR	2032	203002/100	Nov.12, 2009	1 Year
2.	Amplifier	AR	150W1000	301584	NCR	NCR
3.	Dual Directional Coupler	AR	DC6080	301508	NCR	NCR
4.	Isotropic Field Monitor	AR	FM5004	300329	NCR	NCR
5.	Isotropic Field Probe	AR	FP5000	300221	Nov.12, 2009	1 Year
6.	Biconic Antenna	EMCO	3108	9507-2534	NCR	NCR
7.	Log-periodic Antenna	AR	AT1080	16812	NCR	NCR
8.	PC	N/A	486DX2	N/A	N/A	N/A

### 3. RADIATED EMISSION TEST

#### 3.1. Block Diagram of Test

##### 3.1.1. Block diagram of connection between the EUT and simulators

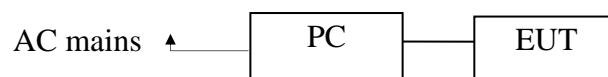
###### 3.1.1.1. For Solar Charging Mode.



###### 3.1.1.2. For Discharging Mode.

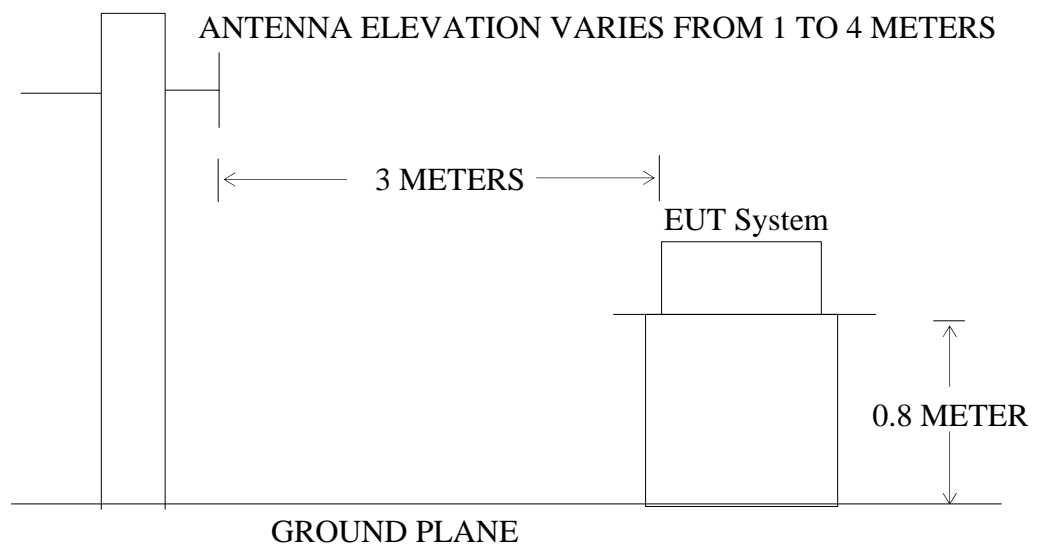


###### 3.1.1.3. For Charging via PC Mode



(EUT: SZ-MSC2009-1 MINI SOLAR CHARGER )

##### 3.1.2. Block diagram of test setup (In chamber)



(EUT. SZ-MSC2009-1 MINI SOLAR CHARGER )

#### 3.2. Measuring Standard

EN 61000-6-3: 2007

#### 3.3. Radiated Emission Limits

EN 61000-6-1: 2007

Radiated Emission Limits



All emanations from a EN 61000-6-3 device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified below:

FREQUENCY (MHz)	DISTANCE (Meters)	FIELD STRENGTHS LIMIT (dB $\mu$ V/m)
30 ~ 230	3	40
230 ~ 1000	3	47

- Note:
- (1) The smaller limit shall apply at the combination point 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.

### 3.4. EUT Configuration on Measurement

The EN 61000-6-3 regulations test method must be used to find the maximum emission during radiated emission measurement.

EUT : SZ-MSC2009-1 MINI SOLAR CHARGER  
 Model Number : SZ-MSC2009-1 MINI SOLAR CHARGER  
 Applicant : Smart Zone Technology Limited

### 3.5. Operating Condition of EUT

3.5.1. Turn on the power.

3.5.2. Let the EUT work in test mode (Solar Charging /Discharging/ Charging via PC) and measure it.

### 3.6. Test Procedure

The EUT is placed on a turn table which is 0.8 meter high above the 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 be moved up and down from 1 to 4 meters to find out the maximum emission level. Bilog antenna (calibrated by Dipole Antenna) is used as a receiving antenna. Both horizontal and vertical polarization of the antenna are set on test.

The bandwidth of the Receiver (ESPI) is set at 120kHz.

The EUT is tested in 9\*6\*6 Chamber.

The test results are listed in Section 3.7.

### 3.7. Measuring Results

**PASS.**

The frequency range from 30MHz to 1000MHz is investigated.

All emissions not reported below are too low against the prescribed limits

As the peak value is too low against the limit, So the quasi-peak value and average value have been omitted.

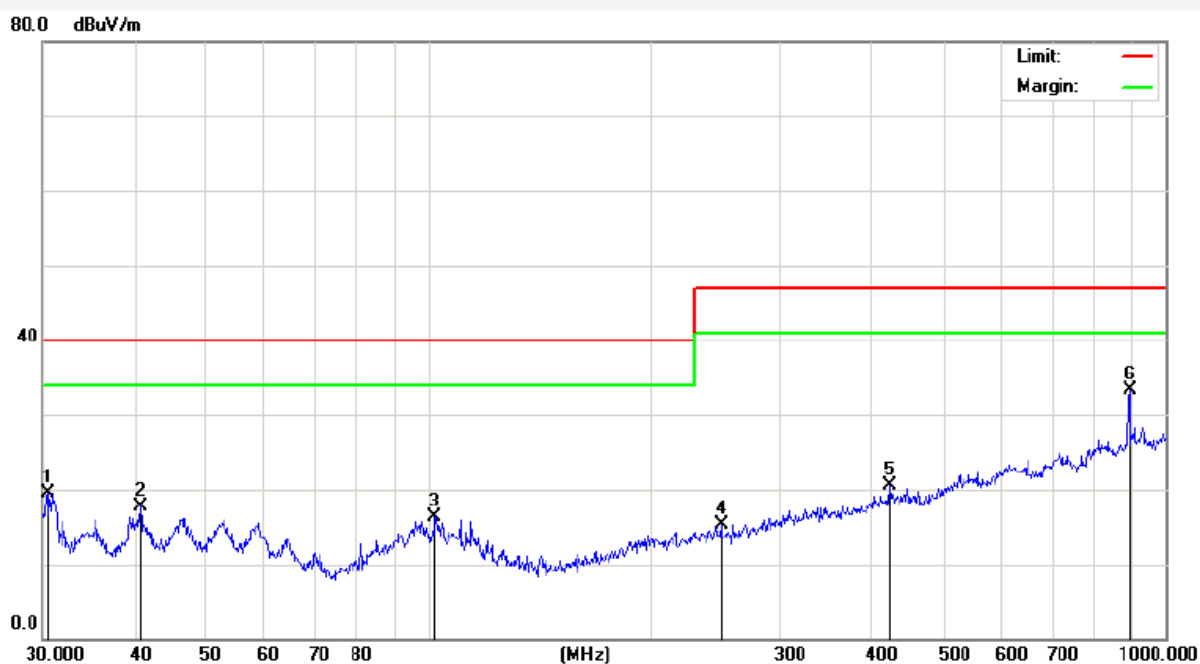
The test curves are shown in the following pages.


