

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: P229724

Luminaire Tested: **24RLN-LD5-74-UNV-L830-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229724
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-LD5-74-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: 7136.0 lumens
Efficiency: N/A
Efficacy: 115.8 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

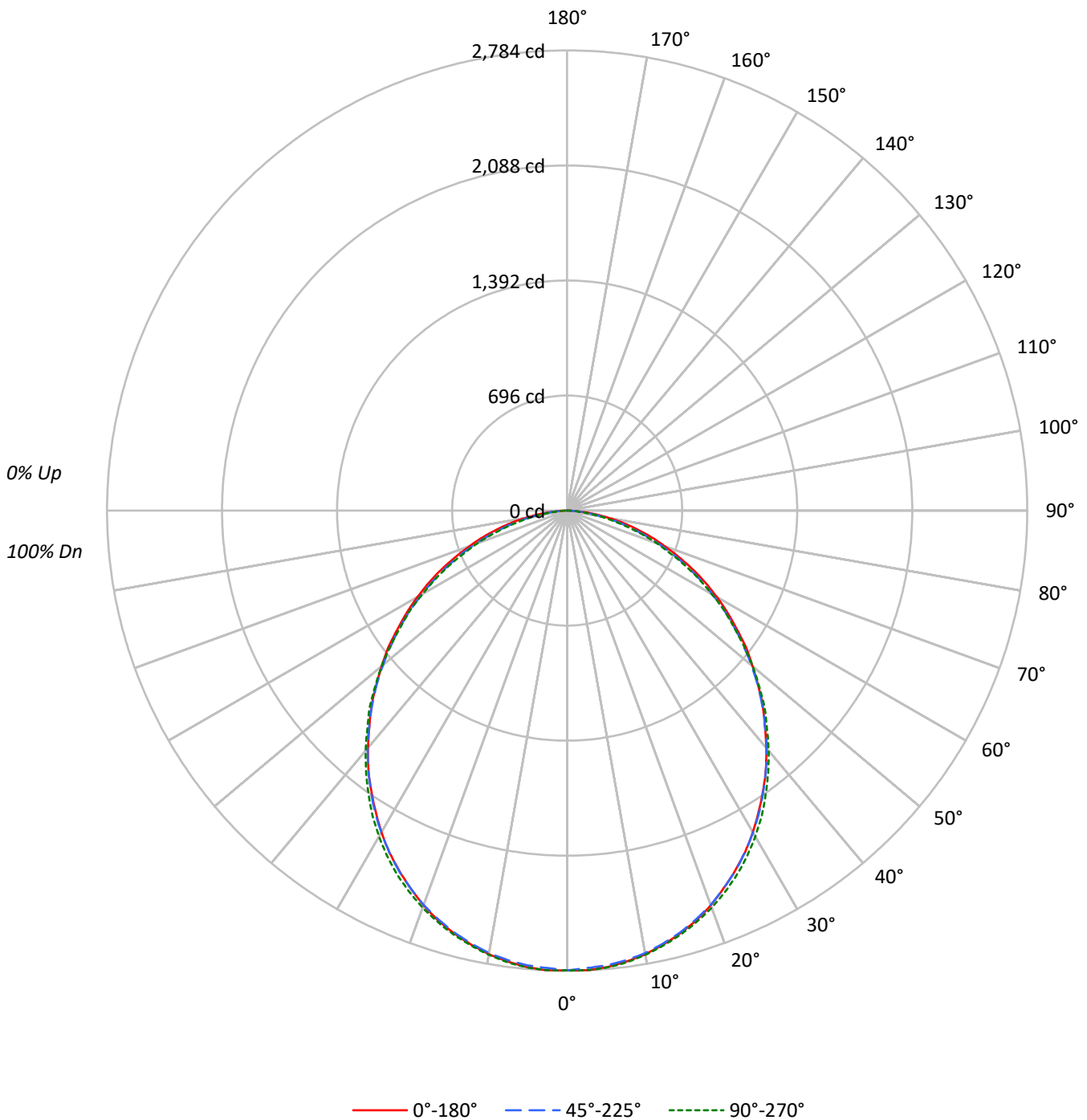
Input Watts (W): 61.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4260	4260	4260
5°	4263	4245	4266
10°	4239	4228	4245
15°	4197	4190	4211
20°	4142	4138	4168
25°	4063	4067	4109
30°	3974	3978	4026
35°	3866	3870	3916
40°	3748	3757	3793
45°	3628	3618	3662
50°	3488	3466	3493
55°	3345	3303	3291
60°	3205	3108	3095
65°	3027	2896	2856
70°	2805	2634	2584
75°	2577	2325	2205
80°	2257	1941	1762
85°	1854	1341	1065



