

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: P881054

Luminaire Tested: **22CZ2-20VHE-S-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: P881054
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-B40
Description: 2X2 2000 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 4000K CCT AND SMOOTH LENS

Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

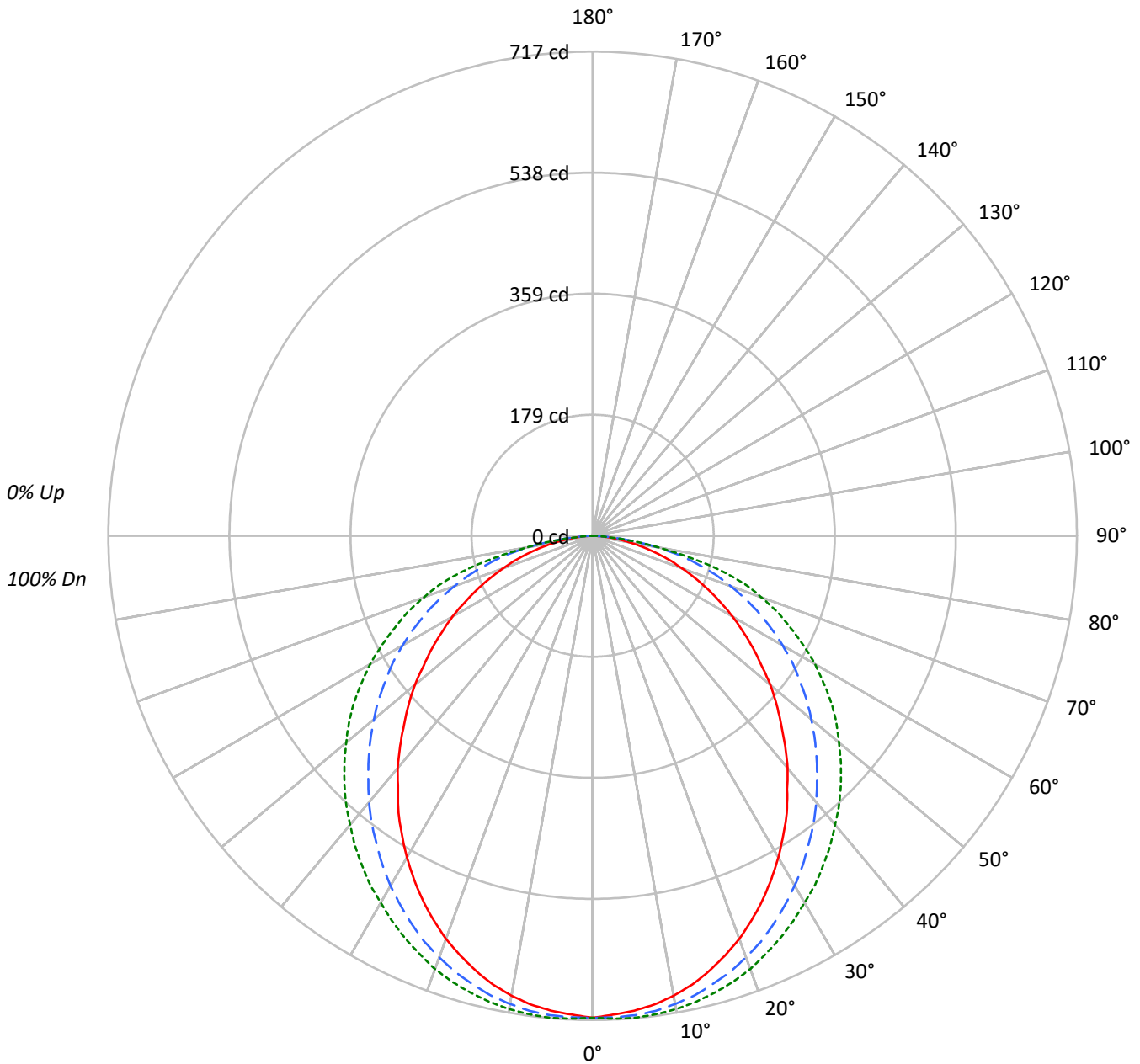
Lumens per Lamp: N/A
Luminaire Lumens: 2043.0 lumens
Efficiency: N/A
Efficacy: 127.7 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.31 / 1.37
Luminous Opening: Rectangular (W 1.92' x L: 1.98' x H: 0')
CIE Type: Direct

