

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: P475734

Luminaire Tested: **24GR-LD5-42-A-UNV-L840-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475734  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-42-A-UNV-L840-CD1-U  
Description: GR 2'X4' LED TROFFER w/ A LENS  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4239.4 lumens  
Efficiency: N/A  
Efficacy: 139.9 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

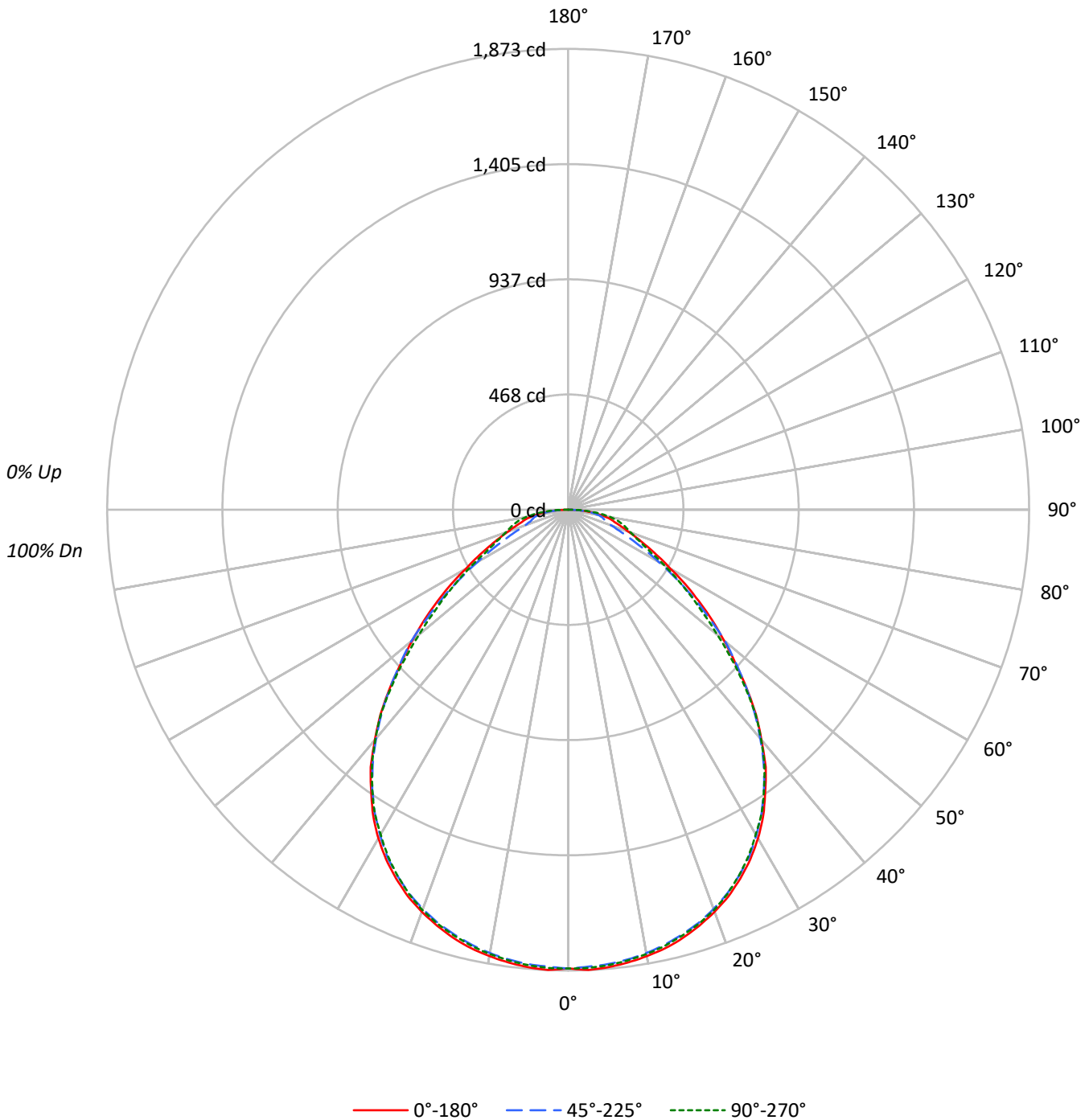
Input Watts (W): 30.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2509	2509	2509
5°	2521	2504	2510
10°	2517	2500	2505
15°	2510	2490	2496
20°	2491	2473	2479
25°	2456	2438	2436
30°	2396	2374	2368
35°	2293	2279	2279
40°	2146	2134	2142
45°	1948	1945	1929
50°	1728	1741	1656
55°	1519	1452	1418
60°	1293	1147	1206
65°	1130	892	1065
70°	1021	734	1063
75°	1022	783	1187
80°	1126	964	1358
85°	1159	1082	1482



