

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: P229466

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229466  
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-L840-CD1-U  
Description: METALUX 1X4 RLN LED TROFFER  
Light Source: (112)4000K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4070.0 lumens  
Efficiency: N/A  
Efficacy: 97.1 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

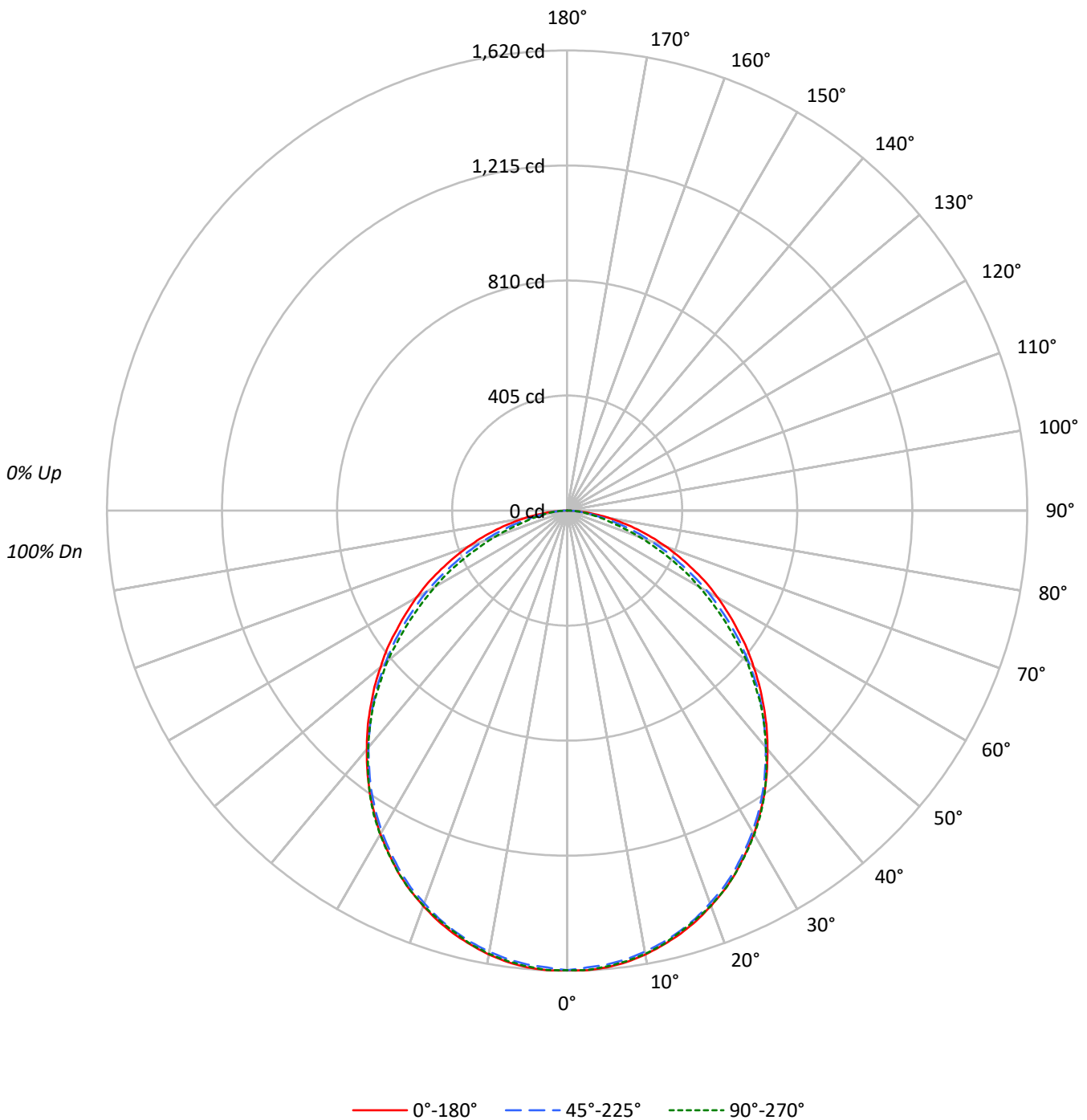
Input Watts (W): 41.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	5452	5452	5452
5°	5460	5426	5449
10°	5430	5396	5420
15°	5380	5348	5359
20°	5311	5275	5304
25°	5228	5191	5228
30°	5117	5078	5125
35°	4986	4945	4986
40°	4826	4786	4791
45°	4666	4604	4589
50°	4493	4378	4331
55°	4307	4131	3978
60°	4124	3855	3619
65°	3899	3484	3189
70°	3635	3094	2680
75°	3333	2591	2070
80°	2872	1940	1785
85°	2320	1624	1662



