

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: P229526

Luminaire Tested: **14RLN-LD5-40-UNV-L840-CD1-SVPD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229526  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36064)  
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-L840-CD1-SVPD1-U  
Description: METALUX 1X4 RLN LED TROFFER WITH SENSOR  
Light Source: (112)4000K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3965.0 lumens  
Efficiency: N/A  
Efficacy: 94.6 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.14 / 1.26  
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')  
CIE Type: Direct

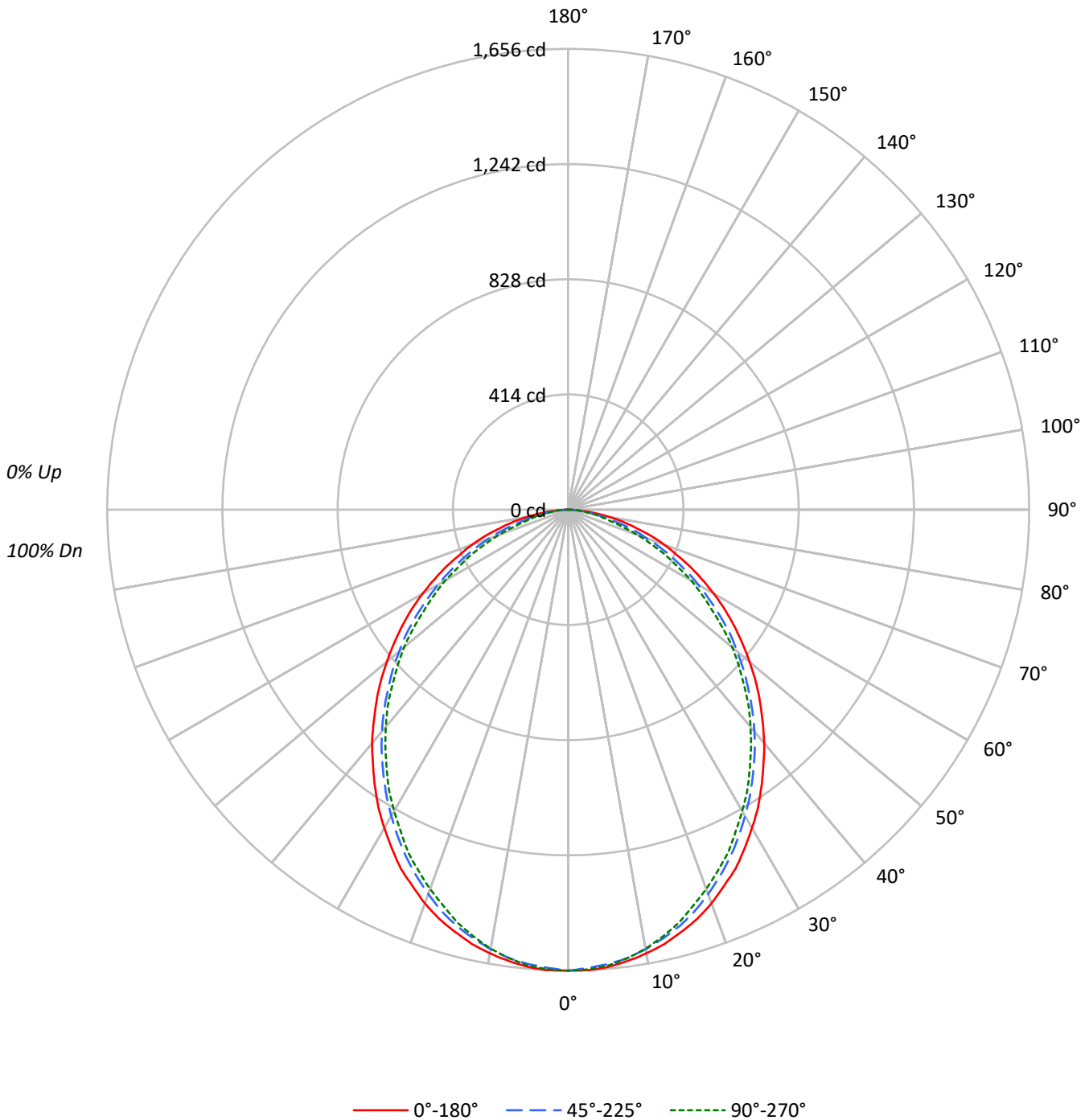
Input Watts (W): 41.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	78	84	79	76	81	77	74	72
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	64	61
4	84	73	64	58	82	71	63	57	69	62	57	67	61	56	64	59	55	53
5	78	65	57	50	76	64	56	50	62	55	49	60	54	49	58	53	48	46
6	72	59	50	44	70	58	50	44	56	49	43	55	48	43	53	47	43	41
7	67	54	45	39	65	53	45	39	51	44	39	50	43	38	49	43	38	36
8	62	49	41	35	61	48	40	35	47	40	35	46	39	35	45	39	34	32
9	58	45	37	32	57	45	37	32	43	36	31	42	36	31	41	35	31	29
10	55	42	34	29	53	41	34	29	40	33	29	39	33	29	38	33	28	27

