ErP
TEST REPORT

For

LED FLOOD LIGHT WITH STAND

Model No.:	**U.G7001001, U.G7002002, U.G7003003, U.G7005004, S.G7001001, S.G7002002, S.G7003003, S.G7005004, H.G7001001, H.G7002002, H.G7003003, H.G7005004**
Applicant :	**Haomai Electrical International Co., Ltd.** **Guanlan High-tech Industrial Park, Longhua New District, Shenzhen, China.**
Manufacturer :	**Haomai Electrical International Co., Ltd.** **Guanlan High-tech Industrial Park, Longhua New District, Shenzhen, China.**
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Report Number :	**GST1512021226P**
Issued Date :	**December 07, 2015**
Date of Report :	**December 07, 2015**

Note:

1. The test data and result is based on the tested sample only.
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Test Report **REQUIREMENTS FOR LIGHT EMITTING DIODE LAMPS AND RELATED EQUIPMENT ACCORDING TO THE EC REGULATION 1194/2012**	
Implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for directional lamps, light emitting diode lamps and related equipment.	
Report reference No. ……..…:	GST1512021226P
Testing laboratory ……:	Global-Standard Testing Service Co., Ltd.
Location……..:	Room 1911-1914, Noble Plaza, Qian Jin 1st Road, Bao An district, Shenzhen, Guangdong, China.
Applicant……:	Haomai Electrical International Co., Ltd.
Address:……....:	Guanlan High-tech Industrial Park, Longhua New District, Shenzhen, China.
Manufacturer……....:	Haomai Electrical International Co., Ltd.
Address:……....:	Guanlan High-tech Industrial Park, Longhua New District, Shenzhen, China.
Standards……...:	CIE 84: 1989 CIE 127: 2007 Annex III of EC 1194/2012
Procedure deviation……:	N/A
Non-standard test method……..:	N/A
Type of test equipment ……...:	LED FLOOD LIGHT WITH STAND
Trade mark……:	N/A
Model/Type designation……..:	U.G7001001, U.G7002002, U.G7003003, U.G7005004, S.G7001001, S.G7002002, S.G7003003, S.G7005004, H.G7001001, H.G7002002, H.G7003003, H.G7005004
Summary of test results……:	These results are in compliance with the stage 1 in Annex III ecodesign requiments of the EC regulation 1194/2012.

Possible test case verdicts :	
test case does not apply to the test object	N(/A.)
test object does meet the requirement	P(ass)
test object does not meet the requirement	F(ail)

Name and address of the testing laboratory :

Global-Standard Testing Service Co., Ltd.

Room 1911-1914, Noble Plaza, Qian Jin 1st Road, Bao An District, Shenzhen, Guangdong, China.

Tested by : Sean Xiao — December 04, 2015

Signature — Date

Sean Xiao / Engineer

Name/title

Reviewed by : Jerry Hu — December 07, 2015

Signature — Date

Jerry Hu / Supervisor

Name/title

Approved by : — December 07, 2015

Signature — Date

Tim Sun / Manager

Name/title

Test and cerification results

Annex III (Clause)	Lamp Efficac of Ecodesign Requirements in EC Regulation 1194/2012, Stage 1 to 3	Result- Remark	Verdict
1.1)	Corrected Power (Pcor)		N/A
	Rated Luminous flux (Φ)		N/A
	Reference Power (Pref) Φ ＜ 1300 lm (Pref=0.88Φ+0,049Φ) Φ ＜ 1300 lm (Pref=0.07341Φ)		P
	Maximum Energy Efficiency Index (EEI; Limit≤0,5)		P
Annex III (Clause)	Lamp Efficacy of Ecodedign Requirements in EC Regulation 1194/2012, stage2		---
1.2a)	No-Load Power: Limit≤1.0W		P
	Efficiency of halogen Lamp Control Gear: Limit 0,91 at 100% Load		P
AnnexIII (Clause)	Lamp Efficacy of Ecodedign Requirements in EC Regulation 1194/2012, stage 3		---
1.2b)	No-Load Power: Limit≤0,5W (Stage 3)		P
	Standby Power; Limit≤0,5W (Stage 3)		N/A
Annex III (Clause)	Functionality of Ecodesign Requuirements in EC Regulation 1194/2012 for Directional Compact Fluoredcent Lamps, Stage 1		---
2.1a)	Rated Lamp Lifetime (h)		N/A
	Measured lamp survival factor: Limit: ≥0,50 (at 6000h)-From 1 March 2014		N/A
2.1b)	Measured lumen maintenance at 2000h: Limint: ≥ 80%		N/A
2.1c)	Number of switching cycles before failure: ≥ half the lamp lifetime expressed in hours		N/A
	Limit: 50% of the sample should be survived		N/A
	Number of switching cycles before failure: ≥ 10000 if lamp starting time > 0,3s		N/A
	Limit: 50% of the sample should be survived		N/A
2.1d)	Measured starting time: Limit: < 2,0s		N/A
2.1e)	Measured lamp warm-up time to 60% Φ: Limit: < 40s , or		N/A
	Measured lamp warm-up time to 60% Φ: Limit: < 100s (for lamps containing mercury in amalgam form)		N/A
Annex III (Clause)	Functionality of Ecodesign Requirements in EC Regulation 1194/2012 for Directional Compact Fluorescent Lamps, Stage 1		---
2.1f)	Measured premature failure rate: Limit: ≤ 5,0% (at 500h)		N/A
2.1g)	Measured lamp power factor: Limit: ≥ 0,50 (if P < 25W), or		N/A

