

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: P391102

Luminaire Tested: **24CZ2-150VHE-RDP-UNV-L930-CD2-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: P391102
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-L930-CD2-SWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND RDP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8223.7 lumens
Efficiency: N/A
Efficacy: 78.9 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

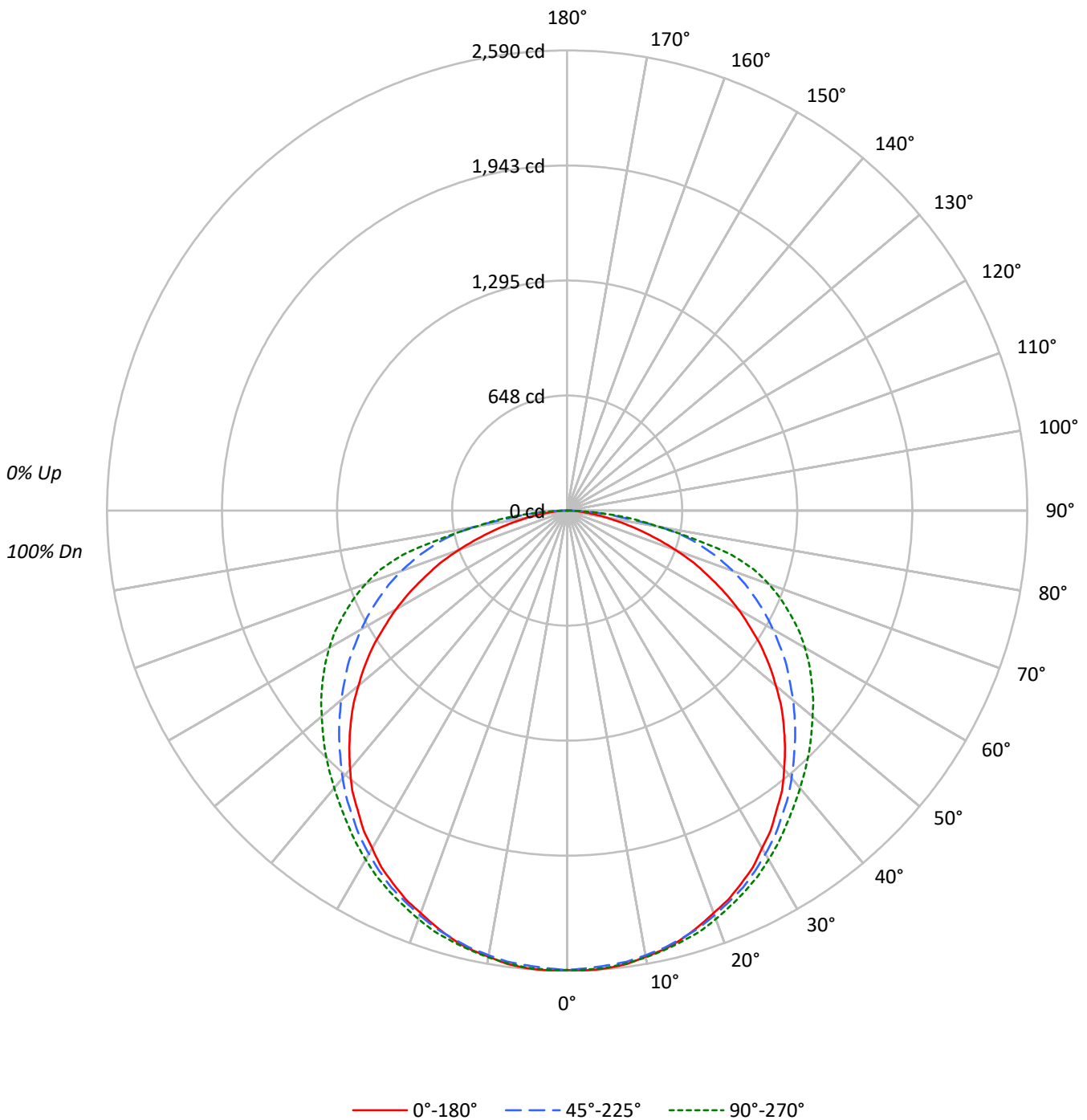
Input Watts (W): 104.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3480	3480	3480
5°	3493	3471	3487
10°	3483	3472	3489
15°	3477	3472	3494
20°	3452	3469	3504
25°	3440	3476	3512
30°	3409	3466	3524
35°	3377	3457	3538
40°	3339	3453	3582
45°	3283	3454	3663
50°	3210	3475	3774
55°	3129	3531	3942
60°	2997	3600	4160
65°	2805	3727	4415
70°	2552	3899	4750
75°	2163	4114	4962
80°	1707	4141	4014
85°	1260	3149	3526



