

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: P475805

Luminaire Tested: **24GR-LD5-180-A125-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475805
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-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: 18483.5 lumens
Efficiency: N/A
Efficacy: 146.3 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

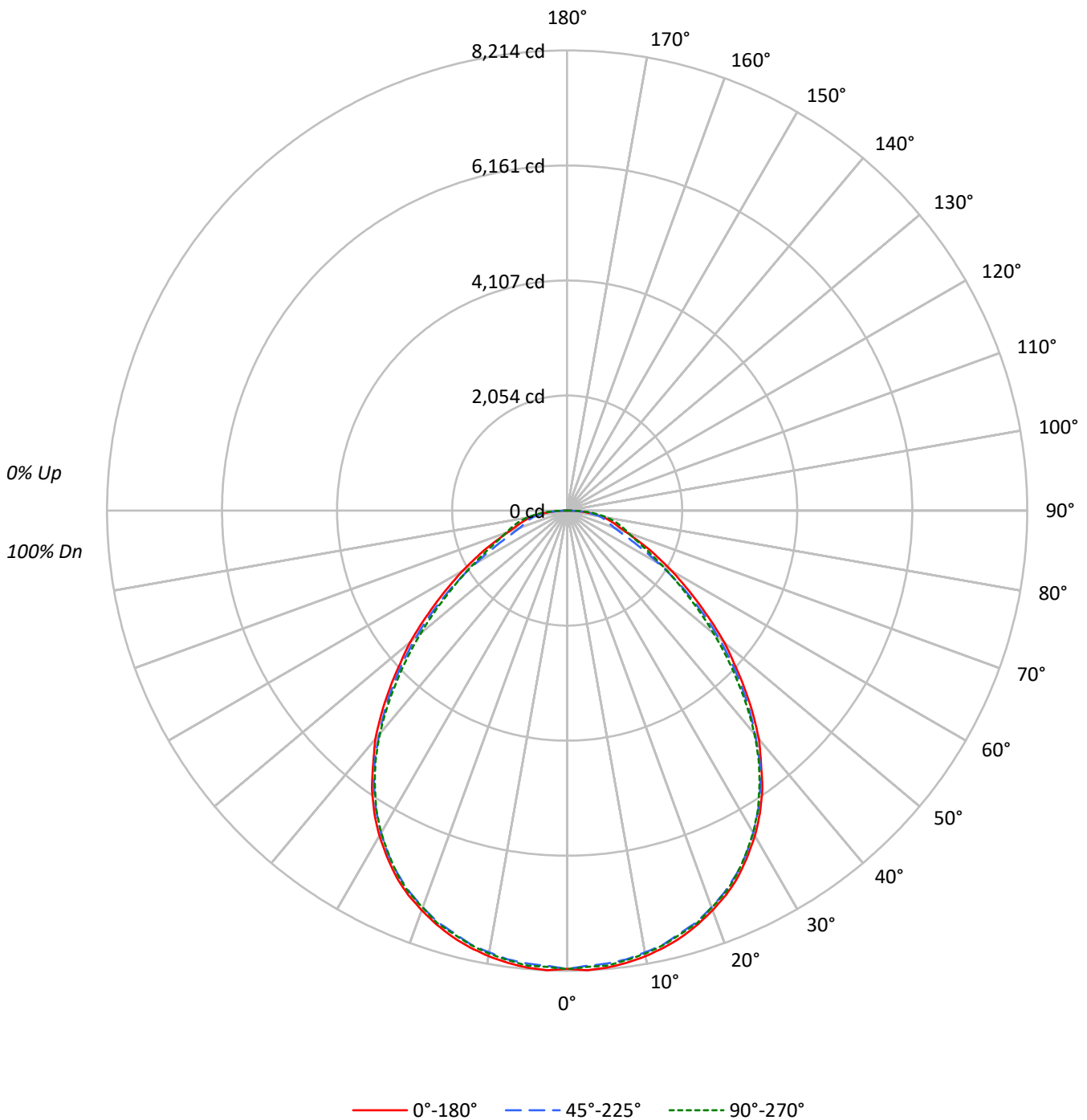
Input Watts (W): 126.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	101	98	107	103	100	96	99	96	93	95	93	90	91	90	88	86					86			
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	76	73					73			
3	93	83	76	70	90	82	75	69	79	73	68	76	71	67	73	69	66	63					63			
4	86	74	66	60	83	73	66	60	71	64	59	68	63	58	66	61	57	55					55			
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49					49			
6	73	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43					43			
7	68	56	47	42	67	55	47	41	53	46	41	52	46	41	51	45	41	39					39			
8	64	51	43	37	62	50	43	37	49	42	37	48	42	37	47	41	37	35					35			
9	60	47	39	34	58	46	39	34	45	38	34	44	38	34	43	38	33	32					32			
10	56	44	36	31	55	43	36	31	42	35	31	41	35	31	40	35	31	29					29			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11007	11007	11007
5°	11059	10963	11010
10°	11035	10940	10970
15°	10980	10873	10899
20°	10868	10792	10797
25°	10712	10625	10641
30°	10415	10321	10315
35°	9977	9878	9830
40°	9349	9166	9128
45°	8511	8340	8180
50°	7663	7391	7150
55°	6648	6288	6100
60°	5806	5068	5245
65°	5024	4029	4663
70°	4431	3532	4554
75°	4449	3840	4981
80°	4874	4562	5639
85°	5138	4968	6464



