

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: P881071

Luminaire Tested: **22CZ2-24VHE-SQR-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: P881071  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P475230)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 10/2/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-24VHE-SQR-UNV-B35  
Description: 2X2 2400 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 3500K CCT AND SQR LENS  
  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

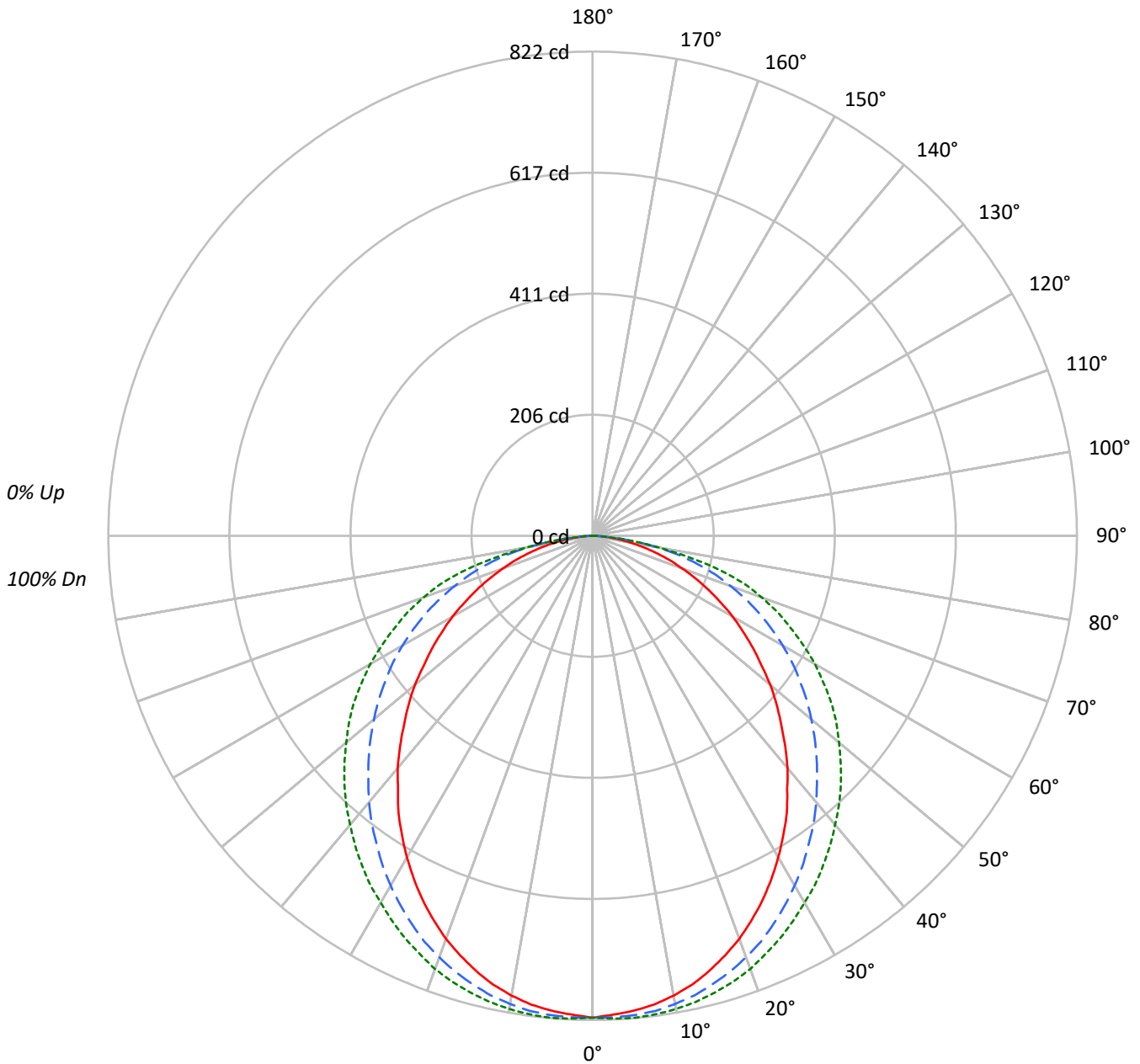
Lumens per Lamp: N/A  
Luminaire Lumens: 2342.0 lumens  
Efficiency: N/A  
Efficacy: 117.1 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.31 / 1.37  
Luminous Opening: Rectangular (W 1.92' x L: 1.98' x H: 0')  
CIE Type: Direct

Input Watts (W): 20  
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: P881071

CATALOG NUMBER: 22CZ2-24VHE-SQR-UNV-B35

### Luminous Intensity Polar Plot





TEST NUMBER: P881071

CATALOG NUMBER: 22CZ2-24VHE-SQR-UNV-B35

**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	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83																			
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69																			
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58																			
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49																			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43																			
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37																			
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33																			
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29																			
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26																			
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24																			

