

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: P229918

Luminaire Tested: **24RLN-LD5-42-RDP-UNV-L840-CD1-SVPD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229918  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1707-178-7)  
Test Lab: INNOVATION CENTER-G3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24RLN-LD5-42-RDP-UNV-L840-CD1-SVPD1-U  
Description: METALUX 2X4 RLN LED TROFFER WITH SENSOR AND RDP LENS  
Light Source: (252)4000K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3446.0 lumens  
Efficiency: N/A  
Efficacy: 110.4 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.31 / 1.38  
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')  
CIE Type: Direct

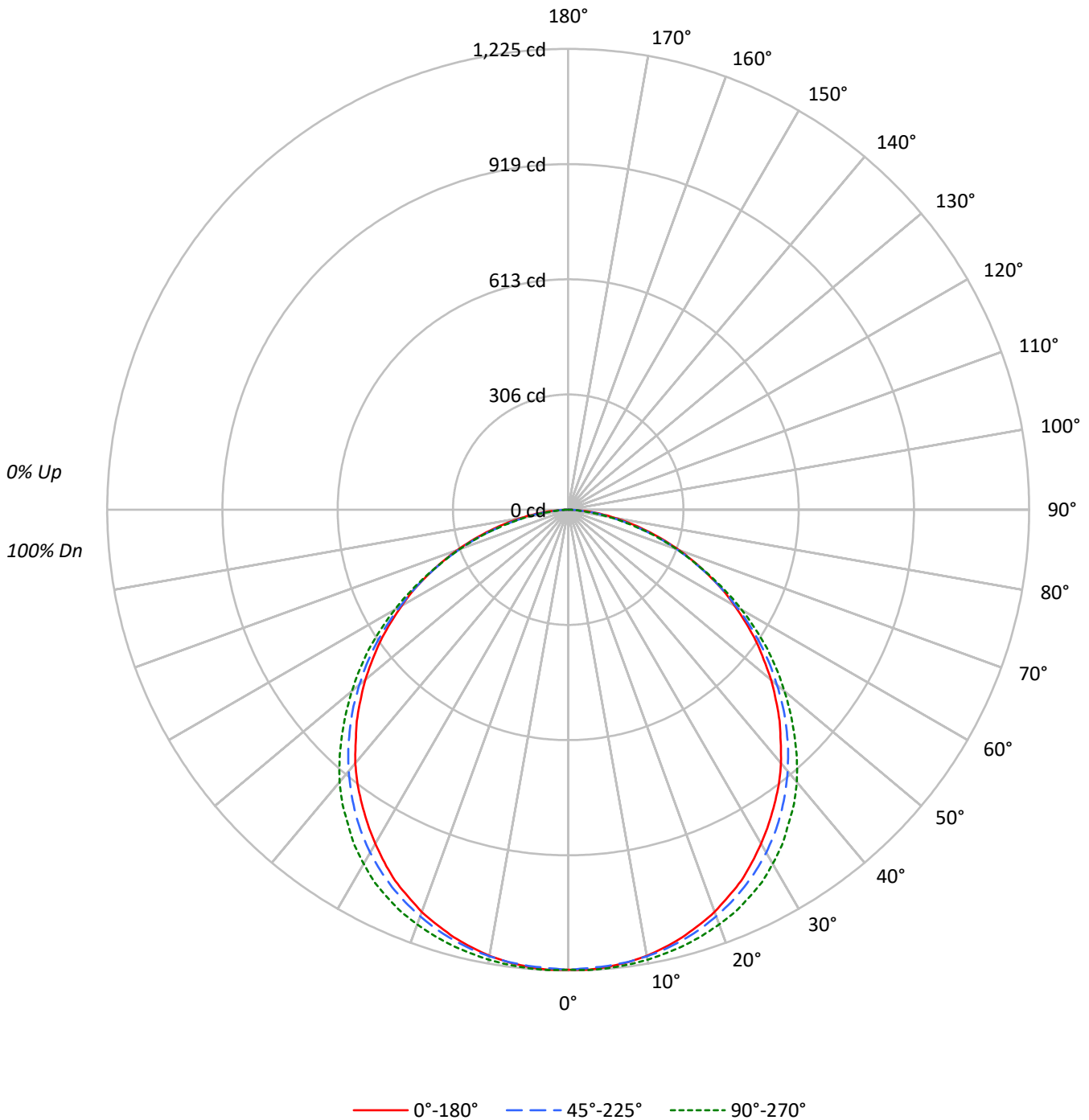
Input Watts (W): 31.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70
3	91	80	72	66	88	78	71	65	76	69	64	73	67	63	70	66	62	59
4	83	71	62	56	81	70	61	55	67	60	54	65	59	54	63	57	53	51
5	76	63	54	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	38
7	65	52	43	37	64	51	43	37	49	42	36	48	41	36	47	41	36	34
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	30
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	33	29	27
10	53	40	32	27	52	39	32	27	38	31	27	38	31	27	37	31	26	25

