

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: P231449

Luminaire Tested: **SSLED-LD5-12-W-UNV-L835-CD1-U-FRR22-FRCDL22**

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: P231449  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1708-240-4)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: SSLED-LD5-12-W-UNV-L835-CD1-U-FRR22-FRCDL22  
Description: STEELER WHITE REFRACTOR LENS AND CIRCULAR DROP  
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: 10832.1 lumens  
Efficiency: N/A  
Efficacy: 127.0 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 1.16 / 1.37  
Luminous Opening: Vertical Cylinder (Dia: 1.83' x H: 1')  
CIE Type: Semi-Direct

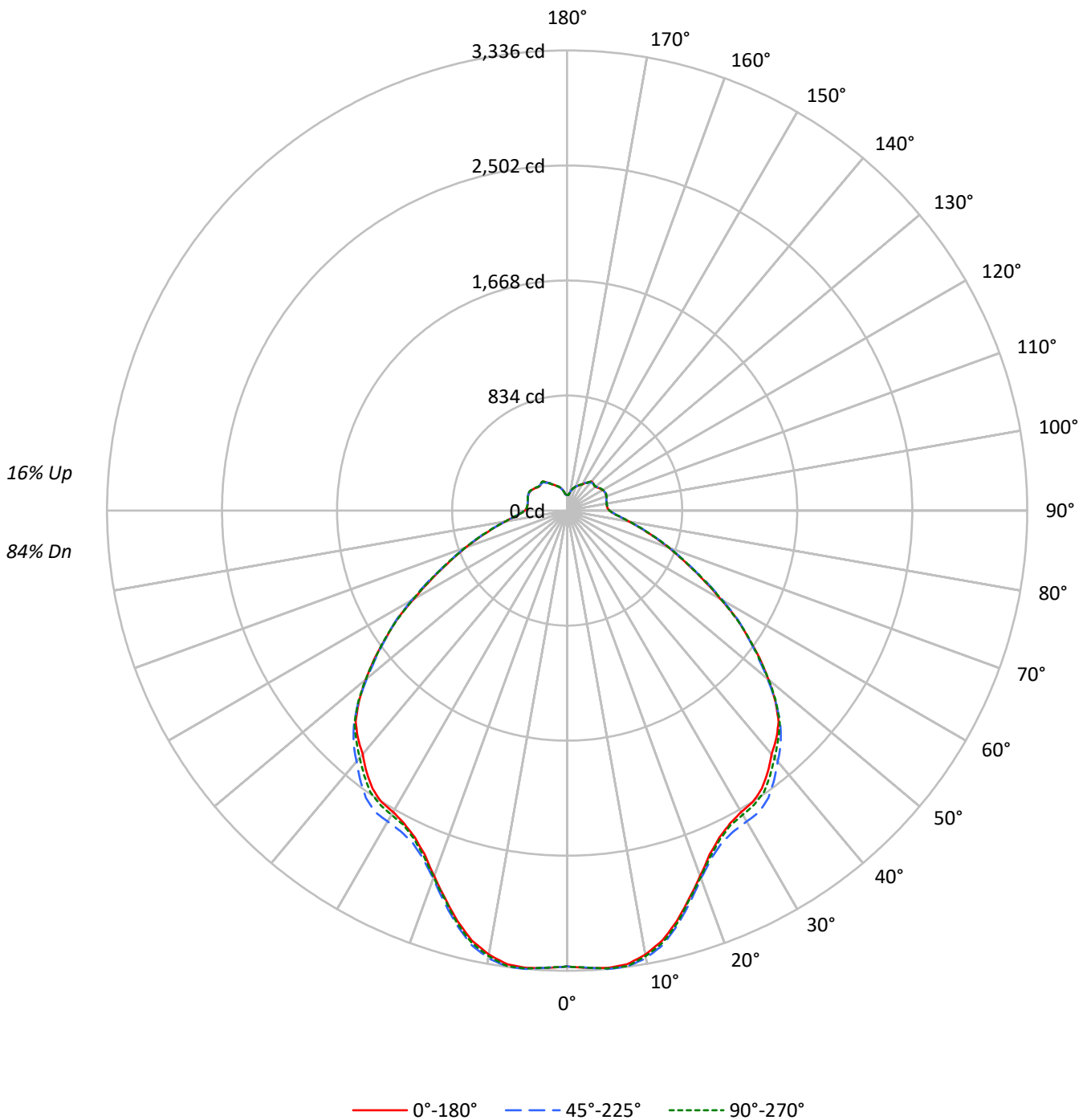
Input Watts (W): 85.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P231449

