

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: P476268

Luminaire Tested: **14GR-LD5-20-A19/156-UNV-L850-CD1-U**

Issue Date: 02/10/2021



**Test Information**

Test Method: LM-79-08  
Report Number: P476268  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14GR-LD5-20-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**

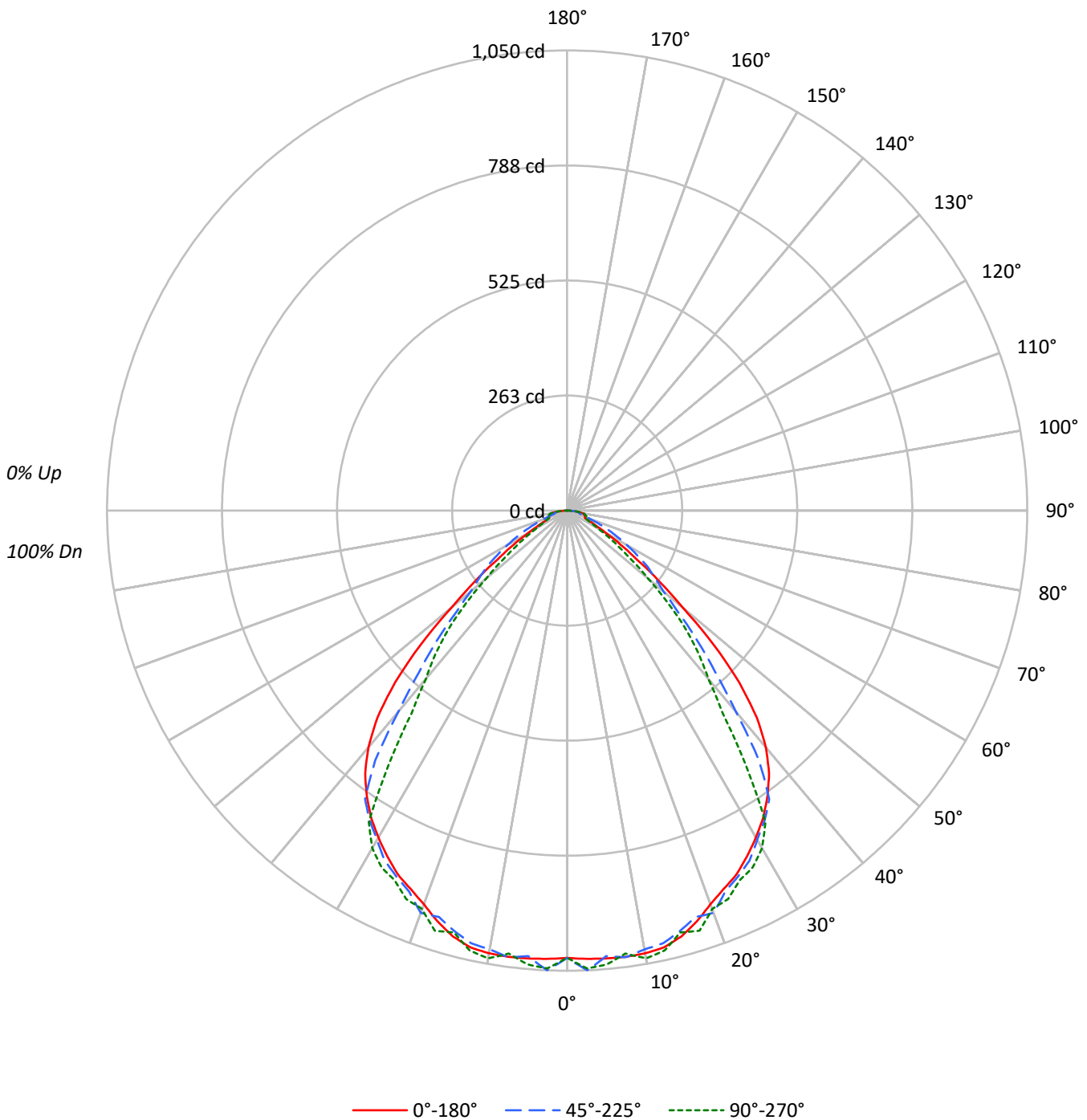
Lumens per Lamp: N/A  
Luminaire Lumens: 1991.7 lumens  
Efficiency: N/A  
Efficacy: 124.5 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.2  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 16  
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	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°	2747	2747	2747
5°	2771	2757	2808
10°	2803	2778	2835
15°	2803	2768	2777
20°	2738	2798	2771
25°	2718	2736	2764
30°	2676	2695	2763
35°	2617	2641	2343
40°	2479	2102	1762
45°	2115	1603	1460
50°	1445	1200	1008
55°	910	1052	670
60°	550	842	432
65°	345	651	332
70°	345	435	352
75°	434	347	455
80°	566	420	598
85°	546	580	580



