

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: P685589

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

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685589
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-L950-CD-U
Description: METALUX CRUZE LINEAR 4FT FROSTED LENS MODEL @90 CRI and 5000K
Light Source: (392) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

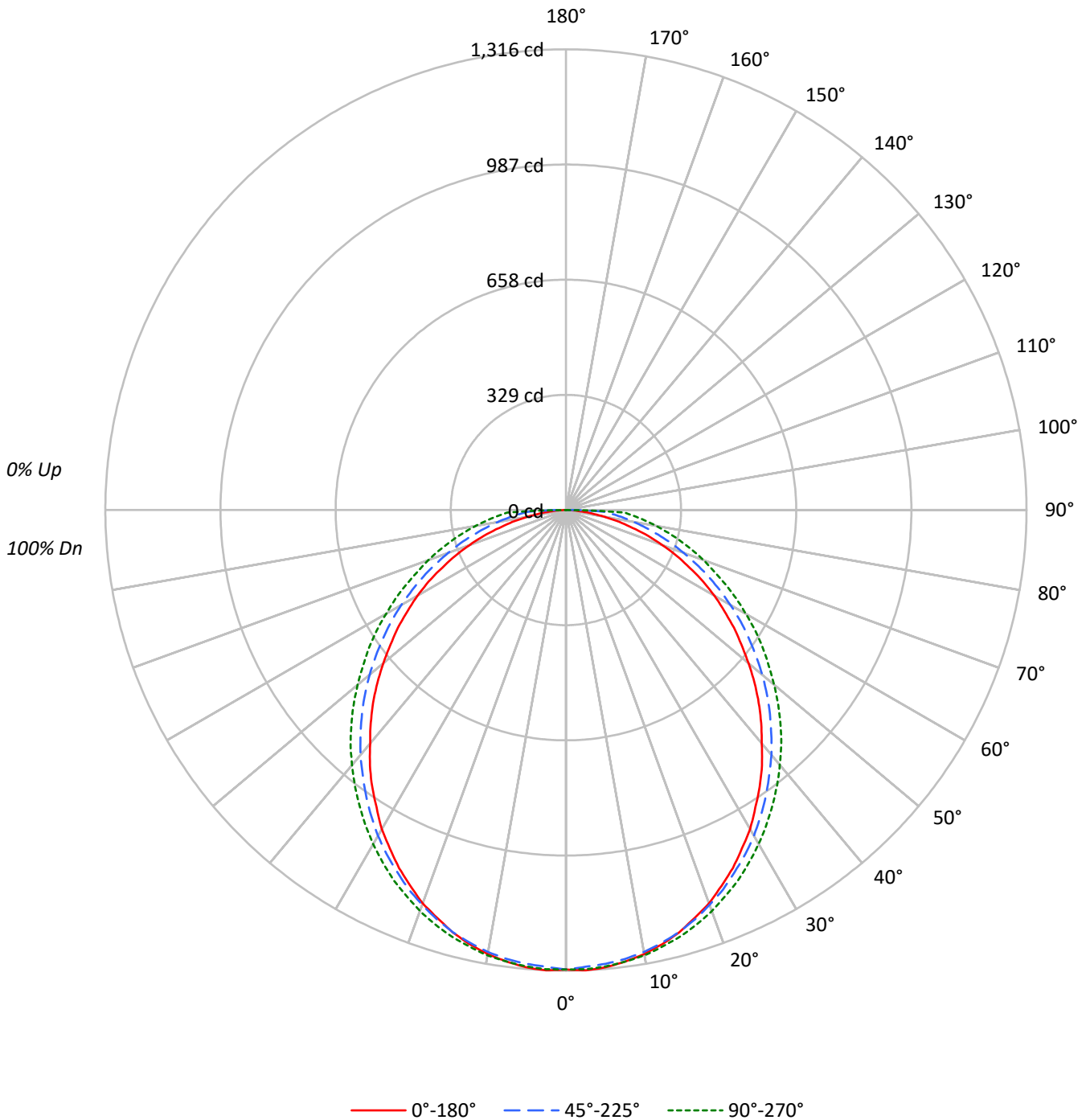
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3696.9 lumens
Efficiency: N/A
Efficacy: 119.3 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 (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	108	103	98	94	105	101	96	93	96	93	90	92	90	87	89	86	84	84	84	84	82
2	98	89	82	76	95	87	81	75	84	78	74	81	76	72	78	74	70	70	70	70	68
3	89	78	70	63	87	77	69	63	74	67	62	71	65	61	68	64	59	59	59	59	57
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	56	51	51	51	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	44	44	44	42
6	69	56	47	40	68	55	46	40	53	45	40	51	45	39	50	44	39	39	39	39	37
7	64	51	42	36	63	50	41	36	48	41	35	47	40	35	46	39	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	43	34	29	55	42	34	29	41	34	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	26	26	26	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4238	4238	4238
5°	4243	4187	4205
10°	4207	4142	4163
15°	4153	4080	4107
20°	4079	4001	4042
25°	3981	3909	3969
30°	3878	3817	3883
35°	3750	3705	3791
40°	3607	3592	3697
45°	3485	3467	3600
50°	3338	3337	3486
55°	3202	3196	3383
60°	3053	3054	3266
65°	2854	2901	3163
70°	2622	2731	3100
75°	2282	2584	3065
80°	1843	2478	3105
85°	1179	2497	3364



