

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: P229781

Luminaire Tested: **24RLN-LD5-55-RDP-UNV-L830-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229781
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36059)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24RLN-LD5-55-RDP-UNV-L830-CD1-U
Description: METALUX 2X4 RLN LED TROFFER WITH RDP LENS
Light Source: (252)3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4421.0 lumens
Efficiency: N/A
Efficacy: 103.5 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

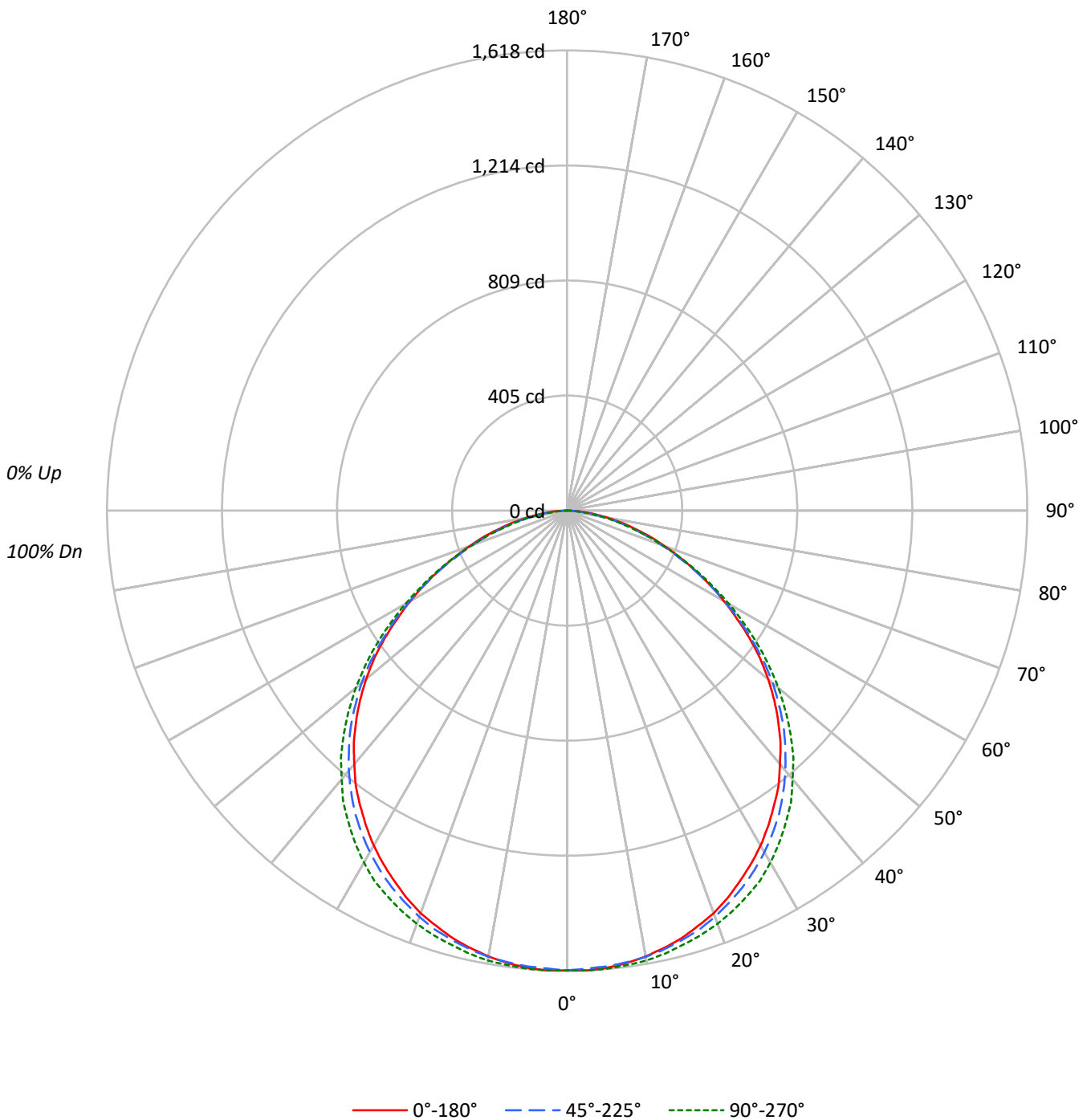
Input Watts (W): 42.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	90	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	66	63	60
4	83	72	63	57	81	70	62	56	68	61	55	66	60	55	63	58	54	52
5	77	64	55	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	53	47	42	52	46	41	39
7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35
8	61	48	39	34	60	47	39	34	46	39	33	45	38	33	43	37	33	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	27	52	40	33	27	39	32	27	38	32	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2476	2476	2476
5°	2481	2473	2486
10°	2475	2478	2499
15°	2468	2479	2505
20°	2455	2477	2520
25°	2429	2469	2528
30°	2406	2453	2527
35°	2371	2430	2506
40°	2327	2388	2465
45°	2274	2332	2405
50°	2198	2250	2310
55°	2091	2118	2181
60°	1952	1963	2014
65°	1793	1781	1823
70°	1630	1585	1592
75°	1449	1369	1360
80°	1258	1125	1095
85°	1032	796	619



