

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: P389499

Luminaire Tested: **22CZ2-95VHE-S-UNV-L940-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: P389499
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-L940-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND SMOOTH LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8415.9 lumens
Efficiency: N/A
Efficacy: 115.8 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

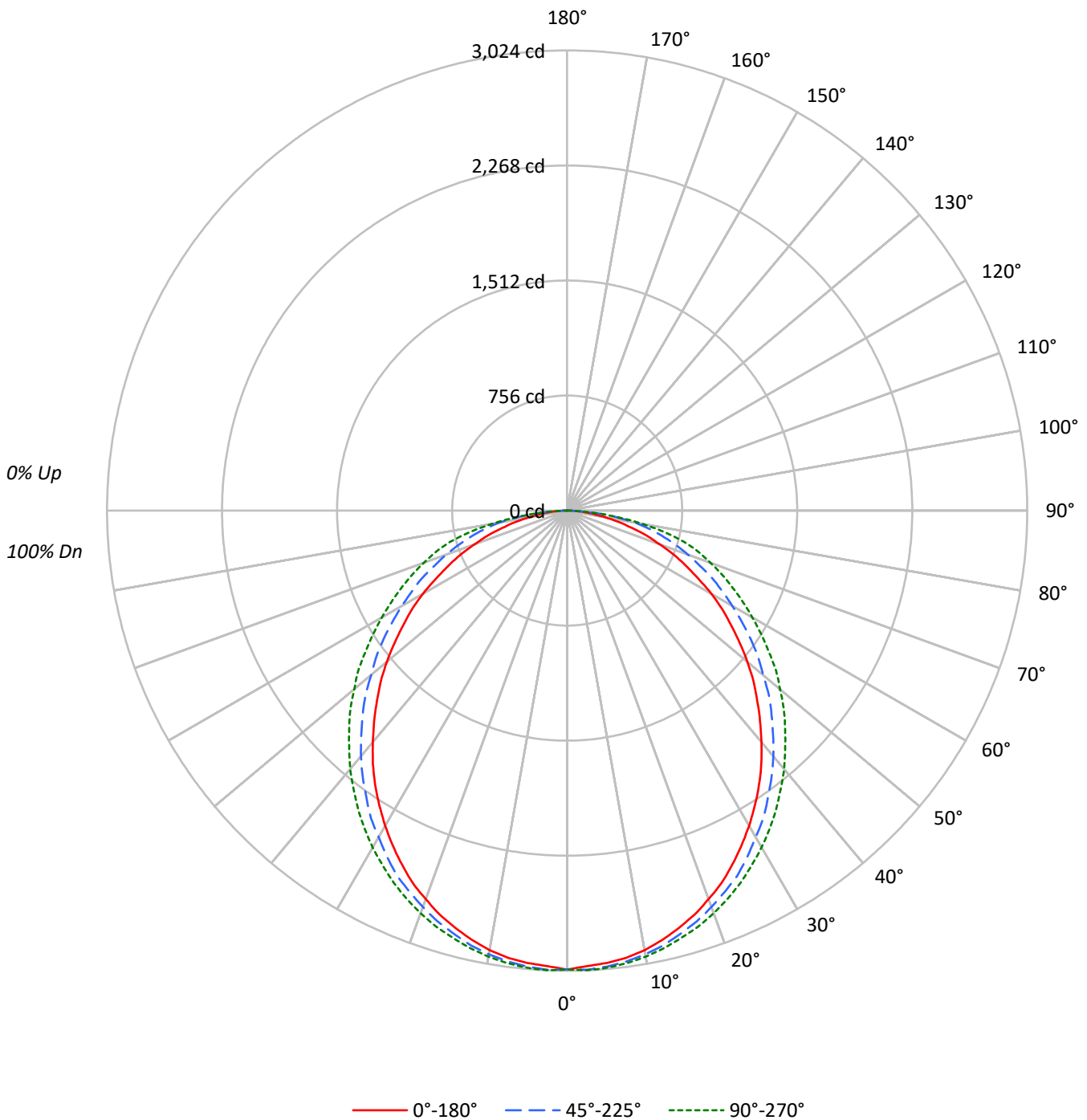
Input Watts (W): 72.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	8115	8115	8115
5°	8061	8125	8146
10°	8015	8090	8133
15°	7909	8018	8095
20°	7781	7939	8062
25°	7625	7858	8010
30°	7430	7699	7943
35°	7224	7559	7869
40°	6980	7407	7794
45°	6725	7233	7711
50°	6477	7036	7644
55°	6171	6908	7590
60°	5896	6741	7565
65°	5501	6700	7651
70°	5067	6642	7878
75°	4573	6736	8288
80°	3955	6936	7789
85°	3273	5820	5820



