

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: P734148

Luminaire Tested: **24FCZ2-30HE-SQR-B2750-W2D-CP187-3500K**

Issue Date: 1/5/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P734148  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P388488)  
Test Lab: INNOVATION CENTER (G2)  
Issue Date: 1/5/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 24FCZ2-30HE-SQR-B2750-W2D-CP187-3500K  
Description: 2X4 3000 LUMEN SEALED CRUZE TROFFER WITH BIO UP LEDS AT 3500K CCT  
AND SQR LENS, WITH, CP187 BOTTOM LENS

Light Source: -  
Ballast/Driver: -

**Summary**

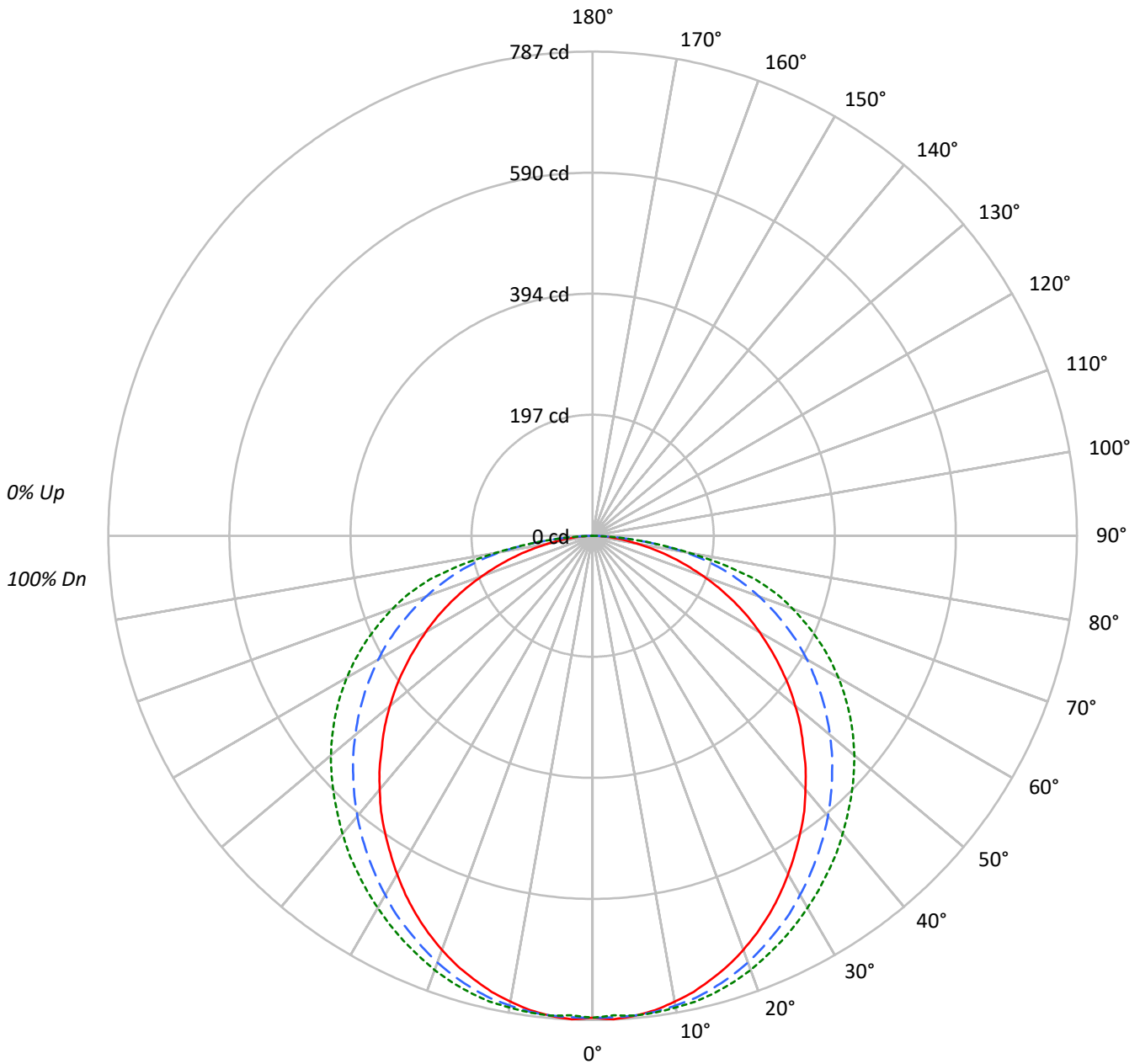
Lumens per Lamp: N/A  
Luminaire Lumens: 2451.0 lumens  
Efficiency: N/A  
Efficacy: 111.4 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.33 / 1.41  
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')  
CIE Type: Direct

