

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: P296199

Luminaire Tested: **24RLN-LD5-60-RDP-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296199  
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-LD5-60-RDP-UNV-L82765-W2A1-U-3500K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER  
WITH RDP LENS  
Light Source: (504) 80 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4879.0 lumens  
Efficiency: N/A  
Efficacy: 112.3 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

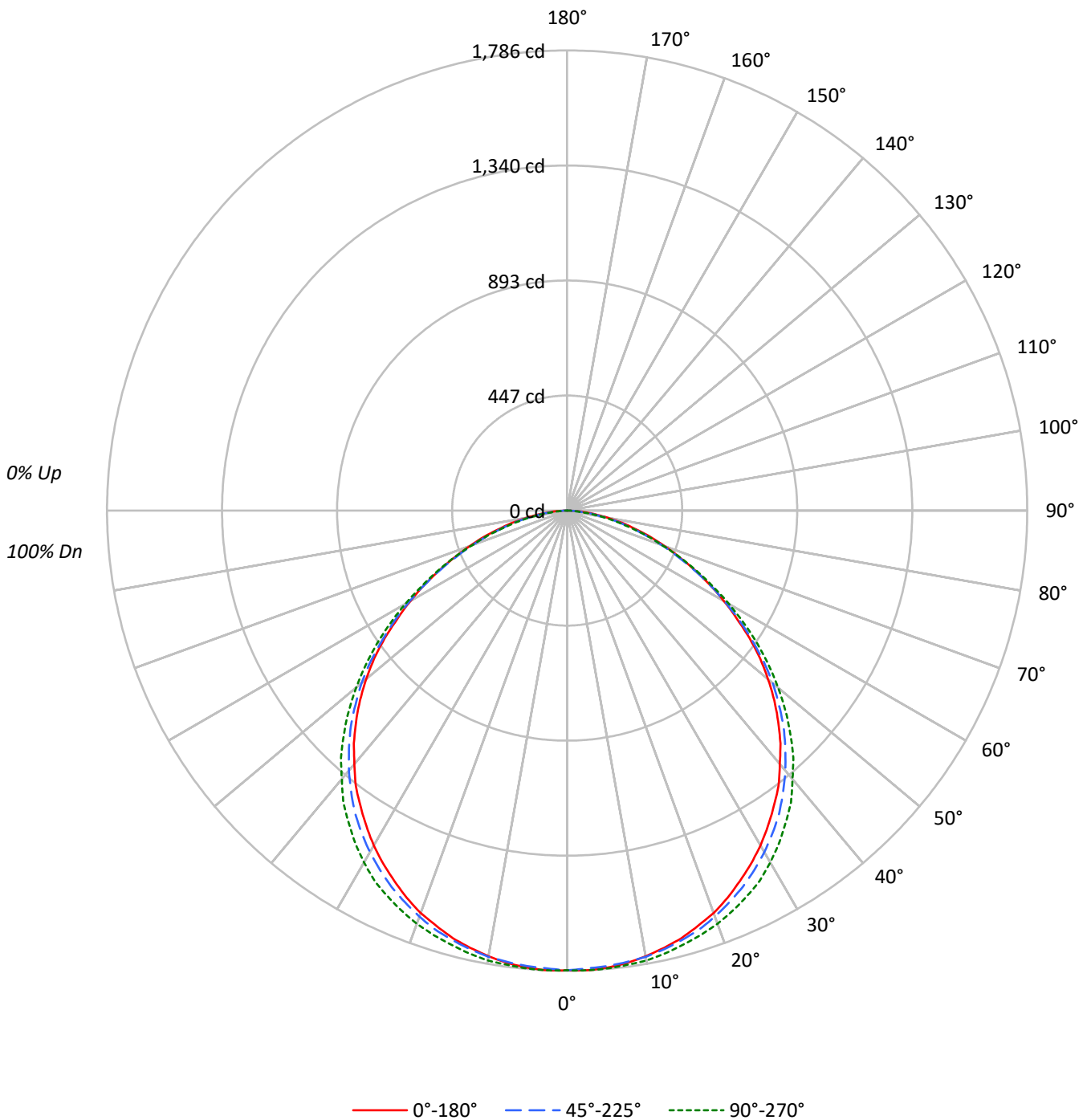
Input Watts (W): 43.431  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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					100			
1	109	105	101	97	107	102	99	95	98	95	92	94	92	90	91	89	87	85					85			
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	77	73	71					71			
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	66	63	60					60			
4	83	72	63	57	81	70	62	56	68	61	55	66	60	55	63	58	54	52					52			
5	77	64	55	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45					45			
6	71	58	49	43	69	57	49	43	55	48	42	53	47	42	52	46	41	39					39			
7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35					35			
8	61	48	39	34	60	47	39	34	46	39	33	45	38	33	43	37	33	31					31			
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28					28			
10	54	41	33	27	52	40	33	27	39	32	27	38	32	27	37	31	27	25					25			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2401	2401	2401
5°	2405	2397	2410
10°	2400	2402	2423
15°	2393	2403	2429
20°	2380	2401	2443
25°	2355	2393	2451
30°	2332	2378	2450
35°	2298	2356	2429
40°	2256	2315	2389
45°	2205	2261	2332
50°	2131	2181	2239
55°	2028	2054	2114
60°	1893	1903	1953
65°	1738	1727	1768
70°	1580	1536	1544
75°	1405	1328	1318
80°	1219	1090	1062
85°	1000	772	601



