

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: P229504

Luminaire Tested: **14RLN-LD5-31-RDP-UNV-L935-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229504  
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-L935-CD1-U  
Description: METALUX 1X4 RLN LED TROFFER WITH RDP LENS  
Light Source: (112)3500K CCT, 90 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2308.0 lumens  
Efficiency: N/A  
Efficacy: 75.4 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

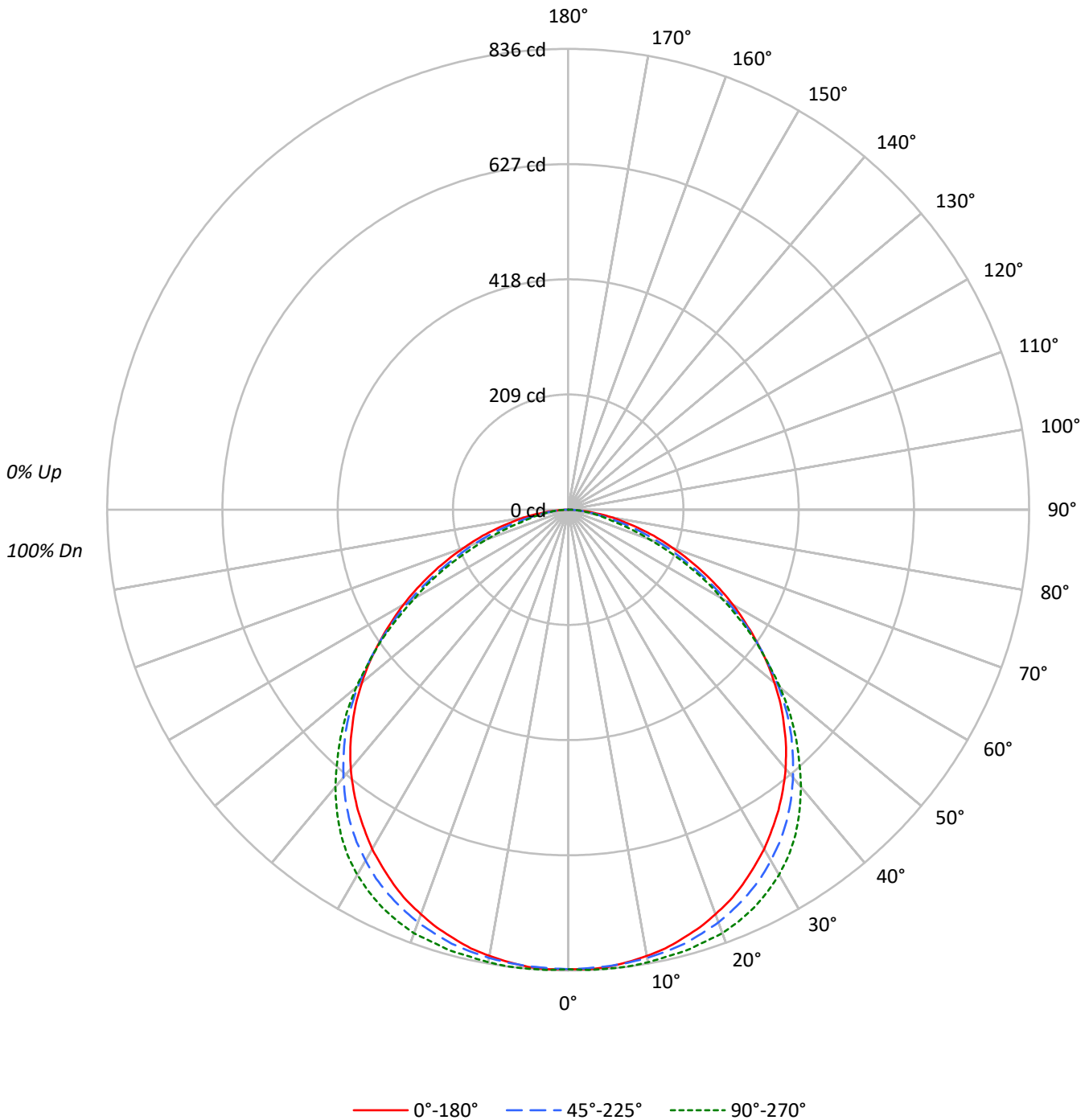
Input Watts (W): 30.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2809	2809	2809
5°	2816	2812	2827
10°	2813	2825	2852
15°	2808	2844	2888
20°	2800	2857	2931
25°	2788	2864	2962
30°	2766	2859	2975
35°	2735	2839	2957
40°	2698	2789	2889
45°	2639	2721	2781
50°	2560	2608	2633
55°	2452	2445	2432
60°	2326	2248	2163
65°	2166	2011	1902
70°	1976	1763	1536
75°	1776	1463	1150
80°	1580	1067	1001
85°	1241	885	885



