

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: P229477

Luminaire Tested: **14RLN-LD5-23-UNV-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229477
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36058)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14RLN-LD5-23-UNV-L940-CD1-U
Description: METALUX 1X4 RLN LED TROFFER
Light Source: (112)4000K CCT, 90 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2096.0 lumens
Efficiency: N/A
Efficacy: 95.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.31
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')
CIE Type: Direct

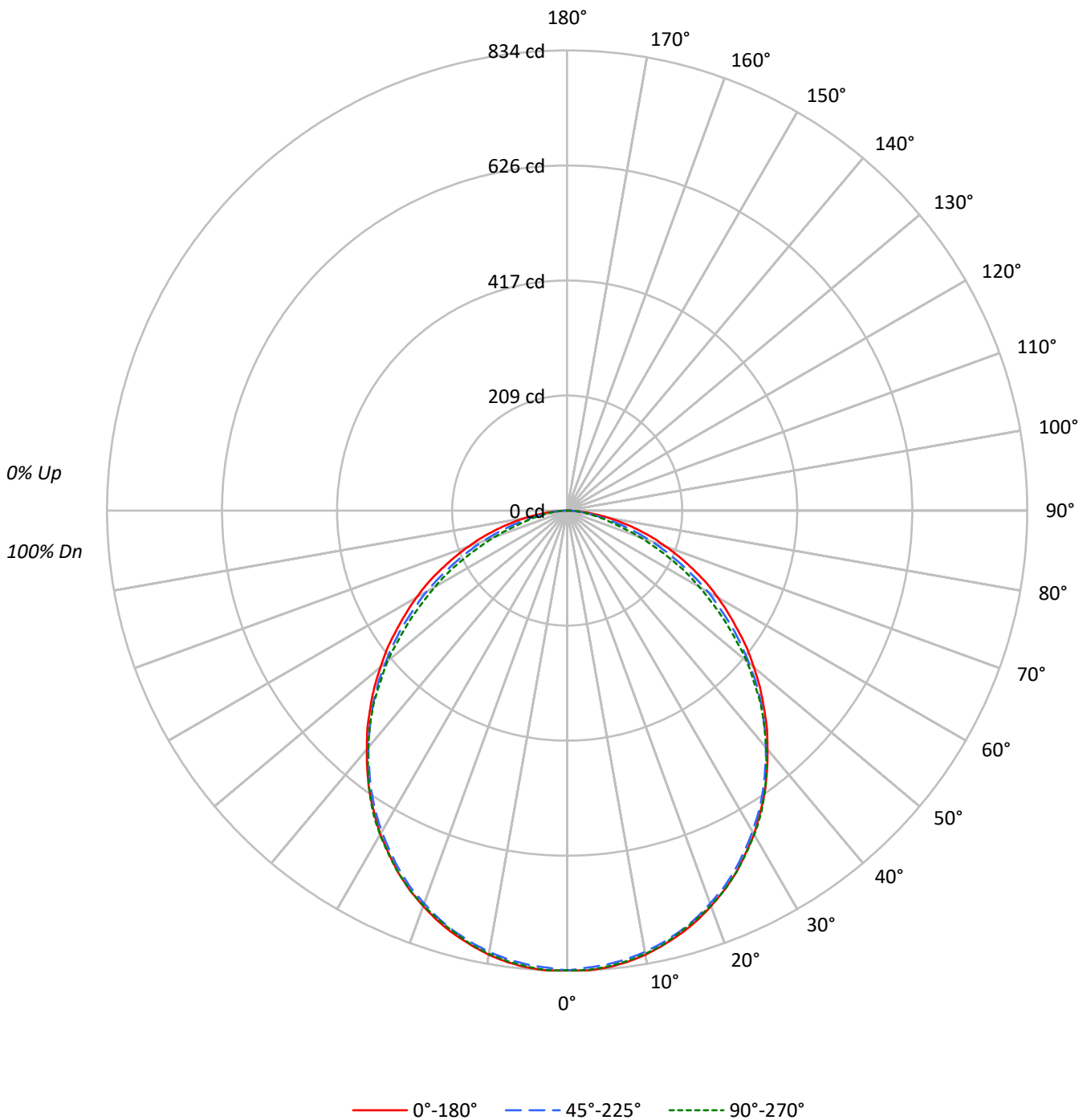
Input Watts (W): 21.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	103	99	96	98	95	93	95	92	90	91	89	87	85
2	100	92	86	80	97	90	84	79	87	82	77	84	79	76	81	77	74	72
3	91	81	74	67	89	80	73	67	77	71	66	74	69	64	72	67	63	61
4	84	72	64	57	82	71	63	57	69	62	56	66	60	56	64	59	55	53
5	77	65	56	50	75	64	56	50	62	55	49	60	53	48	58	52	48	46
6	72	59	50	44	70	58	49	43	56	49	43	54	48	43	53	47	42	40
7	66	53	45	39	65	52	44	39	51	44	38	50	43	38	48	42	38	36
8	62	49	40	35	60	48	40	35	47	40	34	45	39	34	44	38	34	32
9	58	45	37	31	57	44	36	31	43	36	31	42	36	31	41	35	31	29
10	54	41	34	28	53	41	33	28	40	33	28	39	33	28	38	32	28	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2808	2808	2808
5°	2812	2794	2806
10°	2797	2779	2791
15°	2771	2754	2760
20°	2735	2717	2731
25°	2692	2673	2692
30°	2635	2615	2639
35°	2568	2547	2568
40°	2485	2465	2467
45°	2403	2371	2364
50°	2314	2254	2230
55°	2218	2127	2049
60°	2124	1985	1864
65°	2008	1795	1642
70°	1872	1593	1380
75°	1716	1334	1066
80°	1479	999	920
85°	1195	835	854



