

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: P229516

Luminaire Tested: **14RLN-LD5-40-UNV-L830-CD1-SVPD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229516  
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-L830-CD1-SVPD1-U  
Description: METALUX 1X4 RLN LED TROFFER WITH SENSOR  
Light Source: (112)3000K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3807.0 lumens  
Efficiency: N/A  
Efficacy: 90.9 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

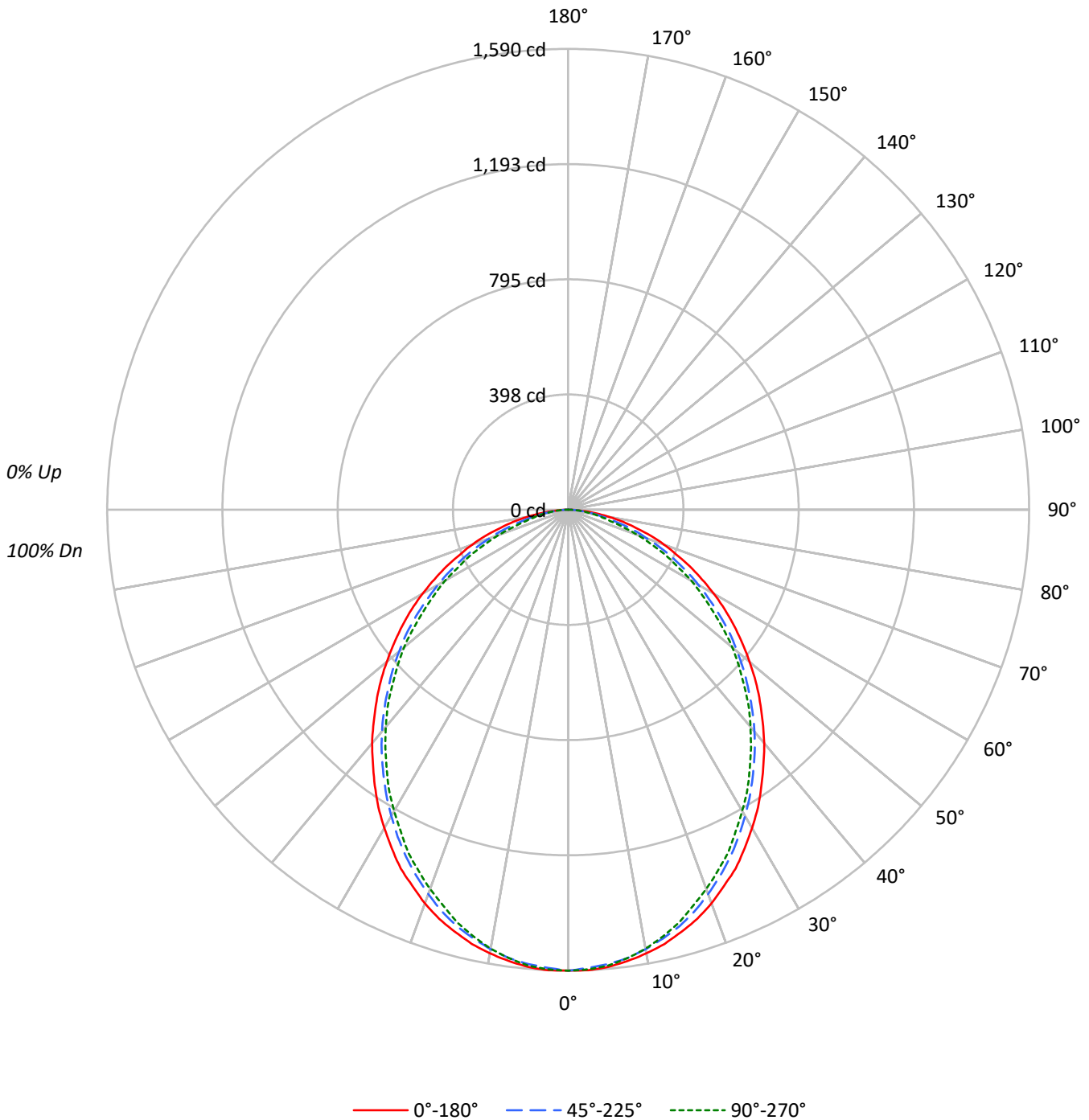
Input Watts (W): 41.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°	45°	90°
0°	5359	5359	5359
5°	5357	5324	5341
10°	5318	5267	5262
15°	5261	5187	5146
20°	5184	5060	4995
25°	5081	4915	4855
30°	4933	4747	4670
35°	4782	4572	4490
40°	4628	4396	4302
45°	4457	4190	4088
50°	4281	3988	3876
55°	4101	3763	3569
60°	3906	3495	3306
65°	3689	3203	2967
70°	3471	2838	2514
75°	3130	2423	1950
80°	2779	1917	1725
85°	2293	1527	1593



