

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: P387486

Luminaire Tested: **14CZ2-39-SQR-UNV-L940-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: P387486
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-L940-CD1-SDWPD1-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: 3146.5 lumens
Efficiency: N/A
Efficacy: 97.4 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

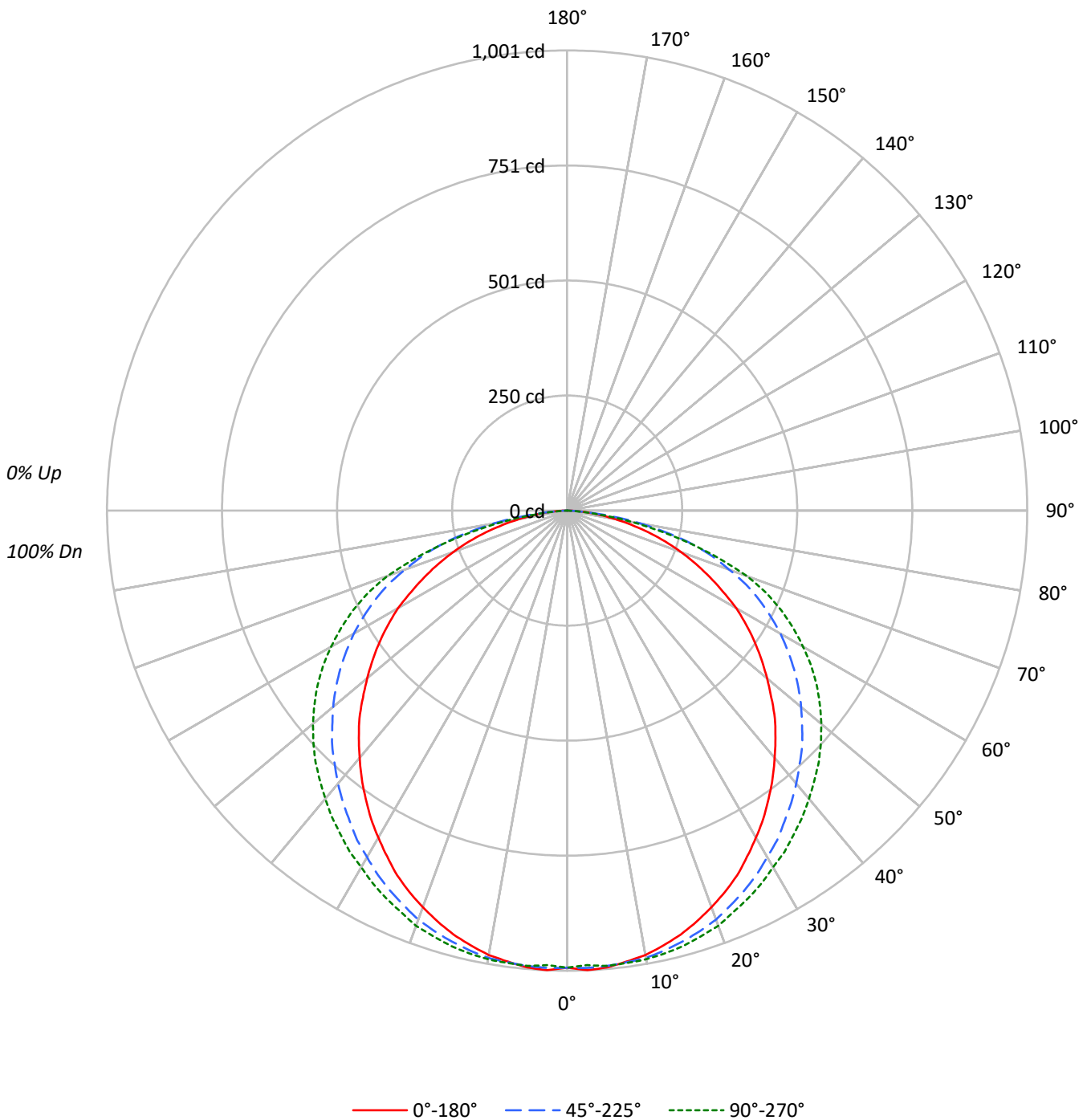
Input Watts (W): 32.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2676	2676	2676
5°	2695	2686	2686
10°	2682	2700	2708
15°	2660	2704	2730
20°	2629	2711	2752
25°	2599	2708	2764
30°	2553	2705	2784
35°	2511	2709	2824
40°	2468	2724	2875
45°	2432	2752	2945
50°	2377	2782	3021
55°	2336	2827	3110
60°	2287	2885	3192
65°	2181	2939	3272
70°	2071	2945	3269
75°	1896	2935	2885
80°	1623	2507	2236
85°	1272	1420	834



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.5	3.0
10°-20°	273.0	8.7
20°-30°	417.4	13.3
30°-40°	511.7	16.3
40°-50°	550.3	17.5
50°-60°	528.8	16.8
60°-70°	440.3	14.0
70°-80°	270.3	8.6
80°-90°	60.2	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°	784.9	24.9
0°-40°	1296.6	41.2
0°-60°	2375.7	75.5
0°-90°	3146.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3146.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	994	994	994	994	994	
5°	998	988	994	994	994	95
15°	955	952	970	977	980	269
25°	875	883	912	923	931	403
35°	764	783	825	847	860	478
45°	639	668	723	756	774	492
55°	498	541	603	644	663	445
65°	342	395	462	500	514	339
75°	182	238	282	281	278	193
85°	41	62	46	32	27	50
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	994.3	994.3	994.3	994.3	994.3
2.5°	1000.7	991.1	995.9	994.3	989.6
5°	997.5	988.0	994.3	994.3	994.3
7.5°	989.6	981.6	991.1	992.7	992.7
10°	981.6	975.3	988.0	989.6	991.1
12.5°	968.9	964.2	980.0	983.2	986.4
15°	954.7	951.5	970.5	976.9	980.0
17.5°	937.2	938.8	959.4	967.4	970.5
20°	918.2	923.0	946.7	954.7	961.0
22.5°	897.6	903.9	929.3	938.8	945.2
25°	875.4	883.3	911.9	923.0	930.9
27.5°	848.4	861.1	892.8	907.1	915.0
30°	821.5	835.7	870.6	888.1	896.0
32.5°	794.5	810.4	850.0	867.5	880.1
35°	764.4	783.4	824.6	846.8	859.5
37.5°	734.2	756.4	800.8	826.2	840.5
40°	702.5	726.3	775.5	804.0	818.3
42.5°	670.8	697.8	748.5	780.2	796.1
45°	639.1	667.6	723.1	756.4	773.9
47.5°	602.6	637.5	693.0	731.1	748.5
50°	567.7	605.8	664.5	704.1	721.6
52.5°	532.8	572.5	634.3	675.6	693.0
55°	498.0	540.8	602.6	643.9	662.9
57.5°	461.5	505.9	569.3	612.1	629.6
60°	425.0	471.0	536.0	575.7	593.1
62.5°	382.2	436.1	499.5	539.2	555.0
65°	342.5	394.9	461.5	499.5	513.8
67.5°	302.9	356.8	421.8	456.7	469.4
70°	263.2	317.2	374.3	407.6	415.5
72.5°	223.6	277.5	331.4	350.5	347.3
75°	182.4	237.9	282.3	280.7	277.5
77.5°	142.7	196.6	223.6	212.5	207.7
80°	104.7	157.0	161.8	150.7	144.3
82.5°	71.4	112.6	101.5	88.8	82.5
85°	41.2	61.8	46.0	31.7	27.0
87.5°	17.4	15.9	4.8	4.8	3.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)