

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: P734175

Luminaire Tested: **24FCZ2-35-B2750-W2D-CP187-5000K**

Issue Date: 1/5/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P734175  
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-CP187-5000K  
Description: 2X4 3500 LUMEN SEALED CRUZE TROFFER WITH BIO UP LEDS AT 5000K CCT  
AND RIBBED LENS, WITH, CP187 BOTTOM LENS  
  
Light Source: -  
Ballast/Driver: -

**Summary**

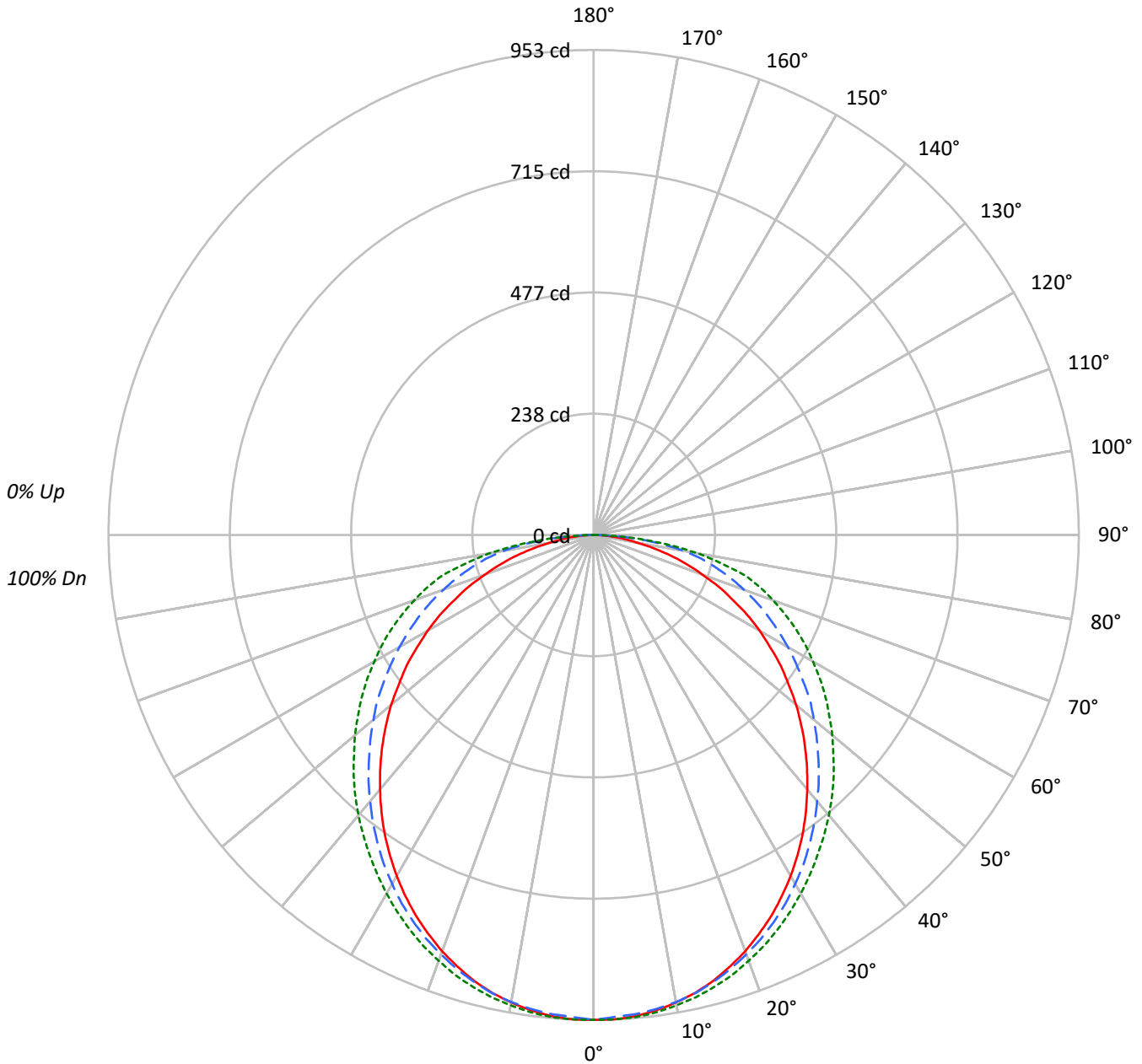
Lumens per Lamp: N/A  
Luminaire Lumens: 2838.0 lumens  
Efficiency: N/A  
Efficacy: 101.4 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37  
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')  
CIE Type: Direct

