

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: P231481

Luminaire Tested: **SSLED-LD5-24-W-UNV-L850-CD2-U-CLR22**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

Test Information

Test Method: LM-79-08
Report Number: P231481
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1708-240-5)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: SSLED-LD5-24-W-UNV-L850-CD2-U-CLR22
Description: STEELER CLEAR REFRACTOR LENS
Light Source: (240) 5000 CCT, 80 CRI LEDS
Ballast/Driver: (2) ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24192.0 lumens
Efficiency: N/A
Efficacy: 126.9 lumens/watt
Spacing Criteria (0/90/45): 1.47 / 1.48 / 1.49
Luminous Opening: Vertical Cylinder (Dia: 1.83' x H: 1')
CIE Type: Direct

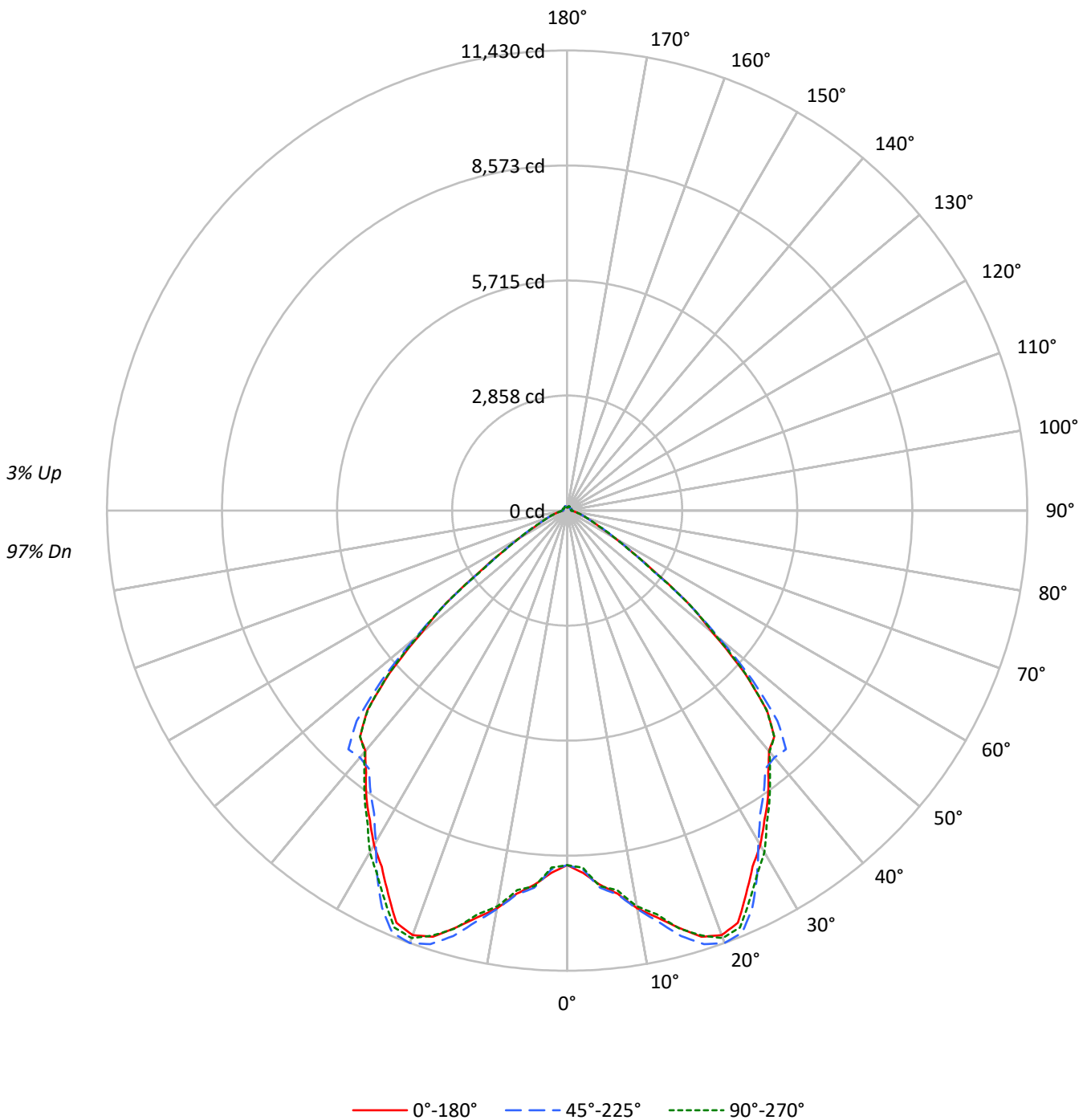
Input Watts (W): 190.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20	
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	118	118	118	118	115	115	115	115	110	110	110	104	104	104	100	100	100	97				
1	111	107	103	100	108	104	101	99	100	97	95	95	94	92	92	90	89	86				
2	103	96	91	86	100	94	89	85	90	86	82	87	83	80	83	81	78	76				
3	95	86	80	74	93	85	78	73	81	76	72	78	74	70	76	72	69	67				
4	88	78	70	65	86	76	70	64	74	68	63	71	66	62	69	65	61	59				
5	82	71	63	57	80	69	62	57	67	61	56	65	59	55	63	58	54	52				
6	76	64	56	51	74	63	56	50	61	55	50	59	54	49	58	53	49	47				
7	71	59	51	45	69	58	50	45	56	49	45	54	49	44	53	48	44	42				
8	66	54	46	41	64	53	46	41	52	45	40	50	44	40	49	43	39	38				
9	62	50	42	37	60	49	42	37	48	41	36	46	40	36	45	40	36	34				
10	58	46	38	34	57	45	38	33	44	38	33	43	37	33	42	37	33	31				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	35918	35918	35918
5°	35980	36292	36139
10°	36993	37078	36813
15°	38186	38930	38227
20°	38864	39588	39131
25°	35722	36990	36376
30°	32239	31924	32933
35°	29137	28539	29356
40°	26216	26937	26307
45°	23874	25154	23831
50°	16393	17088	16647
55°	9463	9143	9235
60°	5110	5200	5119
65°	2938	3063	2983
70°	2009	2061	2061
75°	1423	1446	1429
80°	1061	1074	1055
85°	759	765	752



