

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: P475853

Luminaire Tested: **24GR-LD5-38-FGW080-UNV-L840-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475853  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-38-FGW080-UNV-L840-CD1-U  
Description: GR 2'X4' LED TROFFER w/ FGW080 LENS  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3302.4 lumens  
Efficiency: N/A  
Efficacy: 124.2 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.25 / 1.36  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

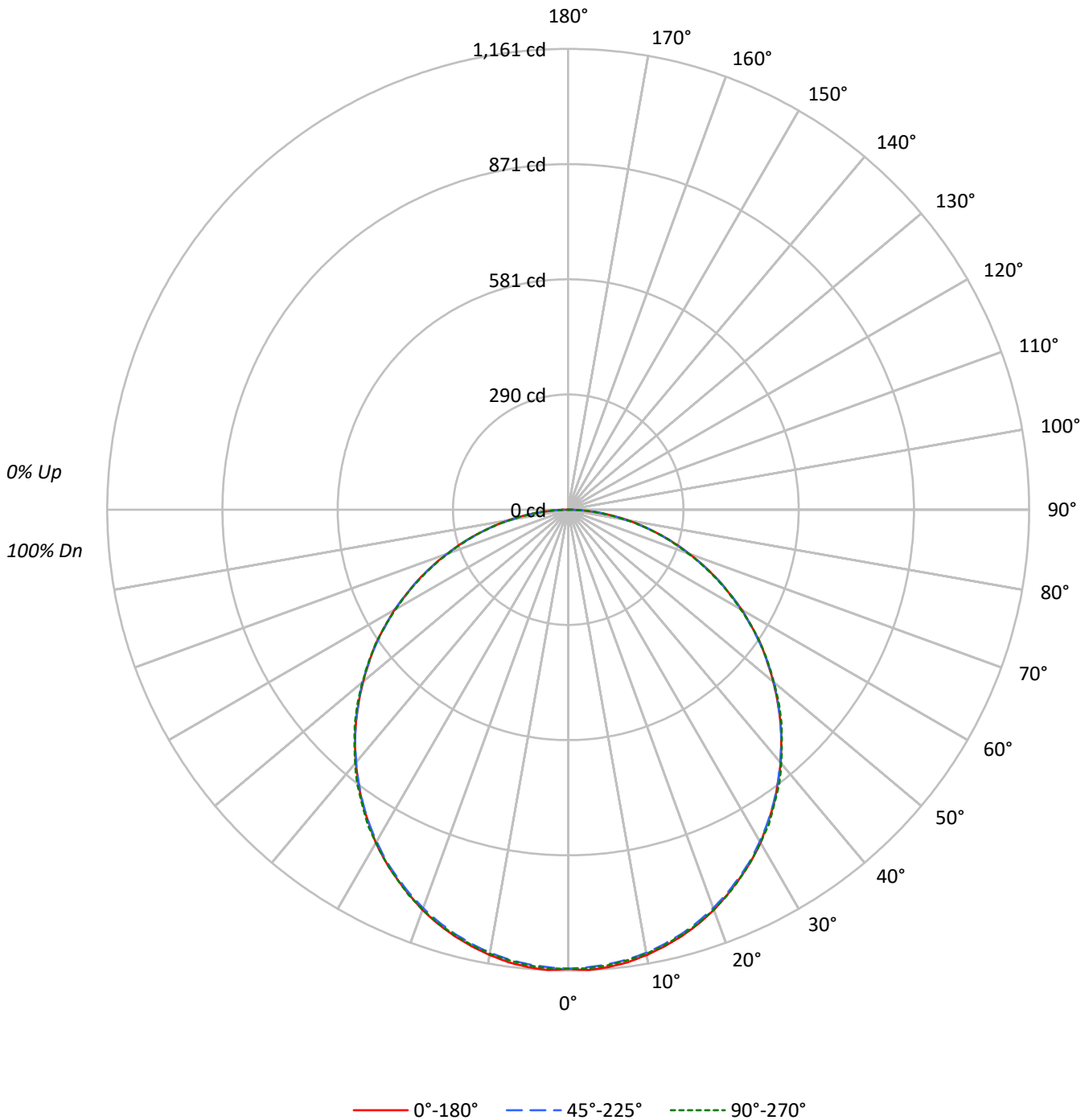
Input Watts (W): 26.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	108	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	85	79	74	81	77	73	78	74	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	52	49
5	75	62	53	47	73	61	53	46	59	52	46	57	50	45	55	49	45	43
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	35	47	40	35	46	40	35	33
8	60	46	38	32	58	46	38	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

