

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: P388378

Luminaire Tested: **24CZ2-130VHE-SQR-UNV-L950-CD2-SWPD1-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: P388378
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-SWPD1-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: 11412.8 lumens
Efficiency: N/A
Efficacy: 125.8 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

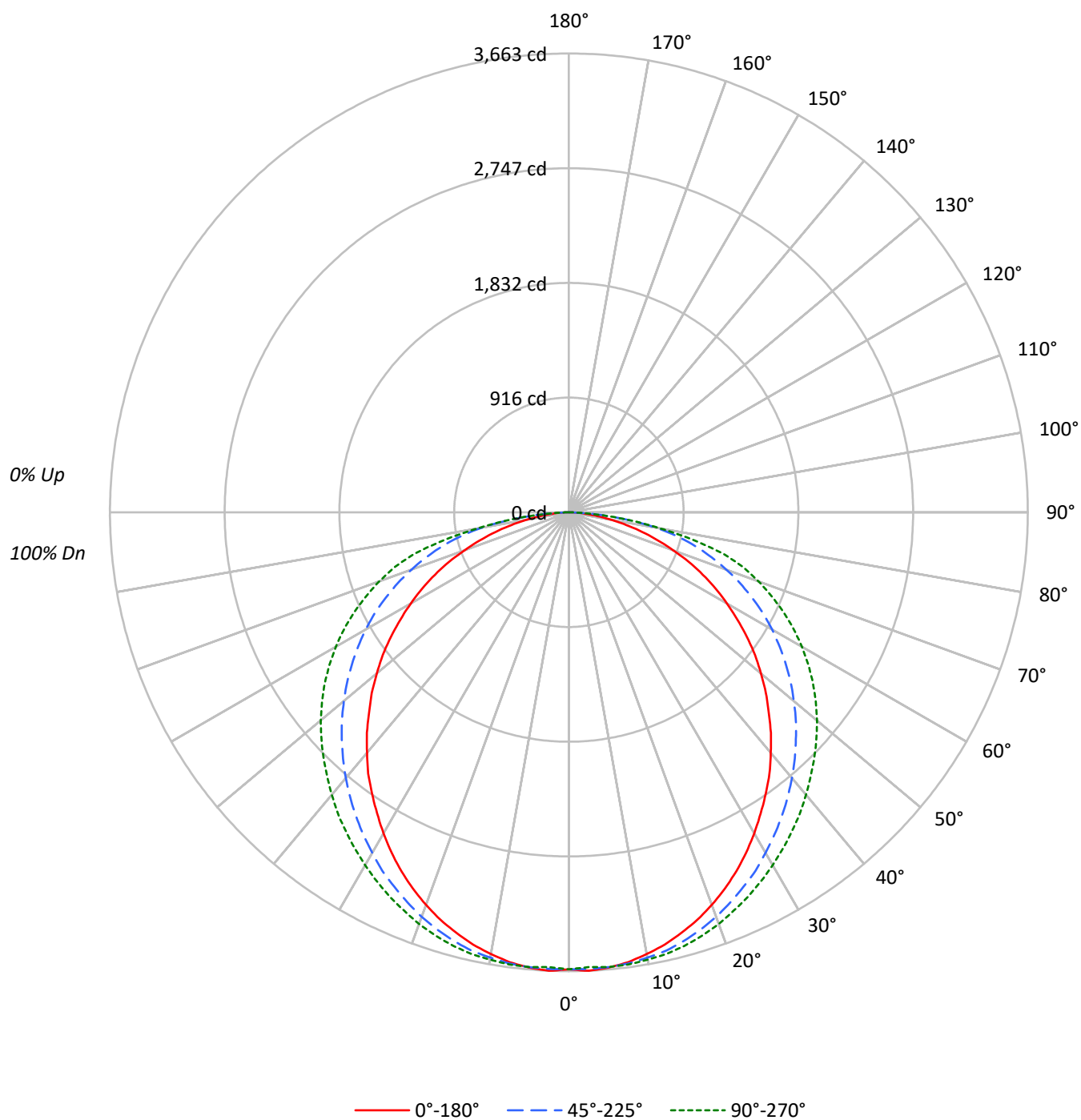
Input Watts (W): 90.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	108	103	98	94	105	100	96	92	96	93	89	92	89	87	89	86	84
2	98	89	81	75	95	87	80	74	83	78	73	80	75	71	77	73	69
3	89	77	69	62	86	76	68	61	73	66	60	70	64	59	67	62	58
4	81	68	59	52	78	67	58	52	64	57	51	62	55	50	60	54	49
5	74	61	51	44	72	60	51	44	57	50	44	55	49	43	54	48	43
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37
7	63	49	40	34	62	49	40	34	47	39	34	45	39	33	44	38	33
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	30
9	55	41	33	27	54	41	33	27	39	32	27	38	32	27	37	31	27
10	52	38	30	25	50	37	30	24	36	29	24	36	29	24	35	29	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4908	4908	4908
5°	4927	4922	4922
10°	4891	4933	4953
15°	4840	4935	4987
20°	4776	4921	5008
25°	4694	4896	5024
30°	4596	4877	5053
35°	4500	4866	5101
40°	4402	4865	5170
45°	4288	4876	5271
50°	4189	4907	5412
55°	4067	4959	5578
60°	3925	5040	5780
65°	3755	5135	6023
70°	3484	5263	6331
75°	3154	5447	6622
80°	2658	5460	5694
85°	2036	4131	4131



