

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: P685448

Luminaire Tested: **8CZL-32-UNV-M-L850-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685448
Test Lab: INNOVATION CENTER(G2)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8CZL-32-UNV-M-L850-CD-U
Description: METALUX CRUZE LINEAR 8FT MEDIUM LENS MODEL @80 CRI and 5000K
Light Source: (1176) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

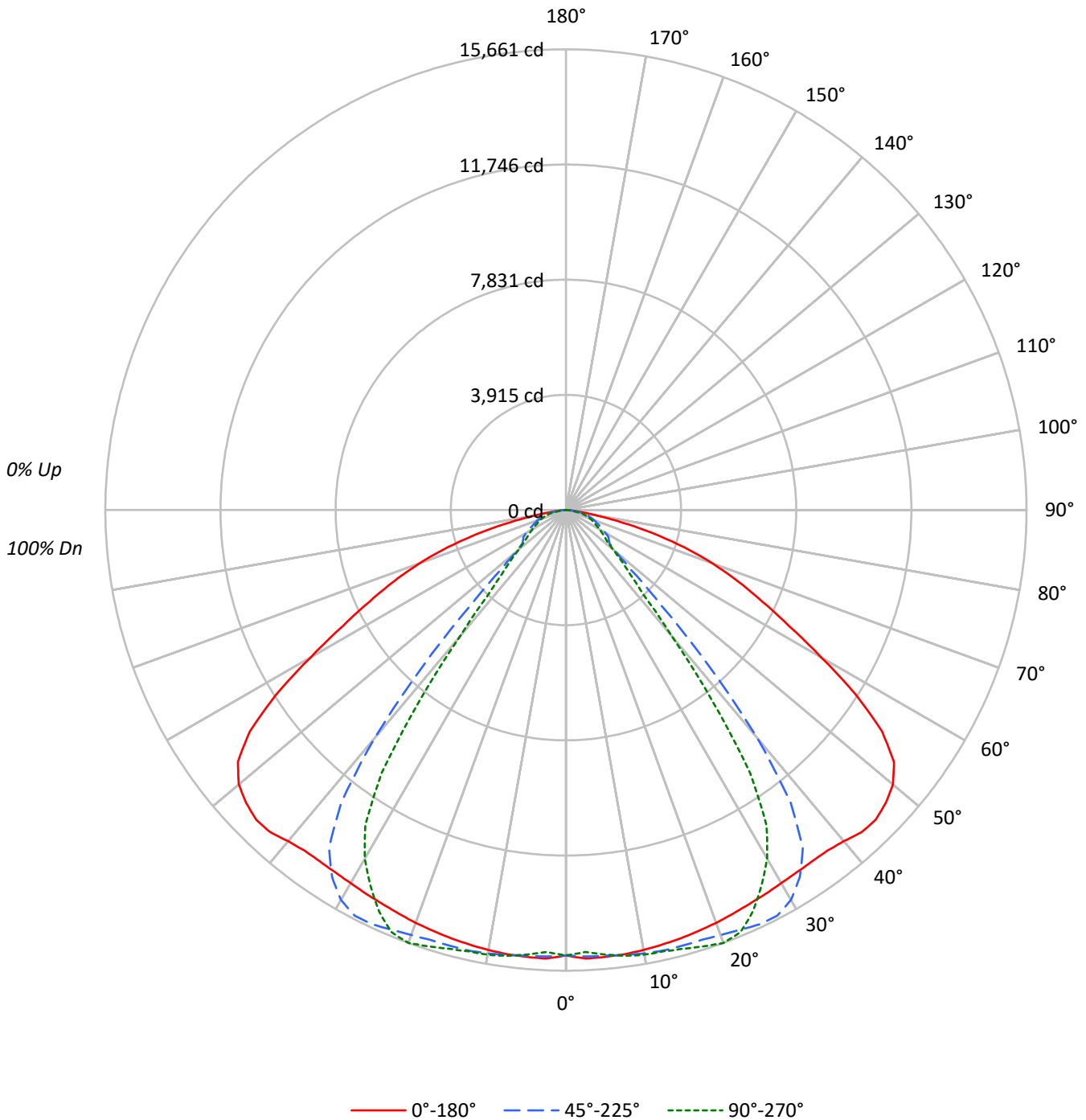
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 32711.6 lumens
Efficiency: N/A
Efficacy: 158.8 lumens/watt
Spacing Criteria (0/90/45): 1.48 / 1.28 / 1.22
Luminous Opening: Rectangular (W 0.83' x L: 8' x H: 0')
CIE Type: Direct

