

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: P688915

Luminaire Tested: SQ4R-PR1-100D-93050-1-UNV-STD-W-4\_4500K

Issue Date: 5/22/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P688915  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-289-4)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/22/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4R-PR1-100D-93050-1-UNV-STD-W-4\_4500K  
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.  
1000 LUMENS PER FOOT  
Light Source: 4500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3855.1 lumens  
Efficiency: N/A  
Efficacy: 83.1 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.23 / 1.34  
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')  
CIE Type: Direct

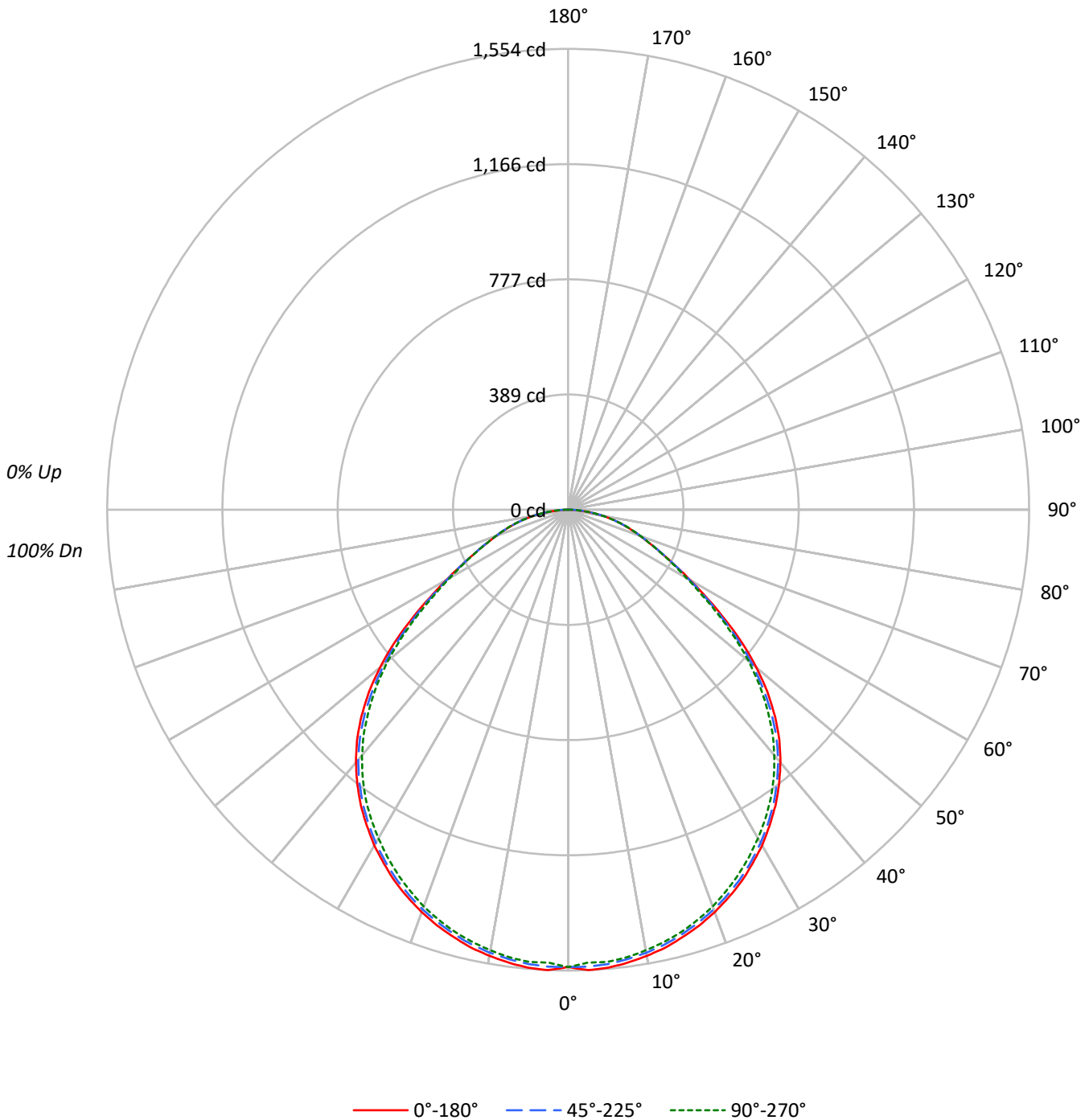
Input Watts (W): 46.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot



