

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: P881115

Luminaire Tested: **22CZ2-39VHE-S-UNV-B50**

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: P881115
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-B50
Description: 2X2 3900 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 5000K CCT AND SMOOTH LENS

Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

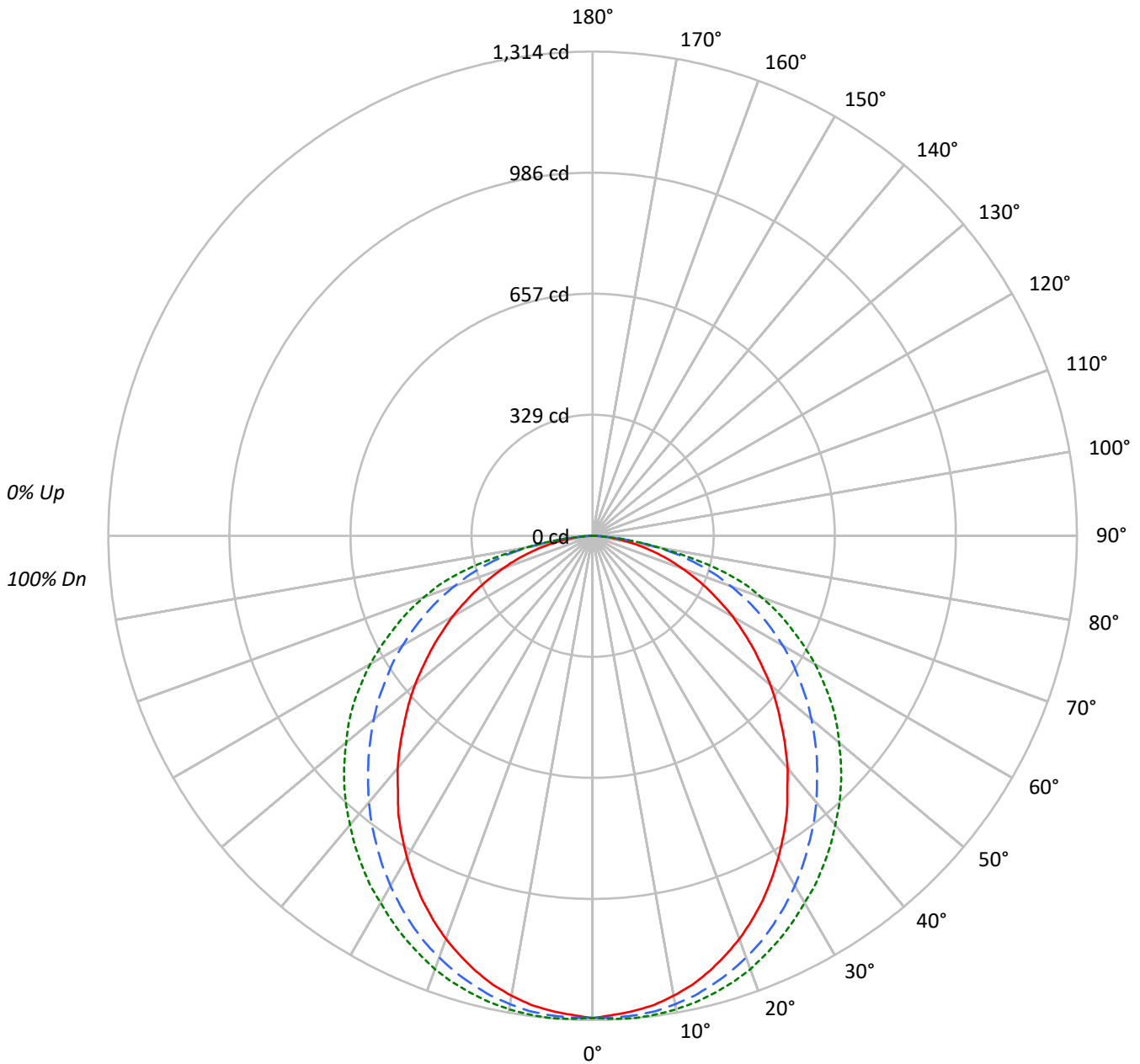
Lumens per Lamp: N/A
Luminaire Lumens: 3746.0 lumens
Efficiency: N/A
Efficacy: 117.1 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.31 / 1.37
Luminous Opening: Rectangular (W 1.92' x L: 1.98' x H: 0')
CIE Type: Direct

