

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: P475998

Luminaire Tested: **22GR-LD5-70-A19/156-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475998
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-L835-CD1-U
Description: GR 2'X2' 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: 6704.9 lumens
Efficiency: N/A
Efficacy: 128.2 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

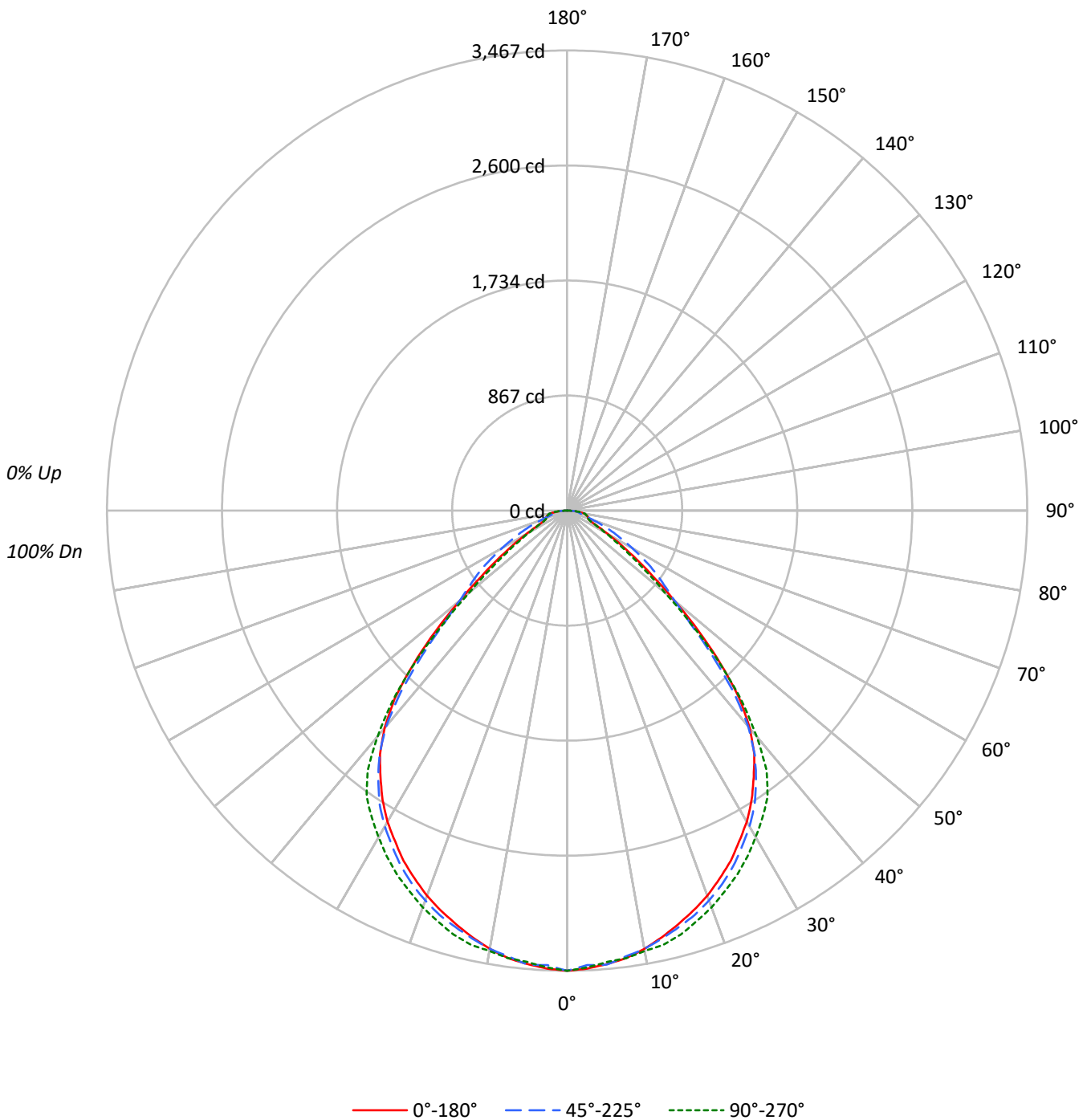
Input Watts (W): 52.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	9330	9330	9330
5°	9265	9275	9223
10°	9161	9164	9207
15°	8992	9053	9214
20°	8841	8952	9111
25°	8651	8785	8991
30°	8410	8538	8830
35°	8050	8151	8650
40°	7514	7455	7803
45°	6240	5887	6186
50°	4397	4418	4030
55°	2952	3798	2657
60°	1905	3048	1766
65°	1319	2360	1270
70°	1327	1610	1316
75°	1632	1258	1619
80°	1994	1455	2114
85°	1948	1985	2146



