

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: P387485

Luminaire Tested: **14CZ2-39-SQR-UNV-L935-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: P387485
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-L935-CD1-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: 3191.9 lumens
Efficiency: N/A
Efficacy: 98.8 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

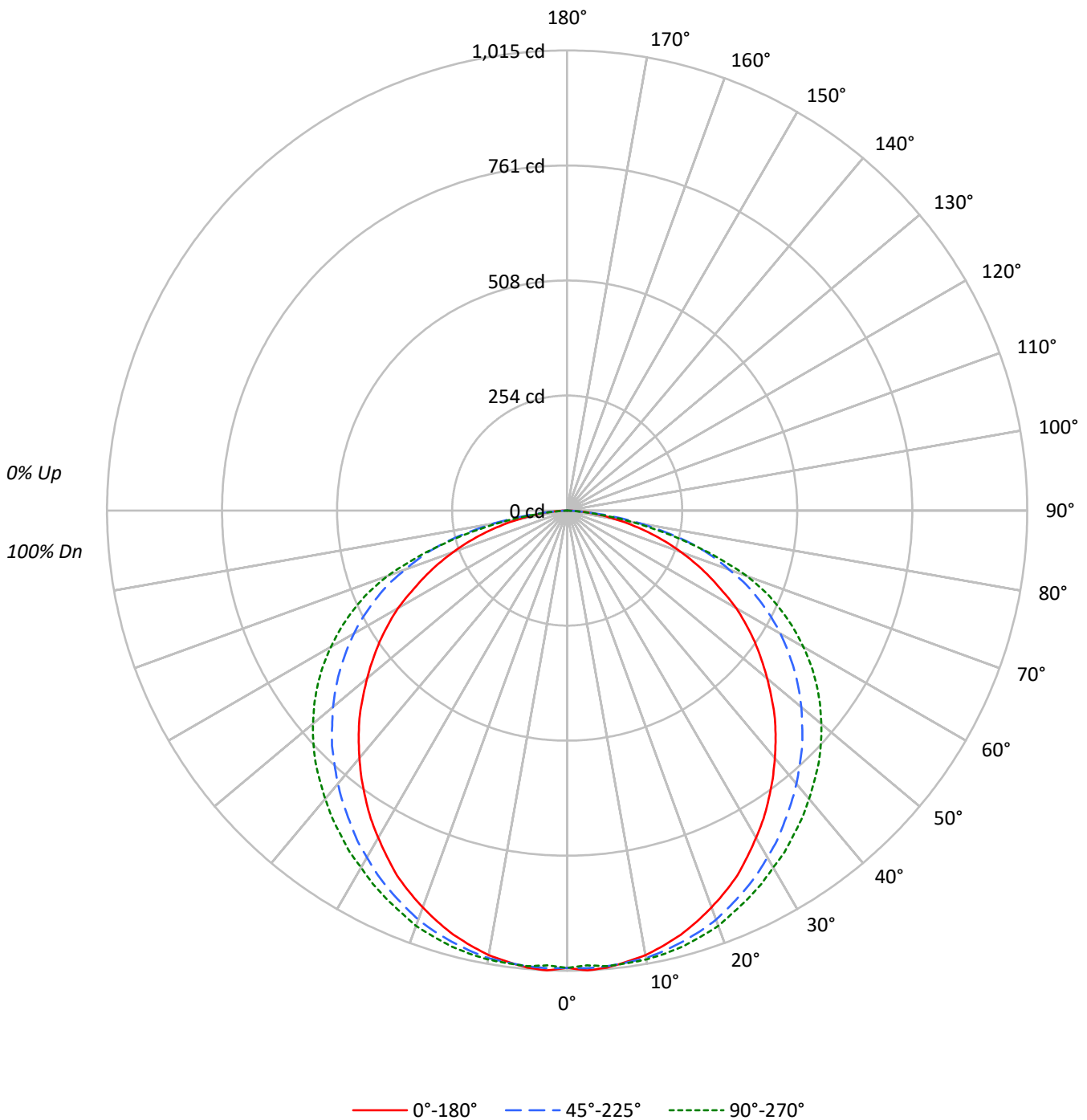
Input Watts (W): 32.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2714	2714	2714
5°	2733	2725	2725
10°	2721	2739	2748
15°	2698	2743	2770
20°	2667	2750	2792
25°	2637	2746	2804
30°	2589	2744	2824
35°	2547	2748	2864
40°	2504	2764	2916
45°	2467	2792	2988
50°	2411	2822	3064
55°	2370	2868	3155
60°	2320	2926	3238
65°	2213	2981	3319
70°	2101	2987	3316
75°	1923	2978	2927
80°	1646	2543	2269
85°	1291	1442	843



