

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: P881174

Luminaire Tested: **24CZ2-35VHE-S-UNV-B40**

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: P881174
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P473969)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 10/2/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-35VHE-S-UNV-B40
Description: 2X4 3500 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 4000K CCT AND SMOOTH LENS

Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

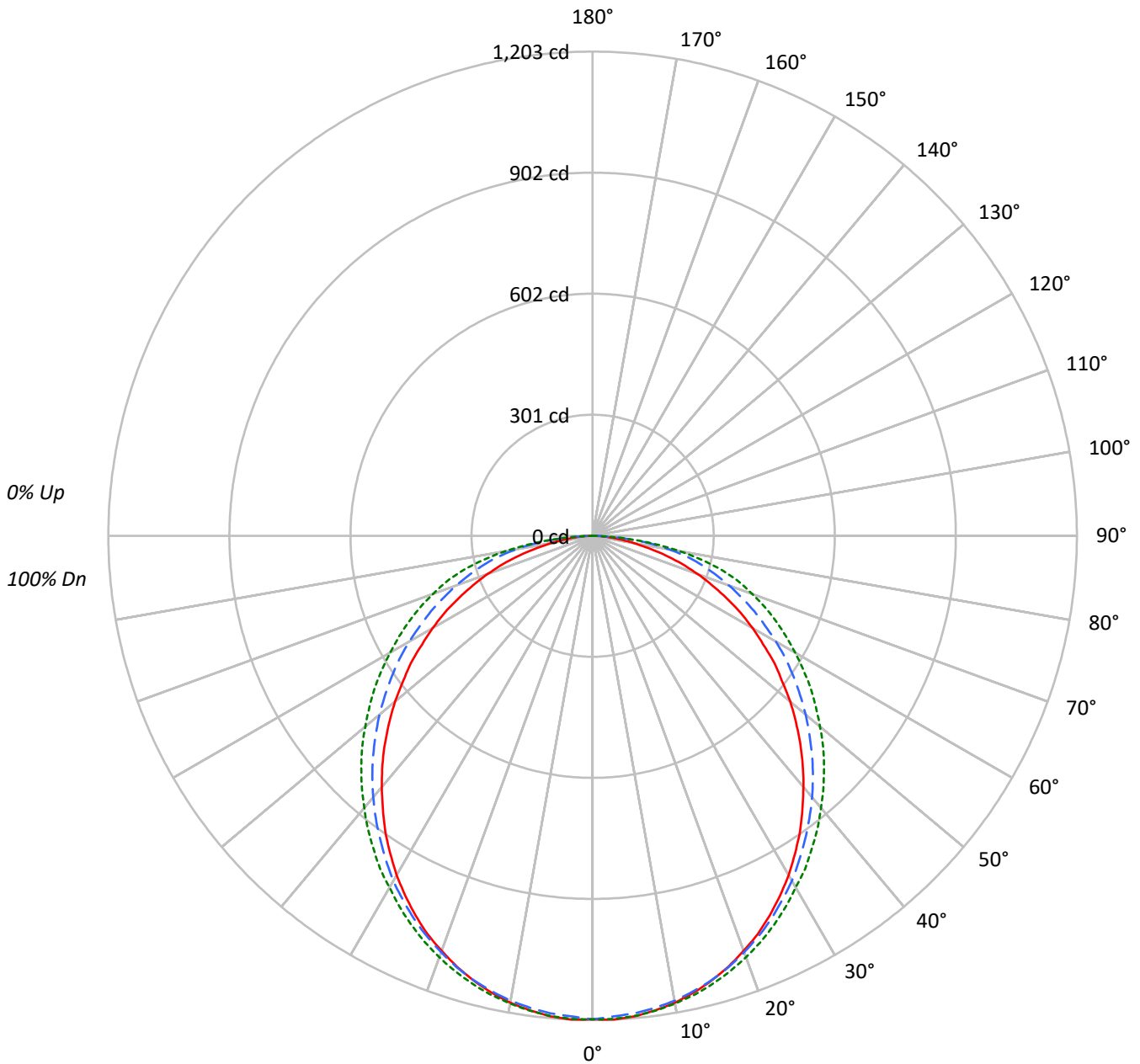
Lumens per Lamp: N/A
Luminaire Lumens: 3442.0 lumens
Efficiency: N/A
Efficacy: 127.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.25 / 1.35
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')
CIE Type: Direct

