

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: P229719

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229719
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36038)
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-U
Description: METALUX 2X4 RLN LED TROFFER
Light Source: (252)3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4365.0 lumens
Efficiency: N/A
Efficacy: 128.4 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

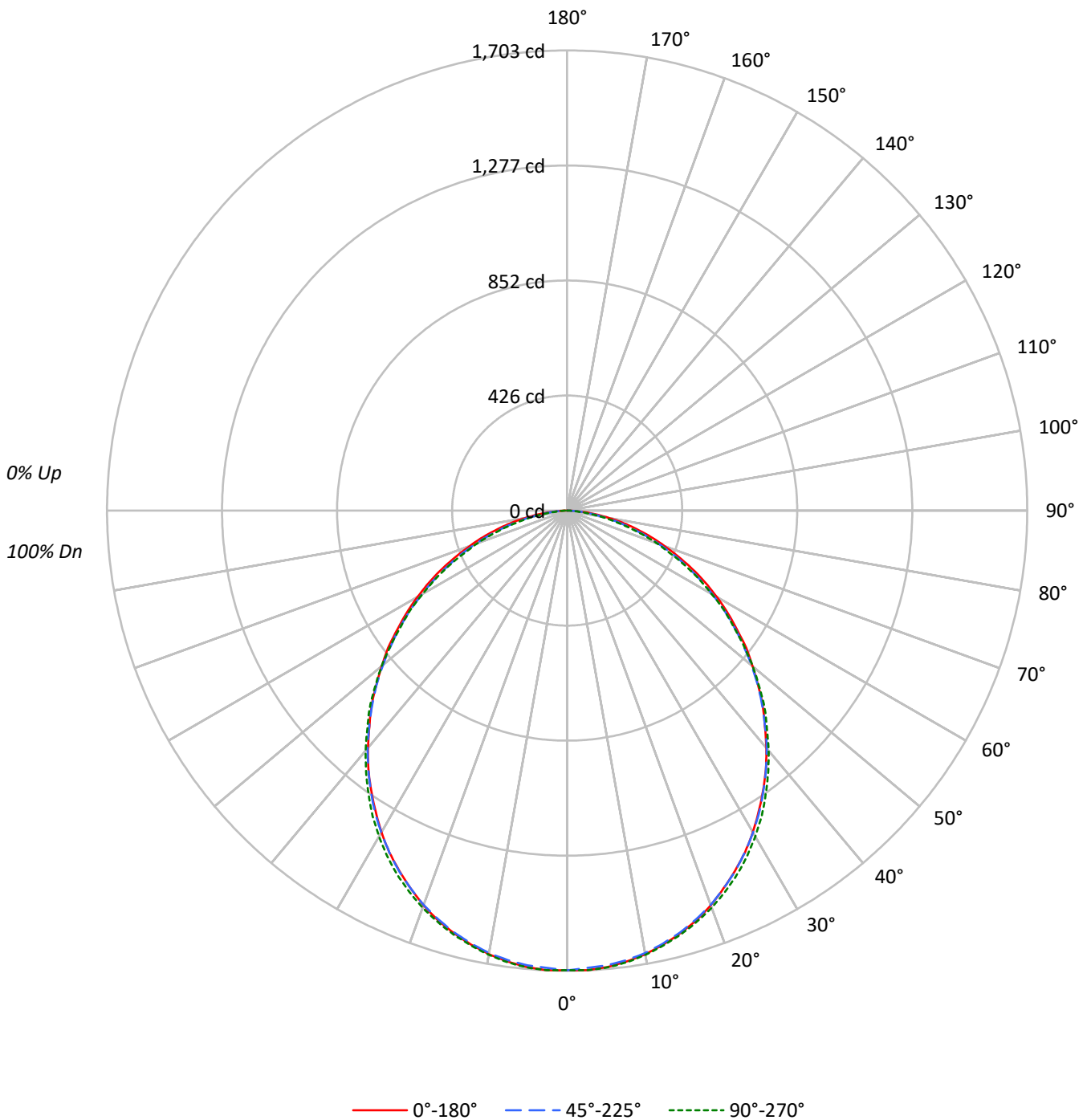
Input Watts (W): 34
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	77	73	71
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	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	32
9	58	44	36	31	56	44	36	31	43	36	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°	2606	2606	2606
5°	2607	2597	2609
10°	2593	2586	2597
15°	2567	2563	2576
20°	2534	2531	2549
25°	2485	2488	2513
30°	2431	2433	2463
35°	2365	2367	2396
40°	2293	2298	2320
45°	2219	2213	2240
50°	2133	2120	2137
55°	2046	2020	2013
60°	1960	1901	1893
65°	1851	1772	1747
70°	1716	1611	1580
75°	1577	1422	1349
80°	1380	1187	1078
85°	1134	821	652



