

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: P685427

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

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685427
Test Lab: INNOVATION CENTER(G2)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8CZL-24-UNV-M-L835-CD-U
Description: METALUX CRUZE LINEAR 8FT MEDIUM LENS MODEL @80 CRI and 3500K
Light Source: (1176) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

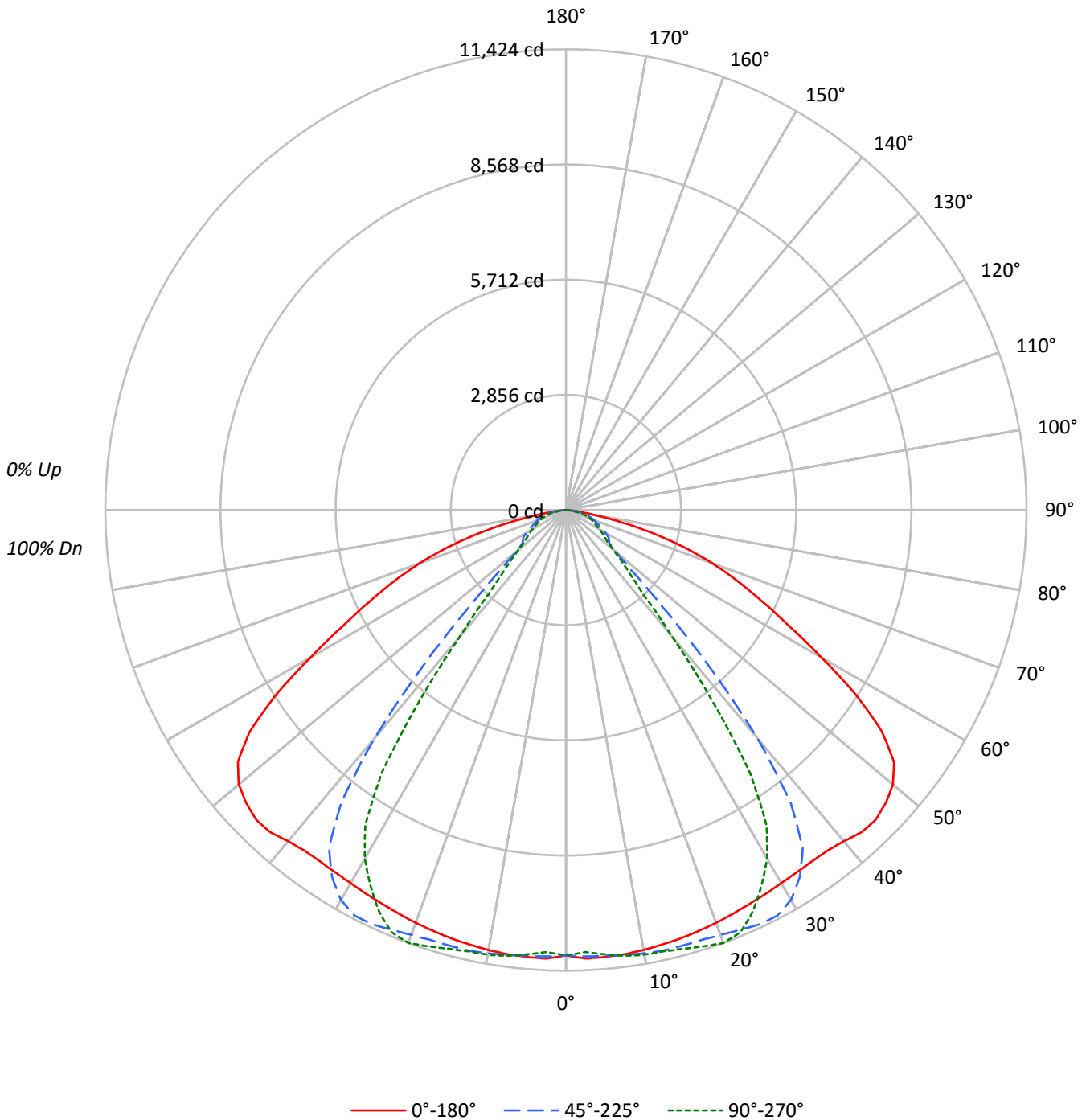
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23860.9 lumens
Efficiency: N/A
Efficacy: 154.9 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): 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	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88
2	103	96	90	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77
3	95	86	80	74	93	85	79	73	82	77	72	79	75	71	77	73	70	68
4	88	78	71	65	86	77	70	64	74	68	64	72	67	63	70	66	62	60
5	82	71	63	57	80	70	63	57	68	61	56	66	60	56	64	59	55	53
6	76	65	57	51	75	64	56	51	62	55	51	61	55	50	59	54	50	48
7	71	59	51	46	70	59	51	46	57	50	46	56	50	45	54	49	45	43
8	67	55	47	42	65	54	47	41	53	46	41	51	45	41	50	45	41	39
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36
10	59	47	39	35	58	46	39	35	45	39	34	44	38	34	44	38	34	33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17832	17832	17832
5°	18032	17981	17930
10°	18163	18305	18356
15°	18378	18693	18824
20°	18716	19264	19628
25°	19196	20202	19555
30°	19918	20810	18602
35°	20965	20187	15708
40°	22595	15569	8592
45°	24807	7654	5134
50°	26599	4000	3829
55°	26938	3651	3305
60°	23624	3639	3116
65°	20558	3496	3017
70°	18243	3542	3036
75°	13995	3638	3083
80°	7123	3695	2552
85°	2810	2082	726



