

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: P231813

Luminaire Tested: **24GR-LD5-180-A-UNV-L935-CD2-U**

Issue Date: 3/12/2020

Test Information

Test Method: LM-79-08
Report Number: P231813
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33306)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/12/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-180-A-UNV-L935-CD2-U
Description: METALUX 2X4 GRLED TROFFER
WITH A LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15522.7 lumens
Efficiency: N/A
Efficacy: 107.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.2 / 1.26
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

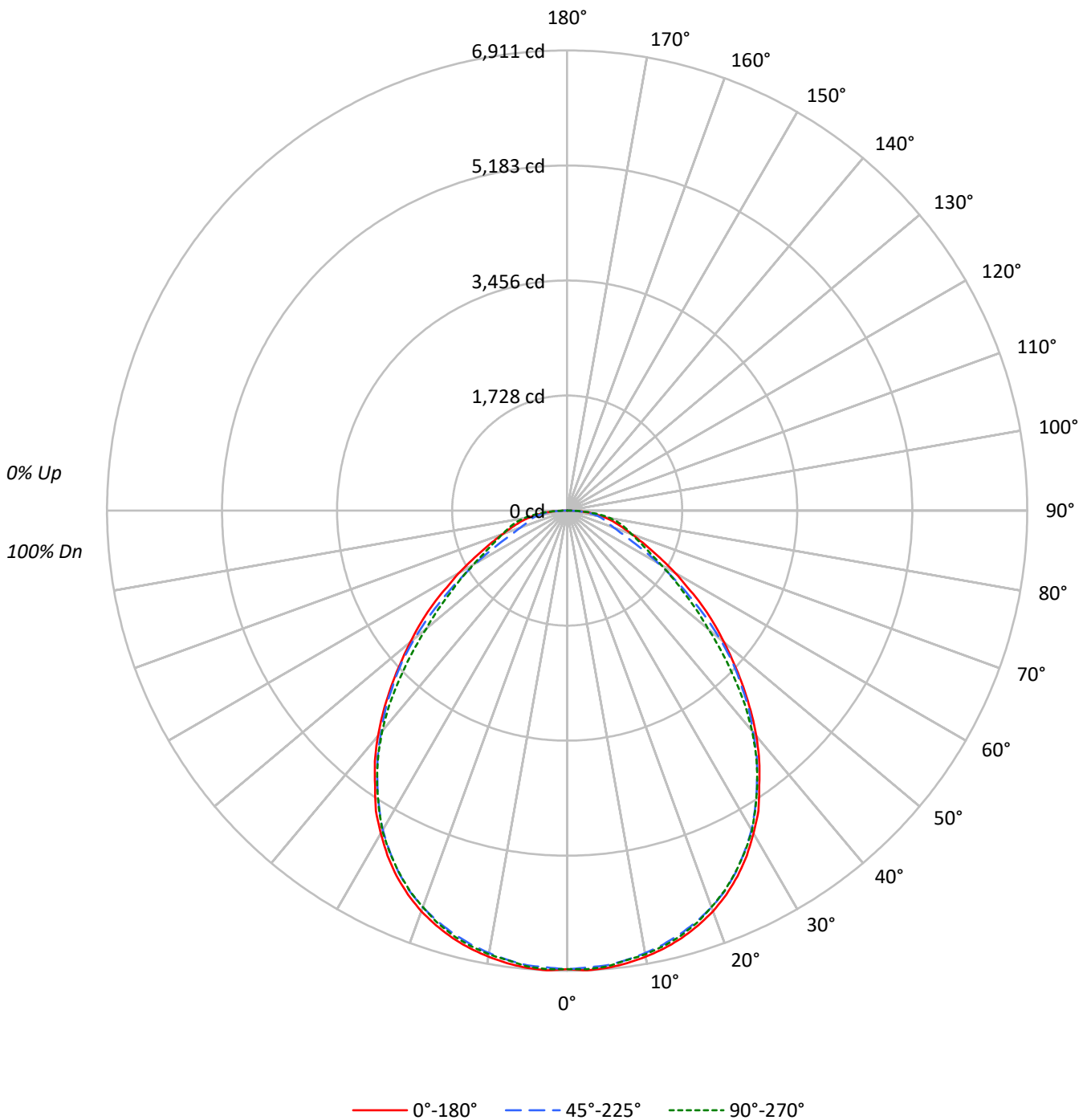
Input Watts (W): 144.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	110	105	101	98	107	103	99	96	99	96	93		95	93	90		91	89	88	86
2	101	93	87	82	98	91	86	81	88	83	79		85	81	77		82	78	75	73
3	93	83	75	69	90	81	74	69	79	73	68		76	71	67		73	69	65	63
4	86	74	66	60	83	73	65	60	71	64	59		68	63	58		66	61	57	55
5	79	67	59	53	77	66	58	52	64	57	52		62	56	51		60	55	51	49
6	73	61	53	46	72	60	52	46	58	51	46		57	50	45		55	49	45	43
7	68	56	47	42	67	55	47	41	53	46	41		52	46	41		51	45	41	39
8	64	51	43	37	62	50	43	37	49	42	37		48	41	37		47	41	37	35
9	60	47	39	34	58	46	39	34	45	38	34		44	38	33		43	38	33	32
10	56	44	36	31	55	43	36	31	42	35	31		41	35	31		40	35	30	29

