

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: P476272

Luminaire Tested: **14GR-LD5-36-A19/156-UNV-L850-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P476272
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-L850-CD1-U
Description: GR 1'X4' 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: 3599.6 lumens
Efficiency: N/A
Efficacy: 124.1 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

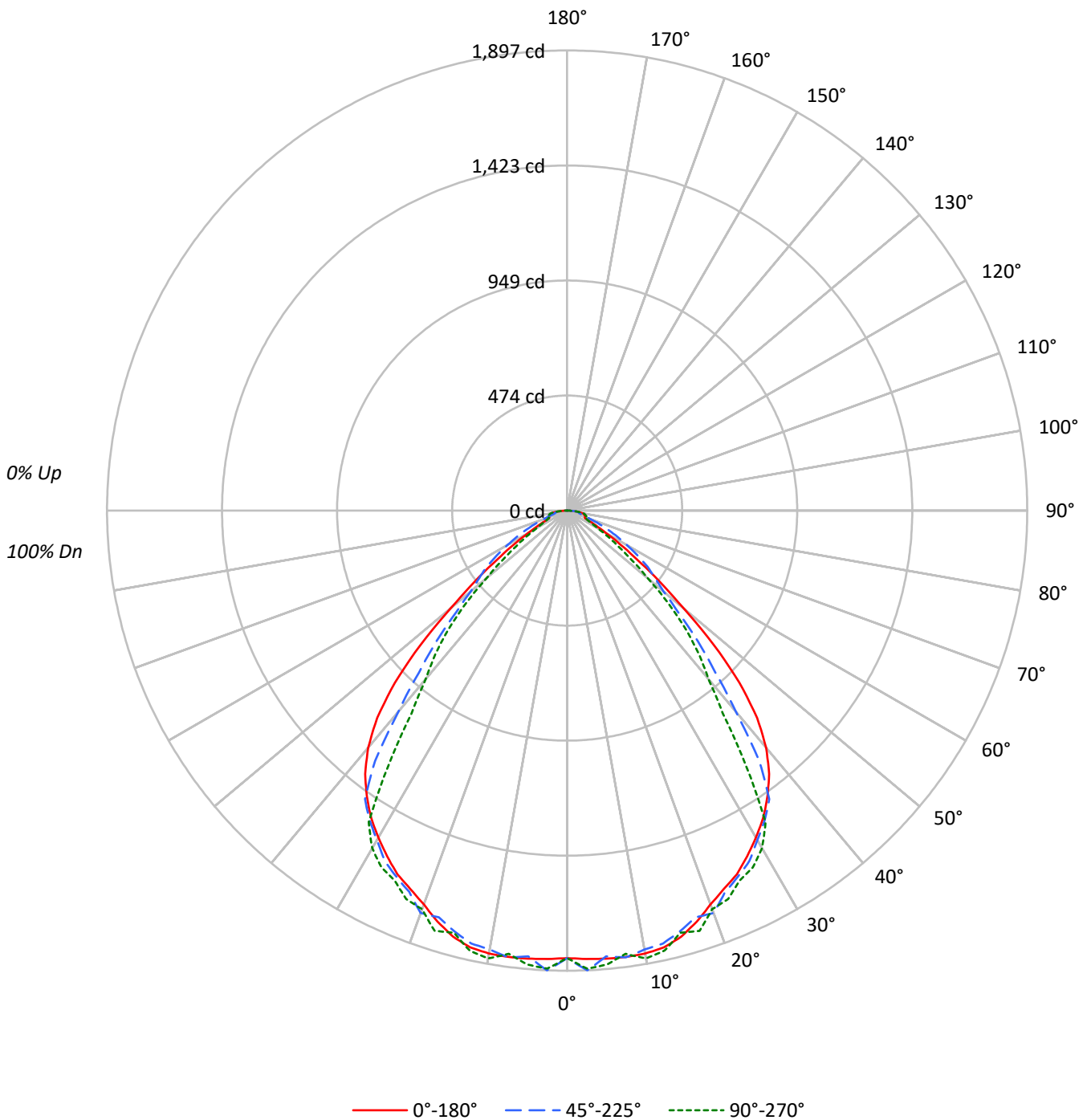
Input Watts (W): 29
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88
2	103	96	91	86	101	94	89	85	91	87	83	88	84	81	85	82	79	78
3	96	87	80	75	93	85	79	74	82	77	73	80	75	71	77	74	70	68
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61
5	83	71	64	58	81	70	63	58	68	62	57	67	61	57	65	60	56	54
6	77	65	58	52	75	64	57	52	63	56	51	61	55	51	60	55	51	49
7	72	60	52	47	70	59	52	47	58	51	46	56	50	46	55	50	46	44
8	67	55	48	42	66	55	47	42	53	47	42	52	46	42	51	46	42	40
9	63	51	44	39	62	51	43	39	49	43	38	48	43	38	48	42	38	36
10	60	47	40	35	58	47	40	35	46	40	35	45	39	35	44	39	35	33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4964	4964	4964
5°	5008	4983	5075
10°	5066	5020	5123
15°	5066	5003	5018
20°	4948	5056	5007
25°	4912	4946	4996
30°	4836	4871	4994
35°	4729	4772	4234
40°	4481	3799	3184
45°	3822	2897	2639
50°	2611	2169	1822
55°	1644	1901	1211
60°	994	1521	781
65°	624	1176	600
70°	622	786	637
75°	784	627	822
80°	1021	759	1080
85°	988	1047	1047



