

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: P881213

Luminaire Tested: **24CZ2-50VHE-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: P881213
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P474369)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 10/2/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-50VHE-HRP-UNV-B40
Description: 2X4 5000 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 4000K CCT AND HRP LENS

Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

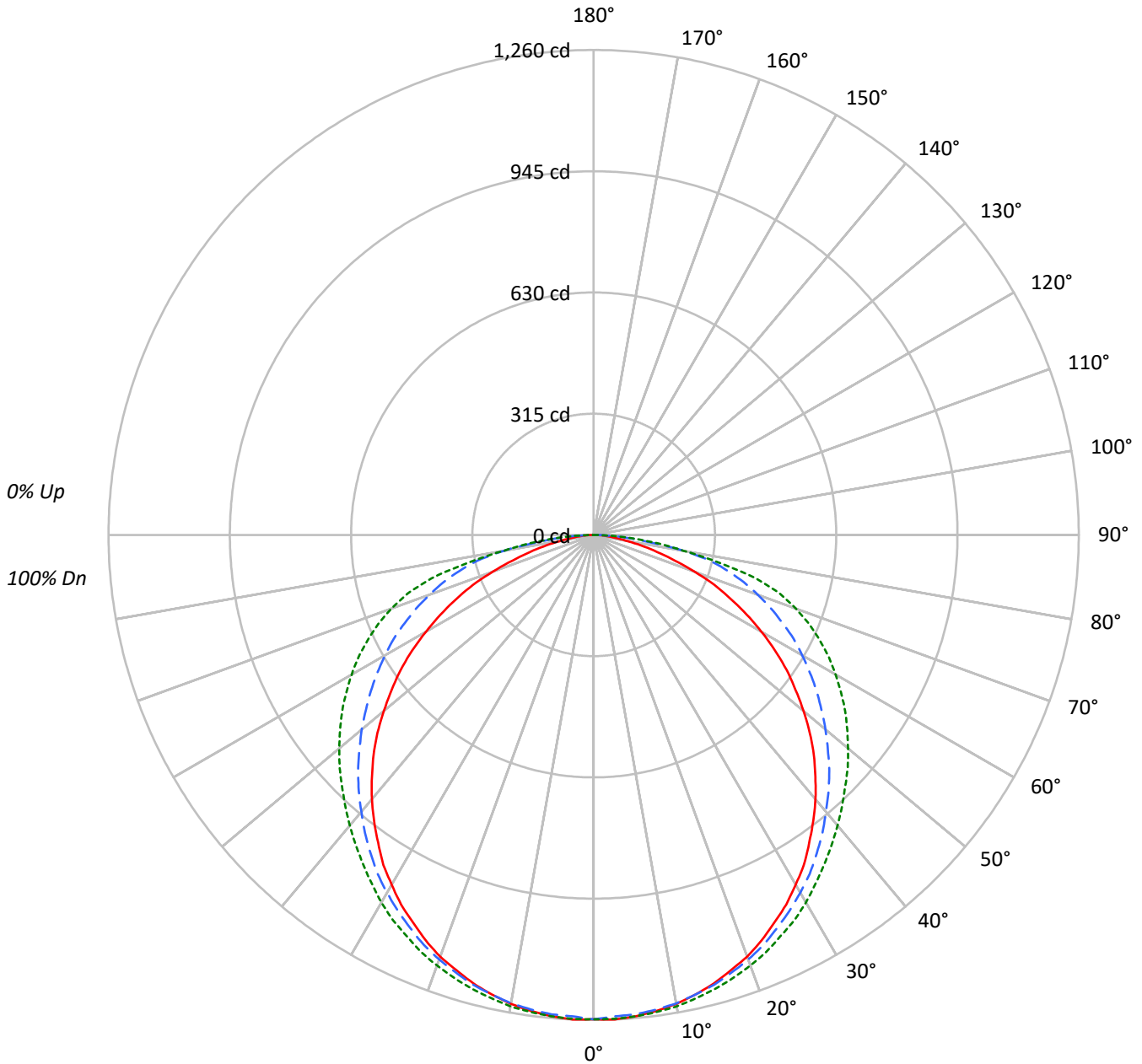
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3879.0 lumens
Efficiency: N/A
Efficacy: 102.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.3 / 1.4
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')
CIE Type: Direct

