

TEST REPORT

Product Name : LED Table Lamp
Model Number : PBG-0613

Prepared for : Power beauty (Dong Guan) Industrial Co., Ltd.
Address : N o.1, Eastern Industry Park, Shujiu Village, Changping Town, Dong guan City, China

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Report Number : EDG2307270237E00201R
Date(s) of Tests : July 27, 2023 to August 04, 2023
Date of issue : August 07, 2023



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TEST REPORT VERIFICATION

Applicant : Power beauty (Dong Guan) Industrial Co., Ltd.
Manufacturer : Power beauty (Dong Guan) Industrial Co., Ltd.
EUT : LED Table Lamp
Model No. : PBG-0613
Rating : DC 5V 1A

Measurement Procedure Used:

EN IEC 55015:2019+A11:2020
EN IEC 61000-3-2: 2019+A1:2021
EN 61000-3-3:2013+A2:2021
EN 61547: 2009
(IEC 61000-4-2: 2008, IEC 61000-4-3:2020, IEC 61000-4-4: 2012,
IEC 61000-4-5: 2014+AMD1:2017, IEC 61000-4-6:2013/COR1:2015, IEC 61000-4-11: 2020)

The device described above is tested by EMTEK (DONGGUAN) CO., LTD. and EMTEK(SHENZHEN) CO., LTD 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 EMTEK (DONGGUAN) CO., LTD. is assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT to be technically compliant with the EN IEC 55015, EN IEC 61000-3-2, EN 61000-3-3 and EN61547 requirements.

This report applies to above tested sample only and shall not be reproduced in part without written approval of EMTEK (DONGGUAN) CO., LTD.

Date of Test : July 27, 2023 to August 04, 2023

Galen Xiao

Prepared by :

Galen Xiao / Editor

Tim Dong

Reviewer :

Tim Dong / Supervisor

EMTEK (DONGGUAN) CO., LTD.
TESTING

Approved & Authorized Signer :

Sam Lv / Manager

Modified Information

| Version | Summary | Revision Date | Report No. |
|---------|-----------------|---------------|----------------------|
| | Original Report | / | EDG2307270237E00201R |
| | | | |
| | | | |



1. DESCRIPTION OF STANDARDS AND RESULTS

| EMISSION | | | | |
|--|--|-------------------------------|----------------------|---------|
| Description of Test Item | | Standard | Limits | Results |
| Wired network ports | Disturbance voltage at the electric power supply interface | EN IEC 55015 | Table 1 | Pass |
| | Disturbance voltage other than power supply interface | | Table 2 | N/A |
| | Disturbance current other than power supply interface | | Table 3 | N/A |
| Local wired ports | Disturbance voltage limits of local wired ports (electrical power supply interface of non-restricted ELV lamps) | | Table 4 | N/A |
| | Disturbance voltage limits of local wired ports (local wired ports other than electrical power supply interface of ELV lamp) | | Table 5 | N/A |
| | Disturbance current limits at local wired ports (local wired ports other than electrical power supply interface of ELV lamp) | | Table 6 | N/A |
| Radiated disturbance (9 kHz~30 Mhz) | | | Table 8 | Pass |
| Radiated disturbance (30 MHz~1 Ghz) | | | Table 10 | Pass |
| Harmonic Current Emissions | | EN IEC 61000-3-2 | Class C | N/A |
| Voltage Fluctuation and Flicker | | EN 61000-3-3 | Section 5 | Pass |
| IMMUNITY (EN 61547) | | | | |
| Description of Test Item | | Basic Standard | Performance Criteria | Results |
| Electrostatic Discharge (ESD) | | IEC 61000-4-2: 2008 | B | Pass |
| Radio-frequency Electromagnetic Fields (R/S) | | IEC 61000-4-3:2020 | A | Pass |
| Fast Transients (EFT) | | IEC 61000-4-4: 2012 | B | Pass |
| Surges | | IEC 61000-4-5: 2014+AMD1:2017 | C | Pass |
| Injected Currents (radio-frequency common mode) | | IEC 61000-4-6:2013/COR1:2015 | A | Pass |
| Power Frequency Magnetic Field | | IEC 61000-4-8: 2009 | A | N/A |
| Voltage Interruptions, 100% | | IEC 61000-4-11: 2020 | B | Pass |
| Voltage Dips, 30% Reduction | | IEC 61000-4-2: 2008 | C | |
| Note: N/A is an abbreviation for Not Applicable. | | | | |

2. GENERAL INFORMATION

2.1. Description of Device (EUT)

| | |
|-------------------------|---|
| EUT | : LED Table Lamp |
| Model Number | : PBG-0613 |
| Trade Mark | : N/A |
| Power Supply for Test | : AC 230V 50Hz, DC 3.7V from internal battery |
| Operate mode | : ON |
| Applicant | : Power beauty (Dong Guan) Industrial Co., Ltd. |
| Address | : N o.1, Eastern Industry Park, Shujiu Village, Changping Town, Dong guan City, China |
| Manufacturer | : Power beauty (Dong Guan) Industrial Co., Ltd. |
| Address | : N o.1, Eastern Industry Park, Shujiu Village, Changping Town, Dong guan City, China |
| Date of sample received | : July 27, 2023 |
| Date of Test | : July 27, 2023 to August 04, 2023 |

2.2. Input / Output Ports

| Port # | Name | Type* | Cable Max. >3m | Cable Shielded | Comments |
|--|-----------|-------|----------------|----------------|----------|
| 0 | Enclosure | N/E | -- | -- | None |
| 1 | DC Cable | DC | No | -- | None |
| * Note: Use abbreviations: AC= AC Power Port; DC= DC Power Port; N/E= Non-Electrical; I/O= Signal Input or Output Port (Not Involved in Process Control); TP= Telecommunication Ports | | | | | |

2.3. Description of Support Device

Adapter : Model : YSV6-0501000
Input: AC 100-240V, 50/60Hz
Output: DC 5V, 1000mA

2.4. Description of Test Facility

Site Description
EMC Lab. : Accredited by CNAS, 2020.08.27
The certificate is valid until 2024.07.05
The Laboratory has been assessed and proved to be in
compliance with CNAS/CL01:2018
The Certificate Registration Number is L3150

Name of Firm : EMTEK(DONGGUAN) CO., LTD.
Site Location : -1&2/F., Building 2, Zone A, Zhongda Marine Biotechnology
Research and Development Base, N.9, Xincheng
Avenue, Songshanhu High-technology Industrial Development
Zone, Dongguan, Guangdong, China

2.5. Measurement Uncertainty

| Test Item | Uncertainty |
|---|--|
| Conducted Emission | : 2.08dB(9K-150KHz) 2.42dB(150K-30MHz) |
| Radiated Emission (3m Chamber) | : 3.32dB (30M~1GHz Polarize: H) 3.34dB (30M~1GHz Polarize: V) |
| Uncertainty for Flicker test | : 0.07% |
| Uncertainty for Harmonic test | : 1.8% |
| Uncertainty for test site temperature and humidity | : 0.6°C 4% |

3. MEASURING DEVICES AND TEST EQUIPMENT

3.1. For Disturbance voltage at the electric power supply interface

| Item | Equipment | Manufacturer | Model No. | Serial No. | Last Cal. | Cal. Interval |
|------|-------------------|---------------|-----------|------------|-----------|---------------|
| 1. | EMI Test Receiver | Rohde&Schwarz | ESCI | 100137 | 2023/5/11 | 1 Year |
| 2. | AMN | Rohde&Schwarz | ENV216 | 101209 | 2023/5/11 | 1 Year |

3.2. For Radiated disturbance (30 MHz~1 Ghz)

| Item | Equipment | Manufacturer | Model No. | Serial No. | Last Cal. | Cal. Interval |
|------|-----------------------|---------------|-----------|------------|-----------|---------------|
| 1. | EMI Test Receiver | Rohde&Schwarz | ESCI | 101415 | 2023/5/11 | 1 Year |
| 2. | Bi-log Hybrid Antenna | Schwarzbeck | VULB9163 | 141 | 2023/5/15 | 1 Year |
| 3. | Pre-Amplifie | HP | 8447F | OPTH64 | 2023/5/11 | 1 Year |

3.3. For Radiated disturbance (9 kHz~30 Mhz)

| Item | Equipment | Manufacturer | Model No. | Serial No. | Last Cal. | Cal. Interval |
|------|-----------------------|---------------|-----------|------------|-----------|---------------|
| 1. | EMI Test Receiver | Rohde&Schwarz | ESCI | 100137 | 2023/5/11 | 1 Year |
| 2. | Van Ween Loop Antenna | Laplace | RF300 | SLOHYH | 2023/5/11 | 1 Year |

3.4. For Harmonic Current / Flicker Measurement

| Item | Equipment | Manufacturer | Model No. | Serial No. | Last Cal. | Cal. Interval |
|------|---|--------------|--------------------|------------|-----------|---------------|
| 1. | AC variable frequency power supply | Teseq | 100-CTS-230-TE SQ | 1804A03259 | 2023/5/11 | 1 Year |
| 2. | Harmonic current and voltage fluctuation analyzer | Teseq | 5001IX-CTS-400-SCH | 1805A03008 | 2023/5/11 | 1 Year |

3.5. For Electrostatic Discharge Test

| Item | Equipment | Manufacturer | Model No. | Serial No. | Last Cal. | Cal. Interval |
|------|------------|--------------|-----------|------------|-----------|---------------|
| 1. | ESD Tester | TESEQ | NSG 437 | 409 | 2023/5/15 | 1 Year |

3.6. For Radio-frequency Electromagnetic Fields Test

| Item | Equipment | Manufacturer | Model No. | Serial No. | Last Cal. | Cal. Interval |
|------|--------------------------|--------------|-----------|------------|-----------|---------------|
| 1. | Power Amplifier | MILMEGA | AS0102-55 | 1018770 | 2023/5/13 | 1 Year |
| 2. | 50ohm Diode Power Sensor | BOONTON | 51011EMC | 34236 | 2023/5/13 | 1 Year |

| | | | | | | |
|-----|------------------------------------|-----------------|---------------------|-------------------|------------|--------|
| 3. | RF Power Meter. Dual Channel | BOONTON | 4232A | 10539 | 2023/5/13 | 1 Year |
| 4. | Log.-Per. Antenna | SCHWARZBECK | STLP 9129-7/16 | 3050 | N/A | N/A |
| 5. | Signal Generator | Agilent | N5181A | MY50145187 | 2023/5/13 | 1 Year |
| 6. | Broad-Band Horn Antenna | SCHWARZBECK | STLP 9149 | 9149-227 | N/A | N/A |
| 7. | Field Strength Meter | DARE | RSS1006A | 10100037SNO 22 | 2023/5/13 | 1 Year |
| 8. | Multi-function interface system | DARE | CTR1009B | 12100250SNO 72 | N/A | N/A |
| 9. | Automatic switch group | DARE | RSW1004A | N/A | N/A | N/A |
| 10. | Power Amplifier | MILMEGA | AS1860-50 | 1059346 | 2023/5/13 | 1 Year |
| 11. | Power Amplifier | Vectawave | VBA 1000-600C | 133627 | 2022/10/31 | 1 Year |
| 12. | Directional Coupler | BONN | BDC 0810-50/1500 | 2229689 | 2022/10/31 | 1 Year |
| 13. | Audio Analyzer | R&S | UPV | 101473 | 2023/5/13 | 1 Year |
| 14. | Audio Test System | AUDIO PRECISION | ATS-1 | 41100 | 2023/5/13 | 1 Year |

3.7. For Fast Transients Test

| Item | Equipment | Manufacturer | Model No. | Serial No. | Last Cal. | Cal. Interval |
|------|--------------------------------|--------------|-----------|------------|-----------|---------------|
| 1. | EMS comprehensive tester | HTEC | HCOMPACT7 | 190305 | 2023/5/11 | 1 Year |
| 2. | Capacitive Coupling Clamp | EMTEST | HFK | 0605-10 | 2023/5/11 | 1 Year |

3.8. For Surges Test

| Item | Equipment | Manufacturer | Model No. | Serial No. | Last Cal. | Cal. Interval |
|------|--------------------------------|--------------|-----------|------------|-----------|---------------|
| 1. | EMS comprehensive tester | HTEC | HCOMPACT7 | 190305 | 2023/5/11 | 1 Year |

3.9. For Injected Currents (radio-frequency common mode) Test

| Item | Equipment | Manufacturer | Model No. | Serial No. | Last Cal. | Cal. Interval |
|------|-------------------------------|----------------|----------------------|------------|-----------|---------------|
| 1. | Signal generator | Rohde& Schwarz | SMB100A | 103042 | 2023/5/11 | 1 Year |
| 2. | Single channel power meter | Rohde& Schwarz | NRVS | 101761 | 2023/5/11 | 1 Year |
| 3. | 6 db attenuator | AR-WORLDWIDE | 6dB/50FH-006-10 0 | 324011 | 2023/5/11 | 1 Year |
| 4. | CDN | SKET | CDN M2+M3 | 204303 | 2023/5/11 | 1 Year |

| | | | | | | |
|----|-----------------|-----------------|-------------|-------|-----------|--------|
| 5. | Power amplifier | BONN Elektronik | BSA 1515-25 | 97483 | 2023/5/11 | 1 Year |
|----|-----------------|-----------------|-------------|-------|-----------|--------|

3.10.For Voltage Dips and Short Interruptions Test

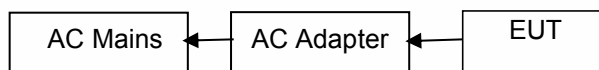
| Item | Equipment | Manufacturer | Model No. | Serial No. | Last Cal. | Cal. Interval |
|------|--------------------------|--------------|-----------|------------|-----------|---------------|
| 1. | EMS comprehensive tester | HTEC | HCOMPACT7 | 190305 | 2023/5/11 | 1 Year |
| 2. | Dips module | HTEC | HV1P16T | 190302 | 2023/5/11 | 1 Year |



4. DISTURBANCE VOLTAGE AT THE ELECTRIC POWER SUPPLY INTERFACE

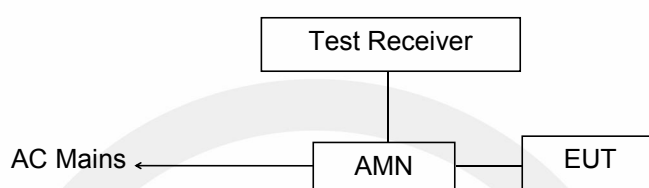
4.1. Block Diagram of Test Setup

4.1.1. Block diagram of connection between the EUT and simulators



(EUT: LED Table Lamp)

4.1.2. Block Diagram of Test Setup



(EUT: LED Table Lamp)

4.2. Measurement Standard and limit

4.2.1. Test Standard

EN IEC 55015:2019+A11:2020

4.2.2. Test Limits

| Frequency | At mains terminals (dBμV) | |
|-----------------|---------------------------|---------------|
| | Quasi-peak Level | Average Level |
| 9KHz ~ 50KHz | 110 | -- |
| 50KHz ~ 150KHz | 90 ~ 80* | -- |
| 150KHz ~ 0.5MHz | 66 ~ 56* | 56 ~ 46* |
| 0.5MHz ~ 5.0MHz | 56 | 46 |
| 5.0MHz ~ 30MHz | 60 | 50 |

1. At the transition frequency the lower limit applies.
2. * decreasing linearly with logarithm of the frequency.

4.3. EUT Configuration on Measurement

The following equipments are installed on Disturbance voltage at the electric power supply interface Measurement to meet the commission requirement and operating regulations in a manner which tends to maximize its emission characteristics in a normal application.

