

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: P229789

Luminaire Tested: **24RLN-LD5-45-RDP-UNV-L835-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229789  
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-LD5-45-RDP-UNV-L835-CD1-U  
Description: METALUX 2X4 RLN LED TROFFER WITH RDP LENS  
Light Source: (252)3500K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3770.0 lumens  
Efficiency: N/A  
Efficacy: 110.9 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

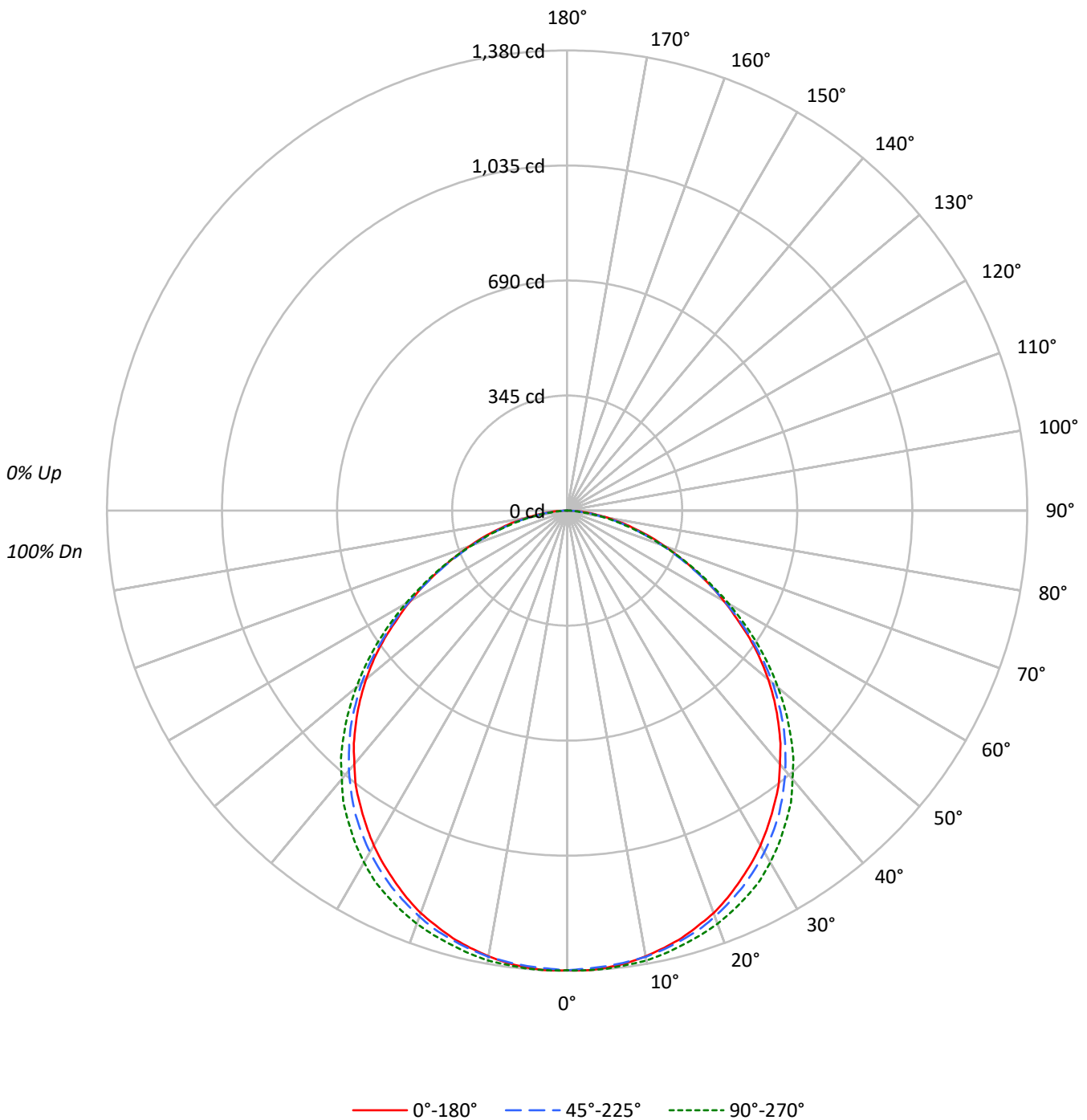
Input Watts (W): 34  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	2112	2112	2112
5°	2115	2109	2120
10°	2111	2113	2131
15°	2105	2114	2136
20°	2093	2112	2149
25°	2071	2105	2156
30°	2051	2092	2155
35°	2022	2073	2137
40°	1985	2036	2102
45°	1939	1989	2051
50°	1874	1919	1970
55°	1784	1807	1860
60°	1665	1673	1717
65°	1529	1519	1555
70°	1390	1352	1358
75°	1236	1168	1159
80°	1073	959	933
85°	880	678	527



