

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: P685656

Luminaire Tested: **8CZL-18-UNV-FUL-L950-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685656
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-L950-CD-U
Description: METALUX CRUZE LINEAR 8FT FROSTED LENS MODEL WITH UPLIGHT @90 CRI and 5000K
Light Source: (1176) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

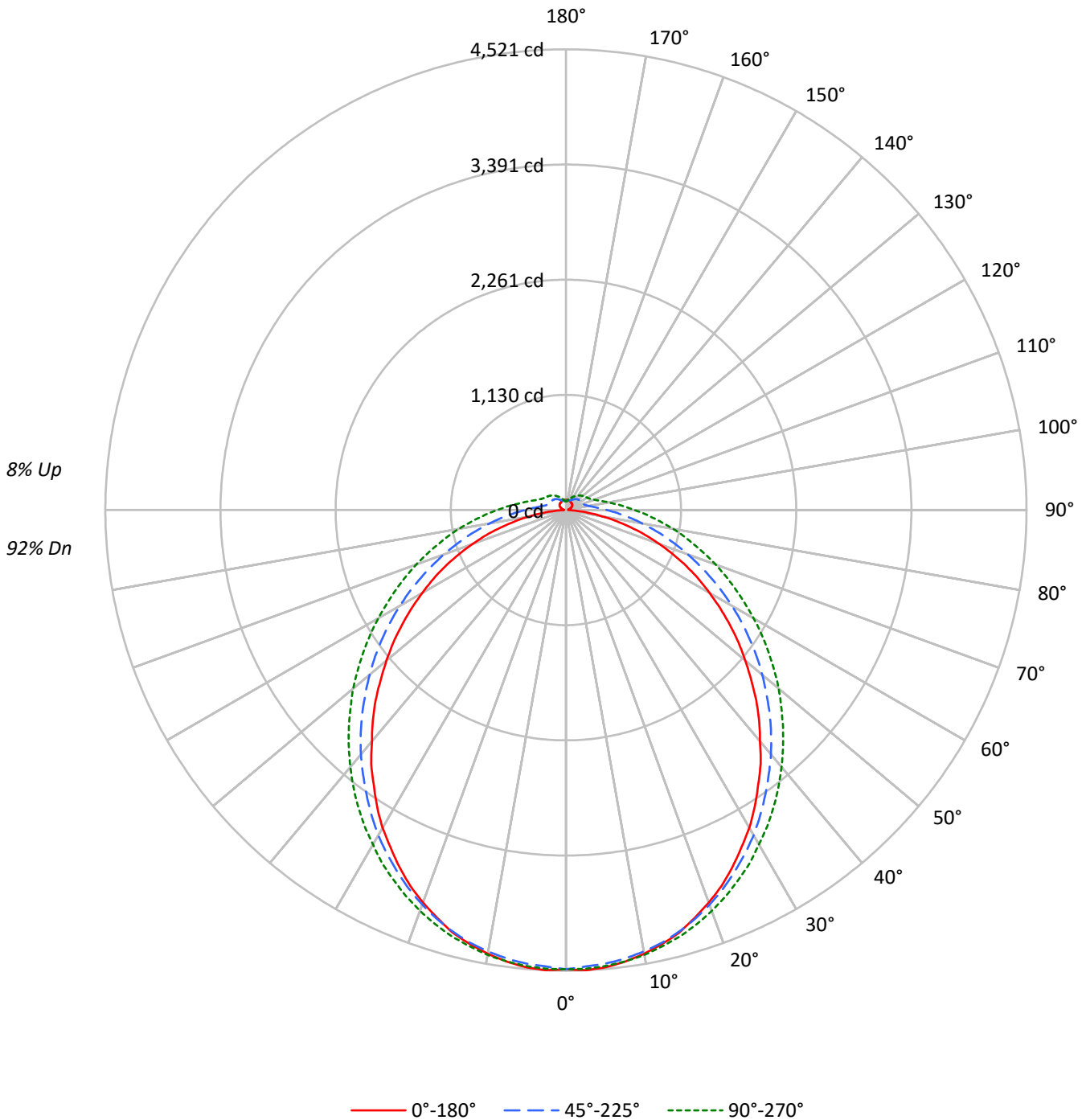
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14057.5 lumens
Efficiency: N/A
Efficacy: 129.0 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_{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°	7276	7276	7276
5°	7286	7144	7155
10°	7222	7018	7022
15°	7139	6874	6871
20°	6989	6702	6705
25°	6822	6503	6526
30°	6633	6302	6332
35°	6391	6062	6146
40°	6137	5835	5941
45°	5910	5584	5732
50°	5634	5327	5531
55°	5367	5062	5310
60°	5069	4782	5103
65°	4778	4492	4909
70°	4354	4212	4762
75°	3828	3953	4632
80°	3073	3760	4665
85°	1933	3709	4804



