

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: P732439

Luminaire Tested: **14FCZ2-20-HRP-B2750-W2D-CA08-4000K**

Issue Date: 1/5/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P732439  
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-CA08-4000K  
Description: 1X4 2000 LUMEN SEALED CRUZE TROFFER WITH BIO UP LEDS AT 4000K CCT  
AND HRP LENS, WITH, CA08 BOTTOM LENS  
  
Light Source: -  
Ballast/Driver: -

**Summary**

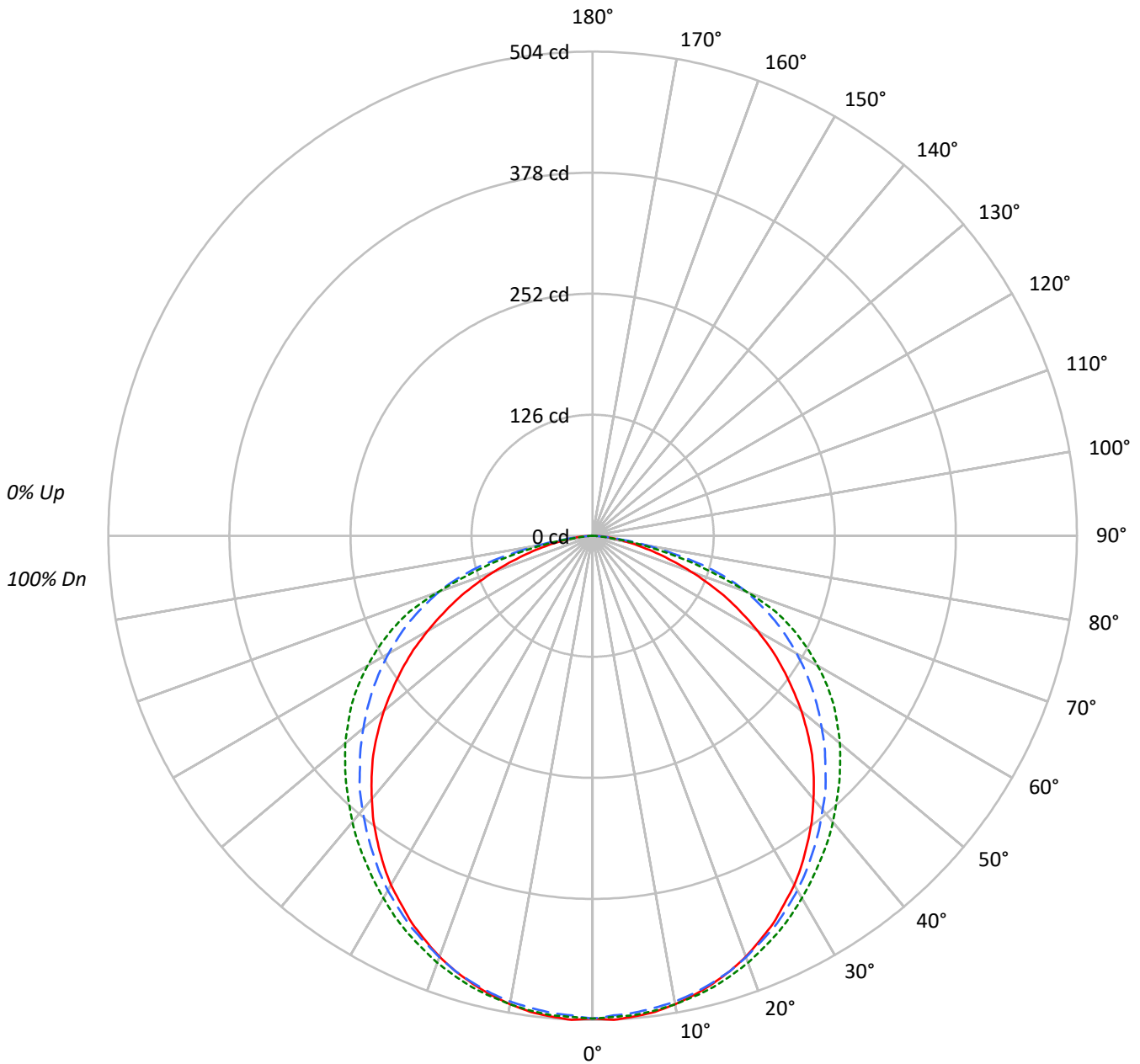
Lumens per Lamp: N/A  
Luminaire Lumens: 1480.0 lumens  
Efficiency: N/A  
Efficacy: 92.5 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39  
Luminous Opening: Rectangular (W 0.96' x L: 3.98' x H: 0')  
CIE Type: Direct

