

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: P231782

Luminaire Tested: **24GR-LD5-120-F1-UNV-L940-CD2-U**

Issue Date: 3/12/2020

Test Information

Test Method: LM-79-08
Report Number: P231782
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33304)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/12/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-120-F1-UNV-L940-CD2-U
Description: METALUX 2X4 GRLED TROFFER
WITH F1 LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10543.6 lumens
Efficiency: N/A
Efficacy: 117.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.19 / 1.27
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

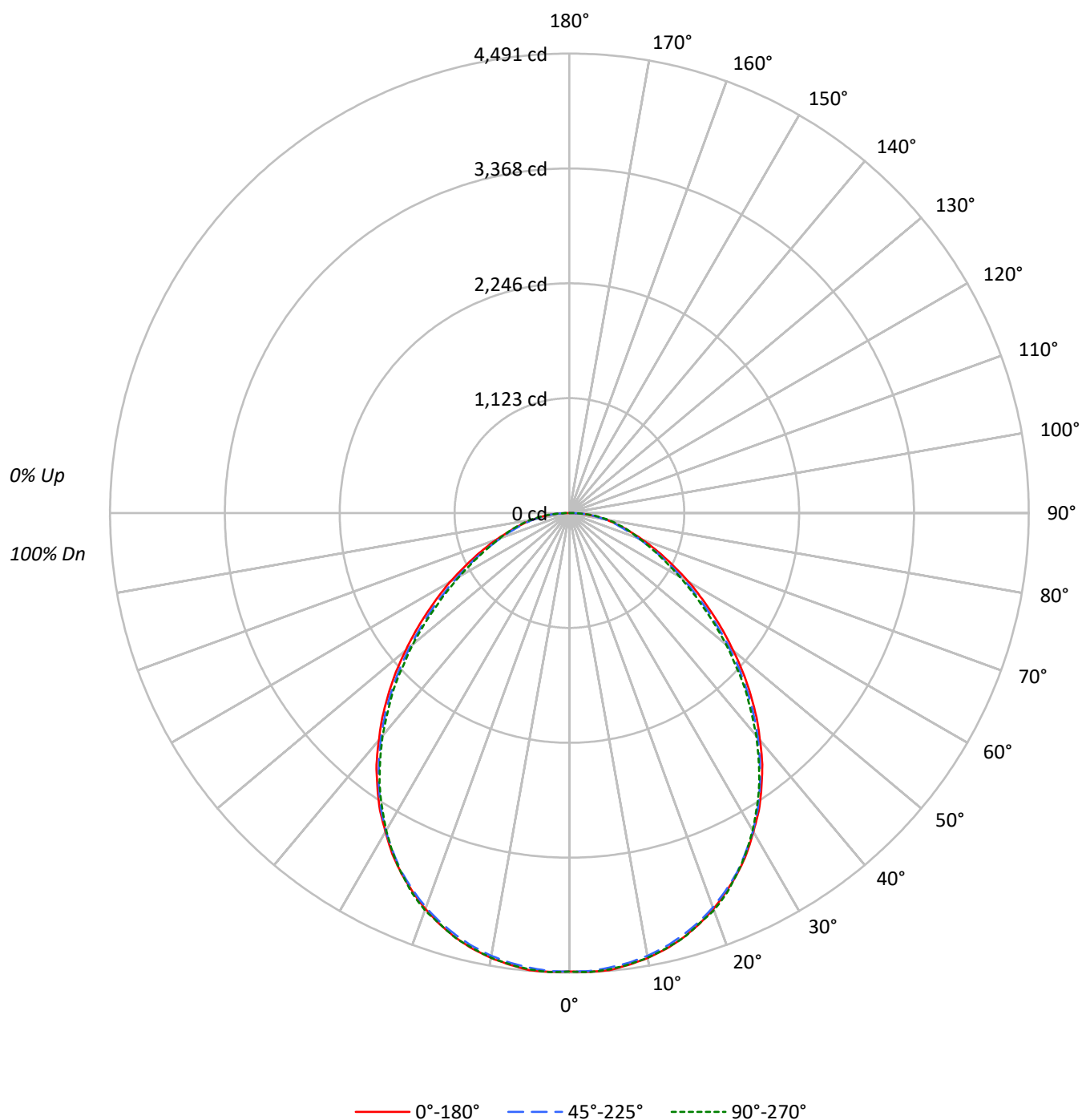
Input Watts (W): 90.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	105	101	97	107	103	99	96		98	95	93			95	92	90			91
2	100	92	86	81	98	91	85	80		87	82	78			84	80	76			81
3	92	82	74	68	90	80	73	68		78	71	66			75	70	65			72
4	85	73	65	59	82	72	64	58		70	63	57			67	61	57			65
5	78	66	57	51	76	65	57	51		63	56	50			61	55	50			59
6	72	60	51	45	71	59	51	45		57	50	44			55	49	44			54
7	67	54	46	40	66	54	46	40		52	45	40			51	44	39			49
8	63	50	42	36	61	49	41	36		48	41	36			47	40	36			46
9	59	46	38	33	58	45	38	33		44	37	32			43	37	32			42
10	55	43	35	30	54	42	35	30		41	34	30			40	34	29			39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6863	6863	6863
5°	6895	6857	6885
10°	6867	6833	6864
15°	6813	6776	6818
20°	6713	6686	6734
25°	6567	6551	6564
30°	6360	6348	6334
35°	6120	6074	6049
40°	5793	5727	5681
45°	5419	5319	5255
50°	4979	4846	4763
55°	4542	4374	4247
60°	4124	3902	3801
65°	3715	3506	3446
70°	3402	3181	3270
75°	3179	3033	3258
80°	3154	3097	3401
85°	3214	3244	3708



