

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: P391110

Luminaire Tested: **24CZ2-150VHE-RDP-UNV-L950-CD2-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: P391110
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: 24CZ2-150VHE-RDP-UNV-L950-CD2-SDWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND RDP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8928.4 lumens
Efficiency: N/A
Efficacy: 85.7 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

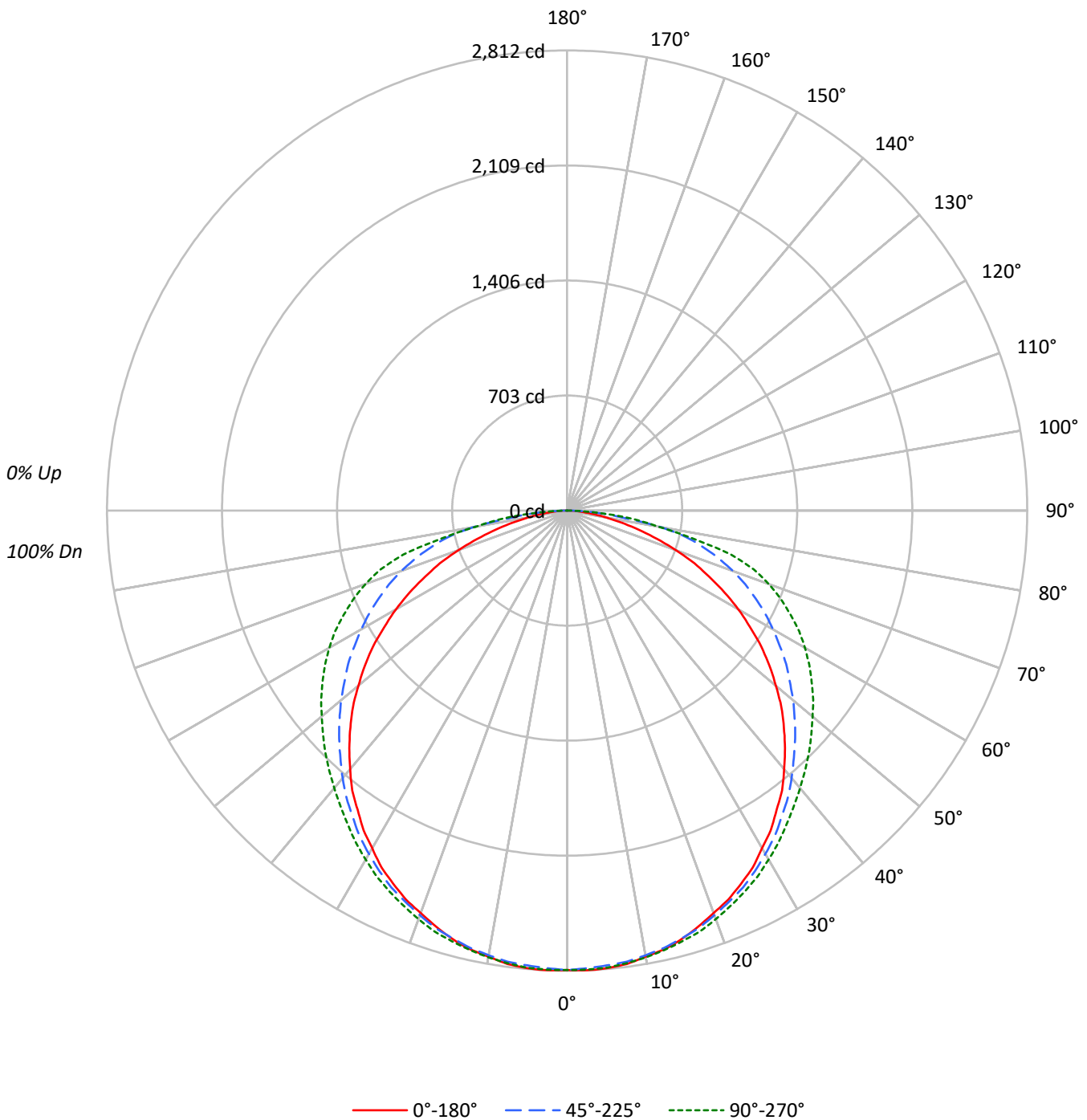
Input Watts (W): 104.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P391110

CATALOG NUMBER: 24CZ2-150VHE-RDP-UNV-L950-CD2-SDWPD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P391110

