

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: P843086

Luminaire Tested: **24CZ2-45HE-HRP-UNV-B40**

Issue Date: 1/5/2024



Test Information

Test Method: LM-79-08
Report Number: P843086
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P295011)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 1/5/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-45HE-HRP-UNV-B40
Description: 2X4 4500 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 4000K CCT AND HRP LENS

Light Source: -
Ballast/Driver: -

Summary

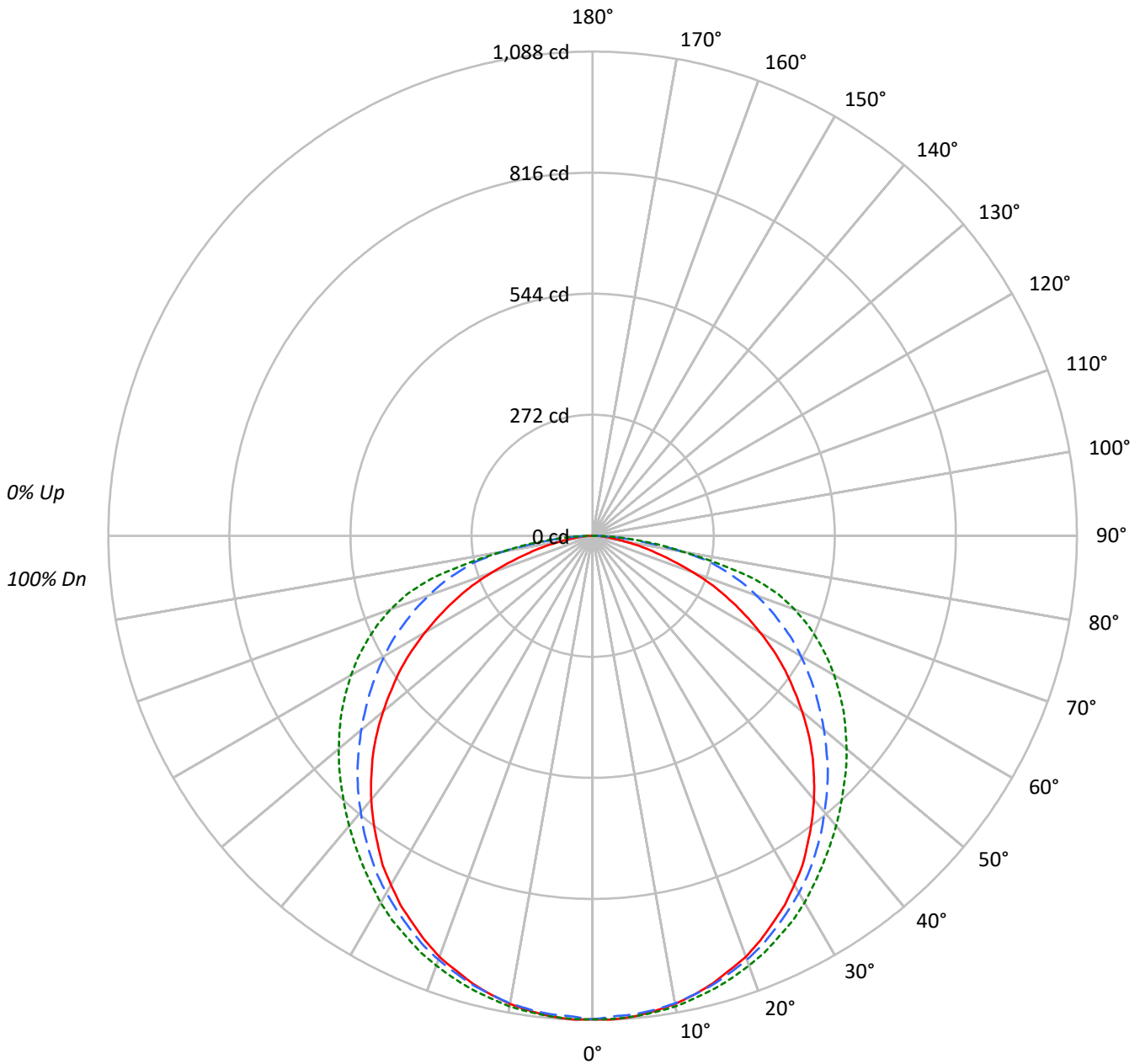
Lumens per Lamp: N/A
Luminaire Lumens: 3349.0 lumens
Efficiency: N/A
Efficacy: 101.5 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.3 / 1.4
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')
CIE Type: Direct

