

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: P685715

Luminaire Tested: **8CZL-14-UNV-LVR-L950-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685715
Test Lab: INNOVATION CENTER(G3)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8CZL-14-UNV-LVR-L950-CD-U
Description: METALUX CRUZE LINEAR 8FT LOUVER MODEL @90 CRI and 5000K
Light Source: (784) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

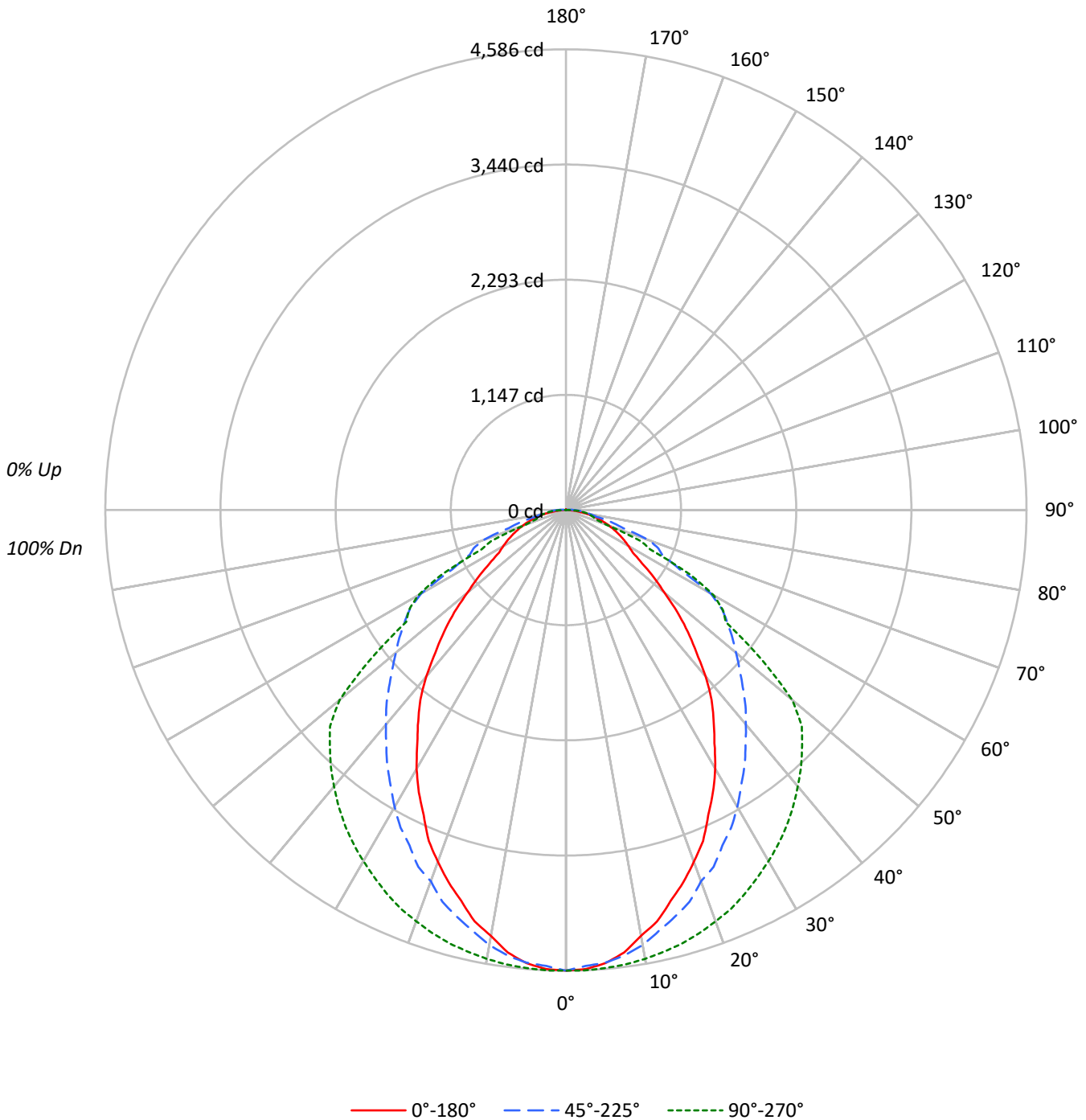
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10383.9 lumens
Efficiency: N/A
Efficacy: 116.7 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): 89
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	30	39	34	29	29	29	29	28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7403	7403	7403
5°	7339	7329	7416
10°	7054	7209	7438
15°	6734	7007	7468
20°	6403	6759	7486
25°	5971	6564	7510
30°	5544	6362	7522
35°	5054	6113	7557
40°	4560	5875	7570
45°	3922	5686	7590
50°	3205	5552	7391
55°	2610	5531	5466
60°	2327	5376	5484
65°	2250	4034	3537
70°	2162	4135	2010
75°	2084	2914	1795
80°	1901	2370	2139
85°	1702	2955	2664



