

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: P225640

Luminaire Tested: **24AC-LD5-31-UNV-L835-CD1-U**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

**Test Information**

Test Method: LM-79-08  
Report Number: P225640  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35753)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24AC-LD5-31-UNV-L835-CD1-U  
Description: METALUX Accord 2X4 LED TROFFER  
Light Source: (168)3500K CCT, 85 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER  
Luminaire Equipment: Sample No.   Condition   Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3155.0 lumens  
Efficiency: N/A  
Efficacy: 124.2 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.32 / 1.42  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

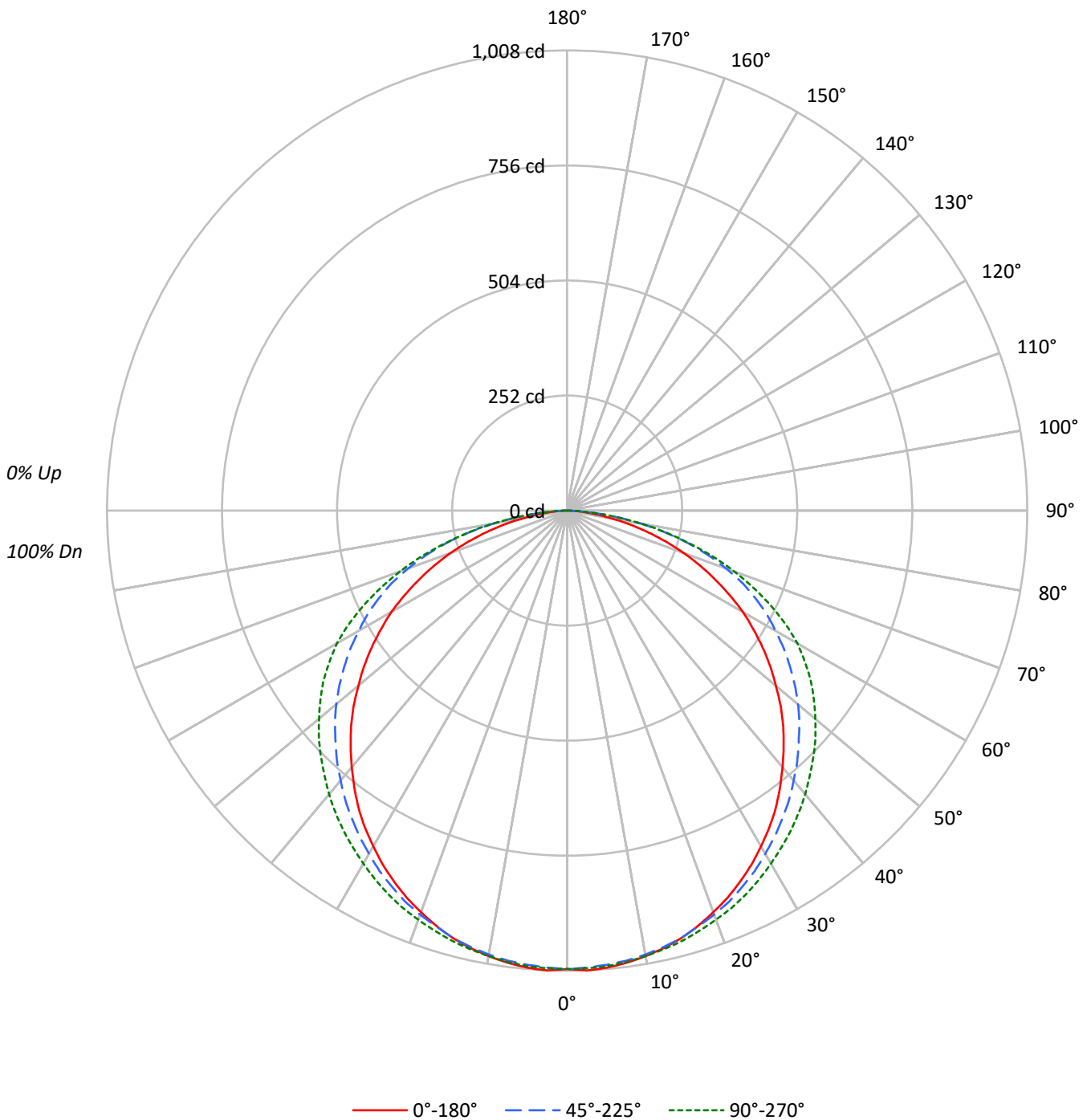
Input Watts (W): 25.41  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	108	103	99	94	105	101	97	93	96	93	90	93	90	87	89	87	85	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	72	77	73	70	68
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	54	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	68	55	45	39	67	54	45	39	52	44	38	50	43	38	49	42	38	35
7	63	49	40	34	62	49	40	34	47	39	34	46	39	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	41	34	30	28
9	55	41	33	27	54	41	33	27	40	32	27	38	32	27	37	31	27	25
10	52	38	30	25	50	38	30	25	37	29	24	36	29	24	35	29	24	22

