

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: P234098

Luminaire Tested: **22GR-LD5-90-F1-UNV-L935-CD1-U**

Issue Date: 3/12/2020

Test Information

Test Method: LM-79-08
Report Number: P234098
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33295)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/12/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-90-F1-UNV-L935-CD1-U
Description: METALUX 2X2 GRLED TROFFER
WITH F1 LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7642.4 lumens
Efficiency: N/A
Efficacy: 88.9 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.19 / 1.24
Luminous Opening: Rectangular (W 1.83' x L: 1.83' x H: 0')
CIE Type: Direct

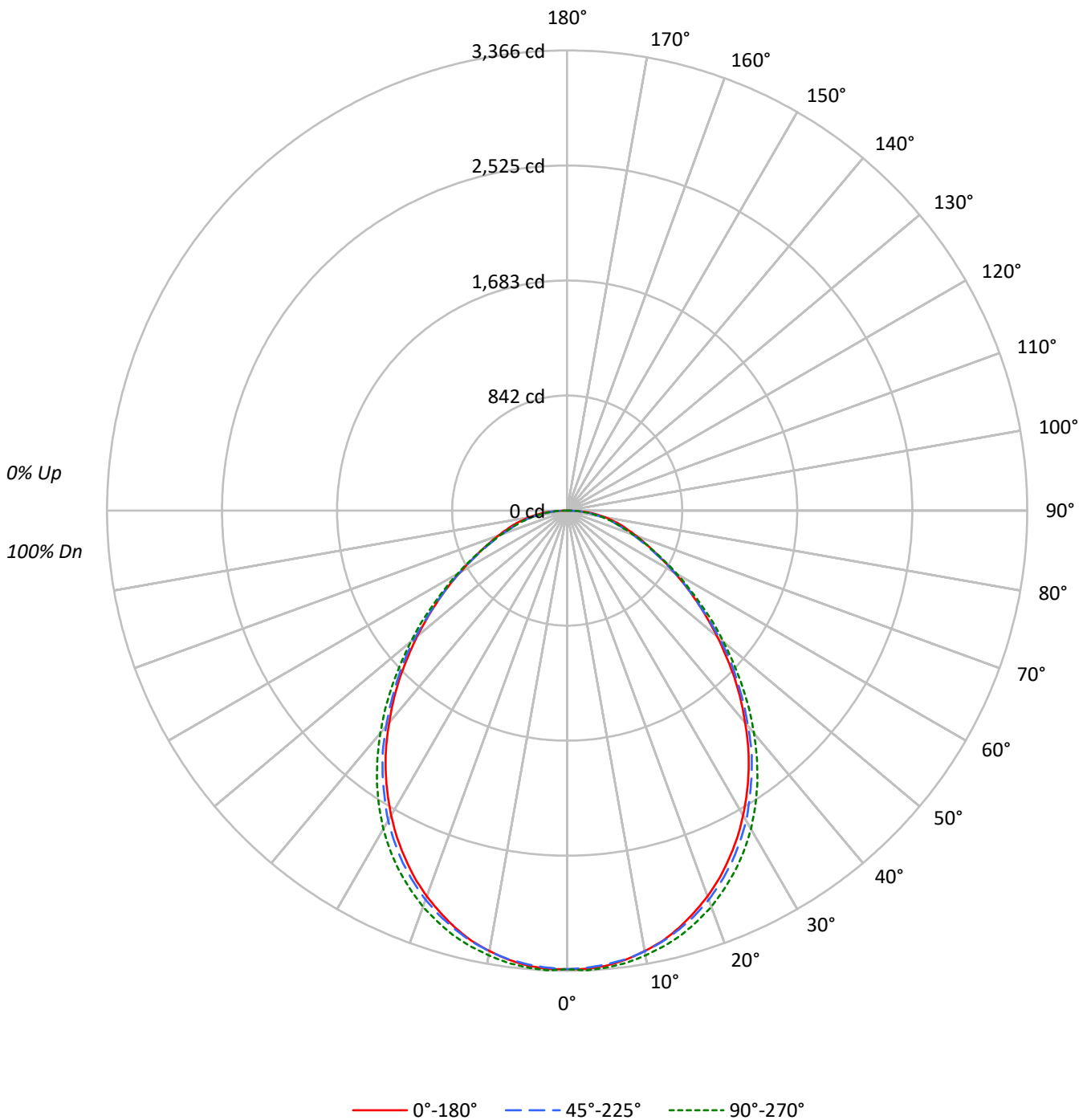
Input Watts (W): 85.94
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	110	105	101	97	107	103	99	96	99	96	93	95	92	90	91	89	87	85
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	73
3	92	82	75	69	90	81	74	68	78	72	67	75	70	66	73	68	65	62
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	60	56	54
5	78	66	58	52	76	65	57	51	63	56	51	61	55	50	59	54	50	48
6	73	60	52	45	71	59	51	45	57	50	45	56	49	45	54	49	44	42
7	68	55	46	41	66	54	46	40	53	45	40	51	45	40	50	44	40	38
8	63	50	42	36	62	50	42	36	48	41	36	47	41	36	46	40	36	34
9	59	46	38	33	58	46	38	33	45	38	33	44	37	33	43	37	33	31
10	56	43	35	30	54	42	35	30	41	35	30	40	34	30	40	34	30	28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10744	10744	10744
5°	10740	10711	10785
10°	10639	10645	10743
15°	10477	10512	10665
20°	10231	10322	10509
25°	9913	10051	10270
30°	9521	9685	9941
35°	9054	9199	9484
40°	8466	8607	8889
45°	7838	7959	8192
50°	7138	7254	7439
55°	6445	6466	6653
60°	5781	5804	5940
65°	5267	5160	5281
70°	5014	4732	4815
75°	5046	4563	4586
80°	5232	4612	4579
85°	5736	4887	4626



