

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: P231858

Luminaire Tested: **24GR-LD5-150-A19/156-UNV-L940-CD2-U**

Issue Date: 3/12/2020

Test Information

Test Method: LM-79-08
Report Number: P231858
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-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: 12839.8 lumens
Efficiency: N/A
Efficacy: 106.7 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

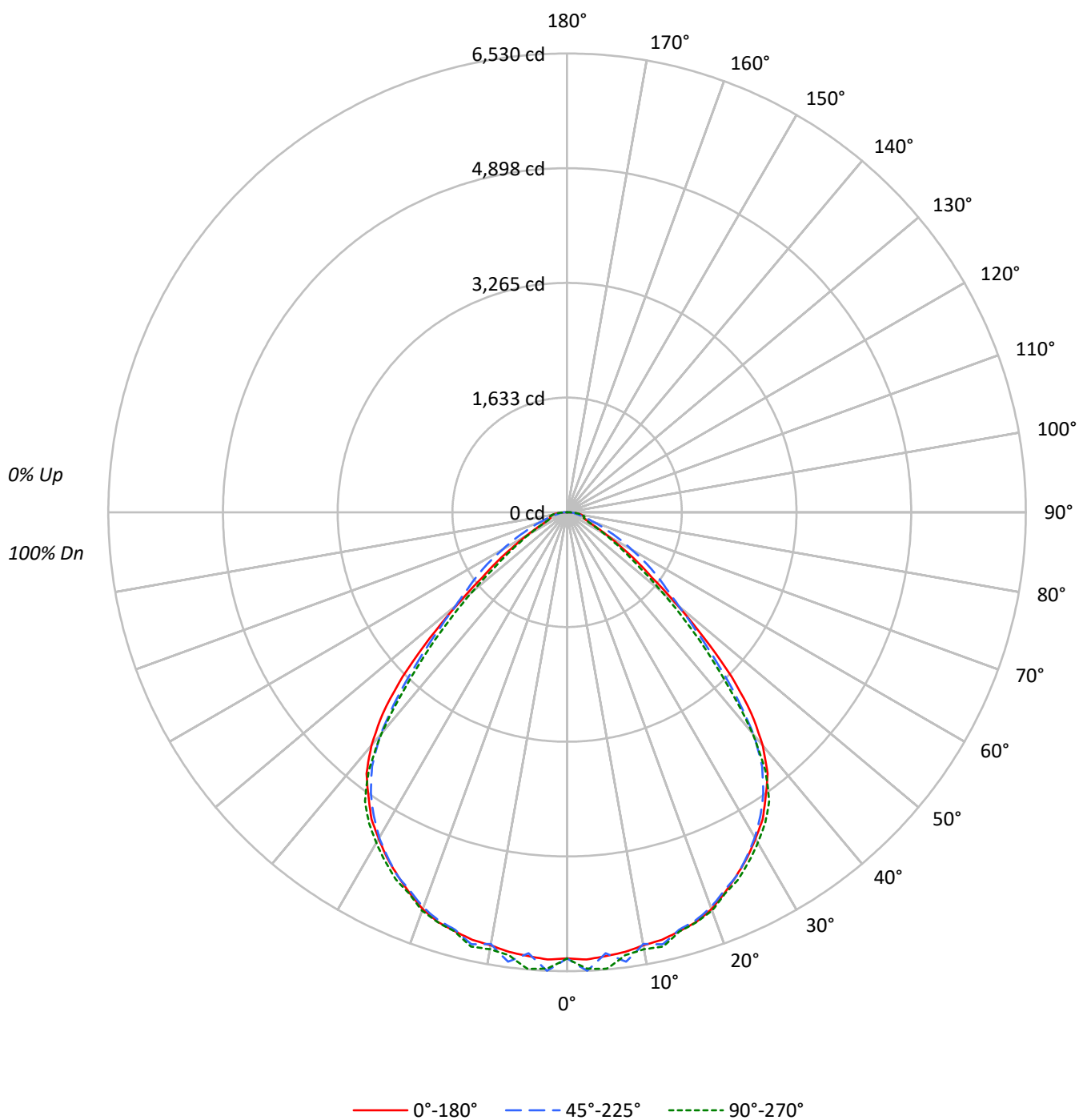
Input Watts (W): 120.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	9724	9724	9724
5°	9745	9682	10024
10°	9730	9701	9820
15°	9786	9753	9793
20°	9794	9753	9834
25°	9642	9649	9743
30°	9482	9452	9606
35°	9215	9103	9377
40°	8654	8266	8221
45°	7173	6490	6155
50°	4825	4923	4206
55°	3183	4130	2758
60°	2040	3259	1888
65°	1315	2488	1278
70°	1163	1782	1163
75°	1501	1416	1513
80°	1837	1218	1928
85°	2139	1812	2248