EUT : LED Table Lamp
Model Number : PBG-0613

4.4. Operating Condition of EUT

Step 1: Setup the EUT as shown in Section 4.1.

Step 2: Turn on the power of all equipments.

Step 3: Let the EUT work in test mode (ON) and measure it.

4.5. Test Procedure

The EUT is put on the table which is 0.8 meter high above the ground and connected to the AC mains through a Line Impedance Stabilization Network (L.I.S.N.). This provided a 50ohm coupling impedance for the tested equipments. Both sides of AC line are checked to find out the maximum conducted emission according to the EN IEC 55015 regulations during conducted emission measurement. And the voltage probe had been used for the load terminals measurement according to the EN55015 standard.

The bandwidth of the test receiver (ESCI) is set at 200Hz in 9KHz~150KHz range and 9KHz in 150KHz~30MHz range.

The frequency range from 9KHz to 30MHz is checked.

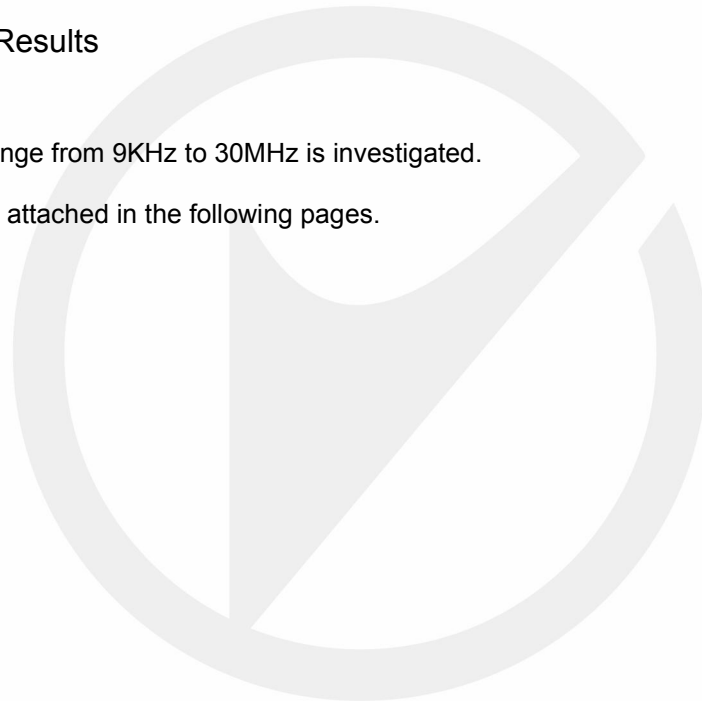
All the test results are listed in Section 4.6.

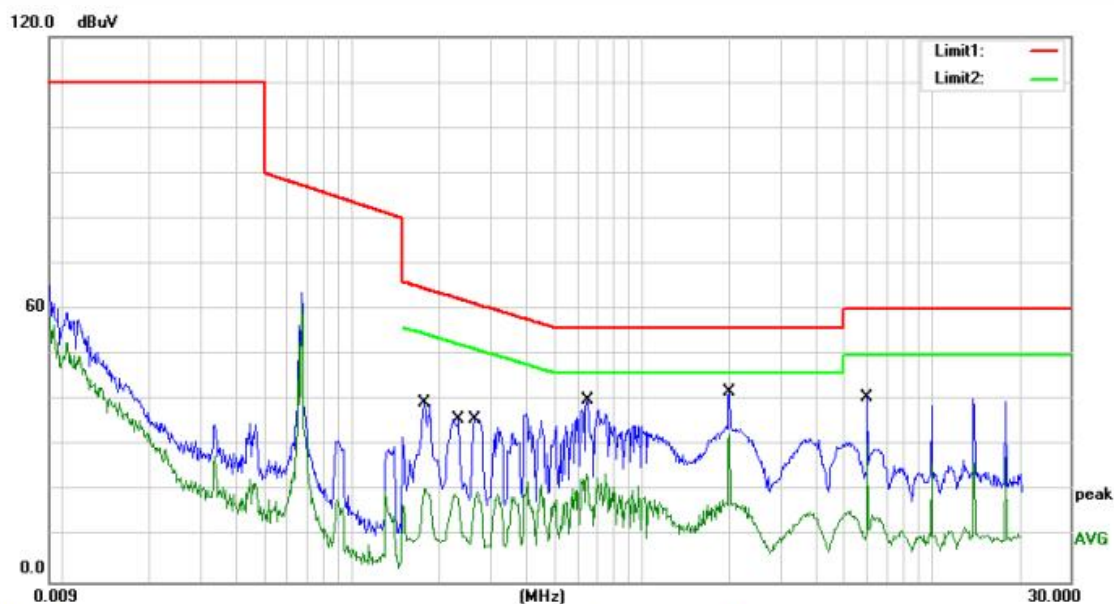
4.6. Measurement Results

PASS.

The frequency range from 9KHz to 30MHz is investigated.

The test data are attached in the following pages.



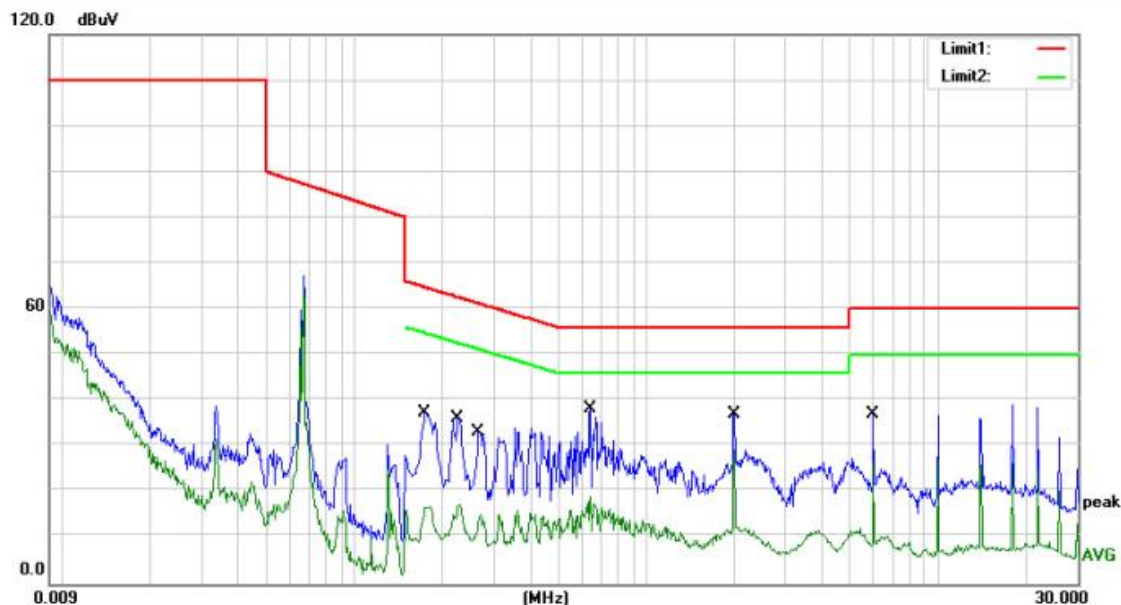


| No. | Mk. | Freq. MHz | Reading Level dBuV | Correct Factor dB | Measure- ment dBuV | Limit dBuV | Over dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|--------------------------|---------------|------------|----------|---------|
| 1 | | 0.1780 | 29.87 | 9.50 | 39.37 | 64.58 | -25.21 | QP | |
| 2 | | 0.1780 | 11.06 | 9.50 | 20.56 | 54.58 | -34.02 | AVG | |
| 3 | | 0.2340 | 26.48 | 9.50 | 35.98 | 62.31 | -26.33 | QP | |
| 4 | | 0.2340 | 9.74 | 9.50 | 19.24 | 52.31 | -33.07 | AVG | |
| 5 | | 0.2660 | 26.41 | 9.52 | 35.93 | 61.24 | -25.31 | QP | |
| 6 | | 0.2660 | 10.32 | 9.52 | 19.84 | 51.24 | -31.40 | AVG | |
| 7 | | 0.6500 | 30.40 | 9.58 | 39.98 | 56.00 | -16.02 | QP | |
| 8 | | 0.6500 | 14.24 | 9.58 | 23.82 | 46.00 | -22.18 | AVG | |
| 9 | | 1.9980 | 32.31 | 9.56 | 41.87 | 56.00 | -14.13 | QP | |
| 10 | * | 1.9980 | 22.90 | 9.56 | 32.46 | 46.00 | -13.54 | AVG | |
| 11 | | 5.9940 | 31.26 | 9.50 | 40.76 | 60.00 | -19.24 | QP | |
| 12 | | 5.9940 | 21.36 | 9.50 | 30.86 | 50.00 | -19.14 | AVG | |

*:Maximum data x:Over limit !:over margin Comment: Factor build in receiver. Operator:

Remark:

1. Measurement (dB μ V) = AMN Factor (dB) + Cable Loss (dB) + Reading (dB μ V)
2. Over (dB) = Measurement (dB μ V) - Limit (dB μ V)



Site site #1 Phase: **N** Temperature: 26
 Limit: EN IEC 55015_QP (CE) Power: AC 230V/50Hz Humidity: 60 %
 Mode: ON
 Note:

| No. | Mk. | Freq. MHz | Reading Level dBuV | Correct Factor dB | Measure- ment dBuV | Limit dBuV | Over dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|--------------------------|---------------|------------|----------|---------|
| 1 | | 0.1740 | 27.97 | 9.50 | 37.47 | 64.77 | -27.30 | QP | |
| 2 | | 0.1740 | 7.50 | 9.50 | 17.00 | 54.77 | -37.77 | AVG | |
| 3 | | 0.2260 | 26.77 | 9.50 | 36.27 | 62.60 | -26.33 | QP | |
| 4 | | 0.2260 | 7.71 | 9.50 | 17.21 | 52.60 | -35.39 | AVG | |
| 5 | | 0.2660 | 23.53 | 9.52 | 33.05 | 61.24 | -28.19 | QP | |
| 6 | | 0.2660 | 5.66 | 9.52 | 15.18 | 51.24 | -36.06 | AVG | |
| 7 | | 0.6460 | 28.78 | 9.58 | 38.36 | 56.00 | -17.64 | QP | |
| 8 | | 0.6460 | 9.38 | 9.58 | 18.96 | 46.00 | -27.04 | AVG | |
| 9 | | 1.9980 | 27.59 | 9.56 | 37.15 | 56.00 | -18.85 | QP | |
| 10 | * | 1.9980 | 19.67 | 9.56 | 29.23 | 46.00 | -16.77 | AVG | |
| 11 | | 6.0020 | 27.66 | 9.50 | 37.16 | 60.00 | -22.84 | QP | |
| 12 | | 6.0020 | 17.12 | 9.50 | 26.62 | 50.00 | -23.38 | AVG | |

*:Maximum data x:Over limit !:over margin Comment: Factor build in receiver. Operator:

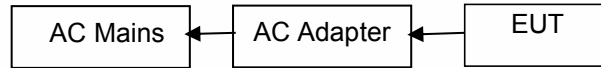
Remark:

1. Measurement (dB μ V) = AMN Factor (dB) + Cable Loss (dB) + Reading (dB μ V)
2. Over (dB) = Measurement (dB μ V) - Limit (dB μ V)

5. RADIATED DISTURBANCE (30 MHZ~1 GHZ)

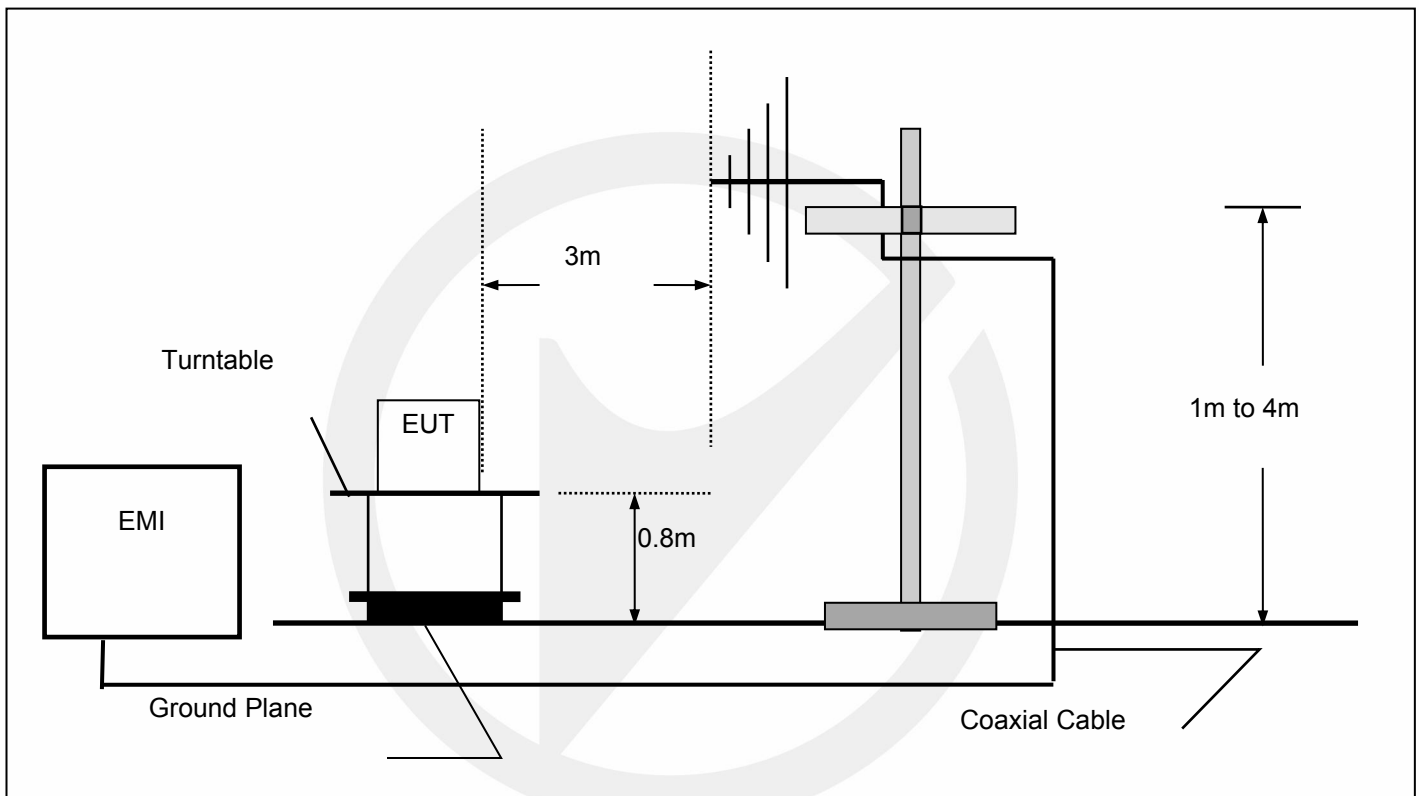
5.1. Block Diagram of Test

5.1.1 Block diagram of connection between the EUT and simulators



(EUT: LED Table Lamp)

5.1.2 Block diagram of test setup (In chamber)



(EUT: LED Table Lamp)

5.2. Measurement Standard and limit

5.2.1. Test Standard

EN IEC 55015:2019+A11:2020

5.2.2. Test Limits

All emanations from a device or system shall not exceed the level of field strengths specified below:

| FREQUENCY (MHz) | DISTANCE (Meters) | FIELD STRENGTHS LIMIT (DbmV/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.

