

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: P881048

Luminaire Tested: **22CZ2-20VHE-HRP-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: P881048
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: 22CZ2-20VHE-HRP-UNV-B40
Description: 2X2 2000 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 4000K CCT AND HRP LENS

Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

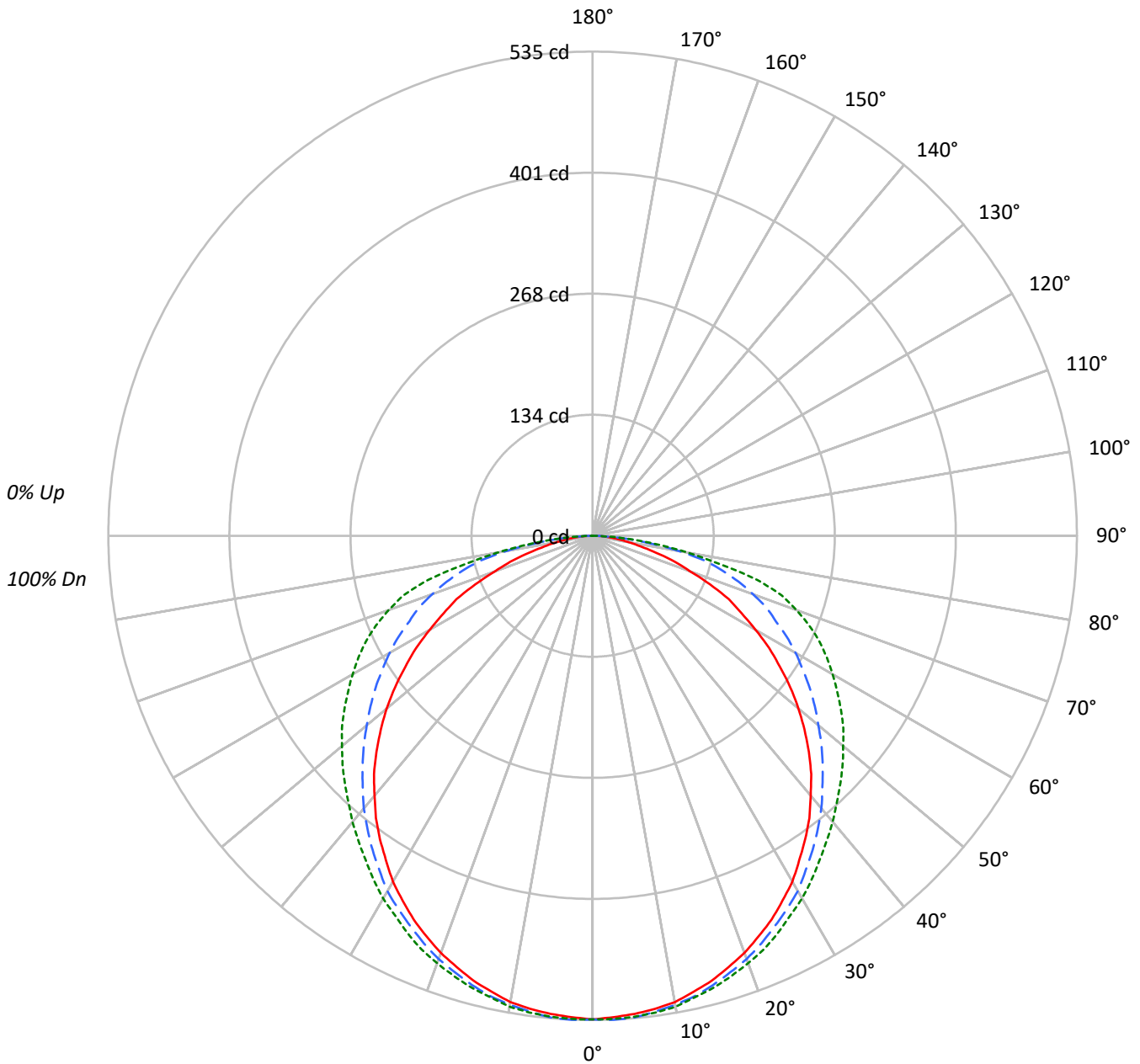
Lumens per Lamp: N/A
Luminaire Lumens: 1623.0 lumens
Efficiency: N/A
Efficacy: 101.4 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.29 / 1.38
Luminous Opening: Rectangular (W 1.92' x L: 1.98' x H: 0')
CIE Type: Direct

