

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: P229722

Luminaire Tested: **24RLN-LD5-60-UNV-L830-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229722  
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-LD5-60-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: 5759.0 lumens  
Efficiency: N/A  
Efficacy: 120.7 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

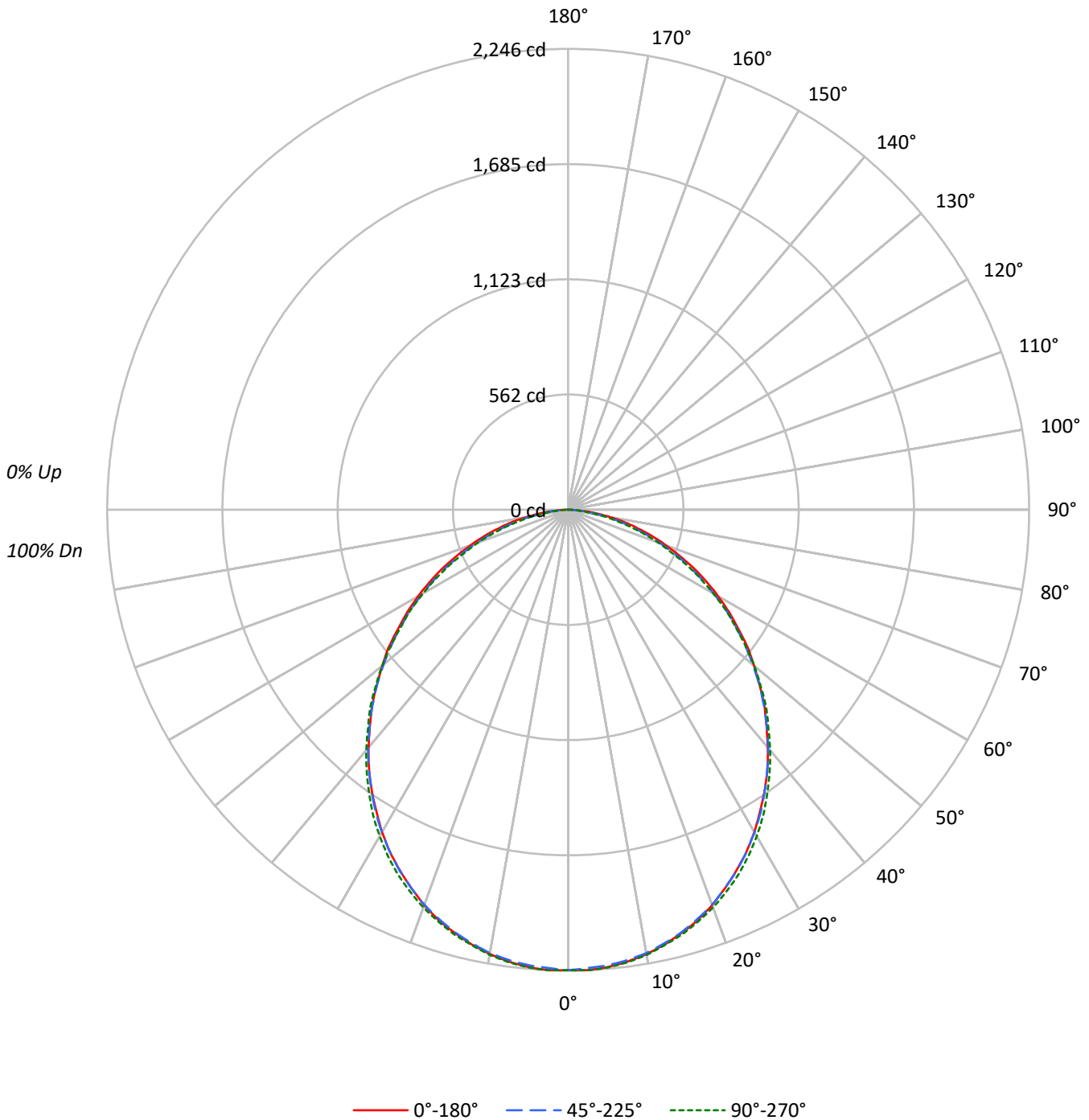
Input Watts (W): 47.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3438	3438	3438
5°	3440	3426	3443
10°	3421	3412	3426
15°	3387	3381	3398
20°	3343	3340	3363
25°	3279	3282	3316
30°	3207	3211	3249
35°	3120	3123	3161
40°	3025	3032	3061
45°	2927	2920	2955
50°	2815	2797	2819
55°	2699	2666	2656
60°	2586	2509	2498
65°	2442	2338	2305
70°	2264	2126	2085
75°	2080	1876	1780
80°	1821	1566	1422
85°	1496	1083	859



