

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: P475521

Luminaire Tested: **24GR-LD5-30-F1-UNV-L830-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475521  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-30-F1-UNV-L830-CD1-U  
Description: GR 2'X4' LED TROFFER w/ F1 LENS  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

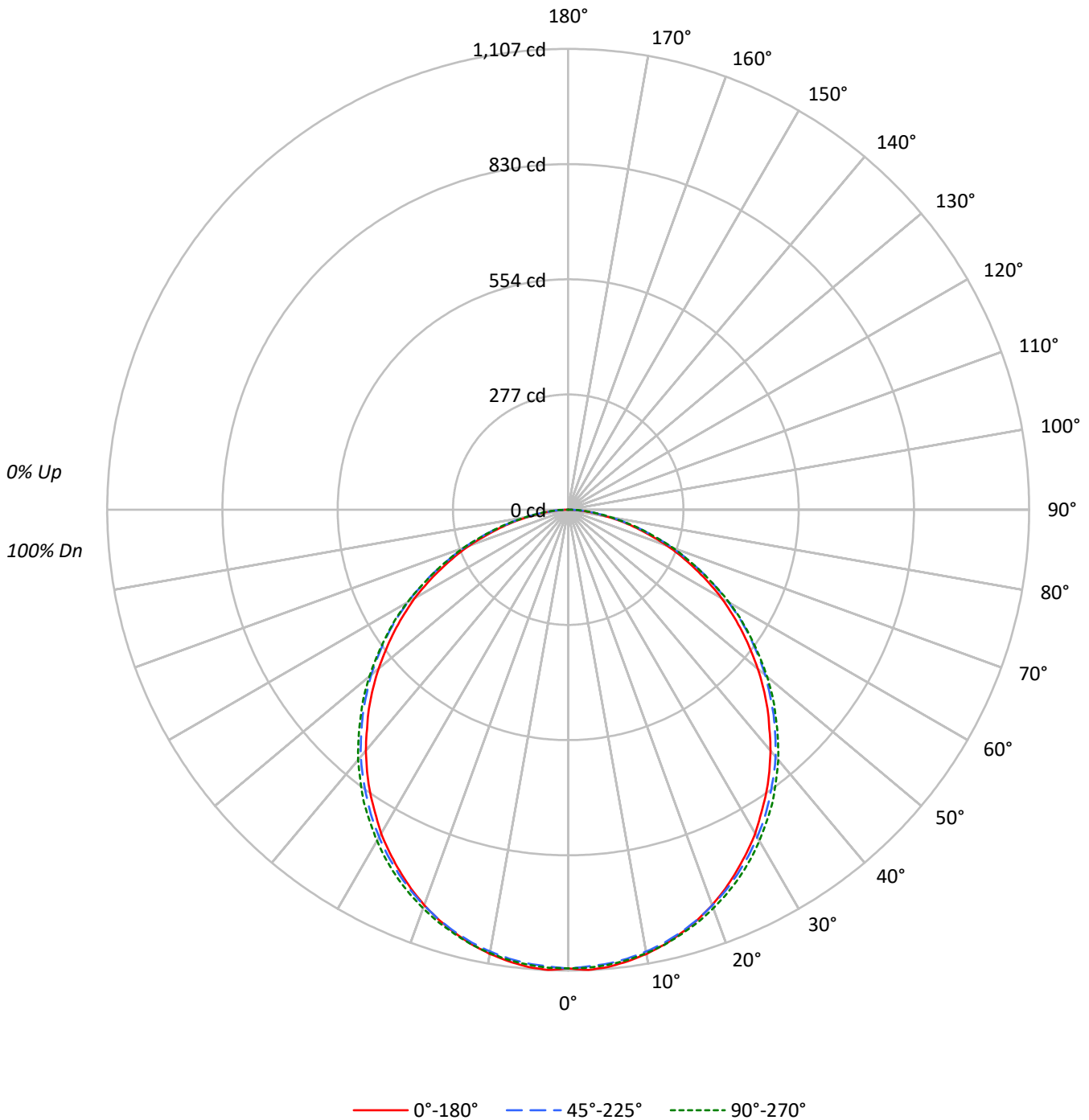
Lumens per Lamp: N/A  
Luminaire Lumens: 2961.5 lumens  
Efficiency: N/A  
Efficacy: 139.0 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.24 / 1.34  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 21.3  
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	109	104	100	96	106	102	98	95	98	95	92		94	91	89		90	88	86	84
2	99	91	84	79	97	89	83	78	86	81	76		82	78	74		79	76	73	70
3	91	80	72	66	88	79	71	65	76	69	64		73	67	63		70	66	62	60
4	83	71	62	56	81	70	62	55	67	60	55		65	59	54		63	58	53	51
5	76	64	55	48	74	63	54	48	60	53	47		58	52	47		57	51	46	44
6	71	57	48	42	69	56	48	42	55	47	42		53	46	41		51	45	41	39
7	65	52	43	37	64	51	43	37	50	42	37		48	42	37		47	41	36	34
8	61	48	39	33	59	47	39	33	46	38	33		44	38	33		43	37	33	31
9	57	44	35	30	56	43	35	30	42	35	30		41	34	30		40	34	29	28
10	53	40	32	27	52	40	32	27	39	32	27		38	31	27		37	31	27	25

