

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: P685487

Luminaire Tested: **8CZL-24-UNV-W-L835-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685487
Test Lab: INNOVATION CENTER(G2)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8CZL-24-UNV-W-L835-CD-U
Description: METALUX CRUZE LINEAR 8FT WIDE LENS MODEL @80 CRI and 3500K
Light Source: (1176) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

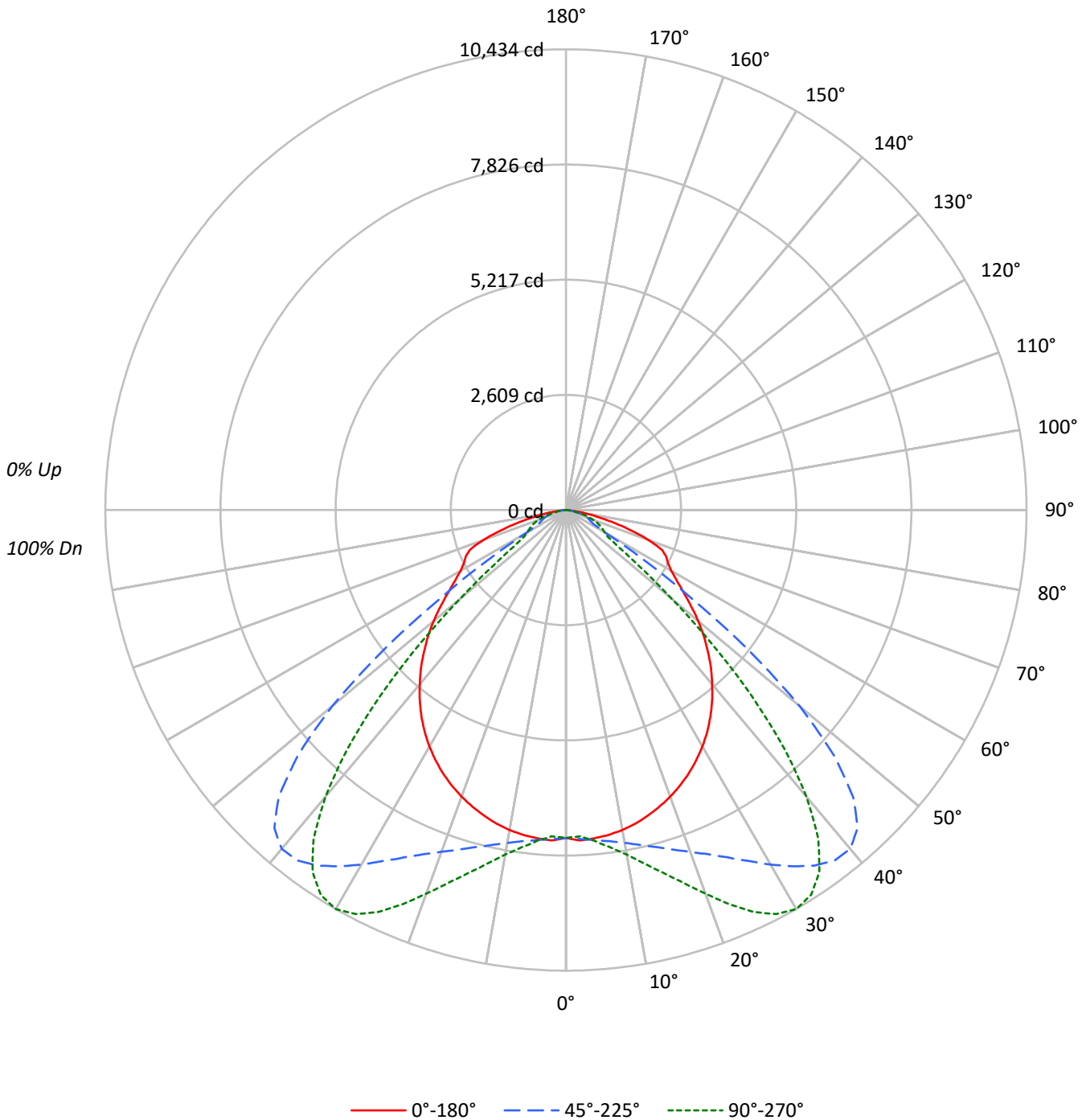
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23750.8 lumens
Efficiency: N/A
Efficacy: 154.2 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): 154
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°	11990	11990	11990
5°	12095	12157	12195
10°	12065	12548	12988
15°	11977	13212	14218
20°	11873	14153	15883
25°	11730	15465	17890
30°	11530	17283	19454
35°	11248	19371	19722
40°	10858	21105	17867
45°	10389	21025	13561
50°	9826	17376	7816
55°	9158	9558	4019
60°	8889	3335	3277
65°	9579	2427	3285
70°	9459	2487	3170
75°	7152	2175	2545
80°	4322	1777	1801
85°	2153	910	383



