

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: P881160

Luminaire Tested: **24CZ2-30VHE-S-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: P881160
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-B50
Description: 2X4 3000 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 5000K CCT AND SMOOTH LENS

Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

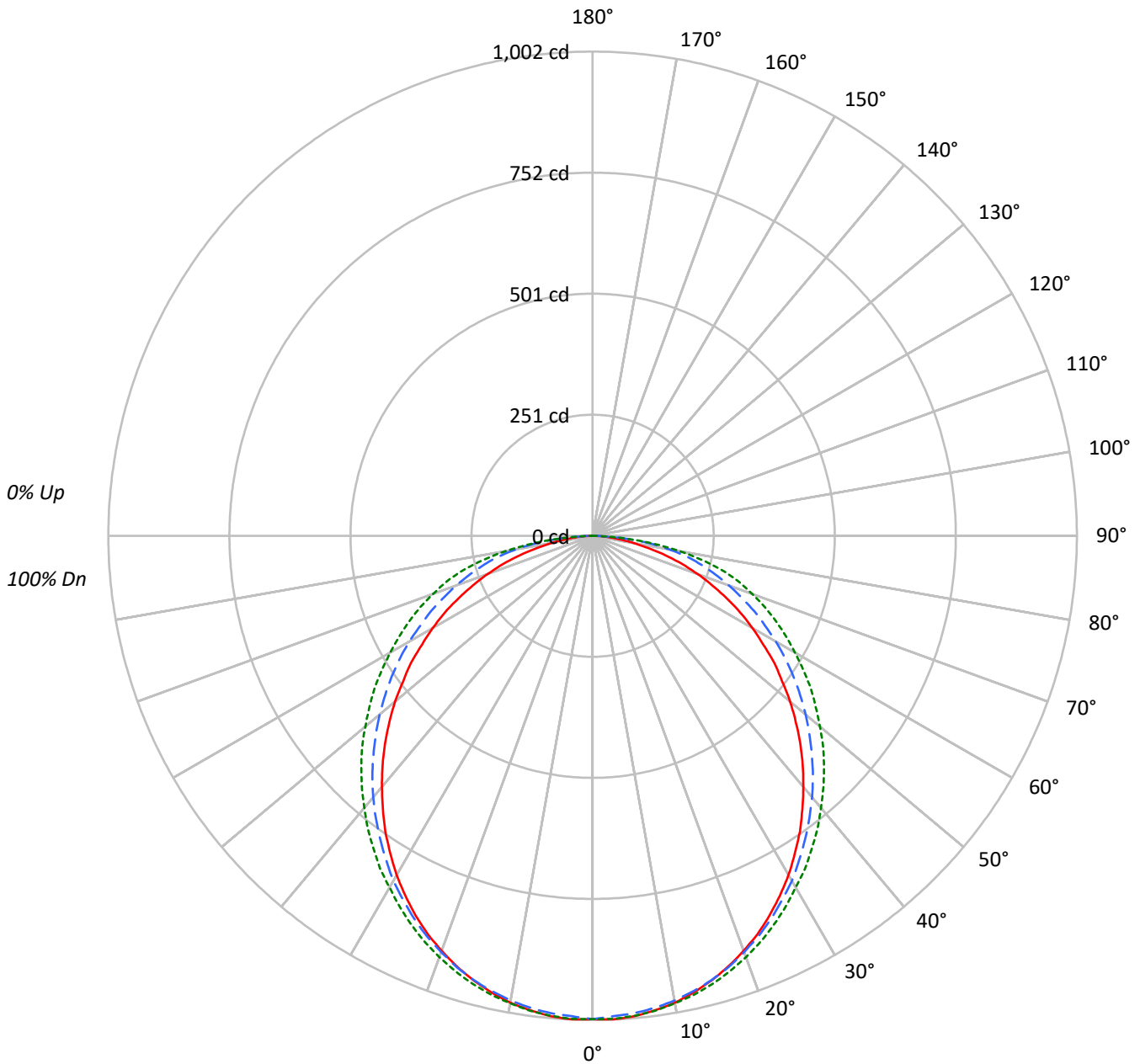
Lumens per Lamp: N/A
Luminaire Lumens: 2866.0 lumens
Efficiency: N/A
Efficacy: 124.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.25 / 1.35
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')
CIE Type: Direct

