

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: P391664

Luminaire Tested: **24CZ2-75VHE-HRP-UNV-L950-CD1-U**

Issue Date: 2/28/2020

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: P391664
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-19)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-75VHE-HRP-UNV-L950-CD1-U
Description: 2x4 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND HRP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5897.0 lumens
Efficiency: N/A
Efficacy: 118.2 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

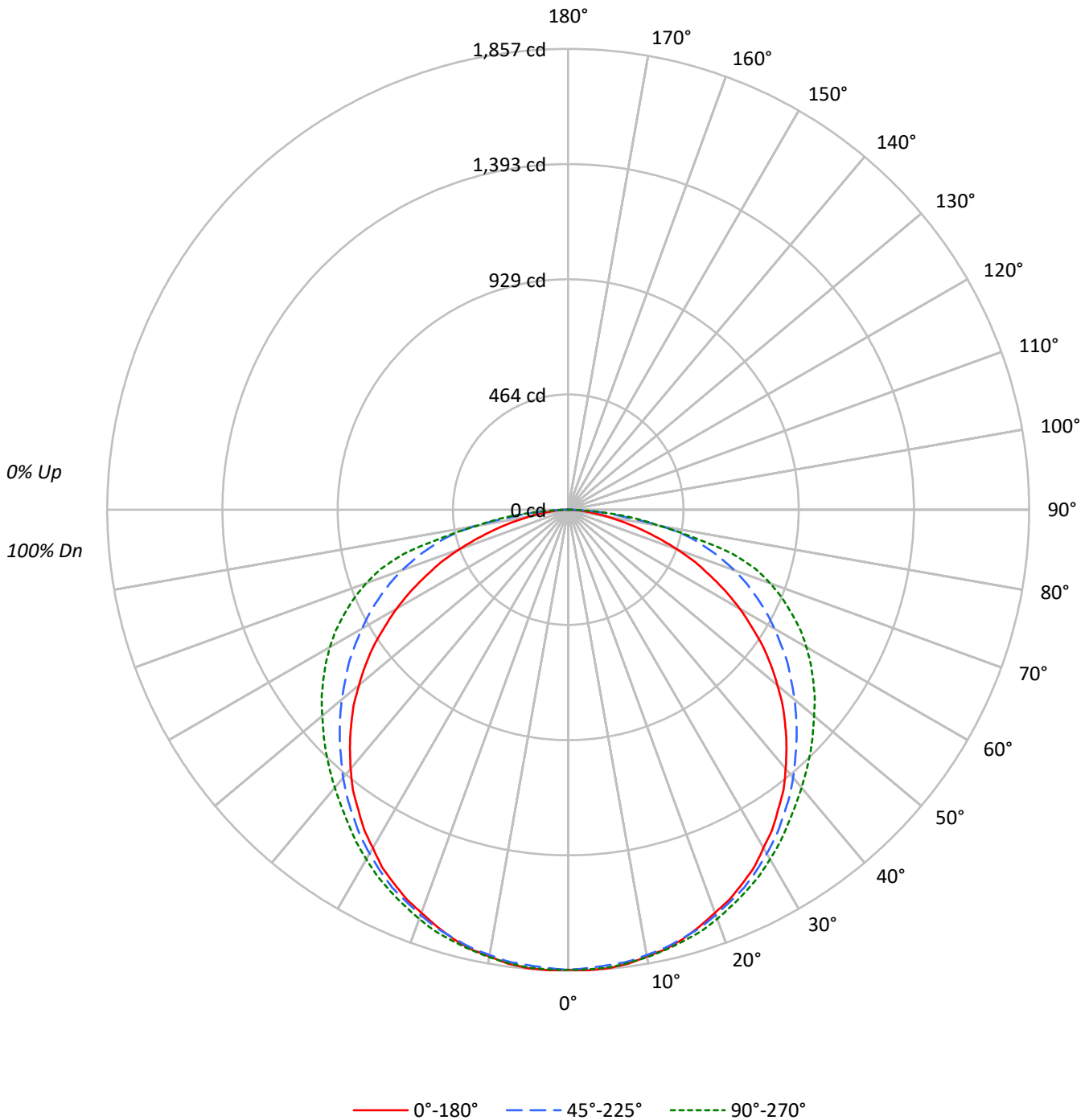
Input Watts (W): 49.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P391664

CATALOG NUMBER: 24CZ2-75VHE-HRP-UNV-L950-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P391664

