

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: P387528

Luminaire Tested: **14CZ2-44-SQR-UNV-L930-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: P387528
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: 14CZ2-44-SQR-UNV-L930-CD1-SDWPD1-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: 3487.5 lumens
Efficiency: N/A
Efficacy: 91.1 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

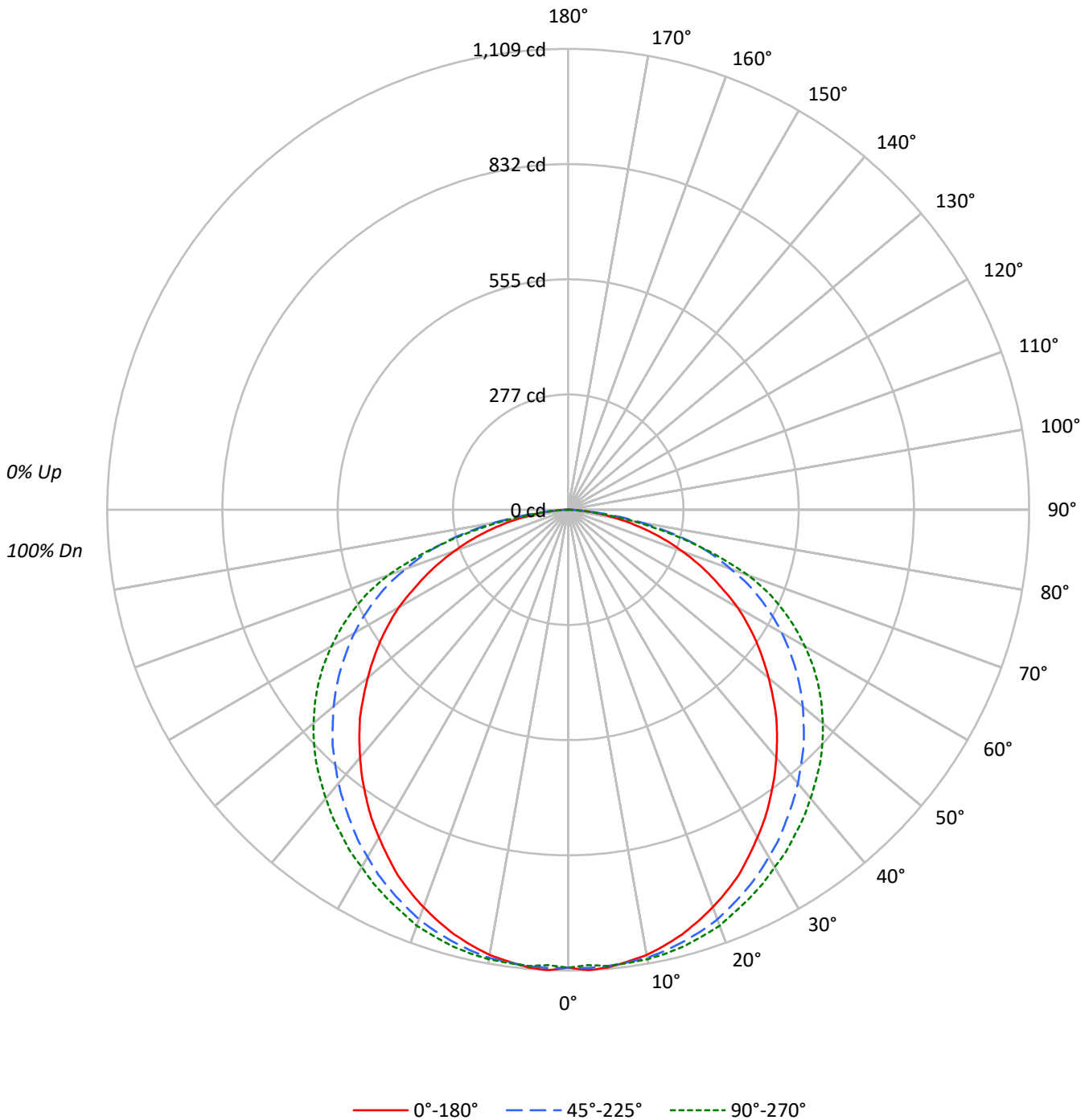
Input Watts (W): 38.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2966	2966	2966
5°	2987	2977	2977
10°	2973	2992	3002
15°	2948	2997	3026
20°	2914	3005	3050
25°	2881	3001	3064
30°	2829	2999	3086
35°	2783	3003	3130
40°	2735	3019	3186
45°	2696	3050	3264
50°	2635	3083	3348
55°	2589	3134	3447
60°	2535	3197	3538
65°	2418	3257	3626
70°	2296	3264	3623
75°	2101	3253	3198
80°	1798	2779	2479
85°	1411	1575	923



