

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: P881111

Luminaire Tested: **22CZ2-39VHE-RDP-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: P881111  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P474998)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 10/2/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-39VHE-RDP-UNV-B40  
Description: 2X2 3900 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 4000K CCT AND RDP LENS

Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

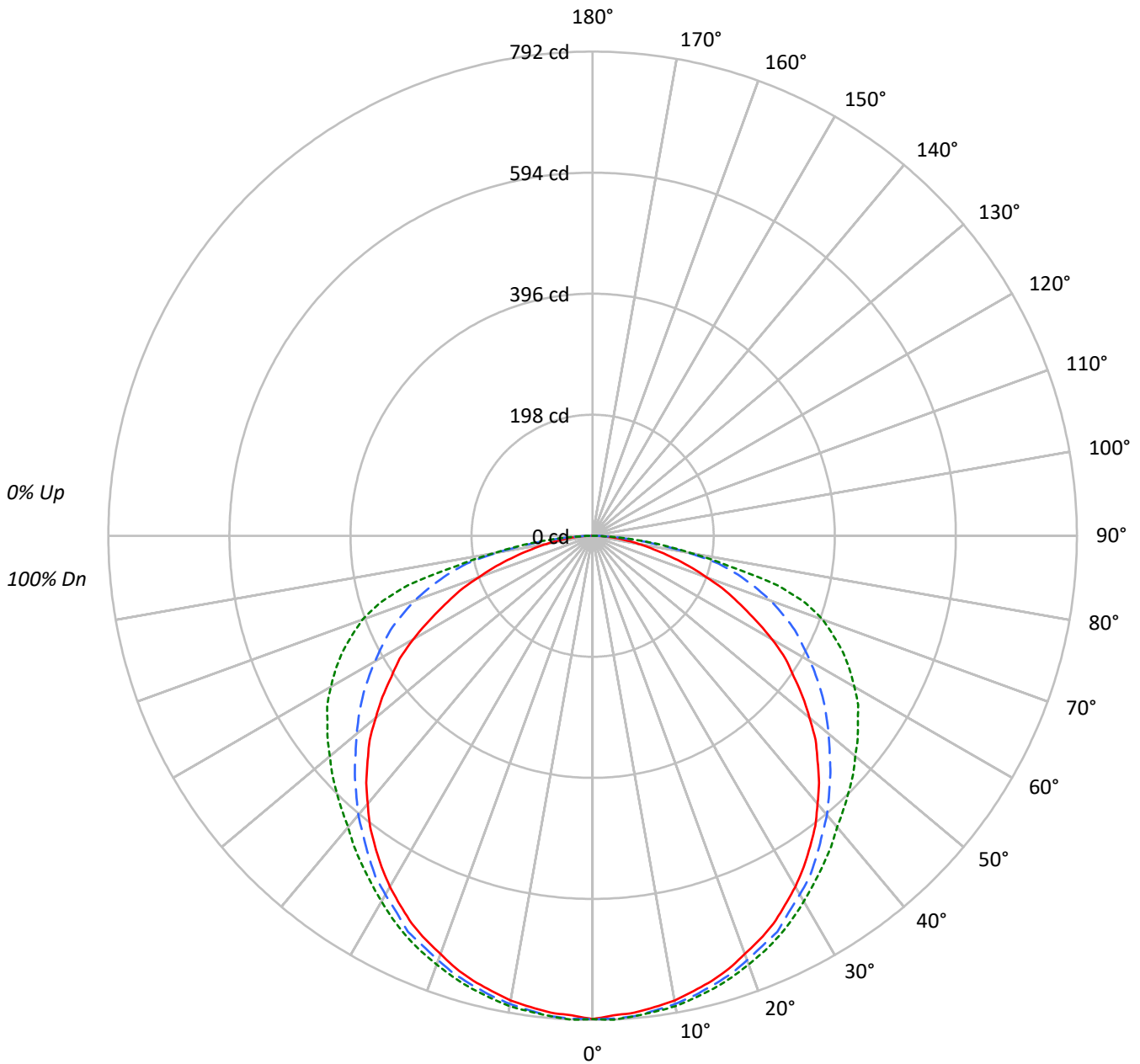
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2517.0 lumens  
Efficiency: N/A  
Efficacy: 78.7 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 1.92' x L: 1.98' x H: 0')  
CIE Type: Direct

