

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: P231437

Luminaire Tested: **SSLED-LD5-24-W-UNV-L835-CD2-U-FRR22-CLCDL22**

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: P231437  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1708-240-3)  
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-L835-CD2-U-FRR22-CLCDL22  
Description: STEELER WHITE REFRACTOR LENS AND CONICAL DROP  
Light Source: (240) 3500 CCT, 80 CRI LEDS  
Ballast/Driver: (2) ELECTRONIC DRIVER  
Luminaire Equipment: Sample No.   Condition   Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 21436.0 lumens  
Efficiency: N/A  
Efficacy: 112.5 lumens/watt  
Spacing Criteria (0/90/45): 1.42 / 1.43 / 1.55  
Luminous Opening: Vertical Cylinder (Dia: 1.67' x H: 1.17')  
CIE Type: Semi-Direct

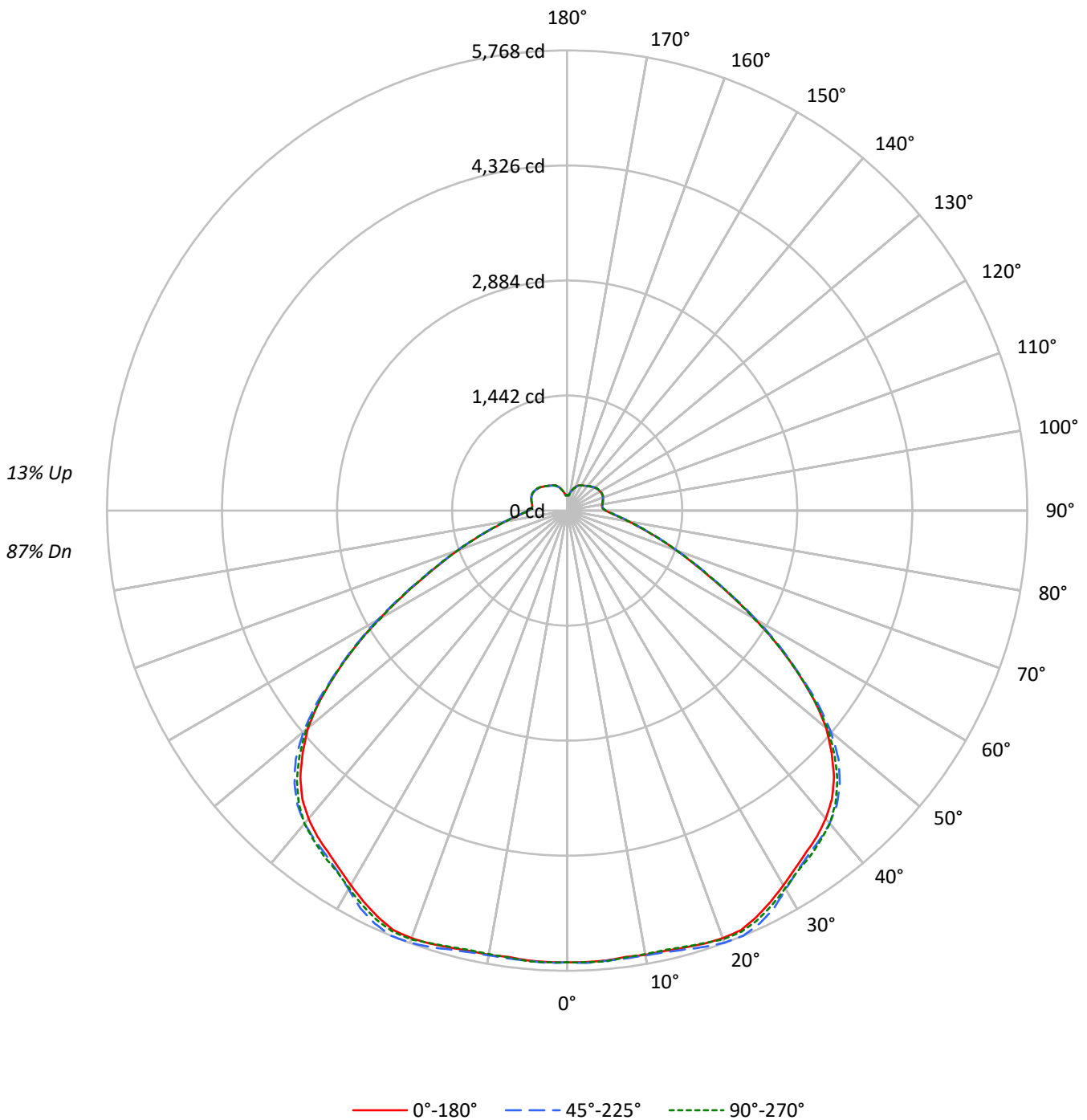
Input Watts (W): 190.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P231437

