

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: P685378

Luminaire Tested: **8CZL-32-UNV-N-L840-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685378
Test Lab: INNOVATION CENTER(G3)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8CZL-32-UNV-N-L840-CD-U
Description: METALUX CRUZE LINEAR 8FT NARROW LENS MODEL @80 CRI and 4000K
Light Source: (1176) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

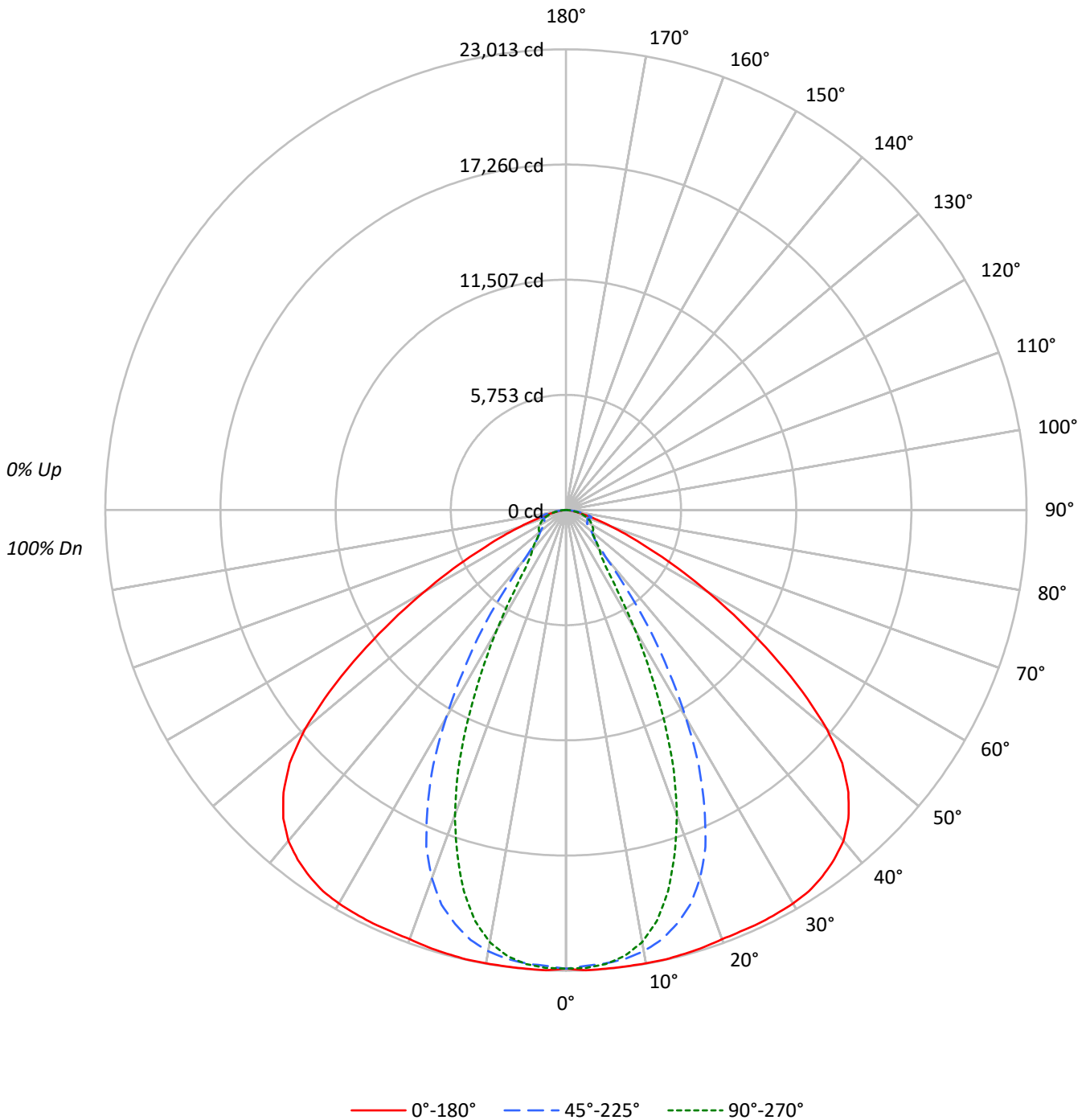
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 32345.5 lumens
Efficiency: N/A
Efficacy: 157.0 lumens/watt
Spacing Criteria (0/90/45): 1.48 / 0.81 / 0.89
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	109	105	102	99	101	99	96	97	95	93	94	92	91	89	89	89	89
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	80	79	79	79	79
3	96	88	81	76	94	86	80	76	84	79	74	81	77	73	79	75	72	70	70	70	70
4	90	80	73	68	88	79	72	67	77	71	66	74	70	66	72	68	65	63	63	63	63
5	84	74	66	61	82	73	66	60	71	64	60	69	63	59	67	62	59	57	57	57	57
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	53	52	52	52	52
7	74	63	55	50	73	62	55	50	61	54	50	59	54	49	58	53	49	47	47	47	47
8	70	58	51	46	68	58	51	46	56	50	46	55	50	45	54	49	45	44	44	44	44
9	66	54	47	42	65	54	47	42	53	47	42	52	46	42	51	46	42	40	40	40	40
10	62	51	44	39	61	50	44	39	49	43	39	49	43	39	48	43	39	37	37	37	37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	36991	36991	36991
5°	37279	36849	36907
10°	37694	36693	35933
15°	38352	35785	32945
20°	39197	33652	27850
25°	40606	29166	20695
30°	42304	22338	12839
35°	44043	14441	6887
40°	45469	6723	5514
45°	45568	4561	4696
50°	42722	4179	4322
55°	35320	3765	4689
60°	26437	3971	4814
65°	17822	4540	5155
70°	11312	5536	5304
75°	6825	8246	5293
80°	4164	7360	4931
85°	2694	4767	3385



