

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: P388159

Luminaire Tested: **22CZ2-100VHE-UNV-L950-CD1-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: P388159
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-27)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-100VHE-UNV-L950-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9051.3 lumens
Efficiency: N/A
Efficacy: 116.5 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

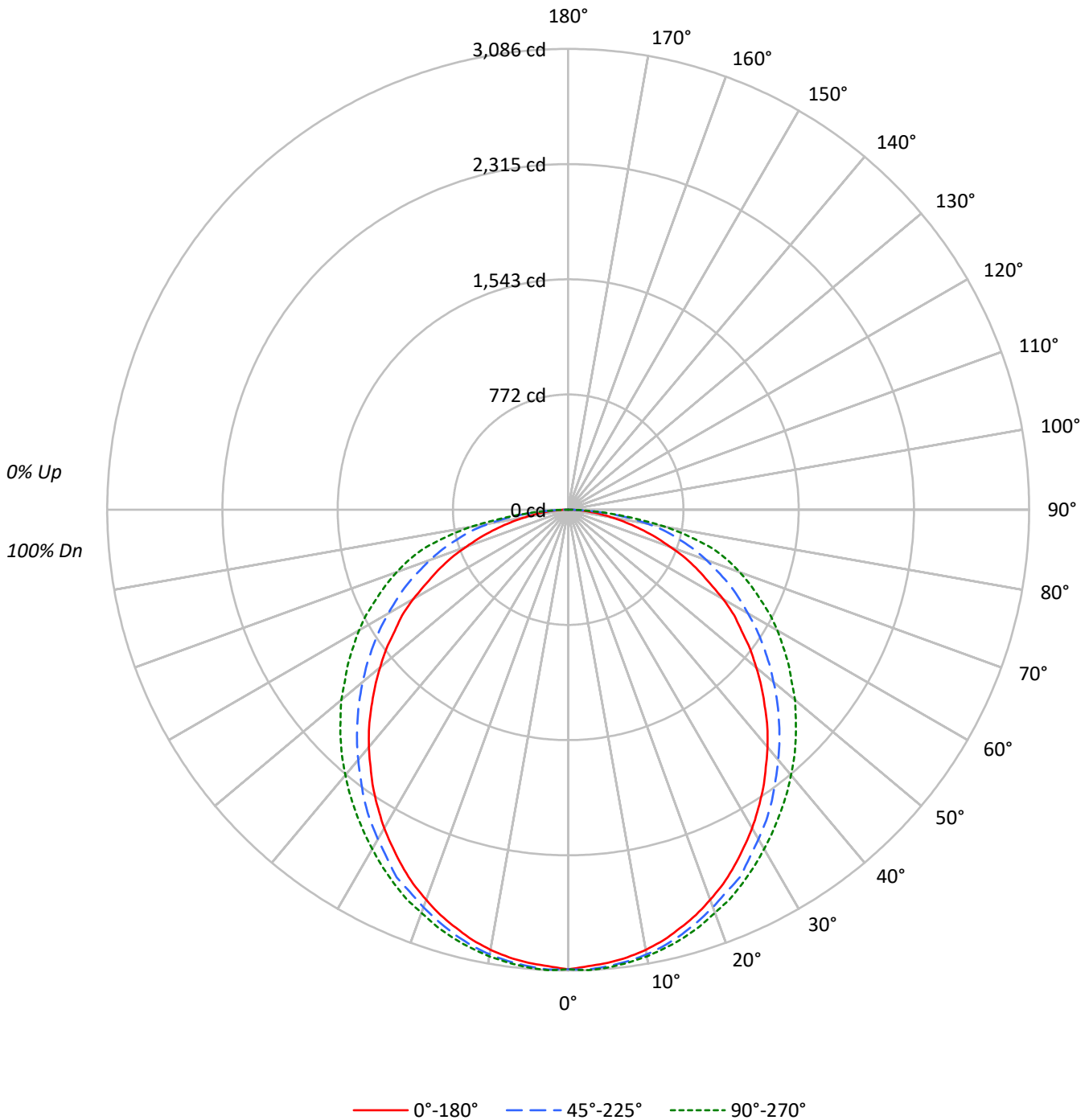
Input Watts (W): 77.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	101	96	93	96	93	90	92	90	87	89	86	84	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68
3	89	78	69	63	86	76	68	62	73	66	61	70	65	60	68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	52	63	56	51	60	55	50	48
5	75	61	52	45	72	60	52	45	58	50	44	56	49	44	54	48	44	41
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	39	34	32
8	59	46	37	31	58	45	37	31	44	36	31	42	35	30	41	35	30	28
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8282	8282	8282
5°	8229	8289	8313
10°	8178	8264	8300
15°	8078	8202	8276
20°	7959	8112	8226
25°	7815	8067	8199
30°	7653	7916	8151
35°	7477	7813	8135
40°	7291	7682	8152
45°	7085	7593	8204
50°	6880	7514	8297
55°	6645	7481	8442
60°	6448	7479	8701
65°	6125	7600	9018
70°	5712	7744	9602
75°	5233	8011	10373
80°	4556	8351	10215
85°	3989	7426	8114



