

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: P476276

Luminaire Tested: **14GR-LD5-60-A19/156-UNV-L850-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P476276
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-60-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: 5956.8 lumens
Efficiency: N/A
Efficacy: 114.3 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

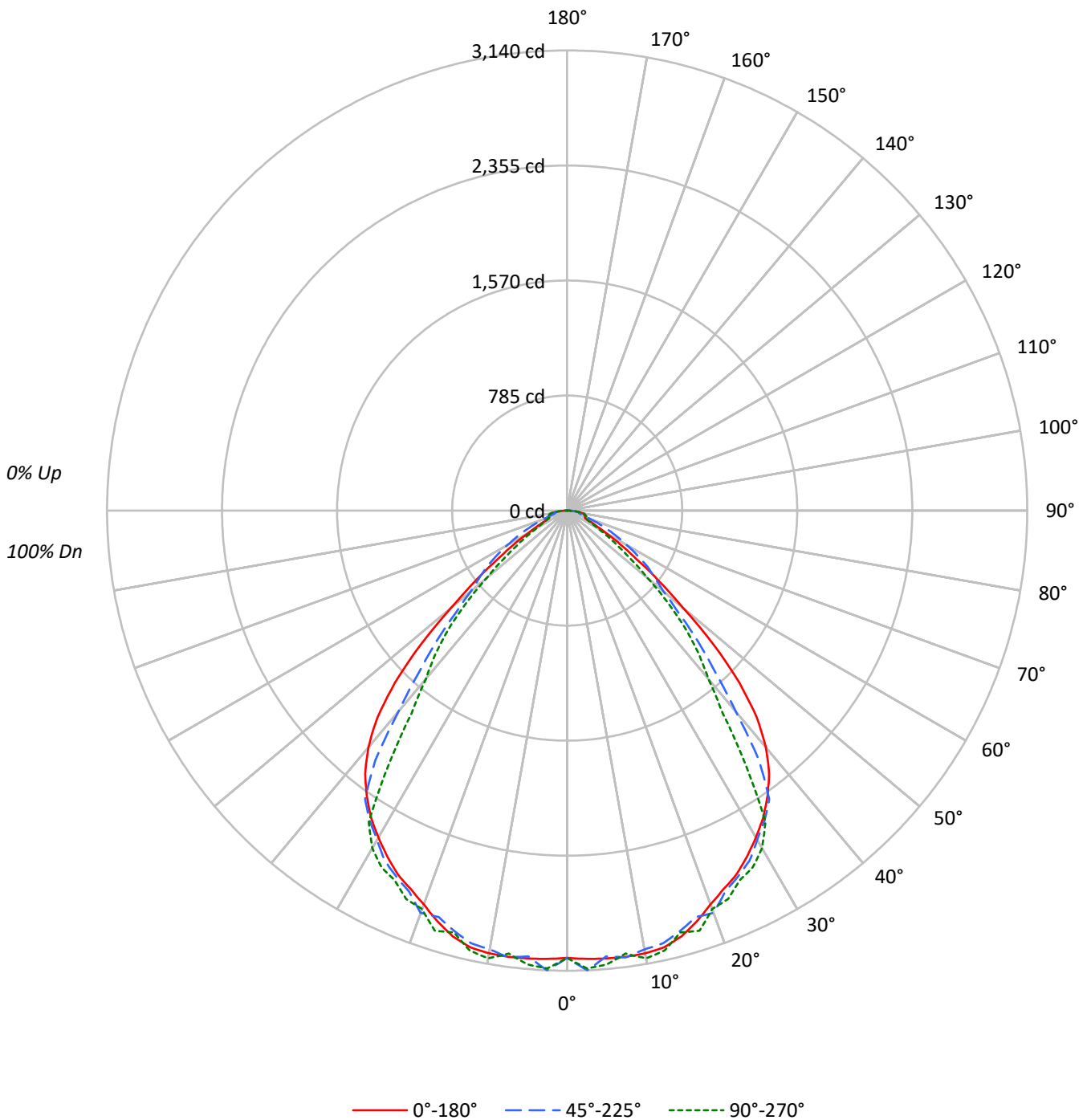
Input Watts (W): 52.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	8214	8214	8214
5°	8288	8246	8397
10°	8384	8307	8478
15°	8383	8278	8305
20°	8188	8367	8286
25°	8128	8184	8267
30°	8003	8061	8264
35°	7826	7897	7006
40°	7415	6287	5269
45°	6325	4794	4367
50°	4321	3590	3015
55°	2721	3145	2004
60°	1645	2517	1292
65°	1032	1946	993
70°	1031	1301	1055
75°	1297	1038	1362
80°	1691	1257	1788
85°	1636	1732	1732