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	262.8	3.7
10°-20°	746.6	10.5
20°-30°	1110.8	15.6
30°-40°	1297.8	18.2
40°-50°	1290.1	18.1
50°-60°	1108.5	15.5
60°-70°	796.1	11.2
70°-80°	424.0	5.9
80°-90°	99.3	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°	2120.2	29.7
0°-40°	3418.0	47.9
0°-60°	5816.6	81.5
0°-90°	7136.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7136.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2781	2781	2781	2781	2781	
5°	2772	2768	2761	2770	2775	263
15°	2647	2647	2642	2651	2656	746
25°	2404	2404	2406	2424	2431	1107
35°	2068	2063	2070	2092	2094	1293
45°	1675	1661	1670	1679	1690	1289
55°	1253	1237	1237	1237	1232	1124
65°	835	810	799	790	788	826
75°	436	411	393	382	373	464
85°	106	90	76	63	61	123
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2781.4	2781.4	2781.4	2781.4	2781.4
2.5°	2783.6	2779.1	2770.2	2781.4	2783.6
5°	2772.4	2767.9	2761.2	2770.2	2774.6
7.5°	2752.2	2747.7	2743.2	2752.2	2756.7
10°	2725.3	2723.0	2718.5	2729.7	2729.7
12.5°	2689.3	2687.1	2682.6	2693.8	2693.8
15°	2646.7	2646.7	2642.2	2651.2	2655.7
17.5°	2599.5	2597.3	2592.8	2604.0	2608.5
20°	2541.2	2541.2	2538.9	2552.4	2556.9
22.5°	2473.8	2473.8	2473.8	2491.8	2496.3
25°	2404.2	2404.2	2406.5	2424.4	2431.2
27.5°	2330.2	2327.9	2330.2	2350.4	2357.1
30°	2247.1	2242.6	2249.3	2269.6	2276.3
32.5°	2157.3	2152.8	2164.0	2182.0	2191.0
35°	2067.5	2063.0	2069.8	2092.2	2094.5
37.5°	1975.5	1964.3	1975.5	1995.7	1997.9
40°	1874.5	1865.5	1878.9	1887.9	1896.9
42.5°	1771.2	1766.7	1773.4	1789.2	1789.2
45°	1674.7	1661.2	1670.2	1679.2	1690.4
47.5°	1566.9	1560.2	1564.7	1571.4	1575.9
50°	1463.6	1452.4	1454.7	1461.4	1465.9
52.5°	1367.1	1344.7	1344.7	1349.2	1349.2
55°	1252.6	1236.9	1236.9	1236.9	1232.4
57.5°	1151.6	1131.4	1129.2	1129.2	1129.2
60°	1046.1	1021.4	1014.7	1014.7	1010.2
62.5°	940.6	918.1	909.2	900.2	900.2
65°	835.1	810.4	799.2	790.2	787.9
67.5°	727.3	709.4	695.9	684.7	673.5
70°	626.3	606.1	588.2	576.9	576.9
72.5°	532.0	509.6	491.6	478.2	471.4
75°	435.5	410.8	392.9	381.6	372.6
77.5°	350.2	323.3	305.3	289.6	280.6
80°	255.9	235.7	220.0	204.3	199.8
82.5°	177.3	161.6	143.7	132.4	128.0
85°	105.5	89.8	76.3	62.9	60.6
87.5°	42.7	31.4	24.7	24.7	24.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)