

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: P296161

Luminaire Tested: **24RLN-LD5-42-RDP-UNV-L82765-W2A1-U-2700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296161  
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-L82765-W2A1-U-2700K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER  
WITH RDP LENS  
Light Source: (504) 80 CRI LEDS TUNED TO 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3206.0 lumens  
Efficiency: N/A  
Efficacy: 110.1 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

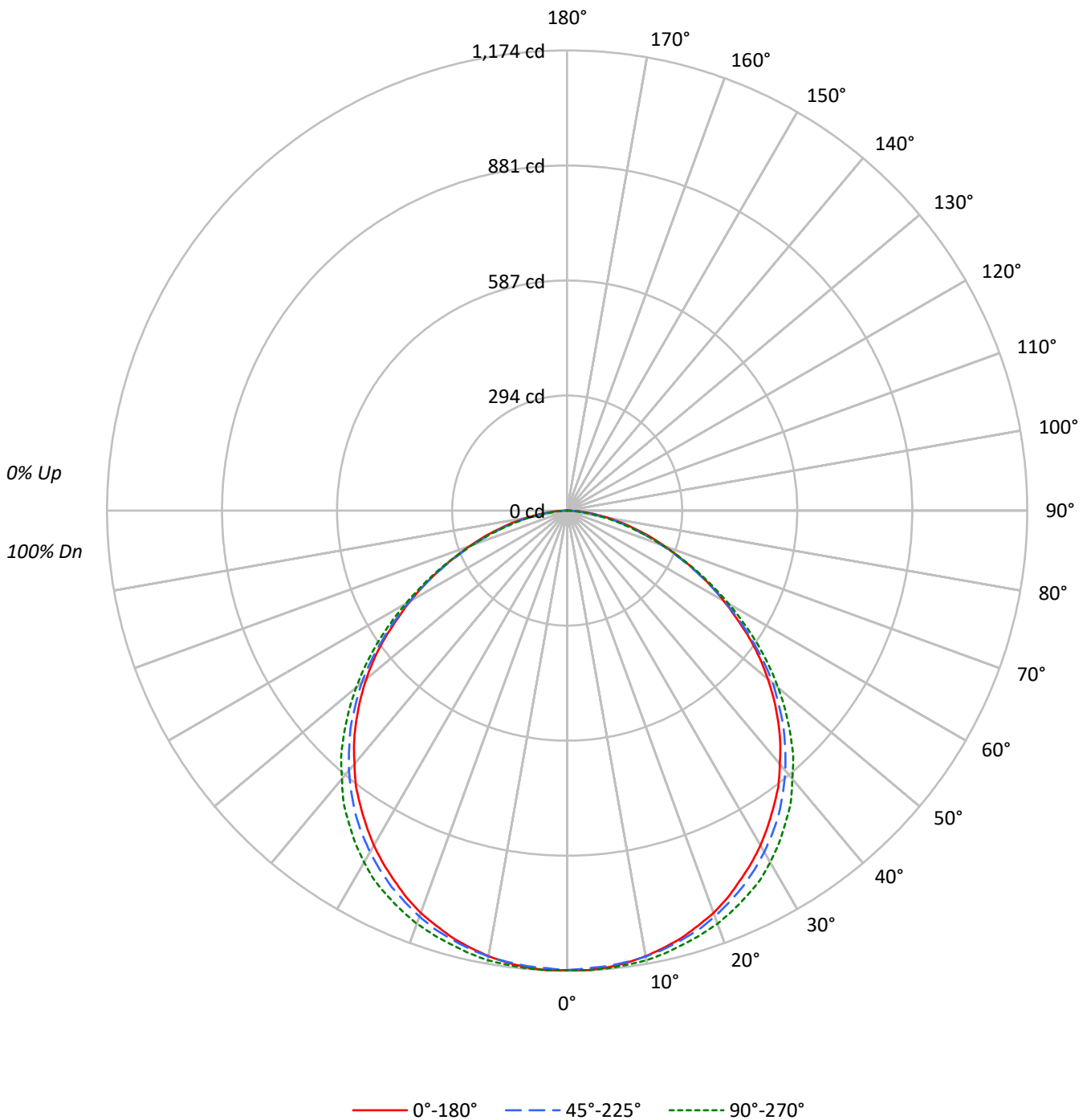
Input Watts (W): 29.109  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**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°	1577	1577	1577
5°	1580	1575	1583
10°	1577	1579	1592
15°	1572	1579	1596
20°	1564	1578	1606
25°	1547	1573	1611
30°	1533	1563	1610
35°	1510	1548	1596
40°	1483	1521	1570
45°	1449	1486	1532
50°	1400	1433	1472
55°	1332	1350	1389
60°	1244	1250	1283
65°	1142	1135	1162
70°	1038	1009	1014
75°	923	872	866
80°	801	716	697
85°	658	506	394



