

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: P881113

Luminaire Tested: **22CZ2-39VHE-S-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: P881113
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-B35
Description: 2X2 3900 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 3500K CCT AND SMOOTH LENS

Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

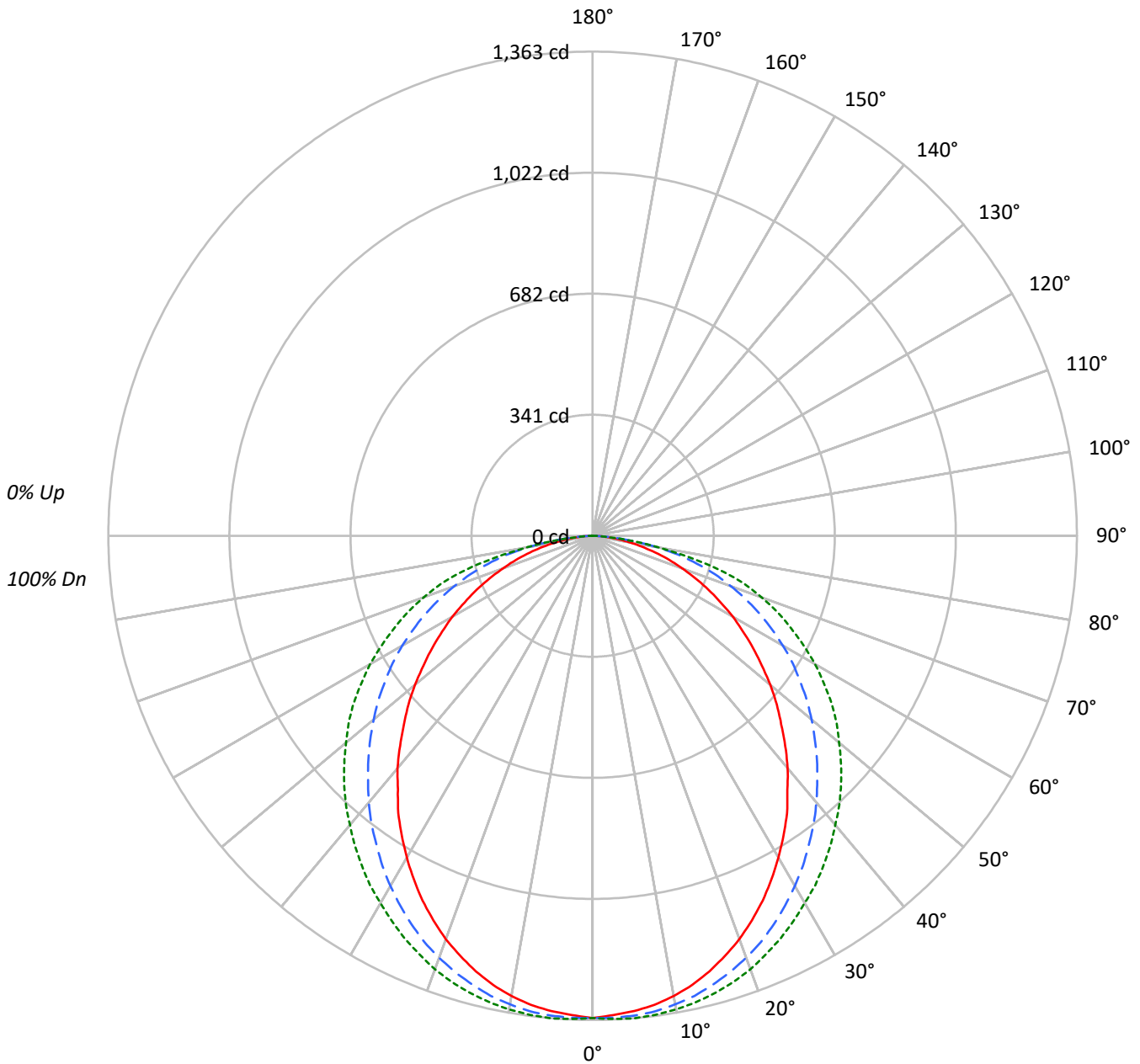
Lumens per Lamp: N/A
Luminaire Lumens: 3887.0 lumens
Efficiency: N/A
Efficacy: 121.5 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.31 / 1.37
Luminous Opening: Rectangular (W 1.92' x L: 1.98' x H: 0')
CIE Type: Direct

