

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: P476174

Luminaire Tested: **14GR-LD5-40-F1-UNV-L830-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P476174  
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-L830-CD1-U  
Description: GR 1'X4' LED TROFFER w/ F1 LENS  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3833.6 lumens  
Efficiency: N/A  
Efficacy: 122.5 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

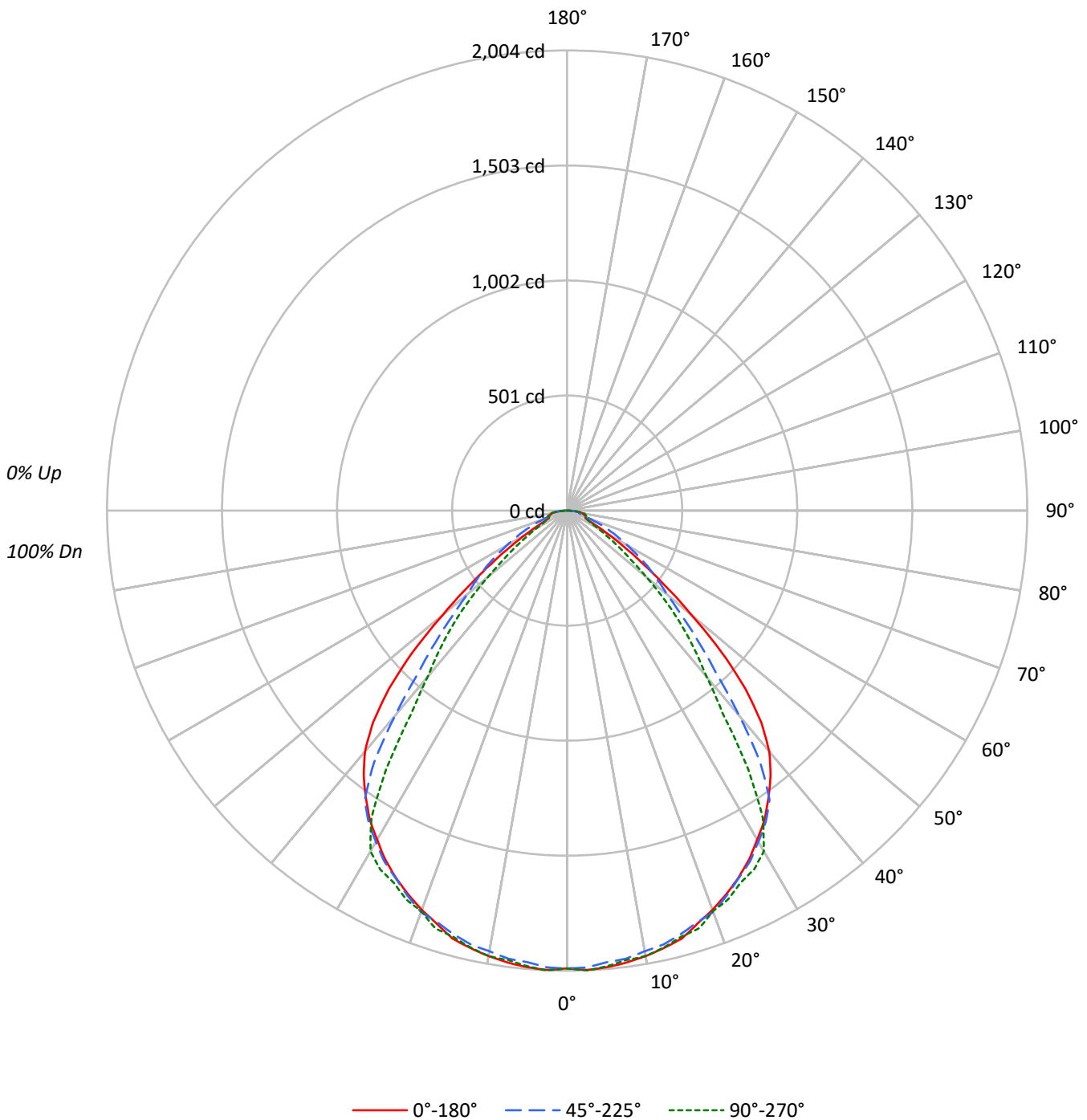
Input Watts (W): 31.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	5365	5365	5365
5°	5391	5333	5380
10°	5383	5325	5383
15°	5375	5321	5351
20°	5298	5328	5316
25°	5238	5244	5308
30°	5142	5175	5322
35°	5020	5048	4512
40°	4810	4093	3317
45°	4174	3087	2679
50°	2965	2372	1878
55°	1883	2034	1259
60°	1109	1629	832
65°	656	1271	642
70°	675	862	659
75°	826	670	870
80°	1065	832	1164
85°	1127	1127	1127