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	908.7	3.8
10°-20°	3080.9	12.7
20°-30°	4941.8	20.4
30°-40°	5434.0	22.5
40°-50°	5288.0	21.9
50°-60°	2535.4	10.5
60°-70°	829.0	3.4
70°-80°	361.3	1.5
80°-90°	166.9	0.7
90°-100°	113.7	0.5
100°-110°	115.4	0.5
110°-120°	104.4	0.4
120°-130°	83.2	0.3
130°-140°	73.4	0.3
140°-150°	67.4	0.3
150°-160°	52.4	0.2
160°-170°	28.4	0.1
170°-180°	7.8	0.0
0°-30°	8931.4	36.9
0°-40°	14365.4	59.4
0°-60°	22188.7	91.7
0°-90°	23545.9	97.3
90°-120°	333.5	1.4
90°-150°	557.4	2.3
90°-180°	646.0	2.7
0°-180°	24192.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8809	8809	8809	8809	8809	
5°	9324	9318	9405	9369	9366	909
15°	10729	10848	10938	10811	10741	3052
25°	10511	10878	10884	11002	10704	4832
35°	8700	8512	8522	8597	8765	5431
45°	7016	6927	7391	6935	7003	5169
55°	2652	2664	2562	2641	2587	2526
65°	758	772	790	786	770	812
75°	324	327	330	327	326	358
85°	145	145	146	146	144	136
90°	101	104	104	105	103	57
95°	96	95	96	99	100	83
105°	118	108	108	103	112	117
115°	101	108	106	106	104	104
125°	88	88	88	90	92	83
135°	95	94	91	94	96	74
145°	108	106	108	108	110	67
155°	114	114	114	114	113	52
165°	101	100	100	99	98	29
175°	80	80	78	78	80	8
180°	81	81	81	81	81	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8808.8	8808.8	8808.8	8808.8	8808.8
2.5°	9005.1	8958.9	8915.3	8883.2	8875.5
5°	9324.5	9318.1	9405.3	9369.4	9365.6
7.5°	9600.3	9617.0	9613.1	9566.9	9506.7
10°	10028.7	10032.6	10051.8	10026.2	9980.0
12.5°	10354.6	10502.1	10457.2	10411.0	10267.3
15°	10729.1	10848.4	10938.2	10811.2	10740.7
17.5°	11098.6	11225.6	11292.3	11260.2	11062.7
20°	11220.4	11418.0	11429.5	11460.3	11297.4
22.5°	11083.2	11309.0	11351.3	11410.3	11208.9
25°	10511.1	10877.9	10884.4	11002.4	10703.5
27.5°	9972.3	10281.5	10216.0	10435.4	10208.3
30°	9592.6	9646.5	9499.0	9776.0	9799.1
32.5°	9120.5	8987.1	8923.0	9053.8	9224.4
35°	8699.8	8512.5	8521.5	8597.2	8765.2
37.5°	8207.2	8338.0	8084.1	8443.2	8273.9
40°	7795.4	8048.1	8009.7	8109.7	7822.4
42.5°	7613.3	7588.9	8045.6	7604.3	7614.6
45°	7015.5	6927.0	7391.4	6934.7	7002.7
47.5°	5981.6	6270.2	6253.5	6356.2	6018.8