5.3. EUT Configuration on Measurement

The EN IEC 55015 regulations test method must be used to find the maximum emission during Radiated disturbance (30 MHz~1 Ghz) at the enclosure port.

EUT : LED Table Lamp
Model No. : PBG-0613

5.4. Operating Condition of EUT

Step 1: Turn on the power.

Step 2: Let the EUT work in test mode (ON) and measure it.

5.5. 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 meter to find out the maximum emission level. Bilog antenna (calibrated by Dipole Antenna) is used as a receiving antenna. Both horizontal and vertical polarizations of the antenna are set on test.

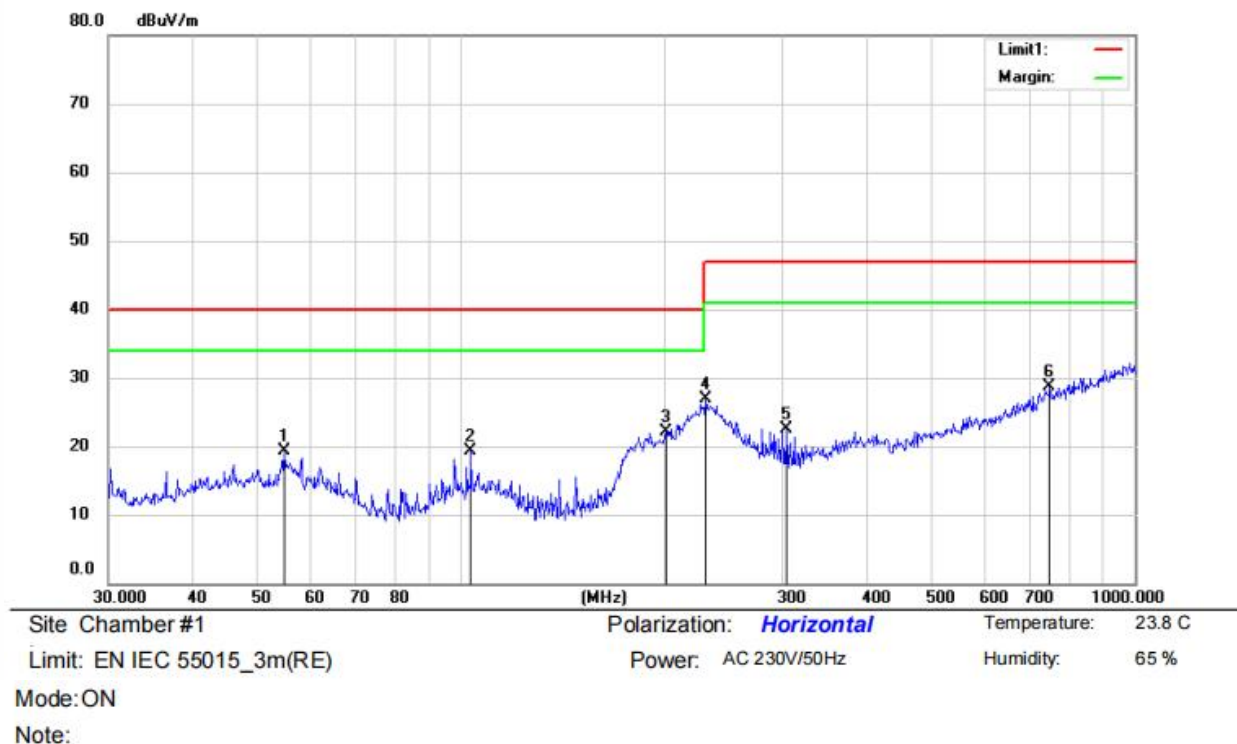
The bandwidth of the Receiver (ESCI) is set at 120kHz.

5.6. Test Results

PASS.

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

The worst test data are attached in the following pages.



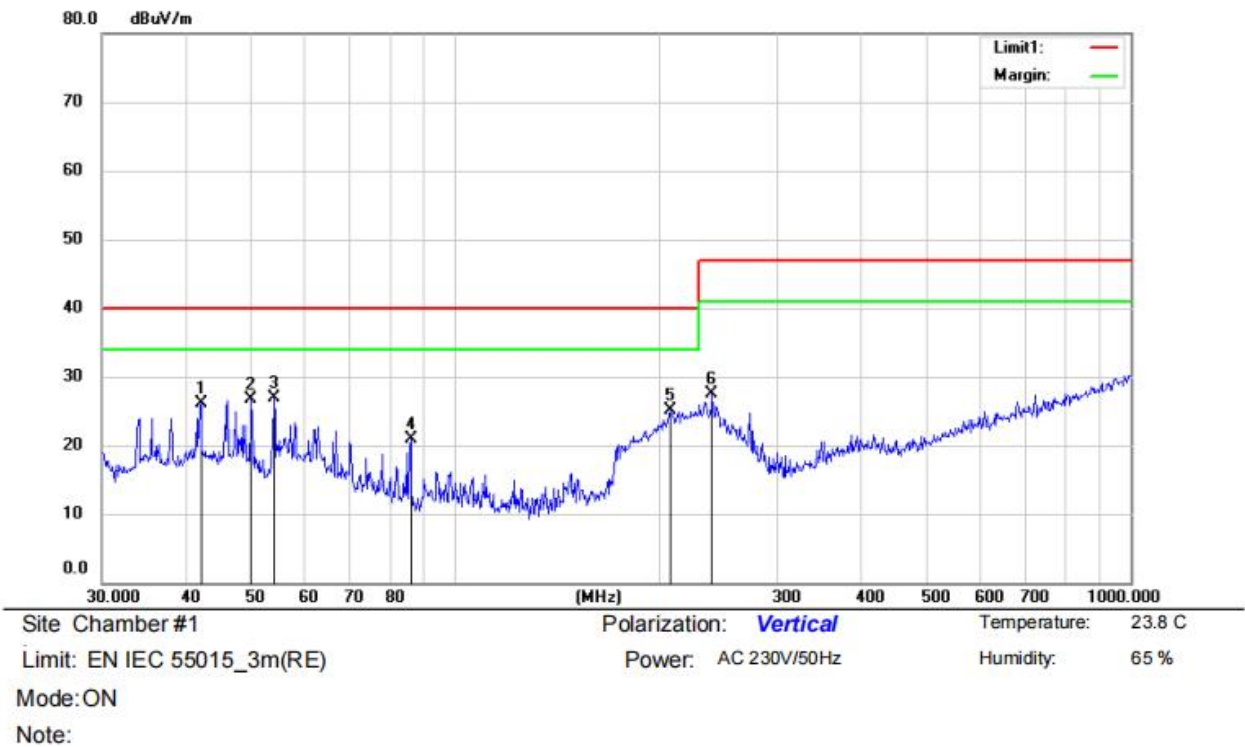
| No. | Mk. | Freq. MHz | Reading Level dBuV | Ant. Factor dB/m | Pre Amp Gain dB | Cable loss dB | Measure- ment dBuV/m | Limit dBuV/m | Over dB | HI | Degree | Comment |
|-----|-----|--------------|--------------------------|------------------------|-----------------------|---------------------|----------------------------|-----------------|------------|----|--------|---------|
| 1 | | 54.6430 | 35.38 | 13.54 | 30.5 | 0.91 | 19.33 | 40.00 | -20.67 | QP | | |
| 2 | | 103.4421 | 37.55 | 11.53 | 30.87 | 1.1 | 19.31 | 40.00 | -20.69 | QP | | |
| 3 | * | 201.3930 | 39.07 | 11.64 | 30.35 | 1.71 | 22.07 | 40.00 | -17.93 | QP | | |
| 4 | | 230.9068 | 42.65 | 12.47 | 30.2 | 1.97 | 26.89 | 47.00 | -20.11 | QP | | |
| 5 | | 304.6100 | 36.09 | 14 | 29.83 | 2.18 | 22.44 | 47.00 | -24.56 | QP | | |
| 6 | | 747.4825 | 34.42 | 20.76 | 30.17 | 3.77 | 28.78 | 47.00 | -18.22 | QP | | |

*:Maximum data x:Over limit !:over margin

Operator: Ccyf

Remark:

1. Measurement (dB μ V/m) = Antenna Factor(dB) -Amp Factor(dB) +Cable Loss(dB) + Reading(dB μ V/m)
2. Over (dB) = Measurement (dB μ V/m) - Limit (dB μ V/m)



| No. | Mk. | Freq. | Reading | Ant. | Pre Amp | Cable | Measure- | Limit | Over | HI | Degree |
|-----|-----|----------|---------|--------|---------|-------|----------|--------|--------|----------|---------|
| | | MHz | dBuV | Factor | Gain | loss | ment | dBuV/m | dB | Detector | cm |
| | | | | | dB | dB | dBuV/m | dBuV/m | | | deg. |
| | | | | | | | | | | | Comment |
| 1 | | 42.0066 | 42.76 | 13.26 | 30.52 | 0.65 | 26.15 | 40.00 | -13.85 | QP | |
| 2 | | 49.8814 | 42.40 | 14 | 30.48 | 0.78 | 26.70 | 40.00 | -13.30 | QP | |
| 3 | * | 53.8818 | 42.91 | 13.61 | 30.49 | 0.88 | 26.91 | 40.00 | -13.09 | QP | |
| 4 | | 85.8984 | 41.63 | 8.83 | 30.68 | 1.06 | 20.84 | 40.00 | -19.16 | QP | |
| 5 | | 207.8501 | 41.92 | 11.82 | 30.32 | 1.77 | 25.19 | 40.00 | -14.81 | QP | |
| 6 | | 239.9874 | 42.93 | 12.72 | 30.15 | 2.04 | 27.54 | 47.00 | -19.46 | QP | |

*:Maximum data x:Over limit !:over margin

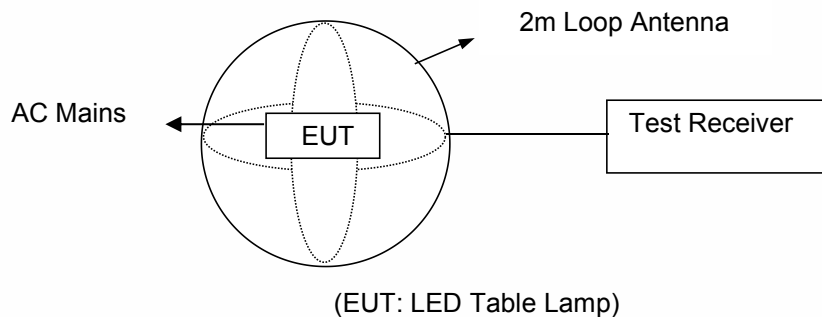
Operator: Ccyf

Remark:

1. Measurement (dB μ V/m) = Antenna Factor(dB) -Amp Factor(dB) +Cable Loss(dB) + Reading(dB μ V/m)
2. Over (dB) = Measurement (dB μ V/m) - Limit (dB μ V/m)

6. RADIATED DISTURBANCE (9 KHZ~30 MHZ)

6.1. Block Diagram of Test Setup



6.2. Measurement Standard and Limits

6.2.1. Test Standard

EN IEC 55015:2019+A11:2020

6.2.2. Test Limits

| Frequency | Limits for loop diameter (dB μ A) |
|-----------------|---------------------------------------|
| | 2m |
| 9KHz ~ 70KHz | 88 |
| 70KHz ~ 150KHz | 88 ~ 53* |
| 150KHz ~ 3.0MHz | 53 ~ 22* |
| 3.0MHz ~ 30MHz | 22 |

1. At the transition frequency the lower limit applies.
2. * decreasing linearly with logarithm of the frequency.

6.3. EUT Configuration on Measurement

The configuration of the EUT is same as Section 6.1.

6.4. Operating Condition of EUT

Same as conducted measurement which is listed in Section 4.4, except that the test setup replaced by Section 6.1.

6.5. Test Procedure

The EUT is placed on a wood table in the center of a loop antenna. The induced current in the loop antenna is measured by means of a current probe and the test receiver.

Three field components are checked by means of a coaxial switch.

The frequency range from 9KHz to 30MHz is investigated. The receiver is measured with the quasi-peak detector. For frequency band 9KHz to 150KHz, the bandwidth of the field strength meter (test receiver ESCI) is set at 200Hz. For frequency band 150KHz to 30MHz, the bandwidth is set at 9KHz.

6.6. Test Results

PASS.

The frequency range from 9KHz to 30MHz is investigated.

The worst test data are attached in the following pages.





