

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: P229768

Luminaire Tested: **24RLN-LD5-42-UNV-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229768
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-LD5-42-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: 3717.0 lumens
Efficiency: N/A
Efficacy: 119.1 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

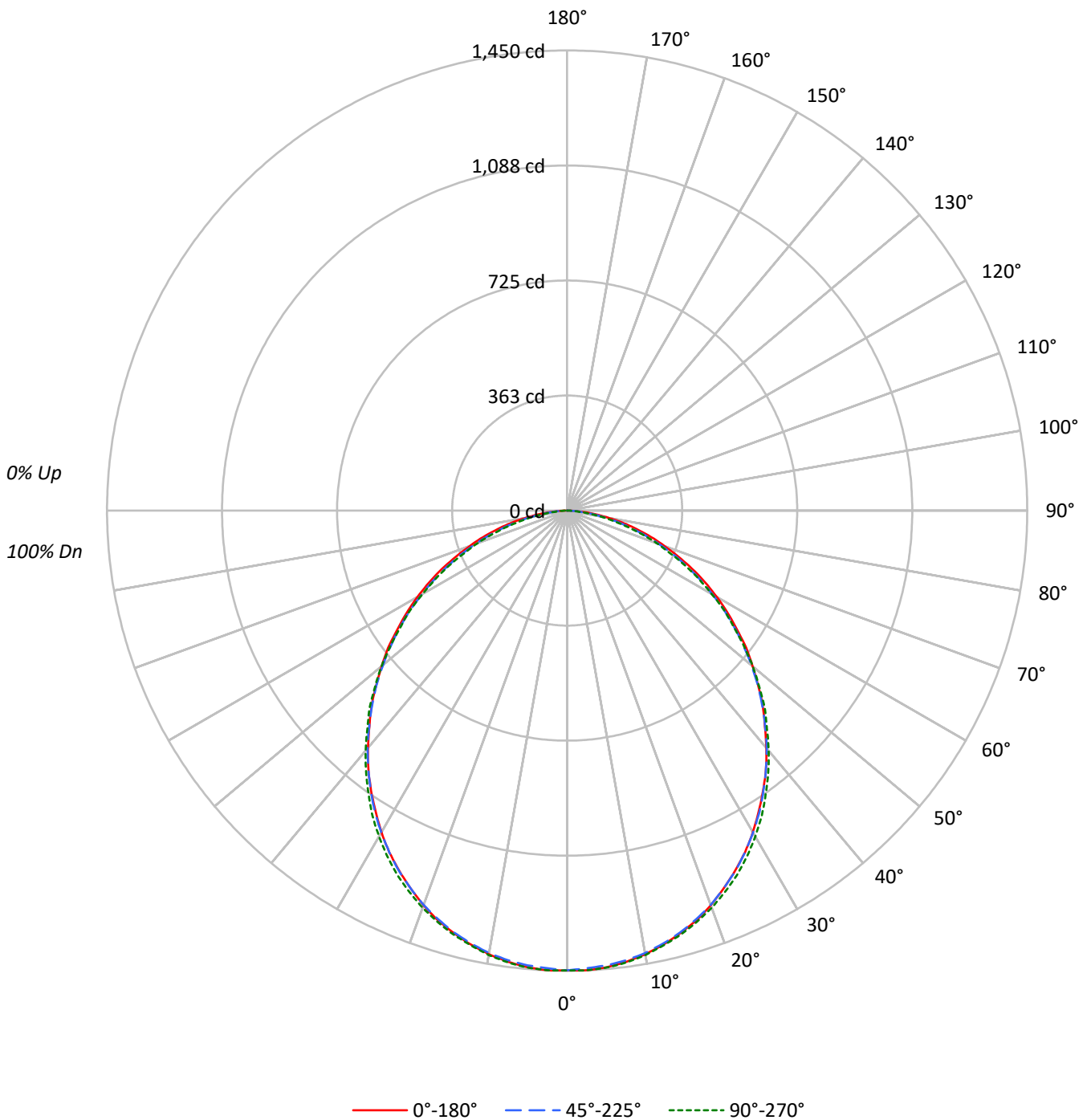
Input Watts (W): 31.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2219	2219	2219
5°	2220	2211	2222
10°	2208	2202	2211
15°	2186	2182	2193
20°	2158	2156	2171
25°	2116	2118	2140
30°	2070	2072	2097
35°	2014	2016	2040
40°	1952	1957	1976
45°	1889	1885	1907
50°	1817	1805	1820
55°	1742	1721	1714
60°	1669	1619	1612
65°	1577	1509	1487
70°	1461	1372	1346
75°	1342	1211	1149
80°	1176	1011	918
85°	967	699	555