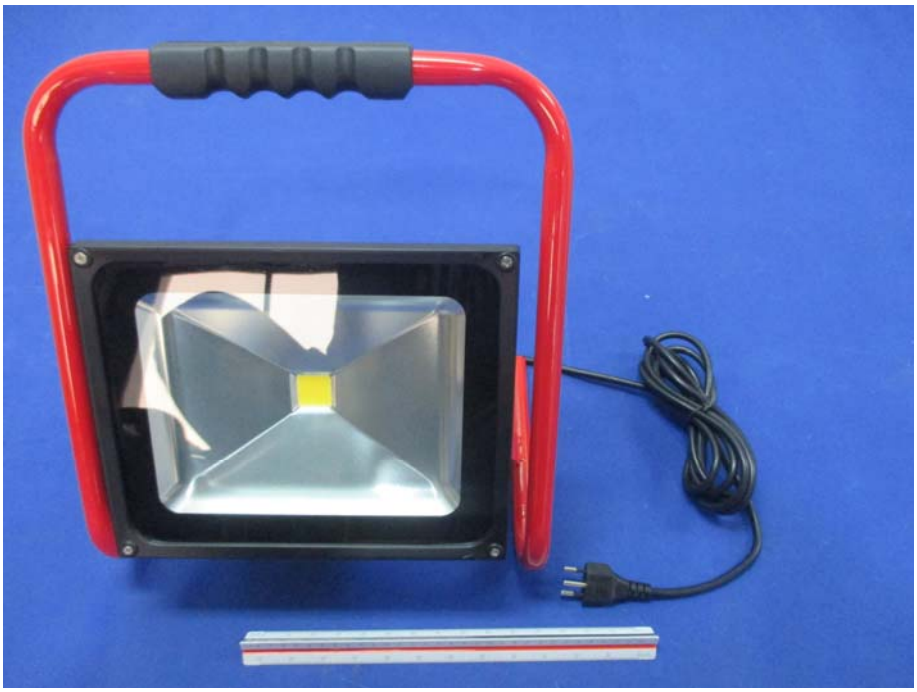
	Measured lamp power factor: Limit: ≥ 0,90 (if P ≥ 25W)		P
2.1h)	Measured color rendering (Ra): Limit: ≥ 80 or		P
	Limit: ≥ 65 for outdoor or industrial applications		N/A
Annex III (Clause)	Functionality of Ecodesign Requirements in EC Regulation 1194/2012 for Directional Compact Fluorescent Lamps, Stage 3		---
2.1a)	Rated Lamp Lifetime (h)		N/A
	Measured lamp survival factor: Limit: ≥ 0,70 (at 6000h)		N/A
2.1b)	Measured lumen maintenance at 2000h: Limit: ≥ 83%		N/A
	Measured lumen maintenance at 6000h: Limit: ≥ 70%		N/A
2.1c)	Number of switching cycles before failure: ≥ lamp lifetime expressed in hours		N/A
	Limit: 50% of the sample should be survived		N/A
	Number of switching cycles before failure: ≥ 30000 if lamp starting time > 0,3s		N/A
	Limit: 50% of the sample should be survived		N/A
2.1d)	Measured starting time: Limit: < 1,5s (If P <10W)		N/A
	Measured starting time: Limit: < 1,0s (If P≥ 10W)		P
2.1e)	Measured lamp warm-up time to 60% Φ: Limit: <40s , or		N/A
	Measured lamp warm-up time to 60% Φ: Limit: < 100s (for lamps containing mercury in amalgam form)		N/A
2.1f)	Measured premature failure rate: Limit: ≤ 5,0% (at 1000h)		N/A
2.1g)	Measured lamp power factor: Limit: ≥ 0,55 (if P < 25W), or		N/A
	Measured lamp power factor: Limit: ≥ 0,90 (if P ≥ 25W)		P
Annex III (Clause)	Functionality of Ecodesign Requirements in EC Regulation 1194/2012 for Directional Compact Fluorescent Lamps, Stage 3		---
2.1h)	Measured color rendering (Ra): Limit: ≥ 80		N/A
	Limit: ≥ 65 for outdoor or industrial applications		N/A
Annex III (Clause)	Functionality of Ecodesign Requirements in EC Regulation 1194/2012 for other directional lamp excluding compact fluorescent lamps and LED lamps and high-intensity discharge lamps, Stage 1 and 2		---
2.1a)	Rated lamp lifetime: Limit ≥ 1000h		N/A
	Rated Lamp Lifetime: Limit≥ 2000h in stage 2		N/A
2.1b)	Measured lumen maintenance: Limit: ≥ 80% (at 75% of rated average lifetime)		N/A
2.1c)	Number of switching cycles before failure: ≥ four times the rated lamp life expressed in hours		N/A
	Limit: 50% of the sample should be survived		N/A
2.1d)	Measured starting time: Limit: < 0,2s		N/A
2.1e)	Measured lamp warm-up time to 60% Φ: Limit: ≤		N/A