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

	0°	45°	90°
0°	5582	5582	5582
5°	5580	5545	5562
10°	5539	5486	5480
15°	5480	5402	5360
20°	5399	5270	5202
25°	5292	5120	5056
30°	5138	4944	4864
35°	4980	4761	4677
40°	4820	4579	4481
45°	4641	4364	4257
50°	4458	4153	4036
55°	4271	3919	3718
60°	4068	3641	3444
65°	3842	3336	3090
70°	3616	2957	2619
75°	3260	2523	2031
80°	2895	1997	1797
85°	2385	1593	1659



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	155.8	3.9
10°-20°	436.9	11.0
20°-30°	636.8	16.1
30°-40°	730.0	18.4
40°-50°	713.7	18.0
50°-60°	602.1	15.2
60°-70°	420.9	10.6
70°-80°	214.6	5.4
80°-90°	54.1	1.4
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°	1229.5	31.0
0°-40°	1959.5	49.4
0°-60°	3275.4	82.6
0°-90°	3965.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3965.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1656	1656	1656	1656	1656	
5°	1650	1646	1639	1644	1644	156
15°	1571	1566	1548	1543	1536	443
25°	1423	1406	1377	1363	1360	654
35°	1211	1194	1158	1146	1137	757
45°	974	948	916	904	893	752
55°	727	700	667	648	633	651
65°	482	453	418	394	388	477
75°	250	230	194	170	156	269
85°	62	46	41	43	43	73
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1656.5	1656.5	1656.5	1656.5	1656.5
2.5°	1656.5	1653.1	1647.9	1654.8	1653.1
5°	1649.6	1646.2	1639.4	1644.5	1644.5
7.5°	1635.9	1632.5	1625.6	1629.1	1625.6
10°	1618.8	1615.3	1603.3	1605.1	1601.6
12.5°	1598.2	1591.3	1577.6	1575.9	1570.8
15°	1570.8	1565.6	1548.5	1543.3	1536.5
17.5°	1541.6	1531.3	1512.5	1502.2	1491.9
20°	1505.6	1491.9	1469.6	1457.6	1450.7
22.5°	1462.7	1452.4	1425.0	1411.3	1404.4
25°	1423.3	1406.1	1377.0	1363.3	1359.8
27.5°	1371.8	1358.1	1325.5	1313.5	1303.3
30°	1320.4	1305.0	1270.7	1258.7	1250.1
32.5°	1269.0	1251.8	1215.8	1202.1	1196.9
35°	1210.7	1193.5	1157.5	1145.5	1136.9
37.5°	1152.3	1131.8	1100.9	1087.2	1078.6
40°	1095.8	1071.8	1040.9	1025.5	1018.6
42.5°	1034.0	1008.3	979.2	963.7	960.3
45°	974.0	948.3	915.7	903.7	893.4
47.5°	914.0	884.8	855.7	838.5	831.7
50°	850.5	823.1	792.2	775.1	769.9
52.5°	788.8	761.4	732.2	713.4	701.4
55°	727.1	699.6	667.1	648.2	632.8
57.5°	667.1	634.5	601.9	579.6	571.0
60°	603.6	574.5	540.2	517.9	511.0
62.5°	541.9	516.2	480.1	454.4	442.4
65°	481.9	452.7	418.4	394.4	387.5
67.5°	420.1	394.4	360.1	332.7	320.7
70°	367.0	334.4	300.1	276.1	265.8
72.5°	310.4	281.2	248.6	221.2	205.8
75°	250.4	229.8	193.8	169.8	156.0
77.5°	202.3	178.3	145.8	126.9	123.5
80°	149.2	130.3	102.9	94.3	92.6
82.5°	104.6	85.7	70.3	66.9	65.2
85°	61.7	46.3	41.2	42.9	42.9
87.5°	25.7	18.9	18.9	20.6	20.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)