

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: P387482

Luminaire Tested: **14CZ2-39-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: P387482
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-L930-CD1-U
Description: 1x4 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

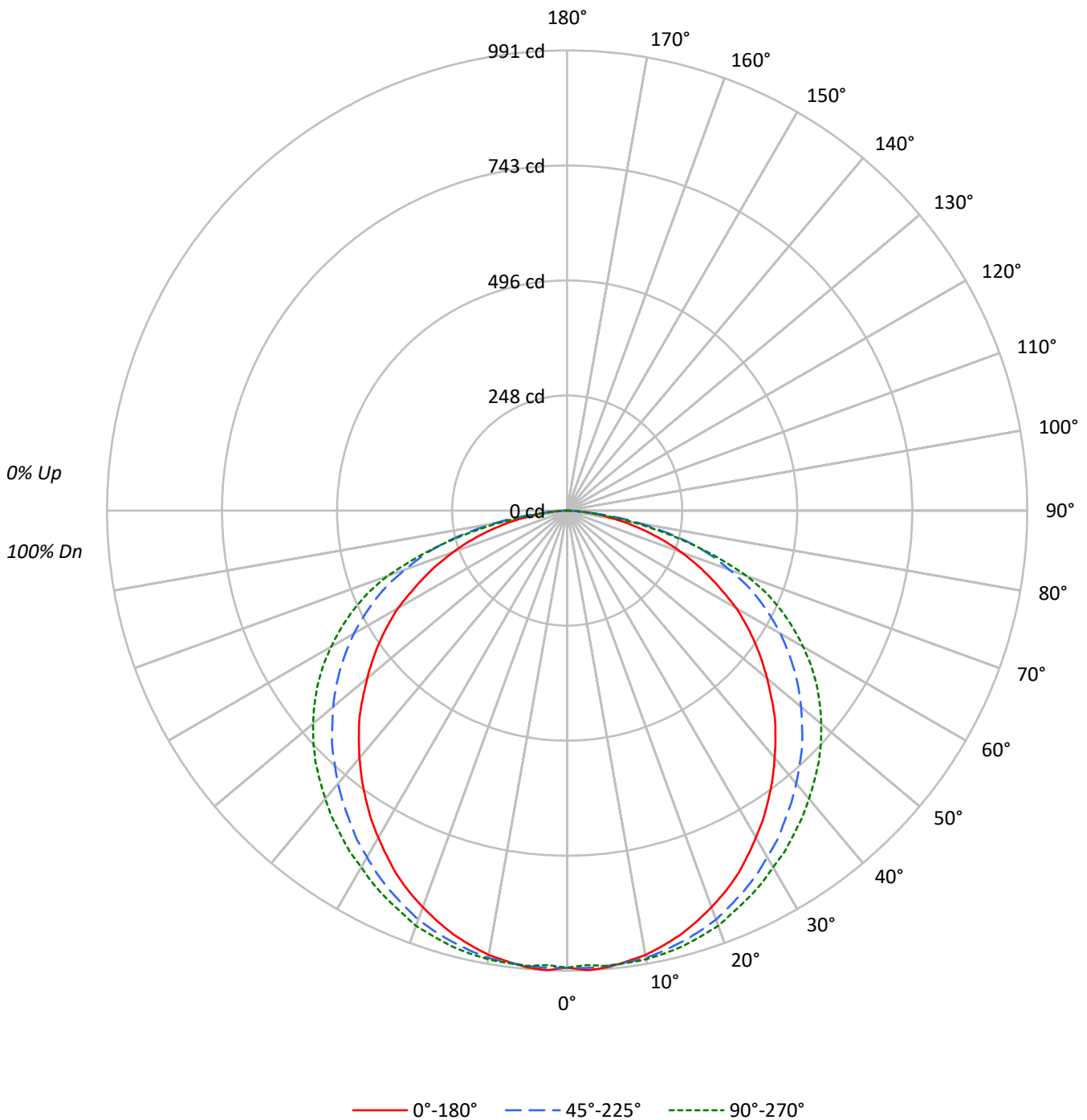
Lumens per Lamp: N/A
Luminaire Lumens: 3114.9 lumens
Efficiency: N/A
Efficacy: 96.4 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.34 / 1.44
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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