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.9	3.7
10°-20°	388.9	10.5
20°-30°	578.6	15.6
30°-40°	676.0	18.2
40°-50°	672.0	18.1
50°-60°	577.4	15.5
60°-70°	414.7	11.2
70°-80°	220.8	5.9
80°-90°	51.7	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°	1104.4	29.7
0°-40°	1780.4	47.9
0°-60°	3029.8	81.5
0°-90°	3717.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3717.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1449	1449	1449	1449	1449	
5°	1444	1442	1438	1443	1445	137
15°	1379	1379	1376	1381	1383	389
25°	1252	1252	1254	1263	1266	577
35°	1077	1075	1078	1090	1091	673
45°	872	865	870	875	880	672
55°	652	644	644	644	642	585
65°	435	422	416	412	410	430
75°	227	214	205	199	194	242
85°	55	47	40	33	32	64
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1448.8	1448.8	1448.8	1448.8	1448.8
2.5°	1449.9	1447.6	1442.9	1448.8	1449.9
5°	1444.1	1441.8	1438.2	1442.9	1445.3
7.5°	1433.6	1431.2	1428.9	1433.6	1435.9
10°	1419.5	1418.4	1416.0	1421.9	1421.9
12.5°	1400.8	1399.7	1397.3	1403.2	1403.2
15°	1378.6	1378.6	1376.3	1380.9	1383.3
17.5°	1354.1	1352.9	1350.5	1356.4	1358.7
20°	1323.7	1323.7	1322.5	1329.5	1331.8
22.5°	1288.6	1288.6	1288.6	1297.9	1300.3
25°	1252.3	1252.3	1253.5	1262.8	1266.4
27.5°	1213.7	1212.6	1213.7	1224.3	1227.8
30°	1170.5	1168.1	1171.6	1182.2	1185.7
32.5°	1123.7	1121.4	1127.2	1136.6	1141.2
35°	1076.9	1074.6	1078.1	1089.8	1091.0
37.5°	1029.0	1023.1	1029.0	1039.5	1040.7
40°	976.4	971.7	978.7	983.4	988.1
42.5°	922.6	920.2	923.7	931.9	931.9
45°	872.3	865.3	870.0	874.6	880.5
47.5°	816.2	812.7	815.0	818.5	820.9
50°	762.4	756.5	757.7	761.2	763.6
52.5°	712.1	700.4	700.4	702.8	702.8
55°	652.5	644.3	644.3	644.3	641.9
57.5°	599.9	589.3	588.2	588.2	588.2
60°	544.9	532.0	528.5	528.5	526.2
62.5°	489.9	478.2	473.6	468.9	468.9
65°	435.0	422.1	416.3	411.6	410.4
67.5°	378.9	369.5	362.5	356.6	350.8
70°	326.2	315.7	306.4	300.5	300.5
72.5°	277.1	265.4	256.1	249.1	245.6
75°	226.8	214.0	204.6	198.8	194.1
77.5°	182.4	168.4	159.0	150.8	146.2
80°	133.3	122.8	114.6	106.4	104.1
82.5°	92.4	84.2	74.8	69.0	66.7
85°	55.0	46.8	39.8	32.7	31.6
87.5°	22.2	16.4	12.9	12.9	12.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)