

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: P685376

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

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685376
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-L840-CD-U
Description: METALUX CRUZE LINEAR 8FT NARROW LENS MODEL @80 CRI and 4000K
Light Source: (1176) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

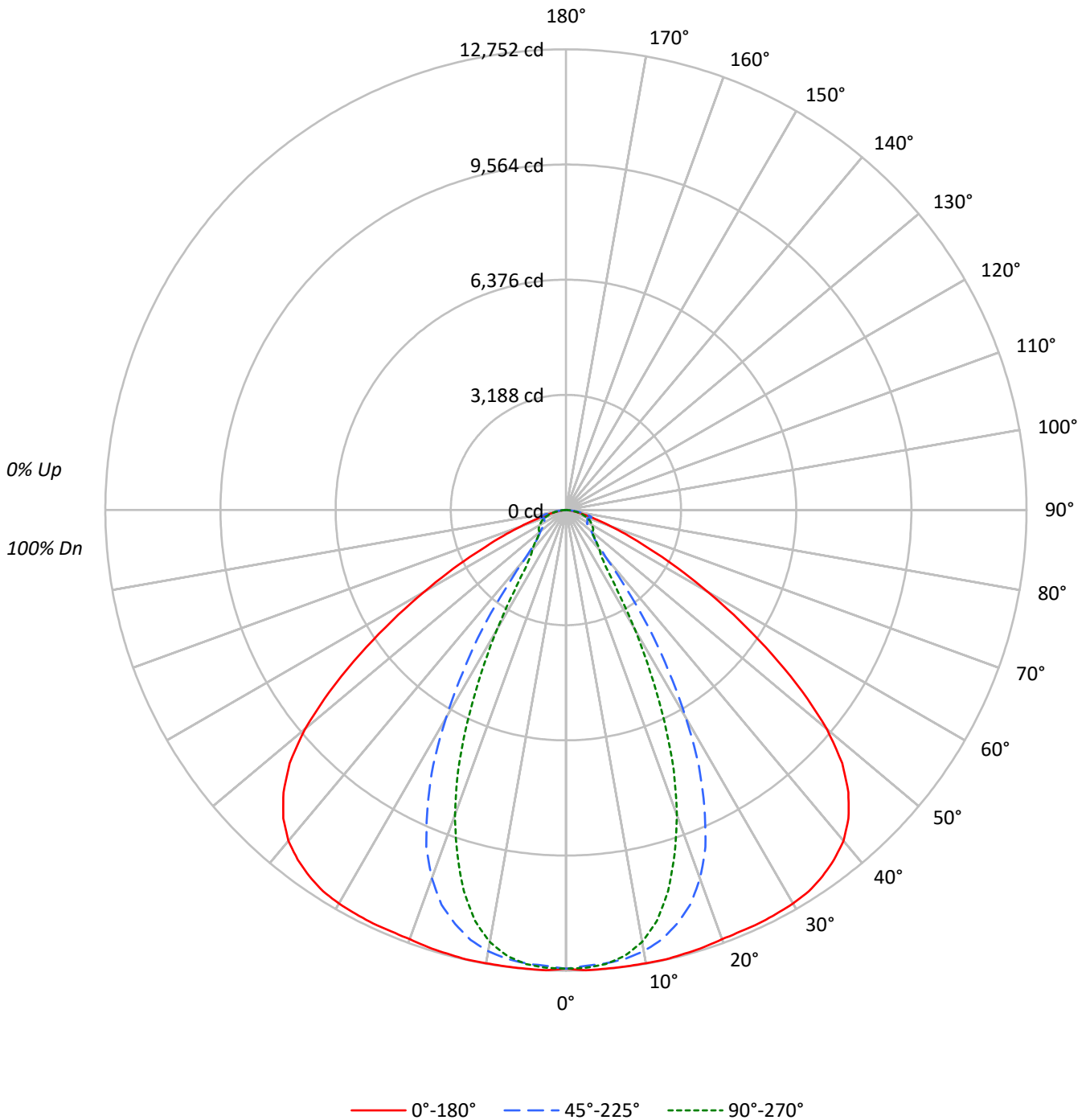
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17923.1 lumens
Efficiency: N/A
Efficacy: 164.4 lumens/watt
Spacing Criteria (0/90/45): 1.48 / 0.81 / 0.89
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

