

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: P476271

Luminaire Tested: **14GR-LD5-32-A19/156-UNV-L850-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P476271
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-32-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: 3151.8 lumens
Efficiency: N/A
Efficacy: 126.1 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

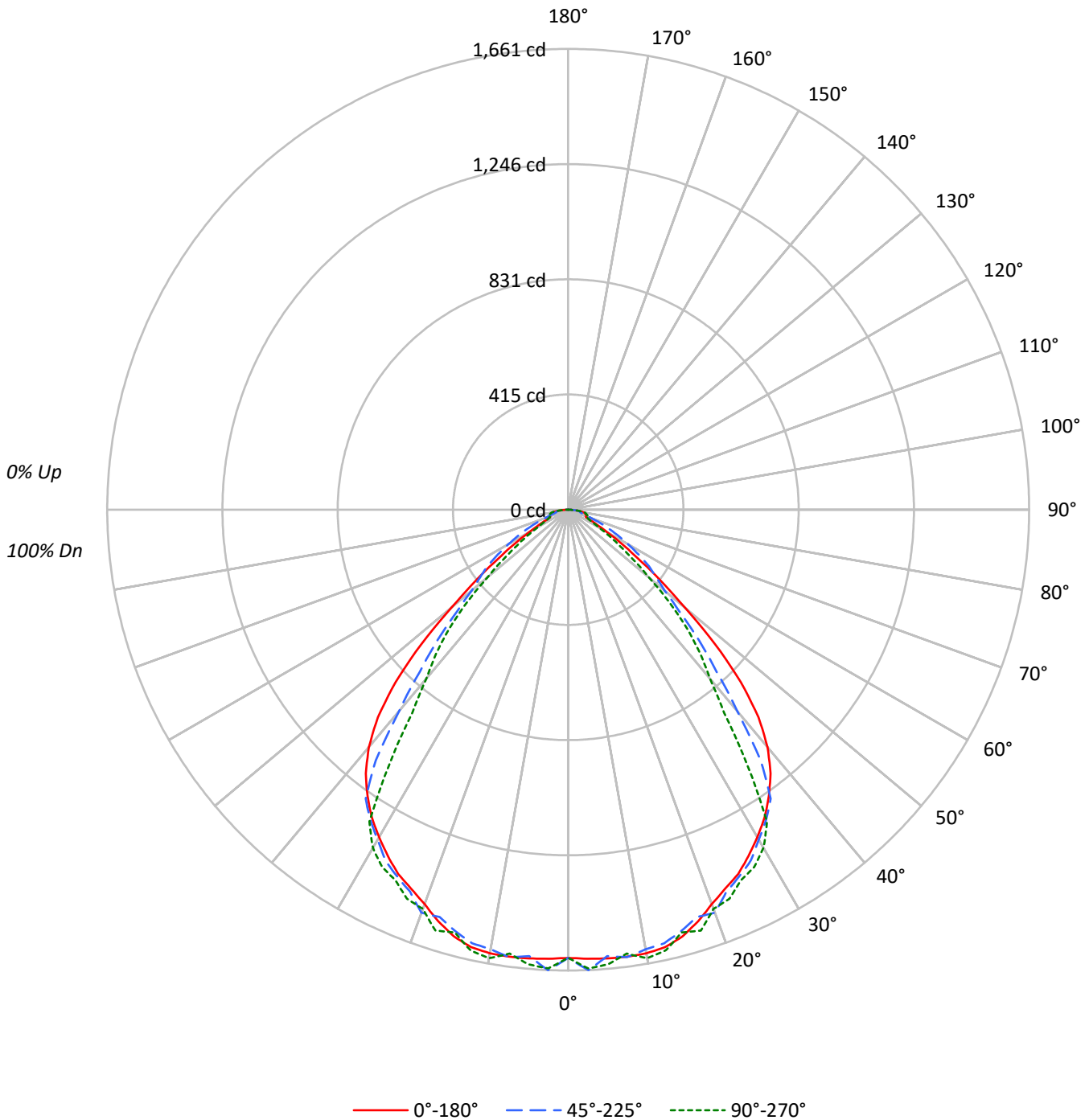
Input Watts (W): 25
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4346	4346	4346
5°	4385	4363	4443
10°	4436	4395	4486
15°	4435	4380	4394
20°	4332	4427	4384
25°	4301	4331	4374
30°	4235	4265	4373
35°	4141	4179	3707
40°	3923	3327	2788
45°	3347	2536	2310
50°	2286	1899	1595
55°	1440	1664	1060
60°	870	1332	684
65°	546	1030	525
70°	545	688	558
75°	686	549	721
80°	894	665	945
85°	865	917	917



