

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: P475835

Luminaire Tested: **24GR-LD5-180-FGW080-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475835
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-180-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: 14817.6 lumens
Efficiency: N/A
Efficacy: 117.3 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

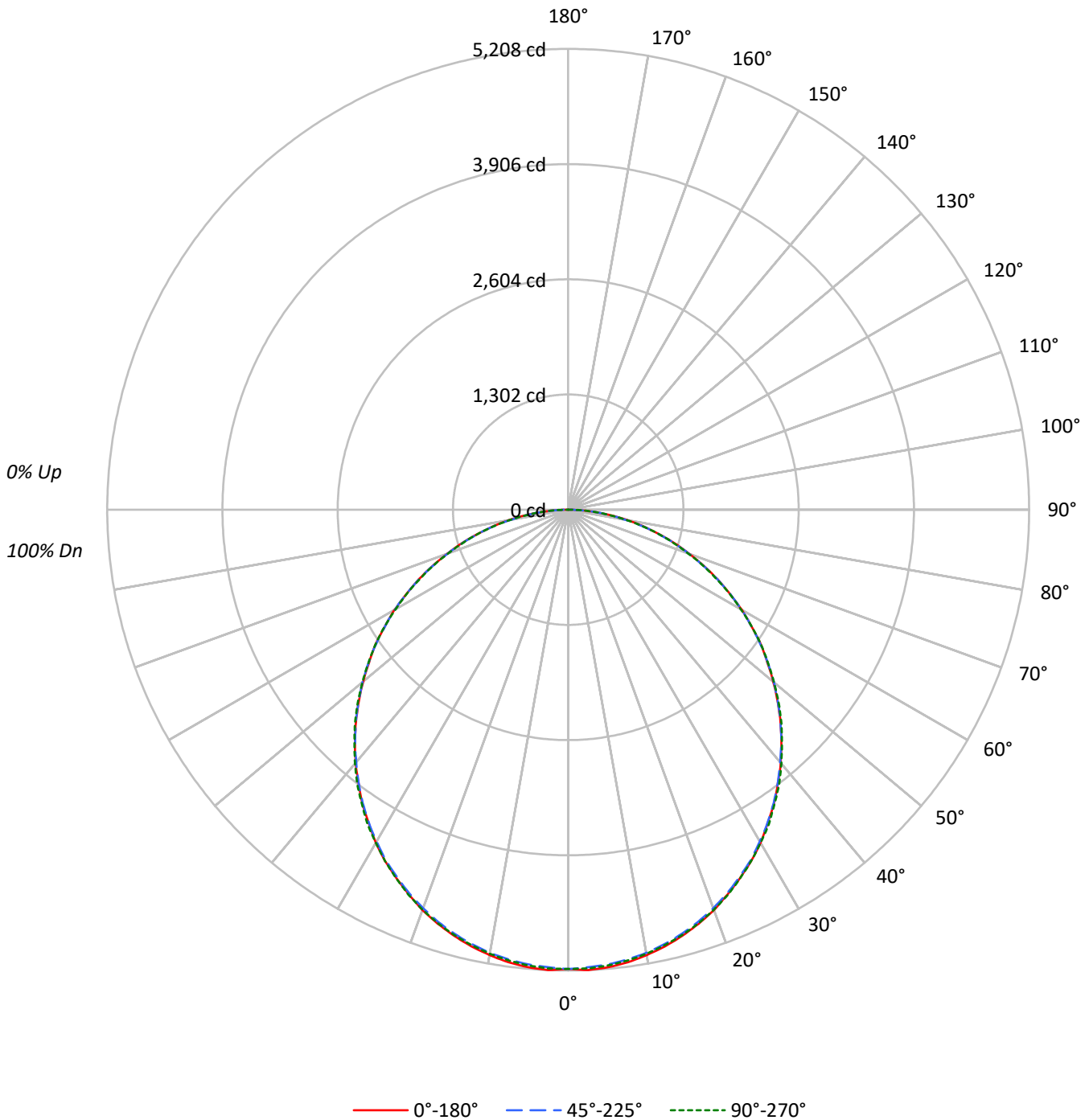
Input Watts (W): 126.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P475835

CATALOG NUMBER: 24GR-LD5-180-FGW080-UNV-L830-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P475835

