

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: P475865

Luminaire Tested: **24GR-LD5-180-FGW080-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475865
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-L840-CD1-U
Description: GR 2'X4' LED TROFFER w/ FGW080 LENS
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15646.8 lumens
Efficiency: N/A
Efficacy: 123.9 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

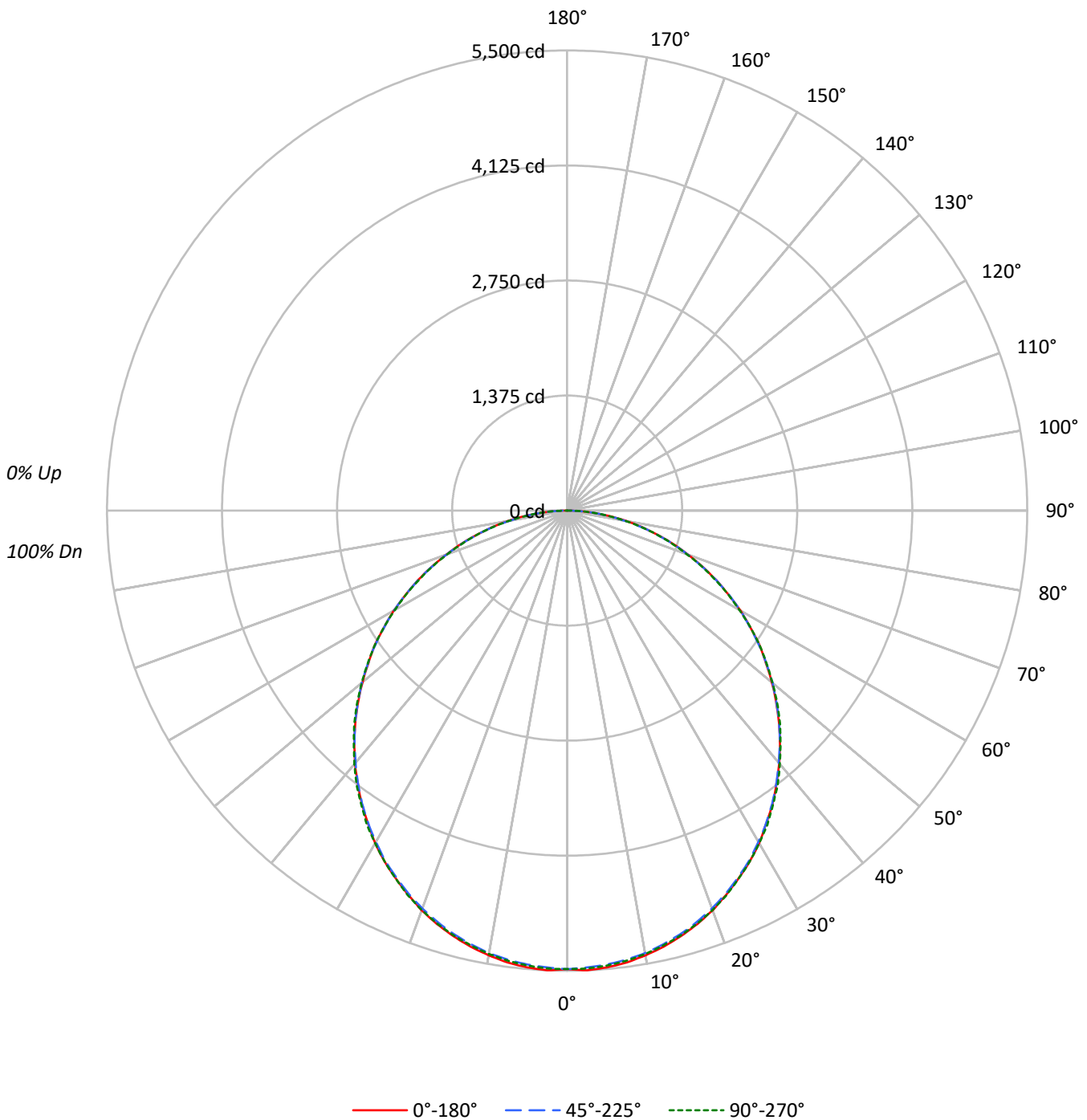
Input Watts (W): 126.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	7374	7374	7374
5°	7402	7356	7373
10°	7374	7338	7352
15°	7333	7299	7318
20°	7279	7246	7274
25°	7200	7179	7205
30°	7131	7103	7131
35°	7030	7018	7044
40°	6929	6911	6948
45°	6816	6816	6846
50°	6687	6705	6705
55°	6592	6567	6588
60°	6442	6437	6395
65°	6258	6252	6212
70°	6039	6026	5991
75°	5808	5790	5800
80°	5543	5433	5460
85°	4920	4920	4976



