

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: P685424

Luminaire Tested: **8CZL-10-UNV-M-L835-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685424
Test Lab: INNOVATION CENTER(G2)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8CZL-10-UNV-M-L835-CD-U
Description: METALUX CRUZE LINEAR 8FT MEDIUM LENS MODEL @80 CRI and 3500K
Light Source: (784) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

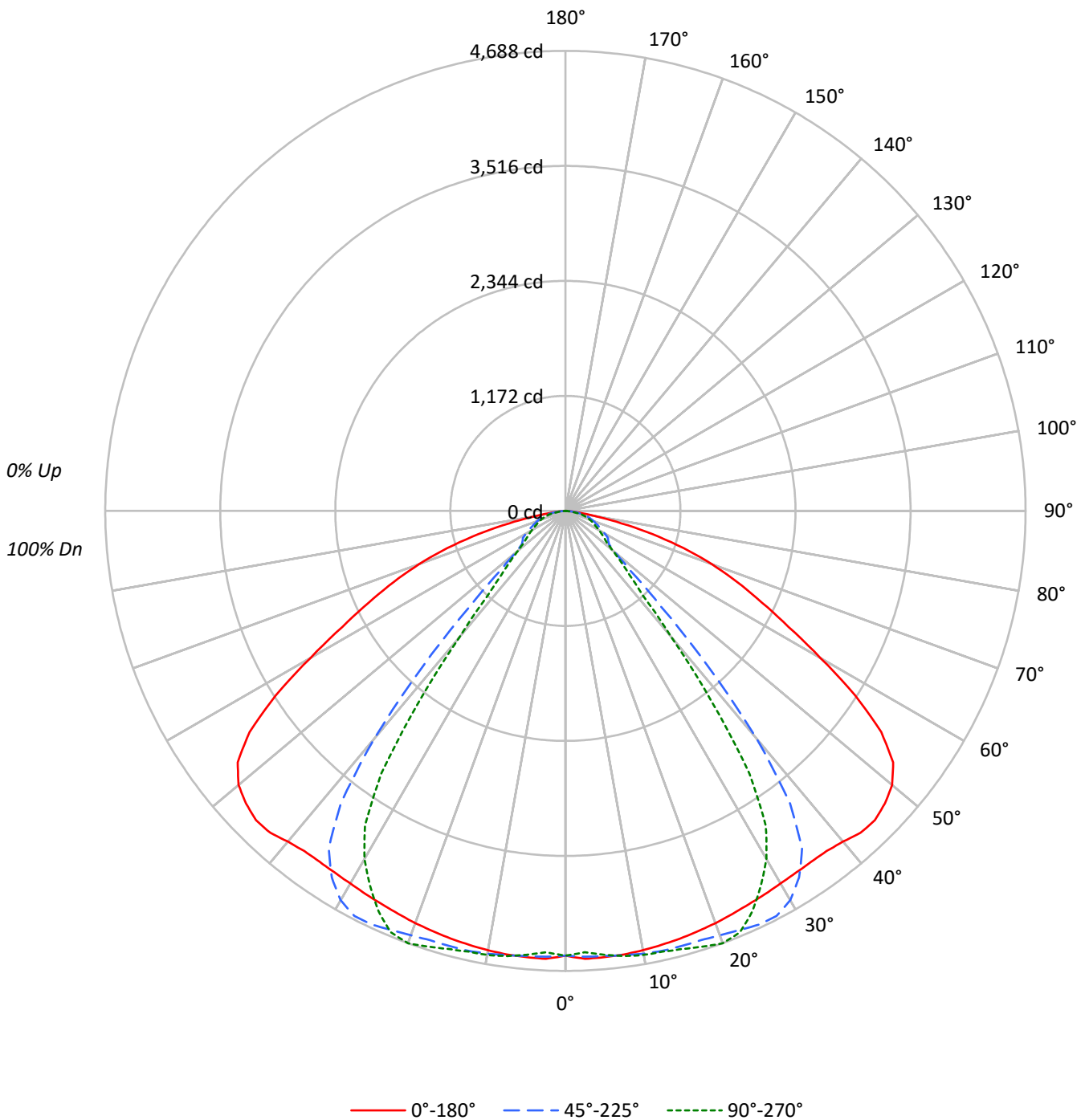
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9792.0 lumens
Efficiency: N/A
Efficacy: 155.4 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): 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	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	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	90	90	90	88
2	103	96	90	86	100	94	89	85	91	87	83	88	84	81	85	82	79	79	79	79	77
3	95	86	80	74	93	85	79	73	82	77	72	79	75	71	77	73	70	70	70	70	68
4	88	78	71	65	86	77	70	64	74	68	64	72	67	63	70	66	62	62	62	62	60
5	82	71	63	57	80	70	63	57	68	61	56	66	60	56	64	59	55	55	55	55	53
6	76	65	57	51	75	64	56	51	62	55	51	61	55	50	59	54	50	50	50	50	48
7	71	59	51	46	70	59	51	46	57	50	46	56	50	45	54	49	45	45	45	45	43
8	67	55	47	42	65	54	47	41	53	46	41	51	45	41	50	45	41	41	41	41	39
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	37	37	37	36
10	59	47	39	35	58	46	39	35	45	39	34	44	38	34	44	38	34	34	34	34	33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7318	7318	7318
5°	7400	7379	7358
10°	7454	7512	7533
15°	7542	7671	7725
20°	7681	7906	8055
25°	7878	8291	8025
30°	8174	8540	7634
35°	8604	8284	6446
40°	9273	6389	3526
45°	10180	3141	2107
50°	10916	1642	1571
55°	11055	1498	1356
60°	9695	1493	1278
65°	8437	1435	1238
70°	7487	1454	1246
75°	5743	1493	1265
80°	2923	1517	1048
85°	1152	854	298