Input Watts (W): 32  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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	100	96	92	96	92	89	92	89	86	88	86	84	82																			
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67																			
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55																			
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47																			
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40																			
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35																			
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31																			
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27																			
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26	24																			
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22																			

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

	0°	45°	90°
0°	2243	2243	2243
5°	2231	2247	2247
10°	2224	2241	2251
15°	2214	2235	2252
20°	2197	2231	2253
25°	2191	2238	2261
30°	2172	2220	2263
35°	2148	2213	2277
40°	2120	2208	2304
45°	2088	2207	2377
50°	2043	2223	2476
55°	1987	2272	2619
60°	1923	2332	2806
65°	1790	2450	3033
70°	1644	2566	3319
75°	1443	2699	3432
80°	1240	2569	2695
85°	1087	1866	2048



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	74.8	3.0
10°-20°	214.7	8.5
20°-30°	327.6	13.0
30°-40°	400.0	15.9
40°-50°	427.7	17.0
50°-60°	412.8	16.4
60°-70°	355.4	14.1
70°-80°	240.5	9.6
80°-90°	63.4	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°	617.1	24.5
0°-40°	1017.1	40.4
0°-60°	1857.7	73.8
0°-90°	2517.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2517.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	791	791	791	791	791	
5°	783	785	789	789	789	74
15°	754	755	761	765	766	213
25°	700	704	715	718	722	322
35°	620	626	639	652	657	388
45°	520	530	550	578	592	402
55°	402	415	459	506	530	360
65°	267	292	365	422	452	265
75°	132	174	246	296	313	141
85°	33	46	57	59	63	38
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	790.6	790.6	790.6	790.6	790.6
2.5°	785.1	786.8	790.6	790.6	792.4
5°	783.2	785.1	788.7	788.7	788.7
7.5°	777.6	779.5	783.2	785.1	785.1
10°	772.0	774.0	777.6	779.5	781.4
12.5°	762.8	764.6	770.1	774.0	774.0
15°	753.6	755.4	760.9	764.6	766.5
17.5°	742.3	746.2	751.7	755.4	757.3
20°	727.7	731.4	738.7	744.4	746.2
22.5°	714.7	718.5	725.8	731.4	735.0
25°	699.9	703.6	714.7	718.5	722.2
27.5°	681.3	685.2	694.4	701.7	707.2
30°	662.9	666.6	677.7	687.1	690.7
32.5°	642.4	648.0	661.0	668.5	673.9
35°	620.2	625.7	638.8	651.6	657.4
37.5°	598.1	603.7	616.5	633.2	640.7
40°	572.2	579.5	596.2	618.4	622.1
42.5°	548.1	557.3	572.2	598.1	607.3
45°	520.3	529.5	550.0	577.8	592.4
47.5°	494.4	503.6	525.8	559.2	577.8
50°	462.9	475.8	503.6	542.5	560.9
52.5°	433.2	444.3	481.5	523.9	546.3
55°	401.7	414.8	459.3	505.5	529.5
57.5°	374.1	385.1	435.1	487.1	514.7
60°	338.8	353.6	411.0	466.6	494.4
62.5°	301.6	324.1	387.0	444.3	473.9
65°	266.6	292.4	364.9	422.1	451.8
67.5°	235.1	262.9	337.1	398.1	425.9
70°	198.1	233.4	309.3	368.6	400.0
72.5°	164.9	203.7	277.9	337.1	364.9
75°	131.6	174.1	246.2	296.3	313.0
77.5°	101.8	142.7	210.9	225.9	227.8
80°	75.9	112.9	157.2	159.2	164.9
82.5°	52.0	79.6	101.8	111.0	112.9
85°	33.4	46.4	57.3	59.3	62.9
87.5°	15.0	16.7	20.3	18.6	18.6
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)