

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: P229499

Luminaire Tested: **14RLN-LD5-31-RDP-UNV-L930-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229499  
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-L930-CD1-U  
Description: METALUX 1X4 RLN LED TROFFER WITH RDP LENS  
Light Source: (112)3000K CCT, 90 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2225.0 lumens  
Efficiency: N/A  
Efficacy: 72.7 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

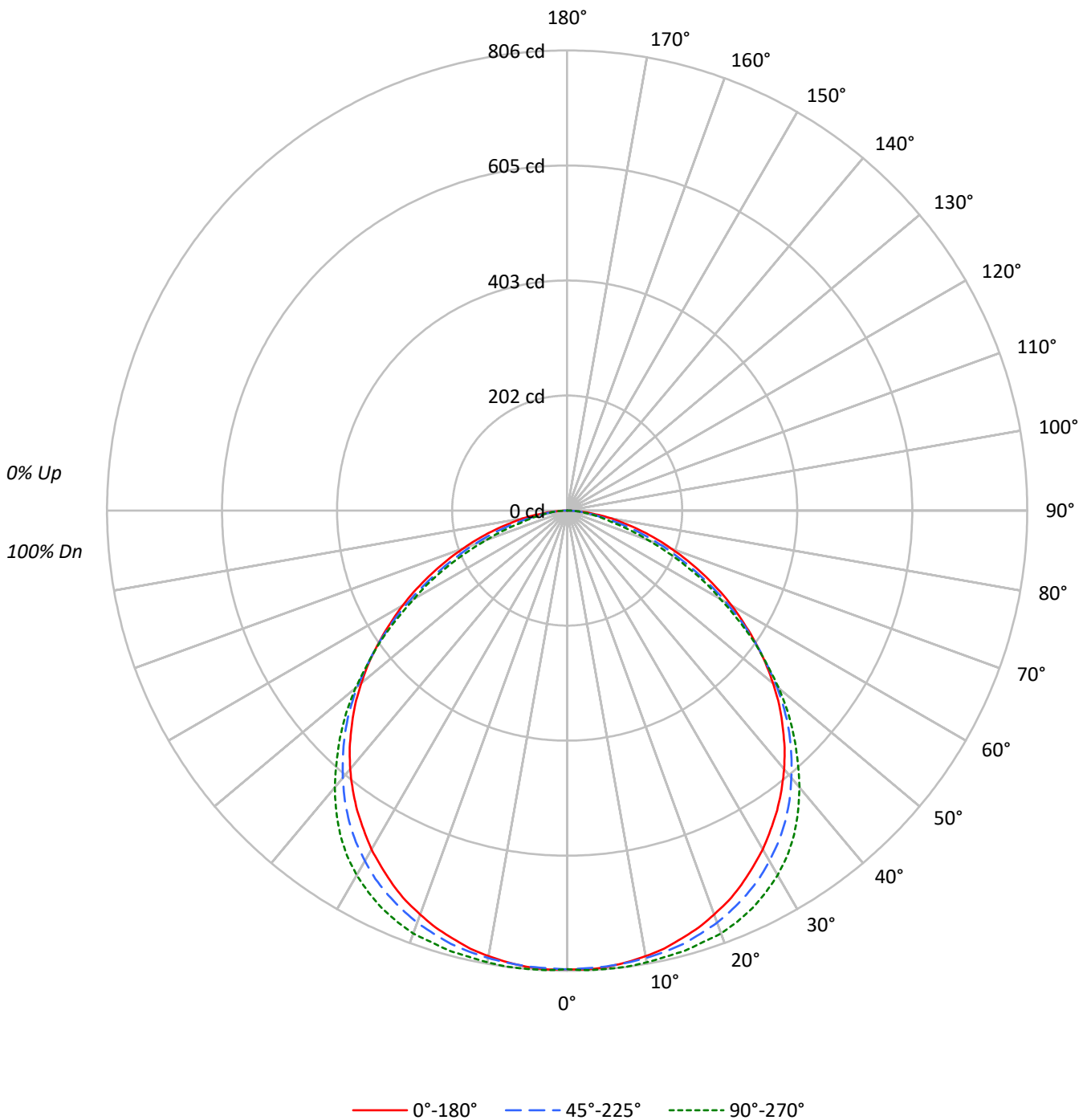
Input Watts (W): 30.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2707	2707	2707
5°	2714	2710	2725
10°	2712	2723	2749
15°	2707	2741	2784
20°	2699	2755	2826
25°	2687	2761	2856
30°	2666	2757	2868
35°	2637	2737	2851
40°	2601	2688	2786
45°	2544	2623	2681
50°	2468	2515	2538
55°	2363	2357	2344
60°	2242	2167	2086
65°	2088	1939	1833
70°	1905	1698	1481
75°	1712	1410	1108
80°	1523	1030	964
85°	1195	854	854



