

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: P231859

Luminaire Tested: **24GR-LD5-150-A19/156-UNV-L950-CD2-U**

Issue Date: 3/12/2020

Test Information

Test Method: LM-79-08
Report Number: P231859
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-LD5-150-A19/156-UNV-L950-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: 14944.9 lumens
Efficiency: N/A
Efficacy: 124.2 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

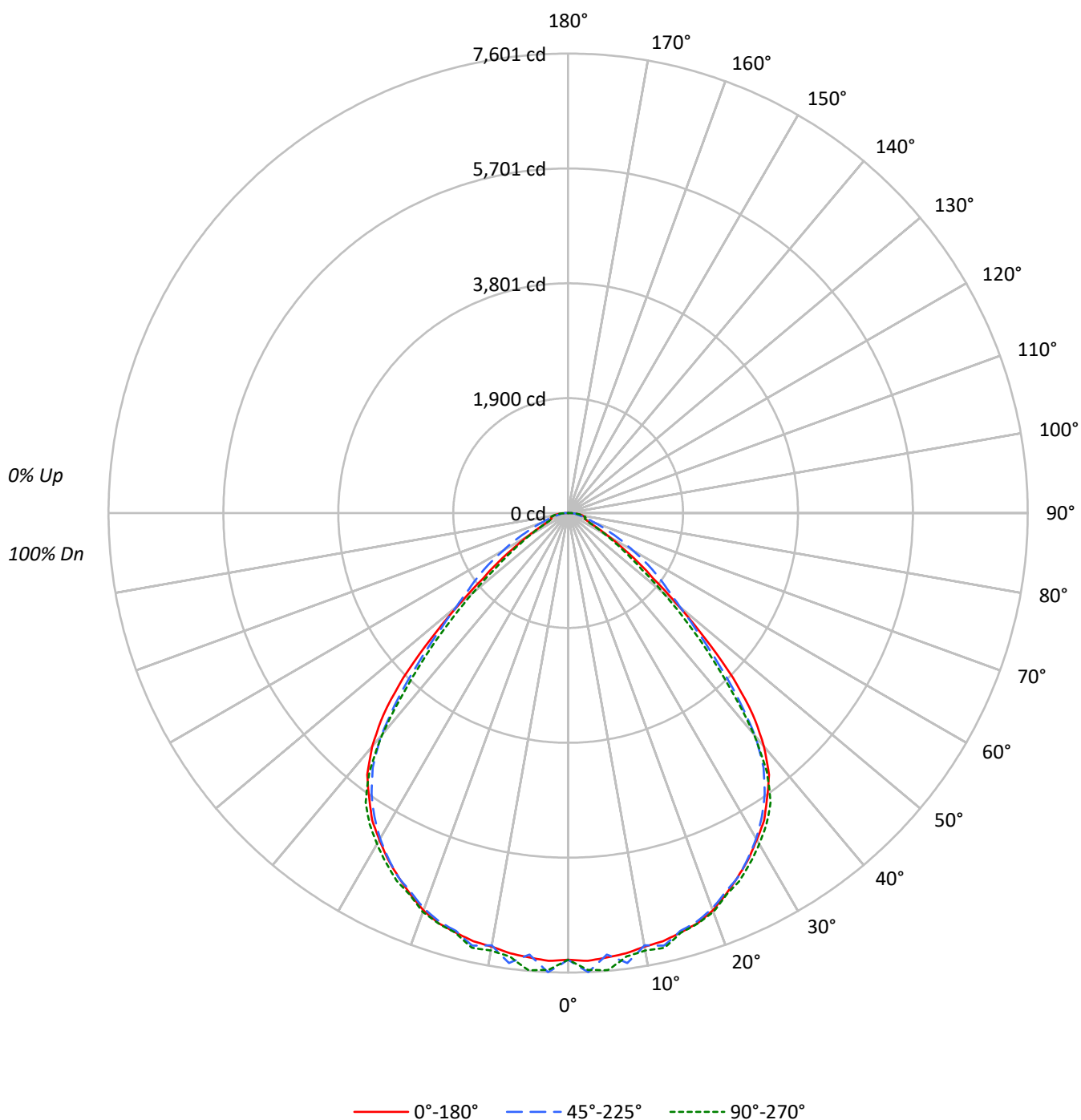
Input Watts (W): 120.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		100
1	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88		88
2	103	96	90	86	100	94	89	85	91	86	83	88	84	81	85	82	79	77		77
3	95	86	79	74	93	85	78	73	82	77	72	79	75	71	77	73	70	68		68
4	88	78	71	65	86	77	70	64	74	68	64	72	67	63	70	66	62	60		60
5	82	71	63	57	80	70	62	57	68	61	56	66	60	56	64	59	55	53		53
6	76	65	57	51	75	64	56	51	62	55	50	60	55	50	59	54	50	48		48
7	71	59	51	46	70	58	51	46	57	50	45	56	50	45	54	49	45	43		43
8	67	55	47	42	65	54	47	41	53	46	41	51	45	41	50	45	41	39		39
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36		36
10	59	47	39	35	58	46	39	35	45	39	34	44	38	34	44	38	34	33		33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11318	11318	11318
5°	11343	11270	11668
10°	11325	11292	11430
15°	11390	11352	11398
20°	11399	11352	11446
25°	11223	11231	11341
30°	11036	11002	11181
35°	10725	10595	10914
40°	10073	9621	9569
45°	8349	7554	7164
50°	5616	5730	4895
55°	3704	4807	3211
60°	2375	3794	2198
65°	1531	2897	1487
70°	1354	2074	1354
75°	1747	1647	1761
80°	2138	1418	2244
85°	2488	2109	2615



