

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: P732413

Luminaire Tested: **14FCZ2-20-B2750-W2D-CA08-3500K**

Issue Date: 1/5/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P732413  
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-CA08-3500K  
Description: 1X4 2000 LUMEN SEALED CRUZE TROFFER WITH BIO UP LEDS AT 3500K CCT  
AND RIBBED LENS, WITH, CA08 BOTTOM LENS  
  
Light Source: -  
Ballast/Driver: -

**Summary**

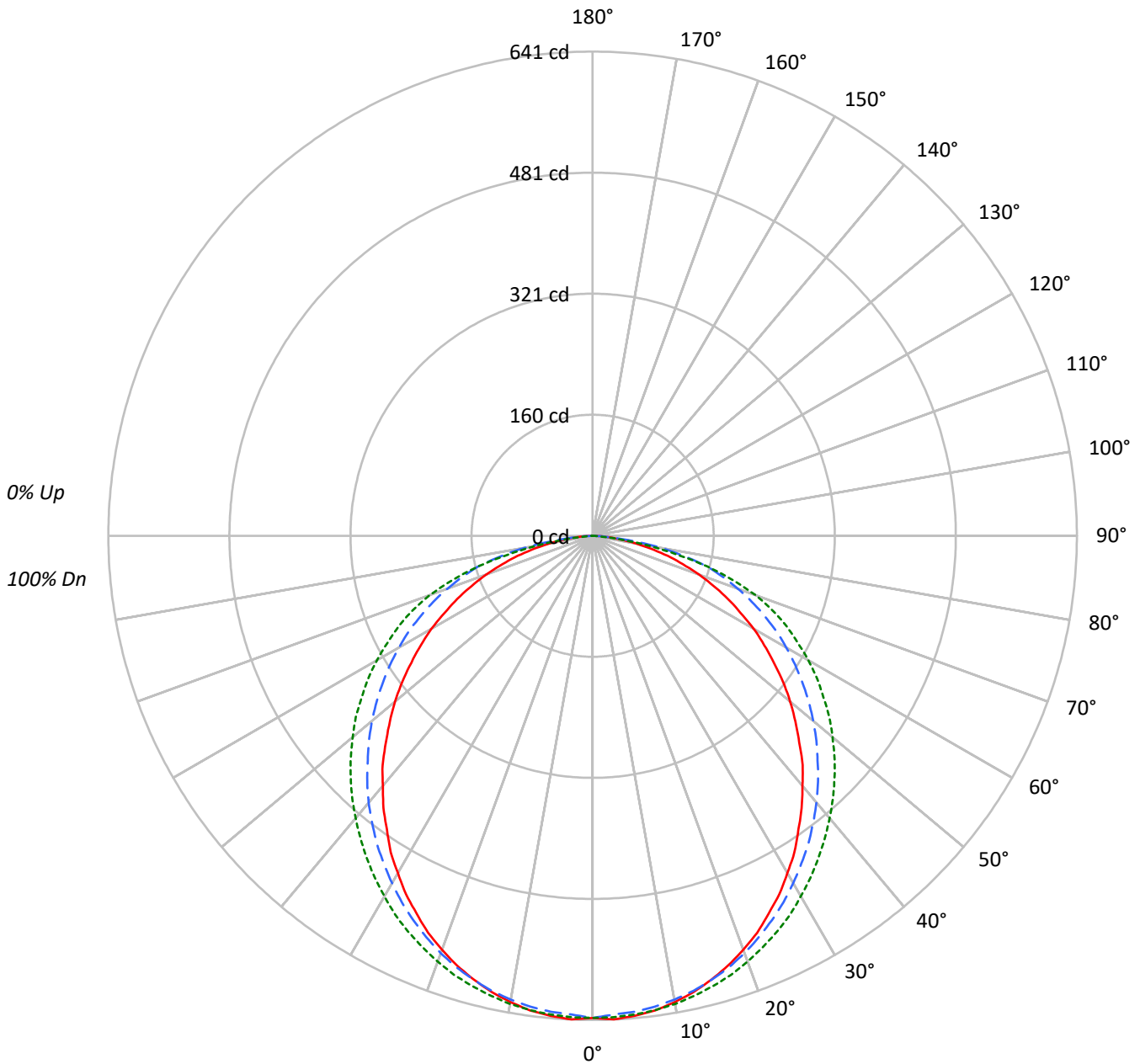
Lumens per Lamp: N/A  
Luminaire Lumens: 1853.0 lumens  
Efficiency: N/A  
Efficacy: 115.8 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 0.96' x L: 3.98' x H: 0')  
CIE Type: Direct