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	149.6	3.9
10°-20°	419.5	11.0
20°-30°	611.4	16.1
30°-40°	700.9	18.4
40°-50°	685.3	18.0
50°-60°	578.1	15.2
60°-70°	404.1	10.6
70°-80°	206.0	5.4
80°-90°	52.0	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°	1180.5	31.0
0°-40°	1881.4	49.4
0°-60°	3144.8	82.6
0°-90°	3807.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3807.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1590	1590	1590	1590	1590	
5°	1584	1581	1574	1579	1579	150
15°	1508	1503	1487	1482	1475	425
25°	1367	1350	1322	1309	1306	628
35°	1162	1146	1111	1100	1092	727
45°	935	910	879	868	858	722
55°	698	672	640	622	608	625
65°	463	435	402	379	372	458
75°	240	221	186	163	150	258
85°	59	44	40	41	41	70
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1590.5	1590.5	1590.5	1590.5	1590.5
2.5°	1590.5	1587.2	1582.3	1588.8	1587.2
5°	1583.9	1580.6	1574.0	1579.0	1579.0
7.5°	1570.7	1567.4	1560.9	1564.1	1560.9
10°	1554.3	1551.0	1539.4	1541.1	1537.8
12.5°	1534.5	1527.9	1514.8	1513.1	1508.2
15°	1508.2	1503.2	1486.8	1481.8	1475.2
17.5°	1480.2	1470.3	1452.2	1442.3	1432.4
20°	1445.6	1432.4	1411.0	1399.5	1392.9
22.5°	1404.4	1394.6	1368.2	1355.0	1348.5
25°	1366.6	1350.1	1322.1	1308.9	1305.7
27.5°	1317.2	1304.0	1272.7	1261.2	1251.3
30°	1267.8	1253.0	1220.0	1208.5	1200.3
32.5°	1218.4	1201.9	1167.3	1154.2	1149.2
35°	1162.4	1145.9	1111.4	1099.8	1091.6
37.5°	1106.4	1086.7	1057.0	1043.9	1035.6
40°	1052.1	1029.0	999.4	984.6	978.0
42.5°	992.8	968.1	940.1	925.3	922.0
45°	935.2	910.5	879.2	867.7	857.8
47.5°	877.6	849.6	821.6	805.1	798.5
50°	816.6	790.3	760.7	744.2	739.3
52.5°	757.4	731.0	703.0	684.9	673.4
55°	698.1	671.8	640.5	622.4	607.5
57.5°	640.5	609.2	577.9	556.5	548.3
60°	579.6	551.6	518.6	497.2	490.6
62.5°	520.3	495.6	461.0	436.3	424.8
65°	462.7	434.7	401.7	378.7	372.1
67.5°	403.4	378.7	345.8	319.4	307.9
70°	352.3	321.1	288.1	265.1	255.2
72.5°	298.0	270.0	238.7	212.4	197.6
75°	240.4	220.6	186.1	163.0	149.8
77.5°	194.3	171.2	139.9	121.8	118.5
80°	143.2	125.1	98.8	90.6	88.9
82.5°	100.4	82.3	67.5	64.2	62.6
85°	59.3	44.5	39.5	41.2	41.2
87.5°	24.7	18.1	18.1	19.8	19.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)