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	518.3	3.3
10°-20°	1480.4	9.5
20°-30°	2231.9	14.3
30°-40°	2674.8	17.1
40°-50°	2763.4	17.7
50°-60°	2502.6	16.0
60°-70°	1938.6	12.4
70°-80°	1175.8	7.5
80°-90°	361.0	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°	4230.7	27.0
0°-40°	6905.4	44.1
0°-60°	12171.4	77.8
0°-90°	15646.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15646.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5480	5480	5480	5480	5480	
5°	5480	5459	5447	5447	5459	520
15°	5264	5248	5240	5243	5254	1485
25°	4850	4839	4836	4846	4854	2236
35°	4280	4264	4273	4280	4289	2676
45°	3582	3575	3582	3588	3598	2761
55°	2810	2794	2800	2803	2808	2504
65°	1966	1955	1964	1958	1951	1943
75°	1117	1117	1114	1103	1116	1185
85°	319	324	319	313	322	366
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5480.4	5480.4	5480.4	5480.4	5480.4
2.5°	5499.9	5480.4	5466.2	5466.2	5478.6
5°	5480.4	5459.1	5446.7	5446.7	5459.1
7.5°	5448.5	5425.5	5414.9	5414.9	5425.5
10°	5397.2	5379.5	5370.6	5370.6	5381.2
12.5°	5337.0	5321.0	5310.4	5312.2	5322.8
15°	5264.4	5248.4	5239.6	5243.1	5253.7
17.5°	5179.4	5163.4	5156.3	5161.7	5174.0
20°	5083.7	5064.3	5060.7	5066.0	5080.2
22.5°	4968.6	4956.2	4954.5	4963.3	4975.7
25°	4850.0	4839.4	4835.8	4846.5	4853.5
27.5°	4727.8	4708.3	4715.4	4717.2	4727.8
30°	4589.7	4572.0	4572.0	4579.1	4589.7
32.5°	4430.3	4419.7	4428.6	4437.4	4453.4
35°	4279.8	4263.9	4272.8	4279.8	4288.7
37.5°	4109.8	4106.3	4108.1	4118.7	4132.9
40°	3945.2	3934.5	3934.5	3948.7	3955.8
42.5°	3764.6	3755.7	3762.8	3769.9	3773.4
45°	3582.2	3575.1	3582.2	3587.5	3598.1
47.5°	3387.4	3389.2	3390.9	3394.5	3405.1
50°	3194.4	3201.5	3203.2	3210.3	3203.2
52.5°	2994.3	2996.1	3003.1	3004.9	3006.7
55°	2810.1	2794.2	2799.5	2803.1	2808.4
57.5°	2594.1	2588.8	2588.8	2594.1	2597.6
60°	2394.0	2383.4	2392.2	2381.6	2376.3
62.5°	2170.9	2174.4	2178.0	2176.2	2167.4
65°	1965.5	1954.9	1963.7	1958.4	1951.3
67.5°	1749.5	1740.6	1744.2	1742.4	1740.6
70°	1535.2	1535.2	1531.7	1522.8	1522.8
72.5°	1333.4	1322.7	1326.3	1315.6	1315.6
75°	1117.3	1117.3	1113.8	1103.2	1115.6
77.5°	915.5	910.2	906.6	899.5	899.5
80°	715.4	703.0	701.2	701.2	704.7
82.5°	518.8	510.0	506.4	506.4	508.2
85°	318.7	324.0	318.7	313.4	322.3
87.5°	150.5	143.4	143.4	148.7	152.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)