

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: P475869

Luminaire Tested: **24GR-LD5-42-FGW080-UNV-L850-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475869
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-L850-CD1-U
Description: GR 2'X4' LED TROFFER w/ FGW080 LENS
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3718.3 lumens
Efficiency: N/A
Efficacy: 122.7 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

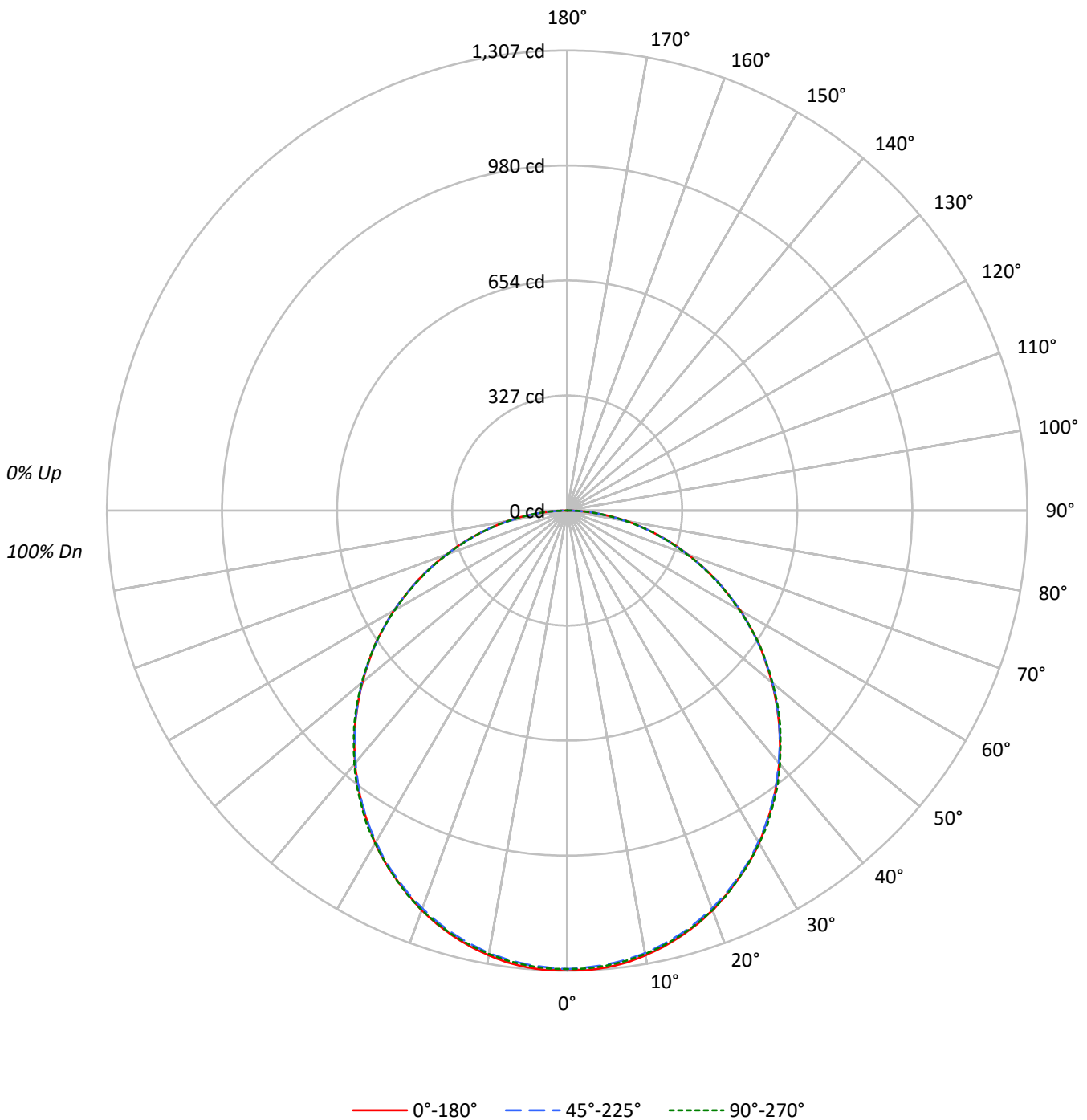
Input Watts (W): 30.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1752	1752	1752
5°	1759	1748	1752
10°	1752	1744	1747
15°	1743	1734	1739
20°	1730	1722	1729
25°	1711	1706	1712
30°	1695	1688	1695
35°	1671	1668	1674
40°	1647	1642	1651
45°	1620	1620	1627
50°	1589	1593	1593
55°	1567	1561	1566
60°	1531	1530	1520
65°	1487	1486	1476
70°	1435	1432	1424
75°	1380	1376	1378
80°	1317	1291	1298
85°	1169	1169	1183



