

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: P231509

Luminaire Tested: **SSLED-LD5-9-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: P231509
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-LD5-9-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: 7894.0 lumens
Efficiency: N/A
Efficacy: 123.2 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

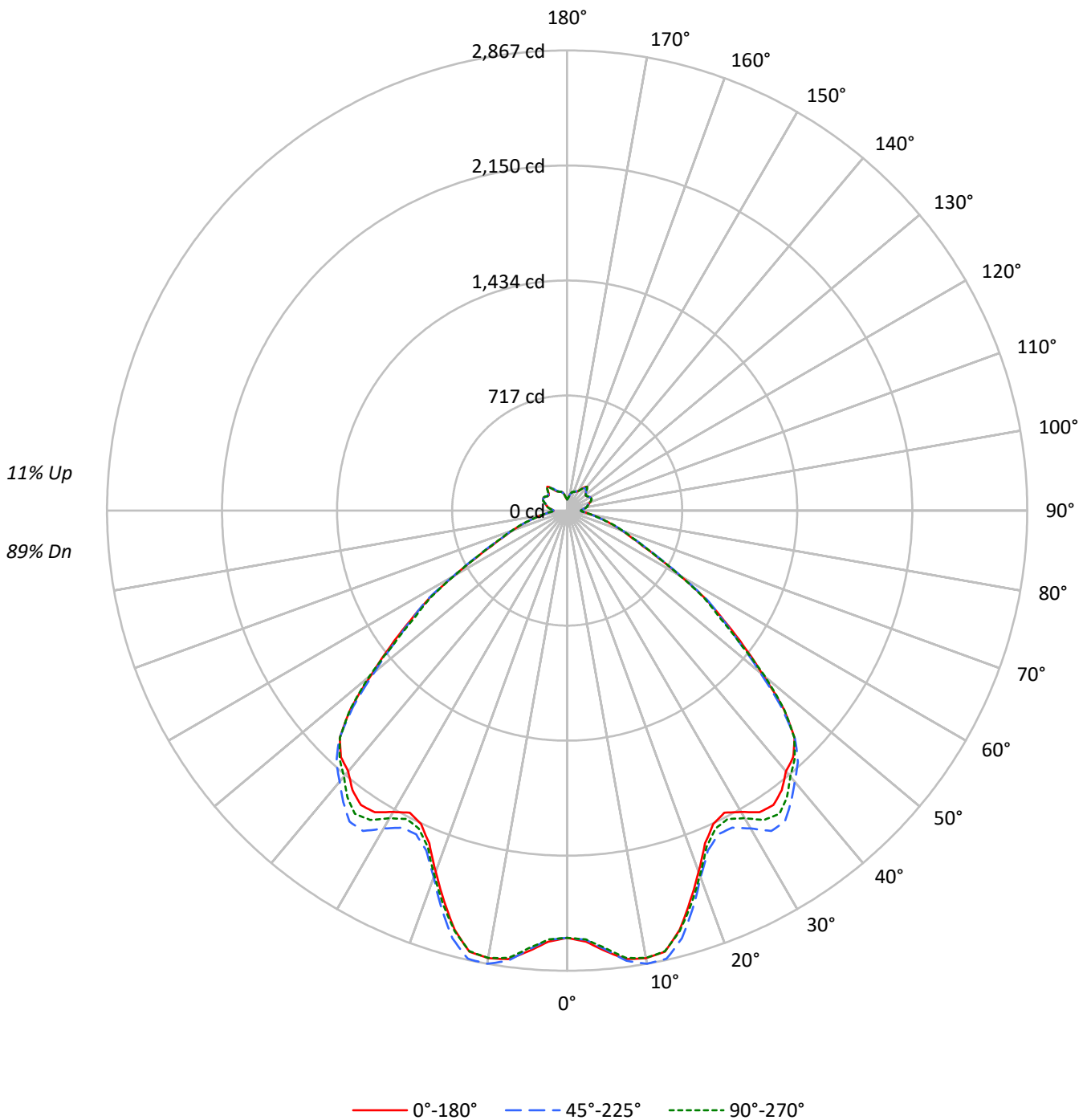
Input Watts (W): 64.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	10852	10852	10852
5°	10633	10590	10559
10°	10444	10576	10440
15°	9628	9821	9647
20°	8294	8415	8378
25°	7321	7563	7431
30°	7285	7685	7437
35°	7502	7921	7722
40°	7135	7418	7274
45°	6820	6833	6811
50°	5530	5452	5587
55°	4253	4205	4127
60°	3022	3042	2997
65°	2005	2061	2029
70°	1485	1502	1507
75°	1080	1082	1082
80°	771	760	767
85°	538	540	540



