

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: P685628

Luminaire Tested: **8CZL-32-UNV-FUL-L850-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685628
Test Lab: INNOVATION CENTER(G3)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8CZL-32-UNV-FUL-L850-CD-U
Description: METALUX CRUZE LINEAR 8FT FROSTED LENS MODEL WITH UPLIGHT @80 CRI and 5000K
Light Source: (1176) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

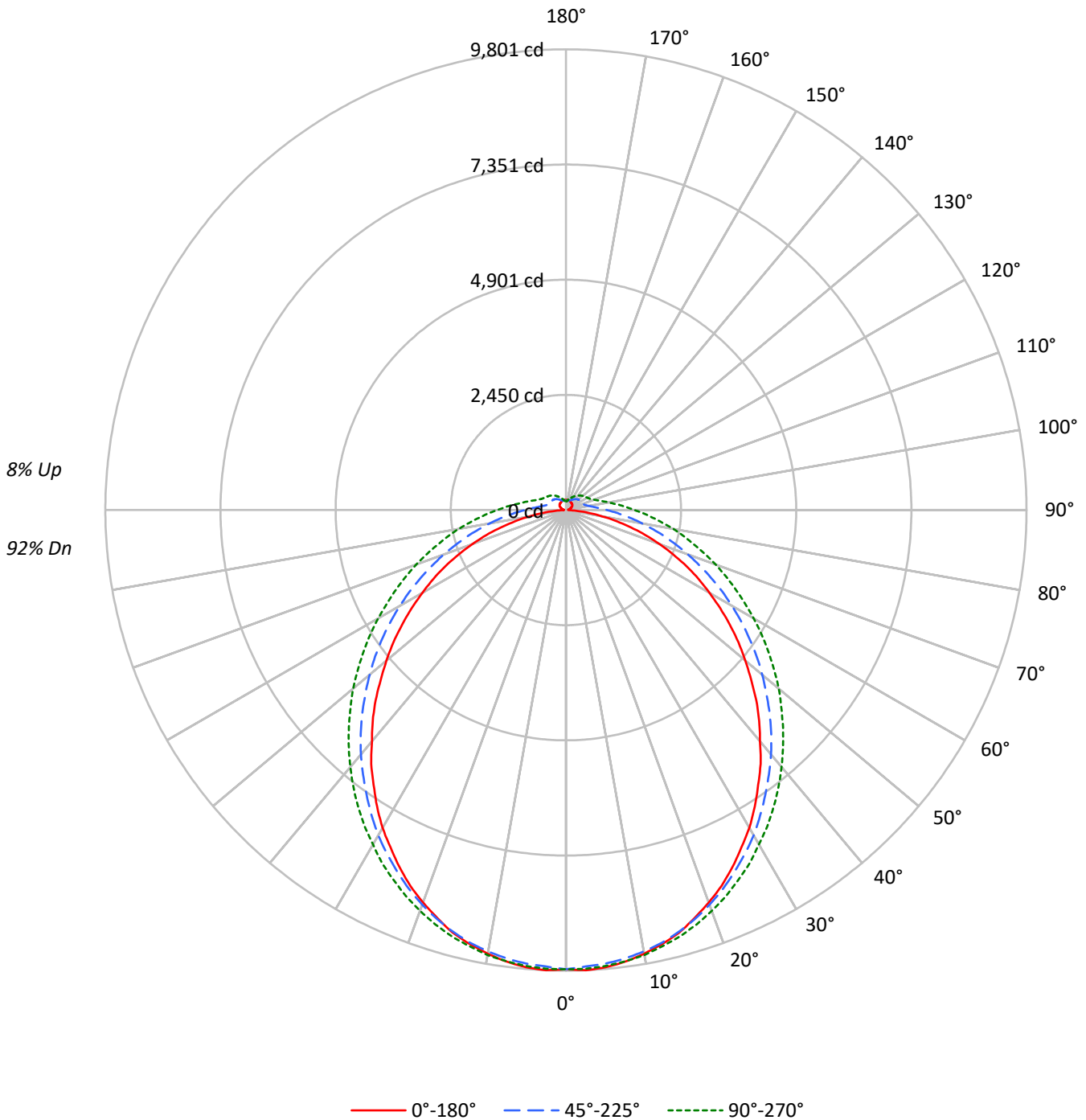
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30477.0 lumens
Efficiency: N/A
Efficacy: 147.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.25 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.83' x L: 8' x H: 0.17')
CIE Type: Direct

