

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: P476201

Luminaire Tested: **14GR-LD5-40-F1-UNV-L850-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P476201
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-40-F1-UNV-L850-CD1-U
Description: GR 1'X4' LED TROFFER w/ F1 LENS
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4052.1 lumens
Efficiency: N/A
Efficacy: 129.5 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.24 / 1.2
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

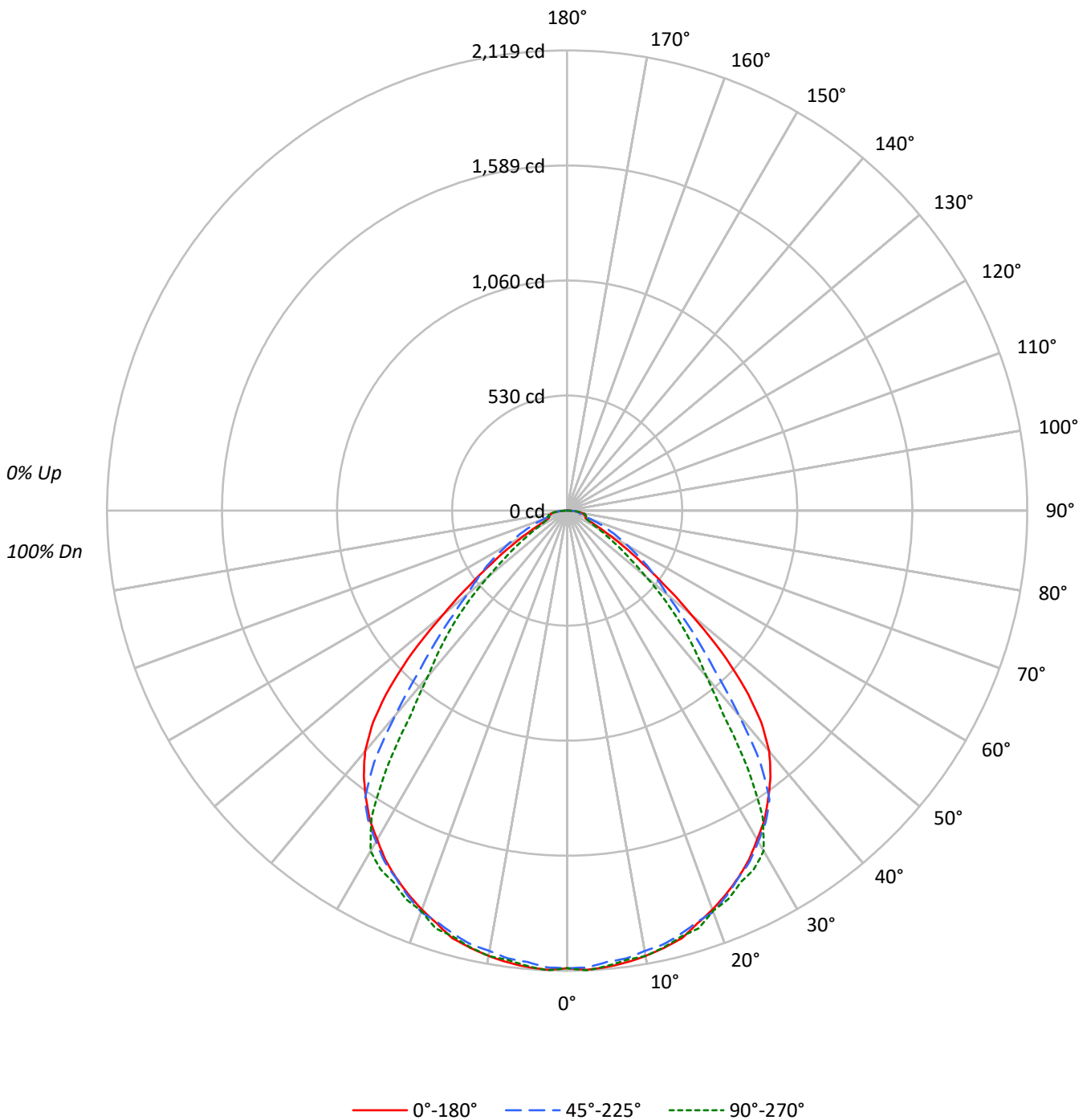
Input Watts (W): 31.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	100	94	89	85	91	87	83	88	84	81	85	82	79	77
3	95	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	82	71	64	58	81	70	63	58	68	62	57	67	61	57	65	60	56	54
6	77	65	57	52	75	64	57	52	63	56	51	61	55	51	60	54	50	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	50	43	39	49	43	38	48	42	38	47	42	38	36
10	59	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°	5671	5671	5671
5°	5699	5638	5686
10°	5690	5628	5690
15°	5681	5624	5656
20°	5600	5632	5619
25°	5537	5543	5611
30°	5435	5470	5625
35°	5306	5336	4769
40°	5084	4327	3506
45°	4411	3263	2831
50°	3134	2507	1985
55°	1990	2150	1331
60°	1172	1722	879
65°	693	1344	679
70°	714	910	696
75°	872	708	920
80°	1125	879	1230
85°	1192	1192	1192



