

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: P391112

Luminaire Tested: **24CZ2-150VHE-RDP-UNV-L950-CD2-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: P391112
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-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: 9150.9 lumens
Efficiency: N/A
Efficacy: 87.8 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

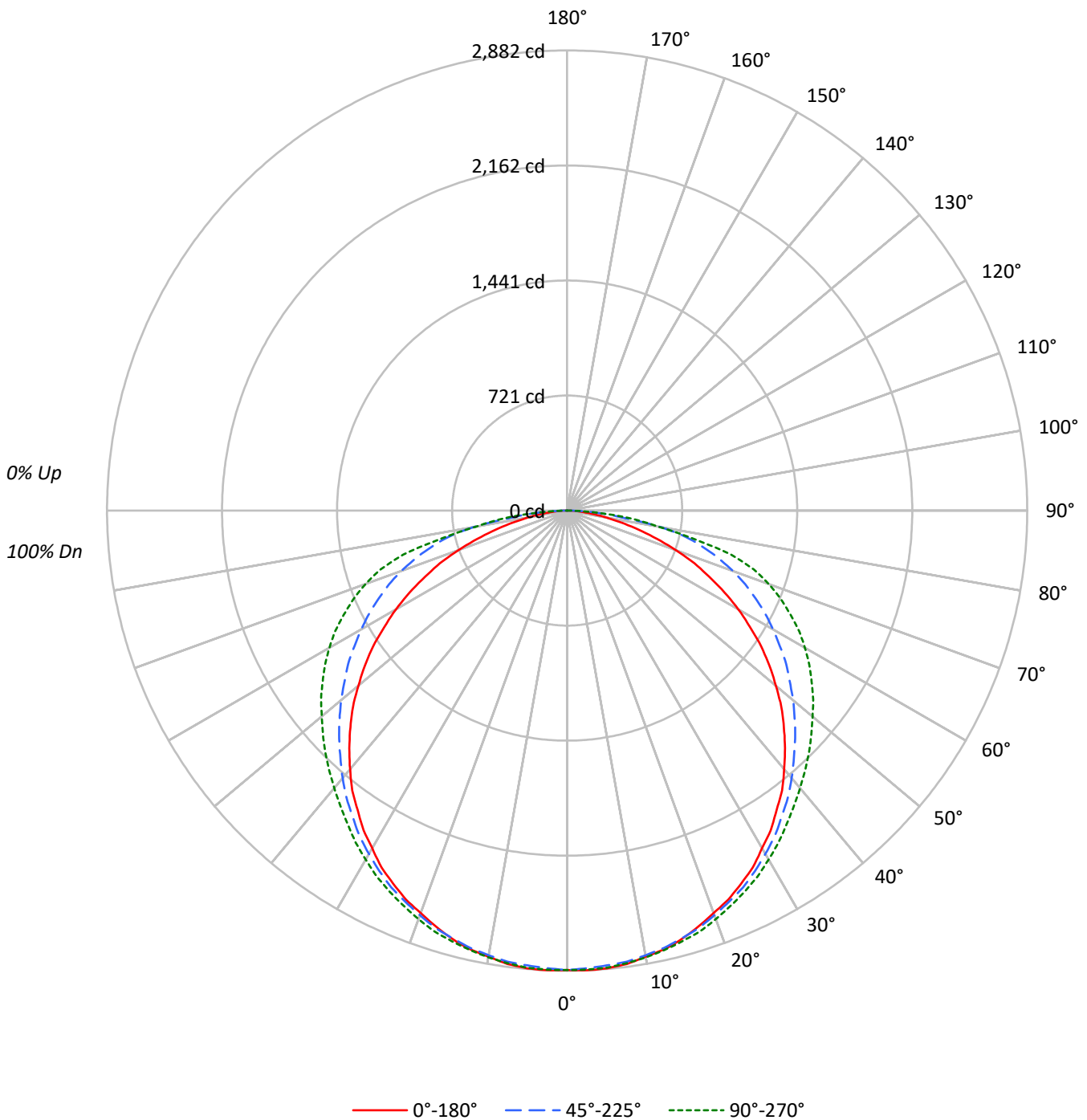
Input Watts (W): 104.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3872	3872	3872
5°	3887	3862	3881
10°	3876	3863	3882
15°	3869	3863	3888
20°	3841	3860	3899
25°	3827	3868	3908
30°	3794	3857	3921
35°	3757	3847	3937
40°	3715	3843	3986
45°	3653	3843	4077
50°	3572	3867	4199
55°	3482	3929	4387
60°	3334	4006	4629
65°	3121	4147	4913
70°	2839	4339	5285
75°	2407	4578	5521
80°	1899	4607	4466
85°	1402	3503	3924