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<b>Job No.:</b>	<b>AT1009632E</b>	<b>Polarization:</b>	<b>Horizontal</b>
<b>Standard:</b>	<b>(RE)EN61000-6-3 _3m</b>	<b>Power Source:</b>	<b>DC 5V</b>
<b>Test item:</b>	<b>Radiation Test</b>	<b>Date:</b>	<b>2010/09/14</b>
<b>Temp.(C)/Hum.(%RH):</b>	<b>24.3( C)/55%RH</b>	<b>Time:</b>	<b>14:21:55</b>
<b>EUT:</b>	<b>SZ-MSC2009-1 MINI SOLAR CHARGER</b>	<b>Test By:</b>	<b>David Xie</b>
<b>Model:</b>	<b>SZ-MSC2009-1 MINI SOLAR CHARGER</b>	<b>Distance:</b>	<b>3m</b>
<b>Note:</b>	<b>Solar Charging</b>		



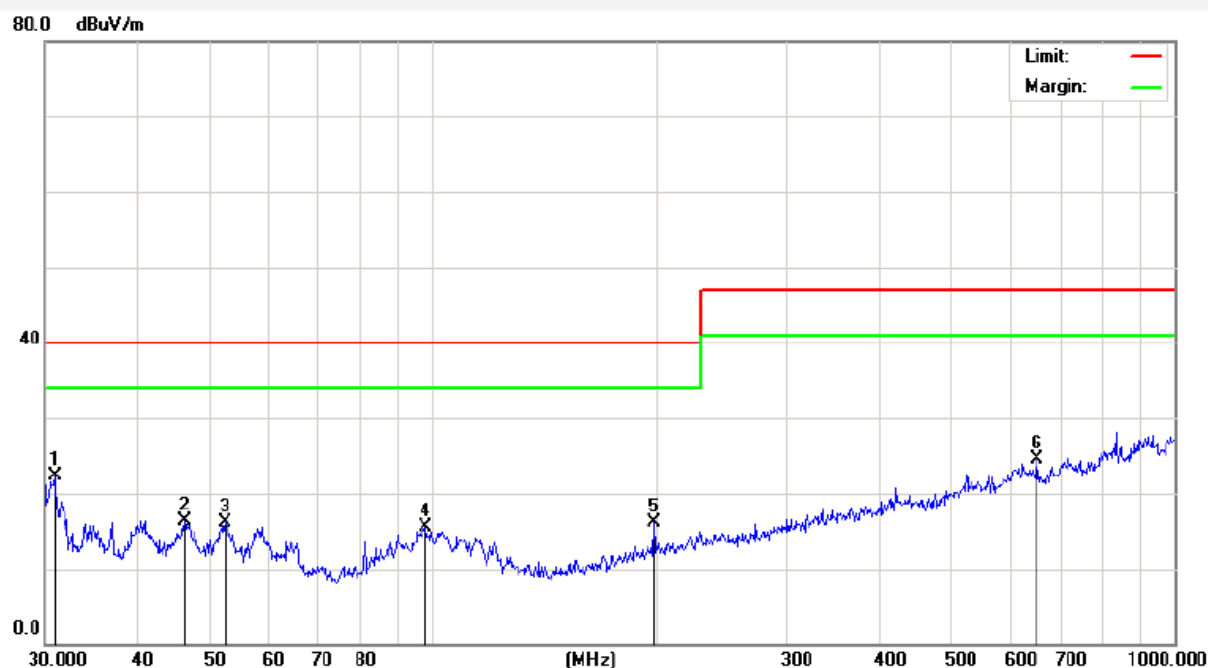
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Remark
1	30.5306	43.83	-24.30	19.53	40.00	-20.47	peak	
2	40.7016	40.59	-22.81	17.78	40.00	-22.22	peak	
3	102.0014	39.04	-22.69	16.35	40.00	-23.65	peak	
4	249.4250	37.83	-22.55	15.28	47.00	-31.72	peak	
5	422.0577	38.31	-17.87	20.44	47.00	-26.56	peak	
6	893.8567	42.14	-8.79	33.35	47.00	-13.65	peak	


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<b>Job No.:</b>	<b>AT1009632E</b>	<b>Polarziation:</b>	<b>Vertical</b>
<b>Standard:</b>	<b>(RE)EN61000-6-3 _3m</b>	<b>Power Source:</b>	<b>DC 5V</b>
<b>Test item:</b>	<b>Radiation Test</b>	<b>Date:</b>	<b>2010/09/14</b>
<b>Temp.(C)/Hum.(%RH):</b>	<b>24.3( C)/55%RH</b>	<b>Time:</b>	<b>14:21:55</b>
<b>EUT:</b>	<b>SZ-MSC2009-1 MINI SOLAR CHARGER</b>	<b>Test By:</b>	<b>David Xie</b>
<b>Model:</b>	<b>SZ-MSC2009-1 MINI SOLAR CHARGER</b>	<b>Distance:</b>	<b>3m</b>
<b>Note:</b>	<b>Solar Charging</b>		



