

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: P732438

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

Issue Date: 1/5/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P732438  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P294787)  
Test Lab: INNOVATIONS CENTER(G3)  
Issue Date: 1/5/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 14FCZ2-20-HRP-B2750-W2D-CA08-3500K  
Description: 1X4 2000 LUMEN SEALED CRUZE TROFFER WITH BIO UP LEDS AT 3500K CCT  
AND HRP LENS, WITH, CA08 BOTTOM LENS  
  
Light Source: -  
Ballast/Driver: -

**Summary**

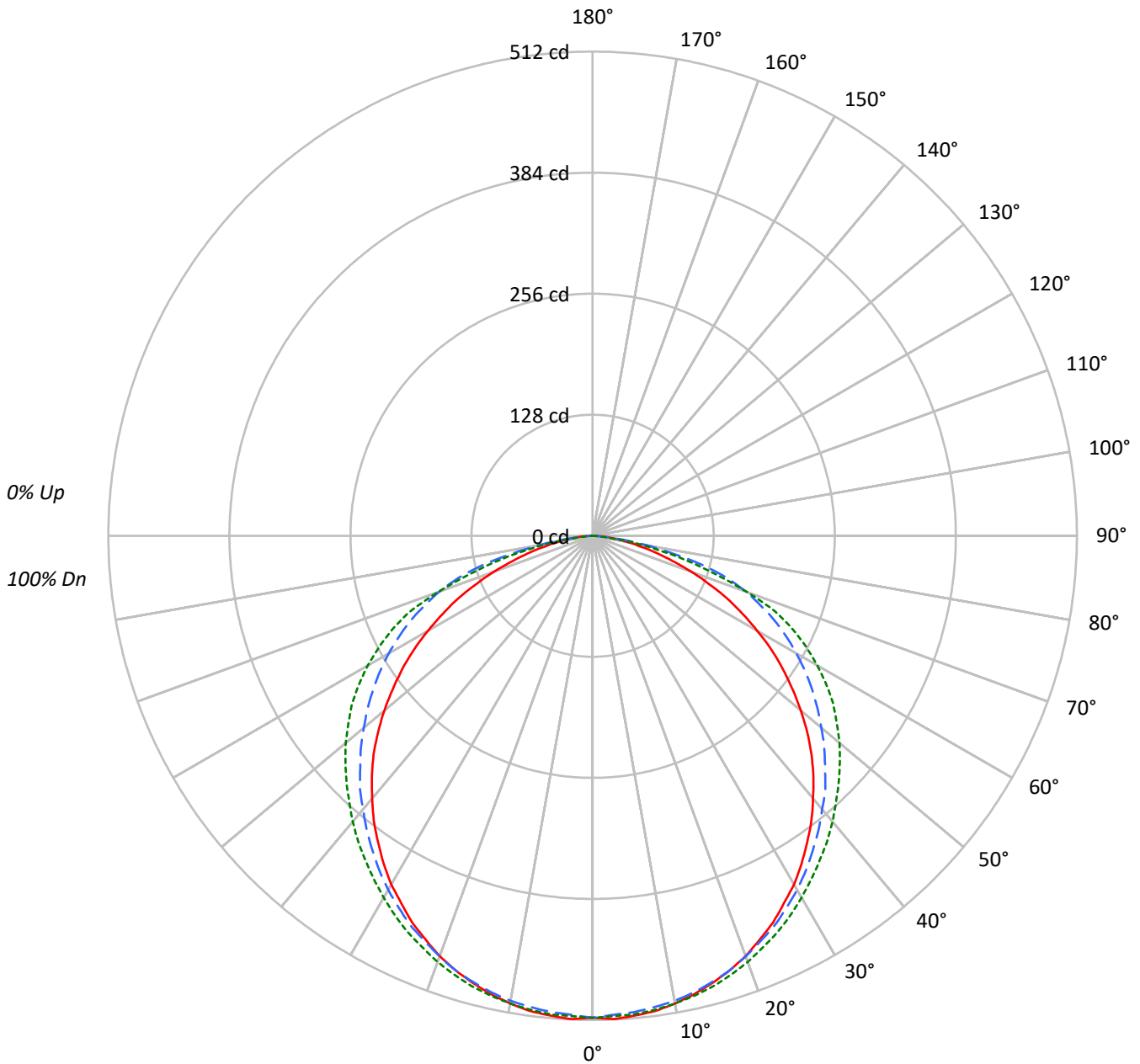
Lumens per Lamp: N/A  
Luminaire Lumens: 1501.0 lumens  
Efficiency: N/A  
Efficacy: 93.8 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39  
Luminous Opening: Rectangular (W 0.96' x L: 3.98' x H: 0')  
CIE Type: Direct