Input Watts (W): 206
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: P685628
CATALOG NUMBER: 8CZL-32-UNV-FUL-L850-CD-U

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	117	117	117	117	113	113	113	113	107	107	107	100	100	100	95	95	95	95	95	95	92
1	106	101	96	92	102	98	93	90	92	88	85	87	84	81	82	79	77	77	77	77	75
2	96	87	80	74	93	85	78	73	80	74	70	75	71	67	71	68	64	64	64	64	62
3	87	77	68	61	84	74	67	60	70	64	58	66	61	56	63	58	54	54	54	54	52
4	80	68	59	52	77	66	58	51	62	55	50	59	53	48	56	51	47	47	47	47	44
5	74	61	51	45	71	59	50	44	56	49	43	53	47	42	50	45	41	41	41	41	38
6	68	54	45	39	65	53	45	38	50	43	38	48	42	37	46	40	36	36	36	36	33
7	63	49	41	34	61	48	40	34	46	39	33	44	37	32	42	36	32	32	32	32	30
8	59	45	37	31	57	44	36	30	42	35	30	40	34	29	38	33	28	28	28	28	26
9	55	41	33	28	53	40	33	27	39	32	27	37	31	26	35	30	26	26	26	26	24
10	51	38	30	25	50	37	30	25	36	29	24	34	28	24	33	27	23	23	23	23	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15774	15774	15774
5°	15796	15489	15512
10°	15658	15216	15223
15°	15477	14904	14897
20°	15153	14530	14536
25°	14790	14099	14148
30°	14381	13662	13729
35°	13857	13143	13324
40°	13306	12649	12880
45°	12813	12106	12428
50°	12215	11550	11992
55°	11637	10975	11512
60°	10990	10367	11065
65°	10359	9739	10643
70°	9438	9131	10325
75°	8300	8571	10041
80°	6662	8153	10113
85°	4191	8041	10414



TEST NUMBER: P685628
 CATALOG NUMBER: 8CZL-32-UNV-FUL-L850-CD-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	924.1	3.0
10°-20°	2629.3	8.6
20°-30°	3926.0	12.9
30°-40°	4641.2	15.2
40°-50°	4729.5	15.5
50°-60°	4264.5	14.0
60°-70°	3374.3	11.1
70°-80°	2280.4	7.5
80°-90°	1275.3	4.2
90°-100°	694.0	2.3
100°-110°	455.2	1.5
110°-120°	361.0	1.2
120°-130°	307.2	1.0
130°-140°	245.7	0.8
140°-150°	175.8	0.6
150°-160°	113.3	0.4
160°-170°	61.2	0.2
170°-180°	19.1	0.1
0°-30°	7479.5	24.5
0°-40°	12120.6	39.8
0°-60°	21114.6	69.3
0°-90°	28044.6	92.0
90°-120°	1510.2	5.0
90°-150°	2238.8	7.3
90°-180°	2432.0	8.0
0°-180°	30477.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	9769	9769	9769	9769	9769	
5°	9764	9748	9687	9742	9738	926
15°	9311	9299	9290	9370	9389	2619
25°	8382	8422	8490	8649	8682	3858
35°	7133	7231	7397	7632	7707	4465
45°	5728	5842	6130	6416	6531	4411
55°	4257	4416	4768	5129	5258	3808
65°	2833	2976	3403	3822	3981	2797
75°	1434	1632	2174	2656	2811	1523
85°	280	629	1209	1679	1847	343
90°	43	347	870	1299	1459	33
95°	47	227	639	1021	1164	41
105°	80	202	417	658	756	84
115°	125	217	372	509	566	124
125°	166	225	355	458	496	148
135°	184	221	329	409	437	142
145°	192	212	276	349	368	121
155°	206	208	229	288	296	95
165°	214	210	206	216	233	61
175°	216	212	204	178	180	21
180°	200	200	200	200	200	

