

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: P685517

Luminaire Tested: **8CZL-24-UNV-W-L935-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685517
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-L935-CD-U
Description: METALUX CRUZE LINEAR 8FT WIDE LENS MODEL @90 CRI and 3500K
Light Source: (1176) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

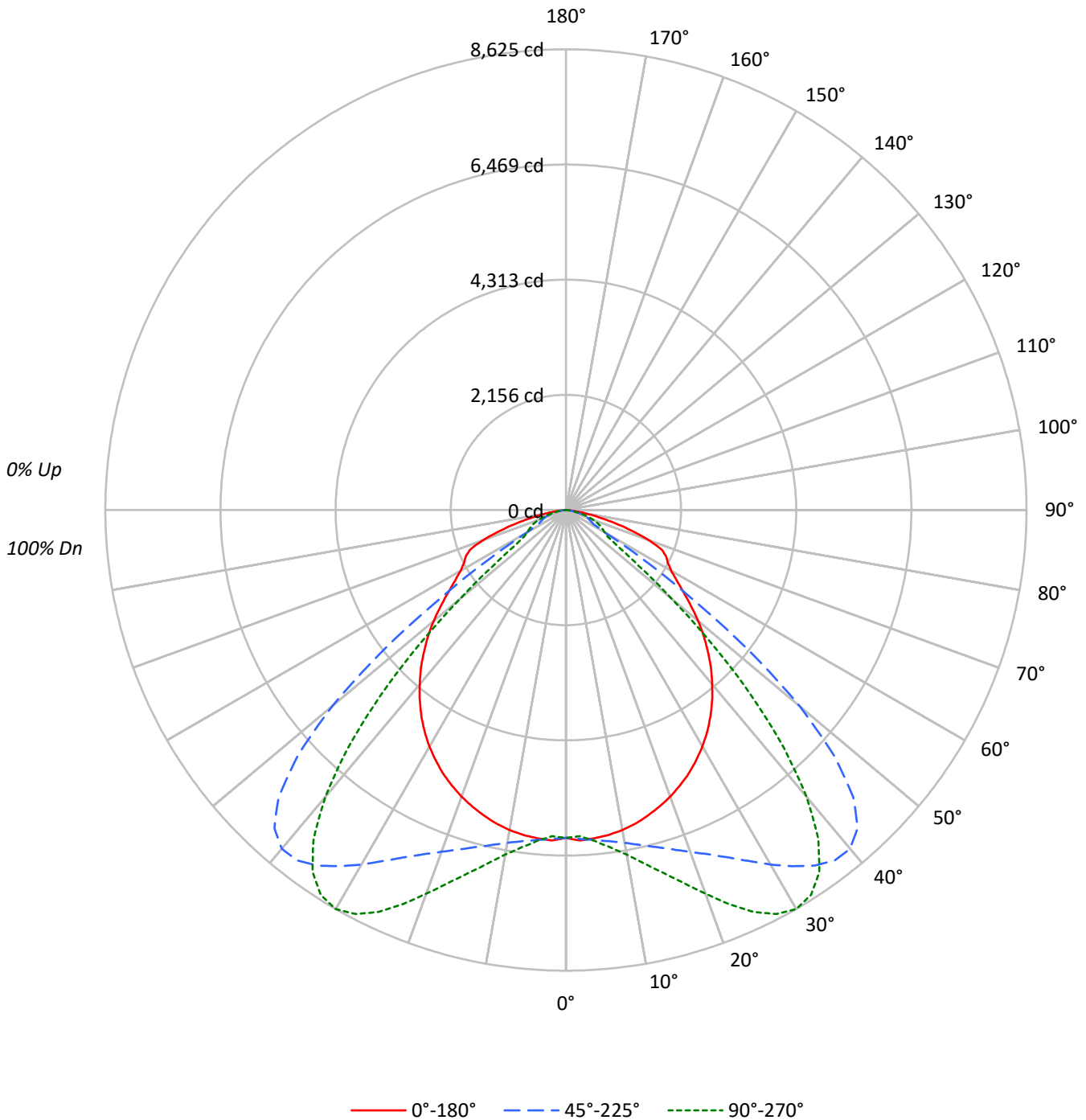
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19631.6 lumens
Efficiency: N/A
Efficacy: 127.5 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	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	111	106	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89	89	89	89	87
2	102	94	88	83	99	93	87	82	89	85	81	86	82	79	83	80	77	77	77	77	75
3	93	84	77	71	91	82	76	70	79	74	69	77	72	68	74	70	67	67	67	67	65
4	86	75	67	61	84	73	66	60	71	65	59	69	63	59	67	62	58	58	58	58	56
5	79	67	59	52	77	66	58	52	64	57	52	62	56	51	60	55	51	51	51	51	49
6	73	60	52	46	71	59	51	46	58	51	45	56	50	45	55	49	45	45	45	45	43
7	68	55	46	40	66	54	46	40	52	45	40	51	45	40	50	44	39	39	39	39	38
8	63	50	42	36	61	49	41	36	48	41	36	47	40	35	45	40	35	35	35	35	33
9	59	46	38	32	57	45	37	32	44	37	32	43	36	32	42	36	32	32	32	32	30
10	55	42	34	29	54	41	34	29	40	34	29	39	33	29	39	33	29	29	29	29	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9911	9911	9911
5°	9997	10049	10080
10°	9973	10372	10735
15°	9900	10920	11752
20°	9813	11698	13129
25°	9696	12783	14787
30°	9530	14285	16080
35°	9297	16011	16301
40°	8974	17445	14768
45°	8587	17379	11209
50°	8122	14362	6460
55°	7570	7900	3322
60°	7347	2757	2709
65°	7918	2006	2715
70°	7819	2055	2620
75°	5911	1797	2104
80°	3572	1468	1489
85°	1778	752	317



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	594.1	3.0
10°-20°	1847.3	9.4
