

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: P272114

Luminaire Tested: **24CZ2-65-UNV-L935-CD1-U**

Issue Date: 3/3/2020

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: P272114
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-15)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-65-UNV-L935-CD1-U
Description: 2'x4' TROFFER LED MODULE,RIBBED LENS, 90CRI
Light Source: (112) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

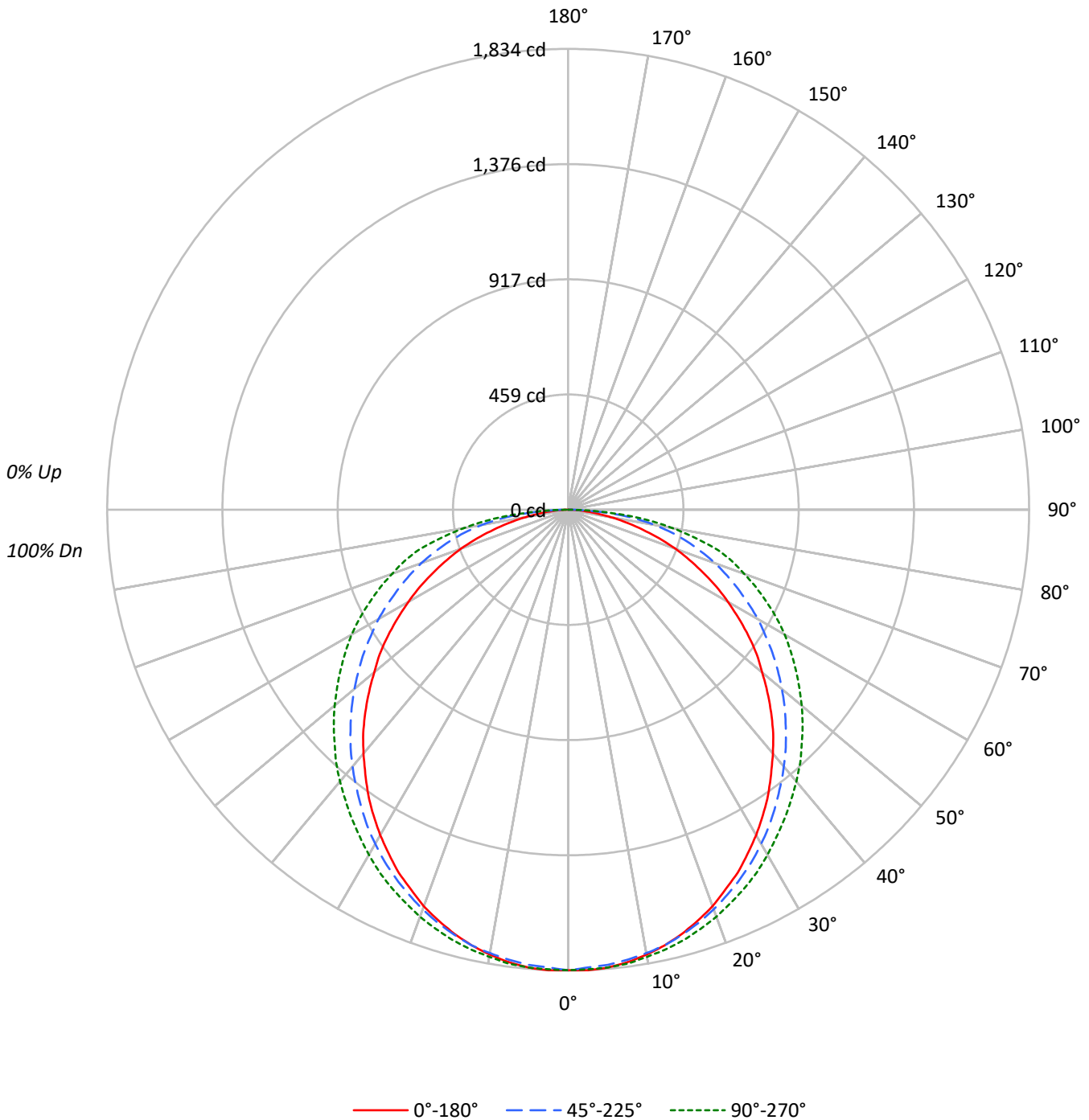
Lumens per Lamp: N/A
Luminaire Lumens: 5557.0 lumens
Efficiency: N/A
Efficacy: 88.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.29 / 1.38
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 62.8
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	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	100	96	92	96	92	89		92	89	87		88	86	84	82
2	98	89	81	75	95	87	80	74	83	78	73		80	75	71		77	73	69	67
3	89	77	69	62	86	76	68	61	73	66	60		70	64	59		67	62	58	56
4	81	68	59	52	79	67	58	52	64	57	51		62	56	50		60	54	50	47
5	74	61	52	45	72	60	51	44	58	50	44		56	49	43		54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	38		50	43	38		49	42	38	36
7	64	50	41	34	62	49	40	34	47	39	34		46	39	34		44	38	33	31
8	59	45	37	31	57	45	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	25		35	29	24	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2466	2466	2466
5°	2470	2455	2470
10°	2456	2448	2469
15°	2435	2440	2471
20°	2405	2423	2468
25°	2368	2406	2466
30°	2323	2386	2463
35°	2277	2362	2465
40°	2225	2344	2481
45°	2172	2329	2501
50°	2107	2323	2539
55°	2054	2327	2591
60°	1975	2347	2679
65°	1884	2372	2777
70°	1784	2444	2930
75°	1591	2549	3201
80°	1358	2700	3271
85°	968	2675	3131



