

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: P388379

Luminaire Tested: **24CZ2-130VHE-SQR-UNV-L950-CD2-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: P388379
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2002-678-2)
Test Lab: INNOVATION CENTER (G2)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-130VHE-SQR-UNV-L950-CD2-U
Description: 2x4 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11556.2 lumens
Efficiency: N/A
Efficacy: 127.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.33 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

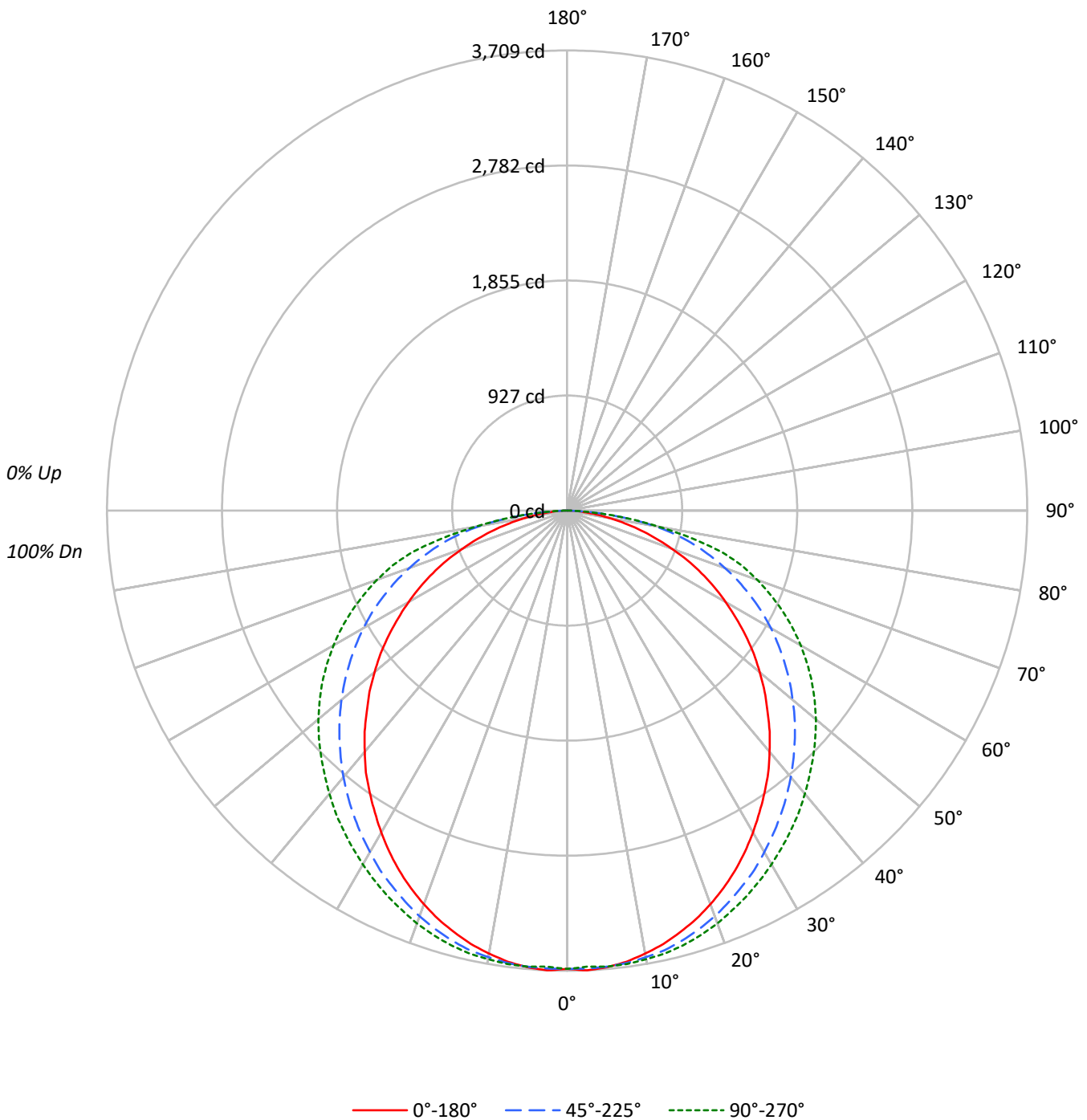
Input Watts (W): 90.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	98	94	105	100	96	92	96	93	89	92	89	87	89	86	84	82
2	98	89	81	75	95	87	80	74	83	78	73	80	75	71	77	73	69	67
3	89	77	69	62	86	76	68	61	73	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	52	64	57	51	62	55	50	60	54	49	47
5	74	61	51	44	72	60	51	44	57	50	44	55	49	43	54	48	43	41
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35
7	63	49	40	34	62	49	40	34	47	39	34	45	39	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	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°	4970	4970	4970
5°	4989	4984	4984
10°	4953	4995	5015
15°	4901	4997	5050
20°	4836	4983	5071
25°	4753	4957	5087
30°	4654	4939	5116
35°	4557	4927	5165
40°	4457	4926	5235
45°	4342	4938	5337
50°	4241	4968	5480
55°	4118	5022	5648
60°	3974	5104	5853
65°	3803	5200	6099
70°	3528	5329	6410
75°	3194	5515	6705
80°	2691	5529	5766
85°	2062	4182	4182



