

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: P390770

Luminaire Tested: **22CZ2-85VHE-RDP-UNV-L935-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: P390770
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-RDP-UNV-L935-CD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND RDP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4898.8 lumens
Efficiency: N/A
Efficacy: 77.0 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

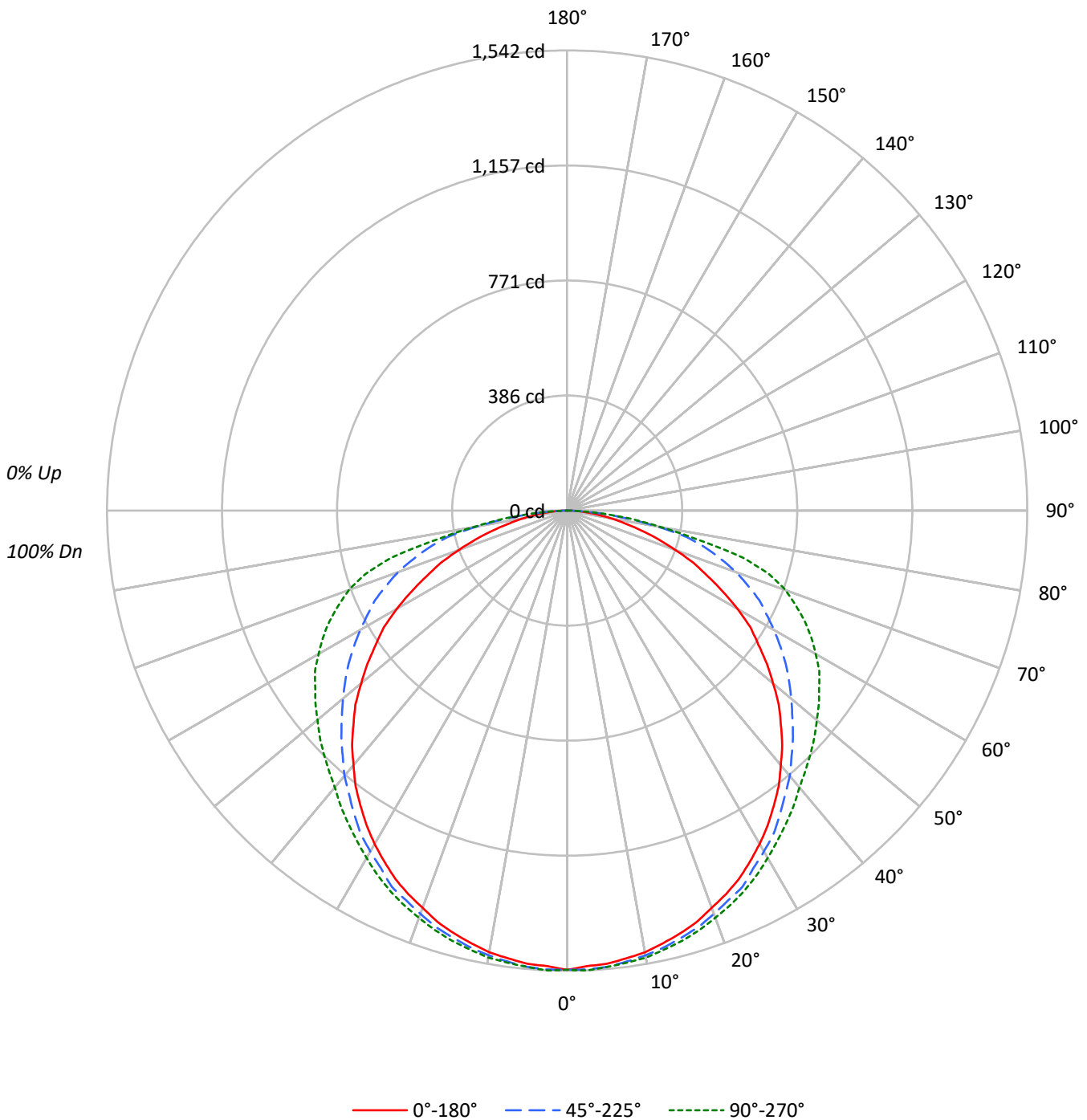
Input Watts (W): 63.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P390770

