

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: P229803

Luminaire Tested: **24RLN-LD5-67-RDP-UNV-L840-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229803  
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-LD5-67-RDP-UNV-L840-CD1-U  
Description: METALUX 2X4 RLN LED TROFFER WITH RDP LENS  
Light Source: (252)4000K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5601.0 lumens  
Efficiency: N/A  
Efficacy: 103.9 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

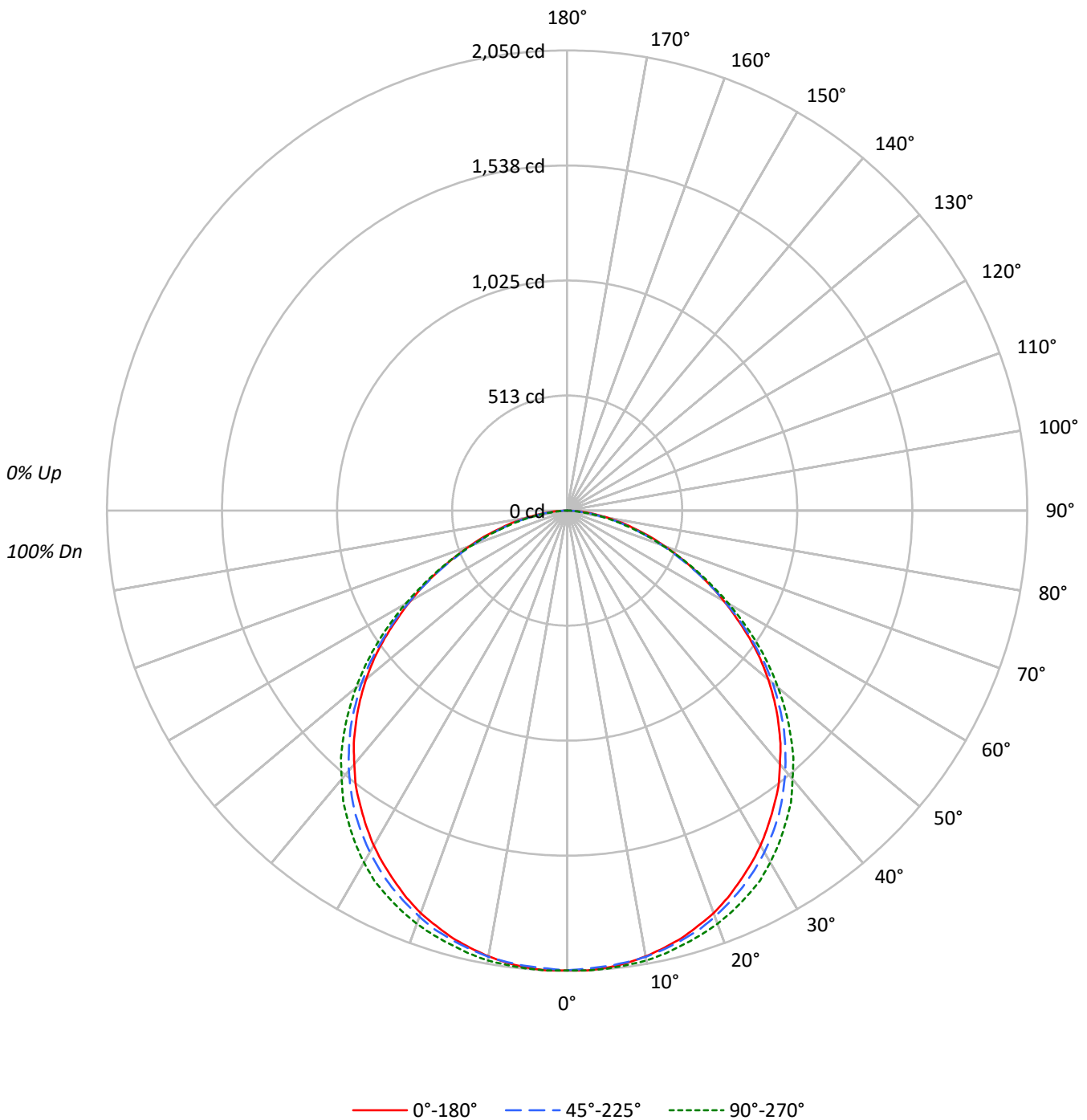
Input Watts (W): 53.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P229803

