

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: P231802

Luminaire Tested: **24GR-LD5-120-A-UNV-L940-CD2-U**

Issue Date: 3/12/2020

Test Information

Test Method: LM-79-08
Report Number: P231802
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-L940-CD2-U
Description: METALUX 2X4 GRLED TROFFER
WITH A LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10667.5 lumens
Efficiency: N/A
Efficacy: 118.4 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

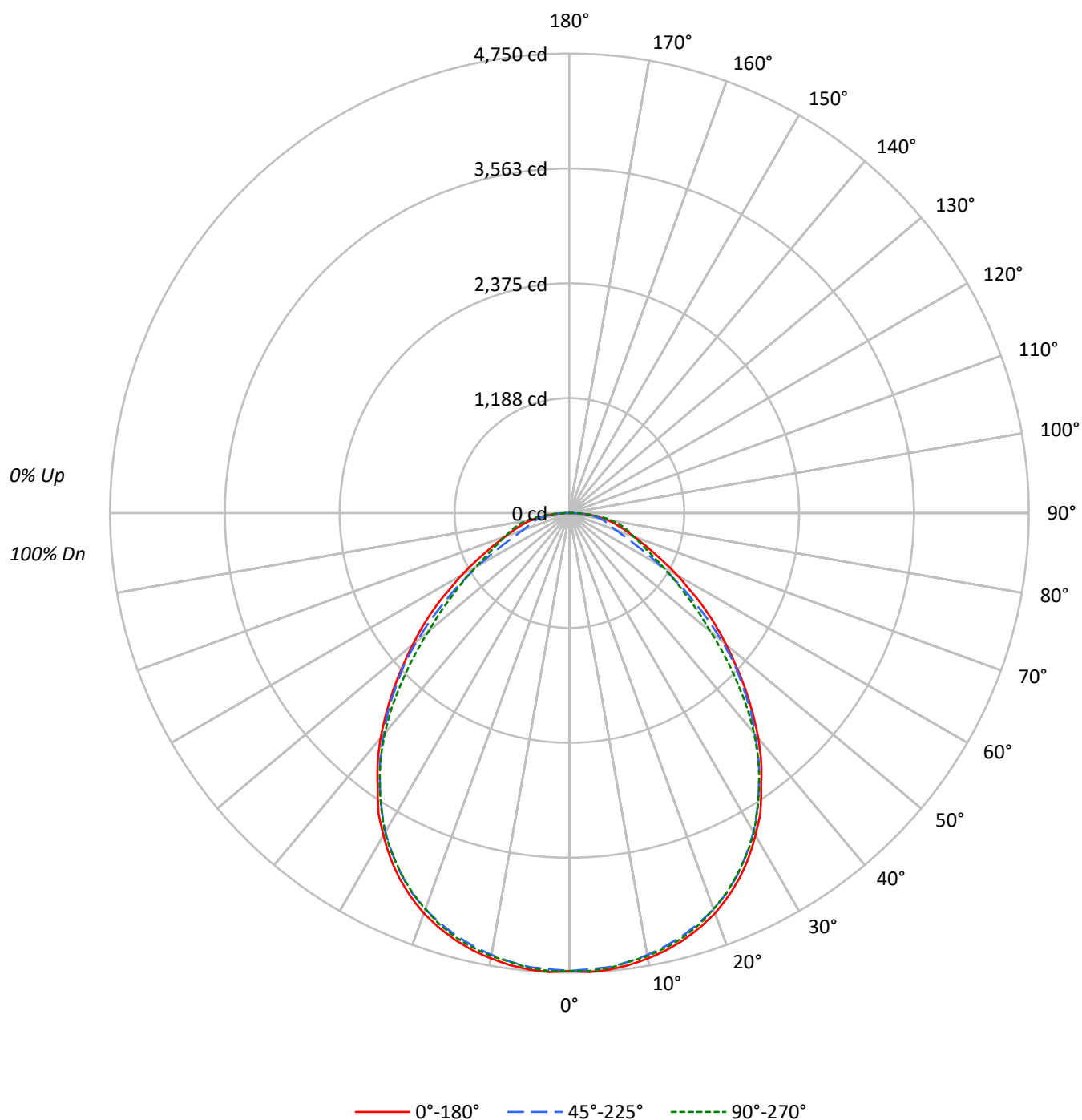
Input Watts (W): 90.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	30	10	50	30	10
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°	7249	7249	7249
5°	7285	7244	7262
10°	7271	7212	7233
15°	7244	7170	7202
20°	7174	7102	7099
25°	7035	6960	6954
30°	6803	6733	6747
35°	6462	6388	6397
40°	6076	5971	5934
45°	5569	5494	5276
50°	5034	4897	4528
55°	4519	4115	3903
60°	3958	3312	3433
65°	3452	2604	3160
70°	3159	2273	3159
75°	3160	2419	3481
80°	3430	2849	3968
85°	3764	3214	4258



