

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: P732278

Luminaire Tested: **24CZ2-45HE-S-B2750-W2D-3500K**

Issue Date: 1/5/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P732278  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P272125)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 1/5/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-45HE-S-B2750-W2D-3500K  
Description: 2X4 4500 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 3500K CCT AND SMOOTH LENS  
  
Light Source: -  
Ballast/Driver: -

**Summary**

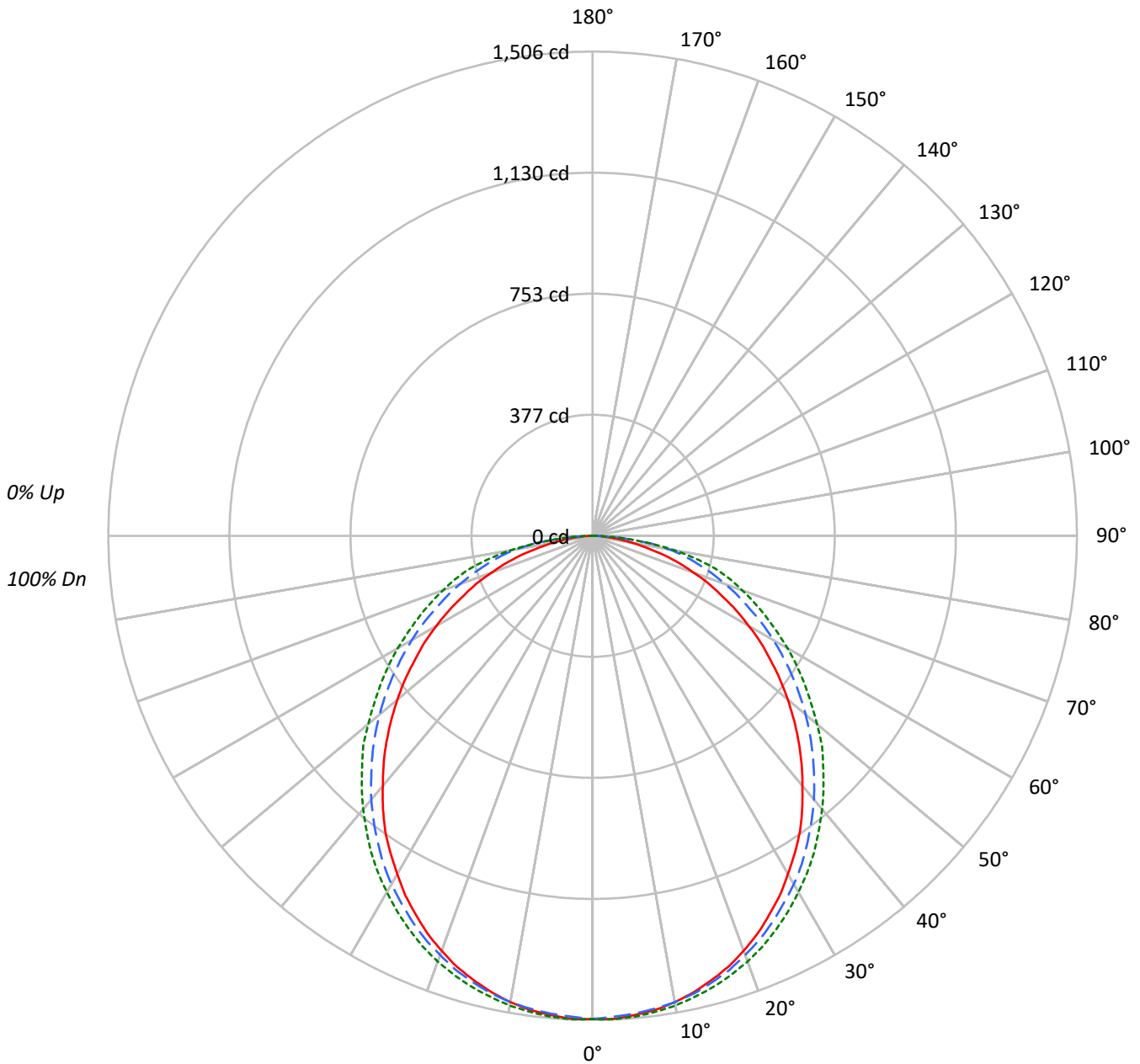
Lumens per Lamp: N/A  
Luminaire Lumens: 4278.0 lumens  
Efficiency: N/A  
Efficacy: 129.6 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35  
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')  
CIE Type: Direct

