

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: P476274

Luminaire Tested: **14GR-LD5-43-A19/156-UNV-L850-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P476274  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14GR-LD5-43-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: 4197.6 lumens  
Efficiency: N/A  
Efficacy: 127.2 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

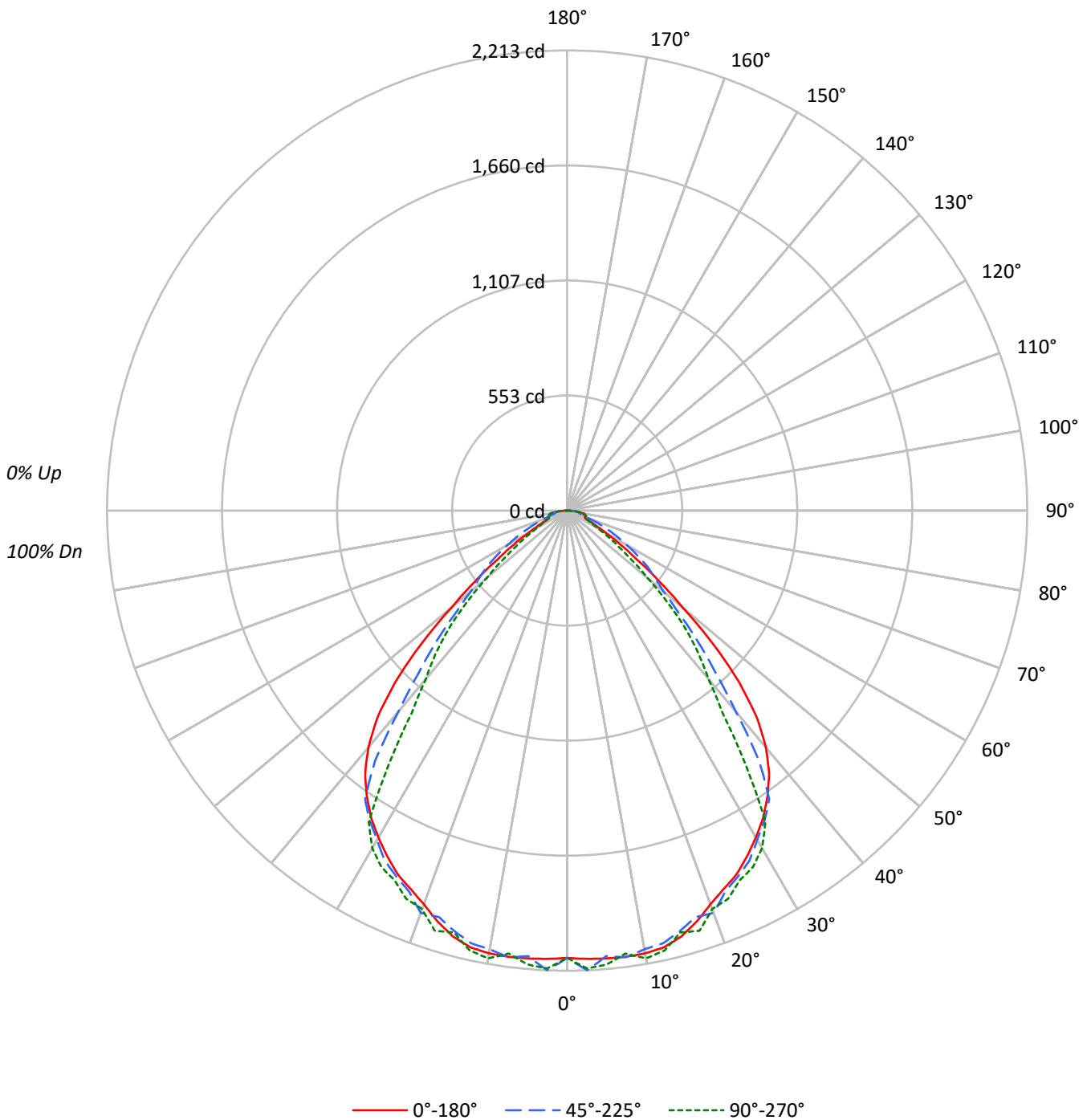
Input Watts (W): 33  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	5789	5789	5789
5°	5840	5811	5918
10°	5908	5854	5974
15°	5907	5834	5852
20°	5770	5896	5839
25°	5728	5767	5826
30°	5639	5680	5824
35°	5515	5565	4937
40°	5225	4430	3713
45°	4457	3378	3077
50°	3045	2529	2125
55°	1917	2216	1412
60°	1159	1774	911
65°	728	1371	700
70°	726	917	744
75°	914	731	960
80°	1192	885	1260
85°	1155	1223	1223



