

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: P229832

Luminaire Tested: **24RLN-LD5-60-RDP-UNV-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229832
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-LD5-60-RDP-UNV-L940-CD1-U
Description: METALUX 2X4 RLN LED TROFFER WITH RDP LENS
Light Source: (252)4000K CCT, 90 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4394.0 lumens
Efficiency: N/A
Efficacy: 92.1 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

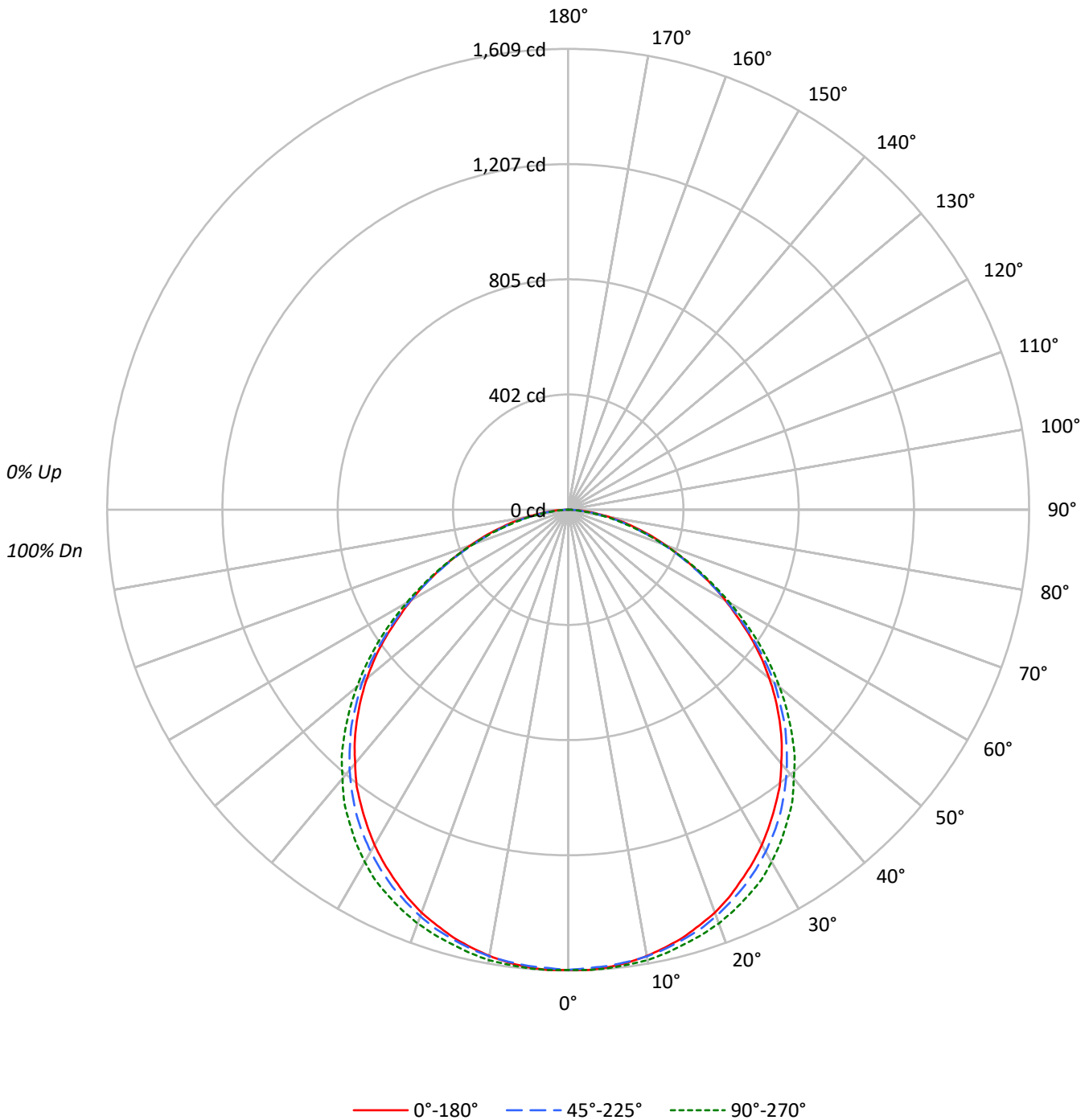
Input Watts (W): 47.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2461	2461	2461
5°	2466	2458	2471
10°	2460	2463	2484
15°	2453	2464	2490
20°	2440	2462	2505
25°	2414	2454	2513
30°	2391	2438	2512
35°	2356	2416	2490
40°	2313	2373	2450
45°	2260	2318	2390
50°	2185	2236	2296
55°	2079	2105	2168
60°	1940	1951	2002
65°	1782	1770	1812
70°	1620	1575	1583
75°	1440	1361	1352
80°	1250	1118	1088
85°	1025	791	615



