

EMC TEST REPORT

For

AOK Industrial Company Limited

SE SERIES SOLAR STREET LIGHT

Test Model: AOK-60WsE-DC-AP-L5-5770-T3-P

Additional Models : Please Refer To Page 9 Model List

Prepared for : AOK Industrial Company Limited
Address : Building 1, Shengzuozhi Technology Industrial Park, Shajing Street, Shenzhen City, Guangdong Province, China

Prepared by : Shenzhen Southern LCS Compliance Testing Laboratory Ltd.
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Date of receipt of test sample : October 29, 2019
Number of tested samples : 1
Serial number : Prototype
Date of Test : October 29, 2019 ~ November 08, 2019
Date of Report : November 08, 2019



EMC TEST REPORT

EN 55015: 2013+A1: 2015

Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment

EN 61547: 2009

Equipment for general lighting purposes - EMC immunity requirements

Report Reference No : LCS191029038BE

Date Of Issue : November 08, 2019

Testing Laboratory Name..... : Shenzhen Southern LCS Compliance Testing Laboratory Ltd.

Address : 101-201, No.39 Building,Xialang Industrial Zone, Heshuikou Community, Matian Street,Guangming District, Shenzhen, China

Testing Location/ Procedure ... : Full application of Harmonised standards
 Partial application of Harmonised standards
 Other standard testing method

Applicant's Name : AOK Industrial Company Limited

Address : Building 1, Shengzuozhi Technology Industrial Park, Shajing Street, Shenzhen City, Guangdong Province, China

Test Specification:

Standard : EN 55015: 2013+A1: 2015
 EN 61547: 2009

Test Report Form No..... : SLCSEMC-2.1


TRF Originator : Shenzhen Southern LCS Compliance Testing Laboratory Ltd.

Master TRF : Dated 2016-08

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Test Item Description..... : SE SERIES SOLAR STREET LIGHT

Trade Mark : 
Quality, Honesty, Service and Innovation

Test Model..... : AOK-60WsE-DC-AP-L5-5770-T3-P

Power Supply..... : DC12.8V, 60W

Results : PASS

Compiled by:

Aimee Yang

Supervised by:

Dm Gu

Approved by:



Aimee Yang/ File administrators

Dm Gu/ Technique principal

Cherry Chen / Manager

EMC - TEST REPORT

Test Report No. :	LCS191029038BE	<u>November 08, 2019</u> Date of issue
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EUT.....: SE SERIES SOLAR STREET LIGHT

Test Model.....: AOK-60WsE-DC-AP-L5-5770-T3-P

Applicant: **AOK Industrial Company Limited**Address: Building 1, Shengzuozhi Technology Industrial Park, Shajing Street,
Shenzhen City, Guangdong Province, China

Telephone: /

Fax: /

Manufacturer: **AOK Industrial Company Limited**Address: Building 1, Shengzuozhi Technology Industrial Park, Shajing Street,
Shenzhen City, Guangdong Province, China

Telephone: /

Fax: /

Factory: **AOK Industrial Company Limited**Address: Building 1, Shengzuozhi Technology Industrial Park, Shajing Street,
Shenzhen City, Guangdong Province, China

Telephone: /

Fax: /

Test Result according to the standards on page 6: **PASS**

The test report merely corresponds to the test sample.

It is not permitted to copy extracts of these test result without the written permission of the test laboratory.

Revision History

Revision	Issue Date	Revisions	Revised By
00	November 08, 2019	Initial Issue	Cherry Chen

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1. REPORT INFORMATION DESCRIPTION

1.1 Summary of Standards and Results

1.1.1 Description of Standards and Results

EMISSION (EN 55015: 2013+A1: 2015)			
Description of Test Item	Test Standard	Limits	Results
Conducted Disturbance at Mains Terminals	EN 55015: 2013+A1: 2015	-----	N/A
Conducted Disturbance at Load Terminals	EN 55015: 2013+A1: 2015	-----	N/A
Conducted Disturbance at Control Terminals	EN 55015: 2013+A1: 2015	-----	N/A
Radiated Disturbance (9kHz to 30MHz)	EN 55015: 2013+A1: 2015	-----	PASS
Radiated Disturbance (30MHz to 300MHz)	EN 55015: 2013+A1: 2015	-----	PASS
Harmonic Current Emissions*	EN 61000-3-2: 2014	Class C	N/A
Voltage Fluctuations & Flicker**	EN 61000-3-3: 2013	-----	N/A
IMMUNITY (EN 61547: 2009)			
Description of Test Item	Test Standard	Basic Standard	Results
Electrostatic Discharge Immunity Test (ESD)	EN 61547: 2009	EN 61000-4-2	PASS
Radiated, Radio-Frequency, Electromagnetic Field Immunity Test (RS)	EN 61547: 2009	EN 61000-4-3	PASS
Power Frequency Magnetic Field Immunity Test	EN 61547: 2009	EN 61000-4-8	N/A
Electrical Fast Transient/Burst Immunity Test (EFT)	EN 61547: 2009	EN 61000-4-4	N/A
Immunity to Conducted Disturbances, Induced by Radio-Frequency Fields (CS)	EN 61547: 2009	EN 61000-4-6	N/A
Surge Immunity Test (a.c. Power Ports)	EN 61547: 2009	EN 61000-4-5	N/A
Voltage Dips, Short Interruptions and Voltage Variations Immunity Test	EN 61547: 2009	EN 61000-4-11	N/A
Note: “*” According to EN 61000-3-2:2014, for LED products ≤ 25 watts, no limits are defined for the harmonics test, the EUT is deemed to comply with the standard without test.			
Note: N/A is an abbreviation for Not Applicable.			
Note: “**” Limits are not specified when LED luminaires with rating less than or equal to 200W(EN 61000-3-3:2013Annex A(A2))			

1.1.2 Performance Criteria

The performance of lighting equipment shall be assessed by monitoring:

- the luminous intensity of the luminaire or of the lamp(s).
- the functioning of the control in the case of equipment which includes a regulating control or concerns the regulating control itself.
- the functioning of the starting device, if any.

