

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: P733923

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

Issue Date: 1/5/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P733923  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P272053)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 1/5/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 24FCZ2-30-B2750-W2D-CP187-3500K  
Description: 2X4 3000 LUMEN SEALED CRUZE TROFFER WITH BIO UP LEDS AT 3500K CCT  
AND RIBBED LENS, WITH, CP187 BOTTOM LENS  
  
Light Source: -  
Ballast/Driver: -

**Summary**

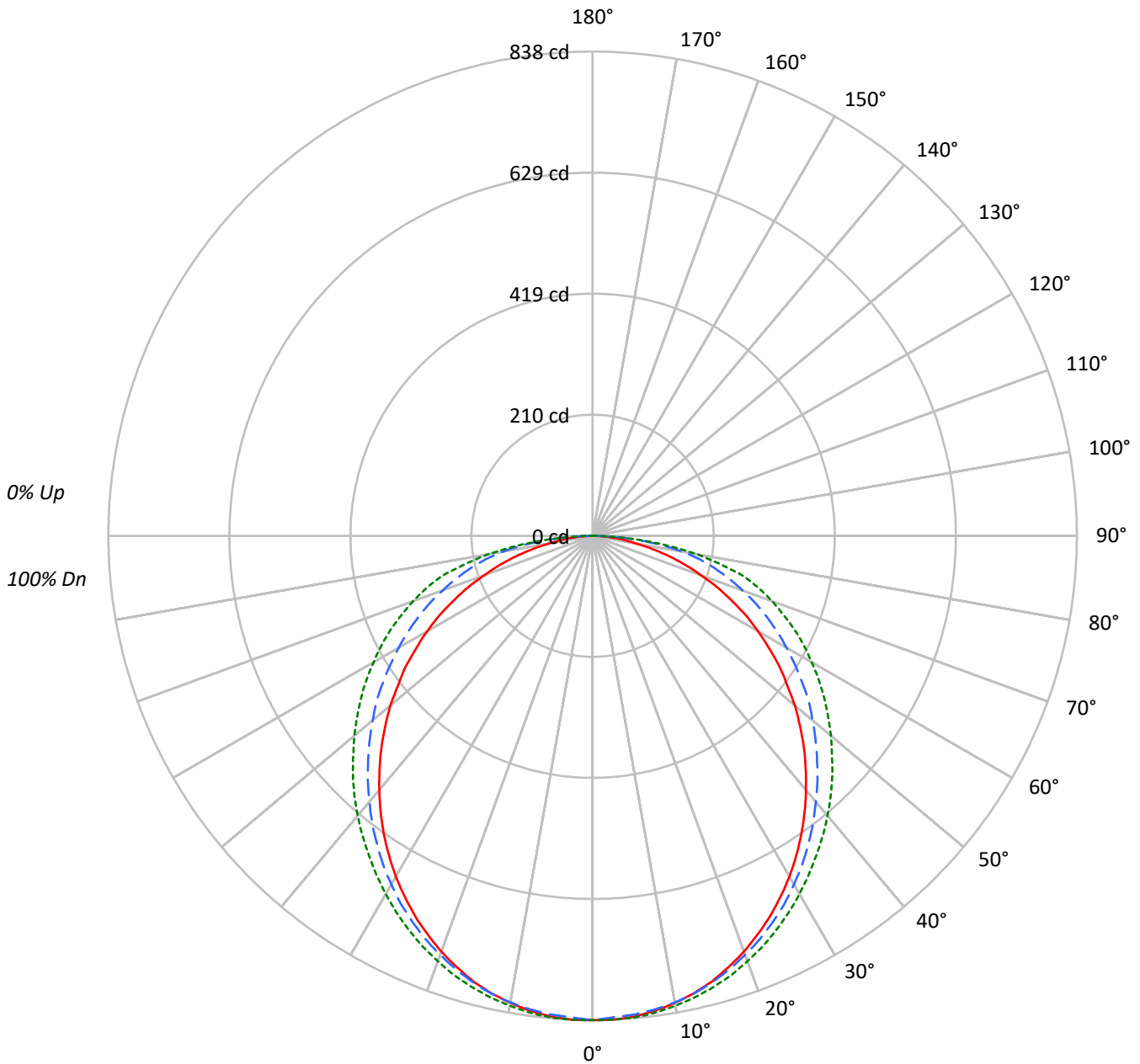
Lumens per Lamp: N/A  
Luminaire Lumens: 2497.0 lumens  
Efficiency: N/A  
Efficacy: 108.6 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37  
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')  
CIE Type: Direct

