

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: P234120

Luminaire Tested: **22GR-LD5-90-A-UNV-L950-CD1-U**

Issue Date: 3/12/2020

Test Information

Test Method: LM-79-08
Report Number: P234120
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33296)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/12/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-90-A-UNV-L950-CD1-U
Description: METALUX 2X2 GRLED TROFFER
WITH A LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8972.9 lumens
Efficiency: N/A
Efficacy: 104.4 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.22 / 1.25
Luminous Opening: Rectangular (W 1.83' x L: 1.83' x H: 0')
CIE Type: Direct

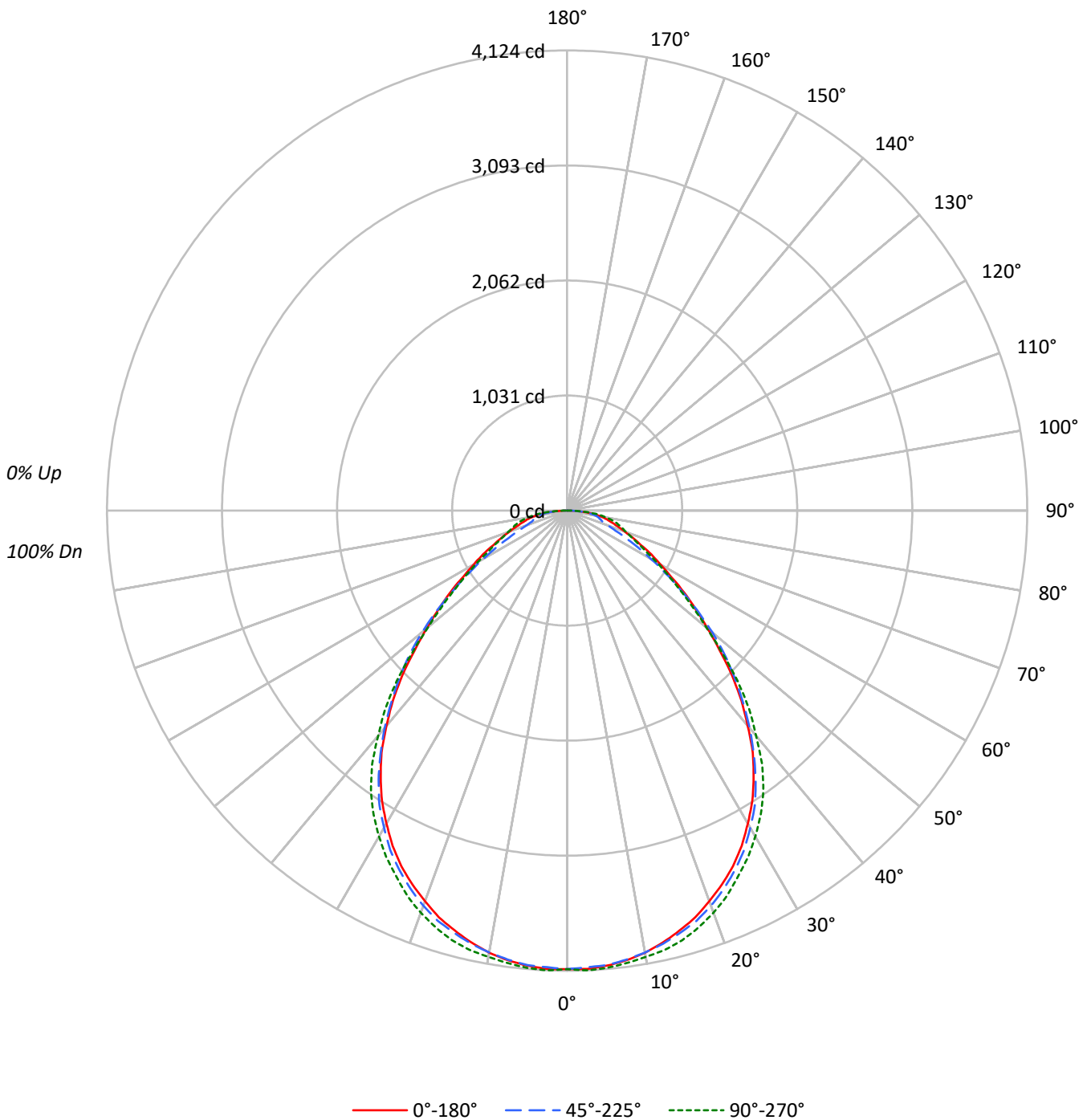
Input Watts (W): 85.94
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86
2	101	94	87	82	99	92	86	81	88	84	79	85	81	78	82	79	76	74
3	93	84	76	70	91	82	75	70	79	73	68	76	71	67	74	70	66	64
4	86	75	67	61	84	74	66	60	71	65	60	69	63	59	67	62	58	56
5	80	68	59	53	78	67	59	53	65	58	53	63	57	52	61	56	51	49
6	74	62	53	47	72	61	53	47	59	52	47	57	51	46	56	50	46	44
7	69	56	48	42	67	55	48	42	54	47	42	53	46	42	51	46	41	39
8	64	52	44	38	63	51	43	38	50	43	38	48	42	38	47	42	37	36
9	60	48	40	35	59	47	40	35	46	39	34	45	39	34	44	38	34	32
10	57	44	37	32	55	44	36	32	43	36	31	42	36	31	41	35	31	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13160	13160	13160
5°	13163	13143	13224
10°	13085	13078	13207
15°	12918	12987	13216
20°	12695	12844	13072
25°	12425	12565	12794
30°	11976	12138	12470
35°	11388	11518	11983
40°	10527	10641	11016
45°	9457	9627	9779
50°	8177	8468	8094
55°	7135	6949	6855
60°	6179	5563	5938
65°	5522	4367	5332
70°	5123	3617	5259
75°	5115	3823	5839
80°	5660	4813	6586
85°	5909	5218	7444



