

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: P476178

Luminaire Tested: **14GR-LD5-20-F1-UNV-L835-CD1-U**

Issue Date: 02/10/2021



Test Information

Test Method: LM-79-08
Report Number: P476178
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-20-F1-UNV-L835-CD1-U
Description: GR 1'X4' LED TROFFER w/ F1 LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

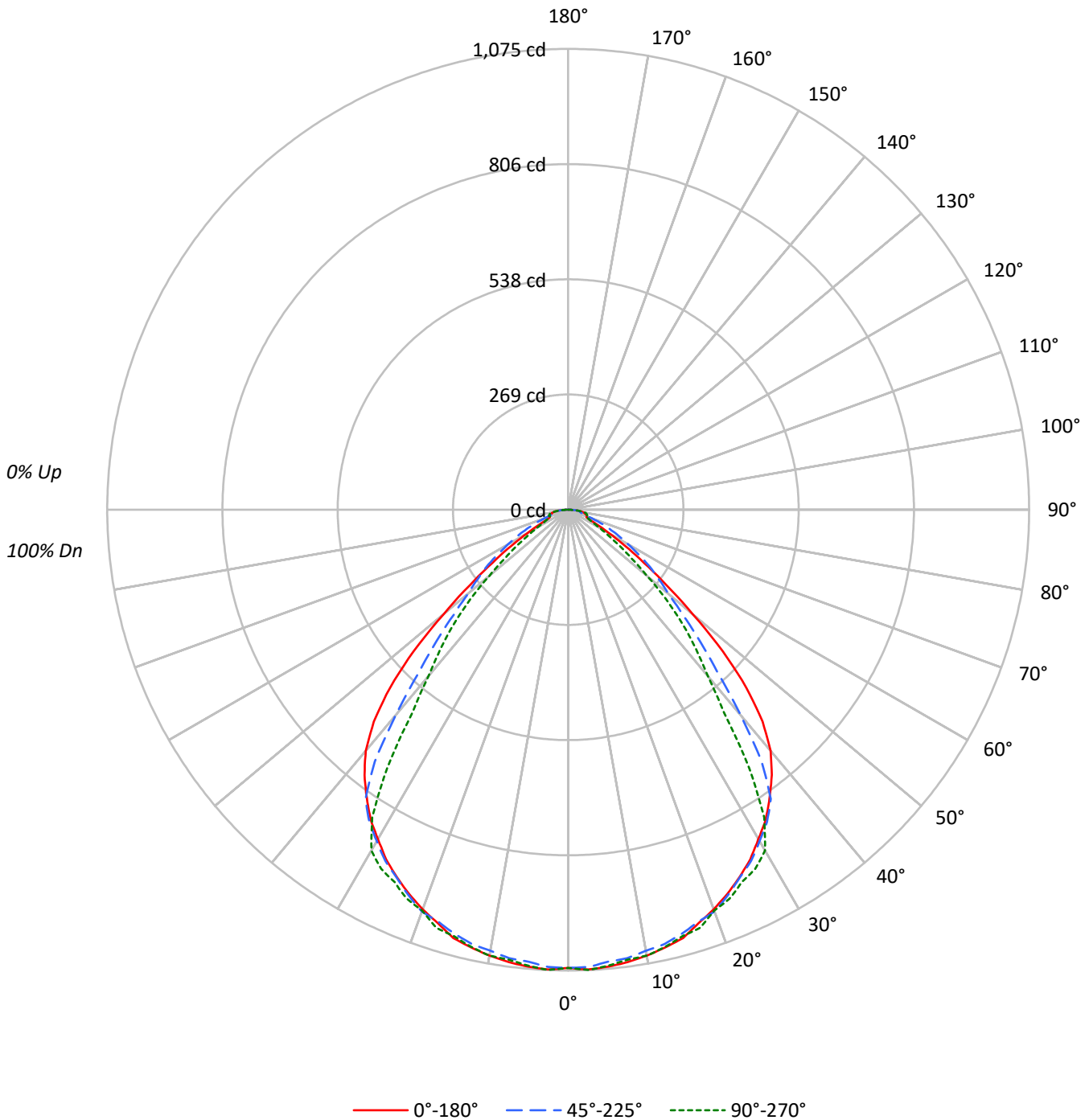
Lumens per Lamp: N/A
Luminaire Lumens: 2055.3 lumens
Efficiency: N/A
Efficacy: 128.5 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.24 / 1.2
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 16
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	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°	2876	2876	2876
5°	2891	2860	2884
10°	2886	2855	2886
15°	2882	2853	2869
20°	2840	2857	2850
25°	2808	2812	2846
30°	2756	2774	2853
35°	2691	2706	2419
40°	2579	2195	1779
45°	2238	1655	1436
50°	1590	1272	1007
55°	1010	1090	675
60°	595	873	446
65°	351	681	344
70°	362	462	353
75°	443	359	467
80°	570	446	625
85°	605	605	605



