# *FCC TEST REPORT*

**FCC ID** : WWZEE0115XXX

**Applicant** : Regal King Comercial Offshore De Macau Limitada

**Address** : Alameda Dr. Carlos D'Assumpcao,No.335, Centro Hotline,8/F, Unit K,Macau

**Equipment Under Test (EUT) :**

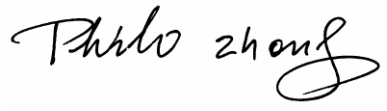
Product description : Portable cabinet LED light

Model No. : EE0115XXX

**Standards** : FCC Part18

**Date of Test** : Nov. 15, 2008

**Test Engineer** : **Olic huang**

**Reviewed By** : 

PERPARED BY:
**Waltek Services (Shenzhen) Co., Ltd.**
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# Contents

# 2 Test Summary

| Test | Test Requirement | Test Method | Class / Severity | Result |
|---|---|---|---|---|
| Radiated Emission (30MHz to 1GHz) | FCC PART 18: 2003 | ANSI C63.4:2003 | N/A | N/A |
| Conducted Emission (150KHz to 30MHz) | FCC PART 18: 2003 | ANSI C63.4:2003 | N/A | PASS |

# 3 General Information

## 3.1 Client Information

| | |
|---|---|
| Applicant: | Regal King Comercial Offshore De Macau Limitada |
| Address of Applicant: | Alameda Dr. Carlos D'Assumpcao,No.335, Centro Hotline, 8/F,Unit K,Macau |
| Manufacturer： | Splendour King Lighting factory Ltd. |
| Address of Manufacturer： | An Le Village section ,GUANGZHOU HWY， Dong Feng Town |

## 3.2 General Description of E.U.T.

| | |
|---|---|
| Product description: | Portable cabinet LED light |
| Model No.: | EE0115XXX |

## 3.3 Details of E.U.T.

| | |
|---|---|
| Power Supply: | 120VAC / 60Hz |

## 3.4 Description of Support Units

The EUT has been tested as an independent unit.

## 3.5 Standards Applicable for Testing

The customer requested FCC tests for a Portable cabinet LED light. The standards used were FCC Part18.

## 3.6 Test Methodology

All measurements contained in this report are conducted with FCC Measurement Procedure MP-5, technical requirements for Methods of Measurement of Radio-Noise Emission from ISM Equipment.

## 3.7 Test Facility

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

- **FCC – Registration No.: 880581**

  Waltek Services(Shenzhen) Co., Ltd. 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 880581,June 24， 2008.

- **IC – Registration No.: 7760**

  Waltek Services(Shenzhen) Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the Industry Canada. The acceptance letter from the Industry Canada is maintained in our files. Registration IC7760,July 24， 2008.

## 3.8 Test Location

All Emissions testswere performed at:-
1/F, Fukangtai Building,West Baima Rd.,Songgang Street, Baoan District, Shenzhen 518105, Guangdong,China.

