

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: P685886

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

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685886
Test Lab: INNOVATION CENTER(G3)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8CZL-18-UNV-W-LVR-L940-CD-U
Description: METALUX CRUZE LINEAR 8FT LOUVER MODEL WITH WIDE LENS @90 CRI and 4000K
Light Source: (1176) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

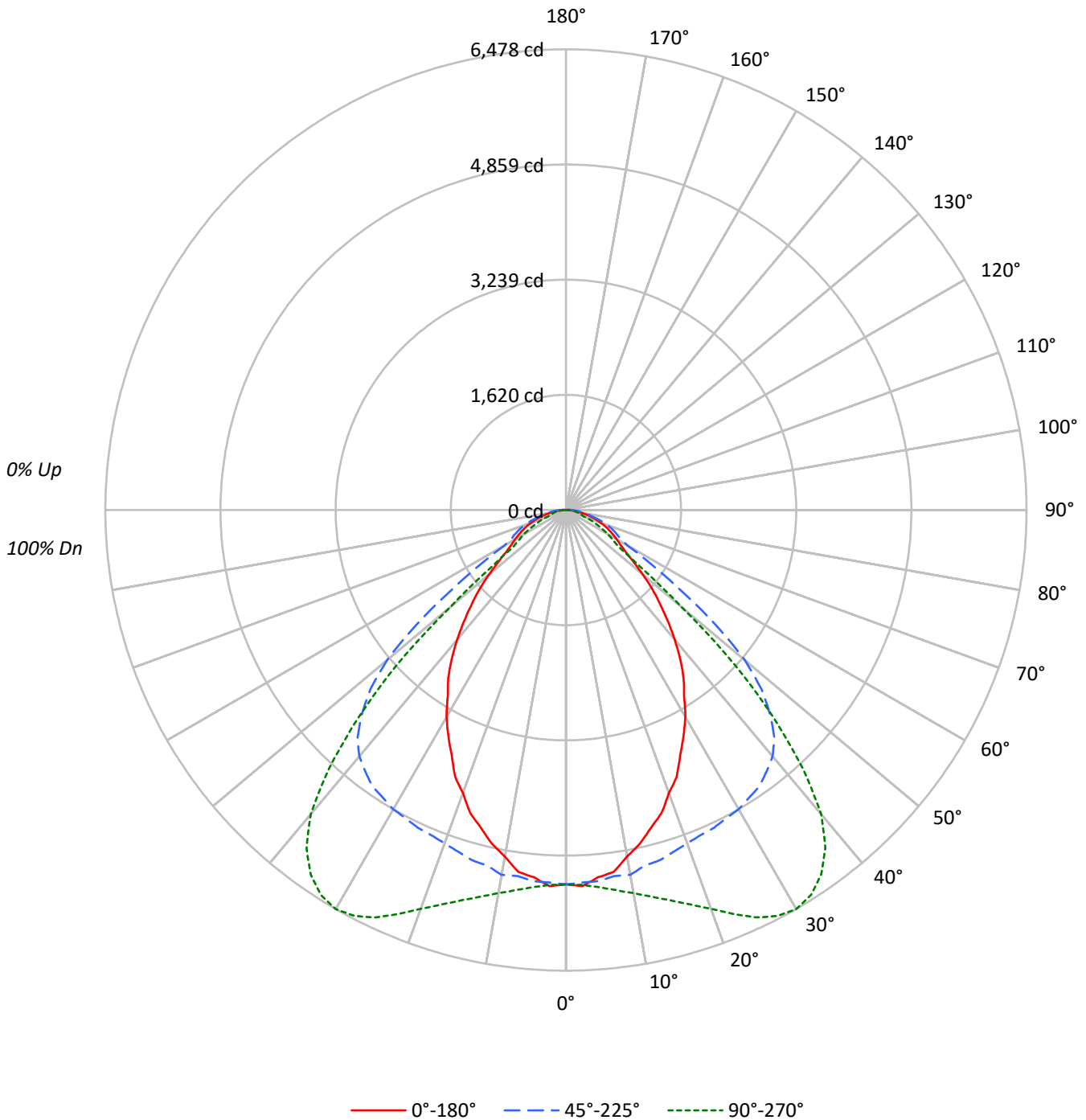
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12521.5 lumens
Efficiency: N/A
Efficacy: 114.9 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): 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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	106	103	99	108	104	101	98	100	97	95	96	94	92	92	91	89	87
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	66
4	87	76	68	62	85	75	68	62	72	66	61	70	65	60	68	63	59	57
5	80	69	61	55	78	68	60	54	66	59	54	64	58	53	62	57	53	51
6	75	62	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	40
8	65	52	44	39	63	51	44	39	50	43	38	49	43	38	48	42	38	36
9	61	48	40	35	59	47	40	35	46	40	35	45	39	35	44	39	34	33
10	57	44	37	32	56	44	37	32	43	36	32	42	36	32	41	35	31	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8498	8498	8498
5°	8401	8487	8627
10°	8110	8539	8970
15°	7729	8523	9497
20°	7275	8569	10251
25°	6773	8780	11259
30°	6262	9057	12077
35°	5689	9351	12331
40°	5016	9527	11764
45°	4276	9267	9432
50°	3544	8241	5352
55°	2886	5568	2560
60°	2665	3238	2211
65°	2569	2978	1798
70°	2425	2922	1285
75°	2256	2667	1249
80°	2057	2620	1371
85°	1578	3138	1512