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	79.3	3.4
10°-20°	230.6	10.0
20°-30°	355.9	15.4
30°-40°	431.6	18.7
40°-50°	438.2	19.0
50°-60°	370.7	16.1
60°-70°	250.8	10.9
70°-80°	121.3	5.3
80°-90°	29.6	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°	665.8	28.8
0°-40°	1097.4	47.5
0°-60°	1906.3	82.6
0°-90°	2308.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2308.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	834	834	834	834	834	
5°	832	832	831	835	836	79
15°	805	809	815	824	828	227
25°	750	756	770	790	797	345
35°	665	672	690	712	719	416
45°	554	555	571	582	584	427
55°	417	414	416	416	414	373
65°	272	260	252	242	238	269
75°	136	126	112	98	88	145
85°	32	25	23	23	23	38
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	833.5	833.5	833.5	833.5	833.5
2.5°	834.6	834.6	832.4	834.6	835.8
5°	832.4	832.4	831.2	834.6	835.8
7.5°	827.8	828.9	828.9	833.5	835.8
10°	822.0	824.3	825.5	832.4	833.5
12.5°	815.2	817.5	820.9	828.9	830.1
15°	804.8	809.4	815.2	824.3	827.8
17.5°	794.5	799.1	806.0	818.6	822.0
20°	780.8	786.5	796.8	811.7	817.5
22.5°	767.0	771.6	784.2	802.5	808.3
25°	749.8	755.5	770.4	789.9	796.8
27.5°	730.3	738.3	754.4	775.0	781.9
30°	710.8	717.7	734.9	757.8	764.7
32.5°	687.9	694.8	714.3	736.1	744.1
35°	665.0	671.8	690.2	712.0	718.9
37.5°	639.7	644.3	663.8	682.2	689.0
40°	613.4	616.8	634.0	652.4	656.9
42.5°	584.7	587.0	603.1	619.1	620.3
45°	553.8	554.9	571.0	582.4	583.6
47.5°	522.8	521.7	535.4	543.4	544.6
50°	488.4	488.4	497.6	502.2	502.2
52.5°	454.0	451.7	456.3	459.7	456.3
55°	417.3	413.9	416.2	416.2	413.9
57.5°	380.6	373.8	374.9	372.6	366.9
60°	345.1	337.1	333.6	325.6	321.0
62.5°	308.4	299.2	292.4	283.2	282.0
65°	271.7	260.3	252.2	241.9	238.5
67.5°	236.2	225.9	214.4	202.9	196.1
70°	200.6	189.2	178.9	163.9	155.9
72.5°	168.5	158.2	145.6	128.4	122.7
75°	136.4	126.1	112.4	97.5	88.3
77.5°	105.5	97.5	82.5	69.9	68.8
80°	81.4	72.2	55.0	51.6	51.6
82.5°	52.7	47.0	39.0	36.7	36.7
85°	32.1	25.2	22.9	22.9	22.9
87.5°	12.6	11.5	11.5	11.5	11.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)