

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: P234114

Luminaire Tested: **22GR-LD5-85-A-UNV-L935-CD1-U**

Issue Date: 3/12/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P234114  
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-LD5-85-A-UNV-L935-CD1-U  
Description: METALUX 2X2 GRLED TROFFER  
WITH A LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7248.8 lumens  
Efficiency: N/A  
Efficacy: 89.4 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

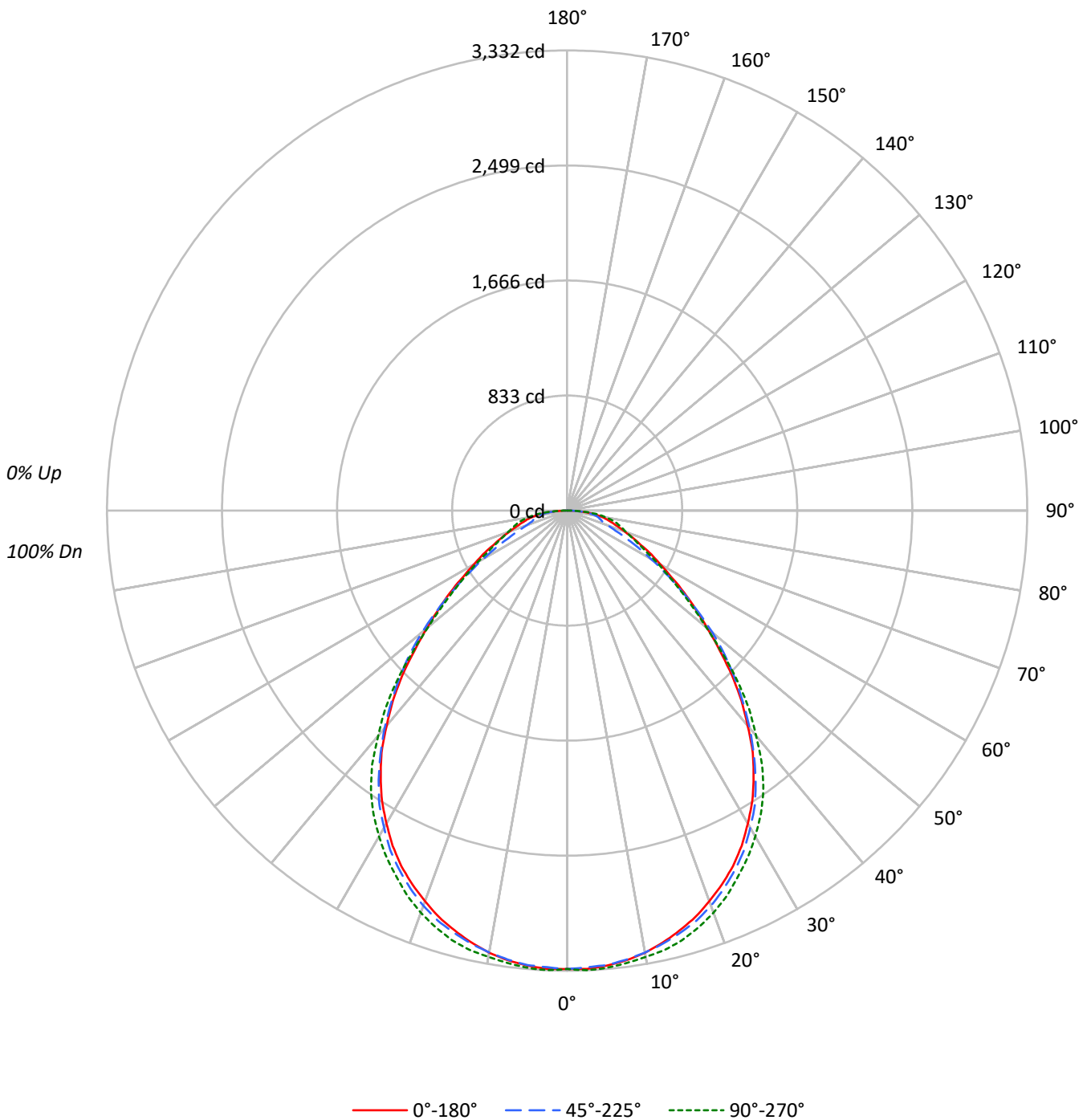
Input Watts (W): 81.06  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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					100			
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86					86			
2	101	94	87	82	99	92	86	81	88	84	79	85	81	78	82	79	76	74					74			
3	93	84	76	70	91	82	75	70	79	73	68	76	71	67	74	70	66	64					64			
4	86	75	67	61	84	74	66	60	71	65	60	69	63	59	67	62	58	56					56			
5	80	68	59	53	78	67	59	53	65	58	53	63	57	52	61	56	51	49					49			
6	74	62	53	47	72	61	53	47	59	52	47	57	51	46	56	50	46	44					44			
7	69	56	48	42	67	55	48	42	54	47	42	53	46	42	51	46	41	39					39			
8	64	52	44	38	63	51	43	38	50	43	38	48	42	38	47	42	37	36					36			
9	60	48	40	35	59	47	40	35	46	39	34	45	39	34	44	38	34	32					32			
10	57	44	37	32	55	44	36	32	43	36	31	42	36	31	41	35	31	30					30			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	10631	10631	10631
5°	10634	10618	10683
10°	10571	10565	10669
15°	10436	10492	10676
20°	10256	10376	10560
25°	10037	10151	10335
30°	9675	9806	10074
35°	9199	9305	9681
40°	8504	8596	8900
45°	7640	7777	7899
50°	6605	6841	6538
55°	5764	5614	5538
60°	4991	4495	4797
65°	4461	3527	4308
70°	4138	2921	4248
75°	4133	3088	4717
80°	4572	3890	5321
85°	4773	4215	6011