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°	3713	3713	3713
5°	3687	3722	3743
10°	3653	3719	3760
15°	3594	3703	3771
20°	3516	3678	3779
25°	3418	3641	3774
30°	3303	3594	3769
35°	3184	3541	3782
40°	3049	3497	3793
45°	2904	3453	3825
50°	2778	3422	3854
55°	2630	3395	3914
60°	2492	3381	3956
65°	2327	3354	3987
70°	2137	3303	4041
75°	1931	3216	3897
80°	1654	2848	2933
85°	1332	1677	1332



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.1	3.3
10°-20°	354.7	9.5
20°-30°	532.7	14.2
30°-40°	635.4	17.0
40°-50°	656.9	17.5
50°-60°	603.9	16.1
60°-70°	480.8	12.8
70°-80°	293.7	7.8
80°-90°	63.8	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°	1011.5	27.0
0°-40°	1646.8	44.0
0°-60°	2907.7	77.6
0°-90°	3746.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3746.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1308	1308	1308	1308	1308	
5°	1294	1298	1307	1312	1314	123
15°	1223	1238	1260	1278	1284	344
25°	1092	1118	1163	1195	1206	502
35°	919	958	1022	1076	1092	573
45°	724	775	860	930	953	560
55°	532	590	686	764	791	476
65°	347	405	500	569	594	343
75°	176	228	293	345	356	187
85°	41	50	52	44	41	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1308.5	1308.5	1308.5	1308.5	1308.5
2.5°	1301.5	1303.1	1308.5	1312.2	1312.2
5°	1294.3	1297.9	1306.7	1312.2	1314.0
7.5°	1283.8	1289.0	1301.5	1308.5	1310.6
10°	1267.7	1274.9	1290.8	1301.5	1304.9
12.5°	1248.2	1258.8	1278.3	1292.6	1296.1
15°	1223.4	1237.5	1260.4	1278.3	1283.8
17.5°	1194.8	1212.5	1241.1	1262.4	1269.5
20°	1164.4	1182.3	1218.0	1242.7	1251.6
22.5°	1129.0	1152.1	1193.0	1221.6	1228.6
25°	1091.8	1118.3	1162.8	1194.8	1205.5
27.5°	1050.7	1082.9	1130.8	1170.1	1178.9
30°	1008.0	1041.8	1097.0	1139.7	1150.3
32.5°	963.5	1002.8	1061.4	1109.5	1123.8
35°	919.1	958.3	1022.3	1075.9	1091.8
37.5°	867.5	913.8	985.1	1040.2	1059.6
40°	823.2	867.5	944.2	1004.6	1024.1
42.5°	773.3	821.4	901.5	967.2	990.3
45°	723.6	775.1	860.5	929.9	953.1
47.5°	677.3	728.8	817.8	890.9	913.8
50°	629.4	682.8	775.1	849.8	873.0
52.5°	577.9	636.5	732.5	807.1	833.9
55°	531.6	590.2	686.2	764.5	791.2
57.5°	483.5	544.1	643.7	718.4	743.3
60°	439.2	497.8	595.8	668.5	697.0
62.5°	391.1	451.5	547.5	618.7	645.5
65°	346.6	405.4	499.6	569.0	593.8
67.5°	302.1	361.1	449.7	515.7	544.1
70°	257.6	316.6	398.1	462.3	487.1
72.5°	218.8	270.3	348.4	407.2	430.3
75°	176.1	227.7	293.3	344.8	355.5
77.5°	136.9	183.2	238.3	261.3	265.1
80°	101.2	136.9	174.3	179.5	179.5
82.5°	67.4	94.2	108.5	110.1	108.5
85°	40.9	49.7	51.5	44.5	40.9
87.5°	14.1	14.1	8.9	5.2	1.8
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)