

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: P296196

Luminaire Tested: **24RLN-LD5-55-RDP-UNV-L82765-W2A1-U-6500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296196  
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-LD5-55-RDP-UNV-L82765-W2A1-U-6500K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER  
WITH RDP LENS  
Light Source: (504) 80 CRI LEDS TUNED TO 6500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4810.0 lumens  
Efficiency: N/A  
Efficacy: 120.3 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

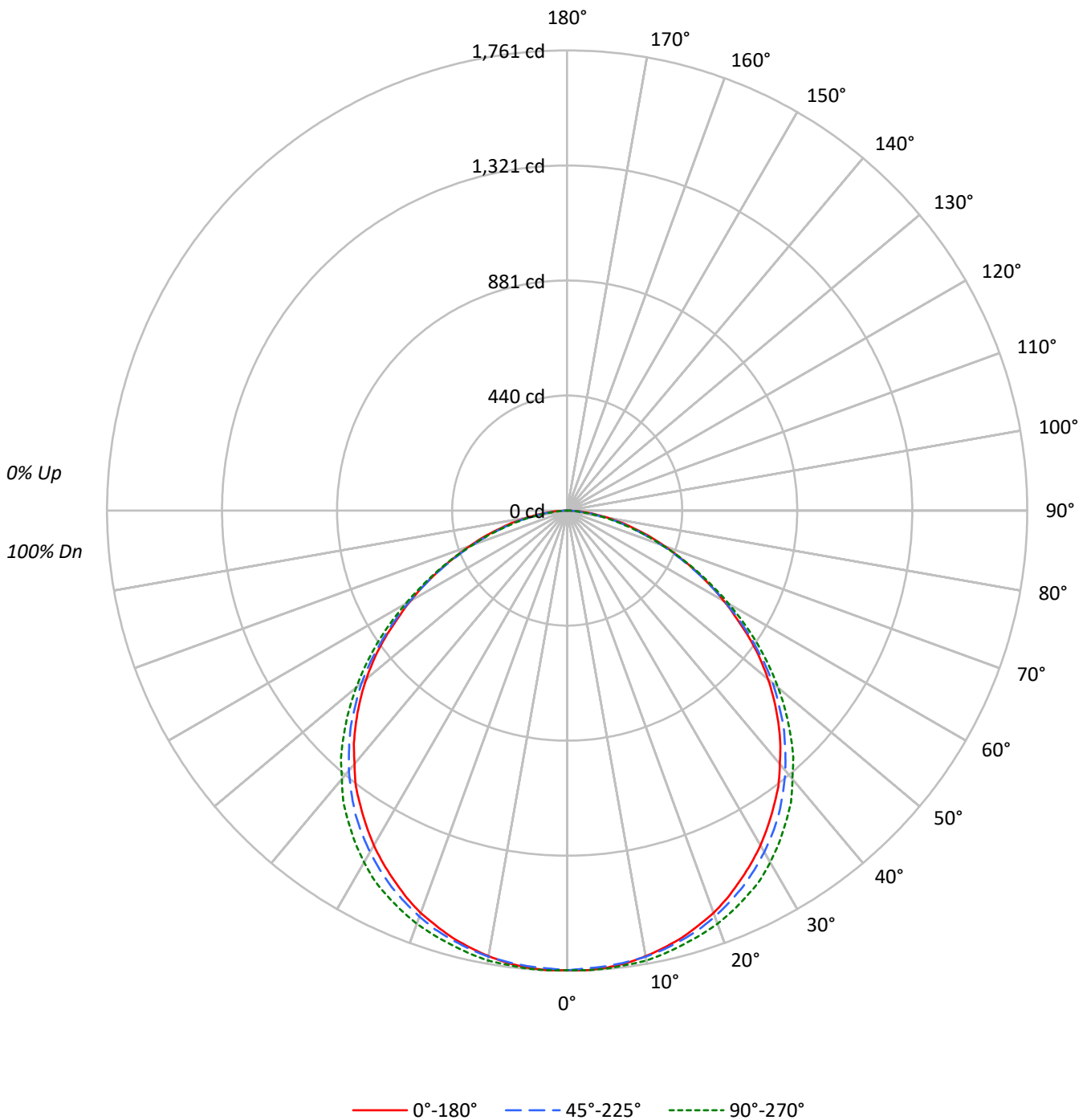
Input Watts (W): 39.99  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P296196

