

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: P229909

Luminaire Tested: **24RLN-LD5-45-RDP-UNV-L835-CD1-SVPD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229909  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1707-178-7)  
Test Lab: INNOVATION CENTER-G3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24RLN-LD5-45-RDP-UNV-L835-CD1-SVPD1-U  
Description: METALUX 2X4 RLN LED TROFFER WITH SENSOR AND RDP LENS  
Light Source: (252)3500K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3724.0 lumens  
Efficiency: N/A  
Efficacy: 109.5 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.31 / 1.38  
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')  
CIE Type: Direct

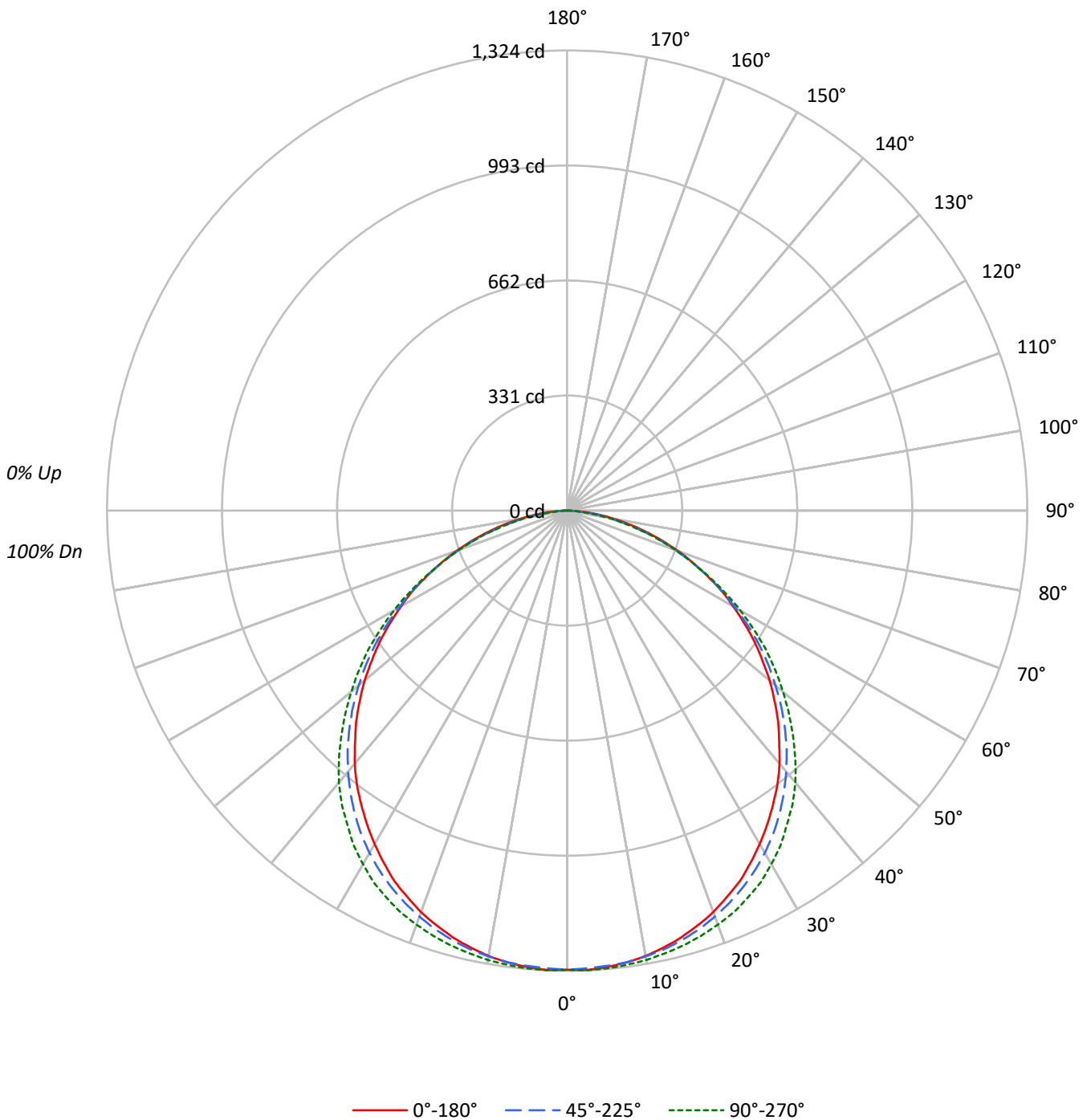
Input Watts (W): 34  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70
3	91	80	72	66	88	78	71	65	76	69	64	73	67	63	70	66	62	59
4	83	71	62	56	81	70	61	55	67	60	54	65	59	54	63	57	53	51
5	76	63	54	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	38
7	65	52	43	37	64	51	43	37	49	42	36	48	41	36	47	41	36	34
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	30
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	33	29	27
10	53	40	32	27	52	39	32	27	38	31	27	38	31	27	37	31	26	25

