

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: P388306

Luminaire Tested: **24CZ2-100VHE-SQR-UNV-L950-CD1-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: P388306
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: 24CZ2-100VHE-SQR-UNV-L950-CD1-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: 8764.0 lumens
Efficiency: N/A
Efficacy: 125.9 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

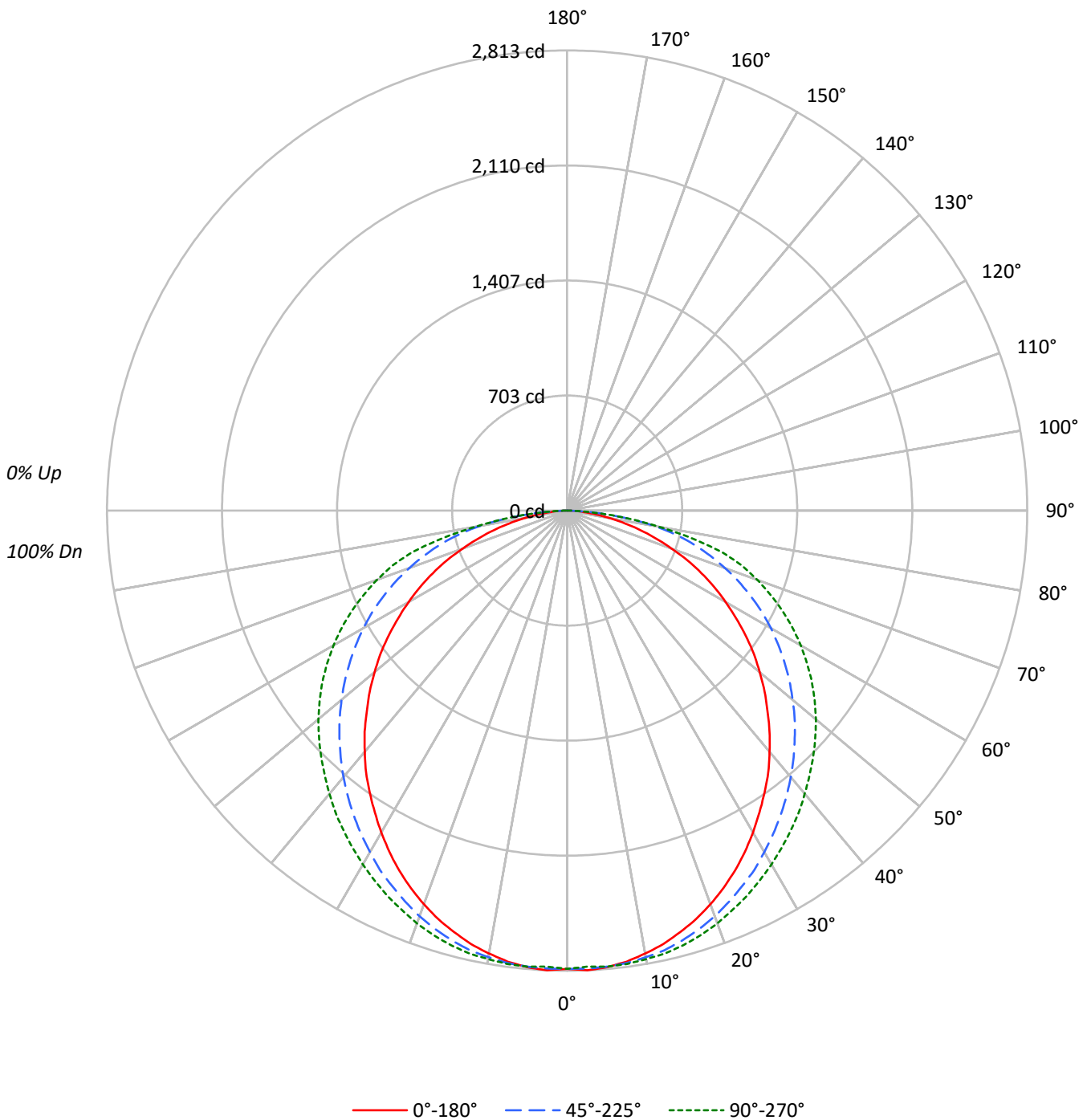
Input Watts (W): 69.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3769	3769	3769
5°	3784	3780	3780
10°	3756	3788	3804
15°	3717	3789	3830
20°	3667	3779	3845
25°	3605	3759	3858
30°	3530	3745	3880
35°	3456	3736	3917
40°	3380	3736	3970
45°	3293	3745	4047
50°	3217	3768	4156
55°	3123	3808	4284
60°	3014	3870	4439
65°	2884	3943	4625
70°	2675	4042	4861
75°	2422	4182	5085
80°	2041	4193	4372
85°	1564	3172	3172



