

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: P231415

Luminaire Tested: **SSLED-LD5-18-W-UNV-L850-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: P231415
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-LD5-18-W-UNV-L850-CD1-U-FRR22
Description: STEELER WHITE REFRACTOR LENS
Light Source: (240) 5000 CCT, 80 CRI LEDS
Ballast/Driver: (1) ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18491.0 lumens
Efficiency: N/A
Efficacy: 138.2 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

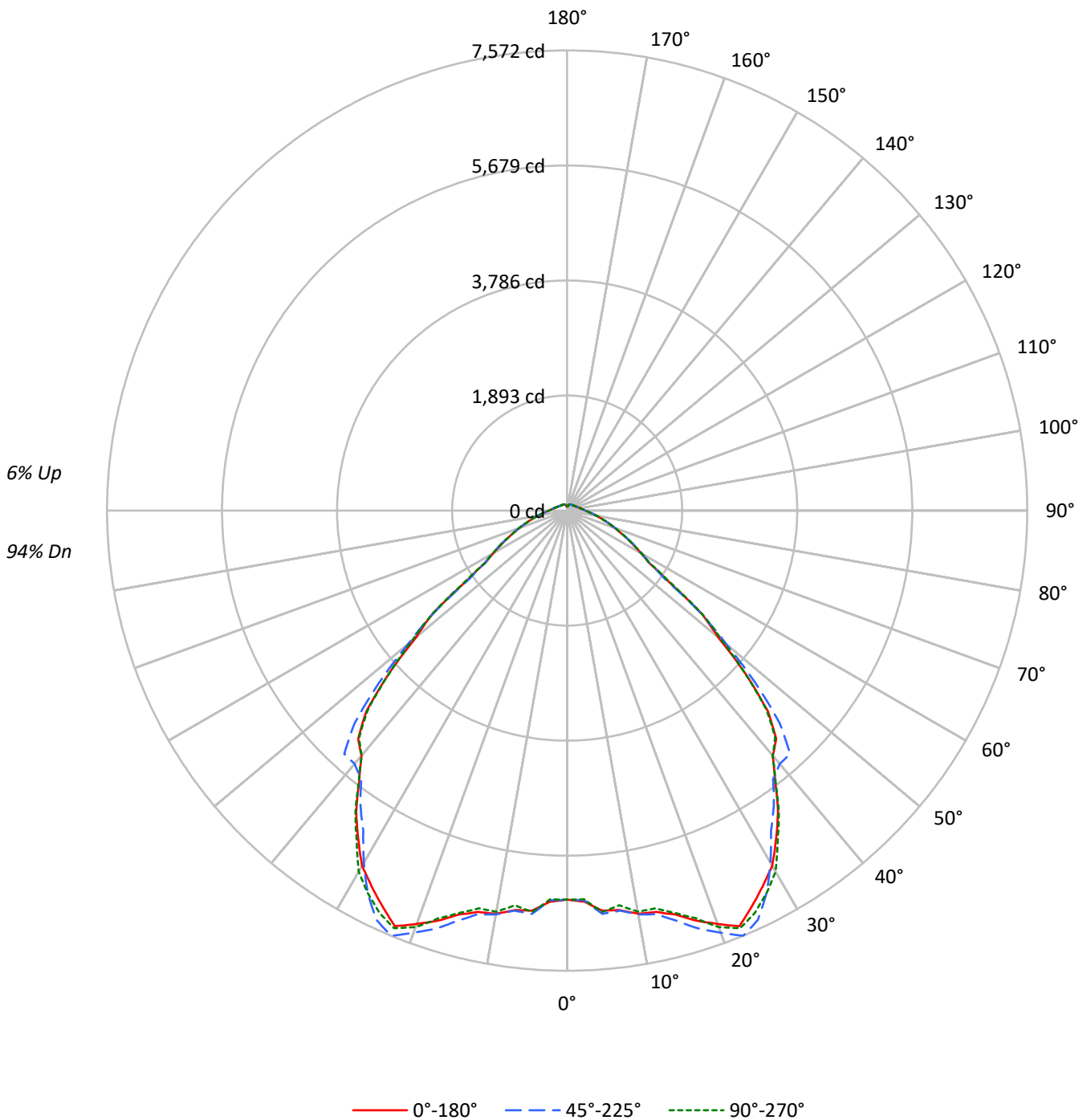
Input Watts (W): 133.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10	0		
RCR																										
0	118	118	118	118	114	114	114	114	108	108	108	102	102	102	97	97	97	94					94			
1	109	104	100	97	105	101	98	95	96	93	91	91	89	87	87	85	84	81					81			
2	100	93	87	81	97	90	85	80	86	81	77	82	78	75	78	75	72	70					70			
3	92	83	75	69	89	81	74	69	77	71	67	74	69	65	70	66	63	61					61			
4	85	74	66	60	82	72	65	59	69	63	58	66	61	57	64	59	55	53					53			
5	79	67	59	53	76	65	58	52	63	56	51	60	55	50	58	53	49	47					47			
6	73	61	52	46	71	59	52	46	57	50	45	55	49	44	53	48	44	42					42			
7	68	55	47	41	66	54	47	41	52	45	40	50	44	40	49	43	39	37					37			
8	63	51	43	37	61	50	42	37	48	41	36	46	40	36	45	39	35	33					33			
9	59	47	39	34	58	46	38	33	44	38	33	43	37	32	41	36	32	30					30			
10	55	43	35	31	54	42	35	30	41	34	30	40	34	30	38	33	29	28					28			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	26107	26107	26107
5°	25492	25707	25574
10°	24847	24889	24719
15°	24491	24879	24396
20°	25068	25609	25264
25°	24430	25247	24824
30°	22679	22486	23059
35°	20266	19859	20344
40°	17704	18303	17691
45°	15895	16843	15804
50°	11274	11872	11550
55°	7274	7011	7425
60°	5192	5263	5263
65°	4208	4256	4211
70°	3395	3450	3430
75°	2788	2830	2797
80°	2326	2353	2349
85°	1964	1999	1979



