

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: P231418

Luminaire Tested: **SSLED-LD5-24-W-UNV-L850-CD2-U-FRR22**

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: P231418
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1708-240-2)
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-FRR22
Description: STEELER WHITE 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: 24776.9 lumens
Efficiency: N/A
Efficacy: 130.0 lumens/watt
Spacing Criteria (0/90/45): 1.43 / 1.43 / 1.45
Luminous Opening: Vertical Cylinder (Dia: 1.83' x H: 1')
CIE Type: Direct

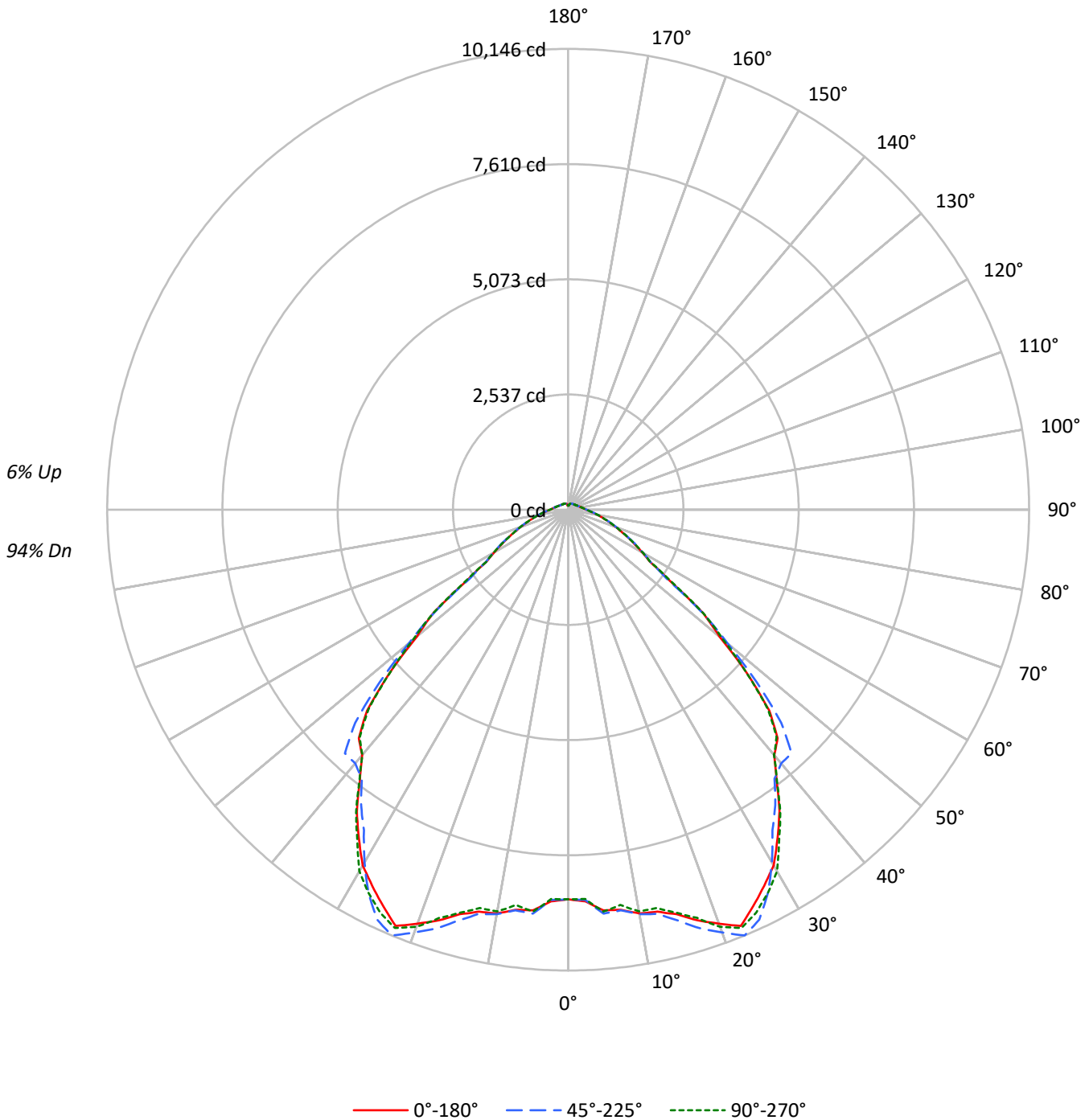
Input Watts (W): 190.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P231418

