

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: P229514

Luminaire Tested: **14RLN-LD5-31-UNV-L830-CD1-SVPD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229514
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36064)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14RLN-LD5-31-UNV-L830-CD1-SVPD1-U
Description: METALUX 1X4 RLN LED TROFFER WITH SENSOR
Light Source: (112)3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2956.0 lumens
Efficiency: N/A
Efficacy: 96.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.13 / 1.26
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')
CIE Type: Direct

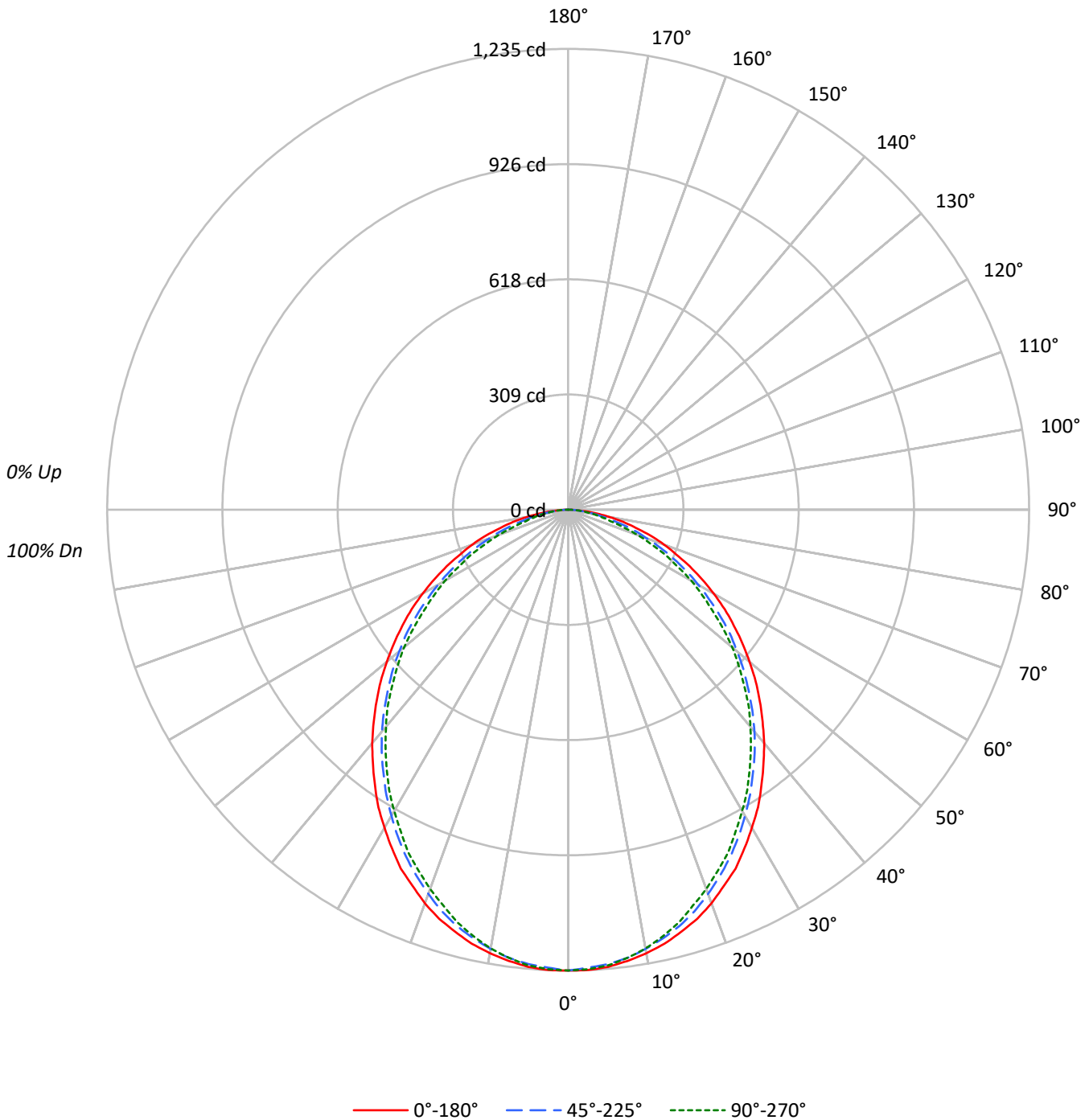
Input Watts (W): 30.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	103	99	96	98	95	93	95	92	90	91	89	87	85
2	100	92	86	80	97	90	84	79	87	82	78	84	79	76	81	77	74	72
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	64	61
4	84	73	64	58	82	71	63	57	69	62	57	67	61	56	64	59	55	53
5	78	65	57	50	76	64	56	50	62	55	49	60	54	49	58	53	48	46
6	72	59	50	44	70	58	50	44	56	49	43	55	48	43	53	47	43	41
7	67	54	45	39	65	53	45	39	51	44	39	50	43	38	49	43	38	36
8	62	49	41	35	61	48	40	35	47	40	35	46	39	35	45	39	34	32
9	58	45	37	32	57	45	37	32	43	36	31	42	36	31	41	35	31	29
10	55	42	34	29	53	41	34	29	40	33	29	39	33	29	38	33	28	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4161	4161	4161
5°	4160	4134	4147
10°	4129	4090	4085
15°	4085	4027	3996
20°	4025	3929	3878
25°	3945	3817	3769
30°	3830	3686	3626
35°	3713	3550	3487
40°	3593	3413	3340
45°	3460	3253	3174
50°	3324	3096	3009
55°	3185	2921	2771
60°	3033	2714	2568
65°	2864	2487	2303
70°	2696	2204	1953
75°	2431	1881	1514
80°	2158	1488	1339
85°	1778	1187	1237