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.

1.2 Product Information

1.2.1 Electrical parameter description

EUT : SE SERIES SOLAR STREET LIGHT

Trade Mark : 
Quality, Honesty, Service and Innovation

Test Model : AOK-60WsE-DC-AP-L5-5770-T3-P

Additional Models : See page 9 model list

Power Supply : See page 9 model list

1.2.2 Test Modes

Lighting : EUT was test with power on, to get the status 'Lighting'

1.2.3 Test Auxiliary Equipment

Configuration	Model	Rating	Manufacturer

1.2.4 General Product Information

The EUTs are general luminaires for illumination purpose. detailed differences shown in below.

Model list:

Model	Rating
AOK-10WsE-DC-XX-XX-XXXX-BN-P	AOK-15WsE-DC-XX-XX-XXXX-BN-P
AOK-20WsE-DC-XX-XX-XXXX-BN-P	AOK-25WsE-DC-XX-XX-XXXX-BN-P
AOK-30WsE-DC-XX-XX-XXXX-BN-P	AOK-35WsE-DC-XX-XX-XXXX-BN-P
AOK-40WsE-DC-XX-XX-XXXX-BN-P	AOK-45WsE-DC-XX-XX-XXXX-BN-P
AOK-50WsE-DC-XX-XX-XXXX-BN-P	AOK-55WsE-DC-XX-XX-XXXX-BN-P
AOK-60WsE-DC-XX-XX-XXXX-BN-P	

where first "XX" can be any letter for manufacturer of LED, second "XX" can be SN or 00 for sensor provided or not, last "XXXX" can be any digits for color temperature, "BN" can be any letter or digits for beam angles, "P" can be A B C D E for mounting means.

1.3 Description of Test Facility

EMC Lab. : TUV RH Registration Number. is UA 50418075 0001.
UL Registration Number. is 100571-492.
NVLAP Registration Code is 600112-0.

Test Facilities : Shenzhen Southern LCS Compliance Testing Laboratory Ltd.
101-201, No.39 Building,Xialang Industrial Zone, Heshuikou Community,
Matian Street, Guangming District, Shenzhen, China.

RF Field Strength : Shenzhen LCS Compliance Testing Laboratory Ltd.
Susceptibility 101, 201 Building A and 301 Building C, Juji Industrial Park,
Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, Guangdong,
China

2. STATEMENT OF THE MEASUREMENT UNCERTAINTY

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. To CISPR 16 – 4 “Specification for radio disturbance and immunity measuring apparatus and methods – Part 4: Uncertainty in EMC Measurements” and is documented in the LCS quality system acc. To DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

Test	Parameters	Expanded uncertainty (U_{lab})	Expanded uncertainty (U_{cispr})
Conducted Disturbance	Level accuracy (9kHz to 150kHz) (150kHz to 30MHz)	± 1.40 dB ± 2.80 dB	± 4.0 dB ± 3.6 dB
Electromagnetic Radiated Emission (3-loop)	Level accuracy (9kHz to 30MHz)	± 3.46 dB	N/A
Radiated Disturbance	Level accuracy (9kHz to 30MHz)	± 3.12 dB	N/A
Radiated Disturbance	Level accuracy (30MHz to 200MHz)	± 4.66 dB	± 5.2 dB
Radiated Disturbance	Level accuracy (200MHz to 1000MHz)	± 4.64 dB	± 5.0 dB

(1) Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus.

(2) The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor of $k=2$, which for a normal distribution corresponds to a coverage probability of approximately 95%.

3. MEASURING DEVICES AND TEST EQUIPMENT

Radiated Disturbance(9kHz to 30MHz)

Item	Test Equipment	Manufacturer	Model No.	Serial No.	Due Date.
1	EMI Test Receiver	R&S	ESPI	101142	2020-06-20
2	Triple-loop Antenna	EVERFINE	LLA-2	9161	2020-06-20
3	EMI Test Software	EZ	EZ_EMCC	N/A	2020-06-20

Radiated Disturbance(30MHz to 300MHz)

Item	Test Equipment	Manufacturer	Model No.	Serial No.	Due Date.
1	3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	2021-08-05
2	EMI Test Receiver	R&S	ESCI	101010	2020-06-20
3	Log per Antenna	SCHWARZBECK	VULB9163	5094	2020-06-23
4	EMI Test Software	AUDIX	E3	N/A	2020-06-20
5	Positioning Controller	MF	BK8807-4A-2T	2016-0808-008	2020-06-20

Electrostatic Discharge Immunity Test (ESD)

Item	Test Equipment	Manufacturer	Model No.	Serial No.	Due Date.
1	ESD Simulator	KIKUSUI	KES4021	KC001311	2020-06-24

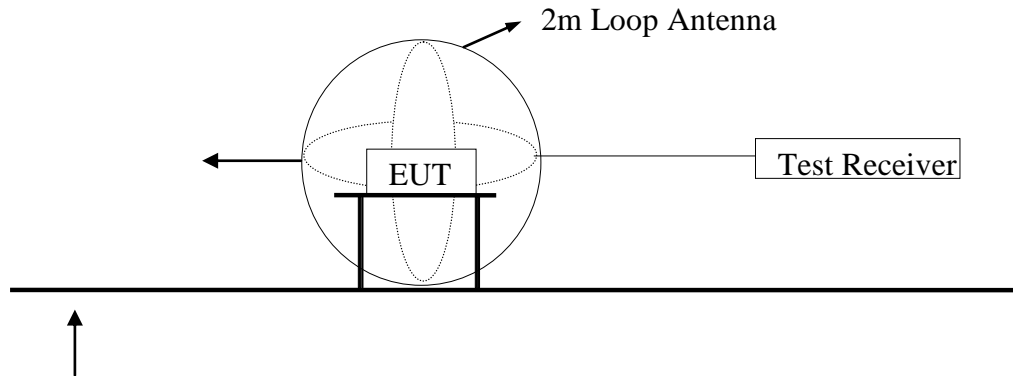
Radiated, Radio-Frequency, Electromagnetic Field Immunity Test (RS)

