

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: P229370

Luminaire Tested: **24ALNG-LD5-42-UNV-L835-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229370  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36066)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24ALNG-LD5-42-UNV-L835-CD1-U  
Description: METALUX 2X4 ARCLINE LED TROFFER WITH CURVED LENS  
Light Source: (252)3500K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4264.0 lumens  
Efficiency: N/A  
Efficacy: 139.3 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33  
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')  
CIE Type: Direct

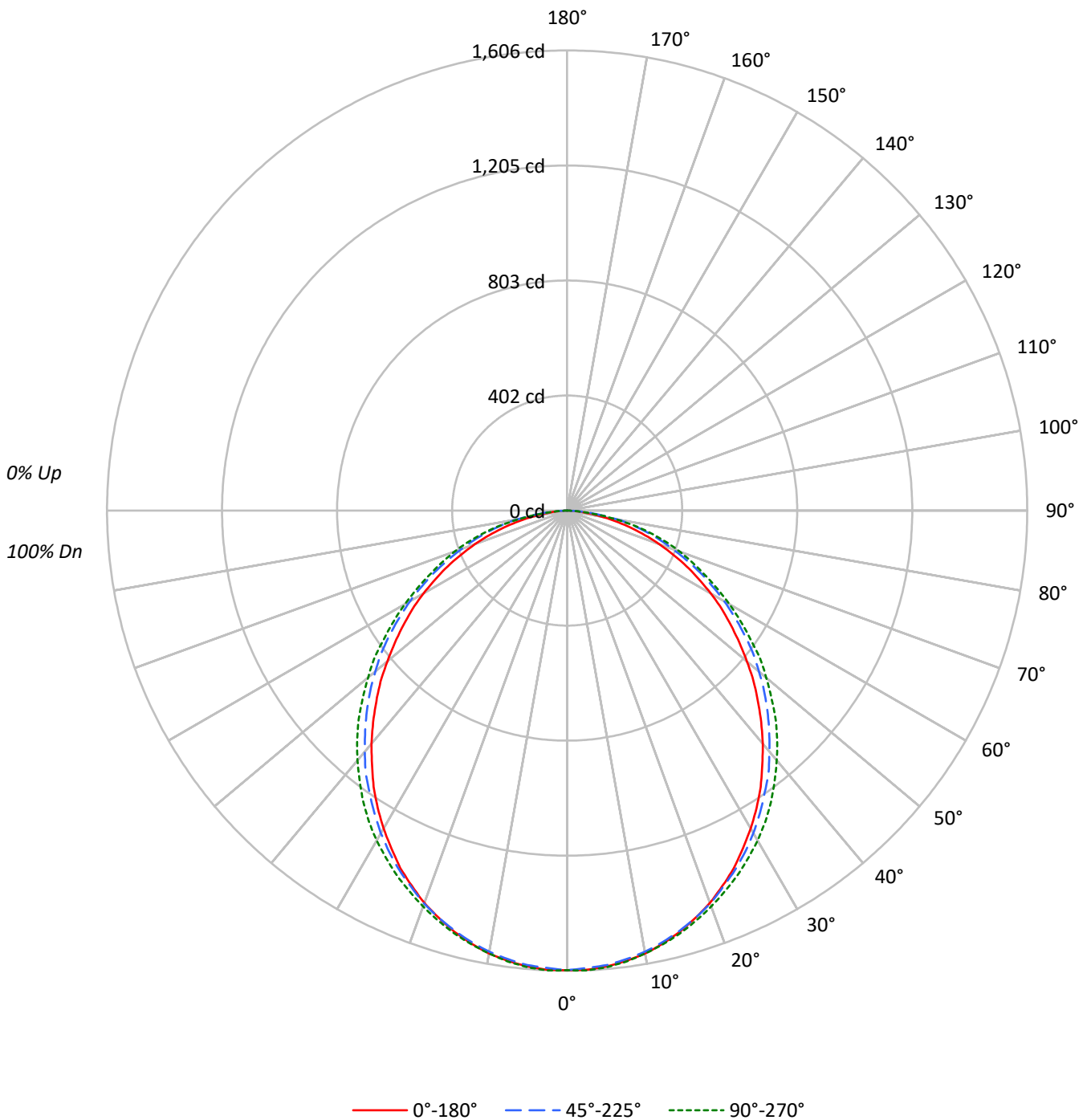
Input Watts (W): 30.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	72	70
3	90	80	72	65	88	78	71	65	75	69	64	73	67	63	70	66	62	59
4	83	71	62	56	81	70	62	55	67	60	54	65	59	54	63	57	53	51
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44
6	71	57	48	42	69	56	48	42	55	47	41	53	46	41	51	45	41	39
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	34
8	61	47	39	33	59	47	39	33	45	38	33	44	38	33	43	37	32	31
9	57	44	35	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

