

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: P734049

Luminaire Tested: **24FCZ2-30HE-B2750-W2D-CP187-4000K**

Issue Date: 1/5/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P734049  
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: 24FCZ2-30HE-B2750-W2D-CP187-4000K  
Description: 2X4 3000 LUMEN SEALED CRUZE TROFFER WITH BIO UP LEDS AT 4000K CCT  
AND RIBBED LENS, WITH, CP187 BOTTOM LENS  
  
Light Source: -  
Ballast/Driver: -

**Summary**

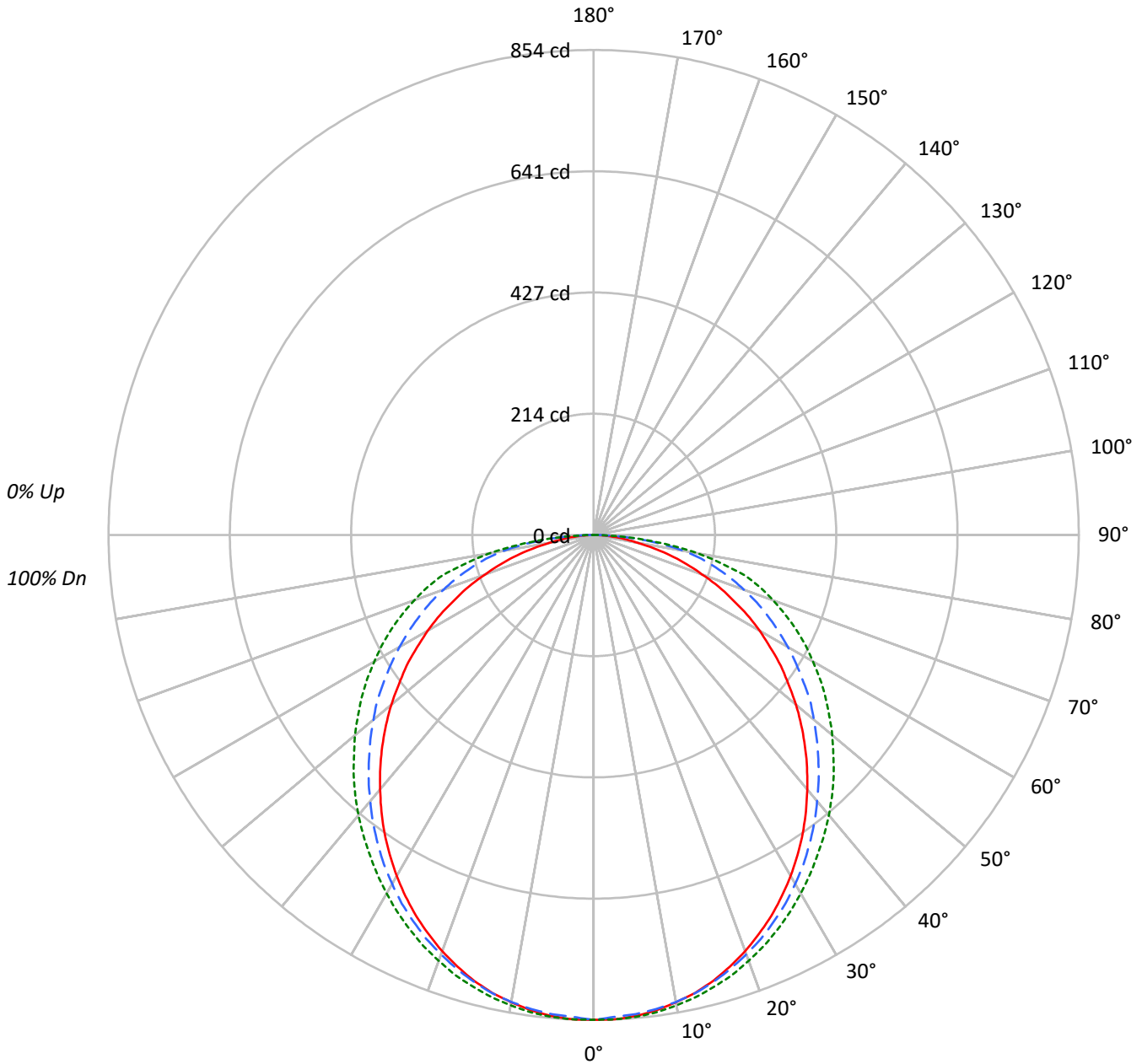
Lumens per Lamp: N/A  
Luminaire Lumens: 2543.0 lumens  
Efficiency: N/A  
Efficacy: 115.6 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37  
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')  
CIE Type: Direct

