

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: P475824

Luminaire Tested: **24GR-LD5-42-FGW080-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475824
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-L830-CD1-U
Description: GR 2'X4' LED TROFFER w/ FGW080 LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3517.8 lumens
Efficiency: N/A
Efficacy: 116.1 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

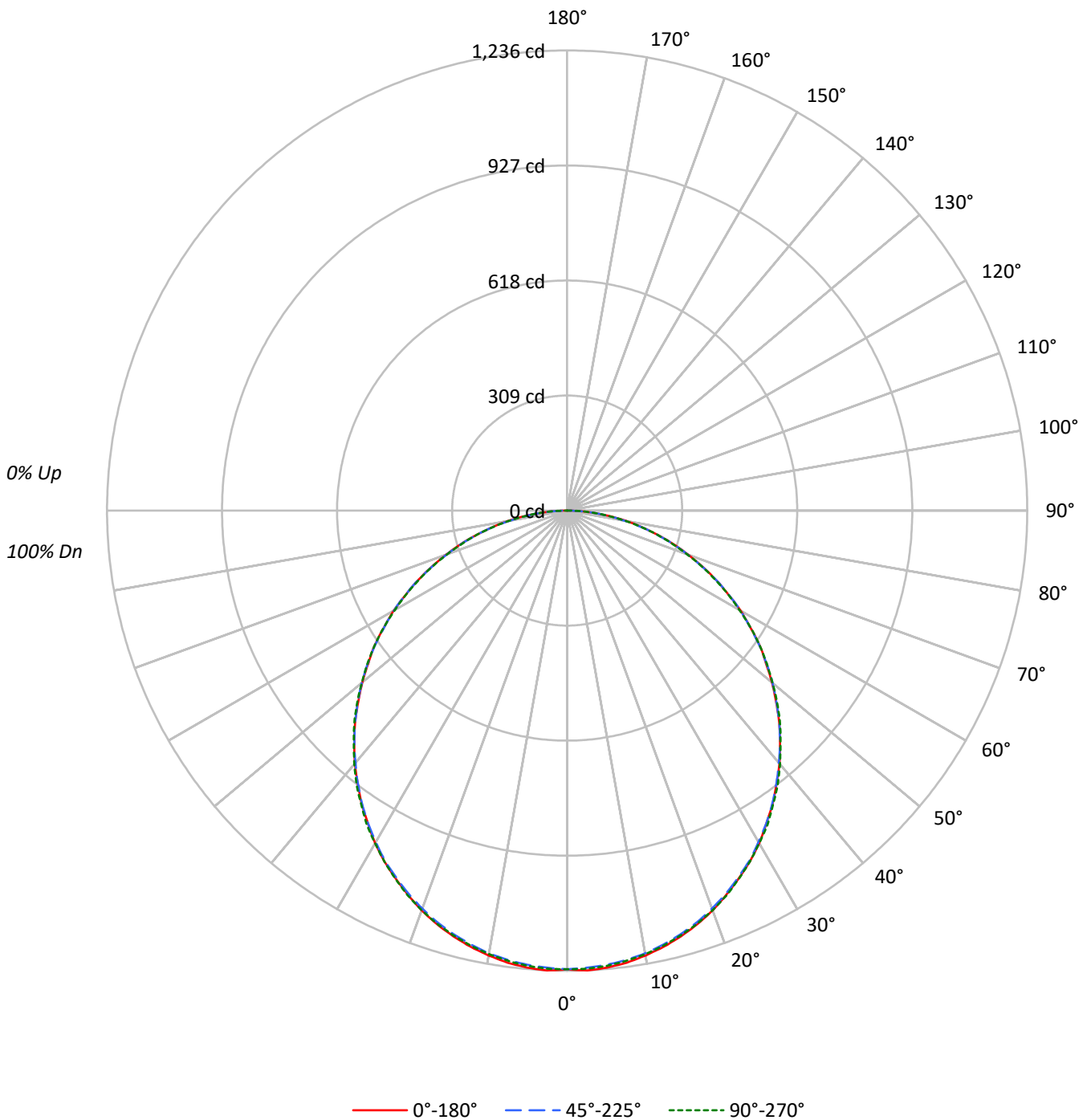
Input Watts (W): 30.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1658	1658	1658
5°	1664	1654	1658
10°	1658	1650	1653
15°	1649	1641	1645
20°	1637	1629	1635
25°	1619	1614	1620
30°	1603	1597	1603
35°	1580	1578	1584
40°	1558	1554	1562
45°	1533	1533	1539
50°	1503	1508	1508
55°	1482	1476	1481
60°	1448	1447	1438
65°	1407	1406	1397
70°	1358	1355	1347
75°	1306	1302	1304
80°	1246	1221	1227
85°	1107	1107	1119



