

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: P685608

Luminaire Tested: **8CZL-32-UNV-FUL-L835-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685608
Test Lab: INNOVATION CENTER(G3)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8CZL-32-UNV-FUL-L835-CD-U
Description: METALUX CRUZE LINEAR 8FT FROSTED LENS MODEL WITH UPLIGHT @80 CRI and 3500K
Light Source: (1176) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

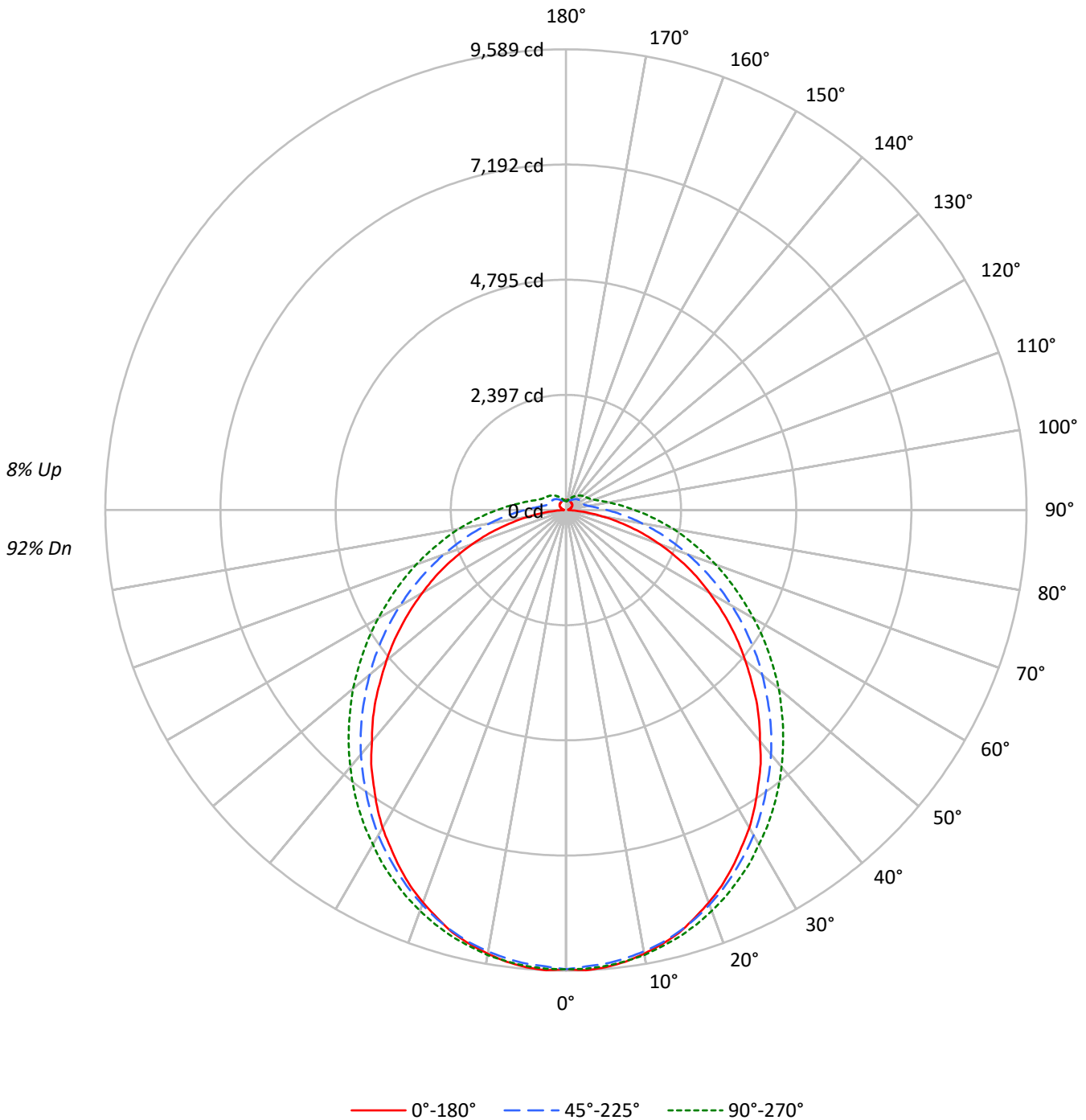
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 29818.5 lumens
Efficiency: N/A
Efficacy: 144.7 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): 206
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°	15433	15433	15433
5°	15454	15154	15177
10°	15319	14887	14894
15°	15143	14582	14575
20°	14826	14216	14222
25°	14470	13794	13842
30°	14070	13367	13432
35°	13557	12859	13036
40°	13019	12376	12602
45°	12536	11844	12159
50°	11951	11300	11733
55°	11385	10737	11264
60°	10753	10143	10825
65°	10136	9528	10413
70°	9234	8934	10102
75°	8121	8385	9825
80°	6519	7977	9895
85°	4101	7867	10189