CATALOG NUMBER: SSLED-LD5-12-W-UNV-L835-CD1-U-FRR22-FRCDL22

### Luminous Intensity Polar Plot





TEST NUMBER: P231449

CATALOG NUMBER: SSLED-LD5-12-W-UNV-L835-CD1-U-FRR22-FRCDL22

**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	115	115	115	115	111	111	111	111	102	102	102	95	95	95	88	88	88	84
1	104	100	95	91	100	96	92	88	89	85	82	82	79	77	76	74	72	69
2	95	87	80	74	91	83	77	72	77	72	68	72	68	64	66	63	60	57
3	87	76	68	61	83	73	66	60	68	62	57	63	58	54	59	55	51	48
4	79	67	59	52	76	65	57	51	60	54	48	56	51	46	52	48	44	41
5	73	60	51	45	70	58	50	44	54	47	42	51	45	40	47	42	38	36
6	67	54	45	39	64	52	44	38	49	42	37	46	40	35	43	38	34	31
7	62	49	40	34	60	47	39	34	44	37	32	42	36	31	39	34	30	28
8	58	45	36	30	55	43	35	30	41	34	29	38	32	28	36	31	27	25
9	54	41	33	27	52	40	32	27	37	31	26	35	29	25	33	28	24	22
10	51	38	30	25	49	37	29	24	34	28	23	33	27	23	31	26	22	20

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

	0°	45°	90°
0°	13477	13477	13477
5°	12843	12873	12857
10°	12055	12152	12099
15°	10957	11046	11006
20°	9766	9825	9795
25°	8881	9019	8924
30°	8480	8747	8561
35°	8239	8517	8335
40°	7755	7987	7869
45°	7379	7435	7419
50°	6614	6578	6624
55°	5710	5712	5735
60°	4758	4817	4784
65°	3894	3928	3907
70°	3202	3222	3224
75°	2608	2642	2642
80°	2156	2173	2176
85°	1865	1881	1862



TEST NUMBER: P231449

CATALOG NUMBER: SSLED-LD5-12-W-UNV-L835-CD1-U-FRR22-FRCDL22

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	316.7	2.9
10°-20°	866.2	8.0
20°-30°	1231.7	11.4
30°-40°	1556.0	14.4
40°-50°	1667.4	15.4
50°-60°	1430.1	13.2
60°-70°	1011.7	9.3
70°-80°	642.2	5.9
80°-90°	400.2	3.7
90°-100°	321.7	3.0
100°-110°	312.4	2.9
110°-120°	301.5	2.8
120°-130°	255.4	2.4
130°-140°	209.7	1.9
140°-150°	155.5	1.4
150°-160°	94.2	0.9
160°-170°	47.6	0.4
170°-180°	11.9	0.1
0°-30°	2414.6	22.3
0°-40°	3970.6	36.7
0°-60°	7068.1	65.3
0°-90°	9122.1	84.2
90°-120°	935.6	8.6
90°-150°	1556.2	14.4
90°-180°	1710.0	15.8
0°-180°	10832.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3305	3305	3305	3305	3305	
5°	3328	3332	3336	3334	3332	316
15°	3079	3083	3104	3096	3092	862
25°	2613	2653	2654	2670	2626	1216
35°	2460	2469	2543	2489	2489	1532
45°	2168	2173	2185	2190	2180	1654
55°	1600	1599	1600	1592	1607	1432
65°	1005	1010	1014	1011	1008	1004
75°	595	601	602	602	602	638
85°	356	356	359	356	356	312
90°	307	307	309	308	307	169
95°	291	291	293	293	292	238
105°	294	294	294	295	296	311
115°	304	305	306	307	307	300
125°	284	284	285	285	287	254
135°	270	270	270	272	273	210
145°	246	247	247	246	244	156
155°	201	202	202	201	203	94
165°	167	167	166	167	167	48
175°	116	116	115	116	116	12
180°	113	113	113	113	113	



