

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: P475741

Luminaire Tested: **24GR-LD5-100-A-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475741
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-L840-CD1-U
Description: GR 2'X4' LED TROFFER w/ A LENS
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9928.0 lumens
Efficiency: N/A
Efficacy: 148.0 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

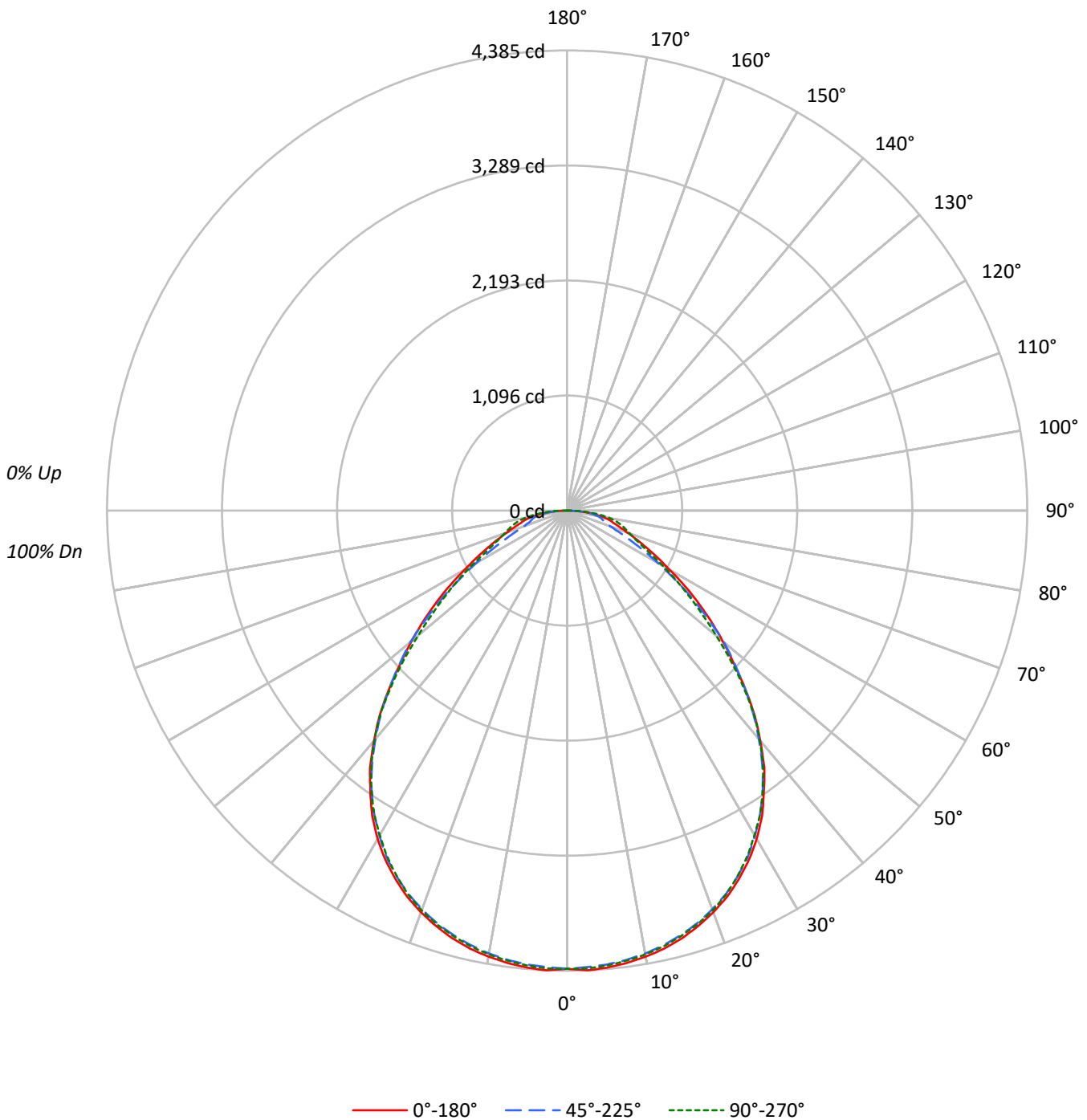
Input Watts (W): 67.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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				86
2	101	93	87	82	98	92	86	81	88	83	79	85	81	77	82	79	76	74				74
3	93	83	76	70	90	82	75	69	79	73	68	76	71	67	74	69	66	64				64
4	86	75	66	60	83	73	66	60	71	64	59	69	63	58	66	62	58	56				56
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49				49
6	74	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	42	53	46	41	52	46	41	51	45	41	39				39
8	64	51	43	38	62	50	43	37	49	42	37	48	42	37	47	41	37	35				35
9	60	47	39	34	59	47	39	34	45	39	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°	5875	5875	5875
5°	5904	5865	5878
10°	5895	5855	5867
15°	5878	5832	5846
20°	5832	5790	5806
25°	5751	5709	5705
30°	5612	5560	5546
35°	5371	5337	5337
40°	5025	4996	5017
45°	4563	4555	4518
50°	4047	4078	3877
55°	3556	3401	3320
60°	3028	2686	2825
65°	2645	2088	2493
70°	2392	1719	2488
75°	2393	1835	2780
80°	2636	2257	3181
85°	2717	2535	3470



