

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: P881264

Luminaire Tested: **24CZ2-65VHE-S-UNV-B40**

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: P881264  
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: 24CZ2-65VHE-S-UNV-B40  
Description: 2X4 6500 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 4000K CCT AND SMOOTH LENS

Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

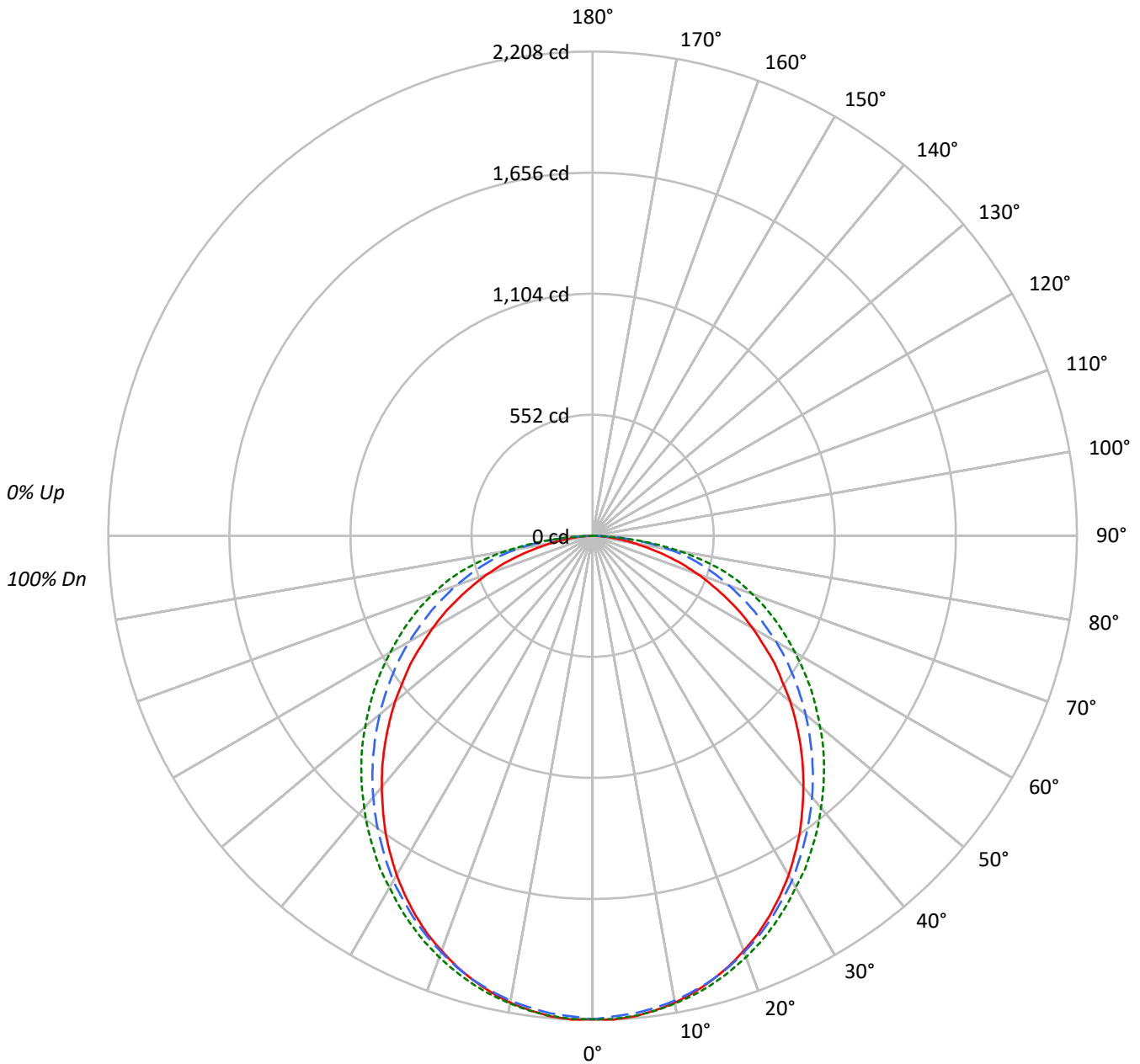
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6317.0 lumens  
Efficiency: N/A  
Efficacy: 123.9 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): 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: P881264  
CATALOG NUMBER: 24CZ2-65VHE-S-UNV-B40

