

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: P475711

Luminaire Tested: **24GR-LD5-100-A-UNV-L830-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475711  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-100-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: 9401.8 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

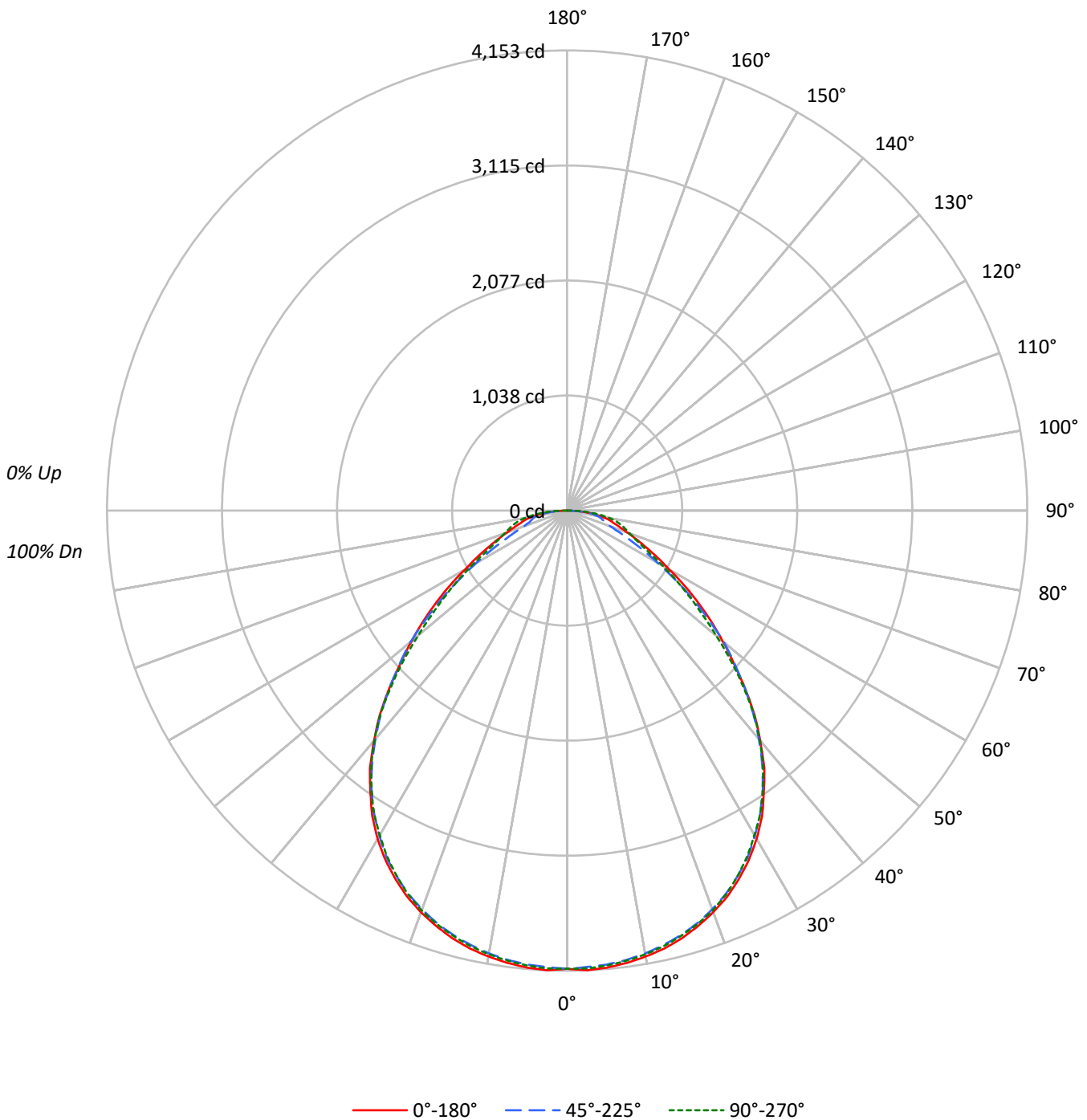
Input Watts (W): 67.1  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P475711

CATALOG NUMBER: 24GR-LD5-100-A-UNV-L830-CD1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P475711

