

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: P475755

Luminaire Tested: **24GR-LD5-90-A-UNV-L850-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475755
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-90-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: 8914.6 lumens
Efficiency: N/A
Efficacy: 145.7 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

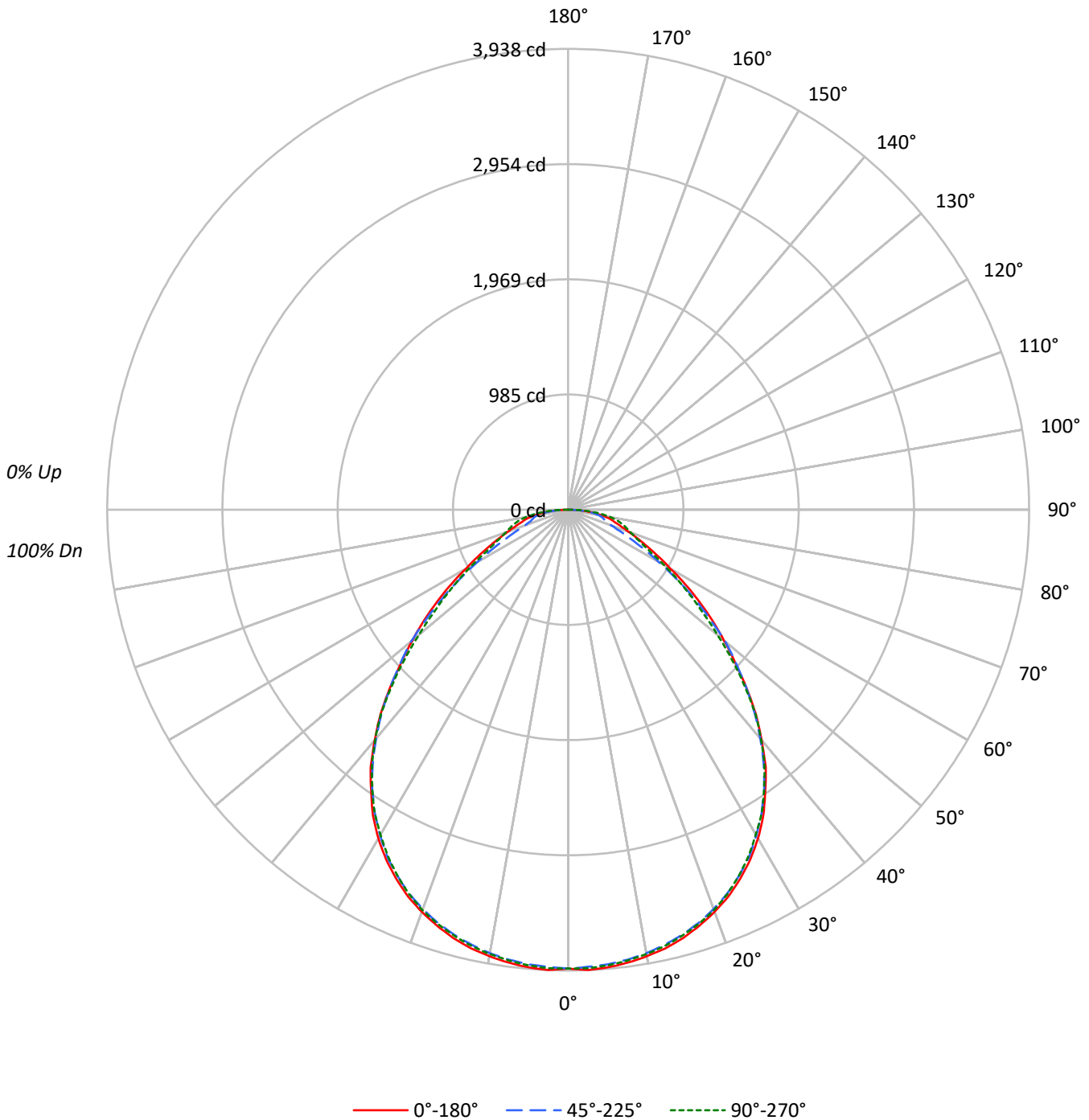
Input Watts (W): 61.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5276	5276	5276
5°	5302	5266	5278
10°	5293	5257	5268
15°	5278	5237	5249
20°	5237	5199	5213
25°	5164	5126	5123
30°	5039	4993	4980
35°	4823	4792	4792
40°	4513	4486	4505
45°	4097	4090	4057
50°	3634	3662	3482
55°	3194	3054	2981
60°	2719	2412	2537
65°	2375	1875	2238
70°	2148	1544	2234
75°	2149	1647	2496
80°	2367	2027	2857
85°	2439	2277	3117



