

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: P475590

Luminaire Tested: **24GR-LD5-90-F125-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475590
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-90-F125-UNV-L830-CD1-U
Description: GR 2'X4' LED TROFFER w/ F125 LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8694.4 lumens
Efficiency: N/A
Efficacy: 142.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

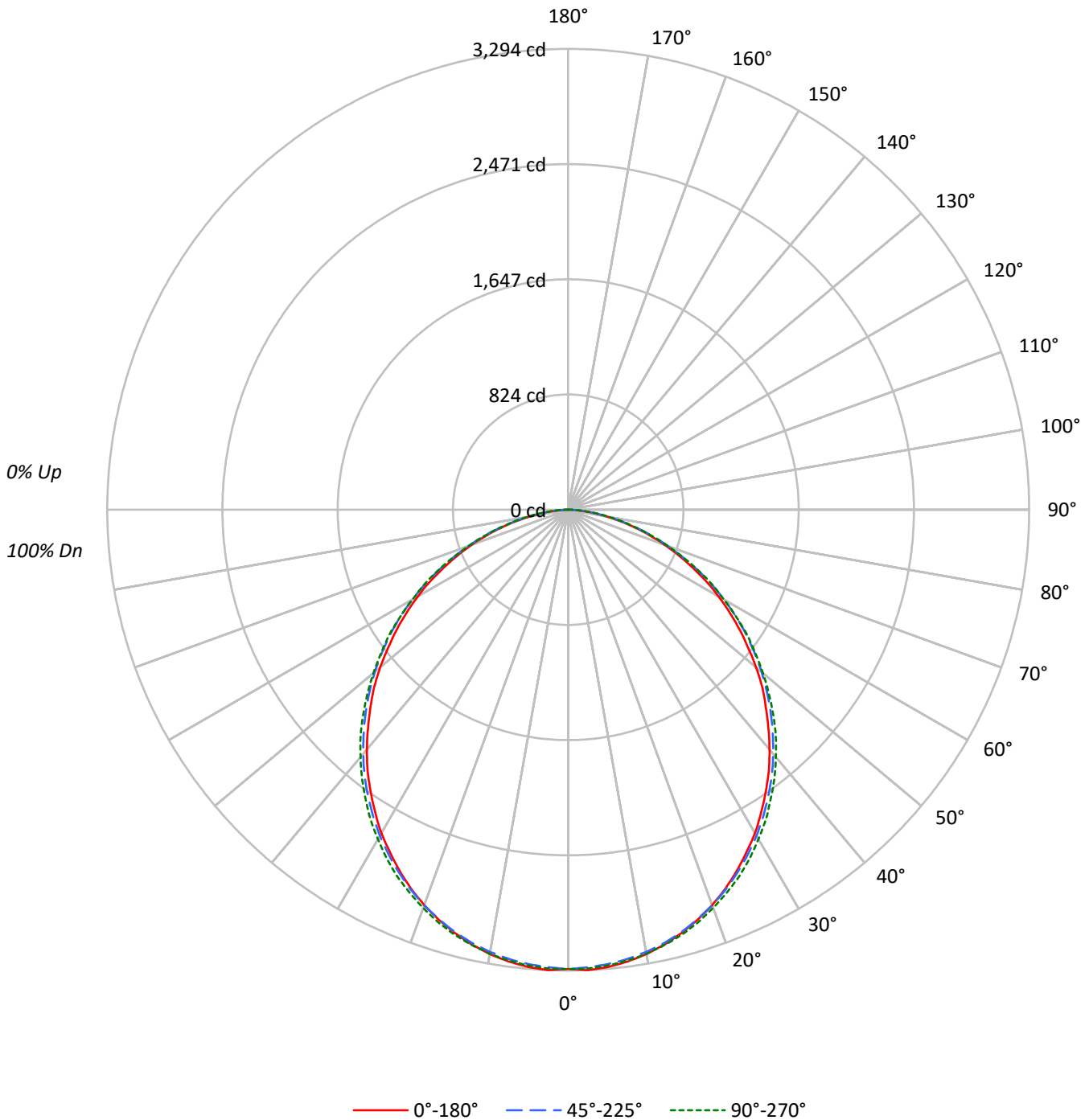
Input Watts (W): 61.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	109	104	100	97	106	102	98	95	98	95	92		94	91	89		90	88	86	84
2	99	91	85	79	97	89	83	78	86	81	76		83	78	75		80	76	73	71
3	91	80	72	66	88	79	71	65	76	69	64		73	68	63		71	66	62	60
4	83	71	63	56	81	70	62	56	68	61	55		65	59	54		63	58	53	51
5	77	64	55	48	74	63	54	48	61	53	48		59	52	47		57	51	47	45
6	71	58	49	42	69	57	48	42	55	47	42		53	47	41		52	46	41	39
7	66	52	44	38	64	51	43	37	50	43	37		48	42	37		47	41	37	35
8	61	48	39	34	60	47	39	33	46	38	33		45	38	33		43	37	33	31
9	57	44	36	30	56	43	35	30	42	35	30		41	35	30		40	34	30	28
10	54	41	33	27	52	40	32	27	39	32	27		38	32	27		37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4418	4418	4418
5°	4431	4403	4416
10°	4406	4385	4403
15°	4362	4353	4379
20°	4306	4308	4337
25°	4231	4248	4293
30°	4149	4180	4224
35°	4042	4097	4145
40°	3931	4002	4055
45°	3801	3894	3944
50°	3669	3776	3802
55°	3510	3636	3663
60°	3342	3456	3460
65°	3123	3244	3261
70°	2893	2974	2965
75°	2570	2662	2670
80°	2150	2226	2311
85°	1613	1735	1795



