

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: P688992

Luminaire Tested: SQ4R-PW1-100D-93050-1-UNV-STD-W-4\_4000K

Issue Date: 5/22/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P688992  
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\_4000K  
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.  
1000 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3987.8 lumens  
Efficiency: N/A  
Efficacy: 85.8 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

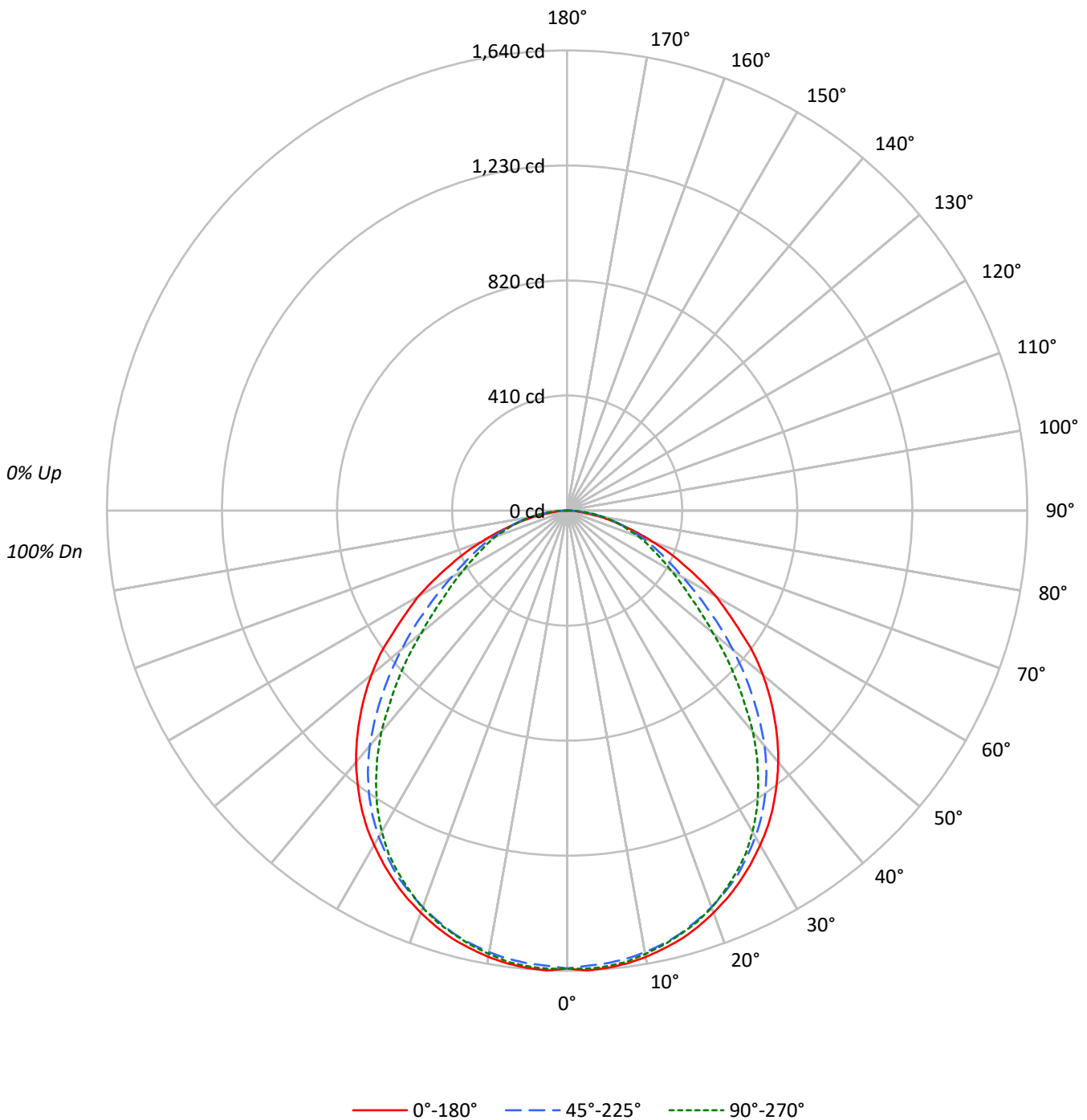
Input Watts (W): 46.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot



