

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: P881055

Luminaire Tested: **22CZ2-20VHE-S-UNV-B50**

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: P881055  
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: 22CZ2-20VHE-S-UNV-B50  
Description: 2X2 2000 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 5000K CCT AND SMOOTH LENS

Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

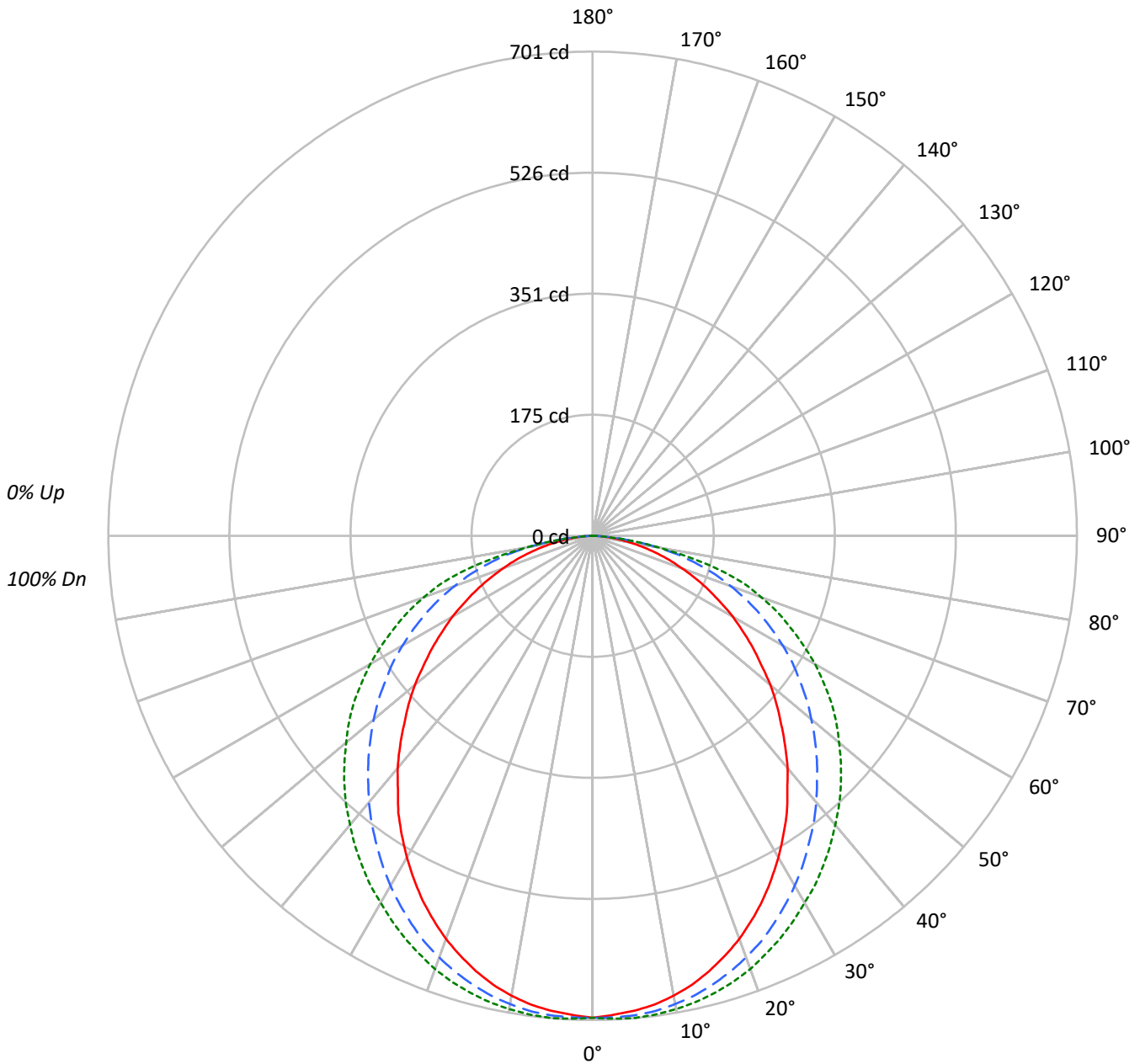
Lumens per Lamp: N/A  
Luminaire Lumens: 1998.0 lumens  
Efficiency: N/A  
Efficacy: 124.9 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.31 / 1.37  
Luminous Opening: Rectangular (W 1.92' x L: 1.98' x H: 0')  
CIE Type: Direct

