

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: P881123

Luminaire Tested: **22CZ2-44VHE-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: P881123  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P475114)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 10/2/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-44VHE-HRP-UNV-B40  
Description: 2X2 4400 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 4000K CCT AND HRP LENS  
  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

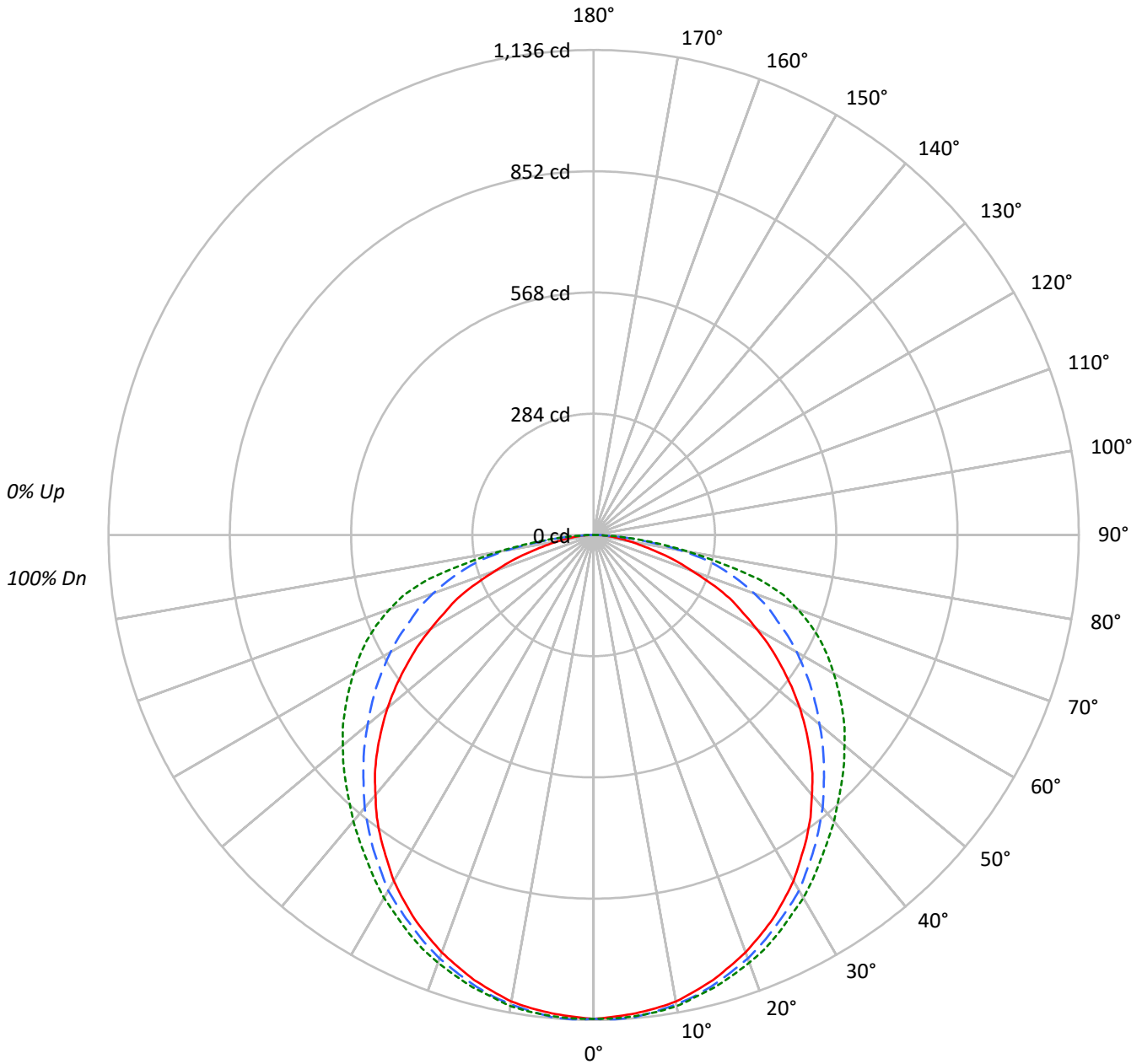
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3443.0 lumens  
Efficiency: N/A  
Efficacy: 93.1 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.29 / 1.38  
Luminous Opening: Rectangular (W 1.92' x L: 1.98' x H: 0')  
CIE Type: Direct

