

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: P229830

Luminaire Tested: **24RLN-LD5-50-RDP-UNV-L940-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229830  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36059)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24RLN-LD5-50-RDP-UNV-L940-CD1-U  
Description: METALUX 2X4 RLN LED TROFFER WITH RDP LENS  
Light Source: (252)4000K CCT, 90 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3662.0 lumens  
Efficiency: N/A  
Efficacy: 96.9 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.38  
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')  
CIE Type: Direct

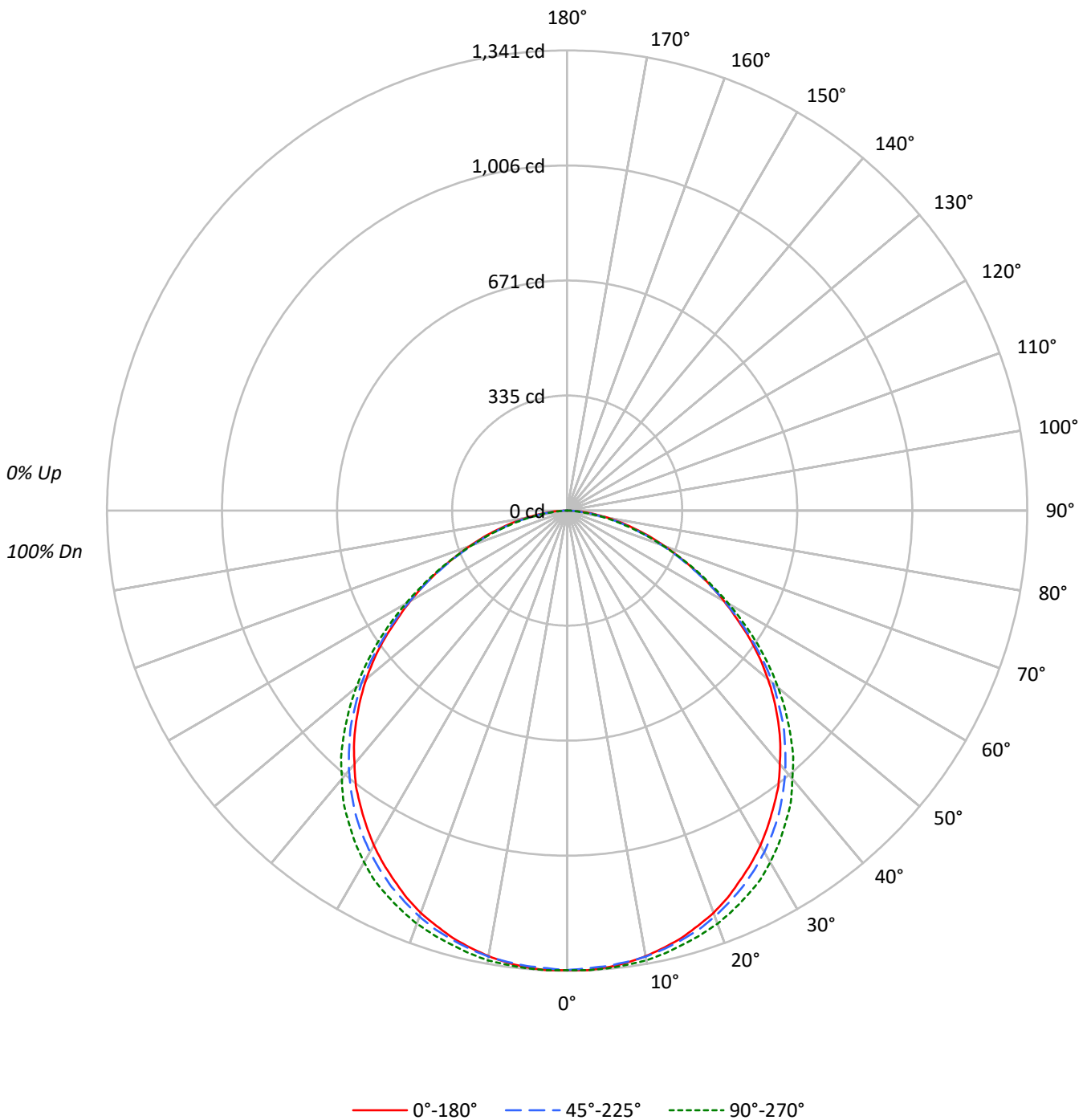
Input Watts (W): 37.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	102	99	95	98	95	92	94	92	90	91	89	87	85
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	77	73	71
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	66	63	60
4	83	72	63	57	81	70	62	56	68	61	55	66	60	55	63	58	54	52
5	77	64	55	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	53	47	42	52	46	41	39
7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35
8	61	48	39	34	60	47	39	34	46	39	33	45	38	33	43	37	33	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	27	52	40	33	27	39	32	27	38	32	27	37	31	27	25

