

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: P881228

Luminaire Tested: **24CZ2-55VHE-HRP-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: P881228  
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: 24CZ2-55VHE-HRP-UNV-B40  
Description: 2X4 5500 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 4000K CCT AND HRP LENS

Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

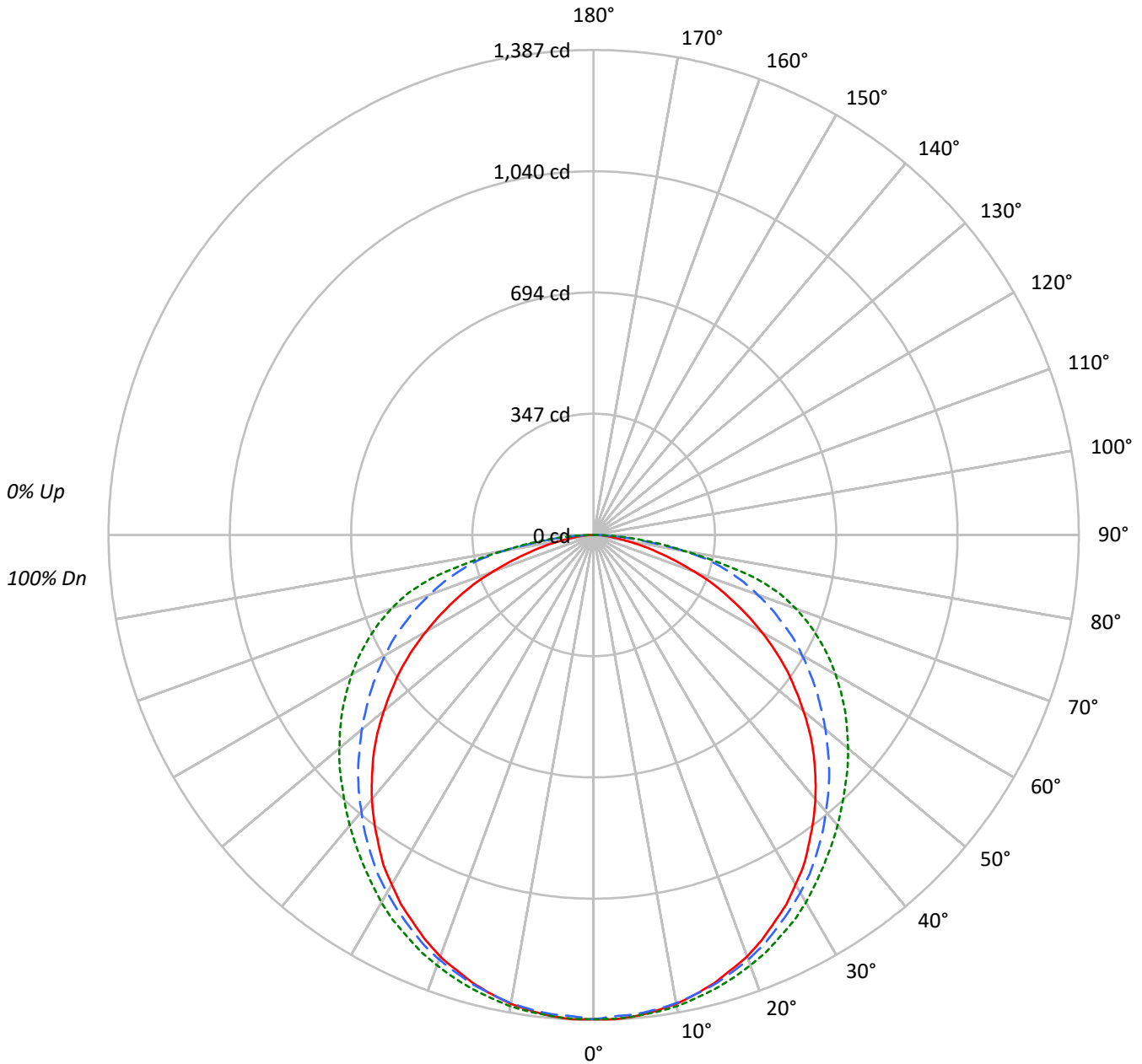
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4269.0 lumens  
Efficiency: N/A  
Efficacy: 99.3 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): 43  
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: P881228  
CATALOG NUMBER: 24CZ2-55VHE-HRP-UNV-B40

