

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: P229878

Luminaire Tested: **24RLN-LD5-42-UNV-L935-CD1-SVPD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229878  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36062)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24RLN-LD5-42-UNV-L935-CD1-SVPD1-U  
Description: METALUX 2X4 RLN LED TROFFER WITH SENSOR  
Light Source: (252)3500K CCT, 90 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3579.0 lumens  
Efficiency: N/A  
Efficacy: 114.7 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.22 / 1.31  
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')  
CIE Type: Direct

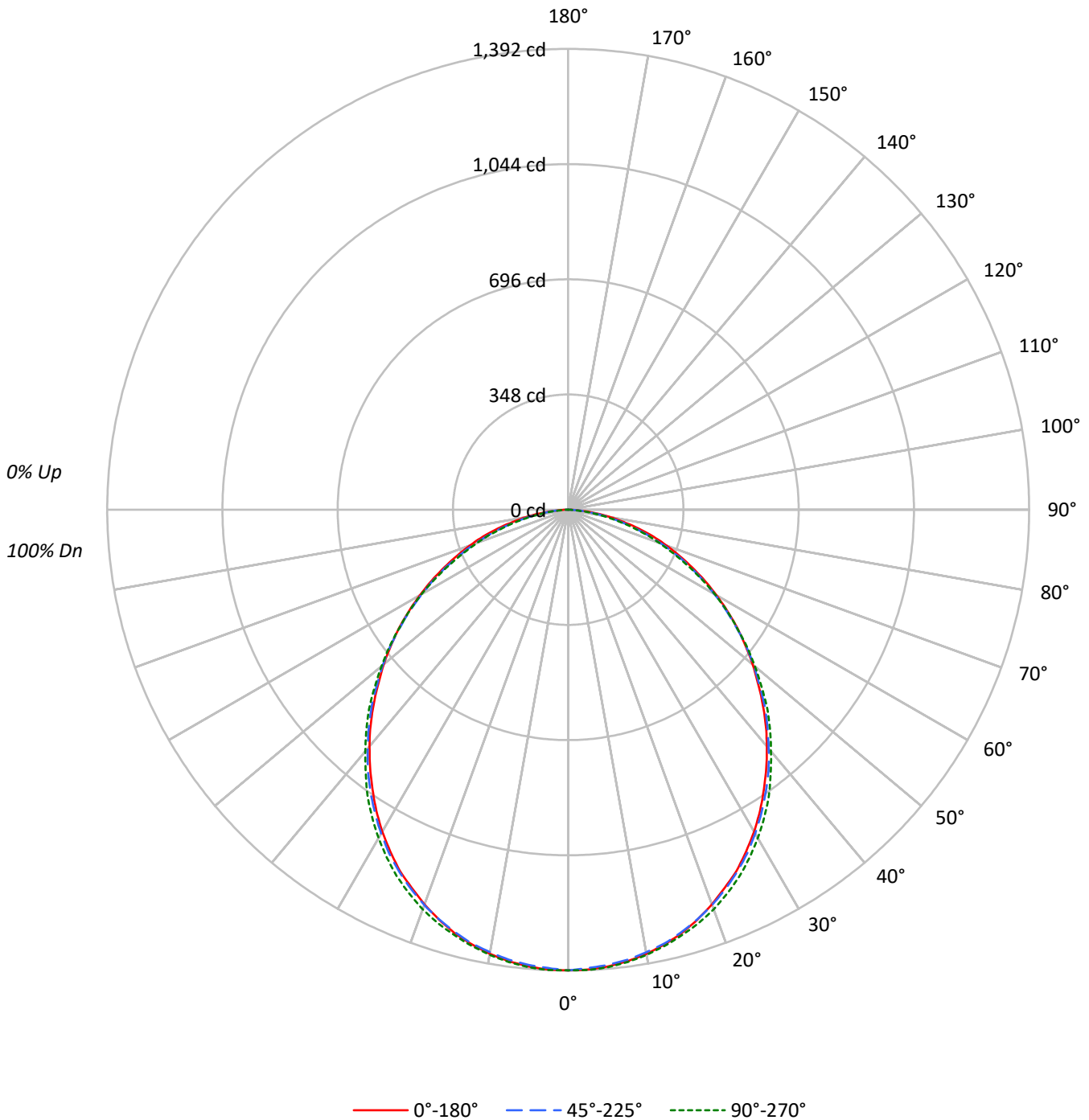
Input Watts (W): 31.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	105	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	76	73	71
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	66	63	60
4	84	72	63	57	81	71	63	56	68	61	56	66	60	55	64	58	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	62	48	40	34	60	48	40	34	46	39	34	45	38	34	44	38	33	31
9	58	44	36	31	56	44	36	31	43	35	31	42	35	30	41	35	30	28
10	54	41	33	28	53	40	33	28	39	33	28	39	32	28	38	32	28	26