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	426.2	3.0
10°-20°	1212.7	8.6
20°-30°	1810.9	12.9
30°-40°	2140.7	15.2
40°-50°	2181.4	15.5
50°-60°	1967.0	14.0
60°-70°	1556.4	11.1
70°-80°	1051.8	7.5
80°-90°	588.3	4.2
90°-100°	320.1	2.3
100°-110°	210.0	1.5
110°-120°	166.5	1.2
120°-130°	141.7	1.0
130°-140°	113.3	0.8
140°-150°	81.1	0.6
150°-160°	52.3	0.4
160°-170°	28.2	0.2
170°-180°	8.8	0.1
0°-30°	3449.9	24.5
0°-40°	5590.6	39.8
0°-60°	9739.0	69.3
0°-90°	12935.5	92.0
90°-120°	696.6	5.0
90°-150°	1032.7	7.3
90°-180°	1122.0	8.0
0°-180°	14057.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4506	4506	4506	4506	4506	
5°	4503	4496	4468	4494	4492	427
15°	4295	4289	4285	4322	4331	1208
25°	3866	3884	3916	3989	4005	1780
35°	3290	3335	3412	3520	3555	2059
45°	2642	2694	2827	2959	3012	2035
55°	1964	2037	2199	2366	2425	1756
65°	1307	1372	1570	1763	1836	1290
75°	661	753	1003	1225	1297	703
85°	129	290	558	774	852	158
90°	20	160	401	599	673	15
95°	22	105	295	471	537	19
105°	37	93	192	304	349	39
115°	58	100	172	235	261	57
125°	77	104	164	211	229	68
135°	85	102	152	189	202	66
145°	89	98	127	161	170	56
155°	95	96	106	133	136	44
165°	98	97	95	99	108	28
175°	99	98	94	82	83	9
180°	92	92	92	92	92	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4506.1	4506.1	4506.1	4506.1	4506.1
2.5°	4520.6	4513.3	4483.5	4507.0	4506.1
5°	4503.4	4496.2	4468.2	4493.5	4491.7
7.5°	4470.0	4465.5	4439.3	4467.3	4466.4
10°	4421.2	4421.2	4398.6	4431.1	4433.8
12.5°	4362.5	4361.5	4349.8	4383.2	4383.2
15°	4294.7	4289.3	4284.7	4321.8	4330.8
17.5°	4198.0	4201.6	4209.7	4254.0	4263.1
20°	4098.6	4106.7	4122.1	4174.5	4186.3
22.5°	3992.0	4001.0	4025.4	4082.3	4101.3
25°	3866.4	3884.5	3916.1	3989.3	4004.6
27.5°	3730.9	3762.5	3803.1	3880.8	3907.1
30°	3600.7	3626.0	3684.8	3766.1	3788.7
32.5°	3450.7	3481.5	3550.1	3647.7	3678.4
35°	3289.9	3335.1	3411.9	3520.3	3554.7
37.5°	3139.9	3176.1	3270.9	3386.6	3427.3
40°	2962.8	3021.5	3130.9	3244.7	3291.7
42.5°	2807.4	2858.0	2980.9	3106.5	3155.3
45°	2642.0	2694.5	2827.3	2959.2	3012.5
47.5°	2464.9	2527.3	2669.2	2816.4	2866.1
50°	2298.7	2363.7	2515.5	2664.6	2727.0
52.5°	2135.1	2202.9	2360.1	2517.4	2575.2
55°	1963.5	2036.7	2199.3	2365.6	2425.2
57.5°	1795.4	1868.6	2042.1	2213.8	2277.9
60°	1626.4	1695.1	1881.2	2057.4	2127.9
62.5°	1468.3	1535.2	1726.7	1916.5	1977.9
65°	1306.6	1372.5	1569.5	1762.9	1836.1
67.5°	1139.4	1218.9	1416.8	1619.2	1696.9
70°	975.0	1056.3	1274.9	1485.5	1563.2
72.5°	819.5	911.7	1132.2	1347.2	1426.7
75°	661.4	752.7	1003.0	1225.2	1296.6
77.5°	512.3	618.9	876.5	1100.6	1184.6
80°	369.6	490.6	762.6	982.2	1070.7
82.5°	243.1	381.3	656.9	874.7	954.2
85°	129.2	290.0	557.5	774.4	852.1
87.5°	50.6	215.1	474.4	683.1	760.8
90°	19.9	159.9	401.2	599.1	673.2
92.5°	19.9	124.7	341.6	531.3	600.9
95°	21.7	104.8	294.6	470.8	536.7
97.5°	23.5	94.9	257.5	417.5	476.2
100°	27.1	91.3	229.5	374.1	427.4
102.5°	31.6	91.3	206.9	334.3	384.9
105°	37.0	93.1	192.5	303.6	348.8
107.5°	41.6	94.9	182.5	278.3	319.0
110°	47.0	97.6	177.1	259.3	294.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	52.4	99.4	173.5	245.8	276.5
115°	57.8	100.3	171.7	234.9	261.1
117.5°	63.3	102.1	169.9	227.7	250.3
120°	68.7	103.0	168.1	222.3	242.2
122.5°	73.2	103.0	166.3	216.9	234.9
125°	76.8	103.9	163.5	211.4	228.6
127.5°	79.5	104.8	161.7	206.0	221.4
130°	82.2	103.9	159.0	200.6	215.1
132.5°	84.0	103.0	155.4	195.2	208.7
135°	84.9	102.1	151.8	188.8	201.5
137.5°	85.8	101.2	146.4	182.5	194.3
140°	85.8	100.3	140.1	175.3	186.1
142.5°	86.7	98.5	133.7	168.1	178.0
145°	88.6	97.6	127.4	160.8	169.9
147.5°	90.4	95.8	122.0	152.7	160.8
150°	92.2	95.8	116.6	145.5	152.7
152.5°	93.1	95.8	111.1	139.2	144.6
155°	94.9	95.8	105.7	132.8	136.4
157.5°	95.8	95.8	102.1	124.7	128.3
160°	96.7	96.7	98.5	115.7	121.1
162.5°	98.5	96.7	96.7	106.6	113.9
165°	98.5	96.7	94.9	99.4	107.5
167.5°	99.4	97.6	94.0	94.0	102.1
170°	99.4	97.6	94.0	89.5	94.0
172.5°	99.4	97.6	94.0	85.8	87.6
175°	99.4	97.6	94.0	82.2	83.1
177.5°	99.4	97.6	93.1	79.5	83.1
180°	92.2	92.2	92.2	92.2	92.2

(END OF REPORT)