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

	0°	45°	90°
0°	1351	1351	1351
5°	1357	1349	1353
10°	1354	1349	1354
15°	1350	1349	1359
20°	1340	1349	1366
25°	1332	1349	1376
30°	1319	1349	1387
35°	1308	1351	1404
40°	1289	1356	1425
45°	1274	1365	1451
50°	1250	1382	1485
55°	1226	1398	1529
60°	1197	1418	1567
65°	1139	1450	1566
70°	1068	1458	1532
75°	956	1416	1434
80°	767	1267	1272
85°	542	922	866



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	95.1	3.0
10°-20°	273.6	8.7
20°-30°	419.3	13.3
30°-40°	515.3	16.3
40°-50°	552.8	17.5
50°-60°	528.6	16.8
60°-70°	434.8	13.8
70°-80°	267.4	8.5
80°-90°	68.2	2.2
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°	787.9	25.0
0°-40°	1303.2	41.3
0°-60°	2384.6	75.6
0°-90°	3155.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3155.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1004	1004	1004	1004	1004	
5°	1005	1001	999	997	1001	95
15°	969	966	968	970	976	273
25°	897	897	909	919	927	413
35°	796	801	822	844	855	498
45°	670	682	717	749	763	516
55°	523	548	596	636	652	467
65°	358	398	456	483	492	354
75°	184	239	272	277	276	194
85°	35	58	60	58	56	43
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1004.3	1004.3	1004.3	1004.3	1004.3
2.5°	1008.5	1003.6	1002.1	1000.0	1003.6
5°	1005.0	1000.7	998.6	997.2	1001.4
7.5°	999.3	995.1	994.4	993.0	997.2
10°	990.9	987.4	987.4	986.7	990.9
12.5°	981.1	976.9	979.0	979.7	983.9
15°	969.2	965.7	968.5	969.9	975.5
17.5°	953.7	950.9	955.1	959.3	965.0
20°	936.2	935.5	941.8	947.4	953.7
22.5°	917.9	917.9	927.1	933.4	941.8
25°	896.9	896.9	908.8	918.6	927.1
27.5°	874.4	875.8	889.9	901.8	910.9
30°	849.2	853.4	868.1	882.8	892.7
32.5°	823.9	827.4	846.4	865.3	874.4
35°	796.5	801.4	822.5	843.5	854.8
37.5°	765.6	772.7	798.6	821.8	833.7
40°	734.1	743.2	772.0	798.6	811.3
42.5°	701.8	714.4	746.0	773.4	786.7
45°	669.5	682.1	717.2	748.8	762.8
47.5°	634.4	649.9	689.9	722.1	737.6
50°	597.2	615.5	660.4	694.1	709.5
52.5°	560.7	581.8	628.8	666.7	681.4
55°	522.8	548.1	595.8	635.8	652.0
57.5°	483.5	512.3	562.8	603.5	617.6
60°	444.9	473.7	527.0	568.4	582.5
62.5°	401.4	436.5	493.4	532.0	539.7
65°	357.9	397.9	455.5	482.8	492.0
67.5°	315.1	358.6	416.2	435.8	441.4
70°	271.6	316.5	370.5	386.7	389.5
72.5°	227.4	277.9	323.5	332.6	334.0
75°	183.9	238.6	272.3	277.2	275.8
77.5°	141.1	195.1	219.0	221.1	221.8
80°	99.0	149.5	163.5	164.2	164.2
82.5°	63.9	103.9	110.9	109.5	110.9
85°	35.1	57.5	59.7	57.5	56.1
87.5°	11.2	16.8	18.2	17.5	17.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)