

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: P881099

Luminaire Tested: **22CZ2-34VHE-S-UNV-B40**

Issue Date: 10/2/2024

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.



**Test Information**

Test Method: LM-79-08  
Report Number: P881099  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P475230)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 10/2/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-34VHE-S-UNV-B40  
Description: 2X2 3400 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 4000K CCT AND SMOOTH LENS

Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

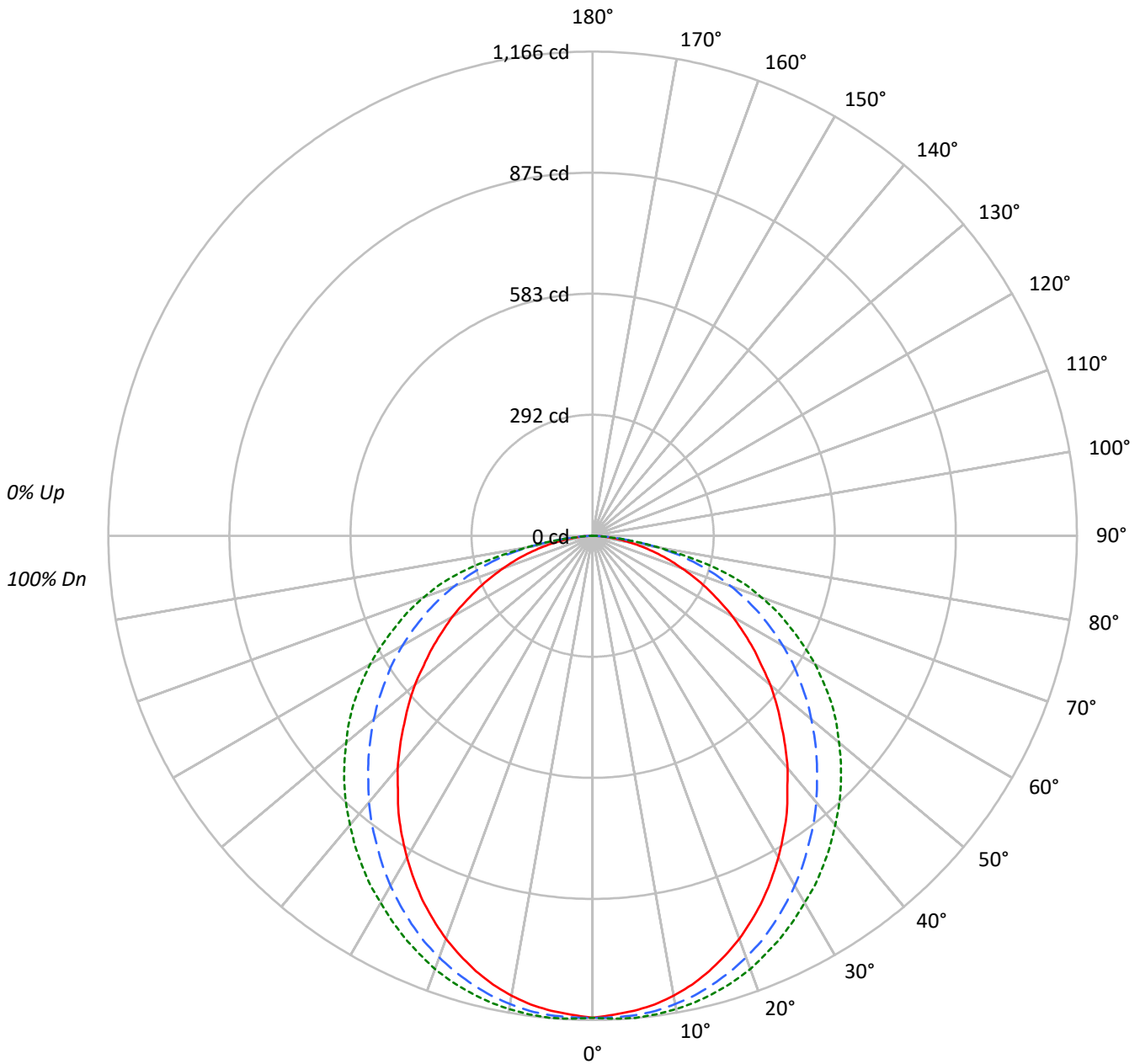
Lumens per Lamp: N/A  
Luminaire Lumens: 3323.0 lumens  
Efficiency: N/A  
Efficacy: 123.1 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.31 / 1.37  
Luminous Opening: Rectangular (W 1.92' x L: 1.98' x H: 0')  
CIE Type: Direct

