

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: P229948

Luminaire Tested: **24RLN-LD5-42-RDP-UNV-L940-CD1-SVPD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229948  
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-L940-CD1-SVPD1-U  
Description: METALUX 2X4 RLN LED TROFFER WITH SENSOR AND RDP LENS  
Light Source: (252)4000K CCT, 90 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3045.0 lumens  
Efficiency: N/A  
Efficacy: 97.6 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

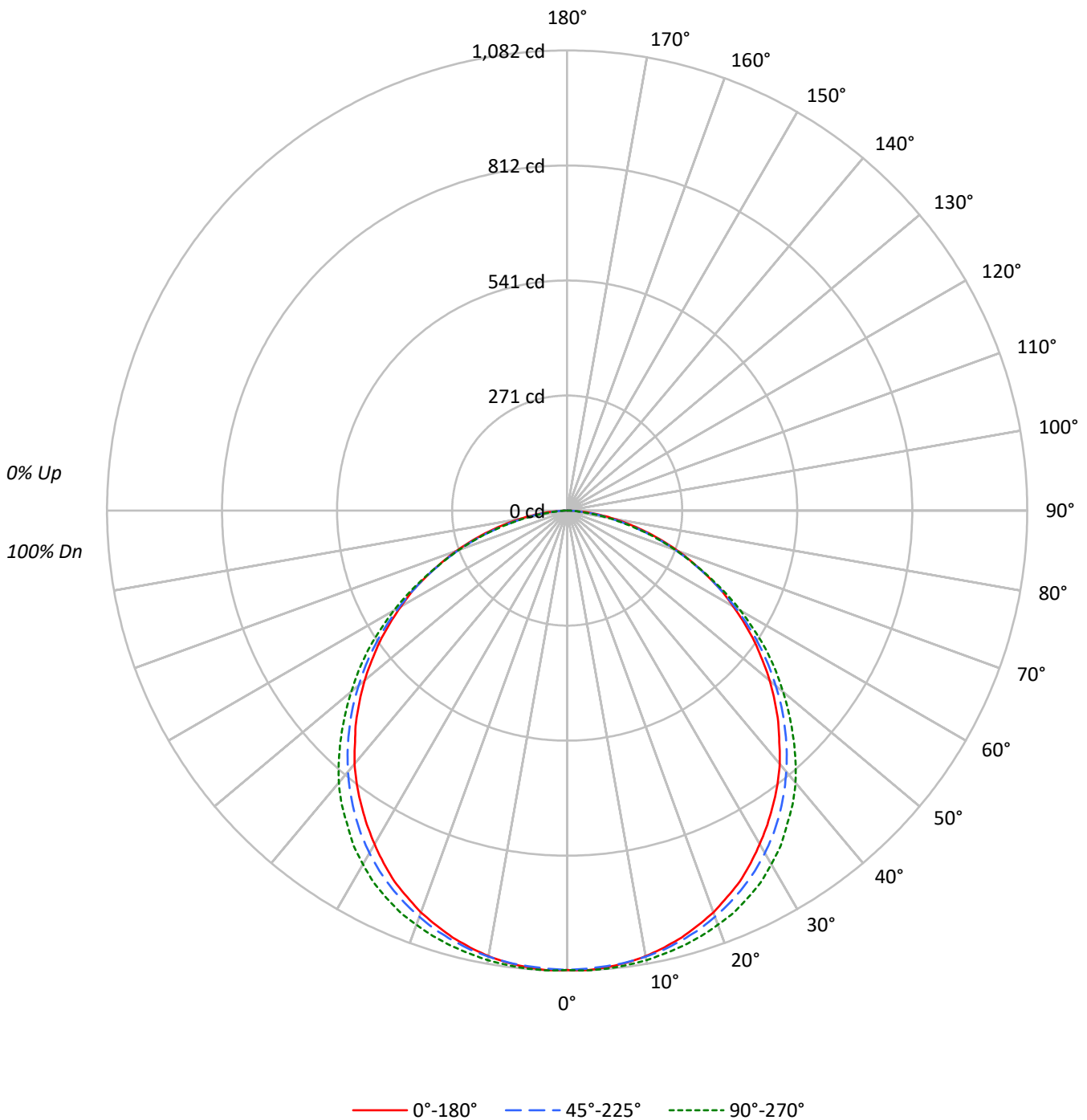
Input Watts (W): 31.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1655	1655	1655
5°	1657	1653	1662
10°	1655	1657	1669
15°	1648	1658	1679
20°	1639	1657	1690
25°	1625	1653	1698
30°	1602	1645	1699
35°	1579	1628	1685
40°	1555	1603	1670
45°	1521	1569	1628
50°	1482	1525	1579
55°	1437	1473	1526
60°	1382	1400	1443
65°	1318	1318	1332
70°	1240	1217	1214
75°	1131	1063	1059
80°	985	885	846
85°	780	613	480



