

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: P881196

Luminaire Tested: **24CZ2-40VHE-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: P881196
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P473819)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 10/2/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-40VHE-UNV-B50
Description: 2X4 4000 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 5000K CCT AND RIBBED LENS

Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

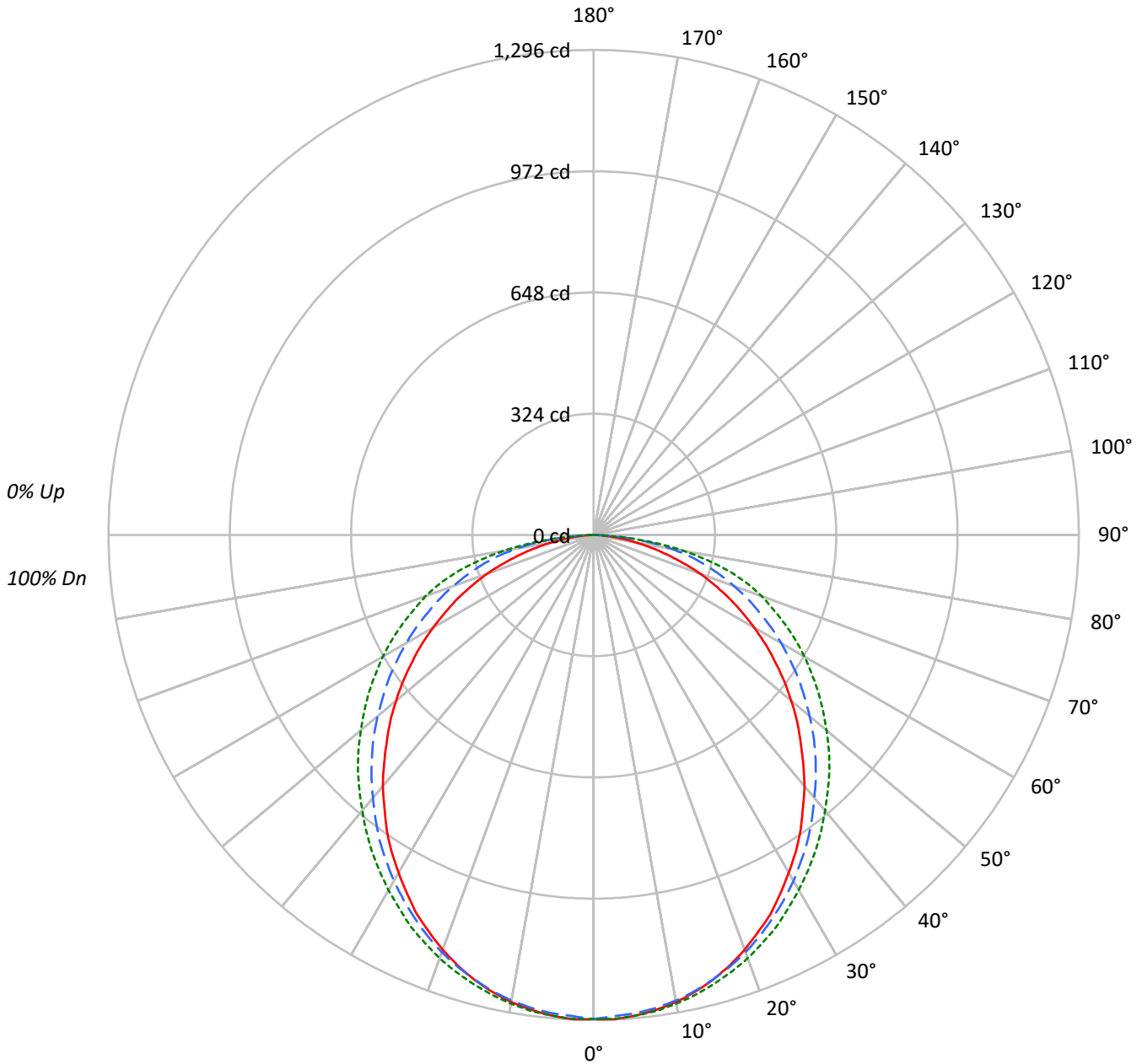
Lumens per Lamp: N/A
Luminaire Lumens: 3744.0 lumens
Efficiency: N/A
Efficacy: 124.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.36
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')
CIE Type: Direct

