

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: P881077

Luminaire Tested: **22CZ2-29VHE-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: P881077  
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: 22CZ2-29VHE-HRP-UNV-B35  
Description: 2X2 2900 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 3500K CCT AND HRP LENS  
  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

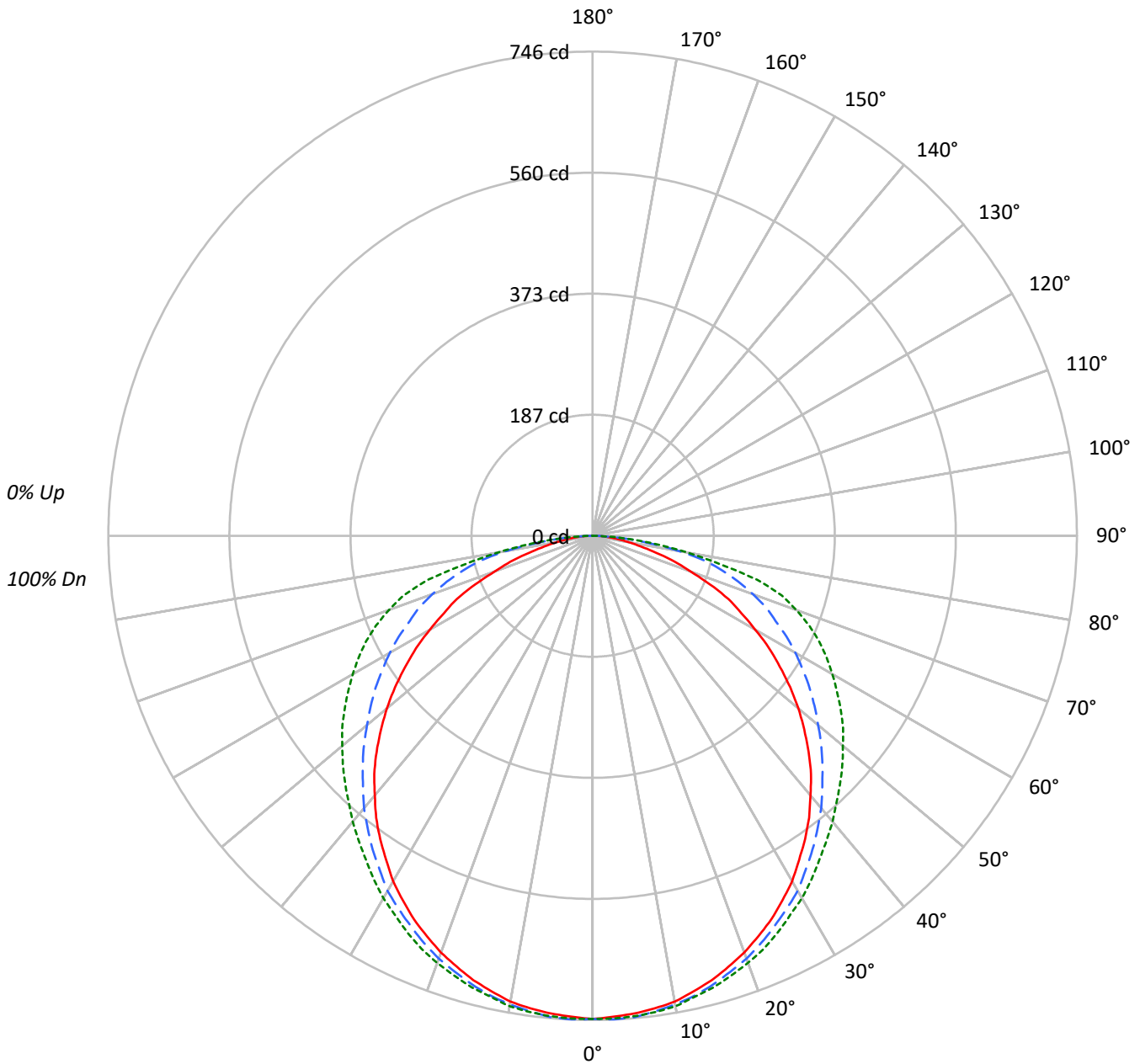
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2261.0 lumens  
Efficiency: N/A  
Efficacy: 102.8 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): 22  
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°	2113	2113	2113
5°	2104	2121	2117
10°	2100	2112	2121
15°	2082	2103	2116
20°	2063	2093	2114
25°	2041	2077	2112
30°	2014	2070	2113
35°	1976	2045	2110
40°	1933	2029	2129
45°	1888	2009	2164
50°	1826	2002	2222
55°	1742	2018	2307
60°	1643	2048	2420
65°	1552	2087	2586
70°	1325	2178	2769
75°	1111	2268	2878
80°	910	2191	2400
85°	788	1625	1761



