

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: P229456

Luminaire Tested: **14RLN-LD5-40-UNV-L830-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229456
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-L830-CD1-U
Description: METALUX 1X4 RLN LED TROFFER
Light Source: (112)3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3907.0 lumens
Efficiency: N/A
Efficacy: 93.2 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

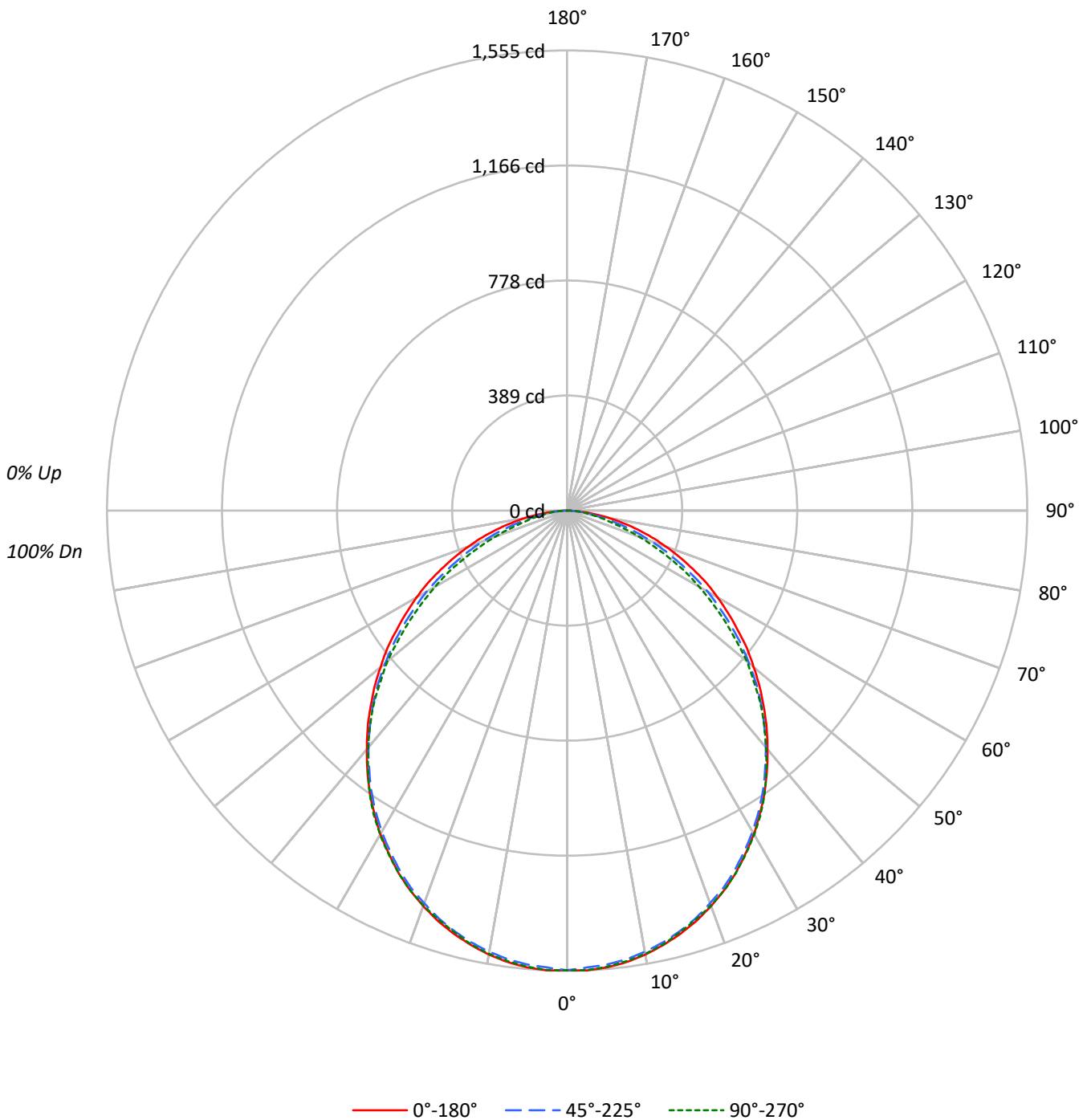
Input Watts (W): 41.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	109	105	101	97	107	103	99	96	98	95	93	95	92	90	91	89	87	85					85			
2	100	92	86	80	97	90	84	79	87	82	77	84	79	76	81	77	74	72					72			
3	91	81	74	67	89	80	73	67	77	71	66	74	69	64	72	67	63	61					61			
4	84	72	64	57	82	71	63	57	69	62	56	66	60	56	64	59	55	53					53			
5	77	65	56	50	75	64	56	50	62	55	49	60	53	48	58	52	48	46					46			
6	72	59	50	44	70	58	49	43	56	49	43	54	48	43	53	47	42	40					40			
7	66	53	45	39	65	52	44	39	51	44	38	50	43	38	48	42	38	36					36			
8	62	49	40	35	60	48	40	35	47	40	34	45	39	34	44	38	34	32					32			
9	58	45	37	31	57	44	36	31	43	36	31	42	36	31	41	35	31	29					29			
10	54	41	34	28	53	41	33	28	40	33	28	39	33	28	38	32	28	26					26			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5234	5234	5234
5°	5241	5209	5231
10°	5213	5180	5203
15°	5164	5134	5144
20°	5098	5064	5092
25°	5018	4983	5018
30°	4912	4874	4920
35°	4786	4747	4786
40°	4633	4594	4599
45°	4479	4419	4406
50°	4313	4202	4157
55°	4134	3965	3818
60°	3959	3700	3474
65°	3743	3345	3062
70°	3491	2969	2572
75°	3200	2487	1987
80°	2757	1863	1713
85°	2227	1558	1597