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

RF	20				20				20			20				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
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	
1	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85	85	
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	72	72	
3	92	82	74	68	90	80	73	68	78	71	66	75	70	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	58	50	44	57	49	44	55	49	44	53	48	43	41	41	
7	67	54	46	40	65	53	45	39	52	44	39	50	44	39	49	43	39	37	37	
8	63	49	41	36	61	49	41	35	47	40	35	46	40	35	45	39	35	33	33	
9	58	45	37	32	57	45	37	32	44	37	32	43	36	32	42	36	31	30	30	
10	55	42	34	29	54	41	34	29	40	34	29	40	33	29	39	33	29	27	27	

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

	0°	45°	90°
0°	14846	14846	14846
5°	14979	14864	14787
10°	14932	14828	14750
15°	14867	14774	14694
20°	14792	14697	14587
25°	14688	14589	14419
30°	14530	14426	14219
35°	14315	14189	13987
40°	13988	13838	13588
45°	13418	13184	12911
50°	12413	12115	11876
55°	10835	10590	10366
60°	9131	9054	8874
65°	7898	7928	7866
70°	7254	7290	7290
75°	6967	6967	7015
80°	6553	6625	6553
85°	5280	5865	5865

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 13418 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	145.9	3.8
10°-20°	417.5	10.8
20°-30°	629.6	16.3
30°-40°	750.3	19.5
40°-50°	740.2	19.2
50°-60°	564.6	14.6
60°-70°	348.5	9.0
70°-80°	198.6	5.2
80°-90°	59.9	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°	1193.0	30.9
0°-40°	1943.3	50.4
0°-60°	3248.1	84.3
0°-90°	3855.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3855.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1542	1542	1542	1542	1542	
5°	1550	1533	1538	1533	1530	147
15°	1492	1476	1482	1477	1474	421
25°	1383	1365	1373	1359	1357	637
35°	1218	1203	1207	1191	1190	761
45°	986	972	968	951	948	756
55°	646	635	631	620	618	578
65°	347	344	348	345	345	350
75°	187	187	187	189	189	198
85°	48	50	53	53	53	57
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1542.1	1542.1	1542.1	1542.1	1542.1
2.5°	1554.0	1536.7	1542.1	1538.1	1528.8
5°	1550.0	1532.8	1538.1	1532.8	1530.1
7.5°	1540.7	1523.5	1528.8	1523.5	1522.1
10°	1527.4	1511.5	1516.8	1511.5	1508.8
12.5°	1512.8	1495.6	1502.2	1495.6	1492.9
15°	1491.6	1475.6	1482.3	1477.0	1474.3
17.5°	1470.3	1453.1	1459.7	1454.4	1450.4
20°	1443.8	1427.8	1434.5	1425.2	1423.8
22.5°	1414.5	1398.6	1405.2	1392.0	1392.0
25°	1382.7	1365.4	1373.4	1358.8	1357.4
27.5°	1345.5	1329.5	1336.2	1321.6	1320.2
30°	1307.0	1291.0	1297.7	1281.7	1279.1
32.5°	1263.1	1248.5	1253.8	1237.9	1236.6
35°	1218.0	1203.4	1207.3	1191.4	1190.1
37.5°	1167.5	1154.2	1156.9	1139.6	1138.3
40°	1113.0	1099.8	1101.1	1082.5	1081.2
42.5°	1053.3	1040.0	1038.7	1020.1	1018.7
45°	985.5	972.2	968.3	951.0	948.3
47.5°	911.2	897.9	889.9	875.3	874.0
50°	828.8	815.5	808.9	796.9	792.9
52.5°	739.8	726.5	721.2	710.6	706.6
55°	645.5	634.9	630.9	620.3	617.6
57.5°	555.2	547.2	545.9	535.3	533.9
60°	474.2	470.2	470.2	460.9	460.9
62.5°	405.1	402.4	405.1	399.8	398.5
65°	346.7	344.0	348.0	345.3	345.3
67.5°	297.5	297.5	300.2	298.8	298.8
70°	257.7	257.7	259.0	259.0	259.0
72.5°	221.8	220.5	224.5	224.5	223.1
75°	187.3	187.3	187.3	188.6	188.6
77.5°	152.7	152.7	154.1	154.1	152.7
80°	118.2	119.5	119.5	118.2	118.2
82.5°	83.7	85.0	85.0	85.0	83.7
85°	47.8	50.5	53.1	53.1	53.1
87.5°	17.3	22.6	26.6	26.6	25.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)