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	100	96	92	96	93	89	92	89	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	60	68	63	58	56								
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	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	39	50	44	38	49	43	38	36								
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32								
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28								
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25								
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23								

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

	0°	45°	90°
0°	1183	1183	1183
5°	1183	1178	1185
10°	1176	1175	1183
15°	1166	1169	1181
20°	1150	1159	1177
25°	1132	1149	1172
30°	1110	1135	1167
35°	1085	1121	1163
40°	1058	1107	1165
45°	1031	1096	1171
50°	1003	1091	1182
55°	972	1089	1204
60°	934	1094	1235
65°	885	1110	1288
70°	822	1138	1362
75°	750	1195	1477
80°	616	1287	1477
85°	471	1187	1268



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	79.3	3.2
10°-20°	226.4	9.1
20°-30°	340.6	13.6
30°-40°	408.2	16.3
40°-50°	425.4	17.0
50°-60°	395.8	15.9
60°-70°	326.0	13.1
70°-80°	222.0	8.9
80°-90°	73.3	2.9
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°	646.3	25.9
0°-40°	1054.5	42.2
0°-60°	1875.7	75.1
0°-90°	2497.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2497.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	838	838	838	838	838	
5°	835	835	832	836	837	79
15°	798	799	800	808	808	225
25°	727	730	738	750	752	335
35°	630	638	651	668	675	394
45°	517	528	549	577	587	398
55°	395	408	443	478	489	352
65°	265	288	332	372	386	263
75°	138	168	219	258	271	145
85°	29	57	73	78	78	36
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	838.4	838.4	838.4	838.4	838.4
2.5°	838.4	838.4	834.2	838.4	838.4
5°	835.0	835.0	831.7	835.9	836.7
7.5°	829.2	830.1	826.7	831.7	832.6
10°	820.8	821.7	820.0	825.0	825.8
12.5°	810.9	811.7	811.7	817.5	818.4
15°	798.3	799.2	800.0	807.6	808.4
17.5°	782.6	785.1	786.7	795.9	797.5
20°	765.9	768.4	771.7	781.6	783.4
22.5°	746.7	750.0	755.8	766.7	769.2
25°	726.7	730.0	737.6	750.0	752.5
27.5°	704.2	709.2	718.4	731.7	735.0
30°	680.9	685.8	696.7	710.8	715.9
32.5°	655.9	662.5	675.0	690.8	695.9
35°	630.0	637.5	650.9	668.3	675.0
37.5°	602.6	610.9	626.7	645.8	654.2
40°	574.2	584.2	600.9	623.3	632.5
42.5°	545.8	555.0	575.8	600.0	610.0
45°	516.7	527.5	549.2	576.6	586.7
47.5°	486.6	497.5	523.3	552.5	561.7
50°	456.7	467.6	496.7	527.5	538.4
52.5°	424.2	438.3	471.7	502.5	513.4
55°	395.0	408.3	442.6	477.5	489.2
57.5°	361.7	377.5	415.0	451.7	464.1
60°	330.9	347.5	387.5	425.0	437.5
62.5°	299.2	317.5	360.0	398.4	412.5
65°	265.0	287.5	332.5	371.6	385.8
67.5°	234.1	257.5	305.0	345.0	357.5
70°	199.2	227.5	275.8	315.9	330.1
72.5°	169.1	197.5	248.3	287.5	301.6
75°	137.5	168.3	219.2	258.3	270.8
77.5°	105.9	140.0	190.8	220.9	225.0
80°	75.8	111.7	158.3	175.9	181.7
82.5°	53.3	85.9	116.7	128.4	131.7
85°	29.1	56.6	73.3	78.3	78.3
87.5°	12.5	24.2	29.1	30.0	30.8
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)