

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: P881176

Luminaire Tested: **24CZ2-35VHE-SQR-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: P881176
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P474669)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 10/2/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-35VHE-SQR-UNV-B35
Description: 2X4 3500 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 3500K CCT AND SQR LENS

Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

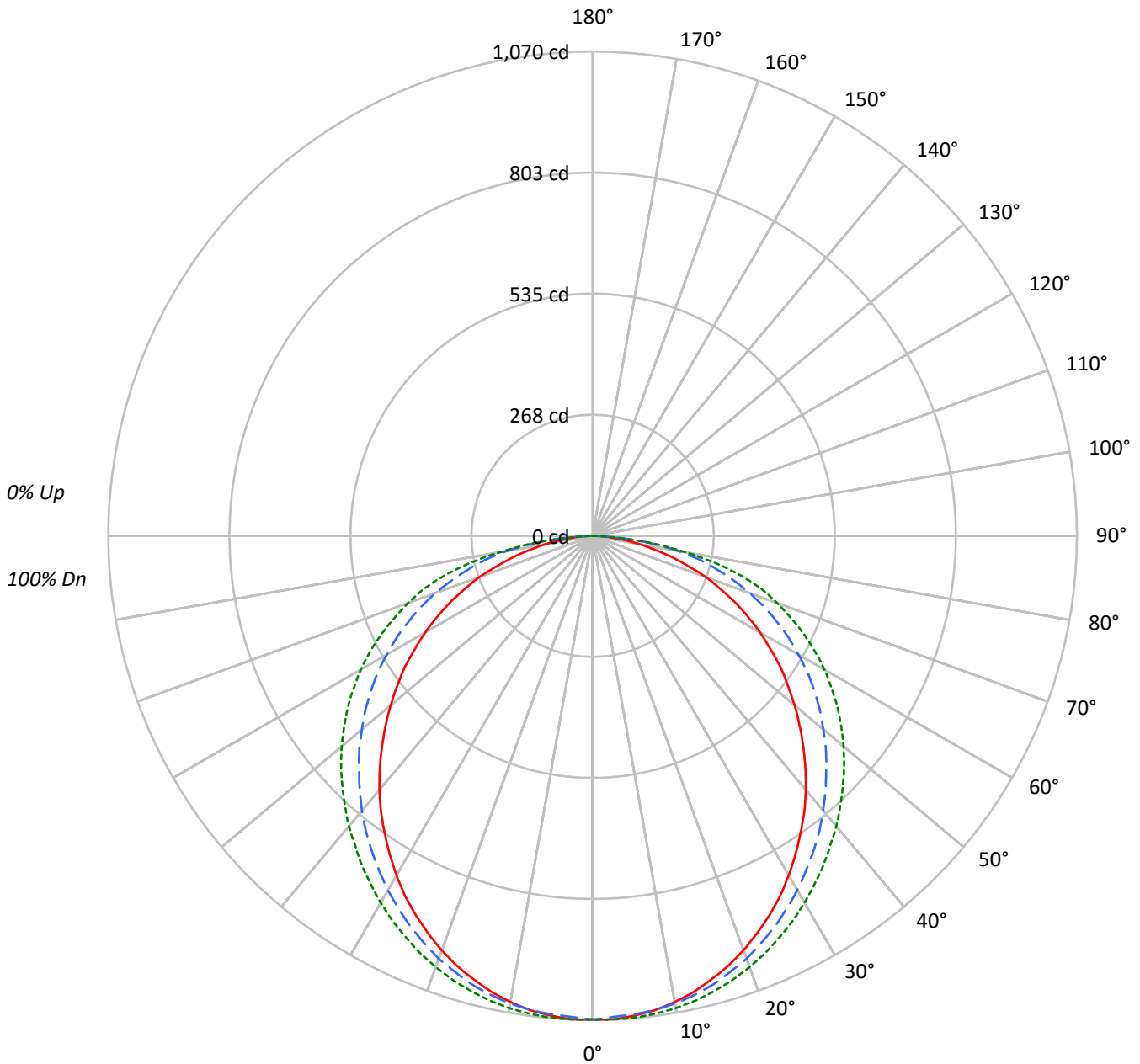
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3254.0 lumens
Efficiency: N/A
Efficacy: 120.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.3 / 1.39
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	98	94	105	101	96	93	96	93	90	92	90	87	89	87	84	82																			
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68																			
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56																			
4	81	69	59	53	79	67	59	52	65	57	51	62	56	51	60	55	50	48																			
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41																			
6	69	55	46	39	67	54	45	39	52	44	39	50	43	38	49	43	38	36																			
7	64	50	41	34	62	49	40	34	47	40	34	46	39	34	44	38	33	31																			
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28																			
9	55	42	33	28	54	41	33	27	40	32	27	39	32	27	38	31	27	25																			
10	52	38	30	25	50	38	30	25	37	30	25	36	29	25	35	29	24	23																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1509	1509	1509
5°	1508	1504	1514
10°	1499	1504	1519
15°	1483	1501	1521
20°	1464	1494	1523
25°	1440	1483	1523
30°	1412	1474	1526
35°	1380	1465	1532
40°	1350	1461	1544
45°	1314	1457	1561
50°	1278	1461	1589
55°	1249	1471	1624
60°	1206	1482	1670
65°	1158	1500	1720
70°	1098	1521	1789
75°	984	1542	1848
80°	828	1547	1677
85°	614	1169	1103



