

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: P843078

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

Issue Date: 1/5/2024



Test Information

Test Method: LM-79-08
Report Number: P843078
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: 24CZ2-45-S-UNV-B50
Description: 2X4 4500 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 5000K CCT AND SMOOTH LENS

Light Source: -
Ballast/Driver: -

Summary

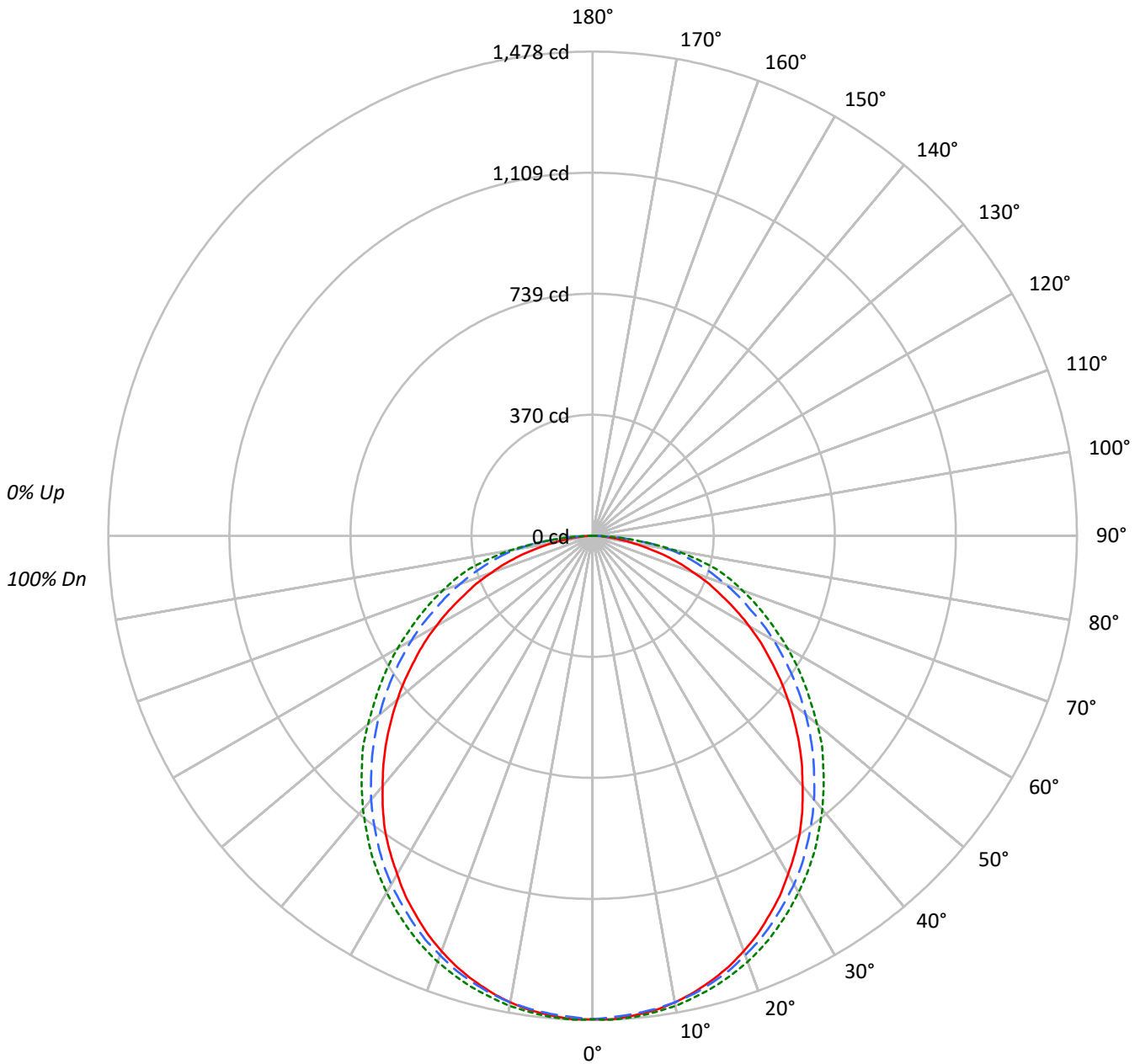
Lumens per Lamp: N/A
Luminaire Lumens: 4201.0 lumens
Efficiency: N/A
Efficacy: 116.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')
CIE Type: Direct

