

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: P733946

Luminaire Tested: **24FCZ2-30-HRP-B2750-W2D-CP187-2700K**

Issue Date: 1/5/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P733946  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P295011)  
Test Lab: INNOVATIONS CENTER(G3)  
Issue Date: 1/5/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 24FCZ2-30-HRP-B2750-W2D-CP187-2700K  
Description: 2X4 3000 LUMEN SEALED CRUZE TROFFER WITH BIO UP LEDS AT 2700K CCT  
AND HRP LENS, WITH, CP187 BOTTOM LENS

Light Source: -  
Ballast/Driver: -

**Summary**

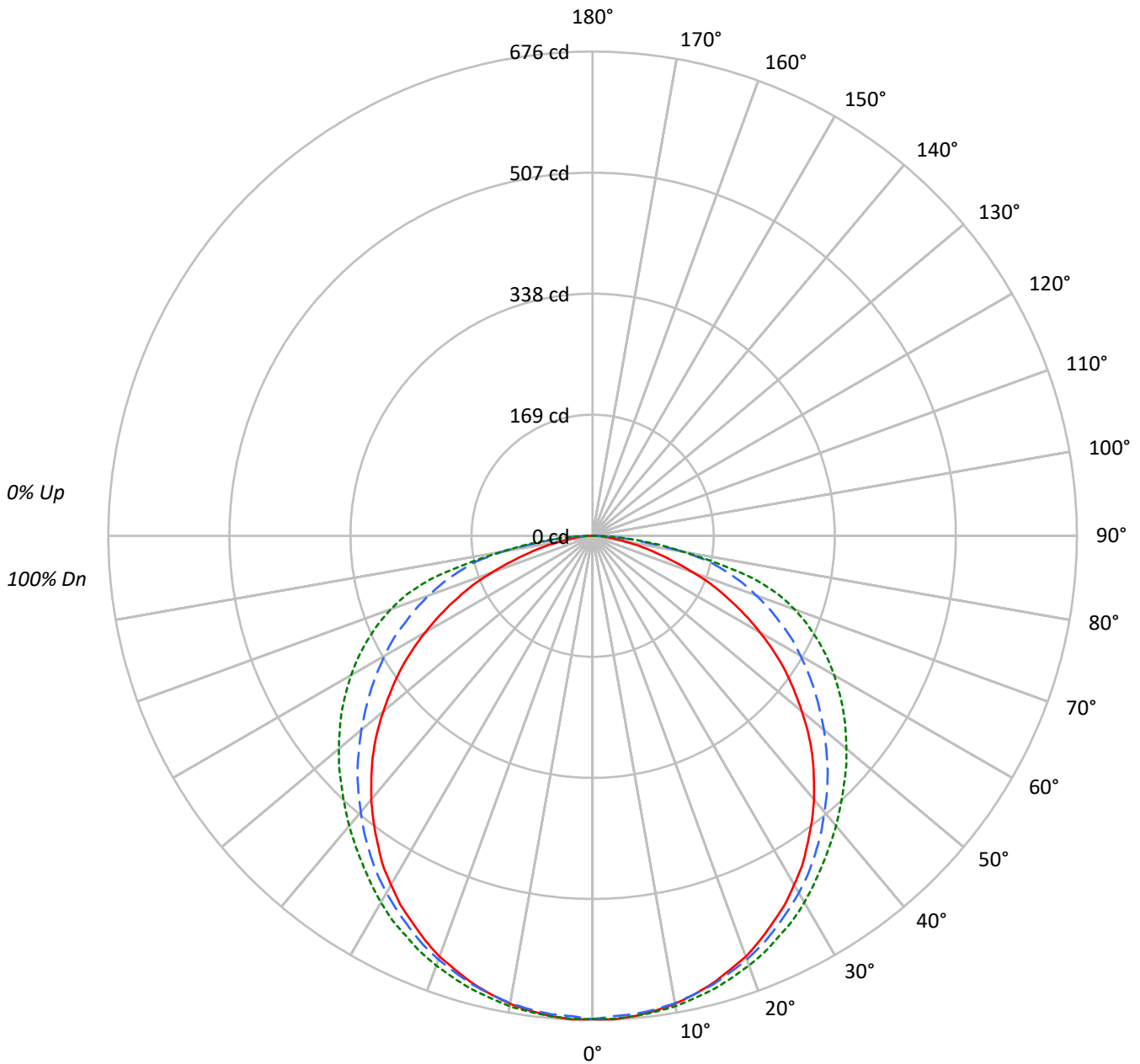
Lumens per Lamp: N/A  
Luminaire Lumens: 2080.0 lumens  
Efficiency: N/A  
Efficacy: 90.4 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.3 / 1.4  
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')  
CIE Type: Direct

