

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: P295554

Luminaire Tested: **14RLN-LD5-40-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P295554  
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-L83050-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: 4057.0 lumens  
Efficiency: N/A  
Efficacy: 102.9 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

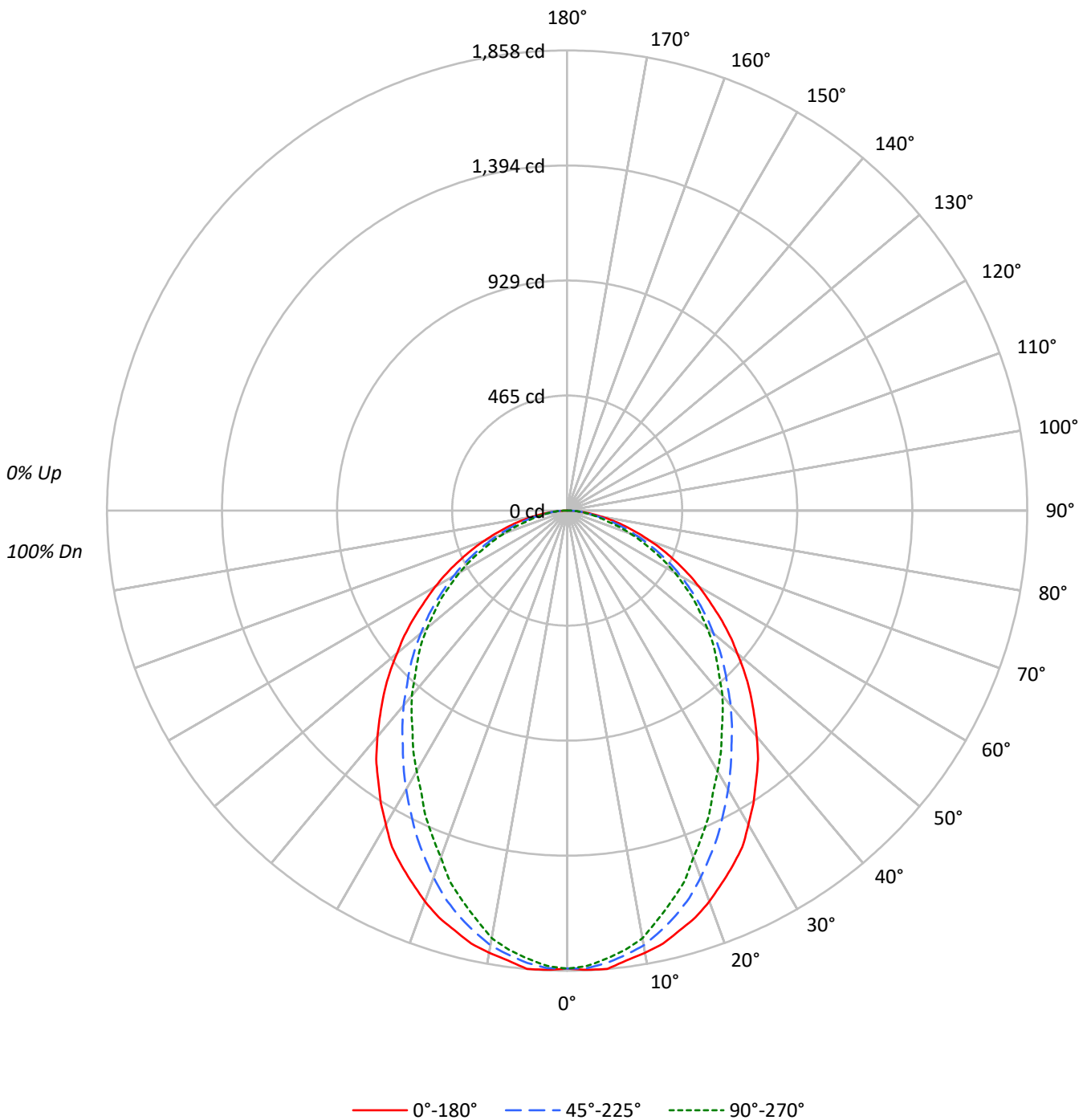
Input Watts (W): 39.432  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	4976	4976	4976
5°	5018	4953	4907
10°	4954	4870	4790
15°	4889	4717	4545
20°	4809	4515	4269
25°	4696	4284	4025
30°	4547	4042	3775
35°	4368	3800	3575
40°	4184	3606	3425
45°	3984	3417	3248
50°	3752	3228	3085
55°	3537	3047	2919
60°	3311	2859	2702
65°	3066	2641	2422
70°	2791	2373	2144
75°	2512	2120	1746
80°	2151	1726	1646
85°	1748	1639	1639