# 4 Equipment Used during Test

| Equipment | Brand Name | Model | Related standards | Cal.Intal Months | Last Cal. Date | Serial No |
|---|---|---|---|---|---|---|
| **3m Anechoic chamber** | | | | | | |
| EMC Analyzer | Agilent | E7405A | ISO9001:2000 | 12 | Jan-08 | MY45114943 |
| Trilog Broadband Antenne | SCHWARZBECK MESS-ELEKTROM | VULB9163 | EN/ISO/IEC 17025 DIN EN ISO9001 | 12 | Jan-08 | 336 |
| Broad-band Horn Antenna | SCHWARZBECK MESS-ELEKTROM | BBHA 9120 D | EN/ISO/IEC 17025 DIN EN ISO9001 | 12 | Jan-08 | 667 |
| Broadband Preamplifier | SCHWARZBECK MESS-ELEKTROM | BBV 9718 | EN/ISO/IEC 17025 DIN EN ISO9001 | 12 | Jan-08 | 9718-148 |
| 10m Coaxial Cable with N-male Connectors | SCHWARZBECK MESS-ELEKTROM | AK 9515 H | EN/ISO/IEC 17025 DIN EN ISO9001 | 12 | Jan-08 | - |
| 10m 50 Ohm Coaxial Cable with N-plug,individual length,usable up to 3(5)GHz, Connectors | SCHWARZBECK MESS-ELEKTROM | AK 9513 | EN/ISO/IEC 17025 DIN EN ISO9001 | 12 | Jan-08 | - |
| Positioning Controller | C&C LAB | CC-C-IF | ISO9001 | 12 | Jan-08 | MF7802108 |
| Color Monitor | SUNSPO | SP-14C | ISO9001 | 12 | Jan-08 | - |
| **EMI Shielded Room** | | | | | | |
| Test Receiver | ROHDE&SCHWARZ | ESPI | ISO9001 | 12 | Jan-08 | 101155 |
| Two-Line V-Network | ROHDE&SCHWARZ | ENV216 | ISO9001 EN/ISO/IEC 17025 | 12 | Jan-08 | 100115 |
| Absorbing Clamp | ROHDE&SCHWARZ | MDS-21 | ISO9001 EN/ISO/IEC 17025 | 12 | Jan-08 | 100205 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 10m 50 Ohm Coaxial Cable with N-plug,individual length,usable up to 3(5)GHz, Connectors | SCHWARZBECK MESS-ELEKTROM | AK 9514 | EN/ISO/IEC 17025 DIN EN ISO9001 | 12 | Jan-08 | - |

# 5 Conducted Emission Test

| | |
|---|---|
| Test Requirement: | FCC Part 18 |
| Test Method: | Based on FCC Part 18 |
| Test Date: | Nov. 15, 2008 |
| Frequency Range: | 150kHz to 30MHz |
| Class: | Class B |
| Detector: | Peak for pre-scan (9kHz Resolution Bandwidth)<br>Quasi-Peak & Average if maximised peak within 6dB of Average Limit |

## 5.1 Test Equipment

Please refer to Section 5 this report.

## 5.2 Test Procedure

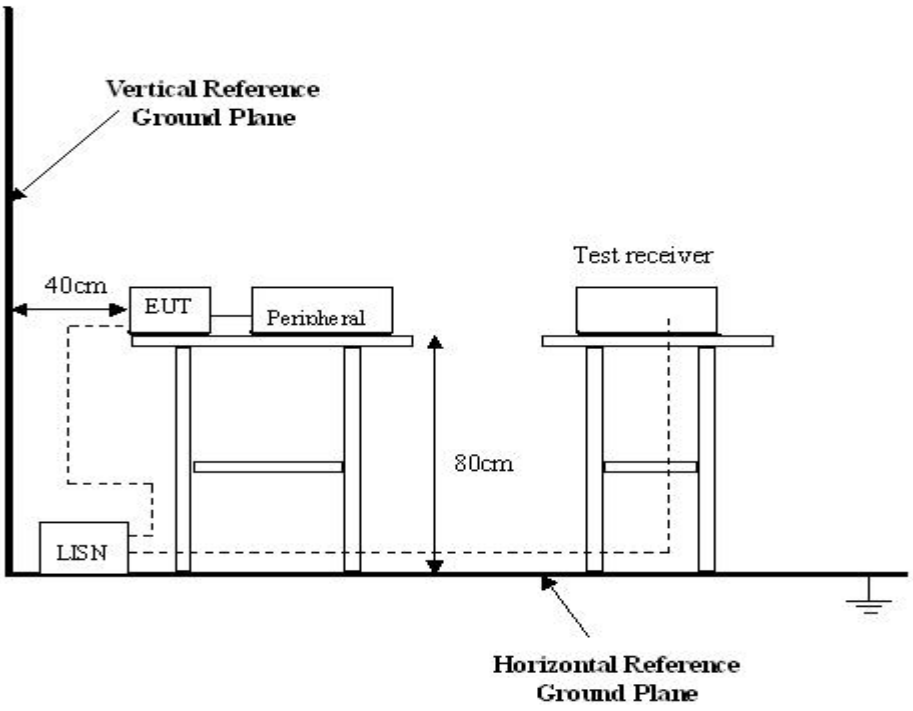
1. During the conducted emission test, the power cord of the EUT is connected to the auxiliary outlet of the LISN.
2. The EUT was tested according to FCC MP-5. The frequency spectrum from 150kHz to 30MHz was investigated.
3. The maximised peak emissions from the EUT was scanned and measured for both the Live and Neutral Lines. Quasi-peak & average measurements were performed if peak emissions were within 6dB of the average limit line.

