



# Light Emission Distribution Laboratory

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Accredited for Compliance with ISO/IEC 17025 - Testing. Accreditation No. 19541

## PHOTOMETRIC TEST REPORT No. 200140PH

Date: 4<sup>th</sup> February 2020

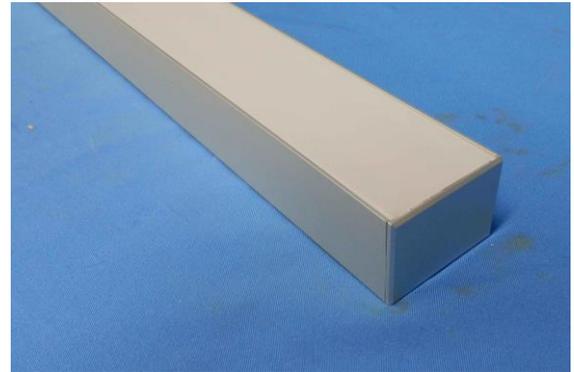
Client: OFFSPRING PROFILES

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

Contact: Robin Campbell

Luminaire: Flat Freddie 35 & Downhill Dan 35

Catalogue No. FF35-SPEC-15-RGB-25-2X30 (sample tested) & DD35-SPEC-15-RGB-25-2X30



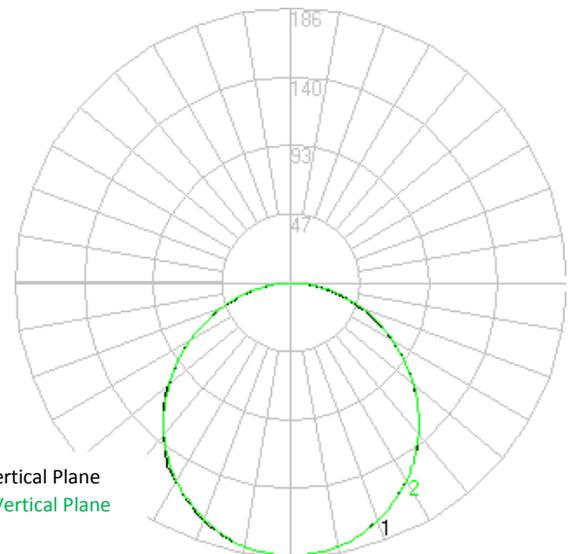
Description: 520mm aluminium extrusion (48mm x 35mm) Incorporating a flat linear opal diffuser. This test report covers both model numbers as their optical openings are identical.

Optical System: Offspring Profiles 24VDC RGBW LED board type SPEC-15-RGB-25W (500mm LED strip) set at 3000K

Control Gear: LISUN DC Series DC3010 24VDC Supply.

### Test Specification:

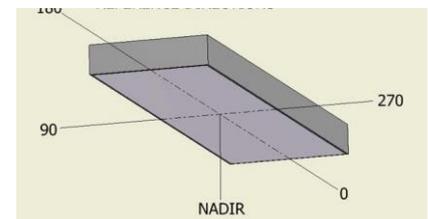
The luminaire was tested in accordance with the procedures given in IES LM79-19, "Optical and electrical measurements of Solid-State Lighting Products" using the **absolute** method.



0-180° Vertical Plane  
90-270° Vertical Plane

### Results:

When tested at an ambient of 25°C at a supply voltage of 24.0V dc, the luminaire consumed 0.491A and 11.8W. That is, Lamp Circuit Power (LCP), which includes power supply losses, is 11.8W. The Total Luminous Flux was measured as 523 Lumens. The Correlated Colour Temperature was measured as 3067K average.



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

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

Authorised Signatory: \_\_\_\_\_

D.Ford

The tests and measurements performed at LEDLab and covered by this document are traceable to Australian National standards of measurement. This report only applies to the items tested as received from the client and shall only be reproduced in full unless approved in writing by Light Emission Distribution Laboratory. The data specified in this report apply to the luminaire with the components nominated and will not necessarily be applicable to the use of other light source sizes or ratings, nor to any other luminaire of similar design. The data are based on operation of the luminaire under laboratory conditions. Multiplying factors to correct the data for actual working conditions should be used when applicable. Ph. 0403242121



