

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: P387536

Luminaire Tested: **14CZ2-44-SQR-UNV-L940-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: P387536
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-L940-CD1-U
Description: 1x4 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3700.8 lumens
Efficiency: N/A
Efficacy: 96.6 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

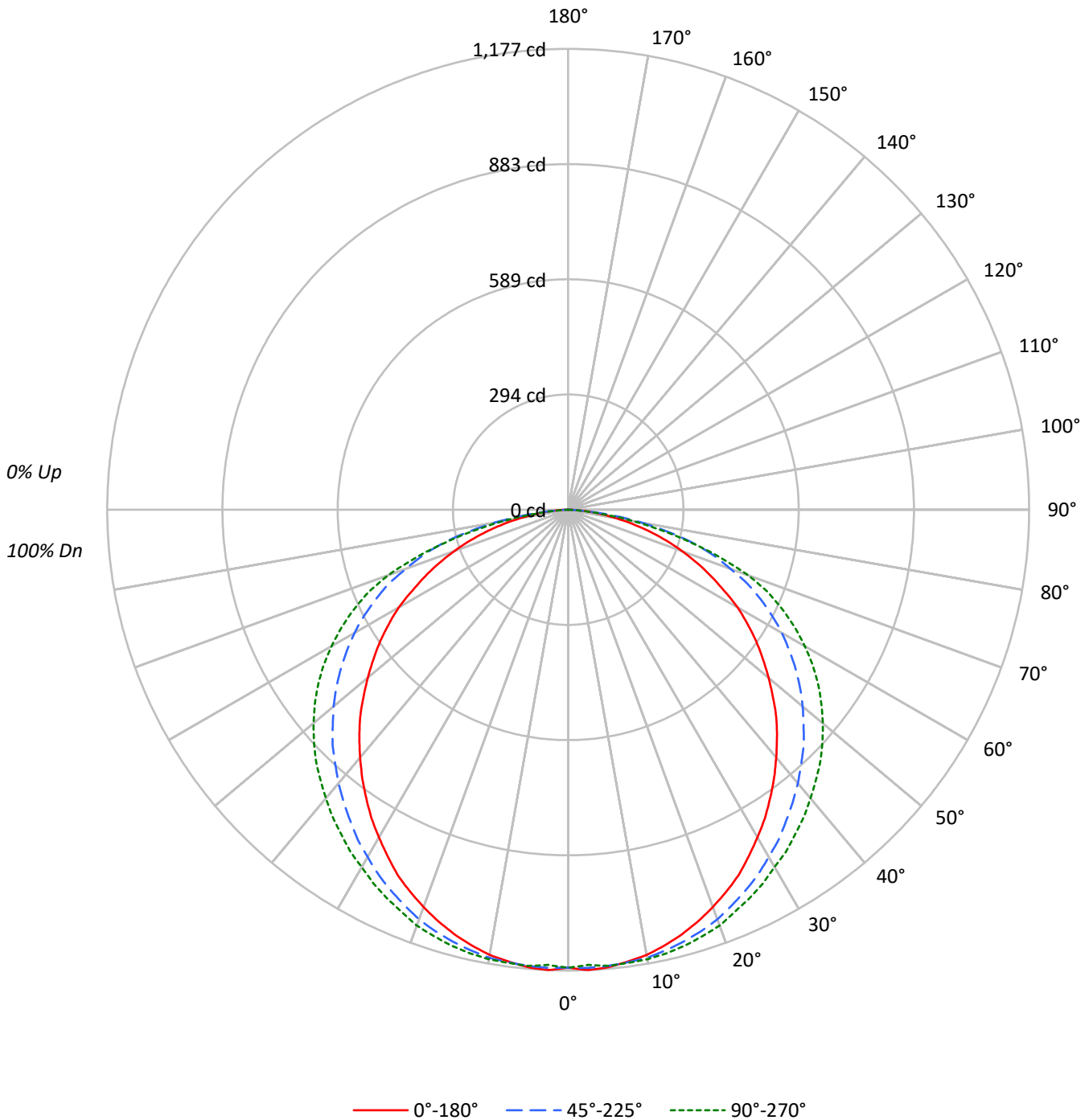
Input Watts (W): 38.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3147	3147	3147
5°	3169	3159	3159
10°	3155	3175	3186
15°	3128	3180	3211
20°	3093	3189	3237
25°	3057	3184	3251
30°	3002	3182	3274
35°	2953	3186	3321
40°	2903	3204	3381
45°	2861	3237	3464
50°	2795	3272	3553
55°	2748	3325	3658
60°	2690	3393	3754
65°	2565	3456	3848
70°	2436	3463	3845
75°	2230	3452	3394
80°	1908	2949	2630
85°	1497	1670	979



