

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: P476263

Luminaire Tested: **14GR-LD5-36-A19/156-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P476263
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-L840-CD1-U
Description: GR 1'X4' LED TROFFER w/ A19/156 LENS
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3596.1 lumens
Efficiency: N/A
Efficacy: 124.0 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

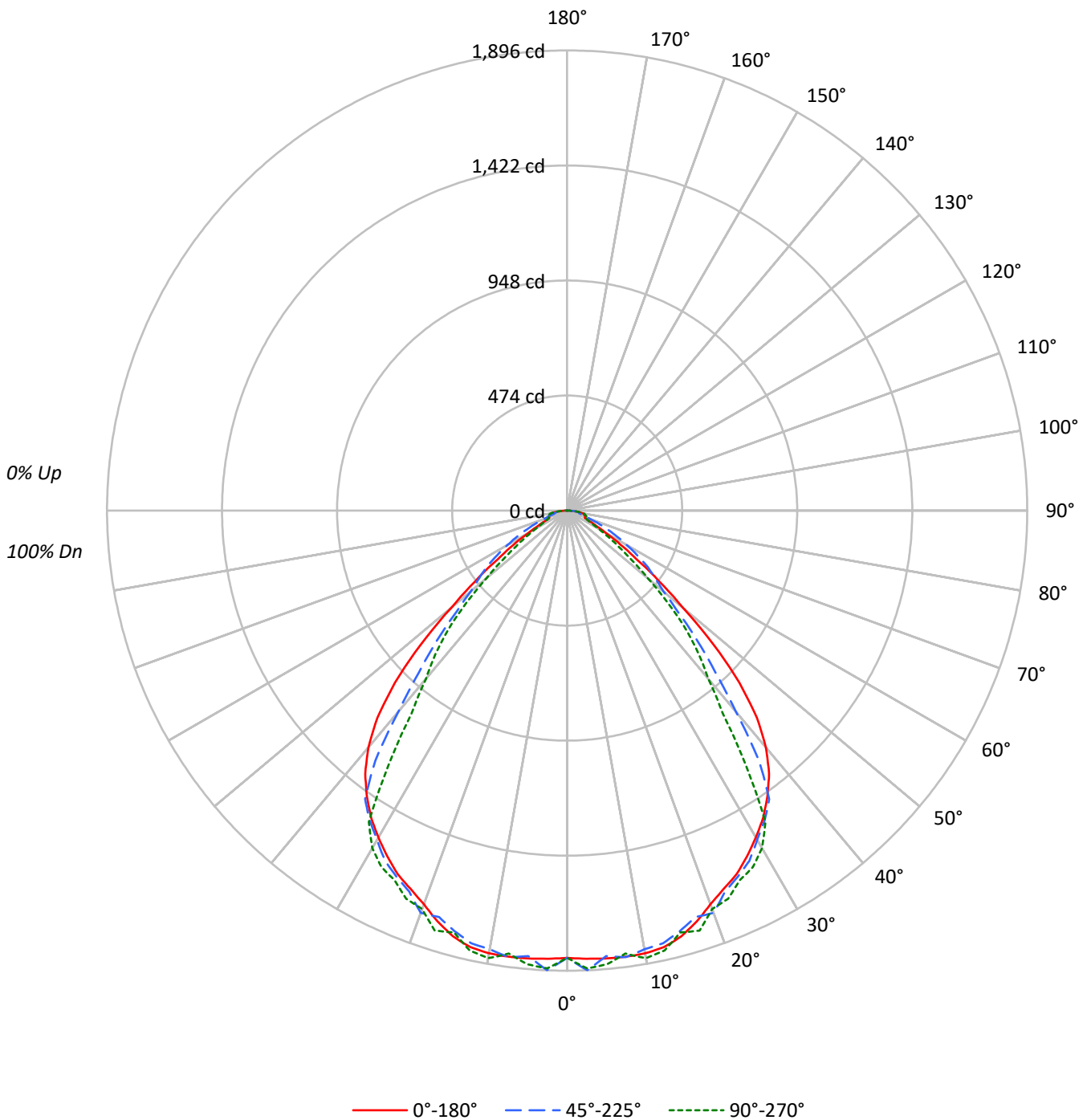
Input Watts (W): 29
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4959	4959	4959
5°	5004	4978	5069
10°	5061	5015	5118
15°	5061	4998	5014
20°	4943	5051	5002
25°	4907	4941	4991
30°	4831	4866	4989
35°	4724	4768	4230
40°	4477	3796	3181
45°	3818	2894	2636
50°	2609	2167	1820
55°	1643	1899	1210
60°	993	1520	780
65°	623	1175	599
70°	622	785	637
75°	783	626	822
80°	1021	758	1079
85°	988	1047	1047



