

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: P881166

Luminaire Tested: **24CZ2-30VHE-UNV-B50**

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: P881166  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P473819)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 10/2/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-30VHE-UNV-B50  
Description: 2X4 3000 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 5000K CCT AND RIBBED LENS

Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

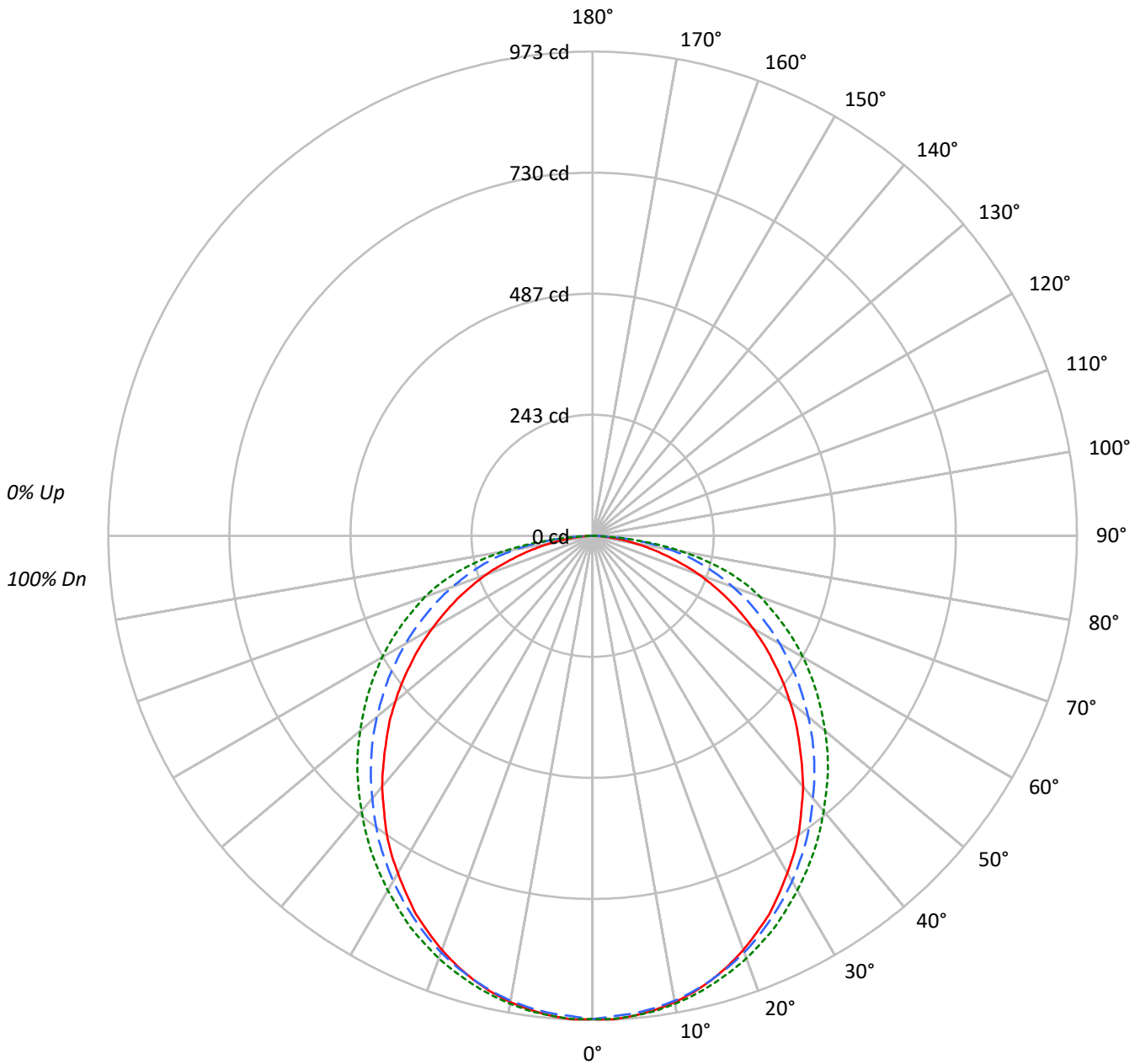
Lumens per Lamp: N/A  
Luminaire Lumens: 2811.0 lumens  
Efficiency: N/A  
Efficacy: 122.2 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.36  
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')  
CIE Type: Direct

