

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: P389526

Luminaire Tested: **24CZ2-100VHE-S-UNV-L950-CD1-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: P389526
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-1)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-100VHE-S-UNV-L950-CD1-SDWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND SMOOTH LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9472.9 lumens
Efficiency: N/A
Efficacy: 136.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

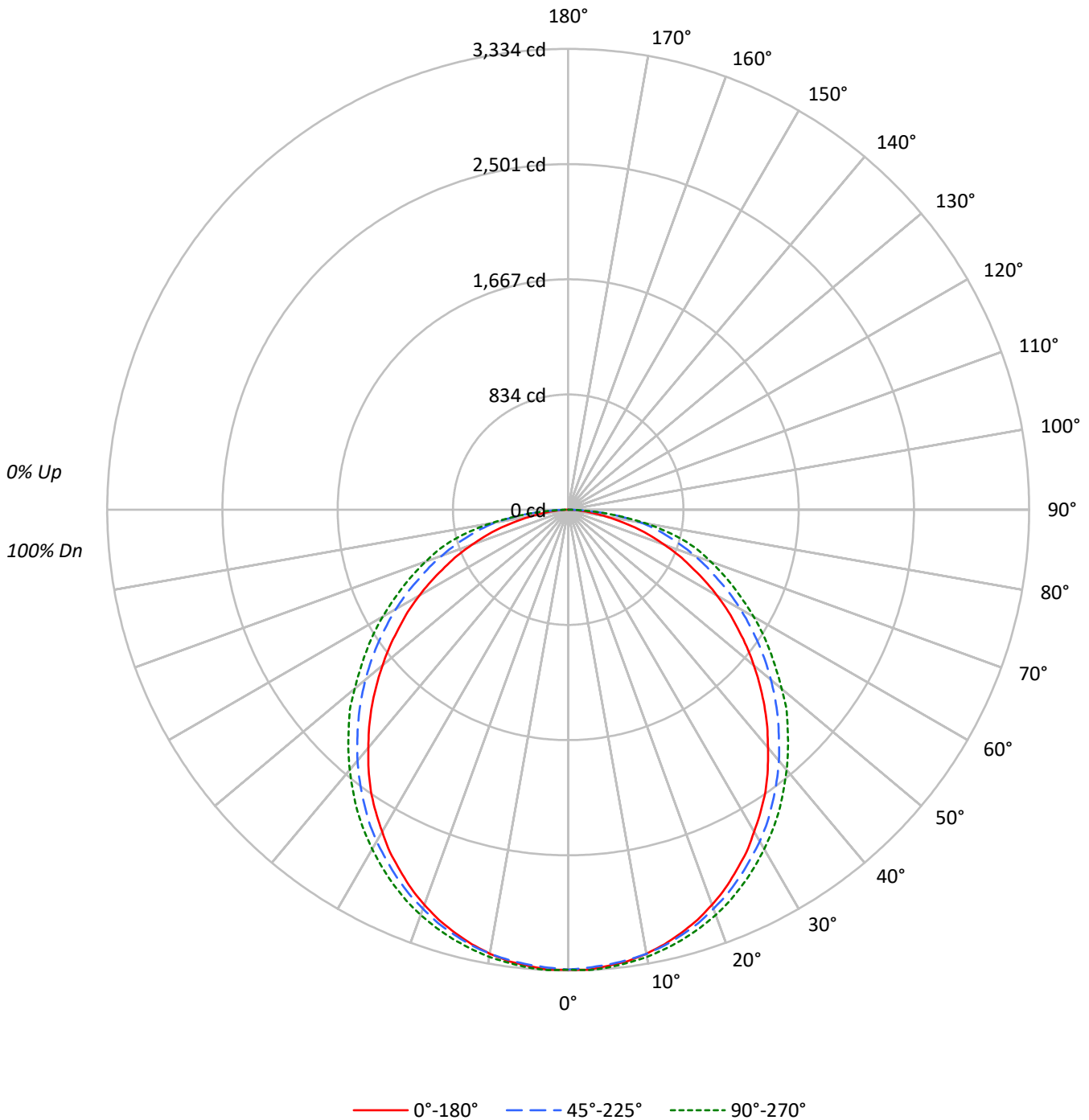
Input Watts (W): 69.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83					83			
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69					69			
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58					58			
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42					42			
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37					37			
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33					33			
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29					29			
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26					26			
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4478	4478	4478
5°	4474	4462	4491
10°	4456	4456	4489
15°	4413	4434	4481
20°	4356	4399	4468
25°	4275	4355	4440
30°	4179	4305	4404
35°	4087	4236	4369
40°	3948	4164	4318
45°	3819	4082	4271
50°	3672	4006	4220
55°	3508	3932	4179
60°	3344	3870	4170
65°	3132	3803	4196
70°	2900	3823	4309
75°	2597	3895	4552
80°	2098	4127	4453
85°	1579	3623	3531



