

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: P685674

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

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685674
Test Lab: INNOVATION CENTER(G3)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8CZL-10-UNV-LVR-L840-CD-U
Description: METALUX CRUZE LINEAR 8FT LOUVER MODEL @80 CRI and 4000K
Light Source: (784) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

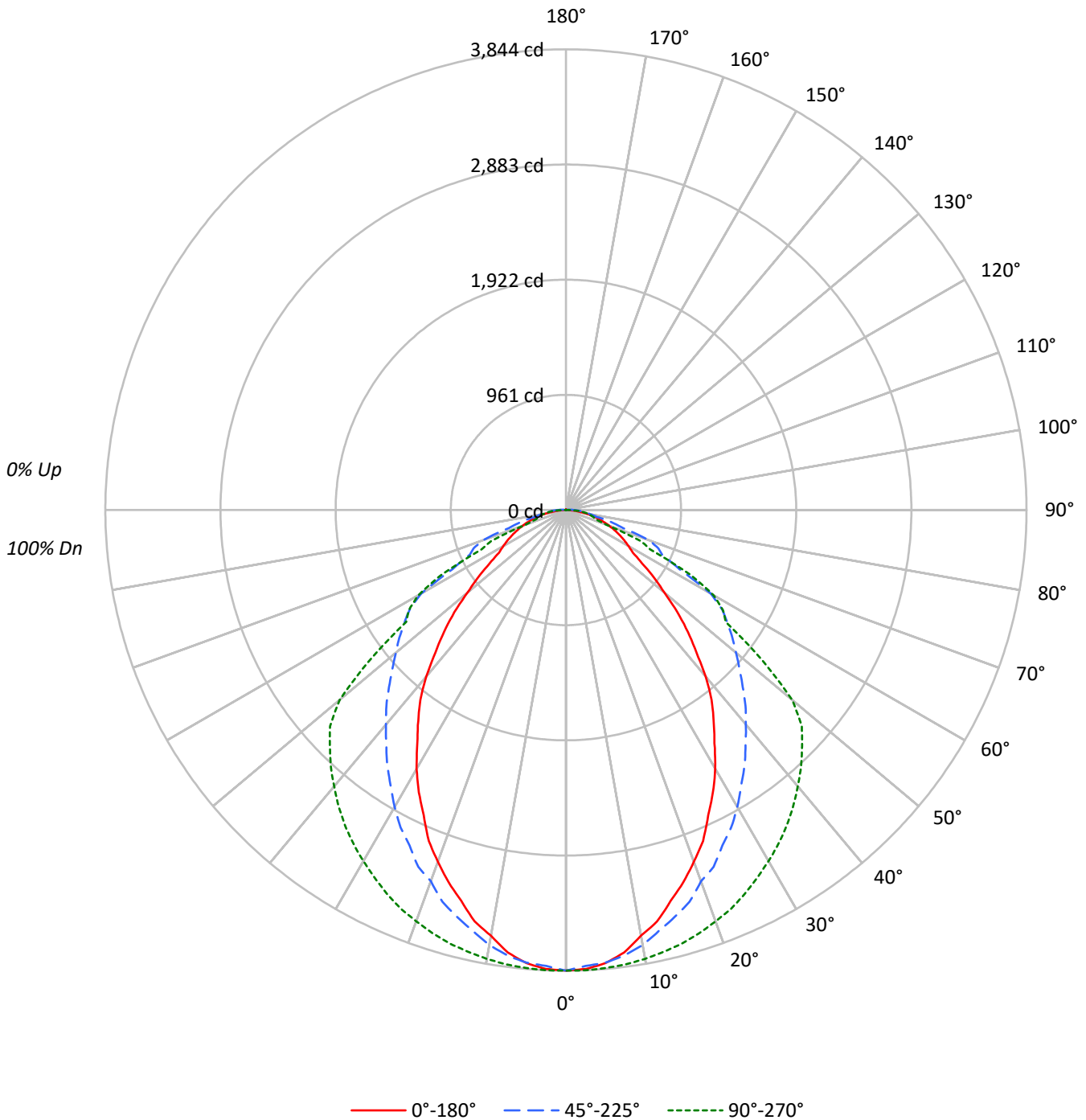
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8703.7 lumens
Efficiency: N/A
Efficacy: 138.2 lumens/watt
Spacing Criteria (0/90/45): 1.01 / 1.31 / 1.26
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 (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				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	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	88	88	88	88	85
2	101	93	87	81	98	91	85	80	88	83	78	84	80	77	81	78	75	75	75	75	73
3	92	82	75	69	90	81	74	68	78	72	67	75	70	66	73	68	65	65	65	65	63
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	60	56	56	56	56	54
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	49	49	49	49	47
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	44	44	44	42
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	39	39	39	37
8	63	50	42	36	61	49	42	36	48	41	36	47	40	36	46	40	35	35	35	35	34
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	32	32	32	30
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	34	29	29	29	29	28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6205	6205	6205
5°	6152	6143	6216
10°	5913	6043	6235
15°	5644	5873	6260
20°	5367	5665	6274
25°	5005	5502	6295
30°	4647	5332	6305
35°	4236	5124	6334
40°	3822	4924	6345
45°	3287	4766	6362
50°	2687	4654	6195
55°	2188	4636	4582
60°	1950	4506	4597
65°	1886	3382	2964
70°	1812	3466	1685
75°	1746	2442	1504
80°	1593	1987	1793
85°	1426	2477	2234



