

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: P685644

Luminaire Tested: **8CZL-10-UNV-FUL-L940-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685644
Test Lab: INNOVATION CENTER(G3)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8CZL-10-UNV-FUL-L940-CD-U
Description: METALUX CRUZE LINEAR 8FT FROSTED LENS MODEL WITH UPLIGHT @90 CRI
and 4000K
Light Source: (784) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

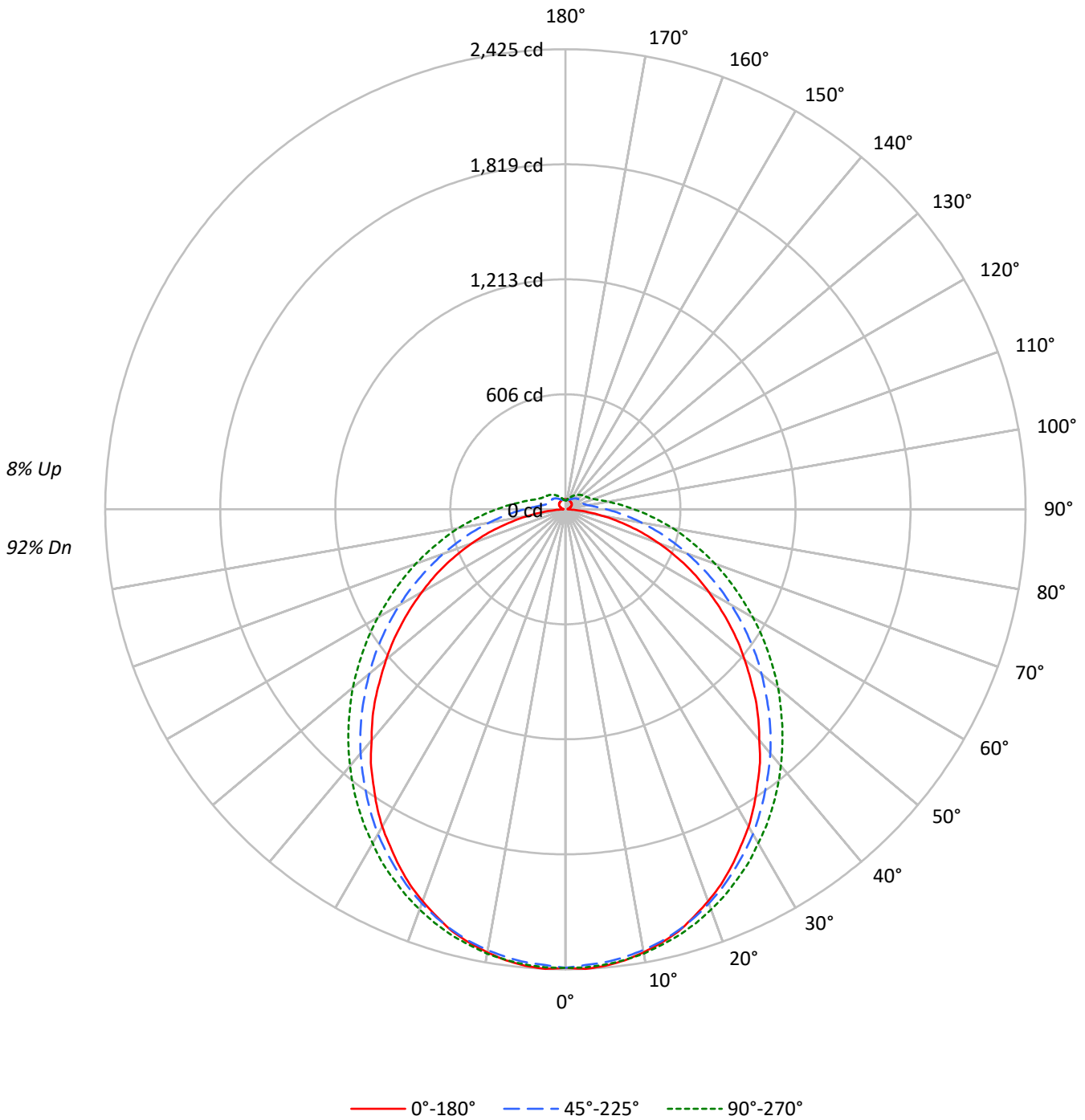
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7540.9 lumens
Efficiency: N/A
Efficacy: 119.7 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): 63
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°	3903	3903	3903
5°	3908	3832	3838
10°	3874	3765	3767
15°	3830	3688	3686
20°	3749	3595	3597
25°	3659	3488	3501
30°	3558	3380	3397
35°	3429	3252	3297
40°	3292	3130	3187
45°	3170	2995	3075
50°	3022	2858	2967
55°	2879	2716	2849
60°	2719	2565	2738
65°	2563	2410	2633
70°	2335	2259	2555
75°	2054	2120	2485
80°	1648	2017	2502
85°	1037	1990	2577



