

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: P476187

Luminaire Tested: **14GR-LD5-20-F1-UNV-L840-CD1-U**

Issue Date: 02/10/2021



**Test Information**

Test Method: LM-79-08  
Report Number: P476187  
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-L840-CD1-U  
Description: GR 1'X4' LED TROFFER w/ F1 LENS  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

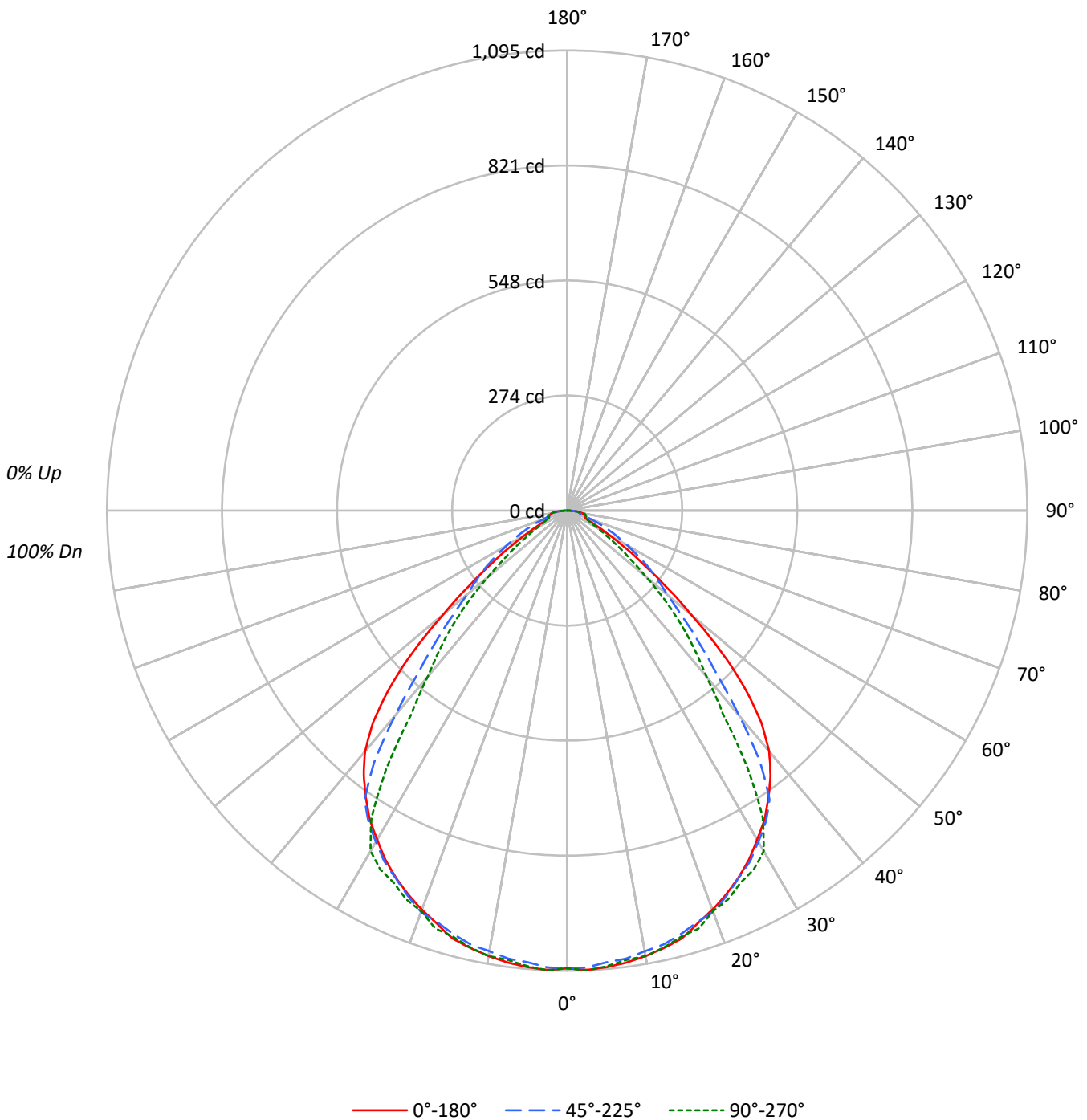
Lumens per Lamp: N/A  
Luminaire Lumens: 2094.4 lumens  
Efficiency: N/A  
Efficacy: 130.9 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.24 / 1.2  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

