

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: P685549

Luminaire Tested: **4CZL-5-UNV-FL-L840-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685549
Test Lab: INNOVATION CENTER(G3)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4CZL-5-UNV-FL-L840-CD-U
Description: METALUX CRUZE LINEAR 4FT FROSTED LENS MODEL @80 CRI and 4000K
Light Source: (392) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

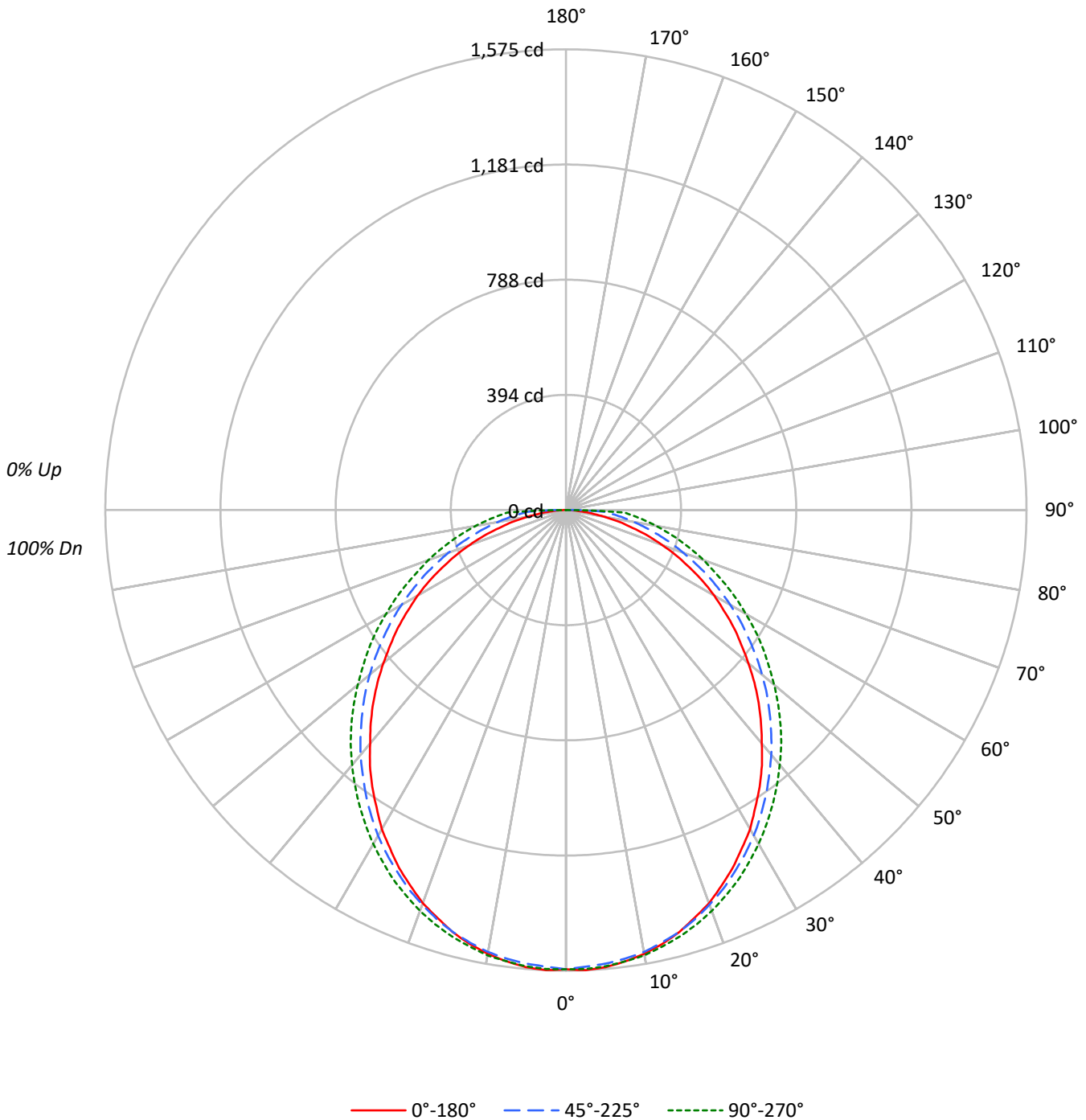
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4422.6 lumens
Efficiency: N/A
Efficacy: 142.7 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.25 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.83' x L: 4' x H: 0.08')
CIE Type: Direct

