

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: P685854

Luminaire Tested: **8CZL-10-UNV-W-LVR-L840-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685854
Test Lab: INNOVATION CENTER(G3)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8CZL-10-UNV-W-LVR-L840-CD-U
Description: METALUX CRUZE LINEAR 8FT LOUVER MODEL WITH WIDE LENS @80 CRI and 4000K
Light Source: (784) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

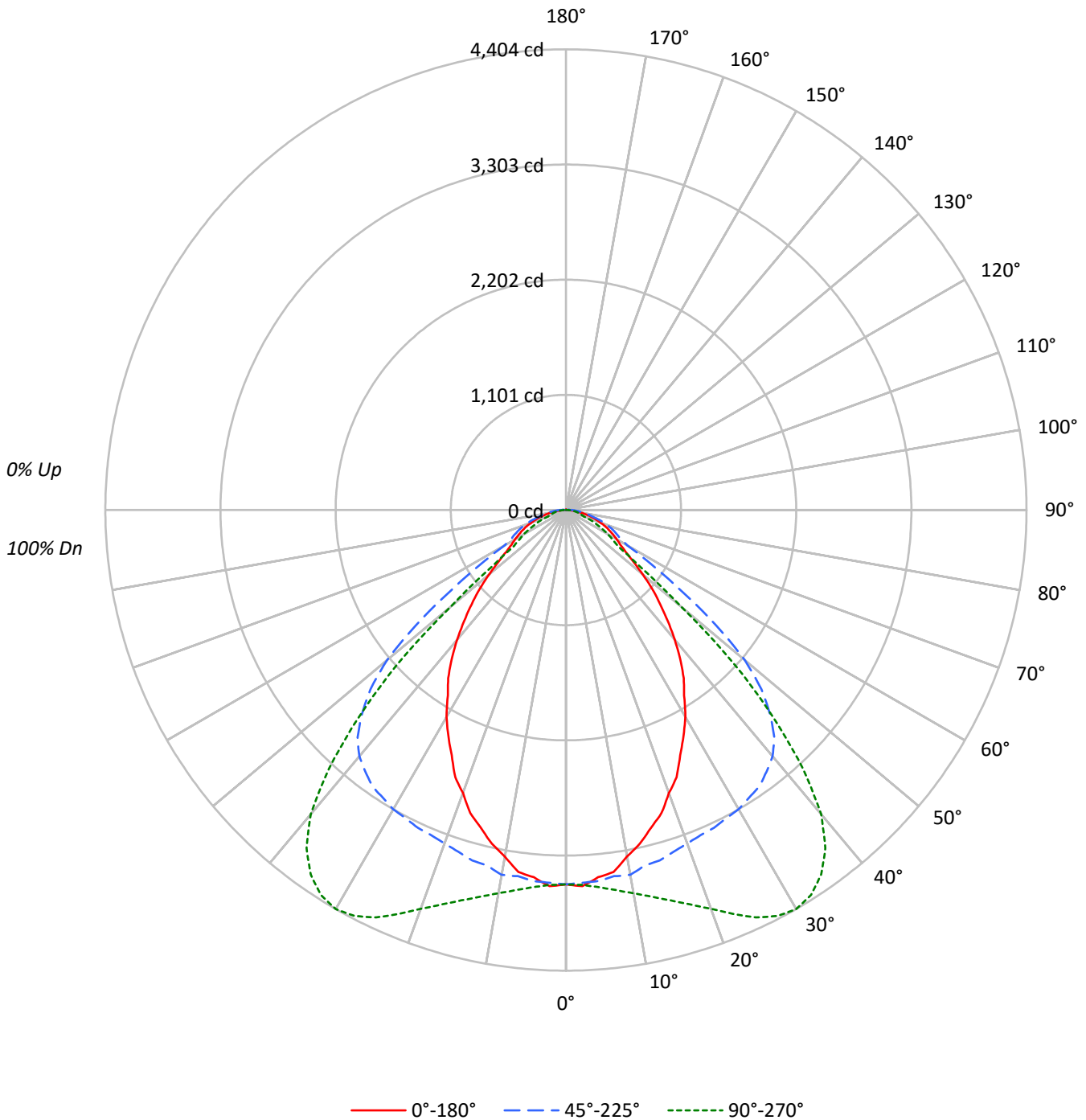
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8513.5 lumens
Efficiency: N/A
Efficacy: 135.1 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): 63
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	87	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°	5778	5778	5778
5°	5712	5771	5865
10°	5514	5806	6099
15°	5255	5795	6457
20°	4946	5826	6970
25°	4605	5970	7655
30°	4258	6158	8211
35°	3868	6358	8384
40°	3411	6478	7999
45°	2907	6301	6413
50°	2409	5603	3639
55°	1963	3786	1741
60°	1812	2201	1504
65°	1747	2025	1222
70°	1648	1986	873
75°	1534	1813	849
80°	1398	1782	933
85°	1073	2134	1028



