

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: P881114

Luminaire Tested: **22CZ2-39VHE-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: P881114
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P475230)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 10/2/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-39VHE-S-UNV-B40
Description: 2X2 3900 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 4000K CCT AND SMOOTH LENS

Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

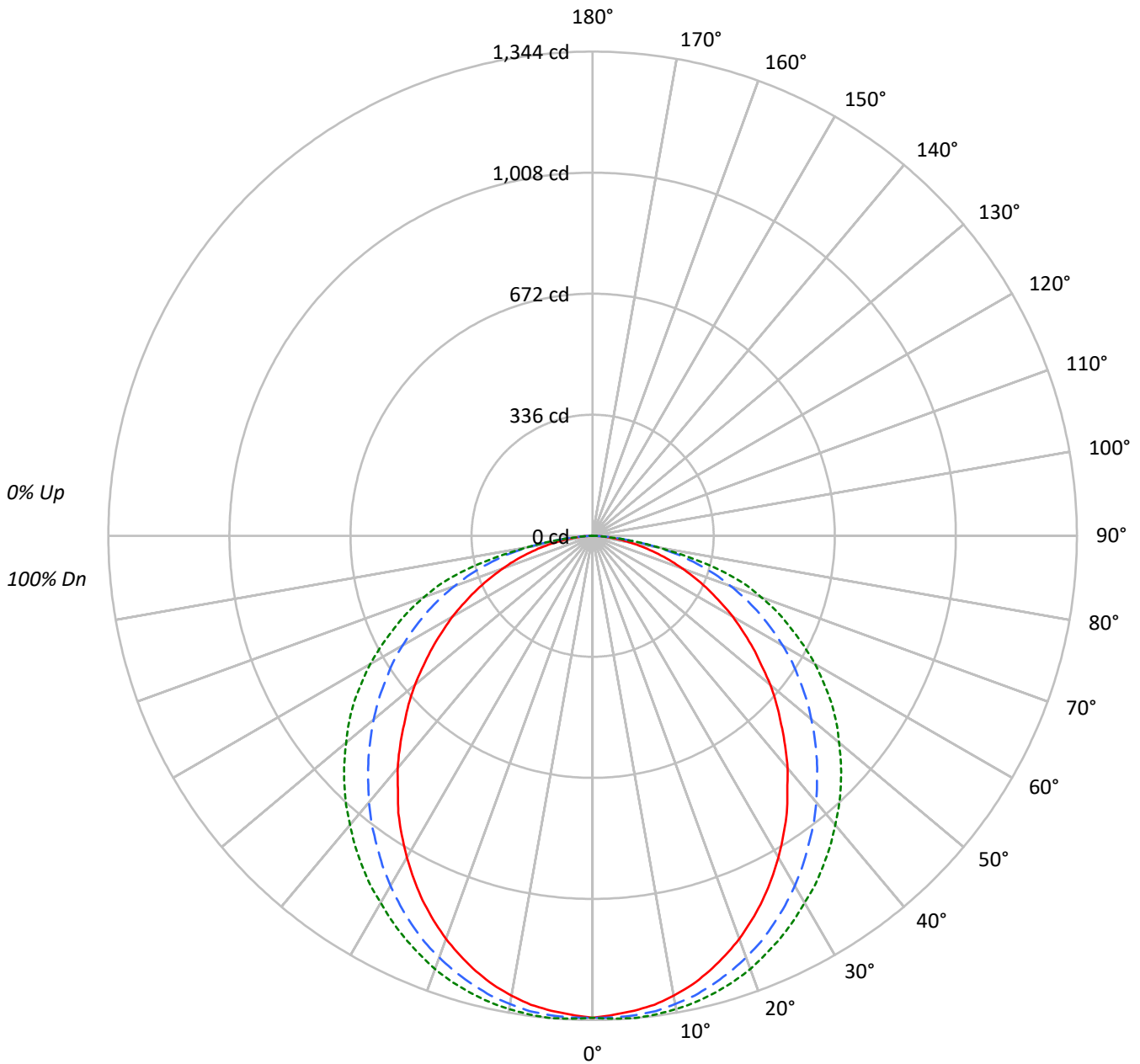
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3831.0 lumens
Efficiency: N/A
Efficacy: 119.7 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.31 / 1.37
Luminous Opening: Rectangular (W 1.92' x L: 1.98' x H: 0')
CIE Type: Direct

