

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: P296303

Luminaire Tested: **24RLN-LD5-42-RDP-UNV-L92765-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296303  
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-LD5-42-RDP-UNV-L92765-W2A1-U-3500K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER  
WITH RDP LENS  
Light Source: (504) 90 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2990.0 lumens  
Efficiency: N/A  
Efficacy: 102.4 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

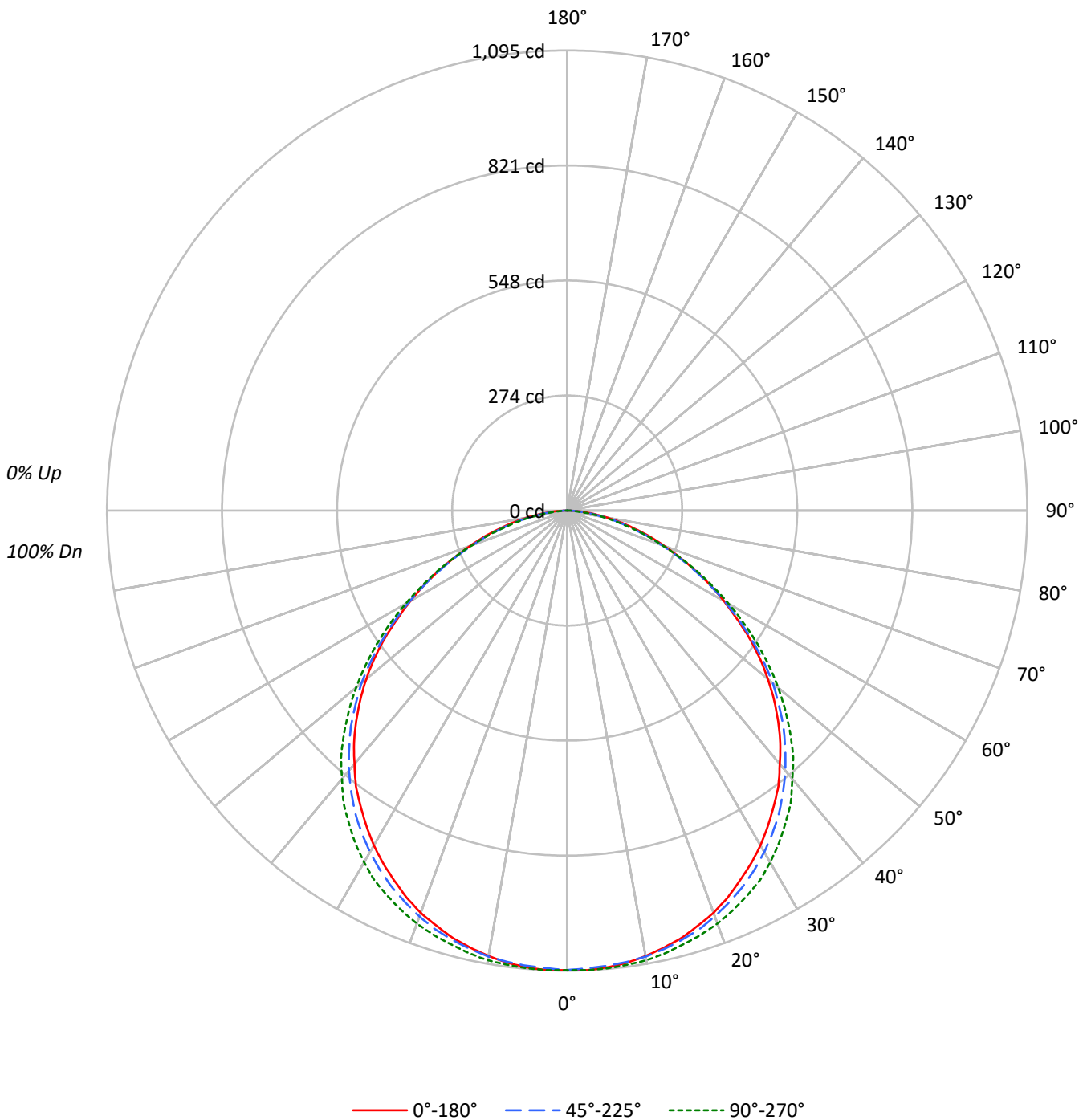
Input Watts (W): 29.202  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P296303