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	904.2	3.0
10°-20°	2572.5	8.6
20°-30°	3841.2	12.9
30°-40°	4540.9	15.2
40°-50°	4627.3	15.5
50°-60°	4172.3	14.0
60°-70°	3301.4	11.1
70°-80°	2231.1	7.5
80°-90°	1247.8	4.2
90°-100°	679.0	2.3
100°-110°	445.3	1.5
110°-120°	353.2	1.2
120°-130°	300.5	1.0
130°-140°	240.4	0.8
140°-150°	172.0	0.6
150°-160°	110.9	0.4
160°-170°	59.9	0.2
170°-180°	18.7	0.1
0°-30°	7317.8	24.5
0°-40°	11858.7	39.8
0°-60°	20658.3	69.3
0°-90°	27438.6	92.0
90°-120°	1477.5	5.0
90°-150°	2190.4	7.3
90°-180°	2380.0	8.0
0°-180°	29818.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	9558	9558	9558	9558	9558	
5°	9553	9537	9478	9532	9528	906
15°	9110	9098	9089	9167	9186	2563
25°	8201	8240	8307	8462	8495	3775
35°	6978	7074	7237	7467	7540	4368
45°	5604	5715	5997	6277	6390	4316
55°	4165	4320	4665	5018	5144	3726
65°	2772	2911	3329	3739	3895	2736
75°	1403	1597	2128	2599	2750	1490
85°	274	615	1183	1643	1807	336
90°	42	339	851	1271	1428	32
95°	46	222	625	999	1138	40
105°	79	197	408	644	740	82
115°	123	213	364	498	554	122
125°	163	220	347	448	485	145
135°	180	217	322	401	427	139
145°	188	207	270	341	360	118
155°	201	203	224	282	289	93
165°	209	205	201	211	228	59
175°	211	207	199	174	176	20
180°	196	196	196	196	196	