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	228.7	3.0
10°-20°	650.6	8.6
20°-30°	971.4	12.9
30°-40°	1148.4	15.2
40°-50°	1170.2	15.5
50°-60°	1055.2	14.0
60°-70°	834.9	11.1
70°-80°	564.2	7.5
80°-90°	315.6	4.2
90°-100°	171.7	2.3
100°-110°	112.6	1.5
110°-120°	89.3	1.2
120°-130°	76.0	1.0
130°-140°	60.8	0.8
140°-150°	43.5	0.6
150°-160°	28.0	0.4
160°-170°	15.1	0.2
170°-180°	4.7	0.1
0°-30°	1850.6	24.5
0°-40°	2999.0	39.8
0°-60°	5224.4	69.3
0°-90°	6939.0	92.0
90°-120°	373.6	5.0
90°-150°	553.9	7.3
90°-180°	602.0	8.0
0°-180°	7540.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2417	2417	2417	2417	2417	
5°	2416	2412	2397	2410	2410	229
15°	2304	2301	2298	2318	2323	648
25°	2074	2084	2101	2140	2148	955
35°	1765	1789	1830	1888	1907	1105
45°	1417	1445	1517	1587	1616	1091
55°	1053	1092	1180	1269	1301	942
65°	701	736	842	946	985	692
75°	355	404	538	657	696	377
85°	69	156	299	415	457	85
90°	11	86	215	321	361	8
95°	12	56	158	252	288	10
105°	20	50	103	163	187	21
115°	31	54	92	126	140	31
125°	41	56	88	113	123	37
135°	46	55	81	101	108	35
145°	48	52	68	86	91	30
155°	51	51	57	71	73	23
165°	53	52	51	53	58	15
175°	53	52	50	44	45	5
180°	49	49	49	49	49	

TEST NUMBER: P685644

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2417.2	2417.2	2417.2	2417.2	2417.2
2.5°	2425.0	2421.1	2405.1	2417.7	2417.2
5°	2415.8	2411.9	2396.9	2410.5	2409.5
7.5°	2397.9	2395.4	2381.4	2396.4	2395.9
10°	2371.7	2371.7	2359.6	2377.0	2378.5
12.5°	2340.2	2339.7	2333.4	2351.3	2351.3
15°	2303.8	2300.9	2298.5	2318.4	2323.2
17.5°	2252.0	2253.9	2258.3	2282.0	2286.9
20°	2198.6	2203.0	2211.2	2239.4	2245.7
22.5°	2141.4	2146.3	2159.4	2189.9	2200.1
25°	2074.1	2083.8	2100.7	2140.0	2148.2
27.5°	2001.4	2018.3	2040.1	2081.8	2095.9
30°	1931.6	1945.1	1976.6	2020.3	2032.4
32.5°	1851.1	1867.6	1904.4	1956.8	1973.2
35°	1764.8	1789.1	1830.3	1888.4	1906.8
37.5°	1684.4	1703.7	1754.6	1816.7	1838.5
40°	1589.4	1620.9	1679.5	1740.6	1765.8
42.5°	1506.0	1533.1	1599.1	1666.4	1692.6
45°	1417.3	1445.4	1516.7	1587.4	1616.0
47.5°	1322.3	1355.7	1431.8	1510.8	1537.5
50°	1233.1	1268.0	1349.4	1429.4	1462.8
52.5°	1145.4	1181.7	1266.1	1350.4	1381.4
55°	1053.3	1092.5	1179.8	1269.0	1301.0
57.5°	963.1	1002.4	1095.4	1187.5	1221.9
60°	872.5	909.3	1009.2	1103.7	1141.5
62.5°	787.7	823.5	926.3	1028.1	1061.0
65°	700.9	736.3	841.9	945.7	984.9
67.5°	611.2	653.9	760.0	868.6	910.3
70°	523.0	566.6	683.9	796.9	838.5
72.5°	439.6	489.1	607.3	722.7	765.4
75°	354.8	403.8	538.0	657.3	695.6
77.5°	274.8	332.0	470.2	590.4	635.5
80°	198.2	263.2	409.1	526.9	574.4
82.5°	130.4	204.5	352.4	469.2	511.9
85°	69.3	155.6	299.1	415.4	457.1
87.5°	27.1	115.4	254.5	366.4	408.1
90°	10.7	85.8	215.2	321.4	361.1
92.5°	10.7	66.9	183.2	285.0	322.3
95°	11.6	56.2	158.0	252.5	287.9
97.5°	12.6	50.9	138.1	223.9	255.4
100°	14.5	49.0	123.1	200.7	229.3
102.5°	17.0	49.0	111.0	179.3	206.5
105°	19.9	49.9	103.2	162.9	187.1
107.5°	22.3	50.9	97.9	149.3	171.1
110°	25.2	52.3	95.0	139.1	158.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	28.1	53.3	93.1	131.8	148.3
115°	31.0	53.8	92.1	126.0	140.1
117.5°	33.9	54.8	91.1	122.1	134.3
120°	36.8	55.3	90.2	119.2	129.9
122.5°	39.3	55.3	89.2	116.3	126.0
125°	41.2	55.7	87.7	113.4	122.6
127.5°	42.7	56.2	86.8	110.5	118.8
130°	44.1	55.7	85.3	107.6	115.4
132.5°	45.1	55.3	83.4	104.7	112.0
135°	45.6	54.8	81.4	101.3	108.1
137.5°	46.0	54.3	78.5	97.9	104.2
140°	46.0	53.8	75.1	94.0	99.8
142.5°	46.5	52.8	71.7	90.2	95.5
145°	47.5	52.3	68.3	86.3	91.1
147.5°	48.5	51.4	65.4	81.9	86.3
150°	49.4	51.4	62.5	78.0	81.9
152.5°	49.9	51.4	59.6	74.6	77.6
155°	50.9	51.4	56.7	71.3	73.2
157.5°	51.4	51.4	54.8	66.9	68.8
160°	51.9	51.9	52.8	62.0	65.0
162.5°	52.8	51.9	51.9	57.2	61.1
165°	52.8	51.9	50.9	53.3	57.7
167.5°	53.3	52.3	50.4	50.4	54.8
170°	53.3	52.3	50.4	48.0	50.4
172.5°	53.3	52.3	50.4	46.0	47.0
175°	53.3	52.3	50.4	44.1	44.6
177.5°	53.3	52.3	49.9	42.7	44.6
180°	49.4	49.4	49.4	49.4	49.4

(END OF REPORT)