

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: P234119

Luminaire Tested: **22GR-LD5-90-A-UNV-L940-CD1-U**

Issue Date: 3/12/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P234119  
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-L940-CD1-U  
Description: METALUX 2X2 GRLED TROFFER  
WITH A LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7709.0 lumens  
Efficiency: N/A  
Efficacy: 89.7 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

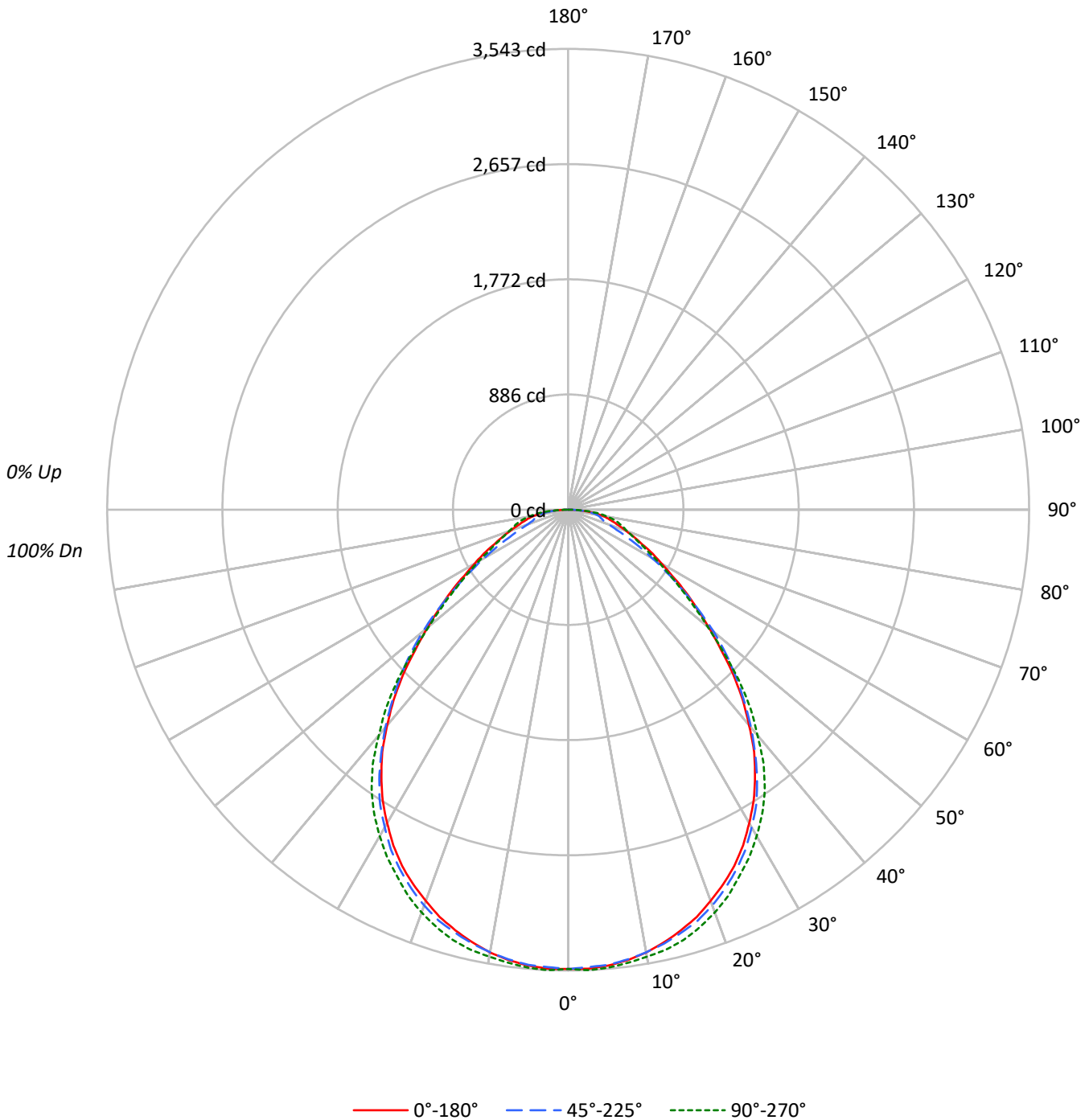
Input Watts (W): 85.94  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	11306	11306	11306
5°	11309	11292	11361
10°	11241	11236	11347
15°	11099	11158	11354
20°	10907	11035	11231
25°	10675	10795	10992
30°	10289	10428	10714
35°	9784	9896	10296
40°	9045	9142	9465
45°	8125	8271	8401
50°	7025	7275	6954
55°	6130	5970	5890
60°	5308	4780	5102
65°	4744	3752	4581
70°	4401	3108	4518
75°	4395	3285	5016
80°	4863	4135	5658
85°	5074	4479	6394