Site site #1
 Limit: (ME)EN IEC 55015_QP
 Mode: ON
 Note:

Phase: X
 Power: AC 230V/50Hz
 Temperature: 26
 Humidity: 60 %

| No. | Mk. | Freq. MHz | Reading Level dBuA | Correct Factor dB | Measure- ment dBuA | Limit dBuA | Over dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|--------------------------|---------------|------------|----------|---------|
| 1 | | 0.1500 | 19.56 | 9.67 | 29.23 | 58.00 | -28.77 | QP | |
| 2 | | 0.2363 | 15.82 | 9.55 | 25.37 | 52.54 | -27.17 | QP | |
| 3 | | 0.3650 | 8.69 | 9.57 | 18.26 | 47.31 | -29.05 | QP | |
| 4 | | 1.1050 | 4.08 | 9.59 | 13.67 | 34.00 | -20.33 | QP | |
| 5 | | 1.7450 | 1.52 | 9.59 | 11.11 | 28.51 | -17.40 | QP | |
| 6 | * | 8.6500 | 1.42 | 9.75 | 11.17 | 22.00 | -10.83 | QP | |

*:Maximum data x:Over limit !:over margin Comment: Factor build in receiver. Operator:

Remark:

1. Measurement (dB μ A) = Antenna Factor (dB) + Cable Loss (dB) + Reading (dB μ A)
2. Over (dB) = Measurement (dB μ A) - Limit (dB μ A)



Site site #1 Phase: Y Temperature: 26
 Limit: (ME)EN IEC 55015_QP Power: AC 230V/50Hz Humidity: 60 %
 Mode: ON
 Note:

| No. | Mk. | Freq. MHz | Reading Level dBuA | Correct Factor dB | Measure- ment dBuA | Limit dBuA | Over dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|--------------------------|---------------|------------|----------|---------|
| 1 | | 0.1723 | 15.73 | 9.55 | 25.28 | 56.33 | -31.05 | QP | |
| 2 | | 0.3300 | 10.90 | 9.56 | 20.46 | 48.53 | -28.07 | QP | |
| 3 | | 0.7700 | 5.39 | 9.58 | 14.97 | 38.34 | -23.37 | QP | |
| 4 | | 1.7450 | 1.52 | 9.59 | 11.11 | 28.51 | -17.40 | QP | |
| 5 | * | 2.9650 | 1.28 | 9.62 | 10.90 | 22.14 | -11.24 | QP | |
| 6 | | 20.2000 | -1.21 | 10.18 | 8.97 | 22.00 | -13.03 | QP | |

*:Maximum data x:Over limit !:over margin Comment: Factor build in receiver. Operator:

Remark:

1. Measurement (dB μ A) = Antenna Factor (dB) + Cable Loss (dB) + Reading (dB μ A)
2. Over (dB) = Measurement (dB μ A) - Limit (dB μ A)



Site site #1

Phase: **Z**

Temperature: 26

Limit: (ME)EN IEC 55015_QP

Power: AC 230V/50Hz

Humidity: 60 %

Mode: ON

Note:

| No. | Mk. | Freq. MHz | Reading Level dBuA | Correct Factor dB | Measure- ment dBuA | Limit dBuA | Over dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|--------------------------|---------------|------------|----------|---------|
| 1 | | 0.1680 | 15.39 | 9.56 | 24.95 | 56.64 | -31.69 | QP | |
| 2 | | 0.3300 | 12.90 | 9.56 | 22.46 | 48.53 | -26.07 | QP | |
| 3 | | 0.4910 | 7.96 | 9.57 | 17.53 | 43.75 | -26.22 | QP | |
| 4 | | 1.2600 | 3.18 | 9.59 | 12.77 | 32.42 | -19.65 | QP | |
| 5 | * | 2.3300 | 5.13 | 9.62 | 14.75 | 25.04 | -10.29 | QP | |
| 6 | | 7.7000 | 1.43 | 9.73 | 11.16 | 22.00 | -10.84 | QP | |

*:Maximum data x:Over limit !:over margin Comment: Factor build in receiver. Operator:

Remark:

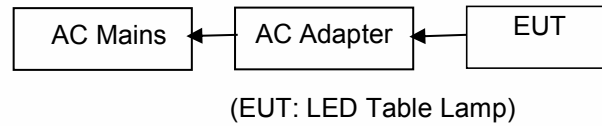
1. Measurement (dB μ A) = Antenna Factor (dB) + Cable Loss (dB) + Reading (dB μ A)

2. Over (dB) = Measurement (dB μ A) - Limit (dB μ A)

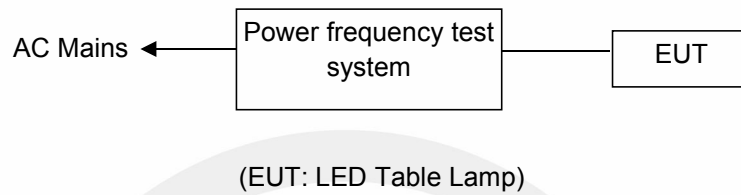
7. HARMONIC CURRENT MEASUREMENT

7.1. Block Diagram of Test Setup

7.1.1. Block diagram of connection between the EUT and simulators



7.1.2. Block Diagram of Test Setup



7.2. Measuring Standard

EN IEC 61000-3-2: 2019+A1:2021 Class C Power<5W

7.3. Operating Condition of EUT

Step 1: Setup the EUT as shown in Section 7.1.

Step 2: Turn on the power of all equipments.

Step 3: Let the EUT work in test mode (ON) and measure it.

7.4. Test Results

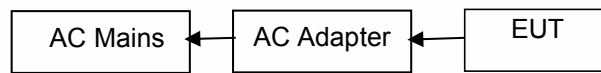
N/A.

Because operating power of EUT is less than 5W, according to standard EN IEC 61000-3-2, Harmonics Current is not required.

8. VOLTAGE FLUCTUATIONS & FLICKER MEASUREMENT

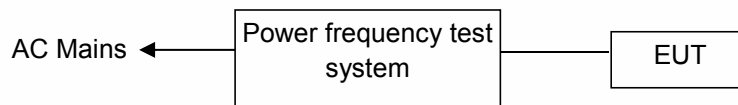
8.1. Block Diagram of Test Setup

8.1.1. Block diagram of connection between the EUT and simulators



(EUT: LED Table Lamp)

8.1.2. Block Diagram of Test Setup



(EUT: LED Table Lamp)

8.2. Measuring Standard

EN 61000-3-3:2013+A2:2021

8.3. Operating Condition of EUT

Step: Setup the EUT as shown in Section 8.1.

Step 2: Turn on the power of all equipments.

Step 3: Let the EUT work in test mode (ON) and measure it.

8.4. Test Results

PASS.

Please refer to the following page.

Flicker Test Summary per EN/IEC61000-3-3 Ed. 3.0 (2013) (Run time)

EUT: PBG-0613

Test category: All parameters (European limits)

Test date: 2023-8-3

Test duration (min): 10

Comment: ON

Customer: Customer information

Tested by: Lennard Lio

Test Margin: 100

End time: 17:17:49

Start time: 17:07:22

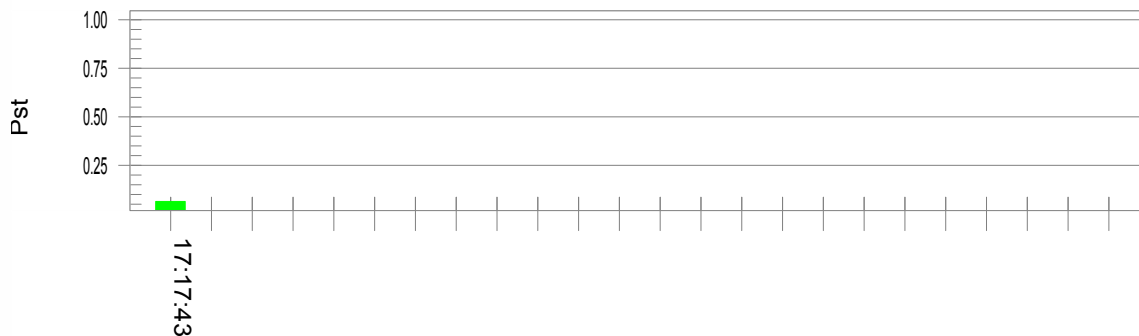
Data file name: F-000108.cts_data

Test Result: Pass

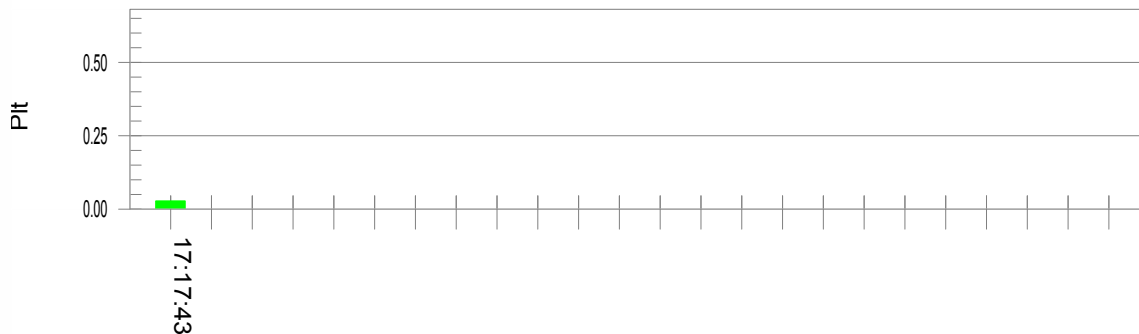
Status: Test Completed

Pst_i and limit line

European Limits



Plt and limit line



Parameter values recorded during the test:

Vrms at the end of test (Volt): 229.88

T-max (mS): 0

Highest dc (%): 0.00

Highest dmax (%): 0.00

Highest Pst (10 min. period): 0.064

Test limit (mS): 500.0 Pass

Test limit (%): 3.30 Pass

Test limit (%): 4.00 Pass

Test limit: 1.000 Pass

Immunity General performance criteria Description

General performance criteria are defined in EN 61547 clause 4. These criteria shall be used during the testing of primary functions where no relevant annex is applicable.

When assessing the impact of a disturbance on a function, the assessment should take into consideration the function's performance prior to the application of the disturbance and only identify as failures those changes in performance that are a result of the disturbance.

EN 61547:

Performance criterion A:

During the test, no change of the luminous intensity shall be observed and the regulating control, if any, shall operate during the test as intended.

Performance criterion B:

During the test, the luminous intensity may change to any value. After the test, the luminous intensity shall be restored to its initial value within 1 min. Regulating controls need not function during the test, but after the test, the mode of the control shall be the same as before the test provided that during the test no mode changing commands were given.

Performance criterion C:

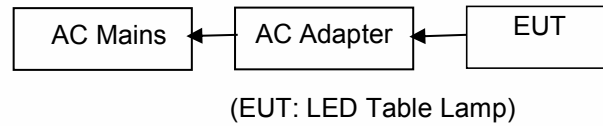
During and after the test, any change of the luminous intensity is allowed and the lamp(s) may be extinguished. After the test, within 30 min, all functions shall return to normal, if necessary by temporary interruption of the mains supply and/or operating the regulating control.

Additional requirement for lighting equipment incorporating a starting device: After the test, the lighting equipment is switched off. After half an hour, it is switched on again. The lighting equipment shall start and operate as intended.

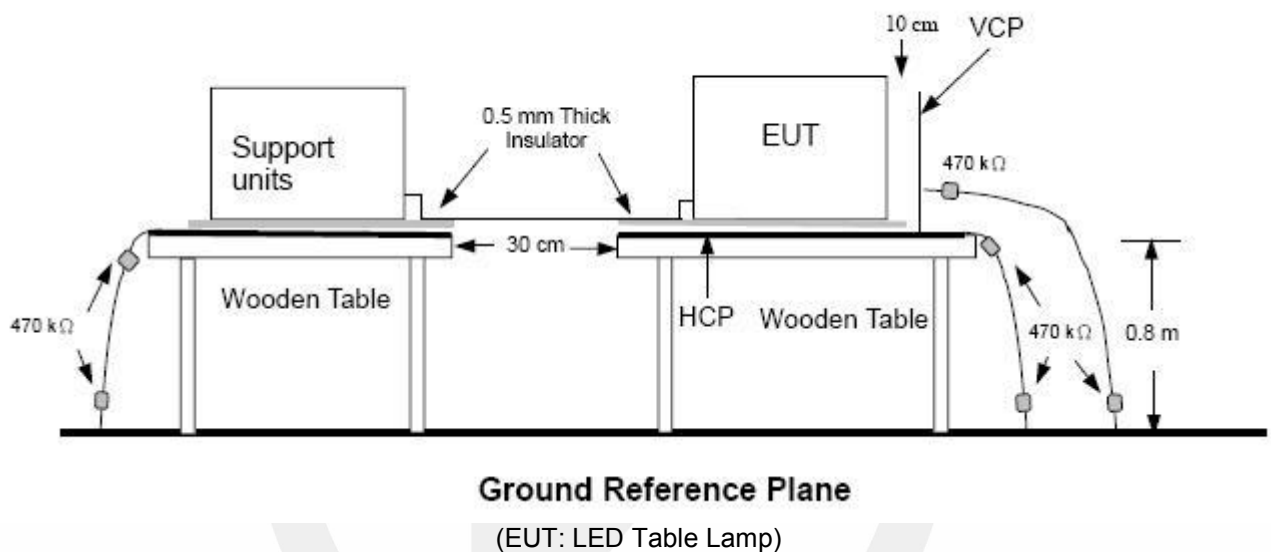
9. ELECTROSTATIC DISCHARGE TEST

9.1. Block Diagram of Test Setup

9.1.1. Block Diagram of the EUT



9.1.2. Block Diagram of ESD Test Setup



9.2. Test Standard

EN 61547: 2009

(IEC 61000-4-2: 2008, Severity Level: Air Discharge: Level 3, ±8KV/Contact Discharge: Level 2, ±4KV)

9.3. Severity Levels and Performance Criterion

9.3.1. Severity level

| Level | Test Voltage Contact Discharge (KV) | Test Voltage Air Discharge (KV) |
|-------|--|------------------------------------|
| 1. | ±2 | ±2 |
| 2. | ±4 | ±4 |
| 3. | ±6 | ±8 |
| 4. | ±8 | ±15 |
| X | Special | Special |

Performance criterion: B

9.4. EUT Configuration

The configuration of EUT is listed in Section 9.1.

9.5. Operating Condition of EUT

Step 1: Setup the EUT as shown in Section 9.1.

Step 2: Turn on the power of all equipments.

Step 3: Let the EUT work in test mode (ON) and measure it.

9.6. Test Procedure

9.6.1. 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 10 times for each pre-selected test point. This procedure shall be repeated until all the air discharge completed.

9.6.2. Contact Discharge

All the procedure shall be same as Section 9.6.1 except that the tip of the discharge electrode shall touch the EUT before the discharge switch is operated.

9.6.3. Indirect discharge for horizontal coupling plane

At least 20 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.

9.6.4. Indirect discharge for vertical coupling plane

At least 20 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.

9.7. Test Results

PASS.

Please refer to the following page.

Electrostatic Discharge Test Results

EMTEK(DONGGUAN) CO., LTD.

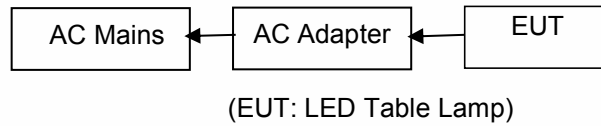
| | | | |
|---|---|----------------|-------------------|
| Applicant | : Power beauty (Dong Guan) Industrial Co., Ltd. | Test Date | : August 03, 2023 |
| EUT | : LED Table Lamp | Temperature | : 25.4℃ |
| M/N | : PBG-0613 | Humidity | : 57.1% |
| Power Supply | : AC 230V 50Hz, DC 3.7V from internal battery | Test Engineer: | Chen Li |
| Test Mode | : ON | Criterion | : B |
| Air Discharge: ± 8KV | | | |
| Contact Discharge: ± 4KV # For each point positive 10 times and negative 10 times | | | |
| Location | Kind A-Air Discharge C-Contact Discharge | Result | |
| HCP | C | PASS | |
| VCP | C | PASS | |
| Conductive parts | C | PASS | |
| Non-conductive enclosure & Gap | A | PASS | |
| | | | |
| | | | |
| Note: No observable change during the test. | | | |

Discharge should be considered on Contact and Air and Horizontal Coupling Plane (HCP) and Vertical Coupling Plane (VCP).

