

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: P685444

Luminaire Tested: **8CZL-10-UNV-M-L850-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685444
Test Lab: INNOVATION CENTER(G2)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8CZL-10-UNV-M-L850-CD-U
Description: METALUX CRUZE LINEAR 8FT MEDIUM LENS MODEL @80 CRI and 5000K
Light Source: (784) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

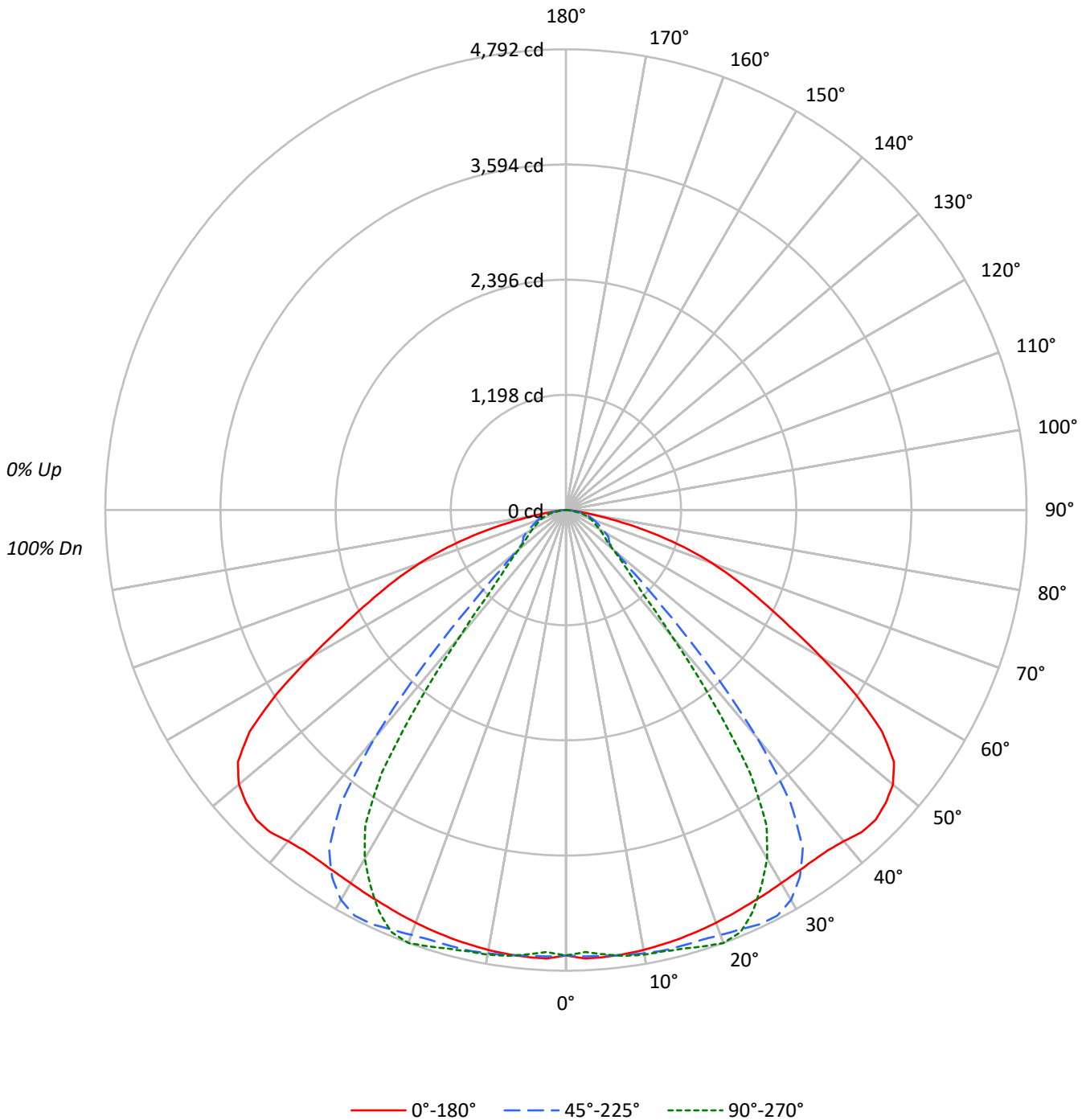
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10008.3 lumens
Efficiency: N/A
Efficacy: 158.9 lumens/watt
Spacing Criteria (0/90/45): 1.48 / 1.28 / 1.22
Luminous Opening: Rectangular (W 0.83' x L: 8' x H: 0')
CIE Type: Direct

