

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: P390742

Luminaire Tested: **22CZ2-85VHE-HRP-UNV-L930-CD1-SWPD1-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: P390742
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-L930-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND HRP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5958.6 lumens
Efficiency: N/A
Efficacy: 93.7 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

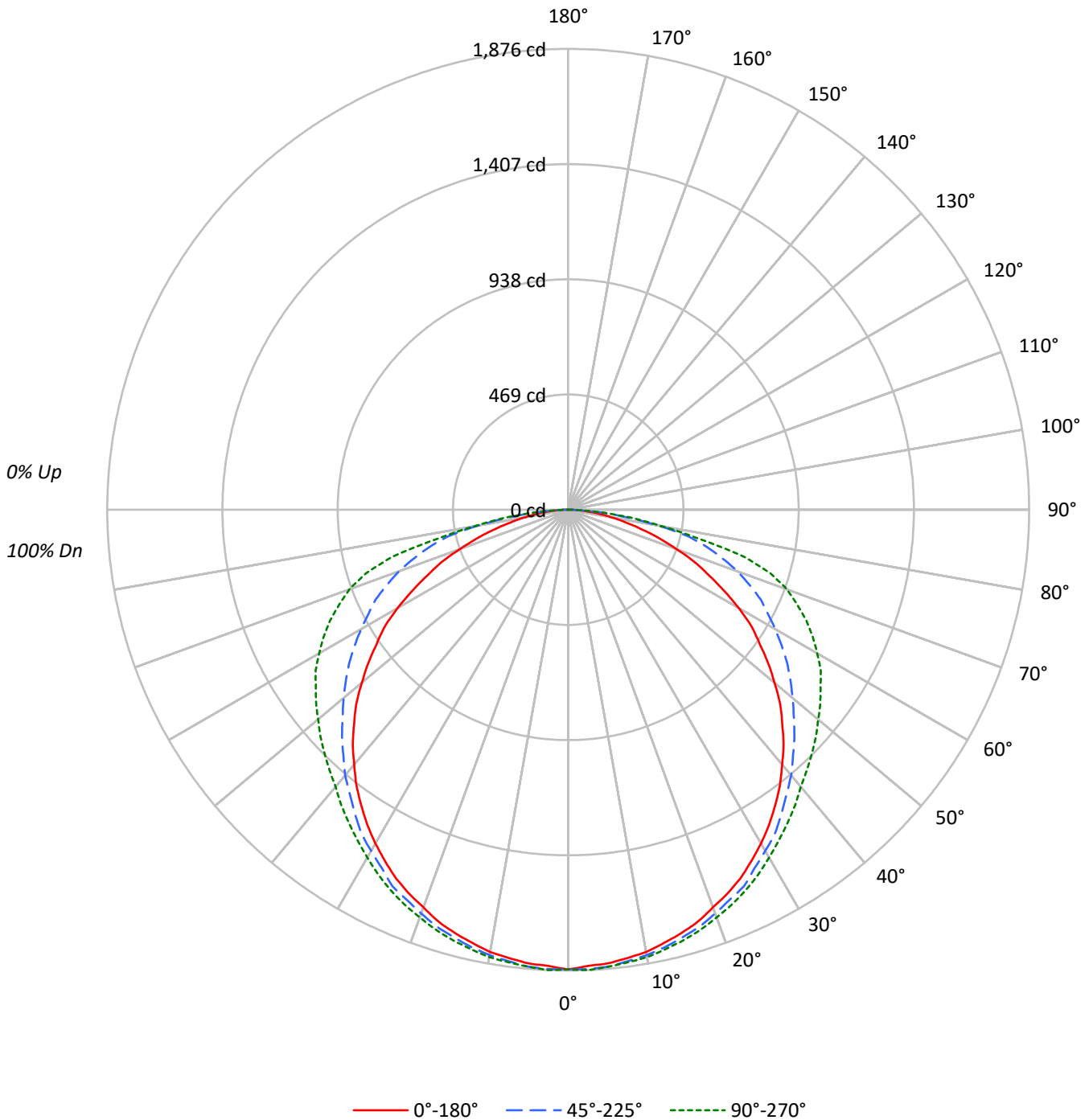
Input Watts (W): 63.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P390742

CATALOG NUMBER: 22CZ2-85VHE-HRP-UNV-L930-CD1-SWPD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P390742

