

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: P388653

Luminaire Tested: **24CZ2-130VHE-UNV-L930-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: P388653
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-5)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-130VHE-UNV-L930-CD2-SDWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10683.3 lumens
Efficiency: N/A
Efficacy: 117.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

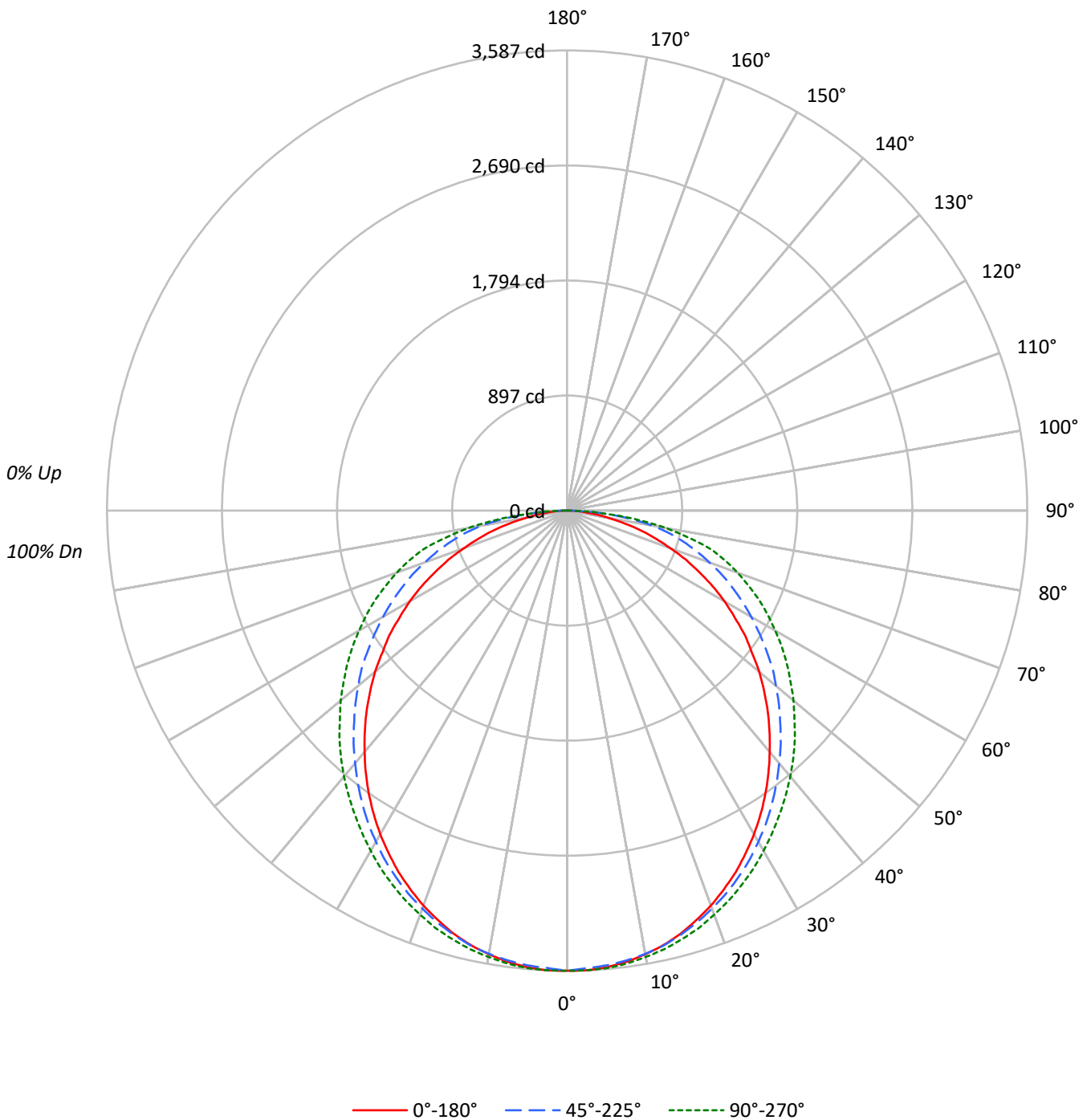
Input Watts (W): 90.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P388653

CATALOG NUMBER: 24CZ2-130VHE-UNV-L930-CD2-SDWPD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P388653

