

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: P389064

Luminaire Tested: **24CZ2-95VHE-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: P389064
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-L935-CD1-SDWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7854.1 lumens
Efficiency: N/A
Efficacy: 119.7 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

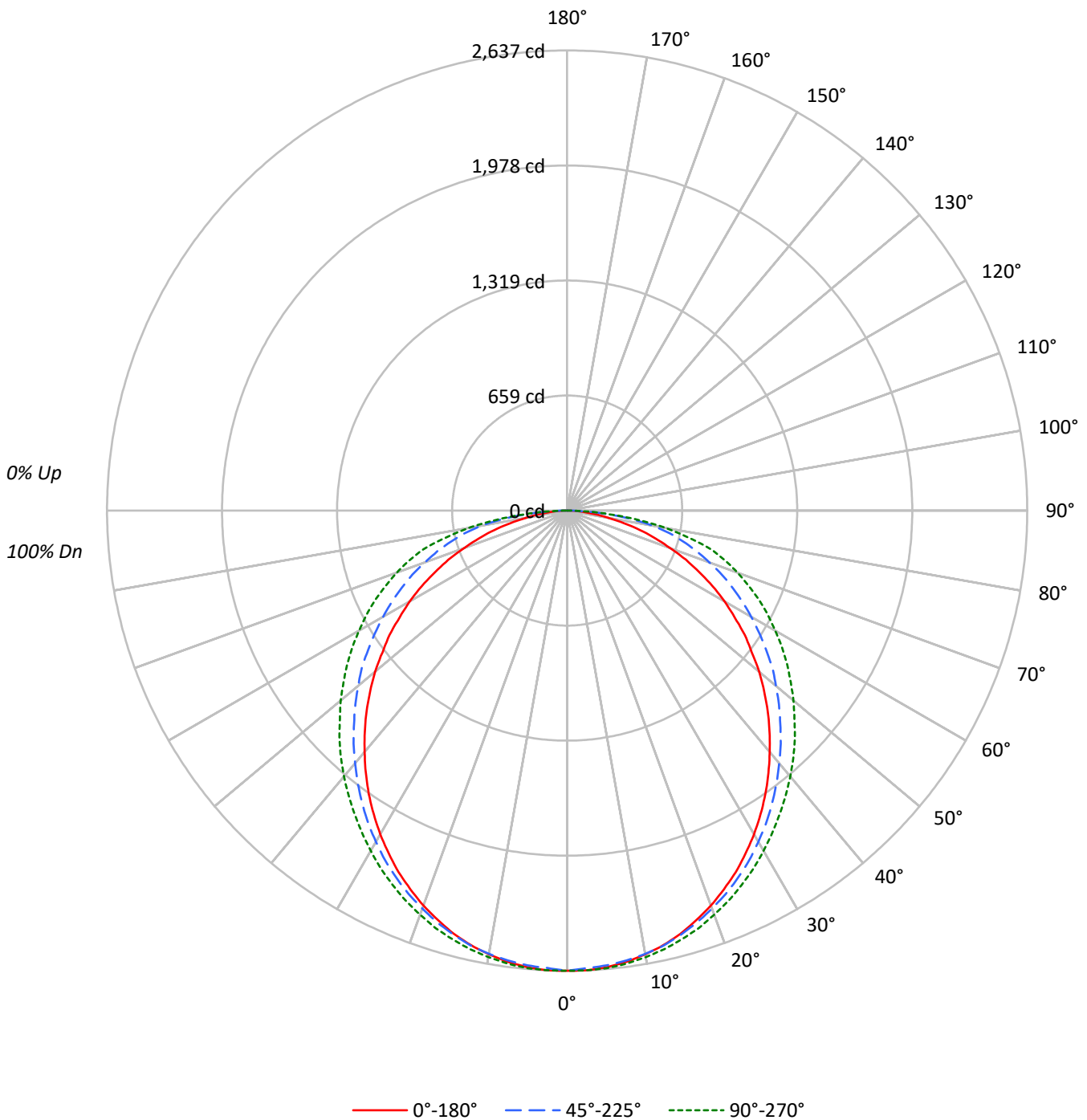
Input Watts (W): 65.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3548	3548	3548
5°	3547	3533	3554
10°	3528	3524	3549
15°	3498	3505	3542
20°	3449	3476	3528
25°	3393	3444	3514
30°	3327	3405	3498
35°	3255	3363	3487
40°	3172	3319	3494
45°	3092	3287	3511
50°	3007	3270	3544
55°	2915	3265	3609
60°	2800	3280	3703
65°	2654	3330	3864
70°	2465	3413	4083
75°	2248	3584	4429
80°	1848	3859	4427
85°	1416	3561	3804



