

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: P475839

Luminaire Tested: **24GR-LD5-42-FGW080-UNV-L835-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475839  
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-L835-CD1-U  
Description: GR 2'X4' LED TROFFER w/ FGW080 LENS  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3645.4 lumens  
Efficiency: N/A  
Efficacy: 120.3 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

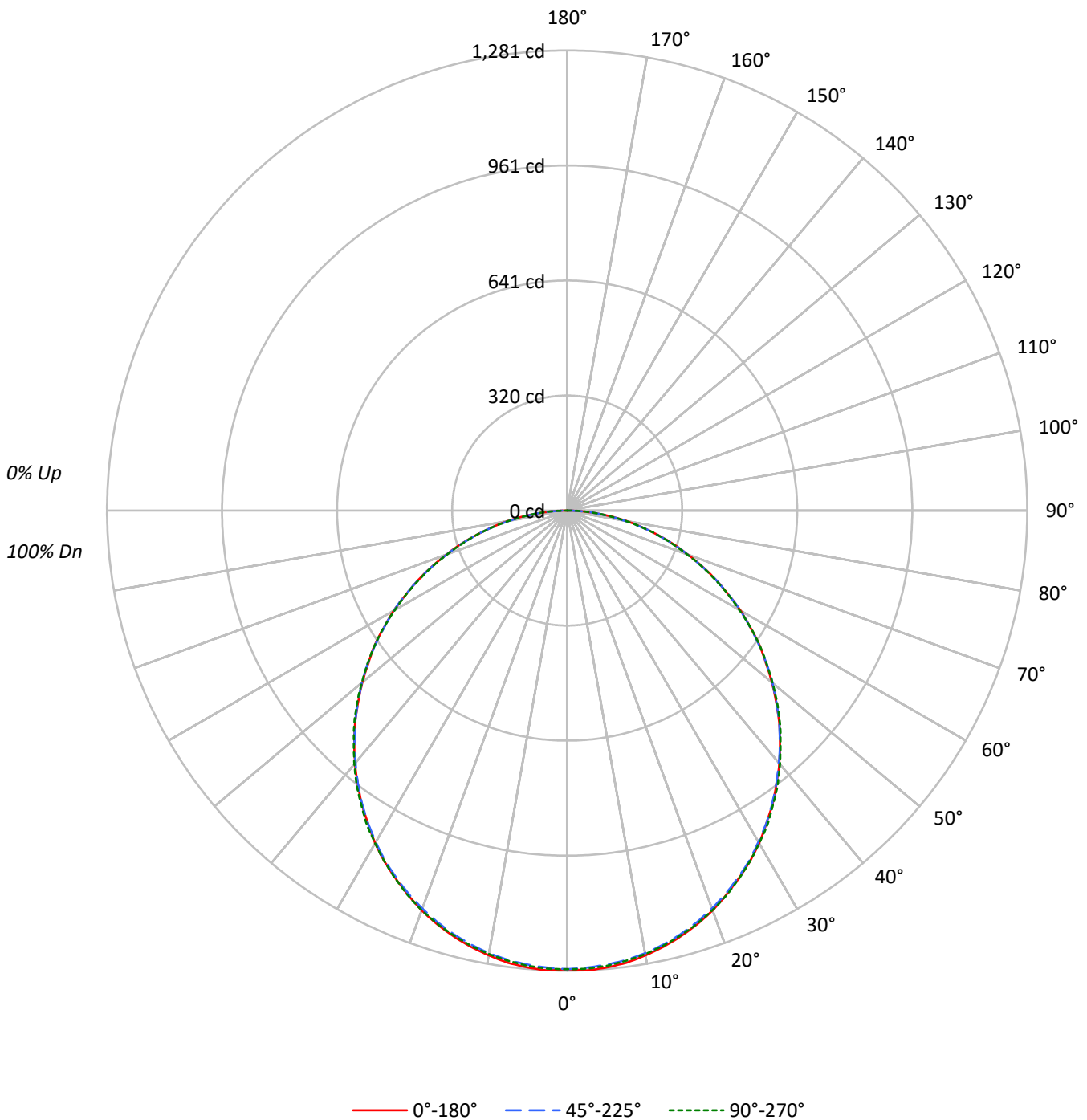
Input Watts (W): 30.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1718	1718	1718
5°	1724	1714	1718
10°	1718	1709	1713
15°	1708	1700	1705
20°	1696	1688	1695
25°	1678	1673	1679
30°	1661	1655	1661
35°	1638	1635	1641
40°	1614	1610	1619
45°	1588	1588	1595
50°	1558	1562	1562
55°	1536	1530	1535
60°	1501	1500	1490
65°	1458	1457	1447
70°	1407	1404	1396
75°	1353	1349	1351
80°	1292	1266	1272
85°	1147	1147	1159



