

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: P388299

Luminaire Tested: **24CZ2-100VHE-SQR-UNV-L935-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: P388299
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-L935-CD1-SDWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8073.7 lumens
Efficiency: N/A
Efficacy: 116.0 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

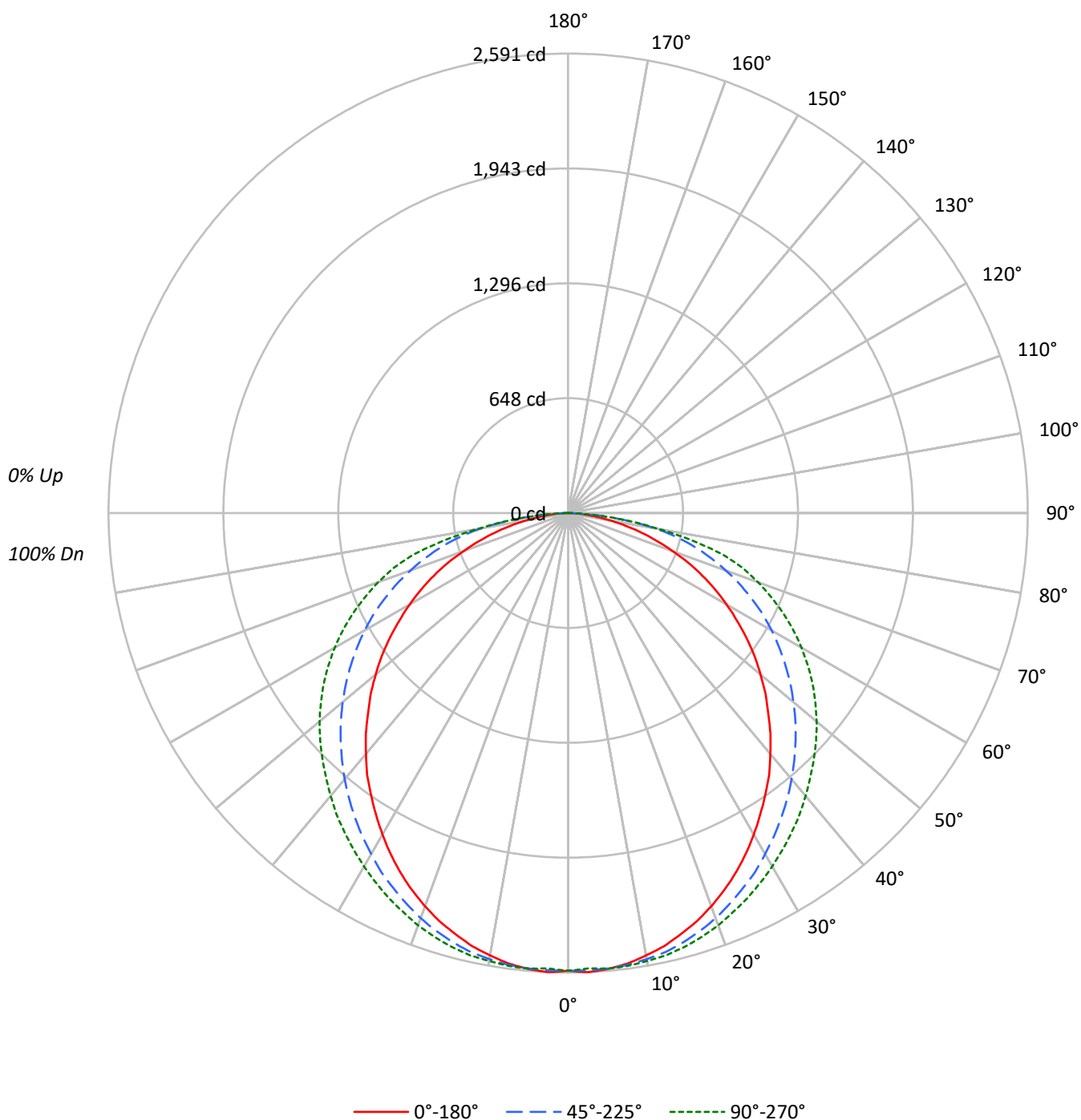
Input Watts (W): 69.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3472	3472	3472
5°	3486	3482	3482
10°	3460	3490	3504
15°	3424	3491	3528
20°	3378	3481	3543
25°	3321	3463	3554
30°	3252	3450	3575
35°	3184	3442	3608
40°	3114	3442	3657
45°	3034	3450	3729
50°	2963	3471	3828
55°	2877	3509	3946
60°	2777	3566	4089
65°	2657	3633	4261
70°	2465	3723	4478
75°	2231	3853	4684
80°	1880	3863	4028
85°	1440	2922	2922



