

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: P178983

Luminaire Tested: **22ALNG-LD4-20-UNV-EL14W-L835-CD1-U**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P178983  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P34296)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22ALNG-LD4-20-UNV-EL14W-L835-CD1-U  
Description: METALUX ARCLINE 2X2 TROFFER LUMINAIRE  
  
Light Source: EATON LED 3500K  
Ballast/Driver: OSRAM ELECTRONIC DRIVER

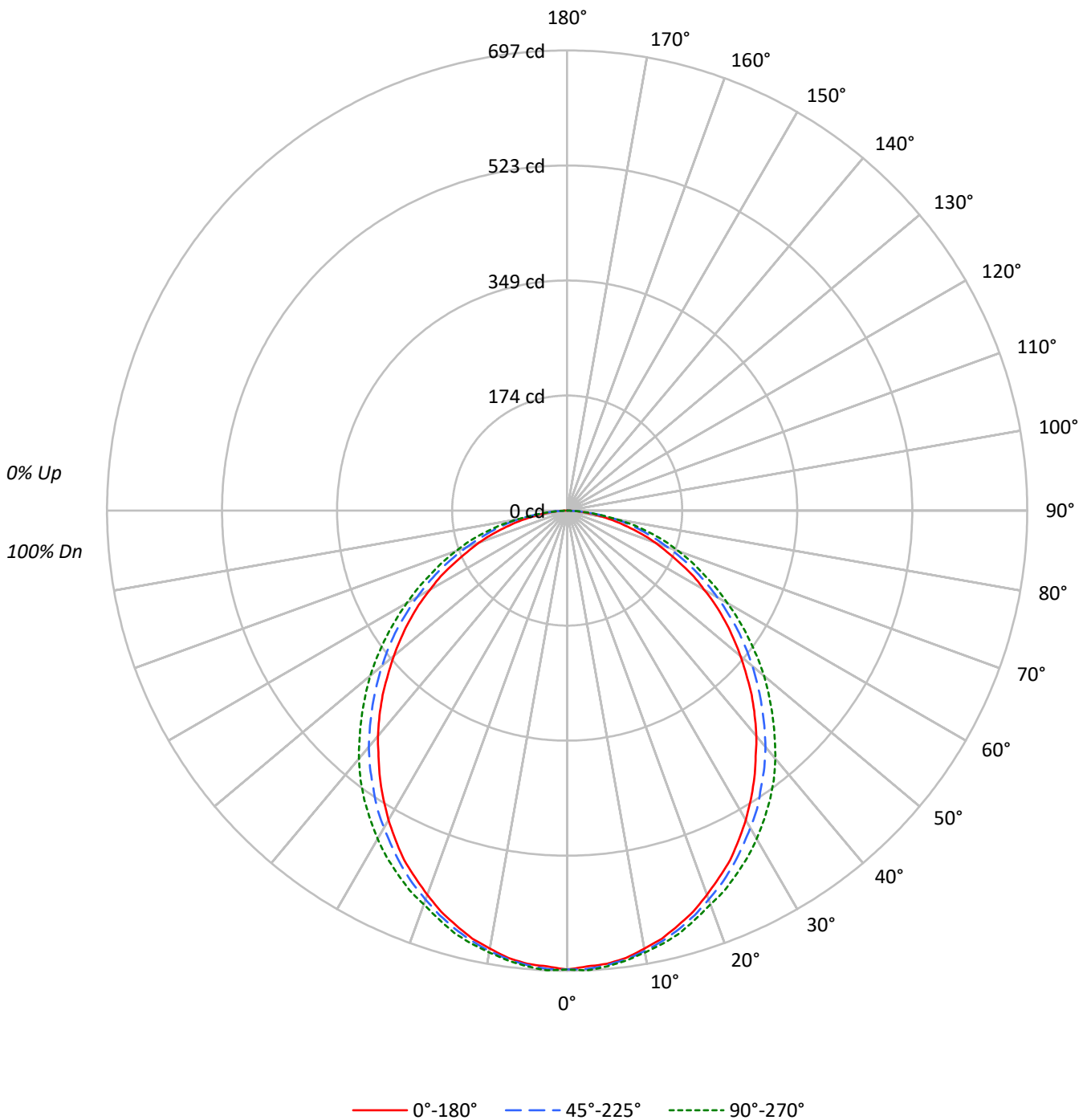
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1808.0 lumens  
Efficiency: N/A  
Efficacy: 141.2 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.23 / 1.31  
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 2' x H: 0.27')  
CIE Type: Direct  
  