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	120.8	3.3
10°-20°	344.9	9.5
20°-30°	520.0	14.3
30°-40°	623.2	17.1
40°-50°	643.8	17.7
50°-60°	583.1	16.0
60°-70°	451.7	12.4
70°-80°	273.9	7.5
80°-90°	84.1	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°	985.7	27.0
0°-40°	1608.8	44.1
0°-60°	2835.7	77.8
0°-90°	3645.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3645.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1277	1277	1277	1277	1277	
5°	1277	1272	1269	1269	1272	121
15°	1226	1223	1221	1222	1224	346
25°	1130	1128	1127	1129	1131	521
35°	997	993	996	997	999	623
45°	835	833	835	836	838	643
55°	655	651	652	653	654	583
65°	458	455	458	456	455	453
75°	260	260	260	257	260	276
85°	74	76	74	73	75	85
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1276.8	1276.8	1276.8	1276.8	1276.8
2.5°	1281.4	1276.8	1273.5	1273.5	1276.4
5°	1276.8	1271.9	1269.0	1269.0	1271.9
7.5°	1269.4	1264.0	1261.6	1261.6	1264.0
10°	1257.4	1253.3	1251.2	1251.2	1253.7
12.5°	1243.4	1239.7	1237.2	1237.6	1240.1
15°	1226.5	1222.8	1220.7	1221.5	1224.0
17.5°	1206.7	1203.0	1201.3	1202.6	1205.5
20°	1184.4	1179.9	1179.1	1180.3	1183.6
22.5°	1157.6	1154.7	1154.3	1156.4	1159.2
25°	1130.0	1127.5	1126.7	1129.1	1130.8
27.5°	1101.5	1097.0	1098.6	1099.0	1101.5
30°	1069.3	1065.2	1065.2	1066.8	1069.3
32.5°	1032.2	1029.7	1031.8	1033.8	1037.5
35°	997.1	993.4	995.5	997.1	999.2
37.5°	957.5	956.7	957.1	959.6	962.9
40°	919.1	916.7	916.7	920.0	921.6
42.5°	877.1	875.0	876.7	878.3	879.1
45°	834.6	832.9	834.6	835.8	838.3
47.5°	789.2	789.6	790.0	790.8	793.3
50°	744.2	745.9	746.3	747.9	746.3
52.5°	697.6	698.0	699.7	700.1	700.5
55°	654.7	651.0	652.2	653.1	654.3
57.5°	604.4	603.1	603.1	604.4	605.2
60°	557.8	555.3	557.3	554.9	553.6
62.5°	505.8	506.6	507.4	507.0	505.0
65°	457.9	455.4	457.5	456.3	454.6
67.5°	407.6	405.5	406.4	405.9	405.5
70°	357.7	357.7	356.9	354.8	354.8
72.5°	310.6	308.2	309.0	306.5	306.5
75°	260.3	260.3	259.5	257.0	259.9
77.5°	213.3	212.0	211.2	209.6	209.6
80°	166.7	163.8	163.4	163.4	164.2
82.5°	120.9	118.8	118.0	118.0	118.4
85°	74.3	75.5	74.3	73.0	75.1
87.5°	35.1	33.4	33.4	34.7	35.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)