

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: P389066

Luminaire Tested: **24CZ2-95VHE-UNV-L935-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: P389066
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-U
Description: 2x4 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

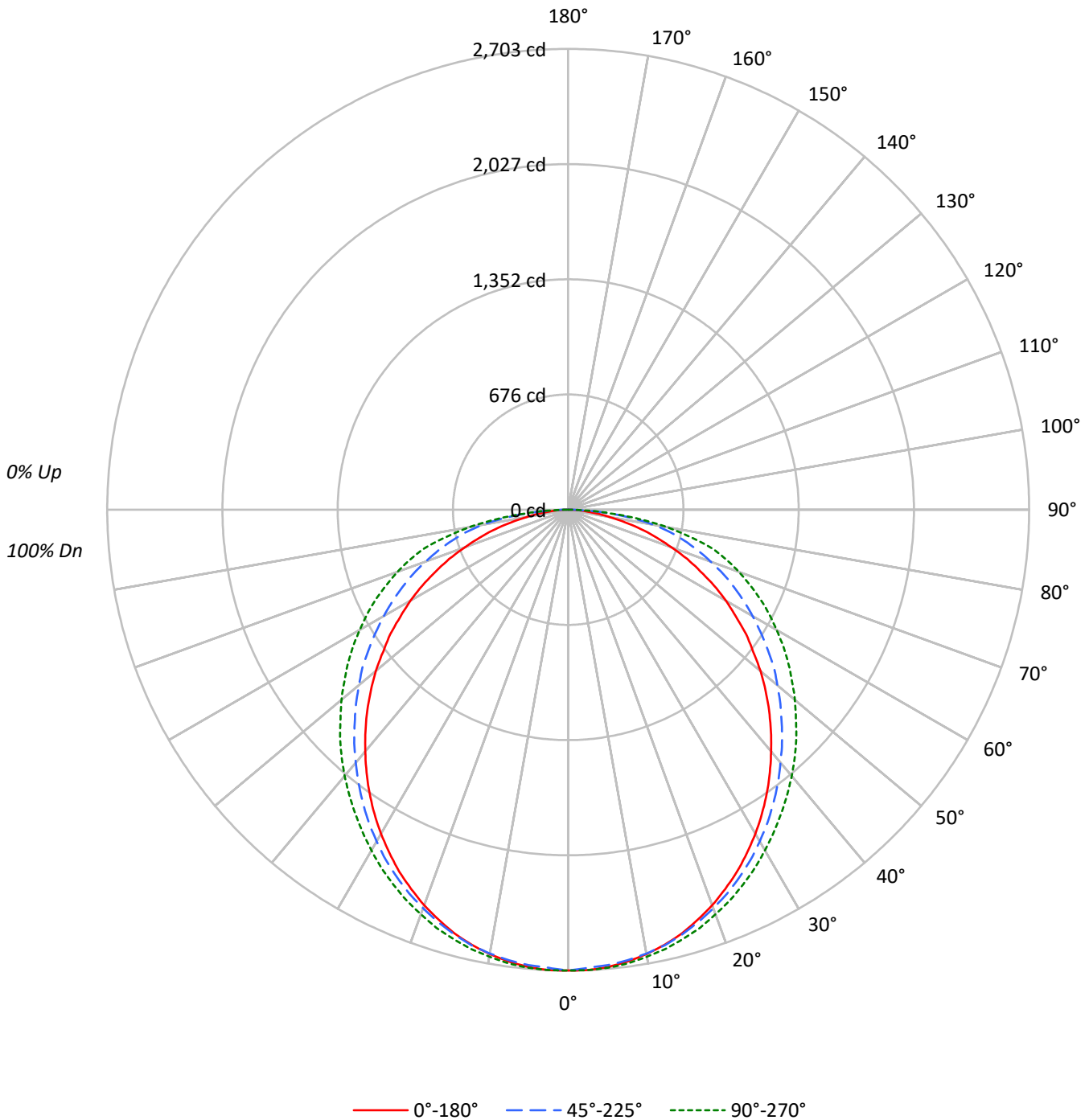
Lumens per Lamp: N/A
Luminaire Lumens: 8049.8 lumens
Efficiency: N/A
Efficacy: 122.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	3636	3636	3636
5°	3636	3621	3643
10°	3615	3612	3637
15°	3585	3593	3630
20°	3535	3562	3616
25°	3478	3530	3602
30°	3410	3489	3585
35°	3336	3446	3574
40°	3251	3402	3581
45°	3170	3369	3599
50°	3082	3352	3633
55°	2987	3347	3699
60°	2870	3362	3796
65°	2720	3413	3960
70°	2526	3498	4185
75°	2305	3673	4539
80°	1894	3955	4538
85°	1451	3649	3898



