

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: P390914

Luminaire Tested: **24CZ2-100VHE-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: P390914
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: 24CZ2-100VHE-RDP-UNV-L935-CD1-U
Description: 2x4 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: 5795.0 lumens
Efficiency: N/A
Efficacy: 83.3 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

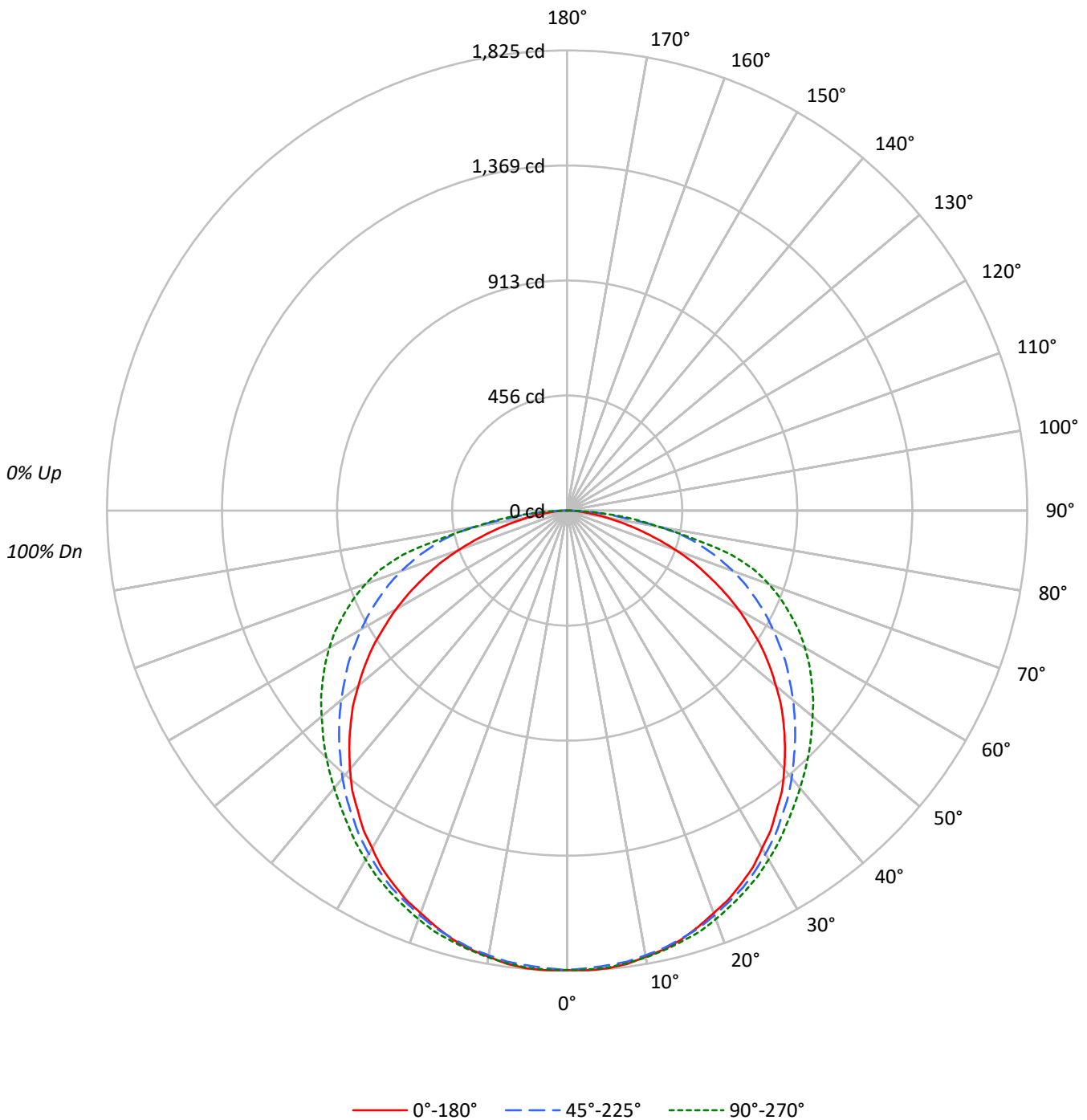
Input Watts (W): 69.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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°	2452	2452	2452
5°	2461	2446	2457
10°	2454	2447	2458
15°	2450	2446	2462
20°	2432	2445	2469
25°	2424	2449	2475
30°	2403	2443	2483
35°	2380	2436	2493
40°	2353	2434	2524
45°	2314	2434	2582
50°	2262	2449	2659
55°	2205	2488	2778
60°	2112	2537	2932
65°	1977	2626	3111
70°	1798	2748	3347
75°	1524	2899	3497
80°	1203	2917	2828
85°	888	2218	2485



