

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: P389072

Luminaire Tested: **24CZ2-95VHE-UNV-L950-CD1-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: P389072
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-5)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-95VHE-UNV-L950-CD1-U
Description: 2x4 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

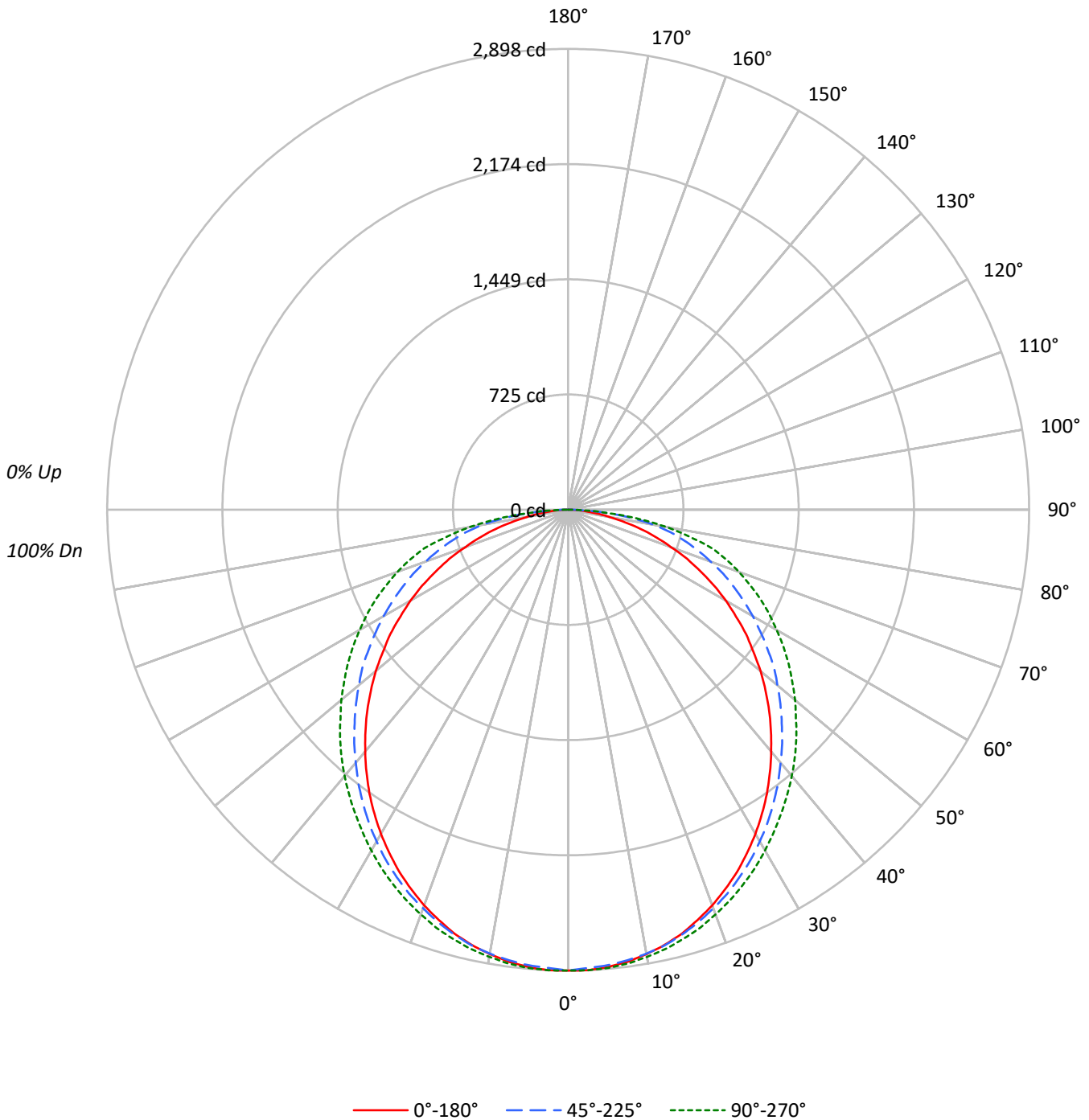
Lumens per Lamp: N/A
Luminaire Lumens: 8632.7 lumens
Efficiency: N/A
Efficacy: 131.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 65.6
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	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	58	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3900	3900	3900
5°	3899	3883	3907
10°	3877	3873	3901
15°	3845	3853	3893
20°	3791	3820	3878
25°	3730	3785	3862
30°	3657	3742	3845
35°	3578	3696	3833
40°	3487	3649	3841
45°	3399	3613	3859
50°	3305	3594	3896
55°	3203	3589	3967
60°	3078	3605	4070
65°	2917	3660	4247
70°	2709	3751	4488
75°	2471	3939	4868
80°	2032	4241	4867
85°	1556	3913	4181



