

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: FAIL-SAFE

Report Number: P520647

Luminaire Tested: **8WSLA-100-L940-UPL8-UNV-U**

Issue Date: 5/3/2021

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: P520647
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2103-174-3)
Test Lab: INNOVATION CENTER
Issue Date: 5/3/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 8WSLA-100-L940-UPL8-UNV-U
Description: 8 FOOT, 2000 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 4000K, 90 CRI
LEDS WITH 8% UPLIGHT
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

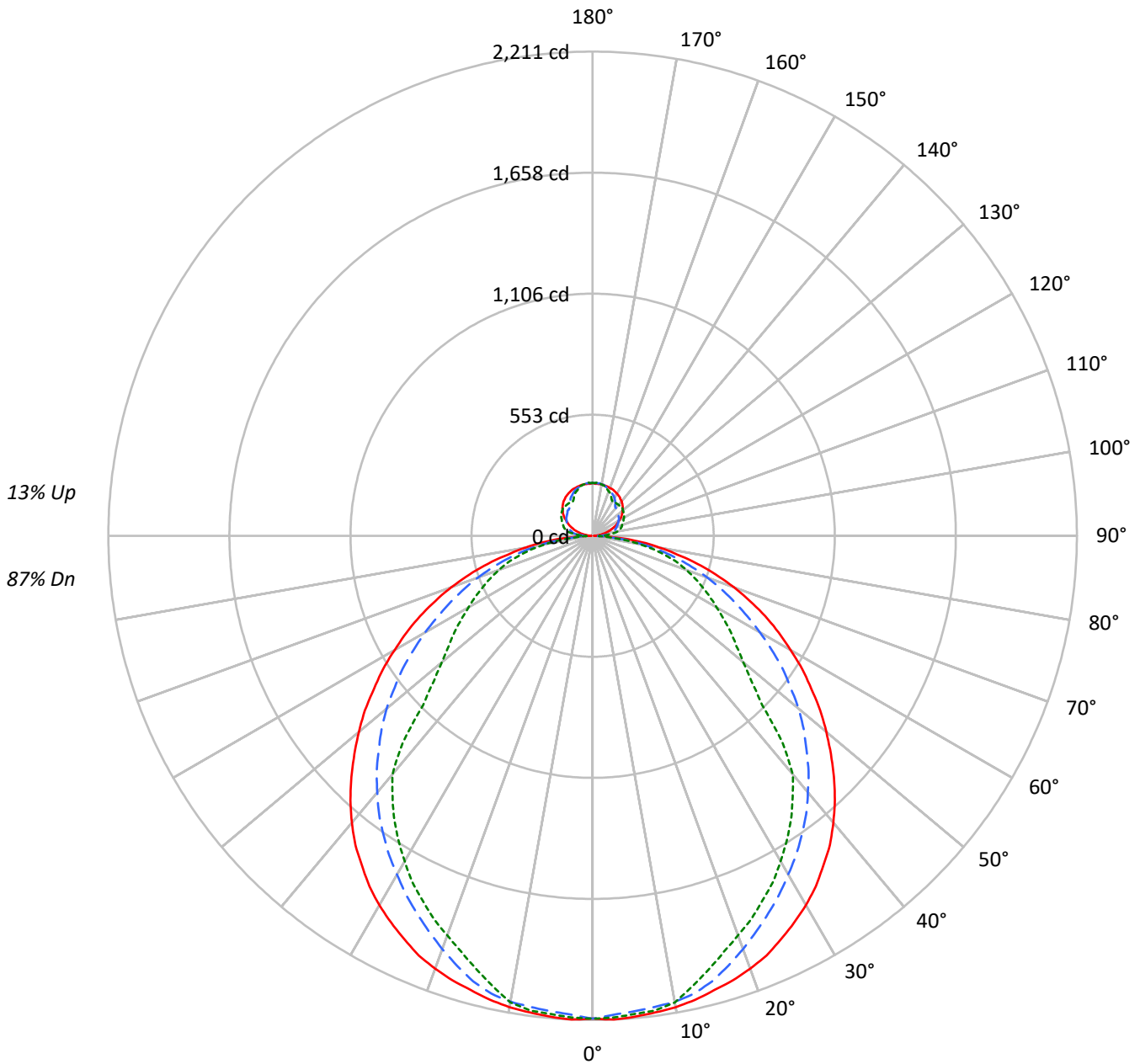
Lumens per Lamp: N/A
Luminaire Lumens: 6862.0 lumens
Efficiency: N/A
Efficacy: 108.2 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 1.17 / 1.33
Luminous Opening: Rectangular (W 0.5' x L: 8' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 63.4
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: P520647

