

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: P231800

Luminaire Tested: **24GR-LD5-120-A-UNV-L930-CD2-U**

Issue Date: 3/12/2020

Test Information

Test Method: LM-79-08
Report Number: P231800
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33306)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/12/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-120-A-UNV-L930-CD2-U
Description: METALUX 2X4 GRLED TROFFER
WITH A LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9784.2 lumens
Efficiency: N/A
Efficacy: 108.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.2 / 1.26
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

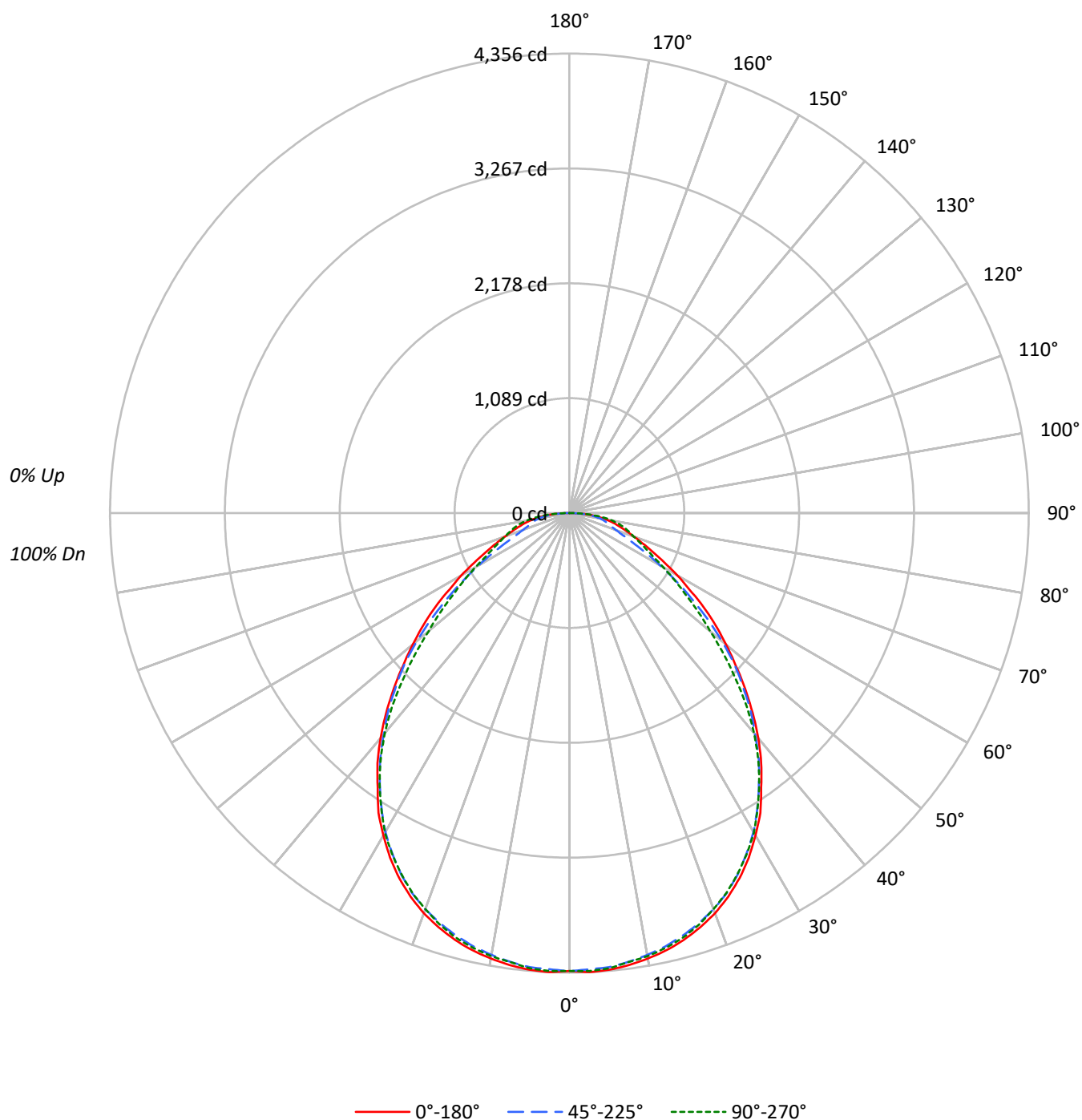
Input Watts (W): 90.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10		50	30	10			50	30	10			50
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111			106	106	106			102
1	110	105	101	98	107	103	99	96		99	96	93			95	93	90			91
2	101	93	87	82	98	91	86	81		88	83	79			85	81	77			82
3	93	83	75	69	90	81	74	69		79	73	68			76	71	67			73
4	86	74	66	60	83	73	65	60		71	64	59			68	63	58			66
5	79	67	59	53	77	66	58	52		64	57	52			62	56	51			60
6	73	61	53	46	72	60	52	46		58	51	46			57	50	45			55
7	68	56	47	42	67	55	47	41		53	46	41			52	46	41			51
8	64	51	43	37	62	50	43	37		49	42	37			48	41	37			47
9	60	47	39	34	58	46	39	34		45	38	34			44	38	33			43
10	56	44	36	31	55	43	36	31		42	35	31			41	35	31			40