CATALOG NUMBER: SSLED-LD5-24-W-UNV-L850-CD2-U-FRR22

Luminous Intensity Polar Plot





TEST NUMBER: P231418

CATALOG NUMBER: SSLED-LD5-24-W-UNV-L850-CD2-U-FRR22

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	114	114	114	114	108	108	108	102	102	102	97	97	97	94				
1	109	104	100	97	105	101	98	95	96	93	91	91	89	87	87	85	84	81				
2	100	93	87	81	97	90	85	80	86	81	77	82	78	75	78	75	72	70				
3	92	83	75	69	89	81	74	69	77	71	67	74	69	65	70	66	63	61				
4	85	74	66	60	82	72	65	59	69	63	58	66	61	57	64	59	55	53				
5	79	67	59	53	76	65	58	52	63	56	51	60	55	50	58	53	49	47				
6	73	61	52	46	71	59	52	46	57	50	45	55	49	44	53	48	44	42				
7	68	55	47	41	66	54	47	41	52	45	40	50	44	40	49	43	39	37				
8	63	51	43	37	61	50	42	37	48	41	36	46	40	36	45	39	35	33				
9	59	47	39	34	58	46	38	33	44	38	33	43	37	32	41	36	32	30				
10	55	43	35	31	54	42	35	30	41	34	30	40	34	30	38	33	29	28				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	34982	34982	34982
5°	34158	34445	34267
10°	33293	33350	33123
15°	32817	33337	32689
20°	33590	34314	33852
25°	32735	33829	33263
30°	30389	30130	30898
35°	27156	26610	27259
40°	23723	24525	23705
45°	21299	22569	21176
50°	15107	15908	15476
55°	9747	9395	9949
60°	6957	7052	7052
65°	5638	5702	5643
70°	4549	4623	4596
75°	3736	3792	3747
80°	3117	3153	3147
85°	2632	2679	2652



TEST NUMBER: P231418

CATALOG NUMBER: SSLED-LD5-24-W-UNV-L850-CD2-U-FRR22

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	846.2	3.4
10°-20°	2665.2	10.8
20°-30°	4508.7	18.2
30°-40°	5041.5	20.3
40°-50°	4764.8	19.2
50°-60°	2619.2	10.6
60°-70°	1465.9	5.9
70°-80°	922.0	3.7
80°-90°	561.8	2.3
90°-100°	375.1	1.5
100°-110°	279.6	1.1
110°-120°	213.9	0.9
120°-130°	166.9	0.7
130°-140°	131.0	0.5
140°-150°	100.2	0.4
150°-160°	69.7	0.3
160°-170°	36.2	0.1
170°-180°	9.2	0.0
0°-30°	8020.1	32.4
0°-40°	13061.6	52.7
0°-60°	20445.6	82.5
0°-90°	23395.2	94.4
90°-120°	868.5	3.5
90°-150°	1266.7	5.1
90°-180°	1382.0	5.6
0°-180°	24776.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8579	8579	8579	8579	8579	
5°	8852	8868	8927	8869	8881	846
15°	9221	9306	9367	9264	9185	2642
25°	9632	9976	9954	10116	9788	4416
35°	8108	7936	7946	7962	8139	5042
45°	6259	6205	6632	6150	6223	4642
55°	2731	2714	2632	2759	2788	2606
65°	1455	1460	1471	1464	1456	1451
75°	852	858	865	862	854	913
85°	503	504	512	505	507	442
90°	396	400	403	402	399	219
95°	337	340	342	341	340	268
105°	262	262	263	263	263	278
115°	213	214	214	216	216	213
125°	183	185	185	186	186	166
135°	168	168	168	168	169	130
145°	159	159	159	159	160	100
155°	150	151	150	150	151	70
165°	127	127	126	126	126	36
175°	92	92	91	91	92	9
180°	95	95	95	95	95	



