

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: P842810

Luminaire Tested: **14CZ2-20-SQR-UNV-B40**

Issue Date: 1/5/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P842810  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P387389)  
Test Lab: INNOVATIONS CENTER(G2)  
Issue Date: 1/5/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ2-20-SQR-UNV-B40  
Description: 1X4 2000 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 4000K CCT AND SQR LENS  
  
Light Source: -  
Ballast/Driver: -

**Summary**

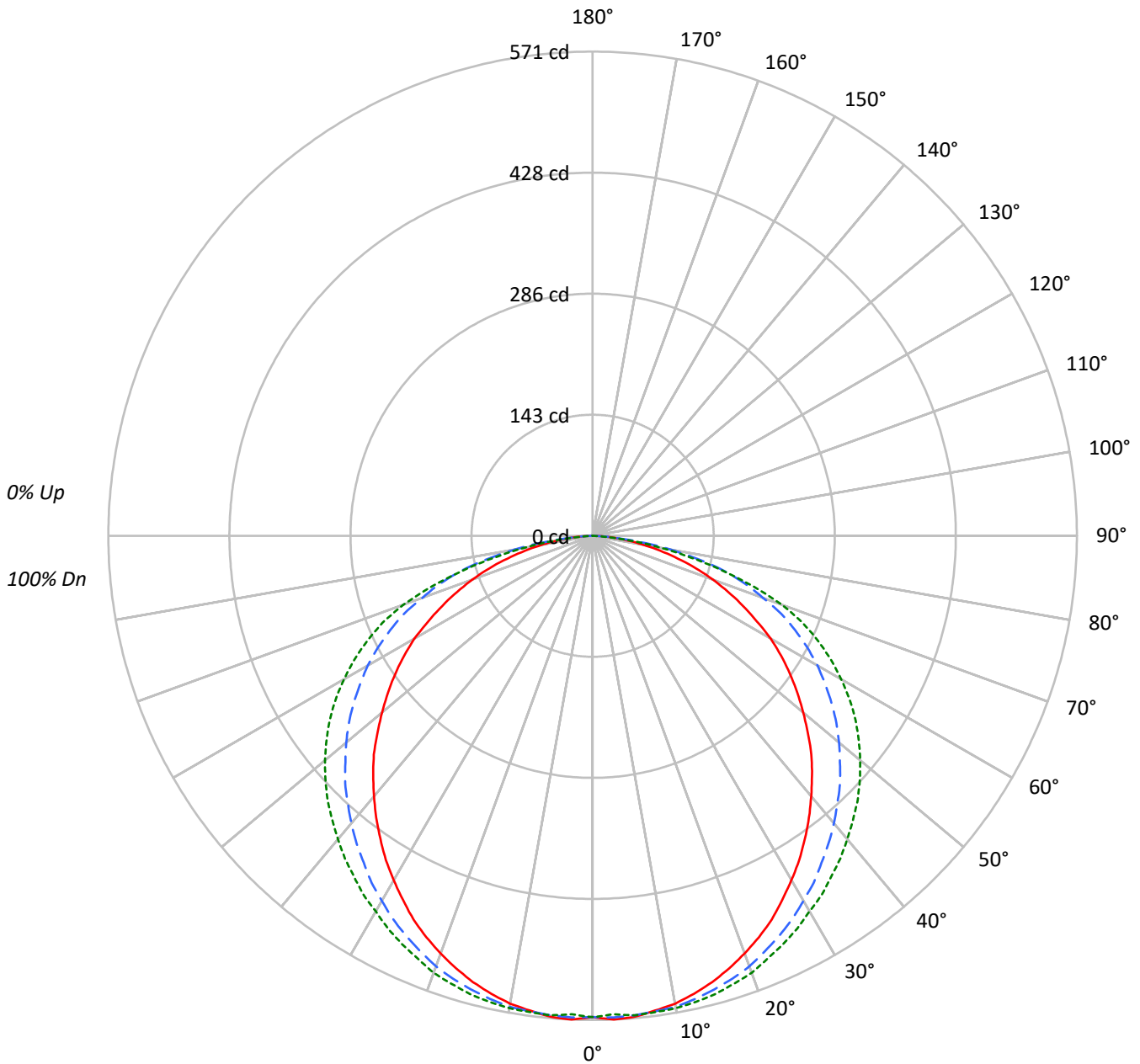
Lumens per Lamp: N/A  
Luminaire Lumens: 1796.0 lumens  
Efficiency: N/A  
Efficacy: 112.2 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.34 / 1.44  
Luminous Opening: Rectangular (W 0.96' x L: 3.98' x H: 0')  
CIE Type: Direct

