

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: P732433

Luminaire Tested: **14FCZ2-20-B2750-W2D-CP375-3500K**

Issue Date: 1/5/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P732433  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P275502)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 1/5/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 14FCZ2-20-B2750-W2D-CP375-3500K  
Description: 1X4 2000 LUMEN SEALED CRUZE TROFFER WITH BIO UP LEDS AT 3500K CCT  
AND RIBBED LENS, WITH, CP375 BOTTOM LENS  
  
Light Source: -  
Ballast/Driver: -

**Summary**

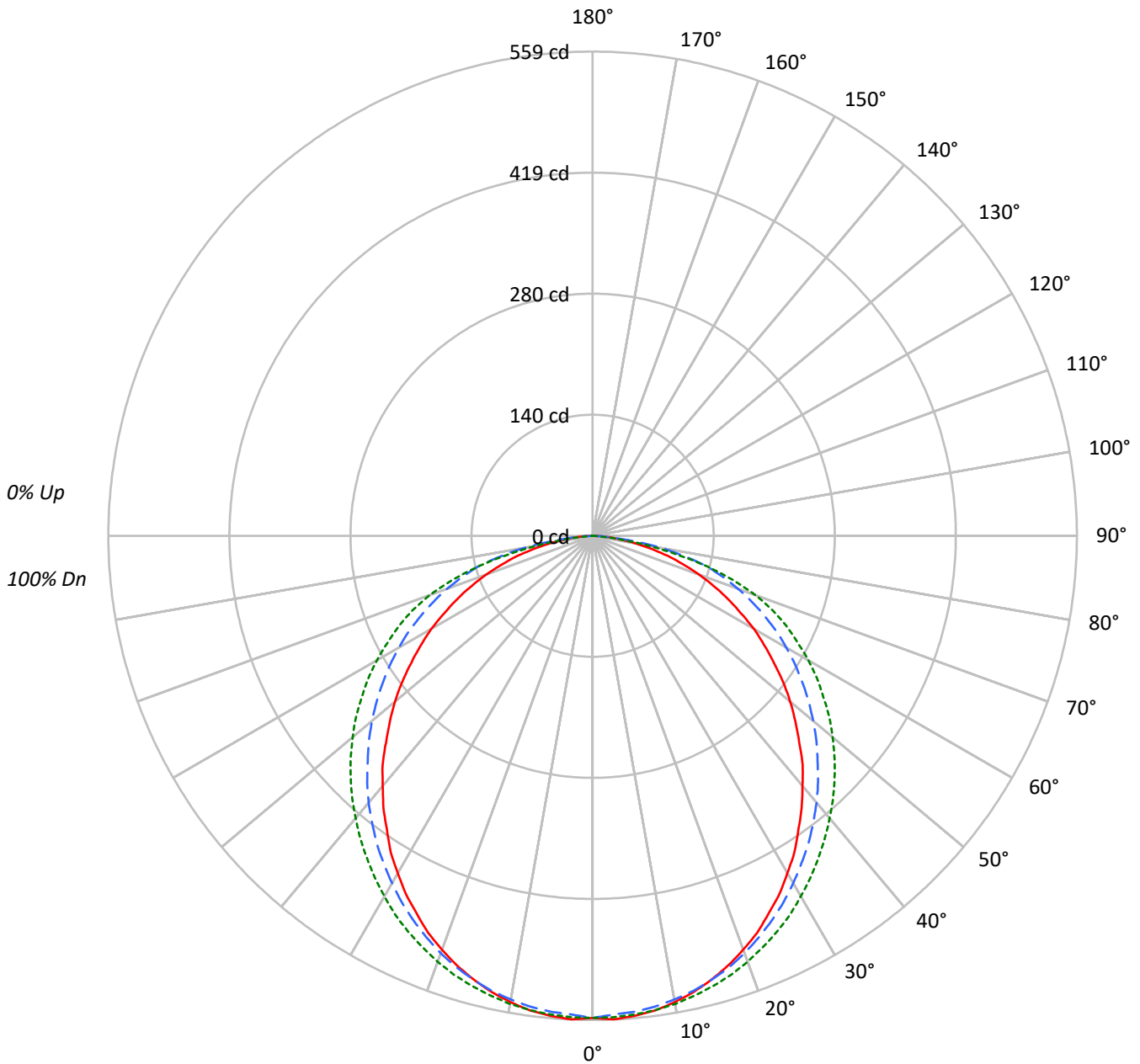
Lumens per Lamp: N/A  
Luminaire Lumens: 1616.0 lumens  
Efficiency: N/A  
Efficacy: 101.0 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 0.96' x L: 3.98' x H: 0')  
CIE Type: Direct

