

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: P475545

Luminaire Tested: **24GR-LD5-90-F1-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475545
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-90-F1-UNV-L835-CD1-U
Description: GR 2'X4' LED TROFFER w/ F1 LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

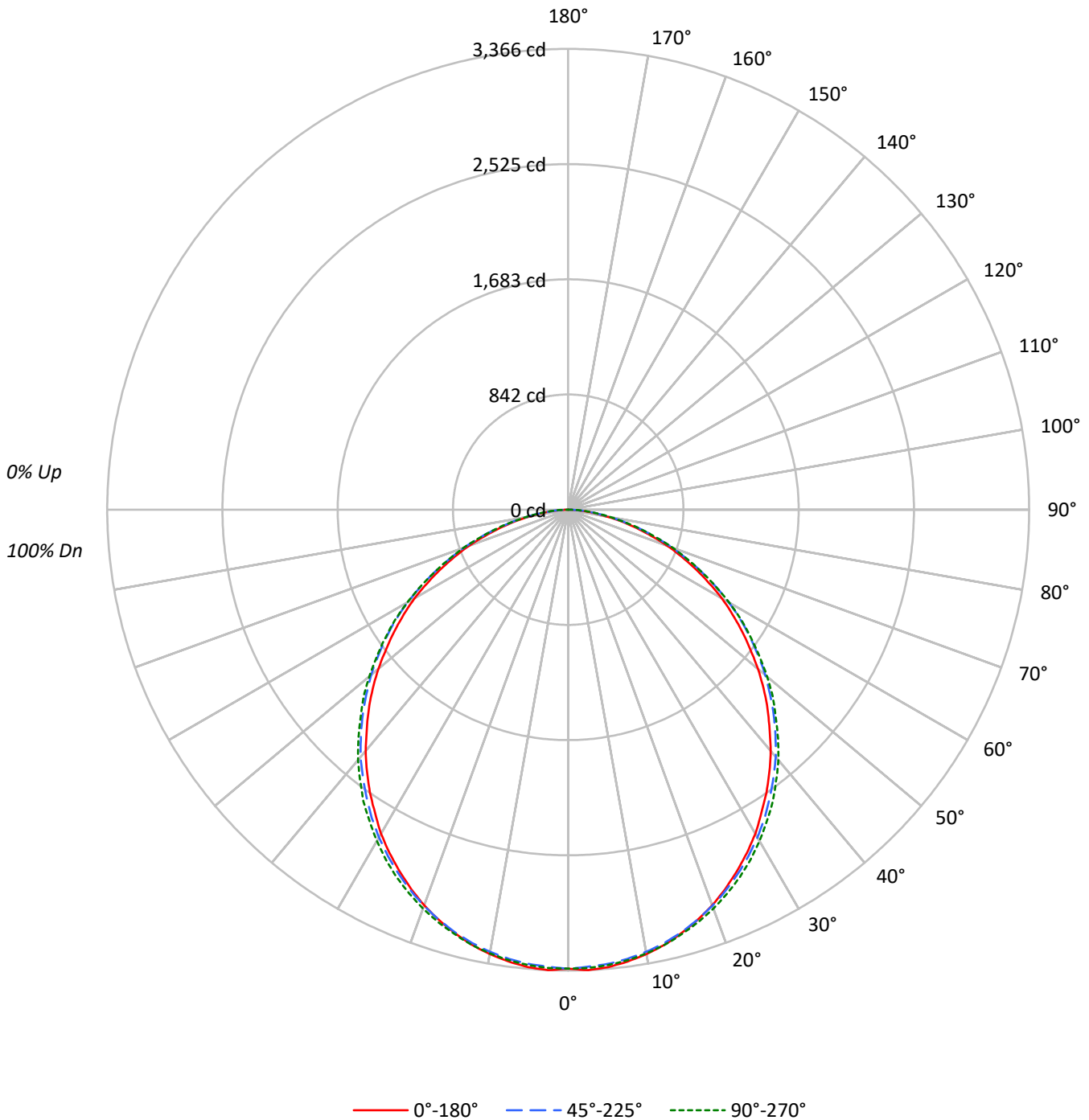
Lumens per Lamp: N/A
Luminaire Lumens: 9009.7 lumens
Efficiency: N/A
Efficacy: 147.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.24 / 1.34
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	81	76	82	78	74	79	76	73	70
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	60
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44
6	71	57	48	42	69	56	48	42	55	47	42	53	46	41	51	45	41	39
7	65	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	48	39	33	59	47	39	33	46	38	33	44	38	33	43	37	33	31
9	57	44	35	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4511	4511	4511
5°	4530	4498	4510
10°	4504	4480	4496
15°	4459	4451	4470
20°	4403	4408	4438
25°	4325	4354	4398
30°	4246	4293	4341
35°	4145	4215	4278
40°	4040	4141	4193
45°	3919	4039	4081
50°	3786	3932	3967
55°	3638	3799	3820
60°	3488	3643	3657
65°	3269	3423	3415
70°	3028	3167	3198
75°	2682	2839	2857
80°	2232	2397	2451
85°	1692	1856	2087