CATALOG NUMBER: 24RLN-LD5-67-RDP-UNV-L840-CD1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P229803

CATALOG NUMBER: 24RLN-LD5-67-RDP-UNV-L840-CD1-U

**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°	3137	3137	3137
5°	3143	3133	3149
10°	3136	3140	3166
15°	3127	3140	3174
20°	3110	3138	3193
25°	3078	3128	3203
30°	3048	3108	3202
35°	3003	3079	3174
40°	2948	3025	3123
45°	2881	2955	3047
50°	2785	2851	2926
55°	2650	2684	2763
60°	2473	2487	2551
65°	2272	2256	2310
70°	2065	2008	2017
75°	1836	1735	1723
80°	1593	1425	1387
85°	1307	1009	784



TEST NUMBER: P229803

CATALOG NUMBER: 24RLN-LD5-67-RDP-UNV-L840-CD1-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	194.3	3.5
10°-20°	560.0	10.0
20°-30°	854.8	15.3
30°-40°	1030.5	18.4
40°-50°	1050.9	18.8
50°-60°	899.4	16.1
60°-70°	619.5	11.1
70°-80°	317.6	5.7
80°-90°	73.9	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°	1609.1	28.7
0°-40°	2639.6	47.1
0°-60°	4589.9	81.9
0°-90°	5601.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5601.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2048	2048	2048	2048	2048	
5°	2044	2040	2038	2044	2048	194
15°	1972	1970	1980	1995	2002	556
25°	1821	1827	1851	1883	1895	840
35°	1606	1613	1647	1683	1698	1005
45°	1330	1332	1364	1398	1407	1025
55°	992	986	1005	1026	1035	885
65°	627	612	623	627	637	623
75°	310	298	293	293	291	334
85°	74	66	57	51	45	86
90°	0	0	0	0	0	



TEST NUMBER: P229803

CATALOG NUMBER: 24RLN-LD5-67-RDP-UNV-L840-CD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2048.3	2048.3	2048.3	2048.3	2048.3
2.5°	2050.4	2046.2	2041.9	2046.2	2050.4
5°	2044.1	2039.8	2037.7	2044.1	2048.3
7.5°	2033.4	2029.2	2029.2	2037.7	2041.9
10°	2016.4	2014.3	2018.6	2027.1	2035.6
12.5°	1995.2	1995.2	2001.6	2012.2	2020.7
15°	1971.8	1969.7	1980.3	1995.2	2001.6
17.5°	1939.9	1942.1	1956.9	1973.9	1982.4
20°	1908.1	1910.2	1925.1	1948.4	1959.1
22.5°	1867.7	1871.9	1888.9	1918.7	1929.3
25°	1821.0	1827.3	1850.7	1882.6	1895.3
27.5°	1774.2	1780.6	1806.1	1842.2	1859.2
30°	1723.2	1731.7	1757.2	1795.5	1810.3
32.5°	1665.8	1672.2	1704.1	1742.3	1757.2
35°	1606.3	1612.7	1646.7	1682.8	1697.7
37.5°	1546.9	1546.9	1580.9	1623.3	1638.2
40°	1474.6	1476.7	1512.9	1553.2	1561.7
42.5°	1406.6	1406.6	1438.5	1476.7	1491.6
45°	1330.1	1332.2	1364.1	1398.1	1406.6
47.5°	1251.5	1251.5	1279.1	1311.0	1319.5
50°	1168.6	1164.4	1196.3	1221.8	1228.1
52.5°	1083.6	1077.3	1102.8	1124.0	1132.5
55°	992.3	985.9	1005.0	1026.3	1034.8
57.5°	896.7	888.2	909.4	928.5	932.8
60°	807.4	794.7	811.7	822.3	832.9
62.5°	718.2	703.3	716.1	722.4	730.9
65°	626.8	611.9	622.6	626.8	637.4
67.5°	539.7	529.1	531.2	537.6	541.8
70°	461.1	448.3	448.3	448.3	450.5
72.5°	388.8	369.7	367.6	369.7	369.7
75°	310.2	297.5	293.2	293.2	291.1
77.5°	248.6	231.6	229.5	225.2	221.0
80°	180.6	165.7	161.5	159.4	157.2
82.5°	125.4	112.6	108.4	104.1	97.7
85°	74.4	65.9	57.4	51.0	44.6
87.5°	27.6	25.5	21.2	19.1	19.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)