

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: P685946

Luminaire Tested: **8CZL-18-UNV-LVRF-L940-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685946
Test Lab: INNOVATION CENTER(G3)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8CZL-18-UNV-LVRF-L940-CD-U
Description: METALUX CRUZE LINEAR 8FT LOUVER MODEL WITH FROSTED LAY-IN @90 CRI and 4000K
Light Source: (1176) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

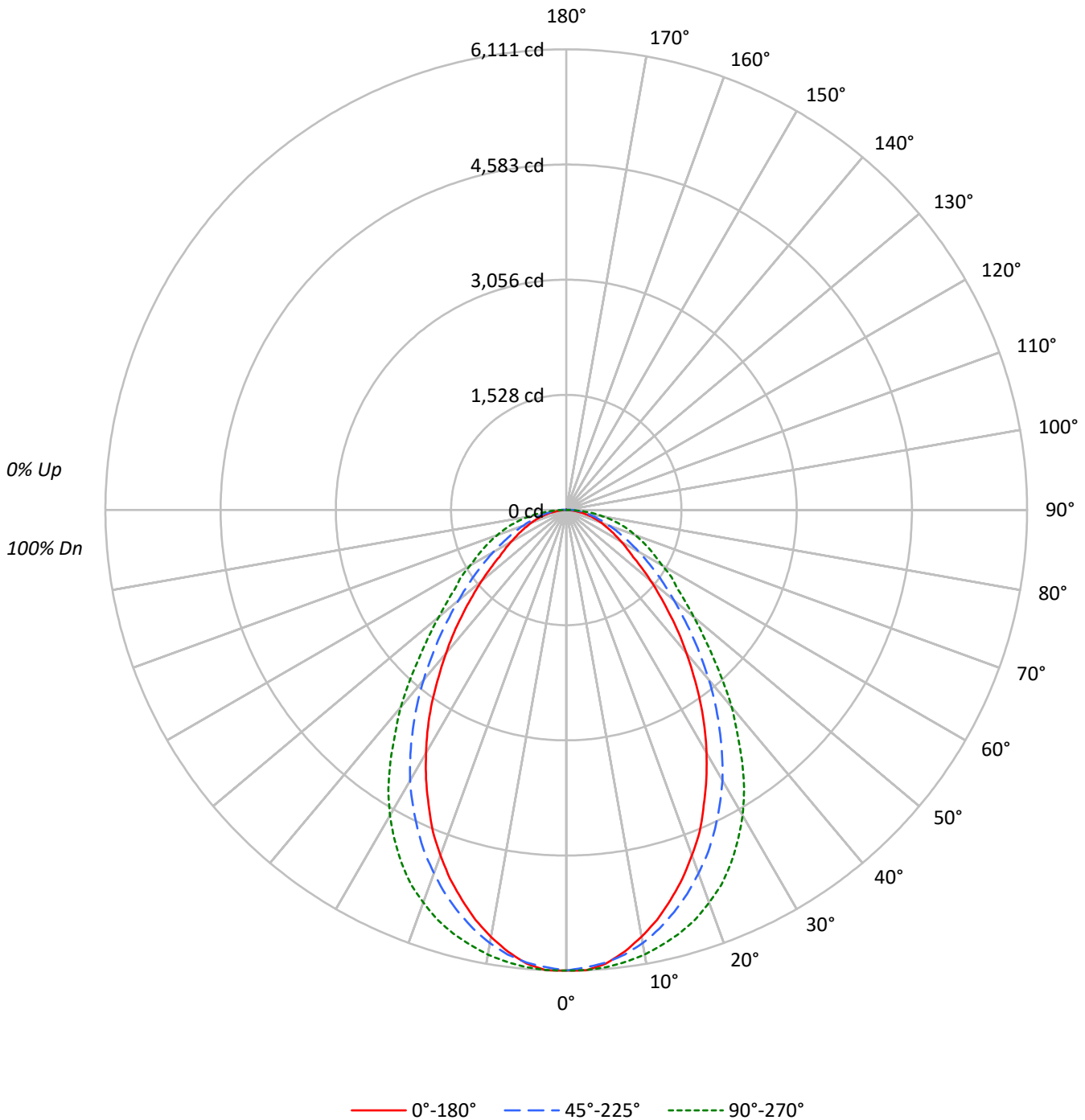
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11267.8 lumens
Efficiency: N/A
Efficacy: 103.4 lumens/watt
Spacing Criteria (0/90/45): 0.97 / 1.15 / 1.12
Luminous Opening: Rectangular (W 0.83' x L: 8' x H: 0')
CIE Type: Direct