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	500.4	4.0
10°-20°	1452.6	11.6
20°-30°	2305.3	18.4
30°-40°	2879.2	23.0
40°-50°	2644.5	21.1
50°-60°	1411.3	11.3
60°-70°	726.4	5.8
70°-80°	399.4	3.2
80°-90°	164.8	1.3
90°-100°	31.8	0.3
100°-110°	1.8	0.0
110°-120°	0.4	0.0
120°-130°	0.6	0.0
130°-140°	1.0	0.0
140°-150°	0.8	0.0
150°-160°	0.7	0.0
160°-170°	0.5	0.0
170°-180°	0.2	0.0
0°-30°	4258.3	34.0
0°-40°	7137.5	57.0
0°-60°	11193.3	89.4
0°-90°	12483.8	99.7
90°-120°	34.0	0.3
90°-150°	36.4	0.3
90°-180°	38.0	0.3
0°-180°	12521.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5263	5263	5263	5263	5263	
5°	5183	5196	5237	5317	5323	490
15°	4624	4775	5099	5514	5682	1300
25°	3802	4159	4928	5831	6320	1752
35°	2886	3419	4744	5779	6256	1792
45°	1872	2700	4058	4206	4130	1449
55°	1025	1838	1978	1108	910	947
65°	672	881	780	636	470	664
75°	362	401	428	380	200	384
85°	85	112	169	223	82	98
90°	0	32	83	135	18	3
95°	0	4	32	62	8	0
105°	0	1	1	1	0	0
115°	0	1	1	0	0	0
125°	0	1	1	0	0	0
135°	1	2	2	1	1	1
145°	1	2	2	1	1	1
155°	2	2	2	1	1	1
165°	2	3	2	1	1	1
175°	3	3	2	1	1	0
180°	2	2	2	2	2	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5263.0	5263.0	5263.0	5263.0	5263.0
2.5°	5293.7	5282.3	5244.5	5278.8	5276.1
5°	5183.1	5196.2	5236.6	5317.4	5322.6
7.5°	5133.9	5169.9	5192.7	5367.4	5390.2
10°	4946.9	5003.1	5208.5	5390.2	5471.0
12.5°	4806.4	4919.7	5119.0	5427.1	5567.6
15°	4623.8	4774.8	5098.8	5514.0	5681.7
17.5°	4468.5	4623.0	5037.3	5579.9	5814.3
20°	4234.1	4514.1	4987.3	5648.3	5966.1
22.5°	4066.4	4349.9	4948.7	5708.9	6146.1
25°	3802.1	4159.4	4928.5	5830.9	6319.9
27.5°	3580.9	3998.8	4883.7	5909.1	6434.9
30°	3358.8	3802.1	4858.2	5923.1	6478.0
32.5°	3091.1	3642.4	4794.2	5890.6	6416.5
35°	2886.5	3419.4	4744.1	5779.2	6255.8
37.5°	2637.2	3243.8	4634.4	5577.2	5992.5
