

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: P229949

Luminaire Tested: **24RLN-LD5-45-RDP-UNV-L940-CD1-SVPD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229949  
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-LD5-45-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: 3290.0 lumens  
Efficiency: N/A  
Efficacy: 96.8 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

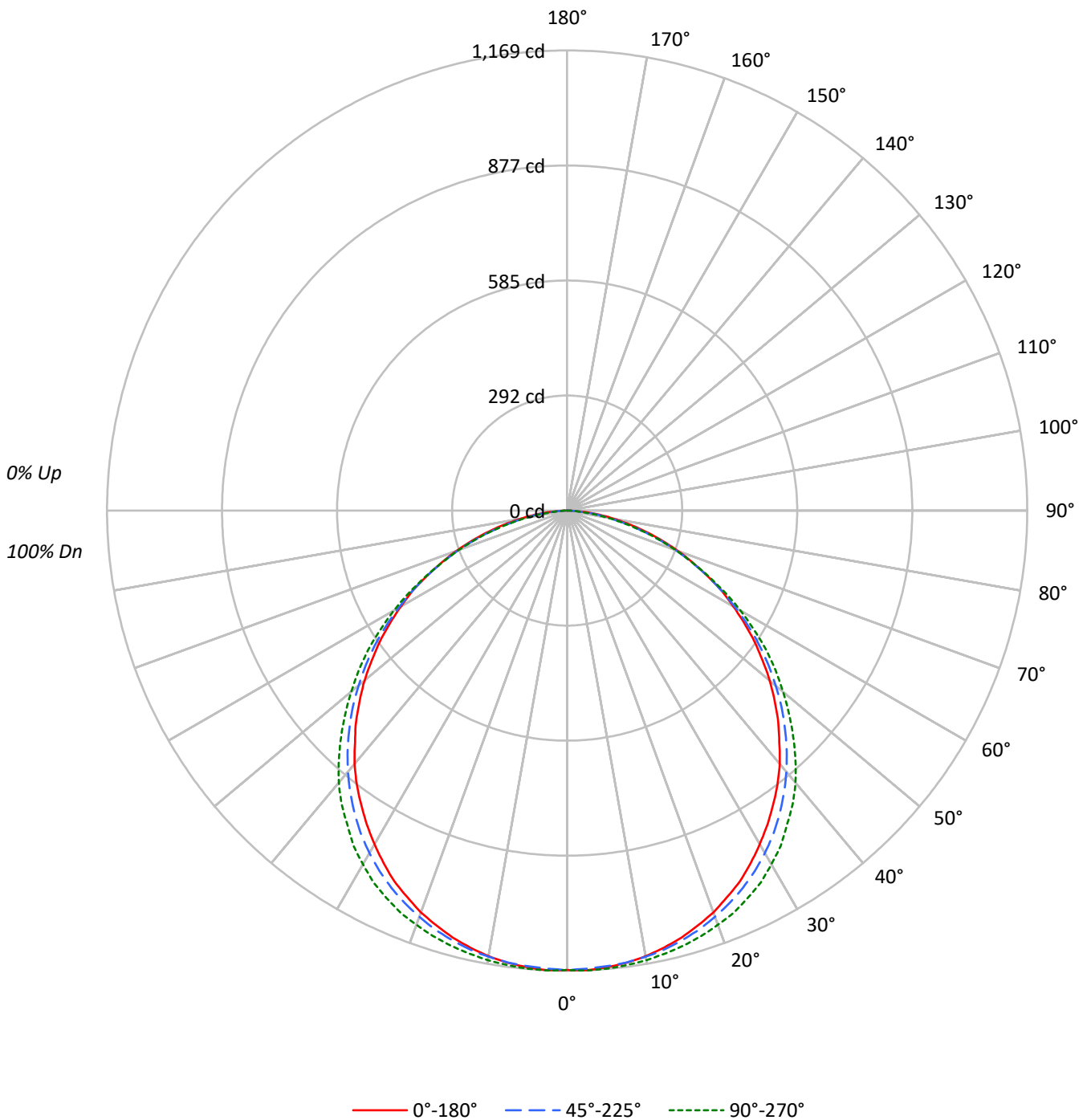
Input Watts (W): 34  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1788	1788	1788
5°	1791	1786	1796
10°	1788	1790	1804
15°	1780	1791	1814
20°	1771	1790	1826
25°	1756	1786	1835
30°	1731	1777	1835
35°	1706	1759	1821
40°	1680	1732	1805
45°	1643	1695	1759
50°	1602	1648	1706
55°	1553	1592	1648
60°	1494	1513	1559
65°	1424	1424	1439
70°	1339	1315	1312
75°	1221	1149	1145
80°	1065	956	914
85°	844	663	518



