

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: P685678

Luminaire Tested: **8CZL-32-UNV-LVR-L840-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685678
Test Lab: INNOVATION CENTER(G3)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8CZL-32-UNV-LVR-L840-CD-U
Description: METALUX CRUZE LINEAR 8FT LOUVER MODEL @80 CRI and 4000K
Light Source: (1176) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

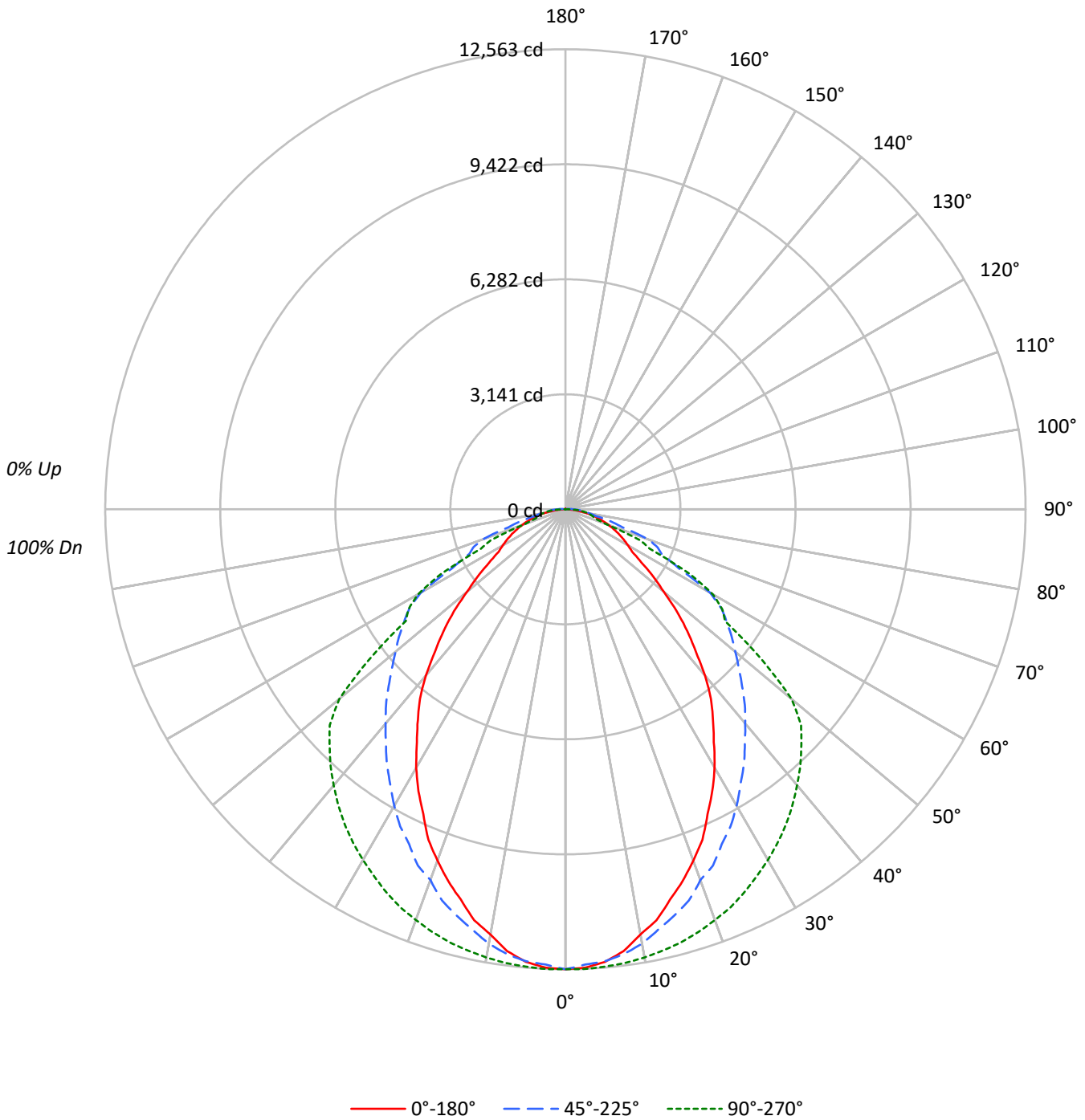
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28447.6 lumens
Efficiency: N/A
Efficacy: 138.1 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): 206
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°	20282	20282	20282
5°	20106	20078	20318
10°	19325	19750	20377
15°	18447	19197	20459
20°	17541	18516	20507
25°	16359	17982	20574
30°	15188	17429	20608
35°	13846	16746	20703
40°	12492	16093	20740
45°	10744	15577	20794
50°	8781	15210	20248
55°	7150	15151	14975
60°	6375	14728	15024
65°	6164	11053	9689
70°	5922	11327	5507
75°	5707	7983	4916
80°	5206	6494	5859
85°	4663	8096	7301



