

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: P880904

Luminaire Tested: **24CZ2-50VHE-HRP-B2750-W2D-3500K**

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: P880904  
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: 24CZ2-50VHE-HRP-B2750-W2D-3500K  
Description: 2X4 5000 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 3500K CCT AND HRP LENS  
  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

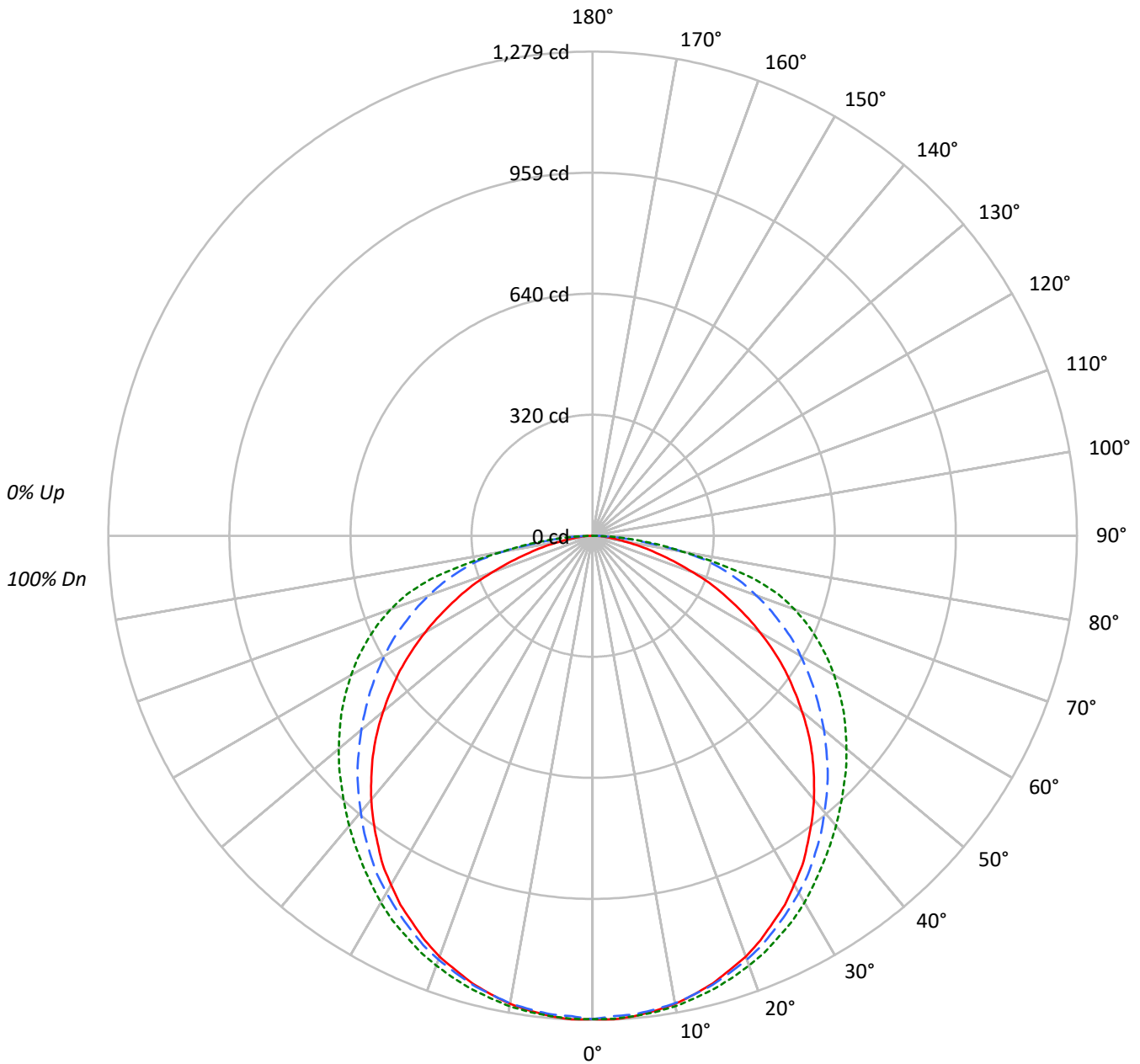
Lumens per Lamp: N/A  
Luminaire Lumens: 3936.0 lumens  
Efficiency: N/A  
Efficacy: 103.6 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.3 / 1.4  
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')  
CIE Type: Direct