## 5.3 Conducted Test Setup

The conducted emission tests were performed using the setup accordance with the FCC MP-5 measurement procedure.

The EUT is tested independently.

The power supply used by the EUT is connected to a 120VAC / 60Hz power source.



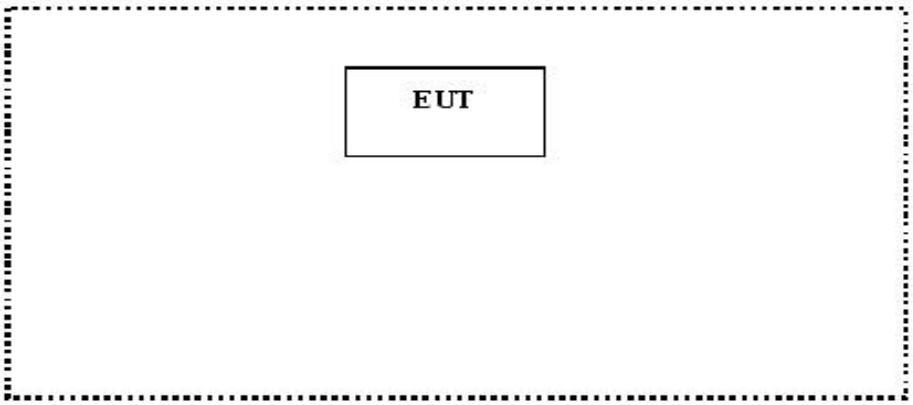

## 5.4 EUT Operating Condition

Operating condition is according to FCC MP-5.

A. Setup the EUT and simulators as shown on follow.

B. Enable RF signal and confirm EUT active.

C. Modulate output capacity of EUT up to specification.



## 5.5 Conducted Emission Limits

| Frequency of Emission (MHz) | Conducted Limit (dBuV)- Quasi-peak |
|---|---|
| 0.15— 0.5 | 66-56* |
| 0.5 — 5.0 | 56 |
| 5.0 — 30 | 60 |

**Note**: 1. In the above limits, the tighter limit applies at the band edges.
2. *Decreases with the logarithm of the frequency.

## 5.6 Spectrum Analyzer

The spectrum analyzer is configured during the conduction test is as follows:

Start Frequency ····· 150 kHz
Stop Frequency ····· 30 MHz
Sweep Speed ····· Auto
IF Bandwidth ····· 9 kHz
Video Bandwidth ····· 100 kHz
Quasi-Peak Adaptor Bandwidth ····· 9 kHz
Quasi-Peak Adaptor Mode ····· Normal

## 5.7 Conducted Emission Test Result

| | |
|---|---|
| Test Item: | Conducted Emission Test |
| Test Voltage: | 120VAC / 60Hz |
| Test Mode: | Normal |
| Temperature: | 24 °C |
| Humidity: | 52%RH |
| Test Result: | PASS |