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

	0°	45°	90°
0°	2051	2051	2051
5°	2055	2048	2059
10°	2050	2053	2070
15°	2044	2053	2075
20°	2033	2051	2088
25°	2012	2045	2094
30°	1993	2032	2093
35°	1964	2013	2075
40°	1928	1978	2042
45°	1884	1932	1992
50°	1821	1864	1913
55°	1733	1755	1807
60°	1617	1626	1668
65°	1485	1475	1511
70°	1350	1313	1319
75°	1200	1134	1126
80°	1042	931	907
85°	854	659	513



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	127.0	3.5
10°-20°	366.1	10.0
20°-30°	558.9	15.3
30°-40°	673.8	18.4
40°-50°	687.1	18.8
50°-60°	588.0	16.1
60°-70°	405.1	11.1
70°-80°	207.6	5.7
80°-90°	48.3	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°	1052.0	28.7
0°-40°	1725.8	47.1
0°-60°	3001.0	81.9
0°-90°	3662.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3662.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1339	1339	1339	1339	1339	
5°	1336	1334	1332	1336	1339	127
15°	1289	1288	1295	1304	1309	364
25°	1191	1195	1210	1231	1239	549
35°	1050	1054	1077	1100	1110	657
45°	870	871	892	914	920	670
55°	649	645	657	671	676	579
65°	410	400	407	410	417	407
75°	203	194	192	192	190	219
85°	49	43	38	33	29	57
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1339.2	1339.2	1339.2	1339.2	1339.2
2.5°	1340.6	1337.8	1335.0	1337.8	1340.6
5°	1336.4	1333.7	1332.3	1336.4	1339.2
7.5°	1329.5	1326.7	1326.7	1332.3	1335.0
10°	1318.4	1317.0	1319.8	1325.3	1330.9
12.5°	1304.5	1304.5	1308.6	1315.6	1321.1
15°	1289.2	1287.8	1294.8	1304.5	1308.6
17.5°	1268.4	1269.7	1279.5	1290.6	1296.1
20°	1247.5	1248.9	1258.6	1273.9	1280.9
22.5°	1221.1	1223.9	1235.0	1254.5	1261.4
25°	1190.6	1194.7	1210.0	1230.8	1239.2
27.5°	1160.0	1164.2	1180.8	1204.5	1215.6
30°	1126.7	1132.2	1148.9	1173.9	1183.6
32.5°	1089.1	1093.3	1114.2	1139.2	1148.9
35°	1050.2	1054.4	1076.6	1100.3	1110.0
37.5°	1011.4	1011.4	1033.6	1061.4	1071.1
40°	964.1	965.5	989.1	1015.5	1021.1
42.5°	919.7	919.7	940.5	965.5	975.2
45°	869.7	871.0	891.9	914.1	919.7
47.5°	818.3	818.3	836.3	857.1	862.7
50°	764.1	761.3	782.1	798.8	803.0
52.5°	708.5	704.3	721.0	734.9	740.5
55°	648.8	644.6	657.1	671.0	676.5
57.5°	586.3	580.7	594.6	607.1	609.9
60°	527.9	519.6	530.7	537.6	544.6
62.5°	469.6	459.8	468.2	472.3	477.9
65°	409.8	400.1	407.0	409.8	416.8
67.5°	352.9	345.9	347.3	351.5	354.3
70°	301.5	293.1	293.1	293.1	294.5
72.5°	254.2	241.7	240.3	241.7	241.7
75°	202.8	194.5	191.7	191.7	190.3
77.5°	162.5	151.4	150.0	147.3	144.5
80°	118.1	108.4	105.6	104.2	102.8
82.5°	82.0	73.6	70.9	68.1	63.9
85°	48.6	43.1	37.5	33.3	29.2
87.5°	18.1	16.7	13.9	12.5	12.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)