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	245.0	3.0
10°-20°	704.8	8.7
20°-30°	1070.6	13.3
30°-40°	1302.2	16.1
40°-50°	1386.4	17.2
50°-60°	1320.5	16.4
60°-70°	1104.3	13.7
70°-80°	736.3	9.1
80°-90°	203.7	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°	2020.3	25.0
0°-40°	3322.5	41.2
0°-60°	6029.4	74.7
0°-90°	8073.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8073.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2581	2581	2581	2581	2581	
5°	2581	2565	2578	2578	2578	245
15°	2458	2463	2506	2525	2533	693
25°	2237	2266	2333	2373	2394	1030
35°	1938	1994	2096	2165	2197	1213
45°	1594	1680	1813	1914	1960	1232
55°	1226	1333	1496	1626	1682	1096
65°	834	957	1141	1282	1338	824
75°	429	565	741	866	901	455
85°	93	173	189	187	189	113
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2580.7	2580.7	2580.7	2580.7	2580.7
2.5°	2591.4	2572.7	2580.7	2580.7	2570.1
5°	2580.7	2564.8	2578.1	2578.1	2578.1
7.5°	2562.1	2548.8	2570.1	2575.4	2575.4
10°	2532.8	2527.4	2554.1	2562.1	2564.8
12.5°	2500.8	2498.1	2535.4	2546.1	2554.1
15°	2458.1	2463.4	2506.1	2524.8	2532.8
17.5°	2412.8	2423.4	2471.4	2498.1	2506.1
20°	2359.5	2375.5	2431.4	2458.1	2474.1
22.5°	2300.8	2324.8	2383.5	2415.5	2434.1
25°	2236.8	2266.2	2332.8	2372.8	2394.1
27.5°	2167.5	2204.8	2282.1	2327.5	2348.8
30°	2092.9	2135.5	2220.8	2274.2	2300.8
32.5°	2015.5	2066.2	2159.5	2218.2	2250.2
35°	1938.2	1994.2	2095.5	2164.8	2196.8
37.5°	1860.9	1916.9	2028.9	2103.5	2143.5
40°	1772.9	1839.6	1959.6	2042.2	2082.2
42.5°	1687.6	1759.6	1887.6	1978.2	2020.9
45°	1594.3	1679.6	1812.9	1914.2	1959.6
47.5°	1509.0	1594.3	1738.3	1844.9	1895.6
50°	1415.7	1506.3	1658.3	1775.6	1828.9
52.5°	1325.0	1418.3	1578.3	1703.6	1756.9
55°	1226.4	1333.0	1495.7	1626.3	1682.3
57.5°	1127.7	1242.4	1410.3	1546.3	1602.3
60°	1031.8	1149.1	1325.0	1461.0	1519.7
62.5°	935.8	1053.1	1237.1	1375.7	1431.7
65°	834.5	957.1	1141.1	1282.4	1338.4
67.5°	733.2	861.1	1045.1	1186.4	1239.7
70°	626.5	762.5	946.5	1085.1	1138.4
72.5°	527.9	663.8	845.1	981.1	1031.8
75°	429.2	565.2	741.2	866.5	901.1
77.5°	333.3	469.2	626.5	709.2	717.2
80°	242.6	370.6	498.6	522.5	519.9
82.5°	162.6	277.3	343.9	346.6	354.6
85°	93.3	173.3	189.3	186.6	189.3
87.5°	37.3	61.3	53.3	40.0	40.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)