

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: P388270

Luminaire Tested: **22CZ2-34VHE-UNV-L930-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: P388270
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: 22CZ2-34VHE-UNV-L930-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2931.8 lumens
Efficiency: N/A
Efficacy: 116.8 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

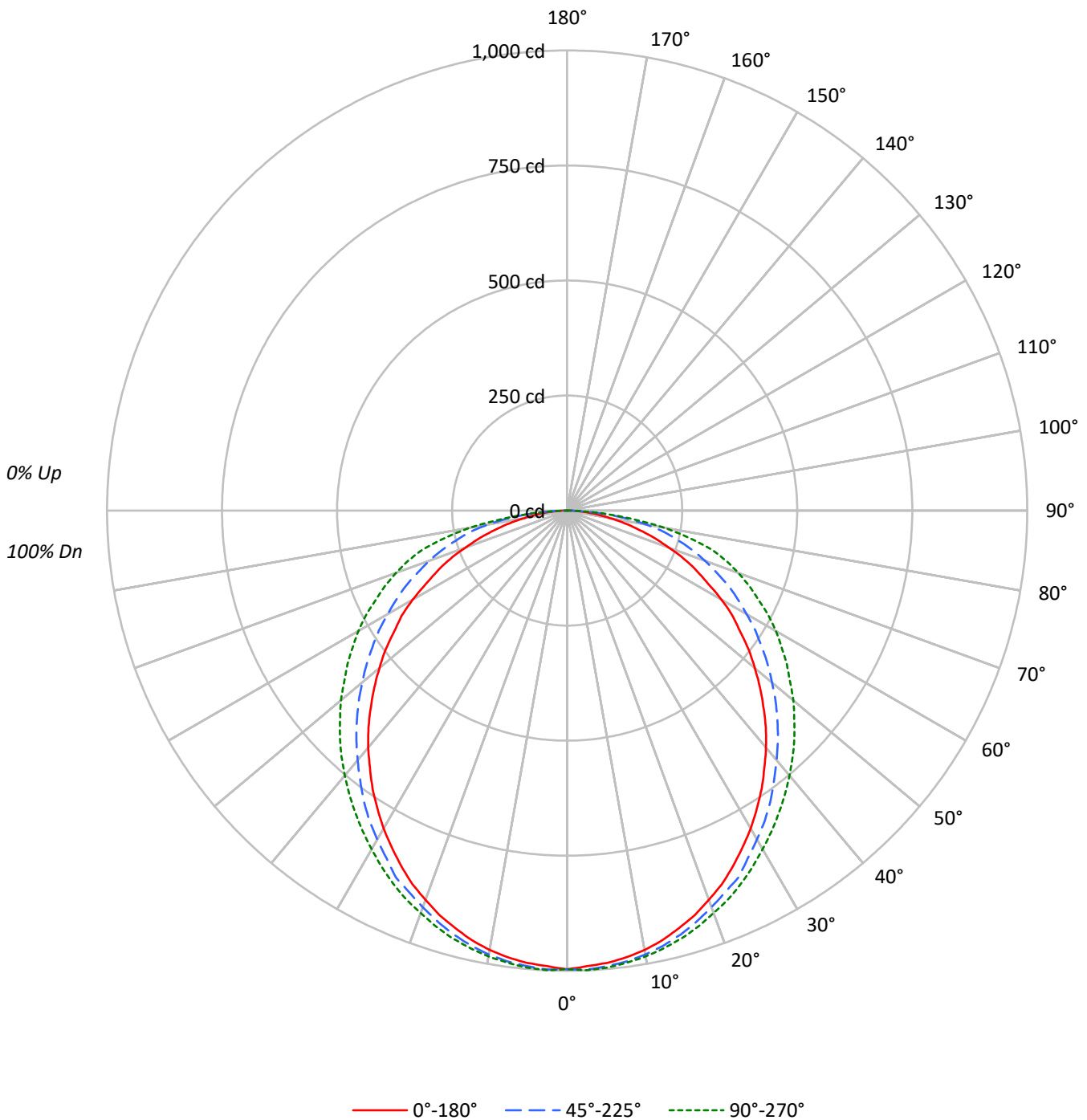
Input Watts (W): 25.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	2683	2683	2683
5°	2666	2685	2693
10°	2649	2677	2688
15°	2617	2657	2681
20°	2578	2627	2665
25°	2532	2613	2656
30°	2479	2564	2640
35°	2422	2531	2635
40°	2362	2488	2640
45°	2295	2460	2657
50°	2228	2434	2688
55°	2152	2423	2734
60°	2089	2422	2819
65°	1984	2462	2921
70°	1851	2508	3110
75°	1695	2595	3360
80°	1475	2706	3309
85°	1291	2405	2628



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.3	3.2
10°-20°	268.5	9.2
20°-30°	403.1	13.7
30°-40°	481.7	16.4
40°-50°	500.9	17.1
50°-60°	464.2	15.8
60°-70°	380.8	13.0
70°-80°	257.4	8.8
80°-90°	80.9	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°	765.9	26.1
0°-40°	1247.6	42.6
0°-60°	2212.7	75.5
0°-90°	2931.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2931.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	997	997	997	997	997	
5°	987	988	994	995	997	94
15°	939	944	954	959	962	265
25°	853	860	880	890	894	393
35°	737	747	770	794	802	461
45°	603	615	646	684	698	466
55°	459	473	516	563	583	412
65°	312	329	387	437	459	308
75°	163	190	250	300	323	173
85°	42	58	78	87	85	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	996.9	996.9	996.9	996.9	996.9
2.5°	991.1	994.0	998.3	999.8	999.8
5°	986.8	988.2	994.0	995.4	996.9
7.5°	979.6	982.4	988.2	989.7	991.1
10°	969.5	972.3	979.6	982.4	983.9
12.5°	956.5	959.4	968.0	972.3	973.8
15°	939.2	943.5	953.6	959.4	962.2
17.5°	921.8	926.2	936.3	944.9	947.8
20°	900.2	910.3	917.5	929.1	930.5
22.5°	878.6	884.3	897.3	908.9	914.6
25°	852.6	859.8	880.0	890.1	894.4
27.5°	825.2	835.3	851.2	867.0	872.8
30°	797.8	805.0	825.2	843.9	849.7
32.5°	767.5	777.6	799.2	818.0	826.6
35°	737.2	747.3	770.4	793.5	802.1
37.5°	704.0	715.6	738.6	766.0	777.6
40°	672.3	680.9	708.3	741.5	751.6
42.5°	639.1	649.2	678.0	714.1	725.6
45°	603.0	614.6	646.3	683.8	698.2
47.5°	568.4	579.9	614.6	652.1	669.4
50°	532.3	546.8	581.4	624.7	642.0
52.5°	497.7	510.7	549.6	594.4	610.2
55°	458.8	473.2	516.5	562.6	582.8
57.5°	427.0	437.1	484.7	532.3	552.5
60°	388.1	401.1	450.1	500.6	523.7
62.5°	346.2	367.9	418.4	470.3	493.4
65°	311.6	328.9	386.6	437.1	458.8
67.5°	275.5	294.3	350.6	403.9	428.5
70°	235.2	259.7	318.8	372.2	395.3
72.5°	199.1	225.1	285.6	337.6	362.1
75°	163.0	190.4	249.6	300.1	323.2
77.5°	128.4	158.7	216.4	255.3	269.8
80°	95.2	124.1	174.6	202.0	213.5
82.5°	66.4	90.9	128.4	142.8	145.7
85°	41.8	57.7	77.9	86.6	85.1
87.5°	18.8	23.1	28.9	31.7	30.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)