

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: P688770

Luminaire Tested: SQ4R-PH1-125D-93050-1-UNV-STD-W-4\_3500K

Issue Date: 5/22/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P688770  
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-PH1-125D-93050-1-UNV-STD-W-4\_3500K  
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE HEX CONTINUOUS LENS.  
1250 LUMENS PER FOOT  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4845.8 lumens  
Efficiency: N/A  
Efficacy: 78.8 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

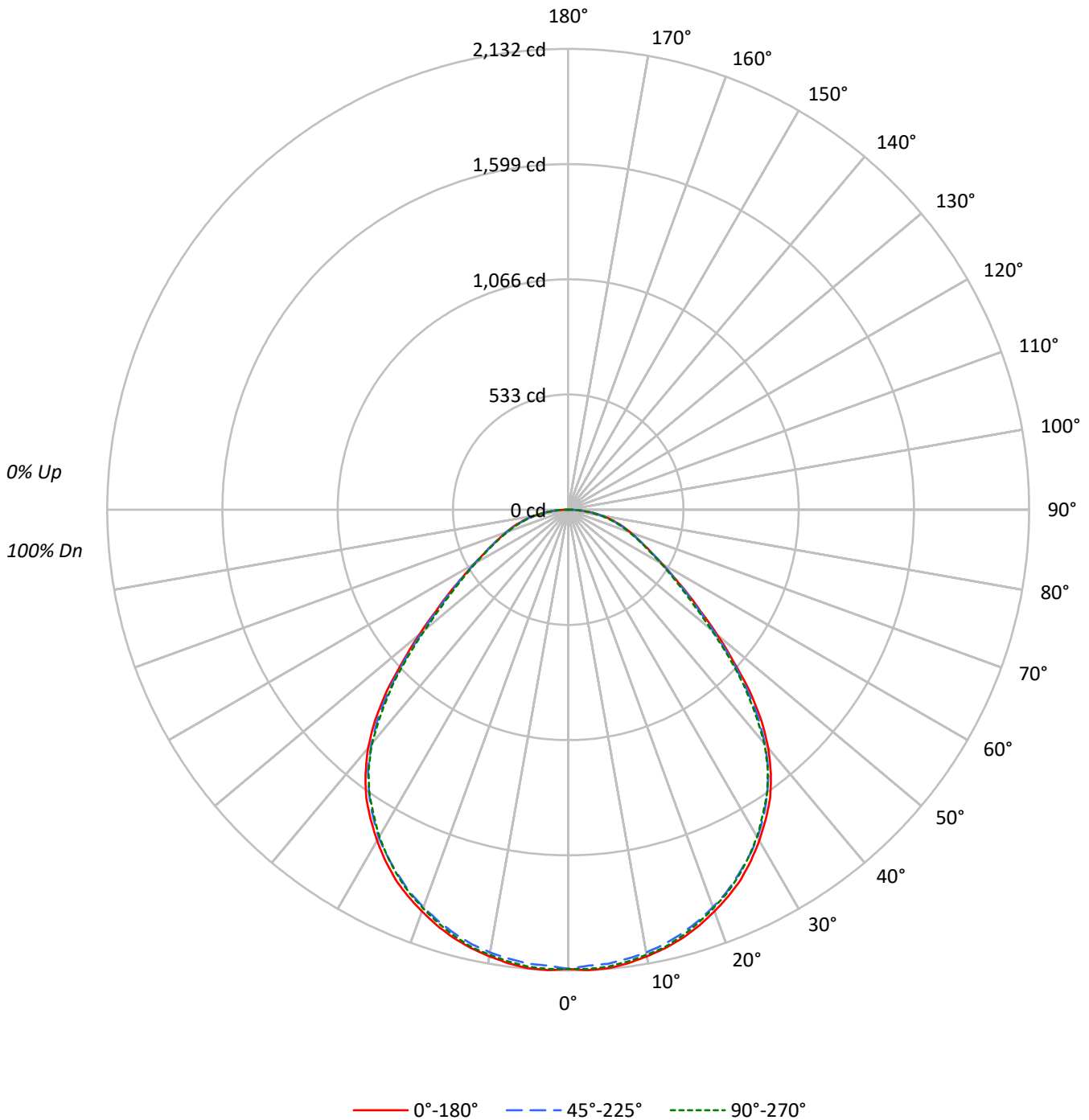
Input Watts (W): 61.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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

