

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: P732451

Luminaire Tested: **14FCZ2-20-HRP-B2750-W2D-CP250-2700K**

Issue Date: 1/5/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P732451  
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-CP250-2700K  
Description: 1X4 2000 LUMEN SEALED CRUZE TROFFER WITH BIO UP LEDS AT 2700K CCT  
AND HRP LENS, WITH, CP250 BOTTOM LENS

Light Source: -  
Ballast/Driver: -

**Summary**

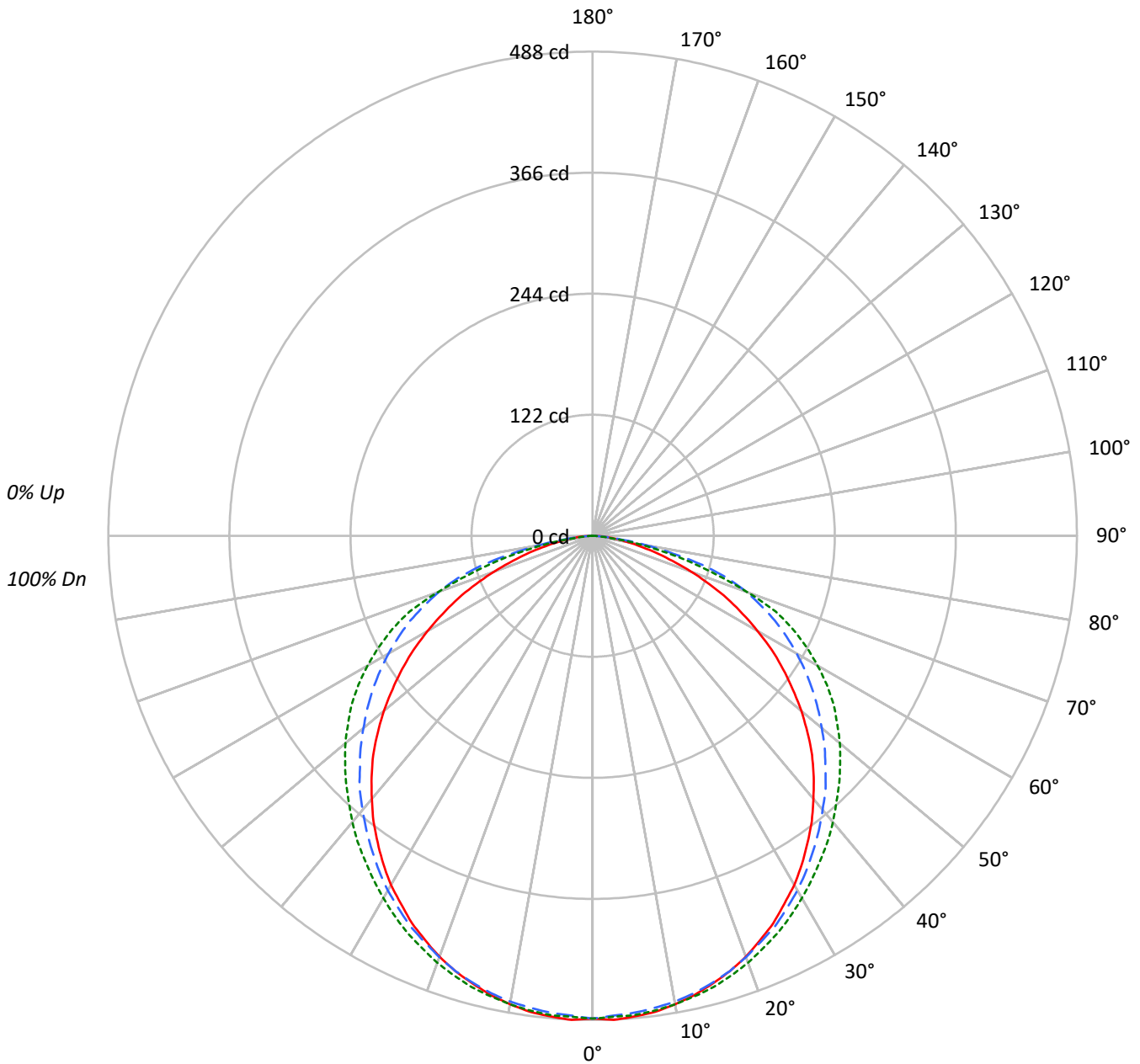
Lumens per Lamp: N/A  
Luminaire Lumens: 1433.0 lumens  
Efficiency: N/A  
Efficacy: 89.6 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39  
Luminous Opening: Rectangular (W 0.96' x L: 3.98' x H: 0')  
CIE Type: Direct

