

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: P229398

Luminaire Tested: **14ALNG-LD5-23-UNV-L840-CD1-SVPD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229398  
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-LD5-23-UNV-L840-CD1-SVPD1-U  
Description: METALUX 1X4 ARCLINE LED TROFFER WITH CURVED LENS AND SENSOR  
Light Source: (84)4000K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2296.0 lumens  
Efficiency: N/A  
Efficacy: 111.5 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

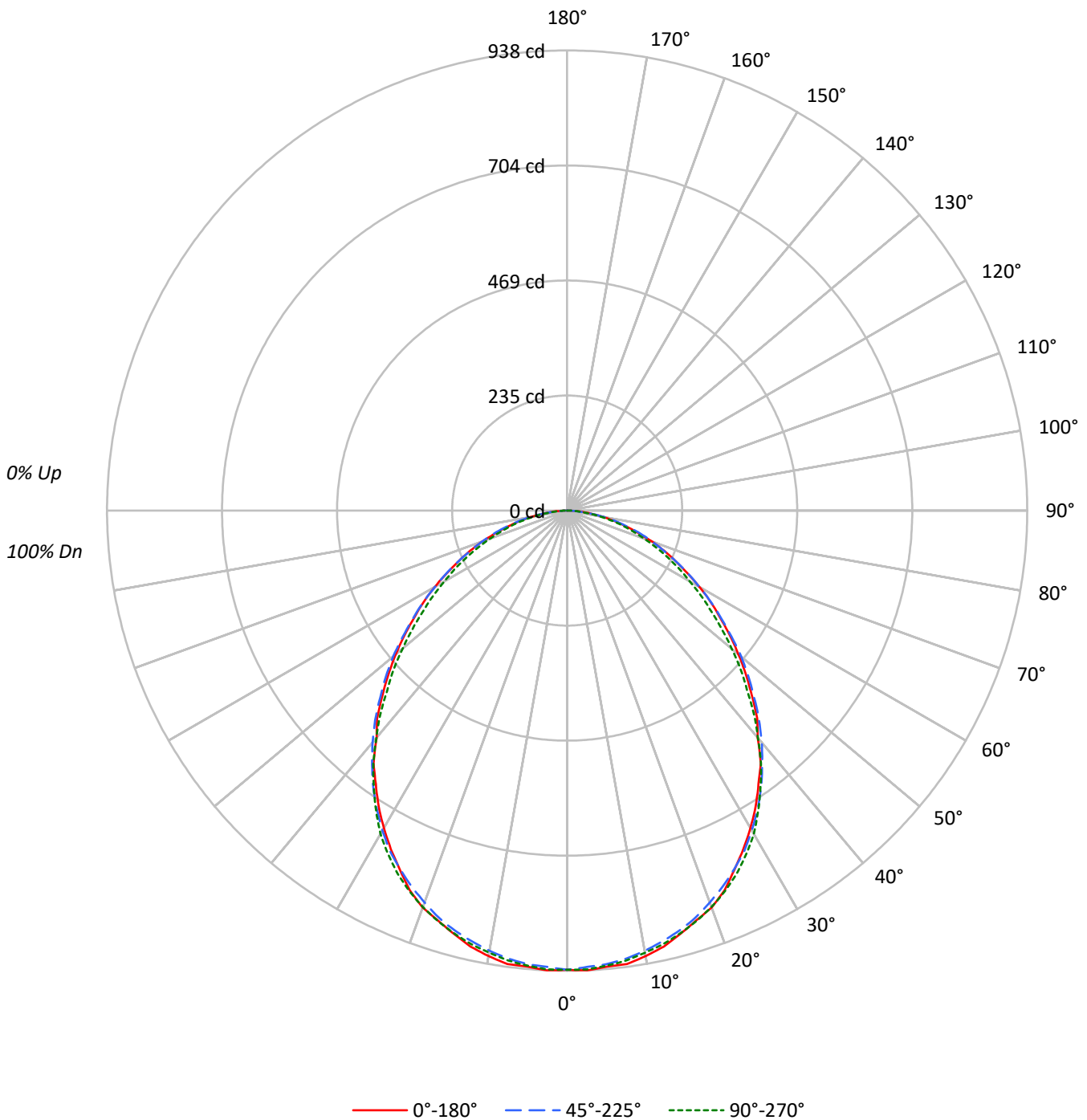
Input Watts (W): 20.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	3154	3154	3154
5°	3156	3139	3149
10°	3155	3117	3131
15°	3116	3091	3112
20°	3088	3048	3084
25°	3001	2997	3038
30°	2907	2930	2961
35°	2798	2835	2826
40°	2657	2714	2662
45°	2536	2569	2474
50°	2390	2427	2296
55°	2238	2256	2109
60°	2103	2096	1948
65°	1945	1945	1802
70°	1803	1803	1645
75°	1614	1666	1510
80°	1436	1494	1300
85°	1237	1083	967



