

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: P391105

Luminaire Tested: **24CZ2-150VHE-RDP-UNV-L935-CD2-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: P391105
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-19)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-150VHE-RDP-UNV-L935-CD2-SWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND RDP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8427.1 lumens
Efficiency: N/A
Efficacy: 80.9 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

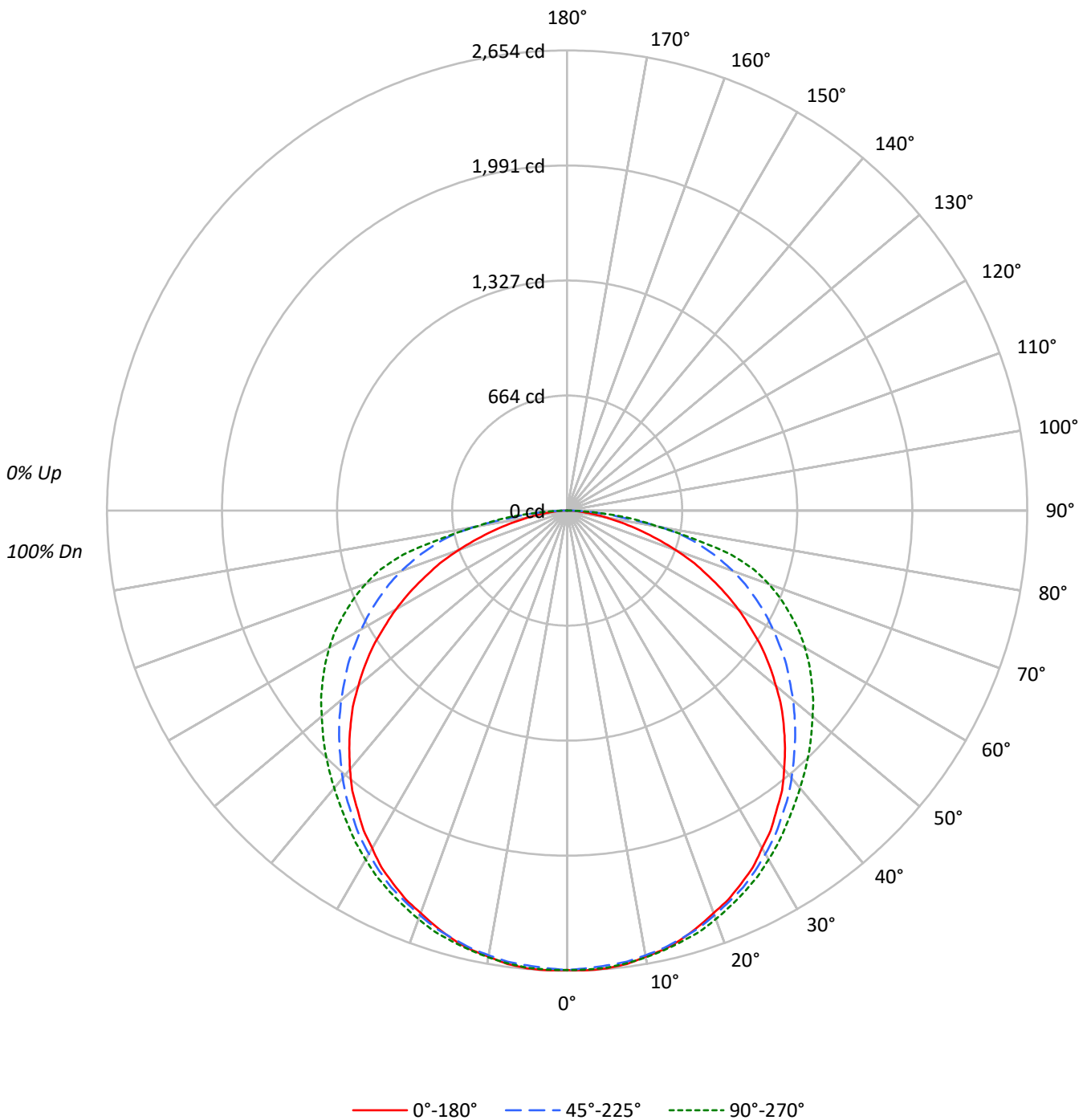
Input Watts (W): 104.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67
3	88	77	68	62	86	76	67	61	72	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3566	3566	3566
5°	3579	3557	3574
10°	3569	3558	3575
15°	3563	3557	3581
20°	3537	3555	3591
25°	3525	3562	3599
30°	3494	3552	3611
35°	3460	3543	3625
40°	3421	3539	3671
45°	3364	3539	3754
50°	3290	3561	3867
55°	3206	3618	4040
60°	3071	3689	4263
65°	2875	3819	4525
70°	2615	3996	4867
75°	2217	4216	5085
80°	1749	4243	4114
85°	1291	3226	3614