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

	0°	45°	90°
0°	1483	1483	1483
5°	1489	1479	1482
10°	1480	1473	1478
15°	1466	1463	1469
20°	1447	1449	1459
25°	1422	1431	1446
30°	1396	1411	1427
35°	1362	1385	1406
40°	1328	1361	1378
45°	1288	1327	1341
50°	1244	1293	1304
55°	1196	1249	1256
60°	1147	1197	1202
65°	1074	1125	1123
70°	995	1041	1051
75°	882	933	939
80°	734	788	806
85°	556	610	685



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	104.1	3.5
10°-20°	296.5	10.0
20°-30°	444.3	15.0
30°-40°	527.1	17.8
40°-50°	535.3	18.1
50°-60°	471.4	15.9
60°-70°	346.4	11.7
70°-80°	188.4	6.4
80°-90°	48.0	1.6
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°	844.9	28.5
0°-40°	1372.0	46.3
0°-60°	2378.7	80.3
0°-90°	2961.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2961.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1102	1102	1102	1102	1102	
5°	1102	1098	1095	1095	1098	105
15°	1052	1050	1050	1052	1055	297
25°	958	959	964	970	974	441
35°	830	834	843	852	856	519
45°	677	682	698	706	705	522
55°	510	517	532	537	535	456
65°	338	343	354	356	353	334
75°	170	173	180	180	181	180
85°	36	37	40	43	44	44
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1101.9	1101.9	1101.9	1101.9	1101.9
2.5°	1106.6	1102.2	1098.4	1098.4	1101.0
5°	1102.5	1097.9	1094.7	1094.7	1097.6
7.5°	1094.1	1090.3	1087.7	1087.7	1090.9
10°	1083.6	1079.8	1077.8	1078.1	1081.6
12.5°	1069.7	1066.2	1065.3	1065.9	1070.3
15°	1052.3	1050.2	1050.2	1051.7	1054.9
17.5°	1032.8	1030.8	1032.2	1034.2	1038.3
20°	1010.7	1009.3	1011.9	1015.1	1018.9
22.5°	985.5	984.9	989.2	993.6	997.4
25°	957.6	958.7	964.0	969.5	973.8
27.5°	928.8	930.0	937.2	943.0	947.4
30°	898.3	898.9	908.2	915.2	918.4
32.5°	862.9	867.5	877.4	884.1	887.0
35°	829.5	834.1	843.4	851.9	856.2
37.5°	793.2	797.2	809.4	818.5	819.9
40°	756.0	759.8	774.9	782.4	784.8
42.5°	715.3	722.6	736.3	743.8	745.3
45°	677.0	682.5	697.6	705.8	704.9
47.5°	636.1	642.2	657.0	664.8	666.3
50°	594.5	601.5	617.5	622.7	623.0
52.5°	551.0	560.0	574.5	581.5	579.1
55°	509.7	517.0	532.4	537.3	535.3
57.5°	467.3	475.4	489.7	492.3	492.6
60°	426.1	432.8	444.9	447.6	446.7
62.5°	380.8	387.4	398.5	401.1	399.1
65°	337.5	343.0	353.5	356.1	352.6
67.5°	294.5	300.0	308.2	312.2	308.4
70°	253.0	257.3	264.6	266.9	267.2
72.5°	208.8	216.7	221.9	221.6	220.7
75°	169.6	173.1	179.5	180.1	180.7
77.5°	132.1	133.0	139.7	141.4	140.3
80°	94.7	97.9	101.7	103.7	104.0
82.5°	62.4	64.8	68.0	71.4	71.4
85°	36.0	36.9	39.5	43.0	44.4
87.5°	14.5	16.0	18.6	21.2	21.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)