

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: P296176

Luminaire Tested: **24RLN-LD5-45-RDP-UNV-L82765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296176  
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-LD5-45-RDP-UNV-L82765-W2A1-U-5500K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER  
WITH RDP LENS  
Light Source: (504) 80 CRI LEDS TUNED TO 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3921.0 lumens  
Efficiency: N/A  
Efficacy: 120.8 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

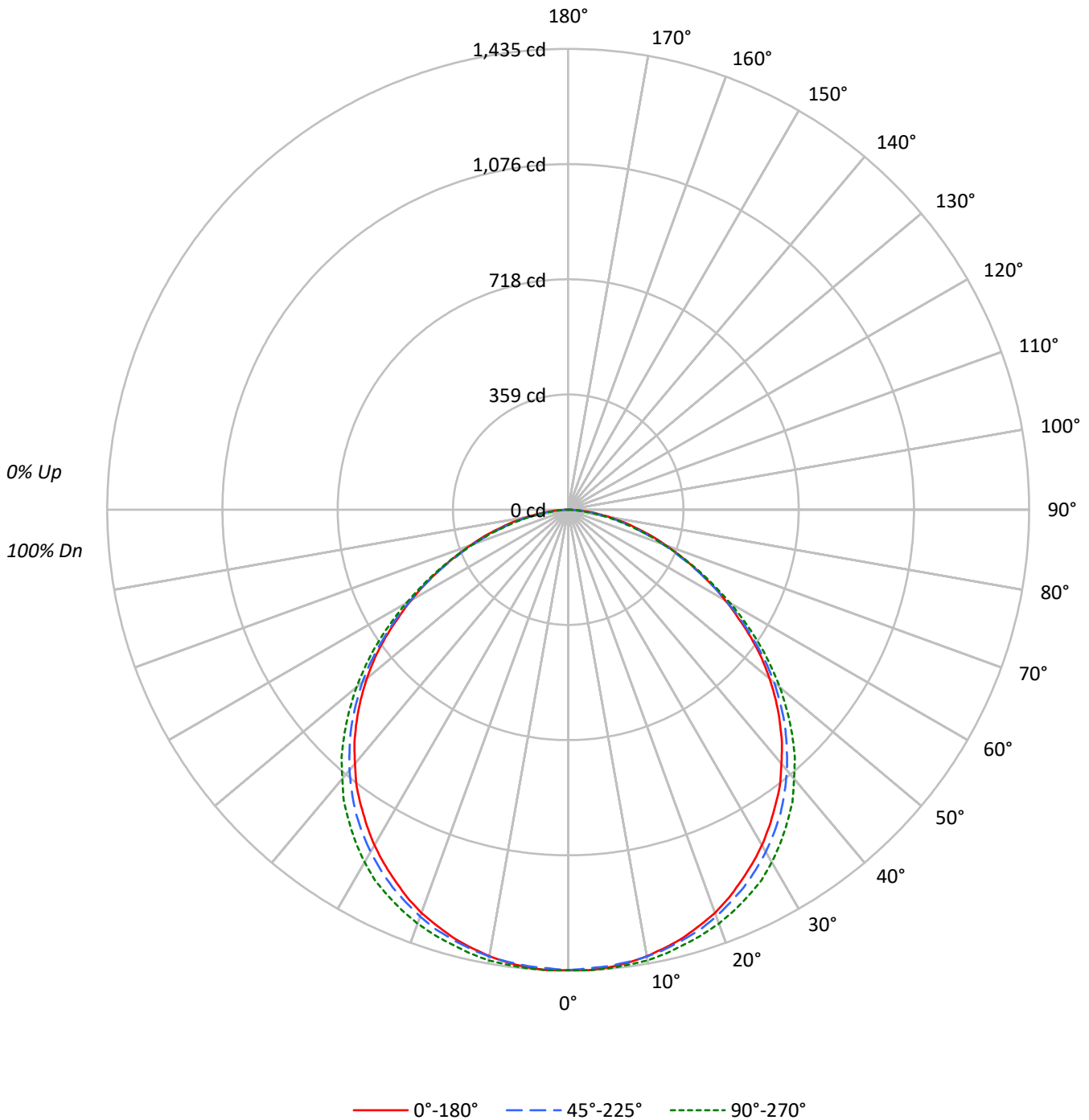
Input Watts (W): 32.457  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P296176

