

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: P881119

Luminaire Tested: **22CZ2-39VHE-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: P881119
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-B35
Description: 2X2 3900 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 3500K CCT AND RIBBED LENS

Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

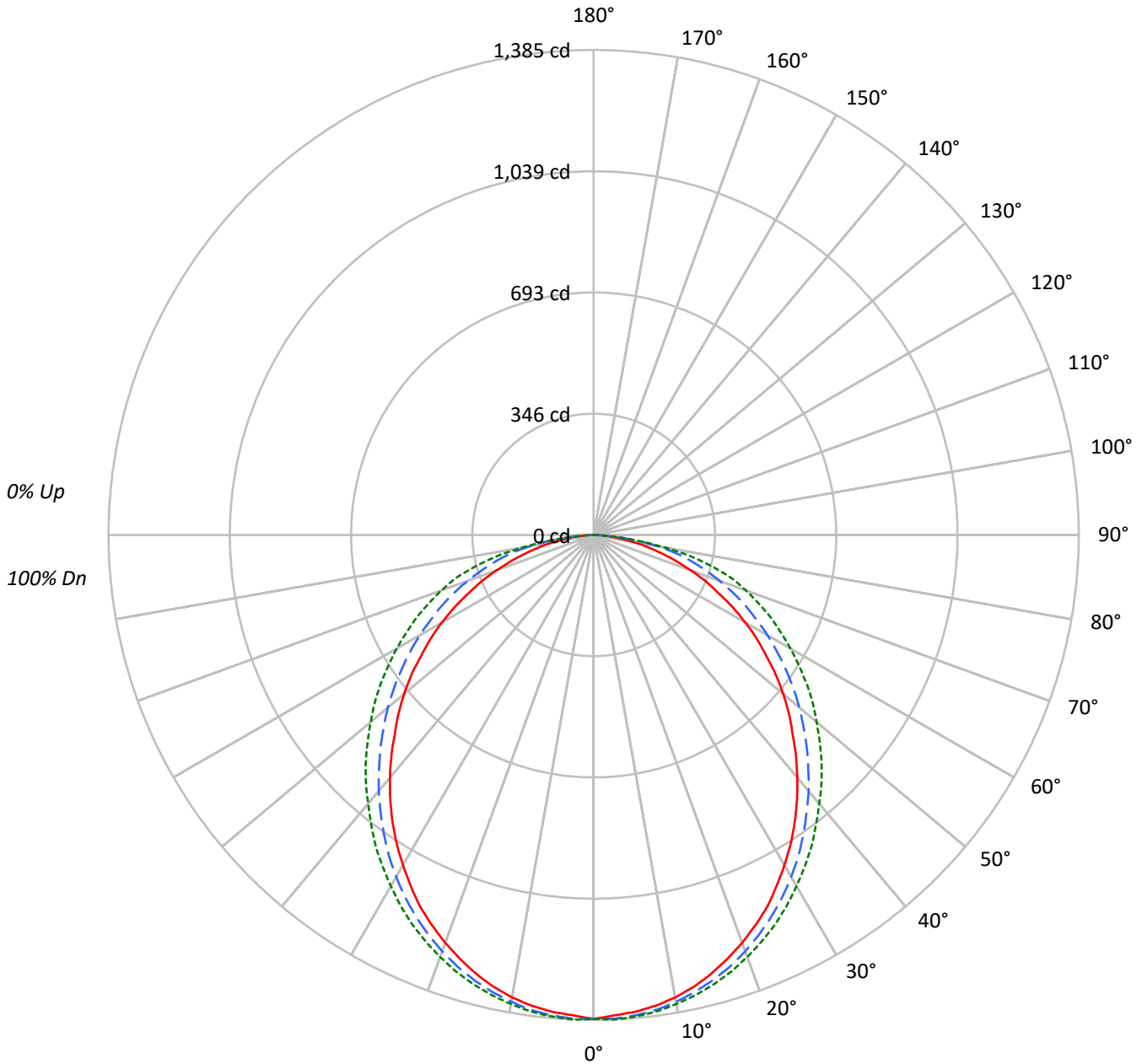
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3811.0 lumens
Efficiency: N/A
Efficacy: 119.1 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°	3922	3922	3922
5°	3893	3923	3932
10°	3864	3901	3920
15°	3812	3866	3901
20°	3743	3820	3872
25°	3669	3762	3841
30°	3568	3695	3795
35°	3467	3616	3758
40°	3350	3536	3712
45°	3222	3455	3694
50°	3118	3385	3666
55°	2972	3311	3673
60°	2838	3254	3684
65°	2638	3212	3742
70°	2439	3167	3835
75°	2182	3153	3859
80°	1829	2989	3368
85°	1419	2048	1914