Item	Test Equipment	Manufacturer	Model No.	Serial No.	Due Date.
1	RS Test Software	Tonscend	/	/	N/A
2	ESG Vector Signal Generator	Agilent	E4438C	MY42081396	2019-11-14
3	3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	2020-06-11
4	RF POWER AMPLIFIER	OPHIR	5225R	1052	NCR
5	RF POWER AMPLIFIER	OPHIR	5273F	1019	NCR
6	Stacked Broadband Log Periodic Antenna	SCHWARZBECK	STLP 9128	9128ES-145	NCR
7	Stacked Mikrowellen Log.-Per Antenna	SCHWARZBECK	STLP 9149	9149-484	NCR
8	RS Test Software	Tonscend	/	/	2020-03-24

4. TEST DETAILS

4.1 Radiated Disturbance (9kHz to 30MHz)

4.1.1 Block Diagram of Test Setup



4.1.2 Test Standard

EN 55015: 2013+A1: 2015

4.1.3 Limits

Radiated Disturbance limits (9KHz-30MHz)	
Frequency range	Limits for loop diameter (dB μ A)
	2m
9kHz to 70kHz	88
70kHz to 150kHz	88 to 58*
150kHz to 3.0MHz	58 to 22*
3.0MHz to 30MHz	22

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

4.1.4 EUT Configuration on Test

The configuration of the EUT is same as Section 3

4.1.5 Test Procedure

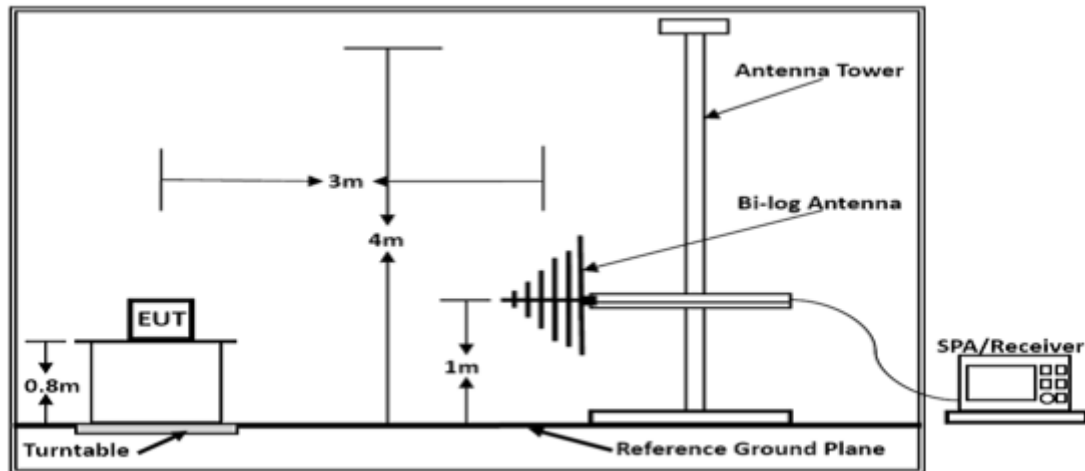
The EUT is placed on a wood table in the center of a loop antenna. The induced current in the loop antenna is measured by means of a current probe and the test receiver. Three field components are checked by means of a coaxial switch.

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 is set at 200Hz. For frequency band 150kHz to 30MHz, the bandwidth is set at 9kHz.

4.1.6 Test Results Refer to attached Annexe C.1

4.2 Radiated Disturbance (30MHz to 300MHz)

4.2.1 Block Diagram of Test Setup



4.2.2 Test Standard

EN 55015: 2013+A1: 2015

4.2.3 Limits

Radiated Disturbance Limits at a measuring distance of 3m (30MHz-300MHz)	
Frequency range (MHz)	Quasi-Peak Limits(dB μ V/m)
30 ~ 230	40
230 ~ 300	47

- 1, At the transition frequency, the lower limit applies.
- 2, Distance refers to the distance in meters between the measuring instrument antenna geometric center and the closed point of any part of the EUT.

4.2.4 EUT Configuration on Test

The configuration of the EUT is same as Section 3.

The EN 55015 regulations test method must be used to find the maximum emission during radiated emission measurement.

4.2.5 Test Procedure

The EUT is placed on a turntable, which is 0.8 meter high above the ground. The turntable 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 an antenna tower. The antenna can be moved up and down from 1 to 4 meters to find out the maximum emission level. By-log antenna (calibrated by Dipole Antenna) is used as a receiving antenna. Both horizontal and vertical polarization of the antenna is set on test.

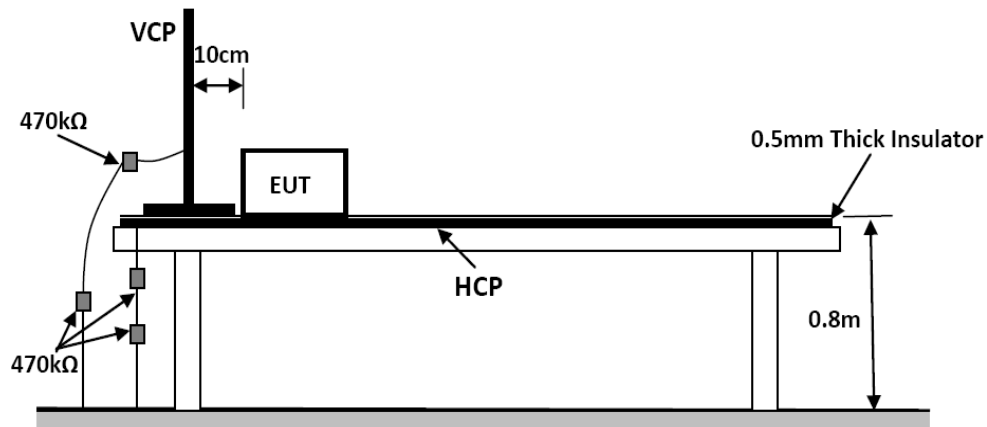
The bandwidth of the Receiver is set at 120kHz; The frequency range from 30MHz to 300MHz is investigated.