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	207.5	4.9
10°-20°	594.8	14.2
20°-30°	897.8	21.4
30°-40°	1001.3	23.9
40°-50°	728.2	17.3
50°-60°	399.4	9.5
60°-70°	203.1	4.8
70°-80°	119.4	2.8
80°-90°	46.1	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°	1700.2	40.5
0°-40°	2701.5	64.4
0°-60°	3829.1	91.2
0°-90°	4197.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4197.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2151	2151	2151	2151	2151	
5°	2162	2208	2151	2191	2191	206
15°	2120	2112	2094	2138	2101	595
25°	1929	1929	1942	1980	1962	887
35°	1679	1676	1694	1580	1503	1045
45°	1171	1081	888	824	809	880
55°	409	505	472	422	301	386
65°	114	244	215	222	110	127
75°	88	156	70	141	92	91
85°	37	48	40	50	40	42
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2151.1	2151.1	2151.1	2151.1	2151.1
2.5°	2157.7	2201.6	2212.6	2212.6	2203.8
5°	2162.1	2208.2	2151.1	2190.7	2190.7
7.5°	2164.3	2170.9	2166.5	2175.3	2148.9
10°	2162.1	2146.7	2142.3	2197.2	2186.3
12.5°	2151.1	2091.8	2131.3	2113.8	2166.5
15°	2120.3	2111.6	2094.0	2137.9	2100.6
17.5°	2072.0	2076.4	2050.0	2072.0	2118.1
20°	2014.9	2034.6	2058.8	2065.4	2039.0
22.5°	1968.7	1975.3	1984.1	2006.1	2021.5
25°	1929.2	1929.2	1942.4	1979.7	1962.1
27.5°	1874.3	1878.6	1898.4	1909.4	1933.6
30°	1814.9	1819.3	1828.1	1878.6	1874.3
32.5°	1753.4	1757.8	1766.6	1799.5	1775.4
35°	1678.7	1676.5	1694.1	1579.8	1502.9
37.5°	1595.2	1593.0	1516.1	1300.8	1228.3
40°	1487.5	1478.7	1261.2	1092.0	1056.9
42.5°	1351.3	1314.0	1054.7	955.8	938.2
45°	1171.1	1081.0	887.7	824.0	808.6
47.5°	958.0	889.9	722.9	694.3	657.0
50°	727.3	731.7	604.2	584.5	507.6
52.5°	555.9	608.6	531.7	494.4	393.3
55°	408.7	505.4	472.4	421.9	301.0
57.5°	303.2	419.7	399.9	362.5	230.7
60°	215.3	349.4	329.6	312.0	169.2
62.5°	156.0	292.2	270.3	263.7	129.6
65°	114.3	243.9	215.3	221.9	109.9
67.5°	92.3	204.3	162.6	193.4	94.5
70°	92.3	182.4	116.5	171.4	94.5
72.5°	92.3	171.4	92.3	156.0	98.9
75°	87.9	156.0	70.3	140.6	92.3
77.5°	81.3	127.4	59.3	120.8	87.9
80°	76.9	94.5	57.1	94.5	81.3
82.5°	59.3	65.9	52.7	70.3	63.7
85°	37.4	48.3	39.6	50.5	39.6
87.5°	17.6	26.4	17.6	26.4	17.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)