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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CATALOG NUMBER: 14GR-LD5-20-F1-UNV-L840-CD1-U

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

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2931	2931	2931
5°	2945	2914	2939
10°	2941	2909	2941
15°	2937	2907	2924
20°	2894	2911	2904
25°	2862	2865	2900
30°	2809	2827	2907
35°	2742	2758	2465
40°	2628	2237	1812
45°	2280	1687	1464
50°	1620	1296	1026
55°	1029	1111	688
60°	606	890	454
65°	358	694	351
70°	369	471	360
75°	451	366	475
80°	581	454	635
85°	614	614	614



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	103.3	4.9
10°-20°	295.8	14.1
20°-30°	447.3	21.4
30°-40°	498.1	23.8
40°-50°	364.6	17.4
50°-60°	200.9	9.6
60°-70°	102.7	4.9
70°-80°	58.5	2.8
80°-90°	23.3	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°	846.3	40.4
0°-40°	1344.4	64.2
0°-60°	1909.9	91.2
0°-90°	2094.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2094.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1089	1089	1089	1089	1089	
5°	1090	1090	1079	1086	1088	104
15°	1054	1042	1044	1056	1049	296
25°	964	961	965	981	977	444
35°	835	836	840	782	750	521
45°	599	552	443	403	385	451
55°	219	258	237	203	147	205
65°	56	134	109	104	55	65
75°	43	75	35	67	46	46
85°	20	25	20	27	20	21
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1089.2	1089.2	1089.2	1089.2	1089.2
2.5°	1093.9	1093.9	1088.1	1095.1	1095.1
5°	1090.4	1090.4	1078.7	1085.7	1088.1
7.5°	1084.5	1084.5	1075.2	1081.0	1078.7
10°	1076.3	1070.5	1064.6	1081.0	1076.3
12.5°	1065.8	1054.1	1057.6	1056.4	1064.6
15°	1054.1	1042.3	1043.5	1056.4	1049.4
17.5°	1030.6	1031.8	1027.1	1036.5	1042.3
20°	1010.7	1014.2	1016.5	1022.4	1014.2
22.5°	988.4	989.6	991.9	1000.1	1001.3
25°	963.8	961.4	964.9	981.4	976.7
27.5°	936.8	935.6	941.5	955.6	962.6
30°	904.0	908.7	909.8	935.6	935.6
32.5°	873.5	873.5	879.4	892.3	866.5
35°	834.8	836.0	839.5	782.0	750.4
37.5°	794.9	791.4	755.1	650.7	608.5
40°	748.0	739.8	636.7	542.9	515.9
42.5°	683.6	658.9	525.3	469.0	449.1
45°	599.1	552.2	443.2	403.3	384.6
47.5°	498.3	454.9	368.2	341.2	315.4
50°	386.9	377.5	309.5	286.1	245.0
52.5°	294.3	313.1	272.0	241.5	188.8
55°	219.3	257.9	236.8	202.8	146.6
57.5°	160.6	214.6	199.3	172.4	110.2
60°	112.6	181.7	165.3	145.4	84.4
62.5°	79.7	157.1	136.0	124.3	64.5
65°	56.3	133.7	109.0	104.4	55.1
67.5°	46.9	112.6	83.2	92.6	46.9
70°	46.9	93.8	59.8	82.1	45.7
72.5°	46.9	82.1	44.6	75.0	48.1
75°	43.4	75.0	35.2	66.8	45.7
77.5°	39.9	63.3	30.5	57.5	44.6
80°	37.5	45.7	29.3	46.9	41.0
82.5°	30.5	32.8	27.0	36.3	31.7
85°	19.9	24.6	19.9	27.0	19.9
87.5°	9.4	12.9	9.4	11.7	8.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)