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.2	3.9
10°-20°	325.7	11.0
20°-30°	474.7	16.1
30°-40°	544.2	18.4
40°-50°	532.1	18.0
50°-60°	448.9	15.2
60°-70°	313.8	10.6
70°-80°	160.0	5.4
80°-90°	40.4	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°	916.6	31.0
0°-40°	1460.9	49.4
0°-60°	2441.8	82.6
0°-90°	2956.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2956.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1235	1235	1235	1235	1235	
5°	1230	1227	1222	1226	1226	117
15°	1171	1167	1154	1151	1146	330
25°	1061	1048	1027	1016	1014	487
35°	903	890	863	854	848	565
45°	726	707	683	674	666	560
55°	542	522	497	483	472	485
65°	359	338	312	294	289	356
75°	187	171	144	127	116	201
85°	46	34	31	32	32	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1235.0	1235.0	1235.0	1235.0	1235.0
2.5°	1235.0	1232.4	1228.6	1233.7	1232.4
5°	1229.8	1227.3	1222.2	1226.0	1226.0
7.5°	1219.6	1217.1	1211.9	1214.5	1211.9
10°	1206.8	1204.3	1195.3	1196.6	1194.0
12.5°	1191.5	1186.4	1176.2	1174.9	1171.0
15°	1171.0	1167.2	1154.4	1150.6	1145.5
17.5°	1149.3	1141.6	1127.6	1119.9	1112.2
20°	1122.5	1112.2	1095.6	1086.7	1081.5
22.5°	1090.5	1082.8	1062.4	1052.1	1047.0
25°	1061.1	1048.3	1026.6	1016.3	1013.8
27.5°	1022.7	1012.5	988.2	979.3	971.6
30°	984.4	972.9	947.3	938.4	932.0
32.5°	946.0	933.3	906.4	896.2	892.3
35°	902.6	889.8	862.9	854.0	847.6
37.5°	859.1	843.8	820.7	810.5	804.1
40°	816.9	799.0	776.0	764.5	759.4
42.5°	770.9	751.7	730.0	718.5	715.9
45°	726.1	707.0	682.7	673.7	666.1
47.5°	681.4	659.7	637.9	625.2	620.0
50°	634.1	613.6	590.6	577.8	574.0
52.5°	588.1	567.6	545.9	531.8	522.9
55°	542.1	521.6	497.3	483.2	471.7
57.5°	497.3	473.0	448.7	432.1	425.7
60°	450.0	428.3	402.7	386.1	381.0
62.5°	404.0	384.8	358.0	338.8	329.8
65°	359.2	337.5	311.9	294.0	288.9
67.5°	313.2	294.0	268.5	248.0	239.1
70°	273.6	249.3	223.7	205.8	198.2
72.5°	231.4	209.7	185.4	164.9	153.4
75°	186.7	171.3	144.5	126.6	116.3
77.5°	150.9	133.0	108.7	94.6	92.0
80°	111.2	97.2	76.7	70.3	69.0
82.5°	78.0	63.9	52.4	49.9	48.6
85°	46.0	34.5	30.7	32.0	32.0
87.5°	19.2	14.1	14.1	15.3	15.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)