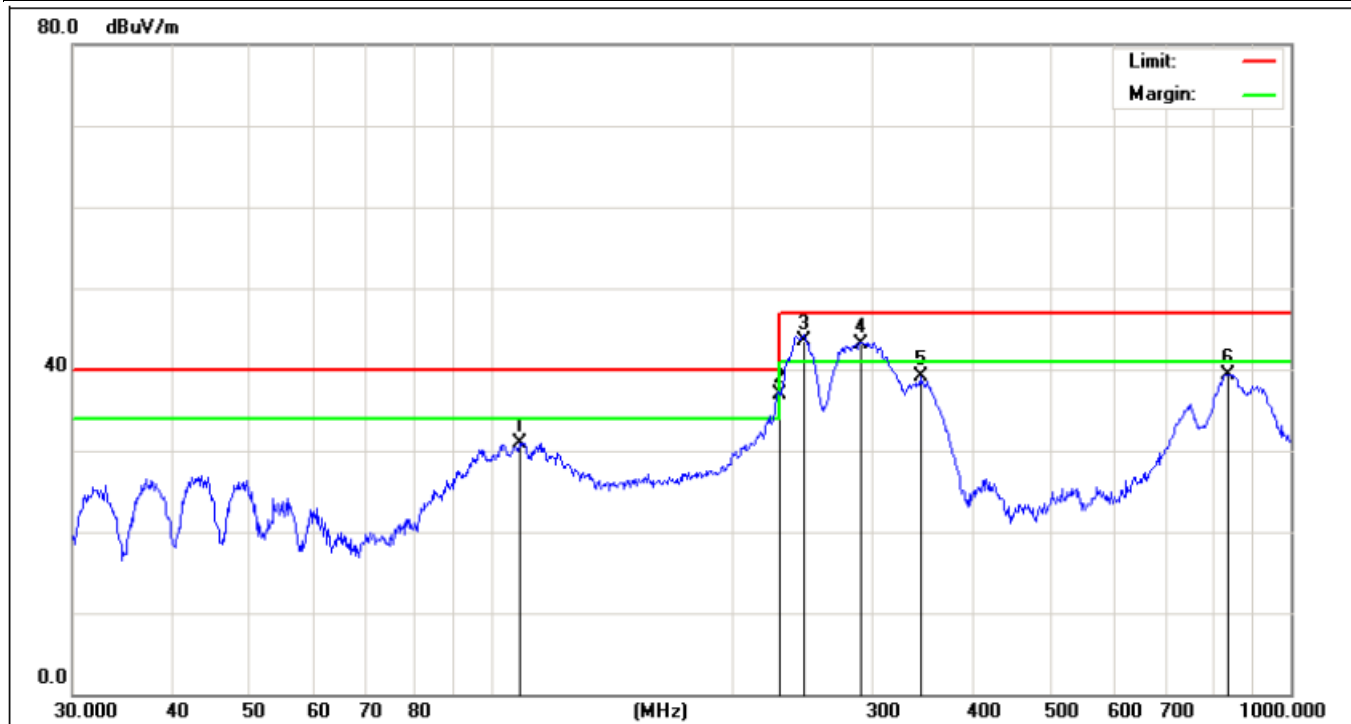
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Remark
1	30.8535	46.59	-24.30	22.29	40.00	-17.71	peak	
2	46.1779	39.13	-22.78	16.35	40.00	-23.65	peak	
3	52.3912	39.22	-23.02	16.20	40.00	-23.80	peak	
4	97.7983	38.27	-22.70	15.57	40.00	-24.43	peak	
5	198.5880	40.54	-24.40	16.14	40.00	-23.86	peak	
6	651.9417	37.55	-13.01	24.54	47.00	-22.46	peak	


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<b>Job No.:</b>	<b>AT1009632E</b>	<b>Polarization:</b>	<b>Horizontal</b>
<b>Standard:</b>	<b>(RE)EN61000-6-3 _3m</b>	<b>Power Source:</b>	<b>DC 5V</b>
<b>Test item:</b>	<b>Radiation Test</b>	<b>Date:</b>	<b>2010/09/14</b>
<b>Temp.(C)/Hum.(%RH):</b>	<b>24.3( C)/55%RH</b>	<b>Time:</b>	<b>14:20:39</b>
<b>EUT:</b>	<b>SZ-MSC2009-1 MINI SOLAR CHARGER</b>	<b>Test By:</b>	<b>David Xie</b>
<b>Model:</b>	<b>SZ-MSC2009-1 MINI SOLAR CHARGER</b>	<b>Distance:</b>	<b>3m</b>
<b>Note:</b>	<b>Discharging</b>		



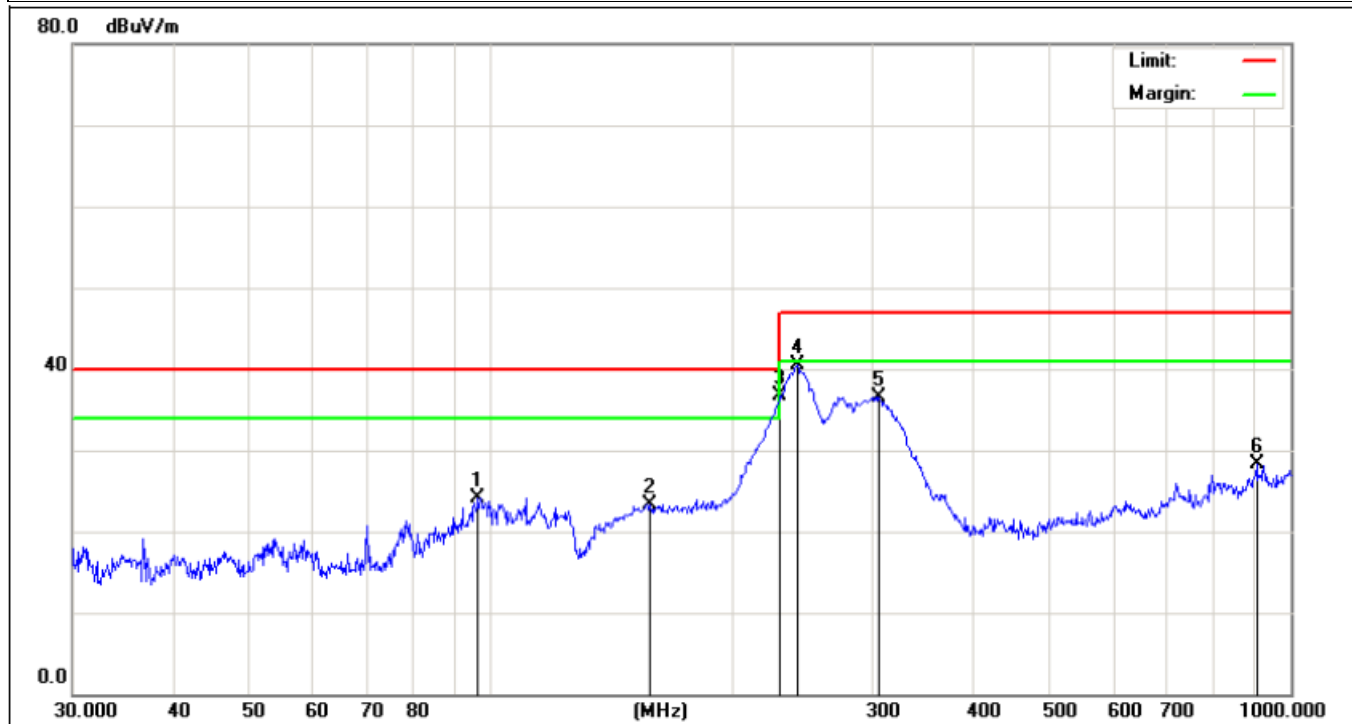
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Remark
1	108.6470	54.23	-23.24	30.99	40.00	-9.01	peak
2	230.0985	59.96	-23.11	36.85	47.00	-10.15	peak
3	246.8149	66.12	-22.57	43.55	47.00	-3.45	QP
4	290.0172	64.63	-21.45	43.18	47.00	-3.82	QP
5	344.3854	58.72	-19.70	39.02	47.00	-7.98	peak
6	836.2443	49.28	-9.89	39.39	47.00	-7.61	peak


