

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: P686081

Luminaire Tested: SQ4R-F-125D-840-1-UNV-STD-W-4

Issue Date: 11/18/2022

**Test Information**

Test Method: LM-79-2019  
Report Number: P686081  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2203-586-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/18/2022  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4R-F-125D-840-1-UNV-STD-W-4  
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH FROSTED LENS.  
1250 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

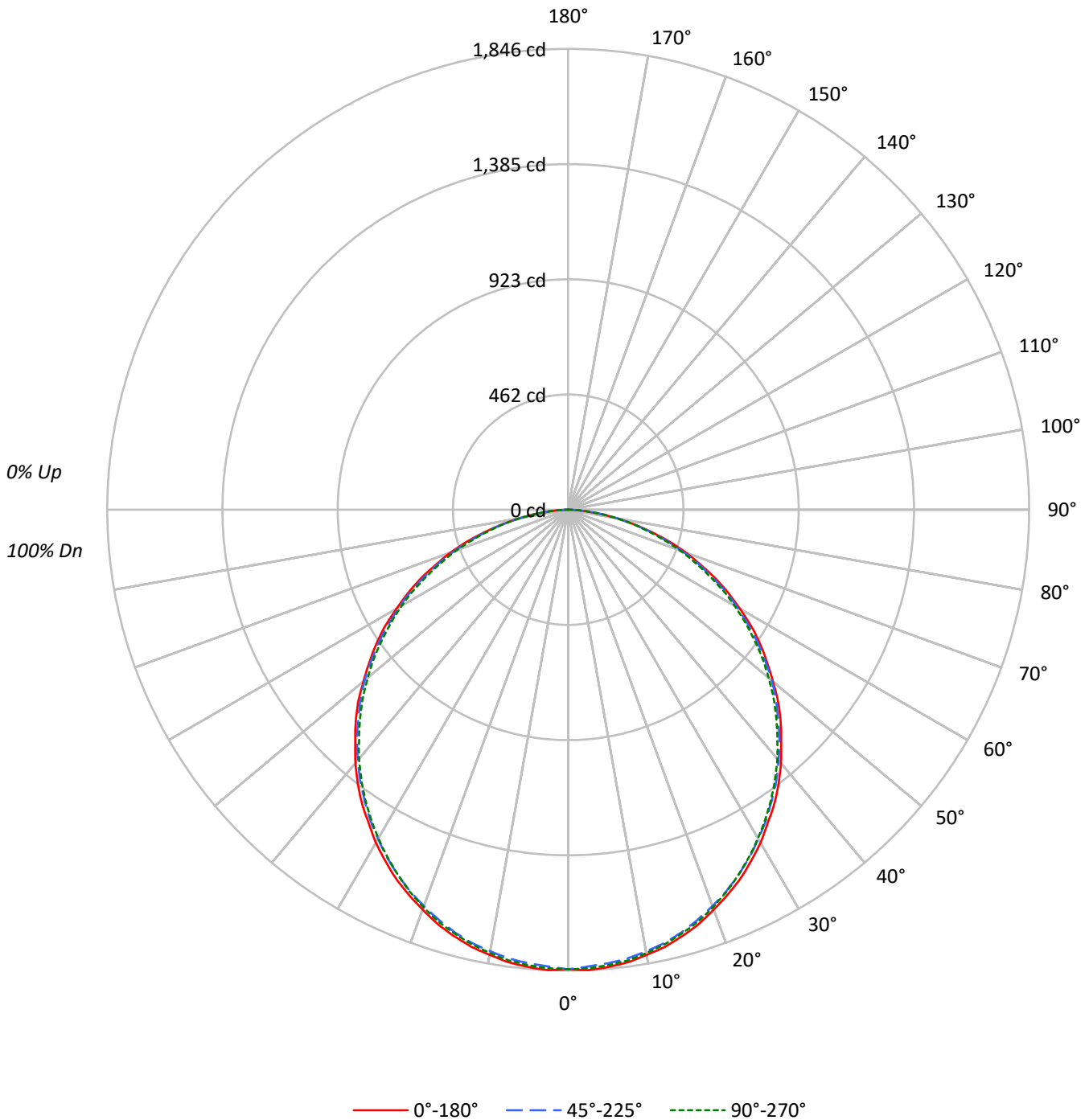
Lumens per Lamp: N/A  
Luminaire Lumens: 5132.5 lumens  
Efficiency: N/A  
Efficacy: 103.7 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.23 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')  
CIE Type: Direct

