

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: P475800

Luminaire Tested: **24GR-LD5-90-A125-UNV-L840-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475800  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-90-A125-UNV-L840-CD1-U  
Description: GR 2'X4' LED TROFFER w/ A125 LENS  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9218.2 lumens  
Efficiency: N/A  
Efficacy: 150.6 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.2 / 1.26  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

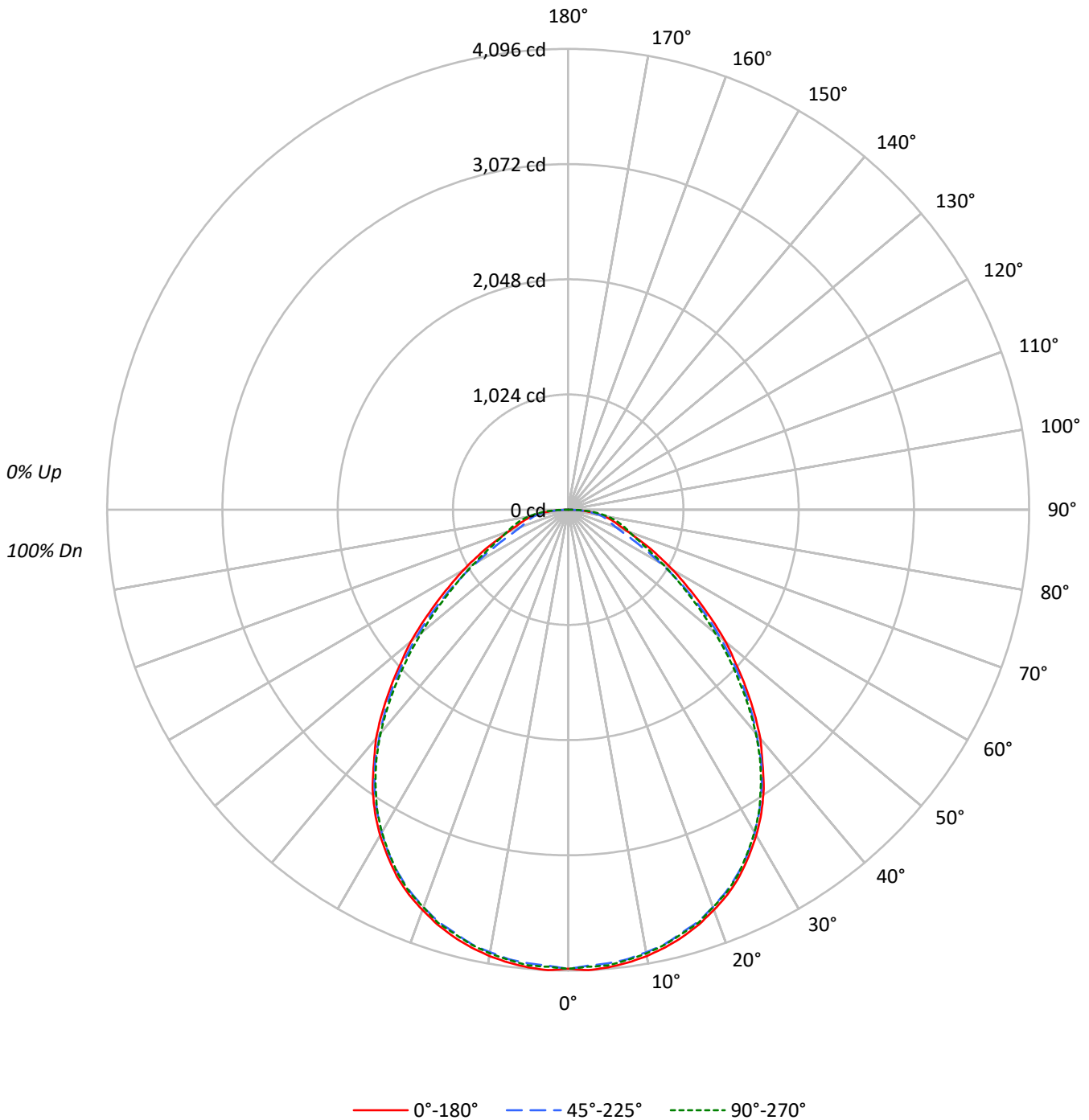
Input Watts (W): 61.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P475800

CATALOG NUMBER: 24GR-LD5-90-A125-UNV-L840-CD1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P475800

