

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: P476296

Luminaire Tested: **14GR-LD5-24-A-UNV-L840-CD1-U**

Issue Date: 02/10/2021



Test Information

Test Method: LM-79-08
Report Number: P476296
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-L840-CD1-U
Description: GR 1'X4' LED TROFFER w/ A LENS
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

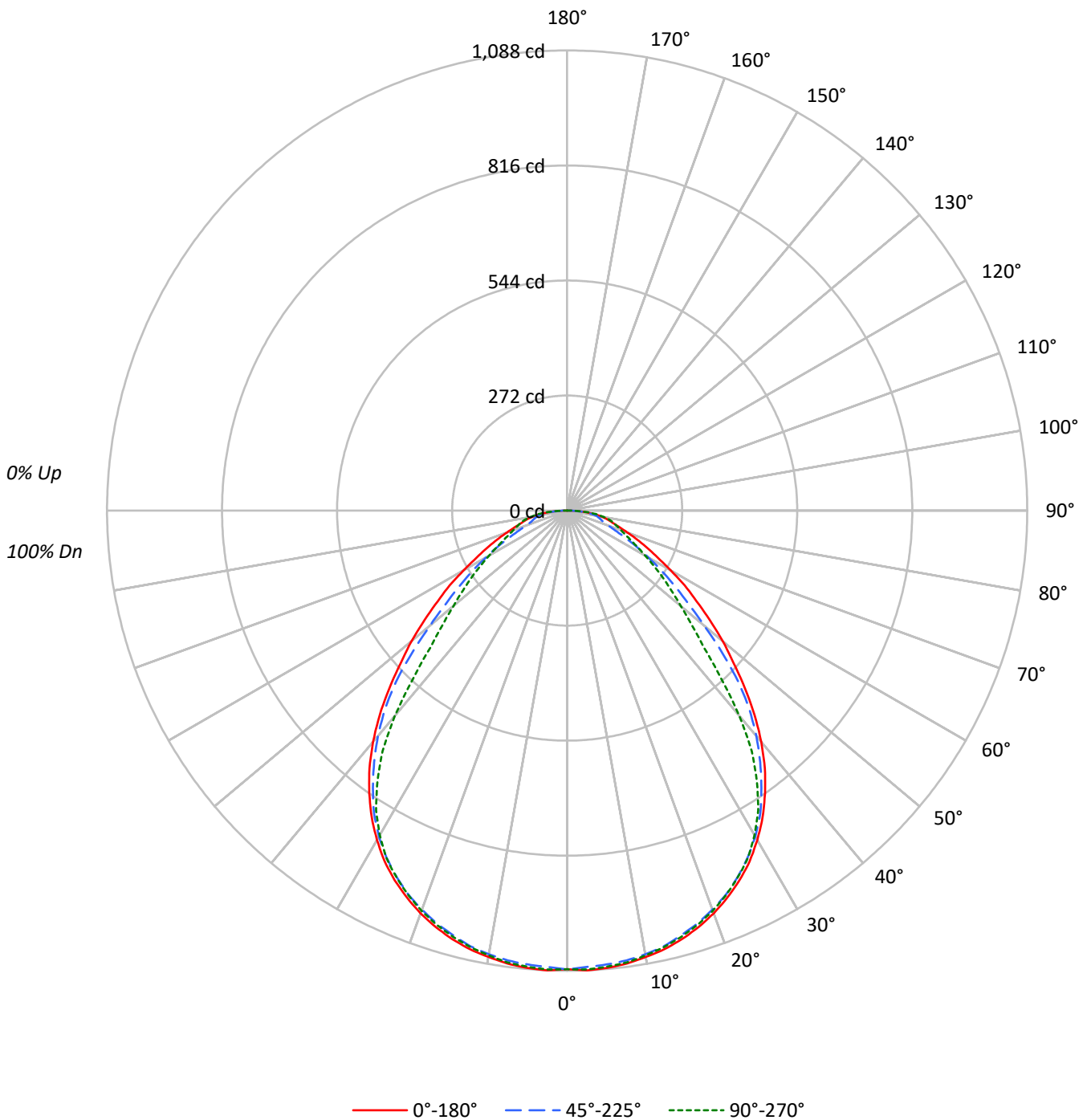
Lumens per Lamp: N/A
Luminaire Lumens: 2366.3 lumens
Efficiency: N/A
Efficacy: 127.9 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.21 / 1.26
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3654	3654	3654
5°	3671	3644	3662
10°	3667	3644	3654
15°	3660	3628	3639
20°	3634	3601	3611
25°	3586	3551	3554
30°	3498	3462	3447
35°	3355	3294	3219
40°	3140	3061	2785
45°	2836	2729	2177
50°	2515	2215	1841
55°	2195	1818	1624
60°	1903	1496	1433
65°	1670	1201	1324
70°	1489	1019	1332
75°	1453	1074	1488
80°	1611	1354	1706
85°	1678	1446	1999