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

	0°	45°	90°
0°	2131	2131	2131
5°	2129	2122	2133
10°	2118	2111	2124
15°	2100	2095	2109
20°	2068	2071	2094
25°	2034	2040	2067
30°	1985	1998	2026
35°	1926	1946	1975
40°	1866	1882	1905
45°	1800	1817	1842
50°	1733	1741	1754
55°	1665	1656	1662
60°	1585	1560	1568
65°	1495	1462	1437
70°	1414	1337	1307
75°	1302	1187	1147
80°	1146	1006	945
85°	902	701	520



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	131.4	3.7
10°-20°	373.4	10.4
20°-30°	556.6	15.6
30°-40°	650.7	18.2
40°-50°	646.2	18.1
50°-60°	554.9	15.5
60°-70°	399.7	11.2
70°-80°	215.2	6.0
80°-90°	50.7	1.4
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°	1061.4	29.7
0°-40°	1712.2	47.8
0°-60°	2913.3	81.4
0°-90°	3579.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3579.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1392	1392	1392	1392	1392	
5°	1385	1384	1380	1385	1387	131
15°	1324	1321	1321	1329	1330	373
25°	1204	1199	1207	1220	1223	553
35°	1030	1029	1041	1052	1056	645
45°	831	829	839	846	850	641
55°	623	618	620	623	622	557
65°	413	406	404	400	397	410
75°	220	206	201	195	194	233
85°	51	47	40	32	30	62
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1391.6	1391.6	1391.6	1391.6	1391.6
2.5°	1390.4	1389.3	1385.9	1390.4	1391.6
5°	1384.7	1383.6	1380.2	1384.7	1387.0
7.5°	1375.6	1373.3	1371.1	1375.6	1377.9
10°	1362.0	1359.7	1357.4	1363.1	1365.4
12.5°	1344.9	1342.6	1342.6	1347.1	1349.4
15°	1324.3	1320.9	1320.9	1328.9	1330.0
17.5°	1298.1	1295.8	1297.0	1306.1	1309.5
20°	1268.5	1267.4	1270.8	1281.0	1284.5
22.5°	1235.4	1234.3	1240.0	1252.5	1254.8
25°	1203.5	1199.0	1207.0	1219.5	1222.9
27.5°	1163.6	1160.2	1170.5	1181.9	1185.3
30°	1122.6	1119.2	1129.5	1142.0	1145.4
32.5°	1078.2	1075.9	1086.1	1098.7	1102.1
35°	1030.3	1029.2	1040.6	1052.0	1056.5
37.5°	982.4	981.3	993.8	1002.9	1004.1
40°	933.4	931.1	941.4	951.7	952.8
42.5°	883.3	879.9	891.3	899.2	902.6
45°	830.8	828.6	838.8	845.7	850.2
47.5°	777.3	777.3	783.0	791.0	792.1
50°	727.1	723.7	730.6	735.1	736.3
52.5°	674.7	671.3	677.0	678.1	680.4
55°	623.4	617.7	620.0	623.4	622.3
57.5°	569.9	560.7	565.3	565.3	567.6
60°	517.4	509.4	509.4	509.4	511.7
62.5°	465.0	457.0	457.0	455.9	454.7
65°	412.6	405.7	403.5	400.0	396.6
67.5°	362.4	354.4	349.9	345.3	341.9
70°	315.7	302.0	298.6	291.8	291.8
72.5°	269.0	255.3	248.5	243.9	242.8
75°	220.0	206.3	200.6	194.9	193.8
77.5°	172.1	163.0	153.9	149.3	147.0
80°	129.9	121.9	114.0	106.0	107.1
82.5°	88.9	80.9	75.2	68.4	66.1
85°	51.3	46.7	39.9	31.9	29.6
87.5°	21.7	16.0	11.4	11.4	11.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)