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1058.2	4.4
10°-20°	3154.0	13.2
20°-30°	5090.2	21.3
30°-40°	5961.4	25.0
40°-50°	4058.3	17.0
50°-60°	2349.9	9.8
60°-70°	1343.5	5.6
70°-80°	691.5	2.9
80°-90°	154.0	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°	9302.4	39.0
0°-40°	15263.8	64.0
0°-60°	21671.9	90.8
0°-90°	23860.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	23860.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	11044	11044	11044	11044	11044	
5°	11125	11016	11094	11081	11063	1060
15°	10995	10978	11183	11212	11261	3113
25°	10775	10927	11340	11165	10976	4987
35°	10636	11162	10242	8637	7970	6696
45°	10864	8083	3352	2258	2249	8346
55°	9570	2774	1297	1207	1174	8338
65°	5381	990	915	808	790	5395
75°	2243	611	583	509	494	2385
85°	152	185	112	52	39	257
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°	11044.4	11044.4	11044.4	11044.4	11044.4	11044.4	11044.4	11044.4	11044.4	11044.4	11044.4
2.5°	11133.3	11101.9	11039.2	11013.0	11013.0	11081.0	11091.4	11049.6	11041.8	11005.2	10971.2
5°	11125.4	11094.1	11033.9	11010.4	11018.2	11094.1	11112.4	11078.4	11088.8	11078.4	11062.7
7.5°	11109.7	11075.8	11020.8	11005.2	11028.7	11125.4	11156.8	11138.5	11162.0	11156.8	11151.6
10°	11078.4	11052.2	10999.9	10997.3	11044.4	11164.7	11203.9	11180.3	11188.2	11185.6	11196.0
12.5°	11036.5	11013.0	10968.6	10992.1	11060.1	11188.2	11214.3	11177.7	11188.2	11190.8	11209.1
15°	10994.7	10965.9	10937.2	10992.1	11062.7	11183.0	11209.1	11203.9	11235.3	11237.9	11261.4
17.5°	10942.4	10924.1	10916.3	10989.5	11044.4	11177.7	11237.9	11269.2	11311.1	11321.5	11345.1
20°	10892.7	10877.0	10895.3	10976.4	11036.5	11211.7	11295.4	11342.5	11386.9	11400.0	11423.5
22.5°	10832.6	10822.1	10871.8	10958.1	11049.6	11264.0	11358.1	11363.4	11345.1	11311.1	11326.8
25°	10775.1	10775.1	10848.3	10952.9	11088.8	11339.8	11347.7	11198.6	11065.3	10976.4	10976.4
27.5°	10728.0	10738.5	10830.0	10976.4	11164.7	11345.1	11128.0	10832.6	10636.5	10508.4	10500.5
30°	10683.6	10701.9	10830.0	11041.8	11219.6	11162.0	10741.1	10382.9	10110.9	9988.1	9977.6
32.5°	10652.2	10680.9	10877.0	11141.1	11154.2	10793.4	10244.3	9792.0	9470.3	9287.3	9255.9
35°	10636.5	10670.5	10965.9	11227.4	10890.1	10241.7	9462.5	8764.4	8254.5	8019.2	7969.5
37.5°	10646.9	10707.1	11088.8	11154.2	10228.6	9156.6	8037.5	7036.1	6335.4	6113.1	5958.8
40°	10720.2	10822.1	11185.6	10558.1	8840.2	7386.5	5903.9	4826.7	4343.0	4183.5	4076.3
42.5°	10843.0	10945.0	10931.9	9193.2	6905.4	5247.6	3804.3	3158.5	2923.2	2897.1	2847.4
45°	10864.0	10903.2	10110.9	7407.4	5022.8	3352.0	2449.9	2259.1	2253.8	2272.2	2248.6
47.5°	10754.2	10678.3	8926.5	5666.0	3459.2	2167.6	1843.3	1874.7	1890.4	1877.3	1859.0
50°	10589.4	10309.7	7598.2	4165.2	2306.1	1592.3	1608.0	1636.8	1581.9	1545.3	1524.4
52.5°	10254.7	9710.9	6123.6	2952.0	1595.0	1359.6	1485.1	1401.5	1323.0	1302.1	1299.5
55°	9569.7	8821.9	4711.6	2128.3	1218.4	1296.9	1320.4	1213.2	1189.7	1179.2	1174.0
57.5°	8526.4	7715.9	3542.9	1537.4	1069.4	1252.4	1147.8	1106.0	1082.5	1074.6	1066.8
60°	7315.9	6479.2	2640.8	1129.5	1038.0	1126.9	1040.6	1001.4	975.3	964.8	964.8
62.5°	6243.8	5362.7	1953.2	917.8	1030.2	1017.1	938.7	896.8	881.1	875.9	870.7
65°	5381.0	4314.2	1409.3	849.8	962.2	915.1	839.3	810.5	800.1	789.6	789.6
67.5°	4612.3	3378.2	1038.0	834.1	883.8	823.6	766.1	742.6	729.5	726.9	724.3
70°	3864.5	2489.2	789.6	815.8	839.3	750.4	695.5	666.7	651.1	643.2	643.2
72.5°	3077.5	1707.4	630.1	750.4	768.7	664.1	609.2	588.3	575.2	567.4	564.8
75°	2243.4	1072.0	554.3	630.1	661.5	583.1	528.2	509.9	504.6	496.8	494.2
77.5°	1427.6	640.6	473.3	515.1	541.2	491.6	449.7	426.2	423.6	415.7	413.1
80°	766.1	410.5	379.1	405.3	421.0	397.4	347.8	300.7	287.6	277.2	274.5
82.5°	355.6	261.5	282.4	305.9	313.8	253.6	209.2	188.3	175.2	162.1	154.3
85°	151.7	141.2	175.2	188.3	154.3	112.4	73.2	54.9	44.4	41.8	39.2
87.5°	54.9	54.9	65.4	44.4	26.1	20.9	20.9	18.3	15.7	13.1	13.1
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)