

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: P229720

Luminaire Tested: **24RLN-LD5-50-UNV-L830-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229720
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-L830-CD1-U
Description: METALUX 2X4 RLN LED TROFFER
Light Source: (252)3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

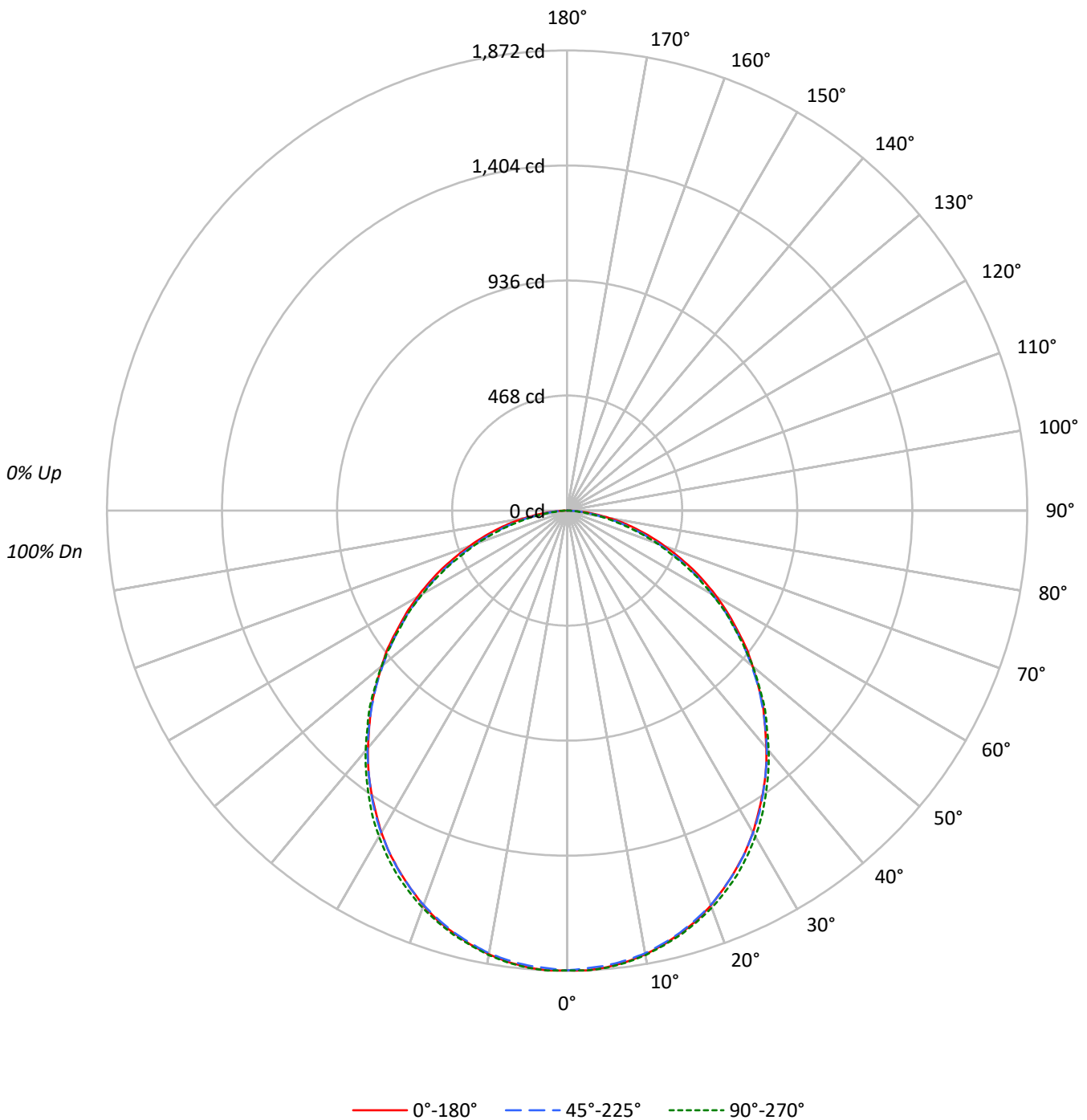
Lumens per Lamp: N/A
Luminaire Lumens: 4800.0 lumens
Efficiency: N/A
Efficacy: 127.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.22 / 1.31
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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°	2866	2866	2866
5°	2867	2856	2870
10°	2851	2844	2856
15°	2823	2818	2833
20°	2786	2784	2803
25°	2733	2736	2764
30°	2673	2676	2708
35°	2600	2603	2634
40°	2521	2527	2551
45°	2440	2433	2463
50°	2346	2332	2349
55°	2250	2222	2214
60°	2156	2091	2082
65°	2036	1948	1921
70°	1887	1772	1738
75°	1733	1564	1484
80°	1518	1305	1185
85°	1248	902	717



