

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: P734180

Luminaire Tested: **24FCZ2-35-B2750-W2D-CP250-5000K**

Issue Date: 1/5/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P734180  
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: 24FCZ2-35-B2750-W2D-CP250-5000K  
Description: 2X4 3500 LUMEN SEALED CRUZE TROFFER WITH BIO UP LEDS AT 5000K CCT  
AND RIBBED LENS, WITH, CP250 BOTTOM LENS  
  
Light Source: -  
Ballast/Driver: -

**Summary**

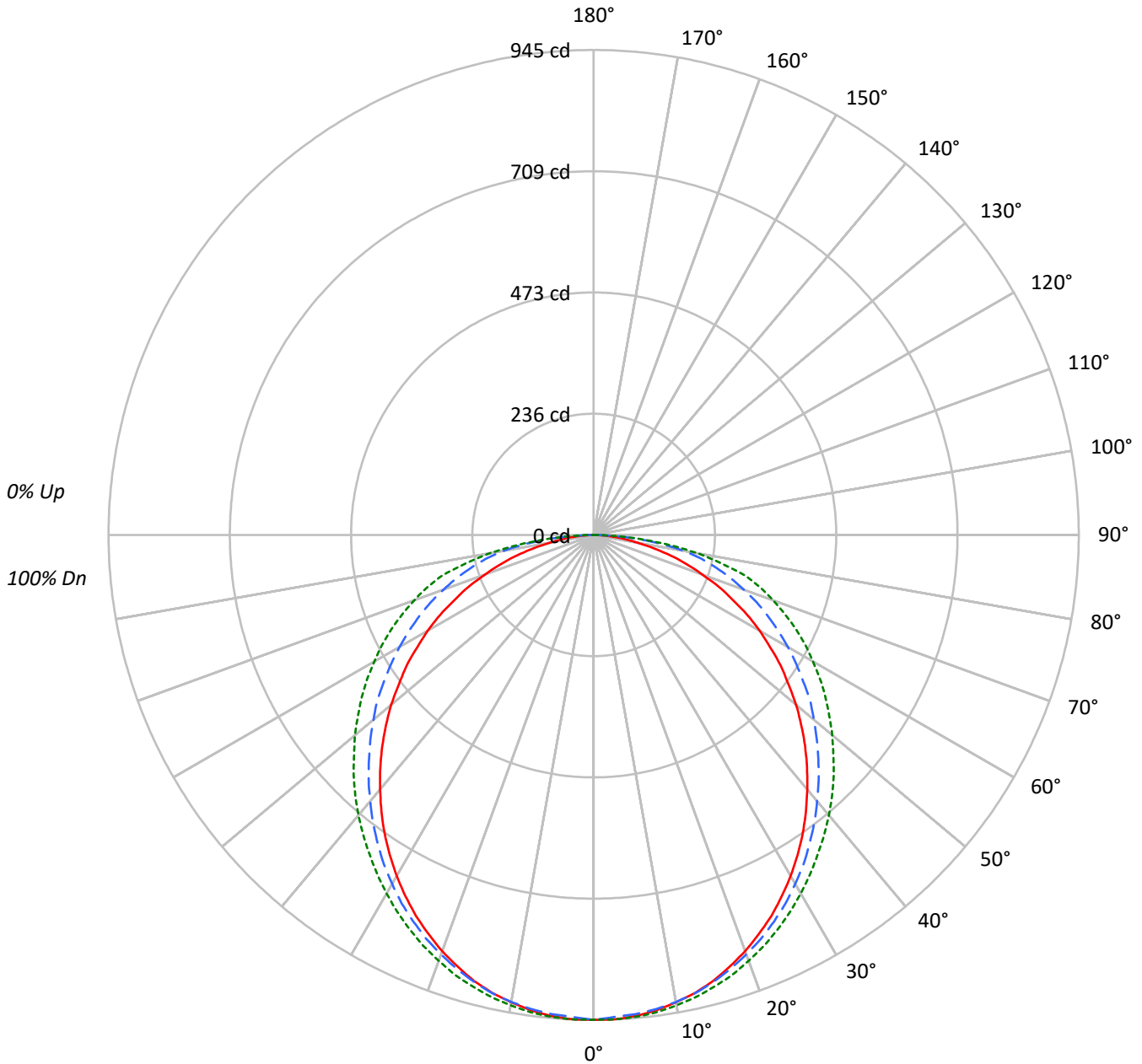
Lumens per Lamp: N/A  
Luminaire Lumens: 2814.0 lumens  
Efficiency: N/A  
Efficacy: 100.5 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37  
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')  
CIE Type: Direct