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°	1374	1374	1374
5°	1378	1367	1374
10°	1374	1367	1374
15°	1366	1363	1376
20°	1356	1357	1375
25°	1342	1353	1375
30°	1325	1345	1374
35°	1301	1335	1377
40°	1275	1328	1388
45°	1248	1324	1403
50°	1205	1324	1428
55°	1153	1331	1459
60°	1083	1340	1478
65°	999	1355	1487
70°	871	1357	1368
75°	718	1264	1106
80°	564	909	740
85°	440	350	175



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	46.1	3.2
10°-20°	132.2	9.2
20°-30°	200.8	14.0
30°-40°	243.3	17.0
40°-50°	256.3	17.9
50°-60°	239.3	16.7
60°-70°	191.2	13.3
70°-80°	105.2	7.3
80°-90°	18.6	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°	379.0	26.5
0°-40°	622.3	43.4
0°-60°	1117.9	78.0
0°-90°	1433.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1433.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	487	487	487	487	487	
5°	486	485	483	486	485	46
15°	467	467	466	471	471	132
25°	431	432	434	441	442	198
35°	378	381	388	397	400	236
45°	313	319	332	347	352	241
55°	234	246	270	289	296	209
65°	150	168	203	219	223	147
75°	66	94	116	104	101	71
85°	14	17	11	7	5	16
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	486.6	486.6	486.6	486.6	486.6
2.5°	488.4	487.1	484.0	486.6	485.3
5°	486.3	484.9	482.6	485.8	484.9
7.5°	484.0	482.1	479.9	483.5	482.6
10°	479.4	478.0	476.8	479.9	479.4
12.5°	474.1	473.6	472.2	475.9	475.4
15°	467.3	467.3	466.4	470.9	470.9
17.5°	460.0	459.6	460.0	465.0	464.6
20°	451.5	451.5	451.9	457.9	457.9
22.5°	441.1	441.6	442.9	450.1	449.6
25°	430.8	431.6	434.4	440.6	441.6
27.5°	418.2	420.5	423.5	431.2	432.1
30°	406.4	407.8	412.7	420.0	421.7
32.5°	392.5	395.1	400.6	408.7	411.0
35°	377.6	381.2	387.5	397.4	399.7
37.5°	362.8	365.9	374.5	384.8	388.9
40°	346.1	351.5	360.5	372.2	376.7
42.5°	329.8	335.3	347.5	359.6	363.7
45°	312.7	318.6	331.6	346.6	351.5
47.5°	293.8	300.6	317.3	333.0	338.3
50°	274.4	282.9	301.4	319.1	325.3
52.5°	254.2	264.9	286.1	304.6	310.5
55°	234.3	246.0	270.4	289.3	296.5
57.5°	214.0	226.7	254.2	275.7	279.8
60°	191.9	207.3	237.4	256.4	261.8
62.5°	170.4	187.9	220.3	238.3	242.9
65°	149.6	168.5	202.8	219.4	222.6
67.5°	127.0	149.6	183.4	198.8	199.6
70°	105.5	131.6	164.4	171.6	165.8
72.5°	84.3	112.2	142.4	136.5	131.6
75°	65.8	94.2	115.9	104.1	101.4
77.5°	48.7	77.1	82.9	76.6	71.6
80°	34.7	60.8	55.9	47.8	45.5
82.5°	23.8	38.3	30.7	23.8	20.8
85°	13.6	17.1	10.8	6.7	5.4
87.5°	5.8	4.1	2.3	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)