

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: P685614

Luminaire Tested: **8CZL-10-UNV-FUL-L840-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685614
Test Lab: INNOVATION CENTER(G3)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8CZL-10-UNV-FUL-L840-CD-U
Description: METALUX CRUZE LINEAR 8FT FROSTED LENS MODEL WITH UPLIGHT @80 CRI
and 4000K
Light Source: (784) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

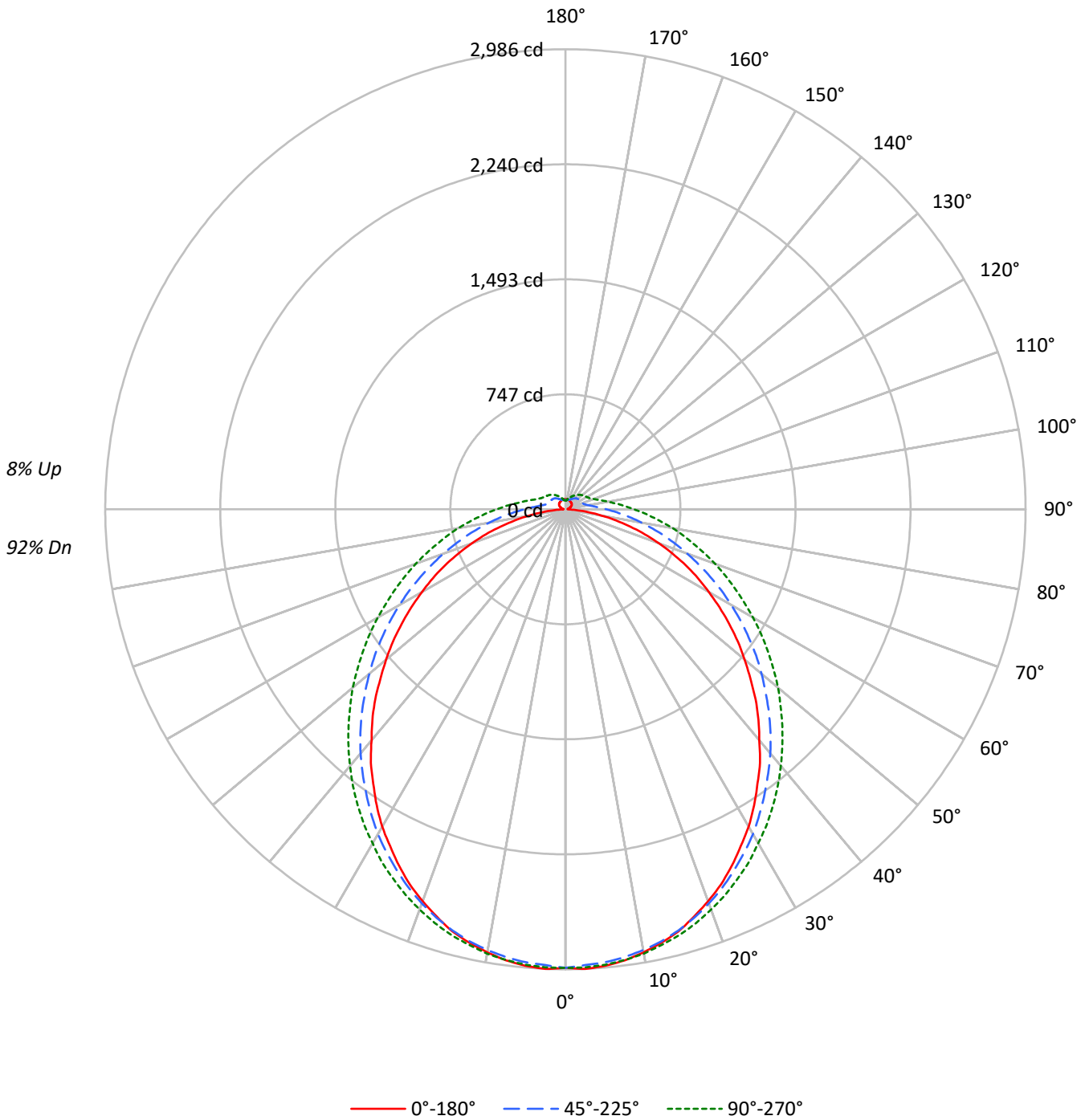
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9285.7 lumens
Efficiency: N/A
Efficacy: 147.4 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): 63
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	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°	4806	4806	4806
5°	4813	4719	4726
10°	4770	4636	4638
15°	4716	4541	4539
20°	4617	4427	4429
25°	4506	4296	4311
30°	4382	4163	4183
35°	4222	4004	4060
40°	4054	3854	3924
45°	3904	3688	3786
50°	3722	3519	3654
55°	3546	3344	3508
60°	3348	3159	3371
65°	3156	2967	3243
70°	2876	2782	3146
75°	2529	2611	3059
80°	2030	2484	3081
85°	1278	2450	3173