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	90	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°	1802	1802	1802
5°	1807	1792	1803
10°	1797	1787	1804
15°	1777	1778	1803
20°	1751	1766	1802
25°	1718	1749	1800
30°	1681	1731	1797
35°	1636	1716	1795
40°	1592	1699	1798
45°	1544	1681	1808
50°	1499	1673	1820
55°	1441	1668	1836
60°	1390	1670	1862
65°	1319	1675	1890
70°	1238	1688	1889
75°	1121	1704	1708
80°	920	1469	1214
85°	680	696	279



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	60.4	3.3
10°-20°	172.6	9.3
20°-30°	259.9	14.0
30°-40°	311.9	16.8
40°-50°	325.1	17.5
50°-60°	301.0	16.2
60°-70°	243.2	13.1
70°-80°	148.3	8.0
80°-90°	30.6	1.6
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°	492.9	26.6
0°-40°	804.8	43.4
0°-60°	1431.0	77.2
0°-90°	1853.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1853.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	638	638	638	638	638	
5°	638	636	633	637	636	61
15°	608	609	609	617	617	171
25°	552	555	562	576	578	254
35°	475	482	498	516	521	297
45°	387	398	421	444	453	299
55°	293	308	339	365	373	262
65°	198	217	251	276	283	195
75°	103	126	156	159	157	108
85°	21	31	22	12	9	26
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	638.4	638.4	638.4	638.4	638.4
2.5°	640.9	638.8	634.3	638.8	637.9
5°	637.9	636.3	632.6	637.1	636.3
7.5°	633.8	632.1	628.8	634.3	633.4
10°	626.8	626.0	623.5	629.7	629.3
12.5°	618.6	618.1	616.9	623.9	623.5
15°	608.2	608.6	608.6	616.9	616.9
17.5°	596.6	597.4	599.1	608.2	609.5
20°	583.0	584.7	588.0	598.3	599.9
22.5°	569.0	570.2	575.1	587.5	589.2
25°	551.6	554.9	561.5	575.6	578.1
27.5°	535.1	537.9	547.0	561.5	565.7
30°	515.6	520.2	531.0	546.7	551.2
32.5°	497.1	502.0	514.4	532.6	536.7
35°	474.8	482.2	497.9	516.1	521.0
37.5°	454.6	461.5	479.3	499.1	504.9
40°	432.1	440.9	461.1	482.2	488.0
42.5°	411.6	419.7	441.7	463.2	471.0
45°	386.8	398.4	421.0	444.5	452.8
47.5°	364.0	375.6	401.7	426.8	434.3
50°	341.3	353.7	381.0	407.0	414.4
52.5°	317.7	331.0	360.3	386.3	395.1
55°	292.9	308.3	338.9	365.3	373.1
57.5°	269.4	285.1	317.7	344.6	352.4
60°	246.3	262.4	295.9	321.5	329.8
62.5°	220.7	239.7	274.4	299.5	305.8
65°	197.5	216.9	250.8	276.0	283.0
67.5°	173.1	194.2	228.1	251.2	257.9
70°	150.0	171.9	204.5	226.0	228.9
72.5°	125.2	147.5	180.5	194.2	194.2
75°	102.8	125.6	156.2	158.7	156.6
77.5°	78.5	103.7	123.5	118.5	113.6
80°	56.6	81.4	90.4	81.4	74.7
82.5°	38.0	59.0	54.5	43.3	38.4
85°	21.0	31.4	21.5	11.9	8.6
87.5°	7.8	7.1	2.0	2.0	2.0
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)