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	718.7	3.0
10°-20°	2234.9	9.4
20°-30°	3926.0	16.5
30°-40°	5454.2	23.0
40°-50°	5531.2	23.3
50°-60°	3549.6	14.9
60°-70°	1660.2	7.0
70°-80°	575.7	2.4
80°-90°	100.4	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°	6879.6	29.0
0°-40°	12333.8	51.9
0°-60°	21414.6	90.2
0°-90°	23750.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	23750.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7426	7426	7426	7426	7426	
5°	7462	7409	7501	7525	7524	709
15°	7165	7336	7904	8328	8506	2022
25°	6584	7259	8681	9697	10042	3031
35°	5706	7320	9828	10166	10006	3564
45°	4550	7836	9208	6868	5939	3507
55°	3254	8094	3396	1635	1428	2936
65°	2507	2586	635	795	860	2439
75°	1146	396	349	402	408	1241
85°	116	105	49	28	21	175
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°	7426.2	7426.2	7426.2	7426.2	7426.2	7426.2	7426.2	7426.2	7426.2	7426.2	7426.2
2.5°	7490.8	7467.5	7428.8	7413.3	7421.1	7459.8	7472.7	7444.3	7436.6	7415.9	7395.2
5°	7462.4	7441.7	7413.3	7408.1	7436.6	7501.1	7529.5	7521.8	7534.7	7537.3	7524.3
7.5°	7421.1	7403.0	7379.7	7403.0	7462.4	7565.7	7630.2	7650.9	7697.3	7707.7	7705.1
10°	7359.1	7343.6	7335.8	7395.2	7498.5	7653.5	7767.1	7823.9	7891.0	7914.2	7922.0
12.5°	7276.5	7261.0	7281.6	7384.9	7547.6	7769.6	7937.5	8038.2	8133.7	8182.8	8198.3
15°	7165.4	7160.3	7211.9	7377.2	7609.6	7903.9	8136.3	8293.8	8430.7	8484.9	8505.6
17.5°	7044.1	7046.6	7139.6	7374.6	7684.4	8061.4	8358.4	8583.0	8750.9	8828.3	8851.6
20°	6909.8	6917.5	7057.0	7372.0	7777.4	8237.0	8603.7	8898.0	9107.2	9210.5	9244.0
22.5°	6752.3	6767.8	6966.6	7374.6	7875.5	8438.4	8892.9	9244.0	9494.5	9618.5	9659.8
25°	6584.4	6607.7	6873.6	7387.5	7999.5	8681.1	9223.4	9634.0	9887.0	9995.4	10041.9
27.5°	6390.8	6429.5	6772.9	7405.6	8146.6	8962.6	9561.7	9956.7	10191.7	10274.3	10315.6
30°	6184.2	6228.1	6674.8	7441.7	8337.7	9269.9	9874.1	10207.2	10364.7	10411.2	10434.4
32.5°	5957.0	6029.3	6576.7	7501.1	8562.4	9566.8	10103.9	10302.7	10341.5	10326.0	10333.7
35°	5706.5	5784.0	6483.7	7599.2	8818.0	9827.6	10194.3	10194.3	10080.7	10010.9	10005.8
37.5°	5440.6	5538.7	6390.8	7712.8	9114.9	10000.6	10096.2	9840.5	9564.2	9414.5	9391.2
40°	5151.4	5283.1	6326.2	7867.8	9383.5	10013.5	9745.0	9218.2	8748.3	8505.6	8477.2
42.5°	4864.7	5027.4	6297.8	8069.2	9584.9	9776.0	9084.0	8270.6	7632.8	7346.2	7315.2
45°	4549.7	4764.0	6308.2	8345.5	9639.1	9207.9	8100.2	7046.6	6331.4	5969.9	5938.9
47.5°	4237.3	4503.2	6334.0	8657.9	9401.6	8244.8	6791.0	5572.2	4862.2	4482.6	4477.4
50°	3911.9	4257.9	6396.0	8913.5	8758.6	6917.5	5182.3	3992.0	3423.9	3134.7	3111.5
52.5°	3573.7	4043.6	6530.2	8960.0	7614.7	5213.3	3516.9	2664.8	2295.5	2112.2	2076.0
55°	3253.5	3862.9	6749.7	8541.7	5969.9	3395.5	2215.5	1681.0	1495.1	1420.2	1427.9
57.5°	2977.2	3728.6	7005.3	7449.5	3875.8	1998.6	1283.3	1118.1	1112.9	1120.6	1123.2
60°	2752.6	3646.0	7118.9	5587.7	2127.7	1032.9	896.0	932.2	981.2	1009.6	1014.8
62.5°	2605.4	3602.1	6772.9	3238.0	945.1	720.4	782.4	849.5	906.3	932.2	934.7
65°	2507.3	3485.9	5541.3	1600.9	578.4	635.2	712.7	782.4	834.0	854.7	859.9
67.5°	2354.9	3158.0	3798.3	663.6	508.7	573.2	648.1	715.3	759.1	774.6	777.2
70°	2003.7	2644.1	2207.7	441.5	459.6	526.8	586.1	637.8	666.2	673.9	671.4
72.5°	1564.8	2094.1	1115.5	400.2	426.1	462.2	495.8	524.2	539.7	547.4	547.4
75°	1146.5	1531.2	524.2	353.8	317.6	348.6	382.2	400.2	405.4	408.0	408.0
77.5°	769.5	1056.1	312.4	273.7	245.3	271.1	284.0	276.3	271.1	276.3	276.3
80°	464.8	650.7	273.7	198.8	188.5	191.1	180.7	180.7	191.1	196.2	193.7
82.5°	250.5	369.2	240.1	144.6	126.5	116.2	113.6	108.4	103.3	100.7	100.7
85°	116.2	188.5	154.9	87.8	67.1	49.1	38.7	28.4	25.8	20.7	20.7
87.5°	46.5	72.3	46.5	28.4	15.5	10.3	7.7	5.2	2.6	2.6	2.6
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)