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	607.9	4.7
10°-20°	1745.5	13.6
20°-30°	2627.8	20.5
30°-40°	3045.8	23.7
40°-50°	2379.2	18.5
50°-60°	1270.4	9.9
60°-70°	653.3	5.1
70°-80°	369.6	2.9
80°-90°	140.4	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°	4981.1	38.8
0°-40°	8026.9	62.5
0°-60°	11676.6	90.9
0°-90°	12839.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12839.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6349	6349	6349	6349	6349	
5°	6339	6516	6297	6471	6520	603
15°	6172	6211	6151	6190	6176	1743
25°	5706	5687	5710	5702	5765	2629
35°	4928	4906	4868	4965	5015	3072
45°	3312	3314	2996	2969	2841	2495
55°	1192	1507	1546	1394	1033	1100
65°	363	757	687	755	353	399
75°	254	476	239	445	256	257
85°	122	159	103	159	128	125
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6349.0	6349.0	6349.0	6349.0	6349.0
2.5°	6369.5	6485.0	6530.4	6474.7	6499.4
5°	6338.6	6516.0	6297.3	6470.6	6520.1
7.5°	6309.7	6291.2	6449.9	6285.0	6355.1
10°	6256.2	6268.5	6237.6	6355.1	6313.9
12.5°	6231.4	6303.5	6297.3	6237.6	6328.3
15°	6171.6	6210.7	6151.0	6190.1	6175.7
17.5°	6111.8	6093.2	6087.1	6103.5	6118.0
20°	6008.6	5946.8	5984.0	5988.1	6033.4
22.5°	5860.2	5823.1	5831.3	5868.5	5872.6
25°	5705.6	5687.0	5709.7	5701.5	5765.4
27.5°	5544.8	5520.0	5534.4	5565.3	5604.5
30°	5361.2	5355.0	5344.7	5371.6	5431.3
32.5°	5179.8	5130.2	5122.0	5177.7	5245.7
35°	4928.2	4905.5	4868.4	4965.3	5014.8
37.5°	4689.0	4618.9	4559.1	4616.8	4637.5
40°	4328.1	4274.5	4134.3	4140.5	4111.7
42.5°	3884.8	3845.7	3577.6	3530.1	3449.7
45°	3311.6	3313.7	2996.1	2969.3	2841.4
47.5°	2645.5	2763.1	2486.8	2455.8	2266.2
50°	2024.9	2237.3	2066.2	2016.6	1765.1
52.5°	1519.7	1831.0	1777.4	1670.2	1323.8
55°	1191.9	1507.3	1546.5	1393.9	1033.0
57.5°	897.0	1241.3	1305.2	1179.5	798.0
60°	666.1	1045.4	1064.0	1014.5	616.5
62.5°	494.8	888.7	864.0	870.1	457.8
65°	362.9	756.7	686.6	754.7	352.6
67.5°	297.0	655.8	534.1	653.7	286.6
70°	259.8	581.4	398.0	575.3	259.8
72.5°	251.6	534.1	315.4	511.4	253.6
75°	253.6	476.4	239.2	445.4	255.7
77.5°	233.0	391.8	181.5	379.4	243.3
80°	208.3	297.0	138.1	301.1	218.6
82.5°	177.3	216.5	111.4	222.7	183.5
85°	121.7	158.8	103.1	158.8	127.9
87.5°	57.7	94.9	63.9	90.7	66.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)