

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: P229740

Luminaire Tested: **24RLN-LD5-50-UNV-L840-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229740
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36038)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24RLN-LD5-50-UNV-L840-CD1-U
Description: METALUX 2X4 RLN LED TROFFER
Light Source: (252)4000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5000.0 lumens
Efficiency: N/A
Efficacy: 132.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.22 / 1.31
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

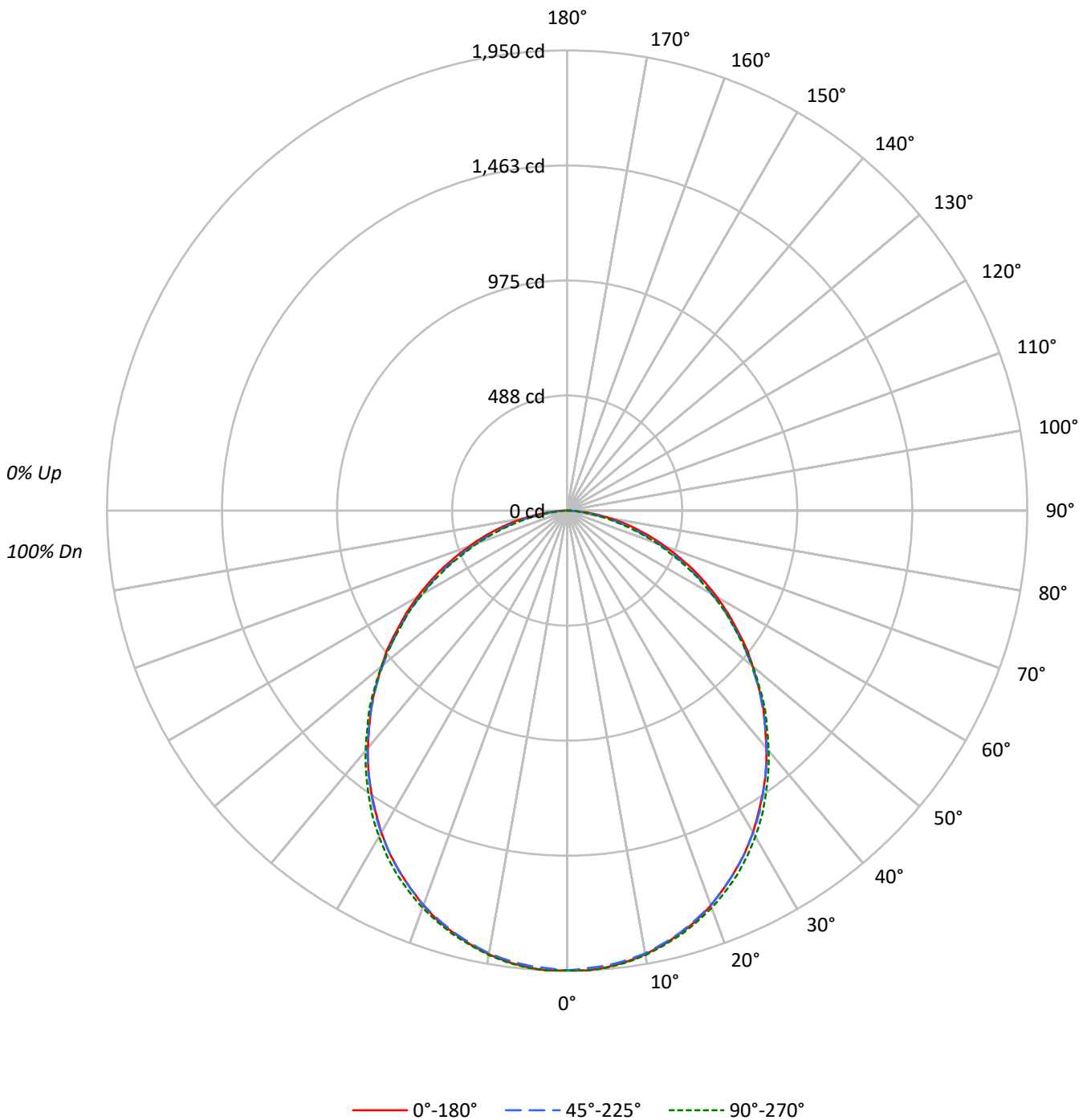
Input Watts (W): 37.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	105	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	77	73	71
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	60
4	84	72	63	57	81	71	63	56	68	61	56	66	60	55	64	58	54	52
5	77	64	56	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45
6	71	58	49	43	69	57	49	43	55	48	42	54	47	42	52	46	42	40
7	66	53	44	38	64	52	44	38	50	43	38	49	42	37	48	42	37	35
8	62	48	40	34	60	48	40	34	46	39	34	45	38	34	44	38	33	32
9	58	44	36	31	56	44	36	31	43	36	31	42	35	30	41	35	30	28
10	54	41	33	28	53	40	33	28	39	33	28	39	32	28	38	32	28	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2985	2985	2985
5°	2987	2975	2989
10°	2970	2963	2975
15°	2941	2936	2951
20°	2902	2900	2920
25°	2847	2850	2879
30°	2785	2788	2821
35°	2709	2712	2744
40°	2626	2632	2657
45°	2542	2535	2566
50°	2444	2429	2447
55°	2344	2314	2306
60°	2245	2178	2168
65°	2121	2030	2001
70°	1965	1846	1810
75°	1806	1629	1545
80°	1582	1359	1235
85°	1299	940	747