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	274.1	3.2
10°-20°	782.6	9.1
20°-30°	1177.7	13.6
30°-40°	1411.3	16.3
40°-50°	1470.7	17.0
50°-60°	1368.3	15.9
60°-70°	1127.0	13.1
70°-80°	767.5	8.9
80°-90°	253.4	2.9
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°	2234.4	25.9
0°-40°	3645.7	42.2
0°-60°	6484.8	75.1
0°-90°	8632.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8632.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2898	2898	2898	2898	2898	
5°	2887	2887	2875	2890	2893	274
15°	2760	2763	2766	2792	2795	778
25°	2512	2524	2550	2593	2602	1157
35°	2178	2204	2250	2311	2334	1362
45°	1786	1824	1899	1994	2028	1378
55°	1366	1412	1530	1651	1691	1217
65°	916	994	1150	1285	1334	909
75°	475	582	758	893	936	501
85°	101	196	254	271	271	125
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2898.4	2898.4	2898.4	2898.4	2898.4
2.5°	2898.4	2898.4	2884.0	2898.4	2898.4
5°	2886.9	2886.9	2875.3	2889.8	2892.6
7.5°	2866.7	2869.6	2858.1	2875.3	2878.2
10°	2837.9	2840.8	2835.0	2852.3	2855.2
12.5°	2803.3	2806.2	2806.2	2826.4	2829.3
15°	2760.1	2763.0	2765.9	2791.8	2794.7
17.5°	2705.4	2714.0	2719.8	2751.5	2757.2
20°	2647.7	2656.4	2667.9	2702.5	2708.2
22.5°	2581.5	2593.0	2613.2	2650.6	2659.3
25°	2512.3	2523.9	2549.8	2593.0	2601.6
27.5°	2434.5	2451.8	2483.5	2529.6	2541.1
30°	2353.9	2371.2	2408.6	2457.6	2474.9
32.5°	2267.4	2290.5	2333.7	2388.4	2405.7
35°	2178.1	2204.1	2250.1	2310.7	2333.7
37.5°	2083.0	2111.9	2166.6	2232.9	2261.7
40°	1985.1	2019.7	2077.3	2155.1	2186.8
42.5°	1887.1	1918.8	1990.8	2074.4	2109.0
45°	1786.3	1823.7	1898.7	1993.7	2028.3
47.5°	1682.6	1720.0	1809.3	1910.2	1941.9
50°	1578.8	1616.3	1717.1	1823.7	1861.2
52.5°	1466.5	1515.5	1630.7	1737.3	1774.8
55°	1365.6	1411.7	1529.9	1650.9	1691.2
57.5°	1250.4	1305.1	1434.8	1561.6	1604.8
60°	1143.8	1201.4	1339.7	1469.4	1512.6
62.5°	1034.3	1097.7	1244.6	1377.2	1426.2
65°	916.2	994.0	1149.6	1285.0	1334.0
67.5°	809.6	890.3	1054.5	1192.8	1236.0
70°	688.6	786.5	953.6	1091.9	1140.9
72.5°	584.9	682.8	858.6	994.0	1043.0
75°	475.4	582.0	757.7	893.1	936.4
77.5°	365.9	484.0	659.8	763.5	777.9
80°	262.2	386.1	547.4	607.9	628.1
82.5°	184.4	296.8	403.4	443.7	455.2
85°	100.8	195.9	253.5	270.8	270.8
87.5°	43.2	83.6	100.8	103.7	106.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)