

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: P476197

Luminaire Tested: **14GR-LD5-24-F1-UNV-L850-CD1-U**

Issue Date: 02/10/2021



**Test Information**

Test Method: LM-79-08  
Report Number: P476197  
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-L850-CD1-U  
Description: GR 1'X4' LED TROFFER w/ F1 LENS  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

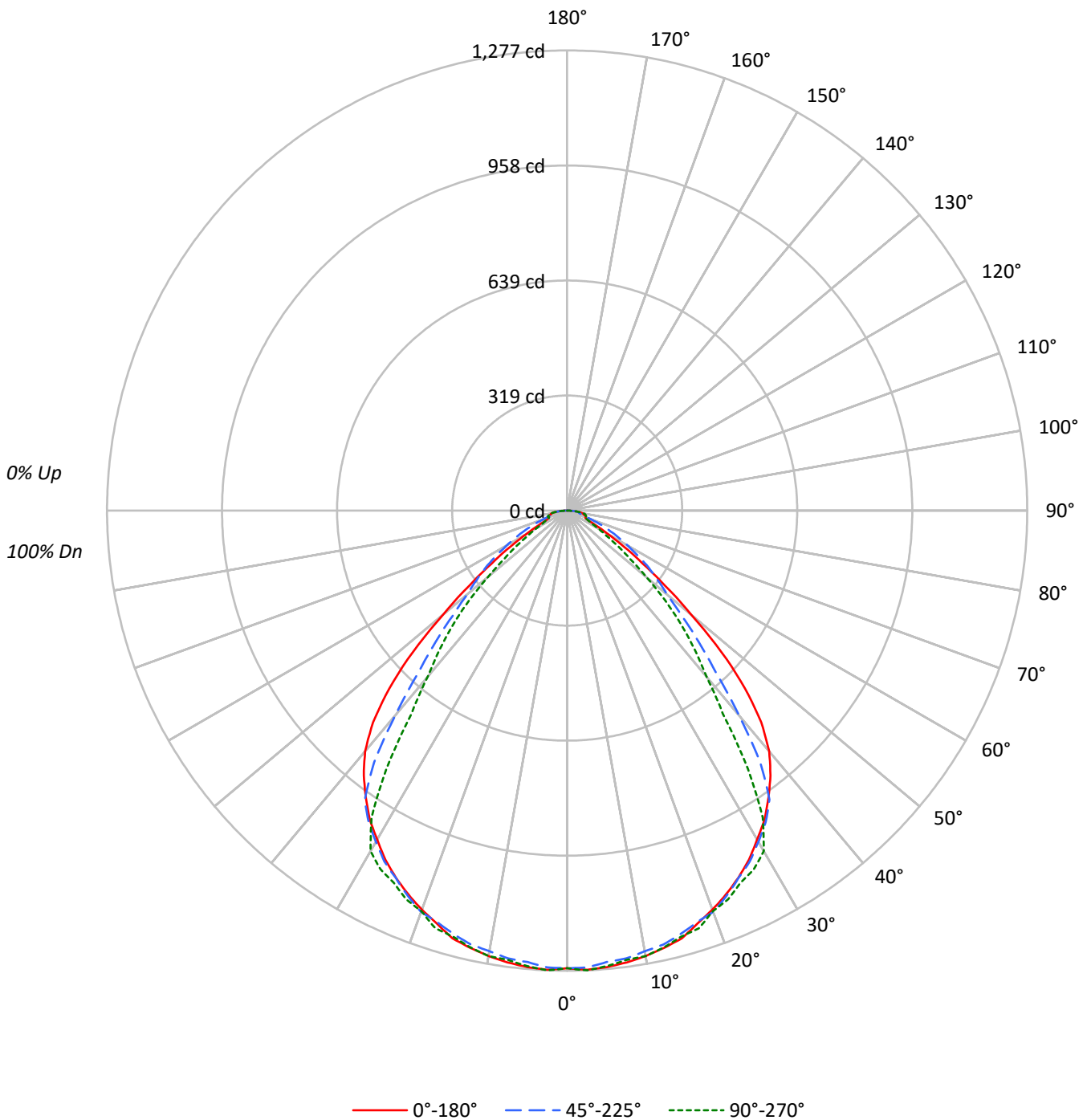
Lumens per Lamp: N/A  
Luminaire Lumens: 2442.3 lumens  
Efficiency: N/A  
Efficacy: 132.0 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.24 / 1.2  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

