

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: P475559

Luminaire Tested: **24GR-LD5-85-F1-UNV-L840-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475559  
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-L840-CD1-U  
Description: GR 2'X4' LED TROFFER w/ F1 LENS  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8701.0 lumens  
Efficiency: N/A  
Efficacy: 147.0 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

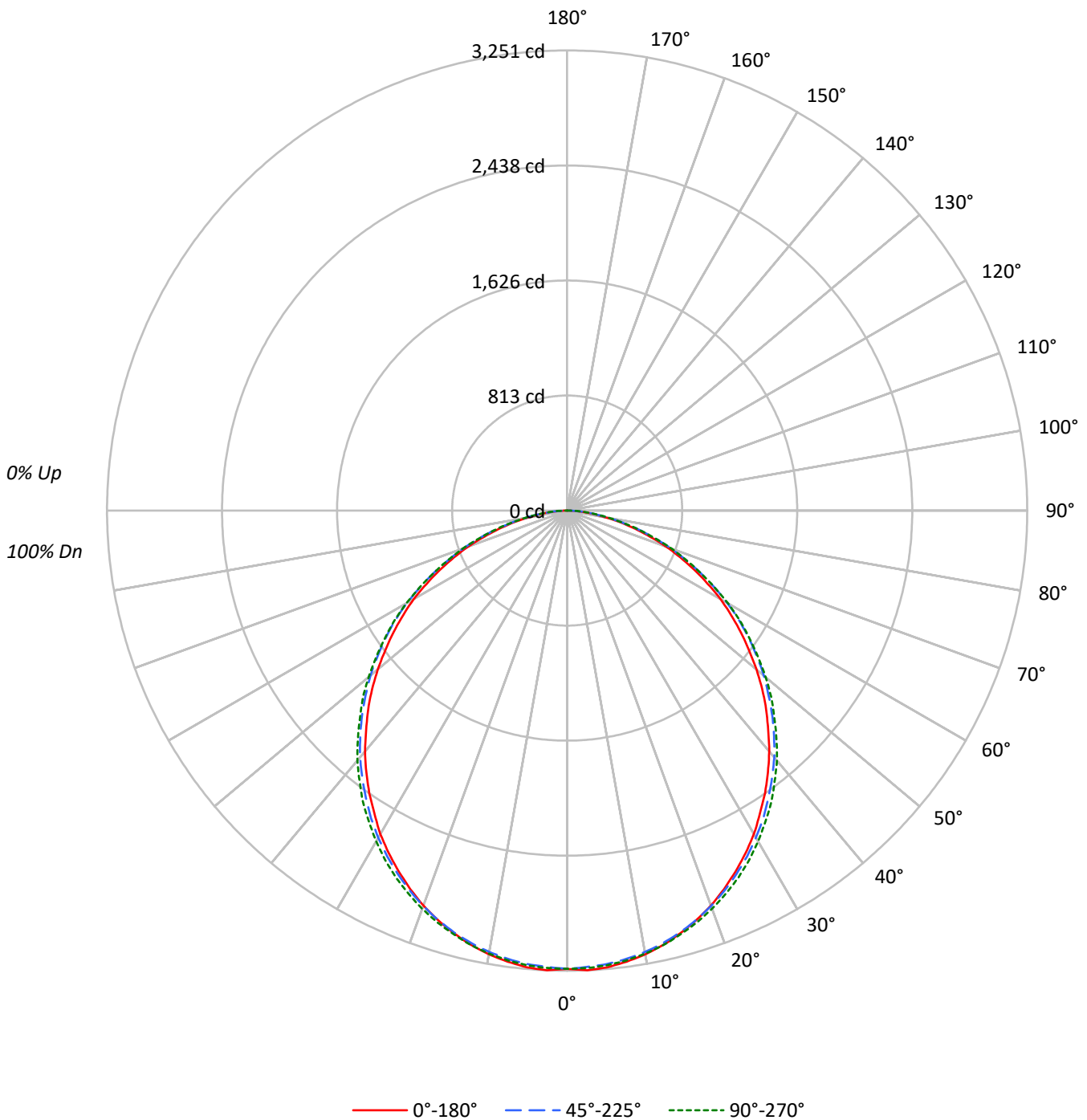
Input Watts (W): 59.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	4356	4356	4356
5°	4375	4344	4355
10°	4350	4326	4342
15°	4306	4298	4317
20°	4252	4257	4286
25°	4177	4204	4248
30°	4101	4146	4192
35°	4003	4070	4132
40°	3901	3999	4050
45°	3785	3900	3941
50°	3656	3797	3831
55°	3513	3669	3689
60°	3369	3518	3532
65°	3157	3306	3298
70°	2924	3058	3088
75°	2590	2741	2759
80°	2156	2314	2367
85°	1633	1792	2016