Input Watts (W): 109
Input Voltage (V): 120
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	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	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	88	88	88	86
2	101	94	88	83	99	92	87	82	89	84	80	85	82	78	82	79	76	76	76	76	74
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	74	70	67	67	67	67	65
4	87	76	68	62	84	74	67	61	72	66	61	70	64	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	63	55	49	73	62	54	48	60	53	48	58	52	48	57	51	47	47	47	47	45
7	70	57	49	44	68	57	49	44	55	48	43	54	48	43	52	47	43	43	43	43	41
8	65	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	39	39	39	37
9	61	49	41	36	60	48	41	36	47	41	36	46	40	36	45	40	36	36	36	36	34
10	58	46	38	33	57	45	38	33	44	38	33	43	37	33	42	37	33	33	33	33	31

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9862	9862	9862
5°	9790	9768	9866
10°	9424	9564	9817
15°	8942	9230	9714
20°	8374	8809	9521
25°	7690	8311	9205
30°	6931	7723	8717
35°	6105	6985	8006
40°	5225	6202	7199
45°	4402	5406	6270
50°	3676	4686	5543
55°	3042	4117	5026
60°	2741	3609	4740
65°	2492	3176	4635
70°	2321	2851	4600
75°	2152	2661	4693
80°	1951	2636	4701
85°	1675	3090	4652