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

	0°	45°	90°
0°	2457	2457	2457
5°	2455	2448	2459
10°	2441	2432	2441
15°	2412	2407	2422
20°	2375	2379	2397
25°	2327	2341	2375
30°	2266	2299	2352
35°	2201	2248	2321
40°	2125	2196	2276
45°	2041	2140	2230
50°	1952	2081	2160
55°	1862	2017	2083
60°	1774	1941	2002
65°	1666	1855	1919
70°	1530	1757	1869
75°	1343	1686	1777
80°	1084	1574	1491
85°	768	1039	831



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	151.4	3.6
10°-20°	429.2	10.1
20°-30°	639.5	15.0
30°-40°	754.4	17.7
40°-50°	761.7	17.9
50°-60°	668.9	15.7
60°-70°	498.9	11.7
70°-80°	290.6	6.8
80°-90°	69.4	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°	1220.1	28.6
0°-40°	1974.5	46.3
0°-60°	3405.1	79.9
0°-90°	4264.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4264.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1604	1604	1604	1604	1604	
5°	1597	1596	1592	1597	1599	152
15°	1521	1520	1518	1525	1527	429
25°	1377	1378	1385	1401	1405	633
35°	1177	1184	1202	1230	1241	735
45°	942	956	988	1018	1030	727
55°	697	719	755	779	780	625
65°	460	479	512	527	530	454
75°	227	254	285	299	300	242
85°	44	64	59	50	47	55
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1604.0	1604.0	1604.0	1604.0	1604.0
2.5°	1604.0	1602.8	1598.1	1602.8	1606.4
5°	1596.9	1595.7	1592.2	1596.9	1599.3
7.5°	1585.1	1583.9	1579.2	1586.3	1587.4
10°	1569.7	1567.4	1563.8	1568.5	1569.7
12.5°	1547.3	1546.1	1542.5	1548.4	1549.6
15°	1521.3	1520.1	1517.7	1524.8	1527.2
17.5°	1490.5	1491.7	1490.5	1498.8	1500.0
20°	1457.4	1458.6	1459.8	1469.2	1470.4
22.5°	1417.2	1418.4	1422.0	1435.0	1438.5
25°	1377.0	1378.2	1385.3	1400.7	1405.4
27.5°	1328.6	1333.3	1344.0	1362.9	1367.6
30°	1281.3	1286.0	1300.2	1322.7	1329.8
32.5°	1230.5	1235.2	1251.8	1276.6	1287.2
35°	1177.3	1184.4	1202.1	1230.5	1241.1
37.5°	1118.2	1131.2	1154.8	1182.0	1189.1
40°	1062.6	1072.1	1098.1	1131.2	1138.3
42.5°	1002.3	1015.4	1043.7	1076.8	1085.1
45°	942.1	956.3	988.2	1017.7	1029.5
47.5°	883.0	898.3	932.6	963.3	966.9
50°	819.1	838.0	873.5	903.1	906.6
52.5°	757.7	780.1	818.0	841.6	849.9
55°	697.4	718.7	755.3	778.9	780.1
57.5°	640.7	658.4	693.8	713.9	717.5
60°	579.2	596.9	633.6	650.1	653.7
62.5°	517.7	536.6	572.1	588.6	591.0
65°	459.8	478.7	511.8	527.2	529.5
67.5°	398.3	422.0	450.3	470.4	472.8
70°	341.6	365.2	392.4	412.5	417.3
72.5°	284.9	312.1	339.2	354.6	360.5
75°	226.9	254.1	284.9	299.0	300.2
77.5°	173.8	199.8	231.7	239.9	236.4
80°	122.9	151.3	178.5	177.3	169.0
82.5°	78.0	105.2	115.8	108.7	104.0
85°	43.7	63.8	59.1	49.6	47.3
87.5°	17.7	18.9	14.2	9.5	8.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)