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.6	3.4
10°-20°	370.7	9.7
20°-30°	552.7	14.5
30°-40°	652.4	17.1
40°-50°	664.9	17.4
50°-60°	599.7	15.7
60°-70°	471.3	12.4
70°-80°	295.1	7.7
80°-90°	73.6	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°	1053.9	27.7
0°-40°	1706.4	44.8
0°-60°	2971.0	78.0
0°-90°	3811.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3811.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1382	1382	1382	1382	1382	
5°	1367	1370	1377	1380	1380	130
15°	1298	1303	1316	1326	1328	366
25°	1172	1181	1202	1220	1227	539
35°	1001	1014	1044	1073	1085	626
45°	803	821	861	903	920	621
55°	601	619	669	721	742	539
65°	393	417	478	532	557	392
75°	199	229	288	339	352	211
85°	44	56	63	63	59	52
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1382.2	1382.2	1382.2	<i>1382.2</i>	1382.2
2.5°	<i>1373.1</i>	<i>1376.5</i>	<i>1382.9</i>	<i>1385.3</i>	<i>1385.3</i>
5°	1366.8	1369.9	1377.3	<i>1380.5</i>	1380.5
7.5°	1356.2	1359.4	1368.4	<i>1372.4</i>	1373.1
10°	1341.0	1345.0	1353.8	<i>1360.4</i>	1360.4
12.5°	1321.7	1325.6	1336.9	<i>1345.0</i>	1345.7
15°	1297.5	1303.1	1316.1	<i>1325.6</i>	1328.1
17.5°	1269.3	1278.1	1292.6	<i>1304.8</i>	1307.2
20°	1239.5	1248.3	1265.2	<i>1278.9</i>	1282.3
22.5°	1206.4	1214.5	1234.6	<i>1251.7</i>	1255.6
25°	1171.9	1180.7	1201.7	<i>1220.1</i>	1226.7
27.5°	1130.8	1141.3	1166.2	<i>1187.1</i>	1193.7
30°	1088.9	1101.9	1127.6	<i>1150.9</i>	1158.2
32.5°	1046.3	1058.3	1087.2	<i>1112.2</i>	1121.9
35°	1001.0	1014.0	1043.8	<i>1072.8</i>	1085.0
37.5°	953.5	966.5	998.8	<i>1031.6</i>	1042.9
40°	904.5	919.7	954.5	<i>989.8</i>	1002.0
42.5°	854.6	870.6	906.8	<i>946.4</i>	962.4
45°	803.0	820.6	861.0	<i>902.8</i>	920.5
47.5°	756.2	770.7	812.7	<i>858.5</i>	875.4
50°	706.3	720.0	766.7	<i>812.7</i>	830.4
52.5°	655.6	668.5	718.5	<i>766.7</i>	788.5
55°	600.8	619.4	669.3	<i>720.7</i>	742.5
57.5°	552.5	569.4	621.0	<i>673.2</i>	694.3
60°	500.1	517.8	573.4	<i>626.7</i>	649.2
62.5°	447.8	467.1	523.4	<i>580.7</i>	601.7
65°	392.9	417.2	478.4	<i>531.5</i>	557.4
67.5°	346.4	369.7	430.1	<i>485.7</i>	508.2
70°	294.0	321.4	381.7	<i>438.2</i>	462.2
72.5°	244.8	272.2	334.2	<i>390.7</i>	414.7
75°	199.0	228.7	287.6	<i>339.1</i>	352.0
77.5°	154.7	182.9	241.6	<i>271.5</i>	285.2
80°	111.9	139.3	182.9	<i>202.9</i>	206.1
82.5°	75.7	99.1	124.1	<i>129.7</i>	126.5
85°	43.6	55.6	62.9	<i>62.9</i>	58.8
87.5°	17.6	17.6	15.4	<i>9.6</i>	5.6
90°	0.0	0.0	0.0	<i>0.0</i>	0.0



Report Generated By 670246072 / DESKTOP-50001EG





— 0°-180° - - 45°-225° - - - - 90°-270°







(END OF REPORT)