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: P881160

CATALOG NUMBER: 24CZ2-30VHE-S-UNV-B50

Luminous Intensity Polar Plot





TEST NUMBER: P881160

CATALOG NUMBER: 24CZ2-30VHE-S-UNV-B50

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	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°	1412	1412	1412
5°	1414	1405	1413
10°	1406	1400	1408
15°	1391	1391	1403
20°	1372	1377	1394
25°	1350	1361	1383
30°	1321	1344	1369
35°	1288	1320	1362
40°	1250	1301	1354
45°	1212	1281	1351
50°	1171	1263	1348
55°	1129	1248	1355
60°	1078	1236	1364
65°	1020	1231	1398
70°	952	1238	1447
75°	847	1273	1525
80°	692	1300	1489
85°	489	1137	1159



TEST NUMBER: P881160

CATALOG NUMBER: 24CZ2-30VHE-S-UNV-B50

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.6	3.3
10°-20°	269.4	9.4
20°-30°	403.8	14.1
30°-40°	480.9	16.8
40°-50°	495.9	17.3
50°-60°	452.5	15.8
60°-70°	361.8	12.6
70°-80°	236.3	8.2
80°-90°	71.0	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°	767.7	26.8
0°-40°	1248.6	43.6
0°-60°	2196.9	76.7
0°-90°	2866.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2866.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1000	1000	1000	1000	1000	
5°	998	996	992	998	997	95
15°	952	953	952	960	960	268
25°	867	868	874	887	888	399
35°	748	753	766	786	790	467
45°	607	618	642	668	677	468
55°	459	472	507	540	551	409
65°	306	326	369	405	418	303
75°	155	181	234	271	280	165
85°	30	54	70	72	72	38
90°	0	0	0	0	0	



TEST NUMBER: P881160

CATALOG NUMBER: 24CZ2-30VHE-S-UNV-B50

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1000.4	1000.4	1000.4	1000.4	1000.4
2.5°	1001.8	1000.4	995.1	1001.3	1000.4
5°	998.1	996.1	991.9	998.1	997.1
7.5°	990.4	989.5	985.3	992.3	991.4
10°	981.1	980.1	976.8	983.9	982.5
12.5°	967.9	967.4	965.1	973.5	972.6
15°	952.3	952.8	951.8	959.9	959.9
17.5°	934.5	934.0	935.9	945.7	944.8
20°	913.7	914.2	916.5	927.9	927.9
22.5°	892.1	891.6	896.8	908.1	909.0
25°	866.7	868.1	874.2	886.9	887.9
27.5°	839.3	841.8	849.3	863.8	865.2
30°	810.7	813.5	824.8	838.4	840.3
32.5°	779.1	785.2	795.5	813.0	817.7
35°	747.6	752.7	766.4	785.7	790.4
37.5°	712.7	721.2	736.8	757.9	764.1
40°	678.3	686.9	706.1	728.3	734.9
42.5°	643.5	652.5	674.6	699.6	706.6
45°	607.3	618.1	641.6	668.5	676.9
47.5°	570.1	582.8	608.3	637.4	646.9
50°	533.4	546.1	575.3	605.3	613.9
52.5°	493.9	509.8	540.9	573.4	581.9
55°	459.0	472.2	507.0	540.4	550.8
57.5°	418.1	435.9	473.1	507.0	516.9
60°	381.8	398.2	437.8	472.2	483.4
62.5°	345.1	362.0	401.5	440.6	451.0
65°	305.5	326.2	368.6	404.8	418.5
67.5°	267.9	289.5	332.9	371.4	385.6
70°	230.7	252.8	299.9	339.4	350.7
72.5°	194.0	217.1	266.0	304.6	317.8
75°	155.4	181.3	233.5	271.2	279.6
77.5°	119.1	147.8	200.5	226.0	232.1
80°	85.2	116.7	160.0	178.5	183.2
82.5°	56.0	86.6	119.6	129.4	128.0
85°	30.2	54.1	70.2	71.6	71.6
87.5°	11.7	21.7	22.2	16.9	16.0
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)