CATALOG NUMBER: 24RLN-LD5-55-RDP-UNV-L82765-W2A1-U-6500K

### Luminous Intensity Polar Plot





TEST NUMBER: P296196

CATALOG NUMBER: 24RLN-LD5-55-RDP-UNV-L82765-W2A1-U-6500K

**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°	2367	2367	2367
5°	2371	2363	2376
10°	2366	2368	2388
15°	2359	2369	2394
20°	2346	2367	2409
25°	2322	2359	2416
30°	2299	2344	2415
35°	2266	2323	2395
40°	2224	2282	2356
45°	2174	2229	2299
50°	2101	2150	2208
55°	1999	2025	2084
60°	1866	1876	1925
65°	1714	1702	1743
70°	1558	1515	1522
75°	1385	1309	1300
80°	1202	1075	1046
85°	986	761	591



TEST NUMBER: P296196

CATALOG NUMBER: 24RLN-LD5-55-RDP-UNV-L82765-W2A1-U-6500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	166.8	3.5
10°-20°	480.9	10.0
20°-30°	734.1	15.3
30°-40°	885.0	18.4
40°-50°	902.5	18.8
50°-60°	772.4	16.1
60°-70°	532.0	11.1
70°-80°	272.7	5.7
80°-90°	63.5	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°	1381.8	28.7
0°-40°	2266.9	47.1
0°-60°	3941.7	81.9
0°-90°	4810.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4810.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1759	1759	1759	1759	1759	
5°	1755	1752	1750	1755	1759	167
15°	1693	1692	1701	1713	1719	478
25°	1564	1569	1589	1617	1628	721
35°	1380	1385	1414	1445	1458	863
45°	1142	1144	1172	1201	1208	880
55°	852	847	863	881	889	760
65°	538	526	535	538	547	535
75°	266	256	252	252	250	287
85°	64	57	49	44	38	74
90°	0	0	0	0	0	



TEST NUMBER: P296196

CATALOG NUMBER: 24RLN-LD5-55-RDP-UNV-L82765-W2A1-U-6500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1759.0	1759.0	1759.0	1759.0	1759.0
2.5°	1760.9	1757.2	1753.6	1757.2	1760.9
5°	1755.4	1751.7	1749.9	1755.4	1759.0
7.5°	1746.3	1742.6	1742.6	1749.9	1753.6
10°	1731.7	1729.8	1733.5	1740.8	1748.1
12.5°	1713.4	1713.4	1718.9	1728.0	1735.3
15°	1693.3	1691.5	1700.6	1713.4	1718.9
17.5°	1666.0	1667.8	1680.6	1695.2	1702.5
20°	1638.6	1640.4	1653.2	1673.3	1682.4
22.5°	1603.9	1607.6	1622.2	1647.7	1656.9
25°	1563.8	1569.3	1589.3	1616.7	1627.7
27.5°	1523.6	1529.1	1551.0	1582.0	1596.6
30°	1479.9	1487.2	1509.0	1541.9	1554.7
32.5°	1430.6	1436.1	1463.4	1496.3	1509.0
35°	1379.5	1385.0	1414.2	1445.2	1458.0
37.5°	1328.4	1328.4	1357.6	1394.1	1406.9
40°	1266.4	1268.2	1299.2	1333.9	1341.2
42.5°	1208.0	1208.0	1235.3	1268.2	1281.0
45°	1142.3	1144.1	1171.5	1200.7	1208.0
47.5°	1074.8	1074.8	1098.5	1125.9	1133.2
50°	1003.6	999.9	1027.3	1049.2	1054.7
52.5°	930.6	925.1	947.0	965.3	972.6
55°	852.1	846.7	863.1	881.3	888.6
57.5°	770.0	762.7	781.0	797.4	801.1
60°	693.4	682.4	697.0	706.2	715.3
62.5°	616.8	604.0	614.9	620.4	627.7
65°	538.3	525.5	534.6	538.3	547.4
67.5°	463.5	454.4	456.2	461.7	465.3
70°	396.0	385.0	385.0	385.0	386.8
72.5°	333.9	317.5	315.7	317.5	317.5
75°	266.4	255.5	251.8	251.8	250.0
77.5°	213.5	198.9	197.1	193.4	189.8
80°	155.1	142.3	138.7	136.9	135.0
82.5°	107.7	96.7	93.1	89.4	83.9
85°	63.9	56.6	49.3	43.8	38.3
87.5°	23.7	21.9	18.2	16.4	16.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)