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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	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	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°	15713	15713	15713
5°	15813	15651	15753
10°	15791	15627	15688
15°	15745	15556	15577
20°	15625	15410	15431
25°	15488	15242	15131
30°	15299	14925	14692
35°	15065	14472	13955
40°	14712	13763	12945
45°	14224	12710	11596
50°	13637	11531	10149
55°	12676	10247	8978
60°	11795	9169	8241
65°	10465	8506	7789
70°	9095	8090	7676
75°	7492	7648	7335
80°	5932	7213	7213
85°	4407	6484	6716

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 14224 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	154.8	3.9
10°-20°	442.3	11.1
20°-30°	662.5	16.6
30°-40°	769.7	19.3
40°-50°	726.2	18.2
50°-60°	566.6	14.2
60°-70°	384.7	9.6
70°-80°	216.6	5.4
80°-90°	64.3	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°	1259.6	31.6
0°-40°	2029.4	50.9
0°-60°	3322.2	83.3
0°-90°	3987.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3987.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1632	1632	1632	1632	1632	
5°	1636	1632	1620	1632	1630	155
15°	1580	1573	1561	1569	1563	445
25°	1458	1452	1435	1431	1424	671
35°	1282	1269	1231	1204	1187	801
45°	1045	1013	934	875	852	806
55°	755	711	610	552	535	678
65°	459	418	373	350	342	459
75°	201	210	206	197	197	219
85°	40	57	59	59	61	48
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1632.1	1632.1	1632.1	1632.1	1632.1
2.5°	1640.5	1636.3	1623.7	1636.3	1634.2
5°	1636.3	1632.1	1619.5	1632.1	1630.0
7.5°	1627.9	1625.8	1611.1	1623.7	1621.6
10°	1615.3	1613.2	1598.5	1609.0	1604.8
12.5°	1598.5	1596.4	1581.8	1590.1	1586.0
15°	1579.7	1573.4	1560.8	1569.2	1562.9
17.5°	1554.5	1548.2	1533.5	1539.8	1537.7
20°	1525.1	1518.8	1504.1	1510.4	1506.2
22.5°	1493.6	1487.4	1470.6	1472.7	1466.4
25°	1458.0	1451.7	1434.9	1430.7	1424.4
27.5°	1418.1	1413.9	1388.8	1384.6	1378.3
30°	1376.2	1369.9	1342.6	1334.2	1321.6
32.5°	1332.1	1319.5	1290.2	1273.4	1258.7
35°	1281.8	1269.2	1231.4	1204.1	1187.4
37.5°	1227.2	1208.3	1166.4	1128.6	1111.8
40°	1170.6	1149.6	1095.1	1044.7	1030.0
42.5°	1109.7	1084.6	1015.3	962.9	937.7
45°	1044.7	1013.2	933.5	874.8	851.7
47.5°	979.7	939.8	853.8	790.9	765.7
50°	910.5	862.2	769.9	702.8	677.6
52.5°	839.1	786.7	692.3	623.1	604.2
55°	755.2	711.2	610.5	551.7	534.9
57.5°	679.7	631.4	543.3	493.0	480.4
60°	612.6	553.8	476.2	438.4	428.0
62.5°	534.9	482.5	421.7	392.3	381.8
65°	459.4	417.5	373.4	350.3	341.9
67.5°	394.4	358.7	329.4	310.5	306.3
70°	323.1	304.2	287.4	272.7	272.7
72.5°	262.2	255.9	245.4	237.1	230.8
75°	201.4	209.8	205.6	197.2	197.2
77.5°	153.1	165.7	167.8	163.6	165.7
80°	107.0	125.9	130.1	128.0	130.1
82.5°	67.1	90.2	94.4	94.4	96.5
85°	39.9	56.6	58.7	58.7	60.8
87.5°	16.8	27.3	29.4	29.4	29.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)