

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: P521098

Luminaire Tested: SQ4-BB-075U-075D-92765-1D-UNV-STD-W-4\_5000K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521098  
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\_5000K  
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 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5445.9 lumens  
Efficiency: N/A  
Efficacy: 98.3 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

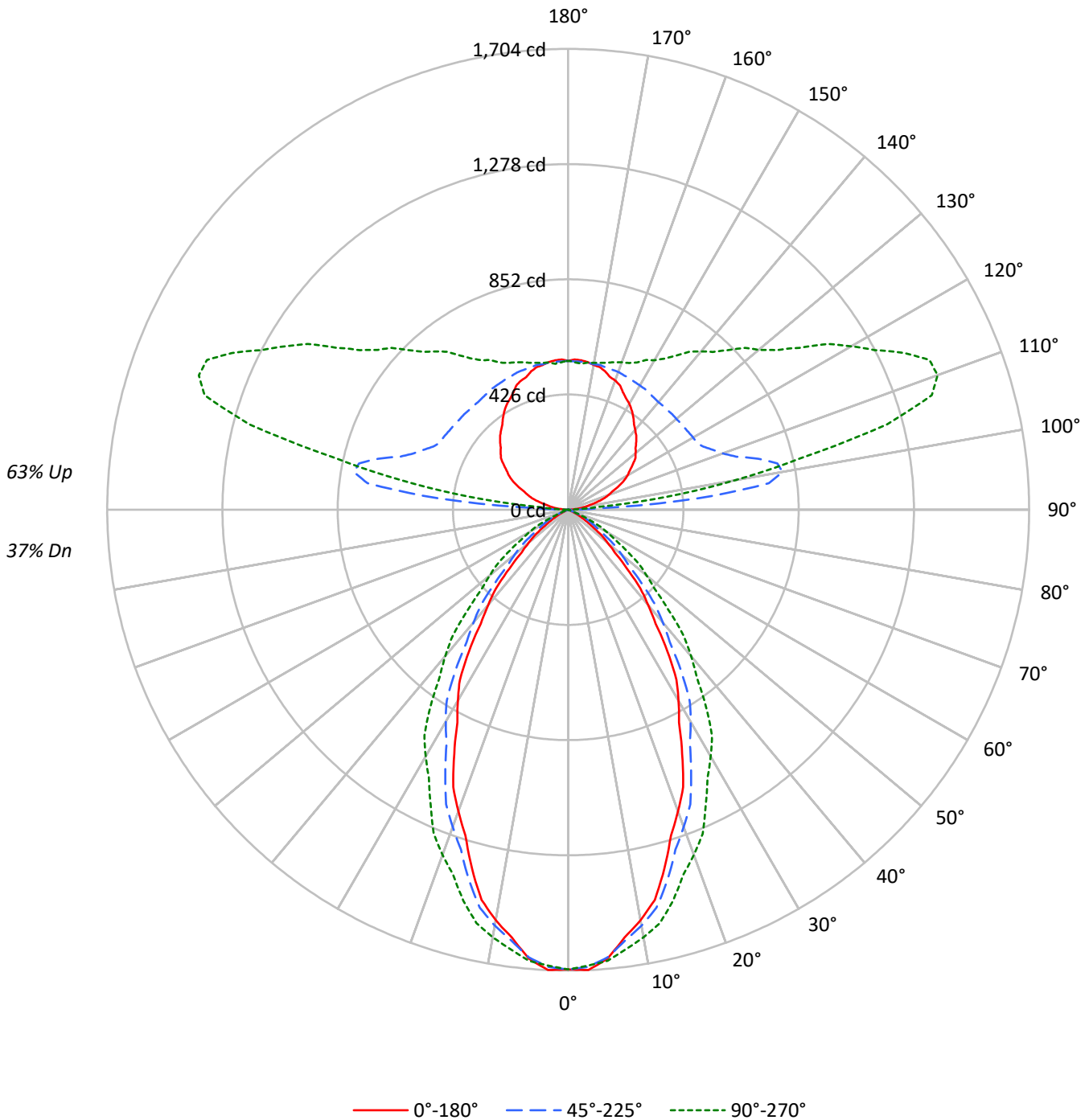
Input Watts (W): 55.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot



