

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: P475849

Luminaire Tested: **24GR-LD5-150-FGW080-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475849
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-150-FGW080-UNV-L835-CD1-U
Description: GR 2'X4' LED TROFFER w/ FGW080 LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12818.9 lumens
Efficiency: N/A
Efficacy: 124.0 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

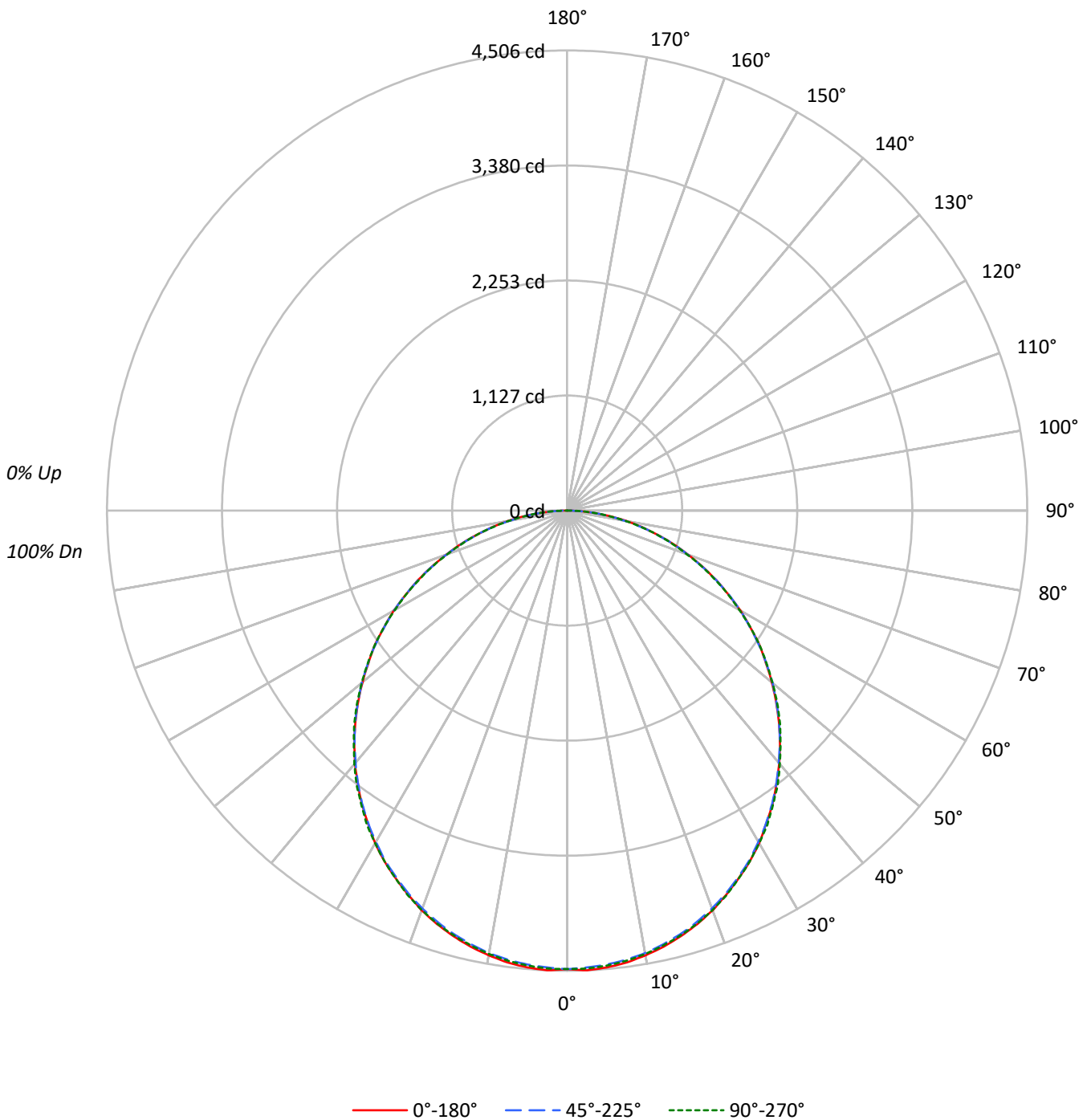
Input Watts (W): 103.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	6041	6041	6041
5°	6064	6027	6041
10°	6041	6011	6023
15°	6008	5979	5996
20°	5963	5937	5959
25°	5899	5882	5903
30°	5842	5819	5842
35°	5759	5750	5771
40°	5677	5662	5692
45°	5584	5584	5609
50°	5478	5493	5493
55°	5400	5380	5397
60°	5278	5274	5239
65°	5127	5122	5090
70°	4948	4936	4908
75°	4759	4744	4751
80°	4541	4451	4474
85°	4031	4031	4076



