

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: P734174

Luminaire Tested: **24FCZ2-35-B2750-W2D-CP187-4000K**

Issue Date: 1/5/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P734174  
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: 24FCZ2-35-B2750-W2D-CP187-4000K  
Description: 2X4 3500 LUMEN SEALED CRUZE TROFFER WITH BIO UP LEDS AT 4000K CCT  
AND RIBBED LENS, WITH, CP187 BOTTOM LENS  
  
Light Source: -  
Ballast/Driver: -

**Summary**

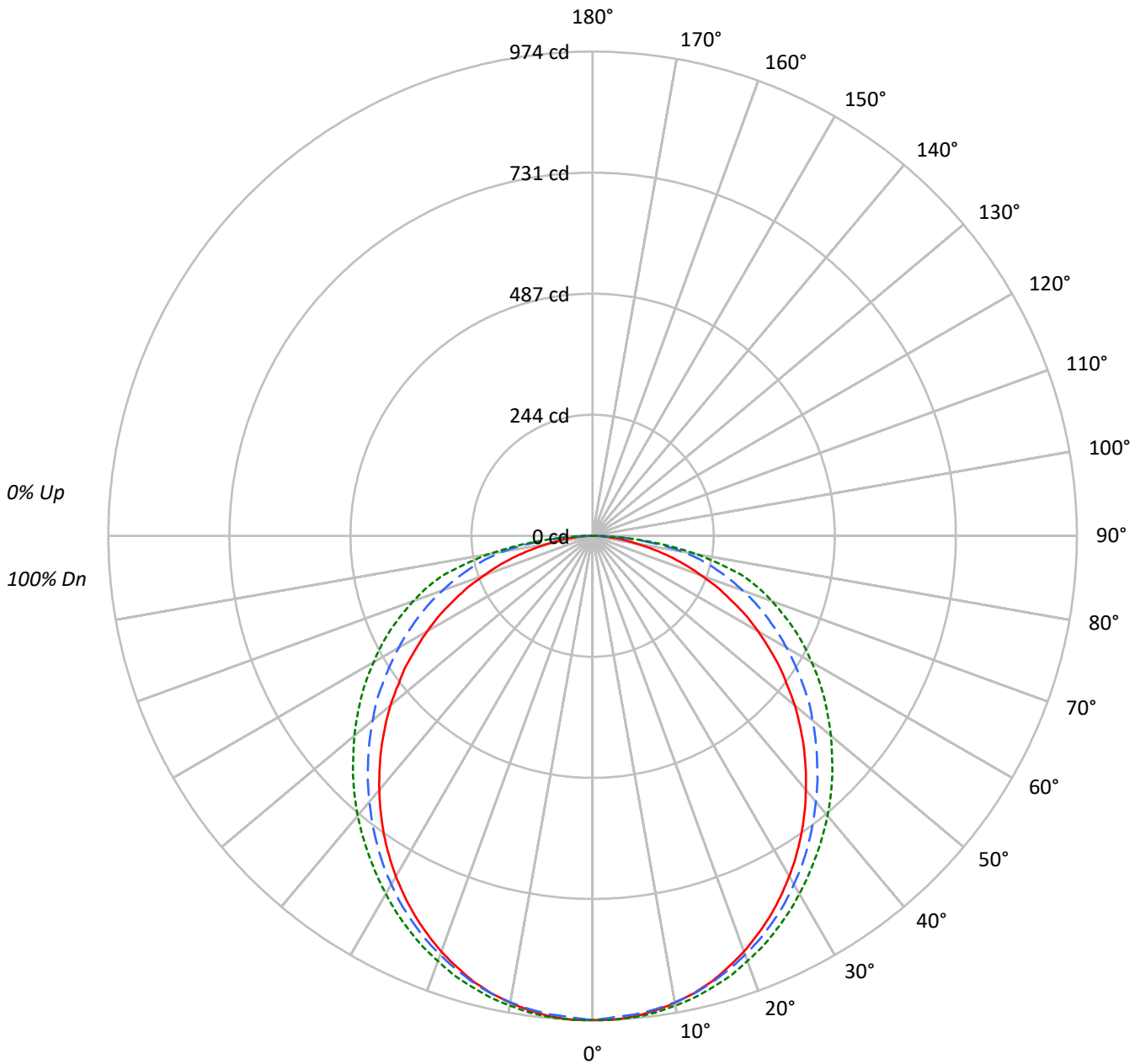
Lumens per Lamp: N/A  
Luminaire Lumens: 2902.0 lumens  
Efficiency: N/A  
Efficacy: 103.6 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37  
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')  
CIE Type: Direct

