

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: P734311

Luminaire Tested: **24FCZ2-35HE-HRP-B2750-W2D-CA08-2700K**

Issue Date: 1/5/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P734311  
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: 24FCZ2-35HE-HRP-B2750-W2D-CA08-2700K  
Description: 2X4 3500 LUMEN SEALED CRUZE TROFFER WITH BIO UP LEDS AT 2700K CCT  
AND HRP LENS, WITH, CA08 BOTTOM LENS  
  
Light Source: -  
Ballast/Driver: -

**Summary**

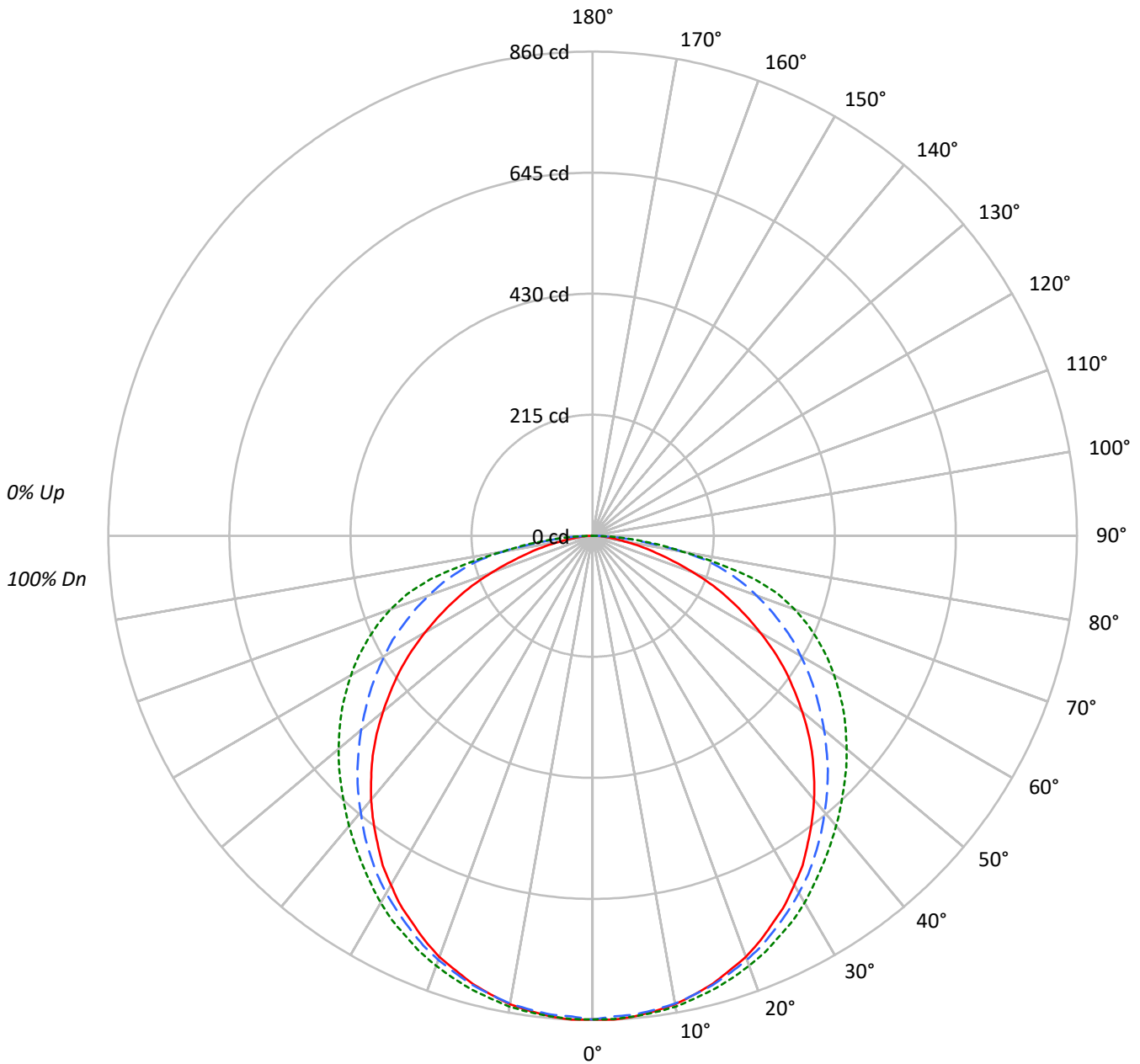
Lumens per Lamp: N/A  
Luminaire Lumens: 2648.1 lumens  
Efficiency: N/A  
Efficacy: 101.8 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.3 / 1.4  
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')  
CIE Type: Direct

