

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: P521097

Luminaire Tested: SQ4-BB-075U-075D-92765-1D-UNV-STD-W-4\_4500K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521097  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2009-966-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 5-5-2021  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-BB-075U-075D-92765-1D-UNV-STD-W-4\_4500K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5386.3 lumens  
Efficiency: N/A  
Efficacy: 96.9 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: Semi-Indirect

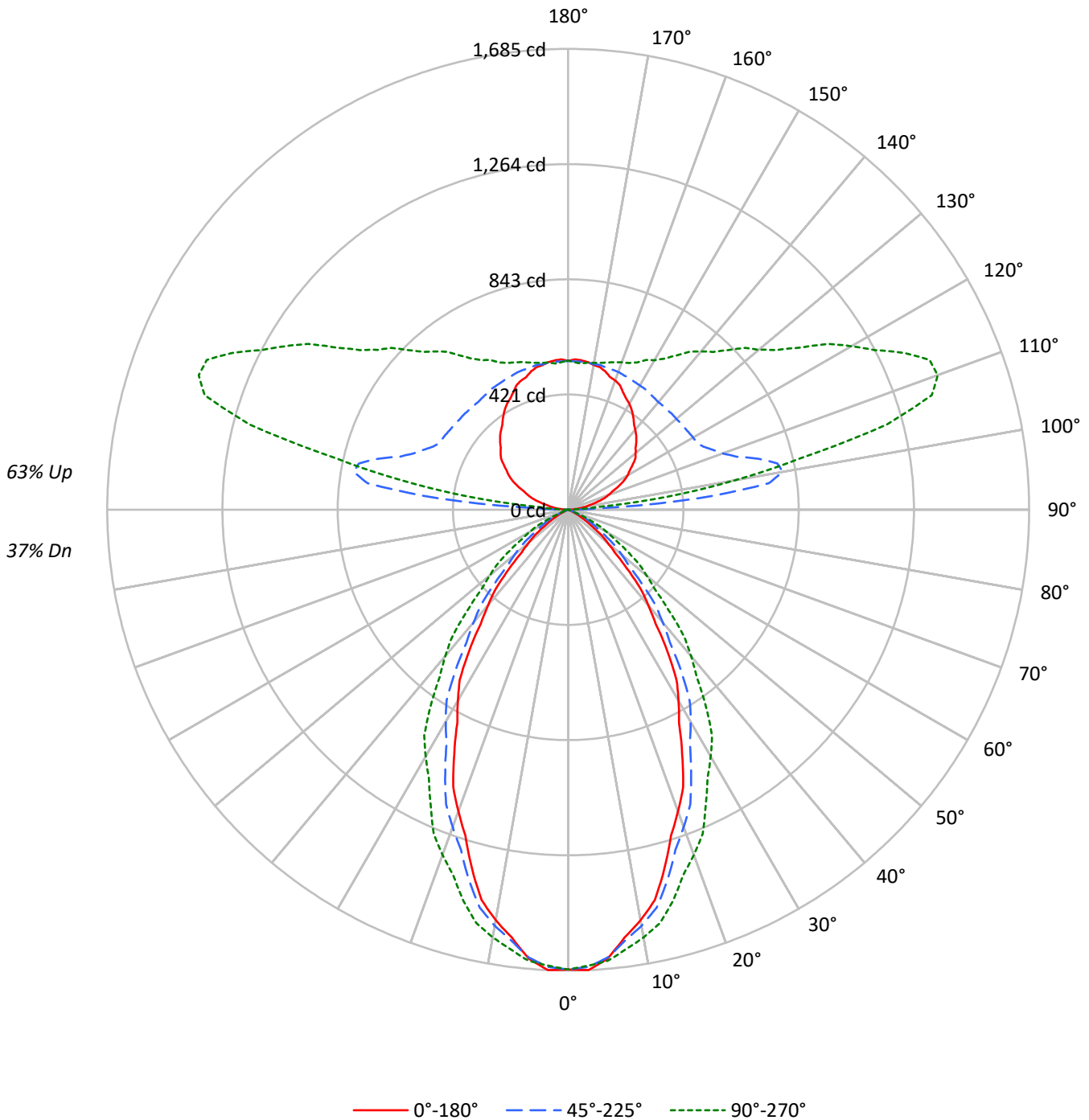
Input Watts (W): 55.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	104	104	104	104	94	94	94	94	76	76	76	60	60	60	44	44	44	37				
1	96	93	89	86	87	84	81	79	69	67	65	54	53	52	41	41	40	34				
2	89	82	77	73	81	75	71	67	62	59	56	49	47	46	38	37	36	31				
3	82	74	67	62	74	67	62	58	56	52	49	45	42	40	35	33	32	28				
4	76	66	59	54	69	61	55	50	50	46	43	41	38	36	32	30	29	25				
5	70	60	52	47	64	55	49	44	46	41	38	38	34	32	30	28	26	23				
6	65	54	47	42	59	50	43	39	42	37	34	34	31	29	28	25	24	21				
7	60	49	42	37	55	45	39	35	38	34	30	32	28	26	26	23	22	19				
8	56	45	38	33	51	42	35	31	35	31	27	29	26	24	24	22	20	18				
9	52	41	34	30	48	38	32	28	33	28	25	27	24	22	22	20	18	16				
10	49	38	31	27	45	35	30	26	30	26	23	25	22	20	21	19	17	15				

