

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: P476254

Luminaire Tested: **14GR-LD5-36-A19/156-UNV-L835-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P476254  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14GR-LD5-36-A19/156-UNV-L835-CD1-U  
Description: GR 1'X4' LED TROFFER w/ A19/156 LENS  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3529.0 lumens  
Efficiency: N/A  
Efficacy: 121.7 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.2  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

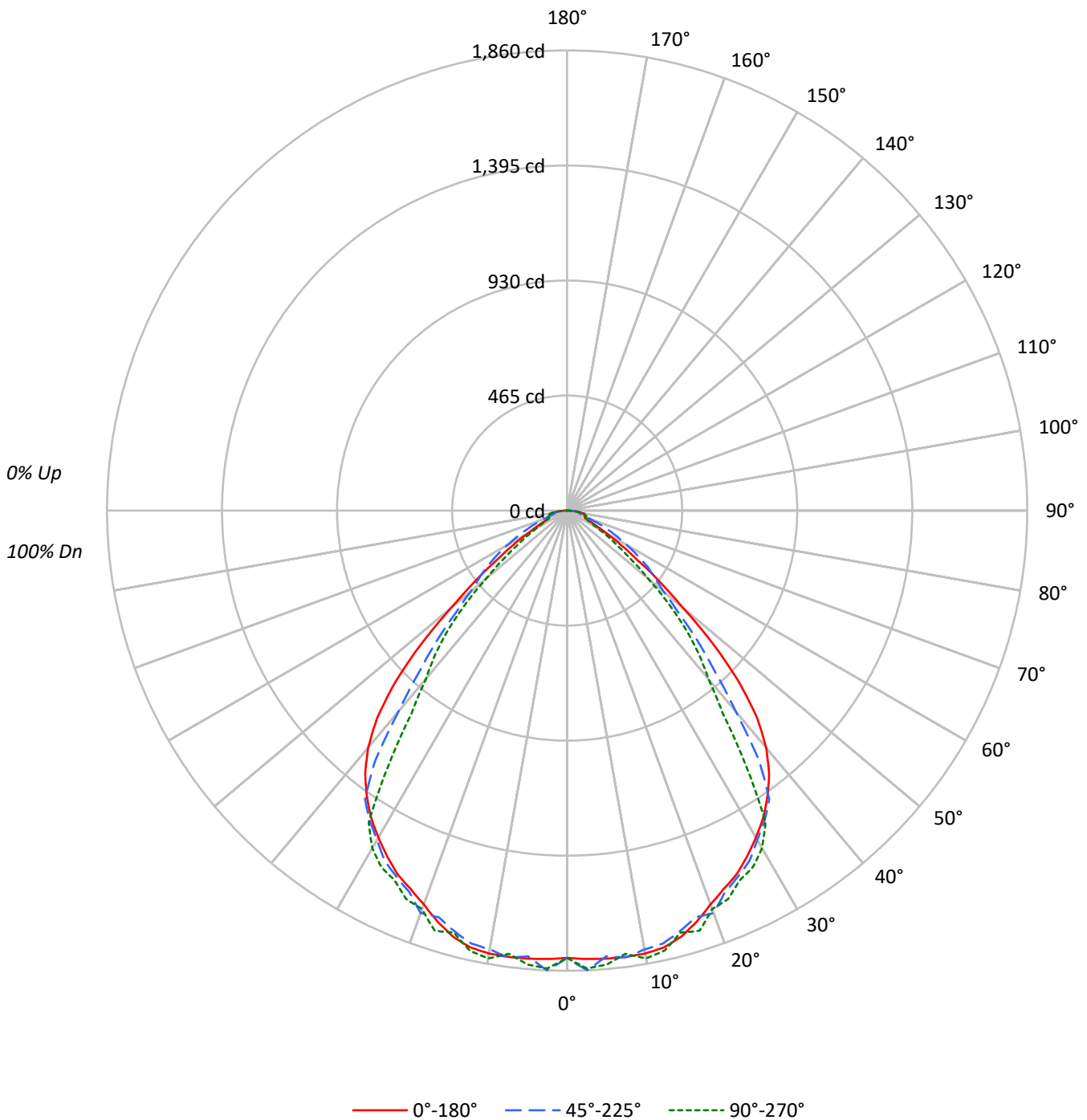
Input Watts (W): 29  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88					88			
2	103	96	91	86	101	94	89	85	91	87	83	88	84	81	85	82	79	78					78			
3	96	87	80	75	93	85	79	74	82	77	73	80	75	71	77	74	70	68					68			
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61					61			
5	83	71	64	58	81	70	63	58	68	62	57	67	61	57	65	60	56	54					54			
6	77	65	58	52	75	64	57	52	63	56	51	61	55	51	60	55	51	49					49			
7	72	60	52	47	70	59	52	47	58	51	46	56	50	46	55	50	46	44					44			
8	67	55	48	42	66	55	47	42	53	47	42	52	46	42	51	46	42	40					40			
9	63	51	44	39	62	51	43	39	49	43	38	48	43	38	48	42	38	36					36			
10	60	47	40	35	58	47	40	35	46	40	35	45	39	35	44	39	35	33					33			