Input Watts (W): 23  
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	108	103	99	95	105	101	97	93	97	93	90	93	90	87	89	87	85	83																			
2	98	89	82	76	95	88	81	75	84	78	74	81	76	72	78	74	70	68																			
3	89	78	70	63	87	77	69	63	74	67	61	71	65	60	68	63	59	57																			
4	82	69	60	53	79	68	59	53	65	58	52	63	57	51	61	55	51	48																			
5	75	62	53	46	73	61	52	46	58	51	45	56	50	44	55	49	44	42																			
6	69	56	46	40	67	55	46	40	53	45	39	51	44	39	49	43	39	37																			
7	64	50	41	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32																			
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29																			
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26																			
10	52	39	31	26	51	38	31	26	37	30	25	36	30	25	36	30	25	23																			

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

	0°	45°	90°
0°	1371	1371	1371
5°	1372	1365	1372
10°	1364	1360	1369
15°	1350	1350	1363
20°	1330	1338	1357
25°	1307	1322	1351
30°	1275	1306	1341
35°	1246	1289	1336
40°	1212	1268	1330
45°	1171	1255	1334
50°	1136	1241	1338
55°	1094	1233	1353
60°	1049	1227	1378
65°	999	1223	1414
70°	941	1235	1479
75°	827	1260	1538
80°	691	1270	1483
85°	494	1088	1103



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	91.8	3.3
10°-20°	261.6	9.3
20°-30°	392.4	14.0
30°-40°	468.5	16.7
40°-50°	485.2	17.3
50°-60°	446.7	15.9
60°-70°	360.4	12.8
70°-80°	235.4	8.4
80°-90°	69.0	2.5
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°	745.8	26.5
0°-40°	1214.2	43.2
0°-60°	2146.2	76.3
0°-90°	2811.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2811.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	971	971	971	971	971	
5°	968	967	963	969	968	92
15°	924	924	924	933	933	260
25°	839	841	849	864	867	386
35°	723	730	748	769	775	452
45°	587	601	629	657	668	454
55°	445	464	501	538	550	398
65°	299	320	366	408	423	296
75°	152	180	231	271	282	162
85°	30	53	67	71	68	38
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	971.4	971.4	971.4	971.4	971.4
2.5°	972.7	971.4	966.4	972.3	971.8
5°	968.2	967.3	963.2	968.6	968.2
7.5°	960.9	960.5	957.3	963.2	963.2
10°	951.9	951.0	948.7	955.5	955.0
12.5°	939.2	938.7	937.4	945.5	945.1
15°	924.1	924.1	923.7	932.8	932.8
17.5°	906.0	906.4	908.2	918.7	919.1
20°	885.6	887.4	891.0	902.8	903.7
22.5°	862.4	866.0	871.0	884.2	885.6
25°	839.2	841.0	848.8	864.2	867.3
27.5°	811.0	815.7	825.6	841.5	844.7
30°	782.5	788.8	801.5	817.9	822.9
32.5°	754.3	759.8	774.8	793.4	799.2
35°	723.4	729.8	748.4	768.9	775.2
37.5°	689.3	699.3	718.9	742.5	749.3
40°	658.1	667.1	688.4	714.8	722.1
42.5°	622.1	633.5	659.4	686.2	695.2
45°	586.7	601.3	629.0	657.2	668.5
47.5°	553.6	565.4	598.1	629.9	639.8
50°	517.2	530.8	565.4	599.0	609.5
52.5°	481.4	497.7	532.6	568.1	579.4
55°	444.6	463.6	500.9	537.7	550.0
57.5°	409.1	428.3	466.8	505.9	518.6
60°	371.5	391.9	434.6	472.3	488.2
62.5°	335.2	355.6	400.5	441.4	456.4
65°	299.2	319.7	366.1	407.8	423.3
67.5°	262.1	284.3	333.8	374.2	389.2
70°	228.0	249.3	299.2	342.4	358.3
72.5°	188.9	214.4	265.2	307.9	322.9
75°	151.7	180.3	231.1	271.1	282.0
77.5°	117.2	145.8	196.6	226.6	233.4
80°	85.0	114.0	156.2	177.1	182.5
82.5°	55.0	85.0	113.1	127.1	128.9
85°	30.5	52.7	67.2	71.3	68.1
87.5°	10.9	19.9	19.5	15.9	12.7
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)