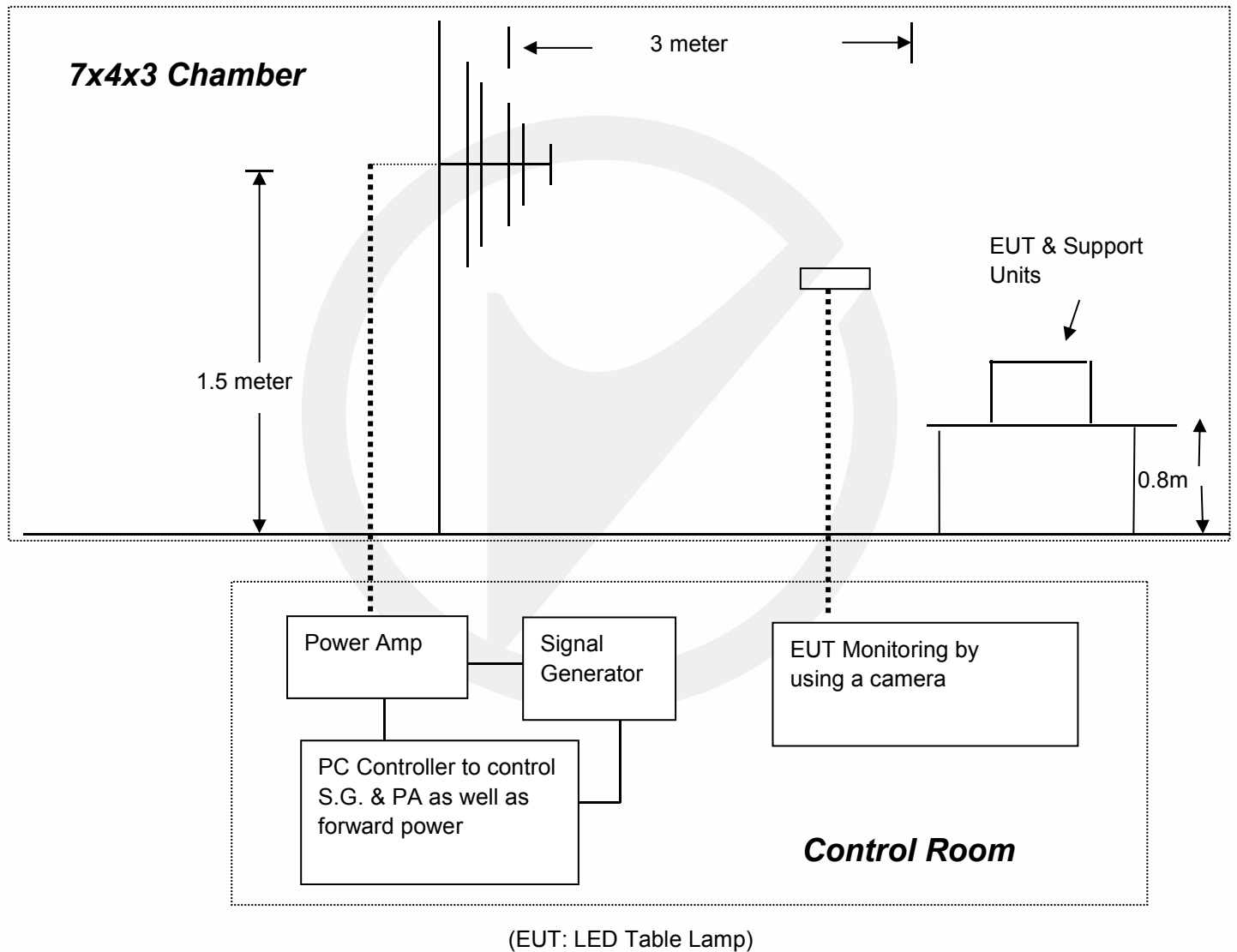
10. RADIO-FREQUENCY ELECTROMAGNETIC FIELDS TEST

10.1. Block Diagram of Test Setup

10.1.1. Block Diagram of the EUT and the simulators



10.1.2. R/S Test Setup



10.2. Test Standard

EN 61547: 2009
(IEC 61000-4-3:2020, Severity Level: 2, 3V / m)

10.3. Severity Levels and Performance Criterion

10.3.1. Severity level

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

Performance criterion: A

10.4. EUT Configuration

The configurations of EUT are listed in Section 10.1.

10.5. Operating Condition of EUT

Step 1: Setup the EUT as shown in Section 10.1.

Step 2: Turn on the power of all equipments.

Step 3: Let the EUT work in test mode (ON) and measure it.

10.6. Test Procedure

The EUT and its simulators are placed on a turn table which is 0.8 meter above ground. EUT is set 3 meter away from the transmitting antenna which is mounted on an antenna tower. Both horizontal and vertical polarizations of the antenna are set on test. Each of the four sides of EUT must be faced this transmitting antenna and measured individually. In order to judge the EUT performance, a CCD camera is used to monitor EUT screen. All the scanning conditions are as follows:

| Condition of Test | Remarks |
|---------------------------|--------------------------|
| 1. Fielded Strength | 3 V/m (Severity Level 2) |
| 2. Radiated Signal | Modulated |
| 3. Scanning Frequency | 80 - 1000 MHz |
| 4. Dwell time of radiated | 0.0015 decade/s |
| 5. Waiting Time | 1 Sec. |

10.7. Test Results

PASS.

These test result outsourced to EMTEK (SHENZHEN) CO., LTD

Please refer to the following page.

Radio-frequency Electromagnetic Fields Test Results

EMTEK(SHENZHEN) CO., LTD

Applicant: Power beauty (Dong Guan) Industrial Co., Ltd.

Test Date : August 02, 2023

EUT : LED Table Lamp

Temperature : 24.8℃

M/N : PBG-0613

Humidity : 56.2%

Field Strength: 3 V/m

Criterion: A

Power Supply: AC 230V 50Hz, DC 3.7V from internal battery

Frequency Range: 80 MHz to 1000 MHz

Test Engineer: Chen Li

Modulation: ☒ AM ☐ Pulse ☐ none 1 KHz 80%

Test Mode : ON

Frequency Range : 80-1000MHz

Steps

/ %

Horizontal

Vertical

Front

PASS

PASS

Right

PASS

PASS

Rear

PASS

PASS

Left

PASS

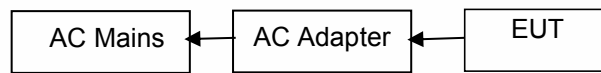
PASS

Note: No observable change during the test.

11. FAST TRANSIENTS TEST

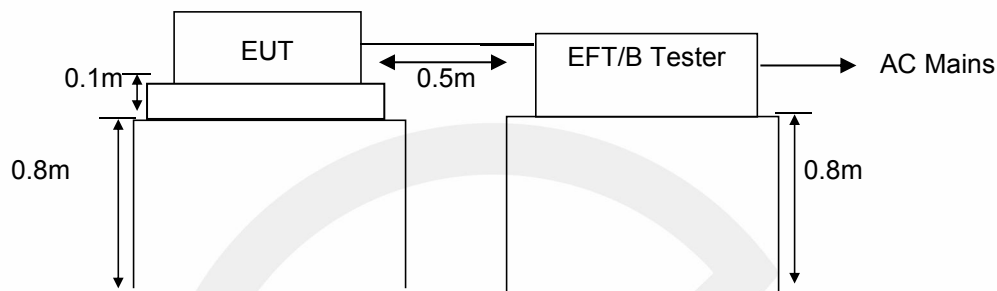
11.1. Block Diagram of Test Setup

11.1.1. Block Diagram of the EUT and the simulators



(EUT: LED Table Lamp)

11.1.2. Block Diagram of Test Setup



(EUT: LED Table Lamp)

11.2. Test Standard

EN 61547: 2009
(IEC 61000-4-4: 2012, Severity Level, Level 2: 1KV)

11.3. Severity Levels and Performance Criterion

11.3.1. Severity level

| Open circuit output test voltage and repetition rate of the impulses | | | | |
|--|--------------------|------------------------|---|------------------------|
| Level | On power port, PE | | On I/O (Input/Output) Signal data and control ports | |
| | Voltage peak KV | Repetition rate KHz | Voltage peak KV | Repetition rate KHz |
| 1. | 0.5 KV | 5 or 100 | 0.25 KV | 5 or 100 |
| 2. | 1 KV | 5 or 100 | 0.5 KV | 5 or 100 |
| 3. | 2 KV | 5 or 100 | 1 KV | 5 or 100 |
| 4. | 4 KV | 5 or 100 | 2 KV | 5 or 100 |
| X | Special | Special | Special | Special |

NOTE 1 Use of 5 KHz repetition rates is traditional; however, 100 KHz is closer to reality. Product committees should determine which frequencies are relevant for specific products or product types.

NOTE 2 With some products, there may be no clear distinction, between power ports and I/O ports, in which case it is up to product committees to make this determination for test purposes.

“X” is an open level. The level has to be specified in the dedicated equipment specification.

Performance criterion: B

11.4.EUT Configuration

The configurations of EUT are listed in Section 11.1.

11.5.Operating Condition of EUT

Step 1: Setup the EUT as shown in Section 11.1.

Step 2: Turn on the power of all equipments.

Step 3: Let the EUT work in test mode (ON) and measure it.

11.6.Test Procedure

The EUT is put on the table which is 0.8 meter high above the ground. This reference ground plane shall project beyond the EUT by at least 0.1m on all sides and the minimum distance between EUT and all other conductive structure, except the ground plane beneath the EUT, shall be more than 0.5m.

For input and output AC power ports:

The EUT is connected to the power mains by using a coupling device which couples the EFT interference signal to AC power lines. Both polarities of the test voltage should be applied during compliance test and the duration of the test is 2 mins.

For signal lines and control lines ports:

No I/O ports. It's unnecessary to test.

For DC output line ports:

No ports. It's unnecessary to test.

11.7.Test Results

PASS.

Please refer to the following page.

Fast Transients Test Results

EMTEK(DONGGUAN) CO., LTD.

Applicant : Power beauty (Dong Guan) Industrial Co., Ltd.

EUT : LED Table Lamp

M/N : PBG-0613

Power Supply: AC 230V 50Hz

Criterion : B

Ambient Condition : 24.9℃ 56.2% RH

Operation Mode : ON

Line : ☒ AC Mains

Line : ☐ Signal ☐ I/O Cable

Coupling : ☒ Direct

Coupling : ☐ Capacitive

Test Time : 120s

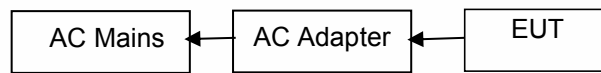
| Line | Test Voltage | Result (+) | Result (-) |
|------|--------------|------------|------------|
| L | 1KV | PASS | PASS |
| N | 1KV | PASS | PASS |
| L+N | 1KV | PASS | PASS |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

Note: No observable change during the test.

12. SURGES TEST

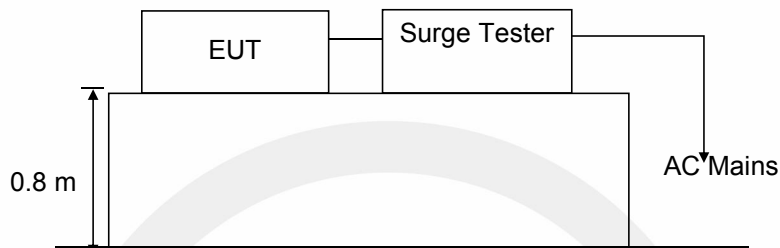
12.1. Block Diagram of Test Setup

12.1.1. Block Diagram of the EUT



(EUT: LED Table Lamp)

12.1.2. Surge Test Setup



(EUT: LED Table Lamp)

12.2. Test Standard

EN 61547: 2009

(IEC 61000-4-5: 2014+AMD1:2017, Severity Level: Line to Line: Level 1, 0.5KV)

12.3. Severity Levels and Performance Criterion

12.3.1. Severity level

| Severity Level | Open-Circuit Test Voltage KV |
|----------------|---------------------------------|
| 1 | 0.5 |
| 2 | 1.0 |
| 3 | 2.0 |
| 4 | 4.0 |
| * | Special |

Performance criterion: C

12.4. EUT Configuration

The configurations of EUT are listed in Section 12.1.

12.5. Operating Condition of EUT

Step 1: Setup the EUT as shown in Section 12.1.

Step 2: Turn on the power of all equipments.

Step 3: Let the EUT work in test mode (ON) and measure it.

12.6.Test Procedure

- 1) Set up the EUT and test generator as shown on Section 12.1.2.
- 2) For line to line coupling mode, respectively provide 0.5KV 1.2/50us voltage surge (at open-circuit condition) and 8/20us current surge to EUT selected points.
- 3) At least 5 positive and 5 negative (polarity) tests with a maximum 1/min repetition rate are conducted during test.
- 4) Different phase angles are done individually.
- 5) Record the EUT operating situation during compliance test and decide the EUT immunity criterion for above each test.

12.7.Test Results

PASS.

Please refer to the following page.



Surges Test Results

EMTEK(DONGGUAN) CO., LTD.

| | | | | | |
|--|--|--|--|------------------------------------|--|
| Applicant : <u>Power beauty (Dong Guan) Industrial Co., Ltd.</u> | | | | Test Date : <u>August 04, 2023</u> | |
| EUT : <u>LED Table Lamp</u> | | | | Temperature : <u>24.9℃</u> | |
| M/N : <u>PBG-0613</u> | | | | Humidity : <u>56.2%</u> | |
| Power Supply : <u>AC 230V 50Hz</u> | | | | Test Engineer : <u>Chen Li</u> | |
| Test Mode : <u>ON</u> | | | | Criterion : <u>C</u> | |

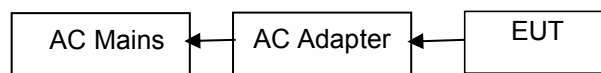
| Location | Polarity | Phase Angle | No of Pulse | Pulse Voltage (KV) | Result |
|----------|----------|------------------|-------------|--------------------|--------|
| L-N | + | 90 ⁰ | 5 | 0.5 | PASS |
| | - | 270 ⁰ | 5 | 0.5. | PASS |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

Note: No observable change during the test.

