

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: P229800

Luminaire Tested: **24RLN-LD5-50-RDP-UNV-L840-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229800
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36059)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24RLN-LD5-50-RDP-UNV-L840-CD1-U
Description: METALUX 2X4 RLN LED TROFFER WITH RDP LENS
Light Source: (252)4000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4146.0 lumens
Efficiency: N/A
Efficacy: 109.7 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

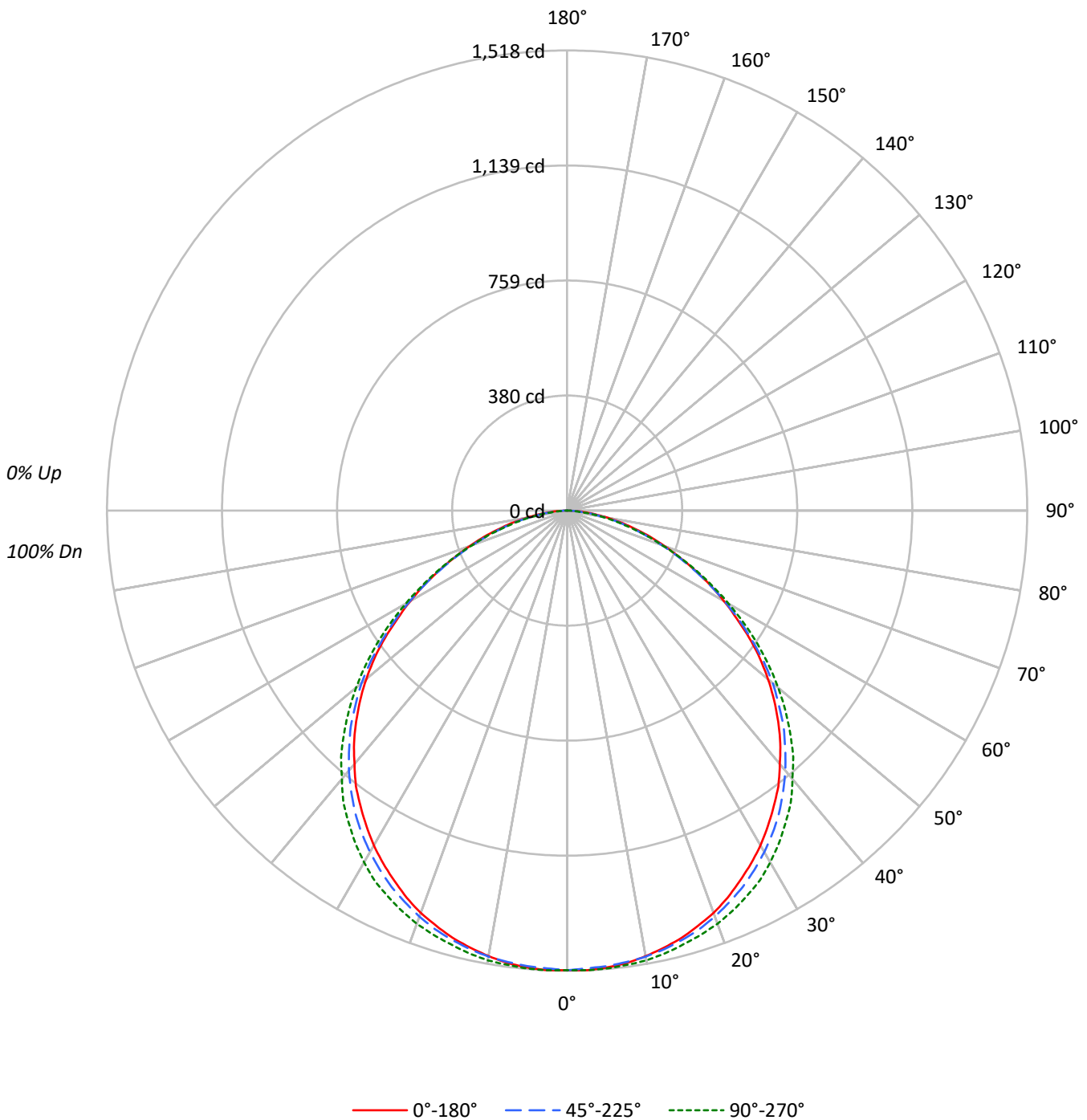
Input Watts (W): 37.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	90	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	66	63	60
4	83	72	63	57	81	70	62	56	68	61	55	66	60	55	63	58	54	52
5	77	64	55	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	53	47	42	52	46	41	39
7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35
8	61	48	39	34	60	47	39	34	46	39	33	45	38	33	43	37	33	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	27	52	40	33	27	39	32	27	38	32	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2322	2322	2322
5°	2326	2319	2331
10°	2321	2324	2344
15°	2314	2324	2349
20°	2302	2323	2364
25°	2278	2315	2371
30°	2256	2300	2370
35°	2223	2279	2350
40°	2182	2239	2311
45°	2133	2187	2255
50°	2061	2110	2166
55°	1961	1986	2046
60°	1831	1840	1889
65°	1682	1670	1710
70°	1528	1486	1493
75°	1359	1285	1275
80°	1179	1054	1027
85°	967	747	580



