

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: P476273

Luminaire Tested: **14GR-LD5-40-A19/156-UNV-L850-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P476273  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14GR-LD5-40-A19/156-UNV-L850-CD1-U  
Description: GR 1'X4' LED TROFFER w/ A19/156 LENS  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3849.7 lumens  
Efficiency: N/A  
Efficacy: 123.0 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.2  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

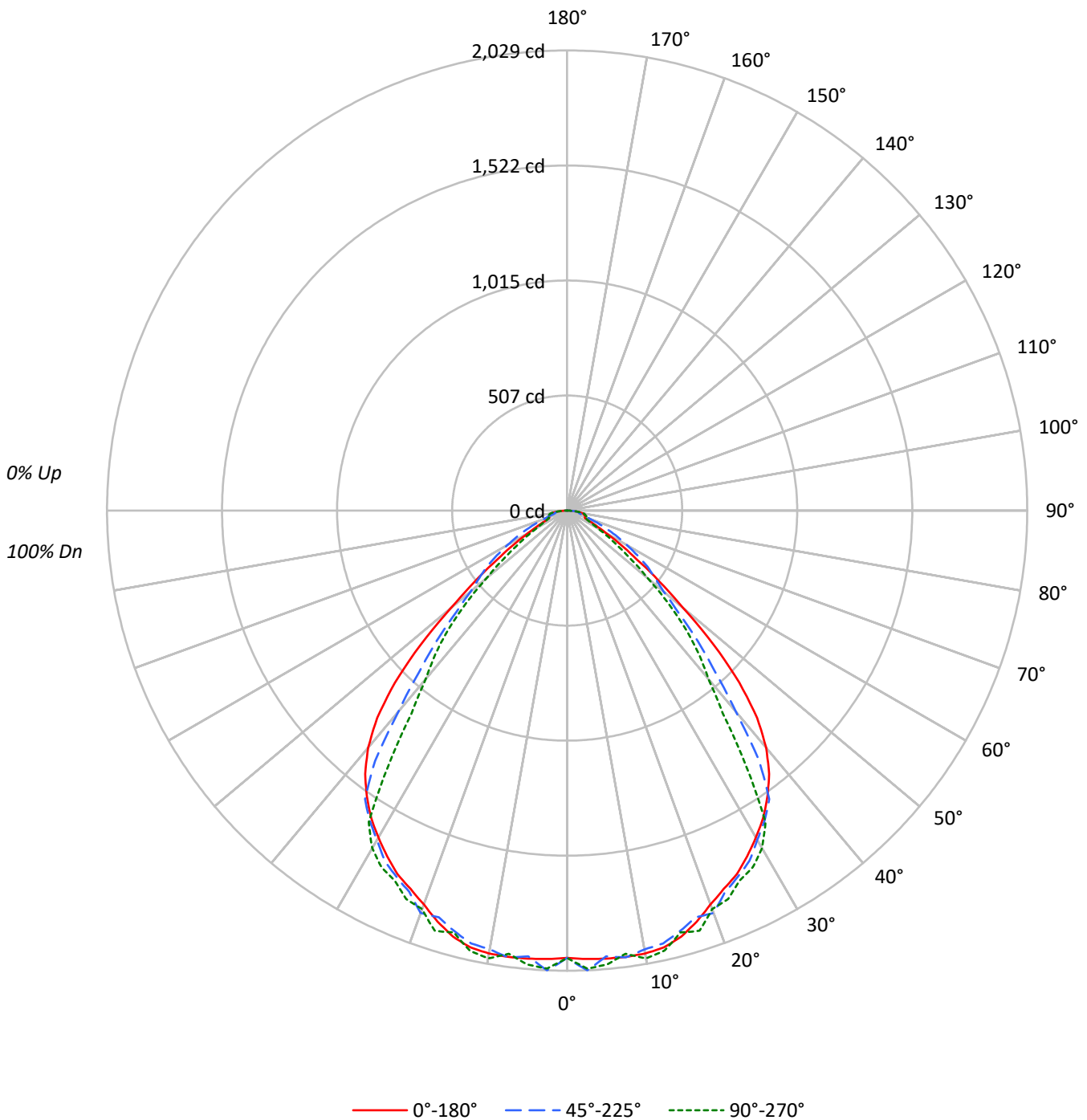
Input Watts (W): 31.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	101	94	89	85	91	87	83	88	84	81	85	82	79	78
3	96	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	83	71	64	58	81	70	63	58	68	62	57	67	61	57	65	60	56	54
6	77	65	58	52	75	64	57	52	63	56	51	61	55	51	60	55	51	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	51	43	39	49	43	38	48	43	38	48	42	38	36
10	60	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°	5309	5309	5309
5°	5356	5329	5427
10°	5418	5369	5479
15°	5417	5350	5367
20°	5292	5407	5355
25°	5253	5289	5343
30°	5172	5210	5341
35°	5057	5104	4528
40°	4792	4063	3405
45°	4088	3098	2822
50°	2792	2320	1949
55°	1758	2032	1295
60°	1063	1627	835
65°	667	1258	642
70°	666	840	681
75°	838	671	880
80°	1093	812	1156
85°	1059	1121	1121



