



PHOTOMETRIC TEST REPORT No. 200142PH

Client: OFFSPRING PROFILES

Date: 5th February 2020

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

Contact: Robin Campbell

Luminaire: Flat Freddie 30

Catalogue No. FF30-SUPER-26-40

Description: 520mm aluminium extrusion (30mm x 30mm) incorporating a flat linear opal diffuser.

Optical System: Offspring Profiles 24VDC LED board type Super Series-26W-4000K (500mm LED strip).

Control Gear: LISUN DC Series DC3010 24VDC Supply.

Test Specification:

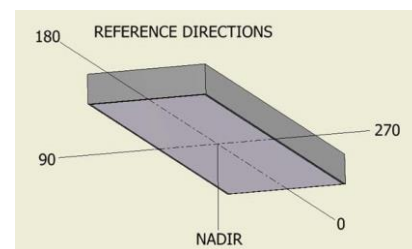
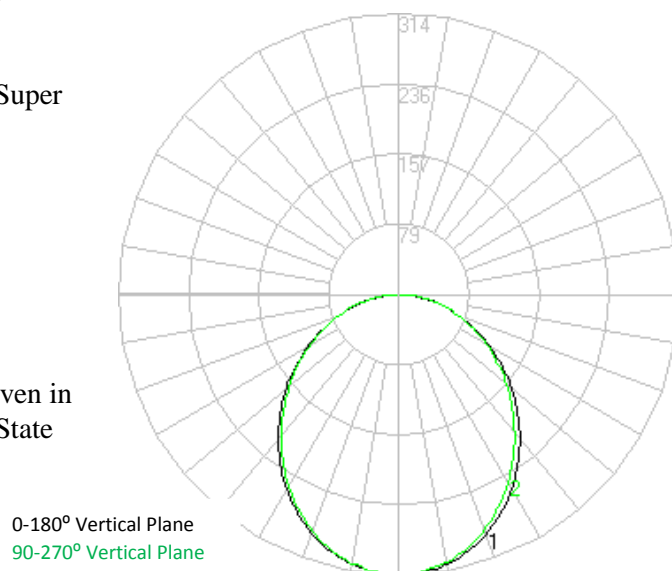
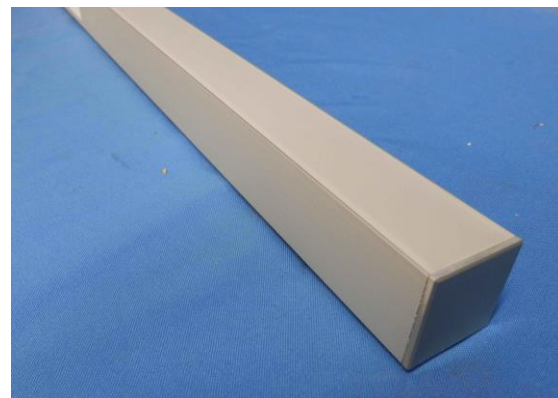
The luminaire was tested in accordance with the procedures given in IES LM79-19, "Optical and electrical measurements of Solid-State Lighting Products" using the **absolute** method.

Results:

When tested at an ambient of 25°C at a supply voltage of 24.0VDC, the luminaire consumed 0.549A and 13.2W. That is, Lamp Circuit Power (LCP), which includes power supply losses, is 13.2W.

The Total Luminous Flux was measured as 808 Lumens. The Correlated Colour Temperature was measured as 3934K 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



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TEST REPORT and IES file archive

The data files for this report are contained in the archive file 200142PH.zip

IES file 200142PH.ies

Document File: 200142PH.pdf

CIE Colorimetric Parameters

Chromaticity coordinates: $x=0.3834$ $y=0.3786$ $u(u')=0.2263$ $v=0.3352$ $v'=0.5029$

CCT: $T_c=3934K$ ($duv=0.00003$)

