

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: P881121

Luminaire Tested: **22CZ2-39VHE-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: P881121
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P474795)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 10/2/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-39VHE-UNV-B50
Description: 2X2 3900 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 5000K CCT AND RIBBED LENS

Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

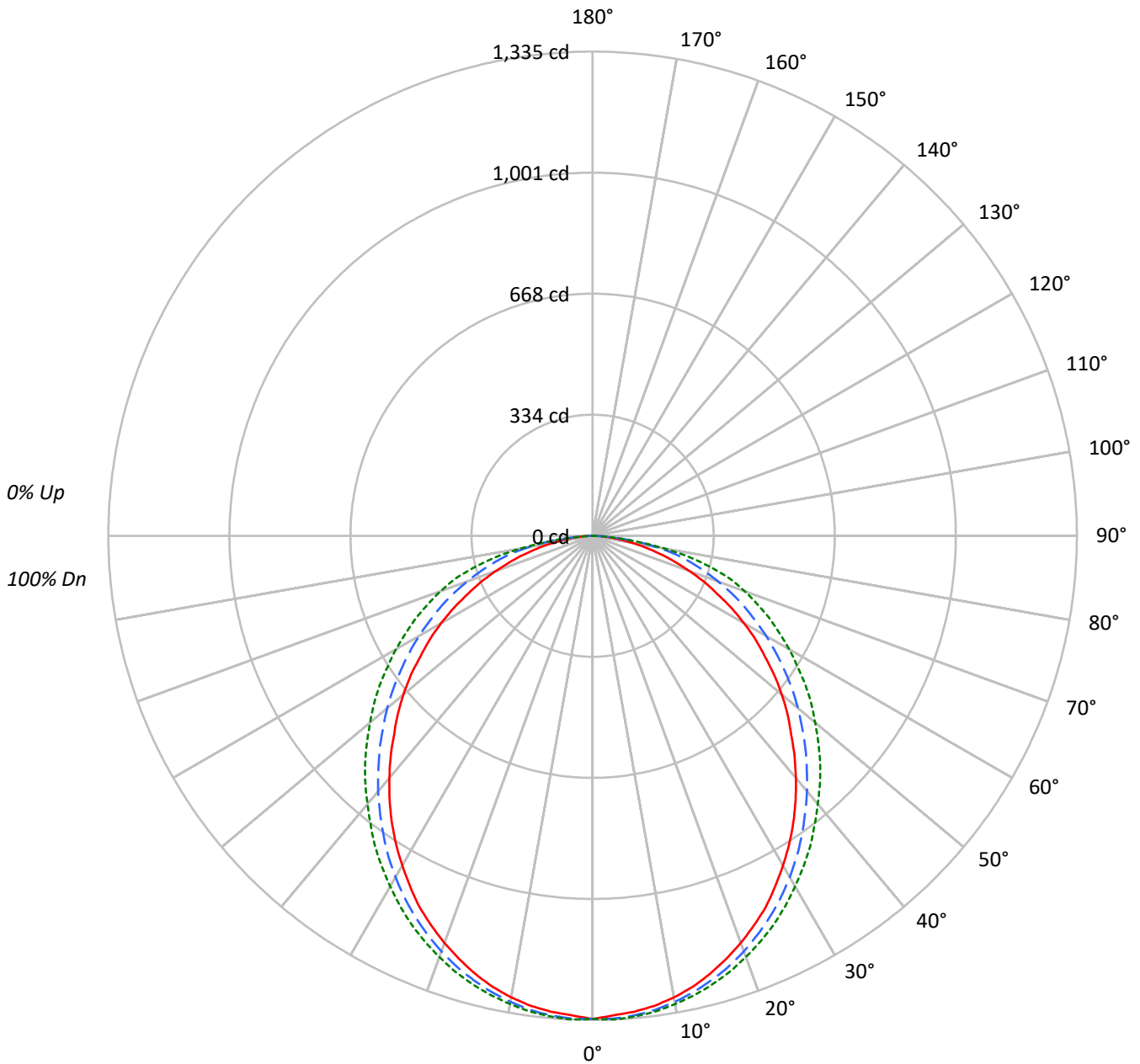
Lumens per Lamp: N/A
Luminaire Lumens: 3673.0 lumens
Efficiency: N/A
Efficacy: 114.8 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.25 / 1.33
Luminous Opening: Rectangular (W 1.92' x L: 1.98' x H: 0')
CIE Type: Direct