TEST NUMBER: P231449

CATALOG NUMBER: SSLED-LD5-12-W-UNV-L835-CD1-U-FRR22-FRCDL22

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3305.1	3305.1	3305.1	3305.1	3305.1
2.5°	3318.8	3318.8	3316.4	3318.2	3316.4
5°	3328.3	3332.5	3336.1	3334.3	3331.9
7.5°	3318.2	3322.3	3334.3	3331.3	3331.3
10°	3268.1	3275.9	3294.3	3289.0	3280.0
12.5°	3192.5	3205.6	3222.2	3212.1	3207.9
15°	3078.7	3082.8	3103.7	3095.9	3092.4
17.5°	2945.2	2945.2	2971.4	2970.2	2952.3
20°	2819.5	2828.4	2836.7	2845.1	2827.8
22.5°	2698.5	2729.5	2728.9	2744.4	2712.8
25°	2613.3	2652.6	2653.8	2669.9	2625.8
27.5°	2557.3	2601.4	2618.1	2616.9	2569.2
30°	2523.3	2549.0	2602.6	2569.8	2547.2
32.5°	2505.5	2506.7	2591.3	2526.9	2526.9
35°	2460.2	2469.1	2543.0	2488.8	2488.8
37.5°	2389.3	2423.8	2463.8	2442.3	2417.3
40°	2305.9	2363.1	2375.0	2371.4	2339.8
42.5°	2243.9	2276.1	2293.9	2289.8	2263.0
45°	2168.2	2173.0	2184.9	2189.7	2180.1
47.5°	2047.9	2046.1	2051.4	2054.4	2055.6
50°	1905.5	1891.8	1895.3	1894.7	1908.4
52.5°	1759.5	1742.2	1742.2	1739.2	1751.1
55°	1599.8	1599.2	1600.4	1592.1	1607.0
57.5°	1455.6	1460.4	1464.0	1453.8	1450.2
60°	1285.2	1301.3	1301.3	1297.1	1292.4
62.5°	1137.4	1149.4	1155.9	1146.4	1145.8
65°	1004.6	1010.5	1013.5	1011.1	1008.1
67.5°	883.0	890.2	893.7	888.4	889.0
70°	781.1	783.5	785.9	791.3	786.5
72.5°	683.4	685.2	690.0	688.8	688.8
75°	594.6	601.2	602.4	602.4	602.4
77.5°	520.8	524.3	523.7	522.5	521.4
80°	453.4	457.0	457.0	457.0	457.6
82.5°	401.0	400.4	401.6	402.8	402.8
85°	356.3	355.7	359.3	356.3	355.7
87.5°	325.3	327.1	328.3	327.7	326.5
90°	306.9	307.4	308.6	308.0	306.9
92.5°	295.5	296.7	297.9	297.9	297.3
95°	290.8	291.4	292.6	292.6	292.0
97.5°	289.6	290.2	291.4	291.4	290.8
100°	290.2	290.8	291.4	291.4	292.0
102.5°	290.8	291.4	292.0	292.6	292.6
105°	293.7	293.7	294.3	294.9	295.5
107.5°	297.3	297.9	298.5	299.1	299.1
110°	301.5	302.1	302.1	303.3	303.3



TEST NUMBER: P231449

CATALOG NUMBER: SSLED-LD5-12-W-UNV-L835-CD1-U-FRR22-FRCDL22

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	304.5	305.1	305.1	306.3	306.9
115°	304.5	305.1	305.7	306.9	307.4
117.5°	302.1	302.1	302.7	303.9	305.1
120°	296.7	296.7	297.9	298.5	299.7
122.5°	290.2	290.8	292.0	292.6	293.1
125°	283.6	284.2	285.4	285.4	286.6
127.5°	274.7	276.5	277.7	277.7	278.3
130°	267.5	269.3	270.5	271.1	270.5
132.5°	265.7	267.5	269.3	268.1	266.9
135°	270.5	270.5	270.5	271.7	272.9
137.5°	275.3	274.1	269.9	274.7	276.5
140°	275.3	271.1	268.1	270.5	275.3
142.5°	261.6	260.4	254.4	259.2	261.0
145°	246.1	247.3	246.7	245.5	244.3
147.5°	233.0	235.4	237.1	232.4	232.4
150°	218.7	224.0	224.0	222.2	220.5
152.5°	210.9	212.1	212.1	210.9	211.5
155°	201.4	202.0	202.0	200.8	202.6
157.5°	191.9	193.0	193.0	193.0	192.5
160°	185.3	185.9	185.3	185.3	184.7
162.5°	177.0	176.4	176.4	176.4	177.0
165°	167.4	166.8	166.2	166.8	167.4
167.5°	156.1	156.1	155.5	155.5	155.5
170°	142.4	143.0	142.4	142.4	141.8
172.5°	124.5	123.9	124.5	124.5	125.1
175°	116.2	115.6	115.0	115.6	115.6
177.5°	113.2	113.8	113.8	113.2	112.6
180°	113.2	113.2	113.2	113.2	113.2

(END OF REPORT)