

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: P391107

Luminaire Tested: **24CZ2-150VHE-RDP-UNV-L940-CD2-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: P391107
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-L940-CD2-SDWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND RDP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8411.6 lumens
Efficiency: N/A
Efficacy: 80.7 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

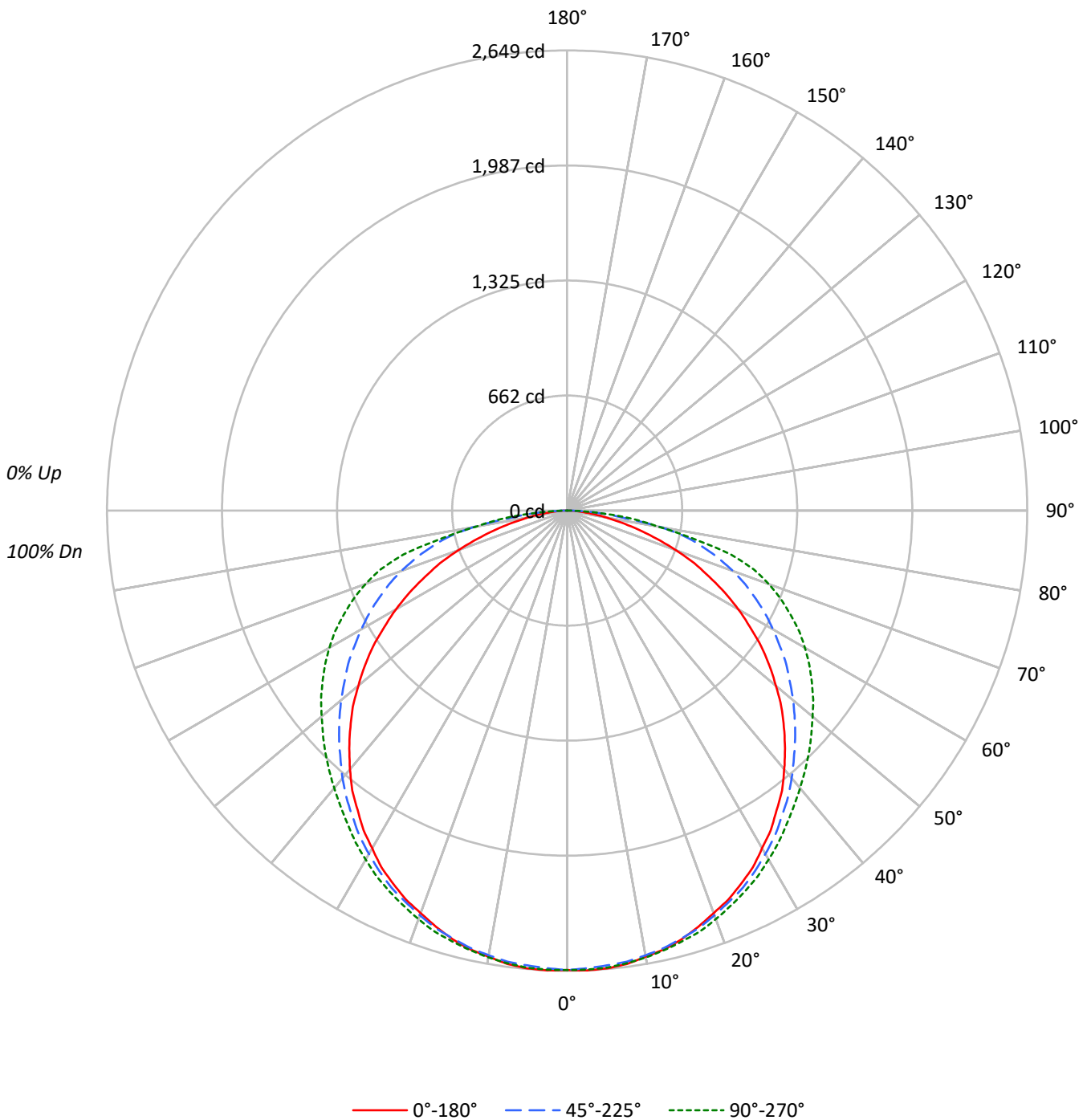
Input Watts (W): 104.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3559	3559	3559
5°	3573	3550	3567
10°	3563	3551	3568
15°	3557	3551	3574
20°	3531	3549	3584
25°	3518	3555	3593
30°	3487	3546	3604
35°	3454	3536	3618
40°	3415	3532	3664
45°	3358	3533	3747
50°	3284	3554	3860
55°	3200	3612	4032
60°	3065	3683	4255
65°	2869	3812	4516
70°	2610	3989	4858
75°	2213	4208	5075
80°	1746	4235	4106
85°	1288	3220	3606



