

Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: CORELITE

Report Number: P688994

Luminaire Tested: SQ4R-PW1-100D-93050-1-UNV-STD-W-4\_5000K

Issue Date: 5/22/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P688994  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2203-586-35)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/22/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4R-PW1-100D-93050-1-UNV-STD-W-4\_5000K  
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.  
1000 LUMENS PER FOOT  
Light Source: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4066.9 lumens  
Efficiency: N/A  
Efficacy: 88.0 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.2 / 1.29  
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')  
CIE Type: Direct

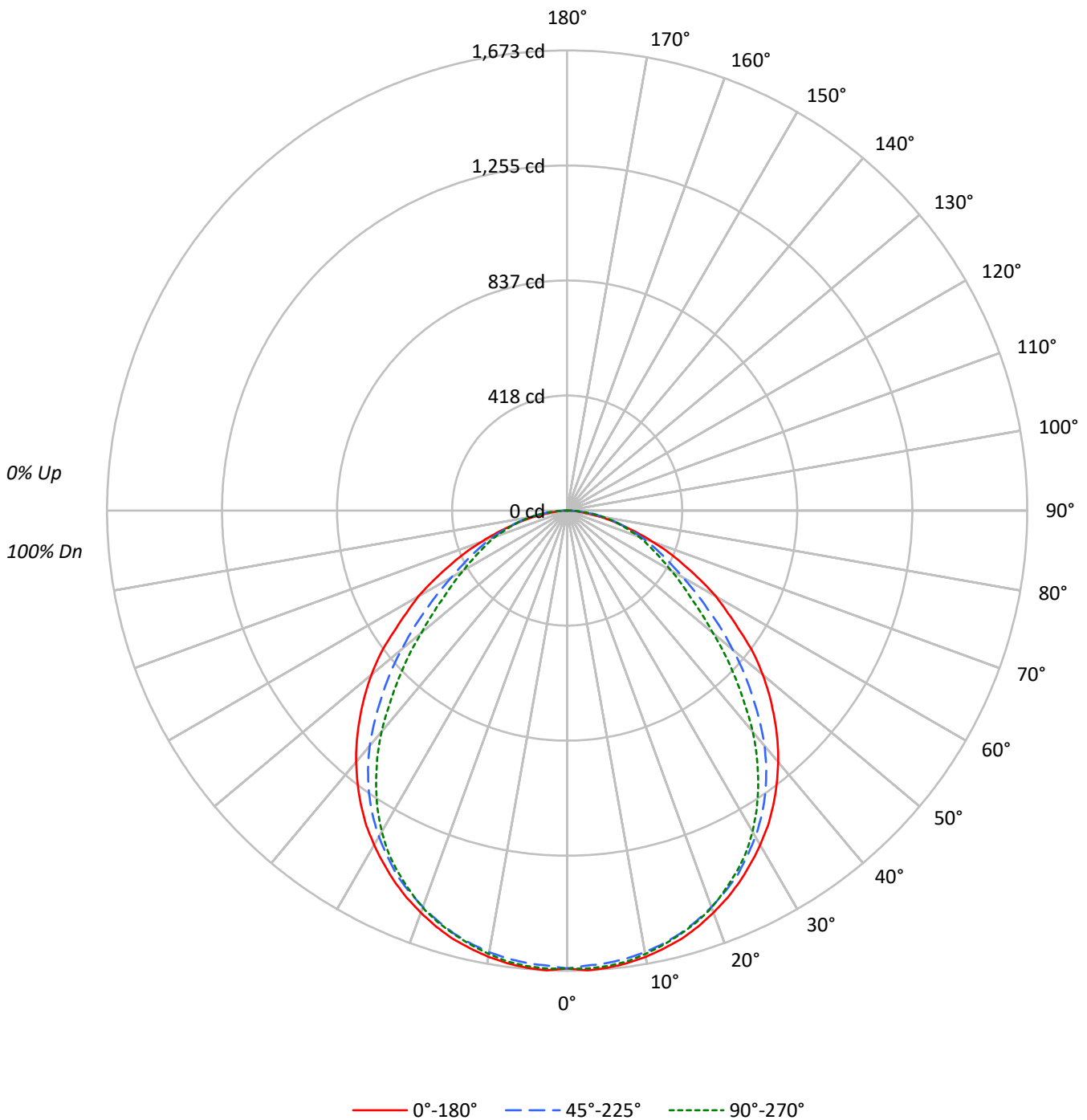
Input Watts (W): 46.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



