

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: P387491

Luminaire Tested: **14CZ2-39-SQR-UNV-L950-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: P387491
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-U
Description: 1x4 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

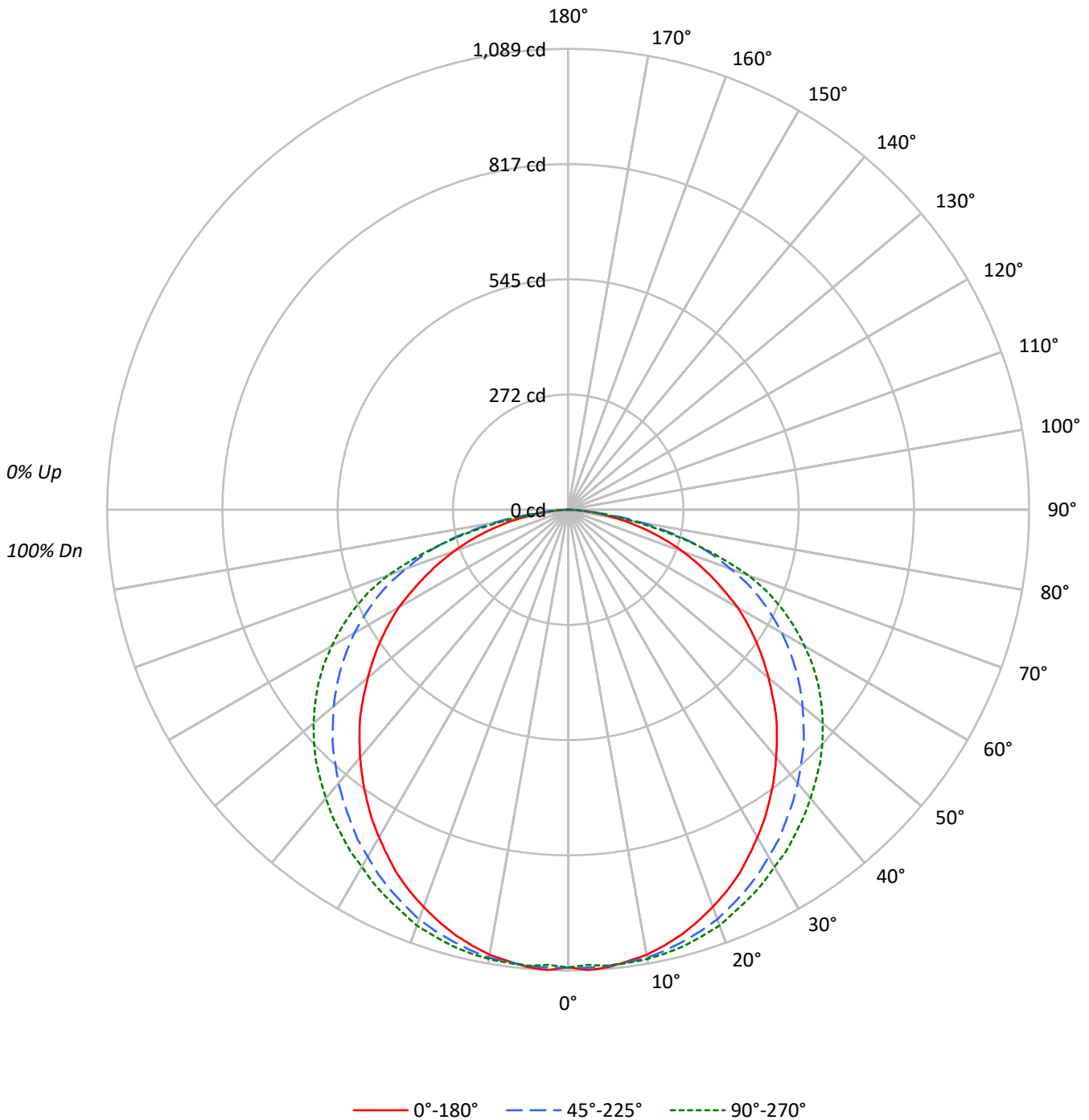
Lumens per Lamp: N/A
Luminaire Lumens: 3423.0 lumens
Efficiency: N/A
Efficacy: 106.0 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.34 / 1.44
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	2911	2911	2911
5°	2931	2922	2922
10°	2918	2937	2946
15°	2893	2941	2970
20°	2861	2949	2994
25°	2828	2945	3007
30°	2777	2943	3029
35°	2732	2947	3072
40°	2685	2963	3127
45°	2646	2994	3204
50°	2586	3026	3286
55°	2541	3076	3383
60°	2489	3138	3472
65°	2372	3196	3559
70°	2253	3203	3556
75°	2063	3193	3139
80°	1765	2727	2433
85°	1386	1544	905