4.2.6 Test Results

Refer to attached Annexe C.2

4.3 Electrostatic Discharge Immunity Test

4.3.1 Block Diagram of Test Setup



4.3.2 Test Standard

EN 61547:2009

4.3.3 Limits

Electrostatic discharges — Test levels				
Discharge Type	Discharge Level (KV)		Number of discharges (Each point)	Performance Criteria
	+	-		
Air Discharge-Direct	2, 4, 8	2, 4, 8	20	B
Contact Discharge-Direct	2, 4	2, 4	20	B
Contact Discharge Indirect	2, 4	2, 4	20	B

4.3.4 EUT Configuration on Test

The configuration of the EUT is same as Section 3

4.3.5 Test Procedure

a) Air Discharge

This test is done on a non-conductive surfaces. 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.

b) Contact Discharge

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

c) 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.

d) Indirect Discharge For Vertical Coupling Plane

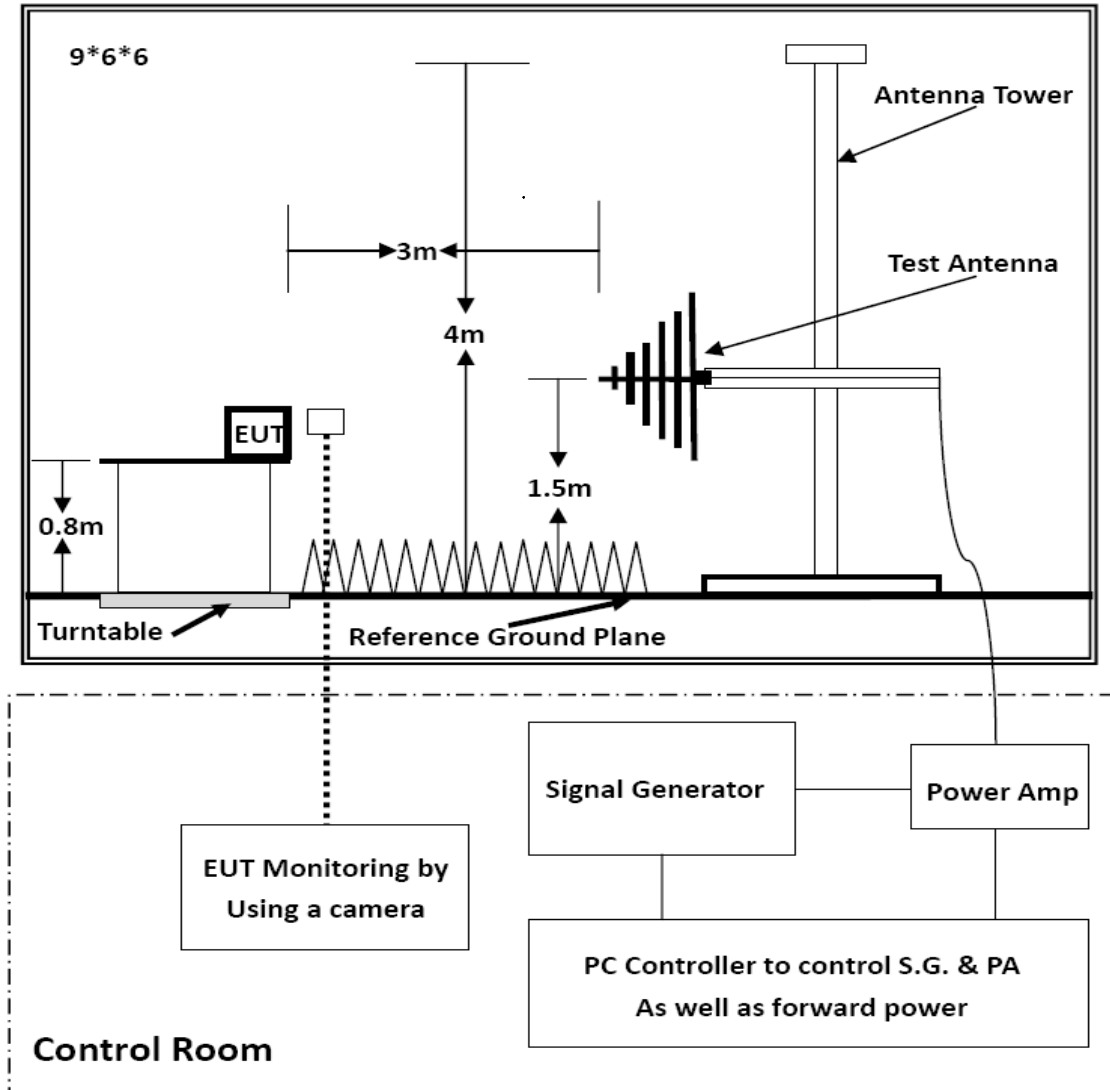
At least 20 single discharge shall be applied to the center of one vertical edge of the coupling plane. The coupling plane, of dimensions 0.5m * 0.5m, is placed parallel to, and positioned at a distance of 0.1m from the EUT. Discharges shall be applied to the coupling plane, with this plane in sufficient different positions that the four faces of the EUT are completely illuminated.

4.3.6 Test Results

Refer to attached Annexe C.3

4.4 Radiated, Radio-Frequency, Electromagnetic Field Immunity Test

4.4.1 Block Diagram of Test Setup



4.4.2 Test Standard

EN 61547:2009

4.4.3 Limits

Radio-frequency electromagnetic fields – Test levels		
Characteristics	Test levels	Performance Criteria
Frequency range	80 MHz to 1 000 MHz	A
Test level	3 V/m (unmodulated)	A
Modulation	1 kHz, 80 % AM, sine wave	A

4.4.4 EUT Configuration on Test

The configuration of the EUT is same as Section 3.

