

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: P476195

Luminaire Tested: **14GR-LD5-60-F1-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P476195
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-L840-CD1-U
Description: GR 1'X4' LED TROFFER w/ F1 LENS
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

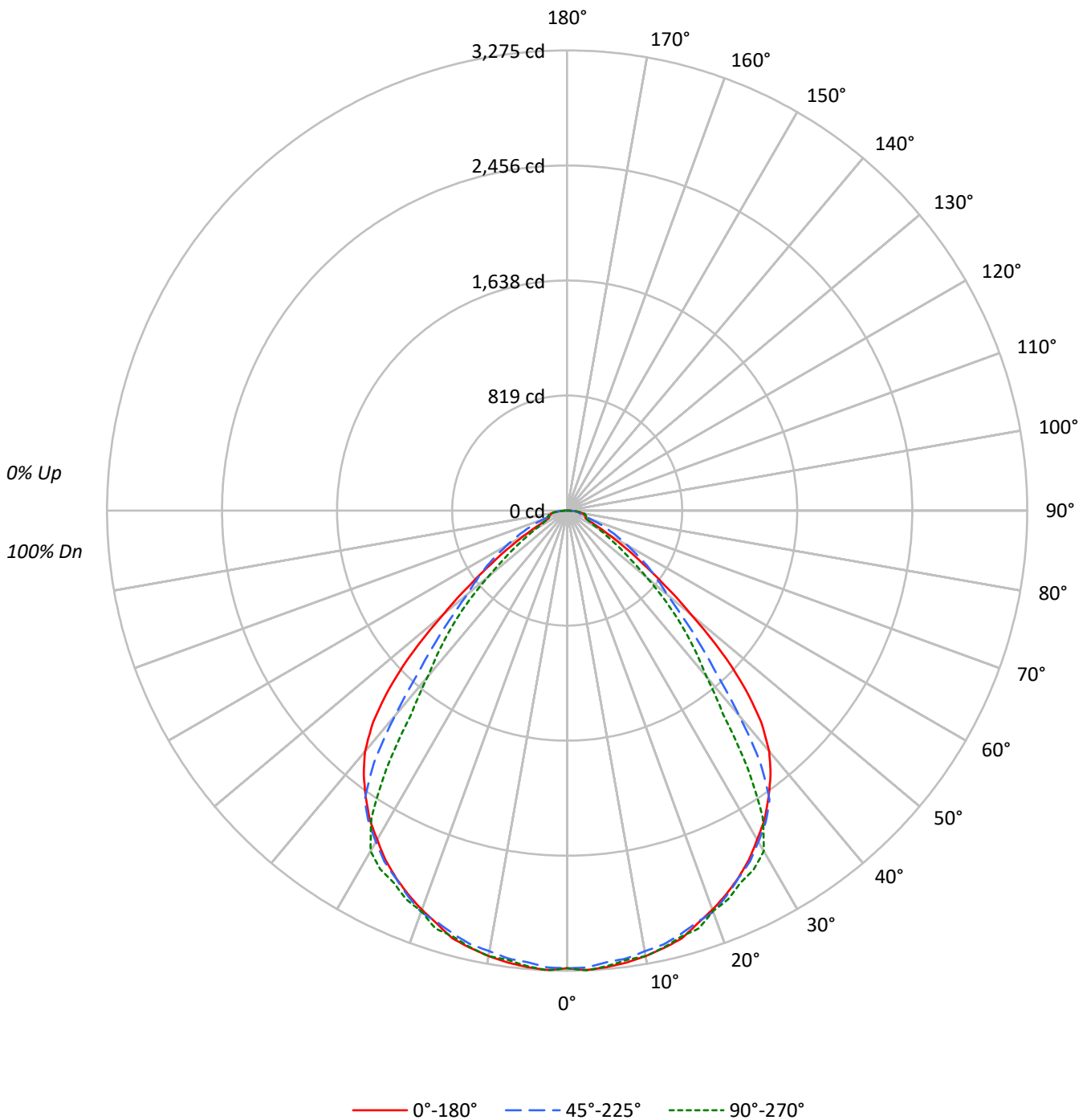
Lumens per Lamp: N/A
Luminaire Lumens: 6263.8 lumens
Efficiency: N/A
Efficacy: 120.2 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.24 / 1.2
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	8766	8766	8766
5°	8809	8715	8790
10°	8796	8700	8796
15°	8782	8695	8743
20°	8656	8706	8686
25°	8558	8569	8673
30°	8401	8455	8695
35°	8202	8248	7372
40°	7859	6689	5420
45°	6819	5044	4377
50°	4845	3875	3068
55°	3076	3323	2056
60°	1812	2661	1359
65°	1072	2076	1049
70°	1104	1407	1076
75°	1349	1094	1422
80°	1739	1359	1901
85°	1840	1840	1840



