

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: P685887

Luminaire Tested: **8CZL-24-UNV-W-LVR-L940-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685887
Test Lab: INNOVATION CENTER(G3)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8CZL-24-UNV-W-LVR-L940-CD-U
Description: METALUX CRUZE LINEAR 8FT LOUVER MODEL WITH WIDE LENS @90 CRI and 4000K
Light Source: (1176) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

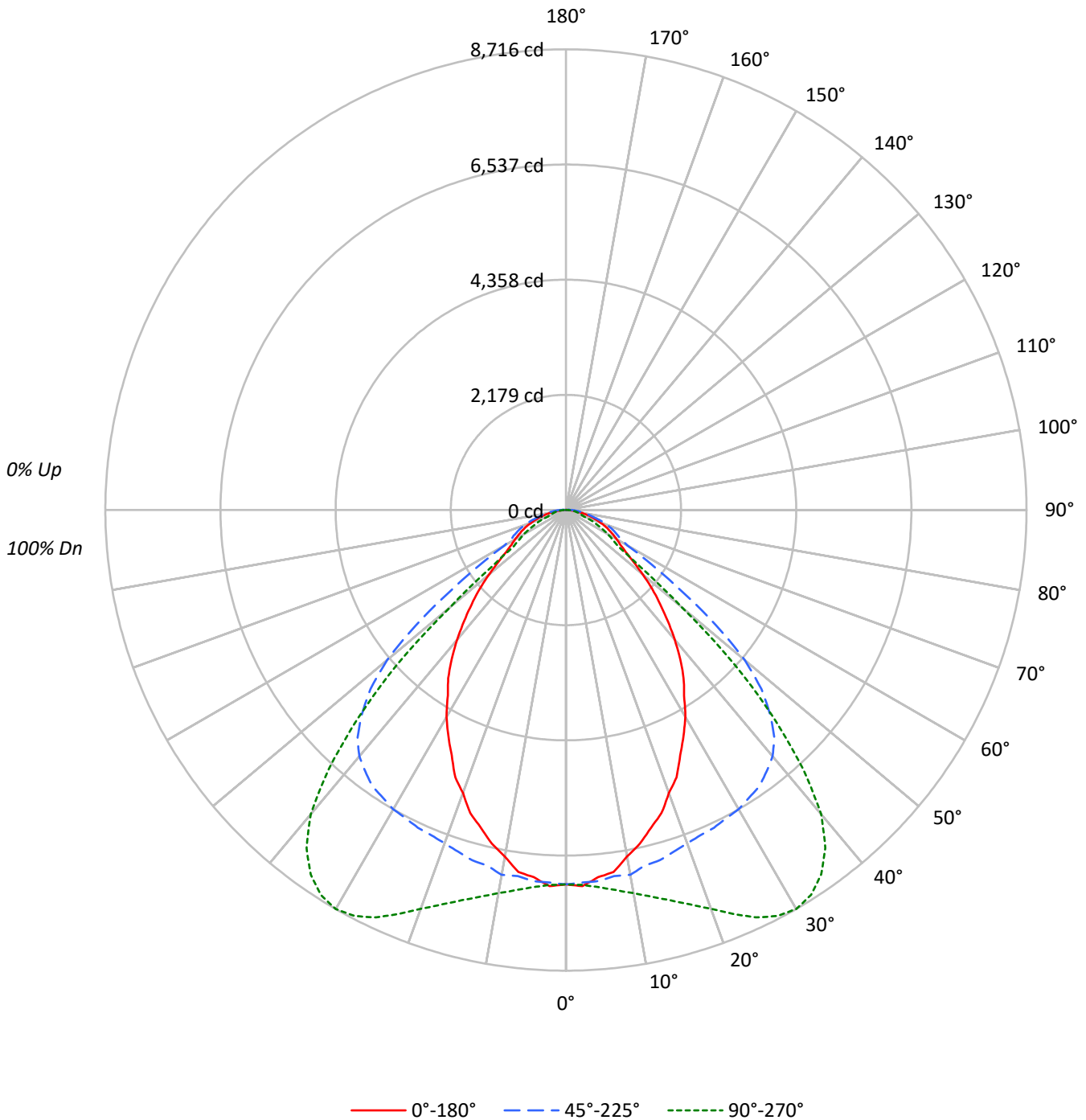
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16847.3 lumens
Efficiency: N/A
Efficacy: 109.4 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): 154
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				
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°	11433	11433	11433
5°	11303	11419	11607
10°	10912	11489	12069
15°	10399	11467	12778
20°	9788	11530	13793
25°	9114	11813	15149
30°	8425	12187	16250
35°	7655	12581	16591
40°	6749	12819	15829
45°	5753	12469	12690
50°	4768	11088	7201
55°	3884	7491	3445
60°	3585	4356	2975
65°	3457	4007	2419
70°	3262	3931	1729
75°	3036	3588	1680
80°	2768	3526	1845
85°	2123	4224	2034