4.4.5 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 polarization 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:

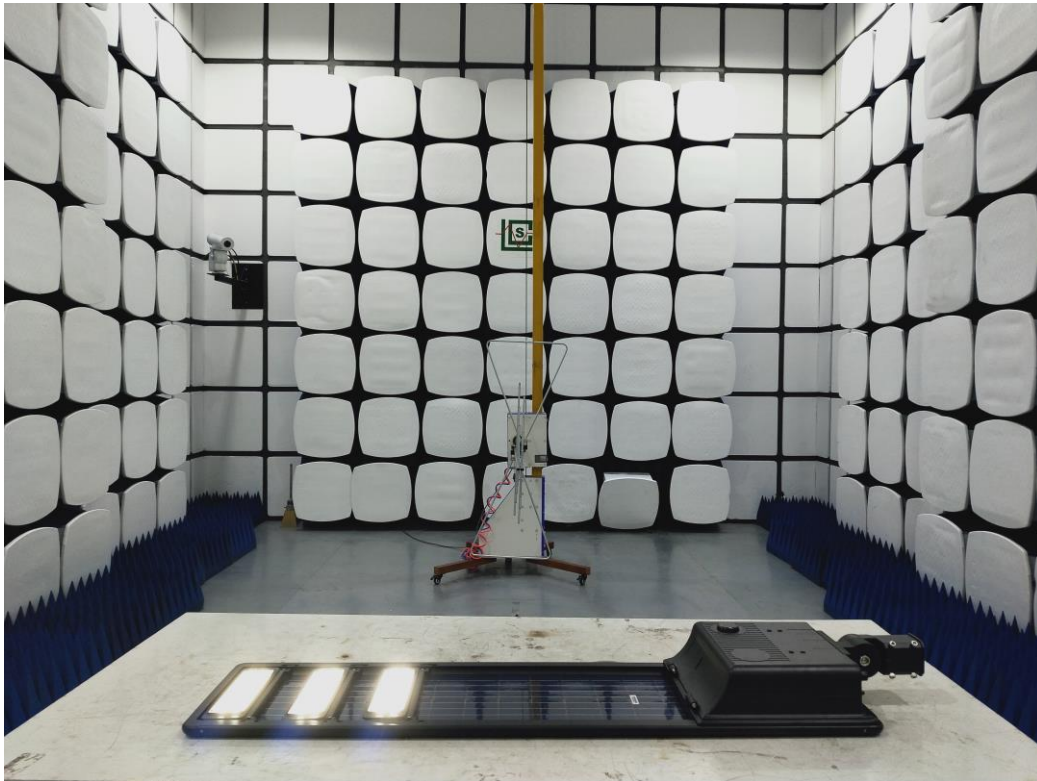
Condition of Test -----	Remarks -----
Fielded Strength	3 V/m
Radiated Signal	Unmodulated
Scanning Frequency	80 - 1000 MHz
Dwell time of radiated	0.0015 decade/s
Waiting Time	3 Sec.

4.4.6 Test Results

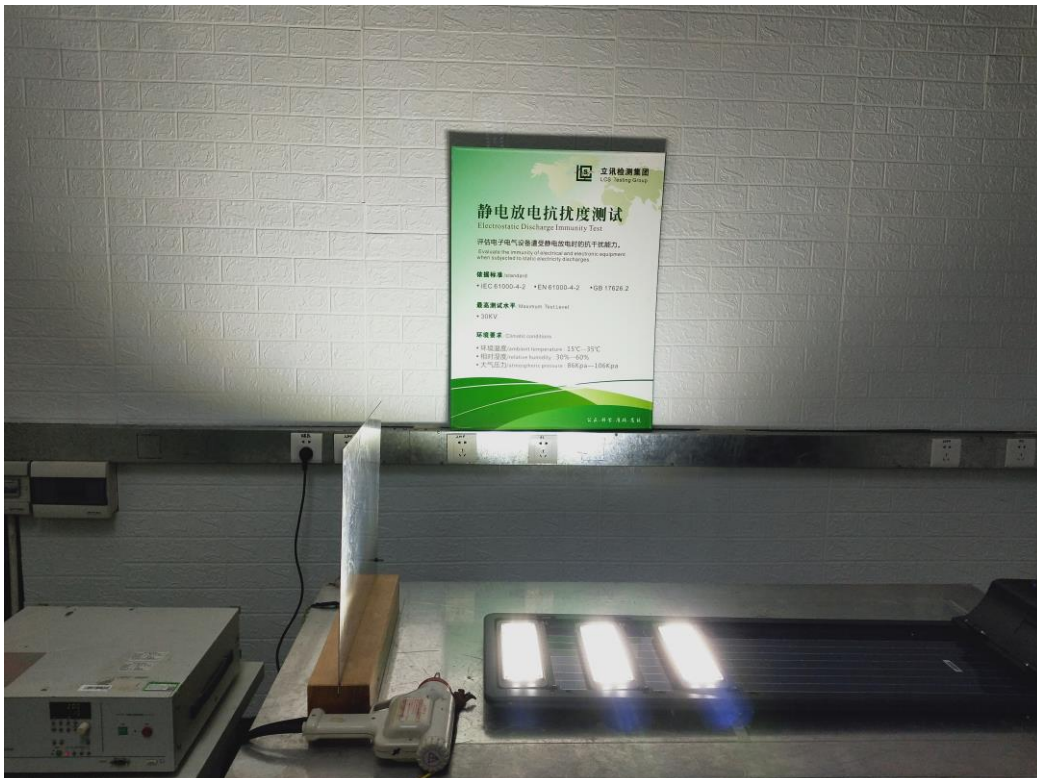
Refer to attached Annexe C.3

ANNEXE A (Test photograph)

A.1 Photo of Radiated Disturbance(30MHz to 300MHz)



A.2 Photo of Electrostatic Discharge Immunity Test



ANNEXE B
(External and internal photos of the EUT)



