

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: P476204

Luminaire Tested: **14GR-LD5-60-F1-UNV-L850-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P476204
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-60-F1-UNV-L850-CD1-U
Description: GR 1'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: 6269.9 lumens
Efficiency: N/A
Efficacy: 120.3 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.24 / 1.2
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

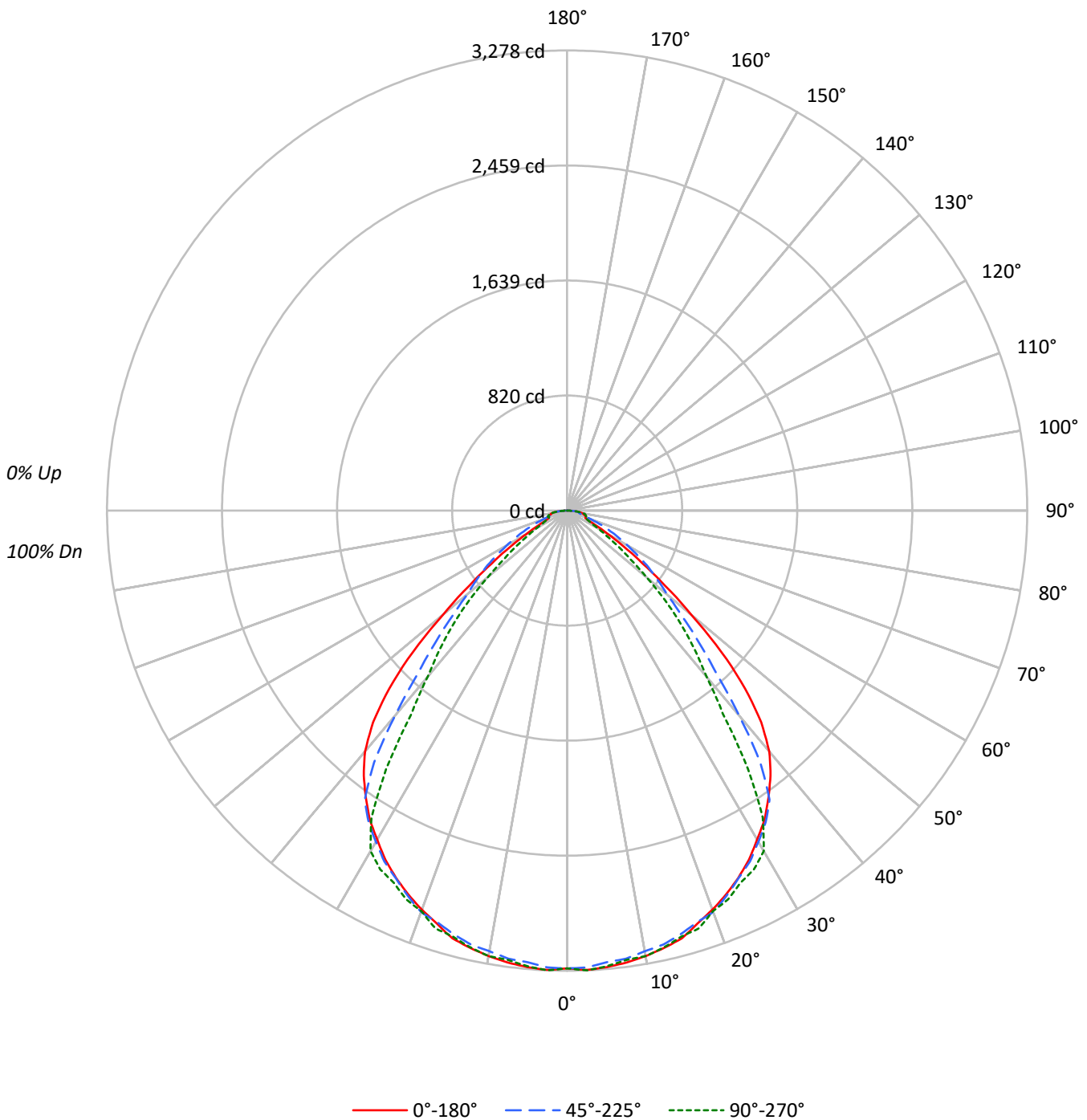
Input Watts (W): 52.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88					88			
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77					77			
3	95	87	80	75	93	85	79	74	82	77	73	80	75	71	77	74	70	68					68			
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61					61			
5	82	71	64	58	81	70	63	58	68	62	57	67	61	57	65	60	56	54					54			
6	77	65	57	52	75	64	57	52	63	56	51	61	55	51	60	54	50	49					49			
7	72	60	52	47	70	59	52	47	58	51	46	56	50	46	55	50	46	44					44			
8	67	55	48	42	66	55	47	42	53	47	42	52	46	42	51	46	42	40					40			
9	63	51	44	39	62	50	43	39	49	43	38	48	42	38	47	42	38	36					36			
10	59	47	40	35	58	47	40	35	46	40	35	45	39	35	44	39	35	33					33			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8775	8775	8775
5°	8818	8723	8799
10°	8805	8709	8805
15°	8791	8703	8752
20°	8664	8715	8695
25°	8567	8577	8682
30°	8409	8464	8703
35°	8210	8256	7380
40°	7867	6695	5425
45°	6826	5049	4381
50°	4849	3879	3071
55°	3080	3326	2059
60°	1814	2664	1360
65°	1073	2078	1051
70°	1105	1408	1077
75°	1351	1095	1423
80°	1740	1361	1905
85°	1843	1843	1843



