

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: P229746

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229746
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36038)
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-U
Description: METALUX 2X4 RLN LED TROFFER
Light Source: (252)3000K CCT, 90 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2639.0 lumens
Efficiency: N/A
Efficacy: 115.2 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

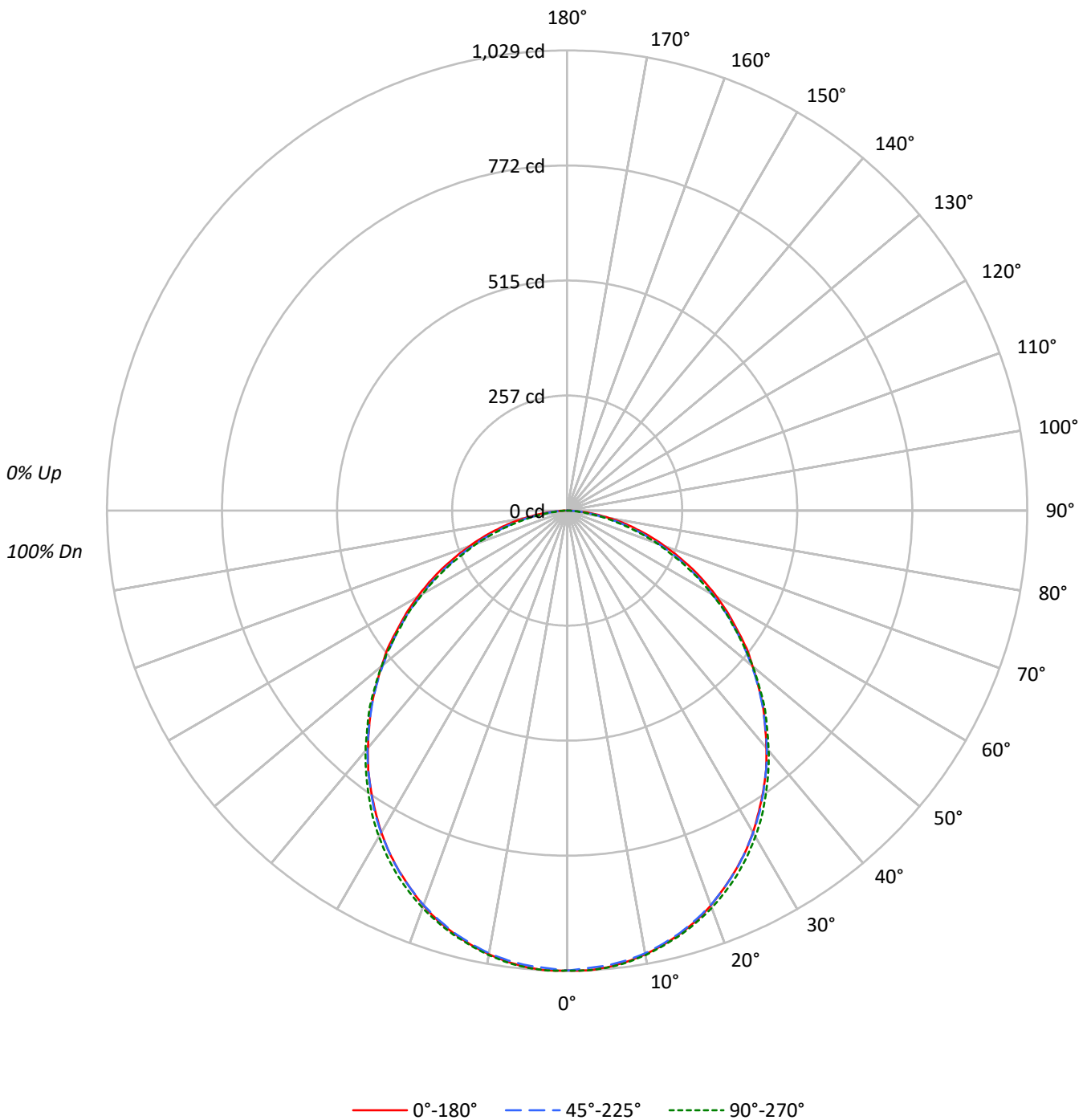
Input Watts (W): 22.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P229746

