

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: P229486

Luminaire Tested: **14RLN-LD5-40-RDP-UNV-L830-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229486
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-LD5-40-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: 3314.0 lumens
Efficiency: N/A
Efficacy: 79.1 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

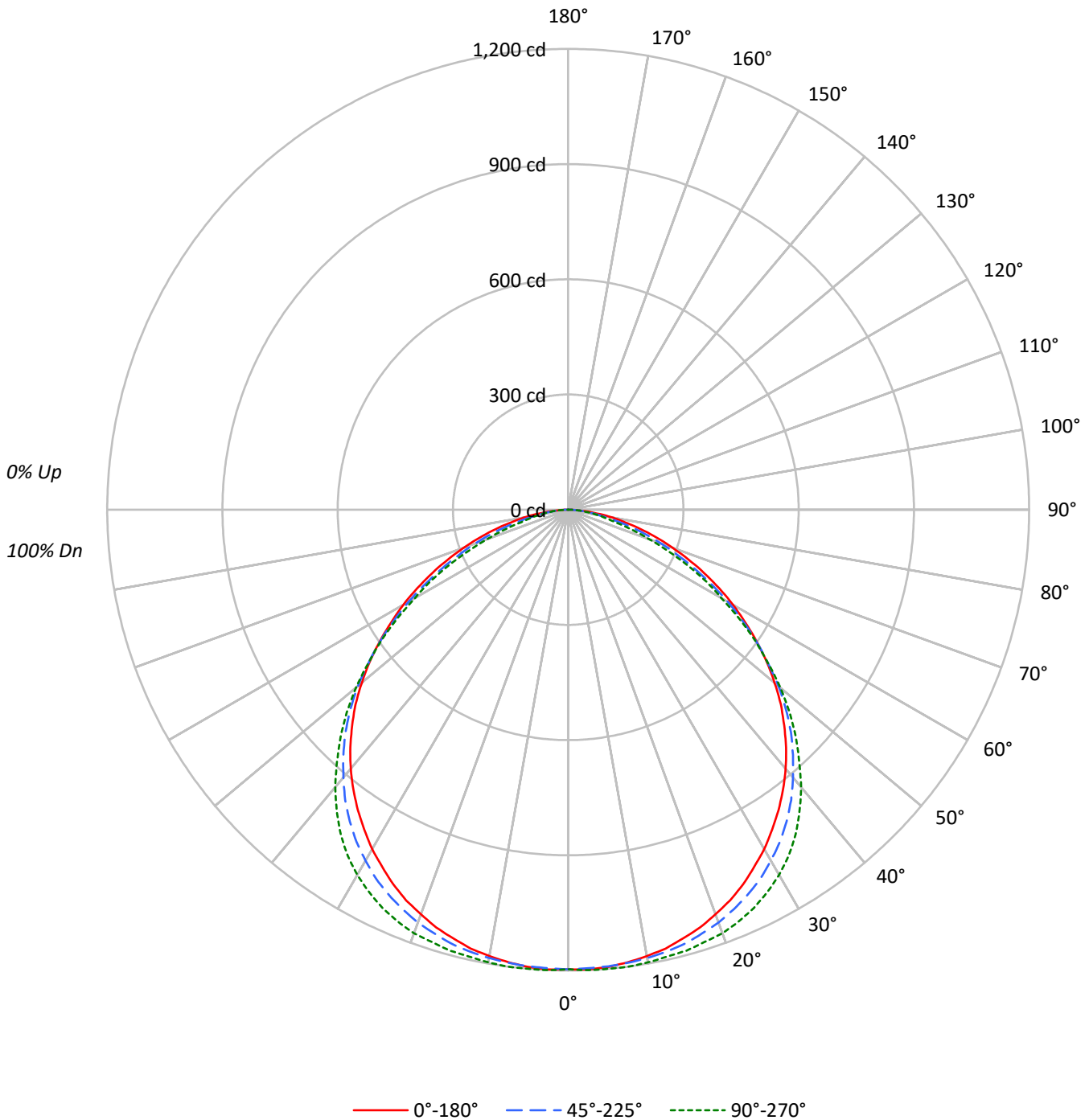
Input Watts (W): 41.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	4033	4033	4033
5°	4043	4037	4059
10°	4038	4056	4095
15°	4032	4083	4146
20°	4020	4103	4209
25°	4003	4113	4254
30°	3971	4106	4272
35°	3928	4076	4246
40°	3874	4005	4149
45°	3789	3907	3993
50°	3676	3746	3780
55°	3520	3511	3491
60°	3339	3229	3106
65°	3111	2888	2730
70°	2838	2530	2206
75°	2550	2100	1651
80°	2268	1533	1438
85°	1782	1272	1272