Input Watts (W): 33  
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

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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	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83																			
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69																			
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58																			
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49																			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42																			
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37																			
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33																			
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29																			
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26																			
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24																			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2121	2121	2121
5°	2120	2114	2127
10°	2111	2111	2126
15°	2091	2101	2123
20°	2063	2084	2116
25°	2025	2063	2103
30°	1980	2040	2086
35°	1936	2006	2070
40°	1870	1973	2045
45°	1809	1934	2023
50°	1739	1898	1999
55°	1662	1862	1980
60°	1584	1833	1975
65°	1484	1802	1987
70°	1373	1811	2041
75°	1230	1845	2156
80°	994	1955	2109
85°	748	1715	1673



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	142.3	3.3
10°-20°	406.5	9.5
20°-30°	611.1	14.3
30°-40°	727.9	17.0
40°-50°	745.0	17.4
50°-60°	670.7	15.7
60°-70°	526.8	12.3
70°-80°	341.9	8.0
80°-90°	105.7	2.5
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°	1159.9	27.1
0°-40°	1887.9	44.1
0°-60°	3303.6	77.2
0°-90°	4278.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4278.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1503	1503	1503	1503	1503	
5°	1496	1499	1492	1500	1502	142
15°	1431	1435	1438	1450	1453	403
25°	1300	1311	1325	1347	1351	599
35°	1124	1137	1164	1193	1201	701
45°	906	928	969	1006	1014	699
55°	675	705	757	796	804	605
65°	444	478	540	584	595	442
75°	226	269	338	385	395	239
85°	46	86	106	103	103	56
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1503.0	1503.0	1503.0	1503.0	1503.0
2.5°	1504.3	1504.3	1497.4	1504.3	1505.6
5°	1496.1	1498.9	1492.0	1500.2	1501.5
7.5°	1487.9	1487.9	1483.8	1492.0	1493.5
10°	1473.0	1474.3	1473.0	1482.5	1483.8
12.5°	1454.0	1456.6	1458.1	1467.6	1468.9
15°	1430.9	1435.0	1437.6	1449.9	1452.7
17.5°	1405.1	1409.1	1415.9	1429.4	1432.2
20°	1373.8	1379.2	1387.4	1405.1	1409.1
22.5°	1339.9	1345.3	1358.9	1375.1	1382.0
25°	1300.4	1311.2	1324.8	1346.6	1350.7
27.5°	1261.0	1270.5	1288.2	1311.2	1316.8
30°	1214.8	1229.7	1251.5	1274.6	1280.0
32.5°	1170.0	1184.8	1210.7	1235.3	1242.0
35°	1123.8	1137.4	1164.5	1193.0	1201.2
37.5°	1070.7	1088.4	1118.4	1146.9	1155.1
40°	1015.1	1036.8	1070.7	1100.7	1110.2
42.5°	962.0	985.1	1019.2	1051.7	1062.5
45°	906.4	928.1	968.9	1005.6	1013.8
47.5°	849.2	873.8	917.2	953.8	967.4
50°	792.2	818.1	864.3	902.3	910.5
52.5°	735.1	762.3	811.2	852.0	856.1
55°	675.3	705.3	756.9	796.3	804.5
57.5°	621.0	646.9	702.5	743.3	752.8
60°	561.2	589.7	649.5	687.6	699.7
62.5°	504.1	534.1	596.6	634.6	645.4
65°	444.3	478.4	539.5	584.3	595.1
67.5°	392.8	425.3	490.5	534.1	544.9
70°	332.8	369.7	438.9	483.8	494.6
72.5°	281.3	319.3	388.7	432.1	448.4
75°	225.6	269.0	338.4	384.6	395.4
77.5°	171.3	221.5	292.1	327.4	327.4
80°	122.3	175.3	240.5	256.9	259.5
82.5°	80.2	131.8	178.0	176.7	176.7
85°	46.2	85.6	105.9	103.3	103.3
87.5°	17.7	35.4	38.0	38.0	36.7
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)