

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: P231407

Luminaire Tested: **SSLED-LD5-12-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: P231407
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-LD5-12-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: 11508.0 lumens
Efficiency: N/A
Efficacy: 134.9 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

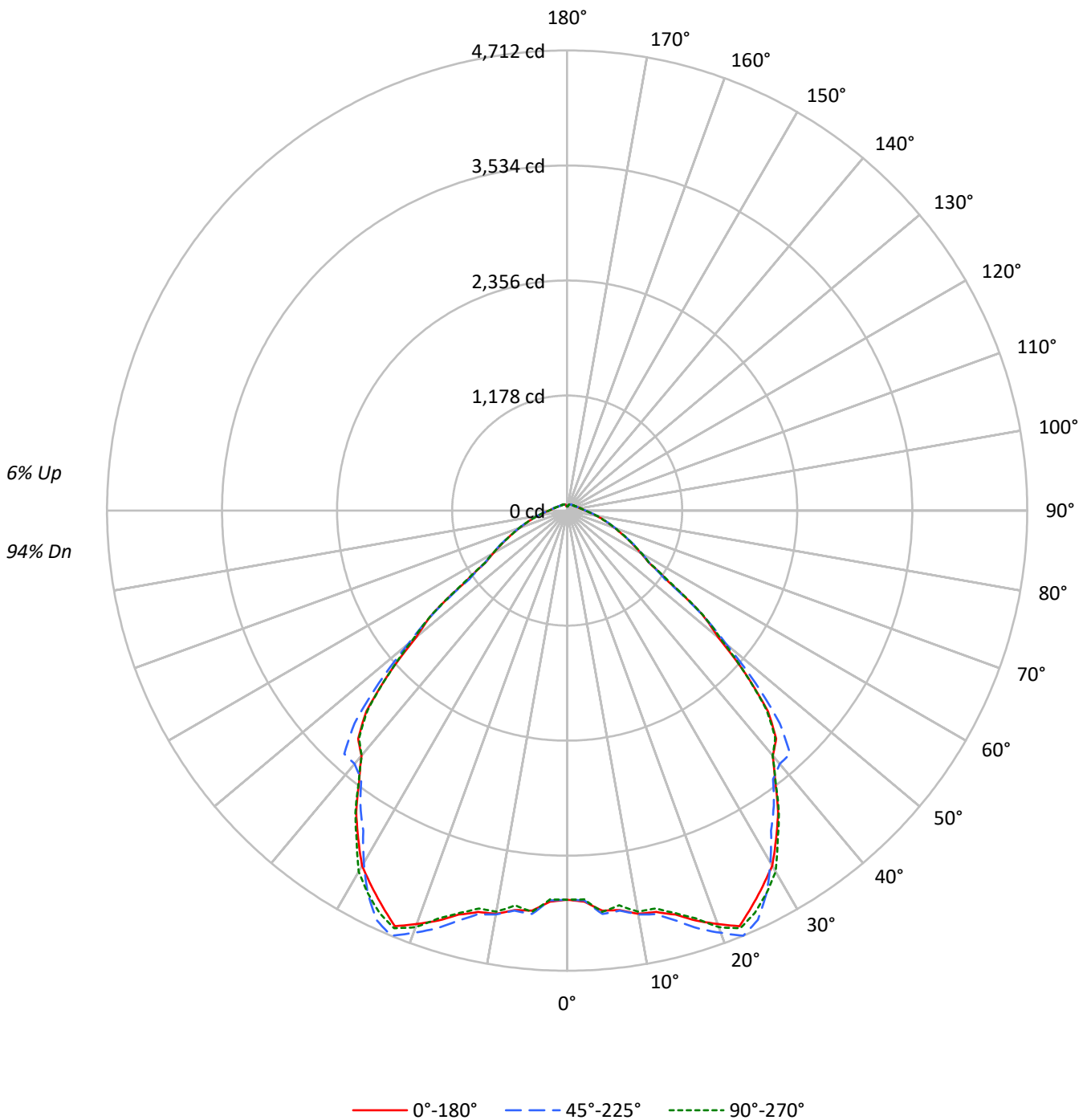
Input Watts (W): 85.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	16248	16248	16248
5°	15865	15999	15916
10°	15463	15490	15384
15°	15242	15484	15183
20°	15601	15938	15723
25°	15204	15712	15449
30°	14115	13995	14351
35°	12613	12360	12661
40°	11018	11391	11010
45°	9892	10483	9836
50°	7017	7389	7188
55°	4527	4364	4621
60°	3231	3276	3276
65°	2619	2649	2621
70°	2113	2147	2135
75°	1735	1761	1740
80°	1448	1464	1462
85°	1223	1244	1232



