

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: P295553

Luminaire Tested: **14RLN-LD5-40-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P295553  
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-3000K  
Description: RLN LED 1x4 TUNABLE WHITE TROFFER  
WITH STANDARD LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3834.0 lumens  
Efficiency: N/A  
Efficacy: 97.5 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

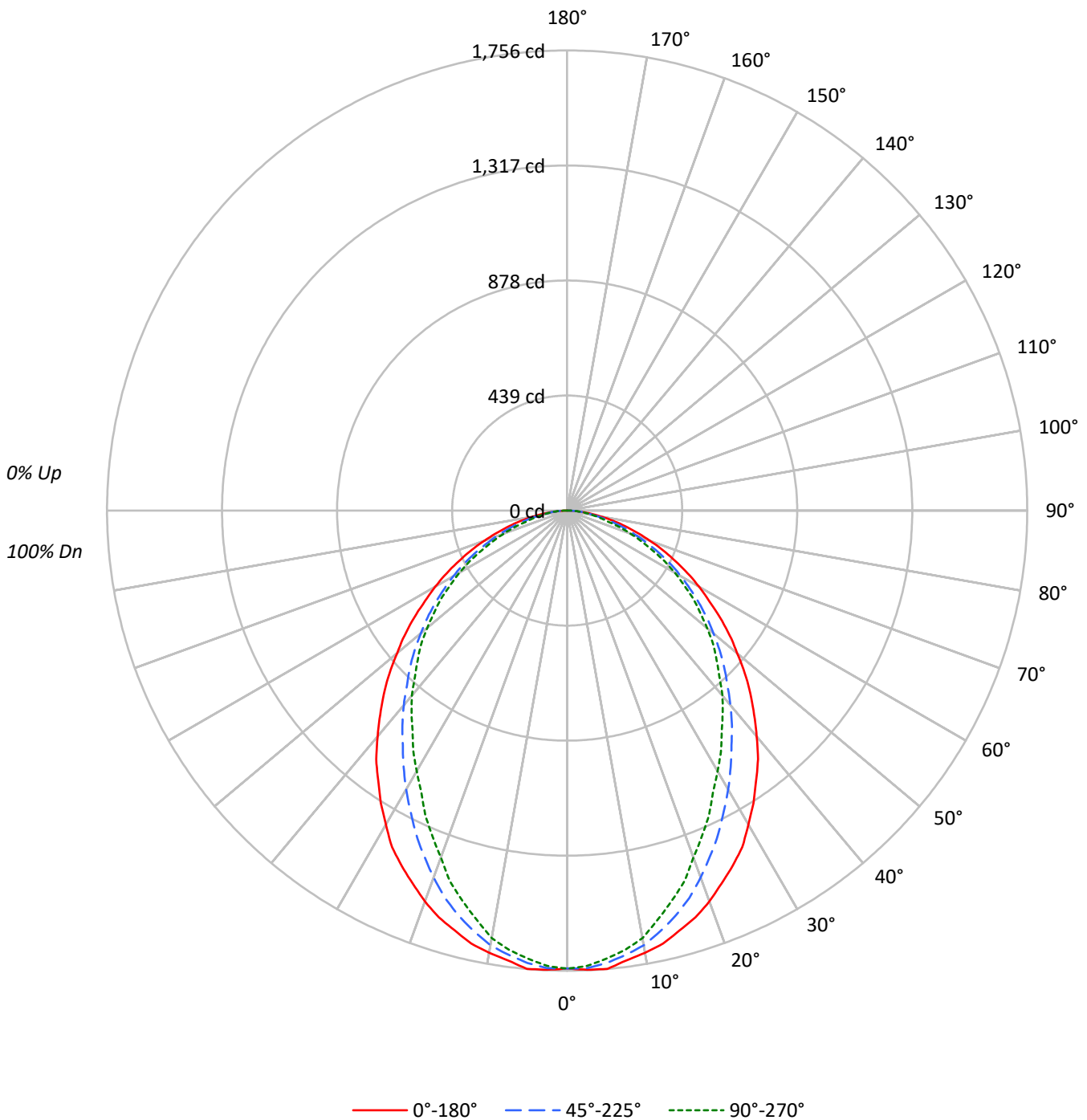
Input Watts (W): 39.339  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P295553

