

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: P521161

Luminaire Tested: SQ4-BB-0U-100D-92765-1D-UNV-STD-W-4\_4000K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521161  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2009-966-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 5-5-2021  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-BB-0U-100D-92765-1D-UNV-STD-W-4\_4000K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 1000 LUMENS PER FOOT  
DIRECT ONLY  
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2594.6 lumens  
Efficiency: N/A  
Efficacy: 61.2 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Direct

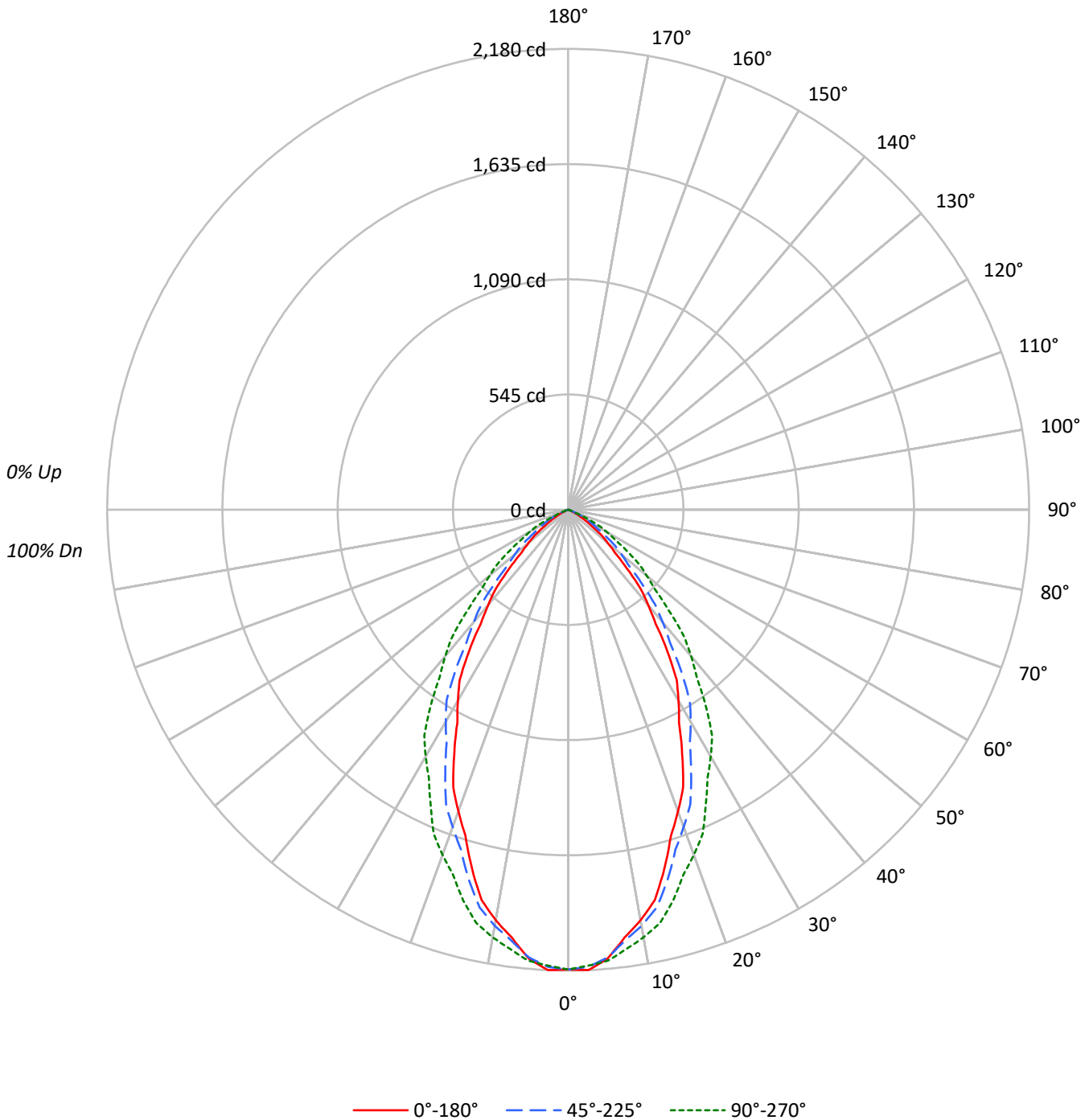
Input Watts (W): 42.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	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	112	109	106	104	110	107	104	102	103	101	99	99	98	96	96	94	93	91				91
2	106	100	95	91	103	98	94	90	95	91	88	92	89	86	89	86	84	82				82
3	99	91	85	81	97	90	84	80	87	82	79	85	81	77	82	79	76	74				74
4	93	84	77	72	91	83	76	72	80	75	71	78	74	70	76	72	69	67				67
5	87	77	70	65	85	76	70	65	74	68	64	72	67	64	71	66	63	61				61
6	82	71	64	59	80	70	64	59	69	63	58	67	62	58	66	61	58	56				56
7	77	66	59	54	75	65	59	54	64	58	53	62	57	53	61	56	53	51				51
8	72	61	54	50	71	61	54	49	59	53	49	58	53	49	57	52	49	47				47
9	68	57	50	46	67	57	50	46	56	50	46	55	49	45	54	49	45	44				44
10	65	54	47	42	63	53	47	42	52	46	42	51	46	42	51	46	42	41				41

