

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: P476022

Luminaire Tested: **22GR-LD5-70-A19/156-UNV-L850-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P476022
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-70-A19/156-UNV-L850-CD1-U
Description: GR 2'X2' 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: 6839.0 lumens
Efficiency: N/A
Efficacy: 130.8 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.22 / 1.23
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

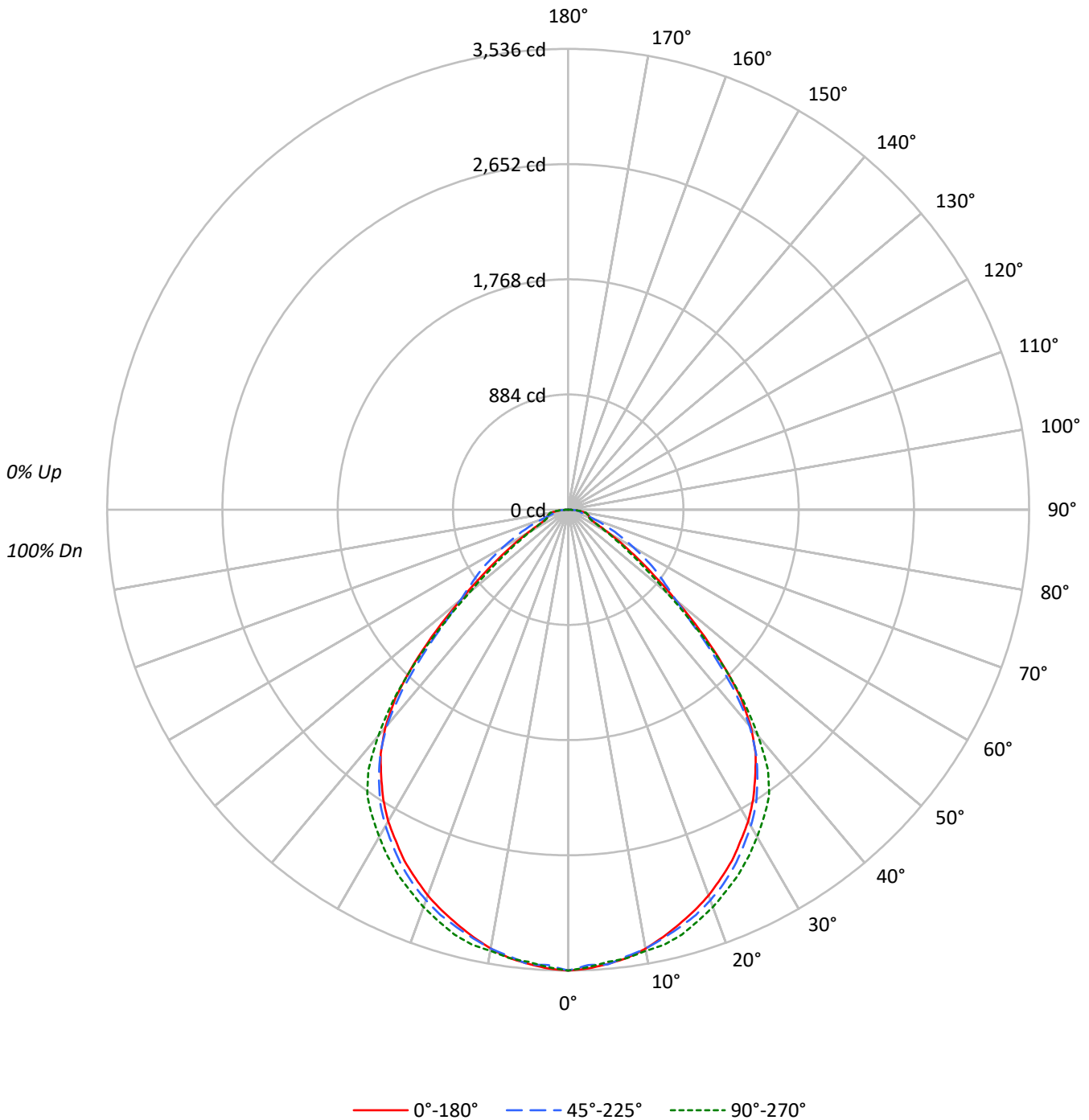
Input Watts (W): 52.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	107	103	100	108	105	101	99	100	98	95	97	95	93	93	91	90	88
2	103	96	90	85	100	94	89	84	91	86	82	87	84	81	84	82	79	77
3	95	86	79	74	93	85	78	73	82	76	72	79	75	71	77	73	70	68
4	88	78	70	65	86	77	70	64	74	68	63	72	67	63	70	65	62	60
5	82	71	63	57	80	70	62	57	68	61	56	66	60	56	64	59	55	53
6	76	65	57	51	75	64	56	51	62	55	50	60	54	50	59	54	50	48
7	71	59	51	46	70	58	51	46	57	50	45	56	50	45	54	49	45	43
8	67	54	47	41	65	54	46	41	53	46	41	51	45	41	50	45	41	39
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36
10	59	47	39	35	58	46	39	35	45	39	34	44	38	34	44	38	34	33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9516	9516	9516
5°	9450	9461	9407
10°	9344	9348	9391
15°	9172	9234	9399
20°	9018	9131	9293
25°	8824	8961	9171
30°	8578	8708	9006
35°	8211	8314	8823
40°	7664	7604	7959
45°	6365	6005	6309
50°	4484	4506	4111
55°	3012	3874	2710
60°	1943	3109	1801
65°	1345	2408	1296
70°	1353	1642	1343
75°	1666	1283	1651
80°	2035	1485	2156
85°	1985	2025	2189