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	152.4	3.5
10°-20°	439.3	10.0
20°-30°	670.6	15.3
30°-40°	808.5	18.4
40°-50°	824.5	18.8
50°-60°	705.6	16.1
60°-70°	486.0	11.1
70°-80°	249.1	5.7
80°-90°	58.0	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
0°-30°	1262.3	28.7
0°-40°	2070.8	47.1
0°-60°	3600.8	81.9
0°-90°	4394.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4394.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1607	1607	1607	1607	1607	
5°	1604	1600	1599	1604	1607	152
15°	1547	1545	1554	1565	1570	436
25°	1428	1434	1452	1477	1487	659
35°	1260	1265	1292	1320	1332	788
45°	1044	1045	1070	1097	1104	804
55°	778	773	788	805	812	694
65°	492	480	488	492	500	489
75°	243	233	230	230	228	262
85°	58	52	45	40	35	68
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1606.9	1606.9	1606.9	1606.9	1606.9
2.5°	1608.6	1605.2	1601.9	1605.2	1608.6
5°	1603.6	1600.2	1598.6	1603.6	1606.9
7.5°	1595.2	1591.9	1591.9	1598.6	1601.9
10°	1581.9	1580.2	1583.6	1590.2	1596.9
12.5°	1565.2	1565.2	1570.2	1578.6	1585.2
15°	1546.9	1545.2	1553.6	1565.2	1570.2
17.5°	1521.9	1523.6	1535.2	1548.6	1555.2
20°	1496.9	1498.6	1510.2	1528.6	1536.9
22.5°	1465.2	1468.5	1481.9	1505.2	1513.6
25°	1428.5	1433.5	1451.9	1476.9	1486.9
27.5°	1391.9	1396.9	1416.9	1445.2	1458.5
30°	1351.9	1358.5	1378.5	1408.5	1420.2
32.5°	1306.9	1311.9	1336.9	1366.9	1378.5
35°	1260.2	1265.2	1291.9	1320.2	1331.9
37.5°	1213.5	1213.5	1240.2	1273.5	1285.2
40°	1156.8	1158.5	1186.8	1218.5	1225.2
42.5°	1103.5	1103.5	1128.5	1158.5	1170.2
45°	1043.5	1045.2	1070.2	1096.8	1103.5
47.5°	981.8	981.8	1003.5	1028.5	1035.2
50°	916.8	913.5	938.5	958.5	963.5
52.5°	850.1	845.1	865.1	881.8	888.5
55°	778.4	773.4	788.4	805.1	811.8
57.5°	703.4	696.8	713.4	728.4	731.8
60°	633.4	623.4	636.8	645.1	653.4
62.5°	563.4	551.7	561.7	566.7	573.4
65°	491.7	480.1	488.4	491.7	500.1
67.5°	423.4	415.1	416.7	421.7	425.1
70°	361.7	351.7	351.7	351.7	353.4
72.5°	305.0	290.0	288.4	290.0	290.0
75°	243.4	233.4	230.0	230.0	228.4
77.5°	195.0	181.7	180.0	176.7	173.4
80°	141.7	130.0	126.7	125.0	123.4
82.5°	98.3	88.3	85.0	81.7	76.7
85°	58.3	51.7	45.0	40.0	35.0
87.5°	21.7	20.0	16.7	15.0	15.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)