





Report No.: OI-2016-50078 Page 1 of 6 Issued: Jul. 01, 2016

TEST REPORT

The following tested product(s) were submitted and identified by the vendor as:

Applicant : Orangtek International Pty Ltd

Address of Applicant : 46 Stanley Street, Peakhurst, NSW 2210, Australia

Testing Laboratory : SGS Taiwan Ltd., Optics Laboratory

Laboratory Address : 33, Wu Chyuan Road, New Taipei Industrial Park, Wu Ku

District, New Taipei City 24886, Taiwan

Product Name : LED Street Light

Model / Serial Number : VOYAGER 30

Manufacturer : Orangtek Limited Taiwan Branch

Rating : AC 220 V to 240 V (50 / 60) Hz, 30 W

Tested Condition : AC 240 V 50 Hz

Test Standard/Method : Clause 8 & Clause 9 of IEC 62384 DC or AC supplied

electronic control gear for LED modules - Performance

requirements

Date of Issue : Jul. 01, 2016

The test results are solely accountable for the testing samples.

◆ All reported contents shall not be used for advertising, publication, marketing strategies and legal proceedings.

• Excerpts taken from the report will not be valid unless otherwise stated in the laboratory agreement.

Test Results: -PLEASE SEE ATTACHED SHEETS-

Signed for and on behalf of SGS TAIWAN Ltd.

rltu Yu

Willie Yu Sr. Engineer

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/en/Terms-and-Conditions/Terms-e-Document. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.

33, Wu Chuan Road, Wu Ku District, New Taipei City, Taiwan /新北市五股區五權路 33 號



Report No.: OI-2016-50078 Page 2 of 6 Issued: Jul. 01, 2016

1 DATE OF RECEIPT OF SAMPLES

May 20, 2016

2 DATE(S) OF PERFORMANCE OF THE TEST

Jun. 08, 2016 ~ Jul. 01, 2016

3 <u>IDENTITY OF SAMPLES</u>

Quantity	Model	Serial Number
10	VOYAGER 30	#1-#10

4 TEST ITEMS

4.1 Total circuit power

The test results were implemented referring to Clause 8 Total circuit power of IEC 62384 DC or AC supplied electronic control gear for LED modules – Performance requirements.

4.2 Circuit power factor

The test results were implemented referring to Clause 9 Circuit power factor of IEC 62384 DC or AC supplied electronic control gear for LED modules – Performance requirements.

5 <u>TEST CONDITIONS</u>

Main Test Equipment:

Name	Brand	Model	S/N	Calibration Due Date
Digital Power Meter / AC Source	YOKOGAWA / apc	WT-210 / AFC-500W	91J837766 / F313030097	2017/2/23

Environmental Conditions:

Ambient temperature: $(20 \text{ to } 27) ^{\circ}\mathbb{C}$ Relative humidity: $(60 \pm 20) ^{\circ}\mathbb{R}\mathbb{H}$

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/en/Terms-and-Conditions/Terms-e-Document. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.

| 33, Wu Chuan Road, Wu Ku District, New Taipei City, Taiwan /新北市五股區五權路 33 號

www.sas.tw



Report No.: OI-2016-50078 Page 3 of 6 Issued: Jul. 01, 2016

DUT Conditions:

Power input: AC 240 V 50 Hz

Dimension: <u>L 630 mm x W 165 mm x H 70 mm</u>

Warm-up time: > 120 minutes

Stabilization time: 30 minutes

Control Gear: PHILIPS / XITANIUM 27W 1.0A Prog 230V-J sXt / 1 pc

Control Gear Spec: <u>I/P: AC (220 to 240) V 0.16 A, (50 / 60) Hz</u>

O/P: DC (0.1 to 1) A, (10 to 38) V

LED Module Conditions:

Model Number: 30 LED PCB with 30 LEDs

Input condition: DC 300 mA, 30 W

Dimension: L 134 mm x W 94 mm

6 TEST RESULTS

S/N	Input Voltage (Vac)	Input Current (A)	Total circuit power (W) (Lamp Circuit Power)	Circuit power factor	Note
# 1	240.01	0.1238	29.40	0.9892	Stabilization
# 2	240.01	0.1256	29.83	0.9894	Stabilization
# 3	240.02	0.1237	29.40	0.9898	Stabilization
# 4	239.93	0.1220	28.95	0.9889	Stabilization
# 5	240.01	0.1243	29.52	0.9896	Stabilization
# 6	240.01	0.1227	29.11	0.9889	Stabilization
# 7	240.01	0.1210	28.72	0.9892	Stabilization
# 8	240.01	0.1228	29.16	0.9893	Stabilization
# 9	240.01	0.1225	29.08	0.9890	Stabilization
# 10	240.00	0.1245	29.56	0.9894	Stabilization
Avg.	240.00	0.1233	29.27	0.9893	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/en/Terms-and-Conditions/Terms-e-Document. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: OI-2016-50078 Page 4 of 6 Issued: Jul. 01, 2016

7 PHOTO



Front View



Back View

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/en/Terms-and-Conditions/Terms-e-Document. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.

| 33, Wu Chuan Road, Wu Ku District, New Taipei City, Taiwan /新北市五股區五權路 33 號



Report No.: OI-2016-50078 Page 5 of 6 Issued: Jul. 01, 2016



DUT



LED module

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/en/Terms-and-Conditions/Terms-e-Document. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.

33, Wu Chuan Road, Wu Ku District, New Taipei City, Taiwan /新北市五股區五權路 33 號



Report No.: OI-2016-50078 Page 6 of 6 Issued: Jul. 01, 2016



Control Gear
- End of Report -

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/en/Terms-and-Conditions/Terms-e-Document. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.

33, Wu Chuan Road, Wu Ku District, New Taipei City, Taiwan /新北市五股區五權路 33 號