

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: P475740

Luminaire Tested: **24GR-LD5-90-A-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475740
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-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: 8905.9 lumens
Efficiency: N/A
Efficacy: 145.5 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

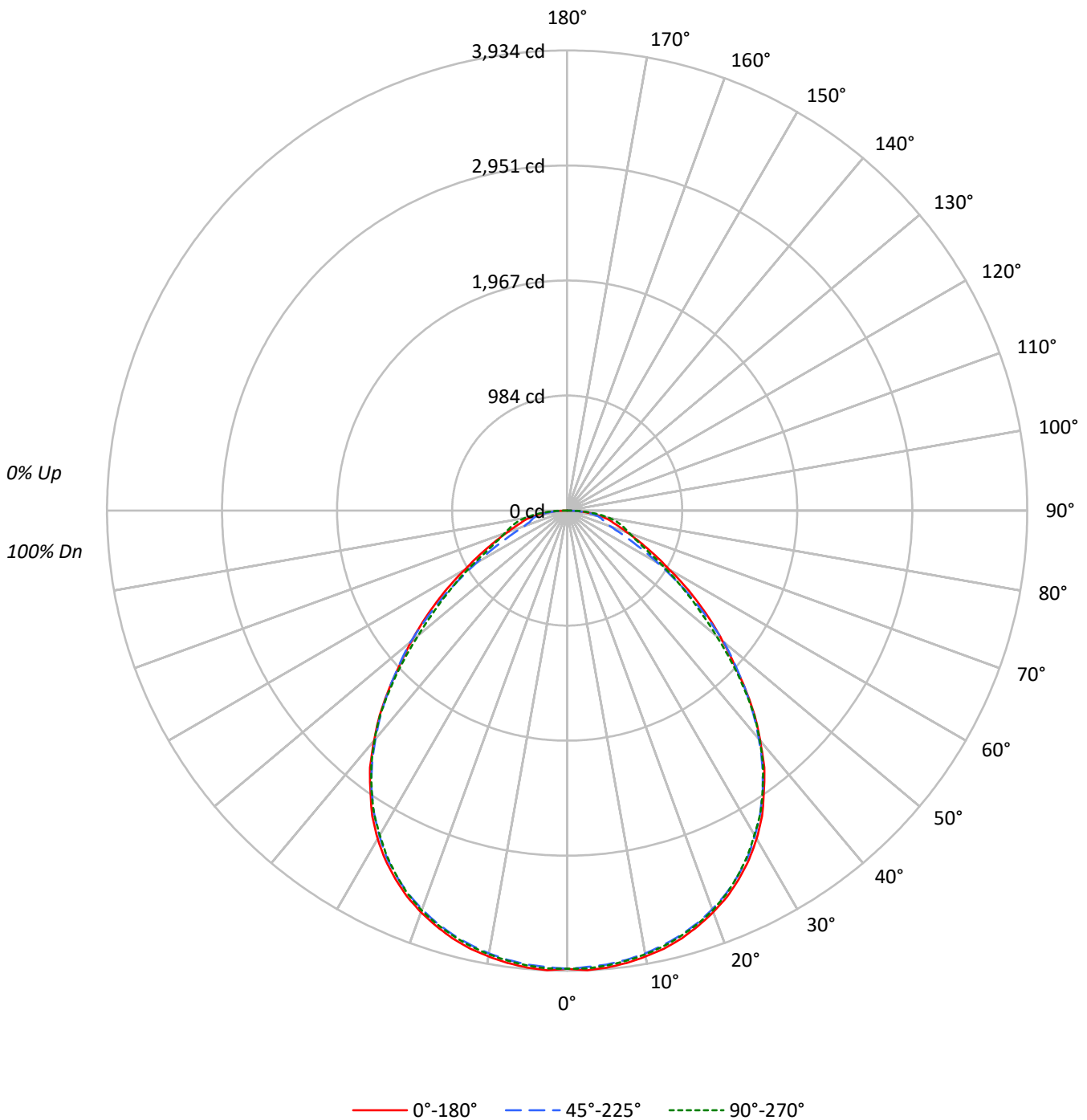
Input Watts (W): 61.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5270	5270	5270
5°	5296	5261	5273
10°	5288	5252	5263
15°	5273	5232	5244
20°	5232	5194	5208
25°	5159	5121	5118
30°	5034	4988	4975
35°	4818	4788	4788
40°	4508	4482	4500
45°	4093	4086	4053
50°	3631	3658	3478
55°	3191	3050	2978
60°	2716	2409	2534
65°	2373	1873	2236
70°	2146	1542	2232
75°	2147	1646	2494
80°	2365	2025	2854
85°	2436	2274	3114



