

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: P229866

Luminaire Tested: **24RLN-LD5-31-UNV-L930-CD1-SVPD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229866
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-LD5-31-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: 2606.0 lumens
Efficiency: N/A
Efficacy: 113.8 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

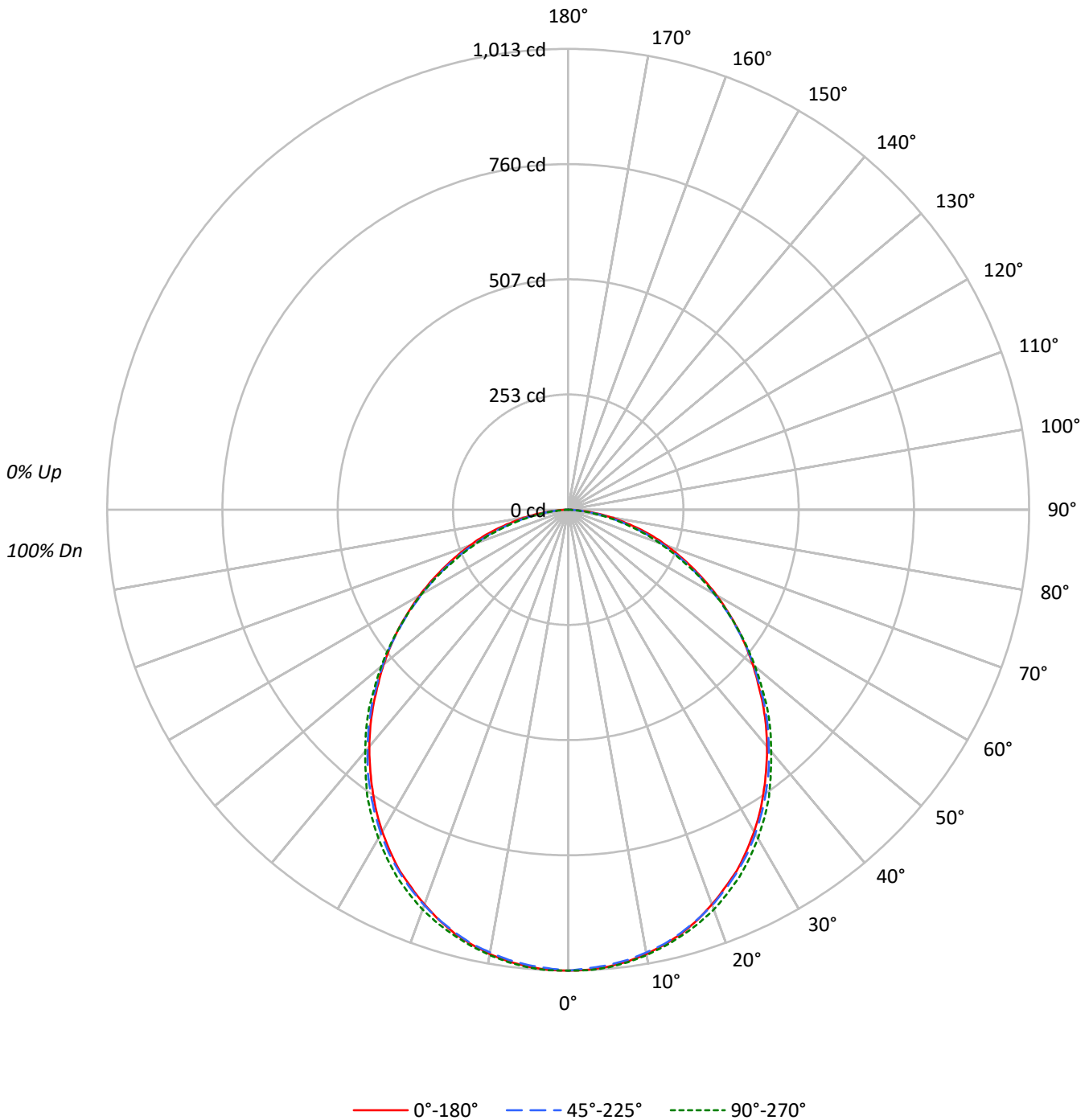
Input Watts (W): 22.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	1552	1552	1552
5°	1550	1545	1553
10°	1542	1537	1546
15°	1529	1525	1536
20°	1505	1508	1525
25°	1481	1485	1505
30°	1446	1455	1475
35°	1403	1417	1438
40°	1359	1371	1387
45°	1310	1323	1341
50°	1262	1267	1277
55°	1212	1205	1210
60°	1154	1136	1141
65°	1089	1065	1047
70°	1030	974	951
75°	948	865	835
80°	834	732	688
85°	656	510	380