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	189.1	4.9
10°-20°	541.4	14.1
20°-30°	818.7	21.4
30°-40°	911.7	23.8
40°-50°	667.3	17.4
50°-60°	367.8	9.6
60°-70°	188.1	4.9
70°-80°	107.0	2.8
80°-90°	42.6	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°	1549.1	40.4
0°-40°	2460.8	64.2
0°-60°	3495.9	91.2
0°-90°	3833.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3833.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1994	1994	1994	1994	1994	
5°	1996	1996	1974	1987	1992	190
15°	1929	1908	1910	1934	1921	542
25°	1764	1760	1766	1796	1788	812
35°	1528	1530	1537	1432	1374	954
45°	1097	1011	811	738	704	825
55°	401	472	434	371	268	375
65°	103	245	200	191	101	118
75°	79	137	64	122	84	83
85°	36	45	36	49	36	39
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1993.8	1993.8	1993.8	1993.8	1993.8
2.5°	2002.3	2002.3	1991.6	2004.5	2004.5
5°	1995.9	1995.9	1974.4	1987.3	1991.6
7.5°	1985.2	1985.2	1968.0	1978.7	1974.4
10°	1970.1	1959.4	1948.7	1978.7	1970.1
12.5°	1950.8	1929.4	1935.8	1933.7	1948.7
15°	1929.4	1907.9	1910.1	1933.7	1920.8
17.5°	1886.4	1888.6	1880.0	1897.2	1907.9
20°	1850.0	1856.4	1860.7	1871.4	1856.4
22.5°	1809.2	1811.3	1815.6	1830.6	1832.8
25°	1764.1	1759.8	1766.3	1796.3	1787.7
27.5°	1714.8	1712.6	1723.3	1749.1	1762.0
30°	1654.7	1663.2	1665.4	1712.6	1712.6
32.5°	1598.9	1598.9	1609.6	1633.2	1586.0
35°	1528.0	1530.2	1536.6	1431.5	1373.5
37.5°	1455.1	1448.6	1382.1	1191.1	1113.8
40°	1369.2	1354.2	1165.3	993.7	944.3
42.5°	1251.2	1206.1	961.5	858.5	822.0
45°	1096.7	1010.8	811.2	738.3	703.9
47.5°	912.1	832.7	673.9	624.5	577.3
50°	708.2	691.1	566.6	523.7	448.5
52.5°	538.7	573.0	497.9	442.1	345.5
55°	401.3	472.1	433.5	371.3	268.3
57.5°	294.0	392.7	364.8	315.5	201.7
60°	206.0	332.6	302.6	266.1	154.5
62.5°	145.9	287.6	249.0	227.5	118.0
65°	103.0	244.7	199.6	191.0	100.9
67.5°	85.8	206.0	152.4	169.5	85.8
70°	85.8	171.7	109.5	150.2	83.7
72.5°	85.8	150.2	81.6	137.4	88.0
75°	79.4	137.4	64.4	122.3	83.7
77.5°	73.0	115.9	55.8	105.2	81.6
80°	68.7	83.7	53.7	85.8	75.1
82.5°	55.8	60.1	49.4	66.5	57.9
85°	36.5	45.1	36.5	49.4	36.5
87.5°	17.2	23.6	17.2	21.5	15.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)