Input Watts (W): 22  
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°	1205	1205	1205
5°	1205	1200	1207
10°	1198	1197	1205
15°	1188	1191	1203
20°	1171	1180	1198
25°	1153	1170	1193
30°	1130	1156	1188
35°	1105	1142	1184
40°	1077	1127	1187
45°	1050	1116	1193
50°	1021	1111	1204
55°	990	1109	1226
60°	951	1114	1258
65°	901	1131	1312
70°	837	1159	1387
75°	763	1217	1504
80°	627	1310	1504
85°	481	1210	1292



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	80.8	3.2
10°-20°	230.5	9.1
20°-30°	346.9	13.6
30°-40°	415.7	16.3
40°-50°	433.2	17.0
50°-60°	403.1	15.9
60°-70°	332.0	13.1
70°-80°	226.1	8.9
80°-90°	74.7	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°	658.2	25.9
0°-40°	1073.9	42.2
0°-60°	1910.3	75.1
0°-90°	2543.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2543.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	854	854	854	854	854	
5°	850	850	847	851	852	81
15°	813	814	815	822	823	229
25°	740	744	751	764	766	341
35°	642	649	663	681	687	401
45°	526	537	559	587	598	406
55°	402	416	451	486	498	359
65°	270	293	339	378	393	268
75°	140	171	223	263	276	148
85°	30	58	75	80	80	37
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	853.8	853.8	853.8	853.8	853.8
2.5°	853.8	853.8	849.5	853.8	853.8
5°	850.4	850.4	847.0	851.3	852.1
7.5°	844.4	845.4	842.0	847.0	847.9
10°	835.9	836.9	835.1	840.2	841.1
12.5°	825.8	826.6	826.6	832.6	833.5
15°	813.0	813.9	814.8	822.4	823.3
17.5°	797.0	799.5	801.2	810.6	812.2
20°	780.0	782.5	785.9	796.0	797.8
22.5°	760.4	763.8	769.8	780.8	783.4
25°	740.1	743.5	751.1	763.8	766.4
27.5°	717.2	722.3	731.6	745.2	748.6
30°	693.4	698.5	709.5	723.9	729.0
32.5°	668.0	674.7	687.4	703.6	708.7
35°	641.6	649.3	662.9	680.7	687.4
37.5°	613.7	622.1	638.2	657.7	666.2
40°	584.8	594.9	611.9	634.8	644.1
42.5°	555.9	565.3	586.4	611.1	621.2
45°	526.2	537.2	559.3	587.3	597.5
47.5°	495.6	506.7	532.9	562.7	572.0
50°	465.1	476.2	505.8	537.2	548.3
52.5°	432.0	446.4	480.4	511.8	522.8
55°	402.3	415.8	450.7	486.3	498.2
57.5°	368.4	384.4	422.7	460.0	472.7
60°	337.0	353.9	394.6	432.8	445.6
62.5°	304.7	323.3	366.6	405.7	420.1
65°	269.8	292.8	338.6	378.5	392.9
67.5°	238.4	262.3	310.7	351.4	364.1
70°	202.8	231.7	280.9	321.7	336.1
72.5°	172.3	201.1	252.9	292.8	307.2
75°	140.0	171.4	223.2	263.1	275.8
77.5°	107.8	142.6	194.4	224.9	229.1
80°	77.2	113.8	161.2	179.1	185.0
82.5°	54.3	87.5	118.9	130.7	134.1
85°	29.7	57.7	74.7	79.8	79.8
87.5°	12.7	24.7	29.7	30.6	31.4
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)