

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: P685885

Luminaire Tested: **8CZL-14-UNV-W-LVR-L940-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685885
Test Lab: INNOVATION CENTER(G3)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8CZL-14-UNV-W-LVR-L940-CD-U
Description: METALUX CRUZE LINEAR 8FT LOUVER MODEL WITH WIDE LENS @90 CRI and 4000K
Light Source: (784) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

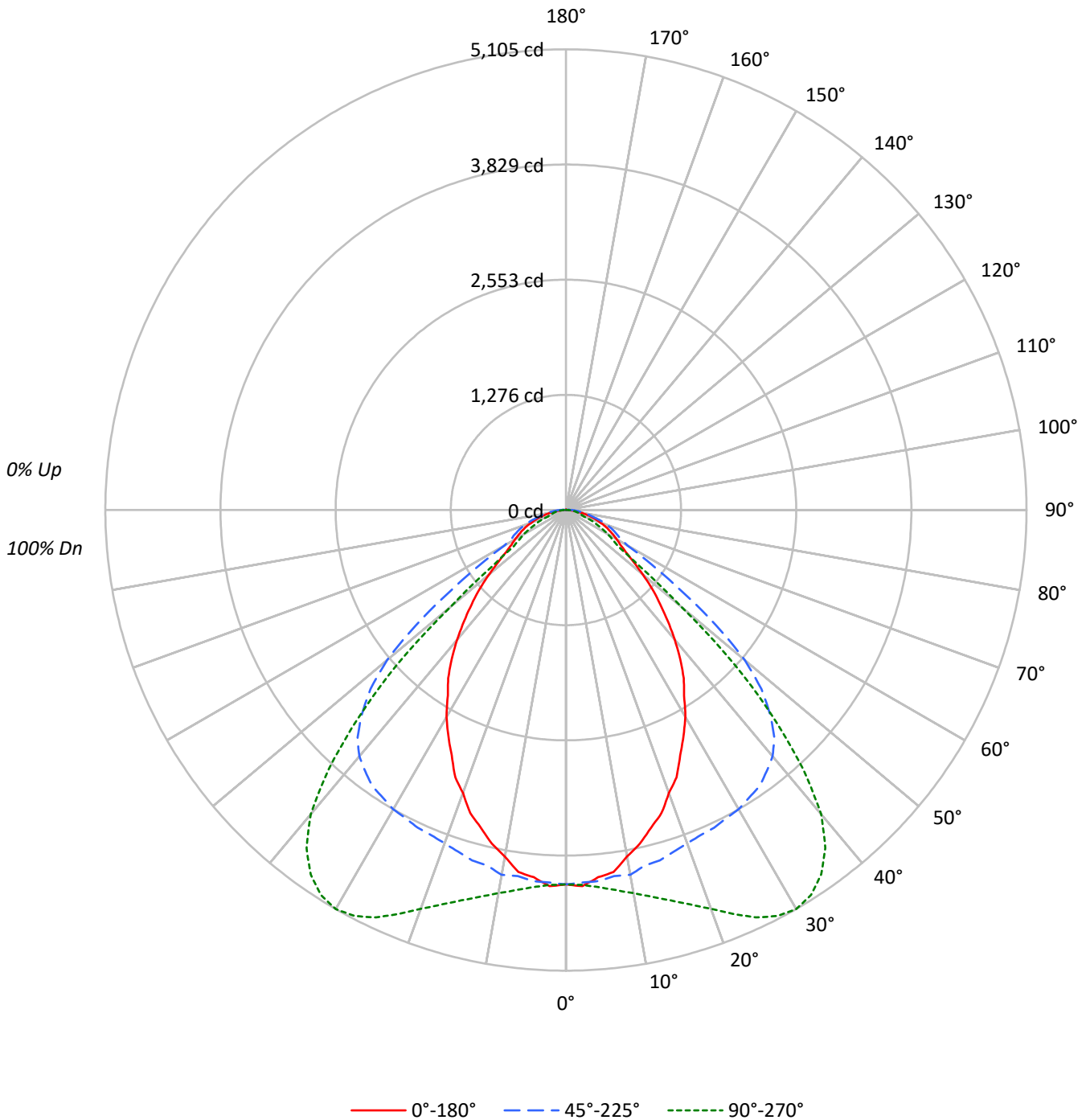
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9867.9 lumens
Efficiency: N/A
Efficacy: 110.9 lumens/watt
Spacing Criteria (0/90/45): 1 / 1.64 / 1.46
Luminous Opening: Rectangular (W 0.83' x L: 8' x H: 0')
CIE Type: Direct