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	773.2	4.2
10°-20°	2209.3	12.0
20°-30°	3293.9	17.8
30°-40°	3744.4	20.3
40°-50°	3374.6	18.3
50°-60°	2430.7	13.2
60°-70°	1413.8	7.6
70°-80°	865.1	4.7
80°-90°	378.6	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°	6276.3	34.0
0°-40°	10020.7	54.2
0°-60°	15826.0	85.6
0°-90°	18483.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	18483.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8181	8181	8181	8181	8181	
5°	8188	8132	8117	8133	8152	778
15°	7883	7839	7806	7819	7824	2222
25°	7215	7172	7157	7146	7168	3314
35°	6074	6032	6014	5979	5985	3780
45°	4473	4421	4383	4315	4299	3450
55°	2834	2767	2681	2653	2600	2556
65°	1578	1419	1265	1364	1465	1578
75°	856	775	739	841	958	911
85°	333	329	322	437	419	352
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8180.9	8180.9	8180.9	8180.9	8180.9
2.5°	8213.8	8169.9	8133.3	8135.2	8153.5
5°	8188.2	8131.5	8116.9	8133.3	8151.6
7.5°	8142.5	8089.5	8080.3	8071.2	8093.1
10°	8076.7	8040.1	8007.2	8016.3	8029.1
12.5°	7988.9	7957.8	7934.0	7915.8	7943.2
15°	7882.8	7839.0	7806.0	7818.8	7824.3
17.5°	7749.4	7707.3	7698.2	7690.8	7718.3
20°	7590.3	7564.7	7537.2	7544.6	7540.9
22.5°	7422.0	7383.6	7361.7	7350.7	7380.0
25°	7215.4	7171.5	7156.9	7145.9	7167.9
27.5°	6963.1	6939.3	6919.2	6904.6	6906.4
30°	6703.4	6679.7	6643.1	6632.1	6639.4
32.5°	6405.4	6378.0	6345.0	6312.1	6335.9
35°	6074.4	6032.4	6014.1	5979.3	5984.8
37.5°	5683.1	5664.8	5648.4	5602.6	5617.3
40°	5322.9	5273.5	5218.7	5191.2	5196.7
42.5°	4906.0	4854.8	4810.9	4772.5	4754.2
45°	4472.6	4421.4	4383.0	4315.4	4298.9
47.5°	4041.1	3993.5	3951.5	3898.4	3850.9
50°	3660.7	3573.0	3530.9	3476.1	3415.7
52.5°	3232.9	3181.7	3099.4	3053.7	2998.8
55°	2834.2	2766.6	2680.6	2653.2	2600.2
57.5°	2475.8	2402.7	2276.5	2265.6	2263.7
60°	2157.7	2058.9	1883.4	1896.2	1949.2
62.5°	1848.7	1707.9	1548.8	1605.5	1684.1
65°	1578.0	1418.9	1265.4	1364.1	1464.7
67.5°	1318.4	1175.8	1045.9	1177.6	1283.6
70°	1126.4	1007.5	897.8	1038.6	1157.5
72.5°	965.5	874.0	802.7	930.7	1058.7
75°	855.8	775.3	738.7	841.1	958.2
77.5°	753.4	682.0	671.1	762.5	848.4
80°	629.0	579.6	588.8	682.0	727.8
82.5°	479.1	464.4	466.3	583.3	592.4
85°	332.8	329.1	321.8	437.0	418.7
87.5°	168.2	171.9	170.1	248.7	223.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)