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	169.2	3.5
10°-20°	487.8	10.0
20°-30°	744.6	15.3
30°-40°	897.7	18.4
40°-50°	915.5	18.8
50°-60°	783.5	16.1
60°-70°	539.7	11.1
70°-80°	276.7	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°	1401.7	28.7
0°-40°	2299.4	47.1
0°-60°	3998.3	81.9
0°-90°	4879.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4879.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1784	1784	1784	1784	1784	
5°	1781	1777	1775	1781	1784	169
15°	1718	1716	1725	1738	1744	484
25°	1586	1592	1612	1640	1651	731
35°	1399	1405	1434	1466	1479	875
45°	1159	1160	1188	1218	1225	893
55°	864	859	876	894	901	771
65°	546	533	542	546	555	543
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°	1784.3	1784.3	1784.3	1784.3	1784.3
2.5°	1786.1	1782.4	1778.7	1782.4	1786.1
5°	1780.6	1776.9	1775.0	1780.6	1784.3
7.5°	1771.3	1767.6	1767.6	1775.0	1778.7
10°	1756.5	1754.7	1758.4	1765.8	1773.2
12.5°	1738.0	1738.0	1743.5	1752.8	1760.2
15°	1717.6	1715.8	1725.0	1738.0	1743.5
17.5°	1689.9	1691.7	1704.7	1719.5	1726.9
20°	1662.1	1664.0	1676.9	1697.3	1706.5
22.5°	1626.9	1630.6	1645.5	1671.4	1680.6
25°	1586.2	1591.8	1612.1	1639.9	1651.0
27.5°	1545.5	1551.1	1573.3	1604.7	1619.5
30°	1501.1	1508.5	1530.7	1564.0	1577.0
32.5°	1451.1	1456.7	1484.4	1517.7	1530.7
35°	1399.3	1404.8	1434.4	1465.9	1478.9
37.5°	1347.5	1347.5	1377.1	1414.1	1427.0
40°	1284.5	1286.4	1317.8	1353.0	1360.4
42.5°	1225.3	1225.3	1253.1	1286.4	1299.3
45°	1158.7	1160.5	1188.3	1217.9	1225.3
47.5°	1090.2	1090.2	1114.2	1142.0	1149.4
50°	1018.0	1014.3	1042.1	1064.3	1069.8
52.5°	944.0	938.4	960.6	979.1	986.5
55°	864.4	858.8	875.5	894.0	901.4
57.5°	781.1	773.7	792.2	808.8	812.5
60°	703.3	692.2	707.0	716.3	725.6
62.5°	625.6	612.6	623.8	629.3	636.7
65°	546.0	533.1	542.3	546.0	555.3
67.5°	470.1	460.9	462.7	468.3	472.0
70°	401.6	390.5	390.5	390.5	392.4
72.5°	338.7	322.1	320.2	322.1	322.1
75°	270.2	259.1	255.4	255.4	253.6
77.5°	216.6	201.7	199.9	196.2	192.5
80°	157.3	144.4	140.7	138.8	137.0
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)