

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: P229839

Luminaire Tested: **24RLN-LD5-45-UNV-L830-CD1-SVPD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229839
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36062)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24RLN-LD5-45-UNV-L830-CD1-SVPD1-U
Description: METALUX 2X4 RLN LED TROFFER WITH SENSOR
Light Source: (252)3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4312.0 lumens
Efficiency: N/A
Efficacy: 126.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.22 / 1.31
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

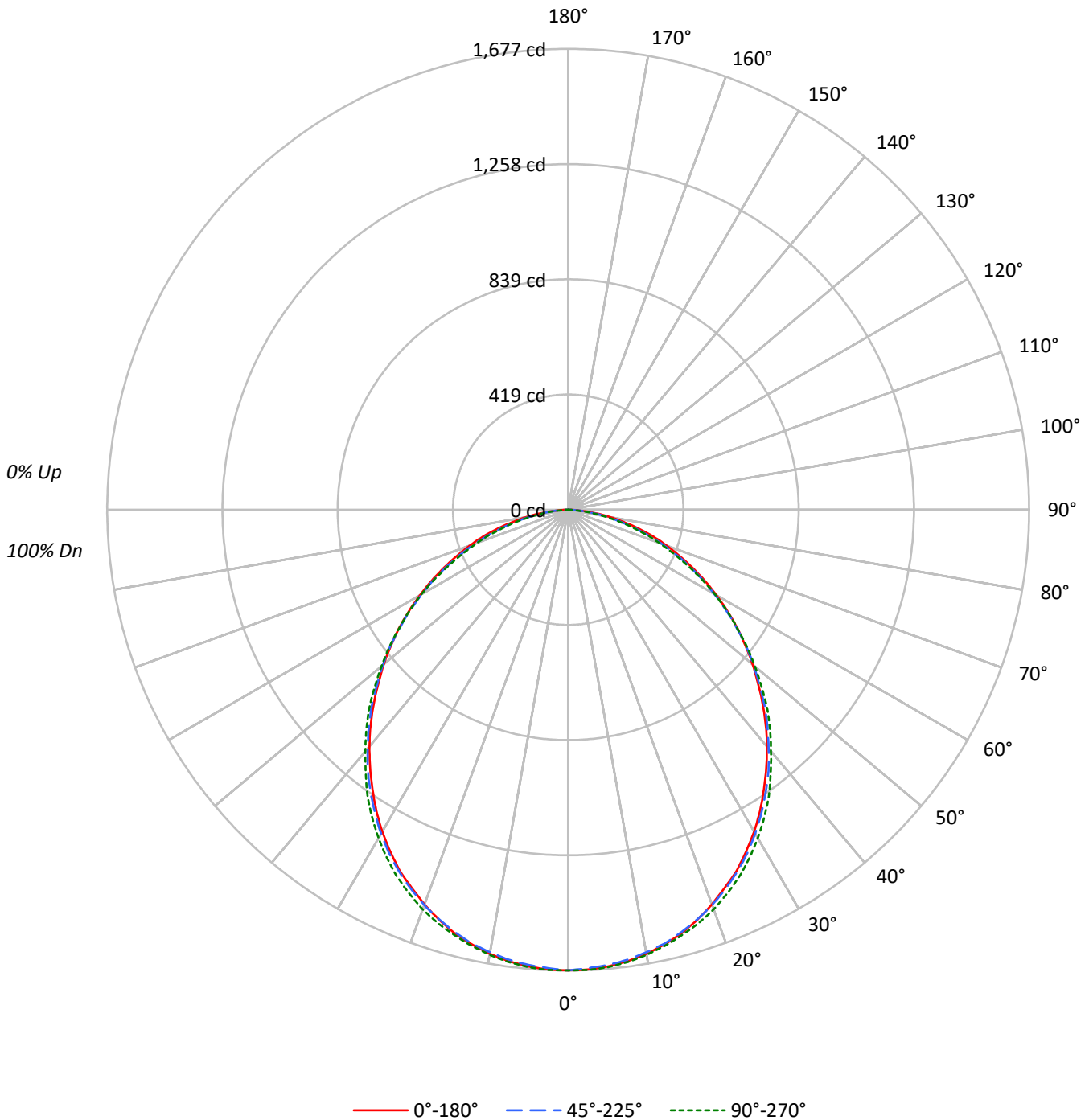
Input Watts (W): 34
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	102	99	95	98	95	92	94	92	89	91	89	87	85																												
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	76	73	71																												
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	66	63	60																												
4	84	72	63	57	81	71	63	56	68	61	56	66	60	55	64	58	54	52																												
5	77	64	56	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45																												
6	71	58	49	43	69	57	49	43	55	48	42	54	47	42	52	46	42	40																												
7	66	53	44	38	64	52	44	38	50	43	38	49	42	37	48	42	37	35																												
8	62	48	40	34	60	48	40	34	46	39	34	45	38	34	44	38	33	31																												
9	58	44	36	31	56	44	36	31	43	35	31	42	35	30	41	35	30	28																												
10	54	41	33	28	53	40	33	28	39	33	28	39	32	28	38	32	28	26																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2568	2568	2568
5°	2565	2557	2569
10°	2552	2544	2558
15°	2530	2524	2541
20°	2491	2495	2522
25°	2451	2457	2490
30°	2392	2407	2441
35°	2321	2344	2380
40°	2249	2268	2295
45°	2168	2189	2219
50°	2088	2097	2114
55°	2006	1995	2002
60°	1910	1880	1889
65°	1802	1762	1732
70°	1704	1611	1574
75°	1568	1430	1381
80°	1380	1211	1139
85°	1086	845	627