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: P881054

CATALOG NUMBER: 22CZ2-20VHE-S-UNV-B40

Luminous Intensity Polar Plot





TEST NUMBER: P881054

CATALOG NUMBER: 22CZ2-20VHE-S-UNV-B40

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°	2025	2025	2025
5°	2011	2030	2041
10°	1992	2028	2051
15°	1960	2019	2057
20°	1918	2006	2061
25°	1864	1986	2058
30°	1801	1960	2056
35°	1736	1932	2062
40°	1663	1908	2069
45°	1583	1883	2086
50°	1515	1866	2102
55°	1434	1851	2135
60°	1359	1844	2158
65°	1269	1830	2174
70°	1166	1801	2204
75°	1054	1753	2126
80°	902	1554	1600
85°	726	915	726



TEST NUMBER: P881054

CATALOG NUMBER: 22CZ2-20VHE-S-UNV-B40

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.7	3.3
10°-20°	193.4	9.5
20°-30°	290.5	14.2
30°-40°	346.5	17.0
40°-50°	358.3	17.5
50°-60°	329.4	16.1
60°-70°	262.2	12.8
70°-80°	160.2	7.8
80°-90°	34.8	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°	551.6	27.0
0°-40°	898.2	44.0
0°-60°	1585.8	77.6
0°-90°	2043.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2043.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	714	714	714	714	714	
5°	706	708	713	716	717	67
15°	667	675	687	697	700	188
25°	595	610	634	652	657	274
35°	501	523	558	587	595	313
45°	395	423	469	507	520	305
55°	290	322	374	417	432	259
65°	189	221	272	310	324	187
75°	96	124	160	188	194	102
85°	22	27	28	24	22	26
90°	0	0	0	0	0	



TEST NUMBER: P881054

CATALOG NUMBER: 22CZ2-20VHE-S-UNV-B40

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	713.7	713.7	713.7	713.7	713.7
2.5°	709.8	710.7	713.7	715.6	715.6
5°	705.9	707.8	712.7	715.6	716.6
7.5°	700.2	703.0	709.8	713.7	714.8
10°	691.4	695.3	704.0	709.8	711.7
12.5°	680.7	686.5	697.2	705.0	706.8
15°	667.2	674.9	687.4	697.2	700.2
17.5°	651.6	661.3	676.9	688.5	692.4
20°	635.1	644.8	664.3	677.8	682.6
22.5°	615.7	628.4	650.6	666.2	670.1
25°	595.4	609.9	634.2	651.6	657.4
27.5°	573.0	590.6	616.7	638.1	643.0
30°	549.8	568.2	598.3	621.6	627.4
32.5°	525.5	546.9	578.8	605.1	612.9
35°	501.2	522.6	557.6	586.8	595.4
37.5°	473.1	498.4	537.2	567.3	577.9
40°	449.0	473.1	515.0	547.9	558.5
42.5°	421.8	448.0	491.7	527.5	540.1
45°	394.6	422.7	469.3	507.2	519.8
47.5°	369.4	397.5	446.0	485.9	498.4
50°	343.3	372.4	422.7	463.5	476.1
52.5°	315.2	347.1	399.5	440.2	454.8
55°	289.9	321.9	374.2	416.9	431.5
57.5°	263.7	296.7	351.1	391.8	405.4
60°	239.5	271.5	324.9	364.6	380.2
62.5°	213.3	246.2	298.6	337.5	352.1
65°	189.0	221.1	272.5	310.3	323.8
67.5°	164.8	196.9	245.2	281.2	296.7
70°	140.5	172.7	217.1	252.2	265.7
72.5°	119.3	147.4	190.0	222.1	234.7
75°	96.1	124.2	159.9	188.0	193.9
77.5°	74.6	99.9	130.0	142.5	144.6
80°	55.2	74.6	95.1	97.9	97.9
82.5°	36.8	51.4	59.2	60.0	59.2
85°	22.3	27.1	28.1	24.3	22.3
87.5°	7.7	7.7	4.8	2.9	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)