

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: P475574

Luminaire Tested: **24GR-LD5-85-F1-UNV-L850-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475574
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-L850-CD1-U
Description: GR 2'X4' LED TROFFER w/ F1 LENS
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

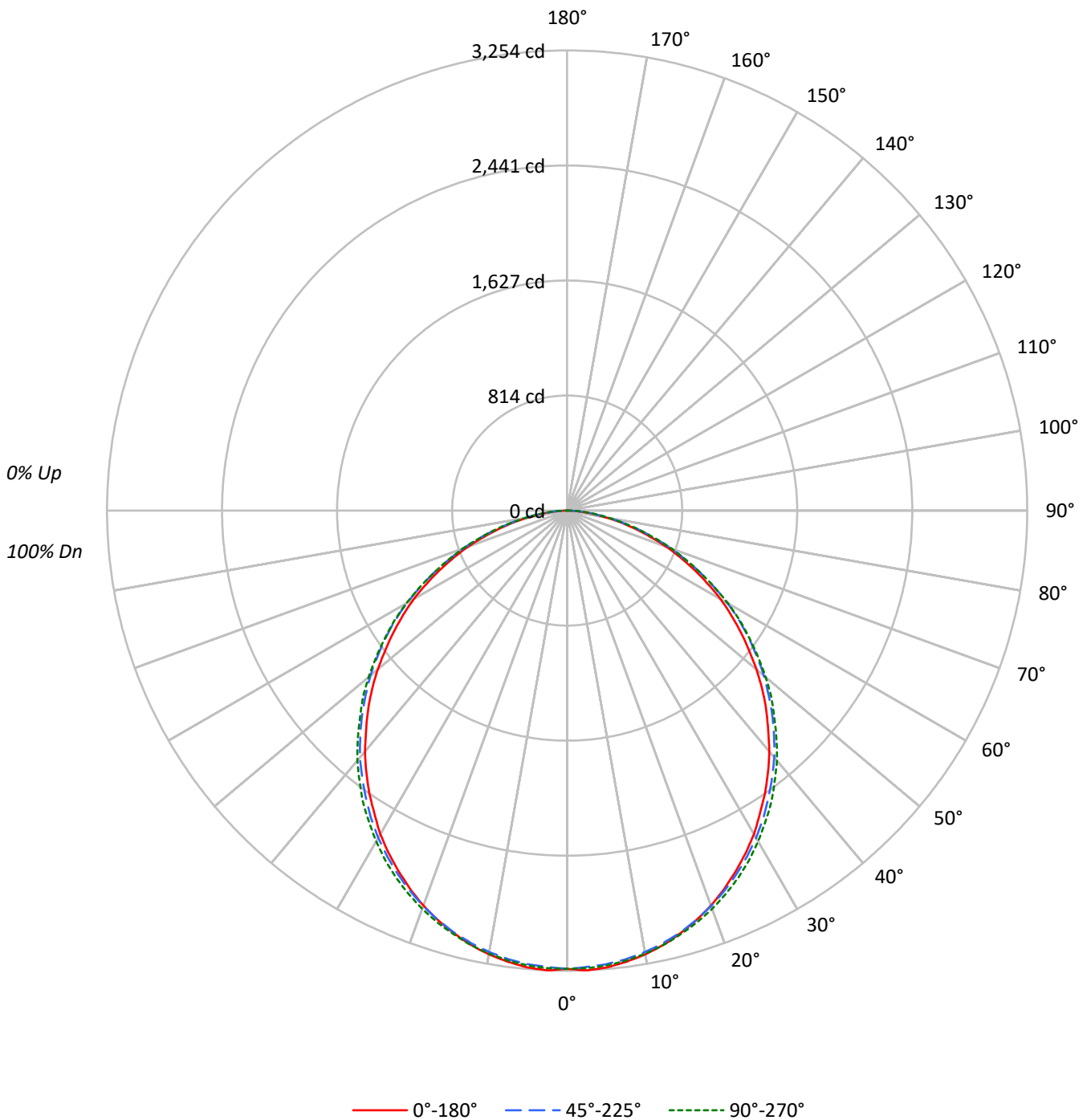
Lumens per Lamp: N/A
Luminaire Lumens: 8709.5 lumens
Efficiency: N/A
Efficacy: 147.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.24 / 1.34
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	4360	4360	4360
5°	4379	4348	4360
10°	4354	4331	4346
15°	4311	4302	4321
20°	4256	4261	4290
25°	4181	4209	4252
30°	4105	4150	4196
35°	4007	4074	4136
40°	3905	4003	4054
45°	3788	3904	3945
50°	3660	3801	3835
55°	3516	3673	3693
60°	3372	3521	3535
65°	3160	3309	3301
70°	2927	3061	3091
75°	2593	2744	2762
80°	2158	2317	2369
85°	1635	1794	2018



