

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: P685495

Luminaire Tested: **8CZL-14-UNV-W-L840-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685495
Test Lab: INNOVATION CENTER(G2)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8CZL-14-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

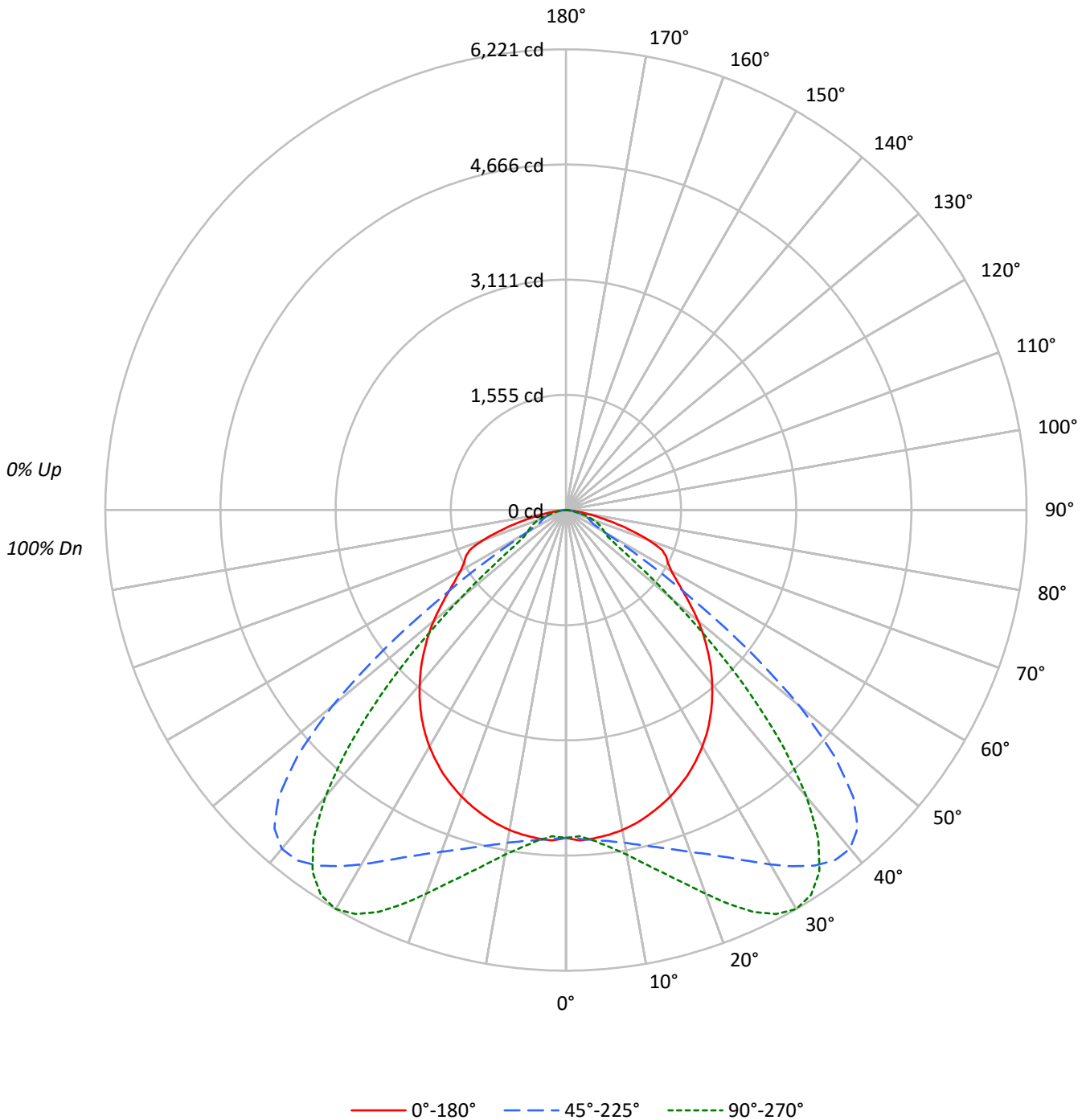
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14159.2 lumens
Efficiency: N/A
Efficacy: 159.1 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): 89
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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	106	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89	87
2	102	94	88	83	99	93	87	82	89	85	81	86	82	79	83	80	77	75
3	93	84	77	71	91	82	76	70	79	74	69	77	72	68	74	70	67	65
4	86	75	67	61	84	73	66	60	71	65	59	69	63	59	67	62	58	56
5	79	67	59	52	77	66	58	52	64	57	52	62	56	51	60	55	51	49
6	73	60	52	46	71	59	51	46	58	51	45	56	50	45	55	49	45	43
7	68	55	46	40	66	54	46	40	52	45	40	51	45	40	50	44	39	38
8	63	50	42	36	61	49	41	36	48	41	36	47	40	35	45	40	35	33
9	59	46	38	32	57	45	37	32	44	37	32	43	36	32	42	36	32	30
10	55	42	34	29	54	41	34	29	40	34	29	39	33	29	39	33	29	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7148	7148	7148
5°	7210	7248	7270
10°	7193	7481	7743
15°	7140	7876	8476
20°	7078	8437	9469
25°	6993	9220	10665
30°	6874	10303	11598
35°	6706	11548	11757
40°	6473	12582	10652
45°	6193	12534	8084
50°	5858	10359	4659
55°	5460	5698	2396
60°	5299	1988	1954
65°	5710	1447	1958
70°	5639	1482	1889
75°	4264	1296	1517
80°	2576	1059	1074
85°	1284	541	228



