

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: P881257

Luminaire Tested: **24CZ2-65VHE-HRP-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: P881257  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P474369)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 10/2/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-65VHE-HRP-UNV-B35  
Description: 2X4 6500 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 3500K CCT AND HRP LENS  
  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

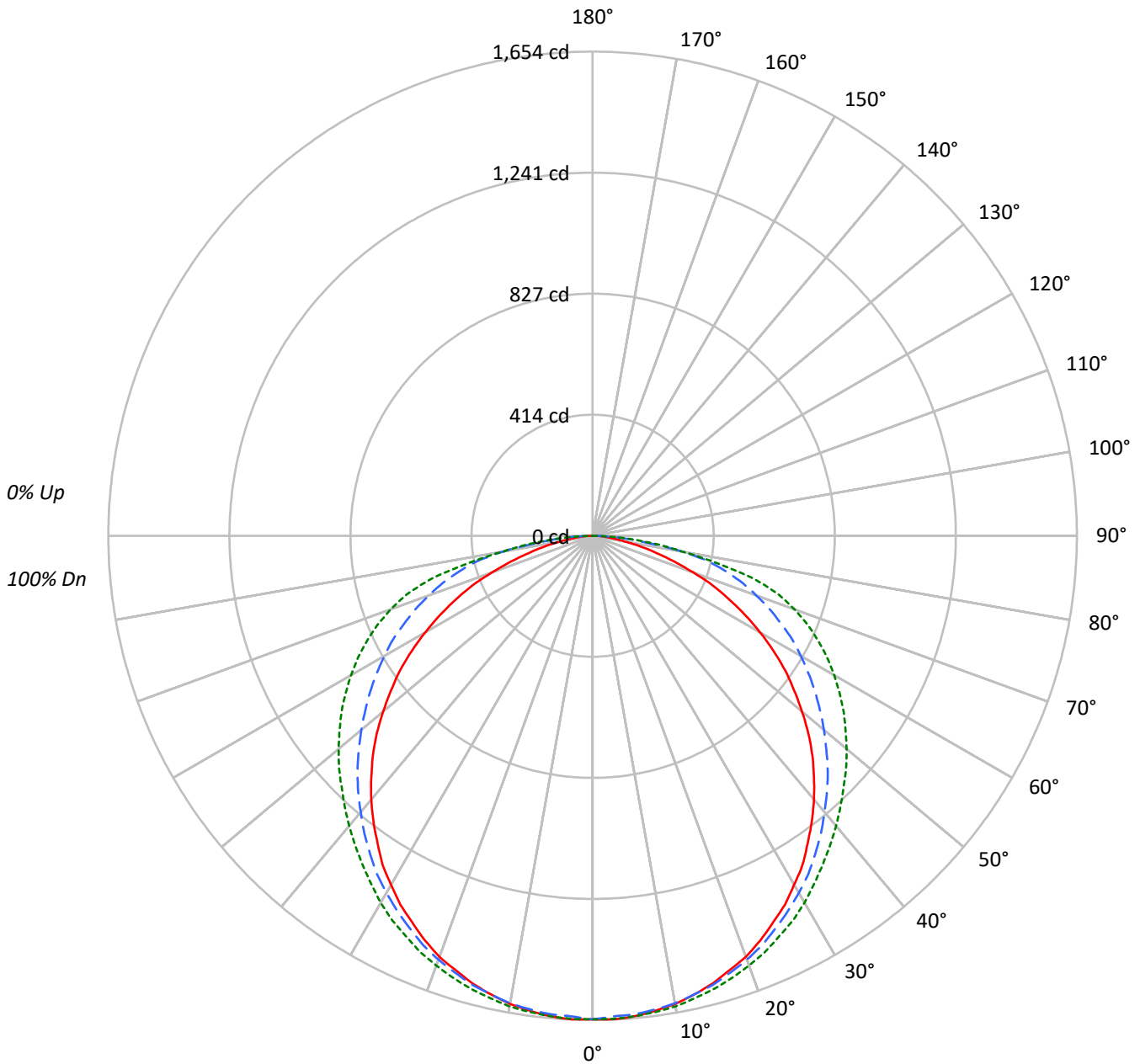
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5091.0 lumens  
Efficiency: N/A  
Efficacy: 99.8 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.3 / 1.4  
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')  
CIE Type: Direct

Input Watts (W): 51  
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: P881257  
CATALOG NUMBER: 24CZ2-65VHE-HRP-UNV-B35