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

	0°	45°	90°
0°	15511	15511	15511
5°	15262	15224	15337
10°	14280	14471	14874
15°	12982	13393	14139
20°	11524	12123	13185
25°	10035	10830	12113
30°	8596	9540	11100
35°	7127	8098	9875
40°	5476	6475	8415
45°	3959	4903	6771
50°	2697	3654	5370
55°	1753	2643	4174
60°	1006	1862	3017
65°	266	1137	1526
70°	132	351	440
75°	57	29	0
80°	43	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 6771 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	153.4	2.8
10°-20°	392.4	7.3
20°-30°	491.2	9.1
30°-40°	453.7	8.4
40°-50°	304.9	5.7
50°-60°	157.5	2.9
60°-70°	49.3	0.9
70°-80°	3.1	0.1
80°-90°	0.1	0.0
90°-100°	248.0	4.6
100°-110°	705.7	13.1
110°-120°	676.1	12.6
120°-130°	535.1	9.9
130°-140°	429.5	8.0
140°-150°	336.2	6.2
150°-160°	246.0	4.6
160°-170°	152.4	2.8
170°-180°	51.7	1.0
0°-30°	1037.0	19.3
0°-40°	1490.7	27.7
0°-60°	1953.1	36.3
0°-90°	2005.6	37.2
90°-120°	1629.8	30.3
90°-150°	2930.6	54.4
90°-180°	3381.0	62.8
0°-180°	5386.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1681	1681	1681	1681	1681	
5°	1648	1631	1644	1650	1656	153
15°	1359	1354	1402	1449	1480	379
25°	986	994	1064	1137	1190	452
35°	633	649	719	804	877	392
45°	303	322	376	449	519	238
55°	109	127	164	211	260	102
65°	12	23	52	63	70	21
75°	2	2	1	0	0	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	27	107	480	166	102	31
105°	110	166	719	1270	1208	116
115°	204	246	545	1155	1356	201
125°	288	319	520	864	1033	257
135°	352	381	514	730	825	271
145°	415	436	518	631	688	259
155°	474	485	531	571	594	219
165°	524	526	537	549	557	147
175°	548	545	543	540	536	52
180°	544	544	544	544	544	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1681.2	1681.2	1681.2	1681.2	1681.2
2.5°	1685.1	1669.2	1673.4	1673.3	1668.9
5°	1647.9	1631.2	1643.8	1649.6	1656.0
7.5°	1578.2	1565.2	1589.5	1607.7	1620.9
10°	1524.2	1513.1	1544.6	1569.4	1587.7
12.5°	1461.8	1453.2	1491.2	1525.3	1548.6
15°	1359.1	1354.4	1402.2	1449.3	1480.3
17.5°	1249.2	1249.0	1303.7	1362.1	1399.5
20°	1173.7	1176.1	1234.7	1299.1	1342.9
22.5°	1098.2	1103.8	1166.4	1233.5	1283.6
25°	985.8	993.7	1063.9	1136.7	1189.9
27.5°	877.8	889.4	963.2	1038.8	1103.7
30°	806.9	820.4	895.5	975.1	1041.9
32.5°	737.2	753.3	826.5	910.7	978.8
35°	632.8	648.7	719.0	803.6	876.8
37.5°	524.9	540.5	609.2	692.5	771.6
40°	454.7	472.2	537.6	618.4	698.7
42.5°	390.9	408.4	470.0	549.3	625.1
45°	303.4	321.7	375.8	448.9	518.9
47.5°	230.8	250.7	298.2	364.4	428.2
50°	187.9	207.8	254.6	312.9	374.1
52.5°	153.4	172.6	214.9	269.8	326.0
55°	109.0	127.3	164.3	210.9	259.5
57.5°	75.3	91.1	124.3	163.2	201.2
60°	54.5	69.6	100.9	132.5	163.5
62.5°	36.3	50.1	80.7	104.9	125.7
65°	12.2	23.3	52.1	62.8	69.9
67.5°	6.2	7.5	27.3	28.8	31.2
70°	4.9	4.9	13.0	13.9	16.3
72.5°	3.6	3.6	5.2	6.7	7.2
75°	1.6	1.6	0.8	0.0	0.0
77.5°	0.8	0.8	0.7	0.0	0.0
80°	0.8	0.8	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
92.5°	8.3	43.9	101.8	29.6	22.3
95°	26.9	106.8	480.1	166.2	102.4
97.5°	49.5	125.1	739.4	529.1	362.6
100°	65.2	136.0	795.7	806.0	620.8
102.5°	82.6	147.7	783.3	1031.7	870.0
105°	109.7	166.3	719.1	1270.2	1207.5
107.5°	137.2	188.0	644.2	1337.5	1393.4
110°	156.2	203.8	601.2	1311.8	1437.2

