

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: P475712

Luminaire Tested: **24GR-LD5-120-A-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475712
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-120-A-UNV-L830-CD1-U
Description: GR 2'X4' LED TROFFER w/ A LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11252.4 lumens
Efficiency: N/A
Efficacy: 138.2 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

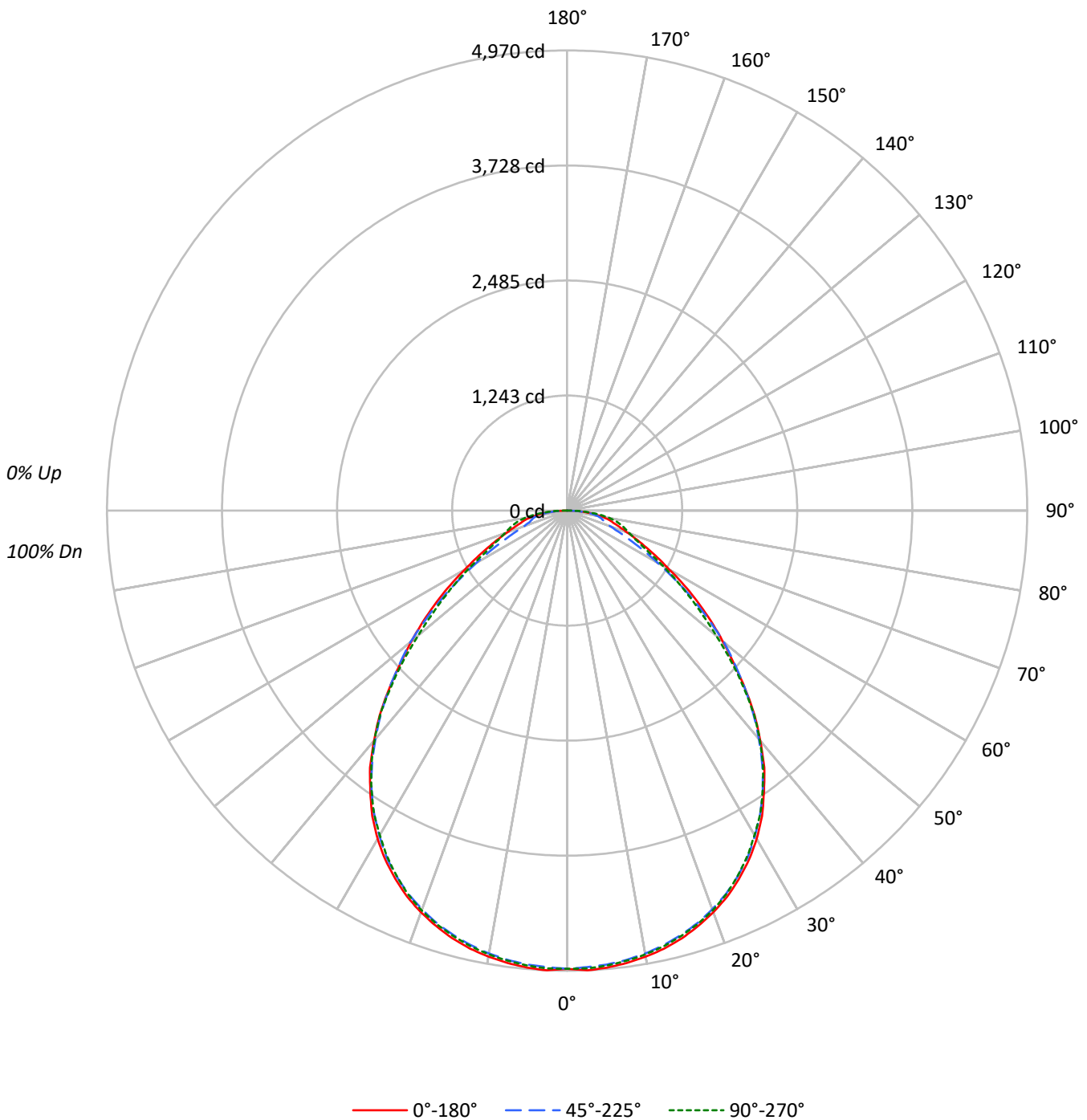
Input Watts (W): 81.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P475712

CATALOG NUMBER: 24GR-LD5-120-A-UNV-L830-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P475712

