

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: P688754

Luminaire Tested: SQ4R-PH1-100D-92765-1-UNV-STD-W-4\_5700K

Issue Date: 5/22/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P688754  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2203-586-36)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/22/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4R-PH1-100D-92765-1-UNV-STD-W-4\_5700K  
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE HEX CONTINUOUS LENS.  
1000 LUMENS PER FOOT  
Light Source: 5700K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4027.0 lumens  
Efficiency: N/A  
Efficacy: 86.8 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.22 / 1.28  
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')  
CIE Type: Direct

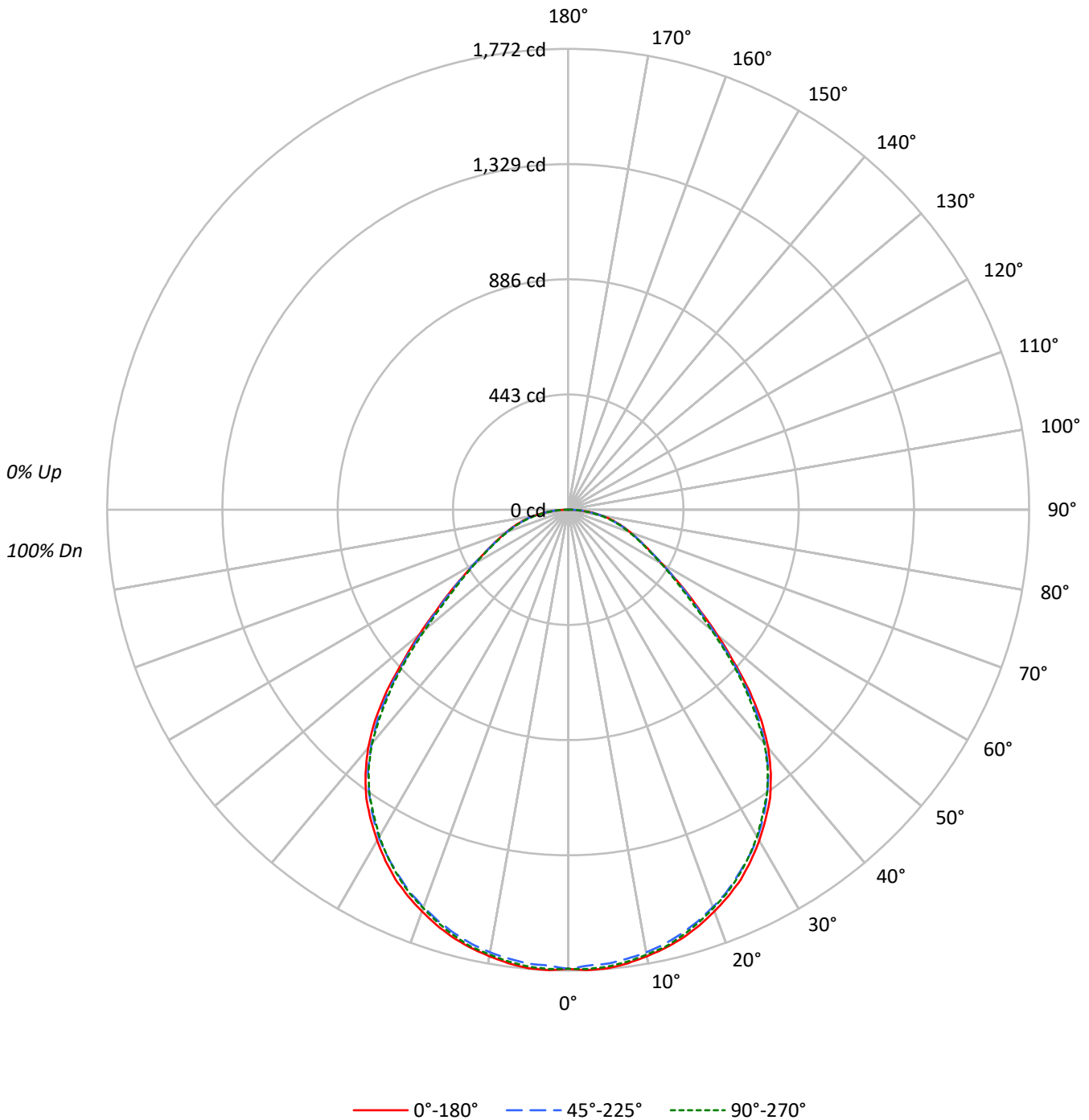
Input Watts (W): 46.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot



