

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: P881049

Luminaire Tested: **22CZ2-20VHE-HRP-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: P881049
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-B50
Description: 2X2 2000 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 5000K CCT AND HRP LENS

Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

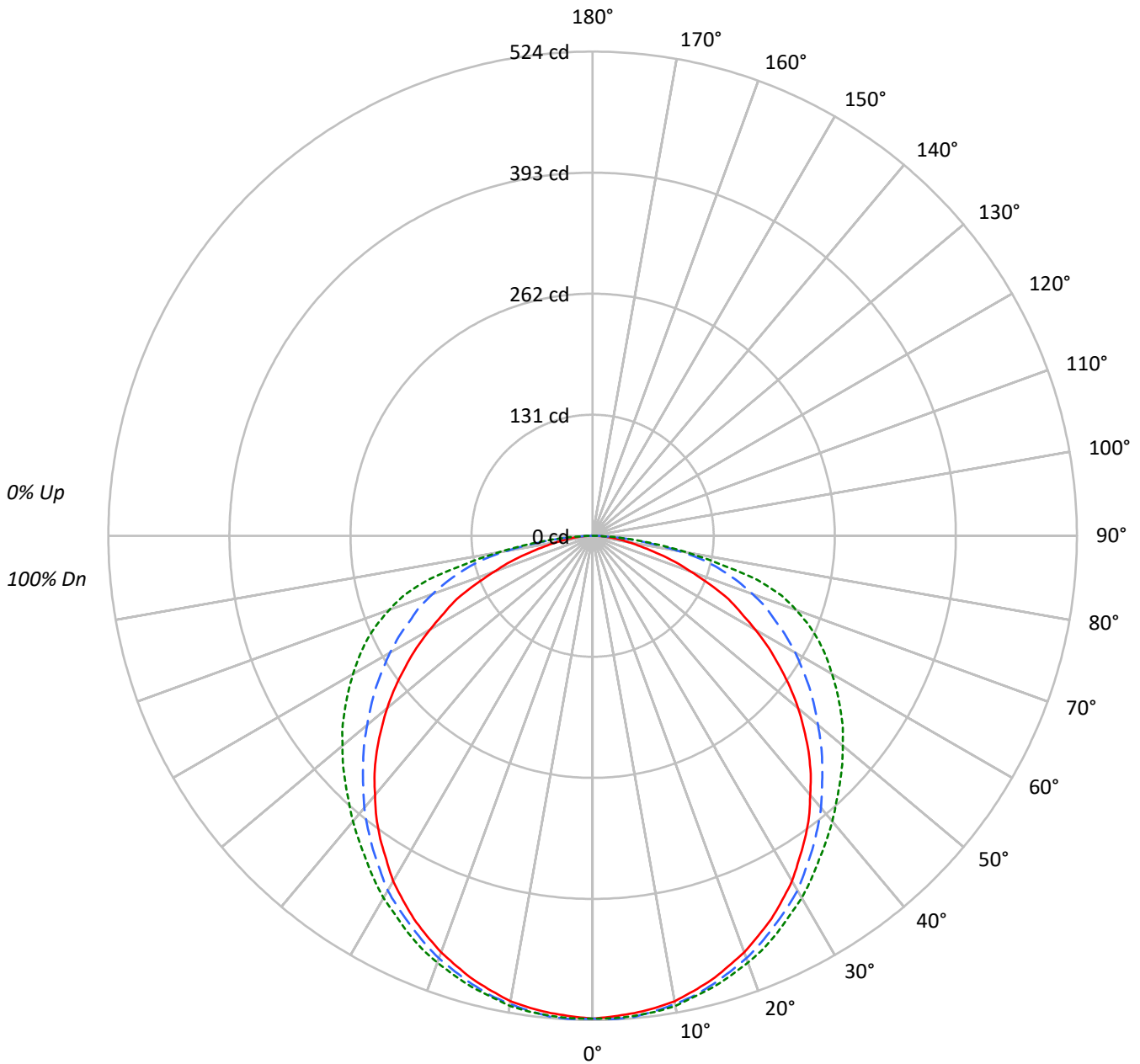
Lumens per Lamp: N/A
Luminaire Lumens: 1586.9 lumens
Efficiency: N/A
Efficacy: 99.2 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.29 / 1.38
Luminous Opening: Rectangular (W 1.92' x L: 1.98' x H: 0')
CIE Type: Direct

