

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: P389493

Luminaire Tested: **22CZ2-95VHE-S-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: P389493
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-23)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-95VHE-S-UNV-L930-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND SMOOTH LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8128.6 lumens
Efficiency: N/A
Efficacy: 111.8 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

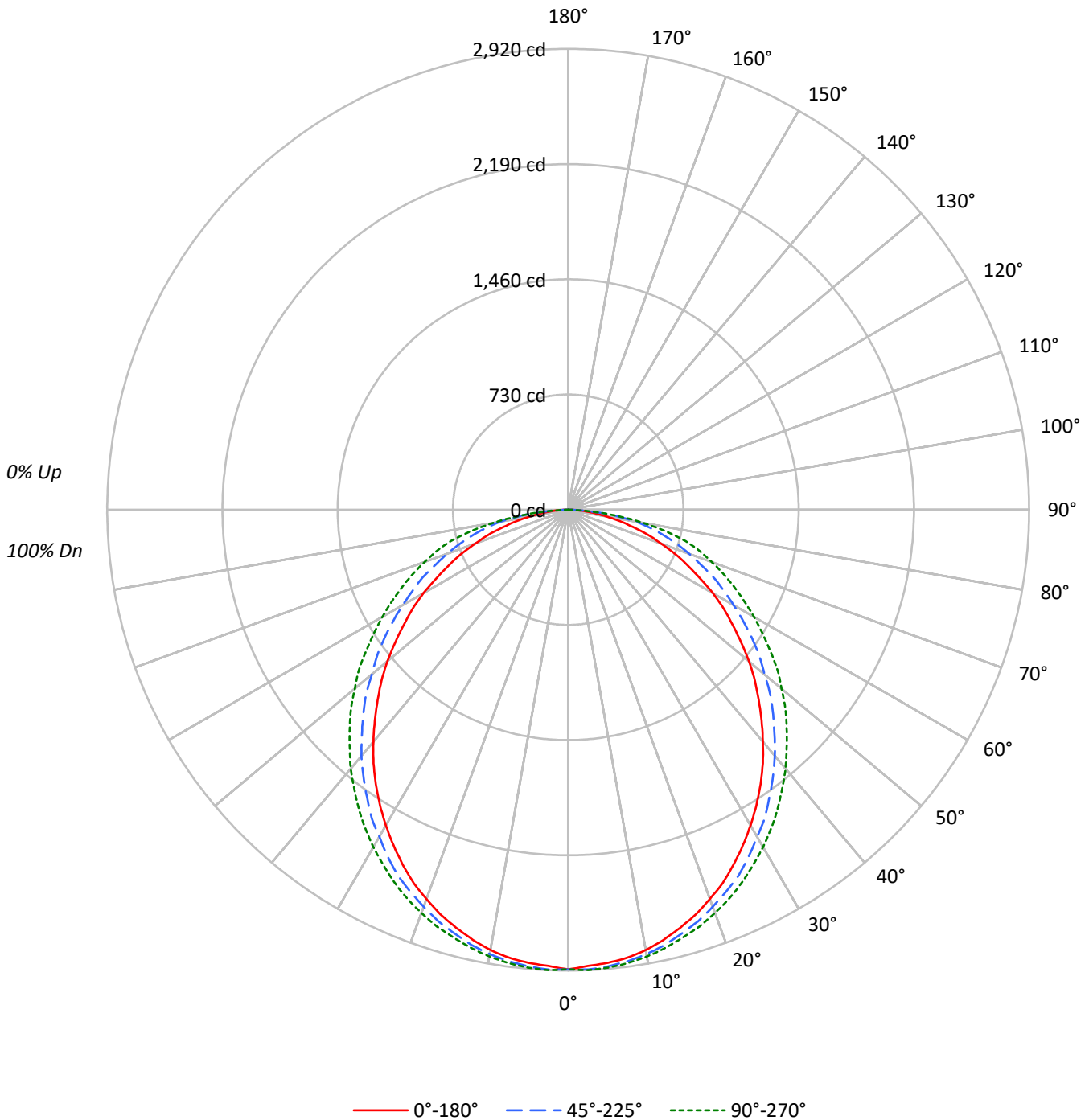
Input Watts (W): 72.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7838	7838	7838
5°	7786	7847	7868
10°	7741	7814	7855
15°	7639	7745	7819
20°	7516	7668	7787
25°	7365	7590	7736
30°	7177	7436	7672
35°	6977	7301	7600
40°	6741	7154	7527
45°	6495	6986	7448
50°	6256	6795	7383
55°	5961	6672	7331
60°	5695	6511	7308
65°	5313	6472	7389
70°	4894	6415	7609
75°	4417	6507	8005
80°	3820	6701	7524
85°	3162	5619	5619



