

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: P295668

Luminaire Tested: **14RLN-LD5-40-UNV-L92765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P295668  
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-L92765-W2A1-U-4500K  
Description: RLN LED 1x4 TUNABLE WHITE TROFFER  
WITH STANDARD LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3676.0 lumens  
Efficiency: N/A  
Efficacy: 91.5 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

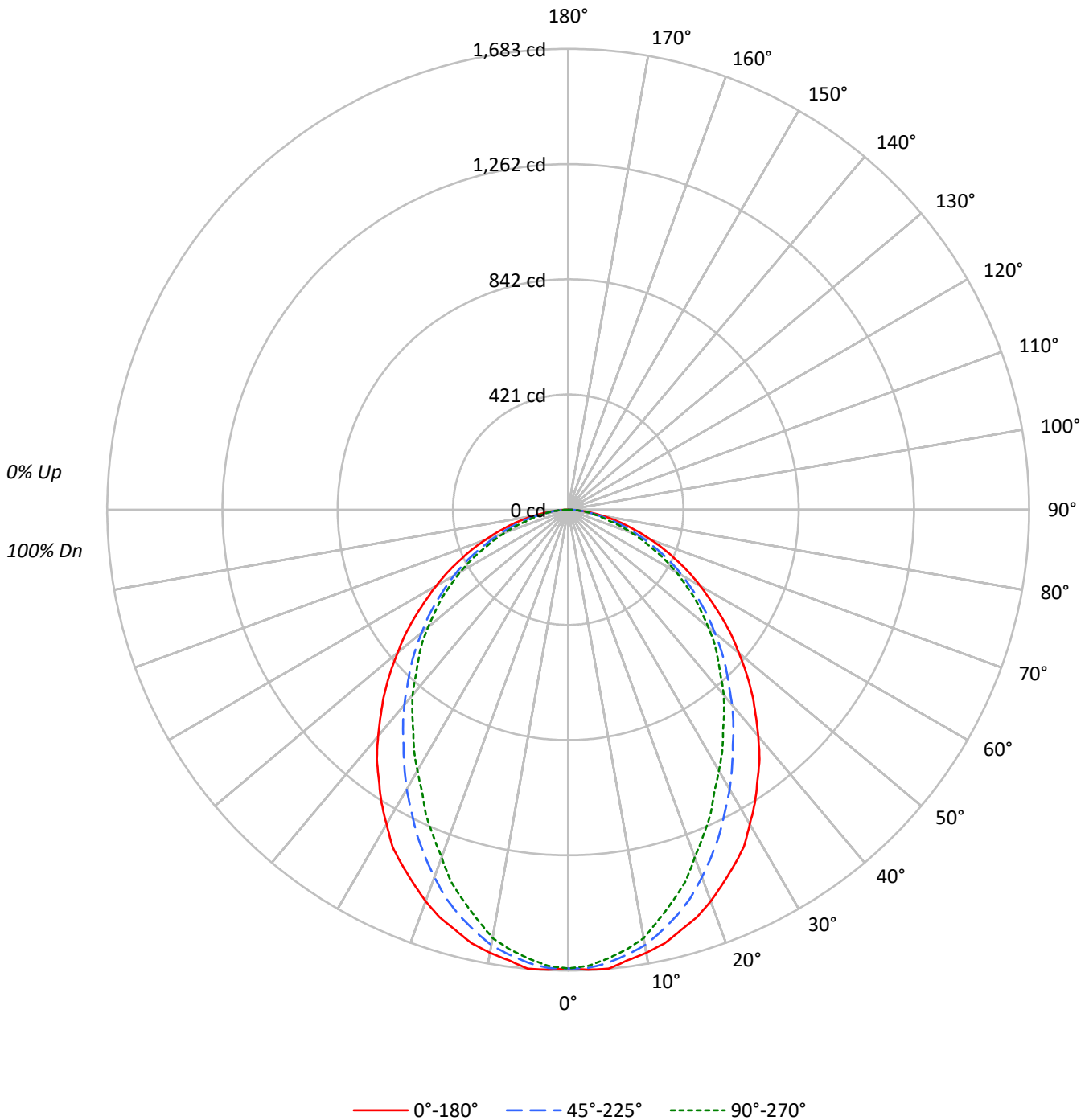
Input Watts (W): 40.176  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	4508	4508	4508
5°	4546	4488	4446
10°	4489	4412	4340
15°	4430	4274	4118
20°	4358	4091	3869
25°	4255	3882	3647
30°	4120	3662	3421
35°	3958	3443	3239
40°	3791	3267	3104
45°	3610	3096	2943
50°	3400	2925	2795
55°	3205	2761	2644
60°	3000	2590	2448
65°	2778	2393	2195
70°	2529	2150	1943
75°	2276	1921	1582
80°	1949	1564	1492
85°	1581	1485	1485



