

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: P229769

Luminaire Tested: **24RLN-LD5-45-UNV-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229769
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-L940-CD1-U
Description: METALUX 2X4 RLN LED TROFFER
Light Source: (252)4000K CCT, 90 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4017.0 lumens
Efficiency: N/A
Efficacy: 118.1 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

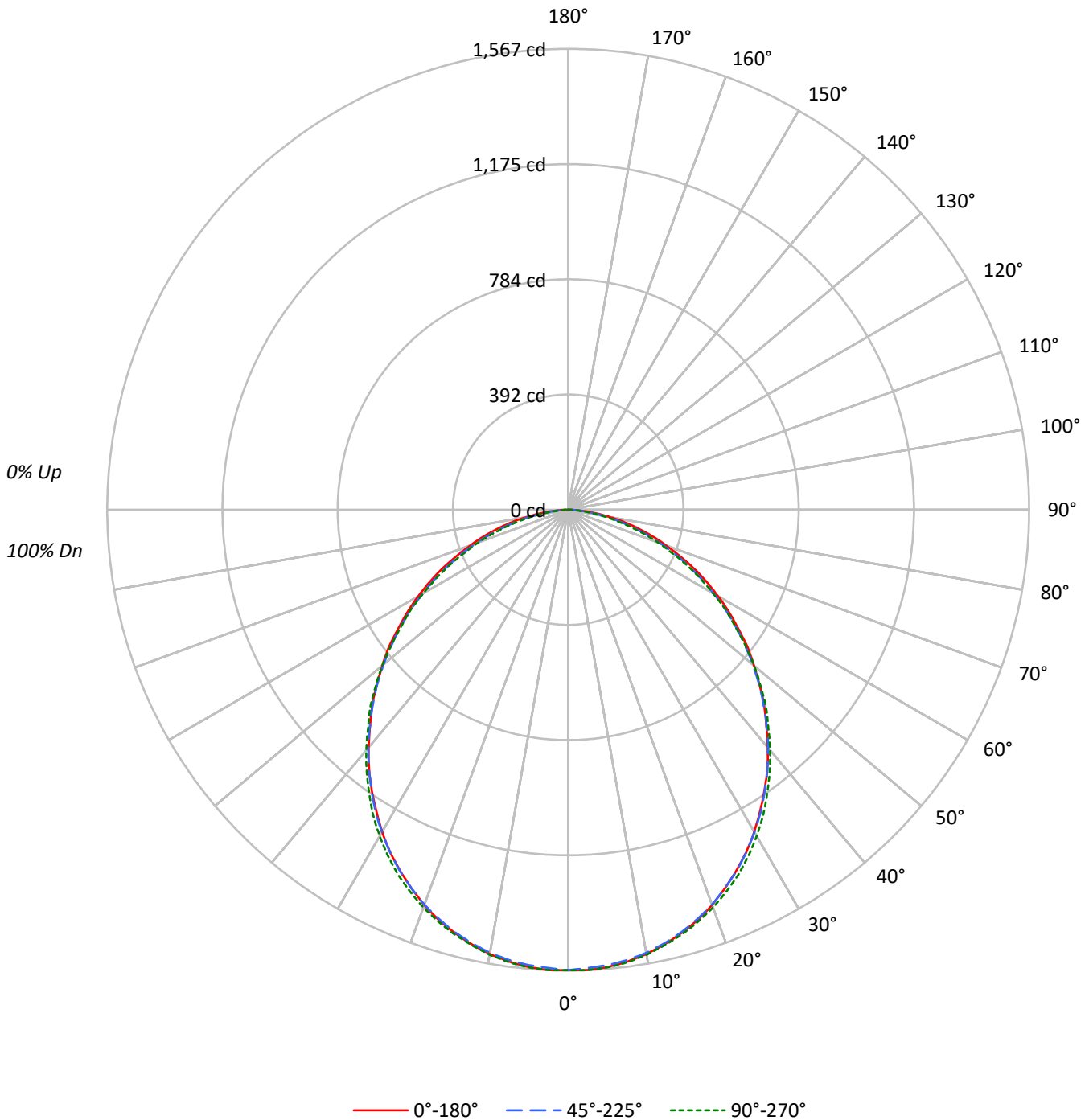
Input Watts (W): 34
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2398	2398	2398
5°	2399	2390	2401
10°	2386	2380	2390
15°	2363	2358	2370
20°	2332	2330	2346
25°	2287	2289	2313
30°	2237	2239	2266
35°	2176	2179	2205
40°	2110	2115	2135
45°	2042	2037	2061
50°	1963	1951	1966
55°	1883	1859	1853
60°	1804	1750	1742
65°	1704	1631	1608
70°	1579	1483	1455
75°	1451	1308	1242
80°	1271	1092	992
85°	1044	756	599



