

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: P229471

Luminaire Tested: **14RLN-LD5-40-UNV-L930-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229471  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36058)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14RLN-LD5-40-UNV-L930-CD1-U  
Description: METALUX 1X4 RLN LED TROFFER  
Light Source: (112)3000K CCT, 90 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

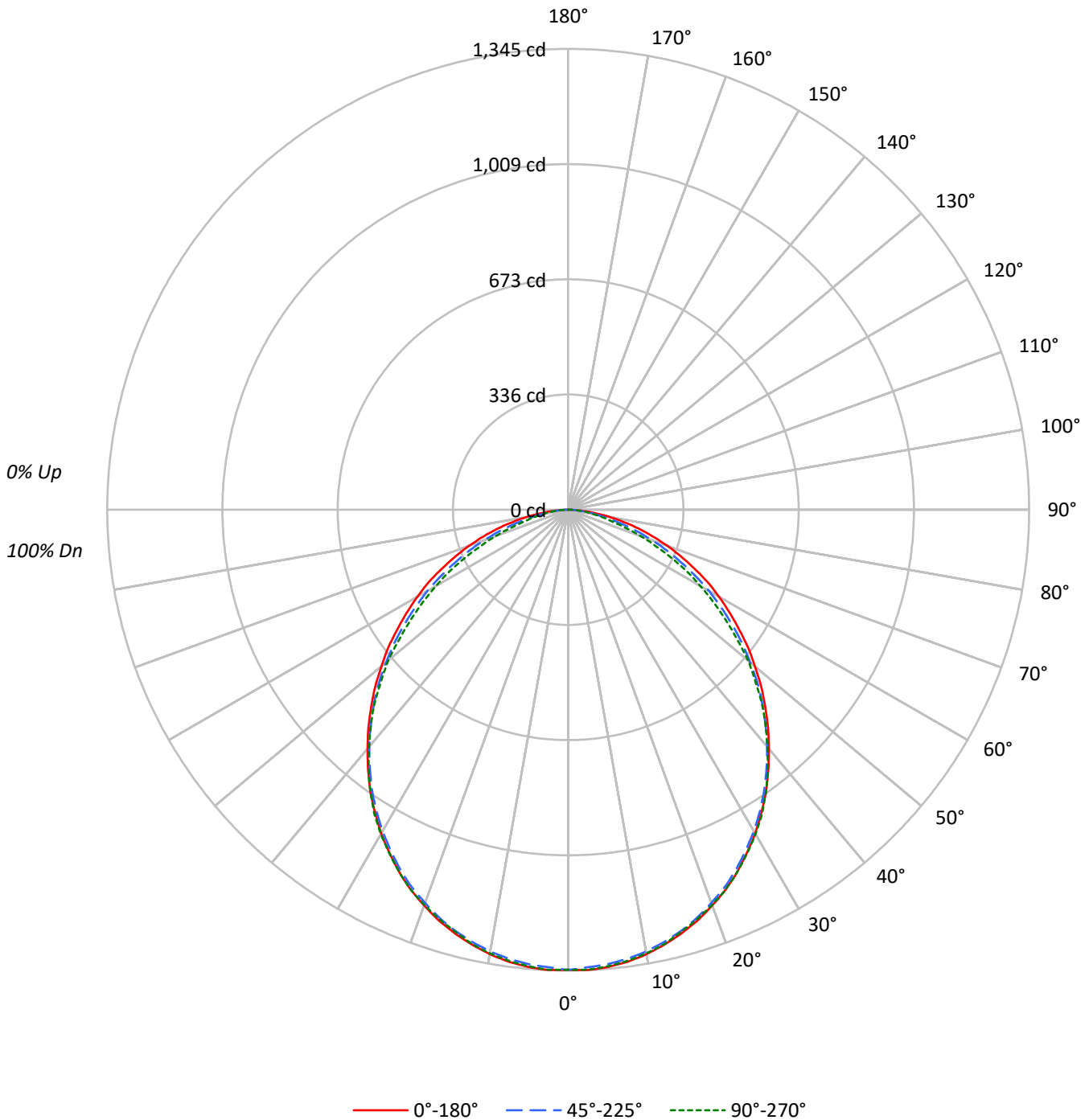
Lumens per Lamp: N/A  
Luminaire Lumens: 3378.0 lumens  
Efficiency: N/A  
Efficacy: 80.6 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.31  
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')  
CIE Type: Direct

