

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: P733921

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

Issue Date: 1/5/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P733921  
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: 24FCZ2-30-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**

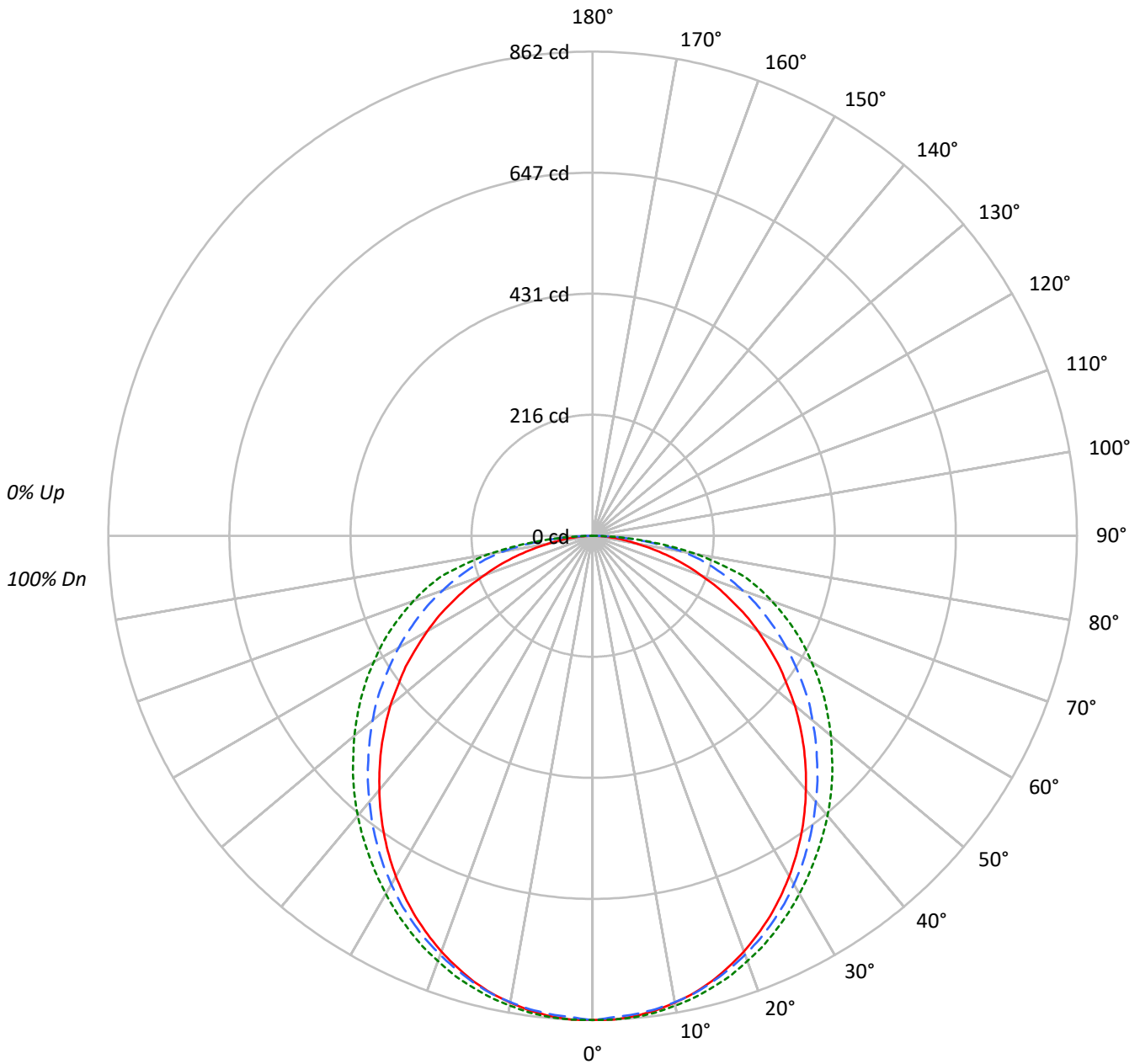
Lumens per Lamp: N/A  
Luminaire Lumens: 2568.0 lumens  
Efficiency: N/A  
Efficacy: 111.7 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37  
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')  
CIE Type: Direct