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	110.8	3.4
10°-20°	319.5	9.7
20°-30°	488.2	14.8
30°-40°	588.9	17.9
40°-50°	603.6	18.3
50°-60°	531.8	16.2
60°-70°	389.2	11.8
70°-80°	209.2	6.4
80°-90°	48.7	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°	918.5	27.9
0°-40°	1507.4	45.8
0°-60°	2642.9	80.3
0°-90°	3290.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3290.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1167	1167	1167	1167	1167	
5°	1165	1163	1162	1165	1168	111
15°	1123	1124	1130	1138	1144	317
25°	1039	1042	1057	1078	1086	478
35°	912	917	941	967	974	571
45°	759	758	783	805	812	584
55°	582	578	596	610	617	519
65°	393	386	393	398	397	390
75°	206	197	194	194	193	219
85°	48	42	38	31	30	57
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1167.3	1167.3	1167.3	1167.3	1167.3
2.5°	1168.7	1166.7	1164.6	1166.7	1169.4
5°	1164.6	1163.2	1161.9	1165.3	1168.0
7.5°	1158.4	1157.1	1157.7	1162.5	1164.6
10°	1149.5	1149.5	1150.9	1156.4	1159.8
12.5°	1137.2	1137.9	1142.0	1148.8	1152.3
15°	1122.8	1124.1	1129.6	1138.5	1144.0
17.5°	1104.9	1108.4	1115.9	1126.9	1133.1
20°	1086.4	1088.5	1098.1	1113.8	1120.0
22.5°	1062.4	1066.5	1078.9	1097.4	1105.6
25°	1039.1	1041.8	1056.9	1077.5	1085.7
27.5°	1009.6	1013.7	1032.2	1056.2	1065.2
30°	978.7	983.5	1004.8	1028.1	1037.7
32.5°	946.5	952.7	974.6	999.3	1009.6
35°	912.2	917.0	941.0	967.1	973.9
37.5°	877.9	879.3	904.7	930.0	941.0
40°	840.2	841.6	866.3	890.3	902.6
42.5°	797.7	801.8	825.8	849.1	858.7
45°	758.6	757.9	782.6	805.2	812.1
47.5°	714.7	716.0	738.7	760.6	764.7
50°	672.2	671.5	691.4	710.6	716.0
52.5°	625.5	624.8	644.7	660.5	667.3
55°	581.6	578.2	596.0	609.7	617.3
57.5°	534.3	529.5	545.3	559.0	562.4
60°	487.7	482.2	493.8	504.1	508.9
62.5°	443.1	436.2	443.8	452.7	453.4
65°	393.0	386.1	393.0	397.8	397.1
67.5°	345.7	338.1	341.6	343.6	342.9
70°	299.0	288.8	293.6	292.2	292.9
72.5°	252.4	244.2	243.5	241.4	243.5
75°	206.4	196.8	194.1	194.1	193.4
77.5°	162.6	152.9	150.2	148.8	146.8
80°	120.7	113.2	108.4	107.7	103.6
82.5°	85.0	75.4	74.1	67.9	63.8
85°	48.0	42.5	37.7	30.9	29.5
87.5°	17.8	15.8	12.3	11.7	11.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)