TEST NUMBER: P685628

CATALOG NUMBER: 8CZL-32-UNV-FUL-L850-CD-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	9769.4	9769.4	9769.4	9769.4	9769.4
2.5°	9800.8	9785.1	9720.5	9771.4	9769.4
5°	9763.6	9747.9	9687.2	9742.0	9738.1
7.5°	9691.1	9681.3	9624.5	9685.2	9683.2
10°	9585.3	9585.3	9536.3	9606.8	9612.7
12.5°	9458.0	9456.0	9430.5	9503.0	9503.0
15°	9311.0	9299.3	9289.5	9369.8	9389.4
17.5°	9101.4	9109.3	9126.9	9222.9	9242.5
20°	8885.9	8903.6	8936.9	9050.5	9076.0
22.5°	8654.8	8674.4	8727.3	8850.7	8891.8
25°	8382.5	8421.7	8490.2	8648.9	8682.2
27.5°	8088.6	8157.2	8245.4	8413.8	8470.6
30°	7806.5	7861.4	7988.7	8165.0	8214.0
32.5°	7481.4	7548.0	7696.8	7908.4	7975.0
35°	7132.7	7230.6	7397.1	7632.2	7706.6
37.5°	6807.5	6885.8	7091.5	7342.3	7430.4
40°	6423.5	6550.8	6787.9	7034.7	7136.6
42.5°	6086.6	6196.3	6462.7	6735.0	6840.8
45°	5728.1	5841.7	6129.7	6415.7	6531.2
47.5°	5344.1	5479.3	5786.8	6106.1	6213.9
50°	4983.7	5124.7	5453.8	5777.0	5912.2
52.5°	4629.1	4776.0	5116.9	5457.7	5583.1
55°	4256.9	4415.5	4768.2	5128.6	5257.9
57.5°	3892.5	4051.2	4427.3	4799.5	4938.6
60°	3526.2	3675.1	4078.6	4460.6	4613.4
62.5°	3183.3	3328.3	3743.6	4155.0	4288.2
65°	2832.7	2975.7	3402.8	3822.0	3980.7
67.5°	2470.3	2642.7	3071.7	3510.5	3679.0
70°	2113.7	2290.0	2764.1	3220.6	3389.0
72.5°	1776.8	1976.6	2454.6	2920.8	3093.2
75°	1434.0	1631.8	2174.5	2656.4	2811.1
77.5°	1110.7	1341.9	1900.2	2386.0	2568.2
80°	801.2	1063.7	1653.4	2129.4	2321.4
82.5°	527.0	826.7	1424.2	1896.3	2068.7
85°	280.1	628.8	1208.7	1678.8	1847.3
87.5°	109.7	466.2	1028.5	1481.0	1649.5
90°	43.1	346.7	869.8	1298.8	1459.4
92.5°	43.1	270.3	740.5	1151.9	1302.7
95°	47.0	227.2	638.6	1020.6	1163.6
97.5°	50.9	205.7	558.3	905.0	1032.4
100°	58.8	197.9	497.6	811.0	926.6
102.5°	68.6	197.9	448.6	724.8	834.5
105°	80.3	201.8	417.3	658.2	756.2
107.5°	90.1	205.7	395.7	603.4	691.5
110°	101.9	211.6	384.0	562.2	638.6

TEST NUMBER: P685628

CATALOG NUMBER: 8CZL-32-UNV-FUL-L850-CD-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	113.6	215.5	376.1	532.8	599.4
115°	125.4	217.4	372.2	509.3	566.1
117.5°	137.1	221.4	368.3	493.7	542.6
120°	148.9	223.3	364.4	481.9	525.0
122.5°	158.7	223.3	360.5	470.2	509.3
125°	166.5	225.3	354.6	458.4	495.6
127.5°	172.4	227.2	350.7	446.6	480.0
130°	178.3	225.3	344.8	434.9	466.2
132.5°	182.2	223.3	336.9	423.1	452.5
135°	184.1	221.4	329.1	409.4	436.9
137.5°	186.1	219.4	317.4	395.7	421.2
140°	186.1	217.4	303.6	380.0	403.6
142.5°	188.1	213.5	289.9	364.4	385.9
145°	192.0	211.6	276.2	348.7	368.3
147.5°	195.9	207.7	264.5	331.1	348.7
150°	199.8	207.7	252.7	315.4	331.1
152.5°	201.8	207.7	241.0	301.7	313.4
155°	205.7	207.7	229.2	288.0	295.8
157.5°	207.7	207.7	221.4	270.3	278.2
160°	209.6	209.6	213.5	250.7	262.5
162.5°	213.5	209.6	209.6	231.2	246.8
165°	213.5	209.6	205.7	215.5	233.1
167.5°	215.5	211.6	203.7	203.7	221.4
170°	215.5	211.6	203.7	193.9	203.7
172.5°	215.5	211.6	203.7	186.1	190.0
175°	215.5	211.6	203.7	178.3	180.2
177.5°	215.5	211.6	201.8	172.4	180.2
180°	199.8	199.8	199.8	199.8	199.8

(END OF REPORT)