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

	0°	45°	90°
0°	20452	20452	20452
5°	20581	20378	20504
10°	20511	20332	20434
15°	20441	20232	20337
20°	20260	20045	20099
25°	20059	19780	19836
30°	19651	19475	19418
35°	19142	18864	18834
40°	18095	17798	17733
45°	16139	15818	15640
50°	13474	13198	12924
55°	11226	11093	10830
60°	9645	9697	9494
65°	8843	8782	8663
70°	8563	8490	8343
75°	8682	8488	8291
80°	8727	8577	8289
85°	8406	8406	7821

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 16139 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	201.5	4.2
10°-20°	575.6	11.9
20°-30°	862.3	17.8
30°-40°	1003.4	20.7
40°-50°	892.4	18.4
50°-60°	599.2	12.4
60°-70°	387.3	8.0
70°-80°	241.4	5.0
80°-90°	82.7	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°	1639.4	33.8
0°-40°	2642.8	54.5
0°-60°	4134.3	85.3
0°-90°	4845.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4845.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2124	2124	2124	2124	2124	
5°	2130	2124	2109	2124	2122	202
15°	2051	2046	2030	2043	2040	578
25°	1888	1880	1862	1873	1867	868
35°	1629	1621	1605	1605	1602	1012
45°	1185	1180	1162	1146	1149	906
55°	669	669	661	650	645	606
65°	388	391	386	383	380	389
75°	233	231	228	228	223	246
85°	76	79	76	73	71	84
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2124.4	2124.4	2124.4	2124.4	2124.4
2.5°	2132.2	2127.0	2111.3	2129.6	2127.0
5°	2129.6	2124.4	2108.6	2124.4	2121.7
7.5°	2116.5	2113.9	2095.5	2113.9	2108.6
10°	2098.1	2098.1	2079.8	2095.5	2090.3
12.5°	2077.2	2074.5	2058.8	2074.5	2071.9
15°	2050.9	2045.7	2029.9	2043.1	2040.4
17.5°	2016.8	2014.2	1995.9	2009.0	2003.7
20°	1977.5	1972.2	1956.5	1967.0	1961.8
22.5°	1935.5	1930.3	1914.6	1922.4	1919.8
25°	1888.3	1880.5	1862.1	1872.6	1867.3
27.5°	1830.6	1828.0	1809.6	1814.9	1809.6
30°	1767.7	1765.1	1751.9	1751.9	1746.7
32.5°	1699.5	1702.1	1681.1	1683.8	1673.3
35°	1628.7	1620.8	1605.1	1605.1	1602.5
37.5°	1539.5	1534.3	1521.1	1518.5	1515.9
40°	1439.8	1434.6	1416.2	1411.0	1411.0
42.5°	1321.8	1316.6	1298.2	1290.4	1279.9
45°	1185.4	1180.2	1161.8	1146.1	1148.7
47.5°	1033.3	1038.6	1020.2	1007.1	1004.5
50°	899.6	897.0	881.2	873.3	862.9
52.5°	771.1	773.7	760.6	755.3	742.2
55°	668.8	668.8	660.9	650.4	645.2
57.5°	577.0	582.2	574.4	569.1	563.9
60°	500.9	503.6	503.6	493.1	493.1
62.5°	438.0	440.6	438.0	432.7	432.7
65°	388.2	390.8	385.5	382.9	380.3
67.5°	343.6	346.2	343.6	340.9	335.7
70°	304.2	304.2	301.6	301.6	296.4
72.5°	270.1	267.5	264.9	264.9	262.3
75°	233.4	230.8	228.2	228.2	222.9
77.5°	196.7	194.1	194.1	188.8	186.2
80°	157.4	157.4	154.7	152.1	149.5
82.5°	120.6	118.0	115.4	112.8	110.2
85°	76.1	78.7	76.1	73.4	70.8
87.5°	34.1	36.7	36.7	36.7	34.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)