

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: P476248

Luminaire Tested: **14GR-LD5-50-A19/156-UNV-L830-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P476248  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14GR-LD5-50-A19/156-UNV-L830-CD1-U  
Description: GR 1'X4' LED TROFFER w/ A19/156 LENS  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4644.3 lumens  
Efficiency: N/A  
Efficacy: 113.3 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

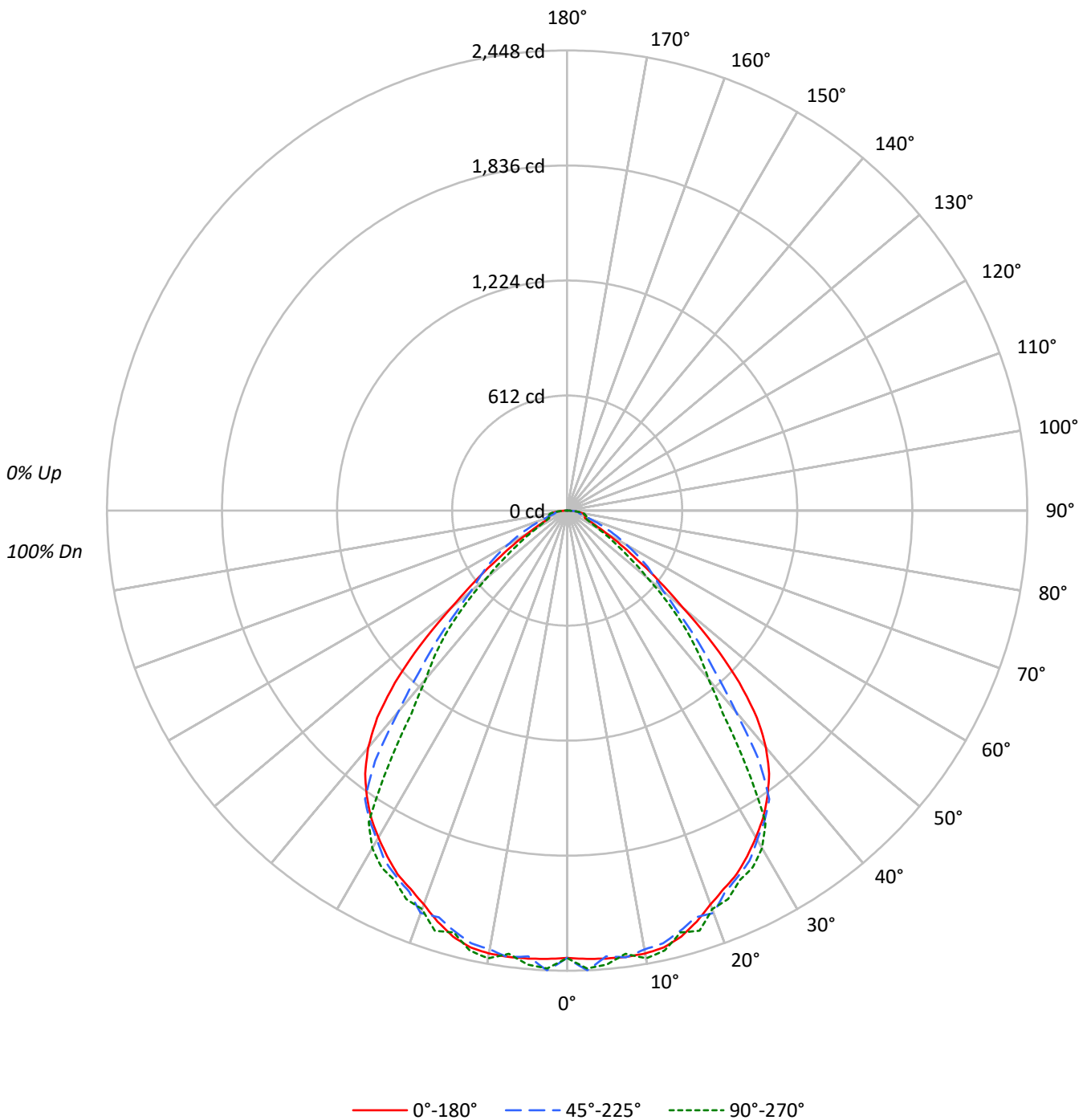
Input Watts (W): 41  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	51	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°	6405	6405	6405
5°	6462	6429	6547
10°	6537	6477	6610
15°	6536	6454	6475
20°	6384	6523	6460
25°	6338	6381	6446
30°	6240	6285	6444
35°	6101	6158	5463
40°	5781	4902	4108
45°	4931	3738	3405
50°	3369	2799	2351
55°	2122	2452	1563
60°	1282	1963	1008
65°	805	1517	774
70°	803	1013	822
75°	1011	809	1062
80°	1319	979	1393
85°	1275	1352	1352