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

	0°	45°	90°
0°	1556	1556	1556
5°	1562	1553	1556
10°	1556	1549	1552
15°	1548	1540	1545
20°	1536	1529	1535
25°	1520	1515	1521
30°	1505	1499	1505
35°	1484	1481	1487
40°	1463	1459	1466
45°	1439	1439	1445
50°	1411	1415	1415
55°	1391	1386	1390
60°	1360	1359	1350
65°	1321	1320	1311
70°	1275	1272	1264
75°	1226	1222	1224
80°	1170	1147	1152
85°	1039	1039	1050



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	109.4	3.3
10°-20°	312.5	9.5
20°-30°	471.1	14.3
30°-40°	564.5	17.1
40°-50°	583.3	17.7
50°-60°	528.2	16.0
60°-70°	409.2	12.4
70°-80°	248.2	7.5
80°-90°	76.2	2.3
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°	892.9	27.0
0°-40°	1457.5	44.1
0°-60°	2568.9	77.8
0°-90°	3302.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3302.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1157	1157	1157	1157	1157	
5°	1157	1152	1150	1150	1152	110
15°	1111	1108	1106	1107	1109	313
25°	1024	1021	1021	1023	1024	472
35°	903	900	902	903	905	565
45°	756	755	756	757	759	583
55°	593	590	591	592	593	528
65°	415	413	414	413	412	410
75°	236	236	235	233	235	250
85°	67	68	67	66	68	77
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1156.7	1156.7	1156.7	1156.7	1156.7
2.5°	1160.8	1156.7	1153.7	1153.7	1156.3
5°	1156.7	1152.2	1149.6	1149.6	1152.2
7.5°	1150.0	1145.1	1142.9	1142.9	1145.1
10°	1139.1	1135.4	1133.5	1133.5	1135.8
12.5°	1126.4	1123.1	1120.8	1121.2	1123.4
15°	1111.1	1107.7	1105.9	1106.6	1108.8
17.5°	1093.2	1089.8	1088.3	1089.4	1092.0
20°	1073.0	1068.9	1068.1	1069.2	1072.2
22.5°	1048.7	1046.1	1045.7	1047.6	1050.2
25°	1023.6	1021.4	1020.6	1022.9	1024.4
27.5°	997.9	993.7	995.2	995.6	997.9
30°	968.7	965.0	965.0	966.5	968.7
32.5°	935.1	932.8	934.7	936.6	939.9
35°	903.3	899.9	901.8	903.3	905.2
37.5°	867.4	866.7	867.0	869.3	872.3
40°	832.7	830.4	830.4	833.4	834.9
42.5°	794.5	792.7	794.2	795.7	796.4
45°	756.1	754.6	756.1	757.2	759.4
47.5°	714.9	715.3	715.7	716.4	718.7
50°	674.2	675.7	676.1	677.6	676.1
52.5°	632.0	632.3	633.8	634.2	634.6
55°	593.1	589.7	590.9	591.6	592.7
57.5°	547.5	546.4	546.4	547.5	548.3
60°	505.3	503.0	504.9	502.7	501.5
62.5°	458.2	458.9	459.7	459.3	457.4
65°	414.8	412.6	414.5	413.3	411.8
67.5°	369.2	367.4	368.1	367.7	367.4
70°	324.0	324.0	323.3	321.4	321.4
72.5°	281.4	279.2	279.9	277.7	277.7
75°	235.8	235.8	235.1	232.8	235.4
77.5°	193.2	192.1	191.3	189.9	189.9
80°	151.0	148.4	148.0	148.0	148.7
82.5°	109.5	107.6	106.9	106.9	107.3
85°	67.3	68.4	67.3	66.1	68.0
87.5°	31.8	30.3	30.3	31.4	32.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)