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.1	3.0
10°-20°	321.1	8.7
20°-30°	491.0	13.3
30°-40°	601.8	16.3
40°-50°	647.2	17.5
50°-60°	622.0	16.8
60°-70°	517.9	14.0
70°-80°	317.9	8.6
80°-90°	70.8	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°	923.2	24.9
0°-40°	1525.0	41.2
0°-60°	2794.3	75.5
0°-90°	3700.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3700.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1170	1170	1170	1170	1170	
5°	1173	1162	1170	1170	1170	111
15°	1123	1119	1142	1149	1153	317
25°	1030	1039	1072	1086	1095	474
35°	899	921	970	996	1011	563
45°	752	785	850	890	910	578
55°	586	636	709	757	780	523
65°	403	464	543	588	604	399
75°	214	280	332	330	326	227
85°	48	73	54	37	32	58
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1169.5	1169.5	1169.5	1169.5	1169.5
2.5°	1176.9	1165.8	1171.4	1169.5	1163.9
5°	1173.2	1162.0	1169.5	1169.5	1169.5
7.5°	1163.9	1154.6	1165.8	1167.6	1167.6
10°	1154.6	1147.1	1162.0	1163.9	1165.8
12.5°	1139.6	1134.0	1152.7	1156.4	1160.2
15°	1122.9	1119.1	1141.5	1149.0	1152.7
17.5°	1102.3	1104.2	1128.5	1137.8	1141.5
20°	1080.0	1085.6	1113.5	1122.9	1130.3
22.5°	1055.7	1063.2	1093.0	1104.2	1111.7
25°	1029.6	1038.9	1072.5	1085.6	1094.9
27.5°	997.9	1012.8	1050.1	1066.9	1076.2
30°	966.2	983.0	1024.0	1044.5	1053.8
32.5°	934.5	953.1	999.8	1020.3	1035.2
35°	899.0	921.4	969.9	996.0	1010.9
37.5°	863.6	889.7	941.9	971.8	988.6
40°	826.3	854.3	912.1	945.7	962.4
42.5°	789.0	820.7	880.4	917.7	936.3
45°	751.7	785.3	850.5	889.7	910.2
47.5°	708.8	749.8	815.1	859.9	880.4
50°	667.7	712.5	781.5	828.2	848.7
52.5°	626.7	673.3	746.1	794.6	815.1
55°	585.7	636.0	708.8	757.3	779.7
57.5°	542.8	595.0	669.6	720.0	740.5
60°	499.9	554.0	630.4	677.1	697.6
62.5°	449.5	512.9	587.5	634.2	652.8
65°	402.9	464.4	542.8	587.5	604.3
67.5°	356.3	419.7	496.1	537.2	552.1
70°	309.6	373.0	440.2	479.4	488.7
72.5°	263.0	326.4	389.8	412.2	408.5
75°	214.5	279.8	332.0	330.1	326.4
77.5°	167.9	231.3	263.0	249.9	244.3
80°	123.1	184.7	190.3	177.2	169.7
82.5°	83.9	132.4	119.4	104.5	97.0
85°	48.5	72.7	54.1	37.3	31.7
87.5°	20.5	18.7	5.6	5.6	3.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)