

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: P231850

Luminaire Tested: **24GR-LD5-120-A19/156-UNV-L940-CD2-U**

Issue Date: 3/12/2020

Test Information

Test Method: LM-79-08
Report Number: P231850
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33308)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/12/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-120-A19/156-UNV-L940-CD2-U
Description: METALUX 2X4 GRLED TROFFER
WITH A19/156 LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10261.5 lumens
Efficiency: N/A
Efficacy: 113.9 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.25
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

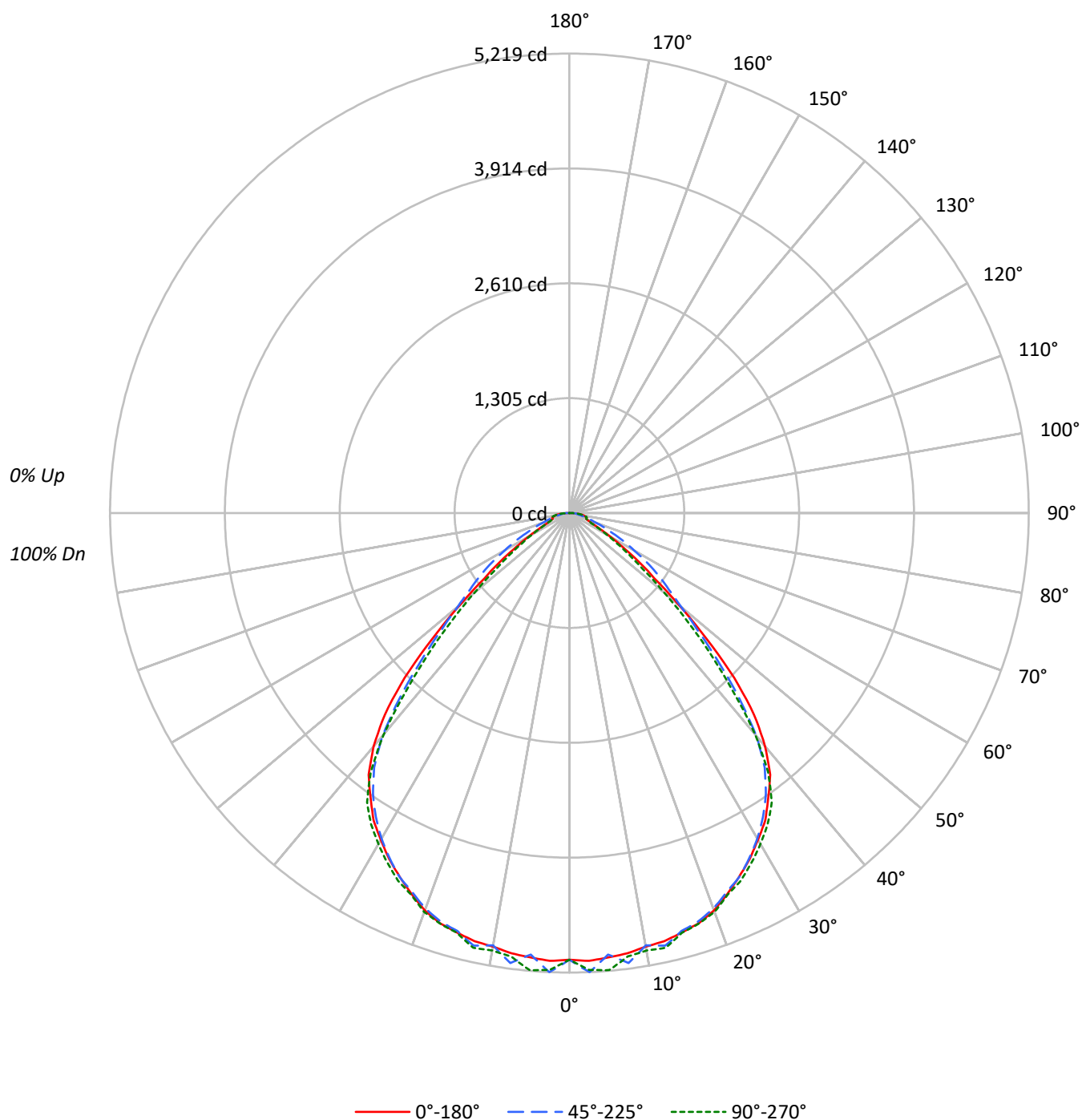
Input Watts (W): 90.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					0
RW	70	50	30	10	70	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
1	111	107	103	100	108	105	102	99		101	98	96		97	95	93		93	92	90
2	103	96	90	86	100	94	89	85		91	86	83		88	84	81		85	82	79
3	95	86	79	74	93	85	78	73		82	77	72		79	75	71		77	73	70
4	88	78	71	65	86	77	70	64		74	68	64		72	67	63		70	66	62
5	82	71	63	57	80	70	62	57		68	61	56		66	60	56		64	59	55
6	76	65	57	51	75	64	56	51		62	55	50		60	55	50		59	54	50
7	71	59	51	46	70	58	51	46		57	50	45		56	50	45		54	49	45
8	67	55	47	42	65	54	47	41		53	46	41		51	45	41		50	45	41
9	63	50	43	38	61	50	43	38		49	42	38		48	42	37		47	41	37
10	59	47	39	35	58	46	39	35		45	39	34		44	38	34		44	38	34