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.6	3.7
10°-20°	271.9	10.4
20°-30°	405.3	15.6
30°-40°	473.8	18.2
40°-50°	470.5	18.1
50°-60°	404.0	15.5
60°-70°	291.1	11.2
70°-80°	156.7	6.0
80°-90°	36.9	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°	772.9	29.7
0°-40°	1246.7	47.8
0°-60°	2121.3	81.4
0°-90°	2606.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2606.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1013	1013	1013	1013	1013	
5°	1008	1008	1005	1008	1010	96
15°	964	962	962	968	968	272
25°	876	873	879	888	890	403
35°	750	749	758	766	769	469
45°	605	603	611	616	619	467
55°	454	450	451	454	453	405
65°	300	295	294	291	289	298
75°	160	150	146	142	141	170
85°	37	34	29	23	22	45
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1013.3	1013.3	1013.3	1013.3	1013.3
2.5°	1012.4	1011.6	1009.1	1012.4	1013.3
5°	1008.3	1007.5	1005.0	1008.3	1009.9
7.5°	1001.6	1000.0	998.3	1001.6	1003.3
10°	991.7	990.0	988.4	992.5	994.2
12.5°	979.2	977.6	977.6	980.9	982.6
15°	964.3	961.8	961.8	967.6	968.5
17.5°	945.2	943.6	944.4	951.0	953.5
20°	923.6	922.8	925.3	932.8	935.3
22.5°	899.6	898.7	902.9	912.0	913.7
25°	876.3	873.0	878.8	888.0	890.4
27.5°	847.3	844.8	852.3	860.6	863.1
30°	817.4	814.9	822.4	831.5	834.0
32.5°	785.1	783.4	790.9	800.0	802.5
35°	750.2	749.4	757.7	766.0	769.3
37.5°	715.3	714.5	723.6	730.3	731.1
40°	679.7	678.0	685.5	692.9	693.8
42.5°	643.1	640.7	649.0	654.8	657.3
45°	605.0	603.3	610.8	615.8	619.1
47.5°	566.0	566.0	570.1	575.9	576.8
50°	529.5	527.0	531.9	535.3	536.1
52.5°	491.3	488.8	492.9	493.8	495.4
55°	453.9	449.8	451.4	453.9	453.1
57.5°	414.9	408.3	411.6	411.6	413.3
60°	376.8	370.9	370.9	370.9	372.6
62.5°	338.6	332.8	332.8	331.9	331.1
65°	300.4	295.4	293.8	291.3	288.8
67.5°	263.9	258.1	254.8	251.4	249.0
70°	229.9	219.9	217.4	212.4	212.4
72.5°	195.8	185.9	180.9	177.6	176.8
75°	160.2	150.2	146.1	141.9	141.1
77.5°	125.3	118.7	112.0	108.7	107.1
80°	94.6	88.8	83.0	77.2	78.0
82.5°	64.7	58.9	54.8	49.8	48.1
85°	37.3	34.0	29.0	23.2	21.6
87.5°	15.8	11.6	8.3	8.3	8.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)