

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: P476255

Luminaire Tested: **14GR-LD5-40-A19/156-UNV-L835-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P476255  
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-L835-CD1-U  
Description: GR 1'X4' LED TROFFER w/ A19/156 LENS  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3774.2 lumens  
Efficiency: N/A  
Efficacy: 120.6 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

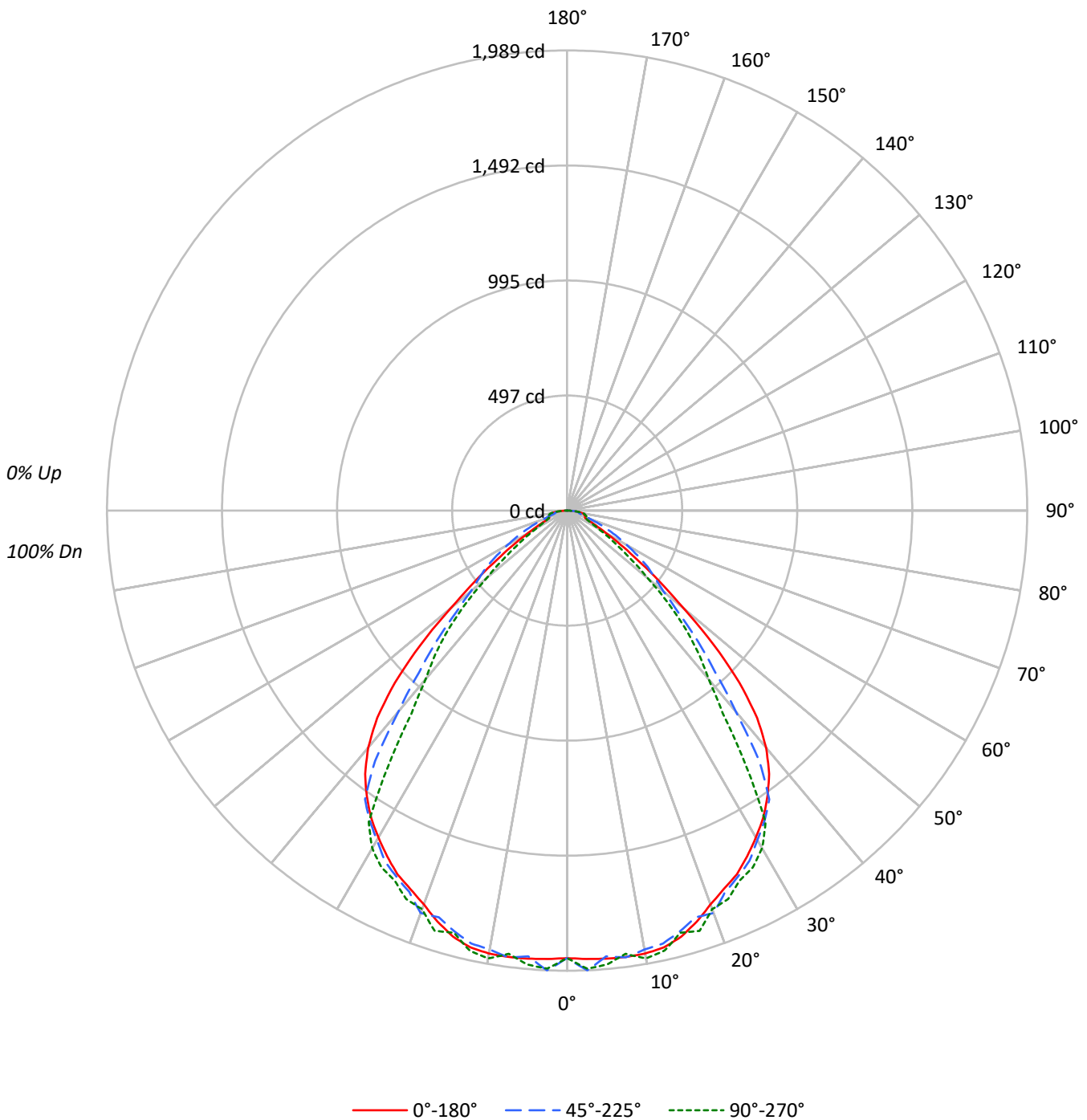
Input Watts (W): 31.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	101	94	89	85	91	87	83	88	84	81	85	82	79	78					78			
3	96	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	83	71	64	58	81	70	63	58	68	62	57	67	61	57	65	60	56	54					54			
6	77	65	58	52	75	64	57	52	63	56	51	61	55	51	60	55	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	51	43	39	49	43	38	48	43	38	48	42	38	36					36			
10	60	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°	5205	5205	5205
5°	5251	5225	5321
10°	5312	5263	5371
15°	5311	5245	5262
20°	5188	5301	5250
25°	5150	5185	5238
30°	5070	5107	5236
35°	4958	5004	4439
40°	4698	3984	3338
45°	4007	3037	2767
50°	2737	2274	1911
55°	1724	1993	1270
60°	1042	1595	819
65°	654	1233	629
70°	653	824	669
75°	821	657	863
80°	1071	797	1133
85°	1037	1099	1099



