

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: P231801

Luminaire Tested: **24GR-LD5-120-A-UNV-L935-CD2-U**

Issue Date: 3/12/2020

Test Information

Test Method: LM-79-08
Report Number: P231801
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-L935-CD2-U
Description: METALUX 2X4 GRLED TROFFER
WITH A LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

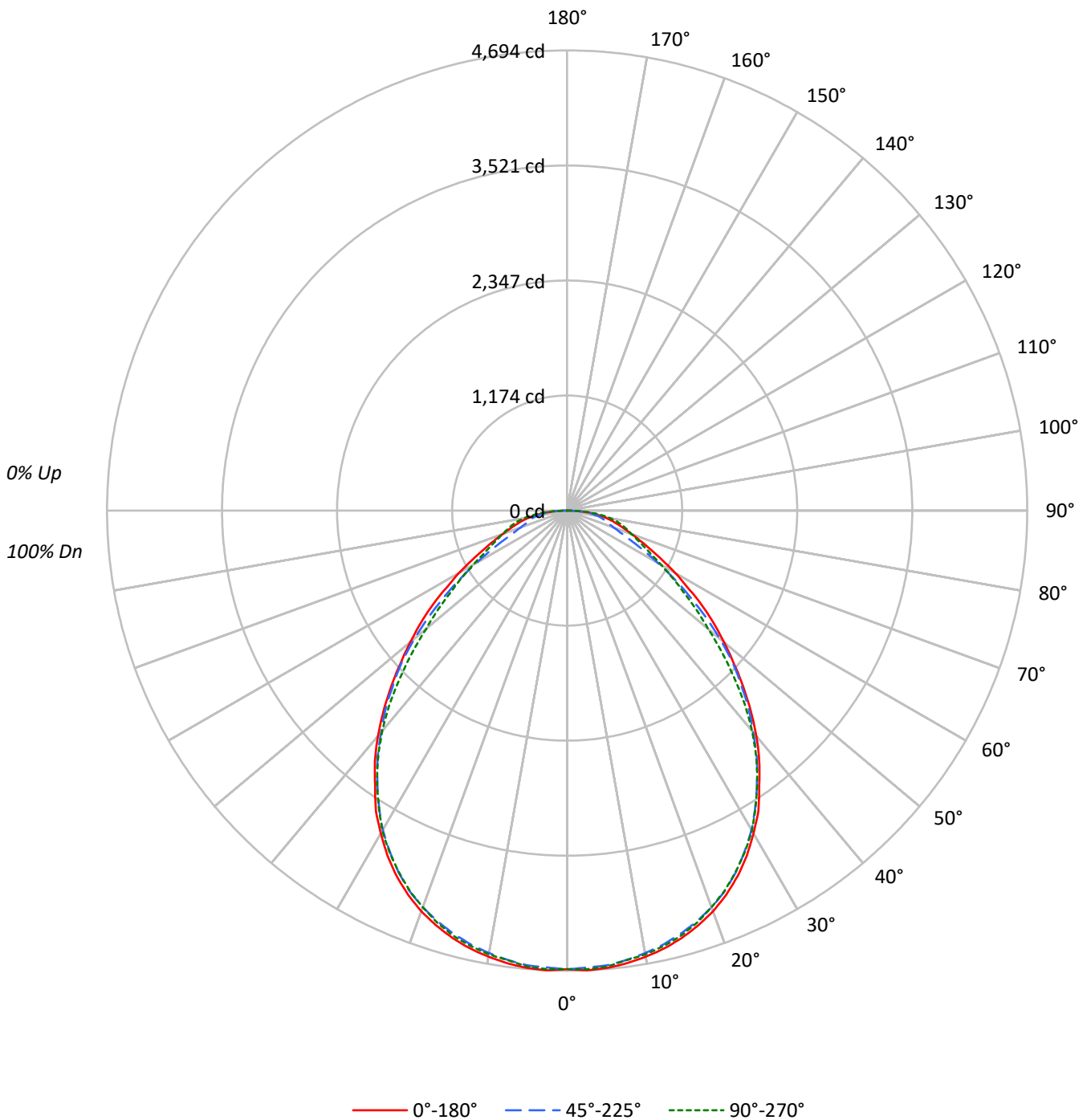
Lumens per Lamp: N/A
Luminaire Lumens: 10543.4 lumens
Efficiency: N/A
Efficacy: 117.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.2 / 1.26
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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	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	110	105	101	98	107	103	99	96	99	96	93	95	93	90	91	89	88	86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73
3	93	83	75	69	90	81	74	69	79	73	68	76	71	67	73	69	65	63
4	86	74	66	60	83	73	65	60	71	64	59	68	63	58	66	61	57	55
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49
6	73	61	53	46	72	60	52	46	58	51	46	57	50	45	55	49	45	43
7	68	56	47	42	67	55	47	41	53	46	41	52	46	41	51	45	41	39
8	64	51	43	37	62	50	43	37	49	42	37	48	41	37	47	41	37	35
9	60	47	39	34	58	46	39	34	45	38	34	44	38	33	43	38	33	32
10	56	44	36	31	55	43	36	31	42	35	31	41	35	31	40	35	30	29

