

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: P475790

Luminaire Tested: **24GR-LD5-180-A125-UNV-L835-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475790  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-180-A125-UNV-L835-CD1-U  
Description: GR 2'X4' LED TROFFER w/ A125 LENS  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 18138.9 lumens  
Efficiency: N/A  
Efficacy: 143.6 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

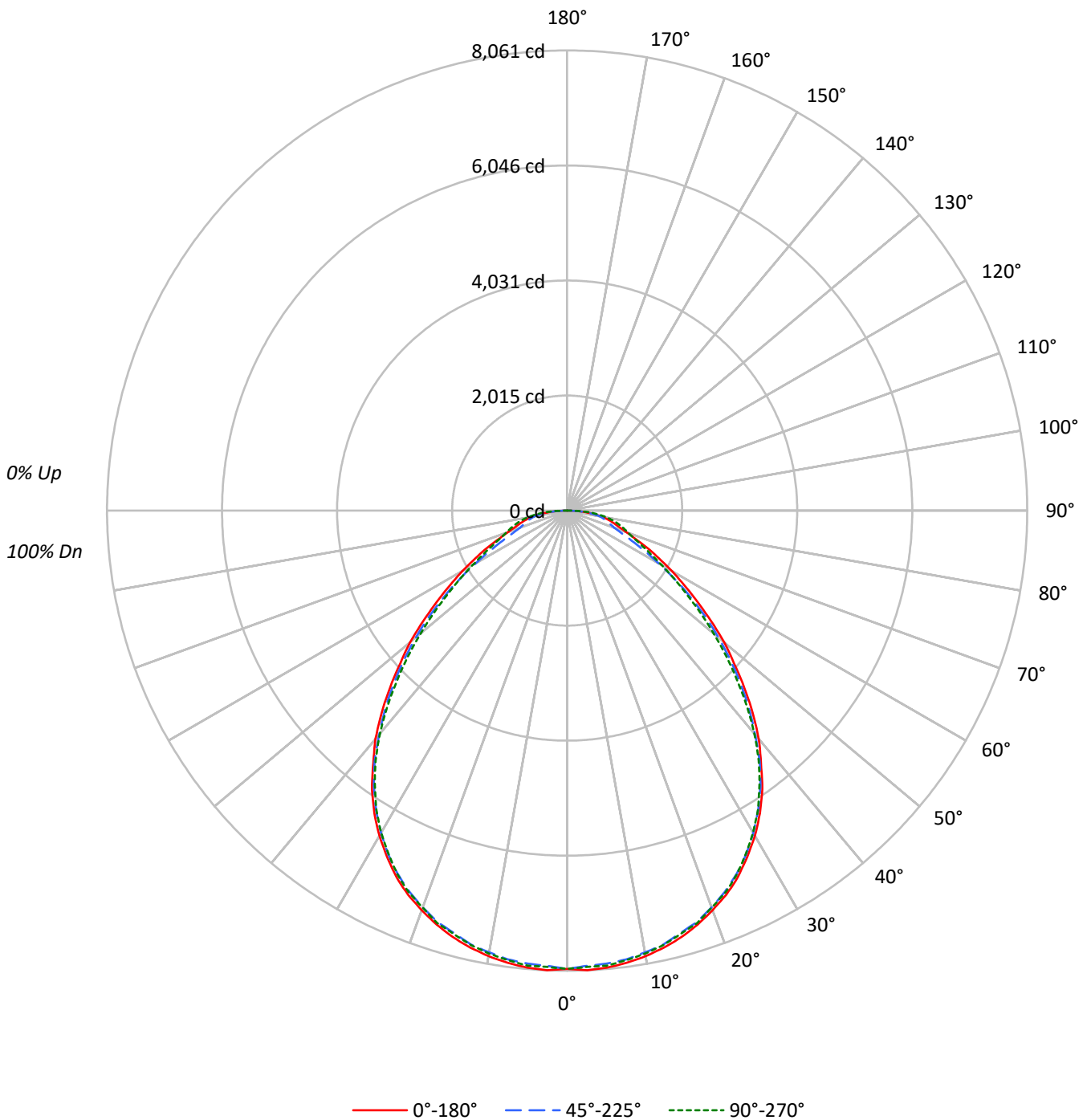
Input Watts (W): 126.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P475790

CATALOG NUMBER: 24GR-LD5-180-A125-UNV-L835-CD1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P475790

