

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: P475693

Luminaire Tested: **24GR-LD5-72-A19/156-UNV-L850-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475693
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-72-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: 6894.2 lumens
Efficiency: N/A
Efficacy: 141.6 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

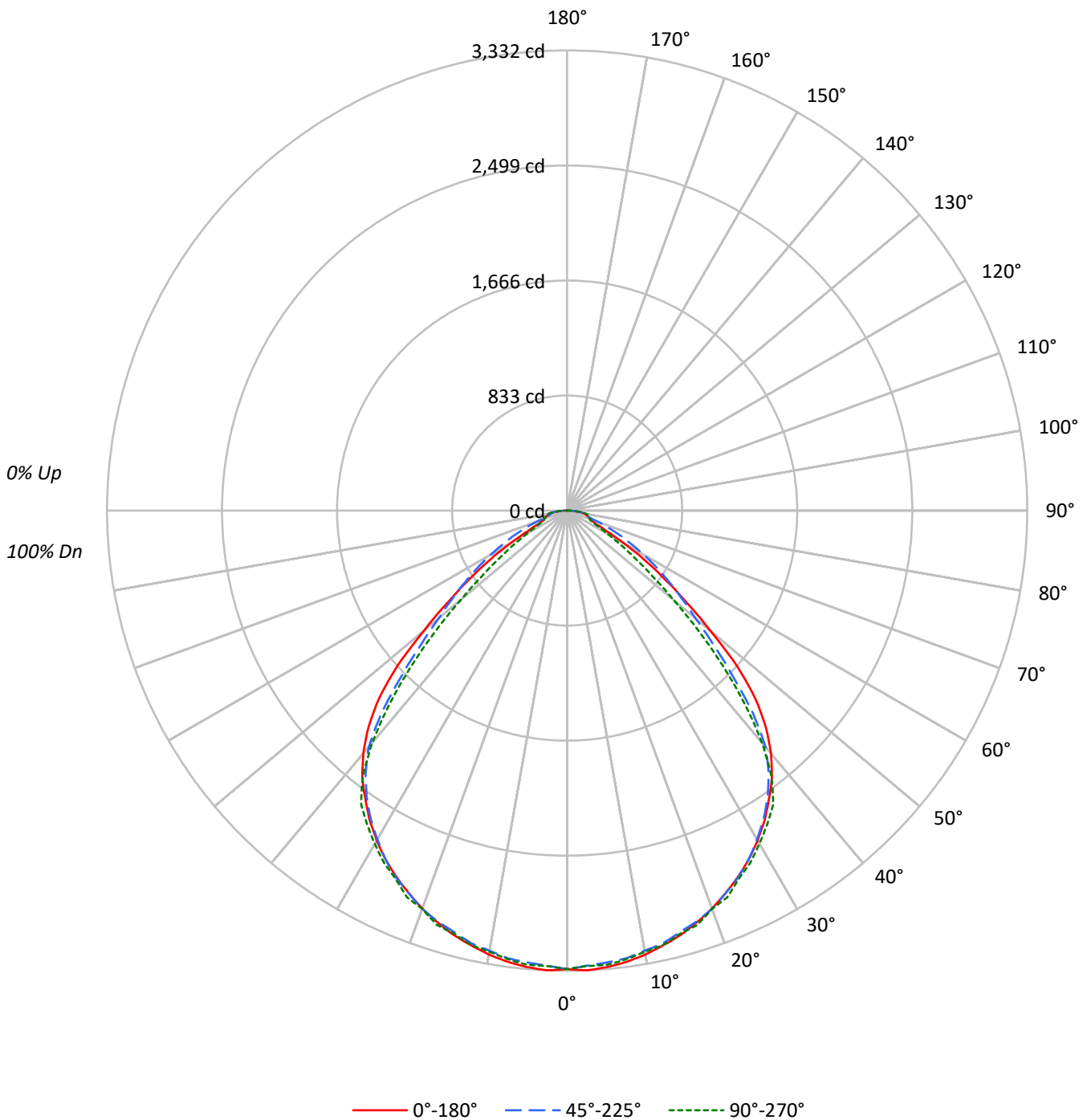
Input Watts (W): 48.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4467	4467	4467
5°	4481	4437	4460
10°	4459	4421	4431
15°	4430	4401	4416
20°	4392	4395	4393
25°	4345	4352	4367
30°	4284	4271	4328
35°	4187	4156	4271
40°	4035	3929	3858
45°	3673	3232	3049
50°	2834	2534	2095
55°	2014	2114	1386
60°	1275	1707	905
65°	740	1343	662
70°	685	925	701
75°	788	704	835
80°	984	973	1104
85°	1073	1138	1181