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	393.0	3.4
10°-20°	1237.9	10.8
20°-30°	2094.1	18.2
30°-40°	2341.6	20.3
40°-50°	2213.1	19.2
50°-60°	1216.5	10.6
60°-70°	680.9	5.9
70°-80°	428.2	3.7
80°-90°	260.9	2.3
90°-100°	174.2	1.5
100°-110°	129.8	1.1
110°-120°	99.3	0.9
120°-130°	77.5	0.7
130°-140°	60.8	0.5
140°-150°	46.6	0.4
150°-160°	32.4	0.3
160°-170°	16.8	0.1
170°-180°	4.3	0.0
0°-30°	3725.1	32.4
0°-40°	6066.6	52.7
0°-60°	9496.2	82.5
0°-90°	10866.2	94.4
90°-120°	403.4	3.5
90°-150°	588.4	5.1
90°-180°	642.0	5.6
0°-180°	11508.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3985	3985	3985	3985	3985	
5°	4112	4119	4146	4119	4125	393
15°	4283	4322	4350	4303	4266	1227
25°	4474	4634	4623	4698	4546	2051
35°	3766	3686	3690	3698	3780	2342
45°	2907	2882	3080	2856	2890	2156
55°	1268	1261	1223	1282	1295	1211
65°	676	678	683	680	676	674
75°	396	399	402	400	397	424
85°	234	234	238	235	235	206
90°	184	186	187	186	185	102
95°	157	158	159	158	158	124
105°	122	122	122	122	122	129
115°	99	100	100	100	100	99
125°	85	86	86	86	86	77
135°	78	78	78	78	79	61
145°	74	74	74	74	74	46
155°	70	70	70	70	70	32
165°	59	59	58	58	58	17
175°	43	43	42	42	43	4
180°	44	44	44	44	44	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3984.7	3984.7	3984.7	3984.7	3984.7
2.5°	4008.0	4005.0	3994.3	3984.1	3984.7
5°	4111.6	4118.8	4146.2	4119.4	4124.7
7.5°	4125.9	4142.6	4131.9	4109.2	4077.1
10°	4192.1	4198.0	4199.2	4187.3	4170.6
12.5°	4209.9	4264.7	4233.8	4223.0	4173.0
15°	4282.6	4322.5	4350.5	4302.9	4265.9
17.5°	4403.6	4471.5	4489.4	4469.1	4376.8
20°	4504.3	4599.0	4601.4	4610.3	4539.4
22.5°	4607.3	4696.7	4712.2	4728.9	4629.4
25°	4473.9	4633.5	4623.4	4698.5	4546.0
27.5°	4336.8	4451.8	4421.4	4506.6	4418.5
30°	4199.8	4225.4	4164.1	4251.0	4270.1
32.5°	3982.3	3904.3	3887.0	3938.2	4011.5
35°	3766.1	3686.2	3690.4	3698.1	3780.4
37.5°	3498.5	3580.2	3464.6	3602.2	3506.3
40°	3276.3	3402.0	3387.1	3406.8	3273.9
42.5°	3167.9	3161.9	3378.8	3166.1	3153.0
45°	2906.9	2881.9	3080.3	2856.3	2890.2
47.5°	2482.1	2642.4	2618.0	2643.6	2479.7
50°	2021.6	2178.2	2128.8	2217.0	2071.0
52.5°	1739.7	1662.9	1718.9	1686.7	1746.9
55°	1268.5	1260.7	1222.6	1281.6	1294.7
57.5°	991.4	996.8	1000.9	997.4	995.0
60°	872.8	885.4	884.8	884.2	884.8
62.5°	766.8	773.9	781.7	776.3	776.9
65°	675.6	678.0	683.4	679.8	676.2
67.5°	587.5	594.6	597.6	598.2	595.2
70°	515.4	520.7	523.7	522.5	520.7
72.5°	454.0	457.0	462.3	460.6	457.0
75°	395.6	398.6	401.6	400.4	396.8
77.5°	346.8	349.1	351.5	352.1	349.7
80°	304.5	306.8	308.0	306.2	307.4
82.5°	266.3	268.7	269.9	269.3	268.7
85°	233.6	234.1	237.7	234.7	235.3
87.5°	205.6	206.1	207.3	207.3	206.1
90°	184.1	185.9	187.1	186.5	185.3
92.5°	169.2	171.0	171.0	171.0	170.4
95°	156.7	157.9	159.1	158.5	157.9
97.5°	146.6	147.2	148.4	147.8	147.2
100°	137.0	137.6	138.8	138.2	137.6
102.5°	128.1	129.3	129.9	129.9	129.3
105°	121.5	121.5	122.1	122.1	122.1
107.5°	115.0	115.0	115.6	115.6	115.6
110°	109.6	109.6	109.6	109.6	110.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	103.7	104.3	104.3	104.3	104.9
115°	98.9	99.5	99.5	100.1	100.1
117.5°	94.7	94.7	95.3	95.3	95.9
120°	91.2	91.8	91.8	92.3	92.3
122.5°	88.2	88.2	88.8	88.8	89.4
125°	85.2	85.8	85.8	86.4	86.4
127.5°	82.8	83.4	84.0	84.0	84.0
130°	81.6	82.2	82.2	82.2	82.8
132.5°	79.8	79.8	79.8	80.4	81.0
135°	78.0	78.0	78.0	78.0	78.6
137.5°	76.3	76.9	76.9	76.9	76.9
140°	75.1	75.7	75.7	75.7	75.7
142.5°	74.5	75.1	75.1	75.1	75.1
145°	73.9	73.9	73.9	73.9	74.5
147.5°	73.3	73.3	73.3	73.3	73.3
150°	72.7	72.7	72.1	72.1	72.7
152.5°	71.5	71.5	70.9	71.5	71.5
155°	69.7	70.3	69.7	69.7	70.3
157.5°	68.5	68.5	68.5	68.5	68.5
160°	66.1	66.1	65.5	65.5	66.1
162.5°	62.6	62.6	62.6	62.6	62.6
165°	59.0	59.0	58.4	58.4	58.4
167.5°	54.8	54.8	54.8	54.8	54.8
170°	49.5	50.0	49.5	49.5	49.5
172.5°	43.5	43.5	43.5	43.5	43.5
175°	42.9	42.9	42.3	42.3	42.9
177.5°	42.9	43.5	43.5	43.5	42.9
180°	44.1	44.1	44.1	44.1	44.1

(END OF REPORT)