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1176.6	4.1
10°-20°	3261.7	11.5
20°-30°	4718.9	16.6
30°-40°	5386.0	18.9
40°-50°	5292.2	18.6
50°-60°	4221.3	14.8
60°-70°	2658.9	9.3
70°-80°	1177.9	4.1
80°-90°	451.7	1.6
90°-100°	89.6	0.3
100°-110°	6.0	0.0
110°-120°	0.7	0.0
120°-130°	0.9	0.0
130°-140°	1.4	0.0
140°-150°	1.2	0.0
150°-160°	1.0	0.0
160°-170°	1.0	0.0
170°-180°	0.4	0.0
0°-30°	9157.3	32.2
0°-40°	14543.3	51.1
0°-60°	24056.8	84.6
0°-90°	28345.4	99.6
90°-120°	96.3	0.3
90°-150°	99.8	0.4
90°-180°	102.0	0.4
0°-180°	28447.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	12561	12561	12561	12561	12561	
5°	12405	12433	12388	12491	12536	1165
15°	11036	11145	11484	12023	12240	3107
25°	9183	9479	10094	11018	11549	4232
35°	7025	7450	8496	9748	10503	4391
45°	4705	5390	6822	8350	9106	3616
55°	2540	3439	5382	5804	5320	2335
65°	1613	2197	2893	3082	2536	1599
75°	915	1057	1280	970	788	959
85°	252	306	437	564	394	266
90°	2	105	230	336	64	14
95°	2	16	96	164	22	2
105°	2	2	2	6	0	2
115°	2	2	0	0	0	2
125°	2	4	0	0	0	2
135°	2	4	2	0	0	2
145°	4	4	2	0	0	2
155°	4	4	2	0	0	2
165°	6	6	4	2	0	2
175°	6	6	4	2	2	1
180°	4	4	4	4	4	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	12561.4	12561.4	12561.4	12561.4	12561.4
2.5°	12528.2	12520.4	12444.3	12551.6	12563.3
5°	12405.3	12432.6	12387.8	12491.2	12536.0
7.5°	12169.3	12198.5	12251.2	12440.4	12495.1
10°	11786.9	11861.0	12046.4	12311.7	12428.7
12.5°	11494.3	11586.0	11751.8	12202.4	12337.0
15°	11035.8	11145.1	11484.5	12023.0	12239.5
17.5°	10645.7	10844.7	11205.6	11796.7	12099.0
20°	10208.7	10368.7	10776.4	11574.3	11935.2
22.5°	9771.7	9974.6	10530.6	11277.7	11769.4
25°	9182.6	9479.1	10093.6	11018.3	11548.9
27.5°	8683.1	9057.7	9763.9	10712.0	11303.1
30°	8146.7	8437.3	9348.4	10399.9	11053.4
32.5°	7541.9	7998.4	8899.7	10042.9	10792.0
35°	7024.9	7450.2	8495.9	9748.3	10503.3
37.5°	6525.5	6925.4	8049.1	9414.7	10183.3
40°	5926.6	6453.3	7635.5	9034.3	9840.0
42.5°	5263.3	5909.1	7251.2	8675.3	9490.8
45°	4705.4	5390.1	6822.1	8349.6	9106.5
47.5°	4126.0	4847.8	6420.2	7953.5	8726.1
50°	3495.9	4373.8	6055.4	7586.8	8060.8
52.5°	3035.5	3880.2	5727.6	6923.5	6794.7
55°	2540.0	3439.3	5382.3	5803.7	5319.9
57.5°	2163.5	3041.3	5058.5	4557.1	5078.0
60°	1974.2	2723.4	4561.0	4338.6	4652.7
62.5°	1796.7	2444.4	3488.1	4069.4	3827.5
65°	1613.3	2196.6	2893.1	3082.3	2536.1
67.5°	1435.8	1982.0	2727.3	2302.0	2208.3
70°	1254.4	1816.2	2399.5	1962.5	1166.6
72.5°	1082.7	1625.0	1640.6	1086.6	866.2
75°	914.9	1057.3	1279.7	969.6	788.1
77.5°	731.6	907.1	856.4	868.1	714.0
80°	559.9	624.3	698.4	776.4	630.1
82.5°	396.0	464.3	565.7	678.9	517.0
85°	251.7	306.3	437.0	563.8	394.1
87.5°	99.5	193.1	325.8	454.5	232.1
90°	2.0	105.3	230.2	335.5	64.4
92.5°	2.0	48.8	154.1	245.8	33.2
95°	2.0	15.6	95.6	163.9	21.5
97.5°	2.0	5.9	50.7	101.4	11.7
100°	2.0	2.0	21.5	54.6	5.9
102.5°	2.0	2.0	7.8	21.5	2.0
105°	2.0	2.0	2.0	5.9	0.0
107.5°	2.0	2.0	0.0	0.0	0.0
110°	2.0	2.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	2.0	2.0	0.0	0.0	0.0
115°	2.0	2.0	0.0	0.0	0.0
117.5°	2.0	2.0	0.0	0.0	0.0
120°	2.0	2.0	0.0	0.0	0.0
122.5°	2.0	2.0	0.0	0.0	0.0
125°	2.0	3.9	0.0	0.0	0.0
127.5°	2.0	2.0	0.0	0.0	0.0
130°	2.0	3.9	2.0	0.0	0.0
132.5°	2.0	3.9	2.0	0.0	0.0
135°	2.0	3.9	2.0	0.0	0.0
137.5°	2.0	3.9	2.0	0.0	0.0
140°	3.9	3.9	2.0	0.0	0.0
142.5°	3.9	3.9	2.0	0.0	0.0
145°	3.9	3.9	2.0	0.0	0.0
147.5°	3.9	3.9	2.0	0.0	0.0
150°	3.9	3.9	2.0	0.0	0.0
152.5°	3.9	3.9	2.0	0.0	0.0
155°	3.9	3.9	2.0	0.0	0.0
157.5°	3.9	5.9	2.0	0.0	0.0
160°	5.9	5.9	2.0	0.0	0.0
162.5°	5.9	5.9	3.9	2.0	0.0
165°	5.9	5.9	3.9	2.0	0.0
167.5°	5.9	5.9	3.9	2.0	0.0
170°	5.9	5.9	3.9	2.0	2.0
172.5°	5.9	5.9	3.9	2.0	2.0
175°	5.9	5.9	3.9	2.0	2.0
177.5°	5.9	5.9	3.9	2.0	2.0
180°	3.9	3.9	3.9	3.9	3.9

(END OF REPORT)