

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: P476183

Luminaire Tested: **14GR-LD5-40-F1-UNV-L835-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P476183  
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-L835-CD1-U  
Description: GR 1'X4' LED TROFFER w/ F1 LENS  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3972.6 lumens  
Efficiency: N/A  
Efficacy: 126.9 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

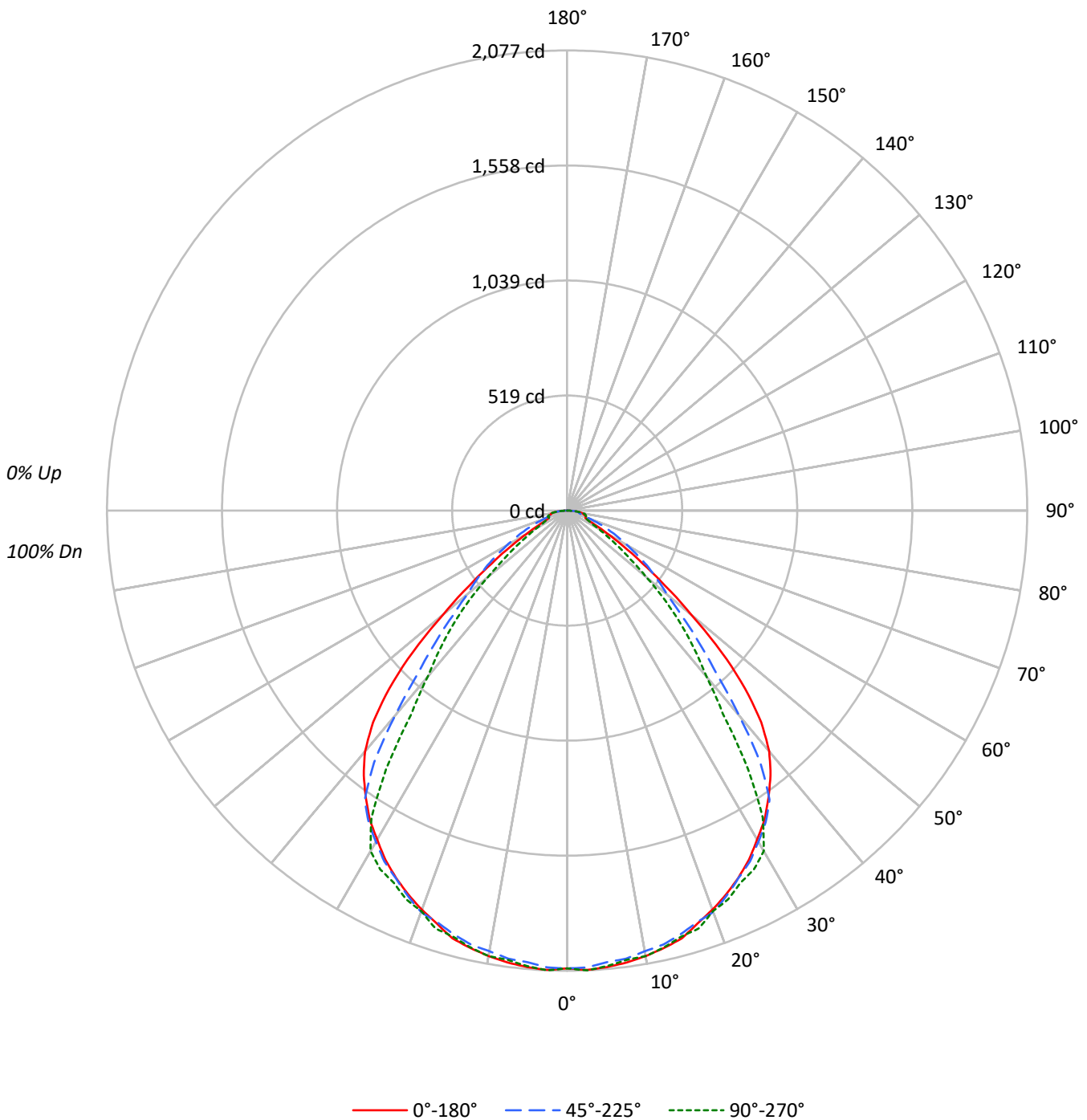
Input Watts (W): 31.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	100	94	89	85	91	87	83	88	84	81	85	82	79	77				77
3	95	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	82	71	64	58	81	70	63	58	68	62	57	67	61	57	65	60	56	54				54
6	77	65	57	52	75	64	57	52	63	56	51	61	55	51	60	54	50	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	50	43	39	49	43	38	48	42	38	47	42	38	36				36
10	59	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°	5560	5560	5560
5°	5587	5527	5575
10°	5579	5518	5579
15°	5570	5514	5545
20°	5490	5522	5509
25°	5428	5434	5501
30°	5328	5363	5514
35°	5202	5231	4676
40°	4984	4242	3437
45°	4325	3199	2776
50°	3072	2458	1946
55°	1951	2107	1304
60°	1149	1688	862
65°	680	1317	665
70°	700	892	682
75°	856	693	901
80°	1103	862	1206
85°	1167	1167	1167



