

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: P475544

Luminaire Tested: **24GR-LD5-85-F1-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475544
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-85-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: 8538.7 lumens
Efficiency: N/A
Efficacy: 144.2 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

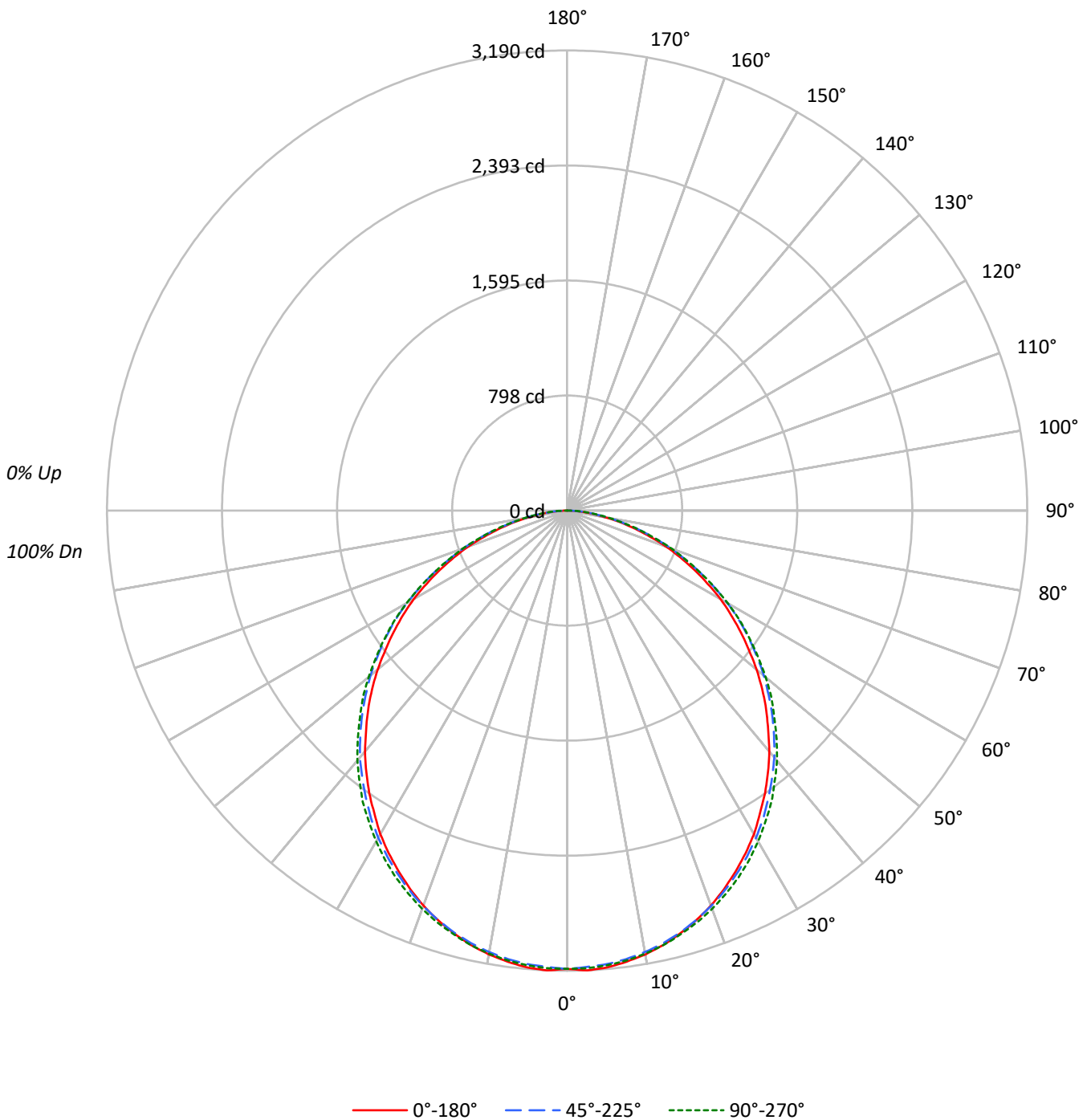
Input Watts (W): 59.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4275	4275	4275
5°	4293	4263	4274
10°	4269	4246	4261
15°	4226	4218	4237
20°	4173	4177	4206
25°	4099	4126	4168
30°	4024	4068	4114
35°	3928	3994	4055
40°	3829	3924	3974
45°	3714	3827	3867
50°	3588	3727	3760
55°	3447	3601	3620
60°	3306	3452	3466
65°	3098	3245	3237
70°	2869	3001	3031
75°	2542	2690	2708
80°	2115	2271	2323
85°	1602	1758	1978