CATALOG NUMBER: 22CZ2-85VHE-RDP-UNV-L935-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P390770

CATALOG NUMBER: 22CZ2-85VHE-RDP-UNV-L935-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°	4141	4141	4141
5°	4118	4147	4147
10°	4106	4136	4156
15°	4086	4126	4156
20°	4056	4118	4159
25°	4045	4130	4173
30°	4009	4098	4177
35°	3966	4084	4203
40°	3912	4076	4254
45°	3854	4073	4389
50°	3772	4104	4571
55°	3669	4193	4836
60°	3549	4306	5179
65°	3304	4520	5599
70°	3034	4735	6124
75°	2661	4983	6332
80°	2290	4747	4970
85°	2004	3449	3782



TEST NUMBER: P390770

CATALOG NUMBER: 22CZ2-85VHE-RDP-UNV-L935-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	145.6	3.0
10°-20°	417.9	8.5
20°-30°	637.6	13.0
30°-40°	778.6	15.9
40°-50°	832.5	17.0
50°-60°	803.5	16.4
60°-70°	691.7	14.1
70°-80°	468.0	9.6
80°-90°	123.5	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°	1201.1	24.5
0°-40°	1979.7	40.4
0°-60°	3615.7	73.8
0°-90°	4898.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4898.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1539	1539	1539	1539	1539	
5°	1524	1528	1535	1535	1535	145
15°	1467	1470	1481	1488	1492	414
25°	1362	1369	1391	1398	1406	627
35°	1207	1218	1243	1268	1279	755
45°	1013	1031	1070	1124	1153	782
55°	782	807	894	984	1031	701
65°	519	569	710	822	879	516
75°	256	339	479	577	609	275
85°	65	90	112	115	122	73
90°	0	0	0	0	0	



TEST NUMBER: P390770

CATALOG NUMBER: 22CZ2-85VHE-RDP-UNV-L935-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1538.8	1538.8	1538.8	1538.8	1538.8
2.5°	1528.0	1531.6	1538.8	1538.8	1542.4
5°	1524.4	1528.0	1535.2	1535.2	1535.2
7.5°	1513.6	1517.2	1524.4	1528.0	1528.0
10°	1502.8	1506.4	1513.6	1517.2	1520.8
12.5°	1484.7	1488.3	1499.2	1506.4	1506.4
15°	1466.7	1470.3	1481.1	1488.3	1491.9
17.5°	1445.1	1452.3	1463.1	1470.3	1473.9
20°	1416.3	1423.5	1437.9	1448.7	1452.3
22.5°	1391.0	1398.3	1412.7	1423.5	1430.7
25°	1362.2	1369.4	1391.0	1398.3	1405.5
27.5°	1326.2	1333.4	1351.4	1365.8	1376.6
30°	1290.1	1297.3	1319.0	1337.0	1344.2
32.5°	1250.5	1261.3	1286.5	1301.0	1311.8
35°	1207.3	1218.1	1243.3	1268.5	1279.3
37.5°	1164.0	1174.8	1200.0	1232.5	1246.9
40°	1113.6	1128.0	1160.4	1203.7	1210.9
42.5°	1066.7	1084.7	1113.6	1164.0	1182.0
45°	1012.7	1030.7	1070.3	1124.4	1153.2
47.5°	962.2	980.2	1023.5	1088.3	1124.4
50°	900.9	926.2	980.2	1055.9	1091.9
52.5°	843.3	864.9	937.0	1019.9	1063.1
55°	782.0	807.2	893.7	983.8	1030.7
57.5°	728.0	749.6	846.9	947.8	1001.8
60°	659.5	688.3	800.0	908.1	962.2
62.5°	587.4	630.7	753.2	864.9	922.6
65°	518.9	569.4	709.9	821.7	879.3
67.5°	457.7	511.7	655.9	774.8	828.9
70°	385.6	454.1	601.8	717.1	778.4
72.5°	320.7	396.4	540.6	655.9	709.9
75°	255.9	338.8	479.3	576.6	609.0
77.5°	198.2	277.5	410.8	439.7	443.3
80°	147.8	219.8	306.3	309.9	320.7
82.5°	100.9	155.0	198.2	216.2	219.8
85°	64.9	90.1	111.7	115.3	122.5
87.5°	28.8	32.4	39.6	36.0	36.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)