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	316.8	3.5
10°-20°	902.1	10.0
20°-30°	1351.6	15.0
30°-40°	1603.5	17.8
40°-50°	1628.5	18.1
50°-60°	1434.2	15.9
60°-70°	1053.8	11.7
70°-80°	573.2	6.4
80°-90°	146.0	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°	2570.5	28.5
0°-40°	4174.0	46.3
0°-60°	7236.7	80.3
0°-90°	9009.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9009.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3352	3352	3352	3352	3352	
5°	3354	3340	3330	3330	3339	318
15°	3201	3195	3195	3200	3209	903
25°	2913	2917	2933	2949	2963	1342
35°	2524	2538	2566	2592	2605	1578
45°	2060	2076	2122	2147	2144	1587
55°	1551	1573	1620	1635	1628	1386
65°	1027	1044	1075	1083	1073	1018
75°	516	527	546	548	550	549
85°	110	112	120	131	135	133
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3352.4	3352.4	3352.4	3352.4	3352.4
2.5°	3366.5	3353.2	3341.7	3341.7	3349.7
5°	3354.1	3340.0	3330.3	3330.3	3339.1
7.5°	3328.5	3317.0	3309.1	3309.1	3318.8
10°	3296.7	3285.2	3279.0	3279.9	3290.5
12.5°	3254.3	3243.7	3241.0	3242.8	3256.0
15°	3201.3	3195.1	3195.1	3199.5	3209.2
17.5°	3142.1	3135.9	3140.3	3146.5	3158.8
20°	3074.9	3070.5	3078.4	3088.2	3099.6
22.5°	2998.0	2996.3	3009.5	3022.8	3034.3
25°	2913.2	2916.7	2932.6	2949.4	2962.7
27.5°	2825.7	2829.3	2851.4	2869.0	2882.3
30°	2733.0	2734.7	2763.0	2784.2	2793.9
32.5°	2625.2	2639.3	2669.3	2689.7	2698.5
35°	2523.5	2537.7	2566.0	2591.6	2604.8
37.5°	2413.1	2425.5	2462.6	2490.0	2494.4
40°	2300.0	2311.5	2357.4	2380.4	2387.5
42.5°	2176.3	2198.4	2239.9	2262.9	2267.3
45°	2059.7	2076.4	2122.4	2147.1	2144.5
47.5°	1935.1	1953.6	1998.7	2022.5	2027.0
50°	1808.7	1829.9	1878.5	1894.4	1895.3
52.5°	1676.2	1703.6	1747.7	1769.0	1761.9
55°	1550.7	1572.8	1619.6	1634.6	1628.5
57.5°	1421.7	1446.4	1489.7	1497.7	1498.6
60°	1296.2	1316.6	1353.7	1361.6	1359.0
62.5°	1158.4	1178.7	1212.3	1220.2	1214.1
65°	1026.7	1043.5	1075.3	1083.3	1072.7
67.5°	896.0	912.8	937.5	949.9	938.4
70°	769.6	782.9	805.0	812.0	812.9
72.5°	635.3	659.2	675.1	674.2	671.5
75°	516.0	526.6	546.1	547.8	549.6
77.5°	402.0	404.7	425.0	430.3	426.8
80°	288.1	297.8	309.3	315.4	316.3
82.5°	190.0	197.0	206.8	217.4	217.4
85°	109.6	112.2	120.2	130.8	135.2
87.5°	44.2	48.6	56.5	64.5	65.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)