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	77	85	79	75	81	77	73	78	75	71	69																			
3	90	79	71	64	87	78	70	64	75	68	63	72	66	61	69	64	60	58																			
4	82	70	61	54	80	69	60	54	66	59	53	64	58	53	62	56	52	50																			
5	76	63	54	47	73	62	53	47	59	52	46	57	51	46	56	50	45	43																			
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38																			
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33																			
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30																			
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27																			
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3780	3780	3780
5°	3752	3781	3790
10°	3724	3760	3778
15°	3674	3726	3760
20°	3607	3682	3732
25°	3536	3626	3702
30°	3439	3561	3657
35°	3342	3485	3622
40°	3229	3407	3577
45°	3106	3330	3560
50°	3005	3262	3533
55°	2864	3191	3540
60°	2735	3136	3551
65°	2543	3095	3607
70°	2351	3052	3696
75°	2103	3039	3720
80°	1762	2879	3247
85°	1367	1973	1843



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.8	3.4
10°-20°	357.2	9.7
20°-30°	532.7	14.5
30°-40°	628.8	17.1
40°-50°	640.9	17.4
50°-60°	578.0	15.7
60°-70°	454.3	12.4
70°-80°	284.4	7.7
80°-90°	70.9	1.9
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°	1015.7	27.7
0°-40°	1644.6	44.8
0°-60°	2863.4	78.0
0°-90°	3673.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3673.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1332	1332	1332	1332	1332	
5°	1317	1320	1327	1330	1330	125
15°	1250	1256	1268	1278	1280	352
25°	1129	1138	1158	1176	1182	519
35°	965	977	1006	1034	1046	603
45°	774	791	830	870	887	599
55°	579	597	645	695	716	520
65°	379	402	461	512	537	378
75°	192	220	277	327	339	204
85°	42	54	61	61	57	51
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1332.1	1332.1	1332.1	1332.1	1332.1
2.5°	1323.4	1326.7	1332.8	1335.2	1335.2
5°	1317.3	1320.3	1327.4	1330.5	1330.5
7.5°	1307.1	1310.2	1318.9	1322.7	1323.4
10°	1292.5	1296.3	1304.8	1311.1	1311.1
12.5°	1273.8	1277.6	1288.5	1296.3	1297.0
15°	1250.5	1255.9	1268.4	1277.6	1280.0
17.5°	1223.4	1231.9	1245.8	1257.6	1259.9
20°	1194.6	1203.1	1219.4	1232.6	1235.8
22.5°	1162.7	1170.5	1189.9	1206.3	1210.1
25°	1129.4	1138.0	1158.2	1175.9	1182.3
27.5°	1089.8	1100.0	1124.0	1144.1	1150.4
30°	1049.5	1062.0	1086.7	1109.2	1116.2
32.5°	1008.4	1020.0	1047.8	1071.9	1081.3
35°	964.8	977.3	1006.0	1033.9	1045.7
37.5°	919.0	931.5	962.6	994.3	1005.1
40°	871.8	886.4	919.9	953.9	965.7
42.5°	823.7	839.0	874.0	912.1	927.5
45°	773.9	790.9	829.8	870.2	887.2
47.5°	728.8	742.8	783.3	827.5	843.7
50°	680.7	693.9	739.0	783.3	800.3
52.5°	631.9	644.3	692.5	739.0	760.0
55°	579.0	596.9	645.1	694.6	715.6
57.5°	532.5	548.8	598.6	648.9	669.1
60°	482.0	499.0	552.6	604.0	625.7
62.5°	431.5	450.2	504.5	559.7	579.9
65°	378.7	402.1	461.0	512.3	537.2
67.5°	333.8	356.3	414.5	468.1	489.8
70°	283.4	309.8	367.9	422.3	445.5
72.5°	235.9	262.4	322.1	376.5	399.7
75°	191.8	220.4	277.2	326.8	339.3
77.5°	149.1	176.2	232.9	261.6	274.9
80°	107.8	134.3	176.2	195.6	198.7
82.5°	72.9	95.5	119.6	125.0	122.0
85°	42.0	53.6	60.6	60.6	56.6
87.5°	17.0	17.0	14.8	9.2	5.4
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)