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	312.9	4.5
10°-20°	894.9	13.0
20°-30°	1350.2	19.6
30°-40°	1584.8	23.0
40°-50°	1334.2	19.4
50°-60°	757.9	11.0
60°-70°	378.3	5.5
70°-80°	198.3	2.9
80°-90°	82.7	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°	2557.9	37.1
0°-40°	4142.8	60.1
0°-60°	6234.9	90.4
0°-90°	6894.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6894.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3320	3320	3320	3320	3320	
5°	3318	3294	3285	3291	3302	315
15°	3180	3172	3160	3168	3170	897
25°	2927	2928	2932	2939	2942	1348
35°	2549	2535	2530	2573	2600	1592
45°	1930	1853	1698	1669	1602	1453
55°	858	918	901	777	591	781
65°	232	482	422	358	208	264
75°	152	234	136	204	161	161
85°	70	83	74	93	76	73
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3319.8	3319.8	3319.8	3319.8	3319.8
2.5°	3331.8	3315.6	3297.4	3292.5	3300.9
5°	3317.7	3293.9	3285.4	3291.1	3302.3
7.5°	3296.0	3271.4	3270.0	3260.2	3277.0
10°	3263.7	3247.5	3235.6	3241.2	3243.3
12.5°	3223.0	3218.1	3208.9	3201.2	3220.2
15°	3180.2	3172.4	3159.8	3168.2	3170.3
17.5°	3125.4	3121.2	3119.1	3125.4	3143.7
20°	3067.2	3067.2	3069.3	3070.7	3067.9
22.5°	2997.7	2995.6	2998.4	3004.0	3030.7
25°	2926.8	2928.2	2931.7	2939.4	2941.5
27.5°	2848.2	2848.9	2847.5	2855.2	2873.4
30°	2757.6	2754.8	2749.2	2766.1	2785.7
32.5°	2659.4	2653.8	2647.4	2673.4	2694.5
35°	2549.2	2535.1	2530.2	2573.0	2600.4
37.5°	2436.2	2407.4	2396.9	2428.5	2432.0
40°	2297.2	2254.4	2236.8	2206.0	2196.8
42.5°	2130.2	2085.9	1991.2	1943.5	1909.8
45°	1930.1	1852.9	1698.5	1669.0	1602.4
47.5°	1671.8	1589.7	1435.3	1372.1	1296.3
50°	1353.9	1306.2	1210.7	1132.1	1000.9
52.5°	1082.3	1092.1	1047.2	938.4	775.6
55°	858.4	918.0	901.2	777.0	591.0
57.5°	660.5	788.9	768.5	639.4	451.3
60°	473.8	675.9	634.5	526.4	336.2
62.5°	325.0	576.9	520.1	434.5	257.6
65°	232.3	481.5	421.8	358.0	207.8
67.5°	190.9	393.7	323.6	303.9	181.1
70°	174.1	317.2	235.1	265.3	178.3
72.5°	165.6	266.0	172.7	232.3	169.9
75°	151.6	233.7	135.5	203.5	160.7
77.5°	140.4	202.1	126.3	178.3	156.5
80°	127.0	160.0	125.6	150.9	142.5
82.5°	102.5	116.5	106.0	123.5	115.1
85°	69.5	82.8	73.7	93.3	76.5
87.5°	34.4	40.7	33.0	44.2	33.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)