

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: P296305

Luminaire Tested: **24RLN-LD5-42-RDP-UNV-L92765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296305  
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-4500K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER  
WITH RDP LENS  
Light Source: (504) 90 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3166.0 lumens  
Efficiency: N/A  
Efficacy: 106.7 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

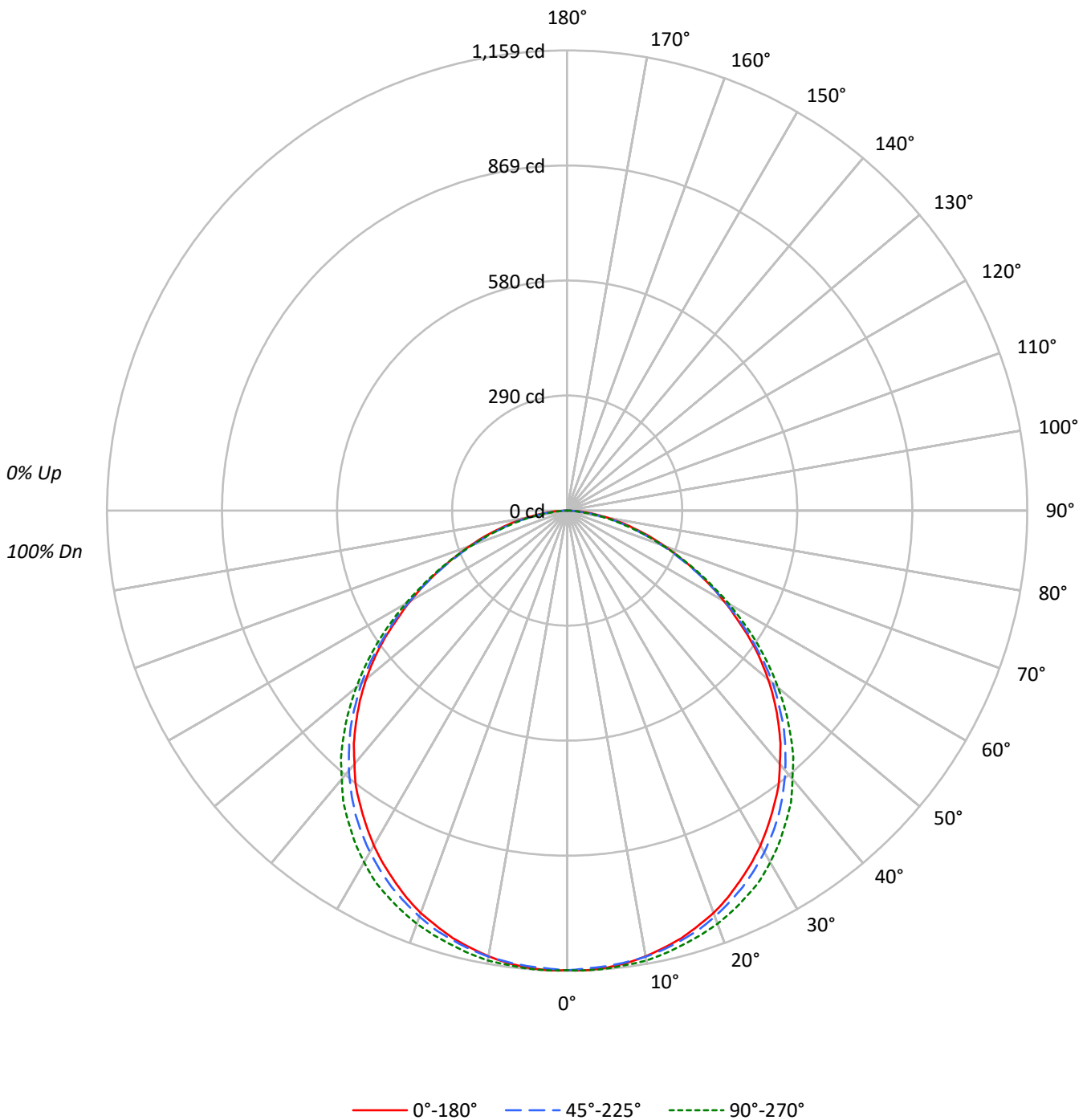
Input Watts (W): 29.667  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P296305

