

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: P881253

Luminaire Tested: **24CZ2-60VHE-SQR-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: P881253  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P474669)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 10/2/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-60VHE-SQR-UNV-B50  
Description: 2X4 6000 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 5000K CCT AND SQR LENS

Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

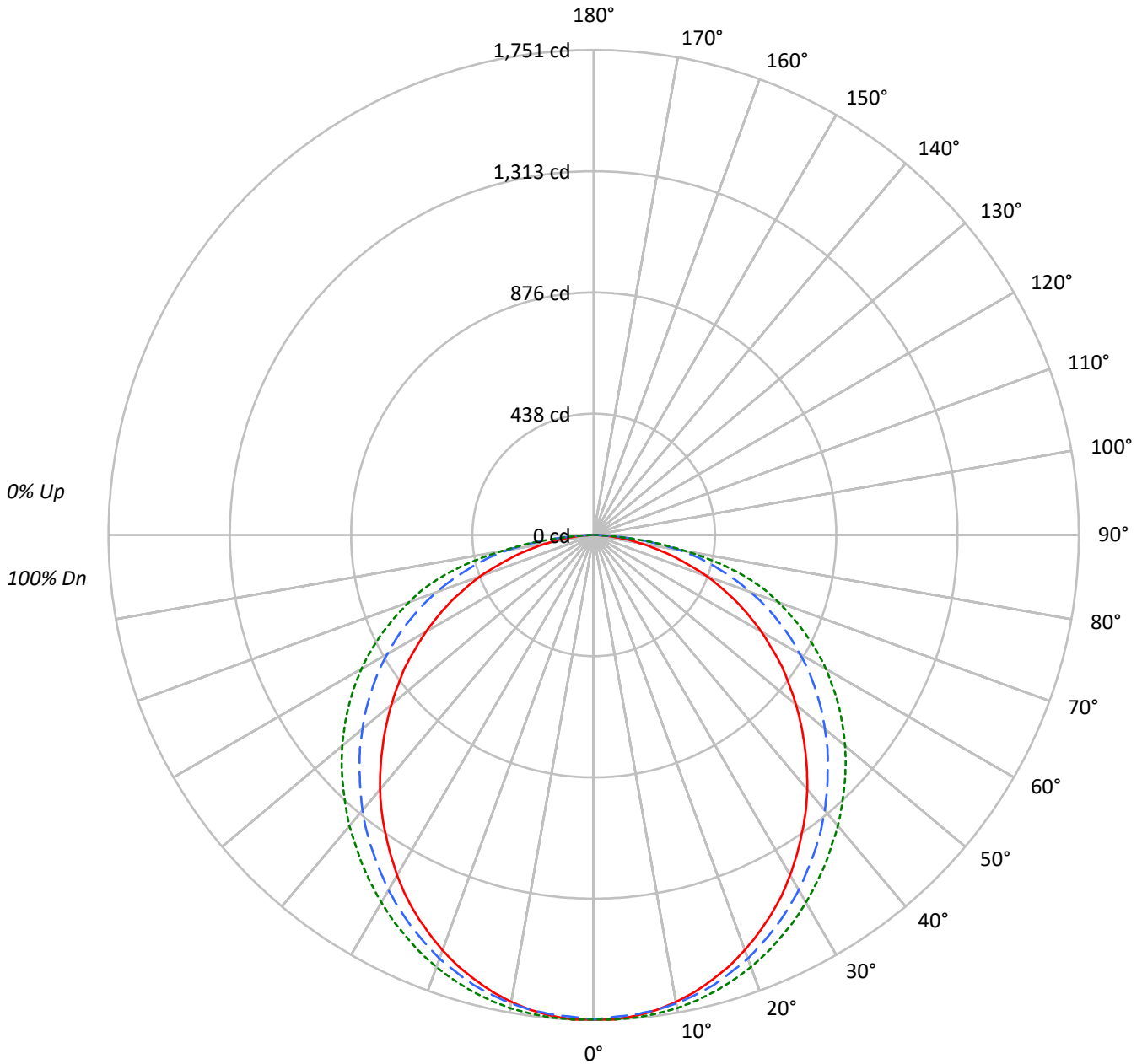
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5326.0 lumens  
Efficiency: N/A  
Efficacy: 113.3 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.3 / 1.39  
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')  
CIE Type: Direct