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	434.3	4.4
10°-20°	1294.3	13.2
20°-30°	2088.9	21.3
30°-40°	2446.4	25.0
40°-50°	1665.4	17.0
50°-60°	964.3	9.8
60°-70°	551.3	5.6
70°-80°	283.8	2.9
80°-90°	63.2	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°	3817.5	39.0
0°-40°	6264.0	64.0
0°-60°	8893.8	90.8
0°-90°	9792.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9792.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4532	4532	4532	4532	4532	
5°	4566	4521	4553	4547	4540	435
15°	4512	4505	4589	4601	4622	1277
25°	4422	4484	4654	4582	4504	2047
35°	4365	4581	4203	3544	3270	2748
45°	4458	3317	1376	927	923	3425
55°	3927	1138	532	495	482	3422
65°	2208	406	376	332	324	2214
75°	921	251	239	209	203	979
85°	62	76	46	21	16	105
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°	4532.4	4532.4	4532.4	4532.4	4532.4	4532.4	4532.4	4532.4	4532.4	4532.4	4532.4
2.5°	4568.9	4556.0	4530.3	4519.5	4519.5	4547.4	4551.7	4534.6	4531.3	4516.3	4502.4
5°	4565.7	4552.8	4528.1	4518.5	4521.7	4552.8	4560.3	4546.4	4550.6	4546.4	4539.9
7.5°	4559.2	4545.3	4522.7	4516.3	4526.0	4565.7	4578.5	4571.0	4580.7	4578.5	4576.4
10°	4546.4	4535.6	4514.2	4513.1	4532.4	4581.8	4597.9	4588.2	4591.4	4590.3	4594.6
12.5°	4529.2	4519.5	4501.3	4510.9	4538.8	4591.4	4602.2	4587.1	4591.4	4592.5	4600.0
15°	4512.0	4500.2	4488.4	4510.9	4539.9	4589.3	4600.0	4597.9	4610.7	4611.8	4621.5
17.5°	4490.6	4483.0	4479.8	4509.9	4532.4	4587.1	4611.8	4624.7	4641.9	4646.1	4655.8
20°	4470.2	4463.7	4471.2	4504.5	4529.2	4601.1	4635.4	4654.7	4673.0	4678.3	4688.0
22.5°	4445.5	4441.2	4461.6	4497.0	4534.6	4622.5	4661.2	4663.3	4655.8	4641.9	4648.3
25°	4421.9	4421.9	4451.9	4494.9	4550.6	4653.7	4656.9	4595.7	4541.0	4504.5	4504.5
27.5°	4402.6	4406.9	4444.4	4504.5	4581.8	4655.8	4566.7	4445.5	4365.0	4312.4	4309.2