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	173.4	3.1
10°-20°	495.9	8.9
20°-30°	749.1	13.5
30°-40°	902.8	16.2
40°-50°	947.8	17.1
50°-60°	886.7	16.0
60°-70°	732.2	13.2
70°-80°	499.0	9.0
80°-90°	170.2	3.1
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°	1418.4	25.5
0°-40°	2321.2	41.8
0°-60°	4155.6	74.8
0°-90°	5557.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5557.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1833	1833	1833	1833	1833	
5°	1829	1827	1818	1829	1829	174
15°	1748	1750	1752	1770	1774	493
25°	1595	1602	1621	1652	1661	734
35°	1386	1401	1438	1486	1501	866
45°	1141	1165	1224	1291	1315	880
55°	876	911	992	1073	1104	782
65°	592	642	745	839	872	587
75°	306	376	490	583	616	326
85°	63	124	173	195	203	78
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1832.7	1832.7	1832.7	1832.7	1832.7
2.5°	1834.5	1832.7	1823.4	1832.7	1830.8
5°	1829.0	1827.1	1817.9	1829.0	1829.0
7.5°	1816.1	1816.1	1806.8	1819.7	1821.6
10°	1797.6	1797.6	1792.1	1806.8	1806.8
12.5°	1775.5	1775.5	1775.5	1790.2	1792.1
15°	1747.8	1749.7	1751.5	1770.0	1773.7
17.5°	1714.7	1718.3	1723.9	1746.0	1749.7
20°	1679.6	1683.3	1692.5	1718.3	1723.9
22.5°	1635.4	1644.6	1657.5	1687.0	1692.5
25°	1594.8	1602.2	1620.6	1652.0	1661.2
27.5°	1545.0	1556.1	1580.1	1613.2	1626.2
30°	1495.3	1506.3	1535.8	1574.5	1585.6
32.5°	1441.8	1458.4	1489.7	1530.3	1543.2
35°	1386.5	1401.2	1438.1	1486.0	1500.8
37.5°	1325.6	1345.9	1386.5	1438.1	1456.5
40°	1266.6	1288.8	1334.8	1390.2	1412.3
42.5°	1207.6	1229.8	1281.4	1344.1	1366.2
45°	1141.3	1165.2	1224.2	1290.6	1314.6
47.5°	1074.9	1104.4	1168.9	1239.0	1264.8
50°	1006.7	1039.9	1109.9	1183.7	1213.2
52.5°	945.8	977.2	1050.9	1130.2	1157.9
55°	875.8	910.8	991.9	1073.0	1104.4
57.5°	803.9	842.6	929.2	1017.7	1049.1
60°	733.8	776.2	872.1	960.6	995.6
62.5°	665.6	708.0	807.5	899.7	934.8
65°	591.8	641.6	744.9	838.9	872.1
67.5°	521.8	575.2	684.0	776.2	809.4
70°	453.6	505.2	621.3	711.7	744.9
72.5°	379.8	438.8	555.0	649.0	684.0
75°	306.1	376.1	490.4	582.6	615.8
77.5°	237.8	309.7	424.1	499.6	516.2
80°	175.2	248.9	348.5	401.9	422.2
82.5°	112.5	186.2	265.5	304.2	320.8
85°	62.7	123.5	173.3	195.4	202.8
87.5°	25.8	53.5	70.1	79.3	79.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)