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	673.3	4.0
10°-20°	1954.5	11.6
20°-30°	3101.7	18.4
30°-40°	3873.9	23.0
40°-50°	3558.1	21.1
50°-60°	1898.9	11.3
60°-70°	977.3	5.8
70°-80°	537.4	3.2
80°-90°	221.7	1.3
90°-100°	42.8	0.3
100°-110°	2.4	0.0
110°-120°	0.6	0.0
120°-130°	0.7	0.0
130°-140°	1.3	0.0
140°-150°	1.1	0.0
150°-160°	0.9	0.0
160°-170°	0.6	0.0
170°-180°	0.2	0.0
0°-30°	5729.5	34.0
0°-40°	9603.4	57.0
0°-60°	15060.3	89.4
0°-90°	16796.6	99.7
90°-120°	45.7	0.3
90°-150°	48.9	0.3
90°-180°	51.0	0.3
0°-180°	16847.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7081	7081	7081	7081	7081	
5°	6974	6991	7046	7154	7162	659
15°	6221	6424	6860	7419	7645	1749
25°	5116	5596	6631	7845	8503	2357
35°	3884	4601	6383	7776	8417	2411
45°	2519	3632	5461	5659	5557	1950
55°	1380	2473	2661	1491	1224	1274
65°	905	1186	1049	855	633	894
75°	487	540	575	511	269	517
85°	115	150	228	300	110	131
90°	0	42	112	182	24	5
95°	0	5	42	84	11	0
105°	0	1	1	1	0	0
115°	0	1	1	0	0	0
125°	0	1	1	0	0	1
135°	1	2	2	1	1	1
145°	1	2	2	1	1	1
155°	2	2	2	1	1	1
165°	2	4	2	1	1	1
175°	4	4	2	1	1	0
180°	2	2	2	2	2	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7081.1	7081.1	7081.1	7081.1	7081.1
2.5°	7122.5	7107.1	7056.3	7102.4	7098.9
5°	6973.7	6991.4	7045.7	7154.4	7161.5
7.5°	6907.5	6955.9	6986.7	7221.7	7252.4
10°	6655.9	6731.5	7007.9	7252.4	7361.1
12.5°	6466.9	6619.3	6887.4	7302.0	7491.0
15°	6221.3	6424.4	6860.3	7419.0	7644.6
17.5°	6012.2	6220.1	6777.6	7507.6	7822.9
20°	5696.8	6073.6	6710.3	7599.7	8027.3
22.5°	5471.2	5852.7	6658.3	7681.2	8269.4
25°	5115.7	5596.4	6631.1	7845.4	8503.3
27.5°	4818.0	5380.3	6570.9	7950.5	8658.0
30°	4519.2	5115.7	6536.6	7969.4	8715.9
32.5°	4158.9	4900.7	6450.4	7925.7	8633.2
35°	3883.7	4600.7	6383.1	7775.7	8417.1
37.5°	3548.3	4364.4	6235.4	7504.0	8062.7
40°	3202.2	4145.9	6081.9	7080.0	7509.9
42.5°	2852.5	3900.2	5836.2	6514.2	6645.3
45°	2519.4	3632.1	5460.6	5659.0	5557.4
47.5°	2220.6	3343.9	5016.5	4586.5	4347.9
50°	1898.1	3051.0	4414.1	3491.6	2866.7
52.5°	1607.6	2806.5	3584.9	2364.7	1783.6
55°	1379.6	2473.4	2661.2	1490.6	1223.7
57.5°	1217.8	2218.2	1920.6	1178.8	1047.7
60°	1110.3	1899.3	1348.9	1082.0	921.3
62.5°	1004.0	1502.5	1154.0	986.3	774.9
65°	904.8	1185.9	1048.9	855.2	633.1
67.5°	802.0	962.7	947.3	776.0	528.0
70°	691.0	791.4	832.7	649.6	366.2
72.5°	591.8	663.8	708.7	555.2	310.6
75°	486.6	539.8	575.2	511.4	269.3
77.5°	386.2	434.7	468.9	463.0	236.2
80°	297.7	329.5	379.2	414.6	198.4
82.5°	203.2	226.8	298.8	357.9	154.7
85°	114.6	150.0	228.0	300.0	109.8
87.5°	33.1	88.6	165.4	241.0	63.8
90°	0.0	42.5	112.2	181.9	23.6
92.5°	0.0	16.5	73.2	127.6	16.5
95°	0.0	4.7	42.5	83.9	10.6
97.5°	0.0	1.2	20.1	49.6	4.7
100°	0.0	1.2	7.1	23.6	1.2
102.5°	0.0	1.2	2.4	8.3	0.0
105°	0.0	1.2	1.2	1.2	0.0
107.5°	0.0	1.2	1.2	0.0	0.0
110°	0.0	1.2	1.2	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	1.2	1.2	0.0	0.0
115°	0.0	1.2	1.2	0.0	0.0
117.5°	0.0	1.2	1.2	0.0	0.0
120°	0.0	1.2	1.2	0.0	0.0
122.5°	0.0	1.2	1.2	0.0	0.0
125°	0.0	1.2	1.2	0.0	0.0
127.5°	1.2	1.2	1.2	1.2	0.0
130°	1.2	2.4	2.4	1.2	0.0
132.5°	1.2	2.4	2.4	1.2	0.0
135°	1.2	2.4	2.4	1.2	1.2
137.5°	1.2	2.4	2.4	1.2	1.2
140°	1.2	2.4	2.4	1.2	1.2
142.5°	1.2	2.4	2.4	1.2	1.2
145°	1.2	2.4	2.4	1.2	1.2
147.5°	1.2	2.4	2.4	1.2	1.2
150°	1.2	2.4	2.4	1.2	1.2
152.5°	2.4	2.4	2.4	1.2	1.2
155°	2.4	2.4	2.4	1.2	1.2
157.5°	2.4	2.4	2.4	1.2	1.2
160°	2.4	2.4	2.4	1.2	1.2
162.5°	2.4	3.5	2.4	1.2	1.2
165°	2.4	3.5	2.4	1.2	1.2
167.5°	2.4	3.5	2.4	1.2	1.2
170°	2.4	3.5	2.4	1.2	1.2
172.5°	2.4	3.5	2.4	1.2	1.2
175°	3.5	3.5	2.4	1.2	1.2
177.5°	3.5	3.5	2.4	2.4	2.4
180°	2.4	2.4	2.4	2.4	2.4

(END OF REPORT)