

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: P843102

Luminaire Tested: **24CZ2-50-HRP-UNV-B50**

Issue Date: 1/5/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P843102  
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: 24CZ2-50-HRP-UNV-B50  
Description: 2X4 5000 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 5000K CCT AND HRP LENS

Light Source: -  
Ballast/Driver: -

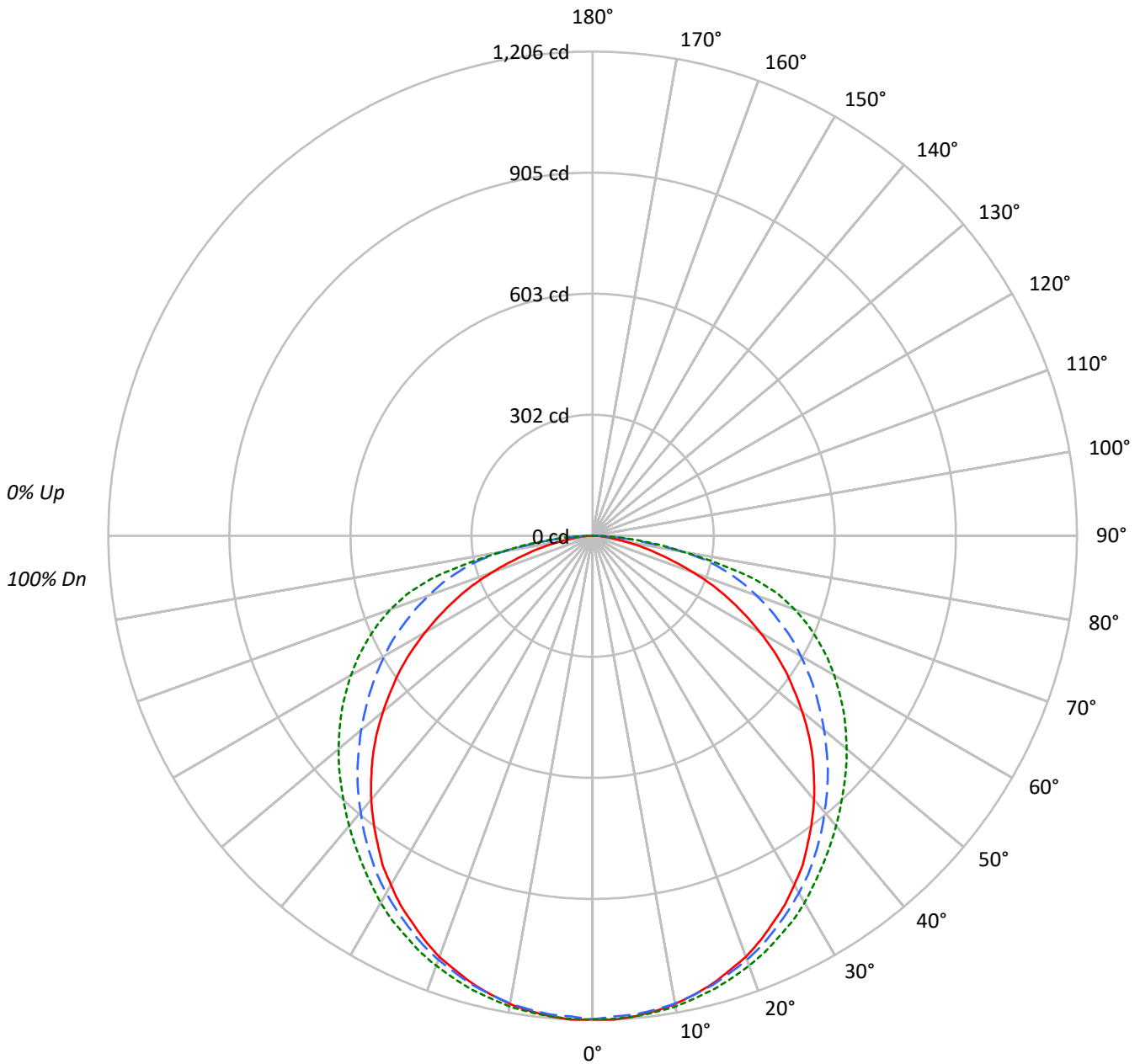
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3713.0 lumens  
Efficiency: N/A  
Efficacy: 92.8 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): 40  
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