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	173.1	4.3
10°-20°	475.2	11.7
20°-30°	666.9	16.4
30°-40°	739.7	18.2
40°-50°	710.1	17.5
50°-60°	595.1	14.7
60°-70°	417.7	10.3
70°-80°	218.1	5.4
80°-90°	61.0	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°	1315.2	32.4
0°-40°	2054.9	50.7
0°-60°	3360.1	82.8
0°-90°	4057.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4057.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1849	1849	1849	1849	1849	
5°	1858	1834	1834	1822	1816	175
15°	1755	1724	1693	1648	1631	495
25°	1582	1525	1443	1373	1356	728
35°	1330	1256	1157	1100	1088	833
45°	1047	966	898	864	853	806
55°	754	698	650	629	622	674
65°	482	449	415	389	380	478
75°	242	223	204	180	168	256
85°	57	53	53	53	53	67
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1849.0	1849.0	1849.0	1849.0	1849.0
2.5°	1855.9	1845.6	1849.0	1849.0	1840.5
5°	1857.6	1833.6	1833.6	1821.6	1816.5
7.5°	1831.9	1813.0	1809.6	1794.2	1789.0
10°	1813.0	1794.2	1782.2	1761.6	1753.1
12.5°	1790.8	1761.6	1739.3	1705.1	1691.4
15°	1754.8	1723.9	1693.1	1648.5	1631.4
17.5°	1722.2	1686.2	1640.0	1590.3	1571.4
20°	1679.4	1636.5	1576.5	1508.0	1490.9
22.5°	1629.7	1580.0	1509.7	1436.0	1422.3
25°	1581.7	1525.1	1442.9	1372.6	1355.5
27.5°	1532.0	1463.4	1369.2	1293.8	1276.7
30°	1463.4	1393.2	1300.7	1227.0	1215.0
32.5°	1400.0	1329.8	1228.7	1168.7	1155.0
35°	1329.8	1256.1	1156.7	1100.2	1088.2
37.5°	1266.4	1180.7	1093.3	1038.5	1031.6
40°	1191.0	1113.9	1026.5	985.3	975.1
42.5°	1117.3	1040.2	957.9	921.9	909.9
45°	1047.0	966.5	897.9	863.7	853.4
47.5°	973.3	899.7	834.5	807.1	800.3
50°	896.2	831.1	771.1	745.4	736.9
52.5°	827.7	760.9	711.2	687.2	676.9
55°	754.0	697.5	649.5	628.9	622.1
57.5°	680.3	634.0	587.8	568.9	558.6
60°	615.2	568.9	531.2	509.0	502.1
62.5°	548.4	509.0	473.0	452.4	443.8
65°	481.5	449.0	414.7	389.0	380.4
67.5°	419.8	383.9	356.4	334.2	325.6
70°	354.7	329.0	301.6	281.0	272.5
72.5°	294.7	275.9	251.9	229.6	221.1
75°	241.6	222.8	203.9	179.9	167.9
77.5°	188.5	176.5	157.7	137.1	137.1
80°	138.8	132.0	111.4	108.0	106.2
82.5°	96.0	92.5	80.5	78.8	78.8
85°	56.6	53.1	53.1	53.1	53.1
87.5°	24.0	25.7	27.4	27.4	29.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)