

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: P231783

Luminaire Tested: **24GR-LD5-120-F1-UNV-L950-CD2-U**

Issue Date: 3/12/2020

Test Information

Test Method: LM-79-08
Report Number: P231783
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-L950-CD2-U
Description: METALUX 2X4 GRLED TROFFER
WITH F1 LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12272.3 lumens
Efficiency: N/A
Efficacy: 136.2 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

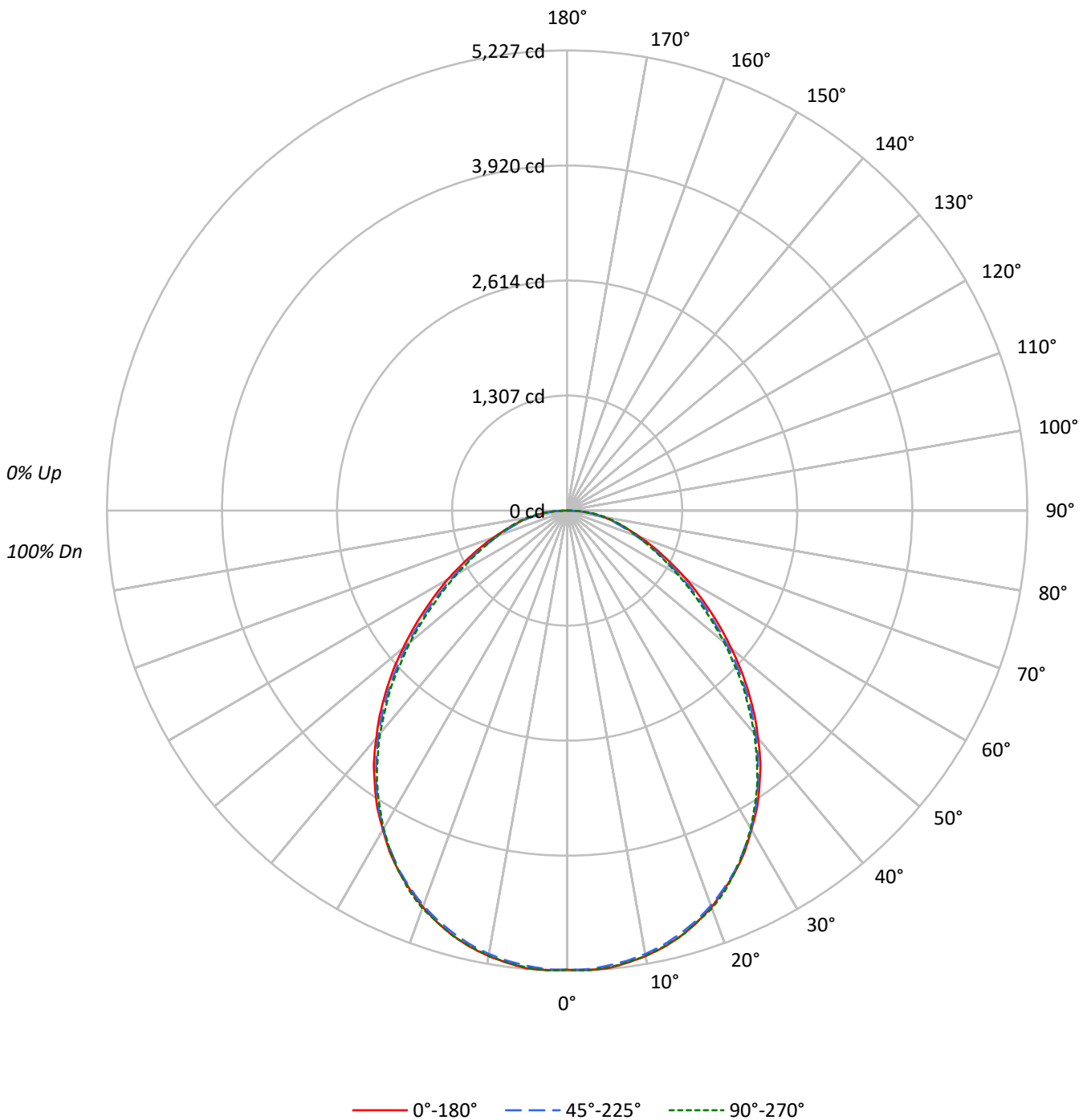
Input Watts (W): 90.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					0
RW	70	50	30	10	70	50	30	10	50	30	10	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					100			
1	109	105	101	97	107	103	99	96	98	95	93	95	92	90	91	89	87	85					85			
2	100	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72					72			
3	92	82	74	68	90	80	73	68	78	71	66	75	70	65	72	68	64	62					62			
4	85	73	65	59	82	72	64	58	70	63	57	67	61	57	65	60	56	54					54			
5	78	66	57	51	76	65	57	51	63	56	50	61	55	50	59	54	49	47					47			
6	72	60	51	45	71	59	51	45	57	50	44	55	49	44	54	48	44	42					42			
7	67	54	46	40	66	54	46	40	52	45	40	51	44	39	49	44	39	37					37			
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	33					33			
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30					30			
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28					28			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7988	7988	7988
5°	8025	7981	8013
10°	7992	7954	7989
15°	7930	7887	7936
20°	7813	7782	7838
25°	7644	7625	7641
30°	7403	7389	7372
35°	7123	7069	7041
40°	6743	6666	6612
45°	6307	6191	6116
50°	5796	5640	5545
55°	5286	5091	4943
60°	4801	4542	4425
65°	4324	4081	4011
70°	3960	3702	3806
75°	3701	3531	3791
80°	3671	3604	3959
85°	3741	3777	4314



