

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: P476267

Luminaire Tested: **14GR-LD5-60-A19/156-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P476267
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-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: 5950.9 lumens
Efficiency: N/A
Efficacy: 114.2 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

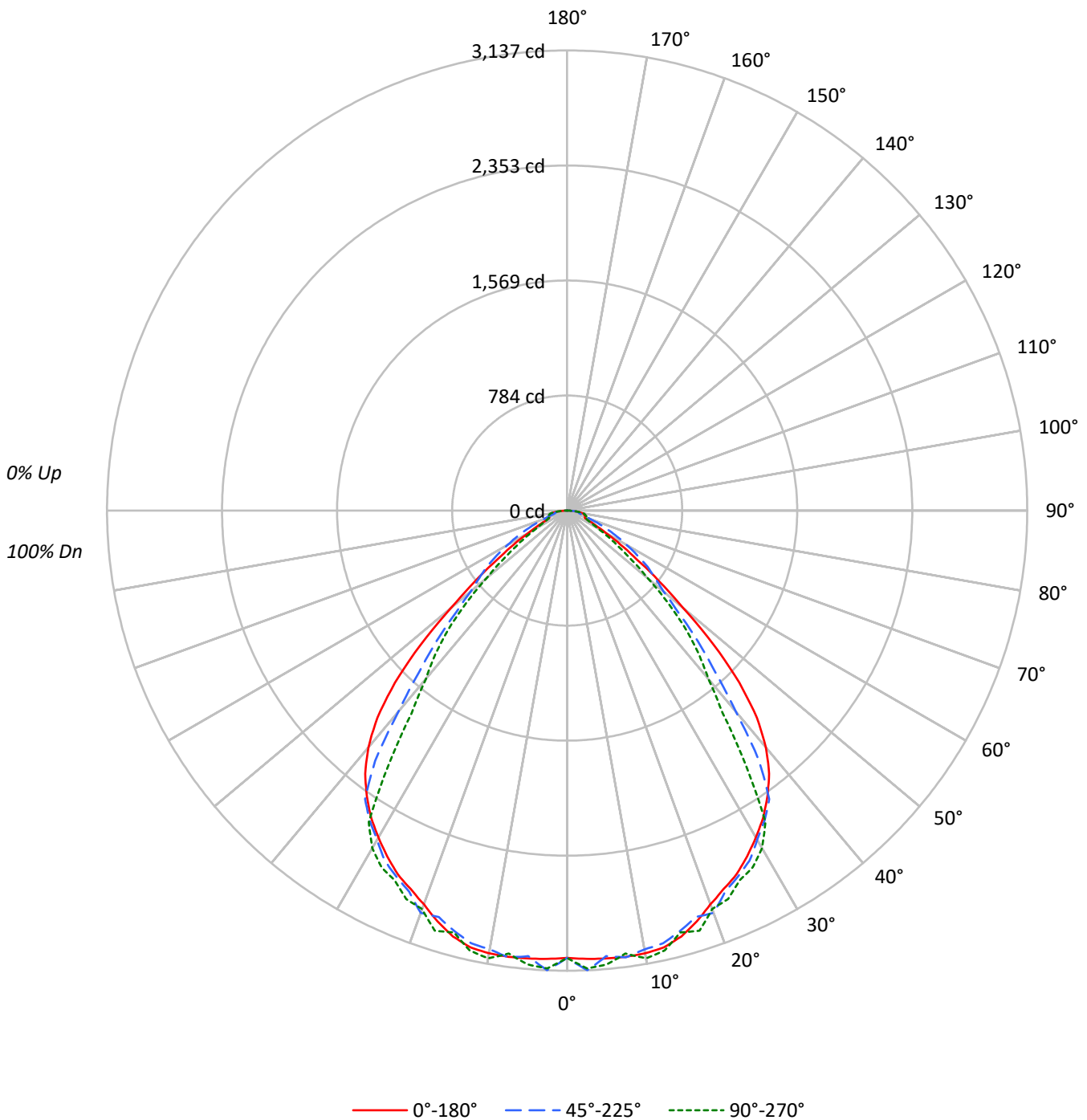
Input Watts (W): 52.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	8206	8206	8206
5°	8280	8238	8389
10°	8376	8299	8469
15°	8374	8270	8296
20°	8180	8358	8278
25°	8121	8176	8259
30°	7995	8053	8256
35°	7818	7890	7000
40°	7408	6281	5263
45°	6318	4789	4362
50°	4317	3586	3013
55°	2718	3142	2002
60°	1643	2514	1291
65°	1032	1944	991
70°	1029	1299	1054
75°	1295	1037	1360
80°	1689	1255	1787
85°	1636	1732	1732