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				20				20	
RC	80				70				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				100
1	108	103	98	94	105	100	96	92	96	93	89	92	89	87	89	86	84	82				82
2	98	89	81	75	95	87	80	74	83	78	73	80	75	71	77	73	69	67				67
3	89	77	69	62	86	76	68	61	73	66	60	70	64	59	67	62	58	56				56
4	81	68	59	52	78	67	58	52	64	57	51	62	55	50	60	54	49	47				47
5	74	61	51	44	72	60	51	44	57	50	44	55	49	43	54	48	43	41				41
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35				35
7	63	49	40	34	62	49	40	34	47	39	34	45	39	33	44	38	33	31				31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	30	28				28
9	55	41	33	27	54	41	33	27	39	32	27	38	32	27	37	31	27	25				25
10	52	38	30	25	50	37	30	24	36	29	24	36	29	24	35	29	24	22				22

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1106	1106	1106
5°	1110	1109	1109
10°	1102	1111	1116
15°	1090	1112	1123
20°	1076	1109	1128
25°	1058	1103	1132
30°	1035	1099	1138
35°	1014	1096	1149
40°	992	1096	1165
45°	966	1098	1187
50°	944	1105	1219
55°	916	1117	1257
60°	884	1135	1302
65°	846	1157	1357
70°	785	1186	1426
75°	711	1227	1492
80°	598	1231	1283
85°	458	929	929



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	74.4	3.0
10°-20°	214.0	8.7
20°-30°	325.0	13.3
30°-40°	395.3	16.1
40°-50°	420.9	17.2
50°-60°	400.9	16.4
60°-70°	335.2	13.7
70°-80°	223.5	9.1
80°-90°	61.8	2.5
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°	613.3	25.0
0°-40°	1008.7	41.2
0°-60°	1830.4	74.7
0°-90°	2451.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2451.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	783	783	783	783	783	
5°	783	779	783	783	783	74
15°	746	748	761	766	769	210
25°	679	688	708	720	727	313
35°	588	605	636	657	667	368
45°	484	510	550	581	595	374
55°	372	405	454	494	511	333
65°	253	290	346	389	406	250
75°	130	172	225	263	274	138
85°	28	53	57	57	57	34
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	783.4	783.4	783.4	783.4	783.4
2.5°	786.7	781.0	783.4	783.4	780.3
5°	783.4	778.6	782.7	782.7	782.7
7.5°	777.8	773.7	780.3	781.8	781.8
10°	768.9	767.3	775.4	777.8	778.6
12.5°	759.2	758.4	769.7	772.9	775.4
15°	746.2	747.9	760.8	766.5	768.9
17.5°	732.5	735.7	750.3	758.4	760.8
20°	716.3	721.1	738.2	746.2	751.1
22.5°	698.5	705.8	723.6	733.2	738.9
25°	679.1	687.9	708.2	720.3	726.8
27.5°	658.0	669.4	692.9	706.5	713.0
30°	635.3	648.3	674.2	690.4	698.5
32.5°	611.9	627.2	655.6	673.4	683.1
35°	588.4	605.4	636.2	657.2	666.9
37.5°	564.9	581.9	616.0	638.6	650.8
40°	538.2	558.4	594.9	620.0	632.2
42.5°	512.4	534.1	573.0	600.5	613.5
45°	484.0	509.9	550.3	581.1	594.9
47.5°	458.1	484.0	527.7	560.1	575.5
50°	429.8	457.2	503.4	539.1	555.3
52.5°	402.2	430.6	479.1	517.2	533.4
55°	372.4	404.6	454.1	493.7	510.7
57.5°	342.4	377.2	428.1	469.4	486.5
60°	313.2	348.8	402.2	443.6	461.3
62.5°	284.1	319.7	375.5	417.6	434.6
65°	253.3	290.5	346.4	389.3	406.3
67.5°	222.6	261.4	317.2	360.2	376.4
70°	190.2	231.5	287.4	329.4	345.6
72.5°	160.3	201.5	256.5	297.9	313.2
75°	130.3	171.6	225.0	263.1	273.6
77.5°	101.2	142.4	190.2	215.3	217.7
80°	73.6	112.5	151.4	158.6	157.8
82.5°	49.3	84.1	104.4	105.2	107.6
85°	28.3	52.6	57.4	56.7	57.4
87.5°	11.4	18.6	16.2	12.1	12.1
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)