

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: P881208

Luminaire Tested: **24CZ2-45VHE-SQR-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: P881208
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P474669)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 10/2/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-45VHE-SQR-UNV-B50
Description: 2X4 4500 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 5000K CCT AND SQR LENS

Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

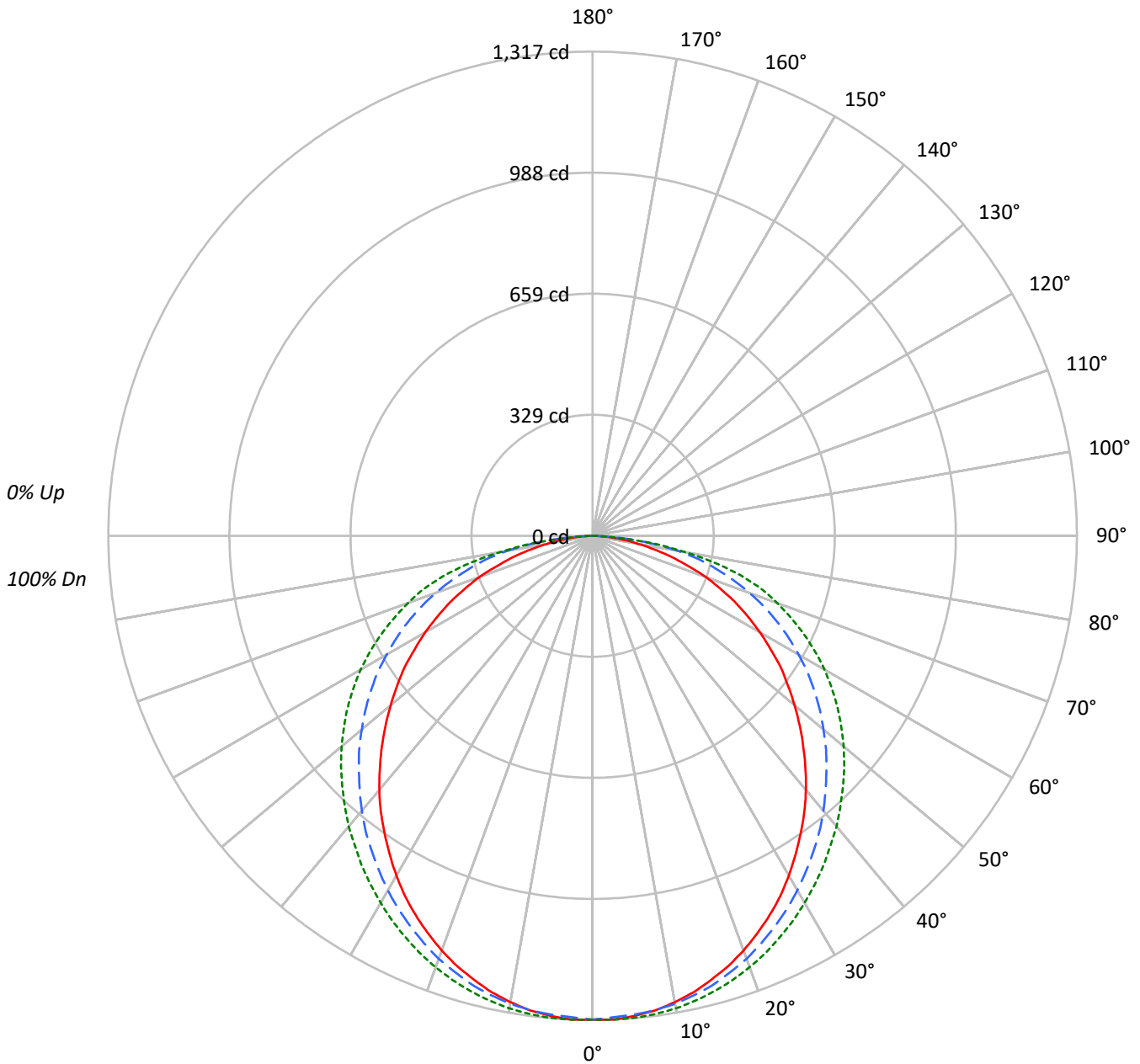
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4007.0 lumens
Efficiency: N/A
Efficacy: 117.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.3 / 1.39
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')
CIE Type: Direct

