

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: P390912

Luminaire Tested: **24CZ2-100VHE-RDP-UNV-L935-CD1-SDWPD1-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: P390912
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-SDWPD1-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: 5654.1 lumens
Efficiency: N/A
Efficacy: 81.2 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

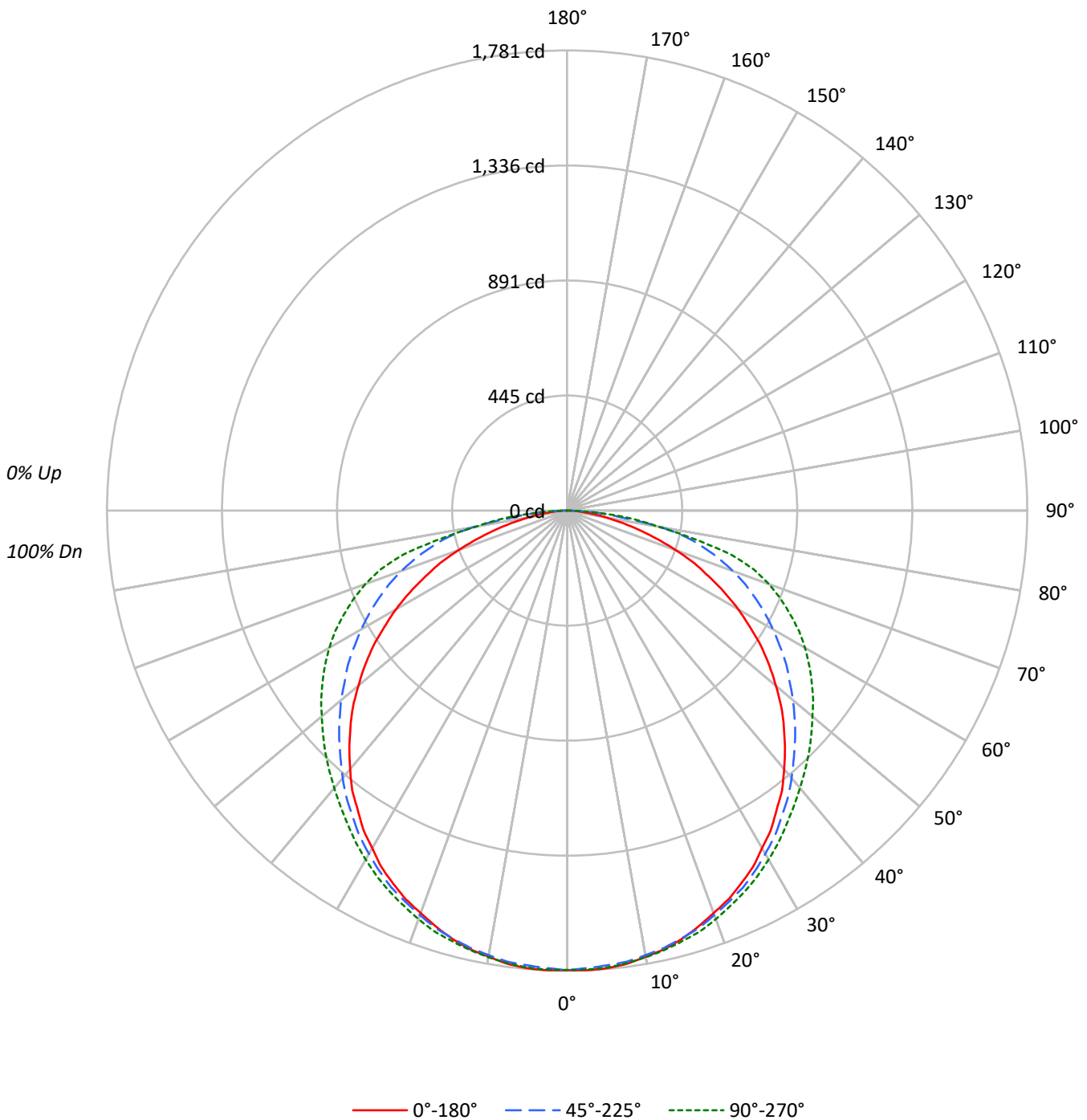
Input Watts (W): 69.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2392	2392	2392
5°	2402	2386	2398
10°	2395	2387	2399
15°	2391	2387	2403
20°	2373	2385	2409
25°	2365	2390	2415
30°	2344	2383	2423
35°	2322	2377	2432
40°	2295	2374	2463
45°	2257	2375	2519
50°	2207	2389	2595
55°	2151	2428	2711
60°	2060	2475	2860
65°	1929	2563	3036
70°	1754	2681	3266
75°	1487	2829	3412
80°	1173	2847	2760
85°	866	2164	2425