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	172.9	3.0
10°-20°	497.5	8.6
20°-30°	760.8	13.1
30°-40°	930.1	16.0
40°-50°	991.3	17.1
50°-60°	947.8	16.4
60°-70°	802.9	13.9
70°-80°	539.6	9.3
80°-90°	152.2	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°	1431.2	24.7
0°-40°	2361.3	40.7
0°-60°	4300.3	74.2
0°-90°	5795.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5795.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1822	1822	1822	1822	1822	
5°	1822	1820	1811	1820	1820	173
15°	1759	1759	1756	1771	1768	496
25°	1633	1638	1650	1664	1667	752
35°	1449	1460	1483	1512	1518	908
45°	1216	1236	1279	1334	1357	938
55°	940	974	1061	1144	1184	837
65°	621	684	825	934	977	616
75°	293	400	558	652	673	314
85°	58	118	144	155	161	71
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1822.4	1822.4	1822.4	1822.4	1822.4
2.5°	1825.2	1825.2	1816.6	1822.4	1822.4
5°	1822.4	1819.5	1810.9	1819.5	1819.5
7.5°	1813.7	1810.9	1805.1	1813.7	1810.9
10°	1796.5	1796.5	1790.7	1799.4	1799.4
12.5°	1782.1	1779.2	1776.4	1787.9	1785.0
15°	1759.1	1759.1	1756.3	1770.6	1767.7
17.5°	1730.4	1733.3	1736.1	1747.6	1750.5
20°	1698.8	1704.5	1707.4	1724.6	1724.6
22.5°	1670.0	1672.9	1678.6	1695.9	1695.9
25°	1632.7	1638.4	1649.9	1664.3	1667.1
27.5°	1595.3	1598.2	1612.5	1632.7	1635.5
30°	1546.4	1555.0	1572.3	1595.3	1598.2
32.5°	1503.3	1511.9	1532.0	1555.0	1560.8
35°	1448.7	1460.2	1483.2	1511.9	1517.7
37.5°	1399.8	1408.5	1437.2	1468.8	1477.4
40°	1339.5	1356.7	1385.5	1422.8	1437.2
42.5°	1279.1	1296.3	1330.8	1379.7	1397.0
45°	1215.9	1236.0	1279.1	1333.7	1356.7
47.5°	1152.6	1175.6	1224.5	1287.7	1313.6
50°	1080.8	1109.5	1169.9	1241.7	1270.5
52.5°	1011.8	1046.3	1112.4	1192.9	1230.2
55°	939.9	974.4	1060.6	1144.0	1184.2
57.5°	859.4	905.4	1000.3	1095.1	1138.3
60°	784.7	827.8	942.8	1046.3	1089.4
62.5°	704.2	761.7	885.3	994.5	1037.7
65°	620.9	684.1	824.9	934.2	977.3
67.5°	546.1	615.1	764.6	873.8	916.9
70°	457.0	543.3	698.5	807.7	850.8
72.5°	373.7	468.5	629.5	735.8	776.1
75°	293.2	399.5	557.6	652.5	672.6
77.5°	218.5	330.6	482.9	523.1	508.8
80°	155.2	264.4	376.5	356.4	365.0
82.5°	100.6	201.2	232.8	264.4	273.1
85°	57.5	117.8	143.7	155.2	161.0
87.5°	25.9	43.1	57.5	57.5	54.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)