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°	1345	1345	1345
5°	1344	1339	1347
10°	1337	1336	1345
15°	1326	1329	1342
20°	1307	1317	1337
25°	1286	1305	1332
30°	1261	1290	1326
35°	1234	1275	1322
40°	1203	1258	1324
45°	1172	1246	1331
50°	1140	1239	1344
55°	1105	1238	1368
60°	1061	1243	1404
65°	1006	1262	1464
70°	934	1294	1548
75°	852	1358	1678
80°	701	1462	1678
85°	536	1349	1441



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	90.1	3.2
10°-20°	257.3	9.1
20°-30°	387.2	13.6
30°-40°	464.0	16.3
40°-50°	483.5	17.0
50°-60°	449.8	15.9
60°-70°	370.5	13.1
70°-80°	252.3	8.9
80°-90°	83.3	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°	734.6	25.9
0°-40°	1198.5	42.2
0°-60°	2131.9	75.1
0°-90°	2838.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2838.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	953	953	953	953	953	
5°	949	949	945	950	951	90
15°	907	908	909	918	919	256
25°	826	830	838	852	855	380
35°	716	725	740	760	767	448
45°	587	600	624	655	667	453
55°	449	464	503	543	556	400
65°	301	327	378	422	438	299
75°	156	191	249	294	308	165
85°	33	64	83	89	89	41
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	952.9	952.9	952.9	952.9	952.9
2.5°	952.9	952.9	948.1	952.9	952.9
5°	949.0	949.0	945.2	950.0	951.0
7.5°	942.4	943.4	939.7	945.2	946.3
10°	932.9	933.9	932.0	937.7	938.6
12.5°	921.6	922.5	922.5	929.1	930.2
15°	907.3	908.4	909.3	917.8	918.8
17.5°	889.4	892.3	894.1	904.6	906.4
20°	870.5	873.3	877.1	888.4	890.3
22.5°	848.7	852.4	859.1	871.4	874.2
25°	825.9	829.7	838.3	852.4	855.3
27.5°	800.4	806.1	816.5	831.7	835.4
30°	773.9	779.5	791.8	807.9	813.6
32.5°	745.5	753.0	767.2	785.2	790.9
35°	716.0	724.6	739.8	759.6	767.2
37.5°	684.8	694.3	712.2	734.0	743.5
40°	652.7	664.0	682.9	708.5	718.9
42.5°	620.3	630.8	654.5	682.0	693.3
45°	587.2	599.6	624.2	655.4	666.8
47.5°	553.1	565.4	594.8	628.0	638.4
50°	519.1	531.4	564.5	599.6	611.9
52.5°	482.1	498.2	536.1	571.1	583.5
55°	449.0	464.1	503.0	542.7	556.0
57.5°	411.1	429.0	471.7	513.4	527.5
60°	376.0	395.0	440.4	483.0	497.3
62.5°	340.1	360.9	409.1	452.8	468.9
65°	301.2	326.7	377.9	422.4	438.5
67.5°	266.1	292.7	346.7	392.1	406.3
70°	226.4	258.6	313.5	359.0	375.1
72.5°	192.2	224.4	282.2	326.7	342.8
75°	156.3	191.3	249.1	293.6	307.8
77.5°	120.3	159.1	216.9	251.0	255.7
80°	86.2	126.9	179.9	199.9	206.5
82.5°	60.6	97.6	132.7	145.9	149.7
85°	33.1	64.4	83.3	89.0	89.0
87.5°	14.2	27.5	33.1	34.1	35.0
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)