13. INJECTED CURRENTS TEST

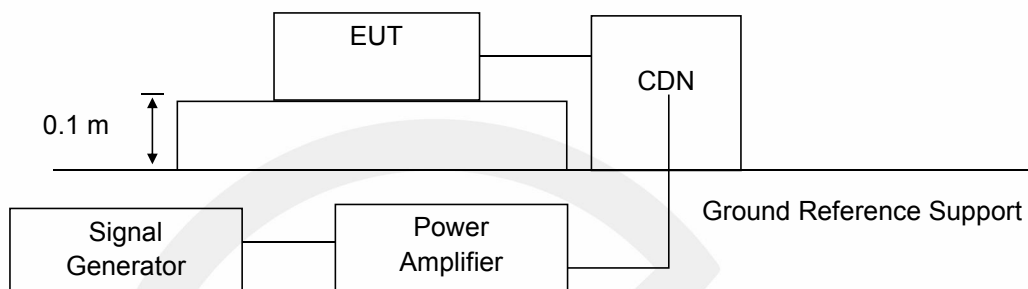
13.1. Block Diagram of Test Setup

13.1.1. Block Diagram of the EUT



(EUT: LED Table Lamp)

13.1.2. Block Diagram of Test Setup



(EUT: LED Table Lamp)

13.2. Test Standard

EN 61547: 2009

(IEC 61000-4-6:2013/COR1:2015, Severity Level 2: 3V (rms), 0.15MHz ~ 80MHz)

13.3. Severity Levels and Performance Criterion

13.3.1. Severity level

| Level | Field Strength V |
|-------|------------------|
| 1. | 1 |
| 2. | 3 |
| 3. | 10 |
| X | Special |

Performance criterion: A

13.4. EUT Configuration

The configurations of EUT are listed in Section 13.1.

13.5. Operating Condition of EUT

Step 1: Setup the EUT as shown in Section 13.1.

Step 2: Turn on the power of all equipments.

Step 3: Let the EUT work in test mode (ON) and measure it.

13.6. Test Procedure

- 1) Set up the EUT, CDN and test generators as shown on Section 13.1.2.
- 2) Let the EUT work in test mode and measure it.
- 3) The EUT are placed on an insulating support 0.1m high above a ground reference plane. CDN (coupling and decoupling device) is placed on the ground plane about 0.3m from EUT. Cables between CDN and EUT are as short as possible, and their height above the ground reference plane shall be between 30 and 50 mm (where possible).
- 4) The disturbance signal described below is injected to EUT through CDN.
- 5) The EUT operates within its operational mode(s) under intended climatic conditions after power on.
- 6) The frequency range is swept from 150KHz to 80MHz using 3V signal level, and with the disturbance signal 80% amplitude modulated with a 1KHz sine wave.
- 7) The rate of sweep shall not exceed 1.5×10^{-3} decades/s. Where the frequency is swept incrementally, the step size shall not exceed 1% of the start and thereafter 1% of the preceding frequency value.
- 8) Recording the EUT operating situation during compliance testing and decide the EUT immunity criterion.

13.7. Test Results

PASS.

Please refer to the following page.

Injected Currents Test Results

EMTEK(DONGGUAN) CO., LTD

| Applicant : <u>Power beauty (Dong Guan) Industrial Co., Ltd.</u> | | | Test Date : <u>August 04, 2023</u> | |
|---|-------------------|---|------------------------------------|--------|
| EUT : <u>LED Table Lamp</u> | | | Temperature : <u>24.9℃</u> | |
| M/N : <u>PBG-0613</u> | | | Humidity : <u>56.2%</u> | |
| Power Supply : <u>AC 230V 50Hz</u> | | | Test Engineer : <u>Chen Li</u> | |
| Test Mode : <u>ON</u> | | | | |
| Frequency Range (MHz) | Injected Position | Strength | Criterion | Result |
| 0.15 ~ 80 | AC Mains | 3V(rms) | A | PASS |
| | | | | |
| Test Mode : _____ | | | | |
| Frequency Range (MHz) | Injected Position | Strength | Criterion | Result |
| | | | | |
| | | | | |
| Remark : | | Note: No observable change during the test. | | |
| 1. Modulation Signal:1KHz 80% AM | | | | |
| 2. CDN : <input checked="" type="checkbox"/> CDN-M2 <input type="checkbox"/> CDN-M3 | | | | |

14. VOLTAGE DIPS AND SHORT INTERRUPTIONS TEST

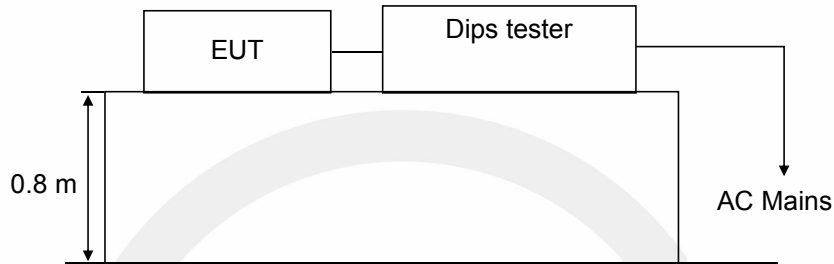
14.1. Block Diagram of Test Setup

14.1.1. Block Diagram of the EUT



(EUT: LED Table Lamp)

14.1.2. Dips Test Setup



(EUT: LED Table Lamp)

14.2. Test Standard

EN 61547: 2009
(IEC 61000-4-11: 2020)

14.3. Severity Levels and Performance Criterion

14.3.1. Severity level

| Test Level %UT | Voltage dip and short interruptions %UT | Duration (in period) |
|-------------------|---|--------------------------------------|
| 0 | 100 | 0.5 1 5 10 25 50 * |
| 40 | 60 | |
| 70 | 30 | |

Performance criterion: B, C

14.4. EUT Configuration

The configurations of EUT are listed in Section 14.1.

14.5. Operating Condition of EUT

Step 1: Setup the EUT as shown in Section 14.1.

Step 2: Turn on the power of all equipments.

Step 3: Let the EUT work in test mode (ON) and measure it.

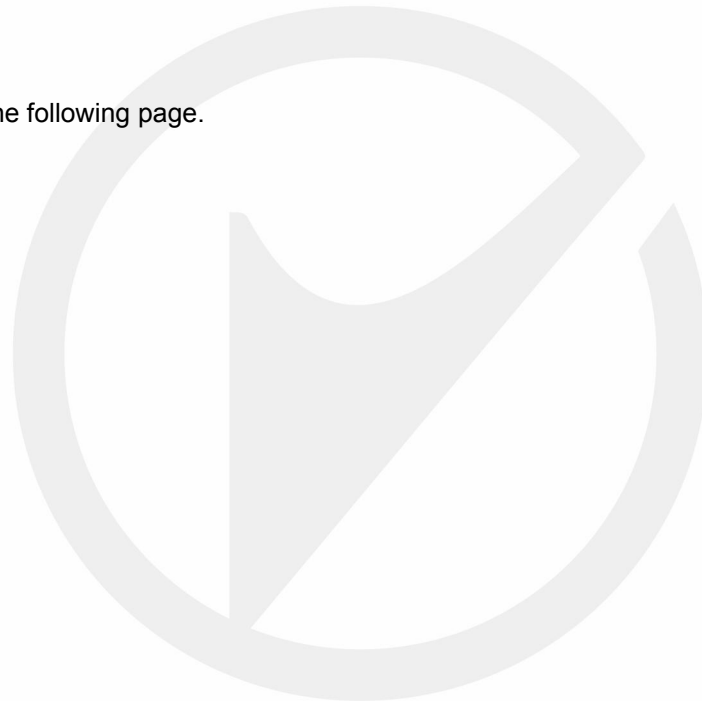
14.6. Test Procedure

- 1) Set up the EUT and test generator as shown on Section 14.1.2.
- 2) The interruption is introduced at selected phase angles with specified duration.
- 3) Record any degradation of performance.

14.7. Test Results

PASS.

Please refer to the following page.



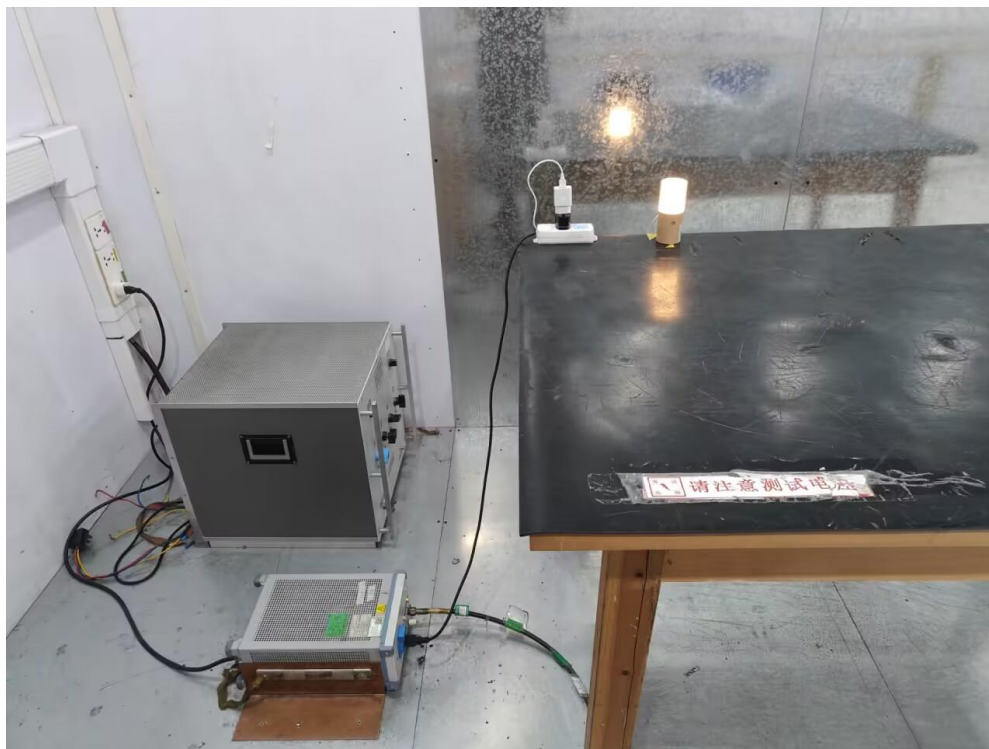
Voltage Dips and Short Interruptions Test Results

EMTEK(DONGGUAN) CO., LTD

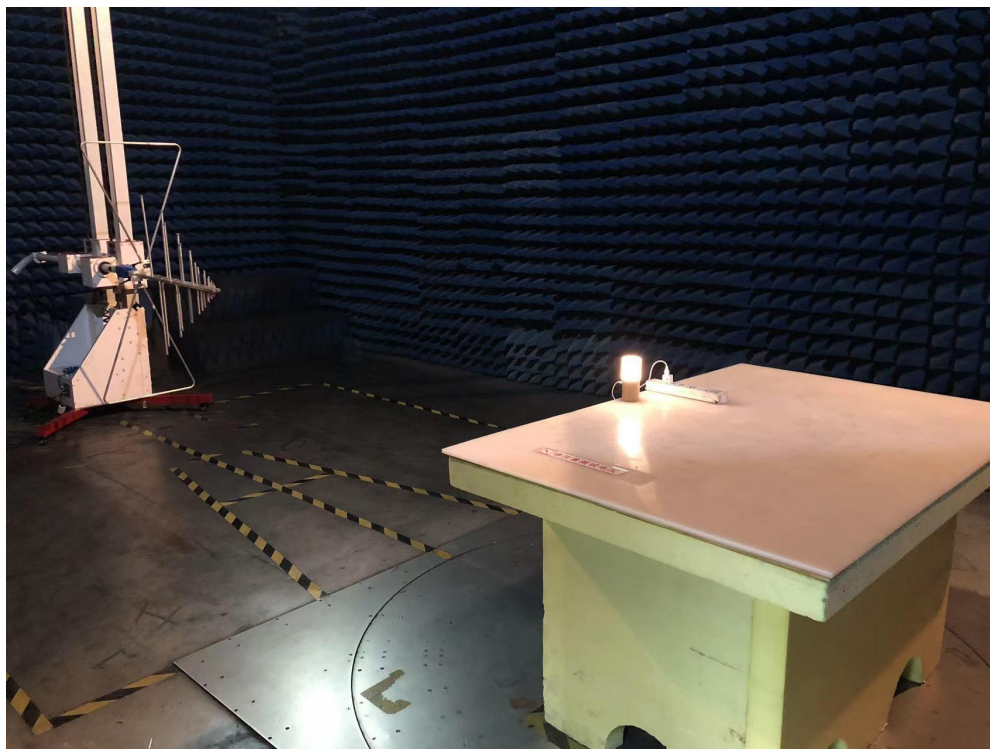
| Applicant : <u>Power beauty (Dong Guan) Industrial Co., Ltd.</u> EUT : <u>LED Table Lamp</u> M/N : <u>PBG-0613</u> Power Supply : <u>AC 230V 50Hz</u> | | | Test Date : <u>August 04, 2023</u> Temperature : <u>24.9℃</u> Humidity : <u>56.2%</u> Test Engineer : <u>Chen Li</u> | |
|--|---|----------------------|---|--------|
| Test Model : <u>ON</u> | | | | |
| Test Level % U _T | Voltage Dips & Short Interruptions % U _T | Duration (in period) | Criterion <input type="checkbox"/> A <input checked="" type="checkbox"/> B <input checked="" type="checkbox"/> C <input type="checkbox"/> D | Result |
| 0 | 100 | 0.5P | B | PASS |
| 70 | 30 | 10P | C | PASS |
| Test Model : | | | | |
| Test Level % U _T | Voltage Dips & Short Interruptions % U _T | Duration (in period) | Criterion <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D | Result |
| | | | | |
| | | | | |
| Remark: U _T is the rated voltage for the equipment. | | | Note: No observable change during the test. | |

15. PHOTOGRAPH

15.1.Photo of Disturbance voltage at the electric power supply interface



15.2.Photo of Radiated disturbance (30 MHz~1 Ghz)



15.3.Photo of Radiated disturbance (9 kHz~30 Mhz)



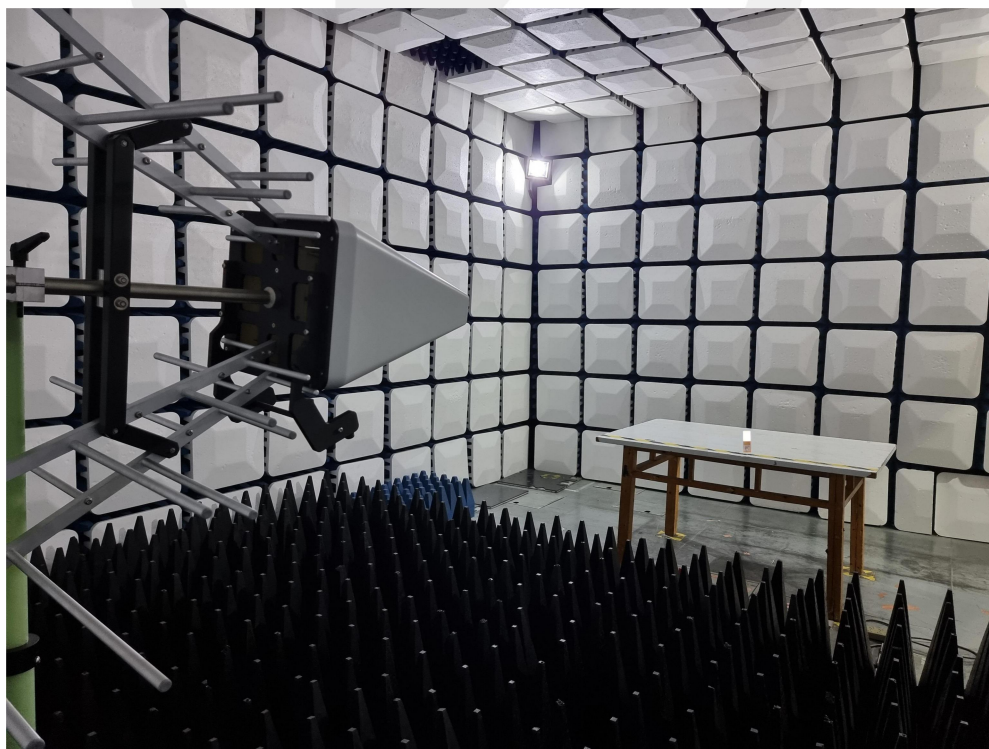
15.4.Photo of Harmonic / Flicker Measurement