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	176.8	3.7
10°-20°	502.2	10.5
20°-30°	747.2	15.6
30°-40°	873.0	18.2
40°-50°	867.8	18.1
50°-60°	745.6	15.5
60°-70°	535.5	11.2
70°-80°	285.2	5.9
80°-90°	66.8	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°	1426.1	29.7
0°-40°	2299.1	47.9
0°-60°	3912.5	81.5
0°-90°	4800.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4800.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1871	1871	1871	1871	1871	
5°	1865	1862	1857	1863	1866	177
15°	1780	1780	1777	1783	1786	502
25°	1617	1617	1619	1631	1635	745
35°	1391	1388	1392	1407	1409	870
45°	1126	1117	1123	1130	1137	867
55°	843	832	832	832	829	756
65°	562	545	538	532	530	556
75°	293	276	264	257	251	312
85°	71	60	51	42	41	83
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1870.9	1870.9	1870.9	1870.9	1870.9
2.5°	1872.4	1869.4	1863.3	1870.9	1872.4
5°	1864.8	1861.8	1857.3	1863.3	1866.4
7.5°	1851.3	1848.2	1845.2	1851.3	1854.3
10°	1833.1	1831.6	1828.6	1836.2	1836.2
12.5°	1809.0	1807.5	1804.4	1812.0	1812.0
15°	1780.3	1780.3	1777.3	1783.3	1786.3
17.5°	1748.6	1747.1	1744.0	1751.6	1754.6
20°	1709.3	1709.3	1707.8	1716.9	1719.9
22.5°	1664.0	1664.0	1664.0	1676.1	1679.1
25°	1617.2	1617.2	1618.7	1630.8	1635.3
27.5°	1567.4	1565.9	1567.4	1581.0	1585.5
30°	1511.5	1508.5	1513.0	1526.6	1531.1
32.5°	1451.1	1448.1	1455.6	1467.7	1473.8
35°	1390.7	1387.7	1392.2	1407.3	1408.8
37.5°	1328.8	1321.2	1328.8	1342.4	1343.9
40°	1260.8	1254.8	1263.9	1269.9	1275.9
42.5°	1191.4	1188.4	1192.9	1203.5	1203.5
45°	1126.5	1117.4	1123.4	1129.5	1137.0
47.5°	1054.0	1049.4	1052.5	1057.0	1060.0
50°	984.5	977.0	978.5	983.0	986.0
52.5°	919.6	904.5	904.5	907.5	907.5
55°	842.6	832.0	832.0	832.0	829.0
57.5°	774.6	761.0	759.5	759.5	759.5
60°	703.7	687.0	682.5	682.5	679.5
62.5°	632.7	617.6	611.5	605.5	605.5
65°	561.7	545.1	537.6	531.5	530.0
67.5°	489.2	477.2	468.1	460.5	453.0
70°	421.3	407.7	395.6	388.1	388.1
72.5°	357.9	342.8	330.7	321.6	317.1
75°	292.9	276.3	264.2	256.7	250.7
77.5°	235.6	217.4	205.4	194.8	188.7
80°	172.1	158.5	148.0	137.4	134.4
82.5°	119.3	108.7	96.6	89.1	86.1
85°	71.0	60.4	51.3	42.3	40.8
87.5°	28.7	21.1	16.6	16.6	16.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)