

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: P229872

Luminaire Tested: **24RLN-LD5-60-UNV-L930-CD1-SVPD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229872  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36062)  
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-L930-CD1-SVPD1-U  
Description: METALUX 2X4 RLN LED TROFFER WITH SENSOR  
Light Source: (252)3000K CCT, 90 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4918.0 lumens  
Efficiency: N/A  
Efficacy: 103.1 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

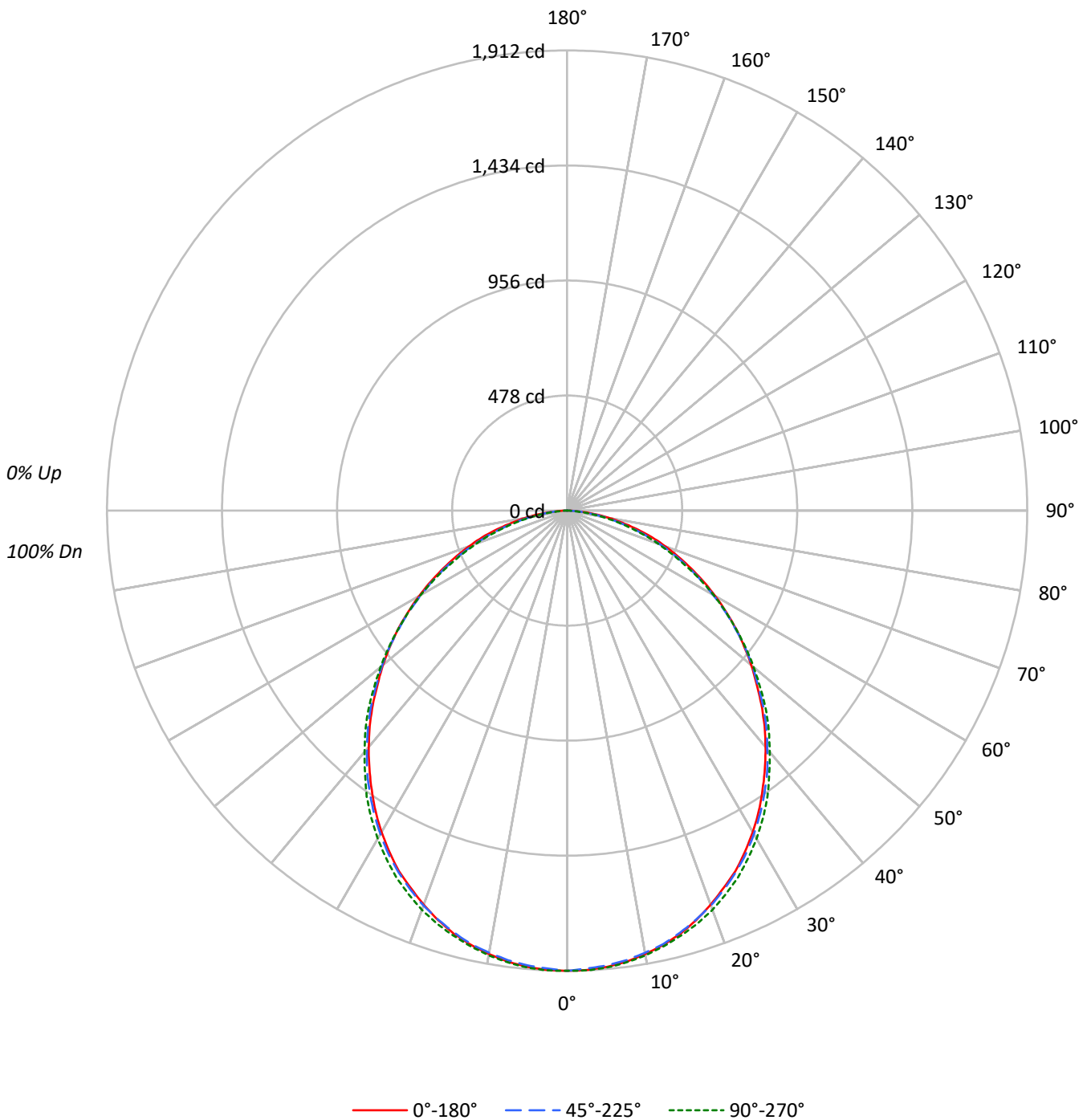
Input Watts (W): 47.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	76	73	71
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	66	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	31
9	58	44	36	31	56	44	36	31	43	35	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°	2929	2929	2929
5°	2926	2916	2930
10°	2911	2901	2918
15°	2886	2878	2898
20°	2841	2846	2877
25°	2795	2803	2840
30°	2728	2745	2784
35°	2647	2674	2715
40°	2564	2586	2618
45°	2473	2497	2531
50°	2381	2392	2411
55°	2288	2275	2283
60°	2178	2144	2154
65°	2055	2009	1975
70°	1943	1837	1795
75°	1789	1631	1575
80°	1574	1381	1298
85°	1239	963	715