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	156.9	4.3
10°-20°	430.5	11.7
20°-30°	604.3	16.4
30°-40°	670.2	18.2
40°-50°	643.4	17.5
50°-60°	539.2	14.7
60°-70°	378.5	10.3
70°-80°	197.7	5.4
80°-90°	55.3	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°	1191.7	32.4
0°-40°	1861.9	50.6
0°-60°	3044.5	82.8
0°-90°	3676.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3676.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1675	1675	1675	1675	1675	
5°	1683	1661	1661	1650	1646	159
15°	1590	1562	1534	1494	1478	449
25°	1433	1382	1307	1244	1228	660
35°	1205	1138	1048	997	986	755
45°	949	876	814	783	773	731
55°	683	632	588	570	564	611
65°	436	407	376	352	345	434
75°	219	202	185	163	152	232
85°	51	48	48	48	48	61
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1675.4	1675.4	1675.4	1675.4	1675.4
2.5°	1681.6	1672.3	1675.4	1675.4	1667.6
5°	1683.1	1661.4	1661.4	1650.5	1645.9
7.5°	1659.8	1642.8	1639.7	1625.7	1621.0
10°	1642.8	1625.7	1614.8	1596.2	1588.4
12.5°	1622.6	1596.2	1576.0	1544.9	1532.5
15°	1590.0	1562.0	1534.1	1493.7	1478.2
17.5°	1560.5	1527.9	1485.9	1440.9	1423.8
20°	1521.7	1482.8	1428.5	1366.4	1350.9
22.5°	1476.6	1431.6	1367.9	1301.2	1288.7
25°	1433.2	1381.9	1307.4	1243.7	1228.2
27.5°	1388.1	1326.0	1240.6	1172.3	1156.8
30°	1326.0	1262.4	1178.5	1111.7	1100.9
32.5°	1268.6	1204.9	1113.3	1058.9	1046.5
35°	1204.9	1138.1	1048.1	996.8	986.0
37.5°	1147.5	1069.8	990.6	940.9	934.7
40°	1079.1	1009.3	930.1	892.8	883.5
42.5°	1012.4	942.5	868.0	835.4	824.5
45°	948.7	875.7	813.6	782.6	773.2
47.5°	881.9	815.2	756.2	731.3	725.1
50°	812.1	753.1	698.7	675.4	667.7
52.5°	750.0	689.4	644.4	622.6	613.3
55°	683.2	632.0	588.5	569.8	563.6
57.5°	616.4	574.5	532.6	515.5	506.2
60°	557.4	515.5	481.3	461.2	454.9
62.5°	496.9	461.2	428.5	409.9	402.2
65°	436.3	406.8	375.8	352.5	344.7
67.5°	380.4	347.8	323.0	302.8	295.0
70°	321.4	298.1	273.3	254.6	246.9
72.5°	267.1	250.0	228.2	208.1	200.3
75°	218.9	201.9	184.8	163.0	152.2
77.5°	170.8	159.9	142.8	124.2	124.2
80°	125.8	119.6	100.9	97.8	96.3
82.5°	87.0	83.8	73.0	71.4	71.4
85°	51.2	48.1	48.1	48.1	48.1
87.5°	21.7	23.3	24.8	24.8	26.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)