

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: P880878

Luminaire Tested: **24CZ2-45VHE-HRP-B2750-W2D-3000K**

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: P880878  
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: 24CZ2-45VHE-HRP-B2750-W2D-3000K  
Description: 2X4 4500 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 3000K CCT AND HRP LENS  
  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

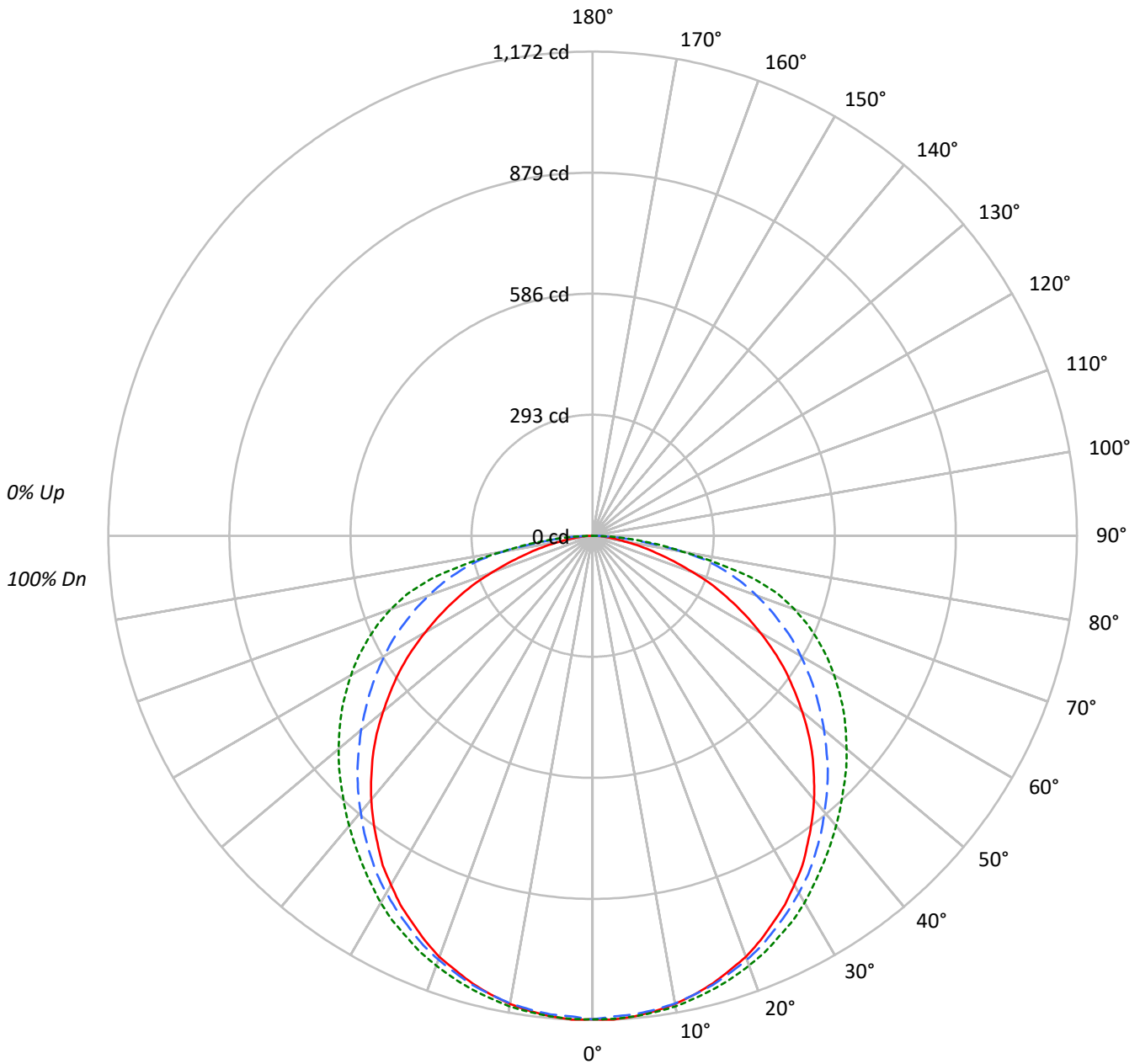
Lumens per Lamp: N/A  
Luminaire Lumens: 3608.0 lumens  
Efficiency: N/A  
Efficacy: 106.1 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.3 / 1.4  
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')  
CIE Type: Direct