TEST NUMBER: P685376
CATALOG NUMBER: 8CZL-18-UNV-N-L840-CD-U

Luminous Intensity Polar Plot





TEST NUMBER: P685376
 CATALOG NUMBER: 8CZL-18-UNV-N-L840-CD-U

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	107	104	101	109	105	102	99	101	99	96	97	95	93	94	92	91	89
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	80	79
3	96	88	81	76	94	86	80	76	84	79	74	81	77	73	79	75	72	70
4	90	80	73	68	88	79	72	67	77	71	66	74	70	66	72	68	65	63
5	84	74	66	61	82	73	66	60	71	64	60	69	63	59	67	62	59	57
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	53	52
7	74	63	55	50	73	62	55	50	61	54	50	59	54	49	58	53	49	47
8	70	58	51	46	68	58	51	46	56	50	46	55	50	45	54	49	45	44
9	66	54	47	42	65	54	47	42	53	47	42	52	46	42	51	46	42	40
10	62	51	44	39	61	50	44	39	49	43	39	49	43	39	48	43	39	37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20497	20497	20497
5°	20657	20419	20450
10°	20887	20332	19911
15°	21251	19829	18255
20°	21719	18647	15432
25°	22500	16161	11467
30°	23441	12378	7114
35°	24405	8002	3817
40°	25195	3726	3056
45°	25250	2527	2602
50°	23673	2316	2395
55°	19572	2086	2598
60°	14649	2200	2668
65°	9876	2516	2857
70°	6268	3068	2939
75°	3782	4570	2933
80°	2308	4078	2733
85°	1491	2642	1875



TEST NUMBER: P685376
 CATALOG NUMBER: 8CZL-18-UNV-N-L840-CD-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1201.8	6.7
10°-20°	3318.1	18.5
20°-30°	4237.7	23.6
30°-40°	3437.0	19.2
40°-50°	2431.9	13.6
50°-60°	1583.9	8.8
60°-70°	972.7	5.4
70°-80°	577.7	3.2
80°-90°	162.3	0.9
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°	8757.6	48.9
0°-40°	12194.6	68.0
0°-60°	16210.4	90.4
0°-90°	17923.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	17923.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	12695	12695	12695	12695	12695	
5°	12745	12718	12598	12649	12618	1216
15°	12714	12542	11862	11246	10921	3601
25°	12630	11587	9072	7053	6437	5839
35°	12382	8406	4060	2178	1936	7744
45°	11058	4232	1107	1177	1140	8435
55°	6953	1425	741	865	923	6213
65°	2585	730	658	790	748	2686
75°	606	415	732	537	470	707
85°	80	161	143	127	101	112
90°	0	0	0	0	0	



TEST NUMBER: P685376

CATALOG NUMBER: 8CZL-18-UNV-N-L840-CD-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	12695.1	12695.1	12695.1	12695.1	12695.1
2.5°	12751.7	12726.7	12629.8	12706.0	12684.2
5°	12745.2	12718.0	12598.2	12649.4	12617.8
7.5°	12740.8	12700.5	12530.8	12515.5	12450.2
10°	12739.7	12669.0	12401.2	12254.3	12144.4
12.5°	12741.9	12616.7	12189.0	11864.7	11641.5
15°	12713.6	12541.6	11862.5	11246.4	10921.0
17.5°	12687.5	12369.7	11451.1	10490.0	10001.3
20°	12640.7	12199.9	10852.4	9562.7	8981.5
22.5°	12627.6	11943.0	10096.0	8368.7	7792.9
25°	12629.8	11587.1	9071.8	7052.8	6436.8
27.5°	12605.9	11112.6	7956.2	5780.5	5051.3
30°	12573.2	10439.9	6639.2	4416.7	3815.9
32.5°	12515.5	9496.3	5290.7	3147.7	2649.2
35°	12381.6	8405.7	4059.7	2177.9	1936.3
37.5°	12195.5	7193.2	2737.3	1634.8	1595.6
40°	11953.9	6092.9	1767.6	1429.1	1449.7
42.5°	11579.5	5142.7	1290.8	1299.6	1301.7
45°	11058.2	4231.7	1106.9	1176.6	1139.6
47.5°	10372.5	3322.9	1005.7	1025.3	1019.8
50°	9424.5	2488.1	921.9	917.5	953.4
52.5°	8252.3	1840.5	835.9	872.9	940.4
55°	6952.7	1424.7	741.2	865.3	923.0
57.5°	5706.5	1154.8	686.8	843.5	877.3
60°	4536.5	962.1	681.3	803.2	826.1
62.5°	3504.6	825.0	678.1	783.6	792.4
65°	2585.0	730.3	658.5	790.2	747.7
67.5°	1882.9	699.8	643.2	779.3	689.0
70°	1327.8	614.9	649.8	719.4	622.6
72.5°	901.2	513.7	722.7	634.5	545.3
75°	606.2	414.7	732.5	536.6	470.2
77.5°	394.0	345.0	622.6	438.6	389.6
80°	248.2	287.3	438.6	337.4	293.9
82.5°	161.1	220.9	277.5	238.4	202.4
85°	80.5	161.1	142.6	127.3	101.2
87.5°	47.9	98.0	76.2	55.5	51.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)