CATALOG NUMBER: 24RLN-LD5-31-UNV-L930-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P229746

CATALOG NUMBER: 24RLN-LD5-31-UNV-L930-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	89	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	67	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	32
9	58	44	36	31	56	44	36	31	43	36	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°	1575	1575	1575
5°	1576	1570	1578
10°	1567	1564	1570
15°	1552	1549	1557
20°	1532	1530	1541
25°	1503	1504	1519
30°	1470	1471	1489
35°	1430	1431	1448
40°	1386	1389	1403
45°	1341	1338	1354
50°	1290	1282	1292
55°	1237	1221	1217
60°	1185	1149	1144
65°	1119	1071	1056
70°	1037	974	956
75°	953	860	815
80°	834	718	652
85°	685	496	394



TEST NUMBER: P229746

CATALOG NUMBER: 24RLN-LD5-31-UNV-L930-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.2	3.7
10°-20°	276.1	10.5
20°-30°	410.8	15.6
30°-40°	479.9	18.2
40°-50°	477.1	18.1
50°-60°	409.9	15.5
60°-70°	294.4	11.2
70°-80°	156.8	5.9
80°-90°	36.7	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°	784.1	29.7
0°-40°	1264.0	47.9
0°-60°	2151.1	81.5
0°-90°	2639.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2639.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1029	1029	1029	1029	1029	
5°	1025	1024	1021	1024	1026	97
15°	979	979	977	980	982	276
25°	889	889	890	897	899	409
35°	765	763	765	774	775	478
45°	619	614	618	621	625	477
55°	463	457	457	457	456	416
65°	309	300	296	292	291	305
75°	161	152	145	141	138	172
85°	39	33	28	23	22	46
90°	0	0	0	0	0	



TEST NUMBER: P229746

CATALOG NUMBER: 24RLN-LD5-31-UNV-L930-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1028.6	1028.6	1028.6	1028.6	1028.6
2.5°	1029.4	1027.8	1024.4	1028.6	1029.4
5°	1025.3	1023.6	1021.1	1024.4	1026.1
7.5°	1017.8	1016.1	1014.5	1017.8	1019.5
10°	1007.8	1007.0	1005.4	1009.5	1009.5
12.5°	994.6	993.7	992.1	996.2	996.2
15°	978.8	978.8	977.1	980.4	982.1
17.5°	961.4	960.5	958.9	963.0	964.7
20°	939.8	939.8	938.9	943.9	945.6
22.5°	914.9	914.9	914.9	921.5	923.2
25°	889.1	889.1	890.0	896.6	899.1
27.5°	861.7	860.9	861.7	869.2	871.7
30°	831.0	829.4	831.8	839.3	841.8
32.5°	797.8	796.1	800.3	806.9	810.3
35°	764.6	762.9	765.4	773.7	774.6
37.5°	730.6	726.4	730.6	738.0	738.9
40°	693.2	689.9	694.9	698.2	701.5
42.5°	655.0	653.4	655.8	661.7	661.7
45°	619.3	614.3	617.7	621.0	625.1
47.5°	579.5	577.0	578.6	581.1	582.8
50°	541.3	537.1	538.0	540.4	542.1
52.5°	505.6	497.3	497.3	498.9	498.9
55°	463.2	457.4	457.4	457.4	455.8
57.5°	425.9	418.4	417.6	417.6	417.6
60°	386.9	377.7	375.2	375.2	373.6
62.5°	347.8	339.5	336.2	332.9	332.9
65°	308.8	299.7	295.5	292.2	291.4
67.5°	269.0	262.3	257.4	253.2	249.1
70°	231.6	224.1	217.5	213.4	213.4
72.5°	196.8	188.5	181.8	176.8	174.3
75°	161.1	151.9	145.3	141.1	137.8
77.5°	129.5	119.5	112.9	107.1	103.8
80°	94.6	87.2	81.4	75.5	73.9
82.5°	65.6	59.8	53.1	49.0	47.3
85°	39.0	33.2	28.2	23.2	22.4
87.5°	15.8	11.6	9.1	9.1	9.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)