

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: P881120

Luminaire Tested: **22CZ2-39VHE-UNV-B40**

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: P881120
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-B40
Description: 2X2 3900 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 4000K CCT AND RIBBED LENS

Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

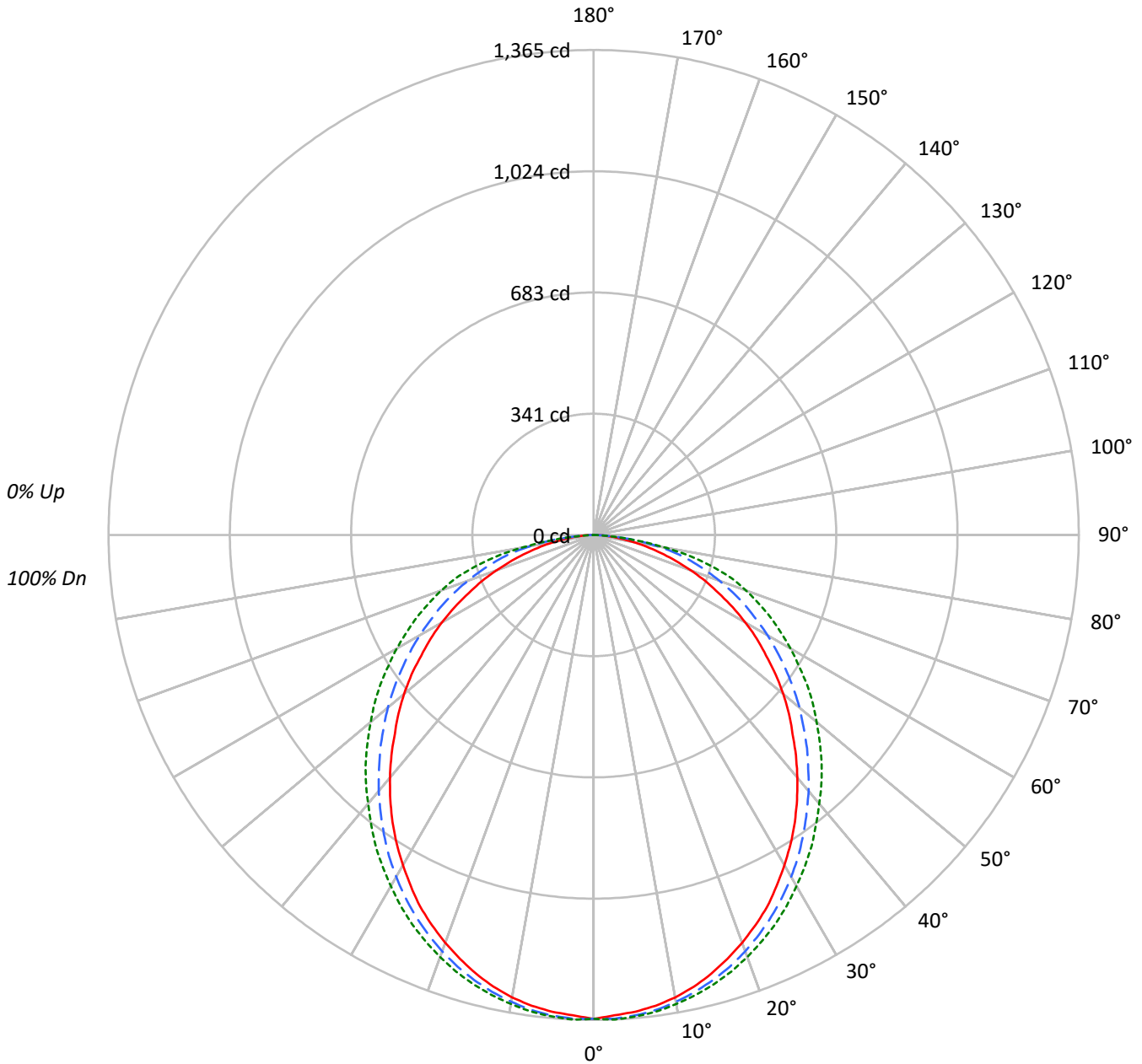
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3756.0 lumens
Efficiency: N/A
Efficacy: 117.4 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°	3865	3865	3865
5°	3837	3866	3875
10°	3808	3845	3863
15°	3757	3810	3845
20°	3689	3765	3816
25°	3616	3708	3785
30°	3516	3641	3740
35°	3418	3564	3704
40°	3302	3484	3658
45°	3176	3405	3640
50°	3073	3336	3613
55°	2929	3263	3620
60°	2797	3207	3631
65°	2600	3166	3689
70°	2404	3121	3779
75°	2150	3108	3803
80°	1802	2945	3320
85°	1397	2019	1885



