

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: P231810

Luminaire Tested: **24GR-LD5-150-A-UNV-L940-CD2-U**

Issue Date: 3/12/2020

Test Information

Test Method: LM-79-08
Report Number: P231810
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-LD5-150-A-UNV-L940-CD2-U
Description: METALUX 2X4 GRLED TROFFER
WITH A LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13347.2 lumens
Efficiency: N/A
Efficacy: 110.9 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

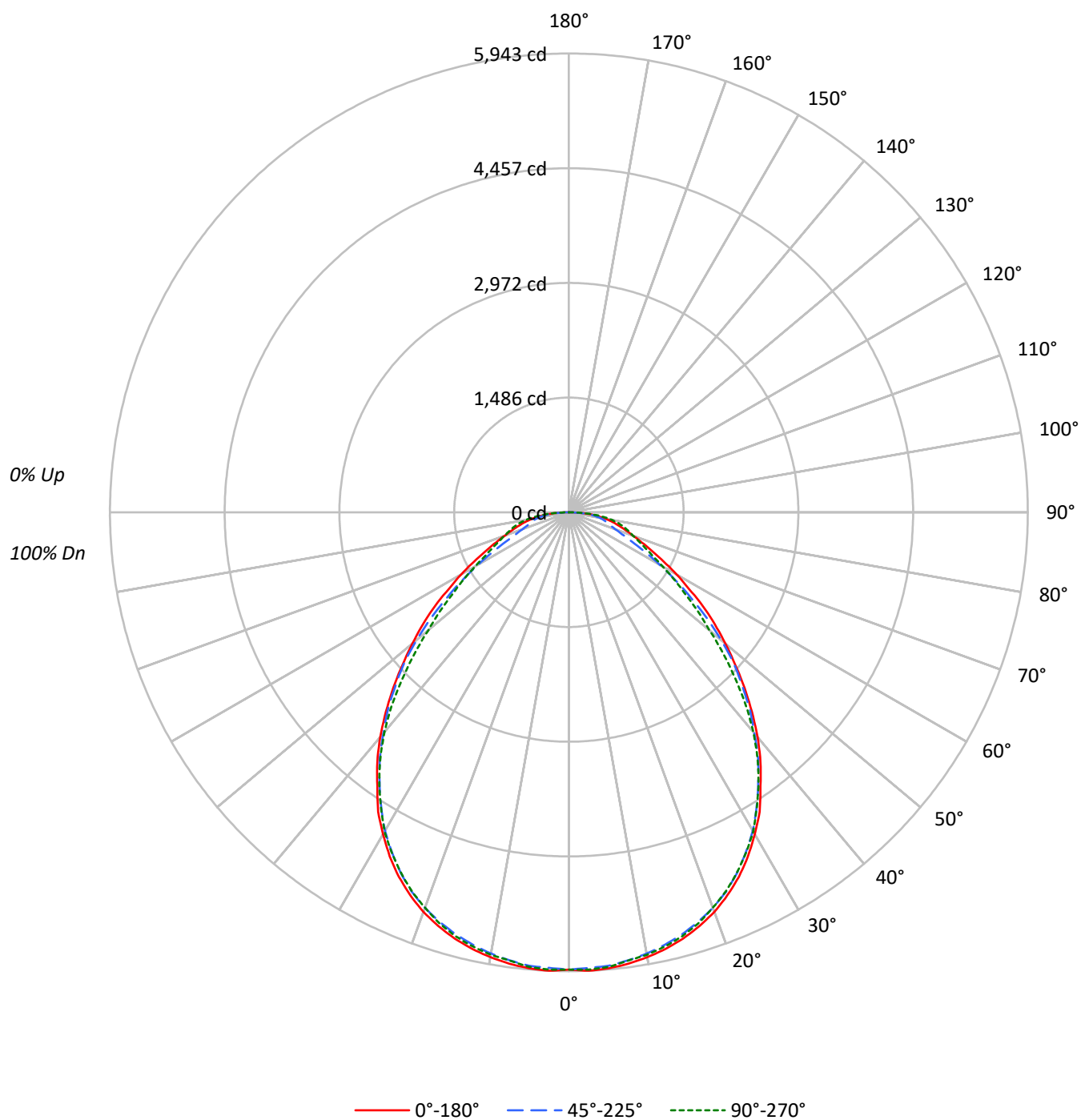
Input Watts (W): 120.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9070	9070	9070
5°	9114	9064	9086
10°	9098	9024	9050
15°	9063	8972	9011
20°	8977	8886	8883
25°	8802	8708	8701
30°	8511	8424	8442
35°	8085	7992	8004
40°	7602	7470	7425
45°	6968	6874	6601
50°	6299	6127	5665
55°	5655	5148	4884
60°	4952	4144	4295
65°	4319	3258	3953
70°	3952	2844	3952
75°	3953	3026	4357
80°	4292	3564	4966
85°	4711	4021	5328