### 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	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°	3112	3112	3112
5°	3117	3097	3114
10°	3099	3085	3103
15°	3067	3065	3091
20°	3025	3034	3072
25°	2975	3000	3048
30°	2912	2963	3018
35°	2839	2911	3002
40°	2755	2867	2984
45°	2672	2823	2978
50°	2581	2784	2971
55°	2489	2750	2987
60°	2375	2724	3008
65°	2249	2713	3081
70°	2098	2728	3190
75°	1867	2807	3361
80°	1526	2867	3281
85°	1077	2503	2555



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	208.5	3.3
10°-20°	593.7	9.4
20°-30°	890.0	14.1
30°-40°	1059.9	16.8
40°-50°	1092.9	17.3
50°-60°	997.3	15.8
60°-70°	797.4	12.6
70°-80°	520.9	8.2
80°-90°	156.4	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°	1692.1	26.8
0°-40°	2752.1	43.6
0°-60°	4842.3	76.7
0°-90°	6317.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6317.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2205	2205	2205	2205	2205	
5°	2200	2196	2186	2200	2198	209
15°	2099	2100	2098	2116	2116	592
25°	1910	1913	1927	1955	1957	879
35°	1648	1659	1689	1732	1742	1029
45°	1339	1362	1414	1473	1492	1032
55°	1012	1041	1118	1191	1214	901
65°	673	719	812	892	922	668
75°	342	400	515	598	616	364
85°	66	119	155	158	158	84
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2205.0	2205.0	2205.0	2205.0	2205.0
2.5°	2208.1	2205.0	2193.4	2207.1	2205.0
5°	2199.8	2195.5	2186.2	2199.8	2197.8
7.5°	2183.1	2181.0	2171.7	2187.2	2185.1
10°	2162.4	2160.3	2153.0	2168.6	2165.5
12.5°	2133.4	2132.3	2127.2	2145.8	2143.7
15°	2099.0	2100.0	2098.0	2115.8	2115.8
17.5°	2059.7	2058.6	2062.8	2084.5	2082.4
20°	2013.9	2015.0	2020.1	2045.2	2045.2
22.5°	1966.3	1965.3	1976.7	2001.5	2003.6
25°	1910.2	1913.3	1926.8	1954.9	1957.0
27.5°	1850.0	1855.3	1871.9	1904.0	1907.1
30°	1786.8	1793.0	1817.9	1847.9	1852.0
32.5°	1717.3	1730.7	1753.5	1792.0	1802.3
35°	1647.7	1659.1	1689.3	1731.7	1742.1
37.5°	1570.9	1589.5	1623.9	1670.5	1684.1
40°	1495.1	1514.0	1556.4	1605.3	1619.7
42.5°	1418.3	1438.2	1486.8	1541.9	1557.4
45°	1338.6	1362.4	1414.2	1473.4	1492.0
47.5°	1256.6	1284.6	1340.7	1404.9	1425.8
50°	1175.7	1203.6	1268.0	1334.3	1353.1
52.5°	1088.5	1123.7	1192.2	1263.9	1282.5
55°	1011.7	1040.7	1117.5	1191.2	1214.0
57.5°	921.5	960.8	1042.8	1117.5	1139.2
60°	841.5	877.8	964.9	1040.7	1065.5
62.5°	760.6	797.9	885.0	971.1	994.1
65°	673.4	719.0	812.4	892.3	922.5
67.5°	590.4	638.0	733.7	818.6	849.8
70°	508.4	557.1	661.0	748.2	773.0
72.5°	427.5	478.4	586.3	671.4	700.4
75°	342.4	399.6	514.7	597.7	616.3
77.5°	262.5	325.9	442.0	498.1	511.6
80°	187.8	257.3	352.8	393.3	403.7
82.5°	123.4	190.9	263.5	285.3	282.2
85°	66.5	119.2	154.6	157.8	157.8
87.5°	25.9	47.8	48.9	37.3	35.2
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)