

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: P229327

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229327
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36085)
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-U
Description: METALUX 1X4 ARCLINE LED TROFFER WITH CURVED LENS
Light Source: (84)3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3054.0 lumens
Efficiency: N/A
Efficacy: 103.8 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.21 / 1.3
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')
CIE Type: Direct

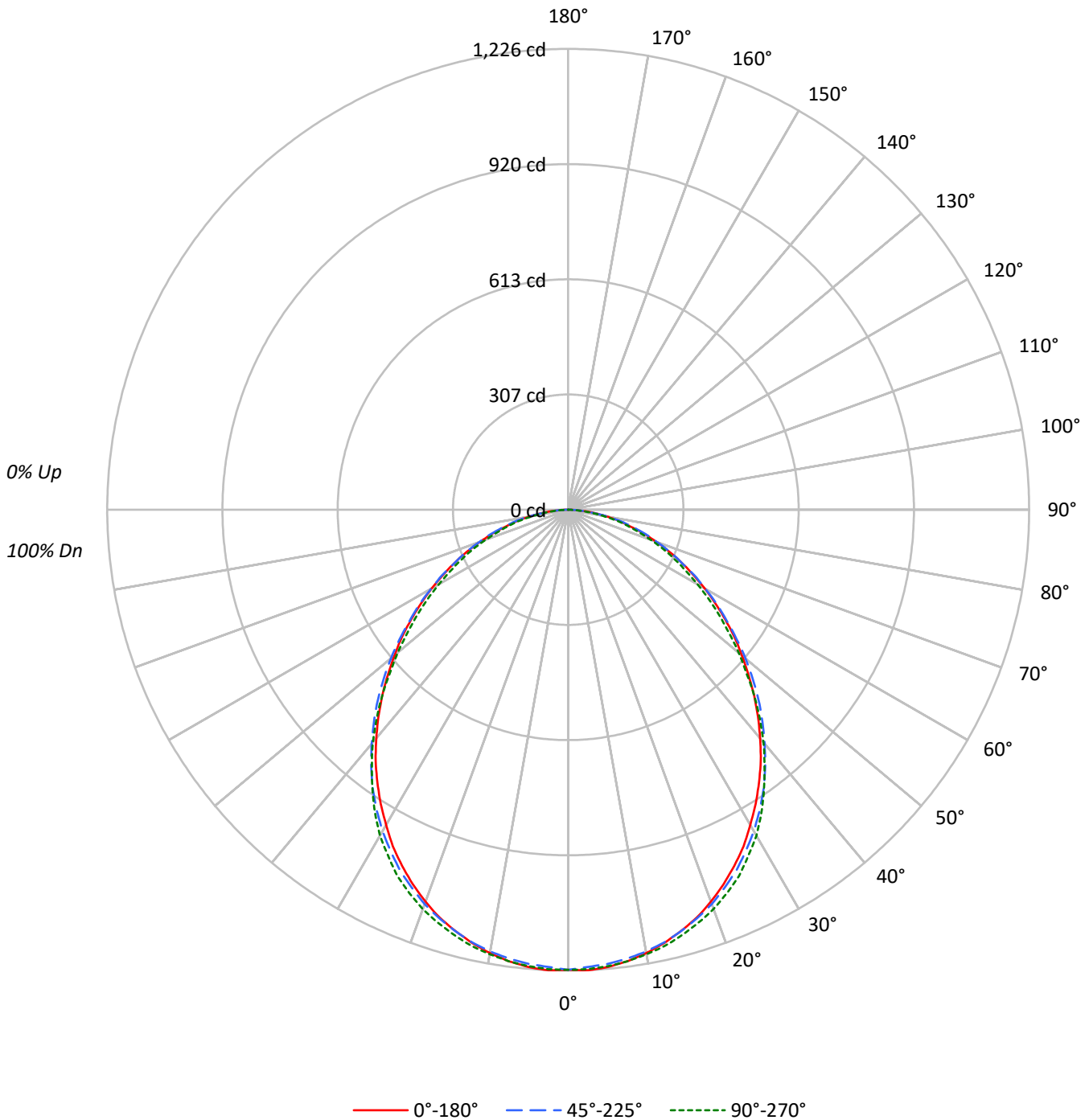
Input Watts (W): 29.42
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	74	71
3	91	81	73	67	89	80	72	66	77	70	65	74	69	64	71	67	63	61
4	84	72	64	57	82	71	63	57	68	61	56	66	60	55	64	59	55	52
5	77	65	56	50	75	64	55	49	62	54	49	60	53	48	58	52	48	46
6	72	59	50	44	70	58	49	43	56	48	43	54	48	43	53	47	42	40
7	66	53	45	39	65	52	44	39	51	44	38	49	43	38	48	42	38	36
8	62	49	40	35	60	48	40	35	47	39	34	45	39	34	44	38	34	32
9	58	45	37	31	57	44	36	31	43	36	31	42	36	31	41	35	31	29
10	54	41	34	28	53	41	33	28	40	33	28	39	33	28	38	32	28	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4125	4125	4125
5°	4130	4103	4123
10°	4098	4083	4109
15°	4047	4050	4087
20°	3980	4004	4055
25°	3886	3936	3998
30°	3768	3841	3896
35°	3640	3726	3735
40°	3492	3574	3555
45°	3331	3413	3334
50°	3159	3227	3104
55°	2997	3023	2882
60°	2824	2834	2677
65°	2645	2645	2489
70°	2446	2476	2291
75°	2224	2312	2106
80°	2030	2088	1795
85°	1775	1570	1369