Input Watts (W): 23  
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°	1217	1217	1217
5°	1217	1212	1219
10°	1210	1209	1217
15°	1200	1202	1215
20°	1183	1192	1210
25°	1164	1181	1205
30°	1141	1168	1200
35°	1116	1153	1196
40°	1088	1138	1198
45°	1061	1127	1204
50°	1031	1122	1216
55°	1000	1120	1238
60°	961	1125	1270
65°	910	1142	1325
70°	845	1171	1401
75°	771	1229	1519
80°	634	1323	1519
85°	486	1221	1305



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	81.5	3.2
10°-20°	232.8	9.1
20°-30°	350.3	13.6
30°-40°	419.8	16.3
40°-50°	437.5	17.0
50°-60°	407.0	15.9
60°-70°	335.2	13.1
70°-80°	228.3	8.9
80°-90°	75.4	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°	664.7	25.9
0°-40°	1084.5	42.2
0°-60°	1929.0	75.1
0°-90°	2568.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2568.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	862	862	862	862	862	
5°	859	859	855	860	860	82
15°	821	822	823	830	831	231
25°	747	751	758	771	774	344
35°	648	656	669	687	694	405
45°	531	542	565	593	603	410
55°	406	420	455	491	503	362
65°	272	296	342	382	397	271
75°	141	173	225	266	278	149
85°	30	58	75	81	81	37
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	862.2	862.2	862.2	862.2	862.2
2.5°	862.2	862.2	857.9	862.2	862.2
5°	858.7	858.7	855.3	859.7	860.5
7.5°	852.7	853.7	850.3	855.3	856.2
10°	844.2	845.1	843.3	848.5	849.3
12.5°	833.9	834.8	834.8	840.8	841.7
15°	821.0	822.0	822.8	830.5	831.4
17.5°	804.8	807.4	809.0	818.5	820.2
20°	787.7	790.2	793.6	803.9	805.6
22.5°	767.9	771.3	777.3	788.5	791.1
25°	747.4	750.8	758.5	771.3	773.9
27.5°	724.2	729.4	738.8	752.5	755.9
30°	700.3	705.3	716.5	731.0	736.2
32.5°	674.5	681.4	694.2	710.5	715.7
35°	647.9	655.6	669.4	687.4	694.2
37.5°	619.7	628.3	644.5	664.2	672.8
40°	590.6	600.8	617.9	641.1	650.5
42.5°	561.3	570.8	592.2	617.1	627.3
45°	531.4	542.5	564.8	593.0	603.4
47.5°	500.5	511.6	538.2	568.2	577.6
50°	469.7	480.9	510.8	542.5	553.7
52.5°	436.2	450.8	485.1	516.8	528.0
55°	406.3	419.9	455.1	491.1	503.1
57.5°	372.0	388.2	426.8	464.5	477.3
60°	340.3	357.4	398.5	437.1	450.0
62.5°	307.7	326.5	370.2	409.7	424.2
65°	272.5	295.6	341.9	382.2	396.8
67.5°	240.8	264.9	313.7	354.8	367.6
70°	204.8	234.0	283.7	324.9	339.4
72.5°	174.0	203.1	255.4	295.6	310.2
75°	141.4	173.1	225.4	265.7	278.5
77.5°	108.9	144.0	196.3	227.2	231.4
80°	78.0	114.9	162.8	180.9	186.9
82.5°	54.9	88.3	120.0	132.0	135.4
85°	30.0	58.3	75.4	80.6	80.6
87.5°	12.8	24.9	30.0	30.9	31.7
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)