CATALOG NUMBER: SSLED-LD5-24-W-UNV-L835-CD2-U-FRR22-CLCDL22

### Luminous Intensity Polar Plot





TEST NUMBER: P231437

CATALOG NUMBER: SSLED-LD5-24-W-UNV-L835-CD2-U-FRR22-CLCDL22

**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	116	116	116	116	112	112	112	112	104	104	104	97	97	97	90	90	90	87
1	106	101	96	92	101	97	93	90	91	87	85	85	82	80	79	77	75	72
2	96	88	81	75	92	85	79	73	79	74	70	74	70	66	69	66	63	60
3	87	77	69	62	84	74	67	61	70	63	58	65	60	56	61	57	53	51
4	80	68	59	53	77	66	58	52	62	55	50	58	52	48	54	50	46	43
5	73	61	52	45	70	59	50	44	55	48	43	52	46	41	49	44	39	37
6	68	54	45	39	65	53	44	38	50	42	37	47	41	36	44	39	35	32
7	62	49	40	34	60	48	40	34	45	38	33	42	36	32	40	35	31	28
8	58	45	36	30	56	43	35	30	41	34	29	39	33	28	37	31	27	25
9	54	41	33	27	52	40	32	27	38	31	26	36	30	25	34	28	24	22
10	51	37	30	24	49	37	29	24	35	28	23	33	27	23	31	26	22	20

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	27940	27940	27940
5°	26002	26023	26045
10°	24483	24503	24442
15°	23378	23484	23345
20°	22607	22847	22672
25°	21608	21956	21760
30°	20392	20610	20567
35°	19385	19549	19657
40°	18580	18867	18875
45°	17448	17830	17671
50°	15777	16059	15899
55°	13310	13380	13323
60°	10531	10634	10472
65°	7944	8032	7981
70°	6103	6127	6078
75°	4662	4723	4677
80°	3682	3715	3672
85°	2982	3030	3012



TEST NUMBER: P231437

CATALOG NUMBER: SSLED-LD5-24-W-UNV-L835-CD2-U-FRR22-CLCDL22

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	539.9	2.5
10°-20°	1611.9	7.5
20°-30°	2608.0	12.2
30°-40°	3315.1	15.5
40°-50°	3675.1	17.1
50°-60°	3148.4	14.7
60°-70°	2013.6	9.4
70°-80°	1148.3	5.4
80°-90°	666.5	3.1
90°-100°	492.7	2.3
100°-110°	490.0	2.3
110°-120°	479.0	2.2
120°-130°	419.4	2.0
130°-140°	329.8	1.5
140°-150°	240.1	1.1
150°-160°	159.2	0.7
160°-170°	79.6	0.4
170°-180°	19.6	0.1
0°-30°	4759.8	22.2
0°-40°	8074.8	37.7
0°-60°	14898.3	69.5
0°-90°	18726.7	87.4
90°-120°	1461.7	6.8
90°-150°	2450.9	11.4
90°-180°	2709.0	12.6
0°-180°	21436.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5663	5663	5663	5663	5663	
5°	5660	5658	5664	5658	5669	540
15°	5670	5680	5696	5676	5662	1609
25°	5619	5652	5710	5654	5658	2588
35°	5227	5278	5271	5301	5300	3282
45°	4729	4769	4833	4800	4790	3627
55°	3517	3535	3535	3528	3520	3132
65°	1981	2000	2003	2006	1990	2000
75°	1058	1063	1072	1065	1061	1142
85°	589	598	599	594	595	525
90°	482	484	486	484	482	267
95°	441	441	444	442	442	363
105°	462	463	464	464	464	488
115°	482	484	484	486	486	477
125°	466	467	468	470	471	418
135°	424	426	424	426	427	329
145°	381	381	380	380	381	240
155°	346	346	341	344	346	160
165°	278	278	277	276	277	80
175°	192	192	191	191	192	20
180°	193	193	193	193	193	