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	424.1	4.0
10°-20°	1205.7	11.4
20°-30°	1781.2	16.9
30°-40°	2025.0	19.2
40°-50°	1891.1	17.9
50°-60°	1470.6	13.9
60°-70°	975.8	9.3
70°-80°	564.7	5.4
80°-90°	205.3	1.9
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°	3411.0	32.4
0°-40°	5436.0	51.6
0°-60°	8797.7	83.4
0°-90°	10543.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10543.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4481	4481	4481	4481	4481	
5°	4484	4461	4460	4468	4478	426
15°	4296	4275	4273	4272	4300	1210
25°	3886	3870	3876	3868	3884	1787
35°	3273	3257	3248	3225	3235	2043
45°	2502	2482	2456	2424	2426	1928
55°	1701	1676	1638	1595	1590	1525
65°	1025	994	967	949	951	1024
75°	537	524	513	536	550	575
85°	183	180	185	209	211	199
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4481.0	4481.0	4481.0	4481.0	4481.0
2.5°	4487.7	4474.4	4481.0	4476.0	4490.9
5°	4484.3	4461.2	4459.6	4467.9	4477.8
7.5°	4453.0	4428.3	4433.2	4433.2	4449.7
10°	4415.1	4390.4	4393.7	4395.3	4413.4
12.5°	4364.0	4339.3	4340.9	4339.3	4357.4
15°	4296.5	4275.1	4273.3	4271.7	4299.7
17.5°	4214.1	4184.4	4194.3	4195.9	4210.7
20°	4118.5	4095.4	4101.9	4100.3	4131.6
22.5°	4004.8	3988.2	3993.2	3989.9	4019.6
25°	3886.1	3869.6	3876.2	3867.9	3884.4
27.5°	3752.6	3741.1	3734.5	3729.6	3741.1
30°	3596.0	3589.5	3589.5	3568.1	3581.2
32.5°	3447.7	3426.2	3426.2	3418.1	3409.8
35°	3273.0	3256.6	3248.3	3225.3	3235.1
37.5°	3098.3	3060.4	3057.1	3039.0	3039.0
40°	2897.3	2875.8	2864.3	2844.5	2841.3
42.5°	2706.1	2684.7	2664.9	2631.9	2625.3
45°	2501.7	2482.0	2455.6	2424.3	2425.9
47.5°	2299.0	2271.0	2246.3	2208.4	2203.4
50°	2089.7	2069.9	2033.6	2000.7	1999.1
52.5°	1893.6	1862.3	1829.3	1789.7	1789.7
55°	1700.8	1676.1	1638.1	1595.3	1590.4
57.5°	1516.2	1493.1	1450.3	1419.0	1410.7
60°	1346.4	1313.5	1273.9	1247.6	1241.0
62.5°	1176.7	1147.1	1117.4	1091.0	1089.4
65°	1025.1	993.7	967.4	949.3	950.9
67.5°	888.3	861.9	832.2	827.3	829.0
70°	759.7	731.8	710.3	721.9	730.1
72.5°	637.8	623.0	608.1	624.6	636.1
75°	537.2	524.1	512.6	535.6	550.5
77.5°	445.0	435.1	433.4	453.2	466.4
80°	357.6	346.1	351.1	374.1	385.6
82.5°	271.9	263.7	265.3	293.3	301.6
85°	182.9	179.7	184.6	209.3	211.0
87.5°	97.3	97.3	100.5	115.3	110.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)