CATALOG NUMBER: 24RLN-LD5-45-RDP-UNV-L82765-W2A1-U-5500K

### Luminous Intensity Polar Plot





TEST NUMBER: P296176

CATALOG NUMBER: 24RLN-LD5-45-RDP-UNV-L82765-W2A1-U-5500K

**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°	1929	1929	1929
5°	1933	1927	1937
10°	1929	1931	1947
15°	1923	1931	1952
20°	1913	1930	1964
25°	1893	1923	1970
30°	1874	1911	1969
35°	1847	1894	1952
40°	1813	1860	1920
45°	1772	1817	1874
50°	1712	1753	1800
55°	1630	1650	1699
60°	1521	1529	1569
65°	1397	1387	1421
70°	1270	1235	1240
75°	1129	1067	1059
80°	979	876	853
85°	804	621	482



TEST NUMBER: P296176

CATALOG NUMBER: 24RLN-LD5-45-RDP-UNV-L82765-W2A1-U-5500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	136.0	3.5
10°-20°	392.0	10.0
20°-30°	598.4	15.3
30°-40°	721.4	18.4
40°-50°	735.7	18.8
50°-60°	629.6	16.1
60°-70°	433.7	11.1
70°-80°	222.3	5.7
80°-90°	51.8	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°	1126.4	28.7
0°-40°	1847.9	47.1
0°-60°	3213.2	81.9
0°-90°	3921.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3921.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1434	1434	1434	1434	1434	
5°	1431	1428	1426	1431	1434	136
15°	1380	1379	1386	1397	1401	389
25°	1275	1279	1296	1318	1327	588
35°	1124	1129	1153	1178	1188	704
45°	931	933	955	979	985	717
55°	695	690	704	718	724	620
65°	439	428	436	439	446	436
75°	217	208	205	205	204	234
85°	52	46	40	36	31	60
90°	0	0	0	0	0	



TEST NUMBER: P296176

CATALOG NUMBER: 24RLN-LD5-45-RDP-UNV-L82765-W2A1-U-5500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1433.9	1433.9	1433.9	1433.9	1433.9
2.5°	1435.4	1432.4	1429.5	1432.4	1435.4
5°	1430.9	1428.0	1426.5	1430.9	1433.9
7.5°	1423.5	1420.5	1420.5	1426.5	1429.5
10°	1411.6	1410.1	1413.1	1419.0	1425.0
12.5°	1396.7	1396.7	1401.2	1408.6	1414.6
15°	1380.4	1378.9	1386.3	1396.7	1401.2
17.5°	1358.1	1359.6	1370.0	1381.9	1387.8
20°	1335.8	1337.2	1347.7	1364.0	1371.5
22.5°	1307.5	1310.5	1322.4	1343.2	1350.6
25°	1274.8	1279.2	1295.6	1317.9	1326.8
27.5°	1242.0	1246.5	1264.4	1289.6	1301.5
30°	1206.3	1212.3	1230.1	1256.9	1267.3
32.5°	1166.2	1170.6	1193.0	1219.7	1230.1
35°	1124.5	1129.0	1152.8	1178.1	1188.5
37.5°	1082.9	1082.9	1106.7	1136.4	1146.8
40°	1032.3	1033.8	1059.1	1087.3	1093.3
42.5°	984.7	984.7	1007.0	1033.8	1044.2
45°	931.2	932.6	955.0	978.8	984.7
47.5°	876.1	876.1	895.5	917.8	923.7
50°	818.1	815.1	837.4	855.3	859.8
52.5°	758.6	754.1	772.0	786.9	792.8
55°	694.7	690.2	703.6	718.4	724.4
57.5°	627.7	621.8	636.6	650.0	653.0
60°	565.2	556.3	568.2	575.7	583.1
62.5°	502.8	492.4	501.3	505.7	511.7
65°	438.8	428.4	435.8	438.8	446.2
67.5°	377.8	370.4	371.9	376.3	379.3
70°	322.8	313.9	313.9	313.9	315.3
72.5°	272.2	258.8	257.3	258.8	258.8
75°	217.2	208.2	205.3	205.3	203.8
77.5°	174.0	162.1	160.6	157.7	154.7
80°	126.4	116.0	113.0	111.6	110.1
82.5°	87.8	78.8	75.9	72.9	68.4
85°	52.1	46.1	40.2	35.7	31.2
87.5°	19.3	17.8	14.9	13.4	13.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)