CATALOG NUMBER: 24GR-LD5-100-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	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°	5564	5564	5564
5°	5591	5554	5566
10°	5583	5545	5556
15°	5567	5523	5536
20°	5523	5484	5498
25°	5446	5407	5402
30°	5314	5265	5253
35°	5086	5054	5054
40°	4759	4732	4751
45°	4321	4314	4279
50°	3833	3862	3672
55°	3368	3221	3145
60°	2867	2544	2675
65°	2505	1978	2361
70°	2265	1628	2356
75°	2267	1737	2633
80°	2497	2138	3013
85°	2572	2401	3287



TEST NUMBER: P475711

CATALOG NUMBER: 24GR-LD5-100-A-UNV-L830-CD1-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	391.6	4.2
10°-20°	1121.0	11.9
20°-30°	1677.0	17.8
30°-40°	1919.0	20.4
40°-50°	1738.7	18.5
50°-60°	1230.9	13.1
60°-70°	711.1	7.6
70°-80°	431.1	4.6
80°-90°	181.4	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°	3189.5	33.9
0°-40°	5108.6	54.3
0°-60°	8078.2	85.9
0°-90°	9401.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9401.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4135	4135	4135	4135	4135	
5°	4140	4125	4112	4111	4121	393
15°	3996	3981	3965	3965	3974	1127
25°	3669	3654	3642	3639	3639	1687
35°	3097	3083	3077	3072	3077	1932
45°	2271	2266	2267	2250	2249	1749
55°	1436	1388	1373	1332	1340	1287
65°	787	705	621	711	742	791
75°	436	391	334	430	506	467
85°	167	150	156	199	213	179
90°	0	0	0	0	0	



TEST NUMBER: P475711

CATALOG NUMBER: 24GR-LD5-100-A-UNV-L830-CD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4135.2	4135.2	4135.2	4135.2	4135.2
2.5°	4152.8	4137.1	4123.2	4125.0	4135.2
5°	4139.9	4125.0	4112.1	4111.2	4121.3
7.5°	4117.6	4104.7	4089.9	4089.9	4098.2
10°	4086.2	4073.2	4058.4	4057.5	4066.7
12.5°	4049.1	4032.5	4016.7	4016.7	4026.9
15°	3996.4	3980.6	3964.9	3964.9	3974.1
17.5°	3931.6	3917.7	3904.7	3905.6	3913.0
20°	3857.5	3843.6	3829.7	3831.6	3839.9
22.5°	3772.3	3755.7	3744.6	3743.6	3749.2
25°	3668.7	3653.8	3641.8	3639.0	3639.0
27.5°	3552.9	3537.2	3528.9	3515.9	3519.6
30°	3420.6	3403.9	3389.1	3381.7	3380.8
32.5°	3271.5	3254.9	3241.9	3241.0	3244.7
35°	3096.6	3082.7	3077.1	3072.5	3077.1
37.5°	2923.4	2897.5	2892.9	2892.0	2904.0
40°	2709.6	2700.3	2693.9	2689.2	2705.0
42.5°	2504.1	2485.6	2487.4	2469.8	2497.6
45°	2270.8	2266.2	2267.1	2250.4	2248.6
47.5°	2039.4	2038.5	2052.3	2006.1	2003.3
50°	1831.1	1821.8	1845.0	1773.7	1754.3
52.5°	1632.1	1606.1	1598.7	1533.9	1533.9
55°	1435.8	1387.7	1372.9	1332.1	1340.5
57.5°	1249.7	1181.2	1150.7	1149.8	1163.6
60°	1065.5	987.8	945.2	978.5	994.2
62.5°	919.2	834.1	769.3	832.2	847.0
65°	786.9	705.4	621.2	711.0	741.5
67.5°	673.0	605.4	499.9	617.5	658.2
70°	575.8	515.6	413.8	544.3	598.9
72.5°	499.0	449.0	360.1	486.0	551.7
75°	436.0	390.7	334.2	429.5	506.4
77.5°	386.0	332.3	312.9	375.8	454.5
80°	322.2	273.1	275.9	323.1	388.8
82.5°	248.1	211.1	222.2	267.5	305.5
85°	166.6	150.0	155.5	199.0	212.9
87.5°	82.4	79.6	85.2	116.6	116.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)