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	281.6	3.0
10°-20°	801.1	8.6
20°-30°	1196.2	12.9
30°-40°	1414.1	15.2
40°-50°	1441.0	15.5
50°-60°	1299.3	14.0
60°-70°	1028.1	11.1
70°-80°	694.8	7.5
80°-90°	388.6	4.2
90°-100°	211.4	2.3
100°-110°	138.7	1.5
110°-120°	110.0	1.2
120°-130°	93.6	1.0
130°-140°	74.9	0.8
140°-150°	53.6	0.6
150°-160°	34.5	0.4
160°-170°	18.7	0.2
170°-180°	5.8	0.1
0°-30°	2278.8	24.5
0°-40°	3692.9	39.8
0°-60°	6433.1	69.3
0°-90°	8544.6	92.0
90°-120°	460.1	5.0
90°-150°	682.1	7.3
90°-180°	741.0	8.0
0°-180°	9285.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2976	2976	2976	2976	2976	
5°	2975	2970	2952	2968	2967	282
15°	2837	2833	2830	2855	2861	798
25°	2554	2566	2587	2635	2645	1176
35°	2173	2203	2254	2325	2348	1360
45°	1745	1780	1868	1955	1990	1344
55°	1297	1345	1453	1563	1602	1160
65°	863	907	1037	1164	1213	852
75°	437	497	662	809	856	464
85°	85	192	368	512	563	105
90°	13	106	265	396	445	10
95°	14	69	195	311	354	12
105°	24	62	127	200	230	26
115°	38	66	113	155	172	38
125°	51	69	108	140	151	45
135°	56	67	100	125	133	43
145°	58	64	84	106	112	37
155°	63	63	70	88	90	29
165°	65	64	63	66	71	18
175°	66	64	62	54	55	6
180°	61	61	61	61	61	



TEST NUMBER: P685614

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2976.5	2976.5	2976.5	2976.5	2976.5
2.5°	2986.1	2981.3	2961.6	2977.1	2976.5
5°	2974.7	2970.0	2951.5	2968.2	2967.0
7.5°	2952.7	2949.7	2932.4	2950.9	2950.3
10°	2920.4	2920.4	2905.5	2927.0	2928.8
12.5°	2881.6	2881.0	2873.3	2895.4	2895.4
15°	2836.9	2833.3	2830.3	2854.8	2860.7
17.5°	2773.0	2775.4	2780.8	2810.0	2816.0
20°	2707.3	2712.7	2722.9	2757.5	2765.2
22.5°	2636.9	2642.9	2659.0	2696.6	2709.1
25°	2554.0	2565.9	2586.8	2635.1	2645.3
27.5°	2464.4	2485.3	2512.2	2563.5	2580.8
30°	2378.5	2395.2	2434.0	2487.7	2502.6
32.5°	2279.4	2299.7	2345.1	2409.5	2429.8
35°	2173.2	2203.0	2253.7	2325.4	2348.0
37.5°	2074.1	2098.0	2160.6	2237.0	2263.9
40°	1957.1	1995.9	2068.1	2143.3	2174.4
42.5°	1854.4	1887.9	1969.0	2052.0	2084.2
45°	1745.2	1779.8	1867.6	1954.7	1989.9
47.5°	1628.2	1669.4	1763.1	1860.4	1893.2
50°	1518.4	1561.4	1661.7	1760.1	1801.3
52.5°	1410.4	1455.1	1559.0	1662.8	1701.0
55°	1297.0	1345.3	1452.8	1562.6	1602.0
57.5°	1186.0	1234.3	1348.9	1462.3	1504.7
60°	1074.3	1119.7	1242.7	1359.0	1405.6
62.5°	969.9	1014.1	1140.6	1265.9	1306.5
65°	863.1	906.6	1036.7	1164.5	1212.8
67.5°	752.6	805.2	935.9	1069.6	1120.9
70°	644.0	697.7	842.2	981.2	1032.6
72.5°	541.3	602.2	747.9	889.9	942.4
75°	436.9	497.2	662.5	809.3	856.5
77.5°	338.4	408.8	579.0	727.0	782.5
80°	244.1	324.1	503.7	648.8	707.3
82.5°	160.6	251.9	433.9	577.8	630.3
85°	85.4	191.6	368.3	511.5	562.8
87.5°	33.4	142.1	313.4	451.2	502.6
90°	13.1	105.6	265.0	395.7	444.7
92.5°	13.1	82.4	225.6	351.0	396.9
95°	14.3	69.2	194.6	311.0	354.5
97.5°	15.5	62.7	170.1	275.7	314.5
100°	17.9	60.3	151.6	247.1	282.3
102.5°	20.9	60.3	136.7	220.8	254.3
105°	24.5	61.5	127.1	200.5	230.4
107.5°	27.5	62.7	120.6	183.8	210.7
110°	31.0	64.5	117.0	171.3	194.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	34.6	65.7	114.6	162.3	182.6
115°	38.2	66.3	113.4	155.2	172.5
117.5°	41.8	67.4	112.2	150.4	165.3
120°	45.4	68.0	111.0	146.8	160.0
122.5°	48.3	68.0	109.8	143.2	155.2
125°	50.7	68.6	108.0	139.7	151.0
127.5°	52.5	69.2	106.8	136.1	146.2
130°	54.3	68.6	105.0	132.5	142.1
132.5°	55.5	68.0	102.7	128.9	137.9
135°	56.1	67.4	100.3	124.7	133.1
137.5°	56.7	66.8	96.7	120.6	128.3
140°	56.7	66.3	92.5	115.8	123.0
142.5°	57.3	65.1	88.3	111.0	117.6
145°	58.5	64.5	84.2	106.2	112.2
147.5°	59.7	63.3	80.6	100.9	106.2
150°	60.9	63.3	77.0	96.1	100.9
152.5°	61.5	63.3	73.4	91.9	95.5
155°	62.7	63.3	69.8	87.7	90.1
157.5°	63.3	63.3	67.4	82.4	84.8
160°	63.9	63.9	65.1	76.4	80.0
162.5°	65.1	63.9	63.9	70.4	75.2
165°	65.1	63.9	62.7	65.7	71.0
167.5°	65.7	64.5	62.1	62.1	67.4
170°	65.7	64.5	62.1	59.1	62.1
172.5°	65.7	64.5	62.1	56.7	57.9
175°	65.7	64.5	62.1	54.3	54.9
177.5°	65.7	64.5	61.5	52.5	54.9
180°	60.9	60.9	60.9	60.9	60.9

(END OF REPORT)