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	265.8	3.4
10°-20°	757.1	9.6
20°-30°	1043.3	13.2
30°-40°	1419.1	18.0
40°-50°	1512.7	19.2
50°-60°	1067.0	13.5
60°-70°	544.7	6.9
70°-80°	266.8	3.4
80°-90°	121.0	1.5
90°-100°	111.7	1.4
100°-110°	143.5	1.8
110°-120°	162.3	2.1
120°-130°	139.7	1.8
130°-140°	130.0	1.6
140°-150°	106.0	1.3
150°-160°	61.7	0.8
160°-170°	33.3	0.4
170°-180°	8.3	0.1
0°-30°	2066.2	26.2
0°-40°	3485.3	44.2
0°-60°	6065.1	76.8
0°-90°	6997.5	88.6
90°-120°	417.5	5.3
90°-150°	793.2	10.0
90°-180°	897.0	11.4
0°-180°	7894.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2661	2661	2661	2661	2661	
5°	2756	2750	2744	2736	2736	266
15°	2705	2729	2759	2730	2711	750
25°	2154	2229	2225	2252	2186	1015
35°	2240	2245	2365	2278	2306	1383
45°	2004	1997	2008	2015	2002	1500
55°	1192	1203	1178	1183	1156	1070
65°	517	523	532	526	524	537
75°	246	245	247	245	247	266
85°	103	103	103	103	103	97
90°	85	85	85	86	86	48
95°	101	101	100	102	102	87
105°	136	135	133	134	134	144
115°	167	166	166	166	168	162
125°	154	153	154	154	155	139
135°	168	167	168	170	171	130
145°	170	168	171	168	168	107
155°	130	130	132	130	131	61
165°	118	118	118	117	118	33
175°	80	80	79	80	80	8
180°	69	69	69	69	69	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2661.4	2661.4	2661.4	2661.4	2661.4
2.5°	2688.2	2683.8	2676.6	2674.8	2673.5
5°	2755.7	2749.9	2744.5	2735.6	2736.5
7.5°	2819.1	2822.7	2829.0	2818.3	2811.1
10°	2831.2	2844.6	2867.0	2848.6	2830.3
12.5°	2815.1	2836.6	2860.3	2833.4	2812.0
15°	2705.2	2728.9	2759.3	2729.8	2710.6
17.5°	2549.7	2569.8	2601.6	2568.5	2571.2
20°	2394.7	2416.6	2429.6	2436.7	2418.8
22.5°	2244.1	2301.8	2292.4	2320.1	2267.8
25°	2154.3	2229.4	2225.4	2252.2	2186.5
27.5°	2121.7	2209.3	2226.3	2227.6	2165.5
30°	2167.7	2202.6	2286.6	2227.6	2212.9
32.5°	2229.0	2216.4	2367.0	2252.6	2285.3
35°	2240.1	2245.0	2365.2	2278.5	2305.8
37.5°	2196.3	2250.8	2290.6	2285.7	2250.0
40°	2121.7	2209.3	2205.7	2231.2	2162.8
42.5°	2085.1	2128.0	2128.0	2146.3	2098.5
45°	2004.2	1996.6	2007.8	2015.4	2001.5
47.5°	1830.9	1816.6	1809.4	1835.8	1834.5
50°	1593.2	1583.8	1570.9	1602.1	1609.7
52.5°	1385.9	1366.2	1354.2	1363.1	1354.6
55°	1191.5	1202.7	1178.1	1182.6	1156.3
57.5°	1019.5	1044.6	1033.4	1029.8	1010.2
60°	816.3	833.7	821.6	827.0	809.6
62.5°	642.0	654.1	659.4	657.2	648.3
65°	517.4	523.2	531.7	526.3	523.6
67.5°	427.1	432.5	434.7	433.4	435.2
70°	362.3	363.7	366.4	362.3	367.7
72.5°	303.4	306.0	306.0	306.5	309.2
75°	246.2	245.3	246.6	244.8	246.6
77.5°	197.9	197.9	197.0	196.1	198.8
80°	162.2	160.4	159.9	159.5	161.3
82.5°	129.1	129.6	129.6	129.1	128.7
85°	102.8	103.2	103.2	102.8	103.2
87.5°	88.5	88.5	88.9	88.9	88.5
90°	84.9	85.3	84.9	85.8	85.8
92.5°	90.7	90.7	91.1	92.0	91.6
95°	101.4	101.0	100.5	101.9	102.3
97.5°	111.7	111.2	112.1	113.0	113.9
100°	123.3	123.3	124.2	124.7	125.5
102.5°	128.2	128.2	127.8	129.1	130.0
105°	136.3	134.9	133.1	133.6	134.5
107.5°	142.5	142.1	141.6	142.5	143.0
110°	151.9	151.5	151.5	151.5	152.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	161.3	161.3	160.8	161.3	162.2
115°	166.6	166.2	165.8	166.2	168.0
117.5°	168.0	168.0	167.1	168.4	169.8
120°	165.8	165.3	165.3	166.2	167.5
122.5°	159.9	159.5	159.5	160.4	161.7
125°	153.7	153.2	154.1	154.1	155.0
127.5°	149.2	149.7	150.6	149.7	150.1
130°	150.1	150.6	152.4	151.0	151.0
132.5°	155.0	155.5	158.6	157.7	157.7
135°	167.5	167.1	167.5	170.2	170.7
137.5°	181.8	178.3	173.3	182.3	184.5
140°	193.9	184.1	182.3	186.3	193.0
142.5°	185.0	179.6	175.1	180.5	184.5
145°	170.2	168.0	170.7	168.0	168.0
147.5°	153.2	156.4	162.2	154.1	153.7
150°	140.3	146.5	148.8	144.3	141.2
152.5°	134.5	137.2	138.5	136.3	136.3
155°	130.0	130.5	131.8	130.5	131.4
157.5°	126.9	128.2	128.2	128.2	127.8
160°	124.2	126.0	125.5	125.5	124.7
162.5°	122.4	123.3	122.9	122.9	122.9
165°	118.4	117.5	117.5	116.6	118.4
167.5°	111.7	110.4	110.4	109.9	111.2
170°	103.2	103.2	102.8	102.8	101.9
172.5°	89.4	88.9	88.5	88.5	88.5
175°	80.4	80.0	79.1	80.0	80.0
177.5°	73.7	73.7	74.2	73.3	73.3
180°	69.3	69.3	69.3	69.3	69.3

(END OF REPORT)