

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: P390752

Luminaire Tested: **22CZ2-85VHE-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: P390752
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-24)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-85VHE-HRP-UNV-L950-CD1-U
Description: 2x2 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: 6630.4 lumens
Efficiency: N/A
Efficacy: 104.3 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

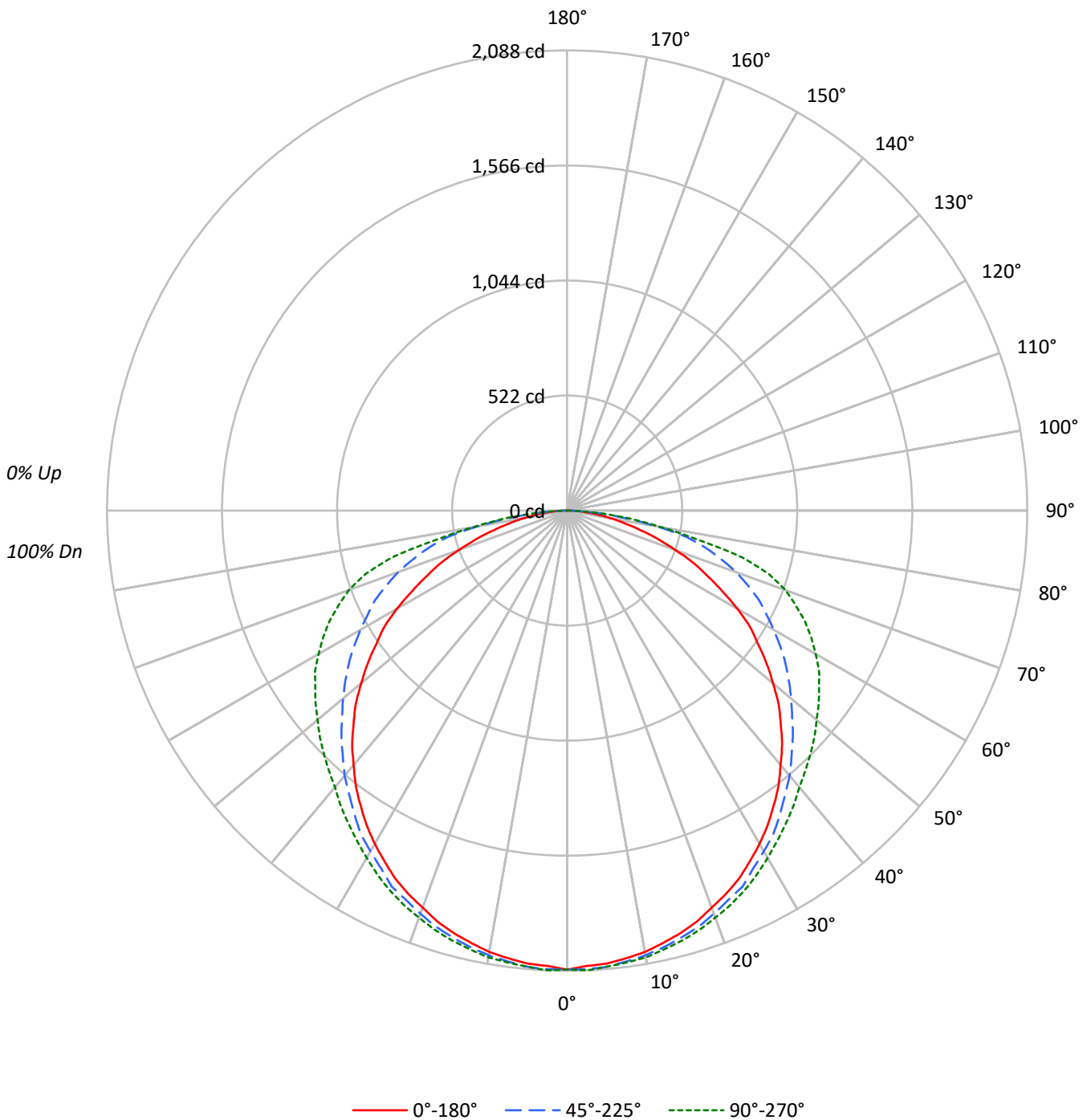
Input Watts (W): 63.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P390752

CATALOG NUMBER: 22CZ2-85VHE-HRP-UNV-L950-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P390752