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	229.6	4.9
10°-20°	658.1	14.2
20°-30°	993.3	21.4
30°-40°	1107.9	23.9
40°-50°	805.7	17.3
50°-60°	441.9	9.5
60°-70°	224.7	4.8
70°-80°	132.1	2.8
80°-90°	51.0	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°	1881.1	40.5
0°-40°	2989.0	64.4
0°-60°	4236.5	91.2
0°-90°	4644.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4644.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2380	2380	2380	2380	2380	
5°	2392	2443	2380	2424	2424	228
15°	2346	2336	2317	2365	2324	659
25°	2134	2134	2149	2190	2171	981
35°	1857	1855	1874	1748	1663	1156
45°	1296	1196	982	912	895	974
55°	452	559	523	467	333	427
65°	126	270	238	246	122	141
75°	97	173	78	156	102	101
85°	41	54	44	56	44	46
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2380.0	2380.0	2380.0	2380.0	2380.0
2.5°	2387.3	2435.9	2448.1	2448.1	2438.4
5°	2392.2	2443.2	2380.0	2423.8	2423.8
7.5°	2394.6	2401.9	2397.0	2406.8	2377.6
10°	2392.2	2375.2	2370.3	2431.1	2418.9
12.5°	2380.0	2314.4	2358.1	2338.7	2397.0
15°	2346.0	2336.3	2316.8	2365.4	2324.1
17.5°	2292.5	2297.4	2268.2	2292.5	2343.5
20°	2229.3	2251.2	2277.9	2285.2	2256.0
22.5°	2178.2	2185.5	2195.3	2219.6	2236.6
25°	2134.5	2134.5	2149.1	2190.4	2170.9
27.5°	2073.7	2078.6	2100.4	2112.6	2139.3
30°	2008.1	2012.9	2022.6	2078.6	2073.7
32.5°	1940.0	1944.9	1954.6	1991.0	1964.3
35°	1857.3	1854.9	1874.4	1747.9	1662.9
37.5°	1765.0	1762.5	1677.4	1439.2	1359.0
40°	1645.8	1636.1	1395.4	1208.2	1169.3
42.5°	1495.1	1453.8	1166.9	1057.5	1038.1
45°	1295.8	1196.1	982.2	911.7	894.6
47.5°	1059.9	984.6	799.8	768.2	726.9
50°	804.7	809.5	668.5	646.7	561.6
52.5°	615.1	673.4	588.3	547.0	435.2
55°	452.2	559.1	522.7	466.8	333.1
57.5°	335.5	464.3	442.5	401.1	255.3
60°	238.2	386.5	364.7	345.2	187.2
62.5°	172.6	323.3	299.0	291.7	143.4
65°	126.4	269.8	238.2	245.5	121.6
67.5°	102.1	226.1	179.9	213.9	104.5
70°	102.1	201.8	128.8	189.6	104.5
72.5°	102.1	189.6	102.1	172.6	109.4
75°	97.2	172.6	77.8	155.6	102.1
77.5°	89.9	141.0	65.6	133.7	97.2
80°	85.1	104.5	63.2	104.5	89.9
82.5°	65.6	72.9	58.3	77.8	70.5
85°	41.3	53.5	43.8	55.9	43.8
87.5°	19.4	29.2	19.4	29.2	19.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)