

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: P389070

Luminaire Tested: **24CZ2-95VHE-UNV-L950-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: P389070
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-SDWPD1-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: 8422.8 lumens
Efficiency: N/A
Efficacy: 128.4 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

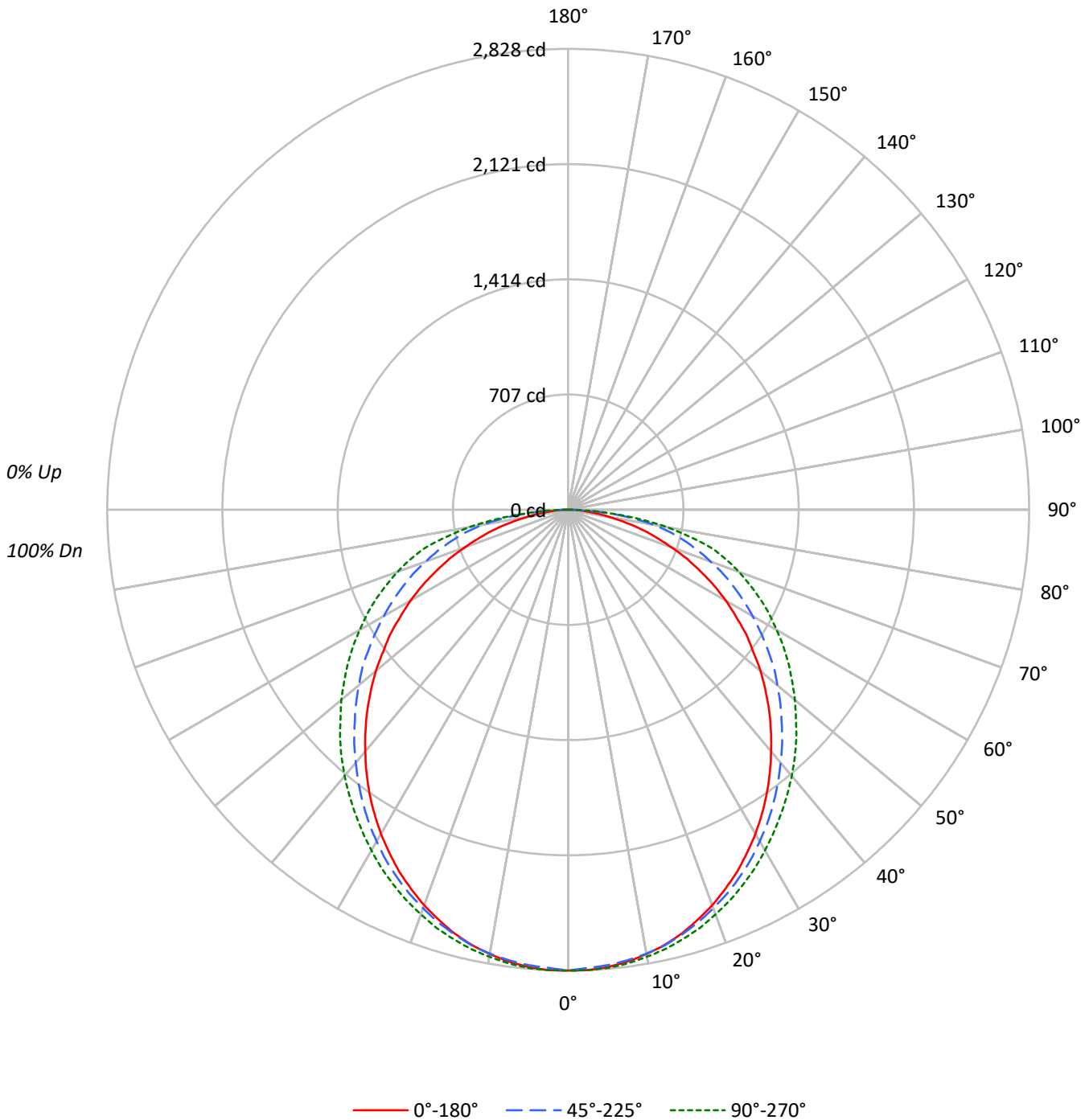
Input Watts (W): 65.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3805	3805	3805
5°	3804	3789	3812
10°	3783	3779	3806
15°	3751	3759	3798
20°	3699	3727	3783
25°	3639	3693	3768
30°	3568	3651	3752
35°	3491	3606	3740
40°	3402	3560	3747
45°	3316	3525	3766
50°	3225	3507	3801
55°	3126	3502	3871
60°	3003	3517	3971
65°	2846	3571	4144
70°	2643	3661	4379
75°	2411	3843	4749
80°	1982	4138	4748
85°	1519	3819	4079



