

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: P231515

Luminaire Tested: **SSLED-LD5-15-W-UNV-L835-CD1-U-CLR22-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: P231515  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1708-240-7)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: SSLED-LD5-15-W-UNV-L835-CD1-U-CLR22-FRCDL22  
Description: STEELER CLEAR 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: 13050.0 lumens  
Efficiency: N/A  
Efficacy: 117.8 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.32 / 1.45  
Luminous Opening: Vertical Cylinder (Dia: 1.83' x H: 1')  
CIE Type: Semi-Direct

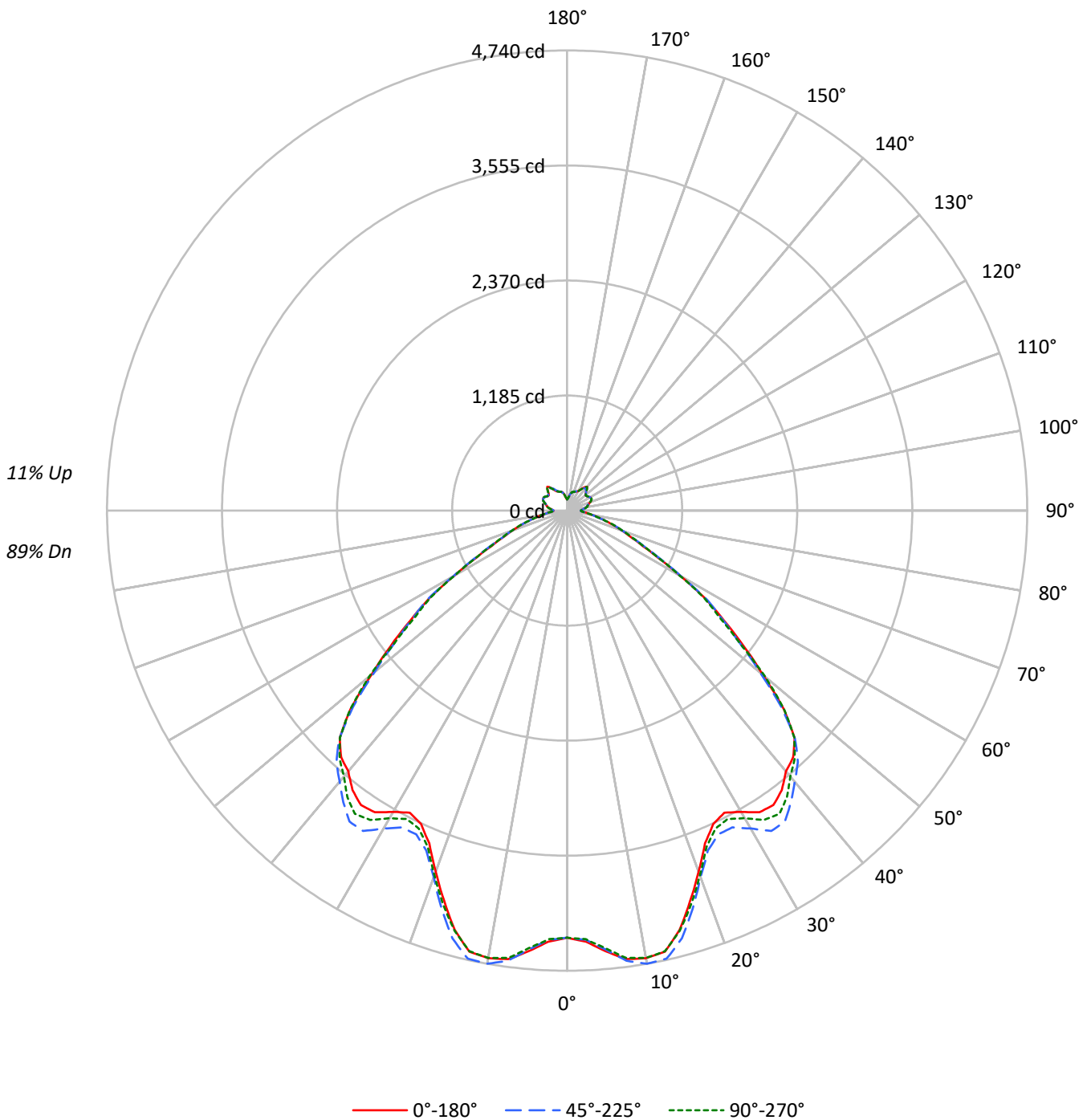
Input Watts (W): 110.74  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																		
0	116	116	116	116	112	112	112	112	105	105	105	98	98	98	92	92	92	89
1	107	103	99	95	103	99	96	93	93	90	88	87	85	83	82	80	79	76
2	98	91	85	79	95	88	82	78	83	78	74	78	74	71	73	70	68	65
3	90	80	73	67	87	78	71	66	73	68	63	69	65	61	65	62	58	56
4	83	72	63	57	80	70	62	56	66	59	54	62	57	52	59	54	51	48
5	76	64	56	50	73	62	55	49	59	52	47	56	50	46	53	48	44	42
6	70	58	49	43	68	56	48	43	53	47	42	51	45	40	48	43	39	37
7	65	53	44	38	63	51	43	38	49	42	37	46	40	36	44	39	35	33
8	61	48	40	34	59	47	39	34	45	38	33	42	36	32	40	35	31	29
9	57	44	36	31	55	43	35	30	41	34	30	39	33	29	37	32	28	26
10	53	40	33	28	51	40	32	27	38	31	27	36	30	26	35	29	26	24

