



PHOTOMETRIC TEST REPORT No. 200141PH

Client: OFFSPRING PROFILES

Date: 5th February 2020

Address: 40 Austin Street, Onekawa, Napier, New Zealand

Contact: Robin Campbell

Luminaire: Flat Freddie 14, Richie Rail 17 & Trim Tim 15

Catalogue No. FF14-SUPER-14-40 (sample tested),
RR17-SUPER-14-40, TT15-SUPER-14-40

Description: 520mm aluminium extrusion (18mm x 14mm) incorporating a flat linear opal diffuser. This test report covers all model numbers as their optical openings are identical.

Optical System: Offspring Profiles 24VDC LED board type Super Series-14W-4000K (500mm LED strip).

Control Gear: LISUN DC Series DC3010 24VDC Supply.

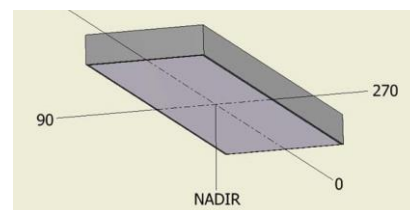
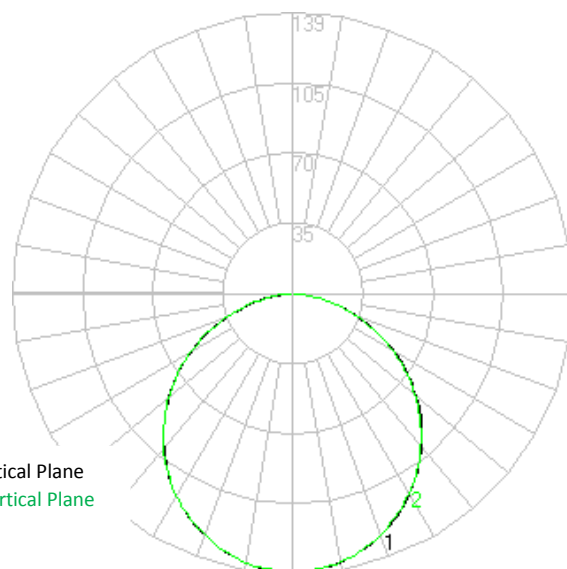
Test Specification:

The luminaire was tested in accordance with the procedures given in IES LM79-19, "Optical and electrical measurements of Solid-State Lighting Products" using the **absolute** method.

Results:

When tested at an ambient of 25°C at a supply voltage of 24.0V dc, the luminaire consumed 0.316A and 7.6W. That is, Lamp Circuit Power (LCP), which includes power supply losses, is 7.6W. The Total Luminous Flux was measured as 380 Lumens. The Correlated Colour Temperature was measured as 4130K average.

Luminous Intensity Distribution (I-TABLE) is given on Page 5



Tested by: Bruce Real/J King on 4th of February 2020

Authorised Signatory: _____
D.Ford



Test Configuration

The luminaire was photometered in IESNA Horizontal – Vertical Reference angles such that:

- The luminaire was mounted with photometric centre aligned with photometric zero (in the direction of nadir), centred on the light emitting area.
- The supply wires were located on the 0° Horizontal angle, photometric horizontal, in the zero-degree photometric plane.
- In accordance with CIE S 025/E:2015 Clause 5.3.2 the face of the diffuser was co-incident with centre of the goniophotometer.
- The long dimension of the optical opening in the direction of the H= 0° - 180° Plane.
- The photometric test distance of 9.82m, is referenced to the photometric centre of the luminaire and the photocell.

Due to the Type B mounting arrangement, a correction factor to achieve correct orientation was determined but not applied as it was less than 0.5% and accounted for in the Uncertainty Budget. Should these Uncertainties be required contact LEDLab.