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	90	83	77	95	88	81	76	84	79	74	81	76	72	78	74	71	68																			
3	89	78	70	63	87	77	69	63	74	67	62	71	65	61	68	64	59	57																			
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	55	51	49																			
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42																			
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37																			
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32																			
8	60	46	38	32	58	45	37	31	44	37	31	43	36	31	42	35	31	29																			
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26																			
10	52	39	31	26	51	39	31	26	38	30	26	37	30	25	36	30	25	24																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1696	1696	1696
5°	1698	1688	1697
10°	1688	1681	1691
15°	1671	1670	1684
20°	1648	1653	1674
25°	1621	1635	1660
30°	1587	1614	1645
35°	1547	1586	1635
40°	1501	1562	1626
45°	1456	1538	1623
50°	1407	1517	1619
55°	1357	1498	1628
60°	1294	1484	1639
65°	1225	1478	1678
70°	1143	1486	1738
75°	1018	1529	1831
80°	831	1562	1788
85°	586	1365	1393



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.6	3.3
10°-20°	323.5	9.4
20°-30°	484.9	14.1
30°-40°	577.5	16.8
40°-50°	595.5	17.3
50°-60°	543.4	15.8
60°-70°	434.5	12.6
70°-80°	283.8	8.2
80°-90°	85.2	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°	922.0	26.8
0°-40°	1499.5	43.6
0°-60°	2638.4	76.7
0°-90°	3442.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3442.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1202	1202	1202	1202	1202	
5°	1199	1196	1191	1199	1198	114
15°	1144	1144	1143	1153	1153	322
25°	1041	1042	1050	1065	1066	479
35°	898	904	920	944	949	561
45°	729	742	771	803	813	562
55°	551	567	609	649	662	491
65°	367	392	443	486	503	364
75°	187	218	280	326	336	198
85°	36	65	84	86	86	46
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1201.5	1201.5	1201.5	1201.5	1201.5
2.5°	1203.2	1201.5	1195.1	1202.6	1201.5
5°	1198.6	1196.3	1191.2	1198.6	1197.5
7.5°	1189.5	1188.4	1183.3	1191.8	1190.6
10°	1178.2	1177.1	1173.1	1181.6	1179.9
12.5°	1162.4	1161.9	1159.0	1169.2	1168.1
15°	1143.7	1144.3	1143.1	1152.8	1152.8
17.5°	1122.3	1121.7	1124.0	1135.8	1134.7
20°	1097.3	1097.9	1100.7	1114.4	1114.4
22.5°	1071.4	1070.8	1077.0	1090.6	1091.7
25°	1040.8	1042.5	1049.9	1065.2	1066.3
27.5°	1008.0	1010.9	1020.0	1037.4	1039.1
30°	973.6	977.0	990.5	1006.9	1009.1
32.5°	935.7	943.0	955.4	976.4	982.1
35°	897.8	904.0	920.5	943.6	949.2
37.5°	855.9	866.1	884.8	910.2	917.6
40°	814.7	824.9	848.0	874.7	882.6
42.5°	772.8	783.6	810.1	840.2	848.6
45°	729.4	742.4	770.6	802.8	813.0
47.5°	684.7	699.9	730.5	765.5	776.9
50°	640.6	655.8	690.9	727.0	737.3
52.5°	593.1	612.3	649.6	688.7	698.8
55°	551.3	567.1	608.9	649.1	661.5
57.5°	502.1	523.5	568.2	608.9	620.8
60°	458.5	478.3	525.8	567.1	580.6
62.5°	414.4	434.7	482.2	529.2	541.7
65°	366.9	391.8	442.6	486.2	502.6
67.5°	321.7	347.7	399.8	446.0	463.1
70°	277.0	303.6	360.2	407.7	421.2
72.5°	232.9	260.7	319.5	365.8	381.6
75°	186.6	217.7	280.4	325.7	335.8
77.5°	143.0	177.6	240.8	271.4	278.7
80°	102.3	140.2	192.2	214.3	220.0
82.5°	67.2	104.0	143.6	155.4	153.7
85°	36.2	65.0	84.3	86.0	86.0
87.5°	14.1	26.1	26.6	20.3	19.2
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)