

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: P229879

Luminaire Tested: **24RLN-LD5-45-UNV-L935-CD1-SVPD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229879  
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-LD5-45-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: 3867.0 lumens  
Efficiency: N/A  
Efficacy: 113.7 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

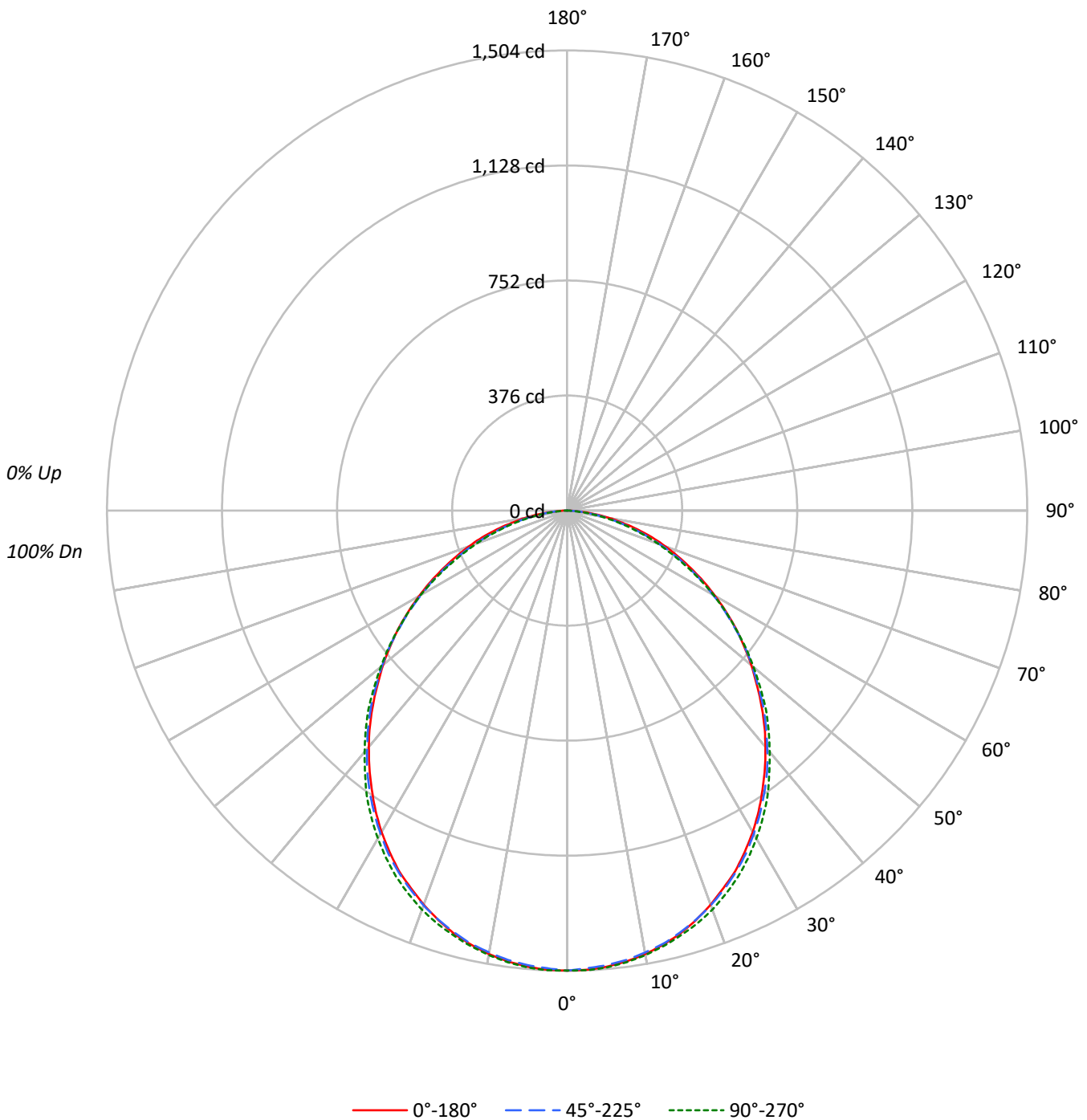
Input Watts (W): 34  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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					100			
1	109	105	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85					85			
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	76	73	71					71			
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	66	63	60					60			
4	84	72	63	57	81	71	63	56	68	61	56	66	60	55	64	58	54	52					52			
5	77	64	56	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45					45			
6	71	58	49	43	69	57	49	43	55	48	42	54	47	42	52	46	42	40					40			
7	66	53	44	38	64	52	44	38	50	43	38	49	42	37	48	42	37	35					35			
8	62	48	40	34	60	48	40	34	46	39	34	45	38	34	44	38	33	31					31			
9	58	44	36	31	56	44	36	31	43	35	31	42	35	30	41	35	30	28					28			
10	54	41	33	28	53	40	33	28	39	33	28	39	32	28	38	32	28	26					26			