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.3	3.1
10°-20°	290.3	8.9
20°-30°	439.4	13.5
30°-40°	531.6	16.3
40°-50°	561.1	17.2
50°-60°	529.2	16.3
60°-70°	436.3	13.4
70°-80°	286.2	8.8
80°-90°	78.7	2.4
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°	831.0	25.5
0°-40°	1362.6	41.9
0°-60°	2452.9	75.4
0°-90°	3254.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3254.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1069	1069	1069	1069	1069	
5°	1065	1065	1062	1069	1069	101
15°	1015	1020	1027	1039	1041	286
25°	925	936	952	972	978	426
35°	801	822	850	880	889	501
45°	658	688	730	769	782	508
55°	507	543	598	642	660	452
65°	347	388	449	497	515	342
75°	180	227	283	328	339	191
85°	38	66	72	70	68	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1068.9	1068.9	1068.9	1068.9	1068.9
2.5°	1069.8	1068.9	1064.2	1070.4	1069.8
5°	1064.6	1064.6	1061.6	1068.9	1068.9
7.5°	1057.4	1057.9	1056.8	1065.2	1065.2
10°	1046.0	1048.0	1049.6	1059.0	1060.0
12.5°	1032.4	1036.1	1039.2	1050.6	1051.7
15°	1014.8	1020.5	1027.2	1039.2	1041.3
17.5°	996.5	1003.4	1010.6	1026.3	1028.9
20°	974.7	982.6	994.5	1010.1	1014.2
22.5°	950.4	961.2	973.7	992.4	997.6
25°	924.9	936.3	952.4	972.1	978.3
27.5°	897.3	910.8	929.0	951.9	958.6
30°	866.6	882.2	904.6	929.0	936.3
32.5°	834.3	852.6	877.5	904.6	912.8
35°	801.2	821.9	850.5	879.7	889.0
37.5°	768.3	789.1	823.0	853.6	862.4
40°	733.0	755.8	792.8	825.6	838.0
42.5°	695.6	722.7	761.6	798.0	809.9
45°	658.1	687.7	729.9	768.8	781.9
47.5°	620.2	652.9	699.2	738.7	753.8
50°	582.2	617.1	665.4	708.0	723.6
52.5°	543.8	580.2	632.7	677.9	692.0
55°	507.4	543.2	597.9	642.5	660.2
57.5°	465.3	505.8	563.5	608.8	625.9
60°	427.3	466.9	525.1	572.9	591.6
62.5°	386.2	426.8	488.1	535.9	554.2
65°	346.7	388.4	449.2	497.0	515.1
67.5°	304.1	347.8	410.2	456.5	474.1
70°	266.2	307.3	368.5	415.9	433.6
72.5°	219.9	266.7	325.4	372.2	391.4
75°	180.4	226.6	282.8	327.6	338.9
77.5°	138.8	185.1	240.7	269.8	277.6
80°	101.9	145.5	190.3	205.9	206.3
82.5°	68.6	107.1	132.6	140.4	139.3
85°	37.9	65.5	72.2	70.2	68.1
87.5°	15.6	21.8	17.7	12.5	9.9
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)