

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: P475699

Luminaire Tested: **24GR-LD5-150-A19/156-UNV-L850-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475699
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-150-A19/156-UNV-L850-CD1-U
Description: GR 2'X4' LED TROFFER w/ A19/156 LENS
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14613.9 lumens
Efficiency: N/A
Efficacy: 141.3 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.25 / 1.28
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

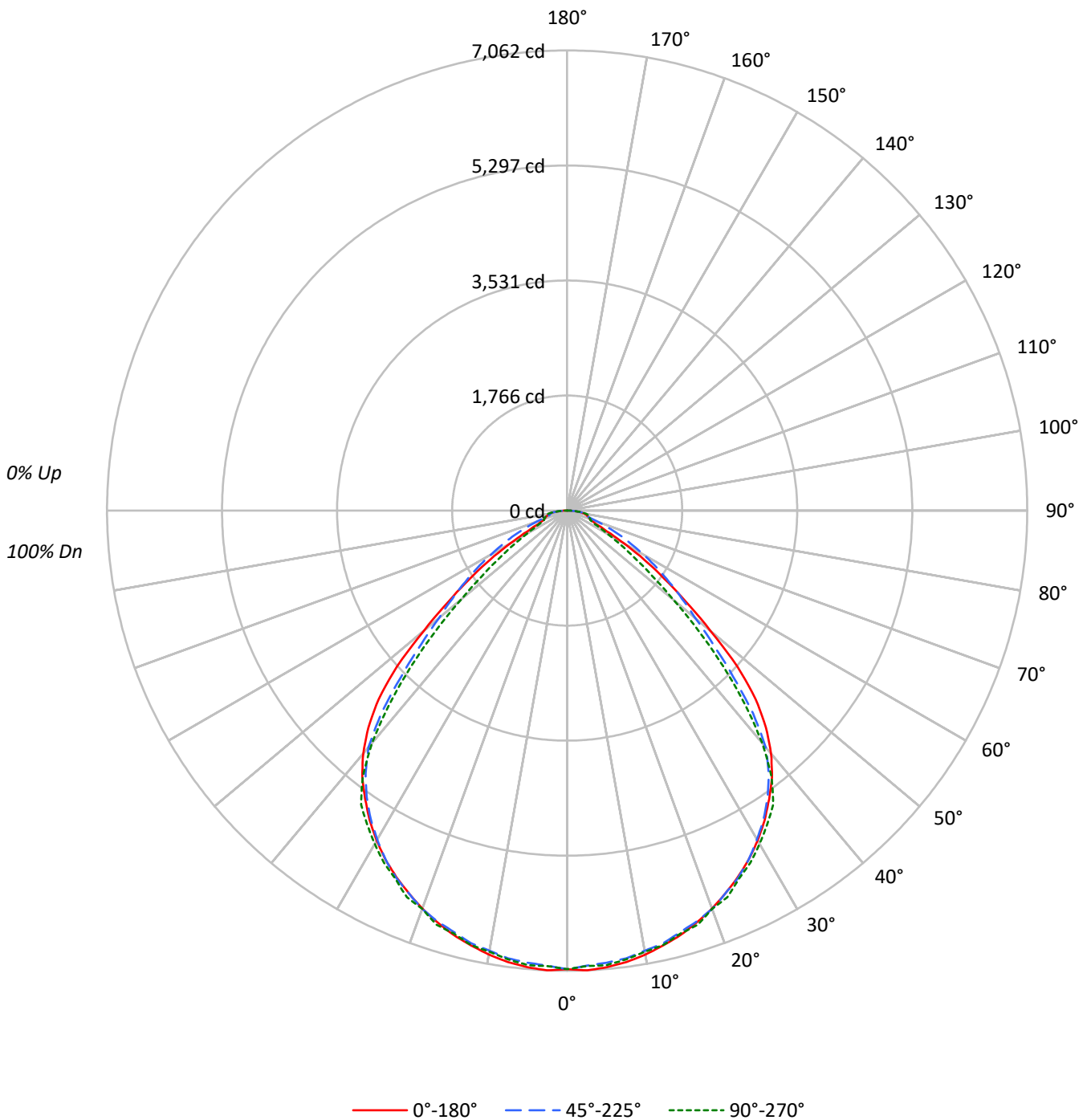
Input Watts (W): 103.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	111	107	103	100	108	104	101	98	100	98	95	96	94	92	93	91	90					88				
2	102	95	90	85	100	94	88	84	90	86	82	87	83	80	84	81	78					76				
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69					67				
4	88	77	70	64	86	76	69	63	74	67	63	71	66	62	69	65	61					59				
5	81	70	62	56	79	69	62	56	67	60	55	65	59	55	63	58	54					52				
6	76	64	56	50	74	63	55	50	61	54	49	60	54	49	58	53	49					47				
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44					42				
8	66	54	46	40	65	53	46	40	52	45	40	50	44	40	49	44	40					38				
9	62	49	42	37	61	49	42	37	48	41	37	47	41	36	46	40	36					34				
10	58	46	38	34	57	45	38	34	44	38	33	43	37	33	43	37	33					31				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9468	9468	9468
5°	9499	9406	9454
10°	9452	9371	9393
15°	9390	9330	9361
20°	9309	9316	9311
25°	9210	9226	9257
30°	9082	9054	9174
35°	8876	8810	9054
40°	8553	8328	8179
45°	7785	6851	6463
50°	6007	5372	4441
55°	4268	4481	2939
60°	2703	3619	1918
65°	1568	2847	1402
70°	1452	1961	1487
75°	1671	1493	1771
80°	2087	2063	2340
85°	2274	2411	2504