Input Watts (W): 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

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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°	1516	1516	1516
5°	1510	1522	1519
10°	1508	1516	1522
15°	1495	1510	1519
20°	1481	1503	1518
25°	1465	1491	1516
30°	1446	1486	1516
35°	1419	1468	1514
40°	1388	1456	1528
45°	1356	1442	1553
50°	1311	1437	1595
55°	1251	1449	1656
60°	1179	1470	1737
65°	1114	1499	1856
70°	952	1563	1987
75°	797	1628	2066
80°	654	1572	1724
85°	566	1166	1266



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.7	3.1
10°-20°	144.9	8.9
20°-30°	219.6	13.5
30°-40°	265.2	16.3
40°-50°	278.6	17.2
50°-60°	262.1	16.2
60°-70°	218.6	13.5
70°-80°	144.8	8.9
80°-90°	38.6	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°	415.1	25.6
0°-40°	680.3	41.9
0°-60°	1221.0	75.2
0°-90°	1623.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1623.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	534	534	534	534	534	
5°	530	531	534	534	533	50
15°	509	511	514	516	517	143
25°	468	471	476	482	484	215
35°	410	414	424	433	437	256
45°	338	343	359	378	387	260
55°	253	264	293	322	335	226
65°	166	180	223	260	276	161
75°	73	101	148	179	188	79
85°	17	27	36	39	39	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	534.4	534.4	534.4	534.4	534.4
2.5°	532.4	533.4	535.4	535.4	534.4
5°	530.3	531.4	534.4	534.4	533.4
7.5°	527.3	528.4	530.3	532.4	531.4
10°	523.2	524.2	526.2	528.4	528.4
12.5°	516.0	517.0	521.1	522.2	522.2
15°	508.9	510.9	514.0	516.0	517.0
17.5°	499.6	501.7	505.8	509.9	509.9
20°	490.4	492.5	497.6	501.7	502.6
22.5°	479.2	482.3	487.4	492.5	494.5
25°	467.9	471.0	476.1	482.3	484.3
27.5°	454.5	457.6	464.9	472.0	472.9
30°	441.2	444.3	453.5	459.7	462.8
32.5°	424.9	429.0	438.2	447.4	450.4
35°	409.5	413.6	423.9	433.2	437.2
37.5°	393.2	397.2	408.5	419.9	424.9
40°	374.7	379.9	393.2	405.4	412.6
42.5°	357.4	362.5	375.8	392.1	399.3
45°	337.8	342.9	359.4	377.7	387.0
47.5°	317.4	323.5	342.9	365.6	374.7
50°	296.9	304.1	325.6	351.1	361.4
52.5°	275.3	284.6	309.2	336.9	349.1
55°	252.8	264.2	292.8	322.5	334.8
57.5°	231.4	241.7	275.3	307.2	320.4
60°	207.8	221.1	259.0	291.7	306.1
62.5°	185.3	199.7	241.7	276.5	291.7
65°	165.9	180.1	223.2	260.0	276.5
67.5°	140.2	159.8	207.8	242.6	259.0
70°	114.7	141.3	188.4	224.2	239.5
72.5°	95.2	120.8	169.0	204.8	219.1
75°	72.7	101.4	148.5	179.2	188.4
77.5°	54.3	84.0	126.9	142.4	143.3
80°	40.0	64.4	96.2	101.4	105.5
82.5°	27.7	45.0	62.5	68.5	70.7
85°	17.4	26.6	35.8	38.9	38.9
87.5°	9.2	10.2	12.3	12.3	12.3
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)