

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: P685756

Luminaire Tested: **8CZL-18-UNV-N-LVR-L935-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685756
Test Lab: INNOVATION CENTER(G3)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8CZL-18-UNV-N-LVR-L935-CD-U
Description: METALUX CRUZE LINEAR 8FT LOUVER MODEL WITH NARROW LENS @90 CRI and 3500K
Light Source: (1176) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

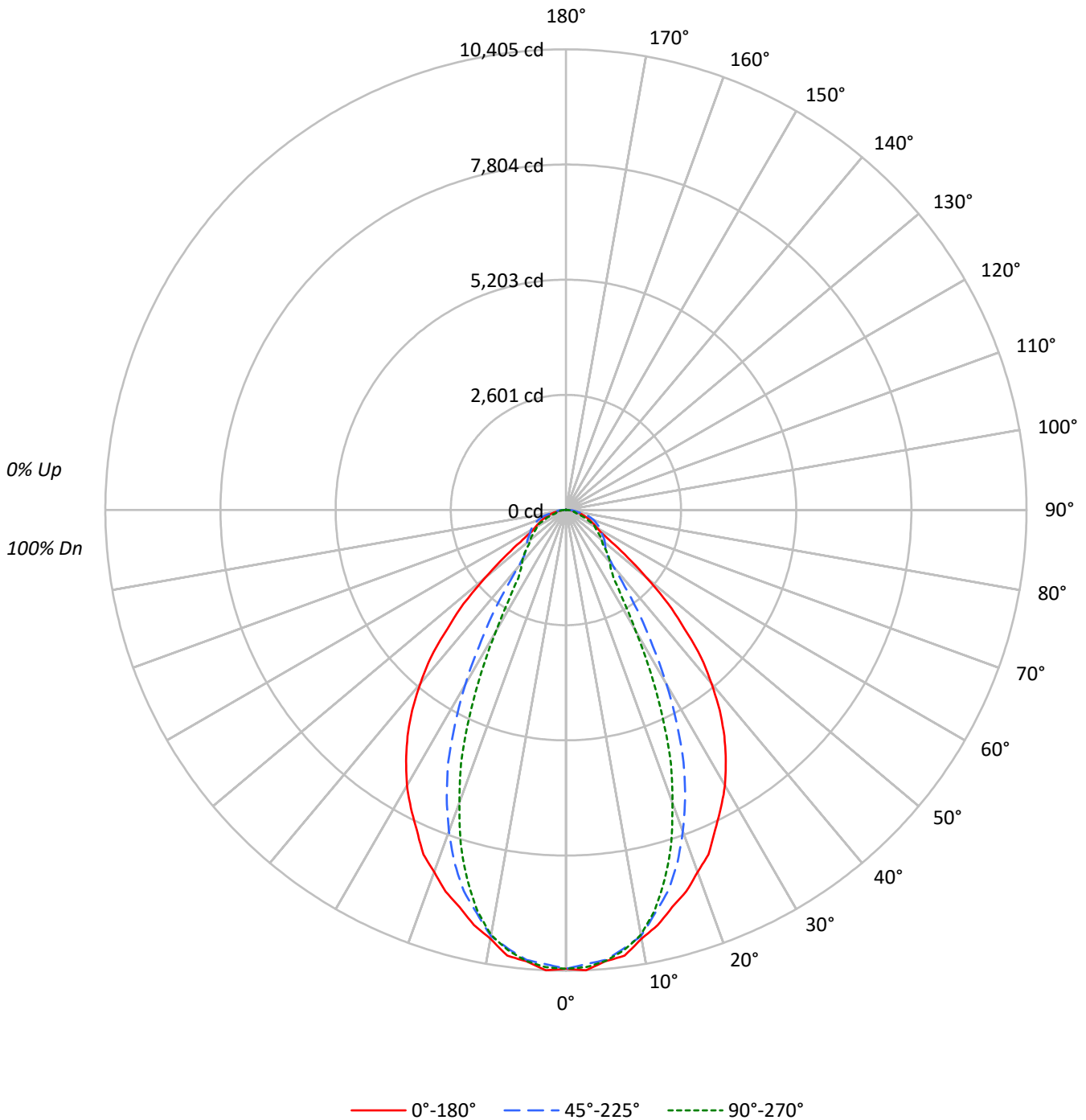
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12266.7 lumens
Efficiency: N/A
Efficacy: 112.5 lumens/watt
Spacing Criteria (0/90/45): 1.06 / 0.8 / 0.85
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 (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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	90	90	90	88
2	103	97	92	87	101	95	90	86	92	88	84	88	85	82	86	83	80	80	80	80	78
3	97	88	82	77	94	87	81	76	84	79	75	81	77	73	79	75	72	72	72	72	70
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	65	65	65	63
5	85	74	67	62	83	73	66	61	71	65	61	69	64	60	68	63	59	59	59	59	58
6	80	69	61	56	78	68	61	56	66	60	55	65	59	55	63	58	55	55	55	55	53
7	75	64	57	51	73	63	56	51	62	55	51	60	55	51	59	54	50	50	50	50	49
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	47	47	47	47	45
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	43	43	43	43	42
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	41	41	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16728	16728	16728
5°	16580	16533	16576
10°	16113	16013	15974
15°	15515	14896	14423
20°	14944	13269	12079
25°	14201	11205	9211
30°	13395	8476	5885
35°	12295	5746	3697
40°	10783	3500	3243
45°	8639	2916	2906
50°	5973	2882	2624
55°	3519	2856	2471
60°	2622	2968	2441
65°	2482	2988	2146
70°	2387	3187	1620
75°	2251	3198	1386
80°	2089	2653	1567
85°	1854	3220	1936