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	212.1	3.7
10°-20°	602.5	10.5
20°-30°	896.4	15.6
30°-40°	1047.4	18.2
40°-50°	1041.2	18.1
50°-60°	894.6	15.5
60°-70°	642.5	11.2
70°-80°	342.2	5.9
80°-90°	80.1	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°	1711.1	29.7
0°-40°	2758.4	47.9
0°-60°	4694.2	81.5
0°-90°	5759.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5759.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2245	2245	2245	2245	2245	
5°	2237	2234	2228	2236	2239	212
15°	2136	2136	2132	2140	2143	602
25°	1940	1940	1942	1957	1962	894
35°	1669	1665	1670	1688	1690	1043
45°	1352	1341	1348	1355	1364	1041
55°	1011	998	998	998	995	907
65°	674	654	645	638	636	667
75°	352	332	317	308	301	374
85°	85	72	62	51	49	100
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2244.7	2244.7	2244.7	2244.7	2244.7
2.5°	2246.5	2242.9	2235.6	2244.7	2246.5
5°	2237.4	2233.8	2228.4	2235.6	2239.2
7.5°	2221.1	2217.5	2213.9	2221.1	2224.7
10°	2199.4	2197.6	2193.9	2203.0	2203.0
12.5°	2170.4	2168.6	2165.0	2174.0	2174.0
15°	2136.0	2136.0	2132.3	2139.6	2143.2
17.5°	2097.9	2096.1	2092.5	2101.5	2105.2
20°	2050.8	2050.8	2049.0	2059.9	2063.5
22.5°	1996.5	1996.5	1996.5	2011.0	2014.6
25°	1940.3	1940.3	1942.1	1956.6	1962.0
27.5°	1880.5	1878.7	1880.5	1896.8	1902.3
30°	1813.5	1809.9	1815.3	1831.6	1837.0
32.5°	1741.0	1737.4	1746.5	1761.0	1768.2
35°	1668.6	1664.9	1670.4	1688.5	1690.3
37.5°	1594.3	1585.2	1594.3	1610.6	1612.4
40°	1512.8	1505.5	1516.4	1523.6	1530.9
42.5°	1429.4	1425.8	1431.2	1443.9	1443.9
45°	1351.5	1340.6	1347.9	1355.1	1364.2
47.5°	1264.6	1259.1	1262.7	1268.2	1271.8
50°	1181.2	1172.2	1174.0	1179.4	1183.0
52.5°	1103.3	1085.2	1085.2	1088.8	1088.8
55°	1010.9	998.2	998.2	998.2	994.6
57.5°	929.4	913.1	911.3	911.3	911.3
60°	844.2	824.3	818.9	818.9	815.3
62.5°	759.1	741.0	733.7	726.5	726.5
65°	673.9	654.0	645.0	637.7	635.9
67.5°	587.0	572.5	561.6	552.6	543.5
70°	505.5	489.2	474.7	465.6	465.6
72.5°	429.4	411.3	396.8	385.9	380.5
75°	351.5	331.5	317.0	308.0	300.7
77.5°	282.6	260.9	246.4	233.7	226.5
80°	206.5	190.2	177.5	164.9	161.2
82.5°	143.1	130.4	115.9	106.9	103.3
85°	85.1	72.5	61.6	50.7	48.9
87.5°	34.4	25.4	19.9	19.9	19.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)