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.8	3.7
10°-20°	456.7	10.5
20°-30°	679.5	15.6
30°-40°	793.8	18.2
40°-50°	789.2	18.1
50°-60°	678.1	15.5
60°-70°	486.9	11.2
70°-80°	259.3	5.9
80°-90°	60.7	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°	1296.9	29.7
0°-40°	2090.7	47.9
0°-60°	3558.0	81.5
0°-90°	4365.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4365.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1701	1701	1701	1701	1701	
5°	1696	1693	1689	1694	1697	161
15°	1619	1619	1616	1622	1624	457
25°	1471	1471	1472	1483	1487	677
35°	1265	1262	1266	1280	1281	791
45°	1024	1016	1022	1027	1034	789
55°	766	757	757	757	754	687
65°	511	496	489	483	482	505
75°	266	251	240	233	228	284
85°	64	55	47	38	37	75
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1701.3	1701.3	1701.3	1701.3	1701.3
2.5°	1702.7	1700.0	1694.5	1701.3	1702.7
5°	1695.8	1693.1	1689.0	1694.5	1697.2
7.5°	1683.5	1680.7	1678.0	1683.5	1686.2
10°	1667.0	1665.6	1662.9	1669.8	1669.8
12.5°	1645.0	1643.7	1640.9	1647.8	1647.8
15°	1618.9	1618.9	1616.2	1621.7	1624.4
17.5°	1590.1	1588.7	1586.0	1592.9	1595.6
20°	1554.4	1554.4	1553.0	1561.3	1564.0
22.5°	1513.2	1513.2	1513.2	1524.2	1526.9
25°	1470.6	1470.6	1472.0	1483.0	1487.1
27.5°	1425.3	1424.0	1425.3	1437.7	1441.8
30°	1374.5	1371.8	1375.9	1388.3	1392.4
32.5°	1319.6	1316.9	1323.7	1334.7	1340.2
35°	1264.7	1261.9	1266.0	1279.8	1281.2
37.5°	1208.4	1201.5	1208.4	1220.7	1222.1
40°	1146.6	1141.1	1149.3	1154.8	1160.3
42.5°	1083.4	1080.7	1084.8	1094.4	1094.4
45°	1024.4	1016.1	1021.6	1027.1	1034.0
47.5°	958.5	954.3	957.1	961.2	964.0
50°	895.3	888.4	889.8	893.9	896.7
52.5°	836.2	822.5	822.5	825.3	825.3
55°	766.2	756.6	756.6	756.6	753.9
57.5°	704.4	692.1	690.7	690.7	690.7
60°	639.9	624.8	620.7	620.7	617.9
62.5°	575.4	561.6	556.1	550.6	550.6
65°	510.8	495.7	488.8	483.3	482.0
67.5°	444.9	433.9	425.7	418.8	411.9
70°	383.1	370.8	359.8	352.9	352.9
72.5°	325.4	311.7	300.7	292.5	288.4
75°	266.4	251.3	240.3	233.4	227.9
77.5°	214.2	197.7	186.7	177.1	171.6
80°	156.5	144.2	134.6	125.0	122.2
82.5°	108.5	98.9	87.9	81.0	78.3
85°	64.5	54.9	46.7	38.4	37.1
87.5°	26.1	19.2	15.1	15.1	15.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)