

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: P475664

Luminaire Tested: **24GR-LD5-85-A19/156-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475664
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-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: 8111.7 lumens
Efficiency: N/A
Efficacy: 137.0 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

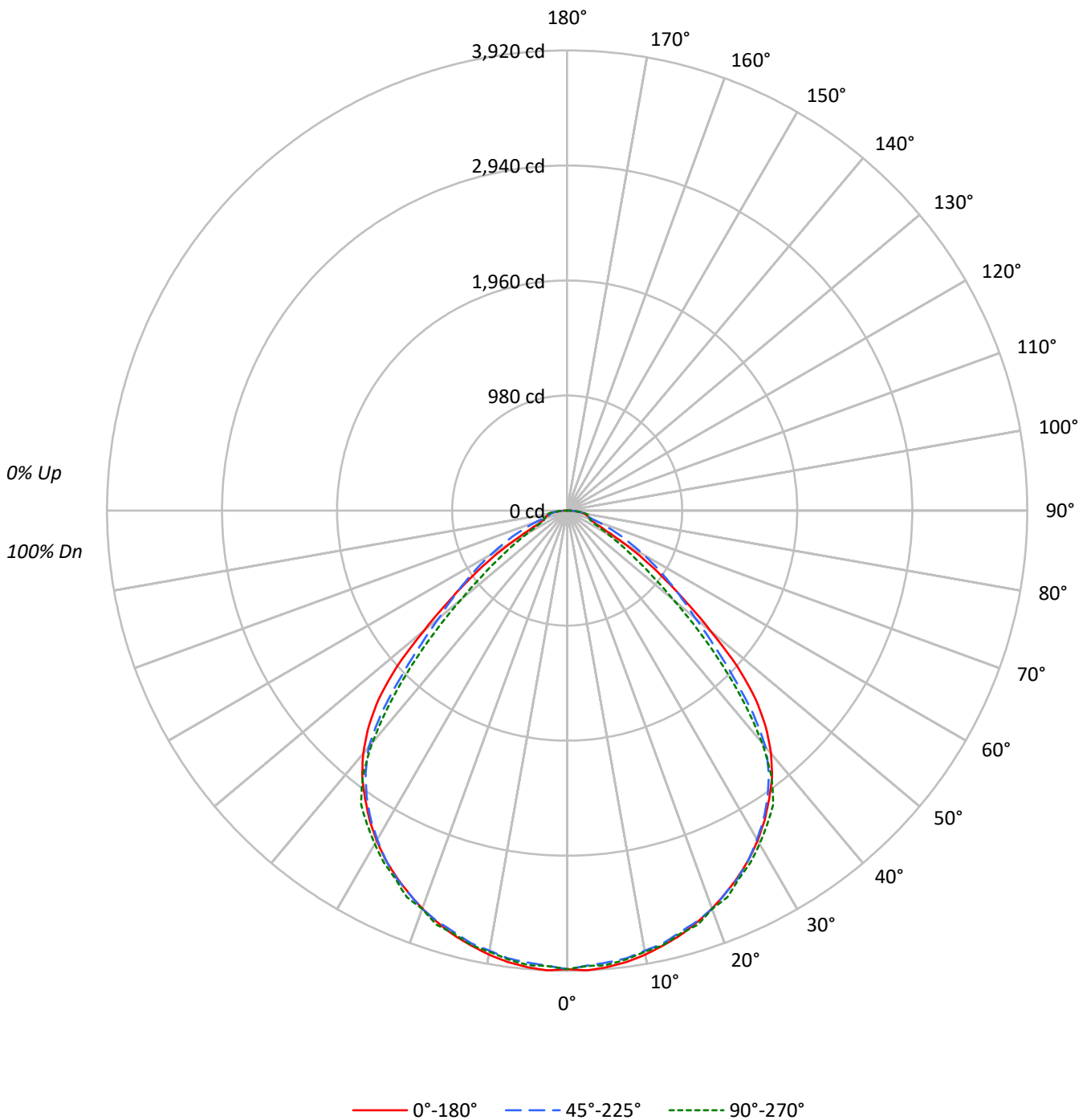
Input Watts (W): 59.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5256	5256	5256
5°	5272	5221	5248
10°	5247	5201	5214
15°	5212	5179	5196
20°	5167	5171	5169
25°	5112	5121	5138
30°	5041	5026	5092
35°	4927	4890	5026
40°	4747	4623	4540
45°	4321	3803	3588
50°	3334	2982	2465
55°	2369	2487	1631
60°	1500	2009	1065
65°	870	1580	778
70°	806	1089	825
75°	927	829	983
80°	1158	1145	1299
85°	1263	1338	1389



