

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: P688755

Luminaire Tested: SQ4R-PH1-100D-92765-1-UNV-STD-W-4\_6500K

Issue Date: 5/22/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P688755  
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\_6500K  
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE HEX CONTINUOUS LENS.  
1000 LUMENS PER FOOT  
Light Source: 6500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4111.4 lumens  
Efficiency: N/A  
Efficacy: 89.0 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

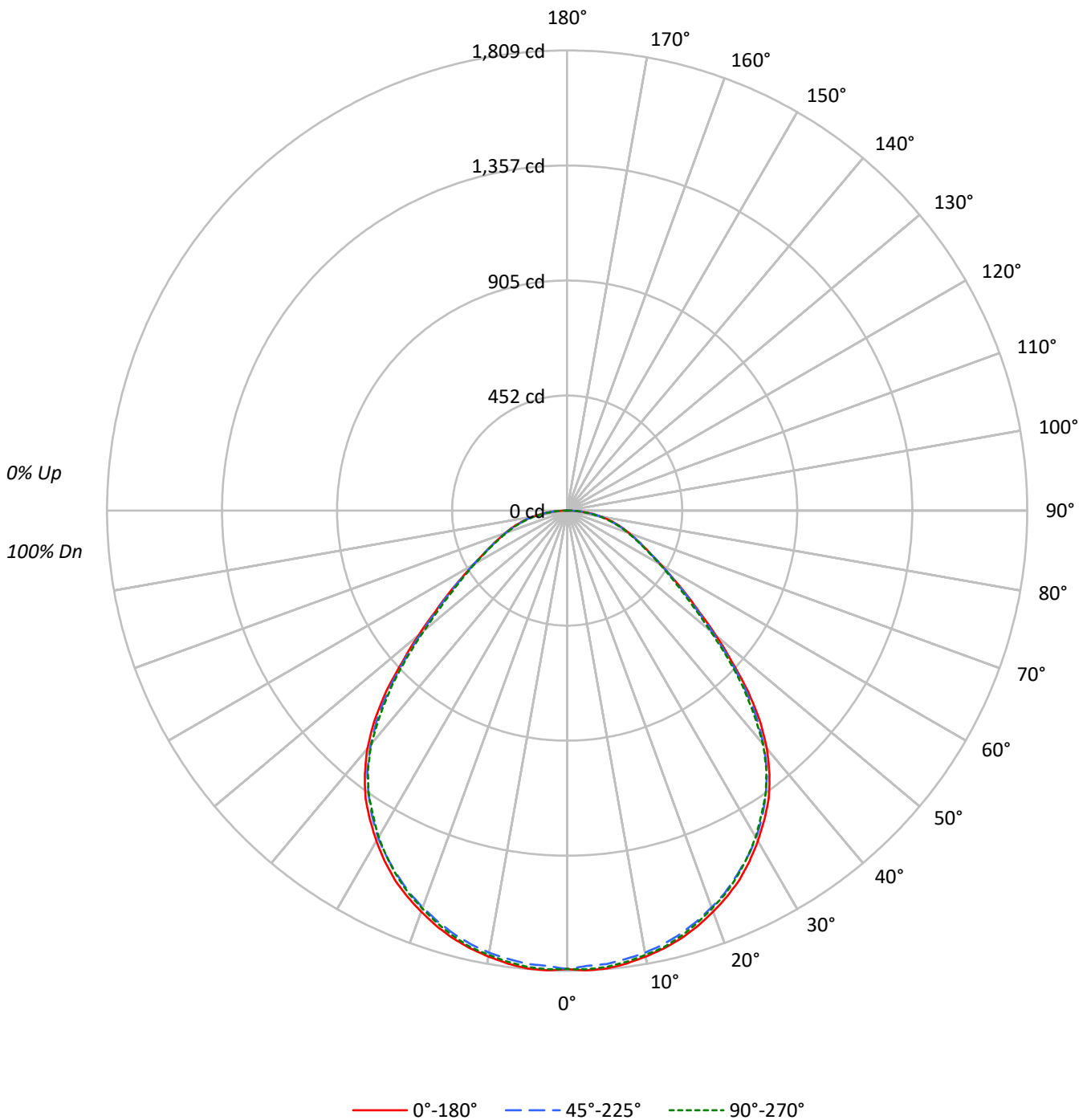
Input Watts (W): 46.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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°	17352	17352	17352
5°	17462	17290	17397
10°	17403	17250	17337
15°	17344	17166	17255
20°	17189	17007	17053
25°	17020	16783	16830
30°	16673	16524	16475
35°	16241	16005	15979
40°	15353	15101	15046
45°	13694	13422	13269
50°	11431	11199	10965
55°	9524	9413	9188
60°	8183	8226	8054
65°	7502	7451	7351
70°	7265	7203	7077
75°	7365	7201	7034
80°	7401	7279	7030
85°	7125	7125	6639

