

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: P390916

Luminaire Tested: **24CZ2-100VHE-RDP-UNV-L940-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: P390916
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-L940-CD1-SWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND RDP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5782.3 lumens
Efficiency: N/A
Efficacy: 83.1 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

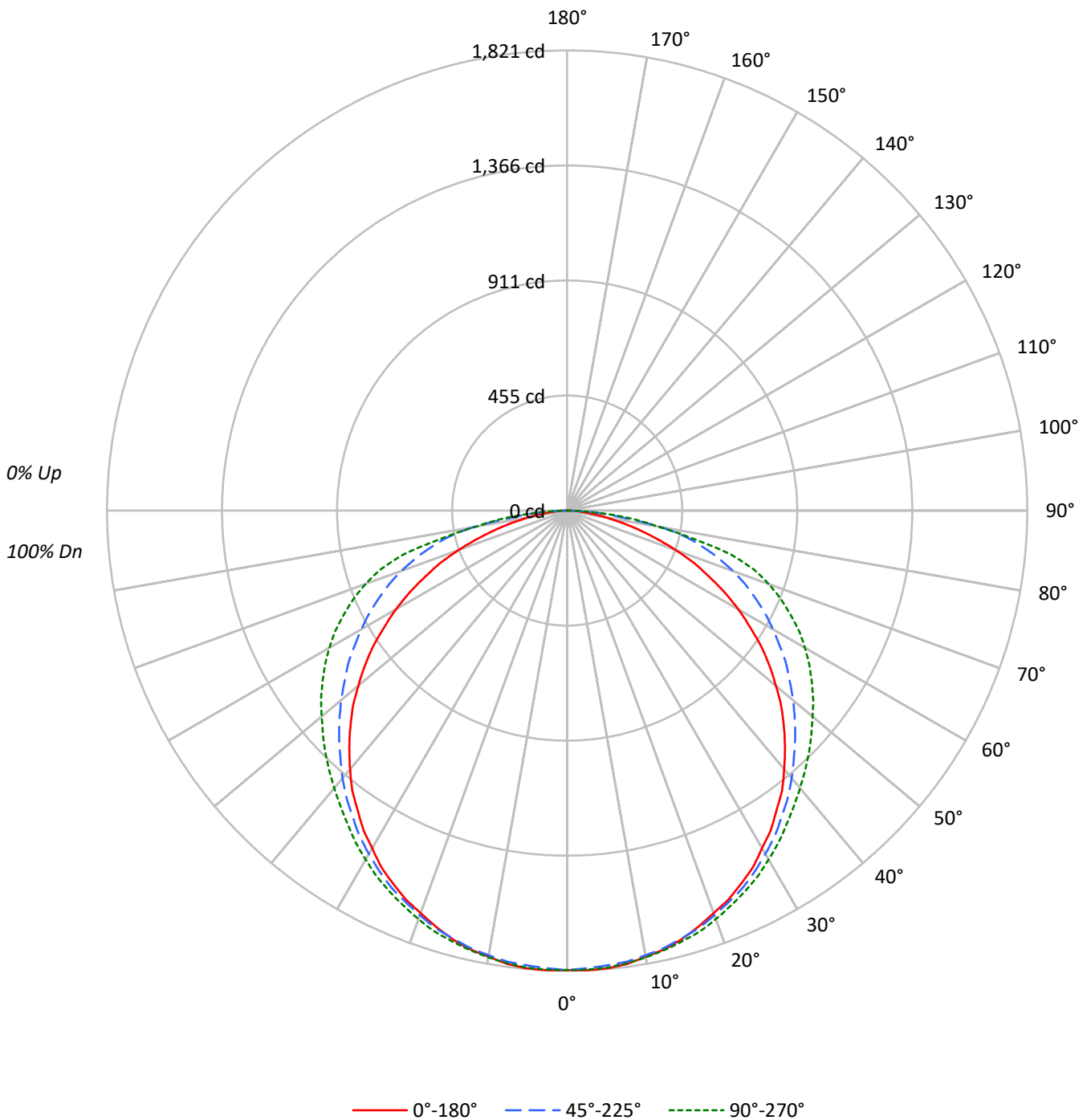
Input Watts (W): 69.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2447	2447	2447
5°	2456	2440	2452
10°	2449	2441	2453
15°	2445	2441	2457
20°	2427	2439	2464
25°	2419	2444	2470
30°	2397	2437	2478
35°	2374	2431	2487
40°	2347	2428	2519
45°	2308	2429	2576
50°	2257	2443	2654
55°	2200	2483	2772
60°	2107	2531	2925
65°	1972	2621	3105
70°	1794	2742	3340
75°	1521	2892	3489
80°	1200	2911	2822
85°	886	2214	2479