CATALOG NUMBER: 24GR-LD5-180-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°	6983	6983	6983
5°	7010	6967	6982
10°	6983	6949	6963
15°	6944	6912	6930
20°	6893	6862	6889
25°	6819	6799	6824
30°	6753	6727	6753
35°	6657	6646	6671
40°	6562	6544	6580
45°	6455	6455	6484
50°	6332	6350	6350
55°	6243	6219	6239
60°	6101	6096	6056
65°	5926	5921	5883
70°	5720	5706	5673
75°	5501	5483	5492
80°	5250	5145	5171
85°	4659	4659	4712



TEST NUMBER: P475835

CATALOG NUMBER: 24GR-LD5-180-FGW080-UNV-L830-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	490.8	3.3
10°-20°	1402.0	9.5
20°-30°	2113.7	14.3
30°-40°	2533.0	17.1
40°-50°	2617.0	17.7
50°-60°	2370.0	16.0
60°-70°	1835.9	12.4
70°-80°	1113.4	7.5
80°-90°	341.9	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°	4006.5	27.0
0°-40°	6539.5	44.1
0°-60°	11526.4	77.8
0°-90°	14817.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	14817.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5190	5190	5190	5190	5190	
5°	5190	5170	5158	5158	5170	493
15°	4985	4970	4962	4965	4975	1406
25°	4593	4583	4580	4590	4596	2118
35°	4053	4038	4046	4053	4061	2534
45°	3392	3386	3392	3397	3407	2615
55°	2661	2646	2651	2654	2660	2371
65°	1861	1851	1860	1855	1848	1840
75°	1058	1058	1055	1045	1056	1122
85°	302	307	302	297	305	347
90°	0	0	0	0	0	



TEST NUMBER: P475835

CATALOG NUMBER: 24GR-LD5-180-FGW080-UNV-L830-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5190.0	5190.0	5190.0	5190.0	5190.0
2.5°	5208.4	5190.0	5176.5	5176.5	5188.3
5°	5190.0	5169.8	5158.1	5158.1	5169.8
7.5°	5159.8	5138.0	5127.9	5127.9	5138.0
10°	5111.1	5094.4	5086.0	5086.0	5096.1
12.5°	5054.1	5039.0	5029.0	5030.7	5040.7
15°	4985.4	4970.3	4961.9	4965.3	4975.3
17.5°	4904.9	4889.8	4883.1	4888.1	4899.9
20°	4814.3	4795.9	4792.5	4797.6	4811.0
22.5°	4705.3	4693.6	4691.9	4700.3	4712.0
25°	4593.0	4582.9	4579.6	4589.6	4596.3
27.5°	4477.3	4458.8	4465.5	4467.2	4477.3
30°	4346.5	4329.7	4329.7	4336.4	4346.5
32.5°	4195.6	4185.5	4193.9	4202.3	4217.4
35°	4053.0	4037.9	4046.3	4053.0	4061.4
37.5°	3892.1	3888.7	3890.4	3900.4	3913.9
40°	3736.1	3726.0	3726.0	3739.5	3746.2
42.5°	3565.1	3556.7	3563.4	3570.1	3573.4
45°	3392.3	3385.6	3392.3	3397.4	3407.4
47.5°	3207.9	3209.6	3211.2	3214.6	3224.7
50°	3025.1	3031.8	3033.5	3040.2	3033.5
52.5°	2835.6	2837.3	2844.0	2845.7	2847.4
55°	2661.2	2646.1	2651.2	2654.5	2659.5
57.5°	2456.6	2451.6	2451.6	2456.6	2460.0
60°	2267.1	2257.1	2265.5	2255.4	2250.4
62.5°	2055.9	2059.2	2062.6	2060.9	2052.5
65°	1861.3	1851.3	1859.7	1854.6	1847.9
67.5°	1656.8	1648.4	1651.7	1650.1	1648.4
70°	1453.9	1453.9	1450.5	1442.1	1442.1
72.5°	1262.7	1252.6	1256.0	1245.9	1245.9
75°	1058.1	1058.1	1054.8	1044.7	1056.4
77.5°	866.9	861.9	858.6	851.9	851.9
80°	677.5	665.7	664.0	664.0	667.4
82.5°	491.3	482.9	479.6	479.6	481.3
85°	301.8	306.9	301.8	296.8	305.2
87.5°	142.5	135.8	135.8	140.9	144.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)