

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: P234113

Luminaire Tested: **22GR-LD5-85-A-UNV-L930-CD1-U**

Issue Date: 3/12/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P234113  
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-L930-CD1-U  
Description: METALUX 2X2 GRLED TROFFER  
WITH A LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6726.2 lumens  
Efficiency: N/A  
Efficacy: 83.0 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

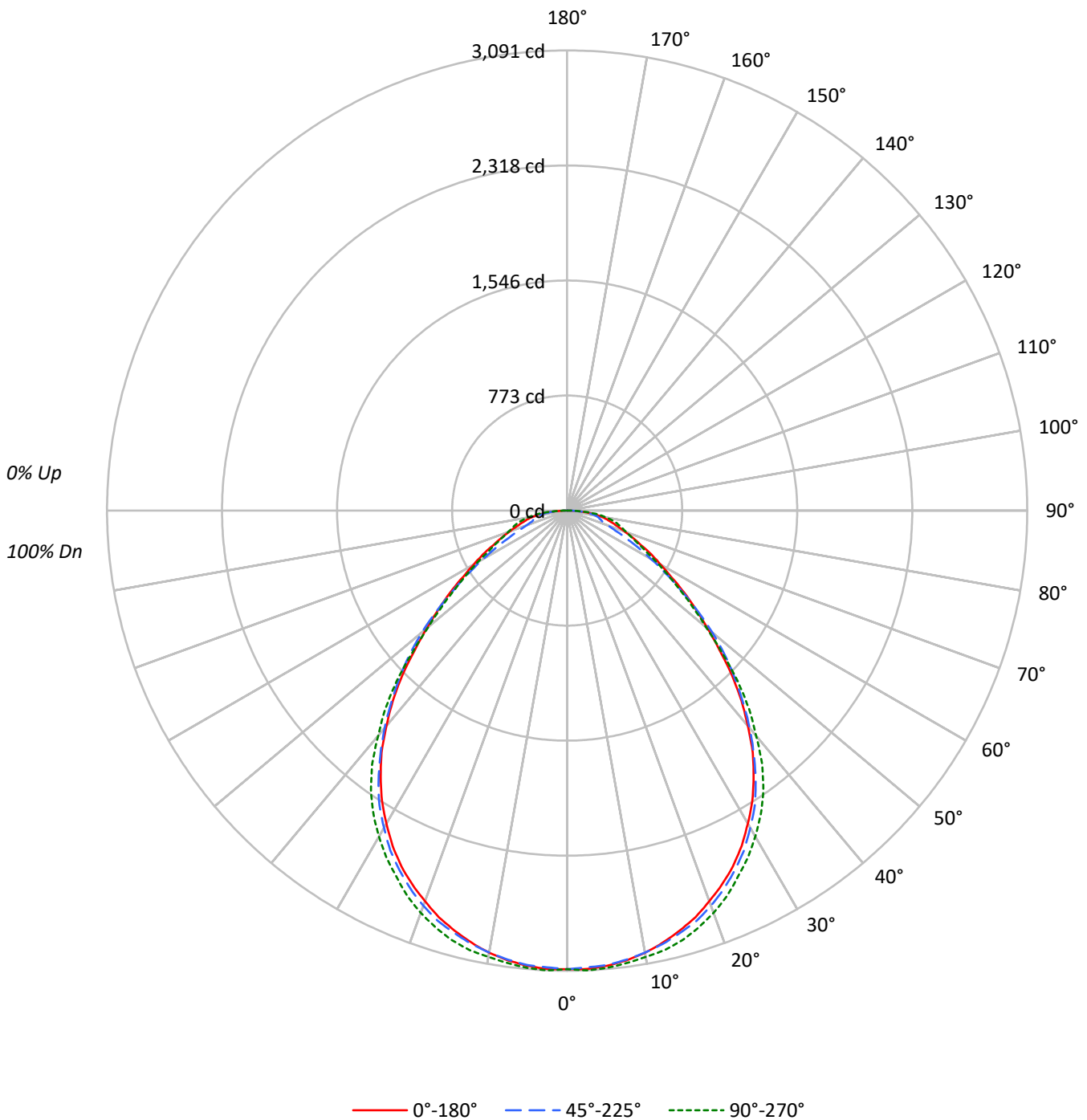
Input Watts (W): 81.06  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°	45°	90°
0°	9865	9865	9865
5°	9867	9852	9913
10°	9808	9803	9900
15°	9684	9735	9907
20°	9516	9628	9799
25°	9314	9419	9590
30°	8977	9099	9348
35°	8536	8634	8983
40°	7891	7977	8258
45°	7089	7217	7330
50°	6129	6348	6067
55°	5348	5209	5139
60°	4632	4171	4451
65°	4140	3274	3997
70°	3840	2711	3943
75°	3835	2866	4376
80°	4244	3609	4935
85°	4428	3910	5581



