

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: P295887

Luminaire Tested: **24RLN-LD5-42-UNV-L82765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P295887  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-085-1)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24RLN-LD5-42-UNV-L82765-W2A1-U-5500K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER  
WITH STANDARD LENS  
Light Source: (504) 80 CRI LEDS TUNED TO 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4382.0 lumens  
Efficiency: N/A  
Efficacy: 146.3 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.19 / 1.29  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

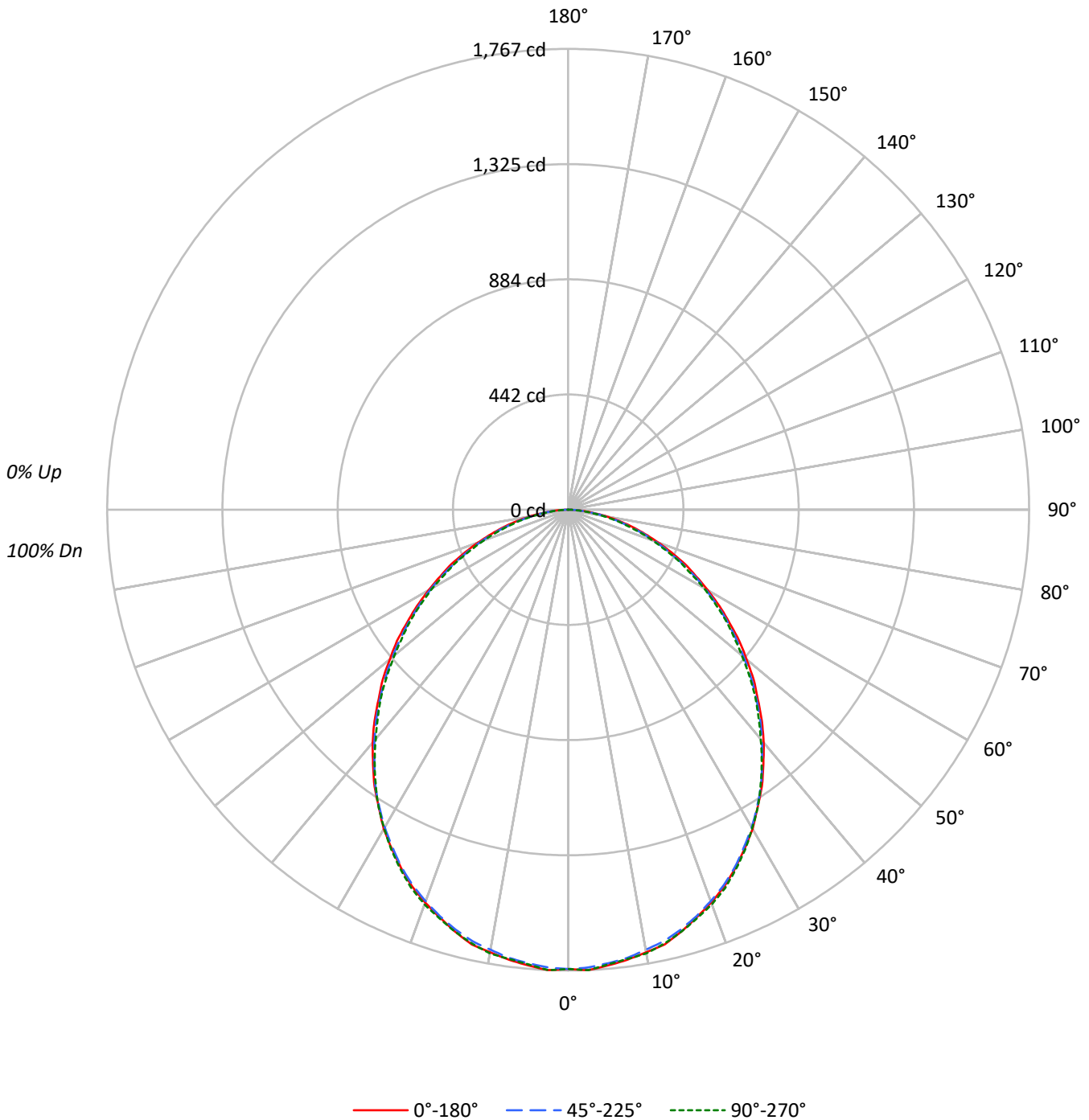
Input Watts (W): 29.946  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	74	72
3	91	81	73	67	89	80	72	66	77	70	65	74	69	64	71	67	63	61
4	84	72	64	57	82	71	63	57	68	62	56	66	60	55	64	59	55	52
5	77	65	56	50	75	64	55	49	62	54	49	60	53	48	58	52	48	46
6	72	59	50	44	70	58	49	43	56	48	43	54	48	43	53	47	42	40
7	66	53	45	39	65	52	44	39	51	44	38	49	43	38	48	42	38	36
8	62	49	40	35	60	48	40	35	47	39	34	45	39	34	44	38	34	32
9	58	45	37	31	57	44	36	31	43	36	31	42	36	31	41	35	31	29
10	54	41	34	28	53	41	33	28	40	33	28	39	33	28	38	32	28	26