Color Ratio: $R=0.199$ $G=0.758$ $B=0.042$

Peak Wavelength: 453nm

Half Bandwidth: 26.2nm

Dominant Wavelength: 579.3nm

Color Purity: 0.287

CRI: R_i : $R_a=93.1$

$R_1=93$

$R_2=96$

$R_3=97$

$R_4=92$

$R_5=92$

$R_6=93$

$R_7=94$

$R_8=87$

$R_9=70$

$R_{10}=90$

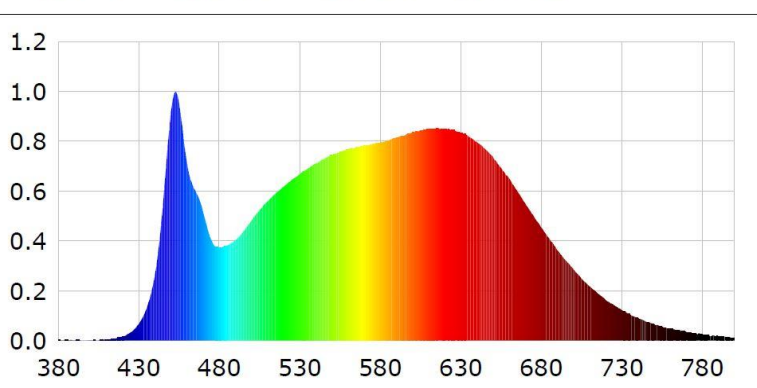
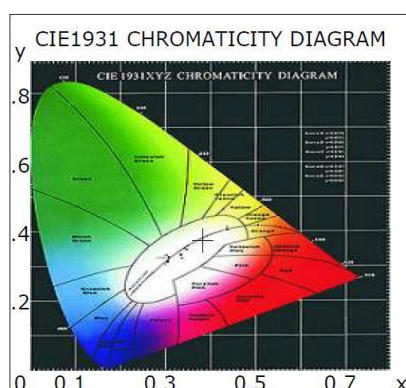
$R_{11}=91$

$R_{12}=70$

$R_{13}=95$

$R_{14}=98$

$R_{15}=92$



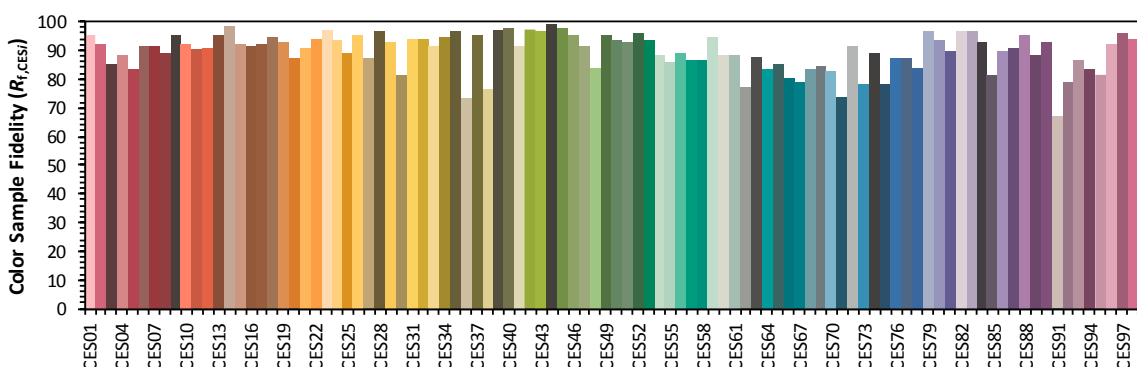
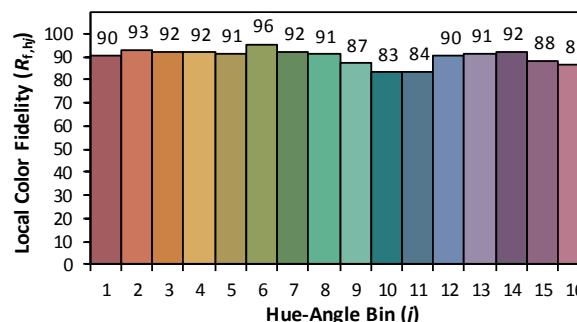
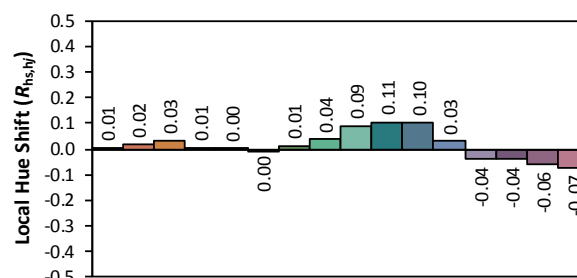
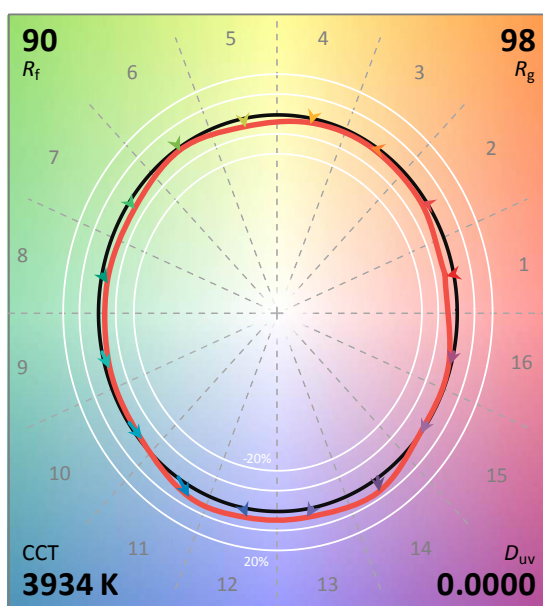
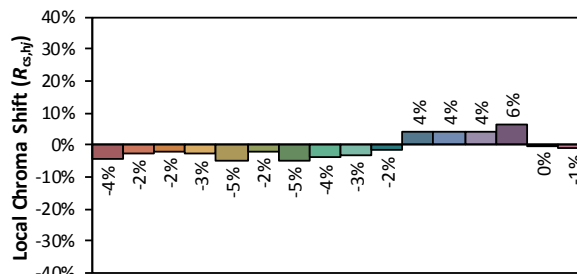
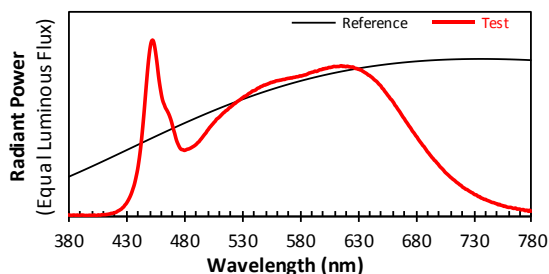
ANSI/IES TM-30-18 Color Rendition Report

