

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: P685345

Luminaire Tested: **8CZL-14-UNV-L940-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685345
Test Lab: INNOVATION CENTER(G2)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8CZL-14-UNV-L940-CD-U
Description: METALUX CRUZE LINEAR 8FT BASE MODEL @90 CRI and 4000K
Light Source: (784) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

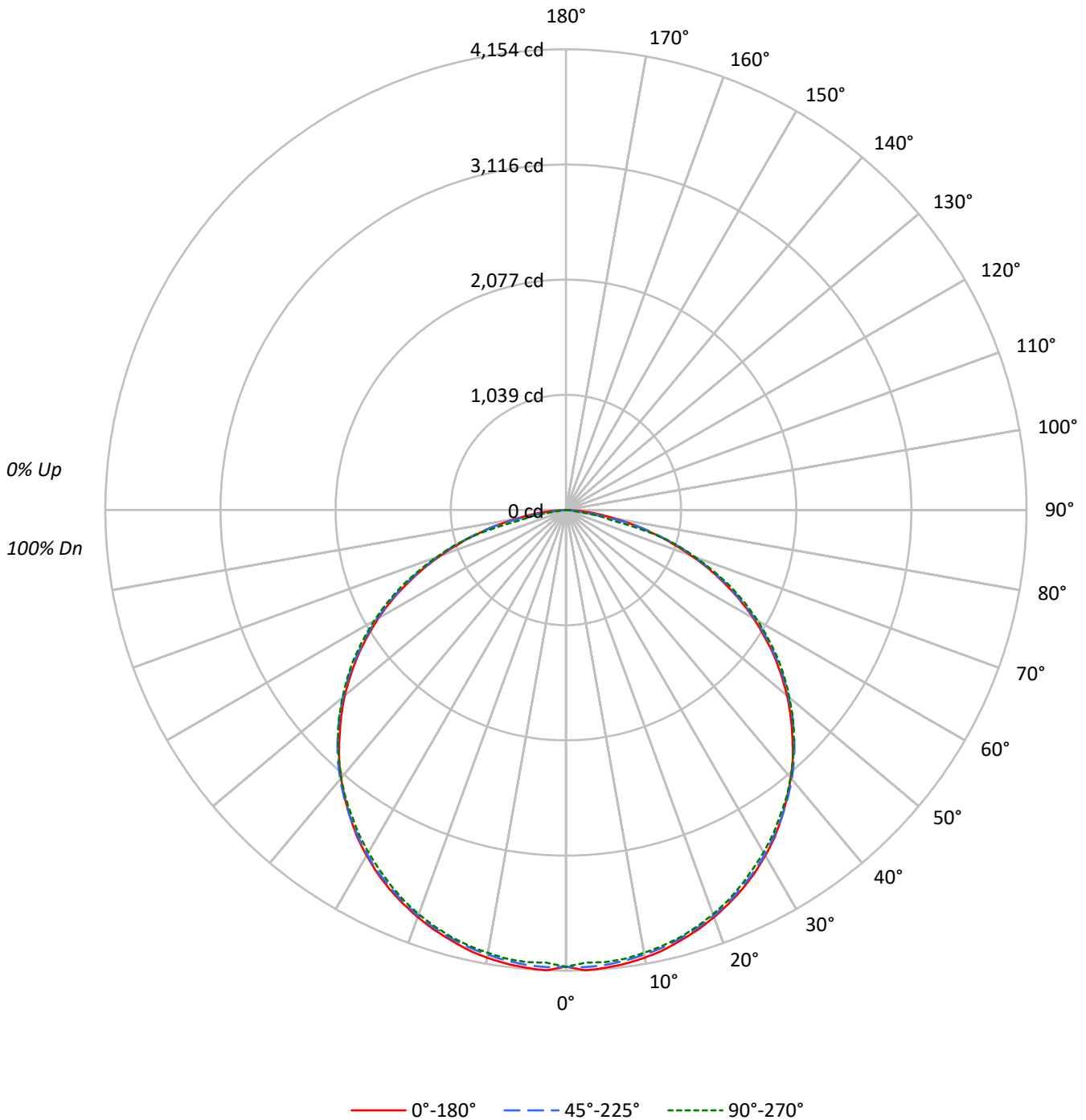
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12215.5 lumens
Efficiency: N/A
Efficacy: 137.3 lumens/watt
Spacing Criteria (0/90/45): 1.3 / 1.29 / 1.41
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	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	109	104	100	96	106	102	98	95	98	94	92	94	91	89	90	88	86	86	86	86	84
2	99	91	84	78	96	89	82	77	85	80	75	82	77	74	79	75	72	72	72	72	70
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	61	61	61	58
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	52	52	52	50
5	76	63	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	45	45	45	43
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	39	39	39	37
7	65	51	42	36	63	50	42	36	48	41	35	47	40	35	46	40	35	35	35	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	31	31	31	29
9	56	42	34	29	55	42	34	29	41	33	28	40	33	28	39	33	28	28	28	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	25	25	25	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6649	6649	6649
5°	6715	6672	6631
10°	6720	6675	6646
15°	6711	6684	6663
20°	6713	6689	6664
25°	6715	6688	6654
30°	6706	6688	6645
35°	6682	6682	6635
40°	6650	6677	6645
45°	6594	6651	6637
50°	6538	6586	6608
55°	6451	6497	6561
60°	6310	6367	6444
65°	6075	6162	6267
70°	5682	5795	5848
75°	5113	5206	4940
80°	4272	3477	2708
85°	3185	837	302



