

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: P390001

Luminaire Tested: **24CZ2-95VHE-S-UNV-L935-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: P390001
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-1)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-95VHE-S-UNV-L935-CD1-SWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND SMOOTH LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8353.3 lumens
Efficiency: N/A
Efficacy: 127.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

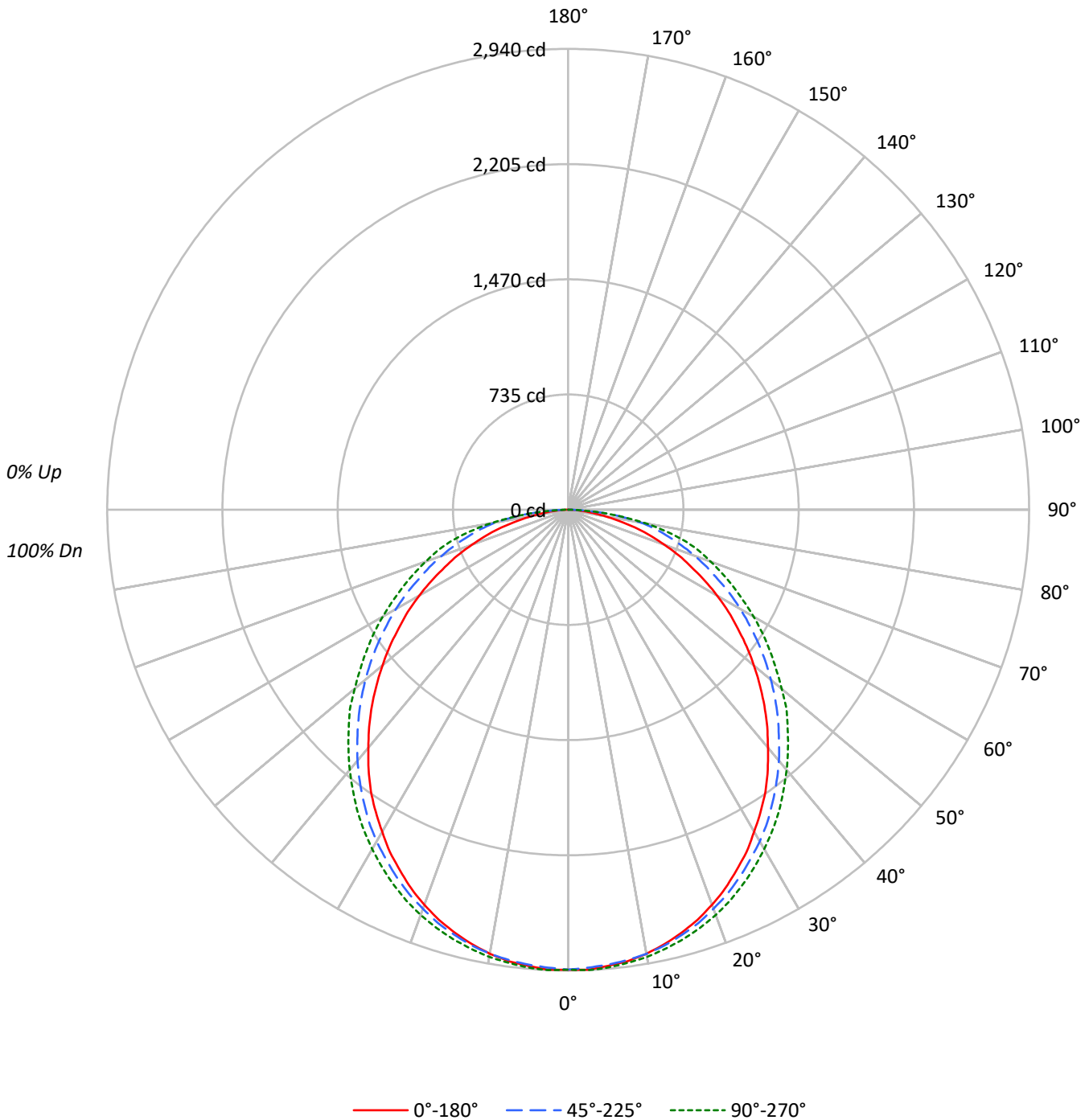
Input Watts (W): 65.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	108	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83					83			
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69					69			
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58					58			
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42					42			
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37					37			
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33					33			
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29					29			
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26					26			
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3948	3948	3948
5°	3946	3935	3960
10°	3930	3930	3959
15°	3892	3910	3951
20°	3841	3879	3940
25°	3770	3841	3915
30°	3685	3797	3883
35°	3604	3735	3853
40°	3481	3672	3808
45°	3368	3600	3766
50°	3238	3532	3721
55°	3093	3467	3685
60°	2949	3413	3677
65°	2762	3354	3700
70°	2557	3371	3799
75°	2290	3435	4014
80°	1850	3639	3927
85°	1392	3196	3114