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

	0°	45°	90°
0°	2370	2370	2370
5°	2370	2358	2364
10°	2354	2341	2360
15°	2333	2322	2333
20°	2295	2287	2306
25°	2250	2246	2258
30°	2196	2185	2192
35°	2127	2118	2113
40°	2049	2029	2016
45°	1956	1937	1929
50°	1867	1838	1817
55°	1768	1741	1724
60°	1662	1632	1613
65°	1571	1512	1499
70°	1440	1385	1357
75°	1323	1242	1190
80°	1161	1085	1019
85°	939	872	743



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	166.2	3.8
10°-20°	471.2	10.8
20°-30°	696.9	15.9
30°-40°	804.3	18.4
40°-50°	785.6	17.9
50°-60°	663.4	15.1
60°-70°	472.5	10.8
70°-80°	255.9	5.8
80°-90°	66.0	1.5
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°	1334.3	30.4
0°-40°	2138.6	48.8
0°-60°	3587.6	81.9
0°-90°	4382.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4382.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1761	1761	1761	1761	1761	
5°	1754	1754	1746	1750	1750	166
15°	1675	1668	1667	1674	1675	472
25°	1516	1507	1513	1518	1521	698
35°	1295	1285	1289	1285	1286	808
45°	1028	1019	1018	1014	1014	795
55°	754	744	742	735	735	676
65°	493	484	475	469	471	486
75°	254	246	239	233	229	269
85°	61	59	56	50	48	72
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1761.4	1761.4	1761.4	1761.4	1761.4
2.5°	1767.1	1760.0	1757.2	1758.6	1767.1
5°	1754.4	1754.4	1745.9	1750.1	1750.1
7.5°	1740.2	1741.6	1733.2	1740.2	1737.4
10°	1723.3	1719.0	1713.4	1724.7	1727.5
12.5°	1707.7	1697.8	1695.0	1702.1	1703.5
15°	1675.2	1668.1	1666.7	1673.8	1675.2
17.5°	1638.4	1639.9	1634.2	1644.1	1642.7
20°	1603.1	1600.3	1597.5	1608.8	1610.2
22.5°	1563.5	1555.0	1557.9	1567.8	1570.6
25°	1515.5	1507.0	1512.6	1518.3	1521.1
27.5°	1464.6	1460.3	1458.9	1466.0	1468.8
30°	1413.7	1406.6	1406.6	1415.1	1410.8
32.5°	1351.5	1345.8	1348.6	1351.5	1352.9
35°	1294.9	1285.0	1289.3	1285.0	1286.4
37.5°	1228.5	1221.4	1220.0	1218.6	1218.6
40°	1166.3	1160.6	1155.0	1155.0	1147.9
42.5°	1098.4	1091.4	1088.5	1084.3	1080.0
45°	1027.7	1019.3	1017.8	1013.6	1013.6
47.5°	964.1	951.4	950.0	941.5	941.5
50°	892.0	883.5	877.9	872.2	868.0
52.5°	827.0	818.5	810.0	804.4	800.1
55°	753.5	743.6	742.2	735.1	735.1
57.5°	687.0	678.6	672.9	664.4	665.8
60°	617.8	609.3	606.5	599.4	599.4
62.5°	552.7	545.7	541.4	534.4	528.7
65°	493.4	483.5	475.0	469.3	470.8
67.5°	428.3	417.0	412.8	407.1	402.9
70°	366.1	359.1	352.0	344.9	344.9
72.5°	308.2	301.1	296.9	288.4	285.6
75°	254.5	246.0	238.9	233.3	229.0
77.5°	200.7	192.3	188.0	181.0	181.0
80°	149.8	144.2	140.0	137.1	131.5
82.5°	103.2	100.4	96.1	91.9	87.6
85°	60.8	59.4	56.5	49.5	48.1
87.5°	24.0	24.0	21.2	19.8	18.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)