

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: P843098

Luminaire Tested: **24CZ2-45HE-UNV-B40**

Issue Date: 1/5/2024



Test Information

Test Method: LM-79-08
Report Number: P843098
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-UNV-B40
Description: 2X4 4500 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 4000K CCT AND RIBBED LENS

Light Source: -
Ballast/Driver: -

Summary

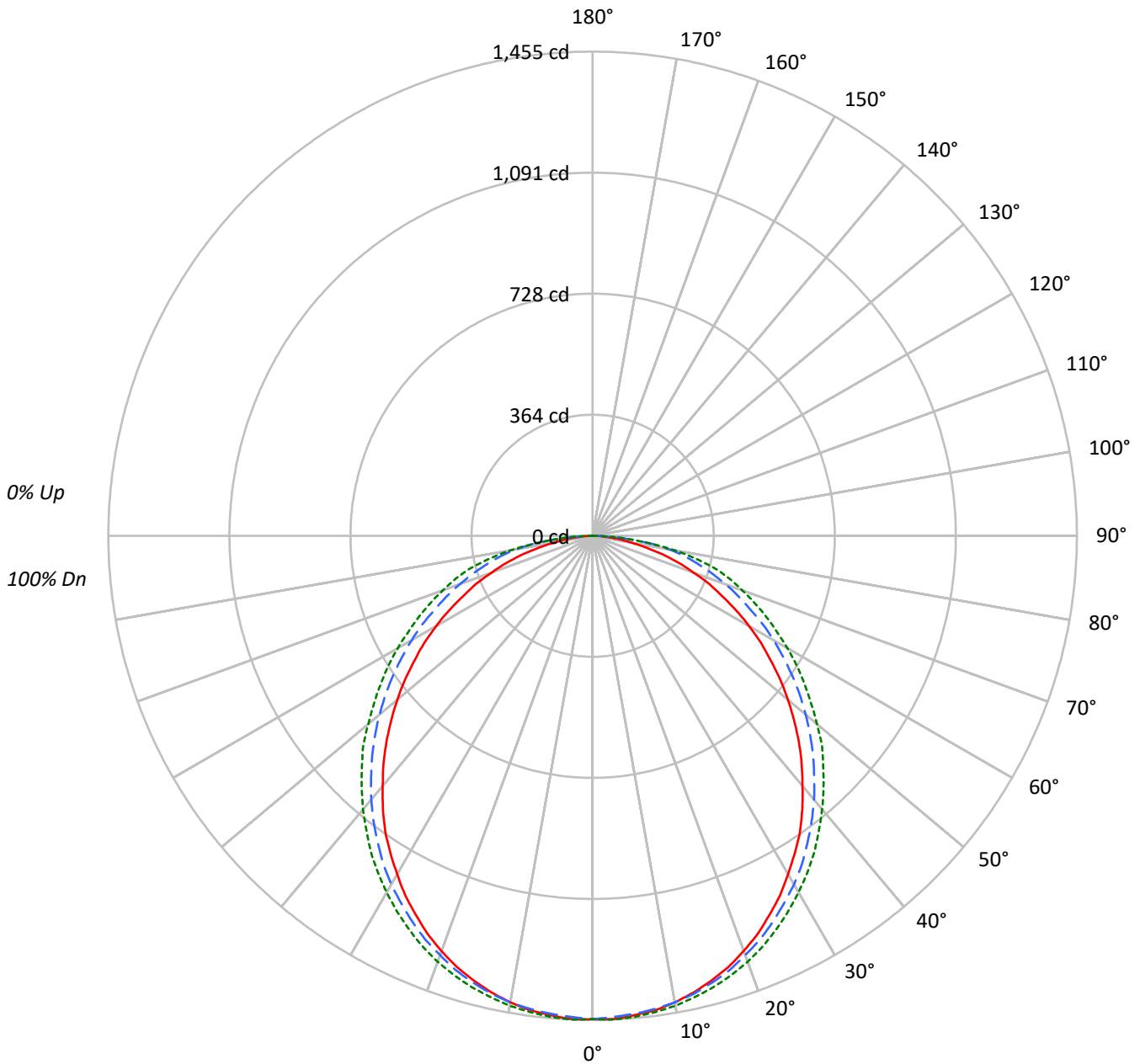
Lumens per Lamp: N/A
Luminaire Lumens: 4135.0 lumens
Efficiency: N/A
Efficacy: 125.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')
CIE Type: Direct

