

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: P296181

Luminaire Tested: **24RLN-LD5-50-RDP-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296181  
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-LD5-50-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: 4042.0 lumens  
Efficiency: N/A  
Efficacy: 115.0 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

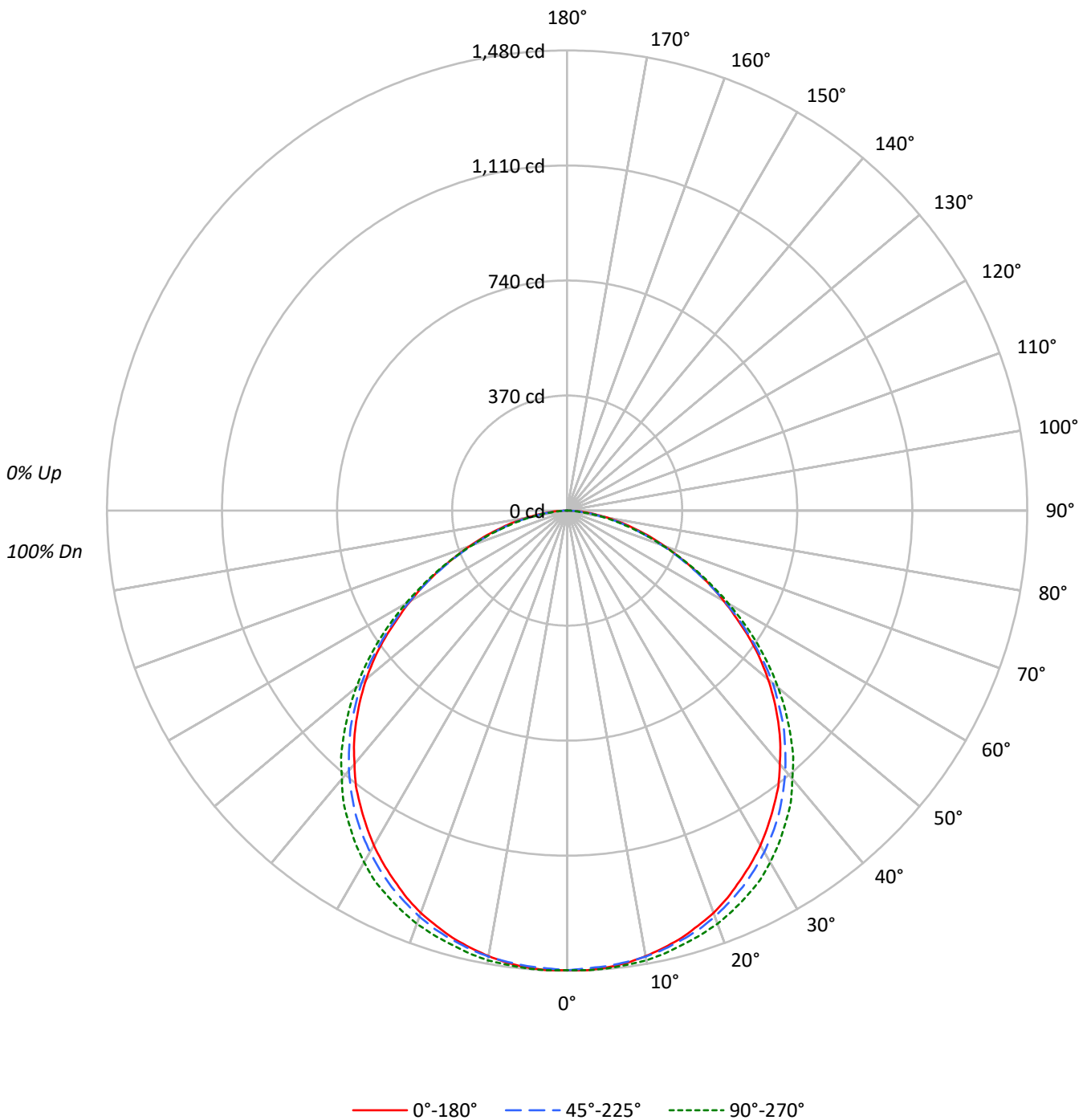
Input Watts (W): 35.154  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1989	1989	1989
5°	1992	1986	1996
10°	1988	1990	2007
15°	1982	1991	2012
20°	1972	1989	2024
25°	1951	1983	2031
30°	1932	1970	2030
35°	1904	1952	2012
40°	1869	1918	1979
45°	1827	1873	1932
50°	1765	1807	1855
55°	1680	1701	1752
60°	1568	1576	1618
65°	1440	1430	1465
70°	1309	1273	1279
75°	1164	1100	1092
80°	1010	903	879
85°	829	639	497