40°	2380.0	3081.4	4520.3	5262.1	5581.6
42.5°	2120.1	2898.8	4337.7	4841.6	4939.0
45°	1872.5	2699.5	4058.5	4206.0	4130.5
47.5°	1650.4	2485.3	3728.4	3408.8	3231.5
50°	1410.8	2267.6	3280.7	2595.0	2130.6
52.5°	1194.8	2085.9	2664.4	1757.5	1325.6
55°	1025.4	1838.3	1977.9	1107.9	909.5
57.5°	905.1	1648.7	1427.4	876.1	778.7
60°	825.2	1411.6	1002.6	804.1	684.8
62.5°	746.2	1116.7	857.7	733.0	575.9
65°	672.5	881.4	779.6	635.6	470.5
67.5°	596.1	715.5	704.1	576.8	392.4
70°	513.6	588.2	618.9	482.8	272.1
72.5°	439.8	493.4	526.7	412.6	230.9
75°	361.7	401.2	427.5	380.1	200.2
77.5°	287.1	323.1	348.5	344.1	175.6
80°	221.2	244.9	281.8	308.1	147.5
82.5°	151.0	168.6	222.1	266.0	115.0
85°	85.2	111.5	169.4	223.0	81.6
87.5°	24.6	65.8	122.9	179.1	47.4
90°	0.0	31.6	83.4	135.2	17.6
92.5°	0.0	12.3	54.4	94.8	12.3
95°	0.0	3.5	31.6	62.3	7.9
97.5°	0.0	0.9	14.9	36.9	3.5
100°	0.0	0.9	5.3	17.6	0.9
102.5°	0.0	0.9	1.8	6.1	0.0
105°	0.0	0.9	0.9	0.9	0.0
107.5°	0.0	0.9	0.9	0.0	0.0
110°	0.0	0.9	0.9	0.0	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°	0.0	0.9	0.9	0.0	0.0
117.5°	0.0	0.9	0.9	0.0	0.0
120°	0.0	0.9	0.9	0.0	0.0
122.5°	0.0	0.9	0.9	0.0	0.0
125°	0.0	0.9	0.9	0.0	0.0
127.5°	0.9	0.9	0.9	0.9	0.0
130°	0.9	1.8	1.8	0.9	0.0
132.5°	0.9	1.8	1.8	0.9	0.0
135°	0.9	1.8	1.8	0.9	0.9
137.5°	0.9	1.8	1.8	0.9	0.9
140°	0.9	1.8	1.8	0.9	0.9
142.5°	0.9	1.8	1.8	0.9	0.9
145°	0.9	1.8	1.8	0.9	0.9
147.5°	0.9	1.8	1.8	0.9	0.9
150°	0.9	1.8	1.8	0.9	0.9
152.5°	1.8	1.8	1.8	0.9	0.9
155°	1.8	1.8	1.8	0.9	0.9
157.5°	1.8	1.8	1.8	0.9	0.9
160°	1.8	1.8	1.8	0.9	0.9
162.5°	1.8	2.6	1.8	0.9	0.9
165°	1.8	2.6	1.8	0.9	0.9
167.5°	1.8	2.6	1.8	0.9	0.9
170°	1.8	2.6	1.8	0.9	0.9
172.5°	1.8	2.6	1.8	0.9	0.9
175°	2.6	2.6	1.8	0.9	0.9
177.5°	2.6	2.6	1.8	1.8	1.8
180°	1.8	1.8	1.8	1.8	1.8

(END OF REPORT)