Input Watts (W): 31
Input Voltage (V): 120
Input Current (A_{in}): 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				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	100	100	100	100
1	108	103	98	94	105	101	96	93	96	93	90	92	90	87	89	86	84	82	82	82	82
2	98	89	82	76	95	87	81	75	84	78	74	81	76	72	78	74	70	68	68	68	68
3	89	78	70	63	87	77	69	63	74	67	62	71	65	61	68	64	59	57	57	57	57
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	56	51	49	49	49	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42	42	42	42
6	69	56	47	40	68	55	46	40	53	45	40	51	45	39	50	44	39	37	37	37	37
7	64	51	42	36	63	50	41	36	48	41	35	47	40	35	46	39	35	33	33	33	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29	29	29	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26	26	26	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24	24	24	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5070	5070	5070
5°	5075	5009	5031
10°	5033	4955	4980
15°	4968	4881	4913
20°	4879	4786	4836
25°	4763	4676	4749
30°	4639	4567	4646
35°	4487	4433	4536
40°	4315	4298	4423
45°	4169	4147	4307
50°	3994	3992	4170
55°	3831	3823	4047
60°	3652	3653	3907
65°	3414	3471	3784
70°	3137	3268	3709
75°	2730	3092	3666
80°	2204	2965	3715
85°	1412	2988	4025



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.5	3.4
10°-20°	422.6	9.6
20°-30°	631.2	14.3
30°-40°	746.5	16.9
40°-50°	760.6	17.2
50°-60°	681.6	15.4
60°-70°	530.9	12.0
70°-80°	343.7	7.8
80°-90°	157.1	3.6
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°	1202.3	27.2
0°-40°	1948.8	44.1
0°-60°	3391.0	76.7
0°-90°	4422.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4422.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1570	1570	1570	1570	1570	
5°	1569	1566	1557	1566	1566	149
15°	1494	1494	1493	1507	1509	421
25°	1350	1355	1365	1389	1395	621
35°	1155	1166	1192	1224	1231	721
45°	932	949	986	1023	1037	718
55°	701	720	762	806	822	626
65°	467	487	538	583	601	464
75°	236	266	327	381	404	253
85°	47	91	159	217	233	60
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1570.1	1570.1	1570.1	1570.1	1570.1
2.5°	1574.6	1571.9	1562.3	1570.7	1570.4
5°	1568.6	1565.9	1556.7	1565.9	1565.6
7.5°	1556.4	1555.5	1547.1	1557.3	1556.4
10°	1540.5	1539.4	1534.0	1544.1	1545.6
12.5°	1519.7	1519.1	1514.9	1526.8	1527.7
15°	1494.3	1494.3	1493.4	1507.4	1508.9
17.5°	1461.8	1465.9	1466.8	1482.1	1485.3
20°	1430.7	1431.9	1436.1	1454.6	1458.5
22.5°	1389.8	1394.9	1403.3	1423.6	1426.8
25°	1349.8	1354.6	1364.8	1388.9	1394.9
27.5°	1303.3	1312.5	1326.6	1350.7	1356.7
30°	1259.1	1266.9	1285.1	1311.9	1317.9
32.5°	1205.1	1218.2	1239.1	1267.5	1275.5
35°	1154.7	1165.7	1191.7	1223.9	1231.1
37.5°	1100.6	1113.8	1141.2	1175.6	1185.4
40°	1041.6	1060.7	1092.6	1126.9	1137.4
42.5°	987.5	1005.1	1038.9	1077.7	1089.6
45°	932.0	948.7	985.7	1023.4	1037.4
47.5°	874.1	891.4	931.7	971.7	984.3
50°	814.7	835.3	875.6	917.7	929.0
52.5°	755.7	776.2	818.9	861.0	873.8
55°	700.7	720.4	761.9	805.8	821.6
57.5°	641.0	661.9	707.6	750.0	767.0
60°	585.8	601.1	649.4	693.3	709.7
62.5°	528.8	545.3	592.4	637.5	656.9
65°	466.8	487.1	537.5	582.6	601.4
67.5°	410.1	429.5	481.4	532.1	547.3
70°	351.3	373.6	427.4	479.3	500.8
72.5°	295.2	318.4	377.5	429.2	450.9
75°	235.8	265.9	326.8	381.1	403.5
77.5°	186.8	216.7	279.0	335.7	357.2
80°	132.5	169.2	236.7	294.0	313.1
82.5°	88.3	125.6	196.4	252.2	272.8
85°	47.2	91.0	159.4	217.0	232.8
87.5°	20.6	63.6	129.2	180.6	199.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)