

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: P475666

Luminaire Tested: **24GR-LD5-100-A19/156-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475666
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-100-A19/156-UNV-L835-CD1-U
Description: GR 2'X4' LED TROFFER w/ A19/156 LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9541.4 lumens
Efficiency: N/A
Efficacy: 142.2 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

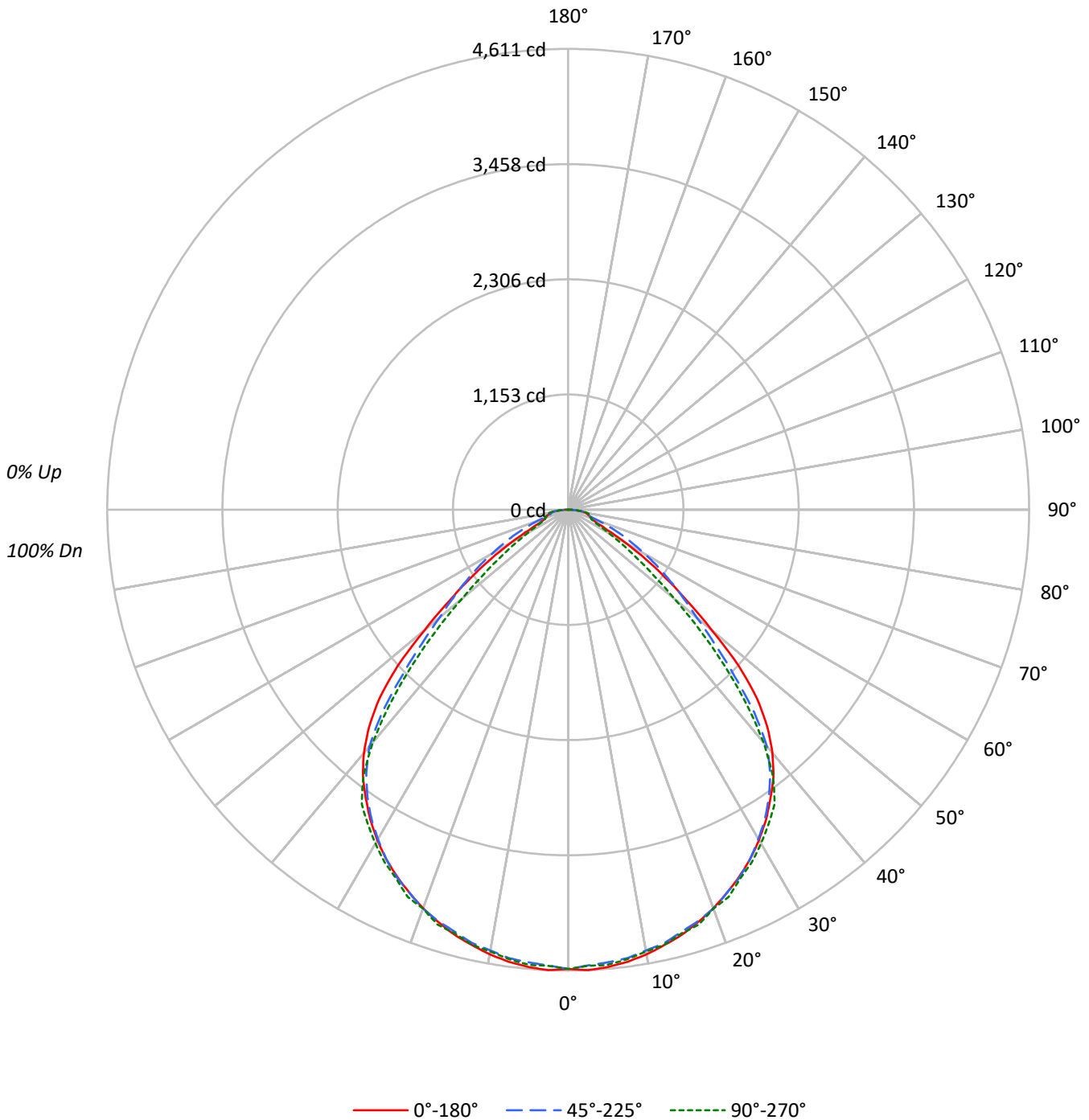
Input Watts (W): 67.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					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°	6182	6182	6182
5°	6202	6141	6173
10°	6171	6118	6133
15°	6131	6092	6112
20°	6078	6082	6079
25°	6013	6024	6044
30°	5929	5911	5990
35°	5795	5752	5911
40°	5584	5437	5340
45°	5083	4473	4220
50°	3922	3507	2900
55°	2787	2926	1919
60°	1764	2363	1252
65°	1024	1859	915
70°	948	1280	971
75°	1091	975	1156
80°	1362	1347	1528
85°	1485	1575	1635



