

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: P475749

Luminaire Tested: **24GR-LD5-42-A-UNV-L850-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475749  
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-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: 4243.6 lumens  
Efficiency: N/A  
Efficacy: 140.1 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

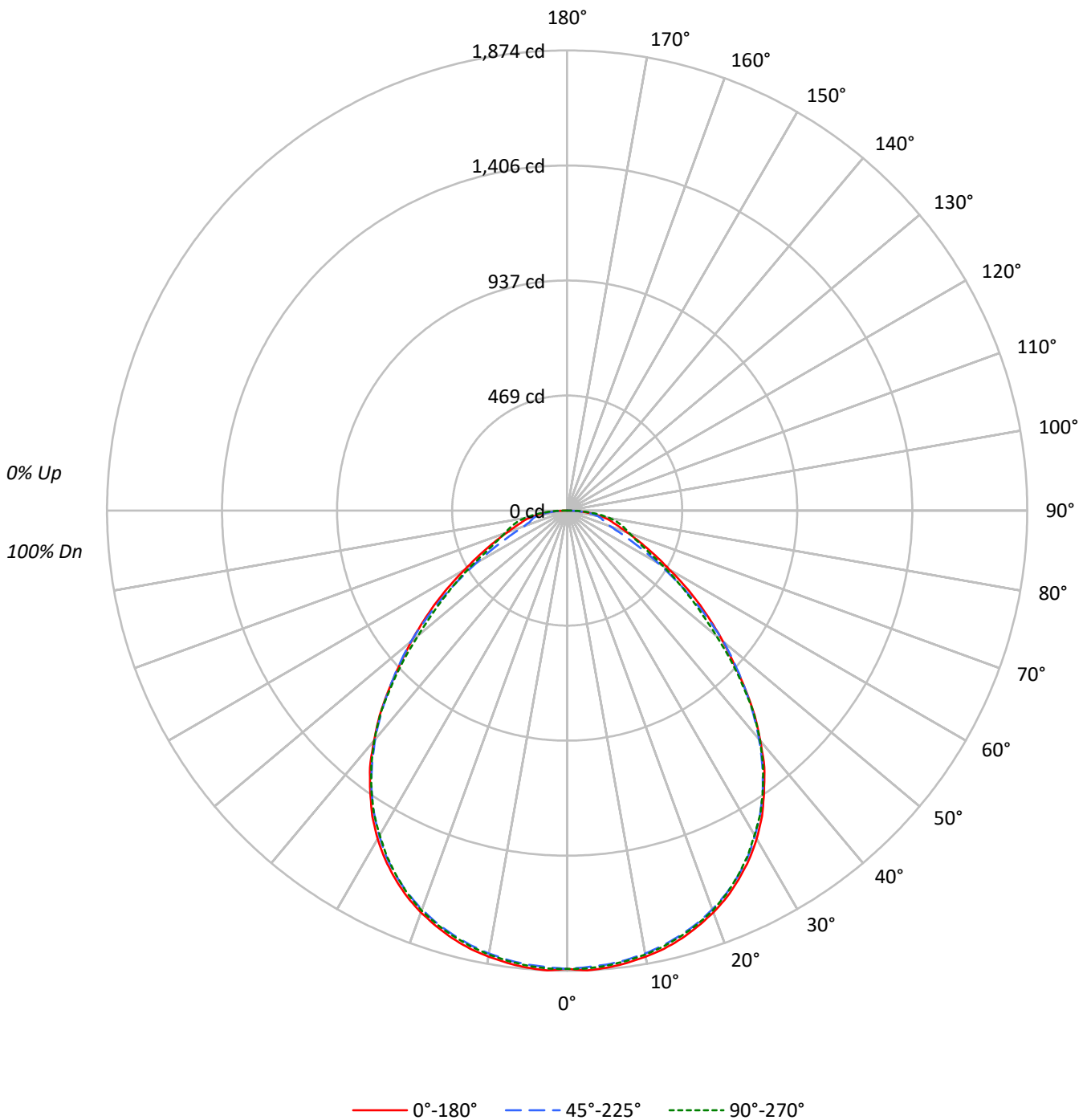
Input Watts (W): 30.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2511	2511	2511
5°	2524	2507	2512
10°	2520	2503	2508
15°	2513	2493	2499
20°	2493	2475	2482
25°	2458	2440	2438
30°	2399	2377	2371
35°	2296	2281	2281
40°	2148	2136	2144
45°	1950	1947	1931
50°	1730	1743	1657
55°	1520	1453	1419
60°	1294	1148	1208
65°	1131	893	1066
70°	1022	735	1063
75°	1023	784	1188
80°	1127	965	1360
85°	1161	1084	1484