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7771	7771	7771
5°	7789	7738	8011
10°	7776	7753	7848
15°	7821	7795	7826
20°	7827	7795	7859
25°	7706	7712	7787
30°	7578	7554	7677
35°	7364	7275	7494
40°	6916	6606	6570
45°	5733	5187	4919
50°	3856	3934	3361
55°	2543	3300	2205
60°	1631	2605	1509
65°	1051	1989	1021
70°	930	1424	930
75°	1200	1131	1209
80°	1468	974	1541
85°	1710	1448	1796



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	485.8	4.7
10°-20°	1395.0	13.6
20°-30°	2100.1	20.5
30°-40°	2434.2	23.7
40°-50°	1901.5	18.5
50°-60°	1015.3	9.9
60°-70°	522.1	5.1
70°-80°	295.4	2.9
80°-90°	112.2	1.1
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°	3980.9	38.8
0°-40°	6415.1	62.5
0°-60°	9331.9	90.9
0°-90°	10261.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10261.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5074	5074	5074	5074	5074	
5°	5066	5208	5033	5171	5211	482
15°	4932	4964	4916	4947	4936	1393
25°	4560	4545	4563	4556	4608	2101
35°	3939	3920	3891	3968	4008	2455
45°	2647	2648	2394	2373	2271	1994
55°	952	1205	1236	1114	826	879
65°	290	605	549	603	282	319
75°	203	381	191	356	204	205
85°	97	127	82	127	102	100
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5074.0	5074.0	5074.0	5074.0	5074.0
2.5°	5090.5	5182.8	5219.1	5174.5	5194.3
5°	5065.8	5207.5	5032.8	5171.3	5210.8
7.5°	5042.7	5027.9	5154.8	5022.9	5079.0
10°	4999.9	5009.8	4985.1	5079.0	5046.0
12.5°	4980.1	5037.8	5032.8	4985.1	5057.6
15°	4932.3	4963.6	4915.8	4947.2	4935.6
17.5°	4884.5	4869.7	4864.8	4877.9	4889.4
20°	4802.2	4752.7	4782.4	4785.6	4821.9
22.5°	4683.5	4653.8	4660.4	4690.1	4693.4
25°	4559.9	4545.0	4563.2	4556.5	4607.6
27.5°	4431.3	4411.5	4423.1	4447.8	4479.1
30°	4284.7	4279.7	4271.4	4292.9	4340.7
32.5°	4139.6	4100.0	4093.5	4138.0	4192.4
35°	3938.6	3920.5	3890.8	3968.3	4007.8
37.5°	3747.4	3691.4	3643.6	3689.7	3706.3
40°	3459.0	3416.2	3304.1	3309.1	3286.0
42.5°	3104.8	3073.4	2859.2	2821.3	2757.0
45°	2646.6	2648.3	2394.5	2373.1	2270.8
47.5°	2114.3	2208.2	1987.5	1962.7	1811.1
50°	1618.3	1788.0	1651.2	1611.7	1410.7
52.5°	1214.6	1463.4	1420.5	1334.8	1058.0
55°	952.5	1204.7	1236.0	1114.0	825.6
57.5°	716.9	992.1	1043.2	942.6	637.8
60°	532.3	835.5	850.4	810.8	492.7
62.5°	395.5	710.3	690.5	695.4	365.8
65°	290.1	604.8	548.8	603.1	281.8
67.5°	237.3	524.1	426.8	522.4	229.1
70°	207.6	464.7	318.0	459.8	207.6
72.5°	201.1	426.8	252.2	408.7	202.7
75°	202.7	380.6	191.2	356.0	204.3
77.5°	186.2	313.1	145.0	303.2	194.4
80°	166.4	237.3	110.4	240.6	174.7
82.5°	141.7	173.0	89.0	178.0	146.6
85°	97.3	126.8	82.4	126.8	102.2
87.5°	46.2	75.8	51.1	72.5	52.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)