

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: P685494

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

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685494
Test Lab: INNOVATION CENTER(G2)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8CZL-10-UNV-W-L840-CD-U
Description: METALUX CRUZE LINEAR 8FT WIDE LENS MODEL @80 CRI and 4000K
Light Source: (784) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

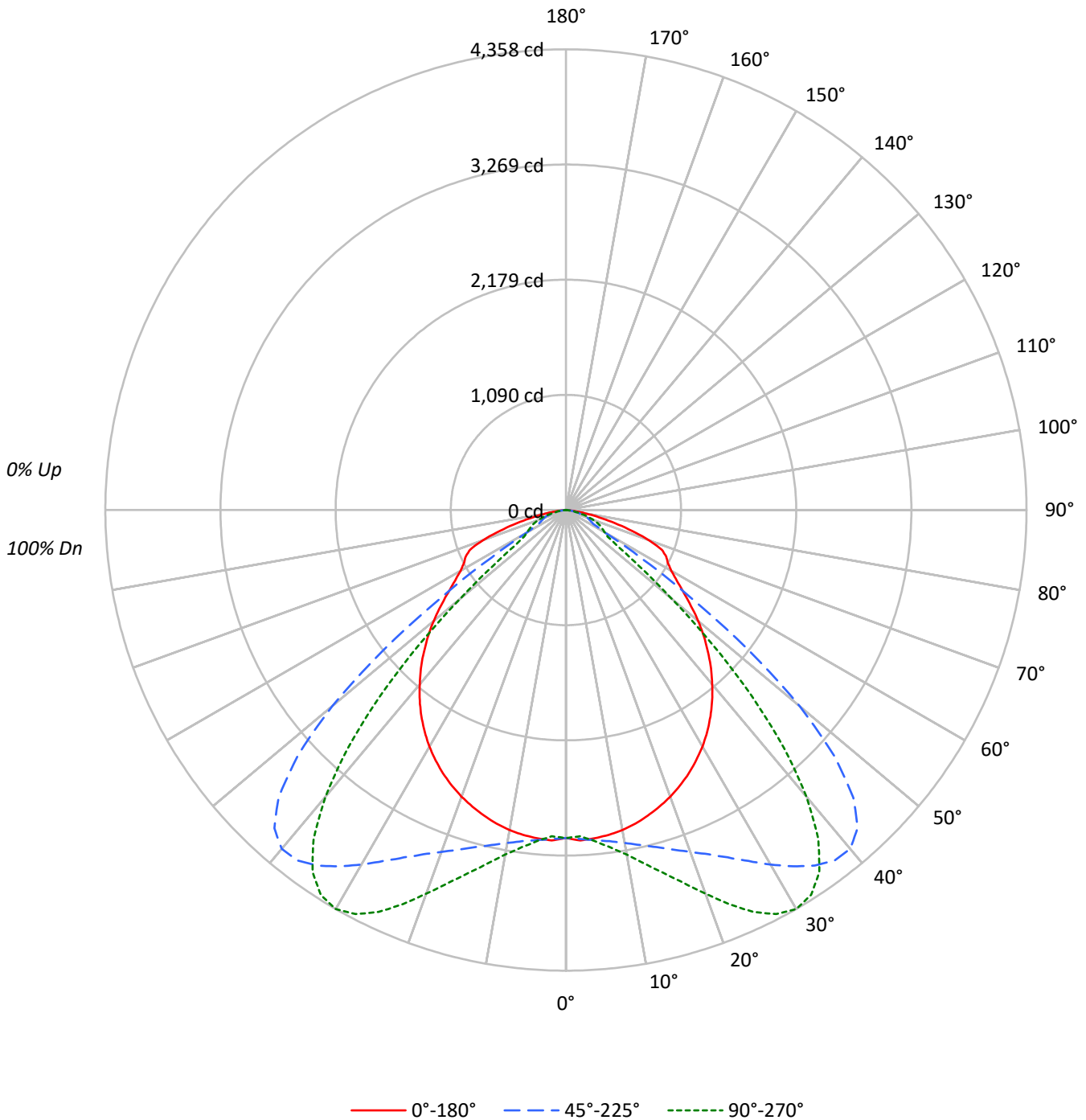
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9920.5 lumens
Efficiency: N/A
Efficacy: 157.5 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.69 / 1.65
Luminous Opening: Rectangular (W 0.83' x L: 8' x H: 0')
CIE Type: Direct