	1,0s		
2.1f)	Measured premature failure rate: Limit: ≤ 5,0% (at 100h)		N/A
2.1g)	Measured lamp power factor: Limit: ≥ 0,9 for Power >25W		P
	Measured lamp power factor: Limit: ≥ 0,5 for Power ≤25W		N/A
Annex III (Clause)	Functionality of Ecodesign Requirements in EC Regulation 1194/2012 for other directional lamp excluding compact fluorescent lamps and LED lamps and high-intensity discharge lamps, Stage 3		---
2.1a)	Rated lamp lifetime: Limit ≥ 2000h		N/A
	Rated Lamp Lifetime: Limit≥ 4000h for SELV		N/A
2.1b)	Measured lumen maintenance: Limit: ≥ 80% (at 75% of rated average lifetime)		P
2.1c)	Number of switching cycles before failure: ≥ four times the rated lamp life expressed in hours		N/A
	Limit: 50% of the sample should be survived		N/A
Annex III (Clause)	Functionality of Ecodesign Requirements in EC Regulation 1194/2012 for other directional lamp excluding compact fluorescent lamps and LED lamps and high-intensity discharge lamps, Stage 3		---
2.1d)	Measured starting time: Limit: < 0,2s		N/A
2e)	Measured lamp warm-up time to 60% Φ: Limit: ≤ 1,0s		N/A
2f)	Measured premature failure rate: Limit: ≤ 5,0% (at 200h)		N/A
2.1g)	Measured lamp power factor: Limit: ≥ 0,9 for Power >25W		P
	Measured lamp power factor: Limit: ≥ 0,5 for Power ≤25W		N/A
Annex III (Clause)	Functionality of Ecodesign Requirements in EC Regulation 1194/2012 for non-directional and directional LED lamps, as from Stage 1		---
2.2a)	Rated lamp survival factor at 6000 hours: Limit ≥ 0,9 (From 1 March 2014)		N/A
2.2b)	Measured lumen maintenance at 6000 hours: Limit: ≥ 0,8 (From 1 March 2014)		N/A
2.2c)	Number of switching cycles before failure: ≥ half the lamp lifetime expressed in hours		N/A
	Limit: 50% of the sample should be survived		N/A
	Number of switching cycles before failure: ≥ 15000 if lamp rated life ≥ 30000h		N/A
	Limit: 50% of the sample should be survived		N/A
2.2d)	Measured starting time: Limit: < 0,5s		N/A
2.2e)	Measured lamp warm-up time to 95% Φ: Limit: ≤ 2,0s		N/A
2.2f)	Measured premature failure rate: Limit: ≤ 5,0% (at 1000h)		N/A
2.2g)	Measured color rendering (Ra): Limit: ≥ 80 or		N/A
	Limit: ≥ 65 for outdoor or industrial applications		N/A
2.2h)	Colour consistency -Six-step MacAdam ellipse or less.		P