Figure. 1



Figure. 2



Figure. 3



Figure. 4



Figure.5



Figure.6

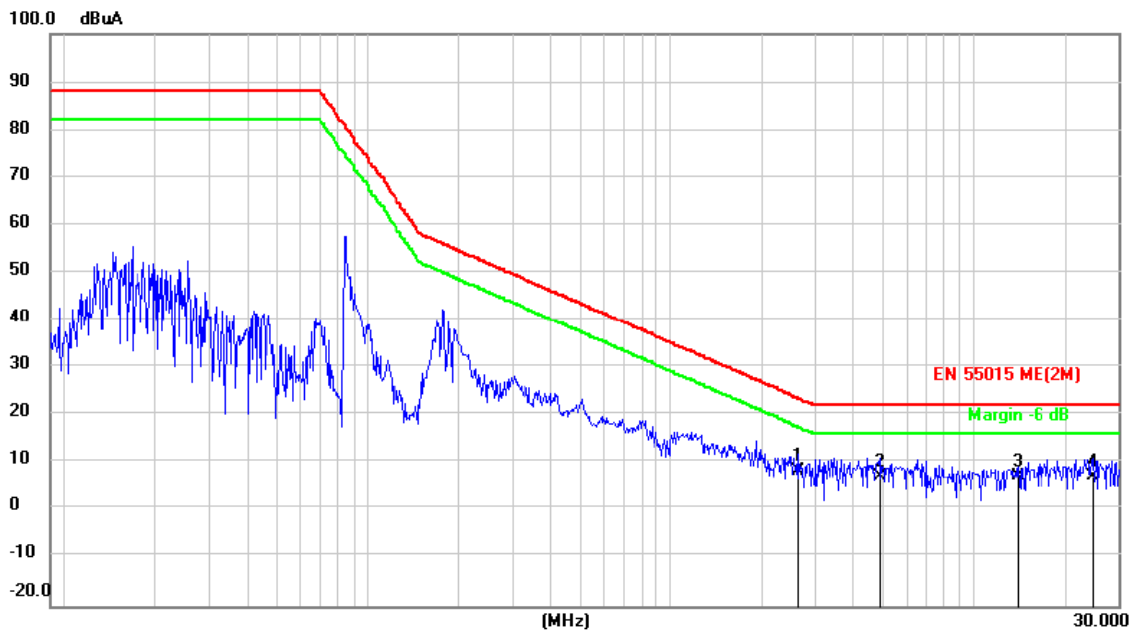
ANNEXE C

(Emission and Immunity test results)

C.1 Radiated Disturbance Test Results (9kHz to 30MHz)

Environmental Conditions:	23.7°C, 56% RH
Test Voltage:	DC 12.8V
Test Model:	AOK-60WsE-DC-AP-L5-5770-T3-P
Test Mode:	Lighting
Test Engineer:	Zed Zhang
Pol:	X

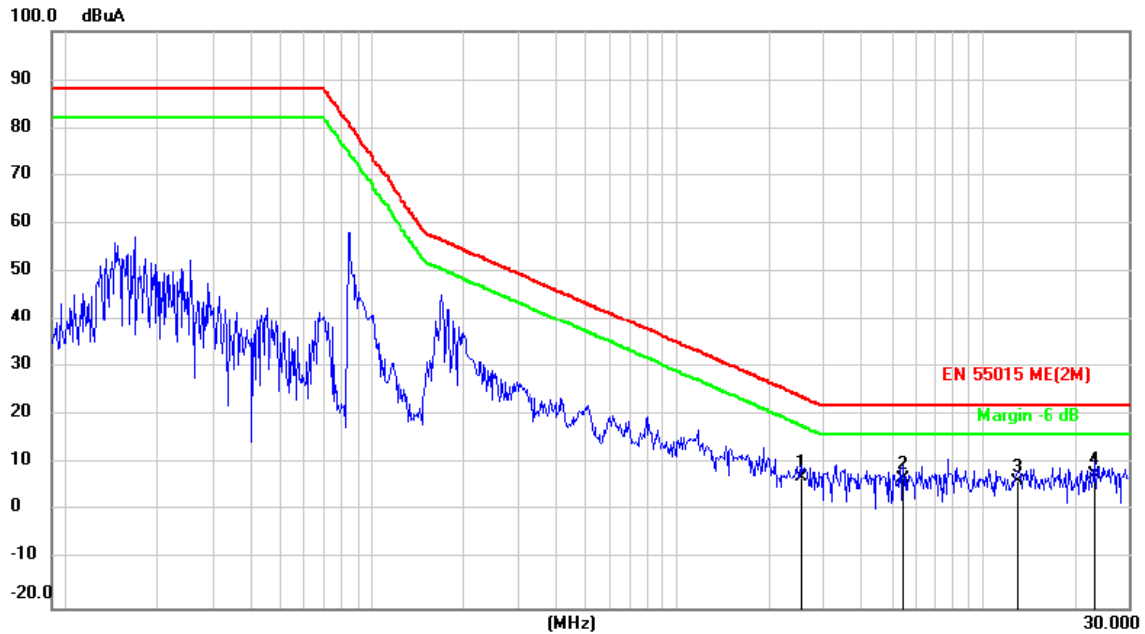
Detailed results are shown below



No.	Mk.	Freq. MHz	Reading Level dBuA	Correct Factor dB	Measure- ment dBuA	Limit dBuA	Over dB	Detector	Comment
1		2.6318	8.26	0.00	8.26	23.57	-15.31	QP	
2		4.8752	7.16	0.00	7.16	22.00	-14.84	QP	
3		13.9946	17.00	-9.99	7.01	22.00	-14.99	QP	
4	*	24.8931	27.23	-20.00	7.23	22.00	-14.77	QP	

Environmental Conditions:	23.7°C, 56% RH
Test Voltage:	DC 12.8V
Test Model:	AOK-60WsE-DC-AP-L5-5770-T3-P
Test Mode:	Lighting
Test Engineer:	Zed Zhang
Pol:	Y