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	315.1	3.3
10°-20°	900.2	9.5
20°-30°	1353.2	14.3
30°-40°	1611.9	17.0
40°-50°	1649.7	17.4
50°-60°	1485.2	15.7
60°-70°	1166.4	12.3
70°-80°	757.0	8.0
80°-90°	234.1	2.5
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°	2568.5	27.1
0°-40°	4180.4	44.1
0°-60°	7315.4	77.2
0°-90°	9472.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9472.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3328	3328	3328	3328	3328	
5°	3313	3319	3304	3322	3325	315
15°	3168	3177	3184	3210	3217	893
25°	2880	2904	2934	2982	2991	1327
35°	2488	2518	2579	2642	2660	1552
45°	2007	2055	2145	2227	2245	1547
55°	1495	1562	1676	1763	1781	1341
65°	984	1059	1195	1294	1318	979
75°	500	596	749	852	876	529
85°	102	190	235	229	229	124
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3327.9	3327.9	3327.9	3327.9	3327.9
2.5°	3330.9	3330.9	3315.9	3330.9	3333.9
5°	3312.8	3318.9	3303.8	3321.9	3324.9
7.5°	3294.8	3294.8	3285.8	3303.8	3306.8
10°	3261.7	3264.7	3261.7	3282.8	3285.8
12.5°	3219.6	3225.6	3228.6	3249.7	3252.7
15°	3168.4	3177.4	3183.5	3210.5	3216.6
17.5°	3111.2	3120.3	3135.3	3165.4	3171.4
20°	3042.0	3054.1	3072.1	3111.2	3120.3
22.5°	2966.8	2978.9	3008.9	3045.1	3060.1
25°	2879.6	2903.6	2933.7	2981.9	2990.9
27.5°	2792.3	2813.4	2852.5	2903.6	2915.7
30°	2690.0	2723.1	2771.2	2822.4	2834.4
32.5°	2590.7	2623.8	2681.0	2735.1	2750.2
35°	2488.4	2518.5	2578.7	2641.9	2659.9
37.5°	2371.0	2410.2	2476.4	2539.5	2557.6
40°	2247.7	2295.8	2371.0	2437.2	2458.3
42.5°	2130.3	2181.5	2256.7	2328.9	2353.0
45°	2007.0	2055.1	2145.4	2226.6	2244.7
47.5°	1880.6	1934.8	2031.0	2112.3	2142.4
50°	1754.2	1811.4	1913.7	1997.9	2016.0
52.5°	1627.8	1688.0	1796.3	1886.6	1895.6
55°	1495.4	1561.6	1676.0	1763.2	1781.3
57.5°	1375.1	1432.3	1555.6	1645.9	1667.0
60°	1242.7	1305.9	1438.3	1522.5	1549.6
62.5°	1116.3	1182.5	1320.9	1405.2	1429.2
65°	983.9	1059.1	1194.6	1293.8	1317.9
67.5°	869.6	941.8	1086.2	1182.5	1206.6
70°	737.2	818.4	971.9	1071.2	1095.3
72.5°	622.9	707.1	860.6	956.8	993.0
75°	499.5	595.8	749.2	851.5	875.6
77.5°	379.1	490.5	646.9	725.2	725.2
80°	270.8	388.2	532.6	568.7	574.7
82.5°	177.5	291.9	394.2	391.2	391.2
85°	102.3	189.6	234.7	228.7	228.7
87.5°	39.1	78.2	84.3	84.3	81.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)