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1873	1873	1873
5°	1875	1871	1881
10°	1873	1875	1889
15°	1865	1876	1900
20°	1855	1875	1912
25°	1839	1871	1922
30°	1813	1861	1922
35°	1787	1843	1907
40°	1760	1814	1890
45°	1721	1776	1842
50°	1678	1725	1787
55°	1627	1667	1726
60°	1565	1584	1633
65°	1492	1492	1507
70°	1403	1377	1374
75°	1279	1203	1199
80°	1115	1001	957
85°	884	694	543



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	116.0	3.4
10°-20°	334.7	9.7
20°-30°	511.3	14.8
30°-40°	616.9	17.9
40°-50°	632.3	18.3
50°-60°	557.0	16.2
60°-70°	407.7	11.8
70°-80°	219.1	6.4
80°-90°	51.0	1.5
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°	962.0	27.9
0°-40°	1578.9	45.8
0°-60°	2768.2	80.3
0°-90°	3446.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3446.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1223	1223	1223	1223	1223	
5°	1220	1218	1217	1220	1223	116
15°	1176	1177	1183	1192	1198	332
25°	1088	1091	1107	1129	1137	501
35°	956	960	986	1013	1020	598
45°	794	794	820	843	851	612
55°	609	606	624	639	646	544
65°	412	404	412	417	416	408
75°	216	206	203	203	203	230
85°	50	44	40	32	31	60
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1222.7	1222.7	1222.7	1222.7	1222.7
2.5°	1224.1	1222.0	1219.8	1222.0	1224.9
5°	1219.8	1218.4	1217.0	1220.5	1223.4
7.5°	1213.4	1211.9	1212.6	1217.7	1219.8
10°	1204.0	1204.0	1205.5	1211.2	1214.8
12.5°	1191.1	1191.8	1196.1	1203.3	1206.9
15°	1176.0	1177.4	1183.2	1192.5	1198.3
17.5°	1157.3	1160.9	1168.8	1180.3	1186.8
20°	1137.9	1140.1	1150.1	1166.7	1173.1
22.5°	1112.8	1117.1	1130.0	1149.4	1158.0
25°	1088.4	1091.2	1107.0	1128.6	1137.2
27.5°	1057.5	1061.8	1081.2	1106.3	1115.7
30°	1025.1	1030.2	1052.4	1076.9	1086.9
32.5°	991.4	997.8	1020.8	1046.7	1057.5
35°	955.5	960.5	985.6	1012.9	1020.1
37.5°	919.5	921.0	947.6	974.1	985.6
40°	880.0	881.5	907.3	932.5	945.4
42.5°	835.5	839.8	864.9	889.4	899.4
45°	794.5	793.8	819.7	843.4	850.6
47.5°	748.6	750.0	773.7	796.7	801.0
50°	704.0	703.3	724.1	744.3	750.0
52.5°	655.2	654.5	675.3	691.8	699.0
55°	609.2	605.6	624.3	638.6	646.5
57.5°	559.6	554.6	571.1	585.5	589.1
60°	510.8	505.0	517.2	528.0	533.0
62.5°	464.1	456.9	464.8	474.1	474.9
65°	411.6	404.5	411.6	416.7	415.9
67.5°	362.1	354.2	357.8	359.9	359.2
70°	313.2	302.4	307.5	306.0	306.8
72.5°	264.4	255.7	255.0	252.9	255.0
75°	216.2	206.2	203.3	203.3	202.6
77.5°	170.3	160.2	157.3	155.9	153.7
80°	126.4	118.5	113.5	112.8	108.5
82.5°	89.1	79.0	77.6	71.1	66.8
85°	50.3	44.5	39.5	32.3	30.9
87.5°	18.7	16.5	12.9	12.2	11.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)