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°	3853	3853	3853
5°	3825	3862	3883
10°	3790	3859	3901
15°	3729	3842	3913
20°	3649	3816	3922
25°	3547	3778	3916
30°	3427	3730	3911
35°	3304	3675	3924
40°	3164	3629	3936
45°	3013	3583	3968
50°	2883	3551	3999
55°	2729	3522	4062
60°	2586	3508	4105
65°	2415	3481	4137
70°	2218	3427	4193
75°	2004	3336	4043
80°	1717	2956	3044
85°	1380	1742	1380



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.7	3.3
10°-20°	368.0	9.5
20°-30°	552.8	14.2
30°-40°	659.3	17.0
40°-50°	681.6	17.5
50°-60°	626.6	16.1
60°-70°	498.9	12.8
70°-80°	304.8	7.8
80°-90°	66.2	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°	1049.6	27.0
0°-40°	1708.8	44.0
0°-60°	3017.1	77.6
0°-90°	3887.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3887.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1358	1358	1358	1358	1358	
5°	1343	1347	1356	1362	1363	127
15°	1269	1284	1308	1326	1332	357
25°	1133	1160	1207	1240	1251	521
35°	954	994	1061	1116	1133	595
45°	751	804	893	965	989	581
55°	552	612	712	793	821	493
65°	360	421	518	590	616	356
75°	183	236	304	358	369	195
85°	42	52	54	46	42	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1357.8	1357.8	1357.8	1357.8	1357.8
2.5°	1350.5	1352.2	1357.8	1361.6	1361.6
5°	1343.0	1346.7	1355.9	1361.6	1363.4
7.5°	1332.1	1337.5	1350.5	1357.8	1359.9
10°	1315.4	1322.9	1339.4	1350.5	1354.0
12.5°	1295.1	1306.2	1326.5	1341.3	1344.8
15°	1269.4	1284.1	1307.9	1326.5	1332.1
17.5°	1239.8	1258.2	1287.8	1310.0	1317.3
20°	1208.3	1226.8	1263.8	1289.5	1298.7
22.5°	1171.5	1195.5	1237.9	1267.6	1274.9
25°	1132.9	1160.4	1206.6	1239.8	1250.9
27.5°	1090.2	1123.7	1173.4	1214.1	1223.3
30°	1046.0	1081.1	1138.3	1182.6	1193.6
32.5°	999.8	1040.5	1101.3	1151.2	1166.1
35°	953.7	994.4	1060.8	1116.4	1132.9
37.5°	900.2	948.2	1022.2	1079.4	1099.4
40°	854.2	900.2	979.8	1042.4	1062.7
42.5°	802.4	852.4	935.5	1003.6	1027.6
45°	750.8	804.3	892.9	964.9	988.9
47.5°	702.8	756.3	848.6	924.4	948.2
50°	653.1	708.5	804.3	881.8	905.8
52.5°	599.6	660.4	760.0	837.5	865.3
55°	551.6	612.4	712.0	793.2	821.0
57.5°	501.7	564.5	667.9	745.4	771.3
60°	455.7	516.5	618.2	693.6	723.3
62.5°	405.8	468.5	568.1	642.0	669.8
65°	359.7	420.6	518.4	590.4	616.1
67.5°	313.5	374.7	466.6	535.1	564.5
70°	267.3	328.5	413.1	479.8	505.4
72.5°	227.0	280.5	361.5	422.5	446.5
75°	182.8	236.2	304.3	357.8	368.8
77.5°	142.0	190.1	247.3	271.1	275.1
80°	105.1	142.0	180.9	186.3	186.3
82.5°	70.0	97.7	112.6	114.2	112.6
85°	42.4	51.6	53.5	46.2	42.4
87.5°	14.6	14.6	9.2	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)