

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: P475821

Luminaire Tested: **24GR-LD5-30-FGW080-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475821
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-30-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: 2517.2 lumens
Efficiency: N/A
Efficacy: 118.2 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

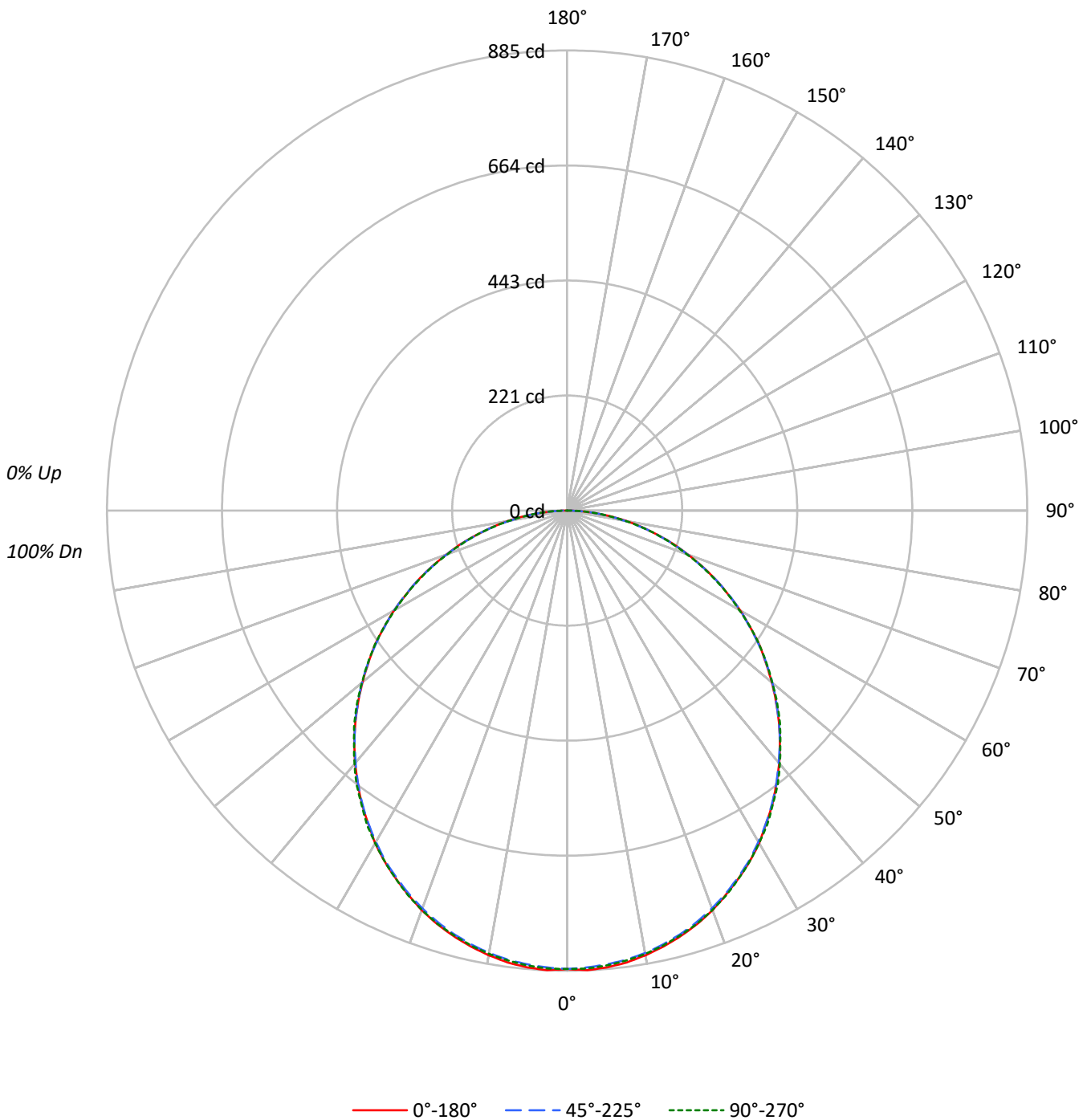
Input Watts (W): 21.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P475821

