

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: P391111

Luminaire Tested: **24CZ2-150VHE-RDP-UNV-L950-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: P391111
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-L950-CD2-SWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND RDP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9037.4 lumens
Efficiency: N/A
Efficacy: 86.7 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

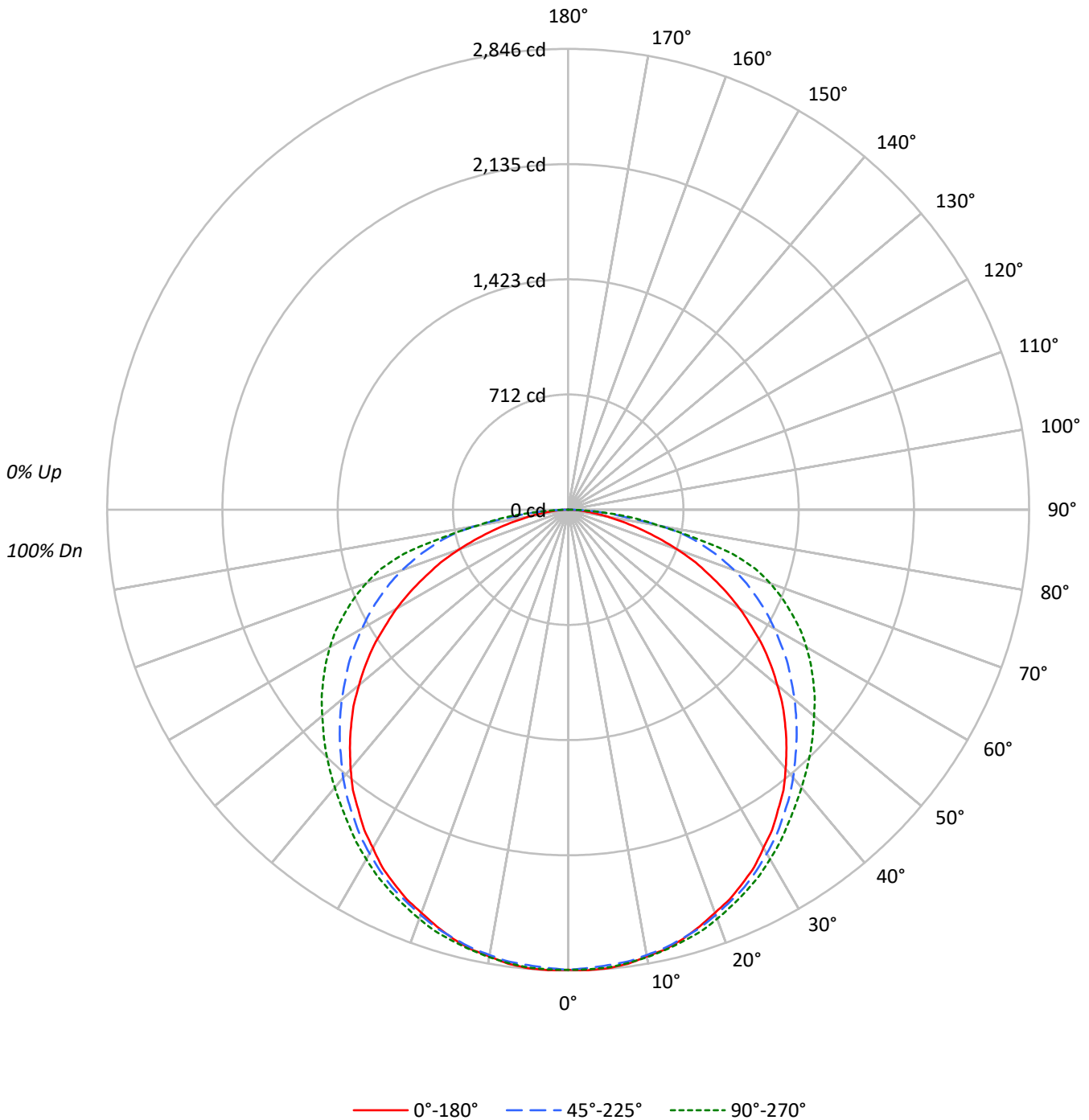
Input Watts (W): 104.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	98	94	105	100	96	92	96	93	89	92	89	87	88	86	84	82					82			
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67					67			
3	88	77	68	62	86	76	67	61	72	66	60	70	64	59	67	62	58	56					56			
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47					47			
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40					40			
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35					35			
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31					31			
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27					27			
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26	24					24			
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22					22			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3824	3824	3824
5°	3838	3814	3832
10°	3828	3816	3834
15°	3821	3815	3840
20°	3793	3813	3851
25°	3780	3820	3860
30°	3747	3810	3872
35°	3711	3799	3888
40°	3669	3795	3937
45°	3608	3796	4026
50°	3528	3819	4147
55°	3438	3880	4332
60°	3293	3957	4572
65°	3083	4096	4852
70°	2804	4285	5220
75°	2377	4521	5453
80°	1876	4550	4411
85°	1385	3460	3875