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	102.5	3.4
10°-20°	295.7	9.7
20°-30°	451.8	14.8
30°-40°	545.1	17.9
40°-50°	558.7	18.3
50°-60°	492.2	16.2
60°-70°	360.3	11.8
70°-80°	193.6	6.4
80°-90°	45.1	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°	850.1	27.9
0°-40°	1395.1	45.8
0°-60°	2446.1	80.3
0°-90°	3045.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3045.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1080	1080	1080	1080	1080	
5°	1078	1077	1075	1078	1081	102
15°	1039	1040	1046	1054	1059	293
25°	962	964	978	997	1005	442
35°	844	849	871	895	901	528
45°	702	701	724	745	752	541
55°	538	535	552	564	571	480
65°	364	357	364	368	368	361
75°	191	182	180	180	179	203
85°	44	39	35	29	27	53
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1080.4	1080.4	1080.4	1080.4	1080.4
2.5°	1081.7	1079.8	1077.9	1079.8	1082.3
5°	1077.9	1076.6	1075.3	1078.5	1081.1
7.5°	1072.2	1070.9	1071.5	1076.0	1077.9
10°	1063.9	1063.9	1065.2	1070.3	1073.4
12.5°	1052.5	1053.1	1056.9	1063.3	1066.5
15°	1039.2	1040.4	1045.5	1053.8	1058.8
17.5°	1022.7	1025.8	1032.8	1043.0	1048.7
20°	1005.5	1007.4	1016.3	1030.9	1036.6
22.5°	983.3	987.1	998.5	1015.7	1023.3
25°	961.7	964.2	978.2	997.3	1004.9
27.5°	934.4	938.2	955.4	977.6	985.8
30°	905.8	910.3	930.0	951.6	960.4
32.5°	876.0	881.7	902.0	924.9	934.4
35°	844.3	848.7	870.9	895.1	901.4
37.5°	812.5	813.8	837.3	860.8	870.9
40°	777.6	778.9	801.7	824.0	835.4
42.5°	738.3	742.1	764.3	785.9	794.8
45°	702.1	701.4	724.3	745.2	751.6
47.5°	661.5	662.7	683.7	704.0	707.8
50°	622.1	621.5	639.9	657.6	662.7
52.5°	578.9	578.3	596.7	611.3	617.7
55°	538.3	535.1	551.6	564.3	571.3
57.5°	494.5	490.1	504.7	517.4	520.5
60°	451.3	446.3	457.1	466.6	471.0
62.5°	410.1	403.7	410.7	419.0	419.6
65°	363.7	357.4	363.7	368.2	367.5
67.5°	319.9	313.0	316.1	318.0	317.4
70°	276.8	267.2	271.7	270.4	271.1
72.5°	233.6	226.0	225.4	223.4	225.4
75°	191.1	182.2	179.6	179.6	179.0
77.5°	150.4	141.6	139.0	137.7	135.8
80°	111.7	104.7	100.3	99.7	95.9
82.5°	78.7	69.8	68.6	62.8	59.0
85°	44.4	39.4	34.9	28.6	27.3
87.5°	16.5	14.6	11.4	10.8	10.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)