

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: P234105

Luminaire Tested: **22GR-LD5-60-A-UNV-L930-CD1-U**

Issue Date: 3/12/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P234105  
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-LD5-60-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: 4663.7 lumens  
Efficiency: N/A  
Efficacy: 94.1 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

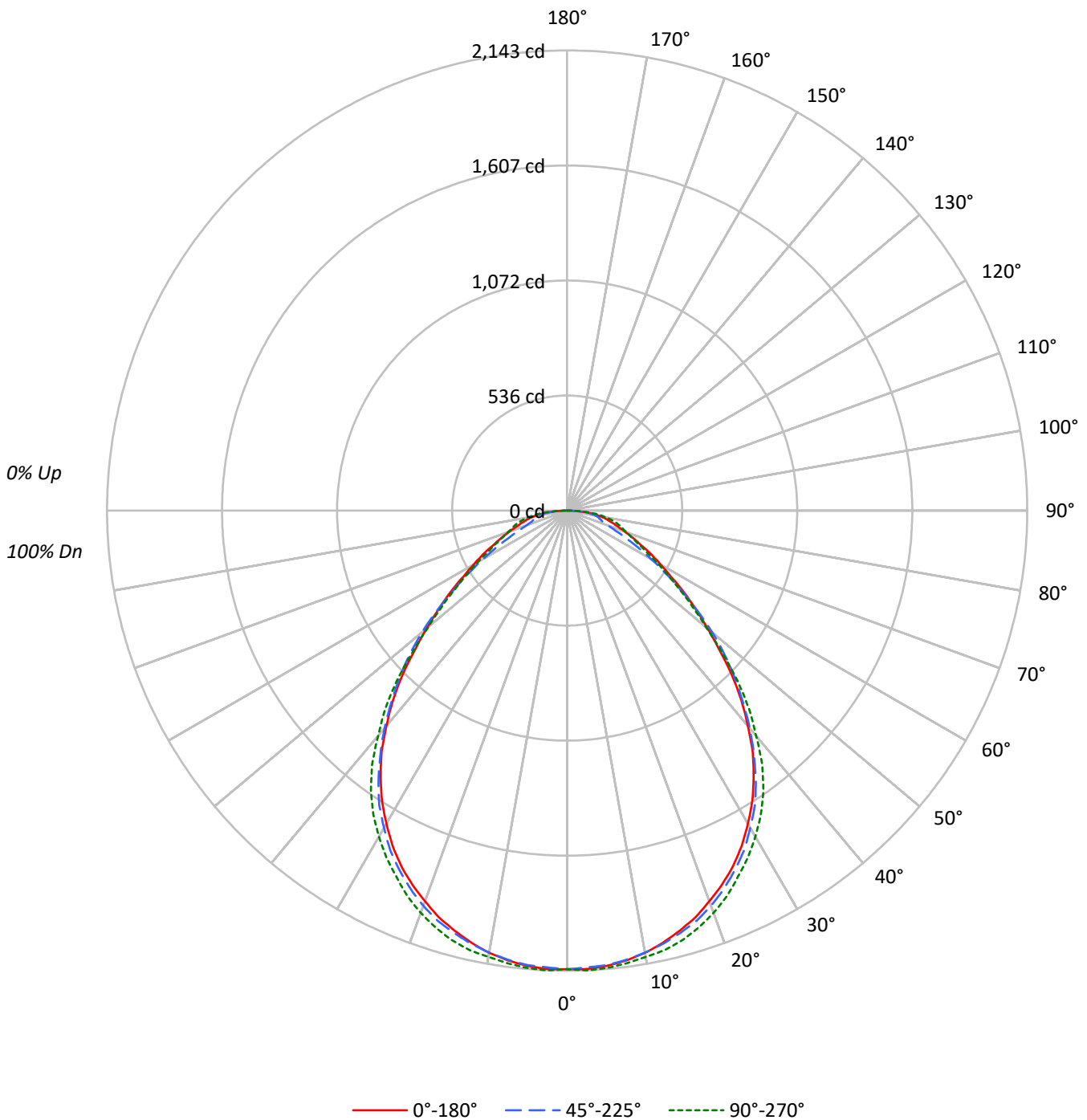
Input Watts (W): 49.58  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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				
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°	6840	6840	6840
5°	6842	6831	6873
10°	6801	6797	6864
15°	6714	6750	6869
20°	6598	6676	6795
25°	6458	6531	6650
30°	6225	6309	6482
35°	5919	5987	6229
40°	5472	5531	5726
45°	4915	5004	5082
50°	4250	4401	4207
55°	3708	3611	3563
60°	3211	2892	3086
65°	2870	2270	2771
70°	2663	1879	2733
75°	2659	1987	3035
80°	2943	2501	3423
85°	3072	2712	3869



