

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: P476179

Luminaire Tested: **14GR-LD5-24-F1-UNV-L835-CD1-U**

Issue Date: 02/10/2021



Test Information

Test Method: LM-79-08
Report Number: P476179
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-24-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

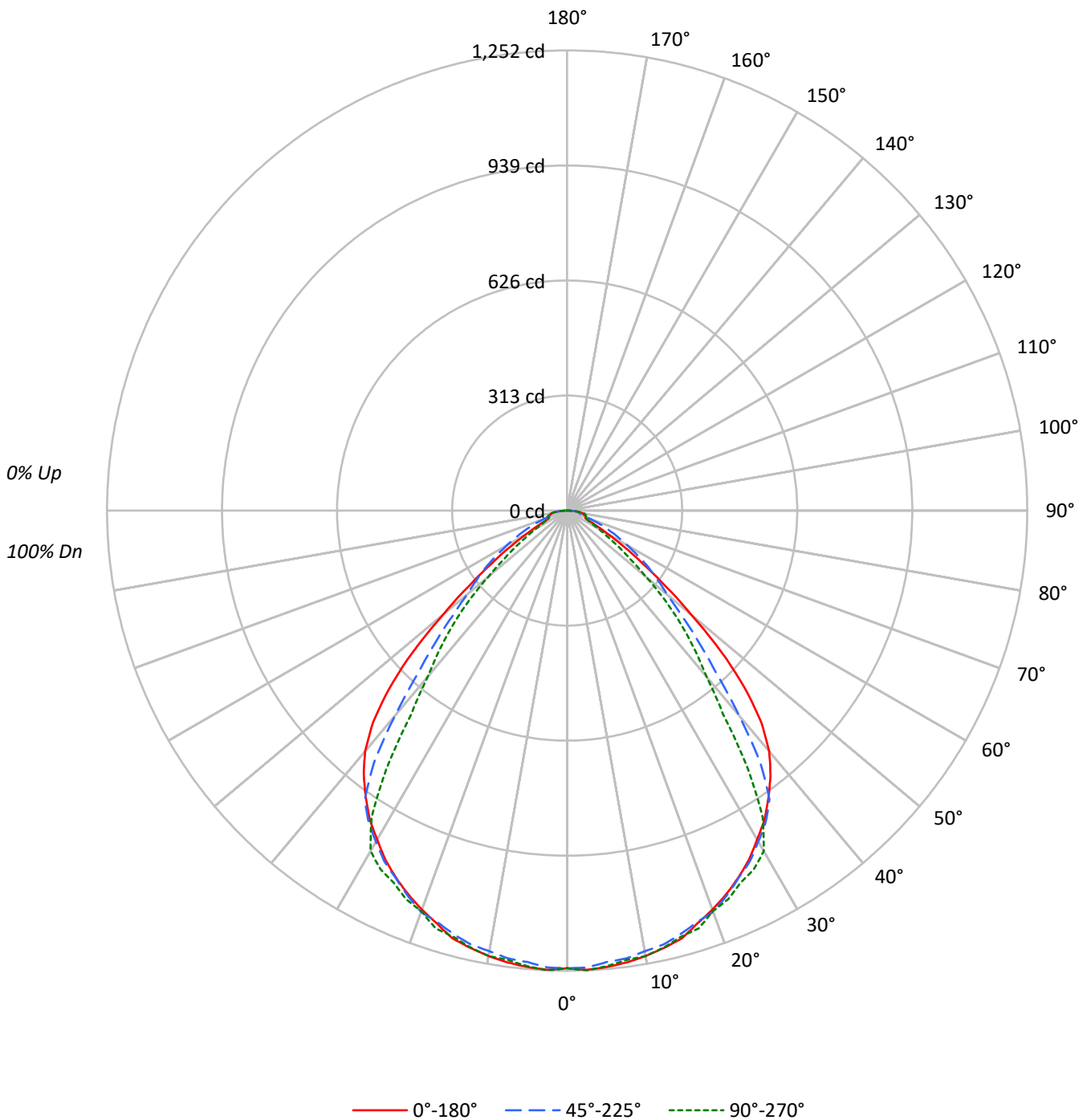
Lumens per Lamp: N/A
Luminaire Lumens: 2394.4 lumens
Efficiency: N/A
Efficacy: 129.4 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.24 / 1.2
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	3351	3351	3351
5°	3367	3331	3360
10°	3362	3326	3362
15°	3357	3324	3342
20°	3309	3328	3320
25°	3271	3276	3315
30°	3211	3232	3324
35°	3135	3153	2818
40°	3004	2557	2072
45°	2607	1928	1673
50°	1852	1482	1173
55°	1176	1270	786
60°	693	1017	519
65°	409	794	401
70°	422	538	411
75°	516	418	544
80°	665	519	727
85°	704	704	704



