

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: P881220

Luminaire Tested: **24CZ2-50VHE-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: P881220
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: 24CZ2-50VHE-S-UNV-B50
Description: 2X4 5000 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 5000K CCT AND SMOOTH LENS

Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

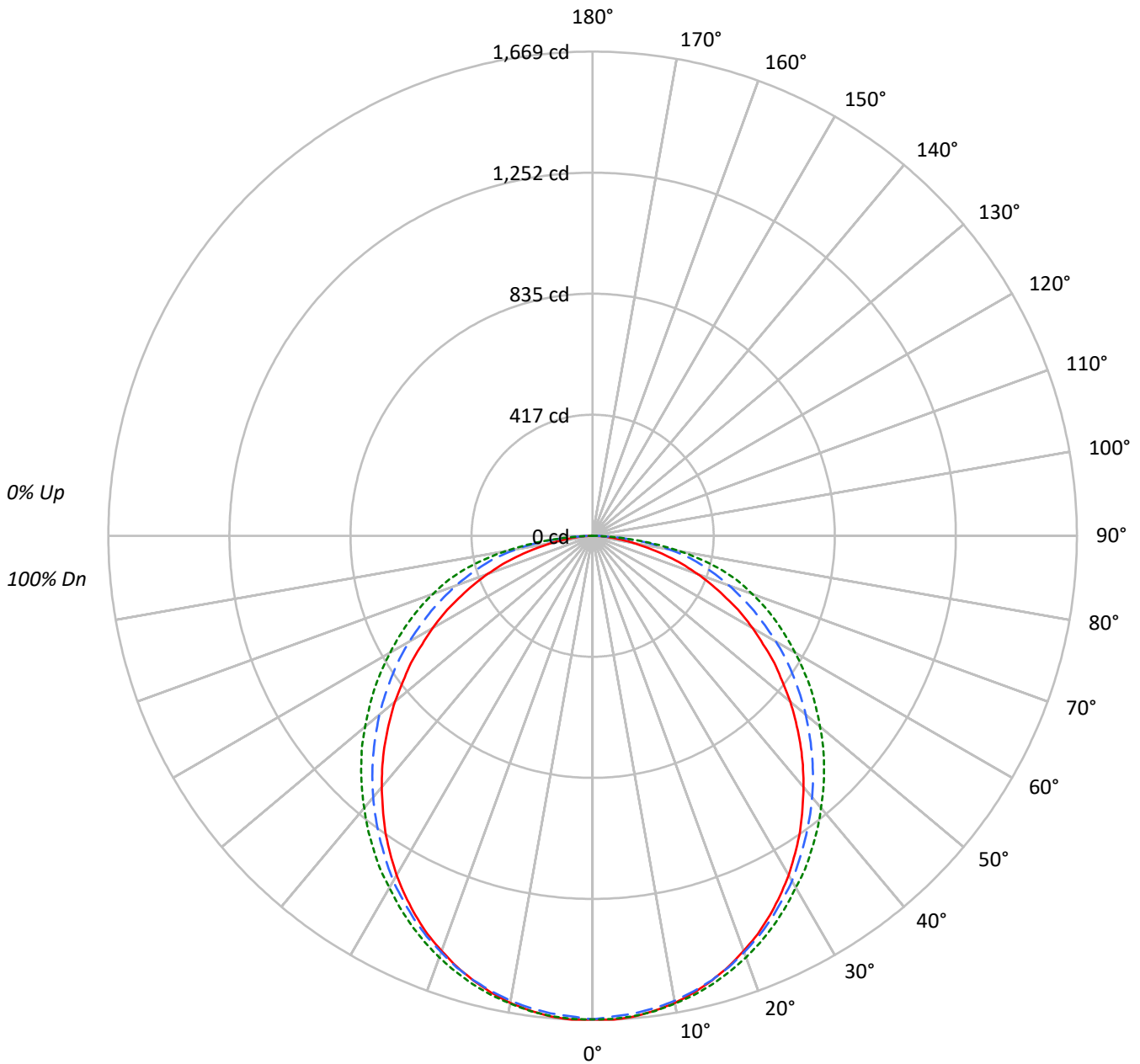
Lumens per Lamp: N/A
Luminaire Lumens: 4776.0 lumens
Efficiency: N/A
Efficacy: 125.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.25 / 1.35
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')
CIE Type: Direct