TEST NUMBER: P231418

CATALOG NUMBER: SSLED-LD5-24-W-UNV-L850-CD2-U-FRR22

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8579.2	8579.2	8579.2	8579.2	8579.2
2.5°	8629.2	8622.8	8599.7	8577.9	8579.2
5°	8852.4	8867.8	8926.8	8869.1	8880.6
7.5°	8883.2	8919.1	8896.0	8847.3	8778.0
10°	9025.6	9038.4	9041.0	9015.3	8979.4
12.5°	9064.1	9182.1	9115.4	9092.3	8984.6
15°	9220.6	9306.5	9366.8	9264.2	9184.7
17.5°	9481.0	9627.2	9665.7	9622.1	9423.3
20°	9697.8	9901.7	9906.9	9926.1	9773.5
22.5°	9919.7	10112.1	10145.5	10181.4	9967.2
25°	9632.4	9976.1	9954.3	10116.0	9787.6
27.5°	9337.3	9584.9	9519.5	9702.9	9513.1
30°	9042.3	9097.4	8965.3	9152.6	9193.6
32.5°	8574.1	8406.0	8368.8	8479.1	8636.9
35°	8108.4	7936.5	7945.5	7962.2	8139.2
37.5°	7532.5	7708.2	7459.3	7755.7	7549.1
40°	7054.0	7324.6	7292.6	7334.9	7048.8
42.5°	6820.5	6807.7	7274.6	6816.7	6788.4
45°	6258.7	6204.8	6631.9	6149.6	6222.7
47.5°	5344.0	5689.1	5636.5	5691.7	5338.9
50°	4352.5	4689.8	4583.4	4773.2	4458.9
52.5°	3745.7	3580.2	3700.8	3631.5	3761.1
55°	2731.0	2714.4	2632.3	2759.2	2787.5
57.5°	2134.5	2146.1	2155.1	2147.4	2142.2
60°	1879.3	1906.2	1904.9	1903.6	1904.9
62.5°	1650.9	1666.3	1683.0	1671.5	1672.7
65°	1454.7	1459.8	1471.3	1463.6	1455.9
67.5°	1264.8	1280.2	1286.6	1287.9	1281.5
70°	1109.6	1121.1	1127.6	1125.0	1121.1
72.5°	977.5	983.9	995.4	991.6	983.9
75°	851.8	858.2	864.6	862.0	854.3
77.5°	746.6	751.7	756.8	758.1	753.0
80°	655.5	660.6	663.2	659.3	661.9
82.5°	573.4	578.5	581.1	579.8	578.5
85°	502.8	504.1	511.8	505.4	506.7
87.5°	442.6	443.8	446.4	446.4	443.8
90°	396.4	400.2	402.8	401.5	398.9
92.5°	364.3	368.2	368.2	368.2	366.9
95°	337.4	339.9	342.5	341.2	339.9
97.5°	315.6	316.8	319.4	318.1	316.8
100°	295.0	296.3	298.9	297.6	296.3
102.5°	275.8	278.4	279.6	279.6	278.4
105°	261.7	261.7	263.0	263.0	263.0
107.5°	247.6	247.6	248.9	248.9	248.9
110°	236.0	236.0	236.0	236.0	237.3



TEST NUMBER: P231418

CATALOG NUMBER: SSLED-LD5-24-W-UNV-L850-CD2-U-FRR22

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	223.2	224.5	224.5	<i>224.5</i>	225.8
115°	212.9	214.2	214.2	<i>215.5</i>	215.5
117.5°	204.0	204.0	205.2	<i>205.2</i>	206.5
120°	196.3	197.5	197.5	<i>198.8</i>	198.8
122.5°	189.9	189.9	191.1	<i>191.1</i>	192.4
125°	183.4	184.7	184.7	<i>186.0</i>	186.0
127.5°	178.3	179.6	180.9	<i>180.9</i>	180.9
130°	175.7	177.0	177.0	<i>177.0</i>	178.3
132.5°	171.9	171.9	171.9	<i>173.2</i>	174.5
135°	168.0	168.0	168.0	<i>168.0</i>	169.3
137.5°	164.2	165.5	165.5	<i>165.5</i>	165.5
140°	161.6	162.9	162.9	<i>162.9</i>	162.9
142.5°	160.3	161.6	161.6	<i>161.6</i>	161.6
145°	159.1	159.1	159.1	<i>159.1</i>	160.3
147.5°	157.8	157.8	157.8	<i>157.8</i>	157.8
150°	156.5	156.5	155.2	<i>155.2</i>	156.5
152.5°	153.9	153.9	152.7	<i>153.9</i>	153.9
155°	150.1	151.4	150.1	<i>150.1</i>	151.4
157.5°	147.5	147.5	147.5	<i>147.5</i>	147.5
160°	142.4	142.4	141.1	<i>141.1</i>	142.4
162.5°	134.7	134.7	134.7	<i>134.7</i>	134.7
165°	127.0	127.0	125.7	<i>125.7</i>	125.7
167.5°	118.0	118.0	118.0	<i>118.0</i>	118.0
170°	106.5	107.8	106.5	<i>106.5</i>	106.5
172.5°	93.6	93.6	93.6	<i>93.6</i>	93.6
175°	92.4	92.4	91.1	<i>91.1</i>	92.4
177.5°	92.4	93.6	93.6	<i>93.6</i>	92.4
180°	94.9	94.9	94.9	<i>94.9</i>	94.9

(END OF REPORT)