

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: P296121

Luminaire Tested: **24RLN-LD5-55-RDP-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296121  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36059-R2)  
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-L83050-W2A1-U-4500K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER  
WITH RDP LENS  
Light Source: (504) 80 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4877.0 lumens  
Efficiency: N/A  
Efficacy: 121.4 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

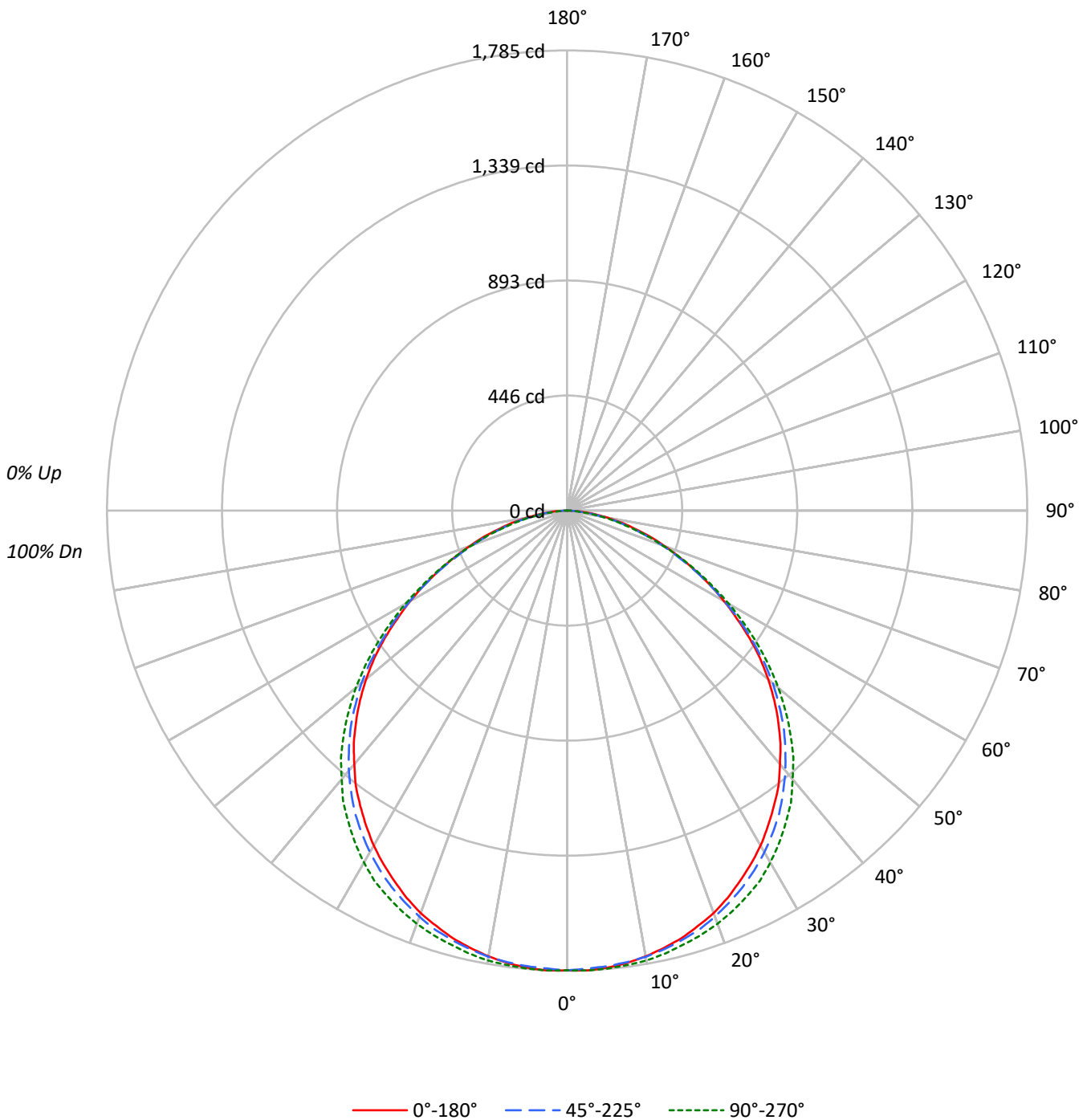
Input Watts (W): 40.176  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2400	2400	2400
5°	2404	2396	2409
10°	2399	2401	2422
15°	2392	2402	2428
20°	2379	2400	2442
25°	2354	2392	2450
30°	2331	2377	2449
35°	2297	2355	2428
40°	2255	2314	2389
45°	2204	2260	2331
50°	2130	2180	2238
55°	2027	2053	2114
60°	1892	1902	1952
65°	1738	1726	1767
70°	1579	1536	1543
75°	1404	1327	1318
80°	1219	1089	1061
85°	1000	772	601