CATALOG NUMBER: 8WSLA-100-L940-UPL8-UNV-U

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	116	116	116	116	112	112	112	112	104	104	104	97	97	97	90	90	90	87			
1	106	101	97	93	102	98	94	90	91	88	85	85	83	80	79	78	76	73			
2	96	88	82	76	92	85	79	74	80	75	70	74	70	67	70	66	64	61			
3	88	78	70	63	84	75	68	62	70	64	59	66	61	56	62	58	54	51			
4	80	69	60	54	77	67	59	53	62	56	50	59	53	48	55	50	46	44			
5	74	61	53	46	71	60	51	45	56	49	44	53	47	42	50	45	40	38			
6	68	55	47	40	66	54	46	40	51	44	38	48	42	37	45	40	36	33			
7	63	50	42	36	61	49	41	35	46	39	34	43	37	33	41	36	32	30			
8	59	46	37	32	57	44	37	31	42	35	30	40	34	29	38	32	28	26			
9	55	42	34	28	53	41	33	28	39	32	27	37	31	26	35	30	26	24			
10	52	39	31	26	50	38	30	25	36	29	25	34	28	24	32	27	23	22			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5933	5933	5933
5°	5956	5887	5922
10°	5973	5904	5912
15°	5984	5869	5710
20°	6023	5751	5560
25°	6038	5643	5454
30°	6053	5550	5333
35°	6034	5472	5190
40°	6007	5372	4993
45°	5928	5252	4165
50°	5830	5140	3759
55°	5716	4971	3617
60°	5618	4747	3517
65°	5535	4545	3515
70°	5392	4368	3570
75°	5146	4156	3595
80°	4818	3736	3343
85°	4409	2646	2254



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	208.7	3.0
10°-20°	593.4	8.6
20°-30°	886.7	12.9
30°-40°	1058.5	15.4
40°-50°	1058.6	15.4
50°-60°	916.2	13.4
60°-70°	703.2	10.2
70°-80°	430.9	6.3
80°-90°	121.3	1.8
90°-100°	68.6	1.0
100°-110°	108.8	1.6
110°-120°	127.2	1.9
120°-130°	137.3	2.0
130°-140°	135.4	2.0
140°-150°	119.7	1.7
150°-160°	98.5	1.4
160°-170°	65.9	1.0
170°-180°	23.0	0.3
0°-30°	1688.9	24.6
0°-40°	2747.4	40.0
0°-60°	4722.1	68.8
0°-90°	5977.5	87.1
90°-120°	304.6	4.4
90°-150°	697.0	10.2
90°-180°	884.0	12.9
0°-180°	6862.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2205	2205	2205	2205	2205	
5°	2205	2199	2180	2195	2192	210
15°	2148	2145	2107	2068	2050	608
25°	2034	2008	1900	1850	1837	938
35°	1837	1789	1666	1605	1580	1150
45°	1558	1513	1380	1256	1094	1201
55°	1218	1190	1060	847	771	1092
65°	869	838	714	574	552	859
75°	495	470	400	346	346	522
85°	143	117	86	73	73	149
90°	6	22	35	44	48	10
95°	25	54	73	76	76	25
105°	73	76	108	127	133	77
115°	121	102	127	146	156	118
125°	162	130	146	168	174	144
135°	194	174	162	178	187	149
145°	216	206	181	178	184	135
155°	228	225	213	203	200	105
165°	235	238	232	232	232	67
175°	238	241	241	244	244	23
180°	241	241	241	241	241	



