

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: P880852

Luminaire Tested: **24CZ2-40VHE-HRP-B2750-W2D-2700K**

Issue Date: 10/2/2024

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.



**Test Information**

Test Method: LM-79-08  
Report Number: P880852  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P474369)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 10/2/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-40VHE-HRP-B2750-W2D-2700K  
Description: 2X4 4000 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 2700K CCT AND HRP LENS  
  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

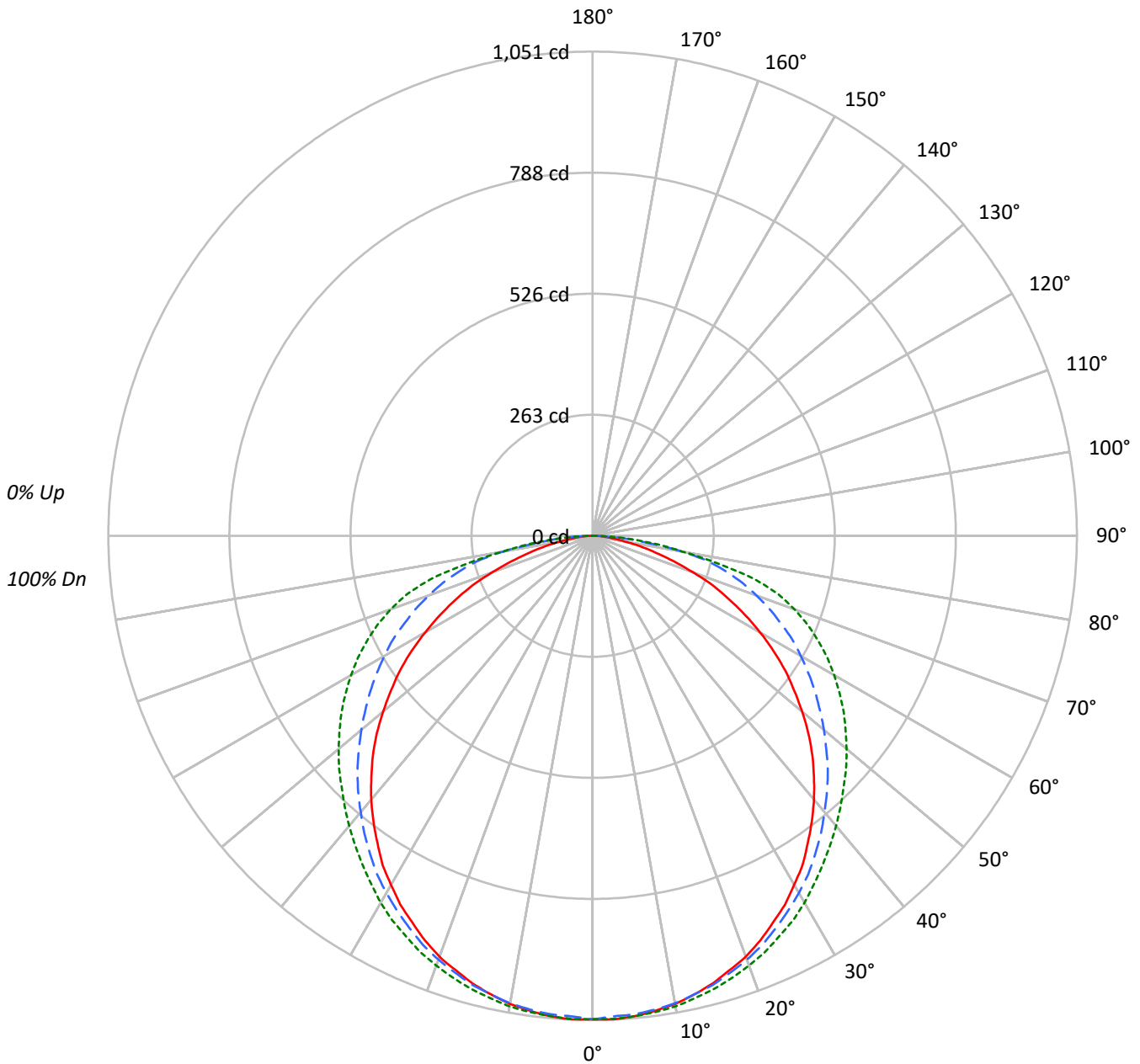
Lumens per Lamp: N/A  
Luminaire Lumens: 3235.0 lumens  
Efficiency: N/A  
Efficacy: 107.8 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.3 / 1.4  
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')  
CIE Type: Direct