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	275.4	3.4
10°-20°	783.9	9.6
20°-30°	1172.9	14.4
30°-40°	1389.0	17.1
40°-50°	1415.6	17.4
50°-60°	1268.7	15.6
60°-70°	993.3	12.2
70°-80°	640.5	7.9
80°-90°	189.2	2.3
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°	2232.2	27.5
0°-40°	3621.2	44.5
0°-60°	6305.5	77.6
0°-90°	8128.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8128.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2913	2913	2913	2913	2913	
5°	2882	2890	2905	2909	2913	274
15°	2742	2757	2780	2803	2806	773
25°	2480	2503	2556	2590	2606	1142
35°	2124	2150	2222	2291	2314	1327
45°	1707	1745	1836	1930	1957	1318
55°	1270	1312	1422	1521	1563	1139
65°	834	884	1016	1115	1160	829
75°	425	489	626	732	770	455
85°	102	140	182	182	182	120
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2912.7	2912.7	2912.7	2912.7	2912.7
2.5°	2893.8	2901.4	2916.5	2920.3	2920.3
5°	2882.4	2890.0	2905.1	2908.9	2912.7
7.5°	2863.4	2867.2	2886.2	2893.8	2897.6
10°	2833.1	2840.7	2859.6	2871.0	2874.8
12.5°	2791.4	2802.7	2825.5	2840.7	2844.5
15°	2742.1	2757.2	2780.0	2802.7	2806.5
17.5°	2689.0	2704.1	2734.5	2761.0	2768.6
20°	2624.5	2643.5	2677.6	2707.9	2719.3
22.5°	2560.0	2575.2	2616.9	2654.8	2666.2
25°	2480.4	2503.1	2556.2	2590.4	2605.5
27.5°	2396.9	2423.5	2476.6	2522.1	2537.3
30°	2309.7	2336.3	2393.1	2450.0	2469.0
32.5°	2218.7	2249.0	2317.3	2374.2	2393.1
35°	2123.9	2150.4	2222.5	2290.7	2313.5
37.5°	2025.3	2048.0	2131.5	2203.5	2226.3
40°	1919.1	1949.4	2036.6	2120.1	2142.8
42.5°	1812.9	1847.0	1934.2	2025.3	2048.0
45°	1706.7	1744.6	1835.6	1930.4	1957.0
47.5°	1604.3	1634.6	1737.0	1828.0	1866.0
50°	1494.3	1524.6	1623.2	1725.6	1763.6
52.5°	1380.5	1422.2	1528.4	1627.0	1672.5
55°	1270.5	1312.2	1422.2	1520.8	1562.6
57.5°	1168.1	1202.3	1316.0	1418.4	1460.2
60°	1058.1	1088.5	1209.8	1319.8	1357.8
62.5°	940.6	986.1	1111.2	1213.6	1259.1
65°	834.4	883.7	1016.4	1115.0	1160.5
67.5°	735.8	781.3	910.2	1016.4	1065.7
70°	622.0	682.7	815.4	921.6	967.1
72.5°	531.0	584.1	720.6	826.8	876.1
75°	424.8	489.2	625.8	732.0	769.9
77.5°	337.5	402.0	531.0	614.4	633.4
80°	246.5	311.0	432.4	474.1	485.5
82.5°	166.9	227.6	311.0	322.4	326.2
85°	102.4	140.3	182.0	182.0	182.0
87.5°	49.3	56.9	64.5	60.7	60.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)