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.1	4.9
10°-20°	338.1	14.1
20°-30°	511.3	21.4
30°-40°	569.4	23.8
40°-50°	416.8	17.4
50°-60°	229.7	9.6
60°-70°	117.5	4.9
70°-80°	66.8	2.8
80°-90°	26.6	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°	967.6	40.4
0°-40°	1537.0	64.2
0°-60°	2183.5	91.2
0°-90°	2394.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2394.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1245	1245	1245	1245	1245	
5°	1247	1247	1233	1241	1244	118
15°	1205	1192	1193	1208	1200	339
25°	1102	1099	1103	1122	1117	507
35°	954	956	960	894	858	596
45°	685	631	507	461	440	515
55°	251	295	271	232	168	234
65°	64	153	125	119	63	74
75°	50	86	40	76	52	52
85°	23	28	23	31	23	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1245.3	1245.3	1245.3	1245.3	1245.3
2.5°	1250.6	1250.6	1243.9	1252.0	1252.0
5°	1246.6	1246.6	1233.2	1241.2	1243.9
7.5°	1239.9	1239.9	1229.2	1235.9	1233.2
10°	1230.5	1223.8	1217.1	1235.9	1230.5
12.5°	1218.4	1205.0	1209.1	1207.7	1217.1
15°	1205.0	1191.6	1193.0	1207.7	1199.7
17.5°	1178.2	1179.6	1174.2	1184.9	1191.6
20°	1155.4	1159.5	1162.1	1168.9	1159.5
22.5°	1130.0	1131.3	1134.0	1143.4	1144.7
25°	1101.8	1099.1	1103.2	1121.9	1116.6
27.5°	1071.0	1069.7	1076.4	1092.4	1100.5
30°	1033.5	1038.8	1040.2	1069.7	1069.7
32.5°	998.6	998.6	1005.3	1020.1	990.6
35°	954.4	955.7	959.7	894.1	857.9
37.5°	908.8	904.8	863.2	743.9	695.7
40°	855.2	845.8	727.9	620.6	589.8
42.5°	781.5	753.3	600.5	536.2	513.4
45°	685.0	631.3	506.7	461.1	439.7
47.5°	569.7	520.1	420.9	390.1	360.6
50°	442.3	431.6	353.9	327.1	280.1
52.5°	336.4	357.9	311.0	276.1	215.8
55°	250.7	294.9	270.8	231.9	167.6
57.5°	183.6	245.3	227.9	197.0	126.0
60°	128.7	207.8	189.0	166.2	96.5
62.5°	91.1	179.6	155.5	142.1	73.7
65°	64.3	152.8	124.7	119.3	63.0
67.5°	53.6	128.7	95.2	105.9	53.6
70°	53.6	107.2	68.4	93.8	52.3
72.5°	53.6	93.8	50.9	85.8	55.0
75°	49.6	85.8	40.2	76.4	52.3
77.5°	45.6	72.4	34.9	65.7	50.9
80°	42.9	52.3	33.5	53.6	46.9
82.5°	34.9	37.5	30.8	41.6	36.2
85°	22.8	28.1	22.8	30.8	22.8
87.5°	10.7	14.7	10.7	13.4	9.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)