

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: P475695

Luminaire Tested: **24GR-LD5-90-A19/156-UNV-L850-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475695
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-90-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: 8730.4 lumens
Efficiency: N/A
Efficacy: 142.7 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

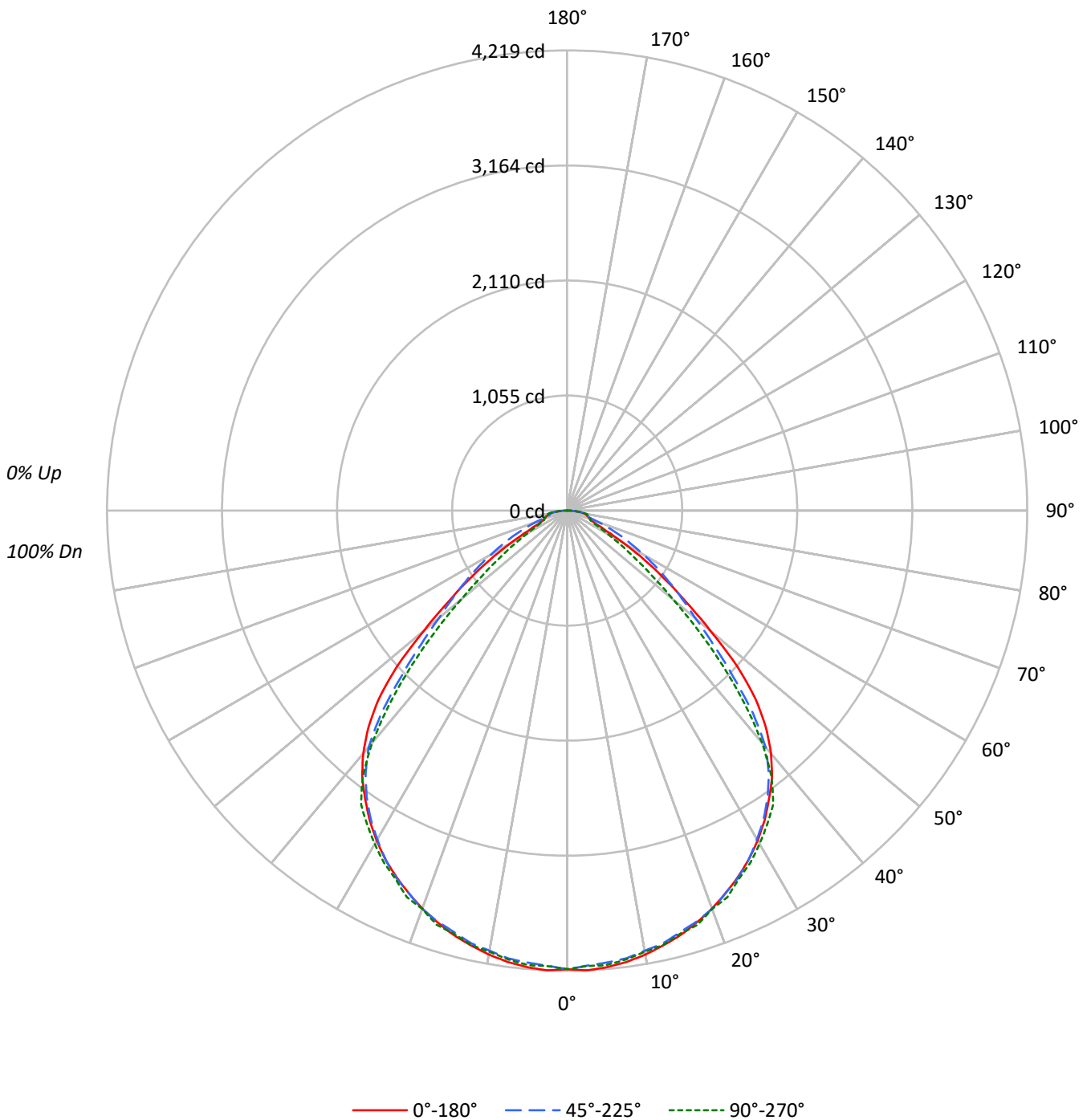
Input Watts (W): 61.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P475695

CATALOG NUMBER: 24GR-LD5-90-A19/156-UNV-L850-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P475695

