

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: P685496

Luminaire Tested: **8CZL-18-UNV-W-L840-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685496
Test Lab: INNOVATION CENTER(G2)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8CZL-18-UNV-W-L840-CD-U
Description: METALUX CRUZE LINEAR 8FT WIDE LENS MODEL @80 CRI and 4000K
Light Source: (1176) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

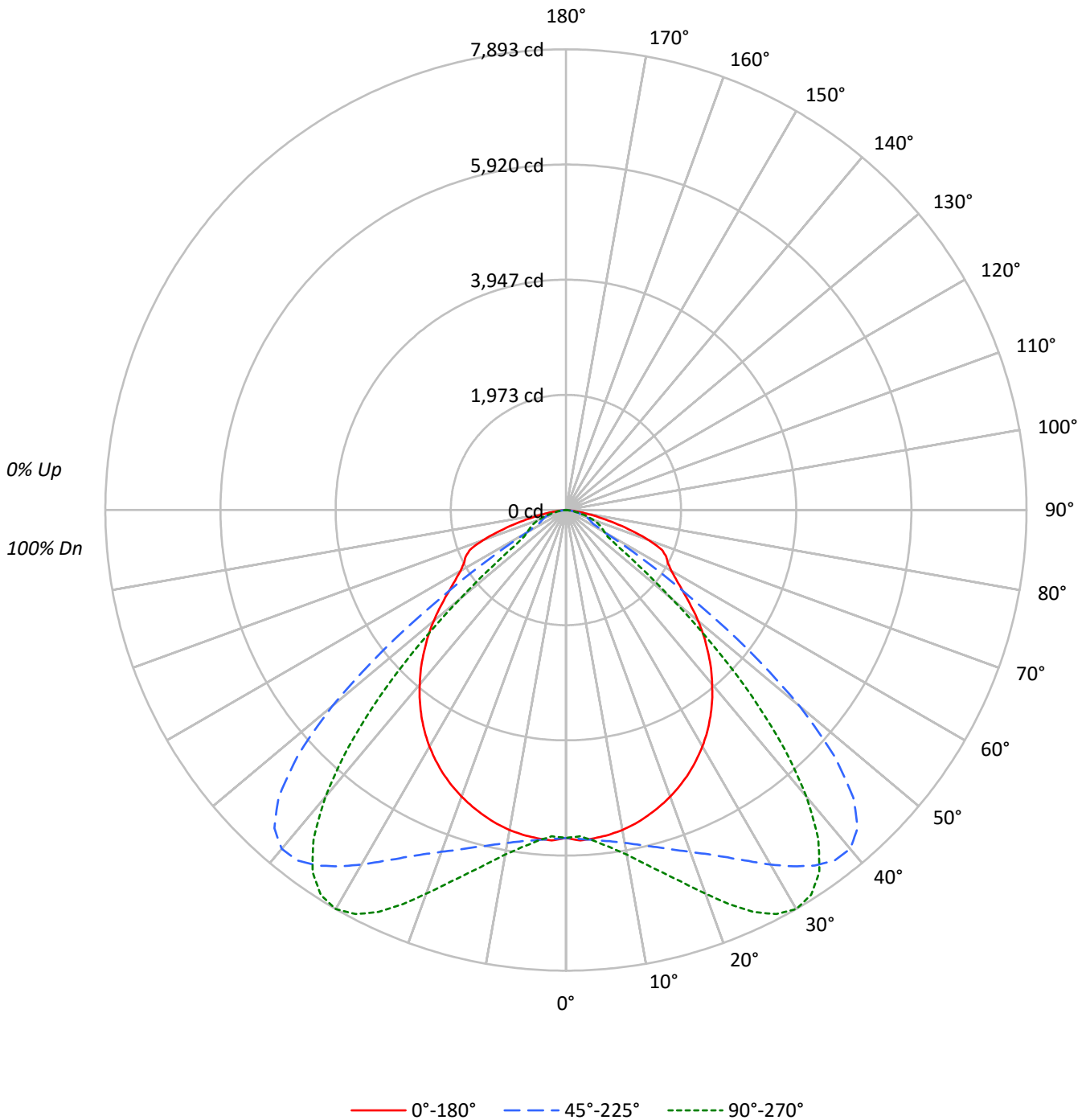
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17966.8 lumens
Efficiency: N/A
Efficacy: 164.8 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): 109
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

TEST NUMBER: P685496
CATALOG NUMBER: 8CZL-18-UNV-W-L840-CD-U

Luminous Intensity Polar Plot





TEST NUMBER: P685496

CATALOG NUMBER: 8CZL-18-UNV-W-L840-CD-U

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°	9070	9070	9070
5°	9149	9197	9225
10°	9127	9492	9825
15°	9060	9994	10755
20°	8981	10706	12015
25°	8874	11699	13533
30°	8722	13074	14716
35°	8509	14653	14919
40°	8214	15966	13516
45°	7859	15905	10258
50°	7433	13144	5912
55°	6928	7231	3041
60°	6724	2523	2479
65°	7246	1836	2485
70°	7156	1881	2398
75°	5410	1645	1925
80°	3269	1344	1362
85°	1628	687	289