### Luminous Intensity Polar Plot





TEST NUMBER: P881228

CATALOG NUMBER: 24CZ2-55VHE-HRP-UNV-B40

**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°	1955	1955	1955
5°	1957	1950	1957
10°	1952	1949	1962
15°	1940	1945	1964
20°	1927	1941	1968
25°	1903	1931	1970
30°	1881	1925	1978
35°	1851	1915	1980
40°	1817	1903	1998
45°	1776	1901	2030
50°	1719	1899	2084
55°	1658	1913	2159
60°	1564	1942	2255
65°	1444	1988	2382
70°	1261	2057	2537
75°	1023	2163	2621
80°	756	2122	2122
85°	580	1563	1765



TEST NUMBER: P881228

CATALOG NUMBER: 24CZ2-55VHE-HRP-UNV-B40

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	131.2	3.1
10°-20°	376.8	8.8
20°-30°	573.6	13.4
30°-40°	696.5	16.3
40°-50°	735.8	17.2
50°-60°	694.4	16.3
60°-70°	577.4	13.5
70°-80°	379.8	8.9
80°-90°	103.5	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°	1081.6	25.3
0°-40°	1778.1	41.7
0°-60°	3208.3	75.2
0°-90°	4269.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4269.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1385	1385	1385	1385	1385	
5°	1382	1382	1376	1382	1382	131
15°	1328	1330	1332	1344	1344	375
25°	1222	1230	1240	1262	1265	564
35°	1074	1087	1112	1140	1149	672
45°	890	908	952	999	1017	685
55°	674	702	777	851	878	600
65°	432	483	595	683	713	427
75°	188	274	397	470	481	202
85°	36	79	96	107	109	44
90°	0	0	0	0	0	



TEST NUMBER: P881228

CATALOG NUMBER: 24CZ2-55VHE-HRP-UNV-B40

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1385.1	1385.1	1385.1	1385.1	1385.1
2.5°	1386.8	1385.1	1377.9	1385.1	1385.1
5°	1381.6	1381.6	1376.1	1381.6	1381.6
7.5°	1372.6	1372.6	1368.9	1376.1	1376.1
10°	1361.8	1361.8	1360.1	1368.9	1368.9
12.5°	1345.8	1347.4	1345.8	1356.4	1356.4
15°	1327.8	1329.6	1331.5	1344.0	1344.0
17.5°	1304.8	1308.3	1311.8	1326.1	1327.8
20°	1283.3	1284.8	1292.1	1308.3	1310.0
22.5°	1254.7	1260.0	1269.0	1284.8	1290.5
25°	1222.3	1229.5	1240.3	1261.8	1265.3
27.5°	1192.0	1197.5	1211.7	1235.0	1242.2
30°	1154.5	1163.5	1181.3	1204.5	1213.5
32.5°	1118.7	1127.7	1149.2	1174.0	1181.3
35°	1074.2	1086.7	1111.5	1140.2	1149.2
37.5°	1031.2	1043.7	1074.2	1106.2	1117.2
40°	986.4	1000.7	1033.1	1070.5	1084.7
42.5°	938.2	957.9	993.7	1034.7	1050.9
45°	889.9	907.9	952.4	999.0	1016.9
47.5°	838.3	859.8	907.9	963.4	984.9
50°	782.8	809.6	865.1	925.7	949.1
52.5°	727.5	757.8	820.3	888.2	913.3
55°	673.8	702.3	777.4	850.8	877.6
57.5°	614.8	650.7	732.8	811.4	838.3
60°	554.0	593.5	688.0	770.1	798.8
62.5°	493.2	538.0	645.1	727.5	757.8
65°	432.5	482.7	595.2	682.8	713.2
67.5°	373.4	428.9	548.7	636.3	666.6
70°	305.6	375.4	498.5	584.5	614.8
72.5°	243.1	323.6	450.2	530.9	557.7
75°	187.6	273.6	396.7	470.0	480.7
77.5°	137.6	223.4	341.4	366.2	368.2
80°	93.0	178.6	261.1	257.4	261.1
82.5°	60.8	134.1	164.3	184.1	185.8
85°	35.8	78.7	96.5	107.3	109.0
87.5°	17.8	26.8	34.0	35.8	39.3
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)