

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: P881047

Luminaire Tested: **22CZ2-20VHE-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: P881047
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-B35
Description: 2X2 2000 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 3500K CCT AND HRP LENS

Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

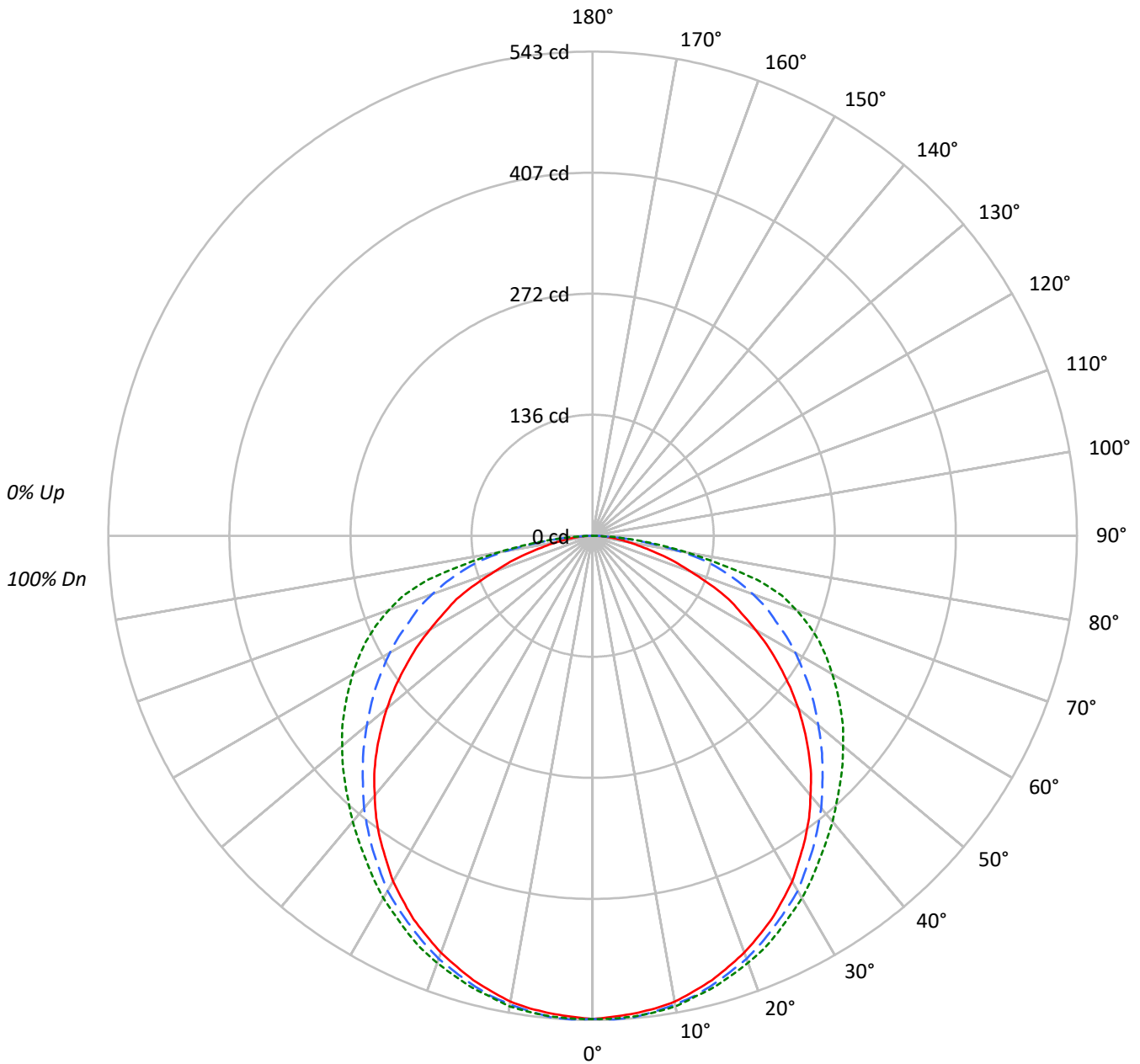
Lumens per Lamp: N/A
Luminaire Lumens: 1646.0 lumens
Efficiency: N/A
Efficacy: 102.9 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.29 / 1.38
Luminous Opening: Rectangular (W 1.92' x L: 1.98' x H: 0')
CIE Type: Direct