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	294.2	4.9
10°-20°	843.3	14.2
20°-30°	1272.8	21.4
30°-40°	1419.6	23.9
40°-50°	1032.3	17.3
50°-60°	566.2	9.5
60°-70°	287.9	4.8
70°-80°	169.2	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°	2410.3	40.5
0°-40°	3829.9	64.4
0°-60°	5428.4	91.2
0°-90°	5950.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5950.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3050	3050	3050	3050	3050	
5°	3065	3131	3050	3106	3106	293
15°	3006	2994	2969	3031	2978	844
25°	2735	2735	2754	2807	2782	1257
35°	2380	2377	2402	2240	2131	1481
45°	1660	1533	1258	1168	1146	1248
55°	579	716	670	598	427	547
65°	162	346	305	315	156	181
75°	125	221	100	199	131	130
85°	53	68	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°	3049.6	3049.6	3049.6	3049.6	3049.6
2.5°	3058.9	3121.2	3136.8	3136.8	3124.3
5°	3065.2	3130.6	3049.6	3105.6	3105.6
7.5°	3068.3	3077.6	3071.4	3083.8	3046.5
10°	3065.2	3043.3	3037.1	3115.0	3099.4
12.5°	3049.6	2965.5	3021.5	2996.6	3071.4
15°	3006.0	2993.5	2968.6	3030.9	2977.9
17.5°	2937.4	2943.7	2906.3	2937.4	3002.9
20°	2856.4	2884.5	2918.7	2928.1	2890.7
22.5°	2791.0	2800.4	2812.8	2844.0	2865.8
25°	2735.0	2735.0	2753.7	2806.6	2781.7
27.5°	2657.1	2663.3	2691.4	2706.9	2741.2
30°	2573.0	2579.2	2591.7	2663.3	2657.1
32.5°	2485.8	2492.0	2504.5	2551.2	2516.9
35°	2379.9	2376.7	2401.7	2239.7	2130.7
37.5°	2261.5	2258.4	2149.3	1844.1	1741.3
40°	2108.8	2096.4	1788.0	1548.2	1498.3
42.5°	1915.7	1862.8	1495.2	1355.0	1330.1
45°	1660.3	1532.6	1258.5	1168.1	1146.3
47.5°	1358.1	1261.6	1024.8	984.3	931.4
50°	1031.1	1037.3	856.6	828.6	719.6
52.5°	788.1	862.9	753.8	700.9	557.6
55°	579.4	716.4	669.7	598.1	426.8
57.5°	429.9	595.0	566.9	514.0	327.1
60°	305.3	495.3	467.2	442.3	239.9
62.5°	221.2	414.3	383.1	373.8	183.8
65°	162.0	345.8	305.3	314.6	155.7
67.5°	130.8	289.7	230.5	274.1	133.9
70°	130.8	258.5	165.1	243.0	133.9
72.5°	130.8	243.0	130.8	221.2	140.2
75°	124.6	221.2	99.7	199.4	130.8
77.5°	115.3	180.7	84.1	171.3	124.6
80°	109.0	133.9	81.0	133.9	115.3
82.5°	84.1	93.4	74.8	99.7	90.3
85°	53.0	68.5	56.1	71.6	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)