

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: P391030

Luminaire Tested: **24CZ2-130VHE-HRP-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: P391030
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: 24CZ2-130VHE-HRP-UNV-L930-CD2-SWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND HRP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9179.0 lumens
Efficiency: N/A
Efficacy: 101.2 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

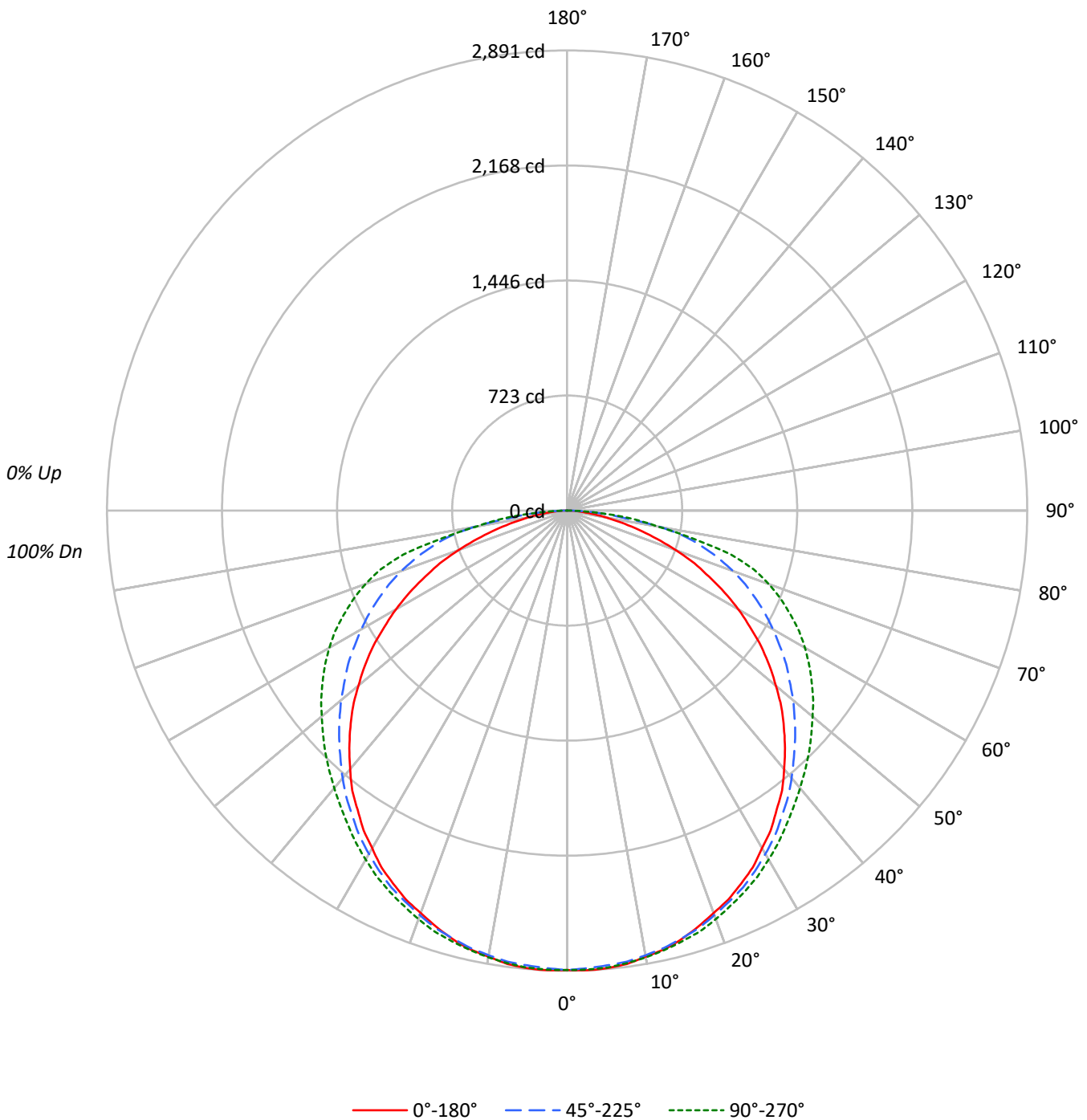
Input Watts (W): 90.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3884	3884	3884
5°	3899	3874	3893
10°	3888	3875	3894
15°	3881	3875	3900
20°	3853	3872	3911
25°	3839	3880	3920
30°	3806	3869	3933
35°	3769	3859	3949
40°	3726	3854	3998
45°	3665	3855	4089
50°	3583	3879	4212
55°	3492	3941	4400
60°	3345	4018	4643
65°	3131	4160	4928
70°	2848	4353	5302
75°	2414	4592	5539
80°	1905	4621	4480
85°	1406	3514	3937



