

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: P387456

Luminaire Tested: **14CZ2-35-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: P387456
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: 14CZ2-35-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: 2740.7 lumens
Efficiency: N/A
Efficacy: 87.8 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

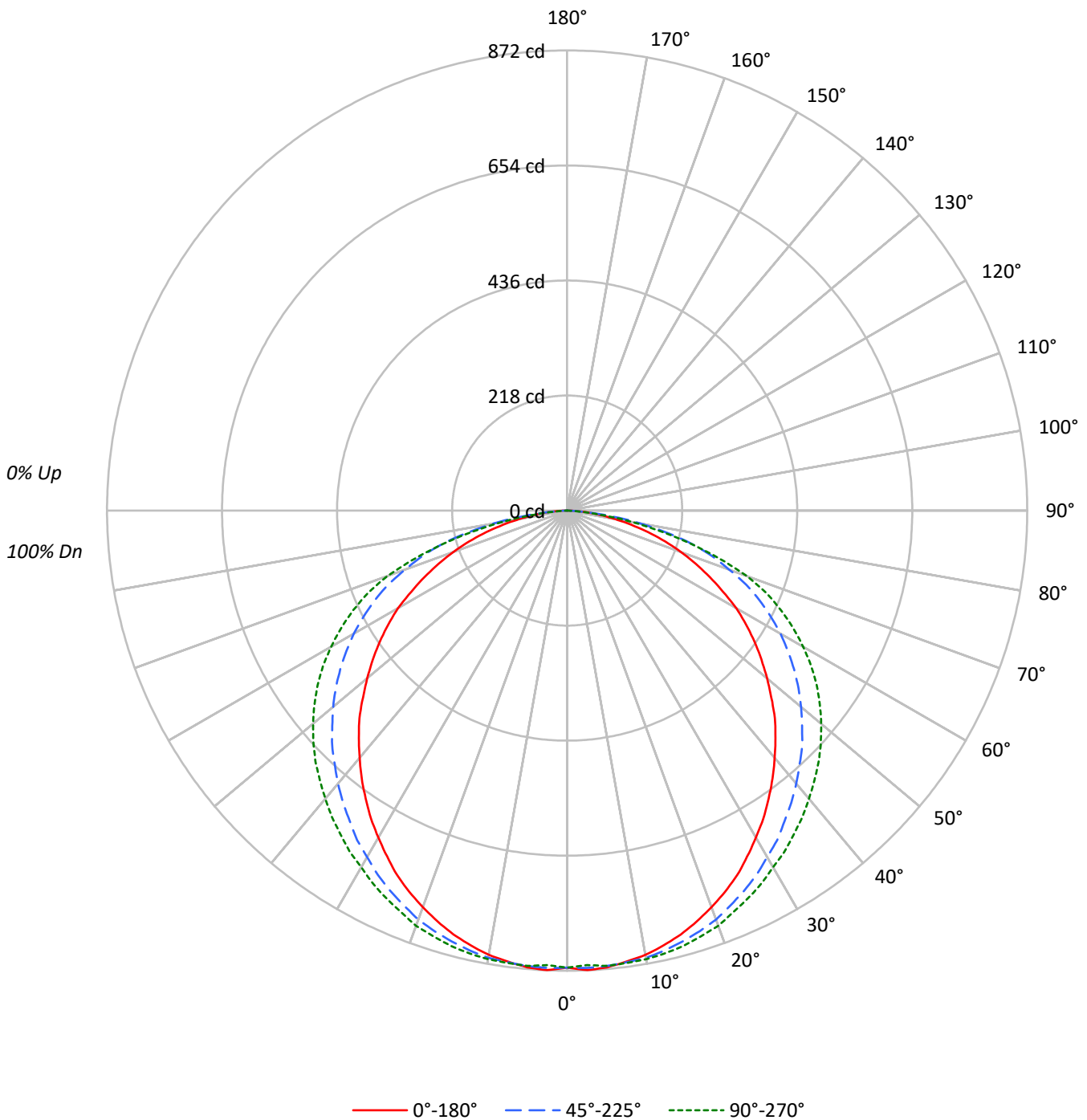
Input Watts (W): 31.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2331	2331	2331
5°	2347	2340	2340
10°	2336	2352	2359
15°	2317	2355	2378
20°	2290	2361	2397
25°	2264	2358	2407
30°	2223	2356	2425
35°	2187	2360	2460
40°	2149	2373	2504
45°	2119	2397	2565
50°	2070	2423	2631
55°	2035	2463	2709
60°	1992	2513	2780
65°	1900	2560	2849
70°	1804	2565	2847
75°	1652	2557	2513
80°	1413	2183	1948
85°	1108	1238	726



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.3	3.0
10°-20°	237.8	8.7
20°-30°	363.6	13.3
30°-40°	445.7	16.3
40°-50°	479.3	17.5
50°-60°	460.6	16.8
60°-70°	383.5	14.0
70°-80°	235.4	8.6
80°-90°	52.4	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°	683.7	24.9
0°-40°	1129.4	41.2
0°-60°	2069.3	75.5
0°-90°	2740.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2740.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	866	866	866	866	866	
5°	869	861	866	866	866	82
15°	832	829	845	851	854	234
25°	762	769	794	804	811	351
35°	666	682	718	738	749	417
45°	557	582	630	659	674	428
55°	434	471	525	561	577	387
65°	298	344	402	435	448	296
75°	159	207	246	244	242	168
85°	36	54	40	28	24	43
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	866.1	866.1	866.1	866.1	866.1
2.5°	871.6	863.3	867.5	866.1	861.9
5°	868.8	860.6	866.1	866.1	866.1
7.5°	861.9	855.0	863.3	864.7	864.7
10°	855.0	849.5	860.6	861.9	863.3
12.5°	844.0	839.8	853.7	856.4	859.2
15°	831.6	828.8	845.4	850.9	853.7
17.5°	816.4	817.7	835.7	842.6	845.4
20°	799.8	803.9	824.6	831.6	837.1
22.5°	781.8	787.3	809.5	817.7	823.3
25°	762.5	769.4	794.3	803.9	810.8
27.5°	739.0	750.1	777.7	790.1	797.0
30°	715.5	728.0	758.3	773.5	780.4
32.5°	692.0	705.9	740.4	755.6	766.6
35°	665.8	682.4	718.3	737.6	748.7
37.5°	639.5	658.9	697.6	719.7	732.1
40°	611.9	632.6	675.5	700.3	712.8
42.5°	584.3	607.8	652.0	679.6	693.4
45°	556.7	581.5	629.9	658.9	674.1
47.5°	524.9	555.3	603.6	636.8	652.0
50°	494.5	527.7	578.8	613.3	628.5
52.5°	464.1	498.7	552.5	588.4	603.6
55°	433.7	471.0	524.9	560.8	577.4
57.5°	402.0	440.6	495.9	533.2	548.4
60°	370.2	410.3	466.9	501.4	516.6
62.5°	332.9	379.9	435.1	469.6	483.5
65°	298.4	343.9	402.0	435.1	447.5
67.5°	263.8	310.8	367.4	397.8	408.9
70°	229.3	276.3	326.0	355.0	361.9
72.5°	194.8	241.7	288.7	305.3	302.5
75°	158.9	207.2	245.9	244.5	241.7
77.5°	124.3	171.3	194.8	185.1	181.0
80°	91.2	136.8	140.9	131.2	125.7
82.5°	62.2	98.1	88.4	77.4	71.8
85°	35.9	53.9	40.1	27.6	23.5
87.5°	15.2	13.8	4.1	4.1	2.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)