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	310.2	3.6
10°-20°	882.7	10.2
20°-30°	1319.4	15.2
30°-40°	1558.8	17.9
40°-50°	1573.6	18.1
50°-60°	1373.3	15.8
60°-70°	1001.2	11.5
70°-80°	540.0	6.2
80°-90°	135.2	1.6
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°	2512.3	28.9
0°-40°	4071.2	46.8
0°-60°	7018.1	80.7
0°-90°	8694.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8694.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3284	3284	3284	3284	3284	
5°	3281	3269	3260	3263	3270	311
15°	3132	3125	3125	3132	3144	883
25°	2850	2851	2862	2880	2892	1312
35°	2461	2468	2494	2518	2524	1539
45°	1998	2012	2046	2072	2072	1542
55°	1496	1515	1550	1556	1561	1337
65°	981	1002	1019	1021	1024	975
75°	494	499	512	514	514	525
85°	104	107	112	118	116	127
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3283.5	3283.5	3283.5	3283.5	3283.5
2.5°	3294.3	3282.5	3273.1	3275.1	3283.0
5°	3281.0	3269.2	3260.3	3263.3	3269.7
7.5°	3257.4	3246.5	3239.6	3242.6	3250.9
10°	3224.8	3216.0	3209.5	3214.0	3222.9
12.5°	3183.4	3174.6	3172.1	3178.5	3186.4
15°	3131.7	3125.3	3124.8	3132.2	3144.0
17.5°	3073.5	3067.1	3070.6	3080.4	3090.8
20°	3007.5	3001.6	3008.5	3021.8	3028.7
22.5°	2932.1	2927.1	2939.5	2953.3	2962.1
25°	2850.2	2850.7	2861.6	2879.8	2891.6
27.5°	2759.6	2763.0	2779.3	2797.0	2808.8
30°	2670.3	2667.4	2690.6	2709.8	2718.6
32.5°	2566.8	2568.3	2595.4	2615.1	2628.5
35°	2460.9	2467.8	2494.4	2518.5	2523.5
37.5°	2353.9	2358.9	2390.9	2414.6	2421.0
40°	2238.1	2247.0	2278.5	2300.7	2308.6
42.5°	2117.4	2128.7	2162.7	2185.9	2196.2
45°	1997.6	2011.9	2046.4	2072.0	2072.5
47.5°	1881.8	1892.1	1925.6	1948.3	1945.8
50°	1752.6	1767.9	1803.9	1817.7	1816.2
52.5°	1620.5	1643.7	1676.7	1687.6	1686.1
55°	1496.3	1514.6	1550.1	1556.0	1561.4
57.5°	1367.7	1383.5	1421.9	1424.4	1423.4
60°	1242.0	1256.3	1284.4	1291.3	1285.9
62.5°	1115.4	1129.6	1154.8	1161.7	1160.7
65°	980.8	1002.0	1018.8	1020.7	1024.2
67.5°	855.6	868.9	885.2	888.1	885.7
70°	735.4	746.7	756.1	758.0	753.6
72.5°	611.2	621.5	634.8	637.3	632.3
75°	494.3	499.3	512.1	514.1	513.6
77.5°	381.0	384.9	394.3	401.7	402.7
80°	277.5	279.0	287.3	292.8	298.2
82.5°	183.8	187.8	194.2	199.6	204.5
85°	104.5	107.0	112.4	117.8	116.3
87.5°	40.4	45.8	46.3	51.8	53.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)