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	309.2	4.9
10°-20°	885.4	14.1
20°-30°	1339.0	21.4
30°-40°	1491.1	23.8
40°-50°	1091.4	17.4
50°-60°	601.6	9.6
60°-70°	307.6	4.9
70°-80°	175.0	2.8
80°-90°	69.7	1.1
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°	2533.6	40.4
0°-40°	4024.7	64.2
0°-60°	5717.7	91.2
0°-90°	6269.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6269.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3261	3261	3261	3261	3261	
5°	3264	3264	3229	3250	3257	310
15°	3156	3120	3124	3162	3142	887
25°	2885	2878	2889	2938	2924	1328
35°	2499	2503	2513	2341	2246	1560
45°	1794	1653	1327	1208	1151	1350
55°	656	772	709	607	439	613
65°	168	400	326	312	165	194
75°	130	225	105	200	137	136
85°	60	74	60	81	60	64
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3260.8	3260.8	3260.8	3260.8	3260.8
2.5°	3274.9	3274.9	3257.3	3278.4	3278.4
5°	3264.3	3264.3	3229.2	3250.3	3257.3
7.5°	3246.8	3246.8	3218.7	3236.3	3229.2
10°	3222.2	3204.7	3187.1	3236.3	3222.2
12.5°	3190.6	3155.5	3166.1	3162.5	3187.1
15°	3155.5	3120.4	3123.9	3162.5	3141.5
17.5°	3085.3	3088.8	3074.8	3102.9	3120.4
20°	3025.6	3036.2	3043.2	3060.7	3036.2
22.5°	2959.0	2962.5	2969.5	2994.1	2997.6
25°	2885.2	2878.2	2888.8	2937.9	2923.9
27.5°	2804.5	2801.0	2818.6	2860.7	2881.7
30°	2706.2	2720.3	2723.8	2801.0	2801.0
32.5°	2615.0	2615.0	2632.5	2671.1	2593.9
35°	2499.1	2502.7	2513.2	2341.2	2246.4
37.5°	2379.8	2369.3	2260.5	1948.1	1821.7
40°	2239.4	2214.8	1905.9	1625.1	1544.4
42.5°	2046.3	1972.6	1572.5	1404.0	1344.3
45°	1793.6	1653.2	1326.8	1207.5	1151.3
47.5°	1491.8	1361.9	1102.2	1021.4	944.2
50°	1158.3	1130.2	926.6	856.4	733.6
52.5°	881.0	937.2	814.3	723.1	565.1
55°	656.4	772.2	709.0	607.2	438.8
57.5°	480.9	642.3	596.7	516.0	329.9
60°	337.0	544.1	494.9	435.2	252.7
62.5°	238.7	470.3	407.2	372.1	193.1
65°	168.5	400.1	326.4	312.4	165.0
67.5°	140.4	337.0	249.2	277.3	140.4
70°	140.4	280.8	179.0	245.7	136.9
72.5°	140.4	245.7	133.4	224.6	143.9
75°	129.9	224.6	105.3	200.1	136.9
77.5°	119.3	189.5	91.3	172.0	133.4
80°	112.3	136.9	87.8	140.4	122.9
82.5°	91.3	98.3	80.7	108.8	94.8
85°	59.7	73.7	59.7	80.7	59.7
87.5°	28.1	38.6	28.1	35.1	24.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)