CATALOG NUMBER: 24GR-LD5-180-A125-UNV-L835-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°	10802	10802	10802
5°	10853	10758	10804
10°	10829	10736	10765
15°	10776	10671	10696
20°	10665	10591	10596
25°	10512	10427	10443
30°	10220	10128	10123
35°	9792	9694	9647
40°	9175	8995	8957
45°	8352	8185	8027
50°	7520	7253	7016
55°	6525	6171	5986
60°	5698	4974	5148
65°	4930	3954	4576
70°	4349	3466	4469
75°	4366	3769	4888
80°	4783	4477	5534
85°	5042	4875	6343



TEST NUMBER: P475790

CATALOG NUMBER: 24GR-LD5-180-A125-UNV-L835-CD1-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	758.7	4.2
10°-20°	2168.1	12.0
20°-30°	3232.4	17.8
30°-40°	3674.6	20.3
40°-50°	3311.7	18.3
50°-60°	2385.4	13.2
60°-70°	1387.5	7.6
70°-80°	849.0	4.7
80°-90°	371.6	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°	6159.3	34.0
0°-40°	9833.9	54.2
0°-60°	15530.9	85.6
0°-90°	18138.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	18138.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	8028	8028	8028	8028	8028	
5°	8036	7980	7966	7982	8000	763
15°	7736	7693	7660	7673	7678	2181
25°	7081	7038	7024	7013	7034	3253
35°	5961	5920	5902	5868	5873	3709
45°	4389	4339	4301	4235	4219	3386
55°	2781	2715	2631	2604	2552	2508
65°	1549	1392	1242	1339	1437	1549
75°	840	761	725	825	940	894
85°	327	323	316	429	411	346
90°	0	0	0	0	0	



TEST NUMBER: P475790

CATALOG NUMBER: 24GR-LD5-180-A125-UNV-L835-CD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	8028.4	8028.4	8028.4	8028.4	8028.4
2.5°	8060.7	8017.6	7981.7	7983.5	8001.4
5°	8035.5	7979.9	7965.5	7981.7	7999.6
7.5°	7990.7	7938.6	7929.7	7920.7	7942.2
10°	7926.1	7890.2	7857.9	7866.9	7879.4
12.5°	7839.9	7809.4	7786.1	7768.2	7795.1
15°	7735.9	7692.8	7660.5	7673.1	7678.4
17.5°	7604.9	7563.6	7554.6	7547.4	7574.4
20°	7448.7	7423.6	7396.7	7403.9	7400.3
22.5°	7283.7	7246.0	7224.4	7213.7	7242.4
25°	7080.9	7037.8	7023.5	7012.7	7034.2
27.5°	6833.3	6809.9	6790.2	6775.8	6777.6
30°	6578.4	6555.1	6519.2	6508.5	6515.6
32.5°	6285.9	6259.0	6226.7	6194.4	6217.8
35°	5961.2	5919.9	5901.9	5867.8	5873.2
37.5°	5577.1	5559.2	5543.0	5498.2	5512.5
40°	5223.6	5175.2	5121.3	5094.4	5099.8
42.5°	4814.5	4764.3	4721.2	4683.5	4665.6
45°	4389.2	4339.0	4301.3	4234.9	4218.7
47.5°	3965.7	3919.1	3877.8	3825.8	3779.1
50°	3592.5	3506.3	3465.1	3411.2	3352.0
52.5°	3172.6	3122.3	3041.6	2996.7	2942.9
55°	2781.4	2715.0	2630.7	2603.7	2551.7
57.5°	2429.7	2357.9	2234.1	2223.3	2221.5
60°	2117.4	2020.5	1848.3	1860.8	1912.9
62.5°	1814.2	1676.0	1519.9	1575.5	1652.7
65°	1548.6	1392.5	1241.8	1338.7	1437.4
67.5°	1293.8	1153.8	1026.4	1155.6	1259.7
70°	1105.4	988.7	881.1	1019.2	1135.9
72.5°	947.5	857.7	787.8	913.4	1039.0
75°	839.8	760.8	725.0	825.4	940.3
77.5°	739.3	669.3	658.6	748.3	832.6
80°	617.3	568.8	577.8	669.3	714.2
82.5°	470.1	455.8	457.6	572.4	581.4
85°	326.6	323.0	315.8	428.9	410.9
87.5°	165.1	168.7	166.9	244.0	218.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)