Input Watts (W): 32
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	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83																			
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69																			
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58																			
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49																			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43																			
6	70	56	47	41	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°	3797	3797	3797
5°	3770	3807	3828
10°	3735	3804	3845
15°	3676	3787	3857
20°	3596	3761	3865
25°	3496	3723	3860
30°	3378	3676	3854
35°	3256	3622	3868
40°	3119	3577	3880
45°	2970	3531	3911
50°	2842	3499	3941
55°	2690	3471	4003
60°	2549	3458	4046
65°	2380	3430	4078
70°	2186	3378	4133
75°	1975	3288	3985
80°	1691	2914	3000
85°	1361	1716	1361



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.9	3.3
10°-20°	362.7	9.5
20°-30°	544.8	14.2
30°-40°	649.8	17.0
40°-50°	671.8	17.5
50°-60°	617.6	16.1
60°-70°	491.7	12.8
70°-80°	300.4	7.8
80°-90°	65.3	1.7
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°	1034.4	27.0
0°-40°	1684.2	44.0
0°-60°	2973.6	77.6
0°-90°	3831.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3831.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1338	1338	1338	1338	1338	
5°	1324	1327	1336	1342	1344	126
15°	1251	1266	1289	1307	1313	352
25°	1116	1144	1189	1222	1233	514
35°	940	980	1046	1100	1116	586
45°	740	793	880	951	975	572
55°	544	604	702	782	809	486
65°	354	415	511	582	607	351
75°	180	233	300	353	364	192
85°	42	51	53	46	42	48
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1338.2	1338.2	1338.2	1338.2	1338.2
2.5°	1331.0	1332.7	1338.2	1341.9	1341.9
5°	1323.6	1327.3	1336.4	1341.9	1343.8
7.5°	1312.9	1318.3	1331.0	1338.2	1340.3
10°	1296.4	1303.9	1320.1	1331.0	1334.5
12.5°	1276.5	1287.4	1307.4	1322.0	1325.5
15°	1251.2	1265.6	1289.0	1307.4	1312.9
17.5°	1221.9	1240.0	1269.3	1291.1	1298.3
20°	1190.8	1209.2	1245.6	1270.9	1280.0
22.5°	1154.6	1178.3	1220.1	1249.3	1256.5
25°	1116.5	1143.7	1189.2	1221.9	1232.8
27.5°	1074.5	1107.5	1156.5	1196.6	1205.7
30°	1030.9	1065.5	1121.9	1165.5	1176.4
32.5°	985.4	1025.5	1085.4	1134.6	1149.3
35°	939.9	980.1	1045.5	1100.3	1116.5
37.5°	887.2	934.6	1007.4	1063.8	1083.6
40°	841.9	887.2	965.6	1027.4	1047.4
42.5°	790.9	840.1	922.0	989.1	1012.8
45°	740.0	792.7	880.0	951.0	974.7
47.5°	692.7	745.4	836.4	911.1	934.6
50°	643.7	698.2	792.7	869.1	892.8
52.5°	591.0	650.9	749.1	825.5	852.8
55°	543.7	603.6	701.7	781.8	809.2
57.5°	494.5	556.4	658.3	734.7	760.2
60°	449.2	509.1	609.3	683.6	712.9
62.5°	400.0	461.7	559.9	632.8	660.2
65°	354.5	414.6	510.9	581.9	607.3
67.5°	309.0	369.3	459.9	527.4	556.4
70°	263.5	323.8	407.2	472.8	498.2
72.5°	223.8	276.5	356.3	416.4	440.1
75°	180.1	232.8	299.9	352.6	363.5
77.5°	140.0	187.3	243.7	267.2	271.1
80°	103.5	140.0	178.3	183.6	183.6
82.5°	69.0	96.3	111.0	112.6	111.0
85°	41.8	50.8	52.7	45.5	41.8
87.5°	14.4	14.4	9.1	5.4	1.9
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)