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	324.6	4.8
10°-20°	918.9	13.7
20°-30°	1362.7	20.3
30°-40°	1558.8	23.2
40°-50°	1234.0	18.4
50°-60°	673.3	10.0
60°-70°	352.3	5.3
70°-80°	203.4	3.0
80°-90°	76.9	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°	2606.2	38.9
0°-40°	4165.0	62.1
0°-60°	6072.3	90.6
0°-90°	6704.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6704.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3467	3467	3467	3467	3467	
5°	3430	3405	3434	3422	3414	325
15°	3228	3244	3250	3275	3308	910
25°	2914	2918	2959	2996	3028	1339
35°	2450	2450	2481	2571	2633	1528
45°	1640	1631	1547	1623	1625	1247
55°	629	786	810	754	566	584
65°	207	417	371	396	200	224
75°	157	251	121	247	156	163
85°	63	82	64	84	70	69
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3467.1	3467.1	3467.1	3467.1	3467.1
2.5°	3454.2	3433.6	3428.5	3438.8	3445.2
5°	3429.8	3405.3	3433.6	3422.0	3414.3
7.5°	3401.5	3392.4	3387.3	3405.3	3401.5
10°	3352.5	3339.7	3353.8	3364.1	3369.3
12.5°	3293.3	3299.8	3302.4	3334.5	3350.0
15°	3227.7	3244.4	3249.6	3275.3	3307.5
17.5°	3160.8	3164.7	3195.5	3229.0	3244.4
20°	3087.4	3093.9	3126.0	3156.9	3181.4
22.5°	3001.2	3008.9	3048.8	3083.6	3104.2
25°	2913.7	2917.6	2958.7	2996.1	3028.2
27.5°	2808.2	2828.8	2853.2	2904.7	2939.4
30°	2706.5	2719.4	2747.7	2804.3	2841.6
32.5°	2586.8	2592.0	2628.0	2689.8	2740.0
35°	2450.4	2450.4	2481.3	2571.4	2633.1
37.5°	2315.3	2297.2	2321.7	2424.6	2468.4
40°	2138.9	2126.1	2122.2	2193.0	2221.3
42.5°	1922.7	1898.3	1854.5	1926.6	1949.8
45°	1639.6	1630.6	1546.9	1622.9	1625.4
47.5°	1343.6	1350.0	1256.1	1332.0	1275.4
50°	1050.2	1117.1	1055.3	1087.5	962.7
52.5°	817.2	942.1	918.9	906.0	736.1
55°	629.3	786.3	809.5	754.2	566.3
57.5°	480.0	670.5	684.7	646.1	431.1
60°	353.9	566.3	566.3	548.2	328.2
62.5°	263.8	486.5	460.7	465.9	251.0
65°	207.2	417.0	370.6	396.4	199.5
67.5°	173.7	347.5	280.6	342.3	173.7
70°	168.6	302.4	204.6	308.9	167.3
72.5°	167.3	278.0	153.1	280.6	168.6
75°	157.0	251.0	121.0	247.1	155.7
77.5°	144.1	208.5	100.4	208.5	145.4
80°	128.7	158.3	93.9	162.2	136.4
82.5°	99.1	113.3	83.7	114.5	105.5
85°	63.1	82.4	64.3	83.7	69.5
87.5°	28.3	43.8	28.3	45.0	30.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)