

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: P476266

Luminaire Tested: **14GR-LD5-50-A19/156-UNV-L840-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P476266  
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-L840-CD1-U  
Description: GR 1'X4' LED TROFFER w/ A19/156 LENS  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4904.2 lumens  
Efficiency: N/A  
Efficacy: 119.6 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

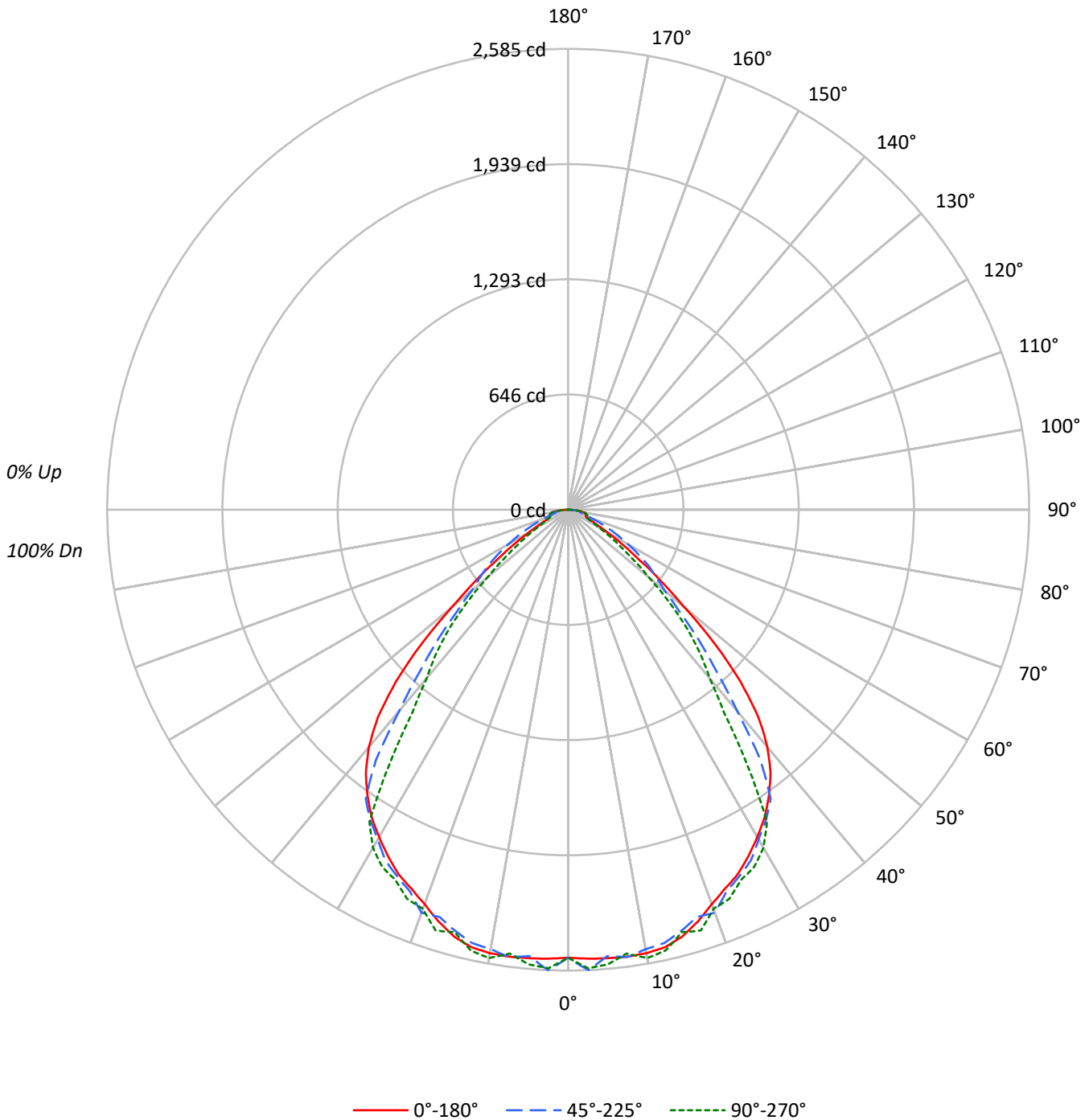
Input Watts (W): 41  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	6763	6763	6763
5°	6823	6789	6914
10°	6902	6839	6980
15°	6902	6816	6837
20°	6741	6888	6822
25°	6692	6738	6807
30°	6589	6637	6804
35°	6443	6502	5768
40°	6105	5176	4338
45°	5207	3947	3595
50°	3557	2956	2483
55°	2240	2589	1650
60°	1354	2073	1064
65°	850	1602	818
70°	848	1071	869
75°	1068	854	1121
80°	1392	1034	1472
85°	1346	1426	1426