CATALOG NUMBER: 24RLN-LD5-42-RDP-UNV-L92765-W2A1-U-4500K

### Luminous Intensity Polar Plot





TEST NUMBER: P296305

CATALOG NUMBER: 24RLN-LD5-42-RDP-UNV-L92765-W2A1-U-4500K

**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°	1558	1558	1558
5°	1561	1556	1564
10°	1557	1559	1572
15°	1553	1559	1576
20°	1544	1558	1586
25°	1528	1553	1590
30°	1513	1543	1590
35°	1491	1529	1576
40°	1464	1502	1551
45°	1431	1467	1513
50°	1383	1415	1453
55°	1316	1333	1372
60°	1228	1235	1267
65°	1128	1120	1147
70°	1025	997	1002
75°	912	861	855
80°	791	707	689
85°	648	500	389



TEST NUMBER: P296305

CATALOG NUMBER: 24RLN-LD5-42-RDP-UNV-L92765-W2A1-U-4500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	109.8	3.5
10°-20°	316.6	10.0
20°-30°	483.2	15.3
30°-40°	582.5	18.4
40°-50°	594.0	18.8
50°-60°	508.4	16.1
60°-70°	350.2	11.1
70°-80°	179.5	5.7
80°-90°	41.8	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°	909.5	28.7
0°-40°	1492.1	47.1
0°-60°	2594.5	81.9
0°-90°	3166.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3166.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1158	1158	1158	1158	1158	
5°	1155	1153	1152	1155	1158	110
15°	1115	1113	1119	1128	1131	314
25°	1029	1033	1046	1064	1071	475
35°	908	912	931	951	960	568
45°	752	753	771	790	795	579
55°	561	557	568	580	585	500
65°	354	346	352	354	360	352
75°	175	168	166	166	164	189
85°	42	37	32	29	25	49
90°	0	0	0	0	0	



TEST NUMBER: P296305

CATALOG NUMBER: 24RLN-LD5-42-RDP-UNV-L92765-W2A1-U-4500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1157.8	1157.8	1157.8	1157.8	1157.8
2.5°	1159.0	1156.6	1154.2	1156.6	1159.0
5°	1155.4	1153.0	1151.8	1155.4	1157.8
7.5°	1149.4	1147.0	1147.0	1151.8	1154.2
10°	1139.8	1138.6	1141.0	1145.8	1150.6
12.5°	1127.8	1127.8	1131.4	1137.4	1142.2
15°	1114.6	1113.4	1119.4	1127.8	1131.4
17.5°	1096.6	1097.8	1106.2	1115.8	1120.6
20°	1078.5	1079.7	1088.2	1101.4	1107.4
22.5°	1055.7	1058.1	1067.7	1084.6	1090.6
25°	1029.3	1032.9	1046.1	1064.1	1071.3
27.5°	1002.9	1006.5	1020.9	1041.3	1050.9
30°	974.1	978.9	993.3	1014.9	1023.3
32.5°	941.6	945.2	963.2	984.9	993.3
35°	908.0	911.6	930.8	951.2	959.6
37.5°	874.4	874.4	893.6	917.6	926.0
40°	833.5	834.7	855.2	878.0	882.8
42.5°	795.1	795.1	813.1	834.7	843.1
45°	751.9	753.1	771.1	790.3	795.1
47.5°	707.4	707.4	723.0	741.1	745.9
50°	660.6	658.2	676.2	690.6	694.2
52.5°	612.5	608.9	623.3	635.4	640.2
55°	560.9	557.3	568.1	580.1	584.9
57.5°	506.8	502.0	514.1	524.9	527.3
60°	456.4	449.2	458.8	464.8	470.8
62.5°	406.0	397.5	404.8	408.4	413.2
65°	354.3	345.9	351.9	354.3	360.3
67.5°	305.1	299.1	300.3	303.9	306.3
70°	260.6	253.4	253.4	253.4	254.6
72.5°	219.8	209.0	207.8	209.0	209.0
75°	175.4	168.1	165.7	165.7	164.5
77.5°	140.5	130.9	129.7	127.3	124.9
80°	102.1	93.7	91.3	90.1	88.9
82.5°	70.9	63.7	61.3	58.9	55.2
85°	42.0	37.2	32.4	28.8	25.2
87.5°	15.6	14.4	12.0	10.8	10.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)