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	317.0	4.1
10°-20°	895.4	11.7
20°-30°	1310.5	17.1
30°-40°	1473.5	19.3
40°-50°	1358.8	17.8
50°-60°	1047.3	13.7
60°-70°	691.1	9.0
70°-80°	402.2	5.3
80°-90°	146.5	1.9
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°	2522.9	33.0
0°-40°	3996.4	52.3
0°-60°	6402.5	83.8
0°-90°	7642.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7642.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3355	3355	3355	3355	3355	
5°	3341	3334	3332	3348	3355	317
15°	3160	3160	3171	3199	3217	889
25°	2805	2820	2844	2883	2906	1290
35°	2316	2326	2353	2401	2426	1444
45°	1731	1732	1757	1793	1809	1333
55°	1154	1153	1158	1177	1192	1036
65°	695	692	681	686	697	697
75°	408	390	369	362	371	430
85°	156	154	133	122	126	165
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3355.0	3355.0	3355.0	3355.0	3355.0
2.5°	3355.0	3347.9	3346.2	3358.6	3365.7
5°	3340.8	3333.8	3332.0	3347.9	3355.0
7.5°	3312.4	3307.2	3308.9	3326.6	3335.5
10°	3271.6	3269.9	3273.4	3293.0	3303.6
12.5°	3223.8	3222.0	3229.2	3250.4	3264.6
15°	3160.0	3160.0	3170.6	3199.0	3216.7
17.5°	3083.7	3089.1	3105.0	3133.4	3152.9
20°	3002.1	3007.5	3028.7	3060.7	3083.7
22.5°	2911.7	2918.8	2940.1	2979.1	2998.6
25°	2805.3	2819.5	2844.4	2883.4	2906.4
27.5°	2695.4	2711.3	2734.4	2782.2	2803.6
30°	2574.8	2585.4	2619.1	2663.5	2688.3
32.5°	2447.2	2457.8	2486.1	2539.3	2560.6
35°	2315.9	2326.5	2353.1	2401.0	2425.8
37.5°	2174.0	2182.9	2214.8	2252.1	2278.7
40°	2025.0	2037.4	2058.8	2103.1	2126.2
42.5°	1879.7	1885.0	1908.0	1952.4	1970.1
45°	1730.7	1732.5	1757.3	1792.7	1808.7
47.5°	1576.4	1580.0	1610.2	1631.4	1647.4
50°	1432.8	1434.5	1455.9	1475.3	1493.1
52.5°	1289.2	1289.2	1299.8	1321.1	1344.1
55°	1154.4	1152.6	1158.0	1177.4	1191.6
57.5°	1026.7	1024.9	1032.1	1044.5	1055.1
60°	902.6	899.0	906.1	913.2	927.4
62.5°	792.6	796.2	787.4	798.0	808.6
65°	695.1	691.6	680.9	686.3	696.9
67.5°	611.7	606.5	588.7	592.3	604.7
70°	535.5	524.9	505.4	505.4	514.2
72.5°	466.4	455.8	430.9	432.6	436.2
75°	407.8	390.2	368.8	361.8	370.6
77.5°	344.0	329.8	310.3	305.0	308.6
80°	283.7	273.1	250.1	242.9	248.3
82.5°	225.2	216.3	189.7	184.4	186.2
85°	156.1	154.3	133.0	122.3	125.9
87.5°	83.4	85.1	69.2	62.0	65.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)