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	186.6	4.9
10°-20°	534.8	14.2
20°-30°	807.2	21.4
30°-40°	900.3	23.9
40°-50°	654.7	17.3
50°-60°	359.1	9.5
60°-70°	182.6	4.8
70°-80°	107.3	2.8
80°-90°	41.5	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°	1528.7	40.5
0°-40°	2429.0	64.4
0°-60°	3442.8	91.2
0°-90°	3774.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3774.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1934	1934	1934	1934	1934	
5°	1944	1986	1934	1970	1970	186
15°	1906	1899	1883	1922	1889	535
25°	1735	1735	1746	1780	1764	797
35°	1509	1507	1523	1420	1351	940
45°	1053	972	798	741	727	791
55°	368	454	425	379	271	347
65°	103	219	194	200	99	115
75°	79	140	63	126	83	82
85°	34	44	36	45	36	37
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1934.1	1934.1	1934.1	1934.1	1934.1
2.5°	1940.0	1979.6	1989.4	1989.4	1981.5
5°	1944.0	1985.5	1934.1	1969.7	1969.7
7.5°	1946.0	1951.9	1947.9	1955.8	1932.1
10°	1944.0	1930.2	1926.2	1975.6	1965.7
12.5°	1934.1	1880.8	1916.3	1900.5	1947.9
15°	1906.5	1898.6	1882.7	1922.3	1888.7
17.5°	1863.0	1866.9	1843.2	1863.0	1904.5
20°	1811.6	1829.4	1851.1	1857.1	1833.4
22.5°	1770.1	1776.1	1784.0	1803.7	1817.6
25°	1734.6	1734.6	1746.4	1780.0	1764.2
27.5°	1685.2	1689.1	1706.9	1716.8	1738.5
30°	1631.8	1635.8	1643.7	1689.1	1685.2
32.5°	1576.5	1580.5	1588.4	1618.0	1596.3
35°	1509.4	1507.4	1523.2	1420.5	1351.3
37.5°	1434.3	1432.3	1363.2	1169.6	1104.4
40°	1337.5	1329.6	1134.0	981.9	950.3
42.5°	1215.0	1181.4	948.3	859.4	843.6
45°	1053.0	972.0	798.1	740.9	727.0
47.5°	861.4	800.1	650.0	624.3	590.7
50°	653.9	657.9	543.3	525.5	456.4
52.5°	499.8	547.2	478.1	444.5	353.6
55°	367.5	454.4	424.8	379.3	270.7
57.5°	272.6	377.3	359.6	326.0	207.4
60°	193.6	314.1	296.3	280.5	152.1
62.5°	140.3	262.8	243.0	237.1	116.6
65°	102.7	219.3	193.6	199.5	98.8
67.5°	83.0	183.7	146.2	173.9	85.0
70°	83.0	164.0	104.7	154.1	85.0
72.5°	83.0	154.1	83.0	140.3	88.9
75°	79.0	140.3	63.2	126.4	83.0
77.5°	73.1	114.6	53.3	108.7	79.0
80°	69.1	85.0	51.4	85.0	73.1
82.5°	53.3	59.3	47.4	63.2	57.3
85°	33.6	43.5	35.6	45.4	35.6
87.5°	15.8	23.7	15.8	23.7	15.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)