20°-30°	3245.1	16.5
30°-40°	4508.2	23.0
40°-50°	4571.9	23.3
50°-60°	2934.0	14.9
60°-70°	1372.3	7.0
70°-80°	475.8	2.4
80°-90°	83.0	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°	5686.5	29.0
0°-40°	10194.7	51.9
0°-60°	17700.5	90.2
0°-90°	19631.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	19631.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6138	6138	6138	6138	6138	
5°	6168	6124	6200	6220	6219	586
15°	5923	6064	6533	6884	7030	1671
25°	5442	6000	7176	8015	8300	2505
35°	4717	6051	8123	8403	8270	2946
45°	3761	6477	7611	5677	4909	2899
55°	2689	6690	2807	1351	1180	2427
65°	2072	2138	525	657	711	2016
75°	948	328	288	332	337	1026
85°	96	86	41	23	17	145
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°	6138.3	6138.3	6138.3	6138.3	6138.3	6138.3	6138.3	6138.3	6138.3	6138.3	6138.3
2.5°	6191.6	6172.4	6140.4	6127.6	6134.0	6166.0	6176.7	6153.2	6146.8	6129.7	6112.6
5°	6168.1	6151.1	6127.6	6123.3	6146.8	6200.2	6223.6	6217.2	6227.9	6230.0	6219.4
7.5°	6134.0	6119.0	6099.8	6119.0	6168.1	6253.5	6306.9	6323.9	6362.4	6370.9	6368.8
10°	6082.8	6070.0	6063.6	6112.6	6198.0	6326.1	6420.0	6466.9	6522.4	6541.6	6548.0
12.5°	6014.5	6001.7	6018.7	6104.1	6238.6	6422.1	6560.8	6644.1	6723.1	6763.6	6776.4
15°	5922.7	5918.4	5961.1	6097.7	6289.8	6533.1	6725.2	6855.4	6968.5	7013.3	7030.4
17.5°	5822.4	5824.5	5901.3	6095.6	6351.7	6663.3	6908.7	7094.4	7233.2	7297.2	7316.4
20°	5711.4	5717.8	5833.1	6093.4	6428.5	6808.4	7111.5	7354.8	7527.7	7613.1	7640.8
22.5°	5581.2	5594.0	5758.3	6095.6	6509.6	6974.9	7350.5	7640.8	7847.8	7950.3	7984.4
25°	5442.5	5461.7	5681.5	6106.2	6612.1	7175.5	7623.7	7963.1	8172.2	8261.9	8300.3
27.5°	5282.4	5314.4	5598.3	6121.2	6733.7	7408.2	7903.3	8229.9	8424.1	8492.4	8526.5
30°	5111.7	5147.9	5517.2	6151.1	6891.7	7662.1	8161.6	8436.9	8567.1	8605.5	8624.7
