

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: P272186

Luminaire Tested: **24CZ2-65-S-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: P272186
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-1)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-65-S-UNV-L935-CD1-U
Description: 2'x4' TROFFER LED MODULE,SMOOTH LENS, 90CRI
Light Source: (112) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

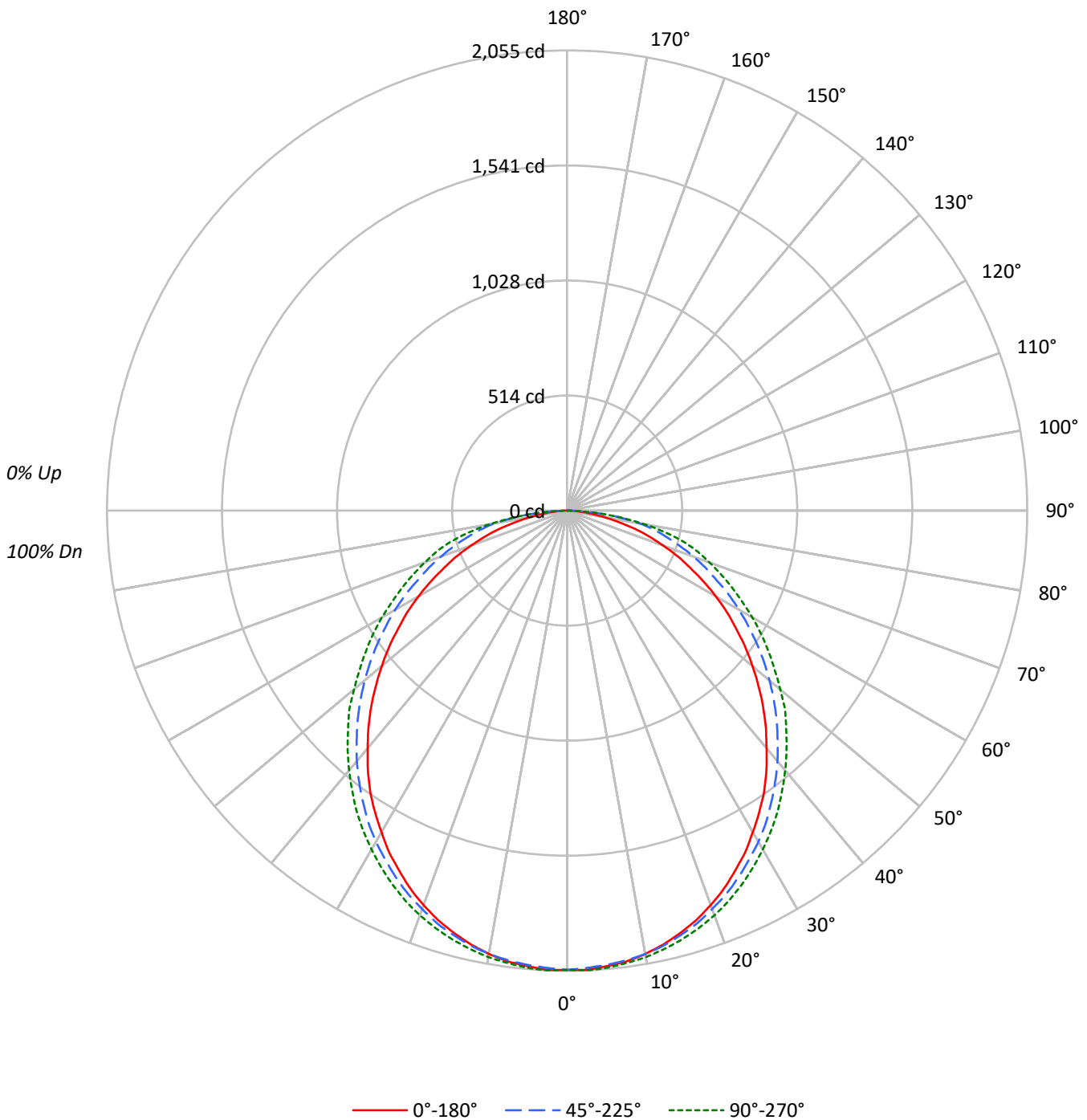
Lumens per Lamp: N/A
Luminaire Lumens: 5839.0 lumens
Efficiency: N/A
Efficacy: 93.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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	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°	2760	2760	2760
5°	2758	2750	2768
10°	2747	2747	2767
15°	2720	2733	2762
20°	2685	2711	2754
25°	2635	2685	2737
30°	2576	2654	2714
35°	2519	2611	2693
40°	2433	2567	2661
45°	2354	2516	2633
50°	2263	2469	2601
55°	2162	2423	2576
60°	2061	2386	2570
65°	1931	2344	2586
70°	1788	2357	2656
75°	1601	2401	2806
80°	1293	2544	2744
85°	974	2234	2177



