

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: P229717

Luminaire Tested: **24RLN-LD5-36-UNV-L830-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229717  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36038)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24RLN-LD5-36-UNV-L830-CD1-U  
Description: METALUX 2X4 RLN LED TROFFER  
Light Source: (252)3000K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3505.0 lumens  
Efficiency: N/A  
Efficacy: 132.3 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

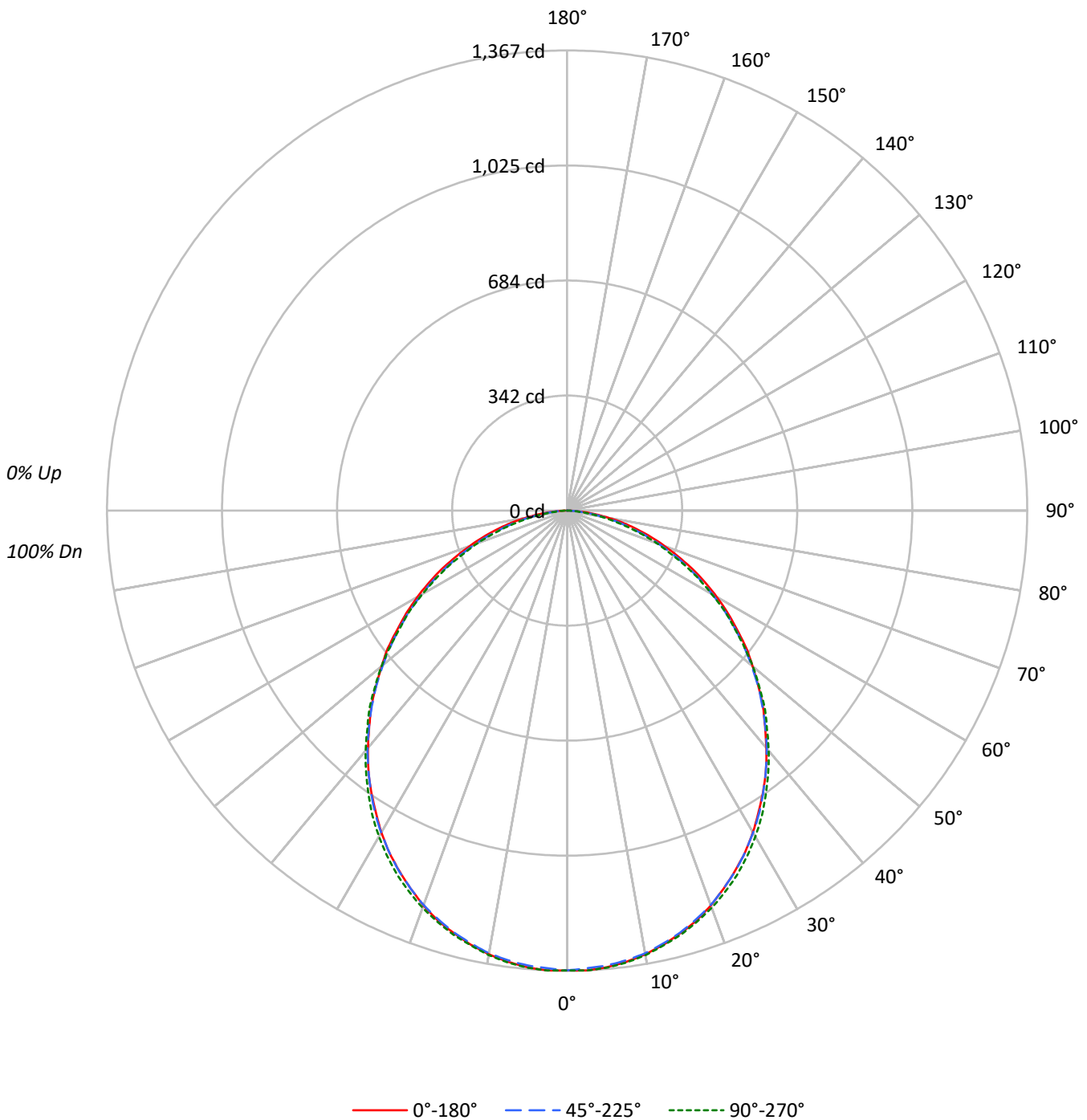
Input Watts (W): 26.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	77	73	71
3	91	81	73	67	89	79	72	66	76	70	65		74	68	64		71	67	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	32
9	58	44	36	31	56	44	36	31	43	36	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°	2092	2092	2092
5°	2094	2085	2095
10°	2082	2077	2085
15°	2061	2058	2068
20°	2035	2033	2047
25°	1996	1998	2018
30°	1952	1954	1977
35°	1899	1901	1923
40°	1841	1845	1863
45°	1782	1777	1799
50°	1713	1703	1716
55°	1643	1622	1616
60°	1574	1527	1520
65°	1487	1423	1403
70°	1378	1294	1269
75°	1266	1142	1083
80°	1109	953	865
85°	910	659	524