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	176.7	4.2
10°-20°	506.0	11.9
20°-30°	756.9	17.8
30°-40°	866.2	20.4
40°-50°	784.8	18.5
50°-60°	555.6	13.1
60°-70°	321.0	7.6
70°-80°	194.6	4.6
80°-90°	81.9	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°	1439.6	33.9
0°-40°	2305.8	54.3
0°-60°	3646.2	85.9
0°-90°	4243.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4243.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1866	1866	1866	1866	1866	
5°	1869	1862	1856	1856	1860	178
15°	1804	1797	1790	1790	1794	509
25°	1656	1649	1644	1642	1642	762
35°	1398	1391	1389	1387	1389	872
45°	1025	1023	1023	1016	1015	790
55°	648	626	620	601	605	581
65°	355	318	280	321	335	357
75°	197	176	151	194	229	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°	1866.5	1866.5	1866.5	1866.5	1866.5
2.5°	1874.4	1867.3	1861.0	1861.9	1866.5
5°	1868.6	1861.9	1856.0	1855.6	1860.2
7.5°	1858.5	1852.7	1846.0	1846.0	1849.8
10°	1844.3	1838.5	1831.8	1831.4	1835.6
12.5°	1827.6	1820.1	1813.0	1813.0	1817.6
15°	1803.8	1796.7	1789.6	1789.6	1793.8
17.5°	1774.5	1768.3	1762.4	1762.8	1766.2
20°	1741.1	1734.9	1728.6	1729.4	1733.2
22.5°	1702.7	1695.2	1690.1	1689.7	1692.2
25°	1655.9	1649.2	1643.8	1642.5	1642.5
27.5°	1603.7	1596.5	1592.8	1586.9	1588.6
30°	1543.9	1536.4	1529.7	1526.4	1525.9
32.5°	1476.6	1469.1	1463.3	1462.8	1464.5
35°	1397.7	1391.4	1388.9	1386.8	1388.9
37.5°	1319.5	1307.8	1305.7	1305.3	1310.7
40°	1223.0	1218.8	1215.9	1213.8	1220.9
42.5°	1130.2	1121.9	1122.7	1114.8	1127.3
45°	1025.0	1022.9	1023.3	1015.8	1014.9
47.5°	920.5	920.1	926.3	905.4	904.2
50°	826.5	822.3	832.7	800.6	791.8
52.5°	736.6	724.9	721.6	692.4	692.4
55°	648.1	626.3	619.6	601.3	605.0
57.5°	564.1	533.2	519.4	519.0	525.2
60°	480.9	445.8	426.6	441.7	448.8
62.5°	414.9	376.5	347.2	375.6	382.3
65°	355.2	318.4	280.4	320.9	334.7
67.5°	303.8	273.3	225.6	278.7	297.1
70°	259.9	232.7	186.8	245.7	270.3
72.5°	225.2	202.7	162.5	219.4	249.0
75°	196.8	176.3	150.8	193.9	228.6
77.5°	174.2	150.0	141.2	169.6	205.2
80°	145.4	123.3	124.5	145.8	175.5
82.5°	112.0	95.3	100.3	120.8	137.9
85°	75.2	67.7	70.2	89.8	96.1
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)