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	308.9	4.9
10°-20°	884.5	14.1
20°-30°	1337.7	21.4
30°-40°	1489.6	23.8
40°-50°	1090.3	17.4
50°-60°	601.0	9.6
60°-70°	307.3	4.9
70°-80°	174.8	2.8
80°-90°	69.6	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°	2531.1	40.4
0°-40°	4020.8	64.2
0°-60°	5712.1	91.2
0°-90°	6263.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6263.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3258	3258	3258	3258	3258	
5°	3261	3261	3226	3247	3254	310
15°	3152	3117	3121	3159	3138	886
25°	2882	2875	2886	2935	2921	1327
35°	2497	2500	2511	2339	2244	1558
45°	1792	1652	1326	1206	1150	1348
55°	656	772	708	607	438	613
65°	168	400	326	312	165	194
75°	130	224	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°	3257.6	3257.6	3257.6	3257.6	3257.6
2.5°	3271.7	3271.7	3254.1	3275.2	3275.2
5°	3261.1	3261.1	3226.1	3247.1	3254.1
7.5°	3243.6	3243.6	3215.5	3233.1	3226.1
10°	3219.1	3201.5	3184.0	3233.1	3219.1
12.5°	3187.5	3152.4	3162.9	3159.4	3184.0
15°	3152.4	3117.4	3120.9	3159.4	3138.4
17.5°	3082.3	3085.8	3071.8	3099.8	3117.4
20°	3022.7	3033.2	3040.2	3057.7	3033.2
22.5°	2956.1	2959.6	2966.6	2991.1	2994.6
25°	2882.4	2875.4	2885.9	2935.0	2921.0
27.5°	2801.8	2798.3	2815.8	2857.9	2878.9
30°	2703.6	2717.6	2721.1	2798.3	2798.3
32.5°	2612.4	2612.4	2629.9	2668.5	2591.4
35°	2496.7	2500.2	2510.7	2338.9	2244.2
37.5°	2377.5	2366.9	2258.2	1946.2	1819.9
40°	2237.2	2212.7	1904.1	1623.6	1542.9
42.5°	2044.3	1970.7	1571.0	1402.6	1343.0
45°	1791.9	1651.6	1325.5	1206.3	1150.2
47.5°	1490.3	1360.6	1101.1	1020.4	943.3
50°	1157.2	1129.1	925.7	855.6	732.9
52.5°	880.2	936.3	813.5	722.4	564.6
55°	655.7	771.5	708.3	606.6	438.3
57.5°	480.4	641.7	596.1	515.5	329.6
60°	336.6	543.5	494.4	434.8	252.5
62.5°	238.4	469.9	406.8	371.7	192.9
65°	168.3	399.8	326.1	312.1	164.8
67.5°	140.3	336.6	249.0	277.0	140.3
70°	140.3	280.5	178.8	245.5	136.8
72.5°	140.3	245.5	133.3	224.4	143.8
75°	129.7	224.4	105.2	199.9	136.8
77.5°	119.2	189.4	91.2	171.8	133.3
80°	112.2	136.8	87.7	140.3	122.7
82.5°	91.2	98.2	80.7	108.7	94.7
85°	59.6	73.6	59.6	80.7	59.6
87.5°	28.1	38.6	28.1	35.1	24.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)