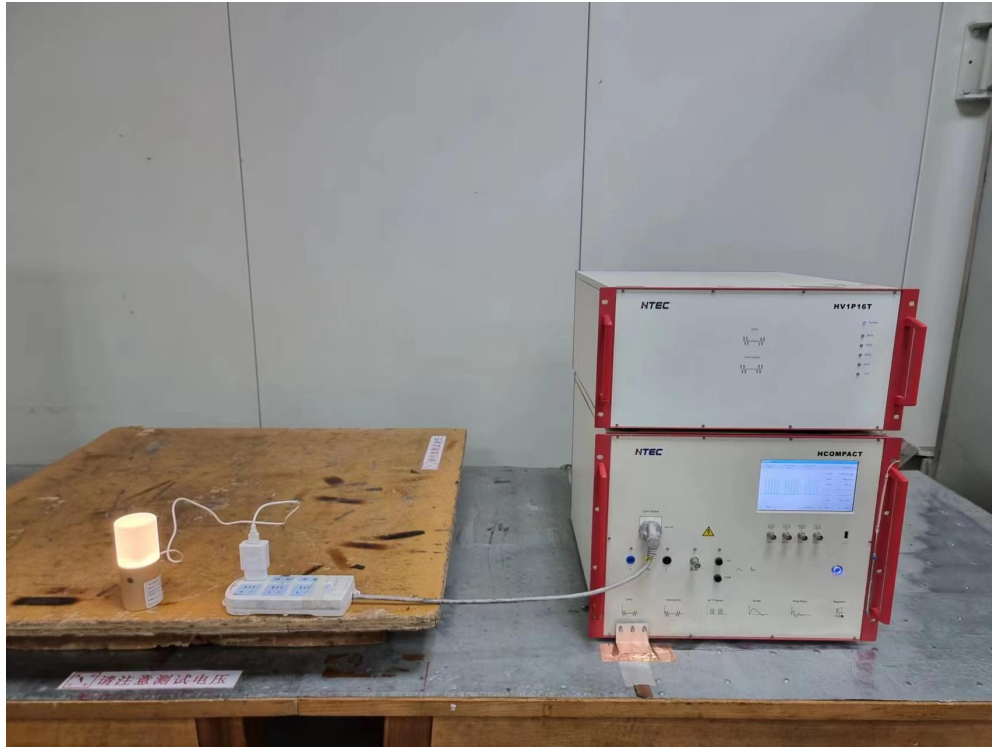
15.5.Photo of Electrostatic Discharge Test



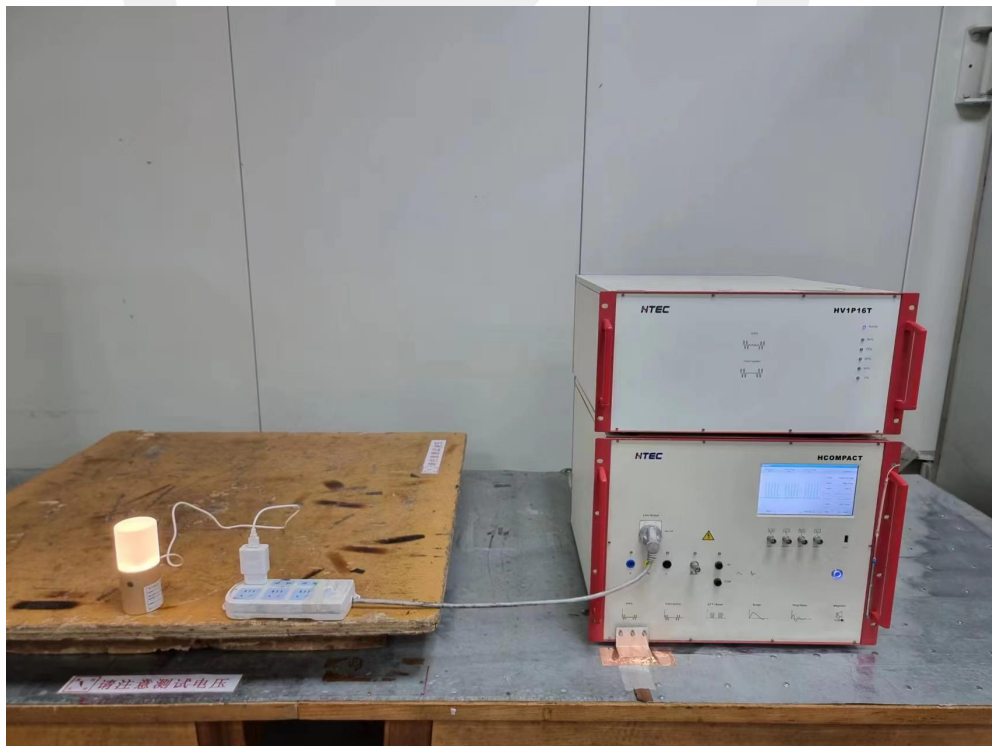
15.6.Photo of Radio-frequency Electromagnetic Fields



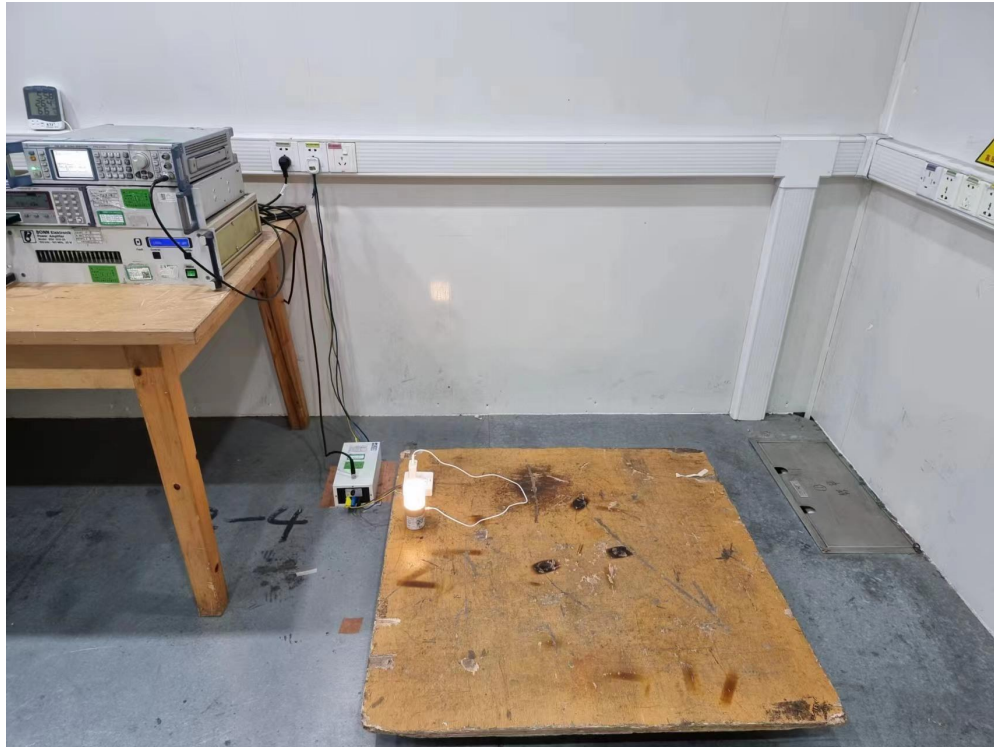
15.7.Photo of Fast Transients Test



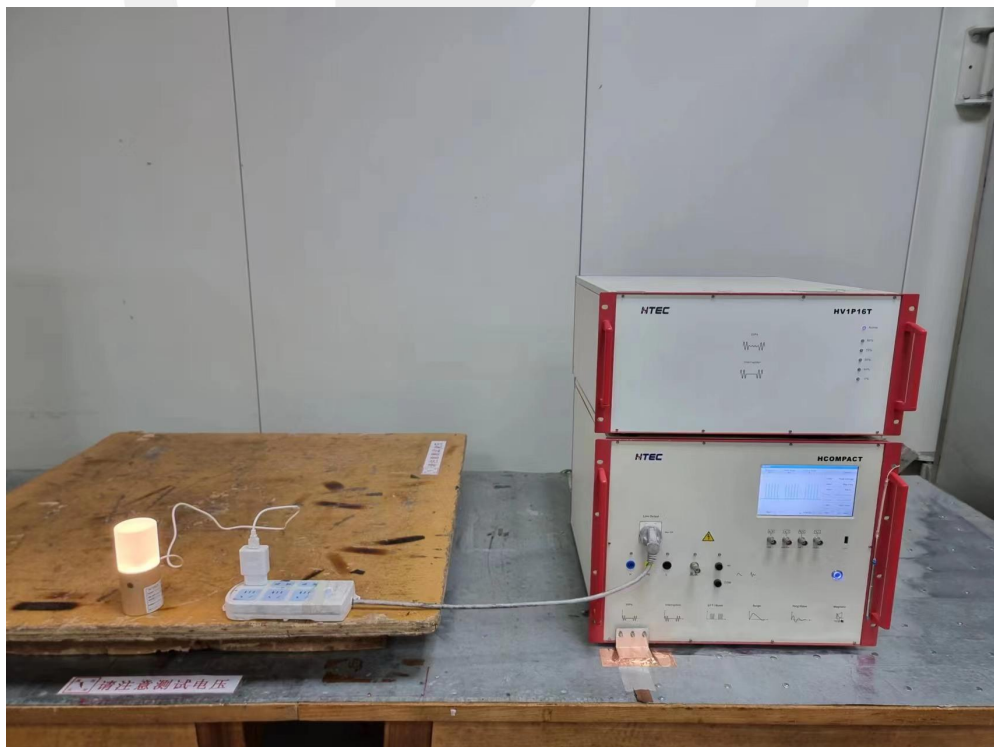
15.8.Photo of Surges Test




15.9.Photo of Injected Currents Test

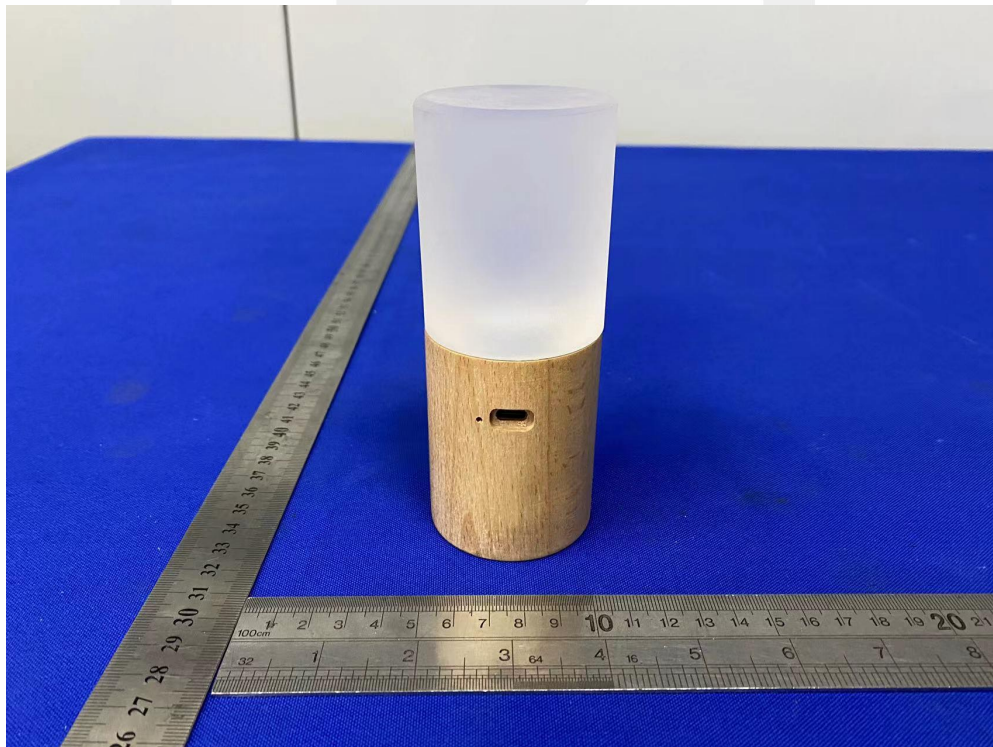
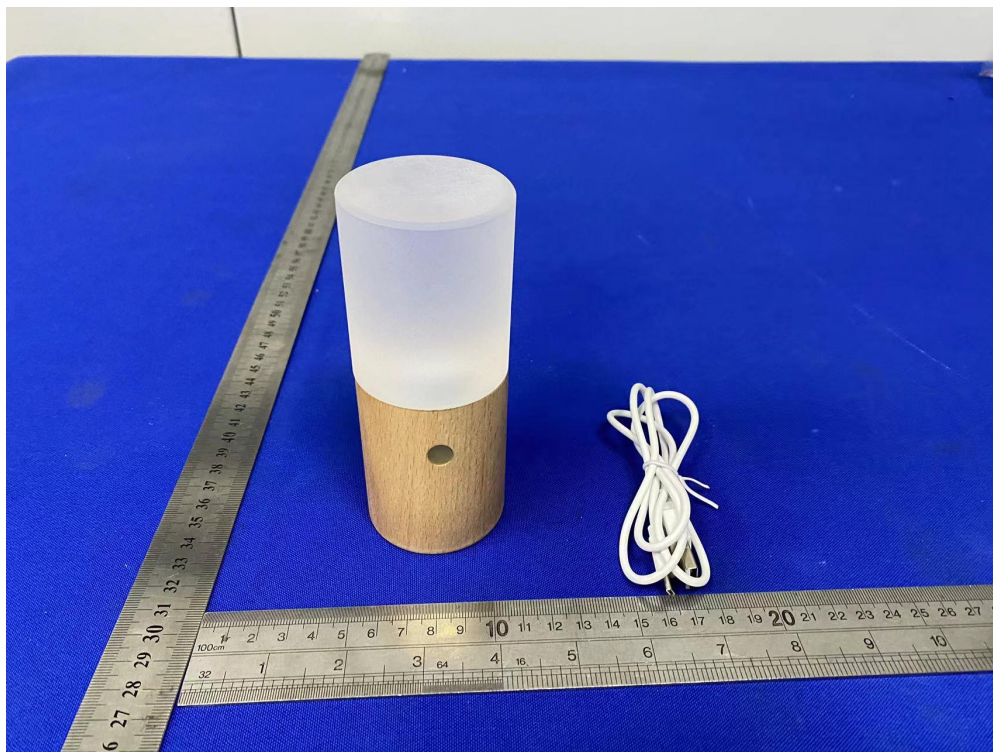


