

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: P387483

Luminaire Tested: **14CZ2-39-SQR-UNV-L935-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: P387483
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1911-580-2)
Test Lab: INNOVATIONS CENTER(G2)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-39-SQR-UNV-L935-CD1-SDWPD1-U
Description: 1x4 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3114.3 lumens
Efficiency: N/A
Efficacy: 96.4 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.34 / 1.44
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

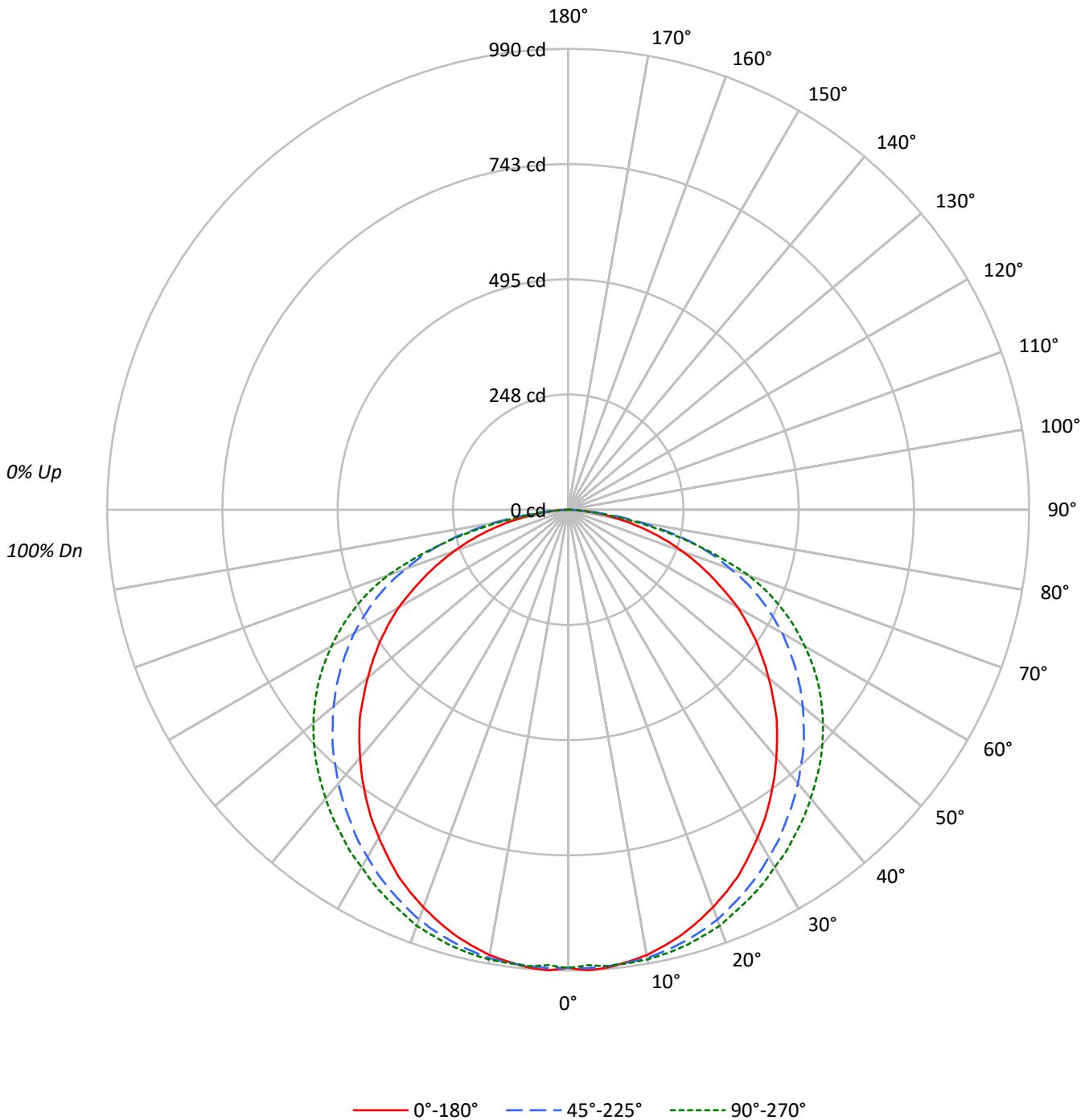
Input Watts (W): 32.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	105	101	97	93	97	93	90	93	90	87	89	87	85	83
2	98	89	82	76	95	87	81	75	84	78	73	80	76	72	77	73	70	68
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56
4	81	68	59	52	79	67	59	52	65	57	51	62	56	51	60	54	50	48
5	74	61	52	45	72	60	51	44	58	50	44	56	49	43	54	48	43	41
6	68	55	45	39	67	54	45	39	52	44	38	50	43	38	49	42	38	35
7	63	49	40	34	62	49	40	34	47	39	34	46	39	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	41	34	30	28
9	55	41	33	27	54	41	33	27	39	32	27	38	32	27	37	31	27	25
10	52	38	30	25	50	37	30	24	36	29	24	36	29	24	35	29	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2648	2648	2648
5°	2667	2658	2658
10°	2655	2672	2681
15°	2632	2676	2702
20°	2603	2684	2724
25°	2572	2680	2736
30°	2527	2678	2756
35°	2485	2681	2795
40°	2442	2696	2845
45°	2407	2724	2915
50°	2352	2753	2990
55°	2312	2799	3078
60°	2264	2855	3159
65°	2159	2909	3238
70°	2050	2914	3235
75°	1877	2905	2856
80°	1605	2481	2213
85°	1260	1405	824



