

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: P388296

Luminaire Tested: **24CZ2-100VHE-SQR-UNV-L930-CD1-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: P388296
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2002-678-2)
Test Lab: INNOVATION CENTER (G2)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-100VHE-SQR-UNV-L930-CD1-SDWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7878.8 lumens
Efficiency: N/A
Efficacy: 113.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.33 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

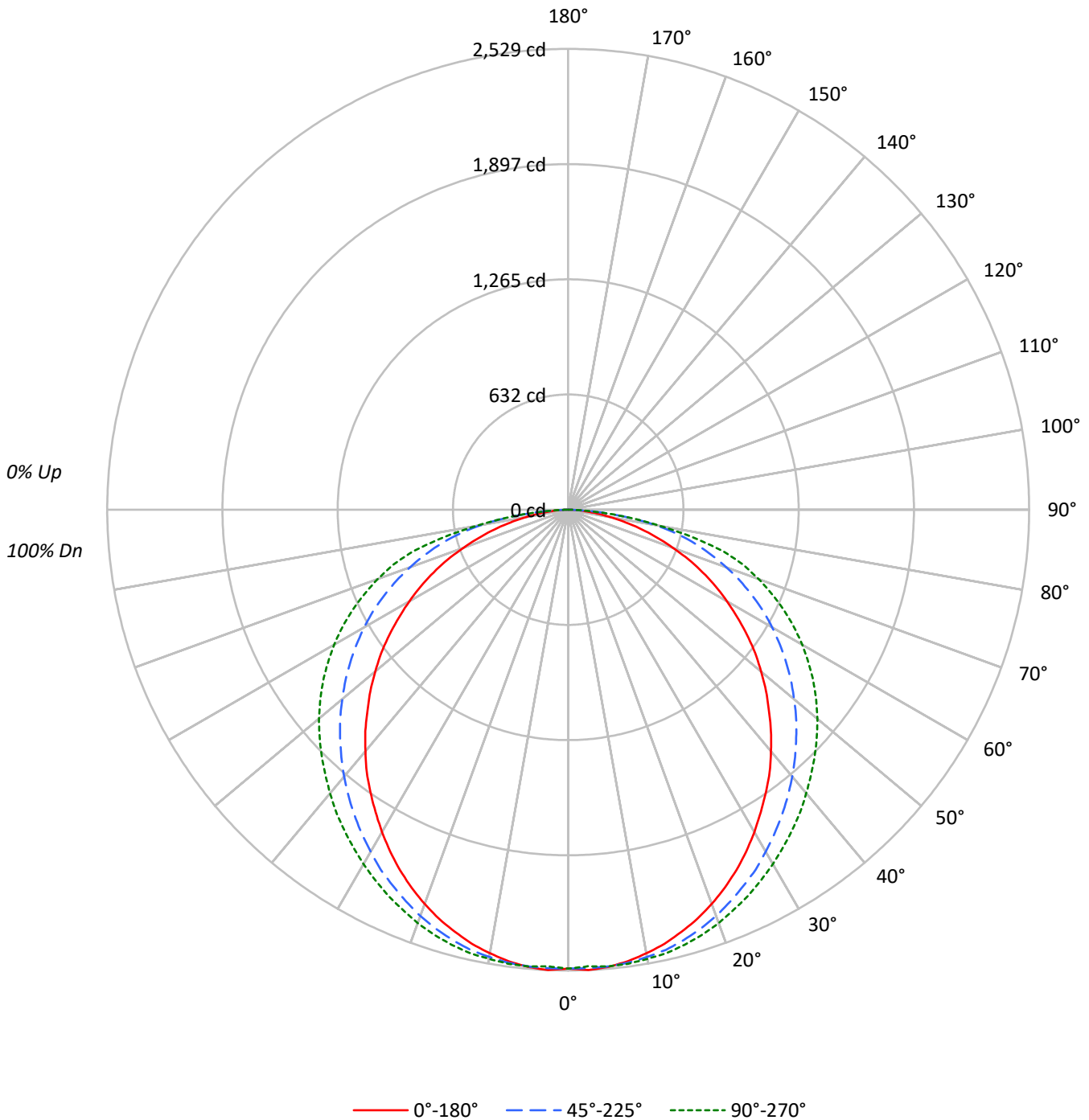
Input Watts (W): 69.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P388296

CATALOG NUMBER: 24CZ2-100VHE-SQR-UNV-L930-CD1-SDWPD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P388296

