

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: P685475

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

Issue Date: 05/10/2023

Test Information

Test Method: LM-79-08
Report Number: P685475
Test Lab: INNOVATION CENTER(G2)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8CZL-14-UNV-M-L950-CD-U
Description: METALUX CRUZE LINEAR 8FT MEDIUM LENS MODEL @90 CRI and 5000K
Light Source: (784) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

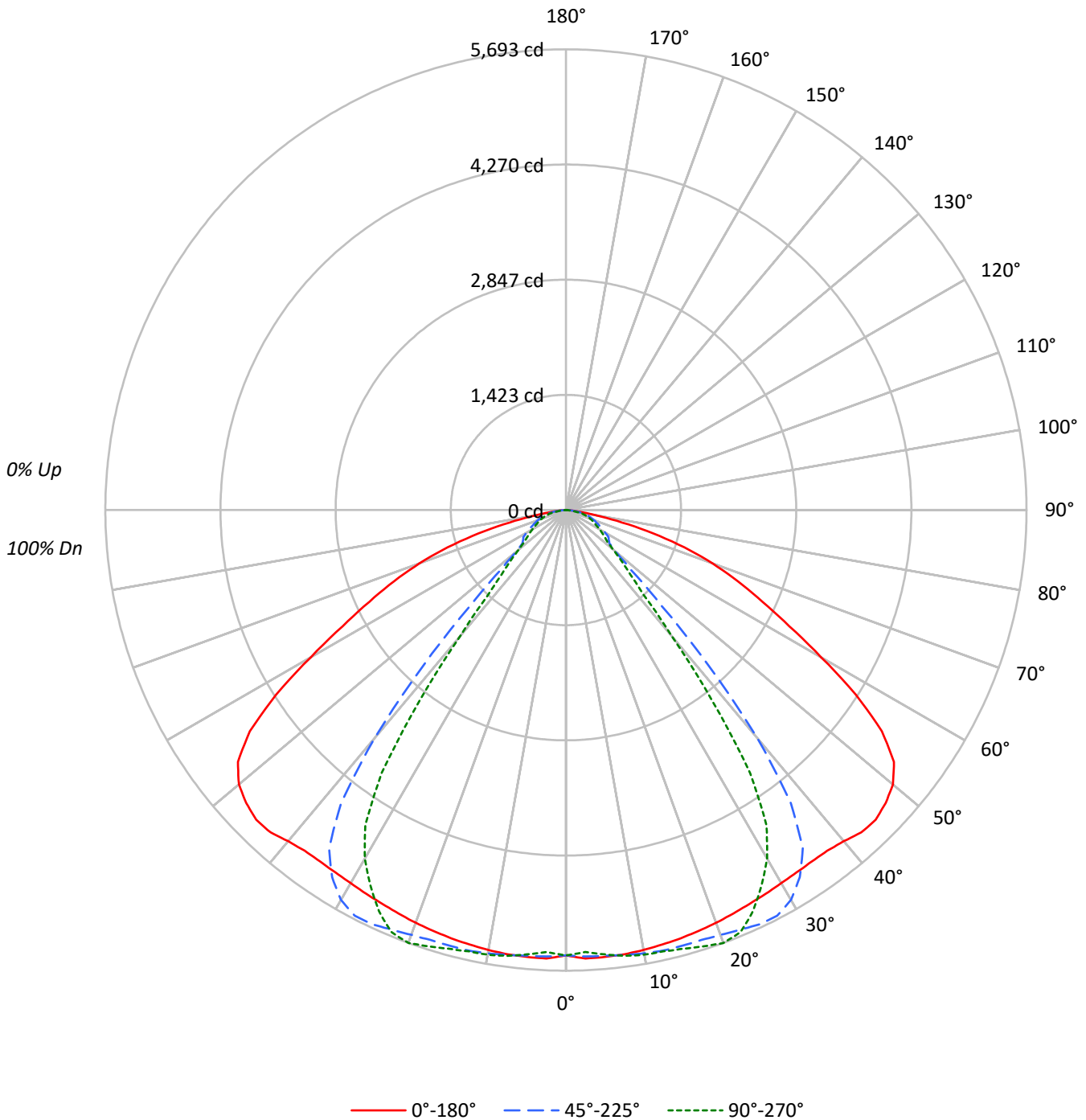
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11890.5 lumens
Efficiency: N/A
Efficacy: 133.6 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): 89
Input Voltage (V): 120
Input Current (A_{in}): 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: P685475
CATALOG NUMBER: 8CZL-14-UNV-M-L950-CD-U

Luminous Intensity Polar Plot





TEST NUMBER: P685475

CATALOG NUMBER: 8CZL-14-UNV-M-L950-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	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°	8886	8886	8886
5°	8986	8960	8935
10°	9051	9122	9147
15°	9158	9315	9381
20°	9327	9600	9781
25°	9566	10067	9744
30°	9926	10370	9270
35°	10448	10060	7828
40°	11260	7758	4281
45°	12362	3814	2559
50°	13255	1993	1908
55°	13424	1819	1647
60°	11773	1814	1553
65°	10245	1742	1503
70°	9091	1766	1513
75°	6974	1813	1536
80°	3550	1842	1272
85°	1401	1037	361