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	177.8	4.9
10°-20°	509.6	14.2
20°-30°	769.1	21.4
30°-40°	857.8	23.9
40°-50°	623.8	17.3
50°-60°	342.1	9.5
60°-70°	174.0	4.8
70°-80°	102.3	2.8
80°-90°	39.5	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°	1456.5	40.5
0°-40°	2314.4	64.4
0°-60°	3280.3	91.2
0°-90°	3596.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3596.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1843	1843	1843	1843	1843	
5°	1852	1892	1843	1877	1877	177
15°	1816	1809	1794	1832	1800	510
25°	1653	1653	1664	1696	1681	760
35°	1438	1436	1451	1353	1288	895
45°	1003	926	760	706	693	754
55°	350	433	405	361	258	330
65°	98	209	184	190	94	109
75°	75	134	60	120	79	78
85°	32	41	34	43	34	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1842.8	1842.8	1842.8	1842.8	1842.8
2.5°	1848.5	1886.1	1895.6	1895.6	1888.0
5°	1852.3	1891.8	1842.8	1876.7	1876.7
7.5°	1854.1	1859.8	1856.0	1863.6	1841.0
10°	1852.3	1839.1	1835.3	1882.4	1873.0
12.5°	1842.8	1792.0	1825.9	1810.8	1856.0
15°	1816.5	1809.0	1793.9	1831.6	1799.6
17.5°	1775.1	1778.8	1756.3	1775.1	1814.6
20°	1726.1	1743.1	1763.8	1769.4	1746.8
22.5°	1686.6	1692.3	1699.8	1718.6	1731.8
25°	1652.7	1652.7	1664.0	1696.0	1681.0
27.5°	1605.7	1609.4	1626.4	1635.8	1656.5
30°	1554.8	1558.6	1566.1	1609.4	1605.7
32.5°	1502.1	1505.9	1513.4	1541.7	1521.0
35°	1438.1	1436.3	1451.3	1353.4	1287.5
37.5°	1366.6	1364.7	1298.8	1114.4	1052.2
40°	1274.4	1266.8	1080.5	935.5	905.4
42.5°	1157.7	1125.7	903.5	818.8	803.8
45°	1003.3	926.1	760.5	705.9	692.7
47.5°	820.7	762.4	619.3	594.8	562.8
50°	623.1	626.8	517.7	500.7	434.8
52.5°	476.2	521.4	455.5	423.5	336.9
55°	350.1	432.9	404.7	361.4	257.9
57.5°	259.8	359.5	342.6	310.6	197.6
60°	184.5	299.3	282.4	267.3	144.9
62.5°	133.6	250.4	231.5	225.9	111.1
65°	97.9	208.9	184.5	190.1	94.1
67.5°	79.1	175.1	139.3	165.6	80.9
70°	79.1	156.2	99.8	146.8	80.9
72.5°	79.1	146.8	79.1	133.6	84.7
75°	75.3	133.6	60.2	120.5	79.1
77.5°	69.6	109.2	50.8	103.5	75.3
80°	65.9	80.9	48.9	80.9	69.6
82.5°	50.8	56.5	45.2	60.2	54.6
85°	32.0	41.4	33.9	43.3	33.9
87.5°	15.1	22.6	15.1	22.6	15.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)