

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: P272116

Luminaire Tested: **24CZ2-65-UNV-L950-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: P272116
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-L950-CD1-U
Description: 2'x4' TROFFER LED MODULE,RIBBED LENS, 90CRI
Light Source: (112) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

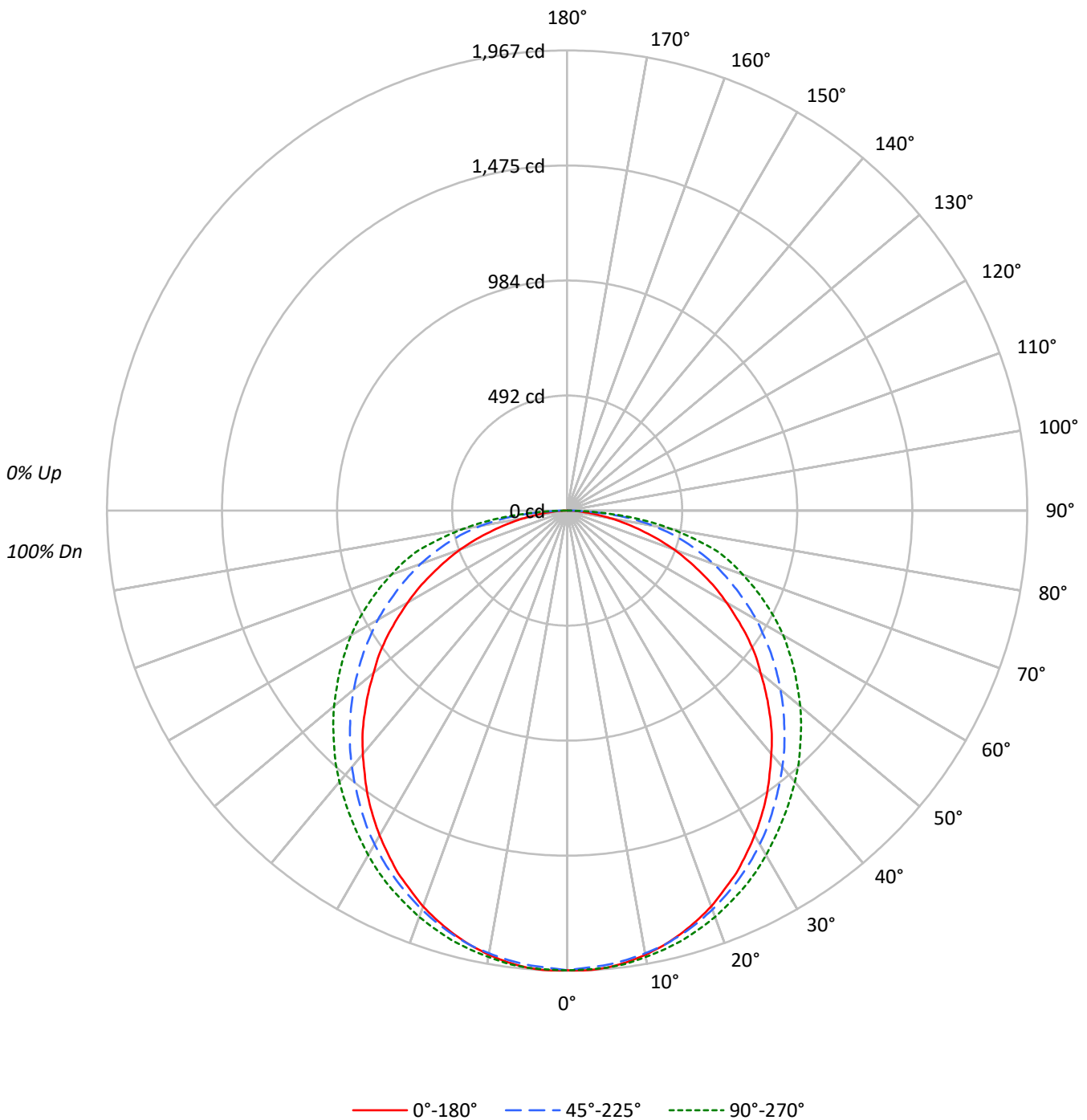
Lumens per Lamp: N/A
Luminaire Lumens: 5959.0 lumens
Efficiency: N/A
Efficacy: 94.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.29 / 1.38
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	2644	2644	2644
5°	2649	2633	2649
10°	2634	2626	2647
15°	2611	2616	2649
20°	2579	2599	2647
25°	2539	2580	2645
30°	2491	2559	2642
35°	2442	2533	2644
40°	2386	2514	2660
45°	2329	2498	2682
50°	2260	2491	2723
55°	2203	2495	2778
60°	2118	2517	2873
65°	2020	2543	2977
70°	1913	2621	3142
75°	1706	2734	3433
80°	1455	2896	3508
85°	1037	2868	3358