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	429.5	4.1
10°-20°	1190.6	11.5
20°-30°	1722.5	16.6
30°-40°	1966.0	18.9
40°-50°	1931.8	18.6
50°-60°	1540.9	14.8
60°-70°	970.6	9.3
70°-80°	430.0	4.1
80°-90°	164.9	1.6
90°-100°	32.7	0.3
100°-110°	2.2	0.0
110°-120°	0.3	0.0
120°-130°	0.3	0.0
130°-140°	0.5	0.0
140°-150°	0.4	0.0
150°-160°	0.4	0.0
160°-170°	0.4	0.0
170°-180°	0.1	0.0
0°-30°	3342.6	32.2
0°-40°	5308.6	51.1
0°-60°	8781.3	84.6
0°-90°	10346.7	99.6
90°-120°	35.1	0.3
90°-150°	36.3	0.4
90°-180°	37.0	0.4
0°-180°	10383.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4585	4585	4585	4585	4585	
5°	4528	4538	4522	4560	4576	425
15°	4028	4068	4192	4389	4468	1134
25°	3352	3460	3684	4022	4216	1545
35°	2564	2720	3101	3558	3834	1603
45°	1718	1968	2490	3048	3324	1320
55°	927	1255	1965	2118	1942	852
65°	589	802	1056	1125	926	583
75°	334	386	467	354	288	350
85°	92	112	160	206	144	97
90°	1	38	84	122	24	5
95°	1	6	35	60	8	1
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°	4585.2	4585.2	4585.2	4585.2	4585.2
2.5°	4573.1	4570.3	4542.5	4581.6	4585.9
5°	4528.2	4538.2	4521.8	4559.6	4575.9
7.5°	4442.1	4452.8	4472.0	4541.1	4561.0
10°	4302.5	4329.6	4397.2	4494.1	4536.8
12.5°	4195.7	4229.2	4289.7	4454.2	4503.3
15°	4028.3	4068.2	4192.1	4388.7	4467.7
17.5°	3885.9	3958.6	4090.3	4306.1	4416.4
20°	3726.4	3784.8	3933.6	4224.9	4356.6
22.5°	3566.9	3641.0	3843.9	4116.6	4296.1
25°	3351.9	3460.1	3684.4	4021.9	4215.6
27.5°	3169.6	3306.3	3564.1	3910.1	4125.9
30°	2973.7	3079.8	3412.4	3796.2	4034.8
32.5°	2753.0	2919.6	3248.6	3665.9	3939.3
35°	2564.3	2719.5	3101.2	3558.4	3833.9
37.5°	2382.0	2528.0	2938.1	3436.6	3717.2
40°	2163.4	2355.6	2787.2	3297.7	3591.8
42.5°	1921.2	2156.9	2646.9	3166.7	3464.4
45°	1717.6	1967.5	2490.2	3047.8	3324.1
47.5°	1506.1	1769.6	2343.5	2903.2	3185.2
50°	1276.1	1596.5	2210.4	2769.4	2942.4
52.5°	1108.0	1416.4	2090.7	2527.2	2480.2
55°	927.2	1255.4	1964.7	2118.5	1941.9
57.5°	789.7	1110.2	1846.5	1663.5	1853.6
60°	720.6	994.1	1664.9	1583.7	1698.4
62.5°	655.8	892.3	1273.2	1485.4	1397.1
65°	588.9	801.8	1056.0	1125.1	925.7
67.5°	524.1	723.5	995.5	840.3	806.1
70°	457.9	663.0	875.9	716.4	425.8
72.5°	395.2	593.2	598.9	396.6	316.2
75°	334.0	386.0	467.1	353.9	287.7
77.5°	267.0	331.1	312.6	316.9	260.6
80°	204.4	227.9	254.9	283.4	230.0
82.5°	144.6	169.5	206.5	247.8	188.7
85°	91.9	111.8	159.5	205.8	143.8
87.5°	36.3	70.5	118.9	165.9	84.7
90°	0.7	38.5	84.0	122.5	23.5
92.5°	0.7	17.8	56.3	89.7	12.1
95°	0.7	5.7	34.9	59.8	7.8
97.5°	0.7	2.1	18.5	37.0	4.3
100°	0.7	0.7	7.8	19.9	2.1
102.5°	0.7	0.7	2.8	7.8	0.7
105°	0.7	0.7	0.7	2.1	0.0
107.5°	0.7	0.7	0.0	0.0	0.0
110°	0.7	0.7	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.7	0.7	0.0	0.0	0.0
115°	0.7	0.7	0.0	0.0	0.0
117.5°	0.7	0.7	0.0	0.0	0.0
120°	0.7	0.7	0.0	0.0	0.0
122.5°	0.7	0.7	0.0	0.0	0.0
125°	0.7	1.4	0.0	0.0	0.0
127.5°	0.7	0.7	0.0	0.0	0.0
130°	0.7	1.4	0.7	0.0	0.0
132.5°	0.7	1.4	0.7	0.0	0.0
135°	0.7	1.4	0.7	0.0	0.0
137.5°	0.7	1.4	0.7	0.0	0.0
140°	1.4	1.4	0.7	0.0	0.0
142.5°	1.4	1.4	0.7	0.0	0.0
145°	1.4	1.4	0.7	0.0	0.0
147.5°	1.4	1.4	0.7	0.0	0.0
150°	1.4	1.4	0.7	0.0	0.0
152.5°	1.4	1.4	0.7	0.0	0.0
155°	1.4	1.4	0.7	0.0	0.0
157.5°	1.4	2.1	0.7	0.0	0.0
160°	2.1	2.1	0.7	0.0	0.0
162.5°	2.1	2.1	1.4	0.7	0.0
165°	2.1	2.1	1.4	0.7	0.0
167.5°	2.1	2.1	1.4	0.7	0.0
170°	2.1	2.1	1.4	0.7	0.7
172.5°	2.1	2.1	1.4	0.7	0.7
175°	2.1	2.1	1.4	0.7	0.7
177.5°	2.1	2.1	1.4	0.7	0.7
180°	1.4	1.4	1.4	1.4	1.4

(END OF REPORT)