

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: P685657

Luminaire Tested: **8CZL-24-UNV-FUL-L950-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685657
Test Lab: INNOVATION CENTER(G3)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8CZL-24-UNV-FUL-L950-CD-U
Description: METALUX CRUZE LINEAR 8FT FROSTED LENS MODEL WITH UPLIGHT @90 CRI and 5000K
Light Source: (1176) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

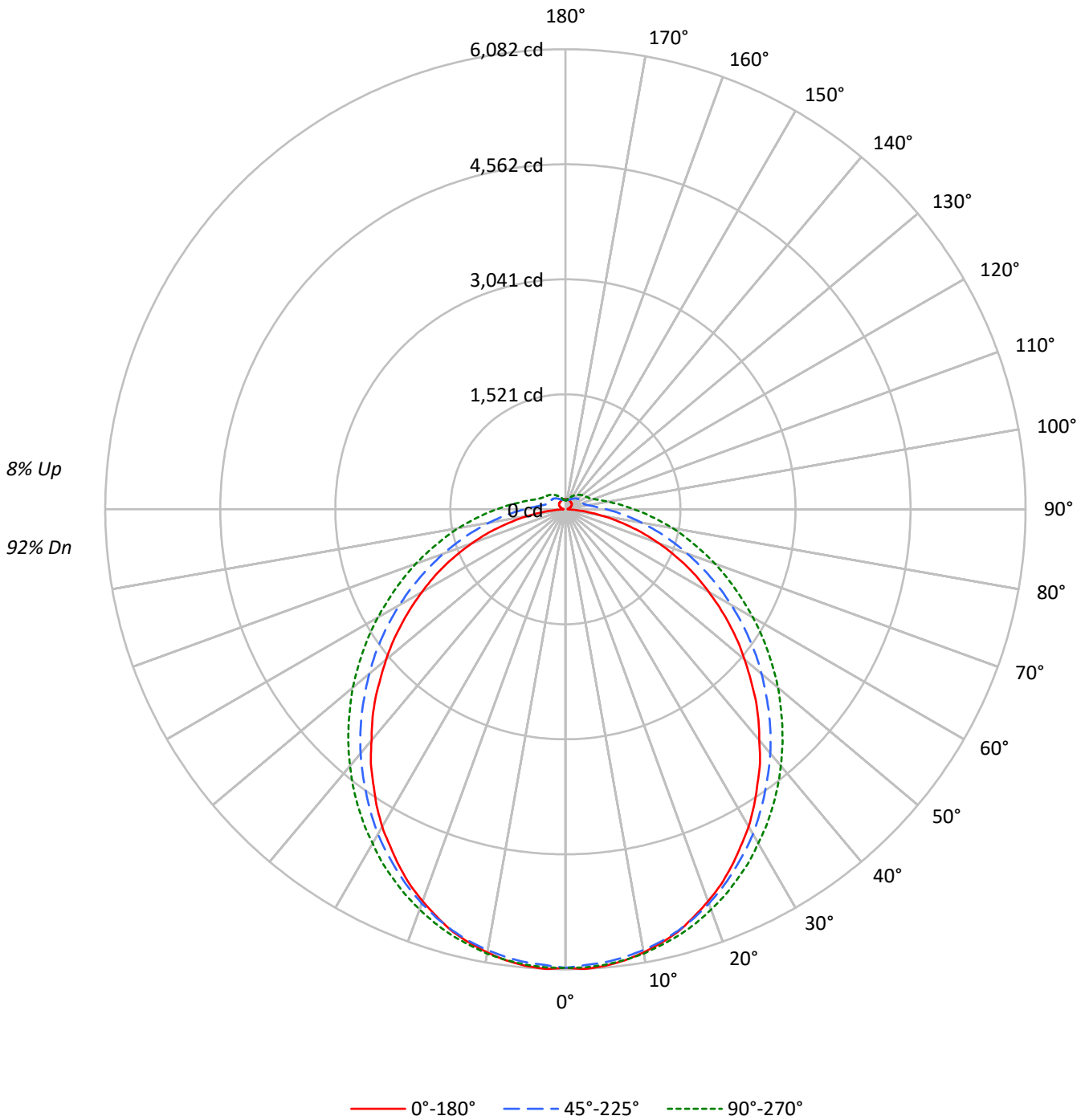
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18913.9 lumens
Efficiency: N/A
Efficacy: 122.8 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.25 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.83' x L: 8' x H: 0.17')
CIE Type: Direct