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	277.8	3.3
10°-20°	793.8	9.5
20°-30°	1193.3	14.3
30°-40°	1421.4	17.0
40°-50°	1454.7	17.4
50°-60°	1309.7	15.7
60°-70°	1028.5	12.3
70°-80°	667.5	8.0
80°-90°	206.5	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°	2264.9	27.1
0°-40°	3686.3	44.1
0°-60°	6450.8	77.2
0°-90°	8353.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8353.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2935	2935	2935	2935	2935	
5°	2921	2927	2913	2929	2932	278
15°	2794	2802	2807	2831	2836	788
25°	2539	2560	2587	2629	2637	1170
35°	2194	2221	2274	2330	2346	1369
45°	1770	1812	1892	1964	1979	1364
55°	1319	1377	1478	1555	1571	1182
65°	868	934	1053	1141	1162	864
75°	440	525	661	751	772	466
85°	90	167	207	202	202	109
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2934.6	2934.6	2934.6	2934.6	2934.6
2.5°	2937.2	2937.2	2924.0	2937.2	2939.9
5°	2921.3	2926.6	2913.3	2929.3	2931.9
7.5°	2905.4	2905.4	2897.4	2913.3	2916.0
10°	2876.2	2878.8	2876.2	2894.8	2897.4
12.5°	2839.0	2844.4	2847.0	2865.6	2868.2
15°	2793.9	2801.9	2807.2	2831.1	2836.4
17.5°	2743.5	2751.5	2764.8	2791.3	2796.6
20°	2682.5	2693.1	2709.0	2743.5	2751.5
22.5°	2616.2	2626.8	2653.3	2685.2	2698.4
25°	2539.2	2560.5	2587.0	2629.4	2637.4
27.5°	2462.3	2480.9	2515.3	2560.5	2571.1
30°	2372.1	2401.3	2443.7	2488.8	2499.4
32.5°	2284.5	2313.7	2364.1	2411.9	2425.1
35°	2194.3	2220.8	2273.9	2329.6	2345.5
37.5°	2090.8	2125.3	2183.7	2239.4	2255.3
40°	1982.0	2024.5	2090.8	2149.2	2167.8
42.5°	1878.5	1923.7	1990.0	2053.7	2074.9
45°	1769.8	1812.2	1891.8	1963.5	1979.4
47.5°	1658.3	1706.1	1791.0	1862.6	1889.2
50°	1546.9	1597.3	1687.5	1761.8	1777.7
52.5°	1435.4	1488.5	1584.0	1663.6	1671.6
55°	1318.7	1377.1	1477.9	1554.8	1570.8
57.5°	1212.6	1263.0	1371.8	1451.4	1469.9
60°	1095.8	1151.5	1268.3	1342.6	1366.5
62.5°	984.4	1042.8	1164.8	1239.1	1260.3
65°	867.6	934.0	1053.4	1140.9	1162.2
67.5°	766.8	830.5	957.8	1042.8	1064.0
70°	650.1	721.7	857.0	944.6	965.8
72.5°	549.2	623.5	758.8	843.8	875.6
75°	440.5	525.4	660.7	750.9	772.1
77.5°	334.3	432.5	570.5	639.4	639.4
80°	238.8	342.3	469.6	501.5	506.8
82.5°	156.5	257.4	347.6	344.9	344.9
85°	90.2	167.2	207.0	201.7	201.7
87.5°	34.5	69.0	74.3	74.3	71.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)