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.7	3.8
10°-20°	416.3	10.7
20°-30°	619.7	15.9
30°-40°	724.4	18.5
40°-50°	715.9	18.3
50°-60°	604.4	15.5
60°-70°	418.7	10.7
70°-80°	208.9	5.3
80°-90°	51.9	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°	1182.7	30.3
0°-40°	1907.1	48.8
0°-60°	3227.4	82.6
0°-90°	3907.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3907.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1553	1553	1553	1553	1553	
5°	1550	1547	1540	1548	1547	147
15°	1480	1478	1472	1478	1475	417
25°	1350	1346	1340	1349	1350	621
35°	1164	1158	1154	1163	1164	727
45°	940	929	927	926	924	725
55°	704	691	675	660	650	630
65°	470	447	420	398	384	466
75°	246	224	191	165	153	260
85°	58	44	40	40	41	68
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1553.3	1553.3	1553.3	1553.3	1553.3
2.5°	1555.2	1552.4	1545.6	1553.3	1554.3
5°	1549.5	1546.6	1539.9	1547.6	1546.6
7.5°	1538.9	1535.1	1529.3	1536.0	1536.0
10°	1523.6	1520.7	1514.0	1521.6	1520.7
12.5°	1503.4	1501.5	1494.8	1502.4	1501.5
15°	1480.4	1478.4	1471.7	1478.4	1474.6
17.5°	1453.5	1452.5	1444.8	1449.6	1448.7
20°	1421.8	1419.9	1412.2	1421.8	1419.9
22.5°	1388.2	1384.4	1379.6	1387.2	1388.2
25°	1349.8	1346.0	1340.2	1348.8	1349.8
27.5°	1305.6	1302.8	1297.0	1309.5	1307.6
30°	1262.4	1259.6	1252.8	1263.4	1264.4
32.5°	1212.5	1209.6	1204.8	1215.4	1217.3
35°	1163.6	1157.8	1154.0	1162.6	1163.6
37.5°	1108.8	1103.1	1099.2	1107.9	1106.0
40°	1053.2	1046.4	1044.5	1051.2	1045.5
42.5°	998.4	989.8	985.9	989.8	985.9
45°	939.9	929.3	927.4	925.5	924.5
47.5°	883.2	871.7	866.9	860.2	855.4
50°	822.7	810.3	801.6	794.9	793.0
52.5°	766.1	751.7	739.2	733.5	718.1
55°	703.7	691.2	674.9	660.5	649.9
57.5°	645.1	628.8	609.6	594.3	580.8
60°	587.5	566.4	549.1	525.1	515.5
62.5°	530.9	506.9	482.9	457.0	452.2
65°	469.5	447.4	419.5	397.5	384.0
67.5°	410.9	387.9	361.0	330.2	317.8
70°	354.3	329.3	301.4	271.7	261.1
72.5°	299.5	274.6	245.8	214.1	201.6
75°	245.8	223.7	191.0	165.1	152.6
77.5°	191.0	172.8	141.1	120.0	118.1
80°	142.1	125.8	96.0	91.2	88.3
82.5°	97.9	82.6	68.2	65.3	63.4
85°	57.6	44.2	40.3	40.3	41.3
87.5°	22.1	19.2	19.2	19.2	20.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)