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	158.3	3.7
10°-20°	449.9	10.4
20°-30°	670.6	15.6
30°-40°	784.0	18.2
40°-50°	778.6	18.1
50°-60°	668.6	15.5
60°-70°	481.6	11.2
70°-80°	259.3	6.0
80°-90°	61.1	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°	1278.8	29.7
0°-40°	2062.8	47.8
0°-60°	3510.0	81.4
0°-90°	4312.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4312.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1677	1677	1677	1677	1677	
5°	1668	1667	1663	1668	1671	158
15°	1596	1592	1592	1601	1602	449
25°	1450	1444	1454	1469	1473	667
35°	1241	1240	1254	1267	1273	777
45°	1001	998	1011	1019	1024	772
55°	751	744	747	751	750	671
65°	497	489	486	482	478	494
75°	265	248	242	235	233	281
85°	62	56	48	38	36	74
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1676.6	1676.6	1676.6	1676.6	1676.6
2.5°	1675.2	1673.8	1669.7	1675.2	1676.6
5°	1668.4	1667.0	1662.9	1668.4	1671.1
7.5°	1657.4	1654.6	1651.9	1657.4	1660.1
10°	1640.9	1638.1	1635.4	1642.3	1645.0
12.5°	1620.3	1617.5	1617.5	1623.0	1625.8
15°	1595.6	1591.5	1591.5	1601.1	1602.4
17.5°	1564.0	1561.2	1562.6	1573.6	1577.7
20°	1528.3	1526.9	1531.0	1543.4	1547.5
22.5°	1488.5	1487.1	1494.0	1509.1	1511.8
25°	1450.0	1444.5	1454.1	1469.2	1473.4
27.5°	1402.0	1397.8	1410.2	1423.9	1428.1
30°	1352.5	1348.4	1360.8	1375.9	1380.0
32.5°	1299.0	1296.2	1308.6	1323.7	1327.8
35°	1241.3	1239.9	1253.7	1267.4	1272.9
37.5°	1183.6	1182.3	1197.4	1208.4	1209.7
40°	1124.6	1121.8	1134.2	1146.6	1147.9
42.5°	1064.2	1060.1	1073.8	1083.4	1087.5
45°	1001.0	998.3	1010.6	1018.9	1024.4
47.5°	936.5	936.5	943.3	953.0	954.3
50°	876.1	871.9	880.2	885.7	887.0
52.5°	812.9	808.8	815.6	817.0	819.8
55°	751.1	744.2	747.0	751.1	749.7
57.5°	686.6	675.6	681.1	681.1	683.8
60°	623.4	613.8	613.8	613.8	616.5
62.5°	560.2	550.6	550.6	549.3	547.9
65°	497.1	488.8	486.1	482.0	477.8
67.5°	436.7	427.0	421.6	416.1	411.9
70°	380.4	363.9	359.8	351.5	351.5
72.5°	324.1	307.6	299.3	293.8	292.5
75°	265.0	248.5	241.7	234.8	233.4
77.5°	207.3	196.4	185.4	179.9	177.1
80°	156.5	146.9	137.3	127.7	129.1
82.5°	107.1	97.5	90.6	82.4	79.6
85°	61.8	56.3	48.1	38.4	35.7
87.5°	26.1	19.2	13.7	13.7	13.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)