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	962.4	7.8
10°-20°	2492.0	20.3
20°-30°	2911.2	23.7
30°-40°	2159.8	17.6
40°-50°	1431.8	11.7
50°-60°	949.6	7.7
60°-70°	708.5	5.8
70°-80°	418.2	3.4
80°-90°	176.1	1.4
90°-100°	38.0	0.3
100°-110°	5.1	0.0
110°-120°	2.6	0.0
120°-130°	2.4	0.0
130°-140°	2.3	0.0
140°-150°	2.4	0.0
150°-160°	2.1	0.0
160°-170°	1.5	0.0
170°-180°	0.6	0.0
0°-30°	6365.6	51.9
0°-40°	8525.4	69.5
0°-60°	10906.8	88.9
0°-90°	12209.6	99.5
90°-120°	45.8	0.4
90°-150°	52.9	0.4
90°-180°	57.0	0.5
0°-180°	12266.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	10361	10361	10361	10361	10361	
5°	10230	10221	10201	10238	10227	968
15°	9282	9171	8911	8758	8629	2618
25°	7971	7398	6289	5395	5170	3672
35°	6238	4622	2915	1971	1876	3872
45°	3783	2232	1277	1326	1273	2912
55°	1250	1098	1015	980	878	1230
65°	650	726	782	765	562	648
75°	361	404	513	372	222	381
85°	100	122	174	231	104	108
90°	2	37	87	149	31	7
95°	1	6	34	75	16	1
105°	1	2	4	6	5	1
115°	1	2	3	4	4	1
125°	2	2	3	4	4	1
135°	2	3	3	4	4	1
145°	3	4	4	4	4	2
155°	4	4	4	5	5	2
165°	4	5	5	6	6	1
175°	4	5	6	7	8	0
180°	6	6	6	6	6	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	10360.6	10360.6	10360.6	10360.6	10360.6
2.5°	10405.3	10349.2	10268.4	10341.3	10335.1
5°	10229.8	10221.0	10200.8	10237.7	10227.1
7.5°	10150.8	10103.4	9991.0	10077.9	10028.8
10°	9827.8	9772.5	9767.2	9749.6	9743.5
12.5°	9598.7	9531.9	9318.6	9307.2	9259.8
15°	9281.8	9171.2	8911.3	8757.7	8628.7
17.5°	9036.0	8795.5	8361.8	8075.7	7909.8
20°	8697.2	8432.1	7722.8	7223.3	7030.2
22.5°	8418.0	7948.4	7036.4	6329.8	6197.2
25°	7971.2	7398.0	6289.4	5394.9	5170.2
27.5°	7583.2	6792.4	5408.1	4426.7	4151.1
30°	7184.7	6113.8	4546.1	3476.9	3156.5
32.5°	6720.4	5430.0	3658.6	2608.8	2377.1
35°	6237.6	4621.6	2915.1	1970.6	1875.8
37.5°	5705.6	3894.8	2191.0	1645.9	1661.7