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2168.9	6.7
10°-20°	5988.1	18.5
20°-30°	7647.7	23.6
30°-40°	6202.7	19.2
40°-50°	4388.8	13.6
50°-60°	2858.4	8.8
60°-70°	1755.4	5.4
70°-80°	1042.6	3.2
80°-90°	293.0	0.9
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°	15804.7	48.9
0°-40°	22007.4	68.0
0°-60°	29254.6	90.4
0°-90°	32345.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	32345.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	22911	22911	22911	22911	22911	
5°	23001	22952	22736	22828	22771	2195
15°	22944	22634	21408	20296	19709	6498
25°	22793	20911	16372	12728	11616	10538
35°	22345	15170	7326	3930	3494	13975
45°	19956	7637	1998	2123	2056	15222
55°	12547	2571	1338	1562	1666	11213
65°	4665	1318	1188	1426	1349	4847
75°	1094	748	1322	968	848	1276
85°	145	291	257	230	183	203
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	22910.7	22910.7	22910.7	22910.7	22910.7
2.5°	23012.8	22967.6	22792.8	22930.3	22891.0
5°	23001.0	22951.9	22735.8	22828.2	22771.2
7.5°	22993.1	22920.5	22614.1	22586.6	22468.7
10°	22991.2	22863.5	22380.3	22115.1	21916.8
12.5°	22995.1	22769.2	21997.3	21412.0	21009.3
15°	22944.0	22633.7	21408.0	20296.3	19709.0
17.5°	22896.9	22323.3	20665.5	18931.1	18049.2
20°	22812.4	22016.9	19585.2	17257.6	16208.7
22.5°	22788.9	21553.4	18220.1	15102.9	14063.8
25°	22792.8	20911.1	16371.8	12728.1	11616.4
27.5°	22749.6	20054.7	14358.4	10432.0	9115.9
30°	22690.7	18840.8	11981.7	7970.8	6886.6
32.5°	22586.6	17137.8	9548.1	5680.5	4780.9
35°	22345.0	15169.7	7326.5	3930.4	3494.3
37.5°	22009.1	12981.5	4940.0	2950.3	2879.5
40°	21573.0	10995.7	3189.9	2579.0	2616.3
42.5°	20897.3	9280.9	2329.6	2345.3	2349.2
45°	19956.5	7636.9	1997.6	2123.3	2056.5
47.5°	18719.0	5996.8	1814.9	1850.3	1840.5
50°	17008.2	4490.2	1663.7	1655.8	1720.7
52.5°	14892.7	3321.5	1508.5	1575.3	1697.1
55°	12547.4	2571.2	1337.6	1561.6	1665.7
57.5°	10298.4	2084.0	1239.4	1522.3	1583.2
60°	8186.9	1736.4	1229.6	1449.6	1490.8
62.5°	6324.8	1488.9	1223.7	1414.2	1430.0
65°	4665.0	1318.0	1188.4	1426.0	1349.4
67.5°	3398.1	1263.0	1160.9	1406.4	1243.4
70°	2396.3	1109.8	1172.6	1298.3	1123.5
72.5°	1626.4	927.1	1304.2	1145.1	984.1
75°	1094.1	748.4	1321.9	968.4	848.5
77.5°	711.0	622.7	1123.5	791.6	703.2
80°	447.8	518.6	791.6	608.9	530.3
82.5°	290.7	398.7	500.9	430.2	365.3
85°	145.4	290.7	257.3	229.8	182.7
87.5°	86.4	176.8	137.5	100.2	92.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)