

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: P880887

Luminaire Tested: **24CZ2-45VHE-S-B2750-W2D-2700K**

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: P880887
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P473969)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 10/2/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-45VHE-S-B2750-W2D-2700K
Description: 2X4 4500 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 2700K CCT AND SMOOTH LENS

Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

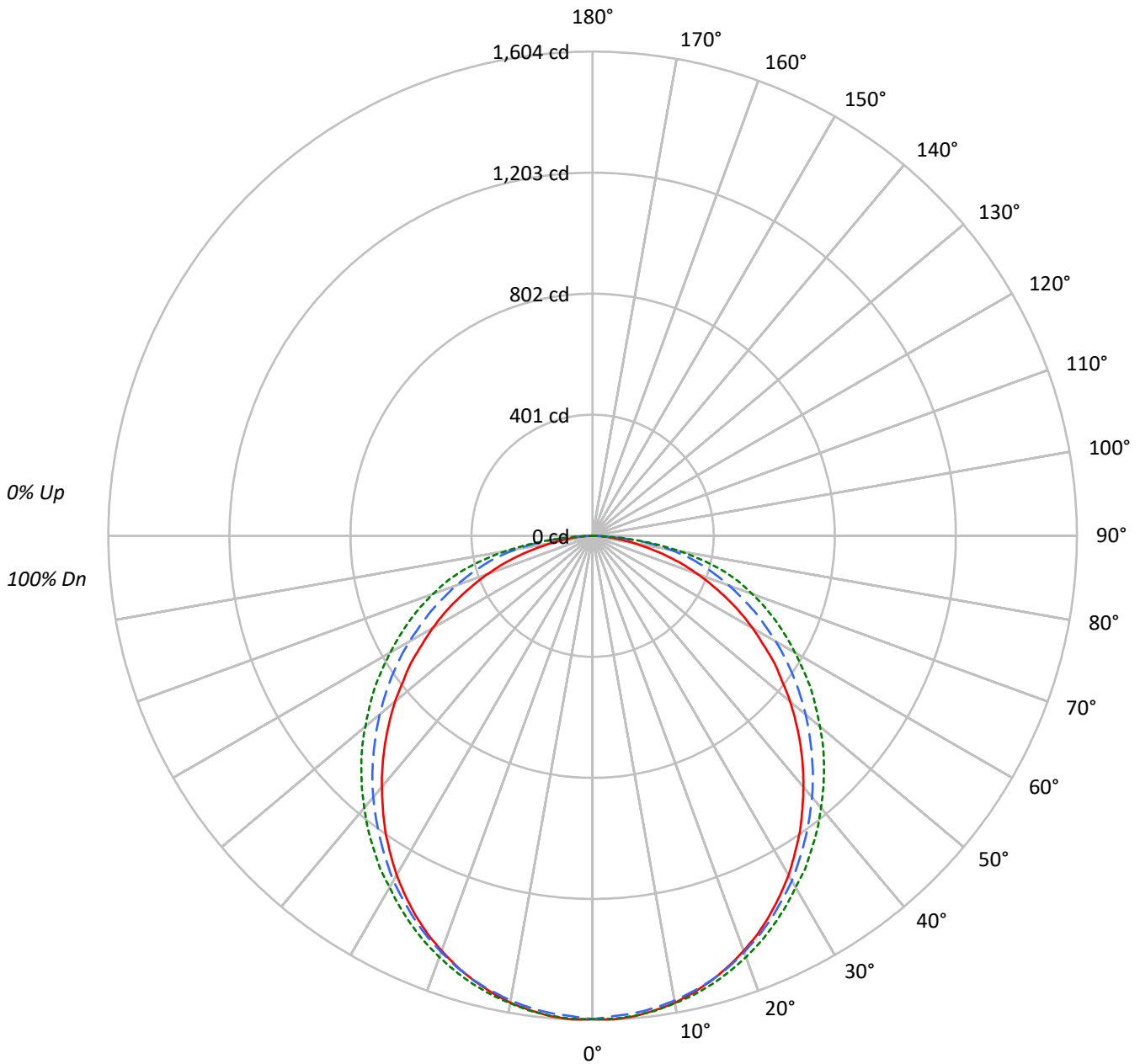
Lumens per Lamp: N/A
Luminaire Lumens: 4588.0 lumens
Efficiency: N/A
Efficacy: 134.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.25 / 1.35
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')
CIE Type: Direct