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.5	3.3
10°-20°	332.8	9.5
20°-30°	501.8	14.3
30°-40°	601.4	17.1
40°-50°	621.3	17.7
50°-60°	562.6	16.0
60°-70°	435.9	12.4
70°-80°	264.3	7.5
80°-90°	81.2	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°	951.2	27.0
0°-40°	1552.5	44.1
0°-60°	2736.5	77.8
0°-90°	3517.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3517.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1232	1232	1232	1232	1232	
5°	1232	1227	1225	1225	1227	117
15°	1184	1180	1178	1179	1181	334
25°	1090	1088	1087	1090	1091	503
35°	962	959	961	962	964	602
45°	805	804	805	807	809	621
55°	632	628	629	630	631	563
65°	442	440	442	440	439	437
75°	251	251	250	248	251	266
85°	72	73	72	70	72	82
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1232.1	1232.1	1232.1	1232.1	1232.1
2.5°	1236.5	1232.1	1228.9	1228.9	1231.7
5°	1232.1	1227.4	1224.6	1224.6	1227.4
7.5°	1225.0	1219.8	1217.4	1217.4	1219.8
10°	1213.4	1209.4	1207.5	1207.5	1209.8
12.5°	1199.9	1196.3	1193.9	1194.3	1196.7
15°	1183.6	1180.0	1178.0	1178.8	1181.2
17.5°	1164.5	1160.9	1159.3	1160.5	1163.3
20°	1143.0	1138.6	1137.8	1139.0	1142.2
22.5°	1117.1	1114.3	1113.9	1115.9	1118.7
25°	1090.4	1088.0	1087.2	1089.6	1091.2
27.5°	1062.9	1058.6	1060.2	1060.6	1062.9
30°	1031.9	1027.9	1027.9	1029.5	1031.9
32.5°	996.1	993.7	995.7	997.7	1001.2
35°	962.2	958.6	960.6	962.2	964.2
37.5°	924.0	923.2	923.6	926.0	929.2
40°	887.0	884.6	884.6	887.8	889.4
42.5°	846.4	844.4	846.0	847.6	848.4
45°	805.4	803.8	805.4	806.6	808.9
47.5°	761.6	762.0	762.4	763.2	765.6
50°	718.2	719.8	720.2	721.8	720.2
52.5°	673.2	673.6	675.2	675.6	676.0
55°	631.8	628.2	629.4	630.2	631.4
57.5°	583.2	582.0	582.0	583.2	584.0
60°	538.2	535.8	537.8	535.5	534.3
62.5°	488.1	488.9	489.7	489.3	487.3
65°	441.9	439.5	441.5	440.3	438.7
67.5°	393.3	391.3	392.1	391.7	391.3
70°	345.2	345.2	344.4	342.4	342.4
72.5°	299.8	297.4	298.2	295.8	295.8
75°	251.2	251.2	250.4	248.0	250.8
77.5°	205.8	204.6	203.8	202.2	202.2
80°	160.8	158.0	157.6	157.6	158.4
82.5°	116.6	114.7	113.9	113.9	114.3
85°	71.7	72.9	71.7	70.5	72.5
87.5°	33.8	32.2	32.2	33.4	34.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)