

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: P685374

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

Issue Date: 05/10/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P685374  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 05/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 8CZL-10-UNV-N-L840-CD-U  
Description: METALUX CRUZE LINEAR 8FT NARROW LENS MODEL @80 CRI and 4000K  
Light Source: (784) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

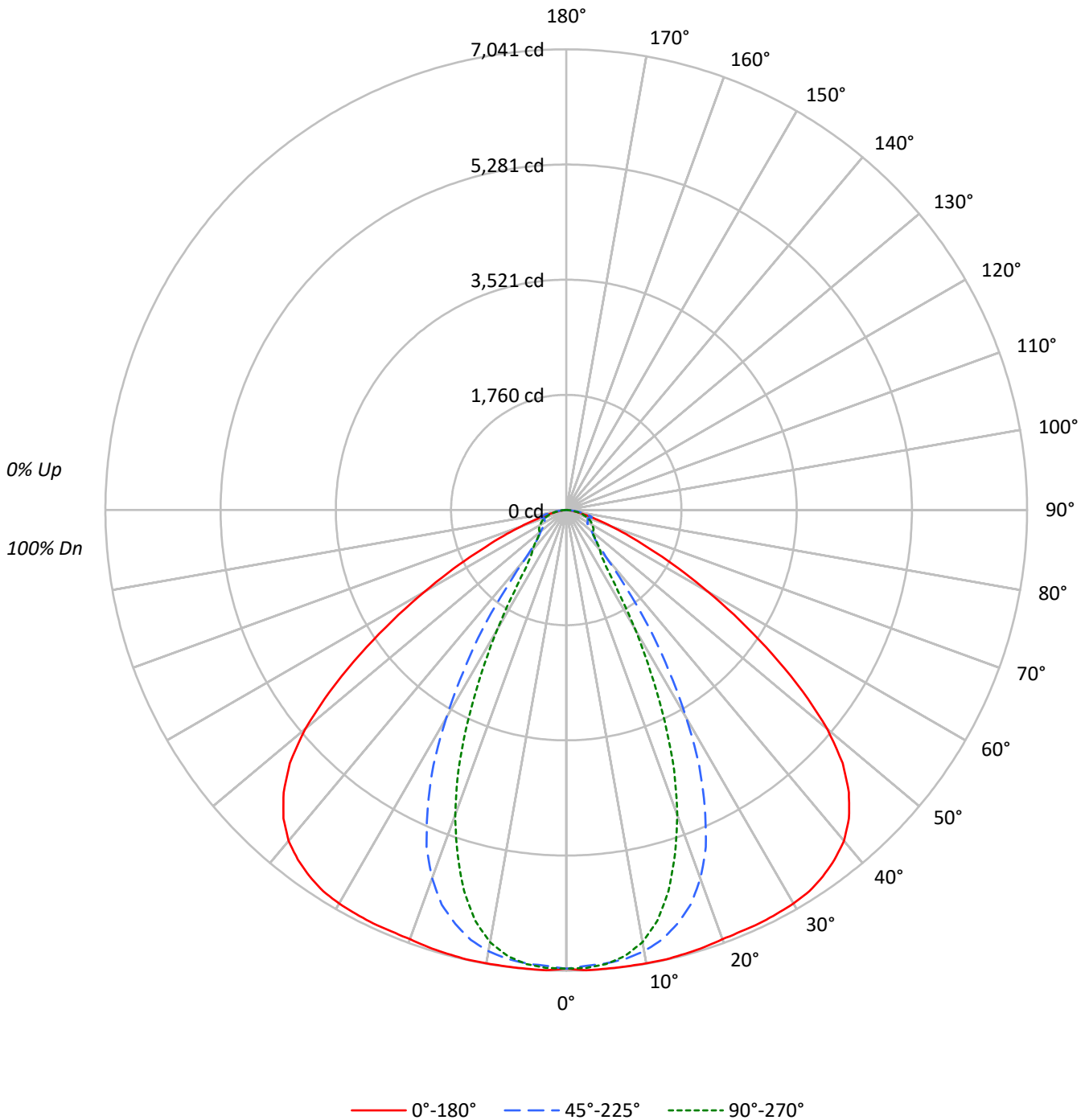
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9896.3 lumens  
Efficiency: N/A  
Efficacy: 157.1 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): 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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	107	104	101	109	105	102	99	101	99	96	97	95	93	94	92	91	89
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	80	79
3	96	88	81	76	94	86	80	76	84	79	74	81	77	73	79	75	72	70
4	90	80	73	68	88	79	72	67	77	71	66	74	70	66	72	68	65	63
5	84	74	66	61	82	73	66	60	71	64	60	69	63	59	67	62	59	57
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	53	52
7	74	63	55	50	73	62	55	50	61	54	50	59	54	49	58	53	49	47
8	70	58	51	46	68	58	51	46	56	50	46	55	50	45	54	49	45	44
9	66	54	47	42	65	54	47	42	53	47	42	52	46	42	51	46	42	40
10	62	51	44	39	61	50	44	39	49	43	39	49	43	39	48	43	39	37

