

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: P685316

Luminaire Tested: **8CZL-18-UNV-L840-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685316
Test Lab: INNOVATION CENTER(G2)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8CZL-18-UNV-L840-CD-U
Description: METALUX CRUZE LINEAR 8FT BASE MODEL @80 CRI and 4000K
Light Source: (1176) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

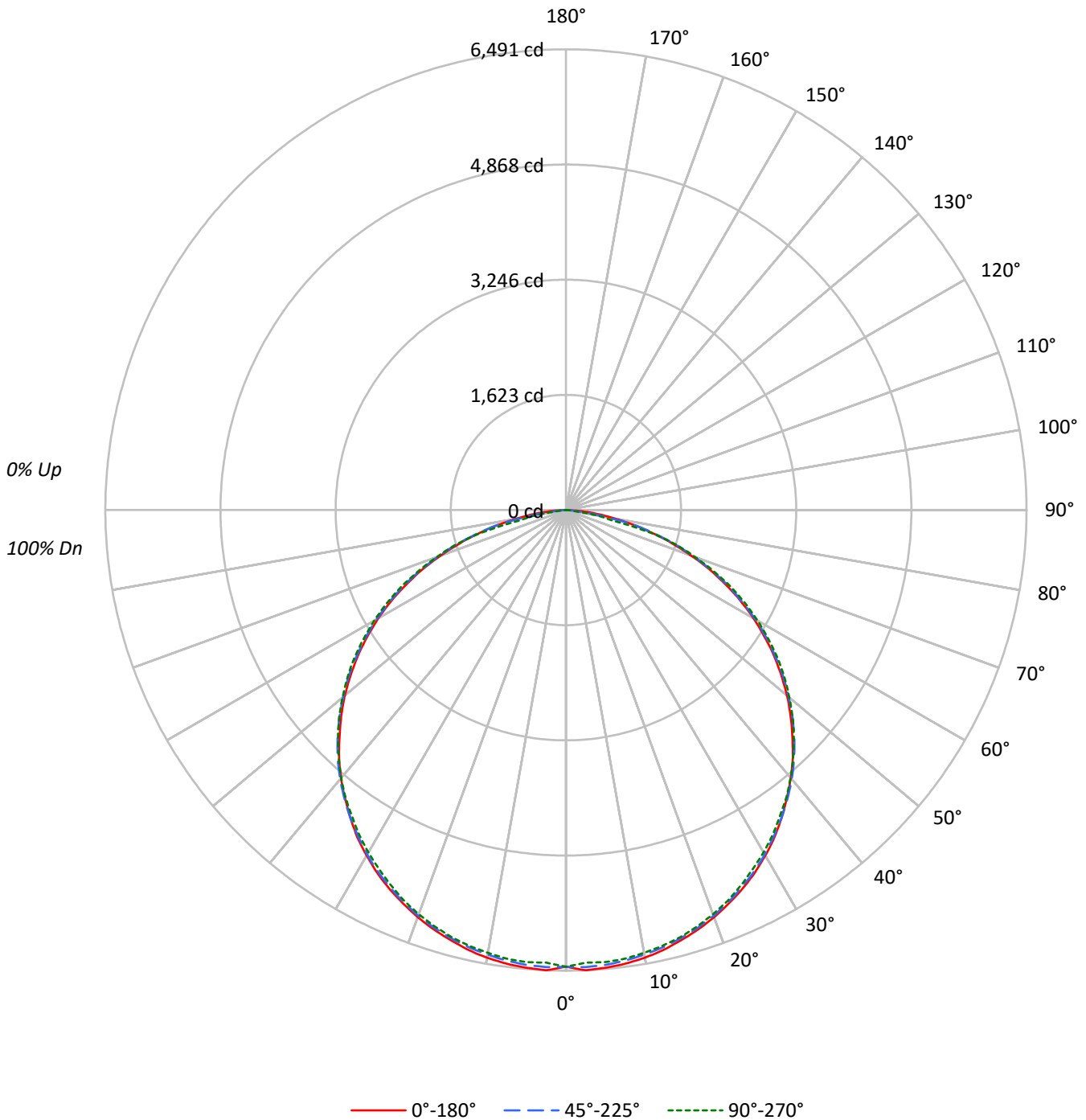
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19086.9 lumens
Efficiency: N/A
Efficacy: 175.1 lumens/watt
Spacing Criteria (0/90/45): 1.3 / 1.29 / 1.41
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 (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	109	104	100	96	106	102	98	95	98	94	92	94	91	89	90	88	86	86	86	86	84
2	99	91	84	78	96	89	82	77	85	80	75	82	77	74	79	75	72	72	72	72	70
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	61	61	61	58
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	52	52	52	50
5	76	63	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	45	45	45	43
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	39	39	39	37
7	65	51	42	36	63	50	42	36	48	41	35	47	40	35	46	40	35	35	35	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	31	31	31	29
9	56	42	34	29	55	42	34	29	41	33	28	40	33	28	39	33	28	28	28	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	25	25	25	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10389	10389	10389
5°	10492	10425	10362
10°	10501	10430	10385
15°	10486	10444	10411
20°	10489	10452	10412
25°	10491	10449	10397
30°	10479	10449	10383
35°	10440	10440	10367
40°	10391	10432	10383
45°	10304	10393	10371
50°	10216	10290	10325
55°	10080	10152	10251
60°	9860	9948	10069
65°	9493	9628	9792
70°	8878	9054	9137
75°	7989	8135	7719
80°	6673	5434	4231
85°	4978	1308	472