### ***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



**PHOTOMETRIC TEST REPORT No. 200140PH**  
**TEST REPORT and IES file archive**

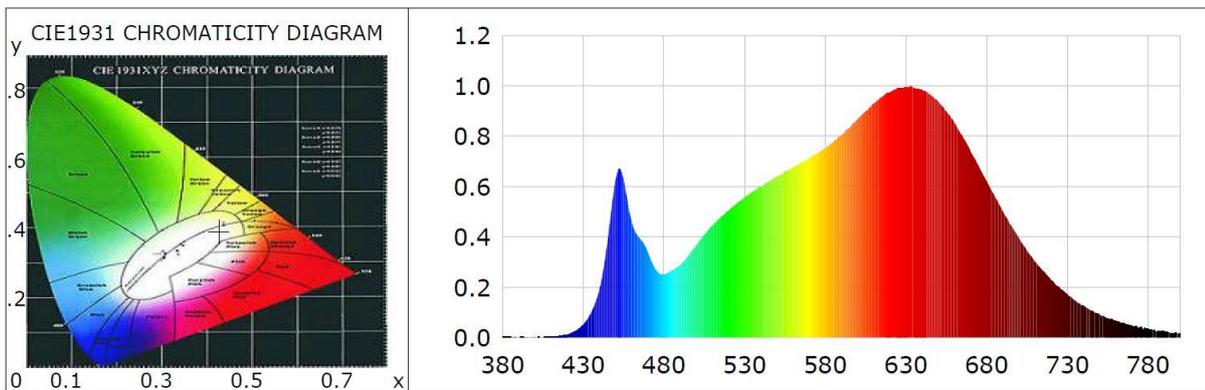
**Date: 4<sup>th</sup> February 2020**

The data files for this report are contained in the archive file *200140PH.zip*

*IES file 200140PH.ies*      *Document File: 200140PH.pdf*

**CIE Colorimetric Parameters**

Chromaticity coordinates:  $x=0.4272$   $y=0.3917$      $u(u')=0.2496$   $v=0.3433$   $v'=0.5150$   
CCT:  $T_c=3067K$  ( $duv=-0.00365$ )                      Color Ratio:  $R=0.245$   $G=0.723$   $B=0.032$   
Peak Wavelength: 633nm                                      Half Bandwidth: 171.3nm  
Dominant Wavelength: 584.0nm                              Color Purity: 0.458  
CRI:  $R_i$ :  $R_a=96.4$   
 $R_1=98$      $R_2=99$      $R_3=97$      $R_4=97$      $R_5=97$      $R_6=96$      $R_7=95$      $R_8=92$   
 $R_9=84$      $R_{10}=96$      $R_{11}=96$      $R_{12}=82$      $R_{13}=99$      $R_{14}=98$      $R_{15}=97$





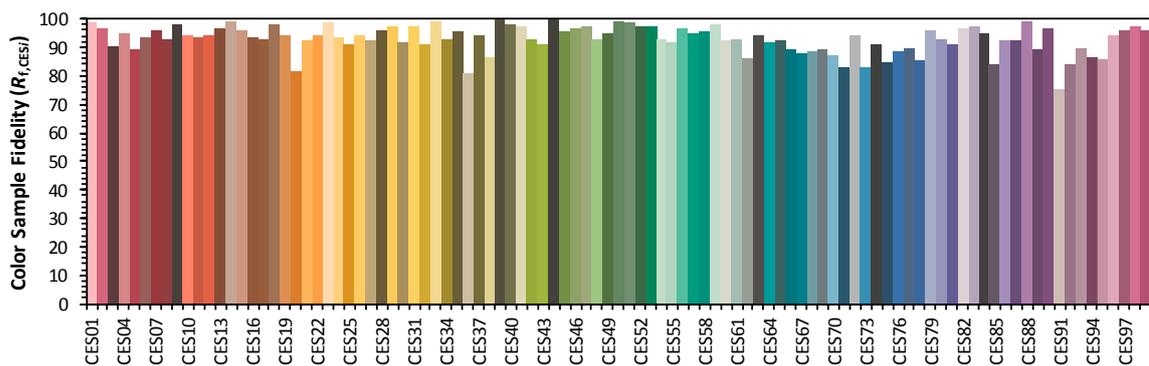
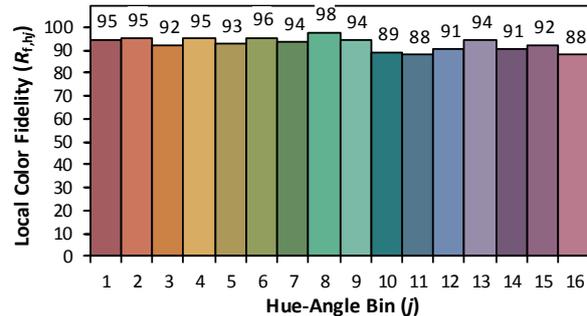
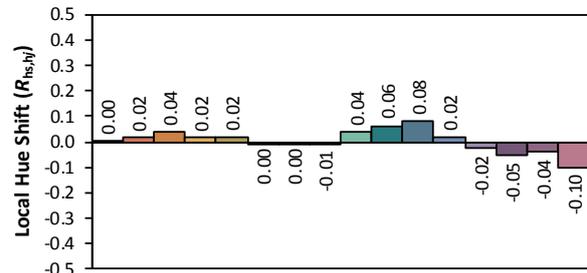
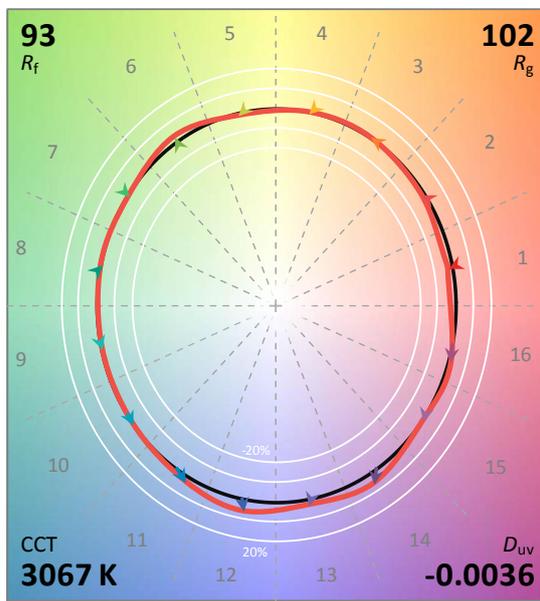
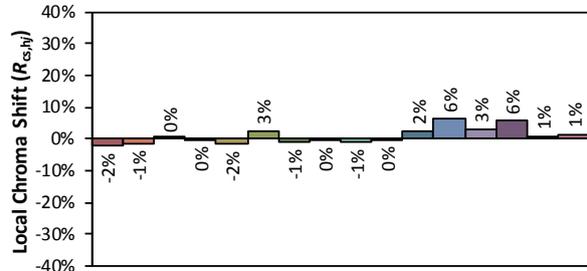
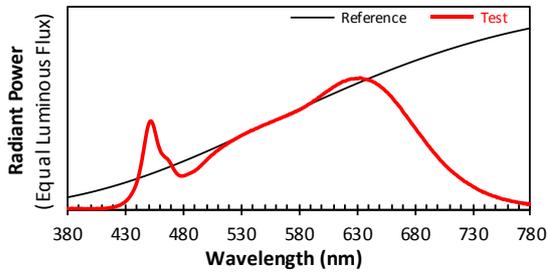
ANSI/IES TM-30-18 Color Rendition Report