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.9	3.0
10°-20°	276.9	8.7
20°-30°	423.5	13.3
30°-40°	519.1	16.3
40°-50°	558.2	17.5
50°-60°	536.5	16.8
60°-70°	446.7	14.0
70°-80°	274.1	8.6
80°-90°	61.1	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°	796.2	24.9
0°-40°	1315.3	41.2
0°-60°	2410.0	75.5
0°-90°	3191.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3191.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1009	1009	1009	1009	1009	
5°	1012	1002	1009	1009	1009	96
15°	968	965	984	991	994	273
25°	888	896	925	936	944	408
35°	775	795	836	859	872	485
45°	648	677	734	767	785	499
55°	505	549	611	653	672	451
65°	348	401	468	507	521	344
75°	185	241	286	285	282	196
85°	42	63	47	32	27	50
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1008.7	1008.7	1008.7	1008.7	1008.7
2.5°	1015.1	1005.5	1010.3	1008.7	1003.8
5°	1011.9	1002.2	1008.7	1008.7	1008.7
7.5°	1003.8	995.8	1005.5	1007.1	1007.1
10°	995.8	989.4	1002.2	1003.8	1005.5
12.5°	982.9	978.1	994.2	997.4	1000.6
15°	968.4	965.2	984.5	991.0	994.2
17.5°	950.8	952.4	973.3	981.3	984.5
20°	931.4	936.3	960.4	968.4	974.9
22.5°	910.5	917.0	942.7	952.4	958.8
25°	888.0	896.1	925.0	936.3	944.3
27.5°	860.7	873.5	905.7	920.2	928.2
30°	833.3	847.8	883.2	900.9	908.9
32.5°	806.0	822.1	862.3	880.0	892.8
35°	775.4	794.7	836.5	859.1	871.9
37.5°	744.8	767.4	812.4	838.1	852.6
40°	712.7	736.8	786.7	815.6	830.1
42.5°	680.5	707.8	759.3	791.5	807.6
45°	648.3	677.3	733.6	767.4	785.1
47.5°	611.3	646.7	703.0	741.6	759.3
50°	575.9	614.5	674.1	714.3	732.0
52.5°	540.5	580.7	643.5	685.3	703.0
55°	505.1	548.6	611.3	653.1	672.4
57.5°	468.1	513.2	577.5	621.0	638.7
60°	431.1	477.8	543.7	584.0	601.7
62.5°	387.7	442.4	506.7	547.0	563.1
65°	347.5	400.6	468.1	506.7	521.2
67.5°	307.3	362.0	427.9	463.3	476.2
70°	267.0	321.7	379.7	413.4	421.5
72.5°	226.8	281.5	336.2	355.5	352.3
75°	185.0	241.3	286.4	284.7	281.5
77.5°	144.8	199.5	226.8	215.6	210.7
80°	106.2	159.3	164.1	152.8	146.4
82.5°	72.4	114.2	103.0	90.1	83.7
85°	41.8	62.7	46.7	32.2	27.3
87.5°	17.7	16.1	4.8	4.8	3.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)