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	265.9	3.0
10°-20°	765.1	8.7
20°-30°	1162.1	13.3
30°-40°	1413.5	16.1
40°-50°	1504.9	17.2
50°-60°	1433.4	16.4
60°-70°	1198.7	13.7
70°-80°	799.2	9.1
80°-90°	221.1	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°	2193.1	25.0
0°-40°	3606.6	41.2
0°-60°	6544.9	74.7
0°-90°	8764.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8764.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2801	2801	2801	2801	2801	
5°	2801	2784	2798	2798	2798	266
15°	2668	2674	2720	2741	2749	753
25°	2428	2460	2532	2576	2599	1118
35°	2104	2165	2275	2350	2385	1317
45°	1731	1823	1968	2078	2127	1338
55°	1331	1447	1624	1765	1826	1190
65°	906	1039	1239	1392	1453	895
75°	466	614	804	941	978	494
85°	101	188	206	203	206	122
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2801.4	2801.4	2801.4	2801.4	2801.4
2.5°	2813.0	2792.7	2801.4	2801.4	2789.8
5°	2801.4	2784.0	2798.5	2798.5	2798.5
7.5°	2781.1	2766.7	2789.8	2795.6	2795.6
10°	2749.3	2743.5	2772.5	2781.1	2784.0
12.5°	2714.6	2711.7	2752.2	2763.8	2772.5
15°	2668.3	2674.1	2720.4	2740.6	2749.3
17.5°	2619.1	2630.7	2682.7	2711.7	2720.4
20°	2561.2	2578.6	2639.3	2668.3	2685.6
22.5°	2497.5	2523.6	2587.2	2622.0	2642.2
25°	2428.1	2459.9	2532.3	2575.7	2598.8
27.5°	2352.8	2393.3	2477.3	2526.5	2549.6
30°	2271.8	2318.1	2410.7	2468.6	2497.5
32.5°	2187.9	2242.9	2344.1	2407.8	2442.5
35°	2103.9	2164.7	2274.7	2349.9	2384.7
37.5°	2020.0	2080.8	2202.3	2283.4	2326.8
40°	1924.5	1996.9	2127.1	2216.8	2260.2
42.5°	1831.9	1910.0	2049.0	2147.4	2193.7
45°	1730.6	1823.2	1967.9	2077.9	2127.1
47.5°	1638.0	1730.6	1886.9	2002.7	2057.6
50°	1536.7	1635.1	1800.1	1927.4	1985.3
52.5°	1438.3	1539.6	1713.3	1849.3	1907.2
55°	1331.2	1447.0	1623.5	1765.3	1826.1
57.5°	1224.2	1348.6	1530.9	1678.5	1739.3
60°	1120.0	1247.3	1438.3	1585.9	1649.6
62.5°	1015.8	1143.1	1342.8	1493.3	1554.1
65°	905.8	1038.9	1238.6	1392.0	1452.8
67.5°	795.9	934.8	1134.5	1287.8	1345.7
70°	680.1	827.7	1027.4	1177.9	1235.7
72.5°	573.0	720.6	917.4	1065.0	1120.0
75°	465.9	613.5	804.5	940.6	978.2
77.5°	361.8	509.3	680.1	769.8	778.5
80°	263.4	402.3	541.2	567.2	564.3
82.5°	176.5	301.0	373.3	376.2	384.9
85°	101.3	188.1	205.5	202.6	205.5
87.5°	40.5	66.6	57.9	43.4	43.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)