

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: P234076

Luminaire Tested: **14GR-LD5-60-A19/156-UNV-L950-CD1-U**

Issue Date: 3/12/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P234076  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33288)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/12/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14GR-LD5-60-A19/156-UNV-L950-CD1-U  
Description: METALUX 1X4 GRLED TROFFER  
WITH A19/156 LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5862.8 lumens  
Efficiency: N/A  
Efficacy: 97.9 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.23 / 1.18  
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')  
CIE Type: Direct

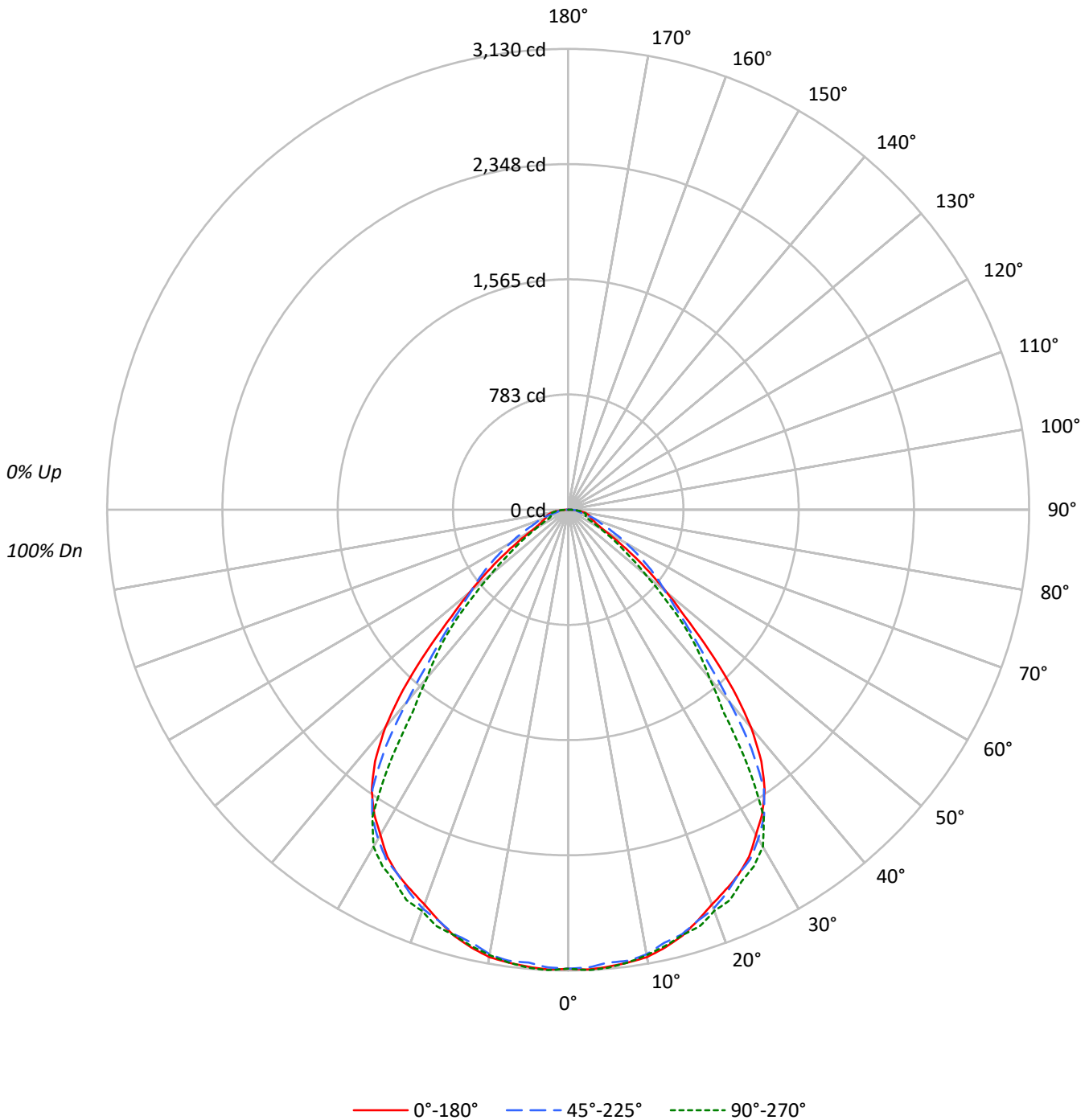
Input Watts (W): 59.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88					88			
2	103	96	90	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77					77			
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	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	51	46	55	50	46	44					44			
8	67	55	48	43	66	55	47	42	53	47	42	52	46	42	51	46	42	40					40			
9	63	51	44	39	62	51	44	39	50	43	39	49	43	38	48	42	38	37					37			
10	60	48	40	36	58	47	40	36	46	40	35	45	39	35	44	39	35	34					34			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	10505	10505	10505
5°	10541	10441	10563
10°	10557	10493	10511
15°	10450	10412	10435
20°	10231	10342	10400
25°	10169	10164	10358
30°	9921	10042	10287
35°	9567	9528	8756
40°	8495	7497	6565
45°	6446	5609	5308
50°	4573	4488	3602
55°	3130	3832	2476
60°	1935	3057	1655
65°	1594	2354	1198
70°	1587	2049	1231
75°	1905	1467	1642
80°	2187	1354	2057
85°	2076	2385	2335