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	255.6	3.2
10°-20°	729.7	9.1
20°-30°	1098.1	13.6
30°-40°	1316.0	16.3
40°-50°	1371.4	17.0
50°-60°	1275.9	15.9
60°-70°	1050.9	13.1
70°-80°	715.7	8.9
80°-90°	236.3	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°	2083.5	25.9
0°-40°	3399.5	42.2
0°-60°	6046.9	75.1
0°-90°	8049.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8049.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2703	2703	2703	2703	2703	
5°	2692	2692	2681	2695	2697	255
15°	2574	2576	2579	2603	2606	725
25°	2343	2353	2378	2418	2426	1078
35°	2031	2055	2098	2155	2176	1270
45°	1666	1701	1770	1859	1891	1285
55°	1273	1316	1427	1539	1577	1135
65°	854	927	1072	1198	1244	848
75°	443	543	707	833	873	467
85°	94	183	236	252	252	117
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2702.7	2702.7	2702.7	2702.7	2702.7
2.5°	2702.7	2702.7	2689.3	2702.7	2702.7
5°	2691.9	2691.9	2681.2	2694.6	2697.3
7.5°	2673.1	2675.8	2665.1	2681.2	2683.9
10°	2646.3	2649.0	2643.6	2659.7	2662.4
12.5°	2614.0	2616.7	2616.7	2635.5	2638.2
15°	2573.7	2576.4	2579.1	2603.3	2606.0
17.5°	2522.7	2530.8	2536.1	2565.7	2571.1
20°	2469.0	2477.0	2487.8	2520.0	2525.4
22.5°	2407.2	2417.9	2436.7	2471.6	2479.7
25°	2342.7	2353.4	2377.6	2417.9	2426.0
27.5°	2270.2	2286.3	2315.8	2358.8	2369.6
30°	2194.9	2211.0	2246.0	2291.6	2307.8
32.5°	2114.3	2135.8	2176.1	2227.2	2243.3
35°	2031.0	2055.2	2098.2	2154.6	2176.1
37.5°	1942.4	1969.3	2020.3	2082.1	2109.0
40°	1851.0	1883.3	1937.0	2009.6	2039.1
42.5°	1759.7	1789.3	1856.4	1934.3	1966.6
45°	1665.7	1700.6	1770.5	1859.1	1891.3
47.5°	1569.0	1603.9	1687.2	1781.2	1810.8
50°	1472.2	1507.2	1601.2	1700.6	1735.5
52.5°	1367.5	1413.1	1520.6	1620.0	1654.9
55°	1273.4	1316.4	1426.6	1539.4	1577.0
57.5°	1166.0	1217.0	1337.9	1456.1	1496.4
60°	1066.6	1120.3	1249.3	1370.2	1410.5
62.5°	964.5	1023.6	1160.6	1284.2	1329.9
65°	854.3	926.9	1071.9	1198.2	1243.9
67.5°	754.9	830.2	983.3	1112.2	1152.5
70°	642.1	733.4	889.3	1018.2	1063.9
72.5°	545.4	636.7	800.6	926.9	972.5
75°	443.3	542.7	706.6	832.8	873.1
77.5°	341.2	451.3	615.2	711.9	725.4
80°	244.5	360.0	510.4	566.9	585.7
82.5°	171.9	276.7	376.1	413.7	424.5
85°	94.0	182.7	236.4	252.5	252.5
87.5°	40.3	77.9	94.0	96.7	99.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)