

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: P295596

Luminaire Tested: **14RLN-LD5-40-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P295596
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1901-085-1)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14RLN-LD5-40-UNV-L82765-W2A1-U-3500K
Description: RLN LED 1x4 TUNABLE WHITE TROFFER
WITH STANDARD LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3962.0 lumens
Efficiency: N/A
Efficacy: 100.0 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.01 / 1.18
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

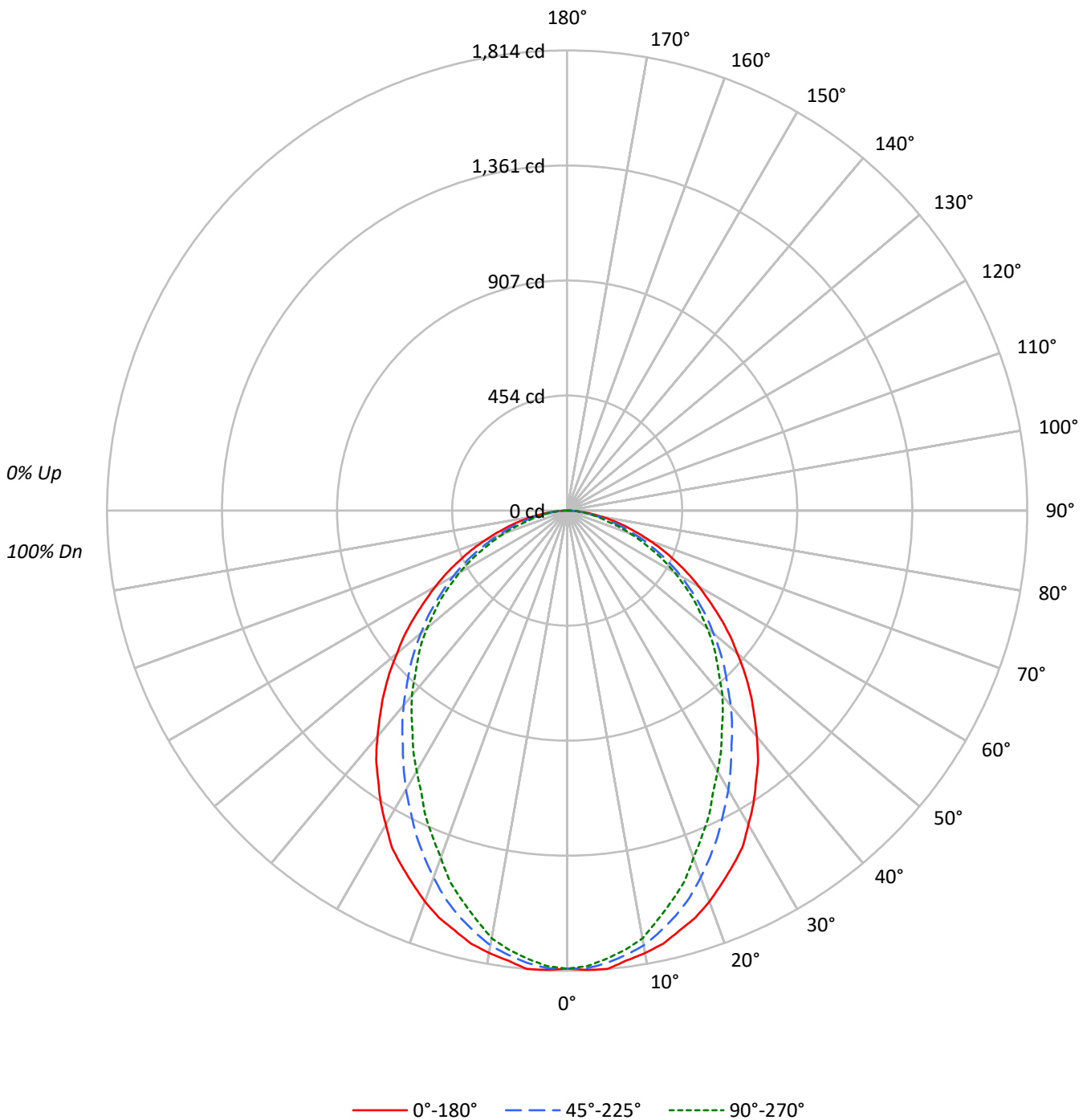
Input Watts (W): 39.618
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P295596