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	194.2	3.3
10°-20°	554.9	9.5
20°-30°	834.1	14.3
30°-40°	993.6	17.0
40°-50°	1016.9	17.4
50°-60°	915.5	15.7
60°-70°	718.9	12.3
70°-80°	466.6	8.0
80°-90°	144.3	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°	1583.2	27.1
0°-40°	2576.8	44.1
0°-60°	4509.1	77.2
0°-90°	5839.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5839.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2051	2051	2051	2051	2051	
5°	2042	2046	2036	2048	2049	194
15°	1953	1958	1962	1979	1983	551
25°	1775	1790	1808	1838	1844	818
35°	1534	1552	1590	1628	1640	957
45°	1237	1267	1322	1372	1384	954
55°	922	963	1033	1087	1098	826
65°	606	653	736	798	812	604
75°	308	367	462	525	540	326
85°	63	117	145	141	141	76
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2051.3	2051.3	2051.3	2051.3	2051.3
2.5°	2053.1	2053.1	2043.9	2053.1	2055.0
5°	2042.0	2045.7	2036.4	2047.6	2049.4
7.5°	2030.9	2030.9	2025.3	2036.4	2038.3
10°	2010.5	2012.3	2010.5	2023.5	2025.3
12.5°	1984.5	1988.2	1990.1	2003.1	2004.9
15°	1953.0	1958.5	1962.3	1978.9	1982.7
17.5°	1917.7	1923.3	1932.6	1951.1	1954.8
20°	1875.1	1882.5	1893.6	1917.7	1923.3
22.5°	1828.7	1836.1	1854.7	1876.9	1886.2
25°	1774.9	1789.8	1808.3	1838.0	1843.6
27.5°	1721.1	1734.1	1758.2	1789.8	1797.2
30°	1658.1	1678.5	1708.2	1739.7	1747.1
32.5°	1596.9	1617.3	1652.5	1685.9	1695.2
35°	1533.8	1552.4	1589.5	1628.4	1639.5
37.5°	1461.5	1485.6	1526.4	1565.4	1576.5
40°	1385.4	1415.1	1461.5	1502.3	1515.3
42.5°	1313.1	1344.6	1391.0	1435.5	1450.4
45°	1237.1	1266.7	1322.4	1372.5	1383.6
47.5°	1159.2	1192.6	1251.9	1302.0	1320.5
50°	1081.3	1116.5	1179.6	1231.5	1242.6
52.5°	1003.4	1040.5	1107.2	1162.9	1168.4
55°	921.8	962.6	1033.1	1086.8	1098.0
57.5°	847.6	882.8	958.9	1014.5	1027.5
60°	766.0	804.9	886.5	938.5	955.2
62.5°	688.1	728.9	814.2	866.1	881.0
65°	606.5	652.8	736.3	797.5	812.4
67.5°	536.0	580.5	669.5	728.9	743.7
70°	454.4	504.5	599.1	660.3	675.1
72.5°	383.9	435.9	530.4	589.8	612.0
75°	307.9	367.2	461.8	524.9	539.7
77.5°	233.7	302.3	398.8	447.0	447.0
80°	166.9	239.3	328.3	350.5	354.2
82.5°	109.4	179.9	243.0	241.1	241.1
85°	63.1	116.8	144.7	141.0	141.0
87.5°	24.1	48.2	51.9	51.9	50.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)