50°	4723.2	5018.2	4923.3	5141.4	4796.3
52.5°	3813.7	3686.7	3788.0	3726.5	3813.7
55°	2651.5	2664.3	2561.7	2641.2	2587.4
57.5°	1880.6	1922.9	1885.7	1883.1	1863.9
60°	1380.3	1385.4	1404.6	1400.8	1382.8
62.5°	1009.5	1019.8	1041.6	1040.3	1028.8
65°	758.1	772.2	790.2	786.3	769.7
67.5°	591.4	606.8	610.6	613.2	615.7
70°	490.0	495.2	502.8	502.8	502.8
72.5°	407.9	414.3	415.6	416.9	414.3
75°	324.5	327.1	329.7	327.1	325.8
77.5°	268.1	268.1	266.8	265.5	266.8
80°	223.2	224.5	225.8	223.2	221.9
82.5°	182.2	183.4	184.7	183.4	183.4
85°	145.0	145.0	146.2	146.2	143.7
87.5°	119.3	119.3	119.3	120.6	119.3
90°	101.3	103.9	103.9	105.2	102.6
92.5°	91.1	93.6	93.6	96.2	93.6
95°	96.2	94.9	96.2	98.8	100.1
97.5°	107.8	110.3	114.2	118.0	114.2
100°	112.9	121.9	124.4	124.4	116.7
102.5°	110.3	109.0	114.2	111.6	115.4
105°	118.0	107.8	107.8	102.6	111.6
107.5°	103.9	109.0	92.4	109.0	102.6
110°	105.2	102.6	101.3	105.2	106.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	107.8	98.8	106.5	<i>98.8</i>	107.8
115°	101.3	107.8	106.5	<i>106.5</i>	103.9
117.5°	105.2	107.8	110.3	<i>111.6</i>	105.2
120°	102.6	98.8	102.6	<i>105.2</i>	105.2
122.5°	92.4	91.1	92.4	<i>94.9</i>	100.1
125°	88.5	88.5	88.5	<i>89.8</i>	92.4
127.5°	89.8	89.8	88.5	<i>89.8</i>	91.1
130°	93.6	92.4	93.6	<i>93.6</i>	94.9
132.5°	94.9	93.6	91.1	<i>93.6</i>	97.5
135°	94.9	93.6	91.1	<i>93.6</i>	96.2
137.5°	96.2	94.9	94.9	<i>94.9</i>	97.5
140°	98.8	100.1	100.1	<i>100.1</i>	100.1
142.5°	103.9	103.9	103.9	<i>103.9</i>	106.5
145°	107.8	106.5	107.8	<i>107.8</i>	110.3
147.5°	111.6	110.3	111.6	<i>111.6</i>	112.9
150°	114.2	112.9	114.2	<i>114.2</i>	114.2
152.5°	115.4	114.2	115.4	<i>115.4</i>	115.4
155°	114.2	114.2	114.2	<i>114.2</i>	112.9
157.5°	111.6	111.6	111.6	<i>111.6</i>	110.3
160°	109.0	110.3	109.0	<i>109.0</i>	107.8
162.5°	105.2	105.2	105.2	<i>103.9</i>	103.9
165°	101.3	100.1	100.1	<i>98.8</i>	97.5
167.5°	96.2	94.9	93.6	<i>93.6</i>	92.4
170°	88.5	88.5	88.5	<i>87.2</i>	87.2
172.5°	80.8	79.5	79.5	<i>79.5</i>	78.2
175°	79.5	79.5	78.2	<i>78.2</i>	79.5
177.5°	79.5	79.5	80.8	<i>79.5</i>	79.5
180°	80.8	80.8	80.8	<i>80.8</i>	80.8

(END OF REPORT)