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	433.0	4.5
10°-20°	1238.5	13.0
20°-30°	1868.7	19.6
30°-40°	2193.4	23.0
40°-50°	1846.5	19.4
50°-60°	1048.9	11.0
60°-70°	523.5	5.5
70°-80°	274.5	2.9
80°-90°	114.4	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°	3540.1	37.1
0°-40°	5733.5	60.1
0°-60°	8629.0	90.4
0°-90°	9541.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9541.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4595	4595	4595	4595	4595	
5°	4592	4559	4547	4555	4570	436
15°	4401	4391	4373	4385	4388	1241
25°	4051	4053	4057	4068	4071	1866
35°	3528	3509	3502	3561	3599	2203
45°	2671	2564	2351	2310	2218	2012
55°	1188	1271	1247	1075	818	1081
65°	322	666	584	495	288	366
75°	210	324	188	282	222	222
85°	96	115	102	129	106	102
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4594.6	4594.6	4594.6	4594.6	4594.6
2.5°	4611.1	4588.8	4563.5	4556.7	4568.4
5°	4591.7	4558.7	4547.0	4554.8	4570.3
7.5°	4561.6	4527.6	4525.6	4512.0	4535.3
10°	4516.9	4494.5	4478.0	4485.8	4488.7
12.5°	4460.5	4453.7	4441.1	4430.4	4456.7
15°	4401.3	4390.6	4373.1	4384.8	4387.7
17.5°	4325.5	4319.7	4316.8	4325.5	4350.8
20°	4244.9	4244.9	4247.8	4249.8	4245.9
22.5°	4148.7	4145.8	4149.7	4157.5	4194.4
25°	4050.6	4052.6	4057.4	4068.1	4071.0
27.5°	3941.8	3942.8	3940.9	3951.5	3976.8
30°	3816.5	3812.6	3804.9	3828.2	3855.4
32.5°	3680.5	3672.8	3664.0	3700.0	3729.1
35°	3528.0	3508.6	3501.8	3561.1	3598.9
37.5°	3371.6	3331.8	3317.2	3361.0	3365.8
40°	3179.3	3120.1	3095.8	3053.0	3040.4
42.5°	2948.1	2886.9	2755.8	2689.7	2643.1
45°	2671.3	2564.4	2350.7	2309.9	2217.6
47.5°	2313.8	2200.2	1986.5	1899.0	1794.1
50°	1873.8	1807.7	1675.6	1566.8	1385.2
52.5°	1497.9	1511.5	1449.3	1298.7	1073.4
55°	1188.0	1270.6	1247.2	1075.3	817.9
57.5°	914.1	1091.8	1063.7	884.9	624.6
60°	655.7	935.4	878.1	728.5	465.3
62.5°	449.7	798.5	719.8	601.3	356.5
65°	321.5	666.4	583.8	495.4	287.5
67.5°	264.2	544.9	447.8	420.6	250.6
70°	240.9	439.1	325.4	367.2	246.7
72.5°	229.2	368.2	239.0	321.5	235.1
75°	209.8	323.5	187.5	281.7	222.4
77.5°	194.3	279.8	174.8	246.7	216.6
80°	175.8	221.5	173.9	208.8	197.2
82.5°	141.8	161.2	146.7	171.0	159.3
85°	96.2	114.6	102.0	129.2	105.9
87.5°	47.6	56.3	45.7	61.2	46.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)