

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: P231851

Luminaire Tested: **24GR-LD5-120-A19/156-UNV-L950-CD2-U**

Issue Date: 3/12/2020

Test Information

Test Method: LM-79-08
Report Number: P231851
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-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: 11944.7 lumens
Efficiency: N/A
Efficacy: 132.6 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

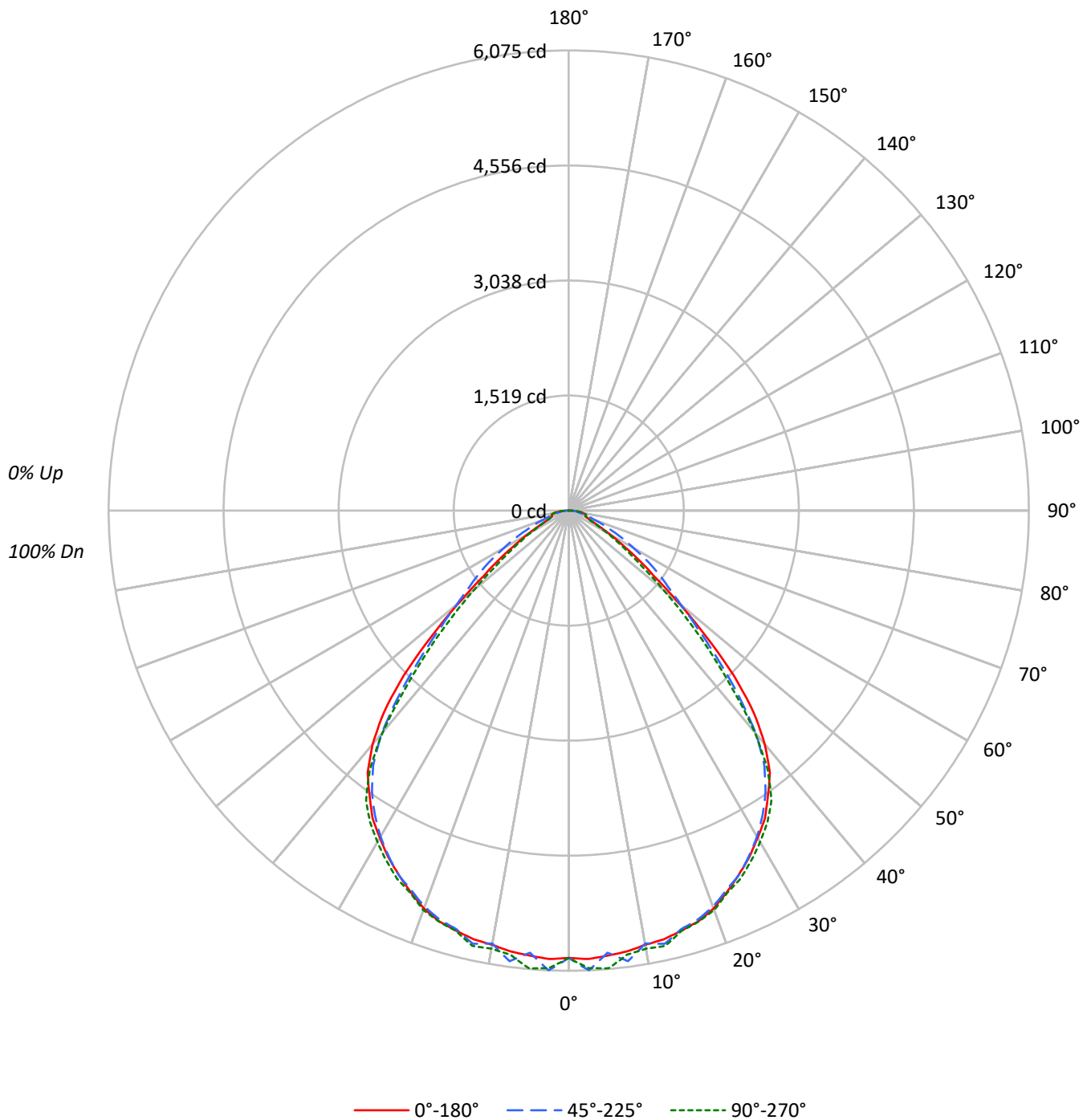
Input Watts (W): 90.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	9046	9046	9046
5°	9066	9007	9326
10°	9052	9025	9135
15°	9104	9073	9110
20°	9111	9073	9148
25°	8970	8977	9064
30°	8821	8793	8936
35°	8572	8468	8723
40°	8050	7690	7648
45°	6673	6037	5726
50°	4488	4580	3913
55°	2961	3842	2566
60°	1898	3032	1757
65°	1224	2315	1189
70°	1082	1658	1082
75°	1397	1317	1408
80°	1708	1133	1793
85°	1989	1685	2089