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	493.6	4.0
10°-20°	1403.4	11.4
20°-30°	2073.2	16.9
30°-40°	2357.0	19.2
40°-50°	2201.1	17.9
50°-60°	1711.8	13.9
60°-70°	1135.8	9.3
70°-80°	657.3	5.4
80°-90°	239.0	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°	3970.2	32.4
0°-40°	6327.2	51.6
0°-60°	10240.2	83.4
0°-90°	12272.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12272.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5216	5216	5216	5216	5216	
5°	5220	5193	5191	5200	5212	495
15°	5001	4976	4974	4972	5005	1409
25°	4523	4504	4512	4502	4521	2080
35°	3810	3790	3781	3754	3766	2378
45°	2912	2889	2858	2822	2824	2244
55°	1980	1951	1907	1857	1851	1775
65°	1193	1157	1126	1105	1107	1192
75°	625	610	597	623	641	669
85°	213	209	215	244	246	232
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5215.7	5215.7	5215.7	5215.7	5215.7
2.5°	5223.4	5208.0	5215.7	5209.9	5227.2
5°	5219.6	5192.7	5190.7	5200.4	5211.8
7.5°	5183.1	5154.3	5160.1	5160.1	5179.3
10°	5139.0	5110.2	5114.0	5115.9	5137.0
12.5°	5079.5	5050.8	5052.7	5050.8	5071.9
15°	5000.9	4976.0	4974.0	4972.1	5004.7
17.5°	4905.0	4870.4	4882.0	4883.9	4901.1
20°	4793.7	4766.9	4774.5	4772.6	4809.1
22.5°	4661.3	4642.2	4647.9	4644.1	4678.6
25°	4523.2	4504.0	4511.7	4502.1	4521.3
27.5°	4367.8	4354.4	4346.7	4341.0	4354.4
30°	4185.6	4177.9	4177.9	4153.0	4168.3
32.5°	4013.0	3988.1	3988.1	3978.4	3968.9
35°	3809.6	3790.4	3780.9	3754.0	3765.5
37.5°	3606.3	3562.2	3558.4	3537.3	3537.3
40°	3372.3	3347.3	3333.9	3310.9	3307.0
42.5°	3149.8	3124.8	3101.8	3063.4	3055.8
45°	2911.9	2888.9	2858.2	2821.7	2823.6
47.5°	2675.9	2643.4	2614.6	2570.5	2564.7
50°	2432.3	2409.3	2367.1	2328.8	2326.9
52.5°	2204.0	2167.6	2129.2	2083.2	2083.2
55°	1979.6	1950.9	1906.7	1856.9	1851.1
57.5°	1764.8	1737.9	1688.0	1651.6	1642.0
60°	1567.2	1528.8	1482.8	1452.1	1444.4
62.5°	1369.6	1335.1	1300.6	1269.9	1268.0
65°	1193.2	1156.7	1126.0	1104.9	1106.8
67.5°	1033.9	1003.3	968.7	963.0	964.9
70°	884.3	851.7	826.7	840.2	849.8
72.5°	742.4	725.1	707.8	727.0	740.5
75°	625.4	610.0	596.6	623.4	640.7
77.5°	517.9	506.4	504.5	527.5	542.9
80°	416.2	402.9	408.6	435.4	448.9
82.5°	316.5	306.9	308.9	341.4	351.1
85°	212.9	209.1	214.9	243.6	245.5
87.5°	113.2	113.2	117.0	134.3	128.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)