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	195.9	4.9
10°-20°	561.0	14.1
20°-30°	848.4	21.4
30°-40°	944.8	23.8
40°-50°	691.5	17.4
50°-60°	381.2	9.6
60°-70°	194.9	4.9
70°-80°	110.9	2.8
80°-90°	44.1	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°	1605.3	40.4
0°-40°	2550.1	64.2
0°-60°	3622.7	91.2
0°-90°	3972.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3972.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2066	2066	2066	2066	2066	
5°	2068	2068	2046	2059	2064	197
15°	1999	1977	1979	2004	1990	562
25°	1828	1824	1830	1862	1853	842
35°	1584	1586	1592	1483	1423	988
45°	1136	1048	841	765	730	855
55°	416	489	449	385	278	389
65°	107	254	207	198	104	123
75°	82	142	67	127	87	86
85°	38	47	38	51	38	41
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2066.1	2066.1	2066.1	2066.1	2066.1
2.5°	2075.0	2075.0	2063.8	2077.2	2077.2
5°	2068.3	2068.3	2046.0	2059.4	2063.8
7.5°	2057.2	2057.2	2039.4	2050.5	2046.0
10°	2041.6	2030.5	2019.4	2050.5	2041.6
12.5°	2021.6	1999.3	2006.0	2003.8	2019.4
15°	1999.3	1977.1	1979.3	2003.8	1990.4
17.5°	1954.9	1957.1	1948.2	1966.0	1977.1
20°	1917.1	1923.7	1928.2	1939.3	1923.7
22.5°	1874.8	1877.0	1881.5	1897.0	1899.3
25°	1828.1	1823.7	1830.3	1861.5	1852.6
27.5°	1776.9	1774.7	1785.8	1812.5	1825.9
30°	1714.7	1723.6	1725.8	1774.7	1774.7
32.5°	1656.9	1656.9	1668.0	1692.4	1643.5
35°	1583.5	1585.7	1592.4	1483.4	1423.3
37.5°	1507.8	1501.2	1432.2	1234.3	1154.2
40°	1418.9	1403.3	1207.6	1029.7	978.5
42.5°	1296.6	1249.9	996.3	889.6	851.8
45°	1136.4	1047.5	840.7	765.0	729.5
47.5°	945.2	862.9	698.3	647.2	598.2
50°	733.9	716.1	587.1	542.6	464.8
52.5°	558.2	593.8	516.0	458.1	358.1
55°	415.9	489.3	449.2	384.7	278.0
57.5°	304.7	407.0	378.1	326.9	209.1
60°	213.5	344.7	313.6	275.8	160.1
62.5°	151.2	298.0	258.0	235.7	122.3
65°	106.8	253.5	206.8	197.9	104.5
67.5°	89.0	213.5	157.9	175.7	89.0
70°	89.0	177.9	113.4	155.7	86.7
72.5°	89.0	155.7	84.5	142.3	91.2
75°	82.3	142.3	66.7	126.8	86.7
77.5°	75.6	120.1	57.8	109.0	84.5
80°	71.2	86.7	55.6	89.0	77.8
82.5°	57.8	62.3	51.2	68.9	60.0
85°	37.8	46.7	37.8	51.2	37.8
87.5°	17.8	24.5	17.8	22.2	15.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)