

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: P476275

Luminaire Tested: **14GR-LD5-50-A19/156-UNV-L850-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P476275
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-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: 4909.0 lumens
Efficiency: N/A
Efficacy: 119.7 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

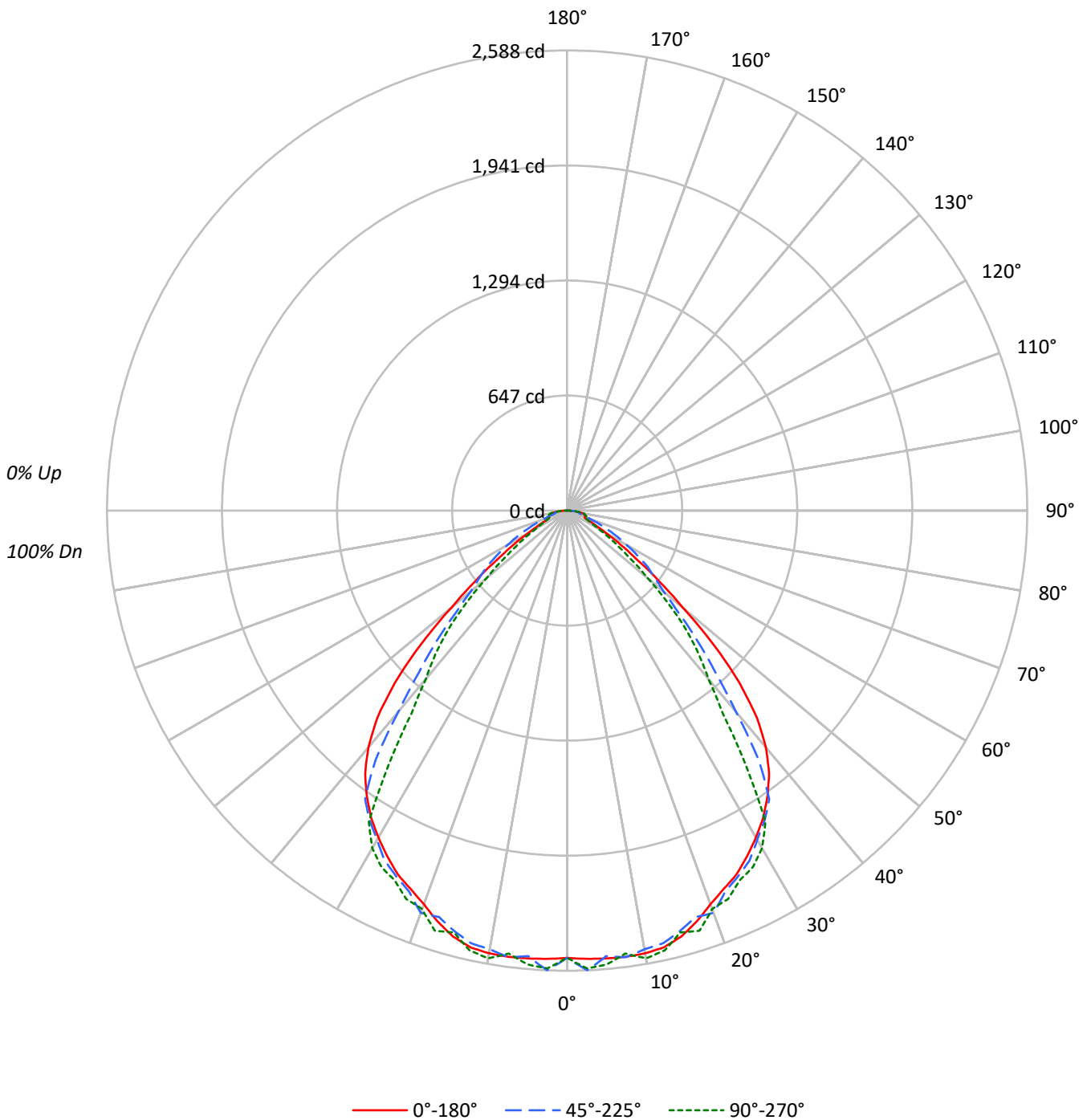
Input Watts (W): 41
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P476275

