

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: P387531

Luminaire Tested: **14CZ2-44-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: P387531
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-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: 3573.8 lumens
Efficiency: N/A
Efficacy: 93.3 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

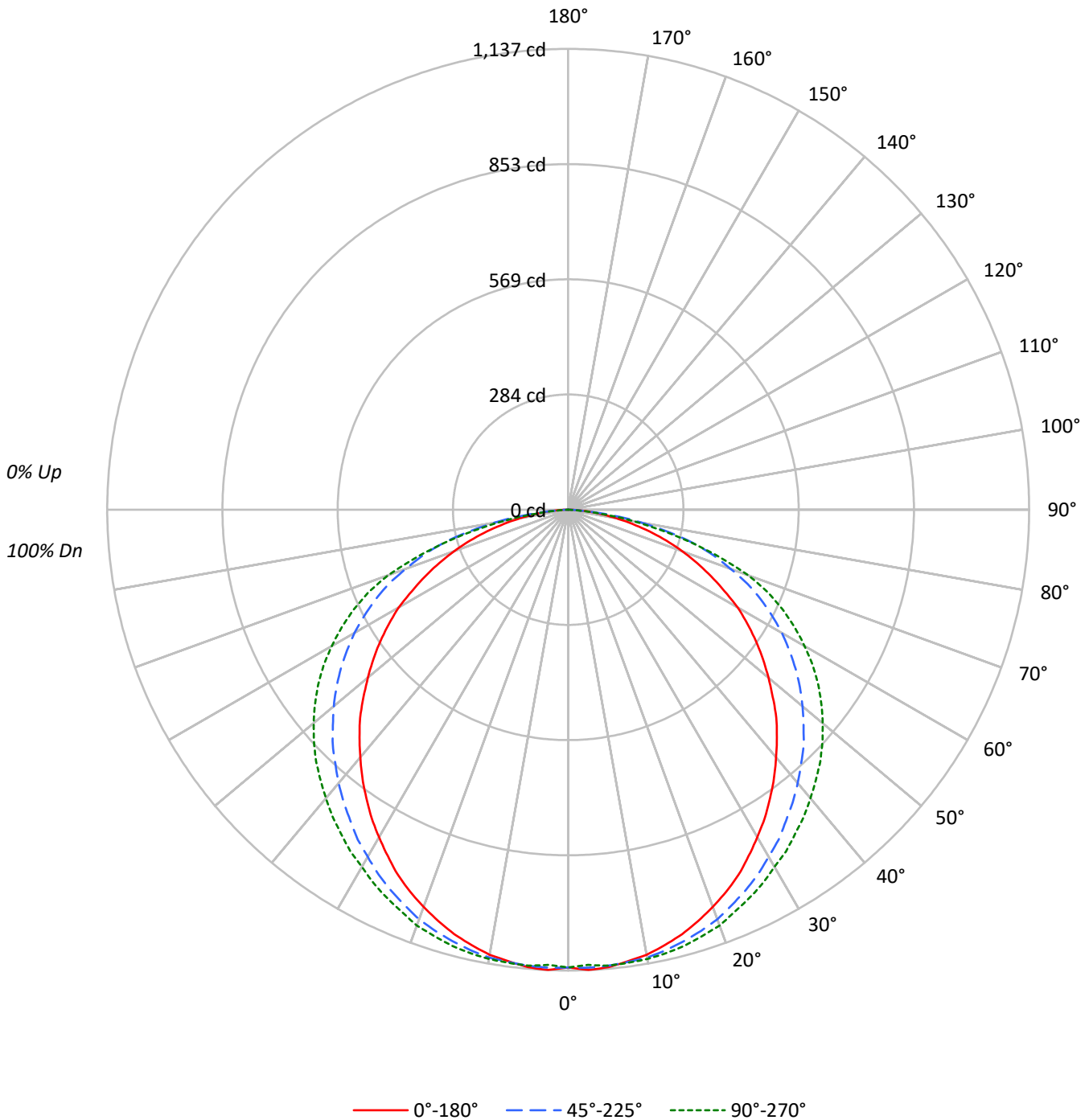
Input Watts (W): 38.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3039	3039	3039
5°	3061	3051	3051
10°	3046	3066	3076
15°	3021	3071	3101
20°	2987	3079	3126
25°	2952	3075	3139
30°	2899	3073	3162
35°	2852	3077	3207
40°	2803	3094	3265
45°	2762	3126	3345
50°	2699	3159	3431
55°	2654	3211	3532
60°	2598	3277	3625
65°	2478	3337	3716
70°	2353	3345	3713
75°	2153	3333	3277
80°	1843	2847	2540
85°	1445	1612	945