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.8	3.0
10°-20°	296.9	8.7
20°-30°	454.1	13.3
30°-40°	556.6	16.3
40°-50°	598.7	17.5
50°-60°	575.3	16.8
60°-70°	479.0	14.0
70°-80°	294.0	8.6
80°-90°	65.5	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°	853.9	24.9
0°-40°	1410.5	41.2
0°-60°	2584.5	75.5
0°-90°	3423.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3423.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1082	1082	1082	1082	1082	
5°	1085	1075	1082	1082	1082	103
15°	1039	1035	1056	1063	1066	293
25°	952	961	992	1004	1013	438
35°	832	852	897	921	935	520
45°	695	726	787	823	842	535
55°	542	588	656	700	721	484
65°	373	430	502	543	559	369
75°	198	259	307	305	302	210
85°	45	67	50	34	29	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1081.7	1081.7	1081.7	1081.7	1081.7
2.5°	1088.6	1078.2	1083.4	1081.7	1076.5
5°	1085.1	1074.8	1081.7	1081.7	1081.7
7.5°	1076.5	1067.9	1078.2	1080.0	1080.0
10°	1067.9	1061.0	1074.8	1076.5	1078.2
12.5°	1054.1	1048.9	1066.2	1069.6	1073.1
15°	1038.6	1035.1	1055.8	1062.7	1066.2
17.5°	1019.6	1021.3	1043.7	1052.4	1055.8
20°	998.9	1004.1	1029.9	1038.6	1045.5
22.5°	976.5	983.4	1011.0	1021.3	1028.2
25°	952.3	960.9	992.0	1004.1	1012.7
27.5°	923.0	936.8	971.3	986.8	995.4
30°	893.7	909.2	947.1	966.1	974.7
32.5°	864.3	881.6	924.7	943.7	957.5
35°	831.5	852.2	897.1	921.3	935.1
37.5°	798.8	822.9	871.2	898.8	914.4
40°	764.3	790.1	843.6	874.7	890.2
42.5°	729.8	759.1	814.3	848.8	866.0
45°	695.3	726.3	786.7	822.9	841.9
47.5°	655.6	693.5	753.9	795.3	814.3
50°	617.6	659.0	722.9	766.0	785.0
52.5°	579.7	622.8	690.1	734.9	753.9
55°	541.7	588.3	655.6	700.4	721.1
57.5°	502.0	550.3	619.3	665.9	684.9
60°	462.4	512.4	583.1	626.2	645.2
62.5°	415.8	474.4	543.4	586.6	603.8
65°	372.6	429.6	502.0	543.4	559.0
67.5°	329.5	388.2	458.9	496.9	510.7
70°	286.4	345.0	407.1	443.4	452.0
72.5°	243.3	301.9	360.6	381.3	377.8
75°	198.4	258.8	307.1	305.4	301.9
77.5°	155.3	213.9	243.3	231.2	226.0
80°	113.9	170.8	176.0	163.9	157.0
82.5°	77.6	122.5	110.4	96.6	89.7
85°	44.9	67.3	50.0	34.5	29.3
87.5°	19.0	17.3	5.2	5.2	3.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)