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	168.7	3.0
10°-20°	485.4	8.6
20°-30°	742.3	13.1
30°-40°	907.5	16.0
40°-50°	967.2	17.1
50°-60°	924.7	16.4
60°-70°	783.4	13.9
70°-80°	526.5	9.3
80°-90°	148.5	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°	1396.4	24.7
0°-40°	2303.8	40.7
0°-60°	4195.7	74.2
0°-90°	5654.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5654.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1778	1778	1778	1778	1778	
5°	1778	1775	1767	1775	1775	169
15°	1716	1716	1714	1728	1725	484
25°	1593	1599	1610	1624	1627	734
35°	1414	1425	1447	1475	1481	885
45°	1186	1206	1248	1301	1324	915
55°	917	951	1035	1116	1156	817
65°	606	668	805	912	954	601
75°	286	390	544	637	656	306
85°	56	115	140	151	157	69
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1778.1	1778.1	1778.1	1778.1	1778.1
2.5°	1780.9	1780.9	1772.4	1778.1	1778.1
5°	1778.1	1775.2	1766.8	1775.2	1775.2
7.5°	1769.6	1766.8	1761.2	1769.6	1766.8
10°	1752.8	1752.8	1747.2	1755.6	1755.6
12.5°	1738.8	1736.0	1733.2	1744.4	1741.6
15°	1716.4	1716.4	1713.5	1727.6	1724.8
17.5°	1688.3	1691.1	1693.9	1705.1	1707.9
20°	1657.5	1663.1	1665.9	1682.7	1682.7
22.5°	1629.4	1632.2	1637.8	1654.7	1654.7
25°	1593.0	1598.6	1609.8	1623.8	1626.6
27.5°	1556.5	1559.3	1573.3	1593.0	1595.8
30°	1508.8	1517.2	1534.1	1556.5	1559.3
32.5°	1466.8	1475.2	1494.8	1517.2	1522.8
35°	1413.5	1424.7	1447.1	1475.2	1480.8
37.5°	1365.8	1374.2	1402.2	1433.1	1441.5
40°	1306.9	1323.7	1351.8	1388.2	1402.2
42.5°	1248.0	1264.8	1298.5	1346.2	1363.0
45°	1186.3	1205.9	1248.0	1301.3	1323.7
47.5°	1124.6	1147.0	1194.7	1256.4	1281.7
50°	1054.5	1082.5	1141.4	1211.5	1239.6
52.5°	987.2	1020.8	1085.3	1163.9	1200.3
55°	917.1	950.7	1034.9	1116.2	1155.5
57.5°	838.5	883.4	976.0	1068.5	1110.6
60°	765.6	807.7	919.9	1020.8	1062.9
62.5°	687.1	743.2	863.8	970.4	1012.4
65°	605.8	667.5	804.9	911.5	953.5
67.5°	532.9	600.2	746.0	852.6	894.6
70°	445.9	530.1	681.5	788.1	830.1
72.5°	364.6	457.1	614.2	718.0	757.2
75°	286.1	389.8	544.1	636.6	656.3
77.5°	213.1	322.5	471.2	510.4	496.4
80°	151.4	258.0	367.4	347.8	356.2
82.5°	98.2	196.3	227.2	258.0	266.4
85°	56.1	115.0	140.2	151.4	157.1
87.5°	25.2	42.1	56.1	56.1	53.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)