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.3	3.0
10°-20°	310.0	8.7
20°-30°	474.1	13.3
30°-40°	581.2	16.3
40°-50°	625.0	17.5
50°-60°	600.6	16.8
60°-70°	500.1	14.0
70°-80°	307.0	8.6
80°-90°	68.4	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°	891.5	24.9
0°-40°	1472.7	41.2
0°-60°	2698.3	75.5
0°-90°	3573.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3573.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1129	1129	1129	1129	1129	
5°	1133	1122	1129	1129	1129	107
15°	1084	1081	1102	1110	1113	306
25°	994	1003	1036	1048	1057	457
35°	868	890	937	962	976	543
45°	726	758	821	859	879	559
55°	566	614	684	731	753	505
65°	389	448	524	567	584	385
75°	207	270	321	319	315	219
85°	47	70	52	36	31	56
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1129.4	1129.4	1129.4	1129.4	1129.4
2.5°	1136.6	1125.7	1131.2	1129.4	1123.9
5°	1133.0	1122.1	1129.4	1129.4	1129.4
7.5°	1123.9	1114.9	1125.7	1127.6	1127.6
10°	1114.9	1107.7	1122.1	1123.9	1125.7
12.5°	1100.5	1095.1	1113.1	1116.7	1120.3
15°	1084.3	1080.7	1102.3	1109.5	1113.1
17.5°	1064.5	1066.3	1089.7	1098.7	1102.3
20°	1042.9	1048.3	1075.3	1084.3	1091.5
22.5°	1019.5	1026.7	1055.5	1066.3	1073.5
25°	994.3	1003.3	1035.7	1048.3	1057.3
27.5°	963.6	978.1	1014.1	1030.3	1039.3
30°	933.0	949.2	988.9	1008.7	1017.7
32.5°	902.4	920.4	965.4	985.3	999.7
35°	868.2	889.8	936.6	961.8	976.2
37.5°	834.0	859.2	909.6	938.4	954.6
40°	797.9	824.9	880.8	913.2	929.4
42.5°	761.9	792.5	850.2	886.2	904.2
45°	725.9	758.3	821.3	859.2	879.0
47.5°	684.5	724.1	787.1	830.4	850.2
50°	644.8	688.1	754.7	799.7	819.5
52.5°	605.2	650.2	720.5	767.3	787.1
55°	565.6	614.2	684.5	731.3	752.9
57.5°	524.1	574.6	646.6	695.3	715.1
60°	482.7	535.0	608.8	653.8	673.6
62.5°	434.1	495.3	567.4	612.4	630.4
65°	389.1	448.5	524.1	567.4	583.6
67.5°	344.0	405.3	479.1	518.7	533.2
70°	299.0	360.2	425.1	462.9	471.9
72.5°	254.0	315.2	376.5	398.1	394.5
75°	207.1	270.2	320.6	318.8	315.2
77.5°	162.1	223.3	254.0	241.4	236.0
80°	118.9	178.3	183.7	171.1	163.9
82.5°	81.1	127.9	115.3	100.9	93.7
85°	46.8	70.2	52.2	36.0	30.6
87.5°	19.8	18.0	5.4	5.4	3.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)