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	130.8	3.5
10°-20°	376.9	10.0
20°-30°	575.4	15.3
30°-40°	693.7	18.4
40°-50°	707.4	18.8
50°-60°	605.4	16.1
60°-70°	417.0	11.1
70°-80°	213.8	5.7
80°-90°	49.8	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°	1083.1	28.7
0°-40°	1776.7	47.1
0°-60°	3089.5	81.9
0°-90°	3770.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3770.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1379	1379	1379	1379	1379	
5°	1376	1373	1372	1376	1379	131
15°	1327	1326	1333	1343	1347	374
25°	1226	1230	1246	1267	1276	565
35°	1081	1086	1108	1133	1143	676
45°	895	897	918	941	947	690
55°	668	664	676	691	696	596
65°	422	412	419	422	429	419
75°	209	200	197	197	196	225
85°	50	44	39	34	30	58
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1378.7	1378.7	1378.7	1378.7	1378.7
2.5°	1380.1	1377.3	1374.4	1377.3	1380.1
5°	1375.8	1373.0	1371.6	1375.8	1378.7
7.5°	1368.7	1365.8	1365.8	1371.6	1374.4
10°	1357.3	1355.8	1358.7	1364.4	1370.1
12.5°	1342.9	1342.9	1347.2	1354.4	1360.1
15°	1327.2	1325.8	1332.9	1342.9	1347.2
17.5°	1305.8	1307.2	1317.2	1328.6	1334.4
20°	1284.3	1285.7	1295.8	1311.5	1318.6
22.5°	1257.1	1260.0	1271.4	1291.5	1298.6
25°	1225.7	1230.0	1245.7	1267.1	1275.7
27.5°	1194.2	1198.5	1215.7	1240.0	1251.4
30°	1159.9	1165.6	1182.8	1208.5	1218.5
32.5°	1121.3	1125.6	1147.0	1172.8	1182.8
35°	1081.2	1085.5	1108.4	1132.7	1142.7
37.5°	1041.2	1041.2	1064.1	1092.7	1102.7
40°	992.6	994.0	1018.3	1045.5	1051.2
42.5°	946.8	946.8	968.2	994.0	1004.0
45°	895.3	896.7	918.2	941.1	946.8
47.5°	842.4	842.4	861.0	882.4	888.1
50°	786.6	783.7	805.2	822.4	826.6
52.5°	729.4	725.1	742.3	756.6	762.3
55°	667.9	663.6	676.5	690.8	696.5
57.5°	603.5	597.8	612.1	625.0	627.9
60°	543.5	534.9	546.3	553.5	560.6
62.5°	483.4	473.4	482.0	486.3	492.0
65°	421.9	411.9	419.0	421.9	429.1
67.5°	363.3	356.1	357.5	361.8	364.7
70°	310.4	301.8	301.8	301.8	303.2
72.5°	261.7	248.9	247.4	248.9	248.9
75°	208.8	200.2	197.4	197.4	195.9
77.5°	167.3	155.9	154.5	151.6	148.7
80°	121.6	111.6	108.7	107.3	105.8
82.5°	84.4	75.8	72.9	70.1	65.8
85°	50.1	44.3	38.6	34.3	30.0
87.5°	18.6	17.2	14.3	12.9	12.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)