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10549	10549	10549
5°	10600	10541	10567
10°	10581	10495	10525
15°	10540	10434	10480
20°	10440	10335	10331
25°	10237	10128	10119
30°	9899	9797	9818
35°	9403	9295	9308
40°	8841	8688	8635
45°	8103	7994	7677
50°	7325	7125	6588
55°	6576	5987	5680
60°	5759	4819	4995
65°	5023	3789	4597
70°	4596	3308	4596
75°	4598	3519	5066
80°	4991	4146	5775
85°	5479	4678	6195



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	652.2	4.2
10°-20°	1861.3	12.0
20°-30°	2759.9	17.8
30°-40°	3113.4	20.1
40°-50°	2819.9	18.2
50°-60°	2034.4	13.1
60°-70°	1214.7	7.8
70°-80°	750.8	4.8
80°-90°	316.3	2.0
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°	5273.3	34.0
0°-40°	8386.8	54.0
0°-60°	13241.0	85.3
0°-90°	15522.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15522.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6887	6887	6887	6887	6887	
5°	6894	6885	6856	6849	6873	655
15°	6647	6607	6580	6583	6609	1874
25°	6058	6024	5993	5971	5988	2783
35°	5029	5022	4971	4974	4978	3146
45°	3741	3717	3691	3600	3544	2883
55°	2463	2386	2242	2132	2127	2199
65°	1386	1221	1046	1187	1268	1394
75°	777	674	595	741	856	830
85°	312	273	266	348	352	326
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6887.2	6887.2	6887.2	6887.2	6887.2
2.5°	6911.3	6892.1	6868.1	6882.4	6894.4
5°	6894.4	6884.8	6856.1	6848.9	6872.8
7.5°	6858.5	6834.5	6808.1	6820.1	6810.5
10°	6803.3	6781.7	6748.2	6750.5	6767.4
12.5°	6736.2	6709.8	6673.8	6683.4	6697.8
15°	6647.4	6606.7	6580.3	6582.7	6609.1
17.5°	6534.7	6503.5	6469.9	6477.2	6489.2
20°	6405.3	6388.4	6340.5	6326.1	6338.1
22.5°	6242.1	6211.0	6184.6	6177.4	6179.8
25°	6057.5	6024.0	5992.8	5971.2	5988.0
27.5°	5841.7	5812.9	5772.2	5765.0	5779.3
30°	5597.1	5575.5	5539.5	5529.9	5551.5
32.5°	5347.7	5311.7	5261.3	5261.3	5266.2
35°	5028.8	5021.5	4971.2	4973.6	4978.4
37.5°	4741.0	4707.4	4678.7	4649.8	4664.2
40°	4422.0	4383.6	4345.3	4326.1	4318.9
42.5°	4079.2	4050.3	4033.5	3964.0	3947.2
45°	3741.0	3717.0	3690.6	3599.5	3544.3
47.5°	3395.7	3390.9	3369.3	3208.6	3153.4
50°	3074.3	3067.1	2990.4	2820.1	2765.0
52.5°	2769.7	2721.8	2621.1	2453.2	2443.7
55°	2462.8	2386.0	2242.2	2131.9	2127.1
57.5°	2139.1	2047.9	1901.7	1841.7	1872.9
60°	1880.1	1741.0	1573.1	1580.3	1630.7
62.5°	1611.5	1455.6	1290.1	1362.1	1422.0
65°	1386.1	1220.6	1045.6	1187.0	1268.5
67.5°	1189.4	1036.0	868.1	1057.6	1136.7
70°	1026.4	901.7	738.6	937.6	1026.4
72.5°	896.8	781.7	654.7	841.8	944.9
75°	777.0	673.9	594.7	741.0	856.1
77.5°	673.9	573.2	537.2	654.7	767.4
80°	565.9	474.8	470.0	570.8	654.7
82.5°	441.2	378.9	378.9	477.2	527.6
85°	311.8	273.4	266.2	347.7	352.5
87.5°	160.6	153.5	139.1	182.2	182.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)