

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: P476278

Luminaire Tested: **14GR-LD5-24-A-UNV-L830-CD1-U**

Issue Date: 02/10/2021



Test Information

Test Method: LM-79-08
Report Number: P476278
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-24-A-UNV-L830-CD1-U
Description: GR 1'X4' LED TROFFER w/ A LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

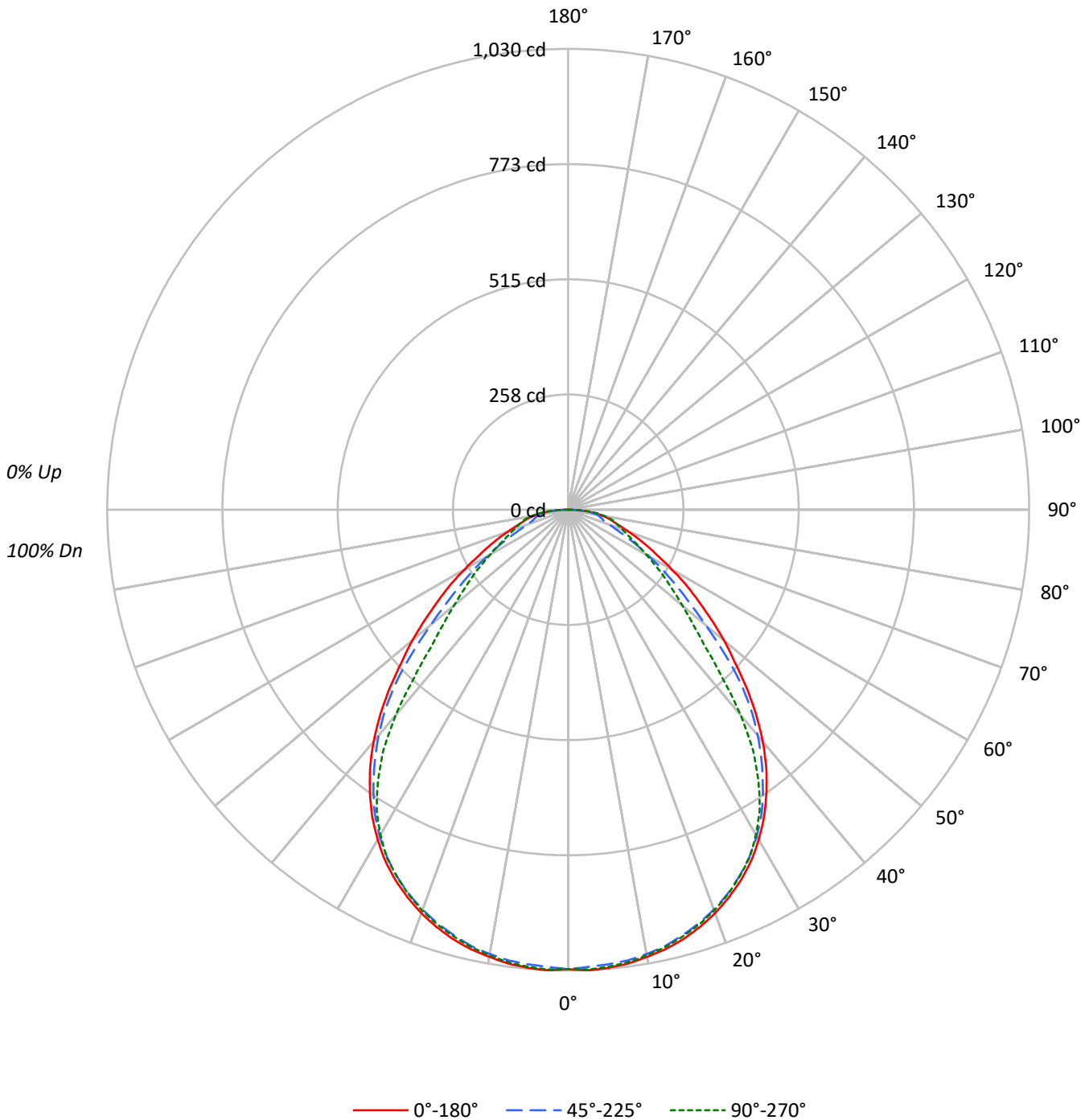
Lumens per Lamp: N/A
Luminaire Lumens: 2240.9 lumens
Efficiency: N/A
Efficacy: 121.1 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.21 / 1.26
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 18.5
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	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86
2	101	94	88	83	99	92	86	82	88	84	80	85	81	78	82	79	76	74
3	93	84	76	71	91	82	75	70	79	74	69	77	72	68	74	70	66	64
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46	44
7	69	57	48	43	67	56	48	43	54	47	42	53	47	42	52	46	42	40
8	65	52	44	38	63	51	44	38	50	43	38	49	43	38	48	42	38	36
9	61	48	40	35	59	47	40	35	46	39	35	45	39	35	44	39	34	33
10	57	44	37	32	56	44	37	32	43	36	32	42	36	32	41	36	31	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3460	3460	3460
5°	3477	3451	3468
10°	3473	3451	3460
15°	3466	3435	3446
20°	3441	3410	3419
25°	3396	3363	3365
30°	3313	3278	3264
35°	3177	3120	3049
40°	2974	2898	2637
45°	2686	2585	2061
50°	2382	2098	1744
55°	2079	1721	1538
60°	1803	1417	1358
65°	1581	1137	1253
70°	1410	965	1262
75°	1376	1017	1410
80°	1525	1283	1616
85°	1589	1369	1891