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

RF	20				20				20				20				20	
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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	105	102	98	107	103	100	96	99	96	93	95	93	91	92	90	88	86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	79	76	74
3	93	83	76	70	90	82	75	69	79	73	68	76	71	67	73	69	66	64
4	86	75	66	60	83	73	66	60	71	64	59	69	63	58	66	62	57	55
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49
6	74	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43
7	68	56	47	42	67	55	47	41	53	46	41	52	46	41	51	45	41	39
8	64	51	43	37	62	50	43	37	49	42	37	48	42	37	47	41	37	35
9	60	47	39	34	58	47	39	34	45	39	34	44	38	34	43	38	33	32
10	56	44	36	31	55	43	36	31	42	35	31	41	35	31	40	35	31	29

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

	0°	45°	90°
0°	16996	16996	16996
5°	17104	16935	17041
10°	17045	16897	16982
15°	16988	16814	16901
20°	16837	16658	16703
25°	16670	16438	16484
30°	16330	16185	16137
35°	15907	15677	15651
40°	15038	14792	14737
45°	13414	13145	12997
50°	11197	10968	10740
55°	9329	9218	9000
60°	8016	8058	7891
65°	7349	7299	7199
70°	7116	7054	6933
75°	7216	7053	6893
80°	7252	7130	6886
85°	6981	6981	6495

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 13414 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	167.4	4.2
10°-20°	478.4	11.9
20°-30°	716.6	17.8
30°-40°	833.8	20.7
40°-50°	741.6	18.4
50°-60°	498.0	12.4
60°-70°	321.9	8.0
70°-80°	200.6	5.0
80°-90°	68.7	1.7
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°	1362.4	33.8
0°-40°	2196.2	54.5
0°-60°	3435.8	85.3
0°-90°	4027.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4027.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1765	1765	1765	1765	1765	
5°	1770	1765	1752	1765	1763	168
15°	1704	1700	1687	1698	1696	480
25°	1569	1563	1548	1556	1552	721
35°	1354	1347	1334	1334	1332	841
45°	985	981	966	952	955	753
55°	556	556	549	540	536	504
65°	323	325	320	318	316	323
75°	194	192	190	190	185	204
85°	63	65	63	61	59	70
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1765.4	1765.4	1765.4	1765.4	1765.4
2.5°	1772.0	1767.6	1754.5	1769.8	1767.6
5°	1769.8	1765.4	1752.4	1765.4	1763.3
7.5°	1758.9	1756.7	1741.5	1756.7	1752.4
10°	1743.6	1743.6	1728.4	1741.5	1737.1
12.5°	1726.2	1724.0	1710.9	1724.0	1721.8
15°	1704.4	1700.0	1687.0	1697.9	1695.7
17.5°	1676.1	1673.9	1658.6	1669.5	1665.2
20°	1643.4	1639.0	1625.9	1634.7	1630.3
22.5°	1608.5	1604.1	1591.1	1597.6	1595.4
25°	1569.3	1562.7	1547.5	1556.2	1551.8
27.5°	1521.3	1519.1	1503.9	1508.2	1503.9
30°	1469.0	1466.8	1455.9	1455.9	1451.6
32.5°	1412.3	1414.5	1397.1	1399.3	1390.5
35°	1353.5	1347.0	1333.9	1333.9	1331.7
37.5°	1279.4	1275.0	1264.1	1262.0	1259.8
40°	1196.6	1192.2	1177.0	1172.6	1172.6
42.5°	1098.5	1094.1	1078.9	1072.3	1063.6
45°	985.2	980.8	965.5	952.5	954.6
47.5°	858.7	863.1	847.8	836.9	834.8
50°	747.6	745.4	732.3	725.8	717.1
52.5°	640.8	643.0	632.1	627.7	616.8
55°	555.8	555.8	549.2	540.5	536.2
57.5°	479.5	483.9	477.3	473.0	468.6
60°	416.3	418.5	418.5	409.8	409.8
62.5°	364.0	366.2	364.0	359.6	359.6
65°	322.6	324.8	320.4	318.2	316.0
67.5°	285.5	287.7	285.5	283.3	279.0
70°	252.8	252.8	250.6	250.6	246.3
72.5°	224.5	222.3	220.1	220.1	218.0
75°	194.0	191.8	189.6	189.6	185.3
77.5°	163.5	161.3	161.3	156.9	154.7
80°	130.8	130.8	128.6	126.4	124.2
82.5°	100.3	98.1	95.9	93.7	91.5
85°	63.2	65.4	63.2	61.0	58.8
87.5°	28.3	30.5	30.5	30.5	28.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)