30°	4384.3	4391.8	4444.4	4531.3	4604.3	4580.7	4407.9	4260.9	4149.3	4098.9	4094.6
32.5°	4371.5	4383.3	4463.7	4572.1	4577.5	4429.4	4204.1	4018.4	3886.5	3811.3	3798.5
35°	4365.0	4379.0	4500.2	4607.5	4469.1	4203.0	3883.2	3596.7	3387.5	3290.9	3270.5
37.5°	4369.3	4394.0	4550.6	4577.5	4197.6	3757.7	3298.4	2887.5	2599.9	2508.7	2445.4
40°	4399.4	4441.2	4590.3	4332.8	3627.9	3031.3	2422.9	1980.8	1782.3	1716.8	1672.8
42.5°	4449.8	4491.6	4486.3	3772.7	2833.8	2153.5	1561.2	1296.2	1199.6	1188.9	1168.5
45°	4458.4	4474.5	4149.3	3039.8	2061.3	1375.6	1005.4	927.1	924.9	932.4	922.8
47.5°	4413.3	4382.2	3663.3	2325.2	1419.6	889.5	756.5	769.4	775.8	770.4	762.9
50°	4345.7	4230.9	3118.2	1709.3	946.4	653.5	659.9	671.7	649.2	634.2	625.6
52.5°	4208.4	3985.2	2513.0	1211.4	654.5	558.0	609.5	575.1	542.9	534.4	533.3
55°	3927.2	3620.3	1933.6	873.4	500.0	532.2	541.9	497.9	488.2	483.9	481.8
57.5°	3499.1	3166.5	1453.9	630.9	438.9	514.0	471.1	453.9	444.2	441.0	437.8
60°	3002.3	2658.9	1083.7	463.5	426.0	462.5	427.1	411.0	400.2	395.9	395.9
62.5°	2562.4	2200.7	801.5	376.6	422.8	417.4	385.2	368.0	361.6	359.5	357.3
65°	2208.3	1770.5	578.4	348.7	394.9	375.6	344.4	332.6	328.3	324.0	324.0
67.5°	1892.8	1386.3	426.0	342.3	362.7	338.0	314.4	304.7	299.4	298.3	297.2
70°	1585.9	1021.5	324.0	334.8	344.4	308.0	285.4	273.6	267.2	264.0	264.0
72.5°	1262.9	700.7	258.6	308.0	315.5	272.5	250.0	241.4	236.1	232.8	231.8
75°	920.6	439.9	227.5	258.6	271.5	239.3	216.7	209.2	207.1	203.9	202.8
77.5°	585.9	262.9	194.2	211.4	222.1	201.7	184.6	174.9	173.8	170.6	169.5
80°	314.4	168.5	155.6	166.3	172.8	163.1	142.7	123.4	118.0	113.7	112.7
82.5°	145.9	107.3	115.9	125.5	128.8	104.1	85.8	77.3	71.9	66.5	63.3
85°	62.2	57.9	71.9	77.3	63.3	46.1	30.0	22.5	18.2	17.2	16.1
87.5°	22.5	22.5	26.8	18.2	10.7	8.6	8.6	7.5	6.4	5.4	5.4
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)