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

	0°	45°	90°
0°	2321	2321	2321
5°	2305	2327	2340
10°	2284	2325	2351
15°	2247	2315	2358
20°	2198	2299	2363
25°	2137	2276	2360
30°	2065	2247	2356
35°	1990	2214	2365
40°	1907	2187	2372
45°	1815	2159	2391
50°	1737	2139	2409
55°	1644	2122	2447
60°	1558	2114	2473
65°	1455	2097	2492
70°	1337	2065	2526
75°	1207	2011	2436
80°	1034	1781	1835
85°	830	1048	830



TEST NUMBER: P881071

CATALOG NUMBER: 22CZ2-24VHE-SQR-UNV-B35

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	77.6	3.3
10°-20°	221.8	9.5
20°-30°	333.1	14.2
30°-40°	397.2	17.0
40°-50°	410.7	17.5
50°-60°	377.6	16.1
60°-70°	300.6	12.8
70°-80°	183.6	7.8
80°-90°	39.9	1.7
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°	632.4	27.0
0°-40°	1029.6	44.0
0°-60°	1817.9	77.6
0°-90°	2342.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2342.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	818	818	818	818	818	
5°	809	811	817	820	822	77
15°	765	774	788	799	803	215
25°	683	699	727	747	754	314
35°	575	599	639	673	683	358
45°	452	485	538	581	596	350
55°	332	369	429	478	495	297
65°	217	253	312	356	371	215
75°	110	142	183	216	222	117
85°	26	31	32	28	26	29
90°	0	0	0	0	0	



TEST NUMBER: P881071

CATALOG NUMBER: 22CZ2-24VHE-SQR-UNV-B35

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	818.1	818.1	818.1	818.1	<i>818.1</i>
2.5°	813.7	814.7	818.1	820.4	<i>820.4</i>
5°	<i>809.2</i>	<i>811.4</i>	<i>817.0</i>	<i>820.4</i>	<i>821.5</i>
7.5°	802.6	805.9	813.7	818.1	<i>819.4</i>
10°	792.6	797.1	807.0	813.7	<i>815.8</i>
12.5°	780.3	787.0	799.2	808.2	<i>810.3</i>
15°	764.9	773.7	788.0	799.2	<i>802.6</i>
17.5°	747.0	758.1	775.9	789.3	<i>793.7</i>
20°	728.0	739.2	761.5	776.9	<i>782.5</i>
22.5°	705.8	720.3	745.9	763.7	<i>768.1</i>
25°	682.6	699.2	727.0	747.0	<i>753.7</i>
27.5°	656.9	677.0	707.0	731.5	<i>737.1</i>
30°	630.2	651.4	685.8	712.5	<i>719.2</i>
32.5°	602.4	626.9	663.6	693.6	<i>702.6</i>
35°	574.6	599.1	639.2	672.6	<i>682.6</i>
37.5°	542.4	571.3	615.9	650.4	<i>662.4</i>
40°	514.7	542.4	590.3	628.1	<i>640.3</i>
42.5°	483.5	513.6	563.6	604.7	<i>619.1</i>
45°	452.4	484.6	538.0	581.4	<i>595.9</i>
47.5°	423.5	455.7	511.3	557.0	<i>571.3</i>
50°	393.5	426.9	484.6	531.3	<i>545.8</i>
52.5°	361.3	397.9	457.9	504.6	<i>521.4</i>
55°	332.3	369.0	429.0	477.9	<i>494.7</i>
57.5°	302.3	340.2	402.4	449.1	<i>464.7</i>
60°	274.6	311.2	372.5	417.9	<i>435.8</i>
62.5°	244.5	282.3	342.3	386.8	<i>403.6</i>
65°	216.7	253.4	312.3	355.8	<i>371.2</i>
67.5°	188.9	225.8	281.1	322.4	<i>340.2</i>
70°	161.1	197.9	248.9	289.1	<i>304.5</i>
72.5°	136.8	169.0	217.8	254.6	<i>269.1</i>
75°	110.1	142.3	183.4	215.6	<i>222.2</i>
77.5°	85.6	114.5	149.0	163.3	<i>165.7</i>
80°	63.3	85.6	109.0	112.3	<i>112.3</i>
82.5°	42.2	58.9	67.8	68.8	<i>67.8</i>
85°	25.5	31.1	32.2	27.8	<i>25.5</i>
87.5°	8.8	8.8	5.5	3.3	<i>1.1</i>
90°	0.0	0.0	0.0	0.0	<i>0.0</i>



Report Generated By 670246072 / DESKTOP-50001EG







— 0°-180°    - - 45°-225°    - - - - 90°-270°







(END OF REPORT)