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	180.5	3.7
10°-20°	513.2	10.4
20°-30°	764.9	15.6
30°-40°	894.2	18.2
40°-50°	888.0	18.1
50°-60°	762.5	15.5
60°-70°	549.3	11.2
70°-80°	295.8	6.0
80°-90°	69.7	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°	1458.5	29.7
0°-40°	2352.7	47.8
0°-60°	4003.2	81.4
0°-90°	4918.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4918.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1912	1912	1912	1912	1912	
5°	1903	1901	1897	1903	1906	181
15°	1820	1815	1815	1826	1828	513
25°	1654	1648	1658	1676	1680	760
35°	1416	1414	1430	1446	1452	886
45°	1142	1139	1153	1162	1168	881
55°	857	849	852	857	855	765
65°	567	558	554	550	545	563
75°	302	284	276	268	266	320
85°	70	64	55	44	41	85
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1912.2	1912.2	1912.2	1912.2	1912.2
2.5°	1910.6	1909.1	1904.4	1910.6	1912.2
5°	1902.8	1901.3	1896.6	1902.8	1905.9
7.5°	1890.3	1887.2	1884.0	1890.3	1893.4
10°	1871.5	1868.4	1865.2	1873.1	1876.2
12.5°	1848.0	1844.9	1844.9	1851.1	1854.3
15°	1819.8	1815.1	1815.1	1826.1	1827.6
17.5°	1783.8	1780.7	1782.2	1794.8	1799.5
20°	1743.1	1741.5	1746.2	1760.3	1765.0
22.5°	1697.7	1696.1	1703.9	1721.1	1724.3
25°	1653.8	1647.5	1658.5	1675.7	1680.4
27.5°	1599.0	1594.3	1608.4	1624.1	1628.7
30°	1542.6	1537.9	1552.0	1569.2	1573.9
32.5°	1481.5	1478.4	1492.5	1509.7	1514.4
35°	1415.8	1414.2	1429.9	1445.5	1451.8
37.5°	1350.0	1348.4	1365.6	1378.2	1379.7
40°	1282.6	1279.5	1293.6	1307.7	1309.3
42.5°	1213.7	1209.0	1224.7	1235.7	1240.4
45°	1141.7	1138.6	1152.7	1162.0	1168.3
47.5°	1068.1	1068.1	1075.9	1086.9	1088.4
50°	999.2	994.5	1003.9	1010.1	1011.7
52.5°	927.1	922.4	930.3	931.8	935.0
55°	856.7	848.8	852.0	856.7	855.1
57.5°	783.1	770.5	776.8	776.8	779.9
60°	711.0	700.0	700.0	700.0	703.2
62.5°	639.0	628.0	628.0	626.4	624.9
65°	566.9	557.5	554.4	549.7	545.0
67.5°	498.0	487.1	480.8	474.5	469.8
70°	433.8	415.0	410.3	400.9	400.9
72.5°	369.6	350.8	341.4	335.1	333.6
75°	302.3	283.5	275.6	267.8	266.2
77.5°	236.5	224.0	211.4	205.2	202.0
80°	178.5	167.6	156.6	145.6	147.2
82.5°	122.2	111.2	103.4	94.0	90.8
85°	70.5	64.2	54.8	43.9	40.7
87.5°	29.8	21.9	15.7	15.7	15.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)