Input Watts (W): 16  
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: P881055

CATALOG NUMBER: 22CZ2-20VHE-S-UNV-B50

### 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	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°	1980	1980	1980
5°	1966	1985	1996
10°	1948	1984	2005
15°	1917	1975	2011
20°	1875	1962	2016
25°	1823	1942	2013
30°	1761	1917	2010
35°	1698	1889	2017
40°	1626	1865	2023
45°	1549	1842	2040
50°	1482	1825	2055
55°	1403	1811	2088
60°	1330	1804	2110
65°	1241	1789	2126
70°	1140	1762	2155
75°	1029	1715	2079
80°	882	1520	1565
85°	710	895	710



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	66.2	3.3
10°-20°	189.2	9.5
20°-30°	284.1	14.2
30°-40°	338.9	17.0
40°-50°	350.4	17.5
50°-60°	322.1	16.1
60°-70°	256.4	12.8
70°-80°	156.7	7.8
80°-90°	34.0	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°	539.5	27.0
0°-40°	878.4	44.0
0°-60°	1550.9	77.6
0°-90°	1998.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1998.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	698	698	698	698	698	
5°	690	692	697	700	701	65
15°	652	660	672	682	685	184
25°	582	596	620	637	643	268
35°	490	511	545	574	582	306
45°	386	413	459	496	508	298
55°	284	315	366	408	422	254
65°	185	216	266	304	317	183
75°	94	121	156	184	190	100
85°	22	26	28	24	22	25
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	697.9	697.9	697.9	697.9	697.9
2.5°	694.2	695.0	697.9	699.9	699.9
5°	690.3	692.2	697.0	699.9	700.8
7.5°	684.7	687.5	694.2	697.9	699.0
10°	676.1	680.0	688.5	694.2	696.0
12.5°	665.7	671.4	681.8	689.5	691.3
15°	652.5	660.0	672.3	681.8	684.7
17.5°	637.3	646.7	662.0	673.4	677.1
20°	621.1	630.6	649.6	662.8	667.6
22.5°	602.2	614.5	636.3	651.6	655.3
25°	582.3	596.5	620.2	637.3	643.0
27.5°	560.4	577.6	603.1	624.1	628.8
30°	537.6	555.7	585.1	607.9	613.6
32.5°	513.9	534.9	566.1	591.8	599.4
35°	490.2	511.1	545.3	573.8	582.3
37.5°	462.7	487.4	525.4	554.8	565.1
40°	439.1	462.7	503.6	535.8	546.2
42.5°	412.5	438.1	480.9	515.9	528.2
45°	386.0	413.4	459.0	496.0	508.3
47.5°	361.3	388.7	436.2	475.2	487.4
50°	335.7	364.2	413.4	453.3	465.6
52.5°	308.2	339.5	390.7	430.5	444.8
55°	283.5	314.8	366.0	407.7	422.0
57.5°	257.9	290.2	343.3	383.2	396.5
60°	234.3	265.5	317.8	356.5	371.8
62.5°	208.6	240.8	292.0	330.0	344.3
65°	184.9	216.2	266.5	303.5	316.7
67.5°	161.1	192.6	239.8	275.1	290.2
70°	137.4	168.9	212.4	246.6	259.8
72.5°	116.7	144.2	185.8	217.2	229.5
75°	93.9	121.4	156.4	183.9	189.6
77.5°	73.0	97.7	127.1	139.4	141.4
80°	54.0	73.0	93.0	95.8	95.8
82.5°	36.0	50.2	57.9	58.7	57.9
85°	21.8	26.5	27.5	23.7	21.8
87.5°	7.5	7.5	4.7	2.8	1.0
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)