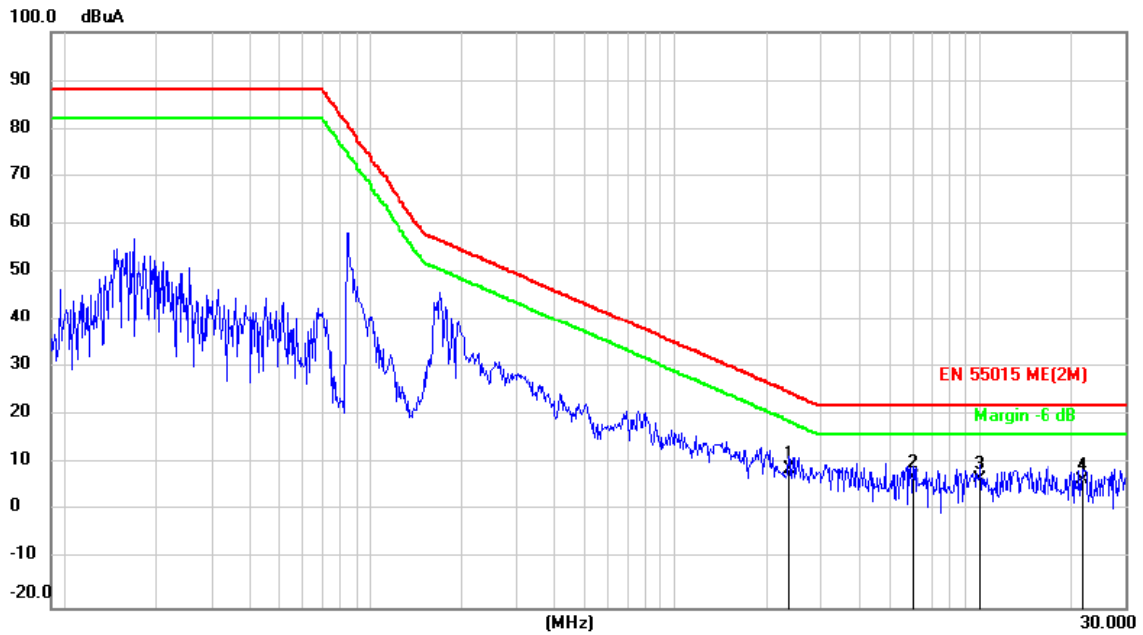
Detailed results are shown below



No.	Mk.	Freq. MHz	Reading Level dBuA	Correct Factor dB	Measure- ment dBuA	Limit dBuA	Over dB	Detector	Comment
1		2.5478	6.72	0.38	7.10	23.96	-16.86	QP	
2		5.4615	7.41	-0.42	6.99	22.00	-15.01	QP	
3		13.0096	15.41	-9.22	6.19	22.00	-15.81	QP	
4	*	23.1414	27.73	-20.10	7.63	22.00	-14.37	QP	

Environmental Conditions:	23.7°C, 56% RH
Test Voltage:	DC 12.8V
Test Model:	AOK-60WsE-DC-AP-L5-5770-T3-P
Test Mode:	Lighting
Test Engineer:	Zed Zhang
Pol:	Z

Detailed results are shown below

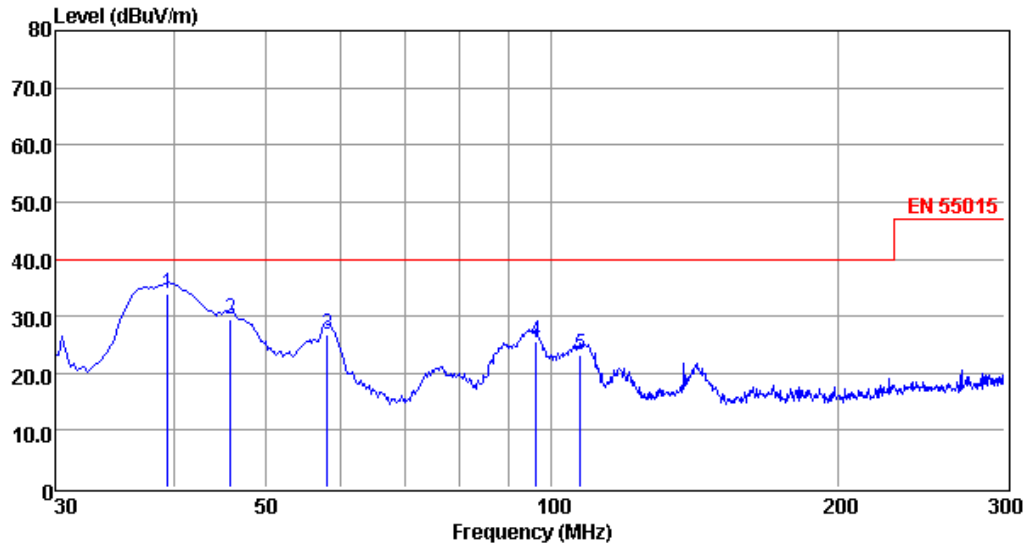


No.	Mk.	Freq. MHz	Reading Level dBuA	Correct Factor dB	Measure- ment dBuA	Limit dBuA	Over dB	Detector	Comment
1		2.3683	8.98	-0.03	8.95	24.84	-15.89	QP	
2	*	6.0198	7.63	-0.42	7.21	22.00	-14.79	QP	
3		10.0350	12.31	-5.31	7.00	22.00	-15.00	QP	
4		21.8640	25.89	-19.38	6.51	22.00	-15.49	QP	

C.2 Radiated Disturbance Test Results (30MHz to 300MHz)

Environmental Conditions:	24°C, 56% RH
Test Voltage:	DC 12.8V
Test Model:	AOK-60WsE-DC-AP-L5-5770-T3-P
Test Mode:	Lighting
Test Engineer:	Zed Zhang
Pol:	Vertical