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°	1538	1538	1538
5°	1532	1544	1541
10°	1529	1538	1544
15°	1516	1531	1540
20°	1502	1524	1539
25°	1486	1512	1538
30°	1466	1507	1538
35°	1439	1489	1536
40°	1408	1477	1550
45°	1375	1463	1575
50°	1329	1458	1618
55°	1268	1469	1680
60°	1196	1490	1762
65°	1130	1519	1883
70°	965	1585	2015
75°	809	1651	2095
80°	663	1595	1747
85°	573	1182	1283



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.4	3.1
10°-20°	146.9	8.9
20°-30°	222.7	13.5
30°-40°	268.9	16.3
40°-50°	282.6	17.2
50°-60°	265.8	16.2
60°-70°	221.7	13.5
70°-80°	146.9	8.9
80°-90°	39.1	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°	421.0	25.6
0°-40°	689.9	41.9
0°-60°	1238.3	75.2
0°-90°	1646.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1646.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	542	542	542	542	542	
5°	538	539	542	542	541	51
15°	516	518	521	523	524	146
25°	475	478	483	489	491	218
35°	415	420	430	439	443	260
45°	343	348	364	383	392	264
55°	256	268	297	327	340	229
65°	168	183	226	264	280	164
75°	74	103	151	182	191	80
85°	18	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°	542.0	542.0	542.0	542.0	542.0
2.5°	539.9	541.0	543.0	543.0	542.0
5°	537.8	538.9	542.0	542.0	541.0
7.5°	534.7	535.9	537.8	539.9	538.9
10°	530.6	531.6	533.7	535.9	535.9
12.5°	523.3	524.4	528.5	529.6	529.6
15°	516.1	518.1	521.2	523.3	524.4
17.5°	506.7	508.8	512.9	517.1	517.1
20°	497.4	499.5	504.7	508.8	509.7
22.5°	486.0	489.1	494.3	499.5	501.5
25°	474.6	477.7	482.9	489.1	491.2
27.5°	461.0	464.1	471.5	478.7	479.7
30°	447.5	450.6	459.9	466.2	469.4
32.5°	430.9	435.0	444.4	453.7	456.8
35°	415.3	419.5	429.9	439.3	443.3
37.5°	398.7	402.8	414.3	425.8	430.9
40°	380.0	385.3	398.7	411.2	418.5
42.5°	362.4	367.6	381.1	397.7	405.0
45°	342.6	347.8	364.5	383.1	392.5
47.5°	321.9	328.1	347.8	370.7	380.0
50°	301.1	308.4	330.2	356.1	366.5
52.5°	279.2	288.7	313.6	341.7	354.0
55°	256.4	267.9	297.0	327.1	339.5
57.5°	234.6	245.1	279.2	311.5	325.0
60°	210.8	224.3	262.6	295.8	310.5
62.5°	188.0	202.5	245.1	280.4	295.8
65°	168.3	182.7	226.3	263.7	280.4
67.5°	142.2	162.0	210.8	246.0	262.6
70°	116.3	143.3	191.1	227.4	242.9
72.5°	96.6	122.5	171.4	207.7	222.2
75°	73.8	102.8	150.6	181.7	191.1
77.5°	55.1	85.2	128.7	144.4	145.3
80°	40.6	65.4	97.6	102.8	106.9
82.5°	28.1	45.6	63.4	69.5	71.7
85°	17.6	27.0	36.3	39.4	39.4
87.5°	9.3	10.4	12.4	12.4	12.4
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)