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	306.0	3.5
10°-20°	871.1	10.0
20°-30°	1305.3	15.0
30°-40°	1548.6	17.8
40°-50°	1572.7	18.1
50°-60°	1385.0	15.9
60°-70°	1017.7	11.7
70°-80°	553.5	6.4
80°-90°	141.0	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°	2482.4	28.5
0°-40°	4030.9	46.3
0°-60°	6988.7	80.3
0°-90°	8701.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8701.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3238	3238	3238	3238	3238	
5°	3239	3226	3216	3216	3225	307
15°	3092	3086	3086	3090	3099	872
25°	2813	2817	2832	2848	2861	1296
35°	2437	2451	2478	2503	2516	1523
45°	1989	2005	2050	2074	2071	1533
55°	1498	1519	1564	1579	1573	1339
65°	992	1008	1038	1046	1036	983
75°	498	509	527	529	531	530
85°	106	108	116	126	131	128
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3237.5	3237.5	3237.5	3237.5	3237.5
2.5°	3251.1	3238.3	3227.2	3227.2	3234.9
5°	3239.2	3225.5	3216.1	3216.1	3224.7
7.5°	3214.4	3203.3	3195.7	3195.7	3205.0
10°	3183.7	3172.6	3166.6	3167.5	3177.7
12.5°	3142.8	3132.5	3130.0	3131.7	3144.5
15°	3091.6	3085.6	3085.6	3089.8	3099.2
17.5°	3034.4	3028.4	3032.7	3038.7	3050.6
20°	2969.5	2965.3	2972.9	2982.3	2993.4
22.5°	2895.3	2893.6	2906.4	2919.2	2930.3
25°	2813.4	2816.8	2832.1	2848.4	2861.2
27.5°	2728.9	2732.3	2753.6	2770.7	2783.5
30°	2639.3	2641.0	2668.3	2688.8	2698.2
32.5°	2535.2	2548.8	2577.9	2597.5	2606.0
35°	2437.1	2450.7	2478.0	2502.8	2515.6
37.5°	2330.4	2342.3	2378.2	2404.6	2408.9
40°	2221.2	2232.3	2276.6	2298.8	2305.7
42.5°	2101.7	2123.0	2163.2	2185.3	2189.6
45°	1989.1	2005.3	2049.7	2073.6	2071.0
47.5°	1868.8	1886.7	1930.2	1953.2	1957.5
50°	1746.7	1767.2	1814.1	1829.5	1830.4
52.5°	1618.7	1645.2	1687.9	1708.3	1701.5
55°	1497.6	1518.9	1564.1	1578.6	1572.7
57.5°	1373.0	1396.9	1438.7	1446.4	1447.2
60°	1251.8	1271.4	1307.3	1315.0	1312.4
62.5°	1118.7	1138.3	1170.7	1178.4	1172.5
65°	991.6	1007.8	1038.5	1046.2	1035.9
67.5°	865.3	881.5	905.4	917.3	906.2
70°	743.2	756.0	777.4	784.2	785.0
72.5°	613.5	636.6	651.9	651.1	648.5
75°	498.3	508.6	527.3	529.1	530.8
77.5°	388.3	390.8	410.4	415.6	412.2
80°	278.2	287.6	298.7	304.6	305.5
82.5°	183.5	190.3	199.7	209.9	209.9
85°	105.8	108.4	116.1	126.3	130.6
87.5°	42.7	46.9	54.6	62.3	63.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)