

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: P881069

Luminaire Tested: **22CZ2-24VHE-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: P881069  
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: 22CZ2-24VHE-S-UNV-B40  
Description: 2X2 2400 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 4000K CCT AND SMOOTH LENS

Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

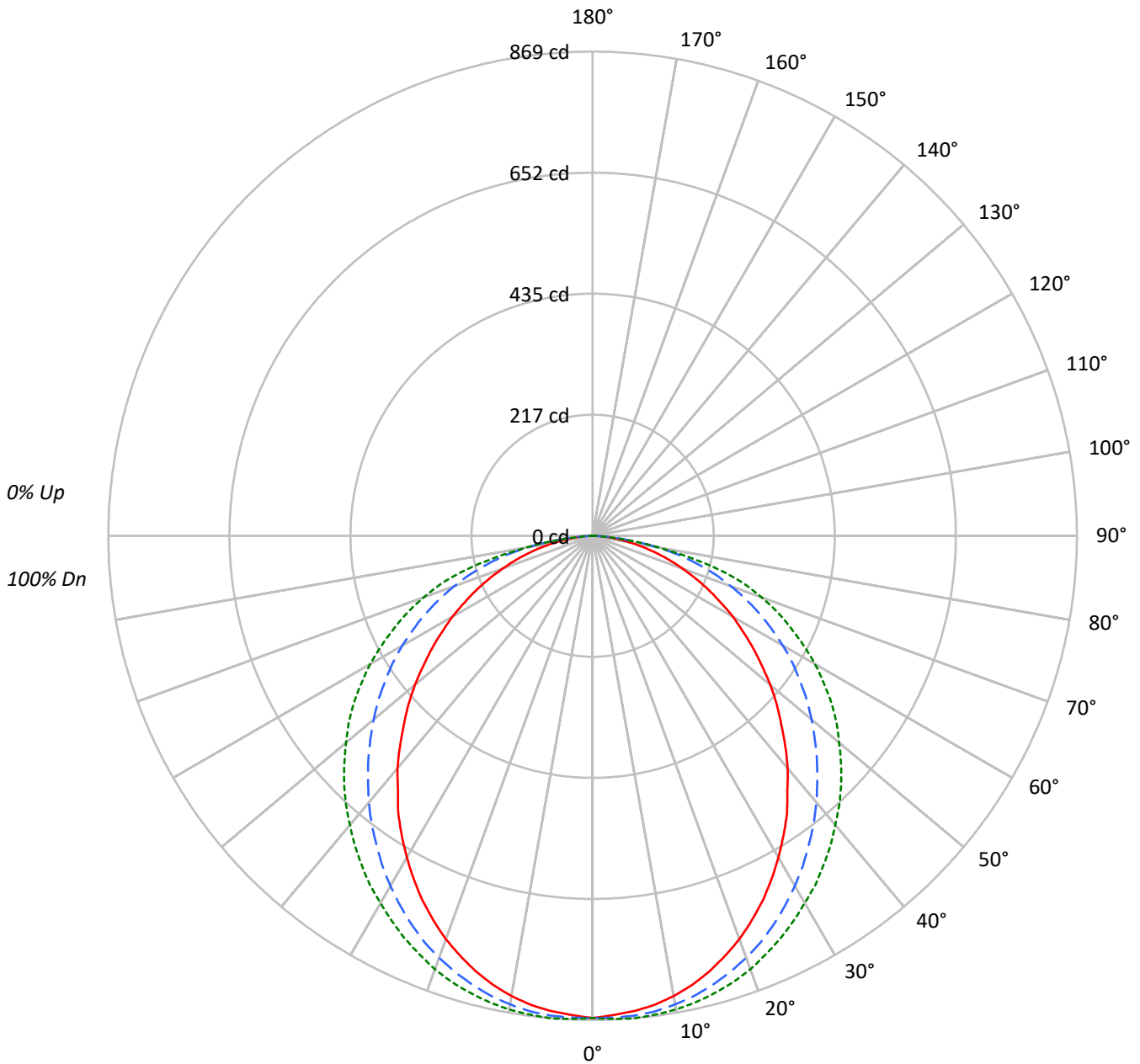
Lumens per Lamp: N/A  
Luminaire Lumens: 2478.0 lumens  
Efficiency: N/A  
Efficacy: 123.9 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.31 / 1.37  
Luminous Opening: Rectangular (W 1.92' x L: 1.98' x H: 0')  
CIE Type: Direct

