

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: P475854

Luminaire Tested: **24GR-LD5-42-FGW080-UNV-L840-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475854  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-42-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: 3714.7 lumens  
Efficiency: N/A  
Efficacy: 122.6 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

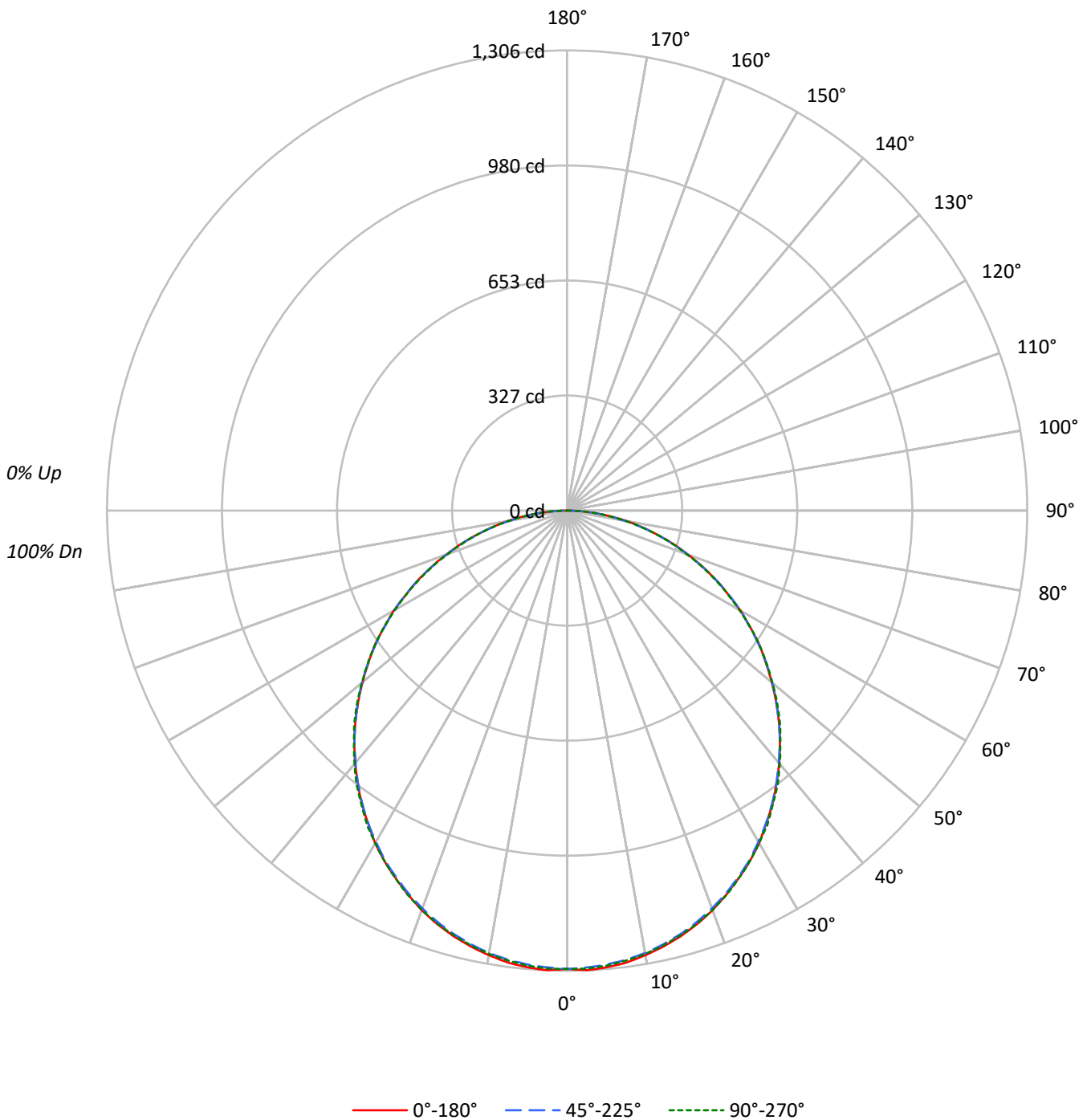
Input Watts (W): 30.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	1751	1751	1751
5°	1757	1746	1750
10°	1751	1742	1745
15°	1741	1733	1737
20°	1728	1720	1727
25°	1709	1704	1711
30°	1693	1686	1693
35°	1669	1666	1672
40°	1645	1641	1649
45°	1618	1618	1625
50°	1587	1592	1592
55°	1565	1559	1564
60°	1530	1528	1518
65°	1486	1484	1475
70°	1434	1430	1422
75°	1379	1375	1377
80°	1316	1290	1296
85°	1169	1169	1181