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	331.1	4.8
10°-20°	937.3	13.7
20°-30°	1389.9	20.3
30°-40°	1590.0	23.2
40°-50°	1258.7	18.4
50°-60°	686.8	10.0
60°-70°	359.3	5.3
70°-80°	207.5	3.0
80°-90°	78.4	1.1
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°	2658.3	38.9
0°-40°	4248.3	62.1
0°-60°	6193.7	90.6
0°-90°	6839.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6839.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3536	3536	3536	3536	3536	
5°	3498	3473	3502	3490	3483	332
15°	3292	3309	3315	3341	3374	929
25°	2972	2976	3018	3056	3089	1366
35°	2499	2499	2531	2623	2686	1559
45°	1672	1663	1578	1655	1658	1272
55°	642	802	826	769	578	595
65°	211	425	378	404	204	228
75°	160	256	123	252	159	166
85°	64	84	66	85	71	71
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3536.4	3536.4	3536.4	3536.4	3536.4
2.5°	3523.3	3502.3	3497.1	3507.6	3514.1
5°	3498.4	3473.4	3502.3	3490.5	3482.6
7.5°	3469.5	3460.3	3455.0	3473.4	3469.5
10°	3419.6	3406.5	3420.9	3431.4	3436.7
12.5°	3359.2	3365.8	3368.4	3401.2	3417.0
15°	3292.3	3309.3	3314.6	3340.8	3373.7
17.5°	3224.0	3227.9	3259.5	3293.6	3309.3
20°	3149.2	3155.7	3188.6	3220.1	3245.0
22.5°	3061.2	3069.1	3109.8	3145.2	3166.2
25°	2972.0	2975.9	3017.9	3056.0	3088.8
27.5°	2864.3	2885.3	2910.3	2962.8	2998.2
30°	2760.6	2773.7	2802.6	2860.4	2898.5
32.5°	2638.5	2643.8	2680.5	2743.6	2794.8
35°	2499.4	2499.4	2530.9	2622.8	2685.8
37.5°	2361.6	2343.2	2368.1	2473.1	2517.8
40°	2181.7	2168.6	2164.7	2236.9	2265.7
42.5°	1961.2	1936.2	1891.6	1965.1	1988.8
45°	1672.4	1663.2	1577.9	1655.3	1657.9
47.5°	1370.5	1377.0	1281.2	1358.7	1300.9
50°	1071.2	1139.4	1076.4	1109.2	981.9
52.5°	833.6	960.9	937.3	924.1	750.9
55°	641.9	802.1	825.7	769.2	577.6
57.5°	489.6	683.9	698.4	659.0	439.8
60°	361.0	577.6	577.6	559.2	334.7
62.5°	269.1	496.2	469.9	475.2	256.0
65°	211.3	425.3	378.1	404.3	203.5
67.5°	177.2	354.4	286.2	349.2	177.2
70°	172.0	308.5	208.7	315.0	170.7
72.5°	170.7	283.5	156.2	286.2	172.0
75°	160.2	256.0	123.4	252.0	158.8
77.5°	147.0	212.7	102.4	212.7	148.3
80°	131.3	161.5	95.8	165.4	139.1
82.5°	101.1	115.5	85.3	116.8	107.6
85°	64.3	84.0	65.6	85.3	70.9
87.5°	28.9	44.6	28.9	45.9	31.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)