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 13694 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	170.9	4.2
10°-20°	488.4	11.9
20°-30°	731.6	17.8
30°-40°	851.3	20.7
40°-50°	757.1	18.4
50°-60°	508.4	12.4
60°-70°	328.6	8.0
70°-80°	204.8	5.0
80°-90°	70.2	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°	1391.0	33.8
0°-40°	2242.3	54.5
0°-60°	3507.8	85.3
0°-90°	4111.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4111.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1802	1802	1802	1802	1802	
5°	1807	1802	1789	1802	1800	172
15°	1740	1736	1722	1733	1731	491
25°	1602	1596	1580	1589	1584	737
35°	1382	1375	1362	1362	1360	859
45°	1006	1001	986	972	975	769
55°	567	567	561	552	547	514
65°	329	332	327	325	323	330
75°	198	196	194	194	189	208
85°	64	67	64	62	60	71
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1802.4	1802.4	1802.4	1802.4	1802.4
2.5°	1809.1	1804.6	1791.3	1806.9	1804.6
5°	1806.9	1802.4	1789.1	1802.4	1800.2
7.5°	1795.7	1793.5	1777.9	1793.5	1789.1
10°	1780.2	1780.2	1764.6	1777.9	1773.5
12.5°	1762.4	1760.1	1746.8	1760.1	1757.9
15°	1740.1	1735.7	1722.3	1733.4	1731.2
17.5°	1711.2	1709.0	1693.4	1704.5	1700.1
20°	1677.8	1673.4	1660.0	1668.9	1664.5
22.5°	1642.2	1637.8	1624.4	1631.1	1628.9
25°	1602.2	1595.5	1579.9	1588.8	1584.4
27.5°	1553.2	1551.0	1535.4	1539.8	1535.4
30°	1499.8	1497.6	1486.4	1486.4	1482.0
32.5°	1441.9	1444.2	1426.4	1428.6	1419.7
35°	1381.9	1375.2	1361.8	1361.8	1359.6
37.5°	1306.2	1301.8	1290.6	1288.4	1286.2
40°	1221.6	1217.2	1201.6	1197.2	1197.2
42.5°	1121.5	1117.1	1101.5	1094.8	1085.9
45°	1005.8	1001.3	985.8	972.4	974.6
47.5°	876.7	881.2	865.6	854.5	852.3
50°	763.2	761.0	747.7	741.0	732.1
52.5°	654.2	656.4	645.3	640.9	629.7
55°	567.4	567.4	560.8	551.9	547.4
57.5°	489.5	494.0	487.3	482.9	478.4
60°	425.0	427.2	427.2	418.3	418.3
62.5°	371.6	373.8	371.6	367.2	367.2
65°	329.3	331.6	327.1	324.9	322.7
67.5°	291.5	293.7	291.5	289.3	284.8
70°	258.1	258.1	255.9	255.9	251.4
72.5°	229.2	227.0	224.7	224.7	222.5
75°	198.0	195.8	193.6	193.6	189.1
77.5°	166.9	164.7	164.7	160.2	158.0
80°	133.5	133.5	131.3	129.1	126.8
82.5°	102.4	100.1	97.9	95.7	93.5
85°	64.5	66.8	64.5	62.3	60.1
87.5°	28.9	31.2	31.2	31.2	28.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)