### 5.7.1 Measurement Data

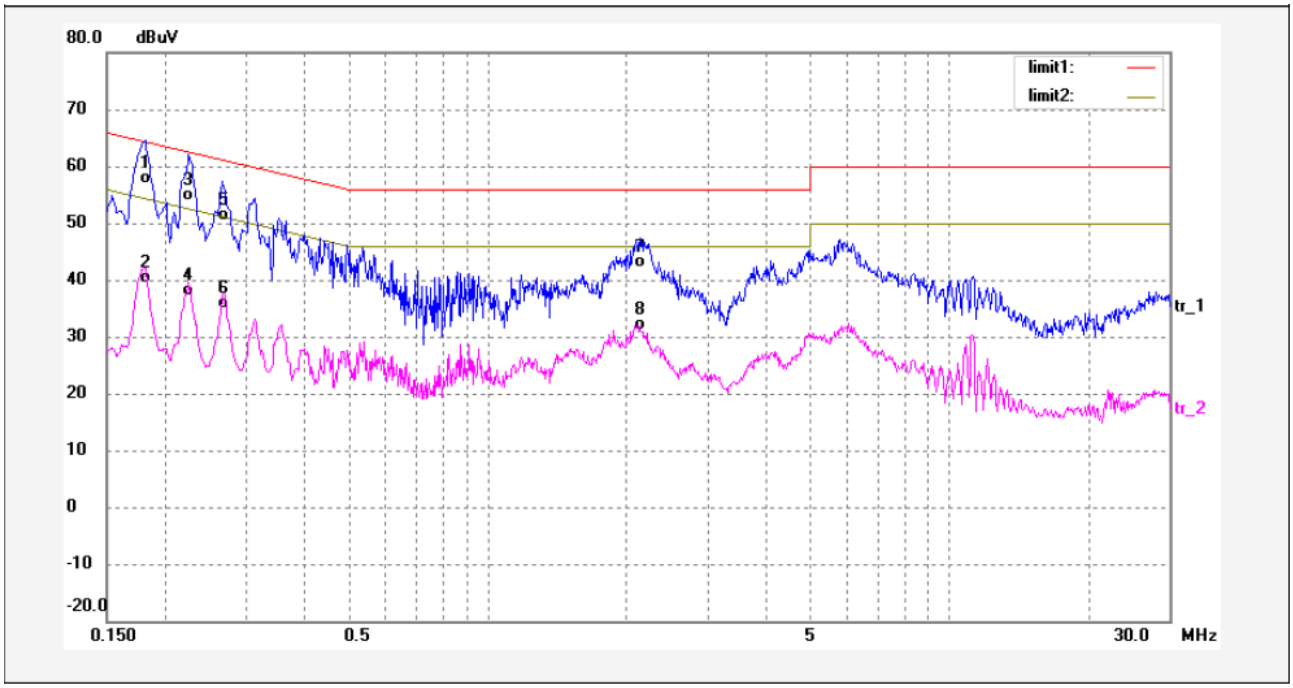
An initial pre-scan was performed on the live and neutral lines.

No futher quasi-peak or average measurements were performed since no peak emissions were detected within 10dB line below the average limit.

Please refer to the following peak scan graph for reference.

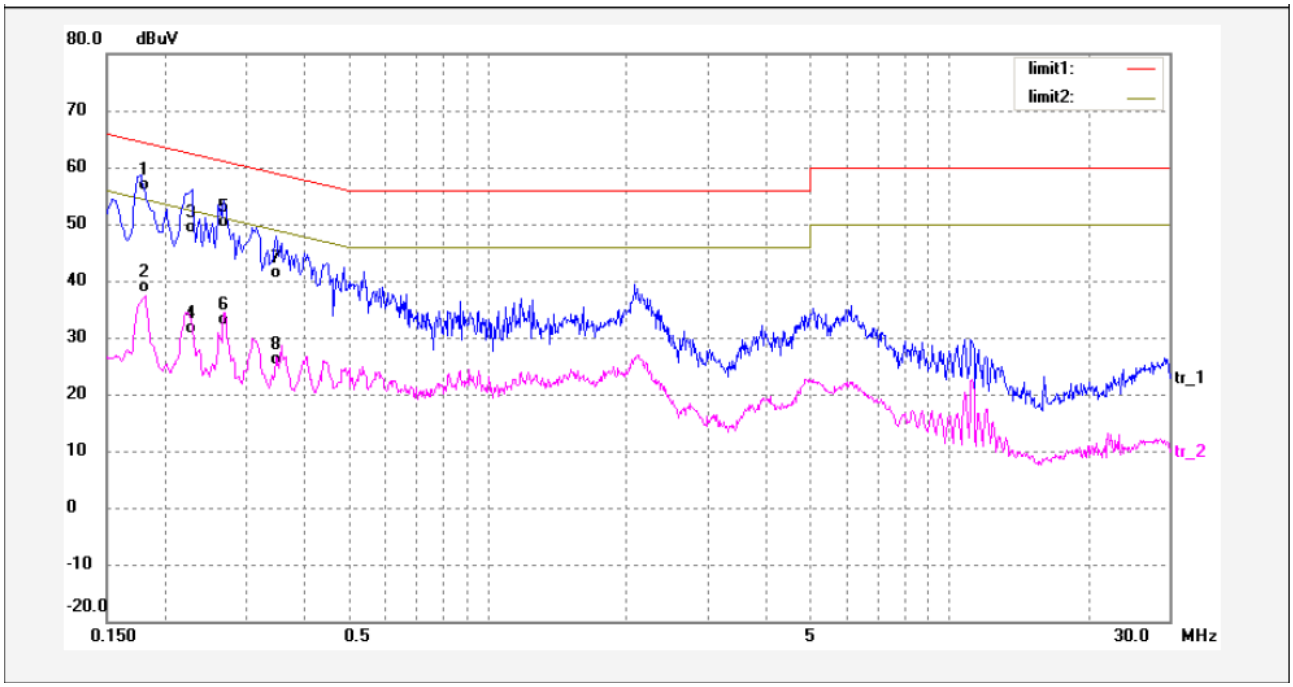
The conducted test data as below :