TEST NUMBER: P685496
 CATALOG NUMBER: 8CZL-18-UNV-W-L840-CD-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	543.7	3.0
10°-20°	1690.6	9.4
20°-30°	2969.9	16.5
30°-40°	4125.9	23.0
40°-50°	4184.2	23.3
50°-60°	2685.1	14.9
60°-70°	1255.9	7.0
70°-80°	435.5	2.4
80°-90°	75.9	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°	5204.2	29.0
0°-40°	9330.2	51.9
0°-60°	16199.5	90.2
0°-90°	17966.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	17966.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5618	5618	5618	5618	5618	
5°	5645	5605	5674	5692	5692	536
15°	5420	5549	5979	6300	6434	1529
25°	4981	5491	6567	7336	7596	2293
35°	4317	5538	7434	7690	7569	2696
45°	3442	5928	6966	5195	4493	2653
55°	2461	6123	2569	1236	1080	2221
65°	1897	1956	480	602	650	1845
75°	867	300	264	304	309	939
85°	88	79	37	21	16	133
90°	0	0	0	0	0	



TEST NUMBER: P685496

CATALOG NUMBER: 8CZL-18-UNV-W-L840-CD-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	5617.7	5617.7	5617.7	5617.7	5617.7	5617.7	5617.7	5617.7	5617.7	5617.7	5617.7
2.5°	5666.6	5649.0	5619.7	5608.0	5613.8	5643.1	5652.9	5631.4	5625.5	5609.9	5594.3
5°	5645.1	5629.5	5608.0	5604.1	5625.5	5674.4	5695.9	5690.0	5699.8	5701.7	5692.0
7.5°	5613.8	5600.2	5582.6	5600.2	5645.1	5723.2	5772.0	5787.7	5822.8	5830.6	5828.7
10°	5566.9	5555.2	5549.4	5594.3	5672.4	5789.6	5875.6	5918.5	5969.3	5986.9	5992.8
12.5°	5504.4	5492.7	5508.3	5586.5	5709.5	5877.5	6004.5	6080.7	6152.9	6190.1	6201.8
15°	5420.4	5416.5	5455.6	5580.6	5756.4	5979.1	6154.9	6274.0	6377.6	6418.6	6434.2
17.5°	5328.6	5330.6	5400.9	5578.7	5813.1	6098.3	6322.9	6492.8	6619.8	6678.4	6696.0
20°	5227.1	5232.9	5338.4	5576.7	5883.4	6231.1	6508.4	6731.1	6889.3	6967.5	6992.9
22.5°	5107.9	5119.6	5270.0	5578.7	5957.6	6383.4	6727.2	6992.9	7182.3	7276.1	7307.4
25°	4981.0	4998.5	5199.7	5588.4	6051.4	6567.0	6977.2	7287.8	7479.2	7561.3	7596.4
27.5°	4834.5	4863.8	5123.5	5602.1	6162.7	6780.0	7233.1	7532.0	7709.7	7772.2	7803.5
30°	4678.2	4711.4	5049.3	5629.5	6307.3	7012.4	7469.5	7721.5	7840.6	7875.8	7893.3
32.5°	4506.3	4561.0	4975.1	5674.4	6477.2	7237.0	7643.3	7793.7	7823.0	7811.3	7817.2
35°	4316.8	4375.4	4904.8	5748.6	6670.6	7434.3	7711.7	7711.7	7625.7	7573.0	7569.1
37.5°	4115.6	4189.9	4834.5	5834.6	6895.2	7565.2	7637.5	7444.1	7235.1	7121.8	7104.2
40°	3896.9	3996.5	4785.6	5951.8	7098.3	7575.0	7371.8	6973.3	6617.8	6434.2	6412.7
42.5°	3680.0	3803.1	4764.1	6104.1	7250.7	7395.3	6871.8	6256.5	5774.0	5557.2	5533.7
45°	3441.7	3603.9	4771.9	6313.1	7291.7	6965.5	6127.5	5330.6	4789.5	4516.1	4492.6
47.5°	3205.4	3406.6	4791.5	6549.5	7112.0	6236.9	5137.2	4215.3	3678.1	3391.0	3387.0
50°	2959.3	3221.0	4838.4	6742.8	6625.6	5232.9	3920.3	3019.8	2590.1	2371.3	2353.7
52.5°	2703.4	3058.9	4939.9	6778.0	5760.3	3943.7	2660.4	2015.8	1736.5	1597.8	1570.5
55°	2461.2	2922.2	5106.0	6461.6	4516.1	2568.6	1675.9	1271.6	1131.0	1074.3	1080.2
57.5°	2252.2	2820.6	5299.3	5635.3	2931.9	1511.9	970.8	845.8	841.9	847.7	849.7
60°	2082.2	2758.1	5385.3	4227.0	1609.5	781.3	677.8	705.1	742.3	763.7	767.7
62.5°	1970.9	2724.9	5123.5	2449.5	714.9	545.0	591.9	642.6	685.6	705.1	707.1
65°	1896.7	2637.0	4191.8	1211.1	437.5	480.5	539.1	591.9	630.9	646.5	650.5
67.5°	1781.4	2388.9	2873.3	502.0	384.8	433.6	490.3	541.1	574.3	586.0	587.9
70°	1515.8	2000.2	1670.1	334.0	347.7	398.5	443.4	482.5	504.0	509.8	507.9
72.5°	1183.7	1584.1	843.8	302.8	322.3	349.6	375.0	396.5	408.2	414.1	414.1
75°	867.3	1158.3	396.5	267.6	240.3	263.7	289.1	302.8	306.7	308.6	308.6
77.5°	582.1	798.9	236.4	207.1	185.6	205.1	214.9	209.0	205.1	209.0	209.0
80°	351.6	492.2	207.1	150.4	142.6	144.5	136.7	136.7	144.5	148.5	146.5
82.5°	189.5	279.3	181.7	109.4	95.7	87.9	85.9	82.0	78.1	76.2	76.2
85°	87.9	142.6	117.2	66.4	50.8	37.1	29.3	21.5	19.5	15.6	15.6
87.5°	35.2	54.7	35.2	21.5	11.7	7.8	5.9	3.9	2.0	2.0	2.0
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)