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	153.3	3.5
10°-20°	442.0	10.0
20°-30°	674.7	15.3
30°-40°	813.4	18.4
40°-50°	829.5	18.8
50°-60°	709.9	16.1
60°-70°	489.0	11.1
70°-80°	250.7	5.7
80°-90°	58.4	1.3
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°	1270.1	28.7
0°-40°	2083.5	47.1
0°-60°	3623.0	81.9
0°-90°	4421.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4421.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1617	1617	1617	1617	1617	
5°	1613	1610	1608	1613	1617	153
15°	1556	1555	1563	1575	1580	439
25°	1437	1442	1461	1486	1496	663
35°	1268	1273	1300	1328	1340	793
45°	1050	1052	1077	1104	1110	809
55°	783	778	793	810	817	699
65°	495	483	491	495	503	492
75°	245	235	231	231	230	264
85°	59	52	45	40	35	68
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1616.8	1616.8	1616.8	1616.8	1616.8
2.5°	1618.5	1615.1	1611.7	1615.1	1618.5
5°	1613.4	1610.1	1608.4	1613.4	1616.8
7.5°	1605.0	1601.7	1601.7	1608.4	1611.7
10°	1591.6	1589.9	1593.3	1600.0	1606.7
12.5°	1574.8	1574.8	1579.9	1588.3	1595.0
15°	1556.4	1554.7	1563.1	1574.8	1579.9
17.5°	1531.2	1532.9	1544.7	1558.1	1564.8
20°	1506.1	1507.8	1519.5	1538.0	1546.3
22.5°	1474.2	1477.6	1491.0	1514.5	1522.9
25°	1437.3	1442.4	1460.8	1486.0	1496.0
27.5°	1400.4	1405.5	1425.6	1454.1	1467.5
30°	1360.2	1366.9	1387.0	1417.2	1428.9
32.5°	1314.9	1319.9	1345.1	1375.3	1387.0
35°	1267.9	1273.0	1299.8	1328.3	1340.0
37.5°	1221.0	1221.0	1247.8	1281.3	1293.1
40°	1163.9	1165.6	1194.1	1226.0	1232.7
42.5°	1110.3	1110.3	1135.4	1165.6	1177.4
45°	1049.9	1051.6	1076.7	1103.6	1110.3
47.5°	987.8	987.8	1009.6	1034.8	1041.5
50°	922.4	919.1	944.2	964.4	969.4
52.5°	855.3	850.3	870.4	887.2	893.9
55°	783.2	778.2	793.3	810.1	816.8
57.5°	707.8	701.1	717.8	732.9	736.3
60°	637.3	627.3	640.7	649.1	657.4
62.5°	566.9	555.1	565.2	570.2	576.9
65°	494.8	483.0	491.4	494.8	503.1
67.5°	426.0	417.6	419.3	424.3	427.7
70°	363.9	353.9	353.9	353.9	355.6
72.5°	306.9	291.8	290.1	291.8	291.8
75°	244.9	234.8	231.4	231.4	229.8
77.5°	196.2	182.8	181.1	177.8	174.4
80°	142.6	130.8	127.5	125.8	124.1
82.5°	99.0	88.9	85.5	82.2	77.1
85°	58.7	52.0	45.3	40.3	35.2
87.5°	21.8	20.1	16.8	15.1	15.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)