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	199.8	4.9
10°-20°	572.2	14.1
20°-30°	865.4	21.4
30°-40°	963.7	23.8
40°-50°	705.3	17.4
50°-60°	388.8	9.6
60°-70°	198.8	4.9
70°-80°	113.1	2.8
80°-90°	45.0	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°	1637.4	40.4
0°-40°	2601.1	64.2
0°-60°	3695.2	91.2
0°-90°	4052.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4052.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2107	2107	2107	2107	2107	
5°	2110	2110	2087	2101	2105	200
15°	2039	2017	2019	2044	2030	573
25°	1865	1860	1867	1899	1890	858
35°	1615	1617	1624	1513	1452	1008
45°	1159	1068	858	780	744	872
55°	424	499	458	392	284	396
65°	109	259	211	202	107	125
75°	84	145	68	129	88	88
85°	39	48	39	52	39	41
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2107.4	2107.4	2107.4	2107.4	2107.4
2.5°	2116.5	2116.5	2105.1	2118.7	2118.7
5°	2109.7	2109.7	2087.0	2100.6	2105.1
7.5°	2098.3	2098.3	2080.2	2091.5	2087.0
10°	2082.4	2071.1	2059.7	2091.5	2082.4
12.5°	2062.0	2039.3	2046.1	2043.9	2059.7
15°	2039.3	2016.6	2018.9	2043.9	2030.3
17.5°	1994.0	1996.2	1987.2	2005.3	2016.6
20°	1955.4	1962.2	1966.7	1978.1	1962.2
22.5°	1912.3	1914.6	1919.1	1935.0	1937.3
25°	1864.7	1860.1	1866.9	1898.7	1889.6
27.5°	1812.5	1810.2	1821.6	1848.8	1862.4
30°	1749.0	1758.0	1760.3	1810.2	1810.2
32.5°	1690.0	1690.0	1701.3	1726.3	1676.4
35°	1615.1	1617.4	1624.2	1513.1	1451.8
37.5°	1538.0	1531.2	1460.9	1259.0	1177.3
40°	1447.3	1431.4	1231.8	1050.3	998.1
42.5°	1322.5	1274.9	1016.3	907.4	868.8
45°	1159.2	1068.4	857.5	780.3	744.0
47.5°	964.1	880.2	712.3	660.1	610.2
50°	748.6	730.4	598.9	553.5	474.1
52.5°	569.4	605.7	526.3	467.3	365.2
55°	424.2	499.1	458.2	392.4	283.6
57.5°	310.8	415.1	385.6	333.5	213.2
60°	217.8	351.6	319.9	281.3	163.3
62.5°	154.3	304.0	263.1	240.5	124.8
65°	108.9	258.6	211.0	201.9	106.6
67.5°	90.7	217.8	161.1	179.2	90.7
70°	90.7	181.5	115.7	158.8	88.5
72.5°	90.7	158.8	86.2	145.2	93.0
75°	83.9	145.2	68.1	129.3	88.5
77.5°	77.1	122.5	59.0	111.2	86.2
80°	72.6	88.5	56.7	90.7	79.4
82.5°	59.0	63.5	52.2	70.3	61.2
85°	38.6	47.6	38.6	52.2	38.6
87.5°	18.1	25.0	18.1	22.7	15.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)