

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: P558465

Luminaire Tested: **22CBRK-A-31-UNV-L840-CD1-WAB-U**

Issue Date: 7/20/2021



**Test Information**

Test Method: LM-79-08  
Report Number: P558465  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2105-259-1)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 7/20/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CBRK-A-31-UNV-L840-CD1-WAB-U  
Description: 2X2 3100 LUMEN, LED TROFFER RETROFIT KIT WITH 4000K AND 80 CRI LEDS  
Light Source: -  
Ballast/Driver: -

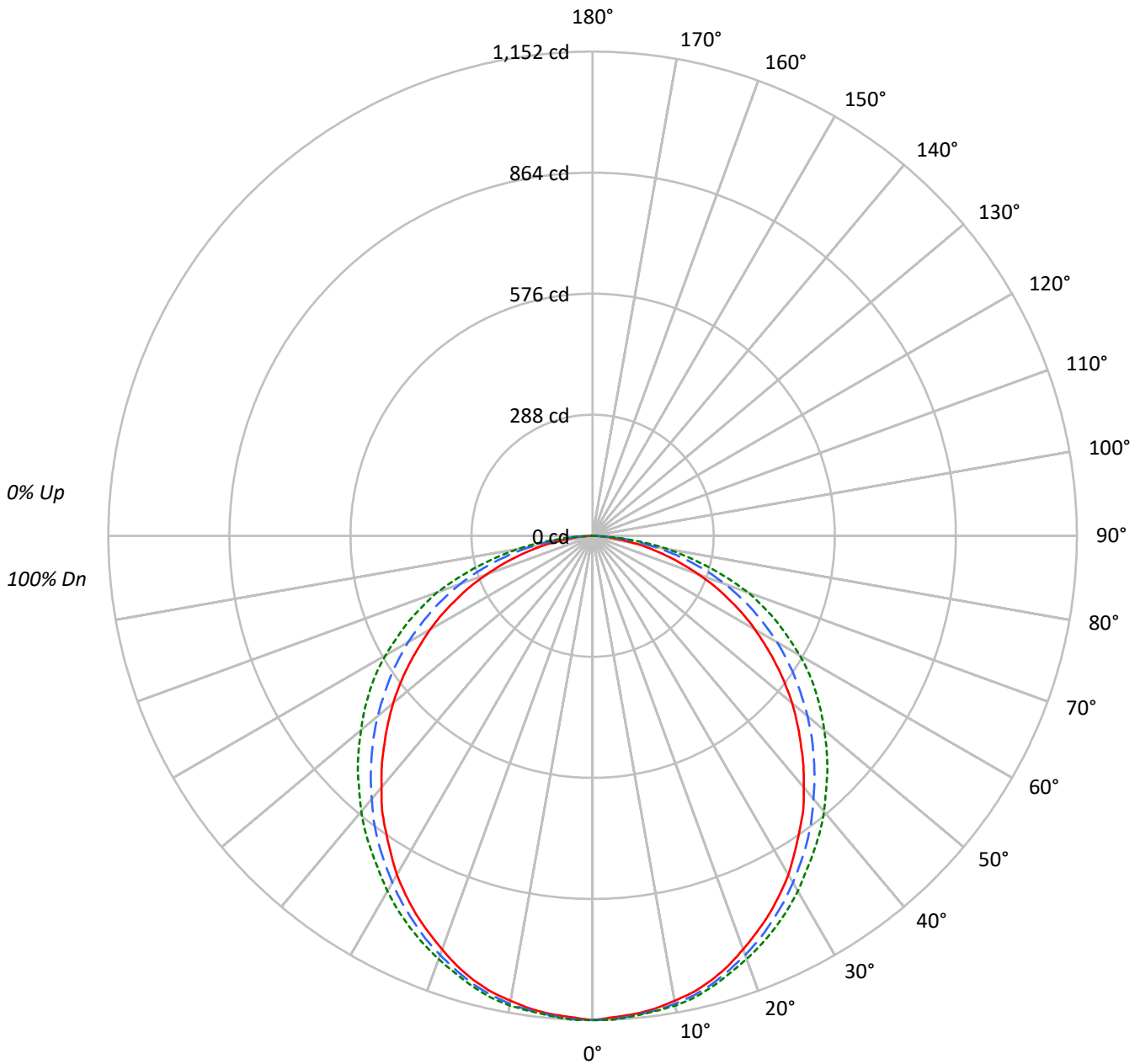
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3274.0 lumens  
Efficiency: N/A  
Efficacy: 158.9 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.36  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 20.6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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: P558465