CATALOG NUMBER: 24CZ2-130VHE-UNV-L930-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	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	58	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4826	4826	4826
5°	4825	4806	4835
10°	4798	4793	4827
15°	4758	4768	4818
20°	4692	4727	4799
25°	4616	4685	4780
30°	4526	4631	4758
35°	4427	4574	4744
40°	4315	4515	4753
45°	4206	4471	4776
50°	4090	4448	4821
55°	3964	4441	4910
60°	3809	4462	5037
65°	3610	4529	5256
70°	3353	4643	5554
75°	3058	4875	6024
80°	2514	5249	6023
85°	1927	4844	5175



TEST NUMBER: P388653

CATALOG NUMBER: 24CZ2-130VHE-UNV-L930-CD2-SDWPD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	339.2	3.2
10°-20°	968.5	9.1
20°-30°	1457.4	13.6
30°-40°	1746.5	16.3
40°-50°	1820.1	17.0
50°-60°	1693.4	15.9
60°-70°	1394.7	13.1
70°-80°	949.9	8.9
80°-90°	313.6	2.9
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°	2765.1	25.9
0°-40°	4511.7	42.2
0°-60°	8025.1	75.1
0°-90°	10683.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10683.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3587	3587	3587	3587	3587	
5°	3573	3573	3558	3576	3580	339
15°	3416	3419	3423	3455	3458	962
25°	3109	3123	3156	3209	3220	1431
35°	2696	2728	2785	2860	2888	1685
45°	2211	2257	2350	2467	2510	1705
55°	1690	1747	1893	2043	2093	1506
65°	1134	1230	1423	1590	1651	1125
75°	588	720	938	1105	1159	620
85°	125	242	314	335	335	155
90°	0	0	0	0	0	



TEST NUMBER: P388653

CATALOG NUMBER: 24CZ2-130VHE-UNV-L930-CD2-SDWPD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3586.9	3586.9	3586.9	3586.9	3586.9
2.5°	3586.9	3586.9	3569.1	3586.9	3586.9
5°	3572.6	3572.6	3558.4	3576.2	3579.7
7.5°	3547.7	3551.2	3537.0	3558.4	3561.9
10°	3512.0	3515.6	3508.4	3529.8	3533.4
12.5°	3469.2	3472.8	3472.8	3497.7	3501.3
15°	3415.7	3419.3	3422.9	3455.0	3458.5
17.5°	3348.0	3358.7	3365.8	3405.0	3412.2
20°	3276.7	3287.4	3301.6	3344.4	3351.6
22.5°	3194.7	3208.9	3233.9	3280.2	3290.9
25°	3109.1	3123.4	3155.5	3208.9	3219.6
27.5°	3012.8	3034.2	3073.5	3130.5	3144.8
30°	2913.0	2934.4	2980.7	3041.4	3062.8
32.5°	2806.0	2834.6	2888.0	2955.8	2977.2
35°	2695.5	2727.6	2784.6	2859.5	2888.0
37.5°	2577.8	2613.5	2681.2	2763.3	2798.9
40°	2456.6	2499.4	2570.7	2667.0	2706.2
42.5°	2335.4	2374.6	2463.8	2567.2	2609.9
45°	2210.6	2257.0	2349.7	2467.3	2510.1
47.5°	2082.2	2128.6	2239.1	2363.9	2403.1
50°	1953.9	2000.2	2125.0	2257.0	2303.3
52.5°	1814.8	1875.4	2018.1	2150.0	2196.3
55°	1690.0	1747.1	1893.3	2043.0	2092.9
57.5°	1547.4	1615.2	1775.6	1932.5	1986.0
60°	1415.5	1486.8	1658.0	1818.4	1871.9
62.5°	1280.0	1358.5	1540.3	1704.3	1764.9
65°	1133.8	1230.1	1422.6	1590.2	1650.8
67.5°	1001.9	1101.7	1305.0	1476.1	1529.6
70°	852.2	973.4	1180.2	1351.3	1411.9
72.5°	723.8	845.0	1062.5	1230.1	1290.7
75°	588.3	720.2	937.7	1105.3	1158.8
77.5°	452.8	599.0	816.5	944.9	962.7
80°	324.5	477.8	677.4	752.3	777.3
82.5°	228.2	367.2	499.2	549.1	563.3
85°	124.8	242.5	313.8	335.2	335.2
87.5°	53.5	103.4	124.8	128.4	131.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)