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	631.5	3.4
10°-20°	1989.0	10.8
20°-30°	3364.8	18.2
30°-40°	3762.4	20.3
40°-50°	3555.9	19.2
50°-60°	1954.7	10.6
60°-70°	1094.0	5.9
70°-80°	688.1	3.7
80°-90°	419.3	2.3
90°-100°	279.9	1.5
100°-110°	208.6	1.1
110°-120°	159.6	0.9
120°-130°	124.6	0.7
130°-140°	97.8	0.5
140°-150°	74.8	0.4
150°-160°	52.0	0.3
160°-170°	27.0	0.1
170°-180°	6.8	0.0
0°-30°	5985.4	32.4
0°-40°	9747.9	52.7
0°-60°	15258.5	82.5
0°-90°	17459.8	94.4
90°-120°	648.2	3.5
90°-150°	945.4	5.1
90°-180°	1031.0	5.6
0°-180°	18491.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6403	6403	6403	6403	6403	
5°	6606	6618	6662	6619	6628	632
15°	6881	6945	6990	6914	6854	1972
25°	7189	7445	7429	7550	7304	3295
35°	6051	5923	5930	5942	6074	3763
45°	4671	4631	4949	4589	4644	3464
55°	2038	2026	1964	2059	2080	1945
65°	1086	1089	1098	1092	1087	1083
75°	636	640	645	643	638	681
85°	375	376	382	377	378	330
90°	296	299	301	300	298	164
95°	252	254	256	255	254	200
105°	195	195	196	196	196	208
115°	159	160	160	161	161	159
125°	137	138	138	139	139	124
135°	125	125	125	125	126	97
145°	119	119	119	119	120	75
155°	112	113	112	112	113	52
165°	95	95	94	94	94	27
175°	69	69	68	68	69	7
180°	71	71	71	71	71	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6402.6	6402.6	6402.6	6402.6	6402.6
2.5°	6440.0	6435.2	6417.9	6401.7	6402.6
5°	6606.5	6618.0	6662.1	6619.0	6627.6
7.5°	6629.5	6656.3	6639.1	6602.7	6551.0
10°	6735.8	6745.4	6747.3	6728.1	6701.3
12.5°	6764.5	6852.6	6802.8	6785.6	6705.1
15°	6881.3	6945.4	6990.4	6913.8	6854.5
17.5°	7075.6	7184.8	7213.5	7180.9	7032.6
20°	7237.4	7389.6	7393.5	7407.8	7293.9
22.5°	7403.0	7546.6	7571.5	7598.3	7438.5
25°	7188.6	7445.2	7428.9	7549.5	7304.4
27.5°	6968.4	7153.2	7104.4	7241.2	7099.6
30°	6748.2	6789.4	6690.8	6830.6	6861.2
32.5°	6398.8	6273.4	6245.6	6328.0	6445.7
35°	6051.3	5923.0	5929.7	5942.2	6074.3
37.5°	5621.4	5752.6	5566.9	5788.0	5633.9
40°	5264.4	5466.4	5442.4	5474.0	5260.5
42.5°	5090.1	5080.6	5429.0	5087.3	5066.2
45°	4670.8	4630.6	4949.4	4589.4	4644.0