Test Procedures and Equipment

Calibration report: 181104CAL using N.M.I. report RN 181690 on standard lamp M14192

Technical Procedure: P113 & P118

Angular Resolution: Test Configuration and issued .ies file
C Plane Interval 15 Deg
Gamma Angle Interval 1.0 Deg
Abbreviated Test Report File (I-Table)
C Plane Interval 15 Deg
Gamma Angle Interval 5.0 Deg

Software: Lisun LSG-1800B

Obstructions: None

Lab. Book Page: PH3/1695

Primary Orientation Correction: 1.0

Colour correction: 1.028

Goniophotometer: Lisun Electronics Model LSG-1800B, Serial No. GSGHF070010.

Photocell: Lisun Electronics Detector Serial No. 330220-1

Lux meter: Lisun Electronics Model PM 400, Serial No. GSRXK090021

Lux meter integration time (PLC): 5

Power meter: Lisun Electronics Model RT-200, Serial No. GSXY0100021

Power meter integration time (s): 0.5

Luminaire thermometer: AMA 1362983 0.1°C Serial No 526,10942

Temperature Data Logger: Lisun TMP-8 Multiplex Serial No GSJWM010028

Auxiliary Photocell: Delta Ohm HD 2102.1 & LP471PHOT

TEST REPORT and IES file archive

The data files for this report are contained in the archive file *200141PH.zip*

IES file 200141PH.ies

Document File: 200141PH.pdf

CIE Colorimetric Parameters

Chromaticity coordinates: $x=0.3746$ $y=0.3717$ $u(u')=0.2232$ $v=0.3323$ $v'=0.4985$

CCT: $T_c=4130K$ ($duv=-0.00060$)