Input Watts (W): 154
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	117	117	117	117	113	113	113	113	107	107	107	100	100	100	95	95	95	95	95	95	92
1	106	101	96	92	102	98	93	90	92	88	85	87	84	81	82	79	77	77	77	77	75
2	96	87	80	74	93	85	78	73	80	74	70	75	71	67	71	68	64	64	64	64	62
3	87	77	68	61	84	74	67	60	70	64	58	66	61	56	63	58	54	54	54	54	52
4	80	68	59	52	77	66	58	51	62	55	50	59	53	48	56	51	47	47	47	47	44
5	74	61	51	45	71	59	50	44	56	49	43	53	47	42	50	45	41	41	41	41	38
6	68	54	45	39	65	53	45	38	50	43	38	48	42	37	46	40	36	36	36	36	33
7	63	49	41	34	61	48	40	34	46	39	33	44	37	32	42	36	32	32	32	32	30
8	59	45	37	31	57	44	36	30	42	35	30	40	34	29	38	33	28	28	28	28	26
9	55	41	33	28	53	40	33	27	39	32	27	37	31	26	35	30	26	26	26	26	24
10	51	38	30	25	50	37	30	25	36	29	24	34	28	24	33	27	23	23	23	23	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9789	9789	9789
5°	9803	9612	9626
10°	9717	9443	9447
15°	9605	9249	9245
20°	9404	9017	9021
25°	9178	8750	8780
30°	8925	8479	8520
35°	8599	8156	8269
40°	8258	7850	7993
45°	7951	7513	7712
50°	7580	7168	7442
55°	7222	6811	7145
60°	6820	6434	6867
65°	6429	6044	6605
70°	5857	5667	6408
75°	5151	5319	6232
80°	4135	5060	6276
85°	2600	4990	6463



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	573.5	3.0
10°-20°	1631.7	8.6
20°-30°	2436.5	12.9
30°-40°	2880.3	15.2
40°-50°	2935.1	15.5
50°-60°	2646.5	14.0
60°-70°	2094.0	11.1
70°-80°	1415.2	7.5
80°-90°	791.4	4.2
90°-100°	430.7	2.3
100°-110°	282.5	1.5
110°-120°	224.0	1.2
120°-130°	190.6	1.0
130°-140°	152.5	0.8
140°-150°	109.1	0.6
150°-160°	70.3	0.4
160°-170°	38.0	0.2
170°-180°	11.9	0.1
0°-30°	4641.7	24.5
0°-40°	7522.0	39.8
0°-60°	13103.6	69.3
0°-90°	17404.3	92.0
90°-120°	937.2	5.0
90°-150°	1389.4	7.3
90°-180°	1510.0	8.0
0°-180°	18913.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6063	6063	6063	6063	6063	
5°	6059	6050	6012	6046	6043	575
15°	5778	5771	5765	5815	5827	1626
25°	5202	5226	5269	5368	5388	2394
35°	4426	4487	4591	4736	4783	2771
45°	3555	3625	3804	3982	4053	2737
55°	2642	2740	2959	3183	3263	2363
65°	1758	1847	2112	2372	2470	1736
75°	890	1013	1350	1648	1745	945
85°	174	390	750	1042	1146	213
90°	27	215	540	806	906	20
95°	29	141	396	633	722	25
105°	50	125	259	408	469	52
115°	78	135	231	316	351	77
125°	103	140	220	284	308	92
135°	114	137	204	254	271	88
145°	119	131	171	216	229	75
155°	128	129	142	179	184	59
165°	132	130	128	134	145	38
175°	134	131	126	111	112	13
180°	124	124	124	124	124	



