

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: P387490

Luminaire Tested: **14CZ2-39-SQR-UNV-L950-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: P387490
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-L950-CD1-SWPD1-U
Description: 1x4 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3380.6 lumens
Efficiency: N/A
Efficacy: 104.7 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

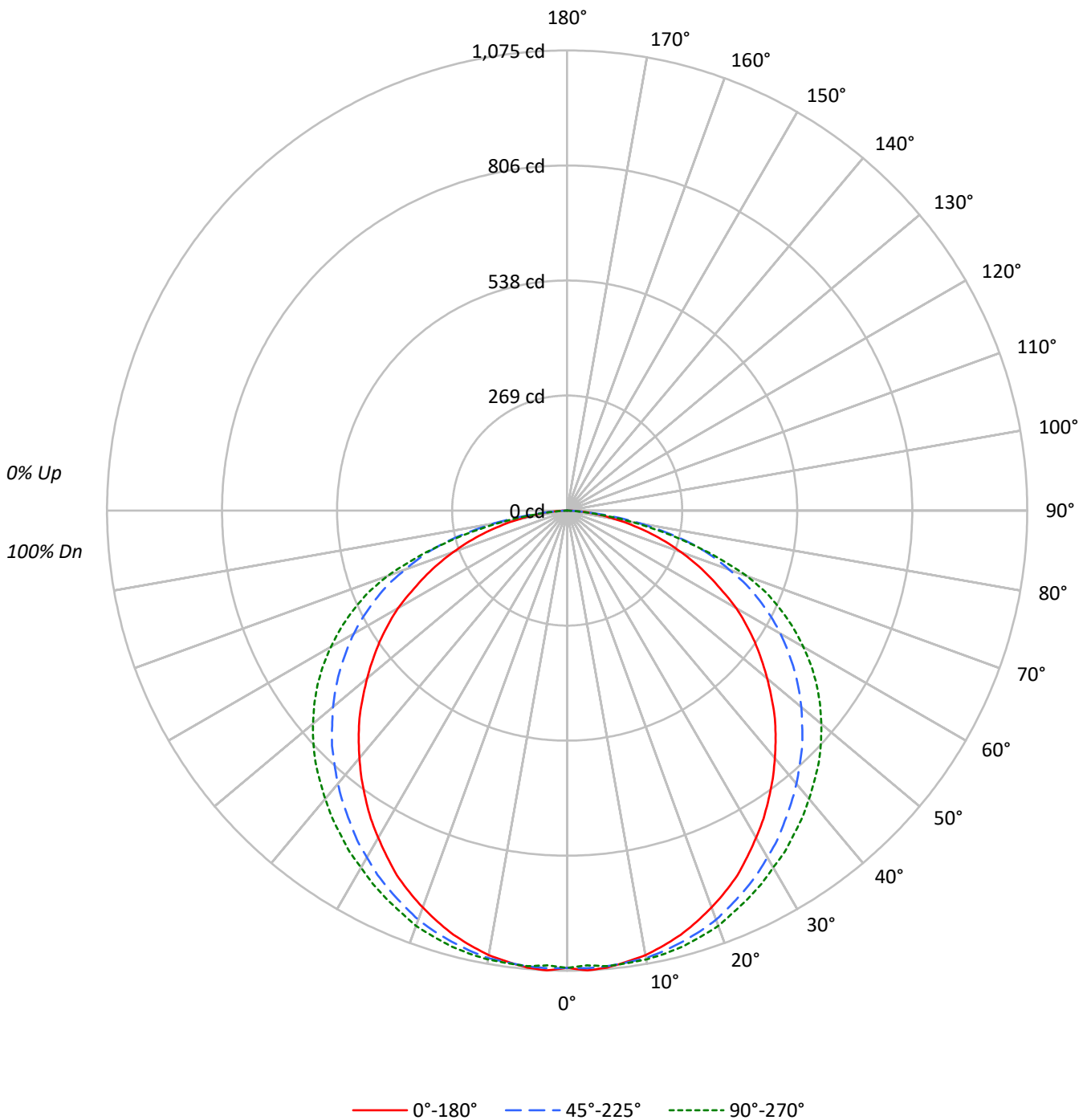
Input Watts (W): 32.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2875	2875	2875
5°	2895	2886	2886
10°	2882	2901	2910
15°	2858	2905	2934
20°	2825	2913	2957
25°	2793	2909	2969
30°	2742	2907	2991
35°	2698	2911	3034
40°	2651	2927	3088
45°	2613	2957	3164
50°	2554	2989	3245
55°	2510	3038	3341
60°	2457	3099	3429
65°	2343	3157	3515
70°	2225	3164	3512
75°	2037	3153	3100
80°	1743	2693	2402
85°	1368	1525	895