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<b>Job No.:</b>	<b>AT1009632E</b>	<b>Polarization:</b>	<b>Vertical</b>
<b>Standard:</b>	<b>(RE)EN61000-6-3_3m</b>	<b>Power Source:</b>	<b>DC 5V</b>
<b>Test item:</b>	<b>Radiation Test</b>	<b>Date:</b>	<b>2010/09/14</b>
<b>Temp.(C)/Hum.(%RH):</b>	<b>24.3( C)/55%RH</b>	<b>Time:</b>	<b>14:21:55</b>
<b>EUT:</b>	<b>SZ-MSC2009-1 MINI SOLAR CHARGER</b>	<b>Test By:</b>	<b>David Xie</b>
<b>Model:</b>	<b>SZ-MSC2009-1 MINI SOLAR CHARGER</b>	<b>Distance:</b>	<b>3m</b>
<b>Note:</b>	<b>Discharging</b>		



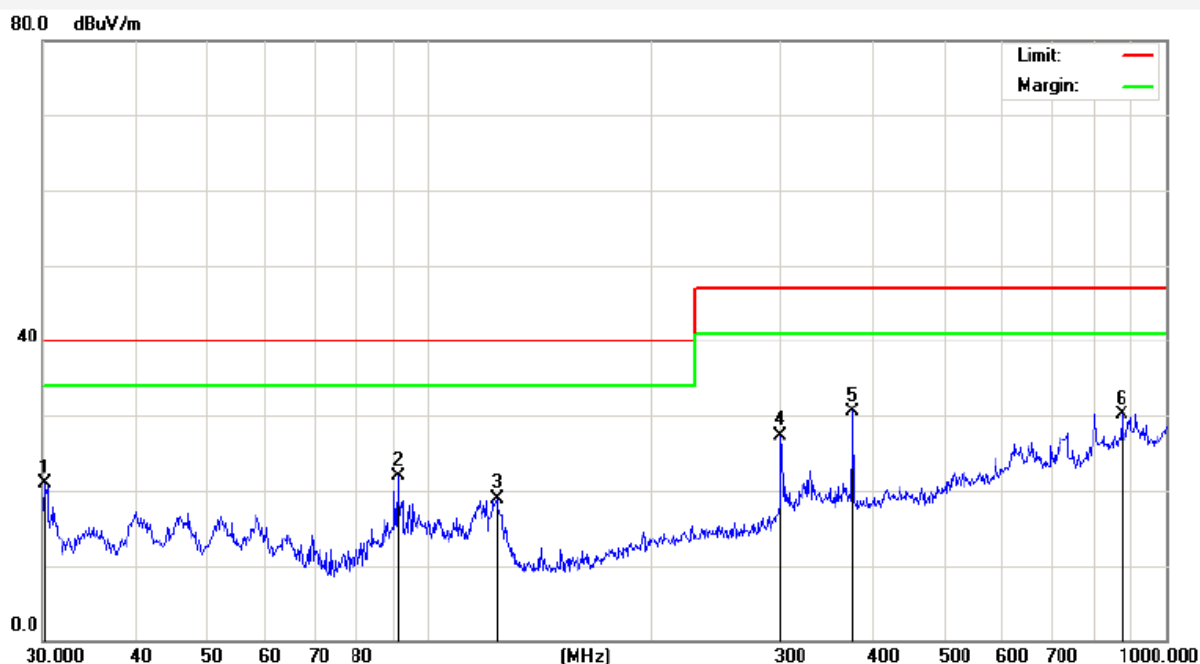
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Remark
1	96.4361	46.89	-22.81	24.08	40.00	-15.92	peak
2	158.1123	49.84	-26.58	23.26	40.00	-16.74	peak
3	230.0985	59.83	-23.11	36.72	47.00	-10.28	peak
4	241.6763	63.00	-22.58	40.42	47.00	-6.58	peak
5	305.6800	57.60	-21.05	36.55	47.00	-10.45	peak
6	906.4823	36.87	-8.61	28.26	47.00	-18.74	peak


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<b>Job No.:</b>	<b>AT1009632E</b>	<b>Polarization:</b>	<b>Horizontal</b>
<b>Standard:</b>	<b>(RE)EN61000-6-3 _3m</b>	<b>Power Source:</b>	<b>DC 5V</b>
<b>Test item:</b>	<b>Radiation Test</b>	<b>Date:</b>	<b>2010/09/14</b>
<b>Temp.(C)/Hum.(%RH):</b>	<b>24.3( C)/55%RH</b>	<b>Time:</b>	<b>14:21:55</b>
<b>EUT:</b>	<b>SZ-MSC2009-1 MINI SOLAR CHARGER</b>	<b>Test By:</b>	<b>David Xie</b>
<b>Model:</b>	<b>SZ-MSC2009-1 MINI SOLAR CHARGER</b>	<b>Distance:</b>	<b>3m</b>
<b>Note:</b>	<b>Charging via PC</b>		