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	172.5	3.0
10°-20°	496.4	8.6
20°-30°	759.1	13.1
30°-40°	928.0	16.0
40°-50°	989.1	17.1
50°-60°	945.7	16.4
60°-70°	801.1	13.9
70°-80°	538.4	9.3
80°-90°	151.9	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
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0°-30°	1428.1	24.7
0°-40°	2356.1	40.7
0°-60°	4290.9	74.2
0°-90°	5782.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5782.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1818	1818	1818	1818	1818	
5°	1818	1816	1807	1816	1816	173
15°	1755	1755	1752	1767	1764	495
25°	1629	1635	1646	1661	1664	751
35°	1446	1457	1480	1509	1514	906
45°	1213	1233	1276	1331	1354	936
55°	938	972	1058	1142	1182	835
65°	620	683	823	932	975	615
75°	292	399	556	651	671	313
85°	57	118	143	155	161	71
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1818.4	1818.4	1818.4	1818.4	1818.4
2.5°	1821.2	1821.2	1812.6	1818.4	1818.4
5°	1818.4	1815.5	1806.9	1815.5	1815.5
7.5°	1809.8	1806.9	1801.2	1809.8	1806.9
10°	1792.6	1792.6	1786.8	1795.4	1795.4
12.5°	1778.2	1775.3	1772.5	1784.0	1781.1
15°	1755.3	1755.3	1752.4	1766.7	1763.9
17.5°	1726.6	1729.5	1732.3	1743.8	1746.7
20°	1695.0	1700.8	1703.6	1720.9	1720.9
22.5°	1666.4	1669.2	1675.0	1692.2	1692.2
25°	1629.1	1634.8	1646.3	1660.6	1663.5
27.5°	1591.8	1594.7	1609.0	1629.1	1631.9
30°	1543.0	1551.6	1568.8	1591.8	1594.7
32.5°	1500.0	1508.6	1528.7	1551.6	1557.4
35°	1445.5	1457.0	1479.9	1508.6	1514.4
37.5°	1396.8	1405.4	1434.0	1465.6	1474.2
40°	1336.5	1353.7	1382.4	1419.7	1434.0
42.5°	1276.3	1293.5	1327.9	1376.7	1393.9
45°	1213.2	1233.3	1276.3	1330.8	1353.7
47.5°	1150.1	1173.0	1221.8	1284.9	1310.7
50°	1078.4	1107.1	1167.3	1239.0	1267.7
52.5°	1009.6	1044.0	1110.0	1190.3	1227.5
55°	937.9	972.3	1058.3	1141.5	1181.7
57.5°	857.6	903.4	998.1	1092.7	1135.8
60°	783.0	826.0	940.7	1044.0	1087.0
62.5°	702.7	760.0	883.4	992.4	1035.4
65°	619.5	682.6	823.1	932.1	975.2
67.5°	544.9	613.8	762.9	871.9	914.9
70°	456.0	542.1	696.9	805.9	849.0
72.5°	372.9	467.5	628.1	734.2	774.4
75°	292.5	398.7	556.4	651.1	671.1
77.5°	218.0	329.8	481.8	522.0	507.7
80°	154.9	263.9	375.7	355.6	364.2
82.5°	100.4	200.8	232.3	263.9	272.5
85°	57.4	117.6	143.4	154.9	160.6
87.5°	25.8	43.0	57.4	57.4	54.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)