

LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

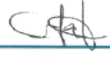
Brand: SURE-LITES

Report Number: G1-2301-894-2-R2

Luminaire Tested: SELHP100R3 (ONE HEAD ONLY)

Test Date: 3/21/2023

Tested By:



Glean Heath
Photometric Technician

Approved By:



Carlos Bogantes
Master Technician



NVLAP Lab Code: 200050-0

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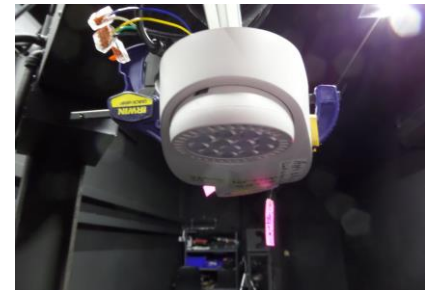
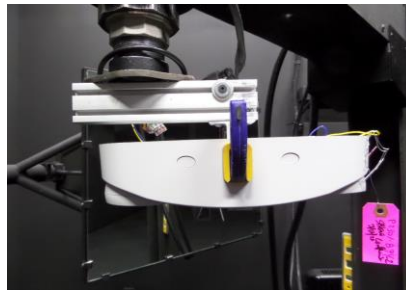
Test Information

Test Method: LM-79-2019
 Report Number: G1-2301-894-2-R2
 Test Lab: COOPER LIGHTING SOLUTIONS
 Test Date: 3/21/2023
 Issue Date: 5/08/2023
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: SURE-LITES
 Catalog Number: SELHP100R3 (ONE HEAD ONLY)
 Description: *** THIS IS A REVISION TO UPDATE REPORT G1-2301-894-2 *** SELHP - HIGH POWER EMERGENCY (VALUES GIVEN FOR ONE HEAD ONLY - X2 FOR WHOLE LUMINAIRE).
 Light Source: CLS
 LED.
 Ballast/Driver: DC SUPPLY
 SUPPLY

Summary

Lumens per Lamp: N/A
 Luminaire Lumens: 649.4 lumens
 Efficiency: N/A
 Efficacy: 154.6 lumens/watt
 Spacing Criteria (0/90/45): 0.4 / 0.4 / 0.42
 Luminous Opening: Circular (Dia: 0.21' x H: 0')
 CIE Type: Direct