CATALOG NUMBER: 24CZ2-100VHE-SQR-UNV-L930-CD1-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	81	75	95	87	80	74	83	78	73	80	75	71	77	73	69	67
3	89	77	69	62	86	76	68	61	73	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	52	64	57	51	62	55	50	60	54	49	47
5	74	61	51	44	72	60	51	44	57	50	44	55	49	43	54	48	43	41
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35
7	63	49	40	34	62	49	40	34	47	39	34	45	39	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	30	28
9	55	41	33	27	54	41	33	27	39	32	27	38	32	27	37	31	27	25
10	52	38	30	25	50	37	30	24	36	29	24	36	29	24	35	29	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3388	3388	3388
5°	3401	3398	3398
10°	3377	3405	3419
15°	3341	3407	3443
20°	3297	3397	3457
25°	3241	3380	3468
30°	3173	3367	3488
35°	3107	3359	3521
40°	3039	3359	3569
45°	2960	3366	3639
50°	2892	3387	3736
55°	2807	3424	3851
60°	2710	3479	3991
65°	2592	3545	4158
70°	2405	3633	4370
75°	2178	3760	4572
80°	1835	3770	3931
85°	1406	2851	2851



TEST NUMBER: P388296

CATALOG NUMBER: 24CZ2-100VHE-SQR-UNV-L930-CD1-SDWPD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	239.1	3.0
10°-20°	687.8	8.7
20°-30°	1044.7	13.3
30°-40°	1270.8	16.1
40°-50°	1352.9	17.2
50°-60°	1288.6	16.4
60°-70°	1077.6	13.7
70°-80°	718.5	9.1
80°-90°	198.8	2.5
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°	1971.6	25.0
0°-40°	3242.3	41.2
0°-60°	5883.9	74.7
0°-90°	7878.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7878.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2518	2518	2518	2518	2518	
5°	2518	2503	2516	2516	2516	239
15°	2399	2404	2446	2464	2472	677
25°	2183	2211	2276	2316	2336	1005
35°	1891	1946	2045	2113	2144	1184
45°	1556	1639	1769	1868	1912	1203
55°	1197	1301	1460	1587	1642	1070
65°	814	934	1114	1251	1306	805
75°	419	552	723	846	879	444
85°	91	169	185	182	185	110
90°	0	0	0	0	0	



TEST NUMBER: P388296

CATALOG NUMBER: 24CZ2-100VHE-SQR-UNV-L930-CD1-SDWPD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2518.4	2518.4	2518.4	2518.4	2518.4
2.5°	2528.9	2510.6	2518.4	2518.4	2508.0
5°	2518.4	2502.8	2515.8	2515.8	2515.8
7.5°	2500.2	2487.2	2508.0	2513.2	2513.2
10°	2471.6	2466.4	2492.4	2500.2	2502.8
12.5°	2440.4	2437.8	2474.2	2484.6	2492.4
15°	2398.8	2404.0	2445.6	2463.8	2471.6
17.5°	2354.5	2364.9	2411.8	2437.8	2445.6
20°	2302.5	2318.1	2372.8	2398.8	2414.4
22.5°	2245.3	2268.7	2325.9	2357.1	2375.4
25°	2182.8	2211.4	2276.5	2315.5	2336.3
27.5°	2115.2	2151.6	2227.1	2271.3	2292.1
30°	2042.3	2084.0	2167.2	2219.3	2245.3
32.5°	1966.9	2016.3	2107.4	2164.6	2195.8
35°	1891.4	1946.1	2044.9	2112.6	2143.8
37.5°	1816.0	1870.6	1979.9	2052.7	2091.8
40°	1730.1	1795.2	1912.3	1992.9	2031.9
42.5°	1646.9	1717.1	1842.0	1930.5	1972.1
45°	1555.8	1639.1	1769.2	1868.0	1912.3
47.5°	1472.6	1555.8	1696.3	1800.4	1849.8
50°	1381.5	1470.0	1618.3	1732.7	1784.8
52.5°	1293.0	1384.1	1540.2	1662.5	1714.5
55°	1196.8	1300.9	1459.6	1587.0	1641.7
57.5°	1100.5	1212.4	1376.3	1509.0	1563.6
60°	1006.9	1121.3	1293.0	1425.7	1483.0
62.5°	913.2	1027.7	1207.2	1342.5	1397.1
65°	814.3	934.0	1113.5	1251.4	1306.1
67.5°	715.5	840.3	1019.9	1157.8	1209.8
70°	611.4	744.1	923.6	1058.9	1110.9
72.5°	515.1	647.8	824.7	957.4	1006.9
75°	418.9	551.6	723.3	845.6	879.4
77.5°	325.2	457.9	611.4	692.1	699.9
80°	236.8	361.6	486.5	509.9	507.3
82.5°	158.7	270.6	335.6	338.2	346.0
85°	91.1	169.1	184.7	182.1	184.7
87.5°	36.4	59.8	52.0	39.0	39.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)