Input Watts (W): 28  
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	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°	1375	1375	1375
5°	1375	1369	1378
10°	1367	1366	1376
15°	1356	1359	1373
20°	1337	1347	1367
25°	1315	1335	1362
30°	1290	1320	1356
35°	1262	1303	1352
40°	1230	1287	1354
45°	1199	1274	1361
50°	1165	1268	1374
55°	1130	1265	1399
60°	1085	1271	1435
65°	1028	1290	1497
70°	955	1323	1583
75°	871	1389	1716
80°	716	1495	1717
85°	549	1380	1475



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	92.2	3.2
10°-20°	263.1	9.1
20°-30°	395.9	13.6
30°-40°	474.4	16.3
40°-50°	494.4	17.0
50°-60°	460.0	15.9
60°-70°	378.9	13.1
70°-80°	258.0	8.9
80°-90°	85.2	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°	751.1	25.9
0°-40°	1225.6	42.2
0°-60°	2180.0	75.1
0°-90°	2902.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2902.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	974	974	974	974	974	
5°	970	970	967	972	972	92
15°	928	929	930	938	940	261
25°	845	848	857	872	875	389
35°	732	741	756	777	784	458
45°	600	613	638	670	682	463
55°	459	474	514	555	568	409
65°	308	334	386	432	448	306
75°	160	196	255	300	315	168
85°	34	66	85	91	91	42
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	974.4	974.4	974.4	974.4	974.4
2.5°	974.4	974.4	969.5	974.4	974.4
5°	970.4	970.4	966.6	971.5	972.4
7.5°	963.6	964.7	960.8	966.6	967.6
10°	954.0	955.0	953.0	958.9	959.8
12.5°	942.4	943.3	943.3	950.1	951.2
15°	927.8	928.9	929.8	938.5	939.5
17.5°	909.5	912.4	914.3	925.0	926.9
20°	890.1	893.0	896.9	908.4	910.4
22.5°	867.8	871.7	878.4	891.0	894.0
25°	844.6	848.4	857.2	871.7	874.6
27.5°	818.4	824.3	834.9	850.4	854.3
30°	791.3	797.1	809.7	826.1	832.0
32.5°	762.3	770.0	784.5	802.9	808.7
35°	732.2	740.9	756.4	776.8	784.5
37.5°	700.3	710.0	728.3	750.6	760.3
40°	667.4	678.9	698.3	724.5	735.1
42.5°	634.3	645.1	669.2	697.4	708.9
45°	600.5	613.1	638.3	670.2	681.8
47.5°	565.6	578.2	608.2	642.2	652.8
50°	530.8	543.4	577.3	613.1	625.7
52.5°	493.0	509.4	548.2	584.0	596.6
55°	459.1	474.5	514.3	555.0	568.5
57.5°	420.4	438.7	482.3	525.0	539.4
60°	384.5	403.9	450.4	493.9	508.5
62.5°	347.8	369.0	418.4	463.0	479.4
65°	307.9	334.1	386.4	431.9	448.4
67.5°	272.1	299.3	354.5	401.0	415.5
70°	231.5	264.4	320.6	367.1	383.6
72.5°	196.6	229.5	288.6	334.1	350.6
75°	159.8	195.6	254.7	300.2	314.7
77.5°	123.0	162.7	221.8	256.7	261.5
80°	88.1	129.8	184.0	204.4	211.2
82.5°	62.0	99.8	135.6	149.2	153.0
85°	33.9	65.8	85.2	91.1	91.1
87.5°	14.5	28.1	33.9	34.9	35.8
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)