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	11318	11318	11318
5°	11406	11274	11292
10°	11533	11226	10994
15°	11734	10948	10080
20°	11992	10296	8521
25°	12424	8924	6332
30°	12943	6835	3928
35°	13475	4418	2107
40°	13912	2057	1687
45°	13942	1396	1437
50°	13071	1279	1322
55°	10807	1152	1435
60°	8088	1215	1473
65°	5453	1389	1577
70°	3461	1694	1623
75°	2088	2523	1619
80°	1274	2252	1509
85°	824	1458	1036



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	663.6	6.7
10°-20°	1832.1	18.5
20°-30°	2339.9	23.6
30°-40°	1897.8	19.2
40°-50°	1342.8	13.6
50°-60°	874.5	8.8
60°-70°	537.1	5.4
70°-80°	319.0	3.2
80°-90°	89.6	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°	4835.5	48.9
0°-40°	6733.3	68.0
0°-60°	8950.6	90.4
0°-90°	9896.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9896.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	7010	7010	7010	7010	7010	
5°	7037	7022	6956	6984	6967	672
15°	7020	6925	6550	6210	6030	1988
25°	6974	6398	5009	3894	3554	3224
35°	6837	4641	2242	1202	1069	4276
45°	6106	2337	611	650	629	4657
55°	3839	787	409	478	510	3431
65°	1427	403	364	436	413	1483
75°	335	229	404	296	260	390
85°	44	89	79	70	56	62
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	7009.7	7009.7	7009.7	7009.7	7009.7
2.5°	7040.9	7027.1	6973.6	7015.7	7003.7
5°	7037.3	7022.3	6956.2	6984.4	6967.0
7.5°	7034.9	7012.7	6918.9	6910.5	6874.5
10°	7034.3	6995.3	6847.4	6766.3	6705.6
12.5°	7035.5	6966.4	6730.2	6551.1	6427.9
15°	7019.9	6924.9	6549.9	6209.8	6030.1
17.5°	7005.5	6830.0	6322.8	5792.1	5522.3
20°	6979.6	6736.2	5992.2	5280.1	4959.2
22.5°	6972.4	6594.4	5574.6	4620.8	4302.9
25°	6973.6	6397.9	5009.1	3894.3	3554.1
27.5°	6960.4	6135.9	4393.1	3191.7	2789.1
30°	6942.4	5764.5	3665.9	2438.7	2107.0
32.5°	6910.5	5243.4	2921.3	1738.0	1462.8
35°	6836.6	4641.3	2241.6	1202.5	1069.1
37.5°	6733.8	3971.8	1511.4	902.7	881.0
40°	6600.4	3364.2	976.0	789.1	800.5
42.5°	6393.7	2839.6	712.7	717.6	718.8
45°	6105.8	2336.6	611.2	649.6	629.2
47.5°	5727.2	1834.8	555.3	566.1	563.1
50°	5203.8	1373.8	509.0	506.6	526.4
52.5°	4556.5	1016.2	461.5	482.0	519.2
55°	3839.0	786.7	409.3	477.8	509.6
57.5°	3150.9	637.6	379.2	465.7	484.4
60°	2504.8	531.3	376.2	443.5	456.1
62.5°	1935.1	455.5	374.4	432.7	437.5
65°	1427.3	403.2	363.6	436.3	412.9
67.5°	1039.7	386.4	355.2	430.3	380.4
70°	733.2	339.5	358.8	397.2	343.8
72.5°	497.6	283.7	399.0	350.4	301.1
75°	334.7	229.0	404.5	296.3	259.6
77.5°	217.5	190.5	343.8	242.2	215.1
80°	137.0	158.7	242.2	186.3	162.3
82.5°	88.9	122.0	153.2	131.6	111.8
85°	44.5	88.9	78.7	70.3	55.9
87.5°	26.4	54.1	42.1	30.6	28.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)