CATALOG NUMBER: 24GR-LD5-90-A125-UNV-L840-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	101	98	107	103	100	96	99	96	93	95	93	90	91	90	88	86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	76	73
3	93	83	76	70	90	82	75	69	79	73	68	76	71	67	73	69	66	63
4	86	74	66	60	83	73	66	60	71	64	59	68	63	58	66	61	57	55
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49
6	73	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	41	53	46	41	52	46	41	51	45	41	39
8	64	51	43	37	62	50	43	37	49	42	37	48	42	37	47	41	37	35
9	60	47	39	34	58	46	39	34	45	38	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°	5490	5490	5490
5°	5516	5467	5491
10°	5503	5456	5471
15°	5476	5423	5436
20°	5420	5382	5385
25°	5342	5299	5307
30°	5194	5147	5145
35°	4976	4927	4903
40°	4663	4571	4552
45°	4244	4159	4080
50°	3822	3686	3566
55°	3316	3136	3042
60°	2896	2528	2616
65°	2506	2009	2326
70°	2210	1762	2271
75°	2219	1915	2484
80°	2431	2275	2813
85°	2563	2478	3223



TEST NUMBER: P475800

CATALOG NUMBER: 24GR-LD5-90-A125-UNV-L840-CD1-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	385.6	4.2
10°-20°	1101.8	12.0
20°-30°	1642.7	17.8
30°-40°	1867.5	20.3
40°-50°	1683.0	18.3
50°-60°	1212.3	13.2
60°-70°	705.1	7.6
70°-80°	431.5	4.7
80°-90°	188.8	2.0
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°	3130.1	34.0
0°-40°	4997.6	54.2
0°-60°	7892.8	85.6
0°-90°	9218.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9218.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4080	4080	4080	4080	4080	
5°	4084	4055	4048	4056	4065	388
15°	3931	3910	3893	3900	3902	1108
25°	3598	3577	3569	3564	3575	1653
35°	3030	3008	2999	2982	2985	1885
45°	2231	2205	2186	2152	2144	1721
55°	1414	1380	1337	1323	1297	1275
65°	787	708	631	680	730	787
75°	427	387	368	420	478	454
85°	166	164	160	218	209	176
90°	0	0	0	0	0	



TEST NUMBER: P475800

CATALOG NUMBER: 24GR-LD5-90-A125-UNV-L840-CD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4080.0	4080.0	4080.0	4080.0	4080.0
2.5°	4096.4	4074.6	4056.3	4057.2	4066.4
5°	4083.7	4055.4	4048.1	4056.3	4065.4
7.5°	4060.9	4034.4	4029.9	4025.3	4036.3
10°	4028.1	4009.8	3993.4	3998.0	4004.3
12.5°	3984.3	3968.8	3956.9	3947.8	3961.5
15°	3931.4	3909.5	3893.1	3899.5	3902.2
17.5°	3864.8	3843.8	3839.3	3835.6	3849.3
20°	3785.5	3772.7	3759.0	3762.7	3760.9
22.5°	3701.6	3682.4	3671.5	3666.0	3680.6
25°	3598.5	3576.6	3569.3	3563.9	3574.8
27.5°	3472.7	3460.8	3450.8	3443.5	3444.4
30°	3343.2	3331.3	3313.1	3307.6	3311.3
32.5°	3194.5	3180.9	3164.4	3148.0	3159.9
35°	3029.5	3008.5	2999.4	2982.1	2984.8
37.5°	2834.3	2825.2	2817.0	2794.2	2801.5
40°	2654.7	2630.0	2602.7	2589.0	2591.7
42.5°	2446.7	2421.2	2399.3	2380.2	2371.1
45°	2230.6	2205.1	2185.9	2152.2	2144.0
47.5°	2015.4	1991.7	1970.7	1944.3	1920.6
50°	1825.7	1781.9	1761.0	1733.6	1703.5
52.5°	1612.3	1586.8	1545.7	1522.9	1495.6
55°	1413.5	1379.8	1336.9	1323.2	1296.8
57.5°	1234.8	1198.3	1135.4	1129.9	1129.0
60°	1076.1	1026.8	939.3	945.7	972.1
62.5°	922.0	851.8	772.4	800.7	839.9
65°	787.0	707.7	631.1	680.3	730.5
67.5°	657.5	586.4	521.6	587.3	640.2
70°	561.8	502.5	447.8	518.0	577.3
72.5°	481.5	435.9	400.3	464.2	528.0
75°	426.8	386.7	368.4	419.5	477.9
77.5°	375.7	340.2	334.7	380.3	423.1
80°	313.7	289.1	293.6	340.2	363.0
82.5°	238.9	231.6	232.5	290.9	295.5
85°	166.0	164.1	160.5	218.0	208.8
87.5°	83.9	85.7	84.8	124.0	111.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)