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	390.6	3.2
10°-20°	1126.3	9.2
20°-30°	1724.8	14.1
30°-40°	2111.7	17.3
40°-50°	2234.0	18.3
50°-60°	2060.1	16.9
60°-70°	1589.2	13.0
70°-80°	848.7	6.9
80°-90°	129.9	1.1
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°	3241.8	26.5
0°-40°	5353.6	43.8
0°-60°	9647.7	79.0
0°-90°	12215.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12215.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4118	4118	4118	4118	4118	
5°	4143	4094	4117	4099	4092	394
15°	4015	3972	3999	3985	3986	1134
25°	3769	3730	3754	3726	3735	1737
35°	3390	3370	3390	3361	3366	2121
45°	2888	2887	2913	2893	2907	2229
55°	2292	2289	2308	2322	2331	2044
65°	1590	1590	1613	1625	1640	1570
75°	820	818	835	841	792	868
85°	172	123	45	19	16	211
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4117.9	4117.9	4117.9	4117.9	4117.9
2.5°	4154.3	4105.3	4125.4	4110.4	4085.3
5°	4143.0	4094.0	4116.6	4099.1	4091.5
7.5°	4125.4	4075.2	4097.8	4084.0	4081.5
10°	4099.1	4047.6	4071.5	4056.4	4053.9
12.5°	4063.9	4013.7	4040.1	4022.5	4025.0
15°	4015.0	3972.3	3998.7	3984.9	3986.1
17.5°	3966.0	3922.1	3949.7	3935.9	3937.2
20°	3907.0	3864.4	3893.2	3871.9	3878.2
22.5°	3840.5	3802.9	3828.0	3800.4	3812.9
25°	3769.0	3730.1	3753.9	3726.3	3735.1
27.5°	3687.4	3651.0	3674.8	3646.0	3649.7
30°	3597.0	3564.4	3587.0	3558.1	3564.4
32.5°	3500.4	3471.5	3489.1	3462.7	3471.5
35°	3389.9	3369.9	3389.9	3361.1	3366.1
37.5°	3274.5	3254.4	3282.0	3256.9	3265.7
40°	3155.2	3136.4	3167.8	3142.7	3152.7
42.5°	3028.5	3014.7	3046.1	3021.0	3033.5
45°	2887.9	2886.7	2913.0	2892.9	2906.7
47.5°	2748.6	2746.1	2772.5	2758.6	2775.0
50°	2603.0	2600.5	2621.8	2620.6	2630.6
52.5°	2447.4	2451.2	2471.2	2475.0	2486.3
55°	2291.8	2289.2	2308.1	2321.9	2330.7
57.5°	2122.3	2127.3	2142.4	2158.7	2165.0
60°	1954.1	1951.6	1971.7	1985.5	1995.6
62.5°	1775.9	1775.9	1792.2	1812.3	1822.4
65°	1590.2	1590.2	1612.8	1625.3	1640.4
67.5°	1400.7	1396.9	1417.0	1444.6	1442.1
70°	1203.6	1204.9	1227.5	1241.3	1238.8
72.5°	1007.8	1011.6	1035.4	1041.7	1048.0
75°	819.6	818.3	834.6	840.9	791.9
77.5°	632.6	633.8	643.9	471.9	414.2
80°	459.4	461.9	374.0	291.2	291.2
82.5°	303.7	298.7	192.0	113.0	82.8
85°	171.9	123.0	45.2	18.8	16.3
87.5°	70.3	22.6	12.6	8.8	7.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)