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	184.2	3.7
10°-20°	523.1	10.5
20°-30°	778.3	15.6
30°-40°	909.3	18.2
40°-50°	904.0	18.1
50°-60°	776.7	15.5
60°-70°	557.8	11.2
70°-80°	297.1	5.9
80°-90°	69.6	1.4
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°	1485.5	29.7
0°-40°	2394.9	47.9
0°-60°	4075.6	81.5
0°-90°	5000.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5000.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1949	1949	1949	1949	1949	
5°	1942	1939	1935	1941	1944	184
15°	1854	1854	1851	1858	1861	523
25°	1685	1685	1686	1699	1704	776
35°	1449	1446	1450	1466	1468	906
45°	1173	1164	1170	1176	1184	903
55°	878	867	867	867	864	787
65°	585	568	560	554	552	579
75°	305	288	275	267	261	325
85°	74	63	54	44	42	86
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1948.8	1948.8	1948.8	1948.8	1948.8
2.5°	1950.4	1947.3	1941.0	1948.8	1950.4
5°	1942.5	1939.4	1934.7	1941.0	1944.1
7.5°	1928.4	1925.2	1922.1	1928.4	1931.5
10°	1909.5	1907.9	1904.8	1912.7	1912.7
12.5°	1884.3	1882.8	1879.6	1887.5	1887.5
15°	1854.5	1854.5	1851.3	1857.6	1860.8
17.5°	1821.4	1819.9	1816.7	1824.6	1827.7
20°	1780.5	1780.5	1779.0	1788.4	1791.5
22.5°	1733.3	1733.3	1733.3	1745.9	1749.1
25°	1684.6	1684.6	1686.2	1698.7	1703.5
27.5°	1632.7	1631.1	1632.7	1646.8	1651.6
30°	1574.5	1571.3	1576.1	1590.2	1594.9
32.5°	1511.6	1508.4	1516.3	1528.9	1535.2
35°	1448.7	1445.5	1450.2	1466.0	1467.5
37.5°	1384.2	1376.3	1384.2	1398.3	1399.9
40°	1313.4	1307.1	1316.5	1322.8	1329.1
42.5°	1241.0	1237.9	1242.6	1253.6	1253.6
45°	1173.4	1164.0	1170.2	1176.5	1184.4
47.5°	1097.9	1093.2	1096.3	1101.0	1104.2
50°	1025.5	1017.7	1019.2	1024.0	1027.1
52.5°	957.9	942.2	942.2	945.3	945.3
55°	877.7	866.7	866.7	866.7	863.5
57.5°	806.9	792.7	791.2	791.2	791.2
60°	733.0	715.7	711.0	711.0	707.8
62.5°	659.0	643.3	637.0	630.7	630.7
65°	585.1	567.8	560.0	553.7	552.1
67.5°	509.6	497.0	487.6	479.7	471.9
70°	438.8	424.7	412.1	404.2	404.2
72.5°	372.8	357.1	344.5	335.0	330.3
75°	305.1	287.8	275.3	267.4	261.1
77.5°	245.4	226.5	213.9	202.9	196.6
80°	179.3	165.2	154.1	143.1	140.0
82.5°	124.3	113.2	100.7	92.8	89.7
85°	73.9	62.9	53.5	44.0	42.5
87.5°	29.9	22.0	17.3	17.3	17.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)