

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: P229955

Luminaire Tested: **24RLN-LD5-80-RDP-UNV-L940-CD1-SVPD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229955  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1707-178-7)  
Test Lab: INNOVATION CENTER-G3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24RLN-LD5-80-RDP-UNV-L940-CD1-SVPD1-U  
Description: METALUX 2X4 RLN LED TROFFER WITH SENSOR AND RDP LENS  
Light Source: (252)4000K CCT, 90 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5829.0 lumens  
Efficiency: N/A  
Efficacy: 86.4 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.31 / 1.38  
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')  
CIE Type: Direct

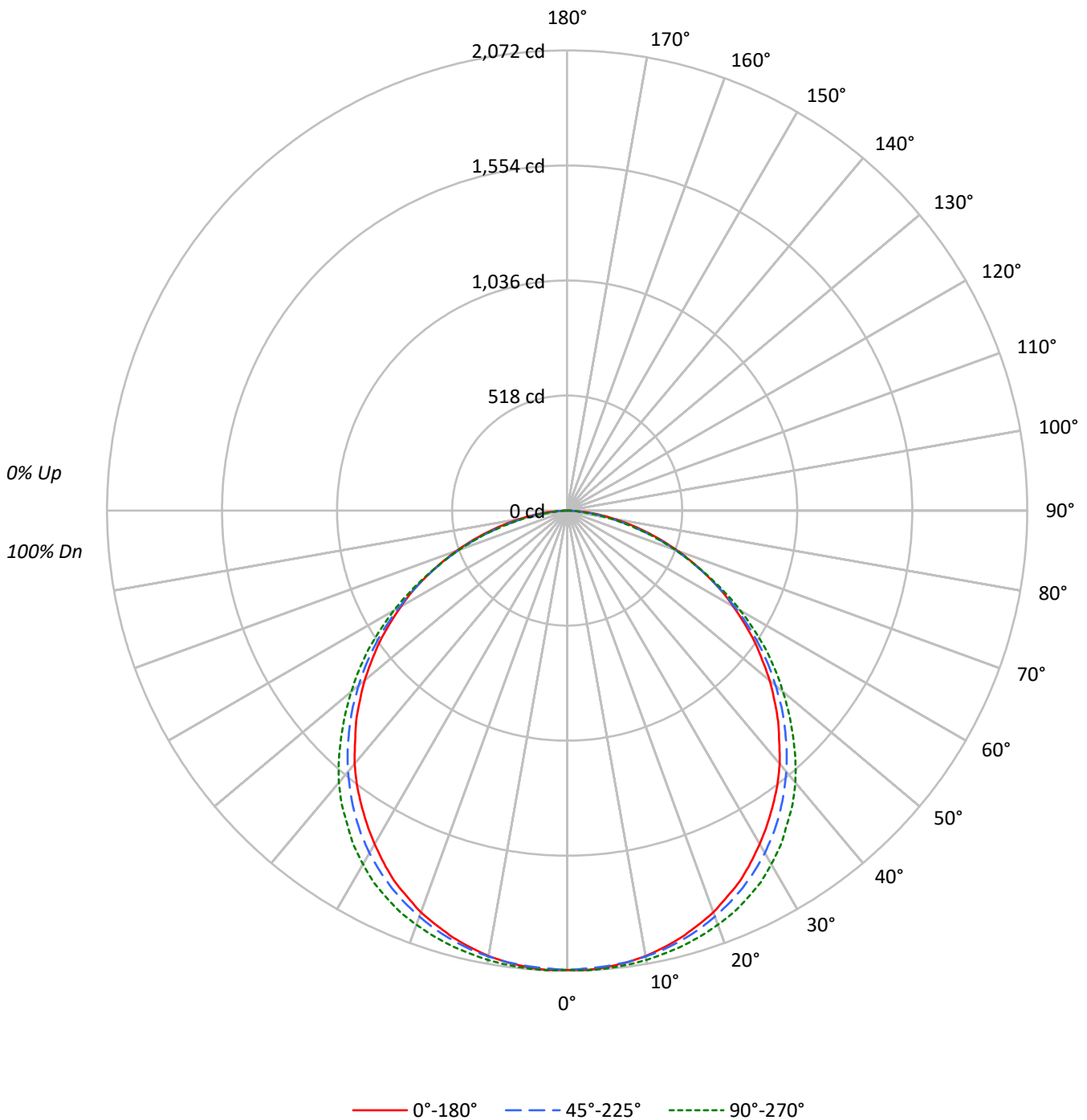
Input Watts (W): 67.45  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70
3	91	80	72	66	88	78	71	65	76	69	64	73	67	63	70	66	62	59
4	83	71	62	56	81	70	61	55	67	60	54	65	59	54	63	57	53	51
5	76	63	54	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	38
7	65	52	43	37	64	51	43	37	49	42	36	48	41	36	47	41	36	34
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	30
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	33	29	27
10	53	40	32	27	52	39	32	27	38	31	27	38	31	27	37	31	26	25