Input Watts (W): 16  
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

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### Luminous Intensity Polar Plot





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**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	108	103	99	95	105	101	97	93	97	93	90	93	90	87	89	87	85	83																			
2	98	89	82	76	95	87	81	75	84	78	73	80	76	72	77	73	70	68																			
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56																			
4	81	68	59	52	79	67	59	52	65	57	51	62	56	51	60	54	50	48																			
5	74	61	52	45	72	60	51	44	58	50	44	56	49	43	54	48	43	41																			
6	68	55	45	39	67	54	45	39	52	44	38	50	43	38	49	42	38	35																			
7	63	49	40	34	62	49	40	34	47	39	34	46	39	33	44	38	33	31																			
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	41	34	30	28																			
9	55	41	33	27	54	41	33	27	39	32	27	38	32	27	37	31	27	25																			
10	52	38	30	25	50	37	30	24	36	29	24	36	29	24	35	29	24	22																			

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

	0°	45°	90°
0°	1602	1602	1602
5°	1613	1608	1608
10°	1606	1617	1621
15°	1592	1619	1635
20°	1574	1623	1648
25°	1556	1621	1655
30°	1528	1620	1667
35°	1503	1622	1691
40°	1477	1631	1721
45°	1456	1647	1763
50°	1423	1665	1808
55°	1399	1693	1862
60°	1369	1727	1911
65°	1306	1759	1959
70°	1240	1763	1958
75°	1135	1757	1728
80°	970	1500	1339
85°	764	849	499



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	53.9	3.0
10°-20°	155.8	8.7
20°-30°	238.3	13.3
30°-40°	292.1	16.3
40°-50°	314.1	17.5
50°-60°	301.8	16.8
60°-70°	251.3	14.0
70°-80°	154.3	8.6
80°-90°	34.4	1.9
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°	448.0	24.9
0°-40°	740.1	41.2
0°-60°	1356.0	75.5
0°-90°	1796.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1796.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	568	568	568	568	568	
5°	569	564	568	568	568	54
15°	545	543	554	558	559	154
25°	500	504	520	527	531	230
35°	436	447	471	483	491	273
45°	365	381	413	432	442	281
55°	284	309	344	368	378	254
65°	196	225	263	285	293	194
75°	104	136	161	160	158	110
85°	24	35	26	18	15	28
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	567.6	567.6	567.6	567.6	567.6
2.5°	571.1	565.7	568.5	567.6	564.8
5°	569.4	564.0	567.6	567.6	567.6
7.5°	564.8	560.3	565.7	566.6	566.6
10°	560.3	556.7	564.0	564.8	565.7
12.5°	553.1	550.3	559.4	561.2	563.0
15°	544.9	543.1	553.9	557.6	559.4
17.5°	535.0	535.9	547.7	552.2	553.9
20°	524.1	526.8	540.4	544.9	548.5
22.5°	512.3	515.9	530.5	535.9	539.5
25°	499.6	504.2	520.5	526.8	531.4
27.5°	484.2	491.5	509.7	517.8	522.3
30°	468.9	477.1	497.0	506.9	511.4
32.5°	453.5	462.5	485.2	495.1	502.4
35°	436.3	447.2	470.7	483.3	490.6
37.5°	419.1	431.8	457.1	471.6	479.7
40°	400.9	414.6	442.6	458.9	467.0
42.5°	382.9	398.3	427.3	445.3	454.4
45°	364.8	381.1	412.7	431.8	441.7
47.5°	344.0	363.9	395.5	417.2	427.3
50°	324.1	345.8	379.2	401.9	411.8
52.5°	304.1	326.8	362.1	385.6	395.5
55°	284.2	308.6	344.0	367.5	378.4
57.5°	263.4	288.7	324.9	349.4	359.3
60°	242.5	268.9	306.0	328.6	338.5
62.5°	218.1	248.9	285.2	307.8	316.8
65°	195.5	225.4	263.4	285.2	293.3
67.5°	172.9	203.7	240.8	260.7	267.9
70°	150.2	181.1	213.6	232.6	237.2
72.5°	127.7	158.4	189.2	200.0	198.3
75°	104.1	135.8	161.1	160.3	158.4
77.5°	81.5	112.2	127.7	121.3	118.6
80°	59.7	89.7	92.3	86.0	82.4
82.5°	40.8	64.2	57.9	50.7	47.0
85°	23.6	35.2	26.2	18.1	15.4
87.5°	9.9	9.0	2.8	2.8	1.8
90°	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-50001EG







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







(END OF REPORT)