

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: P229390

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229390
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36088)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14ALNG-LD5-31-UNV-L830-CD1-SVPD1-U
Description: METALUX 1X4 ARCLINE LED TROFFER WITH CURVED LENS AND SENSOR
Light Source: (84)3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2990.0 lumens
Efficiency: N/A
Efficacy: 101.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.29
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')
CIE Type: Direct

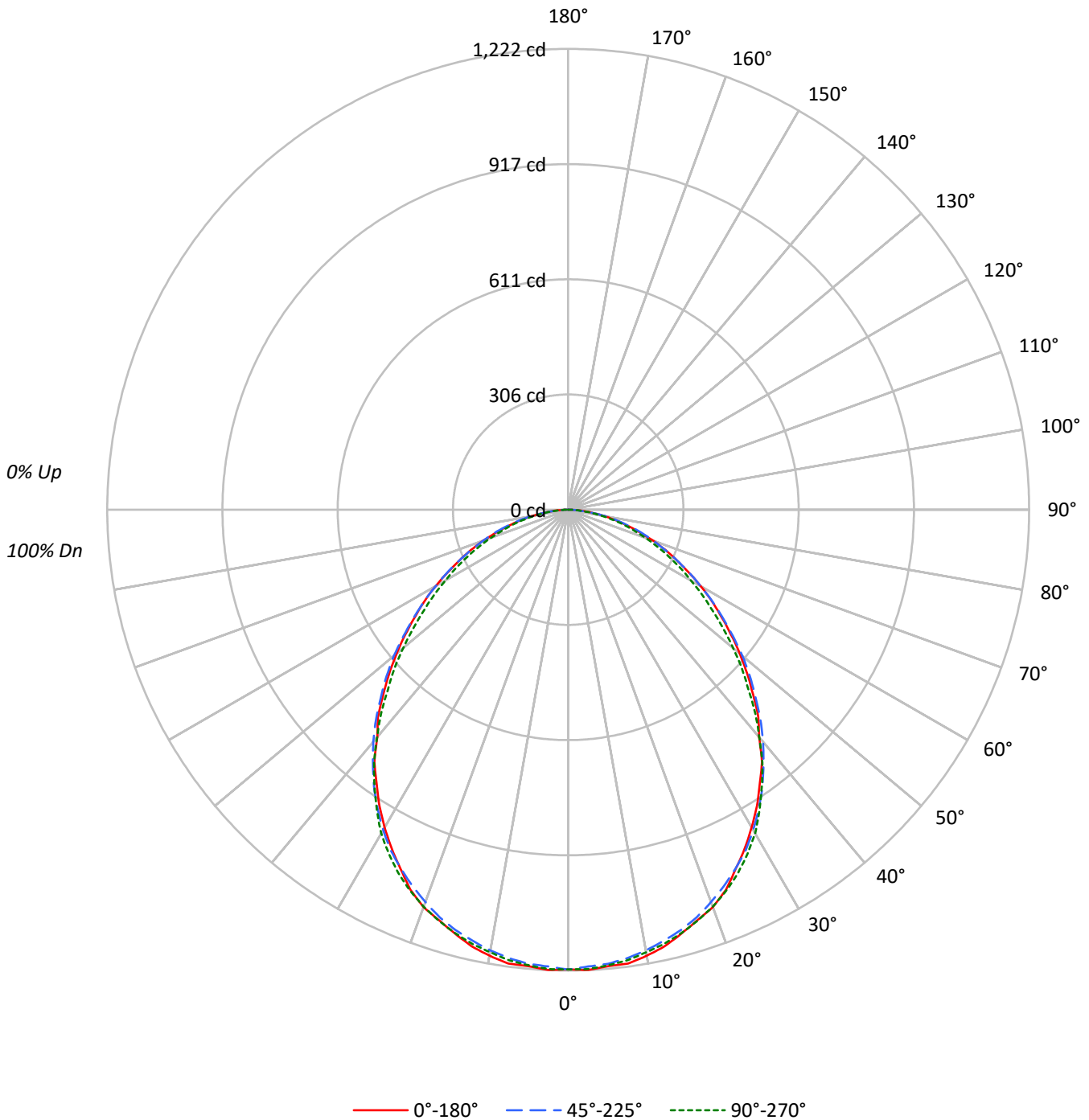
Input Watts (W): 29.42
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	94	92	90	91	89	87	85
2	100	92	86	80	97	90	84	79	87	82	77	83	79	76	80	77	74	72
3	92	81	74	67	89	80	73	67	77	71	66	74	69	64	72	67	63	61
4	84	73	64	58	82	71	63	57	69	62	56	66	61	56	64	59	55	53
5	78	65	56	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°	4108	4108	4108
5°	4110	4088	4101
10°	4109	4060	4077
15°	4057	4025	4053
20°	4021	3970	4016
25°	3908	3903	3956
30°	3785	3816	3856
35°	3643	3691	3681
40°	3460	3535	3466
45°	3302	3345	3221
50°	3113	3161	2991
55°	2915	2938	2747
60°	2739	2729	2537
65°	2534	2534	2346
70°	2348	2348	2143
75°	2103	2170	1967
80°	1871	1946	1694
85°	1612	1411	1260



