

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: P476191

Luminaire Tested: **14GR-LD5-36-F1-UNV-L840-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P476191  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14GR-LD5-36-F1-UNV-L840-CD1-U  
Description: GR 1'X4' LED TROFFER w/ F1 LENS  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3785.2 lumens  
Efficiency: N/A  
Efficacy: 130.5 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

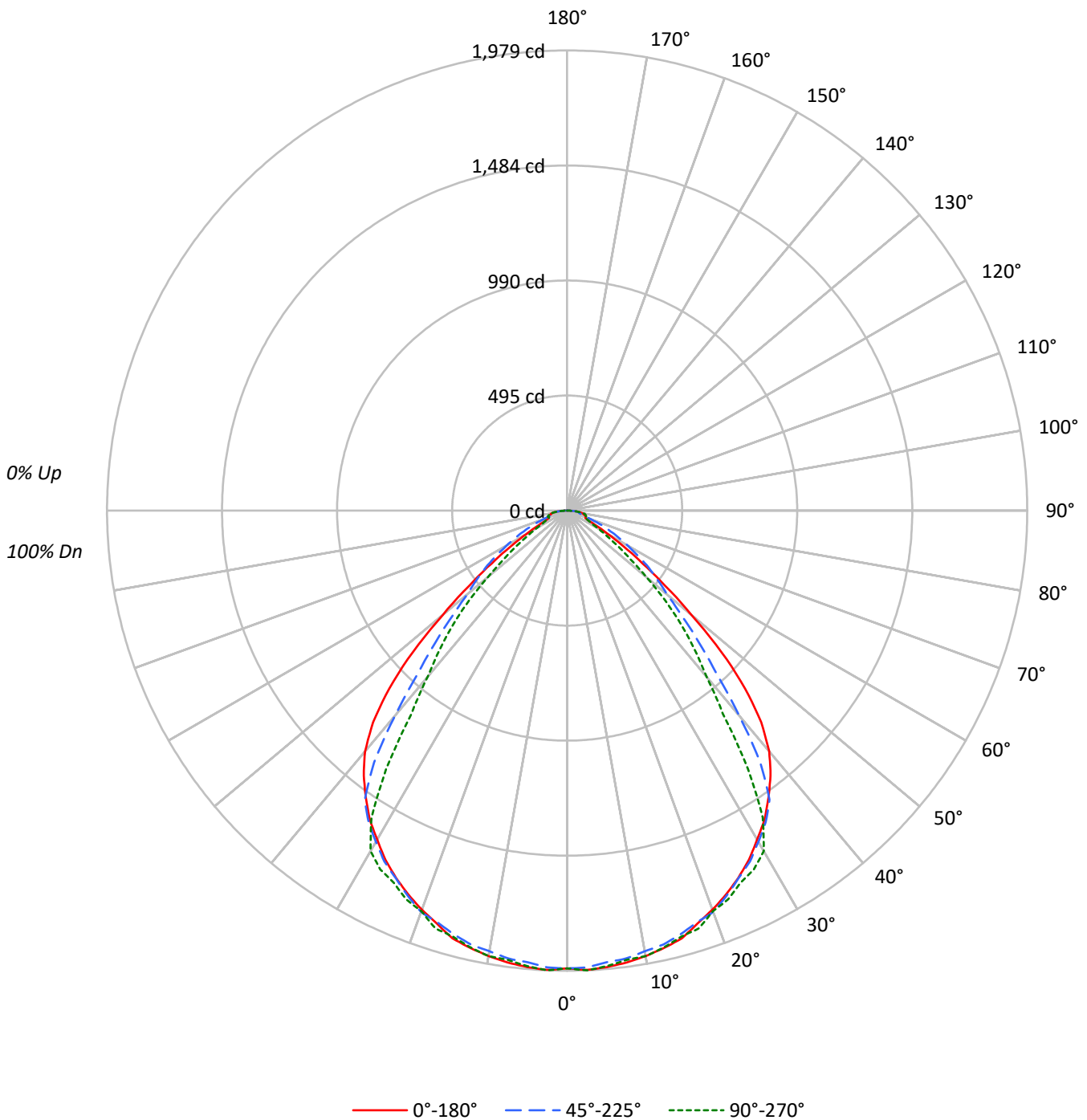
Input Watts (W): 29  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	5297	5297	5297
5°	5323	5266	5312
10°	5316	5258	5316
15°	5307	5254	5283
20°	5231	5261	5249
25°	5172	5178	5241
30°	5077	5110	5254
35°	4956	4984	4455
40°	4749	4042	3275
45°	4121	3048	2645
50°	2928	2342	1854
55°	1859	2008	1243
60°	1095	1608	821
65°	648	1255	634
70°	667	851	650
75°	815	661	859
80°	1051	821	1150
85°	1112	1112	1112