Source: 26W-4000K (500mm LED strip)

Manufacturer: OFFSPRING PROFILES

Date: 4/02/2020

Model: FF30 -SUPER-26-40 (JA19004160S)



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

x 0.3834

y 0.3786

u' 0.2263

v' 0.5029

CIE 13.3-1995
(CRI)

R_a 93

R₉ 70

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	314	314	314	314	314	314	314	314	314	314	314	314	314	314	314	314	314	314	314	314	314	314	314	314	314	314	
5	314	314	313	312	314	312	312	311	311	311	311	312	314	314	314	314	313	314	312	312	312	312	313	312	312	314	
10	307	307	307	307	307	305	306	305	306	305	307	307	307	307	307	307	307	307	307	307	307	307	307	307	307	307	
15	298	297	297	295	295	294	294	294	295	295	296	297	298	298	298	298	297	297	296	297	297	297	297	297	297	298	
20	286	284	284	282	282	280	280	280	282	282	284	284	285	286	285	285	284	284	283	284	283	285	284	284	284	286	
25	271	269	268	266	265	263	263	263	265	265	268	269	270	271	269	269	268	268	266	268	267	269	268	268	269	271	
30	253	251	250	247	246	244	244	244	246	247	250	251	252	253	252	251	249	249	248	249	249	250	250	251	253		
35	233	231	230	227	226	223	223	223	226	227	230	231	232	233	231	231	229	228	227	229	228	230	230	231	233		
40	211	209	208	205	204	201	202	202	204	205	208	210	211	212	209	210	207	207	205	207	207	209	208	210	211		
45	188	187	186	183	182	179	180	180	182	183	186	187	188	189	187	188	185	185	183	185	184	186	186	187	188		
50	164	163	163	160	159	157	156	157	160	160	164	164	164	166	164	165	162	163	161	163	161	164	163	163	164		
55	142	140	140	138	138	135	136	136	138	138	141	141	142	143	141	142	140	140	139	140	139	141	140	140	142		
60	118	117	117	115	115	113	114	114	115	115	117	118	118	119	118	119	117	118	116	118	116	118	116	117	118		
65	95	94	93	93	93	92	93	92	93	93	95	95	95	96	95	96	95	96	94	96	94	95	93	94	95		
70	72	71	71	71	71	70	71	71	72	71	72	71	72	73	72	74	73	74	73	74	72	72	71	71	72		
75	50	49	49	50	51	50	51	51	51	50	51	50	50	52	51	53	52	53	52	53	51	51	49	49	50		
80	29	29	30	30	31	31	32	31	32	31	31	30	30	31	31	33	32	33	32	33	31	31	29	29	29		
85	11	11	12	12	13	14	14	14	14	13	13	12	12	13	13	15	15	15	14	16	14	13	11	11	11		
90	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	1	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		
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		
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		
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		
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		
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		
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		
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		
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		
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		
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		
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		
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		
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		
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		
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		
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		
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		