

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: P685349

Luminaire Tested: **4CZL-5-UNV-L950-CD-U**

Issue Date: 05/10/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P685349  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 05/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 4CZL-5-UNV-L950-CD-U  
Description: METALUX CRUZE LINEAR 4FT BASE MODEL @90 CRI and 5000K  
Light Source: (392) 5000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

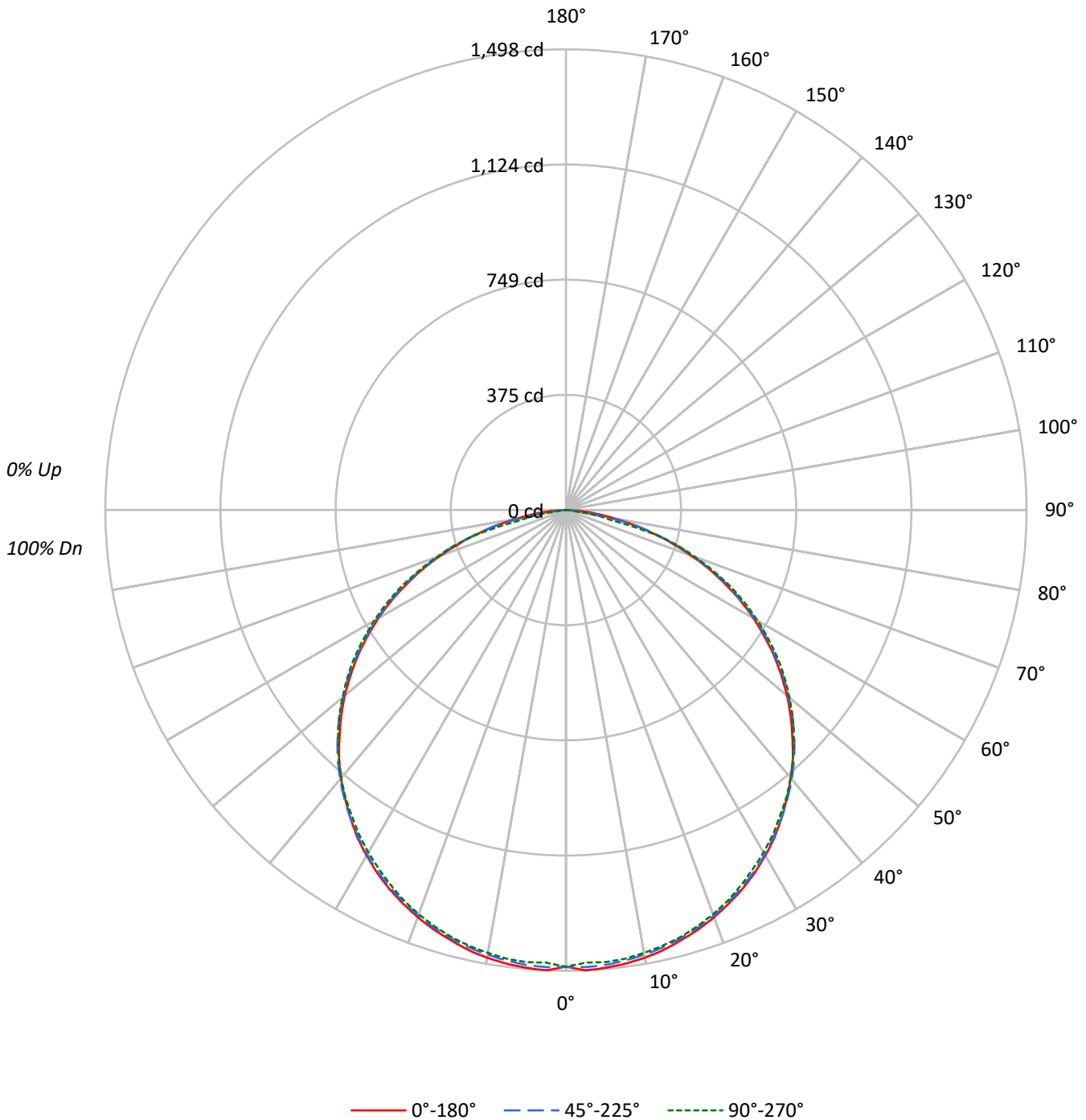
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4405.1 lumens  
Efficiency: N/A  
Efficacy: 142.1 lumens/watt  
Spacing Criteria (0/90/45): 1.3 / 1.29 / 1.41  
Luminous Opening: Rectangular (W 0.83' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 31  
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				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	109	104	100	96	106	102	98	95	98	94	92	94	91	89	90	88	86	86	86	86	84
2	99	91	84	78	96	89	82	77	85	80	75	82	77	74	79	75	72	72	72	72	70
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	61	61	61	58
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	52	52	52	50
5	76	63	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	45	45	45	43
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	39	39	39	37
7	65	51	42	36	63	50	42	36	48	41	35	47	40	35	46	40	35	35	35	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	31	31	31	29
9	56	42	34	29	55	42	34	29	41	33	28	40	33	28	39	33	28	28	28	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	25	25	25	25	24