Input Watts (W): 26  
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	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°	1213	1213	1213
5°	1214	1209	1214
10°	1211	1209	1217
15°	1204	1207	1218
20°	1196	1204	1220
25°	1181	1198	1222
30°	1167	1194	1227
35°	1148	1188	1228
40°	1127	1181	1240
45°	1102	1179	1259
50°	1066	1178	1293
55°	1028	1186	1339
60°	970	1205	1399
65°	896	1233	1477
70°	782	1276	1574
75°	635	1342	1626
80°	468	1316	1316
85°	359	970	1095



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	81.4	3.1
10°-20°	233.7	8.8
20°-30°	355.8	13.4
30°-40°	432.0	16.3
40°-50°	456.5	17.2
50°-60°	430.7	16.3
60°-70°	358.1	13.5
70°-80°	235.6	8.9
80°-90°	64.2	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°	670.9	25.3
0°-40°	1103.0	41.7
0°-60°	1990.1	75.2
0°-90°	2648.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2648.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	859	859	859	859	859	
5°	857	857	854	857	857	81
15°	824	825	826	834	834	232
25°	758	763	769	783	785	350
35°	666	674	690	707	713	417
45°	552	563	591	620	631	425
55°	418	436	482	528	544	372
65°	268	299	369	424	442	265
75°	116	170	246	292	298	125
85°	22	49	60	66	68	27
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	859.2	859.2	859.2	859.2	859.2
2.5°	860.3	859.2	854.7	859.2	859.2
5°	857.0	857.0	853.6	857.0	857.0
7.5°	851.4	851.4	849.2	853.6	853.6
10°	844.8	844.8	843.5	849.2	849.2
12.5°	834.8	835.9	834.8	841.4	841.4
15°	823.7	824.8	825.9	833.7	833.7
17.5°	809.3	811.5	813.7	822.6	823.7
20°	796.0	797.1	801.5	811.5	812.6
22.5°	778.2	781.6	787.1	797.1	800.4
25°	758.3	762.7	769.4	782.7	784.9
27.5°	739.4	742.8	751.6	766.0	770.5
30°	716.2	721.7	732.8	747.2	752.7
32.5°	694.0	699.5	712.8	728.4	732.8
35°	666.3	674.0	689.6	707.3	712.8
37.5°	639.7	647.4	666.3	686.2	692.9
40°	611.9	620.8	640.8	664.1	672.9
42.5°	582.0	594.2	616.4	641.9	651.9
45°	552.1	563.2	590.9	619.7	630.8
47.5°	519.9	533.2	563.2	597.5	610.8
50°	485.6	502.2	536.6	574.3	588.7
52.5°	451.2	470.0	508.8	551.0	566.5
55°	417.9	435.7	482.2	527.7	544.3
57.5°	381.4	403.5	454.5	503.3	519.9
60°	343.7	368.1	426.8	477.8	495.5
62.5°	306.0	333.7	400.2	451.2	470.0
65°	268.3	299.3	369.2	423.5	442.3
67.5°	231.7	266.1	340.3	394.7	413.5
70°	189.6	232.8	309.3	362.5	381.4
72.5°	150.8	200.7	279.4	329.3	345.9
75°	116.4	169.6	246.1	291.6	298.2
77.5°	85.4	138.6	211.7	227.3	228.4
80°	57.6	110.9	161.9	159.6	161.9
82.5°	37.7	83.1	102.0	114.2	115.3
85°	22.2	48.8	59.9	66.5	67.6
87.5°	11.1	16.6	21.1	22.2	24.4
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)