

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: FAIL-SAFE

Report Number: P732698

Luminaire Tested: **14FCZ2-29-HRP-B2750-W2D-CP187-3500K**

Issue Date: 1/5/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P732698  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P294787)  
Test Lab: INNOVATIONS CENTER(G3)  
Issue Date: 1/5/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 14FCZ2-29-HRP-B2750-W2D-CP187-3500K  
Description: 1X4 2900 LUMEN SEALED CRUZE TROFFER WITH BIO UP LEDS AT 3500K CCT  
AND HRP LENS, WITH, CP187 BOTTOM LENS  
  
Light Source: -  
Ballast/Driver: -

**Summary**

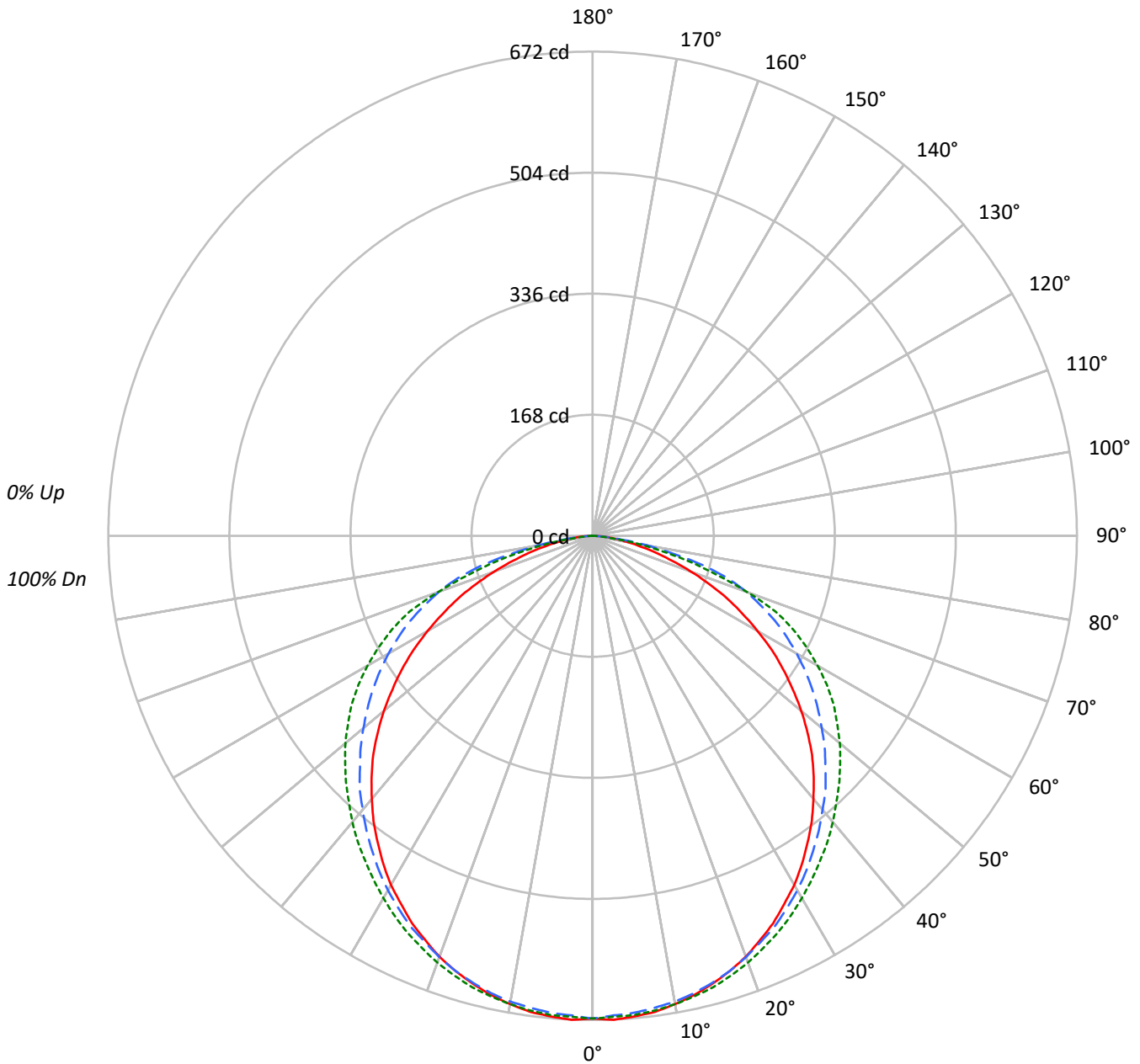
Lumens per Lamp: N/A  
Luminaire Lumens: 1973.0 lumens  
Efficiency: N/A  
Efficacy: 85.8 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39  
Luminous Opening: Rectangular (W 0.96' x L: 3.98' x H: 0')  
CIE Type: Direct