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	273.0	3.0
10°-20°	785.6	8.6
20°-30°	1201.4	13.1
30°-40°	1468.7	16.0
40°-50°	1565.3	17.1
50°-60°	1496.6	16.4
60°-70°	1267.8	13.9
70°-80°	852.1	9.3
80°-90°	240.4	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°	2260.0	24.7
0°-40°	3728.7	40.7
0°-60°	6790.6	74.2
0°-90°	9150.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9150.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2878	2878	2878	2878	2878	
5°	2878	2873	2860	2873	2873	273
15°	2778	2778	2773	2796	2792	783
25°	2578	2587	2605	2628	2633	1188
35°	2288	2306	2342	2388	2397	1433
45°	1920	1952	2020	2106	2142	1481
55°	1484	1539	1675	1806	1870	1322
65°	980	1080	1303	1475	1543	973
75°	463	631	881	1030	1062	496
85°	91	186	227	245	254	112
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2877.7	2877.7	2877.7	2877.7	2877.7
2.5°	2882.2	2882.2	2868.6	2877.7	2877.7
5°	2877.7	2873.2	2859.5	2873.2	2873.2
7.5°	2864.1	2859.5	2850.5	2864.1	2859.5
10°	2836.8	2836.8	2827.8	2841.4	2841.4
12.5°	2814.2	2809.6	2805.1	2823.2	2818.7
15°	2777.8	2777.8	2773.3	2796.0	2791.5
17.5°	2732.5	2737.0	2741.5	2759.7	2764.2
20°	2682.5	2691.6	2696.1	2723.4	2723.4
22.5°	2637.1	2641.7	2650.7	2678.0	2678.0
25°	2578.1	2587.2	2605.4	2628.1	2632.6
27.5°	2519.1	2523.7	2546.4	2578.1	2582.7
30°	2442.0	2455.6	2482.8	2519.1	2523.7
32.5°	2373.9	2387.5	2419.3	2455.6	2464.7
35°	2287.6	2305.8	2342.1	2387.5	2396.6
37.5°	2210.5	2224.1	2269.5	2319.4	2333.0
40°	2115.2	2142.4	2187.8	2246.8	2269.5
42.5°	2019.8	2047.1	2101.5	2178.7	2205.9
45°	1920.0	1951.8	2019.8	2106.1	2142.4
47.5°	1820.1	1856.4	1933.6	2033.5	2074.3
50°	1706.6	1752.0	1847.4	1960.8	2006.2
52.5°	1597.7	1652.2	1756.6	1883.7	1942.7
55°	1484.2	1538.7	1674.9	1806.5	1870.0
57.5°	1357.1	1429.8	1579.6	1729.3	1797.4
60°	1239.1	1307.2	1488.8	1652.2	1720.3
62.5°	1112.0	1202.8	1398.0	1570.5	1638.6
65°	980.4	1080.3	1302.7	1475.2	1543.2
67.5°	862.4	971.3	1207.4	1379.8	1447.9
70°	721.7	857.9	1103.0	1275.4	1343.5
72.5°	590.1	739.8	994.0	1162.0	1225.5
75°	463.0	630.9	880.6	1030.3	1062.1
77.5°	345.0	522.0	762.5	826.1	803.4
80°	245.1	417.6	594.6	562.8	576.4
82.5°	158.9	317.7	367.7	417.6	431.2
85°	90.8	186.1	226.9	245.1	254.2
87.5°	40.9	68.1	90.8	90.8	86.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)