

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: P734046

Luminaire Tested: **24FCZ2-30HE-B2750-W2D-CP187-2700K**

Issue Date: 1/5/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P734046  
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-CP187-2700K  
Description: 2X4 3000 LUMEN SEALED CRUZE TROFFER WITH BIO UP LEDS AT 2700K CCT  
AND RIBBED LENS, WITH, CP187 BOTTOM LENS

Light Source: -  
Ballast/Driver: -

**Summary**

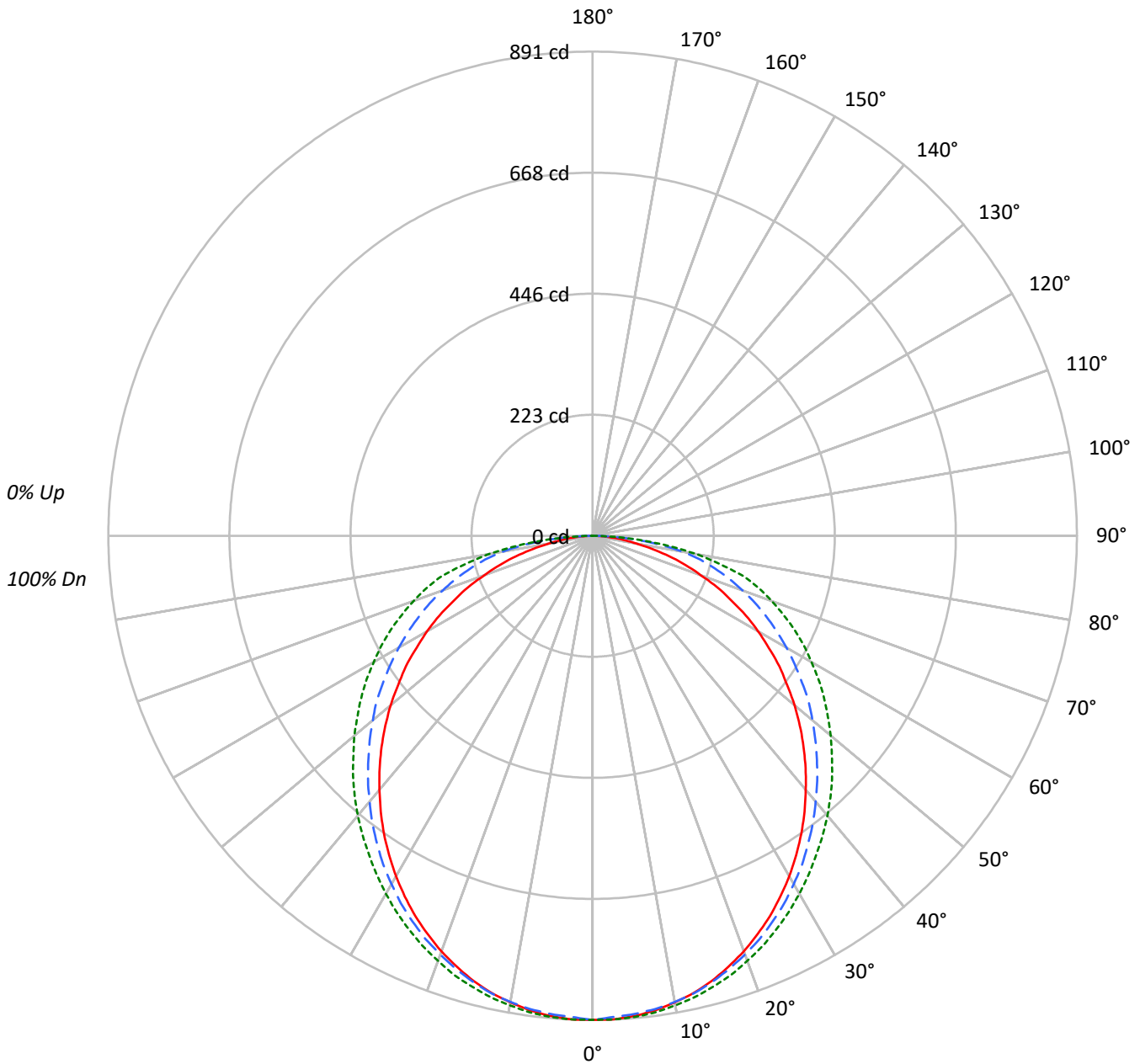
Lumens per Lamp: N/A  
Luminaire Lumens: 2653.0 lumens  
Efficiency: N/A  
Efficacy: 120.6 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37  
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')  
CIE Type: Direct