TEST NUMBER: P843102  
CATALOG NUMBER: 24CZ2-50-HRP-UNV-B50

### Luminous Intensity Polar Plot





TEST NUMBER: P843102

CATALOG NUMBER: 24CZ2-50-HRP-UNV-B50

**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°	1700	1700	1700
5°	1702	1696	1702
10°	1698	1695	1706
15°	1687	1692	1708
20°	1676	1688	1711
25°	1656	1680	1714
30°	1637	1674	1720
35°	1610	1666	1722
40°	1581	1655	1738
45°	1545	1654	1765
50°	1495	1652	1813
55°	1442	1664	1878
60°	1360	1689	1961
65°	1256	1729	2071
70°	1097	1790	2207
75°	890	1882	2280
80°	656	1845	1845
85°	504	1360	1535



TEST NUMBER: P843102

CATALOG NUMBER: 24CZ2-50-HRP-UNV-B50

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	114.1	3.1
10°-20°	327.7	8.8
20°-30°	498.9	13.4
30°-40°	605.8	16.3
40°-50°	640.0	17.2
50°-60°	603.9	16.3
60°-70°	502.1	13.5
70°-80°	330.4	8.9
80°-90°	90.1	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°	940.7	25.3
0°-40°	1546.5	41.7
0°-60°	2790.4	75.2
0°-90°	3713.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3713.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1205	1205	1205	1205	1205	
5°	1202	1202	1197	1202	1202	114
15°	1155	1156	1158	1169	1169	326
25°	1063	1069	1079	1098	1100	490
35°	934	945	967	992	999	585
45°	774	790	828	869	884	596
55°	586	611	676	740	763	522
65°	376	420	518	594	620	372
75°	163	238	345	409	418	176
85°	31	68	84	93	95	38
90°	0	0	0	0	0	



TEST NUMBER: P843102

CATALOG NUMBER: 24CZ2-50-HRP-UNV-B50

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1204.7	1204.7	1204.7	1204.7	1204.7
2.5°	1206.3	1204.7	1198.4	1204.7	1204.7
5°	1201.7	1201.7	1196.9	1201.7	1201.7
7.5°	1193.8	1193.8	1190.7	1196.9	1196.9
10°	1184.5	1184.5	1182.8	1190.7	1190.7
12.5°	1170.5	1172.1	1170.5	1179.7	1179.7
15°	1154.9	1156.5	1158.0	1169.0	1169.0
17.5°	1134.8	1137.8	1140.9	1153.4	1154.9
20°	1116.1	1117.7	1123.8	1137.8	1139.4
22.5°	1091.1	1095.9	1103.6	1117.7	1122.3
25°	1063.2	1069.4	1078.8	1097.5	1100.5
27.5°	1036.7	1041.5	1053.8	1074.0	1080.4
30°	1004.2	1011.9	1027.5	1047.7	1055.4
32.5°	973.1	980.8	999.4	1021.3	1027.5
35°	934.3	945.0	966.9	991.7	999.4
37.5°	897.0	907.7	934.3	962.1	971.6
40°	857.9	870.4	898.5	931.2	943.5
42.5°	816.0	833.1	864.3	900.0	914.1
45°	774.1	789.7	828.5	868.9	884.5
47.5°	729.0	747.6	789.7	837.8	856.4
50°	680.9	704.2	752.4	805.3	825.5
52.5°	632.6	659.0	713.4	772.6	794.3
55°	585.9	610.9	676.1	739.9	763.2
57.5°	534.8	565.7	637.3	705.7	729.0
60°	481.9	516.1	598.4	669.9	694.7
62.5°	429.1	467.9	561.1	632.6	659.0
65°	376.2	419.6	517.7	593.8	620.1
67.5°	324.9	373.1	477.1	553.4	579.8
70°	265.9	326.4	433.7	508.3	534.8
72.5°	211.5	281.4	391.8	461.7	485.0
75°	163.2	237.8	345.1	408.9	418.1
77.5°	119.8	194.3	296.8	318.7	320.3
80°	80.7	155.5	227.0	223.8	227.0
82.5°	52.9	116.5	143.0	160.1	161.7
85°	31.1	68.4	84.0	93.2	94.8
87.5°	15.6	23.3	29.6	31.1	34.2
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)