

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: P229801

Luminaire Tested: **24RLN-LD5-55-RDP-UNV-L840-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229801  
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-L840-CD1-U  
Description: METALUX 2X4 RLN LED TROFFER WITH RDP LENS  
Light Source: (252)4000K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4605.0 lumens  
Efficiency: N/A  
Efficacy: 107.8 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

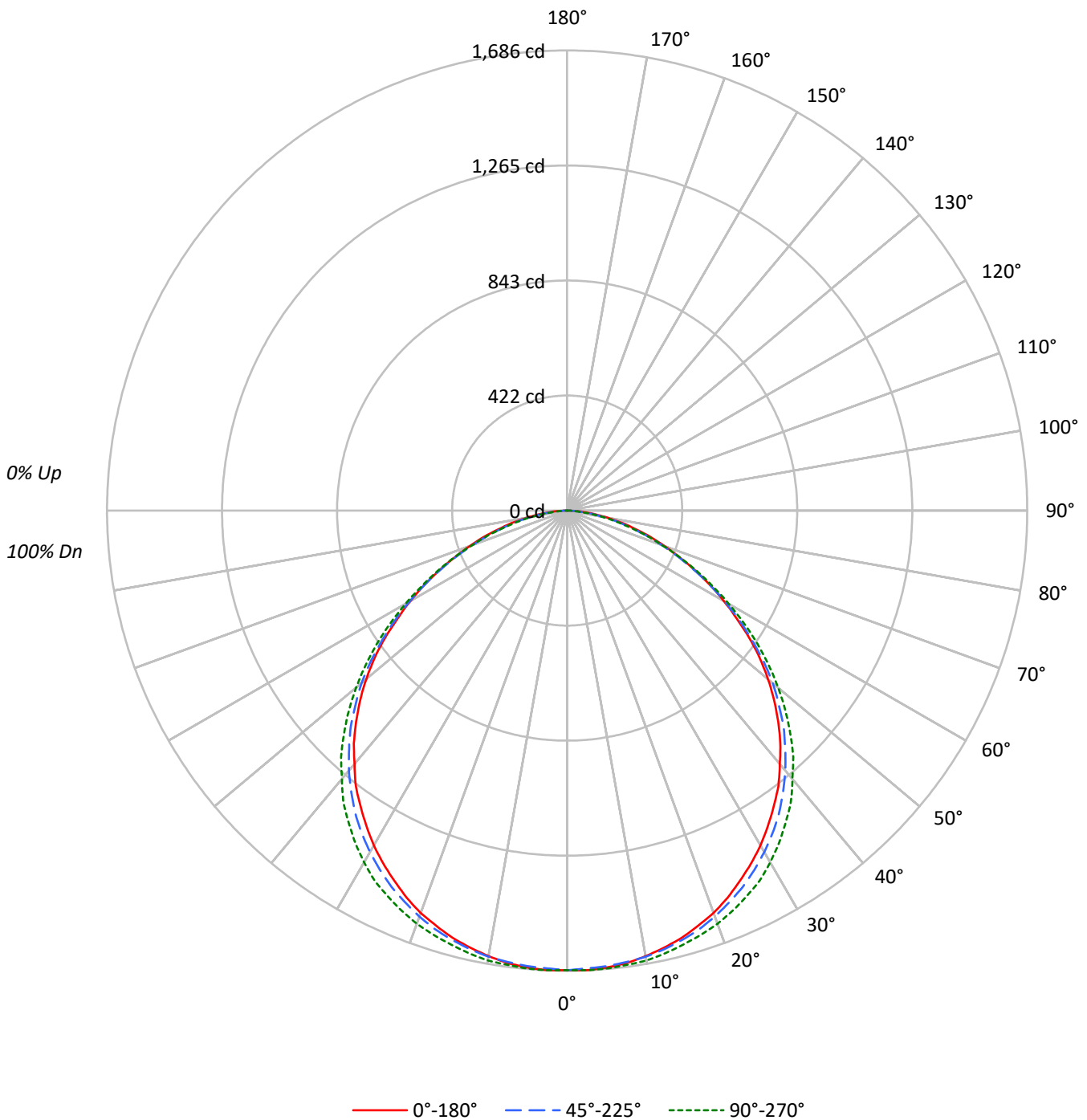
Input Watts (W): 42.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2579	2579	2579
5°	2584	2576	2589
10°	2579	2581	2603
15°	2571	2582	2609
20°	2557	2580	2625
25°	2530	2572	2634
30°	2506	2555	2632
35°	2469	2532	2610
40°	2424	2487	2567
45°	2369	2429	2505
50°	2289	2344	2406
55°	2178	2207	2272
60°	2033	2044	2098
65°	1868	1855	1899
70°	1698	1651	1659
75°	1510	1427	1416
80°	1310	1171	1140
85°	1074	829	645