47.5°	3988.2	4245.8	4206.5	4247.7	3984.4
50°	3248.2	3500.0	3420.5	3562.2	3327.7
52.5°	2795.4	2671.9	2761.9	2710.2	2806.9
55°	2038.2	2025.7	1964.4	2059.2	2080.3
57.5°	1593.0	1601.6	1608.3	1602.6	1598.7
60°	1402.5	1422.6	1421.6	1420.7	1421.6
62.5°	1232.1	1243.6	1256.0	1247.4	1248.4
65°	1085.6	1089.4	1098.1	1092.3	1086.6
67.5°	943.9	955.4	960.2	961.2	956.4
70°	828.1	836.7	841.5	839.6	836.7
72.5°	729.5	734.3	742.9	740.0	734.3
75°	635.7	640.5	645.2	643.3	637.6
77.5°	557.2	561.0	564.8	565.8	562.0
80°	489.2	493.0	494.9	492.1	494.0
82.5°	427.9	431.8	433.7	432.7	431.8
85°	375.3	376.2	382.0	377.2	378.1
87.5°	330.3	331.2	333.2	333.2	331.2
90°	295.8	298.7	300.6	299.6	297.7
92.5°	271.9	274.8	274.8	274.8	273.8
95°	251.8	253.7	255.6	254.6	253.7
97.5°	235.5	236.5	238.4	237.4	236.5
100°	220.2	221.1	223.1	222.1	221.1
102.5°	205.8	207.7	208.7	208.7	207.7
105°	195.3	195.3	196.3	196.3	196.3
107.5°	184.8	184.8	185.7	185.7	185.7
110°	176.1	176.1	176.1	176.1	177.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	166.6	167.5	167.5	167.5	168.5
115°	158.9	159.9	159.9	160.8	160.8
117.5°	152.2	152.2	153.2	153.2	154.1
120°	146.5	147.4	147.4	148.4	148.4
122.5°	141.7	141.7	142.6	142.6	143.6
125°	136.9	137.9	137.9	138.8	138.8
127.5°	133.1	134.0	135.0	135.0	135.0
130°	131.2	132.1	132.1	132.1	133.1
132.5°	128.3	128.3	128.3	129.2	130.2
135°	125.4	125.4	125.4	125.4	126.4
137.5°	122.5	123.5	123.5	123.5	123.5
140°	120.6	121.6	121.6	121.6	121.6
142.5°	119.7	120.6	120.6	120.6	120.6
145°	118.7	118.7	118.7	118.7	119.7
147.5°	117.8	117.8	117.8	117.8	117.8
150°	116.8	116.8	115.8	115.8	116.8
152.5°	114.9	114.9	113.9	114.9	114.9
155°	112.0	113.0	112.0	112.0	113.0
157.5°	110.1	110.1	110.1	110.1	110.1
160°	106.3	106.3	105.3	105.3	106.3
162.5°	100.5	100.5	100.5	100.5	100.5
165°	94.8	94.8	93.8	93.8	93.8
167.5°	88.1	88.1	88.1	88.1	88.1
170°	79.5	80.4	79.5	79.5	79.5
172.5°	69.9	69.9	69.9	69.9	69.9
175°	68.9	68.9	68.0	68.0	68.9
177.5°	68.9	69.9	69.9	69.9	68.9
180°	70.8	70.8	70.8	70.8	70.8

(END OF REPORT)