

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: P880881

Luminaire Tested: **24CZ2-45VHE-HRP-B2750-W2D-5000K**

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: P880881  
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-5000K  
Description: 2X4 4500 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 5000K CCT AND HRP LENS  
  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

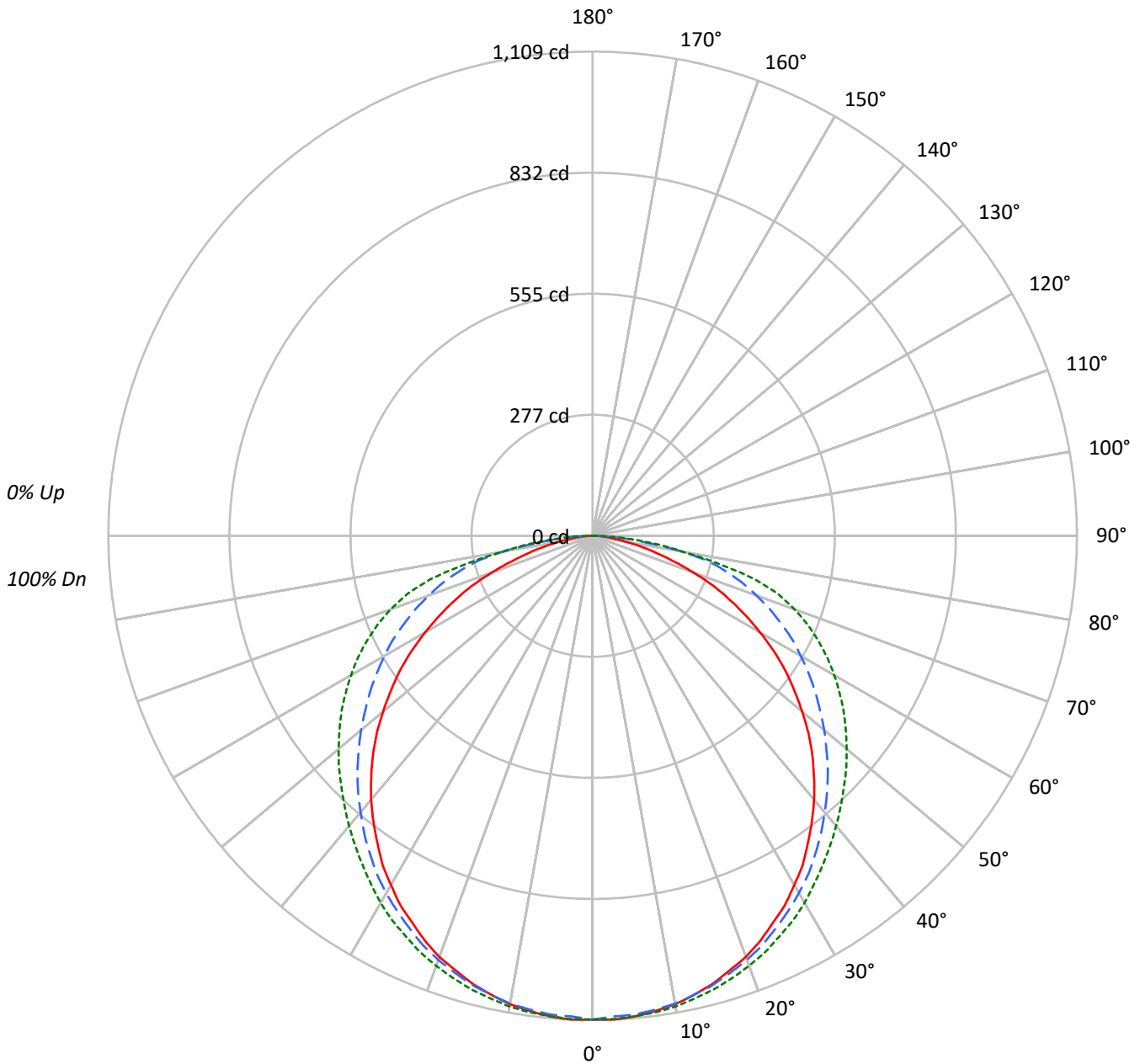
Lumens per Lamp: N/A  
Luminaire Lumens: 3415.0 lumens  
Efficiency: N/A  
Efficacy: 100.4 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.3 / 1.4  
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')  
CIE Type: Direct