CATALOG NUMBER: 24GR-LD5-90-A19/156-UNV-L850-CD1-U

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	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°	5656	5656	5656
5°	5675	5619	5648
10°	5647	5598	5611
15°	5610	5574	5592
20°	5561	5565	5563
25°	5502	5512	5530
30°	5425	5409	5481
35°	5302	5263	5409
40°	5109	4975	4886
45°	4651	4093	3861
50°	3589	3209	2653
55°	2550	2677	1756
60°	1614	2162	1146
65°	937	1701	838
70°	867	1171	888
75°	998	892	1058
80°	1247	1233	1398
85°	1359	1440	1496



TEST NUMBER: P475695

CATALOG NUMBER: 24GR-LD5-90-A19/156-UNV-L850-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	396.2	4.5
10°-20°	1133.2	13.0
20°-30°	1709.8	19.6
30°-40°	2006.9	23.0
40°-50°	1689.6	19.4
50°-60°	959.8	11.0
60°-70°	479.0	5.5
70°-80°	251.2	2.9
80°-90°	104.7	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°	3239.2	37.1
0°-40°	5246.1	60.1
0°-60°	7895.5	90.4
0°-90°	8730.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8730.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4204	4204	4204	4204	4204	
5°	4201	4171	4160	4168	4182	399
15°	4027	4017	4001	4012	4015	1136
25°	3706	3708	3712	3722	3725	1707
35°	3228	3210	3204	3258	3293	2016
45°	2444	2346	2151	2114	2029	1841
55°	1087	1163	1141	984	748	989
65°	294	610	534	453	263	335
75°	192	296	172	258	204	203
85°	88	105	93	118	97	93
90°	0	0	0	0	0	



TEST NUMBER: P475695

CATALOG NUMBER: 24GR-LD5-90-A19/156-UNV-L850-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4204.0	4204.0	4204.0	4204.0	4204.0
2.5°	4219.1	4198.7	4175.6	4169.4	4180.0
5°	4201.4	4171.1	4160.5	4167.6	4181.8
7.5°	4173.8	4142.7	4140.9	4128.5	4149.8
10°	4132.9	4112.5	4097.4	4104.5	4107.1
12.5°	4081.4	4075.2	4063.6	4053.8	4077.8
15°	4027.2	4017.4	4001.4	4012.0	4014.7
17.5°	3957.8	3952.5	3949.8	3957.8	3980.9
20°	3884.1	3884.1	3886.7	3888.5	3884.9
22.5°	3796.1	3793.4	3797.0	3804.1	3837.8
25°	3706.3	3708.1	3712.5	3722.3	3725.0
27.5°	3606.8	3607.6	3605.9	3615.6	3638.8
30°	3492.1	3488.5	3481.4	3502.8	3527.7
32.5°	3367.7	3360.6	3352.6	3385.4	3412.1
35°	3228.1	3210.3	3204.1	3258.3	3293.0
37.5°	3085.0	3048.6	3035.3	3075.3	3079.7
40°	2909.0	2854.8	2832.6	2793.5	2781.9
42.5°	2697.5	2641.5	2521.5	2461.1	2418.4
45°	2444.2	2346.4	2150.9	2113.6	2029.1
47.5°	2117.1	2013.1	1817.6	1737.6	1641.6
50°	1714.5	1654.1	1533.2	1433.6	1267.4
52.5°	1370.5	1383.0	1326.1	1188.3	982.1
55°	1087.0	1162.6	1141.2	983.9	748.4
57.5°	836.4	999.0	973.2	809.7	571.5
60°	599.9	855.9	803.5	666.6	425.7
62.5°	411.5	730.6	658.6	550.2	326.2
65°	294.2	609.7	534.2	453.3	263.1
67.5°	241.8	498.6	409.7	384.9	229.3
70°	220.4	401.7	297.7	336.0	225.8
72.5°	209.8	336.9	218.6	294.2	215.1
75°	192.0	296.0	171.5	257.8	203.5
77.5°	177.8	256.0	160.0	225.8	198.2
80°	160.9	202.6	159.1	191.1	180.4
82.5°	129.8	147.5	134.2	156.4	145.8
85°	88.0	104.9	93.3	118.2	96.9
87.5°	43.6	51.6	41.8	56.0	42.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)