Color Ratio: $R=0.199$ $G=0.750$ $B=0.051$

Peak Wavelength: 456nm

Half Bandwidth: 29.0nm

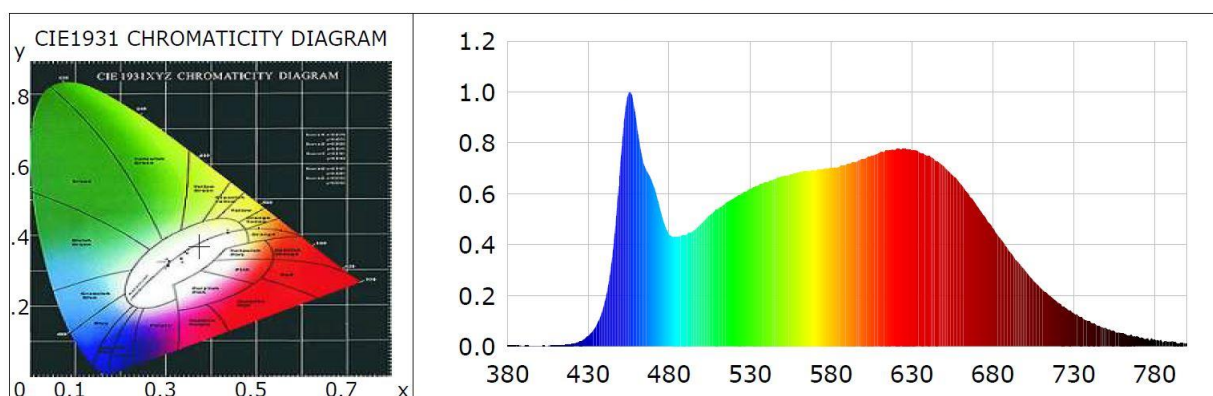
Dominant Wavelength: 578.9nm

Color Purity: 0.240

CRI: R_i : $R_a=95.2$

$R_1=97$ $R_2=99$ $R_3=98$ $R_4=92$ $R_5=95$ $R_6=96$ $R_7=93$ $R_8=92$

$R_9=89$ $R_{10}=99$ $R_{11}=94$ $R_{12}=71$ $R_{13}=99$ $R_{14}=100$ $R_{15}=95$



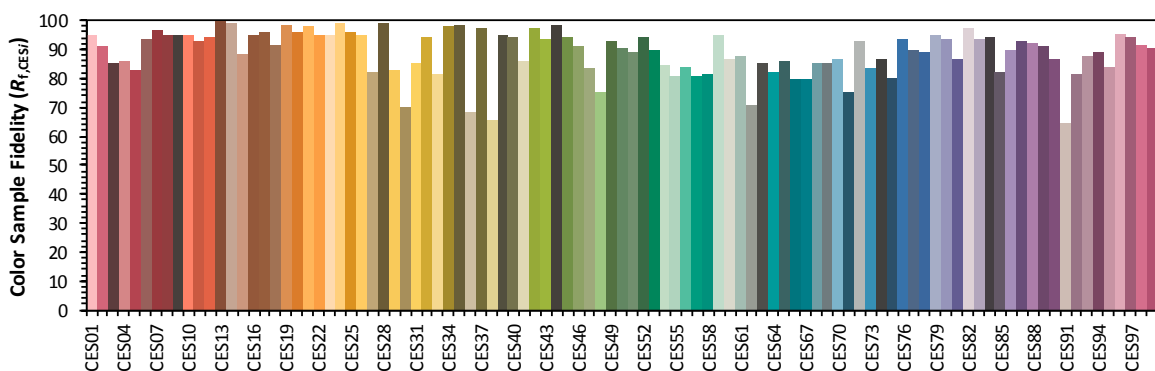
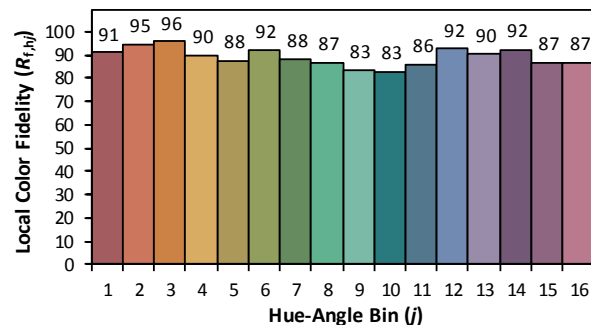
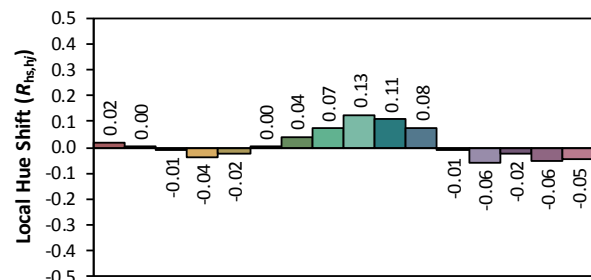
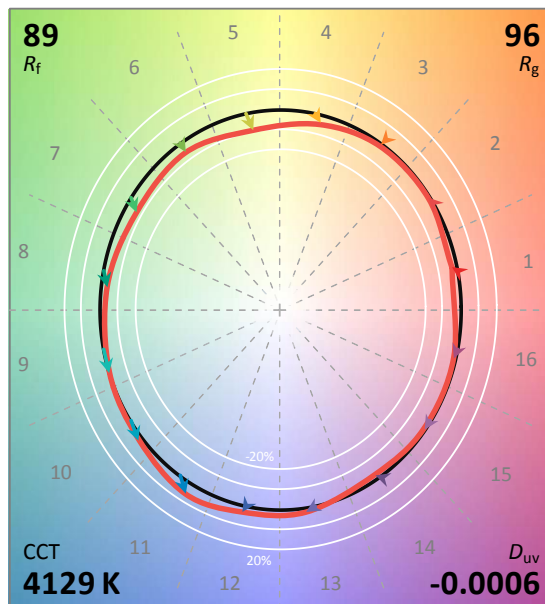
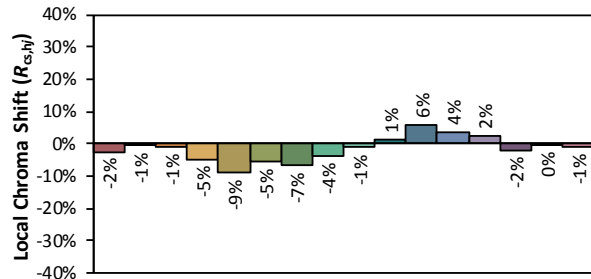
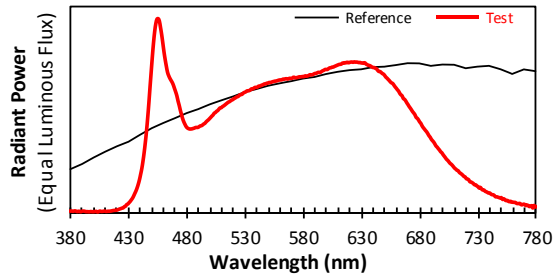
ANSI/IES TM-30-18 Color Rendition Report

