

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: P387890

Luminaire Tested: **22CZ2-34VHE-SQR-UNV-L930-CD1-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: P387890
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-542-6)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-34VHE-SQR-UNV-L930-CD1-U
Description: 2x2 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: 2851.0 lumens
Efficiency: N/A
Efficacy: 113.6 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.31 / 1.37
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

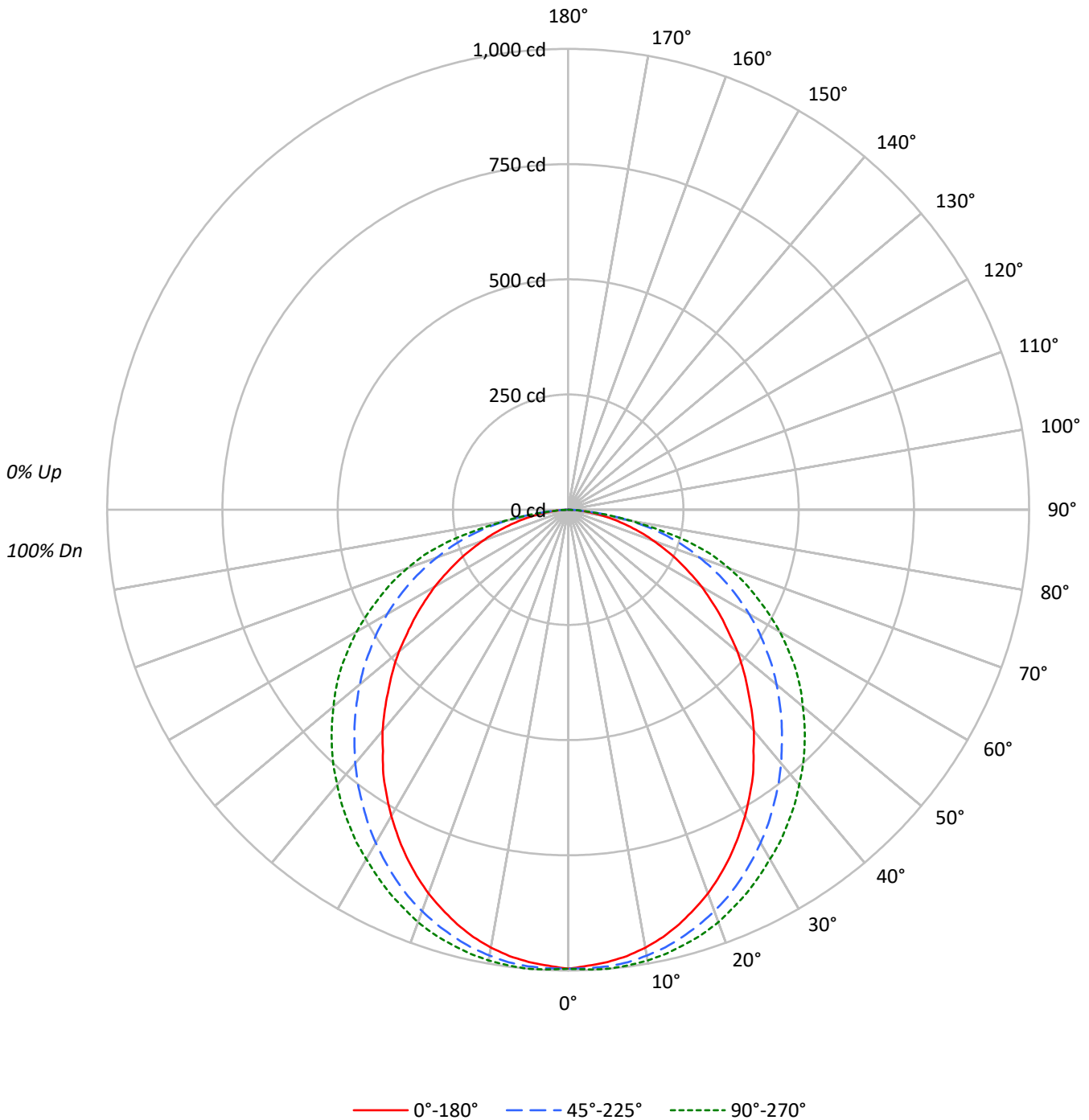
Input Watts (W): 25.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	104	99	95	106	101	97	94	97	94	91		93	91	88		90	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75		81	77	73		78	75	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	68	60	54	66	59	53		64	57	52		61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46		57	50	45		55	49	45	43
6	70	56	47	41	68	55	47	40	53	46	40		52	45	40		50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35		47	40	35		46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32		43	36	31		42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28		40	33	28		39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26		37	30	26		36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2680	2680	2680
5°	2661	2687	2701
10°	2636	2684	2714
15°	2594	2673	2722
20°	2538	2654	2728
25°	2467	2628	2724
30°	2384	2594	2720
35°	2298	2556	2729
40°	2201	2524	2738
45°	2096	2492	2760
50°	2005	2470	2781
55°	1898	2450	2825
60°	1799	2440	2855
65°	1680	2421	2878
70°	1544	2385	2917
75°	1393	2322	2813
80°	1195	2055	2118
85°	960	1210	960