Input Watts (W): 33
Input Voltage (V): NR
Input Current (A_{in}): 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	86	84	82																			
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67																			
3	89	78	69	62	86	76	68	62	73	66	61	70	64	59	68	63	58	56																			
4	81	68	59	52	79	67	59	52	65	57	51	62	56	50	60	54	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	38	50	43	38	49	42	38	36																			
7	63	50	41	34	62	49	40	34	47	39	34	46	39	34	44	38	33	31																			
8	59	45	36	30	57	44	36	30	43	36	30	42	35	30	41	34	30	28																			
9	55	41	33	27	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	24	35	29	24	23																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1534	1534	1534
5°	1536	1529	1536
10°	1531	1529	1539
15°	1522	1526	1541
20°	1512	1522	1544
25°	1493	1515	1546
30°	1476	1510	1551
35°	1452	1503	1553
40°	1426	1493	1568
45°	1394	1492	1592
50°	1348	1490	1635
55°	1300	1500	1694
60°	1227	1524	1769
65°	1133	1559	1868
70°	990	1614	1991
75°	803	1697	2056
80°	592	1665	1665
85°	455	1227	1385



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.9	3.1
10°-20°	295.6	8.8
20°-30°	450.0	13.4
30°-40°	546.4	16.3
40°-50°	577.3	17.2
50°-60°	544.7	16.3
60°-70°	452.9	13.5
70°-80°	298.0	8.9
80°-90°	81.2	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°	848.5	25.3
0°-40°	1394.9	41.7
0°-60°	2516.9	75.2
0°-90°	3349.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3349.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1087	1087	1087	1087	1087	
5°	1084	1084	1080	1084	1084	103
15°	1042	1043	1044	1054	1054	294
25°	959	965	973	990	993	442
35°	843	852	872	894	901	527
45°	698	712	747	784	798	538
55°	528	551	610	667	688	471
65°	339	378	467	536	559	335
75°	147	214	311	369	377	159
85°	28	62	76	84	86	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1086.6	1086.6	1086.6	1086.6	1086.6
2.5°	1088.0	1086.6	1080.9	1086.6	1086.6
5°	1083.9	1083.9	1079.5	1083.9	1083.9
7.5°	1076.7	1076.7	1074.0	1079.5	1079.5
10°	1068.4	1068.4	1066.9	1074.0	1074.0
12.5°	1055.8	1057.2	1055.8	1064.1	1064.1
15°	1041.7	1043.1	1044.5	1054.4	1054.4
17.5°	1023.5	1026.3	1029.1	1040.3	1041.7
20°	1006.7	1008.1	1013.6	1026.3	1027.7
22.5°	984.2	988.5	995.4	1008.1	1012.2
25°	959.0	964.6	973.1	989.9	992.7
27.5°	935.1	939.4	950.5	968.7	974.4
30°	905.8	912.7	926.8	945.0	951.9
32.5°	877.7	884.6	901.4	921.2	926.8
35°	842.7	852.4	872.1	894.5	901.4
37.5°	809.0	818.7	842.7	867.8	876.3
40°	773.8	785.1	810.4	839.9	851.0
42.5°	736.0	751.5	779.6	811.8	824.5
45°	698.2	712.3	747.3	783.7	797.8
47.5°	657.5	674.3	712.3	755.6	772.4
50°	614.1	635.1	678.6	726.3	744.5
52.5°	570.6	594.4	643.4	696.8	716.4
55°	528.5	551.0	609.8	667.4	688.4
57.5°	482.4	510.3	574.8	636.5	657.5
60°	434.7	465.5	539.8	604.3	626.6
62.5°	387.0	422.0	506.1	570.6	594.4
65°	339.3	378.5	466.9	535.6	559.4
67.5°	293.0	336.5	430.4	499.2	522.9
70°	239.8	294.4	391.2	458.4	482.4
72.5°	190.7	253.8	353.4	416.5	437.5
75°	147.2	214.5	311.2	368.8	377.1
77.5°	108.0	175.3	267.7	287.5	288.9
80°	72.8	140.3	204.8	201.8	204.8
82.5°	47.7	105.1	129.0	144.4	145.8
85°	28.1	61.7	75.8	84.1	85.5
87.5°	14.0	21.0	26.7	28.1	30.9
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)