CATALOG NUMBER: 14RLN-LD5-40-UNV-L82765-W2A1-U-3500K

Luminous Intensity Polar Plot





TEST NUMBER: P295596

CATALOG NUMBER: 14RLN-LD5-40-UNV-L82765-W2A1-U-3500K

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	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					100			
1	110	105	101	97	107	103	99	96	99	96	93	95	92	90	91	89	87	85					85			
2	100	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72					72			
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64	62					62			
4	85	73	65	58	82	72	64	58	69	63	57	67	61	56	65	60	56	54					54			
5	78	66	57	51	76	65	57	51	63	55	50	61	54	49	59	53	49	47					47			
6	72	60	51	45	70	59	50	45	57	50	44	55	49	44	54	48	43	41					41			
7	67	54	46	40	66	53	45	40	52	45	39	51	44	39	49	43	39	37					37			
8	63	50	42	36	61	49	41	36	48	41	36	47	40	35	45	40	35	33					33			
9	59	46	38	33	57	45	38	32	44	37	32	43	37	32	42	36	32	30					30			
10	55	42	35	30	54	42	35	30	41	34	29	40	34	29	39	33	29	28					28			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4859	4859	4859
5°	4900	4837	4792
10°	4838	4756	4678
15°	4774	4606	4439
20°	4696	4409	4170
25°	4586	4184	3930
30°	4441	3947	3687
35°	4266	3711	3491
40°	4086	3521	3345
45°	3891	3337	3172
50°	3664	3153	3013
55°	3454	2976	2850
60°	3233	2792	2639
65°	2995	2579	2365
70°	2725	2317	2094
75°	2454	2070	1705
80°	2101	1686	1609
85°	1704	1602	1602



TEST NUMBER: P295596

CATALOG NUMBER: 14RLN-LD5-40-UNV-L82765-W2A1-U-3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.1	4.3
10°-20°	464.0	11.7
20°-30°	651.3	16.4
30°-40°	722.4	18.2
40°-50°	693.5	17.5
50°-60°	581.2	14.7
60°-70°	408.0	10.3
70°-80°	213.0	5.4
80°-90°	59.6	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°	1284.4	32.4
0°-40°	2006.7	50.6
0°-60°	3281.4	82.8
0°-90°	3962.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3962.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1806	1806	1806	1806	1806	
5°	1814	1791	1791	1779	1774	171
15°	1714	1684	1653	1610	1593	484
25°	1545	1489	1409	1340	1324	711
35°	1299	1227	1130	1074	1063	813
45°	1022	944	877	844	833	788
55°	736	681	634	614	608	659
65°	470	438	405	380	372	467
75°	236	218	199	176	164	250
85°	55	52	52	52	52	65
90°	0	0	0	0	0	



TEST NUMBER: P295596

CATALOG NUMBER: 14RLN-LD5-40-UNV-L82765-W2A1-U-3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1805.7	1805.7	1805.7	1805.7	1805.7
2.5°	1812.4	1802.4	1805.7	1805.7	1797.4
5°	1814.1	1790.7	1790.7	1778.9	1773.9
7.5°	1789.0	1770.6	1767.2	1752.2	1747.1
10°	1770.6	1752.2	1740.5	1720.4	1712.0
12.5°	1748.8	1720.4	1698.6	1665.1	1651.8
15°	1713.7	1683.6	1653.4	1609.9	1593.2
17.5°	1681.9	1646.7	1601.6	1553.0	1534.6
20°	1640.0	1598.2	1539.6	1472.7	1456.0
22.5°	1591.5	1543.0	1474.4	1402.4	1389.0
25°	1544.7	1489.4	1409.1	1340.5	1323.7
27.5°	1496.1	1429.2	1337.1	1263.5	1246.8
30°	1429.2	1360.6	1270.2	1198.2	1186.5
32.5°	1367.3	1298.6	1199.9	1141.3	1127.9
35°	1298.6	1226.7	1129.6	1074.4	1062.7
37.5°	1236.7	1153.1	1067.7	1014.1	1007.5
40°	1163.1	1087.8	1002.4	962.3	952.2
42.5°	1091.1	1015.8	935.5	900.4	888.6
45°	1022.5	943.9	876.9	843.5	833.4
47.5°	950.6	878.6	815.0	788.2	781.5
50°	875.2	811.7	753.1	728.0	719.6
52.5°	808.3	743.0	694.5	671.1	661.0
55°	736.3	681.1	634.3	614.2	607.5
57.5°	664.4	619.2	574.0	555.6	545.6
60°	600.8	555.6	518.8	497.0	490.3
62.5°	535.5	497.0	461.9	441.8	433.4
65°	470.3	438.5	405.0	379.9	371.5
67.5°	410.0	374.9	348.1	326.3	318.0
70°	346.4	321.3	294.5	274.5	266.1
72.5°	287.8	269.4	246.0	224.3	215.9
75°	236.0	217.6	199.1	175.7	164.0
77.5°	184.1	172.4	154.0	133.9	133.9
80°	135.6	128.9	108.8	105.4	103.8
82.5°	93.7	90.4	78.7	77.0	77.0
85°	55.2	51.9	51.9	51.9	51.9
87.5°	23.4	25.1	26.8	26.8	28.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)