

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: P734147

Luminaire Tested: **24FCZ2-30HE-SQR-B2750-W2D-CP187-3000K**

Issue Date: 1/5/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P734147  
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-CP187-3000K  
Description: 2X4 3000 LUMEN SEALED CRUZE TROFFER WITH BIO UP LEDS AT 3000K CCT  
AND SQR LENS, WITH, CP187 BOTTOM LENS  
  
Light Source: -  
Ballast/Driver: -

**Summary**

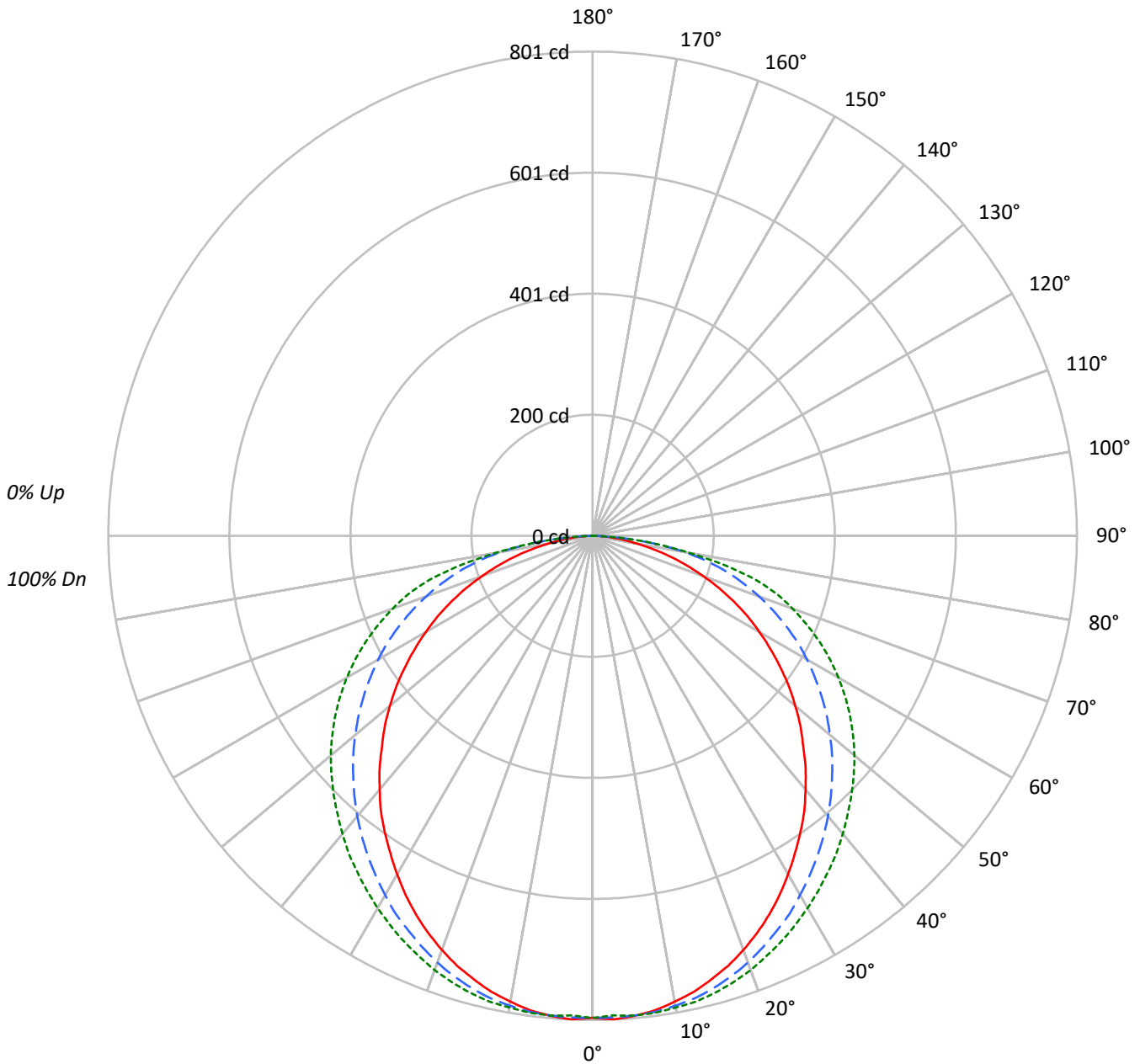
Lumens per Lamp: N/A  
Luminaire Lumens: 2495.0 lumens  
Efficiency: N/A  
Efficacy: 113.4 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.33 / 1.41  
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')  
CIE Type: Direct