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	174.5	219.6	572.2	1250.9	1429.8
115°	203.8	246.3	545.3	1155.2	1356.5
117.5°	229.7	269.6	529.4	1050.5	1263.8
120°	250.4	283.8	527.7	990.7	1195.1
122.5°	267.0	300.3	523.6	938.3	1128.1
125°	287.7	319.0	520.5	863.7	1032.7
127.5°	310.2	339.5	518.8	819.1	958.4
130°	321.8	351.1	516.3	788.1	909.5
132.5°	334.2	362.7	516.3	763.9	875.6
135°	351.8	381.1	514.3	729.6	824.7
137.5°	368.4	396.9	514.0	700.5	782.7
140°	380.8	410.1	513.2	676.4	755.3
142.5°	394.8	419.3	515.7	657.2	728.0
145°	414.9	436.2	518.4	631.4	688.1
147.5°	432.1	452.7	522.9	605.4	654.4
150°	447.0	461.2	524.6	596.8	631.2
152.5°	458.6	473.6	526.3	585.1	617.1
155°	473.9	485.0	530.8	570.7	593.9
157.5°	492.9	499.6	531.8	564.1	580.7
160°	502.9	507.9	536.0	559.1	573.2
162.5°	508.7	514.5	536.8	554.9	565.8
165°	523.6	525.6	537.0	548.6	556.7
167.5°	533.7	531.9	541.8	547.0	550.3
170°	537.0	536.0	540.1	541.3	545.3
172.5°	544.5	541.0	542.6	539.6	542.8
175°	548.4	545.4	543.2	540.0	536.0
177.5°	550.1	545.2	542.6	539.3	540.1
180°	544.3	544.3	544.3	544.3	544.3

(END OF REPORT)