Input Watts (W): 41.9  
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	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	103	99	96	98	95	93	95	92	90	91	89	87	85
2	100	92	86	80	97	90	84	79	87	82	77	84	79	76	81	77	74	72
3	91	81	74	67	89	80	73	67	77	71	66	74	69	64	72	67	63	61
4	84	72	64	57	82	71	63	57	69	62	56	66	60	56	64	59	55	53
5	77	65	56	50	75	64	56	50	62	55	49	60	53	48	58	52	48	46
6	72	59	50	44	70	58	49	43	56	49	43	54	48	43	53	47	42	40
7	66	53	45	39	65	52	44	39	51	44	38	50	43	38	48	42	38	36
8	62	49	40	35	60	48	40	35	47	40	34	45	39	34	44	38	34	32
9	58	45	37	31	57	44	36	31	43	36	31	42	36	31	41	35	31	29
10	54	41	34	28	53	41	33	28	40	33	28	39	33	28	38	32	28	26

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

	0°	45°	90°
0°	4525	4525	4525
5°	4531	4503	4523
10°	4507	4479	4499
15°	4465	4439	4447
20°	4408	4378	4402
25°	4339	4308	4339
30°	4247	4215	4253
35°	4138	4104	4138
40°	4005	3972	3976
45°	3872	3821	3809
50°	3729	3633	3594
55°	3574	3428	3301
60°	3424	3200	3004
65°	3236	2892	2647
70°	3018	2567	2225
75°	2767	2151	1719
80°	2383	1611	1483
85°	1925	1349	1380



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	126.8	3.8
10°-20°	360.0	10.7
20°-30°	535.8	15.9
30°-40°	626.3	18.5
40°-50°	619.0	18.3
50°-60°	522.6	15.5
60°-70°	362.0	10.7
70°-80°	180.7	5.3
80°-90°	44.9	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°	1022.6	30.3
0°-40°	1648.9	48.8
0°-60°	2790.4	82.6
0°-90°	3378.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3378.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1343	1343	1343	1343	1343	
5°	1340	1337	1331	1338	1337	127
15°	1280	1278	1272	1278	1275	361
25°	1167	1164	1159	1166	1167	537
35°	1006	1001	998	1005	1006	628
45°	813	804	802	800	799	627
55°	608	598	584	571	562	545
65°	406	387	363	344	332	403
75°	212	193	165	143	132	224
85°	50	38	35	35	36	58
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1343.0	1343.0	1343.0	1343.0	1343.0
2.5°	1344.7	1342.2	1336.4	1343.0	1343.8
5°	1339.7	1337.2	1331.4	1338.0	1337.2
7.5°	1330.6	1327.2	1322.3	1328.1	1328.1
10°	1317.3	1314.8	1309.0	1315.6	1314.8
12.5°	1299.8	1298.2	1292.4	1299.0	1298.2
15°	1279.9	1278.3	1272.5	1278.3	1274.9
17.5°	1256.7	1255.9	1249.2	1253.4	1252.5
20°	1229.3	1227.6	1221.0	1229.3	1227.6
22.5°	1200.2	1196.9	1192.8	1199.4	1200.2
25°	1167.0	1163.7	1158.7	1166.2	1167.0
27.5°	1128.9	1126.4	1121.4	1132.2	1130.5
30°	1091.5	1089.0	1083.2	1092.3	1093.2
32.5°	1048.3	1045.9	1041.7	1050.8	1052.5
35°	1006.0	1001.0	997.7	1005.2	1006.0
37.5°	958.7	953.7	950.4	957.9	956.2
40°	910.6	904.7	903.1	908.9	903.9
42.5°	863.2	855.8	852.5	855.8	852.5
45°	812.6	803.5	801.8	800.2	799.3
47.5°	763.6	753.7	749.5	743.7	739.6
50°	711.3	700.6	693.1	687.3	685.6
52.5°	662.4	649.9	639.1	634.2	620.9
55°	608.4	597.6	583.5	571.1	561.9
57.5°	557.8	543.7	527.1	513.8	502.2
60°	508.0	489.7	474.8	454.0	445.7
62.5°	459.0	438.3	417.5	395.1	391.0
65°	405.9	386.8	362.7	343.6	332.0
67.5°	355.3	335.3	312.1	285.5	274.7
70°	306.3	284.7	260.6	234.9	225.8
72.5°	259.0	237.4	212.5	185.1	174.3
75°	212.5	193.4	165.2	142.8	132.0
77.5°	165.2	149.4	122.0	103.8	102.1
80°	122.8	108.7	83.0	78.9	76.4
82.5°	84.7	71.4	58.9	56.4	54.8
85°	49.8	38.2	34.9	34.9	35.7
87.5°	19.1	16.6	16.6	16.6	17.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)