TEST NUMBER: P688994

CATALOG NUMBER: SQ4R-PW1-100D-93050-1-UNV-STD-W-4\_5000K

### Luminous Intensity Polar Plot



TEST NUMBER: P688994

CATALOG NUMBER: SQ4R-PW1-100D-93050-1-UNV-STD-W-4\_5000K

**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	109	105	101	97	107	103	99	96	99	96	93	95	92	90	91	89	87	85				85
2	100	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72				72
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64	62				62
4	85	73	65	58	82	72	64	58	69	63	57	67	61	56	65	60	56	54				54
5	78	66	57	51	76	65	57	50	63	55	50	61	54	49	59	53	49	47				47
6	72	59	51	45	70	59	50	44	57	49	44	55	49	44	54	48	43	41				41
7	67	54	46	40	65	53	45	40	52	45	39	50	44	39	49	43	39	37				37
8	63	50	41	36	61	49	41	36	48	40	35	46	40	35	45	39	35	33				33
9	59	46	38	32	57	45	37	32	44	37	32	43	36	32	42	36	32	30				30
10	55	42	34	29	54	42	34	29	41	34	29	40	33	29	39	33	29	27				27

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	16025	16025	16025
5°	16127	15961	16065
10°	16105	15937	16000
15°	16057	15864	15886
20°	15935	15716	15738
25°	15795	15545	15431
30°	15602	15221	14983
35°	15363	14759	14231
40°	15003	14035	13202
45°	14506	12962	11826
50°	13907	11760	10349
55°	12928	10450	9158
60°	12028	9350	8403
65°	10673	8675	7943
70°	9275	8250	7828
75°	7640	7800	7480
80°	6049	7352	7352
85°	4485	6617	6849

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 14506 cd/sqm

TEST NUMBER: P688994

CATALOG NUMBER: SQ4R-PW1-100D-93050-1-UNV-STD-W-4\_5000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	157.9	3.9
10°-20°	451.1	11.1
20°-30°	675.6	16.6
30°-40°	785.0	19.3
40°-50°	740.6	18.2
50°-60°	577.9	14.2
60°-70°	392.3	9.6
70°-80°	220.9	5.4
80°-90°	65.6	1.6
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°	1284.6	31.6
0°-40°	2069.6	50.9
0°-60°	3388.1	83.3
0°-90°	4066.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4066.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1664	1664	1664	1664	1664	
5°	1669	1664	1652	1664	1662	159
15°	1611	1605	1592	1600	1594	454
25°	1487	1480	1463	1459	1453	685
35°	1307	1294	1256	1228	1211	817
45°	1065	1033	952	892	869	821
55°	770	725	623	563	546	692
65°	468	426	381	357	349	468
75°	205	214	210	201	201	223
85°	41	58	60	60	62	49
90°	0	0	0	0	0	

TEST NUMBER: P688994

CATALOG NUMBER: SQ4R-PW1-100D-93050-1-UNV-STD-W-4\_5000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1664.5	1664.5	1664.5	1664.5	1664.5
2.5°	1673.0	1668.8	1655.9	1668.8	1666.6
5°	1668.8	1664.5	1651.6	1664.5	1662.3
7.5°	1660.2	1658.1	1643.1	1655.9	1653.8
10°	1647.4	1645.2	1630.2	1640.9	1636.7
12.5°	1630.2	1628.1	1613.1	1621.7	1617.4
15°	1611.0	1604.6	1591.7	1600.3	1593.9
17.5°	1585.3	1578.9	1563.9	1570.3	1568.2
20°	1555.4	1548.9	1534.0	1540.4	1536.1
22.5°	1523.3	1516.9	1499.7	1501.9	1495.5
25°	1486.9	1480.5	1463.4	1459.1	1452.7
27.5°	1446.3	1442.0	1416.3	1412.0	1405.6
30°	1403.5	1397.0	1369.2	1360.7	1347.8
32.5°	1358.5	1345.7	1315.7	1298.6	1283.7
35°	1307.2	1294.4	1255.8	1228.0	1210.9
37.5°	1251.6	1232.3	1189.5	1151.0	1133.9
40°	1193.8	1172.4	1116.8	1065.4	1050.5
42.5°	1131.8	1106.1	1035.5	982.0	956.3
45°	1065.4	1033.3	952.0	892.1	868.6
47.5°	999.1	958.5	870.7	806.6	780.9
50°	928.5	879.3	785.2	716.7	691.0
52.5°	855.8	802.3	706.0	635.4	616.2
55°	770.2	725.3	622.6	562.7	545.6
57.5°	693.2	644.0	554.1	502.8	489.9
60°	624.7	564.8	485.6	447.1	436.4
62.5°	545.6	492.1	430.0	400.1	389.4
65°	468.5	425.7	380.8	357.3	348.7
67.5°	402.2	365.8	335.9	316.6	312.4
70°	329.5	310.2	293.1	278.1	278.1
72.5°	267.4	261.0	250.3	241.8	235.3
75°	205.4	213.9	209.7	201.1	201.1
77.5°	156.2	169.0	171.2	166.9	169.0
80°	109.1	128.4	132.6	130.5	132.6
82.5°	68.5	92.0	96.3	96.3	98.4
85°	40.6	57.8	59.9	59.9	62.0
87.5°	17.1	27.8	30.0	30.0	30.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)