Input Watts (W): 16  
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	109	104	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83																			
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69																			
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58																			
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49																			
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42																			
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37																			
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32																			
8	60	46	37	32	58	45	37	31	44	37	31	43	36	31	42	35	31	29																			
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26																			
10	52	39	31	26	51	39	31	26	37	30	26	37	30	25	36	30	25	24																			

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

	0°	45°	90°
0°	1571	1571	1571
5°	1576	1563	1572
10°	1567	1558	1573
15°	1550	1551	1572
20°	1527	1540	1572
25°	1498	1525	1570
30°	1466	1509	1567
35°	1427	1496	1565
40°	1389	1482	1568
45°	1346	1465	1576
50°	1307	1459	1587
55°	1257	1454	1601
60°	1213	1457	1624
65°	1150	1461	1648
70°	1079	1472	1647
75°	978	1485	1490
80°	803	1283	1060
85°	596	606	243



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	52.7	3.3
10°-20°	150.5	9.3
20°-30°	226.7	14.0
30°-40°	272.0	16.8
40°-50°	283.5	17.5
50°-60°	262.5	16.2
60°-70°	212.1	13.1
70°-80°	129.3	8.0
80°-90°	26.7	1.7
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°	429.9	26.6
0°-40°	701.9	43.4
0°-60°	1247.9	77.2
0°-90°	1616.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1616.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	557	557	557	557	557	
5°	556	555	552	556	555	53
15°	530	531	531	538	538	150
25°	481	484	490	502	504	222
35°	414	420	434	450	454	259
45°	337	347	367	388	395	261
55°	255	269	296	318	325	229
65°	172	189	219	241	247	170
75°	90	110	136	138	137	94
85°	18	27	19	10	8	23
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	556.7	556.7	556.7	556.7	556.7
2.5°	558.9	557.1	553.2	557.1	556.3
5°	556.3	554.9	551.7	555.6	554.9
7.5°	552.8	551.3	548.4	553.2	552.4
10°	546.6	545.9	543.7	549.2	548.8
12.5°	539.5	539.1	538.0	544.1	543.7
15°	530.4	530.7	530.7	538.0	538.0
17.5°	520.3	521.0	522.5	530.4	531.5
20°	508.4	509.9	512.8	521.8	523.2
22.5°	496.2	497.3	501.6	512.4	513.9
25°	481.0	483.9	489.7	502.0	504.1
27.5°	466.6	469.1	477.1	489.7	493.3
30°	449.7	453.7	463.1	476.8	480.7
32.5°	433.5	437.8	448.6	464.5	468.0
35°	414.1	420.5	434.2	450.1	454.3
37.5°	396.4	402.5	418.0	435.3	440.4
40°	376.9	384.5	402.2	420.5	425.6
42.5°	358.9	366.1	385.2	404.0	410.8
45°	337.3	347.4	367.1	387.7	394.9
47.5°	317.4	327.6	350.3	372.2	378.8
50°	297.6	308.4	332.2	354.9	361.4
52.5°	277.1	288.7	314.2	336.9	344.5
55°	255.4	268.8	295.5	318.5	325.4
57.5°	234.9	248.6	277.1	300.5	307.3
60°	214.8	228.9	258.0	280.3	287.6
62.5°	192.5	209.0	239.3	261.2	266.7
65°	172.2	189.2	218.7	240.7	246.8
67.5°	151.0	169.3	198.9	219.0	224.9
70°	130.8	149.9	178.4	197.1	199.6
72.5°	109.2	128.7	157.4	169.3	169.3
75°	89.7	109.5	136.2	138.4	136.6
77.5°	68.4	90.5	107.7	103.4	99.1
80°	49.4	71.0	78.9	71.0	65.2
82.5°	33.1	51.5	47.5	37.8	33.5
85°	18.4	27.4	18.7	10.4	7.5
87.5°	6.8	6.2	1.8	1.8	1.8
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)