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	176.6	4.2
10°-20°	505.5	11.9
20°-30°	756.2	17.8
30°-40°	865.3	20.4
40°-50°	784.0	18.5
50°-60°	555.0	13.1
60°-70°	320.6	7.6
70°-80°	194.4	4.6
80°-90°	81.8	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°	1438.2	33.9
0°-40°	2303.5	54.3
0°-60°	3642.6	85.9
0°-90°	4239.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4239.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1865	1865	1865	1865	1865	
5°	1867	1860	1854	1854	1858	177
15°	1802	1795	1788	1788	1792	508
25°	1654	1648	1642	1641	1641	761
35°	1396	1390	1388	1385	1388	871
45°	1024	1022	1022	1015	1014	789
55°	647	626	619	601	604	580
65°	355	318	280	321	334	357
75°	197	176	151	194	228	211
85°	75	68	70	90	96	81
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1864.6	1864.6	1864.6	1864.6	1864.6
2.5°	1872.6	1865.5	1859.2	1860.0	1864.6
5°	1866.7	1860.0	1854.2	1853.8	1858.4
7.5°	1856.7	1850.9	1844.2	1844.2	1847.9
10°	1842.5	1836.7	1830.0	1829.6	1833.8
12.5°	1825.8	1818.3	1811.2	1811.2	1815.8
15°	1802.0	1794.9	1787.8	1787.8	1792.0
17.5°	1772.8	1766.5	1760.7	1761.1	1764.5
20°	1739.4	1733.2	1726.9	1727.7	1731.5
22.5°	1701.0	1693.5	1688.5	1688.1	1690.6
25°	1654.3	1647.6	1642.2	1640.9	1640.9
27.5°	1602.1	1595.0	1591.2	1585.4	1587.1
30°	1542.4	1534.9	1528.2	1524.9	1524.4
32.5°	1475.2	1467.7	1461.8	1461.4	1463.1
35°	1396.3	1390.0	1387.5	1385.4	1387.5
37.5°	1318.2	1306.5	1304.5	1304.0	1309.5
40°	1221.8	1217.6	1214.7	1212.6	1219.7
42.5°	1129.1	1120.8	1121.6	1113.7	1126.2
45°	1023.9	1021.9	1022.3	1014.8	1013.9
47.5°	919.6	919.2	925.4	904.6	903.3
50°	825.7	821.5	831.9	799.8	791.0
52.5°	735.9	724.2	720.9	691.7	691.7
55°	647.4	625.7	619.0	600.7	604.4
57.5°	563.5	532.6	518.9	518.4	524.7
60°	480.5	445.4	426.2	441.2	448.3
62.5°	414.5	376.1	346.9	375.3	381.9
65°	354.8	318.1	280.1	320.6	334.4
67.5°	303.5	273.0	225.4	278.4	296.8
70°	259.6	232.5	186.6	245.4	270.1
72.5°	225.0	202.5	162.4	219.1	248.8
75°	196.6	176.2	150.7	193.7	228.3
77.5°	174.1	149.9	141.1	169.5	205.0
80°	145.3	123.1	124.4	145.7	175.3
82.5°	111.9	95.2	100.2	120.6	137.8
85°	75.1	67.6	70.1	89.7	96.0
87.5°	37.2	35.9	38.4	52.6	52.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)