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	70.6	3.1
10°-20°	201.9	8.9
20°-30°	305.9	13.5
30°-40°	369.4	16.3
40°-50°	388.1	17.2
50°-60°	365.2	16.2
60°-70°	304.5	13.5
70°-80°	201.8	8.9
80°-90°	53.7	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°	578.3	25.6
0°-40°	947.7	41.9
0°-60°	1701.0	75.2
0°-90°	2261.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2261.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	744	744	744	744	744	
5°	739	740	744	744	743	70
15°	709	712	716	719	720	200
25°	652	656	663	672	675	300
35°	570	576	590	603	609	357
45°	471	478	501	526	539	363
55°	352	368	408	449	466	315
65°	231	251	311	362	385	225
75°	101	141	207	250	262	110
85°	24	37	50	54	54	28
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	744.5	744.5	744.5	744.5	744.5
2.5°	741.7	743.1	745.9	745.9	744.5
5°	738.8	740.2	744.5	744.5	743.1
7.5°	734.5	736.1	738.8	741.7	740.2
10°	728.8	730.3	733.1	736.1	736.1
12.5°	718.9	720.3	726.0	727.5	727.5
15°	708.9	711.7	716.0	718.9	720.3
17.5°	696.1	698.9	704.6	710.3	710.3
20°	683.2	686.1	693.2	698.9	700.2
22.5°	667.6	671.8	679.0	686.1	688.9
25°	651.9	656.2	663.3	671.8	674.7
27.5°	633.2	637.5	647.6	657.6	658.9
30°	614.7	619.0	631.8	640.3	644.8
32.5°	591.9	597.6	610.4	623.2	627.5
35°	570.5	576.2	590.5	603.4	609.0
37.5°	547.7	553.3	569.1	584.9	591.9
40°	521.9	529.2	547.7	564.8	574.8
42.5°	497.9	505.0	523.5	546.3	556.3
45°	470.6	477.8	500.7	526.2	539.2
47.5°	442.1	450.7	477.8	509.3	521.9
50°	413.6	423.6	453.5	489.2	503.4
52.5°	383.6	396.5	430.7	469.4	486.3
55°	352.2	368.0	407.9	449.3	466.4
57.5°	322.3	336.7	383.6	427.9	446.4
60°	289.5	308.1	360.8	406.4	426.5
62.5°	258.2	278.1	336.7	385.1	406.4
65°	231.1	250.9	310.9	362.2	385.1
67.5°	195.4	222.6	289.5	338.0	360.8
70°	159.7	196.8	262.5	312.3	333.7
72.5°	132.7	168.3	235.4	285.3	305.2
75°	101.3	141.2	206.9	249.6	262.5
77.5°	75.7	117.0	176.8	198.3	199.6
80°	55.7	89.8	134.1	141.2	146.9
82.5°	38.6	62.7	87.1	95.5	98.5
85°	24.2	37.0	49.9	54.1	54.1
87.5°	12.8	14.2	17.1	17.1	17.1
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)