CATALOG NUMBER: 14RLN-LD5-40-UNV-L83050-W2A1-U-3000K

### Luminous Intensity Polar Plot





TEST NUMBER: P295553

CATALOG NUMBER: 14RLN-LD5-40-UNV-L83050-W2A1-U-3000K

**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°	4702	4702	4702
5°	4742	4681	4637
10°	4682	4602	4527
15°	4620	4457	4295
20°	4545	4267	4035
25°	4438	4049	3804
30°	4297	3819	3568
35°	4128	3591	3378
40°	3954	3407	3237
45°	3766	3229	3069
50°	3546	3051	2915
55°	3343	2880	2758
60°	3129	2702	2554
65°	2898	2495	2289
70°	2637	2242	2026
75°	2374	2004	1650
80°	2033	1632	1556
85°	1649	1550	1550



TEST NUMBER: P295553

CATALOG NUMBER: 14RLN-LD5-40-UNV-L83050-W2A1-U-3000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	163.6	4.3
10°-20°	449.0	11.7
20°-30°	630.2	16.4
30°-40°	699.0	18.2
40°-50°	671.1	17.5
50°-60°	562.4	14.7
60°-70°	394.8	10.3
70°-80°	206.1	5.4
80°-90°	57.7	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°	1242.9	32.4
0°-40°	1941.9	50.6
0°-60°	3175.4	82.8
0°-90°	3834.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3834.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1747	1747	1747	1747	1747	
5°	1756	1733	1733	1722	1717	166
15°	1658	1629	1600	1558	1542	468
25°	1495	1441	1364	1297	1281	688
35°	1257	1187	1093	1040	1028	787
45°	990	913	849	816	806	762
55°	713	659	614	594	588	637
65°	455	424	392	368	360	452
75°	228	210	193	170	159	242
85°	53	50	50	50	50	63
90°	0	0	0	0	0	



TEST NUMBER: P295553

CATALOG NUMBER: 14RLN-LD5-40-UNV-L83050-W2A1-U-3000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1747.4	1747.4	1747.4	1747.4	1747.4
2.5°	1753.9	1744.1	1747.4	1747.4	1739.3
5°	1755.5	1732.8	1732.8	1721.5	1716.6
7.5°	1731.2	1713.4	1710.1	1695.6	1690.7
10°	1713.4	1695.6	1684.2	1664.8	1656.7
12.5°	1692.3	1664.8	1643.7	1611.4	1598.4
15°	1658.3	1629.2	1600.0	1557.9	1541.7
17.5°	1627.5	1593.5	1549.8	1502.8	1485.0
20°	1587.1	1546.6	1489.9	1425.1	1408.9
22.5°	1540.1	1493.1	1426.7	1357.1	1344.1
25°	1494.7	1441.3	1363.6	1297.2	1281.0
27.5°	1447.8	1383.0	1293.9	1222.7	1206.5
30°	1383.0	1316.6	1229.2	1159.5	1148.2
32.5°	1323.1	1256.7	1161.1	1104.5	1091.5
35°	1256.7	1187.1	1093.1	1039.7	1028.3
37.5°	1196.8	1115.8	1033.2	981.4	974.9
40°	1125.5	1052.6	970.0	931.2	921.5
42.5°	1055.9	983.0	905.3	871.3	859.9
45°	989.5	913.4	848.6	816.2	806.5
47.5°	919.8	850.2	788.7	762.8	756.3
50°	847.0	785.4	728.8	704.5	696.4
52.5°	782.2	719.0	672.1	649.4	639.7
55°	712.6	659.1	613.8	594.3	587.9
57.5°	642.9	599.2	555.5	537.7	527.9
60°	581.4	537.7	502.0	481.0	474.5
62.5°	518.2	481.0	447.0	427.5	419.4
65°	455.1	424.3	391.9	367.6	359.5
67.5°	396.8	362.8	336.8	315.8	307.7
70°	335.2	310.9	285.0	265.6	257.5
72.5°	278.5	260.7	238.1	217.0	208.9
75°	228.3	210.5	192.7	170.0	158.7
77.5°	178.1	166.8	149.0	129.6	129.6
80°	131.2	124.7	105.3	102.0	100.4
82.5°	90.7	87.5	76.1	74.5	74.5
85°	53.4	50.2	50.2	50.2	50.2
87.5°	22.7	24.3	25.9	25.9	27.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)