

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: P881109

Luminaire Tested: **22CZ2-39VHE-HRP-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: P881109
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P475114)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 10/2/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-39VHE-HRP-UNV-B50
Description: 2X2 3900 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 5000K CCT AND HRP LENS

Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

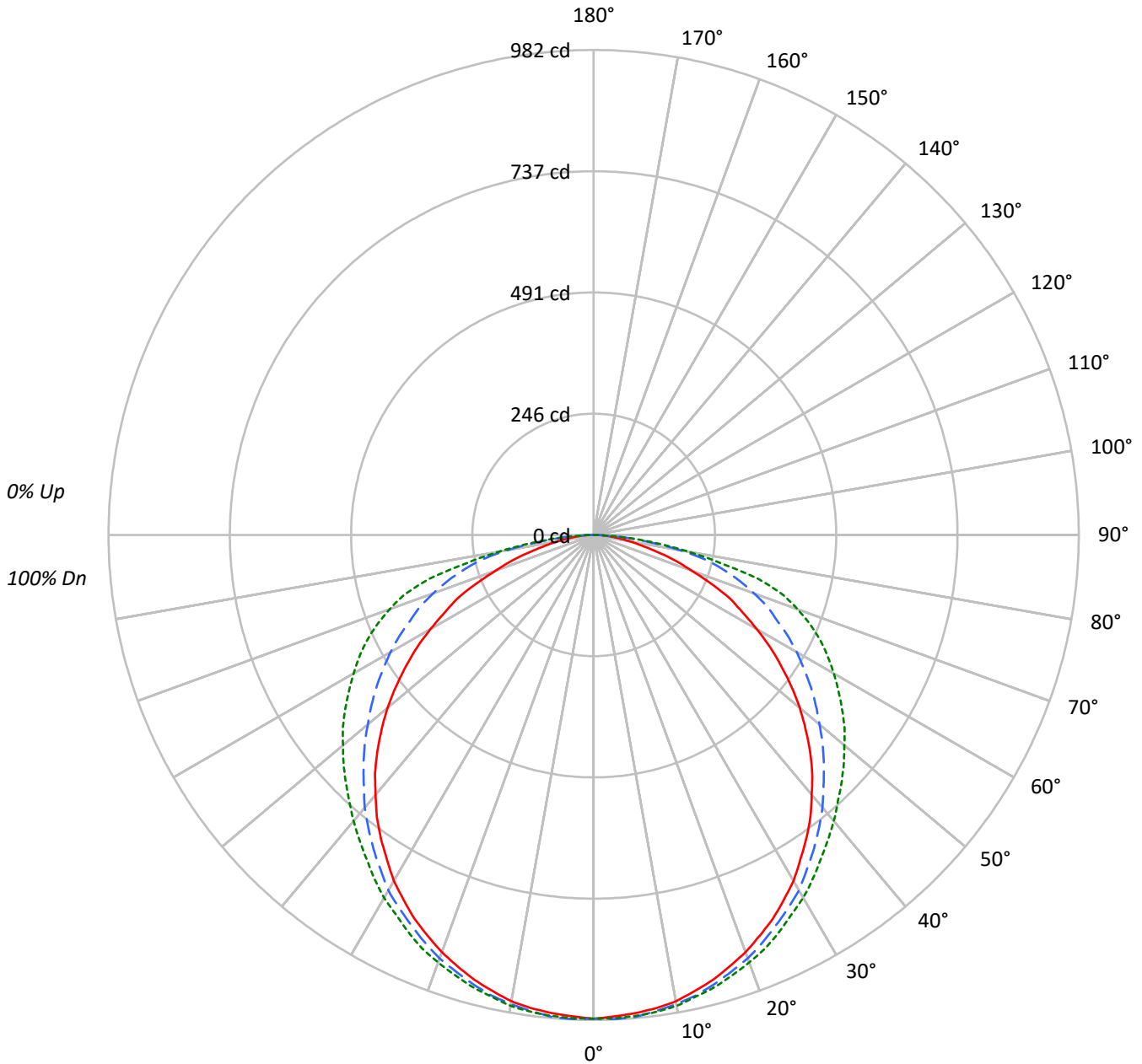
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2975.0 lumens
Efficiency: N/A
Efficacy: 93.0 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.29 / 1.38
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	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	80	75	84	78	73	80	75	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	52	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°	2780	2780	2780
5°	2769	2790	2785
10°	2763	2779	2791
15°	2740	2768	2784
20°	2715	2754	2782
25°	2685	2732	2779
30°	2650	2724	2780
35°	2600	2691	2776
40°	2544	2670	2801
45°	2485	2644	2847
50°	2403	2635	2924
55°	2293	2656	3036
60°	2162	2694	3184
65°	2042	2747	3403
70°	1744	2865	3643
75°	1461	2984	3786
80°	1198	2883	3159
85°	1039	2136	2318