Source: RGB-25W-4000K (500mm LED strip)

Manufacturer: OFFSPRING PROFILES

Date: 4/02/2020

Model: FF35 -SPEC-15-RGB-25-2X40 (JA190702OS)



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

x 0.4272  
y 0.3917  
u' 0.2496  
v' 0.5150

CIE 13.3-1995 (CRI)	
R <sub>a</sub>	96
R <sub>g</sub>	84

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



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	186	186	186	186	186	186	186	186	186	186	186	186	186	186	186	186	186	186	186	186	186	186	186	186	186
5	185	185	185	185	184	185	185	185	185	185	185	185	185	185	185	185	185	185	185	185	185	185	185	185	185
10	182	182	182	182	182	182	182	182	182	182	182	182	183	182	182	182	182	182	182	182	182	182	182	182	182
15	178	178	178	178	178	178	178	178	178	178	178	178	178	178	178	178	178	178	178	178	178	178	177	178	178
20	172	172	172	172	172	172	172	172	172	172	172	172	172	172	172	172	172	172	172	172	172	172	171	172	172
25	165	163	164	164	165	163	165	164	165	165	164	165	164	164	164	164	163	164	163	164	163	165	163	163	165
30	156	156	156	156	156	156	156	156	156	156	156	156	156	156	156	156	156	156	156	156	156	156	156	156	156
35	146	145	146	145	146	145	146	145	146	146	146	146	147	146	148	146	145	146	145	146	145	146	145	145	146
40	135	134	134	134	134	133	134	134	135	134	135	135	134	135	134	135	134	134	134	134	134	134	133	134	135
45	122	121	122	121	122	121	122	121	123	122	123	122	123	122	122	122	122	122	121	121	121	121	121	121	122
50	108	108	108	108	108	108	108	108	109	109	109	109	108	109	109	109	108	108	108	108	108	109	108	108	108
55	94	94	94	94	95	94	94	94	95	95	95	95	94	95	94	95	94	94	94	94	94	94	93	94	94
60	79	79	80	79	80	79	80	80	81	80	81	80	80	80	80	80	80	80	79	80	79	80	79	79	79
65	64	64	65	64	65	65	65	65	66	65	66	65	65	65	65	65	65	65	65	65	64	65	64	64	64
70	49	48	49	49	50	50	51	50	51	50	51	50	49	50	50	50	50	50	50	49	50	48	49	49	49
75	34	34	35	34	36	35	36	36	36	36	36	35	34	35	35	36	36	36	35	36	35	35	34	34	34
80	20	20	21	20	22	21	22	21	22	22	22	21	20	21	21	22	21	22	21	22	21	21	20	20	20
85	7	7	8	7	9	8	8	8	9	9	8	8	8	8	8	8	8	8	8	8	7	8	7	7	7
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
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