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	129.1	3.7
10°-20°	366.7	10.5
20°-30°	545.6	15.6
30°-40°	637.4	18.2
40°-50°	633.7	18.1
50°-60°	544.5	15.5
60°-70°	391.0	11.2
70°-80°	208.3	5.9
80°-90°	48.8	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°	1041.4	29.7
0°-40°	1678.8	47.9
0°-60°	2857.0	81.5
0°-90°	3505.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3505.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1366	1366	1366	1366	1366	
5°	1362	1360	1356	1361	1363	129
15°	1300	1300	1298	1302	1304	367
25°	1181	1181	1182	1191	1194	544
35°	1016	1013	1017	1028	1029	635
45°	822	816	820	825	830	633
55°	615	608	608	608	605	552
65°	410	398	392	388	387	406
75°	214	202	193	187	183	228
85°	52	44	38	31	30	61
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1366.1	1366.1	1366.1	1366.1	1366.1
2.5°	1367.2	1365.0	1360.6	1366.1	1367.2
5°	1361.7	1359.5	1356.2	1360.6	1362.8
7.5°	1351.8	1349.6	1347.4	1351.8	1354.0
10°	1338.6	1337.5	1335.3	1340.8	1340.8
12.5°	1320.9	1319.8	1317.6	1323.1	1323.1
15°	1300.0	1300.0	1297.8	1302.2	1304.4
17.5°	1276.8	1275.7	1273.5	1279.0	1281.2
20°	1248.2	1248.2	1247.1	1253.7	1255.9
22.5°	1215.1	1215.1	1215.1	1223.9	1226.1
25°	1180.9	1180.9	1182.0	1190.8	1194.1
27.5°	1144.5	1143.4	1144.5	1154.4	1157.7
30°	1103.7	1101.5	1104.8	1114.7	1118.0
32.5°	1059.6	1057.4	1062.9	1071.7	1076.1
35°	1015.5	1013.3	1016.6	1027.6	1028.7
37.5°	970.3	964.8	970.3	980.2	981.3
40°	920.7	916.3	922.9	927.3	931.7
42.5°	870.0	867.8	871.1	878.8	878.8
45°	822.5	815.9	820.3	824.8	830.3
47.5°	769.6	766.3	768.5	771.8	774.0
50°	718.9	713.4	714.5	717.8	720.0
52.5°	671.5	660.5	660.5	662.7	662.7
55°	615.3	607.5	607.5	607.5	605.3
57.5°	565.6	555.7	554.6	554.6	554.6
60°	513.8	501.7	498.4	498.4	496.2
62.5°	462.0	451.0	446.6	442.1	442.1
65°	410.2	398.0	392.5	388.1	387.0
67.5°	357.2	348.4	341.8	336.3	330.8
70°	307.6	297.7	288.9	283.4	283.4
72.5°	261.3	250.3	241.5	234.9	231.5
75°	213.9	201.8	193.0	187.4	183.0
77.5°	172.0	158.8	150.0	142.2	137.8
80°	125.7	115.8	108.1	100.3	98.1
82.5°	87.1	79.4	70.6	65.1	62.8
85°	51.8	44.1	37.5	30.9	29.8
87.5°	20.9	15.4	12.1	12.1	12.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)