

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: P229953

Luminaire Tested: **24RLN-LD5-67-RDP-UNV-L940-CD1-SVPD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229953  
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-LD5-67-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: 4887.0 lumens  
Efficiency: N/A  
Efficacy: 90.7 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

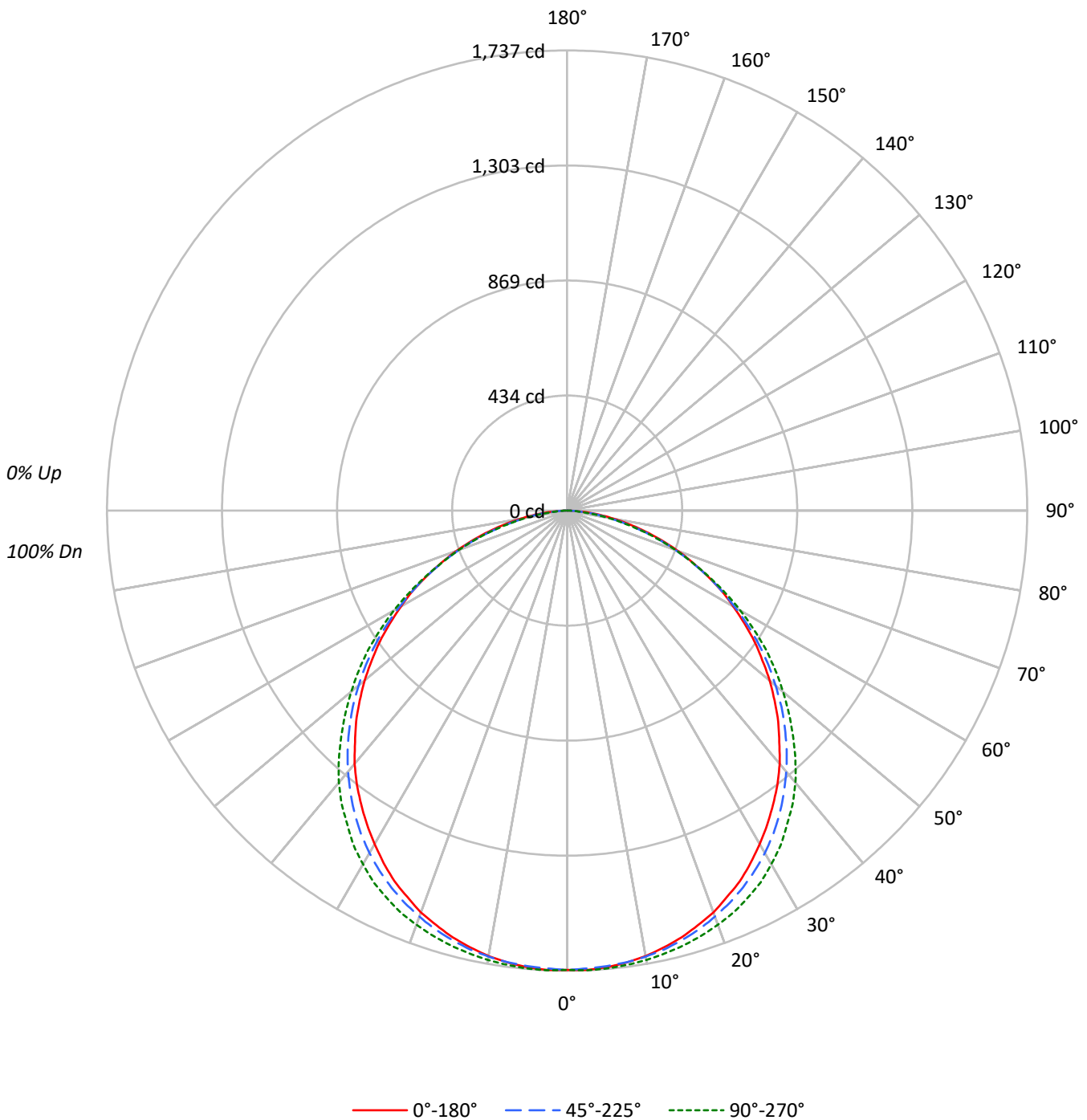
Input Watts (W): 53.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2656	2656	2656
5°	2660	2653	2668
10°	2656	2659	2679
15°	2645	2661	2695
20°	2630	2659	2712
25°	2609	2653	2726
30°	2571	2640	2726
35°	2534	2614	2705
40°	2495	2573	2681
45°	2441	2518	2613
50°	2379	2447	2534
55°	2307	2364	2448
60°	2219	2247	2316
65°	2116	2116	2138
70°	1989	1953	1948
75°	1815	1706	1700
80°	1582	1420	1357
85°	1253	984	770