CATALOG NUMBER: 24GR-LD5-30-FGW080-UNV-L830-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P475821

CATALOG NUMBER: 24GR-LD5-30-FGW080-UNV-L830-CD1-U

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°	1186	1186	1186
5°	1191	1183	1186
10°	1186	1180	1183
15°	1180	1174	1177
20°	1171	1166	1170
25°	1158	1155	1159
30°	1147	1143	1147
35°	1131	1129	1133
40°	1115	1112	1118
45°	1097	1097	1101
50°	1076	1079	1079
55°	1061	1057	1060
60°	1036	1036	1029
65°	1007	1006	999
70°	972	969	964
75°	934	932	933
80°	892	874	879
85°	792	792	800



TEST NUMBER: P475821

CATALOG NUMBER: 24GR-LD5-30-FGW080-UNV-L830-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.4	3.3
10°-20°	238.2	9.5
20°-30°	359.1	14.3
30°-40°	430.3	17.1
40°-50°	444.6	17.7
50°-60°	402.6	16.0
60°-70°	311.9	12.4
70°-80°	189.2	7.5
80°-90°	58.1	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°	680.6	27.0
0°-40°	1110.9	44.1
0°-60°	1958.1	77.8
0°-90°	2517.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2517.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	882	882	882	882	882	
5°	882	878	876	876	878	84
15°	847	844	843	844	845	239
25°	780	778	778	780	781	360
35°	688	686	687	688	690	430
45°	576	575	576	577	579	444
55°	452	450	450	451	452	403
65°	316	314	316	315	314	313
75°	180	180	179	178	180	191
85°	51	52	51	50	52	59
90°	0	0	0	0	0	



TEST NUMBER: P475821

CATALOG NUMBER: 24GR-LD5-30-FGW080-UNV-L830-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	881.7	881.7	881.7	881.7	881.7
2.5°	884.8	881.7	879.4	879.4	881.4
5°	881.7	878.2	876.2	876.2	878.2
7.5°	876.5	872.8	871.1	871.1	872.8
10°	868.3	865.4	864.0	864.0	865.7
12.5°	858.6	856.0	854.3	854.6	856.3
15°	846.9	844.3	842.9	843.5	845.2
17.5°	833.2	830.7	829.5	830.4	832.4
20°	817.8	814.7	814.1	815.0	817.3
22.5°	799.3	797.3	797.1	798.5	800.5
25°	780.2	778.5	778.0	779.7	780.8
27.5°	760.6	757.5	758.6	758.9	760.6
30°	738.4	735.5	735.5	736.7	738.4
32.5°	712.7	711.0	712.4	713.9	716.4
35°	688.5	686.0	687.4	688.5	689.9
37.5°	661.2	660.6	660.9	662.6	664.9
40°	634.7	633.0	633.0	635.2	636.4
42.5°	605.6	604.2	605.3	606.5	607.0
45°	576.3	575.1	576.3	577.1	578.8
47.5°	544.9	545.2	545.5	546.1	547.8
50°	513.9	515.0	515.3	516.5	515.3
52.5°	481.7	482.0	483.1	483.4	483.7
55°	452.1	449.5	450.4	450.9	451.8
57.5°	417.3	416.5	416.5	417.3	417.9
60°	385.1	383.4	384.9	383.1	382.3
62.5°	349.2	349.8	350.4	350.1	348.7
65°	316.2	314.5	315.9	315.1	313.9
67.5°	281.4	280.0	280.6	280.3	280.0
70°	247.0	247.0	246.4	245.0	245.0
72.5°	214.5	212.8	213.4	211.7	211.7
75°	179.7	179.7	179.2	177.5	179.5
77.5°	147.3	146.4	145.9	144.7	144.7
80°	115.1	113.1	112.8	112.8	113.4
82.5°	83.5	82.0	81.5	81.5	81.8
85°	51.3	52.1	51.3	50.4	51.8
87.5°	24.2	23.1	23.1	23.9	24.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)