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

	0°	45°	90°
0°	4867	4867	4867
5°	4910	4885	4975
10°	4967	4921	5022
15°	4966	4905	4920
20°	4851	4957	4909
25°	4816	4849	4898
30°	4741	4776	4896
35°	4636	4679	4151
40°	4393	3725	3121
45°	3747	2840	2587
50°	2560	2127	1786
55°	1612	1863	1187
60°	974	1491	765
65°	612	1152	588
70°	611	770	625
75°	768	614	807
80°	1003	744	1058
85°	969	1028	1028



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	174.5	4.9
10°-20°	500.1	14.2
20°-30°	754.8	21.4
30°-40°	841.9	23.9
40°-50°	612.2	17.3
50°-60°	335.7	9.5
60°-70°	170.7	4.8
70°-80°	100.4	2.8
80°-90°	38.8	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°	1429.4	40.5
0°-40°	2271.2	64.4
0°-60°	3219.2	91.2
0°-90°	3529.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3529.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1808	1808	1808	1808	1808	
5°	1818	1856	1808	1842	1842	174
15°	1783	1775	1760	1797	1766	501
25°	1622	1622	1633	1664	1650	746
35°	1411	1410	1424	1328	1264	878
45°	985	909	746	693	680	740
55°	344	425	397	355	253	324
65°	96	205	181	187	92	107
75°	74	131	59	118	78	77
85°	31	41	33	42	33	35
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1808.5	1808.5	1808.5	1808.5	1808.5
2.5°	1814.0	1851.0	1860.2	1860.2	1852.8
5°	1817.7	1856.5	1808.5	1841.7	1841.7
7.5°	1819.6	1825.1	1821.4	1828.8	1806.6
10°	1817.7	1804.8	1801.1	1847.3	1838.0
12.5°	1808.5	1758.6	1791.9	1777.1	1821.4
15°	1782.6	1775.2	1760.5	1797.4	1766.0
17.5°	1742.0	1745.7	1723.5	1742.0	1780.8
20°	1694.0	1710.6	1730.9	1736.4	1714.3
22.5°	1655.2	1660.7	1668.1	1686.6	1699.5
25°	1621.9	1621.9	1633.0	1664.4	1649.6
27.5°	1575.7	1579.4	1596.0	1605.3	1625.6
30°	1525.9	1529.5	1536.9	1579.4	1575.7
32.5°	1474.1	1477.8	1485.2	1512.9	1492.6
35°	1411.3	1409.5	1424.3	1328.2	1263.5
37.5°	1341.1	1339.3	1274.6	1093.6	1032.6
40°	1250.6	1243.2	1060.3	918.1	888.5
42.5°	1136.1	1104.7	886.7	803.6	788.8
45°	984.6	908.9	746.3	692.7	679.8
47.5°	805.4	748.1	607.8	583.7	552.3
50°	611.4	615.1	508.0	491.4	426.7
52.5°	467.4	511.7	447.0	415.6	330.7
55°	343.6	424.9	397.2	354.7	253.1
57.5°	254.9	352.8	336.2	304.8	194.0
60°	181.0	293.7	277.1	262.3	142.2
62.5°	131.2	245.7	227.2	221.7	109.0
65°	96.1	205.0	181.0	186.6	92.4
67.5°	77.6	171.8	136.7	162.6	79.4
70°	77.6	153.3	97.9	144.1	79.4
72.5°	77.6	144.1	77.6	131.2	83.1
75°	73.9	131.2	59.1	118.2	77.6
77.5°	68.3	107.1	49.9	101.6	73.9
80°	64.7	79.4	48.0	79.4	68.3
82.5°	49.9	55.4	44.3	59.1	53.6
85°	31.4	40.6	33.3	42.5	33.3
87.5°	14.8	22.2	14.8	22.2	14.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)