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	371.3	4.2
10°-20°	1062.9	11.9
20°-30°	1590.1	17.8
30°-40°	1819.6	20.4
40°-50°	1648.6	18.5
50°-60°	1167.2	13.1
60°-70°	674.3	7.6
70°-80°	408.8	4.6
80°-90°	172.1	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°	3024.3	33.9
0°-40°	4843.8	54.3
0°-60°	7659.6	85.9
0°-90°	8914.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8914.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3921	3921	3921	3921	3921	
5°	3925	3911	3899	3898	3908	373
15°	3789	3774	3759	3759	3768	1069
25°	3478	3464	3453	3450	3450	1600
35°	2936	2923	2918	2913	2918	1832
45°	2153	2149	2150	2134	2132	1659
55°	1361	1316	1302	1263	1271	1220
65°	746	669	589	674	703	750
75°	413	370	317	407	480	443
85°	158	142	148	189	202	170
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3920.9	3920.9	3920.9	3920.9	3920.9
2.5°	3937.6	3922.7	3909.5	3911.3	3920.9
5°	3925.3	3911.3	3899.0	3898.1	3907.8
7.5°	3904.3	3892.0	3877.9	3877.9	3885.8
10°	3874.4	3862.1	3848.1	3847.2	3856.0
12.5°	3839.3	3823.5	3808.6	3808.6	3818.2
15°	3789.3	3774.4	3759.4	3759.4	3768.2
17.5°	3727.8	3714.7	3702.4	3703.3	3710.3
20°	3657.6	3644.4	3631.3	3633.0	3640.9
22.5°	3576.9	3561.1	3550.5	3549.6	3554.9
25°	3478.5	3464.5	3453.1	3450.5	3450.5
27.5°	3368.8	3353.9	3346.0	3333.7	3337.2
30°	3243.3	3227.5	3213.5	3206.4	3205.6
32.5°	3102.0	3086.2	3073.9	3073.0	3076.5
35°	2936.1	2922.9	2917.7	2913.3	2917.7
37.5°	2772.0	2747.4	2743.0	2742.1	2753.5
40°	2569.2	2560.4	2554.3	2549.9	2564.8
42.5°	2374.3	2356.8	2358.5	2341.9	2368.2
45°	2153.1	2148.7	2149.6	2133.8	2132.1
47.5°	1933.7	1932.8	1946.0	1902.1	1899.5
50°	1736.2	1727.4	1749.4	1681.8	1663.3
52.5°	1547.5	1522.9	1515.9	1454.4	1454.4
55°	1361.4	1315.8	1301.7	1263.1	1271.0
57.5°	1185.0	1120.0	1091.1	1090.2	1103.3
60°	1010.3	936.6	896.2	927.8	942.7
62.5°	871.6	790.9	729.4	789.1	803.1
65°	746.1	668.9	589.0	674.1	703.1
67.5°	638.1	574.1	474.0	585.5	624.1
70°	546.0	488.9	392.4	516.1	567.9
72.5°	473.1	425.7	341.4	460.8	523.1
75°	413.4	370.4	316.9	407.3	480.1
77.5°	366.0	315.1	296.7	356.4	431.0
80°	305.5	258.9	261.6	306.3	368.7
82.5°	235.2	200.1	210.7	253.7	289.7
85°	158.0	142.2	147.5	188.7	201.9
87.5°	78.1	75.5	80.8	110.6	110.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)