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	291.1	3.2
10°-20°	829.0	9.2
20°-30°	1244.5	13.7
30°-40°	1487.1	16.4
40°-50°	1546.3	17.1
50°-60°	1433.2	15.8
60°-70°	1175.6	13.0
70°-80°	794.7	8.8
80°-90°	249.7	2.8
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°	2364.6	26.1
0°-40°	3851.7	42.6
0°-60°	6831.3	75.5
0°-90°	9051.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9051.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3078	3078	3078	3078	3078	
5°	3046	3051	3069	3073	3078	289
15°	2900	2913	2944	2962	2971	818
25°	2632	2654	2717	2748	2761	1212
35°	2276	2307	2378	2450	2476	1423
45°	1862	1897	1995	2111	2156	1438
55°	1416	1461	1594	1737	1799	1273
65°	962	1016	1194	1350	1416	951
75°	503	588	770	926	998	534
85°	129	178	240	267	263	147
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3077.6	3077.6	3077.6	3077.6	3077.6
2.5°	3059.8	3068.7	3082.1	3086.5	3086.5
5°	3046.4	3050.9	3068.7	3073.2	3077.6
7.5°	3024.2	3033.1	3050.9	3055.3	3059.8
10°	2993.0	3001.9	3024.2	3033.1	3037.5
12.5°	2952.9	2961.8	2988.5	3001.9	3006.3
15°	2899.5	2912.8	2944.0	2961.8	2970.7
17.5°	2846.0	2859.4	2890.5	2917.3	2926.2
20°	2779.2	2810.4	2832.6	2868.3	2872.7
22.5°	2712.4	2730.2	2770.3	2805.9	2823.7
25°	2632.2	2654.5	2716.8	2748.0	2761.4
27.5°	2547.6	2578.8	2627.8	2676.8	2694.6
30°	2463.0	2485.2	2547.6	2605.5	2623.3
32.5°	2369.4	2400.6	2467.4	2525.3	2552.1
35°	2275.9	2307.1	2378.4	2449.6	2476.3
37.5°	2173.5	2209.1	2280.4	2365.0	2400.6
40°	2075.5	2102.2	2186.8	2289.3	2320.5
42.5°	1973.1	2004.2	2093.3	2204.7	2240.3
45°	1861.7	1897.3	1995.3	2111.1	2155.7
47.5°	1754.8	1790.4	1897.3	2013.1	2066.6
50°	1643.5	1688.0	1794.9	1928.5	1982.0
52.5°	1536.6	1576.7	1696.9	1835.0	1884.0
55°	1416.3	1460.9	1594.5	1737.0	1799.4
57.5°	1318.3	1349.5	1496.5	1643.5	1705.8
60°	1198.1	1238.2	1389.6	1545.5	1616.7
62.5°	1068.9	1135.7	1291.6	1452.0	1523.2
65°	962.0	1015.5	1193.6	1349.5	1416.3
67.5°	850.7	908.6	1082.3	1247.1	1322.8
70°	726.0	801.7	984.3	1149.1	1220.4
72.5°	614.6	694.8	881.9	1042.2	1117.9
75°	503.3	587.9	770.5	926.4	997.7
77.5°	396.4	489.9	668.1	788.3	832.9
80°	294.0	383.0	538.9	623.5	659.2
82.5°	204.9	280.6	396.4	440.9	449.8
85°	129.2	178.2	240.5	267.2	262.8
87.5°	57.9	71.3	89.1	98.0	93.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)