

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: P685618

Luminaire Tested: **8CZL-32-UNV-FUL-L840-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685618
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-L840-CD-U
Description: METALUX CRUZE LINEAR 8FT FROSTED LENS MODEL WITH UPLIGHT @80 CRI and 4000K
Light Source: (1176) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

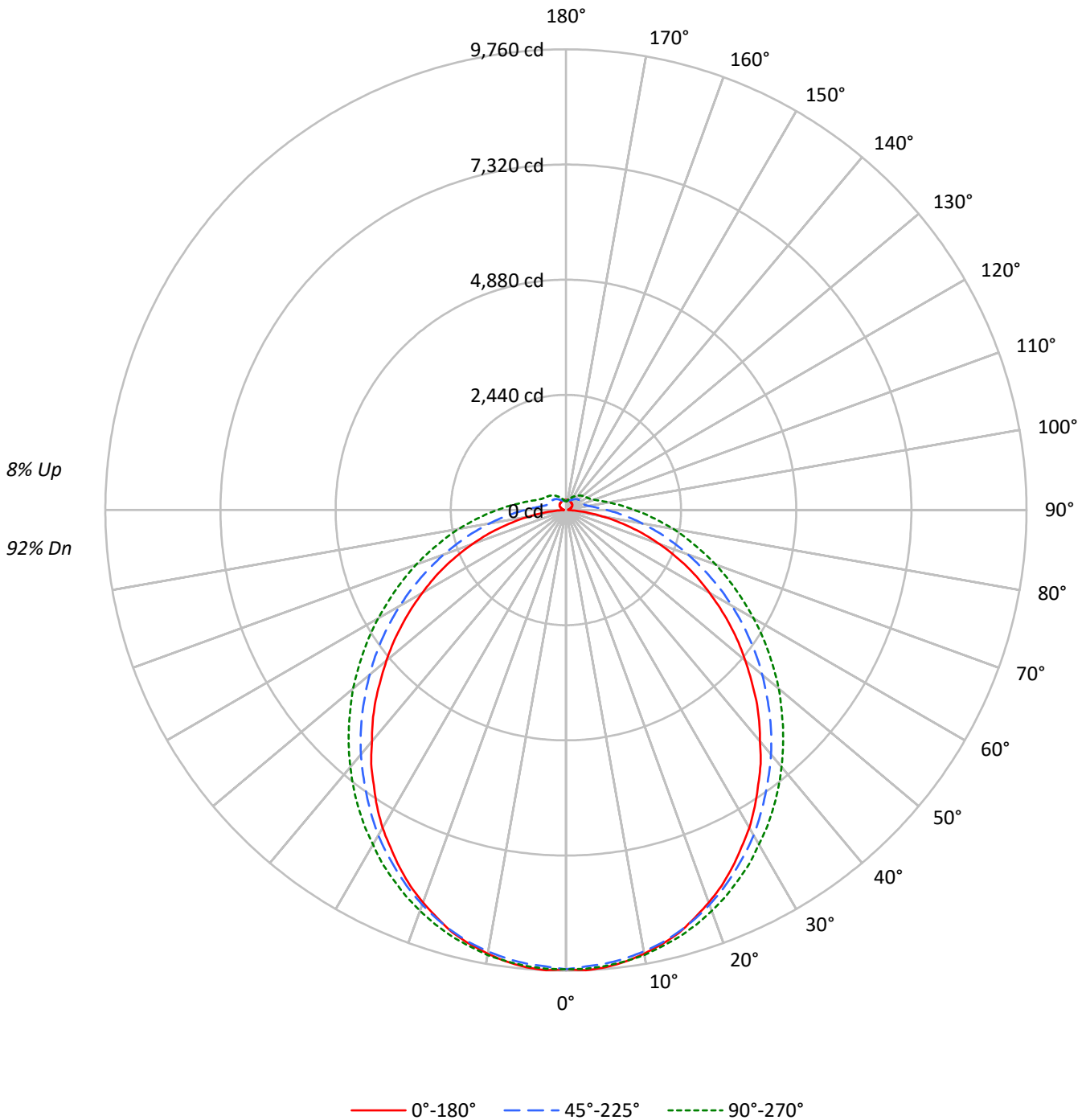
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30349.6 lumens
Efficiency: N/A
Efficacy: 147.3 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