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	300.3	3.5
10°-20°	854.9	10.0
20°-30°	1280.9	15.0
30°-40°	1519.7	17.8
40°-50°	1543.4	18.1
50°-60°	1359.2	15.9
60°-70°	998.7	11.7
70°-80°	543.2	6.4
80°-90°	138.4	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°	2436.1	28.5
0°-40°	3955.8	46.3
0°-60°	6858.4	80.3
0°-90°	8538.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8538.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3177	3177	3177	3177	3177	
5°	3179	3165	3156	3156	3164	302
15°	3034	3028	3028	3032	3041	856
25°	2761	2764	2779	2795	2808	1272
35°	2392	2405	2432	2456	2469	1495
45°	1952	1968	2011	2035	2032	1504
55°	1470	1491	1535	1549	1543	1314
65°	973	989	1019	1027	1017	964
75°	489	499	518	519	521	520
85°	104	106	114	124	128	126
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3177.1	3177.1	3177.1	3177.1	3177.1
2.5°	3190.5	3177.9	3167.1	3167.1	3174.6
5°	3178.8	3165.4	3156.2	3156.2	3164.5
7.5°	3154.5	3143.6	3136.1	3136.1	3145.3
10°	3124.4	3113.5	3107.6	3108.4	3118.5
12.5°	3084.2	3074.1	3071.6	3073.3	3085.8
15°	3033.9	3028.0	3028.0	3032.2	3041.4
17.5°	2977.8	2971.9	2976.1	2982.0	2993.7
20°	2914.2	2910.0	2917.5	2926.7	2937.6
22.5°	2841.3	2839.6	2852.2	2864.8	2875.6
25°	2760.9	2764.3	2779.3	2795.3	2807.8
27.5°	2678.0	2681.4	2702.3	2719.0	2731.6
30°	2590.1	2591.8	2618.6	2638.7	2647.9
32.5°	2487.9	2501.3	2529.8	2549.1	2557.4
35°	2391.6	2405.0	2431.8	2456.1	2468.7
37.5°	2286.9	2298.7	2333.8	2359.8	2364.0
40°	2179.8	2190.6	2234.2	2256.0	2262.7
42.5°	2062.5	2083.5	2122.8	2144.6	2148.8
45°	1952.0	1967.9	2011.4	2034.9	2032.4
47.5°	1833.9	1851.5	1894.2	1916.8	1921.0
50°	1714.2	1734.3	1780.3	1795.4	1796.2
52.5°	1588.6	1614.5	1656.4	1676.5	1669.8
55°	1469.6	1490.6	1535.0	1549.2	1543.3
57.5°	1347.4	1370.8	1411.9	1419.4	1420.2
60°	1228.5	1247.7	1282.9	1290.4	1287.9
62.5°	1097.8	1117.1	1148.9	1156.5	1150.6
65°	973.1	989.0	1019.1	1026.7	1016.6
67.5°	849.1	865.0	888.5	900.2	889.3
70°	729.4	741.9	762.9	769.6	770.4
72.5°	602.1	624.7	639.8	638.9	636.4
75°	489.0	499.1	517.5	519.2	520.9
77.5°	381.0	383.5	402.8	407.8	404.5
80°	273.0	282.2	293.1	299.0	299.8
82.5°	180.0	186.7	196.0	206.0	206.0
85°	103.8	106.4	113.9	123.9	128.1
87.5°	41.9	46.1	53.6	61.1	62.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)