Input Watts (W): 89
Input Voltage (V): 120
Input Current (A_{in}): 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	0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	102	100
1	110	106	103	99	108	104	101	98	100	97	95	96	94	92	92	91	89	89	89	89	87
2	102	95	89	84	99	93	88	83	89	85	81	86	82	79	83	80	77	77	77	77	75
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	68	68	68	66
4	87	76	68	62	85	75	68	62	72	66	61	70	65	60	68	63	59	59	59	59	57
5	80	69	61	55	78	68	60	54	66	59	54	64	58	53	62	57	53	53	53	53	51
6	75	62	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	47	47	47	45
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	42	42	42	40
8	65	52	44	39	63	51	44	39	50	43	38	49	43	38	48	42	38	38	38	38	36
9	61	48	40	35	59	47	40	35	46	40	35	45	39	35	44	39	34	34	34	34	33
10	57	44	37	32	56	44	37	32	43	36	32	42	36	32	41	35	31	31	31	31	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6697	6697	6697
5°	6620	6689	6798
10°	6392	6730	7069
15°	6091	6717	7485
20°	5733	6753	8079
25°	5338	6919	8873
30°	4935	7138	9518
35°	4484	7369	9717
40°	3953	7508	9271
45°	3370	7303	7433
50°	2793	6494	4218
55°	2275	4388	2018
60°	2100	2551	1742
65°	2025	2347	1417
70°	1910	2302	1013
75°	1778	2102	984
80°	1621	2065	1080
85°	1243	2473	1191