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	273.8	3.0
10°-20°	788.0	8.6
20°-30°	1205.1	13.1
30°-40°	1473.2	16.0
40°-50°	1570.1	17.1
50°-60°	1501.2	16.4
60°-70°	1271.7	13.9
70°-80°	854.7	9.3
80°-90°	241.1	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°	2266.9	24.7
0°-40°	3740.1	40.7
0°-60°	6811.5	74.2
0°-90°	9179.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9179.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2886	2886	2886	2886	2886	
5°	2886	2882	2868	2882	2882	274
15°	2786	2786	2782	2805	2800	786
25°	2586	2595	2613	2636	2641	1192
35°	2295	2313	2349	2395	2404	1438
45°	1926	1958	2026	2112	2149	1485
55°	1489	1543	1680	1812	1876	1326
65°	983	1084	1307	1480	1548	976
75°	464	633	883	1034	1065	497
85°	91	187	228	246	255	113
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2886.5	2886.5	2886.5	2886.5	2886.5
2.5°	2891.1	2891.1	2877.4	2886.5	2886.5
5°	2886.5	2882.0	2868.3	2882.0	2882.0
7.5°	2872.9	2868.3	2859.2	2872.9	2868.3
10°	2845.6	2845.6	2836.5	2850.1	2850.1
12.5°	2822.8	2818.2	2813.7	2831.9	2827.3
15°	2786.4	2786.4	2781.8	2804.6	2800.0
17.5°	2740.8	2745.4	2749.9	2768.2	2772.7
20°	2690.8	2699.9	2704.4	2731.7	2731.7
22.5°	2645.2	2649.8	2658.9	2686.2	2686.2
25°	2586.0	2595.1	2613.4	2636.1	2640.7
27.5°	2526.9	2531.4	2554.2	2586.0	2590.6
30°	2449.5	2463.1	2490.4	2526.9	2531.4
32.5°	2381.2	2394.8	2426.7	2463.1	2472.2
35°	2294.7	2312.9	2349.3	2394.8	2403.9
37.5°	2217.3	2230.9	2276.4	2326.5	2340.2
40°	2121.6	2149.0	2194.5	2253.7	2276.4
42.5°	2026.0	2053.4	2108.0	2185.4	2212.7
45°	1925.9	1957.7	2026.0	2112.5	2149.0
47.5°	1825.7	1862.1	1939.5	2039.7	2080.7
50°	1711.9	1757.4	1853.0	1966.8	2012.4
52.5°	1602.6	1657.3	1762.0	1889.5	1948.6
55°	1488.8	1543.4	1680.0	1812.1	1875.8
57.5°	1361.3	1434.2	1584.4	1734.7	1802.9
60°	1242.9	1311.2	1493.3	1657.3	1725.5
62.5°	1115.5	1206.5	1402.3	1575.3	1643.6
65°	983.4	1083.6	1306.7	1479.7	1548.0
67.5°	865.0	974.3	1211.1	1384.1	1452.4
70°	723.9	860.5	1106.4	1279.4	1347.7
72.5°	591.9	742.1	997.1	1165.5	1229.3
75°	464.4	632.9	883.3	1033.5	1065.4
77.5°	346.0	523.6	764.9	828.6	805.9
80°	245.9	418.9	596.4	564.6	578.2
82.5°	159.4	318.7	368.8	418.9	432.5
85°	91.1	186.7	227.6	245.9	255.0
87.5°	41.0	68.3	91.1	91.1	86.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)