

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: P229750

Luminaire Tested: **24RLN-LD5-50-UNV-L930-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229750
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-L930-CD1-U
Description: METALUX 2X4 RLN LED TROFFER
Light Source: (252)3000K CCT, 90 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

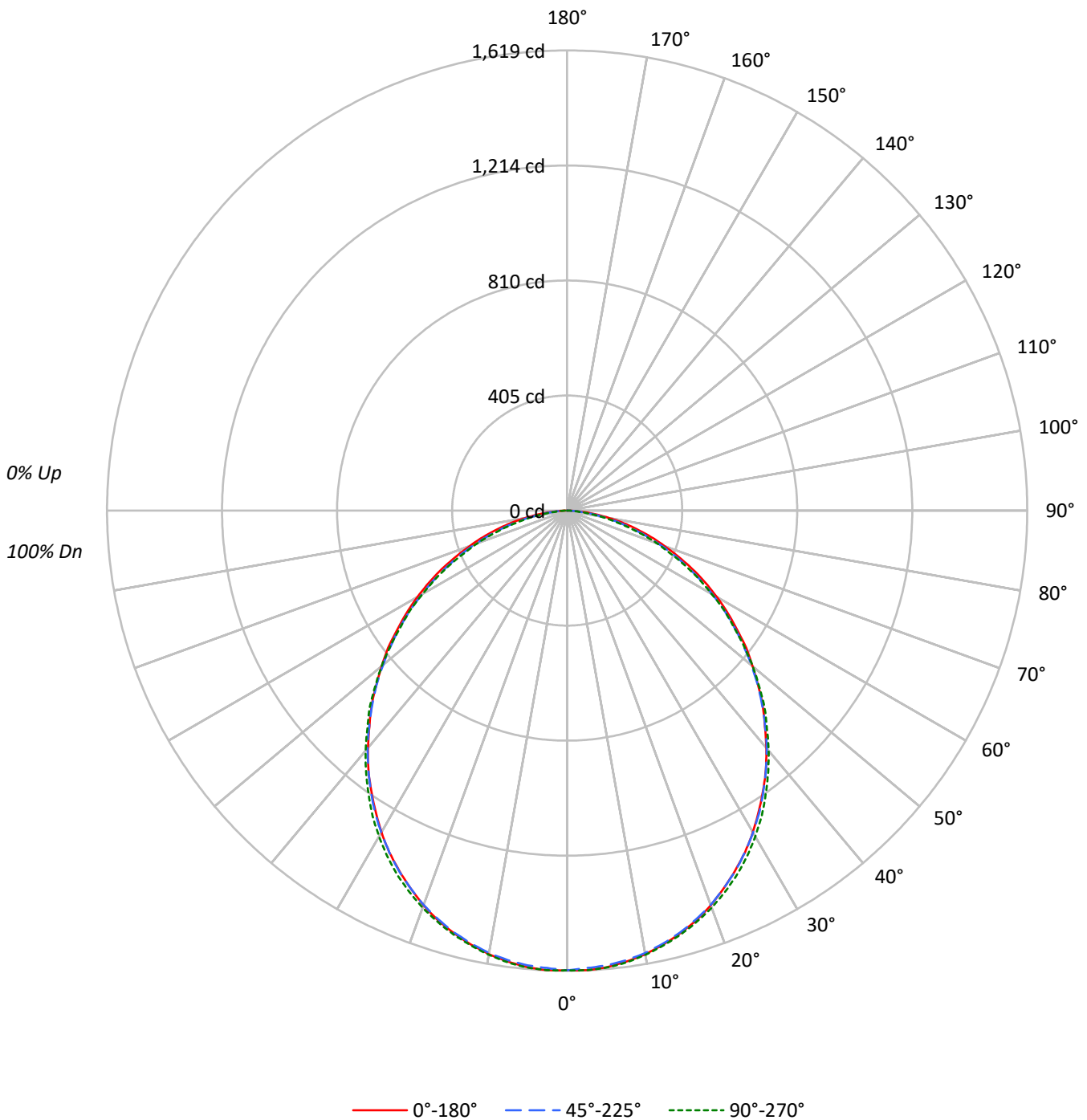
Lumens per Lamp: N/A
Luminaire Lumens: 4150.0 lumens
Efficiency: N/A
Efficacy: 109.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.22 / 1.31
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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°	2477	2477	2477
5°	2479	2469	2481
10°	2465	2459	2469
15°	2441	2437	2449
20°	2409	2407	2424
25°	2363	2365	2389
30°	2311	2314	2341
35°	2248	2251	2277
40°	2180	2185	2206
45°	2110	2104	2129
50°	2028	2016	2031
55°	1945	1921	1914
60°	1864	1808	1800
65°	1760	1685	1661
70°	1631	1532	1502
75°	1499	1352	1282
80°	1312	1128	1025
85°	1079	780	619