Input Watts (W): 33
Input Voltage (V): NR
Input Current (A_{in}): 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				
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	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°	2050	2050	2050
5°	2049	2043	2056
10°	2040	2040	2055
15°	2021	2030	2052
20°	1994	2014	2046
25°	1957	1994	2033
30°	1914	1971	2016
35°	1871	1939	2000
40°	1808	1907	1977
45°	1749	1869	1956
50°	1681	1834	1932
55°	1606	1800	1913
60°	1531	1772	1909
65°	1434	1741	1921
70°	1327	1751	1973
75°	1189	1784	2084
80°	961	1890	2038
85°	722	1658	1618



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.5	3.3
10°-20°	393.0	9.5
20°-30°	590.7	14.3
30°-40°	703.6	17.0
40°-50°	720.1	17.4
50°-60°	648.3	15.7
60°-70°	509.1	12.3
70°-80°	330.4	8.0
80°-90°	102.2	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°	1121.2	27.1
0°-40°	1824.8	44.1
0°-60°	3193.2	77.2
0°-90°	4135.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4135.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1453	1453	1453	1453	1453	
5°	1446	1449	1442	1450	1451	137
15°	1383	1387	1390	1401	1404	390
25°	1257	1267	1280	1302	1306	579
35°	1086	1099	1126	1153	1161	678
45°	876	897	936	972	980	675
55°	653	682	732	770	778	585
65°	430	462	521	565	575	428
75°	218	260	327	372	382	231
85°	45	83	102	100	100	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1452.7	1452.7	1452.7	1452.7	1452.7
2.5°	1454.0	1454.0	1447.3	1454.0	1455.3
5°	1446.1	1448.8	1442.1	1450.0	1451.3
7.5°	1438.2	1438.2	1434.2	1442.1	1443.5
10°	1423.8	1425.0	1423.8	1432.9	1434.2
12.5°	1405.4	1407.9	1409.4	1418.5	1419.8
15°	1383.1	1387.0	1389.6	1401.4	1404.1
17.5°	1358.1	1362.0	1368.5	1381.7	1384.4
20°	1327.9	1333.1	1341.0	1358.1	1362.0
22.5°	1295.1	1300.3	1313.5	1329.1	1335.8
25°	1257.0	1267.4	1280.5	1301.6	1305.5
27.5°	1218.8	1228.0	1245.1	1267.4	1272.8
30°	1174.2	1188.6	1209.7	1232.0	1237.2
32.5°	1130.8	1145.2	1170.2	1194.0	1200.5
35°	1086.2	1099.4	1125.6	1153.2	1161.1
37.5°	1034.9	1052.0	1081.0	1108.5	1116.4
40°	981.1	1002.2	1034.9	1063.9	1073.1
42.5°	929.9	952.2	985.1	1016.6	1027.0
45°	876.1	897.1	936.5	972.0	979.9
47.5°	820.8	844.6	886.5	922.0	935.1
50°	765.8	790.8	835.4	872.1	880.0
52.5°	710.5	736.8	784.1	823.5	827.5
55°	652.8	681.7	731.6	769.7	777.6
57.5°	600.2	625.2	679.0	718.4	727.6
60°	542.5	570.0	627.8	664.6	676.4
62.5°	487.2	516.2	576.7	613.4	623.8
65°	429.5	462.4	521.4	564.8	575.2
67.5°	379.6	411.1	474.1	516.2	526.7
70°	321.7	357.3	424.3	467.6	478.1
72.5°	271.9	308.6	375.7	417.6	433.4
75°	218.1	260.0	327.1	371.7	382.2
77.5°	165.5	214.1	282.3	316.5	316.5
80°	118.2	169.5	232.5	248.3	250.8
82.5°	77.5	127.4	172.0	170.8	170.8
85°	44.6	82.8	102.4	99.9	99.9
87.5°	17.1	34.2	36.7	36.7	35.4
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)