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	251.4	3.0
10°-20°	723.5	8.6
20°-30°	1106.4	13.1
30°-40°	1352.5	16.0
40°-50°	1441.5	17.1
50°-60°	1378.3	16.4
60°-70°	1167.6	13.9
70°-80°	784.7	9.3
80°-90°	221.4	2.6
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°	2081.2	24.7
0°-40°	3433.7	40.7
0°-60°	6253.5	74.2
0°-90°	8427.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8427.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2650	2650	2650	2650	2650	
5°	2650	2646	2633	2646	2646	252
15°	2558	2558	2554	2575	2571	721
25°	2374	2383	2399	2420	2424	1094
35°	2107	2123	2157	2199	2207	1320
45°	1768	1797	1860	1940	1973	1364
55°	1367	1417	1542	1664	1722	1217
65°	903	995	1200	1358	1421	896
75°	426	581	811	949	978	457
85°	84	171	209	226	234	103
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2650.1	2650.1	2650.1	2650.1	2650.1
2.5°	2654.3	2654.3	2641.7	2650.1	2650.1
5°	2650.1	2645.9	2633.4	2645.9	2645.9
7.5°	2637.5	2633.4	2625.0	2637.5	2633.4
10°	2612.5	2612.5	2604.1	2616.6	2616.6
12.5°	2591.6	2587.4	2583.2	2599.9	2595.7
15°	2558.1	2558.1	2553.9	2574.8	2570.7
17.5°	2516.3	2520.5	2524.7	2541.4	2545.6
20°	2470.3	2478.7	2482.9	2508.0	2508.0
22.5°	2428.5	2432.7	2441.1	2466.2	2466.2
25°	2374.2	2382.6	2399.3	2420.2	2424.4
27.5°	2319.9	2324.0	2344.9	2374.2	2378.4
30°	2248.8	2261.3	2286.4	2319.9	2324.0
32.5°	2186.1	2198.6	2227.9	2261.3	2269.7
35°	2106.7	2123.4	2156.8	2198.6	2207.0
37.5°	2035.6	2048.2	2090.0	2135.9	2148.5
40°	1947.9	1972.9	2014.7	2069.1	2090.0
42.5°	1860.1	1885.2	1935.3	2006.4	2031.5
45°	1768.1	1797.4	1860.1	1939.5	1972.9
47.5°	1676.2	1709.6	1780.7	1872.6	1910.2
50°	1571.7	1613.5	1701.2	1805.7	1847.5
52.5°	1471.3	1521.5	1617.6	1734.7	1789.0
55°	1366.8	1417.0	1542.4	1663.6	1722.1
57.5°	1249.8	1316.7	1454.6	1592.6	1655.3
60°	1141.1	1203.8	1371.0	1521.5	1584.2
62.5°	1024.1	1107.7	1287.4	1446.3	1509.0
65°	902.9	994.8	1199.6	1358.5	1421.2
67.5°	794.2	894.5	1111.9	1270.7	1333.4
70°	664.6	790.0	1015.7	1174.6	1237.3
72.5°	543.4	681.3	915.4	1070.1	1128.6
75°	426.4	581.0	810.9	948.8	978.1
77.5°	317.7	480.7	702.2	760.7	739.8
80°	225.7	384.6	547.6	518.3	530.9
82.5°	146.3	292.6	338.6	384.6	397.1
85°	83.6	171.4	209.0	225.7	234.1
87.5°	37.6	62.7	83.6	83.6	79.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)