CATALOG NUMBER: 24CZ2-150VHE-RDP-UNV-L950-CD2-SDWPD1-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	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°	3778	3778	3778
5°	3792	3768	3786
10°	3782	3769	3788
15°	3775	3769	3794
20°	3748	3767	3805
25°	3734	3774	3813
30°	3702	3764	3826
35°	3666	3754	3841
40°	3625	3749	3889
45°	3565	3750	3977
50°	3486	3773	4097
55°	3397	3833	4280
60°	3253	3909	4517
65°	3046	4046	4794
70°	2770	4233	5157
75°	2348	4466	5387
80°	1853	4495	4358
85°	1368	3418	3829



TEST NUMBER: P391110

CATALOG NUMBER: 24CZ2-150VHE-RDP-UNV-L950-CD2-SDWPD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	266.3	3.0
10°-20°	766.5	8.6
20°-30°	1172.2	13.1
30°-40°	1433.0	16.0
40°-50°	1527.2	17.1
50°-60°	1460.2	16.4
60°-70°	1237.0	13.9
70°-80°	831.4	9.3
80°-90°	234.5	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°	2205.0	24.7
0°-40°	3638.0	40.7
0°-60°	6625.5	74.2
0°-90°	8928.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8928.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2808	2808	2808	2808	2808	
5°	2808	2803	2790	2803	2803	267
15°	2710	2710	2706	2728	2724	764
25°	2515	2524	2542	2564	2569	1159
35°	2232	2250	2285	2329	2338	1398
45°	1873	1904	1971	2055	2090	1445
55°	1448	1501	1634	1763	1825	1290
65°	957	1054	1271	1439	1506	950
75°	452	616	859	1005	1036	484
85°	89	182	221	239	248	110
90°	0	0	0	0	0	



TEST NUMBER: P391110

CATALOG NUMBER: 24CZ2-150VHE-RDP-UNV-L950-CD2-SDWPD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2807.7	2807.7	2807.7	2807.7	2807.7
2.5°	2812.2	2812.2	2798.9	2807.7	2807.7
5°	2807.7	2803.3	2790.0	2803.3	2803.3
7.5°	2794.4	2790.0	2781.2	2794.4	2790.0
10°	2767.9	2767.9	2759.0	2772.3	2772.3
12.5°	2745.7	2741.3	2736.9	2754.6	2750.2
15°	2710.3	2710.3	2705.9	2728.0	2723.6
17.5°	2666.0	2670.4	2674.9	2692.6	2697.0
20°	2617.3	2626.2	2630.6	2657.2	2657.2
22.5°	2573.0	2577.4	2586.3	2612.9	2612.9
25°	2515.4	2524.3	2542.0	2564.2	2568.6
27.5°	2457.9	2462.3	2484.4	2515.4	2519.9
30°	2382.6	2395.9	2422.4	2457.9	2462.3
32.5°	2316.2	2329.4	2360.4	2395.9	2404.7
35°	2232.0	2249.7	2285.2	2329.4	2338.3
37.5°	2156.7	2170.0	2214.3	2263.0	2276.3
40°	2063.7	2090.3	2134.6	2192.2	2214.3
42.5°	1970.7	1997.3	2050.4	2125.7	2152.3
45°	1873.3	1904.3	1970.7	2054.9	2090.3
47.5°	1775.9	1811.3	1886.6	1984.0	2023.9
50°	1665.2	1709.4	1802.4	1913.2	1957.4
52.5°	1558.9	1612.0	1713.9	1837.9	1895.4
55°	1448.1	1501.3	1634.2	1762.6	1824.6
57.5°	1324.1	1395.0	1541.1	1687.3	1753.7
60°	1209.0	1275.4	1452.6	1612.0	1678.4
62.5°	1085.0	1173.6	1364.0	1532.3	1598.7
65°	956.6	1054.0	1271.0	1439.3	1505.7
67.5°	841.4	947.7	1178.0	1346.3	1412.7
70°	704.1	837.0	1076.1	1244.4	1310.9
72.5°	575.7	721.9	969.9	1133.7	1195.7
75°	451.7	615.6	859.1	1005.3	1036.3
77.5°	336.6	509.3	744.0	806.0	783.9
80°	239.1	407.4	580.1	549.1	562.4
82.5°	155.0	310.0	358.7	407.4	420.7
85°	88.6	181.6	221.4	239.1	248.0
87.5°	39.9	66.4	88.6	88.6	84.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)