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	370.9	4.2
10°-20°	1061.9	11.9
20°-30°	1588.5	17.8
30°-40°	1817.8	20.4
40°-50°	1647.0	18.5
50°-60°	1166.0	13.1
60°-70°	673.6	7.6
70°-80°	408.4	4.6
80°-90°	171.9	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°	3021.3	33.9
0°-40°	4839.1	54.3
0°-60°	7652.1	85.9
0°-90°	8905.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8905.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3917	3917	3917	3917	3917	
5°	3922	3907	3895	3894	3904	373
15°	3786	3771	3756	3756	3764	1067
25°	3475	3461	3450	3447	3447	1598
35°	2933	2920	2915	2910	2915	1830
45°	2151	2147	2148	2132	2130	1657
55°	1360	1314	1300	1262	1270	1219
65°	745	668	588	674	702	749
75°	413	370	317	407	480	443
85°	158	142	147	188	202	170
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3917.1	3917.1	3917.1	3917.1	3917.1
2.5°	3933.8	3918.8	3905.7	3907.4	3917.1
5°	3921.5	3907.4	3895.2	3894.3	3903.9
7.5°	3900.4	3888.2	3874.1	3874.1	3882.0
10°	3870.6	3858.3	3844.3	3843.4	3852.2
12.5°	3835.5	3819.8	3804.9	3804.9	3814.5
15°	3785.6	3770.7	3755.7	3755.7	3764.5
17.5°	3724.2	3711.0	3698.7	3699.6	3706.6
20°	3654.0	3640.9	3627.7	3629.5	3637.4
22.5°	3573.4	3557.6	3547.0	3546.2	3551.4
25°	3475.1	3461.1	3449.7	3447.1	3447.1
27.5°	3365.5	3350.6	3342.7	3330.5	3334.0
30°	3240.1	3224.3	3210.3	3203.3	3202.4
32.5°	3098.9	3083.2	3070.9	3070.0	3073.5
35°	2933.2	2920.1	2914.8	2910.4	2914.8
37.5°	2769.2	2744.7	2740.3	2739.4	2750.8
40°	2566.7	2557.9	2551.8	2547.4	2562.3
42.5°	2372.0	2354.5	2356.2	2339.6	2365.9
45°	2151.0	2146.6	2147.5	2131.7	2130.0
47.5°	1931.8	1930.9	1944.1	1900.2	1897.6
50°	1734.5	1725.7	1747.7	1680.1	1661.7
52.5°	1546.0	1521.4	1514.4	1453.0	1453.0
55°	1360.1	1314.5	1300.4	1261.9	1269.7
57.5°	1183.8	1118.9	1090.0	1089.1	1102.3
60°	1009.3	935.6	895.3	926.9	941.8
62.5°	870.8	790.1	728.7	788.3	802.4
65°	745.4	668.2	588.4	673.5	702.4
67.5°	637.5	573.5	473.5	584.9	623.5
70°	545.4	488.4	392.0	515.6	567.4
72.5°	472.6	425.3	341.1	460.4	522.6
75°	413.0	370.1	316.6	406.9	479.7
77.5°	365.7	314.8	296.4	356.0	430.6
80°	305.2	258.7	261.3	306.0	368.3
82.5°	235.0	199.9	210.5	253.4	289.4
85°	157.8	142.1	147.3	188.5	201.7
87.5°	78.0	75.4	80.7	110.5	110.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)