

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: P295895

Luminaire Tested: **24RLN-LD5-45-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P295895  
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-LD5-45-UNV-L82765-W2A1-U-5000K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER  
WITH STANDARD LENS  
Light Source: (504) 80 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4682.0 lumens  
Efficiency: N/A  
Efficacy: 145.1 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

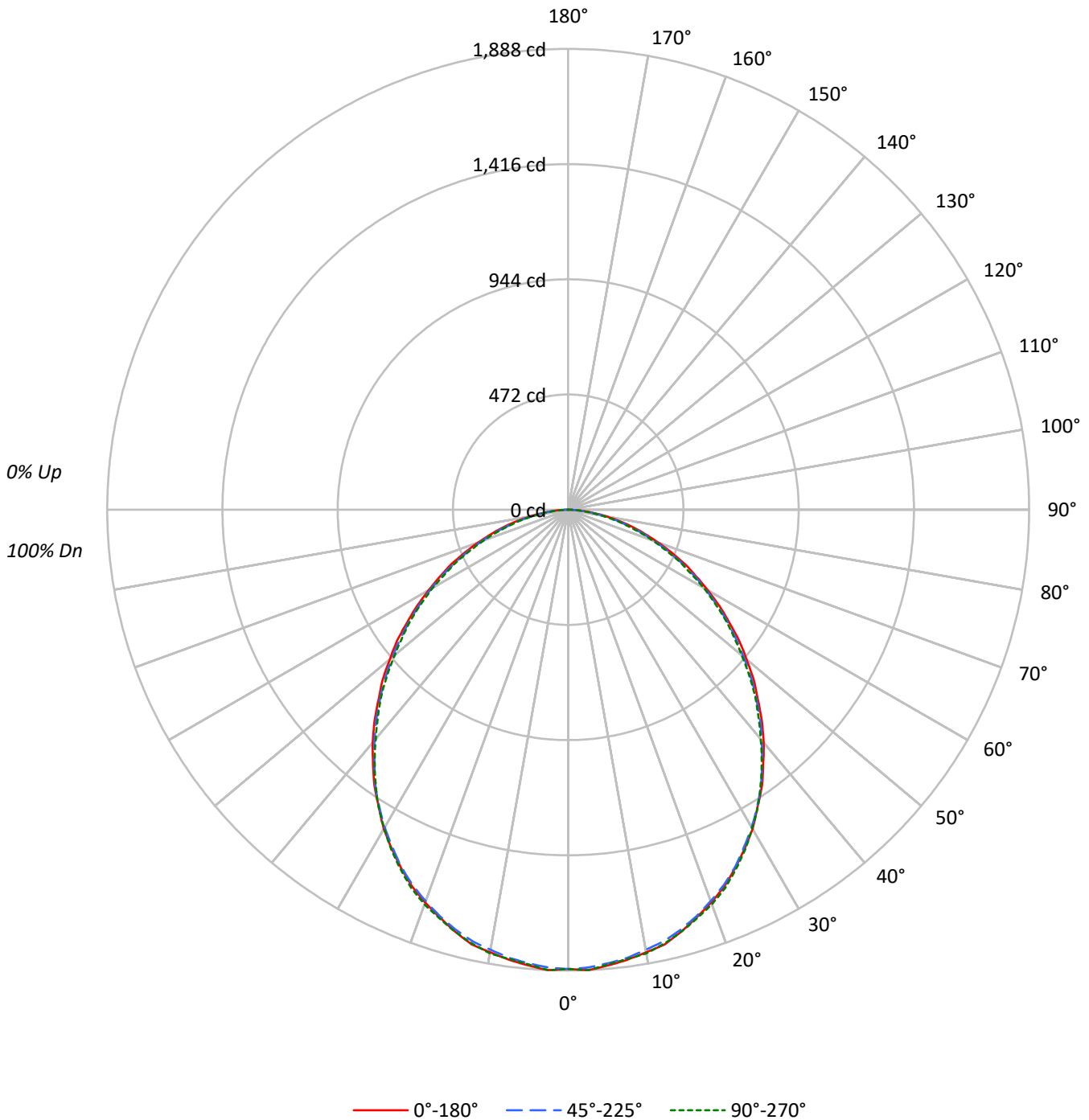
Input Watts (W): 32.271  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P295895