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	388.9	4.3
10°-20°	1107.5	12.3
20°-30°	1638.0	18.3
30°-40°	1848.4	20.6
40°-50°	1629.5	18.2
50°-60°	1117.8	12.5
60°-70°	659.6	7.4
70°-80°	411.6	4.6
80°-90°	171.6	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°	3134.4	34.9
0°-40°	4982.9	55.5
0°-60°	7730.1	86.1
0°-90°	8972.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8972.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4109	4109	4109	4109	4109	
5°	4095	4086	4088	4103	4114	389
15°	3896	3900	3917	3965	3986	1098
25°	3516	3529	3556	3602	3621	1615
35°	2913	2938	2946	3017	3065	1815
45°	2088	2098	2126	2138	2159	1604
55°	1278	1247	1244	1203	1228	1146
65°	729	641	576	666	704	734
75°	413	372	309	432	472	443
85°	161	150	142	186	203	174
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4109.3	4109.3	4109.3	4109.3	4109.3
2.5°	4111.4	4100.9	4096.7	4113.5	4123.9
5°	4094.6	4086.4	4088.4	4103.0	4113.5
7.5°	4065.4	4059.1	4059.1	4080.1	4090.5
10°	4023.7	4021.6	4021.6	4046.7	4061.2
12.5°	3965.2	3967.3	3975.7	4009.1	4034.1
15°	3896.3	3900.4	3917.2	3965.2	3986.1
17.5°	3821.2	3821.2	3854.6	3892.2	3917.2
20°	3725.1	3731.4	3768.9	3810.7	3835.7
22.5°	3627.0	3637.4	3668.8	3716.7	3739.7
25°	3516.2	3528.8	3555.9	3601.9	3620.7
27.5°	3386.8	3403.5	3432.8	3466.2	3505.9
30°	3238.6	3263.6	3282.5	3328.3	3372.2
32.5°	3088.3	3111.2	3132.0	3180.1	3230.2
35°	2912.8	2937.9	2946.2	3017.2	3065.2
37.5°	2733.3	2743.7	2747.8	2818.9	2871.0
40°	2518.2	2539.1	2545.4	2601.7	2635.1
42.5°	2311.5	2319.9	2332.3	2374.1	2413.8
45°	2088.1	2098.5	2125.7	2138.1	2159.1
47.5°	1854.2	1885.5	1916.8	1877.1	1879.2
50°	1641.2	1666.3	1699.7	1624.5	1624.5
52.5°	1451.2	1463.7	1465.8	1403.1	1415.7
55°	1277.9	1246.6	1244.5	1202.7	1227.8
57.5°	1104.6	1062.8	1048.2	1035.7	1064.9
60°	964.7	889.5	868.6	887.4	927.1
62.5°	849.8	753.8	714.1	762.1	797.6
65°	728.7	641.0	576.3	666.1	703.7
67.5°	634.7	551.3	467.7	595.1	622.3
70°	547.1	482.3	386.3	540.8	561.7
72.5°	476.1	426.0	334.1	488.6	513.7
75°	413.4	371.6	309.0	432.2	471.9
77.5°	363.4	317.4	288.2	373.7	421.8
80°	306.9	261.0	261.0	313.2	357.1
82.5°	242.2	204.7	210.9	254.7	286.1
85°	160.8	150.3	142.0	185.8	202.6
87.5°	81.4	83.5	75.2	96.1	98.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)