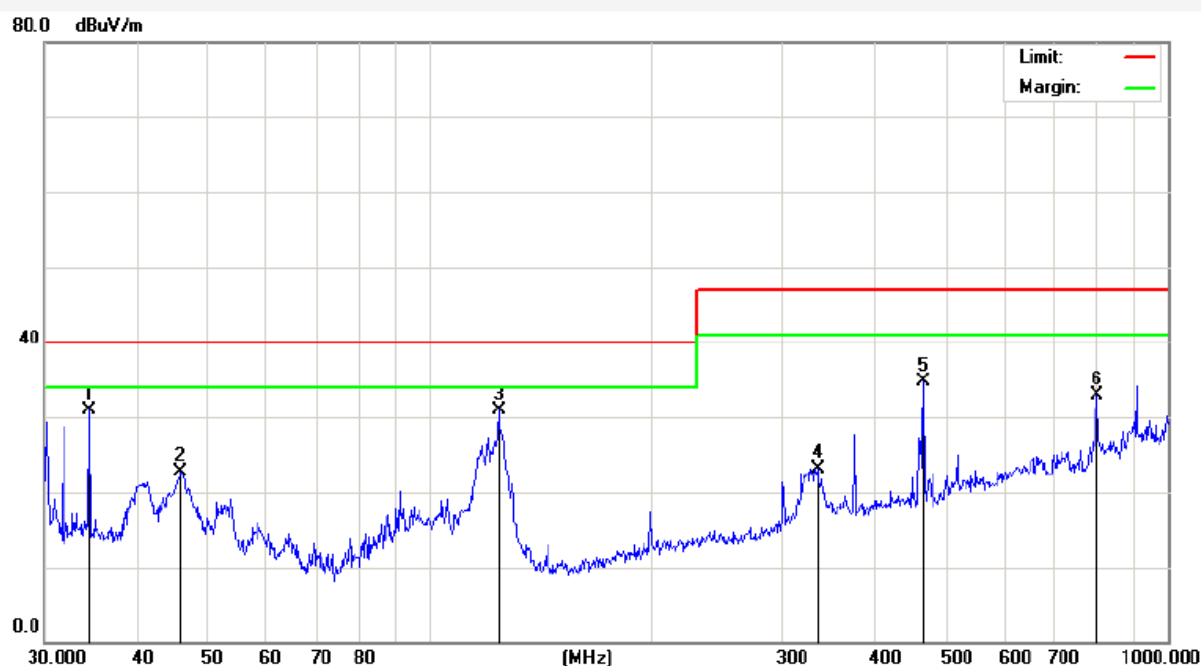
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Remark
1	30.2111	45.21	-24.32	20.89	40.00	-19.11	peak	
2	90.8554	46.57	-24.61	21.96	40.00	-18.04	peak	
3	123.6985	44.56	-25.57	18.99	40.00	-21.01	peak	
4	300.3672	48.57	-21.18	27.39	47.00	-19.61	peak	
5	375.9385	49.46	-18.90	30.56	47.00	-16.44	peak	
6	869.1302	39.35	-9.25	30.10	47.00	-16.90	peak	


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<b>Job No.:</b>	<b>AT1009632E</b>	<b>Polarization:</b>	<b>Vertical</b>
<b>Standard:</b>	<b>(RE)EN61000-6-3_3m</b>	<b>Power Source:</b>	<b>DC 5V</b>
<b>Test item:</b>	<b>Radiation Test</b>	<b>Date:</b>	<b>2010/09/14</b>
<b>Temp.(C)/Hum.(%RH):</b>	<b>24.3( C)/55%RH</b>	<b>Time:</b>	<b>14:21:55</b>
<b>EUT:</b>	<b>SZ-MSC2009-1 MINI SOLAR CHARGER</b>	<b>Test By:</b>	<b>David Xie</b>
<b>Model:</b>	<b>SZ-MSC2009-1 MINI SOLAR CHARGER</b>	<b>Distance:</b>	<b>3m</b>
<b>Note:</b>	<b>Charging via PC</b>		



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Remark
1	34.3964	55.14	-24.22	30.92	40.00	-9.08	peak	
2	45.8553	45.47	-22.77	22.70	40.00	-17.30	peak	
3	123.6985	56.57	-25.57	31.00	40.00	-9.00	peak	
4	334.8589	43.26	-20.06	23.20	47.00	-23.80	peak	
5	465.5994	52.13	-17.35	34.78	47.00	-12.22	peak	
6	801.7863	43.57	-10.59	32.98	47.00	-14.02	peak	



## 4. ELECTROSTATIC DISCHARGE IMMUNITY TEST

### 4.1. Block Diagram of Test Setup

#### 4.1.1. Block diagram of connection between the EUT and simulators

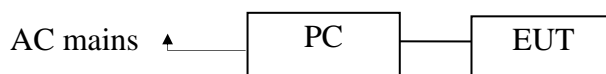
##### 4.1.1.1. For Solar Charging Mode.



##### 4.1.1.2. For Discharging Mode.

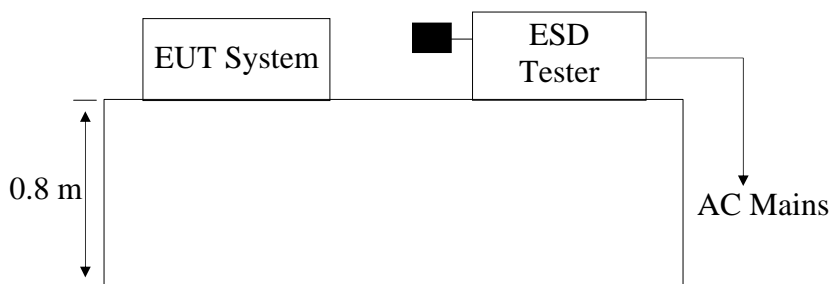


##### 4.1.1.3. For Charging via PC Mode



(EUT: SZ-MSC2009-1 MINI SOLAR CHARGER )

#### 4.1.2. For block diagram of test setup



(EUT: SZ-MSC2009-1 MINI SOLAR CHARGER)

### 4.2. Measuring Standard

EN 55024: 1998+A1: 2001+A2: 2003

IEC 61000-4-2: 2008

Severity Level: 3 / Air Discharge:  $\pm 8\text{KV}$  Level: 2 / Contact Discharge:  $\pm 4\text{KV}$

### 4.3. Severity Levels and Performance Criterion

#### 4.3.1. Severity level

Level	Test Voltage Contact Discharge (KV)	Test Voltage Air Discharge (KV)
1.	$\pm 2$	$\pm 2$
2.	$\pm 4$	$\pm 4$
3.	$\pm 6$	$\pm 8$
4.	$\pm 8$	$\pm 15$
X	Special	Special

#### 4.3.2. Performance criterion: **B**

#### 4.4. EUT Configuration

The configuration of EUT are listed in Section 3.4.