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.8	3.5
10°-20°	414.5	10.0
20°-30°	632.8	15.3
30°-40°	762.8	18.4
40°-50°	777.9	18.8
50°-60°	665.7	16.1
60°-70°	458.6	11.1
70°-80°	235.1	5.7
80°-90°	54.7	1.3
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
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0°-30°	1191.1	28.7
0°-40°	1953.9	47.1
0°-60°	3397.6	81.9
0°-90°	4146.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4146.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1516	1516	1516	1516	1516	
5°	1513	1510	1508	1513	1516	144
15°	1460	1458	1466	1477	1482	412
25°	1348	1353	1370	1394	1403	622
35°	1189	1194	1219	1246	1257	744
45°	985	986	1010	1035	1041	759
55°	734	730	744	760	766	655
65°	464	453	461	464	472	461
75°	230	220	217	217	216	248
85°	55	49	42	38	33	64
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1516.2	1516.2	1516.2	1516.2	1516.2
2.5°	1517.8	1514.6	1511.5	1514.6	1517.8
5°	1513.1	1509.9	1508.3	1513.1	1516.2
7.5°	1505.2	1502.1	1502.1	1508.3	1511.5
10°	1492.6	1491.0	1494.2	1500.5	1506.8
12.5°	1476.9	1476.9	1481.6	1489.5	1495.8
15°	1459.6	1458.0	1465.9	1476.9	1481.6
17.5°	1436.0	1437.6	1448.6	1461.2	1467.5
20°	1412.4	1414.0	1425.0	1442.3	1450.1
22.5°	1382.5	1385.7	1398.2	1420.3	1428.1
25°	1347.9	1352.6	1369.9	1393.5	1403.0
27.5°	1313.3	1318.0	1336.9	1363.6	1376.2
30°	1275.6	1281.9	1300.7	1329.0	1340.1
32.5°	1233.1	1237.8	1261.4	1289.7	1300.7
35°	1189.1	1193.8	1218.9	1245.7	1256.7
37.5°	1145.0	1145.0	1170.2	1201.6	1212.7
40°	1091.5	1093.1	1119.9	1149.7	1156.0
42.5°	1041.2	1041.2	1064.8	1093.1	1104.1
45°	984.6	986.2	1009.8	1034.9	1041.2
47.5°	926.4	926.4	946.8	970.4	976.7
50°	865.1	861.9	885.5	904.4	909.1
52.5°	802.1	797.4	816.3	832.0	838.3
55°	734.5	729.8	743.9	759.7	766.0
57.5°	663.7	657.4	673.2	687.3	690.5
60°	597.7	588.2	600.8	608.7	616.5
62.5°	531.6	520.6	530.0	534.8	541.1
65°	464.0	453.0	460.8	464.0	471.8
67.5°	399.5	391.6	393.2	397.9	401.1
70°	341.3	331.9	331.9	331.9	333.4
72.5°	287.8	273.7	272.1	273.7	273.7
75°	229.6	220.2	217.1	217.1	215.5
77.5°	184.0	171.4	169.9	166.7	163.6
80°	133.7	122.7	119.5	118.0	116.4
82.5°	92.8	83.4	80.2	77.1	72.4
85°	55.0	48.8	42.5	37.7	33.0
87.5°	20.4	18.9	15.7	14.2	14.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)