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.7	3.8
10°-20°	223.3	10.7
20°-30°	332.5	15.9
30°-40°	388.6	18.5
40°-50°	384.0	18.3
50°-60°	324.3	15.5
60°-70°	224.6	10.7
70°-80°	112.1	5.3
80°-90°	27.9	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°	634.5	30.3
0°-40°	1023.1	48.8
0°-60°	1731.4	82.6
0°-90°	2096.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2096.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	833	833	833	833	833	
5°	831	830	826	830	830	79
15°	794	793	790	793	791	224
25°	724	722	719	724	724	333
35°	624	621	619	624	624	390
45°	504	498	498	496	496	389
55°	378	371	362	354	349	338
65°	252	240	225	213	206	250
75°	132	120	102	89	82	139
85°	31	24	22	22	22	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	833.3	833.3	833.3	833.3	833.3
2.5°	834.3	832.8	829.2	833.3	833.8
5°	831.3	829.7	826.1	830.2	829.7
7.5°	825.6	823.5	820.4	824.0	824.0
10°	817.4	815.8	812.2	816.3	815.8
12.5°	806.5	805.5	801.9	806.0	805.5
15°	794.2	793.1	789.5	793.1	791.1
17.5°	779.8	779.2	775.1	777.7	777.2
20°	762.8	761.7	757.6	762.8	761.7
22.5°	744.7	742.7	740.1	744.2	744.7
25°	724.1	722.1	719.0	723.6	724.1
27.5°	700.4	698.9	695.8	702.5	701.5
30°	677.3	675.7	672.1	677.8	678.3
32.5°	650.5	648.9	646.4	652.0	653.1
35°	624.2	621.1	619.1	623.7	624.2
37.5°	594.9	591.8	589.7	594.3	593.3
40°	565.0	561.4	560.4	564.0	560.9
42.5°	535.6	531.0	528.9	531.0	528.9
45°	504.2	498.5	497.5	496.5	496.0
47.5°	473.8	467.6	465.1	461.5	458.9
50°	441.4	434.7	430.0	426.4	425.4
52.5°	411.0	403.3	396.6	393.5	385.2
55°	377.5	370.8	362.1	354.3	348.7
57.5°	346.1	337.3	327.0	318.8	311.6
60°	315.2	303.9	294.6	281.7	276.6
62.5°	284.8	271.9	259.1	245.2	242.6
65°	251.8	240.0	225.1	213.2	206.0
67.5°	220.4	208.1	193.7	177.2	170.5
70°	190.0	176.7	161.7	145.8	140.1
72.5°	160.7	147.3	131.8	114.9	108.2
75°	131.8	120.0	102.5	88.6	81.9
77.5°	102.5	92.7	75.7	64.4	63.3
80°	76.2	67.5	51.5	48.9	47.4
82.5°	52.5	44.3	36.6	35.0	34.0
85°	30.9	23.7	21.6	21.6	22.1
87.5°	11.8	10.3	10.3	10.3	10.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)