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	169.1	3.5
10°-20°	487.6	10.0
20°-30°	744.3	15.3
30°-40°	897.3	18.4
40°-50°	915.1	18.8
50°-60°	783.1	16.1
60°-70°	539.4	11.1
70°-80°	276.5	5.7
80°-90°	64.4	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°	1401.1	28.7
0°-40°	2298.4	47.1
0°-60°	3996.6	81.9
0°-90°	4877.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4877.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1784	1784	1784	1784	1784	
5°	1780	1776	1774	1780	1784	169
15°	1717	1715	1724	1737	1743	484
25°	1586	1591	1612	1639	1650	731
35°	1399	1404	1434	1465	1478	875
45°	1158	1160	1188	1217	1225	892
55°	864	858	875	894	901	771
65°	546	533	542	546	555	542
75°	270	259	255	255	254	291
85°	65	57	50	44	39	75
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1783.5	1783.5	1783.5	1783.5	1783.5
2.5°	1785.4	1781.7	1778.0	1781.7	1785.4
5°	1779.8	1776.1	1774.3	1779.8	1783.5
7.5°	1770.6	1766.9	1766.9	1774.3	1778.0
10°	1755.8	1753.9	1757.6	1765.0	1772.4
12.5°	1737.3	1737.3	1742.8	1752.1	1759.5
15°	1716.9	1715.1	1724.3	1737.3	1742.8
17.5°	1689.2	1691.0	1704.0	1718.8	1726.2
20°	1661.4	1663.3	1676.2	1696.6	1705.8
22.5°	1626.3	1630.0	1644.8	1670.7	1679.9
25°	1585.6	1591.1	1611.5	1639.2	1650.3
27.5°	1544.9	1550.4	1572.6	1604.1	1618.9
30°	1500.5	1507.9	1530.1	1563.4	1576.3
32.5°	1450.5	1456.1	1483.8	1517.1	1530.1
35°	1398.7	1404.3	1433.9	1465.3	1478.3
37.5°	1346.9	1346.9	1376.5	1413.5	1426.5
40°	1284.0	1285.8	1317.3	1352.5	1359.9
42.5°	1224.8	1224.8	1252.5	1285.8	1298.8
45°	1158.2	1160.0	1187.8	1217.4	1224.8
47.5°	1089.7	1089.7	1113.8	1141.5	1148.9
50°	1017.6	1013.9	1041.6	1063.8	1069.4
52.5°	943.6	938.0	960.2	978.7	986.1
55°	864.0	858.5	875.1	893.6	901.0
57.5°	780.8	773.4	791.9	808.5	812.2
60°	703.1	692.0	706.8	716.0	725.3
62.5°	625.3	612.4	623.5	629.0	636.4
65°	545.8	532.8	542.1	545.8	555.0
67.5°	469.9	460.7	462.5	468.1	471.8
70°	401.5	390.4	390.4	390.4	392.2
72.5°	338.6	321.9	320.1	321.9	321.9
75°	270.1	259.0	255.3	255.3	253.5
77.5°	216.5	201.7	199.8	196.1	192.4
80°	157.3	144.3	140.6	138.8	136.9
82.5°	109.2	98.1	94.4	90.7	85.1
85°	64.8	57.4	50.0	44.4	38.9
87.5°	24.1	22.2	18.5	16.7	16.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)