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6649	6649	6649
5°	6681	6644	6660
10°	6669	6615	6634
15°	6644	6577	6606
20°	6581	6514	6512
25°	6453	6383	6378
30°	6240	6175	6189
35°	5927	5859	5867
40°	5573	5476	5443
45°	5108	5039	4839
50°	4617	4491	4153
55°	4145	3774	3580
60°	3630	3037	3149
65°	3166	2388	2898
70°	2897	2085	2897
75°	2898	2218	3193
80°	3146	2613	3639
85°	3453	2949	3905



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	411.1	4.2
10°-20°	1173.2	12.0
20°-30°	1739.6	17.8
30°-40°	1962.5	20.1
40°-50°	1777.4	18.2
50°-60°	1282.3	13.1
60°-70°	765.6	7.8
70°-80°	473.2	4.8
80°-90°	199.4	2.0
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°	3323.9	34.0
0°-40°	5286.3	54.0
0°-60°	8346.0	85.3
0°-90°	9784.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9784.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4341	4341	4341	4341	4341	
5°	4346	4340	4322	4317	4332	413
15°	4190	4164	4148	4149	4166	1181
25°	3818	3797	3777	3764	3774	1754
35°	3170	3165	3134	3135	3138	1983
45°	2358	2343	2326	2269	2234	1817
55°	1552	1504	1413	1344	1341	1386
65°	874	769	659	748	800	879
75°	490	425	375	467	540	523
85°	196	172	168	219	222	205
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4341.2	4341.2	4341.2	4341.2	4341.2
2.5°	4356.2	4344.2	4329.0	4338.1	4345.7
5°	4345.7	4339.6	4321.5	4317.0	4332.1
7.5°	4323.0	4307.9	4291.3	4298.8	4292.8
10°	4288.3	4274.7	4253.5	4255.0	4265.6
12.5°	4246.0	4229.3	4206.6	4212.7	4221.8
15°	4190.0	4164.3	4147.6	4149.2	4165.8
17.5°	4118.9	4099.3	4078.1	4082.7	4090.2
20°	4037.4	4026.8	3996.5	3987.4	3995.0
22.5°	3934.5	3914.9	3898.3	3893.8	3895.2
25°	3818.2	3797.0	3777.3	3763.7	3774.3
27.5°	3682.1	3664.0	3638.3	3633.7	3642.8
30°	3528.0	3514.4	3491.6	3485.7	3499.2
32.5°	3370.8	3348.1	3316.3	3316.3	3319.4
35°	3169.7	3165.2	3133.5	3134.9	3138.0
37.5°	2988.3	2967.2	2949.0	2930.8	2939.9
40°	2787.3	2763.1	2738.9	2726.8	2722.3
42.5°	2571.1	2553.0	2542.4	2498.6	2488.0
45°	2358.0	2342.9	2326.3	2268.9	2234.1
47.5°	2140.4	2137.3	2123.7	2022.4	1987.7
50°	1937.8	1933.2	1884.9	1777.6	1742.8
52.5°	1745.9	1715.6	1652.1	1546.3	1540.3
55°	1552.3	1504.0	1413.3	1343.7	1340.7
57.5°	1348.3	1290.8	1198.7	1160.9	1180.6
60°	1185.1	1097.4	991.5	996.1	1027.9
62.5°	1015.7	917.5	813.2	858.5	896.3
65°	873.7	769.4	659.0	748.2	799.6
67.5°	749.7	653.0	547.2	666.6	716.4
70°	647.0	568.3	465.6	591.0	647.0
72.5°	565.3	492.7	412.6	530.5	595.6
75°	489.7	424.8	374.8	467.1	539.6
77.5°	424.8	361.3	338.6	412.6	483.7
80°	356.7	299.3	296.3	359.7	412.6
82.5°	278.1	238.8	238.8	300.8	332.5
85°	196.5	172.3	167.8	219.2	222.2
87.5°	101.3	96.8	87.7	114.9	114.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)