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.7	3.0
10°-20°	302.5	8.7
20°-30°	462.7	13.3
30°-40°	567.1	16.3
40°-50°	609.9	17.5
50°-60°	586.1	16.8
60°-70°	488.0	14.0
70°-80°	299.5	8.6
80°-90°	66.7	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°	870.0	24.9
0°-40°	1437.1	41.2
0°-60°	2633.2	75.5
0°-90°	3487.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3487.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1102	1102	1102	1102	1102	
5°	1106	1095	1102	1102	1102	105
15°	1058	1055	1076	1083	1086	298
25°	970	979	1011	1023	1032	446
35°	847	868	914	939	953	530
45°	708	740	802	838	858	545
55°	552	599	668	714	735	493
65°	380	438	512	554	570	376
75°	202	264	313	311	308	214
85°	46	69	51	35	30	55
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1102.1	1102.1	1102.1	1102.1	1102.1
2.5°	1109.1	1098.6	1103.8	1102.1	1096.8
5°	1105.6	1095.0	1102.1	1102.1	1102.1
7.5°	1096.8	1088.0	1098.6	1100.3	1100.3
10°	1088.0	1081.0	1095.0	1096.8	1098.6
12.5°	1074.0	1068.7	1086.3	1089.8	1093.3
15°	1058.1	1054.6	1075.7	1082.7	1086.3
17.5°	1038.8	1040.6	1063.4	1072.2	1075.7
20°	1017.7	1023.0	1049.3	1058.1	1065.2
22.5°	994.9	1001.9	1030.0	1040.6	1047.6
25°	970.3	979.0	1010.7	1023.0	1031.8
27.5°	940.4	954.4	989.6	1005.4	1014.2
30°	910.5	926.3	965.0	984.3	993.1
32.5°	880.6	898.2	942.1	961.5	975.5
35°	847.2	868.3	914.0	938.6	952.7
37.5°	813.8	838.4	887.6	915.8	931.6
40°	778.7	805.0	859.5	891.2	907.0
42.5°	743.5	773.4	829.6	864.8	882.4
45°	708.4	740.0	801.5	838.4	857.8
47.5°	667.9	706.6	768.1	810.3	829.6
50°	629.3	671.4	736.5	780.4	799.8
52.5°	590.6	634.5	703.1	748.8	768.1
55°	551.9	599.4	667.9	713.6	734.7
57.5°	511.5	560.7	631.0	678.5	697.8
60°	471.1	522.0	594.1	638.0	657.4
62.5°	423.6	483.4	553.7	597.6	615.2
65°	379.7	437.7	511.5	553.7	569.5
67.5°	335.7	395.5	467.5	506.2	520.3
70°	291.8	351.5	414.8	451.7	460.5
72.5°	247.8	307.6	367.4	388.5	384.9
75°	202.1	263.7	312.9	311.1	307.6
77.5°	158.2	218.0	247.8	235.5	230.3
80°	116.0	174.0	179.3	167.0	160.0
82.5°	79.1	124.8	112.5	98.4	91.4
85°	45.7	68.6	51.0	35.2	29.9
87.5°	19.3	17.6	5.3	5.3	3.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)