CATALOG NUMBER: 24CZ2-75VHE-HRP-UNV-L950-CD1-U

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	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	100	96	92	96	93	89	92	89	87	88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67
3	88	77	68	62	86	76	67	61	72	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2495	2495	2495
5°	2505	2489	2501
10°	2498	2490	2502
15°	2494	2489	2506
20°	2475	2488	2513
25°	2466	2492	2519
30°	2445	2486	2527
35°	2421	2479	2537
40°	2394	2476	2569
45°	2354	2477	2627
50°	2302	2492	2706
55°	2244	2532	2827
60°	2149	2582	2983
65°	2011	2673	3166
70°	1830	2796	3406
75°	1551	2950	3558
80°	1223	2969	2879
85°	903	2257	2529



TEST NUMBER: P391664

CATALOG NUMBER: 24CZ2-75VHE-HRP-UNV-L950-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	175.9	3.0
10°-20°	506.3	8.6
20°-30°	774.2	13.1
30°-40°	946.4	16.0
40°-50°	1008.7	17.1
50°-60°	964.5	16.4
60°-70°	817.0	13.9
70°-80°	549.1	9.3
80°-90°	154.9	2.6
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°	1456.4	24.7
0°-40°	2402.8	40.7
0°-60°	4376.0	74.2
0°-90°	5897.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5897.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1854	1854	1854	1854	1854	
5°	1854	1852	1843	1852	1852	176
15°	1790	1790	1787	1802	1799	505
25°	1661	1667	1679	1694	1696	766
35°	1474	1486	1509	1538	1544	924
45°	1237	1258	1302	1357	1381	954
55°	956	992	1079	1164	1205	852
65°	632	696	840	951	994	627
75°	298	407	567	664	684	319
85°	58	120	146	158	164	72
90°	0	0	0	0	0	



TEST NUMBER: P391664

CATALOG NUMBER: 24CZ2-75VHE-HRP-UNV-L950-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1854.4	1854.4	1854.4	1854.4	1854.4
2.5°	1857.4	1857.4	1848.6	1854.4	1854.4
5°	1854.4	1851.5	1842.7	1851.5	1851.5
7.5°	1845.7	1842.7	1836.9	1845.7	1842.7
10°	1828.1	1828.1	1822.3	1831.0	1831.0
12.5°	1813.5	1810.6	1807.6	1819.3	1816.4
15°	1790.1	1790.1	1787.2	1801.8	1798.9
17.5°	1760.8	1763.8	1766.7	1778.4	1781.3
20°	1728.7	1734.5	1737.4	1755.0	1755.0
22.5°	1699.4	1702.3	1708.2	1725.7	1725.7
25°	1661.4	1667.2	1678.9	1693.6	1696.5
27.5°	1623.4	1626.3	1640.9	1661.4	1664.3
30°	1573.6	1582.4	1600.0	1623.4	1626.3
32.5°	1529.8	1538.5	1559.0	1582.4	1588.3
35°	1474.2	1485.9	1509.3	1538.5	1544.4
37.5°	1424.5	1433.2	1462.5	1494.7	1503.4
40°	1363.0	1380.6	1409.8	1447.9	1462.5
42.5°	1301.6	1319.2	1354.3	1404.0	1421.5
45°	1237.3	1257.7	1301.6	1357.2	1380.6
47.5°	1172.9	1196.3	1246.0	1310.4	1336.7
50°	1099.8	1129.0	1190.5	1263.6	1292.8
52.5°	1029.6	1064.7	1132.0	1213.9	1251.9
55°	956.5	991.6	1079.3	1164.1	1205.1
57.5°	874.6	921.4	1017.9	1114.4	1158.3
60°	798.5	842.4	959.4	1064.7	1108.6
62.5°	716.6	775.1	900.9	1012.0	1055.9
65°	631.8	696.1	839.5	950.6	994.5
67.5°	555.7	625.9	778.0	889.2	933.1
70°	465.1	552.8	710.8	821.9	865.8
72.5°	380.2	476.8	640.6	748.8	789.7
75°	298.3	406.6	567.4	664.0	684.4
77.5°	222.3	336.4	491.4	532.3	517.7
80°	157.9	269.1	383.2	362.7	371.5
82.5°	102.4	204.7	236.9	269.1	277.9
85°	58.5	119.9	146.2	157.9	163.8
87.5°	26.3	43.9	58.5	58.5	55.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)