

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: P229509

Luminaire Tested: **14RLN-LD5-31-RDP-UNV-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229509
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36061)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14RLN-LD5-31-RDP-UNV-L940-CD1-U
Description: METALUX 1X4 RLN LED TROFFER WITH RDP LENS
Light Source: (112)4000K CCT, 90 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2368.0 lumens
Efficiency: N/A
Efficacy: 77.4 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.35 / 1.39
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')
CIE Type: Direct

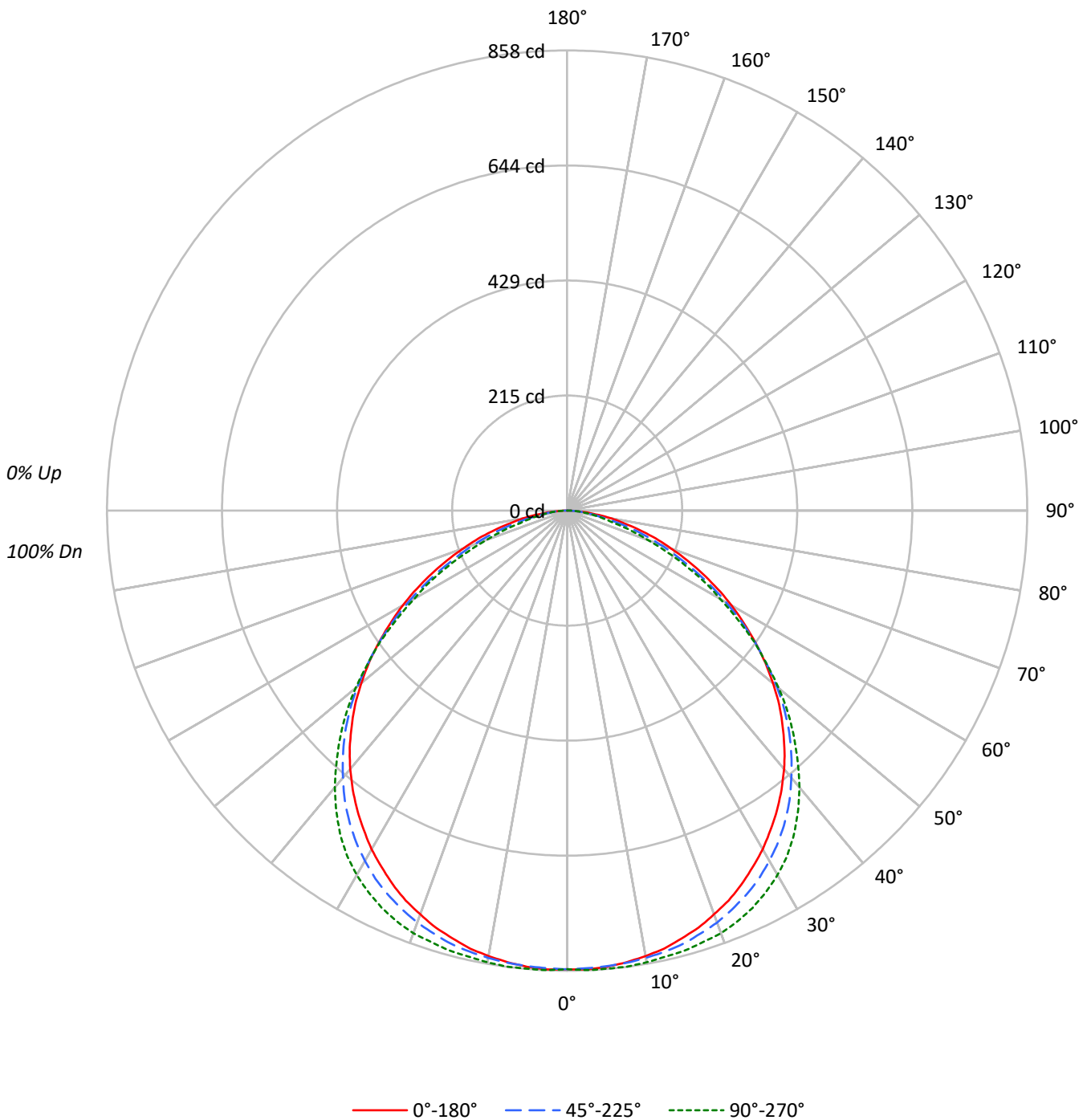
Input Watts (W): 30.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	103	99	96	98	95	93	94	92	90	91	89	87	85
2	100	92	85	80	97	90	84	79	87	81	77	83	79	75	80	77	74	72
3	91	81	73	67	89	79	72	66	77	70	65	74	68	64	71	67	63	61
4	84	72	63	57	81	71	63	57	68	61	56	66	60	55	64	59	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	61	48	40	34	60	47	39	34	46	39	34	45	38	33	44	38	33	31
9	57	44	36	30	56	44	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	28	53	40	33	28	39	32	27	38	32	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2882	2882	2882
5°	2889	2885	2900
10°	2886	2898	2926
15°	2881	2918	2963
20°	2873	2931	3007
25°	2860	2939	3039
30°	2838	2934	3053
35°	2807	2913	3034
40°	2768	2861	2965
45°	2708	2792	2853
50°	2627	2676	2701
55°	2516	2508	2494
60°	2386	2307	2220
65°	2223	2063	1951
70°	2029	1808	1576
75°	1823	1501	1180
80°	1620	1096	1027
85°	1272	909	909



