

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: P685626

Luminaire Tested: **8CZL-18-UNV-FUL-L850-CD-U**

Issue Date: 05/10/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P685626  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 05/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 8CZL-18-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

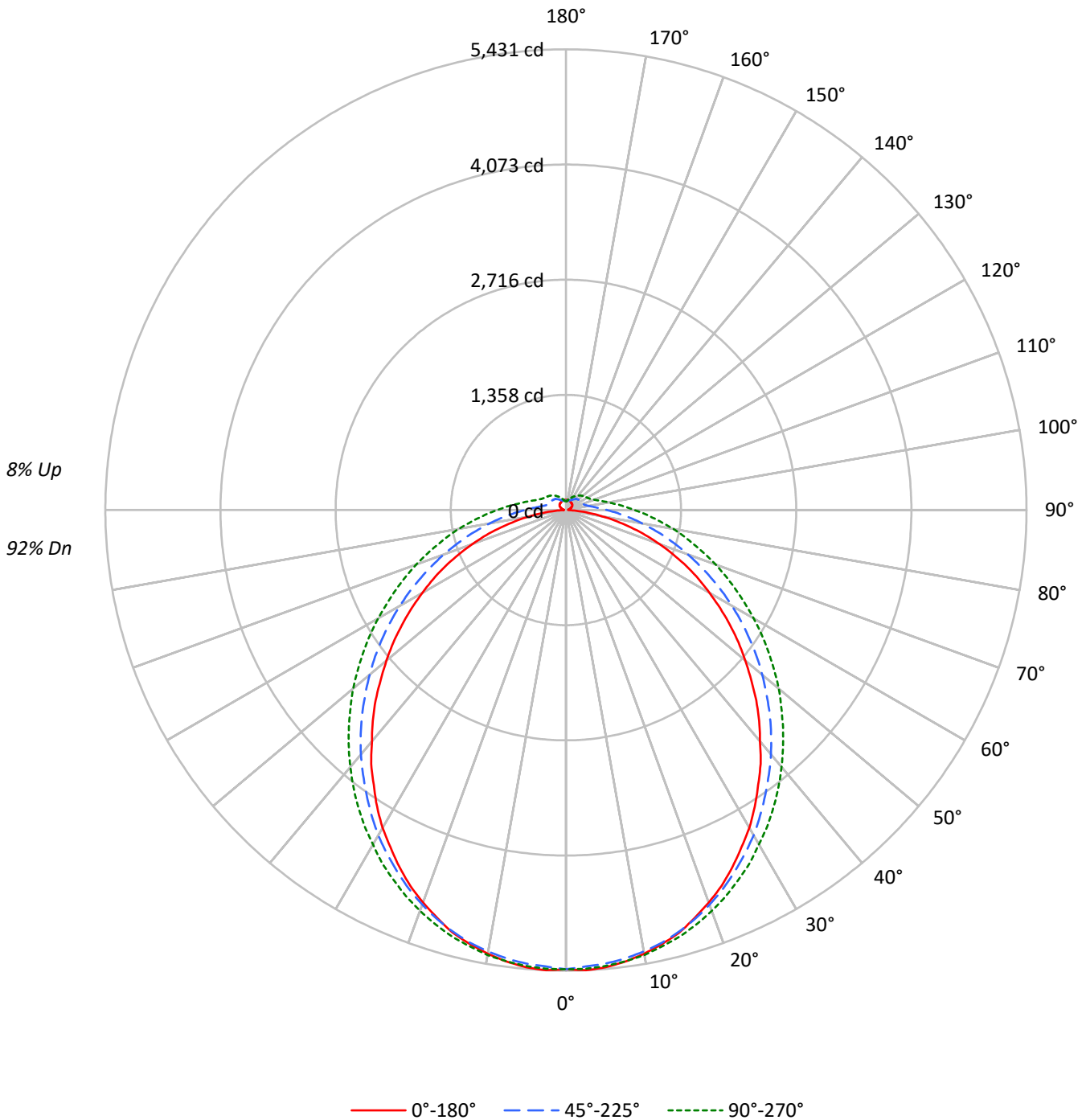
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 16887.7 lumens  
Efficiency: N/A  
Efficacy: 154.9 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): 109  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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				
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°	8740	8740	8740
5°	8753	8583	8595
10°	8676	8431	8435
15°	8576	8259	8254
20°	8396	8051	8055
25°	8195	7812	7840
30°	7969	7570	7607
35°	7678	7283	7383
40°	7373	7009	7137
45°	7100	6708	6886
50°	6768	6400	6645
55°	6448	6081	6379
60°	6090	5744	6131
65°	5740	5396	5897
70°	5230	5060	5721
75°	4599	4749	5564
80°	3692	4518	5604
85°	2322	4456	5771