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	152.8	3.7
10°-20°	434.2	10.5
20°-30°	646.0	15.6
30°-40°	754.7	18.2
40°-50°	750.3	18.1
50°-60°	644.7	15.5
60°-70°	463.0	11.2
70°-80°	246.6	5.9
80°-90°	57.8	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°	1233.0	29.7
0°-40°	1987.8	47.9
0°-60°	3382.7	81.5
0°-90°	4150.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4150.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1618	1618	1618	1618	1618	
5°	1612	1610	1606	1611	1614	153
15°	1539	1539	1537	1542	1544	434
25°	1398	1398	1400	1410	1414	644
35°	1202	1200	1204	1217	1218	752
45°	974	966	971	976	983	750
55°	728	719	719	719	717	654
65°	486	471	465	460	458	480
75°	253	239	228	222	217	270
85°	61	52	44	37	35	72
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1617.5	1617.5	1617.5	1617.5	1617.5
2.5°	1618.8	1616.2	1611.0	1617.5	1618.8
5°	1612.3	1609.7	1605.8	1611.0	1613.6
7.5°	1600.6	1598.0	1595.3	1600.6	1603.2
10°	1584.9	1583.6	1581.0	1587.5	1587.5
12.5°	1564.0	1562.7	1560.1	1566.6	1566.6
15°	1539.2	1539.2	1536.6	1541.8	1544.4
17.5°	1511.8	1510.5	1507.9	1514.4	1517.0
20°	1477.8	1477.8	1476.5	1484.4	1487.0
22.5°	1438.7	1438.7	1438.7	1449.1	1451.7
25°	1398.2	1398.2	1399.5	1410.0	1413.9
27.5°	1355.1	1353.8	1355.1	1366.9	1370.8
30°	1306.8	1304.2	1308.1	1319.9	1323.8
32.5°	1254.6	1252.0	1258.5	1269.0	1274.2
35°	1202.4	1199.8	1203.7	1216.7	1218.0
37.5°	1148.9	1142.3	1148.9	1160.6	1161.9
40°	1090.1	1084.9	1092.7	1097.9	1103.2
42.5°	1030.1	1027.4	1031.4	1040.5	1040.5
45°	973.9	966.1	971.3	976.5	983.1
47.5°	911.3	907.3	909.9	913.9	916.5
50°	851.2	844.7	846.0	849.9	852.5
52.5°	795.1	782.0	782.0	784.6	784.6
55°	728.5	719.3	719.3	719.3	716.7
57.5°	669.7	658.0	656.7	656.7	656.7
60°	608.4	594.0	590.1	590.1	587.5
62.5°	547.0	534.0	528.7	523.5	523.5
65°	485.7	471.3	464.8	459.5	458.2
67.5°	423.0	412.5	404.7	398.2	391.7
70°	364.2	352.5	342.0	335.5	335.5
72.5°	309.4	296.4	285.9	278.1	274.2
75°	253.3	238.9	228.5	221.9	216.7
77.5°	203.7	188.0	177.6	168.4	163.2
80°	148.8	137.1	127.9	118.8	116.2
82.5°	103.1	94.0	83.6	77.0	74.4
85°	61.4	52.2	44.4	36.6	35.2
87.5°	24.8	18.3	14.4	14.4	14.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)