CATALOG NUMBER: 24RLN-LD5-45-UNV-L82765-W2A1-U-5000K

### Luminous Intensity Polar Plot





TEST NUMBER: P295895

CATALOG NUMBER: 24RLN-LD5-45-UNV-L82765-W2A1-U-5000K

**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°	2532	2532	2532
5°	2532	2519	2526
10°	2516	2501	2522
15°	2493	2481	2493
20°	2453	2444	2463
25°	2404	2399	2413
30°	2347	2335	2342
35°	2273	2263	2258
40°	2189	2167	2154
45°	2089	2069	2061
50°	1995	1963	1941
55°	1889	1860	1842
60°	1776	1744	1723
65°	1678	1616	1601
70°	1539	1480	1450
75°	1413	1327	1272
80°	1241	1158	1089
85°	1002	932	794



TEST NUMBER: P295895

CATALOG NUMBER: 24RLN-LD5-45-UNV-L82765-W2A1-U-5000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	177.6	3.8
10°-20°	503.4	10.8
20°-30°	744.7	15.9
30°-40°	859.4	18.4
40°-50°	839.4	17.9
50°-60°	708.8	15.1
60°-70°	504.9	10.8
70°-80°	273.4	5.8
80°-90°	70.5	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°	1425.6	30.4
0°-40°	2285.1	48.8
0°-60°	3833.2	81.9
0°-90°	4682.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4682.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1882	1882	1882	1882	1882	
5°	1874	1874	1865	1870	1870	178
15°	1790	1782	1781	1788	1790	504
25°	1619	1610	1616	1622	1625	745
35°	1384	1373	1378	1373	1374	863
45°	1098	1089	1088	1083	1083	849
55°	805	794	793	785	785	722
65°	527	517	508	502	503	520
75°	272	263	255	249	245	288
85°	65	63	60	53	51	76
90°	0	0	0	0	0	



TEST NUMBER: P295895

CATALOG NUMBER: 24RLN-LD5-45-UNV-L82765-W2A1-U-5000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1882.0	1882.0	1882.0	1882.0	1882.0
2.5°	1888.1	1880.5	1877.5	1879.0	1888.1
5°	1874.5	1874.5	1865.4	1869.9	1869.9
7.5°	1859.4	1860.9	1851.8	1859.4	1856.4
10°	1841.2	1836.7	1830.7	1842.8	1845.8
12.5°	1824.6	1814.1	1811.0	1818.6	1820.1
15°	1789.9	1782.3	1780.8	1788.4	1789.9
17.5°	1750.6	1752.1	1746.1	1756.7	1755.2
20°	1712.9	1709.8	1706.8	1718.9	1720.4
22.5°	1670.6	1661.5	1664.5	1675.1	1678.1
25°	1619.2	1610.1	1616.2	1622.2	1625.3
27.5°	1564.8	1560.3	1558.8	1566.3	1569.4
30°	1510.5	1502.9	1502.9	1512.0	1507.4
32.5°	1444.0	1438.0	1441.0	1444.0	1445.5
35°	1383.6	1373.0	1377.5	1373.0	1374.5
37.5°	1312.6	1305.0	1303.5	1302.0	1302.0
40°	1246.1	1240.1	1234.0	1234.0	1226.5
42.5°	1173.6	1166.1	1163.1	1158.5	1154.0
45°	1098.1	1089.0	1087.5	1083.0	1083.0
47.5°	1030.1	1016.5	1015.0	1006.0	1006.0
50°	953.1	944.0	938.0	932.0	927.4
52.5°	883.6	874.6	865.5	859.5	854.9
55°	805.1	794.5	793.0	785.4	785.4
57.5°	734.1	725.0	719.0	709.9	711.4
60°	660.1	651.0	648.0	640.4	640.4
62.5°	590.6	583.0	578.5	571.0	564.9
65°	527.1	516.6	507.5	501.5	503.0
67.5°	457.7	445.6	441.1	435.0	430.5
70°	391.2	383.7	376.1	368.6	368.6
72.5°	329.3	321.7	317.2	308.1	305.1
75°	271.9	262.8	255.3	249.2	244.7
77.5°	214.5	205.4	200.9	193.3	193.3
80°	160.1	154.1	149.5	146.5	140.5
82.5°	110.3	107.2	102.7	98.2	93.6
85°	64.9	63.4	60.4	52.9	51.4
87.5°	25.7	25.7	22.7	21.1	19.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)