CATALOG NUMBER: 24RLN-LD5-42-RDP-UNV-L92765-W2A1-U-3500K

### Luminous Intensity Polar Plot





TEST NUMBER: P296303

CATALOG NUMBER: 24RLN-LD5-42-RDP-UNV-L92765-W2A1-U-3500K

**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°	1471	1471	1471
5°	1474	1469	1477
10°	1471	1472	1485
15°	1466	1473	1488
20°	1458	1472	1497
25°	1443	1467	1502
30°	1429	1457	1501
35°	1408	1444	1489
40°	1383	1418	1464
45°	1351	1386	1429
50°	1306	1337	1372
55°	1243	1259	1296
60°	1160	1166	1196
65°	1065	1058	1083
70°	968	941	946
75°	861	814	808
80°	747	668	650
85°	613	472	367



TEST NUMBER: P296303

CATALOG NUMBER: 24RLN-LD5-42-RDP-UNV-L92765-W2A1-U-3500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	103.7	3.5
10°-20°	299.0	10.0
20°-30°	456.3	15.3
30°-40°	550.1	18.4
40°-50°	561.0	18.8
50°-60°	480.1	16.1
60°-70°	330.7	11.1
70°-80°	169.5	5.7
80°-90°	39.5	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°	859.0	28.7
0°-40°	1409.1	47.1
0°-60°	2450.3	81.9
0°-90°	2990.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2990.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1094	1094	1094	1094	1094	
5°	1091	1089	1088	1091	1094	104
15°	1053	1052	1057	1065	1068	297
25°	972	976	988	1005	1012	448
35°	858	861	879	898	906	536
45°	710	711	728	746	751	547
55°	530	526	536	548	552	473
65°	335	327	332	335	340	332
75°	166	159	156	156	155	179
85°	40	35	31	27	24	46
90°	0	0	0	0	0	



TEST NUMBER: P296303

CATALOG NUMBER: 24RLN-LD5-42-RDP-UNV-L92765-W2A1-U-3500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1093.5	1093.5	1093.5	1093.5	1093.5
2.5°	1094.6	1092.3	1090.1	1092.3	1094.6
5°	1091.2	1088.9	1087.8	1091.2	1093.5
7.5°	1085.5	1083.2	1083.2	1087.8	1090.1
10°	1076.4	1075.3	1077.6	1082.1	1086.6
12.5°	1065.1	1065.1	1068.5	1074.2	1078.7
15°	1052.6	1051.5	1057.2	1065.1	1068.5
17.5°	1035.6	1036.7	1044.7	1053.8	1058.3
20°	1018.6	1019.7	1027.7	1040.1	1045.8
22.5°	997.0	999.3	1008.4	1024.3	1029.9
25°	972.1	975.5	988.0	1005.0	1011.8
27.5°	947.1	950.5	964.1	983.4	992.5
30°	919.9	924.4	938.1	958.5	966.4
32.5°	889.3	892.7	909.7	930.1	938.1
35°	857.5	860.9	879.1	898.4	906.3
37.5°	825.8	825.8	843.9	866.6	874.5
40°	787.2	788.3	807.6	829.2	833.7
42.5°	750.9	750.9	767.9	788.3	796.3
45°	710.1	711.2	728.2	746.4	750.9
47.5°	668.1	668.1	682.8	699.9	704.4
50°	623.9	621.6	638.6	652.2	655.6
52.5°	578.5	575.1	588.7	600.0	604.6
55°	529.7	526.3	536.5	547.9	552.4
57.5°	478.7	474.1	485.5	495.7	498.0
60°	431.0	424.2	433.3	439.0	444.6
62.5°	383.4	375.4	382.3	385.7	390.2
65°	334.6	326.7	332.3	334.6	340.3
67.5°	288.1	282.4	283.6	287.0	289.2
70°	246.1	239.3	239.3	239.3	240.5
72.5°	207.6	197.4	196.2	197.4	197.4
75°	165.6	158.8	156.5	156.5	155.4
77.5°	132.7	123.6	122.5	120.2	118.0
80°	96.4	88.5	86.2	85.1	83.9
82.5°	66.9	60.1	57.8	55.6	52.2
85°	39.7	35.2	30.6	27.2	23.8
87.5°	14.7	13.6	11.3	10.2	10.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)