

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: P843077

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

Issue Date: 1/5/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P843077  
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-B40  
Description: 2X4 4500 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 4000K CCT AND SMOOTH LENS  
  
Light Source: -  
Ballast/Driver: -

**Summary**

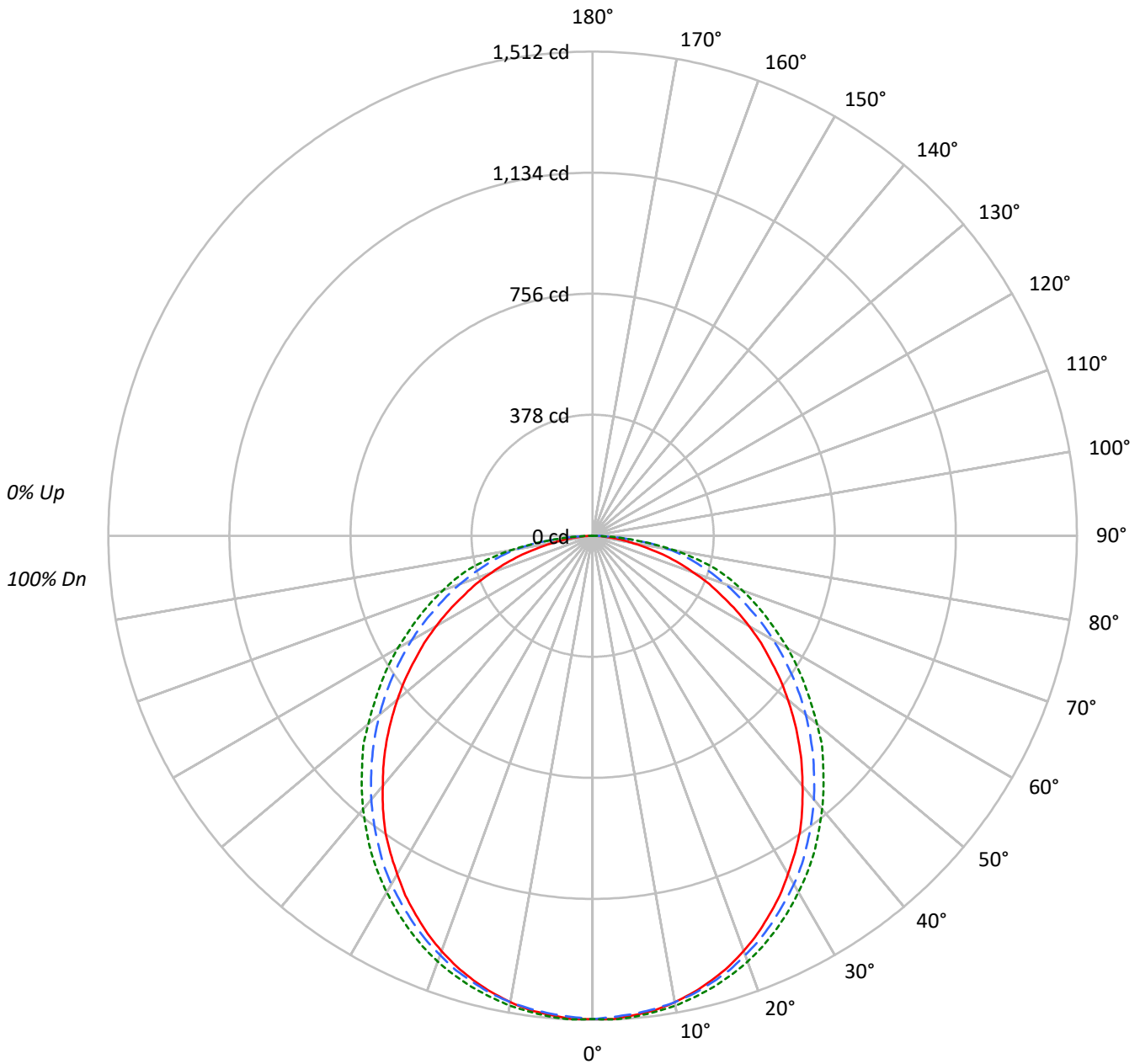
Lumens per Lamp: N/A  
Luminaire Lumens: 4296.0 lumens  
Efficiency: N/A  
Efficacy: 119.3 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35  
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')  
CIE Type: Direct