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.6	3.8
10°-20°	328.4	10.8
20°-30°	487.7	16.0
30°-40°	563.3	18.4
40°-50°	545.9	17.9
50°-60°	455.8	14.9
60°-70°	325.9	10.7
70°-80°	182.8	6.0
80°-90°	48.7	1.6
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°	931.7	30.5
0°-40°	1495.0	49.0
0°-60°	2496.7	81.8
0°-90°	3054.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3054.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1224	1224	1224	1224	1224	
5°	1221	1219	1213	1220	1219	116
15°	1160	1162	1161	1172	1172	327
25°	1045	1050	1059	1074	1075	481
35°	885	892	906	912	908	553
45°	699	709	716	707	700	539
55°	510	518	515	500	491	456
65°	332	338	332	319	312	329
75°	171	178	178	166	162	184
85°	46	47	41	37	35	52
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1224.1	1224.1	1224.1	1224.1	1224.1
2.5°	1226.4	1224.1	1217.4	1224.1	1223.4
5°	1221.1	1218.9	1212.9	1219.6	1218.9
7.5°	1211.4	1209.8	1204.6	1212.9	1211.4
10°	1197.8	1196.3	1193.3	1201.6	1200.8
12.5°	1180.5	1180.5	1179.0	1188.0	1188.8
15°	1160.2	1161.7	1160.9	1172.2	1171.5
17.5°	1137.6	1137.6	1139.9	1152.7	1151.9
20°	1109.8	1111.3	1116.6	1128.6	1130.8
22.5°	1078.9	1081.2	1088.0	1103.0	1103.8
25°	1045.1	1050.3	1058.6	1073.7	1075.2
27.5°	1009.7	1013.5	1023.3	1039.1	1037.6
30°	968.3	977.4	987.1	999.9	1001.4
32.5°	927.7	936.0	948.0	958.6	956.3
35°	884.8	892.3	905.9	911.9	908.1
37.5°	841.2	849.5	860.7	863.7	857.7
40°	793.8	804.3	812.6	812.6	808.1
42.5°	747.1	755.4	764.4	760.7	753.9
45°	699.0	708.8	716.3	707.3	699.7
47.5°	650.1	661.4	665.1	655.3	642.5
50°	602.7	614.7	615.5	602.7	592.1
52.5°	557.5	566.6	564.3	551.5	539.5
55°	510.1	518.4	514.6	500.3	490.6
57.5°	463.5	471.8	469.5	452.9	443.9
60°	419.1	423.6	420.6	407.8	397.3
62.5°	374.7	380.0	378.5	360.4	352.9
65°	331.8	337.8	331.8	319.0	312.2
67.5°	291.2	294.9	293.4	282.9	273.9
70°	248.3	253.6	251.3	239.3	232.5
72.5°	209.9	215.9	215.2	202.4	194.1
75°	170.8	178.3	177.6	165.5	161.8
77.5°	139.2	143.0	143.7	130.9	128.7
80°	104.6	109.8	107.6	96.3	92.5
82.5°	73.7	78.2	71.5	64.7	63.2
85°	45.9	46.6	40.6	36.9	35.4
87.5°	18.8	18.8	14.3	12.8	13.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)