Input Watts (W): 37  
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	80	75	84	78	73	80	75	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	52	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°	3217	3217	3217
5°	3204	3229	3223
10°	3198	3217	3230
15°	3171	3203	3222
20°	3142	3188	3220
25°	3108	3162	3217
30°	3067	3152	3217
35°	3010	3115	3213
40°	2944	3090	3242
45°	2876	3060	3295
50°	2781	3049	3384
55°	2654	3073	3513
60°	2502	3118	3685
65°	2363	3178	3938
70°	2018	3316	4216
75°	1692	3455	4382
80°	1386	3337	3655
85°	1201	2471	2686



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	107.5	3.1
10°-20°	307.4	8.9
20°-30°	465.8	13.5
30°-40°	562.5	16.3
40°-50°	591.0	17.2
50°-60°	556.1	16.2
60°-70°	463.6	13.5
70°-80°	307.2	8.9
80°-90°	81.9	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°	880.7	25.6
0°-40°	1443.1	41.9
0°-60°	2590.3	75.2
0°-90°	3443.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3443.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1134	1134	1134	1134	1134	
5°	1125	1127	1134	1134	1132	107
15°	1080	1084	1090	1095	1097	304
25°	993	999	1010	1023	1027	457
35°	869	878	899	919	927	543
45°	717	728	762	801	821	552
55°	536	560	621	684	710	480
65°	352	382	473	552	586	342
75°	154	215	315	380	400	167
85°	37	56	76	82	82	43
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1133.7	1133.7	1133.7	1133.7	1133.7
2.5°	1129.4	1131.5	1135.9	1135.9	1133.7
5°	1125.0	1127.2	1133.7	1133.7	1131.5
7.5°	1118.5	1120.9	1125.0	1129.4	1127.2
10°	1109.8	1112.0	1116.4	1120.9	1120.9
12.5°	1094.7	1096.8	1105.5	1107.9	1107.9
15°	1079.5	1083.8	1090.3	1094.7	1096.8
17.5°	1059.9	1064.3	1073.0	1081.6	1081.6
20°	1040.4	1044.7	1055.6	1064.3	1066.2
22.5°	1016.5	1023.1	1033.9	1044.7	1049.1
25°	992.7	999.2	1010.0	1023.1	1027.4
27.5°	964.2	970.8	986.2	1001.4	1003.3
30°	936.0	942.6	962.1	975.1	981.8
32.5°	901.3	910.0	929.5	949.1	955.6
35°	868.8	877.5	899.2	918.9	927.4
37.5°	834.1	842.5	866.6	890.7	901.3
40°	794.8	805.9	834.1	860.1	875.3
42.5°	758.1	769.0	797.2	831.9	847.1
45°	716.7	727.5	762.5	801.3	821.0
47.5°	673.3	686.3	727.5	775.5	794.8
50°	629.9	645.1	690.6	744.9	766.6
52.5°	584.1	603.8	655.9	714.7	740.5
55°	536.4	560.5	621.2	684.1	710.2
57.5°	490.8	512.7	584.1	651.6	679.8
60°	440.9	469.1	549.4	618.8	649.4
62.5°	393.2	423.5	512.7	586.5	618.8
65°	351.9	382.1	473.4	551.6	586.5
67.5°	297.5	338.9	440.9	514.7	549.4
70°	243.2	299.6	399.7	475.6	508.2
72.5°	202.0	256.3	358.4	434.4	464.8
75°	154.3	215.0	315.1	380.1	399.7
77.5°	115.2	178.1	269.3	302.0	304.0
80°	84.8	136.7	204.2	215.0	223.7
82.5°	58.8	95.5	132.6	145.4	149.9
85°	36.9	56.4	75.9	82.5	82.5
87.5°	19.5	21.7	26.0	26.0	26.0
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)