

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: P843099

Luminaire Tested: **24CZ2-45HE-UNV-B50**

Issue Date: 1/5/2024



Test Information

Test Method: LM-79-08
Report Number: P843099
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P272125)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 1/5/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-45HE-UNV-B50
Description: 2X4 4500 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 5000K CCT AND RIBBED LENS

Light Source: -
Ballast/Driver: -

Summary

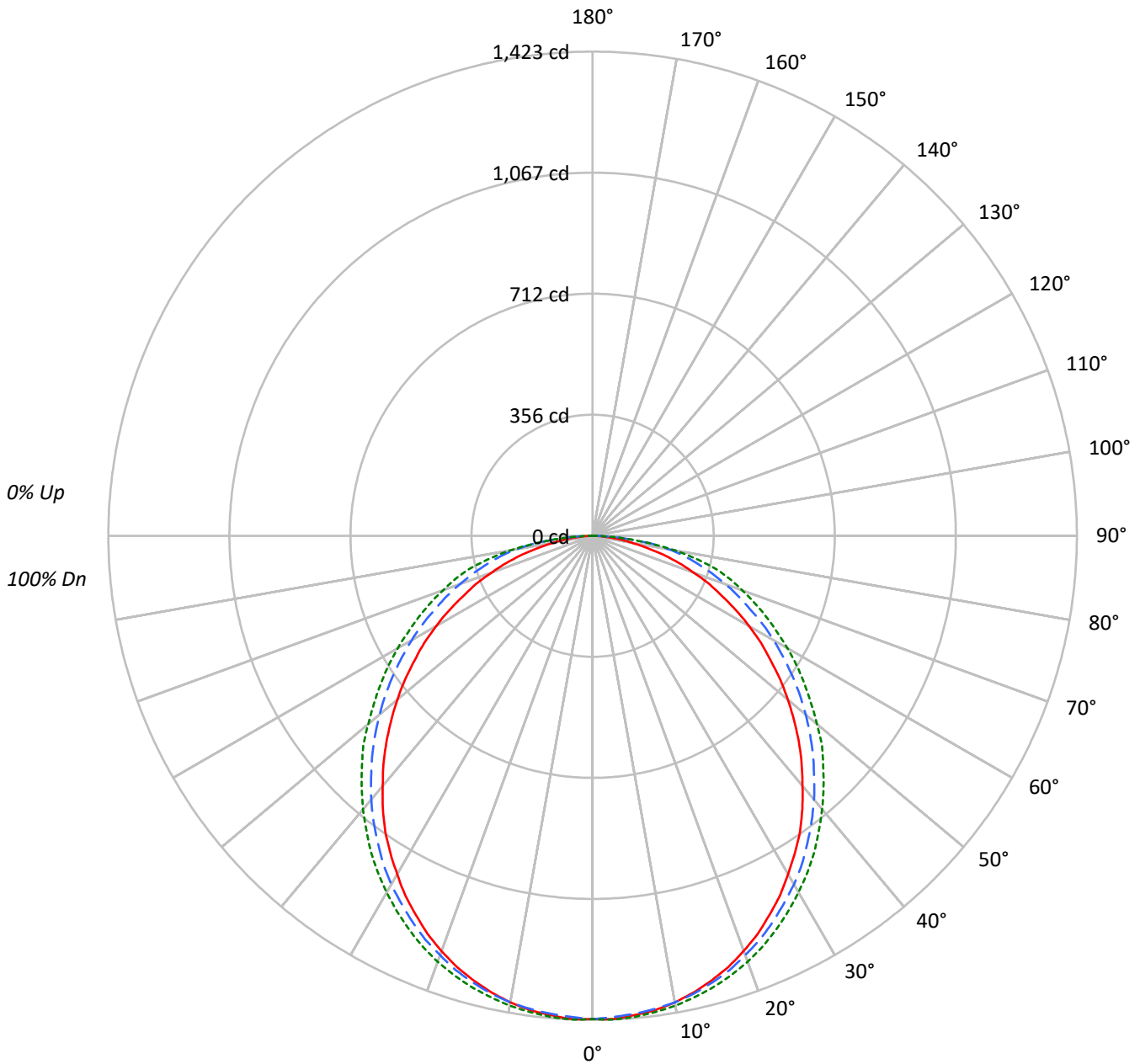
Lumens per Lamp: N/A
Luminaire Lumens: 4044.0 lumens
Efficiency: N/A
Efficacy: 122.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')
CIE Type: Direct