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	346.3	3.0
10°-20°	996.3	8.7
20°-30°	1513.3	13.3
30°-40°	1840.7	16.1
40°-50°	1959.8	17.2
50°-60°	1866.6	16.4
60°-70°	1561.0	13.7
70°-80°	1040.8	9.1
80°-90°	288.0	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°	2855.9	25.0
0°-40°	4696.7	41.2
0°-60°	8523.1	74.7
0°-90°	11412.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11412.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3648	3648	3648	3648	3648	
5°	3648	3626	3644	3644	3644	346
15°	3475	3482	3543	3569	3580	980
25°	3162	3203	3298	3354	3384	1456
35°	2740	2819	2962	3060	3105	1715
45°	2254	2374	2563	2706	2770	1742
55°	1734	1884	2114	2299	2378	1550
65°	1180	1353	1613	1813	1892	1165
75°	607	799	1048	1225	1274	643
85°	132	245	268	264	268	159
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3648.1	3648.1	3648.1	3648.1	3648.1
2.5°	3663.2	3636.8	3648.1	3648.1	3633.0
5°	3648.1	3625.5	3644.3	3644.3	3644.3
7.5°	3621.7	3602.9	3633.0	3640.5	3640.5
10°	3580.2	3572.7	3610.4	3621.7	3625.5
12.5°	3535.0	3531.3	3584.0	3599.1	3610.4
15°	3474.7	3482.3	3542.6	3568.9	3580.2
17.5°	3410.7	3425.7	3493.6	3531.3	3542.6
20°	3335.3	3357.9	3437.0	3474.7	3497.3
22.5°	3252.4	3286.3	3369.2	3414.4	3440.8
25°	3161.9	3203.4	3297.6	3354.1	3384.3
27.5°	3063.9	3116.7	3226.0	3290.1	3320.2
30°	2958.4	3018.7	3139.3	3214.7	3252.4
32.5°	2849.1	2920.7	3052.6	3135.5	3180.8
35°	2739.8	2819.0	2962.2	3060.2	3105.4
37.5°	2630.5	2709.7	2868.0	2973.5	3030.0
40°	2506.2	2600.4	2770.0	2886.8	2943.3
42.5°	2385.6	2487.3	2668.2	2796.4	2856.7
45°	2253.7	2374.3	2562.7	2705.9	2770.0
47.5°	2133.1	2253.7	2457.2	2607.9	2679.5
50°	2001.2	2129.3	2344.1	2509.9	2585.3
52.5°	1873.0	2004.9	2231.1	2408.2	2483.6
55°	1733.6	1884.3	2114.2	2298.9	2378.0
57.5°	1594.2	1756.2	1993.6	2185.8	2265.0
60°	1458.5	1624.3	1873.0	2065.2	2148.1
62.5°	1322.8	1488.6	1748.7	1944.6	2023.8
65°	1179.6	1353.0	1613.0	1812.7	1891.9
67.5°	1036.4	1217.3	1477.3	1677.1	1752.4
70°	885.6	1077.8	1337.9	1533.9	1609.2
72.5°	746.2	938.4	1194.7	1386.9	1458.5
75°	606.8	799.0	1047.7	1224.8	1273.8
77.5°	471.1	663.3	885.6	1002.5	1013.8
80°	343.0	523.8	704.7	738.7	734.9
82.5°	229.9	391.9	486.2	489.9	501.2
85°	131.9	245.0	267.6	263.8	267.6
87.5°	52.8	86.7	75.4	56.5	56.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)