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

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

	0°	45°	90°
0°	1126	1126	1126
5°	1130	1129	1129
10°	1122	1131	1136
15°	1110	1132	1144
20°	1095	1129	1148
25°	1077	1123	1152
30°	1054	1118	1159
35°	1032	1116	1170
40°	1009	1116	1186
45°	983	1118	1209
50°	961	1125	1241
55°	933	1137	1279
60°	900	1156	1326
65°	861	1178	1381
70°	799	1207	1452
75°	724	1249	1519
80°	610	1252	1305
85°	466	947	947



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	75.7	3.0
10°-20°	217.8	8.7
20°-30°	330.8	13.3
30°-40°	402.4	16.1
40°-50°	428.4	17.2
50°-60°	408.1	16.4
60°-70°	341.2	13.7
70°-80°	227.5	9.1
80°-90°	63.0	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°	624.4	25.0
0°-40°	1026.8	41.2
0°-60°	1863.3	74.7
0°-90°	2495.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2495.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	798	798	798	798	798	
5°	798	793	797	797	797	76
15°	760	761	774	780	783	214
25°	691	700	721	733	740	318
35°	599	616	648	669	679	375
45°	493	519	560	592	606	381
55°	379	412	462	503	520	339
65°	258	296	353	396	414	255
75°	133	175	229	268	278	141
85°	29	54	58	58	58	35
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	797.5	797.5	797.5	797.5	797.5
2.5°	800.8	795.0	797.5	797.5	794.3
5°	797.5	792.6	796.7	796.7	796.7
7.5°	791.8	787.6	794.3	795.9	795.9
10°	782.7	781.1	789.3	791.8	792.6
12.5°	772.9	772.0	783.6	786.8	789.3
15°	759.6	761.3	774.5	780.2	782.7
17.5°	745.7	748.9	763.8	772.0	774.5
20°	729.2	734.1	751.4	759.6	764.6
22.5°	711.1	718.5	736.6	746.4	752.2
25°	691.3	700.3	720.9	733.2	739.9
27.5°	669.8	681.4	705.3	719.2	725.8
30°	646.7	659.9	686.3	702.8	711.1
32.5°	622.8	638.5	667.4	685.5	695.3
35°	599.0	616.3	647.6	669.0	678.8
37.5°	575.1	592.3	627.0	650.0	662.5
40°	547.9	568.5	605.6	631.1	643.5
42.5°	521.6	543.7	583.3	611.3	624.6
45°	492.6	519.1	560.2	591.6	605.6
47.5°	466.3	492.6	537.2	570.2	585.8
50°	437.5	465.4	512.5	548.7	565.2
52.5°	409.4	438.4	487.7	526.5	543.0
55°	379.0	411.9	462.2	502.6	519.8
57.5°	348.5	384.0	435.8	477.9	495.2
60°	318.9	355.1	409.4	451.5	469.6
62.5°	289.2	325.4	382.3	425.1	442.4
65°	257.8	295.7	352.6	396.3	413.6
67.5°	226.6	266.1	322.9	366.6	383.1
70°	193.6	235.7	292.5	335.4	351.8
72.5°	163.2	205.2	261.2	303.2	318.9
75°	132.7	174.6	229.0	267.8	278.5
77.5°	103.0	145.0	193.6	219.2	221.6
80°	75.0	114.6	154.1	161.5	160.6
82.5°	50.2	85.7	106.3	107.1	109.5
85°	28.8	53.5	58.5	57.7	58.5
87.5°	11.6	19.0	16.5	12.3	12.3
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)