

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: P229792

Luminaire Tested: **24RLN-LD5-60-RDP-UNV-L835-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229792  
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-LD5-60-RDP-UNV-L835-CD1-U  
Description: METALUX 2X4 RLN LED TROFFER WITH RDP LENS  
Light Source: (252)3500K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4974.0 lumens  
Efficiency: N/A  
Efficacy: 104.3 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

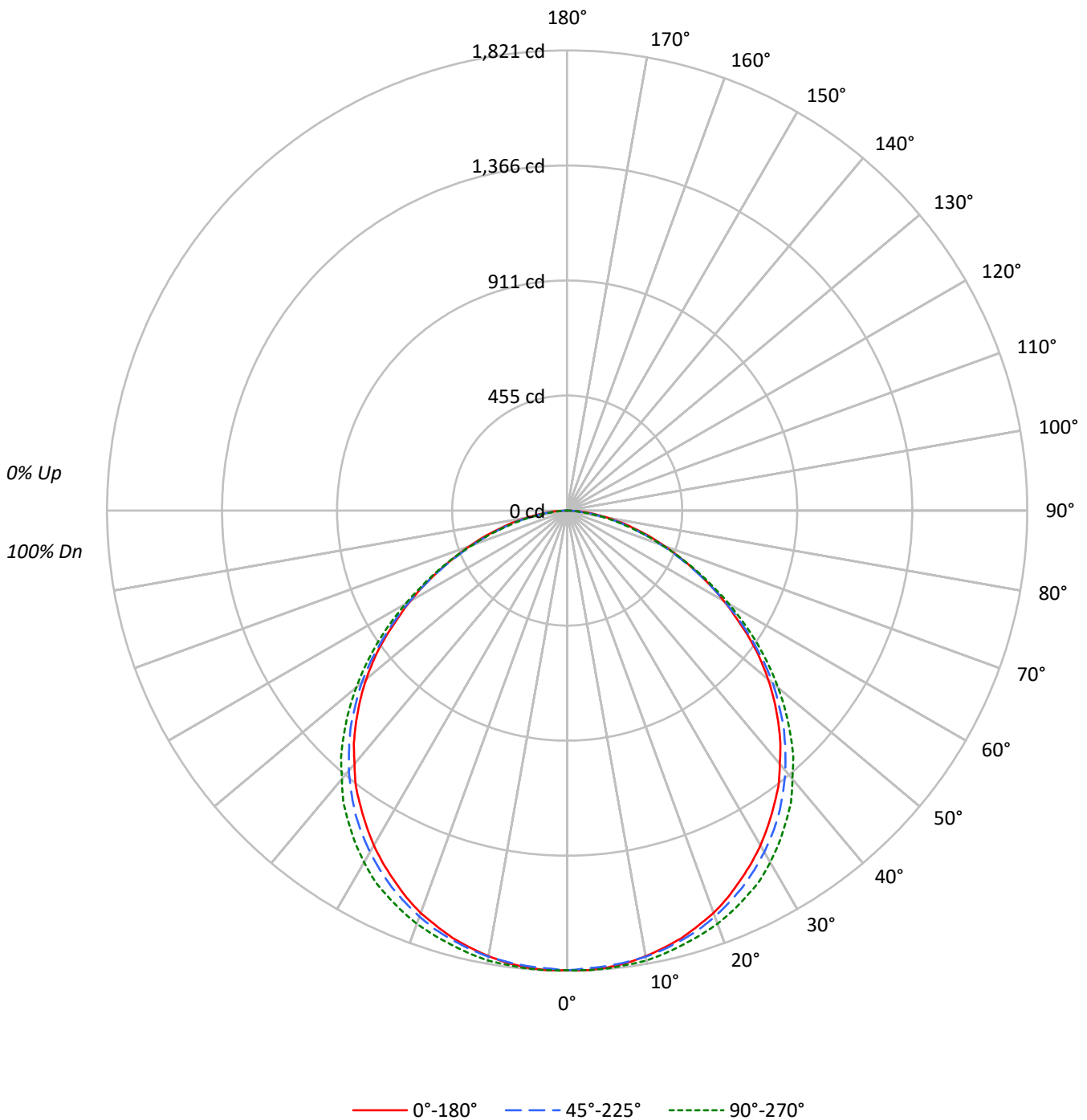
Input Watts (W): 47.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2786	2786	2786
5°	2791	2782	2797
10°	2785	2788	2812
15°	2777	2789	2819
20°	2762	2787	2836
25°	2733	2778	2845
30°	2707	2760	2843
35°	2667	2734	2819
40°	2618	2686	2773
45°	2559	2624	2706
50°	2473	2531	2599
55°	2353	2383	2454
60°	2196	2208	2266
65°	2017	2004	2052
70°	1834	1783	1791
75°	1630	1541	1530
80°	1415	1265	1231
85°	1160	895	696



