

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: P733998

Luminaire Tested: **24FCZ2-30-S-B2750-W2D-CP187-3500K**

Issue Date: 1/5/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P733998  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P272125)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 1/5/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 24FCZ2-30-S-B2750-W2D-CP187-3500K  
Description: 2X4 3000 LUMEN SEALED CRUZE TROFFER WITH BIO UP LEDS AT 3500K CCT  
AND SMOOTH LENS, WITH, CP187 BOTTOM LENS  
  
Light Source: -  
Ballast/Driver: -

**Summary**

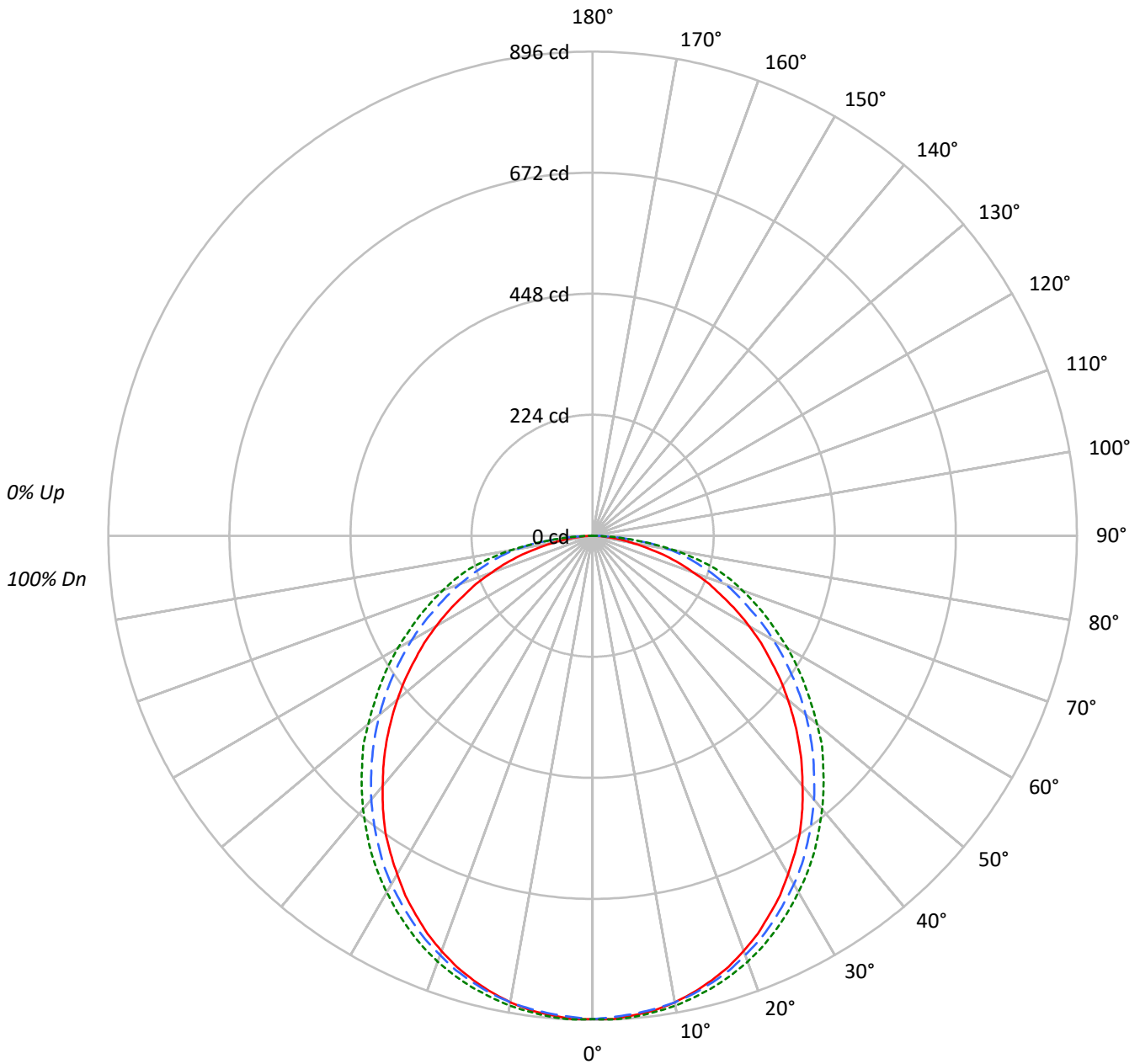
Lumens per Lamp: N/A  
Luminaire Lumens: 2546.0 lumens  
Efficiency: N/A  
Efficacy: 110.7 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35  
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')  
CIE Type: Direct