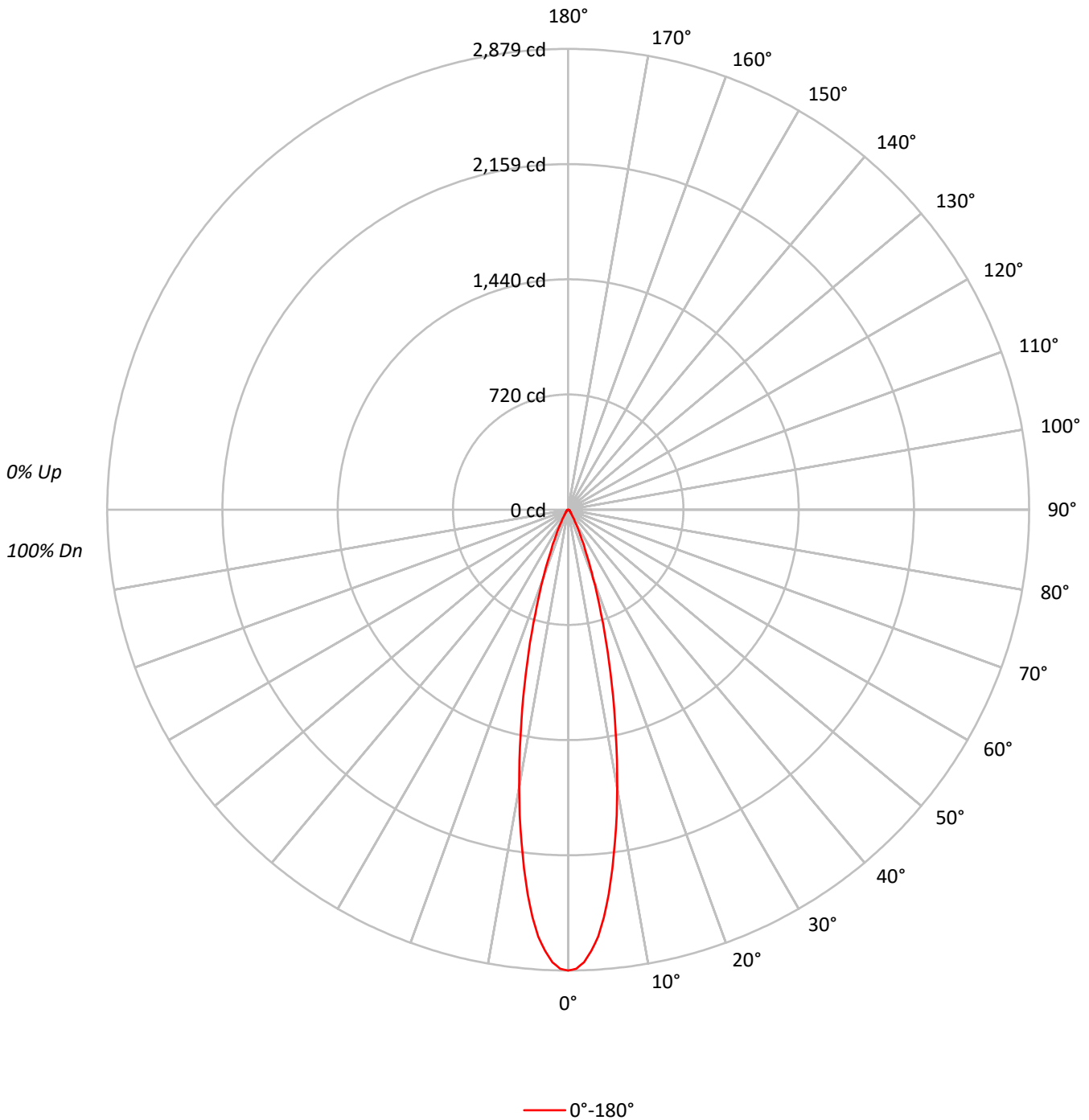
Input Watts (W): 4.2
 Input Voltage (V): 8.76
 Input Current (A_{in}): 0.480
 Voltage Rise (V): NR
 Power Factor: 1
 Total Harmonic Distortion (THDi): 0.0%
 Frequency (hertz): 60
 Stabilization Time: 0.5 HR
 Operation Time: 7.0 HR
 Ambient Temperature (°C): 24.1
 Test Distance: 25 FT



Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	GONIO 1 IN0055	4/17/2023	10/17/2023
Power Meter	XITRON 2801 IN0197	11/28/2022	11/28/2023
AC Power Source	CHROMA 61505 IN0196	11/28/2022	11/28/2023
DC Power Supply	AGILENT E3634A IN0198	11/28/2022	11/28/2023
Room Thermometer	ONSET IN0143	11/28/2022	11/28/2023

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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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	115	112	110	108	112	110	108	107	106	105	103	103	101	100	99	98	98	96				96
2	110	107	103	101	108	105	102	99	102	99	97	99	97	95	96	95	93	92				92
3	107	102	98	95	105	100	97	94	98	95	92	95	93	91	93	91	90	88				88
4	103	97	93	90	101	96	92	89	94	91	88	92	89	87	90	88	86	85				85
5	100	93	89	86	98	92	88	85	91	87	84	89	86	84	88	85	83	82				82
6	96	90	85	82	95	89	85	82	88	84	81	86	83	81	85	82	80	79				79
7	94	87	82	79	92	86	82	79	85	81	78	84	81	78	83	80	78	77				77
8	91	84	79	76	90	83	79	76	82	79	76	81	78	76	81	78	75	74				74
9	88	81	77	74	87	81	77	74	80	76	74	79	76	73	78	75	73	72				72
10	86	79	75	72	85	78	74	72	78	74	71	77	74	71	76	73	71	70				70

