

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: P229784

Luminaire Tested: **24RLN-LD5-74-RDP-UNV-L830-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229784  
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-LD5-74-RDP-UNV-L830-CD1-U  
Description: METALUX 2X4 RLN LED TROFFER WITH RDP LENS  
Light Source: (252)3000K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5917.0 lumens  
Efficiency: N/A  
Efficacy: 96.1 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

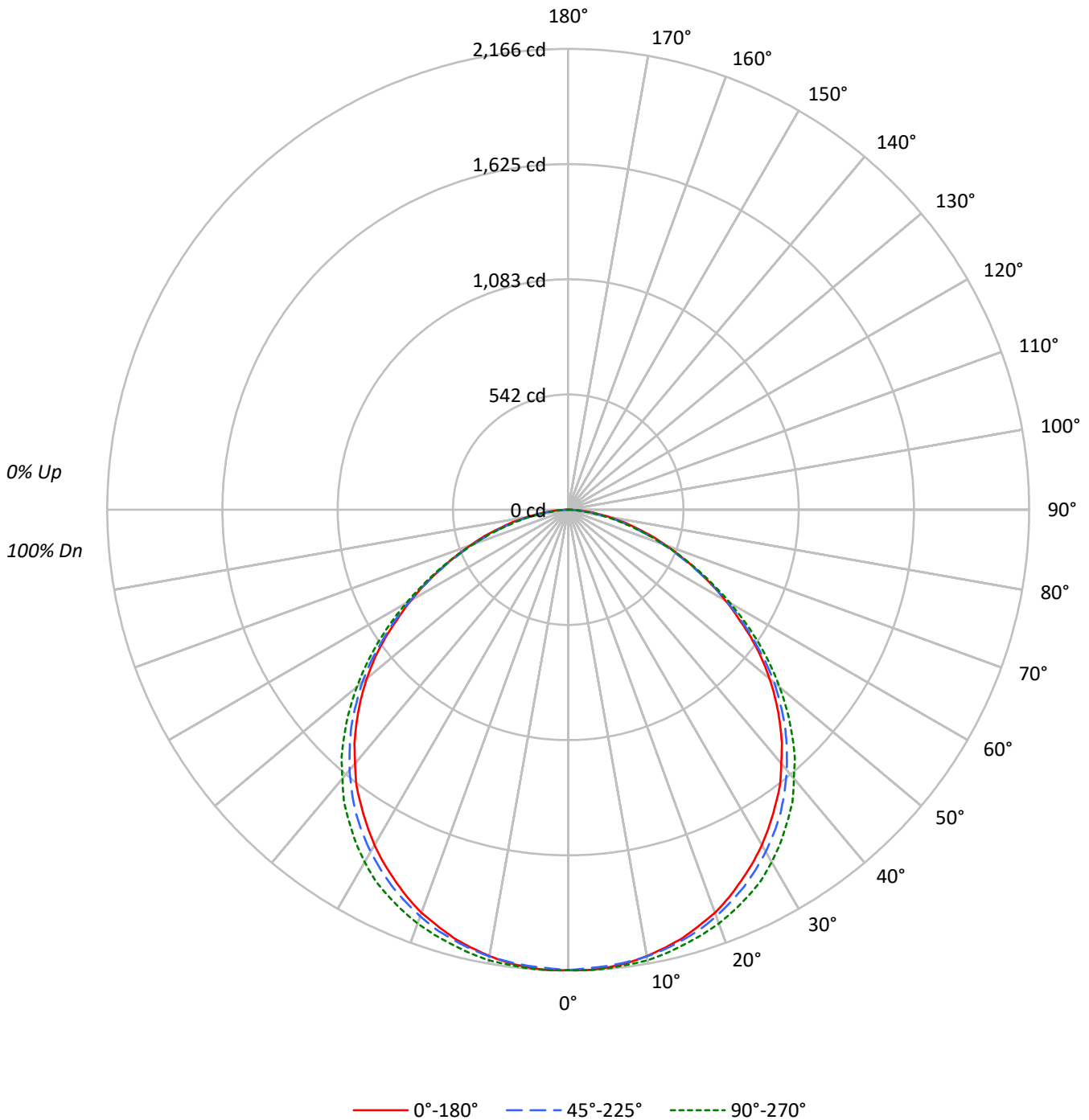
Input Watts (W): 61.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3314	3314	3314
5°	3320	3310	3327
10°	3313	3317	3345
15°	3303	3317	3353
20°	3286	3315	3373
25°	3251	3304	3384
30°	3220	3283	3382
35°	3173	3253	3354
40°	3115	3196	3299
45°	3044	3122	3219
50°	2942	3011	3092
55°	2799	2835	2919
60°	2613	2627	2695
65°	2400	2384	2441
70°	2181	2121	2131
75°	1939	1833	1820
80°	1683	1505	1465
85°	1381	1065	828