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.4	3.3
10°-20°	269.9	9.5
20°-30°	405.4	14.2
30°-40°	483.5	17.0
40°-50°	499.9	17.5
50°-60°	459.6	16.1
60°-70°	365.9	12.8
70°-80°	223.6	7.8
80°-90°	48.6	1.7
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°	769.8	27.0
0°-40°	1253.3	44.0
0°-60°	2212.9	77.6
0°-90°	2851.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2851.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	996	996	996	996	996	
5°	985	988	995	999	1000	93
15°	931	942	959	973	977	262
25°	831	851	885	909	917	382
35°	700	729	778	819	831	436
45°	551	590	655	708	725	426
55°	405	449	522	582	602	362
65°	264	308	380	433	452	261
75°	134	173	223	262	271	143
85°	31	38	39	34	31	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	995.9	995.9	995.9	995.9	995.9
2.5°	990.5	991.9	995.9	998.6	998.6
5°	985.1	987.8	994.6	998.6	1000.0
7.5°	977.0	981.0	990.5	995.9	997.3
10°	964.8	970.2	982.4	990.5	993.2
12.5°	949.9	958.0	972.9	983.7	986.5
15°	931.0	941.8	959.4	972.9	977.0
17.5°	909.3	922.9	944.5	960.7	966.2
20°	886.3	899.8	926.9	945.9	952.6
22.5°	859.3	876.8	908.0	929.6	935.0
25°	830.8	851.1	885.0	909.3	917.4
27.5°	799.7	824.1	860.6	890.4	897.1
30°	767.2	792.9	834.9	867.4	875.5
32.5°	733.4	763.2	807.8	844.4	855.2
35°	699.6	729.4	778.1	818.7	830.8
37.5°	660.3	695.5	749.6	791.6	806.5
40°	626.5	660.3	718.5	764.5	779.4
42.5°	588.6	625.2	686.1	736.1	753.7
45°	550.7	590.0	654.9	707.7	725.3
47.5°	515.6	554.8	622.5	677.9	695.5
50°	479.0	519.6	590.0	646.8	664.4
52.5°	439.8	484.4	557.5	614.3	634.6
55°	404.6	449.2	522.3	581.9	602.2
57.5°	368.1	414.1	489.8	546.7	565.6
60°	334.2	378.9	453.3	508.8	530.4
62.5°	297.7	343.7	416.8	470.9	491.2
65°	263.9	308.5	380.2	433.0	452.0
67.5°	230.0	274.7	342.3	392.4	414.1
70°	196.2	240.9	303.1	351.8	370.8
72.5°	166.4	205.7	265.2	309.9	327.5
75°	134.0	173.2	223.3	262.5	270.6
77.5°	104.2	139.4	181.3	198.9	201.6
80°	77.1	104.2	132.6	136.7	136.7
82.5°	51.4	71.7	82.5	83.9	82.5
85°	31.1	37.9	39.2	33.8	31.1
87.5°	10.8	10.8	6.8	4.1	1.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)