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	140.2	3.5
10°-20°	404.1	10.0
20°-30°	616.9	15.3
30°-40°	743.7	18.4
40°-50°	758.4	18.8
50°-60°	649.1	16.1
60°-70°	447.1	11.1
70°-80°	229.2	5.7
80°-90°	53.3	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°	1161.2	28.7
0°-40°	1904.9	47.1
0°-60°	3312.4	81.9
0°-90°	4042.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4042.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1478	1478	1478	1478	1478	
5°	1475	1472	1470	1475	1478	140
15°	1423	1421	1429	1440	1444	401
25°	1314	1319	1336	1359	1368	606
35°	1159	1164	1188	1214	1225	725
45°	960	961	984	1009	1015	740
55°	716	712	725	741	747	639
65°	452	442	449	452	460	449
75°	224	215	212	212	210	241
85°	54	48	41	37	32	62
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1478.2	1478.2	1478.2	1478.2	1478.2
2.5°	1479.7	1476.6	1473.6	1476.6	1479.7
5°	1475.1	1472.0	1470.5	1475.1	1478.2
7.5°	1467.4	1464.4	1464.4	1470.5	1473.6
10°	1455.2	1453.6	1456.7	1462.8	1469.0
12.5°	1439.8	1439.8	1444.4	1452.1	1458.2
15°	1423.0	1421.4	1429.1	1439.8	1444.4
17.5°	1400.0	1401.5	1412.2	1424.5	1430.6
20°	1377.0	1378.5	1389.2	1406.1	1413.8
22.5°	1347.8	1350.9	1363.2	1384.6	1392.3
25°	1314.1	1318.7	1335.6	1358.6	1367.8
27.5°	1280.4	1285.0	1303.4	1329.4	1341.7
30°	1243.6	1249.7	1268.1	1295.7	1306.4
32.5°	1202.2	1206.8	1229.8	1257.4	1268.1
35°	1159.2	1163.8	1188.4	1214.4	1225.2
37.5°	1116.3	1116.3	1140.8	1171.5	1182.2
40°	1064.2	1065.7	1091.8	1120.9	1127.0
42.5°	1015.1	1015.1	1038.1	1065.7	1076.4
45°	959.9	961.4	984.4	1009.0	1015.1
47.5°	903.2	903.2	923.1	946.1	952.2
50°	843.4	840.3	863.3	881.7	886.3
52.5°	782.0	777.4	795.8	811.2	817.3
55°	716.1	711.5	725.3	740.6	746.8
57.5°	647.1	641.0	656.3	670.1	673.2
60°	582.7	573.5	585.7	593.4	601.1
62.5°	518.3	507.5	516.7	521.3	527.5
65°	452.3	441.6	449.3	452.3	460.0
67.5°	389.5	381.8	383.3	387.9	391.0
70°	332.7	323.5	323.5	323.5	325.1
72.5°	280.6	266.8	265.3	266.8	266.8
75°	223.9	214.7	211.6	211.6	210.1
77.5°	179.4	167.1	165.6	162.5	159.5
80°	130.3	119.6	116.5	115.0	113.5
82.5°	90.5	81.3	78.2	75.1	70.5
85°	53.7	47.5	41.4	36.8	32.2
87.5°	19.9	18.4	15.3	13.8	13.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)