Input Watts (W): 206
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				
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	100	100	100	100
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88	88	88	88
2	103	96	90	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77	77	77	77
3	95	86	80	74	93	85	79	73	82	77	72	79	75	71	77	73	70	68	68	68	68
4	88	78	71	65	86	77	70	64	74	68	64	72	67	63	70	66	62	60	60	60	60
5	82	71	63	57	80	70	63	57	68	61	56	66	60	56	64	59	55	53	53	53	53
6	76	65	57	51	75	64	56	51	62	55	51	61	55	50	59	54	50	48	48	48	48
7	71	59	51	46	70	59	51	46	57	50	46	56	50	45	54	49	45	43	43	43	43
8	67	55	47	42	65	54	47	41	53	46	41	51	45	41	50	45	41	39	39	39	39
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36	36	36	36
10	59	47	39	35	58	46	39	35	45	39	34	44	38	34	44	38	34	33	33	33	33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	24447	24447	24447
5°	24720	24650	24581
10°	24900	25094	25165
15°	25195	25627	25806
20°	25658	26410	26909
25°	26316	27695	26808
30°	27306	28529	25502
35°	28742	27675	21535
40°	30976	21343	11778
45°	34008	10493	7039
50°	36465	5483	5249
55°	36931	5005	4531
60°	32387	4989	4271
65°	28183	4793	4136
70°	25010	4857	4163
75°	19186	4986	4226
80°	9766	5066	3500
85°	3851	2855	997