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	663.2	4.5
10°-20°	1896.9	13.0
20°-30°	2862.1	19.6
30°-40°	3359.5	23.0
40°-50°	2828.2	19.4
50°-60°	1606.6	11.0
60°-70°	801.8	5.5
70°-80°	420.4	2.9
80°-90°	175.3	1.2
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°	5422.2	37.1
0°-40°	8781.6	60.1
0°-60°	13216.4	90.4
0°-90°	14613.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	14613.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7037	7037	7037	7037	7037	
5°	7033	6982	6964	6976	7000	668
15°	6741	6725	6698	6716	6720	1901
25°	6204	6207	6214	6231	6235	2857
35°	5404	5374	5363	5454	5512	3375
45°	4091	3928	3600	3538	3397	3081
55°	1820	1946	1910	1647	1253	1655
65°	492	1021	894	759	440	560
75°	321	495	287	432	341	341
85°	147	176	156	198	162	156
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7037.2	7037.2	7037.2	7037.2	7037.2
2.5°	7062.5	7028.3	6989.6	6979.2	6997.0
5°	7032.7	6982.1	6964.3	6976.2	7000.0
7.5°	6986.6	6934.5	6931.6	6910.7	6946.4
10°	6918.2	6884.0	6858.7	6870.6	6875.0
12.5°	6831.9	6821.5	6802.1	6785.8	6825.9
15°	6741.1	6724.8	6698.0	6715.8	6720.3
17.5°	6625.1	6616.2	6611.7	6625.1	6663.8
20°	6501.6	6501.6	6506.1	6509.0	6503.1
22.5°	6354.3	6349.8	6355.8	6367.7	6424.2
25°	6204.0	6207.0	6214.5	6230.8	6235.3
27.5°	6037.4	6038.9	6035.9	6052.3	6091.0
30°	5845.5	5839.5	5827.6	5863.3	5905.0
32.5°	5637.2	5625.3	5611.9	5667.0	5711.6
35°	5403.6	5373.9	5363.4	5454.2	5512.2
37.5°	5164.1	5103.1	5080.8	5147.7	5155.2
40°	4869.5	4778.7	4741.6	4676.1	4656.7
42.5°	4515.4	4421.7	4220.8	4119.7	4048.2
45°	4091.4	3927.7	3600.4	3537.9	3396.6
47.5°	3543.9	3369.8	3042.5	2908.6	2747.9
50°	2869.9	2768.8	2566.4	2399.8	2121.6
52.5°	2294.2	2315.0	2219.8	1989.2	1644.0
55°	1819.6	1946.0	1910.3	1647.0	1252.7
57.5°	1400.0	1672.3	1629.1	1355.4	956.6
60°	1004.3	1432.7	1345.0	1115.8	712.6
62.5°	688.8	1223.0	1102.4	920.9	546.0
65°	492.5	1020.6	894.2	758.8	440.4
67.5°	404.7	834.6	685.9	644.2	383.8
70°	369.0	672.5	498.4	562.4	377.9
72.5°	351.1	563.9	366.0	492.5	360.0
75°	321.4	495.4	287.1	431.5	340.7
77.5°	297.6	428.5	267.8	377.9	331.8
80°	269.3	339.2	266.3	319.9	302.0
82.5°	217.2	247.0	224.7	261.8	244.0
85°	147.3	175.6	156.2	197.9	162.2
87.5°	72.9	86.3	69.9	93.7	71.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)