

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: P231404

Luminaire Tested: **SSLED-LD5-9-W-UNV-L835-CD1-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: P231404  
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-LD5-9-W-UNV-L835-CD1-U-FRR22  
Description: STEELER WHITE REFRACTOR LENS  
Light Source: (240) 3500 CCT, 80 CRI LEDS  
Ballast/Driver: (1) ELECTRONIC DRIVER  
Luminaire Equipment: Sample No.   Condition   Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8630.0 lumens  
Efficiency: N/A  
Efficacy: 134.6 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

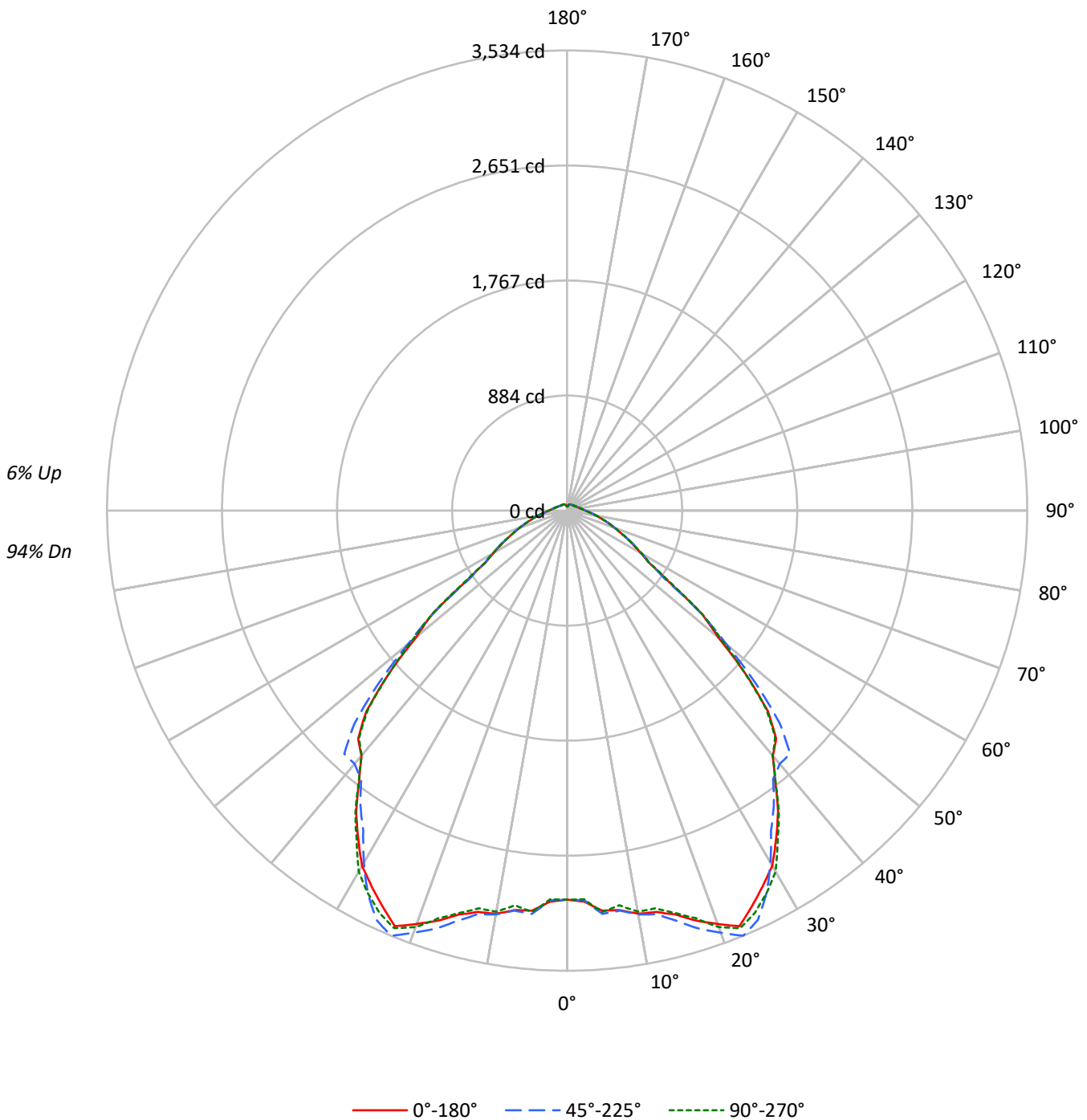
Input Watts (W): 64.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P231404

