

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: P881158

Luminaire Tested: **24CZ2-30VHE-S-UNV-B35**

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: P881158  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P473969)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 10/2/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-30VHE-S-UNV-B35  
Description: 2X4 3000 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 3500K CCT AND SMOOTH LENS

Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

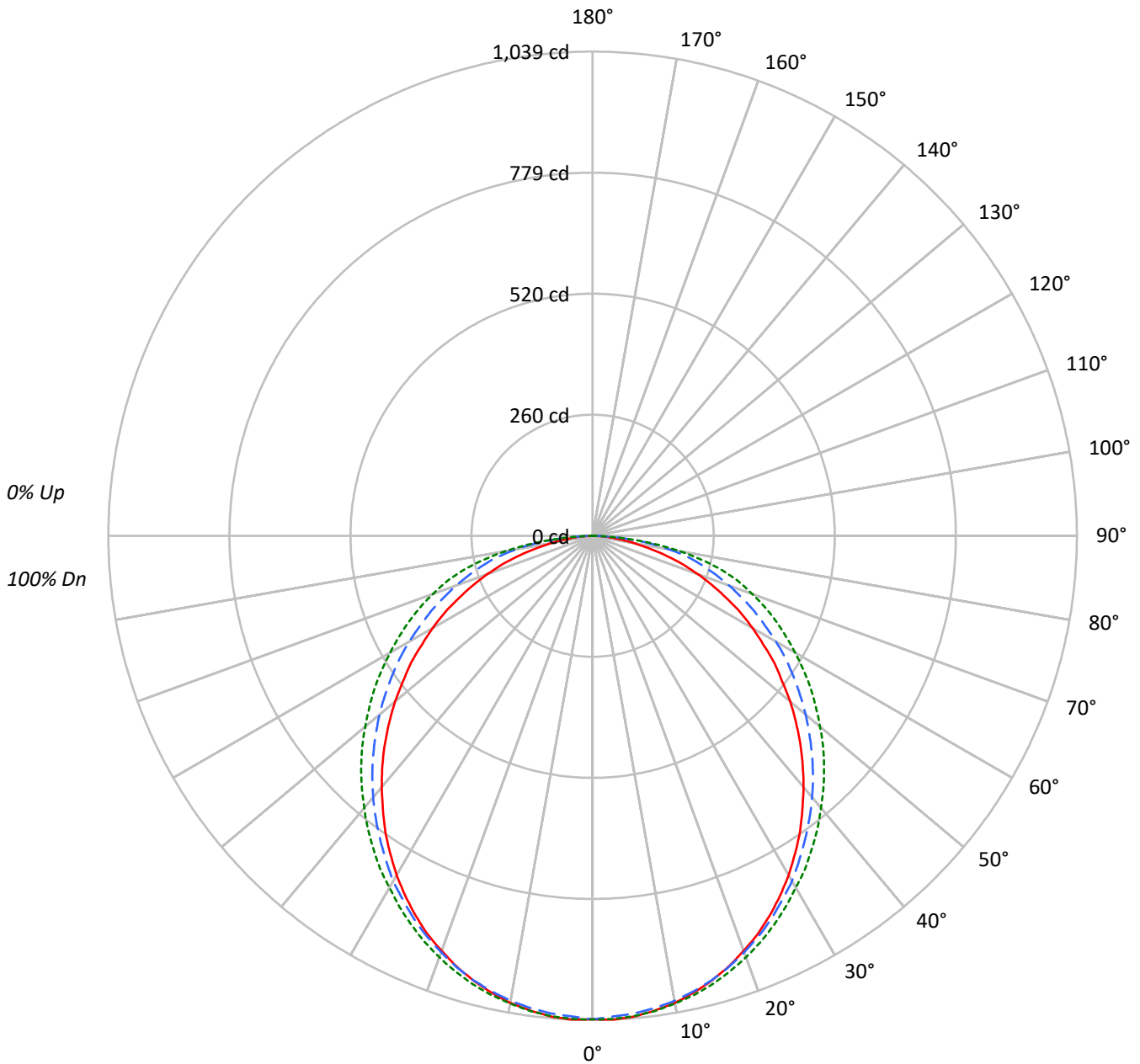
Lumens per Lamp: N/A  
Luminaire Lumens: 2973.0 lumens  
Efficiency: N/A  
Efficacy: 129.3 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.25 / 1.35  
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')  
CIE Type: Direct