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	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84																			
2	99	90	83	78	96	88	82	77	85	79	75	82	77	73	78	75	71	69																			
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58																			
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49																			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42																			
6	69	56	47	40	68	55	46	40	53	45	40	51	45	39	50	44	39	37																			
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	45	39	35	33																			
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	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	38	31	26	37	30	26	37	30	25	36	30	25	24																			

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

	0°	45°	90°
0°	1439	1439	1439
5°	1443	1432	1439
10°	1439	1431	1439
15°	1430	1428	1441
20°	1421	1422	1441
25°	1406	1417	1440
30°	1388	1409	1440
35°	1363	1399	1443
40°	1336	1391	1454
45°	1307	1387	1469
50°	1262	1386	1497
55°	1208	1394	1529
60°	1135	1404	1549
65°	1047	1419	1558
70°	912	1421	1434
75°	751	1324	1158
80°	590	951	775
85°	460	366	181



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	48.3	3.2
10°-20°	138.5	9.2
20°-30°	210.3	14.0
30°-40°	254.8	17.0
40°-50°	268.5	17.9
50°-60°	250.7	16.7
60°-70°	200.3	13.3
70°-80°	110.2	7.3
80°-90°	19.5	1.3
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°	397.0	26.4
0°-40°	651.8	43.4
0°-60°	1171.0	78.0
0°-90°	1501.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1501.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	510	510	510	510	510	
5°	509	508	506	509	508	48
15°	490	490	488	493	493	138
25°	451	452	455	462	462	208
35°	396	399	406	416	419	247
45°	328	334	347	363	368	252
55°	246	258	283	303	311	219
65°	157	176	212	230	233	154
75°	69	99	121	109	106	74
85°	14	18	11	7	6	17
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	509.7	509.7	509.7	509.7	509.7
2.5°	511.6	510.2	506.9	509.7	508.4
5°	509.3	507.9	505.5	508.9	507.9
7.5°	506.9	505.0	502.6	506.5	505.5
10°	502.2	500.7	499.4	502.6	502.2
12.5°	496.5	496.1	494.6	498.5	498.0
15°	489.5	489.5	488.5	493.2	493.2
17.5°	481.9	481.4	481.9	487.1	486.6
20°	472.9	472.9	473.4	479.6	479.6
22.5°	462.0	462.5	463.9	471.5	471.0
25°	451.3	452.1	455.0	461.5	462.5
27.5°	438.0	440.4	443.6	451.6	452.6
30°	425.7	427.1	432.3	439.9	441.7
32.5°	411.1	413.9	419.6	428.1	430.5
35°	395.5	399.3	405.9	416.3	418.7
37.5°	380.0	383.3	392.3	403.0	407.3
40°	362.5	368.1	377.6	389.9	394.5
42.5°	345.4	351.2	364.0	376.6	380.9
45°	327.5	333.7	347.4	363.0	368.1
47.5°	307.7	314.9	332.3	348.8	354.4
50°	287.4	296.4	315.7	334.2	340.8
52.5°	266.3	277.5	299.7	319.0	325.3
55°	245.5	257.7	283.2	303.0	310.6
57.5°	224.2	237.5	266.3	288.8	293.1
60°	201.0	217.2	248.7	268.5	274.3
62.5°	178.5	196.9	230.8	249.6	254.4
65°	156.7	176.5	212.4	229.8	233.2
67.5°	133.1	156.7	192.1	208.2	209.0
70°	110.5	137.8	172.2	179.8	173.7
72.5°	88.3	117.5	149.2	143.0	137.8
75°	68.9	98.7	121.4	109.1	106.2
77.5°	51.0	80.7	86.8	80.3	75.0
80°	36.3	63.7	58.5	50.0	47.7
82.5°	25.0	40.1	32.1	25.0	21.7
85°	14.2	17.9	11.3	7.0	5.6
87.5°	6.1	4.3	2.4	1.9	1.9
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)