TEST NUMBER: P387482
CATALOG NUMBER: 14CZ2-39-SQR-UNV-L930-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P387482

CATALOG NUMBER: 14CZ2-39-SQR-UNV-L930-CD1-U

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°	2649	2649	2649
5°	2667	2659	2659
10°	2655	2673	2681
15°	2633	2677	2703
20°	2603	2684	2725
25°	2573	2680	2736
30°	2527	2678	2756
35°	2486	2682	2795
40°	2443	2697	2846
45°	2408	2724	2915
50°	2353	2754	2990
55°	2313	2799	3079
60°	2264	2856	3160
65°	2159	2909	3239
70°	2050	2915	3236
75°	1877	2905	2856
80°	1605	2481	2214
85°	1260	1405	824



TEST NUMBER: P387482

CATALOG NUMBER: 14CZ2-39-SQR-UNV-L930-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.6	3.0
10°-20°	270.2	8.7
20°-30°	413.3	13.3
30°-40°	506.5	16.3
40°-50°	544.8	17.5
50°-60°	523.5	16.8
60°-70°	435.9	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°	777.0	24.9
0°-40°	1283.6	41.2
0°-60°	2351.9	75.5
0°-90°	3114.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3114.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	984	984	984	984	984	
5°	988	978	984	984	984	94
15°	945	942	961	967	970	266
25°	867	874	903	914	922	399
35°	757	776	816	838	851	474
45°	633	661	716	749	766	487
55°	493	535	597	637	656	440
65°	339	391	457	494	509	336
75°	180	236	279	278	275	191
85°	41	61	46	31	27	49
90°	0	0	0	0	0	



TEST NUMBER: P387482

CATALOG NUMBER: 14CZ2-39-SQR-UNV-L930-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	984.3	984.3	984.3	984.3	984.3
2.5°	990.6	981.2	985.9	984.3	979.6
5°	987.5	978.1	984.3	984.3	984.3
7.5°	979.6	971.8	981.2	982.8	982.8
10°	971.8	965.5	978.1	979.6	981.2
12.5°	959.2	954.5	970.2	973.3	976.5
15°	945.1	941.9	960.8	967.1	970.2
17.5°	927.8	929.4	949.8	957.6	960.8
20°	909.0	913.7	937.2	945.1	951.4
22.5°	888.6	894.9	920.0	929.4	935.7
25°	866.6	874.4	902.7	913.7	921.5
27.5°	839.9	852.5	883.9	898.0	905.8
30°	813.2	827.3	861.9	879.2	887.0
32.5°	786.5	802.2	841.5	858.7	871.3
35°	756.7	775.5	816.4	838.3	850.9
37.5°	726.9	748.8	792.8	817.9	832.1
40°	695.5	719.0	767.7	795.9	810.1
42.5°	664.1	690.8	741.0	772.4	788.1
45°	632.7	660.9	715.9	748.8	766.1
47.5°	596.6	631.1	686.1	723.7	741.0
50°	562.0	599.7	657.8	697.0	714.3
52.5°	527.5	566.7	628.0	668.8	686.1
55°	493.0	535.3	596.6	637.4	656.2
57.5°	456.8	500.8	563.6	606.0	623.3
60°	420.7	466.3	530.6	569.9	587.1
62.5°	378.3	431.7	494.5	533.8	549.5
65°	339.1	390.9	456.8	494.5	508.7
67.5°	299.9	353.2	417.6	452.1	464.7
70°	260.6	314.0	370.5	403.5	411.3
72.5°	221.4	274.7	328.1	347.0	343.8
75°	180.5	235.5	279.4	277.9	274.7
77.5°	141.3	194.7	221.4	210.4	205.7
80°	103.6	155.4	160.1	149.1	142.9
82.5°	70.6	111.5	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)