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	164.5	3.4
10°-20°	474.6	9.7
20°-30°	725.1	14.8
30°-40°	874.8	17.9
40°-50°	896.6	18.3
50°-60°	790.0	16.2
60°-70°	578.2	11.8
70°-80°	310.7	6.4
80°-90°	72.3	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°	1364.3	27.9
0°-40°	2239.1	45.8
0°-60°	3925.7	80.3
0°-90°	4887.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4887.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1734	1734	1734	1734	1734	
5°	1730	1728	1726	1731	1735	164
15°	1668	1670	1678	1691	1699	471
25°	1544	1548	1570	1600	1613	710
35°	1355	1362	1398	1436	1447	848
45°	1127	1126	1162	1196	1206	868
55°	864	859	885	906	917	771
65°	584	574	584	591	590	579
75°	307	292	288	288	287	326
85°	71	63	56	46	44	85
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1734.0	1734.0	1734.0	1734.0	1734.0
2.5°	1736.0	1733.0	1729.9	1733.0	1737.0
5°	1729.9	1727.9	1725.8	1730.9	1735.0
7.5°	1720.7	1718.7	1719.7	1726.9	1729.9
10°	1707.5	1707.5	1709.5	1717.7	1722.8
12.5°	1689.2	1690.2	1696.3	1706.5	1711.6
15°	1667.8	1669.8	1678.0	1691.2	1699.3
17.5°	1641.3	1646.4	1657.6	1673.9	1683.0
20°	1613.8	1616.8	1631.1	1654.5	1663.7
22.5°	1578.1	1584.2	1602.6	1630.1	1642.3
25°	1543.5	1547.5	1570.0	1600.5	1612.8
27.5°	1499.7	1505.8	1533.3	1568.9	1582.2
30°	1453.8	1461.0	1492.5	1527.2	1541.4
32.5°	1405.9	1415.1	1447.7	1484.4	1499.7
35°	1355.0	1362.1	1397.8	1436.5	1446.7
37.5°	1304.1	1306.1	1343.8	1381.5	1397.8
40°	1248.0	1250.1	1286.7	1322.4	1340.7
42.5°	1184.9	1191.0	1226.6	1261.3	1275.5
45°	1126.8	1125.8	1162.4	1196.1	1206.3
47.5°	1061.6	1063.6	1097.2	1129.8	1136.0
50°	998.4	997.4	1026.9	1055.5	1063.6
52.5°	929.1	928.1	957.7	981.1	991.3
55°	863.9	858.8	885.3	905.7	916.9
57.5°	793.6	786.5	809.9	830.3	835.4
60°	724.4	716.2	733.5	748.8	755.9
62.5°	658.1	648.0	659.2	672.4	673.4
65°	583.8	573.6	583.8	590.9	589.9
67.5°	513.5	502.3	507.4	510.4	509.4
70°	444.2	428.9	436.0	434.0	435.0
72.5°	374.9	362.7	361.7	358.6	361.7
75°	306.7	292.4	288.3	288.3	287.3
77.5°	241.5	227.2	223.1	221.1	218.0
80°	179.3	168.1	161.0	160.0	153.8
82.5°	126.3	112.1	110.0	100.9	94.7
85°	71.3	63.2	56.0	45.8	43.8
87.5°	26.5	23.4	18.3	17.3	16.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)