

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: P881281

Luminaire Tested: **24CZ2-70VHE-SQR-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: P881281  
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: 24CZ2-70VHE-SQR-UNV-B35  
Description: 2X4 7000 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 3500K CCT AND SQR LENS

Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

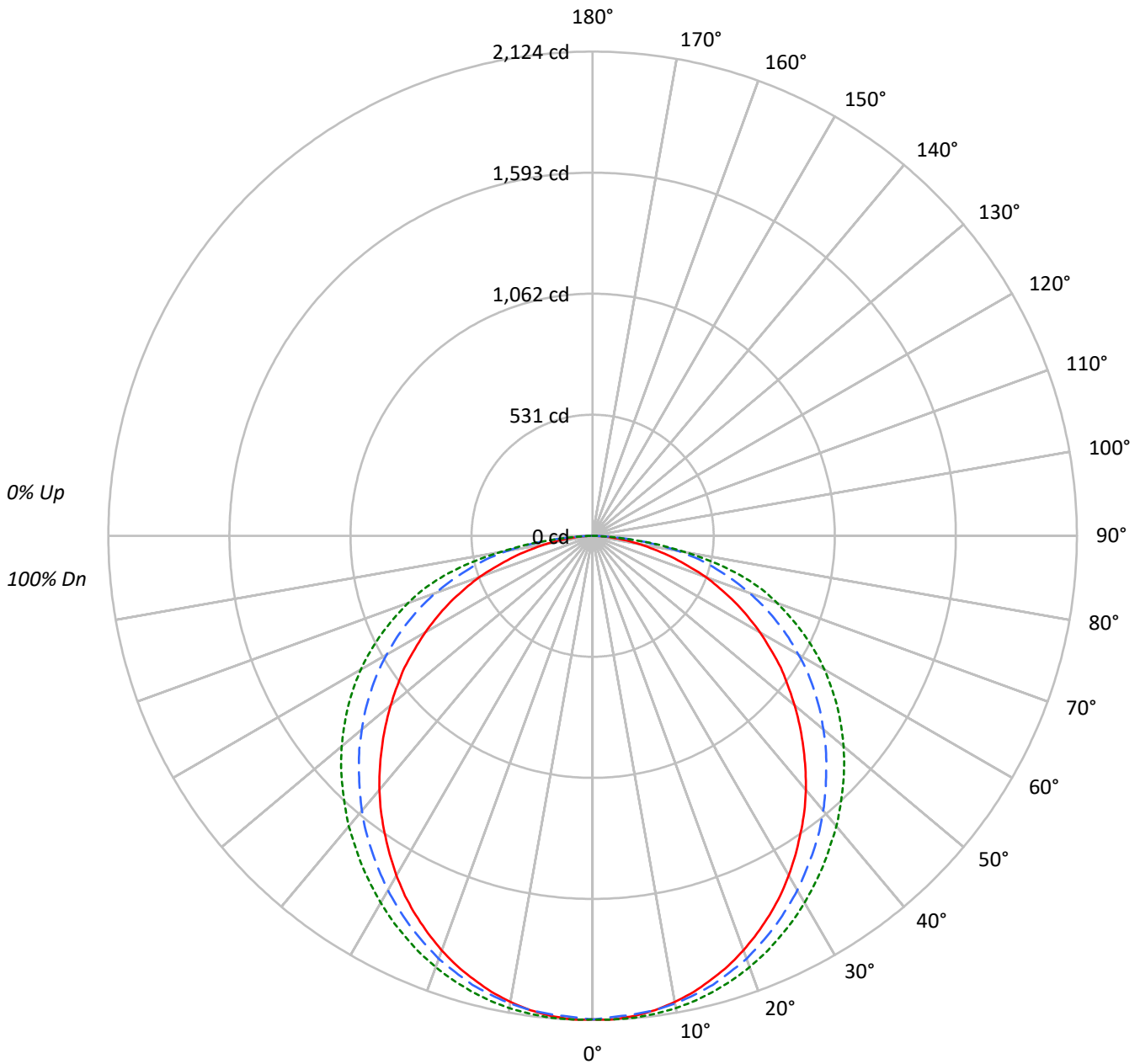
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6460.0 lumens  
Efficiency: N/A  
Efficacy: 115.4 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): 56  
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: P881281  
CATALOG NUMBER: 24CZ2-70VHE-SQR-UNV-B35