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	560.8	4.2
10°-20°	1600.4	12.0
20°-30°	2373.1	17.8
30°-40°	2677.1	20.1
40°-50°	2424.7	18.2
50°-60°	1749.2	13.1
60°-70°	1044.4	7.8
70°-80°	645.5	4.8
80°-90°	271.9	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°	4534.3	34.0
0°-40°	7211.3	54.0
0°-60°	11385.3	85.3
0°-90°	13347.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13347.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5922	5922	5922	5922	5922	
5°	5928	5920	5895	5889	5910	563
15°	5716	5681	5658	5660	5683	1611
25°	5209	5180	5153	5134	5149	2393
35°	4324	4318	4274	4276	4281	2705
45°	3217	3196	3173	3095	3048	2479
55°	2118	2052	1928	1833	1829	1890
65°	1192	1050	899	1021	1091	1199
75°	668	579	511	637	736	713
85°	268	235	229	299	303	280
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5922.0	5922.0	5922.0	5922.0	5922.0
2.5°	5942.6	5926.1	5905.5	5917.8	5928.2
5°	5928.2	5919.9	5895.2	5889.0	5909.7
7.5°	5897.3	5876.6	5853.9	5864.3	5856.0
10°	5849.8	5831.2	5802.4	5804.5	5818.9
12.5°	5792.1	5769.4	5738.5	5746.7	5759.1
15°	5715.8	5680.7	5658.0	5660.1	5682.8
17.5°	5618.9	5592.1	5563.3	5569.4	5579.7
20°	5507.5	5493.1	5451.9	5439.5	5449.8
22.5°	5367.3	5340.5	5317.8	5311.6	5313.7
25°	5208.6	5179.7	5152.9	5134.3	5148.7
27.5°	5023.0	4998.2	4963.1	4957.0	4969.3
30°	4812.6	4794.1	4763.2	4754.9	4773.5
32.5°	4598.2	4567.3	4523.9	4523.9	4528.1
35°	4324.0	4317.8	4274.5	4276.5	4280.6
37.5°	4076.5	4047.7	4022.9	3998.1	4010.5
40°	3802.3	3769.3	3736.3	3719.8	3713.7
42.5°	3507.4	3482.7	3468.2	3408.4	3394.0
45°	3216.7	3196.1	3173.4	3095.1	3047.6
47.5°	2919.8	2915.7	2897.1	2759.0	2711.5
50°	2643.5	2637.3	2571.3	2424.9	2377.5
52.5°	2381.6	2340.3	2253.7	2109.4	2101.2
55°	2117.7	2051.7	1927.9	1833.1	1829.0
57.5°	1839.3	1760.9	1635.1	1583.6	1610.4
60°	1616.6	1497.0	1352.7	1358.8	1402.1
62.5°	1385.6	1251.6	1109.3	1171.2	1222.7
65°	1191.8	1049.5	899.0	1020.6	1090.8
67.5°	1022.7	890.8	746.4	909.4	977.4
70°	882.5	775.3	635.1	806.2	882.5
72.5°	771.2	672.2	563.0	723.8	812.4
75°	668.0	579.4	511.4	637.2	736.2
77.5°	579.4	492.8	461.9	563.0	659.8
80°	486.6	408.2	404.1	490.7	563.0
82.5°	379.4	325.8	325.8	410.3	453.6
85°	268.1	235.0	228.8	299.0	303.2
87.5°	138.1	131.9	119.6	156.7	156.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)