CATALOG NUMBER: SSLED-LD5-9-W-UNV-L835-CD1-U-FRR22

### Luminous Intensity Polar Plot





TEST NUMBER: P231404

CATALOG NUMBER: SSLED-LD5-9-W-UNV-L835-CD1-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	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°	12184	12184	12184
5°	11898	11998	11936
10°	11596	11616	11537
15°	11430	11611	11386
20°	11700	11952	11791
25°	11402	11783	11586
30°	10585	10495	10762
35°	9459	9269	9494
40°	8263	8542	8257
45°	7418	7861	7376
50°	5262	5541	5391
55°	3395	3272	3465
60°	2423	2456	2456
65°	1964	1986	1965
70°	1584	1610	1601
75°	1301	1321	1305
80°	1085	1098	1096
85°	917	933	924



TEST NUMBER: P231404

CATALOG NUMBER: SSLED-LD5-9-W-UNV-L835-CD1-U-FRR22

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	294.8	3.4
10°-20°	928.3	10.8
20°-30°	1570.4	18.2
30°-40°	1756.0	20.3
40°-50°	1659.6	19.2
50°-60°	912.3	10.6
60°-70°	510.6	5.9
70°-80°	321.1	3.7
80°-90°	195.7	2.3
90°-100°	130.6	1.5
100°-110°	97.4	1.1
110°-120°	74.5	0.9
120°-130°	58.2	0.7
130°-140°	45.6	0.5
140°-150°	34.9	0.4
150°-160°	24.3	0.3
160°-170°	12.6	0.1
170°-180°	3.2	0.0
0°-30°	2793.5	32.4
0°-40°	4549.4	52.7
0°-60°	7121.3	82.5
0°-90°	8148.7	94.4
90°-120°	302.5	3.5
90°-150°	441.2	5.1
90°-180°	481.0	5.6
0°-180°	8630.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2988	2988	2988	2988	2988	
5°	3083	3089	3109	3089	3093	295
15°	3212	3242	3262	3227	3199	920
25°	3355	3475	3467	3524	3409	1538
35°	2824	2764	2768	2773	2835	1756
45°	2180	2161	2310	2142	2167	1617
55°	951	945	917	961	971	908
65°	507	508	512	510	507	505
75°	297	299	301	300	298	318
85°	175	176	178	176	176	154
90°	138	139	140	140	139	76
95°	118	118	119	119	118	93
105°	91	91	92	92	92	97
115°	74	75	75	75	75	74
125°	64	64	64	65	65	58
135°	58	58	58	58	59	45
145°	55	55	55	55	56	35
155°	52	53	52	52	53	24
165°	44	44	44	44	44	13
175°	32	32	32	32	32	3
180°	33	33	33	33	33	