CATALOG NUMBER: 14GR-LD5-50-A19/156-UNV-L850-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P476275

CATALOG NUMBER: 14GR-LD5-50-A19/156-UNV-L850-CD1-U

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°	6770	6770	6770
5°	6830	6796	6920
10°	6909	6846	6986
15°	6908	6822	6844
20°	6748	6895	6829
25°	6699	6744	6813
30°	6595	6643	6811
35°	6449	6508	5774
40°	6111	5181	4342
45°	5212	3951	3599
50°	3561	2958	2485
55°	2243	2592	1651
60°	1355	2074	1065
65°	851	1603	818
70°	849	1072	869
75°	1069	855	1122
80°	1393	1035	1474
85°	1349	1430	1430



TEST NUMBER: P476275

CATALOG NUMBER: 14GR-LD5-50-A19/156-UNV-L850-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	242.7	4.9
10°-20°	695.7	14.2
20°-30°	1049.9	21.4
30°-40°	1171.0	23.9
40°-50°	851.6	17.3
50°-60°	467.0	9.5
60°-70°	237.5	4.8
70°-80°	139.6	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°	1988.3	40.5
0°-40°	3159.4	64.4
0°-60°	4478.0	91.2
0°-90°	4909.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4909.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2516	2516	2516	2516	2516	
5°	2528	2582	2516	2562	2562	241
15°	2480	2469	2449	2500	2457	696
25°	2256	2256	2272	2315	2295	1037
35°	1963	1961	1981	1848	1758	1222
45°	1370	1264	1038	964	946	1029
55°	478	591	552	493	352	451
65°	134	285	252	260	128	149
75°	103	182	82	164	108	107
85°	44	56	46	59	46	49
90°	0	0	0	0	0	



TEST NUMBER: P476275

CATALOG NUMBER: 14GR-LD5-50-A19/156-UNV-L850-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2515.7	2515.7	2515.7	2515.7	2515.7
2.5°	2523.4	2574.8	2587.6	2587.6	2577.3
5°	2528.5	2582.5	2515.7	2561.9	2561.9
7.5°	2531.1	2538.8	2533.7	2543.9	2513.1
10°	2528.5	2510.5	2505.4	2569.6	2556.8
12.5°	2515.7	2446.3	2492.5	2472.0	2533.7
15°	2479.7	2469.4	2448.9	2500.2	2456.6
17.5°	2423.2	2428.3	2397.5	2423.2	2477.1
20°	2356.3	2379.5	2407.7	2415.4	2384.6
22.5°	2302.4	2310.1	2320.4	2346.1	2364.1
25°	2256.1	2256.1	2271.5	2315.2	2294.7
27.5°	2191.9	2197.0	2220.2	2233.0	2261.3
30°	2122.5	2127.7	2137.9	2197.0	2191.9
32.5°	2050.6	2055.7	2066.0	2104.5	2076.3
35°	1963.2	1960.6	1981.2	1847.6	1757.6
37.5°	1865.5	1863.0	1773.0	1521.2	1436.4
40°	1739.6	1729.4	1475.0	1277.1	1236.0
42.5°	1580.3	1536.6	1233.4	1117.8	1097.2
45°	1369.6	1264.3	1038.1	963.6	945.6
47.5°	1120.4	1040.7	845.4	812.0	768.3
50°	850.5	855.7	706.6	683.5	593.6
52.5°	650.1	711.8	621.8	578.2	460.0
55°	478.0	591.0	552.5	493.4	352.0
57.5°	354.6	490.8	467.7	424.0	269.8
60°	251.8	408.6	385.4	364.9	197.9
62.5°	182.4	341.8	316.1	308.4	151.6
65°	133.6	285.2	251.8	259.5	128.5
67.5°	107.9	239.0	190.2	226.1	110.5
70°	107.9	213.3	136.2	200.4	110.5
72.5°	107.9	200.4	107.9	182.4	115.6
75°	102.8	182.4	82.2	164.5	107.9
77.5°	95.1	149.0	69.4	141.3	102.8
80°	89.9	110.5	66.8	110.5	95.1
82.5°	69.4	77.1	61.7	82.2	74.5
85°	43.7	56.5	46.3	59.1	46.3
87.5°	20.6	30.8	20.6	30.8	20.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)