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	428.5	3.0
10°-20°	1332.3	9.4
20°-30°	2340.5	16.5
30°-40°	3251.5	23.0
40°-50°	3297.5	23.3
50°-60°	2116.1	14.9
60°-70°	989.7	7.0
70°-80°	343.2	2.4
80°-90°	59.8	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°	4101.3	29.0
0°-40°	7352.9	51.9
0°-60°	12766.5	90.2
0°-90°	14159.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	14159.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4427	4427	4427	4427	4427	
5°	4449	4417	4472	4486	4486	423
15°	4272	4373	4712	4965	5071	1205
25°	3925	4328	5175	5781	5987	1807
35°	3402	4364	5859	6060	5965	2125
45°	2712	4672	5489	4094	3540	2091
55°	1940	4825	2024	974	851	1751
65°	1495	1542	379	474	513	1454
75°	684	236	208	239	243	740
85°	69	62	29	17	12	105
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°	4427.2	4427.2	4427.2	4427.2	4427.2	4427.2	4427.2	4427.2	4427.2	4427.2	4427.2
2.5°	4465.7	4451.8	4428.7	4419.5	4424.1	4447.2	4454.9	4438.0	4433.4	4421.0	4408.7
5°	4448.8	4436.4	4419.5	4416.4	4433.4	4471.8	4488.8	4484.2	4491.9	4493.4	4485.7
7.5°	4424.1	4413.3	4399.5	4413.3	4448.8	4510.3	4548.8	4561.1	4588.8	4595.0	4593.5
10°	4387.2	4377.9	4373.3	4408.7	4470.3	4562.7	4630.4	4664.3	4704.3	4718.1	4722.8
12.5°	4337.9	4328.7	4341.0	4402.6	4499.5	4631.9	4732.0	4792.0	4849.0	4878.2	4887.5
15°	4271.7	4268.6	4299.4	4398.0	4536.5	4712.0	4850.5	4944.4	5026.0	5058.3	5070.7
17.5°	4199.4	4200.9	4256.3	4396.4	4581.1	4805.9	4982.9	5116.8	5216.9	5263.1	5276.9
20°	4119.3	4123.9	4207.1	4394.9	4636.6	4910.6	5129.1	5304.6	5429.3	5490.9	5510.9
22.5°	4025.4	4034.7	4153.2	4396.4	4695.0	5030.6	5301.6	5510.9	5660.2	5734.1	5758.7
25°	3925.4	3939.2	4097.8	4404.1	4768.9	5175.3	5498.6	5743.4	5894.2	5958.9	5986.6
27.5°	3809.9	3833.0	4037.7	4414.9	4856.7	5343.1	5700.3	5935.8	6075.9	6125.1	6149.7
30°	3686.8	3712.9	3979.2	4436.4	4970.6	5526.3	5886.5	6085.1	6179.0	6206.7	6220.6
32.5°	3551.3	3594.4	3920.8	4471.8	5104.5	5703.3	6023.5	6142.0	6165.1	6155.9	6160.5
35°	3402.0	3448.2	3865.3	4530.3	5256.9	5858.8	6077.4	6077.4	6009.7	5968.1	5965.0
37.5°	3243.4	3301.9	3809.9	4598.1	5433.9	5961.9	6018.9	5866.5	5701.8	5612.5	5598.7
40°	3071.0	3149.5	3771.4	4690.4	5594.0	5969.6	5809.5	5495.5	5215.4	5070.7	5053.7
42.5°	2900.2	2997.1	3754.5	4810.5	5714.1	5828.0	5415.5	4930.6	4550.3	4379.5	4361.0
45°	2712.4	2840.1	3760.7	4975.2	5746.4	5489.4	4829.0	4200.9	3774.5	3559.0	3540.5
47.5°	2526.1	2684.6	3776.1	5161.5	5604.8	4915.2	4048.5	3321.9	2898.6	2672.3	2669.3
50°	2332.1	2538.4	3813.0	5313.9	5221.5	4123.9	3089.5	2379.9	2041.2	1868.8	1854.9
52.5°	2130.5	2410.6	3893.0	5341.6	4539.6	3108.0	2096.6	1588.6	1368.5	1259.2	1237.6
55°	1939.6	2302.9	4023.9	5092.2	3559.0	2024.3	1320.8	1002.1	891.3	846.6	851.3
57.5°	1774.9	2222.8	4176.3	4441.1	2310.6	1191.5	765.1	666.5	663.5	668.1	669.6
60°	1641.0	2173.6	4244.0	3331.2	1268.4	615.7	534.2	555.7	585.0	601.9	605.0
62.5°	1553.2	2147.4	4037.7	1930.4	563.4	429.5	466.4	506.4	540.3	555.7	557.2
65°	1494.7	2078.1	3303.5	954.4	344.8	378.7	424.9	466.4	497.2	509.5	512.6
67.5°	1403.9	1882.6	2264.4	395.6	303.3	341.7	386.4	426.4	452.6	461.8	463.3
70°	1194.5	1576.3	1316.2	263.2	274.0	314.0	349.4	380.2	397.2	401.8	400.2
72.5°	932.9	1248.4	665.0	238.6	254.0	275.5	295.6	312.5	321.7	326.3	326.3
75°	683.5	912.8	312.5	210.9	189.3	207.8	227.8	238.6	241.7	243.2	243.2
77.5°	458.7	629.6	186.3	163.2	146.2	161.6	169.3	164.7	161.6	164.7	164.7
80°	277.1	387.9	163.2	118.5	112.4	113.9	107.8	107.8	113.9	117.0	115.5
82.5°	149.3	220.1	143.2	86.2	75.4	69.3	67.7	64.7	61.6	60.0	60.0
85°	69.3	112.4	92.4	52.3	40.0	29.2	23.1	16.9	15.4	12.3	12.3
87.5°	27.7	43.1	27.7	16.9	9.2	6.2	4.6	3.1	1.5	1.5	1.5
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)