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	267.5	3.2
10°-20°	763.6	9.1
20°-30°	1149.0	13.6
30°-40°	1377.0	16.3
40°-50°	1435.0	17.0
50°-60°	1335.1	15.9
60°-70°	1099.6	13.1
70°-80°	748.9	8.9
80°-90°	247.2	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°	2180.0	25.9
0°-40°	3557.0	42.2
0°-60°	6327.1	75.1
0°-90°	8422.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8422.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2828	2828	2828	2828	2828	
5°	2817	2817	2805	2820	2822	267
15°	2693	2696	2699	2724	2727	759
25°	2451	2462	2488	2530	2538	1128
35°	2125	2150	2195	2254	2277	1328
45°	1743	1779	1852	1945	1979	1344
55°	1332	1377	1493	1611	1650	1188
65°	894	970	1122	1254	1302	887
75°	464	568	739	871	914	489
85°	98	191	247	264	264	122
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2827.9	2827.9	2827.9	2827.9	2827.9
2.5°	2827.9	2827.9	2813.9	2827.9	2827.9
5°	2816.7	2816.7	2805.4	2819.5	2822.3
7.5°	2797.0	2799.8	2788.6	2805.4	2808.2
10°	2768.9	2771.7	2766.1	2782.9	2785.8
12.5°	2735.2	2738.0	2738.0	2757.6	2760.5
15°	2693.0	2695.8	2698.6	2723.9	2726.7
17.5°	2639.6	2648.0	2653.6	2684.6	2690.2
20°	2583.4	2591.8	2603.0	2636.8	2642.4
22.5°	2518.7	2530.0	2549.6	2586.2	2594.6
25°	2451.2	2462.5	2487.8	2530.0	2538.4
27.5°	2375.3	2392.2	2423.1	2468.1	2479.4
30°	2296.6	2313.5	2350.0	2397.8	2414.7
32.5°	2212.3	2234.8	2277.0	2330.4	2347.2
35°	2125.2	2150.5	2195.4	2254.5	2277.0
37.5°	2032.4	2060.5	2113.9	2178.6	2206.7
40°	1936.8	1970.6	2026.8	2102.7	2133.6
42.5°	1841.2	1872.2	1942.4	2024.0	2057.7
45°	1742.9	1779.4	1852.5	1945.3	1979.0
47.5°	1641.7	1678.2	1765.3	1863.7	1894.7
50°	1540.5	1577.0	1675.4	1779.4	1815.9
52.5°	1430.8	1478.6	1591.1	1695.1	1731.6
55°	1332.4	1377.4	1492.7	1610.7	1650.1
57.5°	1220.0	1273.4	1399.9	1523.6	1565.8
60°	1116.0	1172.2	1307.1	1433.6	1475.8
62.5°	1009.2	1071.0	1214.4	1343.7	1391.5
65°	893.9	969.8	1121.6	1253.7	1301.5
67.5°	789.9	868.6	1028.8	1163.8	1205.9
70°	671.8	767.4	930.5	1065.4	1113.2
72.5°	570.6	666.2	837.7	969.8	1017.6
75°	463.8	567.8	739.3	871.4	913.6
77.5°	357.0	472.3	643.7	744.9	759.0
80°	255.8	376.7	534.1	593.1	612.8
82.5°	179.9	289.5	393.5	432.9	444.1
85°	98.4	191.2	247.4	264.2	264.2
87.5°	42.2	81.5	98.4	101.2	104.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)