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	159.7	3.5
10°-20°	460.4	10.0
20°-30°	702.8	15.3
30°-40°	847.3	18.4
40°-50°	864.0	18.8
50°-60°	739.5	16.1
60°-70°	509.4	11.1
70°-80°	261.1	5.7
80°-90°	60.8	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°	1322.9	28.7
0°-40°	2170.2	47.1
0°-60°	3773.7	81.9
0°-90°	4605.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4605.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1684	1684	1684	1684	1684	
5°	1681	1677	1675	1681	1684	160
15°	1621	1619	1628	1640	1646	457
25°	1497	1502	1522	1548	1558	690
35°	1321	1326	1354	1384	1396	826
45°	1094	1095	1122	1150	1156	843
55°	816	811	826	844	851	728
65°	515	503	512	515	524	512
75°	255	245	241	241	239	275
85°	61	54	47	42	37	71
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1684.1	1684.1	1684.1	1684.1	1684.1
2.5°	1685.8	1682.3	1678.8	1682.3	1685.8
5°	1680.6	1677.1	1675.3	1680.6	1684.1
7.5°	1671.8	1668.3	1668.3	1675.3	1678.8
10°	1657.9	1656.1	1659.6	1666.6	1673.6
12.5°	1640.4	1640.4	1645.6	1654.4	1661.4
15°	1621.2	1619.4	1628.2	1640.4	1645.6
17.5°	1595.0	1596.7	1608.9	1622.9	1629.9
20°	1568.8	1570.5	1582.7	1602.0	1610.7
22.5°	1535.6	1539.1	1553.0	1577.5	1586.2
25°	1497.1	1502.4	1521.6	1547.8	1558.3
27.5°	1458.7	1463.9	1484.9	1514.6	1528.6
30°	1416.8	1423.8	1444.7	1476.2	1488.4
32.5°	1369.6	1374.9	1401.1	1432.5	1444.7
35°	1320.7	1325.9	1353.9	1383.6	1395.8
37.5°	1271.8	1271.8	1299.7	1334.7	1346.9
40°	1212.4	1214.1	1243.8	1277.0	1284.0
42.5°	1156.5	1156.5	1182.7	1214.1	1226.4
45°	1093.6	1095.3	1121.5	1149.5	1156.5
47.5°	1029.0	1029.0	1051.7	1077.9	1084.9
50°	960.8	957.3	983.5	1004.5	1009.7
52.5°	890.9	885.7	906.7	924.1	931.1
55°	815.8	810.6	826.3	843.8	850.8
57.5°	737.2	730.2	747.7	763.4	766.9
60°	663.8	653.4	667.3	676.1	684.8
62.5°	590.5	578.2	588.7	594.0	601.0
65°	515.4	503.1	511.9	515.4	524.1
67.5°	443.7	435.0	436.7	442.0	445.5
70°	379.1	368.6	368.6	368.6	370.4
72.5°	319.7	304.0	302.2	304.0	304.0
75°	255.1	244.6	241.1	241.1	239.3
77.5°	204.4	190.4	188.7	185.2	181.7
80°	148.5	136.3	132.8	131.0	129.3
82.5°	103.1	92.6	89.1	85.6	80.4
85°	61.1	54.2	47.2	41.9	36.7
87.5°	22.7	21.0	17.5	15.7	15.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)