

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: P843072

Luminaire Tested: **24CZ2-45-HRP-UNV-B50**

Issue Date: 1/5/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P843072  
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: 24CZ2-45-HRP-UNV-B50  
Description: 2X4 4500 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 5000K CCT AND HRP LENS

Light Source: -  
Ballast/Driver: -

**Summary**

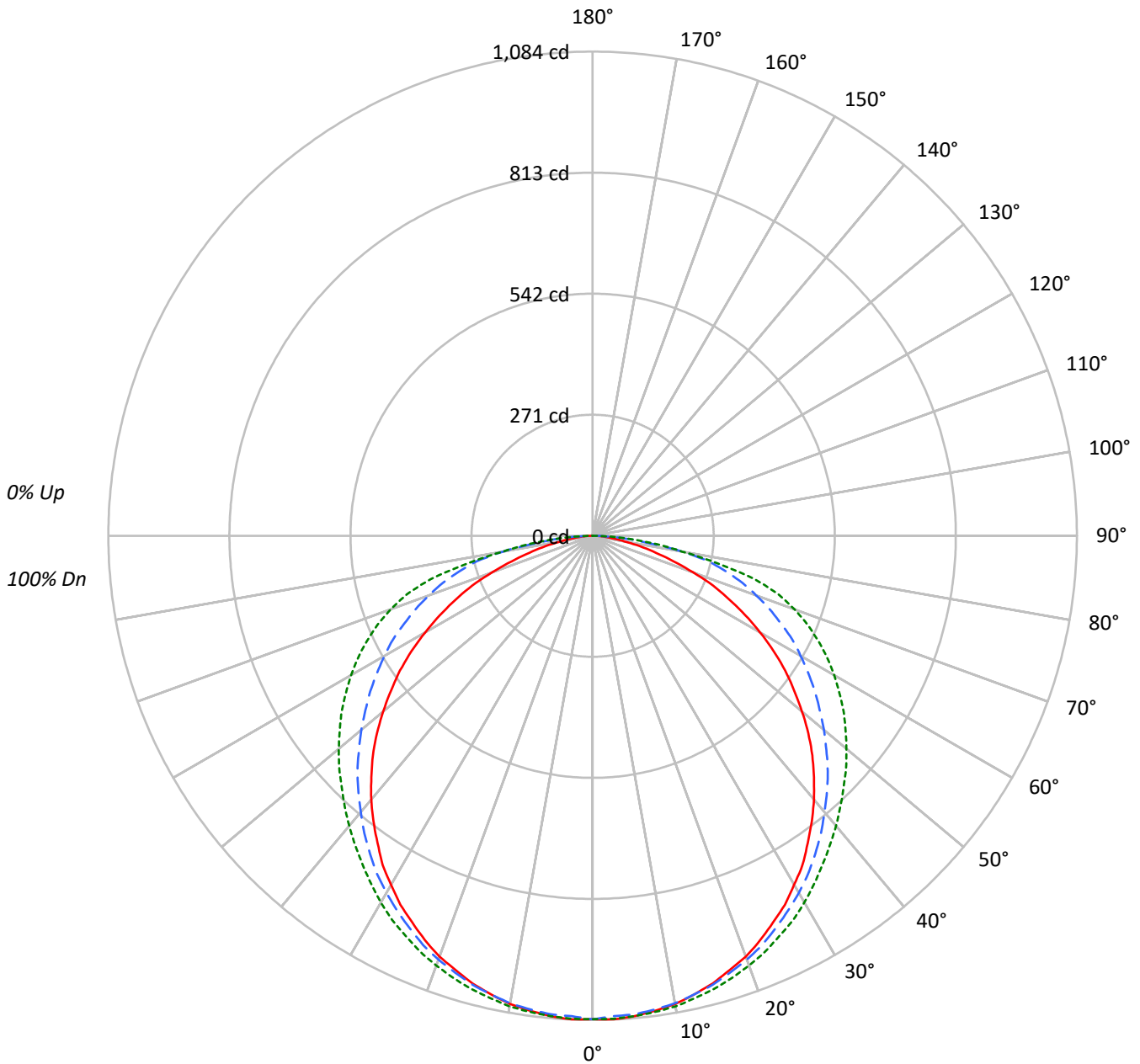
Lumens per Lamp: N/A  
Luminaire Lumens: 3336.0 lumens  
Efficiency: N/A  
Efficacy: 92.7 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.3 / 1.4  
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')  
CIE Type: Direct