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	249.4	3.2
10°-20°	712.0	9.1
20°-30°	1071.5	13.6
30°-40°	1284.0	16.3
40°-50°	1338.1	17.0
50°-60°	1244.9	15.9
60°-70°	1025.4	13.1
70°-80°	698.3	8.9
80°-90°	230.5	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°	2032.9	25.9
0°-40°	3316.9	42.2
0°-60°	5899.9	75.1
0°-90°	7854.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7854.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2637	2637	2637	2637	2637	
5°	2626	2626	2616	2629	2632	249
15°	2511	2514	2516	2540	2543	707
25°	2286	2296	2320	2359	2367	1052
35°	1982	2005	2047	2102	2123	1239
45°	1625	1659	1727	1814	1845	1253
55°	1242	1284	1392	1502	1539	1107
65°	834	904	1046	1169	1214	827
75°	432	530	689	813	852	456
85°	92	178	231	246	246	114
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2637.0	2637.0	2637.0	2637.0	2637.0
2.5°	2637.0	2637.0	2623.9	2637.0	2637.0
5°	2626.5	2626.5	2616.0	2629.1	2631.7
7.5°	2608.2	2610.8	2600.3	2616.0	2618.6
10°	2581.9	2584.6	2579.3	2595.0	2597.7
12.5°	2550.5	2553.1	2553.1	2571.5	2574.1
15°	2511.2	2513.8	2516.4	2540.0	2542.6
17.5°	2461.4	2469.2	2474.5	2503.3	2508.5
20°	2408.9	2416.8	2427.3	2458.7	2464.0
22.5°	2348.6	2359.1	2377.5	2411.6	2419.4
25°	2285.7	2296.2	2319.8	2359.1	2367.0
27.5°	2215.0	2230.7	2259.5	2301.5	2312.0
30°	2141.6	2157.3	2191.4	2235.9	2251.7
32.5°	2062.9	2083.9	2123.2	2173.0	2188.8
35°	1981.7	2005.3	2047.2	2102.2	2123.2
37.5°	1895.2	1921.4	1971.2	2031.5	2057.7
40°	1806.0	1837.5	1889.9	1960.7	1989.5
42.5°	1716.9	1745.8	1811.3	1887.3	1918.8
45°	1625.2	1659.3	1727.4	1813.9	1845.4
47.5°	1530.8	1564.9	1646.2	1737.9	1766.7
50°	1436.4	1470.5	1562.3	1659.3	1693.3
52.5°	1334.2	1378.8	1483.6	1580.6	1614.7
55°	1242.5	1284.4	1391.9	1502.0	1538.7
57.5°	1137.6	1187.4	1305.4	1420.7	1460.0
60°	1040.6	1093.1	1218.9	1336.8	1376.2
62.5°	941.0	998.7	1132.4	1253.0	1297.5
65°	833.6	904.3	1045.9	1169.1	1213.6
67.5°	736.6	810.0	959.4	1085.2	1124.5
70°	626.5	715.6	867.6	993.5	1038.0
72.5°	532.1	621.2	781.1	904.3	948.9
75°	432.5	529.5	689.4	812.6	851.9
77.5°	332.9	440.4	600.3	694.6	707.7
80°	238.5	351.2	498.0	553.1	571.4
82.5°	167.8	270.0	367.0	403.7	414.2
85°	91.7	178.2	230.7	246.4	246.4
87.5°	39.3	76.0	91.7	94.4	97.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)