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					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	50	30	10	0		
RCR	0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100	100	100		
	1	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84	84	84	84	84	84		
	2	99	90	83	78	96	88	82	77	85	79	75	82	77	73	78	75	71	69	69	69	69	69	69		
	3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58	58	58	58	58	58		
	4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49	49	49	49	49	49		
	5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42	42	42	42	42	42		
	6	69	56	47	40	68	55	46	40	53	45	40	51	45	39	50	44	39	37	37	37	37	37	37		
	7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	45	39	35	33	33	33	33	33	33		
	8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29	29	29	29	29	29		
	9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26	26	26	26	26	26		
	10	52	39	31	26	51	38	31	26	37	30	26	37	30	25	36	30	25	24	24	24	24	24	24		

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

	0°	45°	90°
0°	1419	1419	1419
5°	1423	1412	1419
10°	1419	1411	1419
15°	1411	1408	1421
20°	1401	1402	1421
25°	1386	1397	1420
30°	1368	1389	1419
35°	1344	1379	1422
40°	1317	1372	1433
45°	1289	1367	1449
50°	1244	1367	1475
55°	1191	1374	1507
60°	1119	1384	1527
65°	1032	1399	1536
70°	899	1401	1413
75°	742	1305	1142
80°	582	938	764
85°	453	363	178



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	47.6	3.2
10°-20°	136.5	9.2
20°-30°	207.3	14.0
30°-40°	251.2	17.0
40°-50°	264.8	17.9
50°-60°	247.2	16.7
60°-70°	197.5	13.3
70°-80°	108.7	7.3
80°-90°	19.2	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°	391.5	26.5
0°-40°	642.7	43.4
0°-60°	1154.6	78.0
0°-90°	1480.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1480.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	503	503	503	503	503	
5°	502	501	498	502	501	48
15°	483	483	482	486	486	136
25°	445	446	449	455	456	205
35°	390	394	400	410	413	244
45°	323	329	342	358	363	248
55°	242	254	279	299	306	216
65°	154	174	209	227	230	152
75°	68	97	120	108	105	73
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°	502.6	502.6	502.6	502.6	502.6
2.5°	504.4	503.0	499.8	502.6	501.3
5°	502.2	500.8	498.4	501.7	500.8
7.5°	499.8	498.0	495.6	499.4	498.4
10°	495.1	493.7	492.4	495.6	495.1
12.5°	489.6	489.1	487.7	491.5	491.0
15°	482.7	482.7	481.7	486.3	486.3
17.5°	475.1	474.6	475.1	480.3	479.8
20°	466.3	466.3	466.8	472.9	472.9
22.5°	455.6	456.0	457.4	464.9	464.4
25°	445.0	445.8	448.6	455.1	456.0
27.5°	431.9	434.2	437.4	445.3	446.3
30°	419.8	421.2	426.2	433.8	435.5
32.5°	405.4	408.1	413.8	422.1	424.5
35°	390.0	393.7	400.2	410.5	412.8
37.5°	374.6	377.9	386.8	397.4	401.6
40°	357.5	363.0	372.3	384.4	389.0
42.5°	340.6	346.3	358.9	371.4	375.6
45°	322.9	329.1	342.5	357.9	363.0
47.5°	303.4	310.5	327.7	343.9	349.4
50°	283.4	292.2	311.3	329.5	336.0
52.5°	262.5	273.6	295.5	314.6	320.7
55°	242.0	254.0	279.3	298.8	306.2
57.5°	221.1	234.1	262.5	284.8	289.0
60°	198.2	214.1	245.2	264.8	270.4
62.5°	176.0	194.1	227.5	246.2	250.9
65°	154.5	174.1	209.4	226.6	229.9
67.5°	131.2	154.5	189.4	205.3	206.1
70°	108.9	135.9	169.8	177.3	171.2
72.5°	87.0	115.9	147.1	141.0	135.9
75°	68.0	97.3	119.7	107.5	104.7
77.5°	50.3	79.6	85.6	79.1	74.0
80°	35.8	62.8	57.7	49.3	47.0
82.5°	24.6	39.6	31.7	24.6	21.4
85°	14.0	17.7	11.2	6.9	5.5
87.5°	6.0	4.2	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)