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Luminous Intensity Polar Plot





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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	117	117	117	117	113	113	113	113	107	107	107	100	100	100	95	95	95	95	95	95	95
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°	15708	15708	15708
5°	15730	15424	15447
10°	15592	15152	15160
15°	15413	14842	14834
20°	15090	14469	14475
25°	14728	14040	14089
30°	14321	13605	13671
35°	13799	13088	13269
40°	13250	12597	12826
45°	12759	12055	12376
50°	12164	11502	11942
55°	11588	10929	11464
60°	10944	10323	11018
65°	10316	9698	10599
70°	9399	9093	10282
75°	8266	8535	10000
80°	6635	8119	10071
85°	4175	8007	10371



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	920.3	3.0
10°-20°	2618.3	8.6
20°-30°	3909.6	12.9
30°-40°	4621.8	15.2
40°-50°	4709.7	15.5
50°-60°	4246.6	14.0
60°-70°	3360.1	11.1
70°-80°	2270.9	7.5
80°-90°	1270.0	4.2
90°-100°	691.1	2.3
100°-110°	453.3	1.5
110°-120°	359.5	1.2
120°-130°	305.9	1.0
130°-140°	244.7	0.8
140°-150°	175.1	0.6
150°-160°	112.8	0.4
160°-170°	60.9	0.2
170°-180°	19.0	0.1
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0°-30°	7448.2	24.5
0°-40°	12069.9	39.8
0°-60°	21026.3	69.3
0°-90°	27927.3	92.0
90°-120°	1503.9	5.0
90°-150°	2229.5	7.3
90°-180°	2422.0	8.0
0°-180°	30349.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	9729	9729	9729	9729	9729	
5°	9723	9707	9647	9701	9697	922
15°	9272	9260	9251	9331	9350	2608
25°	8347	8386	8455	8613	8646	3842
35°	7103	7200	7366	7600	7674	4446
45°	5704	5817	6104	6389	6504	4393
55°	4239	4397	4748	5107	5236	3792
65°	2821	2963	3388	3806	3964	2785
75°	1428	1625	2165	2645	2799	1517
85°	279	626	1204	1672	1840	342
90°	43	345	866	1293	1453	33
95°	47	226	636	1016	1159	40
105°	80	201	416	656	753	84
115°	125	216	371	507	564	124
125°	166	224	353	456	494	147
135°	183	220	328	408	435	142
145°	191	211	275	347	367	120
155°	205	207	228	287	295	94
165°	213	209	205	215	232	60
175°	215	211	203	178	180	20
180°	199	199	199	199	199	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	9728.6	9728.6	9728.6	9728.6	9728.6
2.5°	9759.8	9744.2	9679.8	9730.5	9728.6
5°	9722.7	9707.1	9646.7	9701.3	9697.4
7.5°	9650.6	9640.8	9584.2	9644.7	9642.7
10°	9545.2	9545.2	9496.4	9566.7	9572.5
12.5°	9418.4	9416.5	9391.1	9463.3	9463.3
15°	9272.1	9260.4	9250.6	9330.6	9350.1
17.5°	9063.4	9071.2	9088.7	9184.3	9203.8
20°	8848.8	8866.3	8899.5	9012.6	9038.0
22.5°	8618.6	8638.1	8690.8	8813.7	8854.6