40°	5115.8	3261.0	1660.8	1508.9	1538.8
42.5°	4527.6	2727.3	1381.6	1419.4	1428.2
45°	3783.3	2232.2	1277.2	1325.5	1272.8
47.5°	3132.8	1824.1	1203.5	1198.2	1123.6
50°	2377.9	1487.0	1147.3	1084.1	1044.6
52.5°	1760.8	1254.4	1093.7	1024.4	984.0
55°	1250.0	1098.1	1014.7	979.6	877.8
57.5°	939.2	987.5	954.2	875.2	804.1
60°	812.0	890.1	919.0	825.1	755.8
62.5°	733.0	806.7	862.0	795.3	691.7
65°	649.6	725.9	782.1	764.6	561.8
67.5°	576.7	661.9	731.2	655.7	459.1
70°	505.6	584.6	675.0	556.5	343.2
72.5°	429.2	488.9	597.8	432.8	250.2
75°	360.8	403.8	512.6	372.2	222.1
77.5°	288.8	324.8	351.1	338.8	195.7
80°	224.7	260.7	285.3	308.1	168.5
82.5°	163.3	187.0	226.5	273.0	140.4
85°	100.1	122.0	173.8	230.9	104.5
87.5°	43.0	74.6	127.3	191.4	68.5
90°	1.8	36.9	86.9	149.2	30.7
92.5°	0.9	15.8	56.2	109.7	20.2
95°	0.9	6.1	34.2	74.6	15.8
97.5°	0.9	2.6	17.6	48.3	11.4
100°	0.9	1.8	9.7	28.1	7.9
102.5°	0.9	1.8	4.4	14.0	6.1
105°	0.9	1.8	3.5	6.1	5.3
107.5°	0.9	1.8	2.6	4.4	4.4
110°	0.9	1.8	2.6	4.4	4.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.9	1.8	2.6	4.4	4.4
115°	0.9	1.8	2.6	3.5	3.5
117.5°	0.9	1.8	2.6	3.5	3.5
120°	0.9	1.8	2.6	3.5	3.5
122.5°	0.9	1.8	2.6	3.5	3.5
125°	1.8	1.8	2.6	3.5	3.5
127.5°	1.8	2.6	2.6	3.5	3.5
130°	1.8	2.6	2.6	3.5	3.5
132.5°	1.8	2.6	2.6	3.5	3.5
135°	1.8	2.6	2.6	3.5	3.5
137.5°	1.8	2.6	3.5	3.5	3.5
140°	2.6	3.5	3.5	3.5	3.5
142.5°	2.6	3.5	3.5	4.4	3.5
145°	2.6	3.5	3.5	4.4	4.4
147.5°	2.6	3.5	4.4	4.4	4.4
150°	2.6	3.5	4.4	5.3	5.3
152.5°	3.5	3.5	4.4	5.3	5.3
155°	3.5	4.4	4.4	5.3	5.3
157.5°	3.5	4.4	4.4	5.3	6.1
160°	3.5	4.4	5.3	6.1	6.1
162.5°	3.5	4.4	5.3	6.1	6.1
165°	4.4	5.3	5.3	6.1	6.1
167.5°	4.4	5.3	6.1	6.1	7.0
170°	4.4	5.3	6.1	7.0	7.0
172.5°	4.4	5.3	6.1	7.0	7.0
175°	4.4	5.3	6.1	7.0	7.9
177.5°	4.4	5.3	6.1	7.0	7.9
180°	6.1	6.1	6.1	6.1	6.1

(END OF REPORT)