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	424.6	3.3
10°-20°	1212.9	9.5
20°-30°	1828.5	14.3
30°-40°	2191.3	17.1
40°-50°	2264.0	17.7
50°-60°	2050.3	16.0
60°-70°	1588.2	12.4
70°-80°	963.3	7.5
80°-90°	295.8	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°	3466.0	27.0
0°-40°	5657.3	44.1
0°-60°	9971.6	77.8
0°-90°	12818.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12818.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4490	4490	4490	4490	4490	
5°	4490	4472	4462	4462	4472	426
15°	4313	4300	4293	4296	4304	1217
25°	3973	3965	3962	3970	3976	1832
35°	3506	3493	3500	3506	3514	2192
45°	2935	2929	2935	2939	2948	2262
55°	2302	2289	2294	2296	2301	2051
65°	1610	1602	1609	1604	1599	1592
75°	915	915	912	904	914	971
85°	261	266	261	257	264	300
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4489.9	4489.9	4489.9	4489.9	4489.9
2.5°	4505.8	4489.9	4478.3	4478.3	4488.4
5°	4489.9	4472.5	4462.3	4462.3	4472.5
7.5°	4463.8	4444.9	4436.2	4436.2	4444.9
10°	4421.7	4407.2	4399.9	4399.9	4408.6
12.5°	4372.4	4359.3	4350.6	4352.1	4360.8
15°	4312.9	4299.8	4292.6	4295.5	4304.2
17.5°	4243.3	4230.2	4224.4	4228.7	4238.9
20°	4164.9	4149.0	4146.1	4150.4	4162.0
22.5°	4070.6	4060.5	4059.0	4066.3	4076.4
25°	3973.4	3964.7	3961.8	3970.5	3976.3
27.5°	3873.3	3857.4	3863.2	3864.6	3873.3
30°	3760.2	3745.7	3745.7	3751.5	3760.2
32.5°	3629.6	3620.9	3628.2	3635.4	3648.5
35°	3506.3	3493.2	3500.5	3506.3	3513.6
37.5°	3367.0	3364.1	3365.6	3374.3	3385.9
40°	3232.1	3223.4	3223.4	3235.0	3240.8
42.5°	3084.2	3076.9	3082.7	3088.5	3091.4
45°	2934.7	2928.9	2934.7	2939.1	2947.8
47.5°	2775.2	2776.6	2778.1	2781.0	2789.7
50°	2617.0	2622.8	2624.3	2630.1	2624.3
52.5°	2453.1	2454.6	2460.4	2461.8	2463.3
55°	2302.2	2289.2	2293.5	2296.4	2300.8
57.5°	2125.3	2120.9	2120.9	2125.3	2128.2
60°	1961.3	1952.6	1959.9	1951.2	1946.8
62.5°	1778.5	1781.4	1784.3	1782.9	1775.6
65°	1610.3	1601.6	1608.8	1604.5	1598.7
67.5°	1433.3	1426.0	1428.9	1427.5	1426.0
70°	1257.7	1257.7	1254.8	1247.6	1247.6
72.5°	1092.4	1083.7	1086.6	1077.9	1077.9
75°	915.4	915.4	912.5	903.8	913.9
77.5°	750.0	745.7	742.8	736.9	736.9
80°	586.1	575.9	574.5	574.5	577.4
82.5°	425.1	417.8	414.9	414.9	416.3
85°	261.1	265.5	261.1	256.8	264.0
87.5°	123.3	117.5	117.5	121.9	124.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)