### Luminous Intensity Polar Plot





TEST NUMBER: P881257

CATALOG NUMBER: 24CZ2-65VHE-HRP-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	98	94	105	101	96	93	96	93	90	92	90	87	89	86	84	82																			
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67																			
3	89	78	69	62	86	76	68	62	73	66	61	70	64	59	68	63	58	56																			
4	81	68	59	52	79	67	59	52	65	57	51	62	56	50	60	54	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	38	50	43	38	49	42	38	36																			
7	63	50	41	34	62	49	40	34	47	39	34	46	39	34	44	38	33	31																			
8	59	45	36	30	57	44	36	30	43	36	30	42	35	30	41	34	30	28																			
9	55	41	33	27	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	24	35	29	24	23																			

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

	0°	45°	90°
0°	2331	2331	2331
5°	2334	2325	2334
10°	2327	2324	2339
15°	2314	2320	2342
20°	2299	2314	2346
25°	2270	2303	2350
30°	2244	2296	2358
35°	2207	2284	2361
40°	2167	2270	2383
45°	2118	2267	2420
50°	2050	2265	2485
55°	1977	2281	2575
60°	1865	2316	2689
65°	1722	2370	2841
70°	1504	2453	3025
75°	1220	2580	3126
80°	901	2530	2530
85°	690	1864	2105



TEST NUMBER: P881257

CATALOG NUMBER: 24CZ2-65VHE-HRP-UNV-B35

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	156.5	3.1
10°-20°	449.3	8.8
20°-30°	684.1	13.4
30°-40°	830.6	16.3
40°-50°	877.5	17.2
50°-60°	828.1	16.3
60°-70°	688.5	13.5
70°-80°	453.0	8.9
80°-90°	123.5	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°	1289.9	25.3
0°-40°	2120.5	41.7
0°-60°	3826.0	75.2
0°-90°	5091.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5091.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1652	1652	1652	1652	1652	
5°	1648	1648	1641	1648	1648	156
15°	1584	1586	1588	1603	1603	447
25°	1458	1466	1479	1505	1509	672
35°	1281	1296	1326	1360	1370	802
45°	1061	1083	1136	1191	1213	817
55°	804	838	927	1015	1047	716
65°	516	576	710	814	851	510
75°	224	326	473	560	573	241
85°	43	94	115	128	130	52
90°	0	0	0	0	0	



TEST NUMBER: P881257

CATALOG NUMBER: 24CZ2-65VHE-HRP-UNV-B35

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1651.8	1651.8	1651.8	1651.8	1651.8
2.5°	1653.9	1651.8	1643.2	1651.8	1651.8
5°	1647.6	1647.6	1641.1	1647.6	1647.6
7.5°	1636.9	1636.9	1632.4	1641.1	1641.1
10°	1624.0	1624.0	1621.9	1632.4	1632.4
12.5°	1604.9	1606.8	1604.9	1617.5	1617.5
15°	1583.5	1585.6	1587.9	1602.8	1602.8
17.5°	1556.0	1560.2	1564.4	1581.4	1583.5
20°	1530.4	1532.2	1540.9	1560.2	1562.3
22.5°	1496.3	1502.6	1513.3	1532.2	1539.0
25°	1457.7	1466.3	1479.1	1504.7	1508.9
27.5°	1421.5	1428.0	1445.1	1472.8	1481.4
30°	1376.8	1387.5	1408.7	1436.5	1447.2
32.5°	1334.1	1344.9	1370.5	1400.1	1408.7
35°	1281.0	1295.9	1325.5	1359.8	1370.5
37.5°	1229.7	1244.7	1281.0	1319.2	1332.3
40°	1176.4	1193.4	1232.1	1276.6	1293.6
42.5°	1118.8	1142.4	1185.0	1233.9	1253.3
45°	1061.3	1082.7	1135.8	1191.3	1212.7
47.5°	999.7	1025.3	1082.7	1148.9	1174.5
50°	933.5	965.5	1031.6	1103.9	1131.9
52.5°	867.6	903.7	978.3	1059.2	1089.2
55°	803.5	837.5	927.0	1014.6	1046.6
57.5°	733.1	776.0	873.9	967.6	999.7
60°	660.7	707.7	820.5	918.4	952.7
62.5°	588.2	641.6	769.3	867.6	903.7
65°	515.7	575.6	709.8	814.2	850.6
67.5°	445.3	511.5	654.4	758.8	794.9
70°	364.5	447.7	594.5	697.0	733.1
72.5°	289.9	385.9	536.9	633.1	665.1
75°	223.7	326.2	473.1	560.5	573.3
77.5°	164.1	266.4	407.1	436.7	439.0
80°	110.9	213.0	311.3	306.9	311.3
82.5°	72.5	159.9	196.0	219.5	221.6
85°	42.6	93.9	115.1	127.9	130.0
87.5°	21.2	31.9	40.5	42.6	46.8
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)