

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: P881179

Luminaire Tested: **24CZ2-35VHE-UNV-B35**

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: P881179  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P473819)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 10/2/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-35VHE-UNV-B35  
Description: 2X4 3500 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 3500K CCT AND RIBBED LENS  
  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

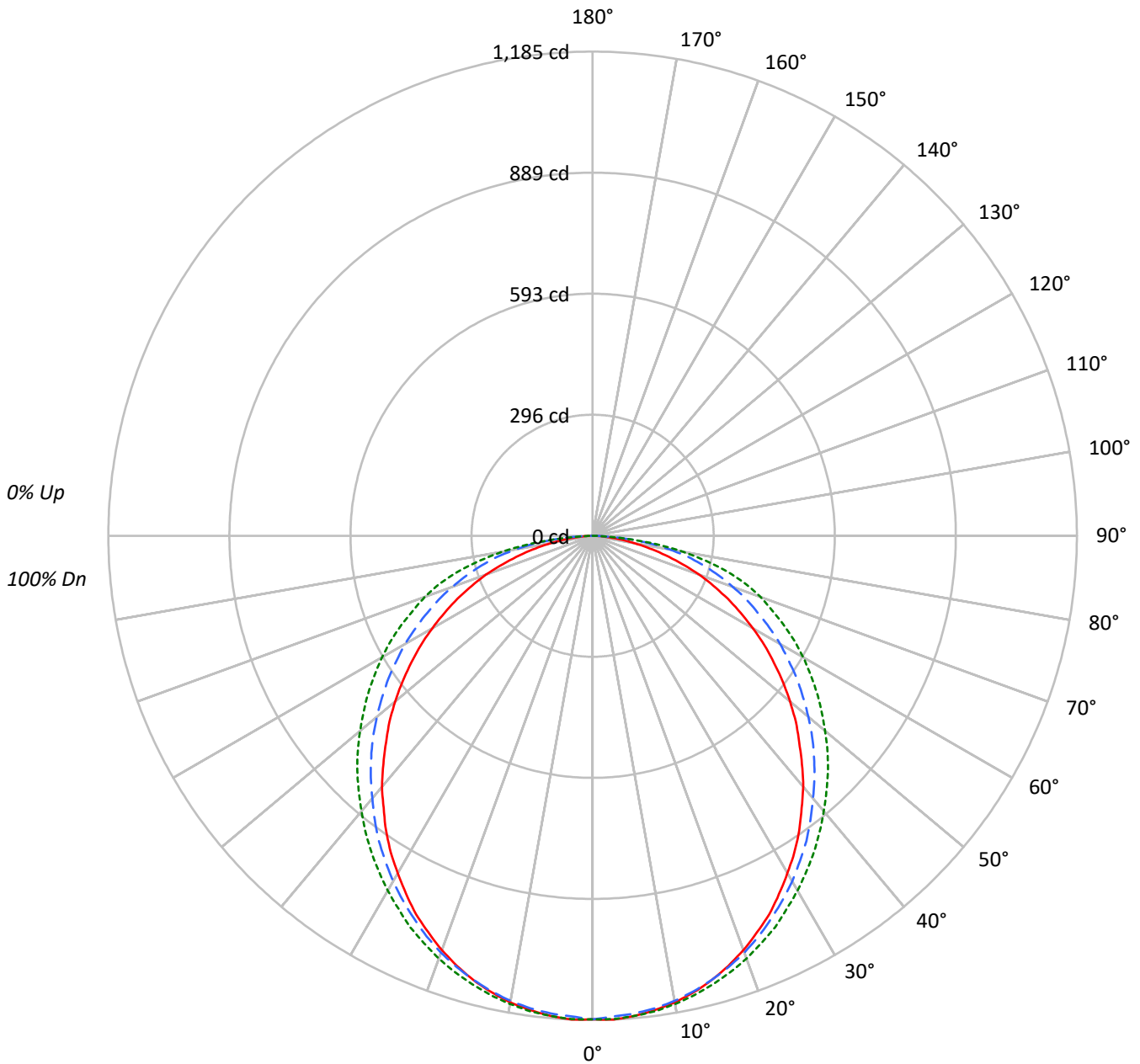
Lumens per Lamp: N/A  
Luminaire Lumens: 3425.0 lumens  
Efficiency: N/A  
Efficacy: 126.9 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.36  
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')  
CIE Type: Direct

