

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: P843097

Luminaire Tested: **24CZ2-45HE-UNV-B35**

Issue Date: 1/5/2024



Test Information

Test Method: LM-79-08
Report Number: P843097
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-B35
Description: 2X4 4500 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 3500K CCT AND RIBBED LENS

Light Source: -
Ballast/Driver: -

Summary

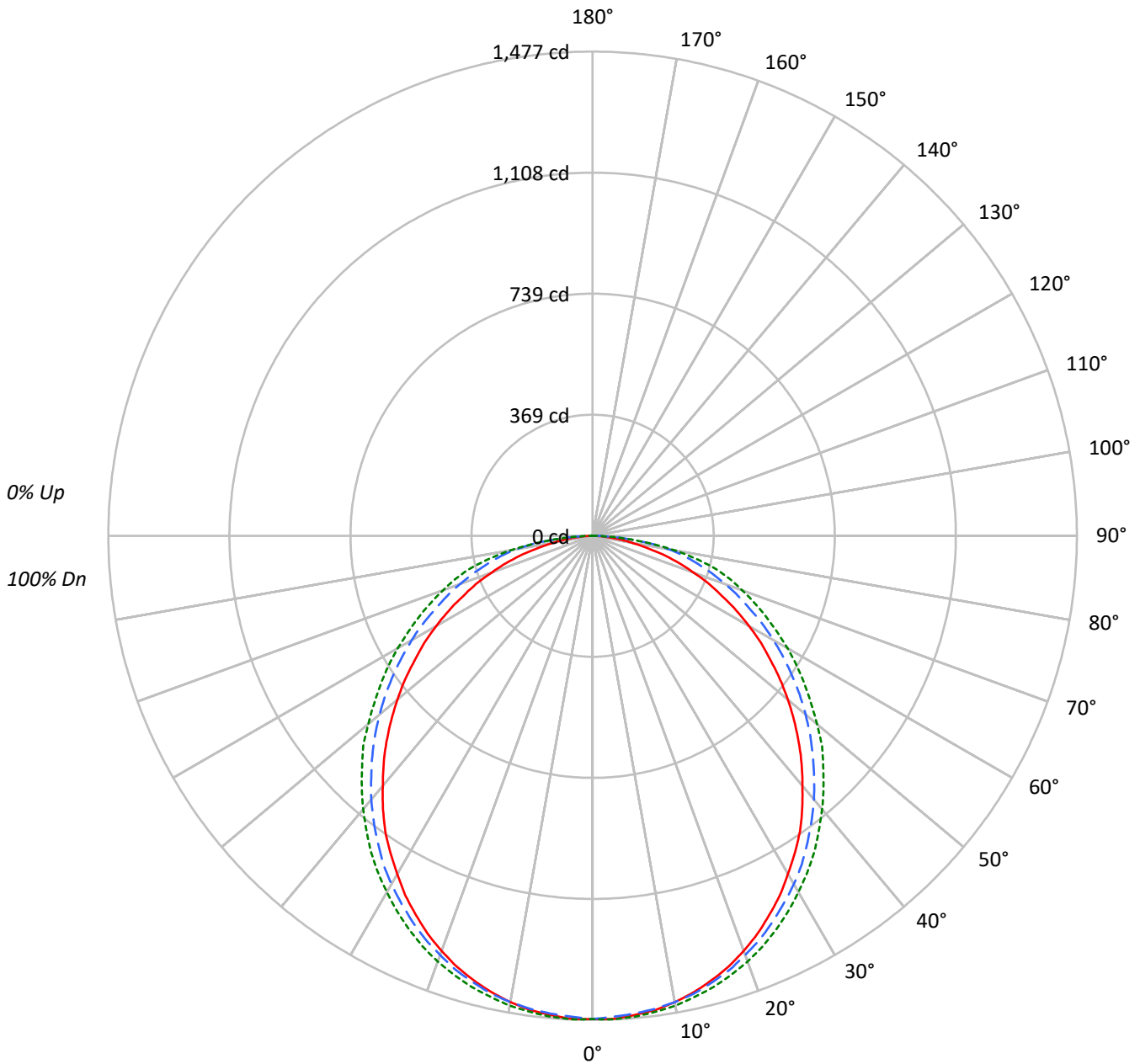
Lumens per Lamp: N/A
Luminaire Lumens: 4196.0 lumens
Efficiency: N/A
Efficacy: 127.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P843097

