

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: P881192

Luminaire Tested: **24CZ2-40VHE-SQR-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: P881192
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: 24CZ2-40VHE-SQR-UNV-B40
Description: 2X4 4000 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 4000K CCT AND SQR LENS

Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

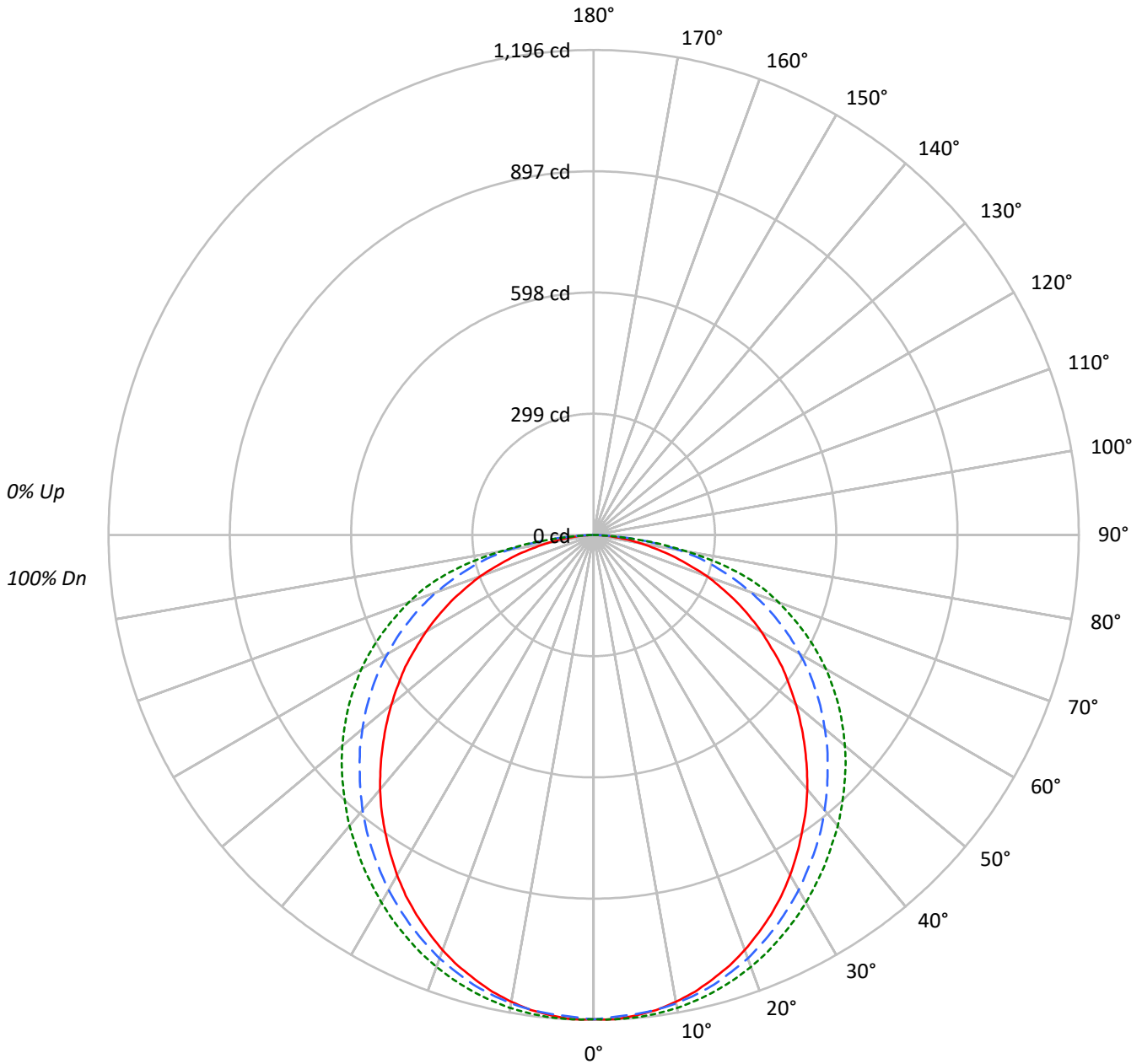
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3637.0 lumens
Efficiency: N/A
Efficacy: 121.2 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): 30
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°	1686	1686	1686
5°	1686	1681	1693
10°	1675	1681	1698
15°	1657	1678	1701
20°	1636	1669	1703
25°	1610	1658	1703
30°	1579	1648	1705
35°	1543	1638	1712
40°	1509	1633	1726
45°	1468	1628	1744
50°	1429	1633	1776
55°	1396	1644	1816
60°	1348	1657	1866
65°	1294	1677	1923
70°	1228	1700	2000
75°	1100	1724	2066
80°	926	1729	1874
85°	687	1307	1232