Input Watts (W): 36
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									
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°	2083	2083	2083
5°	2081	2076	2089
10°	2073	2073	2088
15°	2053	2063	2084
20°	2026	2046	2078
25°	1989	2026	2066
30°	1944	2003	2048
35°	1901	1970	2032
40°	1836	1937	2009
45°	1776	1899	1987
50°	1708	1863	1963
55°	1632	1829	1944
60°	1556	1800	1939
65°	1457	1769	1952
70°	1349	1779	2004
75°	1208	1812	2117
80°	976	1920	2071
85°	734	1684	1642



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	139.7	3.3
10°-20°	399.2	9.5
20°-30°	600.1	14.3
30°-40°	714.8	17.0
40°-50°	731.6	17.4
50°-60°	658.7	15.7
60°-70°	517.3	12.3
70°-80°	335.7	8.0
80°-90°	103.8	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°	1139.1	27.1
0°-40°	1853.9	44.1
0°-60°	3244.2	77.2
0°-90°	4201.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4201.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1476	1476	1476	1476	1476	
5°	1469	1472	1465	1473	1474	140
15°	1405	1409	1412	1424	1426	396
25°	1277	1288	1301	1322	1326	588
35°	1104	1117	1144	1172	1180	688
45°	890	911	952	988	996	686
55°	663	693	743	782	790	595
65°	436	470	530	574	584	434
75°	222	264	332	378	388	234
85°	45	84	104	101	101	55
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1475.9	1475.9	1475.9	1475.9	1475.9
2.5°	1477.2	1477.2	1470.4	1477.2	1478.5
5°	1469.2	1471.9	1465.1	1473.2	1474.5
7.5°	1461.1	1461.1	1457.1	1465.1	1466.6
10°	1446.5	1447.8	1446.5	1455.8	1457.1
12.5°	1427.8	1430.4	1431.9	1441.2	1442.5
15°	1405.2	1409.2	1411.8	1423.8	1426.5
17.5°	1379.8	1383.8	1390.4	1403.7	1406.5
20°	1349.1	1354.4	1362.4	1379.8	1383.8
22.5°	1315.8	1321.1	1334.4	1350.3	1357.1
25°	1277.0	1287.6	1301.0	1322.4	1326.4
27.5°	1238.3	1247.6	1265.0	1287.6	1293.1
30°	1192.9	1207.6	1229.0	1251.6	1256.9
32.5°	1148.9	1163.5	1188.9	1213.0	1219.6
35°	1103.6	1116.9	1143.6	1171.6	1179.6
37.5°	1051.5	1068.8	1098.2	1126.2	1134.3
40°	996.8	1018.2	1051.5	1080.9	1090.2
42.5°	944.7	967.4	1000.8	1032.8	1043.4
45°	890.0	911.4	951.5	987.5	995.5
47.5°	833.9	858.1	900.7	936.7	950.0
50°	778.0	803.4	848.7	886.0	894.1
52.5°	721.9	748.6	796.6	836.7	840.7
55°	663.2	692.6	743.3	782.0	790.0
57.5°	609.8	635.2	689.9	729.9	739.2
60°	551.1	579.1	637.8	675.3	687.1
62.5°	495.0	524.4	585.9	623.2	633.8
65°	436.3	469.8	529.8	573.8	584.4
67.5°	385.7	417.7	481.7	524.4	535.1
70°	326.9	363.0	431.0	475.1	485.7
72.5°	276.2	313.5	381.7	424.3	440.4
75°	221.5	264.2	332.3	377.7	388.3
77.5°	168.2	217.5	286.8	321.5	321.5
80°	120.1	172.2	236.2	252.3	254.8
82.5°	78.8	129.4	174.8	173.5	173.5
85°	45.3	84.1	104.0	101.4	101.4
87.5°	17.4	34.7	37.3	37.3	36.0
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)