2.2i)	Measured lamp power factor: Limit: ≥ 0,4 for 2W< Power ≤5W		N/A
	Measured lamp power factor: Limit: ≥ 0,5 for 5W< Power ≤25W		N/A
	Measured lamp power factor: Limit: ≥ 0,9 for Power >25W		P
Annex III (Clause)	Lamp Efficacy of Ecodesign Requirements in EC Regulation 1194/2012, stage 2		---
2.3a)	EEI for equipment designed for installation between the mains and the lamps: Limits: ≤ 0.24 for non-directional lamps		N/A
	Limits: ≤ 0.40 for directional lamps		N/A
	Dimming control device -at least 1% of their luminous flux at full load		N/A
Annex III (Clause)	Product Information of Ecodesign Requirements in EC Regulation 1194/2012 for Lamp marking, Stage 1		---
3.1.1a)	Nominal useful luminous flux (lm)		N/A
3.1.1b)	Colour temperature (K)		N/A
3.1.1c)	Nominal beam angle (°)		N/A
Annex III (Clause)	Product Information of Ecodesign Requirements in EC Regulation 1194/2012 for Packaging, Stage 1		---
3.1.2)	The nominal luminous flux of the lamp shall be separately displayed in a font at least twice as large as the nominal lamp power		N/A
3.1.2b)	Nominal life time in hours		N/A
3.1.2c)	Color temperature in Kelvins		N/A
3.1.2d)	Number of switching cycles before premature lamp failure		N/A
3.1.2e)	Warm-up time up to 60% of the full light output		N/A
	Indicated as “instant full light” if less than 1 second		N/A
3.1.2f)	A warning if the lamp cannot be dimmed or can be dimmed only on specific dimmers		N/A
3.1.2g)	Information for non-standard conditions		N/A
3.1.2h)	Lamp dimensions in millimeters		N/A
3.1.2i)	Nominal Beam angle in degrees		N/A
3.1.2j)	Warning statement if beam angle ≥ 90°		N/A
3.1.2k)	Drawing with Lamp’s dimension for different than meant to replace		P
3.1.2l)	The claimed equivalent incandescent lamp luminous flux shall corresponding in Table 6 to the luminous flux of the lamp		N/A
Annex III (Clause)	Product Information of Ecodesign Requirements in EC Regulation 1194/2012 for Packaging, Stage 1		---
3.1.2m)	The claimed equivalent incandescent lamp power shall corresponding in Table 6 to the luminous flux of the lamp		N/A
3.1.2n)	Lamp mercury content		N/A
3.1.2o)	Indication which website to consult in case of accidental lamp breakage to find instructions on how to clean up the lamp debris		P
Annex III	Product Information of Ecodesign Requirements in		---

(Clause)	EC Regulation 1194/2012 for Free-Access Websites, Stage 1		
3.1.3a)	The information specified on packaging		P
3.1.3b)	Rated wattage (0,1W precision)		P
3.1.3c)	Rated luminous flux		N/A
3.1.3d)	Rated lamp life time		N/A
3.1.3e)	Lamp power factor		N/A
3.1.3f)	Lumen maintenance factor at the end of the nominal life		N/A
3.1.3g)	Starting time		N/A
3.1.3h)	Colour rendering		N/A
3.1.3i)	Colour consistency (Only for LEDs)		P
3.1.3j)	Rated peak intensity in candela (cd)		N/A
3.1.3k)	Rated beam angle		P
3.1.3l)	Intended for use in outdoor or industrial applications (If applicable)		P
3.1.3m	Spectral power distribution in range 180-800nm		N/A
3.1.3n)	Instruction on how to clean up the lamp debris in case of accidental lamp breakage		P
3.1.3o)	Recommendations on how to dispose of the lamp at its end of life		N/A

Annex 1: Photo Documents

Photo 1 View: [√] Front [ ] Rear [ ] Right side [ ] Left side [ ] Top [ ] Bottom [ ] Internal	

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