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	291.5	4.3
10°-20°	830.2	12.3
20°-30°	1227.9	18.3
30°-40°	1385.6	20.6
40°-50°	1221.5	18.2
50°-60°	837.9	12.5
60°-70°	494.4	7.4
70°-80°	308.5	4.6
80°-90°	128.7	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°	2349.6	34.9
0°-40°	3735.2	55.5
0°-60°	5794.6	86.1
0°-90°	6726.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6726.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3080	3080	3080	3080	3080	
5°	3069	3063	3065	3076	3084	291
15°	2921	2924	2936	2972	2988	823
25°	2636	2645	2666	2700	2714	1211
35°	2184	2202	2208	2262	2298	1361
45°	1565	1573	1593	1603	1618	1202
55°	958	934	933	902	920	859
65°	546	480	432	499	528	550
75°	310	279	232	324	354	332
85°	120	113	106	139	152	130
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3080.4	3080.4	3080.4	3080.4	3080.4
2.5°	3082.0	3074.1	3071.0	3083.5	3091.3
5°	3069.4	3063.2	3064.8	3075.7	3083.5
7.5°	3047.5	3042.8	3042.8	3058.4	3066.3
10°	3016.2	3014.6	3014.6	3033.4	3044.4
12.5°	2972.3	2974.0	2980.2	3005.2	3024.0
15°	2920.8	2923.9	2936.3	2972.3	2988.0
17.5°	2864.3	2864.3	2889.4	2917.6	2936.3
20°	2792.3	2797.1	2825.2	2856.6	2875.3
22.5°	2718.8	2726.7	2750.1	2786.1	2803.3
25°	2635.9	2645.2	2665.6	2700.0	2714.1
27.5°	2538.8	2551.3	2573.2	2598.3	2628.0
30°	2427.7	2446.5	2460.6	2495.0	2527.8
32.5°	2314.9	2332.2	2347.8	2383.8	2421.4
35°	2183.5	2202.3	2208.5	2261.7	2297.7
37.5°	2048.9	2056.7	2059.8	2113.1	2152.2
40°	1887.6	1903.3	1908.1	1950.3	1975.3
42.5°	1732.7	1739.0	1748.4	1779.6	1809.4
45°	1565.2	1573.1	1593.4	1602.8	1618.4
47.5°	1389.9	1413.4	1436.9	1407.1	1408.7
50°	1230.2	1249.0	1274.1	1217.8	1217.8
52.5°	1087.8	1097.2	1098.8	1051.8	1061.2
55°	957.9	934.5	932.9	901.6	920.4
57.5°	828.0	796.7	785.7	776.4	798.3
60°	723.2	666.8	651.2	665.2	694.9
62.5°	637.1	565.1	535.3	571.3	597.9
65°	546.3	480.5	432.0	499.3	527.5
67.5°	475.8	413.2	350.6	446.1	466.4
70°	410.1	361.5	289.5	405.4	421.1
72.5°	356.9	319.3	250.4	366.3	385.1
75°	309.9	278.6	231.6	324.0	353.7
77.5°	272.3	237.9	216.0	280.2	316.2
80°	230.1	195.7	195.7	234.8	267.6
82.5°	181.5	153.4	158.1	191.0	214.4
85°	120.5	112.7	106.4	139.3	151.9
87.5°	61.0	62.6	56.3	72.0	73.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)