**Live Line:**




| No. | Freq. (MHz) | Reading (dBuV) | Factor (dB) | Result (dBuV) | Limit dBuV | Margin (dB) | Detector |
|---|---|---|---|---|---|---|---|
| 1 | 0.1819 | 45.86 | 10.95 | 56.81 | 64.39 | -7.58 | QP |
| 2 | 0.1819 | 28.48 | 10.95 | 39.43 | 54.39 | -14.96 | AVG |
| 3 | 0.2260 | 43.11 | 10.69 | 53.80 | 62.59 | -8.79 | QP |
| 4 | 0.2260 | 26.39 | 10.69 | 37.08 | 52.59 | -15.51 | AVG |
| 5 | 0.2660 | 39.84 | 10.57 | 50.41 | 61.24 | -10.83 | QP |
| 6 | 0.2660 | 24.33 | 10.57 | 34.90 | 51.24 | -16.34 | AVG |
| 7 | 2.1540 | 32.47 | 9.76 | 42.23 | 56.00 | -13.77 | QP |
| 8 | 2.1540 | 21.28 | 9.76 | 31.04 | 46.00 | -14.96 | AVG |

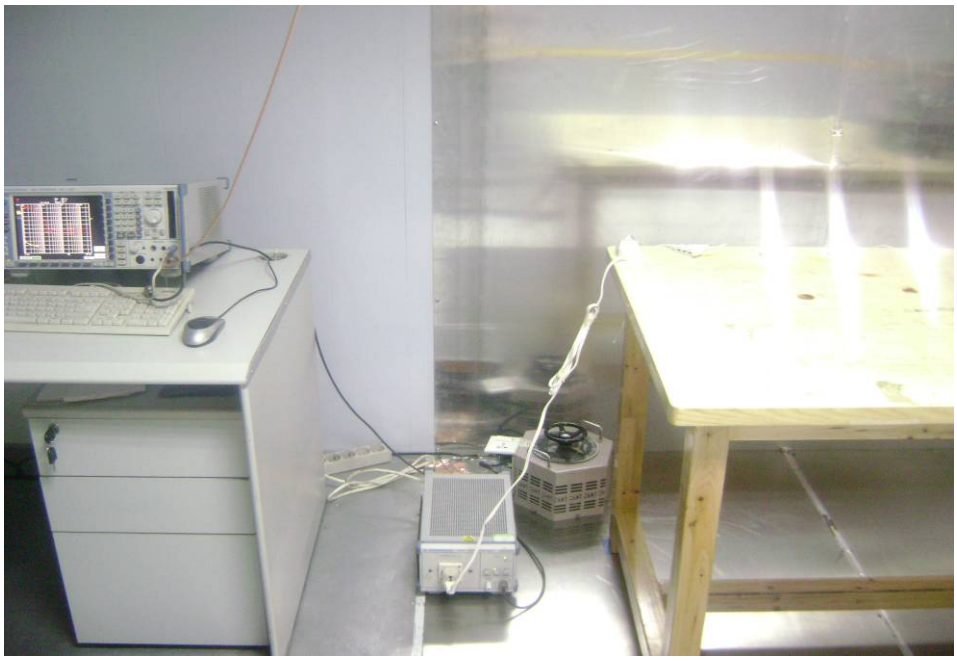
**Neutral Line:**




| No. | Freq. (MHz) | Reading (dBuV) | Factor (dB) | Result (dBuV) | Limit dBuV | Margin (dB) | Detector |
|---|---|---|---|---|---|---|---|
| 1 | 0.1780 | 44.77 | 10.99 | 55.76 | 64.57 | -8.81 | QP |
| 2 | 0.1780 | 26.91 | 10.99 | 37.90 | 54.57 | -16.67 | AVG |
| 3 | 0.2300 | 37.63 | 10.68 | 48.31 | 62.45 | -14.14 | QP |
| 4 | 0.2300 | 19.94 | 10.68 | 30.62 | 52.45 | -21.83 | AVG |
| 5 | 0.2700 | 38.82 | 10.56 | 49.38 | 61.12 | -11.74 | QP |
| 6 | 0.2700 | 21.55 | 10.56 | 32.11 | 51.12 | -19.01 | AVG |
| 7 | 0.3500 | 30.18 | 10.32 | 40.50 | 58.96 | -18.46 | QP |
| 8 | 0.3500 | 14.86 | 10.32 | 25.18 | 48.96 | -23.78 | AVG |

