

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: P229485

Luminaire Tested: **14RLN-LD5-35-RDP-UNV-L830-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229485  
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-LD5-35-RDP-UNV-L830-CD1-U  
Description: METALUX 1X4 RLN LED TROFFER WITH RDP LENS  
Light Source: (112)3000K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2919.1 lumens  
Efficiency: N/A  
Efficacy: 82.0 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

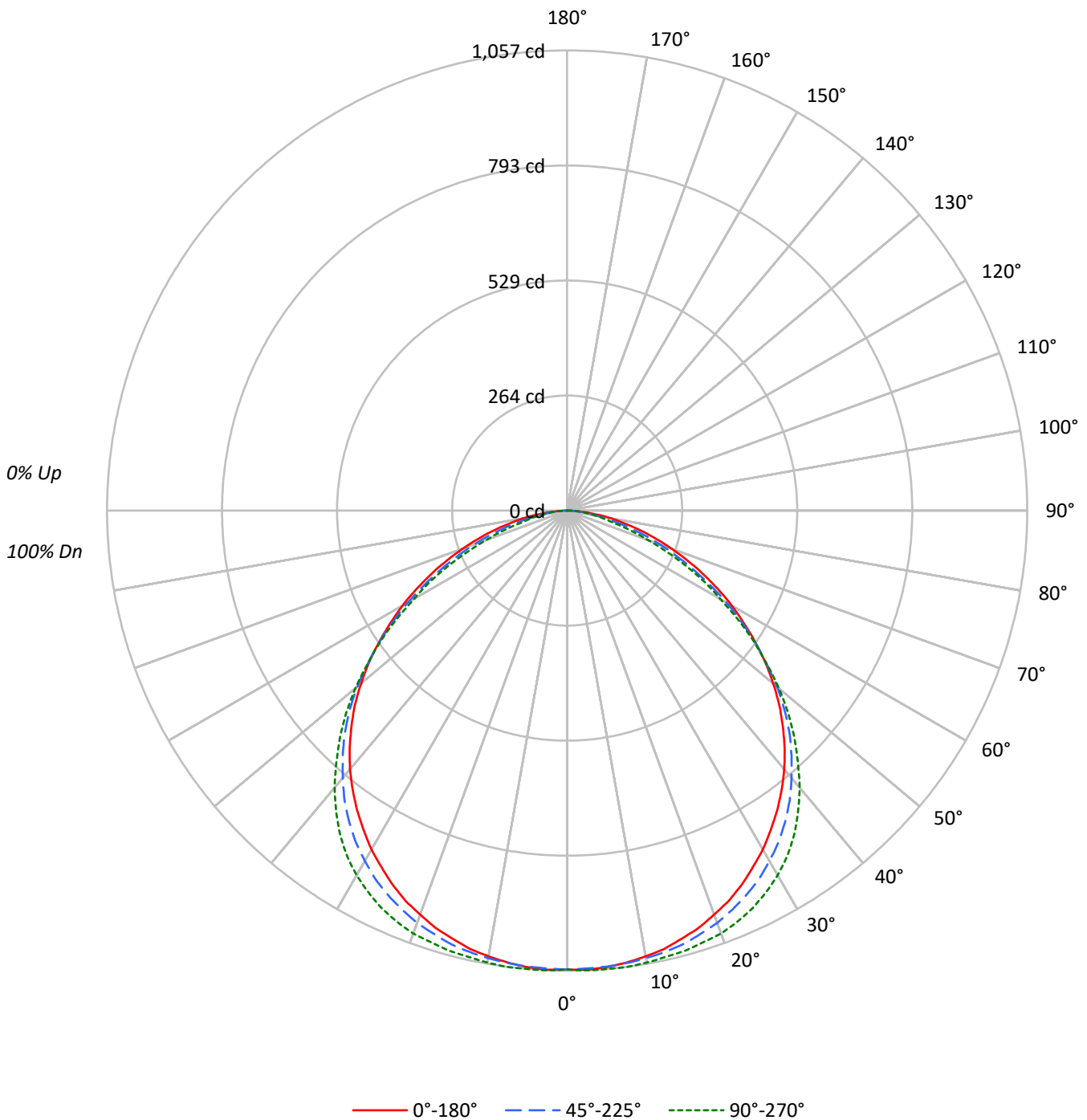
Input Watts (W): 35.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3552	3552	3552
5°	3561	3556	3576
10°	3557	3572	3607
15°	3551	3597	3652
20°	3541	3614	3707
25°	3526	3623	3747
30°	3498	3617	3763
35°	3459	3591	3740
40°	3413	3527	3655
45°	3338	3441	3517
50°	3238	3299	3329
55°	3101	3092	3075
60°	2942	2844	2736
65°	2740	2543	2405
70°	2500	2229	1943
75°	2247	1850	1454
80°	1999	1351	1267
85°	1570	1121	1121