Input Watts (W): 38  
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

TEST NUMBER: P880904

CATALOG NUMBER: 24CZ2-50VHE-HRP-B2750-W2D-3500K

### 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°	1802	1802	1802
5°	1805	1798	1805
10°	1799	1797	1809
15°	1789	1794	1811
20°	1777	1789	1814
25°	1755	1781	1817
30°	1735	1775	1823
35°	1706	1766	1826
40°	1676	1755	1843
45°	1638	1753	1871
50°	1585	1751	1921
55°	1529	1764	1991
60°	1442	1791	2079
65°	1331	1833	2196
70°	1163	1897	2339
75°	943	1994	2417
80°	697	1956	1956
85°	534	1441	1627



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	121.0	3.1
10°-20°	347.4	8.8
20°-30°	528.9	13.4
30°-40°	642.2	16.3
40°-50°	678.4	17.2
50°-60°	640.2	16.3
60°-70°	532.3	13.5
70°-80°	350.2	8.9
80°-90°	95.5	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°	997.2	25.3
0°-40°	1639.4	41.7
0°-60°	2958.0	75.2
0°-90°	3936.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3936.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1277	1277	1277	1277	1277	
5°	1274	1274	1269	1274	1274	121
15°	1224	1226	1228	1239	1239	345
25°	1127	1134	1144	1163	1167	520
35°	990	1002	1025	1051	1060	620
45°	820	837	878	921	938	632
55°	621	648	717	784	809	553
65°	399	445	549	630	658	394
75°	173	252	366	433	443	186
85°	33	73	89	99	100	40
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1277.0	1277.0	1277.0	1277.0	1277.0
2.5°	1278.7	1277.0	1270.4	1277.0	1277.0
5°	1273.8	1273.8	1268.8	1273.8	1273.8
7.5°	1265.5	1265.5	1262.1	1268.8	1268.8
10°	1255.6	1255.6	1254.0	1262.1	1262.1
12.5°	1240.8	1242.3	1240.8	1250.6	1250.6
15°	1224.3	1225.9	1227.7	1239.2	1239.2
17.5°	1203.0	1206.2	1209.5	1222.6	1224.3
20°	1183.2	1184.6	1191.3	1206.2	1207.8
22.5°	1156.9	1161.7	1170.0	1184.6	1189.8
25°	1127.0	1133.6	1143.5	1163.3	1166.6
27.5°	1099.0	1104.1	1117.2	1138.7	1145.3
30°	1064.4	1072.7	1089.1	1110.6	1118.8
32.5°	1031.5	1039.8	1059.6	1082.5	1089.1
35°	990.4	1001.9	1024.8	1051.3	1059.6
37.5°	950.8	962.3	990.4	1019.9	1030.0
40°	909.5	922.7	952.5	987.0	1000.1
42.5°	865.0	883.2	916.2	954.0	968.9
45°	820.5	837.1	878.2	921.0	937.6
47.5°	772.9	792.7	837.1	888.2	908.0
50°	721.8	746.4	797.6	853.5	875.1
52.5°	670.8	698.7	756.3	818.9	842.1
55°	621.2	647.5	716.7	784.4	809.1
57.5°	566.8	599.9	675.6	748.1	772.9
60°	510.8	547.2	634.4	710.1	736.5
62.5°	454.7	496.0	594.7	670.8	698.7
65°	398.7	445.0	548.8	629.5	657.6
67.5°	344.3	395.5	505.9	586.6	614.6
70°	281.8	346.1	459.6	538.9	566.8
72.5°	224.1	298.3	415.1	489.5	514.2
75°	173.0	252.2	365.7	433.3	443.2
77.5°	126.8	205.9	314.8	337.7	339.4
80°	85.8	164.7	240.7	237.3	240.7
82.5°	56.0	123.6	151.5	169.7	171.3
85°	33.0	72.6	89.0	98.9	100.5
87.5°	16.4	24.7	31.3	33.0	36.2
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)