Detailed results are shown below

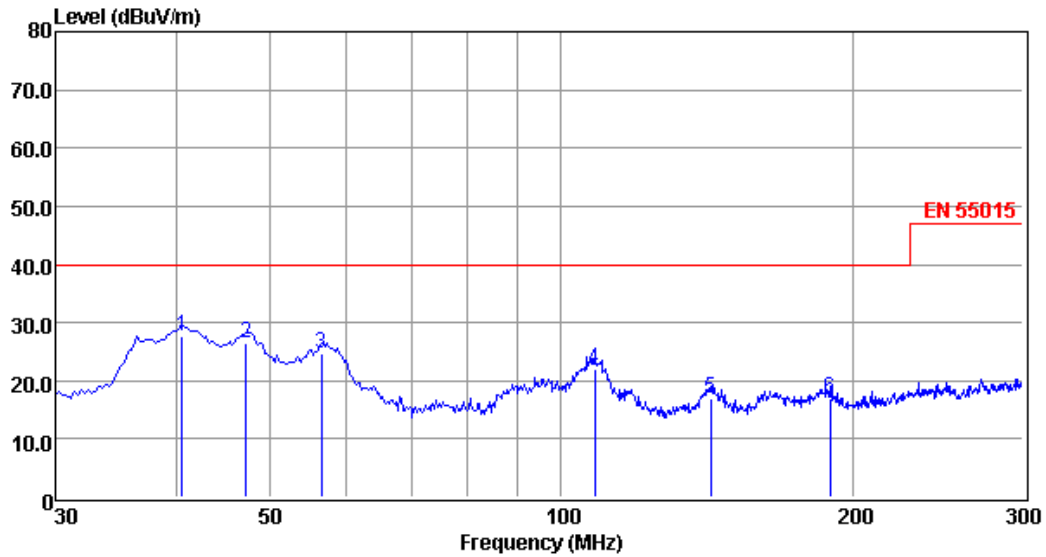


	Freq	Reading	CabLos	Antfac	Measured	Limit	Over	Remark
	MHz	dBuV	dB	dB/m	dBuV/m	dBuV/m	dB	
1	39.45	20.21	0.38	13.44	34.03	40.00	-5.97	QP
2	45.93	15.41	0.41	13.49	29.31	40.00	-10.69	QP
3	58.08	13.38	0.47	12.82	26.67	40.00	-13.33	QP
4	96.42	12.14	0.58	12.93	25.65	40.00	-14.35	QP
5	107.22	10.06	0.68	12.50	23.24	40.00	-16.76	QP

- Note: 1. All readings are Quasi-peak values.
 2. Measured= Reading + Antenna Factor + Cable Loss
 3. The emission that are 20db below the official limit are not reported

Environmental Conditions:	24°C, 56% RH
Test Voltage:	DC 12.8V
Test Model:	AOK-60WsE-DC-AP-L5-5770-T3-P
Test Mode:	Lighting
Test Engineer:	Zed Zhang
Pol:	Horizontal

Detailed results are shown below



	Freq	Reading	CabLos	Antfac	Measured	Limit	Over	Remark
	MHz	dBuV	dB	dB/m	dBuV/m	dBuV/m	dB	
1	40.53	13.59	0.50	13.58	27.67	40.00	-12.33	QP
2	47.28	12.61	0.35	13.41	26.37	40.00	-13.63	QP
3	56.46	11.20	0.47	12.92	24.59	40.00	-15.41	QP
4	108.30	9.06	0.68	12.40	22.14	40.00	-17.86	QP
5	142.86	7.97	0.71	8.21	16.89	40.00	-23.11	QP
6	189.57	5.66	0.86	10.52	17.04	40.00	-22.96	QP

- Note: 1. All readings are Quasi-peak values.
 2. Measured= Reading + Antenna Factor + Cable Loss
 3. The emission that are 20db below the official limit are not reported

C.3 Immunity Test Results

Electrostatic Discharge Immunity Test Results								
Standard	<input checked="" type="checkbox"/> EN 61547: 2009		<input checked="" type="checkbox"/> EN 61000-4-2 : 2006					
Applicant	AOK Industrial Company Limited							
EUT	SE SERIES SOLAR STREET LIGHT	Temperature	23.9°C					
M/N	AOK-60WsE-DC-AP-L5-5770-T3-P	Humidity	51%					
Test Mode	Lighting	Pressure	1008mbar					
Input Voltage	DC 12.8V	Test Results	Pass					
Test Engineer	Zed Zhang							
Discharge mode	Test points	Results						Performance Criteria
		2kv		4kv		8kv		
		+	-	+	-	+	-	
Direct-Contact Discharge	Front	P	P	P	P	/	/	B
	Back	P	P	P	P	/	/	B
	Left	P	P	P	P	/	/	B
	Right	P	P	P	P	/	/	B
	Top	P	P	P	P	/	/	B
	Bottom	P	P	P	P	/	/	B
Direct-Air Discharge	Front	P	P	P	P	P	P	B
	Back	P	P	P	P	P	P	B
	Left	P	P	P	P	P	P	B
	Right	P	P	P	P	P	P	B
	Top	P	P	P	P	P	P	B
	Bottom	P	P	P	P	P	P	B
Indirect-Contact Discharge (VCP)	Front	P	P	P	P	/	/	B
	Back	P	P	P	P	/	/	B
	Left	P	P	P	P	/	/	B
	Right	P	P	P	P	/	/	B
Indirect-Contact Discharge (HCP)	Front	P	P	P	P	/	/	B
	Back	P	P	P	P	/	/	B
	Left	P	P	P	P	/	/	B
	Right	P	P	P	P	/	/	B
Note: "P" = Pass.								

Radiated, Radio-Frequency, Electromagnetic Field Immunity Test Results

Standard	<input checked="" type="checkbox"/> EN 61547: 2009 <input checked="" type="checkbox"/> EN 61000-4-3: 2006+A2: 2010			
Applicant	AOK Industrial Company Limited			
EUT	SE SERIES SOLAR STREET LIGHT	Temperature	23.5°C	
M/N	AOK-60WsE-DC-AP-L5-5770-T3-P	Humidity	53%	
Test Mode	Lighting	Pressure	1008mbar	
Input Voltage	DC 12.8V	Test Engineer	Davey Xu	
Modulation	80% AM 1KHz	Test Results	Pass	
Steps	1%			
Side of EUT	Antenna polarization	Frequency Range (MHz)	Test Level (V/m)	Performance Criteria
Front	Vertical, Horizontal	80 to 1000	3	A
Right	Vertical, Horizontal	80 to 1000	3	A
Rear	Vertical, Horizontal	80 to 1000	3	A
Left	Vertical, Horizontal	80 to 1000	3	A
Note:				

-----THE END OF TEST REPORT-----