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	202.1	4.3
10°-20°	575.6	12.3
20°-30°	851.4	18.3
30°-40°	960.7	20.6
40°-50°	846.9	18.2
50°-60°	581.0	12.5
60°-70°	342.8	7.4
70°-80°	213.9	4.6
80°-90°	89.2	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°	1629.1	34.9
0°-40°	2589.9	55.5
0°-60°	4017.8	86.1
0°-90°	4663.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4663.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2136	2136	2136	2136	2136	
5°	2128	2124	2125	2133	2138	202
15°	2025	2027	2036	2061	2072	571
25°	1828	1834	1848	1872	1882	839
35°	1514	1527	1531	1568	1593	943
45°	1085	1091	1105	1111	1122	834
55°	664	648	647	625	638	596
65°	379	333	300	346	366	382
75°	215	193	161	225	245	230
85°	84	78	74	97	105	90
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2135.9	2135.9	2135.9	2135.9	2135.9
2.5°	2136.9	2131.5	2129.3	2138.0	2143.4
5°	2128.2	2123.9	2124.9	2132.6	2138.0
7.5°	2113.1	2109.8	2109.8	2120.6	2126.0
10°	2091.3	2090.3	2090.3	2103.3	2110.8
12.5°	2060.9	2062.1	2066.4	2083.7	2096.7
15°	2025.2	2027.3	2036.0	2060.9	2071.8
17.5°	1986.0	1986.0	2003.4	2022.9	2036.0
20°	1936.1	1939.4	1958.9	1980.6	1993.7
22.5°	1885.1	1890.5	1906.8	1931.8	1943.7
25°	1827.6	1834.1	1848.2	1872.1	1881.9
27.5°	1760.3	1769.0	1784.2	1801.5	1822.2
30°	1683.3	1696.3	1706.0	1730.0	1752.8
32.5°	1605.1	1617.0	1627.9	1652.9	1679.0
35°	1514.0	1527.0	1531.4	1568.2	1593.2
37.5°	1420.6	1426.1	1428.2	1465.1	1492.2
40°	1308.8	1319.7	1323.0	1352.3	1369.6
42.5°	1201.4	1205.7	1212.3	1233.9	1254.6
45°	1085.3	1090.7	1104.8	1111.3	1122.2
47.5°	963.7	980.0	996.3	975.6	976.8
50°	853.0	866.1	883.4	844.4	844.4
52.5°	754.2	760.8	761.9	729.3	735.8
55°	664.2	647.9	646.8	625.1	638.1
57.5°	574.1	552.4	544.8	538.3	553.5
60°	501.4	462.3	451.5	461.2	481.8
62.5°	441.7	391.8	371.1	396.1	414.6
65°	378.8	333.2	299.5	346.2	365.7
67.5°	329.9	286.5	243.1	309.3	323.4
70°	284.4	250.7	200.7	281.1	291.9
72.5°	247.5	221.4	173.7	254.0	267.0
75°	214.9	193.2	160.6	224.7	245.3
77.5°	188.8	165.0	149.7	194.3	219.2
80°	159.6	135.6	135.6	162.8	185.6
82.5°	125.9	106.4	109.6	132.4	148.7
85°	83.6	78.1	73.8	96.6	105.3
87.5°	42.3	43.4	39.0	49.9	51.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)