Input Watts (W): 20  
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									
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	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°	2456	2456	2456
5°	2439	2462	2476
10°	2416	2460	2487
15°	2377	2449	2495
20°	2326	2433	2500
25°	2261	2408	2497
30°	2185	2378	2493
35°	2106	2343	2502
40°	2017	2314	2510
45°	1921	2284	2530
50°	1838	2264	2549
55°	1739	2245	2589
60°	1649	2237	2617
65°	1540	2219	2637
70°	1414	2185	2673
75°	1277	2127	2577
80°	1095	1884	1941
85°	879	1110	879



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	82.1	3.3
10°-20°	234.6	9.5
20°-30°	352.4	14.2
30°-40°	420.3	17.0
40°-50°	434.5	17.5
50°-60°	399.5	16.1
60°-70°	318.1	12.8
70°-80°	194.3	7.8
80°-90°	42.2	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°	669.1	27.0
0°-40°	1089.4	44.0
0°-60°	1923.4	77.6
0°-90°	2478.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2478.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	866	866	866	866	866	
5°	856	859	864	868	869	81
15°	809	819	834	846	849	228
25°	722	740	769	790	797	332
35°	608	634	676	712	722	379
45°	479	513	569	615	630	370
55°	352	390	454	506	523	315
65°	229	268	330	376	393	227
75°	116	151	194	228	235	124
85°	27	33	34	29	27	31
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	865.6	865.6	865.6	865.6	865.6
2.5°	860.9	862.0	865.6	868.0	868.0
5°	856.2	858.6	864.4	868.0	869.2
7.5°	849.2	852.7	860.9	865.6	866.9
10°	838.6	843.4	853.9	860.9	863.2
12.5°	825.7	832.7	845.6	855.1	857.4
15°	809.3	818.6	833.8	845.6	849.2
17.5°	790.4	802.1	821.0	835.1	839.8
20°	770.3	782.1	805.7	822.1	827.9
22.5°	746.8	762.1	789.2	808.1	812.7
25°	722.2	739.8	769.2	790.4	797.4
27.5°	695.0	716.3	748.0	774.0	779.9
30°	666.8	689.2	725.7	753.9	761.0
32.5°	637.4	663.4	702.1	733.9	743.4
35°	608.0	633.9	676.3	711.7	722.2
37.5°	573.9	604.5	651.6	688.1	700.9
40°	544.6	573.9	624.6	664.6	677.5
42.5°	511.6	543.4	596.4	639.8	655.1
45°	478.7	512.8	569.2	615.2	630.5
47.5°	448.0	482.1	541.0	589.3	604.5
50°	416.4	451.6	512.8	562.2	577.5
52.5°	382.3	421.0	484.5	533.9	551.6
55°	351.6	390.4	453.9	505.7	523.4
57.5°	319.8	359.9	425.8	475.2	491.7
60°	290.5	329.3	394.1	442.2	461.1
62.5°	258.7	298.7	362.2	409.3	427.0
65°	229.3	268.2	330.5	376.4	392.8
67.5°	199.9	238.9	297.5	341.1	359.9
70°	170.4	209.4	263.4	305.8	322.2
72.5°	144.7	178.8	230.5	269.4	284.7
75°	116.5	150.6	194.0	228.1	235.1
77.5°	90.5	121.2	157.6	172.8	175.4
80°	67.0	90.5	115.3	118.8	118.8
82.5°	44.6	62.3	71.8	72.8	71.8
85°	27.0	32.9	34.1	29.4	27.0
87.5°	9.3	9.3	5.9	3.5	1.2
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)