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	448.2	4.2
10°-20°	1279.1	12.0
20°-30°	1896.6	17.8
30°-40°	2139.6	20.1
40°-50°	1937.9	18.2
50°-60°	1398.1	13.1
60°-70°	834.8	7.8
70°-80°	515.9	4.8
80°-90°	217.3	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°	3623.9	34.0
0°-40°	5763.5	54.0
0°-60°	9099.4	85.3
0°-90°	10667.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10667.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4733	4733	4733	4733	4733	
5°	4738	4731	4712	4707	4723	450
15°	4568	4540	4522	4524	4542	1288
25°	4163	4140	4118	4104	4115	1912
35°	3456	3451	3416	3418	3421	2162
45°	2571	2554	2536	2474	2436	1981
55°	1692	1640	1541	1465	1462	1511
65°	952	839	718	816	872	958
75°	534	463	409	509	588	570
85°	214	188	183	239	242	224
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4733.0	4733.0	4733.0	4733.0	4733.0
2.5°	4749.5	4736.3	4719.9	4729.7	4738.0
5°	4738.0	4731.4	4711.6	4706.7	4723.1
7.5°	4713.2	4696.8	4678.7	4686.9	4680.3
10°	4675.3	4660.5	4637.5	4639.1	4650.6
12.5°	4629.2	4611.1	4586.4	4592.9	4602.8
15°	4568.2	4540.2	4522.1	4523.7	4541.8
17.5°	4490.7	4469.3	4446.3	4451.2	4459.4
20°	4401.7	4390.2	4357.3	4347.4	4355.6
22.5°	4289.7	4268.3	4250.1	4245.2	4246.9
25°	4162.8	4139.8	4118.3	4103.5	4115.0
27.5°	4014.5	3994.7	3966.7	3961.8	3971.7
30°	3846.4	3831.6	3806.9	3800.3	3815.1
32.5°	3675.0	3650.3	3615.7	3615.7	3619.0
35°	3455.8	3450.9	3416.3	3417.9	3421.3
37.5°	3258.1	3235.0	3215.2	3195.4	3205.3
40°	3038.9	3012.5	2986.2	2972.9	2968.0
42.5°	2803.3	2783.5	2772.0	2724.1	2712.6
45°	2570.9	2554.4	2536.2	2473.6	2435.7
47.5°	2333.5	2330.3	2315.5	2205.0	2167.1
50°	2112.8	2107.8	2055.1	1938.0	1900.2
52.5°	1903.4	1870.5	1801.3	1685.9	1679.3
55°	1692.5	1639.8	1540.9	1465.1	1461.7
57.5°	1470.0	1407.4	1306.9	1265.7	1287.1
60°	1292.1	1196.4	1081.1	1086.0	1120.7
62.5°	1107.4	1000.4	886.7	936.0	977.2
65°	952.5	838.8	718.5	815.8	871.8
67.5°	817.4	711.9	596.6	726.8	781.1
70°	705.4	619.6	507.6	644.4	705.4
72.5°	616.4	537.2	449.9	578.4	649.3
75°	534.0	463.1	408.7	509.2	588.3
77.5°	463.1	393.9	369.1	449.9	527.4
80°	388.9	326.3	323.0	392.2	449.9
82.5°	303.2	260.4	260.4	327.9	362.6
85°	214.2	187.9	182.9	239.0	242.3
87.5°	110.4	105.4	95.5	125.2	125.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)