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	610.4	3.2
10°-20°	1759.9	9.2
20°-30°	2695.1	14.1
30°-40°	3299.6	17.3
40°-50°	3490.7	18.3
50°-60°	3218.9	16.9
60°-70°	2483.1	13.0
70°-80°	1326.2	6.9
80°-90°	202.9	1.1
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	5065.4	26.5
0°-40°	8365.0	43.8
0°-60°	15074.6	79.0
0°-90°	19086.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	19086.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6434	6434	6434	6434	6434	
5°	6474	6397	6432	6405	6393	616
15°	6273	6207	6248	6226	6228	1773
25°	5889	5828	5866	5822	5836	2714
35°	5297	5265	5297	5252	5260	3314
45°	4512	4510	4552	4520	4542	3483
55°	3581	3577	3606	3628	3642	3195
65°	2485	2485	2520	2540	2563	2453
75°	1281	1279	1304	1314	1237	1356
85°	269	192	71	29	26	330
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6434.2	6434.2	6434.2	6434.2	6434.2
2.5°	6491.1	6414.6	6446.0	6422.5	6383.3
5°	6473.5	6397.0	6432.3	6404.8	6393.1
7.5°	6446.0	6367.6	6402.9	6381.3	6377.4
10°	6404.8	6324.4	6361.7	6338.1	6334.2
12.5°	6349.9	6271.5	6312.7	6285.2	6289.1
15°	6273.4	6206.8	6247.9	6226.4	6228.3
17.5°	6197.0	6128.3	6171.5	6149.9	6151.8
20°	6104.8	6038.1	6083.2	6049.9	6059.7
22.5°	6000.8	5942.0	5981.2	5938.1	5957.7
25°	5889.1	5828.3	5865.5	5822.4	5836.1
27.5°	5761.6	5704.7	5742.0	5696.9	5702.8
30°	5620.4	5569.4	5604.7	5559.6	5569.4
32.5°	5469.4	5424.3	5451.7	5410.6	5424.3
35°	5296.8	5265.4	5296.8	5251.7	5259.6
37.5°	5116.4	5085.0	5128.2	5089.0	5102.7
40°	4930.1	4900.7	4949.7	4910.5	4926.2
42.5°	4732.0	4710.5	4759.5	4720.3	4739.9
45°	4512.4	4510.4	4551.6	4520.2	4541.8
47.5°	4294.7	4290.8	4332.0	4310.4	4335.9
50°	4067.2	4063.3	4096.7	4094.7	4110.4
52.5°	3824.1	3830.0	3861.3	3867.2	3884.9
55°	3580.9	3577.0	3606.4	3628.0	3641.7
57.5°	3316.2	3324.0	3347.5	3373.0	3382.8
60°	3053.4	3049.4	3080.8	3102.4	3118.1
62.5°	2774.9	2774.9	2800.4	2831.8	2847.5
65°	2484.7	2484.7	2520.0	2539.6	2563.1
67.5°	2188.5	2182.7	2214.0	2257.2	2253.3
70°	1880.7	1882.6	1917.9	1939.5	1935.6
72.5°	1574.7	1580.6	1617.9	1627.7	1637.5
75°	1280.6	1278.6	1304.1	1313.9	1237.4
77.5°	988.4	990.3	1006.0	737.4	647.1
80°	717.7	721.7	584.4	455.0	455.0
82.5°	474.6	466.7	300.0	176.5	129.4
85°	268.7	192.2	70.6	29.4	25.5
87.5°	109.8	35.3	19.6	13.7	11.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)