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°	1257	1257	1257
5°	1257	1252	1259
10°	1250	1249	1257
15°	1239	1242	1255
20°	1222	1231	1250
25°	1202	1220	1245
30°	1179	1206	1240
35°	1153	1191	1236
40°	1124	1176	1238
45°	1096	1165	1244
50°	1065	1159	1256
55°	1033	1157	1279
60°	992	1162	1312
65°	940	1180	1369
70°	873	1209	1447
75°	797	1270	1569
80°	655	1367	1569
85°	500	1261	1347



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	84.2	3.2
10°-20°	240.5	9.1
20°-30°	361.9	13.6
30°-40°	433.7	16.3
40°-50°	452.0	17.0
50°-60°	420.5	15.9
60°-70°	346.3	13.1
70°-80°	235.9	8.9
80°-90°	77.9	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°	686.7	25.9
0°-40°	1120.4	42.2
0°-60°	1992.9	75.1
0°-90°	2653.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2653.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	891	891	891	891	891	
5°	887	887	884	888	889	84
15°	848	849	850	858	859	239
25°	772	776	784	797	800	355
35°	669	677	692	710	717	418
45°	549	560	584	613	623	423
55°	420	434	470	507	520	374
65°	282	305	353	395	410	279
75°	146	179	233	274	288	154
85°	31	60	78	83	83	38
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	890.8	890.8	890.8	890.8	890.8
2.5°	890.8	890.8	886.3	890.8	890.8
5°	887.1	887.1	883.6	888.1	889.0
7.5°	881.0	881.9	878.4	883.6	884.6
10°	872.1	873.1	871.2	876.6	877.4
12.5°	861.5	862.4	862.4	868.6	869.5
15°	848.2	849.2	850.0	858.0	858.9
17.5°	831.4	834.1	835.8	845.6	847.3
20°	813.7	816.4	819.9	830.5	832.3
22.5°	793.3	796.9	803.1	814.6	817.2
25°	772.1	775.6	783.6	796.9	799.5
27.5°	748.2	753.5	763.2	777.4	781.0
30°	723.4	728.7	740.2	755.2	760.6
32.5°	696.9	703.9	717.1	734.0	739.3
35°	669.3	677.3	691.5	710.1	717.1
37.5°	640.2	649.1	665.8	686.2	695.1
40°	610.1	620.7	638.4	662.3	672.0
42.5°	579.9	589.7	611.8	637.5	648.1
45°	549.0	560.5	583.5	612.7	623.3
47.5°	517.0	528.6	556.0	587.1	596.8
50°	485.2	496.8	527.7	560.5	572.0
52.5°	450.7	465.7	501.1	533.9	545.4
55°	419.7	433.8	470.2	507.3	519.7
57.5°	384.3	401.0	441.0	479.9	493.1
60°	351.5	369.2	411.7	451.5	464.9
62.5°	317.9	337.3	382.5	423.2	438.3
65°	281.5	305.4	353.2	394.9	409.9
67.5°	248.8	273.6	324.1	366.6	379.8
70°	211.6	241.7	293.0	335.6	350.7
72.5°	179.7	209.8	263.8	305.4	320.5
75°	146.1	178.9	232.9	274.5	287.7
77.5°	112.5	148.8	202.8	234.7	239.0
80°	80.6	118.7	168.2	186.9	193.1
82.5°	56.7	91.2	124.0	136.4	139.9
85°	30.9	60.2	77.9	83.2	83.2
87.5°	13.2	25.7	30.9	31.9	32.8
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)