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	360.0	4.1
10°-20°	998.0	11.5
20°-30°	1443.8	16.6
30°-40°	1647.9	18.9
40°-50°	1619.2	18.6
50°-60°	1291.5	14.8
60°-70°	813.5	9.3
70°-80°	360.4	4.1
80°-90°	138.2	1.6
90°-100°	27.4	0.3
100°-110°	1.8	0.0
110°-120°	0.2	0.0
120°-130°	0.3	0.0
130°-140°	0.4	0.0
140°-150°	0.4	0.0
150°-160°	0.3	0.0
160°-170°	0.3	0.0
170°-180°	0.1	0.0
0°-30°	2801.7	32.2
0°-40°	4449.6	51.1
0°-60°	7360.4	84.6
0°-90°	8672.5	99.6
90°-120°	29.5	0.3
90°-150°	30.5	0.4
90°-180°	31.0	0.4
0°-180°	8703.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3843	3843	3843	3843	3843	
5°	3796	3804	3790	3822	3836	356
15°	3376	3410	3514	3678	3745	951
25°	2810	2900	3088	3371	3534	1295
35°	2149	2279	2599	2983	3214	1344
45°	1440	1649	2087	2555	2786	1106
55°	777	1052	1647	1776	1628	715
65°	494	672	885	943	776	489
75°	280	324	392	297	241	293
85°	77	94	134	172	121	81
90°	1	32	70	103	20	4
95°	1	5	29	50	7	0
105°	1	1	1	2	0	1
115°	1	1	0	0	0	1
125°	1	1	0	0	0	1
135°	1	1	1	0	0	1
145°	1	1	1	0	0	1
155°	1	1	1	0	0	1
165°	2	2	1	1	0	1
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°	3843.2	3843.2	3843.2	3843.2	3843.2
2.5°	3833.1	3830.7	3807.4	3840.3	3843.8
5°	3795.5	3803.9	3790.1	3821.8	3835.5
7.5°	3723.3	3732.2	3748.3	3806.2	3823.0
10°	3606.3	3629.0	3685.7	3766.8	3802.7
12.5°	3516.8	3544.8	3595.5	3733.4	3774.6
15°	3376.5	3409.9	3513.8	3678.5	3744.8
17.5°	3257.1	3318.0	3428.4	3609.3	3701.8
20°	3123.4	3172.4	3297.1	3541.2	3651.7
22.5°	2989.7	3051.8	3221.9	3450.5	3600.9
25°	2809.5	2900.2	3088.2	3371.1	3533.5
27.5°	2656.7	2771.3	2987.3	3277.4	3458.3
30°	2492.5	2581.5	2860.2	3181.9	3381.9
32.5°	2307.5	2447.2	2722.9	3072.7	3301.9
35°	2149.3	2279.4	2599.4	2982.6	3213.5
37.5°	1996.5	2118.9	2462.7	2880.5	3115.7
40°	1813.3	1974.4	2336.2	2764.1	3010.6
42.5°	1610.4	1807.9	2218.6	2654.3	2903.8
45°	1439.7	1649.2	2087.3	2554.6	2786.2
47.5°	1262.4	1483.2	1964.3	2433.4	2669.8
50°	1069.6	1338.2	1852.7	2321.2	2466.3
52.5°	928.7	1187.2	1752.4	2118.3	2078.9
55°	777.1	1052.3	1646.8	1775.7	1627.7
57.5°	661.9	930.5	1547.7	1394.3	1553.7
60°	604.0	833.2	1395.5	1327.4	1423.5
62.5°	549.7	747.9	1067.2	1245.1	1171.1
65°	493.6	672.1	885.2	943.1	775.9
67.5°	439.3	606.4	834.4	704.3	675.7
70°	383.8	555.7	734.2	600.5	356.9
72.5°	331.3	497.2	502.0	332.5	265.0
75°	279.9	323.5	391.5	296.6	241.1
77.5°	223.8	277.5	262.0	265.6	218.5
80°	171.3	191.0	213.7	237.6	192.8
82.5°	121.2	142.1	173.1	207.7	158.2
85°	77.0	93.7	133.7	172.5	120.6
87.5°	30.4	59.1	99.7	139.1	71.0
90°	0.6	32.2	70.4	102.7	19.7
92.5°	0.6	14.9	47.2	75.2	10.1
95°	0.6	4.8	29.2	50.1	6.6
97.5°	0.6	1.8	15.5	31.0	3.6
100°	0.6	0.6	6.6	16.7	1.8
102.5°	0.6	0.6	2.4	6.6	0.6
105°	0.6	0.6	0.6	1.8	0.0
107.5°	0.6	0.6	0.0	0.0	0.0
110°	0.6	0.6	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

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

(END OF REPORT)