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

TEST NUMBER: P881158

CATALOG NUMBER: 24CZ2-30VHE-S-UNV-B35

### Luminous Intensity Polar Plot





TEST NUMBER: P881158

CATALOG NUMBER: 24CZ2-30VHE-S-UNV-B35

**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	90	83	77	95	88	81	76	84	79	74	81	76	72	78	74	71	68																			
3	89	78	70	63	87	77	69	63	74	67	62	71	65	61	68	64	59	57																			
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	55	51	49																			
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42																			
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37																			
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32																			
8	60	46	38	32	58	45	37	31	44	37	31	43	36	31	42	35	31	29																			
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26																			
10	52	39	31	26	51	39	31	26	38	30	26	37	30	25	36	30	25	24																			

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

	0°	45°	90°
0°	1465	1465	1465
5°	1467	1458	1465
10°	1458	1452	1460
15°	1443	1443	1455
20°	1424	1428	1446
25°	1400	1412	1434
30°	1370	1394	1420
35°	1336	1370	1413
40°	1296	1350	1404
45°	1257	1328	1402
50°	1215	1310	1398
55°	1172	1294	1406
60°	1118	1282	1416
65°	1058	1277	1450
70°	987	1284	1501
75°	879	1321	1582
80°	718	1349	1544
85°	507	1179	1202



TEST NUMBER: P881158

CATALOG NUMBER: 24CZ2-30VHE-S-UNV-B35

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	98.1	3.3
10°-20°	279.4	9.4
20°-30°	418.8	14.1
30°-40°	498.9	16.8
40°-50°	514.4	17.3
50°-60°	469.4	15.8
60°-70°	375.3	12.6
70°-80°	245.2	8.2
80°-90°	73.6	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°	796.4	26.8
0°-40°	1295.2	43.6
0°-60°	2279.0	76.7
0°-90°	2973.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2973.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1038	1038	1038	1038	1038	
5°	1035	1033	1029	1035	1034	98
15°	988	988	987	996	996	278
25°	899	900	907	920	921	414
35°	776	781	795	815	820	484
45°	630	641	666	693	702	486
55°	476	490	526	561	571	424
65°	317	338	382	420	434	314
75°	161	188	242	281	290	171
85°	31	56	73	74	74	40
90°	0	0	0	0	0	



TEST NUMBER: P881158

CATALOG NUMBER: 24CZ2-30VHE-S-UNV-B35

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1037.7	1037.7	1037.7	1037.7	1037.7
2.5°	1039.2	1037.7	1032.3	1038.7	1037.7
5°	1035.3	1033.3	1028.9	1035.3	1034.3
7.5°	1027.4	1026.4	1022.1	1029.4	1028.4
10°	1017.7	1016.7	1013.3	1020.6	1019.1
12.5°	1004.0	1003.6	1001.1	1009.9	1008.9
15°	987.9	988.4	987.4	995.8	995.8
17.5°	969.4	968.9	970.8	981.0	980.1
20°	947.8	948.3	950.7	962.5	962.5
22.5°	925.4	924.9	930.3	942.0	942.9
25°	899.0	900.5	906.8	920.1	921.0
27.5°	870.7	873.2	881.0	896.1	897.5
30°	840.9	843.9	855.6	869.7	871.6
32.5°	808.2	814.5	825.3	843.4	848.2
35°	775.5	780.8	795.0	815.0	819.9
37.5°	739.3	748.1	764.3	786.2	792.6
40°	703.7	712.5	732.5	755.5	762.3
42.5°	667.5	676.9	699.8	725.7	733.0
45°	630.0	641.2	665.6	693.4	702.2
47.5°	591.4	604.6	631.0	661.2	671.0
50°	553.3	566.5	596.8	628.0	636.8
52.5°	512.3	528.9	561.1	594.8	603.6
55°	476.2	489.8	525.9	560.6	571.3
57.5°	433.7	452.2	490.8	525.9	536.2
60°	396.1	413.1	454.1	489.8	501.5
62.5°	358.0	375.5	416.5	457.1	467.9
65°	316.9	338.4	382.3	419.9	434.2
67.5°	277.9	300.3	345.3	385.2	400.0
70°	239.3	262.2	311.1	352.1	363.8
72.5°	201.2	225.2	275.9	316.0	329.6
75°	161.2	188.0	242.2	281.3	290.1
77.5°	123.5	153.4	208.0	234.4	240.8
80°	88.4	121.1	166.0	185.1	190.0
82.5°	58.1	89.8	124.0	134.3	132.8
85°	31.3	56.1	72.8	74.2	74.2
87.5°	12.2	22.5	23.0	17.5	16.6
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)