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	512.1	3.0
10°-20°	1456.9	8.6
20°-30°	2175.5	12.9
30°-40°	2571.7	15.2
40°-50°	2620.7	15.5
50°-60°	2363.0	14.0
60°-70°	1869.7	11.1
70°-80°	1263.6	7.5
80°-90°	706.7	4.2
90°-100°	384.5	2.3
100°-110°	252.2	1.5
110°-120°	200.0	1.2
120°-130°	170.2	1.0
130°-140°	136.2	0.8
140°-150°	97.4	0.6
150°-160°	62.8	0.4
160°-170°	33.9	0.2
170°-180°	10.6	0.1
0°-30°	4144.5	24.5
0°-40°	6716.2	39.8
0°-60°	11699.9	69.3
0°-90°	15539.9	92.0
90°-120°	836.8	5.0
90°-150°	1240.6	7.3
90°-180°	1348.0	8.0
0°-180°	16887.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5413	5413	5413	5413	5413	
5°	5410	5401	5368	5398	5396	513
15°	5159	5153	5147	5192	5203	1451
25°	4645	4667	4705	4792	4811	2138
35°	3952	4007	4099	4229	4270	2474
45°	3174	3237	3396	3555	3619	2444
55°	2359	2447	2642	2842	2914	2110
65°	1570	1649	1886	2118	2206	1550
75°	795	904	1205	1472	1558	844
85°	155	348	670	930	1024	190
90°	24	192	482	720	809	18
95°	26	126	354	566	645	22
105°	44	112	231	365	419	47
115°	70	120	206	282	314	69
125°	92	125	196	254	275	82
135°	102	123	182	227	242	79
145°	106	117	153	193	204	67
155°	114	115	127	160	164	52
165°	118	116	114	119	129	34
175°	119	117	113	99	100	11
180°	111	111	111	111	111	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	5413.4	5413.4	5413.4	5413.4	5413.4
2.5°	5430.8	5422.1	5386.2	5414.5	5413.4
5°	5410.1	5401.4	5367.8	5398.2	5396.0
7.5°	5370.0	5364.5	5333.1	5366.7	5365.6
10°	5311.3	5311.3	5284.2	5323.3	5326.5
12.5°	5240.8	5239.7	5225.6	5265.8	5265.8
15°	5159.4	5152.9	5147.4	5191.9	5202.8
17.5°	5043.2	5047.6	5057.3	5110.5	5121.4
20°	4923.8	4933.6	4952.0	5015.0	5029.1
22.5°	4795.7	4806.6	4835.9	4904.3	4927.1
25°	4644.8	4666.6	4704.6	4792.5	4810.9
27.5°	4482.0	4520.0	4568.9	4662.2	4693.7
30°	4325.7	4356.1	4426.7	4524.4	4551.5
32.5°	4145.5	4182.4	4264.9	4382.2	4419.1
35°	3952.3	4006.6	4098.8	4229.1	4270.4
37.5°	3772.1	3815.5	3929.5	4068.4	4117.3
40°	3559.4	3629.9	3761.3	3898.0	3954.5
42.5°	3372.6	3433.4	3581.1	3731.9	3790.6
45°	3174.0	3237.0	3396.5	3555.0	3619.1
47.5°	2961.2	3036.1	3206.6	3383.5	3443.2
50°	2761.5	2839.7	3022.0	3201.1	3276.0
52.5°	2565.0	2646.4	2835.3	3024.2	3093.7
55°	2358.8	2446.7	2642.1	2841.8	2913.5
57.5°	2156.9	2244.8	2453.2	2659.5	2736.5
60°	1953.9	2036.4	2260.0	2471.7	2556.3
62.5°	1763.9	1844.3	2074.4	2302.3	2376.2
65°	1569.6	1648.9	1885.5	2117.8	2205.7
67.5°	1368.8	1464.3	1702.1	1945.2	2038.6
70°	1171.3	1268.9	1531.6	1784.6	1877.9
72.5°	984.5	1095.3	1360.1	1618.5	1714.0
75°	794.6	904.2	1204.9	1471.9	1557.7
77.5°	615.5	743.6	1052.9	1322.1	1423.1
80°	444.0	589.4	916.2	1179.9	1286.3
82.5°	292.0	458.1	789.2	1050.8	1146.3
85°	155.2	348.4	669.8	930.3	1023.6
87.5°	60.8	258.3	569.9	820.6	914.0
90°	23.9	192.1	482.0	719.7	808.7
92.5°	23.9	149.8	410.3	638.3	721.9
95°	26.1	125.9	353.9	565.5	644.8
97.5°	28.2	114.0	309.4	501.5	572.1
100°	32.6	109.6	275.7	449.4	513.4
102.5°	38.0	109.6	248.6	401.6	462.4
105°	44.5	111.8	231.2	364.7	419.0
107.5°	49.9	114.0	219.3	334.3	383.2
110°	56.4	117.2	212.8	311.5	353.9

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	63.0	119.4	208.4	295.3	332.2
115°	69.5	120.5	206.2	282.2	313.7
117.5°	76.0	122.7	204.1	273.5	300.7
120°	82.5	123.7	201.9	267.0	290.9
122.5°	87.9	123.7	199.7	260.5	282.2
125°	92.3	124.8	196.5	254.0	274.6
127.5°	95.5	125.9	194.3	247.5	265.9
130°	98.8	124.8	191.0	241.0	258.3
132.5°	101.0	123.7	186.7	234.5	250.8
135°	102.0	122.7	182.4	226.9	242.1
137.5°	103.1	121.6	175.9	219.3	233.4
140°	103.1	120.5	168.3	210.6	223.6
142.5°	104.2	118.3	160.7	201.9	213.8
145°	106.4	117.2	153.1	193.2	204.1
147.5°	108.5	115.1	146.5	183.4	193.2
150°	110.7	115.1	140.0	174.8	183.4
152.5°	111.8	115.1	133.5	167.2	173.7
155°	114.0	115.1	127.0	159.6	163.9
157.5°	115.1	115.1	122.7	149.8	154.1
160°	116.1	116.1	118.3	138.9	145.5
162.5°	118.3	116.1	116.1	128.1	136.8
165°	118.3	116.1	114.0	119.4	129.2
167.5°	119.4	117.2	112.9	112.9	122.7
170°	119.4	117.2	112.9	107.5	112.9
172.5°	119.4	117.2	112.9	103.1	105.3
175°	119.4	117.2	112.9	98.8	99.9
177.5°	119.4	117.2	111.8	95.5	99.9
180°	110.7	110.7	110.7	110.7	110.7

(END OF REPORT)