

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: P389500

Luminaire Tested: **22CZ2-95VHE-S-UNV-L940-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: P389500
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-SWPD1-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: 8518.6 lumens
Efficiency: N/A
Efficacy: 117.2 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

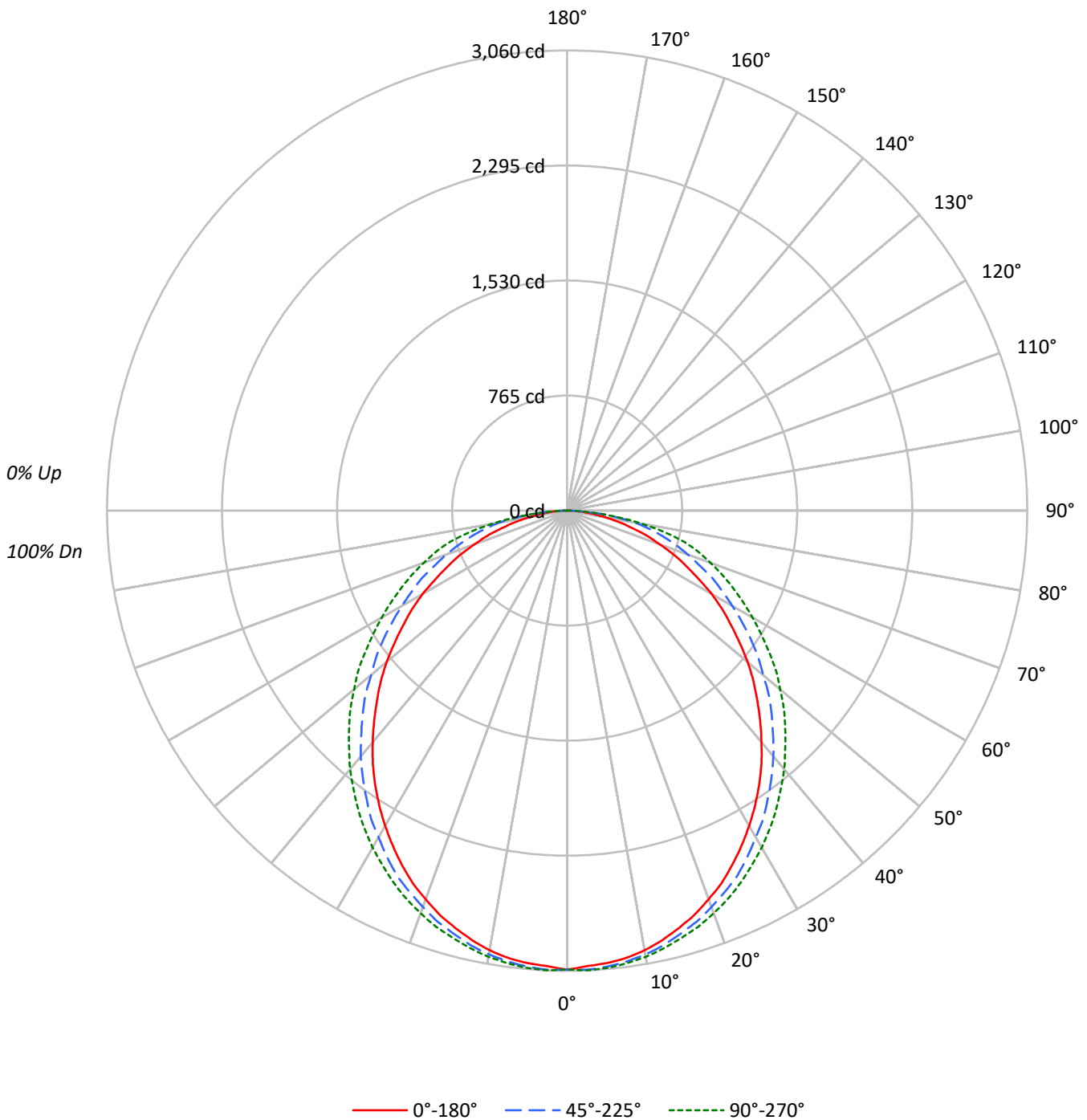
Input Watts (W): 72.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	8214	8214	8214
5°	8160	8224	8246
10°	8113	8189	8232
15°	8006	8116	8194
20°	7876	8036	8161
25°	7718	7954	8107
30°	7521	7793	8040
35°	7312	7651	7965
40°	7065	7498	7888
45°	6807	7321	7805
50°	6556	7122	7737
55°	6247	6993	7682
60°	5968	6824	7658
65°	5568	6783	7744
70°	5128	6723	7974
75°	4629	6818	8388
80°	4003	7022	7883
85°	3313	5891	5891