CATALOG NUMBER: 22CBRK-A-31-UNV-L840-CD1-WAB-U

### Luminous Intensity Polar Plot





TEST NUMBER: P558465

CATALOG NUMBER: 22CBRK-A-31-UNV-L840-CD1-WAB-U

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20									
RC	80									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	0																
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	109	104	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83																			
2	98	90	83	77	96	88	82	76	85	79	75	81	77	73	78	74	71	69																			
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58																			
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49																			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43																			
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37																			
7	65	51	42	36	63	50	42	36	48	41	35	47	40	35	46	40	35	33																			
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29																			
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26																			
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24																			

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

	0°	45°	90°
0°	3101	3101	3101
5°	3086	3093	3097
10°	3070	3090	3101
15°	3049	3074	3090
20°	2998	3040	3068
25°	2950	3002	3053
30°	2894	2962	3033
35°	2818	2922	3012
40°	2744	2871	3008
45°	2665	2830	3006
50°	2593	2793	3011
55°	2500	2757	3042
60°	2401	2728	3062
65°	2271	2685	3081
70°	2102	2636	3091
75°	1877	2508	2942
80°	1543	2261	2775
85°	982	1874	2096



TEST NUMBER: P558465

CATALOG NUMBER: 22CBRK-A-31-UNV-L840-CD1-WAB-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	108.8	3.3
10°-20°	310.7	9.5
20°-30°	465.8	14.2
30°-40°	555.9	17.0
40°-50°	574.8	17.6
50°-60°	526.6	16.1
60°-70°	415.8	12.7
70°-80°	250.2	7.6
80°-90°	65.4	2.0
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°	885.4	27.0
0°-40°	1441.2	44.0
0°-60°	2542.6	77.7
0°-90°	3274.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3274.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1152	1152	1152	1152	1152	
5°	1142	1142	1145	1147	1147	108
15°	1095	1096	1103	1108	1109	308
25°	994	998	1011	1024	1028	457
35°	858	866	890	910	917	537
45°	700	712	744	776	790	541
55°	533	547	588	631	648	476
65°	357	374	422	465	484	354
75°	180	201	241	273	283	192
85°	32	43	61	69	68	42
90°	0	0	0	0	0	



TEST NUMBER: P558465

CATALOG NUMBER: 22CBRK-A-31-UNV-L840-CD1-WAB-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1152.4	1152.4	1152.4	1152.4	1152.4
2.5°	1146.6	1148.0	1150.9	1152.4	1152.4
5°	1142.3	1142.3	1145.2	1146.6	1146.6
7.5°	1135.0	1136.5	1139.4	1140.8	1140.8
10°	1123.5	1126.4	1130.7	1135.0	1135.0
12.5°	1111.9	1113.4	1119.2	1123.5	1124.9
15°	1094.6	1096.1	1103.3	1107.6	1109.1
17.5°	1073.0	1075.8	1083.1	1090.3	1090.3
20°	1047.0	1051.3	1061.4	1068.6	1071.5
22.5°	1021.0	1026.7	1038.3	1047.0	1051.3
25°	993.5	997.9	1010.9	1023.9	1028.2
27.5°	963.2	967.5	983.4	999.3	1003.6
30°	931.4	937.2	953.1	969.0	976.2
32.5°	893.9	902.6	921.3	941.5	945.9
35°	857.8	866.4	889.6	909.8	917.0
37.5°	823.1	828.9	854.9	879.4	888.1
40°	781.2	791.4	817.4	844.8	856.3
42.5°	742.3	752.4	781.2	811.6	821.7
45°	700.4	711.9	743.7	775.5	789.9
47.5°	659.9	674.4	706.2	742.3	755.3
50°	619.5	632.5	667.2	704.7	719.2
52.5°	576.2	589.2	626.7	668.6	684.5
55°	532.9	547.3	587.7	631.1	648.4
57.5°	488.1	505.4	547.3	592.1	610.8
60°	446.2	460.7	506.9	551.6	569.0
62.5°	402.9	418.8	463.6	508.3	524.2
65°	356.7	374.0	421.7	465.0	483.8
67.5°	314.8	330.7	378.3	421.7	437.6
70°	267.2	287.4	335.0	375.5	392.8
72.5°	223.8	244.0	288.8	324.9	337.9
75°	180.5	200.7	241.2	272.9	283.0
77.5°	140.1	158.8	195.0	220.9	229.6
80°	99.6	118.4	145.9	170.4	179.1
82.5°	63.5	79.4	102.5	119.9	124.2
85°	31.8	43.3	60.7	69.3	67.9
87.5°	10.1	13.0	17.3	14.4	13.0
90°	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-MV3F9LC







— 0°-180°    - - 45°-225°    - - - - 90°-270°







(END OF REPORT)