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.5	3.0
10°-20°	293.3	8.7
20°-30°	448.5	13.3
30°-40°	549.8	16.3
40°-50°	591.2	17.5
50°-60°	568.2	16.8
60°-70°	473.1	14.0
70°-80°	290.4	8.6
80°-90°	64.7	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°	843.3	24.9
0°-40°	1393.1	41.2
0°-60°	2552.5	75.5
0°-90°	3380.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3380.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1068	1068	1068	1068	1068	
5°	1072	1062	1068	1068	1068	102
15°	1026	1022	1043	1050	1053	289
25°	940	949	980	992	1000	433
35°	821	842	886	910	924	514
45°	687	717	777	813	832	528
55°	535	581	648	692	712	478
65°	368	424	496	537	552	365
75°	196	256	303	302	298	207
85°	44	66	49	34	29	53
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1068.3	1068.3	1068.3	1068.3	1068.3
2.5°	1075.1	1064.9	1070.0	1068.3	1063.2
5°	1071.7	1061.5	1068.3	1068.3	1068.3
7.5°	1063.2	1054.7	1064.9	1066.6	1066.6
10°	1054.7	1047.9	1061.5	1063.2	1064.9
12.5°	1041.0	1035.9	1053.0	1056.4	1059.8
15°	1025.7	1022.3	1042.7	1049.6	1053.0
17.5°	1007.0	1008.7	1030.8	1039.3	1042.7
20°	986.5	991.6	1017.2	1025.7	1032.5
22.5°	964.4	971.2	998.4	1008.7	1015.5
25°	940.5	949.0	979.7	991.6	1000.1
27.5°	911.5	925.2	959.3	974.6	983.1
30°	882.6	897.9	935.4	954.1	962.7
32.5°	853.6	870.7	913.3	932.0	945.6
35°	821.2	841.7	886.0	909.8	923.5
37.5°	788.9	812.7	860.4	887.7	903.0
40°	754.8	780.4	833.2	863.8	879.2
42.5°	720.7	749.7	804.2	838.3	855.3
45°	686.6	717.3	776.9	812.7	831.5
47.5°	647.5	684.9	744.6	785.5	804.2
50°	610.0	650.9	713.9	756.5	775.2
52.5°	572.5	615.1	681.5	725.8	744.6
55°	535.0	581.0	647.5	691.8	712.2
57.5°	495.8	543.5	611.7	657.7	676.4
60°	456.6	506.0	575.9	618.5	637.2
62.5°	410.6	468.6	536.7	579.3	596.3
65°	368.0	424.3	495.8	536.7	552.0
67.5°	325.4	383.4	453.2	490.7	504.3
70°	282.8	340.8	402.1	437.9	446.4
72.5°	240.2	298.2	356.1	376.5	373.1
75°	195.9	255.6	303.3	301.6	298.2
77.5°	153.3	211.3	240.2	228.3	223.2
80°	112.5	168.7	173.8	161.9	155.0
82.5°	76.7	121.0	109.0	95.4	88.6
85°	44.3	66.4	49.4	34.1	29.0
87.5°	18.7	17.0	5.1	5.1	3.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)