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	340.2	4.0
10°-20°	987.7	11.6
20°-30°	1567.4	18.4
30°-40°	1957.6	23.0
40°-50°	1798.0	21.1
50°-60°	959.6	11.3
60°-70°	493.9	5.8
70°-80°	271.6	3.2
80°-90°	112.0	1.3
90°-100°	21.6	0.3
100°-110°	1.2	0.0
110°-120°	0.3	0.0
120°-130°	0.4	0.0
130°-140°	0.7	0.0
140°-150°	0.6	0.0
150°-160°	0.4	0.0
160°-170°	0.3	0.0
170°-180°	0.1	0.0
0°-30°	2895.3	34.0
0°-40°	4852.9	57.0
0°-60°	7610.5	89.4
0°-90°	8487.9	99.7
90°-120°	23.1	0.3
90°-150°	24.7	0.3
90°-180°	26.0	0.3
0°-180°	8513.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3578	3578	3578	3578	3578	
5°	3524	3533	3560	3615	3619	333
15°	3144	3246	3467	3749	3863	884
25°	2585	2828	3351	3964	4297	1191
35°	1963	2325	3226	3929	4253	1218
45°	1273	1835	2759	2860	2808	985
55°	697	1250	1345	753	618	644
65°	457	599	530	432	320	452
75°	246	273	291	258	136	261
85°	58	76	115	152	56	66
90°	0	22	57	92	12	2
95°	0	2	22	42	5	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	0
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°	3578.3	3578.3	3578.3	3578.3	3578.3
2.5°	3599.2	3591.5	3565.8	3589.1	3587.3
5°	3524.0	3533.0	3560.4	3615.3	3618.9
7.5°	3490.6	3515.1	3530.6	3649.4	3664.9
10°	3363.5	3401.7	3541.3	3664.9	3719.8
12.5°	3268.0	3345.0	3480.5	3690.0	3785.5
15°	3143.8	3246.5	3466.7	3749.0	3863.1
17.5°	3038.2	3143.2	3424.9	3793.8	3953.2
20°	2878.8	3069.2	3390.9	3840.4	4056.4
22.5°	2764.8	2957.6	3364.7	3881.6	4178.8
25°	2585.1	2828.1	3350.9	3964.5	4297.0
27.5°	2434.7	2718.8	3320.5	4017.6	4375.2
30°	2283.7	2585.1	3303.2	4027.2	4404.4
32.5°	2101.6	2476.5	3259.6	4005.1	4362.6
35°	1962.6	2324.9	3225.6	3929.3	4253.4
37.5°	1793.0	2205.5	3151.0	3792.0	4074.4
40°	1618.2	2095.1	3073.4	3577.7	3795.0
42.5°	1441.5	1970.9	2949.2	3291.8	3358.1
45°	1273.2	1835.4	2759.4	2859.7	2808.4
47.5°	1122.1	1689.8	2535.0	2317.7	2197.1
50°	959.2	1541.8	2230.6	1764.4	1448.6
52.5°	812.4	1418.2	1811.6	1195.0	901.3
55°	697.2	1249.9	1344.8	753.3	618.4
57.5°	615.4	1121.0	970.5	595.7	529.4
60°	561.1	959.8	681.6	546.7	465.6
62.5°	507.4	759.2	583.2	498.4	391.6
65°	457.2	599.3	530.0	432.1	319.9
67.5°	405.3	486.5	478.7	392.2	266.8
70°	349.2	399.9	420.8	328.3	185.0
72.5°	299.0	335.5	358.1	280.5	157.0
75°	245.9	272.8	290.7	258.5	136.1
77.5°	195.2	219.7	237.0	234.0	119.4
80°	150.4	166.5	191.6	209.5	100.3
82.5°	102.7	114.6	151.0	180.9	78.2
85°	57.9	75.8	115.2	151.6	55.5
87.5°	16.7	44.8	83.6	121.8	32.2
90°	0.0	21.5	56.7	91.9	11.9
92.5°	0.0	8.4	37.0	64.5	8.4
95°	0.0	2.4	21.5	42.4	5.4
97.5°	0.0	0.6	10.1	25.1	2.4
100°	0.0	0.6	3.6	11.9	0.6
102.5°	0.0	0.6	1.2	4.2	0.0
105°	0.0	0.6	0.6	0.6	0.0
107.5°	0.0	0.6	0.6	0.0	0.0
110°	0.0	0.6	0.6	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	0.6	0.6	0.0	0.0
115°	0.0	0.6	0.6	0.0	0.0
117.5°	0.0	0.6	0.6	0.0	0.0
120°	0.0	0.6	0.6	0.0	0.0
122.5°	0.0	0.6	0.6	0.0	0.0
125°	0.0	0.6	0.6	0.0	0.0
127.5°	0.6	0.6	0.6	0.6	0.0
130°	0.6	1.2	1.2	0.6	0.0
132.5°	0.6	1.2	1.2	0.6	0.0
135°	0.6	1.2	1.2	0.6	0.6
137.5°	0.6	1.2	1.2	0.6	0.6
140°	0.6	1.2	1.2	0.6	0.6
142.5°	0.6	1.2	1.2	0.6	0.6
145°	0.6	1.2	1.2	0.6	0.6
147.5°	0.6	1.2	1.2	0.6	0.6
150°	0.6	1.2	1.2	0.6	0.6
152.5°	1.2	1.2	1.2	0.6	0.6
155°	1.2	1.2	1.2	0.6	0.6
157.5°	1.2	1.2	1.2	0.6	0.6
160°	1.2	1.2	1.2	0.6	0.6
162.5°	1.2	1.8	1.2	0.6	0.6
165°	1.2	1.8	1.2	0.6	0.6
167.5°	1.2	1.8	1.2	0.6	0.6
170°	1.2	1.8	1.2	0.6	0.6
172.5°	1.2	1.8	1.2	0.6	0.6
175°	1.8	1.8	1.2	0.6	0.6
177.5°	1.8	1.8	1.2	1.2	1.2
180°	1.2	1.2	1.2	1.2	1.2

(END OF REPORT)