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.9	3.4
10°-20°	331.1	10.0
20°-30°	511.0	15.4
30°-40°	619.7	18.7
40°-50°	629.2	19.0
50°-60°	532.3	16.1
60°-70°	360.1	10.9
70°-80°	174.1	5.3
80°-90°	42.5	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°	956.0	28.8
0°-40°	1575.8	47.5
0°-60°	2737.3	82.6
0°-90°	3314.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3314.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1197	1197	1197	1197	1197	
5°	1195	1195	1194	1198	1200	114
15°	1156	1162	1170	1184	1189	326
25°	1077	1085	1106	1134	1144	496
35°	955	965	991	1022	1032	597
45°	795	797	820	836	838	613
55°	599	594	598	598	594	536
65°	390	374	362	347	342	387
75°	196	181	161	140	127	209
85°	46	36	33	33	33	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1196.8	1196.8	1196.8	1196.8	<i>1196.8</i>
2.5°	<i>1198.5</i>	<i>1198.5</i>	<i>1195.2</i>	<i>1198.5</i>	<i>1200.1</i>
5°	1195.2	1195.2	1193.5	1198.5	<i>1200.1</i>
7.5°	1188.6	1190.2	1190.2	1196.8	<i>1200.1</i>
10°	1180.3	1183.6	1185.3	1195.2	<i>1196.8</i>
12.5°	1170.5	1173.8	1178.7	1190.2	<i>1191.9</i>
15°	1155.7	1162.2	1170.5	1183.6	<i>1188.6</i>
17.5°	1140.8	1147.4	1157.3	1175.4	<i>1180.3</i>
20°	1121.1	1129.3	1144.1	1165.5	<i>1173.8</i>
22.5°	1101.3	1107.9	1126.0	1152.4	<i>1160.6</i>
25°	1076.6	1084.9	1106.3	1134.2	<i>1144.1</i>
27.5°	1048.6	1060.2	1083.2	1112.8	<i>1122.7</i>
30°	1020.7	1030.5	1055.2	1088.2	<i>1098.0</i>
32.5°	987.7	997.6	1025.6	1056.9	<i>1068.4</i>
35°	954.8	964.7	991.0	1022.3	<i>1032.2</i>
37.5°	918.6	925.2	953.2	979.5	<i>989.4</i>
40°	880.7	885.7	910.4	936.7	<i>943.3</i>
42.5°	839.6	842.9	865.9	889.0	<i>890.6</i>
45°	795.1	796.8	819.8	836.3	<i>837.9</i>
47.5°	750.7	749.0	768.8	780.3	<i>782.0</i>
50°	701.3	701.3	714.5	721.0	<i>721.0</i>
52.5°	651.9	648.6	655.2	660.1	<i>655.2</i>
55°	599.2	594.3	597.6	597.6	<i>594.3</i>
57.5°	546.5	536.7	538.3	535.0	<i>526.8</i>
60°	495.5	484.0	479.1	467.5	<i>460.9</i>
62.5°	442.8	429.7	419.8	406.6	<i>405.0</i>
65°	390.2	373.7	362.2	347.4	<i>342.4</i>
67.5°	339.1	324.3	307.8	291.4	<i>281.5</i>
70°	288.1	271.6	256.8	235.4	<i>223.9</i>
72.5°	242.0	227.2	209.1	184.4	<i>176.1</i>
75°	195.9	181.1	161.3	139.9	<i>126.8</i>
77.5°	151.5	139.9	118.5	100.4	<i>98.8</i>
80°	116.9	103.7	79.0	74.1	<i>74.1</i>
82.5°	75.7	67.5	56.0	52.7	<i>52.7</i>
85°	46.1	36.2	32.9	32.9	<i>32.9</i>
87.5°	18.1	16.5	16.5	16.5	<i>16.5</i>
90°	0.0	0.0	0.0	0.0	<i>0.0</i>

(END OF REPORT)