Input Watts (W): 23  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT

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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0																
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84																			
2	99	90	83	78	96	88	82	77	85	79	75	82	77	73	78	75	71	69																			
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58																			
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49																			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42																			
6	69	56	47	40	68	55	46	40	53	45	40	51	45	39	50	44	39	37																			
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	45	39	35	33																			
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29																			
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26																			
10	52	39	31	26	51	38	31	26	37	30	26	37	30	25	36	30	25	24																			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1891	1891	1891
5°	1897	1883	1892
10°	1892	1882	1892
15°	1880	1877	1894
20°	1867	1869	1894
25°	1848	1863	1893
30°	1824	1852	1892
35°	1792	1838	1896
40°	1756	1829	1911
45°	1719	1823	1932
50°	1659	1822	1967
55°	1588	1832	2009
60°	1492	1845	2035
65°	1376	1865	2047
70°	1198	1868	1884
75°	988	1740	1522
80°	775	1250	1018
85°	606	483	240



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	63.4	3.2
10°-20°	182.0	9.2
20°-30°	276.4	14.0
30°-40°	334.9	17.0
40°-50°	352.9	17.9
50°-60°	329.5	16.7
60°-70°	263.3	13.3
70°-80°	144.9	7.3
80°-90°	25.6	1.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	521.9	26.5
0°-40°	856.8	43.4
0°-60°	1539.2	78.0
0°-90°	1973.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1973.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	670	670	670	670	670	
5°	670	668	664	669	668	64
15°	643	643	642	648	648	182
25°	593	594	598	607	608	273
35°	520	525	534	547	550	325
45°	430	439	457	477	484	331
55°	323	339	372	398	408	288
65°	206	232	279	302	306	203
75°	91	130	160	143	140	97
85°	19	24	15	9	7	23
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	670.0	670.0	670.0	670.0	670.0
2.5°	672.5	670.6	666.4	670.0	668.2
5°	669.5	667.6	664.5	668.9	667.6
7.5°	666.4	663.8	660.7	665.7	664.5
10°	660.1	658.2	656.5	660.7	660.1
12.5°	652.7	652.1	650.2	655.2	654.6
15°	643.4	643.4	642.2	648.3	648.3
17.5°	633.4	632.8	633.4	640.3	639.7
20°	621.6	621.6	622.2	630.4	630.4
22.5°	607.3	607.9	609.8	619.7	619.1
25°	593.2	594.3	598.1	606.7	607.9
27.5°	575.8	578.9	583.1	593.7	594.9
30°	559.6	561.5	568.2	578.3	580.6
32.5°	540.4	544.0	551.6	562.7	565.9
35°	519.9	524.9	533.5	547.2	550.3
37.5°	499.4	503.8	515.6	529.8	535.4
40°	476.5	483.9	496.3	512.5	518.6
42.5°	454.1	461.6	478.4	495.1	500.7
45°	430.5	438.7	456.6	477.2	483.9
47.5°	404.5	413.9	436.8	458.5	465.8
50°	377.8	389.5	415.0	439.3	447.9
52.5°	350.0	364.7	393.9	419.4	427.5
55°	322.7	338.7	372.3	398.3	408.2
57.5°	294.7	312.1	350.0	379.7	385.3
60°	264.2	285.4	326.9	353.0	360.5
62.5°	234.6	258.8	303.3	328.2	334.4
65°	206.0	232.1	279.2	302.1	306.5
67.5°	174.9	206.0	252.5	273.7	274.8
70°	145.2	181.2	226.4	236.3	228.3
72.5°	116.0	154.5	196.1	187.9	181.2
75°	90.6	129.7	159.5	143.4	139.6
77.5°	67.0	106.1	114.1	105.5	98.6
80°	47.7	83.7	76.9	65.8	62.6
82.5°	32.8	52.8	42.2	32.8	28.6
85°	18.7	23.6	14.9	9.3	7.4
87.5°	8.0	5.7	3.1	2.5	2.5
90°	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-50001EG







— 0°-180°    - - 45°-225°    - - - - 90°-270°







(END OF REPORT)