Input Watts (W): 12.8  
Input Voltage (V): NR  
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	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					100			
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84					84			
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70					70			
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	60					60			
4	83	71	63	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51					51			
5	76	64	55	48	74	63	54	48	60	53	47	59	52	47	57	51	46	44					44			
6	71	57	49	42	69	57	48	42	55	47	42	53	46	41	51	46	41	39					39			
7	66	52	44	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34					34			
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33	31					31			
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	28					28			
10	54	41	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	25					25			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1870	1870	1870
5°	1840	1836	1850
10°	1798	1791	1813
15°	1748	1739	1779
20°	1690	1678	1732
25°	1631	1619	1696
30°	1560	1553	1655
35°	1484	1483	1607
40°	1406	1414	1548
45°	1325	1331	1475
50°	1235	1248	1404
55°	1148	1162	1317
60°	1044	1062	1222
65°	932	958	1124
70°	815	833	1027
75°	659	708	901
80°	478	550	665
85°	259	264	307



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	65.5	3.6
10°-20°	184.8	10.2
20°-30°	273.8	15.1
30°-40°	321.2	17.8
40°-50°	321.5	17.8
50°-60°	280.5	15.5
60°-70°	208.3	11.5
70°-80°	121.5	6.7
80°-90°	30.9	1.7
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°	524.1	29.0
0°-40°	845.3	46.8
0°-60°	1447.3	80.1
0°-90°	1808.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1808.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	695	695	695	695	695	
5°	689	689	691	693	693	65
15°	650	652	656	660	662	183
25°	584	586	594	604	607	268
35°	494	498	512	530	535	309
45°	395	399	417	432	440	304
55°	292	298	315	329	335	261
65°	189	197	212	222	228	188
75°	95	103	117	126	130	102
85°	21	25	27	25	25	26
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	695.0	695.0	695.0	695.0	695.0
2.5°	691.1	693.1	695.0	695.0	697.0
5°	689.2	689.2	691.1	693.1	693.1
7.5°	683.4	683.4	685.3	687.3	687.3
10°	673.6	673.6	677.5	679.5	679.5
12.5°	663.9	665.8	667.8	671.7	671.7
15°	650.3	652.2	656.1	660.0	661.9
17.5°	636.6	636.6	642.5	646.4	648.3
20°	619.1	621.1	626.9	632.7	634.7
22.5°	601.6	603.5	611.3	619.1	623.0
25°	584.1	586.0	593.8	603.5	607.4
27.5°	562.7	566.5	574.3	586.0	591.9
30°	541.2	545.1	554.9	568.5	574.3
32.5°	517.9	523.7	535.4	549.0	554.9
35°	494.5	498.4	512.0	529.6	535.4
37.5°	469.2	475.0	490.6	506.2	514.0
40°	445.8	449.7	467.3	482.8	490.6
42.5°	420.5	424.4	441.9	457.5	465.3
45°	395.2	399.1	416.6	432.2	440.0
47.5°	368.0	373.8	391.3	408.8	414.7
50°	342.7	350.4	366.0	381.6	389.4
52.5°	317.3	323.2	340.7	356.3	362.1
55°	292.0	297.9	315.4	329.0	334.9
57.5°	266.7	272.6	288.1	301.8	307.6
60°	239.5	245.3	262.8	274.5	280.4
62.5°	216.1	221.9	237.5	247.3	255.0
65°	188.8	196.6	212.2	221.9	227.8
67.5°	163.5	173.3	186.9	198.6	204.4
70°	142.1	149.9	161.6	173.3	179.1
72.5°	118.8	126.5	138.2	149.9	155.8
75°	95.4	103.2	116.8	126.5	130.4
77.5°	74.0	81.8	95.4	103.2	105.1
80°	54.5	62.3	74.0	75.9	75.9
82.5°	37.0	42.8	48.7	48.7	48.7
85°	21.4	25.3	27.3	25.3	25.3
87.5°	9.7	9.7	7.8	5.8	5.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)