

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: P732446

Luminaire Tested: **14FCZ2-20-HRP-B2750-W2D-CP187-2700K**

Issue Date: 1/5/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P732446  
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-CP187-2700K  
Description: 1X4 2000 LUMEN SEALED CRUZE TROFFER WITH BIO UP LEDS AT 2700K CCT  
AND HRP LENS, WITH, CP187 BOTTOM LENS  
  
Light Source: -  
Ballast/Driver: -

**Summary**

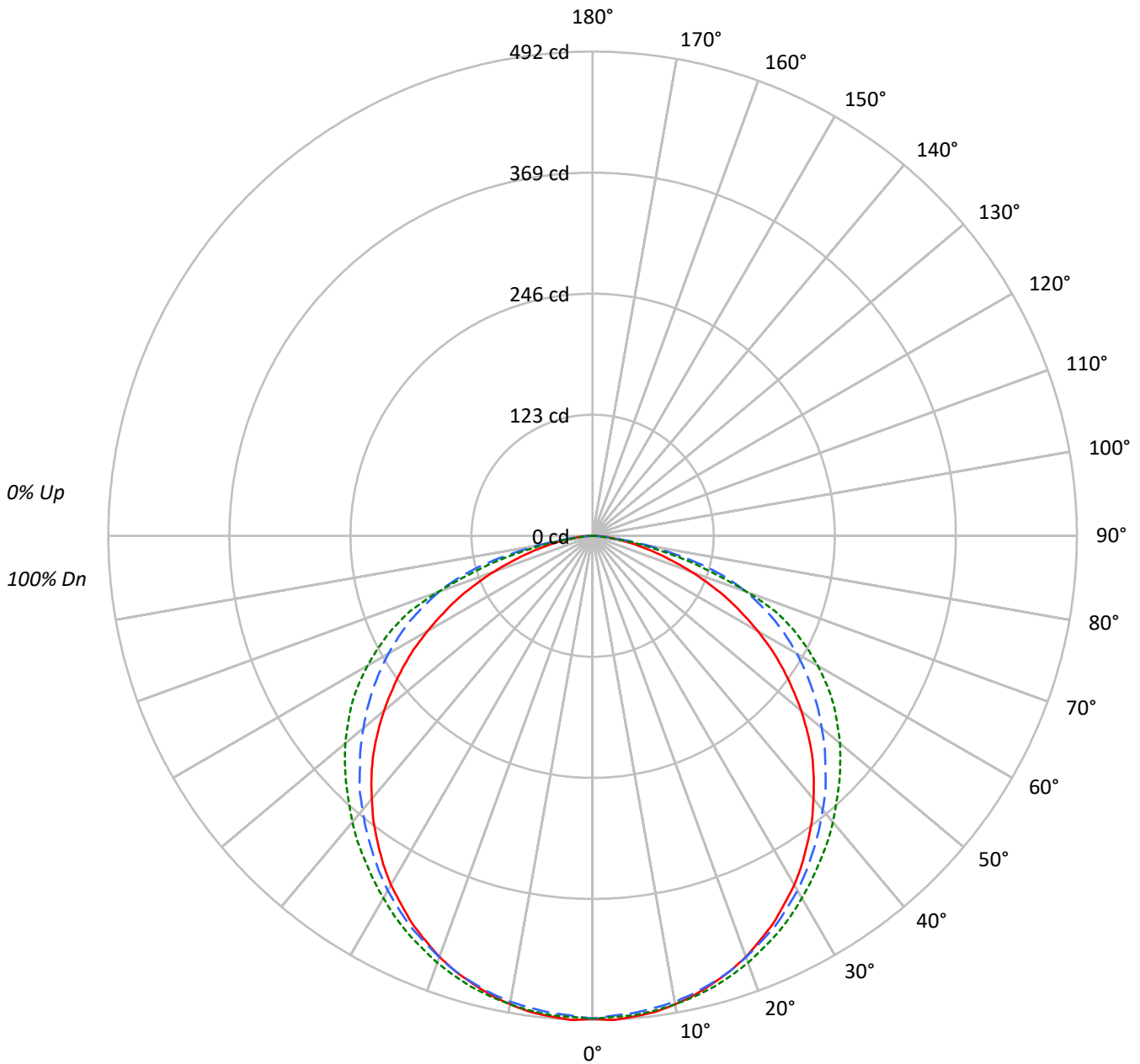
Lumens per Lamp: N/A  
Luminaire Lumens: 1445.0 lumens  
Efficiency: N/A  
Efficacy: 90.3 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39  
Luminous Opening: Rectangular (W 0.96' x L: 3.98' x H: 0')  
CIE Type: Direct