Input Watts (W): 34
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	81	75	84	78	73	80	76	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	53	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°	1858	1858	1858
5°	1857	1852	1865
10°	1846	1852	1871
15°	1826	1848	1874
20°	1803	1839	1876
25°	1774	1826	1876
30°	1739	1815	1879
35°	1700	1804	1886
40°	1663	1799	1901
45°	1618	1794	1922
50°	1574	1799	1957
55°	1538	1811	2000
60°	1485	1825	2056
65°	1426	1847	2118
70°	1353	1873	2203
75°	1212	1899	2276
80°	1020	1904	2065
85°	756	1440	1357



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.7	3.1
10°-20°	357.5	8.9
20°-30°	541.1	13.5
30°-40°	654.6	16.3
40°-50°	691.0	17.2
50°-60°	651.6	16.3
60°-70°	537.2	13.4
70°-80°	352.4	8.8
80°-90°	96.9	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°	1023.3	25.5
0°-40°	1677.9	41.9
0°-60°	3020.5	75.4
0°-90°	4007.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4007.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1316	1316	1316	1316	1316	
5°	1311	1311	1307	1316	1316	124
15°	1250	1257	1265	1280	1282	353
25°	1139	1153	1173	1197	1205	524
35°	987	1012	1047	1083	1095	618
45°	810	847	899	947	963	625
55°	625	669	736	791	813	557
65°	427	478	553	612	634	422
75°	222	279	348	403	417	235
85°	47	81	89	86	84	58
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1316.2	1316.2	1316.2	1316.2	1316.2
2.5°	1317.4	1316.2	1310.5	1318.1	1317.4
5°	1311.0	1311.0	1307.3	1316.2	1316.2
7.5°	1302.1	1302.7	1301.4	1311.7	1311.7
10°	1288.0	1290.6	1292.4	1304.1	1305.3
12.5°	1271.3	1275.9	1279.6	1293.8	1295.1
15°	1249.6	1256.7	1264.9	1279.6	1282.3
17.5°	1227.1	1235.6	1244.5	1263.7	1266.9
20°	1200.3	1209.9	1224.6	1243.8	1248.9
22.5°	1170.3	1183.6	1199.0	1222.1	1228.5
25°	1138.9	1152.9	1172.8	1197.1	1204.7
27.5°	1105.0	1121.5	1144.0	1172.1	1180.4
30°	1067.2	1086.3	1113.9	1144.0	1152.9
32.5°	1027.4	1049.8	1080.5	1113.9	1124.1
35°	986.6	1012.1	1047.3	1083.2	1094.7
37.5°	946.1	971.7	1013.4	1051.2	1062.0
40°	902.6	930.7	976.3	1016.6	1031.9
42.5°	856.5	889.9	937.8	982.7	997.4
45°	810.4	846.9	898.8	946.8	962.8
47.5°	763.7	804.0	861.0	909.6	928.2
50°	717.0	759.8	819.4	871.9	891.1
52.5°	669.6	714.4	779.1	834.7	852.1
55°	624.9	668.9	736.2	791.2	813.0
57.5°	572.9	622.9	693.9	749.7	770.8
60°	526.2	574.9	646.6	705.5	728.5
62.5°	475.6	525.5	601.1	660.0	682.4
65°	427.0	478.3	553.2	612.0	634.3
67.5°	374.5	428.3	505.1	562.1	583.9
70°	327.8	378.4	453.8	512.2	533.9
72.5°	270.8	328.5	400.7	458.4	482.0
75°	222.2	279.0	348.2	403.4	417.4
77.5°	170.9	227.9	296.4	332.2	341.8
80°	125.5	179.2	234.3	253.5	254.1
82.5°	84.5	131.9	163.3	172.9	171.6
85°	46.7	80.6	88.9	86.4	83.8
87.5°	19.2	26.8	21.8	15.4	12.1
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)