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°	1483	1483	1483
5°	1477	1489	1486
10°	1474	1483	1489
15°	1462	1476	1485
20°	1448	1469	1484
25°	1433	1458	1483
30°	1414	1453	1483
35°	1387	1436	1481
40°	1357	1424	1495
45°	1325	1410	1518
50°	1282	1405	1560
55°	1223	1416	1619
60°	1153	1437	1699
65°	1089	1465	1815
70°	930	1528	1943
75°	779	1592	2019
80°	639	1538	1685
85°	553	1139	1237



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.5	3.1
10°-20°	141.7	8.9
20°-30°	214.7	13.5
30°-40°	259.3	16.3
40°-50°	272.4	17.2
50°-60°	256.3	16.1
60°-70°	213.7	13.5
70°-80°	141.6	8.9
80°-90°	37.7	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°	406.0	25.6
0°-40°	665.2	41.9
0°-60°	1193.9	75.2
0°-90°	1586.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1586.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	523	523	523	523	523	
5°	519	520	523	523	522	49
15°	498	500	503	505	506	140
25°	458	461	466	472	474	211
35°	400	404	414	424	428	250
45°	330	335	351	369	378	254
55°	247	258	286	315	327	221
65°	162	176	218	254	270	158
75°	71	99	145	175	184	77
85°	17	26	35	38	38	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	522.6	522.6	522.6	522.6	522.6
2.5°	520.6	521.6	523.6	523.6	522.6
5°	518.6	519.6	522.6	522.6	521.6
7.5°	515.6	516.7	518.6	520.6	519.6
10°	511.6	512.6	514.6	516.7	516.7
12.5°	504.6	505.6	509.6	510.7	510.7
15°	497.6	499.6	502.6	504.6	505.6
17.5°	488.6	490.6	494.6	498.6	498.6
20°	479.6	481.6	486.6	490.6	491.5
22.5°	468.6	471.6	476.6	481.6	483.6
25°	457.6	460.6	465.6	471.6	473.6
27.5°	444.5	447.5	454.6	461.6	462.5
30°	431.5	434.5	443.5	449.5	452.6
32.5°	415.5	419.5	428.5	437.5	440.5
35°	400.5	404.5	414.5	423.6	427.5
37.5°	384.4	388.3	399.5	410.6	415.5
40°	366.3	371.4	384.4	396.5	403.5
42.5°	349.4	354.4	367.4	383.4	390.4
45°	330.3	335.3	351.4	369.3	378.4
47.5°	310.3	316.3	335.3	357.4	366.3
50°	290.3	297.3	318.3	343.3	353.3
52.5°	269.2	278.3	302.3	329.4	341.3
55°	247.2	258.3	286.3	315.3	327.3
57.5°	226.2	236.3	269.2	300.3	313.3
60°	203.2	216.2	253.2	285.2	299.3
62.5°	181.2	195.2	236.3	270.3	285.2
65°	162.2	176.1	218.2	254.2	270.3
67.5°	137.1	156.2	203.2	237.2	253.2
70°	112.1	138.1	184.2	219.2	234.2
72.5°	93.1	118.1	165.2	200.2	214.2
75°	71.1	99.1	145.2	175.2	184.2
77.5°	53.1	82.1	124.1	139.2	140.1
80°	39.1	63.0	94.1	99.1	103.1
82.5°	27.1	44.0	61.1	67.0	69.1
85°	17.0	26.0	35.0	38.0	38.0
87.5°	9.0	10.0	12.0	12.0	12.0
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)