Input Watts (W): 30
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	99	95	105	101	97	93	97	93	90	93	90	87	89	87	85	83																			
2	98	89	82	76	95	88	81	75	84	78	74	81	76	72	78	74	70	68																			
3	89	78	70	63	87	77	69	63	74	67	61	71	65	60	68	63	59	57																			
4	82	69	60	53	79	68	59	53	65	58	52	63	57	51	61	55	51	48																			
5	75	62	53	46	73	61	52	46	58	51	45	56	50	44	55	49	44	42																			
6	69	56	46	40	67	55	46	40	53	45	39	51	44	39	49	43	39	37																			
7	64	50	41	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32																			
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29																			
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26																			
10	52	39	31	26	51	38	31	26	37	30	25	36	30	25	36	30	25	23																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1826	1826	1826
5°	1827	1818	1827
10°	1817	1811	1823
15°	1798	1797	1815
20°	1772	1782	1808
25°	1741	1760	1799
30°	1698	1740	1786
35°	1660	1717	1779
40°	1615	1689	1772
45°	1560	1672	1777
50°	1513	1653	1782
55°	1457	1642	1802
60°	1397	1634	1836
65°	1331	1628	1883
70°	1253	1645	1969
75°	1102	1679	2048
80°	920	1691	1976
85°	657	1449	1469



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.3	3.3
10°-20°	348.4	9.3
20°-30°	522.6	14.0
30°-40°	624.0	16.7
40°-50°	646.3	17.3
50°-60°	595.0	15.9
60°-70°	480.0	12.8
70°-80°	313.6	8.4
80°-90°	91.9	2.5
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°	993.3	26.5
0°-40°	1617.2	43.2
0°-60°	2858.5	76.3
0°-90°	3744.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3744.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1294	1294	1294	1294	1294	
5°	1290	1288	1283	1290	1290	122
15°	1231	1231	1230	1242	1242	347
25°	1118	1120	1130	1151	1155	514
35°	964	972	997	1024	1032	602
45°	781	801	838	875	890	604
55°	592	618	667	716	732	530
65°	399	426	488	543	564	394
75°	202	240	308	361	376	216
85°	41	70	90	95	91	50
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1293.8	1293.8	1293.8	1293.8	1293.8
2.5°	1295.6	1293.8	1287.1	1295.0	1294.4
5°	1289.5	1288.3	1282.9	1290.1	1289.5
7.5°	1279.9	1279.3	1275.0	1282.9	1282.9
10°	1267.8	1266.6	1263.6	1272.6	1272.0
12.5°	1250.9	1250.3	1248.5	1259.3	1258.7
15°	1230.8	1230.8	1230.2	1242.4	1242.4
17.5°	1206.7	1207.3	1209.7	1223.6	1224.2
20°	1179.5	1181.9	1186.8	1202.5	1203.7
22.5°	1148.6	1153.4	1160.1	1177.7	1179.5
25°	1117.8	1120.2	1130.5	1151.0	1155.2
27.5°	1080.2	1086.4	1099.7	1120.8	1125.0
30°	1042.2	1050.6	1067.5	1089.4	1096.0
32.5°	1004.6	1012.0	1031.9	1056.7	1064.5
35°	963.6	972.0	996.8	1024.1	1032.5
37.5°	918.1	931.4	957.5	988.9	998.0
40°	876.5	888.6	916.9	952.1	961.7
42.5°	828.6	843.7	878.3	913.9	926.0
45°	781.4	800.9	837.7	875.3	890.4
47.5°	737.3	753.0	796.6	838.9	852.2
50°	688.9	707.0	753.0	797.8	811.7
52.5°	641.2	662.9	709.4	756.7	771.8
55°	592.2	617.5	667.2	716.2	732.5
57.5°	544.9	570.4	621.8	673.8	690.7
60°	494.8	522.0	578.9	629.0	650.3
62.5°	446.4	473.6	533.5	587.9	607.9
65°	398.6	425.9	487.6	543.1	563.8
67.5°	349.0	378.6	444.6	498.4	518.4
70°	303.6	332.0	398.6	456.1	477.2
72.5°	251.6	285.5	353.3	410.0	430.1
75°	202.1	240.1	307.9	361.1	375.6
77.5°	156.0	194.2	261.8	301.8	310.9
80°	113.2	151.8	208.1	235.9	243.1
82.5°	73.2	113.2	150.6	169.3	171.7
85°	40.6	70.2	89.5	94.9	90.7
87.5°	14.5	26.6	26.0	21.1	16.9
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)