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	269.6	3.0
10°-20°	775.9	8.6
20°-30°	1186.5	13.1
30°-40°	1450.5	16.0
40°-50°	1545.9	17.1
50°-60°	1478.1	16.4
60°-70°	1252.1	13.9
70°-80°	841.5	9.3
80°-90°	237.4	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°	2232.0	24.7
0°-40°	3682.4	40.7
0°-60°	6706.4	74.2
0°-90°	9037.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9037.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2842	2842	2842	2842	2842	
5°	2842	2838	2824	2838	2838	270
15°	2743	2743	2739	2761	2757	774
25°	2546	2555	2573	2596	2600	1174
35°	2259	2277	2313	2358	2367	1415
45°	1896	1928	1995	2080	2116	1463
55°	1466	1520	1654	1784	1847	1306
65°	968	1067	1286	1457	1524	961
75°	457	623	870	1018	1049	490
85°	90	184	224	242	251	111
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2842.0	2842.0	2842.0	2842.0	2842.0
2.5°	2846.5	2846.5	2833.0	2842.0	2842.0
5°	2842.0	2837.5	2824.1	2837.5	2837.5
7.5°	2828.6	2824.1	2815.1	2828.6	2824.1
10°	2801.7	2801.7	2792.7	2806.1	2806.1
12.5°	2779.2	2774.8	2770.3	2788.2	2783.7
15°	2743.4	2743.4	2738.9	2761.3	2756.8
17.5°	2698.6	2703.0	2707.5	2725.5	2729.9
20°	2649.2	2658.2	2662.7	2689.6	2689.6
22.5°	2604.4	2608.9	2617.9	2644.8	2644.8
25°	2546.1	2555.1	2573.0	2595.5	2599.9
27.5°	2487.9	2492.4	2514.8	2546.1	2550.6
30°	2411.7	2425.1	2452.0	2487.9	2492.4
32.5°	2344.4	2357.9	2389.3	2425.1	2434.1
35°	2259.3	2277.2	2313.1	2357.9	2366.8
37.5°	2183.1	2196.5	2241.3	2290.6	2304.1
40°	2088.9	2115.8	2160.6	2218.9	2241.3
42.5°	1994.8	2021.7	2075.5	2151.7	2178.6
45°	1896.2	1927.5	1994.8	2080.0	2115.8
47.5°	1797.5	1833.4	1909.6	2008.2	2048.6
50°	1685.5	1730.3	1824.4	1936.5	1981.3
52.5°	1577.9	1631.7	1734.8	1860.3	1918.6
55°	1465.8	1519.6	1654.1	1784.1	1846.9
57.5°	1340.3	1412.0	1560.0	1707.9	1775.1
60°	1223.8	1291.0	1470.3	1631.7	1698.9
62.5°	1098.3	1187.9	1380.7	1551.0	1618.2
65°	968.3	1066.9	1286.5	1456.9	1524.1
67.5°	851.7	959.3	1192.4	1362.7	1430.0
70°	712.7	847.2	1089.3	1259.6	1326.9
72.5°	582.7	730.7	981.7	1147.6	1210.3
75°	457.2	623.1	869.6	1017.6	1048.9
77.5°	340.7	515.5	753.1	815.8	793.4
80°	242.1	412.4	587.2	555.8	569.3
82.5°	156.9	313.8	363.1	412.4	425.9
85°	89.7	183.8	224.1	242.1	251.0
87.5°	40.3	67.2	89.7	89.7	85.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)