Input Watts (W): 47  
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	98	94	105	101	96	93	96	93	90	92	90	87	89	87	84	82																			
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68																			
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56																			
4	81	69	59	53	79	67	59	52	65	57	51	62	56	51	60	55	50	48																			
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41																			
6	69	55	46	39	67	54	45	39	52	44	39	50	43	38	49	43	38	36																			
7	64	50	41	34	62	49	40	34	47	40	34	46	39	34	44	38	33	31																			
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28																			
9	55	42	33	28	54	41	33	27	40	32	27	39	32	27	38	31	27	25																			
10	52	38	30	25	50	38	30	25	37	30	25	36	29	25	35	29	24	23																			

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

	0°	45°	90°
0°	2469	2469	2469
5°	2469	2462	2479
10°	2453	2462	2486
15°	2427	2457	2490
20°	2396	2445	2493
25°	2357	2428	2494
30°	2312	2413	2497
35°	2259	2398	2507
40°	2210	2391	2527
45°	2150	2385	2554
50°	2092	2391	2601
55°	2044	2408	2659
60°	1974	2426	2733
65°	1895	2455	2816
70°	1798	2489	2929
75°	1610	2524	3025
80°	1356	2532	2745
85°	1006	1914	1804



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	165.8	3.1
10°-20°	475.1	8.9
20°-30°	719.2	13.5
30°-40°	870.1	16.3
40°-50°	918.4	17.2
50°-60°	866.1	16.3
60°-70°	714.0	13.4
70°-80°	468.4	8.8
80°-90°	128.8	2.4
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°	1360.2	25.5
0°-40°	2230.2	41.9
0°-60°	4014.7	75.4
0°-90°	5326.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5326.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1750	1750	1750	1750	1750	
5°	1742	1742	1738	1750	1750	165
15°	1661	1670	1681	1701	1704	469
25°	1514	1532	1559	1591	1601	697
35°	1311	1345	1392	1440	1455	821
45°	1077	1126	1195	1258	1280	831
55°	830	889	978	1052	1081	740
65°	568	636	735	814	843	560
75°	295	371	463	536	555	312
85°	62	107	118	115	111	77
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1749.5	1749.5	1749.5	1749.5	1749.5
2.5°	1751.1	1749.5	1741.8	1751.9	1751.1
5°	1742.5	1742.5	1737.6	1749.5	1749.5
7.5°	1730.7	1731.5	1729.8	1743.4	1743.4
10°	1712.0	1715.4	1717.9	1733.3	1734.9
12.5°	1689.8	1695.9	1700.8	1719.6	1721.4
15°	1660.9	1670.3	1681.3	1700.8	1704.4
17.5°	1631.1	1642.3	1654.2	1679.7	1684.0
20°	1595.4	1608.2	1627.7	1653.3	1660.0
22.5°	1555.5	1573.2	1593.6	1624.4	1632.9
25°	1513.8	1532.4	1558.9	1591.2	1601.3
27.5°	1468.7	1490.7	1520.5	1558.0	1569.0
30°	1418.5	1443.9	1480.6	1520.5	1532.4
32.5°	1365.6	1395.4	1436.2	1480.6	1494.1
35°	1311.3	1345.2	1392.0	1439.8	1455.0
37.5°	1257.5	1291.6	1347.0	1397.2	1411.6
40°	1199.7	1237.1	1297.6	1351.2	1371.6
42.5°	1138.4	1182.8	1246.5	1306.2	1325.7
45°	1077.2	1125.7	1194.7	1258.4	1279.7
47.5°	1015.1	1068.7	1144.5	1209.1	1233.7
50°	953.0	1010.0	1089.1	1158.9	1184.4
52.5°	890.0	949.6	1035.5	1109.5	1132.6
55°	830.5	889.1	978.5	1051.7	1080.6
57.5°	761.5	827.9	922.3	996.5	1024.5
60°	699.4	764.2	859.5	937.7	968.3
62.5°	632.1	698.5	799.0	877.2	907.0
65°	567.5	635.7	735.2	813.5	843.1
67.5°	497.8	569.3	671.4	747.1	776.1
70°	435.7	502.9	603.2	680.8	709.7
72.5°	359.9	436.6	532.6	609.2	640.7
75°	295.3	370.9	462.8	536.1	554.8
77.5°	227.2	302.9	394.0	441.5	454.3
80°	166.8	238.2	311.5	337.0	337.7
82.5°	112.3	175.3	217.0	229.8	228.0
85°	62.1	107.2	118.2	114.8	111.4
87.5°	25.6	35.7	28.9	20.4	16.1
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)