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

	0°	45°	90°
0°	3168	3168	3168
5°	3173	3165	3182
10°	3168	3171	3196
15°	3154	3174	3214
20°	3137	3171	3235
25°	3111	3165	3251
30°	3067	3148	3252
35°	3022	3117	3226
40°	2976	3069	3198
45°	2911	3003	3117
50°	2838	2919	3023
55°	2752	2820	2921
60°	2647	2680	2762
65°	2524	2524	2550
70°	2373	2329	2324
75°	2165	2035	2028
80°	1887	1694	1619
85°	1496	1174	919



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	196.3	3.4
10°-20°	566.1	9.7
20°-30°	864.9	14.8
30°-40°	1043.4	17.9
40°-50°	1069.5	18.3
50°-60°	942.3	16.2
60°-70°	689.6	11.8
70°-80°	370.6	6.4
80°-90°	86.3	1.5
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°	1627.3	27.9
0°-40°	2670.7	45.8
0°-60°	4682.5	80.3
0°-90°	5829.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5829.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2068	2068	2068	2068	2068	
5°	2063	2061	2058	2065	2069	196
15°	1989	1992	2001	2017	2027	561
25°	1841	1846	1873	1909	1924	847
35°	1616	1625	1667	1713	1726	1012
45°	1344	1343	1386	1427	1439	1035
55°	1030	1024	1056	1080	1094	920
65°	696	684	696	705	704	690
75°	366	349	344	344	343	388
85°	85	75	67	55	52	102
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2068.2	2068.2	2068.2	2068.2	2068.2
2.5°	2070.7	2067.0	2063.4	2067.0	2071.9
5°	2063.4	2060.9	2058.5	2064.6	2069.4
7.5°	2052.4	2050.0	2051.2	2059.7	2063.4
10°	2036.6	2036.6	2039.1	2048.8	2054.9
12.5°	2014.8	2016.0	2023.3	2035.4	2041.5
15°	1989.2	1991.7	2001.4	2017.2	2026.9
17.5°	1957.6	1963.7	1977.1	1996.5	2007.5
20°	1924.8	1928.5	1945.5	1973.4	1984.4
22.5°	1882.3	1889.6	1911.5	1944.3	1958.9
25°	1841.0	1845.8	1872.6	1909.0	1923.6
27.5°	1788.7	1796.0	1828.8	1871.4	1887.2
30°	1734.1	1742.6	1780.2	1821.5	1838.6
32.5°	1676.9	1687.9	1726.8	1770.5	1788.7
35°	1616.2	1624.7	1667.2	1713.4	1725.5
37.5°	1555.4	1557.9	1602.8	1647.8	1667.2
40°	1488.6	1491.0	1534.8	1577.3	1599.2
42.5°	1413.2	1420.5	1463.1	1504.4	1521.4
45°	1344.0	1342.8	1386.5	1426.6	1438.8
47.5°	1266.2	1268.6	1308.7	1347.6	1354.9
50°	1190.9	1189.7	1224.9	1258.9	1268.6
52.5°	1108.2	1107.0	1142.3	1170.2	1182.4
55°	1030.5	1024.4	1056.0	1080.3	1093.7
57.5°	946.6	938.1	966.1	990.4	996.4
60°	864.0	854.3	874.9	893.2	901.7
62.5°	785.0	772.9	786.2	802.0	803.2
65°	696.3	684.1	696.3	704.8	703.6
67.5°	612.4	599.1	605.2	608.8	607.6
70°	529.8	511.6	520.1	517.7	518.9
72.5°	447.2	432.6	431.4	427.7	431.4
75°	365.8	348.8	343.9	343.9	342.7
77.5°	288.0	271.0	266.1	263.7	260.0
80°	213.9	200.5	192.0	190.8	183.5
82.5°	150.7	133.7	131.2	120.3	113.0
85°	85.1	75.3	66.8	54.7	52.3
87.5°	31.6	27.9	21.9	20.7	19.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)