#### 4.5. Operating Condition of EUT

Same as radiated emission measurement, which is listed in Section 3.5 except the test set up replaced by Section 4.1.

#### 4.6. Test Procedure

##### 4.6.1. Air Discharge:

This test is done on a non-conductive surface. The round discharge tip of the discharge electrode shall be approached as fast as possible to touch the EUT. After each discharge, the discharge electrode shall be removed from the EUT. The generator is then re-triggered for a new single discharge and repeated 100 times for each pre-selected test point. This procedure shall be repeated until all the air discharge completed

##### 4.6.2. Contact Discharge:

All the procedure shall be same as Section 4.6.1. except that the tip of the discharge electrode shall touch the EUT before the discharge switch is operated.

##### 4.6.3. Indirect discharge for horizontal coupling plane

At least 50 single discharges shall be applied to the horizontal coupling plane, at points on each side of the EUT. The discharge electrode positions vertically at a distance of 0.1m from the EUT and with the discharge electrode touching the coupling plane.

##### 4.6.4. Indirect discharge for vertical coupling plane

At least 50 single discharge shall be applied to the center of one vertical edge of the coupling plane. The coupling plane, of dimensions 0.5m X 0.5m, is placed parallel to, and positioned at a distance of 0.1m from the EUT. Discharges shall be applied to the coupling plane, with this plane in sufficient different positions that the four faces of the EUT are completely illuminated.

#### 4.7. Measuring Results

**PASS**

Please refer to the following page.

# Electrostatic Discharge Test Results

Anbotek Compliance Laboratory Limited

Applicant : Smart Zone Technology Limited	Test Date : Sept. 14, 2010
EUT : SZ-MSC2009-1 MINI SOLAR CHARGER	Temperature : 23°C
M/N : SZ-MSC2009-1 MINI SOLAR CHARGER	Humidity : 57%
Air discharge : ±8.0KV	Criterion : B
Contact discharge: ±4.0KV	Test Engineer: David Xie
Test Mode : Solar Charging /Discharging/ Charging via PC	

Location	Kind A-Air Discharge C-Contact Discharge	Result
Slot of the EUT 10 points	A	PASS
Others 8 points	A	PASS
Surface of the EUT(metal) 8 points	C	PASS
HCP 4 points	C	PASS
VCP of front 4 points	C	PASS
VCP of rear 4 points	C	PASS
VCP of left 4 points	C	PASS
VCP of right 4 points	C	PASS

Note:

Test Equipment :ESD Simulator: KES4021 (KIKUSUI)

Reviewer

*Kiki zheo*  
:

## 5. RF FIELD STRENGTH SUSCEPTIBILITY TEST

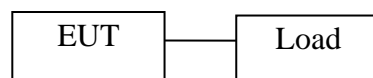
### 5.1. Block Diagram of Test

#### 5.1.1. Block diagram of connection between the EUT and simulators

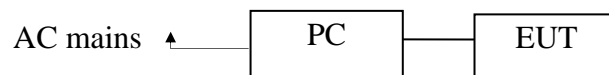
##### 5.1.1.1. For Solar Charging Mode.



##### 5.1.1.3. For Discharging Mode

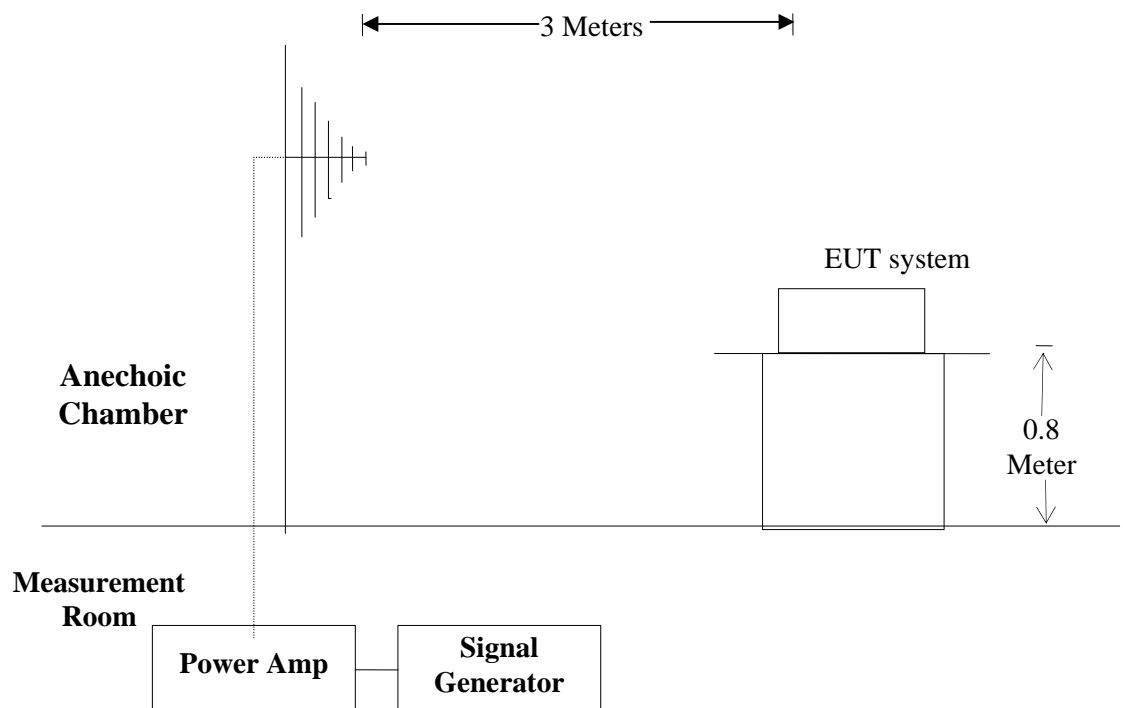


##### 5.1.1.3. For Charging via PC Mode



(EUT: SZ-MSC2009-1 MINI SOLAR CHARGER )