CATALOG NUMBER: 22CZ2-85VHE-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	92	89	92	89	86	88	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26	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°	5605	5605	5605
5°	5573	5613	5613
10°	5558	5598	5624
15°	5531	5585	5626
20°	5489	5573	5629
25°	5474	5590	5648
30°	5426	5547	5653
35°	5368	5528	5688
40°	5295	5517	5757
45°	5216	5513	5940
50°	5105	5554	6187
55°	4966	5675	6545
60°	4804	5828	7009
65°	4472	6118	7578
70°	4106	6409	8290
75°	3601	6745	8570
80°	3099	6425	6727
85°	2711	4668	5119



TEST NUMBER: P390752

CATALOG NUMBER: 22CZ2-85VHE-HRP-UNV-L950-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	197.0	3.0
10°-20°	565.7	8.5
20°-30°	863.0	13.0
30°-40°	1053.8	15.9
40°-50°	1126.7	17.0
50°-60°	1087.5	16.4
60°-70°	936.2	14.1
70°-80°	633.4	9.6
80°-90°	167.1	2.5
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°	1625.7	24.5
0°-40°	2679.5	40.4
0°-60°	4893.7	73.8
0°-90°	6630.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6630.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2083	2083	2083	2083	2083	
5°	2063	2068	2078	2078	2078	196
15°	1985	1990	2005	2014	2019	560
25°	1844	1854	1883	1892	1902	849
35°	1634	1649	1683	1717	1732	1022
45°	1371	1395	1449	1522	1561	1058
55°	1058	1093	1210	1332	1395	948
65°	702	771	961	1112	1190	699
75°	346	458	649	780	824	372
85°	88	122	151	156	166	99
90°	0	0	0	0	0	



TEST NUMBER: P390752

CATALOG NUMBER: 22CZ2-85VHE-HRP-UNV-L950-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2082.7	2082.7	2082.7	2082.7	2082.7
2.5°	2068.1	2073.0	2082.7	2082.7	2087.6
5°	2063.2	2068.1	2077.8	2077.8	2077.8
7.5°	2048.6	2053.5	2063.2	2068.1	2068.1
10°	2033.9	2038.8	2048.6	2053.5	2058.3
12.5°	2009.6	2014.4	2029.1	2038.8	2038.8
15°	1985.2	1990.1	2004.7	2014.4	2019.3
17.5°	1955.9	1965.7	1980.3	1990.1	1994.9
20°	1916.9	1926.6	1946.2	1960.8	1965.7
22.5°	1882.7	1892.5	1912.0	1926.6	1936.4
25°	1843.7	1853.5	1882.7	1892.5	1902.3
27.5°	1794.9	1804.7	1829.1	1848.6	1863.2
30°	1746.2	1755.9	1785.2	1809.6	1819.3
32.5°	1692.5	1707.2	1741.3	1760.8	1775.4
35°	1634.0	1648.6	1682.8	1716.9	1731.5
37.5°	1575.5	1590.1	1624.2	1668.1	1687.6
40°	1507.2	1526.7	1570.6	1629.1	1638.9
42.5°	1443.8	1468.1	1507.2	1575.5	1599.8
45°	1370.6	1395.0	1448.6	1521.8	1560.8
47.5°	1302.3	1326.7	1385.2	1473.0	1521.8
50°	1219.4	1253.5	1326.7	1429.1	1477.9
52.5°	1141.4	1170.6	1268.2	1380.4	1438.9
55°	1058.4	1092.6	1209.6	1331.6	1395.0
57.5°	985.3	1014.5	1146.2	1282.8	1356.0
60°	892.6	931.6	1082.8	1229.1	1302.3
62.5°	795.0	853.6	1019.4	1170.6	1248.7
65°	702.4	770.7	960.9	1112.1	1190.1
67.5°	619.5	692.6	887.7	1048.7	1121.8
70°	521.9	614.6	814.6	970.6	1053.6
72.5°	434.1	536.5	731.6	887.7	960.9
75°	346.3	458.5	648.7	780.4	824.3
77.5°	268.3	375.6	556.0	595.1	599.9
80°	200.0	297.5	414.6	419.5	434.1
82.5°	136.6	209.7	268.3	292.7	297.5
85°	87.8	121.9	151.2	156.1	165.8
87.5°	39.0	43.9	53.7	48.8	48.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)