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	909088
5°	810496
10°	564320
15°	321347
20°	153230
25°	65501
30°	30263
35°	16190
40°	10305
45°	8485
50°	7369
55°	6606
60°	5684
65°	4483
70°	3693
75°	2440
80°	1818
85°	3623

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 8485 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	217.4	33.5
10°-20°	273.0	42.0
20°-30°	96.1	14.8
30°-40°	28.5	4.4
40°-50°	14.6	2.2
50°-60°	10.5	1.6
60°-70°	6.1	0.9
70°-80°	2.5	0.4
80°-90°	0.7	0.1
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	586.5	90.3
0°-40°	615.0	94.7
0°-60°	640.1	98.6
0°-90°	649.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	649.4	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2879	
5°	2557	217
15°	983	273
25°	188	96
35°	42	29
45°	19	15
55°	12	10
65°	6	6
75°	2	3
85°	1	1
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	2879
1°	2868
2°	2829
3°	2761
4°	2674
5°	2557
6°	2415
7°	2261
8°	2096
9°	1933
10°	1760
12.5°	1346
15°	983
17.5°	683
20°	456
22.5°	292
25°	188
27.5°	123
30°	83
32.5°	58
35°	42
37.5°	32
40°	25
42.5°	21
45°	19
47.5°	16
50°	15
52.5°	13
55°	12
57.5°	10
60°	9
62.5°	7
65°	6
67.5°	5
70°	4
72.5°	3
75°	2
77.5°	2
80°	1
82.5°	1
85°	1
87.5°	0
90°	0

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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	11.25	12.20	11.61	12.52	12.83	11.25	12.20	11.61	12.52	12.83
	3H	12.14	12.98	12.52	13.31	13.68	12.14	12.98	12.52	13.31	13.68
	4H	12.31	13.08	12.71	13.44	13.83	12.31	13.08	12.71	13.44	13.83
	6H	12.35	13.07	12.77	13.44	13.84	12.35	13.07	12.77	13.44	13.84
	8H	12.38	13.05	12.82	13.44	13.85	12.38	13.05	12.82	13.44	13.85
	12H	12.45	13.09	12.88	13.47	13.90	12.45	13.09	12.88	13.47	13.90
4H	2H	11.47	12.24	11.87	12.60	12.99	11.47	12.24	11.87	12.60	12.99
	3H	12.51	13.15	12.93	13.56	13.96	12.51	13.15	12.93	13.56	13.96
	4H	12.72	13.29	13.16	13.71	14.16	12.72	13.29	13.16	13.71	14.16
	6H	12.83	13.31	13.30	13.76	14.24	12.83	13.31	13.30	13.76	14.24
	8H	12.88	13.33	13.35	13.78	14.25	12.88	13.33	13.35	13.78	14.25
	12H	13.01	13.39	13.50	13.88	14.36	13.01	13.39	13.50	13.88	14.36
8H	4H	12.71	13.16	13.19	13.61	14.09	12.71	13.16	13.19	13.61	14.09
	6H	12.87	13.22	13.38	13.73	14.21	12.87	13.22	13.38	13.73	14.21
	8H	12.99	13.30	13.52	13.82	14.32	12.99	13.30	13.52	13.82	14.32
	12H	13.25	13.51	13.77	14.01	14.59	13.25	13.51	13.77	14.01	14.59
12H	4H	12.66	13.05	13.16	13.54	14.02	12.66	13.05	13.16	13.54	14.02
	6H	12.84	13.16	13.38	13.68	14.18	12.84	13.16	13.38	13.68	14.18
	8H	13.02	13.29	13.54	13.78	14.37	13.02	13.29	13.54	13.78	14.37