Input Watts (W): 38
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	86	84	82																			
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67																			
3	89	78	69	62	86	76	68	62	73	66	61	70	64	59	68	63	58	56																			
4	81	68	59	52	79	67	59	52	65	57	51	62	56	50	60	54	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	38	50	43	38	49	42	38	36																			
7	63	50	41	34	62	49	40	34	47	39	34	46	39	34	44	38	33	31																			
8	59	45	36	30	57	44	36	30	43	36	30	42	35	30	41	34	30	28																			
9	55	41	33	27	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	24	35	29	24	23																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1776	1776	1776
5°	1778	1771	1778
10°	1773	1771	1783
15°	1763	1768	1784
20°	1751	1763	1788
25°	1729	1755	1790
30°	1710	1749	1797
35°	1682	1740	1799
40°	1651	1729	1816
45°	1614	1727	1844
50°	1562	1726	1894
55°	1506	1738	1962
60°	1421	1765	2049
65°	1312	1806	2164
70°	1146	1869	2305
75°	930	1966	2382
80°	687	1928	1928
85°	526	1420	1605



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.2	3.1
10°-20°	342.4	8.8
20°-30°	521.2	13.4
30°-40°	632.9	16.3
40°-50°	668.6	17.2
50°-60°	630.9	16.3
60°-70°	524.6	13.5
70°-80°	345.1	8.9
80°-90°	94.1	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°	982.8	25.3
0°-40°	1615.6	41.7
0°-60°	2915.2	75.2
0°-90°	3879.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3879.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1258	1258	1258	1258	1258	
5°	1255	1255	1250	1255	1255	119
15°	1206	1208	1210	1221	1221	340
25°	1111	1117	1127	1146	1150	512
35°	976	987	1010	1036	1044	611
45°	809	825	865	908	924	623
55°	612	638	706	773	797	545
65°	393	439	541	620	648	388
75°	170	249	360	427	437	184
85°	32	72	88	98	99	40
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1258.5	1258.5	1258.5	1258.5	1258.5
2.5°	1260.1	1258.5	1252.0	1258.5	1258.5
5°	1255.3	1255.3	1250.4	1255.3	1255.3
7.5°	1247.2	1247.2	1243.8	1250.4	1250.4
10°	1237.4	1237.4	1235.8	1243.8	1243.8
12.5°	1222.8	1224.3	1222.8	1232.5	1232.5
15°	1206.5	1208.1	1209.9	1221.2	1221.2
17.5°	1185.6	1188.8	1192.0	1204.9	1206.5
20°	1166.0	1167.5	1174.0	1188.8	1190.4
22.5°	1140.1	1144.9	1153.1	1167.5	1172.6
25°	1110.6	1117.2	1127.0	1146.5	1149.7
27.5°	1083.1	1088.1	1101.0	1122.2	1128.7
30°	1049.0	1057.2	1073.4	1094.5	1102.6
32.5°	1016.5	1024.7	1044.2	1066.8	1073.4
35°	976.0	987.4	1010.0	1036.1	1044.2
37.5°	937.0	948.3	976.0	1005.2	1015.1
40°	896.3	909.3	938.7	972.7	985.6
42.5°	852.5	870.4	902.9	940.2	954.9
45°	808.6	824.9	865.4	907.7	924.0
47.5°	761.7	781.2	824.9	875.4	894.9
50°	711.3	735.6	786.0	841.1	862.4
52.5°	661.0	688.6	745.4	807.0	829.9
55°	612.2	638.2	706.3	773.1	797.4
57.5°	558.6	591.3	665.8	737.2	761.7
60°	503.4	539.2	625.2	699.8	725.9
62.5°	448.2	488.8	586.1	661.0	688.6
65°	392.9	438.6	540.8	620.4	648.1
67.5°	339.3	389.7	498.6	578.1	605.7
70°	277.7	341.1	453.0	531.1	558.6
72.5°	220.9	294.0	409.1	482.4	506.7
75°	170.5	248.6	360.5	427.0	436.8
77.5°	125.0	203.0	310.2	332.8	334.5
80°	84.5	162.3	237.2	233.8	237.2
82.5°	55.2	121.8	149.3	167.3	168.9
85°	32.5	71.5	87.7	97.5	99.1
87.5°	16.2	24.3	30.9	32.5	35.7
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)