TEST NUMBER: P231404

CATALOG NUMBER: SSLED-LD5-9-W-UNV-L835-CD1-U-FRR22

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2988.2	2988.2	2988.2	2988.2	2988.2
2.5°	3005.6	3003.4	2995.3	2987.7	2988.2
5°	3083.4	3088.7	3109.3	3089.2	3093.2
7.5°	3094.1	3106.6	3098.6	3081.6	3057.4
10°	3143.7	3148.1	3149.0	3140.1	3127.6
12.5°	3157.1	3198.2	3175.0	3166.9	3129.4
15°	3211.6	3241.5	3262.5	3226.8	3199.1
17.5°	3302.3	3353.2	3366.6	3351.4	3282.2
20°	3377.8	3448.8	3450.6	3457.3	3404.2
22.5°	3455.1	3522.1	3533.7	3546.2	3471.6
25°	3355.0	3474.8	3467.2	3523.5	3409.1
27.5°	3252.3	3338.5	3315.7	3379.6	3313.5
30°	3149.5	3168.7	3122.7	3187.9	3202.2
32.5°	2986.4	2927.9	2914.9	2953.3	3008.3
35°	2824.2	2764.3	2767.5	2773.3	2834.9
37.5°	2623.6	2684.8	2598.1	2701.3	2629.4
40°	2456.9	2551.2	2540.1	2554.8	2455.2
42.5°	2375.6	2371.2	2533.8	2374.3	2364.5
45°	2179.9	2161.2	2310.0	2142.0	2167.4
47.5°	1861.4	1981.6	1963.2	1982.4	1859.6
50°	1516.0	1633.5	1596.4	1662.5	1553.1
52.5°	1304.7	1247.0	1289.0	1264.9	1310.0
55°	951.2	945.4	916.8	961.1	970.9
57.5°	743.5	747.5	750.6	747.9	746.2
60°	654.6	663.9	663.5	663.0	663.5
62.5°	575.0	580.4	586.2	582.2	582.6
65°	506.7	508.5	512.5	509.8	507.1
67.5°	440.5	445.9	448.1	448.6	446.4
70°	386.5	390.5	392.7	391.8	390.5
72.5°	340.5	342.7	346.7	345.4	342.7
75°	296.7	298.9	301.1	300.2	297.6
77.5°	260.0	261.8	263.6	264.1	262.3
80°	228.3	230.1	231.0	229.7	230.5
82.5°	199.7	201.5	202.4	202.0	201.5
85°	175.1	175.6	178.3	176.0	176.5
87.5°	154.1	154.6	155.5	155.5	154.6
90°	138.1	139.4	140.3	139.8	139.0
92.5°	126.9	128.2	128.2	128.2	127.8
95°	117.5	118.4	119.3	118.8	118.4
97.5°	109.9	110.4	111.3	110.8	110.4
100°	102.8	103.2	104.1	103.7	103.2
102.5°	96.1	97.0	97.4	97.4	97.0
105°	91.1	91.1	91.6	91.6	91.6
107.5°	86.2	86.2	86.7	86.7	86.7
110°	82.2	82.2	82.2	82.2	82.7



TEST NUMBER: P231404

CATALOG NUMBER: SSLED-LD5-9-W-UNV-L835-CD1-U-FRR22

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	77.7	78.2	78.2	78.2	78.6
115°	74.2	74.6	74.6	75.1	75.1
117.5°	71.0	71.0	71.5	71.5	71.9
120°	68.4	68.8	68.8	69.3	69.3
122.5°	66.1	66.1	66.6	66.6	67.0
125°	63.9	64.3	64.3	64.8	64.8
127.5°	62.1	62.6	63.0	63.0	63.0
130°	61.2	61.7	61.7	61.7	62.1
132.5°	59.9	59.9	59.9	60.3	60.8
135°	58.5	58.5	58.5	58.5	59.0
137.5°	57.2	57.6	57.6	57.6	57.6
140°	56.3	56.7	56.7	56.7	56.7
142.5°	55.8	56.3	56.3	56.3	56.3
145°	55.4	55.4	55.4	55.4	55.8
147.5°	55.0	55.0	55.0	55.0	55.0
150°	54.5	54.5	54.1	54.1	54.5
152.5°	53.6	53.6	53.2	53.6	53.6
155°	52.3	52.7	52.3	52.3	52.7
157.5°	51.4	51.4	51.4	51.4	51.4
160°	49.6	49.6	49.1	49.1	49.6
162.5°	46.9	46.9	46.9	46.9	46.9
165°	44.2	44.2	43.8	43.8	43.8
167.5°	41.1	41.1	41.1	41.1	41.1
170°	37.1	37.5	37.1	37.1	37.1
172.5°	32.6	32.6	32.6	32.6	32.6
175°	32.2	32.2	31.7	31.7	32.2
177.5°	32.2	32.6	32.6	32.6	32.2
180°	33.1	33.1	33.1	33.1	33.1

(END OF REPORT)