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	306.3	3.5
10°-20°	872.0	10.0
20°-30°	1306.5	15.0
30°-40°	1550.1	17.8
40°-50°	1574.3	18.1
50°-60°	1386.4	15.9
60°-70°	1018.7	11.7
70°-80°	554.1	6.4
80°-90°	141.2	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°	2484.8	28.5
0°-40°	4034.9	46.3
0°-60°	6995.6	80.3
0°-90°	8709.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8709.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3241	3241	3241	3241	3241	
5°	3242	3229	3219	3219	3228	308
15°	3095	3089	3089	3093	3102	873
25°	2816	2820	2835	2851	2864	1298
35°	2440	2453	2480	2505	2518	1525
45°	1991	2007	2052	2076	2073	1534
55°	1499	1520	1566	1580	1574	1340
65°	992	1009	1040	1047	1037	984
75°	499	509	528	530	531	531
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°	3240.6	3240.6	3240.6	3240.6	3240.6
2.5°	3254.3	3241.5	3230.4	3230.4	3238.1
5°	3242.4	3228.7	3219.3	3219.3	3227.8
7.5°	3217.6	3206.5	3198.8	3198.8	3208.2
10°	3186.8	3175.7	3169.8	3170.6	3180.9
12.5°	3145.8	3135.6	3133.0	3134.7	3147.5
15°	3094.6	3088.6	3088.6	3092.9	3102.3
17.5°	3037.4	3031.4	3035.7	3041.6	3053.6
20°	2972.4	2968.2	2975.9	2985.3	2996.4
22.5°	2898.1	2896.4	2909.2	2922.1	2933.2
25°	2816.1	2819.6	2834.9	2851.2	2864.0
27.5°	2731.6	2735.0	2756.3	2773.4	2786.2
30°	2641.9	2643.6	2670.9	2691.4	2700.8
32.5°	2537.7	2551.3	2580.4	2600.0	2608.6
35°	2439.5	2453.1	2480.5	2505.2	2518.0
37.5°	2332.7	2344.6	2380.5	2407.0	2411.3
40°	2223.4	2234.5	2278.9	2301.1	2307.9
42.5°	2103.8	2125.1	2165.3	2187.5	2191.8
45°	1991.0	2007.3	2051.7	2075.6	2073.0
47.5°	1870.6	1888.5	1932.1	1955.2	1959.4
50°	1748.4	1768.9	1815.9	1831.3	1832.2
52.5°	1620.3	1646.8	1689.5	1710.0	1703.2
55°	1499.0	1520.4	1565.7	1580.2	1574.2
57.5°	1374.3	1398.2	1440.1	1447.8	1448.6
60°	1253.0	1272.7	1308.6	1316.2	1313.7
62.5°	1119.8	1139.4	1171.9	1179.6	1173.6
65°	992.5	1008.8	1039.5	1047.2	1036.9
67.5°	866.1	882.3	906.3	918.2	907.1
70°	744.0	756.8	778.1	785.0	785.8
72.5°	614.1	637.2	652.6	651.7	649.2
75°	498.8	509.1	527.9	529.6	531.3
77.5°	388.6	391.2	410.8	416.0	412.6
80°	278.5	287.8	299.0	304.9	305.8
82.5°	183.6	190.5	199.9	210.1	210.1
85°	105.9	108.5	116.2	126.4	130.7
87.5°	42.7	47.0	54.7	62.4	63.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)