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	152.8	3.8
10°-20°	433.7	10.7
20°-30°	645.6	15.9
30°-40°	754.6	18.5
40°-50°	745.8	18.3
50°-60°	629.7	15.5
60°-70°	436.1	10.7
70°-80°	217.6	5.3
80°-90°	54.1	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°	1232.1	30.3
0°-40°	1986.7	48.8
0°-60°	3362.1	82.6
0°-90°	4070.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4070.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1618	1618	1618	1618	1618	
5°	1614	1611	1604	1612	1611	153
15°	1542	1540	1533	1540	1536	435
25°	1406	1402	1396	1405	1406	647
35°	1212	1206	1202	1211	1212	757
45°	979	968	966	964	963	756
55°	733	720	703	688	677	657
65°	489	466	437	414	400	485
75°	256	233	199	172	159	270
85°	60	46	42	42	43	70
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1618.1	1618.1	1618.1	1618.1	1618.1
2.5°	1620.1	1617.1	1610.1	1618.1	1619.1
5°	1614.1	1611.1	1604.1	1612.1	1611.1
7.5°	1603.1	1599.1	1593.1	1600.1	1600.1
10°	1587.1	1584.1	1577.1	1585.1	1584.1
12.5°	1566.1	1564.1	1557.1	1565.1	1564.1
15°	1542.1	1540.1	1533.1	1540.1	1536.1
17.5°	1514.1	1513.1	1505.1	1510.1	1509.1
20°	1481.1	1479.1	1471.1	1481.1	1479.1
22.5°	1446.1	1442.1	1437.1	1445.1	1446.1
25°	1406.1	1402.1	1396.1	1405.1	1406.1
27.5°	1360.1	1357.1	1351.1	1364.1	1362.1
30°	1315.1	1312.1	1305.1	1316.1	1317.1
32.5°	1263.1	1260.1	1255.1	1266.1	1268.1
35°	1212.1	1206.1	1202.1	1211.1	1212.1
37.5°	1155.1	1149.1	1145.1	1154.1	1152.1
40°	1097.1	1090.1	1088.1	1095.1	1089.1
42.5°	1040.1	1031.1	1027.1	1031.1	1027.1
45°	979.1	968.1	966.1	964.1	963.1
47.5°	920.1	908.1	903.1	896.1	891.1
50°	857.1	844.1	835.1	828.1	826.1
52.5°	798.1	783.1	770.1	764.1	748.1
55°	733.1	720.1	703.1	688.1	677.1
57.5°	672.1	655.1	635.1	619.1	605.0
60°	612.0	590.0	572.0	547.0	537.0
62.5°	553.0	528.0	503.0	476.0	471.0
65°	489.0	466.0	437.0	414.0	400.0
67.5°	428.0	404.0	376.0	344.0	331.0
70°	369.0	343.0	314.0	283.0	272.0
72.5°	312.0	286.0	256.0	223.0	210.0
75°	256.0	233.0	199.0	172.0	159.0
77.5°	199.0	180.0	147.0	125.0	123.0
80°	148.0	131.0	100.0	95.0	92.0
82.5°	102.0	86.0	71.0	68.0	66.0
85°	60.0	46.0	42.0	42.0	43.0
87.5°	23.0	20.0	20.0	20.0	21.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)