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	76.5	3.4
10°-20°	222.3	10.0
20°-30°	343.1	15.4
30°-40°	416.1	18.7
40°-50°	422.4	19.0
50°-60°	357.4	16.1
60°-70°	241.8	10.9
70°-80°	116.9	5.3
80°-90°	28.5	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°	641.9	28.8
0°-40°	1058.0	47.5
0°-60°	1837.8	82.6
0°-90°	2225.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2225.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	804	804	804	804	804	
5°	802	802	801	805	806	76
15°	776	780	786	795	798	219
25°	723	728	743	762	768	333
35°	641	648	665	686	693	401
45°	534	535	550	562	563	412
55°	402	399	401	401	399	360
65°	262	251	243	233	230	260
75°	132	122	108	94	85	140
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°	803.5	803.5	803.5	803.5	803.5
2.5°	804.6	804.6	802.4	804.6	805.7
5°	802.4	802.4	801.3	804.6	805.7
7.5°	798.0	799.1	799.1	803.5	805.7
10°	792.5	794.7	795.8	802.4	803.5
12.5°	785.8	788.1	791.4	799.1	800.2
15°	775.9	780.3	785.8	794.7	798.0
17.5°	765.9	770.4	777.0	789.2	792.5
20°	752.7	758.2	768.2	782.5	788.1
22.5°	739.4	743.8	756.0	773.7	779.2
25°	722.8	728.4	742.7	761.5	768.2
27.5°	704.1	711.8	727.3	747.2	753.8
30°	685.3	691.9	708.5	730.6	737.2
32.5°	663.2	669.8	688.6	709.6	717.3
35°	641.1	647.7	665.4	686.4	693.0
37.5°	616.7	621.2	639.9	657.6	664.3
40°	591.3	594.6	611.2	628.9	633.3
42.5°	563.7	565.9	581.4	596.8	597.9
45°	533.8	534.9	550.4	561.5	562.6
47.5°	504.0	502.9	516.2	523.9	525.0
50°	470.8	470.8	479.7	484.1	484.1
52.5°	437.7	435.5	439.9	443.2	439.9
55°	402.3	399.0	401.2	401.2	399.0
57.5°	366.9	360.3	361.4	359.2	353.7
60°	332.7	324.9	321.6	313.9	309.5
62.5°	297.3	288.5	281.8	273.0	271.9
65°	261.9	250.9	243.2	233.2	229.9
67.5°	227.7	217.7	206.7	195.6	189.0
70°	193.4	182.4	172.4	158.1	150.3
72.5°	162.5	152.5	140.4	123.8	118.3
75°	131.5	121.6	108.3	93.9	85.1
77.5°	101.7	93.9	79.6	67.4	66.3
80°	78.5	69.6	53.1	49.7	49.7
82.5°	50.8	45.3	37.6	35.4	35.4
85°	30.9	24.3	22.1	22.1	22.1
87.5°	12.2	11.1	11.1	11.1	11.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)