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	4795	4795	4795
5°	4843	4812	4783
10°	4847	4814	4794
15°	4840	4821	4806
20°	4842	4825	4806
25°	4843	4823	4799
30°	4837	4823	4793
35°	4819	4819	4785
40°	4796	4816	4792
45°	4756	4797	4787
50°	4716	4750	4766
55°	4653	4686	4732
60°	4551	4592	4647
65°	4381	4444	4520
70°	4098	4179	4218
75°	3688	3755	3563
80°	3081	2509	1953
85°	2297	604	219



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	140.9	3.2
10°-20°	406.2	9.2
20°-30°	622.0	14.1
30°-40°	761.5	17.3
40°-50°	805.6	18.3
50°-60°	742.9	16.9
60°-70°	573.1	13.0
70°-80°	306.1	6.9
80°-90°	46.8	1.1
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°	1169.1	26.5
0°-40°	1930.6	43.8
0°-60°	3479.1	79.0
0°-90°	4405.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4405.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1485	1485	1485	1485	1485	
5°	1494	1476	1484	1478	1476	142
15°	1448	1432	1442	1437	1438	409
25°	1359	1345	1354	1344	1347	626
35°	1222	1215	1222	1212	1214	765
45°	1041	1041	1050	1043	1048	804
55°	826	826	832	837	840	737
65°	573	573	582	586	592	566
75°	296	295	301	303	286	313
85°	62	44	16	7	6	76
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1485.0	1485.0	1485.0	1485.0	1485.0
2.5°	1498.1	1480.5	1487.7	1482.3	1473.2
5°	1494.0	1476.4	1484.5	1478.2	1475.5
7.5°	1487.7	1469.6	1477.8	1472.8	1471.9
10°	1478.2	1459.6	1468.2	1462.8	1461.9
12.5°	1465.5	1447.4	1456.9	1450.6	1451.5
15°	1447.9	1432.5	1442.0	1437.0	1437.5
17.5°	1430.2	1414.4	1424.3	1419.4	1419.8
20°	1409.0	1393.6	1404.0	1396.3	1398.5
22.5°	1385.0	1371.4	1380.4	1370.5	1375.0
25°	1359.2	1345.1	1353.7	1343.8	1346.9
27.5°	1329.8	1316.6	1325.2	1314.8	1316.2
30°	1297.2	1285.4	1293.5	1283.1	1285.4
32.5°	1262.3	1251.9	1258.2	1248.7	1251.9
35°	1222.5	1215.2	1222.5	1212.1	1213.9
37.5°	1180.8	1173.6	1183.6	1174.5	1177.7
40°	1137.8	1131.1	1142.4	1133.3	1136.9
42.5°	1092.1	1087.2	1098.5	1089.4	1093.9
45°	1041.4	1041.0	1050.5	1043.3	1048.2
47.5°	991.2	990.3	999.8	994.8	1000.7
50°	938.7	937.8	945.5	945.0	948.7
52.5°	882.6	883.9	891.2	892.5	896.6
55°	826.5	825.5	832.3	837.3	840.5
57.5°	765.4	767.2	772.6	778.5	780.7
60°	704.7	703.8	711.0	716.0	719.6
62.5°	640.4	640.4	646.3	653.6	657.2
65°	573.4	573.4	581.6	586.1	591.6
67.5°	505.1	503.7	511.0	520.9	520.0
70°	434.0	434.5	442.6	447.6	446.7
72.5°	363.4	364.8	373.4	375.7	377.9
75°	295.6	295.1	301.0	303.2	285.6
77.5°	228.1	228.6	232.2	170.2	149.4
80°	165.7	166.6	134.9	105.0	105.0
82.5°	109.5	107.7	69.2	40.7	29.9
85°	62.0	44.4	16.3	6.8	5.9
87.5°	25.3	8.1	4.5	3.2	2.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)