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

	0°	45°	90°
0°	2024	2024	2024
5°	2027	2022	2033
10°	2024	2026	2042
15°	2015	2027	2053
20°	2004	2026	2066
25°	1988	2022	2077
30°	1959	2011	2077
35°	1931	1992	2061
40°	1901	1960	2043
45°	1860	1919	1991
50°	1813	1865	1931
55°	1758	1801	1866
60°	1691	1712	1764
65°	1612	1612	1629
70°	1516	1488	1485
75°	1383	1300	1295
80°	1205	1082	1034
85°	954	750	587



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	125.4	3.4
10°-20°	361.7	9.7
20°-30°	552.6	14.8
30°-40°	666.6	17.9
40°-50°	683.3	18.3
50°-60°	602.0	16.2
60°-70°	440.6	11.8
70°-80°	236.8	6.4
80°-90°	55.1	1.5
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°	1039.6	27.9
0°-40°	1706.2	45.8
0°-60°	2991.5	80.3
0°-90°	3724.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3724.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1321	1321	1321	1321	1321	
5°	1318	1317	1315	1319	1322	125
15°	1271	1272	1279	1289	1295	359
25°	1176	1179	1196	1220	1229	541
35°	1032	1038	1065	1095	1102	646
45°	859	858	886	911	919	661
55°	658	654	675	690	699	588
65°	445	437	445	450	450	441
75°	234	223	220	220	219	248
85°	54	48	43	35	33	65
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1321.3	1321.3	1321.3	1321.3	1321.3
2.5°	1322.9	1320.6	1318.2	1320.6	1323.7
5°	1318.2	1316.7	1315.1	1319.0	1322.1
7.5°	1311.2	1309.7	1310.5	1315.9	1318.2
10°	1301.2	1301.2	1302.7	1308.9	1312.8
12.5°	1287.2	1288.0	1292.6	1300.4	1304.3
15°	1270.9	1272.4	1278.6	1288.7	1294.9
17.5°	1250.7	1254.6	1263.1	1275.5	1282.5
20°	1229.7	1232.1	1242.9	1260.8	1267.8
22.5°	1202.6	1207.2	1221.2	1242.1	1251.5
25°	1176.2	1179.3	1196.3	1219.6	1229.0
27.5°	1142.8	1147.4	1168.4	1195.6	1205.7
30°	1107.8	1113.3	1137.3	1163.7	1174.6
32.5°	1071.4	1078.3	1103.2	1131.1	1142.8
35°	1032.5	1038.0	1065.1	1094.6	1102.4
37.5°	993.7	995.3	1024.0	1052.7	1065.1
40°	951.0	952.6	980.5	1007.7	1021.7
42.5°	902.9	907.5	934.7	961.1	972.0
45°	858.6	857.9	885.8	911.4	919.2
47.5°	808.9	810.5	836.1	861.0	865.6
50°	760.8	760.0	782.6	804.3	810.5
52.5°	708.0	707.2	729.8	747.6	755.4
55°	658.3	654.5	674.6	690.2	698.7
57.5°	604.8	599.3	617.2	632.7	636.6
60°	552.0	545.8	559.0	570.6	576.0
62.5°	501.5	493.8	502.3	512.4	513.2
65°	444.8	437.1	444.8	450.3	449.5
67.5°	391.3	382.7	386.6	388.9	388.2
70°	338.5	326.8	332.3	330.7	331.5
72.5°	285.7	276.4	275.6	273.3	275.6
75°	233.7	222.8	219.7	219.7	218.9
77.5°	184.0	173.1	170.0	168.5	166.1
80°	136.6	128.1	122.7	121.9	117.2
82.5°	96.3	85.4	83.8	76.9	72.2
85°	54.3	48.1	42.7	34.9	33.4
87.5°	20.2	17.9	14.0	13.2	12.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)