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

	0°	45°	90°
0°	20067	20067	20067
5°	19744	19695	19842
10°	18474	18720	19243
15°	16795	17328	18292
20°	14908	15683	17057
25°	12983	14011	15671
30°	11120	12342	14360
35°	9220	10477	12776
40°	7084	8377	10887
45°	5121	6343	8759
50°	3489	4728	6947
55°	2268	3420	5400
60°	1301	2408	3903
65°	345	1469	1976
70°	170	453	566
75°	75	39	0
80°	58	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 8759 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	198.5	7.7
10°-20°	507.6	19.6
20°-30°	635.5	24.5
30°-40°	587.0	22.6
40°-50°	394.4	15.2
50°-60°	203.7	7.9
60°-70°	63.8	2.5
70°-80°	4.0	0.2
80°-90°	0.1	0.0
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°	1341.6	51.7
0°-40°	1928.5	74.3
0°-60°	2526.7	97.4
0°-90°	2594.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2594.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2175	2175	2175	2175	2175	
5°	2132	2110	2127	2134	2142	198
15°	1758	1752	1814	1875	1915	490
25°	1275	1286	1376	1470	1539	585
35°	819	839	930	1040	1134	507
45°	392	416	486	581	671	308
55°	141	165	213	273	336	132
65°	16	30	67	81	90	27
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2175.0	2175.0	2175.0	2175.0	2175.0
2.5°	2180.0	2159.5	2164.9	2164.8	2159.0
5°	2131.9	2110.2	2126.6	2134.1	2142.4
7.5°	2041.8	2024.9	2056.3	2079.8	2096.9
10°	1971.9	1957.5	1998.2	2030.3	2054.0
12.5°	1891.1	1880.0	1929.2	1973.2	2003.5
15°	1758.3	1752.1	1814.1	1875.0	1915.1
17.5°	1616.0	1615.8	1686.5	1762.1	1810.5
20°	1518.4	1521.5	1597.3	1680.7	1737.3
22.5°	1420.7	1427.9	1508.9	1595.8	1660.7
25°	1275.3	1285.6	1376.3	1470.5	1539.4
27.5°	1135.6	1150.6	1246.1	1343.9	1427.9
30°	1043.8	1061.3	1158.5	1261.5	1347.9
32.5°	953.8	974.5	1069.3	1178.2	1266.3
35°	818.6	839.2	930.2	1039.7	1134.3
37.5°	679.1	699.3	788.1	895.9	998.2
40°	588.2	610.8	695.5	800.0	903.9
42.5°	505.7	528.3	608.0	710.6	808.8
45°	392.5	416.2	486.1	580.8	671.3
47.5°	298.6	324.3	385.8	471.4	553.9
50°	243.1	268.8	329.4	404.8	484.0
52.5°	198.5	223.4	278.0	349.1	421.7
55°	141.0	164.7	212.6	272.9	335.7
57.5°	97.4	117.8	160.8	211.1	260.3
60°	70.5	90.0	130.5	171.4	211.5
62.5°	46.9	64.8	104.4	135.7	162.7
65°	15.8	30.2	67.3	81.2	90.5
67.5°	8.0	9.6	35.4	37.3	40.4
70°	6.3	6.3	16.8	18.0	21.0
72.5°	4.6	4.6	6.7	8.6	9.3
75°	2.1	2.1	1.1	0.0	0.0
77.5°	1.1	1.1	0.8	0.0	0.0
80°	1.1	1.1	0.0	0.0	0.0
82.5°	0.2	0.2	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)