

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: P475747

Luminaire Tested: **24GR-LD5-34-A-UNV-L850-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475747  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-34-A-UNV-L850-CD1-U  
Description: GR 2'X4' LED TROFFER w/ A LENS  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3415.5 lumens  
Efficiency: N/A  
Efficacy: 142.3 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.21 / 1.28  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

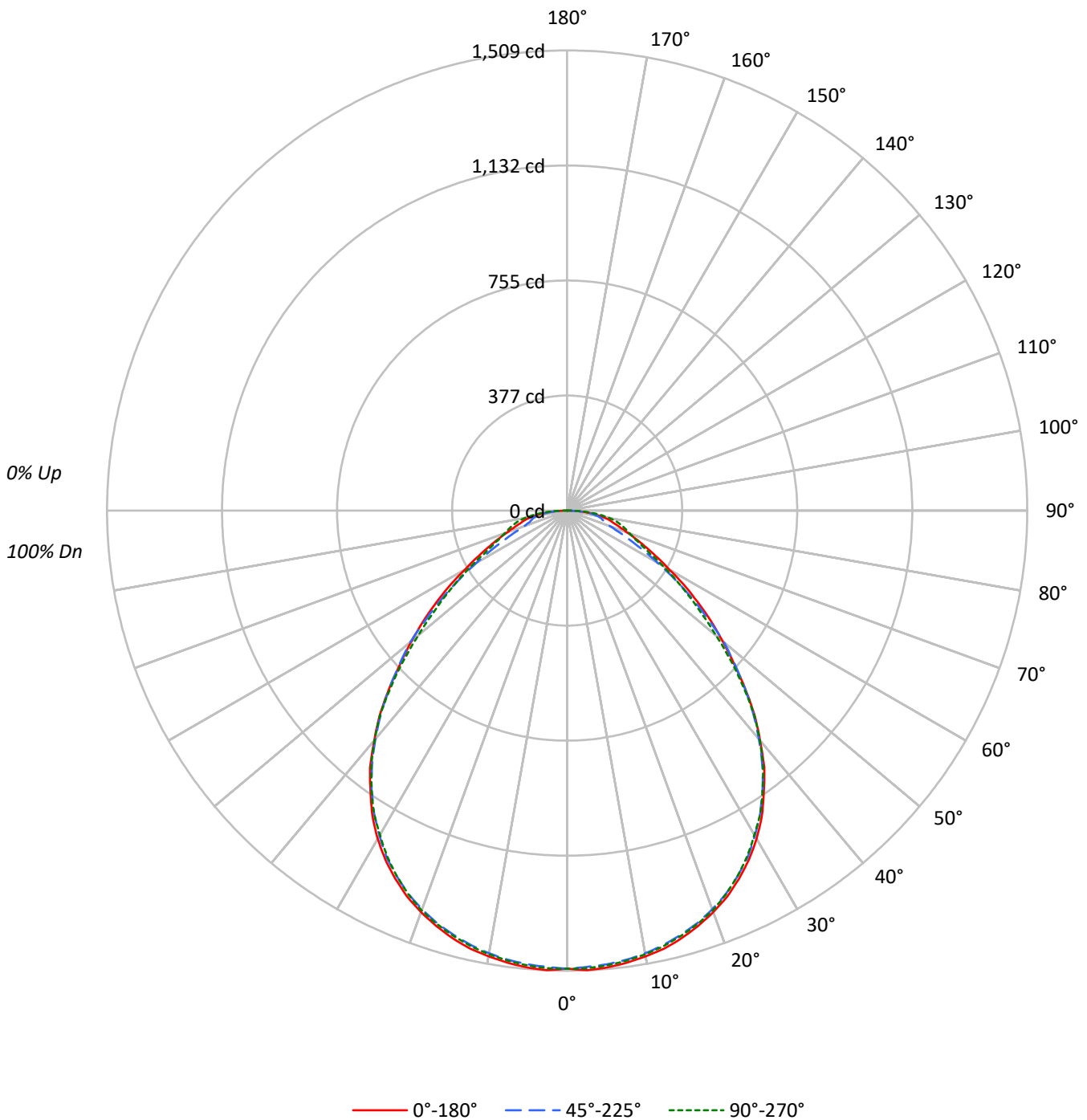
Input Watts (W): 24  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	110	105	102	98	107	103	100	96	99	96	93	95	93	91	92	90	88	86
2	101	93	87	82	98	92	86	81	88	83	79	85	81	77	82	79	76	74
3	93	83	76	70	90	82	75	69	79	73	68	76	71	67	74	69	66	64
4	86	75	66	60	83	73	66	60	71	64	59	69	63	58	66	62	58	56
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49
6	74	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43
7	68	56	47	42	67	55	47	42	53	46	41	52	46	41	51	45	41	39
8	64	51	43	38	62	50	43	37	49	42	37	48	42	37	47	41	37	35
9	60	47	39	34	59	47	39	34	45	39	34	44	38	34	43	38	33	32
10	56	44	36	31	55	43	36	31	42	35	31	41	35	31	40	35	31	29