CATALOG NUMBER: 24GR-LD5-120-A-UNV-L830-CD1-U

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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				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°	6659	6659	6659
5°	6692	6647	6662
10°	6682	6636	6650
15°	6662	6610	6625
20°	6611	6563	6580
25°	6519	6471	6466
30°	6360	6302	6286
35°	6087	6049	6049
40°	5696	5663	5686
45°	5171	5163	5121
50°	4587	4622	4395
55°	4031	3854	3763
60°	3432	3044	3202
65°	2998	2367	2826
70°	2711	1948	2820
75°	2713	2079	3150
80°	2988	2559	3605
85°	3078	2873	3934



TEST NUMBER: P475712

CATALOG NUMBER: 24GR-LD5-120-A-UNV-L830-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	468.6	4.2
10°-20°	1341.7	11.9
20°-30°	2007.0	17.8
30°-40°	2296.7	20.4
40°-50°	2080.9	18.5
50°-60°	1473.2	13.1
60°-70°	851.1	7.6
70°-80°	516.0	4.6
80°-90°	217.2	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°	3817.3	33.9
0°-40°	6114.1	54.3
0°-60°	9668.2	85.9
0°-90°	11252.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11252.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4949	4949	4949	4949	4949	
5°	4955	4937	4922	4920	4933	471
15°	4783	4764	4745	4745	4756	1349
25°	4391	4373	4359	4355	4355	2019
35°	3706	3689	3683	3677	3683	2312
45°	2718	2712	2713	2693	2691	2094
55°	1718	1661	1643	1594	1604	1540
65°	942	844	743	851	888	947
75°	522	468	400	514	606	559
85°	199	180	186	238	255	214
90°	0	0	0	0	0	



TEST NUMBER: P475712

CATALOG NUMBER: 24GR-LD5-120-A-UNV-L830-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4949.2	4949.2	4949.2	4949.2	4949.2
2.5°	4970.2	4951.4	4934.8	4937.0	4949.2
5°	4954.7	4937.0	4921.5	4920.4	4932.6
7.5°	4928.1	4912.6	4894.9	4894.9	4904.9
10°	4890.5	4874.9	4857.2	4856.1	4867.2
12.5°	4846.1	4826.2	4807.4	4807.4	4819.5
15°	4783.0	4764.1	4745.3	4745.3	4756.4
17.5°	4705.4	4688.8	4673.3	4674.4	4683.3
20°	4616.8	4600.2	4583.6	4585.8	4595.7
22.5°	4514.9	4494.9	4481.6	4480.5	4487.2
25°	4390.8	4373.0	4358.6	4355.3	4355.3
27.5°	4252.3	4233.4	4223.5	4208.0	4212.4
30°	4093.8	4073.9	4056.2	4047.3	4046.2
32.5°	3915.5	3895.5	3880.0	3878.9	3883.3
35°	3706.1	3689.4	3682.8	3677.3	3682.8
37.5°	3498.9	3467.9	3462.3	3461.2	3475.6
40°	3242.9	3231.9	3224.1	3218.6	3237.4
42.5°	2997.0	2974.8	2977.0	2956.0	2989.2
45°	2717.8	2712.2	2713.3	2693.4	2691.2
47.5°	2440.8	2439.7	2456.3	2400.9	2397.6
50°	2191.5	2180.4	2208.1	2122.8	2099.5
52.5°	1953.3	1922.3	1913.4	1835.9	1835.9
55°	1718.4	1660.8	1643.1	1594.3	1604.3
57.5°	1495.7	1413.7	1377.2	1376.1	1392.7
60°	1275.2	1182.2	1131.2	1171.1	1189.9
62.5°	1100.2	998.3	920.7	996.0	1013.8
65°	941.8	844.3	743.4	850.9	887.5
67.5°	805.5	724.6	598.3	739.0	787.7
70°	689.1	617.1	495.2	651.5	716.8
72.5°	597.2	537.4	431.0	581.7	660.3
75°	521.8	467.6	400.0	514.1	606.0
77.5°	462.0	397.8	374.5	449.8	544.0
80°	385.6	326.8	330.2	386.7	465.3
82.5°	296.9	252.6	265.9	320.2	365.6
85°	199.4	179.5	186.1	238.2	254.8
87.5°	98.6	95.3	101.9	139.6	139.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)