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	368.1	4.5
10°-20°	1052.9	13.0
20°-30°	1588.7	19.6
30°-40°	1864.7	23.0
40°-50°	1569.9	19.4
50°-60°	891.8	11.0
60°-70°	445.1	5.5
70°-80°	233.4	2.9
80°-90°	97.3	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°	3009.7	37.1
0°-40°	4874.4	60.1
0°-60°	7336.0	90.4
0°-90°	8111.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8111.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3906	3906	3906	3906	3906	
5°	3904	3876	3866	3872	3886	371
15°	3742	3733	3718	3728	3730	1055
25°	3444	3445	3450	3458	3461	1586
35°	2999	2983	2977	3028	3060	1873
45°	2271	2180	1998	1964	1885	1710
55°	1010	1080	1060	914	695	919
65°	273	566	496	421	244	311
75°	178	275	159	240	189	189
85°	82	97	87	110	90	86
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3906.1	3906.1	3906.1	3906.1	3906.1
2.5°	3920.2	3901.2	3879.7	3873.9	3883.8
5°	3903.7	3875.6	3865.7	3872.3	3885.5
7.5°	3878.1	3849.2	3847.5	3835.9	3855.8
10°	3840.1	3821.1	3807.0	3813.6	3816.1
12.5°	3792.2	3786.4	3775.7	3766.6	3788.9
15°	3741.8	3732.7	3717.9	3727.8	3730.2
17.5°	3677.4	3672.4	3670.0	3677.4	3698.9
20°	3608.8	3608.8	3611.3	3613.0	3609.7
22.5°	3527.1	3524.6	3527.9	3534.5	3565.9
25°	3443.7	3445.3	3449.5	3458.5	3461.0
27.5°	3351.2	3352.0	3350.4	3359.4	3380.9
30°	3244.7	3241.4	3234.7	3254.6	3277.7
32.5°	3129.0	3122.4	3115.0	3145.6	3170.3
35°	2999.4	2982.9	2977.1	3027.5	3059.7
37.5°	2866.4	2832.6	2820.2	2857.3	2861.5
40°	2702.9	2652.5	2631.9	2595.6	2584.8
42.5°	2506.4	2454.3	2342.9	2286.7	2247.1
45°	2271.0	2180.2	1998.5	1963.8	1885.4
47.5°	1967.1	1870.5	1688.8	1614.5	1525.3
50°	1593.0	1536.9	1424.5	1332.1	1177.6
52.5°	1273.4	1285.0	1232.1	1104.1	912.5
55°	1010.0	1080.2	1060.4	914.2	695.3
57.5°	777.1	928.2	904.3	752.3	531.0
60°	557.4	795.3	746.5	619.4	395.6
62.5°	382.4	678.8	611.9	511.2	303.1
65°	273.3	566.5	496.3	421.2	244.4
67.5°	224.6	463.3	380.7	357.6	213.1
70°	204.8	373.3	276.7	312.2	209.8
72.5°	194.9	313.0	203.2	273.3	199.8
75°	178.4	275.0	159.4	239.5	189.1
77.5°	165.2	237.8	148.6	209.8	184.2
80°	149.5	188.3	147.8	177.6	167.6
82.5°	120.6	137.1	124.7	145.3	135.4
85°	81.8	97.4	86.7	109.8	90.0
87.5°	40.5	47.9	38.8	52.0	39.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)