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°	1385	1385	1385
5°	1389	1379	1385
10°	1386	1378	1386
15°	1377	1374	1387
20°	1368	1369	1387
25°	1353	1364	1387
30°	1336	1357	1386
35°	1312	1346	1389
40°	1286	1339	1399
45°	1259	1335	1415
50°	1215	1335	1441
55°	1163	1342	1471
60°	1092	1351	1490
65°	1008	1366	1499
70°	878	1368	1380
75°	724	1274	1115
80°	569	915	746
85°	444	353	175



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	46.5	3.2
10°-20°	133.3	9.2
20°-30°	202.4	14.0
30°-40°	245.3	17.0
40°-50°	258.5	17.9
50°-60°	241.3	16.7
60°-70°	192.8	13.3
70°-80°	106.1	7.3
80°-90°	18.7	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°	382.2	26.5
0°-40°	627.5	43.4
0°-60°	1127.3	78.0
0°-90°	1445.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1445.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	491	491	491	491	491	
5°	490	489	487	490	489	47
15°	471	471	470	475	475	133
25°	434	435	438	444	445	200
35°	381	384	391	401	403	238
45°	315	321	334	350	354	243
55°	236	248	273	292	299	211
65°	151	170	204	221	224	149
75°	66	95	117	105	102	71
85°	14	17	11	7	5	17
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	490.7	490.7	490.7	490.7	490.7
2.5°	492.5	491.1	488.0	490.7	489.4
5°	490.3	488.9	486.6	489.9	488.9
7.5°	488.0	486.2	483.9	487.6	486.6
10°	483.4	482.0	480.8	483.9	483.4
12.5°	478.0	477.6	476.2	479.9	479.4
15°	471.2	471.2	470.3	474.8	474.8
17.5°	463.9	463.4	463.9	468.9	468.5
20°	455.3	455.3	455.7	461.7	461.7
22.5°	444.8	445.2	446.6	453.9	453.4
25°	434.4	435.2	438.0	444.3	445.2
27.5°	421.7	424.0	427.1	434.8	435.7
30°	409.8	411.2	416.2	423.5	425.2
32.5°	395.8	398.4	404.0	412.1	414.4
35°	380.7	384.4	390.7	400.7	403.0
37.5°	365.8	369.0	377.6	388.0	392.1
40°	349.0	354.4	363.5	375.3	379.8
42.5°	332.6	338.1	350.4	362.6	366.7
45°	315.3	321.3	334.4	349.5	354.4
47.5°	296.2	303.1	319.9	335.8	341.2
50°	276.7	285.3	303.9	321.7	328.1
52.5°	256.3	267.1	288.5	307.1	313.1
55°	236.3	248.0	272.6	291.7	299.0
57.5°	215.8	228.6	256.3	278.1	282.2
60°	193.5	209.1	239.4	258.5	264.0
62.5°	171.8	189.5	222.2	240.3	244.9
65°	150.9	170.0	204.5	221.2	224.5
67.5°	128.1	150.9	184.9	200.4	201.2
70°	106.4	132.7	165.8	173.1	167.2
72.5°	85.0	113.2	143.6	137.6	132.7
75°	66.4	95.0	116.8	105.0	102.2
77.5°	49.1	77.7	83.6	77.3	72.2
80°	35.0	61.3	56.3	48.2	45.9
82.5°	24.0	38.6	30.9	24.0	20.9
85°	13.7	17.2	10.9	6.8	5.4
87.5°	5.9	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)