

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: P475694

Luminaire Tested: **24GR-LD5-85-A19/156-UNV-L850-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475694
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-85-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: 8274.0 lumens
Efficiency: N/A
Efficacy: 139.8 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

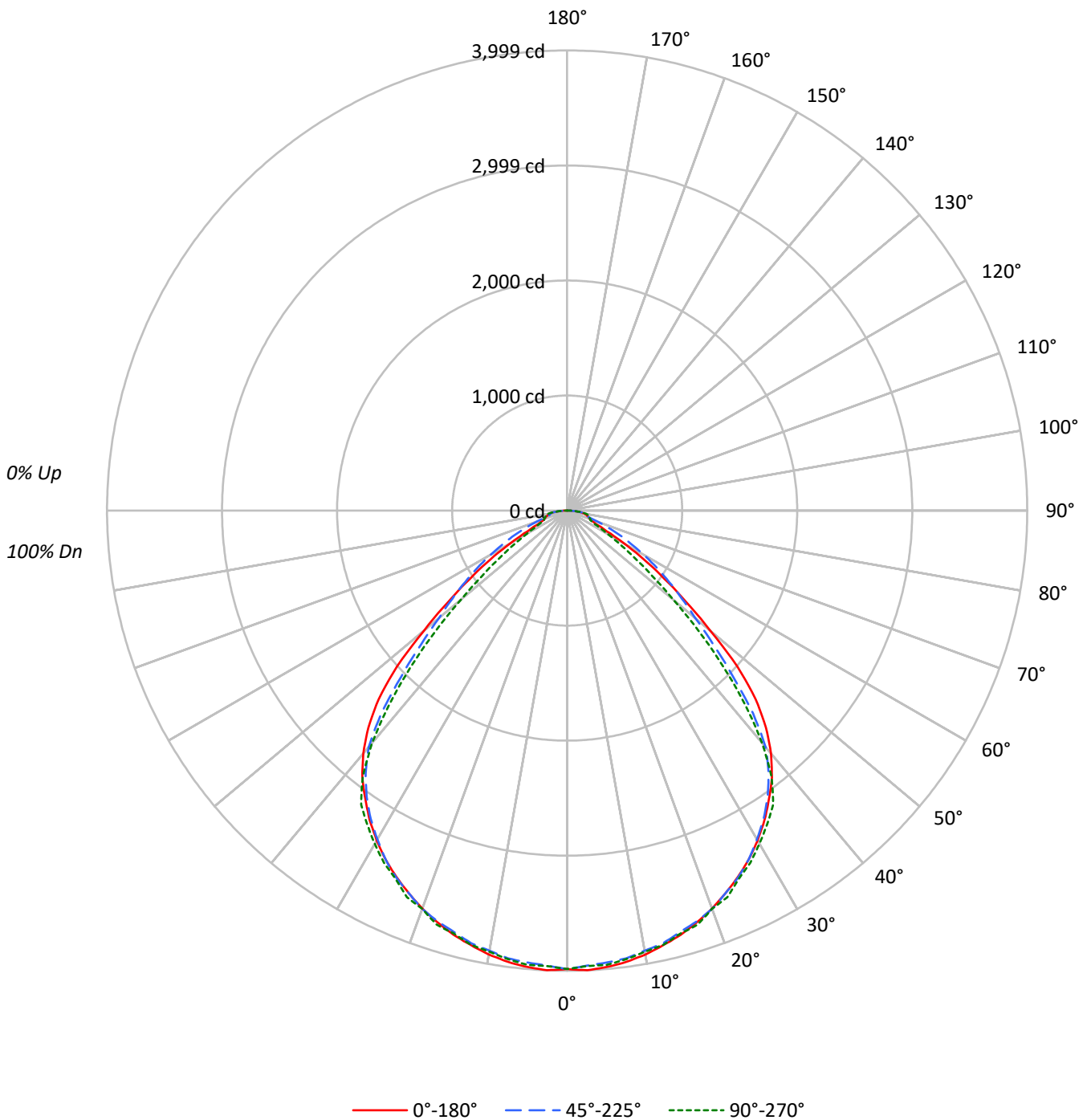
Input Watts (W): 59.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5361	5361	5361
5°	5378	5326	5353
10°	5351	5305	5318
15°	5316	5282	5300
20°	5271	5274	5272
25°	5215	5223	5241
30°	5142	5126	5194
35°	5025	4988	5126
40°	4842	4715	4631
45°	4408	3879	3659
50°	3401	3041	2514
55°	2417	2537	1664
60°	1530	2049	1086
65°	888	1612	794
70°	822	1110	842
75°	946	845	1003
80°	1182	1168	1325
85°	1288	1365	1417