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°	3418	3418	3418
5°	3435	3398	3427
10°	3430	3392	3430
15°	3424	3390	3409
20°	3375	3395	3387
25°	3337	3341	3382
30°	3275	3297	3390
35°	3198	3216	2874
40°	3064	2608	2113
45°	2659	1967	1707
50°	1889	1511	1196
55°	1200	1296	802
60°	707	1038	530
65°	418	810	409
70°	430	548	419
75°	526	426	554
80°	679	530	742
85°	716	716	716



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	120.5	4.9
10°-20°	344.9	14.1
20°-30°	521.6	21.4
30°-40°	580.8	23.8
40°-50°	425.1	17.4
50°-60°	234.3	9.6
60°-70°	119.8	4.9
70°-80°	68.2	2.8
80°-90°	27.1	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°	986.9	40.4
0°-40°	1567.7	64.2
0°-60°	2227.2	91.2
0°-90°	2442.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2442.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1270	1270	1270	1270	1270	
5°	1272	1272	1258	1266	1269	121
15°	1229	1216	1217	1232	1224	345
25°	1124	1121	1125	1144	1139	517
35°	974	975	979	912	875	607
45°	699	644	517	470	448	526
55°	256	301	276	236	171	239
65°	66	156	127	122	64	76
75°	51	88	41	78	53	53
85°	23	29	23	31	23	25
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1270.2	1270.2	1270.2	1270.2	1270.2
2.5°	1275.6	1275.6	1268.8	1277.0	1277.0
5°	1271.5	1271.5	1257.9	1266.1	1268.8
7.5°	1264.7	1264.7	1253.8	1260.6	1257.9
10°	1255.1	1248.3	1241.4	1260.6	1255.1
12.5°	1242.8	1229.1	1233.2	1231.9	1241.4
15°	1229.1	1215.5	1216.8	1231.9	1223.7
17.5°	1201.8	1203.2	1197.7	1208.6	1215.5
20°	1178.6	1182.7	1185.4	1192.2	1182.7
22.5°	1152.6	1153.9	1156.7	1166.3	1167.6
25°	1123.9	1121.1	1125.2	1144.4	1138.9
27.5°	1092.4	1091.1	1097.9	1114.3	1122.5
30°	1054.1	1059.6	1061.0	1091.1	1091.1
32.5°	1018.6	1018.6	1025.4	1040.5	1010.4
35°	973.5	974.8	978.9	911.9	875.0
37.5°	927.0	922.9	880.5	758.8	709.6
40°	872.3	862.7	742.4	633.0	601.6
42.5°	797.1	768.4	612.5	546.9	523.7
45°	698.7	644.0	516.8	470.3	448.5
47.5°	581.1	530.5	429.3	397.9	367.8
50°	451.2	440.2	360.9	333.6	285.8
52.5°	343.2	365.1	317.2	281.7	220.1
55°	255.7	300.8	276.2	236.5	170.9
57.5°	187.3	250.2	232.4	201.0	128.5
60°	131.3	211.9	192.8	169.5	98.4
62.5°	93.0	183.2	158.6	144.9	75.2
65°	65.6	155.9	127.2	121.7	64.3
67.5°	54.7	131.3	97.1	108.0	54.7
70°	54.7	109.4	69.7	95.7	53.3
72.5°	54.7	95.7	52.0	87.5	56.1
75°	50.6	87.5	41.0	77.9	53.3
77.5°	46.5	73.8	35.5	67.0	52.0
80°	43.8	53.3	34.2	54.7	47.9
82.5°	35.5	38.3	31.4	42.4	36.9
85°	23.2	28.7	23.2	31.4	23.2
87.5°	10.9	15.0	10.9	13.7	9.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)