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.4	4.3
10°-20°	279.1	12.5
20°-30°	417.5	18.6
30°-40°	471.3	21.0
40°-50°	399.8	17.8
50°-60°	270.5	12.1
60°-70°	161.5	7.2
70°-80°	101.1	4.5
80°-90°	42.5	1.9
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°	794.1	35.4
0°-40°	1265.4	56.5
0°-60°	1935.8	86.4
0°-90°	2240.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2240.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1027	1027	1027	1027	1027	
5°	1028	1025	1020	1027	1025	98
15°	994	992	985	992	988	280
25°	913	910	905	909	905	420
35°	772	767	758	752	741	481
45°	564	566	542	465	433	434
55°	354	337	293	262	262	319
65°	198	164	143	152	157	198
75°	106	94	78	103	108	114
85°	41	39	35	46	49	44
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1026.9	1026.9	1026.9	1026.9	1026.9
2.5°	1030.5	1027.4	1022.7	1029.0	1028.5
5°	1027.9	1024.9	1020.2	1027.4	1025.3
7.5°	1023.2	1020.6	1016.0	1022.7	1020.6
10°	1014.9	1012.8	1008.7	1014.4	1011.3
12.5°	1006.1	1004.5	999.3	1004.5	1001.4
15°	993.6	991.5	984.8	991.5	987.8
17.5°	978.0	975.4	969.7	975.4	972.2
20°	959.7	956.7	950.9	956.7	953.5
22.5°	937.9	935.3	930.1	935.3	931.1
25°	913.4	910.3	904.6	908.7	905.1
27.5°	885.3	881.2	875.9	879.1	877.0
30°	851.5	846.3	842.6	842.6	839.0
32.5°	814.5	810.9	804.7	801.0	796.3
35°	772.4	767.2	758.4	751.6	741.1
37.5°	727.1	720.9	710.0	692.7	678.7
40°	676.1	668.2	658.9	625.1	599.6
42.5°	621.5	619.8	603.8	546.0	510.6
45°	563.7	565.7	542.4	464.8	432.6
47.5°	505.3	512.6	470.0	394.0	377.4
50°	454.4	456.9	400.2	342.0	332.6
52.5°	401.9	397.6	341.4	300.8	294.0
55°	353.9	337.3	293.0	262.3	261.8
57.5°	311.7	281.0	250.3	227.5	230.1
60°	267.5	233.2	210.2	197.8	201.5
62.5°	228.5	195.7	175.4	171.8	178.0
65°	198.3	164.4	142.6	152.0	157.2
67.5°	169.7	141.1	116.0	138.4	140.5
70°	143.1	122.3	97.9	127.5	128.1
72.5°	121.3	108.3	84.8	115.6	117.1
75°	105.7	94.2	78.1	103.0	108.3
77.5°	92.7	80.6	72.3	89.0	97.9
80°	78.6	65.0	66.1	74.4	83.3
82.5°	60.4	50.5	52.6	61.4	67.6
85°	41.1	39.0	35.4	45.8	48.9
87.5°	21.9	20.9	18.2	26.0	24.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)