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

	0°	45°	90°
0°	2021	2021	2021
5°	2031	2018	2022
10°	2028	2014	2018
15°	2022	2006	2011
20°	2006	1992	1997
25°	1979	1964	1963
30°	1931	1913	1908
35°	1848	1836	1836
40°	1729	1719	1726
45°	1570	1567	1554
50°	1392	1403	1334
55°	1224	1170	1142
60°	1042	924	972
65°	910	719	858
70°	823	591	856
75°	823	631	957
80°	907	776	1094
85°	934	872	1193



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	142.2	4.2
10°-20°	407.2	11.9
20°-30°	609.2	17.8
30°-40°	697.1	20.4
40°-50°	631.6	18.5
50°-60°	447.2	13.1
60°-70°	258.3	7.6
70°-80°	156.6	4.6
80°-90°	65.9	1.9
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°	1158.7	33.9
0°-40°	1855.8	54.3
0°-60°	2934.6	85.9
0°-90°	3415.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3415.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1502	1502	1502	1502	1502	
5°	1504	1498	1494	1494	1497	143
15°	1452	1446	1440	1440	1444	409
25°	1333	1327	1323	1322	1322	613
35°	1125	1120	1118	1116	1118	702
45°	825	823	824	818	817	636
55°	522	504	499	484	487	467
65°	286	256	226	258	269	287
75°	158	142	121	156	184	170
85°	60	54	56	72	77	65
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1502.2	1502.2	1502.2	1502.2	1502.2
2.5°	1508.6	1502.9	1497.9	1498.5	1502.2
5°	1503.9	1498.5	1493.8	1493.5	1497.2
7.5°	1495.8	1491.1	1485.7	1485.7	1488.8
10°	1484.4	1479.7	1474.3	1474.0	1477.3
12.5°	1471.0	1464.9	1459.2	1459.2	1462.9
15°	1451.8	1446.1	1440.4	1440.4	1443.7
17.5°	1428.2	1423.2	1418.5	1418.8	1421.5
20°	1401.3	1396.3	1391.3	1391.9	1395.0
22.5°	1370.4	1364.3	1360.3	1360.0	1362.0
25°	1332.7	1327.4	1323.0	1322.0	1322.0
27.5°	1290.7	1285.0	1282.0	1277.2	1278.6
30°	1242.6	1236.6	1231.2	1228.5	1228.1
32.5°	1188.5	1182.4	1177.7	1177.4	1178.7
35°	1124.9	1119.9	1117.8	1116.2	1117.8
37.5°	1062.0	1052.6	1050.9	1050.6	1055.0
40°	984.3	981.0	978.6	976.9	982.7
42.5°	909.7	903.0	903.6	897.2	907.3
45°	824.9	823.2	823.6	817.5	816.9
47.5°	740.9	740.5	745.6	728.8	727.7
50°	665.2	661.8	670.2	644.3	637.3
52.5°	592.9	583.5	580.8	557.2	557.2
55°	521.6	504.1	498.7	483.9	487.0
57.5°	454.0	429.1	418.0	417.7	422.7
60°	387.1	358.8	343.4	355.5	361.2
62.5°	333.9	303.0	279.5	302.3	307.7
65°	285.9	256.3	225.7	258.3	269.4
67.5°	244.5	219.9	181.6	224.3	239.1
70°	209.2	187.3	150.3	197.7	217.6
72.5°	181.3	163.1	130.8	176.6	200.4
75°	158.4	141.9	121.4	156.0	184.0
77.5°	140.2	120.7	113.7	136.5	165.1
80°	117.0	99.2	100.2	117.4	141.2
82.5°	90.1	76.7	80.7	97.2	111.0
85°	60.5	54.5	56.5	72.3	77.3
87.5°	29.9	28.9	30.9	42.4	42.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)