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.4	3.4
10°-20°	236.6	10.0
20°-30°	365.1	15.4
30°-40°	442.8	18.7
40°-50°	449.6	19.0
50°-60°	380.3	16.1
60°-70°	257.3	10.9
70°-80°	124.4	5.3
80°-90°	30.4	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°	683.1	28.8
0°-40°	1125.9	47.5
0°-60°	1955.9	82.6
0°-90°	2368.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2368.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	855	855	855	855	855	
5°	854	854	853	856	858	81
15°	826	830	836	846	849	233
25°	769	775	790	810	818	354
35°	682	689	708	730	738	427
45°	568	569	586	598	599	438
55°	428	425	427	427	425	383
65°	279	267	259	248	245	276
75°	140	129	115	100	91	149
85°	33	26	24	24	24	39
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	855.2	855.2	855.2	855.2	855.2
2.5°	856.3	856.3	854.0	856.3	857.5
5°	854.0	854.0	852.8	856.3	857.5
7.5°	849.3	850.5	850.5	855.2	857.5
10°	843.4	845.8	846.9	854.0	855.2
12.5°	836.4	838.7	842.2	850.5	851.6
15°	825.8	830.5	836.4	845.8	849.3
17.5°	815.2	819.9	826.9	839.9	843.4
20°	801.1	806.9	817.5	832.8	838.7
22.5°	786.9	791.7	804.6	823.4	829.3
25°	769.3	775.2	790.5	810.5	817.5
27.5°	749.3	757.5	774.0	795.2	802.2
30°	729.3	736.4	754.0	777.5	784.6
32.5°	705.8	712.8	732.8	755.2	763.4
35°	682.3	689.3	708.1	730.5	737.5
37.5°	656.4	661.1	681.1	699.9	707.0
40°	629.3	632.9	650.5	669.3	674.0
42.5°	599.9	602.3	618.7	635.2	636.4
45°	568.2	569.3	585.8	597.6	598.7
47.5°	536.4	535.2	549.3	557.6	558.7
50°	501.1	501.1	510.5	515.2	515.2
52.5°	465.8	463.5	468.2	471.7	468.2
55°	428.2	424.6	427.0	427.0	424.6
57.5°	390.5	383.5	384.7	382.3	376.4
60°	354.1	345.8	342.3	334.1	329.4
62.5°	316.4	307.0	300.0	290.5	289.4
65°	278.8	267.0	258.8	248.2	244.7
67.5°	242.3	231.7	220.0	208.2	201.1
70°	205.9	194.1	183.5	168.2	160.0
72.5°	172.9	162.3	149.4	131.7	125.9
75°	140.0	129.4	115.3	100.0	90.6
77.5°	108.2	100.0	84.7	71.8	70.6
80°	83.5	74.1	56.5	52.9	52.9
82.5°	54.1	48.2	40.0	37.6	37.6
85°	32.9	25.9	23.5	23.5	23.5
87.5°	12.9	11.8	11.8	11.8	11.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)