

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: P476017

Luminaire Tested: **22GR-LD5-36-A19/156-UNV-L850-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P476017  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22GR-LD5-36-A19/156-UNV-L850-CD1-U  
Description: GR 2'X2' LED TROFFER w/ A19/156 LENS  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3568.7 lumens  
Efficiency: N/A  
Efficacy: 125.2 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.22 / 1.23  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

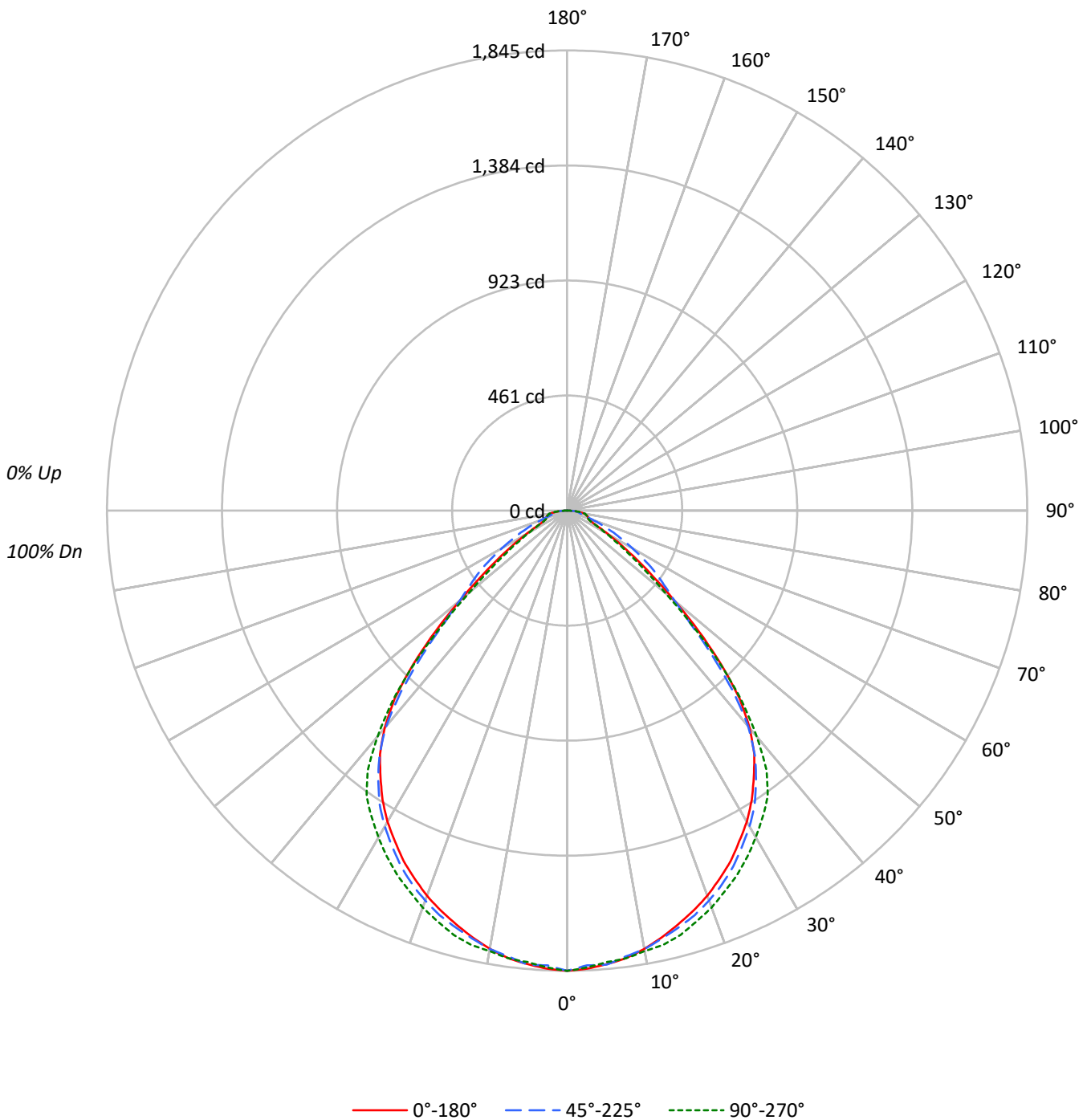
Input Watts (W): 28.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	111	107	103	100	108	105	101	99	100	98	95	97	95	93	93	91	90					88				
2	103	96	90	85	100	94	89	84	91	86	82	87	84	81	84	82	79					77				
3	95	86	79	74	93	85	78	73	82	76	72	79	75	71	77	73	70					68				
4	88	78	70	65	86	77	70	64	74	68	63	72	67	63	70	65	62					60				
5	82	71	63	57	80	70	62	57	68	61	56	66	60	56	64	59	55					53				
6	76	65	57	51	75	64	56	51	62	55	50	60	54	50	59	54	50					48				
7	71	59	51	46	70	58	51	46	57	50	45	56	50	45	54	49	45					43				
8	67	54	47	41	65	54	46	41	53	46	41	51	45	41	50	45	41					39				
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37					36				
10	59	47	39	35	58	46	39	35	45	39	34	44	38	34	44	38	34					33				