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	295.8	5.0
10°-20°	844.3	14.4
20°-30°	1269.7	21.7
30°-40°	1384.1	23.6
40°-50°	969.2	16.5
50°-60°	548.6	9.4
60°-70°	300.2	5.1
70°-80°	181.9	3.1
80°-90°	69.0	1.2
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°	2409.8	41.1
0°-40°	3793.9	64.7
0°-60°	5311.7	90.6
0°-90°	5862.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5862.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3118	3118	3118	3118	3118	
5°	3116	3111	3087	3123	3123	296
15°	2996	2987	2985	3028	2991	842
25°	2735	2741	2734	2797	2786	1256
35°	2326	2315	2316	2198	2128	1433
45°	1353	1412	1177	1162	1114	1051
55°	533	638	652	647	421	487
65°	200	329	295	373	150	205
75°	146	211	113	221	126	152
85°	54	87	62	75	60	60
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3117.7	3117.7	3117.7	3117.7	3117.7
2.5°	3125.7	3121.7	3112.3	3131.0	3129.8
5°	3116.3	3110.9	3086.8	3123.0	3123.0
7.5°	3102.9	3089.5	3090.8	3110.9	3101.6
10°	3085.4	3062.6	3066.6	3072.0	3072.0
12.5°	3045.1	3023.7	3012.9	3030.4	3035.8
15°	2995.5	2987.4	2984.8	3027.8	2991.4
17.5°	2925.7	2943.2	2927.1	2962.0	2967.3
20°	2853.2	2886.8	2884.2	2908.3	2900.3
22.5°	2794.2	2815.6	2815.6	2845.2	2869.3
25°	2735.2	2740.6	2733.8	2796.9	2786.1
27.5°	2658.7	2654.7	2676.1	2708.3	2729.8
30°	2549.9	2551.3	2580.9	2623.7	2643.9
32.5°	2450.6	2438.5	2474.7	2493.6	2472.1
35°	2325.8	2315.0	2316.4	2198.3	2128.5
37.5°	2155.3	2164.8	2041.3	1825.2	1734.0
40°	1931.2	1950.0	1704.4	1543.4	1492.4
42.5°	1660.1	1665.5	1397.1	1344.8	1311.2
45°	1352.8	1411.9	1177.0	1162.3	1113.9
47.5°	1072.3	1182.4	986.4	995.8	880.4
50°	872.3	982.4	856.2	860.3	687.1
52.5°	689.9	797.2	755.6	743.5	539.5
55°	532.8	637.5	652.3	646.9	421.4
57.5°	391.8	504.6	547.5	567.7	324.8
60°	287.2	412.0	453.6	493.9	245.6
62.5°	228.1	357.0	371.7	430.8	190.6
65°	199.9	328.8	295.3	373.1	150.3
67.5°	178.5	312.7	240.2	330.1	131.5
70°	161.1	281.8	208.0	295.3	124.9
72.5°	161.1	247.0	163.7	261.7	126.1
75°	146.3	210.7	112.7	221.4	126.1
77.5°	130.2	179.8	84.5	179.8	118.1
80°	112.7	141.0	69.8	138.2	106.0
82.5°	83.2	106.0	60.4	103.4	85.9
85°	53.7	87.3	61.7	75.2	60.4
87.5°	25.5	44.3	38.9	37.6	30.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)