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	186.7	4.9
10°-20°	534.5	14.1
20°-30°	808.4	21.4
30°-40°	900.2	23.8
40°-50°	658.9	17.4
50°-60°	363.2	9.6
60°-70°	185.7	4.9
70°-80°	105.6	2.8
80°-90°	42.1	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°	1529.6	40.4
0°-40°	2429.8	64.2
0°-60°	3451.8	91.2
0°-90°	3785.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3785.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1969	1969	1969	1969	1969	
5°	1971	1971	1950	1962	1966	187
15°	1905	1884	1886	1909	1896	535
25°	1742	1738	1744	1774	1765	802
35°	1509	1511	1517	1413	1356	942
45°	1083	998	801	729	695	815
55°	396	466	428	367	265	370
65°	102	242	197	189	100	117
75°	78	136	64	121	83	82
85°	36	44	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°	1968.6	1968.6	1968.6	1968.6	1968.6
2.5°	1977.0	1977.0	1966.4	1979.2	1979.2
5°	1970.7	1970.7	1949.5	1962.2	1966.4
7.5°	1960.1	1960.1	1943.1	1953.7	1949.5
10°	1945.3	1934.7	1924.1	1953.7	1945.3
12.5°	1926.2	1905.0	1911.4	1909.2	1924.1
15°	1905.0	1883.8	1885.9	1909.2	1896.5
17.5°	1862.6	1864.7	1856.3	1873.2	1883.8
20°	1826.6	1833.0	1837.2	1847.8	1833.0
22.5°	1786.3	1788.5	1792.7	1807.5	1809.6
25°	1741.8	1737.6	1744.0	1773.6	1765.1
27.5°	1693.1	1691.0	1701.6	1727.0	1739.7
30°	1633.8	1642.2	1644.4	1691.0	1691.0
32.5°	1578.7	1578.7	1589.3	1612.6	1566.0
35°	1508.7	1510.9	1517.2	1413.4	1356.2
37.5°	1436.7	1430.3	1364.6	1176.1	1099.8
40°	1351.9	1337.1	1150.6	981.1	932.4
42.5°	1235.4	1190.9	949.3	847.6	811.6
45°	1082.8	998.1	801.0	728.9	695.0
47.5°	900.6	822.2	665.4	616.6	570.0
50°	699.3	682.3	559.4	517.0	442.9
52.5°	531.9	565.8	491.6	436.5	341.2
55°	396.3	466.2	428.0	366.6	264.9
57.5°	290.3	387.8	360.2	311.5	199.2
60°	203.4	328.4	298.8	262.8	152.6
62.5°	144.1	283.9	245.8	224.6	116.5
65°	101.7	241.6	197.1	188.6	99.6
67.5°	84.8	203.4	150.5	167.4	84.8
70°	84.8	169.5	108.1	148.3	82.6
72.5°	84.8	148.3	80.5	135.6	86.9
75°	78.4	135.6	63.6	120.8	82.6
77.5°	72.0	114.4	55.1	103.8	80.5
80°	67.8	82.6	53.0	84.8	74.2
82.5°	55.1	59.3	48.7	65.7	57.2
85°	36.0	44.5	36.0	48.7	36.0
87.5°	17.0	23.3	17.0	21.2	14.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)