Input Watts (W): 28  
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	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°	1333	1333	1333
5°	1333	1328	1336
10°	1326	1324	1334
15°	1315	1317	1331
20°	1296	1306	1326
25°	1275	1294	1321
30°	1250	1279	1315
35°	1223	1264	1311
40°	1192	1247	1313
45°	1162	1235	1320
50°	1130	1229	1332
55°	1095	1227	1357
60°	1053	1233	1392
65°	997	1251	1452
70°	926	1283	1535
75°	845	1347	1664
80°	695	1450	1665
85°	531	1338	1430



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	89.4	3.2
10°-20°	255.1	9.1
20°-30°	383.9	13.6
30°-40°	460.0	16.3
40°-50°	479.4	17.0
50°-60°	446.0	15.9
60°-70°	367.4	13.1
70°-80°	250.2	8.9
80°-90°	82.6	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°	728.3	25.9
0°-40°	1188.4	42.2
0°-60°	2113.8	75.1
0°-90°	2814.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2814.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	945	945	945	945	945	
5°	941	941	937	942	943	89
15°	900	901	902	910	911	253
25°	819	823	831	845	848	377
35°	710	718	734	753	761	444
45°	582	594	619	650	661	449
55°	445	460	499	538	551	397
65°	299	324	375	419	435	296
75°	155	190	247	291	305	163
85°	33	64	83	88	88	41
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	944.8	944.8	944.8	944.8	944.8
2.5°	944.8	944.8	940.1	944.8	944.8
5°	941.0	941.0	937.3	942.0	942.9
7.5°	934.4	935.4	931.7	937.3	938.3
10°	925.0	926.0	924.1	929.8	930.7
12.5°	913.8	914.7	914.7	921.3	922.3
15°	899.7	900.7	901.6	910.1	911.0
17.5°	881.9	884.7	886.5	897.0	898.8
20°	863.1	865.9	869.7	880.9	882.8
22.5°	841.5	845.2	851.8	864.0	866.8
25°	819.0	822.7	831.2	845.2	848.1
27.5°	793.6	799.3	809.6	824.6	828.4
30°	767.3	772.9	785.1	801.1	806.7
32.5°	739.2	746.6	760.7	778.6	784.2
35°	710.0	718.4	733.5	753.2	760.7
37.5°	679.1	688.4	706.2	727.8	737.2
40°	647.1	658.3	677.1	702.5	712.8
42.5°	615.1	625.5	648.9	676.2	687.4
45°	582.3	594.5	618.9	649.8	661.2
47.5°	548.4	560.7	589.7	622.7	633.0
50°	514.7	526.9	559.7	594.5	606.7
52.5°	478.0	494.0	531.6	566.3	578.5
55°	445.2	460.1	498.7	538.1	551.3
57.5°	407.6	425.4	467.7	509.0	523.1
60°	372.9	391.7	436.7	478.9	493.1
62.5°	337.2	357.8	405.7	448.9	464.9
65°	298.6	324.0	374.7	418.8	434.8
67.5°	263.9	290.2	343.8	388.8	402.9
70°	224.5	256.4	310.8	356.0	372.0
72.5°	190.6	222.5	279.8	324.0	339.9
75°	155.0	189.7	247.0	291.1	305.2
77.5°	119.3	157.8	215.1	248.9	253.6
80°	85.5	125.9	178.4	198.2	204.8
82.5°	60.1	96.8	131.5	144.7	148.4
85°	32.8	63.8	82.6	88.3	88.3
87.5°	14.0	27.3	32.8	33.8	34.8
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)