

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: P476299

Luminaire Tested: **14GR-LD5-36-A-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P476299
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-36-A-UNV-L840-CD1-U
Description: GR 1'X4' LED TROFFER w/ A LENS
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3671.1 lumens
Efficiency: N/A
Efficacy: 126.6 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.21 / 1.26
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')
CIE Type: Direct

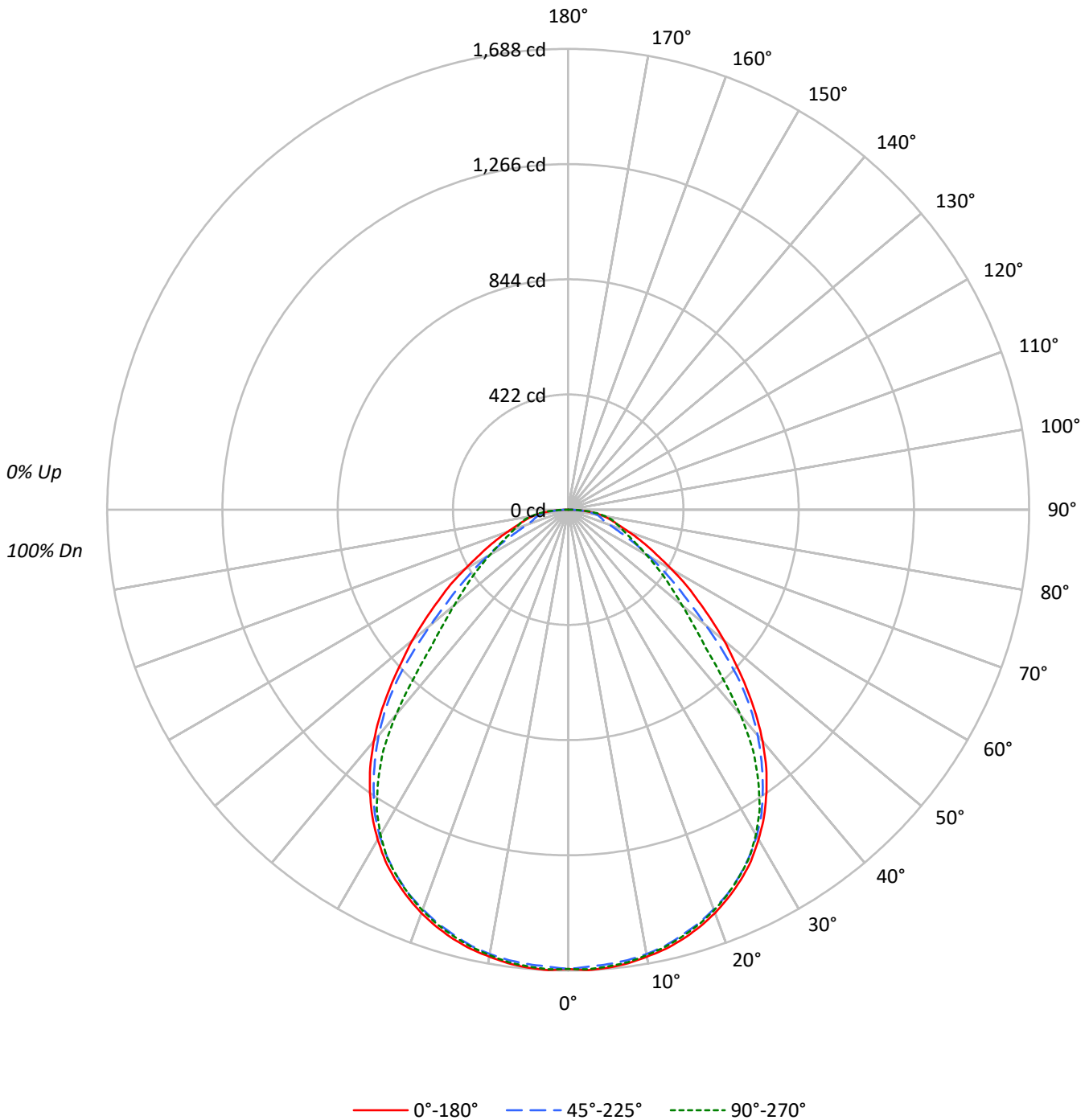
Input Watts (W): 29
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86					86			
2	101	94	88	83	99	92	86	82	88	84	80	85	81	78	82	79	76	74					74			
3	93	84	76	71	91	82	75	70	79	73	69	77	72	68	74	70	66	64					64			
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56					56			
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50					50			
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46	44					44			
7	69	57	48	43	67	56	48	43	54	47	42	53	47	42	52	46	42	40					40			
8	65	52	44	38	63	51	44	38	50	43	38	49	43	38	48	42	38	36					36			
9	61	48	40	35	59	47	40	35	46	39	35	45	39	35	44	39	34	33					33			
10	57	44	37	32	56	44	37	32	43	36	32	42	36	32	41	36	31	30					30			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5669	5669	5669
5°	5696	5653	5681
10°	5689	5654	5668
15°	5678	5628	5645
20°	5638	5586	5601
25°	5563	5509	5513
30°	5427	5371	5348
35°	5205	5111	4994
40°	4872	4748	4321
45°	4400	4234	3377
50°	3902	3437	2856
55°	3406	2820	2520
60°	2953	2321	2225
65°	2590	1863	2054
70°	2310	1580	2067
75°	2254	1666	2310
80°	2497	2102	2647
85°	2602	2242	3101