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.8	3.1
10°-20°	265.6	8.9
20°-30°	402.5	13.5
30°-40°	486.0	16.3
40°-50°	510.7	17.2
50°-60°	480.5	16.2
60°-70°	400.6	13.5
70°-80°	265.5	8.9
80°-90°	70.7	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°	760.9	25.6
0°-40°	1247.0	41.9
0°-60°	2238.2	75.2
0°-90°	2975.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2975.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	980	980	980	980	980	
5°	972	974	980	980	978	92
15°	933	936	942	946	948	263
25°	858	863	873	884	888	395
35°	751	758	777	794	801	469
45°	619	629	659	692	709	477
55°	464	484	537	591	614	415
65°	304	330	409	477	507	296
75°	133	186	272	328	345	145
85°	32	49	66	71	71	37
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	979.6	979.6	979.6	979.6	979.6
2.5°	975.9	977.7	981.5	981.5	979.6
5°	972.1	974.0	979.6	979.6	977.7
7.5°	966.5	968.5	972.1	975.9	974.0
10°	959.0	960.9	964.6	968.5	968.5
12.5°	945.9	947.7	955.2	957.3	957.3
15°	932.7	936.5	942.1	945.9	947.7
17.5°	915.9	919.6	927.1	934.6	934.6
20°	899.0	902.7	912.1	919.6	921.3
22.5°	878.4	884.0	893.4	902.7	906.5
25°	857.7	863.4	872.7	884.0	887.7
27.5°	833.2	838.8	852.1	865.2	866.9
30°	808.8	814.4	831.3	842.6	848.4
32.5°	778.8	786.3	803.2	820.1	825.7
35°	750.7	758.2	776.9	794.0	801.3
37.5°	720.7	728.0	748.8	769.6	778.8
40°	686.8	696.3	720.7	743.2	756.3
42.5°	655.1	664.4	688.8	718.8	731.9
45°	619.3	628.6	658.8	692.4	709.4
47.5°	581.8	593.0	628.6	670.1	686.8
50°	544.3	557.4	596.8	643.6	662.4
52.5°	504.7	521.8	566.8	617.6	639.9
55°	463.5	484.3	536.8	591.1	613.6
57.5°	424.1	443.0	504.7	563.0	587.4
60°	381.0	405.3	474.7	534.7	561.1
62.5°	339.7	366.0	443.0	506.8	534.7
65°	304.1	330.2	409.1	476.6	506.8
67.5°	257.0	292.9	381.0	444.7	474.7
70°	210.2	258.9	345.3	411.0	439.1
72.5°	174.5	221.4	309.7	375.3	401.6
75°	133.3	185.8	272.2	328.5	345.3
77.5°	99.6	153.9	232.7	261.0	262.7
80°	73.3	118.1	176.4	185.8	193.3
82.5°	50.8	82.5	114.6	125.6	129.6
85°	31.9	48.7	65.6	71.2	71.2
87.5°	16.9	18.7	22.5	22.5	22.5
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)