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	100.3	3.4
10°-20°	291.6	10.0
20°-30°	450.1	15.4
30°-40°	545.9	18.7
40°-50°	554.2	19.0
50°-60°	468.9	16.1
60°-70°	317.2	10.9
70°-80°	153.4	5.3
80°-90°	37.4	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°	842.1	28.8
0°-40°	1388.0	47.5
0°-60°	2411.1	82.6
0°-90°	2919.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2919.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1054	1054	1054	1054	1054	
5°	1053	1053	1051	1056	1057	100
15°	1018	1024	1031	1043	1047	287
25°	948	956	974	999	1008	437
35°	841	850	873	900	909	526
45°	700	702	722	737	738	540
55°	528	524	526	526	524	472
65°	344	329	319	306	302	341
75°	173	160	142	123	112	184
85°	41	32	29	29	29	48
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1054.2	1054.2	1054.2	1054.2	1054.2
2.5°	1055.6	1055.6	1052.7	1055.6	1057.1
5°	1052.7	1052.7	1051.3	1055.6	1057.1
7.5°	1046.9	1048.4	1048.4	1054.2	1057.1
10°	1039.7	1042.6	1044.0	1052.7	1054.2
12.5°	1031.0	1033.9	1038.2	1048.4	1049.8
15°	1017.9	1023.7	1031.0	1042.6	1046.9
17.5°	1004.9	1010.7	1019.4	1035.3	1039.7
20°	987.5	994.7	1007.8	1026.6	1033.9
22.5°	970.1	975.9	991.8	1015.0	1022.3
25°	948.3	955.6	974.4	999.1	1007.8
27.5°	923.7	933.8	954.1	980.2	988.9
30°	899.0	907.7	929.5	958.5	967.2
32.5°	870.0	878.7	903.4	930.9	941.1
35°	841.0	849.7	872.9	900.5	909.2
37.5°	809.1	814.9	839.6	862.8	871.5
40°	775.8	780.1	801.9	825.1	830.9
42.5°	739.5	742.4	762.7	783.0	784.5
45°	700.4	701.8	722.1	736.6	738.1
47.5°	661.2	659.8	677.2	687.3	688.8
50°	617.7	617.7	629.3	635.1	635.1
52.5°	574.2	571.3	577.1	581.5	577.1
55°	527.8	523.5	526.4	526.4	523.5
57.5°	481.4	472.7	474.2	471.3	464.0
60°	436.5	426.3	422.0	411.8	406.0
62.5°	390.1	378.5	369.8	358.2	356.7
65°	343.7	329.2	319.0	306.0	301.6
67.5°	298.7	285.7	271.2	256.7	248.0
70°	253.8	239.3	226.2	207.4	197.2
72.5°	213.2	200.1	184.2	162.4	155.2
75°	172.6	159.5	142.1	123.3	111.7
77.5°	133.4	123.3	104.4	88.5	87.0
80°	103.0	91.4	69.6	65.3	65.3
82.5°	66.7	59.5	49.3	46.4	46.4
85°	40.6	31.9	29.0	29.0	29.0
87.5°	16.0	14.5	14.5	14.5	14.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)