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	159.6	4.3
10°-20°	457.2	12.5
20°-30°	684.0	18.6
30°-40°	772.1	21.0
40°-50°	655.0	17.8
50°-60°	443.2	12.1
60°-70°	264.6	7.2
70°-80°	165.7	4.5
80°-90°	69.7	1.9
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°	1300.8	35.4
0°-40°	2072.9	56.5
0°-60°	3171.1	86.4
0°-90°	3671.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3671.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1682	1682	1682	1682	1682	
5°	1684	1679	1671	1683	1680	160
15°	1628	1624	1613	1624	1618	459
25°	1496	1491	1482	1489	1483	688
35°	1265	1257	1242	1231	1214	788
45°	923	927	888	761	709	712
55°	580	552	480	430	429	522
65°	325	269	234	249	258	325
75°	173	154	128	169	177	186
85°	67	64	58	75	80	73
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1682.3	1682.3	1682.3	1682.3	1682.3
2.5°	1688.2	1683.0	1675.3	1685.7	1684.8
5°	1683.9	1678.9	1671.2	1683.0	1679.6
7.5°	1676.2	1671.9	1664.4	1675.3	1671.9
10°	1662.6	1659.2	1652.4	1661.7	1656.7
12.5°	1648.1	1645.6	1637.0	1645.6	1640.4
15°	1627.7	1624.3	1613.2	1624.3	1618.2
17.5°	1602.1	1597.8	1588.5	1597.8	1592.6
20°	1572.2	1567.2	1557.7	1567.2	1562.0
22.5°	1536.4	1532.1	1523.7	1532.1	1525.3
25°	1496.3	1491.3	1481.8	1488.6	1482.7
27.5°	1450.3	1443.5	1434.9	1440.1	1436.7
30°	1394.8	1386.4	1380.3	1380.3	1374.4
32.5°	1334.4	1328.4	1318.2	1312.2	1304.5
35°	1265.3	1256.8	1242.4	1231.3	1214.1
37.5°	1191.2	1181.0	1163.1	1134.8	1111.9
40°	1107.6	1094.7	1079.5	1024.0	982.3
42.5°	1018.1	1015.4	989.1	894.4	836.4
45°	923.4	926.8	888.5	761.4	708.6
47.5°	827.8	839.8	770.0	645.4	618.2
50°	744.4	748.5	655.6	560.2	544.8
52.5°	658.3	651.3	559.3	492.8	481.7
55°	579.7	552.5	480.0	429.7	428.9
57.5°	510.7	460.4	410.1	372.7	376.9
60°	438.2	382.0	344.4	324.0	330.1
62.5°	374.3	320.6	287.3	281.4	291.6
65°	324.9	269.4	233.6	249.0	257.6
67.5°	278.0	231.1	190.1	226.8	230.2
70°	234.5	200.3	160.4	208.9	209.8
72.5°	198.7	177.4	138.9	189.4	191.9
75°	173.1	154.3	128.0	168.8	177.4
77.5°	151.8	132.1	118.5	145.9	160.4
80°	128.7	106.5	108.3	121.9	136.4
82.5°	99.0	82.7	86.1	100.6	110.8
85°	67.3	63.9	58.0	75.0	80.2
87.5°	35.8	34.2	29.9	42.6	40.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)