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

	0°	45°	90°
0°	2303	2303	2303
5°	2300	2293	2304
10°	2289	2281	2294
15°	2269	2263	2279
20°	2234	2238	2262
25°	2198	2204	2233
30°	2145	2158	2189
35°	2081	2102	2134
40°	2016	2034	2058
45°	1945	1963	1990
50°	1872	1881	1896
55°	1799	1789	1796
60°	1713	1686	1694
65°	1616	1580	1553
70°	1528	1445	1412
75°	1407	1282	1239
80°	1238	1086	1021
85°	974	757	562



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	141.9	3.7
10°-20°	403.5	10.4
20°-30°	601.4	15.6
30°-40°	703.1	18.2
40°-50°	698.2	18.1
50°-60°	599.6	15.5
60°-70°	431.9	11.2
70°-80°	232.5	6.0
80°-90°	54.8	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°	1146.8	29.7
0°-40°	1849.9	47.8
0°-60°	3147.7	81.4
0°-90°	3867.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3867.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1504	1504	1504	1504	1504	
5°	1496	1495	1491	1496	1499	142
15°	1431	1427	1427	1436	1437	403
25°	1300	1296	1304	1318	1321	598
35°	1113	1112	1124	1137	1142	696
45°	898	895	906	914	919	692
55°	674	667	670	674	672	602
65°	446	438	436	432	428	443
75°	238	223	217	211	209	252
85°	55	50	43	34	32	67
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1503.6	1503.6	1503.6	1503.6	1503.6
2.5°	1502.3	1501.1	1497.4	1502.3	1503.6
5°	1496.2	1494.9	1491.3	1496.2	1498.6
7.5°	1486.3	1483.9	1481.4	1486.3	1488.8
10°	1471.5	1469.1	1466.6	1472.8	1475.2
12.5°	1453.1	1450.6	1450.6	1455.5	1458.0
15°	1430.9	1427.2	1427.2	1435.8	1437.1
17.5°	1402.6	1400.1	1401.4	1411.2	1414.9
20°	1370.6	1369.3	1373.0	1384.1	1387.8
22.5°	1334.9	1333.6	1339.8	1353.3	1355.8
25°	1300.4	1295.5	1304.1	1317.6	1321.3
27.5°	1257.3	1253.6	1264.7	1277.0	1280.7
30°	1212.9	1209.3	1220.3	1233.9	1237.6
32.5°	1164.9	1162.5	1173.5	1187.1	1190.8
35°	1113.2	1112.0	1124.3	1136.6	1141.5
37.5°	1061.5	1060.3	1073.8	1083.7	1084.9
40°	1008.5	1006.1	1017.2	1028.2	1029.5
42.5°	954.4	950.7	963.0	971.6	975.3
45°	897.7	895.2	906.3	913.7	918.6
47.5°	839.8	839.8	846.0	854.6	855.8
50°	785.6	782.0	789.3	794.3	795.5
52.5°	729.0	725.3	731.5	732.7	735.2
55°	673.6	667.4	669.9	673.6	672.4
57.5°	615.7	605.9	610.8	610.8	613.2
60°	559.1	550.4	550.4	550.4	552.9
62.5°	502.4	493.8	493.8	492.6	491.3
65°	445.8	438.4	435.9	432.2	428.5
67.5°	391.6	383.0	378.0	373.1	369.4
70°	341.1	326.3	322.6	315.2	315.2
72.5°	290.6	275.8	268.4	263.5	262.3
75°	237.7	222.9	216.7	210.6	209.3
77.5°	185.9	176.1	166.2	161.3	158.9
80°	140.4	131.8	123.1	114.5	115.8
82.5°	96.1	87.4	81.3	73.9	71.4
85°	55.4	50.5	43.1	34.5	32.0
87.5°	23.4	17.2	12.3	12.3	12.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)