

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: P685468

Luminaire Tested: **8CZL-32-UNV-M-L940-CD-U**

Issue Date: 05/10/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P685468  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 05/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 8CZL-32-UNV-M-L940-CD-U  
Description: METALUX CRUZE LINEAR 8FT MEDIUM LENS MODEL @90 CRI and 4000K  
Light Source: (1176) 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

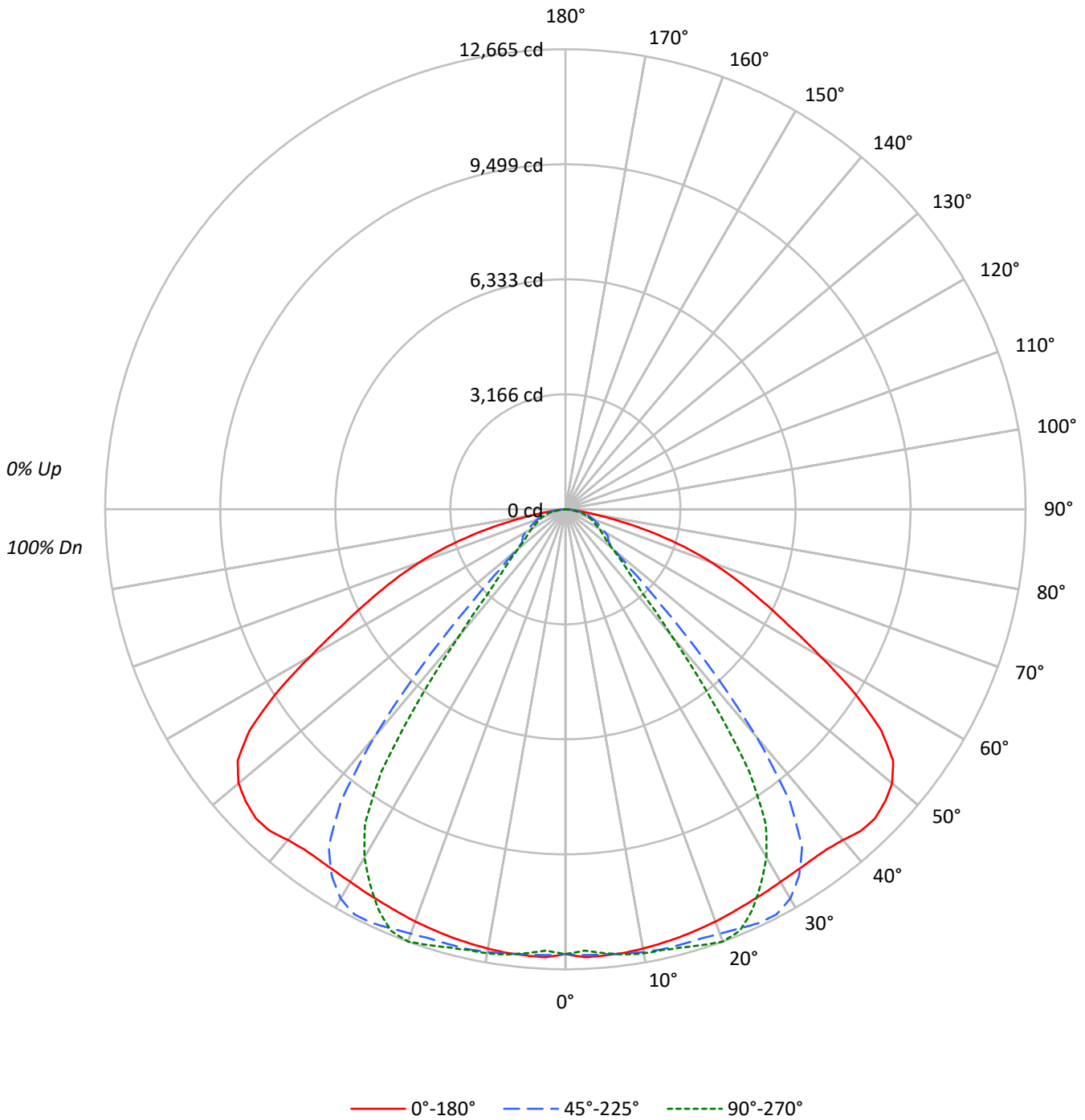
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 26453.9 lumens  
Efficiency: N/A  
Efficacy: 128.4 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): 206  
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°	19770	19770	19770
5°	19991	19935	19878
10°	20137	20294	20351
15°	20375	20724	20870
20°	20750	21358	21761
25°	21282	22397	21680
30°	22083	23072	20623
35°	23243	22381	17415
40°	25050	17260	9525
45°	27502	8486	5692
50°	29490	4434	4245
55°	29866	4047	3664
60°	26192	4035	3454
65°	22792	3876	3344
70°	20226	3928	3366
75°	15516	4032	3418
80°	7898	4097	2830
85°	3114	2308	806