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7165	7165	7165
5°	7200	7160	7177
10°	7187	7128	7149
15°	7159	7087	7118
20°	7091	7019	7017
25°	6953	6879	6873
30°	6724	6654	6669
35°	6386	6313	6323
40°	6005	5901	5865
45°	5504	5430	5215
50°	4976	4840	4475
55°	4467	4067	3858
60°	3912	3273	3393
65°	3412	2574	3123
70°	3122	2247	3122
75°	3123	2390	3441
80°	3391	2816	3921
85°	3720	3177	4207



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	443.0	4.2
10°-20°	1264.2	12.0
20°-30°	1874.6	17.8
30°-40°	2114.7	20.1
40°-50°	1915.3	18.2
50°-60°	1381.8	13.1
60°-70°	825.0	7.8
70°-80°	509.9	4.8
80°-90°	214.8	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°	3581.8	34.0
0°-40°	5696.5	54.0
0°-60°	8993.6	85.3
0°-90°	10543.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10543.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4678	4678	4678	4678	4678	
5°	4683	4676	4657	4652	4668	445
15°	4515	4487	4470	4471	4489	1273
25°	4114	4092	4070	4056	4067	1890
35°	3416	3411	3376	3378	3382	2137
45°	2541	2525	2507	2445	2407	1958
55°	1673	1621	1523	1448	1445	1493
65°	942	829	710	806	862	947
75°	528	458	404	503	582	564
85°	212	186	181	236	239	221
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4678.0	4678.0	4678.0	4678.0	4678.0
2.5°	4694.3	4681.2	4665.0	4674.7	4682.9
5°	4682.9	4676.4	4656.8	4652.0	4668.2
7.5°	4658.4	4642.2	4624.3	4632.4	4625.9
10°	4620.9	4606.3	4583.5	4585.2	4596.5
12.5°	4575.4	4557.4	4533.0	4539.5	4549.3
15°	4515.1	4487.4	4469.5	4471.1	4489.0
17.5°	4438.5	4417.4	4394.6	4399.4	4407.6
20°	4350.6	4339.2	4306.6	4296.8	4305.0
22.5°	4239.8	4218.6	4200.7	4195.9	4197.5
25°	4114.4	4091.6	4070.4	4055.8	4067.2
27.5°	3967.8	3948.2	3920.5	3915.7	3925.5
30°	3801.7	3787.0	3762.6	3756.1	3770.8
32.5°	3632.3	3607.8	3573.7	3573.7	3576.9
35°	3415.6	3410.8	3376.5	3378.2	3381.5
37.5°	3220.2	3197.4	3177.8	3158.3	3168.0
40°	3003.6	2977.5	2951.5	2938.4	2933.5
42.5°	2770.7	2751.1	2739.7	2692.5	2681.1
45°	2541.0	2524.7	2506.7	2444.9	2407.4
47.5°	2306.4	2303.2	2288.5	2179.4	2141.9
50°	2088.2	2083.3	2031.2	1915.5	1878.1
52.5°	1881.3	1848.8	1780.3	1666.3	1659.8
55°	1672.8	1620.7	1522.9	1448.1	1444.7
57.5°	1452.9	1391.0	1291.7	1250.9	1272.1
60°	1277.0	1182.5	1068.5	1073.4	1107.6
62.5°	1094.5	988.7	876.4	925.1	965.9
65°	941.5	829.1	710.2	806.3	861.6
67.5°	807.9	703.6	589.6	718.3	772.1
70°	697.2	612.4	501.7	636.9	697.2
72.5°	609.2	531.0	444.6	571.7	641.8
75°	527.8	457.7	403.9	503.3	581.5
77.5°	457.7	389.3	364.8	444.6	521.2
80°	384.4	322.5	319.3	387.7	444.6
82.5°	299.7	257.4	257.4	324.1	358.4
85°	211.7	185.7	180.8	236.2	239.4
87.5°	109.1	104.2	94.4	123.8	123.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)