Input Watts (W): 49.5  
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					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	104	100	96	106	102	98	94	97	94	91	94	91	88	90	88	86	84				84
2	99	91	84	78	96	89	82	77	85	80	75	82	77	74	79	75	72	70				70
3	90	80	71	65	88	78	70	64	75	68	63	72	67	62	70	65	61	59				59
4	82	70	62	55	80	69	61	54	67	59	54	64	58	53	62	57	52	50				50
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46	56	50	45	43				43
6	70	57	48	41	68	56	47	41	54	46	41	52	45	40	51	45	40	38				38
7	65	51	43	36	63	51	42	36	49	41	36	48	41	36	46	40	35	33				33
8	60	47	38	32	59	46	38	32	45	37	32	44	37	32	42	36	32	30				30
9	56	43	35	29	55	42	35	29	41	34	29	40	34	29	39	33	29	27				27
10	53	40	32	27	52	39	32	26	38	31	26	37	31	26	36	30	26	24				24

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

	0°	45°	90°
0°	17727	17727	17727
5°	17770	17623	17697
10°	17704	17555	17630
15°	17622	17470	17521
20°	17465	17310	17362
25°	17330	17142	17142
30°	17123	16926	16898
35°	16915	16707	16647
40°	16656	16466	16371
45°	16391	16186	16047
50°	16024	15948	15683
55°	15751	15538	15283
60°	15292	15049	14805
65°	14807	14463	14117
70°	14097	13669	13385
75°	12796	12513	12230
80°	10939	10939	10800
85°	7821	8384	8384

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 16391 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	174.1	3.4
10°-20°	496.7	9.7
20°-30°	746.5	14.5
30°-40°	892.1	17.4
40°-50°	919.3	17.9
50°-60°	827.2	16.1
60°-70°	628.8	12.3
70°-80°	357.5	7.0
80°-90°	90.3	1.8
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°	1417.3	27.6
0°-40°	2309.4	45.0
0°-60°	4055.9	79.0
0°-90°	5132.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5132.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1841	1841	1841	1841	1841	
5°	1839	1836	1824	1839	1831	175
15°	1768	1765	1753	1763	1758	499
25°	1631	1626	1614	1619	1614	751
35°	1439	1434	1422	1422	1416	899
45°	1204	1204	1189	1181	1179	928
55°	938	936	926	918	910	838
65°	650	648	635	627	620	641
75°	344	342	336	334	329	366
85°	71	73	76	76	76	87
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1841.3	1841.3	1841.3	1841.3	1841.3
2.5°	1846.4	1841.3	1831.2	1843.9	1838.8
5°	1838.8	1836.3	1823.6	1838.8	1831.2
7.5°	1828.7	1826.1	1813.5	1826.1	1821.1
10°	1811.0	1808.4	1795.8	1808.4	1803.4
12.5°	1793.3	1790.7	1778.1	1788.2	1783.1
15°	1768.0	1765.4	1752.8	1762.9	1757.9
17.5°	1740.2	1737.6	1722.4	1732.6	1730.0
20°	1704.7	1702.2	1689.6	1697.2	1694.6
22.5°	1669.3	1666.8	1654.2	1661.7	1656.7
25°	1631.4	1626.3	1613.7	1618.7	1613.7
27.5°	1585.9	1583.3	1570.7	1573.2	1568.2
30°	1540.3	1537.8	1522.6	1525.2	1520.1
32.5°	1487.2	1487.2	1474.6	1474.6	1469.5
35°	1439.2	1434.1	1421.5	1421.5	1416.4
37.5°	1383.5	1378.5	1368.3	1365.8	1360.8
40°	1325.3	1322.8	1310.2	1307.6	1302.6
42.5°	1262.1	1264.6	1252.0	1244.4	1239.4
45°	1203.9	1203.9	1188.8	1181.2	1178.6
47.5°	1140.7	1140.7	1128.1	1120.5	1115.4
50°	1069.9	1074.9	1064.8	1052.2	1047.1
52.5°	1004.1	1006.7	994.0	986.4	981.4
55°	938.4	935.8	925.7	918.1	910.5
57.5°	870.1	867.5	852.4	844.8	839.7
60°	794.2	794.2	781.6	774.0	768.9
62.5°	723.4	720.8	710.7	700.6	698.1
65°	650.0	647.5	634.9	627.3	619.7
67.5°	571.6	569.1	561.5	551.4	546.3
70°	500.8	493.2	485.6	478.0	475.5
72.5°	424.9	417.3	409.7	404.7	399.6
75°	344.0	341.5	336.4	333.9	328.8
77.5°	270.6	270.6	265.6	263.0	263.0
80°	197.3	197.3	197.3	194.8	194.8
82.5°	129.0	131.5	131.5	129.0	131.5
85°	70.8	73.3	75.9	75.9	75.9
87.5°	22.8	30.4	27.8	30.4	30.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)