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	375.5	4.5
10°-20°	1073.9	13.0
20°-30°	1620.4	19.6
30°-40°	1902.0	23.0
40°-50°	1601.3	19.4
50°-60°	909.6	11.0
60°-70°	454.0	5.5
70°-80°	238.0	2.9
80°-90°	99.2	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°	3069.9	37.1
0°-40°	4971.9	60.1
0°-60°	7482.8	90.4
0°-90°	8274.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8274.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3984	3984	3984	3984	3984	
5°	3982	3953	3943	3950	3963	378
15°	3817	3807	3792	3802	3805	1076
25°	3513	3514	3518	3528	3530	1618
35°	3059	3042	3037	3088	3121	1911
45°	2316	2224	2038	2003	1923	1744
55°	1030	1102	1082	932	709	937
65°	279	578	506	430	249	317
75°	182	280	163	244	193	193
85°	83	99	88	112	92	88
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3984.3	3984.3	3984.3	3984.3	3984.3
2.5°	3998.6	3979.2	3957.3	3951.4	3961.5
5°	3981.7	3953.1	3943.0	3949.7	3963.2
7.5°	3955.6	3926.1	3924.5	3912.7	3932.9
10°	3916.9	3897.5	3883.2	3889.9	3892.4
12.5°	3868.0	3862.1	3851.2	3841.9	3864.6
15°	3816.6	3807.4	3792.2	3802.3	3804.8
17.5°	3750.9	3745.9	3743.4	3750.9	3772.8
20°	3681.0	3681.0	3683.5	3685.2	3681.9
22.5°	3597.6	3595.1	3598.5	3605.2	3637.2
25°	3512.6	3514.2	3518.4	3527.7	3530.2
27.5°	3418.2	3419.1	3417.4	3426.6	3448.5
30°	3309.5	3306.2	3299.4	3319.7	3343.2
32.5°	3191.6	3184.9	3177.3	3208.5	3233.7
35°	3059.4	3042.5	3036.6	3088.0	3120.9
37.5°	2923.8	2889.2	2876.6	2914.5	2918.7
40°	2757.0	2705.6	2684.5	2647.5	2636.5
42.5°	2556.5	2503.4	2389.7	2332.4	2292.0
45°	2316.4	2223.8	2038.5	2003.1	1923.1
47.5°	2006.5	1907.9	1722.6	1646.8	1555.8
50°	1624.9	1567.6	1453.0	1358.7	1201.2
52.5°	1298.9	1310.7	1256.8	1126.2	930.8
55°	1030.2	1101.8	1081.6	932.5	709.2
57.5°	792.6	946.8	922.4	767.4	541.6
60°	568.6	811.2	761.5	631.8	403.5
62.5°	390.0	692.4	624.2	521.4	309.1
65°	278.8	577.8	506.2	429.6	249.3
67.5°	229.1	472.6	388.3	364.7	217.3
70°	208.9	380.7	282.2	318.4	214.0
72.5°	198.8	319.2	207.2	278.8	203.8
75°	181.9	280.5	162.6	244.3	192.9
77.5°	168.5	242.6	151.6	214.0	187.8
80°	152.5	192.1	150.8	181.1	171.0
82.5°	123.0	139.8	127.2	148.3	138.1
85°	83.4	99.4	88.4	112.0	91.8
87.5°	41.3	48.9	39.6	53.1	40.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)