Input Watts (W): 38
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: P881220

CATALOG NUMBER: 24CZ2-50VHE-S-UNV-B50

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	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°	2353	2353	2353
5°	2356	2342	2354
10°	2343	2333	2346
15°	2319	2318	2337
20°	2287	2294	2322
25°	2249	2268	2304
30°	2202	2240	2282
35°	2146	2201	2269
40°	2083	2168	2256
45°	2020	2134	2251
50°	1952	2105	2246
55°	1882	2079	2258
60°	1796	2059	2274
65°	1700	2051	2329
70°	1586	2062	2412
75°	1412	2122	2541
80°	1154	2168	2481
85°	813	1893	1932



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.6	3.3
10°-20°	448.9	9.4
20°-30°	672.8	14.1
30°-40°	801.4	16.8
40°-50°	826.3	17.3
50°-60°	754.0	15.8
60°-70°	602.9	12.6
70°-80°	393.9	8.2
80°-90°	118.3	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°	1279.3	26.8
0°-40°	2080.7	43.6
0°-60°	3661.0	76.7
0°-90°	4776.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4776.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1667	1667	1667	1667	1667	
5°	1663	1660	1653	1663	1662	158
15°	1587	1588	1586	1600	1600	447
25°	1444	1447	1457	1478	1480	665
35°	1246	1254	1277	1309	1317	778
45°	1012	1030	1069	1114	1128	780
55°	765	787	845	901	918	681
65°	509	544	614	675	698	505
75°	259	302	389	452	466	275
85°	50	90	117	119	119	64
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1667.1	1667.1	1667.1	1667.1	1667.1
2.5°	1669.4	1667.1	1658.3	1668.7	1667.1
5°	1663.2	1659.9	1652.9	1663.2	1661.6
7.5°	1650.5	1648.9	1641.9	1653.6	1652.1
10°	1634.9	1633.3	1627.8	1639.6	1637.2
12.5°	1612.9	1612.2	1608.2	1622.3	1620.8
15°	1587.0	1587.7	1586.2	1599.6	1599.6
17.5°	1557.2	1556.4	1559.6	1576.0	1574.4
20°	1522.6	1523.4	1527.3	1546.3	1546.3
22.5°	1486.6	1485.9	1494.5	1513.2	1514.8
25°	1444.2	1446.6	1456.7	1478.0	1479.6
27.5°	1398.7	1402.7	1415.3	1439.5	1441.9
30°	1350.9	1355.6	1374.4	1397.1	1400.2
32.5°	1298.3	1308.5	1325.7	1354.8	1362.7
35°	1245.7	1254.4	1277.2	1309.3	1317.1
37.5°	1187.7	1201.8	1227.7	1263.0	1273.3
40°	1130.4	1144.6	1176.7	1213.7	1224.6
42.5°	1072.3	1087.3	1124.1	1165.8	1177.5
45°	1012.1	1030.1	1069.2	1114.0	1128.0
47.5°	950.1	971.2	1013.6	1062.1	1078.0
50°	888.9	910.0	958.7	1008.8	1023.0
52.5°	823.0	849.6	901.4	955.6	969.6
55°	764.9	786.8	844.9	900.6	917.8
57.5°	696.7	726.4	788.4	844.9	861.3
60°	636.3	663.6	729.5	786.8	805.6
62.5°	575.1	603.2	669.1	734.2	751.6
65°	509.2	543.6	614.2	674.6	697.5
67.5°	446.4	482.4	554.7	618.9	642.5
70°	384.4	421.2	499.8	565.7	584.4
72.5°	323.2	361.7	443.3	507.6	529.5
75°	258.9	302.1	389.1	451.9	466.0
77.5°	198.5	246.4	334.2	376.6	386.8
80°	142.0	194.6	266.7	297.4	305.2
82.5°	93.3	144.3	199.3	215.7	213.3
85°	50.2	90.2	116.9	119.3	119.3
87.5°	19.6	36.2	36.9	28.2	26.6
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)