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

	0°	45°	90°
0°	4966	4966	4966
5°	4931	4937	4909
10°	4876	4878	4900
15°	4786	4819	4904
20°	4706	4765	4849
25°	4605	4676	4786
30°	4476	4544	4700
35°	4284	4339	4604
40°	3999	3968	4153
45°	3321	3134	3292
50°	2340	2352	2145
55°	1572	2022	1414
60°	1014	1622	940
65°	702	1256	676
70°	706	857	700
75°	869	670	862
80°	1062	775	1125
85°	1037	1056	1142



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	172.8	4.8
10°-20°	489.1	13.7
20°-30°	725.3	20.3
30°-40°	829.7	23.2
40°-50°	656.8	18.4
50°-60°	358.4	10.0
60°-70°	187.5	5.3
70°-80°	108.3	3.0
80°-90°	40.9	1.1
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°	1387.2	38.9
0°-40°	2216.8	62.1
0°-60°	3232.0	90.6
0°-90°	3568.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3568.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1845	1845	1845	1845	1845	
5°	1826	1812	1828	1821	1817	173
15°	1718	1727	1730	1743	1760	485
25°	1551	1553	1575	1595	1612	713
35°	1304	1304	1321	1369	1402	813
45°	873	868	823	864	865	664
55°	335	418	431	401	301	311
65°	110	222	197	211	106	119
75°	84	134	64	132	83	87
85°	34	44	34	44	37	37
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1845.4	1845.4	1845.4	1845.4	1845.4
2.5°	1838.5	1827.6	1824.8	1830.3	1833.7
5°	1825.5	1812.5	1827.6	1821.4	1817.3
7.5°	1810.4	1805.6	1802.9	1812.5	1810.4
10°	1784.4	1777.6	1785.1	1790.6	1793.3
12.5°	1752.9	1756.3	1757.7	1774.8	1783.0
15°	1718.0	1726.9	1729.6	1743.3	1760.4
17.5°	1682.3	1684.4	1700.8	1718.7	1726.9
20°	1643.3	1646.7	1663.9	1680.3	1693.3
22.5°	1597.4	1601.5	1622.8	1641.2	1652.2
25°	1550.8	1552.9	1574.8	1594.7	1611.8
27.5°	1494.7	1505.6	1518.6	1546.0	1564.5
30°	1440.5	1447.4	1462.5	1492.6	1512.5
32.5°	1376.8	1379.6	1398.8	1431.6	1458.4
35°	1304.2	1304.2	1320.7	1368.6	1401.5
37.5°	1232.3	1222.7	1235.7	1290.5	1313.8
40°	1138.5	1131.6	1129.6	1167.2	1182.3
42.5°	1023.4	1010.4	987.1	1025.4	1037.8
45°	872.7	867.9	823.4	863.8	865.1
47.5°	715.1	718.6	668.6	709.0	678.8
50°	559.0	594.6	561.7	578.8	512.4
52.5°	435.0	501.4	489.1	482.2	391.8
55°	335.0	418.5	430.9	401.4	301.4
57.5°	255.5	356.9	364.4	343.9	229.5
60°	188.4	301.4	301.4	291.8	174.7
62.5°	140.4	258.9	245.2	248.0	133.6
65°	110.3	221.9	197.3	211.0	106.2
67.5°	92.5	184.9	149.3	182.2	92.5
70°	89.7	161.0	108.9	164.4	89.0
72.5°	89.0	148.0	81.5	149.3	89.7
75°	83.6	133.6	64.4	131.5	82.9
77.5°	76.7	111.0	53.4	111.0	77.4
80°	68.5	84.3	50.0	86.3	72.6
82.5°	52.7	60.3	44.5	61.0	56.2
85°	33.6	43.8	34.2	44.5	37.0
87.5°	15.1	23.3	15.1	24.0	16.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)