TEST NUMBER: P685608

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	9558.3	9558.3	9558.3	9558.3	9558.3
2.5°	9589.0	9573.7	9510.4	9560.2	9558.3
5°	9552.6	9537.2	9477.8	9531.5	9527.7
7.5°	9481.7	9472.1	9416.5	9475.9	9474.0
10°	9378.2	9378.2	9330.3	9399.3	9405.0
12.5°	9253.6	9251.7	9226.8	9297.7	9297.7
15°	9109.8	9098.3	9088.8	9167.3	9186.5
17.5°	8904.8	8912.4	8929.7	9023.6	9042.8
20°	8693.9	8711.2	8743.8	8854.9	8879.8
22.5°	8467.8	8486.9	8538.7	8659.4	8699.7
25°	8201.3	8239.7	8306.8	8462.0	8494.6
27.5°	7913.8	7980.9	8067.2	8232.0	8287.6
30°	7637.8	7691.5	7816.1	7988.6	8036.5
32.5°	7319.7	7384.9	7530.5	7737.5	7802.7
35°	6978.5	7074.4	7237.3	7467.3	7540.1
37.5°	6660.4	6737.0	6938.3	7183.6	7269.9
40°	6284.7	6409.3	6641.2	6882.7	6982.4
42.5°	5955.0	6062.4	6323.0	6589.4	6692.9
45°	5604.3	5715.4	5997.2	6277.0	6390.1
47.5°	5228.6	5360.9	5661.8	5974.2	6079.6
50°	4876.0	5014.0	5336.0	5652.2	5784.4
52.5°	4529.0	4672.8	5006.3	5339.8	5462.5
55°	4164.9	4320.1	4665.1	5017.8	5144.3
57.5°	3808.4	3963.6	4331.6	4695.8	4831.9
60°	3450.0	3595.6	3990.5	4364.2	4513.7
62.5°	3114.6	3256.4	3662.7	4065.2	4195.5
65°	2771.5	2911.4	3329.2	3739.4	3894.6
67.5°	2416.9	2585.6	3005.3	3434.6	3599.5
70°	2068.1	2240.6	2704.4	3151.0	3315.8
72.5°	1738.4	1933.9	2401.6	2857.7	3026.4
75°	1403.0	1596.6	2127.5	2599.0	2750.4
77.5°	1086.7	1312.9	1859.2	2334.5	2512.7
80°	783.9	1040.7	1617.7	2083.4	2271.2
82.5°	515.6	808.8	1393.4	1855.3	2024.0
85°	274.1	615.2	1182.6	1642.6	1807.4
87.5°	107.3	456.2	1006.2	1449.0	1613.8
90°	42.2	339.2	851.0	1270.7	1427.9
92.5°	42.2	264.5	724.5	1127.0	1274.6
95°	46.0	222.3	624.8	998.6	1138.5
97.5°	49.8	201.2	546.2	885.5	1010.1
100°	57.5	193.6	486.8	793.5	906.6
102.5°	67.1	193.6	438.9	709.2	816.5
105°	78.6	197.4	408.2	644.0	739.8
107.5°	88.2	201.2	387.2	590.3	676.6
110°	99.7	207.0	375.7	550.1	624.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	111.2	210.8	368.0	521.3	586.5
115°	122.7	212.7	364.2	498.3	553.9
117.5°	134.2	216.6	360.3	483.0	530.9
120°	145.7	218.5	356.5	471.5	513.7
122.5°	155.2	218.5	352.7	460.0	498.3
125°	162.9	220.4	346.9	448.5	484.9
127.5°	168.7	222.3	343.1	437.0	469.6
130°	174.4	220.4	337.3	425.5	456.2
132.5°	178.2	218.5	329.7	414.0	442.7
135°	180.2	216.6	322.0	400.6	427.4
137.5°	182.1	214.7	310.5	387.2	412.1
140°	182.1	212.7	297.1	371.8	394.8
142.5°	184.0	208.9	283.7	356.5	377.6
145°	187.8	207.0	270.2	341.2	360.3
147.5°	191.7	203.2	258.7	323.9	341.2
150°	195.5	203.2	247.2	308.6	323.9
152.5°	197.4	203.2	235.7	295.2	306.7
155°	201.2	203.2	224.2	281.7	289.4
157.5°	203.2	203.2	216.6	264.5	272.2
160°	205.1	205.1	208.9	245.3	256.8
162.5°	208.9	205.1	205.1	226.2	241.5
165°	208.9	205.1	201.2	210.8	228.1
167.5°	210.8	207.0	199.3	199.3	216.6
170°	210.8	207.0	199.3	189.7	199.3
172.5°	210.8	207.0	199.3	182.1	185.9
175°	210.8	207.0	199.3	174.4	176.3
177.5°	210.8	207.0	197.4	168.7	176.3
180°	195.5	195.5	195.5	195.5	195.5

(END OF REPORT)