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.2	3.1
10°-20°	324.5	8.9
20°-30°	491.2	13.5
30°-40°	594.2	16.3
40°-50°	627.2	17.2
50°-60°	591.4	16.3
60°-70°	487.6	13.4
70°-80°	319.9	8.8
80°-90°	87.9	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°	928.8	25.5
0°-40°	1523.0	41.9
0°-60°	2741.6	75.4
0°-90°	3637.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3637.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1195	1195	1195	1195	1195	
5°	1190	1190	1186	1195	1195	113
15°	1134	1141	1148	1162	1164	320
25°	1034	1046	1064	1087	1094	476
35°	896	919	951	983	994	561
45°	736	769	816	859	874	568
55°	567	607	668	718	738	505
65°	388	434	502	556	576	383
75°	202	253	316	366	379	213
85°	42	73	81	78	76	53
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1194.7	1194.7	1194.7	1194.7	1194.7
2.5°	1195.8	1194.7	1189.5	1196.4	1195.8
5°	1189.9	1189.9	1186.5	1194.7	1194.7
7.5°	1181.8	1182.4	1181.2	1190.5	1190.5
10°	1169.1	1171.4	1173.1	1183.6	1184.7
12.5°	1153.9	1158.1	1161.5	1174.3	1175.5
15°	1134.2	1140.6	1148.1	1161.5	1163.9
17.5°	1113.8	1121.5	1129.6	1147.0	1149.9
20°	1089.5	1098.2	1111.5	1129.0	1133.6
22.5°	1062.2	1074.3	1088.3	1109.2	1115.0
25°	1033.7	1046.5	1064.5	1086.6	1093.5
27.5°	1002.9	1018.0	1038.3	1063.9	1071.4
30°	968.7	986.0	1011.1	1038.3	1046.5
32.5°	932.5	952.9	980.8	1011.1	1020.3
35°	895.5	918.6	950.6	983.2	993.6
37.5°	858.7	882.0	919.8	954.1	963.9
40°	819.2	844.8	886.1	922.7	936.7
42.5°	777.4	807.7	851.2	891.9	905.3
45°	735.6	768.7	815.8	859.3	873.9
47.5°	693.2	729.8	781.5	825.7	842.5
50°	650.8	689.7	743.7	791.4	808.8
52.5°	607.8	648.5	707.1	757.7	773.4
55°	567.2	607.2	668.2	718.2	737.9
57.5°	520.0	565.3	629.8	680.5	699.6
60°	477.6	521.8	586.9	640.4	661.2
62.5°	431.7	477.0	545.6	599.0	619.4
65°	387.6	434.1	502.1	555.5	575.8
67.5°	339.9	388.8	458.5	510.2	530.0
70°	297.5	343.4	411.9	464.9	484.6
72.5°	245.8	298.1	363.7	416.0	437.5
75°	201.7	253.3	316.1	366.1	378.8
77.5°	155.1	206.9	269.0	301.5	310.2
80°	113.9	162.6	212.7	230.1	230.6
82.5°	76.7	119.7	148.2	156.9	155.7
85°	42.4	73.2	80.7	78.4	76.1
87.5°	17.5	24.4	19.8	13.9	11.0
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)