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	190.3	4.9
10°-20°	545.5	14.2
20°-30°	823.4	21.4
30°-40°	918.3	23.9
40°-50°	667.8	17.3
50°-60°	366.3	9.5
60°-70°	186.2	4.8
70°-80°	109.5	2.8
80°-90°	42.3	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°	1559.3	40.5
0°-40°	2477.6	64.4
0°-60°	3511.7	91.2
0°-90°	3849.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3849.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1973	1973	1973	1973	1973	
5°	1983	2025	1973	2009	2009	189
15°	1945	1936	1920	1961	1926	546
25°	1769	1769	1781	1816	1800	813
35°	1540	1538	1554	1449	1378	958
45°	1074	991	814	756	742	807
55°	375	464	433	387	276	354
65°	105	224	198	204	101	117
75°	81	143	64	129	85	84
85°	34	44	36	46	36	38
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1972.8	1972.8	1972.8	1972.8	1972.8
2.5°	1978.8	2019.1	2029.2	2029.2	2021.2
5°	1982.9	2025.2	1972.8	2009.1	2009.1
7.5°	1984.9	1990.9	1986.9	1995.0	1970.8
10°	1982.9	1968.8	1964.7	2015.1	2005.0
12.5°	1972.8	1918.4	1954.7	1938.5	1986.9
15°	1944.6	1936.5	1920.4	1960.7	1926.4
17.5°	1900.3	1904.3	1880.1	1900.3	1942.6
20°	1847.9	1866.0	1888.2	1894.2	1870.0
22.5°	1805.5	1811.6	1819.6	1839.8	1853.9
25°	1769.3	1769.3	1781.4	1815.6	1799.5
27.5°	1718.9	1722.9	1741.1	1751.1	1773.3
30°	1664.5	1668.5	1676.6	1722.9	1718.9
32.5°	1608.1	1612.1	1620.2	1650.4	1628.2
35°	1539.5	1537.5	1553.7	1448.9	1378.3
37.5°	1463.0	1461.0	1390.4	1192.9	1126.4
40°	1364.2	1356.2	1156.7	1001.5	969.3
42.5°	1239.3	1205.0	967.3	876.6	860.5
45°	1074.1	991.4	814.1	755.7	741.6
47.5°	878.6	816.1	663.0	636.8	602.5
50°	667.0	671.0	554.2	536.0	465.5
52.5°	509.8	558.2	487.7	453.4	360.7
55°	374.8	463.5	433.2	386.9	276.1
57.5°	278.1	384.9	366.8	332.5	211.6
60°	197.5	320.4	302.3	286.1	155.2
62.5°	143.1	268.0	247.9	241.8	118.9
65°	104.8	223.7	197.5	203.5	100.8
67.5°	84.6	187.4	149.1	177.3	86.6
70°	84.6	167.3	106.8	157.2	86.6
72.5°	84.6	157.2	84.6	143.1	90.7
75°	80.6	143.1	64.5	129.0	84.6
77.5°	74.6	116.9	54.4	110.8	80.6
80°	70.5	86.6	52.4	86.6	74.6
82.5°	54.4	60.5	48.4	64.5	58.4
85°	34.3	44.3	36.3	46.3	36.3
87.5°	16.1	24.2	16.1	24.2	16.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)