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	571.5	5.1
10°-20°	1561.9	13.9
20°-30°	2158.1	19.2
30°-40°	2220.1	19.7
40°-50°	1820.0	16.2
50°-60°	1306.0	11.6
60°-70°	878.4	7.8
70°-80°	512.7	4.6
80°-90°	197.5	1.8
90°-100°	34.2	0.3
100°-110°	2.9	0.0
110°-120°	0.6	0.0
120°-130°	0.5	0.0
130°-140°	0.7	0.0
140°-150°	0.9	0.0
150°-160°	0.8	0.0
160°-170°	0.6	0.0
170°-180°	0.2	0.0
0°-30°	4291.6	38.1
0°-40°	6511.6	57.8
0°-60°	9637.7	85.5
0°-90°	11226.3	99.6
90°-120°	37.7	0.3
90°-150°	39.9	0.4
90°-180°	41.0	0.4
0°-180°	11267.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6108	6108	6108	6108	6108	
5°	6041	6045	6026	6083	6087	567
15°	5350	5404	5522	5736	5811	1501
25°	4316	4417	4665	4990	5167	1981
35°	3097	3240	3544	3876	4062	1930
45°	1928	2078	2368	2600	2746	1496
55°	1081	1210	1462	1663	1786	995
65°	652	691	831	1068	1213	650
75°	345	357	427	593	752	366
85°	90	112	167	249	251	98
90°	1	38	85	130	27	5
95°	1	6	36	62	11	0
105°	0	1	2	4	2	0
115°	1	1	1	0	0	1
125°	1	1	1	0	0	1
135°	1	2	1	1	0	1
145°	2	2	2	1	1	1
155°	2	3	2	1	1	1
165°	3	3	3	2	1	1
175°	3	4	3	2	2	0
180°	3	3	3	3	3	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6108.2	6108.2	6108.2	6108.2	6108.2
2.5°	6110.8	6105.5	6071.3	6110.8	6109.0
5°	6040.6	6045.0	6026.5	6082.7	6087.1
7.5°	5909.8	5927.3	5947.5	6030.0	6045.0
10°	5748.2	5774.6	5833.4	5956.3	5987.9
12.5°	5566.5	5595.5	5691.2	5860.6	5904.5
15°	5349.7	5404.1	5521.7	5735.9	5811.4
17.5°	5125.8	5192.6	5338.3	5592.0	5693.8
20°	4873.9	4940.6	5126.7	5409.4	5541.1
22.5°	4621.1	4686.0	4913.4	5214.5	5378.7
25°	4316.4	4417.4	4665.0	4989.8	5167.1
27.5°	4025.0	4132.1	4407.7	4756.3	4932.7
30°	3717.7	3843.3	4142.6	4475.3	4675.5
32.5°	3413.1	3540.4	3845.9	4192.7	4391.1
35°	3097.1	3240.2	3543.9	3875.8	4061.9
37.5°	2776.7	2932.9	3245.5	3572.0	3722.1
40°	2479.1	2632.7	2942.6	3234.9	3415.8
42.5°	2204.3	2355.3	2642.4	2907.5	3069.9
45°	1927.8	2077.9	2367.6	2600.2	2746.0
47.5°	1680.2	1833.9	2103.4	2338.6	2460.6
50°	1463.4	1603.0	1865.5	2078.8	2206.9
52.5°	1265.0	1392.3	1652.1	1859.3	1983.1
55°	1080.6	1209.7	1462.5	1662.7	1785.6
57.5°	956.9	1049.0	1276.4	1498.5	1656.5
60°	848.9	906.0	1117.5	1380.9	1467.8
62.5°	739.2	791.0	964.8	1196.5	1331.7
65°	652.3	690.9	831.3	1067.5	1213.2
67.5°	566.2	595.2	715.5	942.8	1090.3
70°	491.6	510.0	604.0	819.9	974.4
72.5°	420.5	430.2	514.4	707.6	861.2
75°	345.0	357.3	426.6	592.6	752.3
77.5°	273.0	290.6	352.0	494.2	627.7
80°	209.8	223.9	283.5	406.4	505.6
82.5°	145.7	165.0	221.2	321.3	387.1
85°	90.4	112.4	166.8	249.3	251.1
87.5°	37.7	70.2	122.0	184.4	128.2
90°	0.9	37.7	85.2	129.9	27.2
92.5°	0.0	17.6	57.9	93.1	15.8
95°	0.9	6.1	36.0	62.3	11.4
97.5°	0.0	1.8	19.3	39.5	7.0
100°	0.0	0.9	7.9	21.9	4.4
102.5°	0.0	0.9	3.5	9.7	2.6
105°	0.0	0.9	1.8	3.5	1.8
107.5°	0.0	0.9	0.9	0.9	0.9
110°	0.9	0.9	0.9	0.9	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	0.9	0.9	0.0	0.0
115°	0.9	0.9	0.9	0.0	0.0
117.5°	0.9	0.9	0.9	0.0	0.0
120°	0.9	0.9	0.9	0.0	0.0
122.5°	0.9	0.9	0.9	0.0	0.0
125°	0.9	0.9	0.9	0.0	0.0
127.5°	0.9	0.9	0.9	0.0	0.0
130°	0.9	0.9	0.9	0.0	0.0
132.5°	0.9	1.8	0.9	0.9	0.0
135°	0.9	1.8	0.9	0.9	0.0
137.5°	0.9	1.8	0.9	0.9	0.0
140°	0.9	1.8	0.9	0.9	0.9
142.5°	1.8	1.8	1.8	0.9	0.9
145°	1.8	1.8	1.8	0.9	0.9
147.5°	1.8	1.8	1.8	0.9	0.9
150°	1.8	1.8	1.8	0.9	0.9
152.5°	1.8	2.6	1.8	0.9	0.9
155°	1.8	2.6	1.8	0.9	0.9
157.5°	1.8	2.6	1.8	0.9	0.9
160°	1.8	2.6	1.8	0.9	0.9
162.5°	2.6	2.6	1.8	1.8	0.9
165°	2.6	2.6	2.6	1.8	0.9
167.5°	2.6	2.6	2.6	1.8	0.9
170°	2.6	2.6	2.6	1.8	1.8
172.5°	2.6	2.6	2.6	1.8	1.8
175°	2.6	3.5	2.6	1.8	1.8
177.5°	2.6	3.5	2.6	1.8	1.8
180°	2.6	2.6	2.6	2.6	2.6

(END OF REPORT)