TEST NUMBER: P520647

CATALOG NUMBER: 8WSLA-100-L940-UPL8-UNV-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2204.9	2204.9	2204.9	2204.9	2204.9
2.5°	2211.3	2204.9	2189.1	2204.9	2201.7
5°	2204.9	2198.6	2179.5	2195.4	2192.2
7.5°	2195.4	2189.1	2170.0	2189.1	2185.9
10°	2185.9	2179.5	2160.5	2173.2	2163.7
12.5°	2170.0	2163.7	2141.5	2125.6	2106.6
15°	2147.8	2144.6	2106.6	2068.5	2049.5
17.5°	2128.8	2119.3	2059.0	2014.6	1992.4
20°	2103.4	2087.5	2008.2	1957.5	1941.6
22.5°	2074.8	2049.5	1954.3	1906.7	1894.0
25°	2033.6	2008.2	1900.4	1849.6	1836.9
27.5°	1992.4	1960.6	1846.4	1795.7	1783.0
30°	1947.9	1903.5	1786.1	1738.6	1716.3
32.5°	1897.2	1852.8	1729.0	1675.1	1649.7
35°	1836.9	1789.3	1665.6	1605.3	1579.9
37.5°	1779.8	1729.0	1602.1	1535.5	1500.6
40°	1710.0	1659.2	1529.2	1456.2	1421.3
42.5°	1637.0	1589.4	1459.4	1370.5	1284.9
45°	1557.7	1513.3	1380.1	1256.3	1094.5
47.5°	1475.2	1437.2	1307.1	1138.9	983.5
50°	1392.7	1354.7	1227.8	1027.9	897.8
52.5°	1310.3	1278.5	1138.9	935.9	828.0
55°	1218.3	1189.7	1059.6	847.1	770.9
57.5°	1135.8	1107.2	967.6	774.1	710.7
60°	1043.8	1018.4	882.0	701.1	653.5
62.5°	958.1	929.6	796.3	637.7	602.8
65°	869.3	837.6	713.8	574.2	552.0
67.5°	777.3	745.5	634.5	517.1	504.4
70°	685.3	659.9	555.2	460.0	453.7
72.5°	590.1	561.5	475.9	406.1	406.1
75°	494.9	469.5	399.7	345.8	345.8
77.5°	396.6	383.9	320.4	282.4	285.5
80°	310.9	295.0	241.1	215.7	215.7
82.5°	228.4	209.4	161.8	142.8	149.1
85°	142.8	117.4	85.7	73.0	73.0
87.5°	44.4	34.9	25.4	28.6	28.6
90°	6.3	22.2	34.9	44.4	47.6
92.5°	15.9	41.2	50.8	60.3	63.5
95°	25.4	53.9	73.0	76.1	76.1
97.5°	34.9	60.3	88.8	101.5	101.5
100°	47.6	63.5	95.2	114.2	117.4
102.5°	60.3	69.8	101.5	120.6	126.9
105°	73.0	76.1	107.9	126.9	133.2



TEST NUMBER: P520647

CATALOG NUMBER: 8WSLA-100-L940-UPL8-UNV-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	107.9	95.2	120.6	142.8	149.1
115°	120.6	101.5	126.9	145.9	155.5
117.5°	130.1	111.0	133.2	152.3	158.6
120°	139.6	117.4	136.4	158.6	165.0
122.5°	152.3	123.7	142.8	161.8	171.3
125°	161.8	130.1	145.9	168.1	174.5
127.5°	171.3	142.8	149.1	171.3	177.7
130°	177.7	155.5	152.3	174.5	180.8
132.5°	187.2	165.0	155.5	177.7	184.0
135°	193.5	174.5	161.8	177.7	187.2
137.5°	199.9	184.0	161.8	177.7	184.0
140°	206.2	193.5	165.0	177.7	184.0
142.5°	209.4	199.9	168.1	177.7	184.0
145°	215.7	206.2	180.8	177.7	184.0
147.5°	218.9	212.6	190.4	177.7	184.0
150°	222.1	218.9	199.9	180.8	180.8
152.5°	225.3	222.1	206.2	193.5	187.2
155°	228.4	225.3	212.6	203.0	199.9
157.5°	231.6	231.6	218.9	212.6	209.4
160°	231.6	234.8	225.3	218.9	215.7
162.5°	234.8	237.9	228.4	225.3	222.1
165°	234.8	237.9	231.6	231.6	231.6
167.5°	237.9	241.1	237.9	234.8	234.8
170°	237.9	241.1	237.9	237.9	237.9
172.5°	237.9	241.1	241.1	241.1	241.1
175°	237.9	241.1	241.1	244.3	244.3
177.5°	237.9	241.1	241.1	241.1	241.1
180°	241.1	241.1	241.1	241.1	241.1



Report Generated By 670246072 / DESKTOP-MV3F9LC





— 0°-180° - - 45°-225° - - - - 90°-270°







107.5°	85.7	82.5	111.0	133.2	139.6
110°	95.2	88.8	117.4	136.4	142.8



(END OF REPORT)