CATALOG NUMBER: 22CZ2-85VHE-HRP-UNV-L930-CD1-SWPD1-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°	5037	5037	5037
5°	5009	5044	5044
10°	4995	5031	5055
15°	4970	5019	5056
20°	4933	5009	5059
25°	4920	5024	5076
30°	4876	4985	5080
35°	4824	4968	5112
40°	4758	4958	5174
45°	4687	4955	5338
50°	4587	4991	5560
55°	4463	5100	5881
60°	4317	5237	6299
65°	4019	5498	6810
70°	3690	5759	7449
75°	3236	6062	7702
80°	2785	5774	6045
85°	2436	4196	4600



TEST NUMBER: P390742

CATALOG NUMBER: 22CZ2-85VHE-HRP-UNV-L930-CD1-SWPD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	177.0	3.0
10°-20°	508.3	8.5
20°-30°	775.6	13.0
30°-40°	947.0	15.9
40°-50°	1012.6	17.0
50°-60°	977.3	16.4
60°-70°	841.3	14.1
70°-80°	569.2	9.6
80°-90°	150.2	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°	1461.0	24.5
0°-40°	2408.0	40.4
0°-60°	4397.8	73.8
0°-90°	5958.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5958.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1872	1872	1872	1872	1872	
5°	1854	1858	1867	1867	1867	176
15°	1784	1788	1802	1810	1815	503
25°	1657	1666	1692	1701	1710	763
35°	1468	1482	1512	1543	1556	919
45°	1232	1254	1302	1368	1403	951
55°	951	982	1087	1197	1254	852
65°	631	693	864	999	1070	628
75°	311	412	583	701	741	334
85°	79	110	136	140	149	89
90°	0	0	0	0	0	



TEST NUMBER: P390742

CATALOG NUMBER: 22CZ2-85VHE-HRP-UNV-L930-CD1-SWPD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1871.7	1871.7	1871.7	1871.7	1871.7
2.5°	1858.5	1862.9	1871.7	1871.7	1876.1
5°	1854.2	1858.5	1867.3	1867.3	1867.3
7.5°	1841.0	1845.4	1854.2	1858.5	1858.5
10°	1827.9	1832.2	1841.0	1845.4	1849.8
12.5°	1805.9	1810.3	1823.5	1832.2	1832.2
15°	1784.0	1788.4	1801.6	1810.3	1814.7
17.5°	1757.7	1766.5	1779.6	1788.4	1792.8
20°	1722.7	1731.4	1749.0	1762.1	1766.5
22.5°	1692.0	1700.7	1718.3	1731.4	1740.2
25°	1656.9	1665.7	1692.0	1700.7	1709.5
27.5°	1613.1	1621.8	1643.8	1661.3	1674.4
30°	1569.2	1578.0	1604.3	1626.2	1635.0
32.5°	1521.0	1534.2	1564.9	1582.4	1595.5
35°	1468.4	1481.6	1512.3	1542.9	1556.1
37.5°	1415.8	1429.0	1459.7	1499.1	1516.6
40°	1354.5	1372.0	1411.4	1464.0	1472.8
42.5°	1297.5	1319.4	1354.5	1415.8	1437.7
45°	1231.7	1253.6	1301.9	1367.6	1402.7
47.5°	1170.4	1192.3	1244.9	1323.8	1367.6
50°	1095.8	1126.5	1192.3	1284.3	1328.2
52.5°	1025.7	1052.0	1139.7	1240.5	1293.1
55°	951.2	981.9	1087.1	1196.7	1253.6
57.5°	885.4	911.7	1030.1	1152.8	1218.6
60°	802.2	837.2	973.1	1104.6	1170.4
62.5°	714.5	767.1	916.1	1052.0	1122.1
65°	631.2	692.6	863.5	999.4	1069.5
67.5°	556.7	622.4	797.8	942.4	1008.2
70°	469.0	552.3	732.0	872.3	946.8
72.5°	390.1	482.2	657.5	797.8	863.5
75°	311.2	412.0	583.0	701.3	740.8
77.5°	241.1	337.5	499.7	534.8	539.2
80°	179.7	267.4	372.6	377.0	390.1
82.5°	122.7	188.5	241.1	263.0	267.4
85°	78.9	109.6	135.9	140.3	149.0
87.5°	35.1	39.5	48.2	43.8	43.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)