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	565.5	4.7
10°-20°	1623.8	13.6
20°-30°	2444.6	20.5
30°-40°	2833.4	23.7
40°-50°	2213.4	18.5
50°-60°	1181.9	9.9
60°-70°	607.8	5.1
70°-80°	343.8	2.9
80°-90°	130.6	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°	4633.9	38.8
0°-40°	7467.3	62.5
0°-60°	10862.5	90.9
0°-90°	11944.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11944.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5906	5906	5906	5906	5906	
5°	5897	6062	5858	6020	6066	561
15°	5741	5778	5722	5759	5745	1622
25°	5308	5291	5312	5304	5363	2446
35°	4585	4564	4529	4619	4665	2858
45°	3081	3083	2787	2762	2643	2321
55°	1109	1402	1439	1297	961	1023
65°	338	704	639	702	328	371
75°	236	443	222	414	238	239
85°	113	148	96	148	119	117
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5906.3	5906.3	5906.3	5906.3	5906.3
2.5°	5925.5	6032.9	6075.1	6023.3	6046.3
5°	5896.7	6061.7	5858.3	6019.5	6065.5
7.5°	5869.9	5852.6	6000.3	5846.8	5912.1
10°	5820.0	5831.5	5802.7	5912.1	5873.7
12.5°	5797.0	5864.1	5858.3	5802.7	5887.2
15°	5741.3	5777.8	5722.2	5758.6	5745.2
17.5°	5685.7	5668.4	5662.7	5678.0	5691.4
20°	5589.8	5532.3	5566.7	5570.6	5612.8
22.5°	5451.6	5417.1	5424.8	5459.4	5463.2
25°	5307.8	5290.6	5311.7	5303.9	5363.4
27.5°	5158.2	5135.1	5148.6	5177.4	5213.8
30°	4987.4	4981.7	4972.1	4997.1	5052.7
32.5°	4818.6	4772.6	4764.9	4816.7	4880.1
35°	4584.6	4563.6	4529.0	4619.2	4665.2
37.5°	4362.1	4296.8	4241.2	4294.9	4314.1
40°	4026.4	3976.5	3846.1	3851.8	3825.0
42.5°	3614.0	3577.6	3328.1	3284.0	3209.2
45°	3080.7	3082.6	2787.2	2762.3	2643.4
47.5°	2461.1	2570.5	2313.4	2284.6	2108.2
50°	1883.7	2081.3	1922.1	1876.1	1642.0
52.5°	1413.8	1703.4	1653.6	1553.8	1231.5
55°	1108.7	1402.2	1438.7	1296.8	961.1
57.5°	834.5	1154.8	1214.2	1097.3	742.4
60°	619.6	972.5	989.8	943.8	573.6
62.5°	460.4	826.7	803.7	809.5	425.9
65°	337.6	704.0	638.8	702.1	328.1
67.5°	276.2	610.0	496.9	608.1	266.6
70°	241.7	540.9	370.2	535.2	241.7
72.5°	234.1	496.9	293.5	475.7	236.0
75°	236.0	443.1	222.5	414.3	237.9
77.5°	216.8	364.5	168.8	353.0	226.3
80°	193.7	276.2	128.5	280.1	203.3
82.5°	165.0	201.4	103.6	207.2	170.7
85°	113.2	147.7	95.9	147.7	118.9
87.5°	53.7	88.3	59.4	84.4	61.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)