

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: P475891

Luminaire Tested: **22GR-LD5-85-F1-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475891
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-85-F1-UNV-L830-CD1-U
Description: GR 2'X2' LED TROFFER w/ F1 LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8244.2 lumens
Efficiency: N/A
Efficacy: 127.2 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.17 / 1.24
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

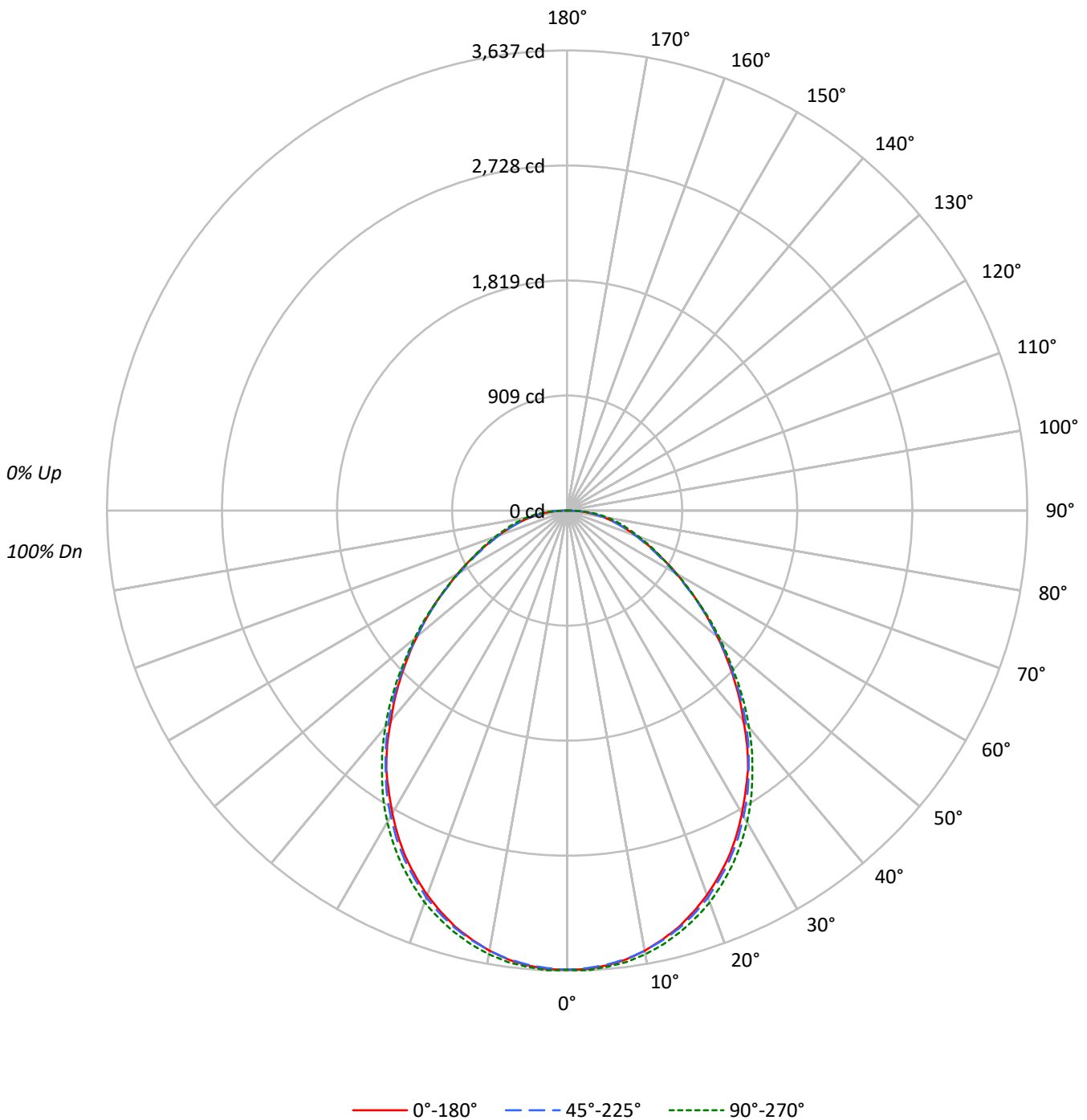
Input Watts (W): 64.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	105	101	97	107	103	99	96	98	95	93	94	92	90	91	89	87	85
2	100	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72
3	92	82	74	68	90	80	73	68	78	71	66	75	70	65	72	68	64	62
4	85	73	65	59	82	72	64	58	70	63	57	67	61	57	65	60	56	54
5	78	66	57	51	76	65	57	51	63	56	50	61	55	50	59	54	49	47
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	50	44	39	37
8	63	50	42	36	62	49	42	36	48	41	36	47	40	36	46	40	36	34
9	59	46	38	33	58	46	38	33	44	37	33	43	37	32	42	37	32	31
10	55	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	30	28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9767	9767	9767
5°	9749	9730	9777
10°	9652	9652	9728
15°	9492	9521	9609
20°	9259	9319	9439
25°	8971	9033	9177
30°	8589	8664	8837
35°	8189	8212	8383
40°	7609	7719	7853
45°	7066	7132	7238
50°	6491	6491	6594
55°	5954	5888	5921
60°	5389	5295	5370
65°	4914	4804	4959
70°	4541	4514	4733
75°	4374	4338	4771
80°	4418	4418	5064
85°	4616	4832	5795