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	288.7	3.4
10°-20°	821.5	9.6
20°-30°	1229.2	14.4
30°-40°	1455.6	17.1
40°-50°	1483.5	17.4
50°-60°	1329.6	15.6
60°-70°	1041.0	12.2
70°-80°	671.2	7.9
80°-90°	198.3	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°	2339.3	27.5
0°-40°	3795.0	44.5
0°-60°	6608.1	77.6
0°-90°	8518.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8518.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3052	3052	3052	3052	3052	
5°	3021	3029	3044	3048	3052	287
15°	2874	2890	2913	2937	2941	810
25°	2599	2623	2679	2715	2730	1197
35°	2226	2254	2329	2401	2424	1391
45°	1789	1828	1924	2023	2051	1381
55°	1332	1375	1490	1594	1638	1194
65°	874	926	1065	1168	1216	869
75°	445	513	656	767	807	477
85°	107	147	191	191	191	126
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3052.5	3052.5	3052.5	3052.5	3052.5
2.5°	3032.6	3040.6	3056.5	3060.4	3060.4
5°	3020.7	3028.6	3044.5	3048.5	3052.5
7.5°	3000.8	3004.8	3024.7	3032.6	3036.6
10°	2969.0	2977.0	2996.8	3008.8	3012.7
12.5°	2925.3	2937.2	2961.1	2977.0	2980.9
15°	2873.6	2889.5	2913.4	2937.2	2941.2
17.5°	2818.0	2833.9	2865.7	2893.5	2901.4
20°	2750.4	2770.3	2806.1	2837.9	2849.8
22.5°	2682.8	2698.7	2742.5	2782.2	2794.1
25°	2599.4	2623.2	2678.9	2714.6	2730.5
27.5°	2511.9	2539.8	2595.4	2643.1	2659.0
30°	2420.5	2448.3	2508.0	2567.6	2587.5
32.5°	2325.1	2356.9	2428.5	2488.1	2508.0
35°	2225.8	2253.6	2329.1	2400.6	2424.5
37.5°	2122.4	2146.3	2233.7	2309.2	2333.1
40°	2011.1	2042.9	2134.4	2221.8	2245.6
42.5°	1899.9	1935.6	2027.0	2122.4	2146.3
45°	1788.6	1828.3	1923.7	2023.1	2050.9
47.5°	1681.2	1713.0	1820.4	1915.7	1955.5
50°	1566.0	1597.8	1701.1	1808.4	1848.2
52.5°	1446.7	1490.5	1601.8	1705.1	1752.8
55°	1331.5	1375.2	1490.5	1593.8	1637.5
57.5°	1224.2	1259.9	1379.2	1486.5	1530.2
60°	1108.9	1140.7	1267.9	1383.2	1422.9
62.5°	985.7	1033.4	1164.6	1271.9	1319.6
65°	874.4	926.1	1065.2	1168.5	1216.2
67.5°	771.1	818.8	953.9	1065.2	1116.9
70°	651.8	715.4	854.5	965.8	1013.5
72.5°	556.4	612.1	755.2	866.5	918.1
75°	445.2	512.7	655.8	767.1	806.8
77.5°	353.7	421.3	556.4	643.9	663.8
80°	258.3	325.9	453.1	496.8	508.7
82.5°	174.9	238.5	325.9	337.8	341.8
85°	107.3	147.1	190.8	190.8	190.8
87.5°	51.7	59.6	67.6	63.6	63.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)