Input Watts (W): 30  
Input Voltage (V): NR  
Input Current (Ain): 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°	1481	1481	1481
5°	1483	1477	1483
10°	1479	1477	1487
15°	1470	1474	1488
20°	1460	1471	1491
25°	1442	1464	1493
30°	1426	1459	1499
35°	1402	1451	1500
40°	1377	1442	1514
45°	1346	1441	1538
50°	1302	1439	1579
55°	1256	1450	1636
60°	1185	1472	1709
65°	1094	1506	1805
70°	956	1559	1923
75°	775	1639	1987
80°	573	1608	1608
85°	439	1184	1338



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	99.4	3.1
10°-20°	285.5	8.8
20°-30°	434.7	13.4
30°-40°	527.8	16.3
40°-50°	557.6	17.2
50°-60°	526.2	16.3
60°-70°	437.5	13.5
70°-80°	287.8	8.9
80°-90°	78.5	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°	819.6	25.3
0°-40°	1347.4	41.7
0°-60°	2431.2	75.2
0°-90°	3235.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3235.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1050	1050	1050	1050	1050	
5°	1047	1047	1043	1047	1047	99
15°	1006	1008	1009	1018	1018	284
25°	926	932	940	956	959	427
35°	814	824	842	864	871	510
45°	674	688	722	757	771	519
55°	511	532	589	645	665	455
65°	328	366	451	517	540	324
75°	142	207	301	356	364	153
85°	27	60	73	81	83	33
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1049.6	1049.6	1049.6	1049.6	1049.6
2.5°	1050.9	1049.6	1044.1	1049.6	1049.6
5°	1046.9	1046.9	1042.8	1046.9	1046.9
7.5°	1040.1	1040.1	1037.3	1042.8	1042.8
10°	1032.0	1032.0	1030.6	1037.3	1037.3
12.5°	1019.8	1021.0	1019.8	1027.8	1027.8
15°	1006.2	1007.5	1009.0	1018.5	1018.5
17.5°	988.7	991.4	994.1	1004.9	1006.2
20°	972.4	973.6	979.1	991.4	992.7
22.5°	950.8	954.8	961.6	973.6	977.9
25°	926.3	931.7	939.9	956.2	958.8
27.5°	903.3	907.4	918.2	935.9	941.3
30°	874.9	881.7	895.2	912.8	919.6
32.5°	847.8	854.6	870.9	889.7	895.2
35°	814.0	823.5	842.3	864.1	870.9
37.5°	781.4	790.9	814.0	838.3	846.6
40°	747.5	758.3	782.9	811.2	822.0
42.5°	710.9	725.9	753.0	784.1	796.4
45°	674.4	688.0	721.8	757.0	770.6
47.5°	635.3	651.5	688.0	730.0	746.3
50°	593.2	613.5	655.5	701.5	719.2
52.5°	551.3	574.3	621.6	673.0	692.1
55°	510.6	532.2	589.1	644.7	665.0
57.5°	465.9	493.1	555.3	614.8	635.3
60°	419.8	449.7	521.4	583.6	605.4
62.5°	373.8	407.7	488.8	551.3	574.3
65°	327.7	365.7	451.0	517.4	540.5
67.5°	283.0	325.0	415.8	482.1	505.1
70°	231.6	284.5	377.8	442.9	465.9
72.5°	184.2	245.2	341.2	402.3	422.6
75°	142.2	207.3	300.6	356.1	364.3
77.5°	104.3	169.3	258.7	277.5	279.0
80°	70.5	135.4	197.8	195.0	197.8
82.5°	46.1	101.6	124.5	139.5	140.8
85°	27.1	59.7	73.1	81.3	82.6
87.5°	13.5	20.3	25.8	27.1	29.8
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)