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	98.5	4.9
10°-20°	282.2	14.2
20°-30°	426.0	21.4
30°-40°	475.1	23.9
40°-50°	345.5	17.3
50°-60°	189.5	9.5
60°-70°	96.3	4.8
70°-80°	56.6	2.8
80°-90°	21.9	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°	806.7	40.5
0°-40°	1281.8	64.4
0°-60°	1816.8	91.2
0°-90°	1991.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1991.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1021	1021	1021	1021	1021	
5°	1026	1048	1021	1039	1039	98
15°	1006	1002	994	1014	997	282
25°	915	915	922	939	931	421
35°	796	796	804	750	713	496
45°	556	513	421	391	384	418
55°	194	240	224	200	143	183
65°	54	116	102	105	52	60
75°	42	74	33	67	44	43
85°	18	23	19	24	19	20
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1020.7	1020.7	1020.7	1020.7	1020.7
2.5°	1023.8	1044.6	1049.9	1049.9	1045.7
5°	1025.9	1047.8	1020.7	1039.4	1039.4
7.5°	1026.9	1030.1	1028.0	1032.1	1019.6
10°	1025.9	1018.6	1016.5	1042.6	1037.4
12.5°	1020.7	992.5	1011.3	1002.9	1028.0
15°	1006.1	1001.9	993.6	1014.4	996.7
17.5°	983.1	985.2	972.7	983.1	1005.0
20°	956.0	965.4	976.9	980.0	967.5
22.5°	934.1	937.3	941.4	951.9	959.2
25°	915.4	915.4	921.6	939.3	931.0
27.5°	889.3	891.4	900.8	906.0	917.5
30°	861.2	863.2	867.4	891.4	889.3
32.5°	832.0	834.1	838.2	853.9	842.4
35°	796.5	795.5	803.8	749.6	713.1
37.5°	756.9	755.9	719.4	617.2	582.8
40°	705.8	701.6	598.4	518.2	501.5
42.5°	641.2	623.5	500.4	453.5	445.2
45°	555.7	512.9	421.2	391.0	383.7
47.5°	454.6	422.2	343.0	329.4	311.7
50°	345.1	347.2	286.7	277.3	240.8
52.5°	263.8	288.8	252.3	234.6	186.6
55°	193.9	239.8	224.2	200.2	142.8
57.5°	143.9	199.1	189.7	172.0	109.5
60°	102.2	165.8	156.4	148.0	80.3
62.5°	74.0	138.7	128.2	125.1	61.5
65°	54.2	115.7	102.2	105.3	52.1
67.5°	43.8	97.0	77.1	91.7	44.8
70°	43.8	86.5	55.3	81.3	44.8
72.5°	43.8	81.3	43.8	74.0	46.9
75°	41.7	74.0	33.4	66.7	43.8
77.5°	38.6	60.5	28.1	57.3	41.7
80°	36.5	44.8	27.1	44.8	38.6
82.5°	28.1	31.3	25.0	33.4	30.2
85°	17.7	22.9	18.8	24.0	18.8
87.5°	8.3	12.5	8.3	12.5	8.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)