Input Watts (W): 34
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				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	105	101	97	93	97	93	90	93	90	87	89	87	85	83			
2	98	90	83	77	95	88	81	76	84	79	74	81	76	72	78	74	71	68			
3	89	78	70	63	87	77	69	63	74	67	62	71	65	61	68	64	59	57			
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	55	51	49			
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42			
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37			
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32			
8	60	46	38	32	58	45	37	31	44	37	31	43	36	31	42	35	31	29			
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26			
10	52	39	31	26	51	39	31	26	38	30	26	37	30	25	36	30	25	24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2260	2260	2260
5°	2264	2249	2261
10°	2251	2241	2254
15°	2227	2226	2245
20°	2197	2204	2231
25°	2161	2179	2213
30°	2115	2152	2192
35°	2062	2114	2180
40°	2001	2083	2167
45°	1940	2050	2163
50°	1875	2022	2158
55°	1808	1997	2170
60°	1725	1978	2184
65°	1633	1970	2237
70°	1524	1981	2317
75°	1356	2038	2441
80°	1109	2082	2383
85°	782	1819	1856



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.4	3.3
10°-20°	431.2	9.4
20°-30°	646.4	14.1
30°-40°	769.8	16.8
40°-50°	793.8	17.3
50°-60°	724.3	15.8
60°-70°	579.2	12.6
70°-80°	378.3	8.2
80°-90°	113.6	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°	1229.0	26.8
0°-40°	1998.8	43.6
0°-60°	3516.9	76.7
0°-90°	4588.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4588.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1602	1602	1602	1602	1602	
5°	1598	1595	1588	1598	1596	152
15°	1524	1525	1524	1537	1537	430
25°	1387	1390	1399	1420	1421	639
35°	1197	1205	1227	1258	1265	748
45°	972	990	1027	1070	1084	750
55°	735	756	812	865	882	654
65°	489	522	590	648	670	485
75°	249	290	374	434	448	264
85°	48	87	112	115	115	61
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1601.5	1601.5	1601.5	1601.5	1601.5
2.5°	1603.7	1601.5	1593.1	1603.0	1601.5
5°	1597.7	1594.6	1587.8	1597.7	1596.2
7.5°	1585.5	1584.0	1577.3	1588.5	1587.0
10°	1570.5	1569.0	1563.7	1575.0	1572.8
12.5°	1549.5	1548.7	1544.9	1558.5	1557.0
15°	1524.5	1525.2	1523.7	1536.7	1536.7
17.5°	1495.9	1495.2	1498.2	1514.0	1512.5
20°	1462.7	1463.4	1467.2	1485.4	1485.4
22.5°	1428.1	1427.4	1435.6	1453.7	1455.2
25°	1387.4	1389.6	1399.4	1419.8	1421.3
27.5°	1343.6	1347.5	1359.6	1382.9	1385.1
30°	1297.8	1302.3	1320.3	1342.1	1345.1
32.5°	1247.2	1257.0	1273.5	1301.5	1309.0
35°	1196.7	1205.0	1226.9	1257.8	1265.3
37.5°	1140.9	1154.5	1179.4	1213.3	1223.2
40°	1085.9	1099.6	1130.4	1165.9	1176.4
42.5°	1030.1	1044.5	1079.9	1119.9	1131.2
45°	972.2	989.5	1027.1	1070.1	1083.6
47.5°	912.7	933.0	973.7	1020.3	1035.5
50°	853.9	874.2	921.0	969.1	982.7
52.5°	790.6	816.2	865.9	917.9	931.5
55°	734.8	755.9	811.6	865.2	881.7
57.5°	669.3	697.8	757.4	811.6	827.4
60°	611.2	637.5	700.8	755.9	773.9
62.5°	552.4	579.5	642.8	705.3	722.0
65°	489.1	522.2	590.0	648.0	670.0
67.5°	428.8	463.4	532.9	594.5	617.2
70°	369.3	404.6	480.1	543.4	561.4
72.5°	310.5	347.5	425.8	487.6	508.7
75°	248.7	290.2	373.8	434.1	447.6
77.5°	190.7	236.7	321.0	361.8	371.5
80°	136.4	186.9	256.2	285.7	293.2
82.5°	89.6	138.6	191.4	207.2	204.9
85°	48.3	86.6	112.3	114.6	114.6
87.5°	18.8	34.7	35.5	27.1	25.6
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)