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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20										
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	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°	15683	15683	15683
5°	15430	15393	15506
10°	14438	14631	15038
15°	13126	13542	14296
20°	11651	12256	13330
25°	10146	10950	12248
30°	8691	9646	11222
35°	7206	8188	9985
40°	5537	6547	8508
45°	4002	4957	6846
50°	2727	3695	5430
55°	1773	2672	4219
60°	1017	1882	3050
65°	269	1148	1543
70°	132	356	442
75°	57	29	0
80°	43	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 6846 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	155.1	2.8
10°-20°	396.7	7.3
20°-30°	496.6	9.1
30°-40°	458.7	8.4
40°-50°	308.2	5.7
50°-60°	159.2	2.9
60°-70°	49.9	0.9
70°-80°	3.1	0.1
80°-90°	0.1	0.0
90°-100°	250.8	4.6
100°-110°	713.5	13.1
110°-120°	683.6	12.6
120°-130°	541.0	9.9
130°-140°	434.3	8.0
140°-150°	340.0	6.2
150°-160°	248.8	4.6
160°-170°	154.1	2.8
170°-180°	52.3	1.0
0°-30°	1048.5	19.3
0°-40°	1507.2	27.7
0°-60°	1974.7	36.3
0°-90°	2027.7	37.2
90°-120°	1647.8	30.3
90°-150°	2963.1	54.4
90°-180°	3418.0	62.8
0°-180°	5445.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1700	1700	1700	1700	1700	
5°	1666	1649	1662	1668	1674	154
15°	1374	1369	1418	1465	1497	383
25°	997	1005	1076	1149	1203	457
35°	640	656	727	812	886	396
45°	307	325	380	454	525	241
55°	110	129	166	213	262	103
65°	12	24	53	64	71	21
75°	2	2	1	0	0	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	27	108	485	168	104	31
105°	111	168	727	1284	1221	117
115°	206	249	551	1168	1372	203
125°	291	322	526	873	1044	260
135°	356	385	520	738	834	274
145°	420	441	524	638	696	262
155°	479	490	537	577	600	221
165°	529	531	543	555	563	149
175°	554	551	549	546	542	53
180°	550	550	550	550	550	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1699.8	1699.8	1699.8	1699.8	1699.8
2.5°	1703.8	1687.7	1691.9	1691.8	1687.3
5°	1666.1	1649.2	1662.0	1667.9	1674.3
7.5°	1595.7	1582.5	1607.1	1625.5	1638.8
10°	1541.1	1529.8	1561.7	1586.8	1605.2
12.5°	1477.9	1469.3	1507.7	1542.1	1565.8
15°	1374.2	1369.3	1417.8	1465.3	1496.7
17.5°	1263.0	1262.8	1318.1	1377.2	1415.0
20°	1186.7	1189.1	1248.3	1313.5	1357.7
22.5°	1110.4	1116.0	1179.3	1247.2	1297.9
25°	996.7	1004.7	1075.6	1149.2	1203.1
27.5°	887.5	899.2	973.8	1050.3	1115.9
30°	815.8	829.5	905.4	985.9	1053.4
32.5°	745.4	761.6	835.7	920.8	989.6
35°	639.8	655.9	727.0	812.5	886.5
37.5°	530.8	546.5	615.9	700.2	780.1
40°	459.7	477.4	543.6	625.2	706.4
42.5°	395.2	412.9	475.2	555.4	632.1
45°	306.7	325.2	379.9	453.9	524.7
47.5°	233.4	253.5	301.5	368.4	432.9
50°	190.0	210.1	257.4	316.4	378.3
52.5°	155.1	174.6	217.3	272.8	329.6
55°	110.2	128.7	166.1	213.3	262.3
57.5°	76.2	92.1	125.7	165.0	203.5
60°	55.1	70.4	102.0	133.9	165.3
62.5°	36.7	50.7	81.6	106.1	127.1
65°	12.3	23.6	52.6	63.5	70.7
67.5°	6.2	7.5	27.6	29.2	31.6
70°	4.9	4.9	13.2	14.0	16.4
72.5°	3.6	3.6	5.3	6.8	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°	8.4	44.4	102.9	30.0	22.6
95°	27.2	108.0	485.4	168.0	103.6
97.5°	50.0	126.5	747.6	535.0	366.6
100°	65.9	137.5	804.5	814.9	627.7
102.5°	83.5	149.4	792.0	1043.1	879.6
105°	110.9	168.2	727.1	1284.3	1220.9
107.5°	138.7	190.1	651.3	1352.3	1408.8
110°	158.0	206.0	607.8	1326.3	1453.1

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	176.4	222.0	578.5	1264.7	1445.6
115°	206.1	249.1	551.3	1168.0	1371.5
117.5°	232.2	272.6	535.2	1062.2	1277.8
120°	253.2	286.9	533.5	1001.7	1208.3
122.5°	269.9	303.7	529.4	948.6	1140.5
125°	290.8	322.5	526.2	873.2	1044.1
127.5°	313.6	343.3	524.5	828.2	969.0
130°	325.4	355.0	522.0	796.8	919.6
132.5°	337.9	366.8	522.0	772.3	885.3
135°	355.7	385.4	519.9	737.6	833.8
137.5°	372.4	401.3	519.7	708.3	791.3
140°	385.0	414.7	518.9	683.9	763.7
142.5°	399.2	424.0	521.4	664.5	736.1
145°	419.5	441.0	524.1	638.4	695.7
147.5°	436.9	457.7	528.7	612.1	661.6
150°	451.9	466.3	530.4	603.4	638.2
152.5°	463.7	478.8	532.1	591.6	623.9
155°	479.1	490.4	536.7	577.0	600.5
157.5°	498.4	505.1	537.7	570.3	587.1
160°	508.4	513.6	541.9	565.3	579.6
162.5°	514.3	520.2	542.8	561.0	572.0
165°	529.4	531.4	543.0	554.7	562.8
167.5°	539.6	537.8	547.8	553.1	556.4
170°	543.0	541.9	546.1	547.2	551.3
172.5°	550.5	547.0	548.6	545.5	548.8
175°	554.5	551.4	549.2	546.0	541.9
177.5°	556.1	551.2	548.6	545.3	546.1
180°	550.3	550.3	550.3	550.3	550.3

(END OF REPORT)