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.8	4.9
10°-20°	446.6	14.2
20°-30°	674.1	21.4
30°-40°	751.9	23.9
40°-50°	546.8	17.3
50°-60°	299.9	9.5
60°-70°	152.5	4.8
70°-80°	89.6	2.8
80°-90°	34.6	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°	1276.6	40.5
0°-40°	2028.5	64.4
0°-60°	2875.1	91.2
0°-90°	3151.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3151.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1615	1615	1615	1615	1615	
5°	1623	1658	1615	1645	1645	155
15°	1592	1586	1572	1605	1577	447
25°	1449	1449	1458	1486	1473	666
35°	1260	1259	1272	1186	1128	785
45°	879	812	666	619	607	661
55°	307	380	355	317	226	290
65°	86	183	162	167	82	96
75°	66	117	53	106	69	69
85°	28	36	30	38	30	31
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1615.2	1615.2	1615.2	1615.2	1615.2
2.5°	1620.1	1653.1	1661.4	1661.4	1654.8
5°	1623.4	1658.1	1615.2	1644.9	1644.9
7.5°	1625.1	1630.0	1626.7	1633.3	1613.5
10°	1623.4	1611.9	1608.6	1649.8	1641.6
12.5°	1615.2	1570.6	1600.3	1587.1	1626.7
15°	1592.1	1585.5	1572.3	1605.3	1577.2
17.5°	1555.8	1559.1	1539.3	1555.8	1590.4
20°	1512.9	1527.7	1545.9	1550.8	1531.0
22.5°	1478.3	1483.2	1489.8	1506.3	1517.8
25°	1448.6	1448.6	1458.5	1486.5	1473.3
27.5°	1407.3	1410.6	1425.5	1433.7	1451.9
30°	1362.8	1366.1	1372.7	1410.6	1407.3
32.5°	1316.6	1319.9	1326.5	1351.2	1333.1
35°	1260.5	1258.8	1272.0	1186.2	1128.5
37.5°	1197.8	1196.1	1138.4	976.7	922.3
40°	1116.9	1110.3	947.0	820.0	793.6
42.5°	1014.6	986.6	791.9	717.7	704.5
45°	879.4	811.7	666.5	618.7	607.1
47.5°	719.3	668.2	542.8	521.3	493.3
50°	546.1	549.4	453.7	438.9	381.1
52.5°	417.4	457.0	399.3	371.2	295.3
55°	306.9	379.5	354.7	316.8	226.0
57.5°	227.7	315.1	300.3	272.2	173.2
60°	161.7	262.3	247.5	234.3	127.0
62.5°	117.1	219.4	202.9	198.0	97.3
65°	85.8	183.1	161.7	166.6	82.5
67.5°	69.3	153.4	122.1	145.2	70.9
70°	69.3	136.9	87.4	128.7	70.9
72.5°	69.3	128.7	69.3	117.1	74.2
75°	66.0	117.1	52.8	105.6	69.3
77.5°	61.0	95.7	44.5	90.7	66.0
80°	57.7	70.9	42.9	70.9	61.0
82.5°	44.5	49.5	39.6	52.8	47.8
85°	28.0	36.3	29.7	37.9	29.7
87.5°	13.2	19.8	13.2	19.8	13.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)