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.2	3.9
10°-20°	327.1	10.9
20°-30°	485.1	16.2
30°-40°	558.2	18.7
40°-50°	535.8	17.9
50°-60°	441.5	14.8
60°-70°	310.5	10.4
70°-80°	171.7	5.7
80°-90°	44.9	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°	927.4	31.0
0°-40°	1485.6	49.7
0°-60°	2462.9	82.4
0°-90°	2990.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2990.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1219	1219	1219	1219	1219	
5°	1215	1212	1209	1214	1212	116
15°	1163	1163	1154	1162	1162	328
25°	1051	1043	1050	1063	1064	484
35°	886	886	897	901	895	554
45°	693	699	702	690	676	535
55°	496	505	500	481	468	445
65°	318	323	318	301	294	316
75°	162	168	167	154	151	173
85°	42	43	36	33	33	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1219.1	1219.1	1219.1	1219.1	1219.1
2.5°	1221.7	1217.7	1212.5	1219.1	1219.1
5°	1215.1	1212.5	1208.6	1213.8	1212.5
7.5°	1213.8	1206.0	1199.5	1206.0	1204.7
10°	1200.8	1198.2	1186.5	1193.0	1191.7
12.5°	1185.2	1182.6	1170.9	1178.7	1178.7
15°	1163.0	1163.0	1153.9	1161.7	1161.7
17.5°	1140.9	1139.6	1133.1	1142.2	1142.2
20°	1121.4	1112.3	1107.0	1120.1	1120.1
22.5°	1091.4	1079.7	1079.7	1095.3	1094.0
25°	1051.0	1043.2	1049.7	1062.8	1064.1
27.5°	1013.3	1009.4	1018.5	1030.2	1028.9
30°	972.9	969.0	980.7	991.1	991.1
32.5°	931.2	928.6	940.3	949.5	944.2
35°	885.6	885.6	897.4	901.3	894.8
37.5°	844.0	842.7	850.5	851.8	845.3
40°	786.7	795.8	803.6	798.4	788.0
42.5°	746.3	748.9	754.1	743.7	734.6
45°	692.9	699.4	702.0	690.3	675.9
47.5°	643.4	651.2	652.5	635.6	625.2
50°	593.9	603.0	603.0	582.2	570.5
52.5°	544.4	553.5	549.6	534.0	518.4
55°	496.2	505.3	500.1	480.6	467.6
57.5°	451.9	458.4	453.2	435.0	422.0
60°	406.4	411.6	405.0	388.1	376.4
62.5°	359.5	366.0	362.1	345.1	336.0
65°	317.8	323.0	317.8	300.9	294.3
67.5°	278.7	280.0	277.4	264.4	255.3
70°	238.3	240.9	238.3	226.6	217.5
72.5°	198.0	201.9	204.5	191.5	182.3
75°	161.5	168.0	166.7	153.7	151.1
77.5°	127.6	135.5	132.8	121.1	118.5
80°	96.4	102.9	100.3	89.9	87.3
82.5°	66.4	71.6	66.4	61.2	58.6
85°	41.7	43.0	36.5	32.6	32.6
87.5°	18.2	15.6	13.0	13.0	13.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)