

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: P229338

Luminaire Tested: **14ALNG-LD5-35-UNV-L840-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229338  
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-LD5-35-UNV-L840-CD1-U  
Description: METALUX 1X4 ARCLINE LED TROFFER WITH CURVED LENS  
Light Source: (84)4000K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3573.0 lumens  
Efficiency: N/A  
Efficacy: 103.7 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

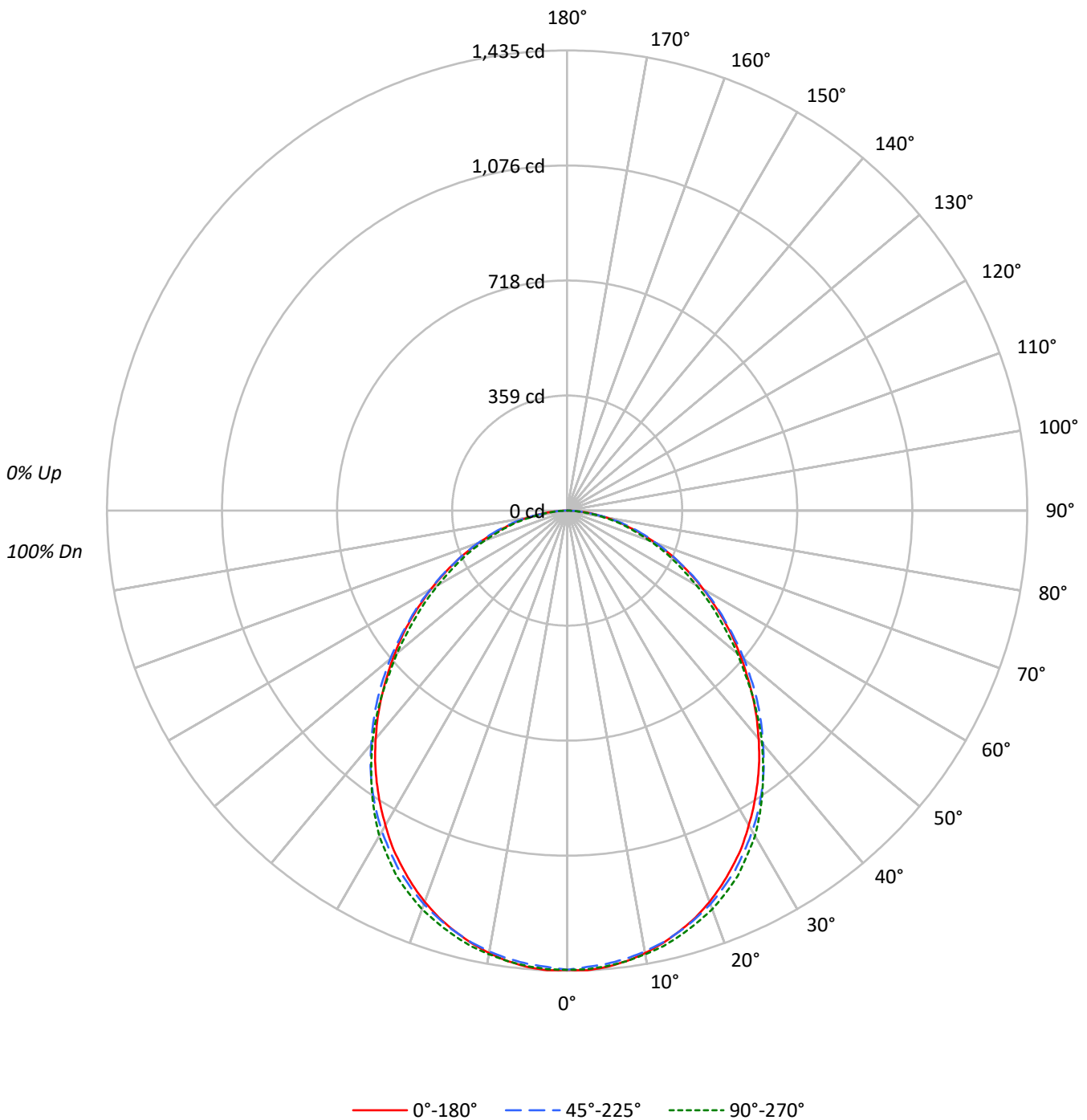
Input Watts (W): 34.46  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	4826	4826	4826
5°	4833	4800	4823
10°	4795	4777	4807
15°	4735	4738	4781
20°	4656	4684	4744
25°	4546	4605	4677
30°	4408	4494	4559
35°	4258	4359	4371
40°	4085	4182	4159
45°	3897	3993	3901
50°	3696	3775	3632
55°	3506	3537	3371
60°	3304	3316	3132
65°	3095	3095	2913
70°	2862	2896	2680
75°	2601	2704	2465
80°	2375	2443	2102
85°	2076	1836	1601