Input Watts (W): 34  
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°	1652	1652	1652
5°	1654	1648	1654
10°	1650	1647	1658
15°	1640	1644	1660
20°	1629	1640	1663
25°	1609	1632	1665
30°	1590	1627	1671
35°	1564	1619	1673
40°	1536	1609	1689
45°	1501	1607	1716
50°	1453	1605	1761
55°	1401	1617	1825
60°	1322	1641	1906
65°	1221	1680	2013
70°	1066	1738	2144
75°	865	1828	2216
80°	639	1793	1793
85°	489	1321	1493



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	110.9	3.1
10°-20°	318.4	8.8
20°-30°	484.8	13.4
30°-40°	588.6	16.3
40°-50°	621.9	17.2
50°-60°	586.8	16.3
60°-70°	487.9	13.5
70°-80°	321.0	8.9
80°-90°	87.5	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°	914.1	25.3
0°-40°	1502.8	41.7
0°-60°	2711.5	75.2
0°-90°	3608.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3608.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1171	1171	1171	1171	1171	
5°	1168	1168	1163	1168	1168	111
15°	1122	1124	1125	1136	1136	317
25°	1033	1039	1048	1066	1069	477
35°	908	918	939	964	971	568
45°	752	767	805	844	860	579
55°	570	594	657	719	742	507
65°	366	408	503	577	603	361
75°	159	231	335	397	406	171
85°	30	66	82	91	92	37
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1170.6	1170.6	1170.6	1170.6	1170.6
2.5°	1172.1	1170.6	1164.5	1170.6	1170.6
5°	1167.6	1167.6	1163.0	1167.6	1167.6
7.5°	1160.0	1160.0	1156.9	1163.0	1163.0
10°	1151.0	1151.0	1149.5	1156.9	1156.9
12.5°	1137.4	1138.8	1137.4	1146.3	1146.3
15°	1122.2	1123.7	1125.4	1135.9	1135.9
17.5°	1102.7	1105.7	1108.7	1120.7	1122.2
20°	1084.6	1085.9	1092.0	1105.7	1107.2
22.5°	1060.4	1064.9	1072.5	1085.9	1090.7
25°	1033.1	1039.2	1048.2	1066.4	1069.4
27.5°	1007.4	1012.1	1024.1	1043.8	1049.9
30°	975.7	983.3	998.4	1018.0	1025.6
32.5°	945.5	953.1	971.3	992.3	998.4
35°	907.8	918.4	939.4	963.7	971.3
37.5°	871.5	882.1	907.8	934.9	944.2
40°	833.7	845.8	873.2	904.7	916.8
42.5°	792.9	809.6	839.8	874.5	888.2
45°	752.1	767.3	805.0	844.3	859.5
47.5°	708.5	726.7	767.3	814.2	832.4
50°	661.6	684.2	731.1	782.3	802.1
52.5°	614.9	640.5	693.3	750.6	771.9
55°	569.5	593.6	657.0	719.1	741.7
57.5°	519.6	549.9	619.3	685.7	708.5
60°	468.2	501.6	581.5	650.9	675.2
62.5°	416.9	454.7	545.2	614.9	640.5
65°	365.5	407.9	503.1	577.0	602.8
67.5°	315.6	362.5	463.7	537.7	563.3
70°	258.3	317.3	421.3	494.0	519.6
72.5°	205.4	273.5	380.5	448.7	471.3
75°	158.6	231.2	335.3	397.2	406.3
77.5°	116.3	188.8	288.5	309.5	311.2
80°	78.6	151.0	220.6	217.5	220.6
82.5°	51.4	113.3	138.9	155.6	157.1
85°	30.2	66.5	81.6	90.7	92.2
87.5°	15.0	22.6	28.7	30.2	33.2
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)