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.5	3.0
10°-20°	270.2	8.7
20°-30°	413.2	13.3
30°-40°	506.5	16.3
40°-50°	544.7	17.5
50°-60°	523.4	16.8
60°-70°	435.8	14.0
70°-80°	267.5	8.6
80°-90°	59.6	1.9
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°	776.9	24.9
0°-40°	1283.3	41.2
0°-60°	2351.4	75.5
0°-90°	3114.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3114.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	984	984	984	984	984	
5°	987	978	984	984	984	94
15°	945	942	961	967	970	266
25°	866	874	902	914	921	399
35°	757	775	816	838	851	473
45°	633	661	716	749	766	487
55°	493	535	596	637	656	440
65°	339	391	457	494	509	336
75°	180	235	279	278	275	191
85°	41	61	46	31	27	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	984.1	984.1	984.1	984.1	984.1
2.5°	990.4	981.0	985.7	984.1	979.4
5°	987.3	977.9	984.1	984.1	984.1
7.5°	979.4	971.6	981.0	982.6	982.6
10°	971.6	965.3	977.9	979.4	981.0
12.5°	959.0	954.3	970.0	973.2	976.3
15°	944.9	941.8	960.6	966.9	970.0
17.5°	927.6	929.2	949.6	957.5	960.6
20°	908.8	913.5	937.1	944.9	951.2
22.5°	888.4	894.7	919.8	929.2	935.5
25°	866.4	874.3	902.5	913.5	921.4
27.5°	839.7	852.3	883.7	897.8	905.7
30°	813.1	827.2	861.7	879.0	886.8
32.5°	786.4	802.1	841.3	858.6	871.1
35°	756.6	775.4	816.2	838.2	850.7
37.5°	726.7	748.7	792.7	817.8	831.9
40°	695.3	718.9	767.5	795.8	809.9
42.5°	663.9	690.6	740.9	772.2	787.9
45°	632.6	660.8	715.7	748.7	766.0
47.5°	596.5	631.0	685.9	723.6	740.9
50°	561.9	599.6	657.7	696.9	714.2
52.5°	527.4	566.6	627.8	668.7	685.9
55°	492.9	535.2	596.5	637.3	656.1
57.5°	456.8	500.7	563.5	605.9	623.1
60°	420.7	466.2	530.5	569.8	587.0
62.5°	378.3	431.6	494.4	533.7	549.4
65°	339.0	390.8	456.8	494.4	508.6
67.5°	299.8	353.2	417.5	452.0	464.6
70°	260.6	313.9	370.4	403.4	411.2
72.5°	221.3	274.7	328.0	346.9	343.7
75°	180.5	235.4	279.4	277.8	274.7
77.5°	141.3	194.6	221.3	210.3	205.6
80°	103.6	155.4	160.1	149.1	142.8
82.5°	70.6	111.4	100.5	87.9	81.6
85°	40.8	61.2	45.5	31.4	26.7
87.5°	17.3	15.7	4.7	4.7	3.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)