TEST NUMBER: P231437

CATALOG NUMBER: SSLED-LD5-24-W-UNV-L835-CD2-U-FRR22-CLCDL22

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	5663.0	5663.0	5663.0	5663.0	5663.0
2.5°	5664.1	5673.5	5674.6	5667.6	5667.6
5°	5659.5	5658.3	5664.1	5658.3	5668.8
7.5°	5642.1	5643.2	5660.7	5650.2	5649.0
10°	5654.8	5643.2	5659.5	5645.5	5645.5
12.5°	5653.7	5651.4	5670.0	5653.7	5642.1
15°	5670.0	5680.4	5695.5	5675.8	5661.8
17.5°	5693.2	5706.0	5733.9	5696.7	5685.1
20°	5702.5	5708.3	5763.0	5708.3	5718.8
22.5°	5692.1	5700.2	5767.6	5700.2	5714.1
25°	5618.8	5652.5	5709.5	5653.7	5658.3
27.5°	5525.8	5582.8	5615.3	5588.6	5570.0
30°	5421.2	5496.7	5479.3	5510.7	5467.7
32.5°	5317.7	5390.9	5360.7	5407.2	5365.4
35°	5227.0	5278.2	5271.2	5301.4	5300.3
37.5°	5146.8	5177.0	5200.3	5213.1	5215.4
40°	5042.2	5084.0	5120.1	5111.9	5122.4
42.5°	4912.0	4957.3	5003.8	4979.4	4977.1
45°	4729.4	4769.0	4832.9	4800.3	4789.9
47.5°	4495.7	4570.2	4614.3	4579.5	4549.2
50°	4238.8	4276.0	4314.4	4294.6	4271.4
52.5°	3902.8	3905.1	3951.7	3924.9	3906.3
55°	3516.8	3535.4	3535.4	3528.5	3520.3
57.5°	3126.2	3140.2	3149.5	3139.0	3126.2
60°	2714.7	2729.8	2741.4	2736.7	2699.5
62.5°	2329.8	2344.9	2351.9	2338.0	2341.5
65°	1981.1	1999.7	2003.1	2005.5	1990.4
67.5°	1695.1	1709.0	1717.1	1710.2	1709.0
70°	1459.1	1462.5	1464.9	1469.5	1453.2
72.5°	1245.1	1246.3	1252.1	1253.3	1244.0
75°	1058.0	1062.6	1071.9	1064.9	1061.4
77.5°	903.3	910.3	915.0	917.3	912.6
80°	784.7	785.9	791.7	787.1	782.4
82.5°	681.3	681.3	684.8	684.8	682.4
85°	589.4	597.6	598.7	594.1	595.2
87.5°	527.8	531.3	532.5	530.1	529.0
90°	482.5	483.6	486.0	483.6	482.5
92.5°	453.4	455.7	456.9	455.7	456.9
95°	440.6	440.6	444.1	441.8	441.8
97.5°	440.6	440.6	444.1	442.9	441.8
100°	446.4	447.6	448.8	448.8	448.8
102.5°	453.4	454.6	455.7	455.7	455.7
105°	461.5	462.7	463.9	463.9	463.9
107.5°	469.7	470.8	472.0	472.0	472.0
110°	477.8	476.7	479.0	479.0	480.2



TEST NUMBER: P231437

CATALOG NUMBER: SSLED-LD5-24-W-UNV-L835-CD2-U-FRR22-CLCDL22

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	481.3	482.5	482.5	483.6	484.8
115°	482.5	483.6	483.6	486.0	486.0
117.5°	482.5	482.5	483.6	484.8	486.0
120°	477.8	479.0	480.2	481.3	482.5
122.5°	474.3	474.3	475.5	476.7	477.8
125°	466.2	467.4	468.5	469.7	470.8
127.5°	458.1	458.1	459.2	460.4	461.5
130°	448.8	448.8	449.9	451.1	452.2
132.5°	436.0	437.1	437.1	438.3	439.5
135°	424.3	425.5	424.3	425.5	426.7
137.5°	412.7	412.7	411.6	412.7	413.9
140°	399.9	401.1	399.9	401.1	401.1
142.5°	389.5	391.8	390.6	390.6	391.8
145°	381.3	381.3	380.2	380.2	381.3
147.5°	372.0	373.2	372.0	372.0	372.0
150°	362.7	363.9	361.6	362.7	362.7
152.5°	355.8	356.9	351.1	355.8	355.8
155°	346.5	346.5	340.6	344.1	346.5
157.5°	333.7	332.5	329.0	332.5	331.3
160°	317.4	318.6	315.1	316.2	315.1
162.5°	296.5	298.8	297.6	297.6	296.5
165°	277.9	277.9	276.7	275.5	276.7
167.5°	256.9	256.9	255.8	256.9	255.8
170°	231.4	233.7	232.5	233.7	231.4
172.5°	205.8	204.6	204.6	204.6	204.6
175°	191.8	191.8	190.7	190.7	191.8
177.5°	190.7	190.7	191.8	189.5	189.5
180°	193.0	193.0	193.0	193.0	193.0

(END OF REPORT)