Input Watts (W): 63
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: P685444
CATALOG NUMBER: 8CZL-10-UNV-M-L850-CD-U

Luminous Intensity Polar Plot





TEST NUMBER: P685444
 CATALOG NUMBER: 8CZL-10-UNV-M-L850-CD-U

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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	90	90	90	88
2	103	96	90	86	100	94	89	85	91	87	83	88	84	81	85	82	79	79	79	79	77
3	95	86	80	74	93	85	79	73	82	77	72	79	75	71	77	73	70	70	70	70	68
4	88	78	71	65	86	77	70	64	74	68	64	72	67	63	70	66	62	62	62	62	60
5	82	71	63	57	80	70	63	57	68	61	56	66	60	56	64	59	55	55	55	55	53
6	76	65	57	51	75	64	56	51	62	55	51	61	55	50	59	54	50	50	50	50	48
7	71	59	51	46	70	59	51	46	57	50	46	56	50	45	54	49	45	45	45	45	43
8	67	55	47	42	65	54	47	41	53	46	41	51	45	41	50	45	41	41	41	41	39
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	37	37	37	36
10	59	47	39	35	58	46	39	35	45	39	34	44	38	34	44	38	34	34	34	34	33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7480	7480	7480
5°	7563	7542	7521
10°	7618	7678	7699
15°	7709	7841	7896
20°	7850	8080	8233
25°	8052	8474	8202
30°	8355	8729	7803
35°	8794	8467	6589
40°	9477	6530	3604
45°	10405	3210	2154
50°	11157	1678	1606
55°	11299	1531	1386
60°	9909	1526	1307
65°	8623	1466	1265
70°	7652	1486	1274
75°	5870	1526	1293
80°	2987	1550	1071
85°	1178	874	306



TEST NUMBER: P685444
 CATALOG NUMBER: 8CZL-10-UNV-M-L850-CD-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	443.9	4.4
10°-20°	1322.9	13.2
20°-30°	2135.0	21.3
30°-40°	2500.5	25.0
40°-50°	1702.2	17.0
50°-60°	985.6	9.8
60°-70°	563.5	5.6
70°-80°	290.0	2.9
80°-90°	64.6	0.6
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°	3901.8	39.0
0°-40°	6402.3	64.0
0°-60°	9090.2	90.8
0°-90°	10008.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10008.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4632	4632	4632	4632	4632	
5°	4666	4621	4653	4648	4640	445
15°	4612	4605	4691	4703	4724	1306
25°	4520	4583	4756	4683	4604	2092
35°	4461	4682	4296	3623	3343	2809
45°	4557	3390	1406	947	943	3501
55°	4014	1164	544	506	492	3497
65°	2257	415	384	339	331	2263
75°	941	256	245	213	207	1000
85°	64	78	47	22	16	108
90°	0	0	0	0	0	