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	111.2	3.5
10°-20°	320.5	10.0
20°-30°	489.3	15.3
30°-40°	589.9	18.4
40°-50°	601.5	18.8
50°-60°	514.8	16.1
60°-70°	354.6	11.1
70°-80°	181.8	5.7
80°-90°	42.3	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°	921.0	28.7
0°-40°	1510.9	47.1
0°-60°	2627.3	81.9
0°-90°	3206.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3206.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1172	1172	1172	1172	1172	
5°	1170	1168	1166	1170	1172	111
15°	1129	1127	1134	1142	1146	318
25°	1042	1046	1059	1078	1085	481
35°	920	923	943	963	972	575
45°	761	763	781	800	805	587
55°	568	564	575	587	592	507
65°	359	350	356	359	365	357
75°	178	170	168	168	167	191
85°	43	38	33	29	26	49
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1172.4	1172.4	1172.4	1172.4	1172.4
2.5°	1173.7	1171.2	1168.8	1171.2	1173.7
5°	1170.0	1167.6	1166.4	1170.0	1172.4
7.5°	1163.9	1161.5	1161.5	1166.4	1168.8
10°	1154.2	1153.0	1155.4	1160.3	1165.1
12.5°	1142.0	1142.0	1145.7	1151.8	1156.6
15°	1128.7	1127.4	1133.5	1142.0	1145.7
17.5°	1110.4	1111.6	1120.1	1129.9	1134.7
20°	1092.2	1093.4	1101.9	1115.3	1121.4
22.5°	1069.1	1071.5	1081.2	1098.3	1104.3
25°	1042.3	1046.0	1059.3	1077.6	1084.9
27.5°	1015.6	1019.2	1033.8	1054.5	1064.2
30°	986.4	991.2	1005.8	1027.7	1036.2
32.5°	953.5	957.2	975.4	997.3	1005.8
35°	919.5	923.1	942.6	963.3	971.8
37.5°	885.4	885.4	904.9	929.2	937.7
40°	844.1	845.3	866.0	889.1	893.9
42.5°	805.1	805.1	823.4	845.3	853.8
45°	761.4	762.6	780.8	800.3	805.1
47.5°	716.4	716.4	732.2	750.4	755.3
50°	668.9	666.5	684.7	699.3	703.0
52.5°	620.3	616.6	631.2	643.4	648.3
55°	568.0	564.3	575.3	587.4	592.3
57.5°	513.2	508.4	520.5	531.5	533.9
60°	462.2	454.9	464.6	470.7	476.8
62.5°	411.1	402.6	409.9	413.5	418.4
65°	358.8	350.3	356.4	358.8	364.9
67.5°	308.9	302.8	304.1	307.7	310.1
70°	263.9	256.6	256.6	256.6	257.8
72.5°	222.6	211.6	210.4	211.6	211.6
75°	177.6	170.3	167.8	167.8	166.6
77.5°	142.3	132.6	131.4	128.9	126.5
80°	103.4	94.9	92.4	91.2	90.0
82.5°	71.8	64.5	62.0	59.6	55.9
85°	42.6	37.7	32.8	29.2	25.5
87.5°	15.8	14.6	12.2	10.9	10.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)