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	285.2	3.4
10°-20°	811.6	9.6
20°-30°	1214.3	14.4
30°-40°	1438.1	17.1
40°-50°	1465.6	17.4
50°-60°	1313.6	15.6
60°-70°	1028.4	12.2
70°-80°	663.2	7.9
80°-90°	195.9	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°	2311.1	27.5
0°-40°	3749.2	44.5
0°-60°	6528.4	77.6
0°-90°	8415.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8415.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3016	3016	3016	3016	3016	
5°	2984	2992	3008	3012	3016	283
15°	2839	2855	2878	2902	2906	800
25°	2568	2592	2647	2682	2698	1182
35°	2199	2226	2301	2372	2395	1374
45°	1767	1806	1900	1999	2026	1365
55°	1315	1359	1472	1575	1618	1179
65°	864	915	1052	1154	1202	858
75°	440	506	648	758	797	472
85°	106	145	188	188	188	124
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3015.7	3015.7	3015.7	3015.7	3015.7
2.5°	2996.0	3003.9	3019.6	3023.5	3023.5
5°	2984.3	2992.1	3007.8	3011.8	3015.7
7.5°	2964.6	2968.6	2988.2	2996.0	3000.0
10°	2933.2	2941.1	2960.7	2972.5	2976.4
12.5°	2890.0	2901.8	2925.4	2941.1	2945.0
15°	2839.0	2854.7	2878.2	2901.8	2905.7
17.5°	2784.0	2799.7	2831.1	2858.6	2866.5
20°	2717.3	2736.9	2772.2	2803.6	2815.4
22.5°	2650.5	2666.2	2709.4	2748.7	2760.4
25°	2568.0	2591.6	2646.6	2681.9	2697.6
27.5°	2481.7	2509.1	2564.1	2611.2	2626.9
30°	2391.3	2418.8	2477.7	2536.6	2556.3
32.5°	2297.1	2328.5	2399.2	2458.1	2477.7
35°	2198.9	2226.4	2301.0	2371.7	2395.3
37.5°	2096.8	2120.4	2206.8	2281.4	2305.0
40°	1986.9	2018.3	2108.6	2195.0	2218.6
42.5°	1876.9	1912.3	2002.6	2096.8	2120.4
45°	1767.0	1806.3	1900.5	1998.7	2026.2
47.5°	1661.0	1692.4	1798.4	1892.7	1931.9
50°	1547.1	1578.5	1680.6	1786.6	1825.9
52.5°	1429.3	1472.5	1582.4	1684.5	1731.7
55°	1315.4	1358.6	1472.5	1574.6	1617.8
57.5°	1209.4	1244.8	1362.6	1468.6	1511.8
60°	1095.5	1127.0	1252.6	1366.5	1405.7
62.5°	973.8	1020.9	1150.5	1256.5	1303.7
65°	863.9	914.9	1052.3	1154.4	1201.6
67.5°	761.8	808.9	942.4	1052.3	1103.4
70°	644.0	706.8	844.2	954.2	1001.3
72.5°	549.7	604.7	746.1	856.0	907.1
75°	439.8	506.5	647.9	757.8	797.1
77.5°	349.5	416.2	549.7	636.1	655.8
80°	255.2	322.0	447.6	490.8	502.6
82.5°	172.8	235.6	322.0	333.8	337.7
85°	106.0	145.3	188.5	188.5	188.5
87.5°	51.0	58.9	66.8	62.8	62.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)