TEST NUMBER: P685444

CATALOG NUMBER: 8CZL-10-UNV-M-L850-CD-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	4632.5	4632.5	4632.5	4632.5	4632.5	4632.5	4632.5	4632.5	4632.5	4632.5	4632.5
2.5°	4669.8	4656.6	4630.3	4619.4	4619.4	4647.9	4652.3	4634.7	4631.4	4616.1	4601.8
5°	4666.5	4653.3	4628.1	4618.3	4621.5	4653.3	4661.0	4646.8	4651.2	4646.8	4640.2
7.5°	4659.9	4645.7	4622.6	4616.1	4625.9	4666.5	4679.7	4672.0	4681.9	4679.7	4677.5
10°	4646.8	4635.8	4613.9	4612.8	4632.5	4683.0	4699.4	4689.5	4692.8	4691.7	4696.1
12.5°	4629.2	4619.4	4600.7	4610.6	4639.1	4692.8	4703.8	4688.4	4692.8	4693.9	4701.6
15°	4611.7	4599.6	4587.5	4610.6	4640.2	4690.6	4701.6	4699.4	4712.6	4713.7	4723.5
17.5°	4589.7	4582.1	4578.8	4609.5	4632.5	4688.4	4713.7	4726.8	4744.4	4748.8	4758.6
20°	4568.9	4562.3	4570.0	4604.0	4629.2	4702.7	4737.8	4757.5	4776.2	4781.7	4791.5
22.5°	4543.7	4539.3	4560.1	4596.3	4634.7	4724.6	4764.1	4766.3	4758.6	4744.4	4751.0
25°	4519.5	4519.5	4550.3	4594.1	4651.2	4756.4	4759.7	4697.2	4641.3	4604.0	4604.0
27.5°	4499.8	4504.2	4542.6	4604.0	4683.0	4758.6	4667.6	4543.7	4461.4	4407.7	4404.4
30°	4481.2	4488.8	4542.6	4631.4	4706.0	4681.9	4505.3	4355.0	4241.0	4189.4	4185.1
32.5°	4468.0	4480.1	4562.3	4673.1	4678.6	4527.2	4296.9	4107.2	3972.3	3895.5	3882.4
35°	4461.4	4475.7	4599.6	4709.3	4567.8	4295.8	3969.0	3676.2	3462.3	3363.6	3342.8
37.5°	4465.8	4491.0	4651.2	4678.6	4290.3	3840.7	3371.3	2951.3	2657.3	2564.1	2499.4
40°	4496.5	4539.3	4691.7	4428.5	3708.0	3098.2	2476.4	2024.5	1821.6	1754.7	1709.8
42.5°	4548.1	4590.8	4585.4	3856.0	2896.4	2201.1	1595.7	1324.8	1226.1	1215.2	1194.3
45°	4556.8	4573.3	4241.0	3107.0	2106.8	1406.0	1027.6	947.6	945.4	953.0	943.2
47.5°	4510.8	4479.0	3744.2	2376.6	1450.9	909.2	773.2	786.3	792.9	787.4	779.8
50°	4441.7	4324.3	3187.0	1747.1	967.3	667.9	674.5	686.5	663.5	648.2	639.4
52.5°	4301.3	4073.2	2568.5	1238.2	669.0	570.3	622.9	587.8	554.9	546.2	545.1
55°	4014.0	3700.3	1976.3	892.7	511.1	544.0	553.8	508.9	499.0	494.6	492.4
57.5°	3576.4	3236.4	1486.0	644.9	448.6	525.3	481.5	463.9	454.0	450.7	447.5
60°	3068.6	2717.7	1107.7	473.8	435.4	472.7	436.5	420.0	409.1	404.7	404.7
62.5°	2618.9	2249.4	819.2	384.9	432.1	426.6	393.7	376.2	369.6	367.4	365.2
65°	2257.0	1809.6	591.1	356.4	403.6	383.8	352.0	340.0	335.6	331.2	331.2
67.5°	1934.6	1417.0	435.4	349.9	370.7	345.5	321.3	311.5	306.0	304.9	303.8
70°	1620.9	1044.1	331.2	342.2	352.0	314.8	291.7	279.7	273.1	269.8	269.8
72.5°	1290.8	716.2	264.3	314.8	322.4	278.6	255.5	246.8	241.3	238.0	236.9
75°	941.0	449.7	232.5	264.3	277.5	244.6	221.5	213.9	211.7	208.4	207.3
77.5°	598.8	268.7	198.5	216.1	227.0	206.2	188.6	178.8	177.7	174.4	173.3
80°	321.3	172.2	159.0	170.0	176.6	166.7	145.9	126.1	120.6	116.3	115.2
82.5°	149.2	109.7	118.4	128.3	131.6	106.4	87.7	79.0	73.5	68.0	64.7
85°	63.6	59.2	73.5	79.0	64.7	47.2	30.7	23.0	18.6	17.5	16.5
87.5°	23.0	23.0	27.4	18.6	11.0	8.8	8.8	7.7	6.6	5.5	5.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)