#### 5.1.2. Block diagram of RS test setup



(EUT: SZ-MSC2009-1 MINI SOLAR CHARGER)

## 5.2. Measuring Standard

EN 55024: 1998+A1: 2001+A2: 2003

IEC 61000-4-3: 2010

Severity Level: 2, 3V / m

## 5.3. Severity Levels and Performance Criterion

### 5.3.1. Severity Levels

Level	Field Strength V/m
1.	1
2.	3
3.	10
X	Special

### 5.3.2. Performance Criterion: A

## 5.4. EUT Configuration on Test

The configuration of the EUT is same as Section 3.4.

## 5.5. Operating Condition of EUT

Same as radiated emission measurement which is listed in Section 3.5. except the test setup replaced as Section 5.1.

## 5.6. Test Procedure

The EUT are placed on a table which is 0.8 meter high above the ground. The EUT is set 3 meters away from the transmitting antenna which is mounted on an antenna tower. Both horizontal and vertical polarization of the antenna are set on test. Each of the four sides of the EUT must be faced this transmitting antenna and measured individually.

In order to judge the EUT performance, a CCD camera is used to monitor its screen . All the scanning conditions are as following:

Condition of Test	Remark
1. Fielded Strength	3V/m (Severity Level 2)
2. Radiated Signal	Unmodulated
3. Scanning Frequency	80-1000MHz
4. Sweep time of radiated	0.0015 Decade/s
5. Dwell Time	1 Sec.

## 5.7. Measuring Results

**PASS.**

Please refer to the following page.

# RF Field Strength Susceptibility Test Results

Anbotek Compliance Laboratory Limited

Applicant : Smart Zone Technology Limited	Test Date : Sept. 14, 2010
EUT : SZ-MSC2009-1 MINI SOLARCHARGER	Temperature : 23°C
M/N : SZ-MSC2009-1 MINI SOLARCHARGER	Humidity : 57%
Field Strength : 3 V/m	Criterion : A
Test Mode : Solar Charging /Discharging/ Charging via PC	Test Engineer : David Xie
	Frequency Range: 80 MHz to 1000 MHz

Modulation:	<input type="checkbox"/> None	<input type="checkbox"/> Pulse	<input checked="" type="checkbox"/> AM 1KHz 80%
	Frequency Rang 1: 80~ 1000MHz		Frequency Rang 2:
Steps	#	/	%
	Horizontal		Vertical
Front	PASS		PASS
Right	PASS		PASS
Rear	PASS		PASS
Left	PASS		PASS

Test Equipment :

1. Signal Generator : 2032 (IFR)
2. Power Amplifier : 150W1000 (A&R)
3. Power Antenna : 3108 (EMCO) & AT1080 (A&R)
4. Field Monitor : FM5004 (A&R)

Note:

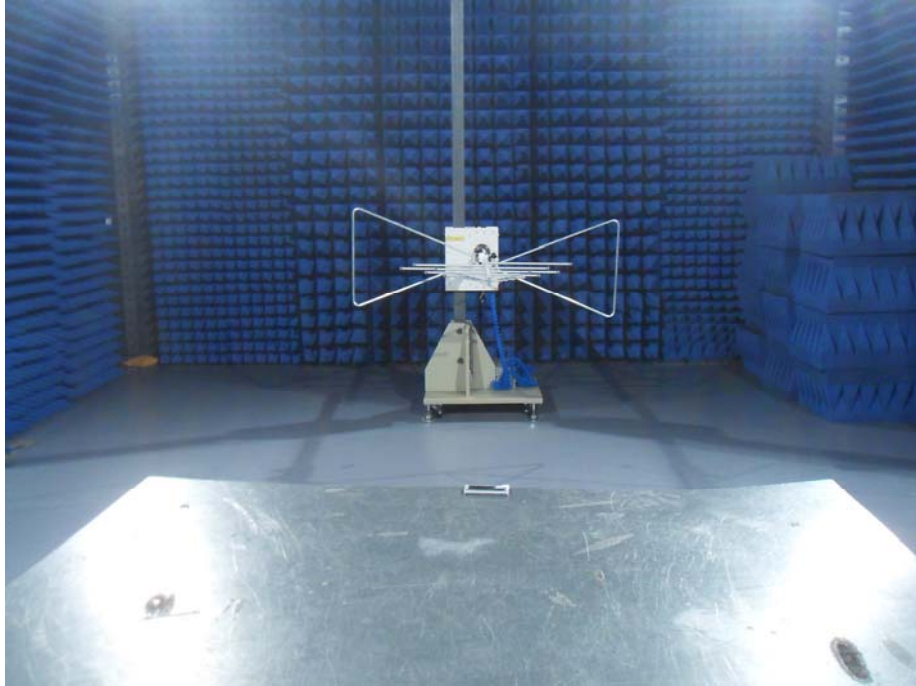
Reviewer:

*Kiki zhuo*

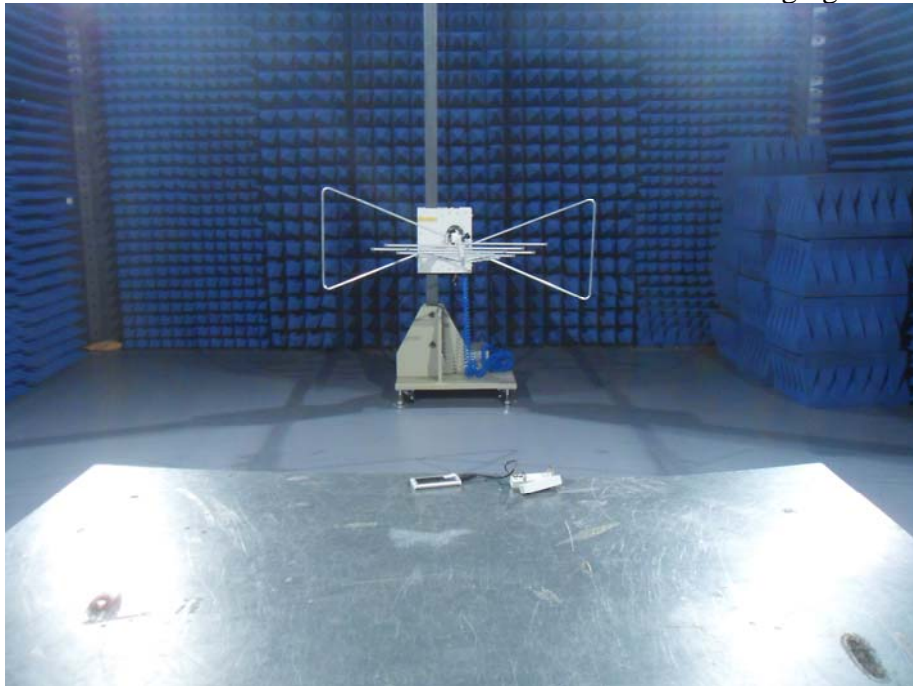
## 6. PHOTOGRAPH

### 6.1. Photo of Radiated Emission Test

For Solar Charging Mode



For Discharging Mode



For Charging via PC Mode



## 6.2. Photo of Electrostatic Discharge Test

For Solar Charging Mode





For Discharging Mode

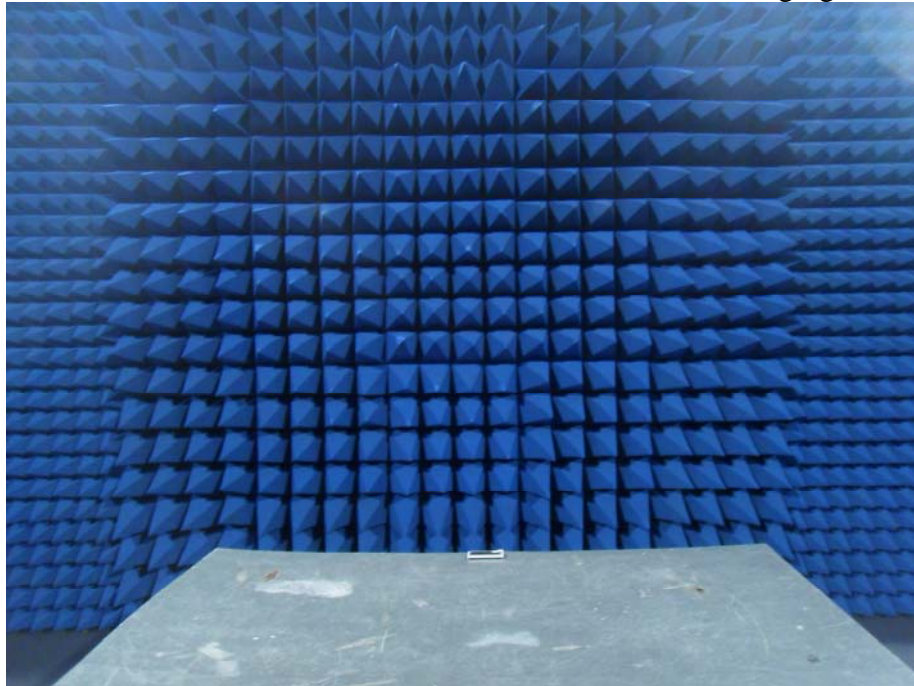


For Charging via PC Mode

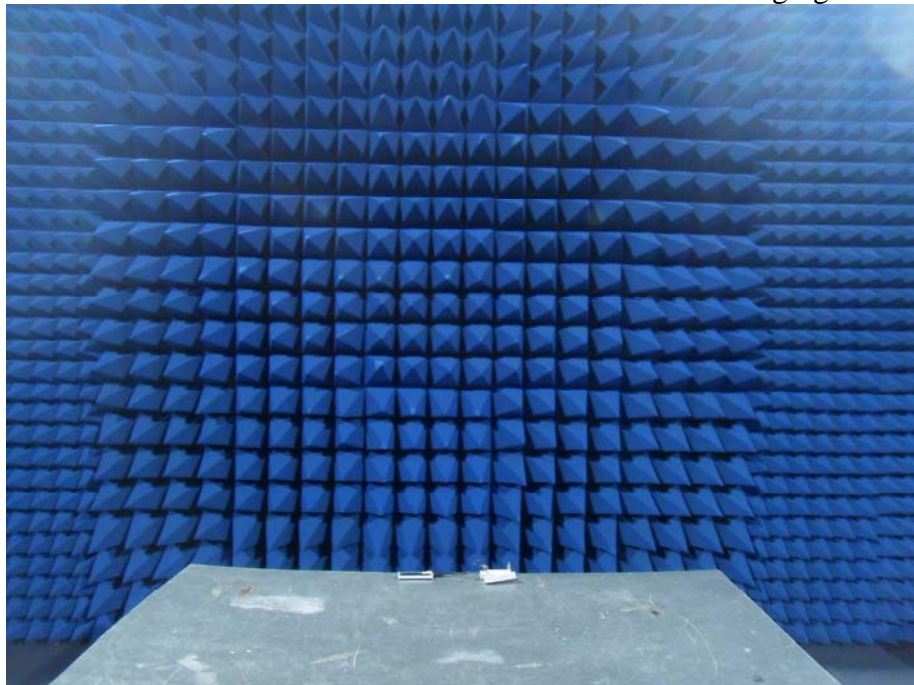


### 6.3. Photo of RF Field Strength susceptibility Test

For Solar Charging Mode



For Discharging Mode



For Charging via PC Mode



# APPENDIX I

## (Photos of EUT)

Figure 1  
The EUT-Overall View



Figure 2  
The EUT-Front View





Figure 3  
The EUT-Back View



Figure 4  
The EUT-Inside View



Figure 5  
The EUT- Inside View



## APPENDIX II (CE Label)



## CE Label

1. The CE conformity marking must consist of the initials 'CE' taking the following form:  
If the CE marking is reduced or enlarged, the proportions given in the above graduated drawing must be respected.
2. The CE marking must have a height of at least 5 mm except where this is not possible on account of the nature of the apparatus.
3. The CE marking must be affixed to the product or to its data plate. Additionally it must be affixed to the packaging, if any, and to the accompanying documents.
4. The CE marking must be affixed visibly, legibly and indelibly.  
It must have the same height as the initials 'CE'

### Proposed Label Location on EUT

### EUT Back View /proposed CE Mark Location