Input Watts (W): 63
Input Voltage (V): 120
Input Current (Ain): 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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	102	100
1	111	106	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89	89	89	89	87
2	102	94	88	83	99	93	87	82	89	85	81	86	82	79	83	80	77	77	77	77	75
3	93	84	77	71	91	82	76	70	79	74	69	77	72	68	74	70	67	67	67	67	65
4	86	75	67	61	84	73	66	60	71	65	59	69	63	59	67	62	58	58	58	58	56
5	79	67	59	52	77	66	58	52	64	57	52	62	56	51	60	55	51	51	51	51	49
6	73	60	52	46	71	59	51	46	58	51	45	56	50	45	55	49	45	45	45	45	43
7	68	55	46	40	66	54	46	40	52	45	40	51	45	40	50	44	39	39	39	39	38
8	63	50	42	36	61	49	41	36	48	41	36	47	40	35	45	40	35	35	35	35	33
9	59	46	38	32	57	45	37	32	44	37	32	43	36	32	42	36	32	32	32	32	30
10	55	42	34	29	54	41	34	29	40	34	29	39	33	29	39	33	29	29	29	29	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5008	5008	5008
5°	5052	5078	5094
10°	5039	5241	5425
15°	5003	5518	5939
20°	4959	5912	6634
25°	4900	6460	7472
30°	4816	7219	8126
35°	4698	8091	8238
40°	4535	8816	7463
45°	4339	8782	5664
50°	4104	7258	3264
55°	3826	3992	1679
60°	3713	1393	1369
65°	4001	1014	1372
70°	3951	1039	1324
75°	2988	908	1063
80°	1805	742	752
85°	898	380	159