TEST NUMBER: P685475
 CATALOG NUMBER: 8CZL-14-UNV-M-L950-CD-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	527.3	4.4
10°-20°	1571.7	13.2
20°-30°	2536.6	21.3
30°-40°	2970.7	25.0
40°-50°	2022.4	17.0
50°-60°	1171.0	9.8
60°-70°	669.5	5.6
70°-80°	344.6	2.9
80°-90°	76.7	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°	4635.6	39.0
0°-40°	7606.4	64.0
0°-60°	10799.7	90.8
0°-90°	11890.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11890.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5504	5504	5504	5504	5504	
5°	5544	5490	5528	5522	5513	528
15°	5479	5471	5573	5587	5612	1551
25°	5370	5445	5651	5564	5470	2485
35°	5300	5562	5104	4304	3971	3337
45°	5414	4028	1670	1125	1121	4159
55°	4769	1382	646	602	585	4155
65°	2682	493	456	403	394	2689
75°	1118	305	291	253	246	1188
85°	76	92	56	26	20	128
90°	0	0	0	0	0	



TEST NUMBER: P685475

CATALOG NUMBER: 8CZL-14-UNV-M-L950-CD-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	5503.7	5503.7	5503.7	5503.7	5503.7	5503.7	5503.7	5503.7	5503.7	5503.7	5503.7
2.5°	5548.0	5532.4	5501.1	5488.1	5488.1	5522.0	5527.2	5506.3	5502.4	5484.2	5467.2
5°	5544.1	5528.5	5498.5	5486.8	5490.7	5528.5	5537.6	5520.7	5525.9	5520.7	5512.8
7.5°	5536.3	5519.4	5492.0	5484.2	5495.9	5544.1	5559.8	5550.6	5562.4	5559.8	5557.1
10°	5520.7	5507.6	5481.6	5480.3	5503.7	5563.7	5583.2	5571.5	5575.4	5574.1	5579.3
12.5°	5499.8	5488.1	5465.9	5477.7	5511.5	5575.4	5588.4	5570.2	5575.4	5576.7	5585.8
15°	5479.0	5464.6	5450.3	5477.7	5512.8	5572.8	5585.8	5583.2	5598.8	5600.1	5611.9
17.5°	5452.9	5443.8	5439.9	5476.4	5503.7	5570.2	5600.1	5615.8	5636.6	5641.8	5653.6
20°	5428.2	5420.3	5429.5	5469.8	5499.8	5587.1	5628.8	5652.3	5674.4	5680.9	5692.7
22.5°	5398.2	5393.0	5417.7	5460.7	5506.3	5613.2	5660.1	5662.7	5653.6	5636.6	5644.4
25°	5369.5	5369.5	5406.0	5458.1	5525.9	5651.0	5654.9	5580.6	5514.1	5469.8	5469.8
27.5°	5346.1	5351.3	5396.9	5469.8	5563.7	5653.6	5545.4	5398.2	5300.5	5236.6	5232.7
30°	5323.9	5333.0	5396.9	5502.4	5591.0	5562.4	5352.6	5174.1	5038.6	4977.3	4972.1
32.5°	5308.3	5322.6	5420.3	5551.9	5558.4	5378.6	5105.0	4879.6	4719.3	4628.1	4612.5
35°	5300.5	5317.4	5464.6	5594.9	5426.9	5103.7	4715.4	4367.5	4113.5	3996.2	3971.4
37.5°	5305.7	5335.6	5525.9	5558.4	5097.2	4563.0	4005.3	3506.3	3157.1	3046.3	2969.5
40°	5342.2	5393.0	5574.1	5261.4	4405.3	3680.9	2942.1	2405.3	2164.2	2084.7	2031.3
42.5°	5403.4	5454.2	5447.7	4581.2	3441.1	2615.1	1895.8	1574.0	1456.7	1443.7	1418.9
45°	5413.8	5433.4	5038.6	3691.3	2503.0	1670.4	1220.9	1125.8	1123.2	1132.3	1120.6
47.5°	5359.1	5321.3	4448.3	2823.5	1723.8	1080.2	918.6	934.2	942.0	935.5	926.4
50°	5277.0	5137.6	3786.4	2075.6	1149.2	793.5	801.3	815.7	788.3	770.1	759.6
52.5°	5110.2	4839.2	3051.5	1471.0	794.8	677.5	740.1	698.4	659.3	648.9	647.6
55°	4768.9	4396.2	2347.9	1060.6	607.2	646.3	658.0	604.6	592.8	587.6	585.0
57.5°	4249.0	3845.1	1765.5	766.1	532.9	624.1	572.0	551.2	539.4	535.5	531.6
60°	3645.7	3228.7	1316.0	562.9	517.3	561.6	518.6	499.0	486.0	480.8	480.8
62.5°	3111.5	2672.4	973.3	457.3	513.4	506.9	467.8	446.9	439.1	436.5	433.9
65°	2681.5	2149.9	702.3	423.5	479.5	456.0	418.3	403.9	398.7	393.5	393.5
67.5°	2298.4	1683.4	517.3	415.6	440.4	410.4	381.8	370.0	363.5	362.2	360.9
70°	1925.8	1240.4	393.5	406.5	418.3	374.0	346.6	332.3	324.4	320.5	320.5
72.5°	1533.6	850.8	314.0	374.0	383.1	331.0	303.6	293.2	286.7	282.7	281.4
75°	1117.9	534.2	276.2	314.0	329.7	290.6	263.2	254.1	251.5	247.6	246.3
77.5°	711.4	319.2	235.8	256.7	269.7	245.0	224.1	212.4	211.1	207.2	205.9
80°	381.8	204.6	188.9	202.0	209.8	198.1	173.3	149.8	143.3	138.1	136.8
82.5°	177.2	130.3	140.7	152.4	156.4	126.4	104.2	93.8	87.3	80.8	76.9
85°	75.6	70.4	87.3	93.8	76.9	56.0	36.5	27.4	22.2	20.8	19.5
87.5°	27.4	27.4	32.6	22.2	13.0	10.4	10.4	9.1	7.8	6.5	6.5
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)