25°	8347.4	8386.4	8454.7	8612.7	8645.9
27.5°	8054.8	8123.1	8210.9	8378.6	8435.2
30°	7773.9	7828.5	7955.3	8130.9	8179.7
32.5°	7450.1	7516.4	7664.6	7875.3	7941.7
35°	7102.8	7200.4	7366.2	7600.3	7674.4
37.5°	6779.0	6857.0	7061.9	7311.6	7399.3
40°	6396.6	6523.4	6759.5	7005.3	7106.7
42.5°	6061.1	6170.3	6435.7	6706.8	6812.2
45°	5704.1	5817.3	6104.0	6388.8	6503.9
47.5°	5321.8	5456.4	5762.6	6080.6	6187.9
50°	4962.8	5103.3	5431.0	5752.9	5887.5
52.5°	4609.7	4756.0	5095.5	5434.9	5559.7
55°	4239.1	4397.1	4748.2	5107.2	5235.9
57.5°	3876.2	4034.2	4408.8	4779.4	4917.9
60°	3511.4	3659.7	4061.5	4441.9	4594.1
62.5°	3170.0	3314.4	3728.0	4137.6	4270.3
65°	2820.8	2963.2	3388.5	3806.0	3964.0
67.5°	2459.9	2631.6	3058.8	3495.8	3663.6
70°	2104.9	2280.5	2752.6	3207.1	3374.9
72.5°	1769.4	1968.3	2444.3	2908.6	3080.3
75°	1428.0	1625.0	2165.4	2645.3	2799.4
77.5°	1106.1	1336.3	1892.3	2376.1	2557.5
80°	797.9	1059.3	1646.5	2120.5	2311.7
82.5°	524.8	823.2	1418.2	1888.4	2060.0
85°	279.0	626.2	1203.6	1671.8	1839.6
87.5°	109.2	464.3	1024.2	1474.8	1642.6
90°	42.9	345.3	866.2	1293.4	1453.3
92.5°	42.9	269.2	737.4	1147.1	1297.3
95°	46.8	226.3	636.0	1016.4	1158.8
97.5°	50.7	204.8	556.0	901.3	1028.1
100°	58.5	197.0	495.5	807.6	922.7
102.5°	68.3	197.0	446.7	721.8	831.0
105°	80.0	200.9	415.5	655.5	753.0
107.5°	89.7	204.8	394.1	600.8	688.6
110°	101.4	210.7	382.4	559.9	636.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	113.1	214.6	374.6	530.6	596.9
115°	124.9	216.5	370.6	507.2	563.8
117.5°	136.6	220.4	366.7	491.6	540.4
120°	148.3	222.4	362.8	479.9	522.8
122.5°	158.0	222.4	358.9	468.2	507.2
125°	165.8	224.3	353.1	456.5	493.5
127.5°	171.7	226.3	349.2	444.8	477.9
130°	177.5	224.3	343.3	433.1	464.3
132.5°	181.4	222.4	335.5	421.4	450.6
135°	183.4	220.4	327.7	407.7	435.0
137.5°	185.3	218.5	316.0	394.1	419.4
140°	185.3	216.5	302.4	378.5	401.9
142.5°	187.3	212.6	288.7	362.8	384.3
145°	191.2	210.7	275.1	347.2	366.7
147.5°	195.1	206.8	263.4	329.7	347.2
150°	199.0	206.8	251.7	314.1	329.7
152.5°	200.9	206.8	239.9	300.4	312.1
155°	204.8	206.8	228.2	286.8	294.6
157.5°	206.8	206.8	220.4	269.2	277.0
160°	208.7	208.7	212.6	249.7	261.4
162.5°	212.6	208.7	208.7	230.2	245.8
165°	212.6	208.7	204.8	214.6	232.1
167.5°	214.6	210.7	202.9	202.9	220.4
170°	214.6	210.7	202.9	193.1	202.9
172.5°	214.6	210.7	202.9	185.3	189.2
175°	214.6	210.7	202.9	177.5	179.5
177.5°	214.6	210.7	200.9	171.7	179.5
180°	199.0	199.0	199.0	199.0	199.0

(END OF REPORT)