Input Watts (W): 36  
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: P843072

CATALOG NUMBER: 24CZ2-45-HRP-UNV-B50

### 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°	1528	1528	1528
5°	1530	1523	1530
10°	1525	1523	1533
15°	1516	1520	1535
20°	1506	1516	1538
25°	1488	1509	1540
30°	1470	1505	1545
35°	1446	1497	1547
40°	1420	1487	1562
45°	1388	1486	1586
50°	1343	1484	1628
55°	1295	1495	1687
60°	1222	1518	1762
65°	1129	1553	1861
70°	986	1608	1983
75°	799	1690	2049
80°	589	1658	1658
85°	453	1223	1378



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	102.5	3.1
10°-20°	294.4	8.8
20°-30°	448.2	13.4
30°-40°	544.3	16.3
40°-50°	575.0	17.2
50°-60°	542.6	16.3
60°-70°	451.1	13.5
70°-80°	296.8	8.9
80°-90°	80.9	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°	845.2	25.3
0°-40°	1389.5	41.7
0°-60°	2507.1	75.2
0°-90°	3336.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3336.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1082	1082	1082	1082	1082	
5°	1080	1080	1075	1080	1080	103
15°	1038	1039	1040	1050	1050	293
25°	955	961	969	986	989	441
35°	839	849	869	891	898	525
45°	696	710	744	781	795	536
55°	526	549	607	665	686	469
65°	338	377	465	534	557	334
75°	147	214	310	367	376	158
85°	28	62	76	84	85	34
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1082.4	1082.4	1082.4	1082.4	1082.4
2.5°	1083.8	1082.4	1076.7	1082.4	1082.4
5°	1079.6	1079.6	1075.3	1079.6	1079.6
7.5°	1072.6	1072.6	1069.8	1075.3	1075.3
10°	1064.3	1064.3	1062.7	1069.8	1069.8
12.5°	1051.7	1053.0	1051.7	1060.0	1060.0
15°	1037.7	1039.1	1040.4	1050.3	1050.3
17.5°	1019.5	1022.3	1025.1	1036.3	1037.7
20°	1002.8	1004.2	1009.7	1022.3	1023.7
22.5°	980.3	984.7	991.6	1004.2	1008.3
25°	955.3	960.8	969.3	986.0	988.8
27.5°	931.5	935.8	946.8	965.0	970.7
30°	902.3	909.2	923.2	941.3	948.2
32.5°	874.3	881.2	897.9	917.6	923.2
35°	839.4	849.1	868.8	891.0	897.9
37.5°	805.9	815.6	839.4	864.4	872.9
40°	770.8	782.1	807.3	836.6	847.7
42.5°	733.2	748.5	776.5	808.7	821.3
45°	695.5	709.5	744.4	780.7	794.7
47.5°	654.9	671.7	709.5	752.7	769.4
50°	611.8	632.7	676.0	723.5	741.6
52.5°	568.4	592.1	640.9	694.1	713.7
55°	526.4	548.9	607.4	664.8	685.7
57.5°	480.5	508.3	572.6	634.0	654.9
60°	433.0	463.7	537.7	601.9	624.2
62.5°	385.5	420.4	504.2	568.4	592.1
65°	338.0	377.0	465.1	533.5	557.2
67.5°	291.9	335.2	428.7	497.2	520.9
70°	238.9	293.3	389.6	456.7	480.5
72.5°	190.0	252.9	352.0	414.9	435.8
75°	146.6	213.6	310.0	367.4	375.7
77.5°	107.6	174.6	266.7	286.4	287.7
80°	72.5	139.7	204.0	201.0	204.0
82.5°	47.5	104.7	128.5	143.9	145.3
85°	28.0	61.5	75.5	83.8	85.1
87.5°	14.0	20.9	26.6	28.0	30.7
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)