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	300.2	3.0
10°-20°	933.5	9.4
20°-30°	1639.8	16.5
30°-40°	2278.2	23.0
40°-50°	2310.3	23.3
50°-60°	1482.6	14.9
60°-70°	693.5	7.0
70°-80°	240.5	2.4
80°-90°	41.9	0.4
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	2873.6	29.0
0°-40°	5151.7	51.9
0°-60°	8944.7	90.2
0°-90°	9920.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9920.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3102	3102	3102	3102	3102	
5°	3117	3095	3133	3143	3143	296
15°	2993	3064	3301	3479	3553	844
25°	2750	3032	3626	4050	4194	1266
35°	2384	3058	4105	4246	4179	1489
45°	1900	3273	3846	2869	2481	1465
55°	1359	3381	1418	683	596	1227
65°	1047	1080	265	332	359	1019
75°	479	166	146	168	170	518
85°	48	44	20	12	9	73
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3101.9	3101.9	3101.9	3101.9	3101.9	3101.9	3101.9	3101.9	3101.9	3101.9	3101.9
2.5°	3128.8	3119.1	3102.9	3096.5	3099.7	3115.9	3121.3	3109.4	3106.2	3097.6	3088.9
5°	3117.0	3108.3	3096.5	3094.3	3106.2	3133.1	3145.0	3141.8	3147.2	3148.2	3142.8
7.5°	3099.7	3092.2	3082.5	3092.2	3117.0	3160.1	3187.1	3195.7	3215.1	3219.4	3218.3
10°	3073.8	3067.4	3064.1	3088.9	3132.1	3196.8	3244.2	3268.0	3296.0	3305.7	3308.9
12.5°	3039.3	3032.8	3041.5	3084.6	3152.6	3245.3	3315.4	3357.5	3397.4	3417.9	3424.3
15°	2992.9	2990.8	3012.3	3081.4	3178.4	3301.4	3398.5	3464.3	3521.4	3544.1	3552.7
17.5°	2942.2	2943.3	2982.1	3080.3	3209.7	3367.2	3491.2	3585.0	3655.2	3687.5	3697.2
20°	2886.2	2889.4	2947.6	3079.2	3248.5	3440.5	3593.7	3716.6	3804.0	3847.1	3861.2
22.5°	2820.4	2826.8	2909.9	3080.3	3289.5	3524.7	3714.5	3861.2	3965.8	4017.5	4034.8
25°	2750.3	2760.0	2871.1	3085.7	3341.3	3626.0	3852.5	4024.0	4129.7	4175.0	4194.4
27.5°	2669.4	2685.6	2829.0	3093.2	3402.8	3743.6	3993.8	4158.8	4257.0	4291.5	4308.7
30°	2583.1	2601.4	2788.0	3108.3	3482.6	3871.9	4124.3	4263.4	4329.2	4348.7	4358.4
32.5°	2488.2	2518.4	2747.0	3133.1	3576.4	3996.0	4220.3	4303.4	4319.5	4313.1	4316.3
35°	2383.6	2415.9	2708.2	3174.1	3683.2	4104.9	4258.1	4258.1	4210.6	4181.5	4179.3
37.5°	2272.5	2313.5	2669.4	3221.6	3807.2	4177.2	4217.1	4110.3	3994.9	3932.3	3922.6
40°	2151.7	2206.7	2642.4	3286.3	3919.4	4182.6	4070.4	3850.4	3654.1	3552.7	3540.8
42.5°	2032.0	2099.9	2630.5	3370.4	4003.5	4083.3	3794.3	3454.5	3188.1	3068.4	3055.5
45°	1900.4	1989.9	2634.9	3485.8	4026.2	3846.1	3383.4	2943.3	2644.6	2493.6	2480.6
47.5°	1769.9	1881.0	2645.6	3616.3	3926.9	3443.8	2836.5	2327.5	2030.9	1872.3	1870.2
50°	1634.0	1778.5	2671.5	3723.1	3658.4	2889.4	2164.6	1667.4	1430.1	1309.3	1299.6
52.5°	1492.7	1689.0	2727.6	3742.5	3180.6	2177.6	1469.0	1113.0	958.8	882.2	867.1
55°	1359.0	1613.5	2819.3	3567.8	2493.6	1418.3	925.4	702.1	624.5	593.2	596.4
57.5°	1243.6	1557.4	2926.1	3111.6	1618.9	834.8	536.0	467.0	464.8	468.1	469.2
60°	1149.7	1522.9	2973.5	2333.9	888.7	431.4	374.3	389.4	409.8	421.7	423.9
62.5°	1088.2	1504.6	2829.0	1352.5	394.7	300.9	326.8	354.8	378.6	389.4	390.4
65°	1047.3	1456.0	2314.5	668.7	241.6	265.3	297.7	326.8	348.4	357.0	359.2
67.5°	983.6	1319.0	1586.5	277.2	212.5	239.4	270.7	298.8	317.1	323.6	324.6
70°	836.9	1104.4	922.1	184.4	192.0	220.0	244.8	266.4	278.3	281.5	280.4
72.5°	653.6	874.7	465.9	167.2	178.0	193.1	207.1	218.9	225.4	228.6	228.6
75°	478.9	639.6	218.9	147.8	132.7	145.6	159.6	167.2	169.3	170.4	170.4
77.5°	321.4	441.1	130.5	114.3	102.5	113.2	118.6	115.4	113.2	115.4	115.4
80°	194.1	271.8	114.3	83.0	78.7	79.8	75.5	75.5	79.8	82.0	80.9
82.5°	104.6	154.2	100.3	60.4	52.8	48.5	47.5	45.3	43.1	42.1	42.1
85°	48.5	78.7	64.7	36.7	28.0	20.5	16.2	11.9	10.8	8.6	8.6
87.5°	19.4	30.2	19.4	11.9	6.5	4.3	3.2	2.2	1.1	1.1	1.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)