Input Watts (W): 27  
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									
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	105	101	97	93	97	93	90	93	90	87	89	87	85	83																			
2	98	89	82	76	95	88	81	75	84	78	74	81	76	72	78	74	70	68																			
3	89	78	70	63	87	77	69	63	74	67	61	71	65	60	68	63	59	57																			
4	82	69	60	53	79	68	59	53	65	58	52	63	57	51	61	55	51	48																			
5	75	62	53	46	73	61	52	46	58	51	45	56	50	44	55	49	44	42																			
6	69	56	46	40	67	55	46	40	53	45	39	51	44	39	49	43	39	37																			
7	64	50	41	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32																			
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29																			
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26																			
10	52	39	31	26	51	38	31	26	37	30	25	36	30	25	36	30	25	23																			

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

	0°	45°	90°
0°	1670	1670	1670
5°	1671	1663	1671
10°	1662	1657	1668
15°	1645	1644	1661
20°	1621	1630	1654
25°	1592	1610	1646
30°	1554	1592	1634
35°	1519	1571	1627
40°	1477	1545	1621
45°	1427	1529	1626
50°	1384	1513	1630
55°	1333	1502	1649
60°	1278	1495	1679
65°	1218	1489	1722
70°	1146	1505	1801
75°	1008	1536	1874
80°	841	1547	1808
85°	601	1326	1344



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	111.9	3.3
10°-20°	318.7	9.3
20°-30°	478.1	14.0
30°-40°	570.8	16.7
40°-50°	591.2	17.3
50°-60°	544.3	15.9
60°-70°	439.1	12.8
70°-80°	286.9	8.4
80°-90°	84.1	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°	908.7	26.5
0°-40°	1479.4	43.2
0°-60°	2615.0	76.3
0°-90°	3425.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3425.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1184	1184	1184	1184	1184	
5°	1180	1179	1174	1180	1180	112
15°	1126	1126	1125	1137	1137	317
25°	1022	1025	1034	1053	1057	470
35°	882	889	912	937	944	551
45°	715	733	766	801	814	553
55°	542	565	610	655	670	485
65°	365	390	446	497	516	361
75°	185	220	282	330	344	197
85°	37	64	82	87	83	46
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1183.5	1183.5	1183.5	1183.5	1183.5
2.5°	1185.2	1183.5	1177.4	1184.6	1184.1
5°	1179.7	1178.6	1173.6	1180.2	1179.7
7.5°	1170.8	1170.3	1166.4	1173.6	1173.6
10°	1159.8	1158.7	1155.9	1164.2	1163.6
12.5°	1144.3	1143.8	1142.1	1152.0	1151.5
15°	1126.0	1126.0	1125.4	1136.6	1136.6
17.5°	1103.9	1104.4	1106.6	1119.3	1119.9
20°	1079.0	1081.2	1085.6	1100.0	1101.1
22.5°	1050.7	1055.1	1061.2	1077.3	1079.0
25°	1022.5	1024.8	1034.1	1052.9	1056.8
27.5°	988.2	993.8	1006.0	1025.3	1029.2
30°	953.4	961.1	976.6	996.6	1002.7
32.5°	919.0	925.8	944.0	966.6	973.8
35°	881.5	889.2	911.8	936.8	944.5
37.5°	839.9	852.1	875.9	904.7	912.9
40°	801.8	812.8	838.8	871.0	879.8
42.5°	758.0	771.9	803.5	836.0	847.1
45°	714.8	732.6	766.3	800.7	814.5
47.5°	674.5	688.9	728.8	767.4	779.6
50°	630.2	646.8	688.9	729.9	742.6
52.5°	586.6	606.5	649.0	692.2	706.0
55°	541.7	564.9	610.3	655.2	670.1
57.5°	498.5	521.8	568.8	616.4	631.9
60°	452.7	477.5	529.6	575.4	594.9
62.5°	408.4	433.2	488.0	537.8	556.1
65°	364.6	389.6	446.0	496.9	515.7
67.5°	319.3	346.4	406.7	456.0	474.2
70°	277.8	303.7	364.6	417.2	436.5
72.5°	230.1	261.2	323.2	375.1	393.4
75°	184.8	219.6	281.6	330.4	343.6
77.5°	142.7	177.7	239.5	276.1	284.4
80°	103.5	138.9	190.4	215.8	222.4
82.5°	67.0	103.5	137.8	154.9	157.1
85°	37.1	64.2	81.9	86.8	83.0
87.5°	13.3	24.3	23.8	19.3	15.5
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)