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.9	3.7
10°-20°	420.3	10.5
20°-30°	625.3	15.6
30°-40°	730.6	18.2
40°-50°	726.2	18.1
50°-60°	624.0	15.5
60°-70°	448.1	11.2
70°-80°	238.7	5.9
80°-90°	55.9	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°	1193.5	29.7
0°-40°	1924.0	47.9
0°-60°	3274.3	81.5
0°-90°	4017.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4017.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1566	1566	1566	1566	1566	
5°	1561	1558	1554	1559	1562	148
15°	1490	1490	1487	1492	1495	420
25°	1353	1353	1355	1365	1369	623
35°	1164	1161	1165	1178	1179	728
45°	943	935	940	945	952	726
55°	705	696	696	696	694	633
65°	470	456	450	445	444	465
75°	245	231	221	215	210	261
85°	59	50	43	35	34	69
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1565.7	1565.7	1565.7	1565.7	1565.7
2.5°	1567.0	1564.4	1559.4	1565.7	1567.0
5°	1560.6	1558.1	1554.3	1559.4	1561.9
7.5°	1549.3	1546.7	1544.2	1549.3	1551.8
10°	1534.1	1532.8	1530.3	1536.6	1536.6
12.5°	1513.9	1512.6	1510.1	1516.4	1516.4
15°	1489.9	1489.9	1487.3	1492.4	1494.9
17.5°	1463.3	1462.1	1459.5	1465.9	1468.4
20°	1430.5	1430.5	1429.2	1436.8	1439.3
22.5°	1392.6	1392.6	1392.6	1402.7	1405.2
25°	1353.4	1353.4	1354.7	1364.8	1368.6
27.5°	1311.7	1310.4	1311.7	1323.1	1326.9
30°	1264.9	1262.4	1266.2	1277.6	1281.4
32.5°	1214.4	1211.9	1218.2	1228.3	1233.3
35°	1163.8	1161.3	1165.1	1177.7	1179.0
37.5°	1112.0	1105.7	1112.0	1123.4	1124.7
40°	1055.2	1050.1	1057.7	1062.8	1067.8
42.5°	997.0	994.5	998.3	1007.2	1007.2
45°	942.7	935.1	940.2	945.2	951.5
47.5°	882.0	878.3	880.8	884.6	887.1
50°	823.9	817.6	818.9	822.7	825.2
52.5°	769.6	756.9	756.9	759.5	759.5
55°	705.1	696.3	696.3	696.3	693.8
57.5°	648.3	636.9	635.6	635.6	635.6
60°	588.9	575.0	571.2	571.2	568.7
62.5°	529.5	516.8	511.8	506.7	506.7
65°	470.1	456.2	449.9	444.8	443.6
67.5°	409.4	399.3	391.7	385.4	379.1
70°	352.6	341.2	331.1	324.8	324.8
72.5°	299.5	286.9	276.7	269.2	265.4
75°	245.2	231.3	221.1	214.8	209.8
77.5°	197.1	182.0	171.9	163.0	158.0
80°	144.1	132.7	123.8	115.0	112.5
82.5°	99.8	91.0	80.9	74.6	72.0
85°	59.4	50.5	43.0	35.4	34.1
87.5°	24.0	17.7	13.9	13.9	13.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)