Input Watts (W): 23  
Input Voltage (V): NR  
Input Current (Ain): 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	108	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83																			
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69																			
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58																			
4	82	70	61	54	80	68	60	54	66	59	53	63	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	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37																			
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33																			
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29																			
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26																			
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24																			

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

	0°	45°	90°
0°	1262	1262	1262
5°	1261	1258	1266
10°	1256	1256	1266
15°	1244	1250	1263
20°	1228	1240	1260
25°	1205	1228	1252
30°	1178	1214	1241
35°	1152	1194	1232
40°	1113	1174	1217
45°	1077	1151	1204
50°	1035	1129	1190
55°	989	1108	1178
60°	943	1091	1175
65°	883	1072	1183
70°	817	1078	1215
75°	732	1098	1283
80°	592	1163	1255
85°	445	1020	996



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	84.7	3.3
10°-20°	241.9	9.5
20°-30°	363.7	14.3
30°-40°	433.2	17.0
40°-50°	443.4	17.4
50°-60°	399.2	15.7
60°-70°	313.5	12.3
70°-80°	203.5	8.0
80°-90°	62.9	2.5
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°	690.3	27.1
0°-40°	1123.5	44.1
0°-60°	1966.1	77.2
0°-90°	2546.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2546.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	894	894	894	894	894	
5°	890	892	888	893	894	85
15°	852	854	856	863	865	240
25°	774	780	788	801	804	357
35°	669	677	693	710	715	417
45°	539	552	577	598	603	416
55°	402	420	450	474	479	360
65°	264	285	321	348	354	263
75°	134	160	201	229	235	142
85°	28	51	63	62	62	33
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	894.5	894.5	894.5	894.5	894.5
2.5°	895.2	895.2	891.2	895.2	896.0
5°	890.4	892.0	887.9	892.8	893.6
7.5°	885.5	885.5	883.1	887.9	888.8
10°	876.6	877.4	876.6	882.3	883.1
12.5°	865.3	866.9	867.8	873.4	874.2
15°	851.6	854.0	855.6	862.9	864.6
17.5°	836.2	838.6	842.6	850.7	852.4
20°	817.6	820.8	825.7	836.2	838.6
22.5°	797.4	800.6	808.7	818.4	822.5
25°	773.9	780.4	788.5	801.4	803.9
27.5°	750.5	756.1	766.6	780.4	783.7
30°	723.0	731.8	744.8	758.5	761.8
32.5°	696.3	705.1	720.5	735.2	739.2
35°	668.8	676.9	693.1	710.0	714.9
37.5°	637.2	647.8	665.6	682.5	687.4
40°	604.1	617.1	637.2	655.1	660.7
42.5°	572.5	586.3	606.5	625.9	632.4
45°	539.4	552.4	576.6	598.5	603.3
47.5°	505.4	520.0	545.8	567.7	575.8
50°	471.5	486.9	514.4	537.0	541.8
52.5°	437.5	453.7	482.8	507.1	509.5
55°	401.9	419.8	450.4	473.9	478.8
57.5°	369.6	385.0	418.1	442.4	448.0
60°	334.0	351.0	386.5	409.2	416.4
62.5°	300.0	317.8	355.1	377.7	384.1
65°	264.4	284.7	321.1	347.8	354.2
67.5°	233.8	253.1	291.9	317.8	324.3
70°	198.1	220.0	261.2	287.9	294.4
72.5°	167.4	190.0	231.3	257.1	266.9
75°	134.3	160.1	201.4	228.9	235.3
77.5°	101.9	131.8	173.8	194.9	194.9
80°	72.8	104.4	143.1	152.9	154.4
82.5°	47.7	78.4	105.9	105.1	105.1
85°	27.5	51.0	63.0	61.5	61.5
87.5°	10.5	21.0	22.6	22.6	21.8
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)