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	707.5	4.7
10°-20°	2031.6	13.6
20°-30°	3058.6	20.5
30°-40°	3545.1	23.7
40°-50°	2769.3	18.5
50°-60°	1478.7	9.9
60°-70°	760.4	5.1
70°-80°	430.2	2.9
80°-90°	163.4	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°	5797.8	38.8
0°-40°	9342.9	62.5
0°-60°	13591.0	90.9
0°-90°	14944.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	14944.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7390	7390	7390	7390	7390	
5°	7378	7584	7330	7531	7589	702
15°	7183	7229	7159	7205	7188	2029
25°	6641	6619	6646	6636	6711	3060
35°	5736	5710	5667	5779	5837	3576
45°	3854	3857	3487	3456	3307	2905
55°	1387	1754	1800	1622	1202	1280
65°	422	881	799	878	410	464
75°	295	554	278	518	298	299
85°	142	185	120	185	149	146
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7389.8	7389.8	7389.8	7389.8	7389.8
2.5°	7413.9	7548.3	7601.0	7536.3	7565.0
5°	7377.8	7584.2	7329.9	7531.4	7589.0
7.5°	7344.2	7322.7	7507.4	7315.4	7397.0
10°	7281.8	7296.2	7260.3	7397.0	7349.1
12.5°	7253.1	7337.1	7329.9	7260.3	7365.8
15°	7183.4	7229.0	7159.4	7205.0	7188.3
17.5°	7113.8	7092.3	7085.0	7104.2	7121.0
20°	6993.8	6921.8	6965.0	6969.8	7022.7
22.5°	6821.0	6777.9	6787.4	6830.6	6835.5
25°	6641.0	6619.4	6645.8	6636.2	6710.6
27.5°	6453.8	6425.0	6441.8	6477.8	6523.4
30°	6240.2	6233.0	6221.0	6252.2	6321.8
32.5°	6029.0	5971.4	5961.8	6026.6	6105.8
35°	5736.2	5709.8	5666.6	5779.4	5837.0
37.5°	5457.8	5376.2	5306.6	5373.7	5397.8
40°	5037.8	4975.3	4812.2	4819.4	4785.8
42.5°	4521.8	4476.1	4164.2	4108.9	4015.4
45°	3854.5	3856.9	3487.3	3456.1	3307.3
47.5°	3079.3	3216.1	2894.5	2858.5	2637.7
50°	2356.9	2604.1	2404.9	2347.3	2054.5
52.5°	1768.9	2131.3	2068.9	1944.0	1540.8
55°	1387.2	1754.5	1800.1	1622.4	1202.5
57.5°	1044.0	1444.8	1519.2	1372.8	928.8
60°	775.2	1216.9	1238.4	1180.8	717.6
62.5°	576.0	1034.4	1005.6	1012.8	532.8
65°	422.4	880.8	799.3	878.4	410.4
67.5°	345.6	763.2	621.6	760.9	333.6
70°	302.4	676.9	463.2	669.6	302.4
72.5°	292.8	621.6	367.2	595.2	295.2
75°	295.2	554.5	278.4	518.4	297.6
77.5°	271.2	456.0	211.2	441.6	283.2
80°	242.4	345.6	160.8	350.4	254.4
82.5°	206.4	252.0	129.6	259.2	213.6
85°	141.6	184.8	120.0	184.8	148.8
87.5°	67.2	110.4	74.4	105.6	76.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)