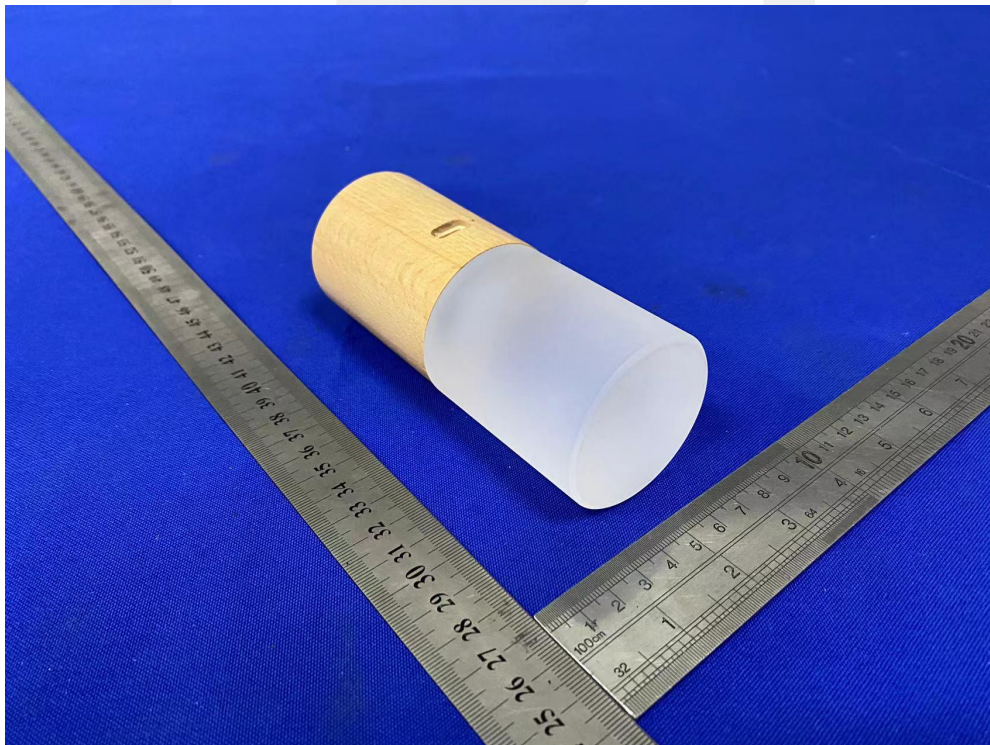
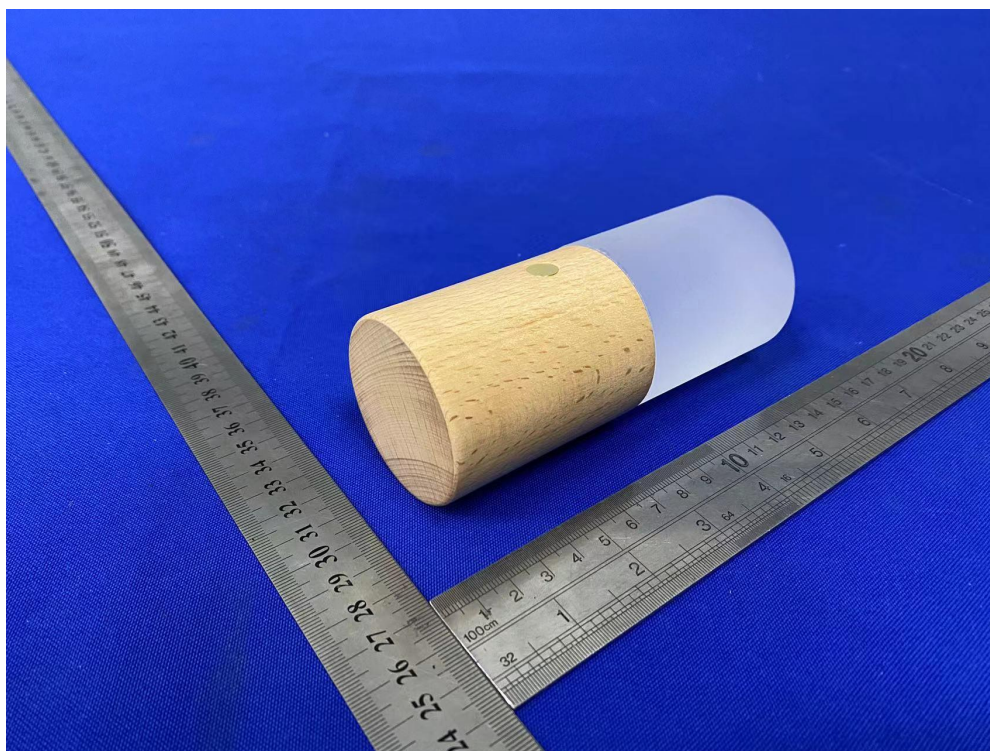
15.10.Photo of Voltage Dips and Short Interruptions Test

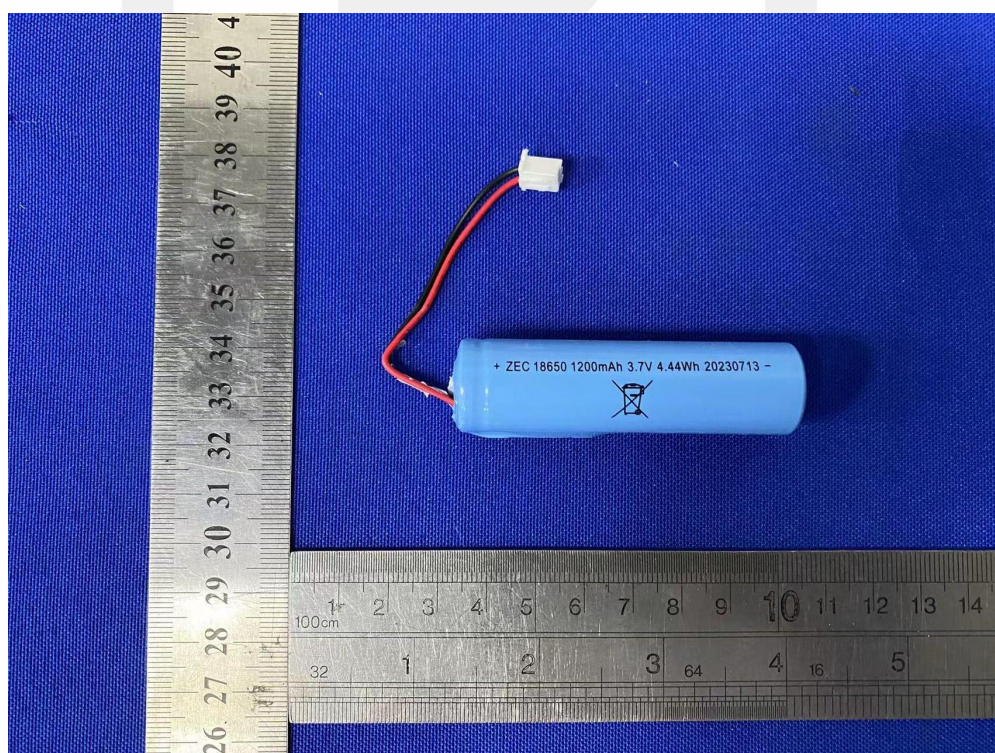
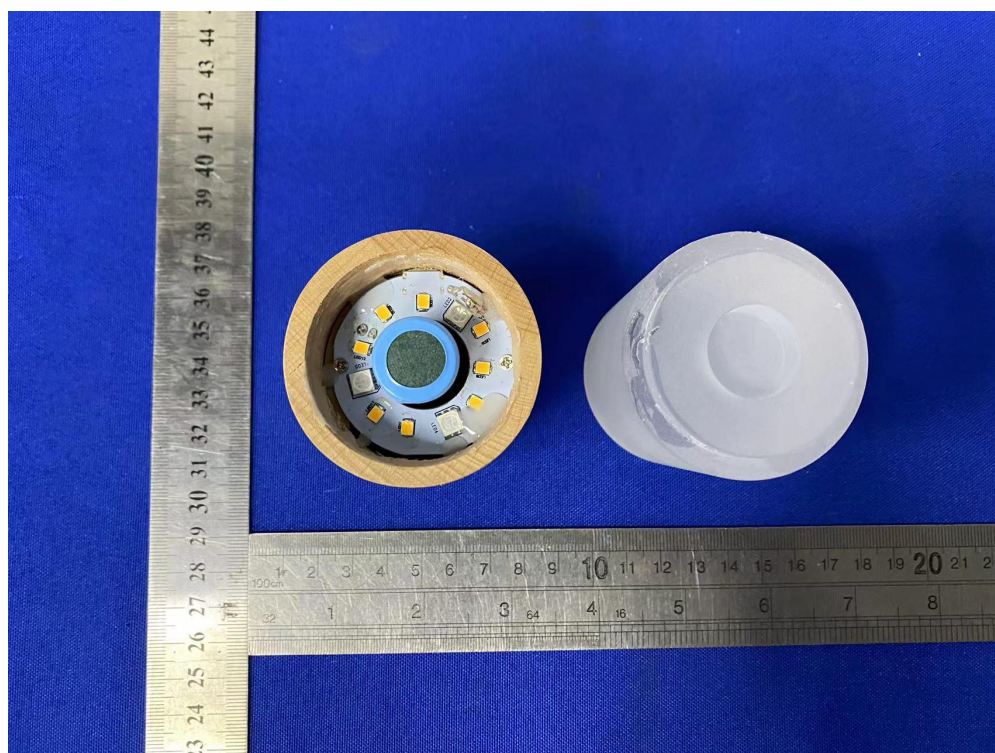


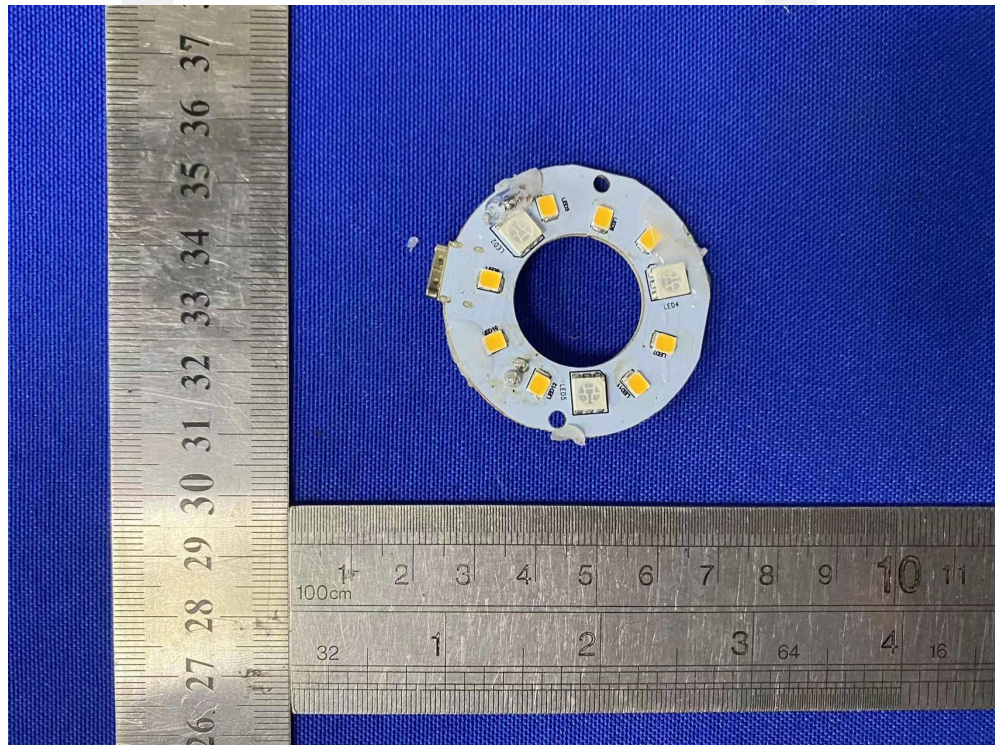
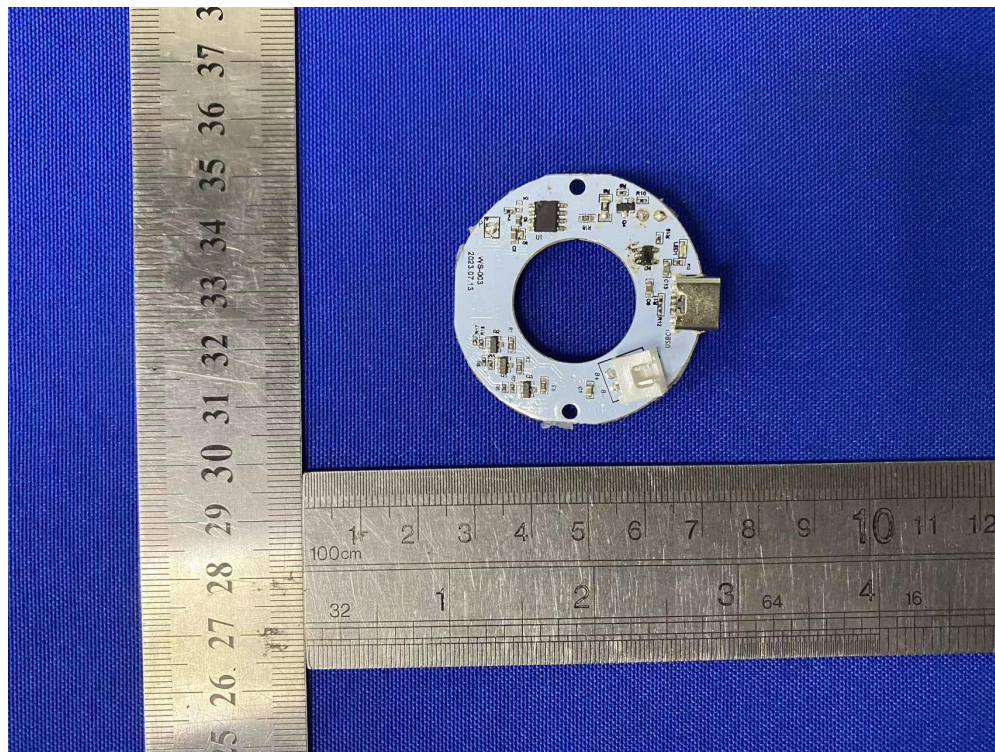


APPENDIX (Photos of EUT)









*** End of Report ***

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