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	413.5	4.2
10°-20°	1183.7	11.9
20°-30°	1770.8	17.8
30°-40°	2026.4	20.4
40°-50°	1836.0	18.5
50°-60°	1299.8	13.1
60°-70°	750.9	7.6
70°-80°	455.2	4.6
80°-90°	191.6	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°	3368.0	33.9
0°-40°	5394.4	54.3
0°-60°	8530.2	85.9
0°-90°	9928.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9928.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4367	4367	4367	4367	4367	
5°	4372	4356	4342	4341	4352	415
15°	4220	4203	4187	4187	4196	1190
25°	3874	3858	3846	3843	3843	1782
35°	3270	3255	3249	3244	3249	2040
45°	2398	2393	2394	2376	2374	1847
55°	1516	1465	1450	1407	1416	1359
65°	831	745	656	751	783	835
75°	460	412	353	454	535	493
85°	176	158	164	210	225	189
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4366.6	4366.6	4366.6	4366.6	4366.6
2.5°	4385.2	4368.6	4353.9	4355.9	4366.6
5°	4371.5	4355.9	4342.2	4341.2	4352.0
7.5°	4348.1	4334.4	4318.7	4318.7	4327.5
10°	4314.8	4301.1	4285.5	4284.5	4294.3
12.5°	4275.7	4258.1	4241.5	4241.5	4252.3
15°	4220.0	4203.4	4186.8	4186.8	4196.5
17.5°	4151.6	4136.9	4123.2	4124.2	4132.0
20°	4073.4	4058.7	4044.0	4046.0	4054.8
22.5°	3983.4	3965.8	3954.1	3953.1	3959.0
25°	3873.9	3858.3	3845.6	3842.7	3842.7
27.5°	3751.8	3735.1	3726.3	3712.7	3716.6
30°	3612.0	3594.4	3578.7	3570.9	3569.9
32.5°	3454.6	3437.0	3423.3	3422.3	3426.2
35°	3269.8	3255.2	3249.3	3244.4	3249.3
37.5°	3087.0	3059.7	3054.8	3053.8	3066.5
40°	2861.2	2851.5	2844.6	2839.7	2856.3
42.5°	2644.2	2624.7	2626.6	2608.0	2637.4
45°	2397.9	2393.0	2394.0	2376.4	2374.4
47.5°	2153.5	2152.5	2167.2	2118.3	2115.4
50°	1933.6	1923.8	1948.2	1872.9	1852.4
52.5°	1723.4	1696.0	1688.2	1619.8	1619.8
55°	1516.1	1465.3	1449.7	1406.7	1415.5
57.5°	1319.7	1247.3	1215.1	1214.1	1228.8
60°	1125.1	1043.0	998.1	1033.2	1049.9
62.5°	970.7	880.8	812.3	878.8	894.4
65°	830.9	744.9	655.9	750.7	783.0
67.5°	710.7	639.3	527.9	652.0	695.0
70°	608.0	544.5	437.0	574.8	632.5
72.5°	526.9	474.1	380.3	513.2	582.6
75°	460.4	412.5	352.9	453.6	534.7
77.5°	407.6	350.9	330.4	396.9	480.0
80°	340.2	288.4	291.3	341.2	410.6
82.5°	262.0	222.9	234.6	282.5	322.6
85°	176.0	158.4	164.2	210.2	224.8
87.5°	87.0	84.1	89.9	123.2	123.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)