# 6 Photographs of Testing

## 6.1 Conducted Emission Test View



# 7 Photographs - Constructional Details

## 7.1 EUT - Component View

## 7.2 EUT1 - Front View

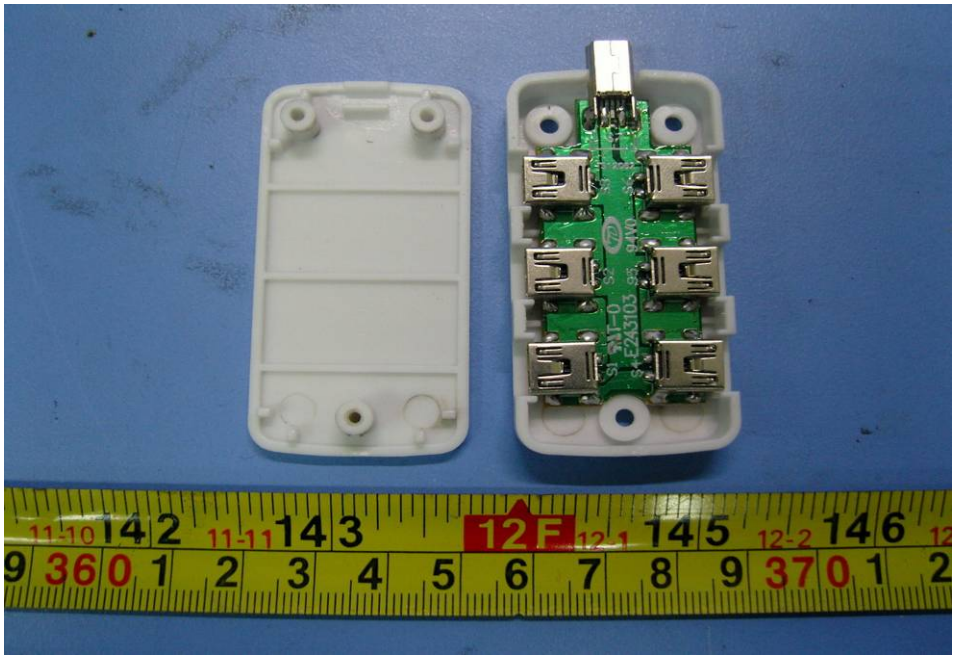
## 7.3 EUT 1 - Back View


## 7.4 EUT 2 - Front View

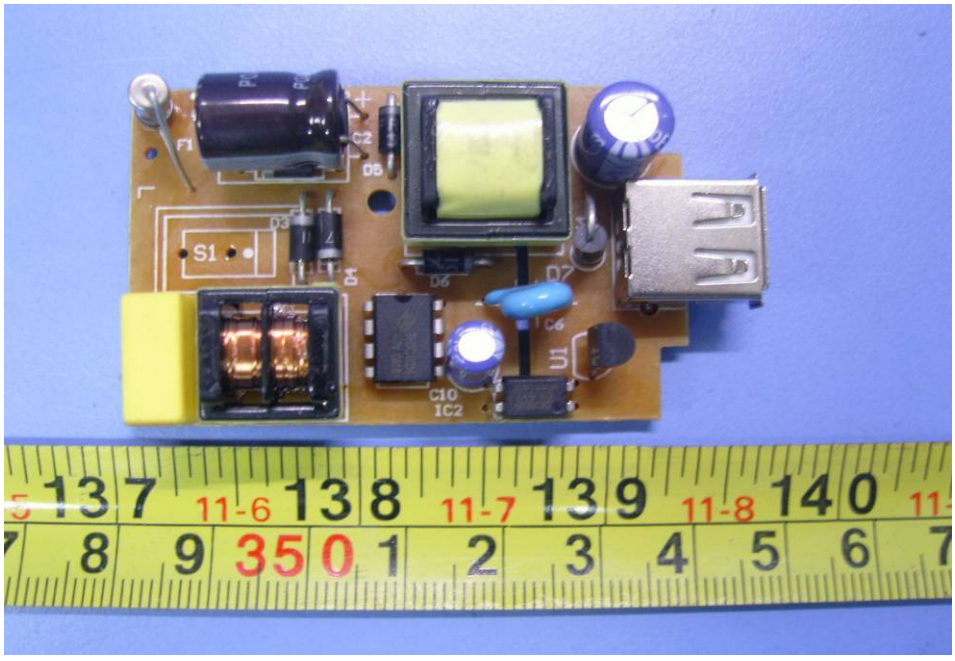