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	242.5	4.9
10°-20°	695.0	14.2
20°-30°	1048.9	21.4
30°-40°	1169.9	23.9
40°-50°	850.8	17.3
50°-60°	466.6	9.5
60°-70°	237.3	4.8
70°-80°	139.5	2.8
80°-90°	53.9	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°	1986.4	40.5
0°-40°	3156.3	64.4
0°-60°	4473.6	91.2
0°-90°	4904.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4904.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2513	2513	2513	2513	2513	
5°	2526	2580	2513	2559	2559	241
15°	2477	2467	2446	2498	2454	696
25°	2254	2254	2269	2313	2292	1036
35°	1961	1959	1979	1846	1756	1221
45°	1368	1263	1037	963	945	1028
55°	478	590	552	493	352	451
65°	134	285	252	259	128	149
75°	103	182	82	164	108	107
85°	44	56	46	59	46	49
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2513.2	2513.2	2513.2	2513.2	2513.2
2.5°	2520.9	2572.2	2585.1	2585.1	2574.8
5°	2526.0	2579.9	2513.2	2559.4	2559.4
7.5°	2528.6	2536.3	2531.2	2541.4	2510.6
10°	2526.0	2508.1	2502.9	2567.1	2554.3
12.5°	2513.2	2443.9	2490.1	2469.6	2531.2
15°	2477.3	2467.0	2446.5	2497.8	2454.2
17.5°	2420.8	2425.9	2395.1	2420.8	2474.7
20°	2354.0	2377.1	2405.4	2413.1	2382.3
22.5°	2300.1	2307.8	2318.1	2343.8	2361.7
25°	2253.9	2253.9	2269.3	2313.0	2292.4
27.5°	2189.7	2194.9	2218.0	2230.8	2259.1
30°	2120.4	2125.6	2135.8	2194.9	2189.7
32.5°	2048.6	2053.7	2064.0	2102.5	2074.2
35°	1961.3	1958.7	1979.2	1845.7	1755.9
37.5°	1863.7	1861.2	1771.3	1519.7	1435.0
40°	1737.9	1727.7	1473.5	1275.9	1234.8
42.5°	1578.8	1535.1	1232.2	1116.7	1096.2
45°	1368.3	1263.0	1037.1	962.7	944.7
47.5°	1119.3	1039.7	844.6	811.2	767.6
50°	849.7	854.8	706.0	682.9	593.0
52.5°	649.5	711.1	621.2	577.6	459.5
55°	477.5	590.4	551.9	492.9	351.7
57.5°	354.3	490.3	467.2	423.6	269.5
60°	251.6	408.2	385.1	364.5	197.7
62.5°	182.3	341.4	315.8	308.1	151.5
65°	133.5	284.9	251.6	259.3	128.4
67.5°	107.8	238.7	190.0	225.9	110.4
70°	107.8	213.1	136.1	200.2	110.4
72.5°	107.8	200.2	107.8	182.3	115.5
75°	102.7	182.3	82.1	164.3	107.8
77.5°	95.0	148.9	69.3	141.2	102.7
80°	89.8	110.4	66.7	110.4	95.0
82.5°	69.3	77.0	61.6	82.1	74.4
85°	43.6	56.5	46.2	59.0	46.2
87.5°	20.5	30.8	20.5	30.8	20.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)