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	314.2	4.3
10°-20°	894.7	12.3
20°-30°	1323.3	18.3
30°-40°	1493.3	20.6
40°-50°	1316.4	18.2
50°-60°	903.0	12.5
60°-70°	532.8	7.4
70°-80°	332.5	4.6
80°-90°	138.6	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°	2532.1	34.9
0°-40°	4025.4	55.5
0°-60°	6244.8	86.1
0°-90°	7248.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7248.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3320	3320	3320	3320	3320	
5°	3308	3301	3303	3315	3323	314
15°	3148	3151	3164	3203	3220	887
25°	2841	2851	2873	2910	2925	1305
35°	2353	2373	2380	2438	2476	1466
45°	1687	1695	1717	1727	1744	1296
55°	1032	1007	1005	972	992	926
65°	589	518	466	538	568	593
75°	334	300	250	349	381	358
85°	130	122	115	150	164	140
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3319.7	3319.7	3319.7	3319.7	3319.7
2.5°	3321.4	3313.0	3309.6	3323.1	3331.5
5°	3307.9	3301.1	3302.8	3314.7	3323.1
7.5°	3284.2	3279.2	3279.2	3296.0	3304.5
10°	3250.6	3248.9	3248.9	3269.1	3280.9
12.5°	3203.3	3205.0	3211.7	3238.8	3259.0
15°	3147.6	3151.0	3164.5	3203.3	3220.1
17.5°	3086.9	3086.9	3113.9	3144.2	3164.5
20°	3009.3	3014.4	3044.7	3078.4	3098.7
22.5°	2930.0	2938.4	2963.8	3002.5	3021.2
25°	2840.6	2850.7	2872.7	2909.8	2924.9
27.5°	2736.1	2749.6	2773.1	2800.2	2832.2
30°	2616.3	2636.5	2651.7	2688.8	2724.2
32.5°	2494.8	2513.4	2530.3	2569.0	2609.5
35°	2353.1	2373.4	2380.1	2437.5	2476.3
37.5°	2208.0	2216.5	2219.9	2277.2	2319.4
40°	2034.3	2051.2	2056.2	2101.8	2128.8
42.5°	1867.4	1874.1	1884.2	1917.9	1950.0
45°	1686.8	1695.2	1717.2	1727.3	1744.2
47.5°	1497.9	1523.2	1548.5	1516.5	1518.2
50°	1325.8	1346.1	1373.1	1312.3	1312.3
52.5°	1172.3	1182.4	1184.1	1133.6	1143.7
55°	1032.3	1007.1	1005.4	971.6	991.9
57.5°	892.3	858.6	846.8	836.7	860.3
60°	779.3	718.6	701.8	716.9	748.9
62.5°	686.5	608.9	576.9	615.7	644.4
65°	588.7	517.8	465.5	538.1	568.5
67.5°	512.8	445.3	377.8	480.8	502.7
70°	441.9	389.6	312.0	436.9	453.7
72.5°	384.6	344.1	269.9	394.7	415.0
75°	334.0	300.2	249.6	349.2	381.2
77.5°	293.5	256.4	232.8	301.9	340.8
80°	247.9	210.9	210.9	253.0	288.5
82.5°	195.7	165.3	170.3	205.8	231.1
85°	129.9	121.5	114.7	150.1	163.6
87.5°	65.8	67.5	60.7	77.6	79.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)