## 7.5 EUT 2 - Back View

## 7.6 EUT 1 - Open View

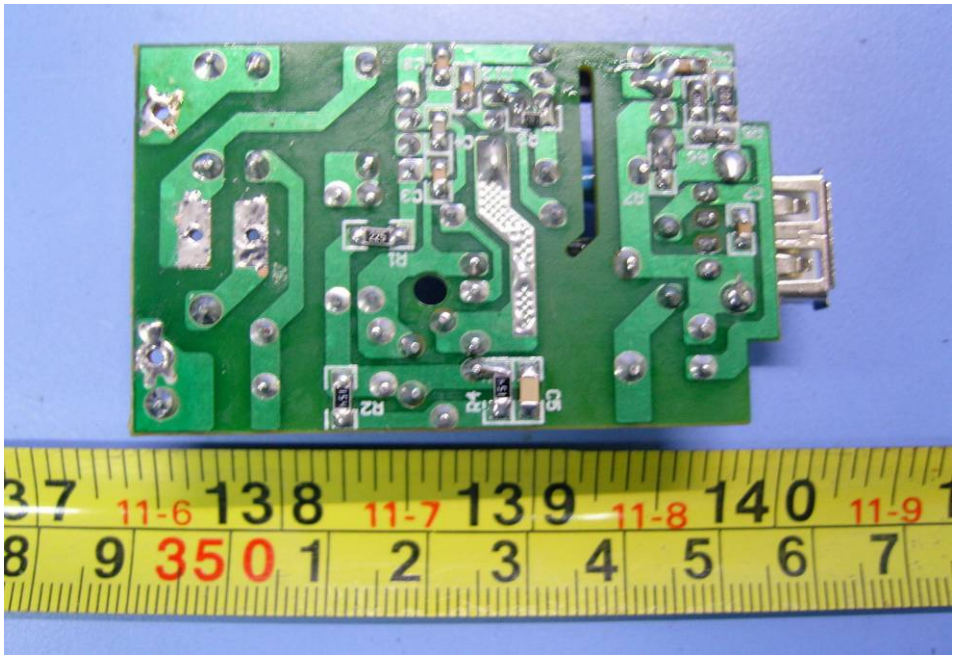
## 7.7 EUT 2 - Open View



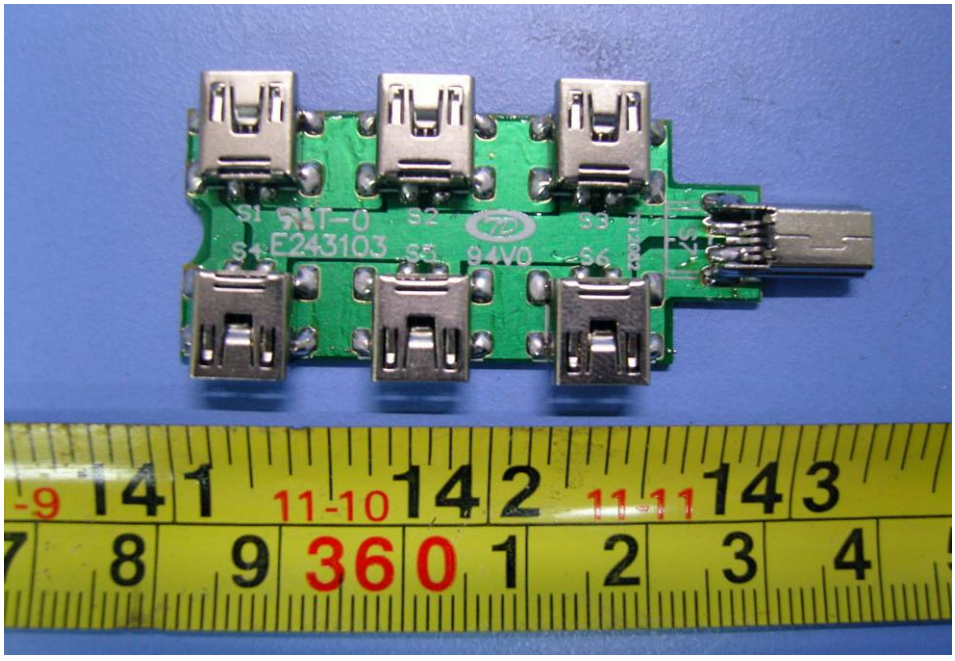
## 7.8 PCB 1 - Front View



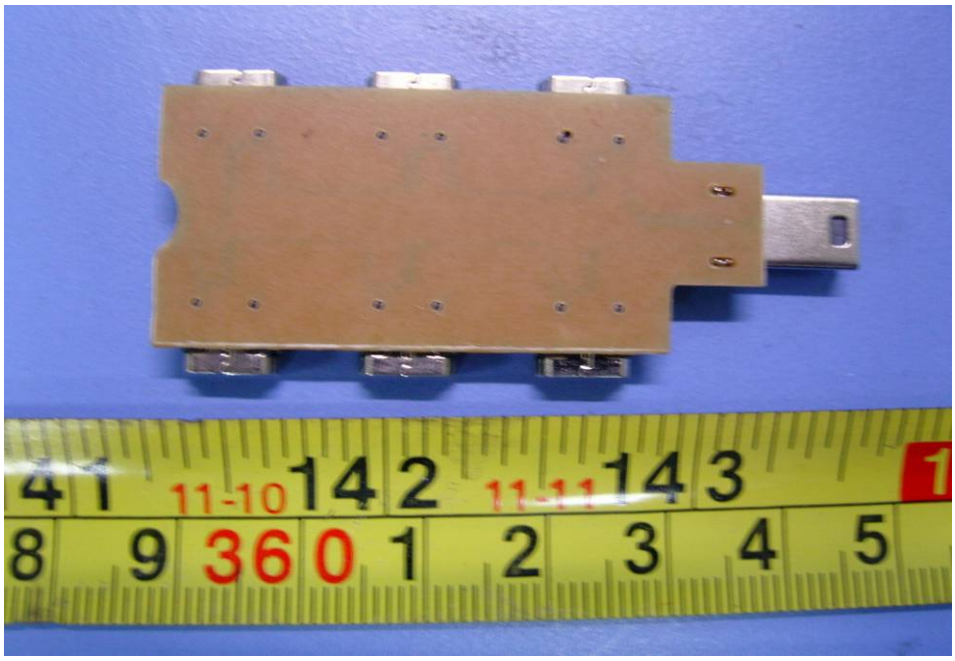
### 7.9 PCB 1 - Back View



### 7.10 PCB 2 - Front View



### 7.11 PCB 2 - Back View



# 8 FCC ID Label

This device complies with Part 18 of the FCC Rules.

The Label must not be a stick-on paper. The Label on these products must be permanently affixed to the product and readily visible at the time of purchase and must last the expected lifetime of the equipment not be readily detachable.

Proposed Label Location on EUT

EUT Top View/ proposed FCC Label Location