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	172.5	3.5
10°-20°	497.3	10.0
20°-30°	759.1	15.3
30°-40°	915.2	18.4
40°-50°	933.3	18.8
50°-60°	798.7	16.1
60°-70°	550.2	11.1
70°-80°	282.0	5.7
80°-90°	65.6	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°	1429.0	28.7
0°-40°	2344.1	47.1
0°-60°	4076.1	81.9
0°-90°	4974.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4974.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1819	1819	1819	1819	1819	
5°	1815	1812	1810	1815	1819	173
15°	1751	1749	1759	1772	1778	494
25°	1617	1623	1644	1672	1683	746
35°	1426	1432	1462	1494	1508	892
45°	1181	1183	1211	1242	1249	910
55°	881	876	892	911	919	786
65°	557	543	553	557	566	553
75°	276	264	260	260	258	297
85°	66	58	51	45	40	77
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1819.0	1819.0	1819.0	1819.0	1819.0
2.5°	1820.9	1817.1	1813.3	1817.1	1820.9
5°	1815.2	1811.5	1809.6	1815.2	1819.0
7.5°	1805.8	1802.0	1802.0	1809.6	1813.3
10°	1790.7	1788.8	1792.6	1800.1	1807.7
12.5°	1771.8	1771.8	1777.5	1786.9	1794.5
15°	1751.1	1749.2	1758.6	1771.8	1777.5
17.5°	1722.8	1724.7	1737.9	1753.0	1760.5
20°	1694.5	1696.4	1709.6	1730.3	1739.8
22.5°	1658.6	1662.4	1677.5	1703.9	1713.3
25°	1617.1	1622.8	1643.5	1671.8	1683.2
27.5°	1575.6	1581.3	1603.9	1636.0	1651.1
30°	1530.3	1537.9	1560.5	1594.5	1607.7
32.5°	1479.4	1485.0	1513.3	1547.3	1560.5
35°	1426.5	1432.2	1462.4	1494.5	1507.7
37.5°	1373.7	1373.7	1403.9	1441.6	1454.8
40°	1309.5	1311.4	1343.5	1379.4	1386.9
42.5°	1249.2	1249.2	1277.5	1311.4	1324.6
45°	1181.2	1183.1	1211.4	1241.6	1249.2
47.5°	1111.4	1111.4	1135.9	1164.2	1171.8
50°	1037.8	1034.0	1062.3	1085.0	1090.7
52.5°	962.3	956.7	979.3	998.2	1005.7
55°	881.2	875.5	892.5	911.4	918.9
57.5°	796.3	788.7	807.6	824.6	828.4
60°	717.0	705.7	720.8	730.2	739.7
62.5°	637.8	624.6	635.9	641.6	649.1
65°	556.6	543.4	552.9	556.6	566.1
67.5°	479.3	469.8	471.7	477.4	481.2
70°	409.5	398.1	398.1	398.1	400.0
72.5°	345.3	328.3	326.4	328.3	328.3
75°	275.5	264.2	260.4	260.4	258.5
77.5°	220.8	205.7	203.8	200.0	196.2
80°	160.4	147.2	143.4	141.5	139.6
82.5°	111.3	100.0	96.2	92.5	86.8
85°	66.0	58.5	50.9	45.3	39.6
87.5°	24.5	22.6	18.9	17.0	17.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)