### Luminous Intensity Polar Plot





TEST NUMBER: P881281

CATALOG NUMBER: 24CZ2-70VHE-SQR-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	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°	2995	2995	2995
5°	2994	2986	3006
10°	2976	2986	3016
15°	2943	2980	3021
20°	2906	2965	3024
25°	2859	2944	3024
30°	2804	2927	3029
35°	2740	2909	3041
40°	2681	2900	3065
45°	2608	2892	3098
50°	2538	2900	3154
55°	2479	2920	3225
60°	2394	2943	3315
65°	2299	2978	3415
70°	2180	3019	3552
75°	1953	3061	3669
80°	1644	3071	3329
85°	1219	2322	2189



TEST NUMBER: P881281

CATALOG NUMBER: 24CZ2-70VHE-SQR-UNV-B35

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	201.1	3.1
10°-20°	576.3	8.9
20°-30°	872.4	13.5
30°-40°	1055.3	16.3
40°-50°	1114.0	17.2
50°-60°	1050.5	16.3
60°-70°	866.1	13.4
70°-80°	568.1	8.8
80°-90°	156.2	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°	1649.8	25.5
0°-40°	2705.1	41.9
0°-60°	4869.6	75.4
0°-90°	6460.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6460.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2122	2122	2122	2122	2122	
5°	2114	2114	2108	2122	2122	201
15°	2014	2026	2039	2063	2067	568
25°	1836	1859	1891	1930	1942	846
35°	1590	1632	1688	1746	1765	996
45°	1307	1365	1449	1526	1552	1008
55°	1007	1078	1187	1276	1311	897
65°	688	771	892	987	1023	680
75°	358	450	561	650	673	378
85°	75	130	143	139	135	93
90°	0	0	0	0	0	



TEST NUMBER: P881281

CATALOG NUMBER: 24CZ2-70VHE-SQR-UNV-B35

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2122.0	2122.0	2122.0	2122.0	2122.0
2.5°	2123.9	2122.0	2112.7	2125.0	2123.9
5°	2113.6	2113.6	2107.5	2122.0	2122.0
7.5°	2099.1	2100.2	2098.1	2114.6	2114.6
10°	2076.5	2080.6	2083.6	2102.4	2104.3
12.5°	2049.6	2056.9	2063.0	2085.8	2087.9
15°	2014.5	2026.0	2039.3	2063.0	2067.3
17.5°	1978.4	1991.9	2006.4	2037.4	2042.5
20°	1935.1	1950.6	1974.3	2005.3	2013.5
22.5°	1886.7	1908.2	1933.0	1970.2	1980.5
25°	1836.1	1858.7	1890.8	1930.0	1942.2
27.5°	1781.4	1808.1	1844.3	1889.7	1903.0
30°	1720.5	1751.3	1795.8	1844.3	1858.7
32.5°	1656.4	1692.5	1742.0	1795.8	1812.2
35°	1590.5	1631.6	1688.4	1746.3	1764.9
37.5°	1525.3	1566.6	1633.8	1694.7	1712.1
40°	1455.1	1500.5	1573.9	1638.9	1663.7
42.5°	1380.8	1434.7	1511.9	1584.3	1607.9
45°	1306.6	1365.3	1449.1	1526.4	1552.2
47.5°	1231.2	1296.2	1388.2	1466.5	1496.4
50°	1155.9	1225.0	1321.0	1405.6	1436.6
52.5°	1079.5	1151.8	1256.0	1345.8	1373.7
55°	1007.4	1078.4	1186.9	1275.6	1310.7
57.5°	923.6	1004.2	1118.7	1208.6	1242.7
60°	848.3	926.9	1042.5	1137.4	1174.4
62.5°	766.7	847.2	969.1	1064.0	1100.2
65°	688.4	771.0	891.8	986.7	1022.7
67.5°	603.8	690.5	814.3	906.2	941.3
70°	528.4	610.0	731.6	825.7	860.8
72.5°	436.5	529.5	646.0	739.0	777.1
75°	358.2	449.9	561.4	650.3	672.9
77.5°	275.5	367.4	477.9	535.5	551.0
80°	202.3	288.9	377.8	408.8	409.6
82.5°	136.3	212.7	263.3	278.8	276.6
85°	75.3	130.0	143.4	139.3	135.2
87.5°	31.0	43.3	35.1	24.8	19.6
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)