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	123.0	3.3
10°-20°	351.5	9.5
20°-30°	529.9	14.3
30°-40°	635.0	17.1
40°-50°	656.1	17.7
50°-60°	594.1	16.0
60°-70°	460.2	12.4
70°-80°	279.1	7.5
80°-90°	85.7	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°	1004.4	27.0
0°-40°	1639.4	44.1
0°-60°	2889.6	77.8
0°-90°	3714.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3714.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1301	1301	1301	1301	1301	
5°	1301	1296	1293	1293	1296	124
15°	1250	1246	1244	1245	1247	353
25°	1151	1149	1148	1151	1152	531
35°	1016	1012	1014	1016	1018	635
45°	850	849	850	852	854	656
55°	667	663	665	666	667	594
65°	467	464	466	465	463	461
75°	265	265	264	262	265	281
85°	76	77	76	74	76	87
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1301.1	1301.1	1301.1	1301.1	1301.1
2.5°	1305.7	1301.1	1297.7	1297.7	1300.7
5°	1301.1	1296.0	1293.1	1293.1	1296.0
7.5°	1293.5	1288.1	1285.5	1285.5	1288.1
10°	1281.3	1277.1	1275.0	1275.0	1277.5
12.5°	1267.0	1263.2	1260.7	1261.1	1263.7
15°	1249.8	1246.0	1243.9	1244.8	1247.3
17.5°	1229.6	1225.8	1224.2	1225.4	1228.4
20°	1206.9	1202.3	1201.5	1202.7	1206.1
22.5°	1179.6	1176.6	1176.2	1178.3	1181.3
25°	1151.4	1148.9	1148.1	1150.6	1152.3
27.5°	1122.4	1117.8	1119.5	1119.9	1122.4
30°	1089.6	1085.4	1085.4	1087.1	1089.6
32.5°	1051.8	1049.3	1051.4	1053.5	1057.3
35°	1016.1	1012.3	1014.4	1016.1	1018.2
37.5°	975.7	974.9	975.3	977.8	981.2
40°	936.6	934.1	934.1	937.5	939.1
42.5°	893.7	891.6	893.3	895.0	895.8
45°	850.4	848.8	850.4	851.7	854.2
47.5°	804.2	804.6	805.0	805.9	808.4
50°	758.4	760.1	760.5	762.2	760.5
52.5°	710.9	711.3	713.0	713.4	713.8
55°	667.1	663.4	664.6	665.5	666.7
57.5°	615.9	614.6	614.6	615.9	616.7
60°	568.4	565.8	567.9	565.4	564.2
62.5°	515.4	516.2	517.1	516.6	514.5
65°	466.6	464.1	466.2	464.9	463.3
67.5°	415.3	413.2	414.1	413.7	413.2
70°	364.5	364.5	363.6	361.5	361.5
72.5°	316.5	314.0	314.9	312.3	312.3
75°	265.3	265.3	264.4	261.9	264.8
77.5°	217.3	216.1	215.2	213.6	213.6
80°	169.8	166.9	166.5	166.5	167.3
82.5°	123.2	121.1	120.2	120.2	120.6
85°	75.7	76.9	75.7	74.4	76.5
87.5°	35.7	34.1	34.1	35.3	36.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)