

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: METALUX

Report Number: P843056

Luminaire Tested: **24CZ2-40HE-HRP-UNV-B40**

Issue Date: 1/5/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P843056  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P295011)  
Test Lab: INNOVATIONS CENTER(G3)  
Issue Date: 1/5/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-40HE-HRP-UNV-B40  
Description: 2X4 4000 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 4000K CCT AND HRP LENS

Light Source: -  
Ballast/Driver: -

**Summary**

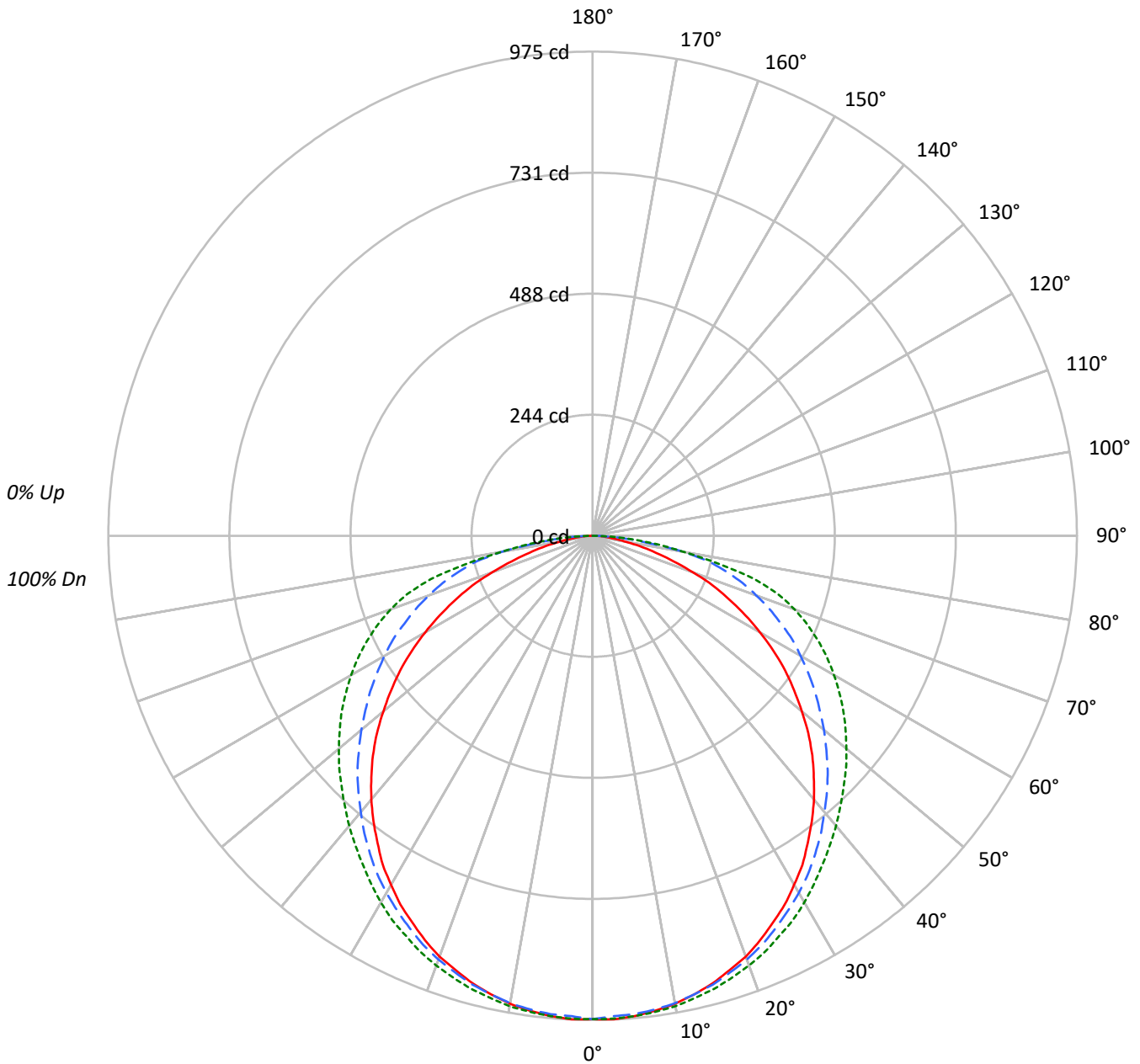
Lumens per Lamp: N/A  
Luminaire Lumens: 3000.0 lumens  
Efficiency: N/A  
Efficacy: 103.4 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.3 / 1.4  
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')  
CIE Type: Direct