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	342.3	4.2
10°-20°	963.5	11.7
20°-30°	1400.9	17.0
30°-40°	1568.1	19.0
40°-50°	1447.3	17.6
50°-60°	1129.4	13.7
60°-70°	764.5	9.3
70°-80°	456.5	5.5
80°-90°	171.5	2.1
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°	2706.7	32.8
0°-40°	4274.9	51.9
0°-60°	6851.7	83.1
0°-90°	8244.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8244.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3630	3630	3630	3630	3630	
5°	3609	3602	3602	3616	3619	342
15°	3407	3407	3418	3438	3449	959
25°	3021	3021	3042	3074	3091	1387
35°	2493	2489	2500	2538	2552	1551
45°	1857	1867	1874	1888	1902	1432
55°	1269	1259	1255	1262	1262	1132
65°	772	765	754	768	779	769
75°	421	417	417	442	459	447
85°	150	146	156	181	188	159
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3629.7	3629.7	3629.7	3629.7	3629.7
2.5°	3626.3	3619.3	3619.3	3629.7	3636.7
5°	3608.9	3601.9	3601.9	3615.8	3619.3
7.5°	3577.6	3574.1	3574.1	3588.0	3598.5
10°	3532.4	3528.9	3532.4	3546.3	3560.2
12.5°	3473.3	3473.3	3480.2	3497.6	3511.5
15°	3407.2	3407.2	3417.7	3438.5	3449.0
17.5°	3323.8	3327.3	3341.2	3365.5	3375.9
20°	3233.4	3240.3	3254.3	3275.1	3296.0
22.5°	3129.1	3136.0	3150.0	3181.2	3195.1
25°	3021.3	3021.3	3042.2	3073.5	3090.8
27.5°	2896.1	2899.6	2920.5	2955.3	2972.6
30°	2764.0	2774.5	2788.4	2819.7	2844.0
32.5°	2625.0	2635.4	2652.8	2687.5	2704.9
35°	2492.8	2489.4	2499.8	2538.0	2551.9
37.5°	2336.4	2339.9	2353.8	2381.6	2399.0
40°	2166.0	2183.4	2197.3	2218.2	2235.6
42.5°	2016.5	2027.0	2037.4	2058.2	2072.2
45°	1856.6	1867.0	1874.0	1887.9	1901.8
47.5°	1700.1	1703.6	1714.0	1721.0	1731.4
50°	1550.6	1554.1	1550.6	1561.1	1575.0
52.5°	1404.6	1401.1	1401.1	1404.6	1425.5
55°	1269.0	1258.6	1255.1	1262.1	1262.1
57.5°	1119.5	1116.0	1116.0	1112.6	1129.9
60°	1001.3	990.9	983.9	990.9	997.8
62.5°	879.6	869.2	862.2	876.1	876.1
65°	771.8	764.9	754.5	768.4	778.8
67.5°	667.5	660.6	657.1	674.5	688.4
70°	577.1	573.7	573.7	591.1	601.5
72.5°	493.7	490.2	490.2	514.6	525.0
75°	420.7	417.2	417.2	441.5	458.9
77.5°	347.7	344.2	354.6	375.5	392.9
80°	285.1	281.6	285.1	312.9	326.8
82.5°	215.6	215.6	222.5	250.3	264.2
85°	149.5	146.0	156.5	180.8	187.7
87.5°	76.5	80.0	83.4	97.3	97.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)