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.2	3.3
10°-20°	351.8	9.5
20°-30°	530.4	14.3
30°-40°	635.6	17.1
40°-50°	656.7	17.7
50°-60°	594.7	16.0
60°-70°	460.7	12.4
70°-80°	279.4	7.5
80°-90°	85.8	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°	1005.4	27.0
0°-40°	1641.0	44.1
0°-60°	2892.4	77.8
0°-90°	3718.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3718.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1302	1302	1302	1302	1302	
5°	1302	1297	1294	1294	1297	124
15°	1251	1247	1245	1246	1248	353
25°	1153	1150	1149	1152	1153	531
35°	1017	1013	1015	1017	1019	636
45°	851	850	851	852	855	656
55°	668	664	665	666	667	595
65°	467	465	467	465	464	462
75°	266	266	265	262	265	282
85°	76	77	76	74	77	87
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1302.4	1302.4	1302.4	1302.4	1302.4
2.5°	1307.0	1302.4	1299.0	1299.0	1301.9
5°	1302.4	1297.3	1294.4	1294.4	1297.3
7.5°	1294.8	1289.3	1286.8	1286.8	1289.3
10°	1282.6	1278.4	1276.3	1276.3	1278.8
12.5°	1268.3	1264.5	1262.0	1262.4	1264.9
15°	1251.0	1247.2	1245.1	1246.0	1248.5
17.5°	1230.8	1227.0	1225.4	1226.6	1229.6
20°	1208.1	1203.5	1202.6	1203.9	1207.3
22.5°	1180.8	1177.8	1177.4	1179.5	1182.4
25°	1152.6	1150.0	1149.2	1151.7	1153.4
27.5°	1123.5	1118.9	1120.6	1121.0	1123.5
30°	1090.7	1086.5	1086.5	1088.2	1090.7
32.5°	1052.8	1050.3	1052.4	1054.5	1058.3
35°	1017.1	1013.3	1015.4	1017.1	1019.2
37.5°	976.7	975.8	976.2	978.8	982.1
40°	937.5	935.0	935.0	938.4	940.1
42.5°	894.6	892.5	894.2	895.9	896.7
45°	851.3	849.6	851.3	852.5	855.1
47.5°	805.0	805.4	805.8	806.7	809.2
50°	759.1	760.8	761.2	762.9	761.2
52.5°	711.6	712.0	713.7	714.1	714.5
55°	667.8	664.0	665.3	666.1	667.4
57.5°	616.5	615.2	615.2	616.5	617.3
60°	568.9	566.4	568.5	566.0	564.7
62.5°	515.9	516.7	517.6	517.2	515.1
65°	467.1	464.6	466.7	465.4	463.7
67.5°	415.7	413.6	414.5	414.1	413.6
70°	364.8	364.8	364.0	361.9	361.9
72.5°	316.9	314.3	315.2	312.7	312.7
75°	265.5	265.5	264.7	262.2	265.1
77.5°	217.6	216.3	215.4	213.8	213.8
80°	170.0	167.1	166.6	166.6	167.5
82.5°	123.3	121.2	120.3	120.3	120.8
85°	75.7	77.0	75.7	74.5	76.6
87.5°	35.8	34.1	34.1	35.3	36.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)