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	350.6	3.0
10°-20°	1008.8	8.7
20°-30°	1532.3	13.3
30°-40°	1863.9	16.1
40°-50°	1984.4	17.2
50°-60°	1890.1	16.4
60°-70°	1580.6	13.7
70°-80°	1053.8	9.1
80°-90°	291.6	2.5
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°	2891.8	25.0
0°-40°	4755.7	41.2
0°-60°	8630.2	74.7
0°-90°	11556.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11556.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3694	3694	3694	3694	3694	
5°	3694	3671	3690	3690	3690	350
15°	3518	3526	3587	3614	3625	992
25°	3202	3244	3339	3396	3427	1474
35°	2774	2854	2999	3099	3144	1736
45°	2282	2404	2595	2740	2805	1764
55°	1755	1908	2141	2328	2408	1569
65°	1194	1370	1633	1836	1916	1180
75°	614	809	1061	1240	1290	651
85°	134	248	271	267	271	161
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3693.9	3693.9	3693.9	3693.9	3693.9
2.5°	3709.2	3682.5	3693.9	3693.9	3678.7
5°	3693.9	3671.0	3690.1	3690.1	3690.1
7.5°	3667.2	3648.1	3678.7	3686.3	3686.3
10°	3625.2	3617.6	3655.8	3667.2	3671.0
12.5°	3579.4	3575.6	3629.1	3644.3	3655.8
15°	3518.4	3526.0	3587.1	3613.8	3625.2
17.5°	3453.5	3468.8	3537.5	3575.6	3587.1
20°	3377.2	3400.1	3480.2	3518.4	3541.3
22.5°	3293.2	3327.6	3411.5	3457.3	3484.0
25°	3201.7	3243.6	3339.0	3396.3	3426.8
27.5°	3102.4	3155.9	3266.5	3331.4	3361.9
30°	2995.6	3056.6	3178.8	3255.1	3293.2
32.5°	2884.9	2957.4	3091.0	3174.9	3220.7
35°	2774.3	2854.4	2999.4	3098.6	3144.4
37.5°	2663.6	2743.7	2904.0	3010.9	3068.1
40°	2537.7	2633.1	2804.8	2923.1	2980.3
42.5°	2415.6	2518.6	2701.8	2831.5	2892.6
45°	2282.0	2404.1	2594.9	2739.9	2804.8
47.5°	2159.9	2282.0	2488.1	2640.7	2713.2
50°	2026.3	2156.1	2373.6	2541.5	2617.8
52.5°	1896.6	2030.1	2259.1	2438.4	2514.8
55°	1755.4	1908.0	2140.8	2327.8	2407.9
57.5°	1614.2	1778.3	2018.7	2213.3	2293.4
60°	1476.8	1644.7	1896.6	2091.2	2175.1
62.5°	1339.4	1507.3	1770.6	1969.1	2049.2
65°	1194.4	1370.0	1633.3	1835.5	1915.7
67.5°	1049.4	1232.6	1495.9	1698.1	1774.5
70°	896.8	1091.4	1354.7	1553.1	1629.4
72.5°	755.6	950.2	1209.7	1404.3	1476.8
75°	614.4	809.0	1060.9	1240.2	1289.8
77.5°	477.0	671.6	896.8	1015.1	1026.5
80°	347.3	530.4	713.6	747.9	744.1
82.5°	232.8	396.9	492.3	496.1	507.5
85°	133.6	248.0	270.9	267.1	270.9
87.5°	53.4	87.8	76.3	57.2	57.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)