Input Watts (W): 29  
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	108	103	98	94	105	101	96	93	96	93	90	92	90	87	89	86	84	82																			
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67																			
3	89	78	69	62	86	76	68	62	73	66	61	70	64	59	68	63	58	56																			
4	81	68	59	52	79	67	59	52	65	57	51	62	56	50	60	54	50	48																			
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41																			
6	69	55	46	39	67	54	45	39	52	44	38	50	43	38	49	42	38	36																			
7	63	50	41	34	62	49	40	34	47	39	34	46	39	34	44	38	33	31																			
8	59	45	36	30	57	44	36	30	43	36	30	42	35	30	41	34	30	28																			
9	55	41	33	27	54	41	33	27	40	32	27	39	32	27	38	31	27	25																			
10	52	38	30	25	50	38	30	25	37	30	25	36	29	24	35	29	24	23																			

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

	0°	45°	90°
0°	1374	1374	1374
5°	1376	1370	1376
10°	1372	1370	1379
15°	1364	1367	1380
20°	1354	1364	1383
25°	1338	1357	1385
30°	1322	1353	1390
35°	1301	1346	1391
40°	1277	1338	1404
45°	1248	1336	1426
50°	1208	1335	1464
55°	1165	1344	1517
60°	1099	1365	1584
65°	1015	1397	1673
70°	886	1446	1783
75°	719	1520	1842
80°	530	1491	1491
85°	408	1100	1240



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	92.2	3.1
10°-20°	264.8	8.8
20°-30°	403.1	13.4
30°-40°	489.5	16.3
40°-50°	517.1	17.2
50°-60°	487.9	16.3
60°-70°	405.7	13.5
70°-80°	266.9	8.9
80°-90°	72.8	2.4
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°	760.1	25.3
0°-40°	1249.5	41.7
0°-60°	2254.6	75.2
0°-90°	3000.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3000.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	973	973	973	973	973	
5°	971	971	967	971	971	92
15°	933	934	936	944	944	263
25°	859	864	872	887	889	396
35°	755	764	781	801	808	473
45°	626	638	669	702	715	482
55°	473	494	546	598	617	422
65°	304	339	418	480	501	300
75°	132	192	279	330	338	142
85°	25	55	68	75	77	31
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	973.4	973.4	973.4	973.4	973.4
2.5°	974.6	973.4	968.3	973.4	973.4
5°	970.9	970.9	967.0	970.9	970.9
7.5°	964.5	964.5	962.1	967.0	967.0
10°	957.1	957.1	955.7	962.1	962.1
12.5°	945.7	947.0	945.7	953.2	953.2
15°	933.2	934.4	935.6	944.5	944.5
17.5°	916.9	919.3	921.8	931.9	933.2
20°	901.8	903.0	908.0	919.3	920.6
22.5°	881.6	885.5	891.7	903.0	906.8
25°	859.1	864.0	871.7	886.7	889.2
27.5°	837.6	841.5	851.5	867.8	872.9
30°	811.4	817.6	830.2	846.5	852.7
32.5°	786.2	792.4	807.5	825.2	830.2
35°	754.9	763.6	781.3	801.3	807.5
37.5°	724.7	733.4	754.9	777.4	785.0
40°	693.2	703.3	726.0	752.4	762.3
42.5°	659.3	673.2	698.3	727.2	738.5
45°	625.5	638.1	669.4	702.0	714.6
47.5°	589.0	604.0	638.1	676.9	692.0
50°	550.1	568.9	607.9	650.6	666.9
52.5°	511.2	532.4	576.4	624.2	641.8
55°	473.4	493.6	546.3	597.8	616.6
57.5°	432.1	457.1	514.9	570.2	589.0
60°	389.4	417.0	483.5	541.3	561.3
62.5°	346.7	378.0	453.4	511.2	532.4
65°	304.0	339.1	418.3	479.8	501.1
67.5°	262.5	301.5	385.5	447.2	468.4
70°	214.8	263.7	350.4	410.7	432.1
72.5°	170.9	227.4	316.5	373.1	391.9
75°	131.9	192.1	278.8	330.4	337.8
77.5°	96.8	157.0	239.8	257.5	258.8
80°	65.2	125.7	183.4	180.8	183.4
82.5°	42.7	94.1	115.6	129.4	130.6
85°	25.2	55.3	67.9	75.3	76.6
87.5°	12.6	18.8	23.9	25.2	27.6
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)