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	394.4	4.0
10°-20°	1144.8	11.6
20°-30°	1816.7	18.4
30°-40°	2269.0	23.0
40°-50°	2084.0	21.1
50°-60°	1112.2	11.3
60°-70°	572.4	5.8
70°-80°	314.7	3.2
80°-90°	129.8	1.3
90°-100°	25.1	0.3
100°-110°	1.4	0.0
110°-120°	0.3	0.0
120°-130°	0.4	0.0
130°-140°	0.8	0.0
140°-150°	0.7	0.0
150°-160°	0.5	0.0
160°-170°	0.4	0.0
170°-180°	0.1	0.0
0°-30°	3355.9	34.0
0°-40°	5624.9	57.0
0°-60°	8821.2	89.4
0°-90°	9838.2	99.7
90°-120°	26.8	0.3
90°-150°	28.7	0.3
90°-180°	30.0	0.3
0°-180°	9867.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4148	4148	4148	4148	4148	
5°	4085	4095	4127	4190	4195	386
15°	3644	3763	4018	4346	4478	1025
25°	2996	3278	3884	4595	4981	1381
35°	2275	2695	3739	4554	4930	1412
45°	1476	2127	3198	3315	3255	1142
55°	808	1449	1559	873	717	746
65°	530	695	614	501	371	523
75°	285	316	337	300	158	303
85°	67	88	134	176	64	77
90°	0	25	66	106	14	3
95°	0	3	25	49	6	0
105°	0	1	1	1	0	0
115°	0	1	1	0	0	0
125°	0	1	1	0	0	0
135°	1	1	1	1	1	1
145°	1	1	1	1	1	0
155°	1	1	1	1	1	1
165°	1	2	1	1	1	0
175°	2	2	1	1	1	0
180°	1	1	1	1	1	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4147.6	4147.6	4147.6	4147.6	4147.6
2.5°	4171.8	4162.8	4133.1	4160.1	4158.0
5°	4084.6	4095.0	4126.8	4190.5	4194.6
7.5°	4045.9	4074.3	4092.3	4229.9	4247.9
10°	3898.5	3942.8	4104.7	4247.9	4311.6
12.5°	3787.8	3877.1	4034.1	4277.0	4387.7
15°	3643.9	3762.9	4018.2	4345.5	4477.6
17.5°	3521.5	3643.2	3969.8	4397.4	4582.1
20°	3336.8	3557.5	3930.4	4451.3	4701.8
22.5°	3204.6	3428.1	3899.9	4499.1	4843.6
25°	2996.4	3278.0	3884.0	4595.2	4980.6
27.5°	2822.0	3151.3	3848.7	4656.8	5071.2
30°	2647.0	2996.4	3828.7	4667.9	5105.1
32.5°	2436.0	2870.5	3778.2	4642.3	5056.7
35°	2274.8	2694.7	3738.7	4554.4	4930.1
37.5°	2078.3	2556.4	3652.2	4395.3	4722.5
40°	1875.6	2428.4	3562.3	4146.9	4398.7
42.5°	1670.8	2284.5	3418.4	3815.5	3892.3
45°	1475.7	2127.4	3198.4	3314.6	3255.1
47.5°	1300.7	1958.6	2938.3	2686.4	2546.7
50°	1111.8	1787.0	2585.4	2045.1	1679.1
52.5°	941.6	1643.8	2099.7	1385.1	1044.7
55°	808.1	1448.7	1558.7	873.1	716.8
57.5°	713.3	1299.3	1124.9	690.5	613.7
60°	650.3	1112.5	790.1	633.7	539.6
62.5°	588.1	880.0	675.9	577.7	453.8
65°	530.0	694.6	614.4	500.9	370.8
67.5°	469.8	563.9	554.9	454.5	309.3
70°	404.7	463.5	487.7	380.5	214.5
72.5°	346.6	388.8	415.1	325.2	182.0
75°	285.0	316.2	336.9	299.6	157.7
77.5°	226.2	254.6	274.7	271.2	138.4
80°	174.3	193.0	222.1	242.8	116.2
82.5°	119.0	132.8	175.0	209.6	90.6
85°	67.1	87.9	133.5	175.7	64.3
87.5°	19.4	51.9	96.9	141.1	37.4
90°	0.0	24.9	65.7	106.5	13.8
92.5°	0.0	9.7	42.9	74.7	9.7
95°	0.0	2.8	24.9	49.1	6.2
97.5°	0.0	0.7	11.8	29.1	2.8
100°	0.0	0.7	4.2	13.8	0.7
102.5°	0.0	0.7	1.4	4.8	0.0
105°	0.0	0.7	0.7	0.7	0.0
107.5°	0.0	0.7	0.7	0.0	0.0
110°	0.0	0.7	0.7	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	0.7	0.7	0.0	0.0
115°	0.0	0.7	0.7	0.0	0.0
117.5°	0.0	0.7	0.7	0.0	0.0
120°	0.0	0.7	0.7	0.0	0.0
122.5°	0.0	0.7	0.7	0.0	0.0
125°	0.0	0.7	0.7	0.0	0.0
127.5°	0.7	0.7	0.7	0.7	0.0
130°	0.7	1.4	1.4	0.7	0.0
132.5°	0.7	1.4	1.4	0.7	0.0
135°	0.7	1.4	1.4	0.7	0.7
137.5°	0.7	1.4	1.4	0.7	0.7
140°	0.7	1.4	1.4	0.7	0.7
142.5°	0.7	1.4	1.4	0.7	0.7
145°	0.7	1.4	1.4	0.7	0.7
147.5°	0.7	1.4	1.4	0.7	0.7
150°	0.7	1.4	1.4	0.7	0.7
152.5°	1.4	1.4	1.4	0.7	0.7
155°	1.4	1.4	1.4	0.7	0.7
157.5°	1.4	1.4	1.4	0.7	0.7
160°	1.4	1.4	1.4	0.7	0.7
162.5°	1.4	2.1	1.4	0.7	0.7
165°	1.4	2.1	1.4	0.7	0.7
167.5°	1.4	2.1	1.4	0.7	0.7
170°	1.4	2.1	1.4	0.7	0.7
172.5°	1.4	2.1	1.4	0.7	0.7
175°	2.1	2.1	1.4	0.7	0.7
177.5°	2.1	2.1	1.4	1.4	1.4
180°	1.4	1.4	1.4	1.4	1.4

(END OF REPORT)