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	178.0	4.9
10°-20°	510.1	14.2
20°-30°	769.9	21.4
30°-40°	858.7	23.9
40°-50°	624.4	17.3
50°-60°	342.5	9.5
60°-70°	174.1	4.8
70°-80°	102.4	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°	1458.0	40.5
0°-40°	2316.7	64.4
0°-60°	3283.6	91.2
0°-90°	3599.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3599.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1845	1845	1845	1845	1845	
5°	1854	1894	1845	1879	1879	177
15°	1818	1811	1796	1833	1801	511
25°	1654	1654	1666	1698	1683	761
35°	1440	1438	1453	1355	1289	896
45°	1004	927	761	707	693	755
55°	350	433	405	362	258	331
65°	98	209	185	190	94	109
75°	75	134	60	121	79	78
85°	32	42	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°	1844.7	1844.7	1844.7	1844.7	1844.7
2.5°	1850.3	1888.0	1897.4	1897.4	1889.9
5°	1854.1	1893.6	1844.7	1878.6	1878.6
7.5°	1856.0	1861.6	1857.8	1865.4	1842.8
10°	1854.1	1840.9	1837.1	1884.2	1874.8
12.5°	1844.7	1793.8	1827.7	1812.6	1857.8
15°	1818.3	1810.7	1795.7	1833.3	1801.3
17.5°	1776.8	1780.6	1758.0	1776.8	1816.4
20°	1727.8	1744.8	1765.5	1771.2	1748.6
22.5°	1688.3	1693.9	1701.5	1720.3	1733.5
25°	1654.3	1654.3	1665.7	1697.7	1682.6
27.5°	1607.2	1611.0	1628.0	1637.4	1658.1
30°	1556.4	1560.1	1567.7	1611.0	1607.2
32.5°	1503.6	1507.4	1514.9	1543.2	1522.5
35°	1439.5	1437.7	1452.7	1354.8	1288.8
37.5°	1367.9	1366.1	1300.1	1115.5	1053.3
40°	1275.6	1268.1	1081.5	936.5	906.3
42.5°	1158.8	1126.8	904.4	819.6	804.6
45°	1004.3	927.0	761.2	706.6	693.4
47.5°	821.5	763.1	619.9	595.4	563.4
50°	623.7	627.4	518.2	501.2	435.3
52.5°	476.7	521.9	456.0	424.0	337.3
55°	350.5	433.4	405.1	361.8	258.1
57.5°	260.0	359.9	342.9	310.9	197.8
60°	184.7	299.6	282.6	267.6	145.1
62.5°	133.8	250.6	231.8	226.1	111.2
65°	98.0	209.1	184.7	190.3	94.2
67.5°	79.1	175.2	139.4	165.8	81.0
70°	79.1	156.4	99.9	147.0	81.0
72.5°	79.1	147.0	79.1	133.8	84.8
75°	75.4	133.8	60.3	120.6	79.1
77.5°	69.7	109.3	50.9	103.6	75.4
80°	65.9	81.0	49.0	81.0	69.7
82.5°	50.9	56.5	45.2	60.3	54.6
85°	32.0	41.5	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)