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

	0°	45°	90°
0°	17940	17940	17940
5°	17578	17507	17456
10°	17265	17483	17259
15°	15917	16235	15948
20°	13712	13912	13850
25°	12104	12503	12284
30°	12044	12704	12294
35°	12403	13095	12766
40°	11796	12263	12025
45°	11275	11296	11260
50°	9141	9013	9236
55°	7030	6951	6822
60°	4995	5028	4954
65°	3315	3406	3355
70°	2456	2483	2492
75°	1785	1788	1788
80°	1275	1257	1268
85°	889	893	893



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	439.5	3.4
10°-20°	1251.6	9.6
20°-30°	1724.7	13.2
30°-40°	2346.1	18.0
40°-50°	2500.8	19.2
50°-60°	1764.0	13.5
60°-70°	900.4	6.9
70°-80°	441.0	3.4
80°-90°	200.0	1.5
90°-100°	184.6	1.4
100°-110°	237.2	1.8
110°-120°	268.4	2.1
120°-130°	231.0	1.8
130°-140°	214.9	1.6
140°-150°	175.2	1.3
150°-160°	102.0	0.8
160°-170°	55.0	0.4
170°-180°	13.7	0.1
0°-30°	3415.7	26.2
0°-40°	5761.8	44.2
0°-60°	10026.6	76.8
0°-90°	11568.0	88.6
90°-120°	690.2	5.3
90°-150°	1311.3	10.0
90°-180°	1482.0	11.4
0°-180°	13050.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4400	4400	4400	4400	4400	
5°	4556	4546	4537	4522	4524	439
15°	4472	4511	4562	4513	4481	1240
25°	3562	3686	3679	3723	3615	1678
35°	3703	3711	3910	3767	3812	2286
45°	3313	3301	3319	3332	3309	2480
55°	1970	1988	1948	1955	1912	1770
65°	855	865	879	870	866	888
75°	407	406	408	405	408	440
85°	170	171	171	170	171	161
90°	140	141	140	142	142	79
95°	168	167	166	168	169	144
105°	225	223	220	221	222	238
115°	276	275	274	275	278	268
125°	254	253	255	255	256	230
135°	277	276	277	281	282	216
145°	281	278	282	278	278	177
155°	215	216	218	216	217	101
165°	196	194	194	193	196	55
175°	133	132	131	132	132	14
180°	114	114	114	114	114	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4399.8	4399.8	4399.8	4399.8	4399.8
2.5°	4444.1	4436.7	4424.9	4421.9	4419.7
5°	4555.6	4546.0	4537.1	4522.4	4523.8
7.5°	4660.5	4666.4	4676.7	4659.0	4647.2
10°	4680.4	4702.6	4739.5	4709.2	4678.9
12.5°	4653.8	4689.3	4728.4	4684.1	4648.7
15°	4472.1	4511.3	4561.5	4512.8	4481.0
17.5°	4215.1	4248.4	4300.8	4246.1	4250.6
20°	3958.8	3995.0	4016.4	4028.3	3998.7
22.5°	3709.9	3805.2	3789.7	3835.5	3749.1
25°	3561.5	3685.5	3678.9	3723.2	3614.6
27.5°	3507.6	3652.3	3680.4	3682.6	3579.9
30°	3583.6	3641.2	3780.1	3682.6	3658.2