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.1	3.4
10°-20°	353.3	9.6
20°-30°	527.6	14.3
30°-40°	624.0	16.9
40°-50°	635.8	17.2
50°-60°	569.7	15.4
60°-70°	443.8	12.0
70°-80°	287.3	7.8
80°-90°	131.3	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°	1005.0	27.2
0°-40°	1629.0	44.1
0°-60°	2834.5	76.7
0°-90°	3696.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3696.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1312	1312	1312	1312	1312	
5°	1311	1309	1301	1309	1309	124
15°	1249	1249	1248	1260	1261	352
25°	1128	1132	1141	1161	1166	519
35°	965	974	996	1023	1029	603
45°	779	793	824	855	867	600
55°	586	602	637	674	687	523
65°	390	407	449	487	503	388
75°	197	222	273	319	337	211
85°	39	76	133	181	195	51
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1312.4	1312.4	1312.4	1312.4	1312.4
2.5°	1316.2	1313.9	1306.0	1312.9	1312.7
5°	1311.2	1308.9	1301.2	1308.9	1308.7
7.5°	1301.0	1300.2	1293.2	1301.7	1301.0
10°	1287.7	1286.7	1282.3	1290.7	1292.0
12.5°	1270.3	1269.8	1266.3	1276.3	1277.0
15°	1249.1	1249.1	1248.3	1260.1	1261.3
17.5°	1221.9	1225.4	1226.1	1238.8	1241.6
20°	1195.9	1196.9	1200.4	1215.9	1219.1
22.5°	1161.8	1166.0	1173.0	1190.0	1192.7
25°	1128.3	1132.3	1140.8	1161.0	1166.0
27.5°	1089.4	1097.2	1108.9	1129.1	1134.1
30°	1052.5	1059.0	1074.2	1096.7	1101.6
32.5°	1007.3	1018.3	1035.8	1059.5	1066.2
35°	965.2	974.4	996.1	1023.1	1029.0
37.5°	920.0	931.0	954.0	982.6	990.9
40°	870.6	886.6	913.3	942.0	950.7
42.5°	825.5	840.2	868.4	900.8	910.8
45°	779.1	793.1	824.0	855.4	867.1
47.5°	730.7	745.2	778.8	812.3	822.7
50°	681.0	698.3	731.9	767.1	776.6
52.5°	631.6	648.9	684.5	719.7	730.4
55°	585.7	602.2	636.9	673.6	686.8
57.5°	535.9	553.3	591.5	626.9	641.1
60°	489.7	502.4	542.8	579.5	593.2
62.5°	442.1	455.8	495.2	532.9	549.1
65°	390.2	407.1	449.3	487.0	502.7
67.5°	342.8	359.0	402.4	444.8	457.5
70°	293.6	312.3	357.2	400.6	418.6
72.5°	246.7	266.2	315.6	358.7	376.9
75°	197.1	222.3	273.2	318.6	337.3
77.5°	156.2	181.1	233.3	280.6	298.6
80°	110.8	141.4	197.8	245.7	261.7
82.5°	73.8	105.0	164.1	210.8	228.0
85°	39.4	76.1	133.2	181.4	194.6
87.5°	17.2	53.1	108.0	150.9	166.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)