Source: 14W-4000K (500mm LED strip)

Manufacturer: OFFSPRING PROFILES

Date: 4/02/2020

Model: FF14 -SUPER-14-40 (JA1905270S)



Notes: This is a recommended method for displaying ANSI/IES TM-30-18 information.

x 0.3746
y 0.3717
u' 0.2232
v' 0.4985

CIE 13.3-1995
(CRI)
R_a 95
R_g 89

Colors are for visual orientation purposes only. Created with the ANSI/IES TM-30-18 Calculator Version 2.00.



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LUMINOUS INTENSITY DISTRIBUTION (I-Table) - cd																											
Vertical Angle (V) Degrees	Horizontal Angle (H Plane) - Degrees																										
	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270	285	300	315	330	345	360		
0	138	138	138	138	138	138	138	138	138	138	138	138	138	138	138	138	138	138	138	138	138	138	138	138	138	138	
5	138	138	138	138	138	138	138	137	138	138	137	138	138	138	138	138	138	138	138	138	138	138	138	138	138	138	
10	136	136	136	135	136	136	135	136	136	136	135	136	136	136	136	136	136	136	136	136	136	136	136	136	136	136	
15	133	132	132	132	132	132	132	132	132	132	133	133	133	133	133	133	133	133	132	133	133	132	132	132	132	133	
20	128	127	128	127	128	128	128	128	128	128	128	128	128	128	128	129	128	128	128	128	128	128	128	128	128	128	
25	122	122	122	121	122	122	122	122	122	122	122	123	123	123	123	123	123	123	123	123	123	122	122	122	122	122	
30	116	115	115	115	115	115	115	115	115	115	116	116	116	116	116	116	116	116	116	116	116	116	116	115	116	116	
35	108	108	108	107	107	107	107	107	108	108	108	108	108	109	109	109	109	109	109	109	109	108	108	108	108	108	
40	99	99	99	98	99	99	99	99	99	99	100	100	100	101	100	100	100	101	100	100	99	100	99	100	99	99	
45	90	90	89	89	89	89	89	89	90	90	91	91	91	91	90	91	91	91	91	91	90	90	90	90	90	90	
50	80	80	79	79	79	79	80	79	80	80	80	81	81	82	80	81	81	81	82	81	81	80	80	80	80	80	
55	70	69	69	68	69	68	69	68	69	69	70	70	70	71	70	71	70	71	70	70	70	70	70	69	70	70	
60	58	58	57	57	57	57	58	57	58	58	59	59	58	60	59	59	59	59	59	59	58	59	58	58	58	58	
65	46	46	46	45	46	46	46	45	46	46	47	47	47	48	47	48	47	48	47	48	47	47	46	47	46	46	
70	35	34	33	33	34	33	34	33	34	34	35	35	35	36	35	36	35	36	36	36	35	35	34	35	35	35	
75	22	22	21	21	22	22	22	22	22	22	23	23	23	24	23	24	23	24	24	24	23	23	23	23	23	22	
80	11	11	10	11	11	11	11	10	11	11	12	12	11	12	11	13	12	13	13	12	12	12	11	11	11	11	
85	1	1	1	1	1	1	2	1	1	1	2	2	1	2	2	3	2	3	3	2	2	2	2	2	2	1	
90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
120	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
130	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
140	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
160	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
170	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	