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.7	3.4
10°-20°	365.3	9.7
20°-30°	544.7	14.5
30°-40°	643.0	17.1
40°-50°	655.4	17.4
50°-60°	591.0	15.7
60°-70°	464.5	12.4
70°-80°	290.9	7.7
80°-90°	72.5	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°	1038.7	27.7
0°-40°	1681.7	44.8
0°-60°	2928.1	78.0
0°-90°	3756.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3756.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1362	1362	1362	1362	1362	
5°	1347	1350	1357	1360	1360	128
15°	1279	1284	1297	1306	1309	360
25°	1155	1164	1184	1202	1209	531
35°	987	999	1029	1057	1069	617
45°	791	809	849	890	907	612
55°	592	610	660	710	732	531
65°	387	411	472	524	549	386
75°	196	225	284	334	347	208
85°	43	55	62	62	58	52
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1362.2	1362.2	1362.2	1362.2	1362.2
2.5°	1353.3	1356.7	1362.9	1365.4	1365.4
5°	1347.0	1350.2	1357.4	1360.5	1360.5
7.5°	1336.7	1339.8	1348.7	1352.6	1353.3
10°	1321.7	1325.6	1334.3	1340.7	1340.7
12.5°	1302.6	1306.5	1317.6	1325.6	1326.3
15°	1278.8	1284.3	1297.1	1306.5	1308.9
17.5°	1251.0	1259.7	1273.9	1286.0	1288.4
20°	1221.6	1230.3	1246.9	1260.4	1263.8
22.5°	1189.0	1197.0	1216.8	1233.6	1237.5
25°	1155.0	1163.7	1184.4	1202.5	1209.0
27.5°	1114.4	1124.8	1149.4	1170.0	1176.4
30°	1073.2	1086.0	1111.3	1134.2	1141.5
32.5°	1031.2	1043.0	1071.5	1096.1	1105.8
35°	986.6	999.4	1028.8	1057.3	1069.3
37.5°	939.8	952.5	984.4	1016.8	1027.9
40°	891.5	906.5	940.7	975.5	987.5
42.5°	842.3	858.0	893.7	932.7	948.5
45°	791.4	808.8	848.6	889.8	907.2
47.5°	745.3	759.6	801.0	846.2	862.8
50°	696.1	709.6	755.7	801.0	818.4
52.5°	646.1	658.9	708.1	755.7	777.1
55°	592.1	610.4	659.6	710.3	731.8
57.5°	544.5	561.2	612.1	663.5	684.2
60°	492.9	510.3	565.1	617.6	639.8
62.5°	441.3	460.4	515.9	572.3	593.0
65°	387.3	411.1	471.5	523.8	549.4
67.5°	341.4	364.3	423.9	478.7	500.9
70°	289.8	316.8	376.2	431.9	455.5
72.5°	241.3	268.3	329.4	385.1	408.7
75°	196.1	225.4	283.5	334.2	346.9
77.5°	152.5	180.2	238.1	267.6	281.1
80°	110.3	137.3	180.2	200.0	203.2
82.5°	74.6	97.7	122.3	127.9	124.7
85°	42.9	54.8	62.0	62.0	57.9
87.5°	17.4	17.4	15.2	9.4	5.6
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)