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	294.5	4.9
10°-20°	844.1	14.2
20°-30°	1274.0	21.4
30°-40°	1421.0	23.9
40°-50°	1033.3	17.3
50°-60°	566.7	9.5
60°-70°	288.2	4.8
70°-80°	169.4	2.8
80°-90°	65.4	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°	2412.7	40.5
0°-40°	3833.7	64.4
0°-60°	5433.7	91.2
0°-90°	5956.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5956.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3053	3053	3053	3053	3053	
5°	3068	3134	3053	3109	3109	293
15°	3009	2996	2972	3034	2981	845
25°	2738	2738	2756	2809	2784	1259
35°	2382	2379	2404	2242	2133	1483
45°	1662	1534	1260	1169	1147	1249
55°	580	717	670	599	427	547
65°	162	346	306	315	156	181
75°	125	221	100	200	131	130
85°	53	69	56	72	56	59
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3052.6	3052.6	3052.6	3052.6	3052.6
2.5°	3061.9	3124.3	3139.9	3139.9	3127.4
5°	3068.2	3133.6	3052.6	3108.7	3108.7
7.5°	3071.3	3080.6	3074.4	3086.9	3049.5
10°	3068.2	3046.3	3040.1	3118.0	3102.5
12.5°	3052.6	2968.4	3024.5	2999.6	3074.4
15°	3008.9	2996.4	2971.5	3033.9	2980.9
17.5°	2940.3	2946.6	2909.1	2940.3	3005.8
20°	2859.3	2887.3	2921.6	2931.0	2893.5
22.5°	2793.8	2803.1	2815.6	2846.8	2868.6
25°	2737.6	2737.6	2756.4	2809.4	2784.4
27.5°	2659.7	2665.9	2694.0	2709.6	2743.9
30°	2575.5	2581.7	2594.2	2665.9	2659.7
32.5°	2488.2	2494.4	2506.9	2553.7	2519.4
35°	2382.2	2379.1	2404.0	2241.9	2132.7
37.5°	2263.7	2260.6	2151.5	1845.9	1743.0
40°	2110.9	2098.4	1789.8	1549.7	1499.8
42.5°	1917.6	1864.6	1496.7	1356.4	1331.4
45°	1661.9	1534.1	1259.7	1169.3	1147.4
47.5°	1359.5	1262.8	1025.8	985.3	932.3
50°	1032.1	1038.3	857.5	829.4	720.3
52.5°	788.9	863.7	754.6	701.6	558.1
55°	580.0	717.2	670.4	598.7	427.2
57.5°	430.3	595.5	567.5	514.5	327.4
60°	305.6	495.8	467.7	442.8	240.1
62.5°	221.4	414.7	383.5	374.2	184.0
65°	162.1	346.1	305.6	314.9	155.9
67.5°	131.0	290.0	230.7	274.4	134.1
70°	131.0	258.8	165.3	243.2	134.1
72.5°	131.0	243.2	131.0	221.4	140.3
75°	124.7	221.4	99.8	199.6	131.0
77.5°	115.4	180.8	84.2	171.5	124.7
80°	109.1	134.1	81.1	134.1	115.4
82.5°	84.2	93.5	74.8	99.8	90.4
85°	53.0	68.6	56.1	71.7	56.1
87.5°	24.9	37.4	24.9	37.4	24.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)