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				20				20
RC	80				70				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°	1564	1564	1564
5°	1566	1560	1566
10°	1561	1559	1569
15°	1552	1556	1571
20°	1542	1552	1574
25°	1523	1545	1576
30°	1505	1540	1582
35°	1481	1532	1584
40°	1454	1523	1599
45°	1421	1521	1624
50°	1375	1519	1667
55°	1326	1530	1727
60°	1251	1554	1804
65°	1155	1590	1906
70°	1009	1646	2029
75°	818	1730	2097
80°	605	1697	1697
85°	463	1250	1412



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	105.0	3.1
10°-20°	301.4	8.8
20°-30°	458.9	13.4
30°-40°	557.2	16.3
40°-50°	588.6	17.2
50°-60°	555.4	16.3
60°-70°	461.8	13.5
70°-80°	303.9	8.9
80°-90°	82.8	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°	865.2	25.3
0°-40°	1422.4	41.7
0°-60°	2566.5	75.2
0°-90°	3415.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3415.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1108	1108	1108	1108	1108	
5°	1105	1105	1101	1105	1105	105
15°	1062	1064	1065	1075	1075	300
25°	978	984	992	1009	1012	451
35°	859	869	889	912	919	538
45°	712	726	762	799	814	548
55°	539	562	622	681	702	480
65°	346	386	476	546	571	342
75°	150	219	317	376	385	162
85°	29	63	77	86	87	35
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1108.0	1108.0	1108.0	1108.0	1108.0
2.5°	1109.4	1108.0	1102.2	1108.0	1108.0
5°	1105.2	1105.2	1100.8	1105.2	1105.2
7.5°	1098.0	1098.0	1095.0	1100.8	1100.8
10°	1089.4	1089.4	1088.0	1095.0	1095.0
12.5°	1076.6	1077.8	1076.6	1085.0	1085.0
15°	1062.2	1063.6	1065.2	1075.2	1075.2
17.5°	1043.7	1046.6	1049.4	1060.8	1062.2
20°	1026.5	1027.8	1033.6	1046.6	1048.0
22.5°	1003.7	1007.9	1015.1	1027.8	1032.3
25°	977.8	983.6	992.2	1009.4	1012.2
27.5°	953.6	957.9	969.3	987.9	993.7
30°	923.5	930.7	945.0	963.6	970.7
32.5°	894.9	902.1	919.3	939.2	945.0
35°	859.3	869.3	889.2	912.1	919.3
37.5°	824.9	834.9	859.3	884.9	893.7
40°	789.1	800.5	826.5	856.3	867.7
42.5°	750.5	766.3	794.9	827.7	840.7
45°	711.9	726.3	761.9	799.1	813.5
47.5°	670.6	687.8	726.3	770.7	787.8
50°	626.2	647.6	692.0	740.5	759.2
52.5°	582.0	606.2	656.2	710.5	730.6
55°	539.0	561.8	621.8	680.6	702.0
57.5°	491.8	520.5	586.2	649.0	670.6
60°	443.2	474.7	550.4	616.1	639.0
62.5°	394.6	430.3	516.0	582.0	606.2
65°	345.9	386.1	476.1	546.2	570.6
67.5°	298.7	343.1	438.9	509.0	533.2
70°	244.5	300.3	398.8	467.5	491.8
72.5°	194.5	258.9	360.2	424.7	446.1
75°	150.1	218.8	317.3	376.0	384.6
77.5°	110.1	178.7	273.1	293.0	294.5
80°	74.4	142.9	208.8	205.9	208.8
82.5°	48.6	107.2	131.5	147.3	148.7
85°	28.6	63.0	77.2	85.8	87.2
87.5°	14.2	21.4	27.2	28.6	31.4
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)