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	88.4	3.9
10°-20°	251.2	10.9
20°-30°	372.5	16.2
30°-40°	428.6	18.7
40°-50°	411.5	17.9
50°-60°	339.0	14.8
60°-70°	238.4	10.4
70°-80°	131.8	5.7
80°-90°	34.5	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°	712.1	31.0
0°-40°	1140.8	49.7
0°-60°	1891.2	82.4
0°-90°	2296.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2296.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	936	936	936	936	936	
5°	933	931	928	932	931	89
15°	893	893	886	892	892	252
25°	807	801	806	816	817	372
35°	680	680	689	692	687	425
45°	532	537	539	530	519	411
55°	381	388	384	369	359	342
65°	244	248	244	231	226	243
75°	124	129	128	118	116	132
85°	32	33	28	25	25	36
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	936.1	936.1	936.1	936.1	936.1
2.5°	938.1	935.1	931.1	936.1	936.1
5°	933.1	931.1	928.1	932.1	931.1
7.5°	932.1	926.1	921.1	926.1	925.1
10°	922.1	920.1	911.1	916.1	915.1
12.5°	910.1	908.1	899.1	905.1	905.1
15°	893.1	893.1	886.1	892.1	892.1
17.5°	876.1	875.1	870.1	877.1	877.1
20°	861.1	854.1	850.1	860.1	860.1
22.5°	838.1	829.1	829.1	841.1	840.1
25°	807.1	801.1	806.1	816.1	817.1
27.5°	778.1	775.1	782.1	791.1	790.1
30°	747.1	744.1	753.1	761.1	761.1
32.5°	715.1	713.1	722.1	729.1	725.1
35°	680.1	680.1	689.1	692.1	687.1
37.5°	648.1	647.1	653.1	654.1	649.1
40°	604.1	611.1	617.1	613.1	605.1
42.5°	573.1	575.1	579.1	571.1	564.1
45°	532.1	537.1	539.1	530.1	519.1
47.5°	494.1	500.1	501.1	488.1	480.1
50°	456.0	463.0	463.0	447.0	438.0
52.5°	418.0	425.0	422.0	410.0	398.0
55°	381.0	388.0	384.0	369.0	359.0
57.5°	347.0	352.0	348.0	334.0	324.0
60°	312.0	316.0	311.0	298.0	289.0
62.5°	276.0	281.0	278.0	265.0	258.0
65°	244.0	248.0	244.0	231.0	226.0
67.5°	214.0	215.0	213.0	203.0	196.0
70°	183.0	185.0	183.0	174.0	167.0
72.5°	152.0	155.0	157.0	147.0	140.0
75°	124.0	129.0	128.0	118.0	116.0
77.5°	98.0	104.0	102.0	93.0	91.0
80°	74.0	79.0	77.0	69.0	67.0
82.5°	51.0	55.0	51.0	47.0	45.0
85°	32.0	33.0	28.0	25.0	25.0
87.5°	14.0	12.0	10.0	10.0	10.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)