Input Watts (W): 27  
Input Voltage (V): NR  
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	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	91	88	90	87	85	83								
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	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	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	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°	3294	3294	3294
5°	3270	3302	3320
10°	3240	3299	3335
15°	3188	3285	3345
20°	3119	3262	3352
25°	3032	3229	3348
30°	2930	3188	3343
35°	2824	3141	3355
40°	2705	3103	3365
45°	2576	3063	3393
50°	2465	3035	3419
55°	2333	3011	3472
60°	2211	2999	3509
65°	2065	2976	3536
70°	1896	2930	3585
75°	1712	2853	3457
80°	1467	2526	2603
85°	1179	1488	1179



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	110.1	3.3
10°-20°	314.6	9.5
20°-30°	472.6	14.2
30°-40°	563.6	17.0
40°-50°	582.7	17.5
50°-60°	535.7	16.1
60°-70°	426.5	12.8
70°-80°	260.6	7.8
80°-90°	56.6	1.7
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°	897.3	27.0
0°-40°	1460.9	44.0
0°-60°	2579.3	77.6
0°-90°	3323.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3323.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1161	1161	1161	1161	1161	
5°	1148	1151	1159	1164	1166	109
15°	1085	1098	1118	1134	1139	306
25°	968	992	1032	1060	1069	445
35°	815	850	907	954	968	509
45°	642	688	763	825	846	496
55°	472	524	609	678	702	422
65°	308	360	443	505	527	305
75°	156	202	260	306	315	166
85°	36	44	46	40	36	42
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1160.8	1160.8	1160.8	1160.8	<i>1160.8</i>
2.5°	1154.5	1156.0	1160.8	1164.0	<i>1164.0</i>
5°	<i>1148.1</i>	<i>1151.3</i>	<i>1159.2</i>	<i>1164.0</i>	<i>1165.6</i>
7.5°	1138.8	1143.5	1154.5	1160.8	<i>1162.6</i>
10°	1124.5	1131.0	1145.1	1154.5	<i>1157.6</i>
12.5°	1107.2	1116.7	1134.0	1146.7	<i>1149.7</i>
15°	1085.3	1097.8	1118.1	1134.0	<i>1138.8</i>
17.5°	1059.9	1075.6	1101.0	1119.9	<i>1126.1</i>
20°	1032.9	1048.8	1080.4	1102.4	<i>1110.2</i>
22.5°	1001.5	1022.0	1058.3	1083.6	<i>1089.9</i>
25°	968.5	992.0	1031.5	1059.9	<i>1069.4</i>
27.5°	932.1	960.6	1003.1	1037.9	<i>1045.8</i>
30°	894.2	924.2	973.1	1011.0	<i>1020.4</i>
32.5°	854.7	889.6	941.5	984.2	<i>996.9</i>
35°	815.3	850.1	906.9	954.4	<i>968.5</i>
37.5°	769.6	810.6	873.8	922.8	<i>939.9</i>
40°	730.3	769.6	837.6	891.2	<i>908.5</i>
42.5°	686.0	728.7	799.7	858.0	<i>878.5</i>
45°	641.9	687.6	763.3	824.9	<i>845.5</i>
47.5°	600.8	646.5	725.5	790.3	<i>810.6</i>
50°	558.3	605.7	687.6	753.9	<i>774.4</i>
52.5°	512.6	564.6	649.8	716.0	<i>739.7</i>
55°	471.6	523.5	608.7	678.1	<i>701.9</i>
57.5°	428.9	482.6	571.0	637.3	<i>659.4</i>
60°	389.6	441.6	528.5	593.0	<i>618.3</i>
62.5°	346.9	400.5	485.7	548.9	<i>572.6</i>
65°	307.5	359.6	443.2	504.8	<i>526.7</i>
67.5°	268.0	320.3	398.9	457.5	<i>482.6</i>
70°	228.5	280.9	353.2	410.1	<i>432.1</i>
72.5°	194.1	239.8	309.1	361.2	<i>381.7</i>
75°	156.2	201.9	260.2	305.9	<i>315.3</i>
77.5°	121.4	162.5	211.4	231.8	<i>235.2</i>
80°	89.8	121.4	154.6	159.3	<i>159.3</i>
82.5°	59.8	83.6	96.2	97.7	<i>96.2</i>
85°	36.2	44.1	45.7	39.5	<i>36.2</i>
87.5°	12.5	12.5	7.9	4.6	<i>1.6</i>
90°	0.0	0.0	0.0	0.0	<i>0.0</i>



Report Generated By 670246072 / DESKTOP-50001EG







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







(END OF REPORT)