

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: P881167

Luminaire Tested: **24CZ2-35VHE-HRP-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: P881167  
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: 24CZ2-35VHE-HRP-UNV-B35  
Description: 2X4 3500 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 3500K CCT AND HRP LENS  
  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

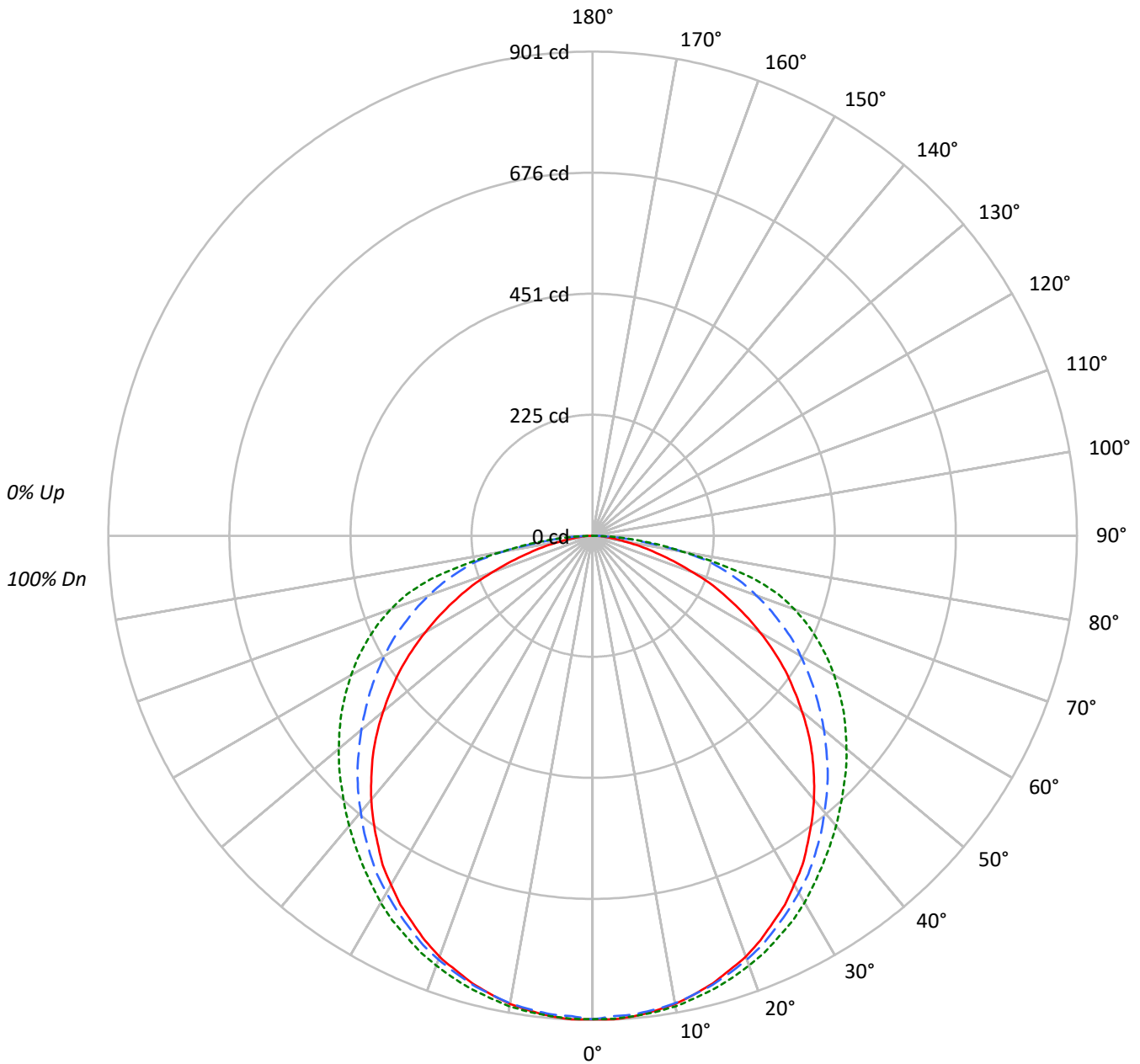
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2773.0 lumens  
Efficiency: N/A  
Efficacy: 102.7 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): 27  
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	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°	1270	1270	1270
5°	1271	1266	1271
10°	1268	1266	1274
15°	1260	1264	1276
20°	1252	1261	1278
25°	1236	1255	1280
30°	1222	1250	1285
35°	1202	1244	1286
40°	1181	1236	1298
45°	1154	1235	1319
50°	1116	1234	1354
55°	1077	1242	1403
60°	1016	1261	1465
65°	938	1291	1547
70°	819	1336	1648
75°	665	1405	1703
80°	491	1378	1378
85°	376	1015	1146