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				20				
RC	80				70				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	106	101	97	93	97	93	90	93	90	88	89	87	85	83			
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69			
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58			
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42			
6	70	56	47	40	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°	2005	2005	2005
5°	2004	1998	2011
10°	1995	1995	2010
15°	1976	1986	2006
20°	1950	1970	2001
25°	1914	1950	1988
30°	1872	1928	1972
35°	1830	1897	1956
40°	1768	1865	1934
45°	1710	1828	1913
50°	1644	1794	1890
55°	1571	1761	1871
60°	1497	1733	1867
65°	1403	1703	1879
70°	1298	1712	1929
75°	1163	1744	2038
80°	940	1848	1994
85°	706	1621	1582



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.5	3.3
10°-20°	384.3	9.5
20°-30°	577.7	14.3
30°-40°	688.1	17.0
40°-50°	704.3	17.4
50°-60°	634.1	15.7
60°-70°	497.9	12.3
70°-80°	323.2	8.0
80°-90°	99.9	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°	1096.5	27.1
0°-40°	1784.6	44.1
0°-60°	3123.0	77.2
0°-90°	4044.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4044.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1421	1421	1421	1421	1421	
5°	1414	1417	1410	1418	1419	134
15°	1353	1356	1359	1371	1373	381
25°	1229	1240	1252	1273	1277	566
35°	1062	1075	1101	1128	1136	663
45°	857	877	916	951	958	661
55°	638	667	716	753	760	572
65°	420	452	510	552	563	418
75°	213	254	320	364	374	226
85°	44	81	100	98	98	53
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1420.7	1420.7	1420.7	1420.7	1420.7
2.5°	1422.0	1422.0	1415.5	1422.0	1423.2
5°	1414.2	1416.9	1410.4	1418.1	1419.4
7.5°	1406.5	1406.5	1402.6	1410.4	1411.8
10°	1392.4	1393.7	1392.4	1401.4	1402.6
12.5°	1374.5	1377.0	1378.3	1387.3	1388.6
15°	1352.7	1356.5	1359.0	1370.6	1373.2
17.5°	1328.2	1332.1	1338.4	1351.3	1353.9
20°	1298.6	1303.7	1311.5	1328.2	1332.1
22.5°	1266.6	1271.7	1284.6	1299.9	1306.4
25°	1229.3	1239.5	1252.4	1272.9	1276.8
27.5°	1192.0	1201.0	1217.7	1239.5	1244.8
30°	1148.4	1162.4	1183.0	1204.9	1210.0
32.5°	1106.0	1120.0	1144.5	1167.7	1174.1
35°	1062.3	1075.2	1100.8	1127.8	1135.5
37.5°	1012.2	1028.9	1057.2	1084.1	1091.9
40°	959.5	980.1	1012.2	1040.5	1049.5
42.5°	909.4	931.2	963.4	994.2	1004.4
45°	856.8	877.4	915.9	950.6	958.3
47.5°	802.8	826.0	867.0	901.7	914.5
50°	748.9	773.4	817.0	852.9	860.7
52.5°	694.9	720.6	766.9	805.4	809.3
55°	638.4	666.7	715.5	752.8	760.5
57.5°	587.0	611.5	664.1	702.6	711.6
60°	530.5	557.5	614.0	650.0	661.5
62.5°	476.5	504.8	564.0	599.9	610.1
65°	420.0	452.2	510.0	552.4	562.6
67.5°	371.3	402.1	463.7	504.8	515.1
70°	314.6	349.5	414.9	457.3	467.5
72.5°	265.9	301.8	367.4	408.4	423.9
75°	213.3	254.3	319.9	363.5	373.8
77.5°	161.9	209.4	276.1	309.5	309.5
80°	115.6	165.8	227.4	242.8	245.3
82.5°	75.8	124.6	168.2	167.0	167.0
85°	43.6	80.9	100.1	97.7	97.7
87.5°	16.7	33.4	35.9	35.9	34.7
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)