Input Watts (W): 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

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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°	2130	2130	2130
5°	2128	2123	2136
10°	2120	2120	2135
15°	2099	2109	2131
20°	2072	2092	2125
25°	2034	2072	2112
30°	1988	2048	2095
35°	1944	2015	2078
40°	1878	1981	2054
45°	1817	1942	2032
50°	1747	1906	2007
55°	1669	1870	1988
60°	1591	1841	1983
65°	1490	1809	1996
70°	1379	1819	2050
75°	1236	1853	2165
80°	998	1963	2118
85°	751	1723	1679



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	142.9	3.3
10°-20°	408.3	9.5
20°-30°	613.7	14.3
30°-40°	731.0	17.0
40°-50°	748.2	17.4
50°-60°	673.6	15.7
60°-70°	529.0	12.3
70°-80°	343.3	8.0
80°-90°	106.2	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°	1164.8	27.1
0°-40°	1895.8	44.1
0°-60°	3317.6	77.2
0°-90°	4296.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4296.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1509	1509	1509	1509	1509	
5°	1502	1505	1498	1506	1508	143
15°	1437	1441	1444	1456	1459	405
25°	1306	1317	1330	1352	1356	602
35°	1128	1142	1169	1198	1206	704
45°	910	932	973	1010	1018	702
55°	678	708	760	800	808	608
65°	446	480	542	587	598	444
75°	227	270	340	386	397	240
85°	46	86	106	104	104	56
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1509.3	1509.3	1509.3	1509.3	1509.3
2.5°	1510.6	1510.6	1503.7	1510.6	1511.9
5°	1502.4	1505.2	1498.3	1506.5	1507.8
7.5°	1494.2	1494.2	1490.0	1498.3	1499.7
10°	1479.2	1480.5	1479.2	1488.7	1490.0
12.5°	1460.1	1462.8	1464.2	1473.8	1475.1
15°	1436.9	1441.1	1443.7	1456.0	1458.8
17.5°	1411.0	1415.1	1421.8	1435.5	1438.3
20°	1379.6	1385.0	1393.2	1411.0	1415.1
22.5°	1345.5	1351.0	1364.6	1380.9	1387.8
25°	1305.9	1316.8	1330.4	1352.3	1356.4
27.5°	1266.3	1275.8	1293.6	1316.8	1322.3
30°	1219.9	1234.9	1256.7	1279.9	1285.4
32.5°	1174.9	1189.8	1215.8	1240.5	1247.2
35°	1128.5	1142.2	1169.4	1198.1	1206.3
37.5°	1075.2	1093.0	1123.1	1151.7	1159.9
40°	1019.3	1041.2	1075.2	1105.3	1114.9
42.5°	966.1	989.3	1023.5	1056.2	1067.0
45°	910.2	932.0	973.0	1009.8	1018.0
47.5°	852.8	877.5	921.0	957.9	971.5
50°	795.6	821.6	867.9	906.1	914.3
52.5°	738.2	765.5	814.7	855.6	859.7
55°	678.2	708.3	760.1	799.7	807.9
57.5°	623.6	649.6	705.5	746.4	756.0
60°	563.6	592.2	652.2	690.5	702.7
62.5°	506.2	536.3	599.1	637.3	648.1
65°	446.2	480.4	541.7	586.8	597.6
67.5°	394.4	427.1	492.6	536.3	547.2
70°	334.2	371.2	440.8	485.8	496.7
72.5°	282.5	320.6	390.3	433.9	450.3
75°	226.6	270.1	339.8	386.2	397.0
77.5°	172.0	222.4	293.3	328.8	328.8
80°	122.8	176.1	241.5	258.0	260.6
82.5°	80.6	132.3	178.7	177.4	177.4
85°	46.4	86.0	106.4	103.7	103.7
87.5°	17.8	35.5	38.1	38.1	36.8
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)