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1173.2	4.4
10°-20°	3496.8	13.2
20°-30°	5643.3	21.3
30°-40°	6609.2	25.0
40°-50°	4499.3	17.0
50°-60°	2605.2	9.8
60°-70°	1489.5	5.6
70°-80°	766.6	2.9
80°-90°	170.7	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°	10313.3	39.0
0°-40°	16922.6	64.0
0°-60°	24027.1	90.8
0°-90°	26453.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	26453.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	12245	12245	12245	12245	12245	
5°	12334	12213	12300	12285	12265	1176
15°	12190	12171	12398	12430	12485	3451
25°	11946	12114	12572	12379	12169	5529
35°	11792	12375	11355	9576	8836	7424
45°	12045	8962	3716	2503	2493	9253
55°	10610	3076	1438	1339	1302	9244
65°	5966	1097	1015	896	875	5981
75°	2487	678	646	564	548	2644
85°	168	205	125	58	44	285
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°	12244.6	12244.6	12244.6	12244.6	12244.6	12244.6	12244.6	12244.6	12244.6	12244.6	12244.6
2.5°	12343.2	12308.4	12238.8	12209.8	12209.8	12285.2	12296.8	12250.4	12241.7	12201.1	12163.4
5°	12334.5	12299.7	12233.0	12206.9	12215.6	12299.7	12320.0	12282.3	12293.9	12282.3	12264.9
7.5°	12317.1	12279.4	12218.5	12201.1	12227.2	12334.5	12369.3	12349.0	12375.1	12369.3	12363.5
10°	12282.3	12253.3	12195.3	12192.4	12244.6	12378.0	12421.4	12395.4	12404.1	12401.2	12412.7
12.5°	12235.9	12209.8	12160.5	12186.6	12262.0	12404.1	12433.0	12392.5	12404.1	12406.9	12427.2
15°	12189.5	12157.7	12125.8	12186.6	12264.9	12398.3	12427.2	12421.4	12456.2	12459.1	12485.2
17.5°	12131.6	12111.3	12102.6	12183.7	12244.6	12392.5	12459.1	12493.9	12540.3	12551.9	12578.0
20°	12076.5	12059.1	12079.4	12169.2	12235.9	12430.1	12522.9	12575.1	12624.4	12638.9	12664.9
22.5°	12009.8	11998.2	12053.3	12149.0	12250.4	12488.1	12592.5	12598.3	12578.0	12540.3	12557.7
25°	11946.0	11946.0	12027.2	12143.2	12293.9	12572.2	12580.9	12415.6	12267.8	12169.2	12169.2
27.5°	11893.9	11905.5	12006.9	12169.2	12378.0	12578.0	12337.4	12009.8	11792.4	11650.4	11641.7
30°	11844.6	11864.9	12006.9	12241.7	12438.8	12375.1	11908.4	11511.2	11209.7	11073.5	11061.9
32.5°	11809.8	11841.7	12059.1	12351.9	12366.4	11966.3	11357.6	10856.1	10499.5	10296.6	10261.8
35°	11792.4	11830.1	12157.7	12447.5	12073.6	11354.7	10490.8	9716.8	9151.6	8890.7	8835.6
37.5°	11804.0	11870.7	12293.9	12366.4	11340.2	10151.7	8911.0	7800.7	7023.8	6777.4	6606.4
40°	11885.2	11998.2	12401.2	11705.4	9800.9	8189.2	6545.5	5351.2	4814.9	4638.1	4519.3
42.5°	12021.4	12134.5	12120.0	10192.3	7655.8	5817.9	4217.8	3501.8	3240.9	3211.9	3156.8
45°	12044.6	12088.1	11209.7	8212.4	5568.6	3716.3	2716.2	2504.6	2498.8	2519.1	2493.0
47.5°	11922.8	11838.8	9896.6	6281.7	3835.1	2403.1	2043.7	2078.5	2095.8	2081.4	2061.1
50°	11740.2	11430.0	8424.0	4617.8	2556.8	1765.4	1782.8	1814.7	1753.8	1713.2	1690.0
52.5°	11369.2	10766.2	6789.0	3272.8	1768.3	1507.4	1646.5	1553.8	1466.8	1443.6	1440.7
55°	10609.7	9780.6	5223.7	2359.6	1350.9	1437.8	1463.9	1345.1	1319.0	1307.4	1301.6
57.5°	9453.1	8554.4	3927.9	1704.5	1185.6	1388.5	1272.6	1226.2	1200.1	1191.4	1182.7
60°	8110.9	7183.3	2927.8	1252.3	1150.8	1249.4	1153.7	1110.2	1081.3	1069.7	1069.7
62.5°	6922.4	5945.5	2165.4	1017.5	1142.1	1127.6	1040.7	994.3	976.9	971.1	965.3
65°	5965.8	4783.1	1562.5	942.1	1066.8	1014.6	930.5	898.6	887.0	875.4	875.4
67.5°	5113.5	3745.3	1150.8	924.7	979.8	913.1	849.4	823.3	808.8	805.9	803.0
70°	4284.5	2759.7	875.4	904.4	930.5	832.0	771.1	739.2	721.8	713.1	713.1
72.5°	3411.9	1892.9	698.6	832.0	852.3	736.3	675.4	652.2	637.7	629.0	626.1
75°	2487.2	1188.5	614.5	698.6	733.4	646.4	585.6	565.3	559.5	550.8	547.9
77.5°	1582.8	710.2	524.7	571.1	600.1	545.0	498.6	472.5	469.6	460.9	458.0
80°	849.4	455.1	420.3	449.3	466.7	440.6	385.5	333.4	318.9	307.3	304.4
82.5°	394.2	289.9	313.1	339.2	347.9	281.2	231.9	208.7	194.2	179.7	171.0
85°	168.1	156.5	194.2	208.7	171.0	124.6	81.2	60.9	49.3	46.4	43.5
87.5°	60.9	60.9	72.5	49.3	29.0	23.2	23.2	20.3	17.4	14.5	14.5
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)