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.9	4.3
10°-20°	294.7	12.5
20°-30°	440.9	18.6
30°-40°	497.7	21.0
40°-50°	422.2	17.8
50°-60°	285.7	12.1
60°-70°	170.5	7.2
70°-80°	106.8	4.5
80°-90°	44.9	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°	838.5	35.4
0°-40°	1336.2	56.5
0°-60°	2044.1	86.4
0°-90°	2366.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2366.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1084	1084	1084	1084	1084	
5°	1085	1082	1077	1085	1083	103
15°	1049	1047	1040	1047	1043	296
25°	964	961	955	960	956	444
35°	816	810	801	794	783	508
45°	595	597	573	491	457	459
55°	374	356	309	277	276	337
65°	209	174	151	160	166	209
75°	112	100	82	109	114	120
85°	43	41	37	48	52	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1084.4	1084.4	1084.4	1084.4	1084.4
2.5°	1088.2	1084.9	1079.9	1086.6	1086.0
5°	1085.4	1082.2	1077.2	1084.9	1082.7
7.5°	1080.5	1077.7	1072.9	1079.9	1077.7
10°	1071.7	1069.5	1065.1	1071.1	1067.9
12.5°	1062.4	1060.7	1055.2	1060.7	1057.4
15°	1049.2	1047.0	1039.9	1047.0	1043.1
17.5°	1032.7	1029.9	1023.9	1029.9	1026.6
20°	1013.4	1010.2	1004.1	1010.2	1006.9
22.5°	990.4	987.6	982.2	987.6	983.2
25°	964.5	961.3	955.2	959.6	955.8
27.5°	934.9	930.5	924.9	928.3	926.1
30°	899.1	893.7	889.8	889.8	885.9
32.5°	860.1	856.3	849.7	845.8	840.8
35°	815.6	810.1	800.8	793.7	782.6
37.5°	767.8	761.2	749.7	731.5	716.7
40°	713.9	705.6	695.8	660.0	633.2
42.5°	656.2	654.5	637.6	576.5	539.1
45°	595.2	597.4	572.7	490.8	456.8
47.5°	533.6	541.3	496.3	416.0	398.5
50°	479.8	482.5	422.6	361.1	351.2
52.5°	424.3	419.8	360.5	317.6	310.5
55°	373.7	356.2	309.4	277.0	276.4
57.5°	329.2	296.7	264.3	240.2	243.0
60°	282.4	246.2	222.0	208.8	212.7
62.5°	241.2	206.6	185.2	181.4	187.9
65°	209.4	173.6	150.6	160.5	166.0
67.5°	179.2	148.9	122.5	146.2	148.4
70°	151.1	129.1	103.4	134.6	135.2
72.5°	128.1	114.3	89.5	122.1	123.7
75°	111.6	99.5	82.5	108.8	114.3
77.5°	97.8	85.1	76.4	94.0	103.4
80°	83.0	68.6	69.8	78.6	87.9
82.5°	63.8	53.3	55.5	64.8	71.4
85°	43.4	41.2	37.4	48.3	51.7
87.5°	23.1	22.0	19.3	27.5	25.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)