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	245.3	3.0
10°-20°	706.0	8.6
20°-30°	1079.7	13.1
30°-40°	1319.9	16.0
40°-50°	1406.7	17.1
50°-60°	1345.0	16.4
60°-70°	1139.4	13.9
70°-80°	765.8	9.3
80°-90°	216.0	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°	2031.0	24.7
0°-40°	3350.9	40.7
0°-60°	6102.6	74.2
0°-90°	8223.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8223.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2586	2586	2586	2586	2586	
5°	2586	2582	2570	2582	2582	246
15°	2496	2496	2492	2513	2509	704
25°	2317	2325	2341	2362	2366	1068
35°	2056	2072	2105	2146	2154	1288
45°	1725	1754	1815	1893	1925	1331
55°	1334	1383	1505	1624	1681	1188
65°	881	971	1171	1326	1387	875
75°	416	567	791	926	954	446
85°	82	167	204	220	228	101
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2586.1	2586.1	2586.1	2586.1	2586.1
2.5°	2590.2	2590.2	2578.0	2586.1	2586.1
5°	2586.1	2582.0	2569.8	2582.0	2582.0
7.5°	2573.9	2569.8	2561.6	2573.9	2569.8
10°	2549.4	2549.4	2541.2	2553.5	2553.5
12.5°	2529.0	2524.9	2520.9	2537.2	2533.1
15°	2496.4	2496.4	2492.3	2512.7	2508.6
17.5°	2455.6	2459.7	2463.7	2480.1	2484.1
20°	2410.7	2418.9	2423.0	2447.4	2447.4
22.5°	2369.9	2374.0	2382.2	2406.6	2406.6
25°	2316.9	2325.1	2341.4	2361.8	2365.9
27.5°	2263.9	2268.0	2288.3	2316.9	2321.0
30°	2194.5	2206.8	2231.2	2263.9	2268.0
32.5°	2133.3	2145.6	2174.1	2206.8	2214.9
35°	2055.8	2072.2	2104.8	2145.6	2153.7
37.5°	1986.5	1998.7	2039.5	2084.4	2096.6
40°	1900.8	1925.3	1966.1	2019.1	2039.5
42.5°	1815.2	1839.7	1888.6	1957.9	1982.4
45°	1725.4	1754.0	1815.2	1892.7	1925.3
47.5°	1635.7	1668.3	1737.7	1827.4	1864.1
50°	1533.7	1574.5	1660.2	1762.2	1802.9
52.5°	1435.8	1484.8	1578.6	1692.8	1745.8
55°	1333.8	1382.8	1505.2	1623.5	1680.6
57.5°	1219.6	1284.9	1419.5	1554.1	1615.3
60°	1113.6	1174.8	1337.9	1484.8	1546.0
62.5°	999.4	1080.9	1256.3	1411.4	1472.5
65°	881.1	970.8	1170.7	1325.7	1386.9
67.5°	775.0	872.9	1085.0	1240.0	1301.2
70°	648.6	770.9	991.2	1146.2	1207.4
72.5°	530.3	664.9	893.3	1044.2	1101.3
75°	416.1	567.0	791.3	925.9	954.5
77.5°	310.0	469.1	685.3	742.4	722.0
80°	220.3	375.3	534.4	505.8	518.0
82.5°	142.8	285.5	330.4	375.3	387.5
85°	81.6	167.2	204.0	220.3	228.4
87.5°	36.7	61.2	81.6	81.6	77.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)