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	250.9	3.0
10°-20°	722.2	8.6
20°-30°	1104.3	13.1
30°-40°	1350.0	16.0
40°-50°	1438.9	17.1
50°-60°	1375.7	16.4
60°-70°	1165.4	13.9
70°-80°	783.2	9.3
80°-90°	220.9	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°	2077.4	24.7
0°-40°	3427.4	40.7
0°-60°	6242.0	74.2
0°-90°	8411.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8411.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2645	2645	2645	2645	2645	
5°	2645	2641	2628	2641	2641	251
15°	2553	2553	2549	2570	2566	720
25°	2370	2378	2395	2416	2420	1092
35°	2103	2120	2153	2195	2203	1317
45°	1765	1794	1857	1936	1969	1361
55°	1364	1414	1540	1661	1719	1215
65°	901	993	1197	1356	1419	895
75°	426	580	809	947	976	456
85°	83	171	209	225	234	103
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2645.2	2645.2	2645.2	2645.2	2645.2
2.5°	2649.4	2649.4	2636.9	2645.2	2645.2
5°	2645.2	2641.0	2628.5	2641.0	2641.0
7.5°	2632.7	2628.5	2620.2	2632.7	2628.5
10°	2607.7	2607.7	2599.3	2611.8	2611.8
12.5°	2586.8	2582.6	2578.5	2595.1	2591.0
15°	2553.4	2553.4	2549.2	2570.1	2565.9
17.5°	2511.7	2515.9	2520.0	2536.7	2540.9
20°	2465.8	2474.1	2478.3	2503.4	2503.4
22.5°	2424.1	2428.3	2436.6	2461.6	2461.6
25°	2369.8	2378.2	2394.9	2415.7	2419.9
27.5°	2315.6	2319.8	2340.6	2369.8	2374.0
30°	2244.7	2257.2	2282.2	2315.6	2319.8
32.5°	2182.1	2194.6	2223.8	2257.2	2265.5
35°	2102.8	2119.5	2152.9	2194.6	2202.9
37.5°	2031.9	2044.4	2086.1	2132.0	2144.5
40°	1944.3	1969.3	2011.0	2065.3	2086.1
42.5°	1856.7	1881.7	1931.8	2002.7	2027.7
45°	1764.9	1794.1	1856.7	1935.9	1969.3
47.5°	1673.1	1706.5	1777.4	1869.2	1906.7
50°	1568.8	1610.5	1698.1	1802.4	1844.1
52.5°	1468.6	1518.7	1614.7	1731.5	1785.7
55°	1364.3	1414.4	1539.6	1660.6	1719.0
57.5°	1247.5	1314.3	1451.9	1589.6	1652.2
60°	1139.0	1201.6	1368.5	1518.7	1581.3
62.5°	1022.2	1105.6	1285.1	1443.6	1506.2
65°	901.2	993.0	1197.4	1356.0	1418.6
67.5°	792.7	892.9	1109.8	1268.4	1330.9
70°	663.4	788.6	1013.9	1172.4	1235.0
72.5°	542.4	680.1	913.7	1068.1	1126.5
75°	425.6	579.9	809.4	947.1	976.3
77.5°	317.1	479.8	700.9	759.3	738.5
80°	225.3	383.8	546.6	517.4	529.9
82.5°	146.0	292.1	338.0	383.8	396.4
85°	83.4	171.1	208.6	225.3	233.6
87.5°	37.6	62.6	83.4	83.4	79.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)