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				20				
RC	80				70				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	108	103	98	94	105	101	96	93	96	93	90	92	90	87	89	86	84	82			
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67			
3	89	78	69	62	86	76	68	62	73	66	61	70	64	59	68	63	58	56			
4	81	68	59	52	79	67	59	52	65	57	51	62	56	50	60	54	50	48			
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41			
6	69	55	46	39	67	54	45	39	52	44	38	50	43	38	49	42	38	36			
7	63	50	41	34	62	49	40	34	47	39	34	46	39	34	44	38	33	31			
8	59	45	36	30	57	44	36	30	43	36	30	42	35	30	41	34	30	28			
9	55	41	33	27	54	41	33	27	40	32	27	39	32	27	38	31	27	25			
10	52	38	30	25	50	38	30	25	37	30	25	36	29	24	35	29	24	23			

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

	0°	45°	90°
0°	953	953	953
5°	954	950	954
10°	951	950	956
15°	945	948	957
20°	939	945	959
25°	927	941	960
30°	917	938	963
35°	902	933	965
40°	885	927	974
45°	866	926	989
50°	837	925	1015
55°	808	932	1052
60°	762	946	1099
65°	704	968	1160
70°	614	1002	1236
75°	498	1054	1277
80°	367	1034	1034
85°	282	763	860



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	63.9	3.1
10°-20°	183.6	8.8
20°-30°	279.5	13.4
30°-40°	339.4	16.3
40°-50°	358.5	17.2
50°-60°	338.3	16.3
60°-70°	281.3	13.5
70°-80°	185.1	8.9
80°-90°	50.4	2.4
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°	527.0	25.3
0°-40°	866.4	41.7
0°-60°	1563.2	75.2
0°-90°	2080.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2080.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	675	675	675	675	675	
5°	673	673	670	673	673	64
15°	647	648	649	655	655	182
25°	596	599	604	615	616	275
35°	523	529	542	556	560	328
45°	434	442	464	487	496	334
55°	328	342	379	414	428	292
65°	211	235	290	333	347	208
75°	91	133	193	229	234	99
85°	17	38	47	52	53	21
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	674.9	674.9	674.9	674.9	674.9
2.5°	675.7	674.9	671.3	674.9	674.9
5°	673.2	673.2	670.5	673.2	673.2
7.5°	668.7	668.7	667.0	670.5	670.5
10°	663.6	663.6	662.6	667.0	667.0
12.5°	655.7	656.6	655.7	660.9	660.9
15°	647.0	647.9	648.7	654.9	654.9
17.5°	635.7	637.4	639.1	646.1	647.0
20°	625.2	626.1	629.5	637.4	638.3
22.5°	611.2	613.9	618.2	626.1	628.7
25°	595.6	599.1	604.3	614.8	616.5
27.5°	580.8	583.5	590.3	601.7	605.2
30°	562.6	566.9	575.6	586.9	591.2
32.5°	545.1	549.4	559.9	572.1	575.6
35°	523.4	529.4	541.7	555.6	559.9
37.5°	502.5	508.5	523.4	539.0	544.3
40°	480.6	487.6	503.3	521.6	528.5
42.5°	457.1	466.7	484.2	504.2	512.1
45°	433.7	442.4	464.1	486.8	495.5
47.5°	408.4	418.8	442.4	469.3	479.8
50°	381.4	394.5	421.5	451.1	462.4
52.5°	354.4	369.2	399.6	432.8	445.0
55°	328.2	342.2	378.7	414.5	427.5
57.5°	299.6	316.9	357.0	395.3	408.4
60°	270.0	289.1	335.2	375.3	389.2
62.5°	240.4	262.1	314.3	354.4	369.2
65°	210.7	235.1	290.0	332.6	347.4
67.5°	182.0	209.0	267.3	310.0	324.8
70°	148.9	182.9	242.9	284.7	299.6
72.5°	118.5	157.7	219.5	258.7	271.7
75°	91.4	133.2	193.3	229.1	234.2
77.5°	67.1	108.9	166.3	178.5	179.4
80°	45.2	87.1	127.2	125.3	127.2
82.5°	29.6	65.3	80.1	89.7	90.6
85°	17.4	38.3	47.1	52.2	53.1
87.5°	8.7	13.0	16.6	17.4	19.2
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)