32.5°	4923.8	4983.6	5436.1	6200.2	7077.3	7907.6	8351.5	8515.9	8547.9	8535.1	8541.5
35°	4716.8	4780.8	5359.2	6281.3	7288.6	8123.2	8426.2	8426.2	8332.3	8274.7	8270.4
37.5°	4497.0	4578.1	5282.4	6375.2	7534.1	8266.2	8345.1	8133.8	7905.5	7781.7	7762.5
40°	4257.9	4366.8	5229.0	6503.2	7756.1	8276.8	8054.9	7619.5	7231.0	7030.4	7006.9
42.5°	4021.0	4155.5	5205.6	6669.7	7922.5	8080.5	7508.5	6836.2	6309.0	6072.1	6046.5
45°	3760.6	3937.8	5214.1	6898.1	7967.4	7610.9	6695.3	5824.5	5233.3	4934.5	4908.9
47.5°	3502.4	3722.2	5235.4	7156.3	7771.0	6814.8	5613.2	4605.8	4018.9	3705.2	3700.9
50°	3233.5	3519.5	5286.7	7367.6	7239.6	5717.8	4283.5	3299.6	2830.1	2591.0	2571.8
52.5°	2953.9	3342.3	5397.7	7406.0	6294.1	4309.2	2906.9	2202.6	1897.4	1745.9	1716.0
55°	2689.2	3192.9	5579.1	7060.3	4934.5	2806.6	1831.2	1389.4	1235.8	1173.9	1180.3
57.5°	2460.9	3081.9	5790.4	6157.5	3203.6	1652.0	1060.7	924.2	919.9	926.3	928.4
60°	2275.2	3013.6	5884.3	4618.6	1758.7	853.7	740.6	770.5	811.0	834.5	838.8
62.5°	2153.5	2977.4	5598.3	2676.4	781.2	595.5	646.7	702.2	749.1	770.5	772.6
65°	2072.4	2881.3	4580.2	1323.3	478.1	525.0	589.1	646.7	689.4	706.5	710.7
67.5°	1946.5	2610.3	3139.6	548.5	420.5	473.8	535.7	591.2	627.5	640.3	642.4
70°	1656.2	2185.5	1824.8	365.0	379.9	435.4	484.5	527.2	550.7	557.1	554.9
72.5°	1293.4	1730.9	922.0	330.8	352.2	382.0	409.8	433.3	446.1	452.5	452.5
75°	947.6	1265.6	433.3	292.4	262.5	288.1	315.9	330.8	335.1	337.2	337.2
77.5°	636.0	872.9	258.3	226.2	202.8	224.1	234.8	228.4	224.1	228.4	228.4
80°	384.2	537.8	226.2	164.3	155.8	157.9	149.4	149.4	157.9	162.2	160.1
82.5°	207.0	305.2	198.5	119.5	104.6	96.0	93.9	89.6	85.4	83.2	83.2
85°	96.0	155.8	128.1	72.6	55.5	40.6	32.0	23.5	21.3	17.1	17.1
87.5°	38.4	59.8	38.4	23.5	12.8	8.5	6.4	4.3	2.1	2.1	2.1
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)