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	135.3	3.8
10°-20°	384.2	10.8
20°-30°	570.5	16.0
30°-40°	659.1	18.4
40°-50°	638.6	17.9
50°-60°	533.2	14.9
60°-70°	381.2	10.7
70°-80°	213.9	6.0
80°-90°	56.9	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°	1090.0	30.5
0°-40°	1749.1	49.0
0°-60°	2920.9	81.8
0°-90°	3573.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3573.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1432	1432	1432	1432	1432	
5°	1429	1426	1419	1427	1426	135
15°	1357	1359	1358	1371	1371	383
25°	1223	1229	1238	1256	1258	563
35°	1035	1044	1060	1067	1062	647
45°	818	829	838	827	819	631
55°	597	606	602	585	574	534
65°	388	395	388	373	365	385
75°	200	209	208	194	189	215
85°	54	55	48	43	41	61
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1432.2	1432.2	1432.2	1432.2	1432.2
2.5°	1434.8	1432.2	1424.3	1432.2	1431.3
5°	1428.7	1426.0	1419.0	1426.9	1426.0
7.5°	1417.2	1415.5	1409.3	1419.0	1417.2
10°	1401.4	1399.6	1396.1	1405.8	1404.9
12.5°	1381.1	1381.1	1379.4	1389.9	1390.8
15°	1357.4	1359.1	1358.2	1371.4	1370.6
17.5°	1330.9	1330.9	1333.6	1348.6	1347.7
20°	1298.4	1300.1	1306.3	1320.4	1323.0
22.5°	1262.3	1264.9	1272.9	1290.5	1291.3
25°	1222.7	1228.8	1238.5	1256.1	1257.9
27.5°	1181.3	1185.7	1197.1	1215.6	1213.9
30°	1132.9	1143.5	1154.9	1169.9	1171.6
32.5°	1085.4	1095.0	1109.1	1121.4	1118.8
35°	1035.2	1044.0	1059.8	1066.9	1062.5
37.5°	984.1	993.8	1007.0	1010.5	1003.5
40°	928.7	941.0	950.7	950.7	945.4
42.5°	874.1	883.8	894.3	889.9	882.0
45°	817.8	829.2	838.0	827.4	818.6
47.5°	760.5	773.7	778.1	766.7	751.7
50°	705.1	719.2	720.1	705.1	692.8
52.5°	652.3	662.8	660.2	645.2	631.1
55°	596.8	606.5	602.1	585.4	573.9
57.5°	542.2	551.9	549.3	529.9	519.4
60°	490.3	495.6	492.1	477.1	464.8
62.5°	438.4	444.5	442.8	421.6	412.8
65°	388.2	395.2	388.2	373.2	365.3
67.5°	340.7	345.1	343.3	331.0	320.4
70°	290.5	296.6	294.0	279.9	272.0
72.5°	245.6	252.6	251.8	236.8	227.1
75°	199.8	208.6	207.7	193.7	189.3
77.5°	162.8	167.2	168.1	153.2	150.5
80°	122.4	128.5	125.9	112.7	108.3
82.5°	86.3	91.5	83.6	75.7	73.9
85°	53.7	54.6	47.5	43.1	41.4
87.5°	22.0	22.0	16.7	15.0	15.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)