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	85.2	3.1
10°-20°	244.7	8.8
20°-30°	372.6	13.4
30°-40°	452.4	16.3
40°-50°	478.0	17.2
50°-60°	451.0	16.3
60°-70°	375.0	13.5
70°-80°	246.7	8.9
80°-90°	67.3	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°	702.6	25.3
0°-40°	1155.0	41.7
0°-60°	2084.0	75.2
0°-90°	2773.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2773.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	900	900	900	900	900	
5°	897	897	894	897	897	85
15°	862	864	865	873	873	243
25°	794	799	806	820	822	366
35°	698	706	722	741	746	437
45°	578	590	619	649	661	445
55°	438	456	505	553	570	390
65°	281	314	387	444	463	278
75°	122	178	258	305	312	131
85°	23	51	63	70	71	28
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	899.7	899.7	899.7	899.7	899.7
2.5°	900.8	899.7	895.0	899.7	899.7
5°	897.4	897.4	893.9	897.4	897.4
7.5°	891.6	891.6	889.2	893.9	893.9
10°	884.6	884.6	883.5	889.2	889.2
12.5°	874.2	875.2	874.2	881.0	881.0
15°	862.5	863.7	864.9	873.0	873.0
17.5°	847.5	849.8	852.1	861.4	862.5
20°	833.6	834.6	839.3	849.8	851.0
22.5°	815.0	818.5	824.3	834.6	838.3
25°	794.0	798.7	805.6	819.6	821.9
27.5°	774.3	777.8	787.1	802.2	806.9
30°	749.9	755.8	767.3	782.4	788.3
32.5°	726.7	732.5	746.5	762.6	767.3
35°	697.7	705.9	722.0	740.7	746.5
37.5°	669.8	677.9	697.7	718.6	725.7
40°	640.8	650.0	671.1	695.3	704.6
42.5°	609.4	622.2	645.5	672.1	682.6
45°	578.1	589.7	618.7	648.9	660.6
47.5°	544.5	558.5	589.7	625.8	639.7
50°	508.5	525.9	561.9	601.3	616.5
52.5°	472.6	492.2	532.9	576.9	593.3
55°	437.7	456.2	504.9	552.7	570.0
57.5°	399.3	422.7	476.0	527.0	544.5
60°	359.9	385.5	446.9	500.3	518.9
62.5°	320.4	349.4	419.0	472.6	492.2
65°	280.9	313.5	386.6	443.5	463.3
67.5°	242.6	278.6	356.4	413.3	433.0
70°	198.5	243.8	323.8	379.7	399.3
72.5°	157.9	210.2	292.5	344.9	362.3
75°	121.9	177.7	257.7	305.3	312.3
77.5°	89.4	145.1	221.7	237.9	239.1
80°	60.4	116.0	169.6	167.2	169.6
82.5°	39.5	87.1	106.8	119.6	120.7
85°	23.2	51.1	62.7	69.7	70.8
87.5°	11.6	17.4	22.1	23.2	25.5
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)