TEST NUMBER: P685657

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6062.9	6062.9	6062.9	6062.9	6062.9
2.5°	6082.3	6072.6	6032.5	6064.1	6062.9
5°	6059.2	6049.5	6011.8	6045.8	6043.4
7.5°	6014.2	6008.1	5972.9	6010.6	6009.4
10°	5948.6	5948.6	5918.2	5961.9	5965.6
12.5°	5869.6	5868.3	5852.5	5897.5	5897.5
15°	5778.4	5771.1	5765.0	5814.8	5827.0
17.5°	5648.3	5653.2	5664.1	5723.7	5735.8
20°	5514.6	5525.5	5546.2	5616.7	5632.5
22.5°	5371.1	5383.3	5416.1	5492.7	5518.2
25°	5202.1	5226.4	5269.0	5367.5	5388.1
27.5°	5019.8	5062.3	5117.0	5221.6	5256.8
30°	4844.7	4878.7	4957.8	5067.2	5097.6
32.5°	4642.9	4684.2	4776.6	4907.9	4949.2
35°	4426.5	4487.3	4590.6	4736.5	4782.7
37.5°	4224.7	4273.3	4400.9	4556.6	4611.3
40°	3986.4	4065.4	4212.5	4365.7	4428.9
42.5°	3777.3	3845.4	4010.7	4179.7	4245.3
45°	3554.8	3625.3	3804.0	3981.5	4053.2
47.5°	3316.5	3400.4	3591.3	3789.4	3856.3
50°	3092.8	3180.4	3384.6	3585.2	3669.1
52.5°	2872.8	2964.0	3175.5	3387.0	3464.8
55°	2641.8	2740.3	2959.1	3182.8	3263.0
57.5°	2415.7	2514.1	2747.6	2978.5	3064.9
60°	2188.3	2280.7	2531.2	2768.2	2863.0
62.5°	1975.6	2065.5	2323.3	2578.6	2661.2
65°	1757.9	1846.7	2111.7	2371.9	2470.4
67.5°	1533.0	1640.0	1906.3	2178.6	2283.1
70°	1311.8	1421.2	1715.4	1998.7	2103.2
72.5°	1102.7	1226.7	1523.3	1812.7	1919.6
75°	889.9	1012.7	1349.5	1648.5	1744.6
77.5°	689.3	832.8	1179.3	1480.8	1593.8
80°	497.2	660.1	1026.1	1321.5	1440.6
82.5°	327.0	513.0	883.8	1176.8	1283.8
85°	173.8	390.2	750.1	1041.9	1146.4
87.5°	68.1	289.3	638.3	919.1	1023.6
90°	26.7	215.2	539.8	806.0	905.7
92.5°	26.7	167.8	459.5	714.9	808.5
95°	29.2	141.0	396.3	633.4	722.1
97.5°	31.6	127.7	346.5	561.7	640.7
100°	36.5	122.8	308.8	503.3	575.0
102.5°	42.6	122.8	278.4	449.8	517.9
105°	49.8	125.2	259.0	408.5	469.3
107.5°	55.9	127.7	245.6	374.4	429.2
110°	63.2	131.3	238.3	348.9	396.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	70.5	133.7	233.4	330.7	372.0
115°	77.8	134.9	231.0	316.1	351.3
117.5°	85.1	137.4	228.6	306.4	336.8
120°	92.4	138.6	226.1	299.1	325.8
122.5°	98.5	138.6	223.7	291.8	316.1
125°	103.3	139.8	220.0	284.5	307.6
127.5°	107.0	141.0	217.6	277.2	297.9
130°	110.6	139.8	214.0	269.9	289.3
132.5°	113.1	138.6	209.1	262.6	280.8
135°	114.3	137.4	204.2	254.1	271.1
137.5°	115.5	136.2	196.9	245.6	261.4
140°	115.5	134.9	188.4	235.9	250.4
142.5°	116.7	132.5	179.9	226.1	239.5
145°	119.1	131.3	171.4	216.4	228.6
147.5°	121.6	128.9	164.1	205.5	216.4
150°	124.0	128.9	156.8	195.7	205.5
152.5°	125.2	128.9	149.5	187.2	194.5
155°	127.7	128.9	142.2	178.7	183.6
157.5°	128.9	128.9	137.4	167.8	172.6
160°	130.1	130.1	132.5	155.6	162.9
162.5°	132.5	130.1	130.1	143.5	153.2
165°	132.5	130.1	127.7	133.7	144.7
167.5°	133.7	131.3	126.4	126.4	137.4
170°	133.7	131.3	126.4	120.4	126.4
172.5°	133.7	131.3	126.4	115.5	117.9
175°	133.7	131.3	126.4	110.6	111.8
177.5°	133.7	131.3	125.2	107.0	111.8
180°	124.0	124.0	124.0	124.0	124.0

(END OF REPORT)