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	334.1	4.3
10°-20°	951.5	12.3
20°-30°	1407.3	18.3
30°-40°	1588.1	20.6
40°-50°	1399.9	18.2
50°-60°	960.4	12.5
60°-70°	566.7	7.4
70°-80°	353.6	4.6
80°-90°	147.5	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°	2692.9	34.9
0°-40°	4281.0	55.5
0°-60°	6641.3	86.1
0°-90°	7709.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7709.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3530	3530	3530	3530	3530	
5°	3518	3511	3512	3525	3534	334
15°	3348	3351	3365	3407	3425	944
25°	3021	3032	3055	3094	3111	1387
35°	2502	2524	2531	2592	2634	1559
45°	1794	1803	1826	1837	1855	1378
55°	1098	1071	1069	1033	1055	985
65°	626	551	495	572	605	631
75°	355	319	266	371	405	381
85°	138	129	122	160	174	149
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3530.5	3530.5	3530.5	3530.5	3530.5
2.5°	3532.3	3523.2	3519.7	3534.1	3543.0
5°	3517.9	3510.7	3512.5	3525.1	3534.1
7.5°	3492.8	3487.4	3487.4	3505.4	3514.3
10°	3456.9	3455.1	3455.1	3476.6	3489.2
12.5°	3406.7	3408.4	3415.7	3444.4	3465.9
15°	3347.5	3351.1	3365.4	3406.7	3424.6
17.5°	3282.9	3282.9	3311.6	3343.9	3365.4
20°	3200.4	3205.7	3238.1	3273.9	3295.4
22.5°	3116.0	3125.1	3151.9	3193.2	3213.0
25°	3021.0	3031.8	3055.1	3094.5	3110.7
27.5°	2909.7	2924.1	2949.2	2977.9	3012.0
30°	2782.4	2803.9	2820.0	2859.5	2897.2
32.5°	2653.2	2673.0	2690.9	2732.1	2775.2
35°	2502.5	2524.1	2531.2	2592.2	2633.5
37.5°	2348.2	2357.3	2360.8	2421.8	2466.7
40°	2163.5	2181.4	2186.8	2235.2	2264.0
42.5°	1985.9	1993.0	2003.8	2039.7	2073.8
45°	1794.0	1802.9	1826.2	1837.0	1854.9
47.5°	1593.0	1619.9	1646.8	1612.8	1614.6
50°	1410.1	1431.6	1460.3	1395.7	1395.7
52.5°	1246.7	1257.6	1259.4	1205.5	1216.3
55°	1097.9	1071.0	1069.2	1033.3	1054.9
57.5°	949.0	913.1	900.6	889.8	914.9
60°	828.8	764.2	746.3	762.4	796.5
62.5°	730.1	647.6	613.5	654.8	685.2
65°	626.1	550.7	495.1	572.2	604.6
67.5°	545.3	473.6	401.9	511.3	534.6
70°	470.0	414.4	331.9	464.7	482.5
72.5°	409.0	365.9	287.1	419.8	441.3
75°	355.2	319.3	265.5	371.3	405.4
77.5°	312.2	272.7	247.6	321.1	362.4
80°	263.7	224.2	224.2	269.1	306.8
82.5°	208.1	175.8	181.2	218.9	245.8
85°	138.1	129.2	121.9	159.7	174.0
87.5°	70.0	71.7	64.6	82.6	84.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)