CATALOG NUMBER: 24CZ2-45HE-UNV-B35

Luminous Intensity Polar Plot





TEST NUMBER: P843097

CATALOG NUMBER: 24CZ2-45HE-UNV-B35

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	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°	2081	2081	2081
5°	2079	2073	2086
10°	2071	2071	2086
15°	2051	2060	2082
20°	2024	2044	2076
25°	1986	2023	2063
30°	1942	2000	2046
35°	1899	1968	2030
40°	1834	1935	2006
45°	1774	1897	1985
50°	1706	1861	1961
55°	1630	1827	1942
60°	1554	1798	1937
65°	1455	1767	1949
70°	1347	1776	2002
75°	1207	1810	2115
80°	975	1917	2068
85°	734	1682	1640



TEST NUMBER: P843097

CATALOG NUMBER: 24CZ2-45HE-UNV-B35

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	139.6	3.3
10°-20°	398.8	9.5
20°-30°	599.4	14.3
30°-40°	714.0	17.0
40°-50°	730.7	17.4
50°-60°	657.9	15.7
60°-70°	516.6	12.3
70°-80°	335.3	8.0
80°-90°	103.7	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°	1137.7	27.1
0°-40°	1851.7	44.1
0°-60°	3240.3	77.2
0°-90°	4196.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4196.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1474	1474	1474	1474	1474	
5°	1467	1470	1463	1471	1473	139
15°	1404	1408	1410	1422	1425	396
25°	1276	1286	1299	1321	1325	588
35°	1102	1116	1142	1170	1178	688
45°	889	910	950	986	994	685
55°	662	692	742	781	789	594
65°	436	469	529	573	584	434
75°	221	264	332	377	388	234
85°	45	84	104	101	101	55
90°	0	0	0	0	0	



TEST NUMBER: P843097

CATALOG NUMBER: 24CZ2-45HE-UNV-B35

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1474.2	1474.2	1474.2	1474.2	1474.2
2.5°	1475.4	1475.4	1468.7	1475.4	1476.7
5°	1467.4	1470.1	1463.4	1471.4	1472.7
7.5°	1459.4	1459.4	1455.4	1463.4	1464.8
10°	1444.8	1446.0	1444.8	1454.1	1455.4
12.5°	1426.1	1428.7	1430.2	1439.5	1440.7
15°	1403.5	1407.5	1410.1	1422.1	1424.9
17.5°	1378.1	1382.1	1388.7	1402.0	1404.8
20°	1347.5	1352.8	1360.8	1378.1	1382.1
22.5°	1314.2	1319.5	1332.8	1348.7	1355.5
25°	1275.5	1286.1	1299.4	1320.8	1324.8
27.5°	1236.8	1246.1	1263.5	1286.1	1291.6
30°	1191.5	1206.1	1227.5	1250.1	1255.4
32.5°	1147.5	1162.1	1187.5	1211.6	1218.2
35°	1102.2	1115.6	1142.2	1170.2	1178.2
37.5°	1050.2	1067.6	1096.9	1124.9	1132.9
40°	995.6	1017.0	1050.2	1079.6	1088.9
42.5°	943.6	966.2	999.6	1031.6	1042.2
45°	889.0	910.3	950.3	986.3	994.3
47.5°	832.9	857.0	899.6	935.6	948.9
50°	777.1	802.4	847.7	885.0	893.0
52.5°	721.0	747.7	795.7	835.7	839.7
55°	662.4	691.8	742.4	781.1	789.1
57.5°	609.1	634.5	689.1	729.0	738.4
60°	550.5	578.4	637.0	674.4	686.3
62.5°	494.4	523.8	585.2	622.4	633.0
65°	435.8	469.2	529.1	573.1	583.7
67.5°	385.2	417.2	481.1	523.8	534.4
70°	326.5	362.6	430.5	474.5	485.1
72.5°	275.9	313.1	381.2	423.8	439.8
75°	221.3	263.8	331.9	377.2	387.8
77.5°	168.0	217.3	286.5	321.2	321.2
80°	120.0	172.0	235.9	252.0	254.5
82.5°	78.7	129.3	174.6	173.3	173.3
85°	45.3	84.0	103.9	101.3	101.3
87.5°	17.3	34.7	37.3	37.3	36.0
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)