32.5°	3684.8	3664.1	3913.0	3724.0	3777.9
35°	3703.3	3711.4	3910.1	3766.8	3811.8
37.5°	3630.9	3721.0	3786.7	3778.6	3719.5
40°	3507.6	3652.3	3646.4	3688.5	3575.5
42.5°	3447.0	3517.9	3517.9	3548.2	3469.1
45°	3313.3	3300.7	3319.2	3331.8	3308.9
47.5°	3026.7	3003.1	2991.3	3034.9	3032.6
50°	2633.8	2618.3	2596.9	2648.6	2661.1
52.5°	2291.1	2258.6	2238.7	2253.4	2239.4
55°	1969.8	1988.3	1947.7	1955.0	1911.5
57.5°	1685.5	1726.8	1708.4	1702.4	1669.9
60°	1349.4	1378.2	1358.3	1367.1	1338.3
62.5°	1061.3	1081.3	1090.2	1086.5	1071.7
65°	855.3	864.9	878.9	870.1	865.6
67.5°	706.1	715.0	718.6	716.4	719.4
70°	599.0	601.2	605.6	599.0	607.9
72.5°	501.5	505.9	505.9	506.7	511.1
75°	407.0	405.5	407.7	404.7	407.7
77.5°	327.2	327.2	325.7	324.2	328.7
80°	268.1	265.2	264.4	263.7	266.6
82.5°	213.5	214.2	214.2	213.5	212.7
85°	169.9	170.6	170.6	169.9	170.6
87.5°	146.2	146.2	147.0	147.0	146.2
90°	140.3	141.1	140.3	141.8	141.8
92.5°	149.9	149.9	150.7	152.1	151.4
95°	167.7	166.9	166.2	168.4	169.1
97.5°	184.6	183.9	185.4	186.9	188.3
100°	203.9	203.9	205.3	206.1	207.5
102.5°	212.0	212.0	211.2	213.5	214.9
105°	225.3	223.1	220.1	220.8	222.3
107.5°	235.6	234.9	234.1	235.6	236.3
110°	251.1	250.4	250.4	250.4	251.9



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	266.6	266.6	265.9	266.6	268.1
115°	275.5	274.8	274.0	274.8	277.7
117.5°	277.7	277.7	276.2	278.4	280.7
120°	274.0	273.3	273.3	274.8	277.0
122.5°	264.4	263.7	263.7	265.2	267.4
125°	254.1	253.3	254.8	254.8	256.3
127.5°	246.7	247.4	248.9	247.4	248.2
130°	248.2	248.9	251.9	249.6	249.6
132.5°	256.3	257.0	262.2	260.7	260.7
135°	277.0	276.2	277.0	281.4	282.1
137.5°	300.6	294.7	286.6	301.3	305.0
140°	320.5	304.3	301.3	308.0	319.1
142.5°	305.8	296.9	289.5	298.4	305.0
145°	281.4	277.7	282.1	277.7	277.7
147.5°	253.3	258.5	268.1	254.8	254.1
150°	231.9	242.3	245.9	238.6	233.4
152.5°	222.3	226.7	229.0	225.3	225.3
155°	214.9	215.7	217.9	215.7	217.1
157.5°	209.8	212.0	212.0	212.0	211.2
160°	205.3	208.3	207.5	207.5	206.1
162.5°	202.4	203.9	203.1	203.1	203.1
165°	195.7	194.2	194.2	192.8	195.7
167.5°	184.6	182.4	182.4	181.7	183.9
170°	170.6	170.6	169.9	169.9	168.4
172.5°	147.7	147.0	146.2	146.2	146.2
175°	132.9	132.2	130.7	132.2	132.2
177.5°	121.9	121.9	122.6	121.1	121.1
180°	114.5	114.5	114.5	114.5	114.5

(END OF REPORT)