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	186.0	3.1
10°-20°	531.8	8.9
20°-30°	803.2	13.5
30°-40°	968.1	16.2
40°-50°	1016.3	17.1
50°-60°	950.8	16.0
60°-70°	785.2	13.2
70°-80°	535.1	9.0
80°-90°	182.5	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°	1521.0	25.5
0°-40°	2489.1	41.8
0°-60°	4456.3	74.8
0°-90°	5959.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5959.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1965	1965	1965	1965	1965	
5°	1961	1959	1949	1961	1961	186
15°	1874	1876	1878	1898	1902	528
25°	1710	1718	1738	1772	1781	787
35°	1487	1503	1542	1594	1609	929
45°	1224	1250	1313	1384	1410	944
55°	939	977	1064	1151	1184	838
65°	635	688	799	900	935	629
75°	328	403	526	625	660	350
85°	67	132	186	210	218	84
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1965.2	1965.2	1965.2	1965.2	1965.2
2.5°	1967.2	1965.2	1955.3	1965.2	1963.2
5°	1961.3	1959.3	1949.4	1961.3	1961.3
7.5°	1947.4	1947.4	1937.5	1951.4	1953.4
10°	1927.7	1927.7	1921.7	1937.5	1937.5
12.5°	1903.9	1903.9	1903.9	1919.8	1921.7
15°	1874.3	1876.3	1878.2	1898.0	1902.0
17.5°	1838.7	1842.6	1848.6	1872.3	1876.3
20°	1801.1	1805.1	1815.0	1842.6	1848.6
22.5°	1753.7	1763.6	1777.4	1809.0	1815.0
25°	1710.2	1718.1	1737.9	1771.5	1781.4
27.5°	1656.8	1668.7	1694.4	1730.0	1743.8
30°	1603.4	1615.3	1646.9	1688.4	1700.3
32.5°	1546.1	1563.9	1597.5	1641.0	1654.8
35°	1486.8	1502.6	1542.1	1593.5	1609.4
37.5°	1421.5	1443.3	1486.8	1542.1	1561.9
40°	1358.3	1382.0	1431.4	1490.7	1514.5
42.5°	1295.0	1318.7	1374.1	1441.3	1465.0
45°	1223.8	1249.5	1312.8	1384.0	1409.7
47.5°	1152.6	1184.3	1253.5	1328.6	1356.3
50°	1079.5	1115.1	1190.2	1269.3	1300.9
52.5°	1014.2	1047.9	1126.9	1212.0	1241.6
55°	939.1	976.7	1063.7	1150.7	1184.3
57.5°	862.0	903.5	996.5	1091.4	1125.0
60°	786.9	832.4	935.2	1030.1	1067.6
62.5°	713.7	759.2	866.0	964.8	1002.4
65°	634.6	688.0	798.7	899.6	935.2
67.5°	559.5	616.9	733.5	832.4	867.9
70°	486.4	541.7	666.3	763.2	798.7
72.5°	407.3	470.5	595.1	695.9	733.5
75°	328.2	403.3	525.9	624.8	660.3
77.5°	255.0	332.2	454.7	535.8	553.6
80°	187.8	266.9	373.7	431.0	452.8
82.5°	120.6	199.7	284.7	326.2	344.0
85°	67.2	132.5	185.8	209.6	217.5
87.5°	27.7	57.3	75.1	85.0	85.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)