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1450.7	4.4
10°-20°	4323.9	13.2
20°-30°	6978.3	21.3
30°-40°	8172.6	25.0
40°-50°	5563.6	17.0
50°-60°	3221.5	9.8
60°-70°	1841.8	5.6
70°-80°	948.0	2.9
80°-90°	211.1	0.6
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°	12752.9	39.0
0°-40°	20925.6	64.0
0°-60°	29710.7	90.8
0°-90°	32711.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	32711.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	15141	15141	15141	15141	15141	
5°	15252	15102	15209	15191	15166	1454
15°	15073	15051	15331	15370	15439	4267
25°	14772	14980	15546	15307	15048	6837
35°	14582	15302	14041	11841	10926	9180
45°	14894	11082	4595	3095	3083	11442
55°	13119	3803	1778	1655	1610	11431
65°	7377	1357	1255	1108	1082	7396
75°	3076	838	799	697	678	3269
85°	208	254	154	72	54	352
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°	15141.0	15141.0	15141.0	15141.0	15141.0	15141.0	15141.0	15141.0	15141.0	15141.0	15141.0
2.5°	15262.9	15219.9	15133.9	15098.0	15098.0	15191.2	15205.6	15148.2	15137.5	15087.3	15040.7
5°	15252.2	15209.2	15126.7	15094.4	15105.2	15209.2	15234.2	15187.6	15202.0	15187.6	15166.1
7.5°	15230.7	15184.1	15108.8	15087.3	15119.5	15252.2	15295.2	15270.1	15302.3	15295.2	15288.0
10°	15187.6	15151.8	15080.1	15076.5	15141.0	15305.9	15359.7	15327.4	15338.2	15334.6	15348.9
12.5°	15130.3	15098.0	15037.1	15069.4	15162.6	15338.2	15374.0	15323.9	15338.2	15341.8	15366.9
15°	15072.9	15033.5	14994.1	15069.4	15166.1	15331.0	15366.9	15359.7	15402.7	15406.3	15438.6
17.5°	15001.2	14976.2	14965.4	15065.8	15141.0	15323.9	15406.3	15449.3	15506.7	15521.0	15553.3
20°	14933.1	14911.6	14936.7	15047.8	15130.3	15370.5	15485.2	15549.7	15610.6	15628.5	15660.8
22.5°	14850.7	14836.4	14904.5	15022.8	15148.2	15442.1	15571.2	15578.4	15553.3	15506.7	15528.2
25°	14771.8	14771.8	14872.2	15015.6	15202.0	15546.1	15556.9	15352.5	15169.7	15047.8	15047.8
27.5°	14707.3	14721.7	14847.1	15047.8	15305.9	15553.3	15255.7	14850.7	14581.9	14406.2	14395.5
30°	14646.4	14671.5	14847.1	15137.5	15381.2	15302.3	14725.2	14234.2	13861.4	13692.9	13678.6
32.5°	14603.4	14642.8	14911.6	15273.7	15291.6	14796.9	14044.2	13424.1	12983.2	12732.2	12689.2
35°	14581.9	14628.5	15033.5	15392.0	14929.6	14040.6	12972.4	12015.3	11316.4	10993.7	10925.6
37.5°	14596.2	14678.6	15202.0	15291.6	14022.7	12553.0	11018.8	9646.0	8685.3	8380.6	8169.1
40°	14696.6	14836.4	15334.6	14474.3	12119.3	10126.3	8093.9	6617.0	5953.9	5735.2	5588.3
42.5°	14865.0	15004.8	14986.9	12603.2	9466.7	7194.1	5215.5	4330.1	4007.5	3971.7	3903.6
45°	14893.7	14947.5	13861.4	10155.0	6885.9	4595.4	3358.7	3097.0	3089.9	3115.0	3082.7
47.5°	14743.2	14639.2	12237.6	7767.7	4742.3	2971.6	2527.1	2570.1	2591.6	2573.7	2548.6
50°	14517.3	14133.8	10416.6	5710.2	3161.6	2183.0	2204.5	2243.9	2168.6	2118.5	2089.8
52.5°	14058.5	13312.9	8395.0	4046.9	2186.6	1864.0	2036.0	1921.3	1813.8	1785.1	1781.5
55°	13119.4	12094.2	6459.3	2917.8	1670.4	1777.9	1810.2	1663.2	1631.0	1616.6	1609.5
57.5°	11689.1	10577.9	4857.0	2107.7	1466.1	1717.0	1573.6	1516.3	1484.0	1473.2	1462.5
60°	10029.5	8882.5	3620.4	1548.5	1423.1	1544.9	1426.6	1372.9	1337.0	1322.7	1322.7
62.5°	8559.9	7351.9	2677.6	1258.2	1412.3	1394.4	1286.8	1229.5	1208.0	1200.8	1193.6
65°	7377.0	5914.5	1932.1	1165.0	1319.1	1254.6	1150.6	1111.2	1096.9	1082.5	1082.5
67.5°	6323.1	4631.2	1423.1	1143.5	1211.6	1129.1	1050.3	1018.0	1000.1	996.5	992.9
70°	5297.9	3412.5	1082.5	1118.4	1150.6	1028.8	953.5	914.1	892.5	881.8	881.8
72.5°	4219.0	2340.7	863.9	1028.8	1053.9	910.5	835.2	806.5	788.6	777.8	774.3
75°	3075.5	1469.7	759.9	863.9	906.9	799.3	724.1	699.0	691.8	681.1	677.5
77.5°	1957.2	878.2	648.8	706.2	742.0	673.9	616.5	584.3	580.7	569.9	566.4
80°	1050.3	562.8	519.8	555.6	577.1	544.8	476.7	412.2	394.3	380.0	376.4
82.5°	487.5	358.5	387.1	419.4	430.1	347.7	286.8	258.1	240.2	222.2	211.5
85°	207.9	193.6	240.2	258.1	211.5	154.1	100.4	75.3	60.9	57.4	53.8
87.5°	75.3	75.3	89.6	60.9	35.8	28.7	28.7	25.1	21.5	17.9	17.9
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)