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.4	4.9
10°-20°	290.2	14.1
20°-30°	438.9	21.4
30°-40°	488.8	23.8
40°-50°	357.8	17.4
50°-60°	197.2	9.6
60°-70°	100.8	4.9
70°-80°	57.4	2.8
80°-90°	22.9	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°	830.5	40.4
0°-40°	1319.3	64.2
0°-60°	1874.3	91.2
0°-90°	2055.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2055.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1069	1069	1069	1069	1069	
5°	1070	1070	1059	1066	1068	102
15°	1034	1023	1024	1037	1030	291
25°	946	944	947	963	958	435
35°	819	820	824	768	736	511
45°	588	542	435	396	377	442
55°	215	253	232	199	144	201
65°	55	131	107	102	54	64
75°	43	74	34	66	45	45
85°	20	24	20	26	20	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1068.9	1068.9	1068.9	1068.9	1068.9
2.5°	1073.5	1073.5	1067.8	1074.7	1074.7
5°	1070.1	1070.1	1058.6	1065.5	1067.8
7.5°	1064.3	1064.3	1055.1	1060.9	1058.6
10°	1056.3	1050.5	1044.8	1060.9	1056.3
12.5°	1045.9	1034.4	1037.9	1036.7	1044.8
15°	1034.4	1022.9	1024.0	1036.7	1029.8
17.5°	1011.4	1012.5	1007.9	1017.1	1022.9
20°	991.8	995.3	997.6	1003.3	995.3
22.5°	970.0	971.1	973.4	981.5	982.6
25°	945.8	943.5	947.0	963.1	958.5
27.5°	919.3	918.2	923.9	937.8	944.7
30°	887.1	891.7	892.9	918.2	918.2
32.5°	857.2	857.2	863.0	875.6	850.3
35°	819.2	820.4	823.8	767.5	736.4
37.5°	780.1	776.7	741.0	638.6	597.2
40°	734.1	726.0	624.8	532.7	506.3
42.5°	670.8	646.6	515.5	460.2	440.7
45°	588.0	541.9	434.9	395.8	377.4
47.5°	489.0	446.4	361.3	334.8	309.5
50°	379.7	370.5	303.8	280.8	240.5
52.5°	288.8	307.2	266.9	237.0	185.2
55°	215.2	253.1	232.4	199.1	143.8
57.5°	157.6	210.6	195.6	169.1	108.2
60°	110.5	178.3	162.2	142.7	82.8
62.5°	78.2	154.2	133.5	122.0	63.3
65°	55.2	131.2	107.0	102.4	54.1
67.5°	46.0	110.5	81.7	90.9	46.0
70°	46.0	92.0	58.7	80.5	44.9
72.5°	46.0	80.5	43.7	73.6	47.2
75°	42.6	73.6	34.5	65.6	44.9
77.5°	39.1	62.1	29.9	56.4	43.7
80°	36.8	44.9	28.8	46.0	40.3
82.5°	29.9	32.2	26.5	35.7	31.1
85°	19.6	24.2	19.6	26.5	19.6
87.5°	9.2	12.7	9.2	11.5	8.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)