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	205.2	3.5
10°-20°	591.6	10.0
20°-30°	903.0	15.3
30°-40°	1088.7	18.4
40°-50°	1110.2	18.8
50°-60°	950.1	16.1
60°-70°	654.5	11.1
70°-80°	335.5	5.7
80°-90°	78.1	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°	1699.9	28.7
0°-40°	2788.5	47.1
0°-60°	4848.9	81.9
0°-90°	5917.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5917.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2164	2164	2164	2164	2164	
5°	2159	2155	2153	2159	2164	205
15°	2083	2081	2092	2108	2114	587
25°	1924	1930	1955	1989	2002	887
35°	1697	1704	1740	1778	1794	1062
45°	1405	1407	1441	1477	1486	1083
55°	1048	1042	1062	1084	1093	935
65°	662	646	658	662	673	658
75°	328	314	310	310	308	353
85°	79	70	61	54	47	91
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2163.9	2163.9	2163.9	2163.9	2163.9
2.5°	2166.1	2161.6	2157.1	2161.6	2166.1
5°	2159.4	2154.9	2152.6	2159.4	2163.9
7.5°	2148.2	2143.7	2143.7	2152.6	2157.1
10°	2130.2	2128.0	2132.4	2141.4	2150.4
12.5°	2107.8	2107.8	2114.5	2125.7	2134.7
15°	2083.1	2080.8	2092.0	2107.8	2114.5
17.5°	2049.4	2051.6	2067.3	2085.3	2094.3
20°	2015.7	2018.0	2033.7	2058.4	2069.6
22.5°	1973.1	1977.6	1995.5	2026.9	2038.2
25°	1923.7	1930.4	1955.1	1988.8	2002.3
27.5°	1874.3	1881.0	1908.0	1946.1	1964.1
30°	1820.4	1829.4	1856.3	1896.8	1912.5
32.5°	1759.8	1766.6	1800.2	1840.6	1856.3
35°	1697.0	1703.7	1739.6	1777.8	1793.5
37.5°	1634.1	1634.1	1670.0	1714.9	1730.6
40°	1557.8	1560.1	1598.2	1640.9	1649.8
42.5°	1486.0	1486.0	1519.6	1560.1	1575.8
45°	1405.2	1407.4	1441.1	1477.0	1486.0
47.5°	1322.1	1322.1	1351.3	1385.0	1393.9
50°	1234.6	1230.1	1263.8	1290.7	1297.4
52.5°	1144.8	1138.1	1165.0	1187.4	1196.4
55°	1048.3	1041.5	1061.7	1084.2	1093.2
57.5°	947.3	938.3	960.7	980.9	985.4
60°	853.0	839.5	857.5	868.7	879.9
62.5°	758.7	743.0	756.5	763.2	772.2
65°	662.2	646.5	657.7	662.2	673.4
67.5°	570.1	558.9	561.2	567.9	572.4
70°	487.1	473.6	473.6	473.6	475.9
72.5°	410.8	390.6	388.3	390.6	390.6
75°	327.7	314.3	309.8	309.8	307.5
77.5°	262.6	244.7	242.4	237.9	233.4
80°	190.8	175.1	170.6	168.4	166.1
82.5°	132.4	119.0	114.5	110.0	103.3
85°	78.6	69.6	60.6	53.9	47.1
87.5°	29.2	26.9	22.4	20.2	20.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)